

# Pantera Consolidated Maintenance Checklist

(Rev 1p)

*(When print this be sure to separately print the imbedded attachments at beginning and end too;  
When revise this keep a backup copy on disk)*



PanteraMaintenance  
ChecklistExplanation(

Explanation and history of this checklist (double-click to open):

**WARNING:** IF YOU ARE WORKING WITH AN ELECTRONIC (MICROSOFT WORD) VERSION OF THIS CHECKLIST, DO NOT CHANGE THE FONT SIZE OF THE CHECKLIST TABLE TO A LARGER FONT (OR TO A WIDER STYLE FONT THAN "TIMES NEW ROMAN"). THE WORD TABLE'S "CELLS" HAVE BEEN SET SO THAT THEY DO NOT CROSS OVER TO THE NEXT PAGE SO ALL INFO FOR A MAINTENANCE ITEM WILL APPEAR ON ONE PAGE (NOT PART ON ONE PAGE AND THE REST ON THE NEXT PAGE) FOR CONVENIENCE AND TO AVOID CONFUSION. IF THE FONT SIZE IS INCREASED, THE WORDS ON CELLS THAT CURRENTLY TAKE UP AN ENTIRE PAGE WILL "SPILL" OFF THE BOTTOM OF THE PAGE INTO NEVER-NEVER LAND AND WON'T BE VISIBLE OR PRINT OUT (THEY WILL REAPPEAR IF YOU DECREASE THE FONT, OR DELETE SOME TEXT ABOVE IT).

**References** (major and/or frequently cited references for which abbreviations are used – any other references will have their full titles indicated wherever they are cited in the checklist):

FTI = Ford Pantera Technical Information Articles (Sept 1973) (group 52 or 53, unless otherwise indicated)

MECH = Info from mechanic (Steve, unless otherwise noted).

OM = Owners Manual (1973) (pages 35, 44, or 45 unless otherwise indicated)

PBN = Bruce Nardoci Knowledge/Research

PI MAG = Pantera International Magazine article

PITI = Pantera International (PI) Club owners written Technical Information Articles (last one issued in February 1991) (group 52 or 53, unless otherwise indicated)

POCA (MAG or NL) = POCA Magazine or Newsletter article

POTI = Pantera Owners Club of America (POCA) Club owners written Technical Information Articles (last one issued August 1, 1990) (group 52 or 53, unless otherwise indicated)

PPQR = Ford Pantera Product Quality Review (also sometimes called "Pantera Product Problems") issued April 1974 ([is this the final issued version?](#)) - See Attachment 0 (attached since not commonly available, note this is a later version than the version published in POCA NL May 2002)

PSH = Ford Pantera Service Highlights (First Printing Jan 1972, Specifications Insert revised Jan 2, 1972)

TSB = Ford Pantera Technical Service Bulletin (thru Final Index #2 July 11, 1975)

WEB = Website or Pantera Email Listserv or Pantera Newsgroup info

ZF = ZF-Synchroma Gearbox DS-25/2 Assembly Maintenance and Operating Instructions Manual (Reproduced for POCA, section IV unless otherwise indicated)

## Key:

ORIG = Was in car when bought it.

TEMP = Car specific temporary problem (will be able to delete off checklist eventually).

TEXT **GREEN ITALICS** = Non-stock/generic Pantera info (e.g., due to modifications to my car, car specific problems, etc.), or PBN personal info - i.e., wouldn't necessarily apply to another Pantera.

TEXT **RED UNDERLINED** = Questions/issues about items on this checklist need to resolve.

## General Checklist Notes:

**Note A:** The references reviewed/incorporated into this checklist (e.g., see "References" listing above) are the ones that would be applicable to stock 1973 Panteras, or all stock Panteras in general. Any potential reference sources that would generally not apply to a 1973 Pantera were not reviewed/incorporated, such as the Dash-1 ZF Transaxle Manual, Owners Manuals for a "pre-L" or GT5-S Pantera, 1971 Ford Car Shop Manual, PI Magazine article on electronic fuel injection, etc. However, if a reviewed/incorporated reference source contained any maintenance related info in it that specifically did not apply to a 1973 Pantera, or my Pantera as currently modified (e.g., I have electronic ignition instead of points), it was still included on this checklist for completeness, but with a note that it doesn't apply to a 1973 (or my specific) car or was placed in the "never" section as being not applicable (this will be useful if the car is remodified in the future, or to apply to a different Pantera, to where those maintenance items become applicable again, as the info could easily be transferred into the main checklist sections). Also, some references were used for this checklist that wouldn't apply to a "stock" Pantera, but apply to my car due to modifications (e.g., Holley carb owners manual info, Cibie Z-Beam Quartz headlight instructions info, Viper burglar alarm manual info, etc). See also the info in the "Key" section above about green italic text.

**Note B:** Source (e.g., reference) of each piece of info on this checklist is indicated in "[ ]" after the info. If there are multiple references dealing with the same entry, the references are generally listed in order from the most respected to the least respected (i.e., Manufacturer Publications like Ford OM, FTI, TSB, PSH, and Other Manufacturer Publications like ZF; then Pantera Clubs Official Publications like PITI, POTI, PI NL/MAG, POCA NL/MAG; then Other Sources like MECH, WEB, PBN). References to non-technical documents such as the PI and POCA NL/MAGs and WEB are only included if their info is new or different from info contained in the official technical documents (i.e., Manufacturer publications and PITI/POTI) – e.g., if a PI Magazine article contains similar info to info already contained in a FTI then the PI Magazine is not included/referenced. See Note C below with respect to "duplicate" PITIs and POTIs. A handful of PITI's were inadvertently mis-numbered when originally published to have identical numbers to other PITI's (i.e., Group 11 Article #4, Group 26 Article #1, Group 35 Article #4, and Group 35 Article #8) – if these are referenced their title or date are also included to avoid confusion (note due to mis-numbering there is no PITI Group 26 Article #2 or Group 52 Article #3). See Note H below with respect to "imbedded" source references.

**Note C:** Some PITI's (and one POTI) were essentially word for word duplicates of information contained in certain Ford Publications (i.e. FTI and PSH, and to a lesser extent the OM) that were created at a time when the general public didn't have access to the Ford publications. Since these contain no new/different information, the duplicated PITI and POTI articles are not listed in the indicated sources of info (see note B above) on this checklist to save space (references are made only to the official Ford publications instead). These "duplicate" PITI and POCA Articles are as follows (with the Ford publication they duplicate information from indicated in parenthesis after it): PITI Group 10 Article #1 (FTI Group 10 Part 00); PITI Group 10 Article #9 (PSH Section I); PITI Group 11 Article #5 (FTI Group 11 Part 02); PITI Group 11 Article #6 (FTI Group 11 Part 10); PITI Group 11 Article #7 (FTI Group 11 Part 11); PITI Group 12 Article #5 (PSH Section VIII); PITI Group 12 Article #6 (PSH Section VIII); PITI Group 12 Article #7 (PSH Section VIII); PITI Group 12 Article #8 (PSH Section VIII); PITI Group 13 Article #1 (PSH Section VII, but the PITI has some additional original material at the end which is referenced on this checklist); PITI Group 13 Article #2 (PSH Section VII); PITI Group 13 Article #4 (FTI Group 13 Part 01); PITI Group 13 Article #5 (FTI Group 13 Part 01); PITI Group 13 Article #6 (FTI Group 13 Part 01); PITI Group 15 Article #4 (FTI Group 15 Part 06); PITI Group 16 Article #13 (FTI Group 16 Part 02); PITI Group 16 Article #14 (FTI Group 16 Part 10); PITI Group 16 Article #15 (FTI Group 16 Part 02); PITI Group 16 Article #16 (FTI Group 16 Part 10); PITI Group 21 Article #5 (PSH Section IV); PITI Group 21 Article #6 (FTI Group 21 Part 22); PITI Group 24 Article #8 (FTI Group 24 Part 41); PITI Group 24 Article #9 (FTI Group 24 Part 21); PITI Group 24 Article #10 (FTI Group 24 Part 21); PITI Group 24 Article #11 (FTI Group 24 Part 51); PITI Group 24 Article #12 (FTI Group 24 Part

21); PITI Group 26 Article #3 (FTI Group 26 Part 01); PITI Group 26 Article #4 (FTI Group 26 Part 22); PITI Group 27 Article #11 (PSH Section III); PITI Group 27 Article #15 (FTI Group 27 Part 01); PITI Group 27 Article #16 (FTI Group 27 Part 01); PITI Group 28 Article #3 (FTI Group 28 Parts 01 & 02); PITI Group 28 Article #4 (FTI Group 28 Part 02); PITI Group 28 Article #5 (FTI Group 28 Part 02); PITI Group 31 Article #2 (FTI Group 31 Part 01); PITI Group 31 Article #3 (FTI Group 31 Part 02); PITI Group 31 Article #4 (FTI Group 31 Part 40); PITI Group 32 Article #3 (FTI Group 32 Part 02); PITI Group 32 Article #4 (FTI Group 32 Part 02 & 40); PITI Group 34 Article #4 (FTI Group 34 Part 30, but the PITI has some additional original material); PITI Group 35 Article #9 (FTI Group 35 Part 40); PITI Group 41 Article #4 (FTI Group 41 Part 01); PITI Group 44 Article #3 (FTI Group 44 Part 01); PITI Group 44 Article #4 (FTI Group 44 Part 06); PITI Group 45 Article #4 (FTI Group 45 Part 03); PITI Group 45 Article #5 (FTI Group 45 Part 61); PITI Group 46 Article #2 (FTI Group 46 Part 01); PITI Group 52 Article #4 (FTI Group 52 Part 00); PITI Group 53 Article #2 (OM Section "Body Maintenance"); PITI Group 53 Article #3 (FTI Group 53 Part 05); PITI Group 53 Article #4 (FTI Group 53 Part 04); PITI Group 53 Article #5 (FTI Group 53 Parts 01 & 02 & 03); POTI Group 13 "Steering System Accessibility" (PSH Section VII).

**Note D:** This checklist only includes info contained in the listed references that directly deals with maintenance/inspection items, NOT other related information in those references such as how to "repair" or "overhaul" stuff (e.g., disassembly/assembly, removal/installation, troubleshooting/diagnosis, cleaning, etc) if the maintenance/inspection item determines something is not in proper working order. For example, info on how to replace the clutch master cylinder, how to rebuild/overhaul the distributor, or how to diagnose a malfunctioning crankcase ventilation system is not included. Exception: Those removal/installation and normal adjustment/cleaning/etc. operations that need or might be needed to be performed as part of the routine maintenance listed on this checklist are included (e.g., removing/installing spark plugs during the spark plug check, changing brake pads when they eventually wear out, removing wheels in order to repack the front wheel bearings, adjusting carburetor fuel mixture, etc.). Therefore, if the results of performing a maintenance/inspection item on this checklist reveals that a repair of some sort is needed, be aware that there are repair etc. related procedures/info in the above reference documents (as well as info/description of how the system/component works and what it consists of) that are not indicated on this checklist. No attempt was made to include any "repair" item references (i.e., things that don't get maintenance, but are just fixed when/if they break).

**Note E:** This checklist does not list/reference any "non-routine" maintenance/inspection (or checks/tests/cleaning/etc) type stuff contained in the listed references that is performed only as part of repair/overhaul/troubleshooting/testing/etc if problems are found during the performance of the main "routine" maintenance item (as per note D above).

**Note F:** The checklist attempts to list each maintenance operation in separate entries (rows), unless it is actually the same specific item phrased differently in different references, even though there may be other related entries dealing with the same system/component (i.e., several different maintenance/inspection items, even though they may be on the same specific component, are not consolidated into a single table entry – see notes 8 and 9). More than one maintenance operation is listed on a single entry only in those cases where they are very closely related and normally performed at the same time and don't warrant separate entries (which would contain largely redundant info), such as "washing the car" and "polishing the car". In those cases where more than one maintenance operation is listed in a single entry (row), then the info related to each sub-operation is "grouped" together within the row where possible to make finding info related to each sub-operation easier (Exceptions: Maintenance/Inspection column info is grouped by reference source since the references typically cover all the related sub-operations; and the "Notes" column). In addition, the row entries in the "Materials/Specifications Info" and "Name Brand Parts/Products To Use" columns also have sub-headings to group and help quickly locate the various specs/parts info.

**Note G:** Asterisks (\*) are used to refer to other info on the same ROW only, not elsewhere on the checklist.

**Note H:** The "imbedded" source documents attached at the end of the checklist (can be viewed/printed by double clicking on them), which are referenced in various places on this checklist, are for cases where it isn't practical to just reference them only (i.e., stuff not in the standard Pantera reference books listed in the "References" listing above that I normally keep in the car (i.e., FTI, OM, PITI, POTI, PSH, TSB, and ZF), and thus wouldn't be handy when performing maintenance), such as an entire web page on how to check for rust/corrosion (with diagrams), etc. The appropriate/needed imbedded documents should be printed out each time a printout of this checklist is made in preparation to do maintenance. Commonly available source documents not kept in the car (such as PI and POCA magazines and newsletters articles) are only imbedded in this checklist if they contain additional information not specifically included on this checklist necessary for performing the maintenance operation (e.g., the detailed steps on "how" to do the operation, rather than just "what" need to do) – if the commonly available source document only contains info that is completely included on this checklist (e.g., "the timing chain needs to be replaced every 30,000 miles", or a part number, or a specification that must be met, etc) or background info not necessary for performing the maintenance operation then it is only referenced (see Note B above) as being the source (so that the information on the checklist can be looked up/verified if desired), not "imbedded". Source documents that are not commonly available or that may become unavailable in the future (e.g., WEB info) are imbedded even if they don't contain any info not specifically included on this checklist, in order that the info on the checklist can be verified if desired.

#### Checklist Columns Notes:

**Note 1:** Priority codes are used to determine the most important entries to do at a given maintenance interval if time or money is limited. Priority code definitions are:

HIGH = Failure to perform the maintenance operation could result in safety hazard or severe equipment damage (i.e., must do). Ex: Checking wiper blade condition or checking engine oil level;

MEDIUM = Failure to perform the maintenance operation could result in loss of mobility/drivability of the car (i.e., should do). Ex: Check/replace spark plugs;

LOW = Failure to perform the maintenance operation could result in nuisance problem (i.e., optional). Ex: Lubricate the window glass mechanism;

VARIES = Entry involves multiple items that have different priority implications. Ex: Check electrical system.

**Note 2:** In order to reduce making duplicate or near duplicate entries whenever possible, and in view of hopefully indefinite lifetime/mileage limits, the frequency of maintenance entries is handled a little differently than those on typical maintenance lists (for instance the one in the owners manual) that show the maintenance by mileage milestones for a normal life expectancy of mileage/age on a car. The "5000 miles" section means to do that at EVERY 5000 miles interval on the odometer, not just the first 5000 miles. Similarly, the 10,000 mile entries are done everytime the mileage on the odometer is divisible by 10,000, and so on. Therefore, for instance if the odometer reads 65,000 miles, do all the 5000 miles stuff; when it reads 70,000 miles do all the 5000 AND 10,000 miles entries; when it reads 75,000 miles do all the 5000 and 15,000 (15,000 x 5 = 75,000) miles entries; when it reads 80,000 do all the 5000, 10,000, and 20,000 mile entries; when it reads 90,000 do all the 5000, 10,000, 15,000, and 30,000 mile entries; and so on.

**Note 3:** In those cases where the maintenance operation involves checking something at one interval and replacing it at another interval, in order to prevent having 2 almost identical entries, they are both listed at the earlier interval (e.g., 5000 miles) with a "\*" note to do the other one at the longer interval (e.g., 10,000 miles), if both intervals were multiples of each other and thus the earlier item would be sure to be reviewed at either interval. However, there were a few cases where that couldn't be done, because the longer interval (e.g., 15,000 miles) wouldn't always be a multiple of the earlier interval (10,000 miles), and thus the earlier interval wouldn't necessarily get reviewed when the longer interval was due (e.g., it would if the odometer read 60,000 miles, but not when it read 75,000 miles) – in those cases separate entries were made in the different mileage sections.

**Note 4:** The mileage intervals listed on this checklist are normally the typical recommended mileage interval given in the references for that maintenance operation rounded UP to the nearest multiple of 5000 (4000 miles becomes 5000, 8000 becomes 10,000, 12,000 becomes 15,000, etc). This allows for easier tracking of when the maintenance operation is due via the odometer (will also have a mental trigger since will normally notice on the odometer when it turns over to a multiple of 5000, whereas a multiple of 4000 or 8000 doesn't stand out). The references recommended intervals for each entry are listed directly below my personal one for that entry which is identified by my initials as the source. Rounding up a little is probably acceptable, since the manufacturer recommendations are likely somewhat conservative, and also since products today (oil, filters, etc) have probably been improved so that they last longer than they did in the 1970's. Along that same line, recommended intervals of 24,000 miles were rounded up to 30,000 (rather than 25,000), on the assumption that there is more leeway in performing the maintenance for a larger interval item than there would be for a 4000 mile recommendation item.

**Note 5:** In the cases where the references interval recommendations are for X miles or X months (e.g., 8000 miles or 8 months) whichever comes first, the checklist lists the maintenance operation item based on miles since I drive the car daily and am likely to put at least 10,000 miles on it a year and/or hit the mileage intervals before the monthly intervals. If change from using it as a daily driver or turn out not to drive it as much, treat the mileage interval sections as "months" instead (e.g., do the 5000 mile section entries every 5 months).

**Note 6:** Some recommended maintenance operation time intervals were rounded off (where it was judged to be acceptable from a maintenance risk standpoint), or picked where no recommended time interval was given, to coincide with the time interval for other existing maintenance operations to reduce the number of different maintenance intervals (e.g., recommendation to do something monthly listed in bi-monthly section instead).

**Note 7:** For those cases where various references give conflicting/different materials/specifications info (e.g., due to typo or other mistake, different opinions, changes/improvements to the info made over the years, different info for different model/year cars, etc.), the appropriate info to use for my car (i.e., latest/best info, info that applies to 1973 model year, etc.) is indicated in **bold** type.

**Note 8:** Name Brand Parts/Products to Use column entries are intended to be only for cases where I've determined what I feel is the "best" part/product to use (e.g., a specific brand of lube to use that exceeds the minimum requirements listed in the Materials/Specifications column, a car polish that independent tests have determined is the best one on the market, a product I've used previously that gave good results, etc.). If the column is left blank, that means that I haven't determined the best product to use yet, and can use anything that looks like it will be acceptable.

**Note 9:** SYSTEM/COMPONENT info (in all capital letters in that column) is cross references to maintenance operation or inspection items that are on the same system or component, even if the operation/inspection itself is completely unrelated (used for sorting maintenance/inspection items by thing they're on). System/Component descriptions used are based on the standard Ford Group/Component Index Titles (e.g., as used in Ford Car Shop Manuals, FTI, etc) where possible (descriptions not based on the Ford Group/Component Index Titles list only a "system" without an associated component entry; e.g., "GARAGE" and "PAPERWORK"). The Checklist is sorted alphabetically by these within each frequency section.

**Note 10:** Checklist Entry Cross References (included in same column as system/component references discussed in Note F above, except listed in small letters), are cross references to other maintenance operations or inspection items that are related in some way besides just being on the same system or component (e.g., may be convenient to perform them at the same time).



Pantera5749Modifica  
tions.doc

*List of Modifications Done To Pantera #5749* (double-click to open): (changes can affect performance of maintenance operations).

*Previous Owner of Pantera #5749 Information* (double-click to open): (Attachment Removed) (history of repairs/maintenance & modifications before me).

<b>PRIORITY</b> (See Note 1 above) <b>and</b> <b>Who Does It</b>  (Check box when done)	<b>Frequency</b> (Calendar or Mileage or Special) (See Notes 2, 3, 4, 5 & 6 above)	<b>Maintenance Operation or Inspection Item</b> (i.e., WHAT to do)	<b>Maintenance/Inspection Instructions</b> (i.e., HOW to do) (Note: In addition see PSH and FTI as needed, per Note D)	<b>Materials/Specifications Info</b> (i.e., REQUIREMENTS must meet) (See Note 7 above) (Note: In addition see "Pantera Specifications" insert of PSH)	<b>Name Brand Parts/Products to Use</b> (See Note 8 above)	<b>SYSTEM (COMPONENT)</b> (see Note 9 above) <b>and</b> <b>Checklist Entry Cross References</b> (see Note 10 above)	<b>Notes</b>
	Calendar						
	Bi-Monthly						

<p>LOW [PBN]. <i>PBN does</i></p>	<p>Bi-Monthly (Jan, Mar, May, Jul, Sep, Nov) [PBN]</p>	<p><i>Check side view mirrors (especially passengers) to be sure still glued on tight [PBN – TEMP].</i></p>				<p>AUXILIARY EQUIPMENT (MIRRORS)</p> <p>Related Up-Keep of Bodywork (Removing Stains, Washing the Car, Polishing the Car) entry below [PBN].</p>	<p>Note: If/once TEMP item is permanently repaired/replaced, delete its entry off this checklist/listing (and any TEMP cross references to this listing), but be sure any useful info/references is also on this checklist elsewhere before delete it off this entry [PBN].</p> <p><i>Note: Previous owner replaced drivers side view mirror with a different design, and added a passenger side view mirror (I replaced both with different design) [PBN].</i></p> <p><i>Note: Drivers side won't fall off even if comes loose again – I previously tried to take it completely off when it first came loose and couldn't do it (easily). Passenger side, while didn't come loose, may not be glued on as well since I didn't take it off to fix original glue job [PBN].</i></p> <p><i>If mirror falls off or comes loose, clean up the mirror mounting surface better and rough up the glass on the window with some 400 grit sandpaper and reglue using JB Weld [PBN - WEB].</i></p>
<p>LOW [PBN]. <i>PBN does</i></p>	<p>Bi-Monthly (Jan, Mar, May, Jul, Sep, Nov) [PBN]</p>	<p>Replenish Windshield Washer Bottle Fluid Level, and Adjust Nozzle Aim [OM page 25].</p> <p>Check Windshield Washer Reservoir (fluid container) [FTI].</p>	<p>See OM page 25 “Windshield Wiper and Washer” [OM].</p> <p>See FTI page 53-04-01 “Check Radiator and Windshield Washer Reservoir” [FTI].</p>	<p>Windshield Washer Fluid: Water and the recommended proportion of Ford Windshield Washer Solution [FTI].</p> <p>Windshield Washer Bottle Level: Fill the water bottle [OM page 25].</p>	<p>Windshield Washer Fluid: “Bug Juice” by TurtleWax [PBN – need to research though to see if best].</p>	<p>AUXILIARY EQUIPMENT (WINDSHIELD WASHER)</p> <p>Related Cleaning the Windows entry below [PBN].</p>	

<p>HIGH [PBN].</p> <p><i>PBN does</i></p>	<p>Bi-Monthly (Jan, Mar, May, Jul, Sep, Nov) [PBN].</p> <p>[OM = check level prior to starting – page 14]; [TSB = 4000 miles (check coolant level) - Bulletin 5 Article #28].</p> <p>[TSB = Supply tank** should be checked daily, expansion/recovery tank need only be checked every 2000-2500 miles - Bulletin 2 Article #11; Check supply tank** regularly and keep it filled at all times, check expansion/recovery tank every 2000/2500 miles - Bulletin 8 Article # 61].</p> <p>[OM = completely fill expansion tank every 2000/2500 miles – page 14]; [PITI = Check expansion tank level periodically]; [TSB = Expansion tank should be maintained at a half filled level at all times – Bulletin 11 Article #96].</p> <p>[POTI = Periodic (manual bleeding of radiator) – POTI Group 27 “The Pantera Cooling System, Faults, and Fixes”].</p>	<p>Check* ** **Coolant Level [OM page 14, TSB Bulletin 5 Article #28]; Keep System Full of Coolant and Free of Air [PITI Group 27 Article #2]; Check Radiator Reservoir [FTI].</p> <p>Check supply tank** and keep it filled, check expansion/recovery tank and maintain half filled [TSB Bulletin 8 Article # 61].</p> <p>Check Coolant Level (expansion tank should be maintained at a half filled level) [TSB Bulletin 11 Article #96]; Completely Fill The Expansion Tank** ***[OM page 14].</p> <p>Manual Bleeding of Radiator is required [POTI Group 27 “The Pantera Cooling System, Faults, and Fixes”].</p>	<p>See OM page 14 “Prior to Starting**” [OM].</p> <p>See FTI page 53-04-01 “Check Radiator and Windshield Washer Reservoir**” [FTI].</p> <p>See PITI Group 27 Article #1 “Cooling System Expansion Tank Relocation – Now You See It!”, PITI Group 27 Article #2 “The Pantera Cooling System” [PITI].</p> <p>See TSB Bulletin 2 Article #11 “Checking Coolant Levels**”, Bulletin 2 Article #13 “Cooling System Characteristics”, Bulletin 11 Article #96 “Checking Coolant Levels – Expansion Tank” [TSB].</p> <p>See Attachment 1 “Coolant Changing Email”, and Attachment 8 “Pantera Cooling System (Coolant Tanks)” for levels of tanks [WEB].</p> <p>ADD “WATER WETTER” COOLANT ADDITIVE [WEB - Attachment 8 “Pantera Cooling System (The Coolant)”].</p>	<p>Cooling System Capacity: 6 3/8 Gallons [OM page 72]; 25 ½ Quarts [PSH Specs Section].</p> <p>Coolant Fluid: 40% Antifreeze – 60% Water (Use only permanent-type coolant that meets Ford Specification ESE-M-97 B18-C. Do Not use Alcohol or Methanol anti-freeze or attempt to mix them with the factory coolant) [OM page 72]; Solution of 50% water and Ford Antifreeze [FTI page 53-04-01]; Ford Cooling System Fluid and water [FTI page 52-00-02]; Permanent antifreeze and water mixture [FTI page 27-01-03]; 50-50 mixture of antifreeze and water (at least 50% antifreeze, good idea to put in about 60% antifreeze) [PITI Group 27 Article #2]; Coolant mixture of approximately 50-50 water and ethylene glycol (antifreeze) [TSB Bulletin 2 Article # 13, Bulletin 8 Article # 61]; See Attachment 8 “Pantera Cooling System (The Coolant)” [WEB]. <b><u>(need to determine which is best value to use, and bold it)</u></b></p> <p>Checking Level**: Check radiator coolant level with engine cold [OM page 14, FTI page 53-04-01, TSB Bulletin 2 Article #11, Bulletin 8 Article # 61]; Check Level in Expansion Tank Using flexible dipstick*** [PITI Group 27 Article #2].</p> <p>Coolant Tanks Level: Top up the supply tank and partially fill the expansion tank [PSH page 13]; Keep supply tank** filled at all times and maintain expansion/recovery tank half filled [TSB Bulletin 2 Article #11]; Feed tank must always be completely full [OM page 14]; Expansion tank should be maintained at a half filled level at all times [TSB Bulletin 11 Article #96].</p>	<p>Coolant Additive: “Water Wetter” by Redline [WEB - Attachment 8 “Pantera Cooling System (The Coolant)”].</p>	<p>COOLING SYSTEM (GENERAL)</p> <p>Related Check Coolant Condition at 15,000 miles, Replace Coolant at 30,000 miles entry in 15,000 Miles section [PBN].</p> <p>Related Replace Coolant at least bi-yearly entry in Bi-Yearly section [PBN].</p>	<p>*Note: Check coolant level and fill expansion tank bi-monthly, Check coolant condition at 15,000 miles, Replace at 30,000 miles or at least bi-yearly (see separate entries) [PBN].</p> <p>**Note: The procedure for checking coolant level was changed (check expansion tank level, with engine cold, instead of supply tank level, maintain expansion tank level about half filled at all times) – TSB Bulletin 2 Article 11 and some OM’s are WRONG with respect to this procedure (repeated removal of the supply tank pressure cap may destroy its sealing capabilities, coolant level should be checked at the expansion tank and not the supply tank) [TSB Bulletin 11 Article #96, PITI Group 27 Articles #1 &amp; 2].</p> <p>***Note: I keep a flexible dipstick (rubber hose) for checking coolant level in expansion tank, and special long/flexible funnel for putting coolant in expansion tank, in front trunk [PBN].</p> <p>Note: I keep gallon of premixed 50-50 water/antifreeze (to use to top off coolant periodically) in garage [PBN].</p>
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<p>HIGH [PBN].</p> <p><i>PBN does</i></p>	<p>Bi-Monthly (Jan, Mar, May, Jul, Sep, Nov) [PBN].</p> <p>[OM = prior to starting – page 14].</p>	<p>Check Motor Oil Level [OM pages 14, 36];</p> <p>Check Engine Oil Level [FTI].</p>	<p>See OM page 36 “Motor Oil Level Control” [OM].</p> <p>See FTI page 53-01-02 “Check Engine Oil Level” [FTI].</p>	<p>Oil Pan Capacity**:</p> <p><b>5 Quarts</b> (Oil Sump and Filter) [OM page 72];</p> <p>5 U.S. Quarts (includes 1 quart with filter replacement) [FTI page 21-22-29];</p> <p>Will hold 6 quarts [PITI Group 27 Article #2];</p> <p>6 Quarts (plus an extra 1/2 or so quarts for a new stock filter) for performance driving, 5 quarts for normal driving [WEB - Attachment 18 “Sunday Oil Change”].</p> <p>Oil:</p> <p>SAE 20W/50 API MS (Temp &gt; 0 deg C), SAE 10W40 API MS (Temp &lt; 0 deg C) [OM page 72];</p> <p>Recommended motor oil (see Specifications “Engine Lubricant: Multi Viscosity Oil, and Single Viscosity Oil” on FTI page 53-01-03) [FTI];</p> <p>Top quality 20-50 weight oil above 40 degrees ambient temperature, 10-40 below 40 degrees (consistent sub-zero temperatures would require a lighter oil) – don’t use single weight oil at all [PITI Group 27 Article #2].</p> <p>Oil Level:</p> <p>Never allow oil to be under the minimum level (ADD) and when filling up never exceed the maximum level (SAFE) [OM page 36];</p> <p>Do not add oil past the full mark, never allow the oil level to fall below the add mark [FTI page 53-01-02];</p> <p><i>Use the previous owner’s hand scratched marks scale on oil dipstick, not the manufactured* marks [PBN].</i></p>	<p>Oil:</p> <p>5W-30 Synthetic (Mobil 1 Tri-Synthetic**) [PBN-WEB – Attachment 11 “Engine Oil Choices”].</p>	<p>ENGINE (GENERAL)</p> <p>Related Oil &amp; Filter Change entry in 5000 Miles section [PBN].</p>	<p>*Note: Dipstick’s manufactured marks are apparently off some (see TSB 5 Article 34, and PPQR Powertrain Item 4), <i>previous owner’s upper scratched mark is measured 5 quarts level, with lower scratched mark scaled to match manufactured range [PBN].</i></p> <p>Note: Car will “burn” (lubricating cylinder walls, etc.) some oil (about 1 quart every 5000 miles is normal), therefore having to add some oil between changes doesn’t mean there’s a “leak” [MECH].</p> <p>**Note: Mobil apparently changed the name/improved this product in 2002 to “Mobil 1 Fully Synthetic Motor Oil with SuperSyn Anti-Wear Technology” (5W-30 Newer Vehicle Formula) [PBN].</p>
<p>LOW [PBN].</p> <p><i>PBN does</i></p>	<p>Bi-Monthly (Jan, Mar, May, Jul, Sep, Nov) [PBN].</p>	<p>Check to be sure hose that connects from oil fill line to underside of air cleaner hasn’t become disconnected at air cleaner connection [PBN-TEMP].</p>				<p>FUEL SYSTEM (AIR CLEANER AND FILTER)</p> <p><u><a href="#">(what is this hose – a vacuum hose or something – find out and add cross ref if appropriate)</a></u></p>	<p>Note: If/once TEMP item is permanently repaired/replaced, delete its entry off this checklist/listing (and any TEMP cross references to this listing), but be sure any useful info/references is also on this checklist elsewhere before delete it off this entry [PBN].</p> <p><i>Note: Need to find a way to secure this hose connection permanently [PBN].</i></p> <p><i>Note: Previous owner replaced the original air cleaner with one that would fit with the Edelbrock Torker manifold when he changed carburetor and intake manifold (I replaced that one with an aftermarket Pantera script air cleaner) [PBN].</i></p>

VARIES [PBN].  <i>PBN does</i>	Bi-Monthly (Jan, Mar, May, Jul, Sep, Nov) [PBN].	Check Garage Floor for Indications of Fluid Leaks from car [PBN].				GARAGE  Related Check for Water/Oil/Fuel Leaks car visual inspection entry in 10,000 Miles section [PBN].  <i>Related Check Shock Absorber Leak entry in 5000 Miles section [PBN - TEMP].</i>  Related Clean/Degrease Engine and Transaxle entry in Yearly section [PBN].	
LOW [PBN].  <i>PBN does</i>	Bi-Monthly (Jan, Mar, May, Jul, Sep, Nov) [PBN].  <i>[Lift-Master Garage Door Opener Owner's Manual – Once a Month – page 27].</i>	<i>Manually Operate Garage Door (to see if it is unbalanced or binding), Check to be Sure Door Opens &amp; Closes Fully (adjust** limits and/or force if necessary), Repeat the Safety Reverse Test (make any necessary adjustments**) [Lift-Master Garage Door Opener Owner's Manual – page 27].</i>  <i>Check the PVC Pipe Covering Door Torsion Spring (I added it to protect car in case spring breaks) to be sure still covering spring correctly – it sometimes slides off sideways some thru door use [PBN].</i>  <i>Check to be sure Garage Door Opener (overhead) Light Bulb(s) not burnt out (replace as needed) [PBN].</i>	<i>See Lift-Master Garage Door Opener Owner's Manual pages 24 "Adjustment Step 1 (Adjust the UP and DOWN Limits)", 25 "Adjustment Step 2 (Adjust the Force)", 26 "Adjustment Step 4 (Test the Safety Reverse System)", 27 "Limit and force adjustment controls" [Lift-Master Garage Door Opener Owner's Manual].</i>	<i>Limit and Force Adjustments**: See Lift-Master Garage Door Opener Owner's Manual pages 24, 25 &amp; 27 (only a screwdriver is required) [Lift-Master Garage Door Opener Owner's Manual].</i>		GARAGE  <i>Related Check Garage Door Opener Chain Tension entry in Semi-Yearly section [PBN].</i>  <i>Related Lubricate all Moving Parts of the Garage Door entry in Yearly section [PBN].</i>  <i>Related Check Garage Door Hardware entry in Yearly section [PBN].</i>	<i>*Note: Weather conditions may cause some minor changes in door operation requiring some re-adjustments, particularly during the first year of operation [Lift-Master Garage Door Opener Owner's Manual – page 27].</i>  <i>**Note: Repeat the safety reverse test after any adjustments of limits or force [Lift-Master Garage Door Opener Owner's Manual – page 27].</i>
LOW [PBN].  <i>PBN does</i>	Bi-Monthly (Jan, Mar, May, Jul, Sep, Nov) [PBN].	<i>Verify Garage Dehumidifier is still on [PBN].</i>  <i>Check garage wall mounted humidity gauge to verify dehumidifier is working properly (replace gauge's battery when needed) [PBN].</i>				GARAGE  <i>Related Perform Routine Maintenance on Garage Dehumidifier entry in Semi-Yearly section [PBN].</i>	<i>Note: Ebac dehumidifier turns off if garage power goes out briefly, and must be manually turned back on [PBN].</i>

<p>LOW [PBN].</p> <p><i>PBN does</i></p>	<p>Bi-Monthly* (Jan, Mar**, May, Jul, Sep**, Nov) [PBN].</p> <p>[OM = Periodically – page 42];</p> <p>[FTI = Frequently (cleaning) – page 45-03-01].</p> <p>[FTI = Premature “Chalking” of the door trim panels and/or seat cover material - page 45-03-01].</p> <p>[PPQR = Premature “chalking” of the door trim panels and/or seat cover material – Body item 12].</p>	<p>Up-Keep of Interior (cleaning) [OM page 42];</p> <p>Remove Dust and Loose Dirt from the upholstery, trim, and floor covering; Wipe Vinyl plastic surfaces clean [FTI page 45-03-01].</p> <p>PUT VINYL/UV PROTECTANT*** ON ALL INTERIOR VINYL SURFACES [PBN].</p> <p>PUT LEATHER CONDITIONER/PROTECTANT ON STEERING WHEEL RIM [PBN].</p> <p>Correct this condition (“Chalking” of the door trim panels and/or seat cover material) [FTI page 45-03-01, TSB Bulletin 6 Article # 40, PPQR Body item 12].</p> <p>Touch up*** silver trim paint on interior HVAC vents and heater controls panel, etc. if needed [PBN].</p> <p>Repair/replace any interior chrome (gauge bezels, switches, shifter arm and gate and bolts, ashtray trim, etc.) that is damaged, flaking off, fading, etc. [PBN].</p>	<p>See OM page 42 “Interior” [OM].</p> <p>See FTI page 45-03-01 “Trim Panels (General Information – Cleaning) [FTI].</p> <p>See TSB Bulletin 6 Article # 40 “Chalking – Door Trim Panels and/or Seat Cover Material” [TSB].</p>	<p>Cleaning Interior:</p> <p>Vacuum cleaner, ammonia on cloth and vaseline (for greasy stains on upholstery), trichloroethylene or soft soap solution (for matings) [OM page 42];</p> <p>Damp cloth (vinyl plastic surfaces) [FTI page 45-03-01];</p> <p>Do not allow gasoline or solvent to come into contact with the weatherstrips or other bodysell rubber seals [OM page 42].</p> <p>Correct “chalking” of the door trim panels and/or seat cover material: Apply light coat of Vaseline with a soft cloth [FTI page 45-03-01, TSB Bulletin 6 Article # 40, PPQR Body item 12].</p>	<p>Vinyl/UV Cleaning/Protectant : 303 Aerospace Protectant* (303 Products Inc. Stock #30340) [PBN/WEB].</p> <p>Steering Wheel Leather Conditioner/Protectant: Lexol Original Formula Leather Conditioner Preservative [PBN]. <a href="#"><u>(need to determine if this is best stuff)</u></a></p> <p>Interior Silver Trim Touch Up: Pen-touch Silver fine point permanent metallic ink pen [PBN/WEB – See Attachment 12 “Detailing Your Pantera”].</p>	<p>INTERIOR TRIM (GENERAL)</p>	<p>*Note: 303 Aerospace Protectant says to use every 3-5 weeks for maximum protection [PBN].</p> <p>**Note: Get car “Detailed” twice a year (see separate Up-Keep of Bodywork (Removing Stains, Washing the Car, Polishing the Car) entry and Cleaning the Windows entry and Cleaning the Wheels entry below too). <i>WARN DETAILER ABOUT THE LIGHTLY GLUED ON “PANTERA” SCRIPT OVER GLOVE COMPARTMENT, AND NOT TO BREAK THE “ANTENNA WIRE” RUNNING ALONG THE WINDSHIELD</i> (see also detailer warning note in “Up-Keep of Bodywork” entry below) [PBN].</p> <p>***Note: Do any silver trim paint touch ups at least a day before putting vinyl/UV protectant on so can dry properly [PBN].</p>
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<p>LOW [PBN].</p> <p><i>PBN does, except detailing</i></p>	<p>Bi-Monthly** (Jan, Mar*, May, Jul, Sep*, Nov) [PBN].</p> <p>[OM = Regular Intervals (Up-Keep of bodywork) – page 40].</p> <p>[OM = ASAP (eliminating stains and foreign particles such as tar spots, oil patches, insect splatter, etc.) – page 40]; [FTI (Wash the Car) = Often; ASAP if tree sap, insect or other sprays, road salt, industrial fallout, tar, or anything similar is on the car; Often when conditions exist such as salt air near coastlines, factory smoke and other conditions found in today’s cities can cause corrosion to chrome plated or anodized aluminum finishes - page 46-01-01].</p> <p>[OM = Once or Twice a Year (polishing) – page 41]; [FTI (Polishing) = Once or Twice a Year – page 46-01-01].</p>	<p>Up-Keep of Bodywork (Removing Stains, Washing the Car, Polishing the Car) [OM pages 40, 41].</p> <p>Wash the Car [FTI page 46-01-01].</p> <p>Polish the Paint [FTI page 46-01-01].</p> <p>Clean Chrome*** *****Tailpipe Tips [PBN].</p>	<p>See OM Pages 40 “Up-Keep of Bodywork” &amp; “Removing Stains”, 41 “Washing the Car” &amp; “Polishing the Car” [OM].</p> <p>See FTI page 46-01-01 “Exterior Finish General Service (General Information – Washing, Polishing, Chrome and Bright Metal Care) [FTI].</p>	<p>Removing Stains: Good quality commercial preparations [OM page 40].</p> <p>Washing: Liberal supply of water at low pressure, solution of water and soft car shampoo highly diluted (using sponge), and chamois leather (drying) [OM page 41]; Use Ford Multi-Purpose Cleaner, followed by a rinse with clean cold water (Do not wash car with hot water, or while the sheet metal is hot, never wipe dirt from dry painted surfaces, do not use strong soaps or detergents, do not allow cleaner to dry on the car) [FTI page 46-01-01]; Never wash car in direct sunlight, never wipe dry dusty surfaces [OM page 41].</p> <p>Polishing: Good quality synthetic paint car polish [OM page 41]; Ford Brand Polish [FTI page 46-01-01].</p> <p>Chrome and Bright Metal Care: Use Ford Bright Metal Cleaner (on all chrome-plated and anodized aluminum parts) [FTI page 46-01-01].</p>	<p>Car Polish: 3M One Step Cleaner Wax #39006 [PBN/WEB – Attachment 9b Consumer Reports “Auto Polishes Ratings 5/00”]. <a href="#">(Is Zaino Brother’s stuff better? – see Attachment 9c)</a></p> <p>Removing Stains: “Bug &amp; Tar and Tree Sap Remover” by TurtleWax [PBN – need to research though to see if best].</p>	<p>TOPS AND EXTERIOR FINISHES (GENERAL)</p> <p>Related Check/Repaint Car entry in Yearly section [PBN].</p> <p><i>Related Check Side View Mirrors to be sure Glued on Tight entry above [PBN – TEMP].</i></p> <p>Related Cleaning the Windows entry below [PBN].</p> <p>Related Cleaning Wheels and Tires entry below [PBN].</p>	<p>*Note: Get car “Detailed” twice a year (see separate Up-Keep of Interior (cleaning) entry above and Cleaning the Windows entry and Cleaning the Wheels entry below too). WARN DETAILER <i>ABOUT THE LIGHTLY GLUED ON SIDE MIRRORS</i>, AND NOT TO RINSE/SPRAY CAR WITH WATER WHICH CAN CAUSE RUSTING (see also detailer warning note in “Up-Keep of Interior” entry above) [PBN].</p> <p>**Note: Even the most durable of car waxes only lasted about 2 months in normal use [WEB - Attachment 9a Consumer Reports “Auto Polishes 5/00”].</p> <p>Note: Don’t have car “pressure washed”, or if do be sure don’t direct the blast directly at the rear upright bearing areas (can blow water past the seals and lead to rusted bearings) [PBN – WEB].</p> <p><i>Note: I installed the Vader headlight modification [PBN].</i></p> <p>***Note: The exhaust chrome extensions are corroding in service. Ghia engineering have released a separate chrome extension which will slip over the muffler outlet [PPQR Chassis item 8].</p> <p>**** Note: <i>Previous owner replaced original exhaust system (headers, manifolds, tailpipes and mufflers) with “Mind-Train Enterprises “Big Throats” Exhaust System” [PBN].</i></p>
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<p>LOW [PBN].</p> <p><i>PBN does, except detailing</i></p>	<p>Bi-Monthly (Jan, Mar*, May, Jul, Sep*, Nov) [PBN].</p>	<p>Clean Wheels and Tires [PBN].</p>	<p>Use tire blackening stuff on tires [PBN].</p>	<p>Magnesium Wheel Paint: Argent silver (Ditzler Part No. DX 8555) [TSB Bulletin 11 Article #92].</p>	<p>Wheel Cleaner: Castrol Super Clean Spray &amp; Rinse All Wheel Cleaner** [PBN – need to research though to see if best].</p> <p>Tire Black: Meguiar’s Gold Class Endurance High Gloss Long Lasting Tire Protectant Gel [PBN/WEB – Attachment 9c].</p>	<p>WHEELS AND TIRES (GENERAL)</p> <p>Related Up-Keep of Bodywork (Removing Stains, Washing the Car, Polishing the Car) entry above [PBN].</p> <p>Related Check Tire Inflation Pressure entry below [PBN].</p> <p>Related Inspect Wheels and Tires entry in 5000 Miles section [PBN].</p>	<p>*Note: Get car “Detailed” twice a year (see separate Up-Keep of Bodywork (Removing Stains, Washing the Car, Polishing the Car) entry (and its detailer warning note) and Up-Keep of Interior (cleaning) entry (and its detailer warning note) above and Cleaning the Windows entry below too) [PBN].</p> <p>**Note: Is safe to use on mag wheels [Castrol Super Clean Spray &amp; Rinse All Wheel Cleaner instructions].</p>
<p>MEDIUM [PBN].</p> <p><i>PBN does</i></p>	<p>Bi-Monthly (Jan, Mar, May, Jul, Sep, Nov) [PBN].</p> <p>[OM = Frequently – page 55, prior to starting – page 14].</p>	<p>Check Tire (air) Inflation Pressure [OM pages 14, 55].</p>	<p>See OM page 55 “Wheels and Tires” [OM].</p>	<p>Inflation Pressure Front Tires: 28* psi [OM page 55, TSB Bulletin 2 Article # 10]; 28 psi (cold inflation pressure) [Sticker on door jam]; 28 pounds (Michelin or Pirelli tires) [PSH page 30]; See PITI Group 11 Article #4 “Pantera Detomaso L &amp; GTS Optional Fitment &amp; Setting” [PITI].</p> <p>Inflation Pressure Rear Tires: 26* psi [OM page 55, TSB Bulletin 2 Article # 10]; 26 psi (cold inflation pressure) [Sticker on door jam]; 26 pounds (Michelin or Pirelli tires) [PSH page 30]; See PITI Group 11 Article #4 “Pantera Detomaso L &amp; GTS Optional Fitment &amp; Setting” [PITI].</p> <p>Checking Inflation: Tire inflation pressure should be checked with cold tires only [OM page 55].</p>		<p>WHEELS AND TIRES (TIRES)</p> <p>Related Tire and Wheel condition/ balance check entry in 5000 Miles section [PBN].</p> <p>Related Clean Wheels and Tires entry above [PBN].</p>	<p>*Note: For consistent maximum speed driving (turnpike cruising) increase the above pressure ratings by 5 psi [OM page 55].</p>

<p>LOW [PBN].</p> <p><i>PBN does, except detailing</i></p>	<p>Bi-Monthly (Jan, Mar*, May, Jul, Sep*, Nov) [PBN].</p> <p>[OM = Regular Intervals (Up-Keep of bodywork) – page 40].</p>	<p>Up-Keep of Bodywork (Cleaning the Windows) [OM page 41].</p>	<p>See OM Page 41 “Cleaning the Windows” [OM].</p> <p>See FTI page 43-01-01 “Door, Windshield, and Rear Window Glass (General Information - Cleaning and Inspection)” [FTI].</p> <p>Use car wax on all exterior glass (see Attachment 7 “Windshield Cleaning”) [WEB].</p> <p>PUT RAIN-X** ON EXTERIOR GLASS AND FOG LIGHTS AND HEADLIGHTS [PBN – Rain-X Instructions].</p> <p>PUT RAIN-X ANTI-FOG ON INTERIOR GLASS (WINDSHIELD, SIDE AND REAR WINDOWS, REARVIEW**** MIRROR) [PBN – Rain-X Instructions].</p>	<p>Cleaning Windows: Windshield washing liquid, and very soft damp cloth or chamois leather [OM page 41]; Use only liquid cleaning solvent (do not use steel wool or abrasives, or the glass will be damaged) [FTI page 43-01-01].</p> <p>Applying Invisible Glass: See instructions on can (NOT recommended for clear plastics***, or surfaces that could be damaged by water or solvents). Discard if not used by “USE BY month/year” date on bottom of can [PBN – Invisible Glass Instructions].</p> <p>Applying Rain-X and Rain-X Anti-Fog: See instructions on bottle (do NOT use on plastics, painted surfaces, non-clear surfaces, surfaces treated with anti-reflective, scratch resistant, or other coatings [PBN – Rain-X and Rain-X Anti-Fog instructions].</p> <p>Applying Bar Keepers Friend Cleanser &amp; Polish: See instructions on can [PBN].</p>	<p>Window Glass Cleaning: “Invisible Glass” by Stoner [PBN/WEB – Attachments 12 “Detailing Your Pantera”, 13 “Invisible Glass”].</p> <p>Window Glass Road Film Removal: Bar Keepers Friend Cleanser &amp; Polish (has no abrasives) [PBN – TV Car Show].</p> <p>Exterior Glass Treatment: Rain-X [PBN].</p> <p>Interior Glass Treatment: Rain-X Anti-Fog [PBN – TV Car Show].</p>	<p>WINDOW GLASS (GENERAL)</p> <p>Related Windshield Washer Reservoir entry above [PBN].</p> <p>Related Up-Keep of Bodywork (Removing Stains, Washing the Car, Polishing the Car) entry above [PBN].</p>	<p><i>Note: Previous owner replaced original windshield glass due to damage from a stone [PBN].</i></p> <p><i>*Note: Get car “Detailed” twice a year (see separate Up-Keep of Bodywork (Removing Stains, Washing the Car, Polishing the Car) entry (and its detailer warning note) above and Up-Keep of Interior (cleaning) entry (and its detailer warning note) and Cleaning the Wheels entry above too) [PBN].</i></p> <p><i>**Note: Rain-X seals glass and repels rain, sleet and snow on contact (rain drops bead up and are blown away by windflow improving visibility and safety), and allows for easy removal of frost, ice, salt, mud, and bugs [PBN – Rain-X Instructions].</i></p> <p><i>***Note: MY RADIO FACEPLATE AND ARMREST CLOCK GAUGE HAVE PLASTIC THAT INVISIBLE GLASS CAUSES TO HAZE (can use clear coat safe car cleaner wax/paint scratch remover to remove haze) [PBN – Invisible Glass Technician].</i></p> <p><i>****Note: I replaced inside rearview mirror with electric auto-dimming mirror [PBN].</i></p>
Semi-Yearly							
<p>LOW [PBN].</p> <p><i>PBN does</i></p>	<p>Semi-Yearly (March, November) [PBN].</p>	<p><i>Perform Routine Maintenance on Garage Dehumidifier to ensure continued full efficiency (Clean* the surface of the evaporator and condenser coils, Check* that the fan** is firmly secured to the motor shaft and that the fan rotates freely, Check the refrigerant charge, Check* all wiring connections, Inspect* the drain tray for water stoppage (if accumulation is excessive, check the drain pipe for blockage), Check* the operation of the defrost system) [Ebac Model CD30 Industrial Dehumidifier Owner’s Manual – page 5].</i></p>		<p><i>Cleaning Surface of Evaporator and Condenser Coils: Use compressed air, or vacuum clean the coils (do NOT steam clean refrigeration coils) [Ebac Model CD30 Industrial Dehumidifier Owner’s Manual].</i></p> <p><i>Checking Refrigerant Charge: Frosting of only the front coils or less, accompanied by frosting of the thin capillary tube, indicates a loss of refrigerant or low charge [Ebac Model CD30 Industrial Dehumidifier Owner’s Manual].</i></p>		<p>GARAGE</p> <p><i>Related Check that Dehumidifier is still on entry in Bi-Monthly Section [PBN].</i></p>	<p><i>Note: Dehumidifier won’t work below 33 degrees F [Ebac Model CD30 Industrial Dehumidifier Owner’s Manual].</i></p> <p><i>*Note: Ensure that the power cord to the machine has been disconnected before carrying out this maintenance [Ebac Model CD30 Industrial Dehumidifier Owner’s Manual].</i></p> <p><i>**Note: The fan motor is sealed for life and therefore does not need oiling [Ebac Model CD30 Industrial Dehumidifier Owner’s Manual].</i></p>

LOW [PBN]. <i>PBN does</i>	Semi-Yearly (March, November) [PBN].  [Clopay Installation & Maintenance Steel Residential Garage Door Instructions = At least twice a year – page 32].	Clean* the Garage Door [Clopay Installation & Maintenance Steel Residential Garage Door Instructions – page 32].	See Clopay Installation & Maintenance Steel Residential Garage Door Instructions page 32 “Cleaning the Door” [Clopay Installation & Maintenance Steel Residential Garage Door Instructions].	Cleaning Door: Wipe down with a mild household detergent and rinse with clear water [Clopay Installation & Maintenance Steel Residential Garage Door Instructions – page 32].		GARAGE	*Note: Clean in order to prevent damage (rusting) caused by foreign matter adhering to the door [Clopay Installation & Maintenance Steel Residential Garage Door Instructions – page 32].
LOW [PBN]. <i>PBN does</i>	Semi-Yearly (March, November) [PBN].  [Lift-Master Garage Door Opener Owner’s Manual = Twice a Year – page 27].	Check* Garage Door Opener Chain Tension (adjust if necessary) [Lift-Master Garage Door Opener Owner’s Manual – page 27].	See Lift-Master Garage Door Opener Owner’s Manual page 7 “Assembly Step 3 (Tighten the Chain)” [Lift-Master Garage Door Opener Owner’s Manual].			GARAGE  Related Manually Operate Garage Door entry in Bi-Monthly section [PBN].  Related Lubricate all Moving Parts of the Garage Door entry in Yearly section [PBN].  Related Check Garage Door Hardware entry in Yearly section [PBN].	*Note: During future maintenance, ALWAYS pull the manual release handle to disconnect trolley before adjusting chain; Disconnect trolley first [Lift-Master Garage Door Opener Owner’s Manual – pages 7 & 27].
LOW [PBN]. <i>PBN does</i>	Semi-Yearly (March, November) [PBN].	Take any stuff out of garage that’s not supposed to be allowed to freeze* (in November), and put back in (in March): 3M Cleaner Wax, Castrol Wheel Cleaner, Ziebart Rust Protection Sealant (per Ziebart guy, not on can itself) [PBN].				GARAGE	*Note: Don’t keep gallon of distilled water (to use to top off coolant periodically) in garage since will freeze/burst in winter, and will dilute coolant’s anti-freeze concentration. Keep gallon of premixed 50-50 water/antifreeze instead [PBN].
MEDIUM [PBN]. <i>PBN does (via to-do calendar)</i>	Semi-Yearly (June, December*) [PBN].	Car Insurance Renewal [PBN].  Pantera Appraisal* [PBN].	*Tell appraiser any improvements I made over “stock” car (especially new ones since last appraisal) that enhance value (give him copy of my latest “Pantera5749Modifications” document) [PBN].  *Send new appraisal to insurance co. (include my latest “Pantera5749Modifications” document if not in appraisal itself) [PBN].			PAPERWORK	*Note: Must get Pantera appraised yearly to maintain comp/coll insurance (Appraiser: Jim XXXXX, 704-XXX-XXXX) [PBN].  Note: GEICO (800-841-3000 customer service, or 800-555-9123 billing) policy # XXX-XX-XX [PBN].  Note: This is also listed on my to-do Calendar [PBN].
	Yearly						
LOW [PBN].	Yearly** (March) [PBN].  [Hypersonic 22 G.T. Installation Instructions = Lubricate each month – page 2].	Lubricate Electric Air Horns* Compressor [Hypersonic 22 G.T. Installation Instructions page 2].	See Hypersonic 22 G.T. Installation Instruction page 2 “Lubrication Instructions” [Hypersonic 22 G.T. Installation Instruction].	Horns Compressor Lubricant: Vaseline oil (one or two drops each month) [Hypersonic 22 G.T. Installation Instructions page 2].		AUXILIARY EQUIPMENT (HORNS)  Related Horn item in DOT Annual Inspection Renewal below [PBN].	* Note: Previous owner augmented horn with Fiamm electric air horns (sound with the existing horns) [PBN].  **Note: Monthly seems much too frequent, especially since rarely use horn, and went unlubricated for years when bought car and still worked fine [PBN].  Note: Air horns & compressor are in right front wheel well [MECH].

<p>HIGH [PBN].</p> <p><i>PBN does (via Annual Inspection Renewal below)</i></p>	<p>Yearly (March) [PBN].</p> <p>[FTI = Blades do not properly clean windshield after wiper blades and glass have been properly cleaned (Item should be checked periodically and service performed when required) - page 52-00-01].</p>	<p>Wiper Blade Condition [PITI Group 52 Article 1]; Inspect Windshield Wiper Blades for good contact to the glass for clear wiping action [FTI page 43-01-01]; Replace Windshield Wiper Blade Elements (if blades do not properly clean windshield) [FTI page 52-00-01].</p>	<p>See FTI page 43-01-01 "Door, Windshield, and Rear Window Glass (General Information - Cleaning and Inspection)" [FTI].</p>			<p>AUXILIARY EQUIPMENT (WINDSHIELD WIPER)</p> <p>Related Windshield Wipers item in DOT Annual Inspection Renewal below [PBN].</p>	<p>Note: 1974 models have windshield wiper arms and blades that park in the opposite side [PPQR Electrical item 5].</p>
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<p>LOW [PBN].</p> <p><i>PBN Does (with help as needed)</i></p>	<p>Yearly (March) [PBN].</p> <p>[OM = at least twice a year at the beginning of winter and in the spring – page 42].</p> <p>[PITI = periodically, especially after driving in rain or on salted roads (keep car clean and hose down the undercarriage, wheel-wells, etc.) – Group 47 Article #7; Periodic (cleaning and treatment of bottom of the rear wheelhouses, the length of both rocker panels, and front wheelwells next to the start of the rocker panels) – Group 47 Article #13]; [FTI = Improper water drainage from body is suspected (Item (body drain holes) should be checked periodically and service performed when required) - page 52-00-01].</p> <p>[PITI = periodically (check drilled rustproofing access holes plugs seals) - Group 47 Article #8].</p>	<p>Underbody*** Protection (rust and corrosion) [OM page 42].</p> <p>Inspect Structural Parts of the Pantera Body for Corrosion [WEB - Attachment 5 “Corrosion”]; Check car for dirt/rust in areas indicated in PITI Group 47 Article #15, remove as necessary [PITI]; Check car for rust in areas indicated in PITI Group 47 Article #13 [PITI]; Check rest of car for rust [PBN].</p> <p>Keep car clean and hose down the undercarriage, wheel-wells, etc., be sure drain holes are kept clear. [PITI Group 47 Article #7]; Inspect the rocker panel/quarter panel lip underneath the gas tank, and the similar lip on the right side of the car between the right rear wheel opening and the passenger door, for trapped dirt and moisture that will cause rust (clean as necessary) [PITI Group 47 Article #8]; Clean and treat bottom of the rear wheelhouses, the length of both rocker panels, and front wheelwells next to the start of the rocker panels, Keep clean and covered with paint or good quality rubberized undercoat the areas between gas tank and wheelhouse, between gas tank and extension of rocker, and inside bottom of both rear wheelhouses [PITI Group 47 Article #13]; Clean Body Drain Holes [FTI page 52-00-01].</p> <p>Check drilled rustproofing access holes plugs seals* [PITI Group 47 Article #8].</p> <p>Check engine/engine compartment for rust (especially spark plug wire holders, and various springs) [PBN].</p> <p><i>Check/Treat Interior of Aftermarket License Plate Holder/Frame/backing plate (previous owner added) for rust [PBN].</i></p> <p>Check/clean out rear bumper for road dirt/debris trapped inside it (may cause corrosion) [PBN – Attachment 24 “Rear Bumper Debris”].</p> <p><u><i>(need to split this into 2 entries – one for “underbody” and another for rest of exterior of car)?</i></u></p>	<p>See OM page 42 “Underbody Spraying” [OM].</p> <p>See PITI Group 47 Article #3 “Rust!”, Group 47 Article #4 “Fuel Tank Corrosion”, Group 47 Article #7 “Rust!”, Group 47 Article #8 “More On Rust!”, Group 47 Article #13 “Restoration of a Pantera”, Group 47 Article #15 “Detailed Look at Causes of Rocker Panel Rust” [PITI].</p> <p>See Attachment 4 “Maintenance and Safety Inspections (Structural Body Corrosion)” [WEB]; SEE ATTACHMENT 5 “CORROSION” [WEB].</p> <p>Take to a place with a lift so can look at underside – if any rust areas or places where undercoating is chipped off clean and spray with rust inhibitor, and then with underbody coating stuff [PBN].</p> <p>See Attachment 24 “Rear Bumper Debris” [PBN].</p>	<p>Undercoating Protectant: Good quality commercially available products [OM page 42]; Best quality injection type system you can find [PITI Group 47 Article #7].</p> <p>Body Sections Rust Inhibitor: Top Quality inhibiting Paint [PITI Group 47 Article #7].</p> <p>Treatment of Bottom of the Rear Wheelhouses, the Length of Both Rocker Panels, and Front Wheelwells Next to the Start of the Rocker Panels: Rust-O-Leum or similar spraypaints or 3M rubberized undercoat [PITI Group 47 Article #13].</p> <p>Cleaning/Filling Rocker/Quarter Panel Lip: Vacuum cleaner, Pheno-Seal, and Texaco Rustproofing Compound “L” [PITI Group 47 Article #8].</p>	<p>Undercoating*: Motorcraft (Ford) Super Seal Anti-Corrosion Compound; Ziebart Rust Protection Sealant – Clear [PBN – need to research though to see which/what is best].</p> <p>Rustproofing Sealant (Door, Hood, and Deck Lid Seams): Ziebart Rust Protection Sealant – Clear [PBN – need to research though to see if best].</p> <p>Rust Inhibitor: Permatex Extend Rust Treatment [PBN – need to research though to see if best].</p>	<p>BODY SHELL AND EXTERIOR TRIM (GENERAL)</p> <p>Related General Exhaust System (Corrosion) Check in 30,000 Miles section [PBN].</p> <p><i>Related Change Fuel Filter (due to gas tank filler neck rust**) entries in 5000 Miles section [PBN - TEMP].</i></p> <p>Related Check (repair/replace if needed) stuff normally don’t have easy access to (inspect for rusting components/areas, check the pressure and overflow coolant tanks for internal rust, inspect gas tank, etc) in Whenever Engine Removed section [PBN].</p> <p><i>Related Replace the Stock Sintered Bronze Fuel Filters (due to gas tank filler neck rust**) in Holley Carburetors entry in Never section [PBN].</i></p>	<p><i>*Note: In 2000 I had drain holes drilled in underbody/frame (more holes drilled in 2002) and dust/dirt blown out and applied OSPHO rust protection chemical. Later sprayed on undercoating by Ford. I then had car completely rust protected by Ziebart in 2001 – shouldn’t need to retreat, except to patch up any underbody coating that gets chipped off etc by stones or whatever, and they suggested I respray bottom inside edges of doors yearly (however, I may want to bring it back in a few years for a “check up”) [PBN – Ziebart Guy].</i></p> <p><i>Note: Previous owner had gas tank internally coated to prevent rusting (but not filler tube/neck or cap area) [PBN].</i></p> <p><b>**NOTE: RUST IS DEVELOPING ON OUTSIDE OF GAS TANK AND IN FILLER NECK – NEED TO TREAT (I had outside of gas tank sprayed with Ziebart stuff, but may not have gotten all the way to top of tank) [PBN - TEMP].</b></p> <p><i>Note: I had exhaust system Jet-Hot coated*** to prevent rusting (previous owner replaced original exhaust system (headers, manifolds, tailpipes and mufflers) with “Mind-Train Enterprises “Big Throats” Exhaust System”) [PBN].</i></p> <p><b>***Note: Jet-Hot Black should never be polished or rubbed [Jet-Hot Coating Installation and Maintenance Tips].</b></p> <p><i>Note: Previous Owner indicated passenger floorboard got wet from dripping A/C condensation, and also car flooded once due to a broken heater hose – therefore keep eye out for any floorboard rust [PBN].</i></p>
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LOW [PBN].	Yearly (March) [PBN].	Clean Engine & Rear Trunk Compartment [PBN]; Degrease Engine & Transaxle Assembly [PITI].				<p>BODY SHELL AND EXTERIOR TRIM (GENERAL); ENGINE (GENERAL); CLUTCH AND TRANSAXLE (TRANSAXLE)</p> <p>Related Check Garage Floor for Indications of Fluid Leaks from car entry in Bi-Monthly section [PBN].</p> <p><i>Related Check Holley 600 Carburetor Diaphragm for Leaks entry in 5000 Miles section [PBN].</i></p> <p>Related Check for Water, Oil, Gasoline, Brake and Clutch Fluid Leakage entry in 10,000 Miles section [PBN].</p> <p>Related Fuel System Components including carburetor should be inspected to assure no fuel leakage entry in 15,000 Miles section [PBN].</p> <p>Related Inspect all Cooling System hoses, and connections for leaks entry in 15,000 Miles section [PBN].</p> <p>Related Fuel System Components including fuel lines should be inspected to assure no fuel leakage entry in 15,000 Miles section [PBN].</p> <p>Related Miscellaneous Stuff To Do When Engine Is Removed entry in When Engine Removed section [PBN].</p> <p>Related Miscellaneous Stuff To Do When Transmission/Clutch Is Removed entry in When Transaxle Removed section [PBN].</p>	<p>Note: Important to do this to help identify leaks [PBN].</p> <p><u>OK to have it "steam cleaned", or will that cause rust? PITI guy used water soluble degreaser.</u></p> <p><i>Note: Jet-Hot Black (on exhaust system) should never be polished or rubbed [Jet-Hot Coating Installation and Maintenance Tips].</i></p>
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<p>HIGH [PBN].</p> <p><i>PBN does (via Inspection Station)</i></p>	<p>Yearly (March) [PBN].</p> <p>[OM = Excessive brake pedal free travel noticed - page 16].</p> <p>[OM = Brake Hydraulic System Indicator Lamp (special warning device) lights up** - page 16]; [FTI = Red (Parking) Brake Warning Light glows when (foot) brakes applied - page 33-06-03].</p>	<p>Brake Operation Check/Correct (road test check for following conditions: pull in either direction, harshness or noise, excess pedal effort or spongy feel, operation of brake warning light, hard stops and slow gradual stops) [FTI]; Check* brake system, and if necessary, bleed (if excessive brake pedal free travel noticed) [OM page 16].</p> <p>Check Brake system without delay (if Brake Hydraulic System Indicator Lamp (special warning device) lights up) [OM page 16]; There is a fault in the hydraulic system (pressure differential exists between front and rear braking systems) (if Red (Parking) Brake Warning Light glows when (foot) brakes applied) [FTI page 12-01-02, 33-06-03].</p>	<p>See FTI pages 53-02-01 “Brake Operation Check”, 12-01-06 “Adjustments (Brake Pedal)”, 12-01-06 “Hydraulic System Bleeding”, 12-01-02 “Testing (Brake System Tests, &amp; Brake Warning Light sections)”, 12-01-07 “Cleaning and Inspection (Brake System)” [FTI].</p> <p>See TSB Bulletin 10 Article # 83 “Brake Master Cylinder Adjustments” [TSB].</p> <p>See PITI Group 12 Article #3 “Brake Master-Cylinder Rebuild” [PITI].</p>	<p>Brake System Fluid/Brake Master Cylinder Lubricant: SAE J 1703 b [OM page 72]; Ford Brake Fluid Extra Heavy Duty (Ford Part No. C6AZ-19542-A, Ford Specification ESA-M6C25-A) [FTI page 12-01-06 and 53-01-03]; Castrol GT LMA conventional fluid or silicone-based*** ***** brake fluid [PITI Group 12 Article #3].</p> <p>Brake Master Cylinder Push Rod Length: 1.16 inches [TSB Bulletin 10 Article # 83].</p> <p>Bleeding: When bleeding your brakes, do not depress brake pedal any farther than normal travel (will avoid tearing up your rubber seals by moving them down into a bore area that has some corrosion in it) [PITI Group 12 Article #3]; All brake systems, especially tandem master cylinder types are best bled using a pressure bleeder. If you cannot properly pressure bleed, much time will be required to bleed manually, so have patience. Note: The front calipers are very difficult to bleed even when using a pressure bleeder, due to their original design. [PBN – Hall Pantera Brake Master Cylinder Installation Instructions].</p>		<p>BRAKES (GENERAL, HYDRAULIC)</p> <p>Related Foot Brake and Emergency Brake items in DOT Annual Inspection Renewal below [PBN].</p> <p>Related Road Test entry in 10,000 Miles section [PBN].</p> <p>Related Brake Pads check entry in 30,000 Miles section [PBN].</p> <p>Related Brake Fluid entry in 5000 Miles section [PBN].</p> <p>Related Coat the Brake Pedal Return Spring with Anti-Seize entry in 50,000 Miles section [PBN].</p>	<p><i>Note: Previous owner installed stainless steel flex brake lines, and replaced brake master cylinder with different design from Hall Pantera [PBN].</i></p> <p>*Note: Have service (hydraulic system)/hand brake warning light on dash instrument panel [OM page 16].</p> <p>**Note: Light signals any malfunction within the brake system [OM page 16].</p> <p>***Note: Silicone brake fluid is not practical for most Pantera Owners – only those who totally change brake systems to American parts and are willing to accept a little softness in the brake pedal [POTI Group 12 “About Pantera Brakes – Part I].</p> <p>****Note: Silicone fluids tend to entrap air, so the bleeding process should be done several times over a period of days [PITI Group 12 Article #3].</p>
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HIGH [PBN].	Yearly (March*) [PBN].  [OM = 12,000 miles or 12 months, at least once a year]; [PITI = The Castrol fluid should be flushed each year - PITI Group 12 Article #3].	Change* ***** Brake Fluid [OM].	See FTI pages 12-01-06 “Hydraulic System Bleeding”, 12-01-02 “Testing (Brake System Tests, & Brake Warning Light sections)”, 12-01-07 “Cleaning and Inspection (Brake System)” [FTI].  See PITI Group 12 Article #3 “Brake Master-Cylinder Rebuild” [PITI].	Brake System Fluid/Brake Master Cylinder Lubricant: SAE J 1703 b [OM page 72]; Ford Brake Fluid Extra Heavy Duty (Ford Part No. C6AZ-19542-A, Ford Specification ESA-M6C25-A) [FTI page 12-01-06 and 53-01-03]; Castrol GT LMA conventional fluid***** or silicone-based** *** brake fluid [PITI Group 12 Article #3].  Brake Fluid Level: Fill to indicated level marked on the reservoir [FTI page 53-04-02].  Bleeding: When bleeding your brakes, do not depress brake pedal any farther than normal travel (will avoid tearing up your rubber seals by moving them down into a bore area that has some corrosion in it) [PITI Group 12 Article #3]; All brake systems, especially tandem master cylinder types are best bled using a pressure bleeder. If you cannot properly pressure bleed, much time will be required to bleed manually, so have patience. Note: The front calipers are very difficult to bleed even when using a pressure bleeder, due to their original design. [PBN – Hall Pantera Brake Master Cylinder Installation Instructions].		BRAKES (HYDRAULIC)  Related check level at 5000 miles, change fluid at 15,000 miles entry in 5000 Miles section [PBN].	<i>Note: Previous owner installed stainless steel flex brake lines, and replaced brake master cylinder with different design from Hall Pantera [PBN].</i>  *Note: Check level at 5000 miles, Change at 15,000 miles or at least yearly (see separate entries) [PBN].  Note: if fluid is turning black, it indicates the seals are degrading ( <i>already happened to me once</i> ) [MECH] – (may be just some minor black seal stuff settling on bottom of reservoir container making fluid look black) [PBN].  **Note: Silicone brake fluid is not practical for most Pantera Owners – only those who totally change brake systems to American parts and are willing to accept a little softness in the brake pedal [POTI Group 12 “About Pantera Brakes – Part I].  ***Note: Silicone fluids tend to entrap air, so the bleeding process should be done several times over a period of days [PITI Group 12 Article #3].  ****Note: Silicone fluids do not require periodic flushing [PITI Group 12 Article #3].  *****Note: The Castrol fluid should be flushed each year to eliminate corrosion caused by water absorption [PITI Group 12 Article #3].
LOW [PBN].  <i>PBN does</i>	Yearly (March) [PBN].	<i>Check* Operation of Car Burglar Alarm [PBN].</i>	<i>See owners manual for description of what it's supposed to do (need to ref pages in manual that say this) [PBN].</i>  <i>In addition confirm rear trunk lid switch I had connected to it sets off** alarm [PBN].</i>			BURGLAR ALARM  <i>Related Replace Burglar Alarm Remote Control Battery entry below [PBN].</i>	<i>*Note: the system requires no specific maintenance [Viper Auto Security System Owners Guide].</i>  <i>**Note: Spray Contact Cleaner on rear trunk lid open sensor switch if not working consistently [PBN].</i>
LOW [PBN].  <i>PBN does</i>	Yearly (March*) [PBN].	<i>Replace (as necessary) Car Burglar Alarm remote control battery (one on keychain, and extra emergency one hidden in car) [Viper Auto Security System Owners Guide].</i>		<i>Remote Control Battery: Small lightweight 3-volt lithium battery [Viper Auto Security System Owners Guide].</i>		BURGLAR ALARM  <i>Related Check Burglar Alarm Operation entry above [PBN].</i>	<i>*Battery will last approximately one year under normal use [Viper Auto Security System Owners Guide].</i>

VARIES [PBN].	Yearly (March) [PBN].  <u>(May need to move this to 10,000 mile section since normally don't have to take trunk tub out at 5000 mile or Yearly (March) maintenances)</u>	Have Mechanic do general all over inspection of car to look for anything that's wearing out, deteriorating, starting to break, leaking, loose, etc. [PBN].				CAR  Related Check (Repair/Replace If Needed) Stuff Normally Don't Have Easy Access To entry in Whenever Engine Removed section [PBN].  Related Check (Repair/Replace If Needed) Stuff Normally Don't Have Easy Access To entry in Whenever Transaxle Removed section [PBN].	
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<p>MEDIUM [PBN].</p> <p><i>PBN does (via Inspection Station)</i></p>	<p>Yearly (March) [PBN].</p>	<p>N.C. Dept of Transportation Annual Inspection* Renewal [PBN].</p>			<p>-----</p> <p>**** Addition (There wasn't room for this in Notes column -PBN):</p> <p><i>Note: Previous owner added aftermarket license plate frame to original license plate holder [PBN].</i></p> <p><i>Note: Previous owner replaced drivers side view mirror with a different design, and added a passenger side view mirror (I replaced both with different design) [PBN].</i></p> <p><i>Note: Previous owner removed vacuum smog control stuff [PBN].</i></p> <p><i>Note: I installed the Vader headlight modification [PBN].</i></p> <p><i>Note: Previous owner replaced original exhaust system (headers, manifolds, tailpipes and mufflers) with "Mind-Train Enterprises "Big Throats" Exhaust System" [PBN].</i></p> <p><i>Note: I replaced inside rearview mirror with electric auto-dimming mirror [PBN].</i></p>	<p>CAR; AUXILIARY EQUIPMENT; BRAKES; ENGINE; EXHAUST SYSTEM; FUEL SYSTEM; INSTRUMENTS, CLUSTERS, AND CONTROLS; LIGHTING SYSTEM; STEERING; WHEELS AND TIRES; WINDOW GLASS <a href="#">(add componentsto?)</a></p> <p>Related Check Tire Wear/Condition entry in 5000 Miles section [PBN].</p> <p>Related Replace PCV Valve entry, Check EGR System entry in 15,000 Miles section [PBN].</p> <p>Related Check Steering Control entry in 15,000 Miles section [PBN].</p> <p><i>Related Lubricate Electric Air Horns Compressor entry above [PBN].</i></p> <p>Related Wiper Blade Condition entry above [PBN].</p> <p>Related Lighting System entry below [PBN].</p> <p>Related Brake Operation Check entry above, Brake Pads check entry in 30,000 Miles section, Handbrake/Parking Brake entry in 15,000 Miles section [PBN].</p> <p>Related General Exhaust System Check entry in 30,000 Miles section [PBN].</p> <p>Related** Inspect Evaporative Emission Canister entry in 30,000 Miles section [PBN].</p> <p>Related*** Adjust Automatic Choke Thermostatic Spring Housing Adjustment entry in 15,000 Miles section [PBN].</p> <p><a href="#">(Is some of the "Tampering Inspection" stuff listed in column to right related to other stuff on this checklist that I haven't cross ref'ed - if so need to add cross refs)</a></p>	<p>*Note: State of <i>North Carolina</i> Vehicle Inspection items: Safety Equipment: Headlights, Parking Lights, Tail Lights, Beam Indicator Light/Switch, License Plate Light, Stop Lights, Directional Signals, Horn, Windshield Wipers, Rear View Mirrors, Foot Brake, Emergency Brake, Steering Mechanism, Tires, Exhaust System, Clearance Lights, Reflectors, Window Tinting; Tampering Inspection <i>(Note: all Tampering stuff N/A to 1973 car, in NC only 1975 and above cars must pass emissions test):</i> Catalytic Converter, Air Injection System, PCV Valve, Unleaded Gas Restrictor, Exhaust Gas Recirculation, Thermostatic Air Control, Fuel Evaporation Control, Oxygen Sensor, Gasoline Tank Cap; Exhaust Emission Test: <i>(Note: Emissions test N/A to 1973 car, in NC only 1975 and above cars must pass emissions test)</i> [PBN - 2000 NC Inspection receipt/statement].</p> <p>**Note: "Catalytic Converter" is not the same thing as "Evaporative Emission Canister" (in Inspect Evaporative Emission Canister entry in 30,000 Miles section), but is similar in that it is for emissions control [MECH].</p> <p>***Note: "Thermostatic Air Control" is same thing as "Thermostatic Spring Housing" in Adjust Automatic Choke Thermostatic Spring Housing Adjustment entry in 15,000 Miles section [MECH].</p> <p><i>Note: Previous owner replaced USA style (red) taillight lenses with European style (amber and red) tail light lenses [PBN].</i></p> <p><i>Note: Previous owner installed Fiamm electric air horns (sound with the existing horns) [PBN].</i></p> <p>See ****Addition [PBN].</p>
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LOW [PBN]. <i>PBN does</i>	Yearly (March) [PBN]	Check Condition (replace if expiration dates exceeded or used up or otherwise as necessary) of the routine items I store in front trunk: Fire Extinguisher, Quart of Oil, Spare Fuses, Can of Brake Fluid, Can of De-Icer, Bottle of Water Wetter, Can of Fix-A-Flat (NON-Flammable) [PBN].				DOORS, HOOD, AND LUGGAGE COMPARTMENT (LUGGAGE COMPARTMENT)	Note: revise this entry yearly to reflect any new stuff I may store (or no longer need to store) [PBN].
HIGH [PBN]. <i>PBN does</i>	Yearly (July) [PBN].	Cut Down any Dead/Dying Trees that could fall on Garage [PBN].				GARAGE	
LOW [PBN]. <i>PBN does</i>	Yearly* (July) [PBN]. <i>[Liftmaster Wireless Keyless Entry Manual = Replace when keypad illumination becomes dim* - page 2].</i>	<i>Check (Replace if needed) Battery in Garage Door Keypad Opener (on Garage exterior wall) [PBN].</i>	<i>See Liftmaster Wireless Keyless Entry Manual page 1 [Liftmaster Wireless Keyless Entry Manual].</i>	<i>Keypad Battery: 9 volt battery[Liftmaster Wireless Keyless Entry Manual – page 2].</i>		GARAGE  <i>Related Check/Replace Garage Door Remote Control (in car) Battery entry in 5 Years section [PBN].</i>	<i>*Note: The keypad battery should produce power for at least one year [Liftmaster Wireless Keyless Entry Manual – page2].</i>
LOW [PBN]. <i>PBN does</i>	Yearly (July) [PBN].  <i>[Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions = Annually – page 32]; [Lift-Master Garage Door Opener Owner’s Manual = Once a Year – page 27].</i>	<i>Lubricate All Moving Parts of the Garage Door*** (Lift cables at the bottom bracket button, Lock hardware where surfaces turn or slide, Full length of torsion spring, Steel rollers*) [Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions – page 32]; Oil Garage Door** *** Rollers, Bearings and Hinges [Lift-Master Garage Door Opener Owner’s Manual – page 27].</i>	<i>See Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions page 32 “Lubrication” [Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions].</i>	<i>Garage Door Lubricant: Light household oil [Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions – page 32].</i>		GARAGE  <i>Related Manually Operate Garage Door entry in Bi-Monthly section [PBN].</i>  <i>Related Check Garage Door Opener Chain Tension entry in Semi-Yearly section [PBN].</i>  <i>Related Check Garage Door Hardware entry below [PBN].</i>	<i>*Note: Do NOT lubricate nylon rollers [Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions – page 32].</i>  <i>**Note: The garage door opener does not require additional lubrication [Lift-Master Garage Door Opener Owner’s Manual – page 27].</i>  <i>***Note: Do not grease the door tracks [Lift-Master Garage Door Opener Owner’s Manual – page 27].</i>
LOW [PBN]. <i>PBN does</i>	Yearly (July) [PBN].  <i>[Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions = Annually – page 32].</i>	<i>Check Garage Door Hardware*: Check for loose or bent hinges (tighten loose hinges, straighten or replace bent hinges); Check roller for broken wheels, bent shafts, or worn out bearings; Check the door and track supports for loose or missing bolts, screws, etc. and tighten**; Check for bent track [Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions – page 32].</i>	<i>See Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions – page 32 “Check Door Hardware” [Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions – page 32].</i>			GARAGE  <i>Related Manually Operate Garage Door entry in Bi-Monthly section [PBN].</i>  <i>Related Check Garage Door Opener Chain Tension entry in Semi-Yearly section [PBN].</i>  <i>Related Lubricate all Moving Parts of the Garage Door entry above [PBN].</i>	<i>*Note: Torsion spring assembly and wood anchor pad should only be adjusted or repaired by a professional door technician [Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions – page 32].</i>  <i>**Note: Be careful not to overtighten [Clopay Installation &amp; Maintenance Steel Residential Garage Door Instructions – page 32].</i>
LOW [PBN]. <i>PBN does</i>	Yearly (March) [PBN]	Check Condition (replace if expiration dates exceeded or used up or otherwise as necessary) of the routine items I store in Glove Compartment: Spare Contact Lenses (and eye drops), Eyeglasses, Car registration/license plate renewal card, Car Proof of Insurance card, Flashlight (battery and bulb) [PBN].				INTERIOR TRIM (GLOVE BOX)  Related Replace Outdated Driving Map entry in 5 Years section [PBN].	Note: revise this entry yearly to reflect any new stuff I may store (or no longer need to store) [PBN].

<p>HIGH [PBN].</p> <p><i>PBN does (via Annual Inspection Renewal above)</i></p>	<p>Yearly (March) [PBN].</p> <p>[FTI = Light Beam appears too high or too low (Item should be checked periodically and service performed when required) - page 52-00-01].</p>	<p>Check Operation of Lights and Turn Signals (check headlight and parking light switches to be sure all parking lights, taillights, headlights, headlight door opening mechanism, instrument lights, and interior*** lights are working; replace any burned-out bulbs and check to see that wiring connections are clean and tight) [FTI page 53-02-01].</p> <p>Check/Adjust Headlamp Setting [OM page 63]; Check/Adjust Headlight Alignment/Aim [FTI page 53-03-01]; Check Headlight alignment (if light beam appears too high or too low) [FTI page 52-00-01].</p> <p>Do visual inspection of headlight system (check for wires with frayed or damaged insulation, loose connections, and improper harness routing – correct any problems found) [FTI page 32-02-02]; Lighting System [PITI Group 52 Article 1].</p> <p>Check operation of side turn signal lights, and backup lights [PBN].</p>	<p>See OM pages 59 “Headlamp Replacement” &amp; “Front Turn Signal/Parking Bulb Replacement”, 60 “Rear Turn Signal/Parking/Back-up/Stop/Number Plate Bulb Replacement”, 61 “Front Side marker Bulb Replacement”, 62 “Rear Side Marker Bulb Replacement”, 63 “Headlamp Aiming” [OM].</p> <p>See FTI pages 53-02-01 “Check Operation of Lights and Turn Signals”, 53-03-01 “Headlight Alignment”, 32-02-02 “Testing (Headlight System)”, “Adjustments (Headlight Alignment)”, “Removal and Installation (Headlight Bulb)”, 32-20-02 “Front Parking and Turn Signal Light Bulb”, “Rear Light Bulbs”, 32-20-03 “Marker Light Bulb – Front and Rear”, “License Light Bulb”, “Back-Up Light Bulb”, 32-40-01 “Removal and Installation (Hazard Flasher Bulb)”, 32-60-02 “Red Light on Door”, “Instrument Panel Lights**”, “Console Bulbs**” [FTI].</p> <p>See PSH page 8 “Headlight System” [PSH].</p> <p>See PITI Group 32 Article #1 “Headlights, Taillights, and Driving Lights” (<a href="#">this is repair, not maintenance?</a>) [PITI].</p>	<p>Bulbs (Back-up, Brake Warning, Cigar Lighter, Console, Courtesy (tube type), Door, Hazard Warning, Headlight, Instrument Panel, License Plate, Seat Belt Warning, Turn Indicator (front), Turn Indicator (rear)); See “Specifications (Bulb Chart)” on FTI page 32-02-04 [FTI].</p> <p>Corroded Electrical Connectors: Liquid Wrench (<a href="#">this is repair, not maintenance?</a>) [PITI Group 32 Article #1].</p> <p>Corroded Bulb Sockets: Wet/dry emery paper (<a href="#">this is repair, not maintenance?</a>) [PITI Group 32 Article #1].</p> <p>Headlight Aiming Equipment: Rotunda Headlight Aiming Kit (Model T.R.E. 540) [FTI page 53-03-01, 32-02-02].</p> <p>Headlamp Aiming Conditions: Headlamp Setting must be made with an unladen vehicle on level group [OM page 63]; Headlight Adjustments should be made with a half-full tank plus or minus one gallon, the vehicle unloaded and the rear compartment empty except for the spare tire and jacking equipment, and recommended pressure in all the tires [FTI page 53-03-01].</p> <p><a href="#">(need to determine type of bulb my added roof console map lights use and list them here)</a></p>	<p>Headlamp Bulbs*: <i>Vader modification replacement DOT headlamps include the following: H4666XV, H4666, H6545 (NAPA H6545 came with conversion kit) [Vader Pantera Headlight Conversion Installation Instructions – [PBN].</i></p>	<p>LIGHTING SYSTEM (GENERAL)</p> <p>Related lights items in DOT Annual Inspection Renewal above [PBN].</p> <p>Related Clean All Lucas Electrical Parts entry in 10,000 Miles section [PBN].</p>	<p><i>*Note: I installed the Vader headlight modification. Previous Owner had installed Cibie Z-Beam quartz headlights (see also PITI Group 32 Article #1) , including adding relays (required per Cibie instructions) in front trunk to avoid burning out the stock Pantera headlight relays or wiring – may or may not need the relays depending on what use to replace the Cibie Z-Beams. [PBN].</i></p> <p><i>**Note: I replaced original bulbs in 4 gauges on center console, and in Speedometer &amp; Tachometer, with brighter ones from Hall Pantera (the Speedometer and Tachometer bulbs are halogen – do not touch with fingers or will cause them to burn out) [PBN].</i></p> <p><i>***Note: I added roof console with map lights [PBN].</i></p> <p><i>Note: Previous owner replaced USA style (red) taillight lenses with European style (amber and red) tail light lenses [PBN].</i></p> <p><i>Note: Previous owner added aftermarket license plate frame to original license plate holder [PBN].</i></p> <p><i>Note: The plastic headlight motor gears (prone to break) have NOT (by previous owner or me) been replaced with the newer metal gears from Hall Pantera [PBN].</i></p>
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<p>LOW [PBN].</p> <p><i>PBN does</i></p>	<p>Yearly (March) [PBN]</p>	<p><i>Print out (and/or save to disk) any new/revised maintenance/technical articles from major Pantera technical websites, and add to my personal tech articles book (and incorporate into this checklist as needed) [PBN].</i></p> <p><i>Print out (and/or save to disk) any newly issued (since last year or last time did it) on-line Pantera clubs newsletters, since they sometimes contain technical articles (add any tech related articles to my personal tech article book and incorporate into this checklist as needed) [PBN].</i></p> <p><i>Save all the various Pantera Newsgroups/Bulletin Boards (Realbig, PI, PPC, etc) posts (i.e., newsgroup/bulletin board archive) to disk for future availability if newsgroup/bulletin board folds [PBN].</i></p> <p><i>Print out PI Magazine Cross Reference Index (if updated) on Back Issues page of Pantera International website to replace the (outdated) one in my personal tech articles book [PBN].</i></p>	<p><i>Be sure to update this list yearly as sites come and go. Also, if site has a "contents" or "index" of the articles, print it out and add to my personal tech articles book as an easy way to compare/identify any new articles the next year (but still need to check for revisions to old articles too) [PBN].</i></p>			<p>PAPERWORK</p>	<p><i>Note: Example websites are:</i></p> <p><i>Tech Info:</i>  <a href="http://www.panteraplace.com">www.panteraplace.com</a>,  <a href="http://geocities.com/provamos072">http://geocities.com/provamos072</a>,  <a href="http://www.panteraparts.com">http://www.panteraparts.com</a>,  <a href="http://members.aol.com/sobill/">http://members.aol.com/sobill/</a> (especially Pantera Gearheads Resource),  <a href="http://www.panteraadventure.com">http://www.panteraadventure.com</a>,  <a href="http://www.351c.info">http://www.351c.info</a> (or <a href="http://www.351cleveland.info">www.351cleveland.info</a>);  <i>Parts Info:</i>  <a href="http://www.rectec.net/~rickjoy/parts.htm">http://www.rectec.net/~rickjoy/parts.htm</a> (parts interchange list),  <a href="http://www.carfolio.com/parts">http://www.carfolio.com/parts</a> (parts interchange list);  <i>Newsgroups Info:</i>  <a href="http://realbig.com/pipermail/detomaso">http://realbig.com/pipermail/detomaso</a>,  <a href="http://64.70.166.243/cgi-bin/ubbcgi/Ultimate.cgi">http://64.70.166.243/cgi-bin/ubbcgi/Ultimate.cgi</a>,  <a href="http://www.panteraparts.com/cgi-bin/Ultimate.cgi?action=intro">http://www.panteraparts.com/cgi-bin/Ultimate.cgi?action=intro</a>,  <a href="http://www.supercars.net/cMsg?viewForumsA=y&amp;make=Detomaso">http://www.supercars.net/cMsg?viewForumsA=y&amp;make=Detomaso</a>,  <a href="http://communities.msn.com/SoutheastPanteras/messaggeboard.msnw">http://communities.msn.com/SoutheastPanteras/messaggeboard.msnw</a>,  <a href="http://www.carmemories.com/clubs/detomaso">http://www.carmemories.com/clubs/detomaso</a>;  <i>Pantera Club Websites:</i>  <a href="http://panteracars.com">http://panteracars.com</a>,  <a href="http://www.panteraclub.com">http://www.panteraclub.com</a>,  <a href="http://www.easternpantera.com">http://www.easternpantera.com</a>,  <a href="http://www.panteraclubnorcal.com">http://www.panteraclubnorcal.com</a>;  <i>On-Line Pantera Club Newsletters:</i>  <a href="http://tpoc.socalpantera.com/documents">http://tpoc.socalpantera.com/documents</a>,  <a href="http://www.norcalpanteraclub.com/library.html">http://www.norcalpanteraclub.com/library.html</a>;  <i>etc. [PBN].</i></p>
<p>LOW [PBN].</p> <p><i>PBN does</i></p>	<p>Yearly (March) [PBN]</p>	<p>Check Consumer Reports Website for new/updated car related stuff reviews (for best products etc to use for this checklist). Use other sources also to try to determine best parts/products to use for those cases where I don't have one determined, or to change currently listed parts/products to use if something better comes out [PBN].</p>				<p>PAPERWORK</p>	<p><i>Note: address is <a href="http://www.consumerreports.org">http://www.consumerreports.org</a> [PBN].</i></p> <p><i>Note: With respect to this, see note 8 above [PBN].</i></p>

<p>LOW [PBN].</p> <p><i>PBN does</i></p>	<p>Yearly (March) [PBN]</p>	<p><i>Order catalogs from major Pantera vendors (or print catalogs from their websites) to see what new car stuff (especially non-stock aftermarket parts and add-on stuff) is available [PBN].</i></p> <p><i>Check Vendor &amp; Club websites for new non-parts products (books etc) [PBN].</i></p> <p><i>Visit auto parts stores (e.g., Pep Boys, AutoZone, Advance, NAPA, etc) to see what new or better products/car stuff is available that would be useful for Pantera [PBN].</i></p>	<p><i>Be sure to update this list yearly as vendors come and go [PBN].</i></p> <p><i>Be sure to update this checklist (and/or modifications list) if find new/better products/parts to use [PBN].</i></p>			<p>PAPERWORK</p>	<p><i>Note: Example vendors with catalogs are Hall Pantera, Pantera Parts Connection, Panteras by Wilkinson (factory authorized), Pantera East, PI Motorsports, Pat Mical's Detomaso Pantera, etc. [PBN].</i></p> <p><i>Note: Example vendors with non-parts products are Pantera International, Wilkenson Pantera, etc; Example Clubs with non-parts products are POCA, PCNC, etc [PBN].</i></p>
<p>LOW [PBN].</p> <p><i>PBN does</i></p>	<p>Yearly (March) [PBN]</p>	<p>Review any modifications/enhancements I made to car in last year to see if any new maintenance stuff need to add to this checklist (or restore stuff from the "Never" section back to the to do sections) because of it. <i>Also, revise the "Pantera 5749 Modifications" attachment at beginning of this checklist if needed [PBN].</i></p> <p>Review repairs I made to car in last year and note on this checklist if replaced a stock component with a non-stock component in case that affects maintenance [PBN].</p> <p><i>If get any more historical info on my car from previous owner or other sources, revise the "Pantera 5749 Previous Owner Info" attachment at beginning of this checklist [PBN].</i></p>				<p>PAPERWORK</p>	

<p>MEDIUM [PBN].</p> <p><i>PBN does (via to-do calendar)</i></p>	<p>Yearly (March*) [PBN].</p>	<p><i>Mecklenburg</i> City-County Vehicle** (Personal Property***) Taxes [PBN].</p>				<p>PAPERWORK</p> <p>Related* Car Registration/License Plate Renewal entry below [PBN].</p>	<p><i>*Note: is due 3 months after car registration/license plate renewal done (therefore for Pantera the License Plate/Registration expires 12/31, so tax due in March and is late May 1) [PBN – TAX BILL].</i></p> <p><i>**Note: This entry covers the Pantera Vehicle taxes only, not my other cars [PBN – TAX BILL].</i></p> <p><i>***Note: Vehicle tax is special class of personal property taxes [PBN – TAX BILL].</i></p> <p>Note: 1973 DeTomaso Pantera VIN # THPNNB05749, Pantera License Plate # XXX-XXXX, Pantera Title # XXXXXXXXXXXXXXXX [PBN].</p> <p>Note: City-County Tax Collector phone 704-336-4600. Can renew online (using credit card) at <a href="http://www.co.mecklenburg.nc.us/cotax">www.co.mecklenburg.nc.us/cotax</a> , or by phone (toll free) 1-877-533-0072 [PBN].</p> <p>Note: Account No. changes yearly, Tax amount \$270 (changes yearly), Tax Value = \$18,350 (changes yearly) [PBN – TAX BILL (2003)].</p> <p>Note: This is also listed on my to-do Calendar [PBN].</p>
<p>LOW [PBN].</p> <p><i>PBN does (via to-do calendar)</i></p>	<p>Yearly (June 30) [PBN]</p>	<p><i>AAA Carolinas Membership Renewal [PBN].</i></p>				<p>PAPERWORK</p>	<p><i>Note: Account # XXX XXX XXXXXXXX X (800-222-4357) [PBN].</i></p> <p><i>Note: For towing, roadside assistance, etc. [PBN].</i></p> <p><i>Note: This is also listed on my to-do Calendar [PBN].</i></p>



<p>LOW [PBN].</p> <p><i>PBN does (via to-do calendar)</i></p>	<p>Yearly (January) [PBN]</p>	<p><i>Renew memberships to Eastern Pantera Association Club and DeTomaso Drivers Club (UK) and Chesapeake Panteras Club [PBN].</i></p>				<p>PAPERWORK</p>	<p><i>Note: Eastern Pantera Website/phone: <a href="http://www.easternpantera.com">http://www.easternpantera.com</a> and <a href="http://groups.msn.com/EAS TERNPANTERAASSOCIATION">http://groups.msn.com/EAS TERNPANTERAASSOCIATION</a> (609-397-8866); DeTomaso Drivers Club Website/email <a href="http://www.detomasdc.co.uk/">http://www.detomasdc.co.uk/</a>, <a href="mailto:detomaso.dcuk@virgin.net">detomaso.dcuk@virgin.net</a> - Roger Brotton, backup is <a href="mailto:Phil.Stebbing@virgin.net">Phil.Stebbing@virgin.net</a>; Chesapeake Panteras Club Website/phone <a href="http://autos.groups.yahoo.com/group/ChesapeakePanteras/">http://autos.groups.yahoo.com/group/ChesapeakePanteras/</a> (Fred XXXXX (410) XXX-XXXX) [PBN].</i></p> <p><i>Note: Club magazines and newsletters sometimes have maintenance related articles (can add to this checklist) [PBN].</i></p> <p><i>Note: This is also listed on my to-do Calendar [PBN].</i></p>
<p>LOW [PBN].</p> <p><i>PBN does (via to-do calendar)</i></p>	<p>Yearly (November) [PBN]</p>	<p>Renew memberships to Pantera International (PI) club and POCA club [PBN].</p>				<p>PAPERWORK</p>	<p><i>Note: PI membership ID# 4774, POCA membership ID# 3591 [PBN].</i></p> <p><i>Note: PI website/phone: <a href="http://panteracars.com">http://panteracars.com</a> (714-639-8163); POCA website/phone: <a href="http://www.panteraclub.com">http://www.panteraclub.com</a> (281-880-9561) [PBN].</i></p> <p><i>Note: My designated local POCA chapter is Chesapeake Panteras [PBN].</i></p> <p><i>Note: Club magazines and newsletters sometimes have maintenance related articles (can add to this checklist) [PBN].</i></p> <p><i>Note: This is also listed on my to-do Calendar [PBN].</i></p>

MEDIUM [PBN]. <i>PBN does (via to-do calendar)</i>	Yearly (December*) [PBN]	N.C. Division of Motor Vehicles (car registration/license plate) renewal [PBN].				PAPERWORK  Related Mecklenburg City-County (Personal) Property Taxes entry above [PBN].	*Note: Will get renewal notice in November (technically expires 12/31, but have 2 week grace period to renew, so actually expires 1/15) [PBN].  Note: NC DMV phone 919-715-7000, Can renew online (using credit card) at <a href="http://www.dmv.dot.state.nc.us">www.dmv.dot.state.nc.us</a> or <a href="http://www.ncgov.com/citizen">www.ncgov.com/citizen</a> [PBN].  Note: 1973 DeTomaso Pantera VIN # THPNNB05749, Pantera License Plate # XXX-XXXX, Pantera Title # XXXXXXXXXXXXXXXX, Customer ID # XXXXXXXXXXXXXXXX, Insurance Co Authorized in NC is "G06 – Government Employees Insurance Co.", County in which vehicle is subject to property tax is MECKL [PBN].  Note: This is also listed on my to-do Calendar [PBN].  Note: Previous owner added aftermarket license plate frame to original license plate holder [PBN].
LOW [PBN]. <i>PBN does</i>	Yearly* (March) [PBN]	Clean Tape Player Heads [PBN].			Head Cleaning: Use head cleaning cassette tape [PBN].	RADIO	*Note: Or more often as needed [PBN].
HIGH [PBN]. <i>PBN does</i>	Yearly (March) [PBN]	Check Seat Belts and Belt/ Shoulder Anchors For Security and Wear and fit (check buckle and clasp for proper retention, release, and length adjustment) [FTI page 53-02-01]; Inspect Seat Belts for loose or worn webbing, inspect all anchor bolts for tightness [FTI page 41-01-02].  Wash Seat Belt webbing [FTI page 41-01-02].	See FTI page 53-02-01 "Check* Seat Belts For Security and Wear", 41-01-02 "Cleaning and Inspection (Seat Belts)" [FTI].	Washing Webbing: Any commercial soap or detergent (do not use carbon tetrachloride, naptha, etc.; Bleaching or re-dyeing the seat belts is not recommended as it may deteriorate the webbing) [FTI page 41-01-02].		SEATS (SEAT BELTS)	*Note: I replaced factory seat belts with different design from Hall Pantera [PBN].
HIGH [PBN].	Yearly (March) [PBN]	Check front/rear suspension for A arm/shaft support assembly problems [PITI Group 14 Article #3, WEB (Attachment 4)]; Check lower front suspension mounts for potential failure [POCA NL Sept 2001 pages 19 & 20 (Attachment 21b), POCA NL July 2002 pages 9 & 10 (Attachment 21c), WEB (Attachment 21a "Frame Rails")].	See PITI Group 14 Article #3 "Rear Suspension Failure" [PITI].  See Attachment 4 "Maintenance and Safety Inspections* (Back A Arm Mounts, Front A Arm Mounts)" [WEB].  See Attachments 21a, b, c "Frame Rails" [POCA NL/WEB].			SUSPENSION (GENERAL)  Related Disassemble both A frame units and re-grease them (the bushings) entry in 40,000 Miles section [PBN].	Note: Some of these concerns may not apply to 1973 Panteras – see POCA NL Sept 2001 pages 19 & 20 (Attachment 21b), POCA NL July 2002 pages 9 & 10 (Attachment 21c), WEB (Attachment 21a "Frame Rails") [PBN/POCA NL/WEB].  Note: Previous owner installed set of Hall Pantera extended rear upper "A" arms [PBN].

<p>LOW [PBN].</p> <p><i>PBN does, except repainting</i></p>	<p>Yearly (March) [PBN].</p>	<p>Check car's paint job. Repaint car (and black trim items – cowl grills, rear quarter panel grills, engine cover, front and rear bumper) after it fades, “touch up” any scratches/dings etc. as necessary in interim [PBN].</p> <p>Correct cuts, scratches or abrasions of front bumper [TSB Bulletin 9 Article #63, PITI Group 47 Article #9].</p> <p>Repaint front bumper after it fades [PITI Group 47 Article #12].</p>	<p>See TSB Bulletin 9 Article # 63 “Elastomer Repair Procedures – Front Bumper” [TSB].</p> <p>See PITI Group 47 Article #9 “Front Bumper Repair “L” Series”, Group 47 Article #12 “Front Bumper*** Repainting” [PITI].</p>	<p>Exterior Paint**: See TSB Bulletin 1 Article #1 “Pantera Paint – Supplier’s Codes”, Bulletin 7 Article # 53 “1972 ½ - 1973 Supplier’s Paint Codes – Model “L”” [TSB]; PITI Group 46 Article # 1 “Exterior Paint Colors – Part Numbers” [PITI].</p> <p>Front Bumper Damaged Area Filler*: Red or grey body putty [TSB Bulletin 9 Article #63]; 3M-8101 Structural Repair Kit for rubber bumpers [PITI Group 47 Article #9].</p> <p>Front Bumper Paint**: Flat black [TSB Bulletin 9 Article #63, PITI Group 47 Article #9]; Jet black Fabspray vinyl color spray [PITI Group 47 Article #12].</p>	<p>Exterior Paint <i>(**repainted by MAACO in 2001): Sherwin Williams # 60180 “Ice Silver Metallic” (black parts of car are Sherwin Williams Gloss Black I think)</i> [PBN].</p>	<p>TOPS AND EXTERIOR FINISHES (GENERAL); BODY SHELL AND EXTERIOR TRIM (BUMPER)</p> <p>Related Up-Keep of Bodywork (Removing Stains, Washing the Car, Polishing the Car) entry in Bi-Monthly section [PBN].</p>	<p>*Note: Using body putty in many instances does not adhere and in weather changes will tend to crack or crumble depending on severity of original damage to bumper – suggest using 3M-8101 Structural Repair Kit for rubber bumpers instead [PITI Group 47 Article #9].</p> <p>***Note: If have front bumper repainted be sure they put “softener” in paint (like Jenkins &amp; Jenkins body guy did) so won’t get spider cracks in it eventually like did after MAACO painted it [PBN].</p> <p><i>Note: The bolts holding on my front bumper are rusting (I put grease on them to protect somewhat, but can’t tighten them very tight)</i> [PBN].</p> <p>NOTE: IF HAVE TO GET CAR REPAINTED <i>(possibly use silver paint the color of the car on the cover of Road &amp; Track magazine July 2001; possibly repaint it burgundy or the dark/rich brown of 1978 Ferrari 308 GTS “Marone Mattalic” – if do then will want to blacken the exterior chrome trim and wiper arms and entire exterior door handles/assemblies and DeTomaso &amp; Pantera script emblems on rear like on Pantera GTs and rear trunk opener/lock and license plate holder and interior window etc trim and gauge bezels etc; or if keep silver possible paint bumpers silver too), install the teardrop shaped windshield washer nozzle I bought and do the “loose” wiper fix of PITI Group 35 Article #6 (since can afford to chip paint then taking off cowl grill and old nozzle), and get the 4 holes drilled in tops of door rocker panels for ziebarting fixed (don’t like looks of plastic plugs), and possibly install the Hibachi style hood vents I bought (maybe buy fiberglass hood to put the vents in so don’t have to cut up original hood in case don’t like it later), see also PITI Group 47 Article #3 “Rust!”, [PBN - TEMP].</i></p>
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LOW [PBN].	Yearly (March) [PBN].  [OM = at least once a year]; [FTI = At beginning of warm weather season (Item should be checked periodically and service performed when required) – page 52-00-01].	Check** Conditioner [OM]; Check Air Conditioning System [FTI].		Air Conditioner Refrigerant*: Freon (R-12), or substitutes [MECH/PBN] ( <a href="#">need to list acceptable substitutes for R12 I can use</a> ).  Air Conditioner Refrigerant Capacity: 3.5 lbs Freon [PBN – handwritten note on a original copy of PSH Specs Section by mechanic that took the class]. ( <a href="#">need to find a more official source to verify this</a> )		VENTILATING AND HEATING (GENERAL)	Note: Assume OM "Conditioner" is Air Conditioner [PBN].  <i>Note: previous owner replaced air conditioner compressor (Sanyo), expansion valve, dryer, clutch and hoses [PBN].</i>  *Note: Car would require modifications (retrofitting) to use the newer environmentally friendly (R-134a) alternative refrigerant [MECH].  <i>**NOTE: HAD TO ADD FREON APRIL 2001 – MAY HAVE SMALL LEAK*** (possibly thru the leak prone long rubber hoses under car [POCA NL May 2001 pages 16 &amp;17]) [PBN- TEMP].</i>  <i>***Note: Slow leak in AC is expensive to find/fix, therefore probably just better to upgrade/replace whole system to use new type refrigerant [PBN – MECH – TEMP].</i>
	Bi-Yearly						

HIGH [PBN].	<p>Odd-Years (March* - Note originally refilled at engine rebuild in 2001) [PBN].</p> <p>[FTI = Check at 12,000 miles or 12 months, replace at 24,000 miles or 24 months (replace every 24 months regardless of mileage) pattern].</p> <p>[PITI = Replace "worn-out" anti-freeze each year – Group 27 Article #5].</p> <p>[POCA NL Apr 2002 = Change antifreeze yearly - POCA NL Apr 2002 – Attachment 23 "POCANLapr2002etc"].</p>	<p>Drain and Flush Cooling System, and Replace* *** Cooling System Fluid [FTI].</p>	<p>See OM page 31 "Cooling System – Filling Procedure" [OM].</p> <p>See FTI page 27-01-03 "Filling Cooling System" [FTI].</p> <p>See PSH page 13 "Filling an Empty Cooling System" [PSH].</p> <p>See PITI Group 27 Article #2 "The Pantera Cooling System", Group 27 Article #5 "Coolant Hoses" [PITI].</p> <p>See TSB Bulletin 2 Article # 13 "Cooling System Characteristics", Bulletin 8 Article # 61 "Coolant System – Overheating Conditions (Air Purging)" [TSB].</p> <p>See Attachment 1 "Coolant Changing Email", and Attachment 8 "Pantera Cooling System (Coolant Tanks, &amp; Air In System sections)" [WEB].</p> <p>ADD "WATER WETTER" COOLANT ADDITIVE [WEB - Attachment 8 "Pantera Cooling System (The Coolant)"].</p>	<p>Cooling System Capacity: 6 3/8 Gallons [OM page 72]; 25 1/2 Quarts [PSH Specs Section].</p> <p>Coolant Fluid: 40% Antifreeze – 60% Water (Use only permanent-type coolant that meets Ford Specification ESE-M-97 B18-C. Do Not use Alcohol or Methanol anti-freeze or attempt to mix them with the factory coolant) [OM page 72]; Solution of 50% water and Ford Antifreeze [FTI page 53-04-01]; Ford Cooling System Fluid and water [FTI page 52-00-02]; Permanent antifreeze and water mixture [FTI page 27-01-03]; 50-50 mixture of antifreeze and water (at least 50% antifreeze, good idea to put in about 60% antifreeze) [PITI Group 27 Article #2]; coolant mixture of approximately 50-50 water and ethylene glycol (antifreeze) [TSB Bulletin 2 Article # 13, Bulletin 8 Article # 61]; See Attachment 8 "Pantera Cooling System (The Coolant)" [WEB]. <u>(need to determine which is best value to use, and bold it)</u></p> <p>Checking Level: Check radiator coolant level with engine cold [OM page 14, FTI page 53-04-01, TSB Bulletin 2 Article #11, Bulletin 8 Article # 61]; Check Level in Expansion Tank Using flexible dipstick*** [PITI Group 27 Article #2].</p> <p>Coolant Tanks Level: Top up the supply tank and partially fill the expansion tank [PSH page 13]; Keep supply tank** filled at all times and maintain expansion/recovery tank half filled [TSB Bulletin 2 Article #11]; Feed tank must always be completely full [OM page 14]; Expansion tank should be maintained at a half filled level at all times [TSB Bulletin 11 Article #96].</p>	<p>Coolant Additive: "Water Wetter" by Redline [WEB - Attachment 8 "Pantera Cooling System (The Coolant)"].</p>	<p>COOLING SYSTEM (GENERAL)</p> <p>Related Check Coolant Level and Fill Expansion Tank entry in Bi-Monthly section [PBN].</p> <p>Related Check Coolant Condition at 15,000 miles, Replace at 30,000 miles entry in 15,000 Miles section [PBN].</p>	<p>*Note: Check coolant level and fill expansion tank bi-monthly. Check coolant condition at 15,000 miles, Replace at 30,000 miles or at least bi-yearly (see separate entries) [PBN].</p> <p><i>Note: will probably drive &lt;30,000 miles every 2 years so the bi-yearly change should negate the need for a 30,000 miles change [PBN].</i></p> <p>**Note: With respect to filling system with coolant and purge all air, TSB 2 Article #13 and TSB 3 Article # 19 are WRONG – use procedure described in TSB 8 Article 61 [PITI Group 27 Article #2].</p> <p><i>***Note: I keep a flexible dipstick (rubber hose) for checking coolant level in expansion tank, and special long/flexible funnel for putting coolant in expansion tank, in front trunk [PBN].</i></p> <p><i>NOTE: NEXT TIME DRAIN COOLING SYSTEM, CHECK TO BE SURE HAVE CORRECT THERMOSTAT PER ATTACHMENT 8 "PANTERA COOLING SYSTEM (CLEVELAND THERMOSTAT)" [PBN – TEMP].</i></p>
	5 Years						
LOW [PBN]. <i>PBN does</i>	Every 5* Years from 2001** (March) [PBN].	<i>Check (Replace if needed) Battery in Garage Door Remote Control Transmitter (in car) [PBN].</i>	<i>See Liftmaster Garage Door Opener Owner's Manual page 27 [Liftmaster Garage Door Opener Owner's Manual].</i>	<i>Remote Control Transmitter Battery: Lithium Battery [Liftmaster Garage Door Opener Manual].</i>		GARAGE  <i>Related Check/Replace Garage Door Keypad Battery entry in Yearly section [PBN].</i>	<p>*Note: The remote control transmitter (in car) battery should produce power for up to 5 years [Liftmaster Garage Door Opener Owner's Manual].</p> <p>**Note: Garage installed (remote control transmitters new) in 2001 [PBN].</p>

LOW [PBN]. <i>PBN does</i>	Every 5 Years from 2001 (March) [PBN].	Replace (becomes outdated) driving map [PBN].				INTERIOR TRIM (GLOVE BOX)  Related Check Condition/Replace Routine Items in Glove Compartment entry in Yearly section [PBN].	
MEDIUM [PBN].  <i>PBN does (via to-do calendar)</i>	Every 5 Years from 2001 (October 14) [PBN]	Drivers License Renewal [PBN]				PAPERWORK	Note: Drivers License # 2051186 [PBN].  <i>Note: This is also listed on my to-do Calendar [PBN].</i>
	<b>Mileage Interval (Do when Odometer is a multiple of this)</b> Every 5000 Miles						
HIGH [PBN].	[5000/15,000* PBN].  [OM = 4000/8000 & 16,000/20,000 & 28,000/32,000 pattern or 4/8 & 16/20 & 28/32 months pattern for checking, 12,000 or 12 months (at least once a year) for changing].  [FTI = check at 8000 or 8 months]; [TSB = 4000 miles (check) - Bulletin 5 Article #28].  [PITI = The Castrol fluid should be flushed each year - PITI Group 12 Article #3].	Check Level/Change* **** * Brake Fluid [OM].  Check Brake Master Cylinder Fluid Level [FTI page 52-00-03]; Check Brake Fluid Reservoir (clean the area around the reservoir caps) [FTI page 53-04-02]; Check Brake Fluid Level [TSB Bulletin 5 Article #28].	See FTI pages 53-04-02 "Check Brake and Clutch Fluid Reservoirs", 12-01-06 "Hydraulic System Bleeding", 12-01-02 "Testing (Brake System Tests, & Brake Warning Light sections)", 12-01-07 "Cleaning and Inspection (Brake System)" [FTI].  See PITI Group 12 Article #3 "Brake Master-Cylinder Rebuild" [PITI].	Brake System Fluid/Brake Master Cylinder Lubricant:: SAE J 1703 b [OM page 72]; Ford Brake Fluid Extra Heavy Duty (Ford Part No. C6AZ-19542-A, Ford Specification ESA-M6C25-A) [FTI page 12-01-06 and 53-01-03]; Castrol GT LMA conventional fluid***** or silicone-based** *** brake fluid [PITI Group 12 Article #3].  Brake Fluid Level: Fill to indicated level marked on the reservoir [FTI page 53-04-02].  Bleeding: When bleeding your brakes, do not depress brake pedal any farther than normal travel (will avoid tearing up your rubber seals by moving them down into a bore area that has some corrosion in it) [PITI Group 12 Article #3]; All brake systems, especially tandem master cylinder types are best bled using a pressure bleeder. If you cannot properly pressure bleed, much time will be required to bleed manually, so have patience. Note: The front calipers are very difficult to bleed even when using a pressure bleeder, due to their original design. [PBN – Hall Pantera Brake Master Cylinder Installation Instructions].		BRAKES (HYDRAULIC)  Related Change Fluid at Least Yearly entry in Yearly section [PBN].  Related Brake Operations Check entry in Yearly section [PBN].	<i>Note: Previous owner installed stainless steel flex brake lines, and replaced brake master cylinder with different design from Hall Pantera [PBN].</i>  *Note: Check Fluid level at 5000 miles, Change Fluid at 15,000 miles or at least yearly (see separate entries) [PBN].  Note: If fluid is turning black, it indicates the seals are degrading [MECH] – (may be just some minor black seal stuff settling on bottom of reservoir container making fluid look black) [PBN].  **Note: Silicone brake fluid is not practical for most Pantera Owners – only those who totally change brake systems to American parts and are willing to accept a little softness in the brake pedal [POTI Group 12 "About Pantera Brakes – Part I].  ***Note: Silicone fluids tend to entrap air, so the bleeding process should be done several times over a period of days [PITI Group 12 Article #3].  ****Note: Silicone fluids do not require periodic flushing [PITI Group 12 Article #3].  *****Note: The Castrol fluid should be flushed each year to eliminate corrosion caused by water absorption [PITI Group 12 Article #3].

<p>HIGH [PBN].</p>	<p>[5000/15,000* PBN].</p> <p>[OM = 4000/8000 &amp; 16,000/20,000 &amp; 28,000/32,000 pattern or 4/8 &amp; 16/20 &amp; 28/32 months pattern for checking, and 12,000 or 12 months for replacing]; [FTI = 12,000 or 12 months for check (adjust, repair, or replace as required)]; [PITI = periodically]; [TSB = 4000 miles - Bulletin 5 Article #28].</p>	<p>Check (adjust, repair, or replace as required) All Drive Belts [FTI page 53-00-02]; Check Tension/Replace* Alternator/Water Pump Drive Belt*** and Compressor Drive Belt** *** [OM].</p> <p>Check/Adjust Drive Belt (alternator*** and compressor** ***) Tension (and free movement) [FTI page 53-04-01]; Check alternator/compressor** drive belt*** tension [TSB Bulletin 5 Article #28].</p> <p>Check the Alternator Belt*** Tension (tighten to specification if necessary) [FTI page 31-01-01]; Check Alternator Drive Belt*** and adjust to specification [FTI page 31-10-01].</p> <p>Check Tension of Water Pump Belt*** [PITI Group 27 Article #2].</p>	<p>See FTI pages 53-04-01 "Check Drive Belt Tension", 31-01-01 "Charging System General Service Testing (Visual Inspection)", 31-10-01 "Testing", Adjustments (Belt Adjustment)" [FTI].</p> <p>See PITI Group 36 Article #5 "Air Conditioner Belt Tensioner Modification [PITI].</p> <p>See PSH page 3 "Interior – Service Accessibility (Engine Accessibility)" [PSH]. <a href="#">(need to reference this wherever else need to remove firewall cover/engine hatch –e.g., all distributor entries, or can you work on distributor from engine top?)</a></p> <p>See Attachment 15 "The Firewall Cover" [WEB]. <a href="#">(need to reference this wherever else need to remove firewall cover/engine hatch –e.g., all distributor entries, or can you work on distributor from engine top?)</a></p>	<p>Tensioning Tool: Use Belt Tension Tool T63L-8620-A [FTI].</p> <p>All Belts Tension: 140 lbs (new), 110 lbs (used – A used belt is any in operation for 10 minutes), Minimum tension before re-adjustment = 70 lbs [FTI page 21-22-28, 53-04-01].</p> <p>Alternator Belt Tension (lbs): 70-110 (Used Belt – used belt is one that has been in operation more than 10 minutes), 140 (New belt), If belt tension is out of specification or belt has been removed reset to 110 lbs [FTI page 31-10-05].</p> <p>Water Pump Belt Tension: So that it doesn't slip [PITI Group 27 Article #2].</p> <p>Free Movement of Both Drive Belts: 1/2 inch (measured midway between the crankshaft pulley and the compressor or alternator pulley) [FTI page 53-04-01].</p> <p>Alternator Drive Belt bolts Torque (ft-lb): 15 to 18 (adjusting bolt), 15 to 17 (lower mounting bolt) [FTI page 53-04-01].</p> <p>Compressor Drive Belt Tension Pulley Nut Torque (ft-lb): 15 to 18 [FTI page 53-04-01].</p> <p>Air Conditioning Compressor Drive Belt: Ford Part No. C9PZ-8620-BF [TSB Bulletin 11 Article #95]; New compressor drive belt (Part No. C9PZ-862-BF) one inch shorter effective in production 12/18/1973 [PPQR Electrical item 11].</p> <p><i>Crankshaft to Compressor Belt*** (firewall modification) Size: 13mm x 910 mm (Brand ContiTech Conti – SF AVX13x910) [MECH].</i></p> <p><i>Alternator Belt*** (firewall modification) Size: 9.5/10mm x 625mm (25/64" x 24-5/8") (Brand NAPA Premium XL Belt 25 # 7240 [PBN – Firewall Vendor supplied].</i></p> <p><i>Water Pump Belt*** (firewall modification) Size: 11A0785 (Brand Dayco "Top Cog" # 15310) [PBN – Firewall Vendor supplied].</i></p>		<p>CHARGING SYSTEM (ALTERNATOR); ENGINE (WATER PUMP) <a href="#">(need compressor system/comp ref)</a></p> <p>Related Check Timing Chain Deflection entry in 30,000 Miles section [PBN].</p>	<p>*Note: Check tension at 5000 miles, Replace at 15,000 miles [PBN].</p> <p>Note: Alternator/Water Pump and (A/C) Compressor belts are the only belts on '73 Pantera) [MECH – Pantera Vendor].</p> <p>**Note: The A/C compressor belt*** cannot be adjusted more than once. After first adjustment belt must be replaced [PPQR Electrical item 11].</p> <p><i>***Note: I replaced alternator and voltage regulator with an alternator that has a built in voltage regulator, and disconnected the generator light in the speedometer (as part of firewall passenger seat modification) - I now have 3 belts (crankshaft to compressor belt (slightly longer than original Pantera one) and separate alternator belt and water pump belt), instead of just 2 (compressor belt and alternator/water pump belt) [PBN].</i></p>
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<p>MEDIUM [PBN].</p>	<p>[5000 PBN].</p> <p>[OM = 4000 or 4 months – page 44, periodic (top-up) - page 64]; [FTI = If difficult starting is experienced (Item should be checked periodically and service performed when required) – page 52-00-01]; [TSB = 4000 miles - Bulletin 5 Article #28].</p>	<p>Check Battery Condition, Check Connections and Fluid Level* [FTI page 52-00-01]; Check Battery Fluid Level*, Cable Connections (for tightness***), and State of Charge [FTI page 53-04-02].</p> <p>Test Battery to determine state of charge and condition (recharge or replace as needed) [FTI page 31-01-01].</p> <p>Give Thorough Visual Examination of Battery to determine if it is damaged (presence of moisture on the outside of the case and/or low electrolyte level in one or more cells are indications of possible battery damage) [FTI page 31-01-01].</p> <p>Check that battery electrical connections are free from oxidation and that they are clean and lightly coated with petroleum jelly [OM page 64]; Check Battery Posts and Battery Cable Terminals for clean and tight*** connections (if cables are corroded remove, clean and install them securely) [FTI page 31-01-01].</p> <p>Check Electrolyte Level* (with a cold battery) [OM]; Check Electrolyte Level* [TSB Bulletin 5 Article #28].</p> <p>Inspect Trunk Floor Under Rubber Mat the Battery Sits on, and Ground Post and Cable Connection on Trunk Floor for Rust/Corrosion (Clean/Correct/Replace as needed) [PITI Group 34 Article #3].</p>	<p>See OM page 64 “Battery” [OM].</p> <p>See FTI pages 53-04-02 “Check Battery Fluid Level, Connections, and State of Charge”, 31-02-01 “Batteries (Testing, Tests Using the Rotunda Cell Analyzer)”, 31-02-02 “Tests Using the Rotunda Battery-Starter Tester (Battery Capacity Test)”, 31-01-01 “Charging System General Service Testing (Visual Inspection)” [FTI].</p> <p>See PITI Group 34 Article #3 “Battery and Cable Corrosion” [PITI].</p>	<p>Electrolyte: Distilled Water [OM page 64]; Distilled Water or tap water unless it has a high mineral content or has been stored in a metal container [FTI].</p> <p>Electrolyte Level: 1/4to 3/8-inch above the top of the plates [FTI page 53-04-02].</p> <p>Electrical Connections: Petroleum Jelly (lightly coated) [OM page 64]; Light coating of non-metallic grease (terminals and posts) [FTI].</p> <p>Battery Capacity Test: Voltage over 9.6, Specific Gravity over 1.230 [FTI page 31-02-02].</p> <p>Battery Capacity (amp-hours): 72** (1971-72 models), 90 (1973 model).</p> <p>Battery Specific Gravity: 1.275 to 1.290 (Charged) [FTI page 31-02-03]; Not less than 1.250 (with battery temperature at 80 degrees F) [FTI page 53-04-02].</p> <p>Battery: Correct service replacement is Motorcraft type G27F [TSB Bulletin 3 Article # 18].</p> <p>Cleaning Ground Post: Steel Wool of a Brush [PITI Group 34 Article #3].</p> <p>Cleaning Front Trunk Floor if Corroded: Water and Baking Soda, seal with a battery post protector sealant and paint [PITI Group 34 Article #3].</p>	<p>Battery****: Exide Select Orbital* [PBN]. <a href="#">(need to determine best battery to use – Orbital?, Optima?, Pro Vol 8900001?)</a></p>	<p>CHARGING SYSTEM (BATTERIES)</p>	<p><i>*Note: Currently installed “Orbital” Battery is sealed – no level to check [PBN].</i></p> <p>Note: If use a non-sealed battery, install a battery venting kit if possible or special battery cover to prevent corrosion in front trunk compartment [PITI Group 28 Articles # 1 &amp; 2; TSB Bulletin 9 Article # 73, Bulletin 11 Article 73-S].</p> <p>Note: Positive external battery venting system effective in production 7/13/1973. A similar system is also available for the 94 AH service replacement battery [PPQR Electrical item 1].</p> <p><b>**Note:</b> Effective 5/14/73, 72 Ampere Hour battery replaced with 90 Ampere Hour battery [TSB Bulletin 9 Article # 74, PPQR Electrical item 2].</p> <p><b>***Note:</b> The Italian battery cable ends are made of a very SOFT lead, DO NOT OVER TIGHTEN the retaining nut as you will break the cable end (SNUG and not moveable is tight enough with good clean cables and posts) ; Service Station quick repairs or quick fixes (“Jerry Rigged”) on the positive cable end due to overtightening is definitely a NO-NO – replace the cable [PITI Group 34 Article #3].</p> <p><b>****Note:</b> When need to replace battery, check Consumer Reports for one rated highest in CCA and Reserve Capacity (and small size so saves front trunk space) – see Attachment 22 “Auto Batteries” for 2001 ratings of some batteries [PBN].</p>
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<p>HIGH [PBN].</p>	<p>[5000 PBN].</p> <p>[OM/FTI = 4000/8000 &amp; 16,000/20,000 &amp; 28,000/32,000 pattern or 4/8 &amp; 16/20 &amp; 28/32 months pattern]; [TSB = 4000 miles - Bulletin 5 Article #28].</p>	<p>Make sure you have plenty of brake fluid in the clutch system, that it is clean, and that you have bled it to ensure no air in the system [POTI Group 16 “Clutch Maintenance”].</p> <p>Check Clutch Fluid Reservoir (Clean the area around the reservoir cap) [FTI page 53-04-02];</p> <p>Check* Clutch Fluid Level [OM, FTI page 52-00-03, TSB Bulletin 5 Article #28].</p> <p>Bleeding of the Clutch hydraulic fluid system is vital (be sure the slave cylinder is rotated so the bleed screw is at the top) [PITI Group 16 Article #9 [PITI].</p>	<p>See FTI pages 53-04-02 “Check Brake and Clutch Fluid Reservoirs”, 16-02-04 “Hydraulic Clutch System Bleeding” [FTI].</p> <p>See PITI Group 16 Article #9 “Understanding, Troubleshooting and Adjusting your Clutch Linkage” [PITI].</p>	<p>Clutch Fluid:          Extra Heavy Duty (Brake/Hydraulic) Fluid conforming to Ford Specification ESA-M6C25-A) [FTI pages 53-04-02, 16-02-04, and 16-02-05];          All Silicone fluids are totally unsatisfactory for the Pantera clutch system [POTI Group 12 “About Pantera Brakes – Part I], Silicone fluid is not acceptable on a stock clutch system [POTI Group 16 “Clutch Maintenance”];          Brake Fluid (note the higher grades (DOT 4, 5, etc) don’t do any good (because they are ratings for heat which is not a problem in the clutch) but you want good quality and are hopefully using a “high” grade for your brakes so why not use the same stuff (for the clutch) [POTI Group 16 “Clutch Maintenance”];  <i>DOT 3 Brake Fluid [PBN – new 2001 Hall Pantera CNC master cylinder’s instructions].</i></p> <p>Clutch Fluid Level:          Fill to indicated level marked on the reservoir [FTI page 53-04-02];  <i>Master cylinder reservoir should be maintained at 3/4 full reservoir (do not overfill) [PBN – new 2001 Hall Pantera CNC master cylinder’s instructions].</i></p>		<p>CLUTCH AND TRANSAXLE (CLUTCH MASTER CYLINDER, CLUTCH HYDRAULIC, CLUTCH SLAVE CYLINDER)</p>	<p>Note: No need to change Clutch Fluid like have to do with Brake Fluid [MECH].</p> <p><i>Note: I replaced clutch master cylinder with Hall Pantera CNC master cylinder [PBN].</i></p> <p>Note: if fluid is turning black, it indicates the seals are degrading (already happened to me once) [MECH] ] – (may be just some minor black seal stuff settling on bottom of reservoir container making fluid look black) [PBN].</p> <p><i>*Note: MY CLUTCH FLUID IS ALREADY TURNING BLACK AGAIN (NOV 2001) – MAY HAVE PROBLEM SOON [PBN].</i></p>
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<p>HIGH [PBN].</p>	<p>[5000/10,000* PBN].</p> <p>[OM = 4000/8000 or 4/8 months (check/change)];</p> <p>[ZF = check regularly – Section IV];</p> <p>[FTI = check at 8000 or 8 months];</p> <p>[TSB = check level at 4000 miles - Bulletin 5 Article #28].</p> <p>[ZF = 1 change after 4000-5000 km, further changes after 16,000-20,000 km – Section I;</p> <p>Change at first 4-5000 km on new or repaired gearboxes, then every 16-20,000 km (if vehicle is out of service for a period of time over 6 months, change the oil before bringing back into service) – Section IV];</p> <p>[TSB = Change lubricant at first 3000 miles, and each 12,000 miles thereafter – Bulletin 2 Article #12].</p>	<p>Check* Level/Change***** Transaxle Oil [OM];</p> <p>Check Transaxle Fluid (Oil) Level [FTI];</p> <p>Check Oil Level in the Transmission [ZF];</p> <p>Check Transmission Oil Level [TSB Bulletin 5 Article #28].</p> <p>Clean magnetic drain plug** ***** (of adhering abrasives) when changing transaxle oil [OM page 39, FTI page 53-01-02, ZF].</p>	<p>See OM page 39 “Changing Transaxle Oil” [OM].</p> <p>See FTI page 53-01-02 “Check Transaxle Oil”, “Changing Transaxle Oil” [FTI].</p> <p>See ZF pages 5 “Method of Lubrication (type for passenger car and sports car)”, 6 “Oil Level Control (type for passenger car and sports car)”, 7 “Oil Drain” [ZF].</p> <p>See TSB Bulletin 12 Article #104 “Transaxle Assembly – Second Gear Synchro Noise”, Bulletin 13 Article #104-S “Transaxle Assembly – Second Gear Synchro Noise” [TSB].</p>	<p>Transmission – Differential Capacity/Oil Amount:</p> <p>7 1/2 Pints [OM page 72];</p> <p>7-1/4 pints oil [TSB Bulletin 12 Article #104];</p> <p>Approx. 3.5 litres [ZF Section I];</p> <p>Amount of oil necessary can be seen on the type plate (on first filling this amounts to 3.5 litres) [ZF Section IV].</p> <p><b><u>need to determine which is best value to use, and bold it</u></b></p> <p>Transaxle Lubricant/Oil Type***: SAE 80 AP GL-5 [OM page 72]; SAE 90 E.P Gear Oil [FTI]; Castrol Hypoy 80W90 (GL4) [TSB Bulletin 12 Article #104]; Mild gear oil of viscosity class SAE 80 [ZF Section I]; Mild EP gearbox oils of viscosity class SAE 80 (these are grades which in the presence of condensation do not cause corrosion on steel and non-ferrous metal parts and hardening of gaskets and seals – must meet lubrication requirements of ZF-Transmission No. 12-118), EP Gear Oils SAE 80 corresponding to ZF Specification MIL-L 2105 (A) [ZF Section IV]; Oil conforming to specs MIL-L-2105 SAE 80 [PPQR Powertrain Item 7]</p> <p>See Also *****Oil Addition and *****Note [PBN].</p> <p>Transaxle Oil Level:</p> <p>The oil should be even with the bottom of the side level plug hole [FTI];</p> <p>Fill until oil flows from oil level plug hole [OM page 39];</p> <p>Oil Container should be filled with oil, oil filler hole must be filled to overflowing [ZF].</p> <p>Transaxle Oil Changing:</p> <p>Transaxle oil must be changed while warm***** [FTI];</p> <p>Transaxle oil changing must be performed when warm [OM page 39];</p> <p>Before draining old oil, vehicle should run for a short while so that any condensed water present can be mixed in the oil, oil should be drained from a warm gearbox [ZF].</p> <p>Transaxle Oil Level Drain***** Plug**:</p> <p>22mm (0.866”) Allen wrench (a 7/8” (0.875”) Allen wrench can be substituted although in some cases it may be necessary to modify the wrench by grinding in order to fit the drain plug) [TSB Bulletin 14 Article #118].</p> <p>See ***** Addition [PBN].</p>	<p>Oil Type Currently in my ZF*****: Castrol Hypoy C Gear Oil SAE 80w90 (GL5) [MECH].</p> <p>***** Addition (There wasn’t room for this in specifications column -PBN):</p> <p>Transaxle Oil Level Checking (Level) Plug: 22mm Allen wrench [TSB Bulletin 3 Article # 22].</p> <p>Transaxle Oil Checking: Vehicle should be in horizontal position to check oil, and some time should be allowed to elapse until the oil has settled and cooled somewhat [ZF]; Unless a careful check of the lubricant used is maintained, it is very easy to believe that the “full” level has been reached. A re-check several minutes later will reveal the level has fallen, requiring further lubricant to be added. This process may have to be repeated several times to ensure a “Full” capacity reading (this filling and checking procedure is necessary due to the slow rate at which oil passes from the rear to the forward sections within the transaxle) [TSB Bulletin 13 Article #104-S].</p>	<p>CLUTCH AND TRANSAXLE (TRANSAXLE)</p> <p>Related Check ZF for Loose Ring Gear Bolts entry in Never section [PBN].</p> <p>***** Oil Addition (There wasn’t room for this in specifications column -PBN):</p> <p>Some lubricants which meet the ZF specifications****: Amoco multi-purpose gear lubricant SAE 80, BP gear oil EP 80, Chevron Multi-Service gear lubricant SAE 80, Esso gear oil GP 80, Gulf gear lubricant SAE 80, Mobilube GX 80, Shell Spirax EP 80, Sunoco MPGL (DB) SAE 80, Texaco universal gear lubricant EP80, Valvoline Hypoid X-18 SAE 80 [TSB Bulletin 2 Article # 12].</p> <p>***Note: All vehicles having a chassis number prior to 05900 (Job 1, 1974 Model) must have the existing transaxle lubricant replaced with Castrol Hypoy 80W90 (GL4) (noisy and/or difficult engagement into second gear could result from the additives in the original factory installed lubricant) – it is also important that the above lubricant be used for filling a replacement transaxle or when changing lubricant at the specified service intervals (additional sources of approved lubricant will be published when they become available****) [TSB Bulletin 12 Article #104]; ZF report premature wear of second gear synchro due to factory fill oil additives which remove molybdenum from synchronesh ring surfaces. Castrol Hypoy GL4 SAE 80/90 is the only approved lubricant which is available to US dealers [PPQR Powertrain Item 7].</p> <p>****Additional Sources of Approved Transaxle Lubricants (complete listing): Penzoiil “Audi-VW Special Gear Lubricant MIL-L-2105-GL4”, Kendall “VW-Porche – Audi Manual Transmission Lubricant S.P. SAE 80W-90”, Quaker State “Special 2105 Gear Oil SAE 80 W90”, Castrol “Hypoy 80W90 (GL4)” [TSB Bulletin 13 Article #104-S].</p>	<p>*Note: Check level at 5000 miles, Change***** at 10,000 miles [PBN].</p> <p><b><i>**Note: I have a ZF drain plug (adapter) tool (17mm hex socket fits ZF “innie” style drain plugs), kept in trunk [PBN]. (does this fit the side fill plug too? If so ref to that too)</i></b></p> <p><b><i>Note: I have a ZF Transaxle Manual Book [PBN].</i></b></p> <p>Note: I have a “Type 2” ZF transaxle [PBN].</p> <p><b><i>Note: I had my ZF safety wired [PBN].</i></b></p> <p>*****Note: See Attachment 18 “Sunday Oil Change” [WEB].</p> <p><b><i>*****Note: I added Teflon tape to drain (not fill) plug to stop slow leak. Have to replace the Teflon tape (or liquid Teflon) each time remove drain (not fill) plug or will leak again. Need to permanently fix this in future. [PBN – TEMP].</i></b></p> <p>*****Note: when topping off oil use the same type as is currently in ZF (not good to mix types) [PBN].</p> <p>Note: The following ZF oil recommendations were made by various Pantera Vendor Mechanics in 2002: Shell Spirax HD 80/90 wt Gear oil (DON’T use Mobil 1 synthetic gear oil) [MECH – Holman &amp; Moody]; Quaker State 90 wt HP oil [MECH – Jenkins &amp; Jenkins]; Penzoiil #4096 (80/90 wt) [MECH – PPC Colorado]; 80/90 wt Chevron Del Gear oil [MECH – Wilkenson Pantera]; 80/90 wt Valvoline or Castrol (regular Castrol is fine, don’t need to use “C”) (either GL4 or GL5 should be fine – if one causes chattering switch to the other) [MECH – RBT Transmissions].</p>
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<p>MEDIUM [MECH].</p>	<p>[5000 PBN].  [OM = 4000 or 4 months]; [TSB = 4000 miles]; [PITI = regular basis (lubricate drive axle splines) – Group 15 Article #2].</p>	<p>Lube Axle Shaft Sleeves [OM]; Lubricate Sliding Sleeves (axle shafts) [TSB Bulletin 5 Article #28]; Lubricate the Drive Axle Splines (male-female) [PITI Group 15 Article #2].</p>	<p>See PITI Group 15 Article #2 “Driving Axles” [PITI].  <a href="#">(has zerK fitting on half shaft [MECH – Pantera Vendor])?</a></p>	<p>Lubricant: Use molybdenum di-sulfide grease [OM]; Grease [PITI Group 15 Article #2].</p>		<p>DRIVING AXLES AND DRIVE SHAFTS (AXLE SHAFT)  Related Lube Drive Shaft Universal Joints entry below [PBN].</p>	<p>Note: “Drive Axles” are referred to as “Half-Shafts” in mid-engine applications (like Pantera) [PITI Group 15 Article #2].  Note: Lubing axle shaft (sliding) sleeves and lubing axle splines is the same thing [MECH – Pantera Vendor].  <i>Note: The left and right axle halves may have been reversed (solid shaft portion of the half shaft near the transaxle and the sleeve portion toward the wheel) in order to put the “Mind Train Big Throats Exhaust System” on [PBN-Mind Train Enterprises Big Throats Installation Instructions].</i></p>
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<p>MEDIUM [PBN].</p> <p><a href="#">(should be high?)</a></p>	<p>[5000 PBN].</p> <p>[TSB = 4000 miles].</p>	<p>Lubricate* *** ***** Drive Shaft Universal Joints [PITI Group 53 Article #1];</p> <p>Lubricate* *** ***** Universal Joints [TSB Bulletin 5 Article #28].</p> <p>Inspect the lubrication* *** ***** passage ways connecting the trunions to be sure are not clogged (if have the type with lube fittings) [PITI Group 15 Article #1].</p>	<p>See PITI Group 53 Article #1 "Lubrication Tips" [PITI].</p>	<p>Universal Joints Lubricant: Good quality lithium base grease [PITI Group 53 Article 1].</p> <p>Lubing Universal Joints Tool: Hand grease gun [PITI Group 53 Article 1].</p>		<p>DRIVING AXLES AND DRIVE SHAFTS (UNIVERSAL JOINTS)</p> <p>Related Lube Drive Axle Shaft Sleeves/Splines entry above [PBN].</p> <p>Related Diagnose Bad Halfshaft Universal Joints entry in 10,000 Miles section [PBN].</p>	<p>Note: "Drive Axles" are referred to as "Half-Shafts" in mid-engine applications (like Pantera) [PITI Group 15 Article #2].</p> <p>Note: There are no u-joints on the front [MECH].</p> <p><i>Note: The left and right axle halves may have been reversed (solid shaft portion of the half shaft near the transaxle and the sleeve portion toward the wheel) in order to put the "Mind Train Big Throats Exhaust System" on [PBN-Mind Train Enterprises Big Throats Installation Instructions].</i></p> <p><i>*Note: Panteras newer than 6/11/73 have lifetime** lubrication on drive shaft universal joints [TSB Bulletin 10 Article # 84, PITI Group 53 Article 1]; Redesigned drive shaft with improved universal joint effective in production 6/12/1973 [PPQR Powertrain item 11] - Mine was built 7/73 per door pillar ID plate [PBN], but VIN code "NB" indicates May 1973 [FTI page 10-00-01] – therefore not sure if my original u-joints were lifetime sealed or not***** [PBN].</i></p> <p><i>**Note: Lifetime lubrication means there's no grease fitting so can't lube it, all you can do is replace it (will make noise when needs replacing) [MECH].</i></p> <p><i>***Note: Many OEM Universal Joints have no zerck fittings and are never lubricated after being assembled [PITI Group 15 Article #2].</i></p> <p><i>****Note: My car's 2 rear inner u-joints have zerck fittings, but the 2 rear outer u-joints don't***** [MECH].</i></p> <p><i>*****Note: Previous owner replaced 2 rear (either inner or outer) u-joints with different design from Hall Pantera [PBN].</i></p>
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<p>HIGH [PBN].</p>	<p>[5000 PBN].</p> <p>[OM = 4000 or 4 months]; [FTI = oil 4000 or 4 months, filter 8000 or 8 months];</p> <p>If Severe Service Operation* change engine oil every 2 months or 2000 miles and oil filter every 4 months or 4000 miles; [PITI = change oil often, 2500 to 3000 miles seems to be most appropriate maximum interval]; [TSB = 4000 miles - Bulletin 5 Article #28].</p>	<p>Change Engine Oil, Replace Engine Oil Filter (Clean the gasket surface of the cylinder block, Inspect the oil pan drain plug gasket and replace if necessary) [FTI];</p> <p>Change Oil &amp; Oil Filter (clean the filter base surface in contact with the seal) [OM pages 35, 37];</p> <p>Change Oil and Filter [PITI Group 27 Article #2];</p> <p>Change Engine Oil and Oil Filter [TSB Bulletin 5 Article #28].</p>	<p>See OM page 37 “Changing Motor Oil and Filter” [OM].</p> <p>See FTI page 53-01-02 “Change Engine Oil and Replace Oil Filter”, 21-22-21 “Removal and Installation (Oil Filter)” [FTI].</p>	<p>Oil Pan Capacity:  <b>5 Quarts</b> (Oil Sump and Filter) [OM page 72];  5 U.S. Quarts (includes 1 quart with filter replacement) [FTI page 21-22-29];  Will hold 6 quarts [PITI Group 27 Article #2];  6 Quarts (plus an extra 1/2 or so quarts for a new stock filter) for performance driving, 5 quarts for normal driving [WEB - Attachment 18 “Sunday Oil Change”].</p> <p>Oil:  SAE 20W/50 API MS (Temp &gt; 0 deg C), SAE 10W40 API MS (Temp &lt; 0 deg C) [OM page 72];  Recommended motor oil (see Specifications “Engine Lubricant: Multi Viscosity Oil, and Single Viscosity Oil” on FTI page 53-01-03) [FTI];  Top quality 20-50 weight oil above 40 degrees ambient temperature, 10-40 below 40 degrees (consistent sub-zero temperatures would require a lighter oil) – don’t use single weight oil at all [PITI Group 27 Article #2].</p> <p>Oil Level:  Never allow oil to be under the minimum level (ADD) and when filling up never exceed the maximum level (SAFE) [OM page 36];  Do not add oil past the full mark, never allow the oil level to fall below the add mark [FTI page 53-01-02];  <i>Use the previous owner’s hand scratched marks scale on oil dipstick, not the manufactured** marks [PBN].</i></p> <p>Oil Changing:  Oil Changing must be carried out with a warm engine [OM page 37].</p> <p>Oil Filter to Block Torque Limit (Cartridge Type):  Screw filter cartridge onto filter base until the seal contacts and give an extra half turn [OM page 37];  With grease on gasket surface, hand tighten until gasket contacts adapter face then tighten 1/2 turn more [FTI page 21-22-32];  Thread filter onto the adapter until gasket contacts the cylinder block, then turn filter an additional one-half turn (do not overtighten the filter) [FTI page 53-01-02];  Hand tighten until gasket contacts the adapter face, then advance it 1/2 turn [FTI page 21-22-21].</p> <p>See *** Addition [PBN].</p>	<p>Oil:  5W-30 Synthetic (Mobil 1 Tri-Synthetic****) [PBN-WEB – Attachment 11 “Engine Oil Choices”].</p> <p>Oil Filter:  Mobil M1-301 [PBN-WEB – Attachment 10 “Engine Oil Filter Study”]. (<a href="#">is Motorcraft FL1-HP oil filter, or Fram HP-1 racing oil filter, better? – they are recommended highly on Pantera email listserv</a>)</p>	<p>ENGINE (GENERAL)</p> <p>Related Oil Level Check entry in Bi-Monthly section [PBN].</p> <p>-----  *** Addition (There wasn’t room for this in specifications column -PBN):</p> <p>Oil Filter Insert to Block Torque Limit (Ft-Lb):  20-30 [FTI page 21-22-32].</p> <p>Oil Pan Drain Plug Torque Limit (Ft-Lb):  15-25 [FTI page 21-22-32].</p>	<p>*Note: Severe Service Operation is when operating your car under any of the following conditions: Extended periods of idling or low-speed operation, Outside temperature remains below + 10 degrees F for 60 days or more and most trips are less than 10 miles, In severe dust conditions [FTI].</p> <p>**Note: Dipstick’s manufactured marks are apparently off some (see TSB 5 Article 34, and PPQR Powertrain Item 4), <i>upper scratched mark is measured 5 quarts level, with lower scratched mark scaled to match manufactured range [PBN].</i></p> <p>****Note: Mobil apparently changed the name/improved this product in 2002 to “Mobil 1 Fully Synthetic Motor Oil with SuperSyn Anti-Wear Technology” (5W-30 Newer Vehicle Formula) [PBN].</p>
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<p>MEDIUM [PBN].</p>	<p>[5000 PBN].</p> <p><i>[WEB = As Part of Regular Ongoing Maintenance Checks - Attachment 3 "Holley 600 Carburetor Fuel Leak Problem"].</i></p>	<p><i>Check Holley 600 Carburetor Diaphragm for Leaks [WEB – Attachment 3 "Holley Carburetor Fuel Leak Problem"].</i></p>	<p><i>See Attachment 3 "Holley 600 Carburetor Fuel Leak Problem" [WEB].</i></p>			<p>FUEL SYSTEM (CARBURETOR)</p> <p>Related Keep Carburetor in Good Operating Condition entry in 15,000 Miles section [PBN].</p> <p>Related Check/Adjust Idling Speed and Mixture entry in 15,000 Miles section [PBN].</p> <p>Related Check Carburetor Choke entry in 15,000 Miles section [PBN].</p> <p>Related Check Carburetor Throttle Linkage, Air Valve, Throttle Solenoid and Dashpot entry in 15,000 Miles section [PBN].</p> <p>Related Clean/Degrease Engine and Transaxle entry in Yearly section [PBN].</p>	<p><i>Note: I replaced carburetor with a Holley 600, with manual choke [PBN].</i></p> <p><i>Note: I have a Holley Carb Manual Book [PBN].</i></p> <p><i>Note: Can check for leaks visually without having to disassemble [MECH].</i></p>
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<p>VARIES [PBN].</p>	<p>[5000 PBN].</p>	<p>MISCELLANEOUS STUFF TO KEEP AN EYE ON PERIODICALLY (more frequently than the normal check frequency of that item elsewhere* in this checklist, or item that has no routine maintenance needed and thus is not listed on checklist) THAT EVENTUALLY NEEDS TO BE REPAIRED OR REPLACED [PBN]:</p> <p>1) Shock Absorbers: Check** from passenger and rear drivers shock absorbers (have slow leak) [PBN – TEMP]. <u>(need permanent entry to periodically check shock absorbers settings (already have entry to check for leaks)?)</u></p> <p>2) Fuel Tank Filler Neck and Interior Side of Gas Cap: Is starting to rust badly PBN – TEMP].</p> <p>3) Fuel Filter: Replace it more often than normal 10,000 miles frequency (gas tank's filler neck and gas cap is rusting, causing filter to get dirty faster) [PBN – TEMP].</p> <p>4) Valve Covers: Tighten bolts at every oil change (keep coming loose*****) [PBN/MECH – TEMP].</p> <p>5) Air Filter: Check to see if so dirty need to change at 5000 miles instead of 10,000 miles***** [PBN – TEMP].</p>	<p>1) See PITI Group 14 Article #6 "Pantera Shock Adjusting*** *****" [PITI - TEMP].</p> <p>3) See Replace Fuel Filter entry info in 10,000 Miles section [PBN – TEMP].</p> <p>5) See Replace Air Cleaner entry in 10,000 Miles section [PBN – TEMP].</p>	<p>1) See PITI Group 11 Article #4 "Pantera Detomaso L &amp; GTS Optional Fitment &amp; Setting" [PITI - TEMP].</p> <p>3) See Replace Fuel Filter entry info in 10,000 Miles section [PBN – TEMP].</p> <p>5) See Replace Air Cleaner entry in 10,000 Miles section [PBN – TEMP].</p>	<p>3) See Replace Fuel Filter entry info in 10,000 Miles section [PBN – TEMP].</p>	<p>MISCELLANEOUS*</p> <p>1) Related Check for Car Leaks entry in 10,000 Miles section [PBN - TEMP].</p> <p>1) Related Garage Floor Leak Indication entry in Bi-Monthly section [PBN - TEMP].</p> <p>2/3) Related Underbody Protection (rust and corrosion) Check entry in Yearly Section [PBN – TEMP].</p> <p>3) Related Replace Fuel Filter entry in 10,000 Miles section [PBN - TEMP].</p> <p>3) Related Replace the Stock Sintered Bronze Fuel Filters in Holley Carburetors entry in Never section [PBN].</p> <p>5) Related Replace Air Cleaner entry in 10,000 Miles section [PBN – TEMP].</p> <p>----- ***** Addition (There wasn't room for this in Notes column -PBN):</p> <p>3) Last 2 times checked this (95,000 &amp; 100,000 miles) it was OK to last 10,000 miles without getting too rusty. Might can delete this temp entry [PBN - TEMP].</p> <p>4) *****Note: is this still a problem since switched to DeTomaso logo valve covers? [PBN - TEMP].</p> <p>5) *****Note: Air filter seems to get dirty even quicker than 10,000 miles. If consistently dirty at 5000 miles eventually move normal 10,000 miles Air Cleaner entry to 5000 miles section [PBN – TEMP].</p>	<p>Note: Once an item is permanently repaired/replaced, delete its entry stuff (TEMP's) off this listing (and any TEMP cross references* to this listing), but be sure any useful info/references is also on this checklist elsewhere before delete it off this entry [PBN].</p> <p>*Note: Add temporary cross references to normal maintenance listing entry for item [PBN].</p> <p>1) IF LEAK GETS TOO BAD WILL NEED TO REPLACE SHOCKS (~\$1000) – SEE MY WEB PRINTOUTS [PBN - TEMP].</p> <p>1) **Note: Since the suspension units/shock absorbers are sealed, they do not require filling [FTI page 14-32-01 - TEMP].</p> <p>1) ***Note: Panteras came equipped with both adjustable and non-adjustable shock absorbers (the later cars used "Telecar" brand shocks and had no choice of setting, the earlier cars used Aristone and could be set to a very precise rate) [PITI Group 14 Article #6 - TEMP].</p> <p>1) ****Note: Previous owner replaced all 4 original shock absorbers with Hall Pantera adjustable (knob adjustment rather than slotted screw adjustment) shocks, and took spacers out of the shocks to lower the car all around [PBN - TEMP].</p> <p>1) Can't refill my Hall Pantera shocks, unless send back to factory [MECH].</p> <p>2/3) WILL NEED TO RUST COAT OR REPLACE RUSTING FILLER NECK AND GAS CAP EVENTUALLY. WHEN DO CAN DELETE THIS TEMP ENTRY AND JUST USE NORMAL (10,000 MILES) FUEL FILTER FREQUENCY'S ENTRY [PBN – TEMP].</p> <p>See *****Addition [PBN].</p>
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<p>LOW [PBN].</p> <p><i>PBN does</i></p>	<p>[5000 PBN].</p>	<p>Printout "clean/unmarked-up" copy (latest revision) of this checklist for use at next maintenance interval [PBN].</p> <p>Save (in trunk) printout of this checklist (marked up to show what was actually performed) for latest completed maintenance intervals <math>\geq 10,000^*</math> miles, in case some of these long-term item(s) were not done so will be able to tell how long its really been since the maintenance item was actually performed [PBN].</p>				<p>PAPERWORK</p>	<p>*This checklist item entry is listed in this 5000 miles section so it will always be reviewed no matter which <math>\geq 10,000</math> mile interval comes up since will always be divisible by 5000 miles [PBN].</p>
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<p>MEDIUM [PBN].</p> <p><i>PBN does, except balance</i></p>	<p>[5000 PBN].</p> <p>[OM = 4000 or 4 months – pg 44; tire condition frequently, wheel balance at all times – pg 55]; [FTI = when tires show uneven wear pattern (Item should be checked periodically and service performed when required) – page 52-00-01]; [TSB = 4000 miles - Bulletin 5 Article #28].</p>	<p>Inspect Wheels and Tires [FTI page 52-00-01]; Check Tire Wear/Condition (uneven wear, cuts, or broken fabric) and Balance [OM pages 44, 55].</p> <p>Wheel* hub nuts**** should be inspected and tightened to specification, Keep the wheels and hubs clean, Check for damage that would affect the runout of the wheels, Inspect the wheel rims for chips that could let air leak from the tires [FTI page 11-02-03].</p> <p>Check wheel balancing [TSB Bulletin 5 Article #28].</p> <p><u><a href="#">Split this into separate (related) entries for Tires and Wheels? (and does "balance go with "rotate tires" entry)?</a></u></p>	<p>See OM pages 55 “Wheels and Tires”, 56/57/58 “Changing* a Wheel” [OM].</p> <p>See FTI pages 11-02-03 “Wheel Inspection” &amp; “Tire Inspection”, 11-02-02 “Removal** and Installation (Wheels and Tires, &amp; Removing Tire from Wheel sections)”, 11-02-02 “Mounting** Tire to Wheel”, 11-02-02 “Wheel Balancing”, 53-05-01 “Torque* Wheel Nuts”, 11-02-01 “Hoisting” [FTI].</p> <p>See TSB Bulletin 5 Article #32 “Tire and/or Wheel Replacement* **”, Bulletin 7 Article # 56 “Care of Magnesium Wheels”, Bulletin 9 Article # 72 “Self Adhesive Wheel Weights”, Bulletin 10 Article # 85 “Rear Tire Matching” [TSB].</p> <p>See PPQR Chassis Items 2 “Tire Replacement” and 3 “Magnesium Wheels” [PPQR].</p>	<p>Tires Size (Front): C 60 V 15 [OM page 72]; See Placard on Vehicle [PSH Specs Section]; C60V15 (23-3/4” x 7”) or similar P225/60VR15 (25” x 7-1/4”) [POTI Group 12 “About Pantera Brakes – Part I]; See PITI Group 11 Article #4 “Pantera Detomaso L &amp; GTS Optional Fitment &amp; Setting” [PITI];</p> <p>Tires Size (Rear)***: H 60 V 15 [OM page 72]; See Placard on Vehicle [PSH Specs Section]; H60V15 (26” x 9”) or similar P255/60VR15 (26-1/2” x 8-1/2”) [POTI Group 12 “About Pantera Brakes – Part I]; See PITI Group 11 Article #4 “Pantera Detomaso L &amp; GTS Optional Fitment &amp; Setting” [PITI];</p> <p>Wheel Balancing: It is mandatory that self-adhesive wheel weights be used in preference to a clip-on design (to prevent corrosion) [TSB Bulletin 7 Article # 56, Bulletin 9 Article # 72]; Galvanic action between balance weight and magnesium wheel causes unsightly corrosion. Application of water repellant grease between balance weight and wheel rim and to inside faces of wheels and hubs. Bonded wheel weights specified for service 11/2/1973 [PPRQ Chassis item 4].</p> <p>Removing Tire From Wheel**: On demounting tire from wheel rim, be sure that no metallic tool for disassembling the tire marks or cuts the surface of wheel rim when it is rotating for disassembly (a circular scratch or groove could render the rim unusable for safety reasons) [OM page 57]; Extreme care must be exercised when removing or replacing tires on magnesium wheels – nicks or gouges resulting from improper use of the tire machine may lead to subsequent failure of the wheel rim (a vertical ram tire changer must be used to break the tire bead from the rim as this design does not contact the magnesium at any point) [TSB Bulletin 5 Article #32]; Lack of care in removing or replacing tires on wheels can nick or gouge the rim resulting in subsequent cracking [PPQR Chassis item 2].</p> <p>Wheel Nuts Torque (alternately and evenly)*: 43 to 58 ft-lb [FTI page 53-05-01, PSH Specs Section].</p> <p>See ***** Addition [PBN].</p>	<p>Tires (Front): BF Goodrich Radial T/A 50H (size 225/50R15 90H)***** [PBN – Previous Owner].</p> <p>Tires (Rear): BF Goodrich Radial T/A 50H (size P305/50R15 107H)***** [PBN – Previous Owner].</p>	<p>WHEELS AND TIRES (GENERAL)</p> <p>Related Tire Air Pressure Check entry in Bi-Monthly section [PBN].</p> <p>Related Clean Wheels and Tires entry in Bi-Monthly section [PBN].</p> <p>Related Rotate Tires entry below [PBN]. <del>delete this ref if delete tire rotation entry – if keep rotation, note in first column I don't do rotation.</del></p> <p>Related Tires item in DOT Annual Inspection Renewal in Yearly section [PBN].</p> <p>Related Stress Relieve Campy (Magnesium) Wheels entry in 50,000 Miles section [PBN].</p> <p>----- ***** Addition (There wasn't room for this in specs column -PBN):</p> <p>Mounting Tire to Wheel**: Clean rim with emery cloth or fine steel wool [FTI page 11-02-03]; Coat new valve and sealing surface on both tire beads with RUGLYDE or similar rubber lubricant [FTI page 11-02-03].</p> <p>Wheel Installation*: Apply light coating of protective grease between the hub and wheel [FTI page 11-02-02]; Water resistant grease should be applied to the inside faces of the wheels and hubs, both front and rear, to facilitate their removal [TSB Bulletin 7 Article # 56].</p> <p>Permissible Run-out: .004 - .006 Ins [PSH Specs Section]; Front brake lateral run-out of the faces must not exceed .004 inches [PSH page 39]; Maximum lateral runout of the disc brake rotor (measured with a dial indicator mounted on the wheel hub) must not exceed 0.008 inches (0.2mm) near the outer edge of the disc brake rotor [TSB Bulletin 1 Article #2]. <u><a href="#">(need to determine which is best value to use, and bold it)</a></u></p>	<p>Note: Tires fitted as original equipment were selected for maximum handling and maximum road-ability rather than long life (owners should be advised not to expect tire mileage comparable with other radial ply tires [TSB Bulletin 6 Article # 39].</p> <p>Note: Wheel hub is the part (connected to spindle) the wheel bolts onto via the lug nuts [MECH].</p> <p>*Note: Only if take wheels off for some reason [PBN].</p> <p>**Note: Only if take tire off for some reason [PBN].</p> <p>***Note: The Goodyear “Arriva” tires used on the rear are fitted as a matched pair – when replacing only one rear tire it is important to ensure the diameter of the new tire is compatible with the opposite tire (if in service tire has a measurable degree of tire wear, the diameter must be verified [TSB Bulletin 10 Article # 85].</p> <p>Note: Hub nuts and axle nuts and bearing adjustment nuts are same thing (called different depending on whether front or back), and are not the same thing as the lug nuts[MECH].</p> <p>****Note: Previous owner said need to “check the torque of the front axle nuts regularly (even with the cotter pin they tend to get loose which can throw off the alignment and cause excessive tire wear), and “the rear axle nuts should be checked for proper torque fairly regularly” [PBN].</p> <p>*****Note: Think no longer made, but may be able to get similar size in lower speed rated tire. See my tire &amp; wheel Web printouts for info if need to replace [PBN].</p>
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LOW [PBN].	[5000 PBN].	<u>Rotate Tires [PBN].</u>  <u>(If this is a valid maintenance item, add other stuff/notes/ref's supposed to do/applies whenever take wheels off car from Inspect wheels and tires entry above)</u>	<u>Rotate Tires front-to-front and rear-to-rear (different sizes) [PBN].</u>  See OM pages 56/57/58 "Changing a Wheel" [OM].  See FTI pages 11-02-02 "Removal and Installation (wheels and tires)", 53-05-01 "Torque Wheel Nuts", 11-02-01 "Hoisting" [FTI].  See TSB Bulletin 7 Article # 56 "Care of Magnesium Wheels" [TSB].	Wheel Installation: Apply light coating of protective grease between the hub and wheel [FTI page 11-02-02]; Water resistant grease should be applied to the inside faces of the wheels and hubs, both front and rear, to facilitate their removal [TSB Bulletin 7 Article # 56].  Wheel Nuts Torque (alternately and evenly): 43 to 58 ft-lb [FTI page 53-05-01, PSH Specs Section].		WHEELS AND TIRES (GENERAL)  Related Inspect Wheels and Tires/Wheel Balance entry above [PBN].	<u>Supposed to rotate tires on Panteras? (note previous owner used to do it), and if so, how often?</u>
	Every 10,000 Miles						
LOW** [PBN].	[10,000 PBN].  [OM = 8000 or 8 months]; [TSB = 4000* miles - Bulletin 5 Article #28].	Road Test [OM, TSB Bulletin 5 Article #28].				CAR  Related Annual Inspection Renewal entry in Yearly section <u>(do they road test in annual renewal? – if so add cross refs)</u> [PBN].  Related (i.e., is driving related) Steering Linkage (Check Steering Control) entry in 15,000 Miles section [PBN].	*Note: Assume was a one time thing at first 4000 miles of car [PBN].  **Note: Low priority since anything real bad would likely be noticed during routine driving [PBN].
VARIES [PBN].	[10,000 PBN].  [OM = 8000 or 8 months]; [TSB = 4000 miles - Bulletin 5 Article #28].	Check for water, oil, gasoline, brake and clutch fluid leakage [TSB Bulletin 5 Article #28]; Check for Water/Oil/Fuel Leakage (Visual Inspection) [OM].  Check for Shock Absorber* ** leakage [PBN].  Check for Transaxle Oil Leakage [PBN].				CAR; ENGINE (GENERAL); COOLING SYSTEM (GENERAL); FUEL SYSTEM (GENERAL); BRAKES (GENERAL); CLUTCH AND TRANSAXLE (GENERAL); SUSPENSION (SHOCK ABSORBER)  Related Garage Floor Leak Indication entry in Bi-Monthly section [PBN].  <i>Related Check Shock Absorber Leak entry in 5000 Miles section [PBN - TEMP].</i>  Related Clean/Degrease Engine and Transaxle entry in Yearly section [PBN].	<i>Note: Previous owner installed stainless steel flex brake lines [PBN].</i>  *Note: Since the suspension units/shock absorbers are sealed, they do not require filling [FTI page 14-32-01].  <i>** Note: Previous owner replaced all 4 original shock absorbers with Hall Pantera adjustable (knob adjustment rather than slotted screw adjustment) shocks, and took spacers out of the shocks to lower the car all around [PBN].</i>

<p>MEDIUM [PBN].</p>	<p>[10,000 PBN]. [OM = 8000 or 8 months]</p>	<p>Lube** Clutch Withdrawal Shaft* [OM].</p> <p><u>Does this belong with (combined into) one of the other clutch/ZF adjustment entries instead of being on its own?</u></p> <p><u>Is lubing the needle bearings the same thing as this, or just related? – if not same thing then need to note to NOT lube the 2 zerk fittings I had added to lube the twin needle bearings for this lube clutch withdrawal shaft entry since that won't lube this and also since using those zerk fittings has a special warning about how much lube to use that's not in this section.</u></p>				<p>CLUTCH AND TRANSAXLE <u>(what component?)</u></p> <p>Related Re-Grease the Twin Needle Bearings entry in 50,000 Miles section [PBN].</p> <p>Related Check, Clean, and Re-Grease the Twin Needle Bearings entry in When Transaxle Removed section [PBN].</p> <p><u>Is this related to replacing the pilot bushing in Special section?</u></p>	<p>*Note: This refers to the cross shaft in bell of transaxle [MECH - Pantera Parts Connection (BJ)]; This is cross shaft across bellhousing opening, withdrawal fork, where bellhousing connects to transaxle – inside housing [MECH - PPC (Colorado)]; Clutch Withdrawal Shaft is same thing as “Shift Trunion” (on left hand side near header) [MECH - Wilkenson Pantera]. <u>(is the “shift trunion” description referring to the same thing as the other two descriptions?)</u></p> <p>**Note: Some ZFs , if modified, have a lube (zerk) fitting – if not modified no way to lube it despite what OM says) [MECH - Pantera Parts Connection (BJ)]; Lever sticks out at end (put in 1<sup>st</sup> gear to lube, turn in 2<sup>nd</sup> gear and lube) [MECH - PPC (Colorado)]; Can't lube clutch withdrawal shaft unless take transaxle apart [MECH - PPC (Nevada)]. <u>(which is way to do it? – if can't be done unless take ZF out, move this entry to Special section)</u></p>
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<p>HIGH [MECH].</p>	<p>[10,000 PBN].</p> <p>[OM = 8000 or 8 months]; [FTI = 8000 or 8 months – page 52-00-03]; Adjust whenever the clutch does not disengage properly, or when new clutch parts are installed – page 16-02-03]; [TSB = 4000 miles - Bulletin 5 Article #28]; [PITI = occasionally when driving the car (check clutch pedal play) [PITI Group 16 Article #9]; [ZF = regularly (check clutch pedal play) – ZF Section III].</p>	<p>Check the Specified Clutch Pedal Play (clutch should engage and disengage completely) [ZF Section III]; Check/Adjust Clutch Pedal Free Travel [OM pages 44, 54]; Check Clutch Pedal Free Play [FTI page 52-00-03]; Check Clutch Free Travel [TSB Bulletin 5 Article #28]; Adjust Clutch Pedal Free Travel (adjust length of push rod) [FTI page 16-02-03]; Adjust Slave Cylinder Push Rod Length [TSB Bulletin 10 Article #88]. Adjust clutch slave cylinder, and make sure there is free play at the other (master cylinder) end of the system [POTI Group 16 “Clutch Maintenance”].</p> <p>Measure/Adjust gap between the clutch disc and the pressure plate (check to be sure the clutch pedal returns all the way when you release it – pull up on the pedal with your hand after depressing it, if it comes up any more check the pedal return spring around the shaft at the top of the pedal) [PITI Group 16 Article #9].</p> <p>Make sure the Clutch Release Lever pinch bolt does not interfere with the transmission case [PITI Group 16 Article #9].</p>	<p>See OM page 54 “Clutch Pedal Free Travel Inspection and Adjustment” [OM].</p> <p>See FTI page 16-02-03 “Adjustments (Clutch Pedal Free Travel)” [FTI].</p> <p>See PSH page 25 “To check and adjust free pedal travel” [PSH]; See PSH page 6 “Interior – Service Accessibility (Pedal Accessibility)” [PSH].</p> <p>See TSB Bulletin 10 Article # 88 “Clutch Adjustment” , Bulletin 10 Article # 89 “Clutch Pedal Effort Reduction Kit”, Bulletin 10 Article # 90 “Clutch Withdrawal Mechanism” [TSB].</p> <p>See PITI Group 16 Article #4 “Clutch Adjustment”, Group 16 Article #9 “Understanding, Troubleshooting and Adjusting your Clutch Linkage” [PITI].</p> <p>See POTI Group 16 “Clutch Maintenance” [POTI].</p>	<p>Pedal Free Travel: 1/4 to 7/16 inch (equivalent to 0.102 to 0.106 inch of release/withdrawal lever clearance) [OM page 54, FTI page 16-02-03, PSH page 25.]; 1/4 to 7/16 inch [PSH Specs Section].</p> <p>Release (Withdrawal) Lever Clearance/Gap: 0.102 to 0.106 inch [TSB Bulletin 10 Article # 88]; Most service people shoot for 1/16 to 1/8 inch (and IF you will keep an eye on this adjustment regularly keep to the 1/16 side) [POTI Group 16 “Clutch Maintenance”]; Manual calls for .102 to .106 inches (but use less, about a 1/16 inch*** [PITI Group 16 Article #9].</p> <p>Push Rod Free Play: 3/4 inch [FTI page 16-02-03]. <u>(which push rod does this refer to? – try to combine)</u></p> <p>Master Cylinder Push Rod Travel: Push rod in the master cylinder MUST be allowed to come all the way out when the pedal is released (whether you have the clutch effort reduction system or not) [POTI Group 16 “Clutch Maintenance”].</p> <p>Master Cylinder Push Rod (new type) Assembled Length Setting: 2.9 inches [TSB Bulletin 10 Article # 89].</p> <p>Slave Cylinder Push Rod Length (from center of hole to the end): 3.07 inches to 3.09 inches [TSB Bulletin 10 Article #88, PITI Group 16 Article #9].</p> <p>Air Gap Between the Pressure Plate, the Clutch Disc, and the Flywheel (when the clutch is fully disengaged): .040* inches (clutches should have as a minimum), .060 inches (high performance application) [POTI Group 16 “Clutch Maintenance”]; At least .050** inches for street use and .060 inches for competition [PITI Group 16 Article #9]. <u>(need to determine which is best value to use, and bold it)</u></p>		<p>CLUTCH AND TRANSAXLE (CLUTCH)</p> <p>Related Lubricate Clutch Linkage (under dashboard) entry in 15,000 Miles section [PBN].</p> <p>Related Lubricate/Repair the Effort Reduction Linkage in 50,000 Miles section [PBN].</p> <p>Related Coat the Clutch Pedal Return Spring with Anti-Seize entry in 50,000 Miles section [PBN].</p>	<p>*Note: Most Panteras usually have about .026 inches [POTI Group 16 “Clutch Maintenance”].</p> <p>**Note: You probably can’t get that in a Pantera, but hopefully will have more than .026 inches (if you don’t have at least this much something is very wrong) [PITI Group 16 Article #9].</p> <p>***Note: Clutch wear makes this gap smaller so you must check it regularly if you use a small gap) [PITI Group 16 Article #9].</p> <p><i>Note: Clutch Disc, Clutch Release Bearing, and Clutch Pressure Plate replaced when engine rebuilt at 80,000 miles [PBN].</i></p> <p><i>Note: I replaced clutch master cylinder with a Hall Pantera CNC master cylinder [PBN].</i></p>
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<p>MEDIUM [PBN].</p> <p><u>(should be high?)</u></p>	<p>[10,000.PBN].</p> <p><u>(need to determine if this is best frequency – I just made a guess – may need to combine into lube u-joints entry in 5000 miles section if that isn't too frequent)</u></p>	<p>Diagnose bad halfshaft universal joints (disassemble for inspection if necessary*) [PITI Group 15 Article #2]; Check Condition of the rear halfshaft outboard universal joints (disassemble and repack the trunions if in doubt about condition) [PITI Group 15 Article #1]; Check Your U-Joints for Failures Ready-To-Happen [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>	<p>See PITI Group 15 Article #1 “Rear Halfshaft Universal Joints”, Group 15 Article #2 “Driving Axles” [PITI].</p> <p>See POCA NL Apr 2002 “The Five Most Neglected Maintenance Areas in your Pantera (Check your u-joints for failures ready-to-happen) - Attachment 23 “POCANLapr2002etc” [POCA NL].</p>			<p>DRIVING AXLES AND DRIVE SHAFTS (UNIVERSAL JOINTS)</p> <p>Related Lube Drive Shaft Universal Joints entry in 5000 Miles section [PBN].</p>	<p>Note: “Drive Axles” are referred to as “Half-Shafts” in mid-engine applications (like Pantera) [PITI Group 15 Article #2].</p> <p>Note: There are no u-joints on the front [MECH].</p> <p><i>Note: The left and right axle halves may have been reversed (solid shaft portion of the half shaft near the transaxle and the sleeve portion toward the wheel) in order to put the “Mind Train Big Throats Exhaust System” on [PBN-Mind Train Enterprises Big Throats Installation Instructions].</i></p> <p><i>Note: Previous owner replaced 2 rear (either inner or outer) u-joints with different design from Hall Pantera [PBN].</i></p> <p>*Note: Slightly worn U-joints are impossible to detect without removal [PITI Group 15 Article #2].</p>
<p>LOW [PBN].</p>	<p>[10,000 PBN].</p> <p>[FTI = 8000 or 8 months].</p>	<p>Lubricate &amp; Free-up Exhaust Control Valve [FTI].</p>				<p><u>ENGINE?, FUEL SYSTEM? (component?)</u></p>	<p><i>Note: Previous owner removed vacuum smog control stuff [PBN]. <u>(does this apply to this entry? – MECH thinks this valve was probably removed, if so move this entry to “Never” section)</u></i></p>

<p>MEDIUM [PBN].</p> <p><i>PBN does</i></p>	<p>[10,000***** PBN].</p> <p>[OM = 8000 or 8 months (more frequently in dusty areas)]; [FTI = 12,000 or 12 months (more often if operated in severe dust conditions), or if it becomes clogged or restricted].</p> <p><i>[Holley 600** Carburetor Installation and Adjustment Instructions = Air cleaner filter elements should be blown clean at 6000 miles, replaced at 12,000 miles to assure maximum protection - page3]. Should I add a blow clean with compressed air entry at 5000 miles per Holley carb instructions?</i></p>	<p>Replace* Air Cleaner***** (clean the inside of the body and check that the cover seal is not damaged) [OM pages 45, 51];</p> <p>Replace* Carburetor Air Cleaner Element [FTI];</p> <p>Install a new filter element in the air cleaner body, if required [FTI page 24-41-01].</p> <p>Clean the Air Cleaner Body and Cover, Inspect the air cleaner body and cover for distortion or damage at the gasket mating surfaces (replace body and cover if they are damaged beyond repair), Inspect filter for any splits or cracks (if split or cracker, replace it) [FTI page 24-01-03].</p> <p>Inspect the air cleaner to carburetor mounting gasket (install new one if required) [FTI page 24-41-01].</p>	<p>See OM page 51 “Air Cleaner” [OM].</p> <p>See FTI page 24-01-03 “Cleaning and Inspection (Air Cleaner)”, 24-41-01 “Removal and Installation (Air Cleaner and Filter Element)” [FTI].</p> <p>See Attachment 2 “Pantera Tune Up Ideas (Carburetor Air Cleaner)” [WEB].</p> <p><i>See Holley 600** Carburetor Installation and Adjustment Instructions page 3 “Caution” [PBN – Holley 600 carburetor Installation and Adjustment Instructions].</i></p>	<p>Air Filter***: <i>NAPA Gold 2063**** [ORIG]. (need to find thicker (performance?) filter size that fits in air cleaner housing more snugly)</i></p> <p>Retaining Nut Torque: Moderately tighten [OM page 51].</p> <p><i>Cleaning Filter Element: Blown clean using compressed air [PBN – Holley 600 carburetor Installation and Adjustment Instructions page 3].</i></p> <p>Cleaning Air Cleaner Body and Cover: Solvent or compressed air [FTI page 24-01-03].</p>		<p>FUEL SYSTEM (AIR CLEANER AND FILTER)</p> <p>Related Replace Crankcase Emission Filter in Air Cleaner entry in Never section [PBN].</p> <p><i>Related Check Air Filter entry in 5000 Miles section [PBN – TEMP].</i></p> <p>Related Keep Carburetor in Good Operating Condition entry in 15,000 Miles section [PBN].</p> <p>Related Check Air Cleaner Temperature Control entry in 15,000 Miles section [PBN].</p>	<p>*Note: Cleaning the air cleaner filter element is not recommended, it should be replaced at the specified mileage intervals [FTI page 24-01-03].</p> <p><i>***Note: I replaced carburetor with a Holley 600 [PBN].</i></p> <p><i>****Note: Previous owner replaced the original air cleaner with one that would fit with the Edelbrock Torker manifold when he changed carburetor and intake manifold (I replaced that one with an aftermarket Pantera script air cleaner), therefore some of the references may not be applicable [PBN].</i></p> <p><i>****Note: NAPA 2063 equivalents are: AC A335C, FRAM CA114, Motorcraft FA41, Purolator A50080, WIX 42063 [NAPA Filter box].</i></p> <p><i>*****Note: Assume means to replace air cleaner’s element/filter [PBN].</i></p> <p><i>*****Note: My air filter seems to get dirty fast (see also Attachment 17 “Filthy Engine Room”), so used 10,000 miles instead of 15,000 miles [PBN/WEB].</i></p>
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<p>MEDIUM [PBN].</p>	<p>[10,000***** PBN].</p> <p>[OM = 8000 or 8 months]; [FTI = 12,000 or 12 months – page 52-00-02; If it becomes clogged or restricted – page 53-04-01 and 24-51-01; Whenever it becomes clogged or damaged – page 24-30-01; If in doubt that it has been changed within the recommended maintenance mileage interval – page 24-30-01].</p>	<p>Replace* Fuel Filter [OM]; Replace* Fuel System Filter [FTI].</p> <p>Make sure fuel filter is not clogged or damaged [FTI page 24-30-01] (<a href="#">is this a troubleshooting, not maintenance step – therefore delete off list?</a>).</p> <p>Check for restriction in fuel supply from the tank, and make sure the tank is venting properly [FTI page 24-30-02] (<a href="#">is this a troubleshooting, not maintenance step – therefore delete off list?</a>).</p>	<p>See FTI page 53-04-01 “Fuel Filter”, 24-51-01 “Removal and Installation (Fuel Filter)” [FTI];</p> <p>See Attachment 2 “Pantera Tune Up Ideas (Carburetor Fuel Filter)” [WEB].</p>	<p>Fuel Filter***** <a href="#">Quality in-line fuel filter such as Holley part number 162-524 [PBN – Holley 600** Carburetor Installation and Adjustment Instructions page3]</a>; Speed shops have racing (fuel filter) units that will vastly outflow the small chrome and glass ones, have easily replaceable filter cartridges and basically pay for themselves in trouble not caused [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>	<p>Fuel Filter: Purolator Performance Pro-Fuel Fuel Line Filter*** (Pro #805, for engines with 5/16” fuel lines) [MECH – need to research though to see if best]; Purolator Fuel Filter***** (#F10024) (will also work, but is not as good of a filter as Purolator Pro #805) [MECH].</p>	<p>FUEL SYSTEM (FUEL FILTER)</p> <p>Related Keep Carburetor in Good Operating Condition entry in 15,000 Miles section [PBN].</p> <p><i>Related Change Fuel Filter (due to gas tank filler neck rust) entry in 5000 Miles section [PBN - TEMP].</i></p> <p>Related Inspect Fuel Lines &amp; Connection entry in 15,000 Miles section [PBN].</p> <p><i>Related Replace the Stock Sintered Bronze Fuel Filters in Holley Carburetors entry in Never section [PBN].</i></p>	<p>*Note: The one-piece in-line fuel filter does not have a replaceable filter element, and cannot be cleaned, therefore the filter must be replaced as a unit [FTI page 24-30-01, 24-51-01, 53-04-01].</p> <p><i>**Note: I replaced carburetor with a Holley 600 (does not contain in line morain fuel filters) [PBN – Holley 600 carburetor Installation and Adjustment Instructions].</i></p> <p>***Note: This filter is recommended to be changed when it becomes visibly dirty, or every 5000 miles (do not use on fuel-injected systems). Has replaceable filter element (use “A Long” filter replacements) [PBN – Purolator Pro #805 filter package] (<a href="#">need to find good filter that will last 10,000 miles, or move this entry to 5000 miles section</a>).</p> <p>****Note: Stock fuel line is 5/16” ID [PBN – WEB].</p> <p>***** Note: This filter is recommended to be replaced every 10,000 miles or manufacturer’s recommended change interval [PBN – Purolator #F10024 filter package].</p> <p>*****Note: Is easy and cheap to change fuel filter (and generic fuel filters typically recommended to be changed every 10,000 miles), so used 10,000 miles instead of 15,000 miles just to be extra safe[PBN].</p> <p>*****Note: The small chrome and glass (external to carburetor) fuel filters are subject to breakage of the glass cylinder and/or the brass shaft that holds the assembly together. The fuel flow capacity of these filters is really too low for a performance engine [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>
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<p>VARIES [PBN].</p>	<p>[10,000 PBN].</p> <p>[OM/FTI = 8000 or 8 months]; [TSB = 4000 miles (check electrical system &amp; cooling fans) - Bulletin 5 Article #28].</p> <p>[PITI = Lucas** cooling fans sometimes have a life span as low as 5000 miles or so].</p> <p>[TSB = Prior to replacement of a new fuse (check spring tension in the fuse holder) – Bulletin 6 Article # 47].</p> <p>[WEB = Periodically (clean all Lucas parts) – Attachment 16A “Lucas Wiper Electrical”].</p>	<p>Check Electrical System (Especially Cooling Fans) [OM, TSB Bulletin 5 Article #28]; Check Electrical System [FTI].</p> <p>Make sure that Cooling Fans are working properly [PITI Group 27 Article #2].</p> <p>Check for Clean and Tight Wiring Connections at the alternator****, regulator****, and engine <a href="#">(is this for troubleshooting, not routine maintenance?)</a> [FTI page 31-01-01]; Check and Tighten all Alternator**** Connectors at the Starter**** Relay and Battery <a href="#">(is this for troubleshooting, not routine maintenance?)</a> [FTI page 31-10-01].</p> <p>Regulator Calibration Test*** <a href="#">(is this for troubleshooting, not routine maintenance?)</a> [FTI page 31-40-02].</p> <p>Replace or clean any (pointed Italian fuses) fuses that have corrosion, and the fuse retainer should be given a little squeeze so that there is sufficient pressure for good continuity [PBN – Based on info in PITI Group 27 Article #14]; Check and restore as necessary spring tension in the fuse holder (prior to replacement of a new fuse) [TSB Bulletin 6 Article # 47]; Removal and replacement of fuses may result in some loss of spring tension in the fuse holders. The tension should be checked and restored as necessary by gently pressing the two holders inward [PPQR Electrical item 15].</p> <p>Clean all Lucas Electrical Parts (headlight limit switches, windshield wiper motor multiconnector*****, contacts, etc.) [PBN/WEB – Attachments 16A “Lucas Wiper Electrical”, 16B “Lucas Headlight Switches”]. <a href="#">(need to find out other Lucas parts to list here – if add any, be sure to add cross references too)</a></p> <p><a href="#">Does anywhere say what parts of electrical system to check (OM/FTI didn't that I could see)?</a></p> <p><a href="#">See also electrical related stuff I listed under Annual Inspection in Yearly Section - supposed to be for this?</a></p>	<p>See OM page 64 “Electric System” [OM].</p> <p>See FTI page 31-01-01 “Charging System General Service Testing (Visual Inspection)”, 31-01-02 “Ammeter-Alternator Charging System”, “Tests Using a Voltmeter”, 31-10-01 “Alternator (Testing)”, 31-40-01 “Regulator (Testing****)”, 31-40-02 “Adjustments {Electro-Mechanical Regulator**}” <a href="#">(are these troubleshooting, not routine maintenance?)</a>; 34-30-01 “Removal and Installation (Individual Fuses)” [FTI].</p> <p>See TSB Bulletin 6 Article # 47 “Fuse Holders Losing Tension” [TSB].</p> <p>See PSH page 3 “Interior – Service Accessibility (Engine Accessibility)”, page 7 “Electrical System (Fusebox Accessibility)” [PSH].</p> <p>See Attachment 15 “The Firewall Cover” [WEB].</p> <p>See Attachments 16A “Lucas Wiper Electrical”, 16B “Lucas Headlight Switches” [WEB].</p>	<p>Contact Cleaner (Lucas parts): Freon Contact Cleaner from Radio Shack [WEB – Attachment 16B “Lucas Headlight Switches”]; TV Contact Cleaner [WEB - Attachment 16A “Lucas Wiper Electrical”].</p> <p>Fuse Sizes*: See OM page 65 “Fuse – Panel” [OM]; See FTI page 34-30-01 “Fig 1 Fuse Replacement - Fuse Replacement Legend” [FTI]; See PSH Specs Section “Electrical Circuit Protection” [PSH]; <i>8-10 amps (auto-dimming rearview mirror in-line fuse) [PBN].</i></p>	<p>----- *****Addition (There wasn't room for this in Notes column -PBN):</p> <p><i>Note: I had my Headlight and Fan Circuits rewired per Mike Drew's "Volts of Confidence" article [PBN - WEB].</i></p> <p>*****Note: I replaced the Starter with a “racing” starter (Ford XStorque Series, Powermaster # 9504) [PBN].</p> <p>*****Note: New windshield wiper with positive seal for limiting switch and internal sealing for wiring connection effective in production 2/15/1973 [PPQR Electrical item 3].</p>	<p>MAIN WIRING HARNESSES AND CIRCUIT PROTECTION (GENERAL); COOLING SYSTEM (COOLING FANS); CHARGING SYSTEM (ALTERNATOR, REGULATOR); AUXILIARY EQUIPMENT (WINDSHIELD WIPER); LIGHTING SYSTEM (HEADLIGHT SYSTEM)</p> <p>Related Electrical stuff to check listed in Annual Inspection Renewal listing in Yearly section [PBN].</p> <p>Related Check Operation of Lights and Turn Signals entry in Yearly section [PBN].</p> <p>----- *****Addition (There wasn't room for this in Notes column -PBN):</p> <p><i>Note: Previous owner augmented horn with Fiamm electric air horns (sound with the existing horns); Moved water temperature sender from surge tank to front of engine block; Installed Cibie Z-Beam quartz headlights (including adding relays in front trunk (required per Cibie instructions) to avoid burning out the stock Pantera headlight relays or wiring) - I installed the Vader headlight modification in place of the Cibie headlights, but left in relays; Installed custom (homemade) burglar alarm (I disconnected it, but its components are still there such as a wooden block inside center console with relays/wires etc); Installed 12 Watt Craig Powerplay amplifier and Pioneer (Flux Craig?) speakers (speakers since replaced, assume amplifier has been removed); Rearranged order of the console instruments (oil pressure, water temperature, amp, and fuel gauges); Installed sun visor mounted radar detector (was removed, but power wire still under headliner trim) [PBN].</i></p>	<p>*Note: Vehicles before approx. chassis number 1600 may have 30A circuit breakers for window motors [PSH Specs Section].</p> <p><i>**Note: My Lucas cooling fans/motors have been replaced with other brands (One is a Mirriah from Hall Pantera, previous owner replaced the other one) [PBN].</i></p> <p>***Note: The electro-mechanical regulator is factory calibrated and sealed and cannot be adjusted – if it does not pass the Regulator Calibration Test it must be replaced [FTI page 31-40-01 &amp; 02].</p> <p><i>****Note: I replaced alternator and voltage regulator with an alternator that has a built in voltage regulator, and disconnected the generator light in the speedometer [PBN].</i></p> <p><i>Note: I had my (inoperable on 1973 Panteras) Fan light on Speedometer hooked up so that it comes on when 2<sup>nd</sup> (higher temp sensor) Radiator Fan comes on; I replaced radiator fan (higher) temp sender with modern style (using adapter from Pantera vendor); I installed a Hall Armrest with Oil Temperature Gauge and clock; I replaced the Ammeter with a “improved design” one from Hall Pantera; I installed a Viper Burglar Alarm; I added an additional resistor to the heater/AC fan blower to slow down the intermediate speed; I added Hall Pantera Top Sound Bar Speaker System; I installed the Vader headlight modification; I added roof console with map lights (tied into dome courtesy light power); I replaced inside rearview mirror with electric auto-dimming mirror (with in-line fuse) [PBN].</i></p> <p>See ***** and ***** Additions [PBN].</p>
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<p>LOW [PBN].</p>	<p>[10,000 PBN].</p> <p>[OM = 8000 or 8 months]; [PSH = after first 4000 miles, then after each subsequent 8000 miles, and after suspension servicing].</p>	<p>Check/Adjust Vehicle Trim. [OM pages 45, 68]; Check Vehicle Trim [PSH page 30].</p>	<p>See OM page 68 “Wheel Geometry and Vehicle Trim” [OM].</p> <p>See PSH page 30 “Vehicle Geometry and Wheel Trim” [PSH].</p> <p>See FTI page 11-02-01 “Hoisting” [FTI].</p>	<p>See OM page 69 “(Caster Angle, King-pin, front/rear wheel camber, front/rear wheel toe-in specs)” [OM] <u>(see if this applies to vehicle trim – if not delete this ref. if does, possibly list each of these as separate spec and add other specs from PSH etc listed in wheel alignment entry)</u>;</p> <p>See PSH page 30 “front suspension” specs, “rear suspension” specs [PSH], See PSH Specs Section “Front Suspension”, “Rear Suspension” [PSH] <u>(do these specs apply to this item, and if they do are they maint or repair related? – possibly add the individual specs)</u>.</p> <p>Checking Trim: To check Vehicle trim place vehicle on level surface, tires must be correctly inflated, two occupants on board (or 154 lb weights – 88 lbs on each seat and 66 lbs in each foot well), tank half full and no luggage [OM page 68, PSH page 30].</p> <p>See PITI Group 11 Article #4 “Pantera Detomaso L &amp; GTS Optional Fitment &amp; Setting” [PITI] <u>(see if this applies to vehicle trim – if not delete this ref)</u>.</p>		<p>STEERING (<u>component?</u>)</p> <p>Related Wheel Alignment entry below [PBN]. <u>Are these supposed to be combined into 1 entry – i.e., are they the exact same maintenance operation, or are they just 2 related things (note I split up wording of 1 quote from PSH “Check Wheel Geometry and Vehicle Trim” [PSH page 30])?</u></p>	<p><i>Note: Previous owner replaced removable cross member (engine compartment spreader bar) with Hall Pantera adjustable cross brace (camber bar) [PBN]. (see if this applies to vehicle trim – if not delete this).</i></p>
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<p>HIGH [MECH].</p>	<p>[10,000 PBN]. [OM = 8000 or 8 months]; [PSH = During routine servicing].</p>	<p>Check Steering Rack inner ball joints Rubber Bellows for leaks (lubricate* if necessary) and ensure that the ball pins move freely [PSH page 33]; Replace defective boots and fill** rack [PITI Group 13 Article #3]; Check Steering Unit Rubber Boots for Leakage and Damage [OM].</p>	<p>See PSH page 34 “Checking for wear and damage (cuts and punctures) and dismantling (Bellows)” [PSH];  See FTI page 13-01-01 “General Manual Steering Service (General Information)” [FTI].  See PITI Group 13 Article #1 “Rack &amp; Pinion Maintenance” (way to top up oil level without taking the rack &amp; pinion assembly out of the car, pages 7 &amp; 8), Group 13 Article #3 “Steering Play” (way to fill rack without pulling it out of the car, page 4) [PITI] <a href="#">Is this “Steering Gear” lubricant what you also use for boots/bellows (if not delete this specs ref)?</a>.</p>	<p>Steering Gear Lubricant: SAE 90 E.P. Gear Oil [FTI]; SAE 90 oil (extreme pressure type), Grease must not be used as a lubricant [PSH page 37]; Extreme Pressure 90 wt gear oil [PITI Group 13 Article #3]. <a href="#">Is this “Steering Gear” lubricant what you also use for boots/bellows (if not delete this specs ref)?</a>  Steering Gear Oil Capacity: 1/3 pint + 10% (this amount should not be exceeded as overfilling may cause the bellows to burst or be forced off the main housing) [PSH page 37]; 1/3rd pint plus 10% [PITI Group 13 Article #3] <a href="#">Is this “Steering Gear” lubricant what you also use for boots/bellows (if not delete this specs ref)?</a>.  Steering Gear Mounting Bolts Torque: 20 ft-lbs [PSH Specs Section].  Tie Rod Ends Torque: 43 ft-lbs [PSH Specs Section].  Pinion Bearing Preload: .002 - .005 Crush [PSH Specs Section].  Rack Yoke Clearance: .002 -.005 [PSH Specs Section]. <a href="#">(do these 4PSH Specs Section things directly above apply to this maint item, and if so are they maint info or repair info?)</a></p>		<p>STEERING (STEERING GEAR BELLOWS)  Related Lubricate Steering Arm Stops entry in 15,000 Miles section [PBN].  Related Check/Lube Steering Linkage entry in 15,000 Miles section [PBN].</p>	<p>Note: Assume Boots and Bellows is same thing [PBN].  *Note: Oil is introduced during manufacture and no further lubrication required unless damage to the bellows is encountered. Providing the bellows are not damaged by stones thrown up from the road, and remain oil tight, no topping up of the oil is required [PSH page 33].  **Note: Most Pantera steering racks have no oil left in them due to defective boots and seepage [PITI Group 13 Article #3].</p>
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<p>LOW [PBN].</p> <p>[10,000 PBN].</p> <p>[OM = 8000 or 8 months]; [FTI = Poor ride and handling characteristics or abnormal tire wear (Item should be checked periodically and service performed when required) – page 52-00-01]; [PSH = after first 4000 miles, then after each subsequent 8000 miles, and after suspension servicing]; [TSB = 4000*** miles (alignment) - Bulletin 5 Article #28 &amp; 33]; [PPQR = Dealers must check suspension alignment at pre-delivery and again at 4000 miles – Chassis Item 1].</p> <p>[POTI = don't know how often (adjust "bay brace" bar) – Group 14 "Wheel Alignment Basics" page 2].</p> <p>Every 15,000 Miles</p>	<p>Check Wheel Geometry [PSH page 30]; Check/Adjust Wheel Geometry [OM page 68].</p> <p>Check Front/Rear Wheel Alignment [TSB Bulletin 5 Article #28 &amp; 33]; Check Front/Rear Wheel Toe-In and Chamber [OM].</p> <p>Check Front Wheel Alignment [FTI page 52-00-01]; Check/Correct Front Wheel Toe-In [FTI page 53-05-01].</p> <p>Check Tracking [TSB Bulletin 2 Article # 10].</p> <p>Adjust (Camber related) "Bay Brace" Bar***** [POTI Group 14 "Wheel Alignment Basics"].</p>	<p>See OM page 68 "Wheel Geometry and Vehicle Trim" [OM].</p> <p>See FTI pages 53-05-01 "Check Front Wheel Toe-In", 13-01-03 "Adjustments" and "Front Wheel Alignment (Camber, Caster, &amp; Toe-In)" and Rear Wheel Alignment***** (Camber, &amp; Toe-In)", 11-02-02 "Removal and Installation (wheels and tires)", FTI page 53-05-01 "Torque Wheel Nuts*", 11-02-01 "Hoisting" [FTI].</p> <p>See PSH page 30 "Vehicle Geometry and Wheel Trim" [PSH].</p> <p>See TSB Bulletin 2 Article # 10 "Wheel Alignment*****", Bulletin 5 Article # 33, Bulletin 13 Article #33-S, TSB Bulletin 7 Article # 56 "Care of Magnesium Wheels*" [TSB].</p> <p>See POTI Group 14 "Wheel Alignment***** Basics" (page 2 &amp; 3 - proper adjustment of "bay brace" bar), "Weight Distribution" [POTI].</p> <p><u>Many of the specs listed in the columns to the right are different from different sources - need to determine which is best value to use, and bold them.</u></p> <p>***** Addition (There wasn't room for this in Notes column -PBN):</p> <p><i>*****Note: Previous owner installed set of Hall Pantera extended rear upper "A" arms to correct original problem of getting good rear wheel alignment (allow more suspension alignment adjustment for the rear tires); Engine compartment spreader bar was replaced with a Hall Pantera adjustable cross brace (camber bar) by previous owner [PBN].</i></p> <p>*****Note: It is important to not over-torque the A-arm mounts when installing them/tightening the nuts down (they have to be loosened and tightened each time the rear wheels are aligned) [POCA NL Sept 2001 page 20 (Attachment 21b)]; Structures feature internal reinforcement of one type or another that would be virtually impossible to deform simply by over-tightening the nuts which secure the yokes to the chassis rails (there has long been speculation that the failures reported were caused by over-tightening, but that no longer seems to be a valid theory) [POCA NL July 2002 pages 9 &amp; 10 (Attachment 21c)].</p>	<p>See OM page 69 "Caster** Angle, King-pin, front/rear wheel camber, front/rear wheel toe-in specs)" [OM];</p> <p>See PSH page 30 "front suspension" specs, "rear suspension" specs [PSH], PSH Specs Section "Wheel Alignment" [PSH]. <u>(Add detailed specs from these to checklist?)</u></p> <p>Front Wheel Camber Adjustment: 1/8 degree negative to 1/8 degree positive [FTI page 13-01-03, TSB Bulletin 2 Article # 10, Bulletin 5 Article # 33]; 1/8 degree negative to 1/8 degree positive (when aligning a vehicle at curb load conditions) [Bulletin 13 Article #33-S, POTI Group 14 "Wheel Alignment Basics"]; 0 degree to 1/4 degree negative [PITI Group 14 Article #6].</p> <p>Front Wheel Caster** Angle Adjustment: 2-3/4 degrees positive [FTI page 13-01-03, TSB Bulletin 5 Article # 33]; 2-3/4 degrees positive (when aligning a vehicle at curb load conditions) [TSB Bulletin 13 Article #33-S]; 2-3/4 degrees minimum [PITI Group 14 Article #6].</p> <p>Front Wheel Toe-In Adjustment (using toe-in measuring bar): 1/8 inch (difference in distance between the wheels measured at both the back and front of the tires, the front measurement should be the smallest) [FTI page 13-01-03, 53-05-01]; 1/8 inch in (by adjusting steering tie rods) [TSB Bulletin 2 Article # 10, Bulletin 5 Article # 33]; 3/8 inch***** (when aligning a vehicle at curb load conditions) TSB Bulletin 13 Article #33-S, POTI Group 14 "Wheel Alignment Basics"); 1/8 inch [PITI Group 14 Article #6].</p> <p>Rear Wheel Camber Adjustment: 3/8 degree negative to 5/8 degree negative [FTI page 13-01-03, TSB Bulletin 5 Article # 33****]; 3/8 degree negative to 5/8 degree negative (when aligning a vehicle at curb load conditions) [Bulletin 13 Article #33-S, POTI Group 14 "Wheel Alignment Basics"]; 3/8 degree – 5/8 degree**** [TSB Bulletin 2 Article # 10]; 1/2 degree to 3/4 degree negative [PITI Group 14 Article #6].</p> <p>See ***** and ***** Additions [PBN].</p>	<p>See OM page 69 "Caster** Angle, King-pin, front/rear wheel camber, front/rear wheel toe-in specs)" [OM];</p> <p>See PSH page 30 "front suspension" specs, "rear suspension" specs [PSH], PSH Specs Section "Wheel Alignment" [PSH]. <u>(Add detailed specs from these to checklist?)</u></p> <p>Front Wheel Camber Adjustment: 1/8 degree negative to 1/8 degree positive [FTI page 13-01-03, TSB Bulletin 2 Article # 10, Bulletin 5 Article # 33]; 1/8 degree negative to 1/8 degree positive (when aligning a vehicle at curb load conditions) [Bulletin 13 Article #33-S, POTI Group 14 "Wheel Alignment Basics"]; 0 degree to 1/4 degree negative [PITI Group 14 Article #6].</p> <p>Front Wheel Caster** Angle Adjustment: 2-3/4 degrees positive [FTI page 13-01-03, TSB Bulletin 5 Article # 33]; 2-3/4 degrees positive (when aligning a vehicle at curb load conditions) [TSB Bulletin 13 Article #33-S]; 2-3/4 degrees minimum [PITI Group 14 Article #6].</p> <p>Front Wheel Toe-In Adjustment (using toe-in measuring bar): 1/8 inch (difference in distance between the wheels measured at both the back and front of the tires, the front measurement should be the smallest) [FTI page 13-01-03, 53-05-01]; 1/8 inch in (by adjusting steering tie rods) [TSB Bulletin 2 Article # 10, Bulletin 5 Article # 33]; 3/8 inch***** (when aligning a vehicle at curb load conditions) TSB Bulletin 13 Article #33-S, POTI Group 14 "Wheel Alignment Basics"); 1/8 inch [PITI Group 14 Article #6].</p> <p>Rear Wheel Camber Adjustment: 3/8 degree negative to 5/8 degree negative [FTI page 13-01-03, TSB Bulletin 5 Article # 33****]; 3/8 degree negative to 5/8 degree negative (when aligning a vehicle at curb load conditions) [Bulletin 13 Article #33-S, POTI Group 14 "Wheel Alignment Basics"]; 3/8 degree – 5/8 degree**** [TSB Bulletin 2 Article # 10]; 1/2 degree to 3/4 degree negative [PITI Group 14 Article #6].</p> <p>See ***** and ***** Additions [PBN].</p>	<p>*****Addition (There wasn't room for this in Specs column – PBN):</p> <p>Rear Wheel Toe-In Adjustment: 1/8 inch to 3/16 inch [FTI page 13-01-03]; 3/16 inch – 5/16 inch**** [TSB Bulletin 2 Article # 10]; 1/8 inch to 3/16 inch**** [TSB Bulletin 5 Article # 33]; 1/8 inch to 3/16 inch (when aligning a vehicle at curb load conditions) [Bulletin 13 Article #33-S]; 1/4 to 3/16 inch [POTI Group 14 "Wheel Alignment Basics"]; 3/16 inch [PITI Group 14 Article #6].</p> <p>Tracking: Front and rear tracks equidistant from the vehicle centerline and relative to each other within .025 inch (alternatively, a straight edge (or string) placed against the rear wheels should not show a significant variation at the front wheels – a maximum variation of ¼ inch is permissible [TSB Bulletin 2 Article # 10].</p> <p>Bay Brace Bar (stock)*****: Some type of mark to see if its moved may help***** [POTI Group 14 "Wheel Alignment Basics"].</p>	<p>STEERING (WHEEL ALIGNMENT)</p> <p>Related Vehicle Trim entry above [PBN].</p> <p>***** Addition (There wasn't room for this in specs column -PBN):</p> <p>Checking Alignment/Geometry: To check Wheel Geometry place vehicle on level surface, tires must be correctly inflated, two occupants on board (or 154 lb weights – 88 lbs on each seat and 66 lbs in each foot well), gas tank half full and no luggage [OM page 68, PSH page 30, TSB Bulletin 2 Article # 10]; Load car for alignment adjustments as follows - 88 lbs on each seat, 66 lbs in each foot well, and half full gas tank [FTI page 13-01-03]; Engineering studying wheel alignment data to establish unladen specifications [PPQR Chassis item 1] <u>(did Ford ever come up with that? – if so incorporate here).</u></p> <p>Wheel Installation*: Apply light coating of protective grease between the hub and wheel [FTI page 11-02-02]; Water resistant grease should be applied to the inside faces of the wheels and hubs, both front and rear, to facilitate their removal [TSB Bulletin 7 Article # 56].</p> <p>Wheel Nuts Torque (alternately and evenly)*: 43 to 58 ft-lb [FTI page 53-05-01, PSH Specs Section].</p> <p>See PSH Specs Section "Front Suspension", "Rear Suspension" [PSH] <u>(do these specs apply to this item, and if they do are they maint or repair related? – if so add the detailed specs to this?)</u>.</p> <p>See PITI Group 11 Article #4 "Pantera Detomaso L &amp; GTS Optional Fitment &amp; Setting" [PITI].</p>	<p>Note: Assume "Chamber" (in OM) and "camber" is same thing [PBN].</p> <p>Note: Toe-In and Camber is same as "Alignment", Wheel Geometry and Wheel Alignment is same thing [MECH].</p> <p><i>Note: Steve (Mechanic) can't do (take to alignment shop) [PBN].</i></p> <p>*Note: Only if take wheels off for some reason (can do alignment without taking wheels off) <u>(if supposed to do without taking wheels off, delete the stuff in this entry that only applies generically to wheel removal)</u> [MECH].</p> <p>**Note: Caster, both front and rear is pre-set, and under normal circumstances should not be altered [TSB Bulletin 2 Article # 10].</p> <p>***Note: Assume was a one time thing at first 4000 miles of car [PBN].</p> <p>****Note: the wheel alignment specifications in TSB Bulletin 5 Article 33 supersede those in Bulletin 2 Article # 10 [TSB Bulletin 5 Article #33].</p> <p>*****Note: The wheel alignment specifications in TSB Bulletin 13 Article #33-S specifications supersede those in TSB Bulletin 5 Article #33 (the specifications reflect a change in front toe-in only) [TSB Bulletin 13 Article #33-S].</p> <p>*****Note: Aftermarket adjustable "bay brace" bars (sold by Pantera Vendors) can be preloaded to provide proper support to the rear suspension [POTI Group 14 "Wheel Alignment Basics"].</p> <p>See ***** Addition [PBN].</p>
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LOW [PBN].	<p>[15,000 PBN].</p> <p>[OM = Occasionally (check) - page 35; Excessive hand brake lever travel or hand brake inefficiency (page 17)]; [FTI = Excessive foot** pedal travel required to hold or will not hold car (Item should be checked periodically and service performed when required) - page 52-00-01]; [TSB = 4000* miles (check) - Bulletin 5 Article #28].</p> <p>[FTI = 8000 or 8 months for Parking Brake lubrication – page 52-00-03]; [OM = 4000* (lubricate) - page 45].</p>	<p>Check Handbrake Linkage [OM page 45, TSB Bulletin 5 Article #28]; Check Parking Brake Cable Tension and Adjust if Required (if excessive foot** pedal travel required to hold or will not hold car) [FTI page 52-00-01]; Adjust through the appropriate points on hand brake linkage (if excessive hand brake lever travel or hand brake inefficiency) [OM page 17].</p> <p>Lubricate Handbrake Linkage [OM page 35]; Lubricate Parking Brake Linkage (all pivot and pulley points) [FTI page 52-00-03].</p>	<p>See FTI pages 53-01-02 “Lubricate Parking Brake Linkage, 53-05-01 “Parking Brake Adjustment”, 12-70-01 “Adjustments (Parking Brake Linkage)” [FTI].</p>			<p>BRAKES (PARKING BRAKE LINKAGE)</p> <p>Related Emergency Brake item in DOT Annual Inspection Renewal entry in Yearly section [PBN].</p>	<p>*Note: Assume was a one time thing at first 4000 miles of car [PBN].</p> <p>**Note: Assume “foot pedal” is generic wording, and actually refers to hand brake lever [PBN]. <a href="#">Or does the parking brake cable interfere with foot pedal working in this scenario?</a></p>
MEDIUM [PBN].	<p>[15,000 PBN].</p> <p>[OM = Occasionally].</p>	<p>Lubricate Clutch Linkage (under dashboard) [OM].</p>	<p>See PSH page 6 “Interior – Service Accessibility (Pedal Accessibility)” [PSH].</p>			<p>CLUTCH AND TRANSAXLE (CLUTCH)</p> <p>Related Check Clutch Pedal Free Play entry in 10,000 Miles section [PBN].</p> <p>Related Coat the Clutch Pedal Return Spring with Anti-Seize entry in 50,000 Miles section [PBN].</p> <p>Related Lubricate/Repair the Effort Reduction Linkage entry in 50,000 Miles section [PBN].</p>	<p>Note: Clutch Linkage is different from Transmission Linkage [MECH].</p>

<p>MEDIUM [PBN].</p>	<p>[15,000 PBN].</p> <p>[OM = 4000* miles (check gearshift linkage) – page 45];  [FTI = 12,000 or 12 months (check) – pg 52-00-03];  [TSB = 4000* miles (check transmission linkage) - Bulletin 5 Article #28;  Poor shifting affecting primarily 1<sup>st</sup> or 3<sup>rd</sup> gear may be an indication of loose bolts (check gearshift universal joint bolts) – Bulletin 9 Article # 70].</p> <p>[OM = Occasionally, or in the event of harshness of the control linkage (lubricate transmission linkage) – page 39];  [FTI = When moving parts and connections are void of lube or sluggish in action (Item should be checked periodically and service performed when required) (lubricate transmission linkage) – page 52-00-01; The connecting rod support bearing requires periodic lubrication – page 16-10-03];  [PSH = periodic (lubrication of connecting rod bearing)];  [PITI = As required, with your normal lubrication schedule (every other oil change, or about each 6 to 8000 miles) (Re-grease the center shift linkage bushing) – Group 16 Article #7].</p>	<p>Check Gearshift Linkage [OM page 45];  Check Transmission Linkage [FTI pg 52-00-03, TSB Bulletin 5 Article #28].</p> <p>Check that the two sections of the gear shift rod are parallel (if not, adjust the support bearing accordingly), check that the support bearing is tight [TSB Bulletin 2 Article # 14].</p> <p>Check gearshift universal joint bolts securing the front, intermediate and rear universal joints to the connecting shafts for tightness (particular attention should be paid to the front universal joints located beneath the console) [TSB Bulletin 9 Article # 70].</p> <p>Lubricate Transmission Linkage [FTI pg 52-00-01];  Lubricate Transmission Linkage (cushioned rod bearing) [OM pages 35 &amp; 39];  Lubricate Connecting Rod Support Bearing [FTI page 16-10-03];  Lubricate Connecting Rod Support Bearing on the Shift Linkage [PITI Group 53 Article 1];  Lubricate Front Connecting Rod Support Bearing [PSH page 25];  Lubricate Center Shift Linkage Bushing [PITI Group 16 Article #7].</p> <p>Clean and lube the 2 U-Joints on shift linkage that are exposed to dirt and road splash [PITI Group 53 Article 1].</p>	<p>See OM page 39 “Lubrication – Transmission Remote Control Linkage” [OM].</p> <p>See FTI page 16-10-03 “Adjustments (Gearshift Linkage)” [FTI].</p> <p>See PITI Group 16 Article #7 “Adding a Grease Fitting to the Center Shift Linkage Bushing, Group 53 Article #1 “Lubrication Tips” [PITI].</p> <p>See PSH page 25 “Transmission Linkage” [PSH].</p> <p>See TSB Bulletin 2 Article # 14 “Shift Linkage Adjustments”, Bulletin 9 Article # 70 “Gearshift Universal Joints”, Bulletin 11 Article #14-S “Shift Linkage Adjustments” [TSB].</p>	<p>Cushioned Rod Bearing Lubricant: Grease [OM page 39].</p> <p>Center Shift Linkage Bushing Lubricant:  Grease [PITI Group 16 Article #7].  (is this bushing same as cushioned rod bearing above (Steve wasn't sure)? – if so combine them)</p> <p>Connecting Rod Support Bearing Greasing Method:  Use a hypodermic syringe (the type lubricant varies with application depending on viscosity you want, e.g. high pressure moly/graphite based types) [PITI Group 53 Article 1];  Use oil can with a flattened spout [PSH].</p> <p>Center Shift Linkage Bushing Lubricating Method:  Slide a needle-like grease probe under the boot and apply grease** [PITI Group 16 Article #7];  Grease it until a small amount of grease can be seen emerging from under the rubber boots, both front and rear [PITI Group 16 Article #7]. (is this lubing bushing same as greasing cushioned rod bearing above (Steve wasn't sure)? – if so combine them)</p> <p>Connector/Register/Lock Nut Torque:  Tighten register until it is secure, but not under strain [PSH page 26].</p>		<p>CLUTCH AND TRANSAXLE (TRANSAXLE GEARSHIFT LINKAGE)</p>	<p>Note: “Gearshift Linkage” and “Shift Linkage” is same as “Transmission Linkage” [MECH].</p> <p><i>Note: Previous owner insulated the gearshift tunnel cover with fiberglass [PBN].</i></p> <p>*Note: Assume was a one time thing at first 4000 miles of car [PBN].</p> <p>**Note: If do this, only the rearward facing boot is accessible, and only one side of the bushing gets greased, and the boot will probably split as it ages (unless add a Zerk fitting modification) [PITI Group 16 Article #7].</p>
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<p>HIGH [PBN].</p>	<p>[15,000/30,000* PBN].</p> <p>[FTI = Check condition at 12,000 or 12 months, replace at 24,000 or 24 months (replace every 24 months regardless of mileage) pattern].</p> <p>[PITI = Replace “worn-out” anti-freeze each year – Group 27 Article #5].</p> <p>[POCA NL Apr 2002 = Change antifreeze yearly - POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>	<p>Check/Replace* * * * * Coolant Condition &amp; Protection. Check: If Coolant is dirty or rusty in appearance, the system should be cleaned and flushed. The radiator cap should be cleaned and the system refilled with the prescribed solution of Ford Cooling System Fluid and water. Replace: Drain and Flush Cooling System, and Replace Cooling System Fluid [FTI].</p> <p>Check the concentration of ethylene glycol in the coolant [TSB Bulletin 8 Article # 61].</p>	<p>See OM page 31 “Cooling System – Filling Procedure” [OM].</p> <p>See FTI page 27-01-03 “Filling Cooling System” [FTI].</p> <p>See PSH page 13 “Filling an Empty Cooling System” [PSH].</p> <p>See PITI Group 27 Article #2 “The Pantera Cooling System”, Group 27 Article #5 “Coolant Hoses” [PITI].</p> <p>See TSB Bulletin 2 Article # 13 “Cooling System Characteristics”, Bulletin 8 Article # 61 “Coolant System – Overheating Conditions (Air Purging, &amp; Coolant sections)” [TSB].</p> <p>See Attachment 1 “Coolant Changing Email”, and Attachment 8 “Pantera Cooling System (Coolant Tanks, &amp; Air In System sections)” [WEB].</p> <p>ADD “WATER WETTER” COOLANT ADDITIVE [WEB - Attachment 8 “Pantera Cooling System (The Coolant)”].</p>	<p>Cooling System Capacity: 6 3/8 Gallons [OM page 72]; 25 1/2 Quarts [PSH Specs Section].</p> <p>Coolant Fluid: 40% Antifreeze – 60% Water (Use only permanent-type coolant that meets Ford Specification ESE-M-97 B18-C. Do Not use Alcohol or Methanol anti-freeze or attempt to mix them with the factory coolant) [OM page 72]; Solution of 50% water and Ford Antifreeze [FTI page 53-04-01]; Ford Cooling System Fluid and water [FTI page 52-00-02]; Permanent antifreeze and water mixture [FTI page 27-01-03]; 50-50 mixture of antifreeze and water (at least 50% antifreeze, good idea to put in about 60% antifreeze) [PITI Group 27 Article #2]; coolant mixture of approximately 50-50 water and ethylene glycol (antifreeze) [TSB Bulletin 2 Article # 13, Bulletin 8 Article # 61]; See Attachment 8 “Pantera Cooling System (The Coolant)” [WEB]. <b><u>(need to determine which is best value to use, and bold it)</u></b></p> <p>Checking Level: Check radiator coolant level with engine cold [OM page 14, FTI page 53-04-01, TSB Bulletin 2 Article #11, Bulletin 8 Article # 61]; Check Level in Expansion Tank Using flexible dipstick*** [PITI Group 27 Article #2].</p> <p>Coolant Tanks Level: Top up the supply tank and partially fill the expansion tank [PSH page 13]; Keep supply tank** filled at all times and maintain expansion/recovery tank half filled [TSB Bulletin 2 Article #11]; Feed tank must always be completely full [OM page 14]; Expansion tank should be maintained at a half filled level at all times [TSB Bulletin 11 Article #96].</p> <p>Check concentration of ethylene glycol: Use an anti-freeze hydrometer [TSB Bulletin 8 Article # 61].</p>	<p>Coolant Additive: “Water Wetter” by Redline [WEB - Attachment 8 “Pantera Cooling System (The Coolant)”].</p>	<p>COOLING SYSTEM (GENERAL)</p> <p>Related Replace Coolant at Least Bi-yearly entry in Bi-Yearly section [PBN].</p> <p>Related Check Coolant Level and Fill Expansion Tank entry in Bi-Monthly section [PBN].</p> <p>Related Check Coolant System Hoses &amp; Clamps entry below [PBN].</p>	<p>*Note: Check coolant level and fill expansion tank bi-monthly. Check coolant condition at 15,000 miles, Replace at 30,000 miles or at least bi-yearly (see separate entries) [PBN].</p> <p><i>Note: will probably drive &lt;30,000 miles every 2 years so the bi-yearly change should negate the need for this 30,000 miles change [PBN].</i></p> <p>**Note: With respect to filling system with coolant and purge all air, TSB 2 Article #13 and TSB 3 Article # 19 are WRONG – use procedure described in TSB 8 Article 61 [PITI Group 27 Article #2].</p> <p><i>***Note: I keep a flexible dipstick (rubber hose) for checking coolant level in expansion tank, and special long/flexible funnel for putting coolant in expansion tank, in front trunk [PBN].</i></p> <p><i>Note: I keep gallon of premixed 50-50 water/antifreeze (to use to top off coolant periodically) in garage [PBN].</i></p> <p><b>NOTE: NEXT TIME DRAIN COOLING SYSTEM. CHECK TO BE SURE HAVE CORRECT THERMOSTAT PER ATTACHMENT 8 “PANTERA COOLING SYSTEM (CLEVELAND THERMOSTAT)” [PBN – TEMP].</b></p>
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<p>HIGH [PBN].</p>	<p>[15,000 PBN].</p> <p>[FTI = 12,000 or 12 months]; [PITI = Tighten hose clamps every few thousand miles - Group 27 Article #2, Replace "worn-out" anti-freeze and cooling system hoses each year - Group 27 Article #5].</p> <p>[PITI = Replace pressure cap if has been on car for more than a year - Group 27 Article #2]; [POTI = EVERY spring (replace supply tank pressure cap) - Group 27 "A Problem That Reached the Boiling Point"].</p>	<p>Inspect all Cooling System hoses, connections, and the bottom of the radiator (for moisture along the bottom edge) for weak spots and leaks, and make sure that ALL of the hose clamps are tight [PITI Group 27 Article #2]; Inspect radiator core, tanks, and inlet/outlet pipes for seepage or leaks (check all fittings to be sure are tight and in good condition) [FTI page 53-04-02].</p> <p>Inspect/Check (and replace if in questionable condition) Cooling System Hoses and Lines (for cracking, checking, softness, extreme weathering, leaking or porous (tighten or replace as required), or hose cuts/ weakness at fittings; Inspect cooling system and heater hoses for deterioration, leaks and loose or stripped hose clamps (repair and/or replace as necessary) - note: it is important to inspect the return (suction) hoses, particularly the center hose underneath the car which connects the two long coolant tubes together (if any evidence of a collapsed condition is evident replace the hose) [TSB Bulletin 8 Article # 61]; Check Cooling System Hoses &amp; Clamps [FTI page 52-00-02]; Be sure to inspect with special care the 2 systems hoses** (accessible only from beneath the car) - one that travels adjacent to (and often rubs) the gearshift linkage rod, and one that is near (and sometimes rubs) the parking brake linkage (replace if necessary) [PITI Group 27 Article #2]; Be sure to check the 2 short heater hoses under dash center console since very dangerous if break while driving (instantly fills cabin inside car with scalding steam making visibility impossible) [POTI Group 36 "Heater Hose Shutoff Valve", WEB - Attachment 8 "Pantera Cooling System (Adding Manual Heater Cutoff Valves)"].</p> <p>Have system and pressure cap tested if any doubts about the pressure holding capacity of the system [PITI Group 27 Article #2].</p> <p>Replace supply tank pressure cap (or at the least reface the sealing seat in the tank, and at best replace the neck) [POTI Group 27 "A Problem That Reached the Boiling Point"].</p> <p>Check release pressure of the supply tank cap (replace if releases below 13 psi) [TSB Bulletin 8 Article #61]; Replace pressure tank cap if its rubber seal shows ANY sign of deterioration [PITI Group 27 Article #2].</p> <p>Check Sealing Surfaces of Supply Tank Neck (visually inspect both sealing surfaces of the neck, if there is any evidence of leakage due to rough/uneven surfaces, replace the tank) [TSB Bulletin 8 Article #61].</p>	<p>See FTI pages 53-04-02 "Inspect Cooling System Hoses and Lines", 27-01-02 "Testing (Cooling System Pressure Test)" [FTI].</p> <p>See PITI Group 27 Article # 2 "The Pantera Cooling System", Group 27 Article #5 "Coolant Hoses" [PITI].</p> <p>See TSB Bulletin 8 Article # 61 "Coolant System - Overheating conditions (Supply Tank and Cap, Hoses and Clamps)" [TSB].</p> <p>See PSH page 3 "Interior - Service Accessibility (Engine Accessibility)" [PSH].</p> <p>See Attachment 15 "The Firewall Cover" [WEB].</p>	<p>System Pressure/Supply Tank Pressure Cap* Release Pressure: 13 psi [PSH Specs Section, TSB Bulletin 8 Article #61]; 14 lbs./sq. in. [TSB Bulletin 2 Article #13]; Within 10-16 psi [FTI page 27-01-02]; At least 15 psi (dimensional difference in Pantera pressure tank filler neck and standard American radiator tank neck is good for about 1 pound of pressure, therefore a 15 psi cap will hold about 14 psi in a Pantera) [POTI Group 27 "A Problem That Reached the Boiling Point"]. <b>(need to determine which is best value to use, and bold it)</b></p> <p>Supply Tank Pressure Cap: Ford Part No. D1TZ-8100-A [TSB Bulletin 2 Article #13]; Ford Part No. D2VY 8100-A [TSB Bulletin 12 Article #102]; Motorcraft RS40 Closed System Pressure Cap [PPQR Powertrain Item 1].</p> <p>Expansion Tank Cap: Ford Part No. D16Y 8K103-A (note: under no circumstances should the radiator pressure tank (supply tank) pressure cap be installed on the radiator reservoir tank (expansion tank) [TSB Bulletin 12 Article #102].</p> <p>Checking Supply Tank Pressure Cap and Sealing Surfaces of the Supply Tank Neck: Use a Radiator Cap Pressure Tester [TSB Bulletin 8 Article #61].</p>		<p>COOLING SYSTEM (GENERAL)</p> <p>Related Check/Replace Coolant Condition &amp; Protection entry above [PBN].</p> <p>Related Clean/Degrease Engine and Transaxle entry in Yearly section [PBN].</p> <p>Related Check Timing Chain Deflection entry in 30,000 Miles section (while the crank damper/pulley and water pump is out, it would be easier to check or change those hard-to-get-at water hoses) [PBN].</p>	<p><i>*Note: My currently installed cap is 13psi [PBN].</i></p> <p><i>**Note: This problem was generally corrected on later Panteras (and there is a permanent fix available if I need it - HAVE MECHANIC (STEVE) CHECK THIS OUT) [PITI Group 27 Article #2].</i></p> <p><i>Note: Previous owner had radiator rebuilt in 1990 [PBN].</i></p>
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LOW [PBN].	[15,000 PBN].  [FTI = 12,000 or 12 months (replace valve) - page 52-00-02].  [FTI = Proper mileage interval (clean oil filler cap and oil separator) - page 21-01-17].	Replace* PCV (Positive Crankcase Ventilation System) Valve [FTI page 52-00-02].  Clean PCV Oil Filler Cap and Oil Separator (in right valve cover if equipped) [FTI page 21-01-17].	See FTI page 21-01-17 "Positive Closed-Type Crankcase Ventilation System (Cleaning)" [FTI].	Wash Cap and Oil Separator: Low volatility, petroleum base solvent (do not dry with compressed air) [FTI page 21-01-17].		ENGINE (CRANKCASE VENTILATION SYSTEM)  Related PCV Valve item in DOT Annual Inspection Renewal in Yearly section [PBN].	*Note: Do not attempt to clean the crankcase ventilation regulator valve, it should be replaced [FTI page 21-01-17].  <i>Note: I replaced stock valve covers with aftermarket DeTomaso script valve covers [PBN].</i>
LOW [PBN].	[15,000 PBN].  [FTI = 12,000 or 12 months].	Clean PCV Hoses, Fittings, Tubes, and Associated Hardware [FTI page 21-01-17].  Clean PCV (Positive Crankcase Ventilation System) System Hoses & Tubes (adjust, repair, or replace as required) [FTI page 52-00-02].  Clean Crankcase Ventilation System Connection(s) on Carburetor Spacer or Intake Manifold [FTI page 21-01-17].	See FTI page 21-01-17 "Positive Closed-Type Crankcase Ventilation System (Cleaning)" [FTI].	Cleaning PCV Hoses, Fittings, Tubes, and Associated Hardware: Low volatility, petroleum base solvent (dry with compressed air) [FTI page 21-01-17].  Cleaning Crankcase Ventilation System Connections: Flexible wire or bottle brush [FTI page 21-01-17].		ENGINE (CRANKCASE VENTILATION SYSTEM)	<i>Note: I replaced intake manifold with an Edelbrock Performer 351-4V manifold [PBN].</i>
LOW [PBN].	[15,000 PBN].  [FTI = 12,000 or 12 months (more often if operated in severe dust conditions)].	Clean Crankcase Breather Cap [FTI].				ENGINE (CRANKCASE VENTILATION SYSTEM)	<i>Mechanic (Steve) didn't think this applies to Pantera – need to find out – if doesn't move to Never section.</i>
LOW [PBN].	[15,000 PBN].  [FTI = 12,000 or 12 months].	Check EGR (Exhaust Gas Recirculation System) System. Adjust, repair, or replace as required. Clean exhaust passages in EGR valve, carburetor spacer, and intake manifold. [FTI].		EGR Valve to Carburetor Spacer Torque Limit 9ft-Lb): 10-15 [FTI page 21-22-32].		ENGINE (EXHAUST EMISSIONS CONTROL SYSTEM)  Related EGR item in DOT Annual Inspection Renewal in Yearly section [PBN].	Note: EGR System not part of carb, is add on [MECH].  <i>Note: I replaced intake manifold with an Edelbrock Performer 351-4V manifold [PBN].</i>  <i>Note: Previous owner removed vacuum smog control stuff [PBN]. (does this apply to this entry?)</i>
MEDIUM [MECH].	[15,000 PBN].  [FTI = 12,000 or 12 months].	Replace Spark, Choke, and EGR (Exhaust Gas Recirculation System) Delay Valve [FTI].				<u>ENGINE (EXHAUST EMISSIONS CONTROL SYSTEM)?</u> <u>IGNITION SYSTEM (component)?</u> <u>FUEL SYSTEM (component)?</u>	<i>Note: Previous owner removed vacuum smog control stuff [PBN]. (does this apply to this entry?)</i>  <i>Note: in above Check EGR System entry am also supposed to clean the EGR valve on same schedule – conflict (or is EGR valve and EGR delay valve 2 different valves)?</i>  <i>Is Spark and Choke part of the "EGR Delay Valve"? Mechanic (Steve) not sure if 1 valve or 3 separate valves (thinks is one though)</i>



<p>LOW [MECH].</p>	<p>[15,000 PBN].  [FTI = 12,000 or 12 months].</p>	<p>Check Air Cleaner Temperature Control [FTI].</p>				<p>FUEL SYSTEM (AIR CLEANER AND FILTER)</p> <p>Related Replace Carburetor Air Cleaner in 10,000 Miles section [PBN].</p> <p>Related Keep Carburetor in Good Operating Condition entry below [PBN].</p> <p>Related Replace Crankcase Emission Filter in Air Cleaner entry in Never section [PBN].</p>	<p><i>Note: Previous owner replaced the original air cleaner with one that would fit with the Edelbrock Torker manifold when he changed carburetor and intake manifold (I replaced that one with an aftermarket Pantera script air cleaner), therefore some of the references may not be applicable [PBN].</i></p>
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<p>MEDIUM [PBN].</p>	<p>[15,000* PBN].</p> <p><i>[Holley 600** Carburetor Installation and Adjustment Instructions = periodically inspect carburetor, and fuel bowl screws torque – page 4].</i></p>	<p>Keep Carburetor in good operating condition and adjusted to specification [FTI page 23-01-02].</p> <p>Check the clearance between the lower edge of the choke plate and the air horn wall [FTI page 24-21-06] <u>(should this be in same listing as “Dechoke clearance” below?)</u>.</p> <p>Check the clearance and alignment of the pontoons (align if necessary), adjust float*** clearance if necessary [FTI page 24-21-07] <u>FTI Page 24-21-07/8 stuff not part of normal “maintenance?” – if so take off checklist</u>.</p> <p>Check Auxiliary Valve Clearance (Adjust if necessary) [FTI page 24-21-08] <u>FTI Page 24-21-07/8 stuff not part of normal “maintenance?” – if so take off checklist</u>.</p> <p><i>Fuel System Components including carburetor should be inspected to assure no fuel leakage (the presence of liquid fuel demands tightening of fittings, and retorquing of fuel system component flange nuts, tightening of carburetor fuel bowl screws - check torque to assure proper fuel metering) [Holley 600** Carburetor Installation and Adjustment Instructions page 4].</i></p>	<p>See FTI page 24-01-03 “Cleaning and Inspection (Carburetor)”, 24-21-05 “Accelerator Pump Stroke Adjustment”, 24-21-06 “Fast Idle Cam Clearance Adjustment”, “Fuel Level”, 24-21-07 “Float*** Setting”, 24-21-08 “Auxiliary (Supplemental) Valve Setting” [FTI].</p> <p><i>See Holley 600 Carburetor Installation and Adjustment Instructions (and page 4 “Maintenance”) [Holley 600** Carburetor Installation and Adjustment Instructions].</i></p> <p>See POTI Group 24 “Carburetor Jetting” [POTI] <u>(does this apply to other any carb entries like adjusting air valve or idle mixture? – if so add it there too)</u>.</p>	<p>Cleaning (accelerating pump diaphragm, power valve, secondary operating diaphragm, and anti-stall dashpot assembly): Clean soft dry cloth, do not use solvent [FTI page 24-01-03].</p> <p>Cleaning (all other carburetor parts): Clean commercial carburetor cleaning solvent – if not available use lacquer thinner or denatured alcohol (rinse in kerosene, dry with compressed air) [FTI page 24-01-03].</p> <p>Cleaning Tools: Do not use a wire brush to clean parts, or a drill or wire to clean out openings or passages in the carburetor [FTI page 24-01-03].</p> <p>Polishing Needle Contact Surface of Arm: Crocus cloth or steel wool [FTI page 24-01-03].</p> <p><u>All the above FTI page 24-01-03 cleaning/polishing stuff part of carb “overhaul”? – if so don’t list it on checklist.</u></p> <p><i>Tightening of Carburetor Fuel Bowl Screws Torque: 25-30 inch pounds (in a clockwise direction) [Holley 600** Carburetor Installation and Adjustment Instructions page 4].</i></p>		<p>FUEL SYSTEM (CARBURETOR)</p> <p><i>Related Check Holley Carburetor Diaphragm for Leaks entry in 5000 Miles section [PBN].</i></p> <p>Related Replace Carburetor Fuel Filter in 10,000 Miles section [PBN].</p> <p>Related Replace Carburetor Air Cleaner in 10,000 Miles section [PBN].</p> <p>Related Check/Adjust Idling Speed and Mixture entry below [PBN].</p> <p>Related Check Carburetor Choke entry below [PBN].</p> <p>Related Check Carburetor Throttle Linkage, Air Valve, Throttle Solenoid and Dashpot entry below [PBN].</p> <p>Related Check Air Cleaner Temperature Control entry above [PBN].</p> <p>Related Clean/Degrease Engine and Transaxle entry in Yearly section [PBN].</p> <p><i>Related Replace the Stock Sintered Bronze Fuel Filters in Holley Carburetors entry in Never section [PBN].</i></p>	<p>*Note: FTI didn’t specify interval for this specific item, but other carburetor related operations listed in FTI say for 12,000 miles interval [PBN].</p> <p><i>**Note: I replaced carburetor with a Holley 600, with manual choke (therefore some of the references may not be applicable to a Holley Carb) [PBN].</i></p> <p><i>***Note: Previous owner indicated when the carb was properly set up (especially the float levels so it didn’t run rich and cause poor fuel consumption, should check them periodically) it would get 17 mpg city and 21 mpg highway (this was with the Edelbrock Torker intake manifold and Holley 650 double-pumper carb – my current intake/carb setup should get even better mileage). HOWEVER, I’M ONLY GETTING (3/2002) ABOUT 14/16 MPG, SO MAY NEED TO ADJUST THIS [PBN].</i></p> <p><i>Note: I have a Holley Carb Manual Book [PBN].</i></p> <p>Note: Don’t have to remove carb for normal maintenance, only if replacing it etc. <u>(therefore I didn’t ref the removal/installation instructions of FTI page 24-21-08) [MECH] - therefore carb cleaning/inspection related stuff I listed on this checklist from FTI page 24-01-03 and 24-21-06 &amp; 07&amp; 08 is actually overhaul and not routine maintenance? – ask mechanic and if so delete off this list (other places too besides just this entry) to be consistent with note 8 &amp; 9 – also ask if “Air horn to main body gasket” section on FTI page 24-21-08 is routine maint or overhaul (add if routine).</u></p>
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HIGH [MECH].	[15,000 PBN].  [OM = 8000 or 8 months]; [FTI = 12,000 or 12 months (check choke linkage)].  <u>(OK to wait until 15,000 miles of should move this to 10,000 miles section (ask mechanic))?</u>	Check Automatic* Choke Efficiency [OM]; Adjust Automatic* Choke Thermostatic Spring Housing Adjustment [FTI page 53-04-03].  Check Carburetor Choke Linkage (Adjust, repair, or replace as required) [FTI page 52-00-02].  Adjust Choke Plate Clearance (pulldown) [FTI page 24-21-06].  Check/Adjust Dechoke Clearance (clearance between the lower edge of the choke plate and the air horn wall) [FTI page 24-21-06].  <u>(Should Thermo spring and Choke Plate/dechoke Clearances adjust be moved to one of the other carb entries instead?)</u> .	See FTI pages 53-04-03 "Carburetor Adjustment (Automatic* Choke Thermostatic Spring Housing Adjustment)", 24-01-03 "Cleaning and Inspection (Carburetor)", 24-21-03 "Testing (Electric Choke Tests – Electrical Tests, Functional Test)", 24-21-05 "Automatic Choke Thermostatic Spring Housing Adjustment", 24-21-06 "Choke Plate Pulldown", 24-21-06 "Dechoke Clearance", 24-41-01 "Removal and Installation (Air Cleaner and Filter Element)**" [FTI].  See Attachment 2 "Pantera Tune Up Ideas (Carburetor)" [WEB].  <i>See Holley 600*** Carburetor Installation and Adjustment Instructions [PBN].</i>			FUEL SYSTEM (CARBURETOR)  Related Keep Carburetor in Good Operating Condition entry above [PBN].  Related Check/Adjust Idling Speed and Mixture entry below [PBN].  Related Check Carburetor Throttle Linkage, Air Valve, Throttle Solenoid and Dashpot entry below [PBN].  Related**** Thermostatic Air Control item in Annual Inspection Renewal entry in Yearly section [PBN].	<i>*Note: Don't need to check automatic choke since mine currently is a manual choke, but still need to check manual choke's function periodically [MECH] (need to check any/all stuff listed by FTI for my carb? – ask mechanic (Steve)).</i>  <i>**Note: Per FTI page 53-04-03, have to remove air cleaner to adjust automatic choke thermostatic spring housing [FTI]; Note: Previous owner replaced the original air cleaner with one that would fit with the Edelbrock Torker manifold when he changed carburetor and intake manifold (I replaced that one with an aftermarket Pantera script air cleaner) [PBN].</i>  <i>***Note: I replaced carburetor with a Holley 600, with manual choke (therefore some of the references may not be applicable to a Holley Carb) [PBN].</i>  <i>****Note: "Thermostatic Air Control" (in Annual Inspection Renewal entry in Yearly section) is same thing as "Thermostatic Spring Housing" [MECH].</i>  <i>Note: I have a Holley Carb Manual Book [PBN].</i>
MEDIUM [MECH].	[15,000 PBN].  [FTI = 12,000 or 12 months]; [TSB = 4000** miles - Bulletin 5 Article #28].	Check Carburetor Throttle Linkage (Adjust, repair, or replace as required), Air Valve, Throttle Solenoid and Dashpot (adjust, repair, or replace as required) [FTI page 52-00-02]; Check full throttle opening [TSB Bulletin 5 Article #28].	See FTI page 24-01-03 "Cleaning and Inspection (Carburetor)" [FTI].  <i>See Holley 600* Carburetor Installation and Adjustment Instructions [PBN].</i>			FUEL SYSTEM (CARBURETOR)  <i>Related Check Holley Carburetor Diaphragm for Leaks entry in 5000 Miles section [PBN].</i>  Related Keep Carburetor in Good Operating Condition entry above [PBN].  Related Check/Adjust Idling Speed and Mixture entry below [PBN].  Related Check Carburetor Choke entry above [PBN].	<i>*Note: I replaced carburetor with a Holley 600, with manual choke (therefore some of the references may not be applicable to a Holley Carb) [PBN].</i>  <i>**Note: Assume was a one time thing at first 4000 miles of car [PBN].</i>  <i>Note: I have a Holley Carb Manual Book [PBN].</i>

<p>MEDIUM [MECH].</p>	<p>[15,000 PBN].</p> <p>[OM = 8000 or 8 months]; [FTI = 12,000 or 12 months – page 52-00-02, check carburetor fuel mixture and idle speed adjustments after making ignition system adjustments – page 23-01-07].</p> <p>[TSB = 4000* miles (idle speed) - Bulletin 5 Article #28].</p> <p><a href="#">(OK to wait until 15,000 miles of should move this to 10,000 miles section (ask mechanic))?</a></p>	<p>Adjust Idle Fuel Mixture***, Fast Idle Speed, Curb Idle Speed, Throttle Solenoid “Off” Speed [FTI page 52-00-02];</p> <p>Check, and if necessary, Adjust Idling Speed and Mixture*** [OM];</p> <p>Check/Adjust Carburetor Idle Speed and Fuel Mixture*** [FTI page 53-04-03].</p> <p>Set idle speed [TSB Bulletin 5 Article #28].</p>	<p>See OM pages 50 “Ignition Timing*** and Idle Speed Adjustment”, 51 “Idle Speed Adjustment” [OM].</p> <p>See FTI page 53-04-03 “Carburetor Adjustment (Idle Speed and Fuel Mixture***”, 24-01-02 “Testing (Use of the Exhaust Gas Analyzer)”, “Removal and Installation of Idle Limiter Caps”, 24-01-03 “Adjustments (Supplemental Idle Speed and Fuel Mixture*** Procedures)”, 24-21-04 “Adjustments (Idle Speed and Fuel Mixture***, Normal Idle Fuel Settings – Engine Off, Normal Idle Fuel Settings – Engine On, Fast Idle Adjustment)” [FTI].</p> <p>See Attachment 2 “Pantera Tune Up Ideas (Carburetor)” [WEB].</p> <p><i>See Holley 600** Carburetor Installation and Adjustment Instructions [PBN].</i></p>	<p>Idle Speed Adjustment and Carburation Specifications: See “Vehicle Emission Control Information” label in engine compartment [OM page 50].</p>		<p>FUEL SYSTEM (CARBURETOR)</p> <p><i>Related Check Holley Carburetor Diaphragm for Leaks entry in 5000 Miles section [PBN].</i></p> <p>Related Keep Carburetor in Good Operating Condition entry above [PBN].</p> <p>Related Check Carburetor Choke entry above [PBN].</p> <p>Related Check Carburetor Throttle Linkage, Air Valve, Throttle Solenoid and Dashpot entry above [PBN].</p>	<p>*Note: Assume was a one time thing at first 4000 miles of car [PBN].</p> <p><i>**Note: I replaced carburetor with a Holley 600, with manual choke (therefore some of the references may not be applicable to a Holley Carb) [PBN].</i></p> <p><i>***Note: During tuning of certain engines, especially new ones, lean or rich fuel/air mixtures can cause hot spots around 1300 degrees F, with potentially adverse effects to the header and possibly the engine. If you are not very careful, you will damage the Jet-Hot coating and possibly the engine. The coating will definitely turn dull and possibly flake off in excess of these temperatures. During this period we strongly recommend using a large floor fan to cool the entire engine and headers (or if available, use an old set first for tuning). Failure to take these precautions could result in permanent damage to the Jet-Hot coating. Ignition timing is critical to exhaust temperatures which are not reflected by the water temperature gauge. It is not unusual to see 190 degrees F on the water gauge when internal exhaust temperatures are exceeding 1300 degrees F. [Jet-Hot Coating Installation and Maintenance Tips, and Caution tag].</i></p> <p><i>Note: I have a Holley Carb Manual Book [PBN].</i></p> <p>Note: Idle Fuel Mixture, Fast Idle Speed, Curb Idle Speed, and Throttle Solenoid “Off” Speed are all Carburetor related [MECH].</p>
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MEDIUM [PBN].	[15,000 PBN].  [FTI = 12,000 or 12 months]; <i>[Holley 600* Carburetor Installation and Adjustment Instructions = inspect periodically – page 4].</i>	Inspect (adjust, repair, or replace as required) Fuel Lines & Connection [FTI]; Make sure fuel lines are not clogged or damaged [FTI page 24-30-01] <u><a href="#">[is this a troubleshooting, not maintenance step – therefore delete off list?]</a></u> ; <i>Fuel System Components including fuel lines should be inspected to assure no fuel leakage and the soundness of the hoses (Hoses which exhibit surface cracks when bent 180 degrees should be replaced; the presence of liquid fuel demands tightening of fittings, hose replacement, and retorquing of fuel system component flange nuts [Holley 600* Carburetor Installation and Adjustment Instructions page 4].</i>	<i>See Holley 600* Carburetor Installation and Adjustment Instructions page 4 “Maintenance” [Holley 600* Carburetor Installation and Adjustment Instructions].</i>	Fuel Line: Stock fuel line is 5/16” ID [PBN – WEB].		FUEL SYSTEM (FUEL LINES)  Related Clean/Degrease Engine and Transaxle entry in Yearly section [PBN].  Related Replace Fuel Filter entry in 10,000 Miles section [PBN].  <i>Related Replace the Stock Sintered Bronze Fuel Filters in Holley Carburetors entry in Never section [PBN].</i>	<i>*Note: I replaced carburetor with a Holley 600 (does not contain in line morain fuel filters) [PBN – Holley 600 carburetor Installation and Adjustment Instructions].</i>
MEDIUM [MECH].	[15,000 PBN].  [FTI = 12,000 or 12 months].	Inspect Fuel Vapor Emission Control System: Fuel Tank Filler Cap, Hoses and Vapor Lines (Adjust, repair, or replace as required) [FTI].				FUEL SYSTEM (GENERAL)	
MEDIUM [PBN].	[15,000 PBN].  [OM = 4000* (check) - page 45].  [OM = Occasionally (lubricate) - page 35].	Check Accelerator Linkage [OM page 45].  Lubricate Accelerator Linkage [OM page 35]; Clean and Lubricate Accelerator Linkage (check for/correct any binding condition that may hinder proper operation) [FTI].	See FTI page 53-01-02 “Accelerator Linkage” [FTI].  See PSH page 6 “Interior – Service Accessibility (Pedal Accessibility)” [PSH].	Accelerator Linkage Lubricant: SAE 10W Oil [FTI].		FUEL SYSTEM (THROTTLE LINKAGE)	<i>*Note: Assume was a one time thing at first 4000 miles of car [PBN].</i>

HIGH [MECH].	[15,000 PBN].  [FTI = 12,000 or 12 months - page 52-00-02; After any adjustment of ignition timing and distributor point dwell, check the distributor automatic advance for proper operation - page 23-01-07].	Check Advance & Retard, Cut-in Speed (Adjust, repair, or replace as required) [FTI page 52-00-02]; Distributor Advance and Retard Check (Check the initial ignition timing*, centrifugal advance, vacuum advance, and vacuum retard) [FTI page 23-01-06].  Check/Test E.P.V.S. Valve (check all connections for proper routing, electrical and vacuum) [TSB Bulletin 8 Article # 61].	See FTI pages 23-01-06 “Distributor Advance and Retard Check”, “Distributor Dual Diaphragm Test”, 23-01-07 “Adjustments (General Procedures)”, “Centrifugal Advance Adjustment”, 23-01-08 “Vacuum Advance”, 23-10-02 “Removal and Installation (Vacuum Advance Unit)”, 23-10-03 “Removal and Installation (Distributor)”, 23-15-01 “Electrical Distributor Vacuum Control Valve Test”, “Removal and Installation (Vacuum Control Valve – EPVS Valve)” [FTI].  See TSB Bulletin 8 Article # 61 “Coolant System – Overheating Conditions (Electric Ported Vacuum Switch (P.V.S.) Valve – Testing) [TSB].  See PSH page 3 “Interior – Service Accessibility (Engine Accessibility)” [PSH]. <u>(do I need to add this to all distributor entries, or can distributor stuff be done without removing firewall?)</u>  See Attachment 15 “The Firewall Cover” [WEB]. <u>(do I need to add this to all distributor entries, or can distributor stuff be done without removing firewall?)</u>	Distributor Vacuum Control Valve Torque Limit: 10-15 ft-lb [FTI page 21-22-32].		IGNITION SYSTEM (DISTRIBUTOR)  Related Inspect/Check Spark Control System entry below [PBN].  Related Keep Distributor in Good Operating Condition and Adjusted to Specification entry in 30,000 Miles section [PBN].  Related Check Ignition Timing in Never section [PBN].	Note: This is done with Distributor on car (engine running), but may have to take off car to correct problems [MECH].  Note: Electric ported vacuum switch effective in production with MSN 04510 [PPQR Powertrain Item 1].  <i>*Note: During tuning of certain engines, especially new ones, lean or rich fuel/air mixtures can cause hot spots around 1300 degrees F, with potentially adverse effects to the header and possibly the engine. If you are not very careful, you will damage the Jet-Hot coating and possibly the engine. The coating will definitely turn dull and possibly flake off in excess of these temperatures. During this period we strongly recommend using a large floor fan to cool the entire engine and headers (or if available, use an old set first for tuning). Failure to take these precautions could result in permanent damage to the Jet-Hot coating. Ignition timing is critical to exhaust temperatures which are not reflected by the water temperature gauge. It is not unusual to see 190 degrees F on the water gauge when internal exhaust temperatures are exceeding 1300 degrees F. [Jet-Hot Coating Installation and Maintenance Tips, and Caution tag].</i>
MEDIUM [PBN].	[15,000 PBN].  [FTI = 12,000 or 12 months].	Keep Spark Control System in good operating condition and adjusted to specification [FTI page 23-01-02]; Inspect/Check Spark Control System (Inspect Vacuum Hoses, Inspect Electrical Leads, Check Thermal Switch (Adjust, repair, or replace as required)) [FTI].				IGNITION SYSTEM (GENERAL)  Related (to Spark Control System) Check Distributor Advance & Retard, Cut-In Speed entry above [PBN].	

<p>LOW [MECH].</p>	<p>[15,000 PBN].</p> <p>[FTI = 12,000 or 12 months (If Severe Service Operation* check spark plug wires resistance every 4 months or 4000 miles. Maintenance intervals given are based on the use of low-lead or unleaded gasoline. When using leaded gasoline or when operating for extended periods at low speeds, replace spark plugs at 8000 mile intervals.)].</p>	<p>Check Spark Plug Wires Resistance [FTI].</p>	<p>See FTI page 23-01-05 “Secondary (High Tension) Wires Resistance Test” [FTI].</p>	<p>Spark Plug Wires Resistance: Each wire should not exceed 1000 ohms per inch (do not puncture wires with a probe) [FTI page 23-01-05].</p> <p>Wiping Secondary Wiring: Use damp cloth [FTI page 23-01-12].</p>		<p>IGNITION SYSTEM (SPARK PLUG WIRES)</p> <p>Related Keep Distributor in Good Operating Condition (secondary wires) and Adjusted to Specification entry in 30,000 Miles section [PBN].</p>	<p>*Note: Severe Service Operation is when operating your car under any of the following conditions: Extended periods of idling or low-speed operation, Outside temperature remains below + 10 degrees F for 60 days or more and most trips are less than 10 miles, In severe dust conditions [FTI].</p>
<p>MEDIUM [PBN].</p>	<p>[15,000 PBN].</p> <p>[OM = 8000 or 8 months]; [FTI = 12,000 or 12 months for maximum efficiency (If Severe Service Operation* clean and regap spark plugs every 4 months or 4000 miles. Maintenance intervals given are based on the use of low-lead or unleaded gasoline. When using leaded gasoline or when operating for extended periods at low speeds, replace spark plugs at 8000 mile intervals.), or whenever plugs are removed].</p>	<p>Check (examine plug, check the gap, and ensure they are efficient), and if Necessary, Replace Spark Plugs [OM pages 44, 47].</p> <p>Examine the firing ends of Spark Plugs, Examine (replace as required) plug carefully for cracked or broken insulators, badly pitted electrodes, and other signs of failure [FTI page 23-01-11].</p> <p>Service Spark Plugs (clean spark plug and insulation, adjust gap, performance test) [OM page 48]; Clean Spark Plugs and Set Gaps (check/clean the spark plug insulators and leads) [FTI page 53-04-02].</p> <p>Inspect, Clean, and file the electrodes and gap the plugs [FTI page 23-01-05]; Clean area around each spark plug port, and dress the electrodes, and set the spark plug gap (All spark plugs, new or used, should have the gap checked and reset as required) [FTI page 23-01-10].</p> <p><i>Correct Spark Plug Gap and Heat Range is very important to optimum Holley 600 Carburetor efficiency and performance [Holley 600** Carburetor Installation and Adjustment Instructions page 4].</i></p> <p>Replace Spark Plugs [FTI page 52-00-02].</p>	<p>See OM pages 47 “Spark Plug Check”, 48 “Spark Plug Servicing” [OM].</p> <p>See FTI pages 53-04-02 “Clean Spark Plugs and Set Gaps”, 23-01-05 “Spark Plug Test”, 23-01-10 “Removal and Installation (Spark Plug Wire, Spark Plugs)”, 23-01-11 “Cleaning and Inspection (Spark Plugs)” [FTI].</p> <p>See Attachment 2 “Pantera Tune Up Ideas (Changing The Plugs)” [WEB].</p>	<p>Cleaning Spark Plugs: Very fine wire brush and a compressed air line [OM page 48]; Sand Blast Cleaner (do not use the abrasive blast for a long time as it will erode insulator and electrodes) [FTI page 23-01-11].</p> <p>Cleaning Spark Plug Port Area: Compressed air [FTI page 23-01-10].</p> <p>Dress Electrodes: Use small file [FTI page 23-01-10].</p>		<p>IGNITION SYSTEM (SPARK PLUGS)</p>	<p>*Note: Severe Service Operation is when operating your car under any of the following conditions: Extended periods of idling or low-speed operation, Outside temperature remains below + 10 degrees F for 60 days or more and most trips are less than 10 miles, In severe dust conditions [FTI].</p> <p><i>Note: previous owner replaced the original dual point distributor with electronic ignition (Mobelec breakerless CD ignition system) [PBN].</i></p> <p><i>Note: Spark plugs should last 20,000 miles since have Electronic Ignition instead of Points (better spark), and no longer use leaded gas [MECH]; Plug life is 3 times longer with the Mobelec breakerless CD ignition system [PBN – Previous Owner].</i></p> <p><i>**Note: I replaced carburetor with a Holley 600 [PBN].</i></p>
<p>LOW [MECH].</p>	<p>[15,000 PBN].</p> <p>[FTI = 12,000 or 12 months].</p>	<p>Lubricate Steering Arm Stops [FTI].</p> <p><u><a href="#">(My mechanic couldn't find steering arm "stops" – is this a valid maintenance item for a Pantera? Maybe was standard Ford Car item inadvertently included in Pantera FTI info)</a></u></p>	<p>See FTI page 13-01-01 “General Manual Steering Service (General Information)” [FTI].</p>	<p>Steering Gear Mounting Bolts Torque: 20 ft-lbs [PSH Specs Section].</p> <p>Tie Rod Ends Torque: 43 ft-lbs [PSH Specs Section].</p> <p>Pinion Bearing Preload: .002 - .005 Crush [PSH Specs Section].</p> <p>Rack Yoke Clearance: .002 -.005 [PSH Specs Section].</p> <p><u><a href="#">(do these 4PSH Specs Section things directly above apply to this maint item, and if so are they maint info or repair info?)</a></u></p>		<p>STEERING (<b>component?</b>)</p> <p>Related Check Steering Boots entry in 10,000 Miles section [PBN].</p> <p>Related Check/Lube Steering Linkage entry below [PBN].</p>	<p>Note: This is not the same thing as checking steering boots and check/lubing steering linkage [MECH].</p>

<p>MEDIUM [PBN].</p> <p><a href="#">(should be HIGH for safety?)</a></p>	<p>[15,000/30,000* PBN].</p> <p>[FTI = Poor ride and handling characteristics or abnormal tire wear – pg 52-00-01; Check at 12,000 or 12 months, Lubricate at 36,000 or 36 months – pg 52-00-03].</p>	<p>Check/Lubricate* Steering Linkage [FTI pg 52-00-01 &amp; 03];</p> <p>Steering Linkage – Abnormal Looseness or Damaged Seals [FTI pg 52-00-03]; Check Steering Control (wheel return from both directions, steering effort required/inconsistent effort in different directions, harshness, noise, wander, or freeplay; if steering is exceptionally stiff check steering effort) [FTI pg 53-02-01]; Steering Gear Adjustment (steering wheel free play, lack of precision, steering wander) [PSH page 33].</p> <p>Steering Box Lube* ** *****Level [PITI Group 52 Article 1].</p> <p>Steering Gear Tie rods should articulate freely in any direction without being so slack as to fall under their own weight (check that the tie rod shank is not bent and that the portion immediately behind the head is not bruised; check spherical seatings for signs of wear or fretting) <a href="#">(is this maint or repair?)</a> [PSH page 34]; Steering Gear Rack Support Yoke should not bind in the housing, and no excessive side clearance should be present <a href="#">(is this maint or repair?)</a> [PSH page 35]; Examine Steering Gear Pinion (wipe clean the pinion shaft to prevent damage to the seal) – examine pinion teeth for signs of wear and chipping and check carefully for signs of cracking towards the end of the teeth (pinion teeth may have been cracked without actually chipping), check that the ball and the ball cups are not worn or pitted <a href="#">(is this maint or repair?)</a> [PSH page 35]; Check Steering Gear Rack bearing and support for signs of scoring or excessive wear, check the flanks of the teeth for wear and also for bruising, check that the threaded ends of the rack are in good condition and ensure that no burrs have been raised near the keyways <a href="#">(is this maint or repair?)</a> [PSH page 35]; Carefully examine the steering gear pinion shaft seal lip for chipping or damage <a href="#">(is this maint or repair?)</a> [PSH page 35]; Examine Steering Gear Rack Support Bush for wear (as proved by sideways movement of rack at end remote from the pinion <a href="#">(is this maint or repair?)</a> [PSH page 35].</p> <p>Check the Coupling Bolt Connecting the Steering Shaft to the Rack Pinion [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>	<p>See FTI pages 53-02-01 “Check Steering Control”, 13-01-01 “General Manual Steering Service (General Information)” [FTI].</p> <p>See PSH pages 33 “Symptoms of Need for Adjustment (of Steering Gear)”, 34 “Checking for Wear and Damage and Dismantling (of Steering Gear)”, 36 “Rebuilding and Adjustment (of Steering Gear)” [PSH].</p> <p>See PITI Group 13 Article #1 “Rack &amp; Pinion Maintenance” (way to top up oil level without taking the rack &amp; pinion assembly out of the car, pages 7 &amp; 8), Group 13 Article #3 “Steering Play” (way to fill rack without pulling it out of the car, page 4) [PITI].</p> <p>See POCA NL Apr 2002 “The Five Most Neglected Maintenance Areas in your Pantera (When’s the last time you checked the coupling bolt connecting the steering shaft to the rack pinion)” - Attachment 23 “POCANLapr2002etc” [POCA NL].</p> <p>See Attachment 4 “Maintenance and Safety Inspections* (Steering Rack***)” [WEB].</p> <p><a href="#">(Some stuff in this row’s entry is similar/duplicate of steering boots entry in 10,000 mile section – need to take duplicate stuff out of whichever entry it doesn’t belong in. Which entry does it not belong in – i.e., 10,000 mile entry for boots/bellows stuff or this entry for rest of rack stuff?)</a></p>	<p>Steering Gear Lubricant: SAE 90 E.P. Gear Oil [FTI]; SAE 90 oil (extreme pressure type), Grease must not be used as a lubricant [PSH page 37]; Extreme Pressure 90 wt gear oil [PITI Group 13 Article #3].</p> <p>Steering Gear Oil Capacity: 1/3 pint + 10% (this amount should not be exceeded as overfilling may cause the bellows to burst or be forced off the main housing) [PSH page 37]; 1/3rd pint plus 10% [PITI Group 13 Article #3].</p> <p>Steering Gear Adjustment: See specs etc in PSH page 36 “Rebuilding and Adjustment (of steering gear)” [PSH].</p> <p>Effort Required to Rotate Steering Wheel (steering arms disconnected): 1-3/4 to 2 lbs [FTI page 53-02-01].</p> <p>Steering Gear Mounting Bolts Torque: 20 ft-lbs [PSH Specs Section].</p> <p>Tie Rod Ends Torque: 43 ft-lbs [PSH Specs Section].</p> <p>Pinion Bearing Preload: .002 - .005 Crush [PSH Specs Section].</p> <p>Rack Yoke Clearance: .002 - .005 [PSH Specs Section].</p> <p><a href="#">(do these 4PSH Specs Section things directly above apply to this maint item, and if so are they maint info or repair info?)</a></p> <p>8mm Bolt Fastening Steering Shaft-To-Rack Coupling Torque: 24 inch-pounds***** (this would be an excellent place for a couple of drops of red Lock-Tite before tightening) [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>		<p>STEERING (STEERING GEAR)</p> <p>Related Road Test (e.g., driving/steering control check) entry in 10,000 Miles section [PBN].</p> <p>Related Lubricate Steering Arm Stops entry above [PBN].</p> <p>Related Steering Mechanism item in DOT Annual Inspection Renewal in Yearly section [PBN].</p>	<p>*Note: Check at 15,000 miles, Lubricate at 30,000 miles [PBN].</p> <p>Note: Steering Gear and Steering Box lubing is same thing (this is the box on the steering rack – rarely (if ever) needs to be checked) [MECH].</p> <p>**Note: Three-tenths of a pint of SAE 90 oil is put into the steering gear assembly during manufacture, and further lubrication is not normally required [FTI page 13-01-01].</p> <p><i>***Note: I replaced the plastic steering rack bushing with a brass one from Hall Pantera [PBN].</i></p> <p>****Note: Most Pantera steering racks have no oil left in them due to defective boots and seepage [PITI Group 13 Article #3].</p> <p>*****Note: Overtorquing the bolt will create exactly the scenario you are trying to avoid (bolt loosens or snaps, the shaft and steering wheel can become disconnected from the rack, leaving you with no steering at all) [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>
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<p>HIGH [MECH].</p>	<p>[15,000/30,000* PBN].</p> <p>[OM = check at 12,000 or 12 months]; [FTI = At regular inspection intervals (check the bearing adjustment) – page 11-02-02; Adjust the front wheel bearings if the wheel is loose on the spindle or if the wheel does not rotate freely – page 11-10-01]; [TSB = 4000*** miles (check) - Bulletin 5 Article #28].</p> <p>[FTI = Clean/Repack at 24,000 or 24 months – page 52-00-03; Whenever the hubs are removed or at the mileage/time periods indicated in the maintenance schedule (clean, inspect, and lubricate front hubs and bearings) – page 11-02-03].</p> <p>[FTI = When the hub is removed (install new hub grease seals) – page 11-02-03].</p>	<p>Check/Clean-Repack* Front Wheel Bearings: Check, and if Necessary, Adjust and Lubricate Front Wheel Bearings [OM pg 45 (Note: OM pg 35 says to lube them on this frequency, not “if necessary”).</p> <p>Check Front Wheel Bearings [TSB Bulletin 5 Article #28]; Check** **** Front Wheel Bearing Adjustment Nuts to See if Locked in Position Securely [PITI Group 14 Article # 1].</p> <p>Clean &amp; Repack Front Wheel Bearings [FTI page 52-00-03]; Repack and Adjust Front Wheel Bearings [FTI page 53-01-02].</p> <p>Clean, Inspect, and Lubricate Front Hubs and Bearings [FTI page 11-02-03, 11-10-02].</p> <p>Install new hub grease seals [FTI page 11-02-03].</p> <p>Wheel hub nuts**** should be inspected and tightened to specification, Keep the wheels and hubs clean, Check for damage that would affect the runout of the wheels, Inspect the wheel rims for chips that could let air leak from the tires [FTI page 11-02-03].</p>	<p>See OM pages 56/57/58 “Changing a Wheel” [OM].</p> <p>See FTI pages 53-01-02 “Repack and Adjust Front Wheel Bearings”, 11-02-02 “Front Wheel Bearing”, 11-10-01 “Front Wheel Bearing Adjustment”, 11-02-02 “Removal and Installation (wheels and tires)”, 11-10-02 “Front Wheel Grease Seal and Bearing Removal, Installation, and/or Repacking”, 11-02-03 “Wheel Inspection (clean, inspect, and lubricate front hubs and bearings)”, 53-05-01 “Torque Wheel Nuts”, 11-02-01 “Hoisting” [FTI].</p> <p>See PITI Group 14 Article # 1 “Front Wheel Bearings”, PITI Group 14 Article #1 “Front Wheel Bearings” [PITI].</p> <p>See TSB Bulletin 7 Article # 56 “Care of Magnesium Wheels” [TSB].</p> <p>See PPQR Chassis Item 4 “Wheel Bearings” [PPQR].</p>	<p>Front Wheel Bearings Lubricant: Lithium based grease Ford Part No. C1AZ-19590-B [FTI page 11-10-02]; Top Quality Wheel Bearing Grease [PITI Group 14 Article #1 page 2].</p> <p>Front Wheel Bearing Adjusting Nut Torque: See FTI Part 11-10 Figure 1 “Front Wheel Bearing Adjustment” [FTI page 11-10-01].</p> <p>Wheel Installation: Apply light coating of protective grease between the hub and wheel [FTI page 11-02-02]; Water resistant grease should be applied to the inside faces of the wheels and hubs, both front and rear, to facilitate their removal [TSB Bulletin 7 Article # 56].</p> <p>Wheel Nuts Torque (alternately and evenly): 43 to 58 ft-lb [FTI page 53-05-01, PSH Specs Section].</p> <p>See PSH Specs Section “Front Suspension” [PSH] (<a href="#">do these specs apply to this item, and if they do are they maint or repair related?</a>).</p> <p>Front Wheel Bearing Seals (size/dimension): 44.4-63.6-7.9 (Corteco A1 CFW BAUD35L) [MECH]. (<a href="#">corteco etc is brand name?</a>)</p>		<p>WHEELS AND TIRES (FRONT WHEEL BEARING)</p> <p>Related Check Rear Wheel Bearings for Free Play entry below [PBN].</p>	<p>*Note: Check at 15,000 miles, Clean/Repack at 30,000 miles [PBN].</p> <p>Note: Reason rear wheel bearings not mentioned is they’re encased/sealed and not serviceable (can only replace them, not repack) [MECH].</p> <p>Note: “Repacking” is taking out old grease and putting in new grease [MECH].</p> <p>Note: Wheel hub is the part (connected to spindle) the wheel bolts onto via the lug nuts [MECH].</p> <p>Note: Hub nuts and axle nuts and bearing adjustment nuts are same thing (called different depending on whether front or back), and are not the same thing as the lug nuts[MECH].</p> <p>Note: Front wheel bearings don’t need the special rear axle nut socket wrench tool like rear wheel bearings do [MECH].</p> <p>***Note: Is problem on all cars but the latest “L” models [PITI Group 14 Article # 1].</p> <p>****Note: Assume was a one time thing at first 4000 miles of car [PBN].</p> <p>****Note: <i>Previous owner said need to “check the torque of the front axle nuts regularly (even with the cotter pin they tend to get loose which can throw off the alignment and cause excessive tire wear) [PBN].</i></p>
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<p>HIGH [MECH].</p>	<p>[15,000* PBN].</p> <p>[PITI = Now (check for free play) - Group 11 Article #2].</p> <p>[PITI = Regular basis (provide supplemental lubrication to rear wheel bearings, if single seal bearing) – Group 14 Article #7].</p> <p>[FTI = When the hub is removed (install new hub grease seals) – page 11-02-03].</p>	<p>Check Rear Wheel Bearings for Free Play [PITI Group 11 Article #2];</p> <p>Check Rear Wheel Bearing for Play (there should be NONE) (replace axle spacer if scored, square the bearing spacer and drive flange if scored, replace flange/axle or both as necessary if there is rotational play in the splines of the drive axle to the flange, replace axle if grooved, wash out the grease that is similar to Vaseline and repack**) (<u>is stuff in “( )” is repair after do inspection so delete off this list?</u>) [PITI Group 14 Article #10].</p> <p>Check Rear Wheel Bearings for Deterioration of Rubber Seal on Inside of the Inner Bearing [PITI Group 14 Article #2].</p> <p>Provide Rear Wheel Bearing Supplemental Lubrication (if single seal bearing) [PITI Group 14 Article #7].</p> <p>Install new hub grease seals [FTI page 11-02-03].</p> <p>Wheel hub nuts*** should be inspected and tightened to specification. Keep the wheels and hubs clean, Check for damage that would affect the runout of the wheels, Inspect the wheel rims for chips that could let air leak from the tires [FTI page 11-02-03].</p> <p><u>(assume have to remove rear wheels to do this check/lube – if not delete the removing wheels related info (or not to do it only if have to remove wheel for some reason)</u></p>	<p>See OM pages 56/57/58 “Changing a Wheel” [OM].</p> <p>See PITI Group 11 Article #2 “Rear Wheel Bearings”, Group 14 Article #2 “Rear Wheel Bearings”, Group 14 Article #4 “Rear Wheel Bearing Replacement”, Group 14 Article #5 “Addendum to Rear Wheel Bearing Replacement Article Group 14, No. 4”, Group 14 Article #10 “Rear Wheel Bearing Looseness” [PITI].</p> <p>See FTI pages 11-11-01 “Removal and Installation (Rear Wheel Bearing)”, 11-02-02 “Removal and Installation (wheels and tires)”, 53-05-01 “Torque Wheel Nuts”, 11-02-01 “Hoisting” [FTI].</p> <p>See TSB Bulletin 7 Article # 56 “Care of Magnesium Wheels” [TSB].</p> <p>See PITI Group 14 Article #8 “Rear Wheel Bearing Stub Shaft Nut Torque” [PITI].</p> <p>See PPQR Chassis Item 4 “Wheel Bearings” [PPQR]. (<u>does this apply to rear wheels?</u>)</p>	<p>Rear Wheel Bearing Repack** ****.</p> <p>High quality wheel bearing grease [PITI Group 14 Article #10].</p> <p>Retaining Nut on Rod into Lower Arm of Vertical Suspension Support Torque: 95 ft-lbs [PITI Group 14 Article #4].</p> <p>Retaining Nut on Ball Joint to Vertical Suspension Support Torque: 40 to 45 ft-lbs [PITI Group 14 Article #4].</p> <p>Shaft, Rotor, and Spindle Assembly to U-Joint Flange Bolts Torque: 50 ft-lbs [PITI Group 14 Article #4].</p> <p>Half Shaft Flange Bolts Torque: <i>50 ft-lbs [PBN – Hall Pantera U-Joint Instructions (previous owner replaced with this)].</i></p> <p>Caliper Assembly to the Spindle Bolts Torque: 35-40 ft-lbs [PITI Group 14 Article #4].</p> <p>Caliper Mounting Bolt Torque: 36-44 ft-lbs [PSH Specs Section].</p> <p>Rear Axle Wheel Bearing Retaining Nut Torque: 275 ft-lbs (requires a special torque wrench and special socket**** Ford Part No. T72 D 4851 – NOT a Hammer and Chisel) [PITI Group 14 Article #8]; 275-300 ft lbs (cannot do this with a hammer and chisel or an impact wrench) (use Locktite with discretion – someday you will need to disassemble this unit) [PITI Group 14 Article #10].</p> <p>Wheel Nuts Torque (alternately and evenly): 43 to 58 ft-lb [FTI page 53-05-01, PSH Specs Section].</p> <p>Wheel Installation: Apply light coating of protective grease between the hub and wheel [FTI page 11-02-02]; Water resistant grease should be applied to the inside faces of the wheels and hubs, both front and rear, to facilitate their removal [TSB Bulletin 7 Article # 56].</p> <p>See PSH Specs Section “Rear Suspension” [PSH] (<u>do these specs apply to this item, and if they do are they maint or repair related?</u>).</p>		<p>WHEELS AND TIRES (REAR WHEEL BEARING)</p> <p>Related Check/Clean-Repack Front Wheel Bearings entry above [PBN].</p> <p>-----</p> <p>***** Addition (There wasn't room for this in Notes column -PBN):</p> <p><i>Note: The left and right axle halves may have been reversed (solid shaft portion of the half shaft near the transaxle and the sleeve portion toward the wheel) in order to put the “Mind Train Big Throats Exhaust System” on [PBN- Mind Train Enterprises Big Throats Installation Instructions].</i></p> <p>*****Note: <i>I have this special rear axle nut socket wrench tool (got from previous owner) [PBN].</i></p>	<p>*Note: Assume need to do this on same frequency as check front wheel bearings [PBN].</p> <p>Note: When selecting replacement rear wheel bearings for your Pantera, they must be double sealed bearings, unless you intend to provide supplemental lubrication on a regular basis in which case a single seal will do [PITI Group 14 Article #7] (<u>are my rear bearings double or single sealed? - note previous owner had one rear bearing replaced [PBN]</u>).</p> <p>Note: “Repacking” is taking out old grease and putting in new grease [MECH].</p> <p>Note: Wheel hub is the part (connected to spindle) the wheel bolts onto via the lug nuts [MECH].</p> <p>Note: Hub nuts and axle nuts and bearing adjustment nuts are same thing (called different depending on whether front or back) , and are not the same thing as the lug nuts[MECH].</p> <p>**Note: Don't recommend leaving the inner seals out and pump the whole upright full of grease because this could lead to well lubricated brake discs when hot [PITI Group 14 Article #10].</p> <p>***Note: <i>Previous owner said “the rear axle nuts should be checked for proper torque fairly regularly” [PBN].</i></p> <p>****Note: Reason rear wheel bearings not indicated (in OM, FTI, etc.) to be cleaned/repacked like front wheel bearings (see front wheel bearing entry above) is they're encased/sealed and not serviceable (can only replace them, not repack) - they will make noise when they start to go bad and entire unit needs replacing [MECH].</p> <p>See *****Addition [PBN].</p>
	<p>Every 20,000 Miles</p>						

VARIES [PBN].	<p>[20,000 PBN (since car already has over 32,000 miles)].</p> <p>[OM = 4000 and 16,000 and 32,000, or 4 and 16 and 32 months]; [TSB = 4000* miles - Bulletin 5 Article #28].</p>	Tighten All Fasteners [OM, TSB Bulletin 5 Article #28].	<p>See PSH page 3 “Interior – Service Accessibility (Engine Accessibility)” [PSH].</p> <p>See Attachment 15 “The Firewall Cover” [WEB].</p>			CAR & BODY?	<p><u>Does something specify somewhere what “all fasteners” are (OM doesn’t)?</u></p> <p>*Note: Assume was a one time thing at first 4000 miles of car [PBN].</p>
LOW [PBN].	<p>[20,000 PBN].</p> <p>[OM = Occasionally]; [FTI = High effort required to swing doors or audible squeaks (Item should be checked periodically and service performed when required) – page 52-00-01; 8000 or 8 months – pg 52-00-03].</p> <p>[FTI = Upper Weatherstrips at every regular lubrication period – pg 44-01-01].</p>	<p>Lubricate Deck Lid and Door Hinges and Locks [OM]; Lubricate Door and Hood Hinges and Checks [FTI – pg 52-00-01]; Lubricate All Lock Cylinders, Deck Lid Hinges and Lock, Hood Hinges and Hood Latch [FTI – pg 52-00-03].</p> <p>Lubricate Door Window Weatherstrips [FTI page 44-01-01].</p>	See FTI page 53-01-01 “Hood Hinges”, “Lubricate Lock Cylinders”, “Lubricate Door Hinges”, “Lubricate Rear Deck Lid Hinge Pivots”, 44-01-01 “Doors, Hood, Luggage Compartment – General Service (General Information)” [FTI].	<p>Body Hinges, Hood, Latch, and Auxiliary Catch Lubricant: Ford Polyethylene Grease (Ford Part No. C4AZ-19584-B, Ford Specification ESB-M1C106-B) [FTI page 53-01-03].</p> <p>Door Hinges Lubricant: Polyethylene Grease [FTI page 53-01-01]; Polyethylene Grease (Ford Part No. C4AZ-195841-B) – even coat to the hinge pivot points [FTI page 44-01-01].</p> <p>Hood Hinges Lubricant: Polyethylene Grease [FTI page 53-01-01].</p> <p>Rear Deck Lid Hinge Pivots: Polyethylene lubricant [FTI page 53-01-01].</p> <p>Lock Cylinders Lubricant: Lock Lubricant (Ford Part No. B4A-19587-A) [FTI page 53-01-01, 44-01-01]; Ford Lock Lubricant (Ford Part No. B4A-19587-A, Ford Specification ESB-M2C20-A) [FTI page 53-01-03].</p> <p>Door Window Weatherstrips Lubricant: Silicone Lubricant (Ford Part No. COAZ-19553-A (jelly) and COAZ-19553-C (spray)) [FTI page 44-01-01].</p>		<p>DOORS, HOOD, AND LUGGAGE COMPARTMENT (GENERAL)</p> <p>Related Doors/Decks etc Operation Check entry in 40,000 Miles section [PBN].</p> <p>Related Lubricate the Window Glass Mechanism entry 40,000 Miles section [PBN].</p>	<p>Note: Assume “Auxiliary Catch” is same as “Checks” [PBN].</p> <p><i>Note: I replaced my rear deck lid support struts with “extra husky” deck lid shocks from Pantera International [PBN].</i></p>

HIGH [MECH].	[20,000* PBN].	Check and Adjust Valve** Clearance [FTI].	See FTI pages 53-04-02 "Check and Adjust Valve Clearance", 21-01-03 "Hydraulic Valve Lifter, 21-22-02 "Adjustments (Valve Clearance – Hydraulic Valve Lifters)" [FTI].  <u>Is this a valid maintenance item? (need to incorporate other info from those referenced sections if this is a valid maintenance item)</u>			ENGINE (VALVES)	*Do this whenever do a tune up (20,000 miles) [MECH]. <u>Need to confirm this is OK frequency)</u>  <i>Note: When engine rebuilt by Holman Moody at 80,000 miles they put in hydraulic (not solid) lifters [PBN].</i>  <i>Note: I replaced stock valve covers with aftermarket DeTomaso script valve covers [PBN].</i>  **Note: Checking/adjusting valve clearance (can do by taking valve covers off) is only if have solid (not hydraulic) lifters – if have hydraulic lifters once set they stay OK [MECH - Steve and PPC (Nevada)]. <u>Then why does FTI refer to checking/adjusting hydraulic lifters – maybe isn't a maintenance item in FTI but rather a repair type item?</u>
HIGH* [PBN].	[20,000** PBN].  <u>(see red text note in lube angle drive in 50,000 miles section)</u>	Lube Speedometer Cable [FTI]; Check and Maintain the Lubrication* on the Speedo Cable [PITI Group 16 Article #11].		Speedometer Cable Lubricant: Ford Speedometer Cable Lube (Ford Part No. B5AZ-19581-A, Ford Specification ESF-M1C135-A) [FTI page 53-01-03].		INSTRUMENTS, CLUSTERS, AND CONTROLS (SPEEDOMETER); CLUTCH AND TRANSAXLE (TRANSAXLE)  Related Lubricate the Transaxle to Speedo Cable Angle Drive entry in 50,000 Miles section [PBN].	*Note: Lubrication is necessary to prevent disastrous and catastrophic damage to the transaxle (high drag or seizure of the cable can cause the steel speedo driven gear to shear and fall into the bottom of the ZF, jamming in the gears and severely damaging the transaxle including breaking the main housing) [PITI Group 16 Article #11].  <i>**Note: I replaced my speedometer cable at 85,000 miles [PBN].</i>
Every 30,000 Miles							

<p>HIGH [PBN].</p>	<p>[30,000 PBN].</p> <p>[FTI = 24,000 or 24 months – page 52-00-03; Orange Brake Wear Warning Light* glows when brakes are applied with the ignition switch in the On position - page 33-06-03]; [TSB = 4000***** miles - Bulletin 5 Article #28].</p>	<p>Inspect* Brake Pads [FTI page 52-00-03]; Check* Condition of Disk Brake Pads [FTI page 53-05-01]; Check Brake Pad Wear [TSB Bulletin 5 Article #28].</p> <p>The front pads have become worn and should be replaced (if Orange Brake Wear Warning Light* glows when brakes are applied with the ignition switch in the On position) [FTI page 33-06-03].</p> <p>Before Installation of new pads clean the pilot surfaces in the caliper opening (do not use tools with sharp edges), check protective boots and rotary rings for correct fit (damaged, hard or brittle protective boots must be replaced) [PSH page 40]; Clean*** pins and pilot surfaces of caliper and inspect for excessive wear or damage, check*** protective boots and rotary rings for damage (replace if necessary) [FTI page 12-10-01].</p> <p>Clean**** Hub and Rotor Assembly, Check**** for Lateral Runout, Adjust**** Wheel Bearings [FTI page 12-10-02].</p> <p>Machine (refinish) the disc brake rotors (if needed) [TSB Bulletin 1 Article #2].</p>	<p>See OM pages 52 “Front Brake Pads Replacement”, 53 “Rear Brake Pads Replacement” [OM].</p> <p>See FTI pages 53-05-01 “Check Condition of Disc Brake Pads”, 53-05-01 “Torque Wheel Nuts**”, 12-01-02 “Testing (Brake System Tests, &amp; Brake Warning Light sections)”, 12-01-07 “Cleaning and Inspection (Brake System)”, 12-10-01 “Removal and Installation (Front Brake Pads, Disc Brake Rotor)”, 12-11-01 “Removal and Installation ((Rear) Brake Pads)”, 12-11-02 “Removal and Installation ((Rear) Disc Brake Rotor, Caliper)” [FTI].</p> <p>See PSH pages 39 “Front Brake Pad Replacement”, 41 “Rear Brake Pad Replacement” [PSH].</p> <p>See TSB Bulletin 7 Article # 56 “Care of Magnesium Wheels”, Bulletin 1 Article #2 “Brake Rotor Refinishing” [TSB].</p>	<p>Replace Brake Pads: If they are 3/32-inch or less in thickness [FTI page 12-01-07]; When the friction material (lining thickness) is worn down to .08 inches [PSH pages 39 &amp; 41]; Min. Brake Pad Lining Thickness Before Replacement 5/64 In [PSH Specs Section].</p> <p>Replace Rear Brake Pads: When friction material is worn down to .110 inch [OM page 54]; If 0.080 inch or less in thickness [FTI page 53-05-01]. <u>(need to determine which is best value to use, and bold it)</u></p> <p>Replacing Pads: Use only Girling specified linings [PSH page 40].</p> <p>Brake Pad Renewal: Should be carried out on both brake units of the same axle, or better still, on all brake units [OM page 54].</p> <p>Cleaning Pins and Pilot Surfaces of Caliper: Do not use sharp edge tools [FTI page 12-10-01].</p> <p>Caliper bolts torque: 50-55 ft-lb [FTI page 12-10-01].</p> <p>Caliper Mounting Bolt Torque: 36-44 ft-lbs [PSH Specs Section].</p> <p>Brake Caliper Retaining Screw (bolt) Torque (ft-lbs): 58 [OM page 52, PSH page 41].</p> <p>Run-out: .004 - .006 Ins (permissible range) [PSH Specs Section]; Front brake lateral run-out of the faces must not exceed .004 inches [PSH page 39]; Maximum lateral runout of the disc brake rotor (measured with a dial indicator mounted on the wheel hub) must not exceed 0.008 inches (0.2mm) near the outer edge of the disc brake rotor [TSB Bulletin 1 Article #2]. <u>(need to determine which is best value to use, and bold it)</u></p> <p>Maximum Values of Brake Rotor Refinishing Thickness Reduction: See table in TSB Bulletin 1 Article #2 [TSB].</p> <p>Disc replacement: Is not necessary if its only lightly scored, only necessary in event of major surface damage [PSH page 39].</p> <p>See ***** Addition [PBN].</p>	<p>***** Addition (There wasn't room for this in specs column -PBN):</p> <p>Wheel Nuts Torque (alternately and evenly)**: 43 to 58 ft-lb [FTI page 53-05-01, PSH Specs Section].</p> <p>Wheel Installation**: Apply light coating of protective grease between the hub and wheel [FTI page 11-02-02]; Water resistant grease should be applied to the inside faces of the wheels and hubs, both front and rear, to facilitate their removal [TSB Bulletin 7 Article # 56].</p>	<p>BRAKES (BRAKE PADS, DISC BRAKE ROTOR)</p> <p>Related Foot Brake item in DOT Annual Inspection Renewal entry in Yearly section <u>(do they check pads in annual renewal? – if not delete cross refs)</u> [PBN].</p> <p>Related Brake Operation Check/Correct entry in Yearly section [PBN].</p>	<p>*Note: Have a front brake pads wear limit warning light on dash instrument panel (indicates low amount of friction material, replace the front pads when the light comes on) [OM pages 16, 54]; A dash mounted Brake Pad-Wear Warning Light will come on indicating the front brake pads have worn down to 3/32-inch (0.100 inch) and need replacing [FTI page 12-01-07, 53-05-01].</p> <p>Note: Don't need to take wheel hub off to do this [MECH].</p> <p>**Note: Only if take wheels off for some reason [PBN].</p> <p>***Note: Only if remove brake pads [PBN].</p> <p>****Note: Only if remove disc brake rotor [PBN].</p> <p>*****Note: Assume was a one time thing at first 4000 miles of car [PBN].</p> <p><i>NOTE: IF FRONT DRIVERS WHEEL SQUEAK WHEN BRAKING (I think is due to dirt on pad or rotor) CONTINUES AFTER CHANGE BRAKE PADS, HAVE MECHANIC (STEVE) CHECK IT OUT [PBN – TEMP].</i></p>
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LOW [PBN].	[30,000 PBN].  [FTI = 24,000 or 24 months]	Torque Intake Manifold Bolts [FTI page 52-00-02]; Tighten Intake Manifold Bolts [FTI page 53-04-02].	See FTI page 53-04-02 "Tighten Intake Manifold Bolts" [FTI].	Intake Manifold Bolts Torque Limit (Ft-Lb): 21-25 (5/16 bolt), 27-33 (3/8 Bolt), 6-9 (1/4 Bolt) [FTI page 21-22-32].		ENGINE (INTAKE MANIFOLD)	<i>Note: I replaced intake manifold with an Edelbrock Performer 351-4V manifold [PBN].</i>
MEDIUM [PBN].	[30,000 PBN].  [WEB = Stock*** chains are considered worn with maybe 20,000 miles on them, only last about 30,000 miles (and at 30,000 miles they're toast) – Attachment 19a "Timing Chain"].	Check Timing Chain Deflection (if deflection exceeds specifications, replace* ** the timing chain and sprockets) [FTI page 21-01-06]; Determine if your timing chain needs to be replaced* ** (measure the slack in the chain) [POCA NL Feb 1991 pages 6 & 7 (Attachment 19b)].  <u><a href="#">(Why isn't this listed as a routine maintenance thing in FTI/OM etc? – not a valid routine maintenance item? If is valid, should you inspect it on one frequency and replace it on another?)</a></u>	See FTI page 21-01-05 "Timing Chain Deflection" [FTI].  See POCA NL Feb 1991 pages 6 & 7 "Replacing the Pantera Timing Chain" (Attachment 19b) [POCA NL].	Timing Chain Deflection (Maximum): 0.500 [FTI page 21-22-30].  Timing Chain Freeplay: A new chain and gear set will have no freeplay between the crank and the cam [POCA NL Feb 1991 pages 6 & 7 (Attachment 19b)].  Timing Chain***: Ford and the aftermarket both offer a double-roller timing chain that is stronger, much more durable and smoother running, but slightly noisier than the standard (stock) chain. A variant, the true-roller chain is built with an extra bearing-tube around each link-pin so the chain literally "rolls" into engagement on its sprocket teeth. Roller chain sprockets have multiple keyways so cam timing can be adjusted, too. [POCA NL Nov 2002 – Attachment 27 "POCANLnov2002etc"].		ENGINE (TIMING CHAIN AND SPROCKETS)  Related Check Coolant System Hoses** & Clamps entry in 15,000 Miles section [PBN].  Related Check All Drive Belts entry in 5000 Miles section [PBN].  Related Bakers Dozen Engine Upgrades (item 4, timing chain) entry in When Engine Removed section [PBN].	*Note: Replacement** CAN be done without removing the engine or dropping the oil pan – See POCA NL Feb 1991 pages 6 & 7 (Attachment 19b) [POCA NL].  **Note: While the crank damper/pulley and water pump is out, it would be easier to check or change those hard-to-get-at water hoses [POCA NL Feb 1991 pages 6 & 7 (Attachment 19b)].  ***Note: The stock timing chain is known as a "silent chain", made up of hundreds of tiny pieces of steel pinned together. All these links wear pretty rapidly, as the 351-C has enormous valves that weigh a bunch. The silent chain is not dependable at continuous high rpms either. [POCA NL Nov 2002 – Attachment 27 "POCANLnov2002etc"].
LOW [PBN].	[30,000 PBN].  [OM = 4000*]; [TSB = 4000* miles - Bulletin 5 Article #28].	Tighten Exhaust Manifold Bolts Adjustment [OM]; Check Exhaust System (tightness of manifold-to-muffler inlet bolts) [FTI]; Tighten exhaust manifold bolts [TSB Bulletin 5 Article #28].	See FTI page 53-05-01 "Check Exhaust System" [FTI].	Exhaust Manifold Bolts Torque Limit (Ft-Lb): 12-22 [FTI page 21-22-32].		EXHAUST SYSTEM (EXHAUST MANIFOLD); ENGINE (EXHAUST MANIFOLD)  Related Check Exhaust System Supports entry below [PBN].  Related General Exhaust System check below [PBN].	*Note: Assume was a one time thing at first 4000 miles of car [PBN].  <u><a href="#">Assume need to do this on very infrequent schedule – is 30,000 miles too often?</a></u>  <i>Note: Previous owner replaced original exhaust system (headers, manifolds, tailpipes and mufflers) with "Mind-Train Enterprises "Big Throats" Exhaust System" [PBN].</i>
LOW [PBN].	[30,000* PBN].	Check Exhaust System Supports (all supports, brackets, and flange joints for damage and/or leaks, replace any hangers that are damaged) [FTI].	See FTI page 53-05-01 "Check Exhaust System Supports" [FTI].  See TSB Bulletin 14 Article #109 "New Muffler Support Strap" [TSB].	Muffler Support Strap: Ford Part No. D46Y-5260-A (new reinforced rubber) [TSB Bulletin 14 Article #109].		EXHAUST SYSTEM (GENERAL)  Related Tighten Exhaust Manifold Bolts entry above [PBN].  Related Exhaust System Check <u><a href="#">(do they check this supports stuff in annual renewal? – if so add cross refs)</a></u> in Annual DOT Inspection Renewal entry in Yearly section [PBN].  Related General Exhaust System Check below [PBN].	*Note: See related Tighten Exhaust Manifold bolts entry above, probably should do at same time, which is why I picked 30,000 miles [PBN].  <i>Note: Previous owner replaced original exhaust system (headers, manifolds, tailpipes and mufflers) with "Mind-Train Enterprises "Big Throats" Exhaust System" [PBN].</i>

LOW [PBN].	[30,000* PBN].	<p>General Exhaust System Check: Check to see that the Exhaust System is free of leaks, binding, grounding, and excessive vibrations (these conditions usually caused by loose or broken insulators, brackets, or pipes) – if any of these conditions exist, check exhaust system components and their alignment (align or replace as necessary to maintain the specified clearances) [FTI page 26-01-01].</p> <p>Inspect brackets and insulators for cracks and stripped or badly corroded bolt threads (replace if damaged or badly corroded) [FTI page 26-01-01]. (<a href="#">does this belong in exhaust supports entry above instead?</a>)</p> <p>Inspect the inlet pipes, outlet pipes, and mufflers for cracked joints, broken welds, and corrosion damage that would result in a leaking exhaust system (replace as needed) [FTI page 26-01-01].</p>	See FTI page 26-01-01 “General Exhaust System Service (Description)” [FTI].			<p>EXHAUST SYSTEM (GENERAL)</p> <p>Related Exhaust System item in Annual DOT Inspection Renewal entry in Yearly section [PBN].</p> <p>Related Tighten Exhaust Manifold Bolts entry above [PBN].</p> <p>Related Check Exhaust System Supports entry above [PBN].</p> <p>Related Underbody Protection (rust and corrosion) Check in Yearly section [PBN].</p>	<p>*Note: See related Tighten Exhaust Manifold bolts entry above, probably should do at same time, which is why I picked 30,000 miles [PBN].</p> <p><i>Note: Previous owner replaced original exhaust system (headers, manifolds, tailpipes and mufflers) with “Mind-Train Enterprises “Big Throats” Exhaust System” [PBN].</i></p> <p><i>Note: Previous owner removed vacuum smog control stuff [PBN].</i></p>
LOW [PBN].	[30,000 PBN].  [FTI = 24,000 or 24 months].	Inspect (adjust, repair, or replace as required) Evaporative Emission Canister [FTI].				<p>FUEL SYSTEM (CARBON CANNISTER)</p> <p>Related* Catalytic Converter Tampering Inspection item in Annual DOT Inspection Renewal entry in Yearly section [PBN].</p>	*Note: “Catalytic Converter” (in Annual Inspection Renewal entry in Yearly section) is not the same thing as “Evaporative Emission Canister”, but is similar in that it is for emissions control [MECH].
MEDIUM [MECH].	[30,000 PBN].  [FTI = 24,000 or 24 months].	<p>Inspect (adjust, repair, or replace as required) Distributor Cap &amp; Rotor [FTI];</p> <p>Inspect Distributor Cap for cracks, burned contacts, broken carbon button, carbon tracks, or dirt or corrosion in the sockets (replace the cap if damaged) [FTI page 23-01-12].</p> <p>Clean Distributor Cap [FTI page 53-04-02].</p> <p>Inspect Rotor for breaks, cracks, carbon tracks, or burning (replace rotor if corroded or damaged) [FTI page 23-01-12].</p>	<p>See FTI page 23-10-03 “Removal and Installation (Distributor)” [FTI];</p> <p>See Attachment 2 “Pantera Tune Up Ideas (Distributor Cap and Rotor)” [WEB].</p>	Cleaning Distributor Cap and Rotor: Soft bristle brush and mild cleaning solvent or mineral spirits, dry cap with compressed air [FTI page 23-01-12].		<p>IGNITION SYSTEM (DISTRIBUTOR CAP, DISTRIBUTOR ROTOR)</p> <p>Related Lubricate Distributor Bearing entry below [PBN].</p> <p>Related Keep Distributor in Good Operating Condition and Adjusted to Specification entry below [PBN].</p> <p>Related Check/Adjust Distributor Points/Gap in Never section [PBN].</p>	<p><i>Note: I still have to do this even though previous owner replaced the original dual point distributor with electronic ignition (Mobelec breakerless CD ignition system) [MECH].</i></p>



<p>MEDIUM [PBN].</p>	<p>[30,000* PBN].</p>	<p>Keep Distributor in good operating condition*** and adjusted to specification [FTI page 23-01-02];</p> <p>Inspect all distributor electrical wiring for fraying, breaks, etc. (replace any that is not in good condition) [FTI page 23-01-12];</p> <p>Check Distributor Secondary wiring for breaks and cracked insulation, inspect the terminals and boots for looseness or corrosion (replace any wires that are not in good condition) [FTI page 23-01-12].</p> <p>Check the Distributor base for cracks or other damage [FTI page 23-01-12].</p> <p>Check the distributor diaphragm housing, bracket, and rod for damage, test diaphragm for leakage (replace all defective parts) [FTI page 23-01-12].</p> <p>Inspect the breaker plate assembly** for signs of distortion, wear, or damage (replace the breaker plate assembly if it is damaged) [FTI page 23-01-11].</p>	<p>See FTI pages 23-01-11 “Cleaning and Inspection (Distributor)”, 23-01-12 “Secondary Wiring”, 23-10-03 “Removal and Installation (Breaker Plate and Sub-Plate)”, 23-10-03 “Removal and Installation (Distributor)” [FTI].</p>	<p>Cleaning Distributor Assembly (except condenser, breaker point assembly, lubricating wick, vacuum diaphragm, distributor base oil seal, and electrical wiring): Mild cleaning solvent or mineral spirits (do not use a harsh cleaning solution; do not use a wire brush, file, or other abrasive object – use a soft bristle brush, dry with compressed air) [FTI page 23-01-11].</p> <p>Cleaning Distributor Assembly (parts that cannot be soaked in a solvent): Wipe with a clean dry cloth [FTI page 23-01-11].</p> <p>Wiping Secondary Wiring: Use damp cloth [FTI page 23-01-12].</p>		<p>IGNITION SYSTEM (DISTRIBUTOR)</p> <p>Related Inspect Distributor Cap &amp; Rotor entry above [PBN].</p> <p>Related Lubricate Distributor Bearing entry below [PBN].</p> <p>Related Lube Distributor Cams entry in Never section [PBN].</p> <p>Related Check/Adjust Ignition Timing entry in Never section [PBN].</p> <p>Related Check/Adjust Distributor Points/Gap entry in Never section [PBN].</p> <p>Related Distributor Condenser entry in Never section [PBN].</p> <p>Related Check Advance &amp; Retard, Cut-in Speed in 15,000 Miles section [PBN].</p> <p>Related Spark Plug (Secondary Wiring) Wires Resistance entry in 15,000 Miles section [PBN].</p> <p>Related Bakers Dozen Engine Upgrades (item 12, distributor roll pin) entry in When Engine Removed section [PBN].</p>	<p>*Note: Assume do this on same frequency as the other distributor maintenance operations (which are listed in this section) [PBN].</p> <p><i>**Note: Even though I don't have distributor breaker points, I still have the breaker plate assembly [MECH].</i></p> <p>***Note: The drive gear on stock or aftermarket 351-C distributors is retained by a roll pin. Some 351-C distributors have a spiral pin instead of a roll pin – this type of pin is weaker than the thicker-wall roll pin in impact resistance. To upgrade this pin, inserting a smaller roll pin inside the stock one sufficiently strengthens the assembly such that no further pin breakage results, even under extreme conditions [POCANL Nov 2002 – Attachment 27 “POCANLnov2002etc”].</p> <p>Note: Don't have to remove distributor for normal maintenance, only if replacing it etc. [MECH] – <a href="#">therefore distributor related stuff I listed on this checklist from FTI page 23-01-11 &amp; 12 and 23-10-02 &amp; 03 is actually overhaul and not routine maintenance? –ask mechanic and if so delete off this list (other places too besides just this entry) to be consistent with note 8 &amp;9.</a></p> <p><a href="#">Note: Holman &amp; Moody installed a Mallory Ignition unit (in my distributor) – need to note that in appropriate place on this list – which entries does it affect (ignition timing, all distributor stuff?)?</a></p>
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MEDIUM [MECH].	[30,000* PBN].	Lubricate Distributor Bearing [FTI].	See FTI page 53-01-02 "Lubricate Distributor Bearing", 23-10-03 "Removal and Installation (Distributor)" [FTI].	Breaker Point Arm Rubbing Blocks: High Temperature lubricant meeting Ford Specification ESF-M1C66-A [FTI].  Felt Wick: SAE 10W Engine Oil [FTI pages 53-01-02, 23-10-03].		IGNITION SYSTEM (DISTRIBUTOR)  Related Inspect Distributor Cap & Rotor entry above [PBN].  Related Keep Distributor in Good Operating Condition and Adjusted to Specification entry above [PBN].	<i>Note: I still have to do this even though previous owner replaced the original dual point distributor with electronic ignition (Mobelec breakerless CD ignition system) [MECH].</i>  Note: Lubing Distributor Bearing and Lubing Distributor Cams are different things [MECH].  Note: Lubing Distributor Bearing and Inspecting Distributor Cap & Rotor are different maintenance operations [MECH].  *Note: Have to remove distributor cap & rotor to lube bearing (per FTI page 53-01-02), so convenient to do this when inspect distributor cap & rotor (see above entry) [PBN/MECH].  Note: The felt wick probably doesn't need to be lubed, lube at factory was probably sufficient (lubing wick and lubing bearing are different, but do at same time) [MECH].
MEDIUM [PBN].	[30,000* PBN].	Clean Distributor Coil [FTI page 53-04-02].  Check Distributor Coil for any cracks or other defects [FTI page 23-01-12].	See FTI pages 23-01-12 "Coil", 23-01-05 "Secondary (High Tension) Wires Resistance Test" [FTI].	Conventional Ignition System – Coil Condenser and Primary Circuit Resistor Specifications: See FTI page 23-10-05 [FTI]. ( <i>list the individual specs here?</i> )  Ignition Coil Wire Resistance: Should not exceed 1000 ohms per inch (do not puncture the wire with a probe) [FTI page 23-01-05].  Wiping Coil: Use damp cloth [FTI page 23-01-12].  Wiping Secondary Wiring: Use damp cloth [FTI page 23-01-12].		IGNITION SYSTEM (IGNITION COIL)  Related Check and Adjust Distributor Points entry in Never section [PBN].	*Note: No frequency given in references for this maintenance, assume do at same time as rest of ignition system maintenance [PBN].  Note: Ignition Coil and Distributor Coil are same thing (coil is not part of the distributor, just connected to it by a wire) [MECH].
Every 40,000 Miles							
LOW [PBN].	[40,000 PBN].  [OM = 4000*]; [TSB = 4000* miles - Bulletin 5 Article #28].	Check Doors and Decks Lock Adjustment [OM, TSB Bulletin 5 Article #28].  Check Door Operation (alignment, fit, and closing effort, striker adjustment) [FTI].	See FTI page 53-03-01 "Check Door Operation" [FTI].			DOORS, HOOD, AND LUGGAGE COMPARTMENT (GENERAL)  Related Lube Doors etc entry in 20,000 Miles section [PBN].	*Note: Assume was a one time thing at first 4000 miles of car [PBN].

HIGH [MECH].	<p>[40,000 PBN].</p> <p>[FTI = 36,000 or 36 months]; [PITI = periodically, probably at the same intervals as repacking the front wheel bearings (re-grease the A frame bushings) – Group 14 Article #9].</p> <p><i>[MECH = periodically (must lubricant poly*** bushings)].</i></p>	<p>Chassis Lube [PITI Group 52 Article 1].</p> <p>Lubricate Front Suspension, Ball Joints [FTI].</p> <p>Lubricate Ball Joints (front/rear, upper/lower) [PITI Group 53 Article 1].</p> <p>Disassemble* ** both A frame units and re-grease them (the bushings) [PITI Group 14 Article #9]; Lubricate* ** Lower Rear Pivot Shafts (A-Arm Pivot Points) in the Rear Suspension, and the Brass Carrier Bushings [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p> <p><i>Lube Poly*** **** Suspension Bushings [MECH].</i></p>	<p>See PITI Group 53 Article #1 “Lubrication Tips” [PITI].</p> <p>See POCA NL Apr 2002 “The Five Most Neglected Maintenance Areas in your Pantera (Lubrication of the lower rear pivot shafts in the rear suspension)*****” - Attachment 23 “POCANLapr2002etc” [POCA NL].</p>	<p>Ball Joints with grease fittings: Hand grease gun with good quality lithium base grease (add grease until rubber seal starts to get “fat”, then stop) [PITI Group 53 Article 1].</p> <p>Ball joints without grease fittings: Use a hypodermic syringe (the type lubricant varies with application depending on viscosity you want, e.g. high pressure moly/graphite based types) [PITI Group 53 Article 1].</p> <p>See PSH Specs Section “Front Suspension”, “Rear Suspension” [PSH] (<a href="#">do these specs apply to this item, and if they do are they maint or repair related?</a>).</p> <p>Rear Suspension Lubricant: Moly Lube [PITI Group 14 Article 3].</p> <p><i>Poly*** Suspension Bushings Lube:</i> <a href="#">Regular Chasis lube?</a> <a href="#">ARP Moly Paste?</a> <a href="#">Special Pantera East lube?</a></p> <p>Anti-Crush Sleeve inside the Carrier: Copious amounts of grease POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>		<p>SUSPENSION (GENERAL, BUSHINGS)</p> <p>Related Check Front/Rear Suspension for A Arm/Shaft Support Assembly Problems in Yearly section [PBN].</p> <p>----- ***** Addition (There wasn’t room for this in Notes column -PBN):</p> <p>*****Note: There is an anti-crush sleeve inside the cast iron carrier that is made of hardened steel. This type of steel rusts very easily, and without copious amounts of grease, soon corrosion-welds itself to the pivot shaft. When this happens, the assembly cannot be pressed apart but must be cut into pieces to disassemble [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>	<p>Note: “chassis” refers to all of the suspension (both front and back) [MECH].</p> <p>*Note: The A frame bushing/shaft/sleeve***** system assembly was originally greased at the factory, and there is no provision for further lubrication short of complete disassembly (unless you added aftermarket zerk fitting kit) [PITI Group 14 Article #9]; There is no external way to lube the a-arm pivot points nor the brass carrier bushings (there are kits that substitute a gun-drilled pivot shaft with a grease fitting on one end, and some owners have added external grease fittings to the carrier) [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p> <p><i>** Note: Previous owner installed set of Hall Pantera extended rear upper “A” arms, and engine compartment spreader bar was replaced with a Hall Pantera adjustable cross brace (camber bar) by previous owner [PBN].</i></p> <p><i>***Note: Previous Owner replaced original (rubber) suspension bushings (except ones on rear sway bar) with poly (neophrene) bushings from Hall Pantera) [PBN].</i></p> <p><i>****NOTE: CAR SQUEAKS WHEN STRESSED DURING DRIVING (is due to poly suspension bushings the previous owner added, according to previous owner) – MAY NEED TO USE BETTER LUBE ON THESE? (or replace them with rubber or other poly ones that don’t squeak) [PBN – TEMP].</i></p> <p>See *****Addition [PBN].</p>
LOW [PBN].	<p>[40,000 PBN].</p> <p>[FTI = Whenever the Window glass channel or window regulator is removed, or it becomes necessary to operate the window manually - page 43-01-01].</p>	<p>Lubricate the Window Glass Mechanism [FTI page 43-01-01].</p>	<p>See FTI page 43-01-01 “Door, Windshield, and Rear Window Glass (General Information - Window Mechanism Lubrication)” [FTI].</p> <p>See PSH page 3 “Interior – Service Accessibility (Door Glass Drop Motor and Gear Mechanism Accessibility)” [PSH].</p>	<p>Window Mechanism Lubricant: Even coating of polyethylene grease (Ford Part No. C4AZ-19584-A) [FTI page 43-01-01].</p>		<p>WINDOW GLASS (WINDOW REGULATOR)</p> <p>Related Lubricate Window Weatherstrips entry in 20,000 Miles section [PBN].</p>	<p><i>Note: Previous owner replaced original nylon window regulator gears with bronze gears from Hall Pantera [PBN].</i></p>

	Every 50,000 Miles						
<p>LOW [PBN].  <a href="#">(should this be low – i.e., will brake pedal continue to work similar to way clutch pedal will continue to work?)</a></p>	<p>[50,000 PBN].</p>	<p>Coat the large shaft the brake pedal return spring goes on with anti-seize, and put some anti-seize around and under the spring to prolong its life [WEB - Attachment 26 “Pedal Return Springs”].</p>		<p>Anti-Seize Type:  Silver [WEB - Attachment 26 “Pedal Return Springs”].</p> <p>Anti-Seize Applicator:  Swab [WEB - Attachment 26 “Pedal Return Springs”].</p>		<p>BRAKES (GENERAL)</p> <p>Related Coat the Clutch Pedal Return Spring with Anti-Seize entry below [PBN].</p> <p>Related Brake Operations  Check entry in Yearly section [PBN].</p>	
<p>MEDIUM [PBN].</p>	<p>[50,000 PBN].</p> <p>[POCA NL Apr 2002 = a pump of grease (via zerk*** fittings) once in a while would surely not be bad].</p> <p>[MECH (Jenkins &amp; Jenkins) = Lube (via zerk fittings) once every 5 years].</p>	<p>Re-Grease* *** ** the Twin Needle Bearings** on the Ends of the Clutch Bellcrank Shaft in your Engine’s Bellhousing [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p> <p><a href="#">(related to/same as “Lube Clutch Withdrawal Shaft” entry in 10,000 Miles section?)</a></p>	<p>See POCA NL Apr 2002 “The Five Most Neglected Maintenance Areas in your Pantera (The twin needle bearings on the ends of the clutch bellcrank shaft in your engine’s bellhousing)” including Attachment 23 “POCANLapr2002etc” [POCA NL].</p>	<p>Needle Bearing Lubricant:  Grease [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>		<p>CLUTCH AND TRANSAXLE (CLUTCH)</p> <p>Related Lube Clutch Withdrawal Shaft entry in 10,000 Miles section [PBN].</p> <p>Related Check, Clean, and Re-Grease the Twin Needle Bearings entry in When Transaxle Removed section [PBN].</p> <p>Related Change the Pilot Bushing in the Rear of the Crankshaft entry in When Transaxle Removed section [PBN].</p>	<p>*Note: Re-grease*** at 50,000 miles and whenever transmission pulled, Check/Clean and Re-Grease whenever transmission pulled (see separate entries) [PBN].</p> <p>**Note: These small bearings are well sealed and were lubed at the factory, but it’s been 30 plus years since that was done. They were not designed to be serviced, because to re-grease them one needs to pull the transaxle (or at least slide it back far enough to allow access to the inside of the bellhousing). A dedicated owner could add zerk** fittings to the bellhousing above these little bearings [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p> <p>***Note: I had zerk fittings added (when had ZF safety-wired) to my bellhousing to enable these to be easily greased**** – therefore probably only need to “clean and check” the needle bearings whenever have to pull transaxle for some reason [PBN].</p> <p>****Note: Use just a squirt of grease - don’t try to fill with grease until it comes out the zerk fitting like normally do with zerk fittings (zerk fitting feeds into large area back into housing) [MECH – Jenkins &amp; Jenkins].</p>

<p>HIGH* [PBN].</p>	<p>[50,000 PBN].</p> <p>[POCA NL Apr 2002 = decade].</p> <p><a href="#">(move this to a longer interval (10 years or 100,000 miles) if create one in future since should last a "decade")</a></p>	<p>Lubricate/Repair the Effort Reduction Linkage** under the Dash [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>	<p>See POCA NL Apr 2002 “The Five Most Neglected Maintenance Areas in your Pantera (The effort reduction linkage under the dash)***” - Attachment 23 “POCANLapr2002etc” [POCA NL].</p>	<p>Effort Reduction Linkage Lubricant: Grease [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>		<p>CLUTCH AND TRANSAXLE (CLUTCH)</p> <p>Related Check Clutch Pedal Free Play entry in 10,000 Miles section [PBN].</p> <p>Related Lubricate Clutch Linkage (under dashboard) entry in 15,000 Miles section [PBN].</p> <p>Related Coat the Clutch Pedal Return Spring with Anti-Seize entry below [PBN].</p>	<p>*Note: Worn and loose or frozen solid effort reduction linkage parts contribute to reducing the release distance your clutch linkage can produce, thus causing more wear on your ZF’s very expensive gear synchronizers [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”]; Assume this can cause same problems as related check clutch pedal free play entry in 10,000 Miles section [PBN].</p> <p>**Note: Only L model Panteras have this [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”]; A redesigned clutch pedal linkage was introduced in production 9/1/1972 [PPQR Powertrain item 12].</p> <p>***Note: Due to the way the effort reduction linkage mechanism is designed, one almost needs to remove the dashboard in order to remove and repair any worn links [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p> <p>Note: Assume this is different from the Lubricate Clutch linkage entry in 15,000 Miles section since that applies to all Panteras and the Effort Reduction Linkage is only on L model Panteras [PBN].</p>
<p>LOW* [PBN].</p>	<p>[50,000 PBN].</p>	<p>Coat the large shaft the clutch pedal return spring goes on with anti-seize, and put some anti-seize around and under the spring to prolong its life [WEB - Attachment 26 “Pedal Return Springs”].</p> <p><a href="#">(is this part of, and thus should be combined with, lubing clutch linkage entry in 15,000 miles section?)</a></p>		<p>Anti-Seize Type: Silver [WEB - Attachment 26 “Pedal Return Springs”].</p> <p>Anti-Seize Applicator: Swab [WEB - Attachment 26 “Pedal Return Springs”].</p>		<p>CLUTCH AND TRANSAXLE (CLUTCH)</p> <p>Related Coat the Brake Pedal Return Spring with Anti-Seize entry above [PBN].</p> <p>Related Lubricate/Repair the Effort Reduction Linkage entry above [PBN].</p> <p>Related Check Clutch Pedal Free Play entry in 10,000 Miles section [PBN].</p> <p>Related Lubricate Clutch Linkage (under dashboard) entry in 15,000 Miles section [PBN].</p>	<p>*Note: If spring breaks the clutch will continue to work as the pressure plate springs push the clutch arm back which in turn pushes the slave cylinder back, which in turn pushes your pedal back (but you should replace it if breaks) [WEB - Attachment 26 “Pedal Return Springs”].</p> <p>Note: Assume this is not part of the effort reduction linkage (entry above) since non-L model Panteras have this spring too [PBN].</p>

<p>LOW [PBN].</p> <p><u>(should this be high for same reason lube speedo cable at 20,000 miles is, or can this angle drive not cause same failure?)</u></p>	<p>[50,000* PBN].</p> <p><u>(need to change frequency of this or the 20,000 mile speedo cable lube so they are at the same time since similar things, or at least do the angle drive lube at some multiple of the speedo cable lube so can be done together when angle drive lube needed?)</u></p>	<p>Lubricate the Transaxle to Speedo Cable Angle Drive [WEB – Attachments 25a, b, c, d “Transaxle Angle Drive Special Tool”].</p>	<p>See Attachments 25a, c, d “Transaxle Angle Drive** Special Tool” [WEB].</p>	<p>Angle Drive Greasing Tools: Use a hand powered grease gun and the Special Tool**** greasing adapter* [WEB – Attachments 25a, b, c, d “Transaxle Angle Drive Special Tool”].</p> <p>Angle Drive Lubricant: Pump grease until resistance is felt, then pump SLOWLY one pump more (do not overgrease***, very very little grease is needed) [WEB – Attachments 25a, b, c, d “Transaxle Angle Drive Special Tool”].</p> <p>Angle Drive Greasing: It is best to regrease the adapter after the car has been run and the adapter is warm. It is not advisable to force grease into something that is dead cold [WEB – Attachment 25a “Transaxle Angle Drive Special Tool”].</p>		<p>INSTRUMENTS, CLUSTERS, AND CONTROLS (SPEEDOMETER); CLUTCH AND TRANSAXLE (TRANSAXLE)</p> <p>Related Lube Speedometer Cable entry in 20,000 Miles section [PBN].</p>	<p>*Note: The angle drive is or was a sealed non-serviceable unit (the adapter allows you to grease your angle drive worm gears which are undoubtedly dry from centrifugal force and age) [WEB – Attachments 25a, b, c, d “Transaxle Angle Drive Special Tool”].</p> <p>**Note: Do NOT remove the angle drive. The angle-drive shaft &amp; bushing are held by a 10mm bolt just below the big nut that retains the angle drive. Unscrewing the big nut is fine but if you try to simplify this by removing the small bolt, the angle drive shaft will drop into the gearbox. This requires disassembly of the ZF to get it back. ) [WEB – Attachment 25a “Transaxle Angle Drive Special Tool”].</p> <p>***Note: A grease gun has the power to blow the staked end caps off the angle drive [WEB – Attachment 25a “Transaxle Angle Drive Special Tool”].</p> <p>****Note: I have the transaxle angle drive special tool [PBN].</p>
<p>MEDIUM [PBN].</p>	<p>[50,000 PBN].</p> <p>[WEB = Maybe once every 50,000 miles of highway driving, or 500 racetrack driving miles – Attachment 14 “Stress Relieving Campys”].</p>	<p>Stress Relieve Campy (Magnesium) Wheels [WEB – Attachment 14 “Stress Relieving Campys”].</p>	<p>See Attachment 14 “Stress Relieving Campy’s” [WEB].</p> <p>See instructions and warnings for taking off wheels and tires in Inspect Wheels and Tires entry in 5000 Miles section [PBN]. <u>(should just copy them here rather than referencing them?)</u></p>			<p>WHEELS AND TIRES (WHEELS)</p> <p>Related Inspect Wheels and Tires entry in 5000 Miles section [PBN].</p>	<p>Note: Magnesium will ignite, must be careful [WEB – Attachment 14 “Stress Relieving Campys”].</p>
	<p><b>Special</b></p> <p>When Engine Removed</p>						

<p>MEDUM* [PBN].</p>	<p>[Whenever engine is removed** PBN].</p>	<p>Replace 351C Engine's Factory Freeze Plugs [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”], [POCA NL Nov 2002 – Attachment 27 “POCANLnov2002etc”].</p>	<p>See POCA NL Apr 2002 “The Five Most Neglected Maintenance Areas in your Pantera (Has your Pantera’s 351C ever had its factory freeze plugs replaced)” - Attachment 23 “POCANLapr2002etc” [POCA NL].</p>	<p>Replacement Plugs: Should be brass (there are low and high side types) [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”]; Brass** [POCA NL Nov 2002 – Attachment 27 “POCANLnov2002etc”].</p> <p>Sealant: No sealant is normally needed (but coating the edges with RTV or permatex can be done after installaton if the block is scarred from removal of the old plugs) [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>		<p>ENGINE (GENERAL)</p> <p>Related Bakers Dozen Engine Upgrades (item 11, freeze plugs) entry below [PBN].</p> <p><a href="#">(is this same thing as “core plugs”?) – if so FTI has info on this need to ref, and change the component from “general” to “Core Plug” or other thing plug called in FTI engine section #2)</a></p> <p><a href="#">(should I add cross ref's to/from replacing coolant?)</a></p>	<p>*Note: Factory freeze plugs are mild steel, and unless all owners of the engine were as diligent as you(?) about changing antifreeze yearly, they are all badly corroded and probably on the verge of failure. [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”]; All the stock freeze plugs in your engine are seriously-rusted mild steel unless you have religiously kept fresh rust-inhibiting anti-freeze in the engine. If one rusts through while you're driving, all the engine coolant will be lost. [POCA NL Nov 2002 – Attachment 27 “POCANLnov2002etc”].</p> <p>**Note: Only one of the six freeze plugs can be practically accessed with the engine installed, just in case you figure it can be done anytime (two are under the motor mounts) [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”]; By replacing the stock steel plugs with brass ones while the block is accessible, no further problems of this sort will occur in your lifetime [POCA NL Nov 2002 – Attachment 27 “POCANLnov2002etc”].</p>
<p>MEDUM [PBN].</p>	<p>[Whenever engine is removed PBN].</p>	<p>Do the “Baker’s Dozen* Vital Upgrades for any Street Performance 351-C Engine” [POCA NL Nov 2002 – Attachment 27 “POCANLnov2002etc”].</p>	<p>See POCA NL Nov 2002 “A Baker’s Dozen Vital Upgrades for any Street Performance 351-C Engine” – Attachment 27 “POCANLnov2002etc” [POCA NL].</p>			<p>ENGINE (GENERAL)</p> <p>Related Replace Freeze Plugs entry above [PBN].</p> <p>Related Check Timing Chain Deflection entry in 30,000 Miles section [PBN].</p> <p>Related Keep Distributor in Good Operating Condition and Adjusted to Specification entry in 30,000 Miles section [PBN].</p> <p><a href="#">(need to add cross ref's to/from maintenance operations related to other parts of engine this says to upgrade?)</a></p>	<p>*Note: Upgrades numbers 4 &amp; 11 &amp; 12 already incorporated into this checklist elsewhere too (in timing chain and freeze plug and distributor maintenance items sections) [PBN].</p> <p>Note: If do these need to incorporate onto this checklist where/as appropriate (like did for items 4 &amp; 11 &amp; 12 above), <i>and incorporate onto modifications list too</i> [PBN].</p>

VARIES [PBN].	[Whenever engine is removed PBN].	<p>MISCELLANEOUS STUFF TO DO WHEN ENGINE IS REMOVED [PBN]:</p> <p>1) Do any modifications*/repairs that were awaiting/need engine removal <i>(see my separate repairs/enhancements lists)</i> [PBN].</p> <p>2) Check (repair/replace** if needed) stuff normally don't have easy access to (such as engine rubber hoses, inspect for rusting components/areas, check the pressure and overflow coolant tanks for internal rust, inspect gas tank, etc) [PBN].</p> <p>3) <i>Be sure reinstall aftermarket DeTomaso script valve covers and aftermarket Pantera script air cleaner (with "T" logo knob), rather than replacing them with stock parts [PBN].</i></p>	<i>(add reference to engine removal section of FTI &amp; PSH etc?)</i>			<p>MISCELLANEOUS</p> <p>See related Miscellaneous Stuff to do When Transaxle/Clutch is Removed entry in When Transaxle Removed section [PBN].</p> <p>Related Underbody Protection (rust and corrosion) Check in Yearly section [PBN].</p> <p>Related Clean/Degrease Engine and Transaxle entry in Yearly section [PBN].</p> <p>Related Have Mechanic Do General All Over Inspection of Car entry in Yearly section [PBN].</p>	<p>Note: If find official maintenance documentation of an item I listed in this "miscellaneous" entry delete it off this entry and create its own separate entry on checklist (and change any affected cross references to this listing), but be sure any useful info/references is also on this checklist elsewhere before delete it off this entry [PBN].</p> <p><i>Note: Engine was rebuilt at 80,000 miles [PBN].</i></p> <p>Note: When remove engine be sure to remove the distributor cap before lifting as the cap will crack/break the rear window [PBN – WEB].</p> <p>Note: When put engine back be sure long motor mount bolts put back on right side up (i.e., bolt head on top) – must be done BEFORE replacing the powertrain [PBN – WEB].</p> <p>Note: If take off rear deck lid struts when removing engine, be sure put them back on with cylinder up (top 1/2) with shaft on bottom (keeps dirt out and has "stop" mechanism in that orientation) [PBN – WEB].</p> <p>*Modification Examples: <i>Different camshaft for better gas mileage</i> [PBN – TEMP].</p> <p>**Repair/Replace Examples: <i>Rusting outside of gas tank and inside filler neck, hoses</i> [PBN – TEMP].</p>
Storage							
VARIES [PBN].	[[PITI Group 52 Article 2 = To Store Vehicle for 30 Days or Longer]; [Jet-Hot Coating Installation and Maintenance Tips = Before storing for winter].	<p>Check/do stuff listed in PITI Group 52 Article 2 page 1 "To Store for up to 30 Days", or "To Store for Long Periods of Time" [PITI];</p> <p><i>Wipe* and dry off your Jet-Hot coated headers. Then park the car over plastic or a large tarp (this will protect your car against moisture seeping up through the floor and causing surface rust) [Jet-Hot Coating Installation and Maintenance Tips].</i></p>	See PITI Group 52 Article #2 "Vehicle Storage (To Store for Up to 30 Days, & To Store for Long Periods of Time sections)".			<p>CAR</p> <p>Related Bring Vehicle out of storage entry below [PBN].</p>	<p><i>*Jet-Hot Black should never be polished or rubbed [Jet-Hot Coating Installation and Maintenance Tips].</i></p>

VARIES [PBN].	[[PITI Group 52 Article 2 = Bring Vehicle out of 30 Days or Longer Storage]; [WEB = Panteras not run for years].	Check/do stuff listed in PITI Group 52 Article 2 page 2 "Bring Your Vehicle Back to Life", and in Group 27 Article #6 [PITI]; Check/do stuff listed in Attachment 20 "Resurrecting Panteras Not Run for Years [WEB].	See PITI Group 52 Article #2 "Vehicle Storage (Bring Your Vehicle Back to Life)", Group 27 Article #6 "Radiator Thermostat Replacement" [PITI].  See Attachment 20 "Resurrecting Panteras Not Run for Years [WEB].			CAR  Related Put Vehicle into Storage entry above [PBN].	Note: May have corrosion damage in the engine and ZF transaxle and fuel tank and other containers from moisture condensation if not stored (for years) in a bone-dry atmosphere [POCA NL Aug 2002 page 20].
<b>When Transaxle Removed</b>							
MEDIUM [PBN].	[Whenever transmission and clutch are removed* PBN].	Change the Pilot Bushing** in the Rear of the Crankshaft [POCA NL Apr 2002 – Attachment 23 "POCANLapr2002etc"].	See POCA NL Apr 2002 "The Five Most Neglected Maintenance Areas in your Pantera (The pilot bushing in the rear of the crankshaft)" - Attachment 23 "POCANLapr2002etc" [POCA NL].	Stock** Bushing Removal: 3/4-thread tap.  Defective Needle Bearing (non-stock**) Removal: Dedicated bearing puller, or a small grinder, a hammer and chisel, and proper sized socket [POCA NL Apr 2002 – Attachment 23 "POCANLapr2002etc"].		CLUTCH AND TRANSAXLE <a href="#">(what component?)</a>  Related Re-Grease the Twin Needle Bearings entry in 50,000 Miles section [PBN].  Related Check, Clean, and Re-Grease the Twin Needle Bearings on the Ends of the Clutch Bellcrank Shaft entry below[PBN].  <a href="#">Is this related to lubing the clutch withdrawal shaft in 10,000 miles section?</a>	*Note: To service this area requires the transmission and clutch to be removed, so it usually only is accessible during engine or clutch rebuilds. This bushing wears out rather regularly [POCA NL Apr 2002 – Attachment 23 "POCANLapr2002etc"].  **Note: There are 3 types of pilot bushings in common use: the stock one is sintered bronze, the second is sintered bronze adulterated with iron filings to make it cheaper, and the third is a small needle bearing (the iron/bronze bushing and the needle bearing have both been known to wear the nose of the transmission when their supply of lube dries up) [POCA NL Apr 2002 – Attachment 23 "POCANLapr2002etc"].



MEDIUM [PBN].	[Whenever transmission is removed** PBN].	<p>Check, Clean, and Re-Grease* *** **** the Twin Needle Bearings** on the Ends of the Clutch Bellcrank Shaft in your Engine's Bellhousing [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p> <p><u>(same as “Lube Clutch Withdrawal Shaft” entry in 10,000 Miles section?)</u></p>	<p>See POCA NL Apr 2002 “The Five Most Neglected Maintenance Areas in your Pantera (The twin needle bearings on the ends of the clutch bellcrank shaft in your engine's bellhousing)” including Attachment 23 “POCANLapr2002etc” [POCA NL].</p>	<p>Needle Bearing Lubricant: Grease [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p>		<p>CLUTCH AND TRANSAXLE (CLUTCH)</p> <p>Related Lube Clutch Withdrawal Shaft entry in 10,000 Miles section [PBN].</p> <p>Related Re-Grease the Twin Needle Bearings entry in 50,000 Miles section [PBN].</p> <p>Related Change the Pilot Bushing in the Rear of the Crankshaft entry above [PBN].</p>	<p>*Note: Re-grease*** at 50,000 miles and whenever transmission pulled, Check/Clean and Re-Grease whenever transmission pulled (see separate entries) [PBN].</p> <p>**Note: These small bearings are well sealed and were lubed at the factory, but it's been 30 plus years since that was done. They were not designed to be serviced, because to re-grease them one needs to pull the transaxle (or at least slide it back far enough to allow access to the inside of the bellhousing). A dedicated owner could add zerk*** fittings to the bellhousing above these little bearings [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”].</p> <p><i>***Note: I had zerk fittings added (when had ZF safety-wired) to my bellhousing to enable these to be easily greased**** – therefore probably only need to “clean and check” the needle bearings whenever have to pull transaxle for some reason [PBN].</i></p> <p><i>****Note: Use just a squirt of grease - don't try to fill with grease until it comes out the zerk fitting like normally do with zerk fittings (zerk fitting feeds into large area back into housing) [MECH – Jenkins &amp; Jenkins].</i></p>
VARIES [PBN].	[Whenever transmission/clutch is removed PBN].	<p>MISCELLANEOUS STUFF TO DO WHEN TRANSMISSION/CLUTCH IS REMOVED [PBN]:</p> <p>1) Do any modifications/repairs that were awaiting/needing transaxle/clutch removal <i>(see my separate repairs/enhancements lists)</i> [PBN].</p> <p>2) Check (repair/replace if needed) stuff normally don't have easy access to (such as throwout bearing, clutch plates, etc) [PBN].</p>	<p><u>(add reference to transmission/clutch removal section of FTI &amp; PSH etc?)</u></p>			<p>MISCELLANEOUS</p> <p>See related Miscellaneous Stuff to do When Engine is Removed entry in When Transaxle Removed section [PBN].</p> <p>Related Clean/Degrease Engine and Transaxle entry in Yearly section [PBN].</p> <p>Related Have Mechanic Do General All Over Inspection of Car entry in Yearly section [PBN].</p>	<p>Note: If find official maintenance documentation of an item I listed in this “miscellaneous” entry delete it off this entry and create its own separate entry on checklist (and change any affected cross references to this listing), but be sure any useful info/references is also on this checklist elsewhere before delete it off this entry [PBN].</p> <p>Note: If take off rear deck lid struts when removing transmission/clutch, be sure put them back on with cylinder up (top 1/2) with shaft on bottom (keeps dirt out and has “stop” mechanism in that orientation) [PBN – WEB].</p>

Never (Historical)							
N/A	<i>[Never* PBN].</i>	Check ZF Transaxle for loose ring gear bolts [PBN].	See Attachment 4 "Maintenance and Safety Inspections (ZF Transaxle Ring Gear)", and PITI Group 16 Article #3 "Transaxle Pinion Gear Repair" [PBN – WEB].			CLUTCH AND TRANSAXLE (TRANSAXLE)  Related Check Level/Change Transaxle Oil entry in 5000 Miles section [PBN].	<i>*Note: I had my ZF safety wired [PBN].</i>  <i>Note: I added Teflon tape to drain (not fill) plug to stop slow leak. Have to replace the Teflon tape (or liquid Teflon) each time remove drain (not fill) plug or will leak again. Need to permanently fix this in future. [PBN – TEMP].</i>
N/A	[Never PBN].  [FTI = at 24,000* or 12 months, and 36,000* or 36 months]	Check (adjust, repair, or replace as required) Engine Compression [FTI].	See FTI page 21-01-02 "Compression Test" [FTI].	Compression Pressure: See FTI page 21-01-03 "Quick Reference Compression Pressure Limit Chart" [FTI]; Compression Pressure PSI (Sea Level) at Cranking Speed: When checking compression, take the highest compression reading and compare it to the lowest reading – the lowest reading must be within 75% of the highest [FTI page 21-22-28].		ENGINE (COMPRESSION)	<i>*Note: Assume was something only do twice in first 36,000 miles/36 months of a new car, not a periodic thing (Steve (MECH) said never heard of regularly checking engine compression (unless causing a problem)) [PBN].</i> <i>Need to do this periodically for some reason? (if so, move entry up to scheduled section)</i>
N/A	[Never* PBN].	Torque Oil Pan Bolts [FTI].	See FTI page 53-05-01 "Torque Oil Pan Bolts" [FTI].	Oil Pan to Cylinder Block Torque Limit (Ft-Lb): 11-13 (5/16 x 18), 7-9 (1/4 x 20) [FTI page 21-22-32]; 7 to 9 ft-lb (Oil Pan Bolts Torque) [FTI page 53-05-01].  Oil Pan Bolts Torquing: Start with the center bolts on each side [FTI page 53-05-01].		ENGINE (OIL PAN)	<i>*Note: Not something you need to do periodically, only if have a problem [MECH]. (need to confirm this)</i>  <i>Note: I assume this info is just for whenever you have to take pan off for some reason [PBN].</i>
N/A	<i>[Never* PBN].</i>  [FTI = 8000 or 8 months (more often if operated in severe dust conditions)]	Replace** Crankcase -Emission Filter in Air Cleaner [FTI].	See FTI page 24-41-01 "Removal and Installation (Crankcase Ventilation Filter)" [FTI].			FUEL SYSTEM (AIR CLEANER AND FILTER)  Related Replace Air Cleaner entry in 10,000 Miles section [PBN].  Related Check Air Cleaner Temperature Control entry in 15,000 Miles section [PBN].	<i>Note: Previous owner replaced the original air cleaner* with one that would fit with the Edelbrock Torker manifold when he changed carburetor and intake manifold (I replaced that one with an aftermarket Pantera script air cleaner), therefore some of the references may not be applicable [PBN].</i>  <i>*Note: I have an aftermarket air cleaner that doesn't have this, so don't need to replace it [MECH]. (Steve was pretty sure I don't have one – need to confirm: if have it move this to 10,000 mile section).</i>  <i>**Note: Cleaning the crankcase ventilation filter element is not recommended, it should be replaced at the specified mileage intervals [FTI page 24-01-03].</i>

N/A	[Never* PBN].	Replace the Stock Sintered Bronze Fuel Filters in Holley** Carburetors [POCA NL Apr 2002 – Attachment 23 “POCANLapr2002etc”]. (I’m assuming you “replace” – maybe you just “clean” it?)	See POCA NL Apr 2002 “The Five Most Neglected Maintenance Areas in your Pantera (The stock sintered bronze fuel filters in Holley carburetors)” including Attachment 23 “POCANLapr2002etc” [POCA NL].			<p>FUEL SYSTEM (CARBURETOR)</p> <p>Related Underbody Protection (rust and corrosion) Check entry in Yearly Section [PBN – TEMP].</p> <p><i>Related Change Fuel Filter (due to gas tank filler neck rust) entry in 5000 Miles section [PBN - TEMP].</i></p> <p>Related Replace Fuel Filter entry in 10,000 Miles section [PBN].</p> <p>Related Keep Carburetor in Good Operating Condition entry in 15,000 Miles section [PBN].</p> <p>Related Inspect Fuel Lines &amp; Connection entry in 15,000 Miles section [PBN].</p>	<p><i>*Note: I replaced carburetor with a Holley 600 (does not contain in line morain fuel filters) [PBN – Holley 600 carburetor Installation and Adjustment Instructions]. (need to confirm the morain fuel filter is the filter this Attachment 23 item is referring to – if not may need to move out of “Never” section)</i></p> <p><i>**Note: These filters are included with most 4bbls. Rochesters have a single tiny paper filter cartridge. Holley dual-inlets have two sintered bronze [POCA NL Apr 2002 – Attachment 23. “POCANLapr2002etc”].</i></p>
N/A	[Never* PBN].  [OM = every 8000 miles or 8 months]; [FTI = inspect at 12,000 or 12 months, replace at 24,000 or 24 months pattern]	<p>Inspect (adjust, repair, or replace as required) Points [FTI]; Check and Adjust Distributor Points (clean distributor cap and coil, inspect and clean points, check/adjust point gap) [FTI page 53-04-02]; Inspect, Clean, and Adjust Breaker Points as necessary (replace breaker point assembly if the contacts are badly burned or excessive metal transfer between the points is evident) [FTI page 23-01-12, 53-04-02]; <i>Correct Distributor Point Condition and Gap is very important to optimum Holley 600 Carburetor efficiency and performance [Holley 600** Carburetor Installation and Adjustment Instructions page 4].</i></p> <p>Check Distributor Contact Gap [OM]; Inspect (and, if necessary, adjust) Breaker Point Gap [OM page 49].</p> <p>Clean Distributor Cam, Adjust Breaker Point Spring Tension, Align and Adjust the Breaker Points [FTI page 23-01-10].</p> <p>Check/Adjust Breaker Point Spring Tension [FTI page 23-01-08].</p> <p>Point Condition and Dwell [PITI Group 52 Article 1].</p> <p>Check/Adjust Dwell Angle [FTI page 23-01-05].</p>	<p>See OM page 49 “Breaker Point Gap”, “Distributor Point Replacement” [OM].</p> <p>See FTI pages 53-04-02 “Check and Adjust Distributor Points”, 23-01-08 “Breaker Points and/or Condenser (Breaker Point Alignment, Breaker Point Gap Adjustment, Breaker Point Spring Tension Adjustment)”, 23-01-09 “Removal and Installation (Vacuum Hose, Breaker Points and/or Condenser)”, 23-01-09 “Removal and Installation (Breaker Points and/or Condenser)”, 23-10-02 “Removal and Installation (Breaker Points and/or Condenser), 23-01-11 “Cleaning and Inspection (Distributor)”, 23-01-05 “Dwell Angle Check”, “Dual Breaker Point Dwell”, 23-01-07 “Adjustments (General Procedures – check distributor automatic advance for proper operation)”, 23-10-03 “Removal and Installation (Distributor)” [FTI].</p> <p>See PITI Group 23 Article #3 “Changing The Points” [PITI].</p> <p>See Attachment 2 “Pantera Tune Up Ideas (Distributor Points)” [WEB].</p>	<p>Clean Breaker Points: Chloroform and a stiff bristle brush [FTI page 53-04-02, 23-01-12].</p> <p>Adjusting Points: Use Dwell Meter [WEB - Attachment 2 “Pantera Tune Up Ideas (Distributor Points)”].</p> <p>Breaker Arm Spring Tension (Pivot type breaker points only): 17.21 oz [FTI page 23-10-05].</p> <p>Metal Transfer: Is considered excessive when it equals or exceeds the gap setting specification [FTI page 23-01-12, 53-04-02].</p> <p>Breaker Point Gap or Dwell Specifications: See FTI page 23-10-05 [FTI]. (<a href="#">add exact specs to this?</a>)</p>		<p>IGNITION SYSTEM (DISTRIBUTOR BREAKER POINTS)</p> <p>Related Inspect Distributor Cap &amp; Rotor entry in 30,000 Miles section [PBN].</p> <p>Related Keep Distributor in Good Operating Condition and Adjusted to Specification entry in 30,000 Miles section [PBN].</p> <p>Related Check/Clean Distributor Coil entry in 30,000 Miles section [PBN].</p> <p>Related Lube Distributor Cam entry in Never section below [PBN].</p>	<p><i>Note: previous owner replaced the original dual point distributor with electronic ignition (Mobelec breakerless CD ignition system) [PBN].</i></p> <p><i>*Note: Don’t need to do since have electronic ignition instead of points [MECH]; No points with Mobelec breakerless CD ignition system [PBN – Previous Owner].</i></p> <p>Note: Breaker Points and Distributor Points are same thing [MECH].</p> <p>Note: “Dwell” is just an electronic way to check point/gap adjustment [MECH].</p> <p><i>**Note: I replaced carburetor with a Holley 600 [PBN].</i></p>

N/A	<p><i>[Never* PBN].</i></p> <p>[OM = every 8000 miles or 8 months].</p>	<p>Lube Distributor Cams (contact breaker control cams) [OM pages 35, 48].</p> <p>Inspect the distributor cam lobes for scoring and signs of wear (if any lobe is scored or worn, replace the distributor [FTI page 23-01-11].</p>	<p>See OM page 48 “Distributor Cam Lubrication” [OM].</p> <p>See FTI pages 23-01-11 “Cleaning and Inspection (Distributor)”, 23-10-03 “Removal and Installation (Cam and Centrifugal Advance Weights)”, 23-10-03 “Removal and Installation (Distributor)” [FTI].</p>	<p>Distributor Cam Lubricant: Special Purpose Grease [OM page 48];  Distributor Cam Lubricant (Ford Part No. C4AZ-19D530-A, Ford Specification ESF-M1C66-A) [FTI page 53-01-03, 23-01-08, 23-01-10, 23-10-03];  Correct distributor Cam lube [WEB - Attachment 2 “Pantera Tune Up Ideas (Distributor Points)”];  Do Not use engine oil to lubricate the distributor cam [FTI page 23-01-08];  Do not use any type of oil [FTI page 23-01-10].</p> <p>Lubing Distributor Cam:  Take care not to smear the breaker points during lubrication (causes premature contact deterioration) [OM page 48].</p>		<p>IGNITION SYSTEM (DISTRIBUTOR CAM AND CENTRIFUGAL ADVANCE WEIGHTS)</p> <p>Related Keep Distributor in Good Operating Condition and Adjusted to Specification entry in 30,000 Miles section [PBN].</p> <p>Related Clean Distributor Cam item in Inspect Distributor Points entry in Never section above [PBN].</p>	<p><i>Note: previous owner replaced the original dual point distributor with electronic ignition (Mobelec breakerless CD ignition system) [PBN].</i></p> <p><i>*Note: Don't need to do since no longer have points (have electronic ignition) [MECH].</i></p> <p>Note: Lubing Distributor Bearing and Lubing Distributor Cams are different things [MECH].</p>
N/A	<p><i>[Never* PBN].</i></p> <p>[PITI = 5000** miles].</p>	<p>Condenser [PITI Group 52 Article #1]; <i>Correct Condensor and wiring is very important to optimum Holley 600 Carburetor efficiency and performance [Holley 600*** Carburetor Installation and Adjustment Instructions page 4].</i></p> <p><i><a href="#">Is this maintenance? – what is the maintenance activity (think the guy inspected/replaced the condenser every so often?)? Why was it listed in maintenance stuff in PITI Group 52 Article #1? Delete this entry (and cross references to it) if isn't a maintenance item.</a></i></p>	<p>See FTI pages 23-01-08 “Breaker Points and/or Condenser”, 23-10-02 “Removal and Installation (Breaker Points and/or Condenser)” [FTI].</p>	<p>Conventional Ignition System – Coil Condenser and Primary Circuit Resistor Specifications:  See FTI page 23-10-05 [FTI]. (<a href="#">list the individual specs here?</a>)</p> <p>Condenser:  Delco D200 [PITI Group 52 Article #1].</p>		<p>IGNITION SYSTEM (DISTRIBUTOR CONDENSER)</p> <p>Related Keep Distributor in Good Operating Condition and Adjusted to Specification entry in 30,000 Miles section [PBN].</p> <p>Related Check/Adjust Distributor Points/Gap entry in Never section above [PBN].</p>	<p>Note: “Condenser” is ignition (distributor) condenser [MECH].</p> <p>Note: Need to remove distributor cap to do this maintenance, but wouldn't have to remove entire distributor [MECH].</p> <p><i>Note: previous owner replaced the original dual point distributor with electronic ignition (Mobelec breakerless CD ignition system) [PBN].</i></p> <p><i>*Note: is not applicable to my car since I have electronic ignition (don't have points or condenser) [MECH].</i></p> <p><b>**Note:</b> PITI Group 52 Article #1 author was extremely conservative in his various maintenance frequencies [PBN].</p> <p><b>***Note:</b> I replaced carburetor with a Holley 600 [PBN].</p>
















N/A	<p><i>[Never* PBN].</i></p> <p>[OM = every 8000 miles or 8 months];  [FTI = 12,000 or 12 months];  [TSB = 4000 miles - Bulletin 5 Article #28].</p>	<p>Check Ignition Timing*** [OM];  Adjust Initial Ignition Timing*** [FTI page 52-00-02];  Check and Adjust Ignition Timing*** [FTI page 53-04-01];  Make sure Ignition Timing*** is Properly set [PITI Group 27 Article #2];  Check Ignition timing*** [TSB Bulletin 5 Article #28];  <i>Correct Engine Timing*** is very important to optimum Holley 600 Carburetor efficiency and performance [Holley 600** Carburetor Installation and Adjustment Instructions page 4].</i></p>	<p>See OM page 50 "Ignition Timing*** and Idle Speed Adjustment" [OM].</p> <p>See FTI pages 53-04-02 "Check and Adjust Ignition Timing***", 23-01-07 "Adjustments (General Procedures - check distributor automatic advance for proper operation)", 23-01-09 "Ignition Timing*** (Timing Mark Locations, Initial Ignition Timing)", 23-01-05 "Secondary (High Tension) Wires Resistance Test" [FTI].</p> <p>See Attachment 2 "Pantera Tune Up Ideas (Distributor Ignition Timing***)" [WEB].</p> <p>See PSH page 3 "Interior – Service Accessibility (Engine Accessibility)" [PSH].</p> <p>See Attachment 15 "The Firewall Cover" [WEB].</p>	<p>Ignition Timing*** Adjustment:  See "Vehicle Emission Control Information" label in engine compartment [OM page 50].</p> <p>Advance Setting:  Most Panteras are set at 16 BTDC (Advance Setting) at idle with the vacuum lines disconnected, but check the information plate riveted on the inside of the engine compartment for your car's proper setting; if have non-stock Mallory dual point distributor, set the timing to give about 38 total advance [PITI Group 27 Article #2].</p>		<p>IGNITION SYSTEM (IGNITION TIMING)</p> <p>Related Keep Distributor in Good Operating Condition and Adjusted to Specification entry in 30,000 Miles section [PBN].</p> <p>Related Check Advance &amp; Retard, Cut-in Speed in 15,000 Miles section [PBN].</p>	<p><i>Note: previous owner replaced the original dual point distributor with electronic ignition (Mobelec breakerless CD ignition system) [PBN].</i></p> <p><i>*Note: Don't need to do since have electronic ignition (timing shouldn't change) instead of points [MECH]; No timing with Mobelec breakerless CD ignition system [PBN – Previous Owner].</i></p> <p><i>**Note: I replaced carburetor with a Holley 600 [PBN].</i></p> <p><i>***Note: During tuning of certain engines, especially new ones, lean or rich fuel/air mixtures can cause hot spots around 1300 degrees F, with potentially adverse effects to the header and possibly the engine. If you are not very careful, you will damage the Jet-Hot coating and possibly the engine. The coating will definitely turn dull and possibly flake off in excess of these temperatures. During this period we strongly recommend using a large floor fan to cool the entire engine and headers (or if available, use an old set first for tuning). Failure to take these precautions could result in permanent damage to the Jet-Hot coating. Ignition timing is critical to exhaust temperatures which are not reflected by the water temperature gauge. It is not unusual to see 190 degrees F on the water gauge when internal exhaust temperatures are exceeding 1300 degrees F. [Jet-Hot Coating Installation and Maintenance Tips, and Caution tag].</i></p> <p>Note: This is done with distributor on car (engine running) [MECH].</p>
			<p><u>Stuff need to determine if/where to put on this checklist</u></p>				





















		Vapor Injector Level [PITI Group 52 Article 2].				<p><u>What system/component is this?</u></p> <p><u>Need to add cross refs to this if move into main section</u></p>	<p><u>Is this something I have on my car (may have been some special thing he added to his car), or a different name for something already elsewhere on this list? If so, need to add it. Note: page I got this from says he uses Acetone and Distilled water for this.</u></p>
		Engine Performance Checks required to keep the exhaust emissions at the specified minimum pollutant level [FTI page 23-01-02].				<p><u>Need to add cross refs to this if move into main section</u></p>	<p>Note: Assume this is covered by other stuff on this checklist, as the FTI (page 23-01-02) says to refer to the OM for these performance checks and the recommended intervals [PBN].</p> <p><u>Need to list this with each of the indicated engine performance checks in the above checklist, if can determine what they are.</u></p> <p><i>Note: Previous owner replaced original exhaust system (headers, manifolds, tailpipes and mufflers) with "Mind-Train Enterprises "Big Throats" Exhaust System" [PBN].</i></p> <p><i>Note: Previous owner removed vacuum smog control stuff [PBN].</i></p>
		Fuel Pump Cleaning and Inspection (inspect for cracks or other damage; inspect mounting flange for distortion; inspect the rocker arm spring, pin, and the rocker arm for wear, cracks, or damage) [FTI page 24-01-04].	See FTI page 24-01-04 "Cleaning and Inspection (Fuel Pump)", 24-30-01 "Fuel Pump Testing (Pressure Tests, Capacity (Volume) Test)" [FTI].	<p>Fuel Pump Cleaning: Use a Cloth [FTI page 24-01-04].</p> <p>Fuel Pump Static Pressure (psi @ 500 Eng.RPM): 5.0 to 7.0 [FTI page 24-30-01, 24-30-03].</p> <p>Fuel Pump Capacity (Maximum Volume Flow @ 500 Eng. RPM): At least one pint of fuel should be discharged within 20 seconds [FTI page 24-30-02, 24-30-03].</p>		<p><u>Need to add cross refs to this (fuel system) if move into main section</u></p>	<p><u>Is this supposed to be done periodically (if so how often), or was the entry in FTI just for in case have fuel pump problem?</u></p>

		<p>Test Air Cleaner Duct System is functioning properly [FTI page 24-42-01].</p> <p>Check Duct and Valve Assembly: Check that duct valve is open when engine off, and closes during engine idle unless engine has reached normal operating temperature, check the bimetal switch to see that the bleed valve is seated, check that duct valve opens during throttle opening (correct if required); Check the functioning of the bimetal switch) (<a href="#">are these "instructions" rather than checks?</a>) [FTI page 24-42-01].</p> <p>Check operation of the vacuum motor attached to the air cleaner: Check that vacuum motor plate is fully closed with engine started and zip tube removed from the air cleaner duct, check that plate is full open with vacuum hose removed from vacuum motor (<a href="#">are these "instructions" rather than checks?</a>) [FTI page 24-42-02].</p>	<p>See FTI page 24-42-01 "Testing (Duct and Valve Assembly – Vacuum Operated)", 24-42-02 "Auxiliary Air Inlet Valve" [FTI].</p>			<p><a href="#">Need to add cross refs to this (air cleaner) if move into main section</a></p>	<p><i>Note: Previous owner replaced the original air cleaner with one that would fit with the Edelbrock Torker manifold when he changed carburetor and intake manifold (I replaced that one with an aftermarket Pantera script air cleaner), therefore some of the references may not be applicable [PBN].</i></p> <p><a href="#">Is this supposed to be done periodically (if so how often), or was the entry in FTI just for in case have problem?</a></p>
		<p>Test Cooling System Thermostat (replace if doesn't function correctly) [FTI page 27-01-02].</p>	<p>See FTI page 27-01-02 "Thermostat Test" [FTI].</p> <p>See PITI Group 27 Article #6 "Radiator Thermostat Replacement" [PITI].</p>	<p>Thermostat Temperature Settings: 185-192 degrees F (Start to Open), 210-216 degrees F (Fully Open) [FTI page 27-01-02].</p>		<p><a href="#">Need to add cross refs to this if move into main section</a></p>	<p><a href="#">Is this supposed to be done periodically (if so how often), or was the entry in FTI just for in case have problem?</a></p> <p><a href="#">See also note I have in draining Coolant 15000 mile entry about confirming I have correct thermostat.</a></p>
		<p>Test Temperature Gauge [FTI page 33-06-03].</p>	<p>See FTI page 33-06-03 "Testing (Temperature Gauge)" [FTI].</p>	<p>Temperature Gauge Test Equipment: Rotunda Gauge System Tester No. WRE 500-70 [FTI page 33-06-03].</p>		<p><a href="#">Need to add cross refs(INSTRUMENTATION) to this if move into main section</a></p>	<p><a href="#">Is this supposed to be done periodically (if so how often), or was the entry in FTI just for in case have problem?</a></p> <p><i>Note: Previous owner moved water temperature sender from surge tank to front of engine block [PBN].</i></p>
		<p>Check Speedometer Accuracy, and Odometer accuracy [FTI page 33-06-03].</p>	<p>See FTI page 33-06-03 "Testing (Speedometer and Odometer)" [FTI].</p>			<p><a href="#">Need to add cross refs (INSTRUMENTATION) to this if move into main section</a></p>	<p><a href="#">Is this supposed to be done periodically (if so how often), or was the entry in FTI just for in case have problem?</a></p>
		<p>Test Fuel Gauge [FTI page 33-06-03].</p>	<p>See FTI page 33-06-03 "Testing (Fuel Gauge)" [FTI].</p>	<p>Fuel Gauge Test Equipment: Rotunda Gauge System Tester No. WRE 500-70 [FTI page 33-06-03].</p>		<p><a href="#">Need to add cross refs(INSTRUMENTATION) to this if move into main section</a></p>	<p><a href="#">Is this supposed to be done periodically (if so how often), or was the entry in FTI just for in case have problem?</a></p>
		<p><i>Correct valve and correct operation of exhaust heat valve is very important to optimum Holley 600 Carburetor efficiency and performance [Holley 600* Carburetor Installation and Adjustment Instructions page 4].</i></p> <p><a href="#">What does this apply to (carb, distributor, or something else?) – it was in my carb instructions</a></p>					<p><i>*Note: I replaced carburetor with a Holley 600 [PBN].</i></p> <p><i>Note: Previous owner removed vacuum smog control stuff [PBN]. (does this apply to this entry?)</i></p>





1. Coolant Changing Email:   
Attachment1(CoolantChangeEmail).doc
2. Pantera Tune Up Ideas:   
Attachment2(TuneUpIdeasWEB).htm
3. Holley 600 Carburetor Fuel Leak Problem:   
Attachment3(Holley600CarbFuelLeak).doc
4. Maintenance And Safety Inspections:   
Attachment4(MaintenanceAndSafety).doc
5. Corrosion:   
Attachment5(Corrosion).doc
6. Rust Proofing Email:   
Attachment6(RustProofingEmail).txt
7. Windshield Cleaning:   
Attachment7(WindshieldCleaning).txt
8. Pantera Cooling System:   
Attachment8(PanteraCoolingSystem).doc
9. Auto Polishes & Ratings:   
Attachment9a(AutoPolishes5-00).htm,   
Attachment9b(AutoPolishesRatings!).htm,   
Attachment9c(DetailingProducts).txt
10. Engine Oil Filter Study:   
Attachment10(EngineOilFilterStudy).doc
11. Engine Oil Choices:   
Attachment11(EngineOilChoices).htm
12. Detailing Your Pantera:   
Attachment12(DetailingYourPantera).doc
13. Invisible Glass:   
Attachment13InvisibleGlass.txt

14. Stress Relieving Campy's:  Attachment14(StressRelievingCamp)
15. The Firewall Cover:  Attachment15(TheFirewallCover).h
16. Lucas Electrical Parts:  Attachment16A(LucasWiperElectric;  Attachment16B(LucasHeadlightSwit
17. Filthy Engine Room:  Attachment17(FilthyEngineRoom).tx
18. Sunday Oil Change:  Attachment18(SundayOilChange).b
19. Timing Chain:  Attachment19a(TimingChain).txt  Attachment19b(POCANLFeb1991(TimingCh
20. Resurrecting Panteras Not Run for Years:  Attachment20(ResurrectingPantera:
21. Frame Rails:  Attachment21a(FrameRails).txt  Attachment21b(POCANL Sep2001(Suspensi  Attachment21c(POCANLJul2002(ChassisFla
22. Auto Batteries:  Attachment22a(AutoBatteries10-01  Attachment22b(AutoBatteryRatings:
23. POCA NL Apr 2002 Etc:  Attachment23(POCANL Apr2002etc).
24. Rear Bumper Debris:  Attachment24(RearBumperDebris).l
25. Transaxle Angle Drive Special Tool:  Attachment25a(SpecialTool).txt  Attachment25b(SPECIALandNEEDED TOC  Attachment25c(SpecialAndNeededTool1).r  Attachment25d(SpecialAndNeededTool2).r



Attachment26(Pedal  
ReturnSprings).txt

26. Pedal Return Springs:



Attachment27POCA  
NLnov2002(BakersDo

27. Bakers Dozen Engine Upgrades: