

ThunderEnlightening^{T.M.}

Classic Auto Supply Co., Inc.



A NEWSLETTER FOR THE CLASSIC THUNDERBIRD OWNER AND RESTORER

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WHAT'S MISSING FROM YOUR OIL MAY BE DESTROYING YOUR ENGINE

What is ZDDP? There seems to be a problem with the oil you are probably using in your TBird. An oil additive known as ZDDP (Zinc Dialkyl Dithio phosphate) has been gradually removed from commercially available engine oils.

There are two main reasons for the diminishing use of ZDDP in our oils. First, the EPA has required new car auto makers to guarantee that catalytic converters will last 100K miles. The use of ZDDP is hard on catalytic converters. Second, cars that have roller rocker assemblies do not need ZDDP.

What does ZDDP do for our engines? ZDDP is a surface modifier. It modifies bearing to journal surface characteristics to prevent metal to metal contact. Under the right conditions of heat and pressure it plates over the contact surface and provides a sacrificial coating. As it breaks down, it dissipates into the oil where it remains in suspension until the right conditions are met and the process starts over again. This cycle reduces the possibility of scuffing and galling.

We have spoken to our cam supplier and they agree that currently available oils are different and they would suggest using an additive that replaces the missing ZDDP.



How do we replace ZDDP? CASCO has reviewed the available products and have settled on a product called ZDDPlus. ZDDPlus is a concentrated 4 ounce bottle that you simply add at every oil change. It is recommended for all engines built before 1988 that have flat tap-

pet setups. We have added this to our product offering as part number **Z4** which sells for \$10.85 a 4 ounce bottle.

WHAT THE *&!# IS THAT BLACK CRUD LINE ON THE UNDERSIDE OF MY HOOD?

Have you noticed a line of what looks like soot on the underside of your hood? Recently on the Classic Thunderbird mailing list (for info and for free subscription go to www.tbird.org) there was a lot of discussion about this phenomenon. We, of course, have experienced this annoying underhood mess. It appears to be a black soot spots that generally follows along the center bracing from side to side which lines up with the fan belt. Around town the spots don't collect very fast, at highway speeds they collect faster. It appears they are being thrown off the fan belt which would indicate that some moisture or liquid source is present, but you will usually find that the belt is clean and dry.

So what is it? The consensus of the T Birders on the mailing list is that it's BUGS. That's right, bugs are being cut up and slung up on the hood. This seems to be confirmed because the crud is more severe in the warm months than in the cold.

As for cleaning it off the good news is that it's easily removed. One T-Birder reported that the best thing that he found in his 47 years of having T-Birds is Goop. The white stuff with lanolin. He reported that it not only cleans it off nicely, but it will also give a light sheen. Wipe it on with a piece of terry cloth, then hand wash it off with clean water and wipe dry. We suspect that there are many good products for cleaning the unsightly mark, but it will be easier to clean if the underside of your hood has a good coat of wax.

INSTALLING LATE STYLE STAINLESS TRIM ON AN EARLY HARD TOP

Classic Auto Supply restoration department has received several calls on stainless trim not fitting early hard tops. Investigation shows that the problem is the application of later stainless trim to early hard tops. Whatever the case may be, either customers purchasing the bare shell hard top or pulling out hard tops from storage and not having the original stainless trim to utilize, the options are to find original stainless or purchase the later style stainless trim.

Unlike the early hard top stainless trim, the later model stainless trim set will have 2 extra trim pieces for installation. To utilize this stainless trim set that is offered, one will need some slight modifications to the early hard tops.

Step 1: Repair any cracks and fill all trim/weather strip holes to the mounting surface of the hard top. This can be done using fiberglass or Epoxy resin.

Step 2: On early hard tops at the side latch mounting area you will notice an intermediate ridge. This is not evident on later hard top due to the stainless trim set change. This intermediate ridge will need to be removed to allow the right/left side stainless trim pieces to fit early hard tops.



Step 3: You will need to relieve this intermediate ridge, here at CASCO we use a wood chisel. From the corner of the hard top measure back 3 inches, this will allow you enough room to install the side corner trim. The reason for measuring from the corner is that these intermediate ridges did not extend all the way to the corners. We have observed various stopping points.



Step 4: Fit your stainless to insure the fit is acceptable.

For any other additional tips or help please call Casco Restorations at (740)622-9700. Our technicians will be more than happy to assist on any questions that you may have. From all of us here in the Restoration Department Happy T-Birding and have a safe and happy holiday season.
John Lonsberry, Manager CASCO Restoration Department

REMOVING THE ENGINE

Removing the engine is not difficult and here are the steps:
Unhook battery *Remove hood *Remove fan shroud
*Drain radiator *Remove radiator hoses *Remove heater hoses and vacuum control line from engine *Remove radiator *Unhook wires from generator *Unhook Power Steering hoses if you have PS *Remove vacuum line to Booster if you have Power Brakes *Unhook ignition wires from coil/resistor *Unhook Temp sending wire and Oil pressure sending wire *Unhook ground wire from block to firewall *Move all wires out of the way *Remove fuel flex hose from fuel line *Remove accelerator linkage from carb and intake manifold *Remove carb and install an engine lift plate in its place if you have one, or attach an engine lift sling to engine *Lift car and place on jack stands *Remove steady rests *Unbolt exhaust manifolds from exhaust pipes *Drain engine oil *Remove oil filter *Drain transmission *Remove drive shaft *Unhook all transmission linkage *Remove speedometer cable from transmission *Remove bolts from rear transmission mount *Unhook Overdrive wires if you have an OD transmission *Remove clutch release lever if you have a stick shift or OD transmission *Remove clutch equalizer bar if you have a stick shift or OD transmission *Lower car *Remove front mount bolts *Double check for anything on or around engine you may have missed *Protect the painted surfaces inside the engine compartment and the top of your fenders so they don't get scratched *Hook up your engine picker and remove Engine/Transmission assembly *You will have to lift some, pull forward some, lift, pull forward and continue until it clears the nose of the car. This is an excellent time to have a good helper.

John Sailors, Hillsboro, OR

57 RADIO TIPS

If your 57 T Bird radio gets 3 or 4 stations there is a very good chance all the cold cathode tubes are OK. I don't recommend connecting the automatic volume control wire to the radio as it will feed more ignition noise into the radio than you will want to hear. Adjust the ant. trimmer for the best reception as per the instructions in the shop manual on page 8-22. In order to improve the performance of the auto tuner adjust the 2 rheostats found behind the auto tuning relay for max sensitivity and volume. If you understand how AM radios work, have a high impedance analog volt meter and insist on working on the radio yourself, obtain the Motorola service manual for the 69MS radio, Ford FEF- 18805. It will tell you everything you need to know about your 57 T Bird radio.

Walt Nuckels (Thanks to Walt's family for permission to reprint his posts. Walt was one of the most knowledgeable Thunderbirders around.)

CONVERTING THE '55 TO 12 VOLTS

Some of you guys are making way too big a deal of the 6V to 12 V conversion on the 55 T Bird. For instance, you don't, or should not need a wiring diagram. You don't need to rewire the car. All the wire for the 6V system is twice as large as need be for 12V service. The only thing you need to change under the dash is the dash lamp bulbs and maybe the cigar lighter if you still smoke. The polarity for the clock must be changed to neg. ground from pos. ground. You may need to remove the clock to do this. There is a little tab that is designed to be positioned for pos. or neg. ground.

Position it for neg. ground or just disconnect it if you like. Major damage will occur if it is powered up in reverse polarity. Install a 125 ohm 10 watt resistor in series with the 6 volt clock to drop the voltage to 6 or 7 V. Of course the radio will need to be replaced. converted to 12V, or powered through a voltage dropping resistor. It is not polarity sensitive. Your choice, or do nothing and disconnect it. You do not need to change any switches or gauges. The fuel and temp gauges will work on 6 or 12 V and are not polarity sensitive. If you miss some of the lamps you can change them after they burn out, no big deal. The direction lamp flasher also must be changed for best performance but you can change it later. The fuses may need to be changed to values smaller than original or use the ones rated for the 56 57 Birds. The tail lamps, the back-up lamps and license plate lamp will need to be replaced with the 12V ones. Now for the firewall forward, You do not need to change the battery cables, the horns, the horn relay or the starter. If converting to a generator install a 12V one and a 12V 30 amp voltage regulator and wire it up exactly as the 6v ones. Or do the alternator conversion. This is done same as a 12V gen to alternator conversion. You will need to install 12V head lamps and park and direction lamps. No changes in lamp wiring or the light switch is necessary, leave it alone or repair it as necessary. Of course you will need a 12V battery, there are 12v batteries that will fit the 55 battery carrier with little or no modifications, connect it neg. ground. The 6V coil can be used but the polarity must be changed, just switch the bat. And dist. wires or install a 12 volt coil same as used on 56-73 Fords or get good used ones from salvage yards from 60-64 Falcons.

They have yellow tops. Now for that very minor wiring change that has everyone confused. Install a 12V starter solenoid such as used on 56 through 73 Ford products. They are still cheap at AutoZone. It will have the extra I terminal, I as in ignition. Run a wire from the I terminal of the 12V starter solenoid to the battery terminal of the coil, remove the ignition wire that is presently attached to the coil and add a new wire about a foot long to the bat. terminal before securing the nut. Now connect both the new wire attached to the batt. terminal of the coil and the original ignition

wire from the ignition switch to a new ignition resistor, Motorcraft # DY 35 When the job is done, before you start the engine, remove the field wire from the voltage regulator and strike it (draw an arc) to the battery terminal of the voltage regulator in order to properly polarize the generator then reconnect the field wire to it's position on the voltage regulator. The heater blower motor, the seat motors and window motors will work on 12V but they will run very fast. The seat motor running too fast should be no problem. The heater motor running on low speed will be acceptable. The window motors will require some expertise in use in order to prevent mechanical damage but most of my customers don't change them. Can if you want, they may cost you over \$200 each for 12V window motors. You might use a dropping resistor in the motor ground wire circuit to drop the voltage but I have not determined what the correct value would have to be. Maybe someone else knows. It will have to be a very high power resistor, maybe 1000 watts and it will give off some heat.

I don't have a 6V window motor to test or I would give you the numbers. I would recommend just using the window motors as they are and release the window switch before the window gets to it's stop. This may take some practice but it is easy.

Walt Nuckels (Thanks to Walt's family for permission to reprint his posts. Walt was one of the most knowledgeable Thunderbirders around.)

IS YOUR T-BIRD REALLY LOCKED?

Try this one on your Bird. Lock your door from the outside and then push hard a number of times on the outside door handle button. Many of you will find that by doing this your door lock button will slowly work is's way upward until the door is no longer locked.

All T-Birders should know that it is very easy to overtighten the lock buttons and to do so may allow the situation described above. This is not a problem of inaccurate reproduction parts. Our Birds came from the factory this way. The problem is that when the lock button is screwed onto the shaft too far it limits the available downward travel of the shaft. The result is that the lock mechanism inside the door latch assembly is not able to engage fully.

The good news is that the fix is simple. Just unscrew the lock button a few turns to allow the shaft a bit more travel.

Thank you to our tech tip and article contributors for this issue, John Sailors and Bob Hartig. If you have a good tech tip or article that you think would be of interest to other T-bird owners, send it to us and if we print it, we will send you a \$30 gift certificate.

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This publication is prepared and published by Classic Auto Supply Co. Inc. for the owners of 1955, 1956, & 1957 Ford Thunderbird automobiles. It is provided without cost to its current active customers.

Readers are encouraged to submit shop tips and articles for publication. Each submission printed will earn for its author the gratitude of Classic T-Bird owners around the world and a \$30.00 gift certificate from Classic Auto Supply Co. We reserve the right to edit any submission.

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SEAT TRACK MAINTENANCE

If your seat movement is sluggish then most likely your problem is very dirty seat tracks. Remove the seat (remove the 4 bolts under the car, disconnect the jack screw behind the seat, lift seat and reach under to disconnect the jack screw and wire motors), and then remove the seat tracks from the seat.

You cannot disassemble the rails but you can blow them clean with penetrating oil and air pressure. Don't be afraid to use lots of stuff to clean the rails. Then lube with Never Seize (available at most parts stores). Also be sure to lube the screw-drive mechanisms. You will be amazed how much this will help.

John Sailors, Hillsboro, OR

DASH PAINTING

All of the outside painted surfaces on the dash get the texture treatment including the ash tray and speaker grille. The back side of the glove box door and ashtray is not textured.

www.classictbird.com

HOLIDAY SHIPPING SPECIAL

SPECIAL SAVINGS ON SHIPPING on all orders shipped from December 1 to December 31, 2007. During that time CASCO will charge a *maximum* shipping & handling of **\$14.95** for all shipments made by standard UPS surface within the continental United States.

This special excludes any items that are normally billed at actual shipping costs.

55 T-BIRD TRUNK LIGHT

By accident Ford had a better idea: When the 1955 T-Bird trunk is open, the rear license lamp actually does function as a trunk light as long as the headlight switch is pulled out one or two notches.

Bob Hartig, McLean, VA

HAPPY HOLIDAYS FROM
ALL THE GANG AT CASCO

*Nancy Glenn Annie Richard Shawn
Shawn Joe John ROBERT Betsy
Bibi Sue Don Susan Mike Jim*