



SALEEN SERIES VI SUPERCHARGER FOR 2005-07 MUSTANG

MAINTENANCE SCHEDULE

Very little maintenance is required for your Series VI supercharger. There are two key fluids involved in the kit which you should pay attention to. Please hold on to the installation manual for the supercharger kit to aid in the location and identification of the components

1. The oil in the front (gear case) of the supercharger is refilled via a brass plug on the driver's side. The plug is underneath the water crossover of a completely installed kit. The supercharger takes a full pint of oil. The oil that the supercharger is delivered with will last 50,000 miles. A 5W-50 oil may be substituted but will need to be changed every 5000 miles. When changing the oil, be sure to completely siphon all of the oil out of the gear case.

2. The supercharger kit comes complete with an independent coolant system. Regularly check the fluid level of the intercooler system. The fluid should reach the bottom of the neck of the recovery tank when the system is cold. With the water pump on (key on or car on), check as often as every couple of oil changes that the fluid is circulating. If it is not, purge the system per the instructions in the supercharger installation manual.

Change the fluid in the intercooler system as often as the radiator fluid is changed, using a 50/50 mix of antifreeze and water.

If you have any questions, please call Saleen at 800-888-8945.

*note: there is no warranty on the supercharger in the aftermarket unless supplied by the installer.



COMMUNICATION WITH A SALEEN-CALIBRATED PCM (POWERTRAIN CONTROL MODULE)

The PCM in each Saleen vehicle is programmed with specific performance and calibration data.

Saleen-programmed PCMs have a unique "PCM ID" number. This number can be found on the Saleen label affixed to the PCM or it can be looked up using a diagnostic tool (IDS, WDS, or NGS; for 2005 and newer vehicles [except S7] always use IDS if available). All Saleen PCM ID numbers end in ".HEX"

PCMs in Saleen vehicles can ONLY be re-programmed (re-flashed) by Saleen. If re-programming is needed, the PCM must be sent back to Saleen.

A P0605 DTC will be present in each Saleen-programmed PCM. This code cannot be permanently cleared.

When using an IDS or WDS diagnostic tool to access Saleen-programmed PCMs, the tool may prompt you to upgrade the PCM to the latest Fordstockprogram. DO NOT DO THIS. If the PCM is programmed to the Ford stock program, or any other program, the engine will not run properly and Saleen will void the vehicle warranty.

* for more information, refer to the provided copy of Saleen Technical Service Bulletin
STB06-005a



ROTOR CLASH ON TWIN-SCREW SUPERCHARGER

The Saleen Series IV and Series VI superchargers are extremely efficient twin-screw style superchargers. They are chosen for their excellent power delivery characteristics, and for their ability to keep air temperature cool and maintain high boost under harsh operating conditions.

The twin-screw style superchargers feature tightly bound rotors. As a result of the tight tolerances, the rotors are relatively loose when cold and when the engine is running at idle. This causes a whirring noise to emanate from the core of the supercharger which is known as “rotor clash.”

If a twin-screw supercharger is noisy when cold and running at idle speeds, but the noise subsides as the car (and the supercharger) warms up, and as engine speeds climb into normal driving speeds, the supercharger may be considered to be operating properly.

All superchargers are carefully examined after being assembled, and are pressure tested before shipment. The Series VI unit is also subjected to a special test stand where it is run at high velocity; the noise level from the supercharger is measured and compared to a pre-determined standard to ensure that all moving parts are properly installed and working as designed.

An easy field test for a supercharged vehicle is to compare it to an equivalent Saleen supercharged vehicle.

If you have any questions, please feel free to contact us at 800-888-8945.

SERVICE FOR WARRANTY

Remove only the complete manifold assembly as shown below for warranty returns and repairs. Fuel rails and injectors need not be completed. NEVER DISASSEMBLE ANY PART OF THE CORE SUPERCHARGER UNIT AS THIS WILL VOID ANY EXPLICIT OR IMPLIED WARRANTY.



Check
supercharger oil
level here



Check
supercharger oil
level here

1. Belt routing diagram, 2005-07 S281 SC. (Figure 1)

2. S331 SC belt routing, Figure 2.

3. Tamper-proof pulley seal; DO NOT REMOVE UNDER ANY CIRCUMSTANCE!

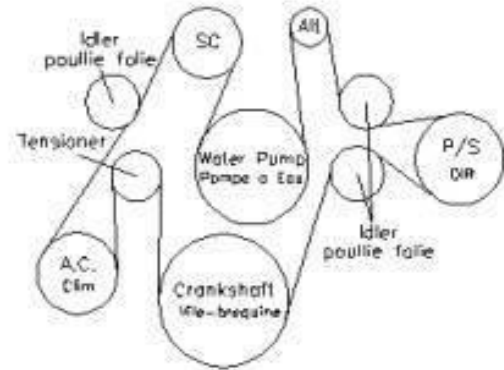


Figure 1

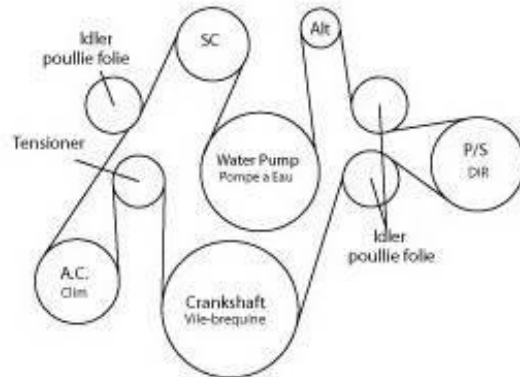


Figure 2

1. The coolant for the supercharger's intercooler system should reach the bottom of the neck for the recovery tank.

S281 recovery tank (Figure XX)

S331 recovery tank (Figure XY)

2. The water pump on the S281 will operate with the key in the accessory position (Position II). With the key in the accessory position or with the engine running, listen for the water pump to spool up. Then remove the recovery tank cap and ensure the fluid is circulating vigorously.

3. The water pump on the S331 will operate *only with the engine on?* With the engine on, verify the water pump comes on, then remove the recovery tank cap and verify the fluid is circulating vigorously.

4. The fuse for the S281 water pump is located near the fuse box in the passenger side footwell, behind the kick panel. Check continuity at this fuse if the water pump is inoperative.

5. The fuse for the S331 water pump is located in **the engine bay near the battery!?**

6. Once the tank is full, attach a radiator pressure test tool to the top of the radiator recovery tank, and apply pressure until water overflows out of the two holes at the top of the water crossover (**FIGURE 95**). Be sure not to let the recovery tank run dry.

7. Install the 3/8" NPT plug into the top of the water crossover. (**FIGURE 96**)

- a. Use a 5/16" Allen tool with 3/8" drive ratchet,
- b. Use a small dab of Teflon thread sealant

8. Using a 3/16" Allen tool with 1/4" drive ratchet, and a small dab of Teflon thread sealant, install the 1/8" NPT plug into the top of the water crossover. (**FIGURE 97**)



Figure 95

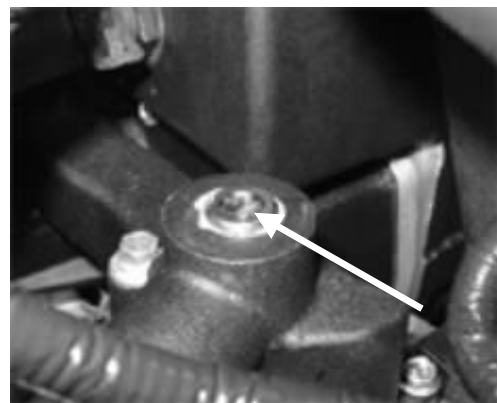


Figure 96



Figure 97

9. Remove the pressure test tool, and refill the recovery tank to the cold fill range with the 50/50 water/anti-freeze mix. **(FIGURE 98)**
10. Install the radiator recovery tank cap.
11. Cap off the inlet to the intercooler recovery tank using a short piece of 3/4" hose that is plugged at one end. **(FIGURE 99)**
12. Fill the intercooler recovery tank with an 80/20 water/anti-freeze mix, to 1" from the top.
13. Attach the coolant system pressure tool. **(FIGURE 100)** For location of the fluid reservoir on which you will mount the pressure tool, see top arrow in **FIGURE 104**, next page.
14. Place the open end of the intercooler hose 06-2003-C09860 into a drain pan. **(FIGURE 101)**
15. Actuate the pressure tool until water flows out of the hose into the drain pan. **Make sure that the tank does not run dry.**
16. Remove the capped hose from the tank inlet, and attach the hose 06-2003-C09860, securing it with a clamp 00-2003-C10068*.



Figure 98



Figure 99



Figure 100



Figure 101

17. Remove pressure tool from the tank and fill tank with an 80/20 water/anti-freeze mix, to 1" from the top.
18. Install the intercooler tank cap 00-2001-C09994* onto the tank. **(Topmost arrow in FIGURE 104)**
19. Attach the water pump timer 178-372 to the inside of the passenger side front fender with two strips of double sided tape. **(FIGURE 102)** The general location of the timer is shown by the smaller white box in **FIGURE 104**.
20. Plug the white 6-pin connector of the harness (06-1701-C10711) into the timer installed in the last step **(bottom arrow in FIGURE 104; wire bundle and white 6-pin connector shown in close-up in FIGURE 105)**.
21. Run the 1/4" ring terminal for the wire with the yellow fuse in the middle to the power junction at the back of the fuse box. Secure with the stock nut using an 8mm socket. **(FIGURE 103)**
22. Run the shorter of the two 1/4" ring terminals with black sleeves to the PCM bracket bolt as indicated by top right arrow in **FIGURE 104**.



Figure 1002



Figure 103

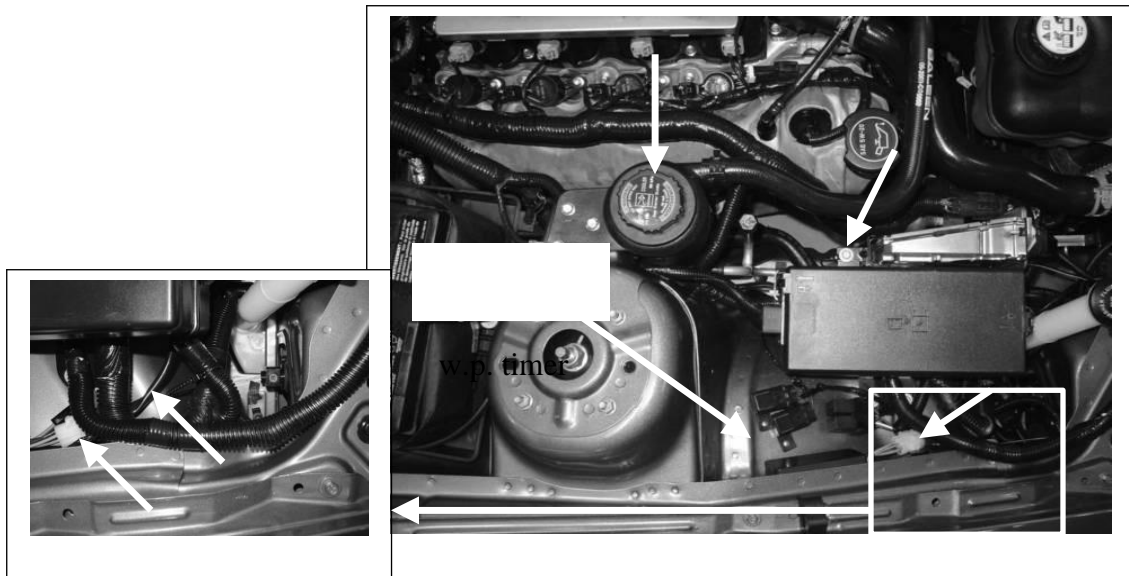


Figure 105

Figure 104