1. Open the hood and remove radiator cap and coolant vent plug. (The coolant vent plug is sticking straight up on the passenger side of the valve cover.)

2. Drain the radiator. There is a drain valve on the bottom driver’s side of the radiator. You will need a 4.5 gallon container to drain the coolant into.

3. Remove the passenger side inner fender cover. Disengage any component retaining clips, remove the screws and plastic clips holding the inner fender cover on.

4. Wait for coolant to completely finish draining before proceeding.

5. Remove (4) 5mm allen head screws holding the actuator onto the turbocharger and pull actuator straight back from turbo. Unplug the actuator harness from the engine harness.

6. Check the turbo actuator gear lever that was under the actuator. It should be able to easily be moved full travel by hand. (Full travel is approximately 1 inch). We then suggest slamming the vanes against each stop. This is done to make sure that when the vanes are pushed to the extreme ends of their travel, they do not stick. If the actuator lever cannot be moved easily by hand or resistance is found when slammed at either end of its fullest travel, the turbo must be replaced.

7. Remove the (4) T20 six-sided Torx screws holding the 2 actuator halves together and separate the two halves.

8. Mount the new actuator halve to its mate and use either the (4) removed T20 Torx screws to secure or use the included (4) T15 Torx screws. Torque the screws to around 25 in-lbs. Do not over torque.

9. Be sure to dry off all components and make sure both pieces are completely moisture-free before bolting to the turbo. Verify that the mounting surface of the actuator housing does not have any recessed grooves that would not allow the gaskets to seal off the coolant. If you find any imperfections, fill them with high-temp RTV and smooth with a sharp razor knife. You should not be able to catch a fingernail on the mating surface of the actuator housing. Do not grease the actuator gears!

10. Mount the actuator to the turbocharger. The gear positioning will take care of itself. Make sure the actuator is sitting flush against the turbo before screwing it on. Using the (4) new allen head bolts that are included, tight the actuator to the turbocharger. IMPORTANT: Do not use the screws to force the two halves together. Make sure they are flush before tightening! This can cause binding of the vanes and slow response codes.

11. Plug the actuator connector back into the engine harness. Be careful to avoid routing it against the hot side of the turbo or exhaust.

12. Close the radiator drain and refill the coolant system. Leave the coolant vent plug out until you get most of the coolant back in and it starts coming out of the vent.

13. Re-install the fender cover and radiator cap.