WE STRONGLY RECOMMEND:

CHECK FUEL PRESSURE PRIOR TO INSTALLING ANY PERFORMANCE PRODUCT.
MINIMUM-IDLING IN NEUTRAL-10 PSI, WIDE OPEN THROTTLE, DRIVING DOWN ROAD-6PSI

ADD PUMP LUBRICANT TO YOUR FUEL AT ALL TIMES.
WE SELL BG PRODUCTS-DFC
LUCAS & STANDADYNE ARE ALSO EXCELLENT PRODUCTS & ARE READILY AVAILABLE AT MOST TRUCK STOPS & AUTOMOTIVE PARTS STORES.

MAXIMUM INTERVAL BETWEEN FUEL FILTER CHANGES 10,000 MILES

TORQUE ENHANCER

Installation and Operating Instructions

CONTENTS

(1)	JVD Torque Enhancer	(6)	Cable tie straps	(1)	A.D.D. Device
(2)	Wire Clip	(2)	Scotchlok t-tap connectors	(1)	Extra line fuse
(1)	Velcro strip	(1)	Wastegate fitting (kit)	(1)	Instructions

INSTALLATION INSTRUCTIONS

Tools required for installation:

Straight screwdriver
Pliers
Ratchet w/10mm, 13mm and 7/16” sockets – wrenches the same size will work
2’ piece of wire for pulling wires through from cab

Installation:

1. Park truck on level surface, (install parking brake on manuals), turn engine off.

2. Place 2 velcro strips side by side on back of *Torque Enhancer*. With clean lint free rag, using alcohol or brake cleaner on rag, prepare dash mounting area by removing all dust, dirt, Armor-All, etc. Peel backing from velcro and mount on dash. See picture #2.

3. Remove 1 phillips head screw from bottom of dash panel, install wiring clip around *Torque Enhancer* wiring harness. Reattach screw to bottom dash panel. See picture #3.

4. Route wiring harness along lower dash below steering column. Attach with enclosed cable tie straps. Turn wiring harness toward front of truck, attach wiring harness to side of main (big) wiring harness under dash.

5. Use 5a for automatic transmissions or 5b for a manual transmission.

   a. **If your truck has an automatic transmission**, locate foam grommet through firewall attached with 2 bolts. (This is for the clutch master cylinder location for vehicles equipped with manual transmission) Pierce the foam grommet, route *Torque Enhancer* wires through firewall at this location. See picture #5a.

   b. **If your vehicle is equipped with a manual transmission**, under the hood on the driver’s side, locate the large grommet on the firewall that supports the main wiring harness. Pierce it with screwdriver or a knife in the soft area away from the wires. Push the 2’ piece of wire through the hole. Go inside the cab and find the wire under the dash, tape the end of the wire loom to it. Go back under the hood and pull wires through the grommet. See picture #5b.

6. Using a 7/16" socket or wrench remove top inner cooler hose clamp. See picture #6a. With 10mm socket or wrench, remove dip stick retaining bolt attached to air intake horn. See picture 6b. Move dipstick out of the way. With 10mm socket or wrench remove 4 bolts retaining air intake horn at the engine. See picture 6c. Remove air intake horn and air intake heater as one assembly and move out of the way. See picture 6d. Place clean rag or cloth over air intake manifold to prevent dirt and foreign material from falling into engine. See picture 6e.

7. Using a 13mm socket or wrench, remove 3 bolts from throttle linkage bracket and lift up, unhook wiring harness from connector and unclamp wires from plastic clamp. Lift throttle bracket out of way. (Do not remove cables – i.e. throttle cable, transmission cable and cruise control.) See pictures #7a, b & c.

8. Route wires along firewall down to cylinder head behind fuel filter to injection pump. Remove your 2' pulling wire. See picture #8.

9. Find the black plastic 90-degree wiring connector on injection pump (top rear) this connector connects to injection pump module. With 2 fingers, pull connector toward driver side battery, this will unhook connector. Peel back tape and wiring loom approximately 6 inches**. FIND BLACK WIRE WITH BROWN TRACER.** Clip on blue scotchlok t-tap connector with pliers. Leave this wire out of harness, tape harness back. DO NOT RECONNECT CONNECTOR TO INJECTION PUMP AT THIS TIME. See picture #9a, b & c.

10. Find 4 black wires coming from injection pump module to rear of injection pump. See picture 10a. These 4 wires are split in 2 pairs, 2 on the top and 2 on the bottom. Working with the top pair, take a straight screwdriver, push wiring protector down towards injector lines, this will separate the top 2 wires. See picture 10b. **FIND TOP WIRE NEXT TO CYLINDER HEAD**, clip on blue scotchlok t-tap connector with pliers. See picture 10c. Install **YELLOW WIRE** from Torque Enhancer to this scotchlok connector. See picture #10d.

11. Reinstall injection pump module connector to injection pump. (Start connector from rear of truck, push connector lock toward cylinder head to lock connector to injection pump module.) Connect **BLACK WIRE** from *Torque Enhancer* to this scotchlok connector. See picture 11a & b.

12. Reinstall wiring harness to throttle bracket. Don't forget to reinstall plastic wire clip on wires. Install 3 mounting bolts and tighten.

13. Inspect air intake horn gasket to intake, remount air horn and heater assembly to intake manifold. Install 4 mounting bolts and tighten.

14. Remove the fuse box cover from the left side of the dash. Locate 10 amp fuse #17, cluster A – lower right hand side. Connect **RED** (12v keyed hot) wire from Torque Enhancer with enclosed fuse tap to the upper leg of fuse. Reinstall fuse using straight screwdriver, slight pressure will be required. See picture #14.

15. At this time, double check *Torque Enhancer* wiring harness to make sure it is clear of moving brake and/or clutch pedals and it attached securely to the dash.

16. Check the (8) clamps on the inner cooler hoses to be sure they are tight and correctly installed. We find everyday, clamps that are installed over the edge of the hoses. You must be able to see the hose on both sides of the clamp. If the clamps are loose, the inner cooler hoses may come off with the added performance of your engine. This will cause loss of power, excessive black smoke and extremely high exhaust temperatures.

OPERATING/TEST INSTRUCTIONS

Instructions for initial powering and testing of *JVD Torque Enhancer* Model 6002A after installation and wiring is completed.

1. *Torque Enhancer* must be in the "ON" mode (either economy or performance) before starting check out. Toggle switch should be either up or down, not in the center positions.

2. **Without cranking or starting engine**, turn the key to the "ON" position. At this time you should see four distinct flashes of the green or red LED (light) on the *Torque Enhancer*. If you do not see these four flashes DO NOT PROCEED ANY FURTHER UNTIL THE PROBLEM IS LOCATED AND THIS STEP IS SUCCESSFULLY COMPLETED. CALL THE JVD TOLL FREE NUMBER FOR ASSISTANCE, 1-877-948-4050.

3. After you observe the four flashes, the LED will stay on. Start engine. LED will go out until working RPM is obtained. (In center position Torque Enhancer is OFF-there will be no lights or flashes of any kind.)

4. When engine is started, if LED does not go out, contact JVD Engineering 1-877-948-4050.

5. Test Drive – while accelerating green or red light will come on dim to bright. You should notice an increase of horsepower immediately.

   At this time the *JVD Torque Enhancer* is installed correctly and should give your truck the amount of power necessary to make it a pleasure to drive.

   Most people merely leave the switch in the "ON" of the economy (green) mode and forget the unit is even there.

   The Performance Mode (red) is designed for trailer towing or off road use only. Driveability problems (i.e. cruise control surge, rapid acceleration) can occur when not loaded. However, cruise control will work while loaded.

   It has been designed for as hands free operation as possible.

   It is not necessary to turn it off or on before starting and stopping engine.

The **TORQUE ENHANCER** is a product of:

JVD ENGINEERING COMPANY, LLC

8231 South 200 West

Fairmount, Indiana 46928

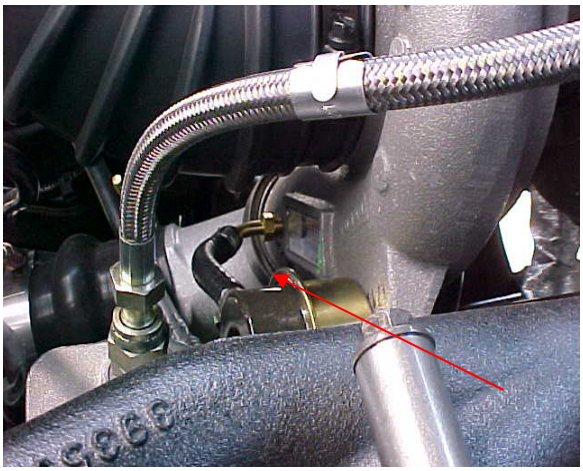
Phone: 1-765-948-4050 Fax: 765-948-3163

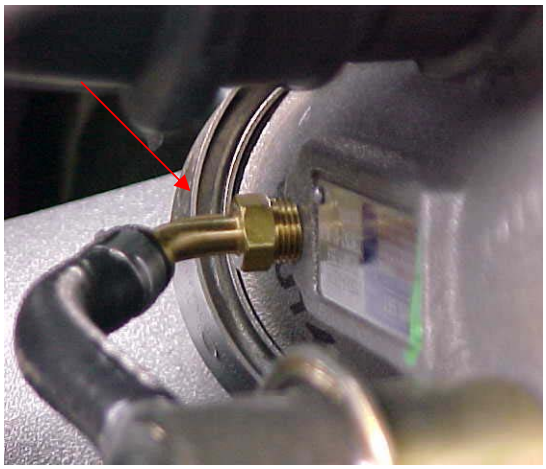
TOLL FREE: 1-877-948-4050

INSTALLATION OF WASTEGATE FITTING

For all applications EXCEPT-2001 & 2002 Automatic

1. Remove hose from brass fitting on turbo
2. Remove brass fitting from turbo
3. Reinstall modified fitting
4. Reattach hose

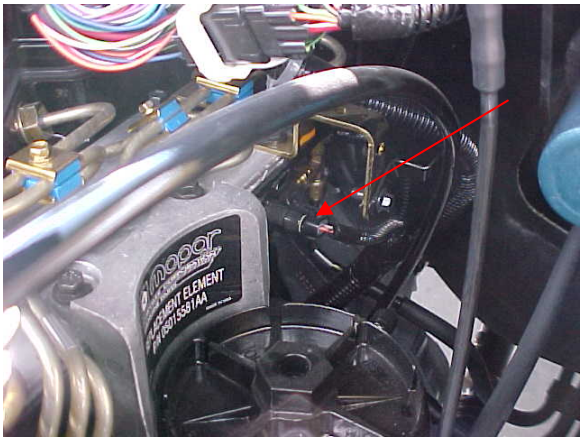


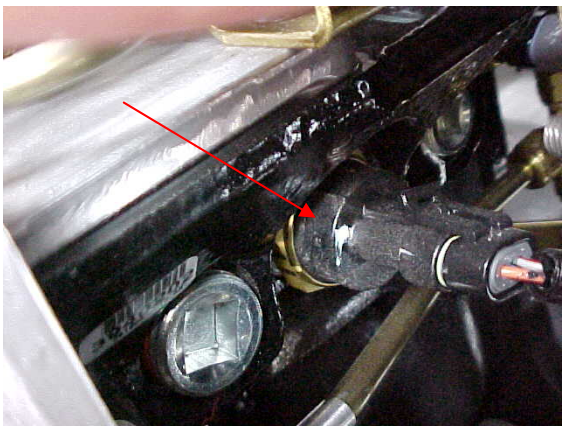


INSTALLATION OF A.D.D. 1998.5 – 2002

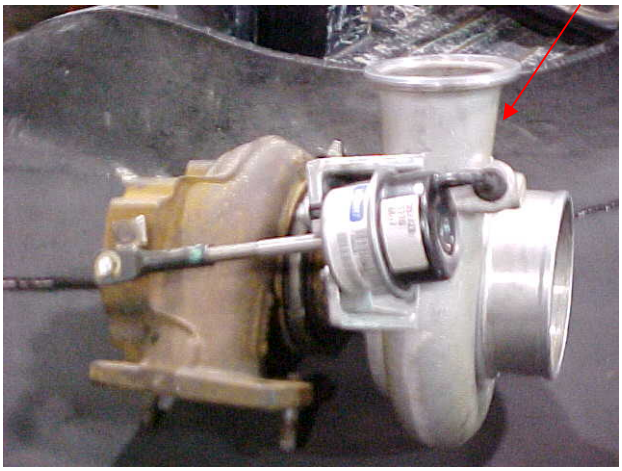
2001 model shown

1. Locate MAP Sensor, unplug wiring harness from block.
2. Plug in A.D.D. device into MAP Sensor and other end into wiring harness.

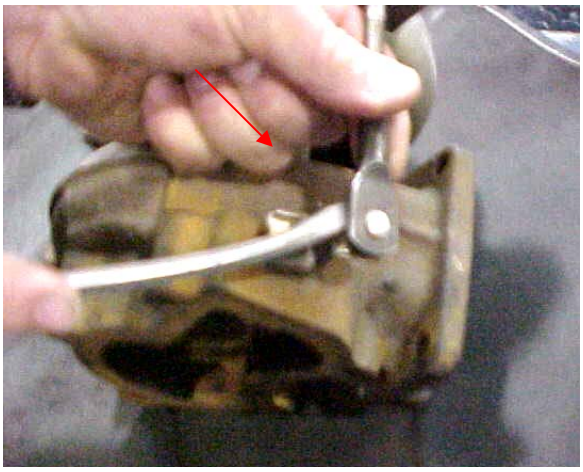




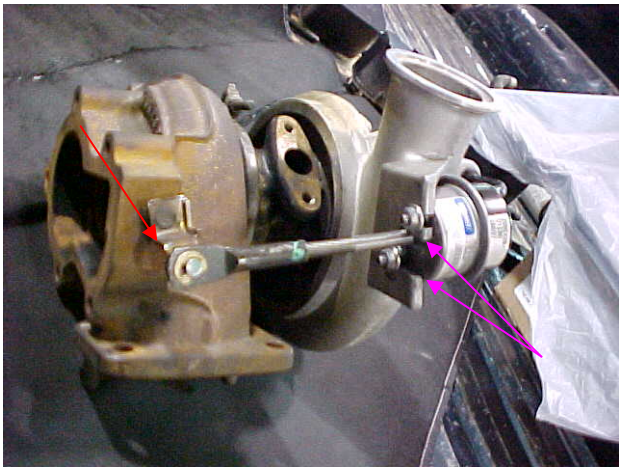
Wastegate Fitting Installation Instructions
2001 Automatic



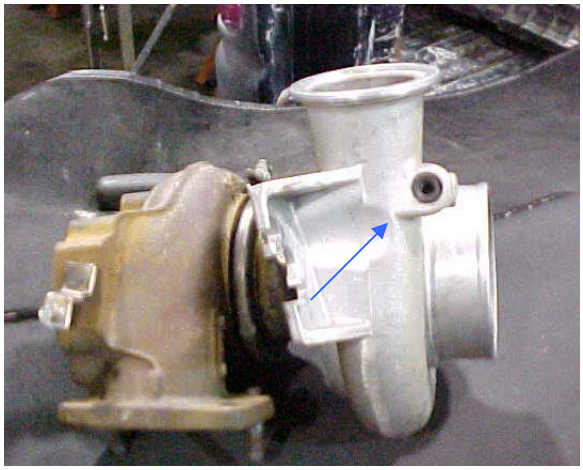
On the bottom side, next to engine, of the turbocharger, locate the wastegate assembly.



Step 2 – With a screwdriver, gently pry/remove Actuator assembly from turbocharger.

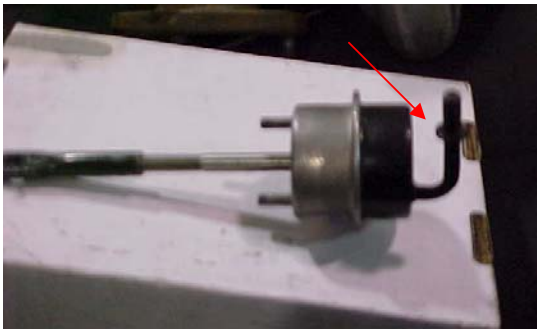


Step 1: Remove e-clip with small screwdriver, remove the (2) 10mm nuts from the actuator mounting studs.

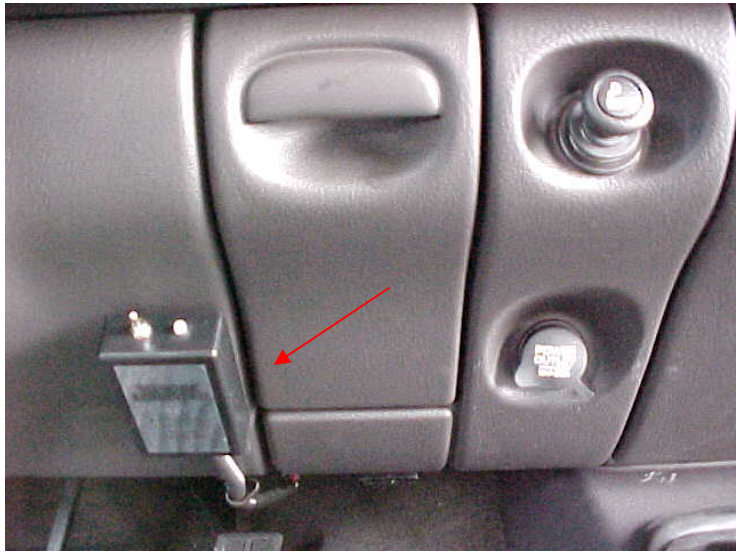


Step 2: If the o-ring comes out of the housing with the small tube, be sure to replace back into the turbo housing.

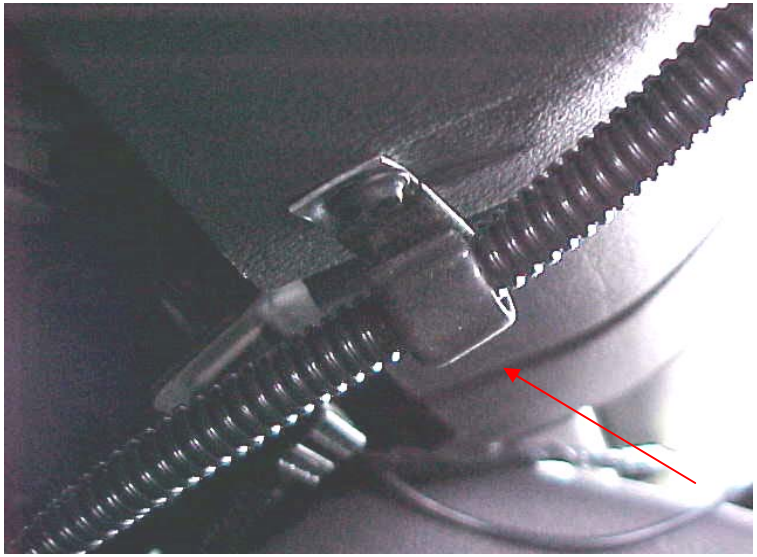
Step 3: With actuator removed, hold small 90 degree tube in vise. (Caution: not too tight, it is very easy to crimp tube) Using a ¼”-28 fine thread tap, tap inside of tube approximately 1” deep. Place a generous amount of red Locktite #271 on threads of set screw (included in hardware kit) and in new threads inside tube. Insert set screw (using 1/8” allen wrench) until very snug. We recommend letting this tube set for a minimum of 8 hours to allow Locktite to cure completely.



Step 4: After allowing Locktite to cure, file off any burrs on the end the tube. Lubricate end of tube with motor oil and reinsert into the o-ring in the turbo housing. Reinstall 10mm nuts finger tight, reconnect actuator arm and reinstall e-clip. Check tube, making sure it is pushed as far into the o-ring as possible. Tighten the (2) 10mm nuts.



Picture 2



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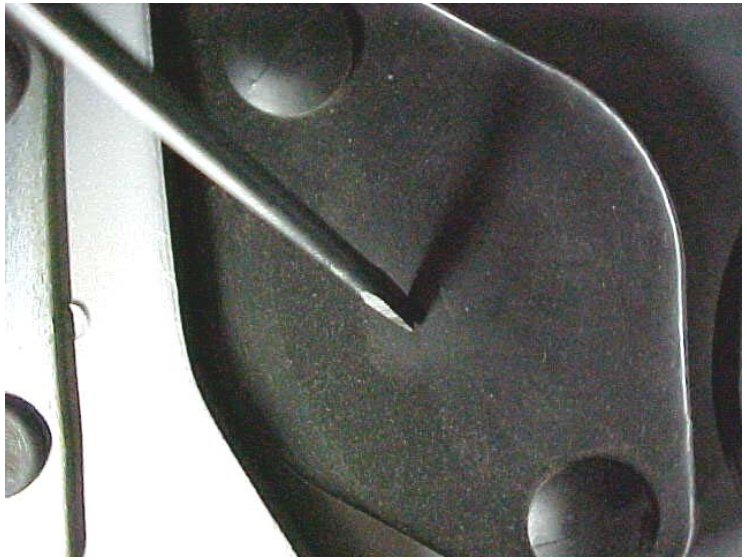
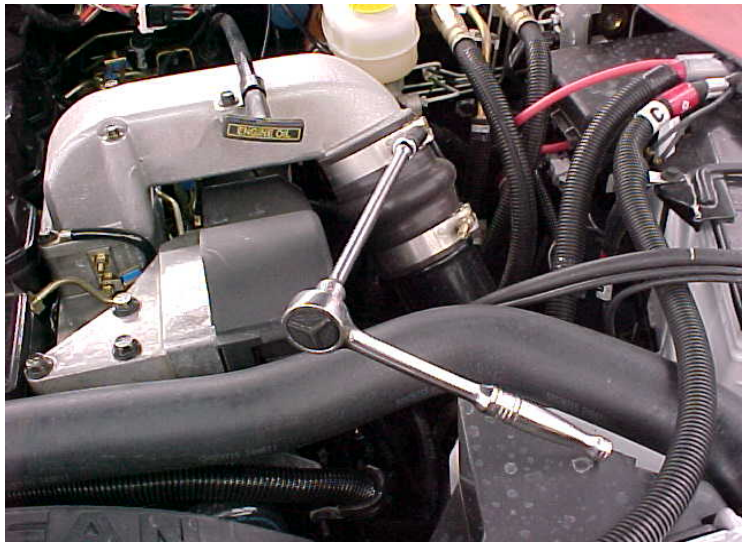


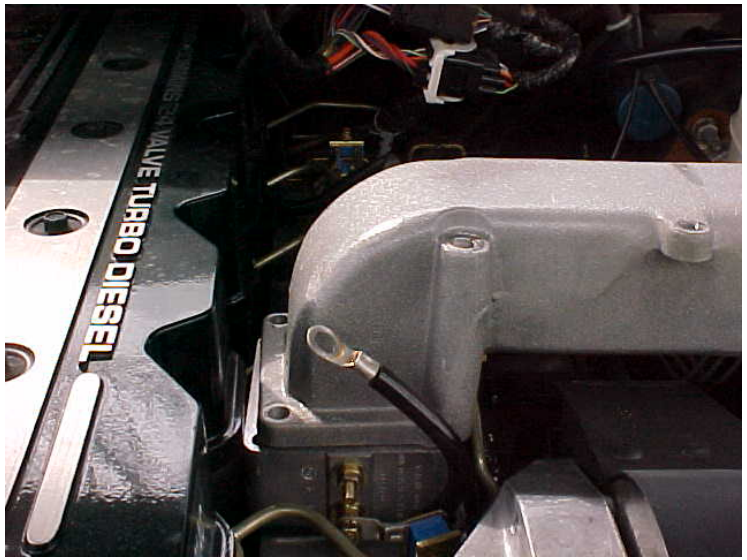
Picture 5a

Picture 5b



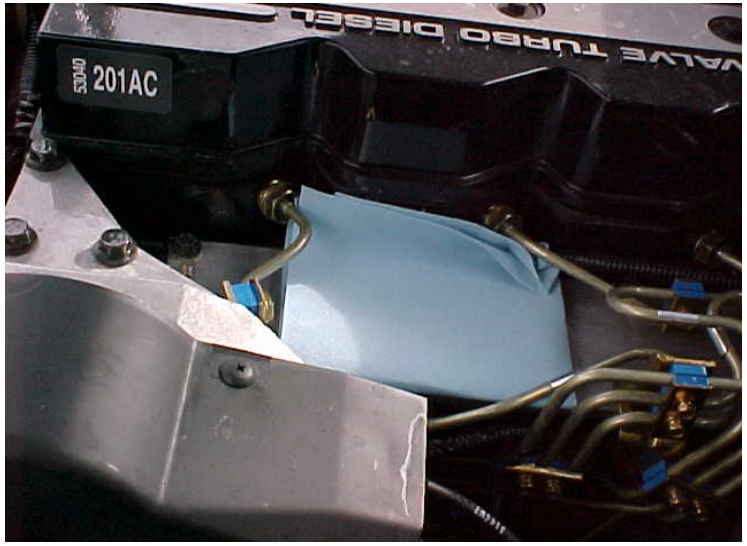
Picture 6a

Picture 6b

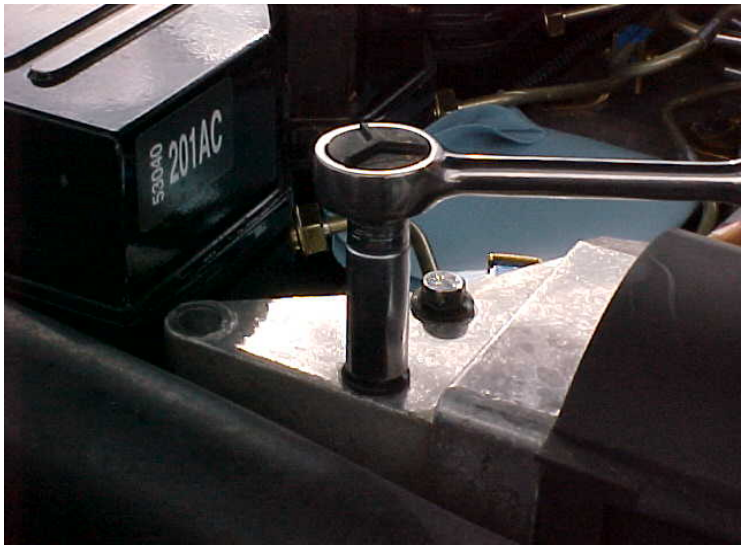


Picture 6c

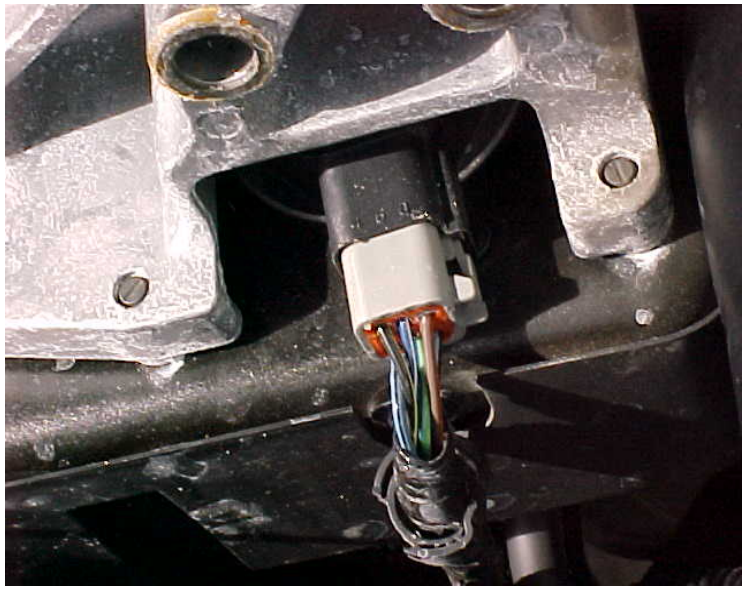
Picture 6d



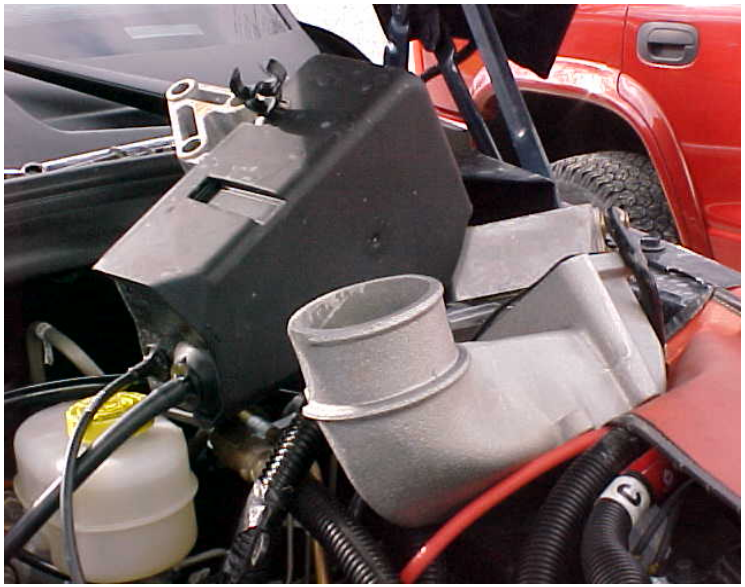
Picture 6e



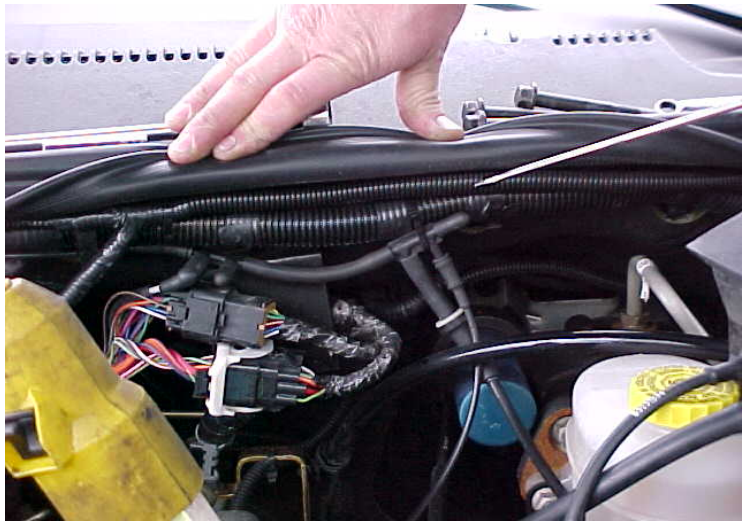
Picture 7a



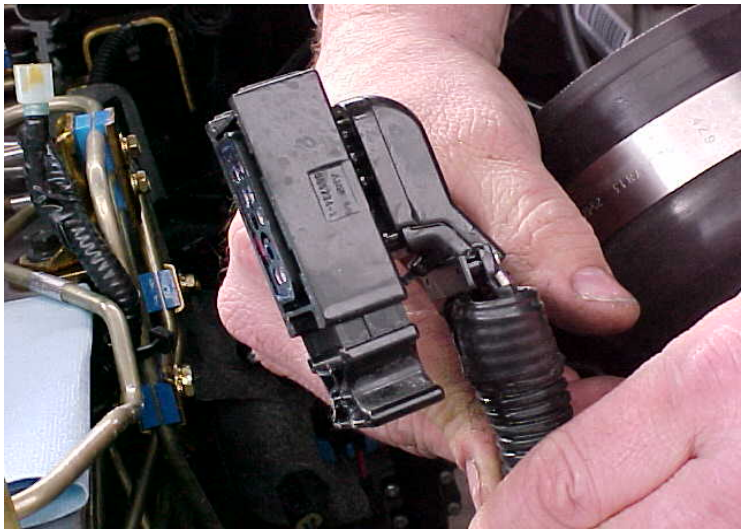
Picture 7b



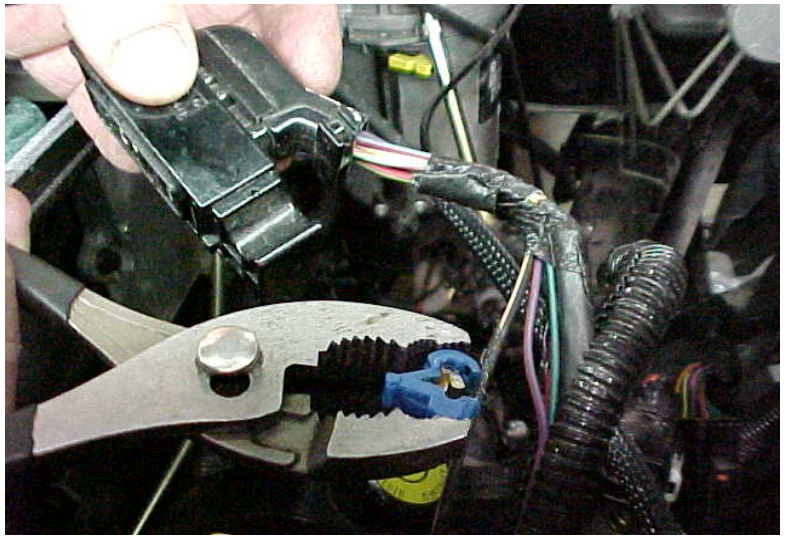
Picture 7c



Picture 8



Picture 9a



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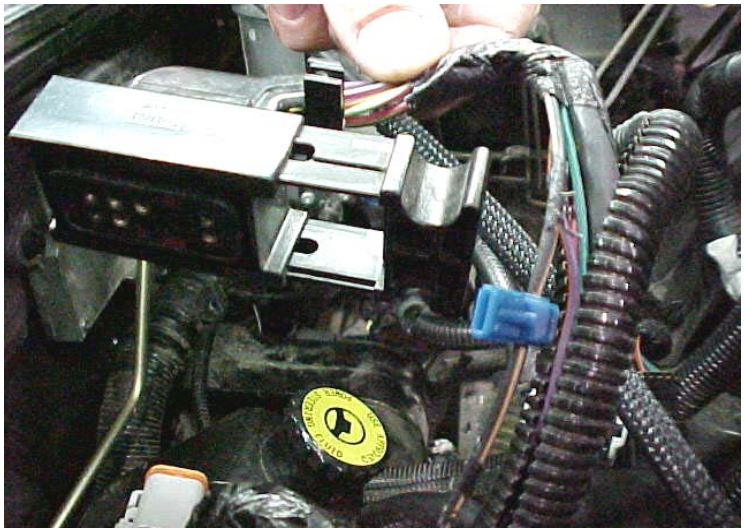
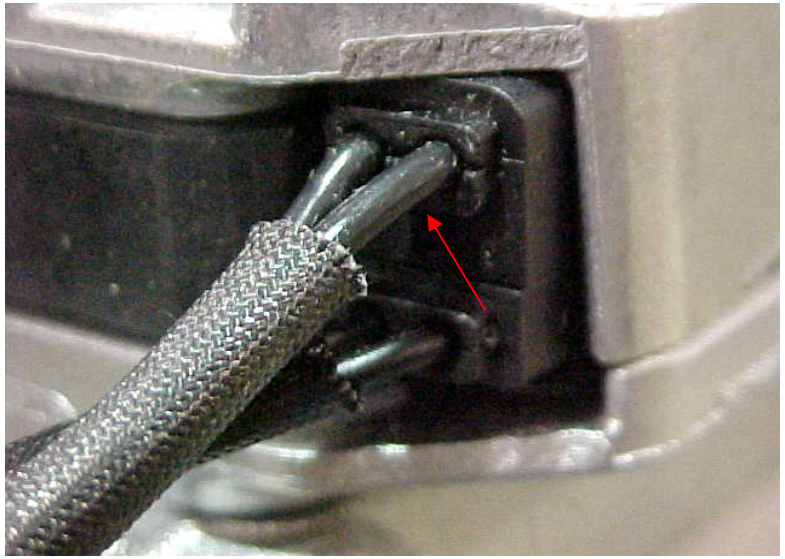
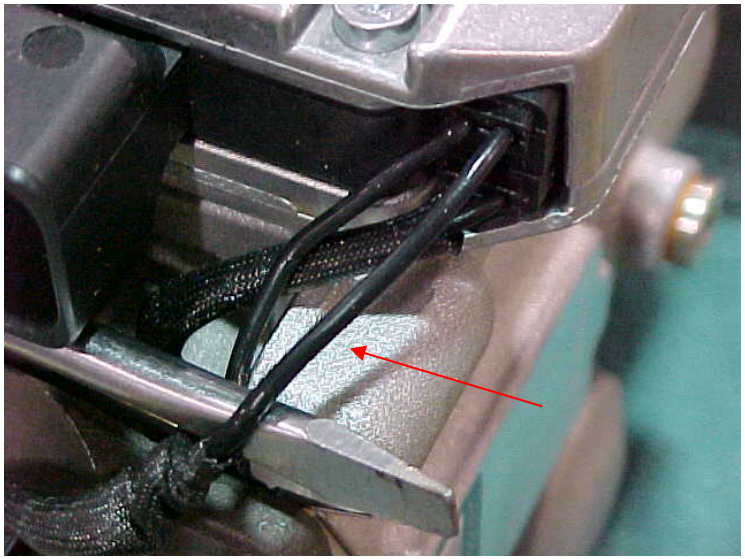


Picture 9c



Picture 10a



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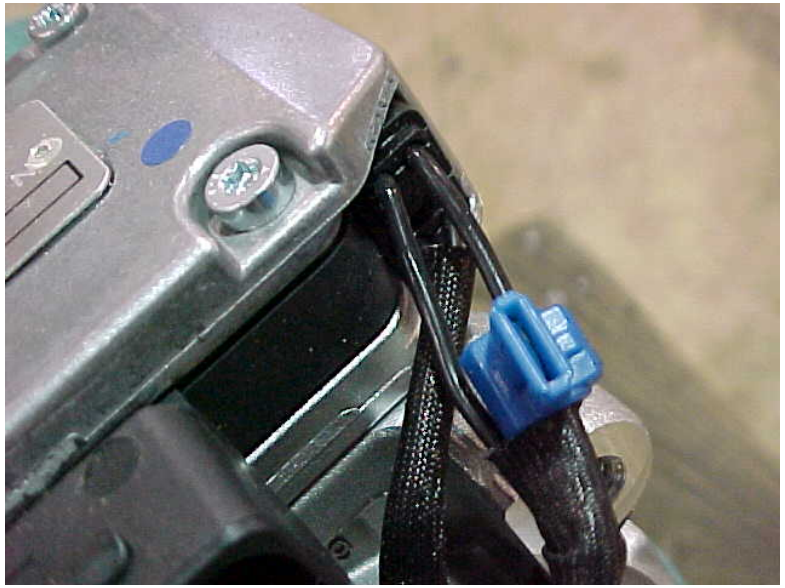

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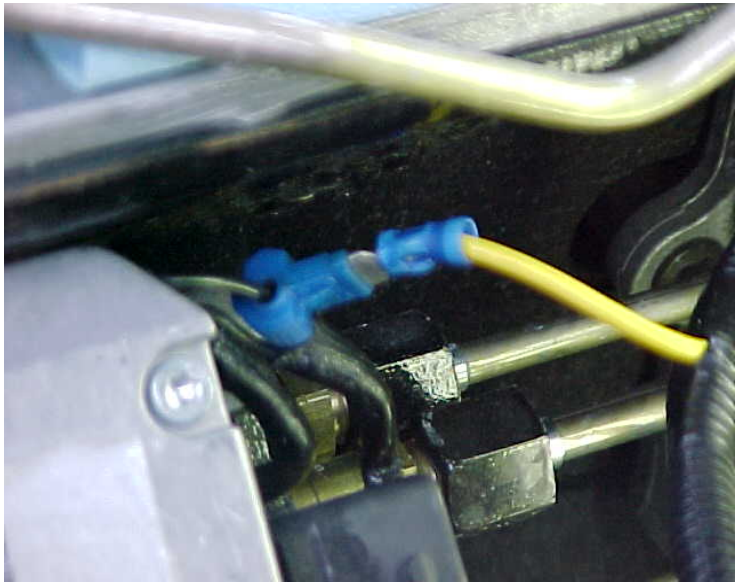
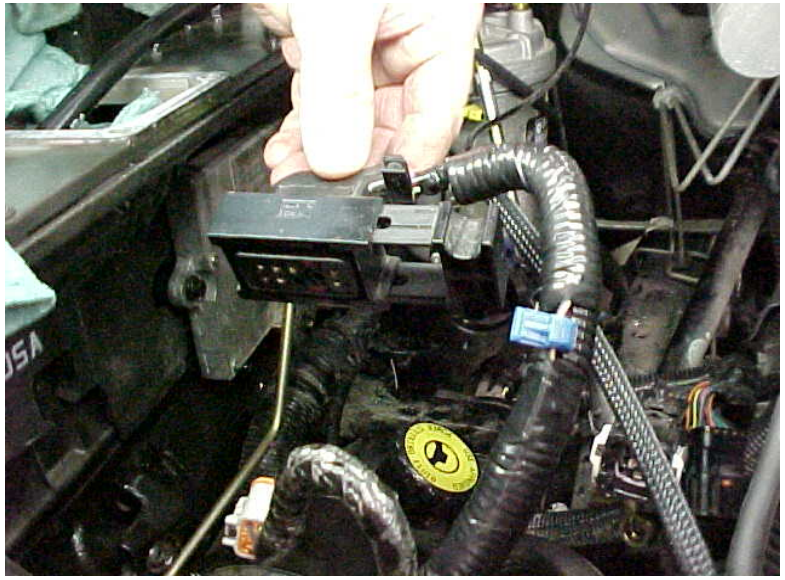
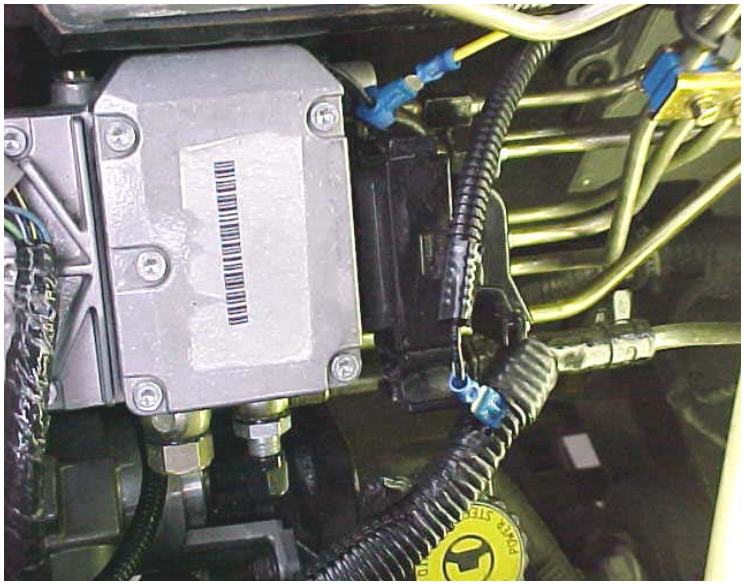


Picture 10d



Picture 11a



Picture 11b

Picture 14

Finished Result!