



2501 Ludelle Street
Fort Worth, Texas 76105
817-244-6212 Phone • 817-244-4024 Fax
888-350-6588 Sales • 800-423-9696 Tech
E-mail: painless@painlessperformance.com
Web: www.painlessperformance.com

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200-4R TRANSMISSION LOCK-UP HARNESS INSTALLATION INSTRUCTIONS

TORQUE CONVERTER LOCK-UP CONTROL WITHOUT THE USE OF A COMPUTER.

INSTALLATION INSTRUCTIONS (TRANSMISSION)

1. Remove the transmission oil pan bolts, carefully drain the transmission fluid and remove the pan.
2. Next remove the transmission fluid filter by gently twisting and pulling down on the filter. Note: The filter neck rubber seal will more than likely stay inside the pump housing and will only need to be removed if the filter is to be replaced.
3. Now remove the two 10mm torque converter clutch solenoid bolts and pull the solenoid and attached original harness. Use caution not to break the retaining tab when removing the case connector plug.
4. Locate and remove the 4th gear pressure switch from the valve body housing and install the new 4th gear switch. See Figures 1 and 2.



Figure 1

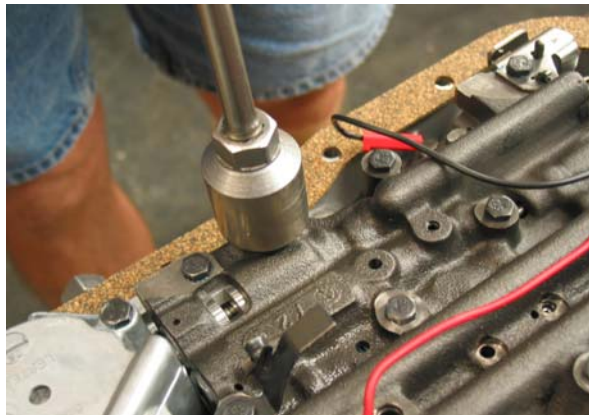


Figure 2

- Next install the new torque converter clutch solenoid using the new studs and the included shouldered nuts. Torque both the studs into the case and the nuts to the solenoid at 95 in/lbs. See Figures 3, 4, & 5



Figure 3



Figure 4



Figure 5

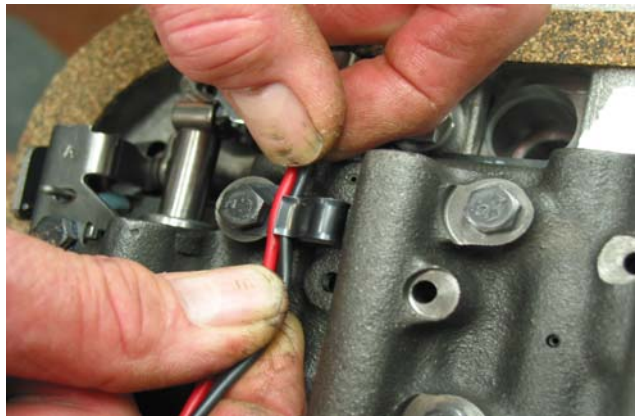


Figure 6

- Carefully fasten the wires using the original metal clips on the valve body bolts. See Figures 6 and 7. Attach the red connector to the new 4th gear pressure switch. See Figure 8.

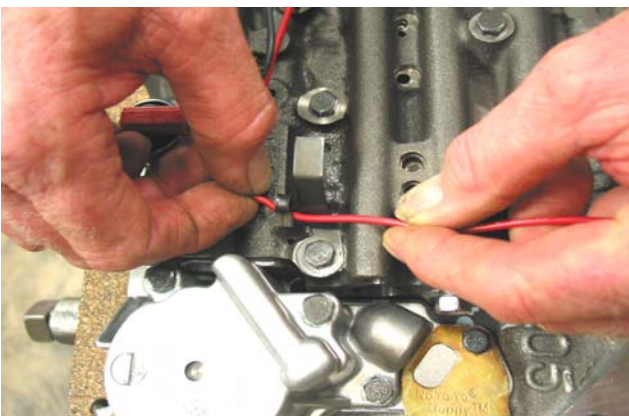


Figure 7

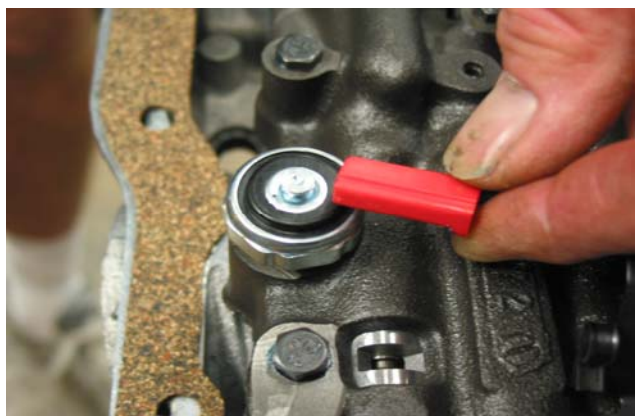


Figure 8

7. Plug in the black four way connector into the case connector. See Figure 9.

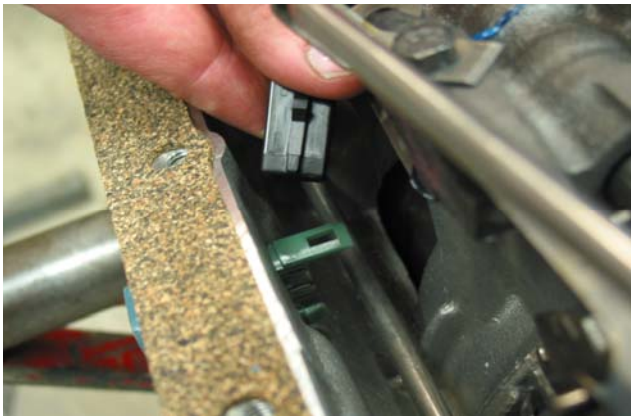


Figure 9

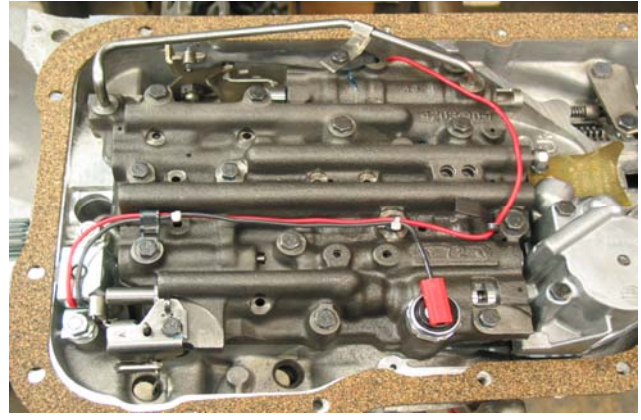


Figure 10

8. With the harness installed properly, it should be routed as shown in Figure 10.
9. Reinstall the transmission filter and pan with the new gasket provided.
10. Fill transmission with the correct amount and type of transmission fluid. 200-4R transmissions require at least Dextron III fluid.

INSTALLATION INSTRUCTIONS (CHASSIS WIRING)

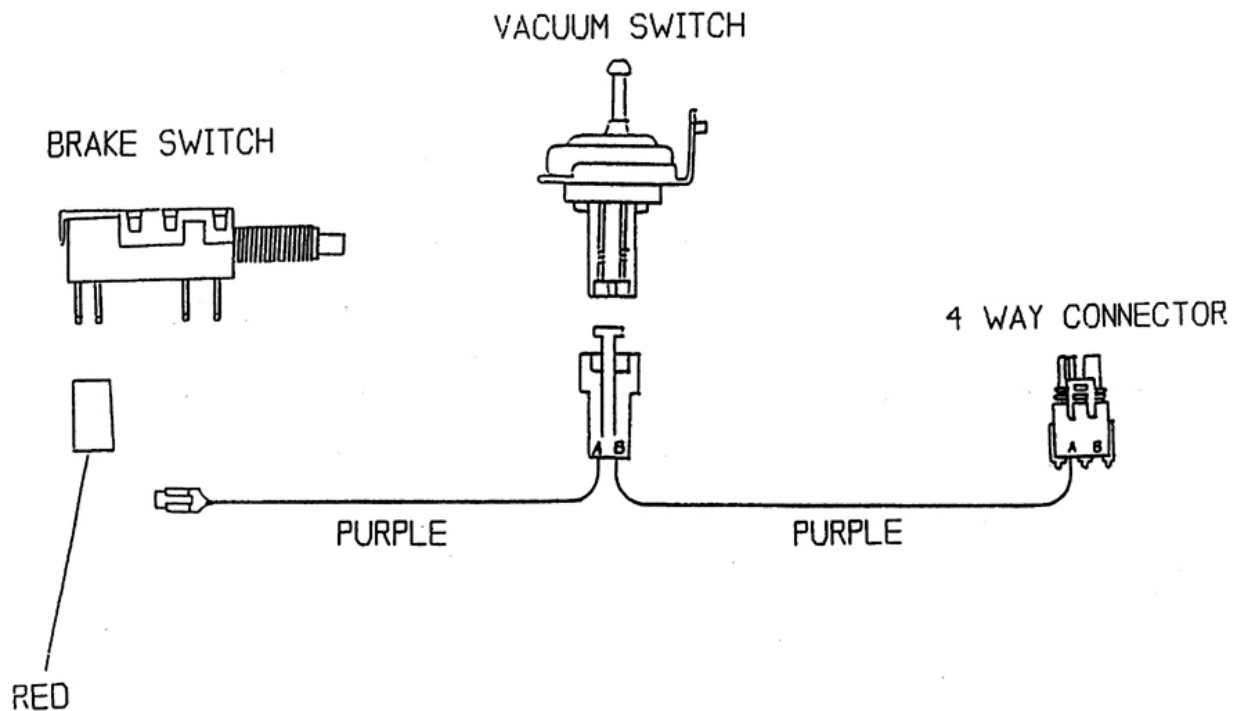
- A. Install the new brake light switch provided at the brake pedal. See NOTE below:

NOTE: (1) If the vehicle has a GM plunger-style switch with two terminals, then the new switch provided will directly replace it. (2) If a hydraulic pressure-type brake switch or a four terminal switch is already in use and the vehicle has cruise control, then a new bracket will need to be fabricated and the new switch provided will need to be installed with the plunger fully depressed at the brake pedal resting position.

ON THE PROVIDED SWITCH – The two terminals closest together unlock the torque converter clutch when the brakes are applied and the two terminals with wider spacing are for the brake lights.

- B. Mount the vacuum switch in a convenient place in the engine compartment to run a vacuum hose to. Connect one end of the vacuum hose to the switch and the other to a **ported vacuum source**. This means a vacuum port off of the carburetor or throttle body which **only** has vacuum when throttling the engine. When properly connected there will be no vacuum signal at idle.

- C. Route the purple wire with the white 4-way connector down to the transmission and plug it into the factory plug located above the pan on the drivers side of the case.
- D. Route the purple wire with the bare terminal through the firewall and snap the terminal into the empty slot in the plastic connector housing on the new brake switch.
- E. Next route the red wire from the brake switch to a fused 20 amp ignition power source. If the vehicle this kit is being installed in doesn't have a readily available 20 amp fused power source then purchasing Painless Part #70439 20 amp fuse loop is recommended.
- F. Now test drive the vehicle. The torque converter clutch should lockup shortly after the transmission shifts into 4th gear.
- G. If a constant lock-unlock situation is experienced during slower speeds or up hills, a vacuum delay valve (P/N 14020691) may be purchased from a GM parts dealer. Install it with the blue side towards the ported vacuum source.



Painless Performance Limited Warranty and Return Policy

Chassis harnesses and fuel injection harnesses are covered under a lifetime warranty.

All other products manufactured and/or sold by Painless Performance are warranted to the original purchaser to be free from defects in material and workmanship under normal use. Painless Performance will repair or replace defective products without charge during the first 12 months from the purchase date. No products will be considered for warranty without a copy of the purchase receipt showing the sellers name, address and date of purchase. You must return the product to the dealer you purchased it from to initiate warranty procedures.