Transmission Installation Instructions for 603010, 603015, 603020, and 603025

This is a general guideline for installation. Since we cannot cover all the specific steps in the installation for your application, it is best to consult a vehicle-specific repair manual.

NOTE: JEGS 4L60E transmissions are designed to work in a production vehicle that came from the factory with this transmission. This transmission is electronically controlled by the vehicle ECU. If this transmission is used in any other application, the transmission will require an aftermarket transmission controller (not included, but available from TCI, Powertrain Control Solutions, and other sources).

Safety Guidelines

This installation begins with common sense! If the installation is not to be performed with the aid of a full size chassis lift, it is highly recommended that you support the vehicle with four heavy duty jack stands, one at each corner. The vehicle should be positioned on hard, flat and level surface (asphalt in the summer can be very dangerous).

NEVER use a bumper or scissors jack for support of your vehicle! Safety first. Always wear safety glasses.

Have some help available when the transmission and torque converter assembly is ready to be removed from the vehicle. It is heavy and care should be taken to avoid injury.

STOP! A new transmission and a used torque converter do not mix!

You have just purchased a new transmission. Your used torque converter is full of used transmission fluid containing particles of metal and friction materials that will damage and ruin the operation and life of your new transmission.

It is physically impossible to drain all the fluid from your used torque converter unless it is split into two sections! We highly recommend the investment in a new torque converter at this point if you have not already done so.

Make sure to flush out the cooler and cooler lines. The best way to accomplish this is to use a high quality transmission flush available from a local auto parts supply outlet.

Check these items for wear and tear and replace if needed

- Universal Joints
- Transmission mounts

Tear Down and Disassembly

1. Remove both the negative (-) and positive (+) power cables from the battery.
2. Raise and support your vehicle as addressed in the Safety Guidelines.
3. Remove any exhaust components that may be in the way for the removal of the transmission.
4. Spray the dowel pins with a penetrating oil now to ease the removal of the transmission in the later steps.
5. Disconnect all wiring connections to the transmission. Take care not to damage the wiring connectors.
6. Disconnect the dip stick & tube.
7. Drain the transmission fluid into a drain pan. If the pan does not have a drain plug, loosen the bolts securing the pan to the transmission. The latter method is extremely messy and you will need a larger pan that can cover the entire area of the transmission pan.
8. Disconnect the cooler lines and drain them into the drain pan at this time.
9. Move the drain pan to the tail shaft area and remove the driveshaft. Be careful with the u-joint cups, so as to not displace the needle bearings.
10. Support the transmission with either a hydraulic jack or a jack made especially for transmission removal. Remove the bolts (all but two) attaching the transmission to the engine block and remove the torque converter-to-flexplate bolts. Remove the bolts from the transmission mount to the crossmember. Raise the transmission slightly to remove the weight of the transmission from the crossmember. With the transmission secured by the jack, remove the crossmember.
11. With the crossmember removed, lower the transmission to a point slightly lower than its original position. Support the engine in this position with a bottle-style hydraulic jack or another jack stand to prevent the engine dropping and causing damage (usually the distributor) or injury to you.
12. This is where the helper is needed. The transmission and torque converter assembly weighs close to 200 pounds and without the proper transmission jack this could be a very difficult procedure. Remove the two remaining transmission-to-engine block bolts now. With the weight of transmission still supported by the jack, pull rearward on the transmission to separate it from the engine block (it may need to be moved side to side to free it form the dowel pins). The torque converter must stay with the transmission, fully engaged to the input shaft. Once free from the engine lower the assembly and remove from the vehicle.

13. With the transmission and torque converter removed from the vehicle and on the floor. It is time to take a measurement for reference purposes to ensure for proper engagement of the pump drive of the new transmission and new torque converter. Place a straight edge across the front mounting surface of the transmission and measure back to the torque converter and record this dimension. The replacement units should measure the same.

Reassembly and Installation

1. Remove any fittings from your transmission case and clean before installing them into the new transmission. (New fittings are cheap insurance to avoid any leakage.) It may be time to buy a new transmission mount to top off the installation. Re-install the fill tube, wiring connections other accessories at this time.
2. From your supplies, pour one quart of Dexron II (or equivalent non-synthetic fluid) into the new torque converter. Apply a light film of the transmission fluid to the pump drive hub and guide onto the input shaft, rotate the torque converter and apply force until it engages the pump. You should notice a little drag as it engages the front pump.
3. As in step 12 from the Tear Down and Disassembly phase, repeat the process of measuring the distance to the torque converter from the transmission mounting surface. This should match your dimension from step 12.
4. Place the transmission and torque converter assembly onto the jack as you did for the removal process. Raise the transmission into place. Be aware not to let the torque converter slide out of the drive tangs of the front pump.
5. Slide the transmission onto the dowel pins and install the transmission to engine block bolts. Do not attempt to pull the transmission into place using any of the transmission bolts. You will crack the case! With the transmission secured in place, spin the torque converter, it should spin freely. Now bolt the torque converter to the flexplate.
6. Reinstall the cross member by raising the rear of the transmission and reinstall the cross member to transmission bolts at this time also.
7. Before installing the driveshaft, the driven yoke should be cleaned and lubricated with a thin film of fresh transmission fluid.
8. Reinstall linkages, shift cable, dipstick, speedometer cable and vacuum line to the modulator. Kickdown cable is deleted due to valve body being recalibrated for street/strip use. Cooler lines should be installed at this time also.
9. Replace any removed exhaust components.
10. With everything replaced that was removed and secured you can now add 4 quarts of the Dexron II (or equivalent non-synthetic fluid) to the transmission. With the transmission placed in park you can now reconnect the battery and start the engine. Add transmission fluid until the dipstick shows you are a quart low. Let the transmission operate for a few minutes. During this time check for leaks.
11. While the vehicle is still on the jack stands with engine idling, shift the transmission to reverse and allow the wheels to rotate. Apply the brakes before shifting the transmission from reverse. **Damage could occur to the park pawl!** After a 5 minute run-in time, shift to park, applying the brakes first.
12. Lower the vehicle to the ground start the engine and check the fluid level and add fluid to the full mark.
13. Watch for leaks and than test drive your vehicle. This is a performance transmission - you need to service the fluid and filter more often. The recommended service interval is 12,000 miles.

Items Needed and Suggestions For Installation

4 Jack Stands .....Available From JEGS
12 quarts needed Dexron II (or equivalent non-synthetic fluid).....Available From JEGS
Hydraulic Jack .....Available From JEGS
U-Joints.....Available From JEGS
Transmission Mount .....Available From JEGS
New Converter .....Available From JEGS
Transmission Cooler .....Available From JEGS

Penetrating Oil	Transmission Jack
Drain Pan	Hand Tools
Straight Edge	Tape Measure or Ruler
A Helper	Service Manual, Vehicle Specific
Wheel Chocks	Support for Engine (additional jack stand or jack)
A Chassis Lift	