

PA45304 AODE/4R70W Transbrake

Important – Read this first!

1- This valve body is a direct bolt in replacement for AODE/4R70W transmissions manufactured from 1992-2004

- a. The shift pattern is P R N 3 2 1
- b. There is engine braking in 1, 2 & 3
- c. This valve body requires a Deep Aluminum Pan
- d. The transbrake must be activated in Reverse to back up

2- This valve body requires no computer hook ups; if your vehicles computer controls this transmission you must disconnect it at the transmission by disconnecting the plug on the rear side of the transmission.

3- There are several options for electrical hookups depending on your application. The following suggestions will help:

a. One electrical connection (12 V momentary) is required for the transbrake/reverse function. If you do not need or want the transbrake, it still must be functional to attain reverse.

b. Manual 1st, 2nd & 3rd gear do not require any electrical hookups. These 3 forward ranges are full manual.

c. If you desire 4th (Overdrive), you must activate both shift solenoids together while in 3rd. Apply a 12V source through a switch to the designated wire.

d. The lockup solenoid can also be activated through a switched 12V source.

e. There are many possibilities for electrical hookups. The use of timers can be used to activate the lockup or Overdrive function.

Tool List

- Metric sockets (8mm 10mm 13mm)
- 5mm Allen wrench or socket
- Drill

Installation Instructions:

- 1- Raise vehicle & secure firmly
- 2- Remove transmission pan, filter and electrical connections.
- 3- Remove detent spring & roller
- 4- Remove twenty four (24) valve body bolts and EPC bracket.
 - a. Remove factory wiring harness and bulkhead connector.
 - b. Install supplied harness.

- 5- Locate the two (2) guide pin holes in the case. These holes are not threaded. If the drill bit supplied fits into these holes, no modifications are necessary. If they do not, these holes must be drilled larger using the drill bit supplied. Mark the bit so that you will only drill ½” deep into the case, this is important and will be enough for the larger pins. You can see the larger pins already installed in the transbrake valve body. This may help you understand why you have to drill the case. You may now proceed with the remaining steps to install the valve body.
- 6- Make sure the new valve body gasket has remained installed on the new valve body.
- 7- You must position the EPC Retainer bracket in the valve body pocket before you bolt the valve body in. It’s a tight fit and you may have to trim the bracket around the bolt hole.
- 8- Place the new valve body onto the case, making sure manual valve is engaged into the shifter lever, and loosely start all the bolts making sure the long and short bolts go back into their respective holes.
- 9- Tighten all bolts to 120 in lbs (10 ft lbs).
- 10- Plug in the connector for the shift solenoids (90 degree connector). Plug blue wire into trans brake connector and plug in remaining connector to the lock up solenoid (next to the shift solenoids). Install the eyelets (ground wire) under any valve body bolt. Carefully wire the external harness according to the table below*.
- 11- Re-install the filter.
- 12- Fill the transmission with four (4) quarts of ATF (MerconV). This level will be finalized after the vehicle is started and brought up to operating temperature.

This installation is complete. Finalize fluid level and check your wiring. **Remember you must press the transbrake button and have the shifter in (R) to back up.** Make sure the vehicle is stopped before transbrake is engaged.

*Wiring Code

- Transbrake/Reverse – white with yellow
- Overdrive – pink with black
- Lock-up - yellow