

Reprogramming Kit

555-60949

1992-2011 | Ford AODE, 4R70/75W,
& 4R70/75E Transmissions



JEGS.com

1-800-345-4545

Introduction

We would like to take this opportunity to thank you for purchasing this JEGS 1992 - 2011 Ford AODE, 4R70/75W, & 4R70/75E Transmission Reprogramming Kit. We welcome any comments or feedback you might have. If you have any questions about this product or about the installation procedure, please feel free to contact us at 1.800.345.4545.

Features:

- Firmer shifts
- Saves worn separator plates
- Will hold 1st and 2nd to any RPM, but will shift normally when in Drive. (Gear Command)

This kit is designed to address the following:

- Diagnostic Trouble Codes:
 - P0731, P0751, P0756, P1714, P1715
- Failure of the direct clutch
- 2nd roller failure
- 4th to 2nd kickdown
- 4th to 3rd bind-up
- 4th/Overdrive band failure
- Soft shifts (1st - 2nd, and 2nd - 3rd)
- High-pressure parts breakage

NOTE

INSTALLATION DOES NOT REQUIRE REMOVAL OF THE TRANSMISSION.

TO INSTALL ALL COMPONENTS OF THIS KIT, THE TRANSMISSION WILL NEED TO BE REMOVED.

CHECK FLUID LEVEL

- Remove and clean dipstick
- With dipstick removed
 - Start engine
 - Run at twice idle rpm for 10 seconds
 - Turn off engine
- Check fluid level
 - Level should be at top of Full mark when cold
 - Level should be no more than 1/4 in. above cross-hatches when hot

Information

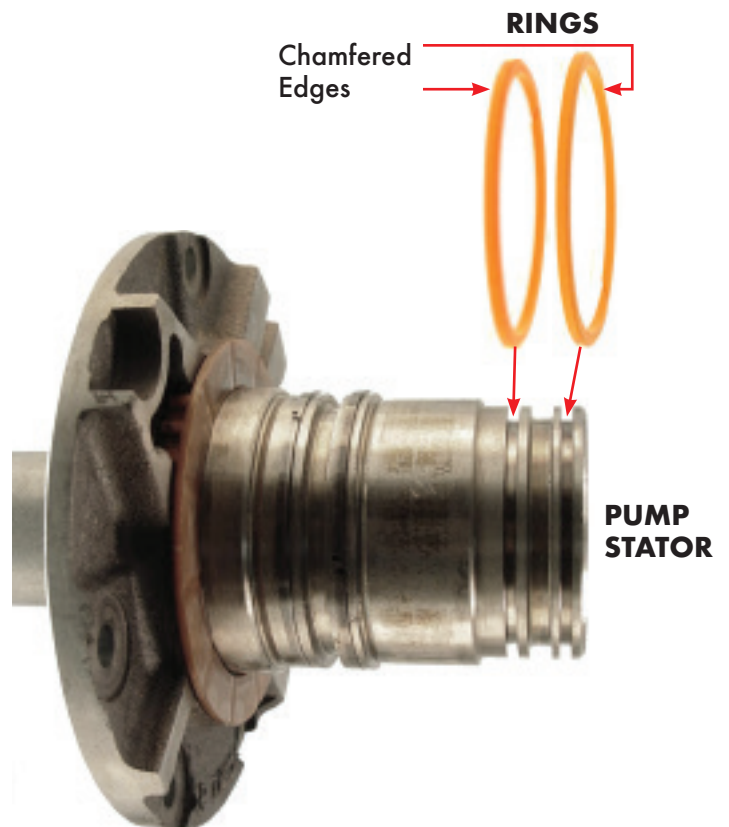
INSTALLATION WITH TRANSMISSION REMOVED

1992 - 2003

1. The installation of the supplied special rings will reduce the chance of accidental 4th band apply and burn-up.
2. The new rings have a slight chamfer on one side. When installing the rings make sure the chamfers face away from each other.

2004 - Up

1. If equipped with factory plastic-type rings reuse the original rings.
2. Late stator has narrower ring grooves.



Installation (4th Band & Servo)

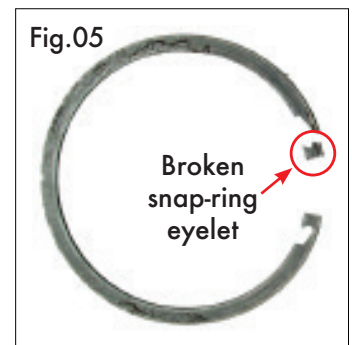
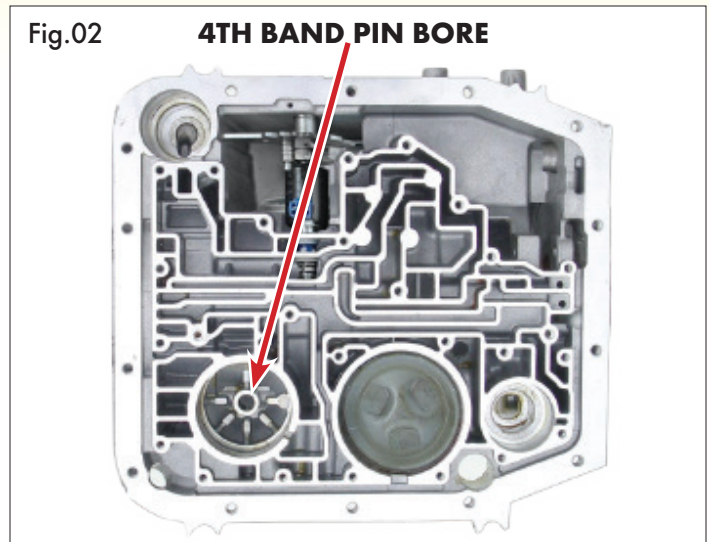
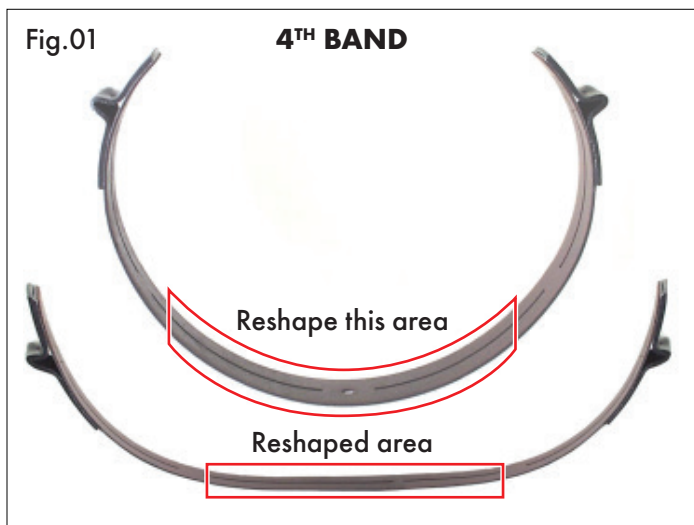
4TH BAND

(REQUIRES TRANSMISSION REMOVAL)

1. Reshape the band to ensure a quick release during the 4th-3rd downshift. (Fig. 01)
 - Flatten the mid-section of the band.
 - Leave a 5 in. section on either end alone
2. Inspect the 4th band pin bore (Fig. 02)
 - If the band is heavily worn, there is a chance the bore will be too.

SERVO

1. Small overdrive servo uses sleeve. (Fig. 03)
2. Large overdrive servo does not use a sleeve.
3. Disassemble the servo and check the piston and case for wear. (Fig. 04)
4. Always replace the overdrive servo piston with the same size as original. Increasing size may cause issues with the 4th-3rd and 3rd-4th shift.
5. A broken snap-ring eyelet can get stuck in the overdrive servo regulator valve. If this happens, it can cause neutral on the 3rd-4th shift. (Fig. 05)



Installation (2nd & 3rd Accumulators)

2ND ACCUMULATOR

1. Remove all old parts.
2. If your 2nd accumulator piston is steel and the rubber is soft & undamaged reuse it including the cover. Do not use pistons with hard or damaged seals or cover.
3. Install the inner & outer orange springs into small end of piston. Use ATF to lube the bore.
4. Insert the piston and orange springs into the case. The piston will hold itself into the bore.
5. Place the purple inner & outer springs, plus the solid spacer onto the cover before inserting them into case. Maintain pressure on the cover until snap-ring is reinstalled.

3RD ACCUMULATOR

1. If the point of the 3rd retainer touches the valve body separator plate, install the new spacer.
2. Use an assembly gel to get the spacer to stick to the retainer.
3. Bend the 3rd retainer tangs out slightly to hold it into the case.
4. Reuse the original accumulator spring.

NOTE
Aluminum 2nd accumulator pistons are not recommended due to their high failure rate. It is suggested to convert to steel.



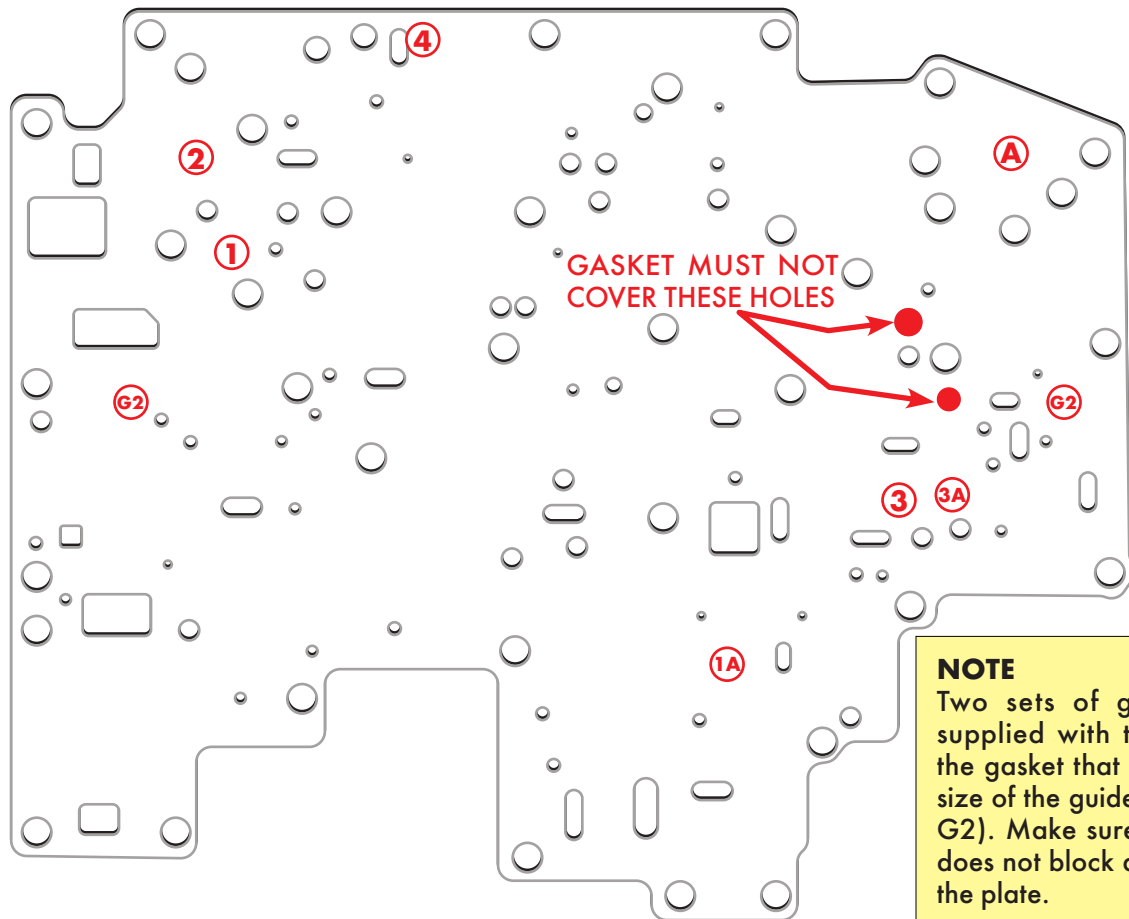
Installation (Plate Holes)

DRILL BIT SIZES (IN.) BY HOLE AND APPLICATIONS				
USAGE	HOLE 1 & 1A	HOLE 2	HOLE 3 & 3A ^c	HOLE 4
Mild Street Rod	0.055 in. ^B	0.076 (⁵ / ₆₄) in.	0.086-0.094 in.	0.055 in. ^D
Taxi	0.055 in. ^B	0.076 (⁵ / ₆₄) in.	0.086-0.094 in.	0.055 in. ^D
Towing	0.055 in. ^B	0.076 (⁵ / ₆₄) in.	0.086-0.094 in.	0.055 in. ^D
Police	0.055 in. ^B	0.076 (⁵ / ₆₄) in.	0.086-0.094 in.	0.055 in. ^D
Street Rod Stock Converter	0.055 in. ^B	0.086 in. (#44) ^A	Don't Drill	0.055 in. ^D
Hot Rod High Stall Converter	0.055 in. ^B	0.125 (¹ / ₈) in.	Don't Drill	0.055 in. ^D

- A. If you want a firmer shift use a 0.110 (⁷/₆₄) in. drill bit.
- B. Existing hole may be larger than the 0.055 in. size. This is fine.
- C. Fine if the existing hole is larger, or one hole is missing.
- D. Only drill hole if your plate has an existing hole in this location.

NOTE

Models without bolt-down plate "A" may have a small crack in the separate plate. The supplied spacer fits the pointed end of the 3rd accumulator retainer and allows for the damaged plate to be reused.



NOTE

Two sets of gaskets are supplied with this kit. Use the gasket that matches the size of the guide pins (G1 & G2). Make sure the gasket does not block any holes on the plate.

The combination of holes on this plate may vary by application and model.

Installation (Solenoid Regulator Valve)

SOLENOID REGULATOR VALVE

- Prior to installation use the unpainted spring to hone the new solenoid regulator valve.
 - In a repetitive motion slide the spring back and forth in the valve until the spring easily falls out.
 - Use a light side pressure during the break-in process.
- Discard the unpainted spring and install the solenoid regulator valve with the orange spring.

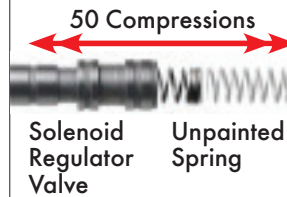
LOCKUP VALVE

- Spring replacement
 - 1991-1995 - Install the orange spring.
 - 1996-Up - Reuse the original spring.
- On all models install the new lockup bushing.

PRESSURE REGULATOR VALVE

- If your pressure regulator valve has a step at "A" install the supplied unit. If the original valve does not have this step reuse it.

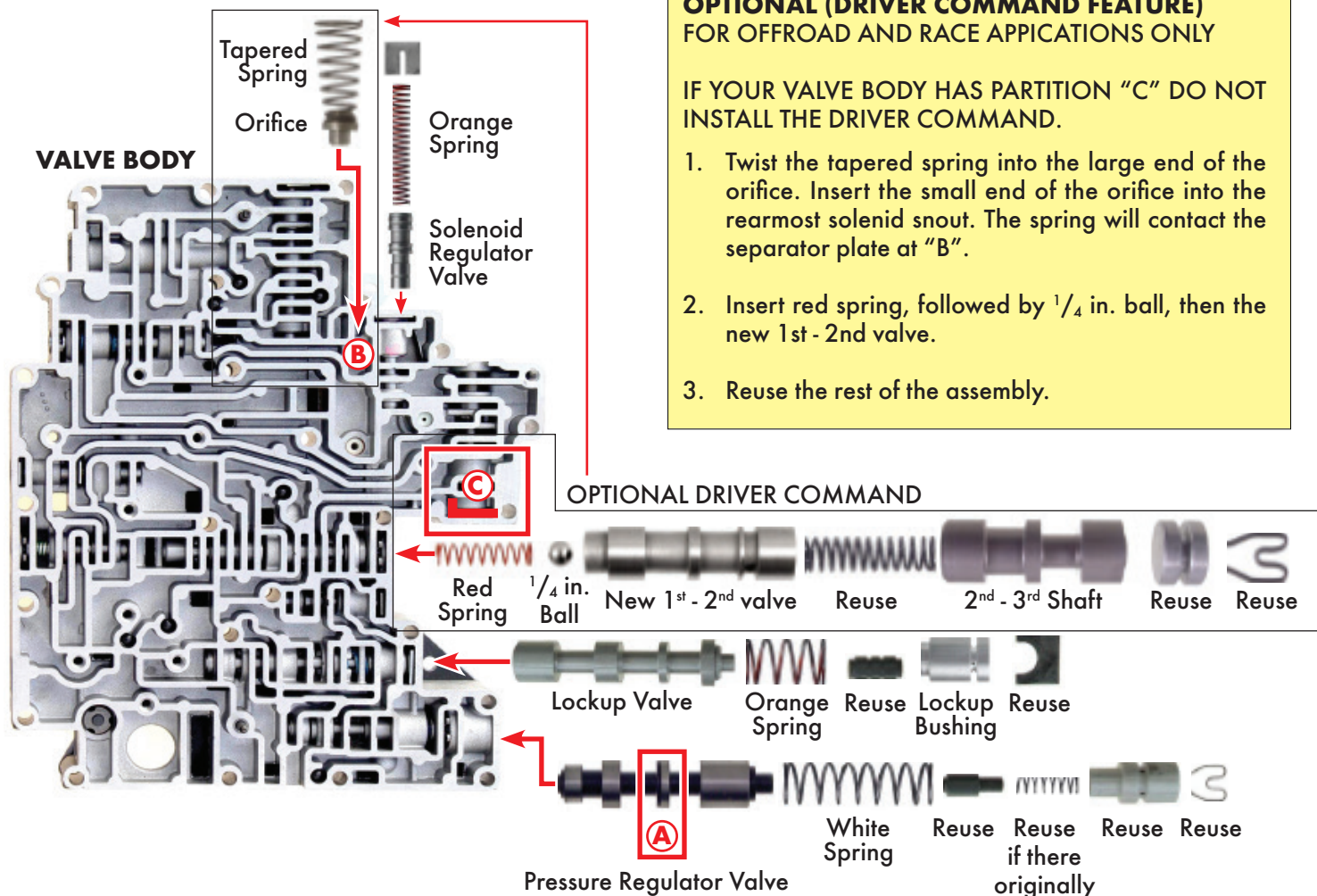
Solenoid Regulator Valve Honing



OPTIONAL (DRIVER COMMAND FEATURE) FOR OFFROAD AND RACE APPLICATIONS ONLY

IF YOUR VALVE BODY HAS PARTITION "C" DO NOT INSTALL THE DRIVER COMMAND.

- Twist the tapered spring into the large end of the orifice. Insert the small end of the orifice into the rearmost solenoid snout. The spring will contact the separator plate at "B".
- Insert red spring, followed by 1/4 in. ball, then the new 1st - 2nd valve.
- Reuse the rest of the assembly.



Installation (Valve Body)

- Use the supplied blue spring with the 3rd - 4th capacity, and the white spring with the low valve.
 - Both springs must be installed inboard of the retainer.

4TH BUSHING

- If your separator plate has hole #4, as shown in the diagram on Pg.4, your overdrive servo regulator should look like "A". Replace the original 4th bushing with the new bushing provided.
 - If your transmission's overdrive servo regulator does not match, or you do not have the #4 hole on your separator plate, do not install the new 4th bushing.
- The valve goes inside the new bushing.
- Reuse the spring and overdrive servo regulator.

MANUAL VALVE

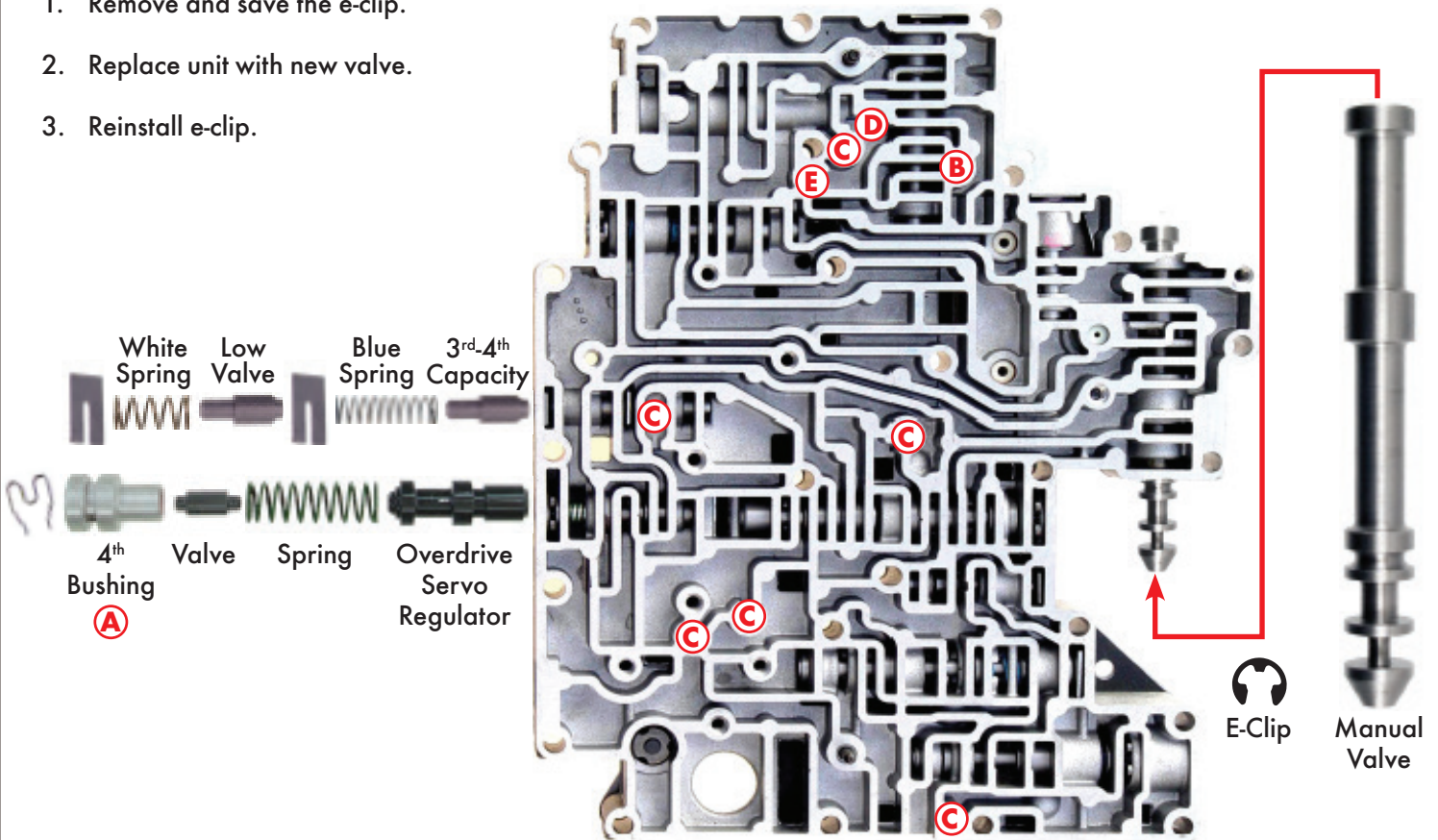
- Remove and save the e-clip.
- Replace unit with new valve.
- Reinstall e-clip.

CHECKBALLS

Follow the diagram on this page for checkball location. Checkballs are designated by "C".

There are eight 0.250 (1/4) in. plastic checkballs for normal use.

- For the firmest 2nd - 3rd shift do not install checkballs at locations marked "B".
 - This is primarily for hot rods with normal or high stall torque converters. (7 checkballs)
 - All other applications should install checkballs at "B" and "C" locations. (8 checkballs)
- Valve body checkball locations vary by Type 1 & 2.
 - Type 1 valve bodies have a checkball at "D"
 - Type 2 valve bodies have a checkball at "E"

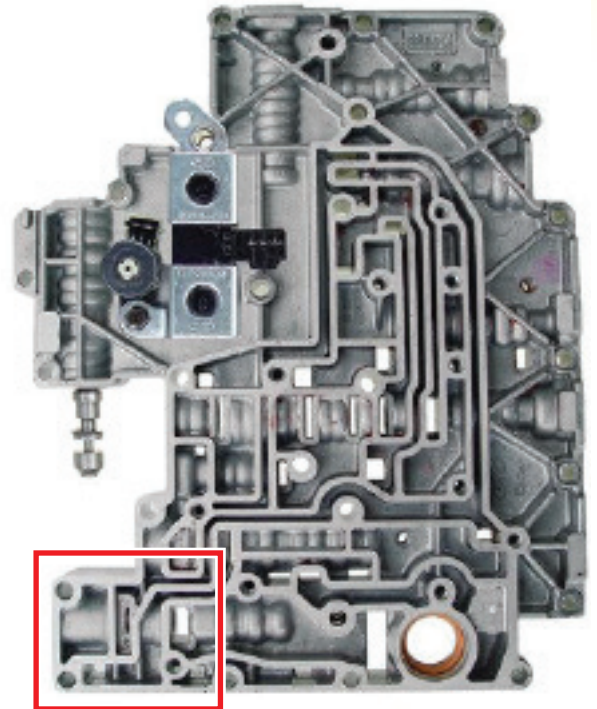


KEY: (B) No Checkball (C) Plastic Checkball (D) Type 1 Checkball (E) Type 2 Checkball

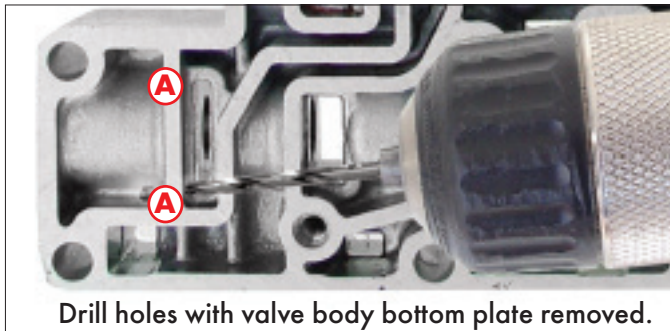
Installation (EPC Relief Valve)

The EPC relief valve corrects uncontrolled line pressure due to electrical malfunction, stuck EPC valve, or cross leaks. It will also reduce the accidental neutral condition, runaway, and the abrupt 2nd gear clutch engagement that can break the 2nd gear one-way sprag or mid-shaft.

1. Remove the valve body's thick bottom plate. Drill two 0.125 (1/8) in. holes through partition "A".
 - DO NOT allow the side of the drill bit to make contact with other partitions.
2. Reinstall bottom plate on valve body.
3. Install the purple spring on the valve. Push the valve's stem end, with the spring installed, through the bracket and temporarily secure it with a metal rod, or paperclip.
4. Bolt the bracket to the valve body thick bottom plate and remove the pin/paperclip.



VALVE BODY (PAN SIDE)

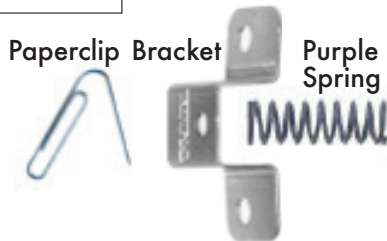


Drill holes with valve body bottom plate removed.



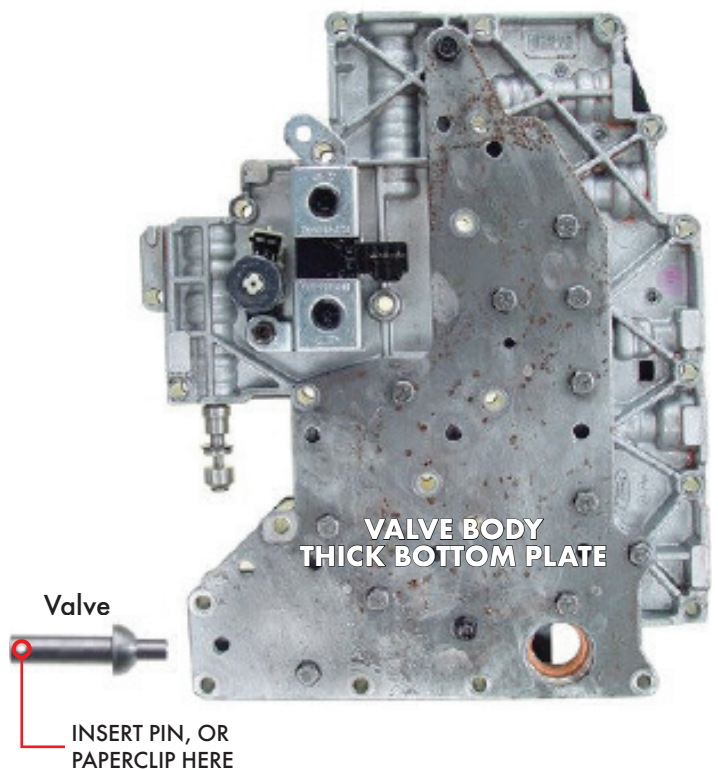
EPC RELIEF VALVE ASSEMBLY (COMPLETE)

EPC RELIEF VALVE ASSEMBLY



Paperclip Bracket

Purple Spring



VALVE BODY THICK BOTTOM PLATE

INSERT PIN, OR PAPERCLIP HERE