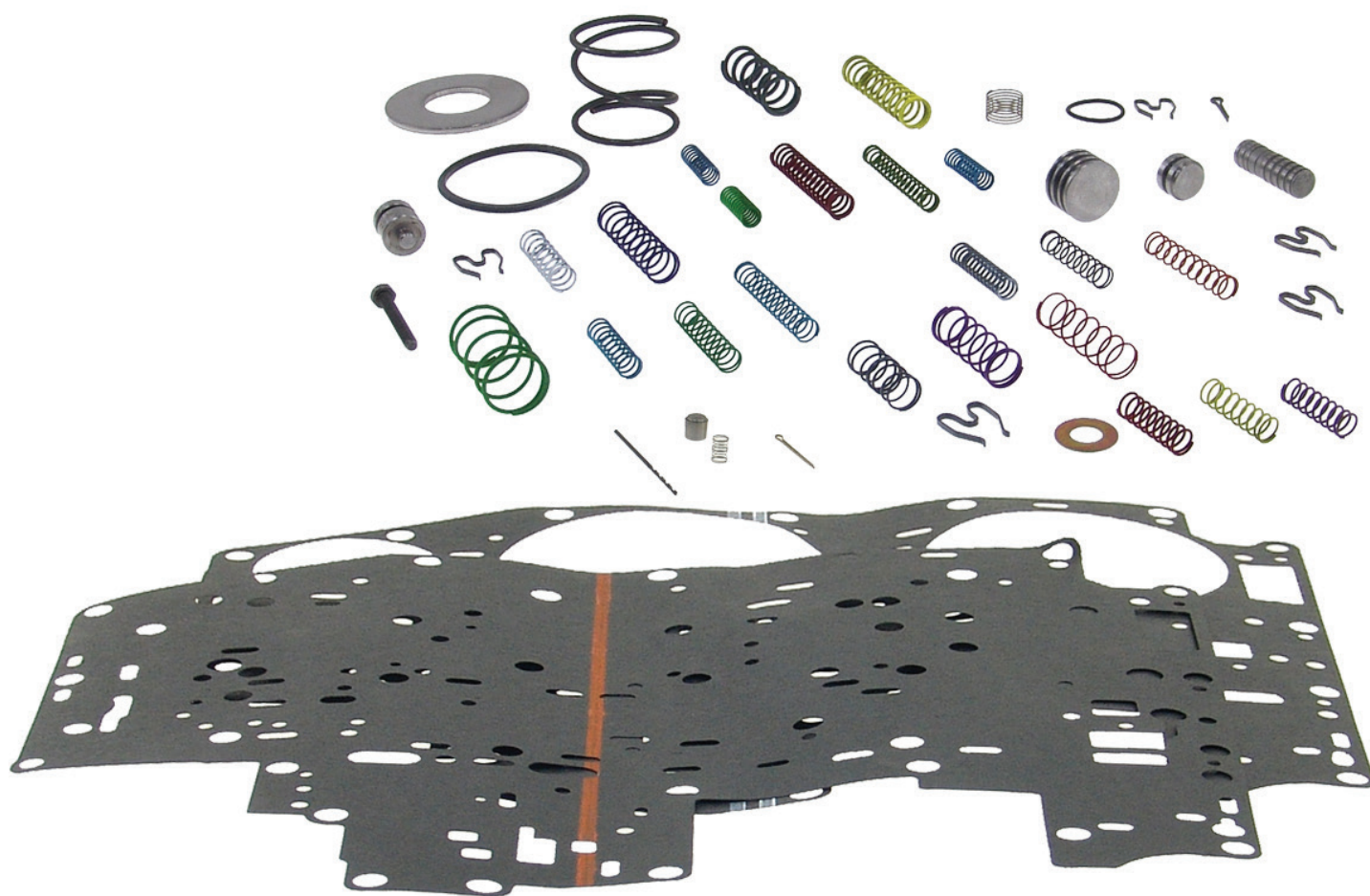


Shift Kit

555-60935

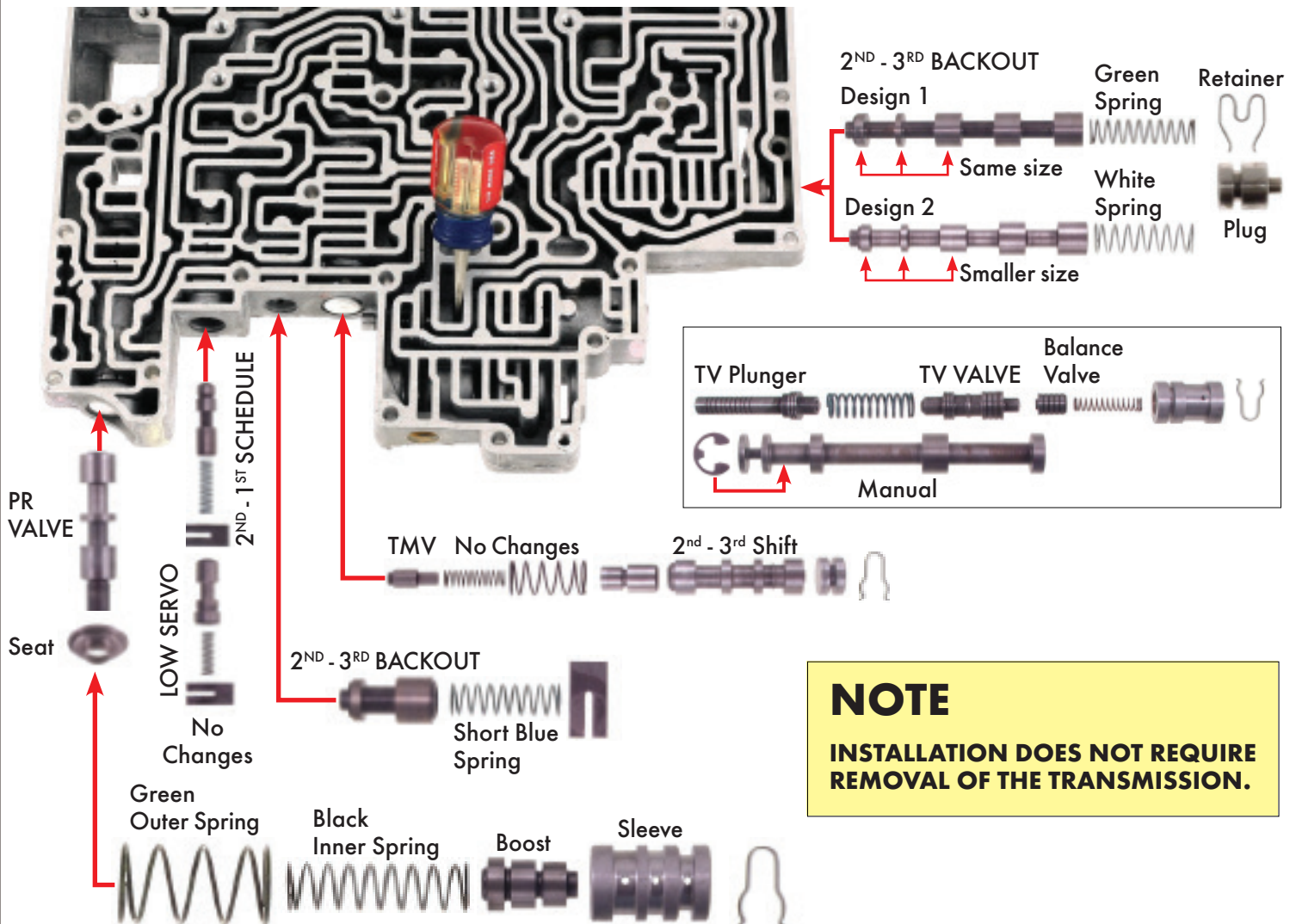
1980 - On | Ford AOD Automatic Transmission



Installation

1. The valve plugs are threaded for removal. This kit includes a 4mm bolt for this purpose.
2. Pressure Regulator Valve:
 - Green outer spring with black inner spring.
3. 3rd - 4th Backout Valve:
 - Install short blue spring
4. 2nd - 3rd Backout: Replace spring, plug and retainer
 - Design 1 (3 equal size lands): Green spring
 - Design 2 (3 smaller lands): White spring
5. TV Valve:
 - Do not over-adjust the throttle valve (TV) either way in an attempt to correct a bad shift. Adjust the TV until the start of the shift is where it should be. Then if the shift is too long or short, fix that shift.
 - Use a short screwdriver to hold the TV plunger in place if you are cleaning the 2nd - 3rd shift valve.
6. Reuse the original parts for the following valves:
 - Low Servo
 - 2nd - 3rd Shift
 - TV

VALVE BODY



Installation

1. 2nd - 3rd Capacity

- Ford built the AOD with 5 medium-capacity direct frictions (3rd). The repair quality and durability of the transmission is greatly improved with six or seven high-capacity fractions.
- The included washer is a sizing tool, do not install it.
- Washer fits on the end of the 2nd - 3rd Capacity valve.
 - 5 Frictions: Install green spring at "A"
 - 6-8 Frictions: Install yellow spring at "A"
- Washer does not fit on the 2nd - 3rd Capacity valve.
 - 5 Frictions: Install red spring at "A"
 - 6-8 Frictions: Install green spring at "A"
- Install white spring between Orifice Ctrl and plug.
- Install new clip

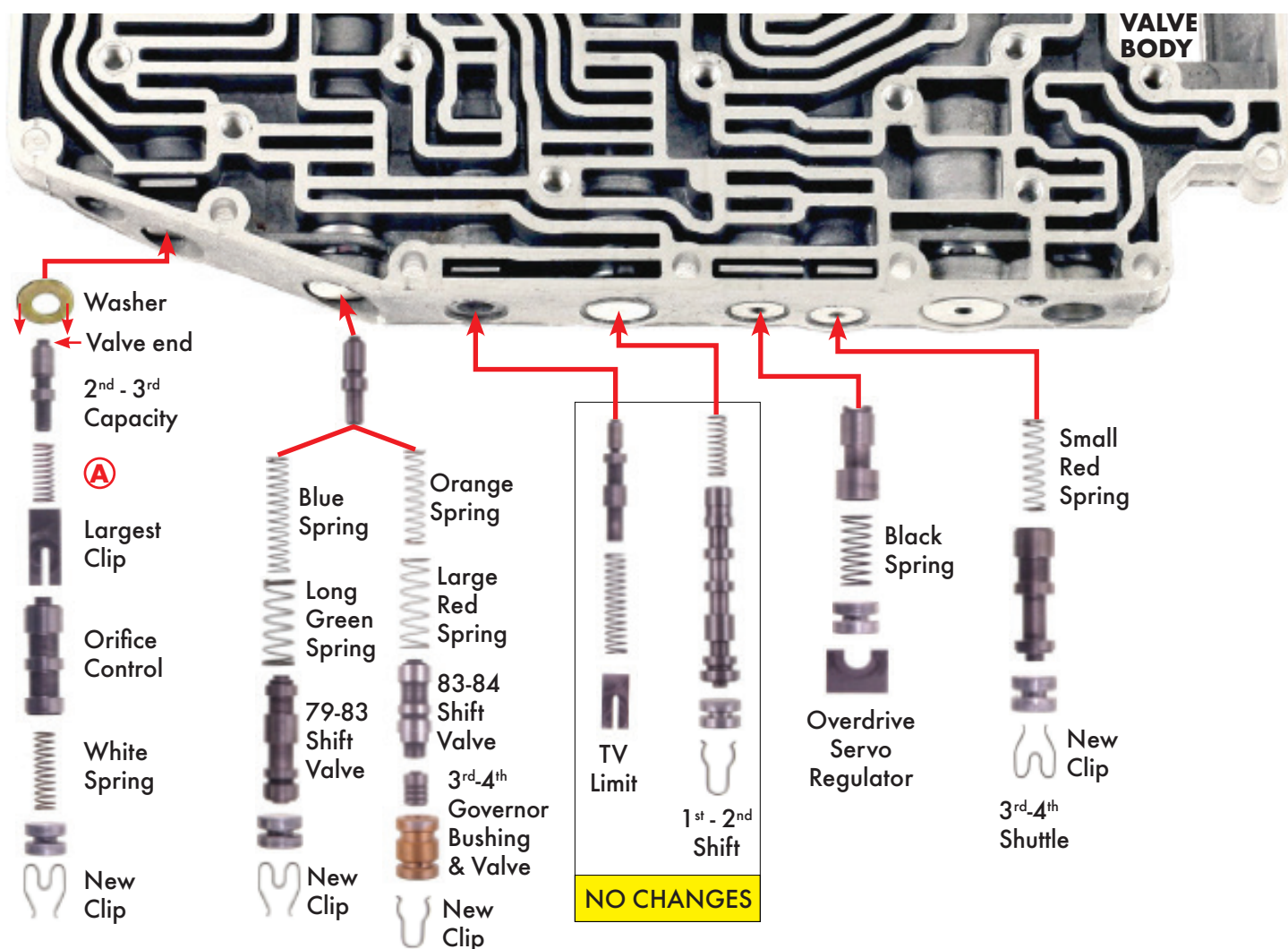
2. 3rd - 4th Shift Valve

- 1979 - Early 1983
 - Install long green outer spring with blue inner
- Late 1983 - 1985
 - Install large red outer spring with orange inner
- 1985 - Up
 - Reuse original springs
 - Install new clip

3. OD Servo Regulator: Install black spring

4. 3rd - 4th Shuttle

- Install small red spring
- Install new clip up through the bottom of the valve body.



Checkballs

1. 4-3-4 ORIFICE VALVE

- Install with the shiny spring into the hollow end of the flat orifice end facing up at the plate.
- Replaces a checkball

2. CHECKBALLS

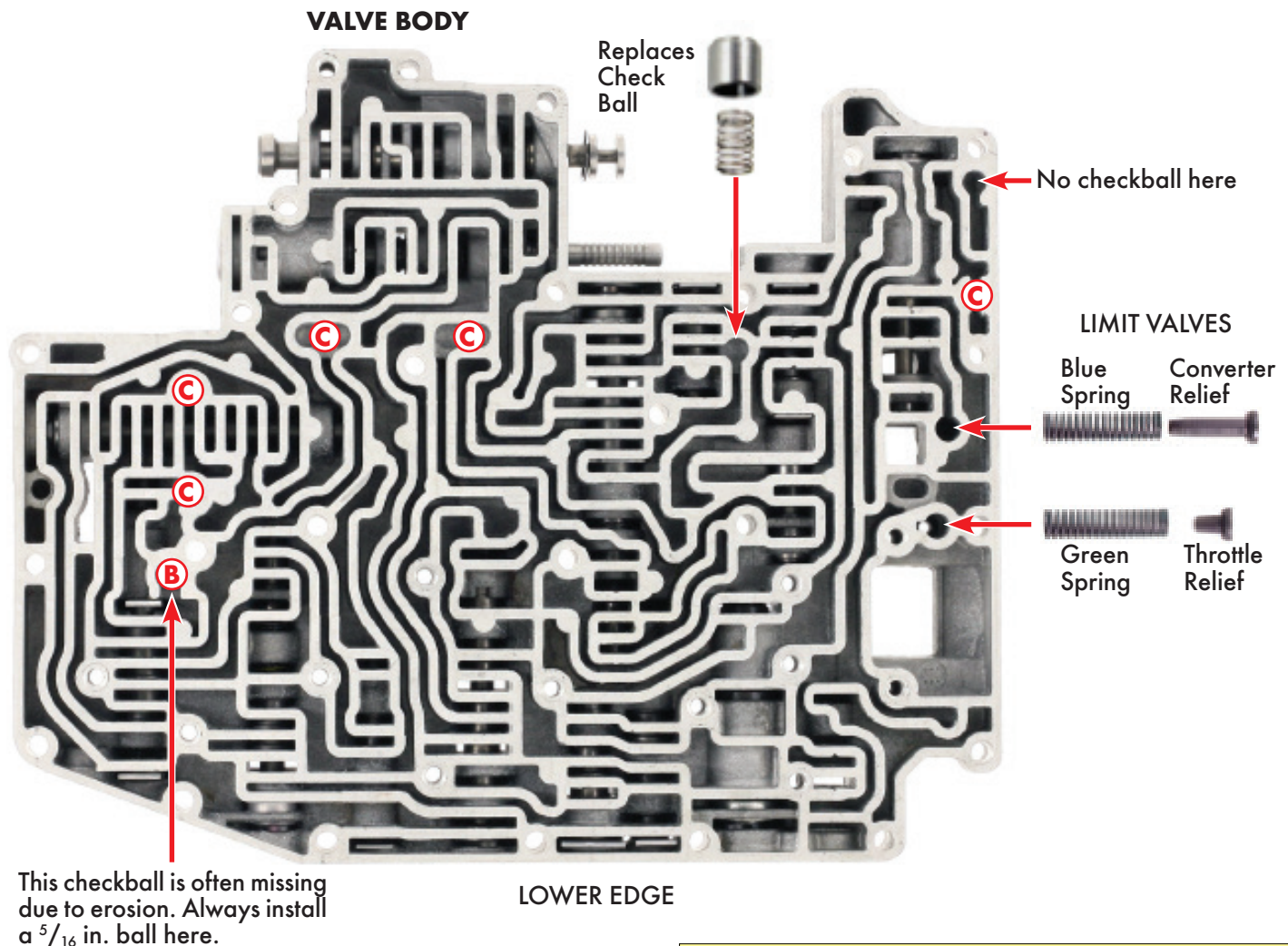
- (1) $\frac{5}{16}$ in. ball
- (5) $\frac{1}{4}$ in. balls

3. LIMIT VALVES

- Reinstall original springs and valves. Early model may have a short valve which is fine.
- Both springs are the same.

4. VALVE BODY GASKET

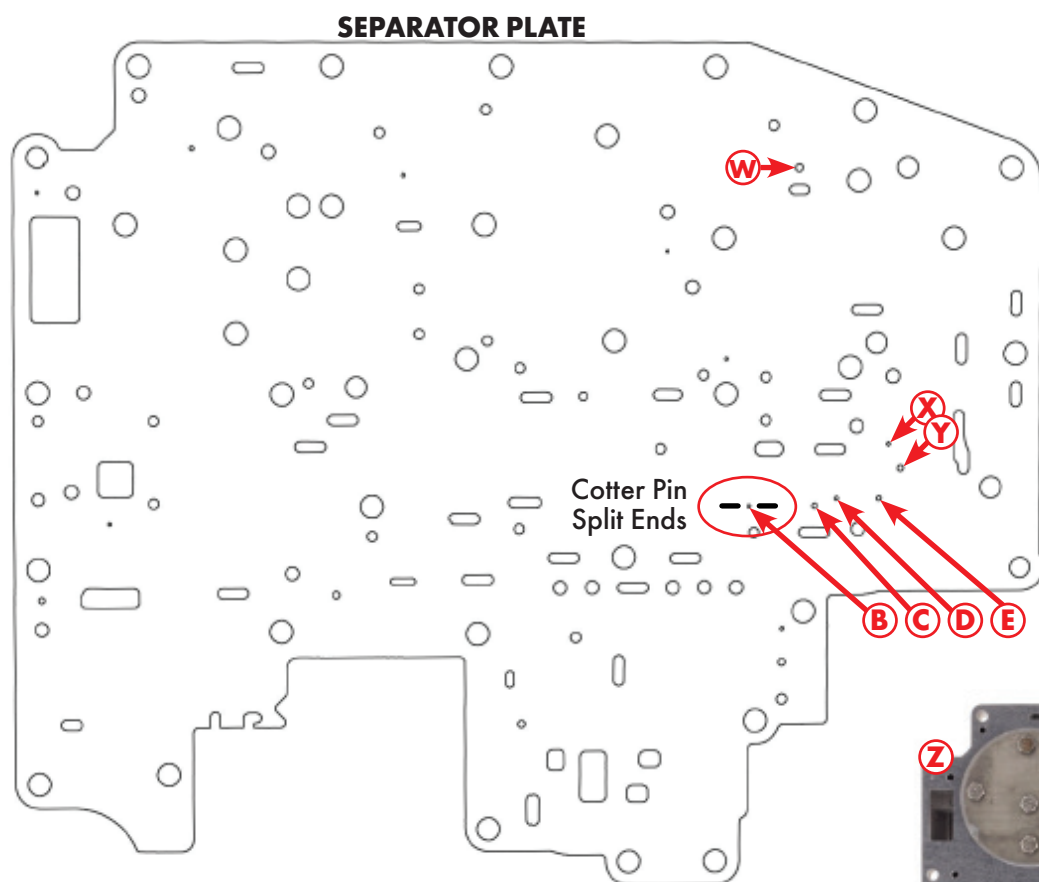
- Line the valve body gasket up on the 4-3-4 orifice valve. The valve body gasket may overhang the bolt holes on the lower edge. After installing the separator plate cover plates, make sure the 4-3-4 orifice valve moves freely and always contacts the separator plate when released.



KEY: **C** $\frac{1}{4}$ in. Checkball **B** $\frac{5}{16}$ in. Checkball

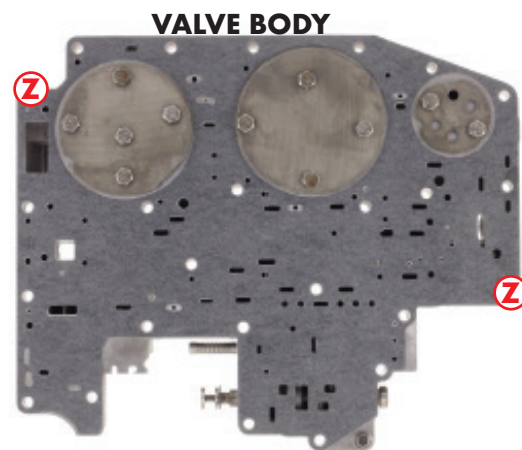
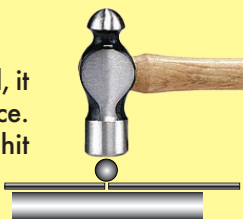
Separator Plate

1. If the plate has a round hole at "W" drill it to 0.086-0.093 in.
2. If the plate has a hole at "X" use a center punch around the hole to peen it closed.
3. If the plate has a hole at "Y" drill it to 0.093-0.099 in.
4. Holes "B", "C", "D", & "E"
 - Drill with the included 0.055 in. bit.
 - If the hole is larger than 0.055 in. reduce the size of the hole (See the diagram below) and drill to 0.055 in.
5. Hole "B"
 - Install the supplied cotter pin through the hole.
 - Bend the split ends and cut them short so that they will fit through the hole in the gasket.
 - Rotate the cotter pin so that the split ends are horizontal as shown below.
6. "Z" marks the alignment holes that are used when putting the plate and valve body together.



NOTE

If a hole on the separate plate is larger than needed, it can be adjusted. Place the plate on a hardened surface. Put a steel ball on the hole to be made smaller & hit the ball with a light hammer. Re-drill to size.



Pistons

4TH ACCUMULATOR (If Equipped)

1. If your 4th accumulator contains a spring, discard it and use the plain spring provided.
2. For transmissions that do not originally have a 4th accumulator spring, install the supplied plain spring.
3. Check seals for damage

3RD ACCUMULATOR

1. Aluminum Piston
 - If the o-ring and piston are in ok, reuse them.
 - Install the new green inner spring.
 - Reuse the outer spring.
2. Bonded Rubber Piston
 - Check that the rubber is not hard, torn, or worn. Replace if it is. Otherwise reuse.
 - Install the new green inner spring.
 - Reuse the outer spring
 - Bend retainer tangs slightly outward to hold it in the case.
3. Plastic Piston
 - Install new seal on the piston with the chamfered edge facing outward.
 - Install the new green inner spring.
 - Reuse the outer spring.

3RD ACCUMULATOR

	ALUMINUM	BONDED RUBBER	PLASTIC
Piston			
Outer Spring Reuse			
Green Inner Spring			
			

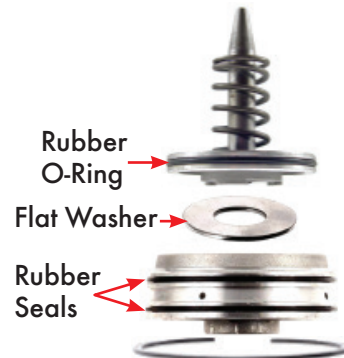
OVERDRIVE (OD) SERVO

1. Install the new flat washer between the piston and cover.
2. Reinstalling the piston into the case.
 - It is easy to miss the pin when installing the OD servo piston. Doing so will result in neutral instead of 4th.
 - Before installing the piston reach past the rooster comb with a screwdriver and rotate the band toward the servo to set it against the anchor pin.
 - Insert a thin screwdriver through the slot next to the servo and push the band toward the top of the case and hold it there while you install the piston and cover.
 - If the OD servo cover won't install with the washer in place remove the washer and reassemble.
 - With the washer installed move the band front to back to check clearance. There should be $\frac{1}{16}$ in. of play.
 - If the band drags, remove the piston and grind $\frac{1}{32}$ in. off the tip of the pin and recheck your clearance.

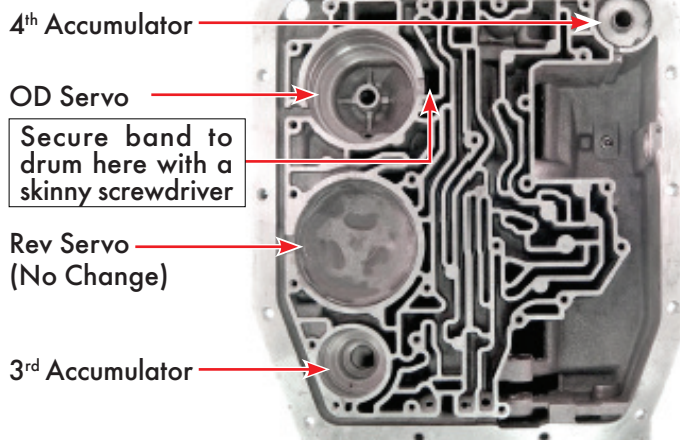
4TH ACCUMULATOR



OD SERVO



CASE



Adjustments

TV ADJUSTMENT (ROD TYPE)

1. Remove the air cleaner. Have someone floor the gas pedal while you bend the throttle cable bracket, until the butterfly arm bottoms firmly on it's stop.
2. Turn the adjustment screw "IN" until 13 threads are sticking out the front of the adjuster arm. Approx $7/16$ in.
3. Start the engine with the A/C off, and leave it off.
4. While the engine is idling, loosen the adjustment bolt on the arm on the side of the transmission with a 13mm socket, one full turn. Push the arm UP (towards the top of the car) gently and tighten the bolt.
5. Now go back to the top adjustment and back it off 13 turns.
6. Place the selector in the "3" position and cruise at 45 MPH. Floor the throttle, you will notice you do not have a 3-2 kick-down. Turn adjustment screw in exactly one turn at a time, until you have kick-down at 45 mph. Then turn the screw in 3 more turns and you will be in the middle of the TV adjustment.
7. Now road test for shift feel and timing. You can adjust it two turns from here either "IN" or "OUT", to improve shift quality.
8. Reinstall the air cleaner.

TV ADJUSTMENT (ROD TYPE)

1. Install a 100psi pressure gauge on the TV port located on the passenger side of the transmission towards the middle and just above the pan gasket. There are two taps side by side. Use the one that is recessed inward towards the gear train more.
2. Bring the gauge up to the engine bay & tie it up safely so you can drive the car with the gauge left on to make adjustments.
3. You need the spacer tool or make your own. Take a $5/16$ bolt and grind two flats 180° apart from each other on the threaded end until the total thickness between the flats is 0.250 in. Using a exhaust cutoff wheel or hack saw, make a slot for the cable that will pass through the center of both flats.
4. Locate the crimped end of the bare cable that is sticking out of the plastic. Its in front of where it hooks to the throttle arm. Gently pull on the crimp exposing the bare cable and insert the slotted spacer onto the cable. Effectively it's holding the cable out 0.250 in.
5. Release the cable lock and adjust the cable until the pressure gauge reads approx 28psi to start. Remove spacer & road test. Range with our kit installed is 24 to 40psi. Don't go below 24psi. Also, you must have a 3-2 kickdown at 45mph in the D3 position.
6. To adjust shift points
 - Lower the TV pressure = Earlier shifts

