



H I G H P E R F O R M A N C E T R A N S M I S S I O N P A R T S

4L60-E ('94-UP) & 4L65-E

PERFORMANCE PACK

FULL COMPATIBILITY

- Works in all 4L60-E (1994-Up) and 4L65-E units

Part No.

HP-4L60E-01

PUMP PARTS INCLUDE:

Boost Valve with O-Ring, .490"
Elevated Pressure Regulator Spring
High RPM Pump Slide Spring
1 Spacer

SERVO PARTS INCLUDE:

4th Servo Return Spring
Servo Cushion Spring
Servo Piston D-Ring Kit

CASE PARTS INCLUDE:

3-4 Accumulator Piston Kit
3-4 Accumulator Spring
Servo Release Check Valve

VALVE BODY PARTS INCLUDE:

Forward Accumulator Kit
Accumulator Valve Shim
Twist Drills

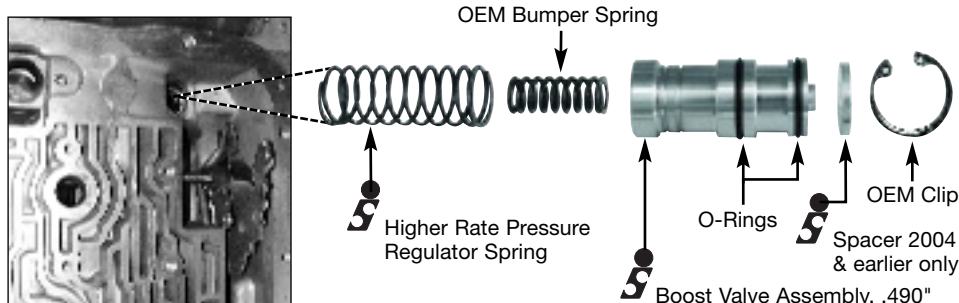
ACCUMULATOR PARTS INCLUDE:

1-2 Pinless Accumulator Piston Kit
1-2 Accumulator Inner Spring
1-2 Accumulator Outer Spring
1-2 Accumulator Waved Spring
Accumulator Housing Spacer

Note: For more radical applications and even greater levels of performance, combine this kit with the Sonnax 1-2 & 4th "Super Hold" Servos. Order **77911-03K** for 1-2 and **77767K** for 4th.



PRESSURE REGULATOR BOOST VALVE & SPRING

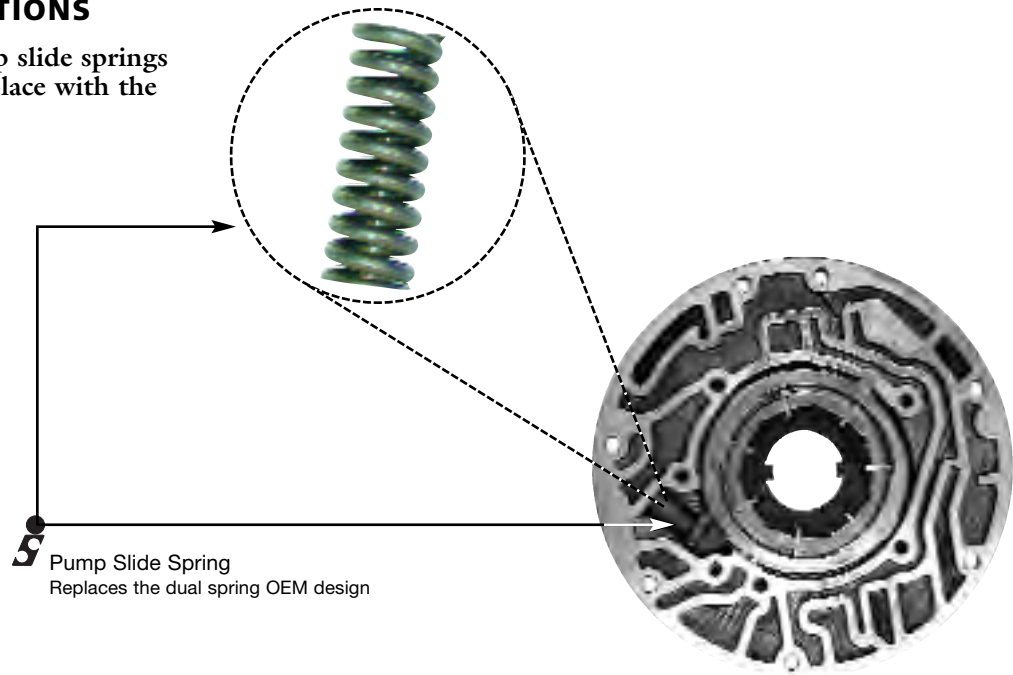


1. Remove original boost sleeve and springs. The original boost valve sleeve comes in two lengths, depending on year. The 1994-2004 boost sleeve is longer (1.907") and should be replaced with the boost sleeve AND included spacer. The additional spacer **MUST** be installed in the earlier applications or transmission failure will result. For 2005-up applications with 1.810" long original boost sleeve, do **NOT** use the included spacer.
2. After placing the two o-rings into the grooves on the boost sleeve, pre-lube them and roll sleeve over bench to resize the o-ring. Assemble correct boost sleeve/spacer combination, original bumper spring and included higher rate pressure regulator spring.
3. Insert the valve into sleeve with the nubbed end facing out.
4. Carefully push the sleeve assembly into the pump body, with the open end toward the two springs, only deep enough to reinstall the retaining ring.
5. Return the retaining clip to the pump body.

PUMP SLIDE SPRING

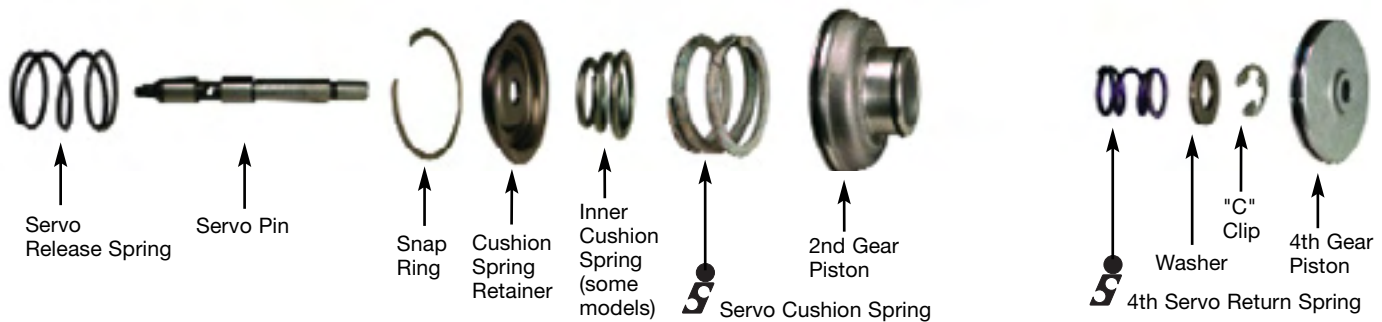
INSTALLATION INSTRUCTIONS

Remove both of the OEM pump slide springs from the pump housing and replace with the Sonnax spring.

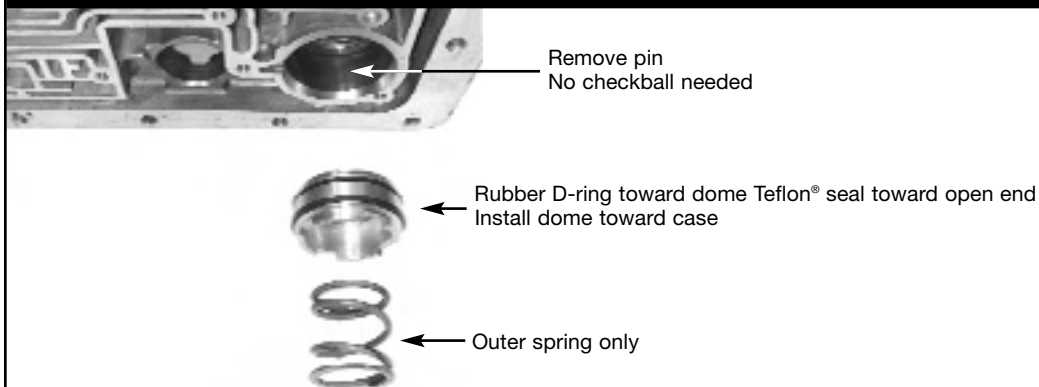


SERVO

1. Remove the OEM servo cushion spring and replace with the Sonnax servo cushion spring.
2. Reinstall the OEM conical inner cushion spring if used in your application.
3. Replace the OEM 4th servo return spring under the washer and C-clip with the Sonnax 4th servo return spring.
4. Install rubber D-rings onto servos. Ensure seals are not twisted in groove.



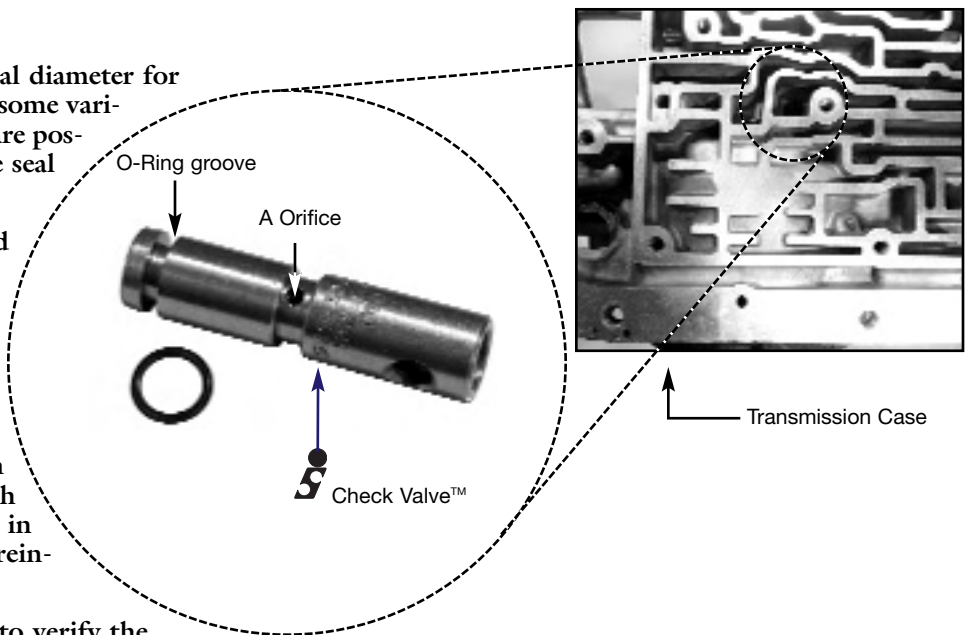
PINLESS 3-4 ACCUMULATOR



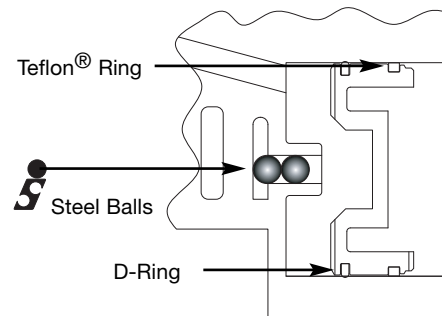
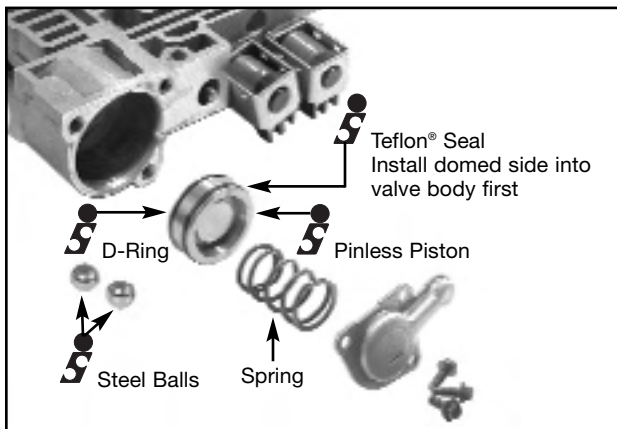
3RD ACCUMULATOR CHECK VALVE

INSTALLATION INSTRUCTIONS

1. The bore in the case is not a critical diameter for OEM manufacturing purposes, so some variations in the fit of the check valve are possible. The o-ring ensures a positive seal in cases with larger bores.
2. The check valve is installed between the OEM checkball capsule and the separator plate. The check valve **DOES NOT** replace the OEM checkball capsule.
3. Install the check valve, tapered end first, into the case. If resistance is felt, tap the check valve in until flush or just below flush with the case. If it slides all the way in without resistance, remove and reinstall with the o-ring.
4. Run a straight edge over the case to verify the check valve is not sticking up above the case gasket surface.



PINLESS FORWARD ACCUMULATOR

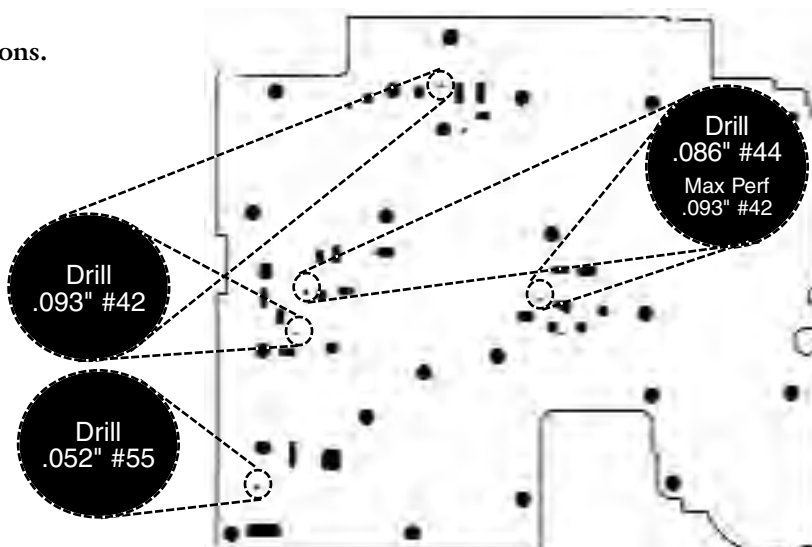


INSTALLATION INSTRUCTIONS

1. Remove OEM piston, pin and seal and discard. (Do not reuse the OEM D-ring seal.)
2. Plug the pin bore in bottom of accumulator bore by installing both the Sonnax steel balls as shown above. Lightly stake the pin bore after pressing in the balls.

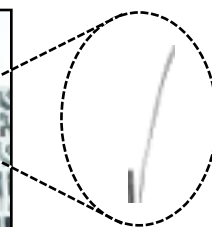
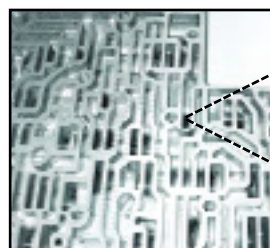
SEPARATOR PLATE

1. Drill the plate as indicated at right.
2. Install 8 plastic checkballs in original locations.



1-2 ACCUMULATOR VALVE SHIM

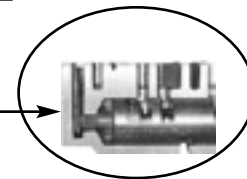
1. Reuse original accumulator valve spring.
2. Install shim into sleeve pocket. This can be done by removing the accumulator valve or by simply inserting the shim between the spring and the end of the bore using a feeler gauge as an installation tool (see figures at right and below).



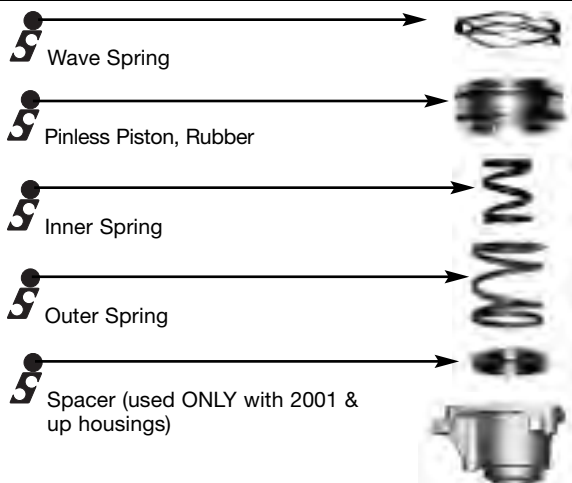
Use feeler gauge or lip seal installer to install shim without removing accumulator valve sleeve.



Shim installed



PINLESS 1-2 ACCUMULATOR



1. Remove piston pin from the 1-2 accumulator housing.
2. Plug pin hole by driving one of the steel checkballs provided into the hole.
3. Stake ball in place.
4. Install rubber D-rings toward dome, with Teflon® seal toward open end.
5. Install piston with dome toward plate.

2001 & up
Use spacer ONLY
with this housing

1994-2000
Do not use
spacer

1993
Do not use kit
with this housing