MITSUBISHI*

PART NUMBERS 41954-01K, F-41954-TL

Oversized Pressure Regulator Valve

41954-01K

1 Pressure Regulator Valve

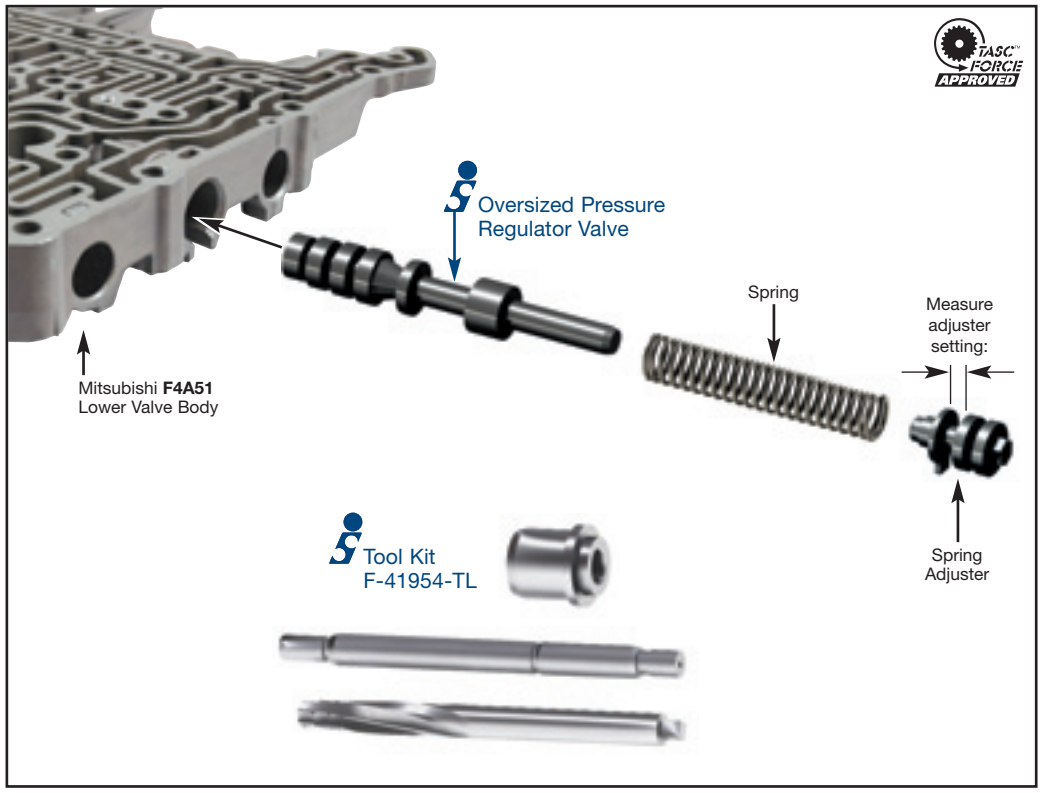
TOOL REQUIRED

F-41954-TL

1 Reamer
1 Reamer Jig
1 Guide Pin

VALVE BODY FIXTURE REQUIRED

***Note:** May be used in Mitsubishi Front Wheel Drive valve bodies including: F4A41/42/51, F5A51, A5HF1 & A5GF1; 1996 - Up. However, OEM valve spool diameters MUST be measured to verify application. CANNOT be use in Rear Wheel or All Wheel Drive units.



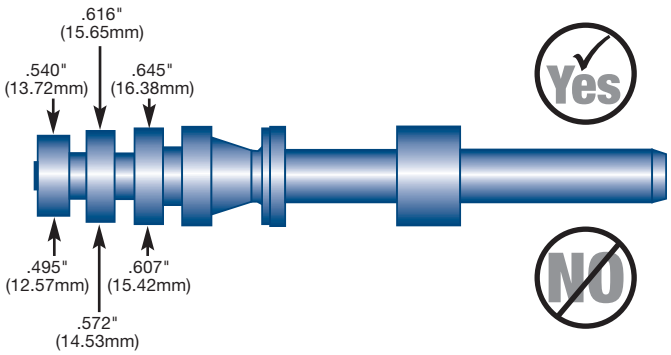
Notes or Cautions:

Oversized Pressure Regulator Valve **41954-01K** may be used in Mitsubishi F4A41/42/51, F5A51, A5GF1 Front Wheel Drive valve bodies. However, valve spool diameters MUST be measured to verify application.

Disassembly Steps:

Remove the retainer and OEM spring adjuster, without turning the adjuster screw. Measure and record the adjuster setting as shown above in main photo. Remove spring and pressure regulator valve. Discard pressure regulator valve only.

The OEM valve spool diameters ***MUST*** be measured to verify application. Sonnax valve will replace OEM valve matching these top measurements:



Do ***NOT*** use Sonnax valve to replace OEM valve if the valve spool diameters match these bottom measurements:

Important Notes:

- **OEM valve spool diameters MUST be verified BEFORE Reaming.**
- Clean the bore thoroughly in a solvent tank.
- Generously lubricate the bore and reamer with cutting fluid (i.e. Mobilmet S-122, Lubegard Bio-Tap, Tap Magic™, etc). For best results, provide a continuous flow of water-soluble cutting fluid (i.e. Mobilmet S-122) during the reaming process.
- The reamer should be turned using a low rpm, high torque air drill regulated to a maximum of 200 rpm.
- Examine the bore after cleaning for surface finish, debris, and burrs. Flashing and burrs on the exit side of lands and bores must be carefully removed. A small piece of Scotchbrite™ material attached to a wire and powered with a drill motor is ideal for the task.

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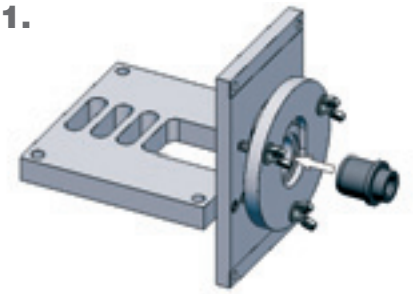
PART NUMBERS **41954-01K, F-41954-TL**

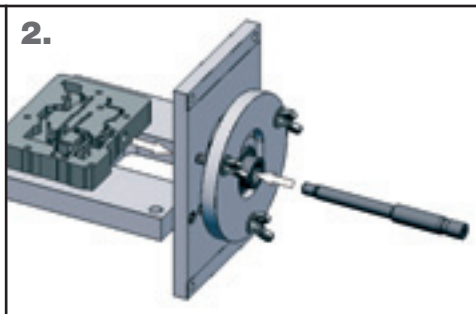
Reaming Steps:

1.



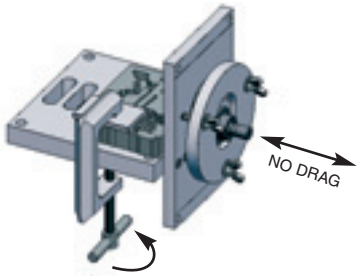
Insert the reamer jig.

2.



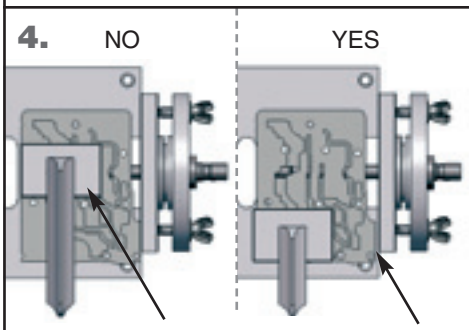
Align the guide pin and valve body.

3.



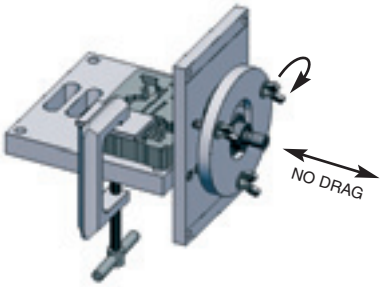
Tighten the clamp.
Guide pin must move freely.

4.



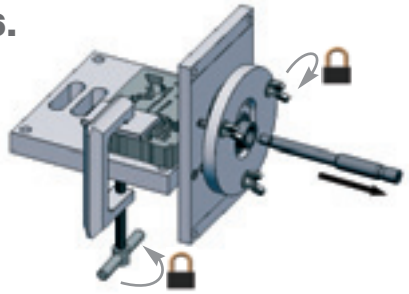
Do not clamp over bore. Leave gap.

5.



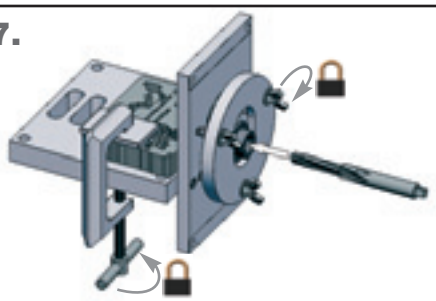
Tighten wing nuts.
Guide pin must move freely.

6.



Remove guide pin.
Do not loosen clamp or wing nuts.

7.

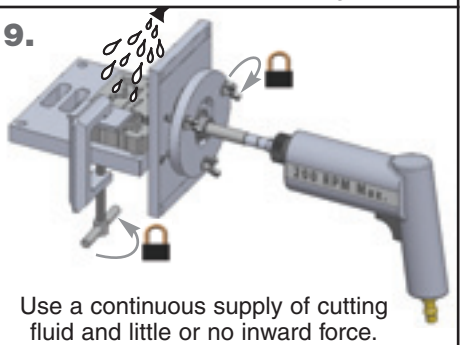


Insert the reamer.

8.

Use a loose fitting reamer socket,
a wobble adapter and a regulated air drill.

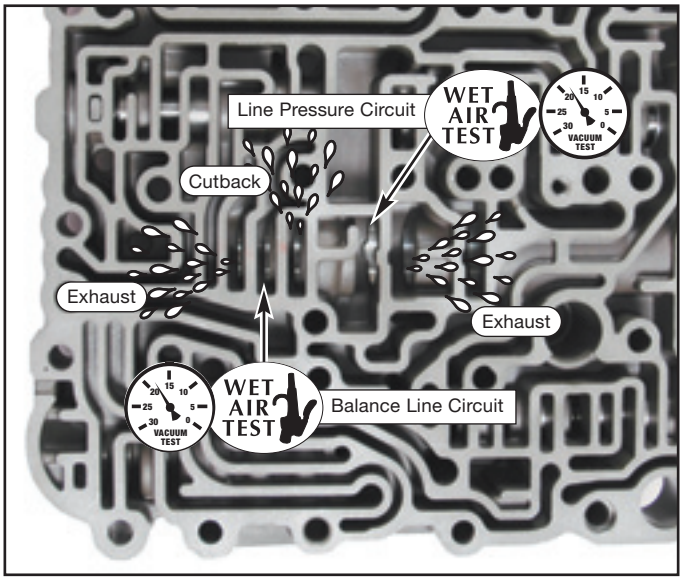
9.



Use a continuous supply of cutting
fluid and little or no inward force.

Installation/Assembly Steps:

1. Discard the OEM pressure regulator valve.
2. Re-use the OEM spring, spring adjuster and retainer.
3. Install the new oversized pressure regulator valve.
4. Install the OEM pressure regulator spring.
5. Before installing the adjuster, verify that it is set to the measurement noted during disassembly. If that setting is not known, set the spring adjuster assembly to .25" (6.35mm). Pressure must be verified after repair. One revolution of the adjuster will change idle pressure by approximately 5 PSI.
6. Install the spring adjuster.
7. Install retainer.



Final Verification Steps:

1. Perform a Wet Air Test or Vacuum Test as indicated at right. No leakage should occur during a WAT. A vacuum test should hold at least 18" of vacuum or more to pass.
2. Line pressure should be verified after repair. Pressure should be: D1 - 145 psi at idle; R - 185 idle, 260 max.