

Forward Engagement Valve Kit

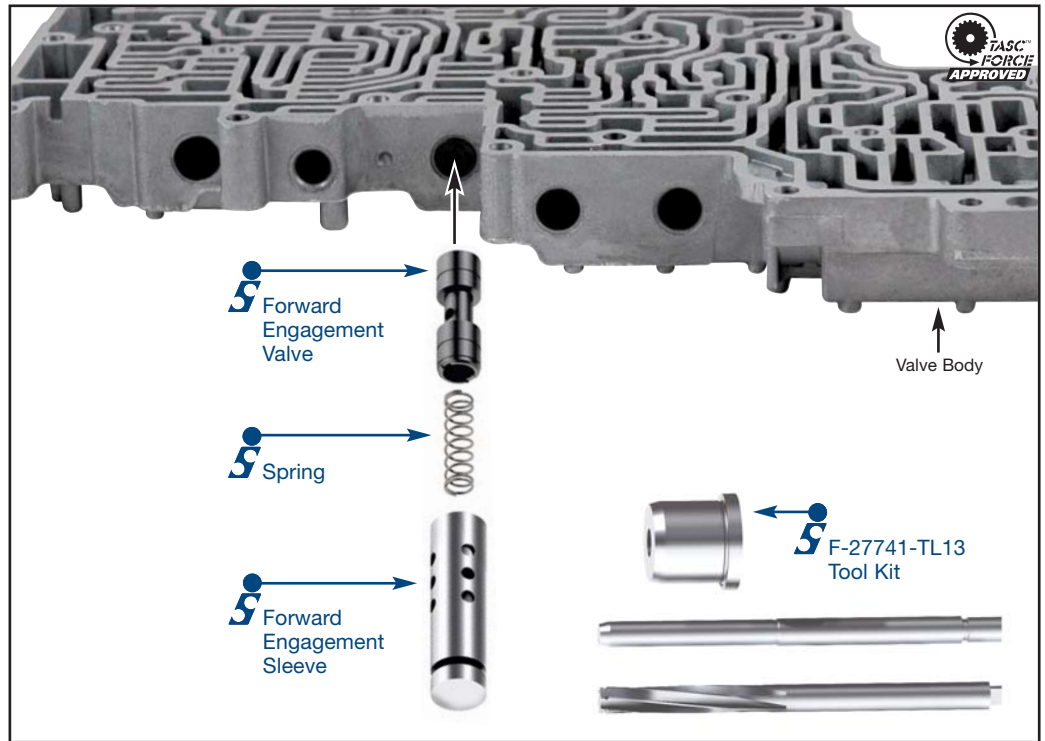
56947J-26K

1 Valve
1 Sleeve
1 Spring



F-27741-TL13

1 Reamer
1 Guide Pin
1 Reamer Jig



Disassembly Steps

1. Remove and discard OEM valve, spring and end-plug.
2. Keep the OEM retaining clip for re-use.

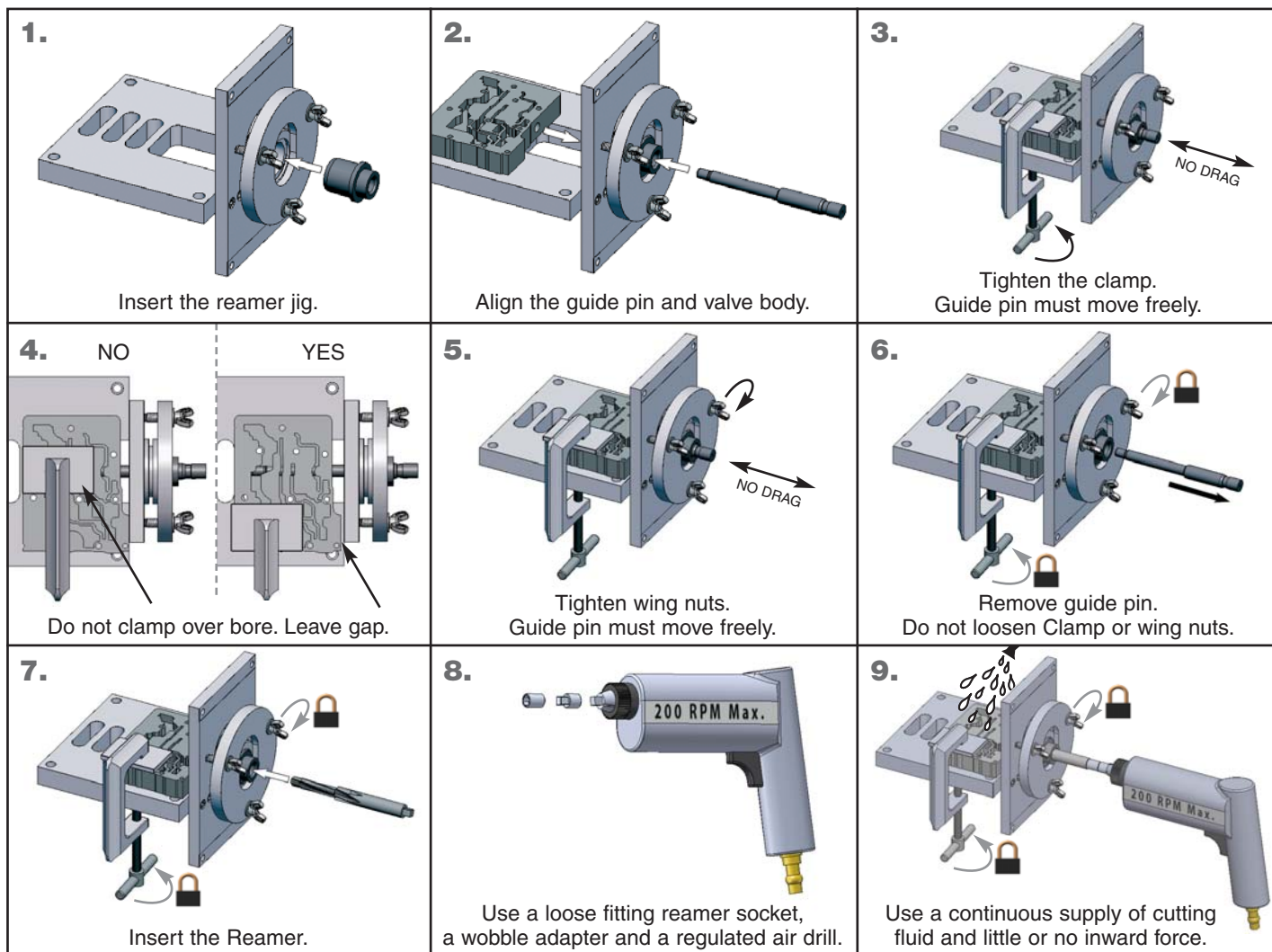
Important Notes

1. Clean the bore thoroughly in a solvent tank.
2. 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.
3. The reamers should be turned using a low rpm, high torque air drill regulated to a maximum of 200 rpm.
4. 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.

Reaming Instructions

See next page

Reaming Instructions



Cautions and Suggestions

- Turning the reamer backward will dull it prematurely.
- Pushing on the reamer will result in poor surface finish and inadequate and sporadic material removal.
- Never use a crescent wrench, ratchet or pliers to turn the reamer.
- A dull reamer will cut a smaller hole. Reamers can be sharpened, but should only be done by a professional tool sharpener. Actual life of a reamer before resharpening or replacing averages 50-70 bores.

Installation/Assembly Steps

- Place the replacement spring into the valve spring picket.
- Install the valve/spring into the sleeve, spring end first.
- Push valve/sleeve/spring assembly into the bore, until OEM retaining clip can be re-installed into sleeve groove.

Final Verification Steps

Wet Air Test at the VFS2 feed port should have no leakage past the valve spool and out the D321 port. Wet Air Test at the VFS1 modulator port should have no leakage past the valve spool and out the balance or FWCF ports. Vacuum testing at the VFS2 or VFS1 ports should reach a minimum of 18" vacuum.

