

## Oversized Pump Flow Control Valve

### 113741-07



1 Oversized Pump Flow Control Valve

**NOTE:** Fits JF010E only

### F-113741-TL7C

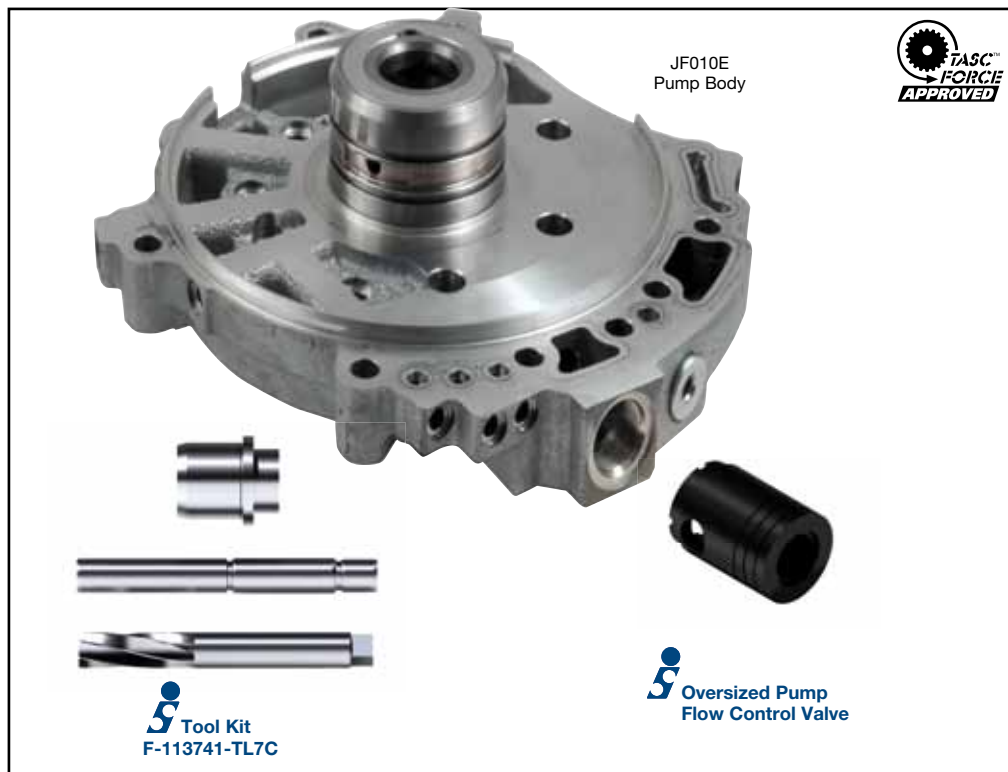


1 Carbide Reamer  
1 Reamer Jig  
1 Guide Pin

**NOTE:**

Use of the VB-06 Base Plate is highly recommended when using the F-113741-TL7C tool kit. The standard VB-Fix base plate would require drilling and tapping to allow reverse installation.

Sonnax "F" tool kits designed to service a specific bore require the VB-FIX, a self-aligning valve body reaming fixture. More information and instructions are available at [www.sonnax.com](http://www.sonnax.com).



JF010E  
Pump Body



 Oversized Pump  
Flow Control Valve

**Note:**

Use of the VB-06 Base plate is highly recommended as the best way to mount the JF010E pump body onto the VB-Fix for reaming. To clamp the JF010E pump body onto the standard VB-Fix plate, the technician will need to drill and tap the standard plate so it can be mounted in reverse of its normal orientation.

### Disassembly

- Remove and discard the OEM pump flow control valve.
- Keep the OEM threaded plug, spring cage and spring

### Reaming Instructions

#### Prep & Setup:

1. Remove all components from the bore.
2. Clean the bore thoroughly in a solvent tank.
3. Align the pump body on the fixture according to the VB-FIX instructions:

**Important Note:** Once alignment is complete, do not loosen wing nuts or unclamp the pump body from fixture until entire reaming process is completed.

4. We strongly recommend a continuous flow of reaming fluid to remove chips, improve bore finish and extend reamer life. Two water soluble reaming fluids are Mobilmet S-122 and Lubegard 80903. Lubegard Bio-Tap is another alternative.
5. Gently insert the reamer through the jig and into the bore until the cutting tip contacts the first bore to be reamed.
6. Select the correct sized socket to fit the square shank of the reamer, and attach it to a swivel socket drive.

# JATCO / NISSAN CVT

PART NUMBER 113741-07, F-113741-TL7C

**Oversized Pump Flow  
Control Valve**

## Reaming:

(We recommend you review the Sonnax reaming DVD or go the Sonnax website for a video preview of reaming.)

1. The reamer should be turned by a low rpm, high torque air drill regulated to a maximum of 200 rpm or by hand using a speed handle.
2. The reaming action should be clockwise in a smooth and continuous motion, at 60-200 rpm. The reamer should actually pull itself through the bore, so little or no forward force should be applied.
3. Continue reaming until the reamer bottoms in the bore.

## FINISH AND CLEAN-UP:

1. Using low air pressure, blow the chips free before removing the reamer.
2. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
3. Remove any remaining debris from the bore with low air pressure and clean in a solvent tank.
4. Examine the bore after cleaning for surface finish, debris, and, burrs. Flashing and burrs on the exit side of the casting bores can be carefully removed with a piece of Scotchbrite on the end of a long wire.
5. Clean the reamer after each use and store in its protective tube.

## CAUTIONS AND SUGGESTIONS:

1. Turning the reamer backward will dull it prematurely.
2. Pushing on the reamer will result in a poor surface finish and inadequate and sporadic material removal. The leading cutting edge will hold material if inward force and turning speed are incorrect. If a burr occurs, remove it by drawing a tool along the edge of the flute from the rear of the tool toward the tip.
3. Never use a crescent wrench, ratchet or pliers to turn the reamer.
4. A dull reamer will cut a smaller hole. Reamers can be sharpened, but should only be done by a professional machine tool sharpener.

## INSTALLATION / ASSEMBLY STEPS:

1. Be certain all debris has been removed from the valve bores and pump body.
2. Install the Sonnax OS pump flow control valve followed by the OE spring, the OE cage/spacer and the threaded end plug.

## FINAL VERIFICATION STEPS:

Vacuum testing at indicated test point indicates 14 in-Hg or greater.

