PART NUMBERS 68942-17K, F-68942-TL14

## Oversized Regulating Valve Pressure Control Valve Kit (Early & Late)

#### 68942-17K

1 Valve

1 Spring

2 Plugs .062

#### F-68942-TL14

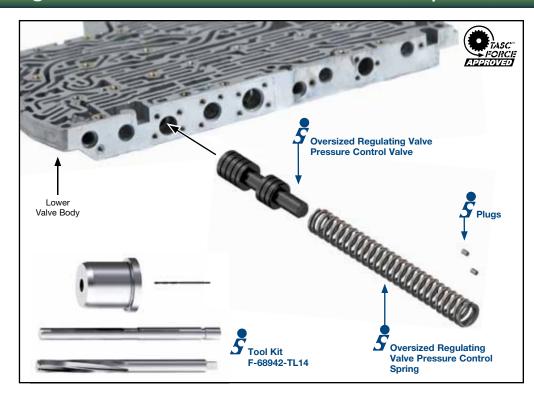
1 Reamer

1 Guide Pin

1 Reamer Jig

1 Drill Bit

Note: Tool kit F-68942-TL14 can also be used for Lubricating Pressure Control Valve 68942-14K.



#### **Notes:**

Tool kit F-68942-TL14 is for use with Sonnax VB-FIX.

.0625'

#### **Disassembly Steps**

- 1. Remove OEM retainer plate.
- 2. Remove and discard OEM valves and spring(s).

#### **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<sup>™</sup>, etc.). For best results, provide a continuous flow of water-soluble cutting fluid (i.e. Mobilment S-122) during the reaming process.
- 3. The reamers should be turner using a low rpm, high torque air drills 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 land and bores must be carefully removed. A small piece of Scotchbrite<sup>TM</sup> material attached to a wire and powered with a drill motor is ideal for the task.

#### **Cautions and Suggestions**

- 1. Turning the reamer backward will dull it prematurely.
- 2. Pushing on the reamer will result in poor surface finish and inadequate and sporadic material removal.

- 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 tool sharpener. Actual life of a reamer before re sharpening or replacing averages 50-70 bores..

Note: We recommend you review the Sonnax Reaming DVD for reaming procedures.

#### Reaming

Follow illustrated reaming instructions on the following page.

#### Finish & Clean-up

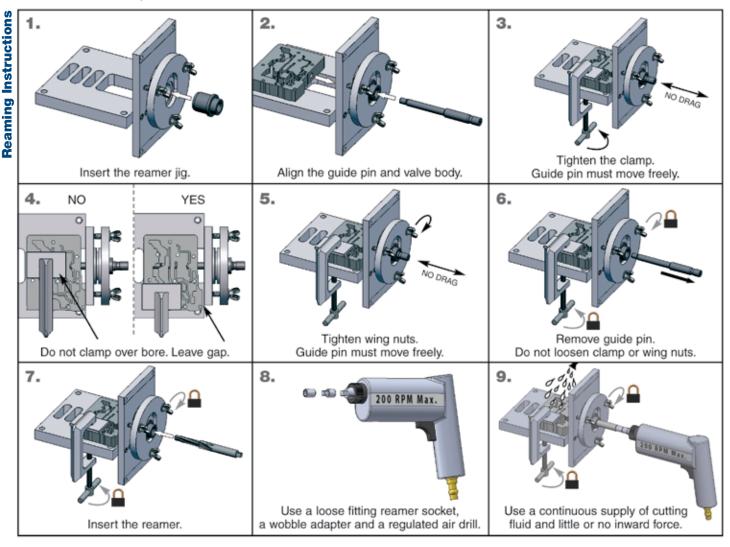
- 1. Using low air pressure, blow chips free before removing the reamer.
- 2. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
- 3. Remove any remaining debris from the bore with low air pressure and clean in a solvent tank.
- 4. Examine the bore after cleaning for surface 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.



(Early & Late)

# **ERCEDES 722.6**

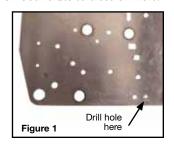
PART NUMBERS 68942-17K, F-68942-TL14K



**Installation/Assembly** Be certain all debris has been removed from the valve bore and valve body.

#### **EARLY Application:**

- 1. Using the 1/16" drill (included), drill through indicated hole in separator plate (see Figure 1).
- 2. Then countersink both sides of the hole just drilled with either a 1/8" or 3/16" drill (not included).
- 3. Install aluminum plug. Peen shut on both sides to close off hole.
- 4. Install Sonnax valve and spring.
- 5. Install OEM retainer plate.
- 6. The TCM must be reprogrammed after the valve body is repaired to address the revised calibration.

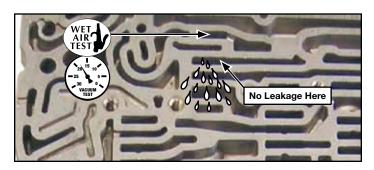


### **LATE Application:**

- 1. Install the new Sonnax valve and spring.
- 2. Install OEM retainer plate.

#### **Final Verification**

1. Vacuum testing at port should yield 18" of vacuum or higher.





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