

Secondary Regulator Valve & Spring Kit

59947-16K

1 Secondary Regulator Valve
1 Secondary Regulator Spring

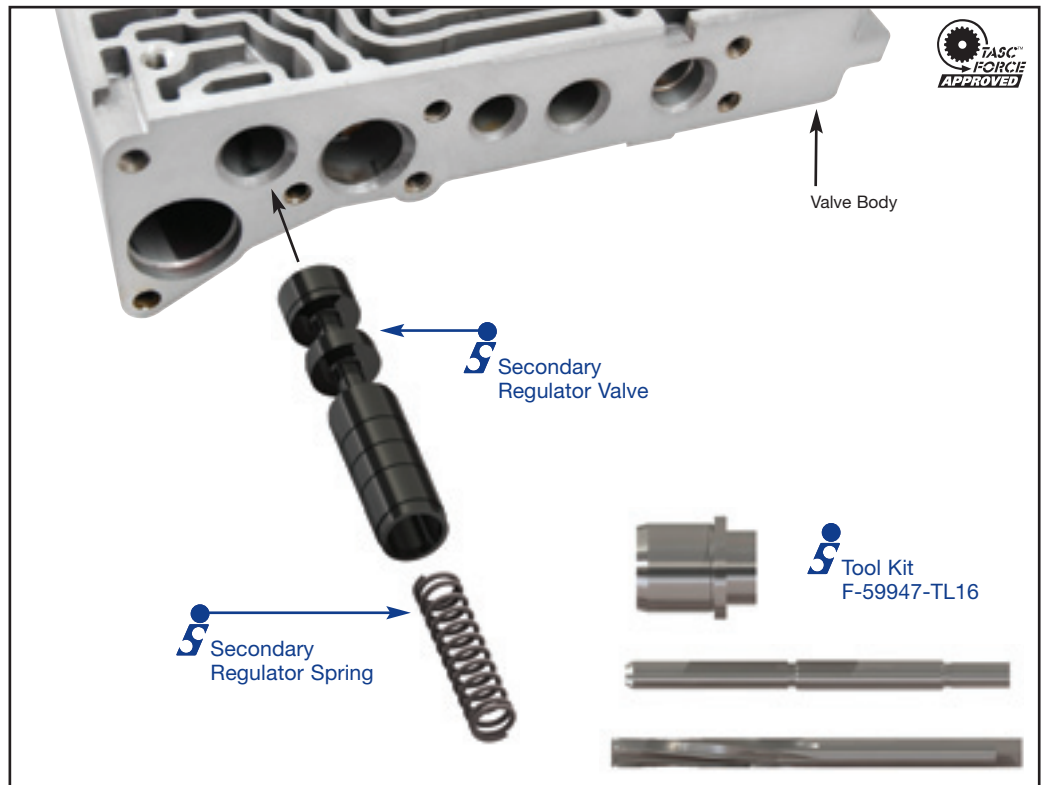


F-59947-TL16

1 Reamer
1 Guide Pin
1 Reamer Jig



Note: Also fits AW55-51SN, AF 23/33 and RE5F22A units.



Prep and Set-up:

1. Remove all components from the bore.
2. Clean the bore thoroughly in a solvent tank.
3. Place the valve body on the reaming fixture (VB-FIX). Align and secure the valve body to the fixture according to the VB-FIX instructions, using the guide pin and reamer jig from the F-59947-TL16 tool kit. **Do not loosen wing nuts or clamp once position has been established until the entire reaming process is complete.**
4. Remove the guide pin.
5. Soak the bore and reamer with cutting fluid (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.
6. Gently insert the reamer through the jig and into the bore until the cutting tip contacts the first bore to be reamed.
7. Select the correct sized socket to fit the square shank of the reamer, and attach it to a wobble/swivel socket drive.

Reaming:

Note: 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 valve body.
2. Install the new Sonnax secondary regulator valve & spring.

Final Verification Step:

Wet air test at the two locations shown at right.

