AW55-50SN

PART NUMBERS 59947-26K, F-59947-TL26

B4 Release Valve Kit

59947-26K

- 1 Release Valve
- 1 Spring
- 1 End Plug

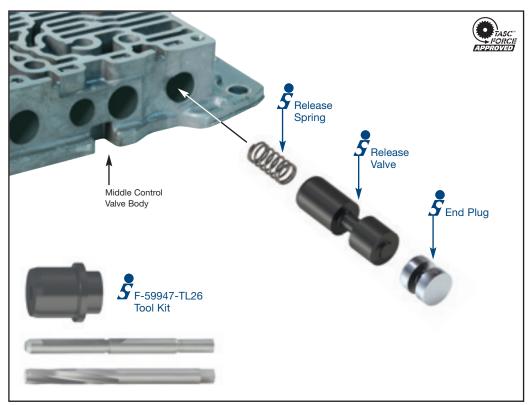


F-59947-TL26

- 1 Reamer
- 1 Guide Pin
- 1 Reamer Jig



Note: For information on proper vacuum test procedures, go to **www.sonnax.com**, click on "Technical Information" and go to Vacuum Testing Guidelines Instructions.



Prep and Set-Up:

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

Important Note: Once alignment is complete, do not loosen wing nuts or unclamp valve 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, & attach it to a swivel socket drive.

Reaming:

Note: We recommend you review the reaming tips in our valve body training DVD. To order a free DVD, go to the Catalog Request Page on www.sonnax.com (www.sonnax.com/request_catalog.php).

- 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.



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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.

Installations/Assembly Steps:

- 1. Thoroughly clean and be certain all debris has been removed from the valve bores and valve body.
- 2. Install the new Sonnax spring, valve and end-plug.
- 3. Install the retainer post.

Final Verification Steps:

Vacuum tests at the ports indicated should hold 18" or more.

