4L60-E PWM & NON-PWM

PART NUMBER **77754-ISO**

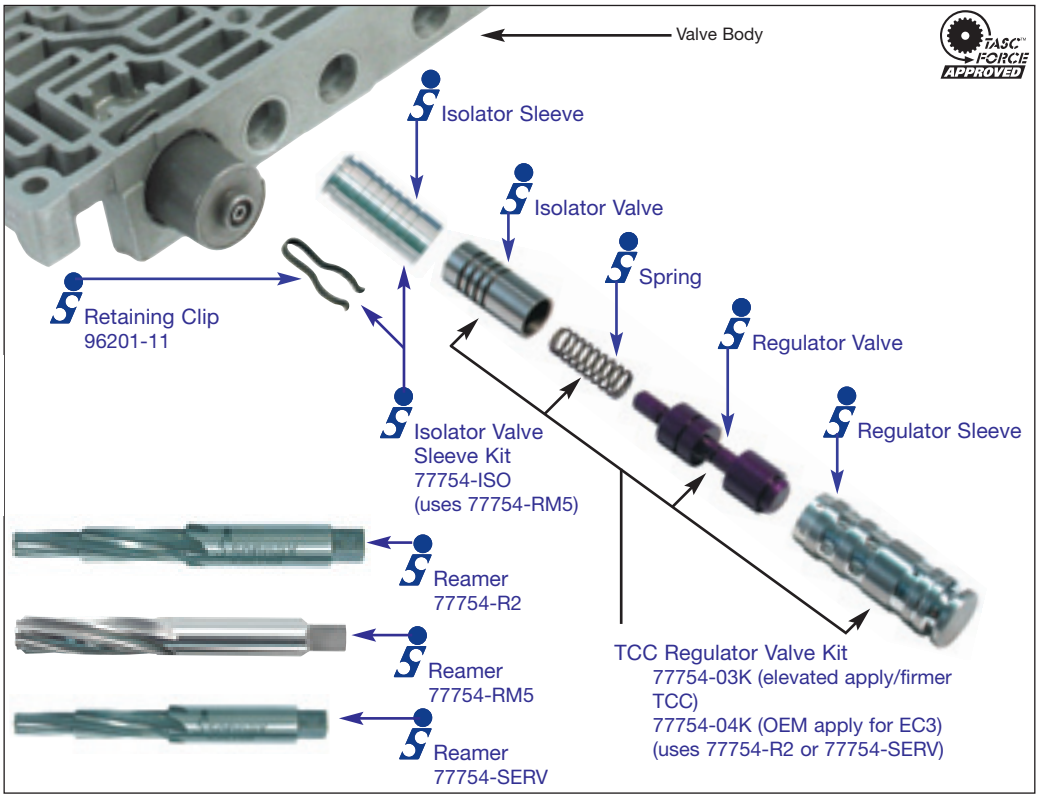
Isolator Valve Sleeve Kit

77754-ISO
1 Isolator Valve Sleeve
1 Retaining Clip

Note: U.S. Patent No. 6,990,996 & 7,104,273

NOTE: This kit requires the use of a reamer **77754-RM5** and will be installed along with **77754-03K** or **77754-04K**.

More technical information is available at www.sonnax.com. Type in this part number under "Part Finder."

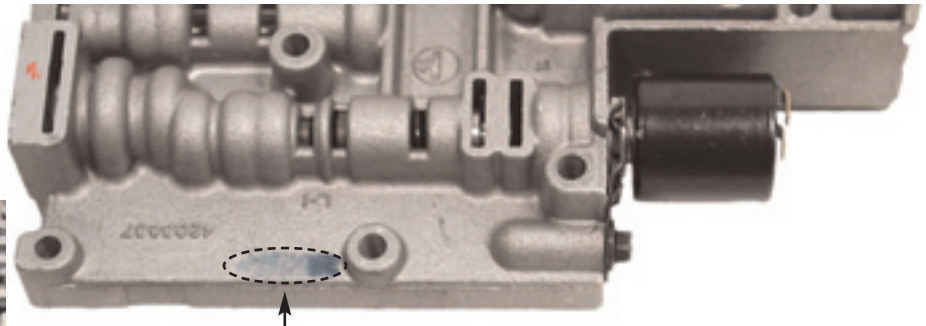


Valve Body Identification & Reaming

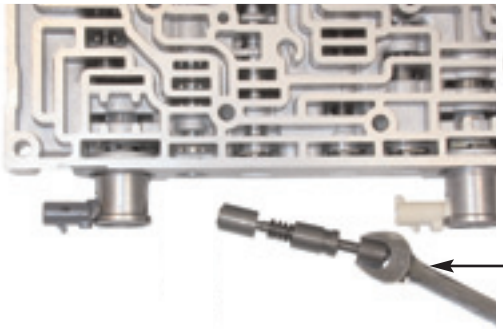
Before reaming the isolator section of the bore to install the 77754-ISO sleeve, you must first ream the pocket for the regulator sleeve. It is critical that you identify which regulator bore reamer is needed to ream your valve body. GM remanufactured valve bodies already have an enlarged bore. Valves are **.473"** diameter and require **77754-SERV.** Original GM valve bodies will have valves that are **.441"** diameter and require **77754-RM2**. After selecting the correct reamer and reaming the regulator section of the bore to create a sleeve pocket, the isolator bore will then be reamed using **77754-RM5**.

Identification of GM Remanufactured Valve Bodies

Valves from "SERV" Valve Body



"SERV" stamped here indicates a remanufactured valve body



Remanufactured SERV units have valve with the same O.D. as a 12mm wrench.

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Reaming Instructions

- Use **77754-R2** for stock OEM regulator bore.
- Use **77754-SERV** for GM remanufactured regulator bore.
- Use **77754-RM5** for isolator bore after regulator bore has been reamed.

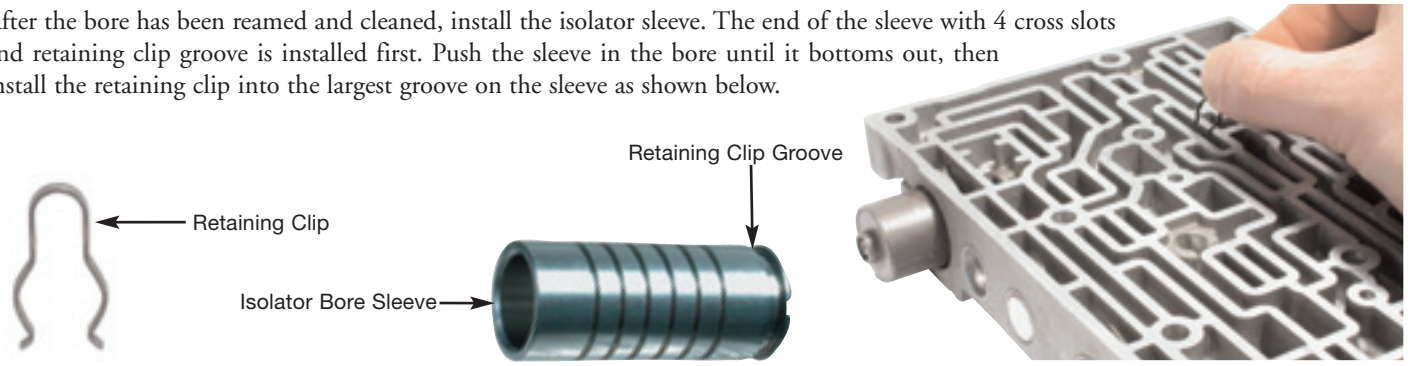
1. Remove all components from the bore and clean thoroughly in a solvent tank.
2. Securely clamp the valve body horizontally to the bench, making sure not to clamp directly over the bore to be reamed.
3. Soak the bore and reamer with cutting fluid (Tap Magic™, etc.).
4. Gently insert the reamer into the bore until the cutting tip contacts the first bore to be reamed.
5. Use a speed handle to turn ream the bore. The reaming action should be clockwise in a smooth and continuous motion, at 60-120 rpm.
6. On the **77754-R2** and **77754-SERV** reamers, continue reaming until the stepped reamer shank bottoms on the face of the valve body bore. Approximate reaming time is 5 minutes.
7. On the **77754-RM5** reamer, continue reaming until the reamer bottoms in the bore. Approximate reaming time is 5 minutes.
8. Using low air pressure, blow the chips free prior to removing the reamer.
9. To remove the reamer, turn clockwise while slowly pulling outward on the reamer.
10. Removing any remaining debris from the bore with air pressure and clean in the solvent tank.

Reaming Cautions:

- Never turn the reamer backwards. This will dull the reamer.
- Pushing on the reamer or using a power tool will result in poor surface finish, and inadequate and sporadic material removal.
- Never us a crescent wrench, ratchet or pliers to turn the reamer.
- Clean the reamer after each use and store in its protective tube.
- A dull reamer will cut a smaller hole. Reamers can be sharpened. Actual life of a reamer before resharpening averages 50 to 70 bores, and depends on oil and turning process.

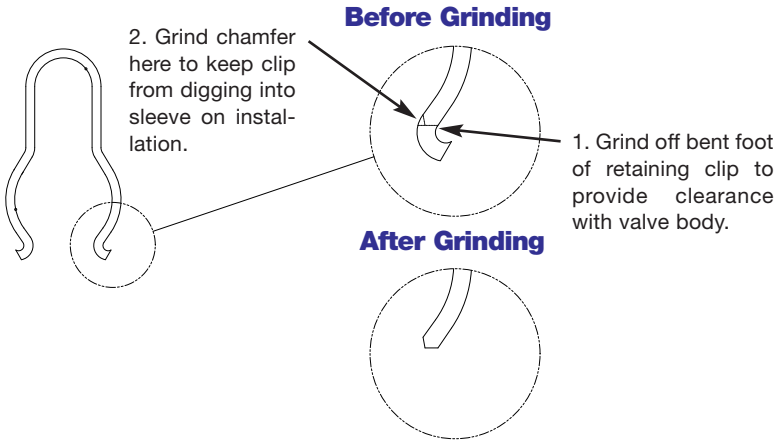
Isolator bore repair sleeve

After the bore has been reamed and cleaned, install the isolator sleeve. The end of the sleeve with 4 cross slots and retaining clip groove is installed first. Push the sleeve in the bore until it bottoms out, then install the retaining clip into the largest groove on the sleeve as shown below.



Retaining Clip Modification

Due to limited clearance between the isolator sleeve and valve body, it may be necessary to modify the retaining clip for proper installation. If the clip does not fit around the installed sleeve, grind one foot of the clip off on a bench grinder (as shown).



Install 77754-03K or 77754-04K following the instructions included in those kits.