FORD C6 ('70 & UP)

PART NUMBERS **36946-11K, TL2**

Oversized (Gas) Throttle Modulator Valve, Spring & Tool Kit

Oversized (Gas) Throttle Modulator Valve, Spring & Tool Kit

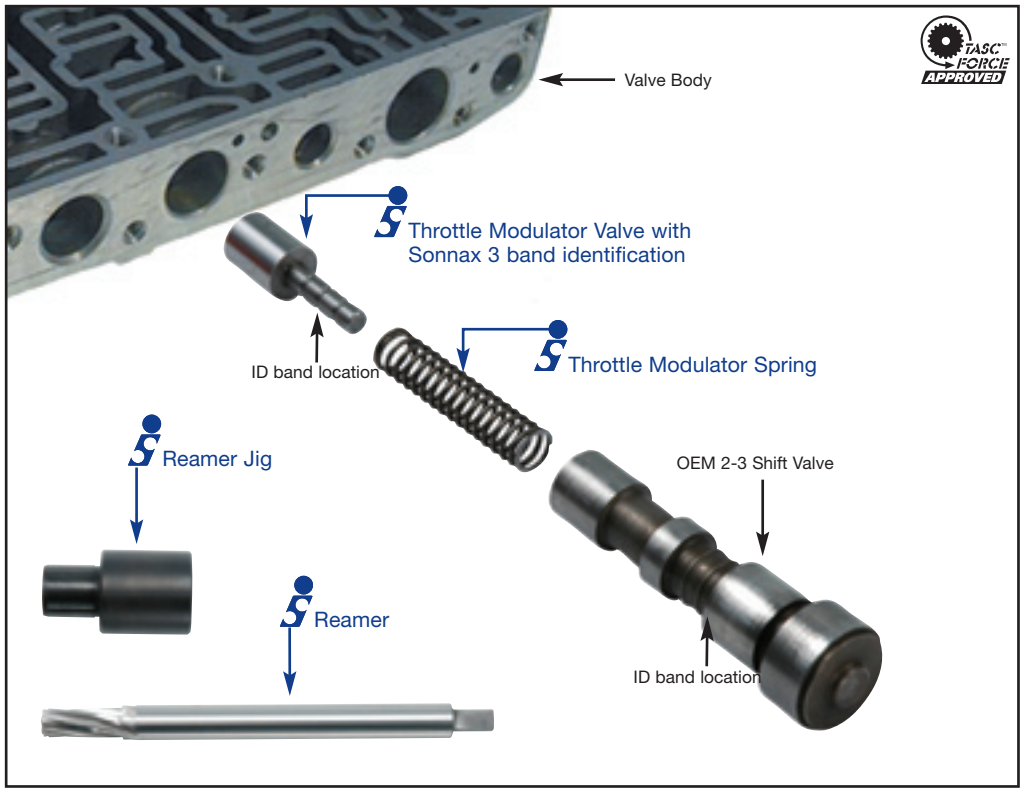
36946-11K

1 Oversized Throttle Modulator Valve
1 Spring

Note: Kit replaces the OEM .338" diameter throttle modulator valve, identified by a single groove on the small stem of the valve. Kit is not recommended to replace .300" or .318" diameter throttle modulator valves.

36946-TL2

1 Reamer
1 Reamer Jig



OEM Application Detail

This throttle modulator valve will restore OEM control when replacing the single band design, common to the gas unit in 1970 and later.

Use this kit to replace:

- .338" TV common to '70 and later gas applications. Has one band on the TV and 2 bands on the 2-3 shift valve.

Do NOT use this kit to replace:

- .300" TV common to '66 - '70. No identification band on TV valve. Mates with one band on 2-3 shift valve.
- .318" TV common to diesel valve body. Has two identification bands. Mates with 3 bands on 2-3 shift valve which then has an additional spring inserted into the bore before the 2-3 valve.

Instructions

Prep and Set-up

1. Remove all components from the bore.
2. Clean the bore thoroughly in a solvent tank.
3. Securely clamp the housing to the bench, making sure not to clamp directly over the bore to be reamed.
4. Insert the reamer jig into the bore.
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.

800-843-2600 • 802-463-9722 • F: 802-463-4059 • www.sonnax.com • info@sonnax.com

6. Gently insert the reamer through the jig and into the bore until the cutting tip contacts the first bore to be reamed (see Figure 1).
7. Select the correct sized socket to fit the square shank of the reamer, and attach it to a wobble/swivel socket drive.

Reaming

1. The reamer should be turned either by hand using a speed handle or by a low rpm, high torque air drill regulated to a maximum of 200 rpm.
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 stop is reached. The approximate reaming time is 2 minutes.

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 casting bores can be carefully removed with a small 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 counterclockwise 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.

Valve Installation

1. Be certain that all debris has been removed from the valve bore and valve body.
2. Turn the OEM 2-3 shift valve so the spring pocket is facing up, place the spring into the valve pocket and the stem end (long /small diameter of valve) of the new Sonnax throttle modulator valve into the I.D. of the spring.

Note: This valve has three identification grooves on the valve stem.

3. Turn the 2-3 shift valve, spring and throttle modulator valve subassembly so that its axis is the same as the valve bore. Start the throttle modulator valve (which is supported by the spring and 2-3 shift valve) into the valve bore with light pressure until it contacts the renewed valve bore. Seat the valve against the valve bore end wall.

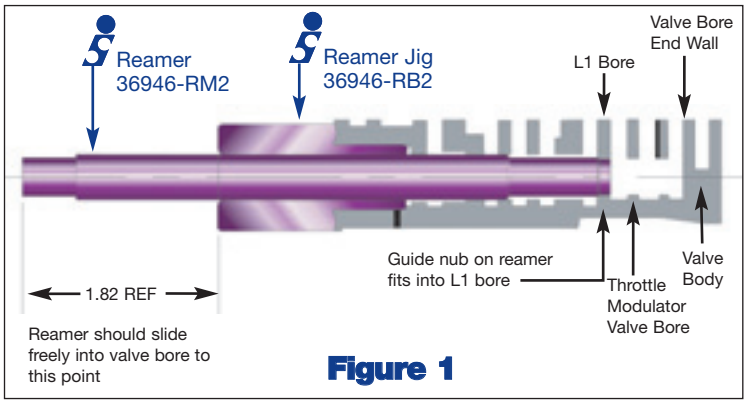


Figure 1

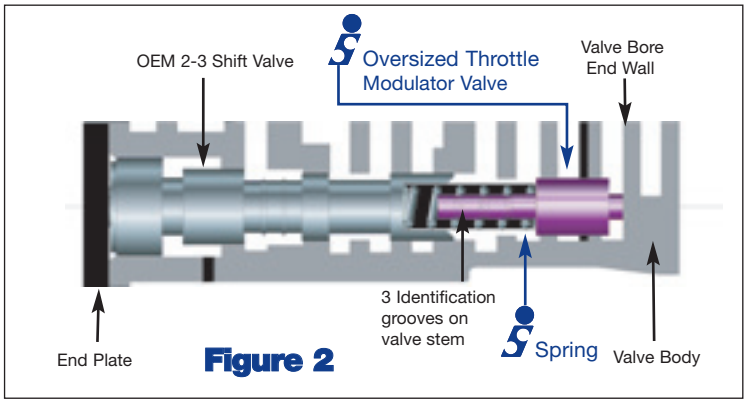


Figure 2