

### Instructions

## **Saturn TAAT**

## Pressure Regulator Sleeve Kit

## Part No. 95200-05K

- Sleeve
- Retaining Clip

**NOTE:** Fits both Type 1 and Type 2 valve body designs.

**CAUTION:** The OE valve spools MUST measure .569" diameter. If larger, it indicates the valve body has been remanufactured. This Sonnax sleeve and tool kit may still be used, but requires the use of Sonnax pressure regulator valve **95200-06**.

# **Tool Kit**

## Part No. 95200-TL

- Reamer
- Reamer Jig
- Drill Jig
- Core Drill

## TAAT Valve Bodv Retaining Spools must Clip measure .569" dia. see Caution note. Sleeve Tool Kit Core Drill OE Pressure Drill Jig Regulator Valve Reamer Reamer Jig

#### 1. Disassembly

Remove and save OE boost valve retainer, boost valve assembly, pressure regulator springs, spring hat and pressure regulator valve.

#### **2. Drilling Instructions**

- a. Clean valve body in solvent tank.
- b. Clamp valve body to bench horizontally, circuits facing upward. Do not clamp directly over the bore to be drilled and reamed.
- c. Insert Sonnax drill jig into bore, knurled end out, until it bottoms.
- d. Fill bore and coat core drill with water-soluble cutting fluid (Tap Magic®, etc.).
- e. Insert core drill into the drill jig carefully, until bit contacts bore. Drill bore carefully, at about 250 rpm, until drill bit bottoms in the bore (**Figure 1**).
- f. Using an air gun, blow out as many chips as possible before removing drill.
- g. Remove drill and blow out any remaining chips. Clean valve body again in solvent tank.

#### **3. Reaming Cautions**

- Never turn reamer backward.
- Pushing on reamer will result in poor surface finish, inadequate and sporadic material removal, and material being left behind as reamer exits bore.
- Blow any chips free from the reamer after each use.
- Never use a crescent wrench or ratchet to turn reamer.

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Figure 1

Drill Jig

Core Drill



#### TRANSMISSION PARTS

#### PRESSURE REGULATOR SLEEVE KIT 95200-05K, 95200-TL

#### 4. Reaming Instructions

- a. Clamp valve body to bench horizontally, circuits facing upward. Do not clamp over bore to be reamed.
- b. Insert Sonnax reamer jig into bore, knurled end out, until it bottoms.
- c. Fill bore and coat reamer with water-soluble cutting fluid (Tap Magic<sup>™</sup>, etc.).
- d. Insert Sonnax reamer into jig carefully, until it contacts bore. Using a speed handle or drill, turn reamer clockwise at about 200 RPM in a continuous motion. Continue until reamer bottoms in bore (**Figure 2**).



**NOTE:** Hand-reaming bore may take up to 15 minutes.

- e. Using an air gun, blow out as many chips as possible before removing reamer.
- f. Remove reamer by rotating clockwise while pulling outward. Blow out any remaining chips and clean valve body again in solvent tank.

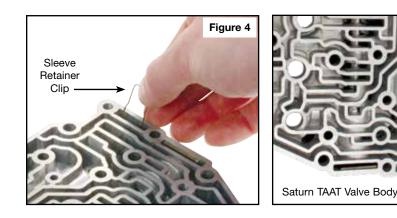
#### 5. Installation & Assembly

- a. Clean bore and sleeve thoroughly.
- b. Apply Loctite<sup>®</sup> 638 to outboard sleeve groove. For a faster cure time, Loctite<sup>®</sup> 7649 anaerobic primer can be used concurrently (**Figure 3**).
- c. The sleeve will fit over the shank end of Sonnax core drill, which can be used as an installation tool for the sleeve (**Figure 3**).
- d. Install Sonnax sleeve into bore with end notches and narrow clip groove facing inboard (Figure 3).
- e. Carefully insert sleeve until it contacts end of bore. Install Sonnax sleeve retainer clip (Figure 4).
- f. Insert OE pressure regulator valve OR Sonnax pressure regulator valve (available separately) into the installed sleeve (see CAUTION note on page 1).
- g. Reinstall OE spring hat, springs and boost valve assembly. Secure with OE retainer.

#### 6. Final Testing

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Vacuum testing at the port(s) indicated holds the recommended minimum 18 in-Hg (Figure 5).



end first Retaining Clip Groove Apply Loctite® 638 in groove before sleeve installation

this step and use as an installation

Core Drill Shank

tool.

Figure 5

18"-Hg

95200-05K-IN 11-18-15

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### Instructions

Figure 2

Figure 3

Reamer

Jig

Reamer

Install this