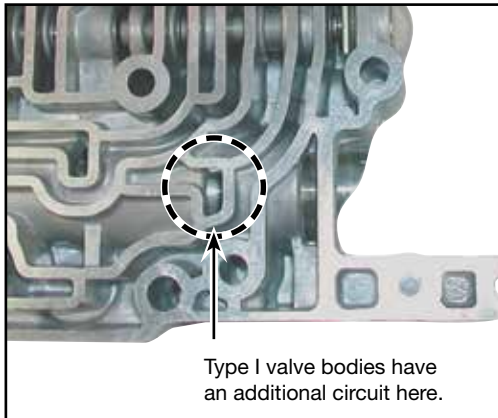


Parts are labeled here in order of installation. See other side of sheet for details on kit contents.

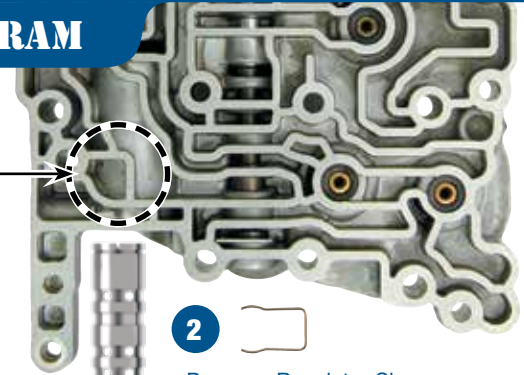
INSTALLATION DIAGRAM

NOTE: This kit is fully compatible with TAAT Type II valve bodies.

WARNING: Verify application since boost valve kit included is for Type II valve bodies only and cannot be installed in or used to update earlier Type I design. All other components in this kit can be installed in either Type I or II units.



Type II valve bodies do NOT have a circuit here.



2 Pressure Regulator Sleeve & Retaining Clip

3 Pressure Regulator Valve

OE Spring Seat

OE Pressure Regulator Spring

5 Pressure Regulator Cushion Spring

OE Spring Guide

6
7 Boost Valve & Sleeve Assembly, with 2 O-Rings

WARNING: Required tool kit **95200-TL** is no longer in production. Check with your distributor for availability.



1 Part No. **95200-TL**
 Required for use with this Sure Cure® Kit.

Contents & Installation Steps

See pages 3 & 4 for detailed instructions

Step 1 Ream Pressure Regulator Bore

NOTE: Requires Sonnax Tool kit 95200-TL not included in this kit.

Step 2 Install Pressure Regulator Sleeve & Retaining Clip

Packaging Pockets 6 & 3

- Sleeve
- Retaining Clip

Step 3 Install Pressure Regulator Valve

Packaging Pocket 4

Valve

Step 4 Reinstall OE Spring Seat & Pressure Regulator Spring

Step 5 Install Cushion Spring & OE Spring Guide

Packaging Pocket 1

Spring

Step 6 Install O-Rings On Boost Sleeve

Packaging Pocket 2

- O-Ring .739" x .070"
- O-Ring .864" x .070" Viton

Step 7 Install Boost Valve & Sleeve Assembly

Packaging Pocket 5

- Valve
- Sleeve

Torque Specifications

Input & Output Shaft Lock Nut	110 ft-lb	Case Half Bolts - Short	18 ft-lb
Valve Body-to-Case	97 in-lb	Case Half Bolts - Long	21 ft-lb
Oil Pump Bolts	106 in-lb	Oil Pan Bolts	89 in-lb

Clearance & Endplay

Differential Unit Endplay

Use thickest possible snap ring that provides smallest possible endplay

OE Differential Endplay Rings

21002329	.051"	(1.3mm)
21002324	.055"	(1.4mm)
21002325	.059"	(1.5mm)
21002326	.063"	(1.6mm)
21002327	.067"	(1.7mm)
21002328	.071"	(1.8mm)
21002330	.075"	(1.9mm)
21002331	.079"	(2.0mm)

Pump Clearances

Pump Pocket	.0005-.0016"
Outer Gear-to-Housing	.0025-.0055"

Clutch Clearance

1st Clutch	.038-.055"	Selective Snap Ring
2nd Clutch	.060-.086"	Selective Snap Ring
3rd Clutch	.046-.061"	Selective Snap Ring
4th Clutch	.036-.046"	Selective Snap Ring

OE Selective Snap Rings

21002290	.063"	(1.60mm)
21002291	.070"	(1.78mm)
21002292	.077"	(1.96mm)
21002293	.084"	(2.14mm)
21002294	.091"	(2.32mm)
21002295	.098"	(2.50mm)
21002296	.105"	(2.68mm)
21002297	.113"	(2.86mm)

Tech Tips

Various intermittent electrical codes are often caused by poor connection at the transmission harness connector or the wires nearest the connector. Replacement harness connector repair kit, OE part #12116563 is available.

Before reinstalling the circuit board over the actuators, push down slightly on the solenoid pin contact tabs to improve tension on solenoid pins.

Closely inspect the small bushings deep inside the input and output shafts. Make sure bushings are securely in position, and are not worn where the tubes fit.

The 1st clutch return spring is different from 2nd, 3rd, 4th spring. Mixing locations causes shift complaints and falling out of gear.

IDENTIFY!

Saturn TAAT Type II Valve Body:
Sonnax boost valve kit fits in Type II valve bodies **ONLY**.

1. Type II valve bodies have four valve bores in the lower valve body.

2. Type II boost sleeve has two O-rings.

3. Type II valve bodies do NOT have an additional circuit here.

If your OE boost valve and valve body look like this, it's OK to install the boost valve supplied in this kit.

Saturn TAAT Type I Valve Body:
Sonnax boost valve kit does **NOT** work in Type I valve bodies.

1. Type I valve bodies have five valve bores in the lower valve body.

2. Type I boost sleeve has three O-rings.

3. Type I valve bodies have an additional circuit here.

If your OE boost valve and valve body look like this do NOT install boost valve supplied in this kit.

1. Disassembly Instructions

Remove all components from the pressure regulator bore:

- **Type II valve bodies:** Save the large OE pressure regulator spring, spring seat, spring guide, and boost sleeve retainer.
- **Type I valve bodies:** Save the large OE pressure regulator spring, spring seat, spring guide and the original boost valve, boost sleeve and sleeve retainer.

2. Drilling Instructions

- Clean valve body in solvent tank.
- Clamp valve body to bench horizontally, circuits facing upward. Do not clamp directly over the bore to be drilled and reamed.
- Insert Sonnax drill jig into bore, knurled end out, until it bottoms.
- Fill bore and coat core drill with water-soluble cutting fluid (Tap Magic®, etc.).
- 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.
- Using an air gun, blow out as many chips as possible before removing drill.
- Remove drill and blow out any remaining chips.
- Clean valve body again in solvent tank.

3. Reaming Instructions

- Clamp valve body to bench horizontally, circuits facing upward. Do not clamp over bore to be reamed.
- Insert Sonnax reamer jig into bore, knurled end out, until it bottoms.
- Fill bore and coat reamer with water-soluble cutting fluid (Tap Magic™, etc.).
- 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.
NOTE: Hand-reaming bore may take up to 15 minutes.
- Using an air gun, blow out as many chips as possible before removing reamer.
- Remove reamer by rotating clockwise while pulling outward. Blow out any remaining chips and clean valve body again in solvent tank.

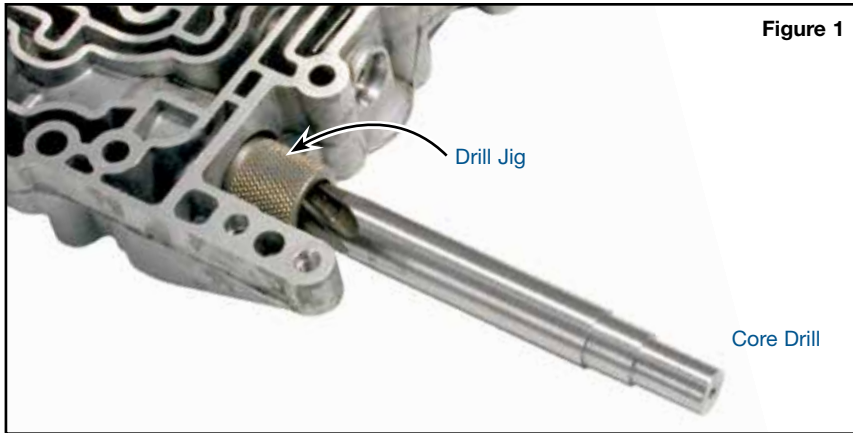


Figure 1

3. Reaming Instructions (continued)

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 reamer after each use.
- Never use a crescent wrench or ratchet to turn reamer.

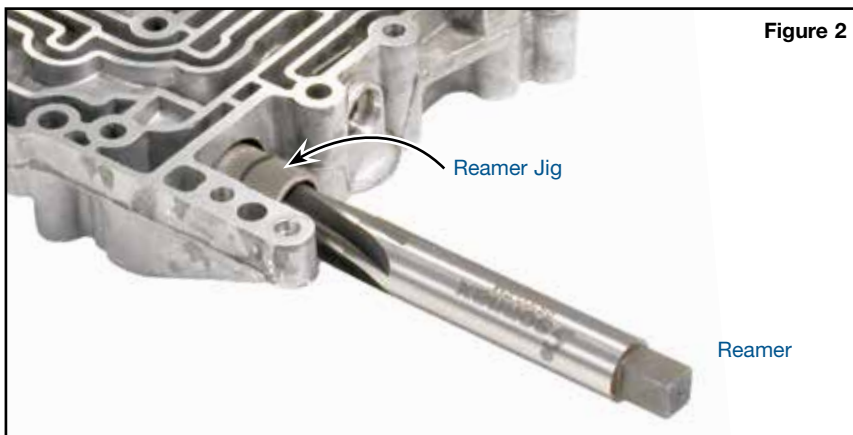


Figure 2

4. Installation Instructions

- a. Clean bore and sleeve thoroughly.
 - b. Apply Loctite® 638 to outboard sleeve groove.
 - c. Install Sonnax sleeve into bore with end notches and narrow clip groove first (inboard).
 - d. 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**).
 - e. Carefully insert sleeve until it contacts end of bore. Install Sonnax sleeve retainer clip.
 - f. Insert Sonnax pressure regulator valve into the installed sleeve.
 - g. Reinstall OE spring seat and pressure regulator spring.
 - h. Install Sonnax cushion spring and OE spring guide.
- **Type II valve bodies:** Install O-rings on Sonnax boost sleeve. Lubricate O-rings and roll sleeve on clean bench to size into grooves. Install boost valve/sleeve assembly and secure with OE retainer.
 - **Type I valve bodies:** Reinstall OE boost valve assembly and retainer.

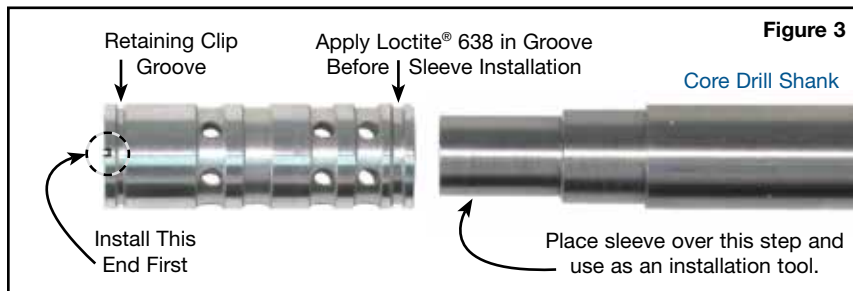


Figure 3

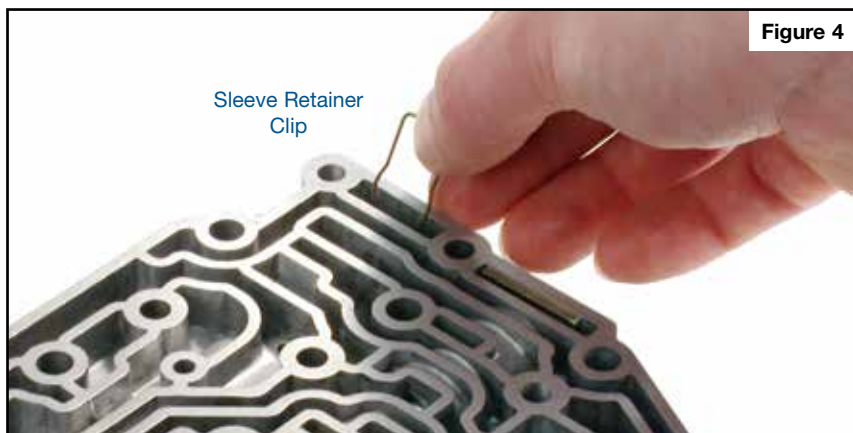


Figure 4