

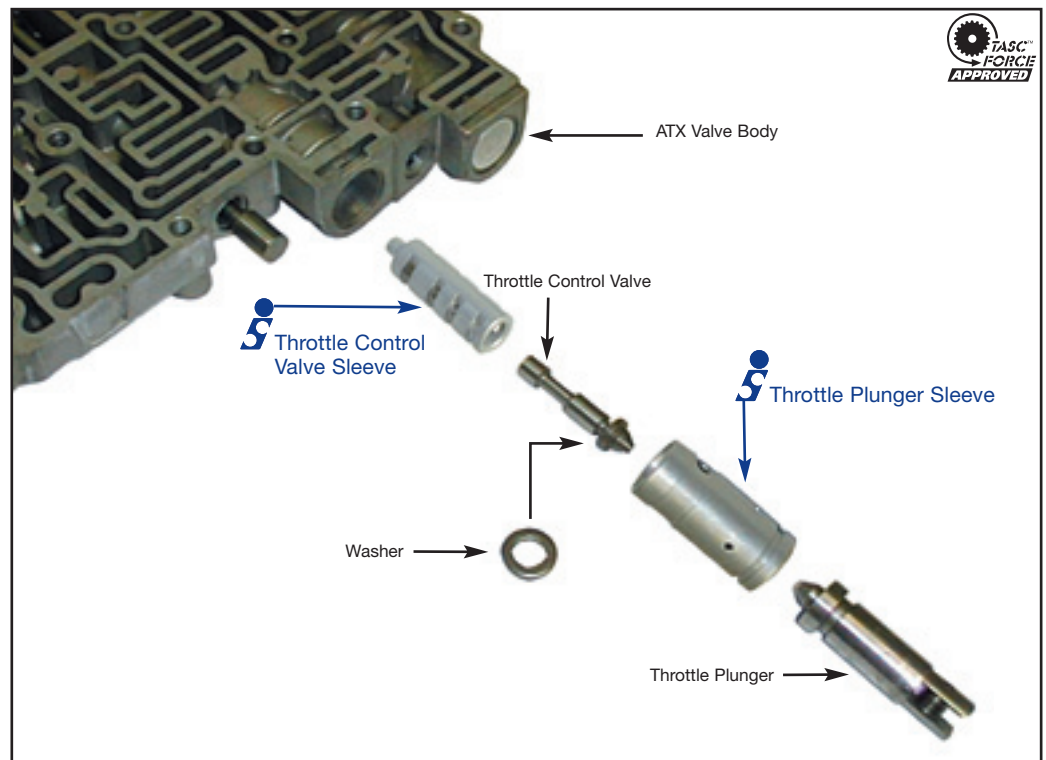
## Throttle Control Valve & Throttle Plunger Sleeves

### 86940-01

1 Throttle Plunger Sleeve

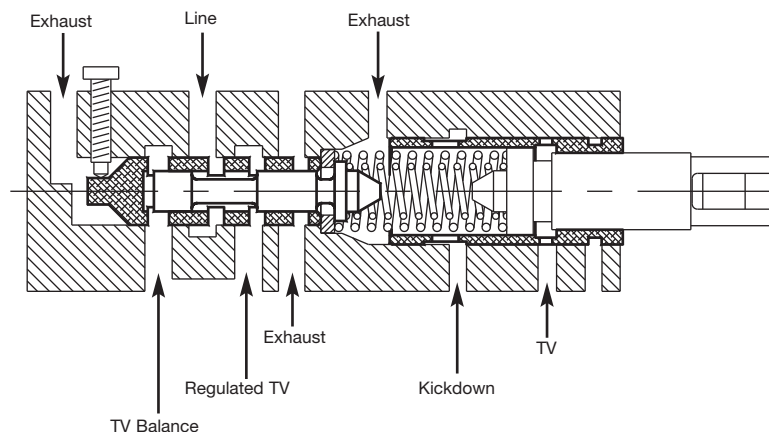
### 86940-03

1 Throttle Control Valve Sleeve



### Gauge Test Information

The Wet Air Test is difficult to perform on these hydraulically balanced valves. The best way to verify if the sleeves are worn is by visual inspection or gauge testing. The plunger can be reversed in the sleeve to perform a “wobble test” to determine whether there is excess clearance between the two. Extra “wobble room” as you stroke the plunger through its travel indicates a worn sleeve. The throttle control valve sleeve can be visually inspected between the ports for worn and polished bores. A pressure gauge installed on an ATX with a worn throttle control valve sleeve will show incorrect line pressure control and minimum kickdown control. A worn throttle plunger sleeve will result in a hydraulic bind or vibration in the accelerator linkage.



### Instructions

1. Remove the worn throttle plunger and control valve sleeve from the valve body and discard.
2. Lubricate the replacement throttle control valve sleeve **86940-03**.
3. Push the sleeve into the valve body bore, open end facing out, until it seats against the set screw. This screw is used for setting the location of the control valve sleeve, thereby altering throttle sensitivity.
4. Return the washer to the valve body bore. This washer must be installed prior to the throttle pressure valve, as it serves as a stop when the throttle pressure valve is fully stroked. If the washer is positioned incorrectly, late or no upshifts can result.
5. Return the throttle control valve to the assembly, ensuring that the two small spool diameters slip into the valve sleeve. Prior to returning the throttle plunger and sleeve to the assembly, examine the sleeve for wear. If the throttle plunger sleeve has excessive wear, replace the throttle plunger sleeve with Sonnax plunger sleeve **86940-01**.
6. Insert the throttle valve plunger into the sleeve, split end toward the retaining clip groove.
7. Place the two OEM springs into the TV sleeve assembly, then press the sleeve assembly into the valve body, springs first.
8. Return the retaining clip to the valve body.

**Note:** Late production throttle plunger sleeves extend farther from the body. The 86940-01 will replace all designs to date.

**Caution:** Overtightening or use of an air tool on linkage can force throttle valve cam to imprint/bend the sleeve. This will cause a no upshift condition.