

### Oversized Boost Regulator Valve Kit

**Part No.**  
**119940-05K**



- Valve
- Ratcheting End Plug

### Tool Kit

**Part No.**  
**F-119940-TL5**



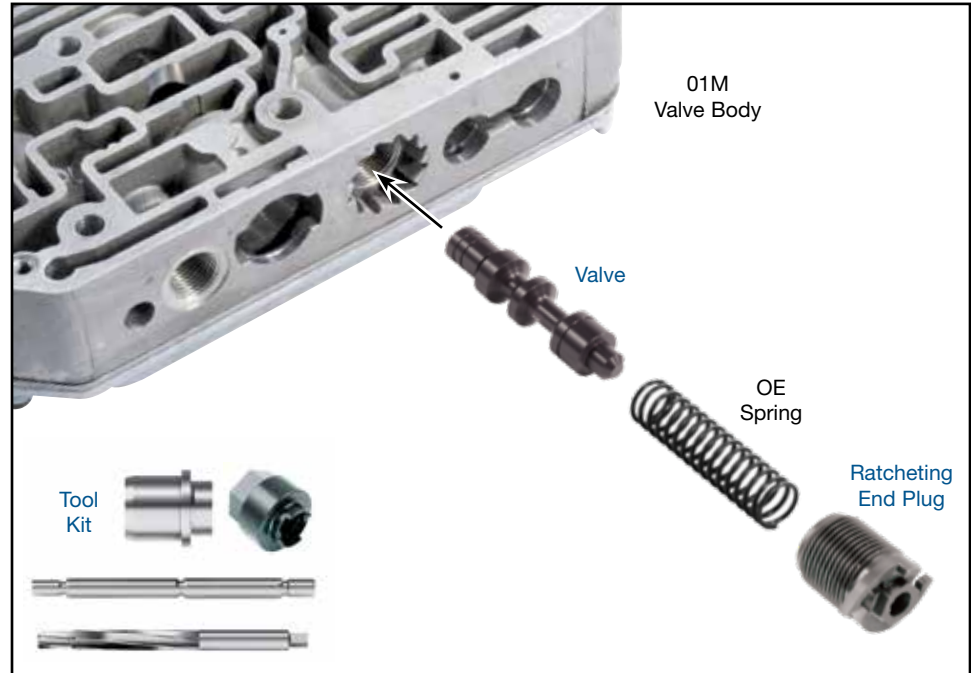
- Reamer
- Reamer Jig
- Guide Pin
- Adjustment Tool

**NOTE:** Sonnax “F-Tool” kits designed to service a specific bore require the VB-FIX, a self-aligning valve body reaming fixture. More information and instructions can be found online at [www.sonnax.com](http://www.sonnax.com).

**NOTE:** Sonnax adjustment tool may be used during removal of either OE or Sonnax ratcheting end plug. Using this tool prevents breakage of the two anti-rotational tabs.

**NOTE:** Required tool kit F-119940-TL5 is no longer in production. Check with distributor for availability.

### VW/Audi 01M, 01N, 01P



#### 1. Remove Ratcheting End Plug

- Prior to removing the ratcheting end plug from the bore, measure and note how deeply it is installed. The Sonnax ratcheting end plug should be installed to this same depth to ensure proper line pressure control.

**NOTE:** The most accurate method to measure depth is to insert a .105" gauge pin (or comparable) through the hole in the plastic plug until it bottoms against the control valve. Mark at the end of the plug, remove pin and measure distance from mark to the end of pin. This gives you the spring height adjustment from the plug to the valve. Record this measurement before removing the plug and use the distance during reassembly to most accurately duplicate the spring compression setting. Alternatively you can measure from the valve body casting surface to the outer face of the OE plug and duplicate later.

- Remove OE ratcheting end plug from valve body bore by gently inserting the cam end of Sonnax adjustment tool into bore and over end of the end plug.
- Carefully rotate tool counterclockwise until tool seats fully against the plug and the anti-rotational tabs are enclosed fully in the cam.
- Continue rotating tool counterclockwise, until the end plug is removed from the bore. Sonnax tool has a 3/4" hex head so a socket or wrench may be used.

#### 2. Disassembly

- Remove OE spring and keep for reuse.
- Remove OE valve and discard.

### 3. Bore Reaming



**NOTE:** Before reaming any bores, inspect the main pressure regulator valve. 01M, 01N, 01P valve inner spools measure .5935" O.D. If your valve inner spools measure .6095" O.D., **DO NOT CONTINUE.** You have an 096, 097, 098 valve body.

Ream regulator bore (for reaming instructions/reamer care, please visit [www.sonnax.com](http://www.sonnax.com)).  
Sonnax reaming tool kit **F-119940-TL5** and **VB-FIX** are required for this operation.

### 4. Installation & Assembly

- Be certain all debris has been removed from the valve bore and valve body.
- Install Sonnax valve followed by OE spring and Sonnax ratcheting end plug.
- To install Sonnax ratcheting end plug, thread into the bore until the pre-measured height is again achieved.
- A 5/16" socket may be used while threading the plug into the bore. However, the adjustment tool will be needed to turn the plug back out while adjusting to the correct setting.



**NOTE:** Adjustments to the base setting may be required due to variations in ratcheting end plug, valve body or improvements from either regulator bore. Initial setting on average OE parts is .940" measured from the end of the valve to the outer face of the plastic adjuster. Turning the adjuster clockwise will increase boost pressure, line pressure and create firmer engagements as well as upshifts and downshifts. Counter clockwise reduces line pressure at idle and results in softer shifts. Each turn is approximately 8 psi alteration. One turn is drastic and we suggest you go by 1/4 to 1/2 turns. Outcome of this adjustment is monitored at line pressure tap.

- It is very important to verify line pressure when installation is complete. OE line pressure in Drive is generally 50-56 psi. Reverse is 95-110 psi at idle. To obtain firm engagements or reduce flare, increase to line pressure in Drive to 60 psi (1/2 turn clockwise). Re-adjust if not within this range.



**NOTE:** OE line pressure port is a straight 10 x 1.0mm thread with a flanged plug. A line pressure adapter can be made from a common 1/8th NPT 45 degree adapter. Chase male thread on the adapter with 10 x 1.0 thread die. Gently screw adapter into the case and then screw pressure gauge into adapter.

### 5. Final Testing

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

