4R70E, 4R70W, 4R75E, 4R75W Heavy Duty Remanufactured Valve Body

Part No.

101-108

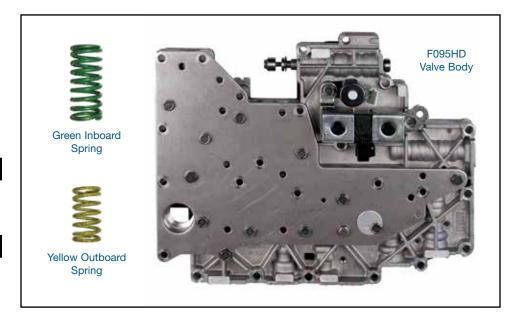
NOTE: F095HD has solenoids that connect to a hard wire harness; includes 1-2 accumulator piston case springs.

F098HD

'09-Later

NOTE: F098HD has solenoids that connect to a soft wire harness; includes 1-2 accumulator piston case springs.

NOTE: Sonnax heavy duty remanufactured valve bodies F095HD and F098HD are built to provide firmer shifts and a moderately increased pressure curve to improve performance, especially in truck and towing applications.





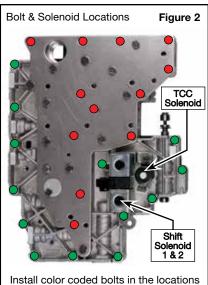
1. 1-2 Accumulator Spring Installation

- a. Install Sonnax green spring into the inboard end of the 1-2 accumulator piston and install the piston and spring into the case.
- b. Install Sonnax yellow spring into the outboard end of the 1-2 accumulator piston, followed by the accumulator cap and snap ring (Figure 1).

NOTE: Only use the two springs included in this Sonnax kit. Some OE applications have a blue inner spring that is NOT used with this heavy duty valve body.

2. Valve Body Installation Tips

- a. Verify valve body upper gasket is aligned on the separator plate. Install the valve body onto the transmission case while indexing the manual valve into the manual linkage.
- b. Install the valve body-to-case bolts in the locations shown (**Figure 2**). Torque all bolts to 100 in-lb.



shown above and torque to 100 in-lb.

Tech & Install Tips

Figure 3

Solenoid	Wire Colors (F098 Only)	Ohm Value	
SS1	Red/White	20-40-Ohms	
SS2	Red/Black	20-40-Ohms	
EPC*	Red/Blue	3-6-Ohms	
TCC	Red/Green	10-16-Ohms	

*Not Included

2. Valve Body Installation Tips (continued)

NOTE: It is best to re-check torque on the valve body-to-case bolts after the initial torque sequence has been performed, after a 10 to 15 minute set.

c. Install internal wire harness onto valve body and connect solenoids. Solenoid location and connector color information is shown. Refer to chart (Figure 3) for wire color identification and ohm test values.

NOTE: Wire colors are for the F098 as it has a soft wired internal harness.

3. Fluid Fill & Road Test

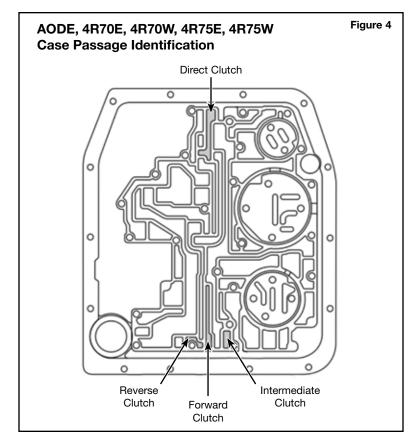
- a. Fill the transmission to factory spec with OE compatible ATF.
- b. Let engine run to help warm transmission fluid to 185°.
- c. Road test vehicle performing 10-15 upshift and downshift cycles through all four speeds.

4. Bonus Diagnostic Tech

This Sonnax remanufactured valve body has been thru a rigorous inspection and rebuild process, and then put thru a comprehensive functional hydraulic and electronic test to ensure it meets OE performance and quality. It is designed to eliminate many pressure, shift, and converter related complaints, but will not correct complaints that stem from other areas of the transmission. Following are common areas of failure or root causes for symptoms that could be attributed to valve body issues that should also be examined or addressed during your transmission build. In addition, see air test locations to verify internal integrity, and a component application chart for troubleshooting driveability issues (Figures 4 & 5).

5. Common Failure Areas

- a. Forward engagement problems can be attributed to sealing ring wear in the Forward drum, or wrong sealing ring use.
- b. 2-3 Flare can be caused by sealing ring wear in the drum or in the rear of the case where the output shaft sealing rings ride.
- c. Torque converter clutch shudder and premature clutch failure can be caused by wear in the stator where the turbine shaft solid rings ride.



AODE, 4R70E, 4R70W, 4R75E, 4R75W Application Chart

F	ia	u	re	

Gear	Range	OD Band	Low/ Rev Band	Int Clutch	REV Clutch	FWD Clutch	Direct Clutch
Park	Р						
Reverse	R		ON		ON		
Neutral	N						
1st	OD-D					ON	
2nd	OD-D			ON		ON	
3rd	OD-D			ON		ON	ON
4th	OD-D	ON		ON			ON
M-2nd	2	ON		ON		ON	
M-1st	1		ON			ON	