



# Technical Service Information

## MAZDA/FORD F4A-EL BIND-UP IN REVERSE AND MANUAL LOW AND THIRD GEAR STARTS

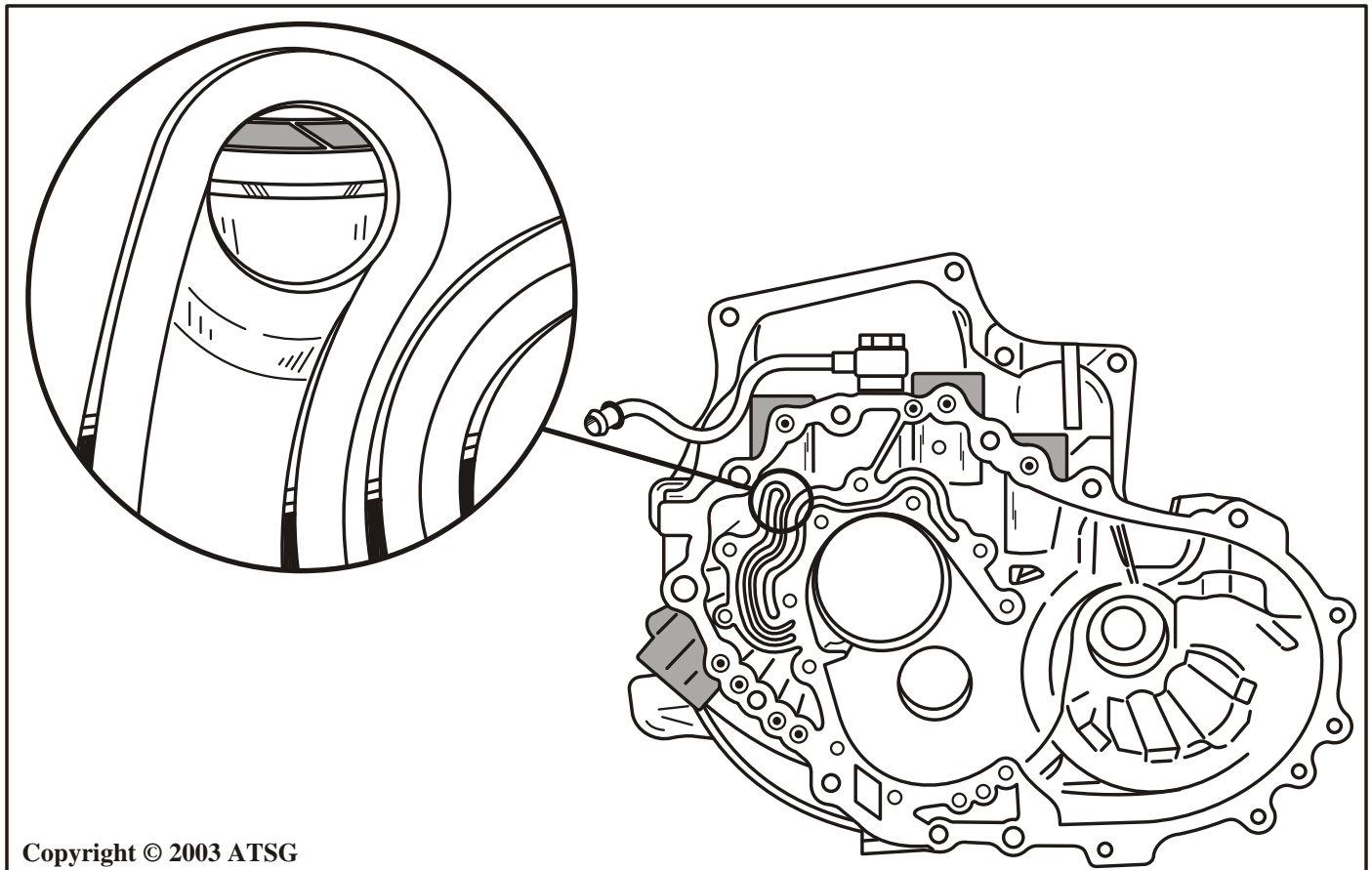
**COMPLAINT:** After rebuild, the vehicle exhibits a bind-up in reverse and manual low condition, and also has a third gear start.

**CAUSE:** The cause may be, the 2-3 accumulator piston, the N/D accumulator piston, or the N/R accumulator piston was mistakenly installed into the 1-2 accumulator bore in the case, or the sealing ring at the small end of the 1-2 accumulator piston was damaged on the initial installation into the case bore.

Because of the difference in overall length of the piston, when the 2-3 or N/D piston is installed into the 1-2 accumulator case bore, **line pressure** can be forced past the accumulator piston into the 3-4 clutch circuit and apply the 3-4 clutch (See Figure 1).

When the N/R accum. piston is installed into the 1-2 accumulator bore **line pressure** again can enter the 3-4 clutch circuit and apply the 3-4 clutch, through the **factory** hole bored through the center of the small end of the piston, or the "**factory gap**" in the small diameter sealing ring.

**CORRECTION:** Refer to Figure 2 for the correct accumulator piston identification for proper assembly, and replace the small diameter sealing ring as necessary.



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Figure 1

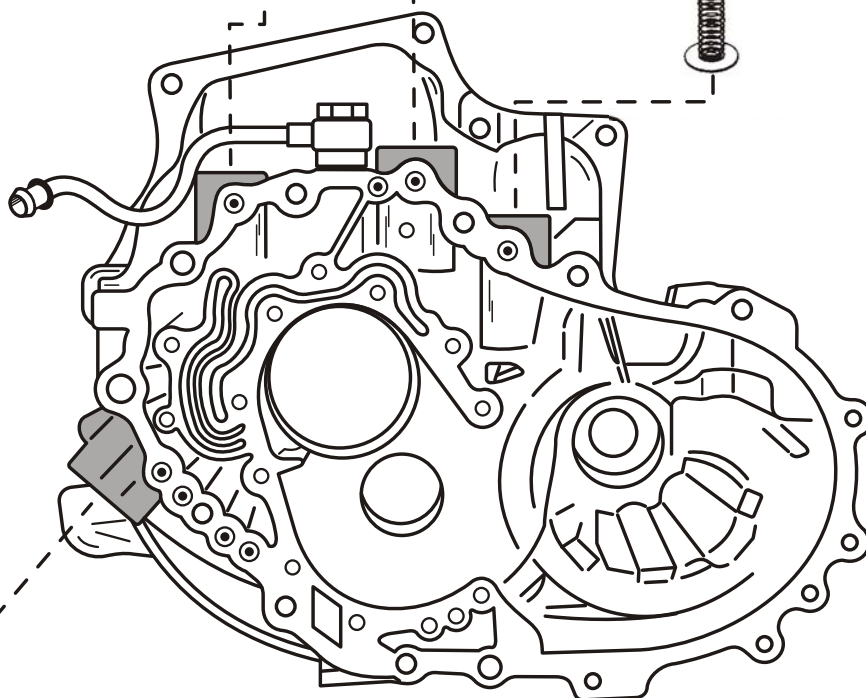
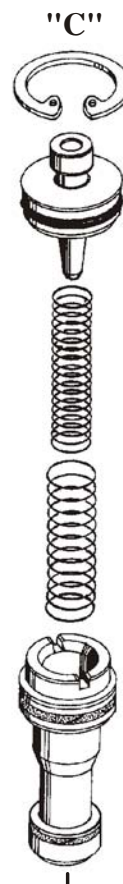
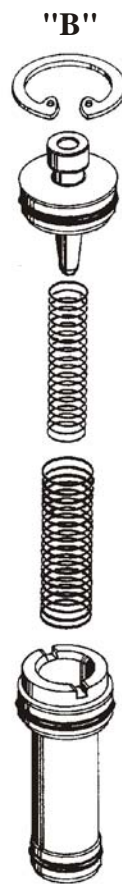
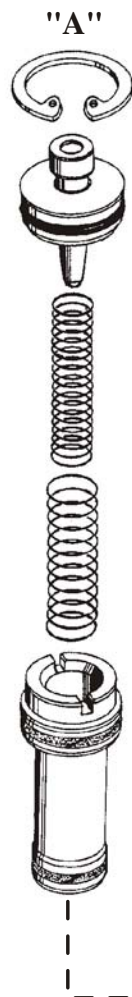
AUTOMATIC TRANSMISSION SERVICE GROUP

03-25  
Page 1 of 2

ACCUMULATOR PISTON I.D.		
ACCUM.	PISTON COLOR	LENGTH
"A" = 2-3	GREEN	2.108"
"B" = 1-2	RED	2.313"
"C" = N/D	BEIGE/WHITE	2.152"
"D" = N/R	TURQUOISE/BLUE	2.152"

ACCUMULATOR SPRING I.D. (1.9L)		
ACCUM.	SPRING COLOR <i>Inner/Outer</i>	SPRING LENGTH <i>Inner/Outer</i>
"A" = 2-3	GREY/GREY	2.345"/2.813"
"B" = 1-2	**/WHITE	**/3.080"
"C" = N/D	YELLOW/PLAIN	2.100"/2.080"
"D" = N/R	ORANGE/ORANGE	3.670"/4.115"

\*\* 1-2 Inner Spring not used on 1.9L Engine.



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Figure 2