



GM 6L80/90

INTERNAL PARTS DIMENSIONAL DIFFERENCES

COMPLAINT: A GM truck equipped with the 6L90 Transmission has an after overhaul complaint of a “screech” noise during the 2-3 and 4-5 shift.

CAUSE: A 6L80 3-5-R Clutch hub was installed in this 6L90. The 6L80 3-5-R is 8 inches tall, while the 6L90 3-5-R Clutch hub is 8½ inches tall. The 6L80 clutch hub did not engage the bottom friction plate teeth which would scrap the clutch hub when the clutch applied making the “screech” noise.

CORRECTION: There are a number of 6L80/90 parts that are dimensionally different, fifteen (15) of them are illustrated in this bulletin where the height, diameter or thickness of the component matters. When grabbing one of these parts off the shelf for the 6L80/90 transmission, make certain it dimensionally matches the original.

SERVICE INFORMATION:

Figure 1 shows the height of the 6L80 torque converter housing.

Figure 2 shows the height of the 6L90 torque converter housing.

Figure 3 shows the length of the 6L80 transmission case, the length of the park rod and the thickness of the park pawl.

Figure 4 shows the length of the 6L90 transmission case, the length of the park rod and the thickness of the park pawl.

Figure 5 shows the height of the 6L80 4-5-6 clutch housing.

Figure 6 shows the height of the 6L90 4-5-6 clutch housing.

Figure 7 shows the height of the 6L80 4-5-6 clutch hub.

Figure 8 shows the height of the 6L90 4-5-6 clutch hub.

Figure 9 shows the height of the 6L80 1-2-3-4/3-5-R clutch housing.

Figure 10 shows the height of the 6L90 1-2-3-4/3-5-R clutch housing.

Figure 11 shows the height of the 6L80 2-6/low/reverse support.

Figure 12 shows the height of the 6L90 2-6/low/reverse support.

Figure 13 shows the height of the 6L80 1-2-3-4 clutch hub.

Figure 14 shows the height of the 6L90 1-2-3-4 clutch hub.

Figure 15 shows the 3-5-R/2-6 6L80 clutch hub.

Figure 16 shows the 3-5-R/2-6 6L90 clutch hub.

Figure 17 shows the height of the 6L80 output planetary and sun gear.

Figure 18 shows the height of the 6L90 output planetary and sun gear.

Figures 19 and 20 explains the many possibilities of 6L80 and 6L90 output shaft lengths and diameter.

Figure 21 shows the dimensional difference in the 6L80 valve body assembly that pertains to the clutch feed oil transfer passages to transmission case distance.

Figure 22 shows the dimensional difference in the 6L90 valve body assembly that pertains to the clutch feed oil transfer passages to transmission case distance.

Figure 23 shows the difference in length of the 6L80 transmission fluid pan.

Figure 24 shows the difference in length of the 6L90 transmission fluid pan.

6L80/90 INTERNAL PARTS DIMENSIONAL DIFFERENCES

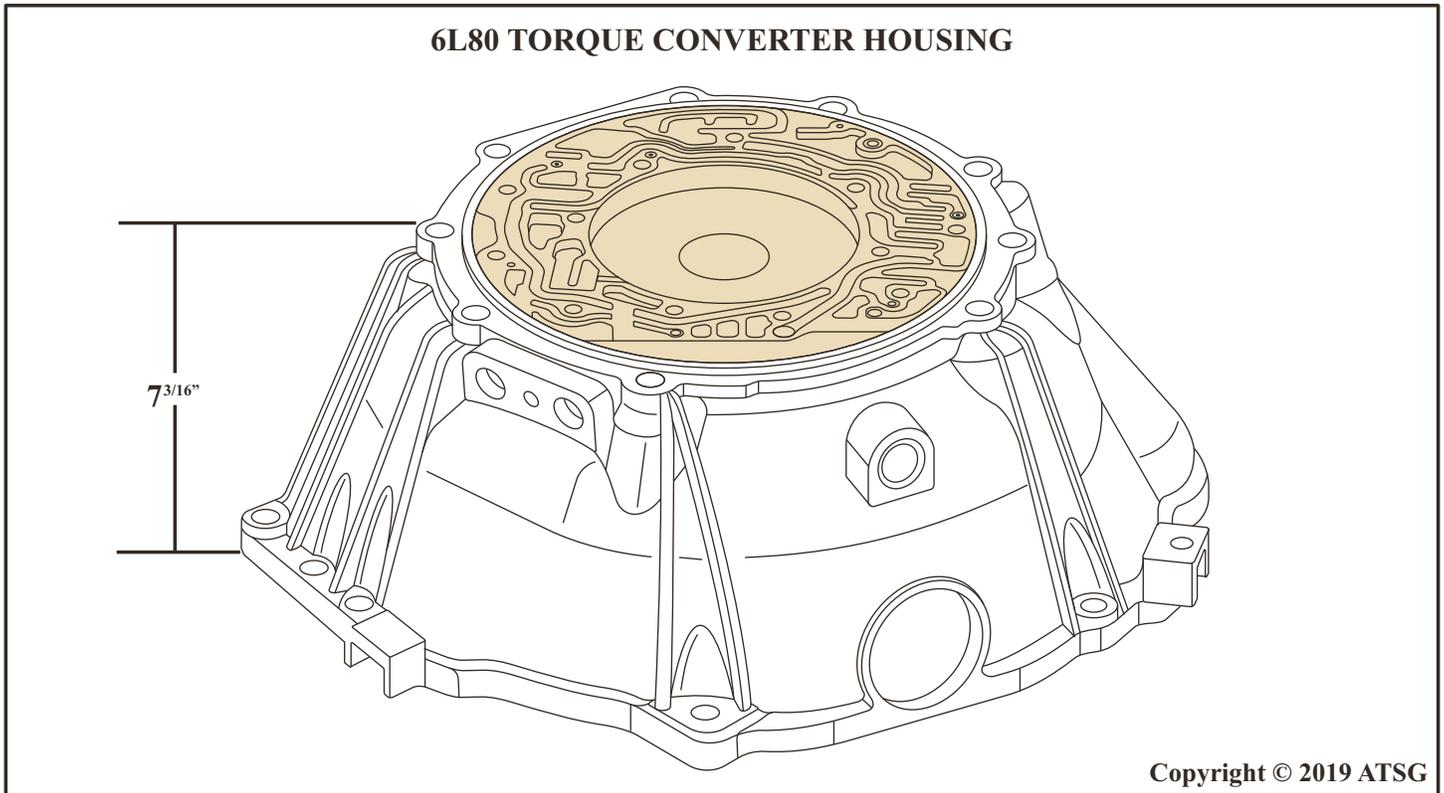


Figure 1

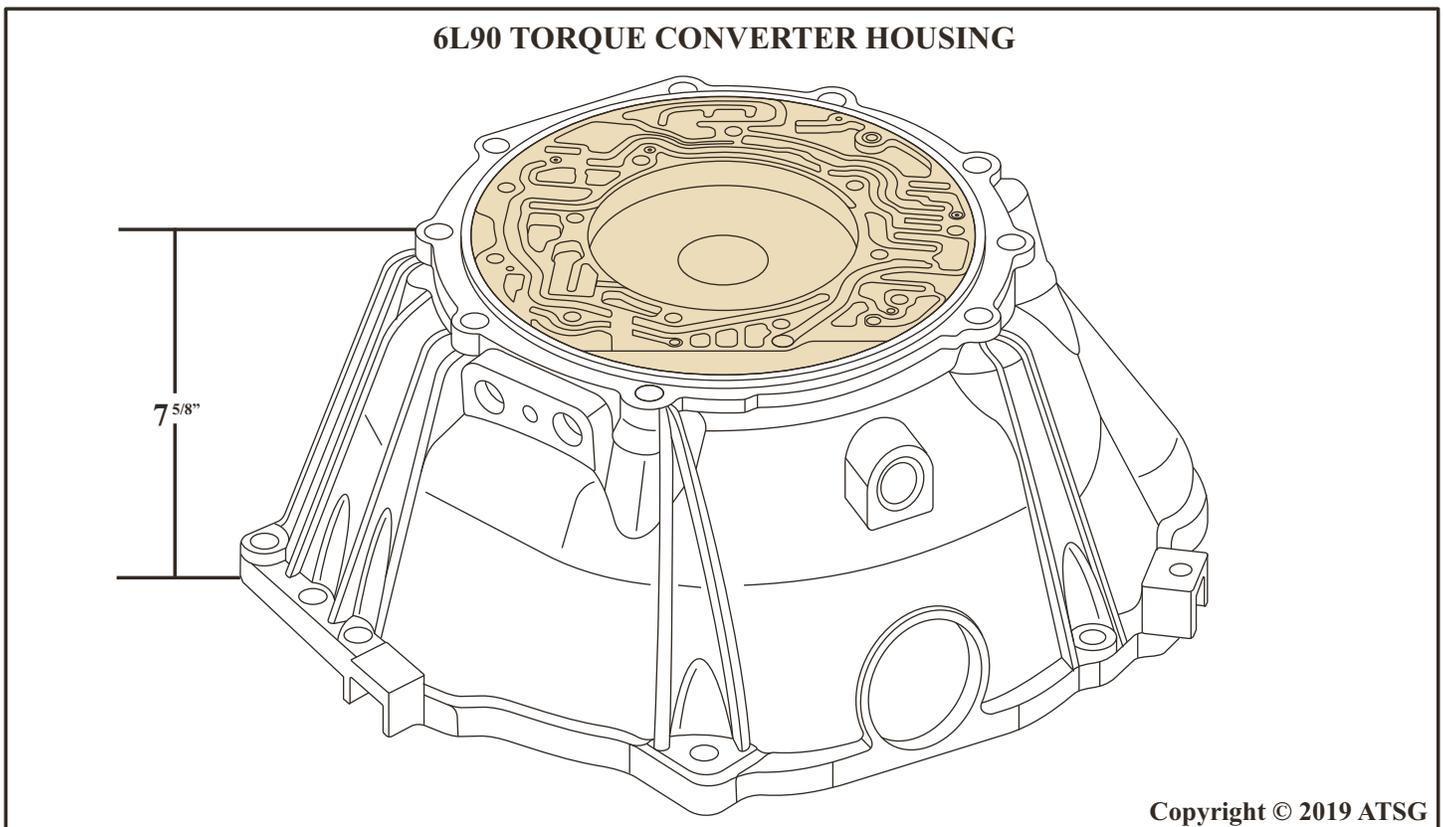


Figure 2

6L80/90 INTERNAL PARTS DIMENSIONAL DIFFERENCES

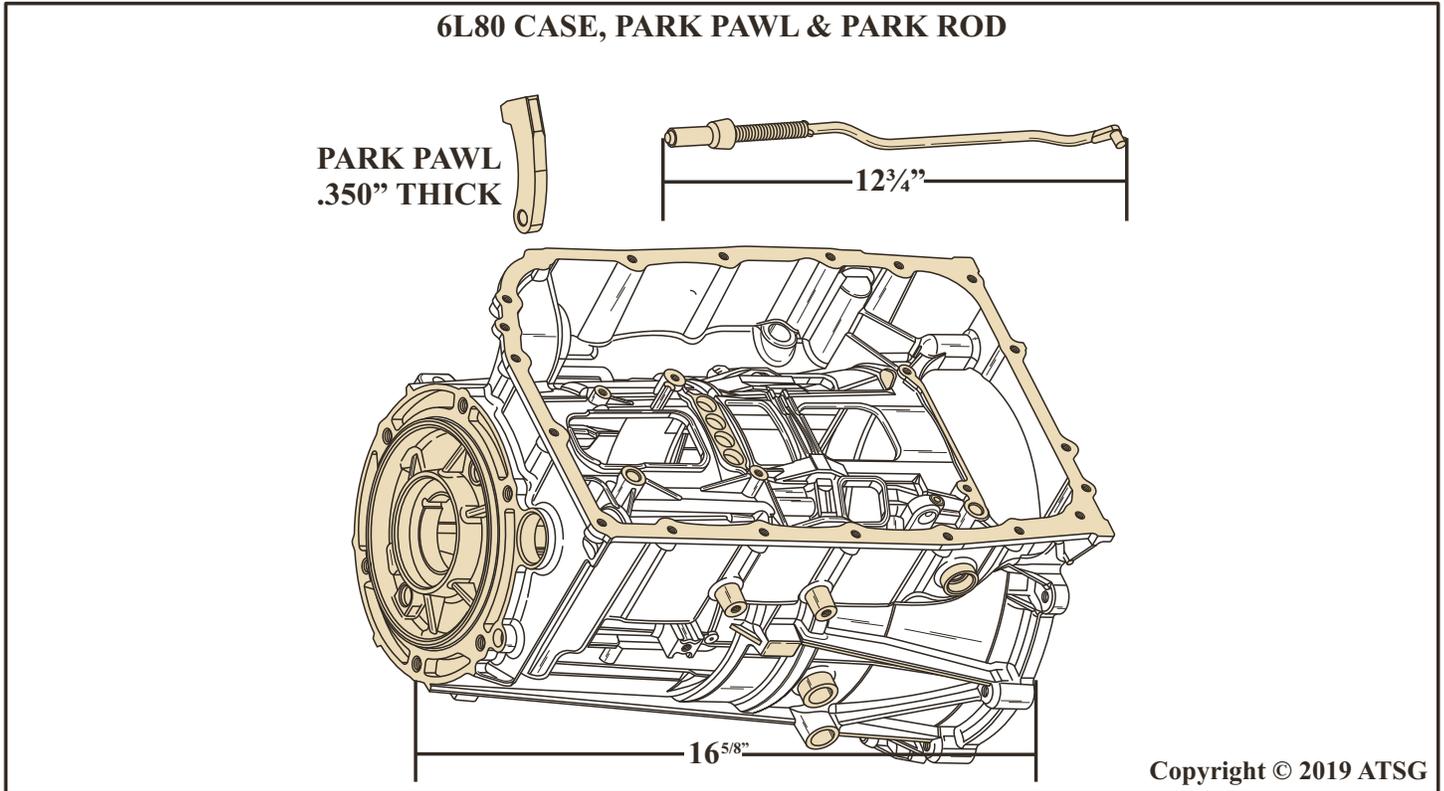


Figure 3

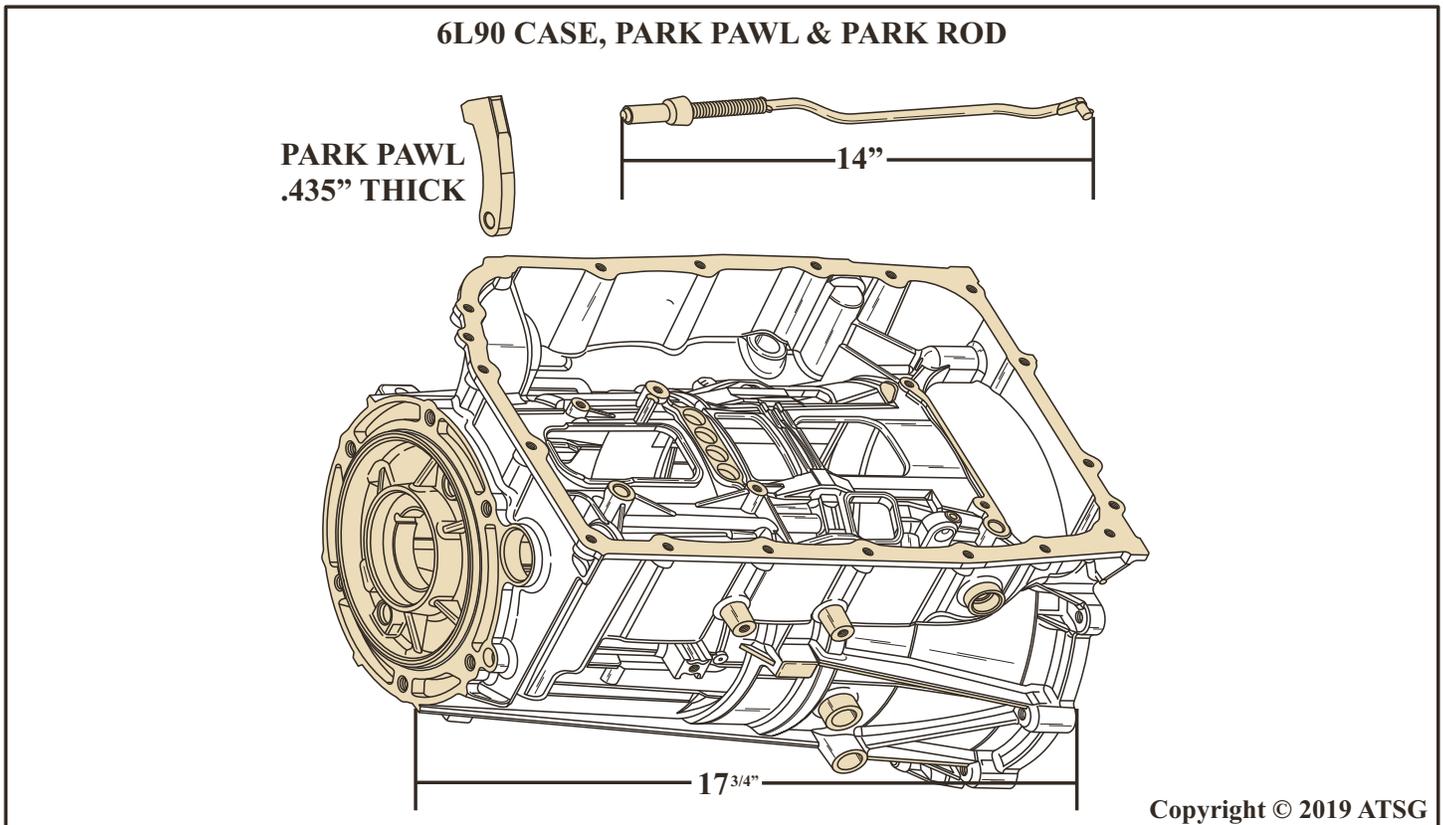


Figure 4

6L80/90 INTERNAL PARTS DIMENSIONAL DIFFERENCES

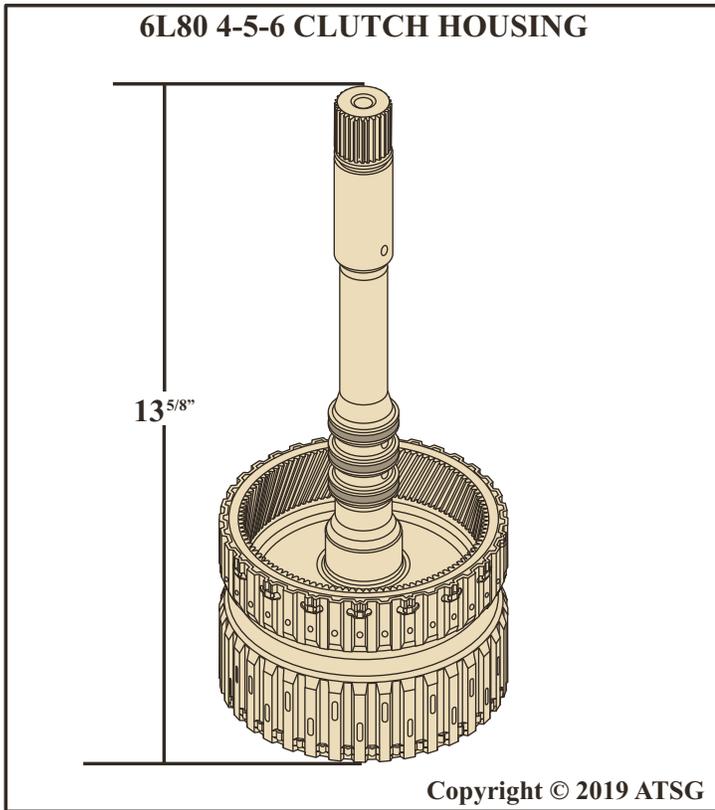


Figure 5

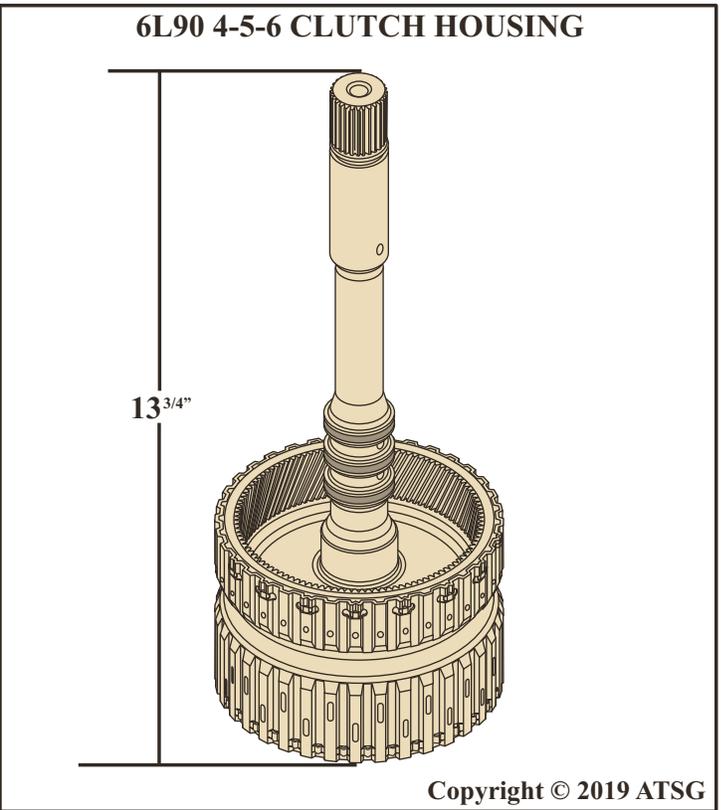


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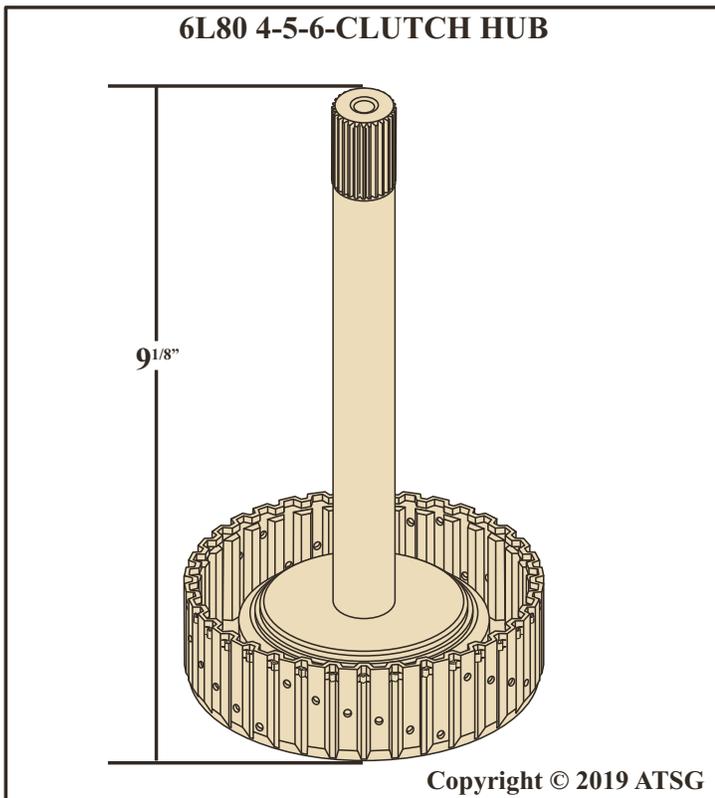


Figure 7

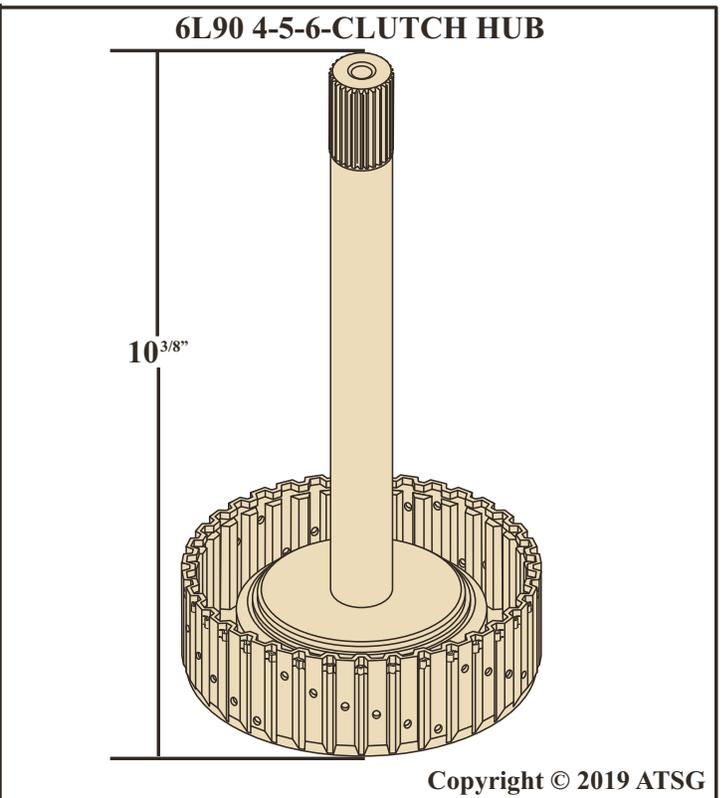
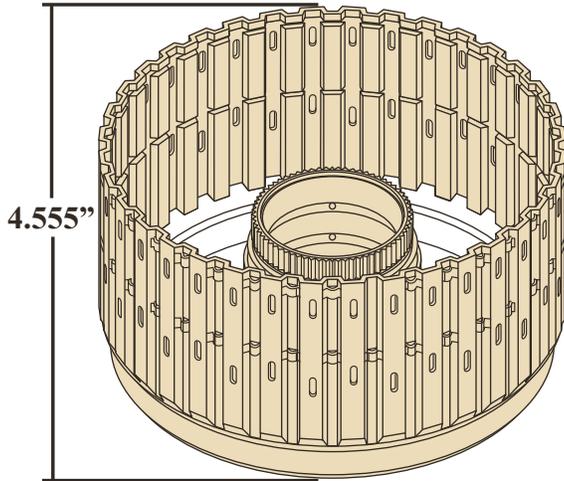


Figure 8

6L80/90 INTERNAL PARTS DIMENSIONAL DIFFERENCES

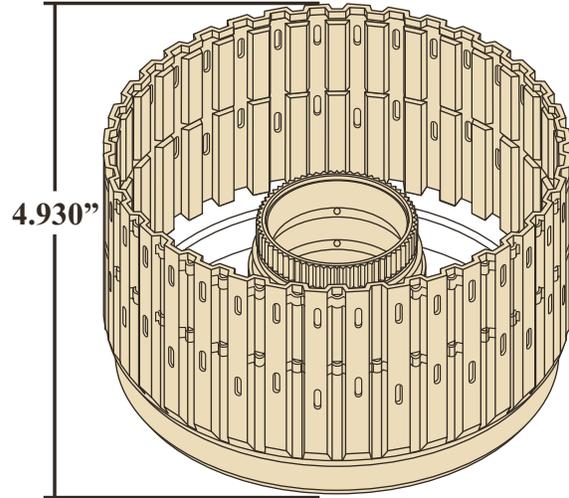
6L80 1-2-3-4/3-5-R CLUTCH HOUSING



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Figure 9

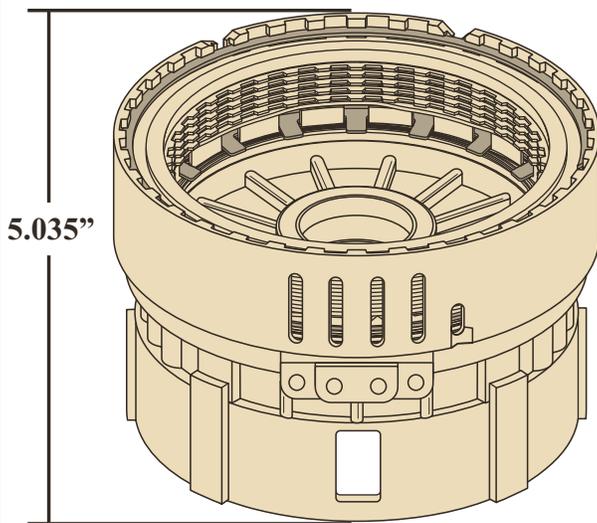
6L90 1-2-3-4/3-5-R CLUTCH HOUSING



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Figure 10

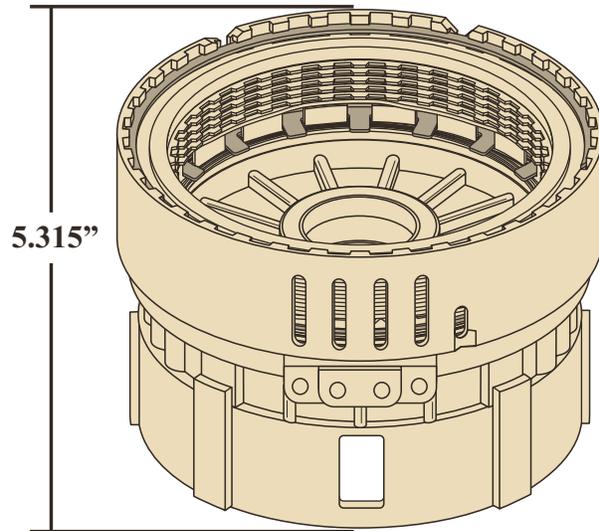
6L80 2-6/LOW-REVERSE SUPPORT



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Figure 11

6L90 1-2-3-4/3-5-R SUPPORT



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Figure 12

6L80/90 INTERNAL PARTS DIMENSIONAL DIFFERENCES

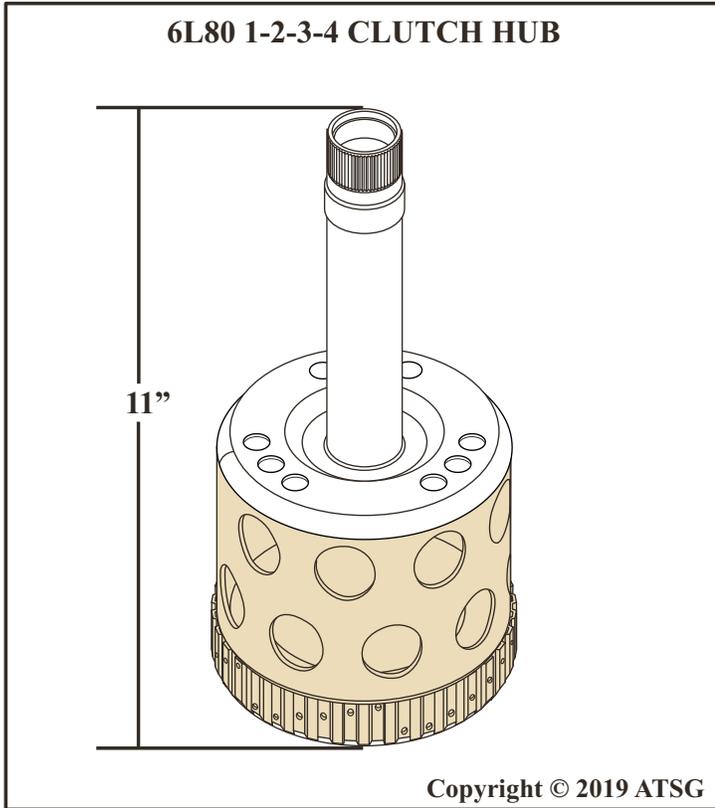


Figure 13

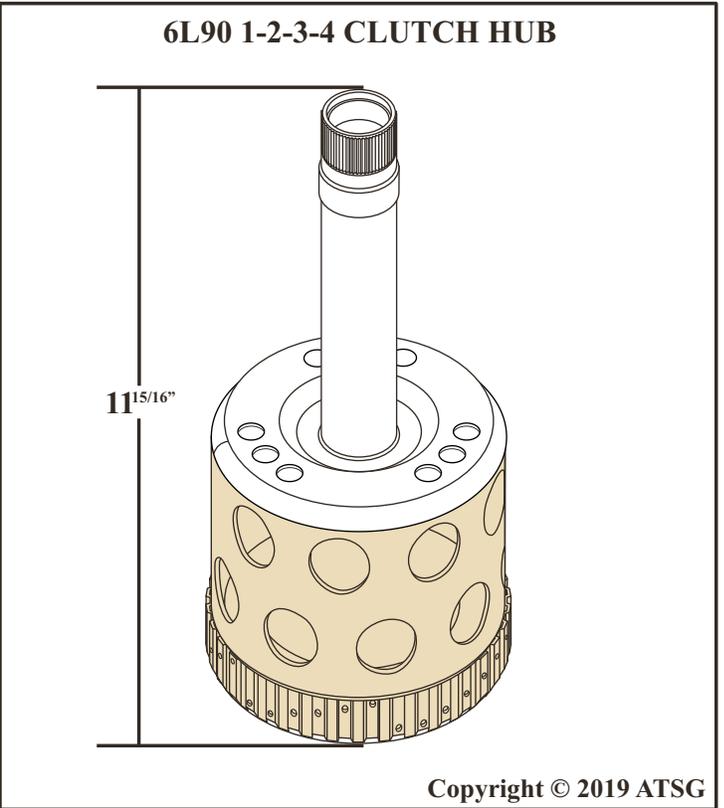


Figure 14

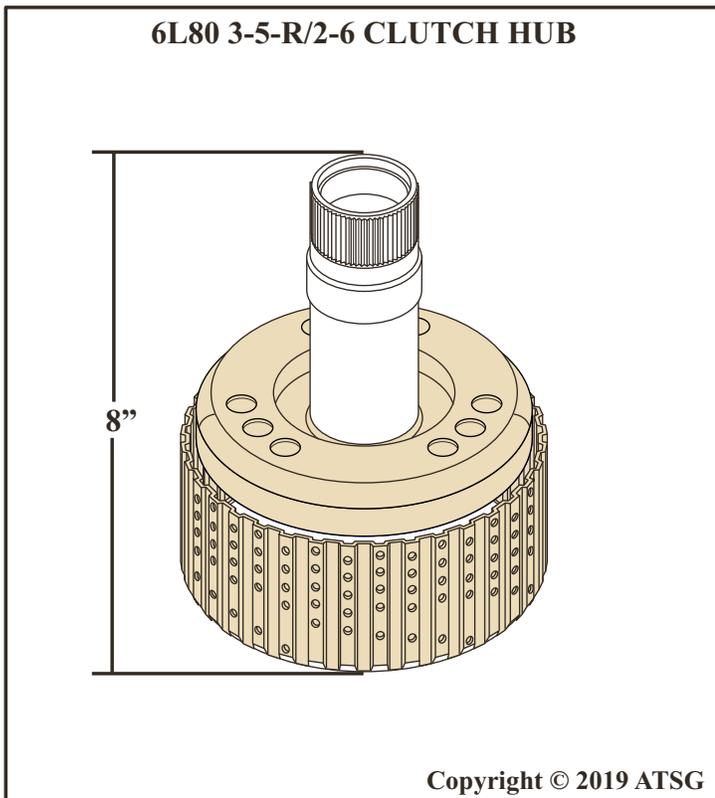


Figure 15

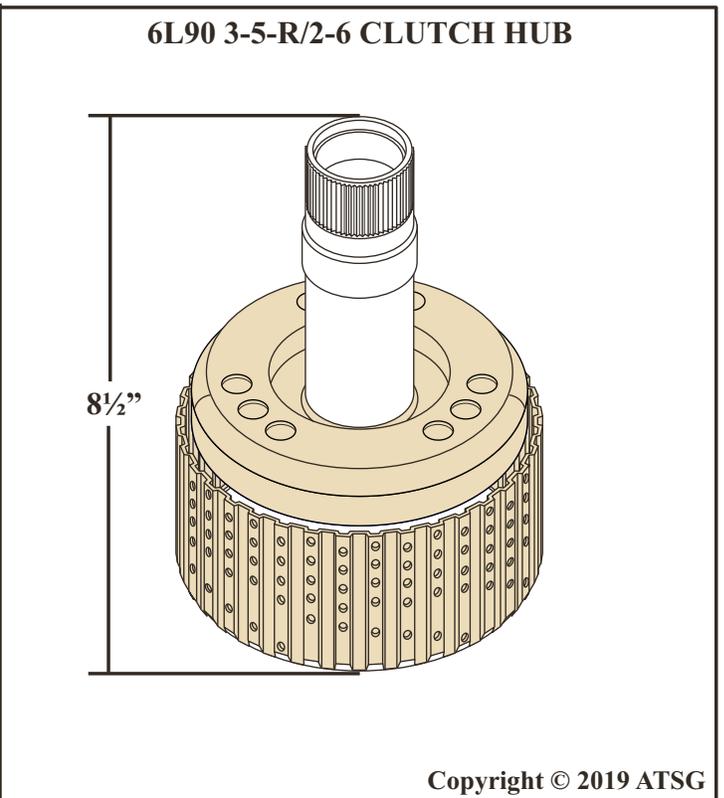


Figure 16

6L80/90 INTERNAL PARTS DIMENSIONAL DIFFERENCES

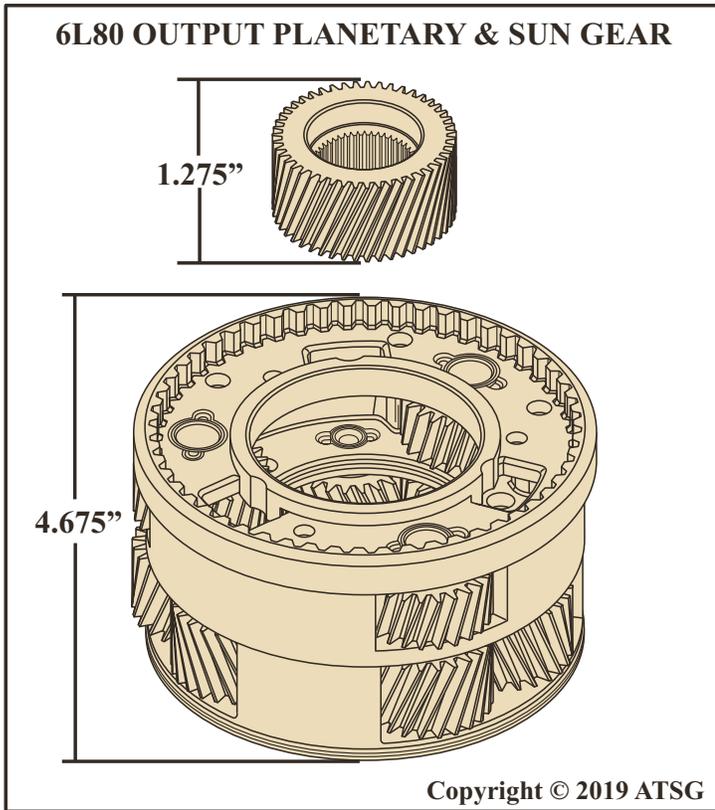


Figure 17

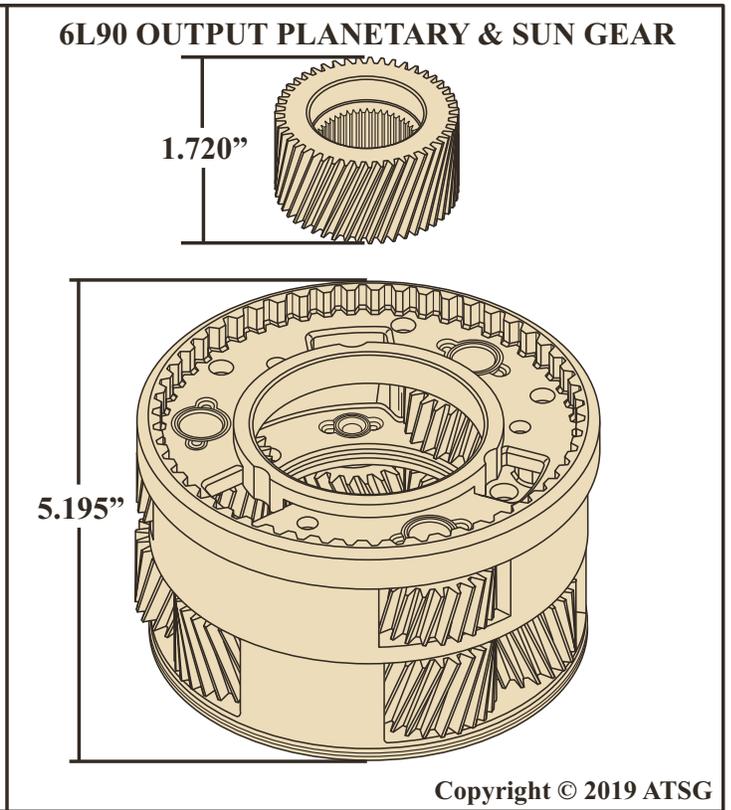


Figure 18

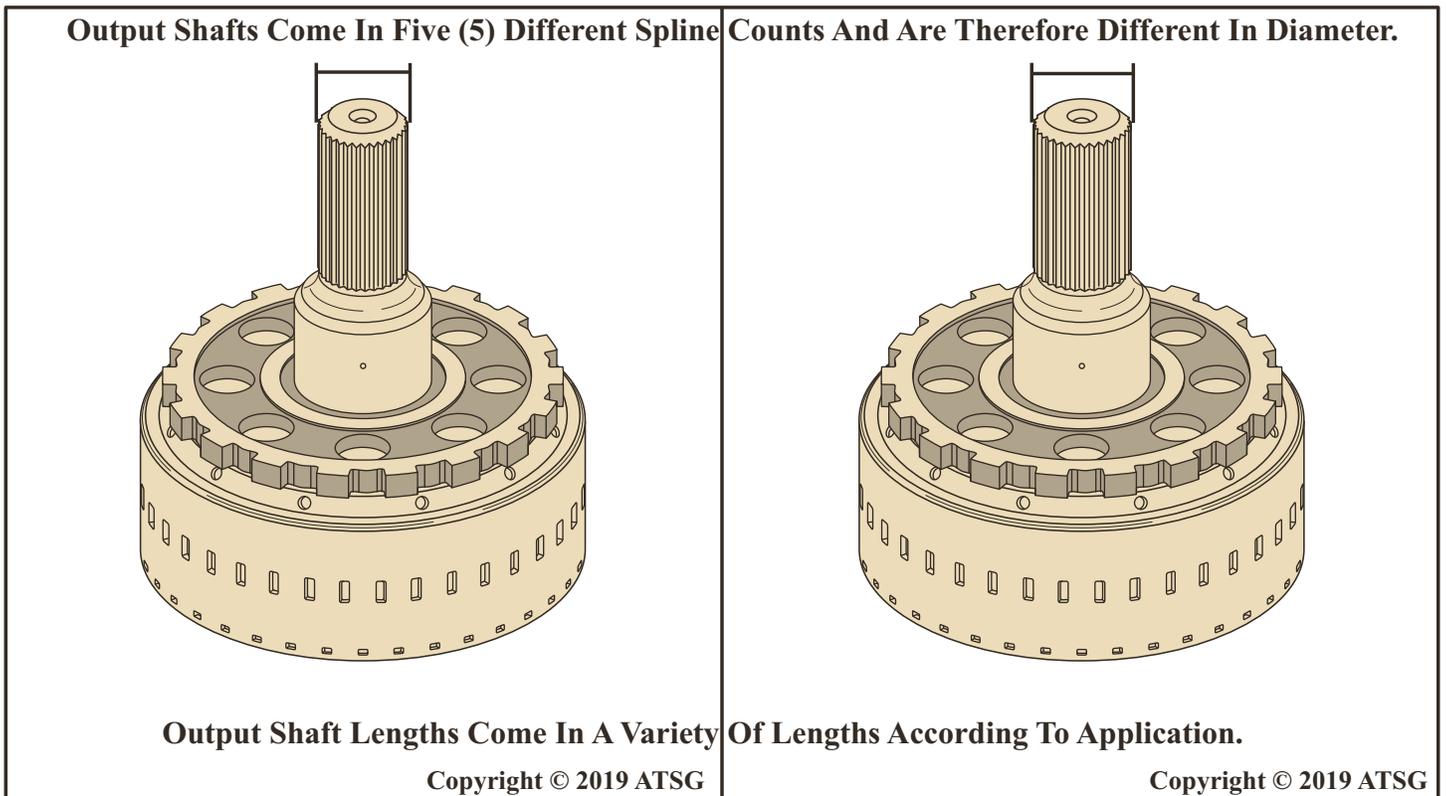
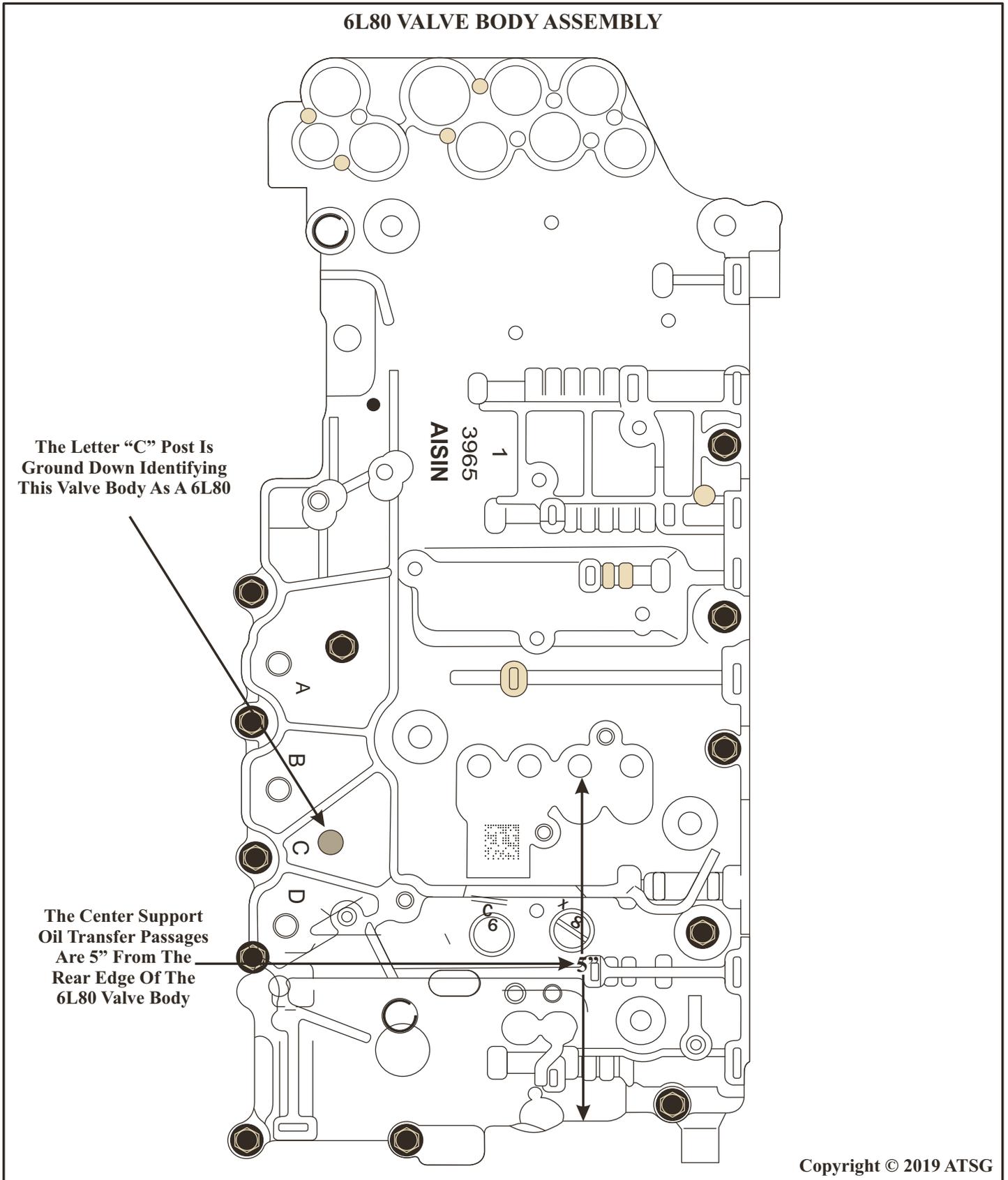


Figure 19

Figure 20

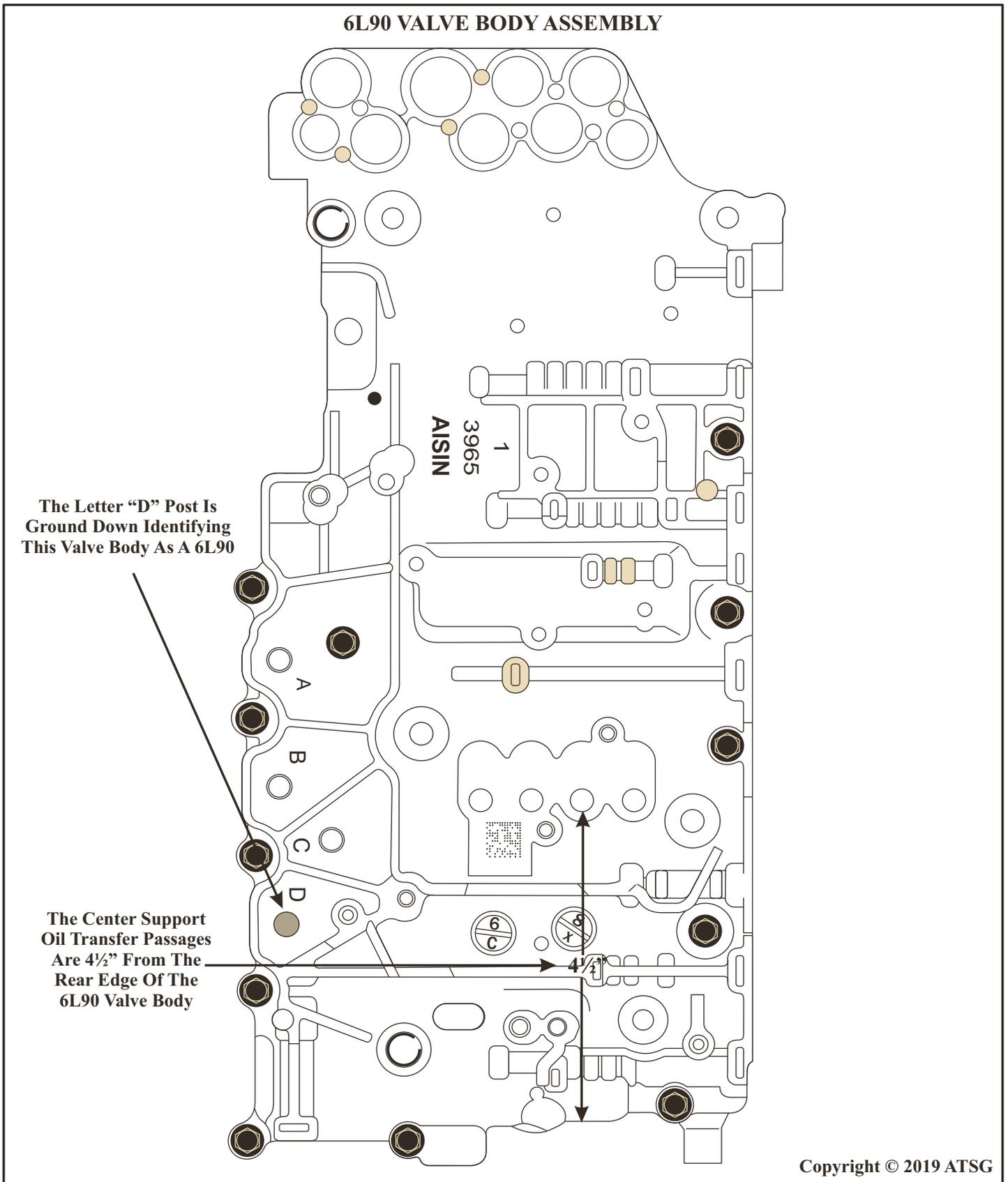
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Figure 21

6L80/90 INTERNAL PARTS DIMENSIONAL DIFFERENCES



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Figure 22



Technical Service Information

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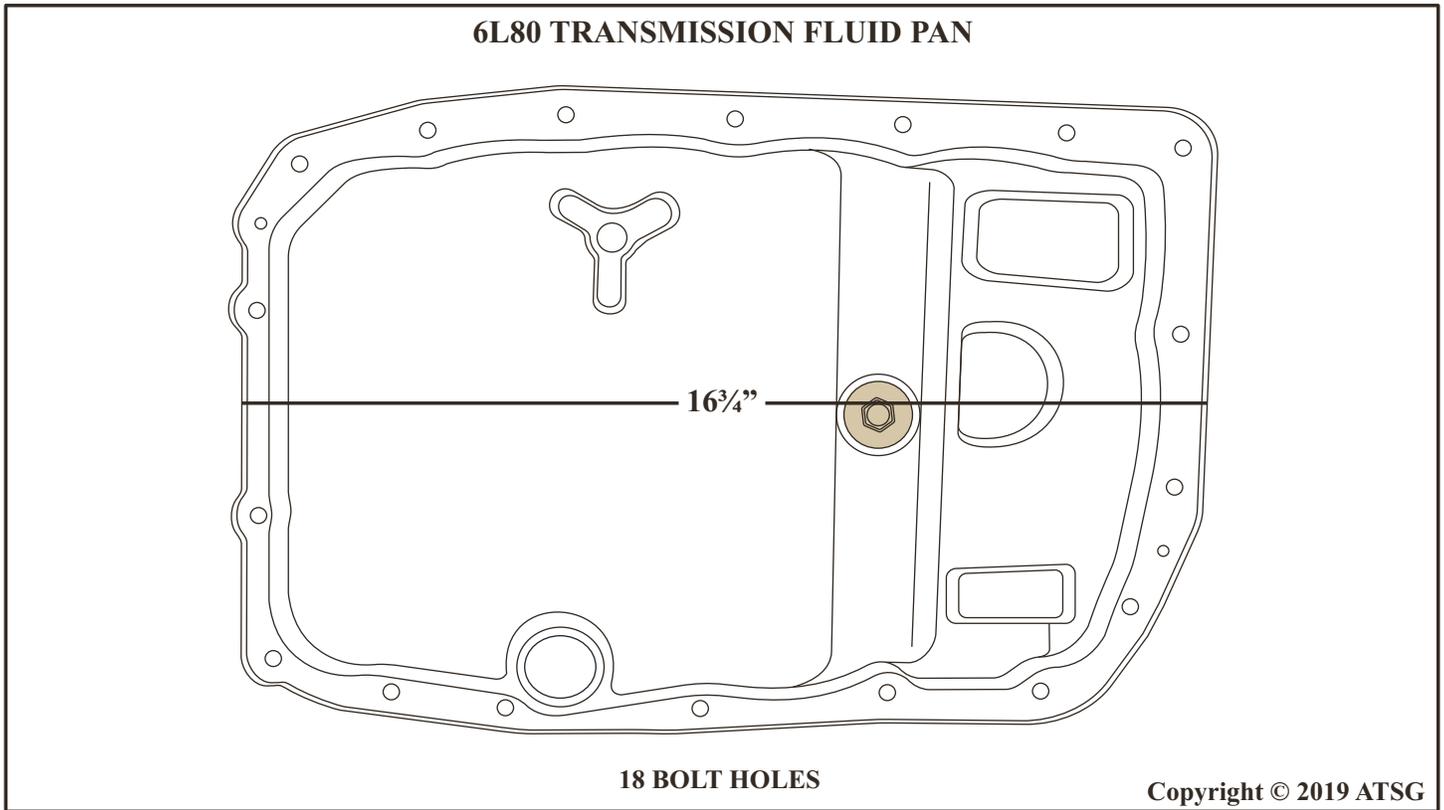


Figure 23

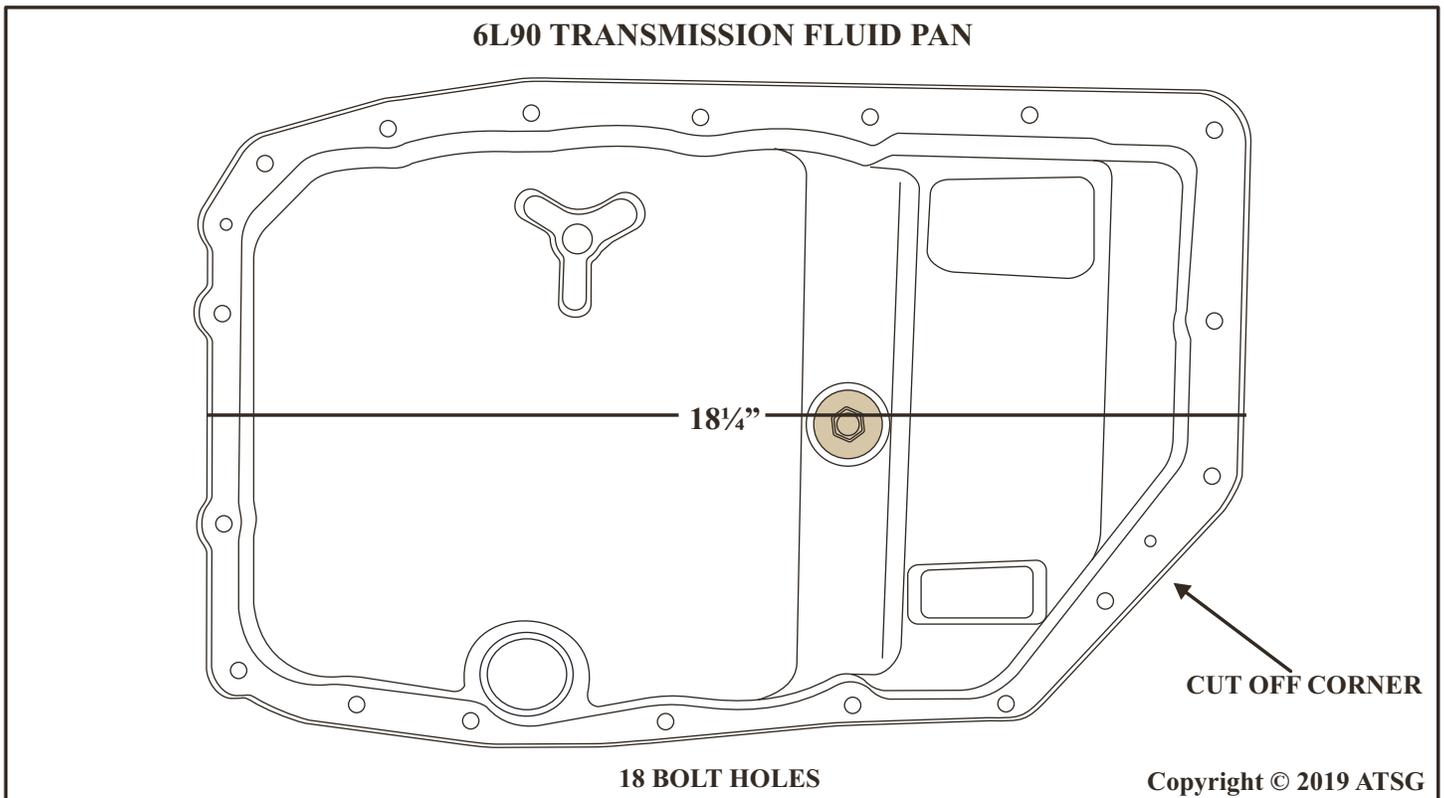


Figure 24