



Technical Service Information

TOYOTA A540-E TRANSAXLE MODIFICATIONS FOR NEW DESIGN "COMMON SUMP"

CHANGE: Beginning in Mid-May, 1991, many engineering changes were made on all Toyota and Lexus vehicles equipped with the A540-E transaxle, to accommodate a new design "Common Sump" that now allows the transaxle *and* differential to be filled from the transaxle fill tube.

REASON: Increased lubrication performance, and increased final drive durability.

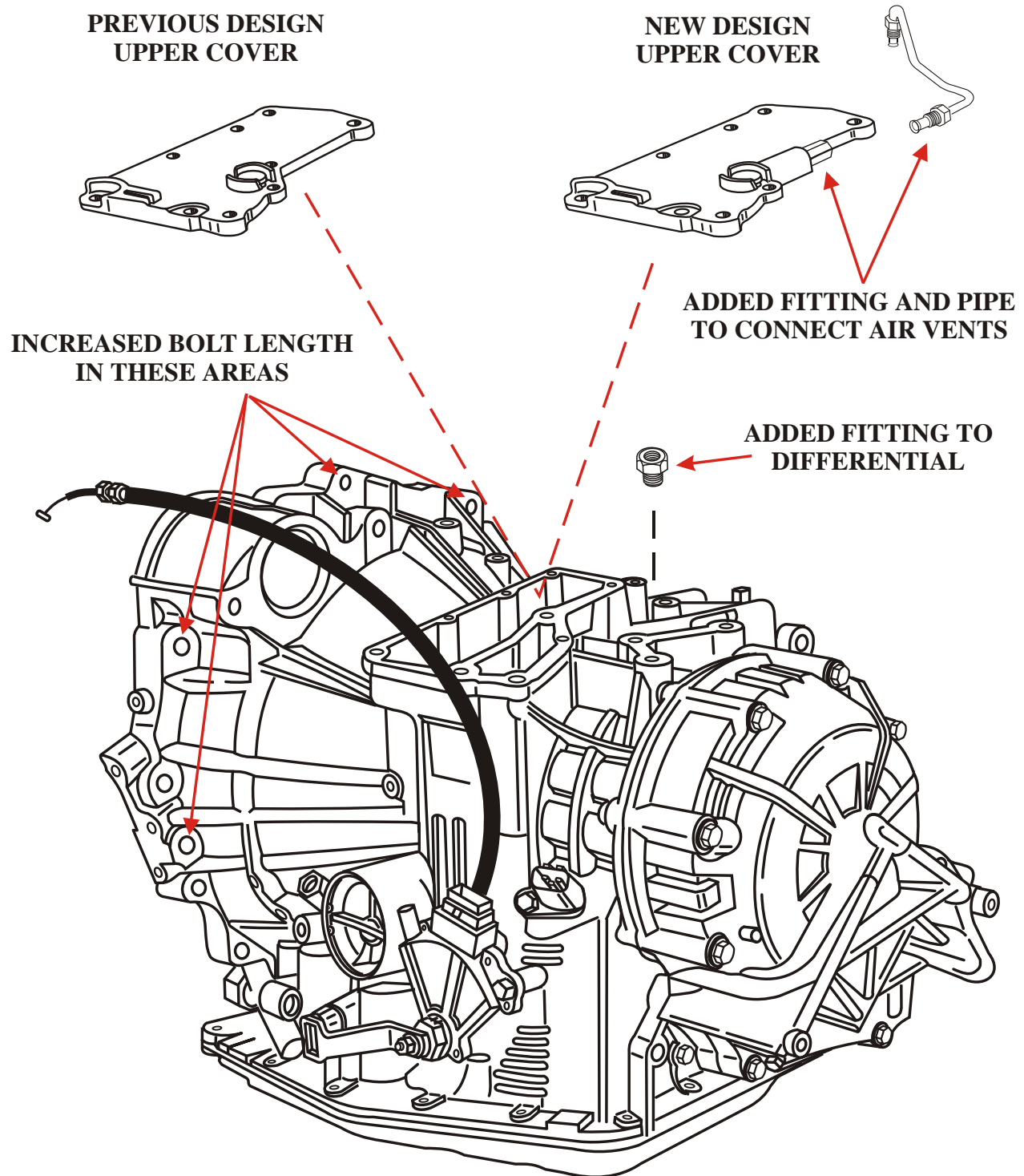
PARTS AFFECTED:

- (1) TRANSAXLE CASE - Added passage in transaxle case to allow free flow of oil between the transaxle and the differential. Refer to Figure 2.
Second added passage, near the differential area that is fed with oil from the valve body to keep the differential at a constant oil level. Refer to Figure 2.
A new fitting and tube assembly added on top of the transaxle case to give the transaxle and differential a common vent system. Refer to Figure 1.
Increased thickness in the bellhousing to accommodate 5mm (1/4") increase in the bolts that attach the transaxle to the engine. Refer to Figure 1.
- (2) TRANSAXLE CASE UPPER COVER - Added fitting and tube assembly to connect the differential to the transaxles air vent system.
- (3) DIFFERENTIAL COVER - Added passage in the cover to transport the oil from the valve body to fill the differential. Refer to Figure 3.
A new design rear engine mount to accommodate the added passage in the differential cover, as shown in Figure 3.
- (4) VALVE BODY - Added passage to accommodate a new tube and hold down brackets to supply the differential with fluid, direct from the valve body. Refer to Figure 4.
- (5) TRANSAXLE DIPSTICK - The "Full" mark increased from 1.338" to 1.929" on the Lexus vehicles, and from 1.338" to 2.047" on Toyota vehicles, which changes the transaxle and differential fluid capacity. Refer to Figure 5.

INTERCHANGEABILITY:

NONE OF THE PARTS LISTED ABOVE WILL INTERCHANGE WITH PREVIOUS DESIGN LEVEL PARTS. THE NEW DESIGN LEVEL PARTS WILL RETRO-FIT BACK TO PREVIOUS MODEL VEHICLES WHEN ALL OF THE PARTS LISTED ABOVE ARE USED AS A PACKAGE.

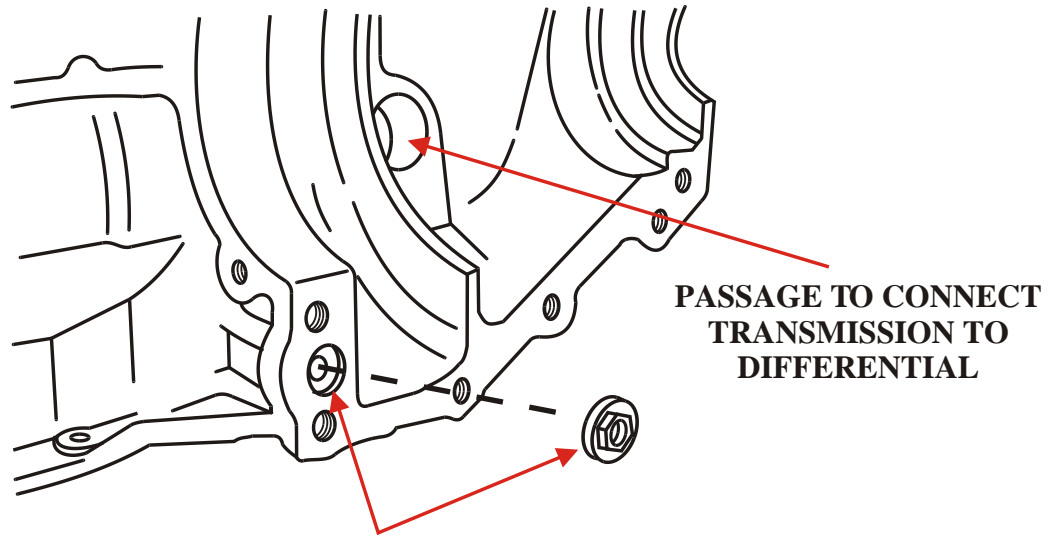
TRANSMISSION CASE AND UPPER COVER



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Figure 1

DIFFERENTIAL AREA CHANGES



ADDED PASSAGE AND GASKET FOR CONSTANT LEVEL IN DIFFERENTIAL

Figure 2

DIFFERENTIAL COVER CHANGES

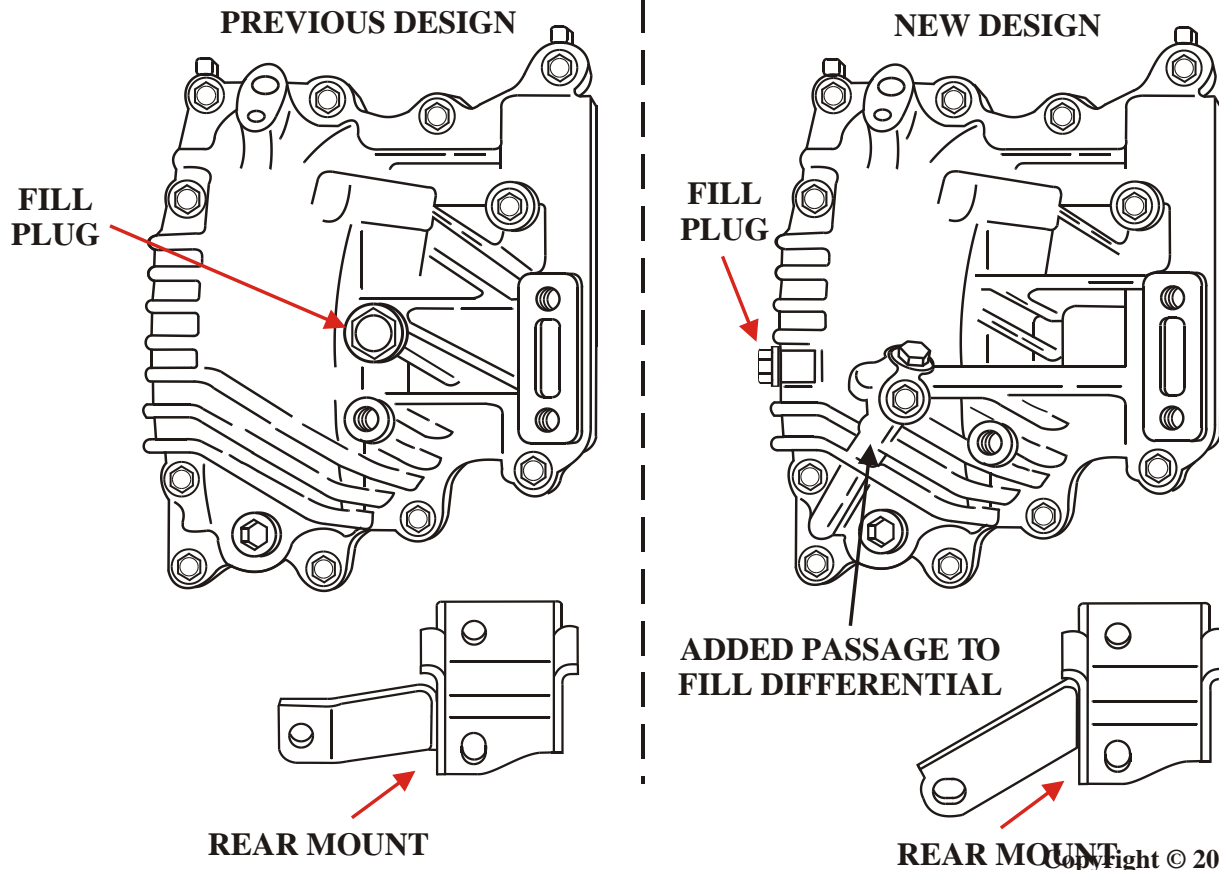


Figure 3

VALVE-BODY

**ADDITIONAL TUBE
AND HOLD DOWN BRACKETS**

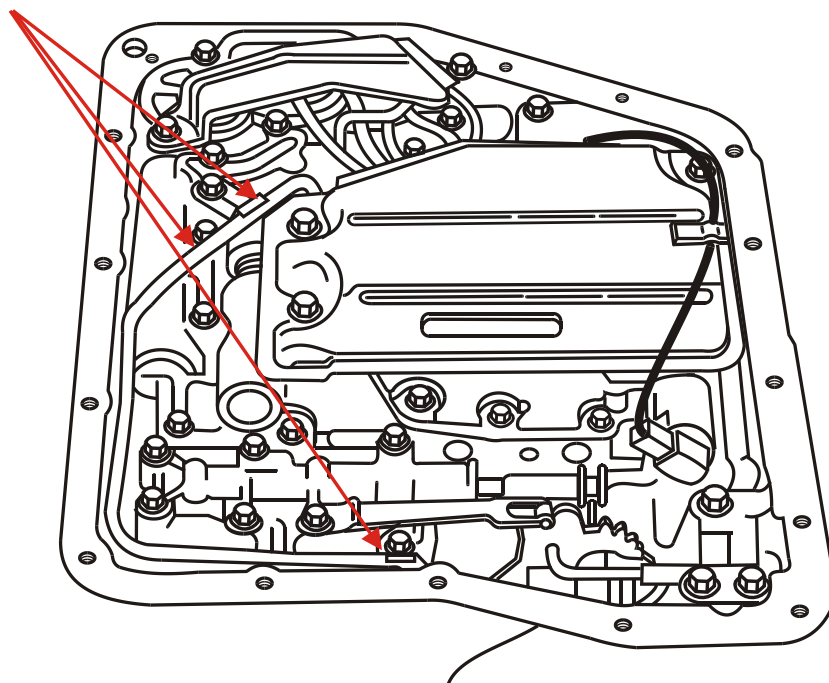
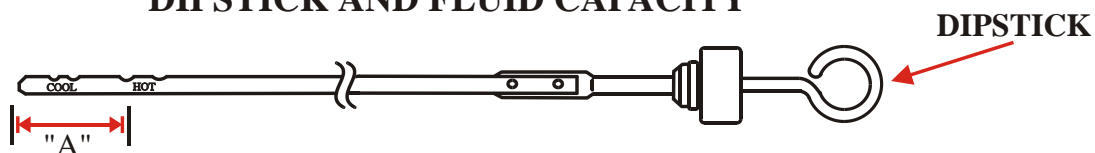


Figure 4

DIPSTICK AND FLUID CAPACITY



DIMENSION "A" = 34mm. (1.338") now 49mm. (1.929") on LEXUS
DIMENSION "A" = 34mm. (1.338") now 52mm. (2.047") on TOYOTA

FLUID CAPACITY'S

	PREVIOUS DESIGN	NEW DESIGN
TRANSMISSION	DRY FILL 6.2 qts. (5.9 liters)	DRY FILL 6.9 qts. (6.5 liters)
	DRAIN & REFILL 2.6 qts. (2.5 liters)	DRAIN & REFILL 3.3 qts. (3.1 liters)
DIFFERENTIAL	DRY FILL 1.1 qts. (1.0 liters)	DRY FILL 0.8 qts. (0.8 liters)
	DRAIN & REFILL 1.1 qts. (1.0 liters)	DRAIN & REFILL 0.8qts. (0.8 liters)

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Figure 5