THM 4T60-E

TAPERED ROTOR PUMP CASTING IDENTIFICATION AND INTERCHANGE

CHANGE: Beginning at the start of production for 1994 models, all THM 4T60-E transaxles were produced with a new design "Tapered" pump rotor and new design pump casting with location changes for the suction passage. Refer to Figures 1, 2 and 4. Beginning at the start of production for 1996 models, another new "Light Weight" pump casting was introduced that also requires the tapered rotor. Refer to Figures 1, 2 and 5.

REASON: New tapered rotor increases pump capacity and reduces cavitation for improved durability, and the random vane spacing reduces a noise concern.

PARTS AFFECTED:

(1) PUMP ROTOR - New design is now "Tapered" instead of the previous straight rotor, as shown in Figure 1. The "L" Body and "N" Body vehicles were built using the random spacing of the rotor vanes (34°, 40° and 46°) similar to the 4L60-E design. All other models will use a "Tapered" rotor with equal spacing of the rotor vanes (40°) as shown in Figure 1. All slides, rotors and vanes are still selective sizes.

(2) PUMP BODY - The new design pump body for the tapered rotor has the suction slot in the pump pocket re-sized and moved closer to the center hole for the oil pump drive shaft as shown in Figure 2.

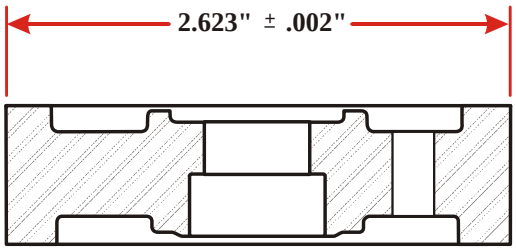
INTERCHANGEABILITY:

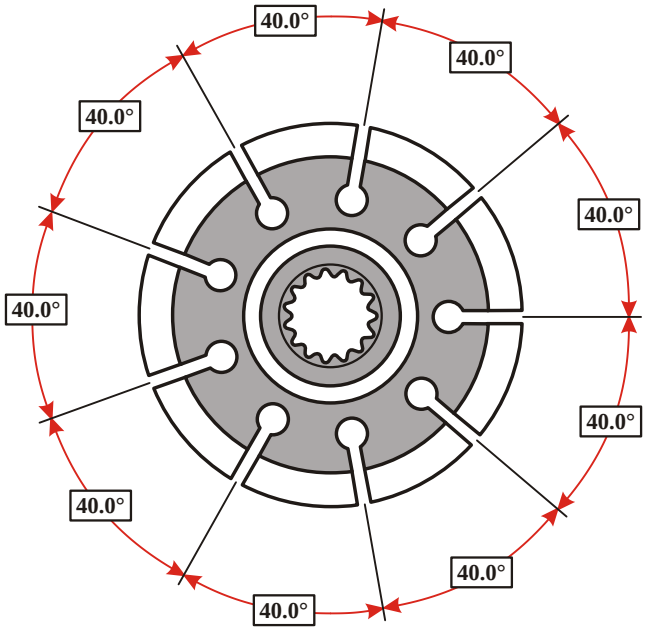
(1) 1ST DESIGN PUMP CASTING - This pump casting can use either the straight rotor or the new design tapered rotor, as the tapered rotor will retro-fit back in all models of the 4T60-E transaxle. This pump casting can be identified with the presence of two threaded holes for the pump cover and by the casting number, as shown in Figure 3.

(2) 2ND DESIGN PUMP CASTING - This pump casting ***requires*** the tapered rotor as the suction slot in the pump pocket was re-sized and moved closer to the center hole for the oil pump drive shaft, as shown in Figure 4. This pump casting can be identified by the presence of only one threaded hole for the pump cover and by the casting number, as shown in Figure 4. This pump casting, with the tapered rotor will back service all models of the 4T60-E transaxle, but will not replace the 3rd design pump body.

(3) 3RD DESIGN PUMP CASTING - This pump casting also ***requires*** the tapered rotor as the suction slot is in the same position as the 2nd design casting and is obviously a much lighter weight pump with the removal of much material, as shown in Figure 5. This pump also has a different casting number, and does not have any threaded holes for the pump cover, as shown in Figure 5. This pump casting ***will not*** retro-fit back on the first design valve body as it leaves open the second clutch passage.

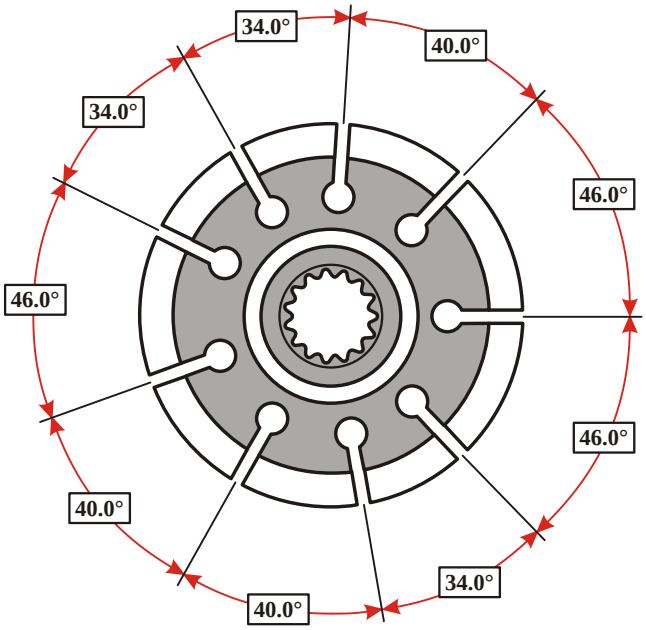
PREVIOUS DESIGN "STRAIGHT" PUMP ROTOR

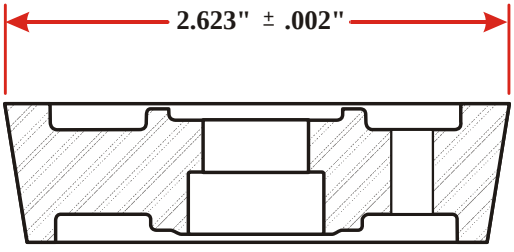




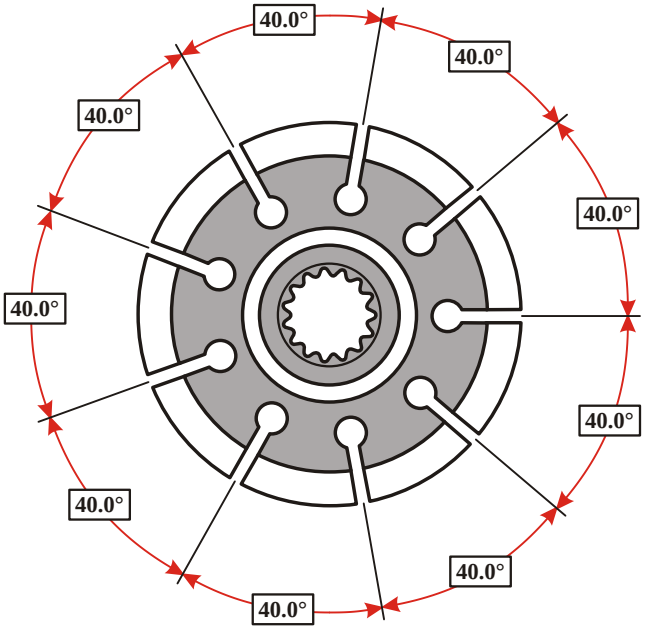
NEW DESIGN "TAPERED" PUMP ROTOR

L & N CAR





A, H, C, K, U & W CAR



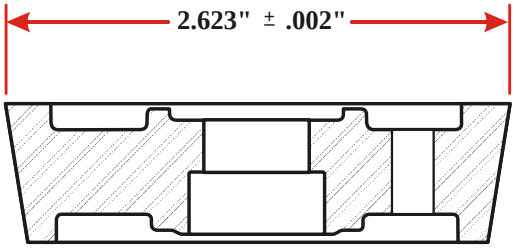


Figure 1

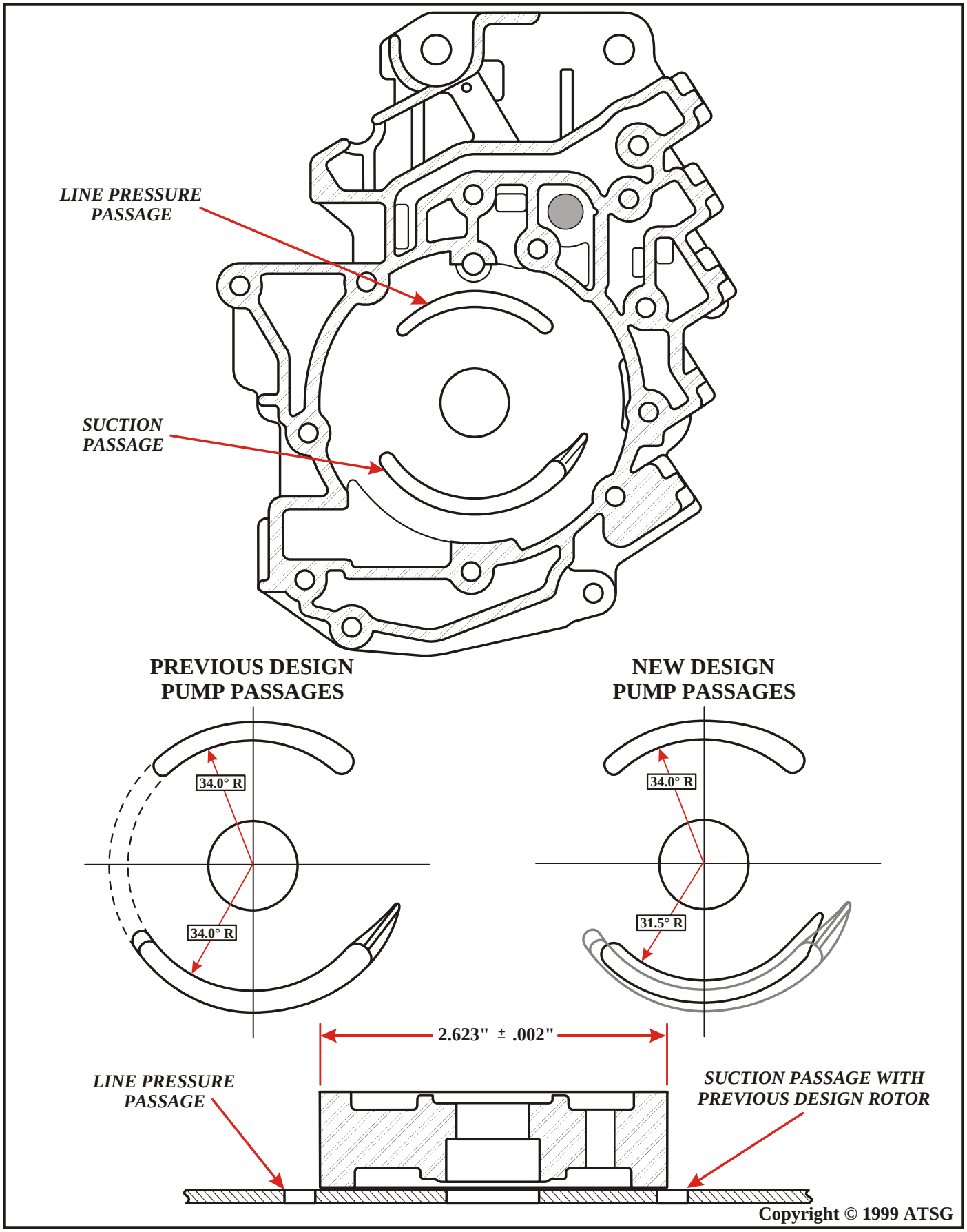
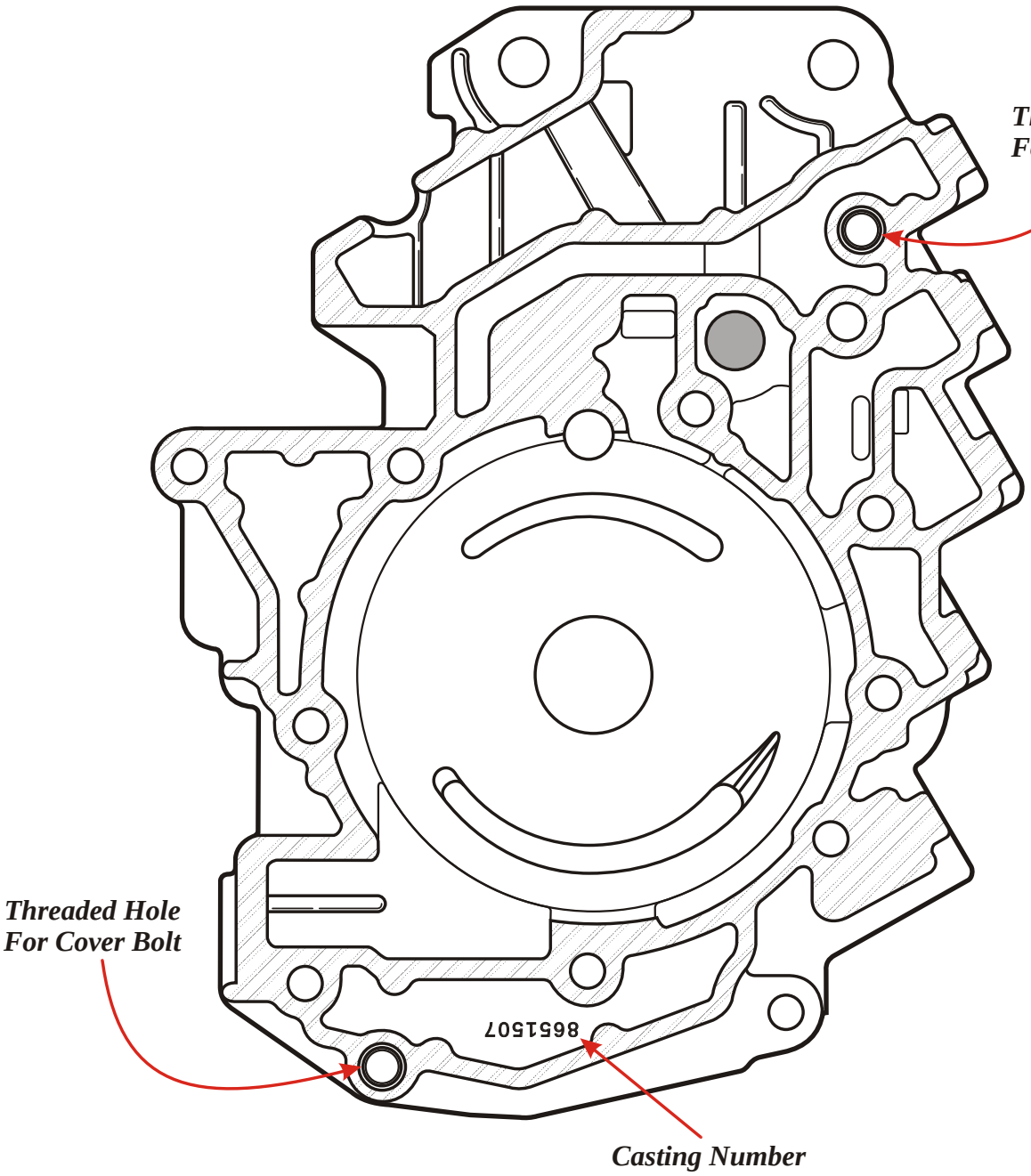


Figure 2

"1ST DESIGN" PUMP BODY CASTING



THIS PUMP CASTING CAN USE EITHER STRAIGHT OR TAPERED ROTOR

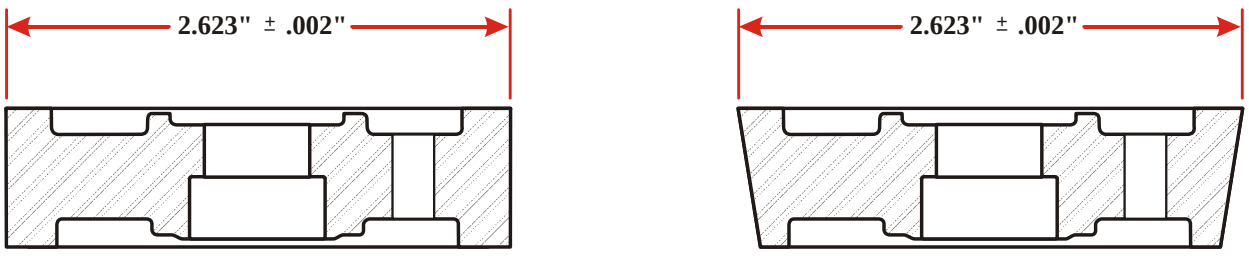
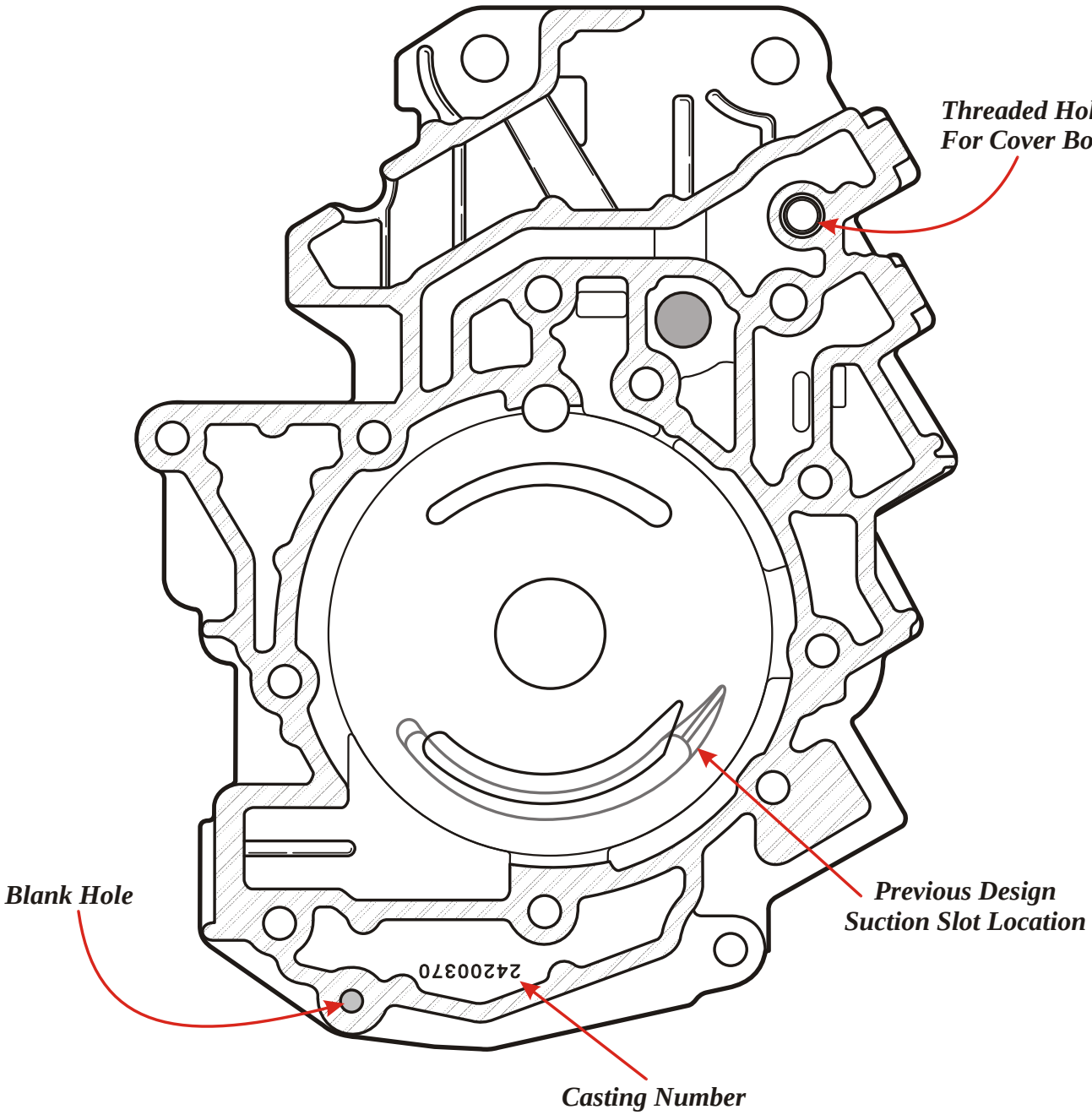
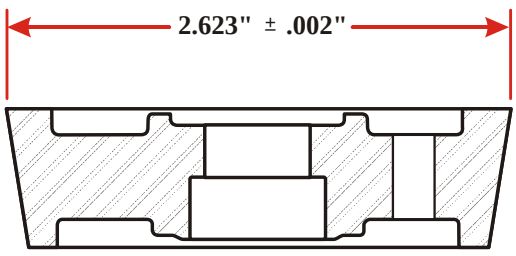


Figure 3

"2ND DESIGN" PUMP BODY CASTING



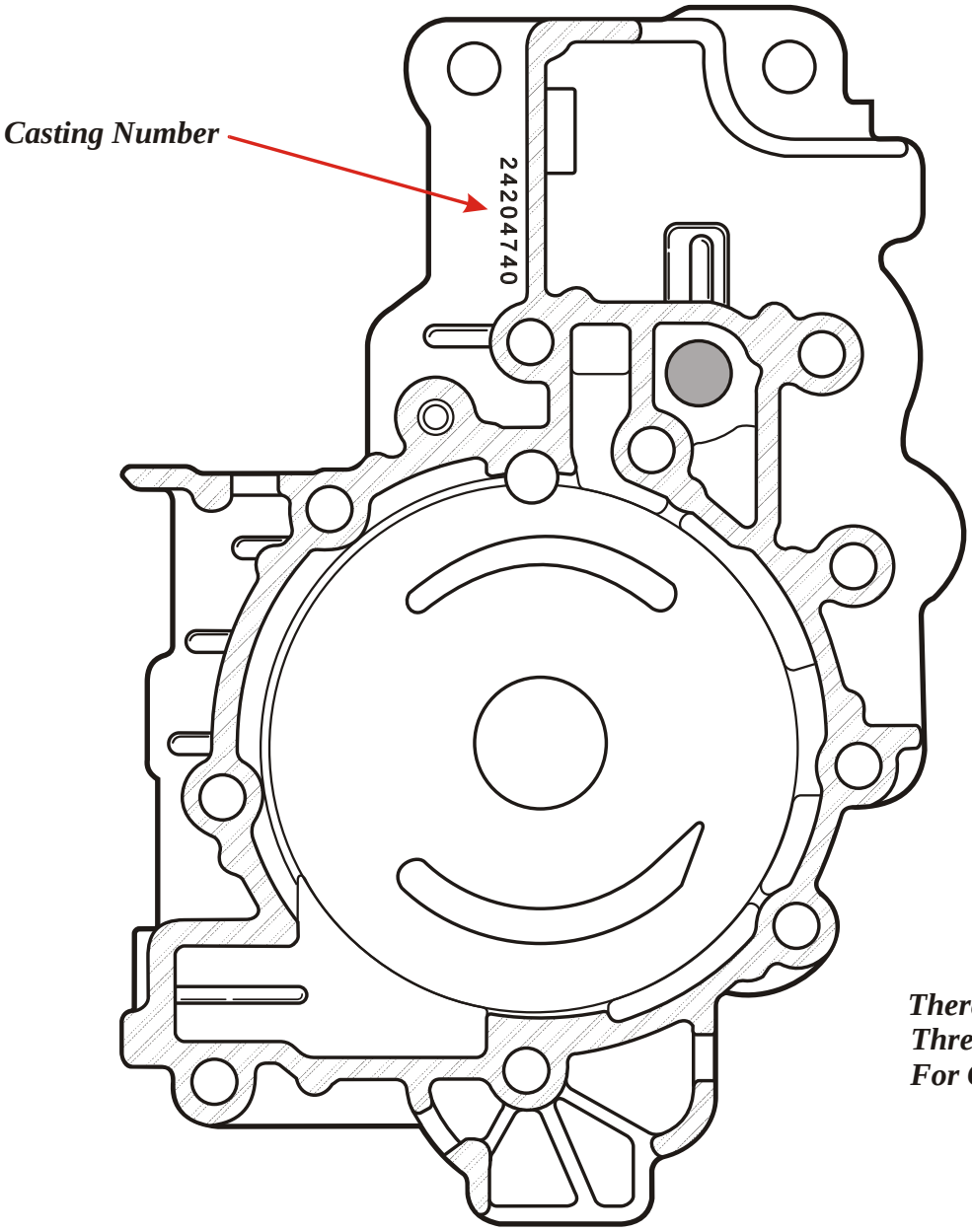
THIS PUMP CASTING *"REQUIRES"* TAPERED ROTOR



If the previous design straight pump rotor is used in this casting, the rotor will cover a portion of the "suction slot" as shown in Figure 2, and result in transaxle damage.

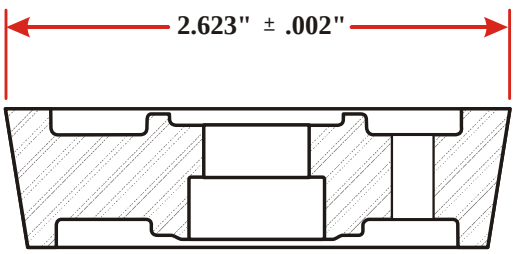
Figure 4

"3RD DESIGN" PUMP BODY CASTING



There Are "No" Threaded Holes For Cover Bolts

THIS PUMP CASTING *"REQUIRES"* TAPERED ROTOR AND *"WILL NOT"* BACK SERVICE PREVIOUS MODELS.



If the previous design straight pump rotor is used in this casting, the rotor will cover a portion of the "suction slot" as shown in Figure 2, and result in transaxle damage.

Figure 5