CHRYSLER 42RE AND 47RE

CHECKBALL LOCATIONS AND FUNCTIONS, PLUS NEW CHECKBALL ADDED IN TRANSFER PLATE

CHANGE: Beginning with the 1996 model year all of the 42RE and 47RE models, with the electronic controlled governor pressure, were produced with an added number 10 checkball located in the transfer plate, as shown in Figure 3.

REASON: To ensure sequential downshifts.

PARTS AFFECTED:

(1) TRANSFER PLATE - Casting changes to accommodate the added number 10 checkball and illustrated in Figure 3.

(2) OVERDRIVE SPACER PLATE - Changes in the hole configuration to accommodate the added number 10 checkball, as illustrated in Figure 4

(3) OVERDRIVE VALVE BODY - Casting changes to accommodate the added number 10 check ball, as illustrated in Figure 5.

INTERCHANGEABILITY:

None of the individual parts listed above will interchange with previous design level parts. When used as a complete service package, will back service any 42RE or 47RE.

NOTE: We have also provided you with the main valve body checkball locations in Figure 2 and the transfer plate checkball locations in Figure 3. The function of all checkballs are provided for you in Figure 1.

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CHECKBALL IDENTIFICATION AND FUNCTIONS

Checkball	Size	Function
No. 1	1/4" Steel	A) Checkball No. 1 forces line pressure behind the 1-2 shift control valve and both the 1-2 and 2-3 governor plugs to prevent an upshift into 2nd and/or 3rd gear when the selector lever is placed into Manual Low. B) Checkball No. 1 directs throttle pressure behind the 1-2 shift control valve and blocks the passage to the 1-2 governor plug in order to inhibit a 3-1 downshift during a forced 3-2 downshift when the vehicle is above the calibrated speed.
No. 2	1/4" Steel	A) Checkball No. 2 forces line pressure behind the 2-3 shift valve to prevent a 2-3 upshift when the selector lever is placed into Manual 2nd. B) Checkball No. 2 blocks the manual 2nd circuit and directs throttle pressure to the 2-3 shift valve during a forced 3-2 downshift.
No. 3	11/32" Steel	A) Checkball No. 3 blocks front (Direct) clutch oil, after a 2-3 upshift, from entering the reverse band circuit and allows front (Direct) clutch oil to enter the intermediate band release circuit. B) Checkball No. 3 blocks the intermediate band release circuit and allows reverse oil to apply the front (Direct) clutch when the selector lever is placed into Reverse.
No. 4	1/4" Steel	A) Checkball No. 4 blocks rear band apply pressure from entering the front (Direct) clutch circuit when the selector lever is placed into Manual Low. B) Checkball No. 4 blocks the manual low circuit and directs line pressure into the rear band circuit when the selector lever is placed into Reverse.
No. 5	1/4" Steel	A) Checkball No. 5 blocks the manual 2nd circuit and directs throttle pressure to the back side of both shift valves and the shuttle valve, when the selector lever is placed into either Drive or Reverse. B) Checkball No. 5 blocks the throttle pressure circuit and directs line pressure to back side of 2-3 shift valve to prevent a 2-3 upshift when selector lever is placed in Manual 2nd.
No. 6	1/4" Steel	A) Checkball No. 6 forces intermediate band apply oil through an orifice to apply the intermediate band and stroke the 1-2 accumulator on a 1-2 upshift.
No. 7	1/4" Steel	A) Checkball No. 7 forces rear (Forward) clutch through an orifice for a smooth garage shift into any forward range.
No. 8	1/4" Steel	A) Checkball No. 8 blocks line pressure from entering the rear (Forward) clutch circuit when the selector lever is placed into Park, Reverse or Neutral.
No. 9	1/4" Steel	A) Checkball No. 9 forces rear band apply oil through an orifice for a smooth reverse band apply when the selector lever is placed into Reverse or Manual Low. (Not used in 47RE)
No. 10	3/16" Steel	A) Checkball No. 10 blocks orificed rear (Forward) clutch oil from entering the converter clutch apply circuit and allows orificed rear (Forward) clutch oil to pre-fill the overdrive clutch circuit. B) Checkball No. 10 prevents converter clutch apply oil from entering the overdrive circuit, and allows converter apply oil to stroke the 3-4 timing valve, which in turn loads the 2-3 shift valve in the upshifted position when the converter clutch is on in third gear.

Figure 1

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MAIN VALVE BODY CHECKBALL I.D. AND LOCATIONS

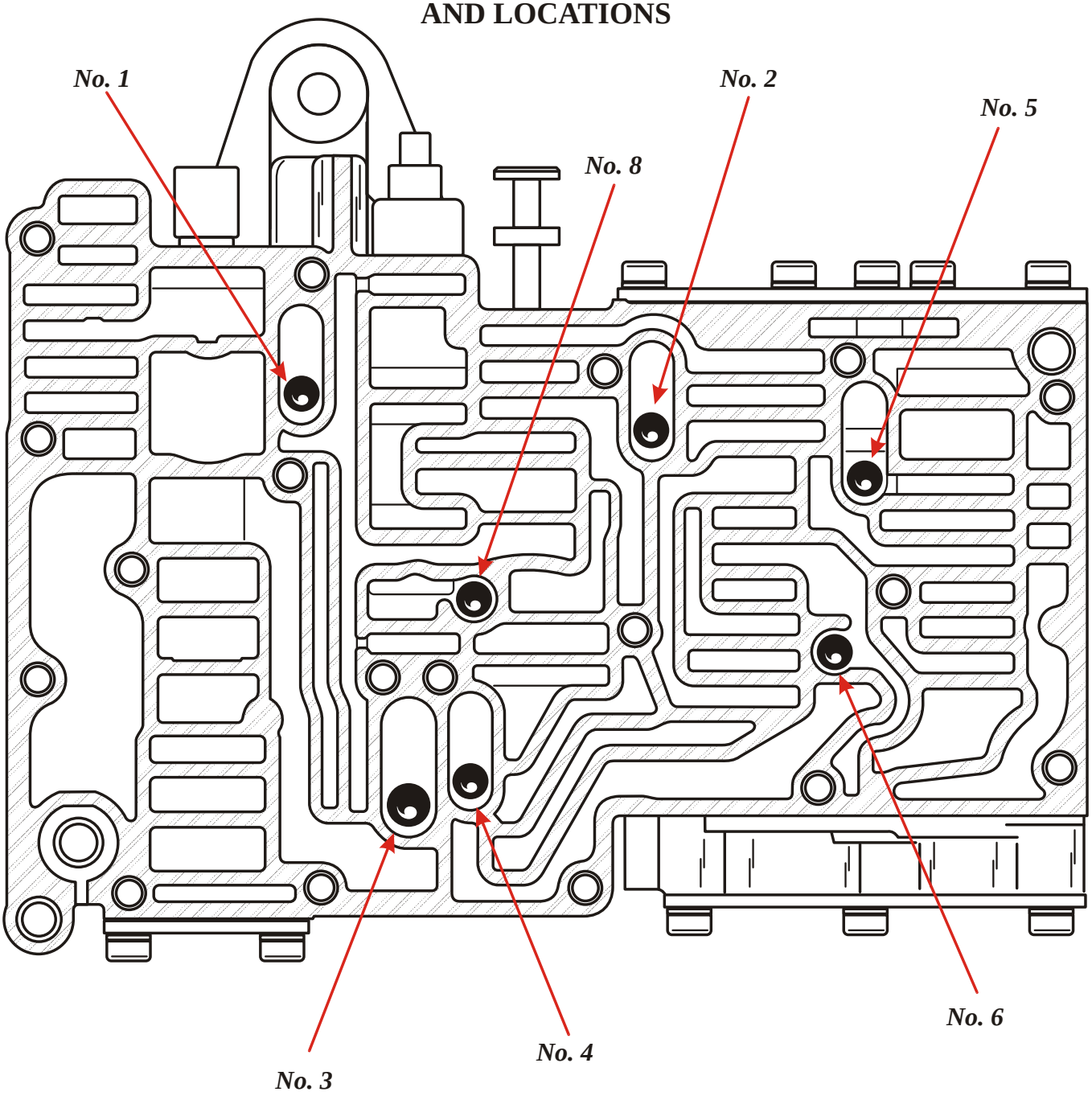

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Figure 2

TRANSFER PLATE "LOWER SIDE"
CHECKBALL LOCATIONS

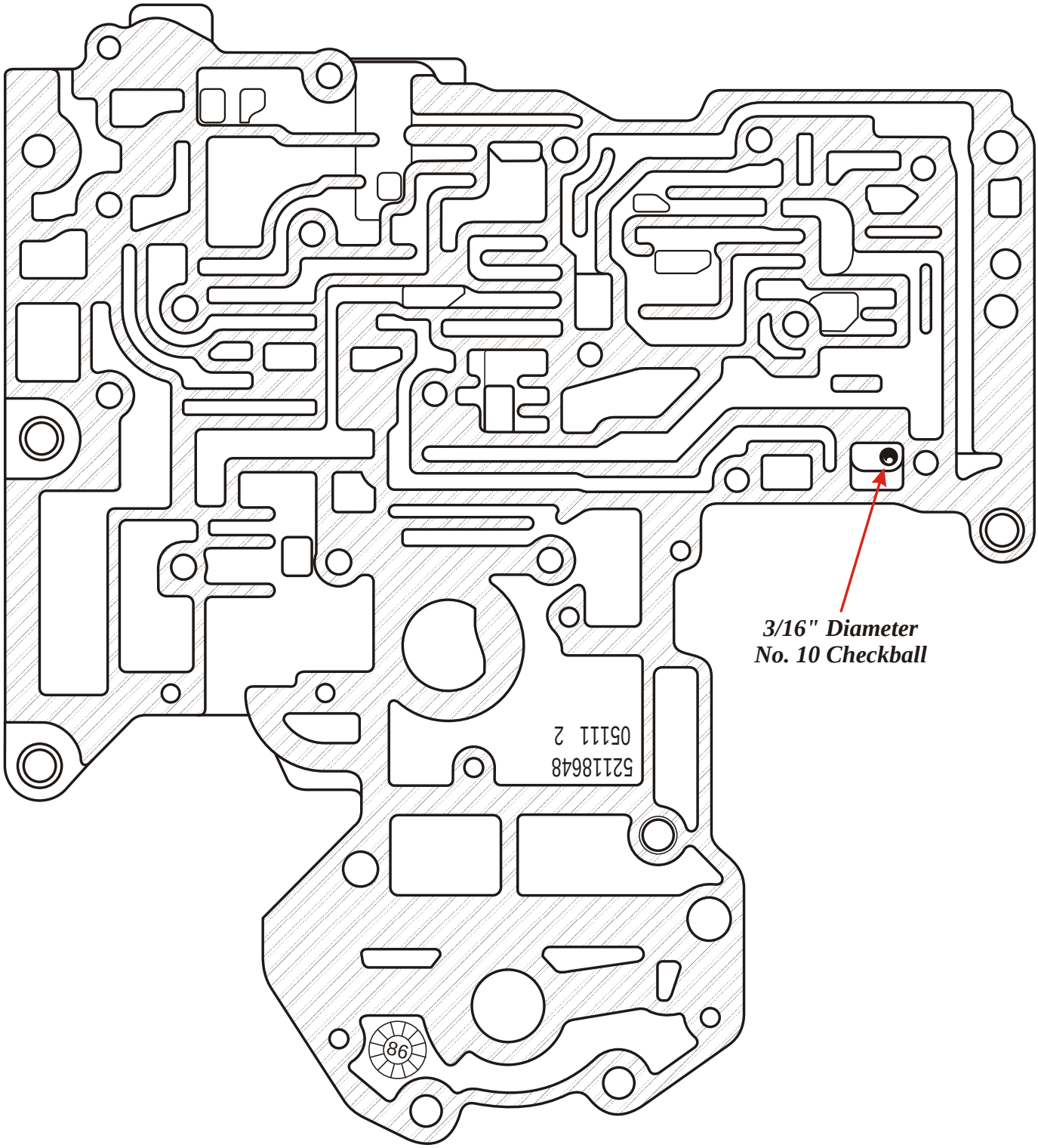

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Figure 3

OVERDRIVE VALVE BODY
SPACER PLATE

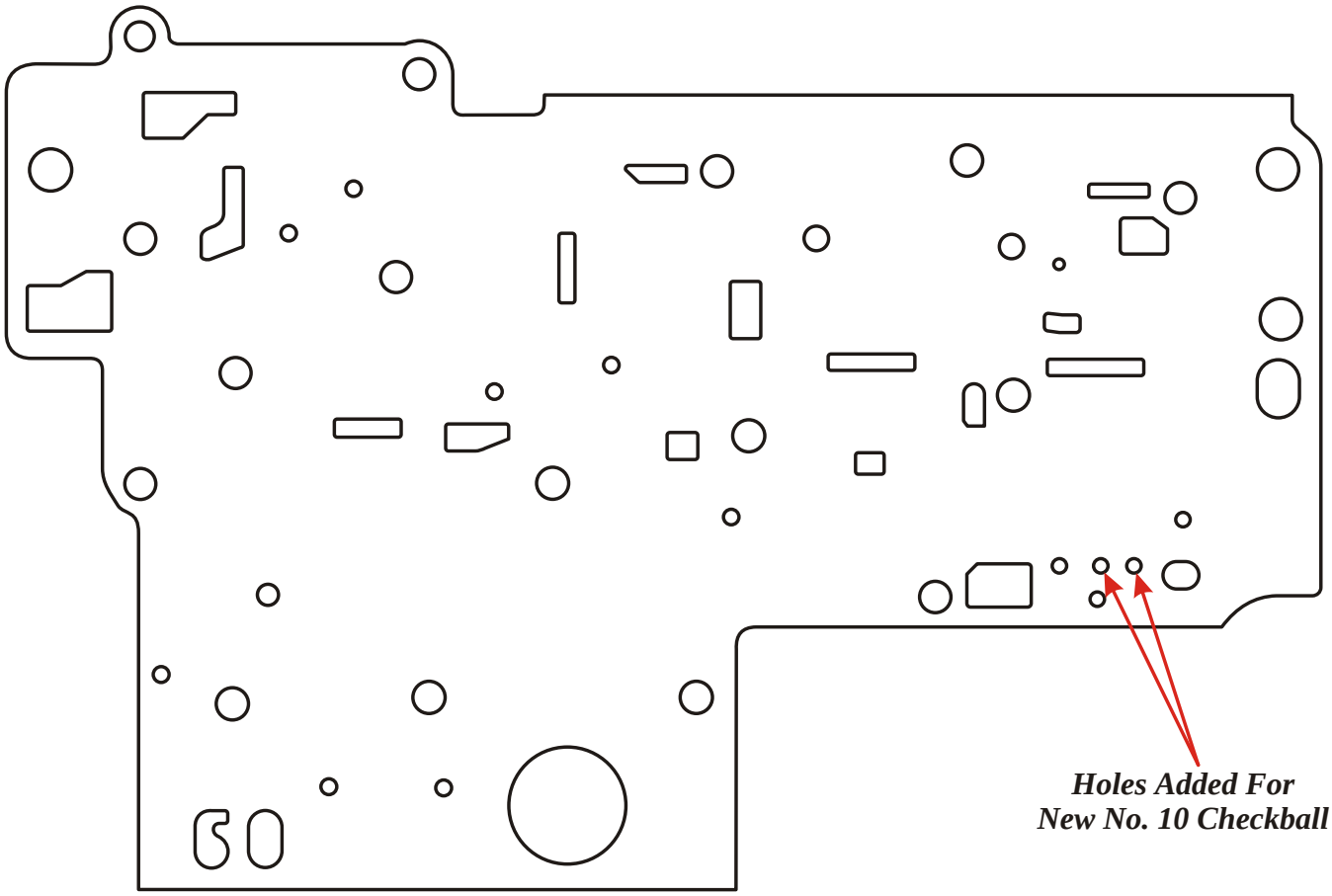

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Figure 4

OVERDRIVE VALVE BODY

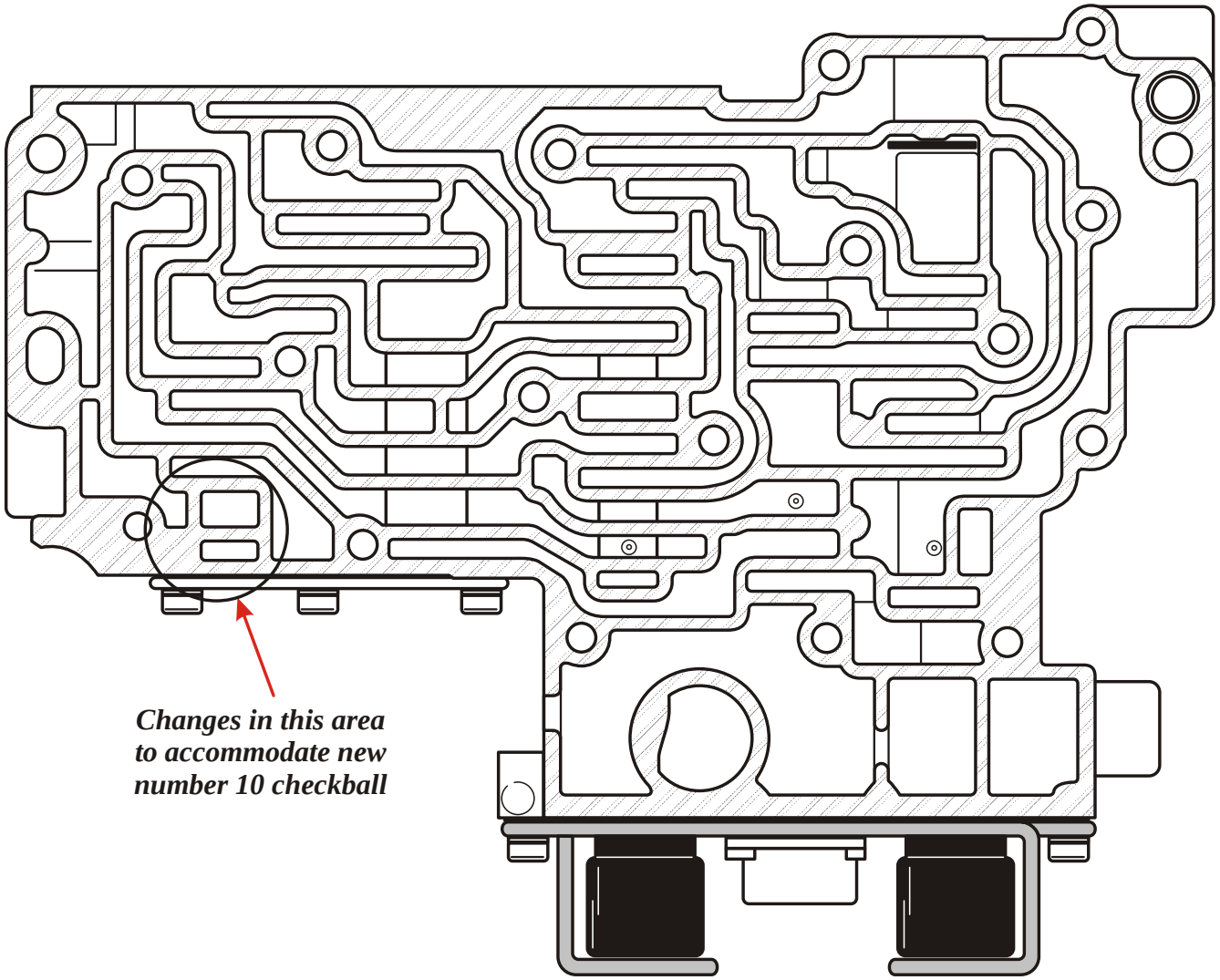

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Figure 5

TRANSFER PLATE "UPPER SIDE"
CHECKBALL LOCATIONS

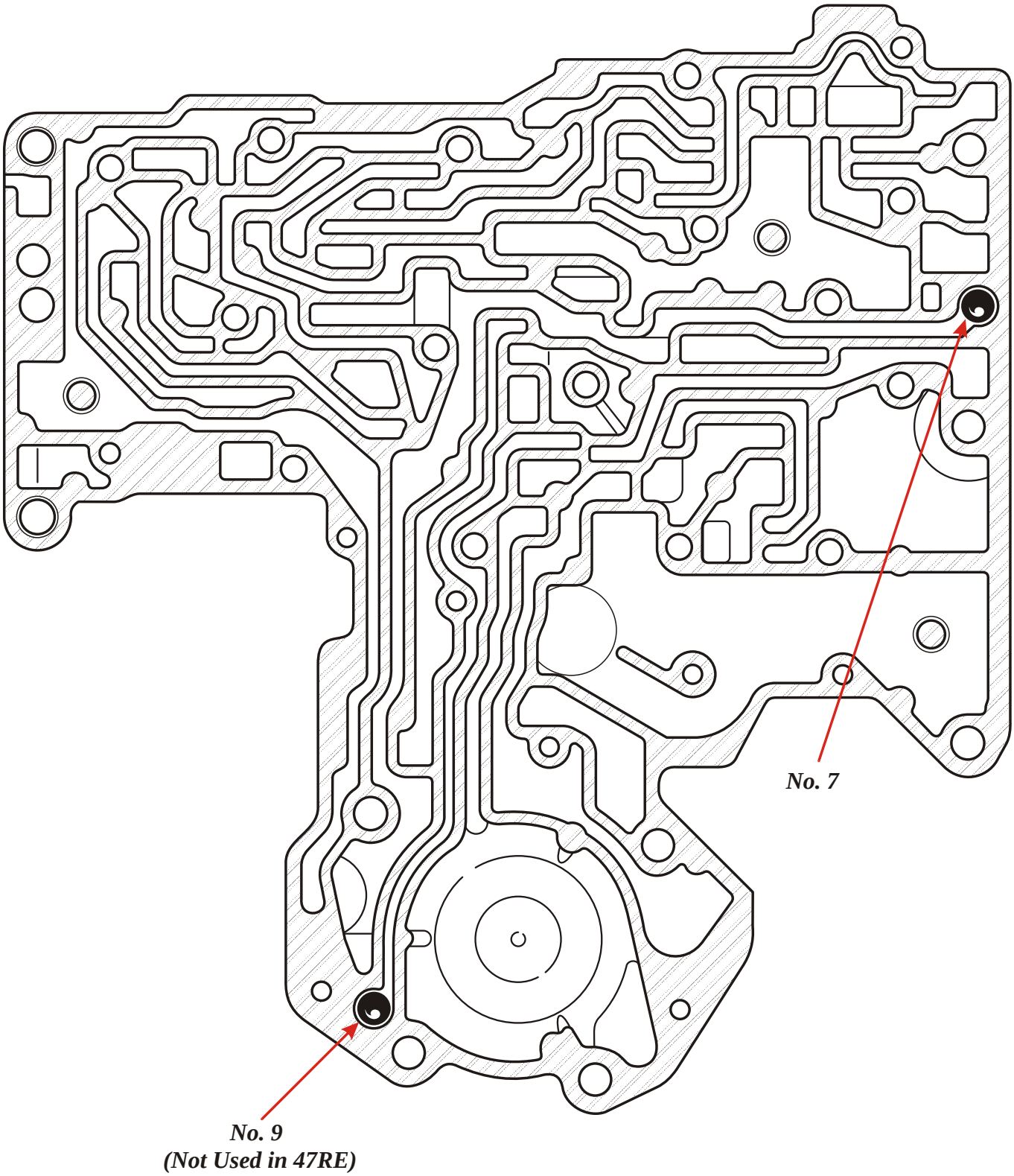

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Figure 6

MAIN SPACER PLATE

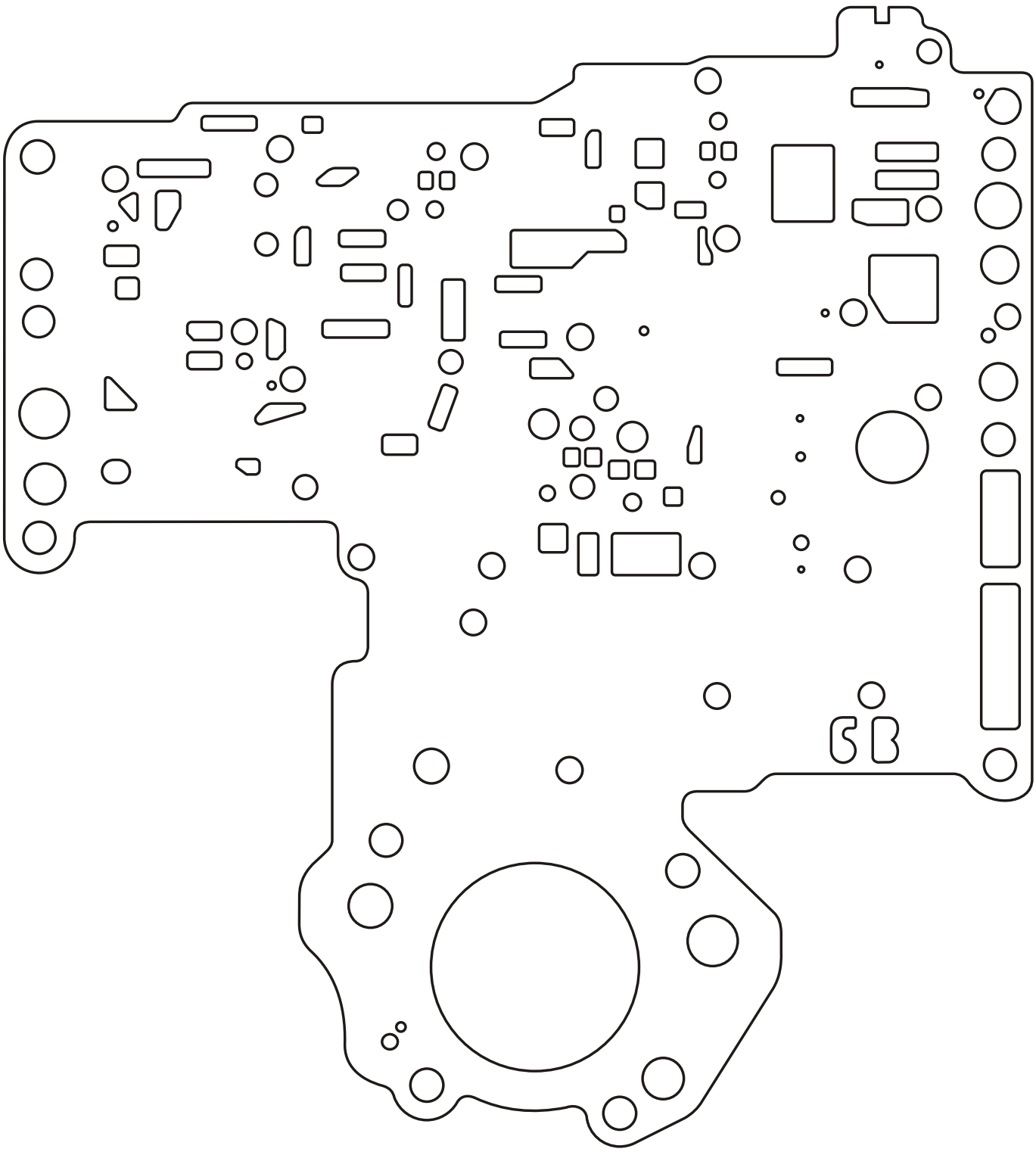

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Figure 7