



Technical Service Information

THM 440-T4 EARLY UPSHIFTS AND NO PASSING GEAR

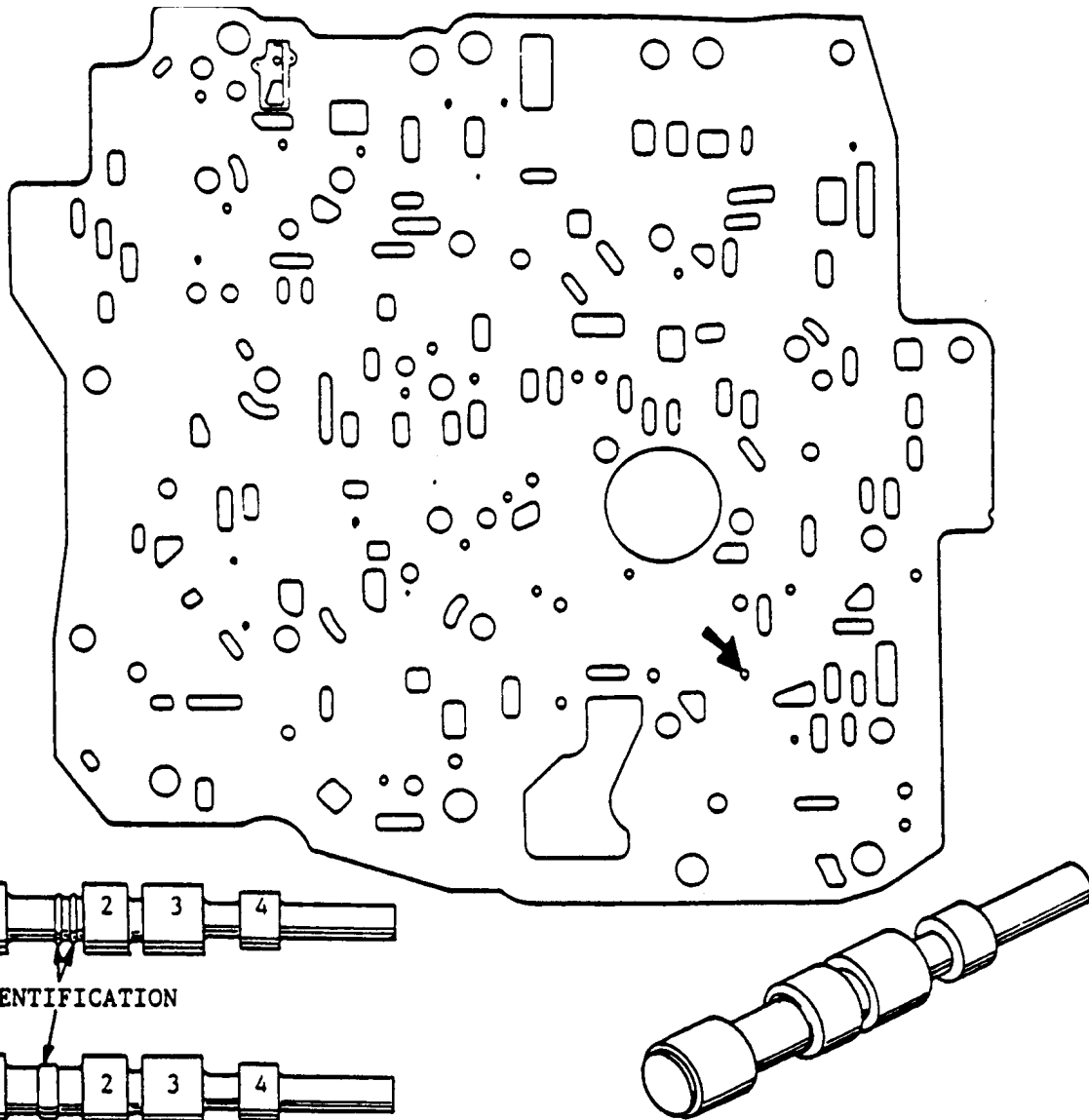
COMPLAINT: Early upshift pattern (Regardless of Throttle Position), and no forced (Part or Full Throttle) downshifts.

CAUSE: The cause may be, a loss of T.V. pressure due to a mis-matched spacer plate and T.C.C. Regulator Valve. There are two totally different types of converter regulator valve systems.
(1) T.V. CONTROLLED T.C.C. REGULATOR VALVE - On this system lands one, two, and three are all the same diameter, and requires a spacer plate **WITH** a T.V. hole as shown in Figure 1. There are currently two different styles of the T.V. controlled converter regulator valve as shown in Figure 1. The 1st design is identified by "2 Narrow Rings", and the 2nd design is identified by a "Wide Band". The 2nd design valve improves T.C.C. apply feel because land No. 2 is .01B" longer than the 1st design. Refer to Figure 1 to compare the length.

(2) NON T.V. CONTROLLED CONVERTER REGULATOR VALVE - On this system lands one and two are the same size, but land three is .052" smaller in diameter (See Figure 2). This system requires a spacer plate **WITHOUT** a T.V. hole by arrow, as shown in Figure 2.

If the non T.V. controlled converter regulator valve is mis-matched with a spacer plate "WITH" the T.V. hole, all T.V. pressure will be exhausted and early upshifts and no kickdown will be the result.

CORRECTION: Install spacer plate and T.C.C. regulator valve that are compatible with one another. Refer to Figures 1 and 2.



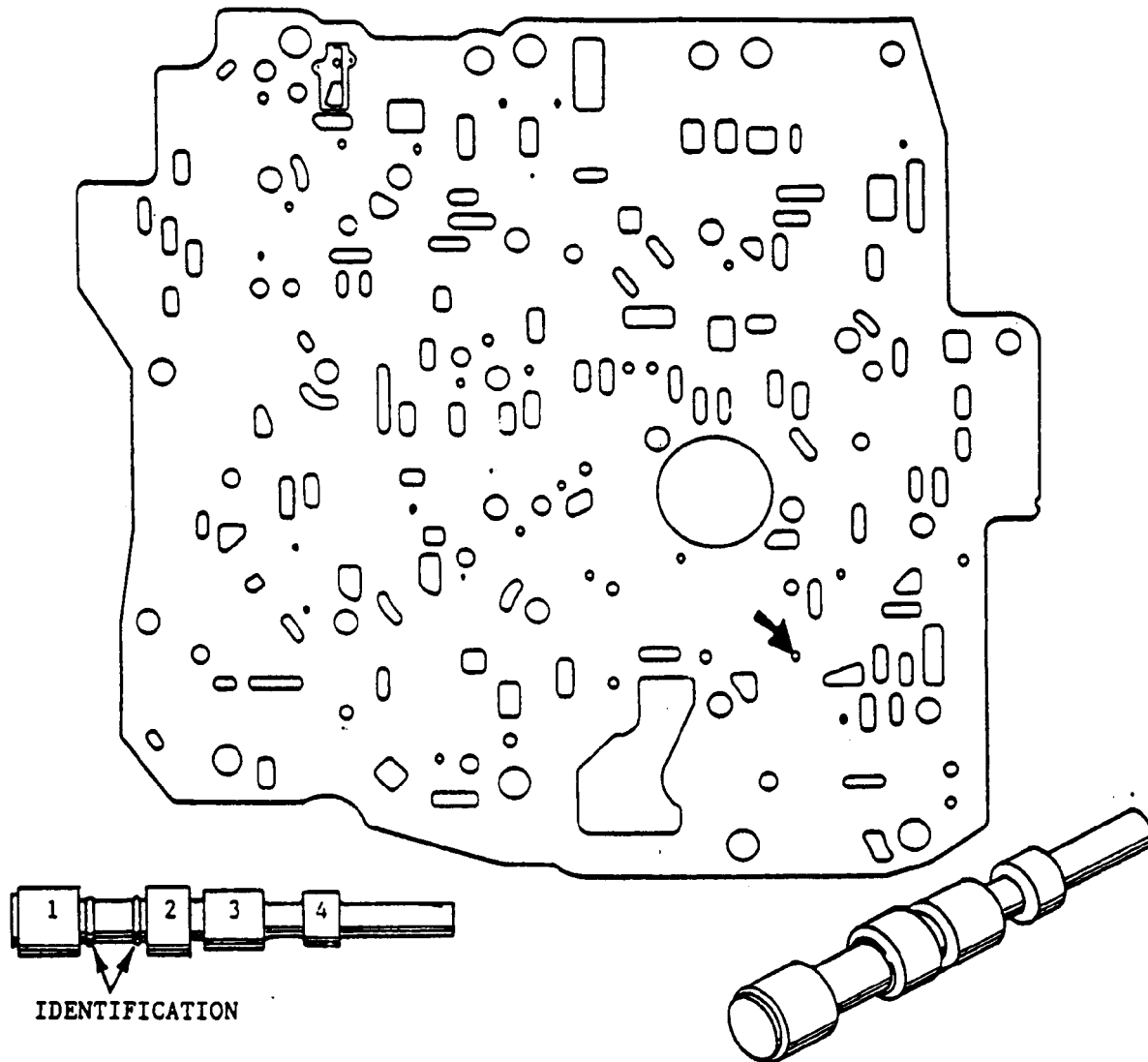
I.D.		LAND 1	LAND 2	LAND 3	LAND 4
2 RINGS (NARROW)	Diameter	.387"	.387"	.387"	.315"
	Length	.335"	.222"	.333"	.197"
WIDE BAND	Diameter	.387"	.387"	.387"	.315"
	Length	.335"	.240"	.333"	.197"

THIS TYPE OF CONVERTER CLUTCH REGULATOR VALVE REQUIRES
SPACER PLATE WITH HOLE SHOWN BY ARROW ABOVE.

NOTE: LAND 3 IS THE SAME SIZE AS LAND 1 AND LAND 2.

T.V. CONTROLLED T.C.C. REGULATOR VALVE

Figure 1



I.D.		LAND 1	LAND 2	LAND 3	LAND 4
2 RINGS (WIDE)	Diameter	.387"	.387"	.335"	.315"
	Length	.335"	.222"	.333"	.197"

THIS TYPE OF CONVERTER CLUTCH REGULATOR VALVE REQUIRES
SPACER PLATE WITHOUT HOLE SHOWN BY ARROW ABOVE.

NOTE: LAND 3 IS SMALLER THAN LAND 1 AND LAND 2.

NON T.V. CONTROLLED REGULATOR VALVE

Figure 2