



Technical Service Information

MERCEDES 722.9 CHECK BALL FUNCTION AND LOCATION

COMPLAINT: After valve body inspection and cleaning the vehicle now produces various complaints not previously present such as severe clutch slip producing codes for gear ratio error. Or indescribable shift complaints with solenoid performance codes or TCC issues.

CAUSE: There are only two black Teflon style check balls in the 722.9 valve body that are used in the hydraulic activity of the transmission (Figures 1 and 4). The other 14 steel check balls are not (Figures 2 and 4). By gravity, these check balls seal off test ports used during the assembly process in the factory. Should any one of these balls be left out or misplaced a leak in a clutch circuit or a solenoid's signal oil circuit will occur causing some of the above mentioned complaints depending upon which ball or balls is missing or not sealing.

CORRECTION: Inspect each check ball for proper location and that each of the steel balls are in place and sealing off the test port so that their respective circuits are no longer dumping to exhaust.

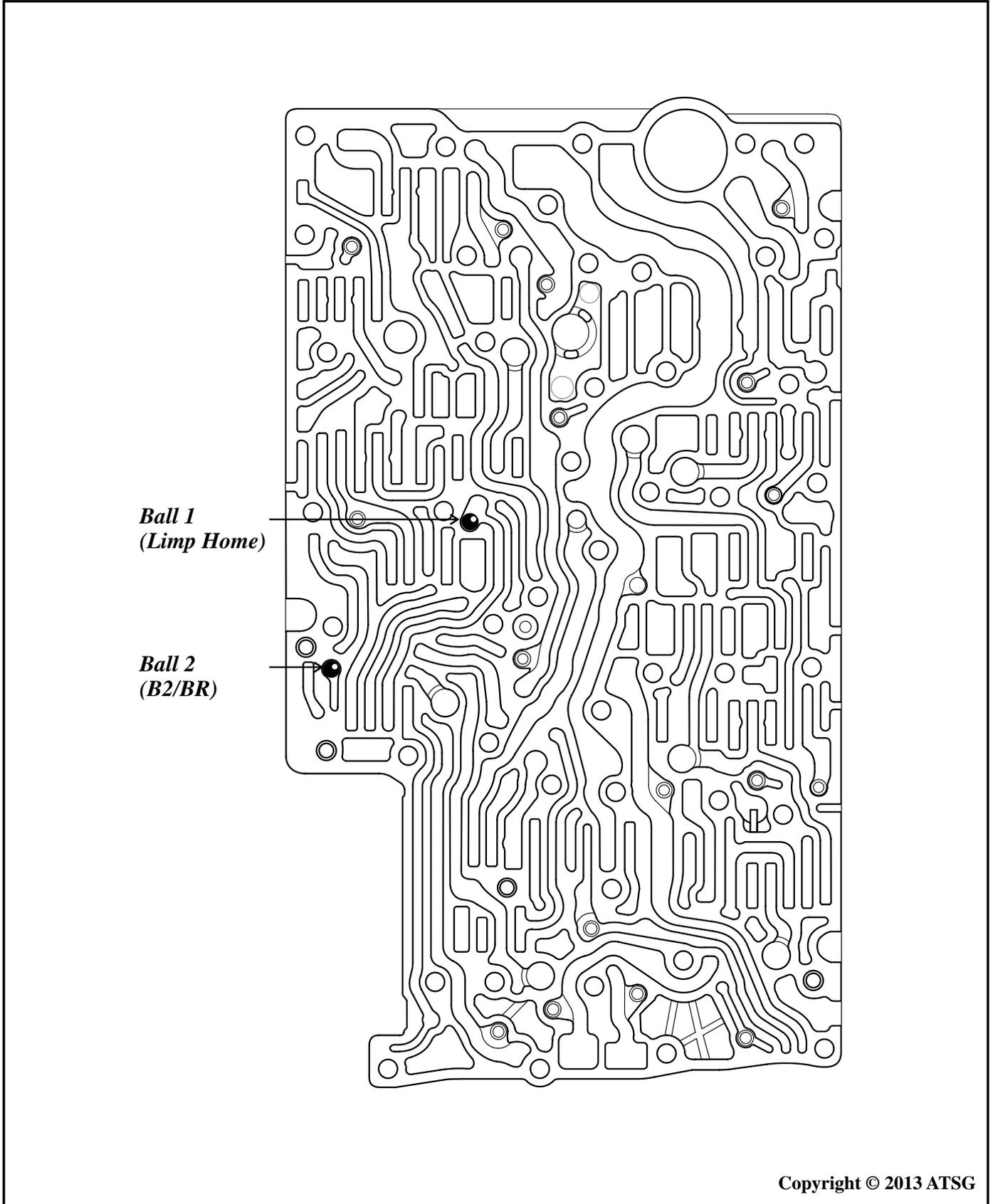
Figures 1 through 3 provide the proper location of all 16 check balls and check valve as well as their function.

In addition to the steel check balls being specifically identified in figure 2 and the check valves in figure 3, a lower case letter has been assigned to show its location in the hydraulic schematic provided in figure 4.



Technical Service Information

2 Black Check Ball Identification and Location

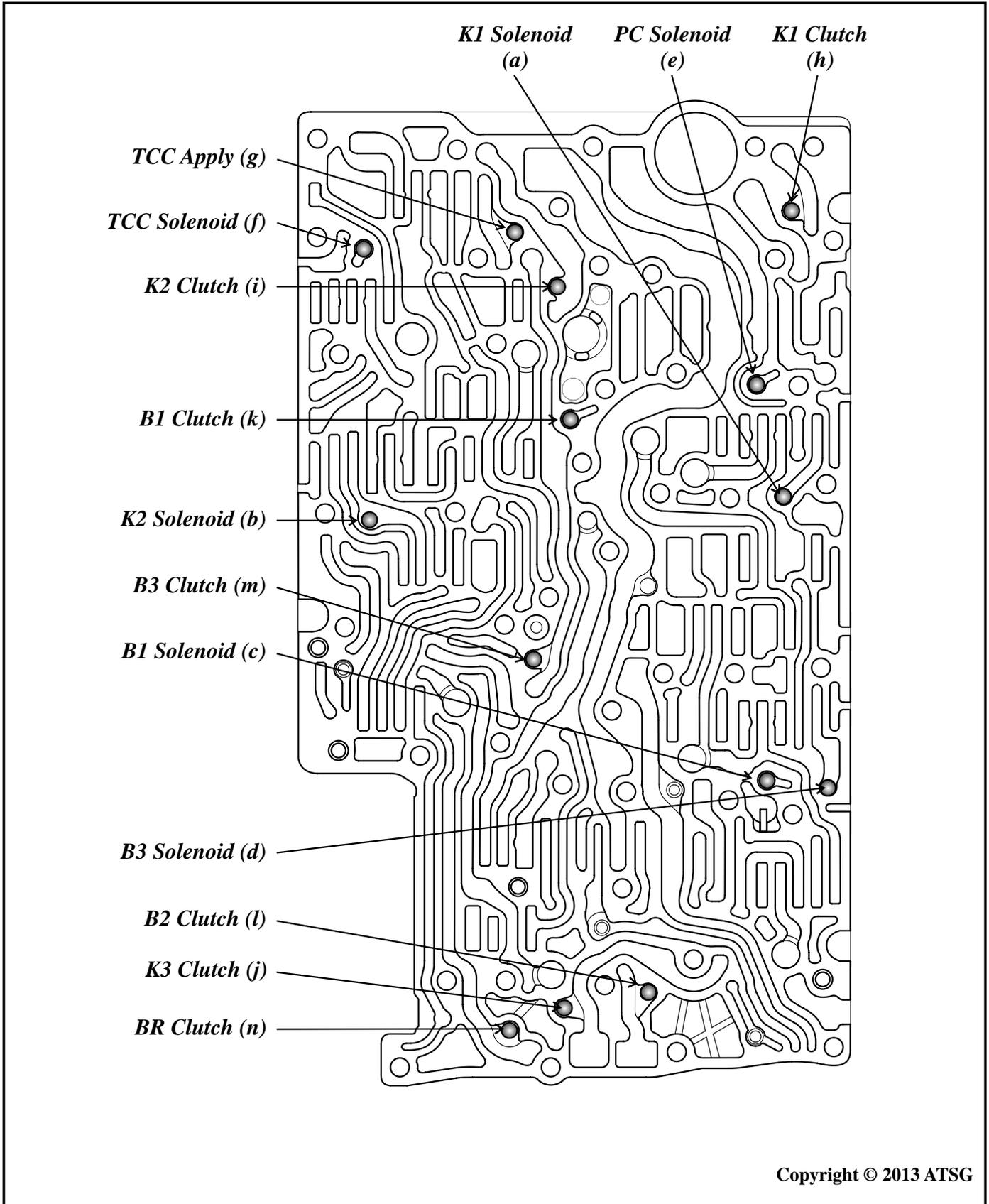


Copyright © 2013 ATSG

Figure 1

Technical Service Information

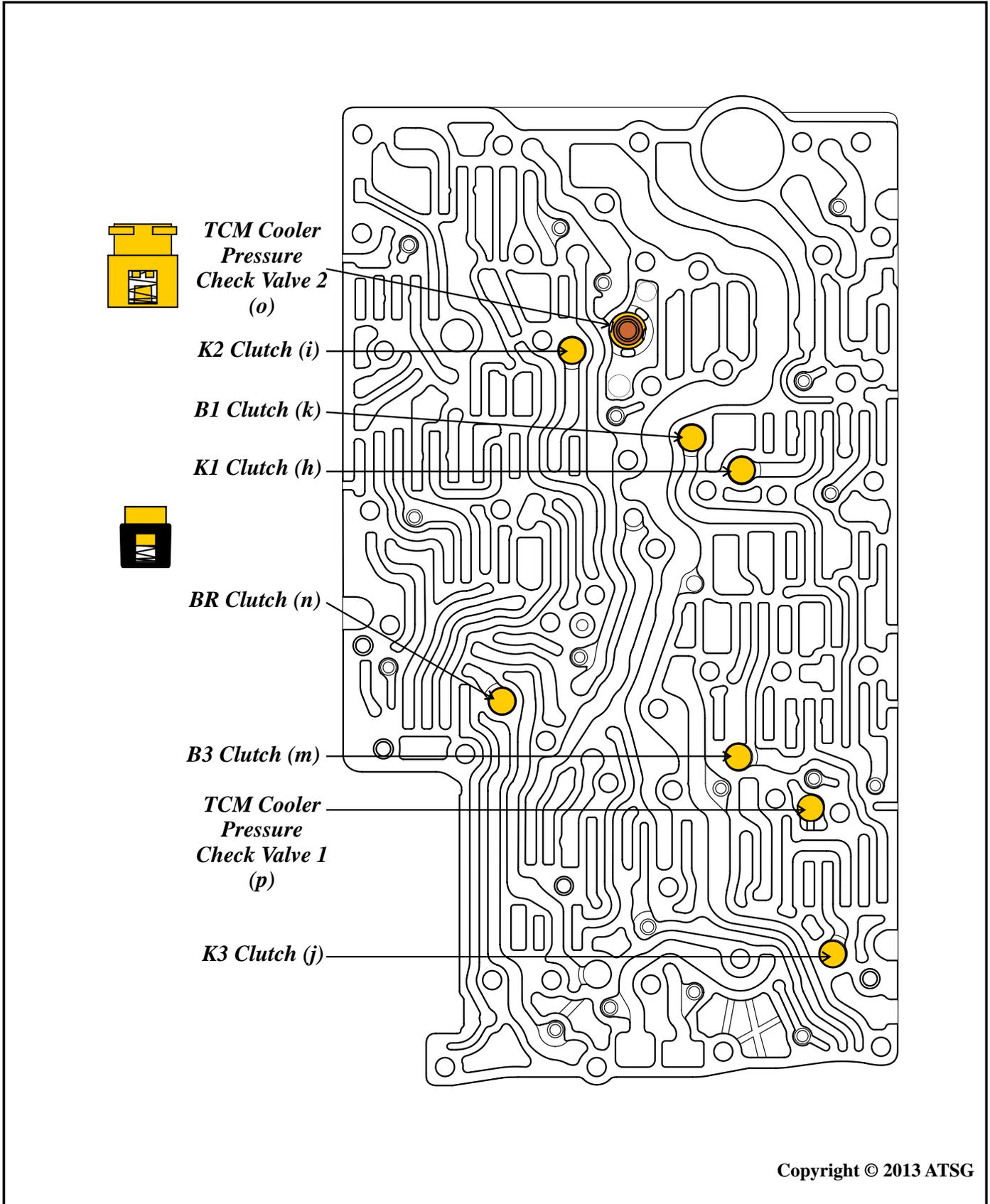
14 Steel Check Ball Identification and Locations Sealing Off Factory Measuring Points



Copyright © 2013 ATSG

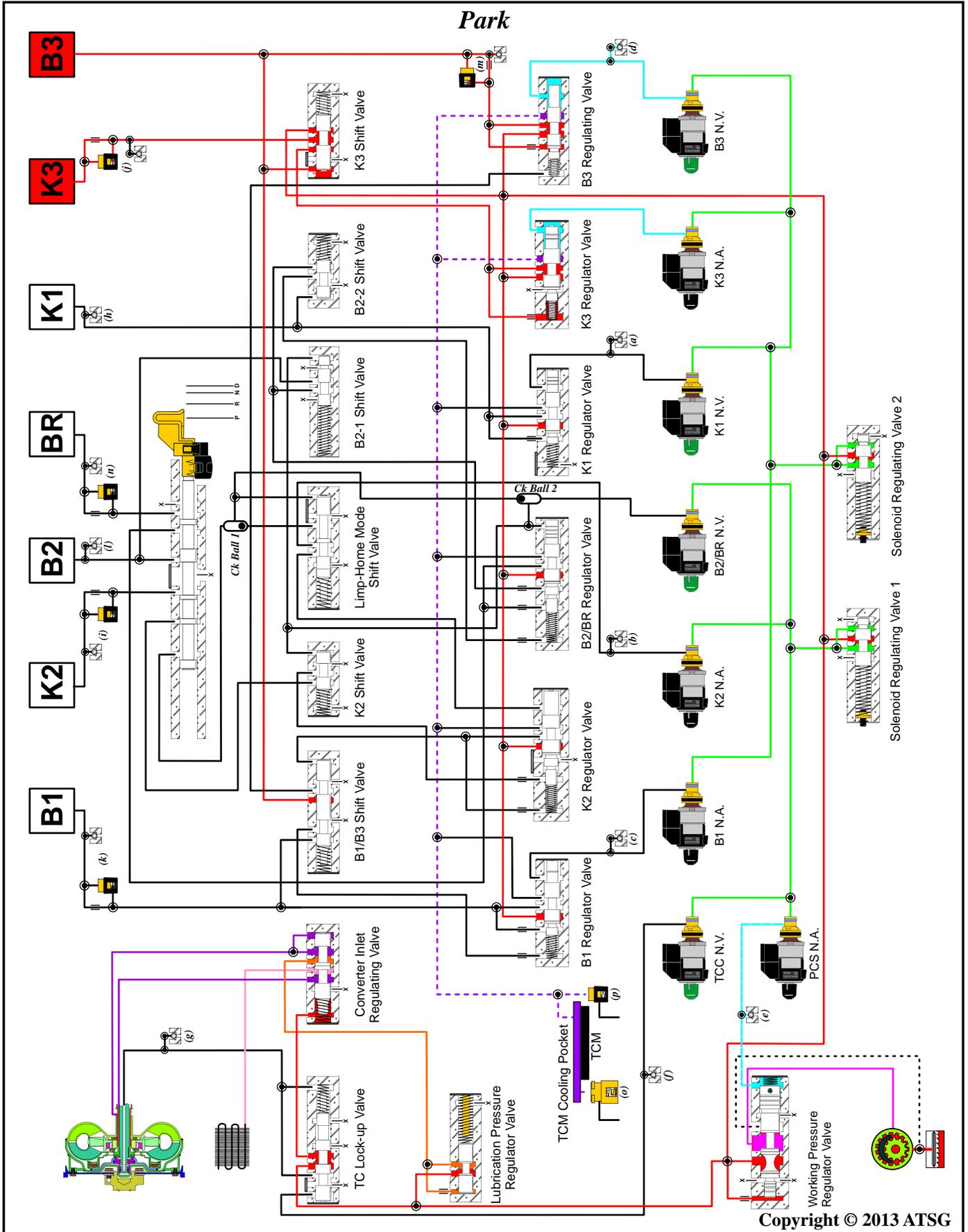
Figure 2

8 Check Valve Identification and Location



Copyright © 2013 ATSG

Figure 3



Copyright © 2013 ATSG

Figure 4