



Technical Service Information

HONDA BAXA/B7XA FAMILY FLARES OR SLIPS ON UP SHIFTS

COMPLAINT: Before or after overhaul, a Honda vehicle equipped with a BAXA/B7XA Family transmission exhibits a complaint of flared or slipping up shifts. This could be a “Cold Only” condition, or the problem may continue even after warm up.

CAUSE: One cause may be a loss of clutch apply pressure at the Clutch Pressure Control (CPC) valves in the accumulator valve body. Clutch apply pressure loss can be caused by faulty Clutch Pressure Control Solenoids, a faulty Clutch Pressure Switch, or a problem with the CPC valves in the valve body. The CPC valves are used to regulate clutch apply oil during each gear shift transition. The CPC valves are regulated by pressure from the Clutch Pressure Control Solenoids. The Solenoids are activated and modulated by the ECM and use the Clutch Pressure Switches as an input for clutch apply control. The valves may stick in the bore during cold operation. If this happens, they cannot regulate clutch control pressure adequately, causing a flared or sliding shift. The bore plugs that retain the CPC valves may become loose in the bore or the bore where the CPC valves travel may become worn causing a loss of clutch control pressure. This also can cause a flared or sliding shift.

Refer to Figure 1 for a partial hydraulic diagram of the Clutch Pressure Control System showing the transition between 2nd and 3rd gear. Refer to Figure 2 for partial hydraulic diagram showing 3rd gear fully applied.

CORRECTION: When overhauling the transmission, it is necessary to pay close attention to the CPC valves, the bore plugs, and the CPC valve bores in the accumulator body. There are several things that need to be done during the overhaul procedure to reduce the potential of having a repeat failure, or continued problem.

The bores in the accumulator valve body where the CPC valves travel must be closely inspected for wear. If the bores are worn the accumulator valve body will need to be replaced.

Remove the CPC valve springs from the body (*leave the valves in and replace the bore plugs*). Place the accumulator body in a freezer for at least two hours. After the body has had a chance to get good and cold, turn the body from side to side and check if the valves drag. The valves should float freely back and forth, if there is any drag, clean the bores with some very slightly abrasive cloth, (*be careful not to scratch the bore*) or replace the accumulator body as necessary.

Make certain the bore plugs fit snugly in the bore. Use a tubing cutter around the outside of each plug to raise a ridge that will help the bore plugs fit much tighter and help reduce the possibility of leaking.

Refer to figure 3 for accumulator valve body diagram and CPC valve locations.

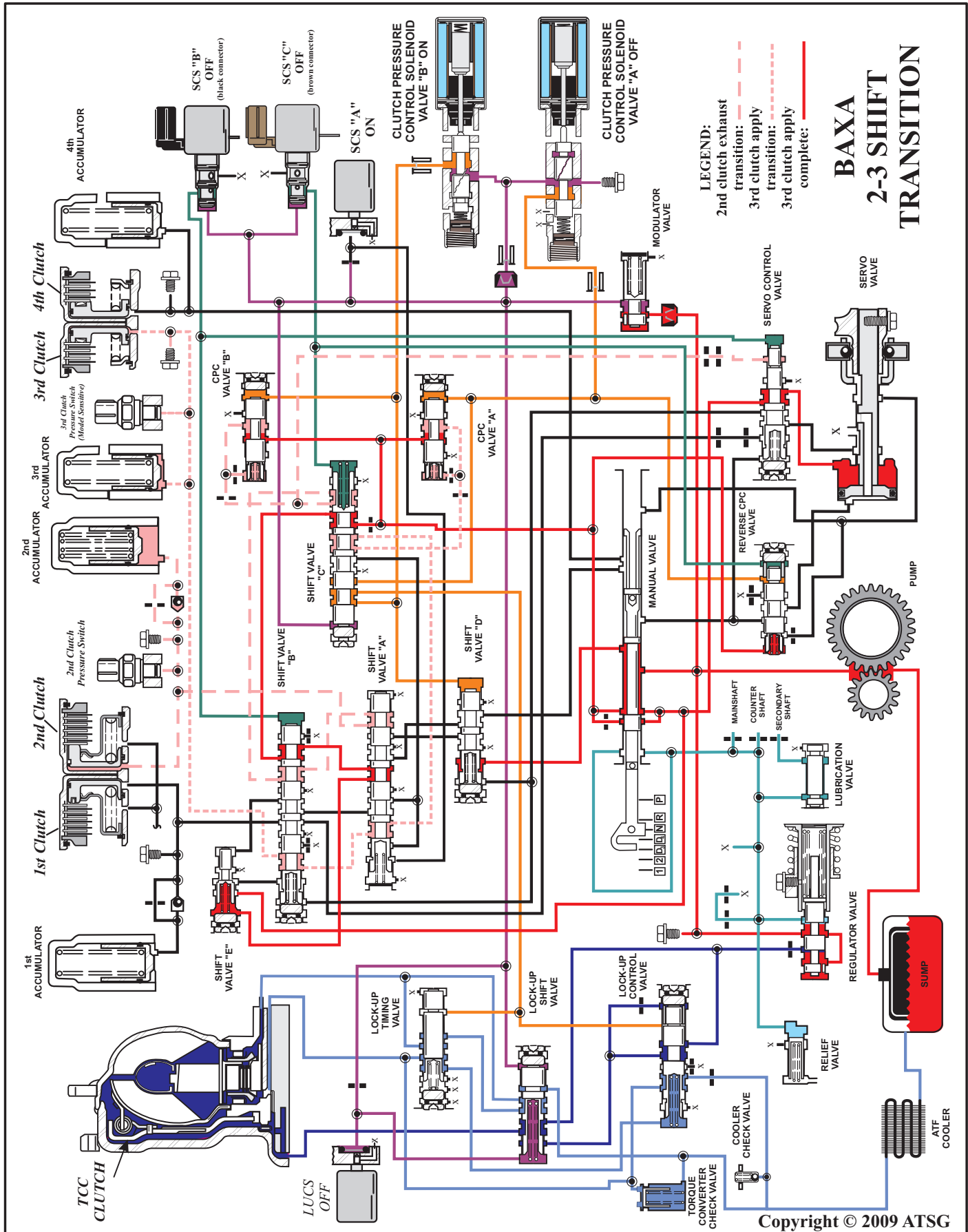


Figure 1

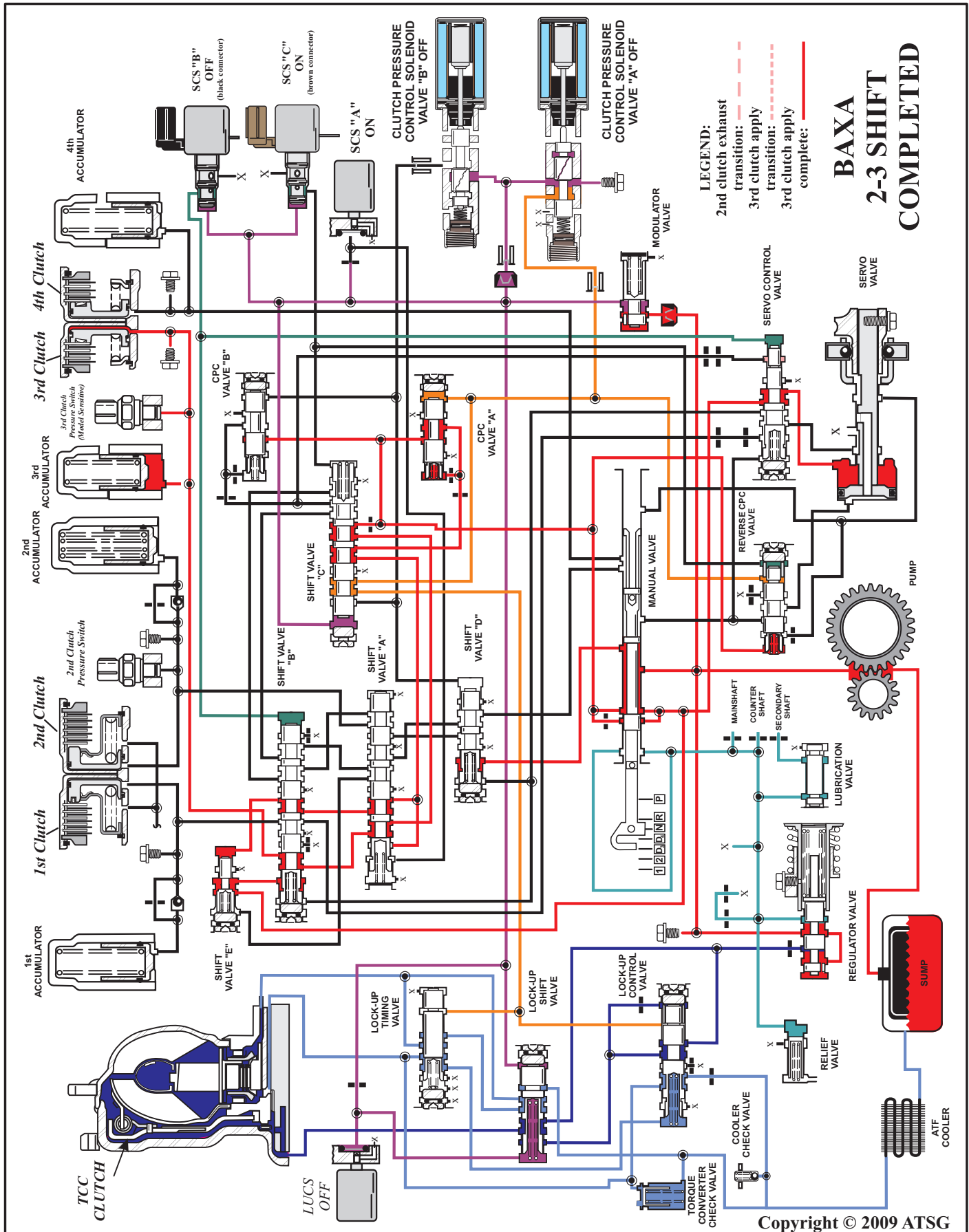
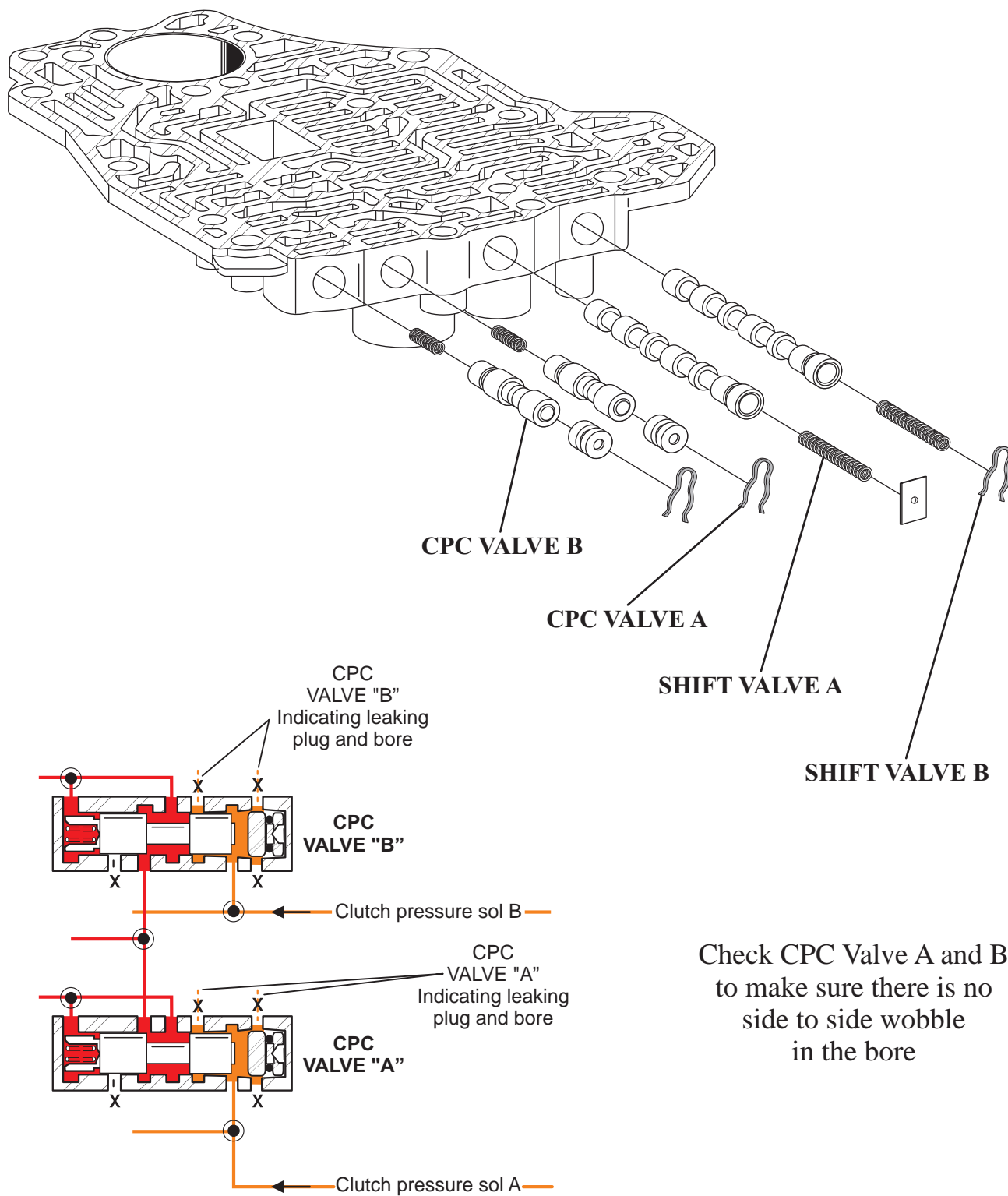


Figure 2

ACCUMULATOR VALVE BODY



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Figure 3