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ANTI RUN-ON VALVES

CIRCUIT DESCRIPTION

Around 1973, Triumph begin adding on various emissions control and safety equipment to meet increasingly stringent federal standards. Items added by Triumph included anti run-on valves. The purpose and mechanical operation of these valves is beyond the scope of this manual, but the electrical circuitry and operation will be covered.

Figure 1 below shows the schematic diagram for an anti run-on valve. In this figure, the ignition key is on, but the engine isn't running, or, if it is running, there is no oil pressure. The valve has neither a source of power nor a ground, so it will be de-energized.

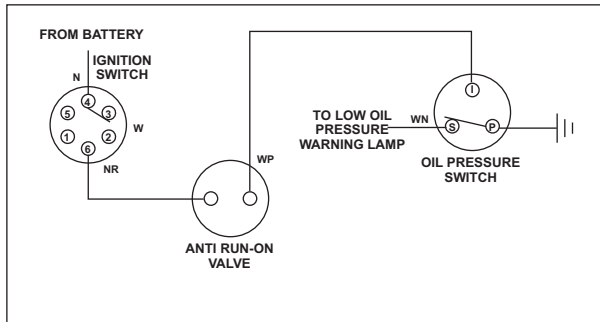


FIGURE 1

Figure 2 below shows the situation after the engine is up to speed, and has sufficient oil pressure. In this case, the valve has a ground, but it still doesn't have a source of power, so the valve is still de-energized.

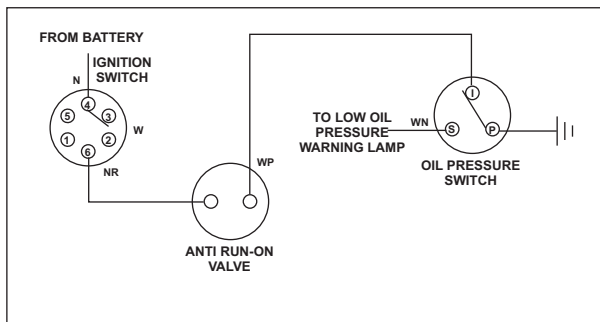


FIGURE 2

In **figure 3** above right, the ignition key has been turned off, but the engine is still running enough to maintain oil pressure. The valve now has both a source of power and a

ground, and it is now energized. The current path is shown by the heavy lines.

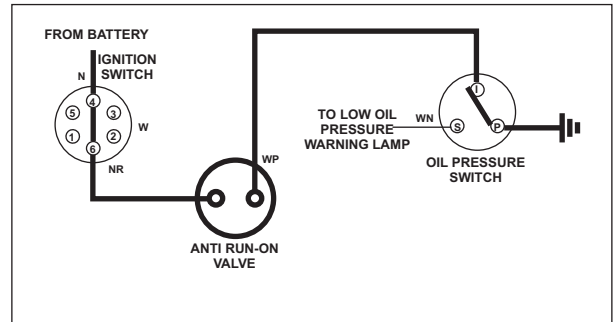


FIGURE 3

Figure 4 below shows the condition after the engine has had time to coast down, and the oil pressure has dropped. The valve is once again de-energized.

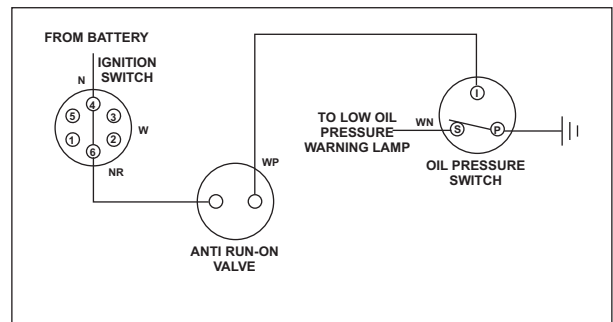


FIGURE 4

TROUBLESHOOTING

Step 1). With the ignition key in the off position, check for voltage on the brown/red wire at the valve. If you don't have voltage here, your ignition switch is bad, or there is a break in the N/R wire from the switch to the valve. If you do have voltage, go to step 2.

Step 2). With the key still in the off position, remove the white/purple wire from the oil pressure switch and touch it to ground. If the valve works, your oil pressure switch is bad. If not, go to step 3.

Step 3). With the key still off, use a short piece of wire to short the valve terminal with the W/P wire to ground. If the valve works, you have a break in the W/P wire to the oil pressure switch. If not, the valve is bad.

TROUBLESHOOTING FLOW DIAGRAM

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