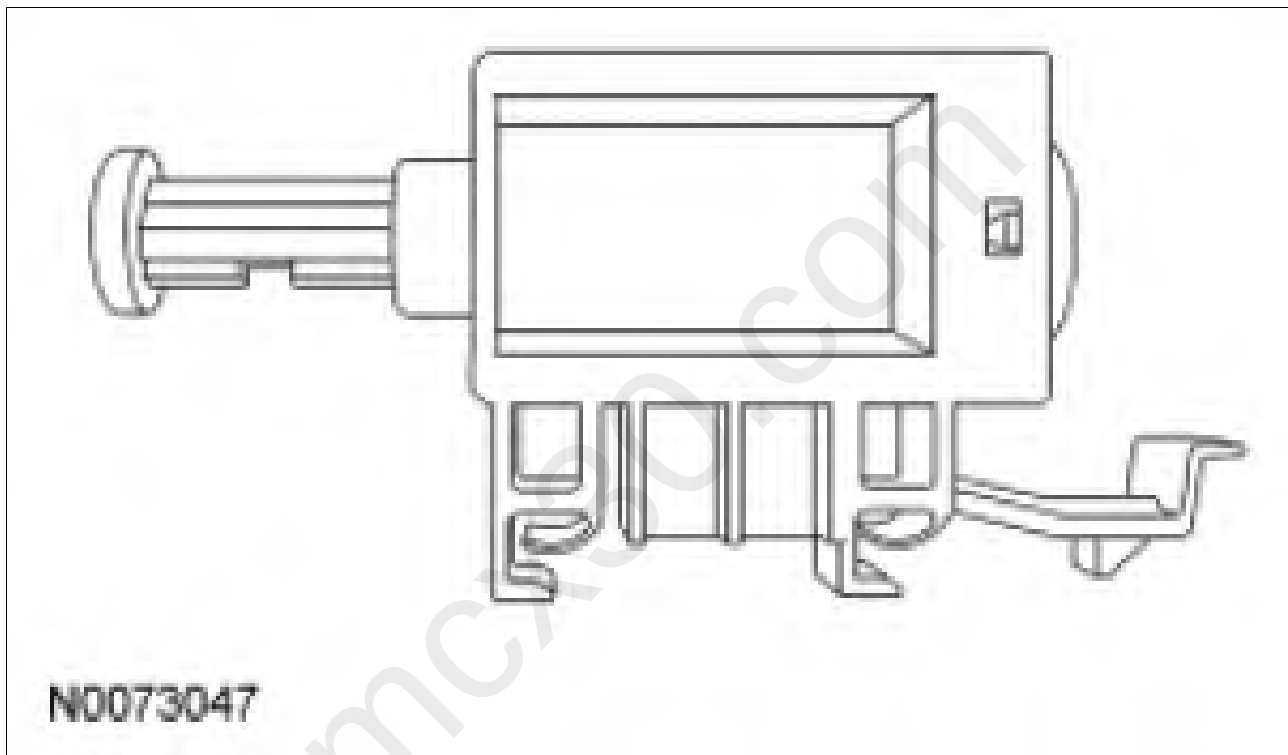


1	-	Clutch Master Cylinder
2	-	CPP Sensor Assembly

ENGINE CONTROL COMPONENTS > CLUTCH PEDAL POSITION (CPP) SWITCH

The CPP switch is an input to the PCM indicating the clutch pedal position. The PCM provides a low current voltage on the CPP circuit. When the CPP switch is closed, this voltage is pulled low through the signal return (SIGRTN) circuit. The CPP input to the PCM is used to detect a reduction in engine load. The PCM uses the load information for mass airflow and fuel calculations.

Fig 1: Identifying Clutch Pedal Position (CPP) Switch



Courtesy of FORD MOTOR CO.

ENGINE CONTROL COMPONENTS > COIL ON PLUG (COP)

The COP ignition operates similar to a standard coil pack ignition except each plug has 1 coil per plug. The COP operates in engine crank, engine running and camshaft position failure mode effects management (FMEM) modes. The COP eliminates the need for secondary spark plug wires which improves reliability. Currently there are two types of COP in use today. The first type is a 2 circuit system that consists of the coil and boot that is installed directly on top of the spark plug which is fired by a driver located in the PCM. The second type is a 3 circuit system with the driver integrated in the COP assembly that is triggered when the PCM supplies the signal to fire. This configuration eliminates the need for high current lines from the PCM to the COP. For additional information, refer to IGNITION SYSTEMS in this service information.

Fig 1: Identifying Coil On Plug (COP)



Courtesy of FORD MOTOR CO.