

## **Borg-Warner Relay / Kickdown Switch / Solenoid / Install**

### **Instructions:**

The enclosed overdrive parts are an exact replacement of the original factory Borg Warner overdrive parts. Included, as part of these instructions is a picture-wiring diagram to show you how everything is to be wired. In some applications there may be a difference between this diagram and the factory shop manual diagrams, but this diagram is based on the original Borg Warner service guide. Keep in mind that there were **eleven different car companies** that all used the **Borg-Warner T-10 and T-11 overdrives**.

### **Wiring the Relay -**

The terminal marked **Batt** on the relay (upper left) should connect to the battery **hot post on the starter solenoid**. This terminal will be " Hot " all of the time.

The terminal on the **relay** marked labeled **Kickdown Switch** (upper right) should connect to the **top left post of the Kickdown switch**.

The terminal on the **relay** marked **Solenoid** (lower left) should connect to the number **(4)** (Right hand as viewed from the rear) terminal on the solenoid.

The terminal on the **relay** marked **ignition** (lower right) should connect to the **accessory post** on the ignition switch.

### **Wiring The Kickdown Switch –**

The **lower left terminal** on the kickdown switch should connect to (-) or **negative terminal** on the distributor or (-) terminal on the coil.

The **top right hand terminal** on the kickdown switch should connect to the **Governor**.

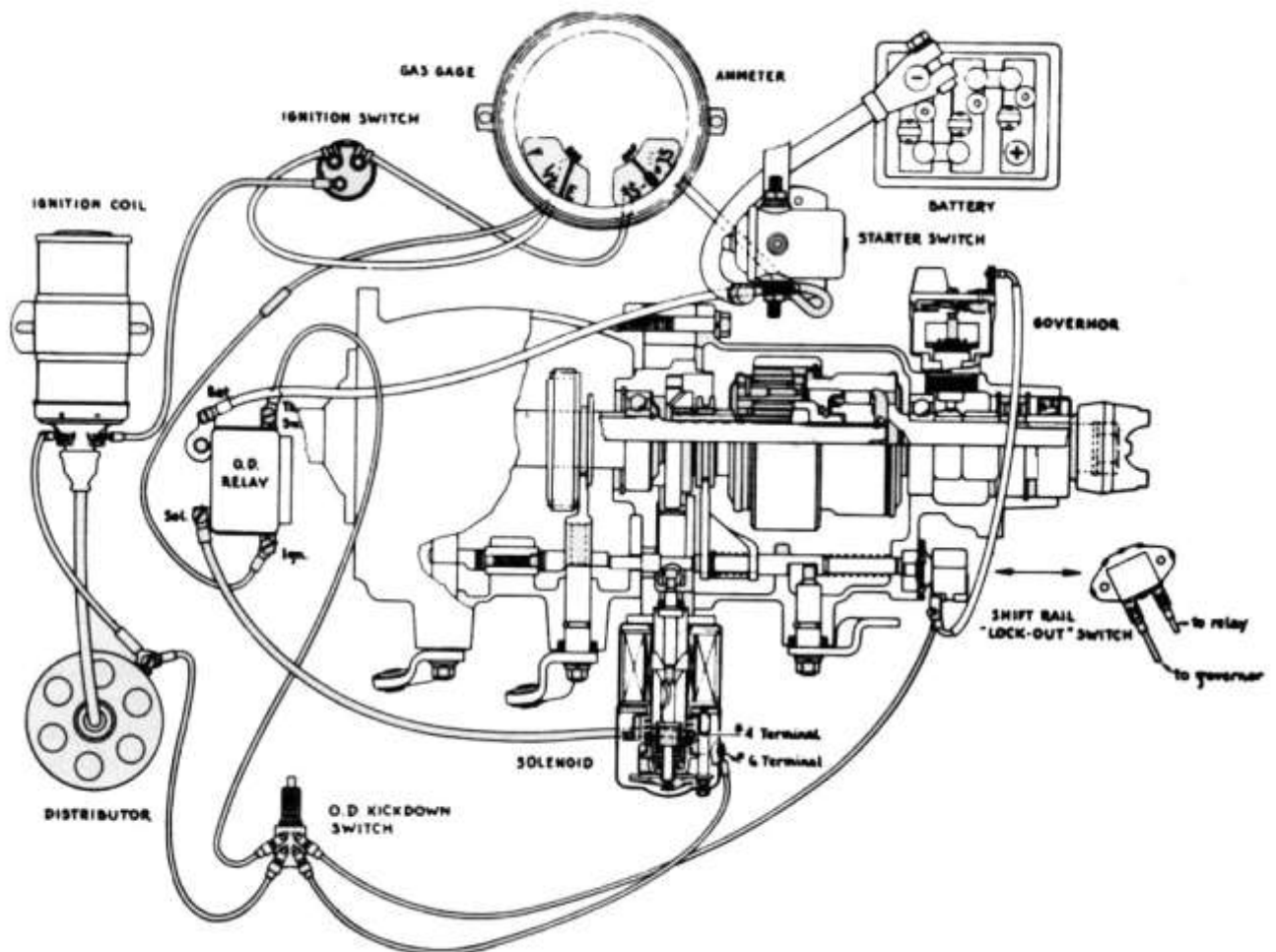
The **lower right hand terminal** on the kickdown switch should connect to the number **(6)** (Left Hand) terminal on the **solenoid**.

In some applications before 1951, a reverse lockout switch was located between the kickdown switch and the governor. The reverse lockout switches were discontinued sometime during the 1950 model year and can be eliminated in prior year applications. No replacements are available. The wiring connections will be the same as explained above.

**Solenoid Replacement –** Removing the wiring and the two mounting bolts, and then turning the solenoid a quarter turn to the right will disengage the internal pawl and release the solenoid. Carefully remove the solenoid taking care not to damage the oil seal with the ball end of the solenoid shaft.

***It is highly recommended that the oil seal be replaced whenever the solenoid is removed for service or replaced. If the seal becomes damaged transmission lubricant will be allowed to leak into the solenoid causing the solenoid to fail.***

A small bit of white grease or Vaseline applied to the center of the seal will keep it soft and help the ball of the solenoid shaft pass thru the seal during solenoid replacement. To replace solenoid carefully insert shaft, engage pawl then rotate the solenoid a quarter turn to left, and install bolts replace the wiring and you are done.



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