



## Technical Service Bulletin

### Clutch Cover Assembly Types

A clutch pressure plate is the spring-loaded plate bolted to the flywheel that applies pressure to a clutch disc or discs. When you press the clutch pedal, it compresses the pressure plate springs. Once the springs begin to compress, it releases the clutch disc allowing it to spin freely. When you release the clutch pedal, the pressure plate applies pressure to the clutch disc clamping it tightly to the flywheel. This makes it possible for an engine to transfer power to a manual transmission. Pressure plates come in a variety of styles dependent on the make and model of your vehicle. Here are three common types:



**Borg and Beck Style**



**Long Style**



**Diaphragm Style**

**Borg and Beck** - Borg and Beck pressure plates are commonly found on older GM, Chrysler, and some AMC Models. These pressure plates use multiple coil springs actuated by three 1 inch wide levers to engage and disengage the clutch. Borg and Beck pressure plates have only a preset, or static amount of pressure to clamp to the flywheel.

**Long** - The Long style clutch pressure plate is commonly found in older Ford muscle cars and trucks and is the basis for many modern drag race clutches. It has 3 levers that actuate multiple coil springs to engage and disengage the clutch. The levers are weighted and provide added centrifugal pressure as rpms increase. This adds to the static pressure of the coil springs allowing the long style clutch to hold more power.

**Diaphragm** - A diaphragm clutch is commonly found in late model vehicles and as an upgrade for both previous types. The diaphragm style pressure plate utilizes a one-piece Bellville, or diaphragm spring. The Bellville spring allows for a relatively light pedal effort and smoother engagement compared to both the Borg and Beck and Long types.

Cover Type	Pedal Feel	Linkage Type	Best Use
Borg and Beck	Heavy Effort	Mechanical	Race/Limited Street
Long	Heavy Effort	Mechanical	Race/Limited Street
Diaphragm	Light Effort	Cable, Hydraulic or Mechanical	Daily Driver / Race