■SELF-ADJUSTING TYPE CLUTCH COVER

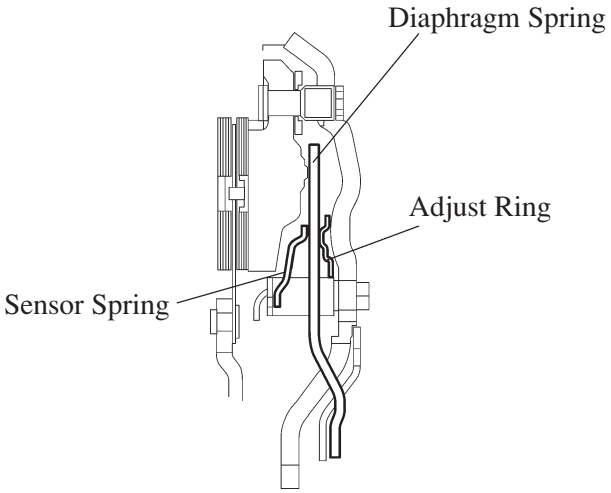
1. General

Self-adjusting type clutch cover maintains a constant diaphragm spring posture regardless of the amount of the clutch disc wear. Consequently, it maintains the clutch pedal effort constant to ensure a comfortable clutch feel.

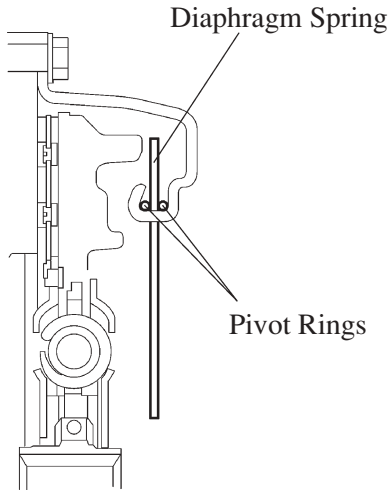
2. Major Difference

A major difference between the self-adjusting type clutch cover and the conventional clutch cover is the support mechanism for the diaphragm spring.

- Conventional type uses pivot rings to support the diaphragm spring.
- Self-adjusting type uses a sensor spring and an adjust ring to support the diaphragm spring.



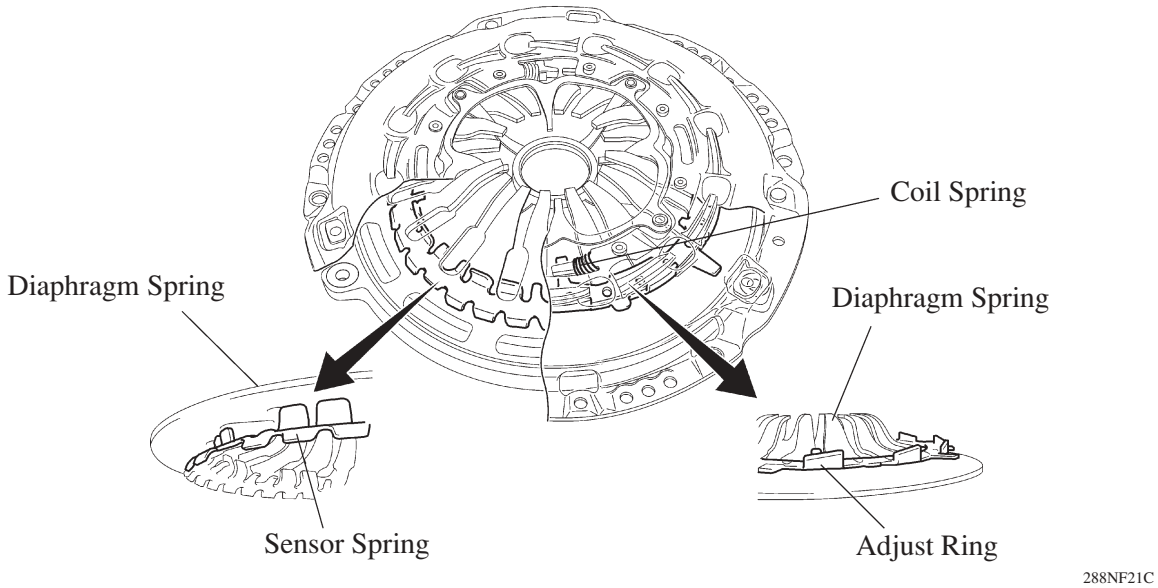
Self-adjusting Type



Conventional Type

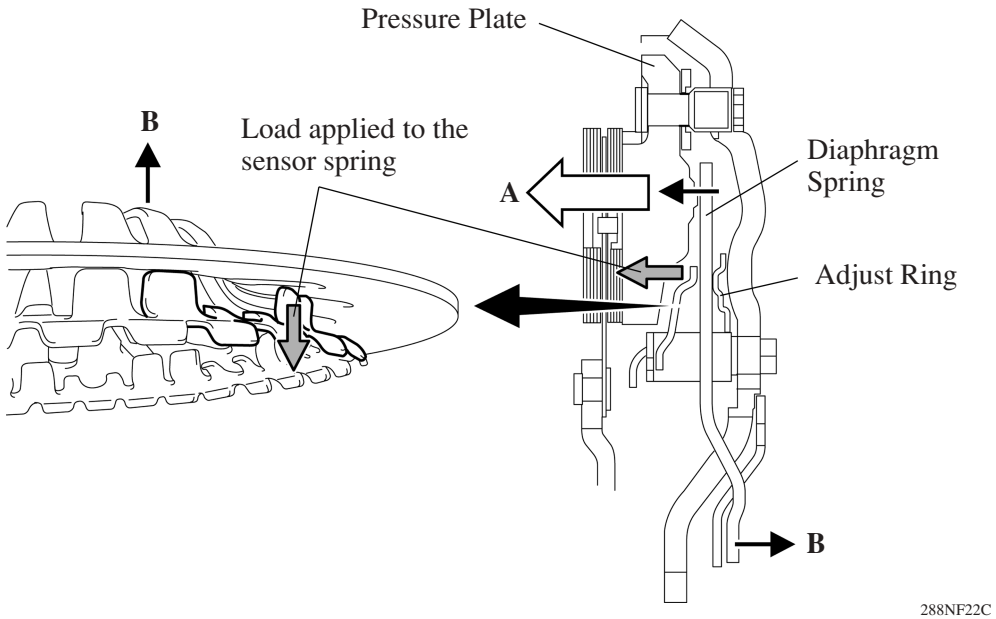
3. Construction and Operation

Self-adjusting mechanism consists of the diaphragm spring, sensor spring, adjust ring, and coil spring.



The self-adjusting mechanism operates as follows:

- When the clutch disc wears, the pressure plate will move in the direction shown by arrow A. The height of the tip of the diaphragm spring will also increase in the direction shown by arrow B, resulting in a change in the diaphragm spring posture. This will increase the installed load of the diaphragm spring applied to the sensor spring.
- When the installed load becomes excessive, the sensor spring will deform.
- The clearance between the diaphragm spring and adjust ring will increase due to the deformation of the sensor spring.



- However, the coil spring of the clutch cover will rotate the adjust ring, eliminating this clearance.
- The diaphragm spring posture will be maintained by this mechanism, realizing a constant pedal effort.

