
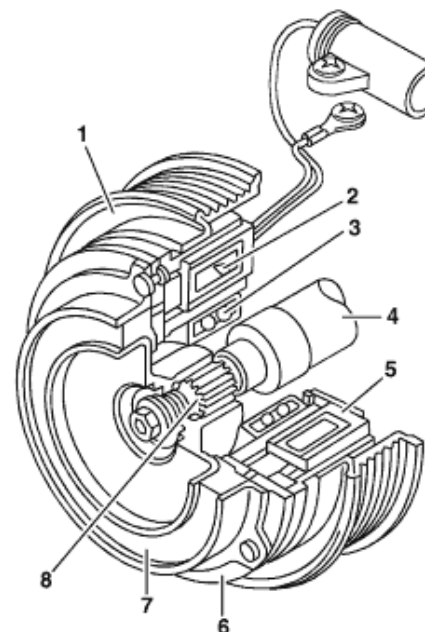


GF83.55-P-2101-01A	Electromagnetic clutch, function	 GF
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Electromagnetic clutch (A9k1)

- 1 Belt pulley
- 2 Melting fuse
- 3 Ball bearing
- 4 Input shaft
- 5 Solenoid
- 6 Pressure plate
- 7 Rubber insert
- 8 Splining



P83.55-0212-03

Function

In order to start operating the refrigerant compressor, the pushbutton control module (N19, N22) actuates the electromagnetic clutch (A9k1) and the solenoid (5) is supplied with electrical current. The magnetic force attracts the pressure plate (6) against the rubber insert (7) and holds it securely. This creates the frictional connection between the automotive engine and the refrigerant compressor.

If the solenoid (5) is de-energized, then the pressure plate (6) is pressed back by the rubber insert (7) into its rest position and the frictional connection is interrupted.

Safety shutoff of the refrigerant compressor

To prevent a mechanical defect in the refrigerant compressor from causing the poly V-belt to jump loose, the electromagnetic clutch releases itself automatically. With a mechanical defect, the refrigerant compressor rotates more sluggishly or even locks completely.

The heat generated at the friction surface causes the melting fuse (2) in the solenoid (5) to melt. The current supply to the solenoid (5) is interrupted and the frictional connection is released.