

The air conditioning (A/C) electro-magnetic clutch mounts to the front of the air conditioning compressor and electrically engages and disengages according to commands from the A/C system. A/C Compressor designs may vary from one manufacturer to the next as to internal design and components. The A/C system is divided into two sides: high-pressure and low-pressure. The low-pressure side connects to the inlet of the compressor and the high-pressure side connects to the outlet, or discharge, of the compressor.

Purpose: Upon command, the A/C clutch energizes and locks the clutch to the compressor. Once engaged, a serpentine belt or V-belt from the engine drives the A/C compressor. The compressor's main job is to pump refrigerant through the system so it can remove heat from the interior of the vehicle. Circulation of refrigerant also provides a secondary benefit? It moves refrigerant oil throughout the system, providing lubrication to key parts of the system.