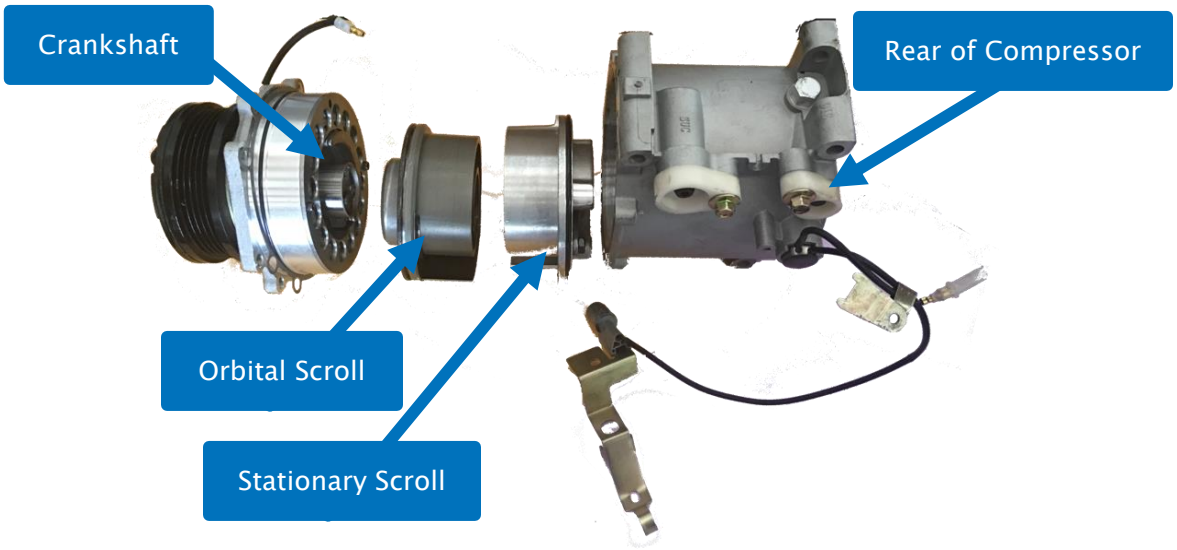
Global Parts Distributors, LLC

TECH TIP

How it Works

Scroll Compressors

Generally, the scroll compressor design features two main components: a stationary scroll and an orbital scroll. The stationary scroll (Figure 1.2) is attached to the rear of the compressor by four bolts (Figure 1.3), while the orbiting scroll (Figure 1.1) is attached to the clutch via a crankshaft and continuously orbits inside the stationary scroll.



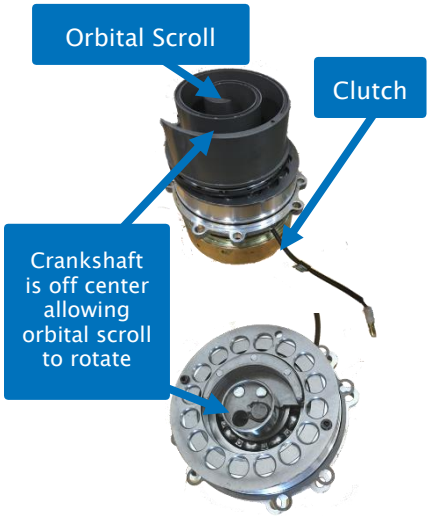


Figure 1.1

Figure 1.2
Stationary Scroll

Figure 1.3
Rear of Compressor

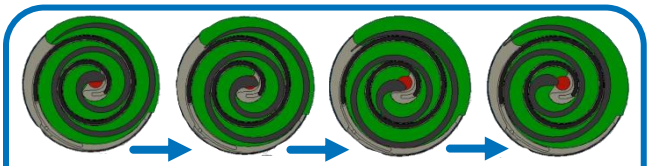


Figure 1.4 • Gray shows movement of orbital scroll; Black shows movement of stationary scroll

Refrigerant is compressed between the orbital and stationary scroll (Figure 1.4). The inlet opening draws in the gas. This gas is then compressed into the center of the scroll. As the scroll orbits, the opening becomes smaller, pressure rises, and refrigerant is forced out of the discharge at the rear of the compressor.

#54

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