

# BASIC GENERAL MOTORS COMPRESSOR SEAL SET

*This set includes all the specialized tools needed when replacing seals on R4 and A6 compressors*

## INSTALLATION

Place the **O-ring Installation Guide** on the compressor shaft, position the new O-ring at the entrance to the cavity and push the O-ring into its groove using the **O-ring / Retaining Ring Installer**. Remove the **O-ring Installation Guide** using the Tongs.

Place the **Seal Protector** over the end of the shaft. For carbon-type seals, place the new seal on the **Seal Remover / Installer** and install the seal. Place the new ceramic seal seat on the **Seal Seat Remover / Installer** and install the seal seat. For lip type seals, place the new seal on the **Seal Seat Remover / Installer** and install the seal.

Place the new retaining ring on the cavity and push it into the groove using the **O-ring / Retaining Ring Installer**.

Install the shaft key. Position the clutch end plate on the shaft and push it into place using the **Clutch End Plate Installer**.

Use the **Clutch Holding Tool** to prevent the shaft from turning and install the retaining nut on the end of the shaft.

Check the air gap with a standard feeler gauge.

## REMOVAL

Secure the clutch end plate from rotating with the **Clutch Holding Tool**. Remove the retaining nut from the compressor end shaft. Install the **Clutch End Plate Remover** and remove the end plate.

Remove the shaft key. Remove the retaining ring that holds the seal assembly in place using the **Internal Retaining Ring Pliers**.

For carbon-type seals, remove the ceramic seal seat using the **Seal Seat Remover/Installer**.

For lip-type seals, remove the seal with the **Seal Seat Remover / Installer**.

For carbon type seals, remove the seal with the **Seal Remover / Installer**.

Remove the **O-ring** from inside the nose cavity using the **O-ring Remover**.



O-RING INSTALLATION GUIDE



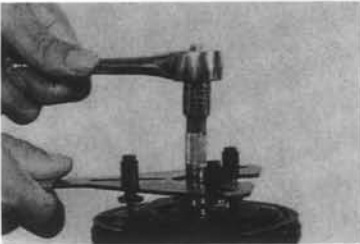
SEAL PROTECTOR



SEAL SEAT REMOVER / INSTALLER



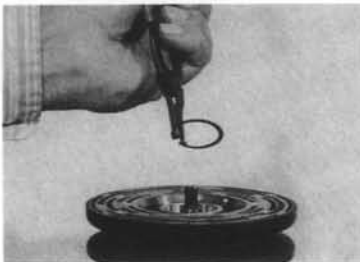
O-RING / RETAINING RING INSTALLER



CLUTCH HOLDING TOOL



CLUTCH END PLATE REMOVER



INTERNAL RETAINING RING PLIERS



SEAL SEAT REMOVER / INSTALLER



SEAL REMOVER / INSTALLER



CLUTCH END PLATE INSTALLER