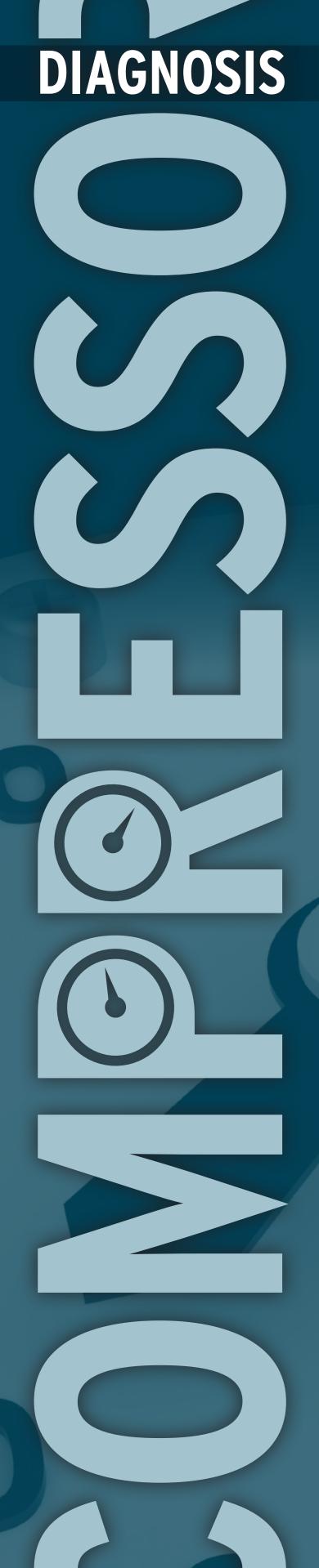
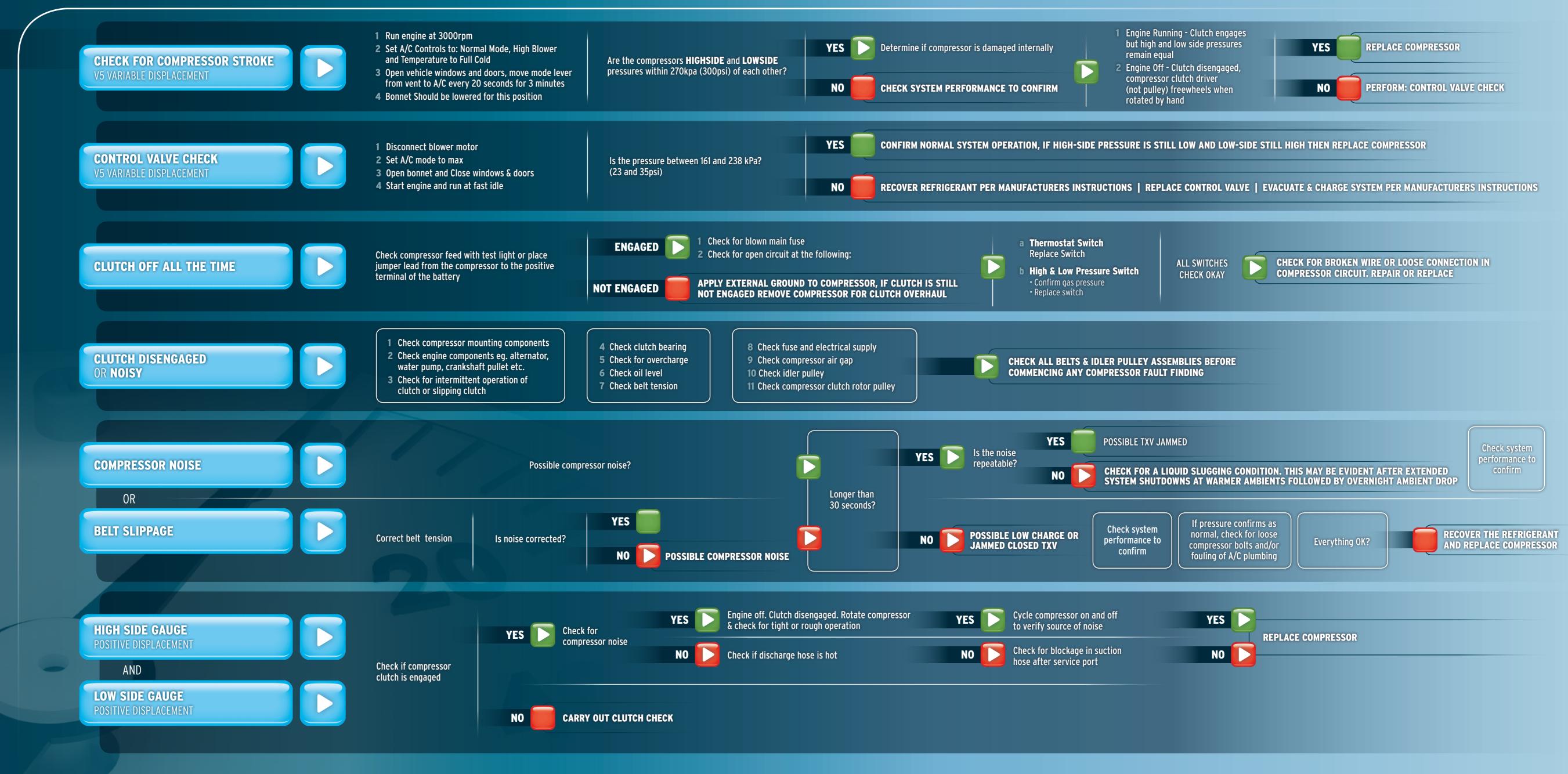
# O GENERAL SYMPTOMS





# COMPRESSOR TYPES THE COMPRESSOR IS A PUMP THAT CAN BE EITHER VARIABLE OR POSITIVE DISPLACEMENT. IT CARRIES BOTH REFRIGERANT AND OIL THROUGH THE A/C SYSTEM AND HAS TWO PURPOSES

ONE FUNCTION TO CREATE A LOW PRESSURE CONDITION AT THE PRESSURE INLET SECOND FUNCTION TO COMPRESS THE LOW PRESSURE REFRIGERANT VAPOUR INTO HIGH PRESSURE REFRIGERANT VAPOUR

### **ROTARY VANE**

The rotating vane compressor employs a series of rotating vanes or blades, which are installed equidistant around the periphery of a slotted rotor. No sealing rings or pistons are used in the vane type compressor and it has only one valve, which is a discharge valve. The vanes are sealed against the compressor housing by centrifugal force and lubricating oil. Oil is supplied from an oil pump located on the discharge side of the compressor.

e.g. Matsushita, Seiko Seiki

### VARIABLE DISPLACEMENT

As the name implies, this compressor varies its displacement by changing the stroke of the pistons. The angle of a wobble plate is changed by means of a mechanical valve train or by electronic control valves. Temperature is maintained by varying the capacity of the compressor, NOT BY CYCLING THE CLUTCH ON & OFF. The displacement of the compressor can be varied with the load from 5% to 100%.

eg. V5 Delphi, Sanden TRV

#### SCROLL

This compressor is based on the scrollcompression concept. The compression unit is made up of two matching scrolls one fixed and the other orbiting, which when placed together form a series of gas pockets. The suction gas enters the scroll unit at the periphery and is compressed progressively into the centre discharge port of the stationary scroll.

eg. Sanden TR

### RECIPROCATING PISTON SINGLE ACTING

In the single-acting compressor, compression of the vapour occurs only on the one side of the piston and once every revolution of the crankshaft.

eg. York, Tecumesh

## RECIPROCATING PISTON DOUBLE ACTING (SWASH PLATE)

In the double acting compressor, the pistons are controlled by means of a wobble plate, compression of the vapour occurs alternately on both sides of the piston so that compression occurs twice during each revolution.

eg. Sanden SD, Unicla



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