

## WHY DO COMPRESSORS FAIL?

In most cases the reason you are fitting a reconditioned and guaranteed compressor is that the old or original compressor has **"GONE DOWN"**, therefore you must ask yourself why did this happen?

Compressors do not fail for unexplained reasons so be assured that if you fit a compressor without answering the **"WHY"** question and without following the correct installation procedure this compressor will also **"GO DOWN"** causing you unnecessary losses in both time and money.

### So, why did the old unit fail?

The two most likely causes for compressors to seize are:

1. **EXCESSIVE HEAD PRESSURE**
2. **LACK OF OIL**
3. **LACK OF REFRIGERANT (COMPRESSOR OVERHEATS)**

In the case of excessive head pressure your fault finding can be broken down into three sections:

<b>BLOCKAGE IN SYSTEM -</b>	Check dryer, T.X. Valve, Condenser (internally)
<b>OVERCHARGE IN THE SYSTEM-</b>	Nippondensos are extremely susceptible to this
<b>OVERPRESSURE IN THE SYSTEM -</b>	Inadequate car cooling system Clogged condenser fins (external) Defective thermo fan or fan clutch Excessive moisture in system. A cocktail of refrigerants.

In the case of lack of oil the two reasons for this are:

**SYSTEM BLOCKAGE** - restrictive flow of oil back to the compressor (i.e. tx valve, receiver/dryer, condenser, freezing evaporator)

**SYSTEM LEAK** - allowing the oil to escape from the system.

Once you have found and rectified the reason for the old compressor failure, follow this procedure for the installation of the new unit to ensure trouble free running.

1. FLUSH THE SYSTEM (With an approved solvent)  YES
2. FLUSH THE SYSTEM (With an approved solvent)  YES
3. FLUSH THE SYSTEM AGAIN (With an approved solvent)  YES

**It cannot be stressed strongly enough that if a compressor has had a burnout and put sludge and debris through the system, this sludge will simply work its way back to the compressor if it is not removed.**

4. REPLACE T.X. VALVE
5. REPLACE RECEIVER DRYER
6. VAC SYSTEM FOR CHARGING AND TESTING

**When compressor oil is replaced it should match the refrigerant to be used.**

**ERG 1000 lubricant is compatible with all refrigerants.**

(Available from HyChill Refrigerants)

**HR12 Refrigerant is compatible with all oils.**