

## RECOMENDATIONS FOR AIR CONDITIONING COMPRESSOR ASSEMBLY

Before beginning with the change of the air conditioning compressor, and in order to avoid any loss in the circuit, it is recommended to not open the inlet of the same until you are completely sure that the compressor you are going to install is the same as the one of the vehicle.

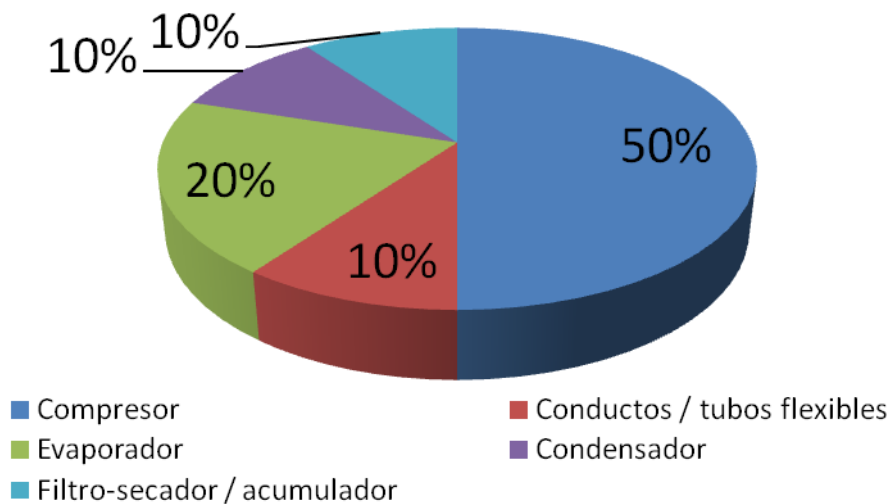
**IT IS VERY IMPORTANT TO IDENTIFY THE ORIGIN OF THE CLIMATE SYSTEM ERROR;** witch usually is caused by the one of the following reasons:

- Leakages in the circuit. The lack of fluid indicates a leakage. It is recommended to realize a leakage search always before re-charging the circuit. Therefore, it is necessary to check if any leakages exist in connections and conducts, compressor, condenser, evaporator, switch button and expansion valve or accumulator.
- Lack of coolant. This leads to a lack of lubrication of the compressor, witch ends up causing failure of this component.
- Lack of lubrication. It can seize different elements of the system, amongst them the compressor.
- Electric failure of electromagnetic clutch.
- Lack of cleanliness of the circuit. This generates:
  - Condenser with low performance. If the condenser does not work correctly, it must be replaced with other of equivalent features. This could break down basically because of impurity of the circuit and/or surface corrosion.
  - Saturated dehydrating filter: the water penetrating into the circuit could have a chemical reaction with the lubricating oil, causing the apparition of highly corrosive acids and subsequently a deterioration of the compressor and the expansion valve. The appearance of bubbles is a symptom of this failure.
- Blocked expansion valve. The valve can be blocked in open or closed position. It can also stay obstructed due to ice or dirt.
- Broken evaporator. The presence of corrosion on the evaporator's surface may perforate it. Also, the obstruction of the wings due to the presence of ice could be a cause for break down.

**THE REPLACEMENT OF THE COMPRESSOR REQUIRES 100% CLEANLINESS OF THE ENTIRE CIMATE SYSTEM AND THE SUBSTITUTION OF THE EXTERIOR COMPONENTS.** The system must be revised searching for dirt, solid parts and permeability. When a compressor fails, small internal particles get mixed with oil and disperse in the system. This oil contaminated with particles, or humidity or corrosive elements must be replaced. The dirt particles of the climate circuit can only be eliminated with a deep washing of the complete system except the compressors, accumulators and expansion valves, witch cannot be washed. Depending on the dirt grade of the circuit you want to wash, the use of nitrogen, R134a coolant or other special washing solutions will be adequate. Compressed air by itself cannot eliminate the contaminants. You should never mix R134a coolant with R12, because they are incompatible.

**IT IS NECESSARY TO REPLACE THE VALVE AND THE DRYING FILTER (DEHYDRATANT) OR THE ACCUMULATOR.** With this, all the humidity of the air conditioning system can be eliminated. The humidity can form corrosive contaminants causing quick system failure. In presence of water the R134a is corrosive.

**IT IS NECESSARY TO EMPTY AND REPLACE THE OIL COMPLETELY FROM THE CIRCUIT.** Every Sercore compressor has the necessary oil charge to work correctly inside the system. In case of any doubt regarding the oil quantity inside the compressor and to the correct lubricant type, please check the label on the compressor. With the exception of the compressor, each one of the system components must be filled with oil in order to complete the total circuit charge, according to the following proportion:



Remarks: The double air conditioning systems require additional coolant and oil; you should verify the specifications of the vehicle.

Oils should never be mixed. Mineral and synthetic oils are incompatible. It is recommended to verify the conformity of the oil which will be added to the circuit. Oils usually used with R134a are synthetic PAG and ESTER oils.

**ALL O-RING SEALS MUST BE REPLACED** and soaked with oil.

**IT IS RECOMMENDED TO CHECK WORN-OUT BELTS, PULLEYS AND TENSORS;** if they are not in good condition they can reduce the performance of the climate system. You should check that the motor belt is correctly adjusted, that it is tensed and free for damages. It is also recommended to check that the voltage in the electric clutch of the compressor is the correct.

**BEFORE STARTING, TURN THE NUT OF THE COMPRESSOR CLUTCH** in order to perfectly lubricate the internal components.

**RECHARGE THE CLIMATE SYSTEM WITH THE AMOUNT OF COOLANT INDICATED BY THE CAR MANUFACTURER.** The lack or excess of coolant in the circuit produces malfunctions in the air conditioning circuit. The lack of coolant causes additional fuel consumption.

**CHECK THAT THE CIRCUIT HAS NO LEAKAGE.** It is recommended to use a leakage-detector in order to check that the circuit is free from leakages. Leakages cause system error.