



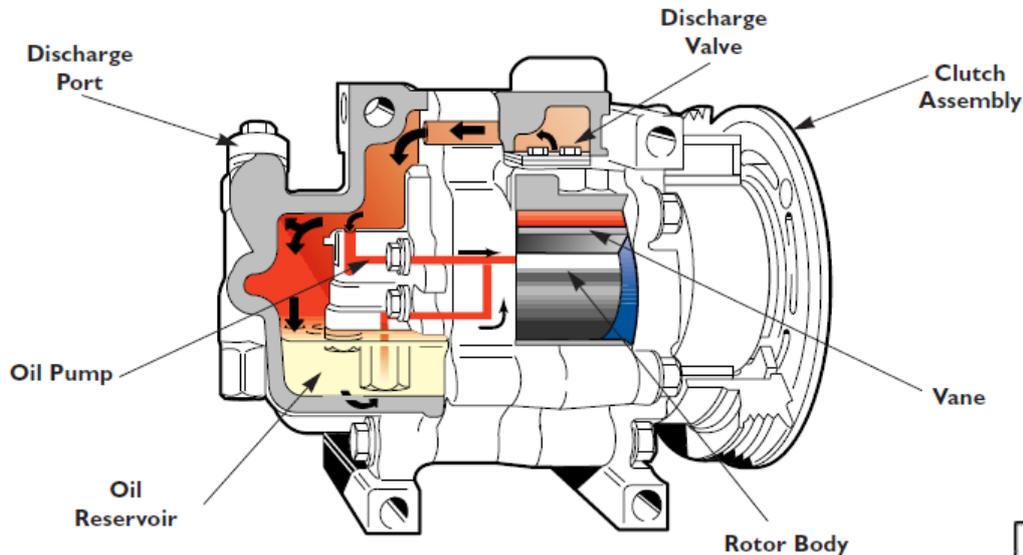
<b>COMPRESSOR PMAZ23 FOR THE MAZDA 3</b>					TSB #:	<b>61</b>
					Date:	<b>24/5/2012</b>
Initial Once Read:						

Information from our customers have revealed that two (2) potential issues that may occur after fitting the Adair compressor PMAZ23 which is a Panasonic replacement compressor.

The compressor supplier requires that the refrigerant charge specification for the Mazda 3 which is 475+/-25 grams be reduced to 425+/-25 grams to reduce the A/C system High side pressure.

At fitment ensure that the recommended charging procedure of: Initial charging though the High side (A/C off) approximately 300 grams and the final charge of 125 +/-25 grams through the Low side (A/C on) ensuring that you filling pressure is "throttled" to below 275 kPa to reduce the risk of liquid refrigerant entering the compressor. When you carry out the performance check ensure that the engine cooling fan is operational.

1. *Internal vane "rattling" noise heard on initial compressor engagement at idle.* The vane noise should normally disappear in a matter of minutes. If the noise does not disappear after 10 minutes, hold the engine speed at approximately 3,000 rpm for 5 minutes. The vanes located in the rotor body require both refrigerant pressure and lubricating oil to act as a cushion behind the vane. The cushioning effect ensures full sealing of the vane against the cylinder wall.
2. *Clutch front plate turning anticlockwise when the compressor cycles off.* This is normally an indication of damaged reed valves which then allows refrigerant pressure feed in the opposite direction and turns the compressor backwards. It is essential that you follow the charging procedure as described previous as broken reeds may be the result of excessive liquid refrigerant being fed into the low side. If you experience this issue—replace the compressor.



Internal view of a National Panasonic vane compressor provided by Air International Thermal (Australia)

