



HOLDEN VE, WM A/C “COMPRESSOR PROTECTION MODE”					TSB #:	70
					Date:	10/12/2012
Initial Once Read:						

VEHICLE: 2008 Holden VE, V6 Commodore. Customer of Adrian Sanderson, Natrad Echuca, Victoria and also Sam Atkinson, Natrad Seaford had the same issue with a customer vehicle.

CUSTOMER COMPLAINT: On a day of very high ambient temperature “the A/C is not cold”. Blower fan only operates on lowest speed and cannot be altered. Air intake goes to recirculation and cannot be turned to fresh air mode.

TESTING or INSPECTION: Connect pressure gauges and check High and Low pressures. For this situation to occur, the High side pressure must be above 2500 kPa. Both engine fans will also be operating at idle.

RESULT: High side A/C system pressure should be above 2500 kPa (issue in the A/C system). If the actual High side pressure is lower than 2500 kPa, check the pressure transducer with a scan tool as it could be providing incorrect feedback signals to the PCM - misleading it into putting the A/C system into compressor protection mode.

CAUSE or REASON: The A/C system has gone into A/C “compressor protection” mode and the HCM (HVAC control module) has reduced the blower fan speed, moved the air intake to recirculation and reduced the compressor stroke (output) to minimum to reduce the load on the evaporator which in turn will lower the pressures in the A/C system. This is a normal function when the High side pressure is above 2500kPa. Once the pressure lowers below 2000 kPa or the ignition is cycled off / on the A/C system will revert to normal operation.

The cause of the increased High side pressure will have to be rectified. Causes include restrictions in the condenser and poor air flow to the condenser (obstructions of dirt & insects) or a faulty pressure transducer.

SUMMARY: Normal A/C system safety mode built into the HCM (HVAC control module) logic to protect the compressor from destruction through excessive high pressure.

PHOTOGRAPH:

