Charging System - Alternator Charging Issues

NO: 32-02

DATE: 05-09-2005

MODEL/YEAR: S60, S80, V70 and XC70.

M.YEAR: MY99-02

SUBJECT:

Alternator Charging Problems

REFERENCE: VADIS (VIDA)

DESCRIPTION:

Analysis of damaged alternators shows that the regulator may get damaged due to extreme weather conditions with high temperature and high humidity. The regulator may fail in two phases.

Early failure phase:

- Normal charge when engine is cold.
- Low charge (10-11 Volts) when charge regulator is hot (after 20-30 minutes driving, with high <u>alternator</u> charging current).
- Poor or discharged battery, with no start conditions.
- Charge indicator in DIM only when battery voltage is low.

Late failure phase:

Later the regulator may break down and cease to function, the following conditions may apply:

- No charging, OR
- Over charging.
- Poor or discharged battery, with no start conditions.
- Vehicle may stop during driving (due to discharged battery).
- Message in DIM LOW BATTERY VOLTAGE or CHECK EL SYST.
- One or more DTCs: CEM:0C01,0C02,0C04,0C05. ECM:801D,91E0. ABS:0074,0077
- Charge indicator in DIM when DTC is set.

PRODUCTION:

A new type of regulator 8637851 was introduced in production from M/Y 2003.

SERVICE:

The new regulator (p/n 8637851) also fits the older alternators that previously used the regulator (p/n 9459741). This regulator can be used on all S60, S80, V70, XC70.

Note: VADIS does not show regulators and other spare parts for certain models, it only shows a complete <u>alternator</u>. VADIS (VIDA) will soon be corrected with spare parts such as regulator, free wheel pulley etc.

Replace the regulator, refer to VADIS for methods.



The old regulator (P/N 9459741) can be identified by the Suppler P/N FOOM 145 229 (See picture) And the new regulator (P/N 8637851) by the Supplier P/N FOOM 145 279

LABOR OP	LABOR DESCRIPTION		LABOR TIME
32205-2	Charging regulator replace	S60/V70/ non-turbo	1.5 hr
		S60 turbo	1.8 hr
		V70/XC70 turbo	1.9 hr
		S80 non-turbo	0.5 hr
		S80 turbo	1.1 hr

Claims may be submitted under the New Car warranty when there is a documented customer complaint using claim type: 01