



S-TYPE	Date 02/2000	S412-01
TECHNICAL BULLETIN		

Subject AIR-CON COMPRESSOR REPLACEMENT	Model S-TYPE Year 1999.25 ON VIN L00600 ON
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ISSUE:

Air Conditioning Compressors are supplied without the Drive Clutch Assembly. Should it be necessary to replace a Compressor or Drive Clutch Field Coil, a clearance adjustment is required as the clutch is assembled to the compressor. The necessary Workshop Procedure is outlined below.

ACTION:

To dismantle:

1. De-gas the refrigeration system and remove the compressor from the engine. In all cases, immediately plug the refrigerant suction and outlet ports and the disconnected pipes, to contain the residual oil and to prevent the ingress of moisture or dirt.
2. Fit and tighten Special Tool 303-D055 Universal Strap Wrench around the clutch plate.
3. Slacken off the central clutch retaining nut. Remove the nut and the clutch plate.
4. Remove the shim from the shaft.
5. Remove the clutch pulley circlip.
6. Using Special Tool 303-D121 Crankshaft Damper Remover, draw the clutch pulley from the shaft.
7. Remove the retaining bolt and plate, allowing the sensor to be detached from its location on the compressor body.
8. Remove the clutch field coil retaining circlip.
9. Remove the clutch field coil assembly.

To assemble:

10. Install the clutch field coil assembly to the compressor and install the retaining circlip.
11. Align the sensor to its location on the compressor body and fit the retaining plate and bolt.
12. Using Special Tool 412-109 if necessary, install the clutch pulley to the compressor shaft.

NOTE: The bearing of the clutch pulley should be a slip-fit on the drive shaft, enabling the assembly to be pushed home by hand.

Should difficulty be experienced, align the above tool to the bearing and shaft, and use light hammer blows to tap the bearing fully into position.

13. Install the clutch pulley circlip.
14. Install the shim (removed in step 4 above) to the shaft.
15. Install the clutch, start the retaining nut, and finally tighten the nut, holding the clutch plate from rotating using Special Tool 303-D055 Strap Wrench.
Torque Wrench Setting: 17Nm (13 lbf.ft)
16. Using feeler gages, determine the air gap clearance between the rear face of the clutch plate and the pulley.
Specified Clearance: 0.35 - 0.75mm (0.010 - 0.030 inch)
17. Should the measured air gap not fall within the above limits, remove the clutch plate and add or remove shims as necessary to obtain the specified clearance.
18. Refit the compressor assembly to the engine.

NOTE 1: Install NEW 'O' rings, freshly moistened with compressor lubricating oil, when reconnecting the refrigerant suction and outlet connections at the compressor.
Do NOT return to the bottle any oil used in connection with moistening of the 'O' rings. Immediately refit the cap to the bottle, to reduce absorption of moisture from the atmosphere.

NOTE 2: A replacement compressor is supplied pre-filled with the correct quantity of oil.

NOTE 3: Should an existing compressor be refitted, but oil be lost during the process of fitting new clutch components, make good the volume of oil lost.

19. Recharge the system with refrigerant.

PARTS INFORMATION:

The following should be ordered via Jaguar Parts Operations, as required:

DESCRIPTION		PART NUMBER	QTY/VEHICLE
Air Con Compressor	3.0 L	XR8 2897	1
	4.0 L	XR8 1188	1
Compressor Clutch	3.0 L	XR8 9203	1
	4.0 L	XR8 9202	1
'O' ring, suction and outlet connections		XR8 3790	2
Oil, compressor lubrication 100 ml pack		XR8 3680	1

FEELER GAGE MEASUREMENT	COMPRESSOR SHIMS PART NUMBER
0.4mm	XR8 3786
0.5mm	XR8 1287
0.6mm	XR8 1288
0.7mm	XR8 1289
0.8mm	XR8 1290
0.9mm	XR8 1291
1.0mm	XR8 1292

WARRANTY INFORMATION:

WARRANTY FAULT CODE:	COMPRESSOR OR COMPRESSOR CLUTCH UNIT	PERMISSIBLE CONDITION CODES
	JJ-BB-**	B4, D7, D8, X1, X2, X4, X7, 01, 07, 28, 33, 42, 46, 49, 55, 69.

SRO	DESCRIPTION	LABOR TIME ALLOWANCE	
		3.0L	4.0L
82-10-20	Air Con Compressor - Renew	0.65 hours	0.70 hours
82-10-25	Clutch Field Coil - Renew	0.65 hours	0.70 hours
82-30-30	Degas and recharge refrigerant system (additional to either above)	0.40 hours	

All claims must be submitted in accordance with the current Jaguar Warranty Policy and Procedures Manual and its amendments.