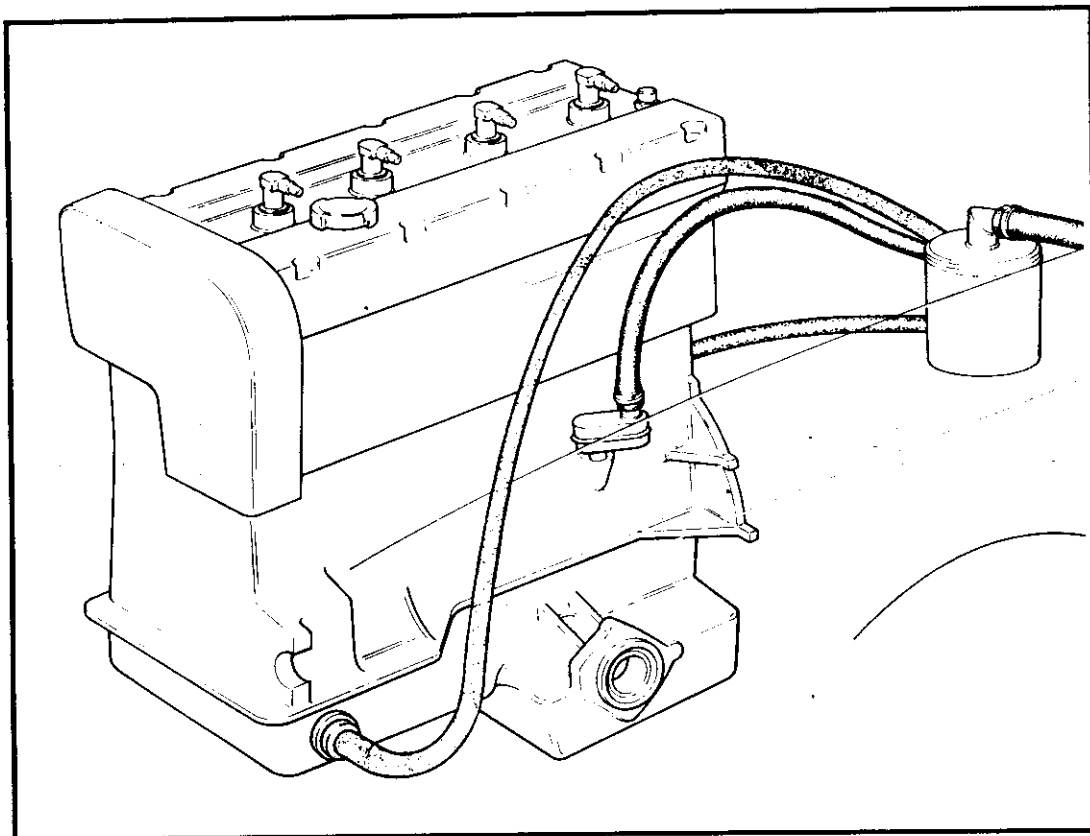


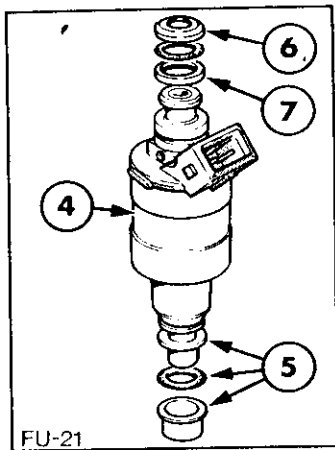
ENGINE





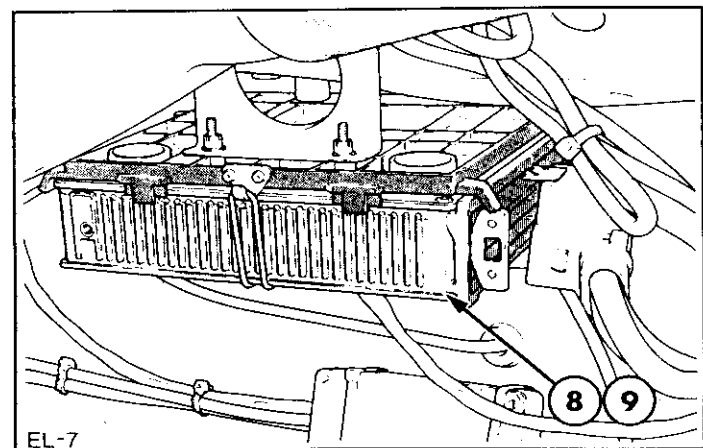
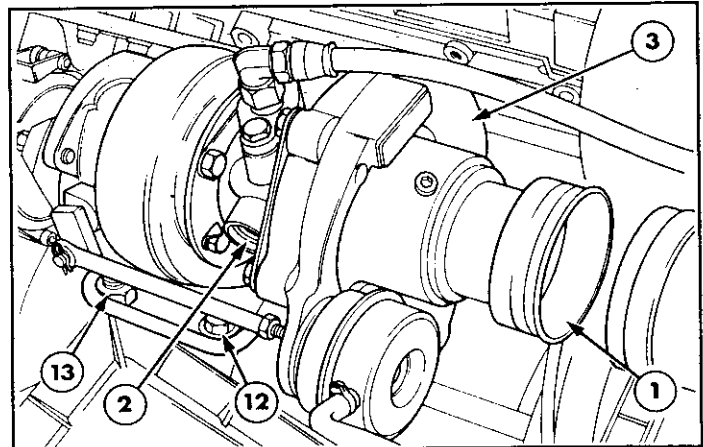
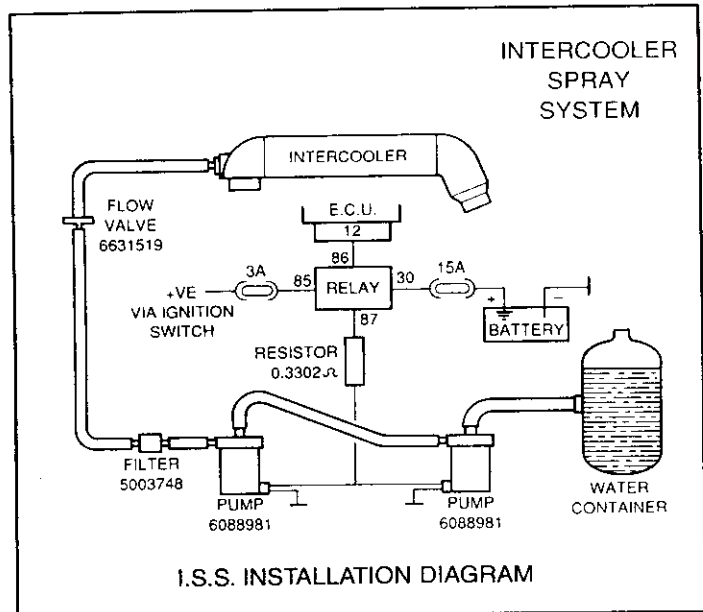
The basic engine is virtually a carry over from the Sierra Cosworth 4x4, but with a larger turbo, and a water-cooled intercooler. Water injection (I.S.S) is also fitted to the initial production runs. This can only be activated with the correct EPROM.

It is strongly recommended that the group 'A' engine is built by a professional tuning company who will optimise the compression ratio and cam timing on a dynamometer. Fit the recommended injectors, spark plugs, map sensor and fuel pump. Set the boost to (TBE) bar peak. Excessive boost will raise the water temperature and shorten turbo and gasket life. The turbocharger will normally last for 800km between rebuilds. Ensure air filter element is replaced regularly in dusty conditions or if wet. Seal gaps around radiator/intercooler with tape.



The water temperature should be approx. 90°C at 20°C ambient. In warm climates, run the radiator fans continuously (fit an override switch). The intercooler spray system (ISS) will keep the plenum temperature at 40°C (ensure container is refilled at service points) The thermostat can be modified or replaced. Use new cylinder head bolts at each rebuild.

The turbocharger exhaust housing can be modified by slotting three holes to help quick removal. Use one bolt and three studs.



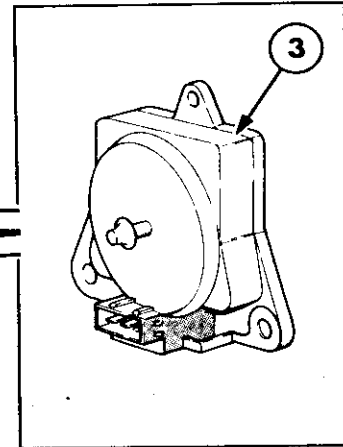
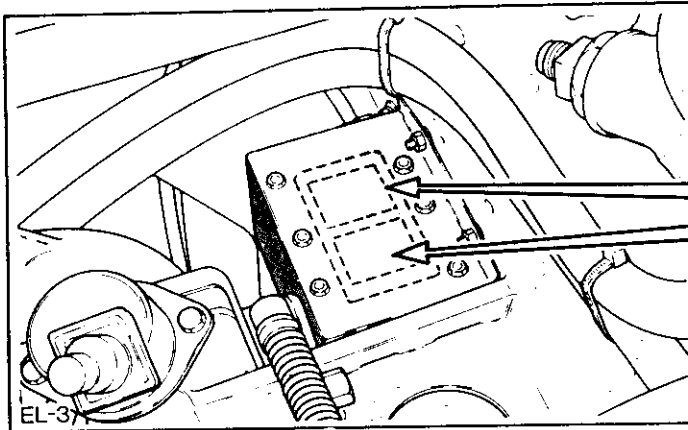
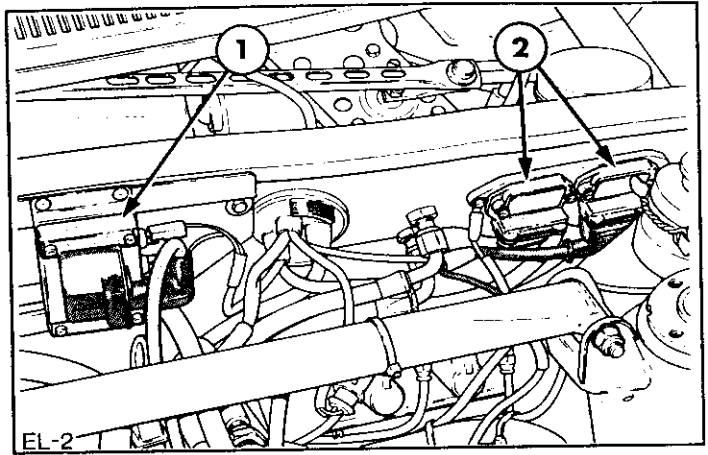
Description	Finis Code	Comments	Qty.
1 Restrictor Turbo	9095445	38mm diameter	1
2 CHRA Turbo Core	9095477	Balanced	1
3 Compressor Hsg.	9095446	To suit restrictor	1
4 Fuel Injector	9092402	Grey	4
5 Fitting Kit Injector	9092400		4
6 Adaptor Ring, Injector,	9092397	Upper	4
7 Adaptor Ring Injector,	9092396	Lower	4
8 Eprom, Rally	TBE	Level '8' ECU	1
or			
9 Eprom, Rally	T B E	P8 ECU (Alt.)	1
10 Spark Plug	9094884	AGP 601	4
11 Cyl. Head Gasket	9092431		1
12 Bolt - Turbo Mounting	9095143	Quick release	1
13 Nut - Turbo Mounting	9095144	Quick release	3
14 Fuel Rail	TBE		1
15 Bracket - Regulator	TBE		1
16 Fuel Regulator	9095101		1
17 Piston Ring Pack	9093153		4
18 Flywheel	9095548	Modified	1
19 Seal Kit	9095561	Turbo O/Haul	1

ONLY SUPER UNLEADED FUEL (98 OCTANE) SHOULD BE USED

- Wastegate Setting : TBE
- Max. Boost : TBE (Overboost)
- † Fuel Pressure (Idle) : 3.5 Bar
- Engine Oil : Mobil 1 (Change after 1000km)

† Sensor pipe removed

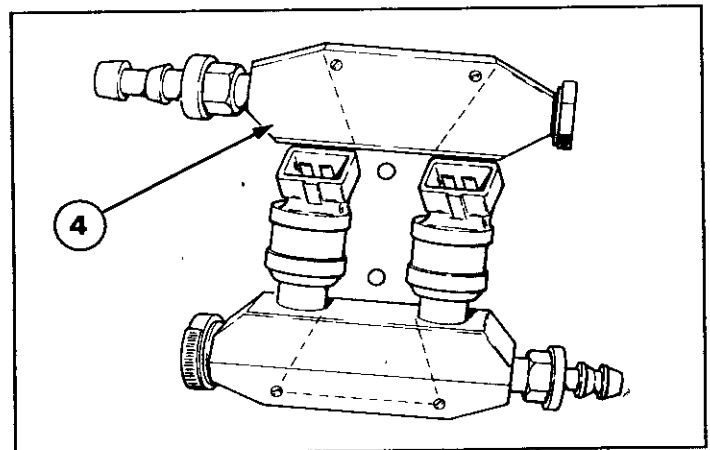
Description	Finis Code	Comments	Qty.
1 Ignition Coil	9095085		1
2 TFI - Ignition	*1637546	Earth to engine	2
3 MAP Sensor	9092433	3.0 Bar	2
4 Kit - Wastegate Control	9095147		1

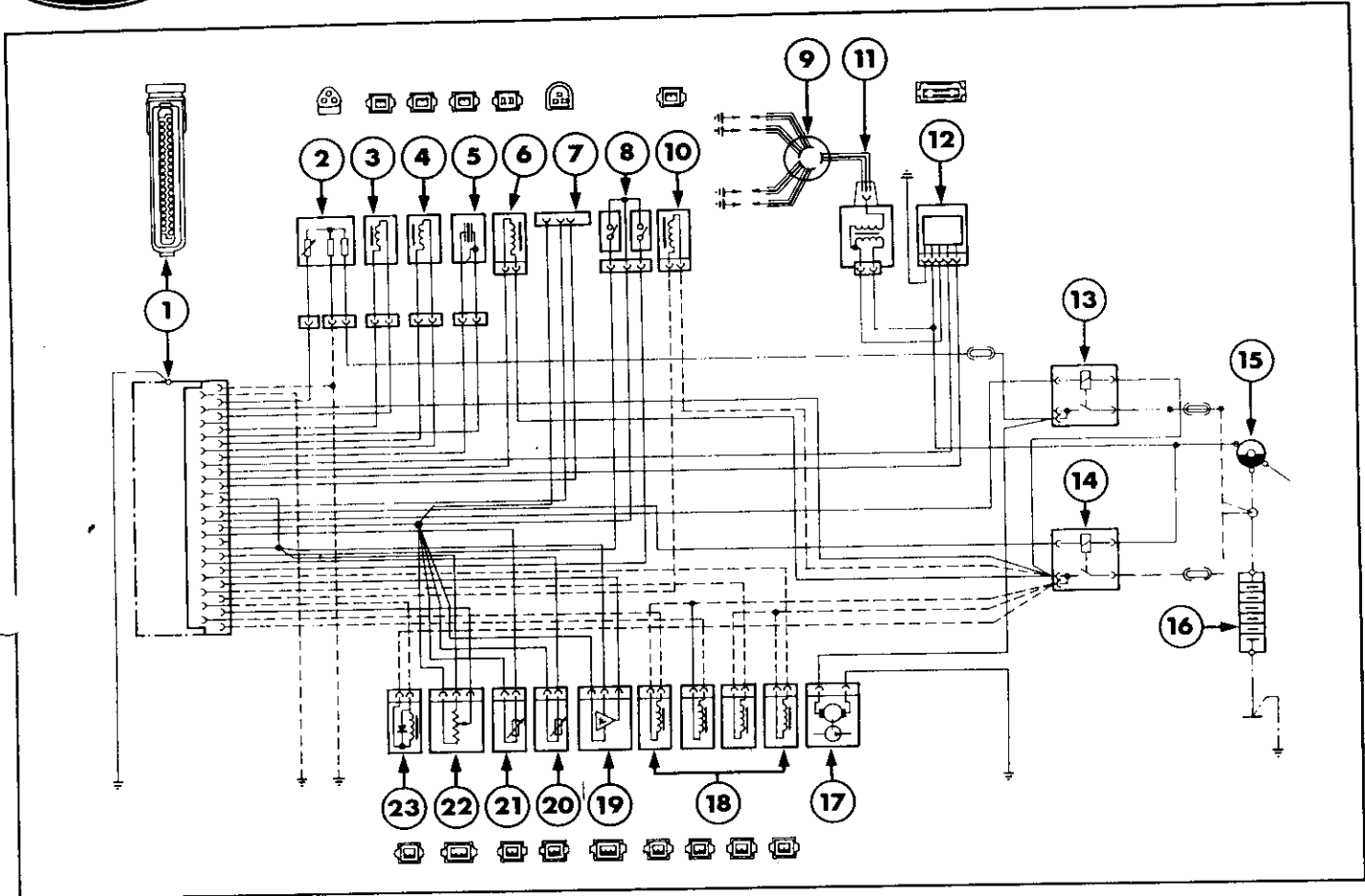


NOTE:

The HT leads must NOT be allowed to make contact with any sensor wires.

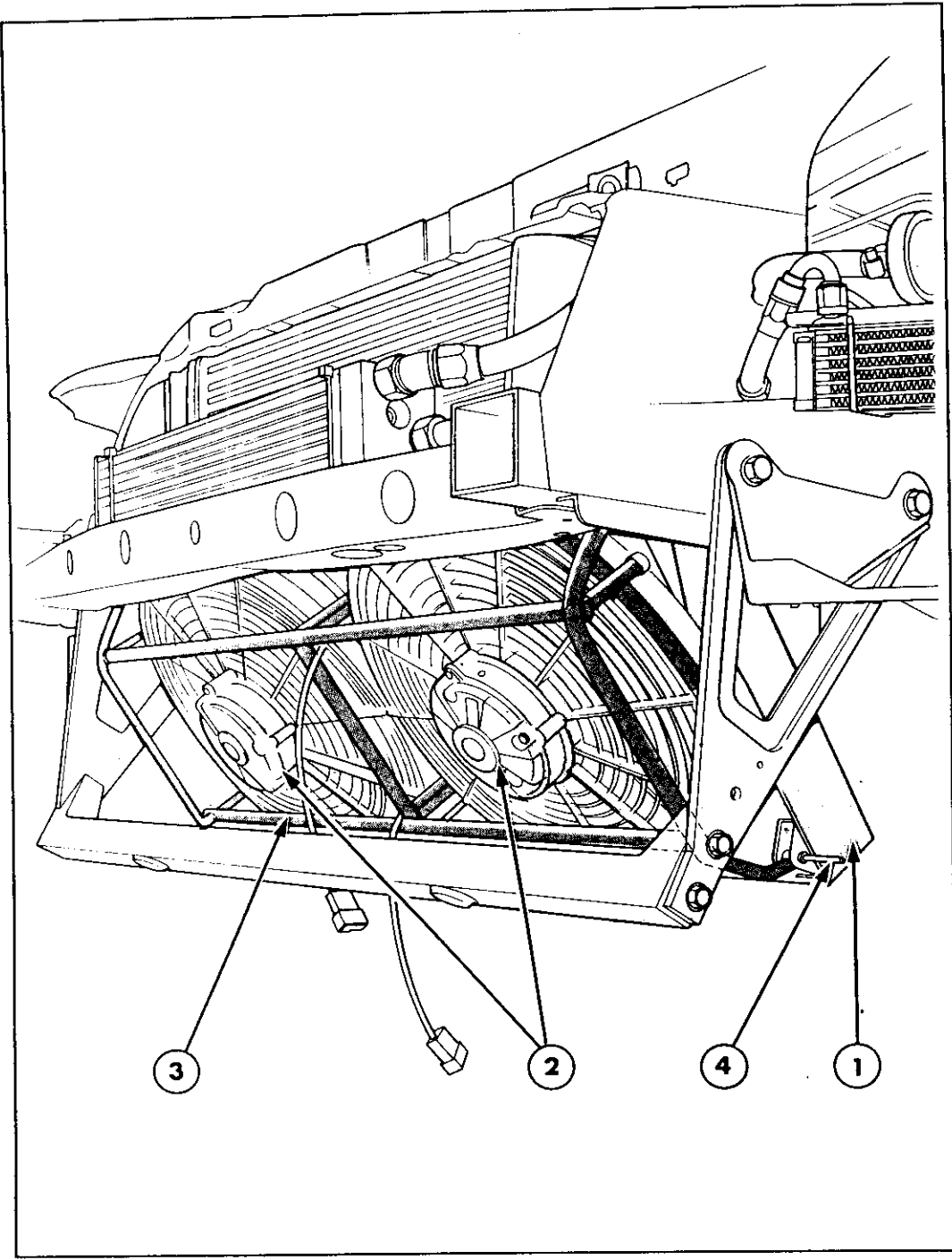
Fit the 2 MAP sensors inside a metal box as shown, to reduce the possibility of electronic interference.





- | | |
|---------------------------------|--|
| 1 ECU | 13 Fuel Pump Relay |
| 2 Lambda Sensor | 14 ECU Relay |
| 3 Vehicle Speed Sensor (VSS) | 15 Ignition Switch |
| 4 Phase Sensor | 16 Battery |
| 5 Knock Sensor | 17 Fuel Pump |
| 6 Canister Purge Solenoid Valve | 18 Injectors |
| 7 Diagnostic | 19 Manifold Pressure Sensor |
| 8 Octane Adjustment | 20 Air Temperature Sensor |
| 9 Ignition Distribution | 21 Coolant Temperature Sensor |
| 10 Wastegate Control | 22 Throttle Position Sensor |
| 11 Ignition Coil | 23 Idle Speed Control Valve with Diode |
| 12 TFI Module | |

- NOTE 1: The ECU body should be connected to the chassis making sure of a perfect electrical connection. A RF connection is allowed. Max length = 150mm.
- NOTE 2: These connections should be made at a different location. Max distance = 150mm.
- NOTE 3: Chassis connection. Max length = 100mm.
- NOTE 4: Joint is inside ECU connector.
- NOTE 6: This connector must have the indicated polarity to avoid damage at the ECU module.



Description	Finis Code	Comments	Qty.
1 Radiator	9095521		1
2 Fan	9095524		2
3 Fan Mounting Frame	9095523		1
4 Pin - Fan Mounting	9095522		4

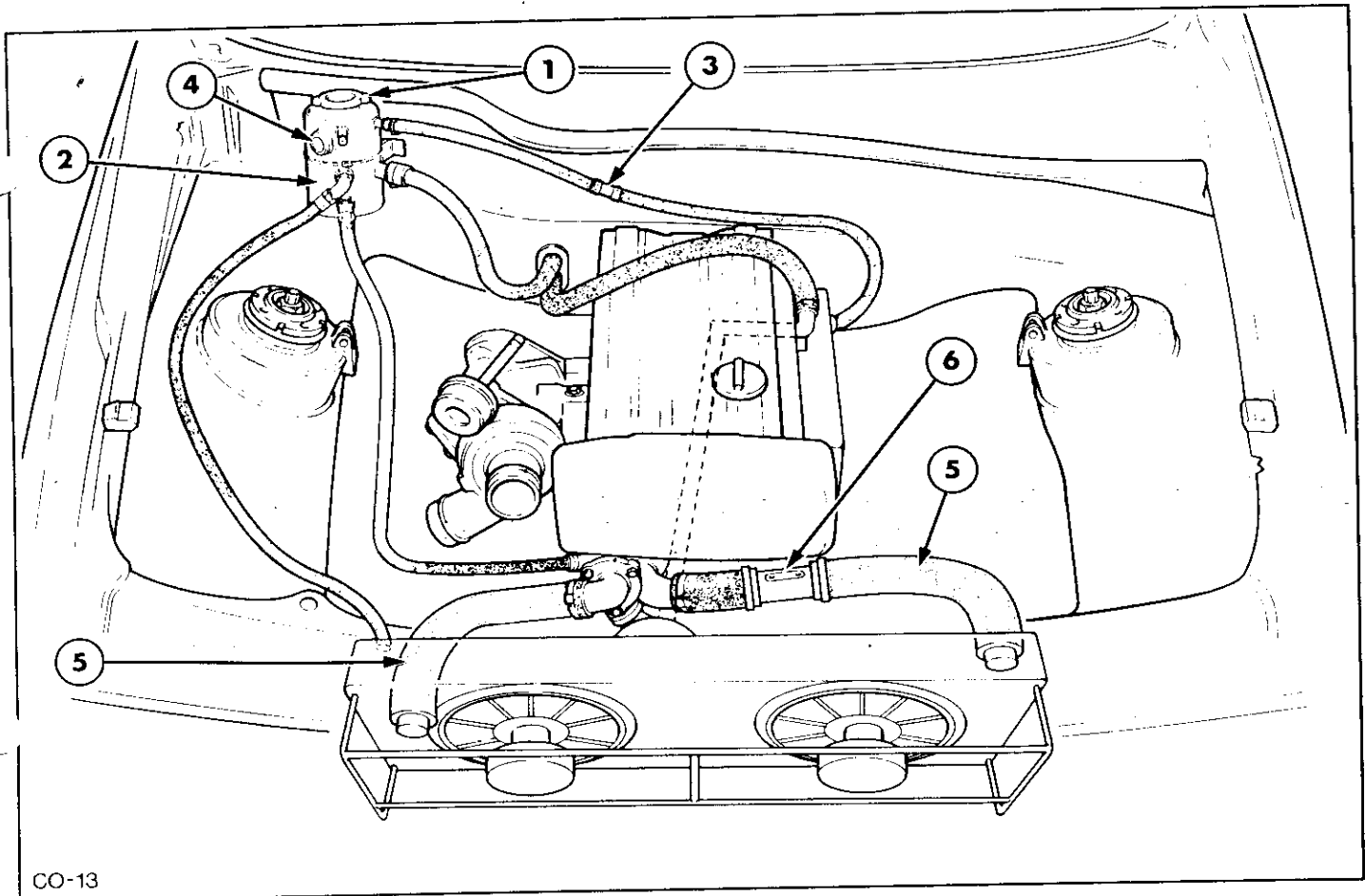


The water system is piped up as shown.

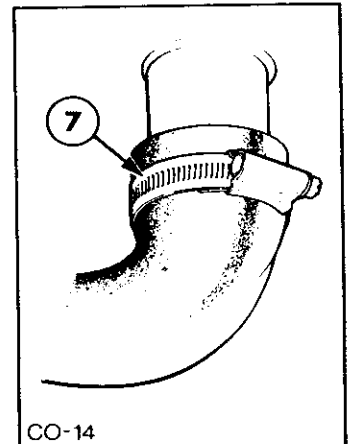
The sensor tube carries the fan switch and the engine coolant temperature sensor if no thermostat is fitted.

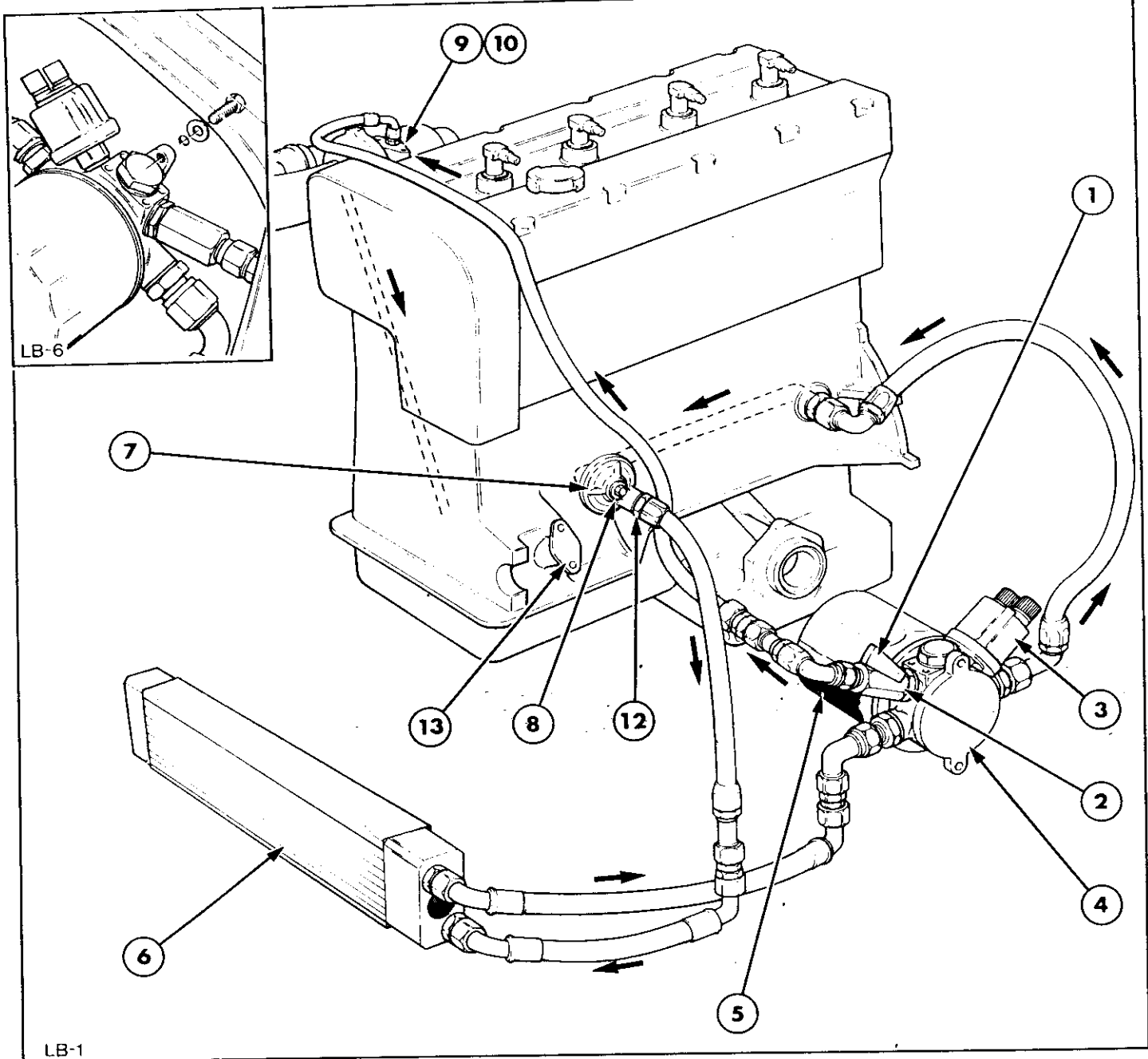
Use a mix of 50% water / 50% antifreeze and fill to the centre of the window. Keep all hoses clear of the belts. The system is fully pressurised using engine boost (or via the shradar valve).

Do not remove cap when engine is hot!



Description	Finis Code	Comments	Qty.
1 Cap - Header Tank	9095183	2 Bar	1
2 Header Tank	9095195		1
3 Valve - one Way	9095182	Manifold boost	1
4 Window - Header Seal - window	9095197 9095196		1 1
5 Hose - water	9095159	Cut to length	2
6 Tube - sensor	9095343		1
7 Clip - hose	5007669		A/R
Alt.	5007666		A/R
Alt.	5007665		A/R

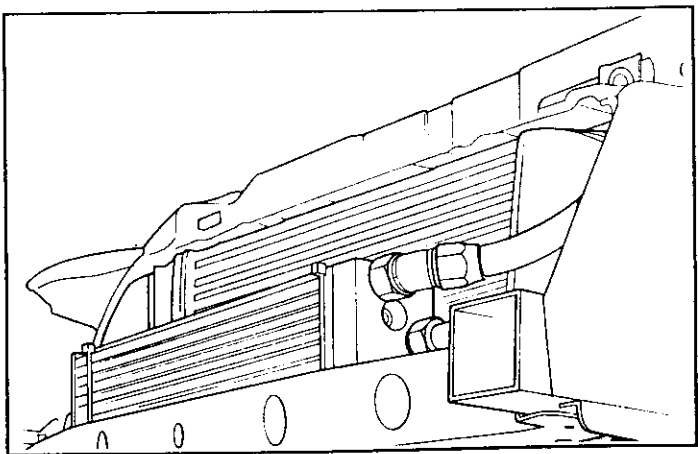


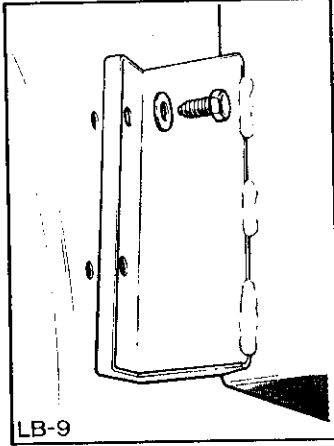
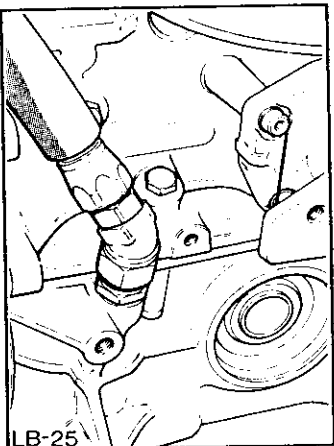
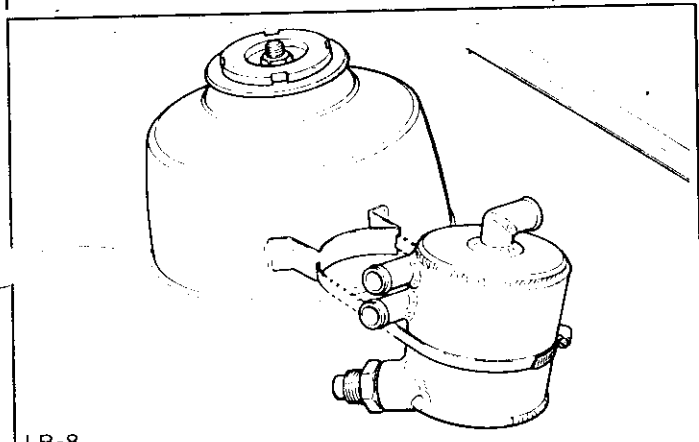
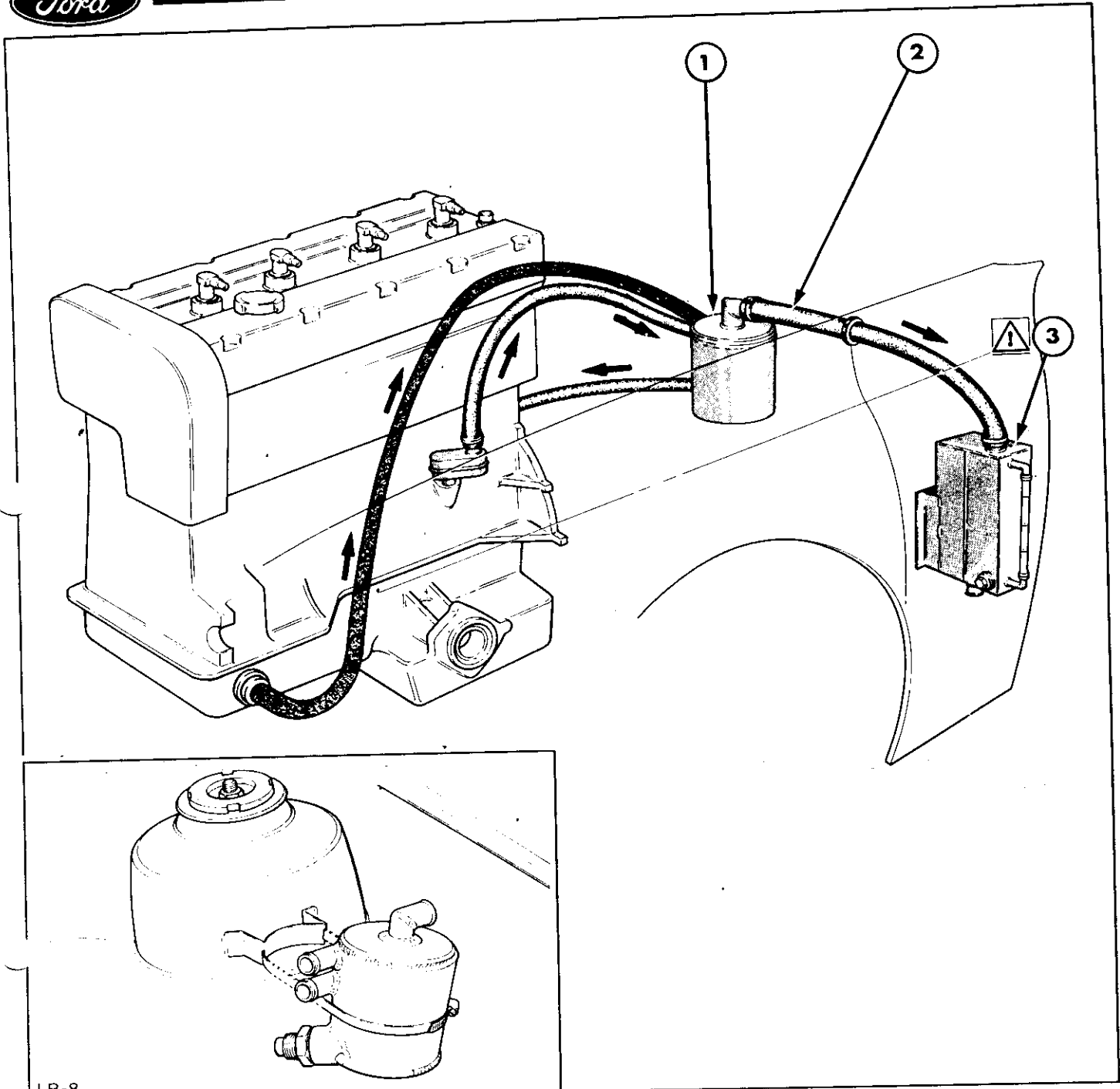


LB-1

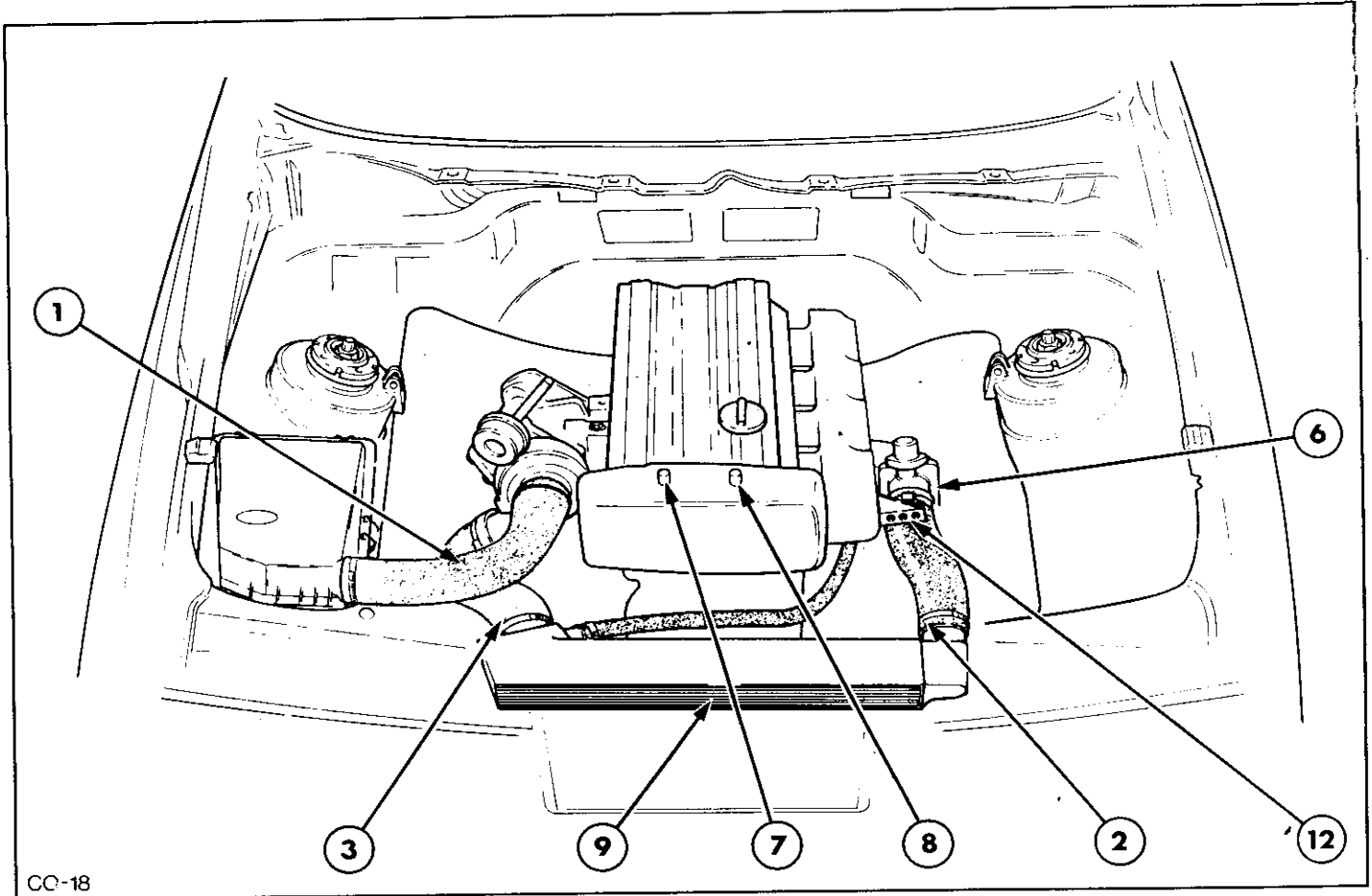
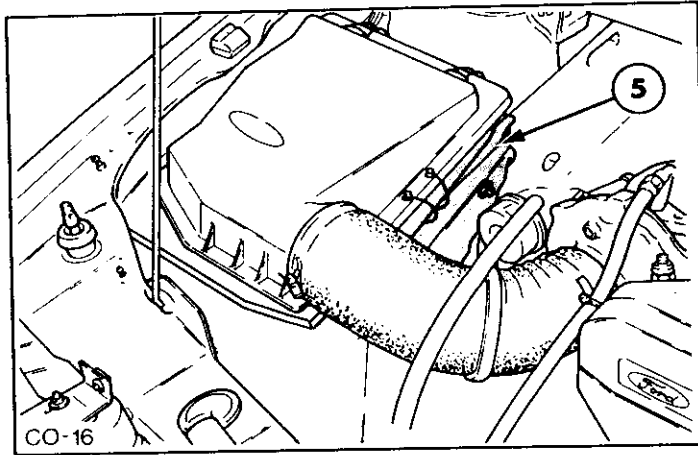
Note: For sump see P57 (Front Axle).

Description	Finis Code	Comments	Qty.
1 Turbo Cut Off Valve	9094842		1
2 Union	9094841		1
3 Sender - Oil Pressure	9091956		1
4 Bracket - Oil Filter	9094920		1
5 Oil Filter	9094911		1
6 Oil Cooler	9093258		1
7 Adaptor Plate	9094901	(Use seal 1579875)	1
8 Nut - Blind	9094880		1
Seal 'O' Ring	9094887		1
9 Connecting Flange	9095367		1
10 'O' Ring Connecting Flange	9095369		1
11 Seal	9095071	Service	1
12 Union Adaptor	9094882		1
13 Plate - Fuel Pump	9095151	Blanking plate	1
14 Spring - Oil Pump	9095139	Increased pressure	1
15 Oil Pick Up	9095140	Including spray rail	1



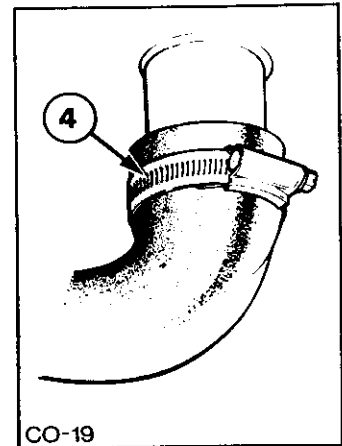


Description	Finis Code	Comments	Qty.
1 Tank Oil Separator	T B E		1
2 Hose - Breather	T B E		1
3 Oil Catch Tank	9095081		1



CO-18

Description	Finis Code	Comments	Qty.
1 Hose - A/C to Turbo	*6698040		1
2 Hose - I/C to Engine	9093652		1
3 Hose - Turbo to I/C	*6883520		1
4 Hose Clip	*6130115		A/R
5 Heat Shield	9092616	Air Cleaner	1
6 Throttle Body	9095234	Modified lever	1
7 Spacer - Cover	9095149		1
8 Spacer - Cover	9095150	Threaded	1
9 Intercooler	*6683878		1
10 Camshaft In	9094773	Virgin Lobes	1
11 Camshaft Ex	9094774	Virgin Lobes	1
12 Throttle Bracket	9094892	Modified	1



CO-19