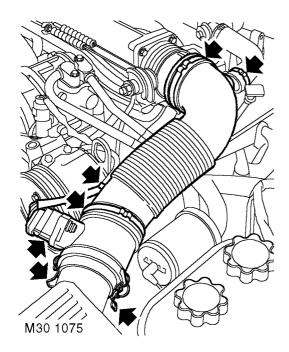
Gasket - inlet manifold - upper - With Secondary Air Injection

→ 30.15.24

Remove

- 1. Release fixings and remove battery cover.
- 2. Disconnect battery earth lead.
- 3. Remove bonnet.

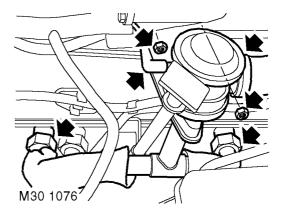
EXTERIOR FITTINGS, REPAIRS, Bonnet.



- **4.** Disconnect multiplug from MAF sensor.
- **5.** Release clip on intake hose and release harness.

Note: Pre 03 MY air intake hose illustrated.

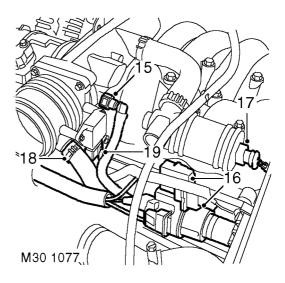
- 6. Release and disconnect IACV hose.
- **7.** Loosen clip securing air intake hose to throttle body.
- 8. Release 2 clips securing MAF sensor.
- 9. Release and remove air intake hose.



- 10. Disconnect vacuum hose from air valve.
- 11. Loosen clip securing air valve hose to air valve.
- **12.** Remove 2 nuts securing air manifold support bracket to upper inlet manifold.
- **13.** Disconnect 2 air manifold unions from adapters in cylinder head.

CAUTION: Take care that air manifold pipes are not damaged during removal of union nuts.

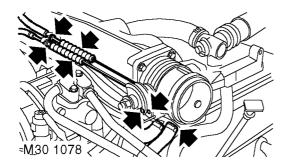
14. Remove LH air manifold.



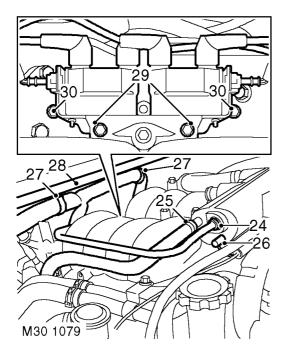
- **15.** Disconnect purge valve hose from inlet manifold.
- **16.** Release purge valve from clips and air control valve from bracket and lay aside.
- 17. Disconnect multiplug from IACV.
- **18.** Release clip and disconnect breather hose from throttle housing.
- 19. Disconnect multiplug from TP sensor.

MANIFOLDS AND EXHAUST SYSTEMS - V8

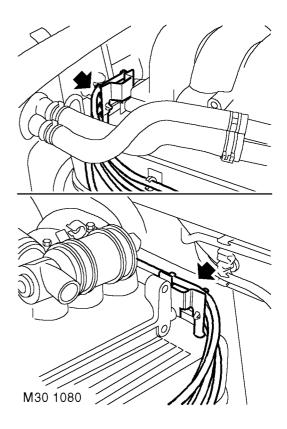




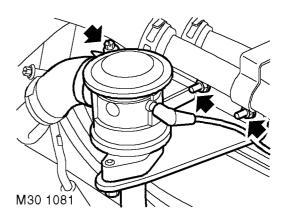
- 20. Position container to collect spillage.
- **21.** Release clips and disconnect 2 coolant hoses from throttle housing.
- **22.** Loosen outer cable locknuts and release throttle and cruise control cables from abutment.
- **23.** Release throttle and cruise control cables from clips and throttle cams and position aside.



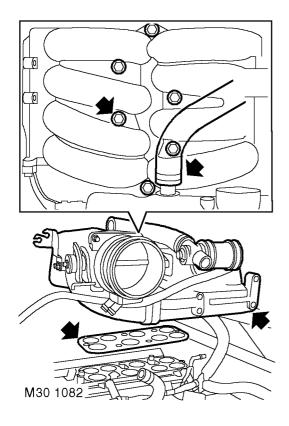
- **24.** Depress plastic collar and disconnect brake servo hose from inlet manifold.
- **25.** Release clip and disconnect breather hose from manifold.
- 26. Disconnect vacuum hose from manifold.
- **27.** Release engine harness from bulkhead clips and position aside.
- **28.** Release and remove bonnet seal from rear of engine bay.
- **29.** Remove 2 bolts securing air pipe and coil bracket to manifold.
- **30.** Loosen 2 lower bolts securing coil bracket sufficiently to allow bracket to clear manifold.



31. Release plug leads from upper manifold clips.



- **32.** Loosen clip and disconnect air hose from air valve.
- **33.** Remove 2 nuts securing RH air manifold support bracket to upper inlet manifold.



- 34. Release clip and disconnect IACV hose.
- **35.** Remove 6 bolts securing upper manifold and remove manifold.
- 36. Collect upper manifold gasket.

Refit

- 1. Clean upper and lower inlet manifold mating faces, dowels and dowel holes.
- 2. Using a new gasket, position upper inlet manifold. Fit bolts and, working in a diagonal sequence, tighten to 22 Nm (16 lbf.ft).
- 3. Connect IACV hose and secure clip.
- 4. Connect hose to air valve and tighten clip.
- 5. Secure plug leads to clips.
- **6.** Fit and tighten nuts securing RH air manifold support bracket.
- 7. Align air pipe and coil bracket, fit bolts and tighten to 8 Nm (6 lbf.ft).
- **8.** Tighten 2 lower bolts securing coil bracket to 8 Nm (6 lbf.ft).
- 9. Fit bonnet seal.
- 10. Secure engine harness in bulkhead clips.
- **11.** Connect breather hose to manifold and secure clip.
- 12. Connect vacuum hose to inlet manifold.
- 13. Connect brake servo hose to inlet manifold.
- 14. Connect throttle and cruise control cables.
- 15. Adjust throttle cable.

ENGINE MANAGEMENT SYSTEM - V8, ADJUSTMENTS, Cable - throttle.

- 16. Adjust cruise control cable.
 - ENGINE MANAGEMENT SYSTEM V8, ADJUSTMENTS, Cable cruise control.
- **17.** Connect coolant hoses to throttle housing and secure clips.
- 18. Connect multiplug to TP sensor.
- **19.** Connect breather hose to throttle housing and secure with clip.
- 20. Connect multiplug to IACV.
- 21. Secure purge valve and air control valve to clips and bracket.
- 22. Connect purge hose to manifold.
- 23. Clean air manifold unions.
- **24.** Apply a small amount of engine oil to top of air manifold union nuts and around air manifold pipes.
- **25.** Position air manifold and finger tighten both air manifold union nuts.

CAUTION: Finger tighten union nuts as far as possible, damage to air manifold pipes or adaptors may result if this is not done.

26. Tighten both air manifold union nuts to 25 Nm (18 lbf.ft).

CAUTION: Ensure that air manifold pipes are not distorted during tightening operation.

- **27.** Fit nuts securing air manifold support bracket and tighten to 25 Nm (18 lbf.ft).
- 28. Connect hose to air valve and tighten clip.
- 29. Connect vacuum hose to air valve.
- 30. Fit air intake hose.
- 31. Connect multiplug to MAF sensor.
- 32. Secure harness to clip.
- 33. Connect battery earth lead.
- **34.** Fit battery cover and secure with fixings.
- 35. Top up cooling system.

MAINTENANCE, PROCEDURES, Cooling system.

36. Fit bonnet.

EXTERIOR FITTINGS, REPAIRS, Bonnet.