

13. Remove 4 nuts securing manifold and remove exhaust manifold.
14. Remove and discard manifold and down pipe gaskets.

#### Refit

1. Clean exhaust manifold and mating faces.
2. Using new gaskets, fit exhaust manifold and tighten nuts to cylinder head to 45 Nm (33 lbf.ft) and nuts to front pipe to 50 Nm (37 lbf.ft).
3. Connect H02S multiplugs, secure multiplugs to brackets and harness to clips.
4. Clean compressor and mounting bracket mating faces.
5. Fit compressor heat shield.
6. Position compressor to mounting and align heat shield. Fit and tighten bolts to 25 Nm (18 lbf.ft).
7. Using a 3/8" square drive socket bar, raise ancillary drive belt tensioner and fit drive belt to pulleys.
8. Fit underbelly panel.  
**EXTERIOR FITTINGS, REPAIRS, Panel - underbelly.**
9. Fit engine acoustic cover.  
**ENGINE - K SERIES KV6, REPAIRS, Cover - engine acoustic.**
10. Connect battery earth lead.

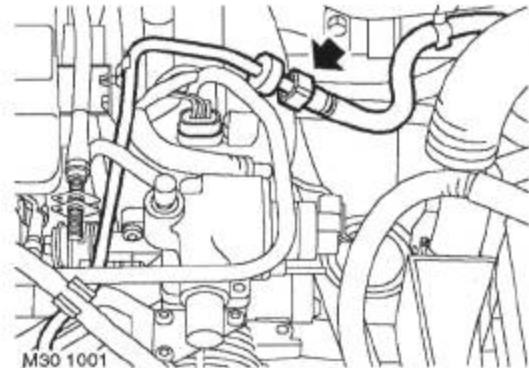
#### Seals - inlet manifold chamber - up to 03MY

30.15.37

#### Remove

1. Disconnect battery earth lead.
2. Remove vacuum enhancer.  
**BRAKES, REPAIRS, Vacuum - enhancer - KV6.**
3. Position absorbent cloth around fuel feed pipe connection to collect spillage.

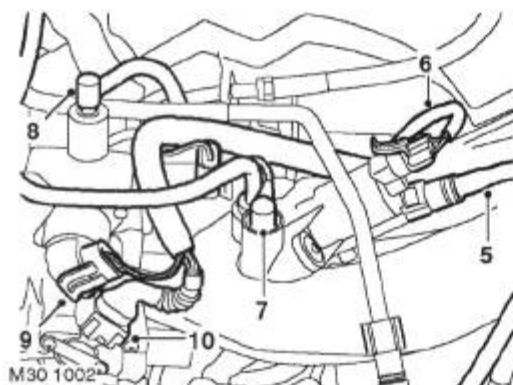
**WARNING: The spilling of fuel is unavoidable during this operation. Ensure that all necessary precautions are taken to prevent fire and explosion.**



4. Pull back rubber sleeve on fuel pipe connector, release connector and disconnect fuel pipe from fuel rail pipe.

**CAUTION: Always fit plugs to open connections to prevent contamination.**

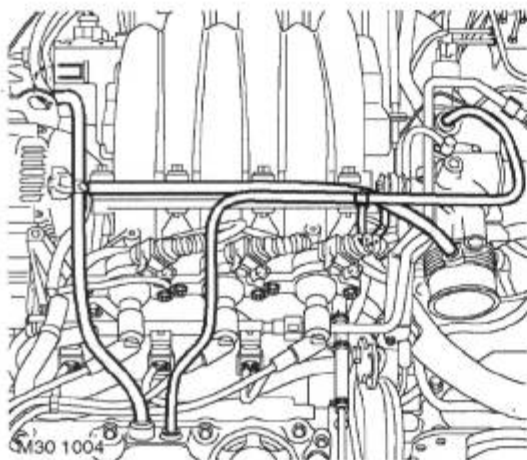
## MANIFOLDS & EXHAUST SYSTEMS - K SERIES KV6



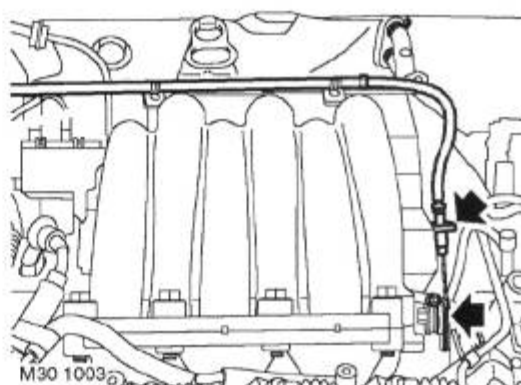
5. Release clip and disconnect hose from purge control valve.

**CAUTION:** Always fit plugs to open connections to prevent contamination.

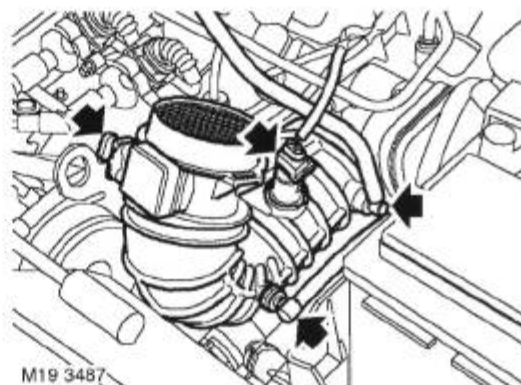
6. Disconnect multiplug from purge control valve.  
7. **Non NAS models:** Disconnect small vacuum hose from purge control valve.  
8. **Non NAS models:** Depress locking collar and release vacuum hose from IACV housing.  
9. **Non NAS models:** Disconnect multiplug from IACV.  
10. **Non NAS models:** Disconnect multiplug from TP sensor.



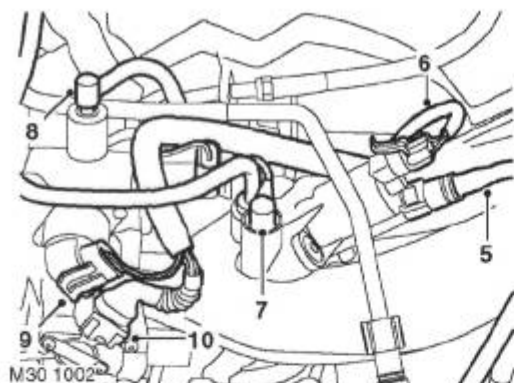
11. Depress locking collars and release vacuum/breather hose from purge control valve and LH camshaft cover. Release clip securing hose to 'T' piece and remove hose.  
12. Depress locking collars and release vacuum/breather hoses from throttle body, LH and RH camshaft cover and remove hose.



13. **Non NAS models:** Release throttle cable from clips on harness brackets.  
14. **Non NAS models:** Release throttle cable from abutment bracket and disconnect cable from throttle body cam.



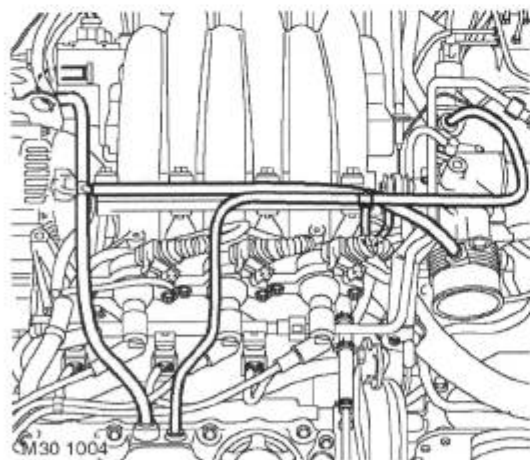
15. **NAS models:** Disconnect multiplugs from IAT and MAF sensors.  
16. **NAS models:** Disconnect engine breather pipe from intake hose.



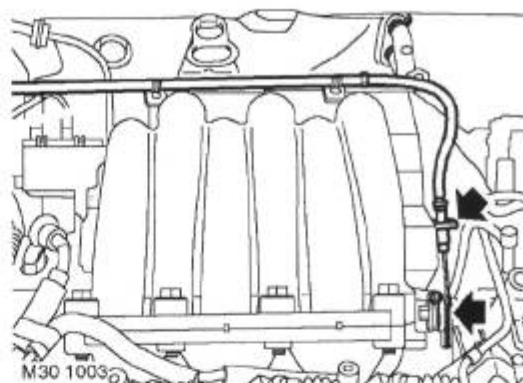
5. Release clip and disconnect hose from purge control valve.

**CAUTION:** Always fit plugs to open connections to prevent contamination.

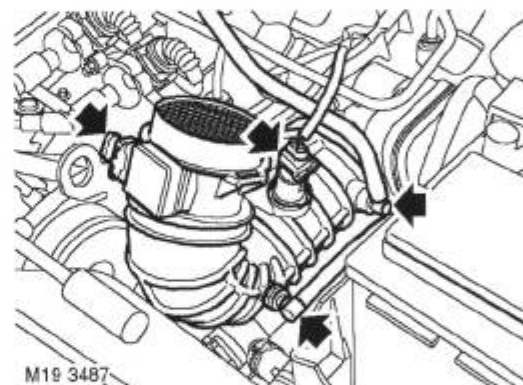
6. Disconnect multiplug from purge control valve.  
 7. **Non NAS models:** Disconnect small vacuum hose from purge control valve.  
 8. **Non NAS models:** Depress locking collar and release vacuum hose from IACV housing.  
 9. **Non NAS models:** Disconnect multiplug from IACV.  
 10. **Non NAS models:** Disconnect multiplug from TP sensor.



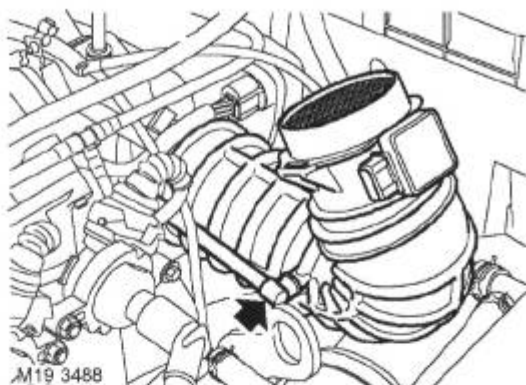
11. Depress locking collars and release vacuum/breather hose from purge control valve and LH camshaft cover. Release clip securing hose to 'T' piece and remove hose.  
 12. Depress locking collars and release vacuum/breather hoses from throttle body, LH and RH camshaft cover and remove hose.



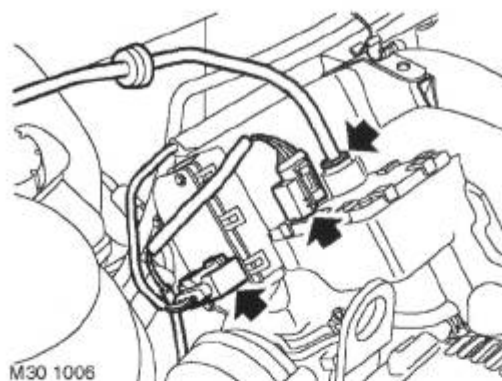
13. **Non NAS models:** Release throttle cable from clips on harness brackets.  
 14. **Non NAS models:** Release throttle cable from abutment bracket and disconnect cable from throttle body cam.



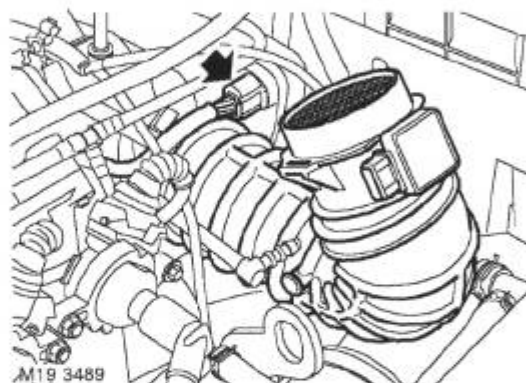
15. **NAS models:** Disconnect multiplugs from IAT and MAF sensors.  
 16. **NAS models:** Disconnect engine breather pipe from intake hose.



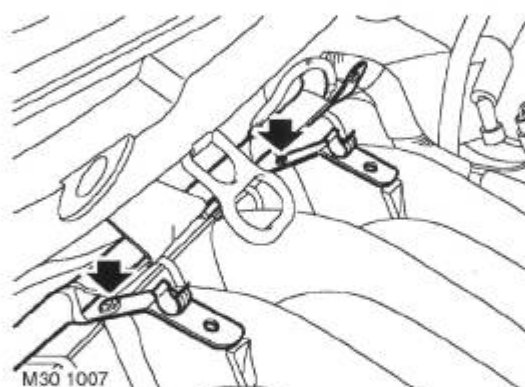
17. **NAS models:** Disconnect injector air supply pipe from intake hose.



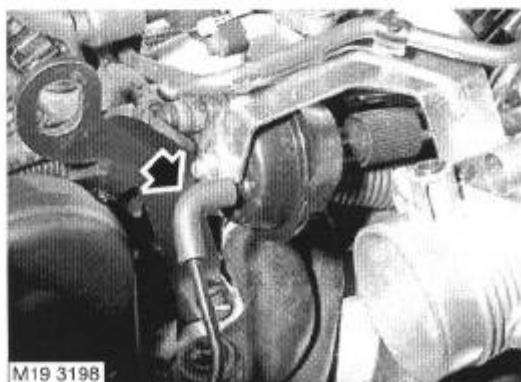
21. Depress locking collar and disconnect brake servo hose from inlet manifold chamber.  
22. Disconnect multiplugs from VIS motors.



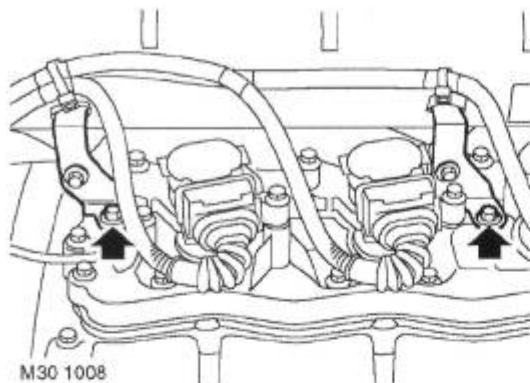
18. **NAS models:** Disconnect multiplug from throttle body.  
19. **NAS models:** Release clip and remove intake hose and MAF sensor assembly.



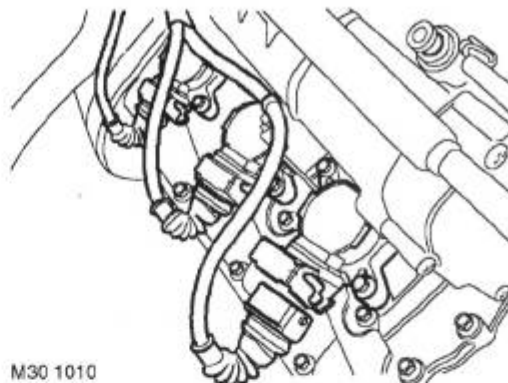
23. Remove 2 screws securing engine harness brackets to inlet manifold chamber and position harness aside.



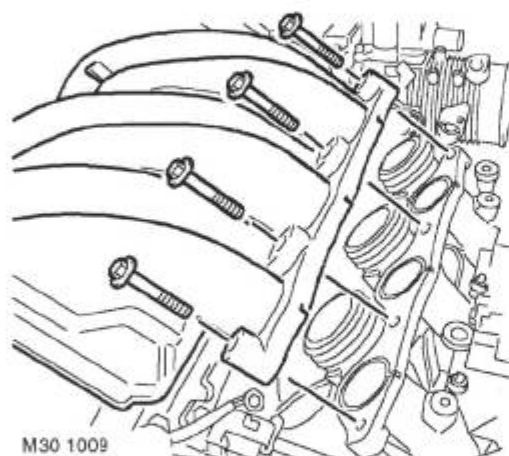
20. Disconnect cruise control actuator vacuum pipe.



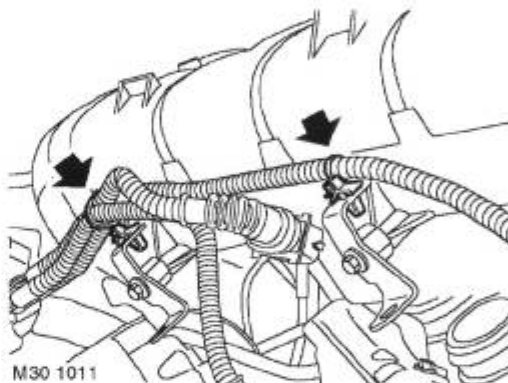
24. Remove 2 bolts securing inlet manifold chamber rear support brackets to RH camshaft cover.



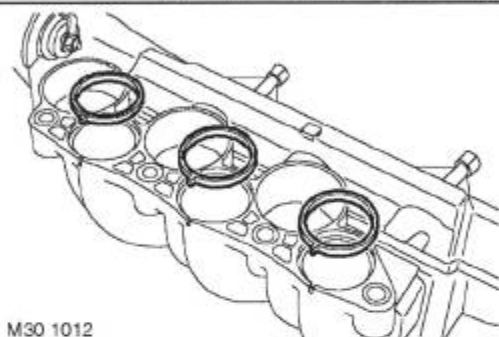
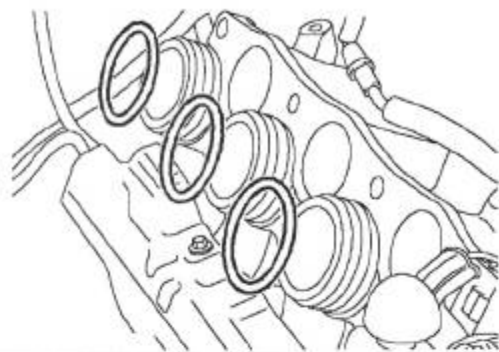
27. Release 3 locking clips and disconnect 3 multiplugs from RH plug top coils.



25. Remove 4 bolts securing inlet manifold chamber to LH inlet manifold.  
26. Release and raise inlet manifold chamber from inlet manifolds.



28. Release 2 clips securing RH plug top coil harness to inlet manifold camber rear support brackets.  
29. Remove inlet manifold chamber.



M30 1012

30. Remove and discard seals from inlet manifold chamber and 'O' rings from RH inlet manifold.

#### Refit

1. Clean seal faces on inlet manifold chamber and inlet manifolds.
2. Fit new 'O' rings to RH inlet manifold and new seals to manifold chamber.
3. Position inlet manifold chamber, secure RH coil harness clips in inlet manifold chamber support brackets.
4. Connect multiplugs to plug top coils and secure with locking clips.
5. Align inlet manifold chamber to inlet manifolds, fit and tighten bolts to 18 Nm (13 lbf.ft).
6. Align inlet manifold chamber support brackets to RH camshaft cover, fit and tighten bolts to 10 Nm (7.5 lbf.ft).
7. Position engine harness brackets to inlet manifold chamber, fit and tighten screws.
8. Connect multiplugs to VIS motors.
9. **NAS models:** Connect engine breather pipe.
10. **NAS models:** Connect multiplugs to IAT and MAF sensors.
11. Connect brake servo vacuum hose to inlet manifold chamber.
12. Connect vacuum/breather hoses to LH and RH camshaft covers and to throttle body.
13. Connect cruise control actuator vacuum pipe.
14. **Non NAS models:** Connect vacuum hose to IACV housing.
15. **Non NAS models:** Connect multiplugs to TP and IACV sensors.
16. Connect vacuum/breather hoses to LH camshaft cover, 'T' piece and purge control valve.
17. **Non NAS models:** Connect small vacuum hose to purge control valve.
18. Connect multiplug to purge control valve.
19. Connect EVAP hose to purge control valve.
20. Connect fuel hose to fuel rail pipe, fit rubber sleeve over hose connector.
21. Remove absorbent cloth.
22. **Non NAS models:** Connect throttle inner cable to throttle cam and secure outer cable in abutment bracket.
23. **Non NAS models:** Secure throttle cable in clips on harness brackets.
24. Adjust throttle cable, if fitted.
25. **FUEL DELIVERY SYSTEM - PETROL, ADJUSTMENTS, Throttle cable - check and adjust - KV6.**
26. Remove vacuum enhancer.
27. **BRAKES, REPAIRS, Vacuum - enhancer - KV6.**
28. Connect battery earth lead.