

30 - MANIFOLD AND EXHAUST SYSTEM

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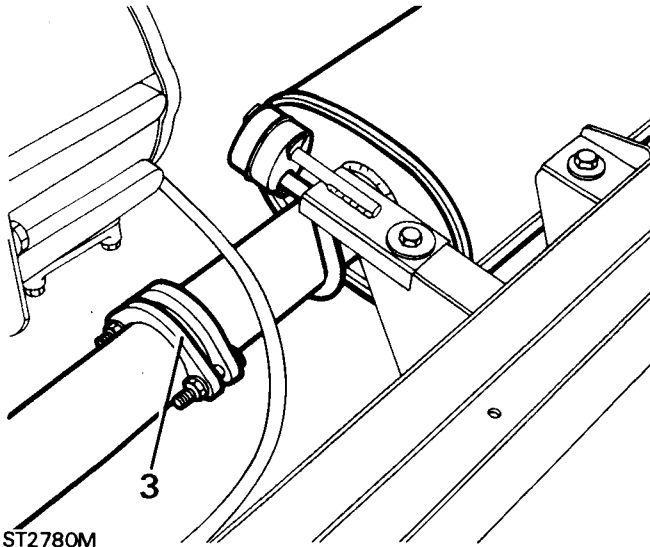




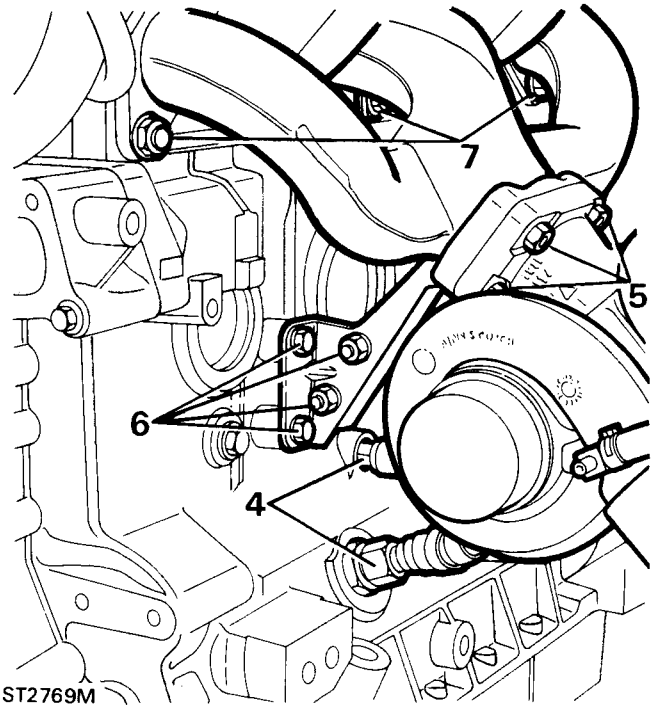
EXHAUST MANIFOLD

Remove

1. Disconnect battery negative lead.
2. Remove the air intake manifold. *See Air Intake Manifold.*

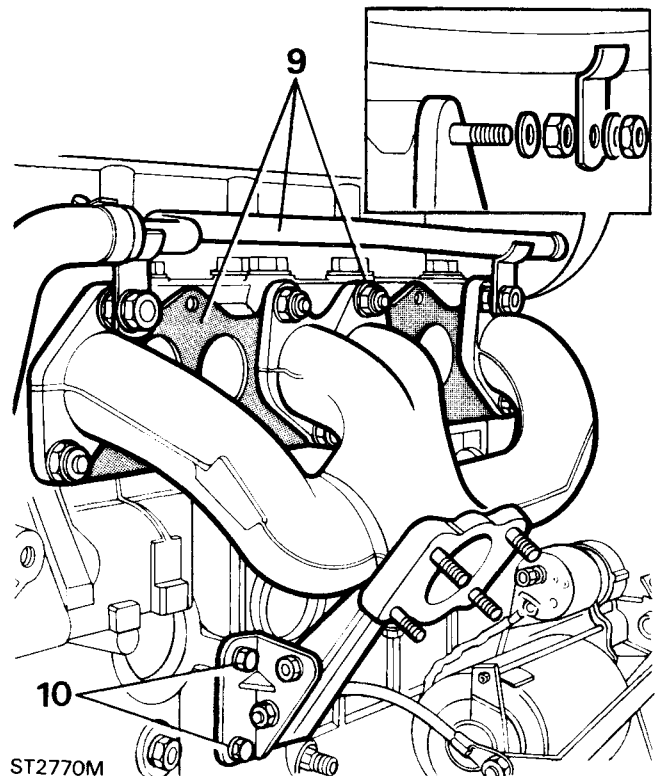


3. Loosen front exhaust pipe fixings at the silencer end.
4. Release turbocharger oil pipes from cylinder block.
5. Remove the four nuts securing turbocharger to exhaust manifold, move turbo away from manifold.
6. Remove nut securing support bracket to manifold. Loosen the two support bracket nuts and bolts. Remove bolts retaining bracket to cylinder block, remove support bracket.
7. Remove seven bolts securing manifold. Release heater rail, remove manifold and gasket.



Refit

8. Fit support bracket to manifold with single nut.
9. Fit gasket and manifold and heater rail to cylinder head. Secure with the seven bolts tightening evenly to **25 Nm**.
10. Fit support bracket to cylinder block and tighten support bracket to **25 Nm**.

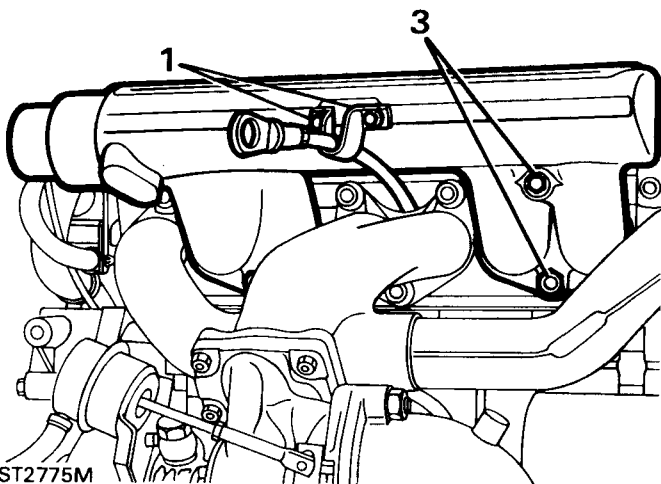


11. Secure turbocharger to manifold with steel gasket and four nuts. Tighten to **25 Nm**.
12. Connect the turbo oil pipes to the cylinder block.
13. Prime turbocharger. **See ENGINE, Overhaul, Fitting Manifolds And Turbocharger.**
14. Fit air inlet manifold. Connect hose. Secure dipstick tube at top and bottom.
15. Tighten exhaust front pipe connection.
16. Reconnect battery negative lead.
17. Start engine and check for leaks.

AIR INTAKE MANIFOLD

Remove

1. Release dipstick tube attachment to air intake manifold.
2. Disconnect intake hose from manifold.
3. Remove two bolts and two nuts securing intake manifold to cylinder head. Remove manifold.



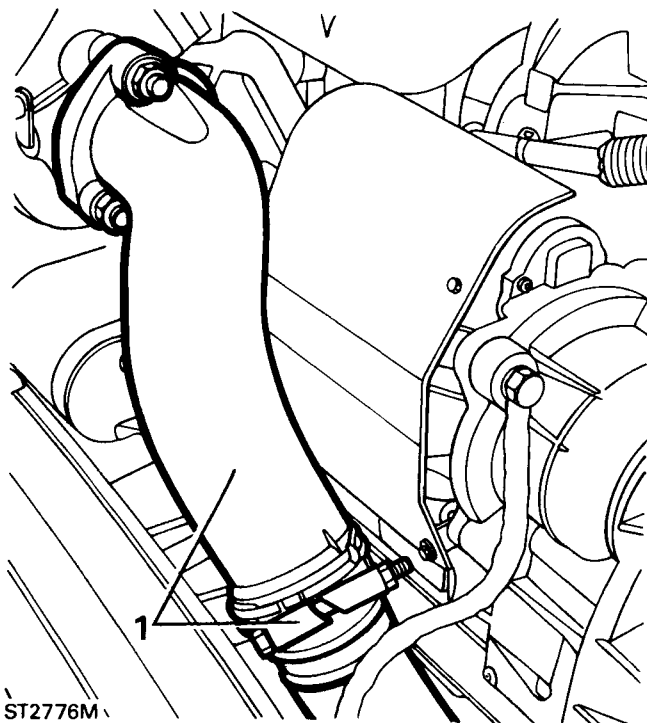
Refit

4. Check that the manifold gasket is in good condition. Secure air intake to cylinder head. Tighten the two nuts and two bolts evenly to **25 Nm**.
5. Connect inlet hose to manifold.
6. Secure dipstick tube to manifold.

EXHAUST SYSTEM FRONT PIPE

Remove

1. Release the clamp securing front pipe to turbocharger elbow.



2. Remove the two flange bolts and nuts connecting front pipe to silencer.
3. Release front silencer from the support bracket.
4. Release silencer from rear support bracket to prevent straining the system.
5. Separate front pipe from the silencer. Remove front pipe from the elbow.



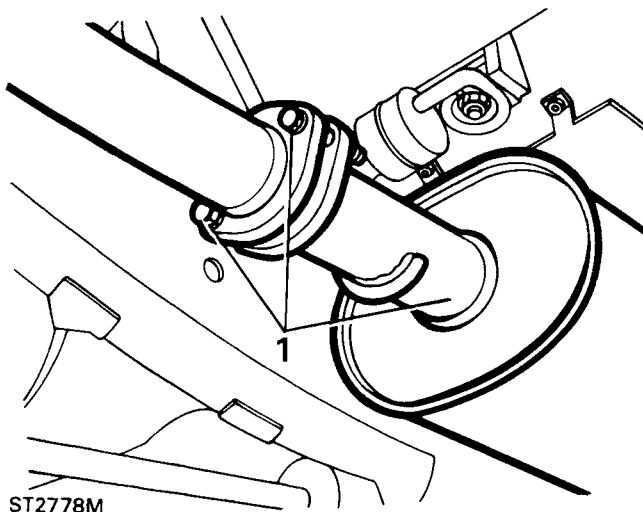
Refit

6. Apply Holts "Firegum" to the outside of the elbow and to the inside of the front pipe.
7. Slide clamp over the front pipe, fit pipe to elbow. Loosely secure the joint with the clamp.
8. Connect front pipe to silencer with the olive, loosely secure joint with the bolts and nuts.
9. Connect silencer to front and rear support brackets with new rubbers, if necessary.
10. Tighten all fixings evenly.

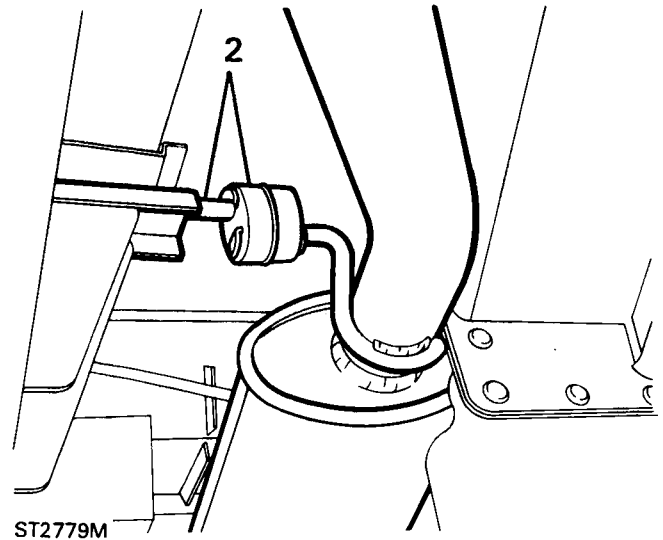
REAR PIPE AND SILENCER

Remove

1. Remove the two flange bolts and nuts connecting rear pipe section to front silencer.



2. Release rear pipe from rear support bracket, remove the section from the vehicle.



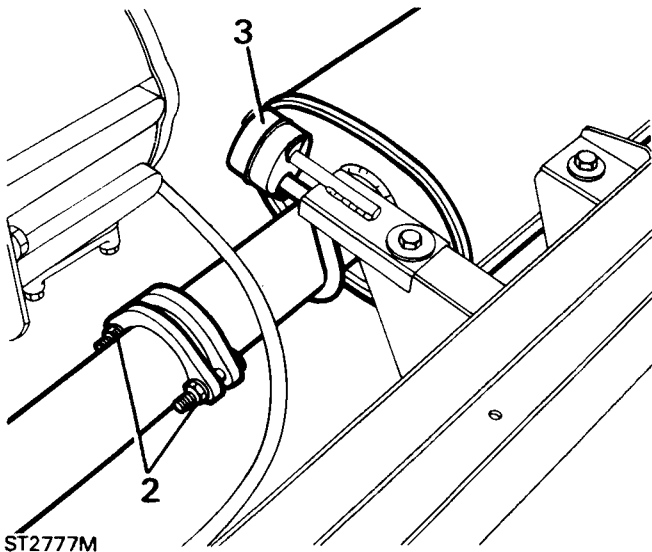
Refit

3. Fit rear pipe section to rear support bracket, with new rubbers if necessary.
4. Connect rear pipe to front silencer with olive and two flange bolts and nuts, tighten evenly.

FRONT SILENCER

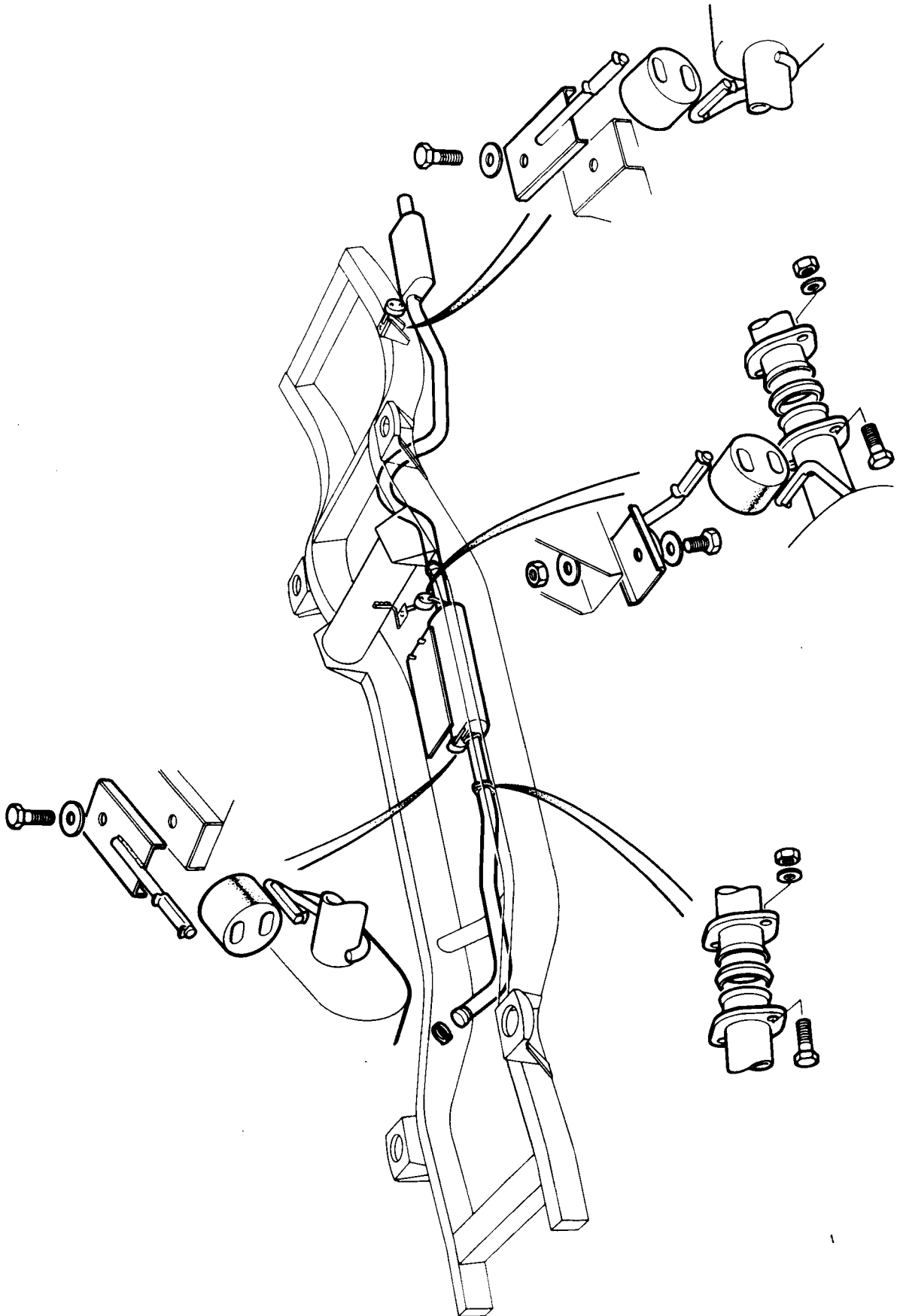
Remove

1. Remove rear pipe and silencer. *See Rear Pipe And Silencer.*
2. Remove two flange nuts and bolts retaining front pipe to silencer.
3. Release silencer from front support bracket, remove it from the front pipe.

**Refit**

4. Loosely secure olive and two bolts and nuts.
5. Attach silencer to front support bracket. Evenly tighten the two flange bolts.
6. Fit rear pipe and silencer into position, attach to rear support bracket.
7. Connect rear pipe to silencer with the olive and two bolts, evenly tighten the two nuts.

EXHAUST SYSTEM LAYOUT



ST2623M