

# SERVICE MANUAL

*Datsun*

MODEL 510 SERIES

CHASSIS and BODY



## SECTION ER

# ENGINE REMOVAL & INSTALLATION

ER

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## ENGINE REMOVAL & INSTALLATION

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# ENGINE REMOVAL AND INSTALLATION

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Experience has shown that it is much easier to remove the engine with transmission as a single unit than to remove the engine only.

The engine can then be separated from the transmission assembly.



*Fig. ER-1 Engine compartment*

### REMOVAL

1. Scribe alignment marks on hood around hood hinges and remove hood from hinges.
2. Completely drain the cooling system, engine and transmission lubricant.
3. Remove blow-by hose from rocker cover and remove air cleaner.
4. Remove the radiator grille.
5. Disconnect the battery cable and remove the battery off the car.

6. Take off both upper and lower radiator hoses by removing the hose clamps. Then loosen the fixing bolts of the radiator, and take it out in sequence.

**Note:** If equipped with automatic transmission, remove the torque convertor cooling pipes from the radiator.

7. Remove engine fan and pulley.
8. Disconnect the fuel tube from the fuel pump.

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## CHASSIS

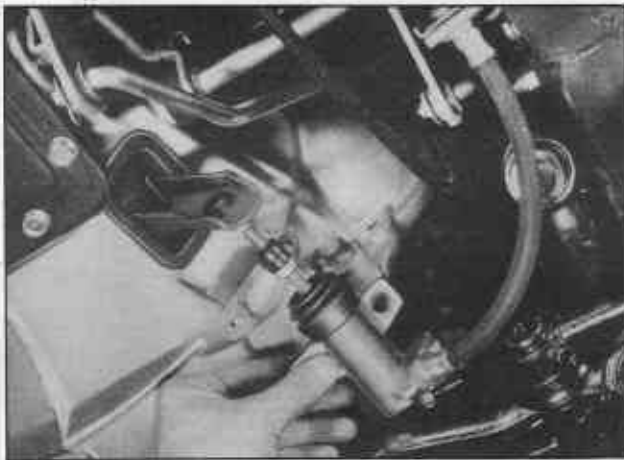
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9. If equipped with heater, remove its hoses at engine attachment.

10. Disconnect accelerator control linkage and choke wire at the carburetor side.

11. Disconnect the wirings for the starter, alternator, ignition coil, oil pressure switch and thermal transmitter.

12. Remove the clutch operating cylinder and its return spring.



*Fig. ER-2 Removing clutch operating cylinder*

13. Disconnect the speedometer cable. Disconnect flat-attaching plug connector from the reverse lamp switch.

14. Disconnect the shift rods and select rods, and then remove the cross shaft assembly by removing the cross shaft bracket from the side member.

15. Disconnect the front exhaust tube from the exhaust manifold.

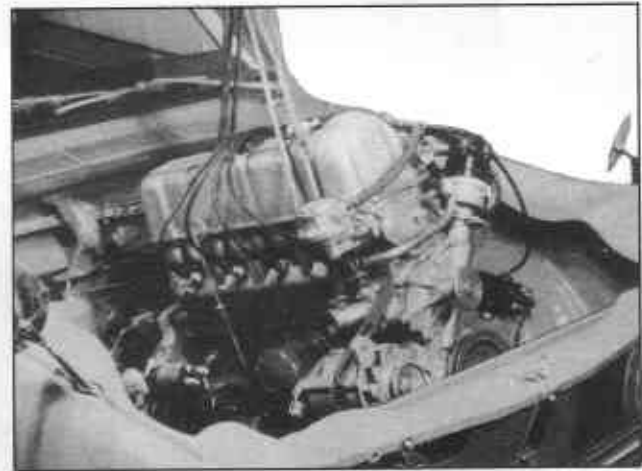
16. Disconnect the center tube from the rear tube and remove the front tube, pre-muffler and center tube assembly.

17. Disconnect the propeller shaft by disconnecting it from the companion flange of the gear carrier.

18. Jack up the transmission a little and then remove the rear engine mounting cross member by removing the fixing bolts of the engine mounting insulator, mounting cross member and hand brake cable clamp.

19. Remove the fixing bolts securing the front engine mounting insulators to cross member.

20. Hook with cable or chain to the stringers (hooks) which are installed on the engine cylinder head one at the front and the other at the rear.



*Fig. ER-3 Lifting engine*

At this lifting, lower the jack placed under the transmission gradually (draw off the jack at adequate stage), hoist up engine observing the tension of wire and adjusting the position of chain block so that the engine tilts in order to make it cleared off the body. At this lifting, take care that accessories installed on the body side do not touch the engine and transmission.

## INSTALLATION

Reverse the removal procedure but do not connect any parts to the engine steadily until the engine mounting insulators have been replaced and the power unit weight is taken by them.

## ENGINE REMOVAL & INSTALLATION

### FRONT ENGINE MOUNTING INSULATOR

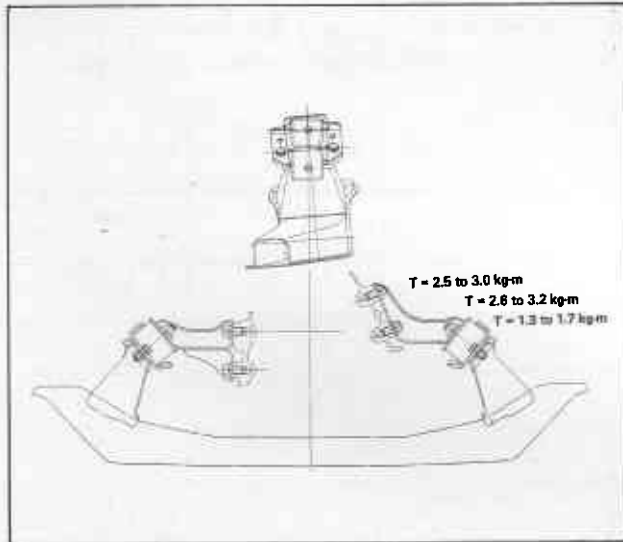


Fig. ER-4 Sectional view of front engine mounting

#### REMOVAL AND INSTALLATION

1. Support the engine weight by a jack.
2. Remove the bolts connecting the front engine mounting insulator and the front suspension

member. Remove the nut connecting the engine mounting insulator and the engine mounting bracket.

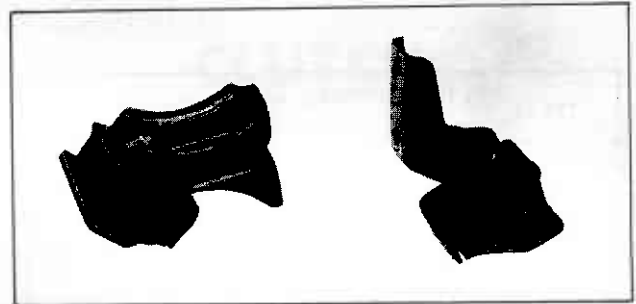


Fig. ER-5 Front engine mounting insulator

3. Jack up the engine a little and remove the insulator.
4. Reverse the removal procedure.

Note: Keep the insulator free from Oil or Grease.

#### INSPECTION

If there is damage, deterioration, or separation of bonded surface, renew the parts.

### REAR ENGINE MOUNTING INSULATOR

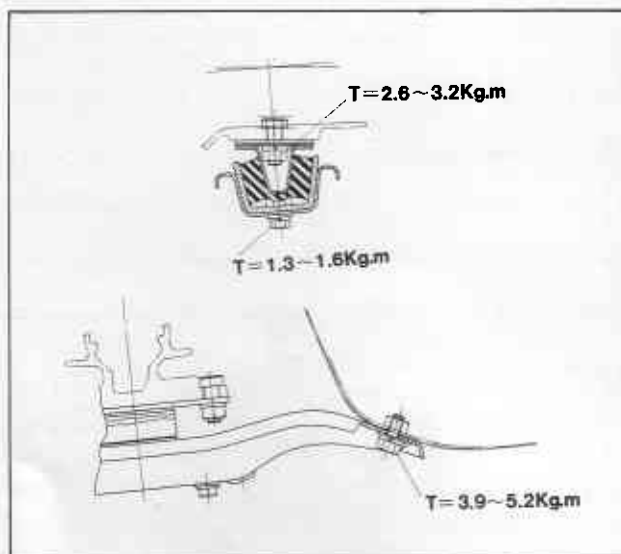


Fig. ER-6 Sectional view of rear engine mounting

#### REMOVAL AND INSTALLATION

1. Support the transmission weight by a jack.
2. Remove the bolts connecting the rear engine mounting insulator and the transmission rear extension housing. Remove the fixing bolts connecting the mounting insulator and the cross member.

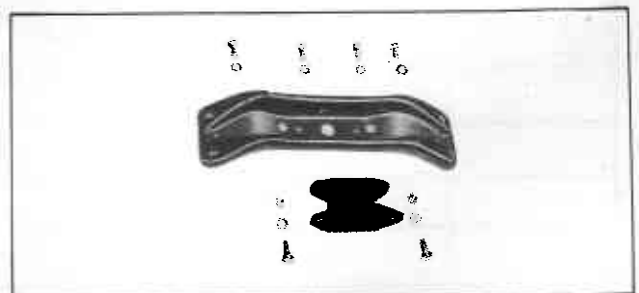


Fig. ER-7 Rear engine mounting insulator

