

## ENGINE REMOVE AND REFIT

### To Remove

Disconnect battery.

Open and secure bonnet.

Pull heater air ducting from its location at bulk-head and inner wing.

Release clips and lift out rear engine cover.

Release 'Dzus' fasteners, remove bolts and detach both undertrays and cross strap.

Remove bolt securing exhaust down pipe to bell housing.

Disconnect silencer from mounting bracket and recover mounting rubbers and spacers.

Remove nuts from down pipe to manifold joint, lower down pipe and recover gasket.

Drain engine oil sump (if necessary).

Remove radiator (Refer to Sub-section C200).

If hoses were disconnected at radiator, release hose clips and detach hoses from water pump and thermostat housing.

Disconnect bonnet release cable from bonnet closing platform.

Remove bonnet closing platform bolts, move R/H side of platform clear, lift and move to the right thereby releasing the L/H side and remove from vehicle.

Detach bumper assembly.

Remove cab front lower crossmember.

**Note:** If vehicle is fitted with power assisted steering the following additional operations are necessary:

Release steering reservoir hoses from chassis crossmember, remove two bolts securing reservoir to front panel and move complete with hoses to the opposite side of the vehicle. Secure the assembly clear of the working area.

Slacken the adjustment bolts of the steering pump, move pump towards engine and remove drive belt.

Remove two bolts securing steering pump support brackets to engine and displace pump complete with brackets and hoses clear of working area.

Remove bolts and detach top brackets from front chassis crossmember.

Slacken inner bolts securing towing eyes, remove outer bolts and detach front chassis crossmember.

Carefully disconnect fuel supply line at fuel pump.

Disconnect plug of wiring harness to distributor and remove the 'Lucar' connector from coolant temperature sensor.

Slide the retaining clip into the 'Release' position and disconnect the plug from the rear of the alternator.

Remove clamping bolt from alternator adjustment strap. This will release the engine to chassis earthing cable and spacer.

Disconnect wires from carburettor idle solenoid, oil pressure switch and remove the two 'Lucars' from the starter solenoid.

Displace the rubber boot and release the main feed cable from starter solenoid.

Disconnect H.T. coil lead from distributor cap, release clips and lift off cap. Remove leads from spark plugs and remove cap complete with plug leads.

Remove rotor arm and anti-arcing shield.

Detach metallised hose from air cleaner.

Release clip and detach breather hose from rocker cover.

Slacken hose clip securing air cleaner to carburettor, lift off air cleaner and disconnect vacuum pipe.

Slacken bolt securing accelerator cable clamp, remove the return arm and spring assembly and detach the cable from its abutment.

Disconnect choke cable by releasing the cable clamp bolts.

Unscrew union of vacuum pipe at rear of inlet manifold.

Remove bolts securing clutch slave cylinder and displace cylinder in such a way that it will lay on top of the front road spring.

Remove bolt from oil filler neck support bracket, twist the rocker cover adaptor to release filler neck assembly from cover and lift clear.

Remove ten nuts from the periphery of the bell housing, but only slacken the eleventh nut approximately two turns. This will prevent the engine moving forward accidentally.

Remove all nuts from front flexible engine mountings.

Using an engine crane and suitable slinging arrangements, raise the engine just enough to remove the flexible engine mountings.

Carefully lower the engine onto the metal brackets which originally supported the flexible mountings. This will support the engine and provide clearance between the engine and the cab to enable the crane and slinging arrangements to be changed. Place an additional support below the engine as a safety precaution before removing the sling.

Reposition the engine sling and crane to provide lift above a line passing along the inlet manifold to cylinder head joint. This arrangement will prevent the engine tilting excessively and possibly damaging the distributor and carburettor during removal.

Raise the engine slightly to clear metal support brackets and remove the bolts securing them to the chassis side members.

With the engine still supported by the crane and sling, place a support under the rear of the gearbox.

Remove the support from under the engine and remove the last nut from the bell housing.

Withdraw the engine from the vehicle taking care not to damage any equipment fitted to the engine.

### **To Refit**

Refitting is a reversal of the removal instructions.

Refill with coolant.

Replenish sump with correct grade of engine oil.

Run engine and check for leaks.