

Engine Removal

CHRYSLER CORP.

6 CYLINDER ENGINES

"B", "CB", "MB", & "PB" MODELS

1) Disconnect battery and remove oil dipstick. Raise vehicle and remove air pump tube from exhaust pipe, then remove pipe. Remove inspection cover from transmission and drain crankcase. Remove oil pan, turn oil pickup tube upward to protect from damage. Remove flex plate-to-torque converter bolts and transmission housing bolts. Remove right motor mount nut.

2) Lower vehicle and drain cooling system. Remove engine cover, carburetor air cleaner and carburetor. If equipped with air conditioning, discharge system and disconnect condenser lines. Remove fan shroud, windshield washer and overflow reservoirs. Remove front bumper, grille and support brace. Disconnect radiator hoses and remove radiator and support as an assembly. Remove steering pump bracket bolts and set pump to one side. Remove air pump and disconnect throttle linkage, all hoses, electrical connections and lines to coil, alternator and other engine accessories.

3) Remove alternator with brackets, fan blade, pulley and drive belts. Remove starter attaching bolts and set starter aside. Remove distributor cap and left engine mount nut. Attach suitable lifting fixture to engine and place floor jack under transmission. Remove remaining transmission housing bolts and remove engine from front of vehicle.

ALL OTHER MODELS

1) Scribe hood hinge for reinstallation and remove hood. Drain cooling system and remove battery. Remove radiator hoses and radiator. Set fan shroud to one side and discharge air conditioning system (if equipped). Remove air cleaner, vacuum lines, distributor cap and wiring.

2) Remove carburetor, linkage, starter wiring and oil pressure wire. Remove starter, alternator, charcoal canister and horns. Remove air conditioning and power steering hoses (if equipped). Remove exhaust pipe at manifold. Remove transmission housing and inspection plate bolts.

3) Attach "C" clamp to front of housing to prevent torque converter from coming out. Remove torque converter drive plate bolts and mark converter and drive plate to aid in reassembly. Support transmission with stand (C-3201-A) and disconnect engine from torque converter drive plate. Install engine lifting fixture and attach chain. Remove engine front mount bolts and remove engine from engine compartment.

V8 ENGINES

"B", "CB", "MB" & "PB" MODELS

1) Disconnect battery and remove oil dipstick. Raise vehicle and remove exhaust crossover and pipes from manifolds. Remove inspection cover from transmission. Drain engine oil and remove strut from transmission (if equipped). Remove oil pan (it may be necessary to rotate engine to clear front of pan). Remove flex plate to torque converter bolts and (if necessary), oil pump. Remove starter retaining bolts and set starter aside. Remove lower transmission housing bolts and engine mount nuts. Lower vehicle and drain cooling system.

2) Remove engine cover and discharge air conditioning system. Remove air cleaner and carburetor (318" & 360" engines). Disconnect condenser lines and remove front bumper, grille and support brace. Disconnect radiator hoses and remove condenser, radiator and support as an assembly. Remove air conditioning compressor bracket bolts and set compressor aside (remove if necessary). Remove air pump and power steering pump brackets and position pumps to one side (remove if necessary).

3) Disconnect throttle linkage, heater and vacuum hoses and all electrical connections to coil, alternator and other engine accessories. Remove alternator, fan blade (or fluid fan unit), pulley and drive belts. Disconnect flexible line to fuel pump and cap line. Remove left exhaust manifold heat shield and remove spark plug wires and distributor cap. On 318" & 360" engines, attach a suitable lifting fixture to intake manifold. On 440" engines remove intake manifold and use manifold bolts to attach a chain between center of cylinder heads to provide lifting attachment. Place floor jack under transmission and remove upper transmission housing bolts. Use suitable lifting device to remove engine from front of vehicle.

MOTOR HOME CHASSIS MODELS

Engine removal procedure will vary with body configuration. Removal of engine through front end is preferred method, however, inspection of vehicle should be done to determine most practical method to be used. Proceed with one of the three following methods:

Removal From Front End — 1) Remove battery ground cable, drain cooling system and remove radiator. Remove engine cover, passenger seat and any other fixtures which may limit access to top of engine. Disconnect heater hoses and all wires from engine, starter, alternator and ignition. Remove air cleaner, fuel line and carburetor.

2) Install suitable lifting adapter to carburetor mounting pad on intake manifold. Disconnect throttle linkage at transmission, line to fuel pump inlet and exhaust pipes at both manifolds. Use suitable engine support tool (C-3487A) to support engine assembly. Raise engine and transmission assembly slightly and disconnect rear transmission mount, speedometer cable and hand brake cable (if mounted to transmission). Separate engine and transmission and remove transmission from vehicle.

3) Remove front bumper and frame front crossmember. Using a hydro-crane, attach hook to lifting fixture, raise engine slightly and remove front motor mounts from frame. Carefully remove engine assembly through front of vehicle.

Removal Through Side Door — Proceed as outlined for Removal From Front End while noting the following: Careful measurement of door should be made to ensure engine removal is possible. Engine accessories and exhaust manifolds may have to be removed. Remove engine through side door using suitable hydro-crane.

Removal From Beneath Vehicle — 1) Disconnect battery negative cable and raise vehicle on a two-post truck hoist. Drain cooling system, remove lower radiator hose and disconnect oil cooler lines at radiator. Remove torque converter cover plate and disconnect flex plate from converter. Remove front section drive shaft with center bearing and tie rear section out of the way.

CHRYSLER CORP. (Cont.)

2) Remove starter, hand brake drum from transmission short extension, brake cable, speedometer cable and oil cooler connections at transmission. Use suitable jack to support transmission and remove rear motor mount bolts. Raise transmission and remove crossmember, ground strap and transmission linkage.

3) Block engine up on front hoist support, unbolt transmission from engine, lower transmission jack and remove transmission from vehicle. Lower hoist. Disconnect electrical wiring harnesses, throttle linkage, sending units, vacuum hoses, upper radiator hose and heater connections. Remove fan drive and fan, oil dipstick with tube and power steering hoses.

4) Raise vehicle on hoist and remove fuel line at fuel pump. Install engine holding fixture using transmission jack under engine to obtain clearance. Hook holding fixture side members over frame longitudinals and remove transmission jack. Disconnect front brake tubing and hoses, then loosen front spring hanger bolts. Remove nuts from spring hanger bolts and disconnect drag link from pitman arm.

5) Position four tall jack stands under longitudinal frame members with two jacks on each side between front and rear axle. Remove front eyebolt from front spring hangers, remove strain from spring and drive the eyebolts out of spring eyes. Carefully lower front hoist post with tall jackstands in position. Springs will hang vertically from rear spring shackles.

6) Position transmission jack under engine, then remove front motor mount bolts and support brackets. Remove engine holding fixture. **CAUTION** — Transmission jack with suitable adapter is now sole support of engine. Carefully lower transmission jack until engine clears bottom of vehicle.

NOTE — Steady engine as jack is lowered.

ALL OTHER MODELS

1) Scribe hood hinges for reassembly and remove hood. Drain cooling system and remove battery and air cleaner. Remove radiator hoses and remove radiator. Discharge air conditioning system (if equipped) and remove vacuum lines, distributor cap and wiring. Remove carburetor, linkage, starter wires and oil pressure wire. Remove air conditioning hoses and power steering hoses (if equipped). Remove starter, alternator, charcoal canister and horns.

2) Remove exhaust pipe at manifold and transmission housing bolts. Remove inspection plate and attach "C" clamp to front

of transmission torque converter housing to prevent converter from falling out. Remove drive plate and mark converter and drive plate to aid in reassembly. Support transmission with stand and disconnect engine from torque converter drive plate. Install engine lifting fixture and device and remove engine from engine compartment.

TIGHTENING SPECIFICATIONS

"B", "CB", "MB" & "PB" MODELS

Application	Ft. Lbs.
Exhaust Pipe Flange	
6 Cyl. Engines	35
V8 Engines	24
Flex Plate-to-Converter	22.5
Flex Plate-to-Crankshaft	55
Front Mount-to-Engine	75
Rear Mount-to-Crossmember	50
Starter Mount Bolt	50

"AW", "AD", "PD" & "PW" MODELS

Application	Ft. Lbs.
Exhaust Manifold Nuts & Bolts	20
Flex Plate-to-Converter	22.5
Flex Plate-to-Crankshaft	55
Flywheel-to-Crankshaft	55

"D" & "W" MODELS

Application	Ft. Lbs.
Exhaust Pipe Flange	24
Flex Plate-to-Converter	75
Flex Plate-to-Crankshaft	55
Flywheel-to-Crankshaft	55
Front Mount-to-Engine	45-55
Rear Mount-to-Engine	50
Starter Motor Bolt	50

MOTOR HOME CHASSIS MODELS

Application	Ft. Lbs.
Exhaust Pipe Flange	40
Flywheel Housing-to-Block	50
Front Mount-to-Engine	50
Rear Mount-to-Crossmember	30