INTERNATIONAL HARVESTER

4 CYLINDER ENGINES

1965-72 152" & 196"

NOTE — Engine removal will vary between models and between individual chassis because of various equipment and accessories. Following procedures on all engines cover general disconnect points and lifting instructions.

1) Drain cooling system at radiator and block. Drain crankcase and disconnect battery ground cable. Disconnect heater hoses and remove radiator hoses, fan blade and radiator. Remove radiator cross braces and heater air ducts which may interfere with engine removal. Remove air cleaner and disconnect throttle linkage, choke control, fuel line and vacuum line from carburetor. Remove carburetor.

2) Disconnect electrical wiring to engine as necessary, heater temperature control valve control wire and fuel line at fuel pump. Disconnect exhaust pipe from manifold. Install suitable lifting fixture on engine, connect hoisting equipment to fixture and raise slightly to support engine.

3) Disconnect engine front mountings. Remove flywheel to transmission bolts or clutch housing to engine bolts. Pull engine forward to clear clutch assembly from transmission main shaft. Tilt front of engine up and raise engine out of vehicle. Rotate engine sufficiently to avoid contact between engine and chassis components.

6 CYLINDER ENGINES

1965-68 241" & 265"

NOTE — Removal will vary between models and between individual chassis because of various equipment and accessories. Following procedure covers general disconnect points and lifting instructions.

1) Drain cooling system at radiator and block. Drain crankcase, remove hood and disconnect ground cable from battery. Disconnect heater hoses and remove radiator hoses, fan blade, fan shroud and radiator. Remove air cleaner and disconnect throttle linkage and choke control cable.

2) Disconnect electrical wiring to engine as necessary, fuel line from fuel pump and exhaust pipe from manifold. Install suitable lifting fixture on engine, connect hoisting equipment to fixture and raise slightly to support engine. Remove clutch housing or converter housing cover. Disconnect clutch linkage or clutch slave cylinder line.

3) Disconnect engine rear mountings. Use a suitable floor jack to support transmission and disconnect transmission from clutch housing. On models with automatic transmission, disconnect converter housing from adapter plate and converter from drive plate. Disconnect front engine mountings from crossmember. Pull engine forward to clear clutch assembly from transmission main shaft. Tilt front of engine up and raise engine out of vehicle. Rotate engine sufficiently to avoid contact between engine and chassis components.

1969-74 232" & 258"

NOTE — Removal will vary between models and between individual chassis because of various equipment and accessories. Following procedure covers general disconnect points and lifting instructions.

1) Drain cooling system at radiator and block. Drain crankcase and disconnect ground cable from battery. Remove hood hinge bracket mounting bolts and remove hood. Remove radiator hoses and radiator. Disconnect air cleaner hoses and remove air cleaner from carburetor. Disconnect fuel line at fuel pump, heater hoses, power steering pump line and hose (if equipped) and all vacuum hoses.

2) Disconnect electrical wiring and harnesses as required. Disconnect carburetor throttle linkage and choke control, exhaust pipe from manifold and lines from canister (if equipped). Remove starter, transmission filler tube support (if equipped) and air conditioning compressor lines (if equipped). Remove air pump hoses, drive belt, air pump and mounting bracket (if equipped).

3) Attach suitable lifting sling to cylinder head bolts, connect hoisting equipment to fixture and raise slightly to support engine. Disconnect engine mounting brackets from crossmember and support transmission using a suitable floor jack. Remove clutch housing front cover and clutch housing to crankcase attaching bolts.

4) Pull engine forward to clear clutch assembly from transmission main shaft. Tilt front of engine up and raise engine out of vehicle. Rotate engine sufficiently to avoid contact between engine and chassis components.

V8 ENGINES

1965-74

NOTE — Removal will vary between models and between individual chassis because of various equipment and accessories. Following procedure covers general disconnect points and lifting instructions.

CAUTION — Vehicles equipped with LPG fuel system must be serviced with extreme care. System is pressurized and tank valves should be closed tightly. Exhaust all fuel from lines before working on or disconnecting fuel system.

INTERNATIONAL HARVESTER (Cont.)

1) Drain cooling system at radiator and block. Drain crankcase and disconnect battery cables from battery. Remove hood hinge bracket mounting bolts and remove hood. Remove radiator hoses, radiator and fan shroud. *NOTE — Disconnect transmission oil cooler lines if equipped.* Remove air cleaner and transmission filler tube support (automatic transmissions only).

2) Disconnect heater hoses, vacuum lines and hoses as necessary, fuel line from fuel pump and governor lines (if equipped). Disconnect electrical leads and harnesses, carburetor linkage, and power steering pump line (if equipped). Disconnect air conditioning compressor lines (if equipped), tachometer drive at distributor, and exhaust pipes at manifolds.

3) On 400" engines, remove starting motor and install suitable lifting eyes (SE-1899) at intake manifold. On all other models, remove carburetor and install suitable lifting fixture (SE-1948) at carburetor mounting pad. Attach suitable lifting hoist and support engine assembly. Disconnect front motor mounts and support transmission using a suitable floor jack.

4) Remove transmission front cover and transmission housing to engine attaching bolts. Remove converter to drive plate attaching bolts (automatic transmission only). Pull engine assembly forward to clear transmission converter or main shaft and clutch driven disc. Raise engine and remove from vehicle.

TIGHTENING SPECIFICATIONS

152" & 196" ENGINES

Application	Ft. Lbs.
Front Mount-to-Engine	
3/8" Bolts	38-42
1/2" Bolts	68-76
Flywheel Housing-to-Engine	①
Converter-to-Flywheel	①

232" & 258" ENGINES

Application	Ft. Lbs.
Front Mount-to-Crossmember	45-51
Flywheel Housing-to-Engine	
Top Bolts	28-33
Bottom Bolts	40-45
Converter-to-Flywheel	30-35

241" & 265" ENGINES

Application	Ft. Lbs.
Front Mount Bracket-to-Engine	35-45
Flywheel Housing-to-Engine	45-50

ALL V8 ENGINES

Application	Ft. Lbs.
Engine Mounting Bracket	70-80
Flywheel Housing-to-Engine	①
Converter-to-Flywheel	①

① — All 5/16" Bolts are 14-16 ft. lbs.
All 3/8" Bolts are 25-30 ft. lbs.
All 7/16" Bolts are 35-40 ft. lbs.