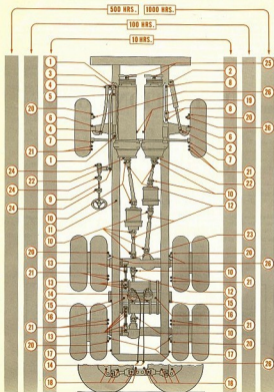


LUBRICATION CHART

3LLD - 4LLD



EUCLID

MAINTENANCE MANUAL

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ENGINE

ENGINE

G.M.C. 6-110 WITH STUB SHAFT

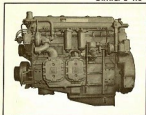


Fig. 1 - Left Hand Side of Engine L-1794

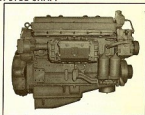


Fig. 2 - Right Hand Side of Engine L-1795

DESCRIPTION

These units are powered by General Motors series 6-110 Diesel Engines. These engines are of the 2-stroke valve-in-head type, delivering high power for their weight. A "Roxa" type blower furnishes fresh air both for scavenging of exhaust gases and for compression in the cylinders. The engines feature fully counter-balanced crank-

shafts and replaceable cylinder liners for ease of maintenance.

Refer to your Operators Engine Manual and Engine Maintenance Manual for detailed operating and overhaul procedures to be followed in servicing the engine.

REMOVAL OF ENGINE

1. Remove the hood sides and the bolts, nuts and lockwashers from the muffler (if used) mounting flange. Lift off the hood with muffler.
2. Disconnect and remove the air cleaner piping from the intake manifold.
3. Before starting to remove any other engine components, remove the battery cable from the cranking motor to prevent accidents.
4. Drain the cooling system and crankcase. Close the shut-off valve near the bottom of the fuel tank.
5. Disconnect the radiator hoses and remove the fan shroud, fan, and fan hub.
6. Disconnect or remove all air, fuel, lube oil filter, and other starting kit lines that are necessary for the removal of the engine. Before disconnecting air lines, blow out the tanks. Plug lube oil lines to prevent loss of oil.
7. Disconnect all electrical leads from the motor and generator. It is good practice to tag all electrical leads as they are disconnected for reference when they are reconnected.
8. Disconnect the following leads from the engine: Crankcase oil pressure gage, temperature gage, tachometer cable, emergency stop linkage, and accelerator pedal linkage.
9. Disconnect the drive line from the flywheel cover stub shaft.
10. Support the engine with suitable lifting equipment and remove the nuts, lockwashers and bolts from the mounting brackets.
11. Lift the engine out of the frame. It may be necessary to tilt the engine to facilitate removal. After engine is free, mount it on an overhaul stand for further disassembly.

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ENGINE

ENGINE

CUMMINS ENGINES WITH STUB SHAFT ASSEMBLY

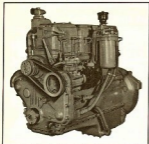


Fig. 1 - Left Side of Engine With "PT" Fuel Pump

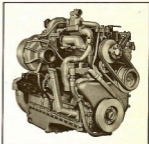


Fig. 2 - Right Side of Turbo Charged Engine

DESCRIPTION

These units are powered by Cummins diesel engines. These engines are of the 4-stroke valve-in-head type. They feature Tocco hardened crankshafts, force feed lubrication to all bearings, replaceable cylinder liners, and distributor type

fuel systems.

Refer to your Cummins Operation and Maintenance Manual published by the Cummins Engine Company, for complete operating and maintenance procedures for these engines.

REMOVAL OF ENGINE

1. Remove the hood sides and the bolts, nuts and lockwashers from the muffler (if used) mounting flange. Lift off the hood with muffler.
2. Disconnect and remove the air cleaner piping from the intake manifold.
3. Before starting to remove any other engine components, remove the battery cable from the cranking motor to prevent accidents.
4. Drain the cooling system and crankcase. Close the shut-off valve near the bottom of the fuel tank.
5. Disconnect the radiator hoses and remove the fan shroud, fan, and fan hub.
6. Disconnect or remove all air, fuel, lube oil filler, and other starting kit lines that are necessary for the removal of the engine. Before

disconnecting air lines, blow out the tanks. Plug lube oil lines to prevent loss of oil.

7. Disconnect all electrical leads from the motor and generator. It is good practice to tag all electrical leads as they are disconnected for reference when they are reconnected.
8. Disconnect the following leads from the engine: Crankcase oil pressure gage, temperature gage, tachometer cable, PT shut-down valve solenoid lead, compression release and accelerator pedal linkage.
9. Disconnect the drive line from the flywheel cover stub shaft.
10. Support the engine with suitable lifting equipment and remove the nuts, lockwashers and bolts from the mounting brackets.

EUCLID 62 TON REAR DUMP

(MODEL 6LLD)

SPECIFICATIONS SUBJECT TO CHANGE WITHOUT NOTICE

ENGINE

Two Cummins Model NHTO-6-81 "TURBODIESEL" 4 cycle, 6 cylinder, bore 5 7/8", stroke 6", displacement 743 cu. in., each rated 335 hp at 2100 rpm; maximum torque 900 lb. ft. at 1500 rpm. (670 h.p. total)

TORQUE CONVERTER AND TRANSMISSION

Allison CLBT-5640 transmission with integral converter. The transmission has four forward and two reverse speeds. Full power shifting, through hydraulically actuated multiple disc clutches. Standard ratios: 1st-4.09:1; 2nd-2.01:1; 3rd-1.00:1; 4th-0.67:1. Mechanical linkage control to gear selector valve. Transmission assembly is mounted separately from engine. Converter lockup and torque brake are standard equipment.

DRIVE AXLE

Two Euclid Model 508A, heavy duty, full floating with single reduction carrier and planetary reduction in each wheel.

Ratio: Differential	3.13:1
Planetary	6.33:1
Total Reduction	19.8:1

FRAME

Right, wide flange, fabricated beam with torque tube stiffeners and integral front bumper. Body supported by top flange of frame rail and fabricated cross beam.

SPRINGS

Free floating, on curved spring pads for variable load centers. Front - 13 leaves 6" x 1/4". Rear - 6 leaves 6" x 1 1/4" thick, 5 leaves 6" x 1 1/2" thick. The two rear axles operate independently of each other and are spring mounted about a central pivot point to produce a bogie action.

BRAKES

Two shoe internal expanding type. Front and rear size 26"x6 1/2", total lining area 2406 sq. in. Air actuated, 12 cu. ft. compressor.

STEERING

Full time power steering with Vickers booster.

CAB

Full width completely enclosed streamlined cab, offset to left, safety Plexiglass throughout. Bucket type drivers seat with neoplyde covered air foam rubber cushion and mounted on double acting shock absorber - fully adjustable.

HOIST

Two Euclid 3 stage double acting hoist.

ELECTRICAL

24 volt lighting and 24 volt starting system. All wiring in conduit.

BODY

All welded steel construction. Exhaust heated with gases passing through bottom and side box stiffeners. Chute type construction. High strength Alloy (100,000 PSI) steel used for 3/4" floor, 1/2" front, 3/4" side, and 3/4" canopy plates. All other plates made of low Alloy (45,000 PSI) steel.

CAPACITY

Struck	40 cu. yds.
Heaped 3:1	45 cu. yds.
Heaped 1:1	61 cu. yds.

TIRES AND RIMS (Tubeless)

	Tire Size	Rim Size
Front	18.00x33-32 ply Rock Tread	13.00
Drive	18.00x33-32 ply Rock Tread	13.00

Tire and tube optional.

STANDARD EQUIPMENT

Hourmeter, Ammeter, Voltage Regulator, Engine Temperature Gauges, Air Pressure Gauge, Engine Oil Pressure Gauge, Tachometer, Air Horn, Emergency Stop, Speedometer, Converter Temperature Gauge, Clutch Pressure Gauge, Tachograph, Tail and Stop Light, Back-up Light, Rock Ejectors, Maintenance Manual, Parts Book.

SERVICE DATA

Water Cooling System	40 gals.
Fuel Tank	445 gals.
Crankcase (Each)	26 qts.
Transmission and Converter (Each)	18 gals.
Rear Axle (Each)	90 lbs.
Hydraulic tank	40 gals.

**Note: Change from previous edition.

