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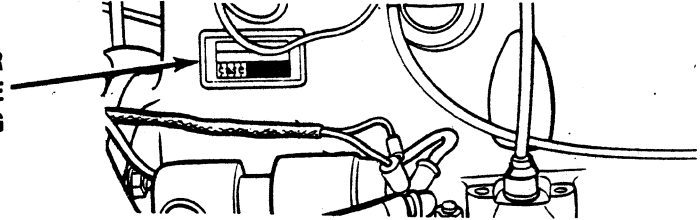
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Section 1010

GENERAL ENGINE SPECIFICATIONS 880R EXCAVATOR

THE MODEL AND ENGINE SERIAL NUMBER IS STAMPED ON A PLATE LOCATED ON THE SIDE OF THE ENGINE ABOVE THE CRANKING MOTOR.



General

Type	4 Cylinder, 4 Stroke Cycle, Valve-in-Head Turbo-Charged
Firing Order	1-3-4-2
Bore	4-5/8 Inches
Stroke	5 Inches
Piston Displacement	336 Cubic Inches
Compression Ratio	15.8 to 1
No Load Governed Speed	2330 to 2370 RPM
Rated Engine Speed	2200 RPM
Engine Idling Speed	700 to 750 RPM
Exhaust Valve Rotators	Positive Type
Valve Tappet Clearance (Exhaust)	(Cold) .025 Inch
(Intake)	(Cold) .015 Inch

Piston and Connecting Rods

Rings per Piston	3
Number of Compression Rings	2
Number of Oil Rings	1
Type Pins	Full Floating Type
Type Bearing	Replaceable Precision, Steel Back, Copper-Lead Alloy Liners

Main Bearings

Number of Bearings	5
Type Bearings	Replaceable Precision Steel Back, Copper-Lead Alloy Liners

Engine Lubricating System

Crankcase Capacity	10 Quarts
with Filter Change	11 Quarts
Oil Pressure	45 to 60 Pounds with Engine Warm and Operating at Rated Engine Speed
Type System	Pressure and Spray Circulation
Oil Pump	Gear Type
Oil Filter	Full Flow Spin on Type

Fuel System

Fuel Injection Pump	Robert Bosch, Type PES Multiple Plunger
Pump Timing	30 Degrees Before Top Dead Center (Port Closing)
Fuel Injectors	Pencil Type (Opening Pressure 2800 PSI)
Fuel Transfer Pump	Plunger Type, Integral Part of Injection Pump
Governor	Variable Speed, Fly-Weight Centrifugal Type, Integral Part of Injection Pump
1st Stage Fuel Filter	Full Flow Spin on Type
2nd Stage Fuel Filter	Full Flow Spin on Type



Section 1055

GENERAL CLEANING INSTRUCTIONS

GENERAL CLEANING INSTRUCTIONS

Complete Assemblies

Completely assembled components may be steam cleaned on the outside only, to make for easier removal and disassembly. All openings and breathers must be closed or plugged to prevent possibility of water entering the component.



WARNING: To prevent injury from burns always use a non-flammable solvent for cleaning component parts. **DO NOT USE** gasoline or other flammable substances.

Rough Parts

Rough parts such as housings, castings, etc., may be cleaned in hot solution tanks with mild alkali solutions, providing these parts do not have ground or polished surfaces. The parts should remain in the tank long enough to be thoroughly cleaned and heated. This will aid the evaporation of rinse water. The parts should be thoroughly rinsed after cleaning to remove all traces of alkali.

Finished or Machined Parts

Parts having ground or polished surfaces such as gears, bearings, shafts and collars, should be cleaned in non-flammable solvent.

IMPORTANT: DO NOT clean machined parts in hot solution tanks with water and alkaline solutions such as sodium hydroxide, orthosilicates or phosphates.

Rubber Parts

Clean rubber parts by washing in clean denatured alcohol. **DO NOT** use mineral base cleaning solvents such as acetone or paint thinner on any rubber parts. If a mineral base solvent is used, the rubber will start to deteriorate and continue to deteriorate after the part is put back into service. The continued deterioration of the rubber could cause the part to fail.

Drying

All parts cleaned must be thoroughly dried immediately. Use moisture-free compressed air or soft lintless absorbent wiping rags. The rags should be free of abrasive materials such as metal filings, contaminated oil or lapping compound. Bearings may be dried using compressed air, provided the air is directed across the bearings to avoid spinning. Do not spin bearings when drying. Bearings may be rotated slowly by hand to speed the drying process.



CAUTION: When using compressed air keep stream from direction of face. Use only low air pressure.

Corrosion Prevention

Parts that have been cleaned, dried, inspected and are to be immediately reassembled should be coated with a light oil to prevent corrosion. If these parts are to be stored for any length of time, they should be treated with a good RUST PREVENTIVE and wrapped in special paper or other material to prevent corrosion.

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