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MANUAL PREVIEW

J.I. Case

Service Manual

480CK

Tractor, Loader & Backhoe

Volume 1 of 2

Service Manual

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CA-S-480CK TLB

480 LOADER

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23

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**188D DIESEL AND
188G, 159G, 148G SPARK IGNITION ENGINES**

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Section

3022

ROOSA MASTER

MODEL DB FUEL INJECTION PUMPS

188 SERIES DIESEL ENGINES

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Special Torques

High pressure fuel line connection screws	35 ft. lbs.
Fuel inlet filter assembly	20 ft. lbs.

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Removing the Fuel Injection Pump

NOTE: Steam clean the engine thoroughly in the area of the fuel injection pump and lines prior to performing any service work.

Use every possible precaution to obtain absolute cleanliness, to prevent entry of foreign matter into fuel system and injection pump

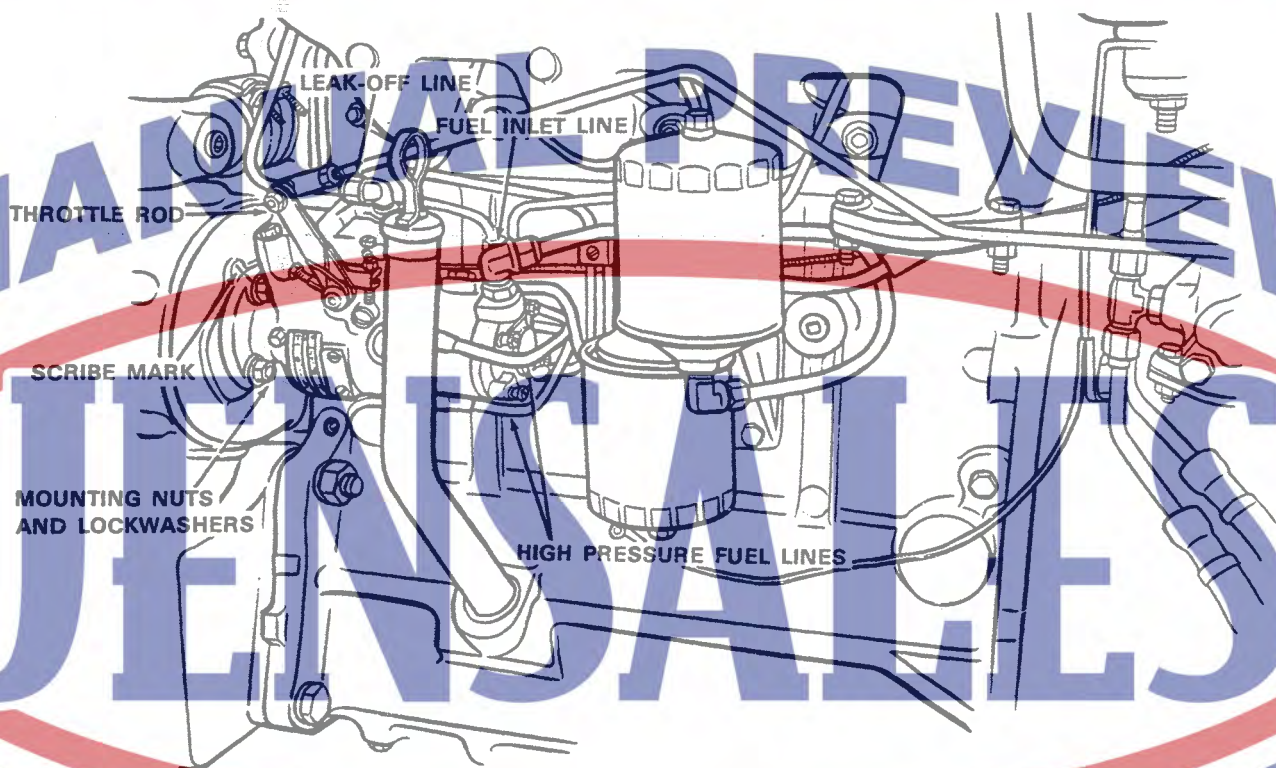


Figure 2

1. Before removing pump, set engine at correct pump timing on #1 cylinder, refer to Page 32-6.
2. Close the fuel tank shut-off valve.
3. Remove high pressure fuel lines, fuel inlet line at pump and leak-off line, Figure 2.
4. Disconnect the throttle rod from the governor control lever and the fuel shut-off cable from the shut-off lever.
5. It is advisable to put a small scribe mark on pump flange and timing gear housing if the same pump is going to be reinstalled, and then line up scribe marks on installation of pump.
6. Remove the three nuts and washers from pump flange studs.
7. Carefully pull pump rearward off of the pump drive shaft.
8. Remove the timing gear cover if there is an occasion to remove the pump drive shaft. Refer to Section 23 of this service manual.

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INTRODUCTION

Section F contains the specifications and wiring diagrams necessary to diagnose and make minor adjustments on the electrical components on the Case Wheel Tractors.

All major adjustments and overhaul of electrical components should be performed by an Authorized Electrical Service Station (Delco-United Motors Service or Auto-Lite Service Stations) where specialized equipment and trained personnel are available.

DO NOT ATTEMPT EVEN MINOR ELECTRICAL ADJUSTMENTS WITHOUT THE AID OF PROPER TEST EQUIPMENT

NOTE Gas engines before Serial No. 8233766 and Diesel engines before Serial No. 8232882 used a positive grounded system. These Serial Numbers and after use a negative grounded system.

BATTERY SERVICE AND INSPECTION

IMPORTANT Working with storage batteries all exposed metal surfaces are "live". Never lay a metal object on top of a battery as a short circuit may result. Sparks or open flame must be kept away from batteries due to the presence of explosive gas in and around the batteries while they are being charged or in use.

The sulfuric acid or electrolyte present in a battery is very harmful to your eyes, skin and clothing. If contact is made with it, wash it with a weak solution of baking soda and water. This will neutralize the acid.

Visual Inspection

Check the battery terminals and cables for dirty or corroded conditions which will cause high resistance, resulting in undercharged batteries and very poor cranking speed.

The battery tray, holdown terminals and cable ends must be cleaned when contaminated with baking soda and water. This will help to prevent self discharge of batteries. After cleaning and drying a thin coating of vasoline, light cup grease or paint will help prevent contamination.

A cracked or leaking battery case will let the electrolyte leak out and cause damage to the equipment, a battery in this condition should be replaced. When just the top sealing compound is leaking the battery can be resealed.

Vent holes in the filler caps should always be kept open to let the battery gases escape. Never remove battery caps except to add water.

The electrolyte level should be checked each week. Never let the level drop to a point where the plates are exposed. Pure or distilled water should only be added when the electrolyte level is low. DO NOT OVERFILL, refer to Figure F-1.

Normal water consumption would be approximately 1 oz. every 60 hours of operation. If it is greater, either the case is leaking or regulator is overcharging and must be adjusted.

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GROUP A - MODEL "23" LOADER

The Model "23" Loader has been expressly designed for installation on the Model 480 Construction King Diesel and Gasoline Wheel Loader

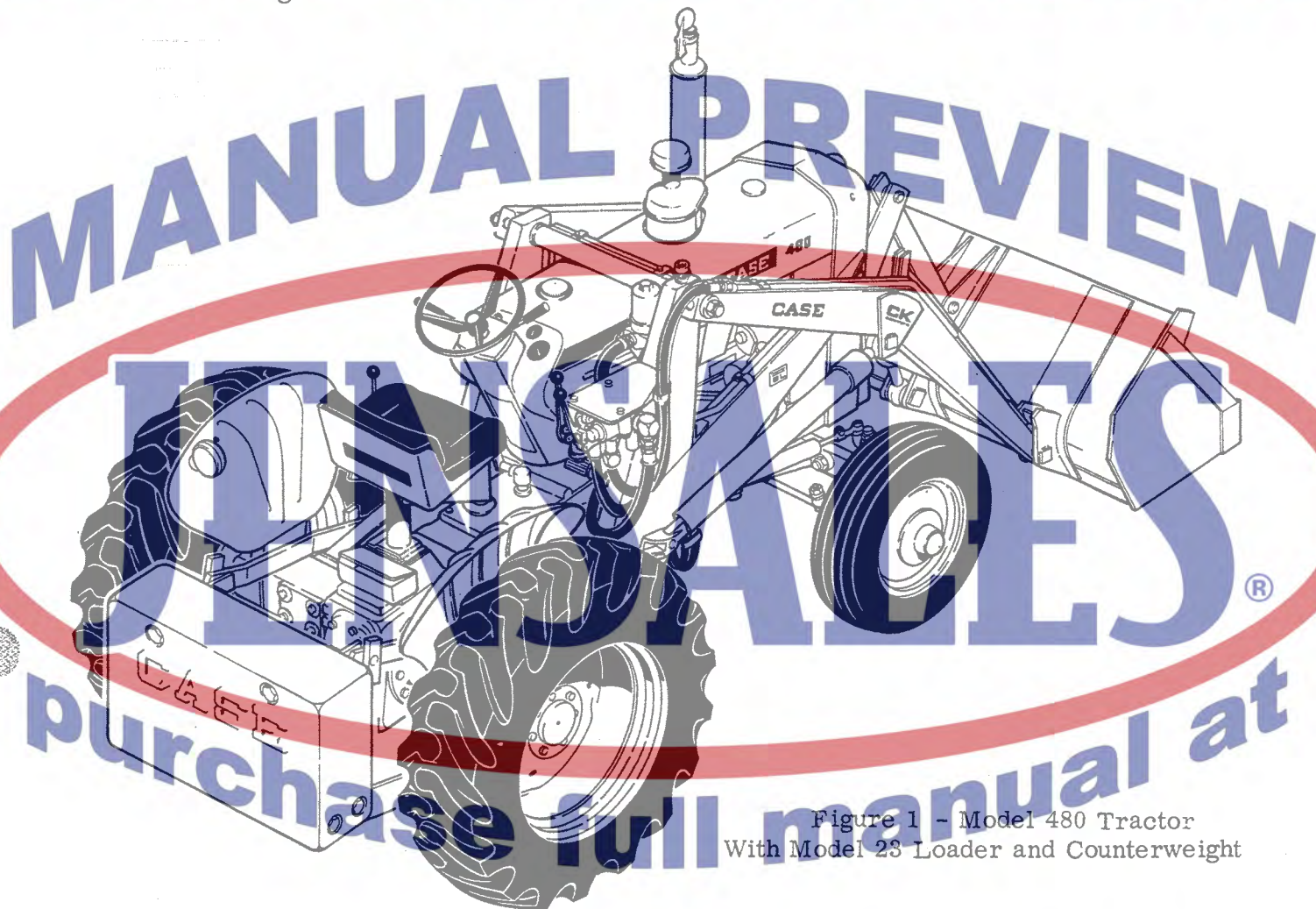


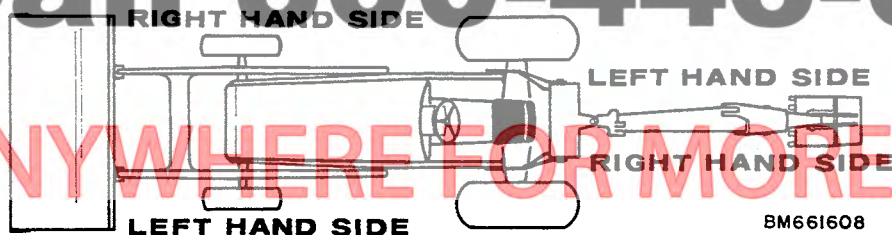
Figure 1 - Model 480 Tractor
With Model 23 Loader and Counterweight

DEFINITION OF "RIGHT HAND" AND "LEFT HAND"

The terms "right hand" and "left hand", when referring to the loader or tractor, are determined by standing at the rear of the unit and facing in the forward direction of travel.

The terms "right hand" and "left hand", when referring to the backhoe, are determined as they appear to the operator sitting in the backhoe seat.

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Figure 2

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MODEL 26 LOADER

The Model 26 Loader has been expressly designed for installation on the Model 480

Wheel Tractor with either gasoline or diesel engine.

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Figure 1 - Model 480 Tractor With Model 26 Loader

Definition of 'Right Hand' And 'Left Hand'

The terms "right hand" and "left hand", when referring to the loader or tractor, are determined by standing at the rear of the unit and facing in the forward direction of travel.

The terms "right hand" and "left hand", when referring to the backhoe, are determined as they appear to the operator sitting in the backhoe seat.

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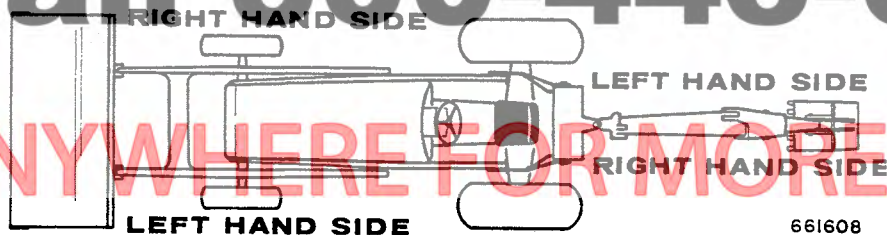


Figure 2