

SERIAL NO. \_\_\_\_\_

# Parts Manual for Series C12 HD Hydraulic Backhoes

NOTE:

The parts pages are intended for use in ordering parts, and therefore do not always depict the correct way to assemble components.



CONSTRUCTION EQUIPMENT DIVISION  
WAUKESHA, WISCONSIN 53186

## Akerman HW Inc. ["Akerman"]

### WARRANTY AND LIMITATION OF LIABILITY

#### Limited Warranty

Akerman warrants to the first user that its products shall be free from defects in material and workmanship for six (6) months from date of delivery or 1000 hours of use, whichever first occurs.

Should failure to conform with this warranty appear during the warranty period as mentioned above under normal and proper use and provided the products have been properly installed, stored and maintained, Akerman shall, if given prompt notice by Buyer, correct such nonconformity, at Akerman's option, by: (i) repair at jobsite, if possible; or, (ii) repair or replacement of the nonconforming products or parts thereof F.O.B. factory or authorized distributor; or, (iii) refund of the purchase price of the nonconforming product after return of such product to Akerman. Return of products or parts to Akerman shall be at Buyer's risk and expense. In no event shall Akerman be responsible for providing working access to the defect, including disassembly and reassembly of associated equipment.

Parts repaired or replaced, or the product if replaced as a unit, are warranted for 30 days or for the period of time remaining under the original warranty, whichever is longer.

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Akerman neither assumes nor authorizes any person to assume for it any obligation other than as herein provided in connection with its products.

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#### LIMITATION OF LIABILITY

IN NO EVENT SHALL AKERMAN BE LIABLE FOR SPECIAL, INDIRECT, INCIDENTAL OR CONSEQUENTIAL DAMAGES whether arising in contract, negligence, tort, strict liability or otherwise, including but not limited to damage to property, loss of profits or revenues, loss of use of the product or any associated equipment, cost of capital, cost of substitute equipment, facilities or services, downtime costs, or claims of customers of the Buyer for such or other damages, whether on account of products, parts or services furnished hereunder or delays in delivery or performance thereof.

## ABOUT THIS MANUAL

This manual incorporates a new simplified page numbering system. The book is divided into major categories or sections, each of which is separated by an index tab sheet. Pages are numbered consecutively within each section. For example, let's say the section entitled "Pumps and Motors" contains the following pages:

Page 1	Dipstick or Boom Pump
Page 2	Swing and Boost Pump
Page 3	Swing Motor
Page 4	Propel Motor

Should we add a pump to the machine at a future date, it would simply become "page 5."

If we change one of the existing pages, the new page would have the same number. For example, if we change the vendor on the swing motor, a new page would be prepared. This new page would also be "page 3". In other words, each Master Parts Manual would then contain two page 3's. The effective date and serial number block will be your key to determine which page to use for a particular machine.

Each page includes the name of the major category it is a part of. This is found below the title of the page itself, and will enable you to file newly released pages in their proper location in your Master Parts Manual.

As in the past, customer manuals will be individually assembled, and contain only those pages which apply to his particular machine.

## INSTRUCTIONS FOR ORDERING REPLACEMENT PARTS

To assure prompt and accurate service, include the following data with each parts order:

1. Purchase Order Number
2. Model and Serial Number of Machine
3. Part Numbers
4. Part Descriptions
5. Quantity of each part desired
6. Method of transportation

Confirm all telephone and telegraph orders in writing. Be sure these orders are marked "Confirmation", to avoid duplication of orders.

## INSPECTION OF SHIPMENTS

Carefully inspect all shipments upon arrival. In the event of loss or damage, do not accept the shipment until the transportation company either makes a notation on the freight bill, or gives you an inspection report covering said damage or loss. In the event of concealed damage or loss, notify the carrier at once (within 20 days) requesting that an inspection be made and damage or loss be acknowledged.

USE ONLY GENUINE HEIN-WERNER PARTS FOR MAXIMUM PERFORMANCE

## WHERE TO ORDER PARTS

Contact the Hein-Werner dealer in your area when placing parts orders. Hein-Werner Dealers are conveniently located throughout the United States and Canada. These Dealers maintain a stock of genuine Hein-Werner replacement parts so that orders are filled as quickly as possible. To aid the dealer in processing your order promptly and correctly, you should supply the following information:

1. Model and Serial Number of your Machine.
2. Part Numbers of items desired
3. Part Descriptions
4. Quantity of each part desired
5. Method of transportation

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## OPERATION

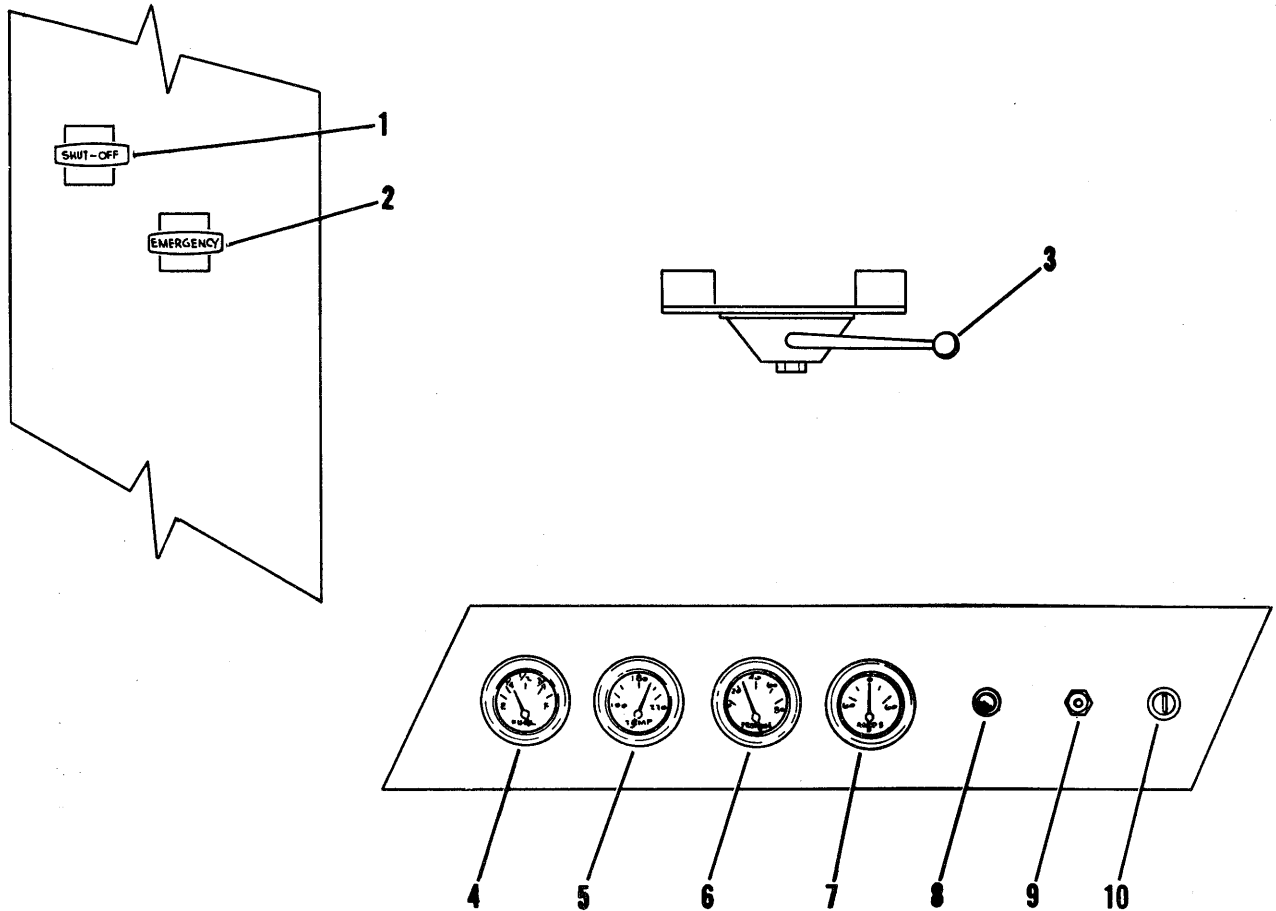
The information in this manual is designed to furnish the owner and operator of the Hein-Werner C-12HD Backhoe with the basic information needed to understand the operation of the machine.

For safe and efficient operation, first become familiar with the location and purpose of all controls and instruments. Study the following pages carefully, regardless of your previous experience.

### **SAFETY FIRST**

**THE COMPLETE OBSERVANCE of this one simple motto would prevent many thousand serious injuries each year.**

## ENGINE CONTROLS AND INSTRUMENTS



1. Shut-off Control
2. Emergency Shut-off Control
3. Throttle Control
4. Fuel Gauge
5. Water Temperature Gauge
6. Oil Pressure Gauge
7. Ammeter Gauge
8. Hydraulic Temperature Warning Light
9. Toggle Switch
10. Ignition Switch

## ENGINE AND INSTRUMENTS

When operating the machine, periodic attention should be given to the instrument panel gauges and warning lights. This will prevent any minor malfunction from becoming a major breakdown.

### GAUGES

#### NOTE:

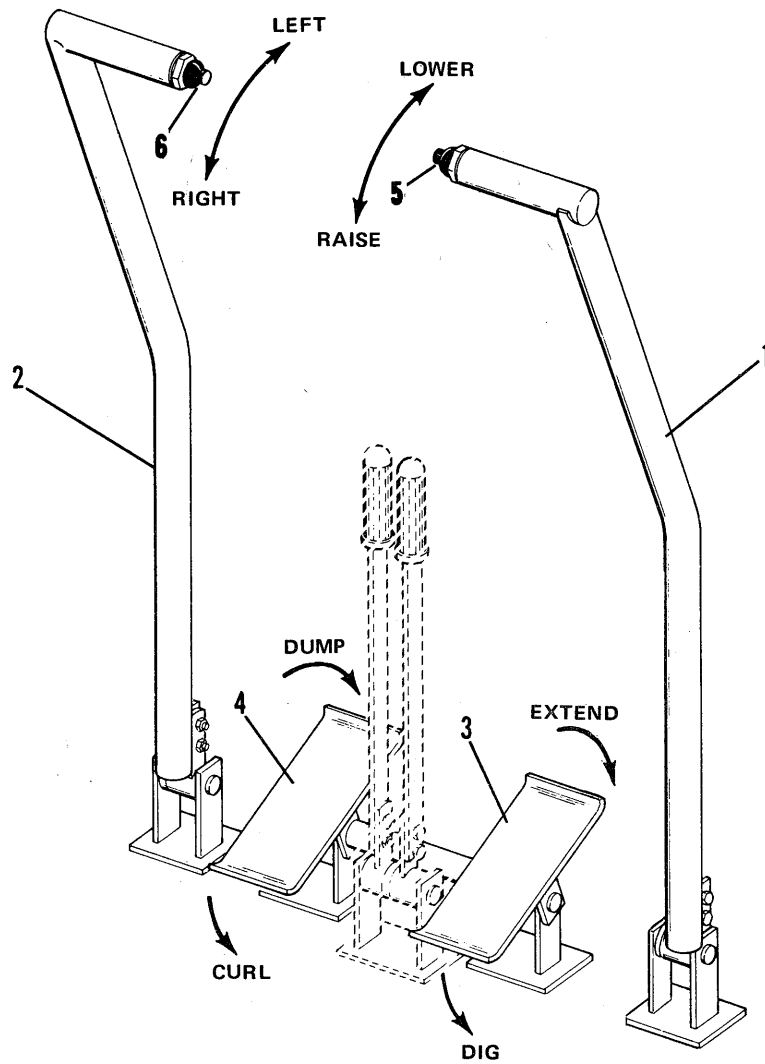
The tachometer located at the rear of the engine is an integral part of the Detroit Diesel. The engine governed speed has been preset at 2650 R.P.M. (Clutch disengaged) at full throttle. The engine R.P.M. should never exceed 2650 R.P.M. at full throttle.

5. Water Temperature Gauge: Under normal engine operating conditions the water temperature should be 160° to 185°F.
6. Oil Pressure Gauge: The oil pressure gauge should indicate 40 to 60 P.S.I. at full throttle. Should the pressure fall below this range (other than at idle) immediately shut off the engine and investigate the cause.
7. Ammeter Gauge: The ammeter indicates either battery charge or discharge depending on the condition of the battery.

### WARNING LIGHTS

8. Hydraulic Temperature Warning Light: A red light located on the instrument panel will appear should the hydraulic oil overheat. If this happens, immediately stop the engine and investigate as to the cause.
9. Toggle Switch: To test the hydraulic temperature warning light (red light) use the toggle switch.





### DIGGING CONTROL LEVERS

1. Boom Control Lever
2. Swing Control Lever
3. Dipstick Control Pedal
4. Bucket Control Pedal
5. Boom Speed Boost Button
6. Dipstick Speed Boost Button

## DIGGING CONTROL LEVERS

Operators not familiar with hydraulic machines may tend to over-control and thereby cause rough operation of the machine. It is, therefore, recommended that the machine be operated at half throttle or less until the operator becomes thoroughly oriented with the controls.

### 1. Boom Control Lever

- A. To raise the boom, pull back on the boom control lever. If greater lift speed is desired, push the boom speed boost control button while pulling back on the boom control lever.
- B. When the boom control lever is returned to the neutral position (center) the boom will remain positioned.
- C. To lower the boom, push the boom control lever forward.

### 2. Swing Control Lever

- A. To swing the platform in a clockwise direction, pull the swing control lever back.
- B. To swing the platform in a counter-clockwise direction, push the swing control lever forward.
- C. To stop swing rotation in either direction, feather the swing control lever into the opposite direction until rotation stops.

CAUTION: WHENEVER THE MACHINE IS NOT BEING OPERATED, ALWAYS ENGAGE SWING BRAKE AND LOWER BUCKET TO THE GROUND.

### 3. Dipstick Control Pedal

- A. To tuck the dipstick, push down with the heel of the **right** foot on the dipstick control pedal. If greater digging speed is desired, push the dipstick speed boost control button while heeling the dipstick control pedal.
- B. When the dipstick control pedal is returned to the **neutral** position (center) the dipstick will remain positioned.
- C. To extend the dipstick, push down with toe of the **right** foot on the dipstick control pedal.