

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

# Parts Manual for Series C24 Hydraulic Backhoes

The Hein-Werner Corporation prides itself in the machining and assembling of quality products and welcomes the opportunity to live up to its obligations. However, when the machine enters the service field the operating and servicing responsibilities then become the user's. We have suggested in our safety manuals and service manuals the proper procedures for operating, lubricating and general maintenance of equipment. If these rules are followed, your machine will continue to be a safe and efficient piece of equipment and a pleasure to operate.

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  
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## ABOUT THIS MANUAL

This manual incorporates a new simplified page numbering system. The book is divided into major categories, each of which is separated by an index tab sheet. Pages are numbered consecutively within each section only. For example, the section entitled "Pumps and Motors" might contain 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 page 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 will include the name of the major category of which it is a part. 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

Hein-Werner Dealers are conveniently located throughout the United States and Canada. These Dealers maintain a stock of genuine Hein-Werner replacement parts.

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## OPERATION

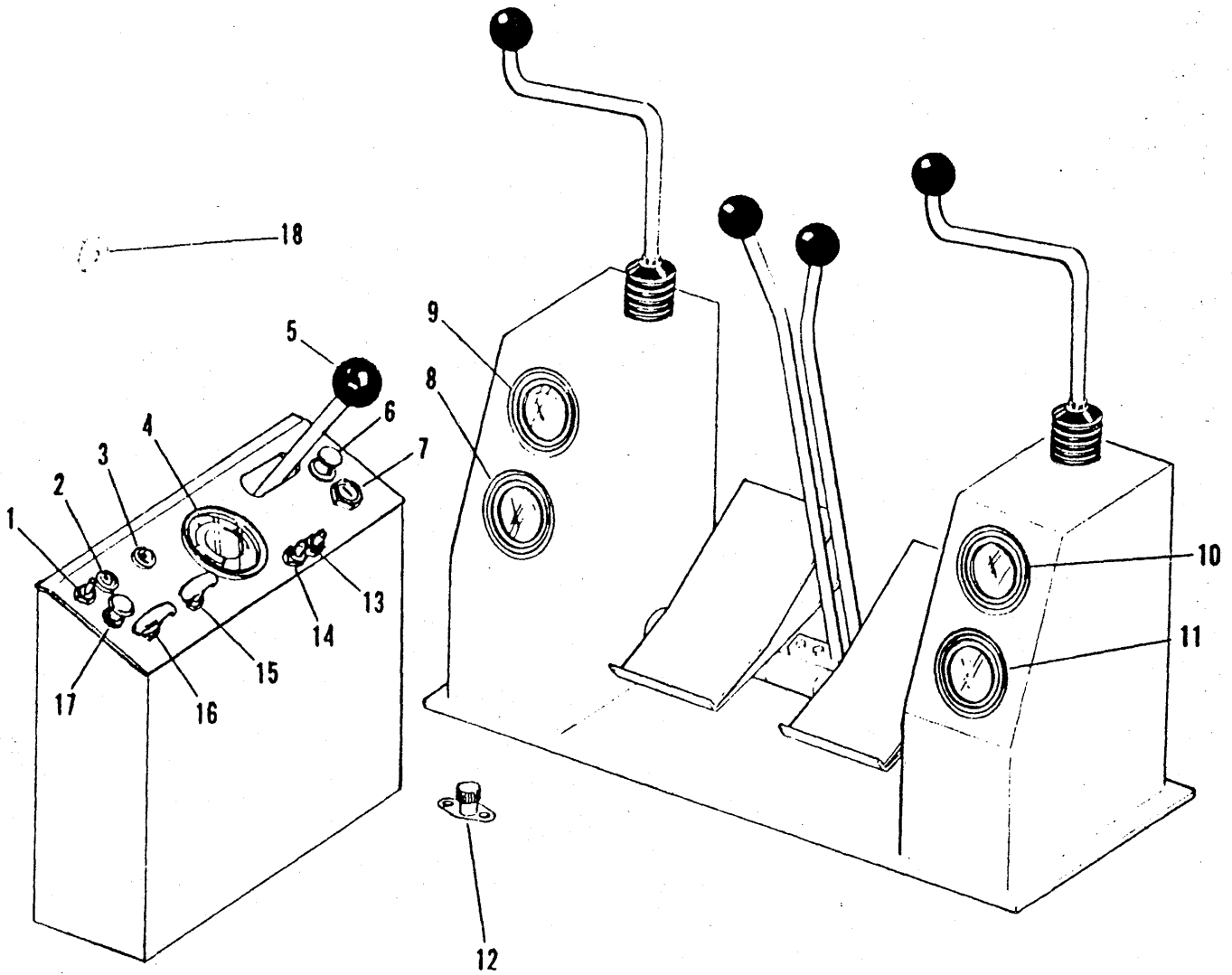
The information in this manual is designed to furnish the owner and operator of the Hein-Werner C-24 Backhoe with the basic information needed to understand the operation of the machine.

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. Dome Light
2. Reservoir Oil Temperature Light
3. Filter Pressure Light
4. Tachometer (with hourmeter)
5. Engine Speed Control
6. Cigarette Lighter
7. Ignition Switch
8. Engine Oil Pressure Gauge
9. Ammeter
10. Water Temperature Gauge
11. Fuel Gauge
12. Horn Button
13. Flood Light Switch
14. Flood Light Switch
15. Engine Shutdown Control
16. Emergency Engine Shutdown Control
17. Heater Switch
18. Propel Speed Selector

## ENGINE AND INSTRUMENTS

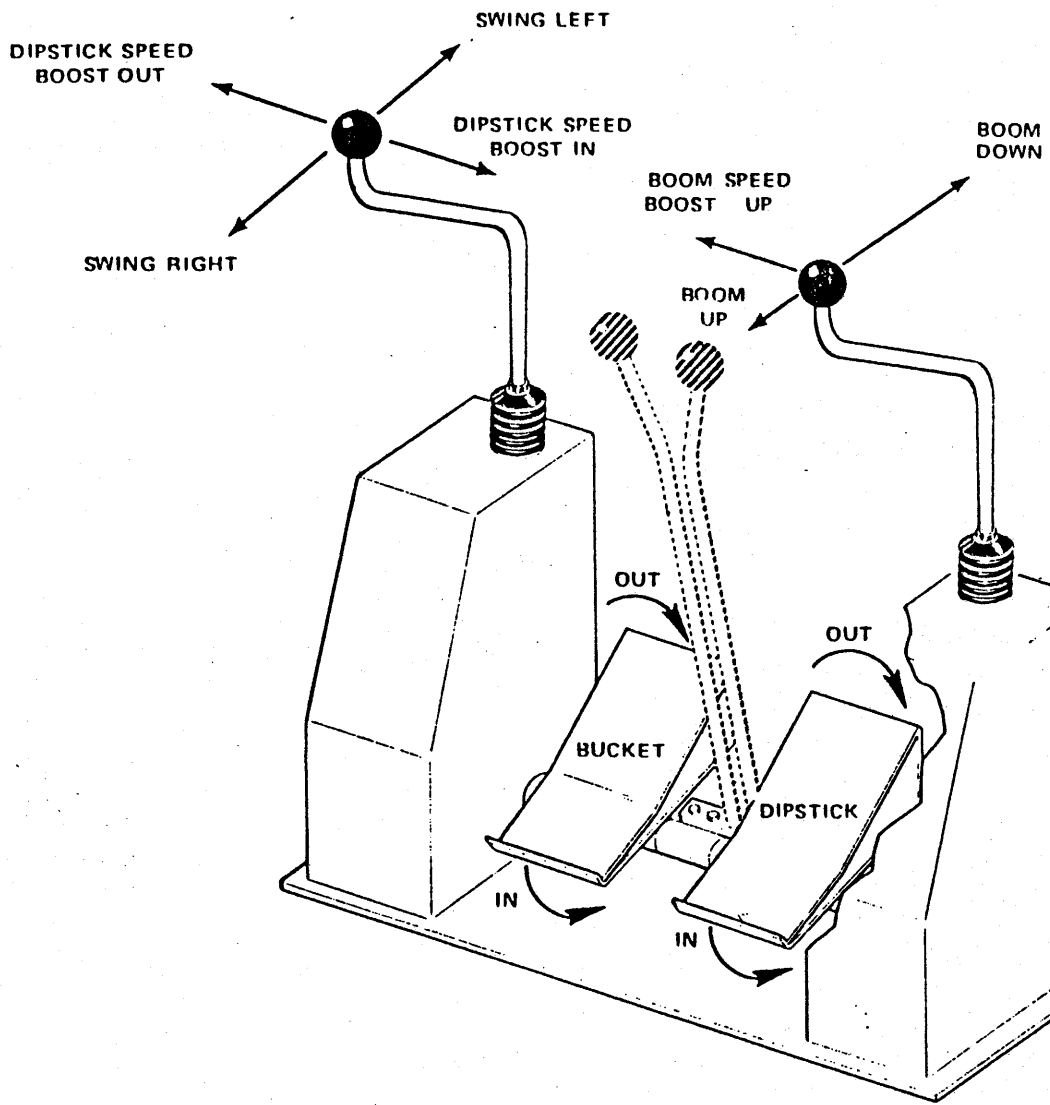
When operating the machine, periodic attention should be given to the instrument panel gauges and warning lights. This will prevent any minor malfunction from becoming a major breakdown.

### WARNING LIGHTS

2. Reservoir Oil Temperature Warning Light: This warning light will glow should the hydraulic oil overheat. If this happens, immediately stop the engine and investigate the cause.
3. Filter Pressure Light: This warning light will glow if the hydraulic filter becomes clogged or inoperative. It is not to be used to determine filter replacement. For filter replacement, refer to the lubrication section.

### GAUGES

4. Tachometer: The engine governed speed has been preset at 2350 R.P.M. (clutch engaged) at full throttle. The engine should never exceed 2400 R.P.M.
8. Engine 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.
9. Ammeter Gauge: The ammeter indicates either battery charge or discharge depending on the condition of the battery.
10. Water Temperature Gauge: Under normal engine operating conditions the water temperature should be 160° to 185°F.



CONVENTIONAL CONTROLS



## DIGGING CONTROL LEVERS

Operators not familiar with hydraulic machines may tend to over-control and thereby cause rough operation of the machine. Therefore, it is 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 right hand control lever. If greater lift speed is desired, push down on the toe of the boom speed boost pedal while pulling back on the right hand control lever (speed boost pedal linkage is reversible).
- B. When the control lever is returned to the neutral position (center), the boom will remain positioned.
- C. To lower the boom, push the right hand control lever forward.

### 2. Swing Control Lever

- A. To swing the platform in a clockwise direction, disengage the swing brake and push left hand control lever to the right.
- B. To swing the platform in a counter-clockwise direction, push the left hand control lever to the left.
- C. To stop swing rotation in either direction, feather the 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, pull back the left hand control lever. If greater digging speed is desired, push down with the heel of the right foot on the dipstick speed boost pedal while pulling back on the control lever.
- B. When the left hand control lever is returned to the neutral position (center), the dipstick will remain positioned.
- C. To extend the dipstick, push the left hand control lever forward. Push down on the toe of the dipstick speed boost pedal for greater speed.

## DIGGING CONTROL LEVERS

### 4. Bucket Control Pedal

- A. To curl the bucket, push down with the heel of the left foot on the bucket control pedal.
- B. When the bucket control pedal is returned to the neutral position (center), the bucket will remain positioned.
- C. To dump bucket, push down with toe of the left foot on the bucket control pedal.

**A Careful Operator  
IS THE BEST INSURANCE  
AGAINST AN ACCIDENT**