

# HEIN-WERNER AUTOMOTIVE

## INSTRUCTION MANUAL / REPAIR PARTS LIST

MODEL FR-10  
MODEL FR-10.16

CAPACITY 10 TON 6" STROKE  
CAPACITY 10 TON 10" STROKE

PART CODE H48660  
PART CODE H48664

### WARNING

1. READ, STUDY AND UNDERSTAND ALL WARNING LABELS AND OPERATING INSTRUCTIONS FURNISHED WITH THIS EQUIPMENT PRIOR TO USE. IF ANY PORTION OF THIS MATERIAL IS UNCLEAR, CONTACT YOUR REPRESENTATIVE FOR CLARIFICATION.
2. NEVER ALLOW UNSKILLED OR IMPROPERLY TRAINED PERSONNEL TO OPERATE THIS EQUIPMENT.
3. CENTER LOADS ON SADDLE. OFF CENTER LOADS MAY CAUSE DAMAGE TO THE RAM AND/OR LOSS OF LOAD.
4. DO NOT OVERLOAD RAM. OVERLOADING IS OFTEN INDICATED BY BOWING EXTENSION TUBES OR SLIPPING ATTACHMENTS AND CAN RESULT IN PERSONAL INJURY OR DAMAGE TO THE EQUIPMENT.
5. WHEN OFFSET ATTACHMENTS ARE USED, THE RATED CAPACITY IS ALWAYS REDUCED BY 50%. FOR EACH EXTENSION TUBE IN THE SETUP, THE OVERALL CAPACITY IS REDUCED AN ADDITIONAL 50%. REFER TO THE OPERATING INSTRUCTIONS PROVIDED FOR TYPICAL SETUPS AND CORRESPONDING LOAD CAPACITIES.
6. PRIOR TO APPLYING A LOAD, INSURE THAT ALL ATTACHMENTS AND EXTENSION TUBES ARE FULLY ENGAGED.
7. INSURE LOAD IS CENTRALLY APPLIED TO ATTACHMENTS AND RAM SADDLE TO MINIMIZE AN OFF CENTER LOAD CONDITION.
8. ALWAYS USE A PRESSURE GAUGE IN-LINE WITH PUMP AND RAM TO MONITOR THE WORKING PRESSURE WITHIN THE RAM.
9. DO NOT USE THE RAM TO SUPPORT A LOAD. THE LOAD MUST BE SUPPORTED IMMEDIATELY BY OTHER APPROPRIATE MEANS.
10. USE ONLY ON HARD LEVEL SURFACE CAPABLE OF SUSTAINING THE LOAD.
11. DO NOT CONTINUE TO PUMP WHEN RAM IS FULLY EXTENDED.
12. NEVER USE A PUMP WITH AN OPERATING CAPACITY GREATER THAN THE RATED CAPACITY OF THE RAM.
13. USE ONLY HYDRAULIC HOSE OR PLUMBING WITH A MINIMUM WORKING PRESSURE OF 10,000 PSI.
14. BE CERTAIN THAT ALL HYDRAULIC CONNECTORS AND FITTINGS IN THE SYSTEM HAVE A MINIMUM WORKING PRESSURE OF 10,000 PSI.
15. RELEASE ALL HYDRAULIC PRESSURE BEFORE DISCONNECTING HOSES OR ACCESSORIES.
16. USE ONLY HYDRAULIC OIL RECOMMENDED BY THE RAM MANUFACTURER. DO NOT USE BRAKE, TRANSMISSION, OR FIRE RESISTANT OILS OR AUTOMOTIVE FLUIDS.
17. IT IS YOUR RESPONSIBILITY TO KEEP ALL WARNING LABELS AND INSTRUCTIONAL LITERATURE LEGIBLE AND INTACT. REPLACEMENT LABELS AND LITERATURE LEGIBLE AND INTACT. REPLACEMENT LABELS AND LITERATURE ARE AVAILABLE FROM THE FACTORY.
18. FAILURE TO HEED THESE WARNINGS MAY RESULT IN EQUIPMENT AND/OR PROPERTY DAMAGE AND/OR PERSONAL OR FATAL INJURY.

H 311X000

### OWNER'S RESPONSIBILITY

**Operation.** The owner and/or operator shall have an understanding of these operating instructions and warnings before operating the ram. Warning information shall be emphasized and understood. If the user is not fluent in English, the instructions and warnings shall be read to and discussed with the operator in the operator's native language by the purchaser/owner, making sure that the operator comprehends its contents.

**Maintenance.** The ram shall be maintained in accordance with instructions listed under "Maintenance."

#### Inspection

1. Visual inspection shall be made before each use of the ram, checking for leaking hydraulic fluid, and damaged, loose or missing parts.
2. Each ram shall be inspected by an authorized service center immediately, if subjected to an abnormal load or shock.
3. Owners and/or users should be aware that repair of this equipment may require specialized knowledge and facilities. It is recommended that an annual inspection

of the ram be made by an authorized service center and that any defective parts, decals or warning labels be replaced with genuine factory parts. A list of authorized service centers is available from the factory.

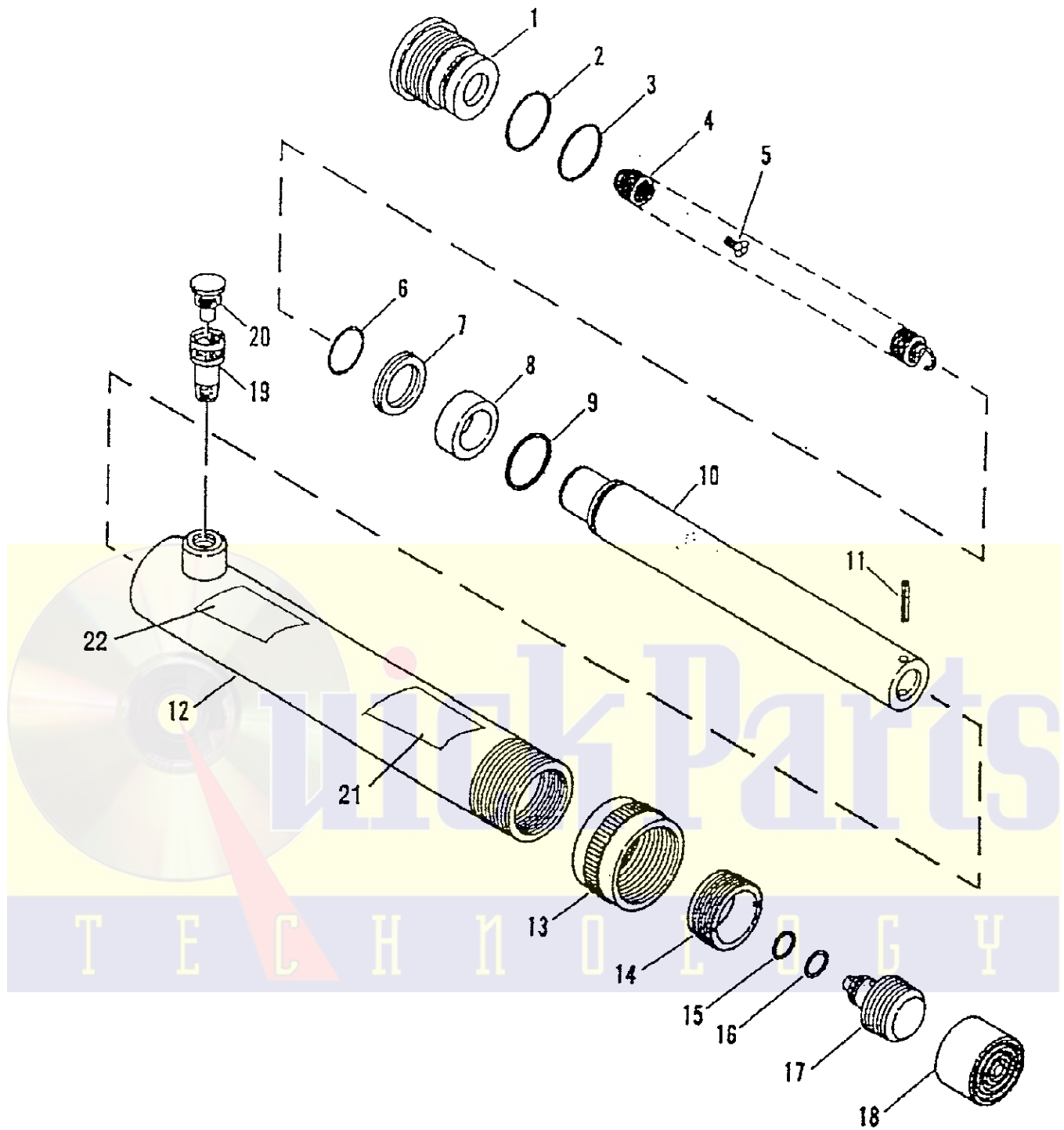
**Damaged Rams.** Any ram which appears to be damaged in any way, is found to be badly worn, or operates abnormally SHALL BE REMOVED FROM SERVICE until necessary repairs are made by an authorized service center.

#### Operation.

1. Always tighten attachments and extension tubes the full thread provided. Use ram for lifting only. Always support load by appropriate means.
2. Center the load on the ram. Off center loads and loads lifted while ram is not level may damage the ram or cause personal injury.

### MAINTENANCE

1. Use only hydraulic Jack oil. Never use alcohol or hydraulic brake fluid.
2. Always keep your ram clean.
3. Keep ram fully retracted when not in use.



ITEM NO.	PART CODE	PART CODE	DESCRIPTION	QTY. REQUIRED
	48660	48664		
1	H1989500	H1989500	Ram Base	1
2*	H1633500	H1633500	Back-Up Ring	1
3*	H1632000	H1632000	O-Ring	1
4	H2085000	H2085500	Extension Spring	1
5	H6534100	H6534100	Flat Head Screw	1
6	H2349000	H2349000	Retaining Ring	1
7*	H6444900	H6444900	U-Cup	1
8*	H6445000	H6445000	Bearing	1
9	H6247400	H6247400	Retaining Ring	1
10	H2011500	H2012500	Ram Plunger	1
11	H2574500	H2574500	Roll Pin	1
12	H0552500	H0553000	Cylinder	1
13	H6393300	H6393300	Collar Thd Protcr	1

ITEM NO.	PART CODE	PART CODE	DESCRIPTION	QTY. REQUIRED
	48660	48664		
14	H2029000	H2029000	Plunger Guide	1
15*	H1626000	H1626000	O-Ring	1
16*	H1628000	H1628000	Back-Up	1
17	H2058500	H2058500	Head-Thd Rom	1
18	H2251000	H2251000	Saddle	1
19	H0563000	H0563000	Quick Coupler	1
20	H4624500	H4624500	Dust Cover	1
21	H3234400	H3234500	Product Decal	1
22	H3113000	H3113000	Warning Decal	1
23	H8080700	H8080700	Repair Kit	1
			(not shown)	1

\* Included in Repair Kit