

**HEIN-WERNER
AUTOMOTIVE**



INSTRUCTION MANUAL REPAIR PARTS LIST

4 TON BODY/ FRAME REPAIR KIT

PART CODE H67700

WARNING

1. READ, STUDY, AND UNDERSTAND ALL WARNINGS AND OPERATING INSTRUCTIONS FURNISHED WITH THIS EQUIPMENT BEFORE USE.
2. THIS EQUIPMENT IS DESIGNED FOR USE ONLY WITH HEIN-WERNER SPRINT, OR WINNER SERIES BODY/FRAME EQUIPMENT AND ATTACHMENTS. USE WITH ANY OTHER EQUIPMENT MAY RESULT IN OVERLOADING, REDUCED LOAD CAPACITY, REDUCED STABILITY, AND/OR SYSTEM FAILURE.
3. DO NOT OVERLOAD. OVERLOADING IS OFTEN INDICATED BY BOWING EXTENSION TUBES OR SLIPPING ATTACHMENTS AND CAN RESULT IN PERSONAL INJURY OR DAMAGE TO THE EQUIPMENT.
4. MAINTAIN PROPER OIL LEVEL. OVERFILLING MAY CAUSE DAMAGE TO, OR FAILURE OF THIS EQUIPMENT.
5. WHEN OFFSET ATTACHMENTS ARE USED, THE RATED CAPACITY IS ALWAYS REDUCED BY 50%. FOR EACH EXTENSION TUBE USED IN THE SETUP, THE OVERALL RATED CAPACITY IS REDUCED AN ADDITIONAL 50%. REFER TO OPERATING INSTRUCTIONS PROVIDED FOR TYPICAL SETUPS AND CORRESPONDING LOAD CAPACITIES.
6. DO NOT OPEN FILLER SCREW FOR ANY REASON, UNLESS RAM IS FULLY RETRACTED.
7. DO NOT CONNECT PUMP TO ANY RAM THAT IS EXTENDED OR PARTIALLY EXTENDED.
8. PRIOR TO APPLYING A LOAD, INSURE THAT ALL ATTACHMENTS AND EXTENSION TUBES ARE FULLY ENGAGED.
9. INSURE LOAD IS CENTRALLY APPLIED TO ATTACHMENTS AND RAM SADDLE TO MINIMIZE AN OFF CENTER LOAD CONDITION.
10. HEIN-WERNER RECOMMENDS THE USE OF A FORCE GAUGE TO VERIFY THE ACTUAL LOAD BEING APPLIED FOR VARIOUS TYPES OF SETUPS USED.
11. IT IS THE OWNER'S RESPONSIBILITY TO KEEP DECALS LEGIBLE AND INTACT. REPLACEMENT DECALS ARE AVAILABLE FROM AUTHORIZED SERVICE CENTERS OR THE FACTORY.
12. FAILURE TO HEED THESE WARNINGS MAY RESULT IN LOSS OF LOAD, DAMAGE TO EQUIPMENT AND/OR FAILURE RESULTING IN PROPERTY DAMAGE, PERSONAL OR FATAL INJURY.

OWNER'S RESPONSIBILITY

Operation. The owner and/or operator shall have an understanding of these operating instructions and warnings before operating this equipment. 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. This equipment shall be maintained in accordance with instructions listed under "Maintenance."

Inspection

1. Visual inspection shall be made before each use of this equipment checking for leaking hydraulic fluid, worn or damaged hose and fittings, and damaged or bent extension tubes or attachments.

2. Each piece of equipment shall be inspected by an authorized Hein-Werner 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 this equipment be made by an authorized Hein-Werner service center and that any defective parts, decals or warning labels be replaced with genuine Hein-Werner parts. A list of authorized service centers is available from Hein-Werner.

Damaged Equipment. Any equipment 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 Hein-Werner service center.

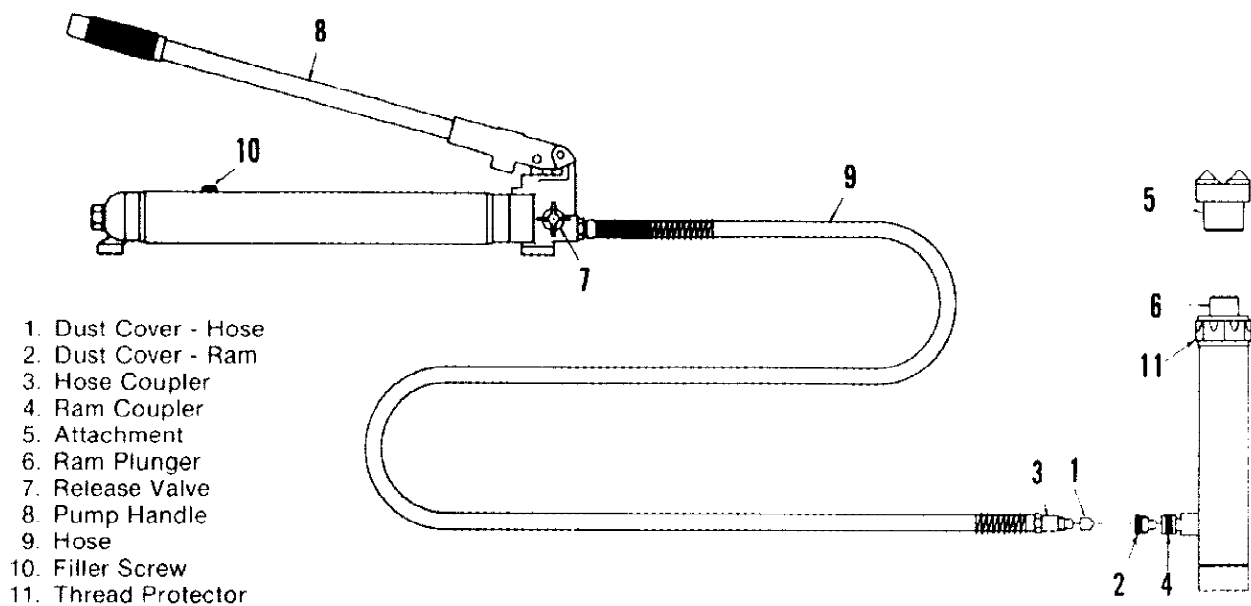


FIGURE 1

BASIC PRINCIPLES OF OPERATION (See Figure 1)

1. To prepare the pump and ram for operation, remove dust covers (1 and 2) from hose coupler (3) and ram coupler (4). Connect hose coupler to ram coupler and thread retaining ring on to hold hose in position. Select an appropriate attachment (5) and assemble onto ram plunger (6). Make sure attachment is properly sealed on plunger.

If attachment threads onto ram - remove and retain thread protector for reuse - assemble attachment to ram

2. The use of extension tubes or off-center attachments such as plunger or ram toes can significantly reduce the capacity of the system. When using extension tubes, never put the shortest tubes in the middle of the setup - they should always be on the ends.
3. **Operation.** To operate - close the release valve (7) by turning clockwise until snug (do not overtighten). Operate pump handle (8) which pumps oil through hose (9) to the ram, causing the ram plunger (6) to extend until it contacts the workpiece. Continue pumping until the desired operation is completed.

NOTE

The pump is equipped with an overload valve that will by-pass (pump oil back into reservoir) when the system reaches maximum pressure. At this point, continued pumping will have no effect on system.

Be careful, however, to watch for signs that the system is overloading or that the equipment setup is unstable. If bowing of extension tubes or shifting of attachments occurs - release the pump immediately and reposition equipment. Continual overloading on a given workpiece may indicate that a higher capacity bodyframe kit should be used.

To release the pump and retract the ram plunger, slowly turn the release valve (7) counterclockwise. The release speed can be controlled by the amount the release valve is turned.

PUMP OPERATING POSITIONS (See Figures 2 and 3)

When the pump is used in a horizontal position, the handle must be on top as shown in figure 2. When the pump is used in a vertical position, the hose must be pointed downwards (fig. 3). Any other position will prevent oil from being pumped into the hose and ram.

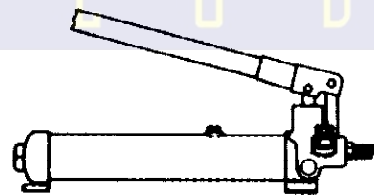


FIGURE 2

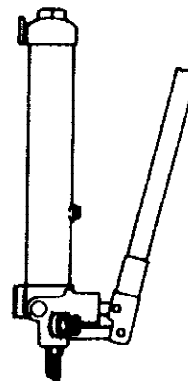


FIGURE 3

MAINTENANCE

1. When the equipment is not in use, keep the ram retracted and the pump release valve closed.
2. Keep equipment clean. Lubricate moving parts on pump handle. Store in box when not in use. Avoid sharp kinks in hose.
3. Check oil level frequently. With ram fully retracted, pump must contain 8 fluid ounces of hydraulic jack oil. Add or drain oil as necessary to maintain proper oil level. Replace filler plug. Use only Hein-Werner hydraulic jack oil. Do not use brake fluid.

OPERATION

TROUBLESHOOTING

1. Occasionally during transit or storage, or through use, the pump or ram can become low on fluid, or air can be introduced into the system causing it to become "air-bound."
2. To bleed hydraulic system - place pump in a horizontal position and place ram so that the ram plunger is pointed downward (Figure 4). The ram and hose must be lower than the pump discharge port. Open release valve fully, and pump handle full stroke 10-12 times. Close release valve. Pump to extend ram plunger fully, then release. Repeat two or three times if required.

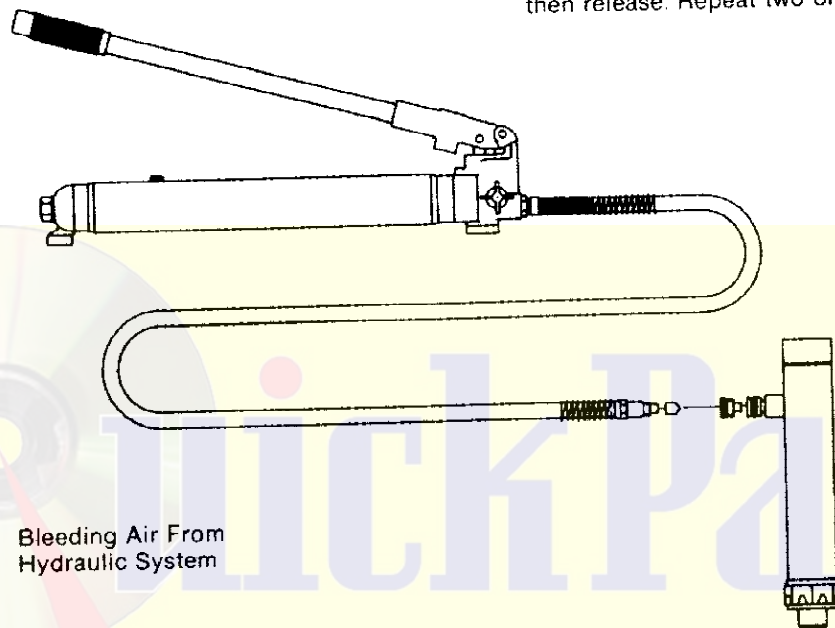
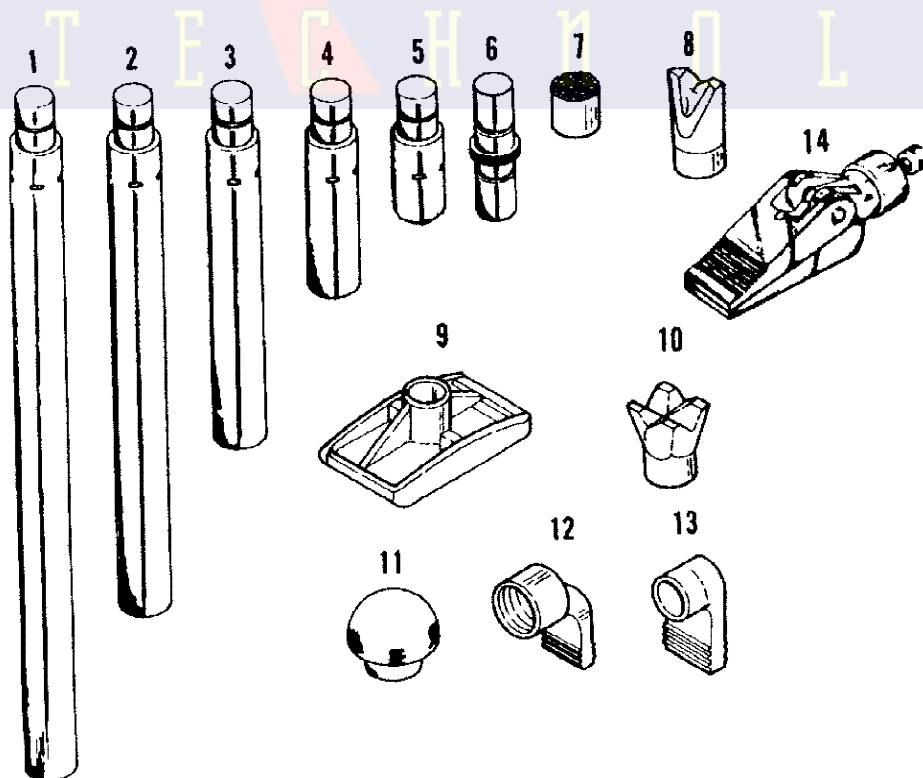


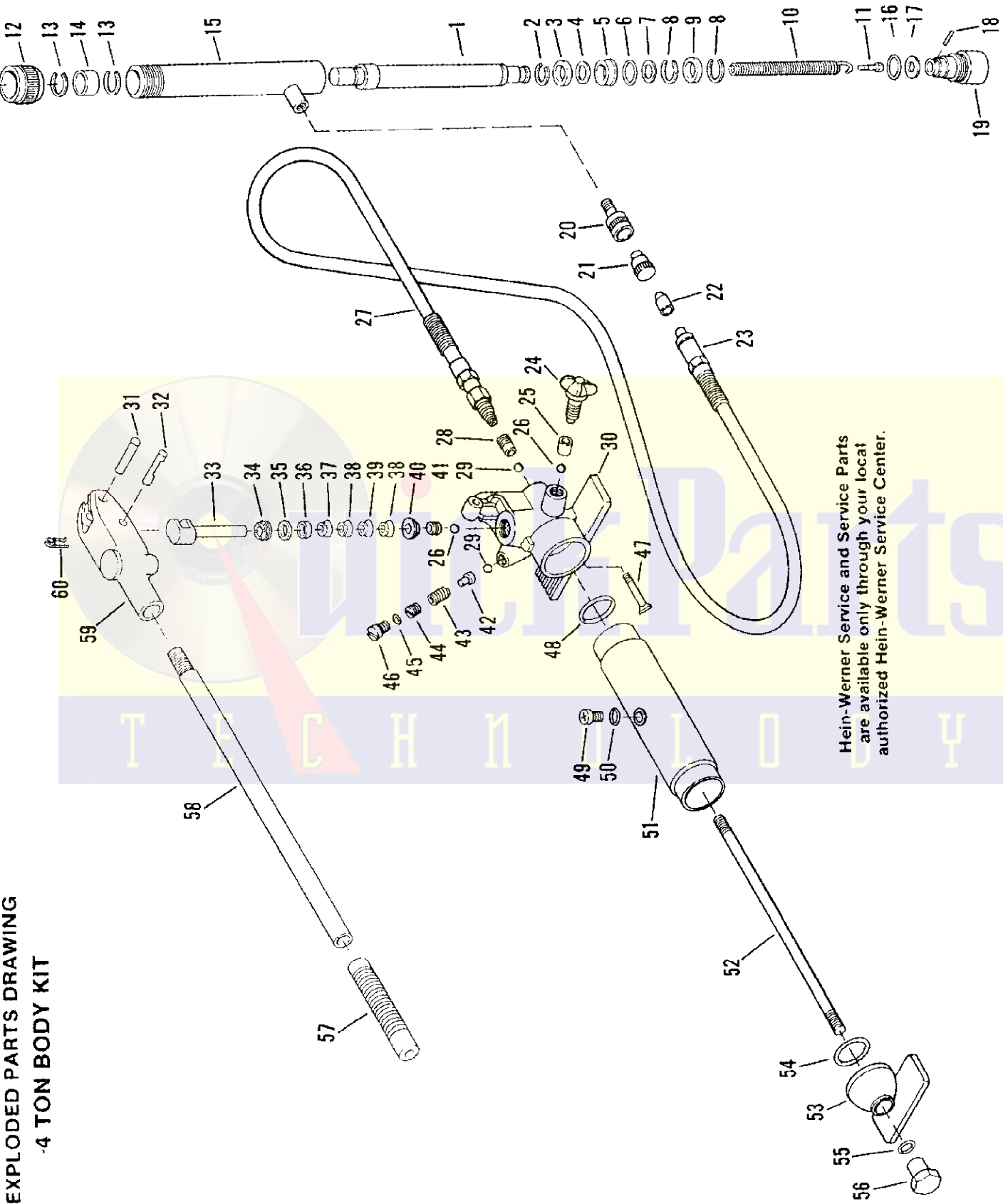
FIGURE 4



ATTACHMENTS

1. 67718 19-1/2" Extension Tube
2. 67717 16-1/2" Extension Tube
3. 67716 8-1/2" Extension Tube
4. 67715 6" Extension Tube
5. 67714 3" Extension Tube
6. 67706 Male Connector
7. 67707 Serrated Saddle
8. 67710 Wedge Head
9. 67713 Flat Base
10. 67709 90° Comb. Head
11. 67708 Rubber Head
12. 67712 Ram Toe
13. 67711 Plunger Toe
14. 67705 Hydraulic Spreader

EXPLODED PARTS DRAWING
-4 TON BODY KIT



Hein-Werner Service and Service Parts
are available only through your local
authorized Hein-Werner Service Center.

4 TON BODY KIT PART CODE H67700

Item No.	Part Code	Description	Qty. Required
1	69355	Ram Plunger	1
2	69286**	Snap Ring	1
3	69275	Collar	1
4	69289**	Back-Up, Ring	1
5	63977**	U-Cup	1
6	69297**	"O" Ring	1
7	69299	Washer	1
8	69340**	Internal Snap Ring	2
9	69283**	Bushing	1
10	69359	Spring	1
11	69345	Hex Head Bolt	1
12	69476	Thread Protector, Ring	1
13	69284**	Retaining Ring	2
14	69358	Cylinder Collar	1
15	69357	Cylinder	1
16	69352**	"O" Ring	1
17	69287	Back-Up, Ring	1
18	69475	Spring Pin	1
19	69288	Cylinder Base	1
20	69477	Quick Coupler - Female	1
21	69356	Dust Cover - Female	1
22	69291	Dust Cover - Male	1
23	69478	Quick Coupler - Male	1
24	69343	Release Valve	1
25	69522*	Packing - Release Valve	1
26	69415*	Ball 1/4"	2
27	67704	Hose	1
28	69298	Bolt Plug	1
29	69414	Ball 3/16"	2
30	69295	Base	1
31	69351	Pin - Socket	1
32	69292	Pin - Piston	1
33	69348	Piston - Pump	1

Item No.	Part Code	Description	Qty. Required
34	69296	Screw Adjustment	1
35	69293	Washer	1
36	69279*	Upper Seal Base	1
37	69294*	"V" - Oil Seal	1
38	69479*	"V" - Oil Seal	1
39	69278*	"V" - Oil Seal	4
40	69277*	Lower Seal Base	1
41	69276*	Cup Filter	1
42	69434	Spring Cup	1
43	69281*	Spring Safety Valve	1
44	69341	Screw Safety Valve	1
45	69282*	"O" Ring Safety Valve	1
46	69342	Screw Protector Safety Valve	1
47	69417	Filter	1
48	69280*	"O" Ring	2
49	69436	Filler Screw	1
50	69437*	"O" Ring Filler Screw	1
51	69344	Reservoir	1
52	69339	Bolt Rod	1
53	69346	Bracket	1
54	69280	"O" Ring Reservoir	1
55	69285*	"O" Ring	1
56	69347	Nut	1
57	69354	Rubber Hand Grip	1
58	69353	Handle	1
59	69350	Handle Sleeve	1
60	69409	Retaining Pin	1
61	67721	Ram - Product Decal	1
62	67722	Pump - Product Decal	1
63	68528	Pump - Warning Decal	1
	67701	Pump Assembly Only	1
		(Not shown)	
	67702	Ram Assembly Only	1
		(Not shown)	

*Denotes 69669 Pump Repair Kit

**Denotes 69670 Ram Repair Kit

TYPICAL HOOK-UP AND LOAD CAPACITIES

The capacity of this equipment is significantly affected by the number of attachments used, and the type of load applied. (See warnings on page 1.) Several typical hook-ups are illustrated below. The approximate load capacity

of each set up is noted with the illustration. When using two or more extension tubes together, always position the shortest tube, farthest away from the ram.

