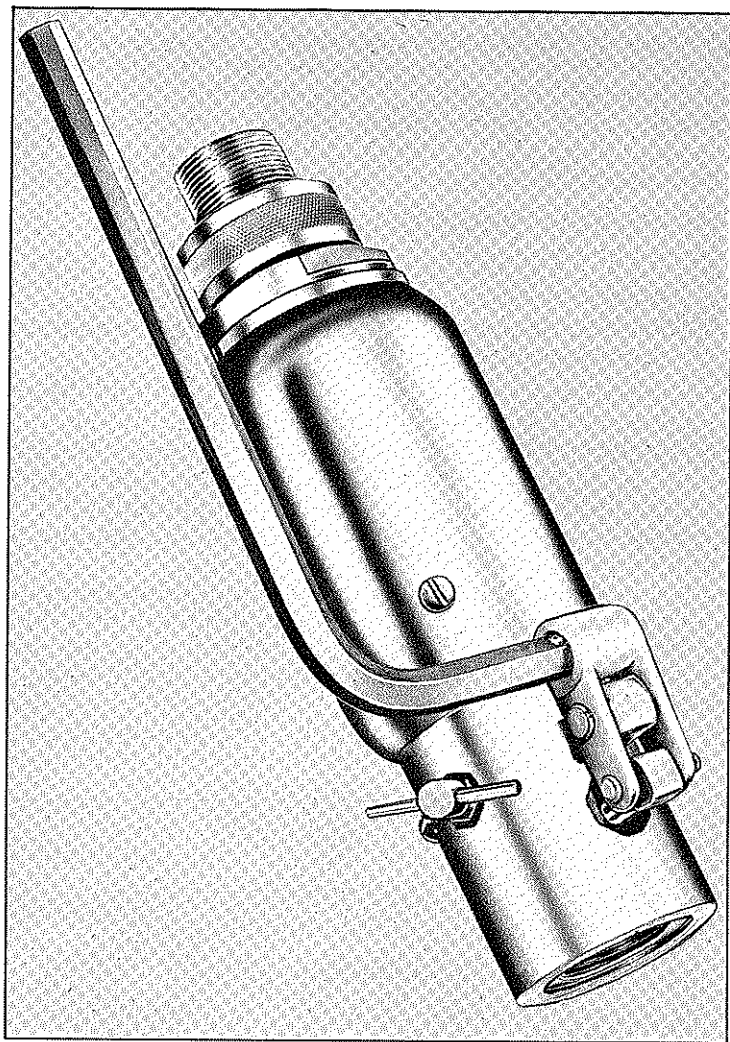


Instructions



Snap-on

10 Ton Body Jack Set

THE HYDRA-RAM

HYDRA-RAM supplies the power for your HYDRA-PAK set — extensions and attachments, used singly or in combinations, are easily screwed into the base, on the top, or on the plunger. HYDRA-RAM is compact, designed for one-man operation, and develops 10 tons of hydraulic power . . . yet you have absolute control at every moment.

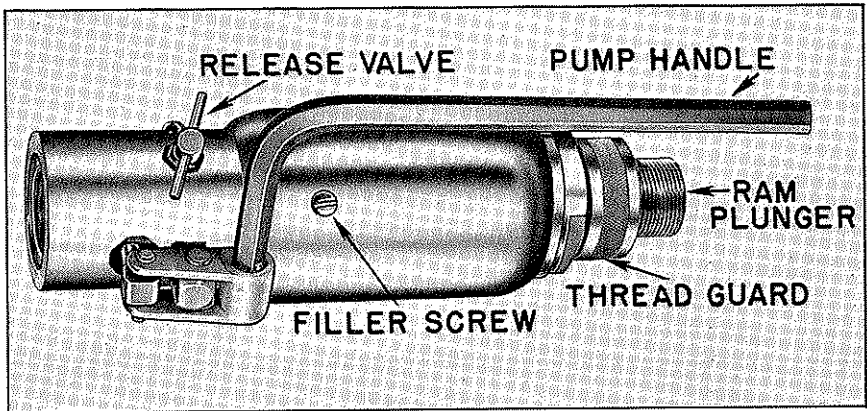
No more cramped working quarters. You can use HYDRA-RAM in any position that is most convenient for you. Use HYDRA-RAM vertically, horizontally, or angled . . . right side up, or upside down. The pump handle can be inserted in any position that is most convenient for you — from either side, at any of the 12 different angles, with either the short end or the long end of the hexagon handle engaged.

TO OPERATE YOUR HYDRA-RAM:

- 1 — Close the release valve by turning it as far to the right (clockwise) as it will go.
- 2 — Place the handle in the double-hexagon opening in any position that gives convenient handle movement.
- 3 — When you pump the handle, oil is forced into the plunger of the ram and it is extended under pressure.

TO RELEASE PRESSURE (retract the ram plunger), just turn the release valve to the left — HYDRA-RAM is equipped with a special retracting spring which draws the plunger back automatically. When you're through with a job, tighten the release valve again and your HYDRA-RAM is ready for the next use.

When fastening attachments to the ram plunger, always use the spanner wrench supplied with your HYDRA-RAM to hold the ram plunger stationary while tightening the attachment. This lets you tighten the attachment quicker and avoids the possibility of twisting the retracting spring.

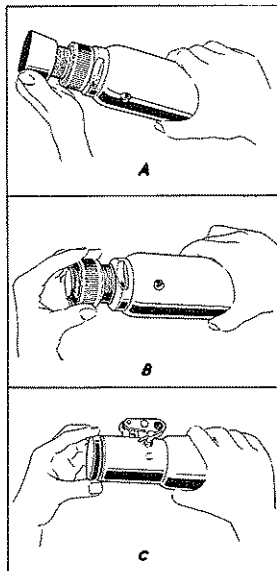


If you use **HYDRA-RAM** without attachments, be sure to use the serrated plunger saddle (BJ-10-13) as in Illustration A, the thread guard on the body threads as in Illustration B, and base plate (BJ-10-28) as in Illustration C. This is also a handy setup to fully protect all of the **HYDRA-RAM** threads when you're not using it.

REFILLING YOUR HYDRA-RAM is seldom required since its entire operation is within a single, compact unit. If fluid is lost through leakage or tampering, it's a good idea to send the unit to the factory for repacking, refilling, and thorough inspection, which is handled at a nominal charge.

In an emergency where time does not permit a return to the factory, close the release valve and extend the ram plunger three inches. Lay the **HYDRA-RAM** on its side with the filler screw up and remove the filler screw. Add fluid until the reservoir overflows. Replace the filler screw and your **HYDRA-RAM** is ready for use.

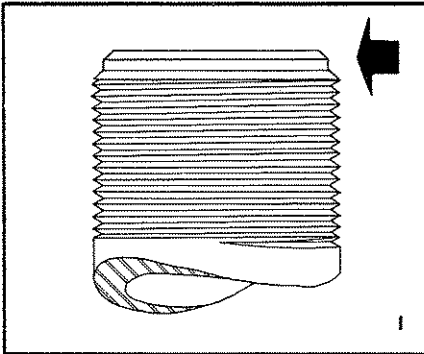
Caution: Use a good grade of hydraulic jack fluid when refilling your **HYDRA-RAM** — do NOT use hydraulic brake fluid.



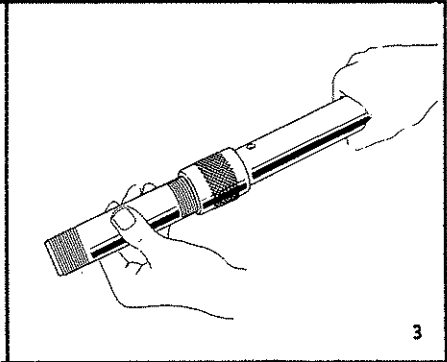
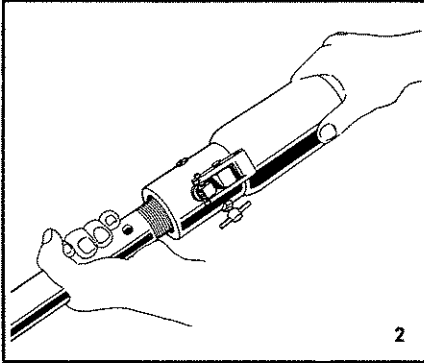
EXTENSIONS AND ATTACHMENTS

HYDRA-PAK attachments are made of malleable castings and alloy steel forgings . . . each attachment being designed for its part in pushing, pulling, clamping, pressing, bending, and spreading operations. All **HYDRA-PAK** Extension Tubes are made of fine 1½" seamless steel tubing, tested to withstand maximum pressures of **HYDRA-RAM** with a generous margin of added strength for safety. Extensions are threaded for quick and positive assembly on the job . . . and the threads are protected from becoming burred in normal use, or by dropping, by special **SAF-T-ENDS** (shown by the arrow in Figure 1).

To assure a rigid unit and long thread life, connect all extensions and attachments solidly, using the full length of the thread (Figure 2). This solidly bottoms one piece of metal against the other instead of throwing the strain on the threads alone.



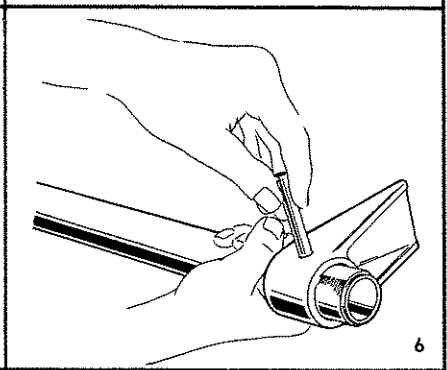
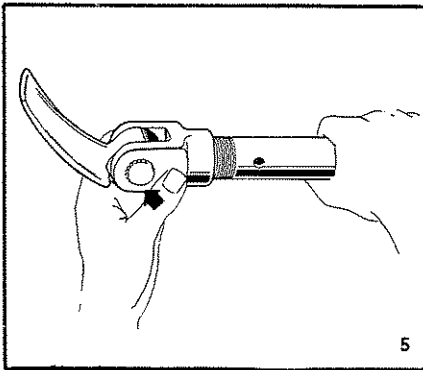
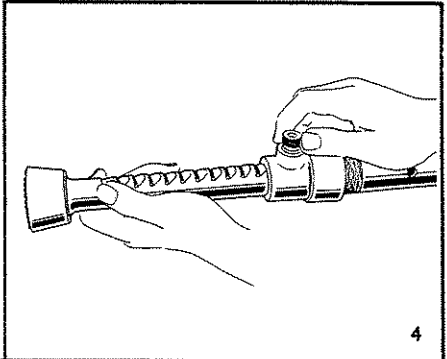
An **EXTENSION COUPLER** is furnished in your **HYDRA-PAK** set. The continuous thread inside this coupler lets you butt solid metal against solid metal when joining tubes together or joining an extension tube to the ram plunger. (Figure 3.)



KWIXTENSION saves time in making a setup on the job. An exclusive feature in **HYDRA-PAK**, this extension attachment gives you 14 positions with quick extensions from 4" to 11 $\frac{3}{4}$ " length. No need to change extensions on a body job or other work of less than six tons — a pull on the pad end extends the **KWIXTENSION** to any of the 14 positions. To retract, just lift the knurled knob and slide the extension back to its original length (Figure 4)

TWO ADJUSTABLE SPOONS that are interchangeable without removing the setup from the car are each adjustable to 12 positions to suit the particular job. To adjust them, simply push out the locking pin (shown by the arrow in Figure 5) until the spoon is free to turn, adjust the spoon to the position you want, and push the locking pin back into place.

ADJUSTABLE CLAMPS can be set in any of several positions along the length of any extension. Just insert one of the steel pins through the hole in the clamp and the hole in the extension tube (Figure 6). In addition to clamping operations, this clamp is a big help where offset pushing is necessary.

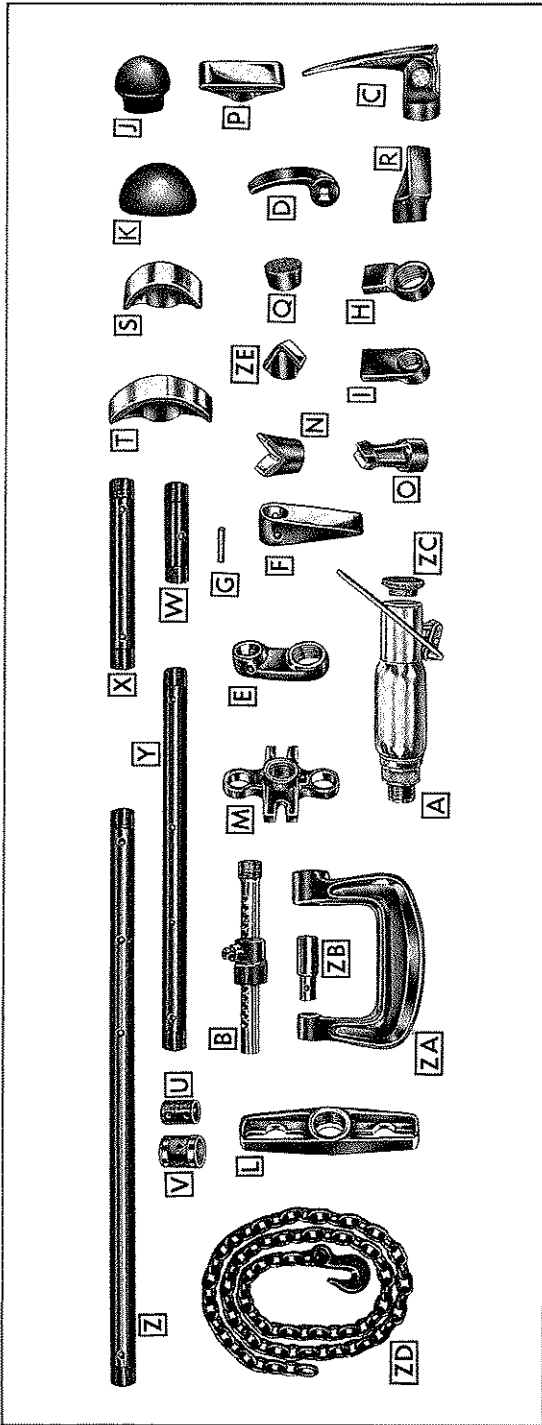


GUARANTEE

All HYDRA-PAK parts and attachments are guaranteed against defects in workmanship and materials. In the case of the HYDRA-RAM power unit, this guarantee* is limited to a period of 90 days from date of purchase.

Free replacements will be made on any HYDRA-PAK parts or attachments that fail to give this guaranteed service. (All HYDRA-RAMS and attachments repaired or serviced by the factory will be guaranteed the same as new equipment.)

*In order to qualify your Hydra-Ram for the guarantee, please fill in and mail promptly the addressed, post-paid registry card packed with it.



CONTENTS OF BJ-10 SET

Key Letter	Stock No.	Description
A	BJ-10-1E	Hydra-Ram Power Unit
B	BJ-10-2	Kwixtension
C	BJ-10-3	Adjustable Body Spoon Complete with BJ-10-3-2 Large Dolly Blade
D	BJ-10-3-3	Small Dolly Blade for BJ-10-3 Adjustable Spoon
E	BJ-10-4-1	Extension Tube Clamp Head
F	BJ-10-4-2	Clamp End Toe
G	BJ-10-4-3	Clamp Toe Lock Pin (2 included)
H	BJ-10-5-1	Spreader Toe
I	BJ-10-5-2	Spreader Plunger Toe
J	BJ-10-6	Small Plastic Pad
K	BJ-10-7	Large Plastic Pad
L	BJ-10-8	Large Chain Pull Plate
M	BJ-10-9	Small Chain Pull Plate (2 included)
N	BJ-10-10	Large 90° V-Base
O	BJ-10-11	Small 90° V-Base (2 included)
P	BJ-10-12	Flat Base Pad
Q	BJ-10-13	Serrated Plunger Saddle
R	BJ-10-14	Wedge End
S	BJ-10-15	3" Radius Pad
T	BJ-10-16	5" Radius Pad
U	BJ-10-17	Pad Coupler
V	BJ-10-18	Tube Coupler
W	BJ-10-21	6" Seamless Steel Extension Tube
X	BJ-10-22	12" Seamless Steel Extension Tube
Y	BJ-10-23	24" Seamless Steel Extension Tube
Z	BJ-10-24	36" Seamless Steel Extension Tube
ZA	BJ-10-27	"C" Clamp
ZB	BJ-10-27-1	"C" Clamp Adaptor
ZC	BJ-10-28	Hydra-Ram Base Plate
ZD	BJ-10-29A	Special $\frac{3}{8}$ " Alloy Chain (2 included)
ZE	BJ-10-31	90° Angle Base Pad

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