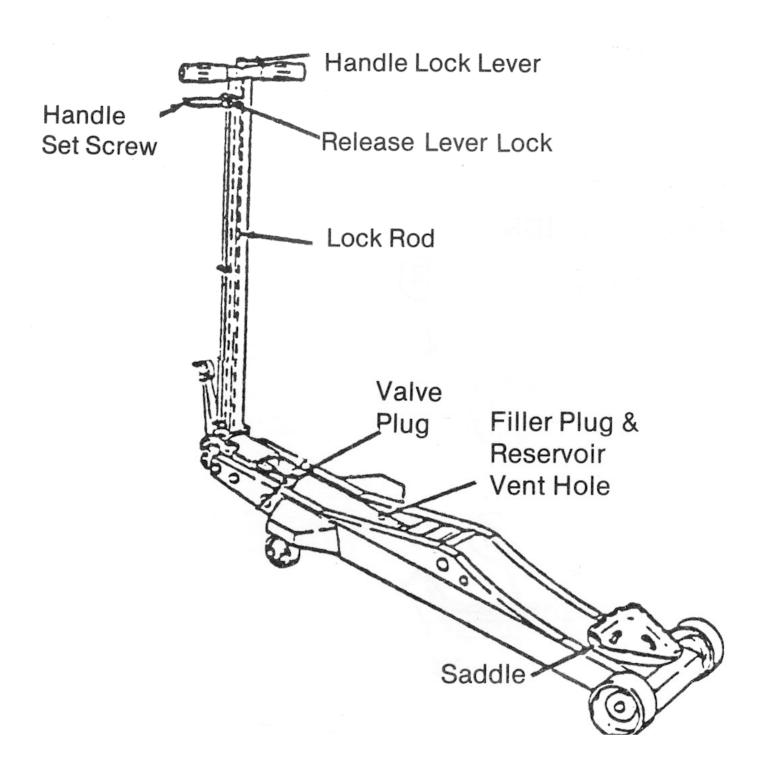


WA-72B, WA-73B, WA-75B, & WA-85

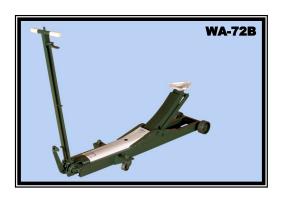
OPERATION & SERVICE INSTRUCTIONS

Weaver Jack Corporation 343 Lawrence Street Adrian, MI 49221 (517) 263-6500

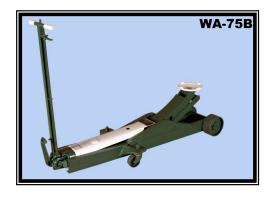


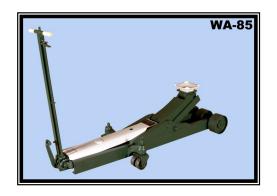
Weaver Jack Model Specifications

MODEL	CAPACI- TY	FRONT WHEELS	SADDLE STYLE AND SIZE	FRAME LENGTH	JACK WEIGHT
WA-72B	2 TONS	2 WHEELS - 4" DIAMETER	TRIANGULAR OR ROUND 5" TO 6"	51"	136 LBS
WA-73B	4 TONS	2 WHEELS - 5" DIAMETER	TRIANGULAR OR ROUND 5" TO 6"	58"	212 LBS
WA-75B	10 TONS	2 WHEELS - 7" DIAMETER	ROUND 9"	66"	356 LBS
WA-85	20 TONS	2 WHEELS - 7" DIAMETER	ROUND 7"	69"	531 LBS









Assembly of a New Weaver Jack

- 1. Check the handle set screw for tightness.
- 2. On the **WA-85 only**: Remove and discard the vent filler plug. This is very important, as the vent hole must always be kept open so the jack can "breathe". The other models have a breathable vent built into the cap.
- 3. Loosen the piston ram and pump packing nuts slightly. They are tightened all the way down at the factory for shipment. Tighten until no oil seeps out; they only need to be moderately tight.

Operation of a Weaver Jack

WARNING! Always use stands to support the vehicle before attempting undervehicle repairs or inspections. Always follow OSHA Workplace Safety Standards.

- 1. Use the jacks on a smooth, hard, level surface only. Use the jack as a lifting device only.
- 2. Test the jack by using the food pedal only to raise the saddle to full height without a load. The pedal should become very tight. If not, check the oil level or see the troubleshooting section.
- 3. The jack is easily maneuvered by depressing the handle lock lever until the lock rod engages one of the two handle positions, and then pivoting the jack on its rear casters.
- 4. Place the jack in position so that the saddle will engage an approved lifting area of the vehicle. The saddle is raised to the contact point by the foot pedal. Lift the load using the long handle do not lift loads with the foot pedal alone. On low clearance vehicles, it is often advantageous to operate the foot pedal by hand while watching to assure proper saddle contact. The surface on which the jack rests should be fairly flat to prevent twisting of the frame. The load should be centered in the saddle.
- 5. Pump with the handle for easy lifting. Do not attempt to raise the jack beyond its travel stops.
- 6. To lower the load, pull back gently on the release lever. Always lower the load slowly.
- 7. Be certain that the area beneath the vehicle is clear before lowering the vehicle. Always use the release lever lock to prevent unintentional operation of the release lever.

Refilling the Jack with Oil

- Remove the filler plug and with the saddle down, put in AW-32 Light Hydraulic Oil (or an oil that meets MIL-F-17111 011 specifications) until the level comes up to within 1/4" to 3/8" below the filler hole.
- Overfilling will cause oil to squirt out of the vent hole as the jack is lowered, or may prevent the jack from lowering properly.
- Insufficient oil will cause the jack to lift only part of the way up.
- Always be sure to put in oil only when the saddle is all the way down.
- Be careful not to let any dirt get into the reservoir while the filler plug is out.

*DO NOT USE BRAKE FLUID, TRANSMISSION FLUID, OR ANY OTHER FLUIDS! DO-ING SO COULD DAMAGE THE SEALS AND CAUSE THE JACK TO FAIL!

Overload Protection

The lowering valve (release valve) is also designed to work as an overload protection device. If you attempt to raise a load that exceeds the jack's rated capacity, this valve will automatically release the cylinder pressure as an overload protection safety feature.

Safety Precautions

- Follow OSHA Standards and ASME PALD Part 10 Instructions.
- Never exceed the jack's rated load capacity.
- Only lift vehicles at the recommended lift points found in the vehicle's service manual.
- Eye protection should be worn per OSHA recommendations.
- Always use the jack on a smooth, hard, level surface.
- Keep the load centered on the saddle.
- Always check the jack prior to each use and do not use jack if any defect is observed.
- Do not add accessories or make any modifications to the jack in any way.
- Always use jack stands under the vehicle and stay clear when lifting or lowering the vehicle.

Preventative Maintenance

- Inspect the jack before each use. Take corrective action before using the jack if a leak or defect is detected.
- Keep all working parts thoroughly lubricated. Keep the jack clean. Dirt is the major cause of jack failure, and all openings should be kept free of debris.
- Packing nuts at the piston and pump plunger should be kept moderately tight.
 The packing are NOT under high pressure, and should only be tight enough to prevent leakage.
- Keep oil filled to within 1/4" to 3/8" of fill opening. Replace the oil at least once per year.
- Ball valve may be removed for inspection and cleaning by removing the ball chamber plug and using a small magnet. Remove the ball and the ball weight.
- **Important:** Whenever it is necessary to loosen or remove the ball chamber plug, the gasket should be replaced with a new one. Oil leakage at this point is usually caused by trying to reuse an old gasket over again.

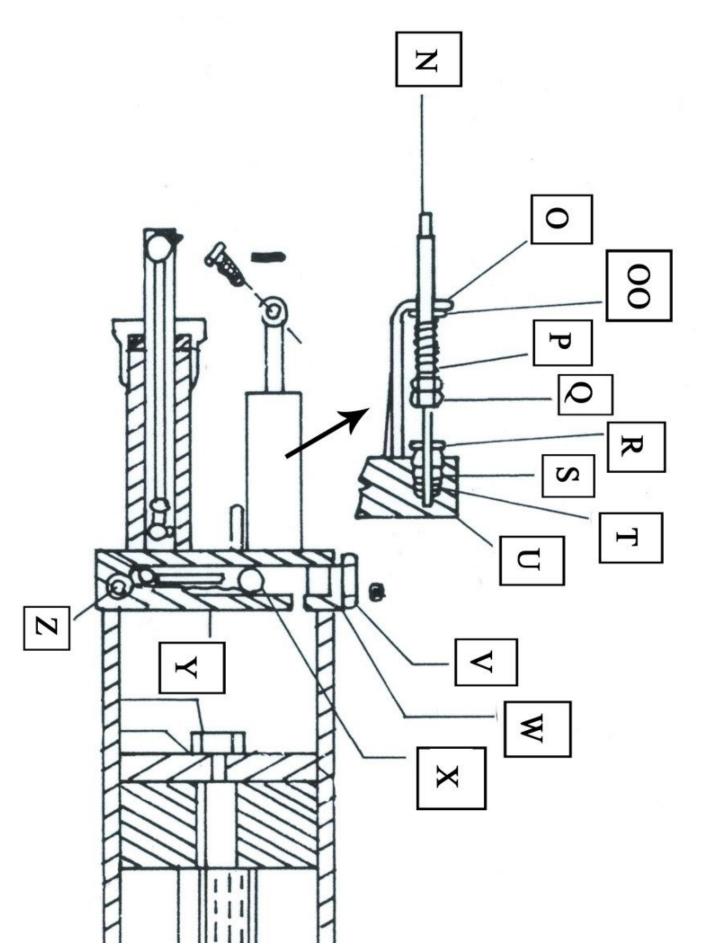
Relieve When Air-Bound

- If the oil supply runs too low, the jack may become air-bound and work on only a half stroke of the handle.
- Fill the jack with oil, raise the saddle, and then using the release lever (lowering lever), lower the saddle while holding the foot pedal depressed. This will flush out any air in the system, and excess oil may then run out of the vent.
- Repeat if necessary.
- Be sure to properly fill the jack with oil before returning it to service.
- Oil should never cover the piston rod.
- If you cannot pump the jack saddle to full height, raise the saddle by hand and then perform this operation.

Troubleshooting

ISSUE	CORRECTIVE ACTION
Saddle will not raise:	 Check the oil level. Perform the ball valve test.
Oil spurts out of the vent hole:	1. The jack is overfilled with oil.
Jack will only lift part of the way up:	1. It may be low on oil; check and refill.
Jack will not lift load:	 Check for proper oil level. If pumping fails to raise the rated load, the lower ball valve may be leaking, and it should be inspected for dirt or other obstructions.
The load rises on the down stroke of the handle and then immediately settles back down while forcing the jack handle back up:	The upper ball valve may be leaking, and it should be inspected for dirt or other obstructions.
Jack bleeds down while under load:	 The release handle may not be closed. The release valve may be leaking. Replace the release valve packing housing O-rings. The release needle valve may need to be adjusted.
Jack only rises on half-stroke, and then settles back down while forcing the hand back up:	1. The jack may be air-bound.

Release Valve Group and Ball Valve Assembly Derail



Ball Valve Test

- 1. If the jack will not raise at all, the ball valve may be obstructed by debris.
- 2. Open the release valve and keep it open.
- 3. Raise the saddle lift arm manually to full height.
- 4. Lower the saddle by pushing it all the way down (this will flush out any debris in the ball seats).
- 5. Close the release valve and try to pump up the jack.
- 6. If it now will raise and hold, then the ball valve may need to be serviced.

Ball Valve Replacement

- 1. Remove the ball chamber plug (V).
- 2. Remove the two balls (X&Z) and the ball weight (Y).
- 3. Reassemble with the two new balls (X&Z), new plug gasket (W), and existing ball weight (Y) between the two balls.

Note: Whenever it is necessary to loosen or remove the ball chamber plug, the gasket (W) should be replaced with a new one. Oil leakage at this point is usually caused by trying to reuse an old gasket.

Release Valve Group (Upper) and Pump Assembly (Lower)



Release Group Needle Valve Adjustment

In the release group assembly, the spring governs the load that the jack will lift. When the pressure within the cylinder overcomes the spring tension, the release valve floats off the seat. It is imperative that the release valve floats freely in the release group assembly. To check: use your forefinger and thumb to grasp the release valve where the release clevis pin passes through and wiggle it from side to side. There should be a minimum of .002 to .004 clearance in the release valve guide (OO). If no movement is noted, follow the steps below:

- 1. Measure the distance from the bracket (O) to the first nut (P) on the compression spring accurately and write it down (approximately two inches).
- 2. Remove nuts (P&Q), the spring, the valve rod (N), and the valve guide (OO). It is not necessary to loosen the packing nut.
- 3. Insert the valve rod (N) through the bracket's (O) opening.
- 4. Slide the release valve guide (OO) onto the rod, but not seated in the hole, and insert the rod (N) into the packing nut's (R) opening.
- 5. Gently tap the end of the release rod (N) with a hammer until it stays firmly seated in the internal needle seat.
- 6. Slide the release valve guide (OO) towards the bracket (O). Normally it will fit smoothly into the bracket hole. Note where the center alignment of the rod in the bracket hole is off. Tap the welded bracket accordingly with a hammer to gently bend the bracket and correct the misalignment. It is in alignment when you can smoothly slide the valve guide into the bracket's hole.
- 7. Reassemble the release valve and parts.
- 8. Tighten the adjusting nut (P) to the original dimension you wrote down in step 1 and lock this with nut (Q).
- 9. Test the jack for proper operation.