



2 TON ONE-END FRAME LIFT

Model 33795

ASSEMBLY and OPERATING INSTRUCTIONS



3491 Mission Oaks Blvd., Camarillo, CA 93011
Visit our Web site at <http://www.harborfreight.com>

**TO PREVENT SERIOUS INJURY,
READ AND UNDERSTAND ALL WARNINGS
AND INSTRUCTIONS BEFORE USE.**

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For technical questions and replacement parts, please call 1-800-444-3353

Specifications

Maximum Capacity	2 Tons
Reach	17'-1/4"
Overall Dimensions	35-1/2" x 30" x 56-1/2" H
Pad Adjustment Range	18" to 57"
Saddle Height	11" to 36"
Recommended Air Pressure	125 PSI
Maximum Air Pressure	145 PSI
Hydraulic Oil Type	ISO VG 32 Hydraulic Oil (Extreme temperature conditions may require an oil with a different viscosity – consult a qualified technician.)
Air Consumption	5 CFM @ 125 PSI
Air Inlet	1/4" NPT

Save This Manual

You will need the manual for the safety warnings and precautions, assembly instructions, operating and maintenance procedures, parts list and diagram. Keep your invoice with this manual. Write the invoice number on the inside of the front cover. Keep the manual and invoice in a safe and dry place for future reference.

Safety Warnings and Precautions

WARNING: When using the Frame Lift, basic safety precautions should always be followed to reduce the risk of personal injury and damage to equipment.

Read all instructions before using this product!

1. **Keep work area clean.** Cluttered areas invite injuries.
2. **Observe work area conditions.** Do not use machines or power tools in damp or wet locations. Don't expose to rain. Keep work area well lit. Do not use electrically powered tools in the presence of flammable gases or liquids.
3. **Keep children away.** Children must never be allowed in the work area. Do not let them handle machines, tools, extension cords, or air hoses.
4. **Store idle equipment.** When not in use, the Frame Lift must be stored in a dry location to inhibit rust. Always lock up products and keep out of reach of children.
5. **Use the right Frame Lift for the job.** Do not attempt to force a small Frame Lift to do the work of a larger industrial model. There are certain applications for which this product was designed. It will do the job better and more safely at the rate for which it was intended. Do not modify this product and do not use this product for a purpose for which it was not intended.
6. **Dress properly.** Do not wear loose clothing or jewelry as they can be caught in moving parts. Protective, electrically nonconductive clothes and nonskid footwear are recommended when working. Wear restrictive hair covering to contain long hair.
7. **Use eye protection.** Always wear ANSI approved impact safety goggles.
8. **Do not overreach.** Keep proper footing and balance at all times. Do not reach over or across running machines or air hoses.

9. **Maintain products with care.** Keep products clean for better and safer performance. Follow instructions for lubricating and changing accessories. Inspect tool cords and air hoses periodically, and if damaged, have them repaired by an authorized technician. The handles must be kept clean, dry, and free from oil and grease at all times.
10. **Disconnect air supply.** Disconnect air hose when not in use.
11. **Avoid unintentional starting.** Be sure the Frame Lift is not attached to the air source until you are ready to start lifting.
12. **Stay alert.** Watch what you are doing, use common sense. Do not operate the Frame Lift when you are tired.
13. **Check for damaged parts.** Before using any product, any part that appears damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment and binding of moving parts; any broken parts or mounting fixtures; and any other condition that may affect proper operation. Any part that is damaged should be properly repaired or replaced by a qualified technician. Do not use the tool if the lever does not operate properly.
14. **Guard against electric shock.** Prevent body contact with grounded surfaces such as pipes, radiators, ranges, and refrigerator enclosures.
15. **Replacement parts and accessories.** When servicing, use only identical replacement parts. Use of any other parts will void the warranty. Only use accessories intended for use with this product. Approved accessories are available from Harbor Freight Tools.
16. **Do not operate the Frame Lift if under the influence of alcohol or drugs.** Read warning labels if taking prescription medicine to determine if your judgement or reflexes are impaired while taking drugs. If there is any doubt, do not operate the product.
17. **Use proper size and type extension cord.** If an extension cord is required, it must be of the proper size and type to supply the correct current to the compressor without heating up. Otherwise, the extension cord could melt and catch fire, or cause electrical damage to the compressor. Check your air compressor's manual for the appropriate size cord.
18. **Maintenance.** For your safety, maintenance should be performed regularly by a qualified technician.
19. **Compressed air only.** Never use combustible gas as a power source.
20. The brass components of this product contain lead, a chemical known to the State of California to cause birth defects (or other reproductive harm).
(California Health & Safety code 25249.5, *et seq.*)

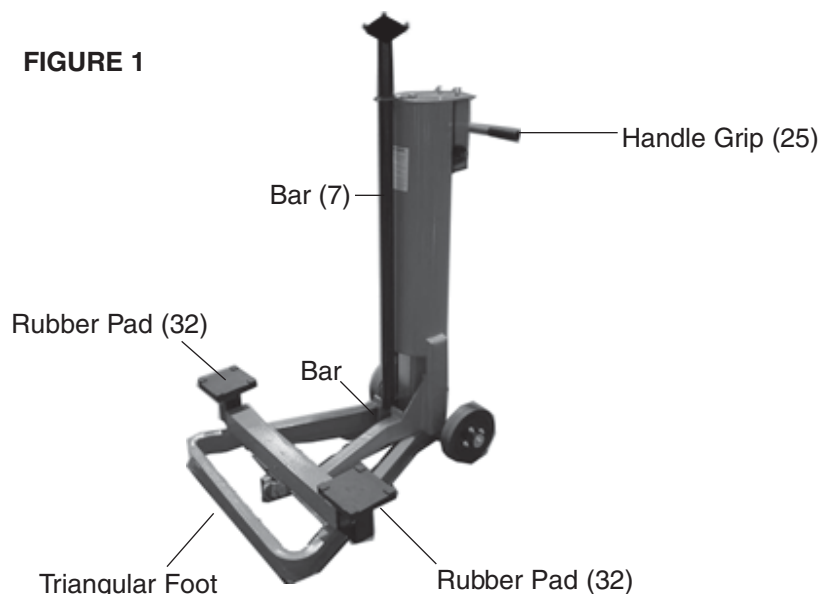
Note: Performance of the compressor (if powered by line voltage) may vary depending on variations in local line voltage. Extension cord usage may also affect tool performance.

Warning: The warnings, cautions, and instructions discussed in this instruction manual cannot cover all possible conditions and situations that may occur. It must be understood by the operator that common sense and caution are factors which cannot be built into this product, but must be supplied by the operator.

Frame Lift Specific Safety Warnings

1. Always use the Frame Lift on a flat, level, hard, dry surface, capable of supporting the Frame Lift and a maximum capacity load (2 Tons).
2. Never exceed the maximum capacity of 2 tons (4000 Lbs.). **Always be aware of Dynamic Loading.** If you drop a weight on the Lift it may create, for a brief instant, an excess load, causing property damage, SERIOUS INJURY, and/or DEATH.
3. This Frame Lift is designed for lifting only. Do not use it to support vehicles while working underneath the vehicle. Support vehicles with proper capacity jack stands (not included).
4. Never go under or allow other people or animals to go under a load supported by the Frame Lift alone.
5. Never use the Frame Lift for aircraft purposes.
6. Before lifting or lowering, make sure there are no air hoses, tools, or power cords under the Triangular Foot.
7. Make sure the load is secured to both of the Rubber Pads (32).
8. **The Bar (7) cannot support a freestanding load on its own.** If it is swung out with a freestanding load, it may break causing the vehicle to tilt or fall, resulting in SEVERE INJURY OR DEATH.
9. When lifting an engine or transmission, read the vehicle owner's manual to find the proper lifting points.
10. **Never adjust or loosen the Air Regulator or any other part of the Air Valve (22), or the load may fall too quickly, causing SEVERE INJURY OR DEATH.**
See **FIGURE 2** on page 5.
11. Never turn off the air compressor or disconnect the air hose unless the lift is in completely lowered position.
12. Do not disable or interfere with proper operation of the Safety Catches. Check for proper operation of the Safety Catches before each use.

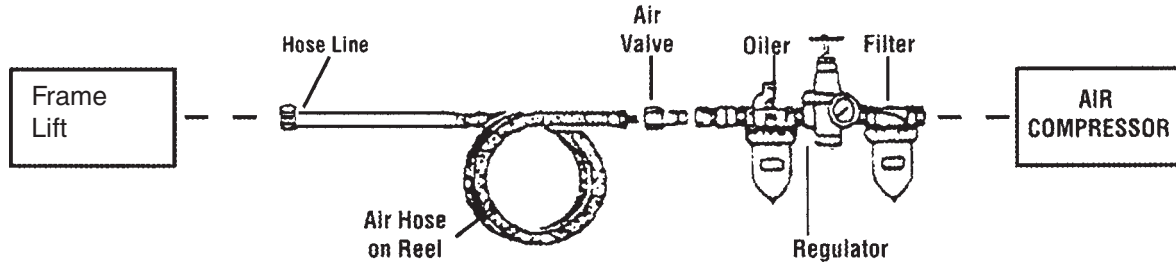
FIGURE 1



Unpacking

When unpacking, check to make sure the parts listed on page 7 are included. If any parts are missing or broken, please call Harbor Freight Tools at the number on the cover of this manual as soon as possible.

Operation



Recommended Air Line Components

Make sure all of the air accessories you use are rated to a maximum pressure of at least 145 PSI.

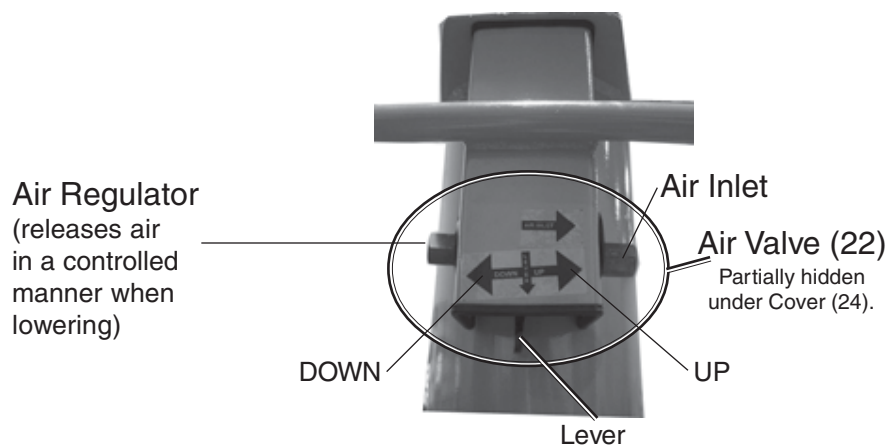
For best service you should incorporate an oiler, regulator, and inline filter, as shown in the diagram above. Hoses, couplers, oilers, regulators, and filters are all available at Harbor Freight Tools.

1. You will need to prepare a 1/4" air connector (sold separately) to connect to the air inlet on the Frame Lift. First, wrap the 1/4" air connector with pipe thread seal tape (not included) before threading it into the Air Inlet (on the Air Valve (22)). Connect the 3/8" ID Air Source Hose to the Frame Lift.

Note: If you are not using an automatic oiler system, before operation, add a few drops of Pneumatic Tool Oil to the airline connection. Add a few drops more after each hour of continual use.

2. Set the air pressure on your compressor to 125 PSI. Do not exceed the maximum air pressure of 145 PSI.
3. Check the air connection for leaks. Then, disconnect from the air source until operation.

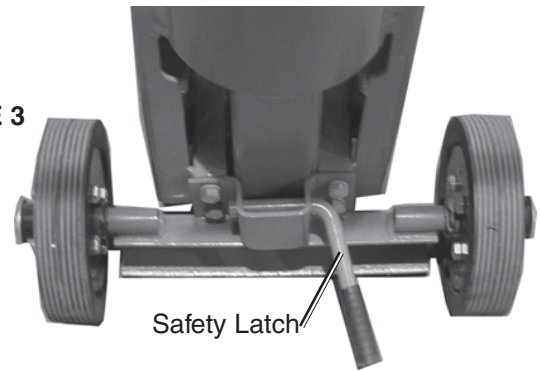
FIGURE 2



Operation (continued)

1. Make sure the Rubber Wheels (3) are well lubricated and move freely.
2. Connect the air supply as explained on page 5.
3. By pulling on them, adjust the Lift Arms (28) to fit under the proper lift points on the vehicle or engine. If necessary, lubricate the Lift Arms (28) slightly.
4. Securely block the tires on the opposite end of the vehicle. Push the front end of the Frame Lift under the vehicle or engine and line up the Rubber Pads (32) with the lifting points on the vehicle.
5. When you are ready to lift, press the Lever (See **FIGURE 2** on page 5) to the “UP” or lift position. The Frame Lift will begin lifting the load and the Safety Latch will engage into place (see below). The Safety Latch will slide over the Latches on the Vertical Post of the Base Assembly (1) as the load is lifted to the desired height.
6. Once the vehicle has reached the desired height, release the Lever to stop the air flow. The lifted load will come to rest on a safety notch. Promptly support the vehicle with jack stands (not included) before working.

FIGURE 3



Warning! Make sure no tools, air hoses, or cables are under the load before lowering it. Keep all bystanders clear of the load.

7. To lower the unit, adjust the Lever to lift the load slightly, then push the Lever toward the “Down” position while making sure the Safety Latch is held up.

Note: The Bar (7) can be inserted through the bracket on the top of the cylinder, and rest on the Lift, as shown in **FIGURE 1** on page 4.

Maintenance

Warning! Never perform maintenance procedures while the Frame Lift carries a load.

1. Keep the Rubber Pads (32) and Bar (7) free of dirt, grease, and debris.
2. Periodically lubricate the lifting pivot points with a high grade lubricant.
3. Before each use, check the entire Frame Lift for cracks, breaks, or air leaks*. If any are found, do not use the unit. Have it taken to an authorized service technician.

*Air seeping out of the Air Regulator (see Figure 2, page 5) does not necessarily indicate a problem.

Parts List

Part	Description	Qty.	Part	Description	Qty.
1	Base Assembly	1	18	Spring Washer M16	1
2	C-clip	4	19	Nut M16	1
3	Rubber Wheels	2	20	Safety Latch Grip	1
4	Top Assembly	1	21	'L' Fitting	1
5	Swivel Castor	1	22	Air Valve	1
6	Piston	1	23	Pipe Nipple	1
7	Bar	1	24	Cover	1
8	Cup Packing	1	25	Handle Grips	2
9	Cup Washer	1	26	Spring Washer M10	2
10	Bolt M12x25	1	27	Nut M10	2
11	Bolt M12x120	1	28	Lift Arms	2
12	Bolt M12x90	1	29	Bolt M6x90	1
13	Nut M12	2	30	Nut M6	1
14	Roller	1	31	Lift Pads	2
15	Bearing	2	32	Rubber Pad	2
16	Roller Bushing	1	33	Nut M8	8
17	Bolt M16x100	1			

PLEASE READ THE FOLLOWING CAREFULLY

THE MANUFACTURER AND/OR DISTRIBUTOR HAS PROVIDED THE PARTS DIAGRAM IN THIS MANUAL AS A REFERENCE TOOL ONLY. NEITHER THE MANUFACTURER NOR DISTRIBUTOR MAKES ANY REPRESENTATION OR WARRANTY OF ANY KIND TO THE BUYER THAT HE OR SHE IS QUALIFIED TO MAKE ANY REPAIRS TO THE PRODUCT OR THAT HE OR SHE IS QUALIFIED TO REPLACE ANY PARTS OF THE PRODUCT. IN FACT, THE MANUFACTURER AND/OR DISTRIBUTOR EXPRESSLY STATES THAT ALL REPAIRS AND PARTS REPLACEMENTS SHOULD BE UNDERTAKEN BY CERTIFIED AND LICENSED TECHNICIANS AND NOT BY THE BUYER. THE BUYER ASSUMES ALL RISK AND LIABILITY ARISING OUT OF HIS OR HER REPAIRS TO THE ORIGINAL PRODUCT OR REPLACEMENT PARTS THERETO, OR ARISING OUT OF HIS OR HER INSTALLATION OF REPLACEMENT PARTS THERETO.

NOTE: Some parts are listed and shown for illustration purposes only and are not available individually as replacement parts.

Assembly Drawing

