



# Air Hydraulic Truck Jack

## Operating Instructions & Parts Manual

Model Number      Capacity  
HW93735            25 Ton



**Made in the  
U.S.A.**



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

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**Read this manual carefully and retain it for future reference.**

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# RECEIVING INSPECTION

Before attempting to operate this jack, thoroughly read and understand this manual. Completely remove all tape and packaging. Inspect the jack immediately upon delivery. If shipping damage is evident, inform the delivering carrier immediately and contact customer service at the address and numbers shown on the back cover of this manual.

## INTRODUCTION

### Owner and / or Operator Responsibilities

The owner and / or user must have an understanding of the manufacturer's operating instructions and warnings before using this jack. Personnel involved in the use and operation of equipment shall be careful, competent, trained, and qualified in the safe operation of the equipment and its proper use when servicing motor vehicles and their components. Warning information should be emphasized and understood.

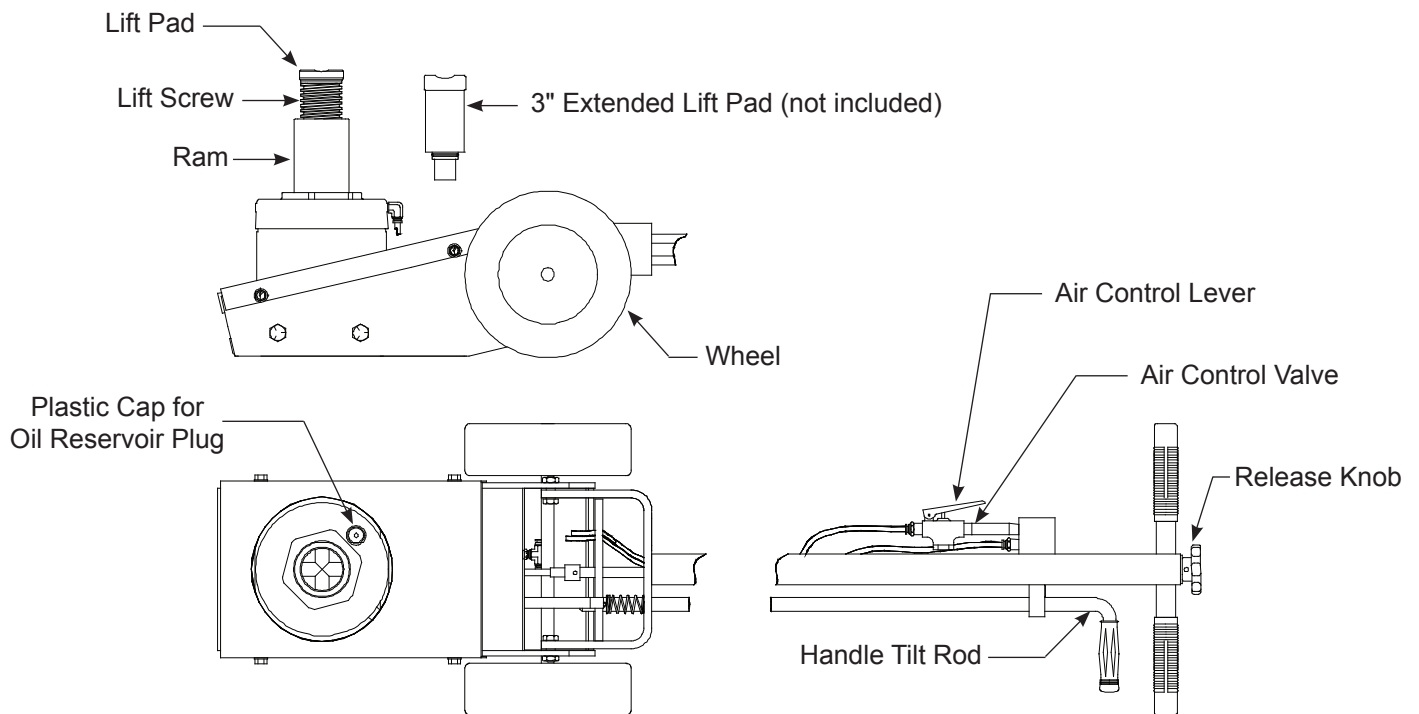
The owner / manager must make this manual available to all personnel using this jack at your direction. They must read and understand the contents of this manual. If the operator is not fluent in English, the manufacturer's instructions and warnings shall be read to and discussed with the operator in the operator's native language by the purchaser / owner, making sure that the operator comprehends its contents and observes the proper procedures for use of this jack.

Owner and / or user must study and maintain for future reference the manufacturer's instructions. Owner and / or user are responsible for keeping all warning labels and instruction manuals legible and intact. Replacement labels and literature are available from the manufacturer.

## SPECIFICATIONS

|                                                                 |                                                  |
|-----------------------------------------------------------------|--------------------------------------------------|
| Capacity:                                                       | 50,000 lb. / 22,680 kg.                          |
| Maximum Air Pressure:                                           | 200-psi                                          |
| Starting Height:                                                | 8"                                               |
| Starting Height with Extended Lift Pad:                         | 11"                                              |
| Lifting Height (lift screw extended):                           | 18"                                              |
| Lifting Height (lift screw extended) with 3" Extended Lift Pad: | 21" <i>(optional, not included in this unit)</i> |
| Stroke:                                                         | 5 1/8"                                           |
| Screw Extension:                                                | 4 7/8"                                           |
| Weight:                                                         | 120 lb.                                          |

# COMPONENT IDENTIFICATION



## SIGNAL WORDS

Signal words call attention to a safety message/messages, or a property damage message/messages, and designates a degree or level of hazard seriousness. The signal words are “**DANGER**”, “**WARNING**”, “**CAUTION**”, and “**NOTICE**”.

- **DANGER:** Indicates a hazardous situation, which, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations.
- **WARNING:** Indicates a hazardous situation, which, if not avoided, could result in death or serious injury.
- **CAUTION:** Indicates a hazardous situation, which, if not avoided, could result in minor or moderate injury. It may be used to alert against unsafe practices.
- **NOTICE:** Indicates a property damage message

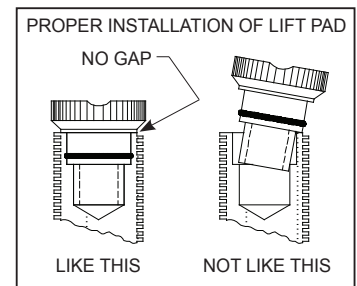
# SAFETY

## WARNING

To avoid serious injury or death, read this manual carefully before operating this unit. Contact customer service if you have any questions.

Failure to understand and obey safety instructions may result in unsafe or improper use of this product.

1. Do not overload. Maximum capacity is 50,000 lb. / 22,680 kg.
2. Use this jack only on hard level surfaces capable of sustaining the load. Use on other than hard level surfaces can result in jack instability and possible loss of load.
3. Select the lifting point with care. It must be strong enough to sustain the lifting force without damage to the vehicle. It is necessary to cradle the lifting point in the lift pad to insure that the selected lift point will not shift or tilt which could cause loss of load resulting in bodily injury or property damage.
4. This jack is designed solely for the lifting of vehicles only, (Use of the jack for any other purpose constitutes misuse of the jack), and must never be used to support a load. After raising a vehicle, never allow any part of your body to pass under it and never begin work on the vehicle until it is properly supported by adequate stands.
5. Once the vehicle is properly supported by adequate stands, the jack must be removed from beneath the vehicle before work on the vehicle begins.
6. No alterations shall be made to this product.
7. Always lift with either the factory supplied lift pad or lift pad extension in place. Never lift when one of these two factory furnished lift pads is not properly installed. Do not use any kind of cribbing or adapters with this jack. The jack must remain in direct contact with the floor and the lifting pad must be in direct contact with the vehicle. See illustration to the right.
8. Never use more than one jack at the same time to lift a vehicle. If a jack does not have enough capacity to raise a load, remove it and use a jack with adequate capacity. Failure to observe this instruction may lead to unstable or overload conditions that could cause failure of one or both of the jacks.
9. Do not drive the vehicle off of the jack, or attempt to move the vehicle at any time while the jack supports it.



Failure to understand and obey this warning may result in personal injury and / or property damage.

# OPERATING INSTRUCTIONS

Connect a quick coupler to the air control valve inlet. Close the release valve by rotating the release knob clockwise. Attach air supply of 90-PSI minimum to 200 PSI maximum. The unit is now ready for use. Actuation of the air control lever will now raise the lift pad. Rotating the release knob counter-clockwise will lower the lift pad.

Rapid Raising of lift pad to Contact Load: Upon actuating the air control valve, the jack lift pad will rise quickly until contact is made with the load. Then the jack will continue to lift the load (at a slower rate) until the air control valve is released or the jack has reached the limit of its stroke.

Air Powered Ram Retraction: The ram will retract by leaving the air supply connected and the release valve open. The ram will fully retract even under no load conditions.

# MAINTENANCE INSTRUCTIONS

Check oil level in the oil reservoir. Refer to the “Adding Hydraulic Fluid” section.

All warning and capacity labels should be readable and complete. Wash external surfaces of jack and decals with a mild soap solution.

Lubricate all rotating and sliding portions of the jack monthly.

## WARNING

All inspection and maintenance procedures must be performed **after** the jack has been removed from service. Failure to heed this warning may result in personal and / or property damage.

# STRUCTURAL INSPECTION

## WARNING

The jack must be removed from service and inspected for damage immediately if the jack is subjected to an abnormal shock or load. Failure to heed this warning may result in personal and / or property damage

**NOTICE:** The owner must inspect, or appoint a knowledgeable person to inspect the jack for signs of corrosion and / or excessive wear. Regular inspections should be made weekly for daily use and monthly for intermittent use.

Inspect lift pad regularly and replace if it is cracked, chipped or shows signs of excessive wear.

The ram should extend and retract smoothly through its full range. Inspect the ram for scratches and dents, which prevent normal operation.

Inspect for oil leaks. Operate jack for signs of oil blowing from the exhaust ports.

If any irregularities or problems are detected during an inspection, the jack must be removed from service immediately and repaired. Contact customer service.

# ADDING HYDRAULIC FLUID



## WARNING

The jack must be removed from service and inspected for damage immediately if the jack is subjected to an abnormal shock or load. Failure to heed this warning may result in personal and / or property damage

Remove the jack from service.

Make sure ram is fully retracted.

Disconnect airline.

Carefully remove the plastic cover from the oil reservoir plug located on the top surface of the jack body.

Make sure the hole for the oil reservoir plug is clean and dry before removing plug. Water and dirt destroy hydraulic parts.

Remove oil reservoir plug using a 3/16" Hex wrench.

Check fluid level. RAM MUST BE FULLY RETRACTED. The oil should be within 1/4 inch of the bottom of the oil fill hole. If fluid is low, add a high-grade hydraulic fluid equivalent to Mobil Tellus T22 oil. Do not use brake or transmission fluid.

Reinstall and secure the oil reservoir plug, replace the plastic cover, and connect to air supply and test for normal operation.

## TROUBLESHOOTING

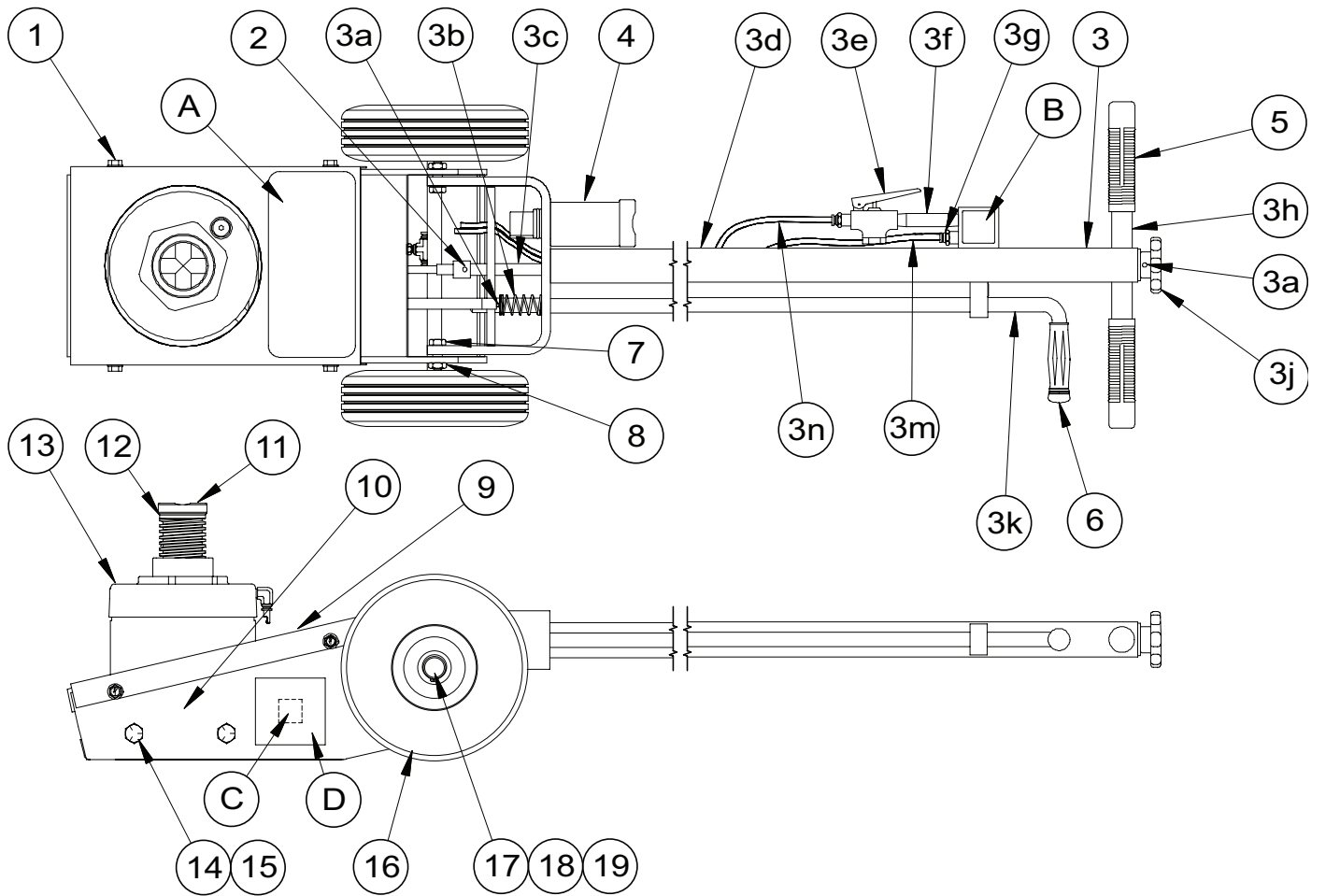
This section is a list of possible problems, which may be encountered, and their solutions. If the solution listed fails to correct the problem, contact customer service. Please have the model number, and serial number of your jack available. The serial number is permanently stamped on the top of the frame.

| PROBLEM             | CAUSE / SOLUTION                                                                                                                                                                                                                              |
|---------------------|-----------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Fails to lift load  | Low oil level, see "Adding Hydraulic Fluid".<br>Inadequate air pressure, requires 90 PSI min.<br>Release open, turn release knob clockwise until tight.<br>Air line leaks, locate and correct leaks.<br>Overloaded, use larger capacity jack. |
| Fails to hold load  | Release open, turn release knob clockwise until tight.                                                                                                                                                                                        |
| Air motor won't run | Airline leaks, locate and correct leaks.<br>Inadequate air pressure, requires 90-psi minimum.                                                                                                                                                 |
| Oil leaks           | Oil reservoir plug loose, tighten fill oil reservoir plug.                                                                                                                                                                                    |

## REPLACEMENT PARTS

(refer to page 8 thru 11)

Not all components of the jack are replacement items, but are illustrated as a convenient reference of location and position in the assembly sequence. When ordering parts, give model number, part number and parts description. Call or write for current pricing: Hein-Werner Customer Support, 10939 N. Pomona Ave. Kansas City, MO 64153. Phone: (816)891-6390; E-mail: [customerservices@heinwerner-automotive.com](mailto:customerservices@heinwerner-automotive.com)



### Figure 1 - Parts Illustration for HW93735 Frame

## Replacement Parts List for HW93735 Frame:

| Item | Part#       | Description                          | Qty. |
|------|-------------|--------------------------------------|------|
| 1    | 1-202-01103 | Screw, Self Tapping, 5/16"-18        | 4    |
| 2    | 0-235-21004 | Roll Pin, 3/16" Dia x 3/4"           | 1    |
| 3    | 3-850-01014 | Handle Assembly                      | 1    |
| 3a   | 0-235-21011 | Roll Pin, 3/16" Dia x 1-1/8"         | 2    |
| 3b   | 1-233-14012 | Compression Spring, 53/64" OD        | 1    |
| 3c   | 1-353-49159 | Release Control Rod                  | 1    |
| 3d   | 2-850-02006 | Handle Weldment                      | 1    |
| 3e   | 1-312-00002 | Air Valve                            | 1    |
| 3f   | 0-275-01004 | Air Nipple, 1/4"x 3" long            | 1    |
| 3g   | 1-275-11004 | Male Connector, 1/4"-18NPT           | 2    |
| 3h   | 1-850-04010 | Handle Bar, Drilled                  | 1    |
| 3j   | 1-232-20094 | Knob, 2-1/2" Dia                     | 1    |
| 3k   | 1-850-02007 | Handle Release Rod                   | 1    |
| 3m   | 8-082-30022 | Tubing, Nylon, 1/4" OD x 60"         | 1    |
| 3n   | 8-082-30021 | Tubing, Nylon, 1/4"OD x 45-1/2"      | 1    |
| 4    | 735-002-001 | 3" Extended Saddle Adapter           | 1    |
| 5    | 1-232-20113 | Handle Grip, 7/8" ID x 5"            | 2    |
| 6    | 1-232-20107 | Handle Grip, 5/8" ID x 3-1/2"        | 1    |
| 7    | 1-202-01304 | Hex Head Capscrew, 7/16"-14UNC       | 2    |
| 8    | 1-203-11204 | Hex Nut, Jam, 7/16"-14UNC            | 2    |
| 9    | 1-850-04004 | Top Cover                            | 1    |
| 10   | 3-850-02010 | Base Frame                           | 1    |
| 11   | 2-015-50008 | Saddle                               | 1    |
| 12   | 1-390-01047 | O-ring, 1-1/16"ID x 1-1/4"OD x 3/32" | 1    |
| 13   | 4-353-40058 | Hydraulic Unit                       | 1    |
| 14   | 0-200-31406 | Hex Head Capscrew, 1/2"-13UNC        | 4    |
| 15   | 0-204-11400 | Lockwasher, 1/2"                     | 4    |
| 16   | 1-480-02006 | Wheel, 8"Dia x 2/5" Hub              | 2    |
| 17   | 0-203-51500 | Washer Cap, 5/8"Dia x 14"            | 2    |
| 18   | 8-009-63060 | Bar, 5/8" x 14"                      | 1    |
| 19   | 0-204-01614 | Washer 5/8", 1-1/4"OD                | 4    |
| A    | HW93735-L0  | Label, Product                       | 1    |
| B    | 1-670-10163 | Label, Ram Retract                   | 1    |
| C    | 1-670-10176 | Label, Multi-Language                | 1    |
| D    | 1-670-10259 | Label, Warning                       | 1    |
| -    | HW93735-M0  | Manual                               | 1    |

Replacement Parts Illustration for HW93735 Hydraulic Unit:

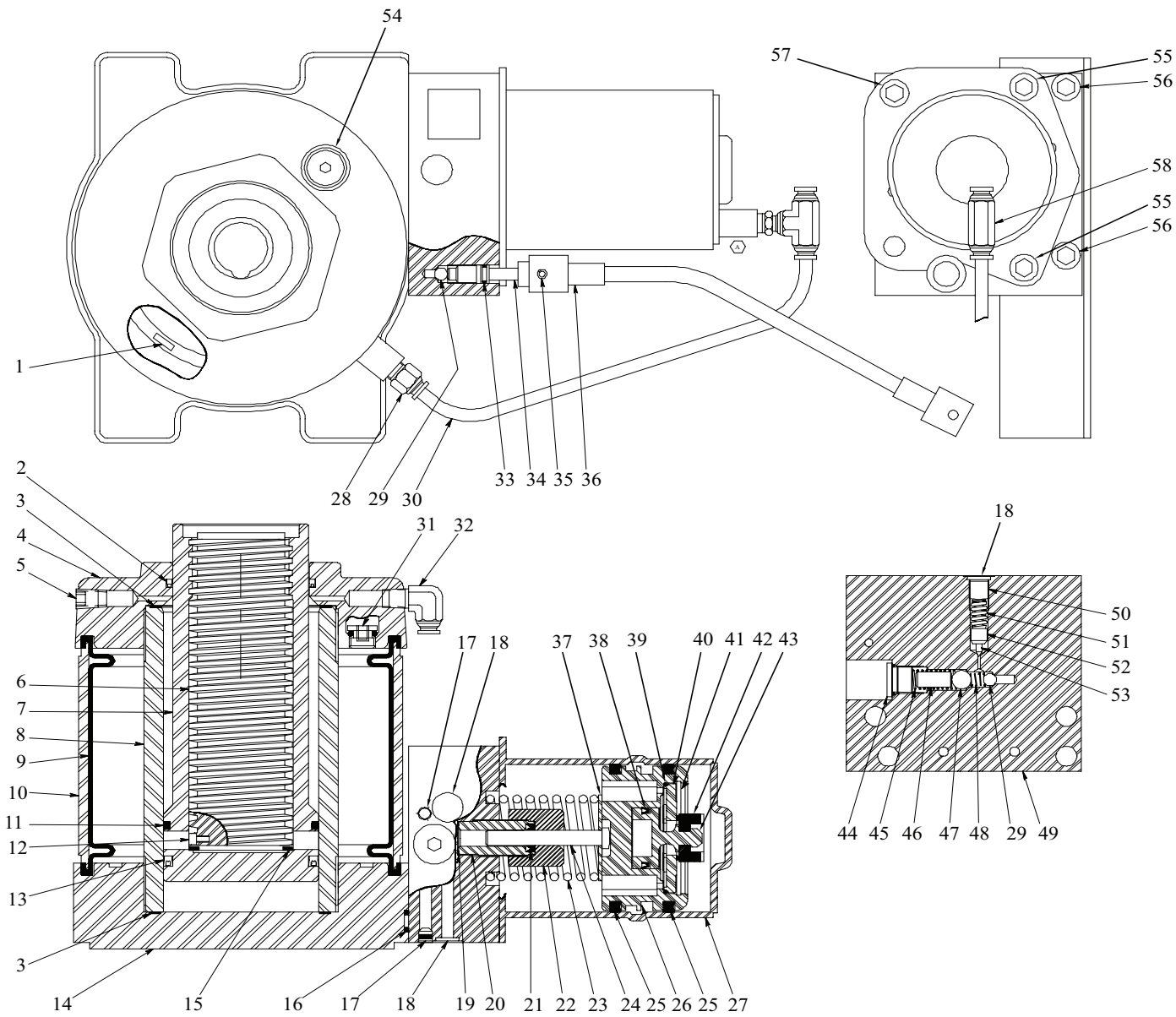


Figure 2 - Parts Illustration for HW93735 Hydraulic Unit

## Replacement Parts List for HW93735 Hydraulic Unit:

| Item | Part#       | Description                       | Qty |
|------|-------------|-----------------------------------|-----|
| 1    | 1-353-49010 | Magnet, 1/8"Dia x 7/16"           | 1   |
| 2*   | 1-390-11092 | Seal, 2-5/8" x 2-7/8" x 1/8"      | 1   |
| 3*   | 1-390-11083 | Back-up Ring, 3-1/8"x3-1/2"x3/16" | 2   |
| 4    | 4-353-43019 | Jack Cap                          | 1   |
| 5    | 0-275-20010 | Hollow Head Hex Plug, 1/8"NPT     | 2   |
| 6    | 2-850-04002 | Extension Screw                   | 1   |
| 7    | 3-353-42027 | Ram Plunger, 25 Ton               | 1   |
| 8    | 2-353-41036 | Hydraulic Cylinder                | 1   |
| 9    | 2-353-49155 | Bladder                           | 1   |
| 10   | 1-850-02002 | Outer Barrel                      | 1   |
| 11*  | 1-390-01045 | Quad Ring, 2-3/4" x 1/8" x 3"     | 1   |
| 12   | 0-201-00602 | Capscrew, #6-32 x 1/4"            | 1   |
| 13*  | 1-390-11102 | Seal, 2-1/2"ID x 3"OD x 1/4"      | 1   |
| 14   | 4-353-49199 | Base Plate                        | 1   |
| 15*  | 1-390-11085 | Back-up Ring, 1-5/8" x 1/16"x2"   | 1   |
| 16*  | 1-390-10056 | Quad ring, 7/16"x1/4"x3/32"       | 2   |
| 17   | 1-230-40001 | Plug                              | 2   |
| 18   | 1-353-49089 | Expansion Plug                    | 3   |
| 19*  | 1-390-10060 | Back-up Ring 11/16"x1/2"          | 1   |
| 20   | 1-353-43030 | Pump Housing                      | 1   |
| 21*  | 1-390-10055 | Seal, 9/16"x5/16"x1/8"            | 1   |
| 22   | 1-353-43029 | Pump Housing cap                  | 1   |
| 23   | 1-233-15003 | Spring, 1-3/4OD                   | 1   |
| 24   | 1-353-49156 | Pump Plunger                      | 1   |
| 25*  | 1-390-02010 | Quad ring, 3"ODx2-5/8"ID          | 2   |
| 26   | 4-310-41017 | Piston, Air Motor                 | 1   |
| 27   | 3-310-11024 | Cylinder, Air Motor               | 1   |
| 28   | 1-275-10001 | Male Connector, 1/8"-27NPT        | 1   |
| 29   | 0-236-00005 | Ball, 1/4"                        | 2   |
| 30   | 8-082-30027 | Tubing, Nylon, 1/4"ODx10-1/2"     | 1   |

| Item | Part#       | Description                   | Qty |
|------|-------------|-------------------------------|-----|
| 31   | 1-274-32001 | Oil Filler Screw with O-ring  | 1   |
| 32   | 1-275-11005 | Male Elbow, 1/8"-27NPT        | 1   |
| 33*  | 0-390-00002 | O-ring, 3/8"ODx1/4"IDx1/16Dia | 1   |
| 34   | 1-353-49166 | Release Stem                  | 1   |
| 35   | 0-235-21004 | Roll Pin, 3/16"Dia x 3/4"     | 1   |
| 36   | 1-850-04024 | Flex Shaft                    | 1   |
| 37   | 1-204-01106 | Washer 1.75x.32x.064          | 1   |
| 38*  | 1-390-10076 | Seal, 1/4"OD, 1"IDx1/8"W      | 1   |
| 39*  | 1-390-01061 | O-ring, 2-1/4"x1/16"x2-1/8"   | 1   |
| 40   | 1-310-91014 | Piston Cap                    | 1   |
| 41   | 1-230-06001 | Retaining Ring, 2/18"Dia      | 1   |
| 42*  | 2-315-00002 | Seal, Shuttle Valve           | 1   |
| 43   | 2-310-40004 | Air Shuttle Piston            | 1   |
| 44   | 1-274-34001 | Plug, with O-ring             | 1   |
| 45   | 1-233-12002 | Spring, .406OD                | 1   |
| 46   | 1-353-49162 | Check Valve Spacer            | 1   |
| 47   | 0-236-00006 | Ball, 3/8"                    | 1   |
| 48   | 1-233-10012 | Spring, 1/4"Dia x 3/8"        | 1   |
| 49   | N/A         | Hydraulic Block               | 1   |
| 50   | 0-201-31202 | Set Screw, 3/8"-24UNF x 3/8"  | 1   |
| 51   | 1-233-11007 | Spring, .312OD                | 1   |
| 52   | 1-353-49057 | Release Guide                 | 1   |
| 53   | 1-353-49056 | Rod, Tapered Release          | 1   |
| 54   | 0-680-00120 | Plastic Cap                   | 1   |
| 55   | 0-210-11212 | Capscrew, 3/8"-24UNF x 2-3/8" | 2   |
| 56   | 0-201-11211 | Capscrew, 3/8"-24UNF x 2-1/4" | 2   |
| 57   | 0-201-11204 | Capscrew, 3/8"-24UNF x 3/4"   | 1   |
| 58   | 1-275-11006 | Branch Tee, 1/8"NPT           | 1   |
| *    | 928014      | Air & Hyd Seal Kit            | -   |



## TWO YEARS LIMITED WARRANTY

For a period of two (2) years from date of purchase, SFA Companies will repair or replace, at its option, without charge, any of its products which fails due to a defect in material or workmanship under normal usage. This limited warranty is a consumer's exclusive remedy.

Performance of any obligation under this warranty may be obtained by returning the warranted product, freight prepaid, to SFA Companies Warranty Service Department, 10939 N. Pomona Ave., Kansas City, MO 64153. Except where such limitations and exclusions are specifically prohibited by applicable law:

- (1) THE CONSUMER'S SOLE AND EXCLUSIVE REMEDY SHALL BE THE REPAIR OR REPLACEMENT OF DEFECTIVE PRODUCTS AS DESCRIBED ABOVE
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