

OWNER'S MANUAL

GUN SAFE LOADER



NOTICE

This manual contains an instructional video on how to use this machine. The video must be viewed by the operator(s) before attempting to use this machine.

Model # _____

Serial # _____

Placed in Service _____

SOUTHWORTH

Southworth Products Corp

P.O. Box 1380 Portland, Maine 04104-1380

Phone: 207-878-0700 Fax: 207-797-4734

July 2015

INTRODUCTION

The Gun Safe Loader is designed to allow faster, safer, and easier loading of gun safes. Using a manual hand control, the trained operator can position the gun safe from a vertical position to a horizontal position when loading it into a pick-up or into a vehicle or trailer. It can be done safely and easily when all instructions in this manual are followed.

This manual contains instructions on the safe and proper installation, use, and maintenance of the Gun Safe Loader. Please be sure that this manual is available to anyone who uses the Loader. Be sure that everyone who uses the Gun Safe Loader has read and understands this manual.

The instructions included in this manual are not necessarily all-inclusive, because Southworth cannot anticipate all conceivable or unique situations.

In the interest of safety, please read this whole manual carefully. If you have any questions about the instructions or if anything is unclear in this manual, please contact Southworth Products Corp.

Southworth's product warranty is shown on the rear cover of this manual. This instruction manual is **not intended to be or to create any other warranty, express or implied, including any implied warranty of merchantability or fitness for a particular purpose, all of which are hereby expressly excluded.** As set forth more specifically in the product warranty, Southworth's obligation under that warranty is **limited** to the repair or replacement of defective components, which shall be the buyer's **sole remedy**, and Southworth shall not be liable for any loss, injury, or damage to persons or property, nor for any direct, indirect, or consequential damage of any kind resulting from the Gun Safe Loader.

NOTICE

The Gun Safe Loader should NOT be used for any other purpose other than loading gun safes in pick-ups, SUVs or other suitable vehicles. Loading any other item or material is not authorized and may represent a hazard.

CONTENTS

- INTRODUCTION 2
- RESPONSIBILITY OF OWNERS AND USERS 4
- SAFETY ALERT SYMBOLS AND SIGNAL WORDS..... 5
- SAFETY 6

- LABELS AND PRECAUTIONARY MARKINGS 7 & 8

- LOADING SEQUENCE 9

- INSTALLATION INSTRUCTIONS 9 & 10
 - Preparation..... 9
 - Positioning the loader..... 9
 - Testing 9-10

- MAINTENANCE & TROUBLESHOOTING..... 11
 - Hazards..... 11
 - Routine Periodic Maintenance 12
 - Trouble Shooting Checklist 13

- HYDRAULIC OIL SPECIFICATIONS 14

- POWER Loader..... 14 & 15
 - Power Loader Part Description 14
 - Power Loader Views 15

- BATTERY MAINTENANCE 16
 - Preparing to Charge a Battery..... 16
 - Battery Charging 16
 - Warnings and Battery Information..... 16
 - Battery Maintenance 16

- ORDERING REPLACEMENT PARTS..... 16

- ONE-YEAR WARRANTY 17

Responsibility of Owners and Users

Inspection and Maintenance

The device shall be inspected and maintained in proper working order in accordance with Southworth's owner's manual.

Removal from Service

Any device not in safe operating condition such as, but not limited to, excessive leakage, missing rollers, pins, or fasteners, any bent or cracked structural members, cut or frayed electric or hydraulic lines, damaged or malfunctioning controls or safety devices, etc. shall be removed from service until it is repaired to the original manufacturer's standards.

Repairs

All repairs shall be made by qualified personnel in conformance with Southworth's instructions.

Before Operation

Before using the device, the operator shall have:

- Read and/or had explained, and understood, the manufacturer's operating instructions and safety rules.
- Inspected the device for proper operation and condition. Any suspect item shall be carefully examined and a determination made by a qualified person as to whether it constitutes a hazard. All items not in conformance with Southworth's specification shall be corrected before further use of the equipment.

During Operation

The device shall only be used in accordance with this owner's manual.

- Do not overload.
- Ensure that all safety devices are operational and in place.

Modifications or Alterations

Modifications or alterations to any Southworth industrial positioning equipment shall be made only with written permission from Southworth.

SAFETY ALERT SYMBOLS AND SIGNAL WORDS

The safety of all persons operating, maintaining, repairing, or in the vicinity of this equipment is of paramount concern. This is a powerful machine with moving parts, and is capable of causing personal injury if proper precautions are not taken. Therefore, throughout this manual, certain hazards have been identified which may occur in the use of the machine, and there are appropriate instructions or precautions which should be taken to avoid these hazards. In some cases, there are consequences which may occur if instructions or precautions are not followed. Below are the symbols and signal words along with their definitions referenced from ANSI Z535.4 - Product Safety Signs and Labels.

Safety Alert Symbols

These are the safety alert symbols. They are used to alert you to potential physical injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.



For use with **DANGER** signal word
(Red Background)



For use with **WARNING** signal word
(Orange Background)



For use with **CAUTION** signal word
(Yellow Background)

Signal Words

The meaning of different signal words as defined by ANSI Standard Z535.4 indicates the relative seriousness of the hazardous situation.



(Red Background)

DANGER indicates a hazardous situation which, if not avoided, will result in death or serious injury.



(Orange Background)

WARNING indicates a hazardous situation which, if not avoided, could result in death or serious injury.



(Yellow Background)

CAUTION, used with the safety alert symbol, indicates a hazardous situation which, if not avoided, could result in minor or moderate injury.



(Blue Background)

NOTICE is used to address practices not related to personal injury.



(Green Background)

SAFETY INSTRUCTIONS (or equivalent) signs indicate safety-related instructions or procedures.

SAFETY

The safety of all persons using, servicing, or working near the Gun Safe Loader is of paramount concern to Southworth. The Gun Safe Loader is a powerful machine with moving parts, and is CAPABLE OF CAUSING PERSONAL INJURY IF PROPER PRECAUTIONS ARE NOT TAKEN.

Therefore, throughout this manual, Southworth has identified certain hazards which may occur in the use of the Gun Safe Loader, and provided appropriate INSTRUCTIONS or PRECAUTIONS which should be taken to avoid these hazards. In some cases, Southworth has also pointed out the CONSEQUENCES which may occur if Southworth's instructions or precautions are not followed. Southworth uses the following system of identifying the severity of the hazards associated with its products:

PLEASE READ AND FOLLOW THIS INSTRUCTION MANUAL, INCLUDING ALL SAFETY INSTRUCTIONS AND PRECAUTIONS, CAREFULLY AND COMPLETELY.

⚠ DANGER Immediate hazard which will result in severe personal injury or death.

⚠ WARNING Hazard or unsafe practice which could result in severe personal injury or death.

⚠ CAUTION Hazard or unsafe practice which could result in minor personal injury or property damage.



LABELS AND PRECAUTIONARY MARKINGS

TO LOWER CONVEYOR STOP
PUSH FORWARD AND HOLD
10043434
10043434

CAUTION
SECURE STRAP AROUND SAFE PRIOR TO TILTING
LOCATE ONE EACH SIDE
10043432

OWNER'S MANUAL
10043439
CENTER IN INDENTATION ON COVER
10043439

ON - OFF
BATTERY DISCONNECT
10043585
10043585

**CAPACITY
2000 LBS**
2998427
LOCATE CENTERED NEAR
TOP OF MAST ON BOTH SIDES
2998427

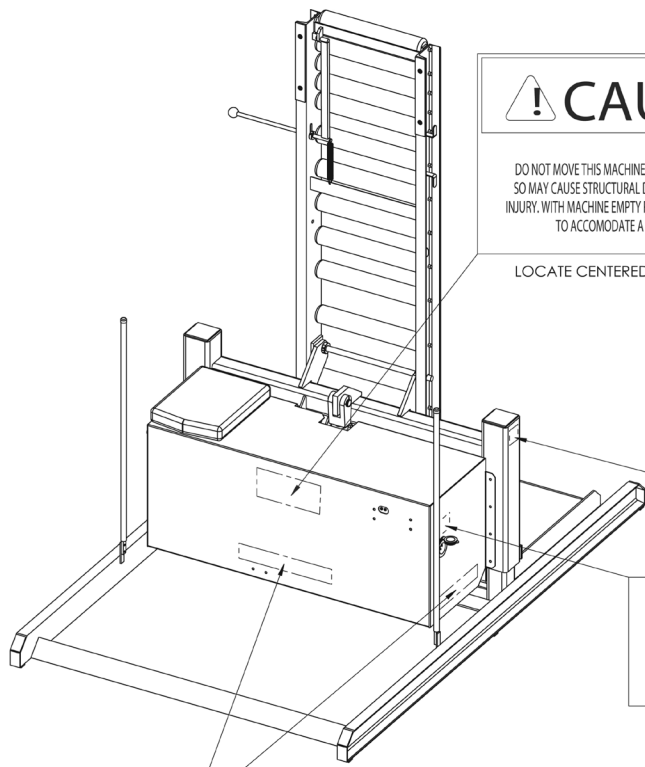
SOUTHWORTH
LOCATE CENTERED NEAR THE BOTTOM
OF THE COVER ON ALL 3 SIDES
2987334

CAUTION DO NOT OPERATE THIS MACHINE UNLESS YOU HAVE READ AND UNDERSTAND ALL INSTRUCTIONS IN THE OWNER'S MANUAL

LOADING SEQUENCE

1. Move the motor on the vehicle to left. The emergency stop is in the top right corner of the bed. It is like all of dials, and the area in the center of the loading sequence. **NOTE:** Always position the bed and motor on the emergency stop. (10043434) to raise. For safety, always use "SAFE" or "STOP" with rubber level covers. A sheet of plastic is recommended to protect the safe to avoid.
2. Bring a hand pallet jack position the Gun Safe. After as the to light or leading edge of the vehicle is just touching the base safety motor rods.
3. Secure the safe against the conveyor using the strap provided. The back of the safe must be against the conveyor.
4. Insert the key (authorised person only) and turn on the lift.
5. Lift the safe to the full extent of the machine.
6. To the safe weight. It's always obeying the top end of the conveyor is positioned over the bed of the vehicle. The end of the conveyor mast is just inside the safe. It should "NOT" rest on the safe. If the safe has to be moved it should be removed.
7. To the other truck bed to engage.
8. Move the vehicle bed height to accommodate the safe. **NOTE:** The distance from the front of the vehicle bed at the first step of the conveyor is no longer than the width of the safe. The safe is to be raised from the top of the side to the bottom of the bed.
9. The safe is lower than the object. The object has to be compressed the article against. Continue to lower until the vehicle and the safe are going down. The safe is now ready to be placed onto the vehicle bed.
10. No one should be in the truck bed.
11. Release the strap. Pull the conveyor stop over forward and hold it. With your other hand, lift the safe onto the vehicle bed. If the safe does not rest on the vehicle bed, it is not safe to use. The safe should be raised to the correct height. Additional steps may be needed with this process. The safe is now ready to be placed onto the vehicle bed.
12. Return lift to vertical position. The lift is now the floor level for transport to storage location with a hand pallet jack.

10043112
10043112



CAUTION
DO NOT MOVE THIS MACHINE WHEN LOADED DOING
SO MAY CAUSE STRUCTURAL DAMAGE AND PERSONAL
INJURY. WITH MACHINE EMPTY RAISE LIFT SLIGHTLY
TO ACCOMMODATE A HAND PALLET JACK
10043440
LOCATE CENTERED NEAR THE TOP OF THE COVER
10043440

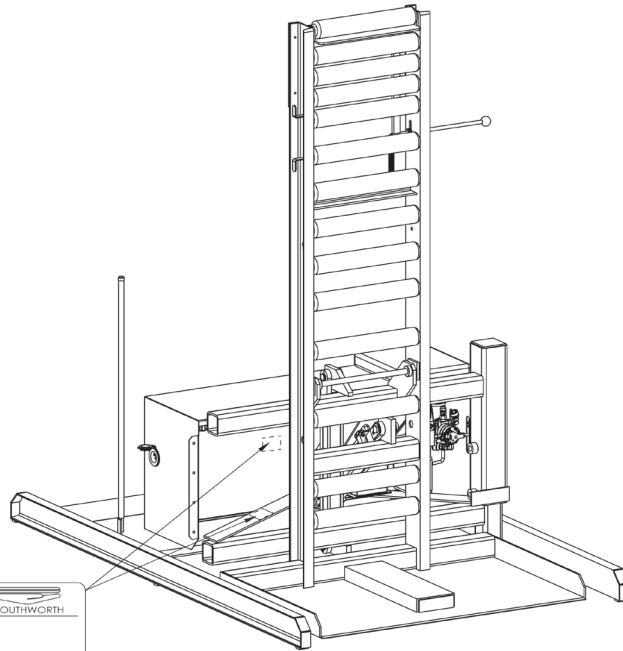
**CAPACITY
2000 LBS**
2998427
LOCATE CENTERED NEAR
TOP OF MAST ON BOTH SIDES
2998427

BATTERY CHARGER PLUG
DO NOT OPERATE WHILE
CHARGING OR DAMAGE TO LIFT
OR PERSON CAN RESULT
115 VOLTS
1 PHASE
10043586
LOCATE DIRECTLY ABOVE
POWER INPUT JACK
10043586

SOUTHWORTH
LOCATE CENTERED NEAR THE BOTTOM
OF THE COVER ON ALL 3 SIDES # 2987334

Gun Safe Loader Manual

LABELS AND PRECAUTIONARY MARKINGS



Southworth Products
P.O. Box 1380
Portland, ME 04104-1380 SOUTHWORTH

Model No:
442XXXX
Serial No:
XXXXXX-XXX-XX
Date of Shipment: Month-Year

Sales, Parts, and Service
1-800-743-1000

LOCATE ON BASE FRAME AND ON INSIDE OF COVER

POWER & CONTROLS
12 VOLT (DC) →

PLACE ON MOTOR
2991783

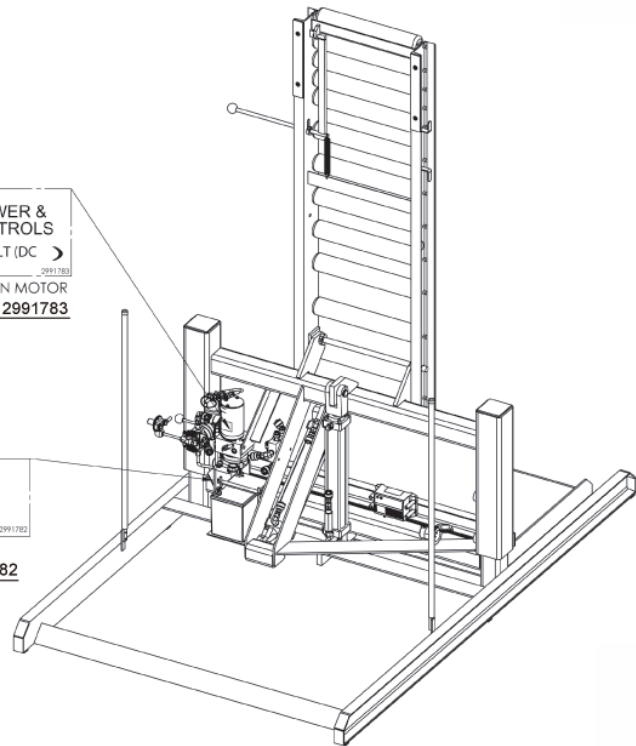
TANK TO BE FULL
ONLY WHEN CYLINDER
IS COLLAPSED

THIS MACHINE USES
DEXTRON 3 ATF
HYDRAULIC FLUID
OR EQUIVALENT

2991782

LOCATE ON SIDE OF TANK

2991782



NOTICE

Precautionary labeling in this machine is for your safety and any personnel that maybe nearby. It is the owner's responsibility to ensure that all labeling is clear and legible at all times.

If replacement labels are needed they can be obtained from the Southworth Products Corp, Parts Department. (Ph: 800-743-1000)

CAUTION

Do not operate this machine unless you have read and understand all instructions in the owner's manual and have reviewed the enclosed video.

LOADING SEQUENCE

1. Make sure the motor in the vehicle is off, the emergency brake is set, the loading area in the bed is clear of all debris, and no one is in the vehicle during the loading sequence. **NOTE: Smooth, painted pickup beds will permit safes weighing up to 1,000 lbs. to slide. For safes weighing over 1,000 lbs., or beds with rubberized coatings, a sheet of Masonite is recommended to permit the safe to slide.**
2. Using a hand pallet jack, position the Gun Safe Lifter so the tailgate or leading edge of the vehicle is just touching the two white marker rods.
3. Secure the safe against the conveyor using the strap provided. The back of the safe must be against the conveyor.
4. Insert the key (authorized trained person only) and turn on the Lifter.
5. Lift the safe to the full vertical travel of the machine.
6. Tilt the safe roughly 90 degrees, observing how the top end of the conveyor is positioned over the bed of the vehicle. The end of the conveyor must land just inside of the bed. It should **NOT** rest on the tailgate. If the tailgate interferes it should be removed.
7. Tilt the Lifter to the full 93 degrees.
8. Make sure the vehicle bed length can accommodate the safe. **NOTE: The distance from the front of the vehicle bed to the first (top) roller of the conveyor must be longer than the safe (measuring from the top of the safe to the bottom of the skid).**
9. Vertically lower the Lifter slowly. The object here is to compress the vehicle springs. Continue to lower until the vehicle and Lifter stop going down. The safe is now ready to offload onto the vehicle bed.
10. No one should be in the truck bed.
11. Release the strap. Push the conveyor stop lever forward and hold it. With your other hand, roll the safe onto the vehicle bed. If the safe does not roll completely off the conveyor then push the safe to move it off the end (top) of the conveyor. Additional help may be needed with this process depending on the weight of the safe and/or the condition of the truck bed.
12. Return tilt to vertical and lower the Lifter to near the floor level for transport to storage location with a hand pallet jack.

10043112

Installation Instructions

Preparation

1. Before you use the Loader, check for local codes and ordinances which may apply. It is your responsibility to obtain any necessary local permits, if required.
2. Read all of these installation instructions carefully. Be sure to read and understand all of the warnings.
3. The Loader should be placed indoors, or protected from the weather.

WARNING

Protect the Loader from rain or moisture. If the electrical parts in the power Loader get wet, workers may be hurt by electrical shock. The electrical parts may fail if they are wet.

WARNING

The electric motor can create sparks. Don't install the Loader in an area where flammable gases may be present.

Positioning the Loader

1. Remove the shipping material. Inspect the Loader for any shipping damage
2. On the front of this manual, write down the model number, serial number, and date the Loader is placed in service. You can find the model number and serial number on the name plate.
3. Move the Loader into position and place the Loader on a firm, level surface.

CAUTION

If you place the Loader on a surface which is not level, the Loader may shift as it operates. You may be hurt, or the Loader or load may be damaged.

Testing

1. Clear the area around the Loader. Remove any lumber or other materials which might get in the way of the Loader as it raises or lowers.

Gun Safe Loader Manual

- Warn others to stay away from the Loader. Operate the Loader through its full range of travel (lift/lower, tilt/return). The Loader should rise smoothly with a quiet humming sound, and lower smoothly and quietly. Raise and lower the Loader a few times to check the lifting action.

WARNING

As the platform moves up and down, “pinch points” may be created. If you are standing too close to the Loader when it is moving, your arm or leg may be caught in the moving parts, and you may be hurt. Stay away from the pinch points when the Loader is moving.

- Test the Loader with the rated load. If the Loader does not rise, and you hear a loud squealing noise -- DO NOT CONTINUE.

NOTICE

If you hear a squealing noise from the pump, the pressure relief valve is operating. **DON'T CONTINUE TO USE THE LOADER!** The pump will overheat very quickly, and may be permanently damaged. The relief valve is included to protect the machine operators - **DO NOT CHANGE THE SETTING ON THE RELIEF VALVE.**

- Clean up any spilled hydraulic fluid. Spilled hydraulic oil is slippery, and may present a fire hazard. If you clean up any spilled fluid, you will be able to tell right away if the Loader begins to leak.
- Figure 1 shows the safety labels on this Loader. Check to be sure all of the labels are in place.

WARNING

As you operate this Loader, follow these rules:

- Do not put your hands or feet under

the lift platform or conveyor.

- Do not work on the lift unless it is in the lowered position.
- Do not stand, sit, or ride on the Loader.

WARNING

Do not try to lift a load that is higher than the maximum rating. If you do not follow these rules, the Loader may fail suddenly. Someone may be hurt, or the Loader and load may be damaged.

The Loader is designed so it can lift the rated load if the load center is placed over the center of the platform. If the load is placed “off center,” near the front of the platform, the Loader will not be able to lift the rated load safely.

Place the gun safe as far back on the platform as possible. It is also important that the load be centered side-to-side. For these reasons, it is very important to be sure the load is centered in the platform area.

Loading Sequence

- Make sure the motor in the vehicle to be loaded is off, emergency brake is set, the loading area in bed of truck is clear of all debris, and no one is in the vehicle during the loading sequence.

NOTE: Smooth, painted vehicle beds will permit safes weighing up to 1,000 lbs to slide. For safes weighing over 1,000 lbs or beds with rubberized coatings, a sheet of Masonite is recommended to permit the safe to slide.

- Using a hand pallet jack, position the Loader so the tailgate or leading edge of the vehicle is just touching the two white marker rods.

- Secure the safe against the conveyor using the strap provided. The back of the safe must be against the conveyor.

4. Insert the key (authorized trained person only) and turn on the Loader.

5. Lift the safe to the full vertical travel of the machine.

6. Tilt the safe roughly 90 degrees, observing how the top end of the conveyor is positioned over the bed of the vehicle. The end of the conveyor must land just inside of the bed. It should **NOT** rest on the tailgate. If the tailgate interferes it should be removed.

7. Tilt the Loader to the full 93 degrees.

8. Make sure the vehicle bed length can accommodate the safe. **NOTE: The distance from the front of the vehicle bed to the first (top) roller of the conveyor must be longer than the safe (measuring from the top of the safe to the bottom of the skid).**

9. Vertically lower the Loader slowly. The object here is to compress the vehicle springs. Continue to lower until the vehicle and Loader stop going down. The safe is now ready to offload onto the vehicle bed.

10. No one should be in the truck bed.

11. Release the strap. Push the conveyor stop lever forward and hold it. With your other hand, roll the safe onto the vehicle bed. If the safe does not roll completely off the conveyor then push the safe to move it off the end (top) of the conveyor. Additional help may be needed with this process depending on the weight of the safe and/or the condition of the truck bed.

12. Return tilt to vertical and lower the Loader to near the floor level for transport to storage location with a hand pallet jack.

Maintenance and Troubleshooting

All servicing should be done by qualified personnel. Qualified personnel should be able to read and understand wiring and hydraulic diagrams. They should be able to troubleshoot

live electrical circuits safely and in accordance with accepted practice. **FOR SAFETY'S SAKE**, if in doubt, please contact your distributor or Southworth Products Corp Customer Service Department at (207) 878-0700 or (800) 743-1000. Before servicing the Loader, please read and understand all of this section and the section entitled "Operating Instructions."

Hazards

There are several hazards you should be aware of as you service the Loader:

WARNING

- **As the Loader moves up and down, "pinch points" are formed as shown in Fig. 2. KEEP HANDS, FEET AND LOOSE CLOTHING AWAY FROM THESE PINCH POINTS. If your hand or arm or a part of your clothing is caught, you may be hurt.**
- **Before performing any maintenance on the Loader, lower the platform completely. Failure to do so could result in severe personal injury.**
- **You should not have to do any maintenance work with the platform raised. All normal maintenance can be done with the platform lowered. However, if you ever need to work under the platform, you must be careful to do this safely.**
- **The relief valve has been included for the protection of all of the workers who use the Loader. DON'T CHANGE THE RELIEF SETTING! If the relief valve does not open when it should, the Loader may fail. Someone may be hurt, and the Loader and load may be damaged.**
- **If the hydraulic fluid is released under high pressure, it can cause personal injury. Before you open any part of the hydraulic system, BE SURE TO RELEASE THE HYDRAULIC PRESSURE. You can do this by**

Gun Safe Loader Manual

lowering the platform all the way down.

- The warning labels have been included for the safety of the operator. If the labels are worn or missing, or have been painted over, **REPLACE THEM** before releasing the lift for operation. Fig. 1 shows the safety markings on this Loader.

Routine Periodic Maintenance

Every month:

- Remove the plate covering the power Loader and check the mechanical parts. Check for signs of wear. If the machine is operated in a very dusty environment, you may have to wipe off the dust.
- Check cylinders, clevis pins, and bushings for wear.
- Check the level and appearance of the hydraulic fluid. In order to check the level, lower the Loader completely. Remove the rear cover on the Loader. Remove the red plastic vent plug on top of the hydraulic tank, and use a dipstick to check the oil level. When the platform is fully lowered, the oil should be about 1/2" to 3/4" inch below the top of the tank. Add oil if necessary. Change the oil if it has darkened, or feels gritty or sticky.

NOTICE

It is important to use hydraulic fluid with the correct grade and properties. See the hydraulic oil specification on page 9 of this manual.

Every six months or 50 hours of operation, whichever comes first:

- Check all of the hydraulic fittings and hoses, and tighten the connections if necessary. Sometimes the fittings can be worked loose by the vibrations from the power Loader.

WARNING

If a hydraulic fitting becomes loose, or if a hydraulic hose breaks, the hydraulic fluid may escape from the system under pressure. If the platform is raised when this happens, it can drop quickly. Someone may be hurt, or the Loader or load may be damaged. To avoid this problem, inspect all of the hydraulic hoses and fittings regularly, and replace them if they are worn or damaged.

- The clear plastic vent line and the cylinder rod should be free of hydraulic fluid. If you find much fluid in either place, the cylinder seals may be leaking. (It is also possible the tank may be over-filled.) If the worn parts must be replaced, see the section on "Repacking the Cylinder."
- Lower the platform and disassemble the down valve as shown in Fig. 9. Blow the valve plunger clean with compressed air. Reassemble the valve and reinstall it.
- Drain and discard the hydraulic fluid. The suction filter is in the tank, at the point where the suction line runs out to the pump. Unscrew the hydraulic line, then remove the filter. Blow the filter clean with compressed air. Reinstall the filter in the tank and reassemble the hydraulic line.
- Refill the tank with new hydraulic fluid. See oil specifications on page 9.
- Be sure all of the warning labels are in position and legible. See Fig. 1. THE WARNING LABELS ARE INTENDED TO PROTECT YOUR WORKERS. If the labels are missing, or if they have been painted over, replace them.

Troubleshooting Check List

All servicing should be done by qualified personnel. Qualified personnel should be able to read and understand wiring and hydraulic diagrams. They should be able to troubleshoot live electrical circuits safely and in accordance with accepted practice. FOR SAFETY'S SAKE, if in doubt, please contact your distributor or Southworth Products Corp at (207) 878-0700 or (800) 743-1000.

Before servicing the Loader, read and understand this entire section and the section entitled "Operating Instructions."

NOTICE

Before performing any maintenance on this Loader, lower the platform completely.

If the platform will not raise:

NOTICE

If the platform will not raise, do not continue to hold the Up button for more than 2 or 3 seconds. You may damage the pump.

1. Ensure that the switch is on and the battery is charged.
2. The load may be too heavy. Check the actual weight of the load. The rated capacity of the Loader is shown on the name plate.

WARNING

DON'T CHANGE THE SETTING OF THE RELIEF VALVE. If you do change the setting, this may cause a hydraulic part to fail. The platform may drop suddenly. Someone may be hurt, and the Loader and load may be damaged. The hydraulic parts in the Loader are designed to handle a certain amount of pressure. The relief valve is set to relieve this pressure before it becomes too great. The relief valve has been included for the

protection of all of the workers who use the Loader.

3. If the motor is not running, check the connections and the wiring to the motor.
4. The hydraulic oil level may be low. In order to check the level, lower the Loader completely and remove the rear cover on the Loader. When the platform is lowered as far as possible, the oil should be about 1/2" to 3/4" inch below the top of the tank. Remove the red plastic plug on top of the tank. Use a dipstick to check the oil level.
7. A vacuum leak may be allowing air into the suction line, causing cavitation (loss of suction) in the pump. Check all fittings in the suction line, and tighten or replace them if necessary.

NOTICE

If cavitation is allowed to continue, the pump may be damaged, and may have to be replaced.

If the platform elevates, but fails to hold a load:

1. The cylinder may be leaking. Look for oil on the cylinder rod

If these steps do not solve the problem, please call the Southworth Products' Customer Service Department at (207) 878-0700 or (800) 743-100

Hydraulic Oil Specifications

If the lift will be used at normal ambient temperatures, Southworth supplies the Loader with Citgo AW 32 oil. This may be replaced by any other good quality oil with 150 SSU at 100° F and rust and oxidation inhibitors and anti-wear properties.

If the lift will be used at ambient temperatures below 0°F, use aircraft hydraulic oil. Use Type 15 aircraft hydraulic oil.

The following are equivalent to CITGO AW32:

TYPE	MANUFACTURER
DTE 24	EXXON/MOBIL
NUTO H32	EXXON/MOBIL
AMOCO AW32	CHEVRON (AMOCO CO.)



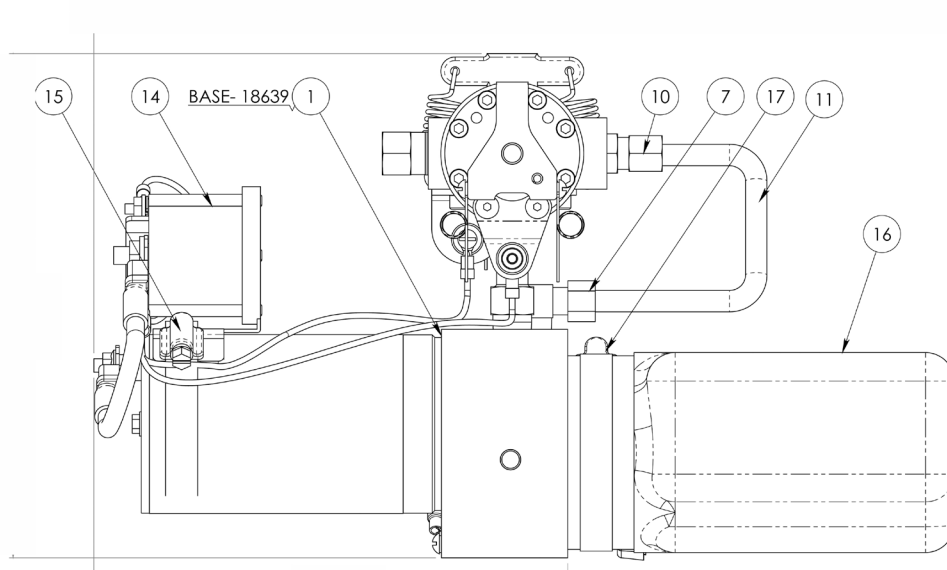
It is very important to keep the hydraulic oil free of dirt, dust, metal chips, water, and other contamination. Most of the problems with hydraulic systems are caused by contamination in the oil.

Table 2. Power Loader Part Description

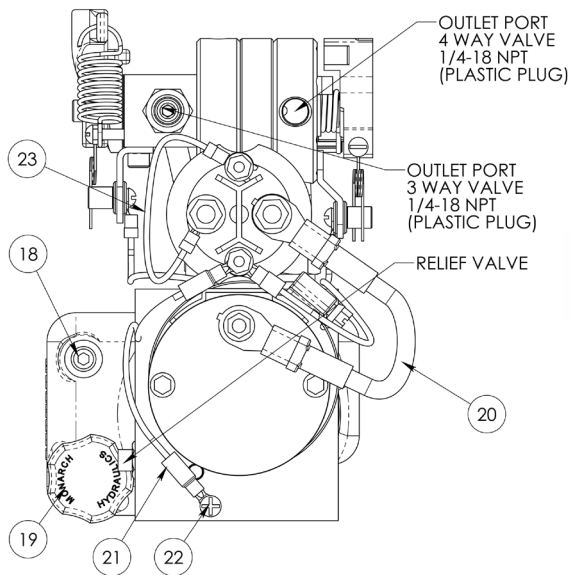
ITEM NO.	QTY	DESCRIPTION
1	1	BASE ASSY, M3200, 3/8, 1/4 NPT
2	2	PIN, DOWEL, 1/4 x 3/4
7	1	ELBOW ASSY, 90DEG. BRSS 3/8T x 1/4
8	1	ADAPTER, PUMP-VALVE, 2-1/2
9	1	VALVE ASSY, 3W CKED 4WBNKD DIR
10	1	CONNECTOR ASSY, 3/8-18 x 3/8M
11	1	TUBE, RETURN, 180DEG, M500
12	1	SHAFT, INTERMEDIATE, MICRO, DC
14	1	SWITCH, SOL ACT MTR ST, 12 VDC
15	1	CLAMP, HOSE, WORM, GR, 2.3-3.25 ID
16	1	RESV, PLASTIC, 3.5 x 5.3 8 x 6.76
17	1	CLAMP, HOSE, WORM, GR, 2.56-3.5 ID
18	1	PLUG, PIPE, FLUSH, 1/8 NPTF
19	1	PLUG, RESV, BREATHER, 3/8 NPT
20	1	CABLE, INSULATED, W/LUGS, 5", #6GA
21	1	WIRE ASSY, CNTRL, 16AWG, HS, RING
22	1	SCREW, SELF TAPPING, 10-25 3/8
23	1	WIRE ASSY, CNTRL, 16AWG, SPRG SPD

Power Loader Views

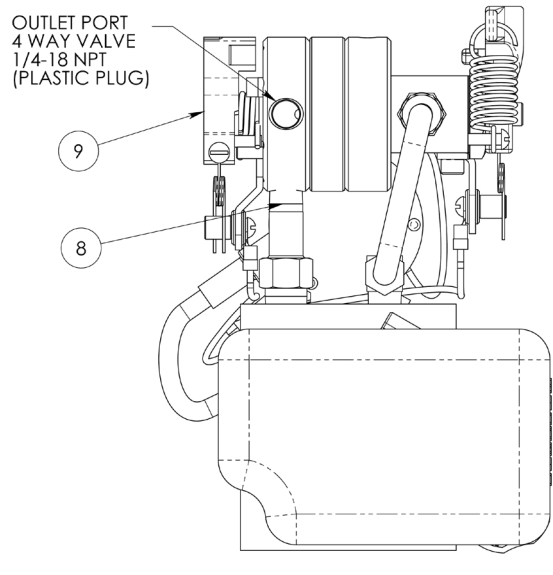
← ACTUATION DIRECTION FOR LIFT
POWER PORT ON 3 WAY VALVE



Side View



End View



End View

BATTERY MAINTENANCE

A. PREPARING TO CHARGE A BATTERY

1. Always turn off E-stop and key switch before working with the batteries.
2. Be sure the area around the stacker and the battery is well ventilated while battery is being charged.
3. The battery terminals, connections and wiring connections should be clean and free of corrosion. When cleaning any of these components wear a face shield or other suitable protective eyewear.

B. BATTERY CHARGING

Charging must be performed with the charger that is provided with or prewired into the machine. During charging, the temperature in the battery must not exceed 120 F. Charging simultaneously with truck operation is not recommended. Plug the charger into a 115V outlet. Charge until the battery gauge indicator lights show fully charged (approximately 6-8 hours).

C. WARNINGS AND BATTERY INFORMATION

Avoid use of open flame near batteries. At temperatures around freezing point, battery capacity is reduced by 30%. The battery terminals, connections and wiring should be clean and free of corrosion. When cleaning any of these components, wear a face shield or other suitable protective eyewear. Read, understand, and follow all battery and battery manufacturer's specific precautions while working with and/or charging batteries.

D. BATTERY MAINTENANCE

To measure the voltage, use a digital voltmeter (DC) on the battery poles. The truck must not have been in use for the previous 30 minutes.



Never alter the AC cord or plug provided. If it will not fit outlet, have proper outlet installed by a qualified electrician. Improper connection can result in a risk of an electric shock.

ORDERING REPLACEMENT PARTS

Southworth has carefully chosen the components in your lift to be the best available for the purpose. Replacement parts should be identical to the original equipment. Southworth will not be responsible for equipment failures resulting from the use of incorrect replacement parts or from unauthorized modifications of the machine.

Southworth will gladly supply you with replacement parts for your Southworth lift. Key parts are identified in Figures 8 through 15. With your order, please include the model number and the serial number of the lift. You can find these numbers on the name plate, which is located on the crossbar at the base of the cylinder(s). When you are ordering parts for a cylinder, also include the cylinder number. This is stamped on the base of the cylinder housing.

To order replacement parts, please call the Parts Department.

Parts are shipped subject to the following terms:

- FOB factory
- Returns only with the approval of our Parts Department.
- Payment net 30 days (except parts covered by warranty).
- Freight collect (except parts covered by warranty).
- The warranty for repair parts is 30 days from date of shipment.

Parts replaced under warranty are on a "charge-credit" basis. We will invoice you when we ship the replacement part, then credit you when you return the worn or damaged part, and we verify that it is covered by our warranty. Labor is not covered under warranty for Parts orders.

Parts Department - Southworth Products Corp

Telephone 207) 878-0700 or (800) 743-1000 • FAX : (207) 797-4734

repairparts@SouthworthProducts.com • www.SouthworthProducts.com

ONE YEAR WARRANTY

Southworth Products Corp warrants this product to be free from defects in material or workmanship for a period of (1) one year of single shift usage from date of shipment, providing claim is made in writing within that time period. This warranty shall not cover modified designs for special applications, failure or defective operation caused by misuse, misapplication, negligence or accident, exceeding recommended capacities, failure to perform required maintenance or altering or repairing, unless alteration is authorized by Southworth Products Corp. Except as set forth herein, there are no other warranties, express or implied, including the warranties of merchantability and fitness for a particular purpose, all of which are hereby excluded.

Southworth Products Corp makes no warranty or representation with respect to the compliance of any product with state or local safety or product standard codes, and any failure to comply with such codes shall not be considered a defect of material or workmanship under this warranty. Southworth Products Corp shall not be liable for any direct or consequential damages arising out of such noncompliance.

Southworth Products Corp's obligation under this warranty is limited to the replacement or repair of defective components at its factory or another location at Southworth Products Corp's discretion. The Southworth Warranty is for product sold with in North America. For products shipped outside of North America the warranty will be for replacement of defective parts only. Labor is not included. This is buyer's sole remedy. Except as stated herein, Southworth Products Corp will not be liable for any loss, injury or damage to persons or property, nor for direct, indirect, or consequential damage of any kind, resulting from failure or defective operation of said product.

This warranty may be altered only in writing by Southworth Products Corp, Portland, Maine.

SOUTHWORTH

Southworth Products Corp
P.O. Box 1380, Portland, ME 04104-1380
Telephone: (800) 743-1000 • (207) 878-0700
Fax: (207) 797-4734
www.SouthworthProducts.com

SOUTHWORTH

making work faster, safer, and easier

Southworth is the world class supplier of products designed to improve productivity and enhance safety. Our staff has over 400 years of engineering experience. If one of our standard products does not meet your needs, our engineers can custom design equipment specifically suited to your material handling application.



Spring PalletPal Load Leveler



Lift with Flush Mount Turntable



Portable Container Tilters



Dock Lifts



Roll on Level Loaders



Portable Lifts



Stack-n-Go Powered Stacker



**Floor Height Lifts
Roll-E**

**Floor to
Mezzanine Lifts**



Pallet Rotators



For more information, contact Southworth Products

Telephone (800) 743-1000 Fax (207) 797-4734

Email: salesinfo@SouthworthProducts.com