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A company dedicated to solving ergonomic and material handling problems since 1955.

Ergonomic Solutions

OWNER'S MANUAL

HEFTI-LIFT • MODEL HYD-5 & HYD-10

Contents

ENGLISH

ESPANOL

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SAFETY PRECAUTIONS

Read owner's manual completely before operating unit!

- Never exceed the maximum loading capacity of 880 pounds.
- Stand clear of load while loading and unloading.
- Load must be evenly distributed on deck to insure stability.
- Use caution in moving a loaded unit; avoid obstructions and floor defects.
- Always apply wheel brakes when unit is not in motion.
- Never go under deck if there is weight on unit.
- Do not continue to pump on the foot lever if the deck is not raising.
- Remove weight before working on unit.
- Do not use brake fluid or jack oils. Use AW-32 hydraulic oil or equivalent.
- Use only replacement parts supplied or approved by the manufacturer.
- Consult factory before performing any modification to the original equipment.
- Make sure all operator safety labels are in place (p.11).

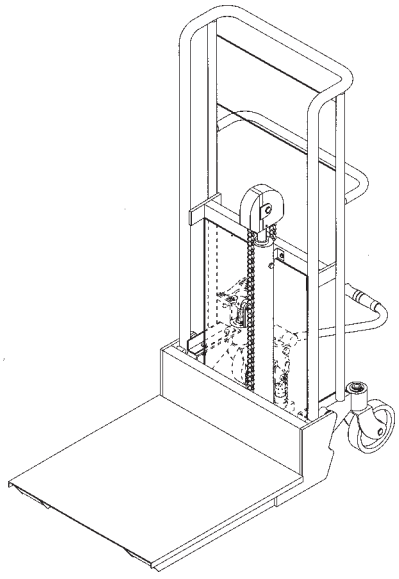
RECEIVING INSTRUCTIONS

Every unit is thoroughly tested and inspected prior to shipment. However, it is possible that the unit may incur damage during transit. If damage is noticed when unloading, make a note of it on the **BILL OF LADING**. Remove all packing and strapping material, then inspect the unit again for damage. **IF DAMAGE IS EVIDENT, FILE A CLAIM WITH THE CARRIER IMMEDIATELY!**

WARRANTY

This product is warranted for 90 DAYS from date of purchase to be free of manufacturing defects in material and workmanship. The manufacturer's obligation hereunder is limited to repairing such products during the warranty period, provided the product is sent prepaid back to the factory.

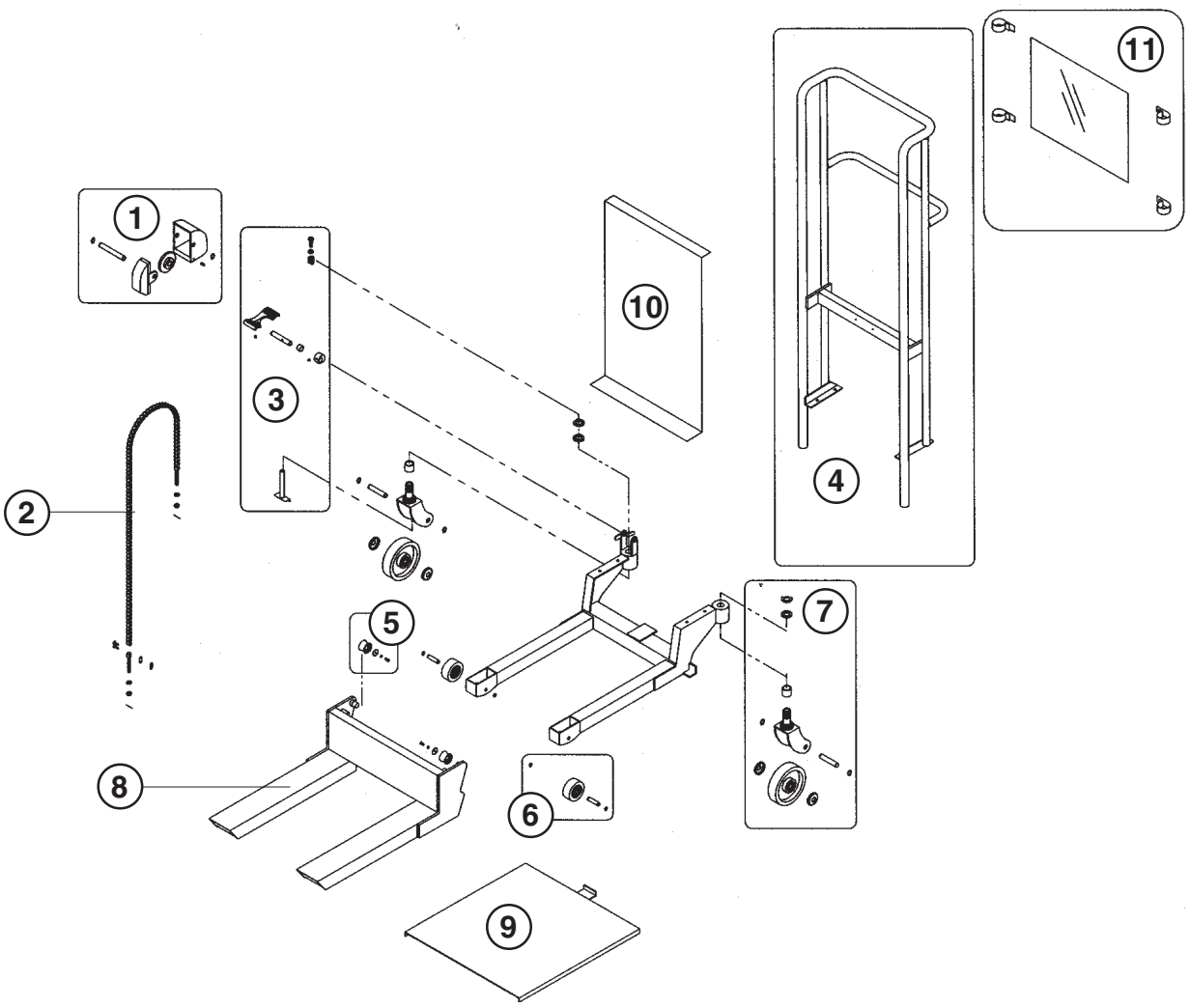
This warranty does not cover normal wear of parts or damage resulting from any of the following: negligent use or misuse of the product, use or application contrary to installation instructions, or disassembly, repair or alteration by any person prior to authorization from a factory representative.



HEFTI-LIFT
MODEL HYD 5 & HYD-10

PARTS LIST

HEFTI-LIFT • HYD-5 & HYD-10

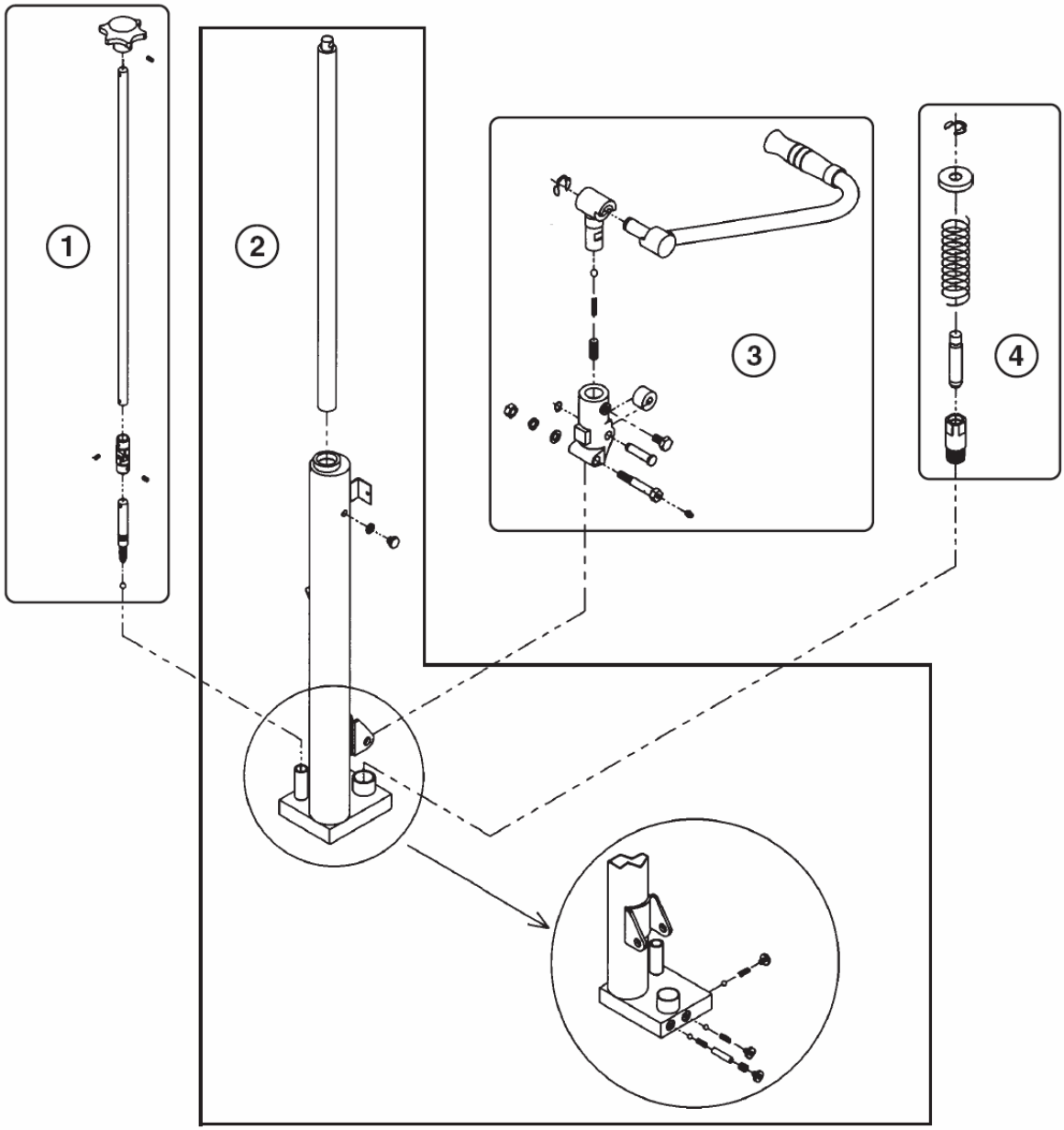


PARTS IDENTIFICATION HEFTI-LIFT
MODEL HYD-5 & HYD-10

ITEM NO.	DESCRIPTION	HYD-5 ENGINEER NO.	QTY.	HYD-10 ENGINEER NO.	QTY.
1	Chain Cover	33-154-004	1	33-154-016	1
2	Chain Assembly	33-154-005	1	33-154-017	2
3	Brake Assembly	33-154-006	1	33-154-006	1
4	Mast	33-154-032	1	33-514-018	1
5	Guide Wheel and Axle	33-154-007	4	33-154-007	4
6	Front Wheel and Axle	33-154-008	2	33-154-008	2
7	Rear Wheel and Axle	33-154-009	2	33-154-009	2
8	Forks Assembly	33-528-001	1	33-528-001	1
9	Top Deck	33-013-001	1	33-013-001	1
10	Front Plastic Shield	33-024-011	1	33-024-013	1
11	Back Plastic Shield	33-024-010	1	33-024-012	1

FOOT PUMP

HEFTI-LIFT • HYD-5 & HYD-10



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PARTS IDENTIFICATION
FOOT PUMP (HEFTI-LIFT)

KIT NO.	ITEM NO.	DESCRIPTION	HYD-5 ENGINEER NO.	HYD-5 PART NO.	HYD-10 ENGINEER NO.	HYD-10 PART NO.	QTY.
1	1	Release Knob Assembly	33-154-010	HYD5-FP01	33-154-010	HYD10-FP01	1
2	2	Pump Assembly	33-154-011	HYD5-FP02	33-154-018	HYD10-FP02	1
3	3	Foot Pedal Assembly	33-154-012	HYD5-FP03	33-154-012	HYD10-FP03	1
4	4	Plunger Assembly	33-154-013	HYD5-FP04	33-154-013	HYD10-FP04	1
A	A	Pump Seal Kit	33-144-401	HYD5-KITA	33-144-401	HYD10-KITA	1
B	B	Complete Assembly	33-154-014	HYD5-KITB	33-154-022	HYD10-KITB	1

a/k Available only with purchase of kit

Troubleshooting Quick Reference Guide for HYD-5 & HYD-10

(For further information please contact the factory)

WARNING! BEFORE PERFORMING ANY MAINTENANCE WORK ALWAYS ENSURE THAT THE DECK/FORKS ARE IN LOWER POSITION

Observation	Possible Cause	Remedy
1.) Deck/forks do not raise.	a. Excessive load.	a. Remove part of the load.
	b. Oil is low.	b. Fill oil as necessary.
	c. Relief valve set too low.	c. Increase only as necessary.
	d. Released pin is not rotating to closed position.	d. Check linkage for proper rotation.
	e. Breather cap is not allowing air into cylinder.	e. Be sure cap has air hole. Clean cap out with compressed air.
2.) Foot pedal goes down but deck/forks do not raise.	a. Particle of dirt under the pressure relief valve.	a. Lower deck/forks - Remove and clean steel ball and seat. (Refer figure 1)
	b. Particle of dirt under inlet check valve.	b. Lower deck/forks - Remove and clean inlet ball and seat. (Refer figure 1)
3.) Unit will pump under no load or when rapidly stroked, or pedal will stroke without pumping.	a. Pump is air locked.	a. Bleed air from system inlet.
	b. Inlet check valve has foreign material on seat.	b. Same as 2(b).
	c. Relief valve setting is out of adjustment.	c. Adjust relief valve setting higher.
	d. Foreign material on pressure relief valve seat.	d. Same as 2(a).
	e. Release pin has foreign material on the seat or is stuck in the open position.	e. Lower deck/forks - Remove and clean steel ball and seat. (Refer figure 1)
4.) Deck/forks raise when the pump is stroked but lower on return stroke.	a. Outlet check valve is leaking.	a.1. Lower deck/forks - Remove and clean steel ball and seat. (Refer figure 1)
		a.2. Pump vigorously to remove debris.
5.) Deck/forks raise but is too slow.	a. Foreign material stuck under pressure relief valve or under inlet check valve.	a. Same as 2(a) / 2(b).
6.) Spongy or jerky operation.	a. Check for foreign material stuck in the deck or frame rails.	a. Correct as necessary.
	b. Oil is low.	b. Same as 1(b).
7.) Deck/forks raise but do not lower.	a. Foreign object blocking roller travel.	a. Correct as necessary.
	b. Release pin is not rotating to open position.	b. Same as 1(d).

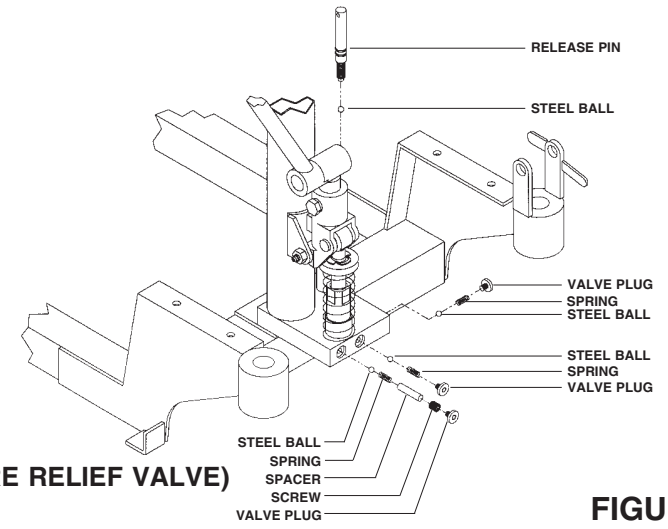


FIGURE 1

OPERATING INSTRUCTIONS - HYD-10-DC

Ensure that all employees involved in the operation of this lift understand and follow the following instructions!

Loading:

The load rating, in pounds, is shown on the machine dataplate. It indicates the net capacity of the lift with the load centered and evenly distributed on the platform.

Warning: For applications involving side or end edge loading, consult the factory.

Note: The addition of any ancillary equipment to the platform by third parties must be taken into account when determining the maximum working load to be placed on the table.

Warning: Do not exceed the lift's load ratings. Structural damage to the lift or injury to personnel could result from exceeding the listed capacity.

Operation:

Warning: Keep all personnel clear of the machine when it is in operation. Be certain no part of any person or object is under any part of the platform before lowering the unit.

Caution: Always carefully watch the lift and any load on it when it is in operation.

The DC powered lift is furnished with a constant-pressure (dead-man style) pushbutton control.

Pressing the "UP" pushbutton, or pulling the lever up, will turn on the power unit to raise the platform. The platform will raise only while the control is pressed. Upon releasing the control, the platform will stop and hold its position.

Pressing the "DOWN" pushbutton will energize the lowering valve, or pushing the lever down will open a manual valve, to allow the platform to descend by gravity (the motor does not run). Again, releasing the control will stop the platform movement, and the unit will hold its position.

Caution: Never use the lift if any damage or unusual noise is observed, if it is in need of repairs, or if it seems to be malfunctioning. Notify your supervisor or maintenance personnel if you notice anything out of the ordinary.

Ensure that all safety and warning labels stay in place and are legible. Refer to the labels page in this manual.

ADDITIONAL INSTRUCTIONS FOR BATTERY-POWERED UNITS

WARNING!

! Working with or near lead acid batteries is dangerous. Batteries contain sulfuric acid and produce explosive gases. A battery explosion could result in loss of eyesight or serious burns.

! Do not smoke or allow a spark or flame near batteries. Charge batteries in locations which are clean, dry, and well-ventilated. Do not lay tools or anything metallic on top of any battery. All repairs to a battery must be made by experienced and qualified personnel.

! When working with batteries, remove personal items such as rings, bracelets, necklaces, and watches. Batteries can produce enough energy to weld jewelry to metal, causing a severe burn.

! Always have fresh water and soap nearby in case battery acid contacts skin, clothing, or eyes.

! Operating the battery with a low battery voltage can cause premature motor contact failure.

! Do not expose the lift or charger to rain or adverse conditions.

! Replace defective cords or wires immediately.

! Check the battery's water level frequently.

BATTERY CHARGER OPERATING INSTRUCTIONS

Never operate the charger with either of the cables coiled. Operating the unit with the cord wrapped around itself could cause the cord to overheat, melt, and cause a short-circuit or a fire.

Plug the charger into a standard 115V receptacle. If an extension cord must be used, keep it as short as possible.

Connection: the ribbed wire of the charger's output cord must be connected to the battery's negative (-) terminal. The non-ribbed wire must be connected to the battery's positive (+) terminal. Reversing this polarity will blow the charger's output fuse.

Caution: Remember to unplug the charger before moving the equipment. Failure to do so could cause damage to cords, receptacles and other equipment.

TROUBLESHOOTING

If the unit does not operate, check all of the wiring connections to make sure they're both mechanically and electrically sound – specifically at the battery, the motor, and at any location a wire is connected to the chassis. Also make sure the quick-connect plug on the end of the pendant control cord is plugged in correctly.

A fully-charged lead acid battery in good condition at room temperature should read 12.65 volts. At 11.9 volts it is considered to be fully discharged and in need of charging. When checking battery voltage, wait at least 1/2 hour after the charger has been turned off before checking the battery's voltage.

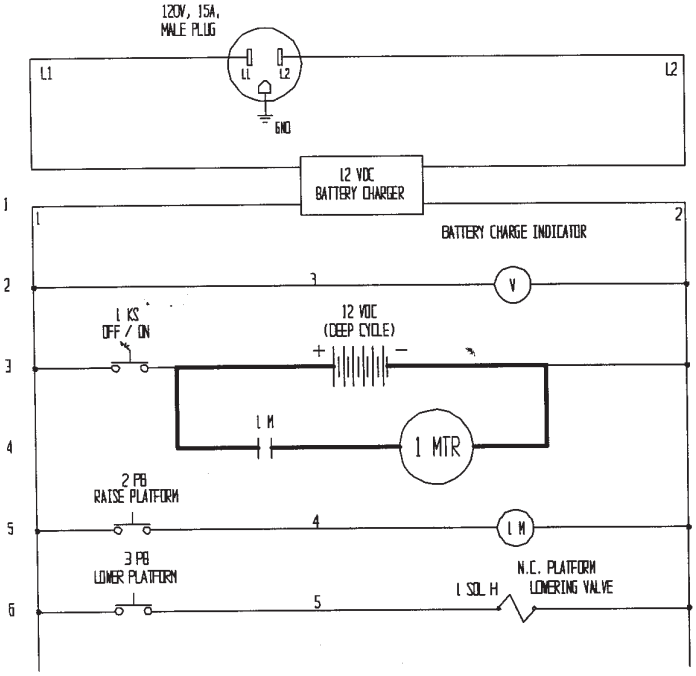
If the motor doesn't run, observe the green LED on the motor relay. If it is not lit, or if the LED goes out when the "UP" control is pressed, the battery voltage should be checked with a voltmeter.

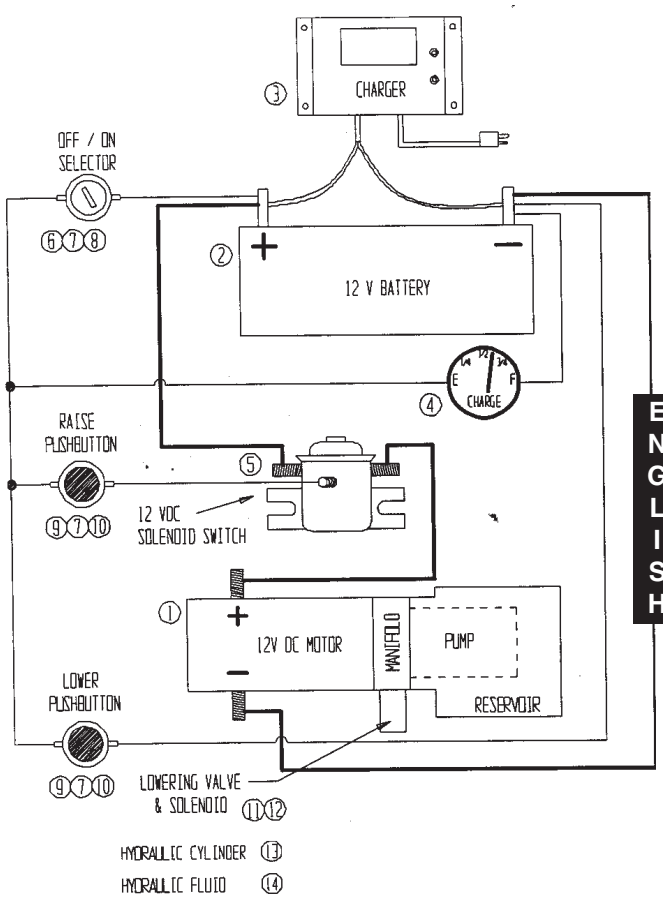
If the batteries don't seem to be taking a charge, check the charger's 115V supply circuit, the charger's 10A output fuse, and the charger's output with a voltmeter. If all check okay, confirm the battery's state of charge using a hydrometer or a voltmeter.

ELECTRICAL DIAGRAM • HYD-10-DC

Warning: Care should be taken to identify all potential hazards and comply with applicable safety procedures before beginning work. Fully lower or securely support the platform, and ensure that system pressure and power have been removed, before attempting to work on any of the hydraulic components!

Only qualified individuals trained to understand mechanical devices and their associated electrical and hydraulic circuits should attempt troubleshooting and repair of this equipment.





BE SURE ALL POWER IS OFF BEFORE ATTEMPTING TO WORK ON THIS EQUIPMENT!

CAUTION: SERVICE WORK SHOULD BE PERFORMED ONLY BY TRAINED & QUALIFIED PERSONNEL

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ELECTRICAL BILL OF MATERIALS • HYD-10-DC

When contacting the factory for replacement parts or for any correspondence, please provide the products serial number.

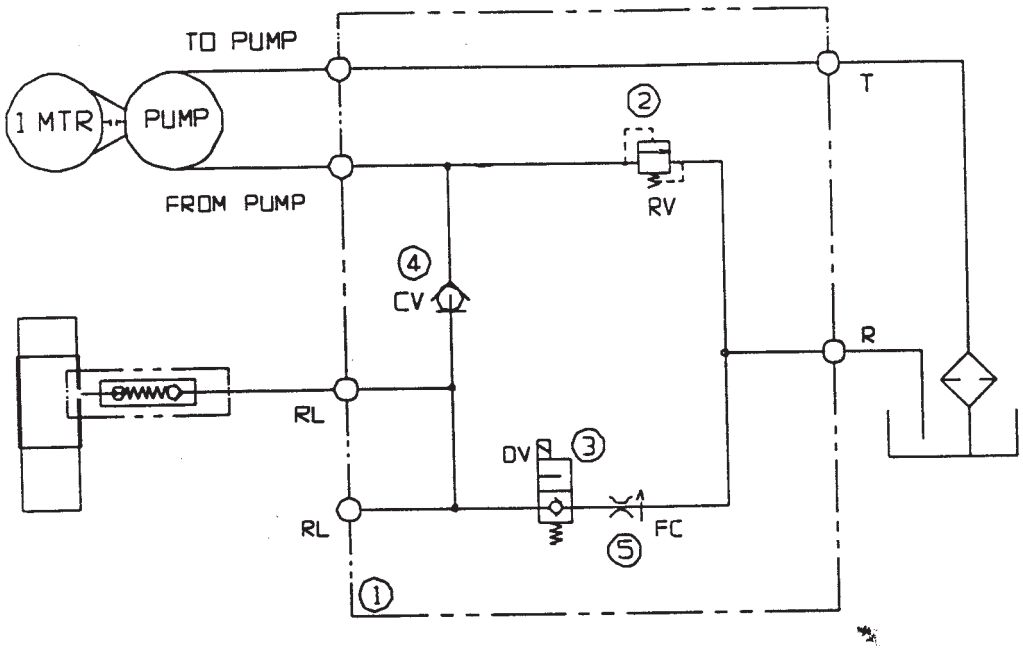
Only qualified individuals trained to understand mechanical devices and their associated electrical and hydraulic circuits should attempt troubleshooting and repair of this equipment.

ITEM NUMBER	DESCRIPTION	PART NUMBER	QUANTITY
1	12 VCD power unit (motor, pump, manifold, valves)	H10DC-PU	1
2	12 VCD battery	H10DC-BAT	1
3	12 VCD, 5 amp battery charger	H10DC-BATCHG	1
4	Battery charge indicator	H10DC-BCI	1
5	Solenoid start switch	H10DC-SSW	1
6	Key selector switch operator	H10DC-KS	1
7	Contact block mounting blaock	H10DC-CMB	3
8	Normally-closed contact block	H10DC-NCCB	1
9	Flush pushbutton operator	H10DC-PB	2
10	Normally-open contact block	H10DC-NOCB	2
11	Lowering valve solenoid	H10DC-LVS	1
12	Lowering valve	H10DC-HSV	1
13	Hydraulic cylinder	H10DC-CYL	1
14	Hydraulic fluid (quarts)	HO150	3

HYDRAULIC DIAGRAM • LIFT-HOLD-LOWER CIRCUITS

- Care should be taken to identify all potential hazards and comply with applicable safety procedures before beginning work.
- Raise the lift and install the maintenance props before beginning any inspections or work on the unit.
- Only qualified individuals trained to understand mechanical devices and their associated electrical and hydraulic circuits should attempt troubleshooting and repair of this equipment

CAUTION: *Do not use brake fluid or jack oils in the hydraulic system. If oil is needed, use an anti-wear hydraulic oil with a viscosity of 150 SUS at 100°F (ISO 32 @ 40°C), or non-synthetic transmission fluid.*



ELECTRIC / HYDRAULIC DIAGRAM

TROUBLESHOOTING GUIDE
HYD-10-DC

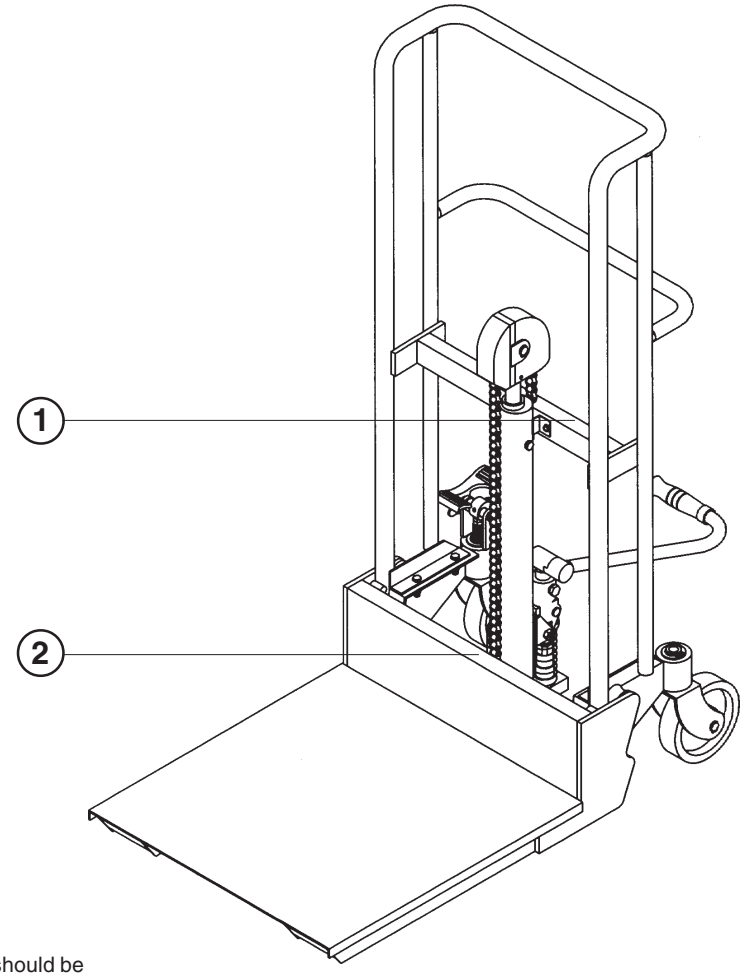
- WARNING: Care should be taken to identify all potential hazards and comply with all applicable safety procedures before beginning troubleshooting or repairs.
- CAUTION: Before performing any troubleshooting or repairs, the load must be removed from the platform. Then either raise the platform and install maintenance props or fully lower the platform to the floor.
- Only qualified individuals trained to understand mechanical devices and their associated electrical and hydraulic circuits should attempt troubleshooting and repair of this equipment.

Consult the factory for problems at time of installation, or for any problems not addressed in this manual.
* Check the charger notes page for troubleshooting other problems specific to battery-powered units.

PROBLEM	Possible Cause	Remedy
Power unit doesn't run when "UP" button is pressed.	Bad motor relay coil.	Test with meter; replace if bad.
	Battery voltage low.	Test with meter; replace if bad. Check battery voltage with meter.
Motor runs, platform doesn't move. Power unit not noisy.	Pump is failing to build pressure.	Consult the factory.
Motor hums or pump squeals, but the platform does not move, or the platform moves only slowly.	See last paragraph, above.	Same as above.
	Platform overloaded.	Verify that the load doesn't exceed the lift's capacity.
	Pressure relief opening at full pressure.	Check for structural damage or binding of the load rollers, etc. Check for platform overload condition.
	Contamination holding open the lowering valve or the check valve.	Remove and inspect.
Platform raises, then drifts down. Spongy or jerky platform movement.	See last paragraph, above.	Same as above.
	Excessive air in the hydraulic cylinders.	Bleed air from the cylinder(s).
Platform won't lower.	Solenoid coil is bad or connector is loose.	Check with meter.
	Physical blockage of the structure.	Inspect for foreign material or objects that might block the platform or its rollers.
	Solenoid valve screen or suction hose screen plugged.	Remove and inspect.
Platform lowers too slowly.	Pinched hose.	Check pressure, supply, and return hoses for kinks.
	Velocity fuse locking (platform will only very slowly creep down).	Same as for jerky platform movement.
	Flow control stuck.	Pull and inspect the flow control, clear if necessary.
Platform lowers too quickly.	See last paragraph, above.	Same as above.

WARNING LABEL IDENTIFICATION

MAKE SURE ALL WARNING LABELS ARE IN PLACE!



* Product safety signs or labels should be periodically inspected and cleaned by the product users as necessary to maintain good legibility for safe viewing distance. ANSI 535.4 (10.21)
Contact manufacturer for replacement labels.

ENGLISH

(1)

CAPA400Kgs (880lbs)

(2)

⚠ CAUTION	⚠ PRECAUCIÓN	⚠ ATTENTION
PLATFORM MUST BE LOWERED BEFORE MOVING LIFT	**LA PLATAFORMA DEBE DE ESTAR EN LA POSICIÓN BAJA ANTES DE MOVER EL ELEVADOR**	**LA PLATE-FORME DOIT ÊTRE ABAISSÉE AVANT D'ACTIVER LE MONTE-CHARGE**
210		