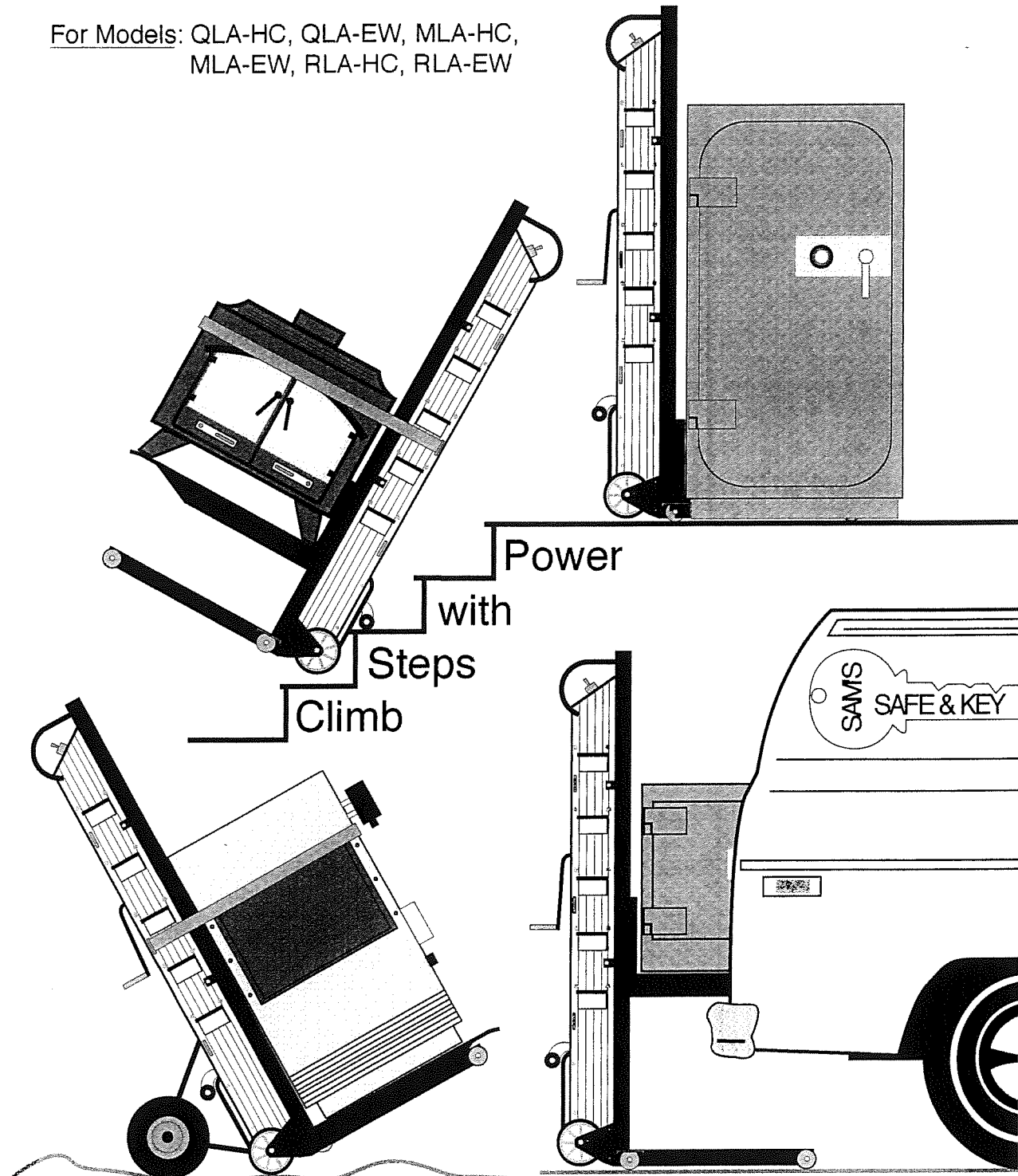


Escalera StairClimbing Forklift Owner's Manual

For Models: QLA-HC, QLA-EW, MLA-HC,
MLA-EW, RLA-HC, RLA-EW



READ INSTRUCTIONS BEFORE USE!

WARRANTY

Escalera Inc. warrants the stairclimbing handtrucks manufactured by them, when lubricated and operated as recommended, to be free from defect in material and workmanship for a period of one year after delivery. All warranty items are to be returned to Escalera, freight prepaid, for inspection. If the item is determined to be a defect, Escalera will repair or replace the item.

Alterations and/or careless or improper usage void this warranty. A nominal charge will be made for repair of units which are not operable for reasons other than defects in workmanship or material.

GUARANTEE

Escalera Inc. guarantees their handtrucks with a two-month trial. If for any reason within the first 60 days of your purchase you are dissatisfied with your unit, you can return it to Escalera, freight prepaid, for a prompt exchange or refund of the entire purchase price with no restocking fee. All we ask is for you to call us first for packing instructions, and that the handtruck be returned in what Escalera considers to be a reasonably new condition.

SERVICE

Escalera Inc

708 Industrial Dr.
P.O. Box 1359
Yuba City, CA. 95992

Phone: 800-622-1359

530-673-6318

Fax: 530-673-6376

e-mail: escalera@escalera.com

Internet: www.escalera.com

CONTENTS

CONGRATULATIONS! You have chosen an outstanding, carefully engineered, and thoroughly tested handtruck. Your unit will provide many years of profitable, trouble-free service if the following instructions are observed. Familiarize yourself with your handtruck by reading this manual before beginning operation. This manual contains essential information **YOU WILL NEED TO KNOW** in order to get started, as well as operating tips and instructions, a maintenance and trouble-shooting guide, and information on obtaining replacement parts.

This manual contains the following sections:

- **Operation & Safety**
This section contains information on operating your Escalera handtruck safely and correctly.
- **Maintenance & Lubrication**
Here you will find information on keeping your Escalera handtruck in top working condition.
- **Trouble-shooting Guide**
If trouble strikes, look here for the answers to your problems.
- **Parts Breakdown**
Replacement parts can be identified by examining the useful schematics found in this section of the manual.

Please write down your model and serial numbers below for easy identification when calling Escalera.

MODEL# _____ SERIAL# _____

OPERATION & SAFETY

Before you can begin operating your new Escalera handtruck, you must first install the battery (for all units with power options).

BATTERY INSTALLATION & CHARGING INSTRUCTIONS

1. Mount the battery to the handtruck by placing it on the lower cross-member located directly above the stairclimbing gearbox. Stretch the rubber cords around the battery and attach the hooks to the battery bars to hold the battery in place.
2. Connect the positive(+) and negative(-) battery wires to the leads coming from the circuit-breaker by connecting the yellow quick-disconnect terminals. The terminals will only connect one way to prevent accidental reversal of polarity.
3. To charge your battery, first totally disconnect the battery from the handtruck by disconnecting the yellow quick-disconnect terminals.

Use the #531 charger for charging the #621 battery. (see Fig. 1.1)

- Connect the yellow terminals from the charger to the yellow terminals on the battery wires. The terminals will only connect one way to prevent accidental reversal of polarity.
- Plug in the charger to a grounded AC wall plug. The green LED will light when AC power is present to the charger. The red LED will light when the charging voltage reaches approx. 14 volts and stays lit until the battery voltage drops approx. 1 volt. Then the red LED light will turn off. This will occur frequently at the start of the charge and then gradually lengthen as the battery becomes more fully charged.

Use the #532 charger for charging the #730 battery. (see Fig. 1.2)

- Slide back the rubber terminal boots to reveal the battery terminals.
- Connect the alligator clips on the charger to the battery terminals, making sure to connect the red lead to the positive(+) and the black lead to the negative(-) terminals on the battery.
- Plug in the charger to a grounded AC wall plug.

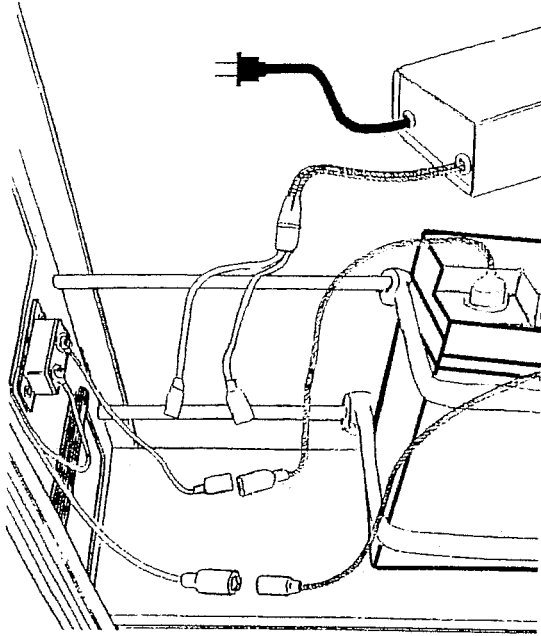


Fig. 1.1
#531 Battery Charger with
#621 battery

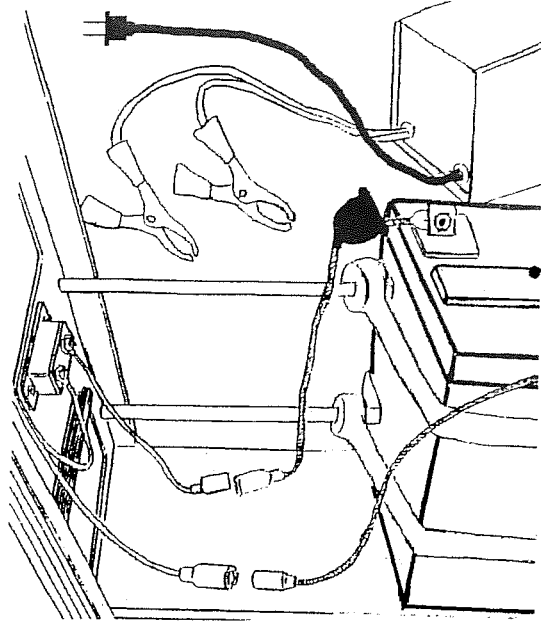


Fig. 1.2
#532 Battery Charger with
#730 battery

4. Always fully charge your battery after each use.
 - An overnight charge is sufficient to fully charge your battery.
 - Deeply discharging your battery will shorten the life. DO NOT drain your battery all the way before charging!
 - When you are not using your handtruck for extended periods of time, DO NOT store the battery in a discharged state. If the battery has been discharged for some time, it may not readily take a charge. To overcome this, leave the charger connected for 24 to 48 hours and the battery will eventually begin to accept a charge.
 - Avoid placing the battery in extreme heat. The longest service life is attained when the battery is used at an ambient temperature of between 68°f (20°c) and 77°f (25°c).

5. NEVER operate your handtruck with a deeply discharged or worn out battery. Operating at low voltage can cause damage to the electrical system of the handtruck.
 - To test if your battery has worn out, first try charging for 24 to 48 hours. A volt meter can be used to check the battery. The battery should maintain 12 volts with a full charge while it is UNDER LOAD.
 - With a new battery and a full charge, your handtruck should be able to climb up and back down 10 flights of steps (approx. 130 steps).

OPERATION & STAIRCLIMBING

NOTE: Do not expect to operate your unit with ease the first time you use it. Practice with the handtruck empty until you become familiar with its operation and "get the feel" before attempting heavy loads. Following these simple instructions will assure safe and correct operation of your Escalera Stairclimbing Handtruck.

1. UPSTAIRS OPERATION:

- Strap the load securely to the handtruck.
- To 'break back' the load, place your heel on the floor with the ball of your foot on the handtruck tire. Quickly snap the load back to a balanced position.
- Roll the handtruck firmly to the edge of the stair tread. BOTH glide-belts must be against the edge of the step before activating the switch.
- Activate the switch in the UP position. The lifting feet will come around and press down on the step with a vertical thrust, lifting the dolly wheels up and over the edge of the step.

NOTE: A change in the center of gravity will occur when the load shifts from the dolly wheels to the lifting feet. Keeping the weight slightly toward the operator will compensate for the change in center of gravity. The handtruck will do the lifting - The operator must balance the load.

- Repeat this process for each step climbed.

2. DOWNSTAIRS OPERATION:

- Roll dolly wheels about 2 inches from the stair edge. (This is the same position the dolly wheels are set down on the step when climbing up.)
- Activate the DOWN switch and the lifting feet will lift the dolly wheels up and over the step edge and start down the stair.
- Repeat this process for each step.

With practice, smooth operation of the handtruck will become second-nature.

3. NEVER allow unauthorized persons on the stairway or below the handtruck while in operation.
4. NEVER leave the handtruck unattended in the field when not in use.
5. DO NOT allow inexperienced persons to operate the handtruck.
6. DO NOT exceed the rated maximum capacity of the handtruck.

MAINTENANCE & LUBRICATION

Before attempting any work on your Escalera Stairclimbing Handtruck - ALWAYS remove the battery. Regularly scheduled maintenance should occur every three months or as conditions require.

1. Frequently lubricating the chains and lifting cam pivot fasteners with WD-40 will extend the life of the chains. Also spray lubricant on the nylon shaft bearings.

NEVER allow lubricant to come in contact with the drive V-belt, as this will cause slippage.

2. Remove the aluminum rear guard to expose the large spur gear. Apply a small amount of automotive type grease to the spur gear. Make sure the gear box is clear of any obstructions, then activate the switch to spread the grease to the internal gears.
3. Apply a drop of light machine oil to the motor shaft to lubricate the internal bearing.
4. To adjust the V-belt, turn the tightening bolt located at the top and slightly to the left of center. Full compression of the tension spring will be required at full capacity. Reducing the tension for lighter loads will extend the motor bearing life.

NEVER attempt to operate your handtruck with a slipping belt.

5. Check to make sure the bolts holding the lifting feet are tight. As the lifting feet wear, they can be rotated 180 degrees for longer life.
6. Lift chains should be firm, but not excessively tight. To tighten the lifting chains, first loosen the locking bolts holding the shaft bearing retainer to the side plates. Turn the vertical adjustment bolts located at the bottom of the side plates to adjust the tension on the chains. Chains should be tightened evenly. Re-tighten the locking bolts and nuts.
7. To adjust the center drive chains, first loosen the V-belt. Loosen the lock nuts behind the center main bearings and tighten the chain by turning the adjusting screws. Reset the locknuts and tighten the V-belt.
8. Keep the battery fully charged when not in use. Check the terminals for loose or frayed connections.

Keep your wheels, lifting feet, glide belts and lifting chains clean to prevent tracking dirt or grease when moving equipment over deep carpet or rugs.

TROUBLE-SHOOTING GUIDE

Use this section to help track down answers to potential problems.

PROBLEM	POSSIBLE CAUSE	SOLUTION
• No power when switch is activated:	Loose ground in switch box	tighten
	Corroded or loose battery terminals	replace terminals
	Circuit breaker	replace - check by bypassing breaker
• Motor runs but handtruck will not climb:	V-belt is loose	see Maintenance section for tightening instructions
• Handtruck runs too slow:	Battery faulty or not fully charged	check condition with a voltmeter - should read 12 volts while under load
	Faulty charger	check output of charger while the battery is connected - it should show the battery charging 13 - 14 volts
	Bad switch causing resistance	replace switch
	Worn motor bearing	replace motor
• Handtruck runs full speed for a few steps - then slows down:	Faulty battery	check with voltmeter - < 12 volts while under load - replace
• Short battery life: (deep cycling shortens life)	Battery not kept fully charged	keep charged
• Lifting cams keep breaking off chain:	Lift chains too loose	see Maintenance section for tightening instructions

BIG WHEEL INSTALLATION & MAINTENANCE INSTRUCTIONS

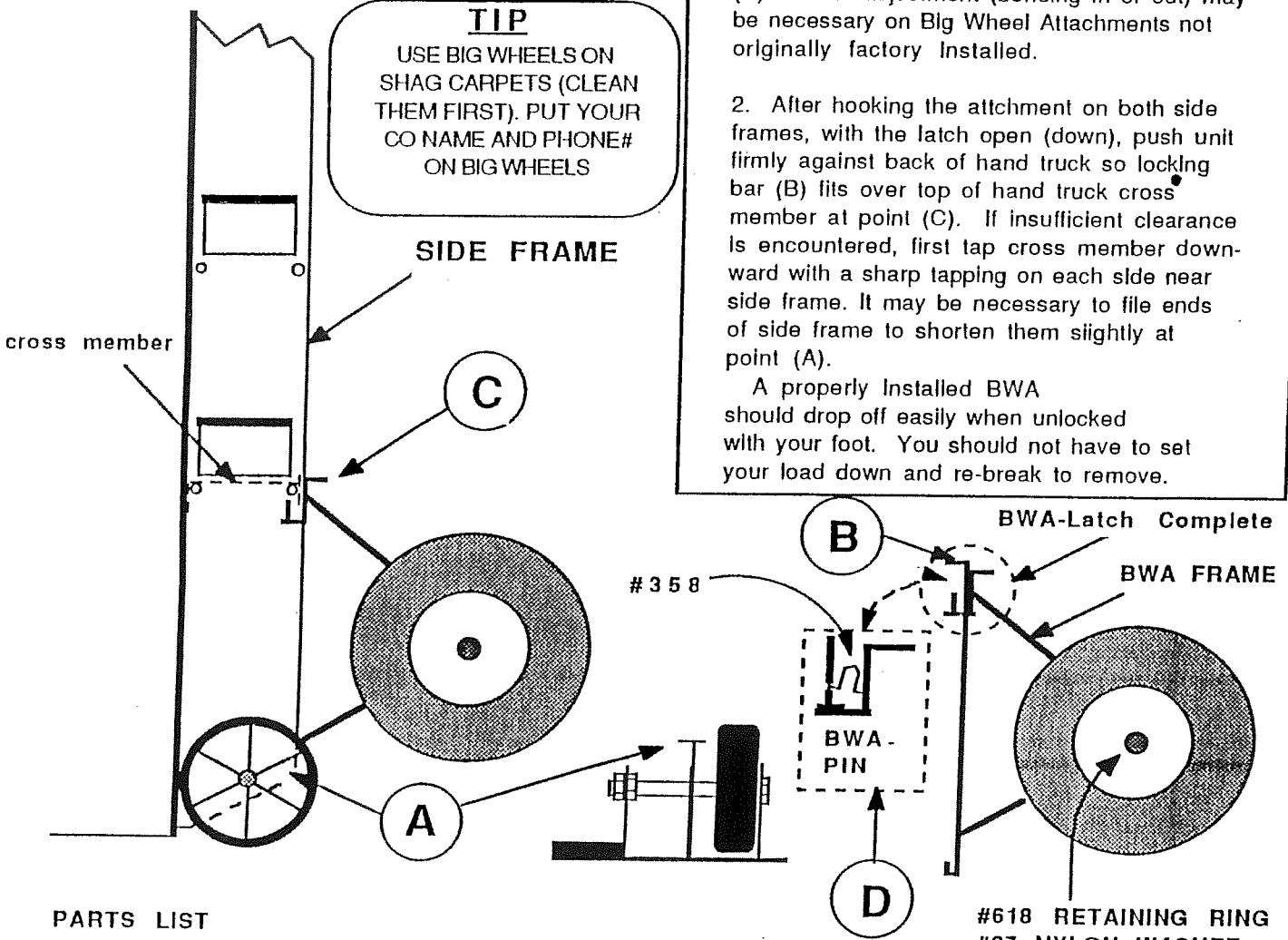
TIRE PRESSURE 24 PSI
LUBRICATE LATCH WITH WD-40

TIP
USE BIG WHEELS ON SHAG CARPETS (CLEAN THEM FIRST). PUT YOUR CO NAME AND PHONE# ON BIG WHEELS

1. Hook bottom edge of Big Wheel Attachment over bottom edge of each side frame at point (A). Some adjustment (bending in or out) may be necessary on Big Wheel Attachments not originally factory installed.

2. After hooking the attachment on both side frames, with the latch open (down), push unit firmly against back of hand truck so locking bar (B) fits over top of hand truck cross member at point (C). If insufficient clearance is encountered, first tap cross member downward with a sharp tapping on each side near side frame. It may be necessary to file ends of side frame to shorten them slightly at point (A).

A properly installed BWA should drop off easily when unlocked with your foot. You should not have to set your load down and re-break to remove.



PARTS LIST

PART NO.	DESCRIPTION	QUANTITY
BWA-Frame	BWA Frame (less wheels)	1
BWA-ZPIN w/sping	BWA-Pin w/spring (see D above)	1
BWA-Latch Complete	BWA-Pin and Mounting Bracket (Bracket must be welded on to the BWA-Frame so BWA-Pin can be attached)	1
#358	BWA-Spring (lock)	1
#618	Retaining Rings (axle)	2
#87	Nylon Washer	3 to 4 (ea. side)
#283	BWA-Tire and Wheel w/bearings	2
#338	Ball bearings	4

* Tire is not sold separately, you may be able to purchase tires locally.

IMPORTANT NOTICE

Big Wheel Attachments used on units with Retractable Load Supports differ from the above. Always specify when ordering parts "for use with RLS (retractable load support)" when applicable.

ESCALERA INC
BOX 1359
YUBA CITY CA. 95991
PHONE 916-673-6318

FAX 916-673-6376

HAND WINCH INSTRUCTIONS

When operating your hand winch, it is important to always follow these directions.

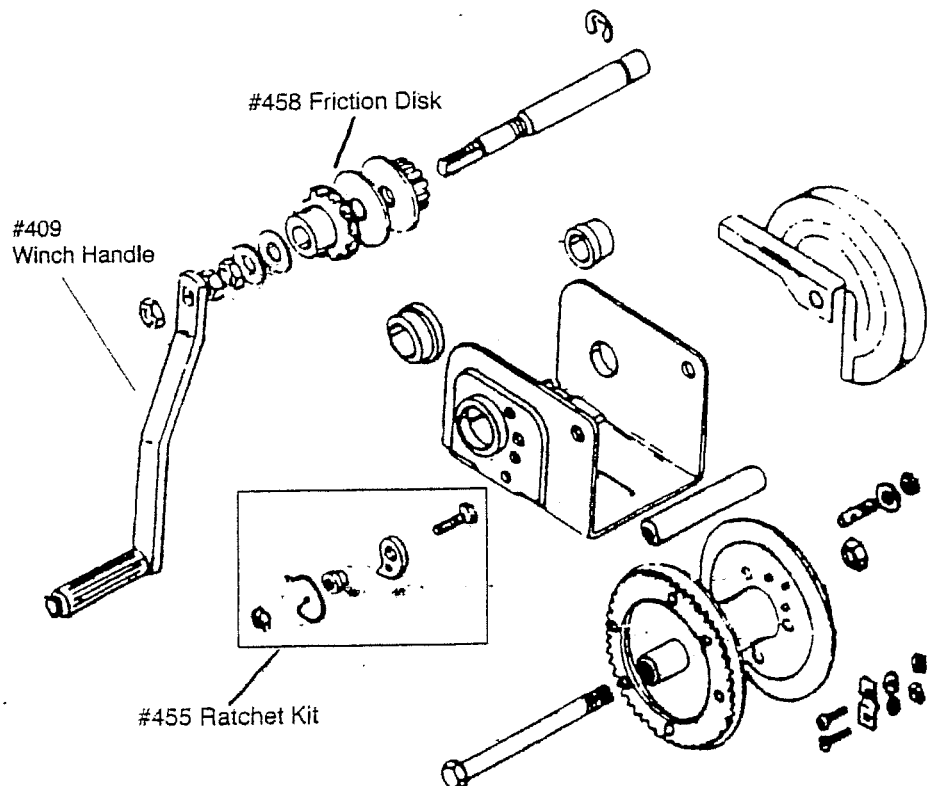
•CAUTION•

Remember worn out parts cause unsafe conditions!

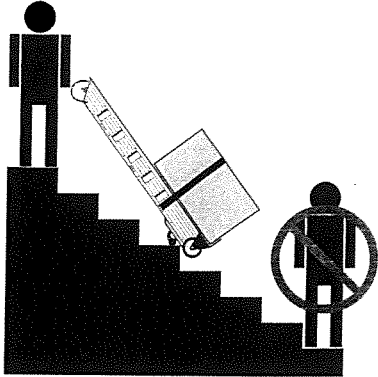
- Be sure that cable on the winch is strong enough to support the load to be lifted.
- ALWAYS inspect the cable and hook before each use to make sure they are not damaged. Replace the cable (#407) if it is frayed or kinked. If the cable or hook breaks, the cable can act like a whip and can inflict injury to anyone within its path.
- NEVER stand along side the winch cable, or guide the cable with your hands.
- NEVER allow anyone on or under the load being moved or lifted.
- NEVER operate with wet or oily hands and ALWAYS use a firm grip on the handle.
- NEVER leave a weight hanging by the winch while the handtruck is unattended.

MAINTENANCE:

1. Apply automotive grease to pinion and drum gears.
2. Apply a few drops of automotive engine oil to ratchet pawl, pivot, bushings, and pinion threads.
3. Check friction disk. If less than 1/8 inch thick, cracked, or broken - replace. (#458)
4. Check proper ratchet operation. When cranking cable IN, clicking should be heard. When cranking cable OUT, no clicking sound should be heard. If no clicking sound can be heard when cranking cable IN - replace ratchet kit. (#455)



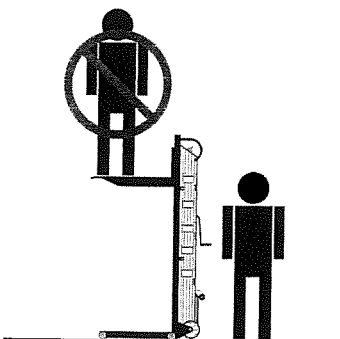
IMPORTANT SAFETY PRECAUTIONS



NEVER ALLOW PERSONS ON STAIRWAY
BELOW UNIT WHILE IN OPERATION.

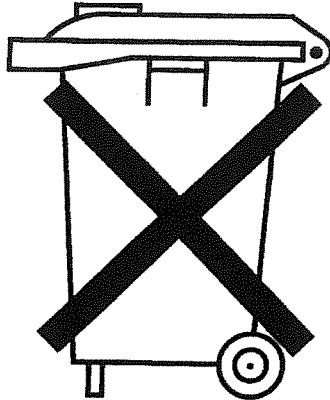


NEVER ALLOW PERSONS ON THE UNIT
WHILE IN OPERATION.
DO NOT ATTEMPT TO MOVE PEOPLE
WITH THIS UNIT.



THIS IS NOT A HUMAN HOIST.
NEVER USE THE LIFT TO RAISE PERSONS.

Important Environmental Notice: Battery Disposal



Caution Batteries in this product may harm the environment if you do not dispose of them properly. Please follow local, state, or national regulations regarding the proper disposal of these batteries.

Attention Les batteries dans ce produit peuvent poser un danger pour l'environnement. Veuillez suivre les lois et règlements locaux ou nationaux avant de vous en débarrasser.

Achtung Batterien in diesen Produkt können die Umwelt schädigen, falls sie nicht vorschriftsmäßig entsorgt werden. Bitte die örtlichen Vorschriften zum Entsorgen der Batterien genauestens befolgen.

Avvertenze Le batterie in questo prodotto potrebbero danneggiare l'ambiente se usate in maniera impropria. Siete pregati di seguire le leggi locali, regionali o statali circa l'eliminazione delle stesse.

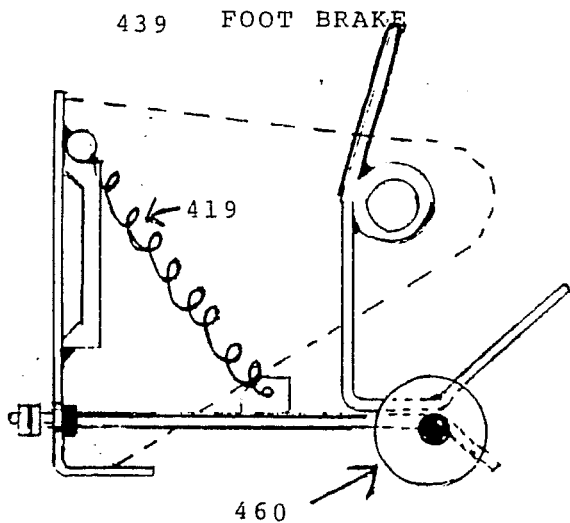
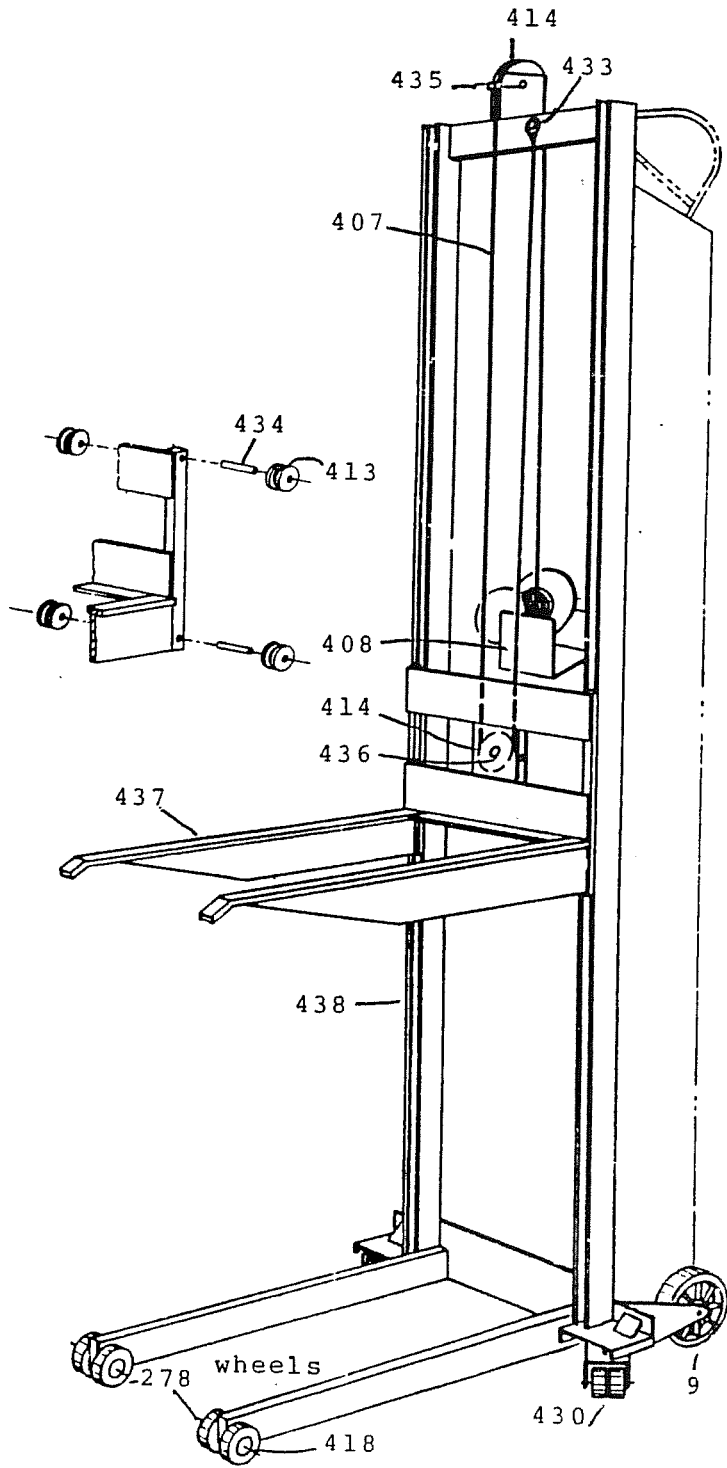
Precaución Las baterías en este producto pueden causar daño al medio ambiente si no son desechadas en forma apropiada. Por favor siga las regulaciones locales, estatales o del país, en cuanto se refieren al desecho adecuado de estas baterías.

Waarschuwing Batterijen in dit product kunnen schadelijk zijn voor het milieu. Volg de landelijke en plaatselijke voorschriften betreffende de inzameling en verwerking van batterijen op.

PARTS LIST FOR WOOD STOVE LIFTS

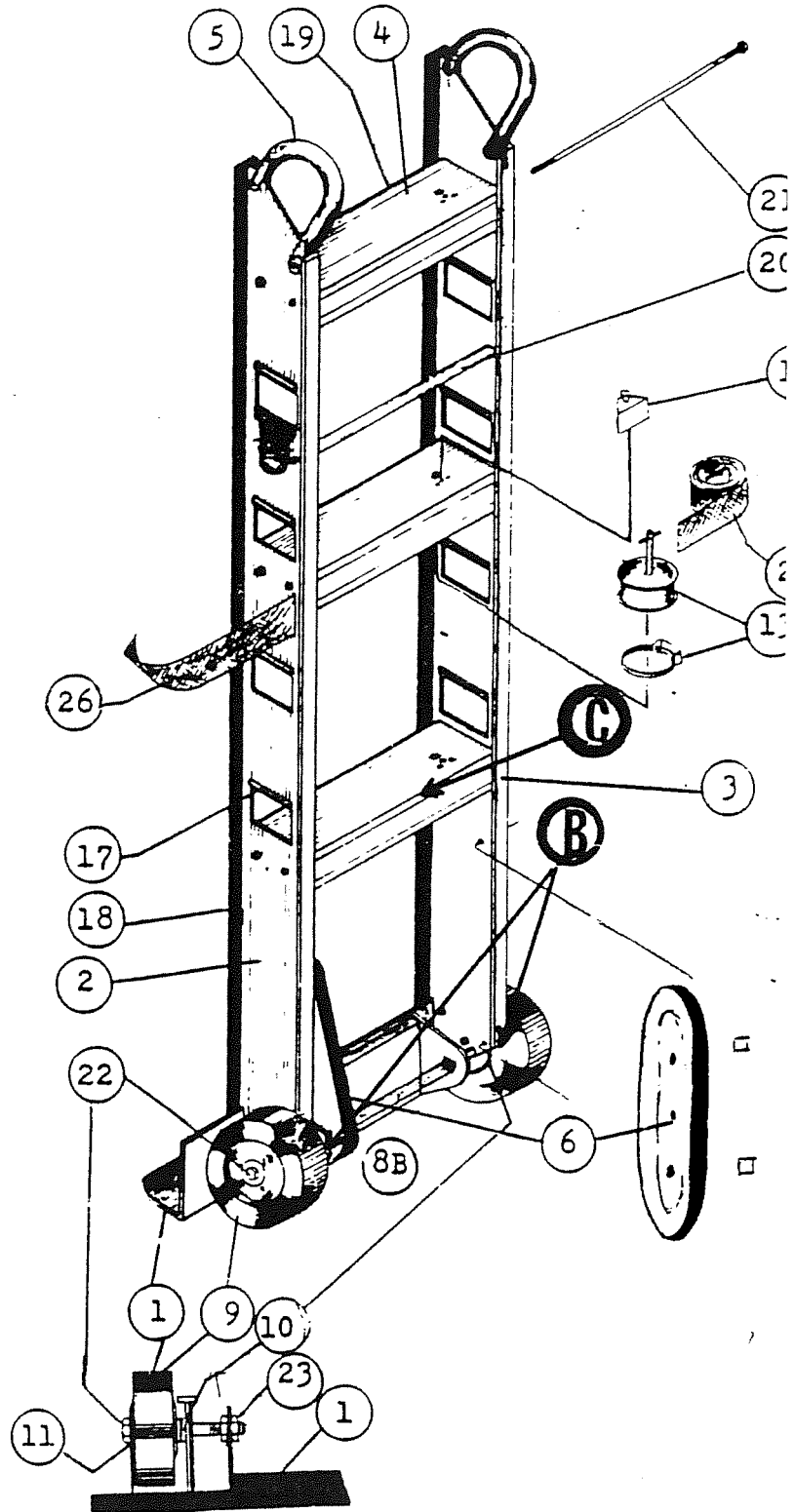
Part Number	Description
407	Cable with sleeves.....
408	Hand winch.....
409	Winch Handle.....
410	Electric winch ONLY.....
413	1½" Roller.....
414	Pulley w bearing.....
415	Black plastic bushing.....
418	Retaining ring.....
419	Foot brake spring (QLA ONLY)....
422	Flat washer, Handle.....
425	Spring Pin, folding handle.....
428	Spring for handle(#2).....
429	Retaining ring, handle.....
430	2" Casters, washers, bolts.....
431	Electric winch, complete with harness.....
433	Cable fastener, stop & Pins.....
434	Roller Shaft.....
435/36	Pulley shaft & pins.....
437	Forks, Complete.....
438	Lift frame complete.....
439	Foot brake (QLA ONLY).....
441	Special cotterless pin.....
442	Caster wheels, set of 4.....
460	Foot brake feet (QLA ONLY).....
447	Wiring harness complete-MLA-EW only.....
9	Wheel.....
278	Plain bore wheels 2½".....

Selling prices will be furnished upon request; or, parts will be shipped at prevailing prices and you will be billed accordingly.

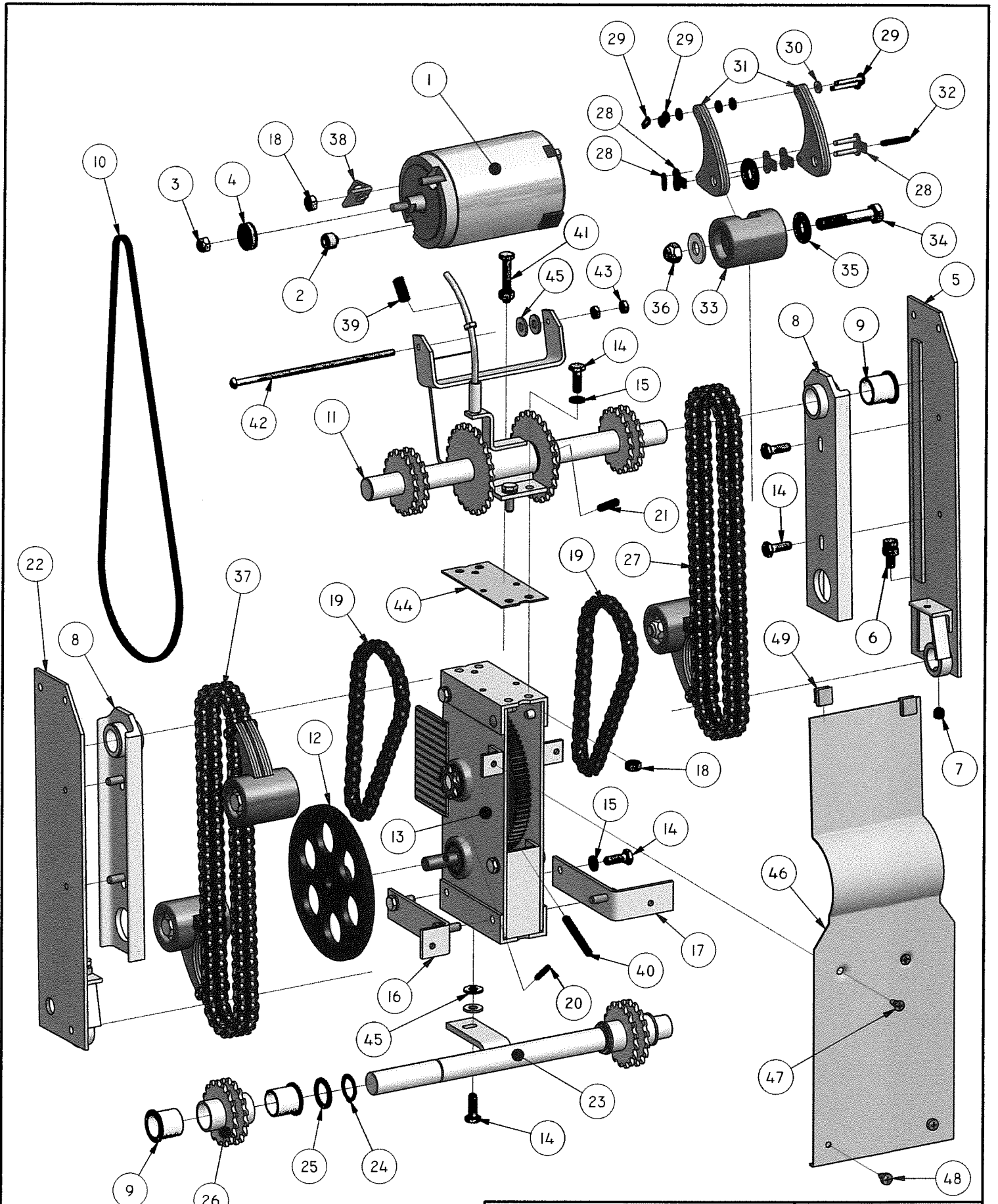



HAND TRUCK- Parts List

<u>Part No.</u>	<u>DESCRIPTION</u>
1.	TOE PLATE
2s.	LEFT SIDE FRAME.....
3s.	RIGHT SIDE FRAME.....
4.	CROSS MEMBERS.....
5.	TOP HANDLES.....
6.	DRAG BELT ASSEMBLY.....
8B.	STRAIGHT THROUGH BAR AXEL....
9.	WHEELS (w/Bearings).....
10.	AXEL WASHERS.....
11.	WHEEL BEARINGS.....
12.	REWIND LOCK
13.	REWIND MECHANISM & MOUNTING BRACKET....
17.	SIDE HAND HOLDS.....
18.	SIDE FRAME PADDING.....
19.	CROSS MEMBER PADDING.....
20.	SPACER BAR & ROD.....
21.	CROSS MEMBER TIE RODS.....
22.	AXLE BOLTS (hardened).....
23.	AXLE JAM NUTS.....
24.	RWK-1 REWIND KIT (complete) (extra straps, buckles rewind) ..
25.	STRAP (w/buckle) (female)...
26.	STRAP (w/ male clip).....



Selling prices will be furnished upon request; or, parts will be shipped at prevailing prices and you will be billed accordingly



	ESCALERA, INC. 800 622 1359 WWW.ESCALERA.COM	2/11/2011
		MODELS: MS-I-66, MS-I-72, M.L.A., R.L.A.
	GEAR BOX ASSEMBLY (1200LBS)	PN GB-I200-I0

ITEM	P/N	TITLE	QTY
1	0564HD	Ball Bearing Motor (P/N 1301 for Pre 1994)	1
2	0586	Assembly, Motor End Plate Spacer	1
3	0576	Hex Nut, 1/4-20UNC Top Lock	1
4	0565	Motor Pully	1
5	0716-R	Weldment, Steel Side Plate RH	1
6	1404	Assembly, Adjusting Screw	2
7	1405	Set Screw	2
8	0720	Assembly, Chain Adjusting Channel	2
9	0612	Nylon Bushing 3/4" ID x 7/8" OD	6
10	0590	V-Belt	1
11	0708	Assembly, Final Drive	1
12	0592	Pulley, V-Belt 5-18" Dia.	1
13	0722	Assembly, Drive Train	1
14	0561	Hex Bolt, 1/4"-20UNC 3/4"	13
15	0584	Split Lock Washer, 1/4"	12
16	1407	Bracket, Rear Guard LH	1
17	1408	Bracket, Rear Guard RH	1
18	0582	Hex Nut, 1/4 - 20UNC	5
19	0658	Drive Chain	2
20	0594	Slotted Spring Pin, 5/32" x 1"	1
21	0620	Slotted Spring Pin, 7/32" x 1-1/4"	1
22	0716-L	Weldment, Steel Side Plate LH	1
23	0724	Weldment, Idler Shaft	1
24	0613	External Retaining Ring, 3/4" (thin)	2
25	0087	Nylon Washer 3/4" ID x 1" OD x 1/16"	2
26	0706	Assembly, Idler Sprocket	2
27	0710-R	Assembly, Lifting Chain RH (complete)	1
28	0685	Cam Link Connector Bottom	4
29	0661	Cam Link Connector Top	4
30	0526	Flat Washer, #6 SAE	16
31	0726	Assembly, Lifting Foot Cam (complete)	4
32	0594	Slotted Spring Pin, 5/32" x 1"	4
33	0715HD	1200 lb Lifting Foot	4
34	0560	Hex Bolt, 3/8"-16UNC 2"	4
35	0300	Flat Washer, 3/8" USS High Strength	12
36	0555	Hex Nut, 3/8-16 UNC Top Lock (plated)	4
37	0710-L	Assembly, Lifting Chain LH (complete)	1
38	0557	Assembly, V-Belt Tensioner Bracket (Specify if Pre 7/1/2003)	1
39	0577	Spring, V-Belt Tension	1
40	0318	Slotted Spring Pin, 7/32" x 1-1/4"	1
41	1406	Assembly, Tensioner Bolt (drive chain)	2
42	0574	Machine Screw, 10 - 24UNC 6"	1
43	0692	Hex Nut, 10 - 24 UNC	3
44	9200	Shim, Final Drive	1
45	0311	Flat Washer, 1/4" SAE	4
46	0718	Rear Guard, 1200lb	1
47	0277	Sheet Metal Screw, #10 x 1/2, Flat,Phillips	2
48	0284	Sheet Metal Screw, #10 x 1/2", Pan, Phillips	2
49	0680	"S" Clip, Rear Guard	2