



IB-400
Weighmobile
Owner's Manual



0046-M023-O1 Rev I
05/00

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Thank you for purchasing our DETECTO™ Model IB-400 Weighmobile. It has been manufactured with quality and reliability at our factory in Webb City, MO USA. This scale has been tested before leaving our factory to insure accuracy and dependability for years to come.

When removing the scale from its packing, inspect it for signs of damage, such as exterior dents and scratches. Keep the carton and packing material for return shipment if it should become necessary. It is the responsibility of the purchaser to file all claims for any damages or loss incurred during transit, unless this responsibility has been accepted by the seller in its proposal.

This manual is provided to guide you through installation, operation and maintenance of your scale. Please read it thoroughly before attempting to install or operate your IB-400 and keep it handy for future reference.

FCC COMPLIANCE STATEMENT WARNING!
This equipment generates, uses and can radiate radio frequency and if not installed and used in accordance with the instruction manual, may cause interference to radio communications. It has been tested and found to comply with the limits for a Class A computing device pursuant to Subpart J of Part 15 of FCC rules, which are designed to provide reasonable protection against such interference when operated in a commercial environment. Operation of this equipment in a residential area may cause interference in which case the user will be responsible to take whatever measures necessary to correct the interference.

You may find the booklet "How to Identify and Resolve Radio TV Interference Problems" prepared by the Federal Communications Commission helpful. It is available from the U.S. Government Printing Office, Washington, D.C. 20402. Stock No. 001-000-00315-4.

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SERIAL NUMBER _____
DATE OF PURCHASE _____
PURCHASED FROM _____

RETAIN THIS INFORMATION FOR FUTURE USE

PRECAUTIONS

Before using this instrument, read this manual and pay special attention to all "WARNING" symbols:



IMPORTANT

SPECIFICATIONS

Capacity:	400 lbs (180 kg)
Resolution:	0.1 lb (0.05kg)
Display:	LCD digital display mounted on Weighmobile, operating from replaceable Alkaline, Ni-Cad or NiMH batteries. Refer to 758C Indicator manual for battery operation.
Casters:	Four (4); full swivel, rear pair locking
Lift Mechanism:	Hydraulic
Stretcher: (Adult)	Staph-Chek® 38" W x 72" L
Stretcher: (Child)	Staph-Chek® 32" W x 48" L
Closed Overall Dimensions:	54"H x 22"W x 50"L
Shipping Weight:	280 lbs
Operating Voltage:	9.0 VDC nominal

INTRODUCTION

The Detecto IB-400 Weighmobile provides a fast, easy and efficient method for weighing bedridden patients. The IB-400 is easily operated by one person. Through its use, patient weighing time will be reduced to a minimum. Operation of the scale can be quickly learned using the following instructions and guidelines.

The Detecto IB-400 Weighmobile indicator is a completely self-contained, battery-powered unit that can be programmed to automatically shutoff after one (1) to nine (9) minutes of non-use. It can be powered for months by six (6) "C" size Alkaline, Ni-Cad or NiMH batteries and is equipped with a low "BAT" indicator to alert the operator when the batteries are discharged.

The flame-retardant, anti-bacterial, self-deodorizing Staph-Check® stretcher is *non-machine washable / dryable* and should only be wiped clean using warm, soapy water and/or a mild detergent and allowed to air dry.

Staph-Chek® is a registered trademark of Herculite Products, Inc.

ASSEMBLY INSTRUCTIONS

1. Unpack and remove all packing material.
2. Check for damaged parts.
3. Install batteries in indicator "C". Refer to the 758C Series Operation Manual, 8555-M167-O1 for detailed instructions.
4. Plug the coiled scale cable from the boom "F" into the 9-pin D shaped connector on the rear panel of the indicator. Tighten the scale cable connector retaining screws to hold the cable securely to the connector on the indicator. Refer to the 758C Series Operation Manual for more information.
5. Pull down on hoop release rings "X" and hang stretcher hoops "J" in hoop brackets "T". Patient stretcher "K" can now be attached to stretcher support hoop "J".
6. Turn on indicator to check battery charge.

It is now time to ready the hydraulic pump assembly:

7. Turn the cylinder "H" release valve clockwise to the fullest degree.
8. Move the pump handle "G" up and down slowly until the boom "F" reaches its highest position.
9. Fully open the cylinder "H" release valve counterclockwise, and push the boom "F" down as far as it will go.
10. Close the cylinder release valve, turning clockwise.
11. Raise the boom "F" to the approximate height at which it will be used.

Reference Figures No. 1 and 2 on pages 4 and 5 for component identification.

WEIGHING THE PATIENT



WARNING - This product is not intended for use in transporting patients! It is to be used **ONLY** for weighing a patient. Failure to observe this warning may result in serious injury to the patient and/or the Weighmobile operator.

1. Wheel scale to patient's bedside.
2. Remove stretcher "K" from carrier "M" and suspend it from stretcher support hooks "J".
3. On the indicator "C", press the **ON** key on the keypad, then press the **ZERO** key.
4. When indicator reads zero (0.0), remove stretcher from stretcher support hooks. The indicator will show a negative weight equal to stretcher weight.
5. With patient lying flat in bed, roll and place stretcher alongside patient. Work stretcher under patient by unrolling stretcher, much like changing a bed sheet.
6. The patient's weight must be centered as nearly as possible along the length of the stretcher, so that when lifting, the patient remains in a horizontal position.
7. Roll scale so that base "A" is under bed, and stretcher support hoops "J" are suspended directly over patient. Set brakes on rear wheels "P".
8. Widen base stance. To adjust base stance, face rear of scale and pivot adjust handle "L" towards the column. Rotate handle unit until stance widens. Return handle to a vertical position to engage lock pin. To return base to the narrow position, reverse above procedure.
9. Turn the cylinder "H" release valve counterclockwise to the open position. When stretcher support hooks "J" reach the mattress, return the release valve to the original position.
10. Engage the stretcher support hooks "J" in the four (4) holes of the stretcher braces "N".
11. After closing the release valve, move the pump handle "G" up and down with slow strokes of even pressure until the patient is about an inch above the mattress. Make sure that no part of the patient or stretcher is touching any part of the bed or mattress.
12. When weight is stable, press the **HOLD/RELEASE** key to lock the displayed weight. Note, that the weight displayed, will flash and remain locked until the **HOLD/RELEASE** key is pressed again.
13. Lower patient by **slowly** opening release valve counterclockwise. When patient is back on bed and stretcher support hooks "J" touch mattress, disengage hooks from stretcher braces "N", raise Boom "F", release brakes on rear wheels "P" and remove scale from bedside.



Caution: Open control valve **SLOWLY** to prevent sudden lowering of boom.

14. Remove stretcher from under patient. Replace stretcher in stretcher transport carrier "M", and stretcher cup "R".

COMPONENT IDENTIFICATION

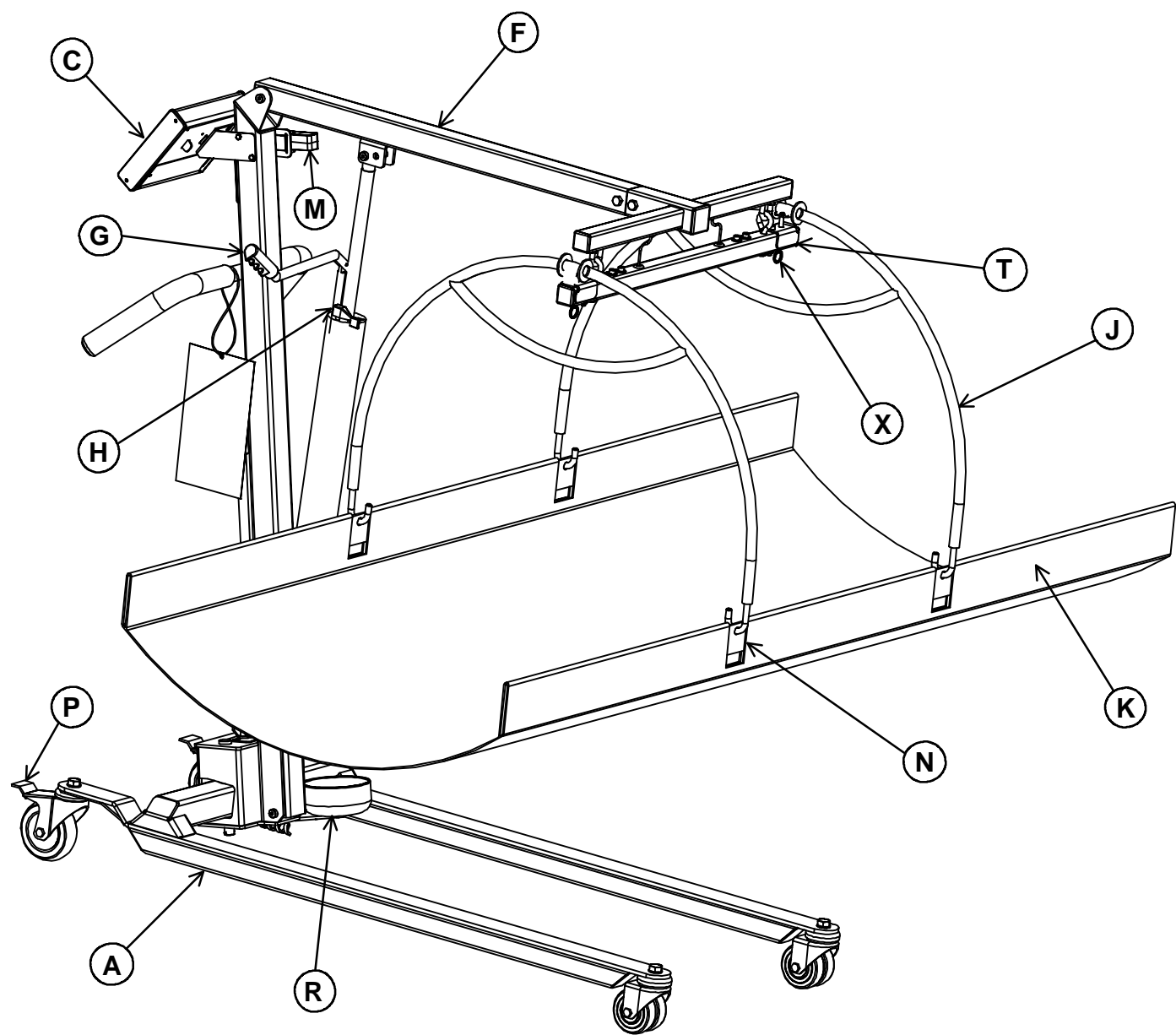


Figure No. 1

COMPONENT IDENTIFICATION

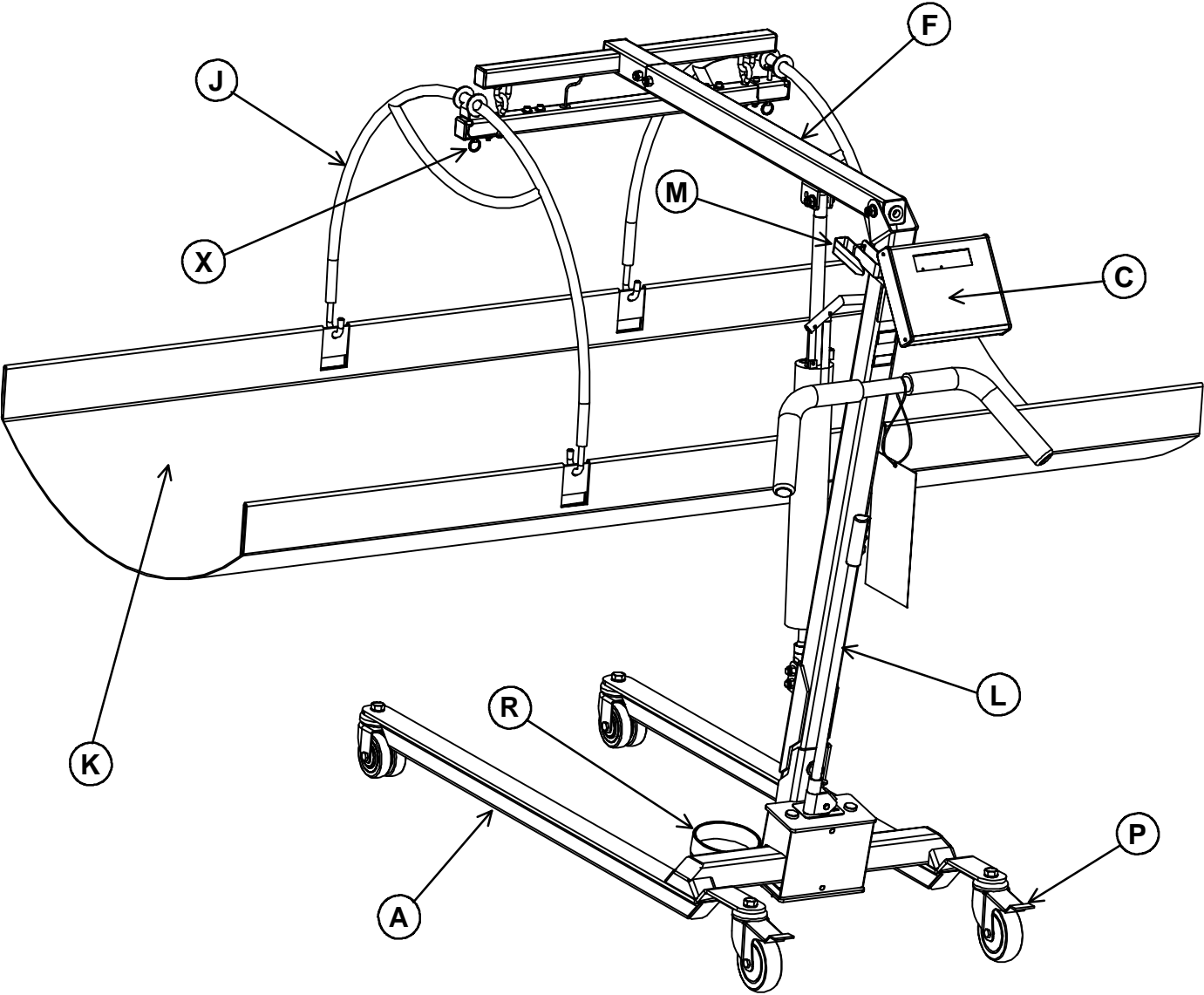


Figure No. 2

PREVENTIVE MAINTENANCE

The information presented below can save you time and trouble, and if adhered to, will prolong the service and life of the Weighmobile.

1. Do not lift the boom by hand. Use only the pump.
2. A small amount of oil will accumulate around the piston from time to time. This should be removed with a facial tissue.
3. Casters and axle bolts require inspection every sixty (60) days to be sure that the axle nuts are tight and that the casters swivel and roll smoothly. A light grease (waterproof auto lubricant) may be applied to the ball bearing swivel of the casters once a year, or more frequently if the casters are exposed to extreme moisture conditions.
4. The hydraulic pump is factory sealed. If service is ever required, the pump unit must be returned to the factory for repair. This is seldom necessary, but after many years of service, the seals may require replacement. Do not attempt to open the hydraulic pump to obtain local service. This will void the guarantee, and may result in damage and costly repair.
5. Periodically check and tighten all bolted connections and check that both "U" bolts are securely fastened to the boom assembly.



IMPORTANT! Failure to maintain tightness of bolted connections may result in injury to the patient and/or Weighmobile operator.

7. When transporting the Weighmobile between locations, use care in observing clearance through doorways, etc. Severe collisions with the weighing assembly could result in permanent damage to the weighing sensors. Also, when moving the Weighmobile through doorways and corridors, insure that the stretcher is stored in the stretcher transport carrier.



NOTE: The lower eyebolts are secured by a special type of locknut and must NOT be tightened or adjusted. Tightening will preload the weight sensor and result in inaccurate readings or possible permanent damage.

SERVICE INFORMATION

The Detecto Weighmobile is designed and fabricated as a precision scale instrument. It is comprised of four (4) major subassemblies that are functionally integrated and are most efficiently serviced as a system or independently at the factory. In the event that factory repairs are required, call the factory for service authorization. It is suggested that the inoperative subassembly be tagged with a manila tag, bearing as much information as possible regarding the nature of the problem. Refer to Operation Manual 8555-M167-O1 for questions regarding the 758C indicator.

PROBLEM	SOLUTION
Weights grossly inaccurate.	Make sure patient is centered on stretcher and not touching any part of the bed or mattress.
Display does not illuminate, or turns off soon after being turned on.	Batteries may be discharged. If using Alkaline, remove and replace. If using Ni-Cad or NiMH batteries remove and recharge in external charger.
Weight reading does not change when applying weight to stretcher or force to ends of support cage.	Make certain coiled cable from boom is plugged into connector on indicator and screws are tight. Instrument is defective. Call factory for assistance.
Instrument reading drifts randomly.	Call factory for assistance.
Certain segments of the display do not illuminate.	Call factory for assistance.
Display is "locked up" - either over range or underrange.	This is usually due to weight transducer or cable malfunction, and is difficult to resolve without special equipment. Call factory for assistance.

PARTS LIST

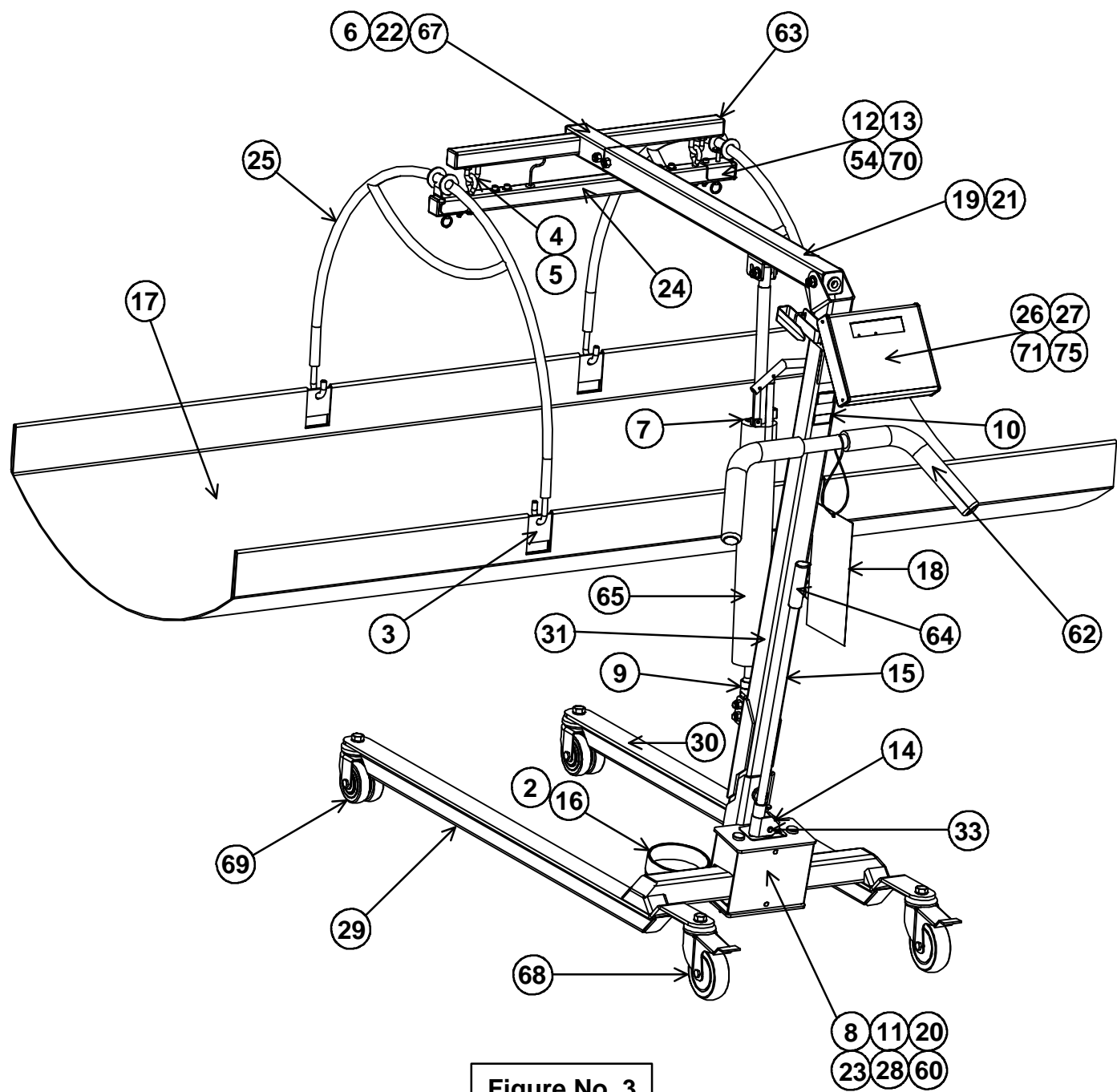


Figure No. 3

PARTS LIST, Cont.

ITEM	PART NO.	QTY	DESCRIPTION
2	0046-B005-08	1	STRETCHER CUP
3	0046-B006-08	2	STRETCHER BAR, ADULT
4	0046-B018-08	2	EYE BOLT
5	0046-B019-08	2	U-BOLT
6	0046-B108-0A	1	TRIM BOARD ASSEMBLY
7	0046-B111-08	1	DECAL, CYLINDER TOP
8	0046-B200-08	5	BUSHING
9	0046-B249-08	1	BALL SOCKET
10	0046-B268-08	1	WARNING LABEL
11	0046-B431-08	1	SCRATCH GUARD
12	0046-B448-08	2	HOOP RETAINER PIN
13	0046-B450-08	2	HOOP BRACKET WELDMENT
14	0046-B455-08	1	CAM HANDLE WELDMENT
15	0046-B458-08	1	CAM HANDLE
16	0046-B468-08	1	STRETCHER CUP BRACKET
17	0046-C007-08	1	STRETCHER COVER
18	0046-C026-08	1	INSTRUCTION CARD
19	0046-C409-0A	1	BOOM WELDMENT
20	0046-C423-08	1	CAM
21	0046-C429-08	1	INNER BOOM
22	0046-C437-0A	1	STRETCHER SLEEVE WELDMENT
23	0046-C440-08	1	CAM BOX DOOR
24	0046-C447-08	1	LOAD CELL TUBE
25	0046-C465-0A	2	HOOP WELDMENT
26	0046-C471-08	1	758C BRACKET
27	0046-C467-0A	1	INDICATOR BRACKET WELDMENT
28	0046-D405-0A	1	CAM BOX WELDMENT
29	0046-D406-0A	1	LEFT LEG WELDMENT
30	0046-D407-0A	1	RIGHT LEG WELDMENT
31	0046-D408-0A	1	MAST WELDMENT
32	391RV204	2	1/4-20 ELASTIC NUT
33	409-B030	1	1/4" X 1 1/4" CLEVIS PIN
34	593GR986	1	SERIAL TAG WITH OVERLAY
35	6007-0054	2	3/8-16 X 2 HEX HEAD BOLT
36	6007-0120	4	1/2-13 X 1 HEX HEAD BOLT
37	6007-1016	1	1/2-13 X 3 HEX HEAD BOLT
38	6013-0025	4	10-32 ELASTIC NUT
39	6013-0070	4	3/8-16 ELASTIC NUT
40	6013-0379	4	5/16-24 NUT
41	6013-0410	5	5/16-18 ELASTIC NUT
42	6013-0438	5	1/2-13 ELASTIC NUT
43	6020-0015	3	5/32 X 1 SPRING PIN
44	6021-1126	2	1/4-20 X 1-3/4 SOCKET HEAD CAP SCREW

PARTS LIST, Cont.

45	6021-1171	5	10-24 X 3/4 SELF TAPPING HEX HEAD SCREW
46	6021-1236	1	3/8 X 1-1/4 SOCKET HEAD SHOULDER SCREW
47	6021-1237	1	3/8 X 2-1/2 SOCKET HEAD SHOULDER SCREW
48	6021-1239	1	3/8 X 2-1/4 SOCKET HEAD SHOULDER SCREW
49	6021-1401	4	1/4-20 X 1/2 SOCKET HEAD CAP SCREW
50	6021-1464	2	3/8-16 X 1-3/4 HEX HEAD MACHINE SCREW
51	6021-1497	4	1/4-20 X 1-1/8 SOCKET HEAD CAP SCREW
52	6021-2002	1	10-32 X 3/4 THUMB SCREW
53	6021-2069	2	#6 X 1/2 TRUSS HEAD SHEET METAL SCREW
54	6022-0028	2	SPRING
55	6024-0009	3	3/8 FLAT WASHER
56	6024-0012	6	1/2 FLAT WASHER
57	6024-0017	2	5/8 FLAT WASHER
58	6028-0094	2	SPLIT RING
59	6028-0095	2	5/8 X 5-1/2 CLEVIS PIN
60	60S43	1	SPRING
61	650RV26	4	5/8 FLAT WASHER, ZINC PLATED
62	6540-1070	2	FOAM HAND GRIP
63	6540-1078	4	1-1/4 SQUARE TUBING PLUG
64	6540-1080	1	HANDLE GRIP
65	6540-1119	1	HYDRAULIC CYLINDER
66	6540-1120	2	CAP PLUG
67	6540-1132	1	1-3/4 SQUARE TUBING PLUG
68	6540-1133	2	REAR CASTER
69	6540-1134	2	FRONT CASTER
70	6650-0085	2	1/4 E-RING
71	6680-1044	1	3/4 GROMMET
72	6680-1081	1	1/4 HUB CAP
73	6750-0015	2	3/8 BUSHING
74	6980-1035	4	1/4 BUSHING
75	758C	1	INDICATOR

