



IB-600

Weighmobile

Owner's Manual

CARDINAL SCALE MFG. CO.

0046-M264-O1 Rev D
05/00

PO BOX 151 • WEBB CITY, MO 64870
PH 417-673-4631 • FAX 417-673-5001
Web Site - <http://www.detectoscale.com>

Printed in USA

Thank you for purchasing our DETECTO™ Model IB-600 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-600 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:	600 lbs (270 kg)
Resolution:	0.2 lb (0.1kg)
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 ball bearing, rear pair locking
Lift Mechanism:	Hydraulic
Stretcher:	Staph-Chek® 44" W x 72" L (1.1m W x 1.8m L)
Closed Overall Dimensions:	60" H x 32" W x 62" D (1.52m H x 0.81m W x 1.57m D)
Shipping Weight:	460 lbs (209 kg)
Operating Voltage:	9.0 VDC nominal

INTRODUCTION

The Detecto IB-600 Weighmobile is a new concept in weighing instrumentation that provides a fast, easy and efficient method for weighing bedridden patients. The IB-600 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-600 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 to 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 connector on the indicator. Refer to the 758C Series Operation Manual for more information.
5. Hang stretcher support hoops "J" on weighing hooks "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. Move the pump handle "G" up and down slowly until the boom "F" reaches its highest position.
8. Fully open the cylinder "H" release valve counterclockwise, and push the boom "F" down as far as it will go. Close the cylinder release valve, turning clockwise.
9. 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. Undo the Vel-cro® strap holding the stretcher "K" to the column "D". Remove the stretcher from the stretcher cup "R" and suspend it from stretcher support hooks "U".
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 the patient lying flat in bed, roll the patient on their side and place the stretcher alongside the patient. Work the stretcher under the patient by unrolling the 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" away from 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 "U" reach the mattress, return the release valve to the original position.
10. Engage the stretcher support hooks "U" 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 the patient by **slowly** opening the release valve counterclockwise. When the patient is back on the bed and the stretcher support hooks "U" touch the mattress, disengage the hooks from stretcher braces "N", raise the Boom "F", release the brakes on rear wheels "P" and remove the scale from the bedside.



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

14. Remove the stretcher from under the patient. Replace the stretcher in stretcher cup "R" and secure to column "D" with the Vel-cro® strap.

COMPONENT IDENTIFICATION

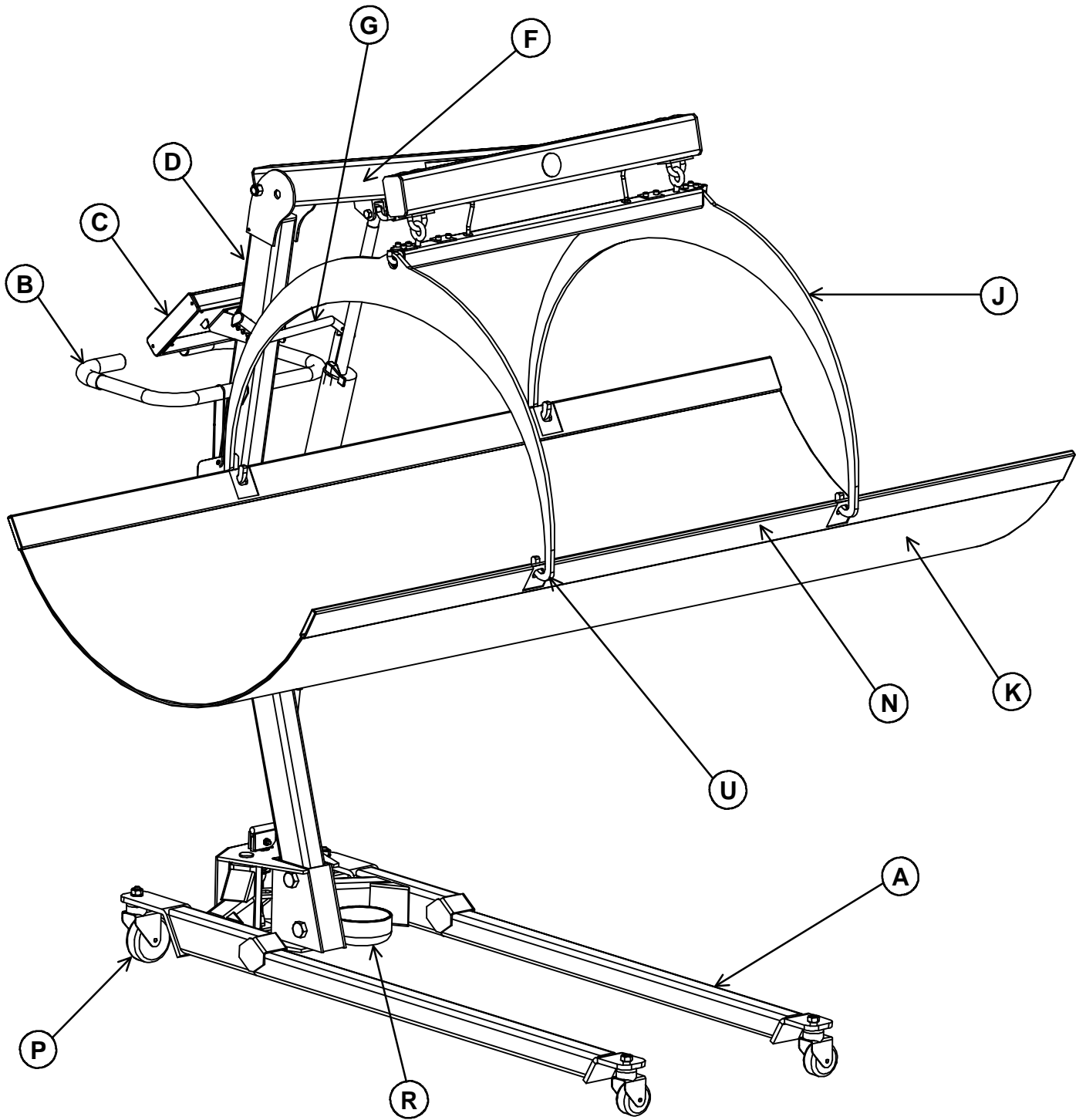


Figure No. 1

COMPONENT IDENTIFICATION

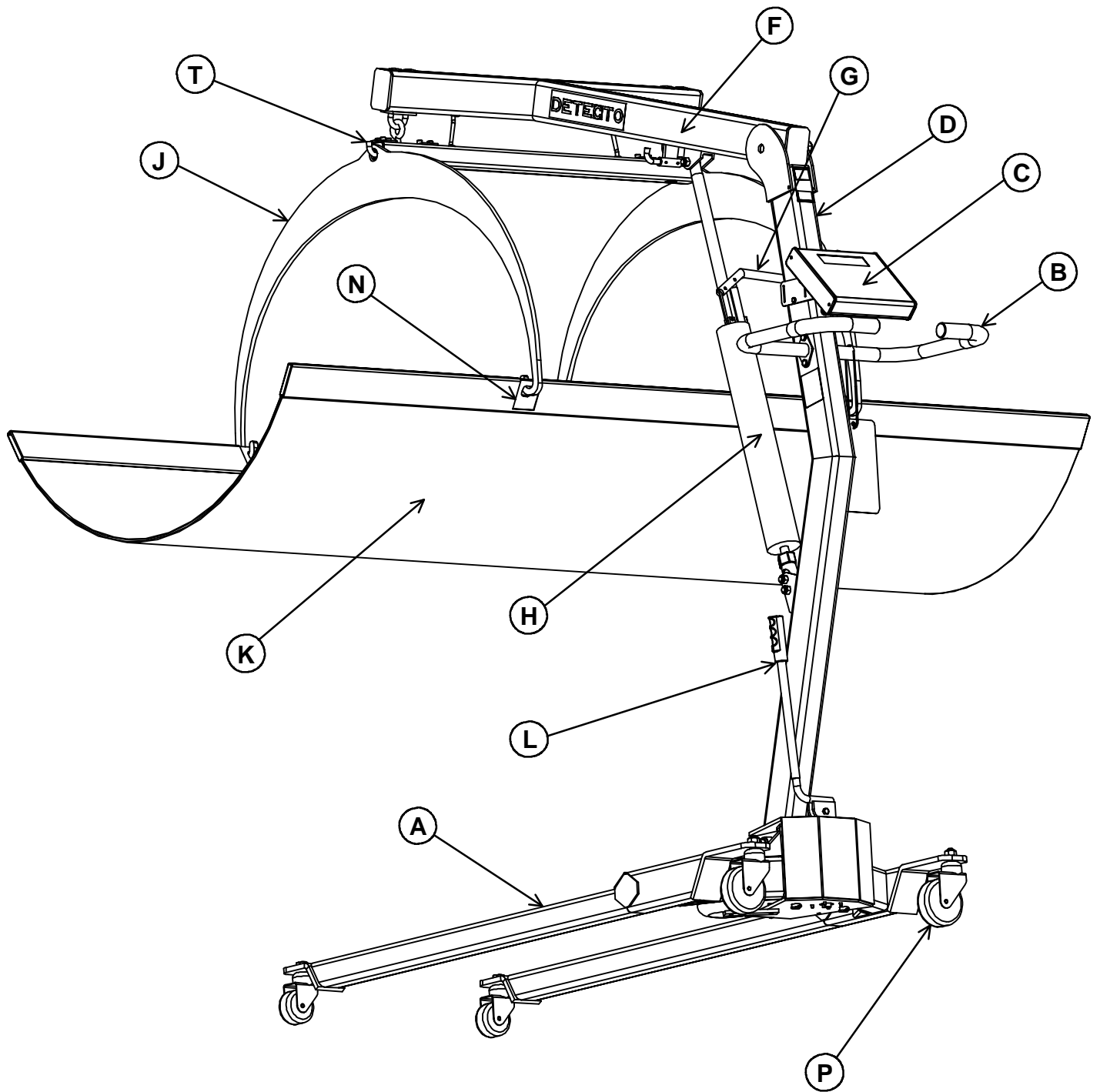


Figure No. 2

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

ITEM	QTY	PART NO.	DESCRIPTION
1	1	0046-C253-0A	CARD ASSY, INSTRUCTION FOR IB600
2	1	6680-1052	CHAIN, BEAD 3/32" DIA
3	1	6680-1053	SPLICING LINK, CHAIN, BEAD 3/32" DIA
4	1	6680-1044	GROMMET
5	2	6013-0436	5/8-11 ELASTIC STOP NUT
6	2	6007-0240	5/8-11 x 3 1/2 HEX HD BOLT
7	1	0046-B268-08	WARNING LABEL, READ INSTRUCTION MANUAL
8	1	0046-B242-08	HANDLE EXTENSION
9	1	6021-0595	SHOULDER BOLT 2½ X 1/2
10	1	6013-0438	1/2-13 ELASTIC STOP NUT
11	1	0046-C247-08	STRETCHER
12	2	0046-C248-08	STRETCHER BARS
13	2	0046-D261-18	HOOP - STRETCHER
14	1	758C	INDICATOR
15	1	6540-1119	HYDRAULIC CYLINDER
16	1	6540-1080	HANDLE GRIP
17	1	0046-D217-0A	BASE ASSY
18	1	0046-B005-08	STRETCHER CUP
19	1	60S43	SPRING
20	2	6540-1037	FRONT CASTERS
21	2	6540-1038	REAR CASTERS
22	1	391RV204	1/4-20 ELASTIC STOP NUT
23	4	6013-0086	1/2-13 NARROW HEX JAM NUT
24	3	6020-0040	1/8x1.125 SPRING PIN
25	4	6021-1117	#10-32x0.625 SHCS
26	1	6021-1401	1/4-20x0.50 SHCS
27	1	6021-1426	1/4-20x1.25 HEX HD BOLT
28	2	6024-0004	1/4 FLAT WASHER
29	4	6024-0017	5/8 FLAT WASHER
30	2	6024-0048	1/2 HELICAL SPLIT WSHR
31	5	0046-B200-08	BUSHING
32	2	0046-B236-08	LEG HINGE PIN
33	1	0046-B262-08	COVER PLATE
34	1	0046-B213-0A	HANDLE WELDMENT
35	1	0046-C216-0A	COLUMN SUPPORT WELDMENT
36	1	0046-C228-08	CAM
37	1	0046-C231-0A	LH LEG ASSY (WELDMENT)
38	1	0046-C232-0A	RH LEG ASSY (WELDMENT)
39	1	0046-C278-0A	COLUMN ASSY
41	3	6013-0070	3/8-16 ELASTIC STOP NUT
43	4	6007-0009	1/4-20x0.50 HHB
44	3	6021-1464	3/8-16x1.75 HHMS
45	2	0046-B244-0A	PUSH HANDLE
46	6	6540-0020	7/8" DIA PLUG, HOLE
47	1	0046-C471-08	MOUNTING BRKT, 758C
48	2	6540-1070	HAND GRIP, FOAM
50	2	6680-1075	STRAP, CINCHING, VEL-CRO®
51	1	0046-B249-08	BALL SOCKET - CYL
52	1	0046-D277-0A	COLUMN WELDMENT
53	1	0046-C279-0A	BOOM ASSY
54	1	6610-1076	1-1/2" PLUG, HOLE
55	1	6710-0014	1/2" DIA SHRINK TUBING
56	2	6013-0410	5/16-18 ELASTIC STOP NUT
57	4	6013-0400	3/8-24UNF HEX NUT

PARTS LIST, Cont.

ITEM	QTY	PART NO.	DESCRIPTION
58	2	6020-0020	1/8" DIA x 0.75 SPRING PIN
59	1	6024-0045	3/8 HEL. SPLIT LOCK WSHR
60	2	0046-B202-0A	U BOLT WELDMENT
61	1	0046-C233-0A	BOOM WELDMENT
62	1	0046-B108-0A	TRIM BOARD ASSY
63	4	6980-1035	BUSHING, 1/4 ID
64	1	0046-B474-0A	CABLE MODULAR, COILED
66	1	0046-C229-0A	LOADCELL TUBE ASSY
67	2	CMBC-400	LOAD CELL
68	2	6020-0040	1/8 x 1.125 SPRING PIN
69	4	6021-1497	1/4-28 x 1.125 SHCS
70	4	6021-2045	#6-32 x 0.375 FHMS
71	6	6021-1401	1/4-20 x 0.50 SHCS
72	2	6710-0003	3/16 HEAT SHRINK TUBING
73	2	0046-B098-08	LOAD CELL PROTECTOR
74	2	0046-B250-08	CVR - LOAD CELL TUBE
75	2	0046-C245-08	BLOCK - HOOP SUPPORT
76	4	0046-B246-08	HOOK - HOOP SUPPORT
77	1	0046-C237-0A	LOAD CELL TUBE WELDMENT
79	1	6024-0051	5/8 SPLIT LOCK WASHER
80	1	6021-1171	SCREW, SELFTAP 10-32 X .75

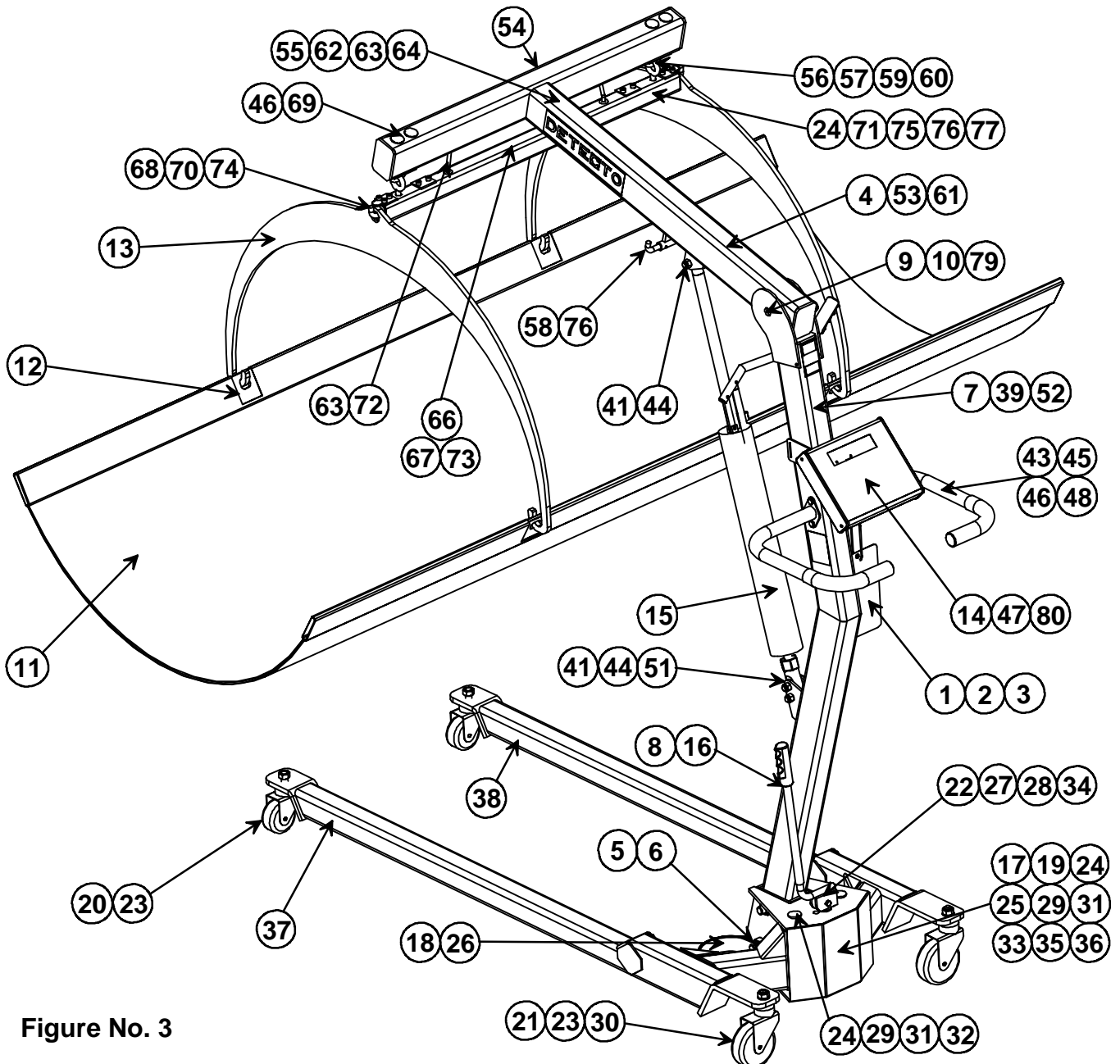


Figure No. 3

