



DCS302 DUAL CYLINDER SCALE

INSTALLATION & OPERATION MANUAL

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DCS302 GENERAL INFORMATION

GENERAL

The DCS302 is a dual cylinder scale designed specifically for the water and wastewater industry. The scale base and weighing surfaces are made of Type 2 PVC plastic and are guaranteed for five years against environmental damage. All mechanical parts, wherever possible, are made of stainless steel or protected with a durable chemical-resistant powder finish.

The DCS302 can accommodate any cylinder that does not exceed 12" diameter and 150 lbs. net weight.

SPECIFICATIONS

Accuracy: +/- 0.25% FS
Resolution: 0.5 lb.
Scale Readability: 0.1 lb.
Scale capacity: 300 lbs.
Safe overload capacity: 400 lbs.

FEATURES

- Simultaneously weighs two cylinders independently and displays the net weight on separate digital indicators.
- Wall mounting bracket and safety chains are optionally available. These can adapt to different cylinder sizes.
- All scales are factory assembled, tested and calibrated.

ASSEMBLY

The DCS302 scale base is fully assembled at the factory. Installation and testing procedures later in this manual.

OPERATION

See Instruction Manual EI-2000 for scale setup and operation.

WARRANTY

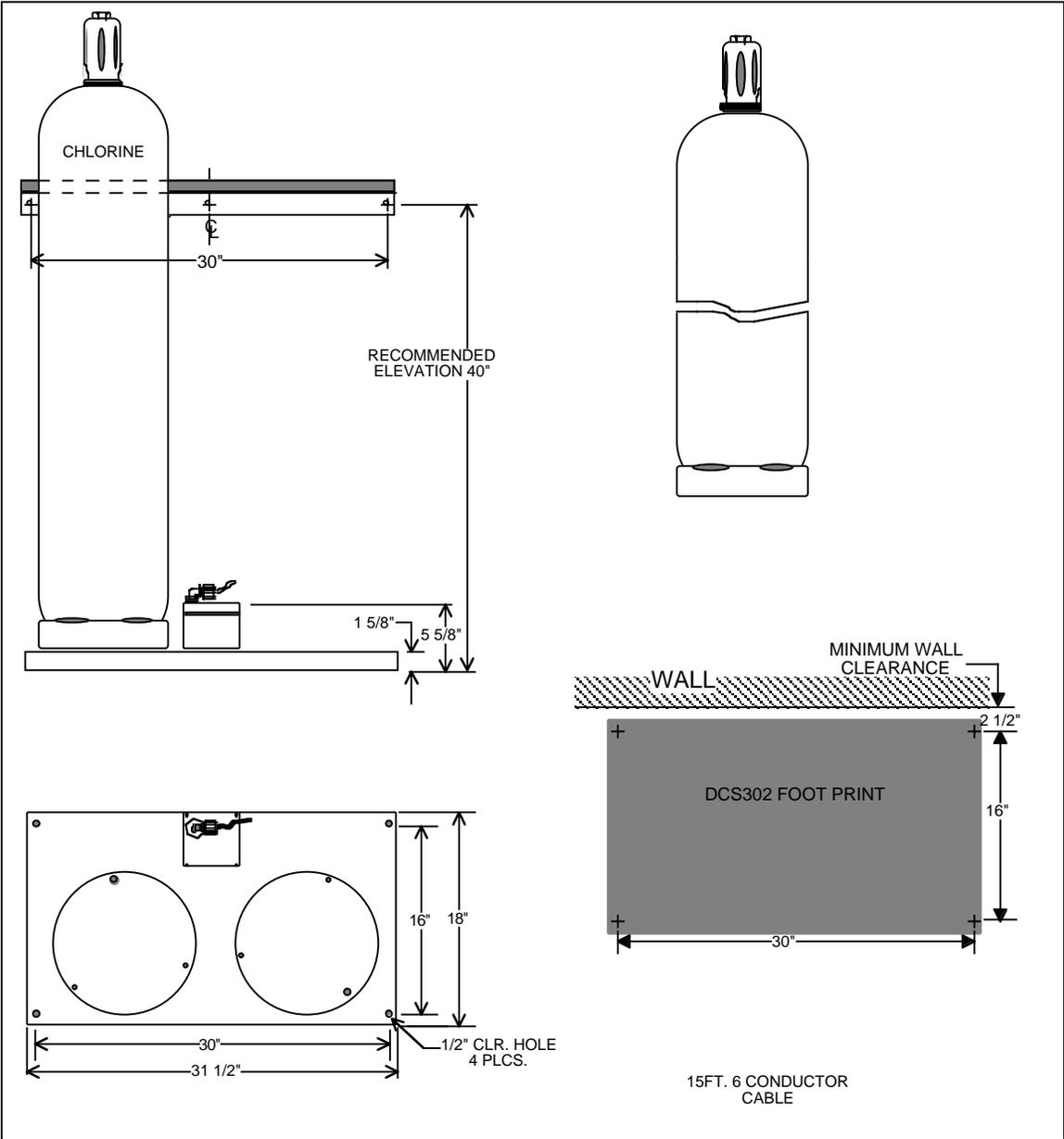
Eagle Microsystems warrants the DCS302 scale base to be free from all defects in material and workmanship. Any parts that fail because of defective Workmanship or material within five (5) years of date of shipment will be replaced. The warranty does not include miss use, negligence or modifications. Eagle Microsystems shall not be liable for transportation or installation charges, or any other expenses incurred by the customer.

INSTRUCTIONS

DCS302 DUAL CYLINDER LOAD CELL SCALE

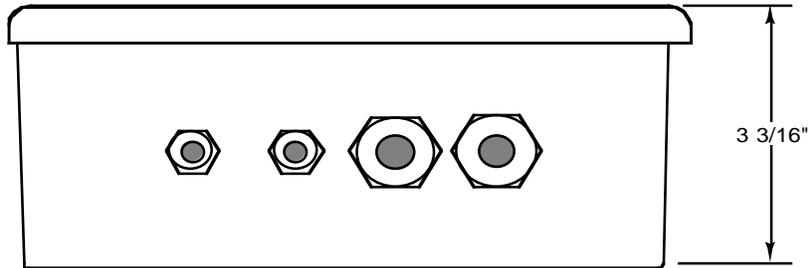
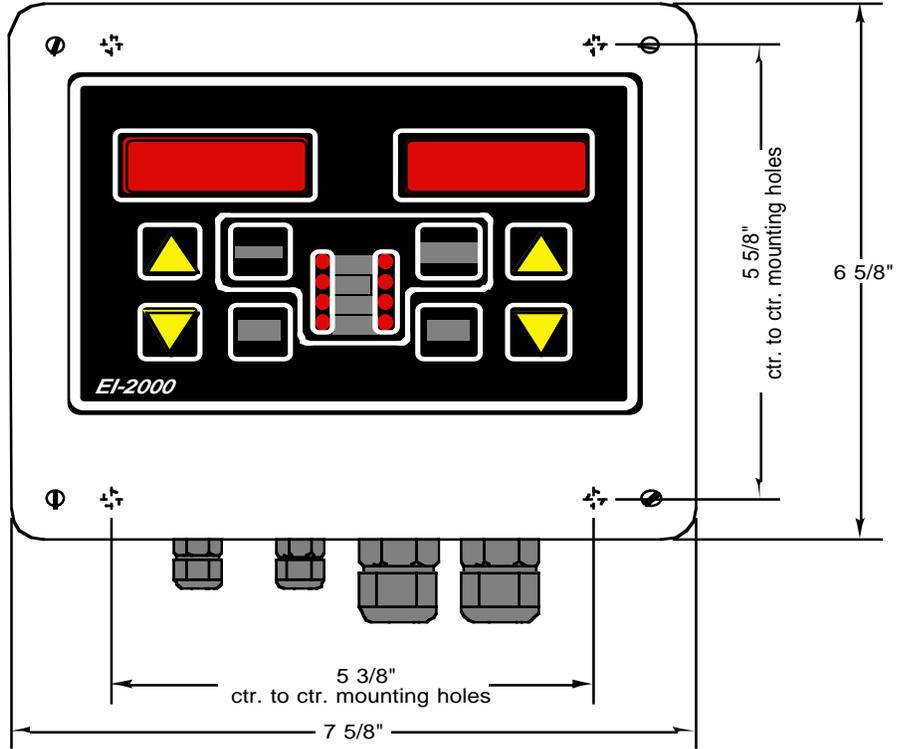
1. Before placing scale in operation remove the six (6) plastic stops and the aluminum shipping plate located on the underside of the scale.
2. Determine service location of scale and position base 2 1/2-inches or more from the wall.
3. Anchor scale base securely to smooth, level floor using 3/8-inch anchor bolts (not supplied) through the four (4) 1/2-inch diameter holes in the corners of the scale base. It is recommended that the floor be level to within 0.5 degree for optimal performance.
4. Mount NEMA 4X EI-2000 Dual Channel Digital Display Instrument to a suitable and convenient wall surface. Remove instrument cover and mount instrument to the wall with #10 screws or suitably sized masonry or hollow wall anchors, as applicable. The instrument case has four (4) through holes, as shown in the Operating Manual, located on 5 3/8-inch centers horizontally and 5 5/8-inch centers vertically.
5. Route the cable provided, and factory terminated at the scale, to the display instrument. Make wiring connections as shown on pages 13 and 14 of the "EI-2000 Dual Channel Weight & Level Display/Transmitter Operating Manual" for the "DCS302 Dual Cylinder Scale".
6. Follow instructions in the Operating Manual for startup and calibration of the EI-2000. The scale base is factory calibrated using known weights and is ready for use when received.

SCALE INSTALLATION



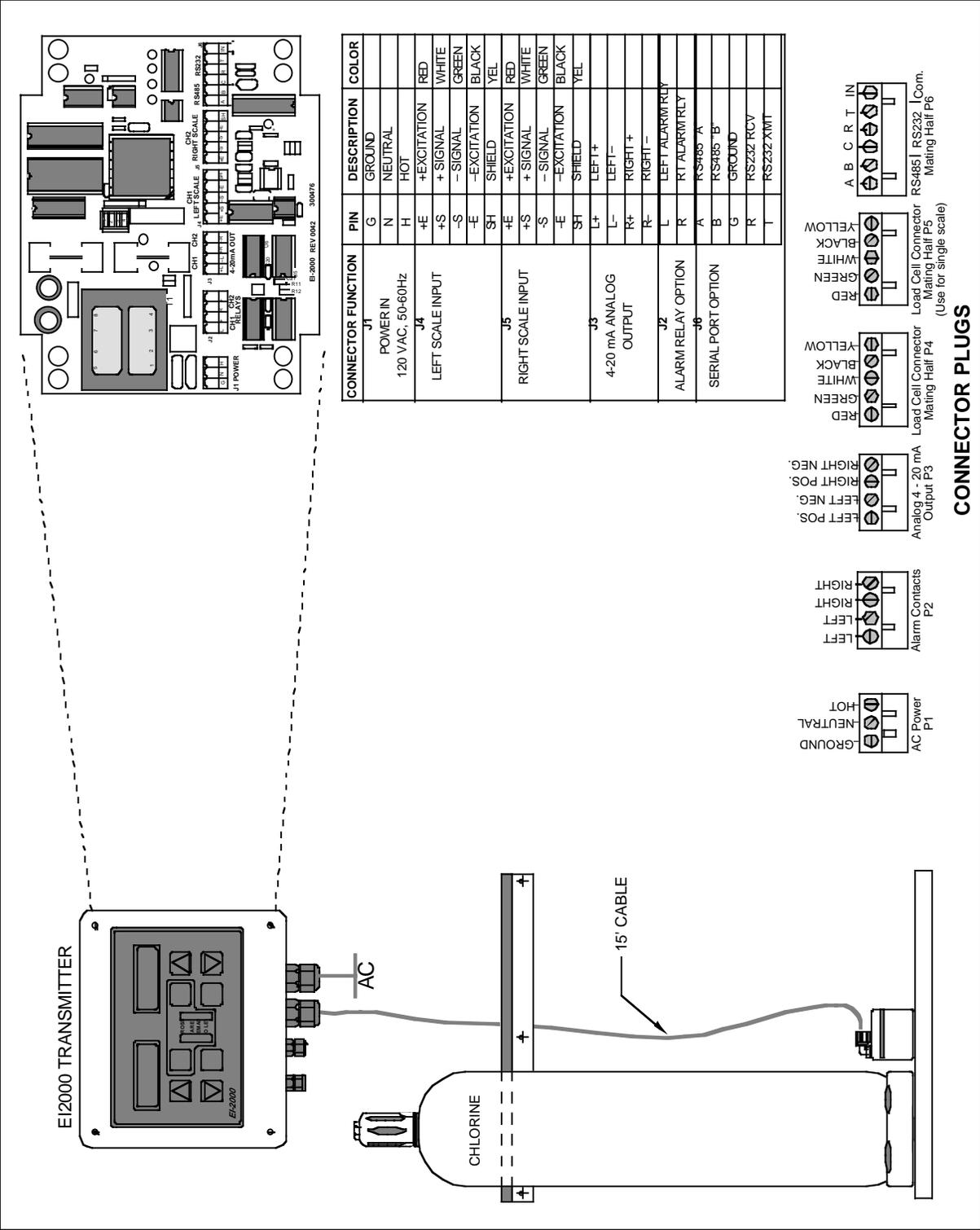
EI2000 INDICATOR

Wall Mounting Dimensions



Enclosure conforms to: NEMA 4X

PC BOARD CONNECTIONS



TEST PROCEDURES
DCS302 DUAL CYLINDER LOAD CELL SCALE

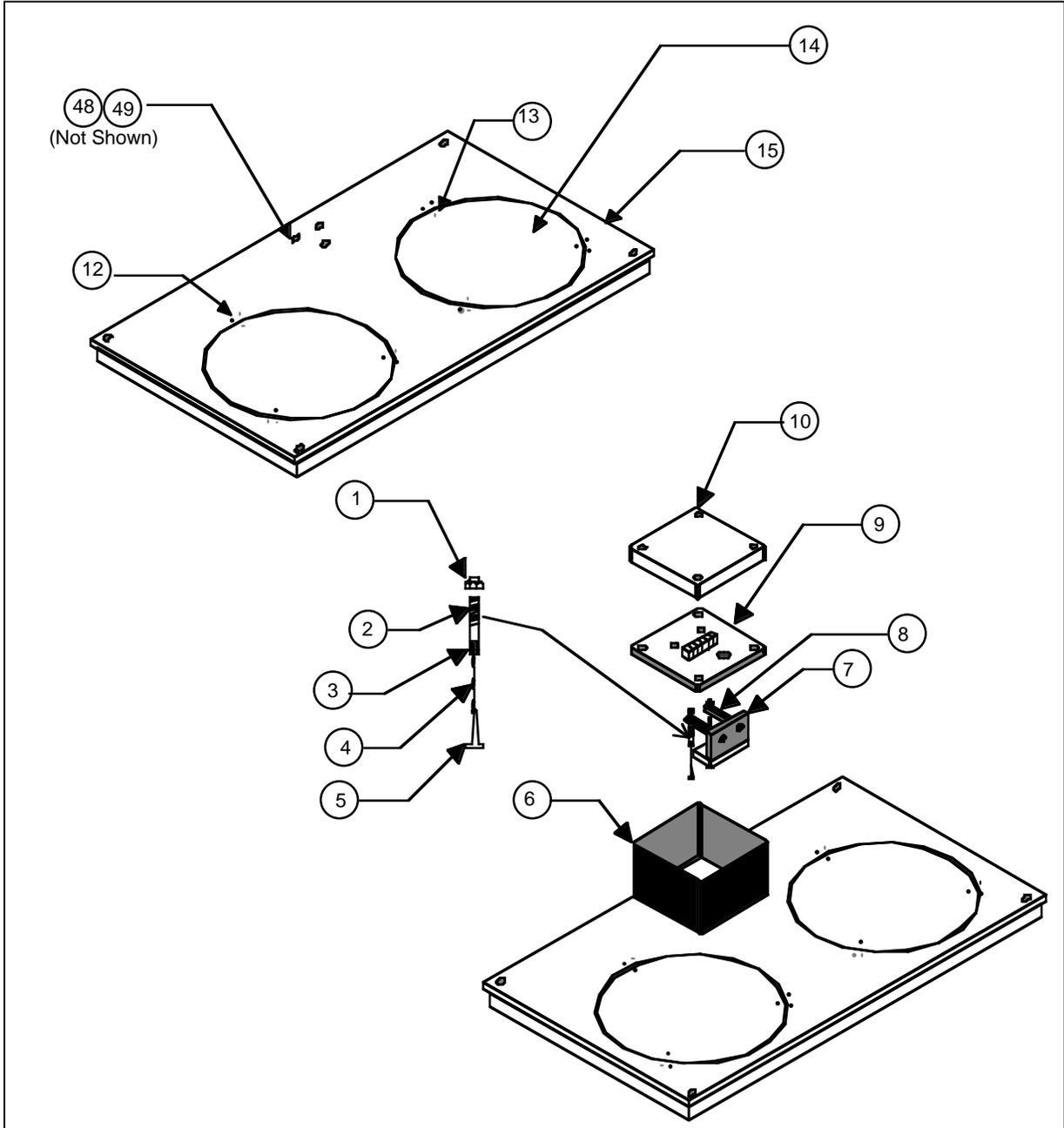
1. After assembly a known weight of 250 lbs. is alternately placed on each platform and removed two times in order to flex the components of the scale base.

2. Upon loading the scale for the third time, the display of the EI-2000 indicator allowed to stabilize. The display value is noted and, in Mode 3 - Automatic Operation, the display is adjusted to read the known weight using the Up/Down arrow keys. Once the Gross Weight display is set to the known 250 lbs. the SEL PB is pressed and the display will change to Weight Remaining and show 150 lbs. The weights are removed. Readout should return to zero.

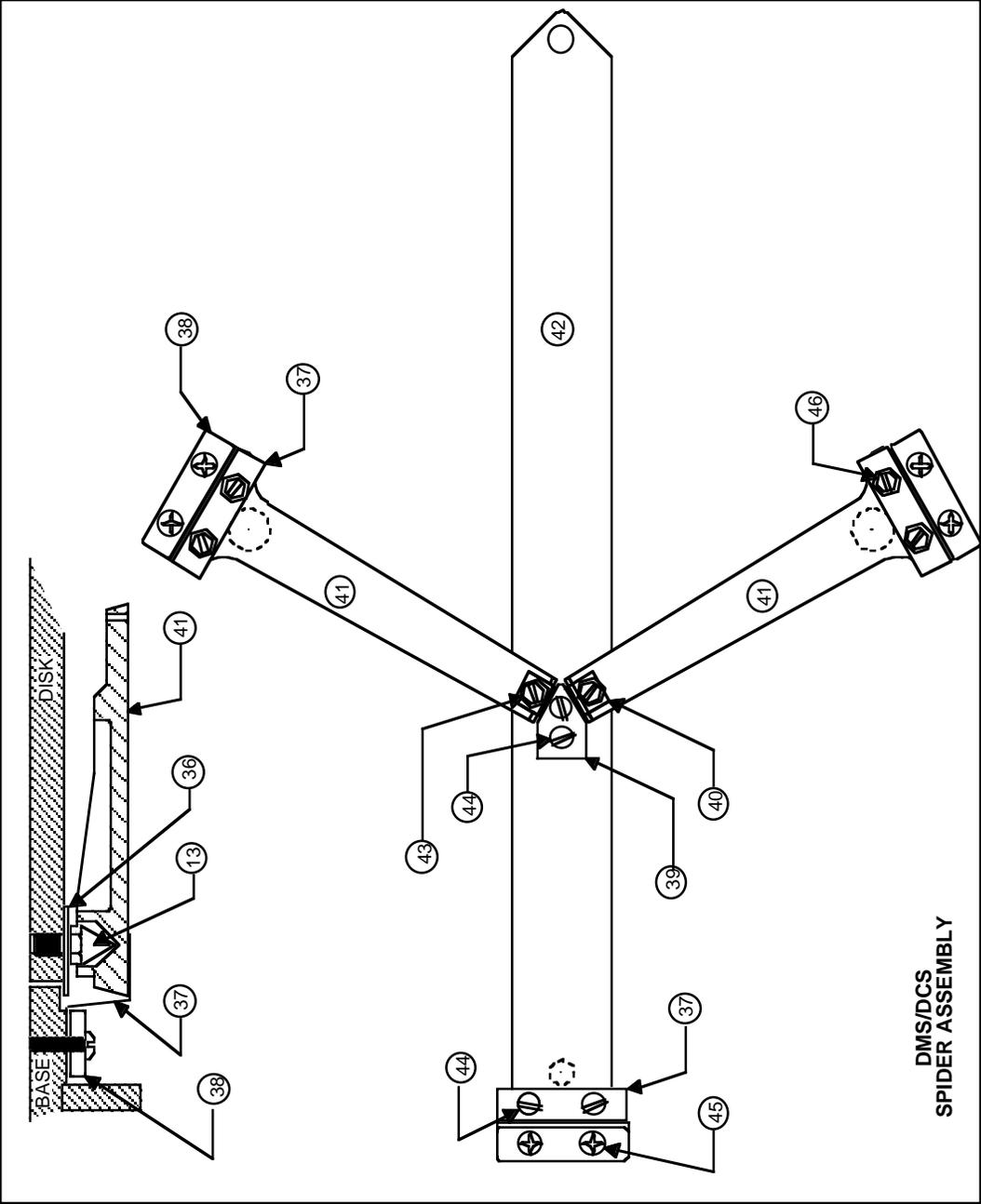
3. The known weight is reapplied once more. The scale should now read Gross Weight of 250 lbs +/- 3 counts. (A count is the smallest displayed increment, i.e., if counting by 0.5 lb. increments a count represents 0.5 lb.). The weight is removed and the display should read zero. If so test is concluded and scale is ready for packing and shipment.

4. If readout weight is outside tolerance, platforms are adjusted and test is repeated.

DCS302 DUAL CYLINDER SCALE BASE



SPIDER DRAWING



DRAWING KEY

ITEM	DESCRIPTION	P/N
1	Locknut	612541
2	Adjusting bolt, ss	400177
3	Pin, spring (split), ss, type 420	640136
4	Chain, sash, ss, 1/0	100356
5	Chain clip	400182
6	Enclosure, FG 5x5x3	630604
7	Bracket, cell, PVC-1	400244
8	Load cell, 40#, 14", 350 ohm	500317
9	Term. block, 6 ckt, screw term.	532061
10	Lid, enclosure, FG	Part of Item 6 above
11	Not used	-----
12	Screw, 10B x 5/8 Self tap, ss	611060
13	Pivot screw	400229
14	Disc	400178
15	Deck	400178
16-35	Not used	-----
36	Disc washer	400154
37	Perimeter flexure	400143
38	Perimeter clamp	400144
39	Center clamp	400145
40	Center flexure	400142
41	Short lever	400160
42	Long lever	400141
43	Screw, 6A-3/8, self tap hex	610684
44	Screw, 10-24 x 3/8 Hex head	611061
45	Screw, 10B-5/8 Self tap Phillips	611060
46	Screw, 10A-3/8 Self tap hex	611028
47	Bolt, 10-32 x 3 1/4	611013