



**DMS302  
DUAL CYLINDER SCALE**

**INSTALLATION & OPERATION  
MANUAL**

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## DMS302 INFORMATION

### GENERAL

The DMS302 is a dual cylinder scale designed specifically for the water and waste water 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 DMS302 can accommodate any gas cylinder that does not exceed 12" dia. and 150 lbs. net weight.

### SPECIFICATIONS

Accuracy: .....	±1% F.S.
Resolution: .....	1 lb.
Scale readability: .....	1/2 lb.
Scale capacity: .....	300 lbs.
Safe overload capacity: .....	400 lbs.

### FEATURES

- Simultaneously weighs two cylinders independently and displays the net weight on separate indicators.
- Adjustable cross bar and chains adapt to different size cylinders.
- All scales are assembled, tested and calibrated at the factory.
- Easy to read 5" scale length with 150 graduations that allows for 1/2 lb. readability.

### ASSEMBLY

Remove the scale parts from the carton and inspect for shipping damage. Place the post on the floor with the indicator face up and insert the two 6-32 threaded extension rods into the brass bottom stops.

Cut the plastic tie wrap and stand the scale base vertical on its back skirt. Guide the extension rods thru the base and levers while bringing the post and base together. Use the extension rods to pull the brass bottom stops thru the levers and insert the "E" ring. Secure the base to the post with two 5/16 hex bolts and lock washers.

Locate the scale on a reasonably level floor. The circular rings are designed to support the loads. For best performance, use the four holes located in the corners to bolt the scale base to the floor. In order to make the assembly easier, all tension has been removed from the lever springs. Before placing in service, preload the indicator by turning both tare adjust knobs clockwise for approximately seven turns.

### OPERATION

Locate a full cylinder in the approximate center of the weighing surface, connect the cylinder chains and make all the required gas connections. Use the tare weight adjust knob to cancel out the tare weight of the gas cylinder. Using the tare adjust knob, set the pointer to the net weight of the cylinder (150 in the case of the standard chlorine cylinders). The displayed weight is now an indication of the weight of product remaining.

### WARRANTY

Eagle Microsystems warrants the DMS302 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 misuse, negligence or modifications.

Eagle Microsystems shall not be liable for transportation or installation charges, or any other expenses incurred by the customer.

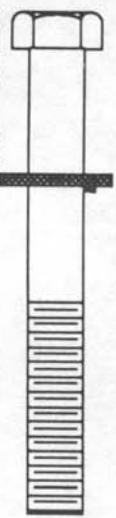
The DMS302 Has Been Assembled, Tested & Calibrated, Then Disassembled & packaged for shipment. The Following Steps Are Required For Re-assembly.

### REQUIRED ITEMS

A. Threaded Extension Rods (2)



B. Hex Head Bolt - 5/16 - 18 x 2 1/2" & Lock Washer (2)



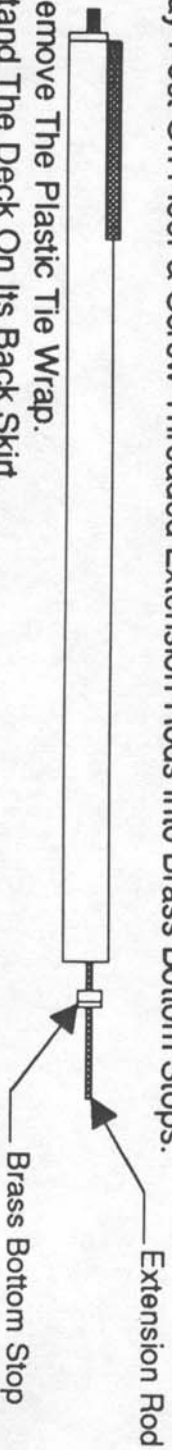
C. "E" Ring (2)

## CAUTION

*Do Not Stand Post Vertical! Damage To The Steelyard Can Result.*

### ASSEMBLY STEPS

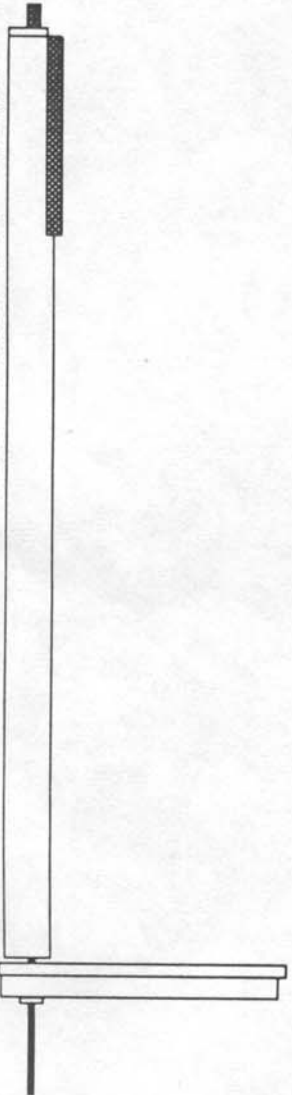
1. Lay Post On Floor & Screw Threaded Extension Rods Into Brass Bottom Stops.



2. Remove The Plastic Tie Wrap.

3. Stand The Deck On Its Back Skirt.

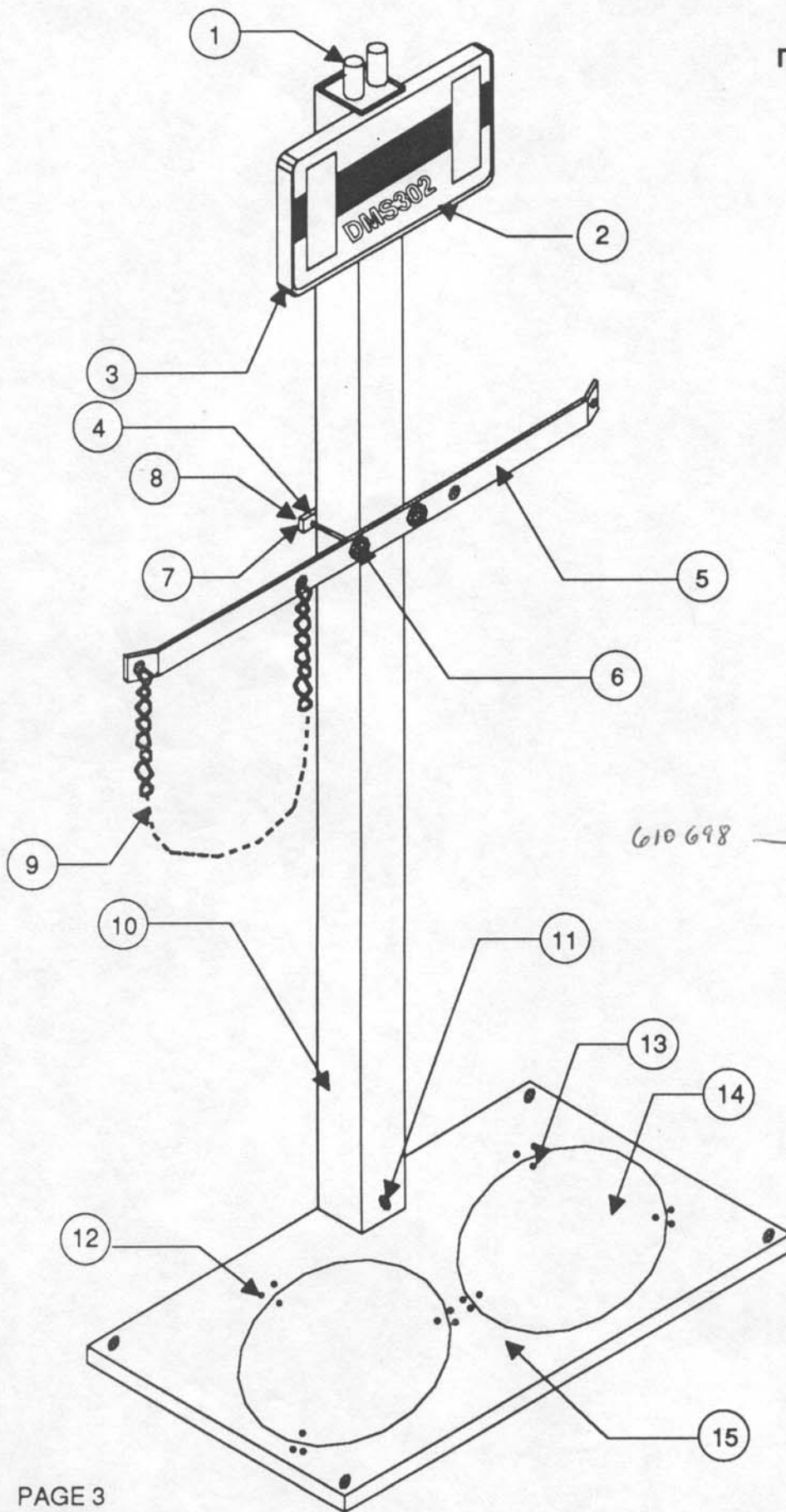
4. Slide Deck & Post Together, While Using The Extension Rods To Guide The "Brass Bottom Stops" Thru The Levers.



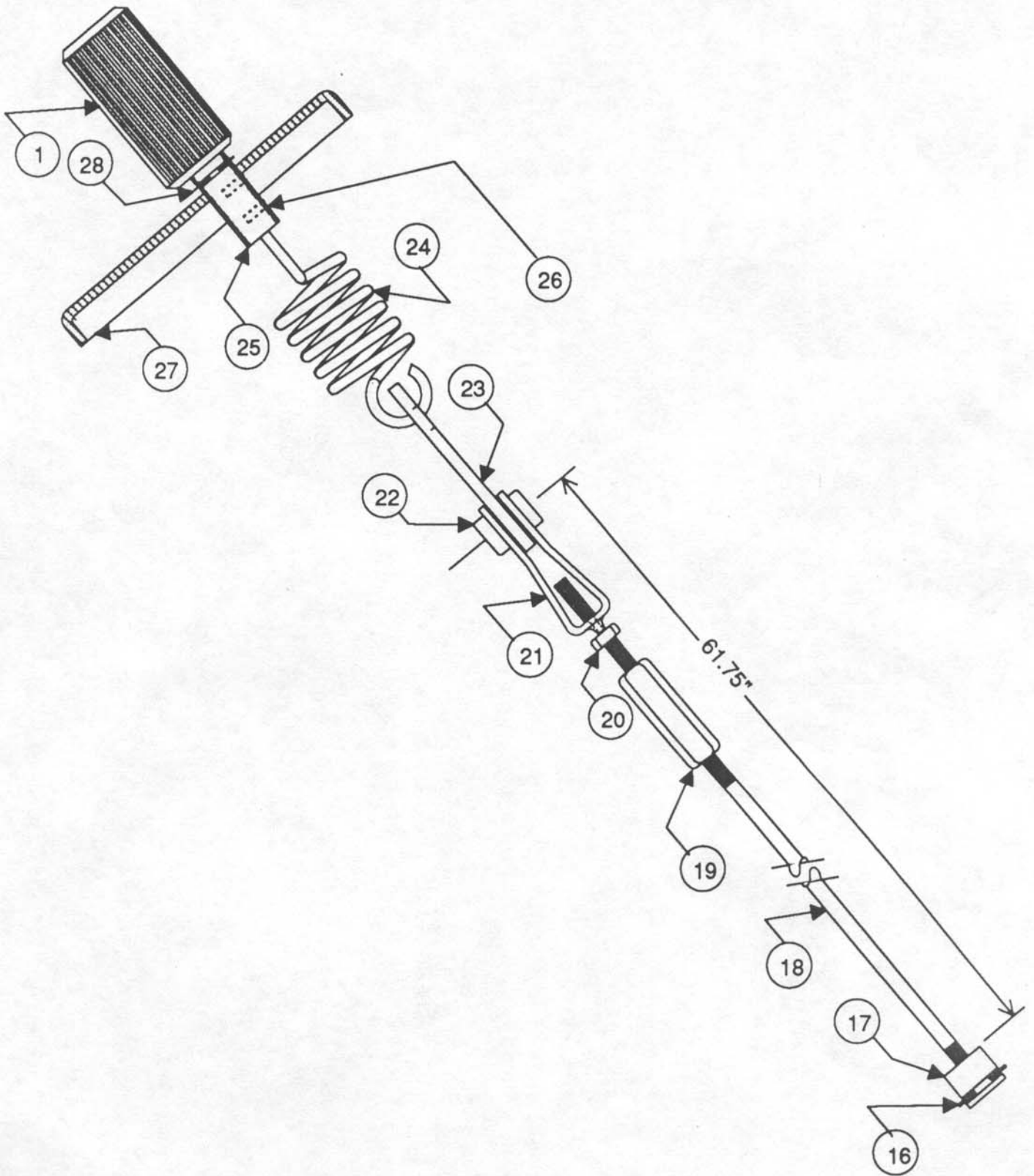
5. Screw 5/16 Hex Bolts With Lock Washers Thru Bottom Of Deck & Into Bottom Of Post.

6. Pull Extension Rods Thru The Lever Holes. Insert E-rings Into Snap Ring Groove, & Let Stops Back Into Lever Holes.

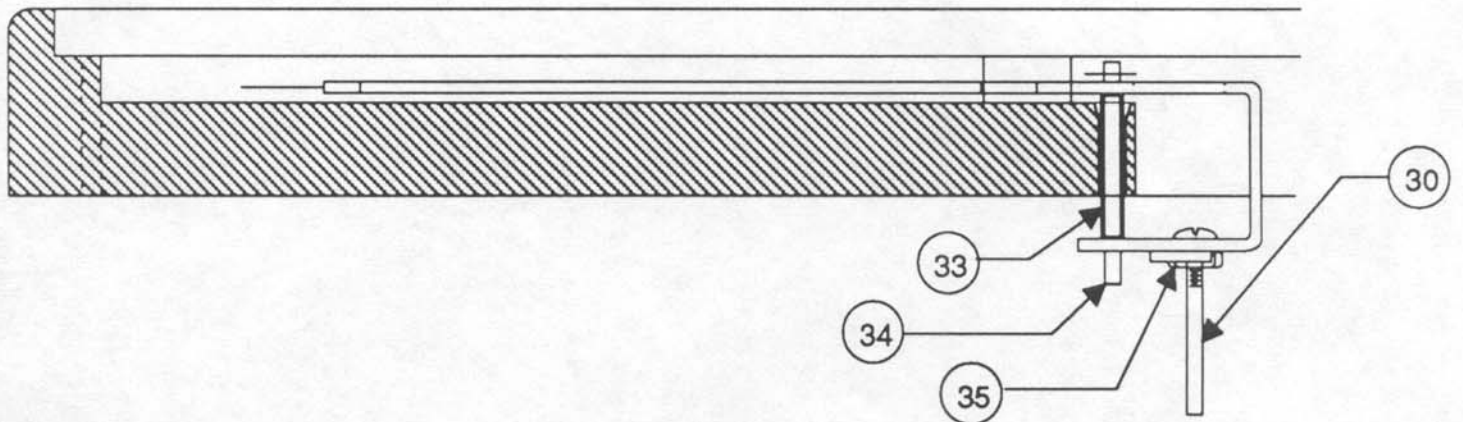
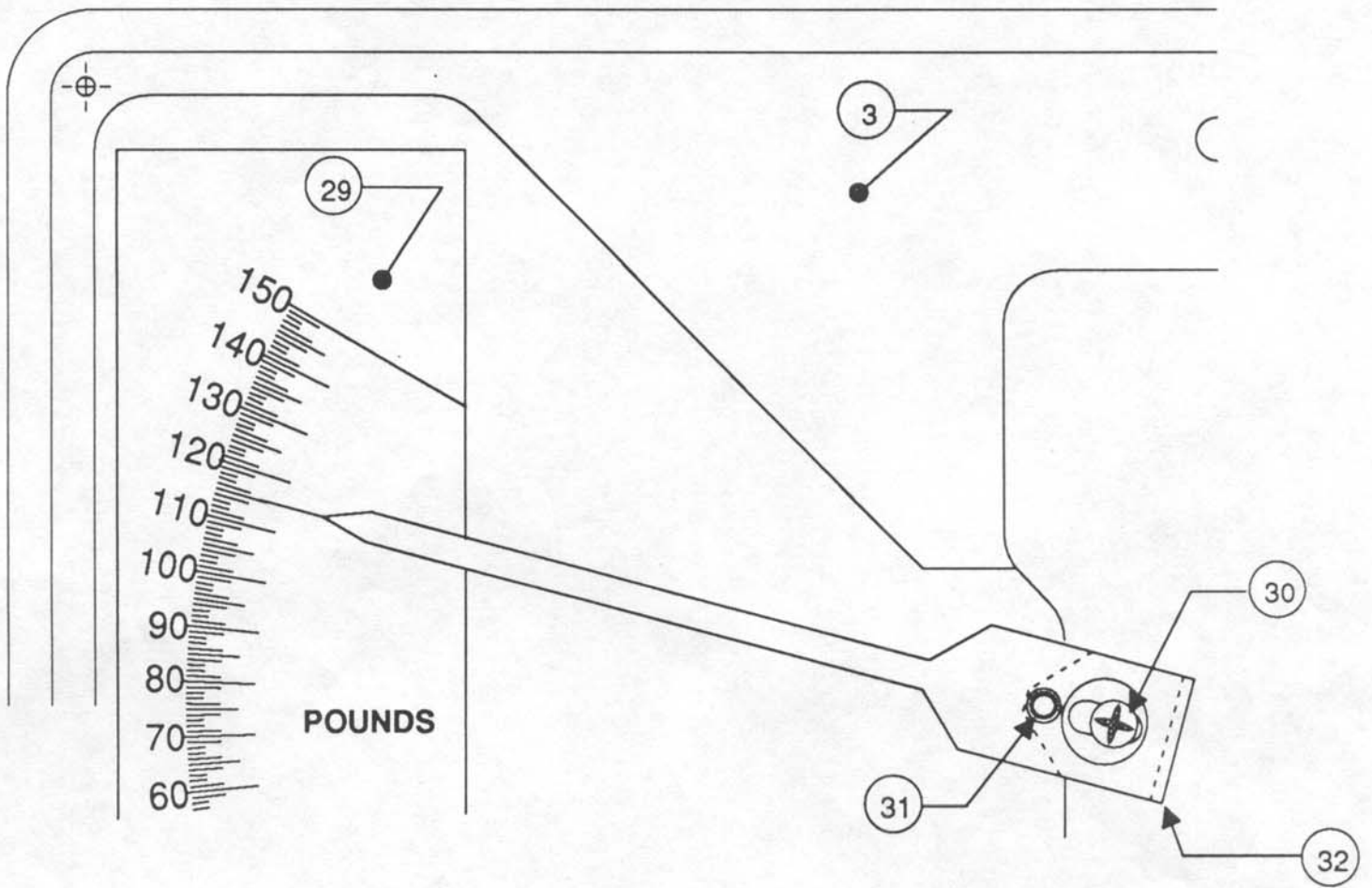
7. Unscrew Extension Rod & Stand Scale Upright.

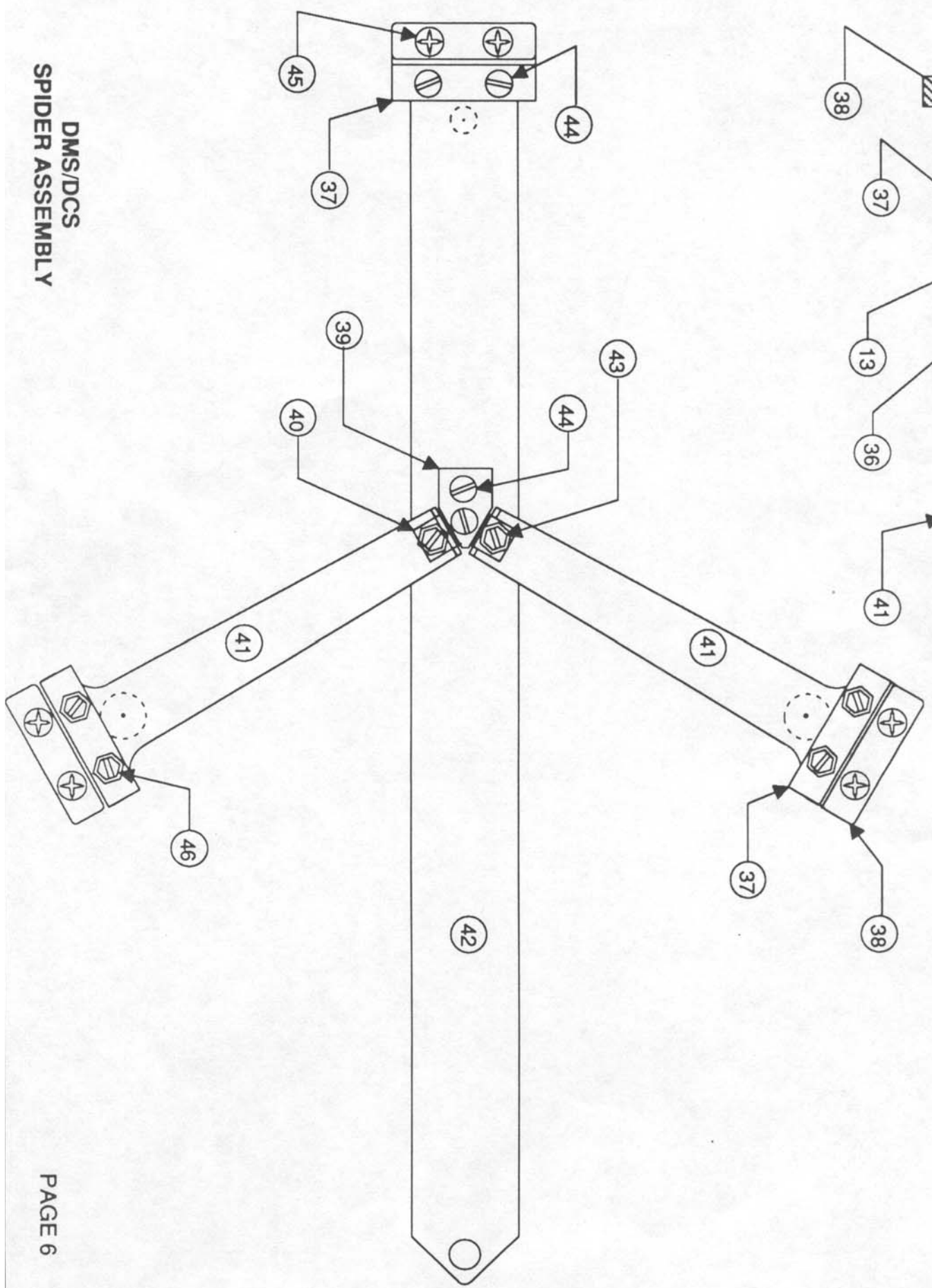
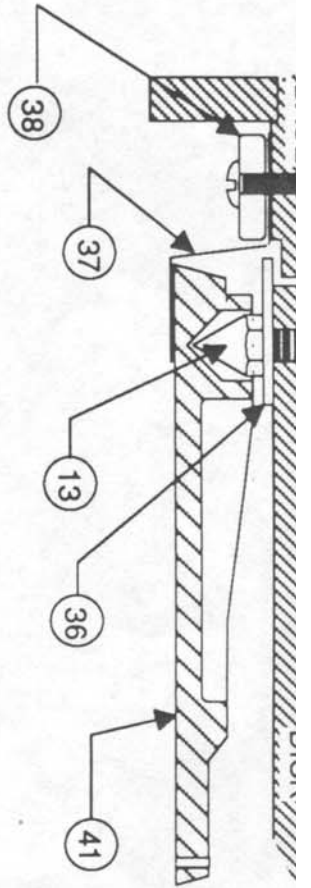


ITEM	DISCRIPTION	P/N
1	Zero Knob	400316
2	Overlay	10015
3	Back Plate	400302
4	Support Arm Strap	400319
5	Support Arm	400320
6	5/16-18 x 4 Hex Bolt	613029
7	5/16 Hex Nut	613028
8	5/16 Lock Washer	613015
9	Cylinder Chain	100489
10	Post	400307
11	Post Clamp	400308
12	10B x 5/8 Self Tap	611060
13	Pivot Screw	400229
14	Disc	400178
15	Deck	400178
16	Stop "E" Ring	613709
17	Steelyard Stop	400313
18	Steelyard	400140
19	Adjusting Nut	610693
20	Jam Nut	610632
21	Clevis	400312
22	Clevis Bushing	400334
23	Link	400329
24	Tension Spring	400318
25	Zero Adj. Link	400315
26	Socket Set Screw	610436
27	Post Cap	400328
28	Link "E" Ring	612101
29	Dial Scale	100602
30	Pointer Crank Axel	400305
31	Pointer "E" Ring	610506
32	Pointer	400304
33	Axel Bushing	400317
34	Pointer Axel	400309
35	Lock Nut	611035
36	Disk 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	6A-3/8 Self Tap Hex	610684
44	10-24 x 3/8 Hex Head	611061
45	10B-5/8 Self Tap Phlip	611060
46	10A-3/8 Self Tap Hex	611028
47	10-32 x 3 1/4 Bolt	611013



**DMS STEELYARD/CLEVIS  
ASSEMBLY**





DMS/DCS  
SPIDER ASSEMBLY