



A Division of T.E. Bouton Company, Inc.

UNIVERSAL DIAL ADJUSTMENT INSTRUCTIONS

WARRANTY AND RETURN INSTRUCTIONS

PARTS LIST



CCI's Mechanical Spring Dial Scales

MECHANICAL SPRING INSTALLATION

(FIGURES 8 B AND 10 B)

Lay the scale on its side and remove side panel. Make sure the spring and weight spring connector are out of the scale and proceed as follows:

- 1) Insert weight spring connector (#18/#32) in hole provided as shown.
- 2) Attach the bottom of weight spring (#31/#34) into the top hole of weight spring connector with opening towards face of scale.
- 3) Put the top of the spring hook into the holes provided on zero adjust bracket (#13/#9) with opening towards face of scale. Before proceeding, make sure the spring is not binding at the weight spring connector.
- 4) Push the spring clip (attached to the zero adjust bracket) down till it locks in place (only on 8" dials).
- 5) Remove wooden stops from below platter.
- 6) Check calibration - (if scale is off, refer to section titled MECHANICAL SPRING ADJUSTMENT)
- 7) Replace side panel and replace wooden stops from below the platter.

MECHANICAL SPRING ADJUSTMENT

Accurate weight readings on CCI's Spring Dial Scales are established by adjusting the springs using a vertical lever system. Each scale is factory calibrated and the springs adjusted prior to shipment and adjustments can be accomplished by manipulating the "spring calibrators". These calibrators are used to *increase/decrease* the "power length" of the springs. Due to the possibility of general metal fatigue we recommend the scales be tested from time to time to assure accuracy of weight readings. Check the accuracy, by placing a test weight equal to the capacity of the scale as near as possible to the center of the platform and if necessary, the adjust the accuracy by following the directions below.

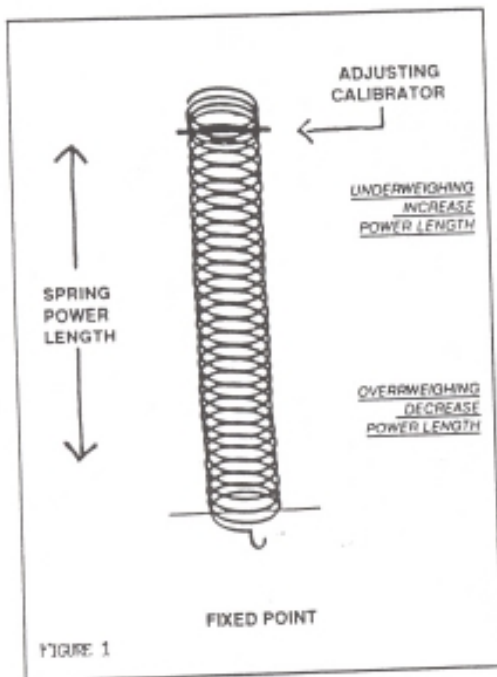


FIGURE 1

After removing both side panels:

If the pointer is showing less than the correct weight, the "power length" of BOTH springs must be INCREASED.

- 1) Turn the calibrator counter clockwise. For each graduation adjustment required, turn the calibrator 1/4 turn. This correction must be made equally on both springs.
- 2) Re-set pointer to "0"
- 3) Check the scale at full capacity, repeating Steps 1 and 2 until correct weighing is restored.
- 4) Reattach the side panels.

If the pointer is showing more than the correct weight, the "power length" of BOTH springs must be DECREASED.

- 1) Turn the calibrator clockwise. For each graduation adjustment required, turn the calibrator 1/4 turn. This correction must be made equally on both springs.
- 2) Re-set pointer to "0"
- 3) Check the scale at full capacity. Repeat Steps 1 and 2 until correct weighing is restored.
- 4) Reattach the side panels.

Keep in mind that after each adjustment, you must re-set ZERO BALANCE.



CCI's Mechanical Spring Dial Scales



(1 of 2)

Mechanical Spring Installation

CCI's Mechanical Spring Dial Scales

AIR DASHPOT INSTALLATION

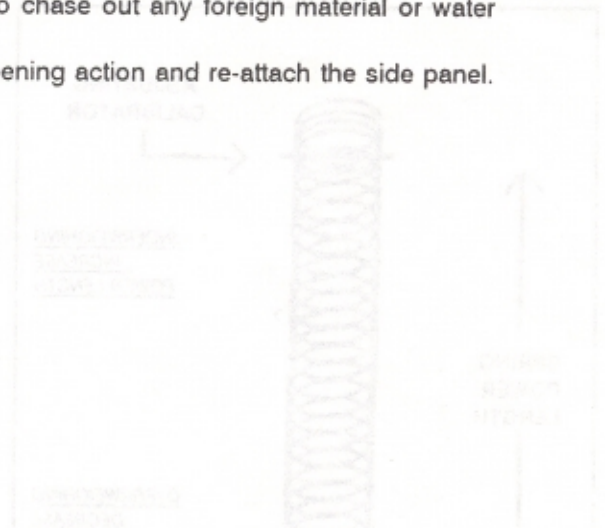
(FIGURE 8 A INSERT)

- 1) Remove the left side panel
- 2) Using the two holes provided, fasten the air cylinder bracket (#40) to the back of the scale chassis. Align the cylinder and secure.
- 3) Insert the graphite piston assembly into the plexiglass cylinder. Use the holes provided to secure the piston arm (#42) inside the post bracket (i.e. the frame which supports the springs).
- 4) Align and adjust all parts so the piston and rod are as close to vertical as possible and tighten all fasteners.
- 5) Check the calibration. If the scale binds, dashpot assembly is not aligned properly. Loosen all fasteners and repeat Step 3.
- 6) Adjust dashpot air tension by tightening or loosening the set screw on the top of the dashpot. Extra air tension can be obtained by adding a few drops of oil inside the plexiglass cylinder.

AIR DASHPOT ADJUSTMENT

From time to time the air dashpots can be checked and adjusted, if needed in the following manner:

- 1) Remove the left side panel.
- 2) Open the dampening screw to its maximum position.
- 3) Vigorously move the scale platter up and down several times to chase out any foreign material or water which could plug the air hole.
- 4) Re-adjust the dampening adjustment screw to the desired dampening action and re-attach the side panel.



8" SPRING DIAL SCALE PARTS LIST

Reference Number	Part Number	Description (Numbers) Total Parts Per Scale
1	*	Main Housing
2	08-SCL	Side Cover Left
3	08-SCR	Side Cover Right
4	08-BEZ-1	Bezel
5	08-LEN	Clear Lens
6	08-FACE-XX	Face Plate
7	08-PLT-XX	Platter Assembly
		Stainless - 2-40 lb model
		Stainless - 50 lb model
		Chrome - 70 lb model
8	*	Hinge Bracket
9	*	Hinge (2)
10	08-POST-XX	Post Bracket
11	08-RK-HNG	Rack Hinge
12	08-PIN-XX	Pinion Assembly
		2-40 lb model
		50-70 lb model
13	08-ZAK/BRKT-XX	Zero Adjust Bracket
14	08-ZAK	Zero Adjust Knob
15	*	Rack Spring Bracket
16	*	Pivot Bearing Link
17	08-RK-XX	Rack
		2-40 lb model
		50-70 lb model
18	08-WSC-XX	Weight Spring Connector
19	*	Hinge Pin 4-5/16" Long (4)
20	*	Rack Hinge Pin 1-3/4" Long
21	*	Hinge Bracket Screw (4)
22	*	Rack Hinge Pivot Bearing (2)
23	*	Pivot Bearing Nut (2)
24	*	Clevis Pin (2)
25	*	Rack Spring Bracket Nut
26	*	Rack Spring Bracket Screw
27	RRS	Rack Return Spring
28	*	Link Bracket Nut
29	*	Link Bracket Screw
30	08-LKB	Link Bracket
31	08-SP-XX	Spring Assembly (2)
		2-40 lb model
		50 lb model
		70 lb model
32	08-HK-XX	Spring Hook (2)
		2-40 lb model
		50-70 lb model
33	*	Zero Adjust Mounting Screw (4)
34	08-NUT-1	Platform Wing Nut (2)
35	*	Side Cover Screw (2)
36	*	Dial Mounting Screw (2)
37	08-PTR	Pointer
38	08-PTRN	Pointer Nut
39	*	Pinion Assembly Mounting Screw (2)
40	08-DASH-XX	Dashpot Assembly
41	*	Dashpot Assembly Mounting Screw (4)
42	*	Dashpot Lever
43	*	Dashpot Lever Connecting Nut (2)



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10" SPRING DIAL SCALE

PARTS LIST

REFERENCE NUMBER	PART NUMBER	DESCRIPTION (NUMBER) TOTAL PARTS PER SCALE
1	*	Main Housing
2	10-SCL	Side Cover Left
3	10-SCR	Side Cover Right
4	10-FACE-XX	Face Plate
5	10-LEN	Clear Lens
6	10-BEZ	Bezel
7	*	Platter
7(a)	10-PLT-1	13" x 13" Chrome Platter
7(b)	10-PLT-4	15" x 15" Chrome Platter
8	*	Sub-Platform
9	10-ZAK/BRKT	Zero Adjust Bracket
10	10-PIN-XX	Pinion Assembly
11	10-POST	Post Bracket
12	*	Link Bracket
13	*	Hinge (2)
14	10-RK-HNG	Rack Hinge
15	*	Rack Spring Bracket
16	10-RK-XX	Rack
17	*	Hinge Connecting Bracket (2)
18	*	Rack Hinge Connecting Bracket
19	*	Hinge Pin 5-5/8" Long
20	*	Rack Hinge Pin 2" Long (4)
21	*	Pivot Bearing Link
22	10-ZAK	Zero Adjust Knob
23	*	Upper Stop
24	*	Rack Hinge Pivot Bearing (2)
25	*	Hinge Connecting Screw (4)
26	*	Rack Hinge Bracket Connecting Screw (2)
27	*	Pivot Bearing Nut (2)
28	*	Link Bracket Screw (2)
29	*	Link Bracket Nut (2)
30	*	Hex Head Bottom Stop Bolt (2)
31	*	Bottom Stop Nut (2)
32	*	Weight Spring Connector Nut (4)
33	10-WSC	Weight Spring Connector (2)
34	10-SP-XX	Spring Assembly (2)
35	*	Post Bracket Check Rod
36	*	Check Rod Nut (4)
37	10-HK1	Spring Hook (2)
38	*	Clevis Pin (2)
39	*	Rack Spring Bracket Nut
40	*	Rack Spring Bracket Screw
41	RRS	Rack Return Spring
42	*	Platform Wing Nut (4)
43	*	Sub-Platform Mounting Nut (2)
44	*	Sub-Platform Mounting Screws (2)
45	*	Zero Adjust Mounting Screw (3)
46	*	Side Cover Screw (4)
47	*	Pinion Assembly Mounting Screw (2)
48	*	Dial Mounting Screw (2)
49	10-PTR	Pointer
50	10-PTRN	Pointer Nut

-XX (Specify Model)

* Non Inventory Item

WARRANTY POLICY

We warrant our scales to be free from defects in both materials and workmanship for one year from purchase date. Occasionally, conditions arise where a defect is noticed but the warranty period has expired. Our policy is to review and evaluate each occurrence and, if required, the warranty period may be extended. Warranty is voided if other than normal use is apparent or if abuse is indicated.

ASSEMBLE FOR USE

Remove wooden stops from under platform.
Attach platform to scale using wing nuts provided.
Your scale is ready for use.

USE, CARE AND HANDLING

CCI's spring dial scales are designed to perform in extreme conditions over long periods of time provided they are treated with the precautions any precision instrument would be afforded. The following suggestions are only a partial listing of proper treatment of these hardworking scales, as well as some preventative measures that should help reduce problems and extend the life of your scale.

Avoid OVERLOADING; do not drop items on the scale platform

For more accurate readings, place the scale on a flat stable surface and check "ZERO" balance before weighing items. Re-set "ZERO" if necessary using the ZERO ADJUST KNOB. Place container/item to be weighed as near the center of the platform as possible.

DO NOT carry the scale by the platform.

DO NOT drop the scale.

DO NOT weigh items that exceed the capacity of the scale.

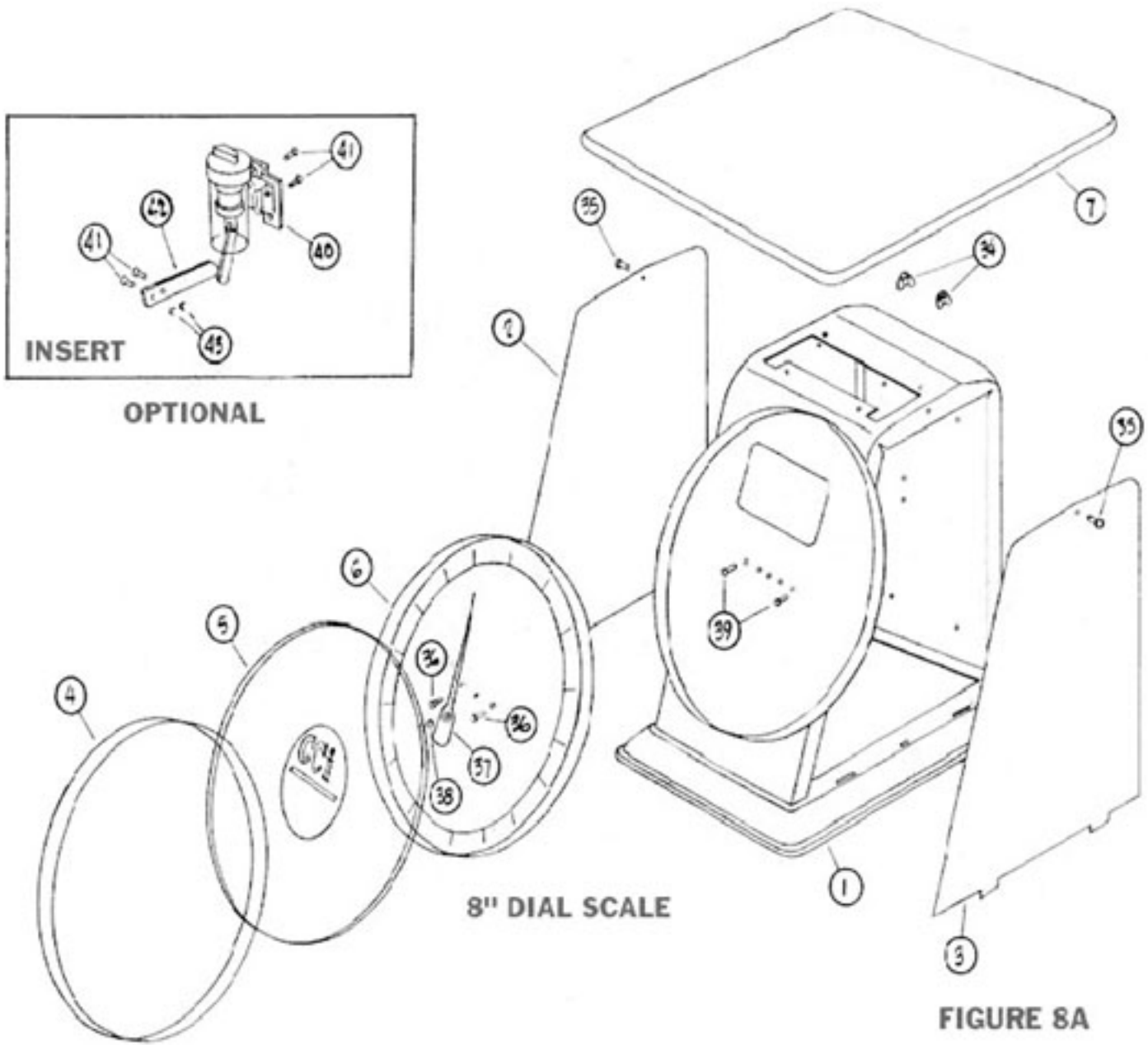
When the scale is moved from one location to another, put "STOPS" in the space between the body of the scale and the platform to prevent "bouncing" of platform

These scales should be cleaned out/off periodically using a damp cloth on the outside parts. The inside can be examined occasionally by removing a side panel and cleaning out any items, which are not MEANT to be there. These practices can dramatically increase the life of your scale.



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LCD SERIES



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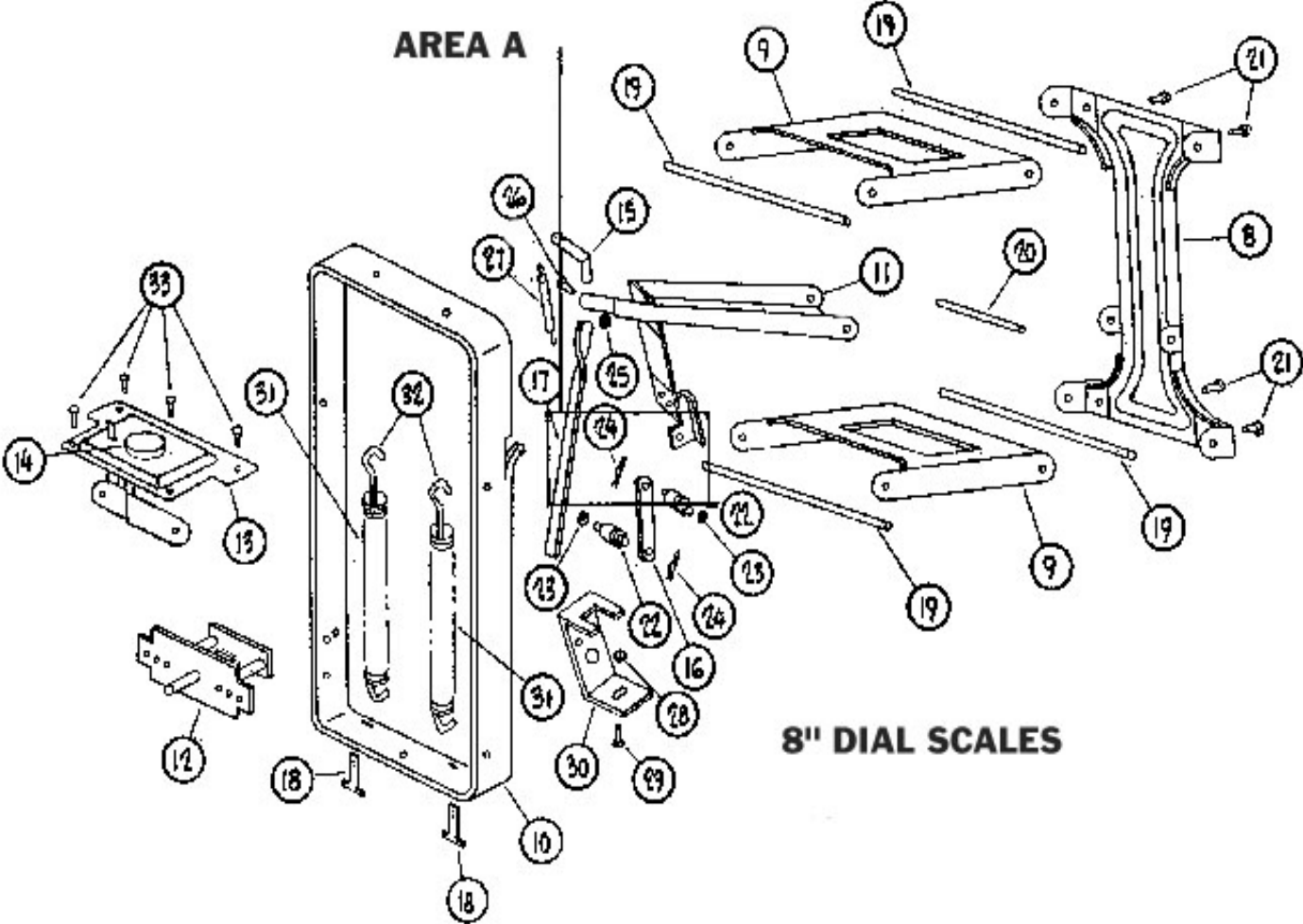


FIGURE 8B



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HCD SERIES

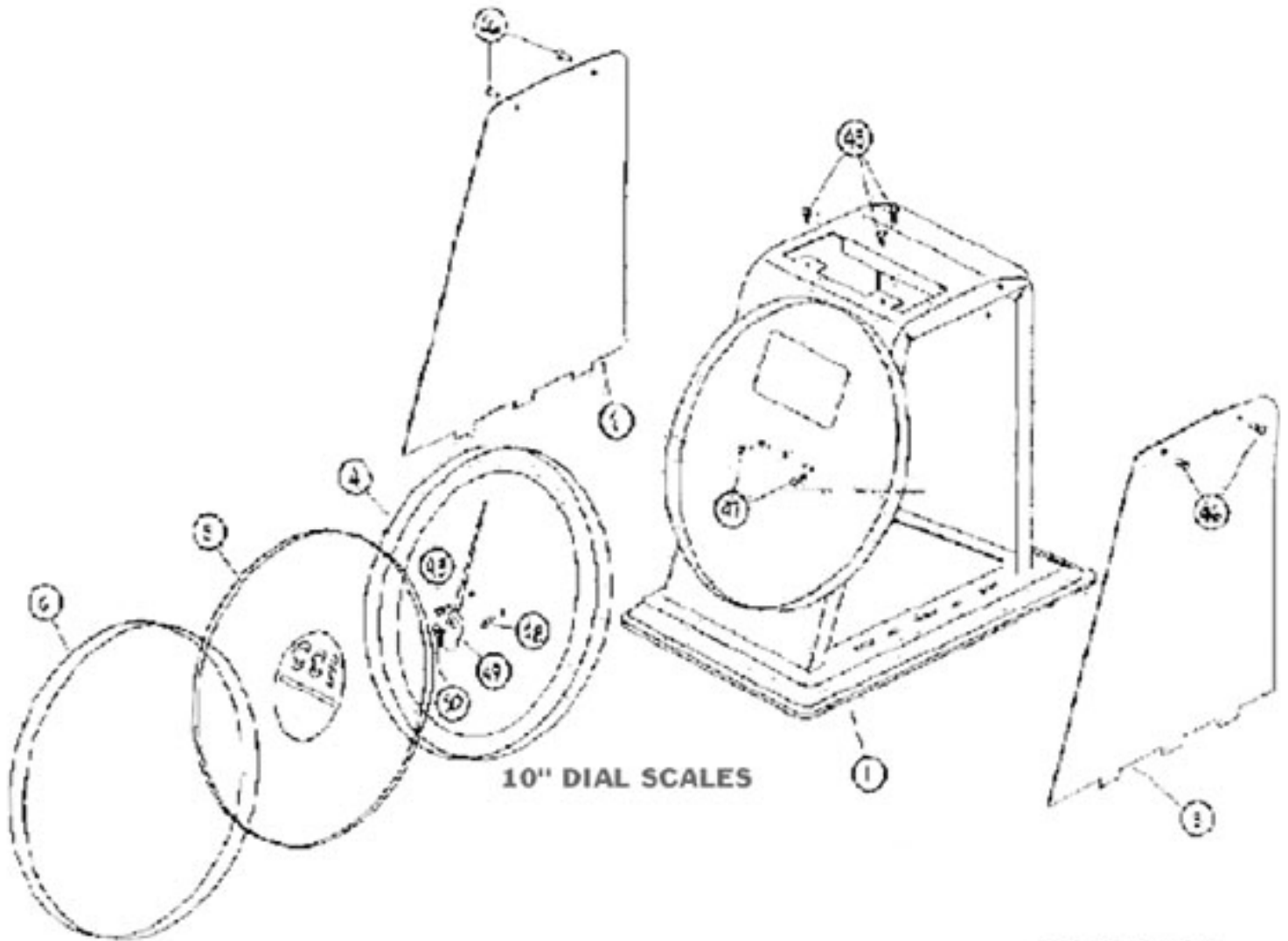


FIGURE 10A



A Division of T.E. Bouton Company, Inc.

HCD SERIES

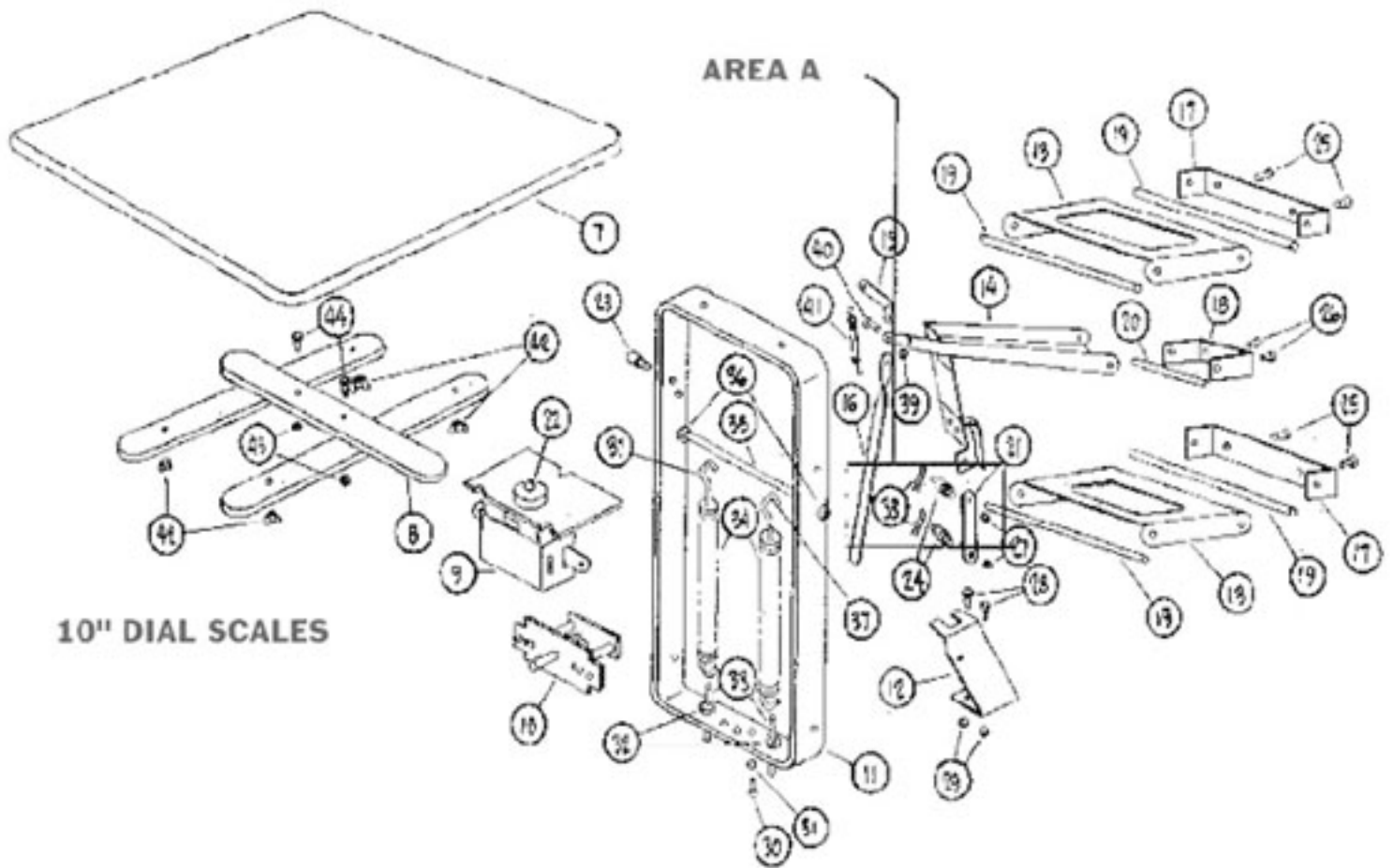


FIGURE 10B



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