Model 2112 HANGING SCALE

Technical Manual and Parts Catalog

PART NUMBER

INTRODUCTION

This publication is provided solely as a guide for individuals who have received Technical Training in servicing the METTLER TOLEDO product.

Information regarding METTLER TOLEDO Technical Training may be obtained by writing to:

METTLER TOLEDO
1150 Dearborn Drive
Worthington, Ohio 43085-6712
(614) 438-4400

METTLER TOLEDO RESERVES THE RIGHT TO MAKE REFINEMENTS OR CHANGES WITHOUT NOTICE.

PRECAUTIONS

READ this manual **BEFORE** operating or servicing this equipment.

FOLLOW these instructions carefully.

SAVE this manual for future reference.

DO NOT allow untrained personnel to operate, clean, inspect, maintain, service, or tamper with this equipment.

CALL METTLER TOLEDO for parts, information, and service.

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1 Specifications

General Description

The Model 2112 Retail Hanging Scale uses two temperature-compensated coil springs as the counterbalancing force. The oscillation of the indicator is controlled by an air cylinder type dashpot.

A 10 lb. x 1 oz. chart is standard and its 30 lb. total capacity is obtained by three complete revolutions of the indicator. Indications for 10 and 20 pounds appear below the chart housing and are exposed after the first and second revolution of the indicator, respectively.

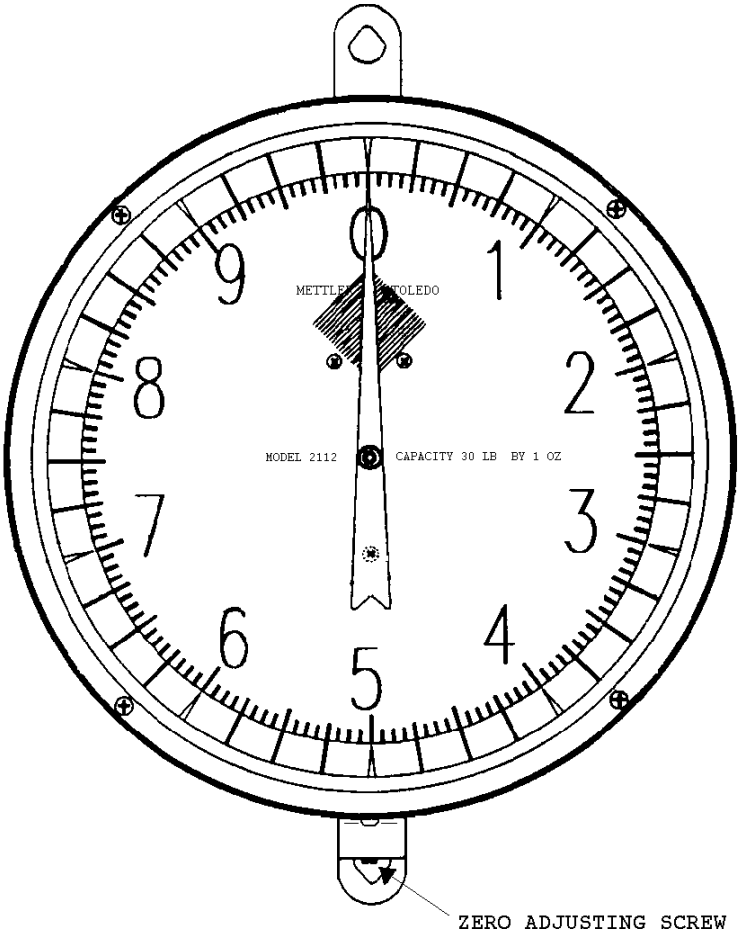

Figure 1

2 Setup

Unpacking

1. Place box, top side up, on a table or bench.
2. Open the box by cutting the sealing tape down the middle of the box.
3. Remove the upper foam packing
4. Remove the pan, pan bail, and the pan support ring.
5. Remove the center foam packing.
6. Remove the scale.

Installation

1. Assemble pan bail (1) and pan support ring (2) as shown in figure 2.

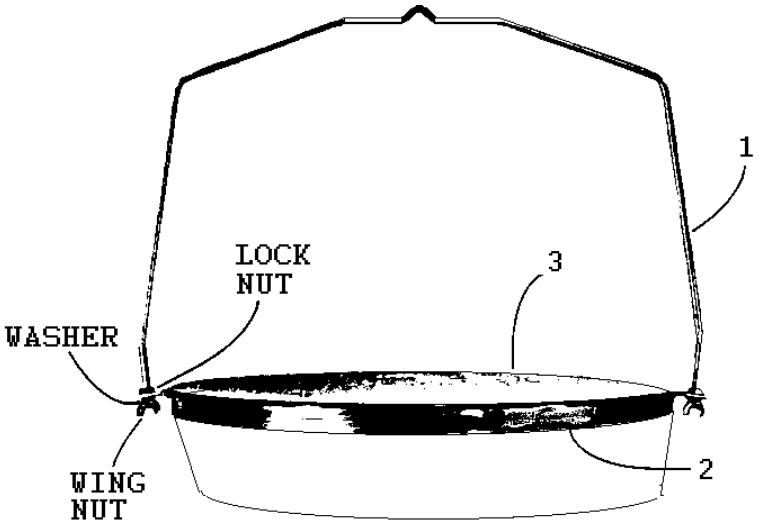

Figure 2

2. With the scale suspended properly, attach the pan bail and ring assembly to the scale.

3. Place pan (3) on the support ring.

3 Testing and Adjusting

Testing and Adjusting

1. After hanging scale in desired position depress the pan to the full capacity of the scale several times to align the inner mechanism of the scale.
2. Adjust the indicator to zero graduation on the chart by turning the zero adjustment screw, Figure 3. Depress the pan several times and recheck the zero indication. Always depress the commodity pan to full capacity and recheck zero after adjusting zero screw.

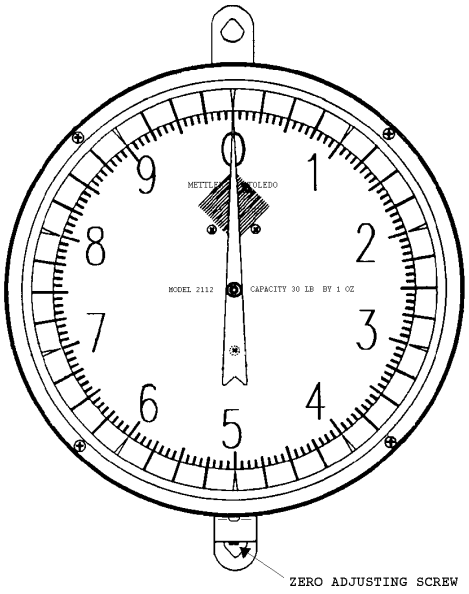

FIGURE 3

3. Check the scale for weighing accuracy pound by pound to full capacity.
4. If the indication is not correct, within one division, at any point throughout the scale capacity, proceed as outlined under calibration.

4 Calibration

1. Place the scale on a clean flat working surface and remove both trim and glass by removing eight housing screws and four rod supports(Figure 4).

NOTE: Glass is not fastened to either trimming or housing.

NOTE: The front of the scale is the side with the clockwise chart and the back of the scale is the side with the counterclockwise chart.

2. Remove the retaining nut and washer. Remove the indicator, taking care not to bend it.

3. Remove three screws holding back chart to frame. Remove chart to expose inner mechanics of the scale (Figure 4).

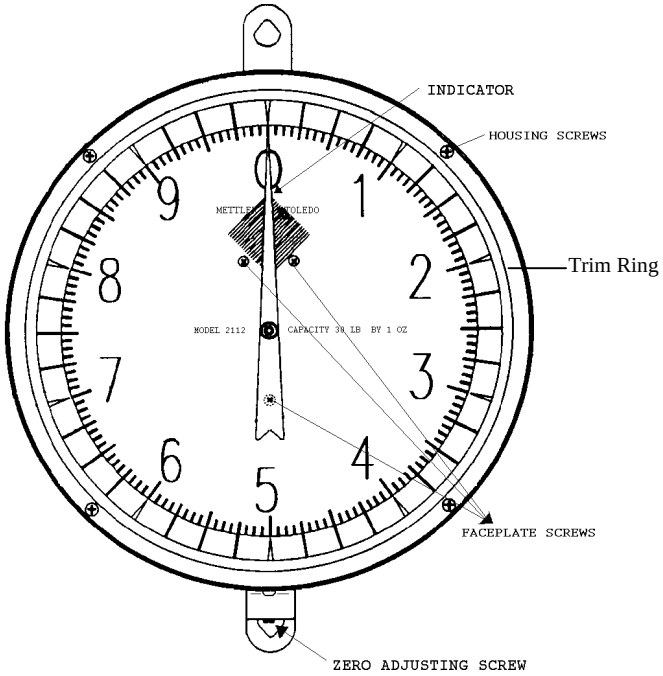

Figure 4

Calibration (continued)

4. Reposition the scale in the desired hanging position and reconnect the pan assembly.

Note: Attach a 7R visegrip to the center of the channel as a counterweight during calibration. (See Figure 8)

5. Adjust the scale to zero with the zero calibration screw with no weight applied.

6. Apply a 30lb load to the scale.

7. If the weight indation is over the applied load turn the calibrators within the spring so the calibrators move toward the top of the scale. Use a screw driver as shown in Figure 5.

8. Remove the load and adjust the scale to zero with the zero calibration screw.

9. Reapply the load and check the weight indication. If it is not correct, go back to setp 7.

Note: Refer to Figure 6 for location of calibrators.

Note: Always adjust both calibrators the same distance.

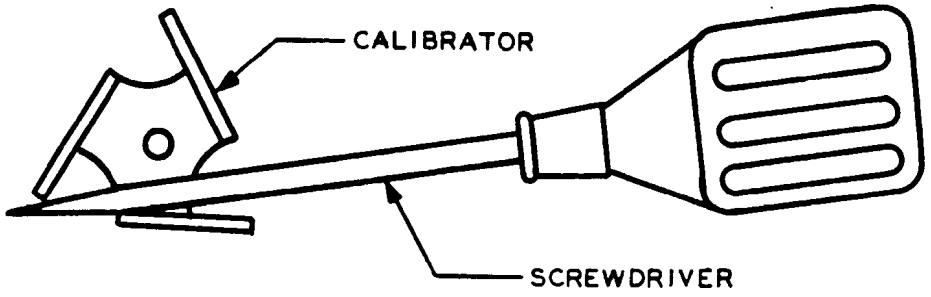

Figure 5

Calibration (continued)

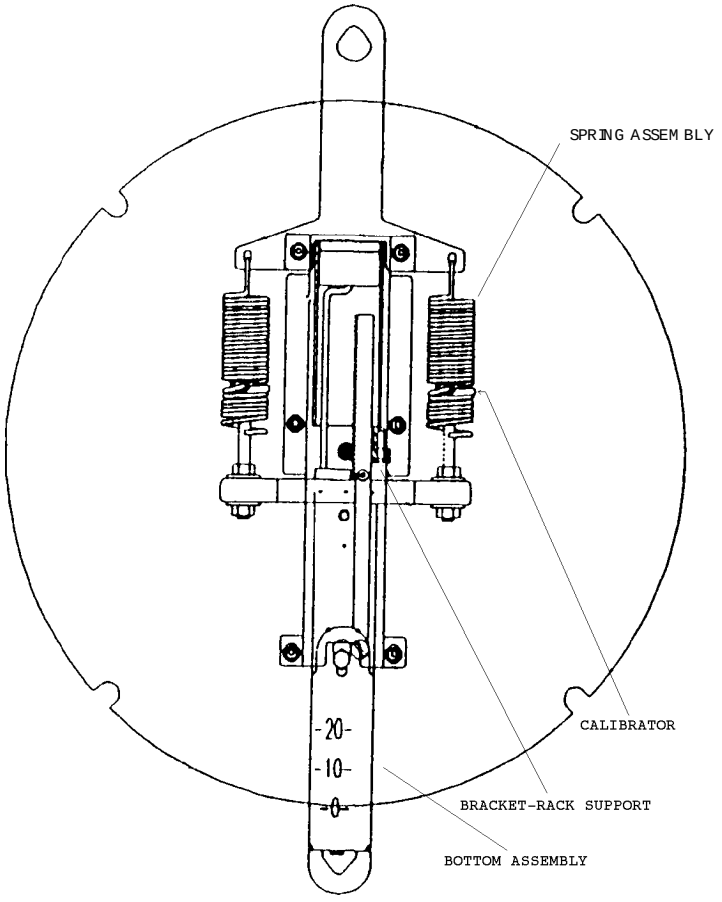

Figure 6

10. After scale is weighting correctly, proceed as follows:

    a) Reassemble the back chart to the housing, aligning the three center screw holes and installing the screws.

    b) Reinstall indicator with washer and nut.

    Note: Be sure both indicators are at the same point.

Calibration (continued)

c) Place scale on flat surface and reassemble the scrolls and glass. Be sure to insert four support post and all eight screws to secure housing.

d) Reposition scale in the hanging position and attach pan assembly.

e) Scale is now ready for operation.

5 Parts

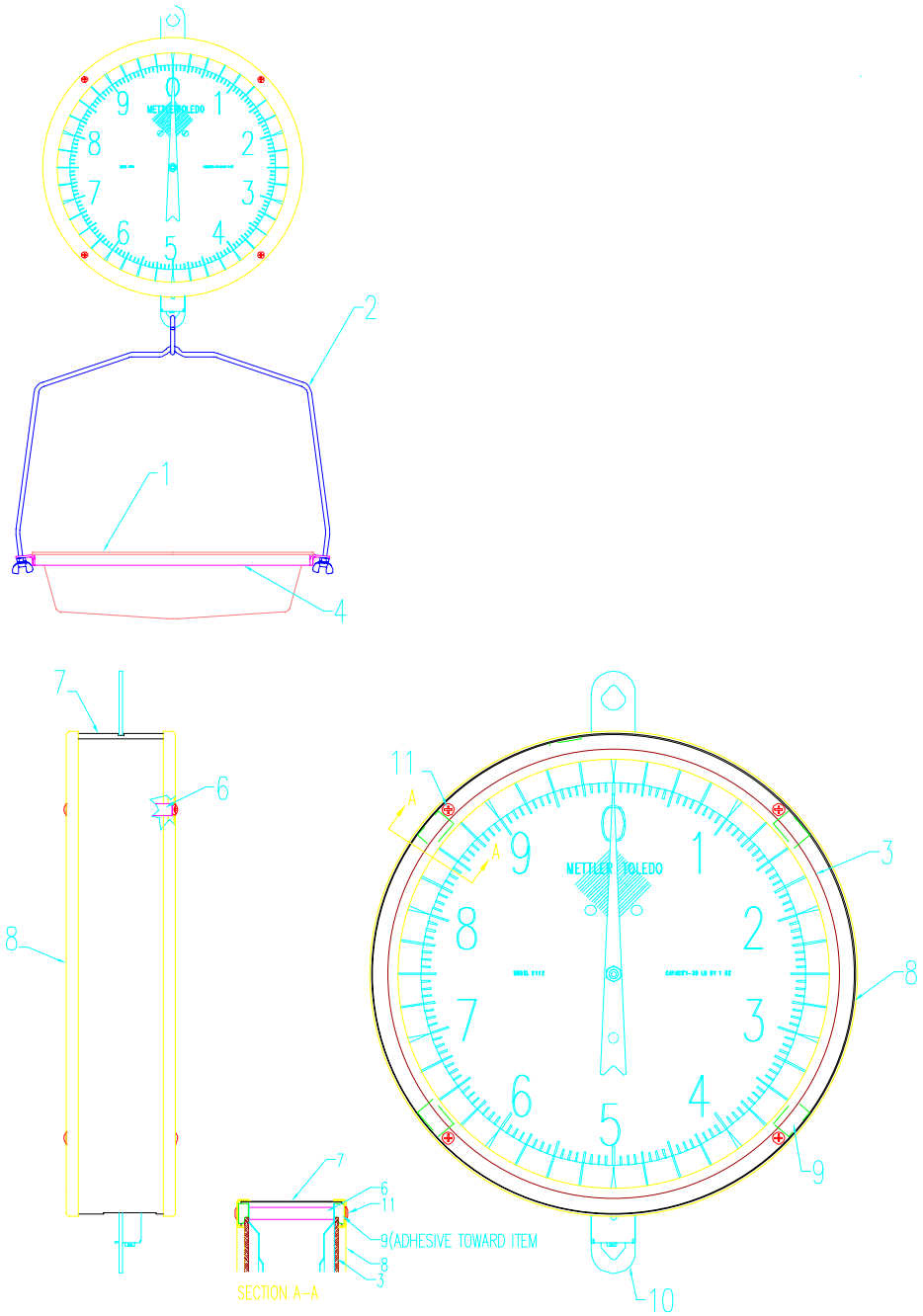

Figure 7

Parts (continued)

Number	Quantity	Description	Part Number
1	1	Pan	032104250
2	1	Bail Assembly	032108050
3	2	Glass	032136020
4	1	Ring - Pan Support	032102050
6	4	Rod - Support	82809700A
8	2	Trim Ring	82619400A
9	8	Gasket	82627700A
11	8	Screw #10-24x1/4	82809900A

Table 1 for Figure 7

Parts (continued)

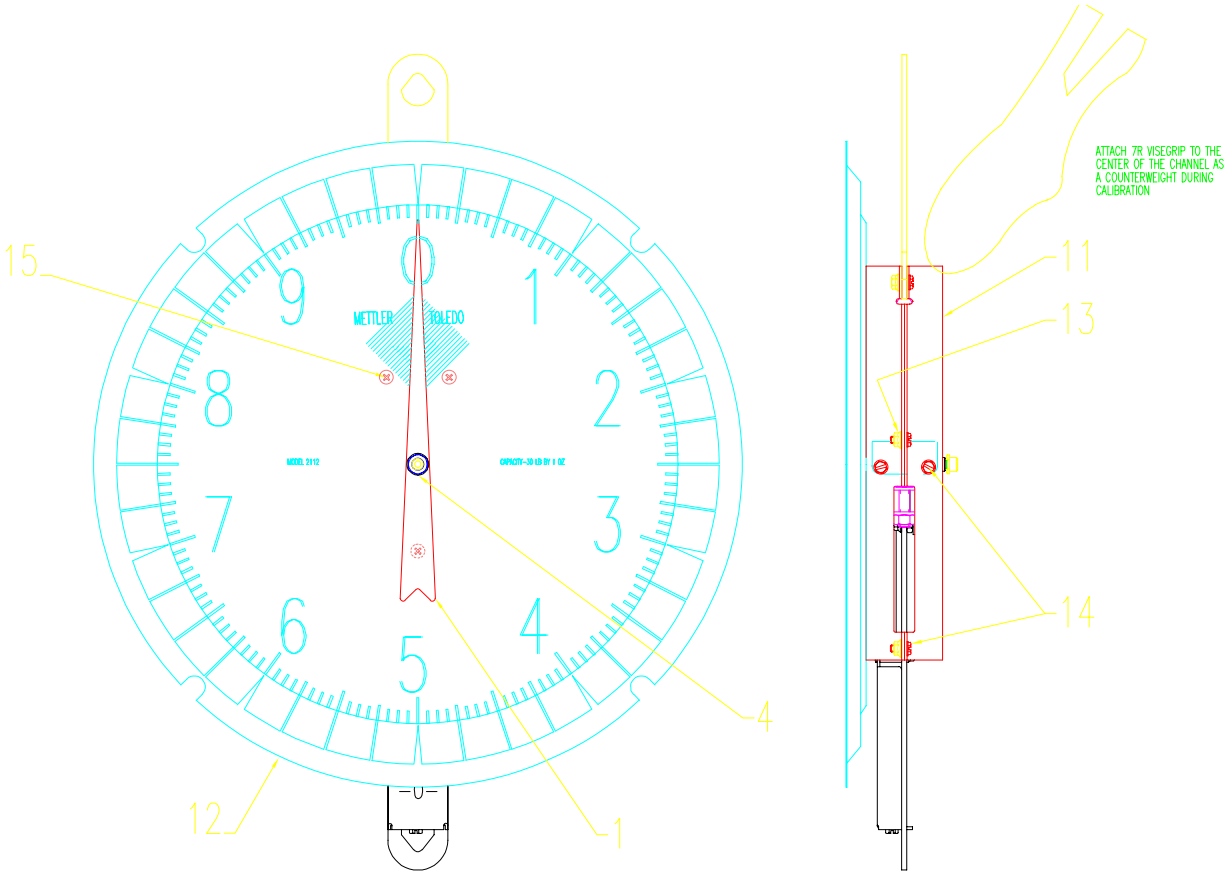

Figure 8

Number	Quantity	Description	Part Number
1	1	Indicator	03213341R
4	1	Nut - Indicator	039709020
12	1	Chart - 10lb Clockwise	82615000A
	1	Chart - 10lb Counter clockwise	82615100A
	1	Chart - 15kg Clockwise	82627200A
	1	Chart - 15kg Counter clockwise	82627300A
13	6	Nut - #8-32 Whiz Lock	82625700A
14	5	Screw - #8-32x3/8	R0508400A
15	3	Screw - #6-32x1/4	82673600A

Table 2 for Figure 8

Parts (continued)

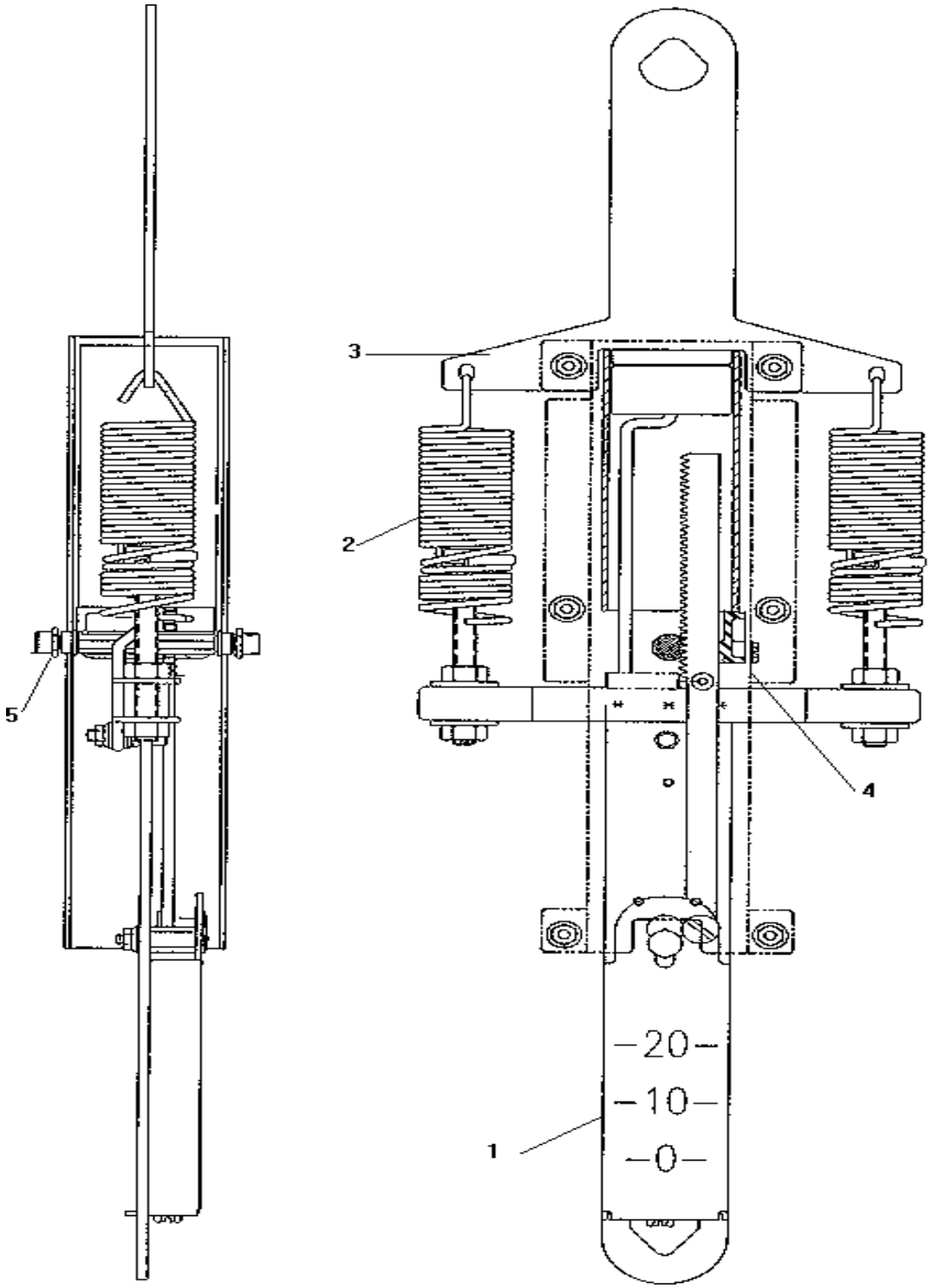

Figure 9

Number	Quantity	Description	Part Number
1	1	2112 Scale Mechanism (lb)	82870000A
1	1	2112 Scale Mechanism (kg)	82873600A
2	2	Weighing Spring Assembly	82603900A
3	1	Spring Support	82768500A
4	1	Bracket - Rack Support	82605600A
5	1	Washer	003190130

Table 3 for Figure 9

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350 West Wilson Bridge Road
Worthington, Ohio 43085-2273

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