



**PORTABLE PLATFORM
SCALES
BEAM TYPE
SERIES 854F/954F
Owner's Manual**



0066-M110-O1 Rev H 09/11 CARDINAL SCALE MFG. CO.
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Thank you for purchasing our Detecto 854F/954F Series Scale. Manufactured with Detecto quality and reliability, this scale has been calibrated and tested before leaving our factory to insure accuracy and dependability for years to come.

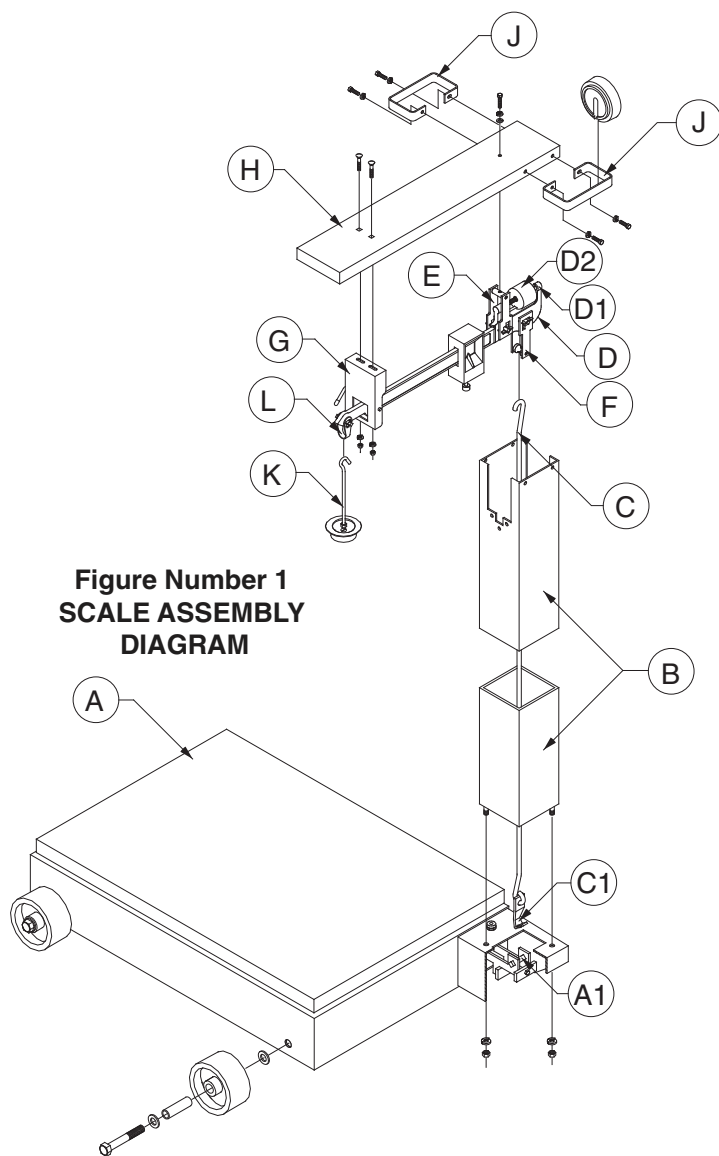
Remove your scale from its packing and inspect it for signs of damage such as exterior dents and scratches. Keep the carton and packing for return shipment or relocation if it should become necessary. It is the responsibility of the purchaser to file all claims for any damage or loss incurred during transit, unless this responsibility has been accepted by the Seller in its proposal.

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All rights reserved. Reproduction or use, without express permission, of editorial or pictorial content, in any manner, is prohibited. No patent liability is assumed with respect to the use of the information contained herein. While every precaution has been taken in the preparation of this book, the Seller assumes no responsibility for errors or omissions. Neither is any liability assumed for damages resulting from the use of the information contained herein. All instructions and diagrams have been checked for accuracy and ease of application; however, success and safety in working with tools depend to a great extent upon the individual accuracy, skill and caution. For this reason the Seller is not able to guarantee the result of any procedure contained herein. Nor can they assume responsibility for any damage to property or injury to persons occasioned from the procedures. Persons engaging the procedures do so entirely at their own risk.

SCALE ASSEMBLY INSTRUCTIONS

Refer to Figure Number 1 and follow the instructions below for scale assembly.



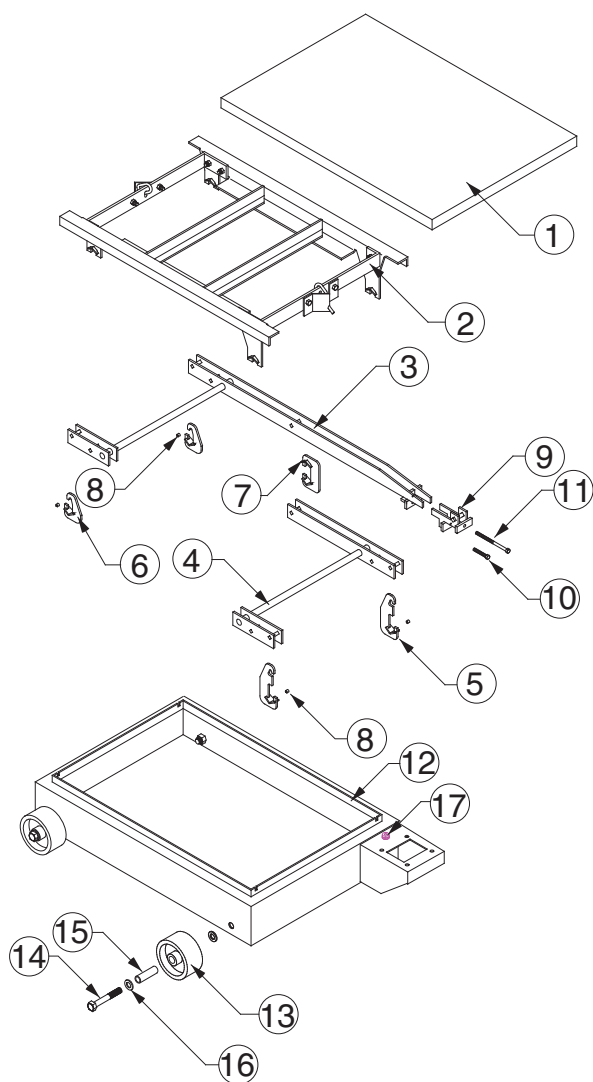
**Figure Number 1
SCALE ASSEMBLY
DIAGRAM**

1. Assemble wheels to scale base with four 5/8-11 x 3 1/2" hex head bolts, four sleeves and eight 5/8 flat washers. To secure the wheel, tighten the bolt against the sleeve to the scale base.
2. Insert column (B) into scale base assembly (A) and secure with two 3/8 split lock washers and two 3/8 -16 hex nuts. NOTE: Detecto decal should be facing toward the platform.
3. Lower steelyard rod assembly (C) into column (B).
4. Hook hanger bearing (C1) into pivot (A1).
5. Column cap (H) may now be placed over column (B) together with weight racks (J). NOTE: If using only one weight rack, we recommend it be assembled to the back of the column. Secure with four 1/4 - 20 x 3/4" hex head bolts and four 1/4 split lock washers.
6. Attach trig loop (G) to column cap (H) with two 1/4 - 20 x 3/4" carriage bolts, two 1/4 split lock washers and two 1/4 - 20 hex nuts.
7. Guide beam assembly (D) through the trig loop (G) and back into the column (B) opening.
8. Attach steelyard rod (C) onto the load loop assembly (F).
9. Secure the fulcrum loop assembly (E) to the column cap (H) with one 1/4-20 x 1" hex head bolt, one 1/4 split lock washer and one 1/4 flat washer.
10. Hook counterpoise (K) into beam loop assembly (L). Scale assembly is now complete.

FINAL SEALING AND ADJUSTING INSTRUCTIONS

1. Place capacity poise at Zero, move balance ball (D2) to center of adjusting area by turning zero adjust screw (D1).
2. Remove screw from counterpoise cup (K). Remove sufficient shot from cup (K) until scale is in balance. NOTE: Screw must be used as part of weight when removing shot.
3. Replace and tighten screw into counterpoise cup (K). NOTE: Beam must arc freely, otherwise, all bearings and hook connections must be rechecked for proper assembly. Scale is now ready for operation. (Note: Scale must be set up and operation must be on a level surface. The scale is level when the air bubble is in the target on the bulls-eye level.)

BASE ASSEMBLY



**Figure Number 2
BASE ASSEMBLY
PARTS DIAGRAM**

Item No.	854F Part No.	954F Part No.	Part Name	Quantity
1	0066-C017-08	0066-D057-0A	Deck Plate	1
2	0066-D012-0A	0066-D107-0A	Weighbridge Assembly	1
3	0066-D006-0A	0066-D060-0A	Long Lever Assembly	1
4	0066-D007-0A	0066-D061-0A	Short Lever Assembly	1
5	0066-B004-0A	0066-B004-0A	Long Hanger Assembly	2
6	0066-B005-0A	0066-B005-0A	Short Hanger Assembly	2
7	0066-B008-0A	0066-B008-0A	Center Hanger Assembly	1
8	0066-B003-08	0066-B003-08	Bearing	4
9	0066-B010-0A	0066-B010-0A	Nose Iron Assembly	1
10	6021-1458	6021-1458	5/16 -18UNC x 1 3/4" Hex head Bolt	1
11	6021-1833	6021-1833	5/16 -18UNC x 4" Hex head Bolt	1
12	0066-D002-0A	0066-D067-0A	Base Weldment	1
13	0066-B199-08	0066-B199-08	5" Rubber Wheel	4
14	6007-0240	6007-0240	5/8 -11 x 3 1/2" Hex head Bolt	4
15	0066-B200-08	0066-B200-0A	Sleeve	4
16	6024-0015	6024-0015	5/8 Flat Washer	8
17	6690-0001	6690-0001	Bulls-eye Level	1

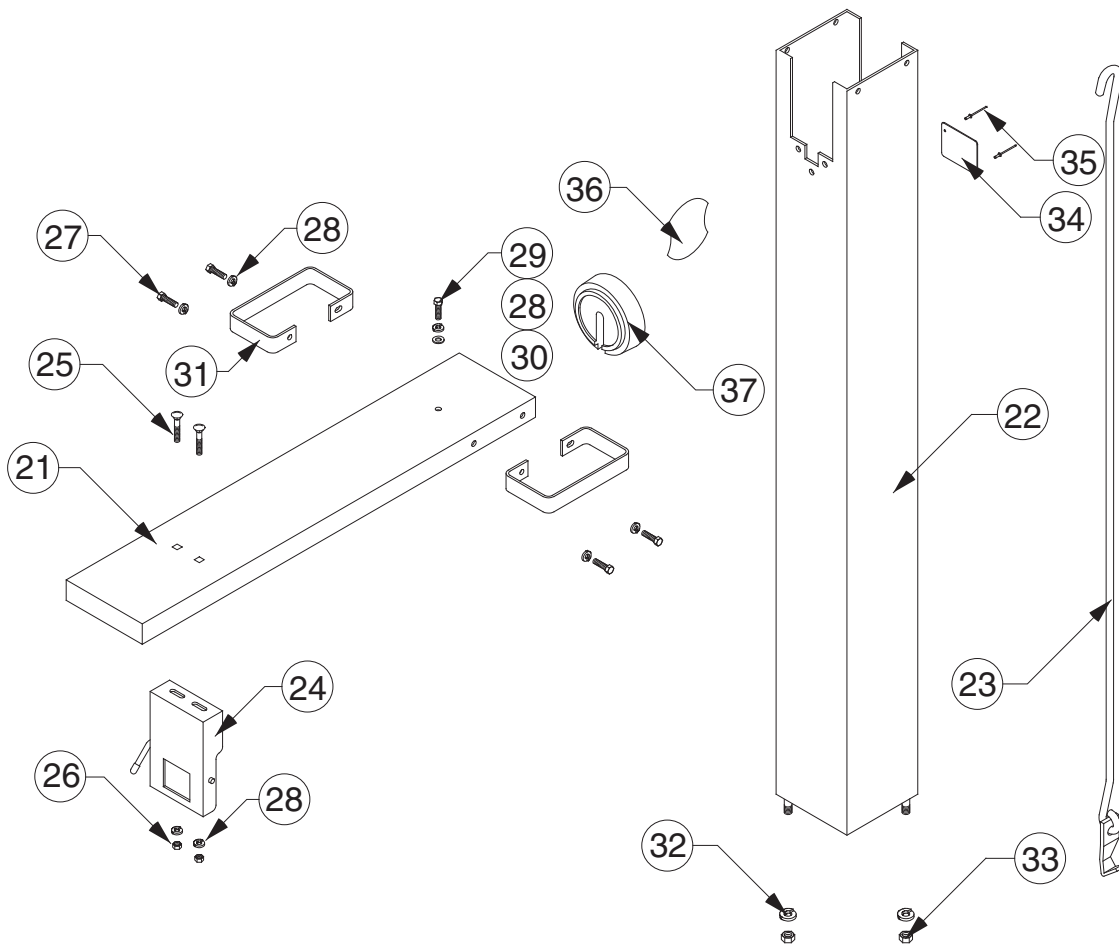


Figure Number 3
COLUMN ASSEMBLY PARTS DIAGRAM

COLUMN ASSEMBLY

Item No.	Part No.	Part Name	Quantity	Model No.
21	0066-C036-18	Column Cap	1	854F/954F
22	0066-C042-0A	Column Assembly	1	854F/954F
23	6P33X	Steelyard Rod Assembly	1	854F/954F
24	6P2009X	Trig Loop	1	854F/954F
25	345MV0406	1/4 - 20 X 3/4" Carriage Bolt	2	854F/954F
26	6013-0045	1/4 - 20 Hex Nut	2	854F/954F
27	6021-1454	1/4 - 20 x 3/4" Hex Head Bolt	4	854F/954F
28	6024-0039	1/4 Split Lock Washer	7	854F/954F
29	6021-1428	1/4-20 x 1" Hex Head Bolt	1	854F/954F
30	6024-0003	1/4 Flat Washer	1	854F/954F
31	6P1007	Weight Rack	1 or 2 as required	854F/954F
32	6024-0045	3/8 Split Lock Washer	2	854F/954F
33	6P23	3/8 - 16 Hex Nut	2	854F/954F
34	593M729	Serial No. Plate	1	854F/954F
35	6680-0073	Pop Rivet	2	854F/954F
36	6PSS1002	Detecto Logo Decal	1	854F/954F
37	6PP3000X	Weight Pack Assembly 1000lb	1	854F100P
	6PP3050X	Weight Pack Assembly 500lb	1	854F50P
	6PK2500X	Weight Pack Assembly 500kg	1	854F50K
	6PK2550X	Weight Pack Assembly 1000lb/500kg	1	854F100PK
	6PL1000X	Weight Pack Assembly 1000 libra/500kg	1	854FFS
	6PK10	Weight	1	854F-50PK
	0066-C241-1A	Weight	1	
	6PK20	Weight	1	
	0066-C239-1A	Weight	1	
	0066-C234-1A	Weight	1	
	0066-C236-1A	Weight	1	
	0066-C233-1A	Weight	1	
	0066-C234-1A	Weight	1	954F100P
	0066-C236-1A	Weight	2	
	0066-C237-1A	Weight	3	
	0066-C239-1A	Weight	1	954F50K
	0066-C241-1A	Weight	1	
	0066-C242-1A	Weight	4	
	0066-C239-1A	Weight	1	954FFS
	0066-C241-1A	Weight	1	
	0066-C242-1A	Weight	4	
	0066-C234-1A	Weight	1	
	0066-C236-1A	Weight	2	
	0066-C237-1A	Weight	3	

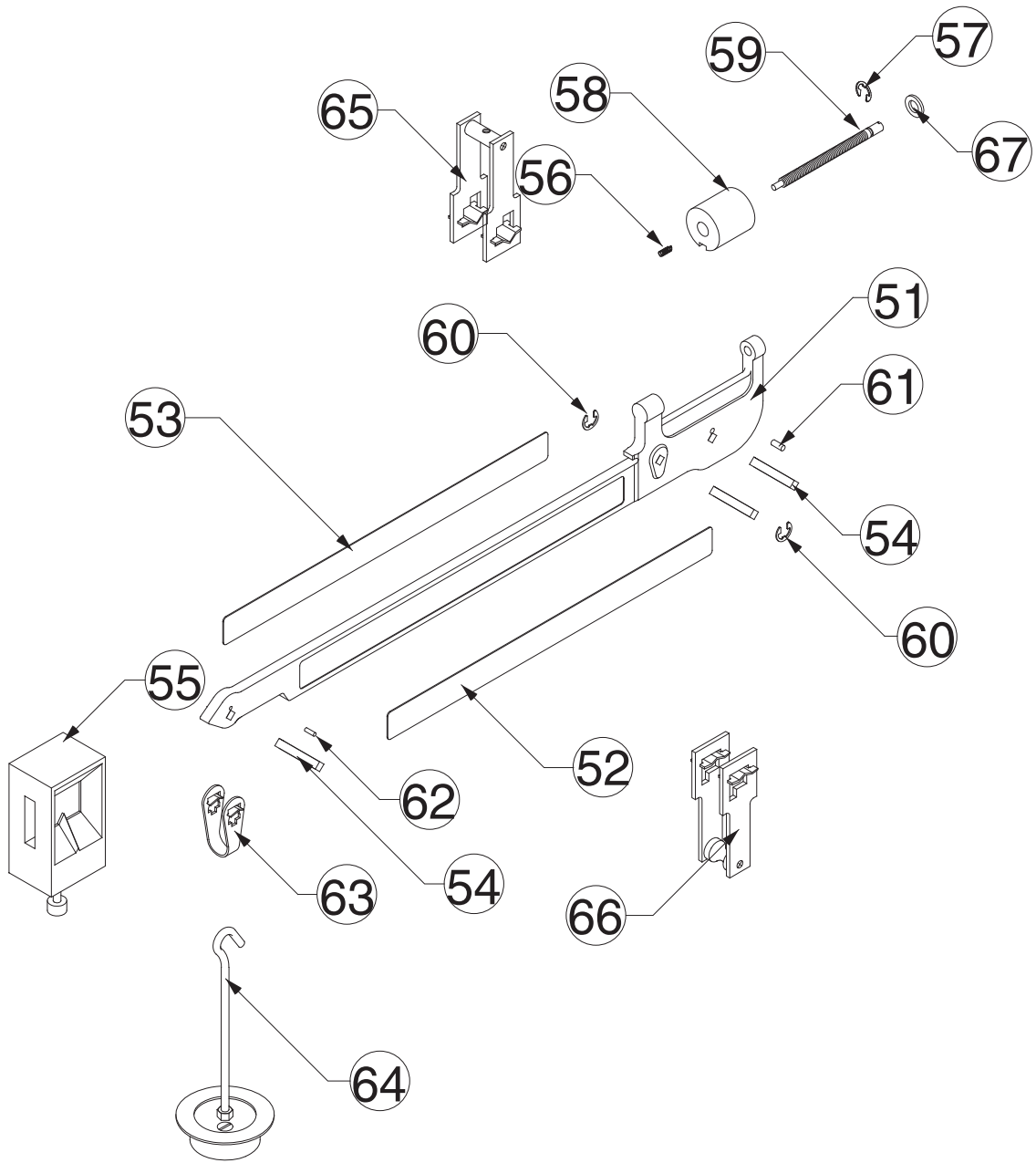


Figure Number 4
BEAM ASSEMBLY PARTS DIAGRAM

BEAM ASSEMBLY

Item No.	854F Part No.	954F Part No.	Part Name	Quantity	Model No.	
51	6P10037	6P10037	Beam	1		
52 & 53	6P11037	6P11037	Insert 100lb (Rear)	1	854F100P/954F100P	
	6P11137	6P11137	Insert 100lb (Front)	1	854F100P/954F100P	
	6P11042		Insert 50lb (Rear)	1	854F50P	
	6P11142		Insert 50lb (Front)	1	854F50P	
	6P11038	6P11038	Insert 50kg (Rear)	1	854F50K/954F50K	
	6P11138	6P11138	Insert 50kg (Front)	1	854F50K/954F50K	
	6P11044		Insert 20kg (Rear)	1	854F50PK	
	6P11142		Insert 50lb (Front)	1	854F50PK	
	6P11043		Insert 100lb (Rear)	1	854F100PK	
	6P11138		Insert 50kg (Front)	1	854F100PK	
	6P11039	6P11039	Insert 100 libra (Rear)	1	854FFS/954FFS	
	6P11138	6P11138	Insert 50kg (Front)	1	854FFS/954FFS	
	54	0066-B040-08	0066-B040-08	Pivot	3	
	55	0066-D112-0A	0066-D112-0A	Poise Assembly	1	854F100P/954F100P
6P1031X		6P1031X	Poise Assembly	1	854F50P 854F50PK	
0066-D112-3A		0066-D112-3A	Poise Assembly	1	854F50K/954F50K 854F100PK 854FFS/954FFS	
56	2P60	2P60	Adjusting Spring	1		
57	6029-0032	6029-0032	Snap Ring	1		
58	6P27	6P27	Balance Weight	1		
59	6P22	6P22	Adjusting Screw	1		
60	6029-0022	6029-0022	Snap Ring	2		
61	6P72	6P72	Pin	1		
62	6P74	6P74	Pin	1		
63	0066-C041-1A	0066-C041-1A	Beam Loop Assem.	1		
64	6P10021X	0066-B109-0A	Counter Poise Assem.	1		
65	0066-B126-1A	0066-B126-1A	Fulcrum Loop Assem.	1		
66	0066-B125-0A	0066-B125-0A	Load Loop Assem.	1		
67	6024-1043	6024-1043	Washer Nylon	1		

854DB DOUBLE BEAM SCALE

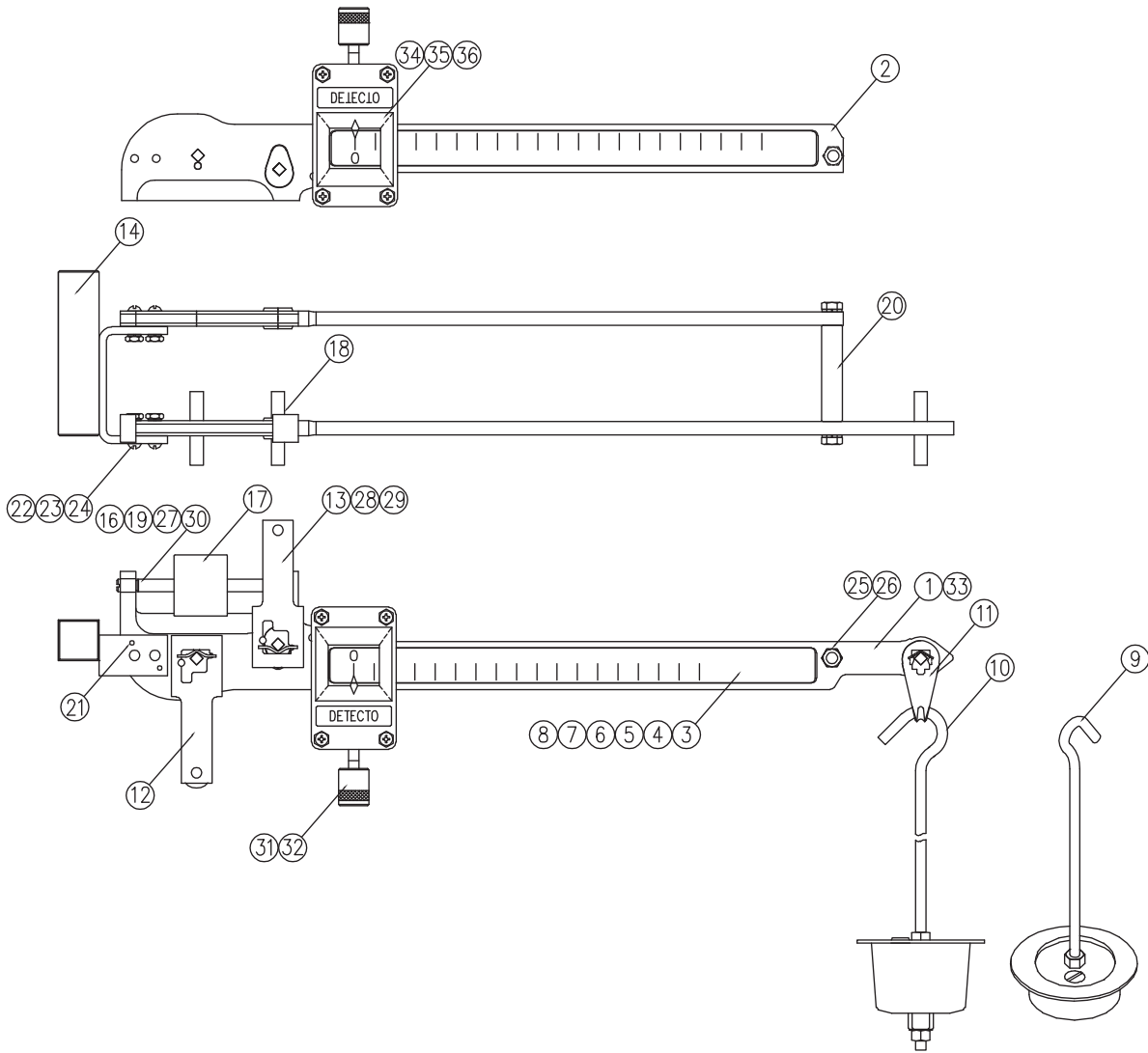


Figure Number 5
DOUBLE BEAM ASSEMBLY PARTS DIAGRAM

854DB DOUBLE BEAM SCALE

(Assembly for avoirdupois, unit available in metric)

Only 1700 Demountable Heads can be used with these scales.

ITEM NUMBER	PART NUMBER	PART NAME	QUANTITY
1	6P7037X	Beam W/Pivots	1
2	6P6042	Tare Beam	1
3	6P11138	Insert 50K Front	2
4	6P11038	Insert 50K Rear	2
5	6P11137	Insert 100P Front	2
6	6P11037	Insert 100P Rear	2
7	6P11142	Insert 50P Front	2
8	6P11042	Insert 50P Rear	2
9	6P10021X	C-Poise Assy.	1
10	0066-B109-0A	C-Poise Assy.	1
11	0066-C041-1A	Beam Loop Assy.	1
12	0066-B125-0A	Load Loop Assy.	1
13	0066-B126-1A	Fulcrum Loop Assy.	1
14	6P166X	Balance Wt. Assy.	1
15	6560-1061	Loctite #262 or Equal	A/R
16	6P22	Adjusting Screw	1
17	6P27	Balance Weight	1
18	6029-0022	E-Ring 3/8"	2
19	6029-0032	E-Ring 5/16"	1
20	6P167	Spacer	1
21	548R590810	Roll Pin	4
22	6013-0295	Nut Hex #10-32	4
23	6021-1001	Scw Rd Head #10-32	4
24	6024-1010	Washer Lock #10	4
25	6021-1454	Scw Hex Hd 1/4-20	2
26	6024-0039	Washer Lock 1/4	2
27	6024-1043	Washer Flat 5/16	1
28	6007-0011	Blt Hex Head 1/4-20	1
29	6024-0003	Washer Flat 1/4	1
30	2P60	Spring	1
31	6P1065	Poise Screw	REF
32	6P65X	Poise Screw Assy	REF
33	6P5042X	Beam W/Pivots	1
34	0066-D112-0A	Poise Assy (Uses Item 32)	2
35	6P1031X	Poise Assy Alum (Uses Item 31)	1
36	0066-D112-3A	Poise Assy (Uses Item 32)	1

STATEMENT OF LIMITED WARRANTY

Detecto Scale warrants its equipment to be free from defects in material and workmanship as follows: Detecto warrants to the original purchaser only that it will repair or replace any part of equipment which is defective in material or workmanship for a period of one **(1) year** from date of shipment. Detecto shall be the sole judge of what constitutes a defect.

During the **first ninety (90) days** Detecto may choose to supply all necessary replacement parts and service during normal weekday working hours at no charge to the buyer.

After the first ninety (90) days Detecto will supply parts and service at the job site provided the owner agrees to pay the Dealer for all travel time, including mileage and test equipment, as well as any expenses incurred over the direct labor of the technician at the job site. This limited warranty honors only labor performed by Detecto authorized dealers.

This warranty does not apply to peripheral equipment not manufactured by Detecto; this equipment will be covered by certain manufacturer's warranty only.

This warranty does not include replacement of expendable or consumable parts. This does not apply to any item which has deteriorated or damaged due to wear, accident, misuse, abuse, improper line voltage, overloading, theft, lightning, fire, water or acts of God, or due to extended storage or exposure while in purchaser's possession. This warranty does not apply to maintenance service. Purchased parts will have a ninety (90) day repair or replacement warranty only.

Detecto may require components be returned to the factory; they must be properly packed and shipping charges prepaid. A return authorization number must be obtained for all returns and marked on the outside of all returned packages. Detecto accepts no responsibility for loss or damage in transit.

STATEMENT OF LIMITED WARRANTY

Conditions Which Void Limited Warranty

This warranty shall not apply to equipment which:

- A.) Has been tampered with, defaced, mishandled or have had repairs and modifications not authorized by Detecto.
- B.) Has had serial number altered, defaced, or removed.
- C.) Has not been grounded according to Detecto's recommended procedure.

Freight Carrier Damage

Claims for equipment damaged in transit must be referred to the freight carrier in accordance with freight carrier regulations.

This warranty sets forth the extent of our liability for breach of any warranty or deficiency in connection with the sale or use of the product. Detecto will not be liable for consequential damages of any nature, including but not limited to, loss of profit, delays or expenses, whether based on tort or contract. Detecto reserves the right to incorporate improvements in material and design without notice and is not obligated to incorporate improvements in equipment previously manufactured.

The foregoing is in lieu of all other warranties, express or implied including any warranty that extends beyond the description of the product including any warranty of merchantability or fitness for a particular purpose. This warranty covers only those Detecto products installed in the forty-eight (48) contiguous continental United States.



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