

SHAW-BOX®

INSTRUCTIONS AND PARTS LIST SHAW-BOX® RIGID MOUNT I-BEAM AND PATENTED TRACK TROLLEYS (PUSH & HAND GEARED - 1/2 THRU 15 TON RATED LOADS)

GENERAL

SHAW-BOX Rigid Mount I-Beam Trolleys are designed especially for use on Series 700 and 800 SHAW-BOX Electric Hoists. They attach directly to suspension brackets of lug mounted hoists.

Trolleys are shipped partially disassembled to make it unnecessary to take them apart before mounting on hoist. This also makes it easier to properly adjust the trolleys to fit the particular beams on which they are to operate. Correctly fitted trolleys travel easier and last longer.

Your new SHAW-BOX Rigid Mount Trolley can be assembled to your hoist and the complete unit then installed on its runway beam with a minimum of effort by following the directions given here.

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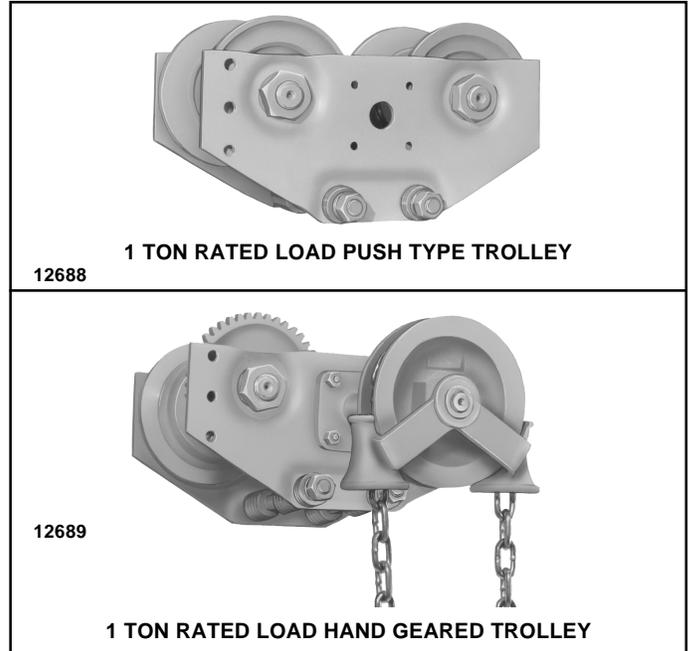


Figure 1

ASSEMBLY OF TROLLEY TO HOIST

Place hoist on workbench, suspension lug facing up, and proceed as follows:

1. If trolley is a hand geared type rated 2 tons or less, make certain that proper size anti-tilt roller is installed on inside of one side plate before assembling trolley to hoist. Two rollers are provided with each hand geared trolley to accommodate full range of beam sizes that trolley is designed for. A small roller, suitable for I-beam sizes of 10" up to largest specified for trolley has been pre-installed by the factory. If trolley is to operate on an I-beam smaller than 10", substitute the larger roller, which is shipped loose, by removing the outer "C" ring and replacing the smaller roller. For other than standard I-beams, measure beam flange thickness and allow not less than 1/16" clearance between roller and bottom of beam flange.

2. Before attaching trolley to hoist, first determine proper spacing of trolley side plates to provide adequate wheel clearance (approximately 1/8") on both sides of I-beam, between inside faces of wheel flanges and edges of bottom beam flange. Proper spacing is obtained by varying number of spacer washers, (furnished with trolley) which are installed on suspension cross pins, between suspension lug and trolley side plates.

3. Due to manufacturing tolerances, I-beams having the same size designation may vary in the width of their flanges. This makes it impossible to prescribe the specific number of spacer washers required between trolley side plates and lug for any

particular beam size. As a result the following procedure should be followed:

4. Measure exact width of bottom beam flange and add 1/4" to this dimension. This is the required distance between inside faces of wheel flanges to obtain proper operating clearance, as indicated in Figure 2.

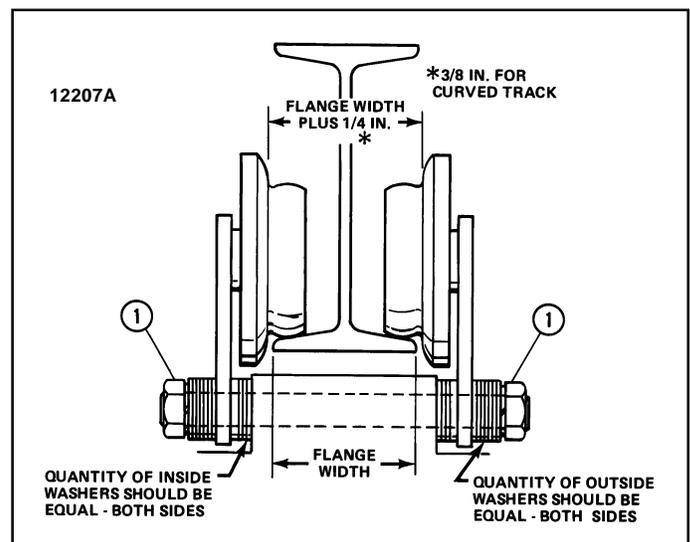


Figure 2. Sectional View of Trolley showing proper wheel and washer spacing

5. An equal number of washers must be removed or added at each end of lug (inside side plates) as required to obtain proper wheel spacing determined in Step 4. When spacing is correct, remaining spacer washers are to be installed in equal numbers on outside ends of cross pins. Install lockwashers and tighten hex nuts.

Note: It is important that all the spacer washers that come with trolley be used.

SUSPENDING TROLLEY AND HOIST

The hoist and trolley may be installed on I-beams by one of two methods. If the trolley can be slipped directly over end of beam it need not be partially disassembled. If this is impossible, remove hex nuts, lockwashers, outer spacer washers and one side plate from one side of trolley and reassemble on beam.

CAUTION

In all cases, after trolley and hoist have been installed on I-beam, make sure a suitable stop is secured to each end of beam to prevent trolley rolling off. Make certain lockwashers are in place on cross pins and hex nuts are tight. Recheck clearance dimensions between wheel flanges and beam flanges.

WARNING

If trolley is mounted on an open-end beam, end stops must be installed to prevent trolley from running off the end of the beam, resulting in injury to operator and others, including danger to life and limb and damages to load and other property.

OPERATING PRECAUTIONS

DO NOT load trolley beyond rated load.

DO NOT subject trolley to side loads. Always center trolley over load when hoisting.

DO NOT ram trolley into end stops, other trolleys, or any obstruction on beam. Improper and careless operation can result in a hazardous condition for operator and load.

ALWAYS be sure load is clear of obstruction before traversing load and trolley.

DO NOT stand and **DO NOT** cause or allow others to stand or get under any load the trolley is supporting. **DO** keep clear, and make sure others keep clear, of any load the trolley is supporting.

WARNING

These trolleys are not designed nor intended to be used to support or transport people or for supporting or transporting loads over people.

MAINTENANCE AND LUBRICATION

1. SHAW-BOX Rigid Mount Trolleys are built to give long service, but should be inspected periodically for evidence of damage or wear, particularly when subjected to unusually severe operating conditions.

2. Lubrication requirements:

a. Wheel bearings have grease sealed in and require no additional lubricant.

b. Drive wheel gears are to be lubricated with an open type gear grease which is heavy, plastic, extreme pressure and tacky; such as MOBILTAC 325 NC or equal.

REPLACEMENT PARTS

The following parts lists and illustrations cover standard model SHAW-BOX Rigid Mount Trolleys. Typical units are used as the basis for the exploded parts illustrations; therefore, certain variations may occur from the parts information given. For this reason always give the model number.

Pins referred to in some column headings are trolley suspension pins. The symbol \varnothing indicates diameter.

These SHAW-BOX trolleys are built in three basic wheel sizes. They are: 4" diameter wheels, 6-1/2" diameter wheels, and 8" diameter wheels. When selecting parts from the following parts lists, be sure to use appropriate illustration and parts table for your particular trolley size, based on wheel size and pin data.

Use only factory provided replacement parts.

Parts may look alike but parts are made of specific materials and processes to achieve specific properties.

WARNING

NON-FACTORY AUTHORIZATIONS OR MODIFICATION OF EQUIPMENT AND USE OF NON-FACTORY REPAIR PARTS CAN LEAD TO DANGEROUS OPERATION AND INJURY.

TO AVOID INJURY:

- **DO NOT** alter or modify equipment without factory authorization.
- **DO** use only factory provided replacement parts.

The numbers assigned to the parts of our various assemblies in our parts list are not the part numbers used in manufacturing the part. They are identification numbers, that when given with the trolley model number, permit us to identify, select or manufacture and ship the correct part needed for any trolley.

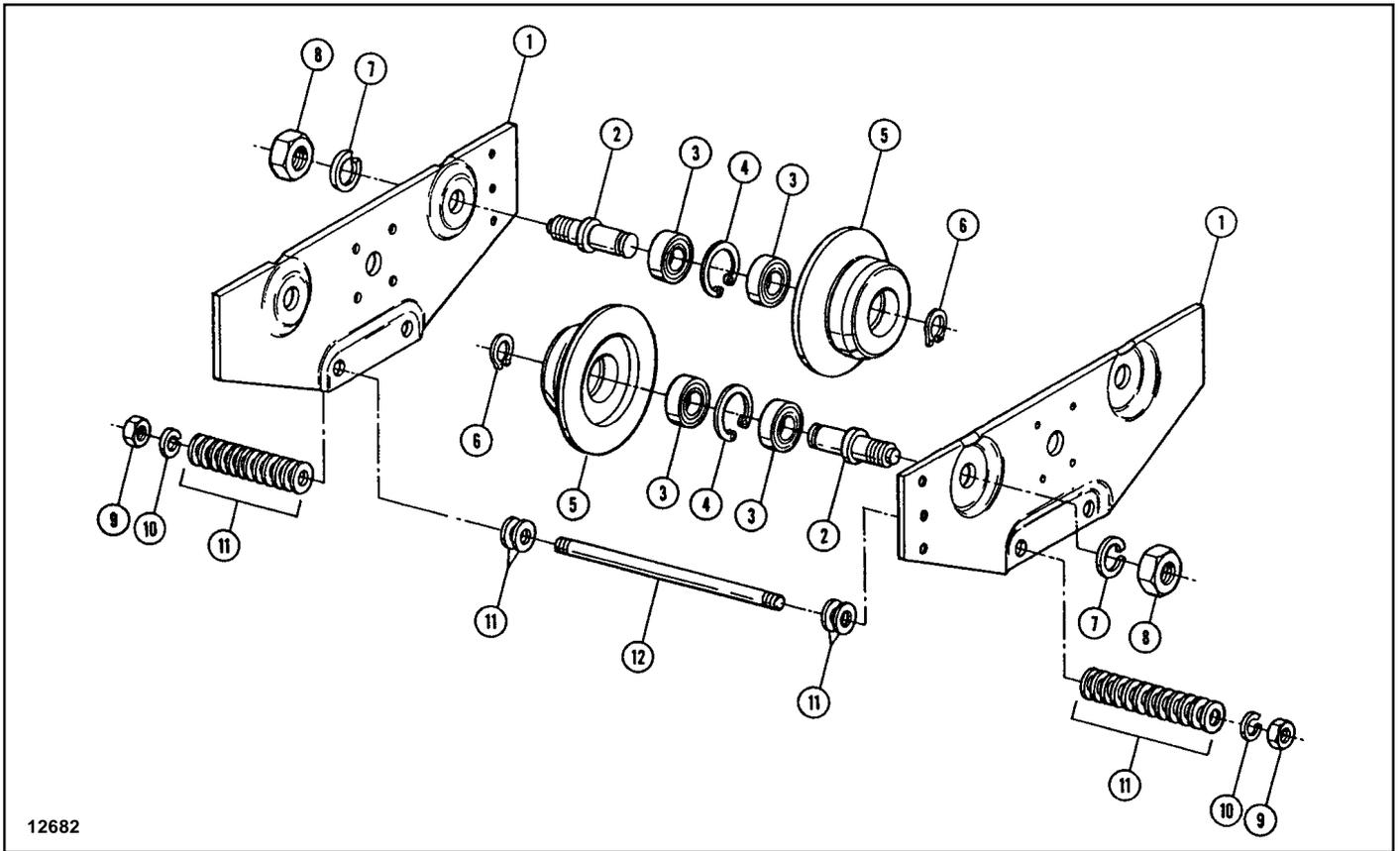


Figure 3. Push Type Rigid Mount Trolley Assembly.
 (4" ø Wheels - 3-1/8" and 5" c/c Pins.)

Ref. No.	Description	3-1/8" c/c Pins		5" c/c Pins	
		Part Number	Qty. Req'd.	Part Number	Qty. Req'd.
1	Plate Assembly - Side				
	For 3" to 5" Flange Widths and Patented Track	700T-1300	2	—	—
	For 5-1/8" to 7-1/4" Flange Widths	700T-1301	2	—	—
	For 7-1/2" to 9-1/8" Flange Widths	700T-1302	2	—	—
	For 3-5/8" to 6" Flange Widths and Patented Track	—	—	700T-1303	2
	For 6-1/4" to 8-5/8" Flange Widths	—	—	700T-1304	2
2	Shaft - Wheel	700T-1306	4	700T-1306	4
		700T-1307	8	700T-1307	8
		700T-1308	4	700T-1308	4
		700T-1309	4	700T-1309	4
3	Bearing - Ball	700T-1310	4	700T-1310	4
		700T-1311	4	700T-1311	4
		700T-1312	4	700T-1312	4
4	Ring - Retaining	700T-1313	4	700T-1313	4
		700T-1314	4	700T-1314	4
5	Wheel - Plain	700T-1315	4	700T-1315	4
		700T-1316	4	700T-1316	4
6	Ring - Retaining	700T-1317	56	700T-1317	36
		700T-1318	4	700T-1318	4
7	Lockwasher	700T-1319	2	—	—
		700T-1320	2	—	—
8	Nut - Hex Jam	700T-1321	2	—	—
		700T-1322	2	—	—
9	Nut - Hex Jam	—	—	700T-1322	2
		—	—	700T-1323	2
10	Lockwasher	—	—	700T-1324	2
		—	—	—	—
11	Washer - Spacer	—	—	—	—
		—	—	—	—
		—	—	—	—
		—	—	—	—
		—	—	—	—
		—	—	—	—
12	Pin - Suspension	700T-1319	2	—	—
		700T-1320	2	—	—
		700T-1321	2	—	—
		—	—	700T-1322	2
		—	—	700T-1323	2
		—	—	700T-1324	2

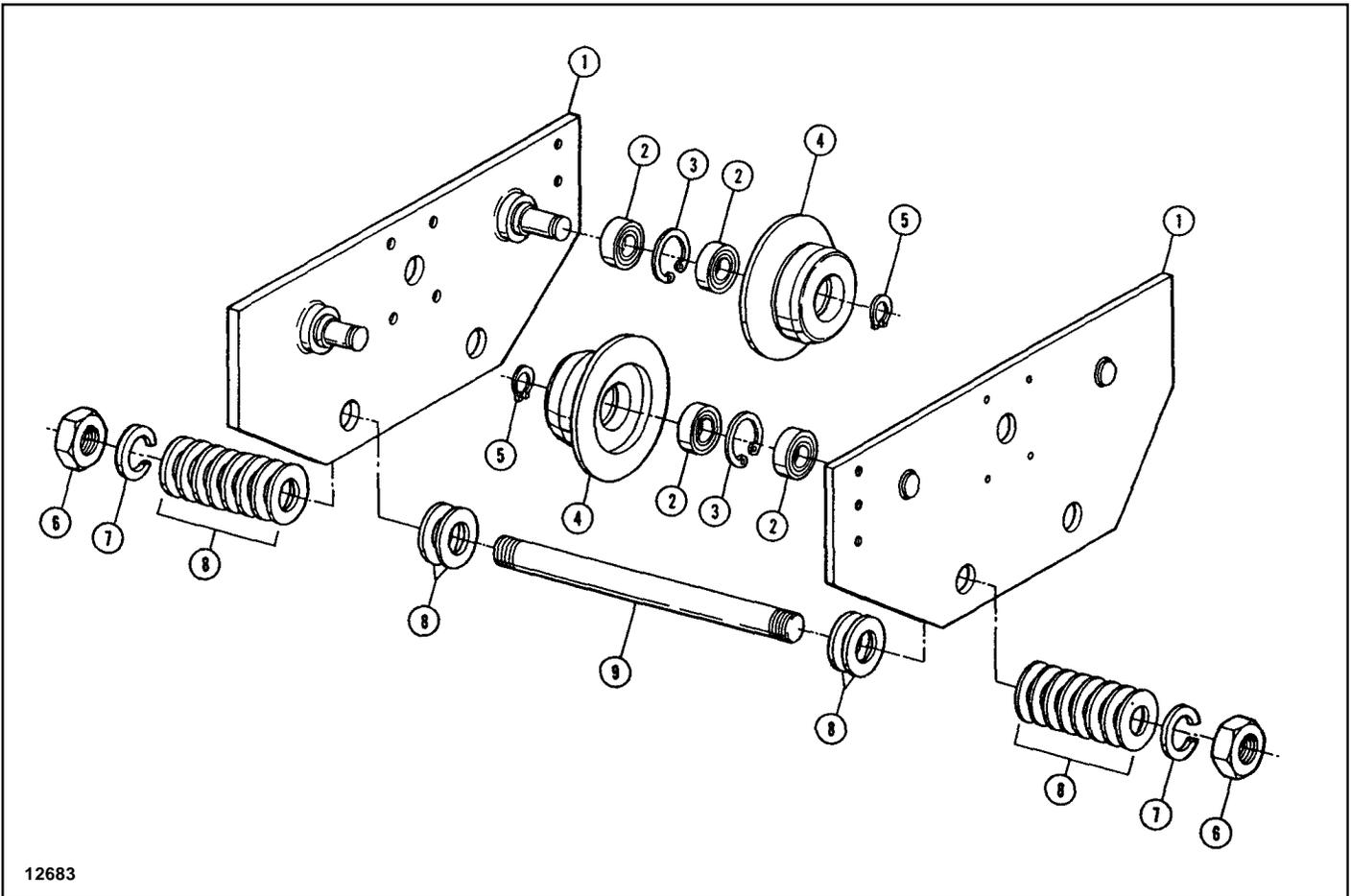


Figure 4. Push Type Rigid Mount Trolley Assembly. (4" \varnothing Wheels - 6" c/c Pins) and Trailer Trolley* - (2 - 4" \varnothing wheels).

Ref. No.	Description	6" c/c Pins		2 Wheel Trolley	
		Part Number	Qty. Req'd.	Part Number	Qty. Req'd.
1	Plate Assembly - Side For 4" to 6" Flange Widths and Patented Track	700T-1400	2	700T-1401	2
	For 6-3/8" to 8-5/8" Flange Widths	700T-1402	2	700T-1403	2
	For 8-3/4" to 11" Flange Widths	700T-1404	2	700T-1405	2
2	Bearing - Ball	700T-1406	8	700T-1406	4
3	Ring - Retaining	700T-1407	4	700T-1407	2
4	Wheel - Plain				
	Standard	700T-1408	4	700T-1408	2
	Patented Track	700T-1409	4	—	—
	Spark Resistant	700T-1410	4	—	—
5	Ring - Retaining	700T-1411	4	700T-1411	2
6	Nut - Hex Jam	700T-1412	4	700T-1413	4
7	Lockwasher	700T-1414	4	700T-1415	4
8	Washer - Spacer	700T-1416	40	700T-1417	40
9	Pin - Suspension				
	For 4" to 6" Flange Widths and Patented Track	700T-1418	2	700T-1419	2
	For 6-3/8" to 8-5/8" Flange Widths	700T-1420	2	700T-1421	2
	For 8-3/4" to 11" Flange Widths	700T-1422	2	700T-1423	2

*Used on low headroom hoists only.

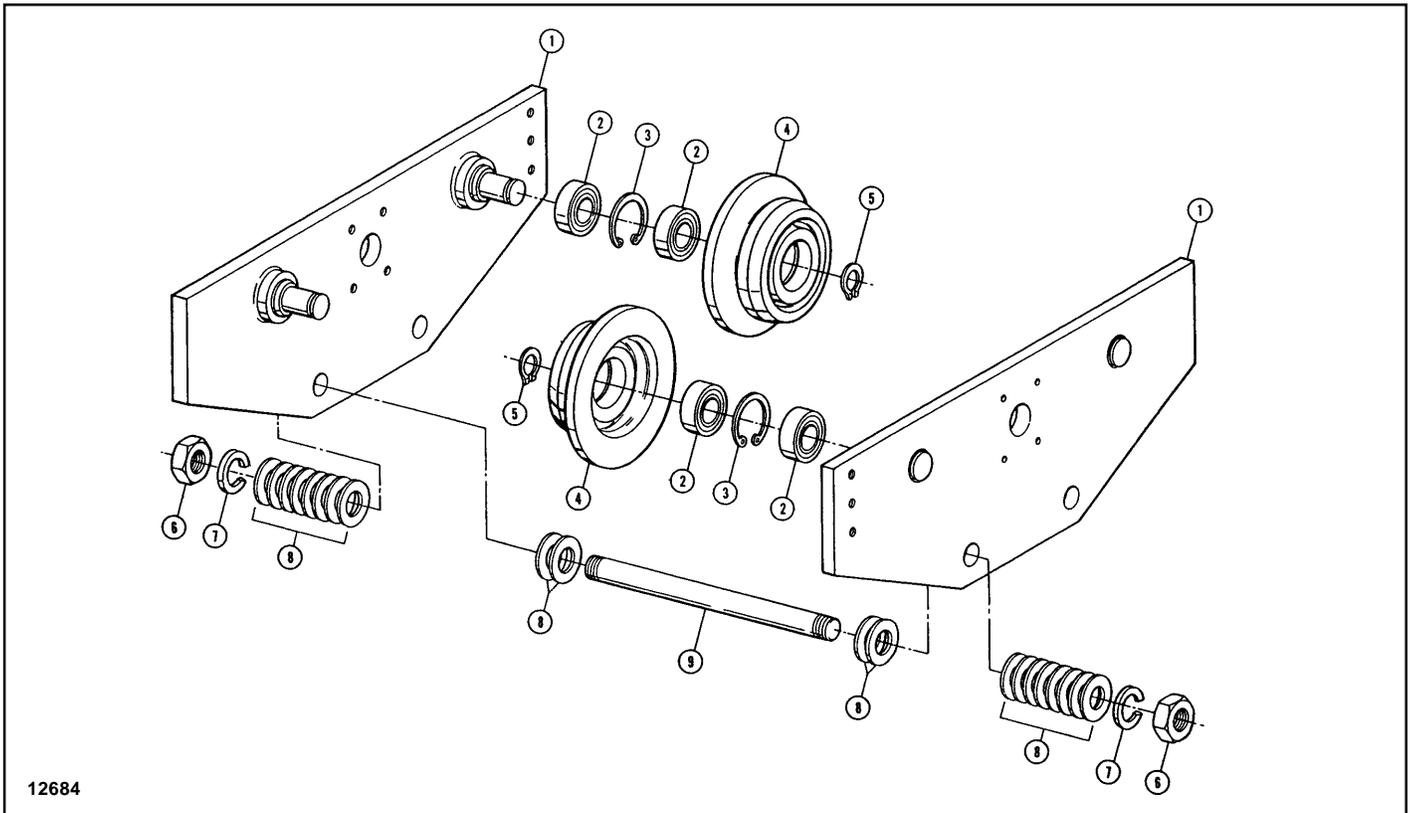


Figure 5. Push Type Rigid Mount Trolley Assembly - (6½" and 8" ø Wheels) and Trailer Trolley* - (6½" ø Wheels).

Ref. No.	Description	6½" ø Wheels				8" ø Wheels						
		1¼" ø Pins	1½" ø Pins	Trailer Trolley	Qty. Req'd.	9" c/c Pins	16" c/c Pins	Qty. Req'd.				
		Part Number	Part Number	Part Number		Part Number	Part Number					
1	Plate Assembly - Side For 4" to 6¼" Flange Widths and Patented Track	700T-1500	700T-1501	700T-1502	2	—	—	—				
	For 6¾" to 8⅝"	700T-1503	700T-1504	700T-1505	2	—	—	—				
	Flange Widths For 8¾" to 11" Flange Widths	700T-1506	700T-1507	700T-1508	2	—	—	—				
	For 6" to 8½" Flange Widths	—	—	—	—	700T-1509	700T-1509	2				
	For 8⅝" to 11⅛" Flange Widths	—	—	—	—	700T-1510	700T-1511	2				
2	Bearing - Ball	700T-1514	700T-1514	700T-1514	8	700T-1515	700T-1515	8				
						700T-1516	700T-1516	700T-1516	4	700T-1517	700T-1517	4
3	Ring - Retaining	700T-1516	700T-1516	700T-1516	4	700T-1517	700T-1517	4				
4	Wheel - Plain	700T-1518	700T-1518	700T-1518	4	700T-1519	700T-1519	4				
						700T-1520	700T-1520	—	4	—	—	—
						700T-1521	700T-1521	—	4	700T-1522	700T-1522	4
						700T-1523	700T-1523	700T-1523	4	700T-1524	700T-1524	4
5	Ring - Retaining	700T-1523	700T-1523	700T-1523	4	700T-1524	700T-1524	4				
6	Nut - Hex Jam	700T-1525	700T-1526	700T-1525	4	700T-1527	700T-1527	4				
7	Lockwasher	700T-1528	700T-1529	700T-1528	4	700T-1530	700T-1530	4				
8	Washer - Spacer	700T-1531	700T-1532	700T-1531	40	700T-1533	700T-1533	44				
9	Pin - Suspension	700T-1534	700T-1535	700T-1534	2	—	—	—				
						700T-1536	700T-1537	700T-1536	2	—	—	—
						700T-1538	700T-1539	700T-1538	2	—	—	—
						—	—	—	—	700T-1540	700T-1540	2
						—	—	—	—	700T-1541	700T-1541	2
						—	—	—	—	700T-1542	700T-1542	2

*Used on low headroom hoists only.

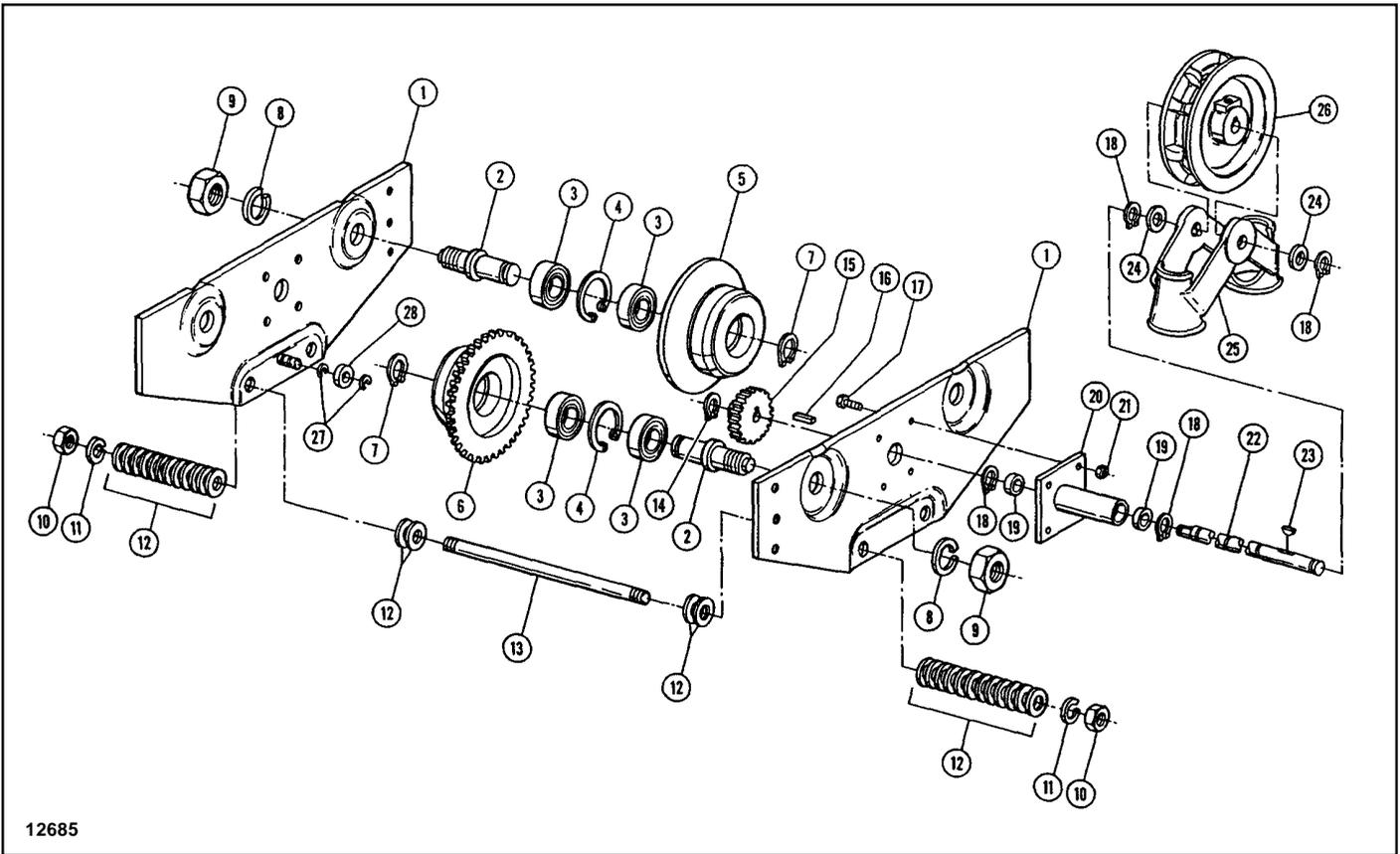


Figure 6. Hand Geared Rigid Mount Trolley Assembly.
 (4" ∅ Wheels – 3-1/8" and 5" c/c Pins.)

Ref. No.	Description	3-1/8" c/c Pins		5" c/c Pins	
		Part Number	Qty. Req'd.	Part Number	Qty. Req'd.
1	Plate Assembly - Side				
	For 3" to 5" Flange Widths and Patented Track	700T-1600	2	—	—
	For 5-1/8" to 7-1/4" Flange Widths	700T-1601	2	—	—
	For 7-1/2" to 9-1/8" Flange Widths	700T-1602	2	—	—
	For 3-5/8" to 6" Flange Widths and Patented Track	—	—	700T-1603	2
	For 6-1/4" to 8-5/8" Flange Widths	—	—	700T-1604	2
2	Shaft - Wheel				
	Standard	700T-1606	4	700T-1606	4
	Patented Track	700T-1609	2	700T-1609	2
3	Bearing - Ball				
	Standard	700T-1607	8	700T-1607	8
	Spark Resistant	700T-1611	2	700T-1611	2
4	Ring - Retaining				
	Standard	700T-1608	4	700T-1608	4
	Spark Resistant	700T-1614	2	700T-1614	2
5	Wheel - Plain				
	Standard	700T-1609	2	700T-1609	2
	Patented Track	700T-1610	2	700T-1610	2
6	Wheel - Geared				
	Standard	700T-1612	2	700T-1612	2
	Spark Resistant	700T-1614	2	700T-1614	2
7	Ring - Retaining				
	Standard	700T-1615	4	700T-1615	4
8	Lockwasher	700T-1616	4	700T-1616	4
9	Nut - Hex Jam	700T-1617	4	700T-1617	4
10	Nut - Hex Jam	700T-1618	4	700T-1617	4
11	Lockwasher	700T-1619	4	700T-1616	4
12	Washer - Spacer	700T-1620	56	700T-1621	36

Figure 6. Hand Geared Rigid Mount Trolley Assembly - (4" \varnothing Wheels – 3-1/8" and 5" c/c Pins) (Continued).

Ref. No.	Description	3-1/8" c/c Pins		5" c/c Pins	
		Part Number	Qty. Req'd.	Part Number	Qty. Req'd.
13	Pin - Suspension				
	For 3" to 5" Flange Widths and Patented Track	700T-1622	2	—	—
	For 5-1/8" to 7-1/4" Flange Widths	700T-1623	2	—	—
	For 7-1/2" to 9-1/8" Flange Widths	700T-1624	2	—	—
	For 3-5/8" to 6" Flange Widths and Patented Track	—	—	700T-1625	2
	For 6-1/4" to 8-5/8" Flange Widths	—	—	700T-1626	2
	For 8-7/8" to 11-1/4" Flange Widths	—	—	700T-1627	2
14	Ring - Retaining	700T-1628	1	700T-1628	1
15	Pinion	700T-1629	1	700T-1630	1
16	Key - Pinion	700T-1631	1	700T-1631	1
17	Screw - Hex Cap	700T-1632	4	700T-1632	4
18	Ring - Retaining	700T-1633	4	700T-1633	4
19	Bushing	700T-1634	2	700T-1634	2
20	Plate and Tube Assembly	700T-1635	1	700T-1635	1
21	Nut - Self-locking	700T-1636	4	700T-1636	4
22	Shaft - Hand Chain Wheel	700T-1637	1	700T-1637	1
23	Key - Hand Chain Wheel	700T-1638	1	700T-1638	1
24	Washer	700T-1639	2	700T-1639	2
25	Guide - Chain	700T-1640	1	700T-1640	1
26	Wheel - Hand Chain	700T-1641	1	700T-1641	1
27	Ring - Retaining	700T-1642	2	700T-1642	2
28	Roller				
	1" Diameter	700T-1643	1	700T-1643	1
	1-1/4" Diameter	700T-1644	1	700T-1644	1
*	Chain - Hand (Not Shown)				
	Standard	700T-1645	As Req'd.	700T-1645	As Req'd.
	Spark Resistant	700T-1646	As Req'd.	700T-1646	As Req'd.
	Link - Open (Not Shown)	700T-1647	1	700T-1647	1

*Specify length of hand chain required. Standard length equals two times hoist lift plus 2'-6".

Notes

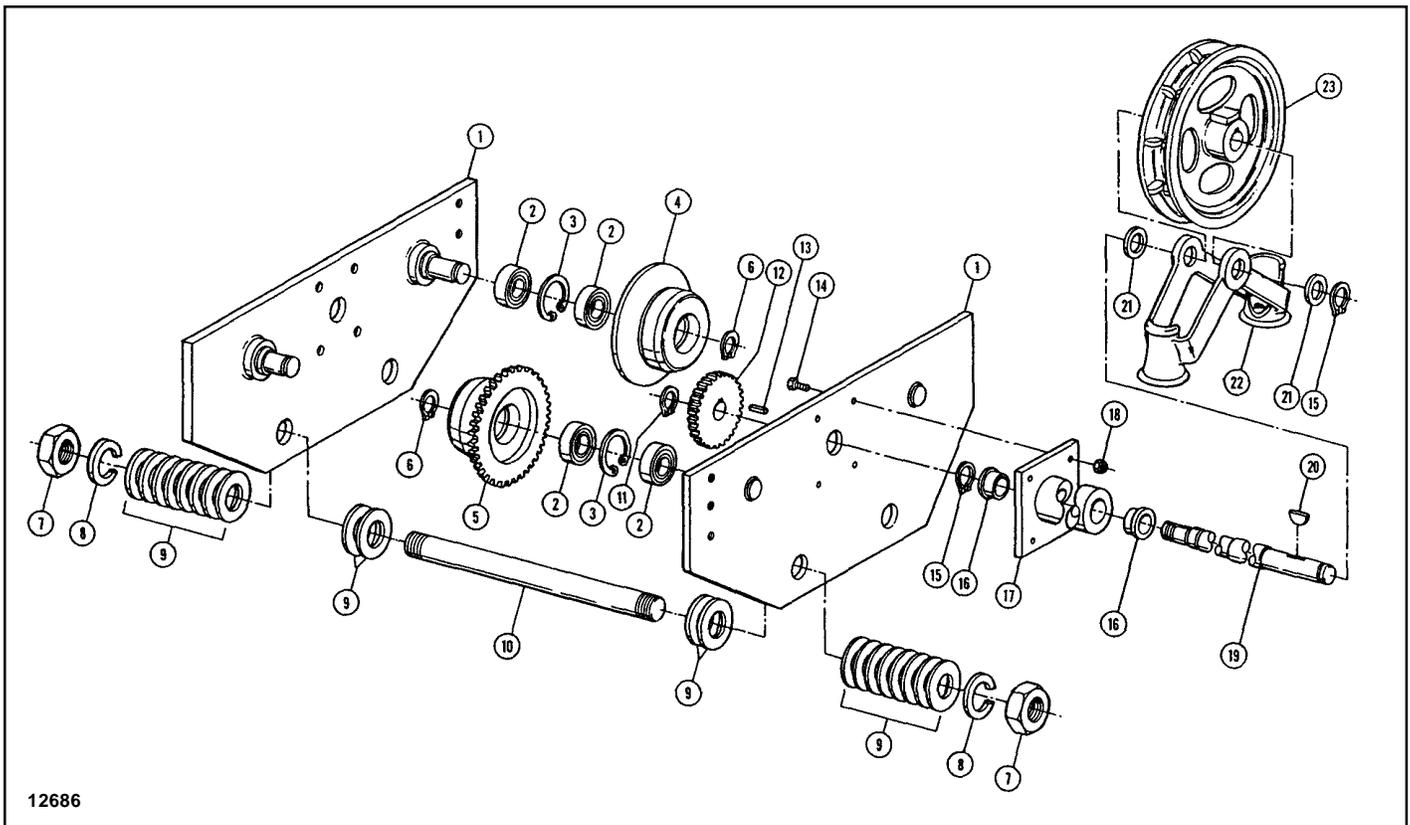
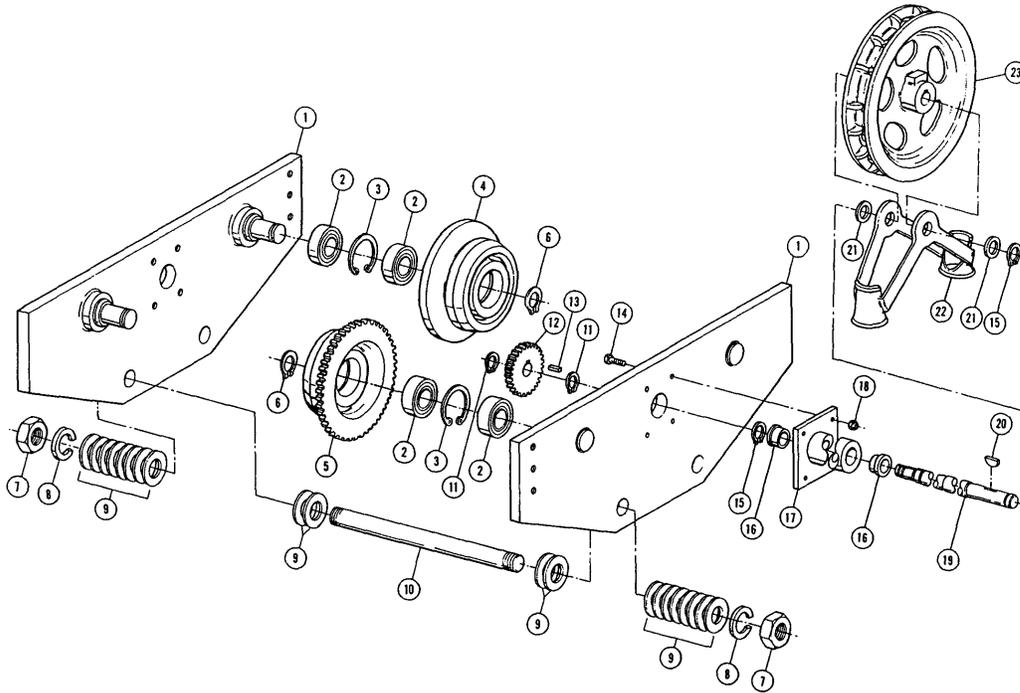


Figure 7. Hand Geared Rigid Mount Trolley Assembly.
(4" ∅ Wheels – 6" c/c Pins.)

Ref. No.	Part Number	Description	Qty. Req'd	
1	700T-1700	Plate Assembly - Side For 4" to 6-1/4" Flange Widths and Patented Track	2	
	700T-1701	For 6-3/8" to 8-5/8" Flange Widths	2	
	700T-1702	For 8-3/4" to 11" Flange Widths	2	
2	700T-1703	Bearing - Ball	8	
3	700T-1704	Ring - Retaining	4	
4		Wheel - Plain		
	700T-1705	Standard	2	
	700T-1706	Patented Track	2	
5	700T-1707	Spark Resistant	2	
		Wheel - Geared		
	700T-1708	Standard	2	
6	700T-1709	Patented Track	2	
	700T-1710	Spark Resistant	2	
	700T-1711	Ring - Retaining	4	
7	700T-1712	Nut - Hex Jam	4	
8	700T-1713	Lockwasher	4	
9	700T-1714	Washer - Spacer	40	
	10		Pin - Suspension	
		700T-1715	For 4" to 6-1/4" Flange Widths and Patented Track	2
		700T-1716	For 6-3/8" to 8-5/8" Flange Widths	2
	700T-1717	For 8-3/4" to 11" Flange Widths	2	
11	700T-1718	Ring - Retaining	1	
12	700T-1719	Pinion	1	
13	700T-1720	Key - Pinion	1	
14	700T-1721	Screw - Hex Cap	4	



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**Figure 8. Hand Geared Rigid Mount Trolley Assembly.
(6½" and 8" ø Wheels.)**

Ref. No.	Description	6½" ø Wheels			8" ø Wheels		
		1¼" ø Pins	1½" ø Pins	Qty. Req'd.	9" c/c Pins	16" c/c Pins	Qty. Req'd.
		Part Number	Part Number		Part Number	Part Number	
1	Plate Assembly - Side						
	For 4" to 6-1/4" Flange Widths and Patented Track	700T-1800	700T-1801	2	-	-	-
	For 6-3/8" to 8-5/8" Flange Widths	700T-1802	700T-1803	2	-	-	-
	For 8-3/4" to 11" Flange Widths	700T-1804	700T-1805	2	-	-	-
	For 6" to 8-1/2" Flange Widths	-	-	-	700T-1806	700T-1806	2
	For 8-5/8" to 11-1/8" Flange Widths	-	-	-	700T-1807	700T-1808	2
	For 11-1/4" to 13-3/4" Flange Widths	-	-	-	700T-1809	700T-1810	2
2	Bearing - Ball	700T-1811	700T-1811	8	700T-1812	700T-1812	8
3	Ring - Retaining	700T-1813	700T-1813	4	700T-1814	700T-1814	4
4	Wheel - Plain						
	Standard	700T-1815	700T-1815	2	700T-1816	700T-1816	2
	Patented Track	700T-1817	-	2	-	-	-
	Spark Resistant	700T-1818	700T-1818	2	700T-1819	700T-1819	2
5	Wheel - Geared						
	Standard	700T-1820	700T-1820	2	700T-1821	700T-1821	2
	Patented Track	700T-1822	-	2	-	-	-
	Spark Resistant	700T-1823	700T-1823	2	700T-1824	700T-1824	2
6	Ring-Retaining	700T-1825	700T-1825	4	700T-1826	700T-1826	4
7	Nut - Hex Jam	700T-1827	700T-1828	4	700T-1829	700T-1829	4
8	Lockwasher	700T-1830	700T-1831	4	700T-1832	700T-1832	4
9	Washer - Spacer	700T-1833	700T-1834	40	700T-1835	700T-1835	44
10	Pin - Suspension						
	For 4" to 6-1/4" Flange Widths and Patented Track	700T-1836	700T-1837	2	-	-	-
	For 6-3/8" to 8-5/8" Flange Widths	700T-1838	700T-1839	2	-	-	-
	For 8-3/4" to 11" Flange Widths	700T-1840	700T-1841	2	-	-	-
	For 6" to 8-1/2" Flange Widths	-	-	-	700T-1842	700T-1842	2
	For 8-5/8" to 11-1/8" Flange Widths	-	-	-	700T-1843	700T-1843	2
	For 11-1/4" to 13-3/4" Flange Widths	-	-	-	700T-1844	700T-1844	2

Recommended Spare Parts for Your Shaw-Box Trolley

Certain parts of your trolley will, in time, require replacement under normal wear conditions. It is suggested that the following parts be purchased for your trolley as spares for future use.

- 1 Set of Wheels
- 1 Pinion (Hand Geared Trolley Only)

Note: When ordering parts always furnish Model Number of Trolley.

Parts for your trolley are available from your local authorized **Shaw-Box** repair station. For the location of your nearest repair station, write:

Yale•Lift-Tech
P.O. Box 769
Muskegon, MI 49443-0769

Phone: **800 742-9269**
Fax: **800 742-9270**

WARRANTY

WARRANTY AND LIMITATION OF REMEDY AND LIABILITY

A. Seller warrants that its products and parts, when shipped, and its work (including installation, construction and start-up), when performed, will meet applicable specifications, will be of good quality and will be free from defects in material and workmanship. All claims for defective products or parts under this warranty must be made in writing immediately upon discovery and in any event, within one (1) year from shipment of the applicable item unless Seller specifically assumes installation, construction or start-up responsibility. All claims for defective products or parts when Seller specifically assumes installation, construction or start-up responsibility and all claims for defective work must be made in writing immediately upon discovery and in any event, within one (1) year from completion of the applicable work by Seller, provided; however, all claims for defective products and parts made in writing no later than eighteen (18) months after shipment. Defective items must be held for Seller's inspection and returned to the original f.o.b. point upon request. THE 'FOREGOING IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES WHATSOEVER, EXPRESS, IMPLIED AND STATUTORY, INCLUDING, WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS.

B. Upon Buyer's submission of a claim as provided above and its substantiation, Seller shall at its option either (i) repair or replace its product, part or work at either the original f.o.b. point of delivery or at Seller's authorized service station nearest Buyer or (ii) refund an equitable portion of the purchase price.

C. This warranty is contingent upon Buyer's proper maintenance and care of Seller's products, and does not extend to normal wear and tear. Seller reserves the right to void warranty in event of Buyer's use of inappropriate materials in the course of repair or maintenance, or if Seller's products have been dismantled prior to submission to Seller for warranty inspection.

D. The foregoing is Seller's only obligation and Buyer's exclusive remedy for breach of warranty and is Buyer's exclusive remedy hereunder by way of breach of contract, tort, strict liability or otherwise. In no event shall Buyer be entitled to or Seller liable for incidental or consequential damages. Any action for breach of this agreement must be commenced within one (1) year after the cause of action has accrued.

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