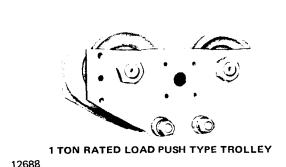
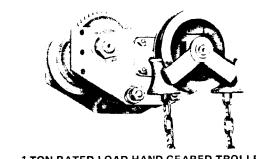
PARTS, OPERATION AND MAINTENANCE MANUAL

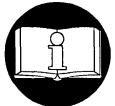
RIGID MOUNT PUSH AND HAND GEARED TROLLEYS

FOR 1/2 THROUGH 5 METRIC TON SERIES E1 AND E2 WIRE ROPE HOISTS





1 TON RATED LOAD HAND GEARED TROLLEY 12689



Tons in this manual are metric tons (2,200 lbs.)

READ THIS MANUAL BEFORE USING THESE TROLLEYS. This manual contains important safety, installation, operation and maintenance information. Make this manual available to all persons responsible for the operation, installation and maintenance of these products.

AWARNING

Do not use this trolley for lifting, supporting, or transporting people or lifting or supporting loads over people.

Always operate, inspect and maintain this trolley in accordance with any federal, state or local regulations and any other applicable safety codes.

Refer all communications to the nearest Ingersoll-Rand Material Handling Products Office or Distributor.

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GENERAL

INGERSOLL-RAND Rigid Mount I-Beam Trolleys are designed especially for use on Series E1 and E2 INGERSOLL-RAND 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 INGERSOLL-RAND 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.

THE INFORMATION CONTAINED IN THIS MANUAL IS FOR INFORMATIONAL PURPOSES ONLY AND INGERSOLL-RAND DOES NOT WARRANT OR OTHERWISE GUARANTEE (IMPLIEDLY OR EXPRESSLY) ANYTHING OTHER THAN THE COMPONENTS THAT INGERSOLL-RAND SUPPLIES AND ASSUMES NO LEGAL RESPONSIBILITY (INCLUDING, BUT NOT LIMITED TO CONSEQUENTIAL DAMAGES) FOR INFORMATION CONTAINED IN THIS MANUAL.

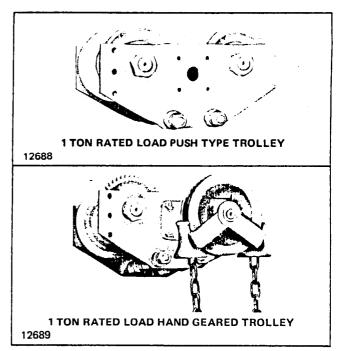


Figure 1.

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.

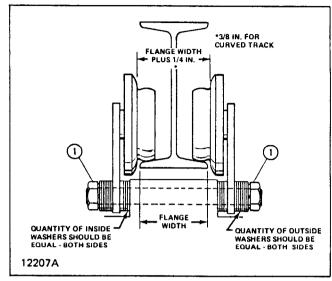


Figure 2. Sectional View of Trolley Showing Proper Wheel and Washer Spacing.

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 has 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.



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 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 obstructions 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.



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. INGERSOLL-RAND 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 275 or equal.

REPLACEMENT PARTS

The following parts lists and illustrations cover standard model INGERSOLL-RAND 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 ϕ indicates diameter.

These INGERSOLL-RAND 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.

The numbers assigned to the parts of our various assemblies in our parts lists 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.

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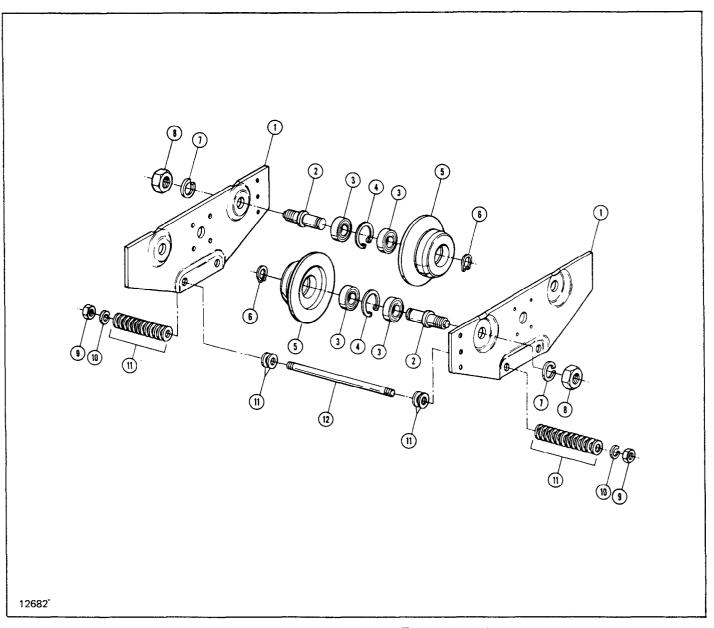


Figure 3. Push Type Rigid Mount Trolley Assembly. (4" ϕ Wheels - 3-1/8" and 5" c/c Pins.)

Ref. No.		3-1/8" c/d	Pins	5" c/c Pins	
	Description	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
	For 8-7/8" to 11-1/4" Flange Widths	 		700T-1305	2
2	Shaft Wheel	700T-1306	4	700T-1306	4
3	Bearing — Ball	700T-1307	8	700T-1307	8
4	Ring — Retaining	700T-1308	4	700T-1308	4
5	Wheel - Plain		ļ		
	Standard	700T-1309	4	700T-1309	4
	Patented Track	700T-1310	4	700T-1310	4
	Spark Resistant	700T-1311	4	700T-1311	4
6	Ring — Retaining	700T-1312	4	700T-1312	4
7	Lockwasher	700T-1313	4	700T-1313	4
8	Nut – Hex Jam	700T-1314	4	700T-1314	4

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

Ref.		3-1/8" c/d	Pins	5" c/c Pins	
No.	Description	Part Number	Qty. Req'd.	Part Number	Qty. Req'd.
9	Nut — Hex Jam	700T-1315	4	700T-1314	4
10	Lockwasher	700T-1316	4	700T-1313	4
11	Washer - Spacer	700T-1317	56	700T-1318	36
12	Pin – Suspension				
	For 3" to 5" Flange Widths and Patented Track	700T-1319	2		
	For 5-1/8" to 7-1/4" Flange Widths	700T-1320	2		
	For 7-1/2" to 9-1/8" Flange Widths	700T-1321	2		
[For 3-5/8" to 6" Flange Widths and Patented Track			700T-1322	2
	For 6-1/4'' to 8-5/8'' Flange Widths			700T-1323	2
	For 8-7/8" to 11-1/4" Flange Widths			700T-1324	2

NOT	ES
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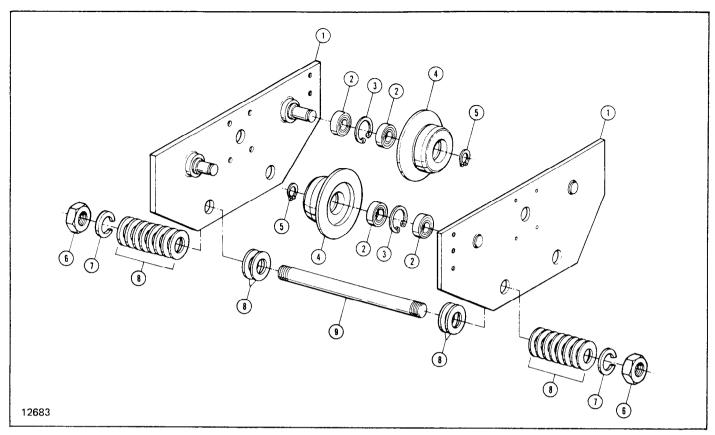


Figure 4. Push Type Rigid Mount Trolley Assembly - (4" ϕ Wheels - 6" c/c Pins) and Trailer Trolley* - (2 - 4" ϕ Wheels).

Ref. No.		6′′ c/c	Pins	2 Wheel Trolley	
	Description	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 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		İ	1	
	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 2
	For 8-3/4" to 11" Flange Widths	700T-1422	2	700T-1423	2

^{*}Used on low headroom hoists only.

NOTES	

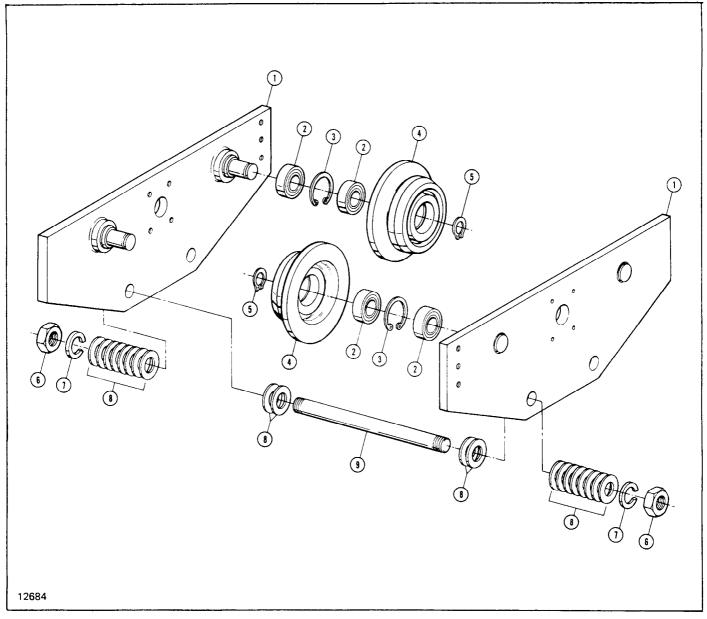


Figure 5. Push Type Rigid Mount Trolley Assembly — (6-1/2" & 8" ϕ Wheels) and Trailer Trolley* — (6-1/2" ϕ Wheels).

		6-1/2" φ Wheels				8" ϕ Wheels		
Ref. No.	Description	1-1/4" ϕ Pins	1-1/2" ϕ Pins	Trailer Trolley	Qty.	9" c/c Pins	16" c/c Pins	Ωty.
		Part Number	Part Number	Part Number	Req'd.	Part Number	Part Number	Req'd.
1	Plate Assembly – Side							
	For 4" to 6-1/4" Flange	7007 4500	7007 4504	7007 4500				
	Widths and Patented Track For 6-3/8" to 8-5/8"	700T-1500	70 0 T-1501	700T-1502	2			
	Flange Widths	700T-1503	700T-1504	700T-1505	2			
	For 8-3/4" to 11"	7001 7000	7001 1001	7001 1000				
	Flange Widths	700T-1506	700T-1507	700T-1508	2			
	For 6" to 8-1/2"							
	Flange Widths					700T-1509	700T-1509	2
	For 8-5/8" to 11-1/8"							
	Flange Widths For 11-1/4" to 13-3/4"					700T-1510	700T-1511	2
	Flange Widths					700T-1512	700T-1513	2
2	Bearing - Ball	700T-1514	700T-1514	700T-1514	8	700T-1512	700T-1515	8
3	Ring - Retaining	700T-1516	700T-1516	700T-1516	4	700T-1517	700T-1517	4

Figure 5. Push Type Rigid Mount Trolley Assembly – $(6-1/2" \& 8" \phi \text{ Wheels})$ and Trailer Trolley *– $(6-1/2" \phi \text{ Wheels})$ (Continued).

6-1/2" φ Wheels				6-1/2" φ Wheels		8′′	φ Wheels	
Ref.		1-1/4" φ Pins 1-1/2" φ Pins Trailer Trolley		Qty.	9" c/c Pins	16" c/c Pins	Qty.	
No.	Description	Part Number	Part Number	Part Number	Req'd.	Part Number	Part Number	Req'd.
4	Wheel - Plain							
	Standard	700T-1518	700T-1518	700T-1518	4	700T-1519	700T-1519	4
	Patented Track	700T-1520	700T-1520		4			
	Spark Resistant	700T-1521	700T-1521		4	700T-1522	700T-1522	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							
	For 4" to 6-1/4" Flange				i i			
	Widths and Patented Track	700T-1534	700T-1535	700T-1534	2			
1	For 6-3/8'' to 8-5/8'')			1) i
	Flange Widths	700T-1536	700T-1537	700T-1536	2			
	For 8-3/4" to 11"							
1	Flange Widths	700T-1538	700T-1539	700T-1538	2			
1	For 6" to 8-1/2"							1
	Flange Widths					700T-1540	700T-1540	2
	For 8-5/8" to 11-1/8"							
	Flange Widths		- -			700T-1541	700T-1541	2
l	For 11-1/4" to 13-3/4"			1				
	Flange Widths					700T-1542	700T-1542	2

^{*}Used on low headroom hoists only.

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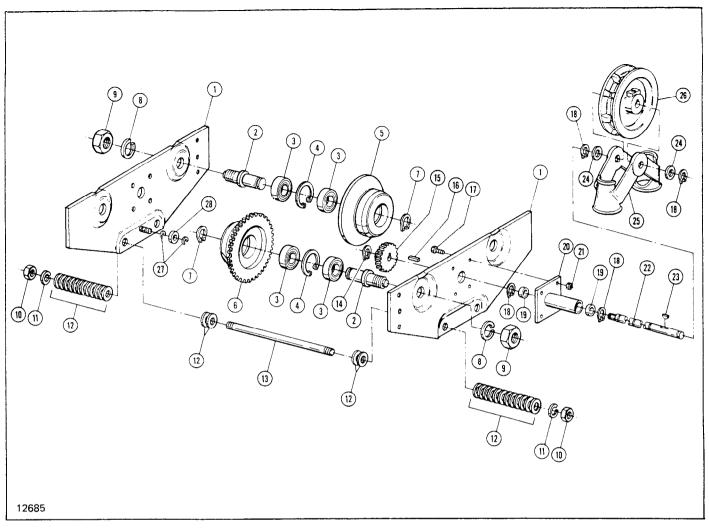


Figure 6. Hand Geared Rigid Mount Trolley Assembly. (4" ϕ Wheels - 3-1/8" & 5" c/c Pins.)

Det		3-1/8" c/c	Pins	5" c/c Pins		
Ref. No.	Description	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			
1	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	
	For 8-7/8" to 11-1/4" Flange Widths			70 0T -1605	2 2 2	
2	Shaft - Wheel	700T-1606	4	700T-1606	4	
3	Bearing - Ball	700T-1607	8	700T-1607	8	
4	Ring — Retaining	700T-1608	4	700T-1608	4	
5	Wheel - Plain		!			
	Standard	700T-1609	2	700T-1609	2	
	Patented Track	700T-1610	2	700T-1610	2 2 2	
	Spark Resistant	700T-1611	2	700T-1611	2	
6	Wheel - Geared					
	Standard	700T-1612	2	700T-1612	2	
	Patented Track	700T-1613	2	700T-1613	2	
	Spark Resistant	700T-1614	2	700T-1614	2	
7	Ring – Retaining	700T-1615	4	700T-1615	4	
8	Lockwasher	700T-1616	4	700T-1616	4	
9	Nut — Hex Jam	700T-1617	4	700 T -1617	4	
10	Nut – Hex Jam	700T-1618	4	. 700 T -1617	4	
11	Lockwasher	700T-1619	4	70 0 T-1616	4	
12	Washer – Spacer	700T-1620	56	700T-1621	36	

Figure 6. Hand Geared Rigid Mount Trolley Assembly - (4" ϕ Wheels - 3-1/8" & 5" c/c Pins) (Continued).

Ref.		3-1/8" c/	c Pins	5" c/c Pins		
No.	Description	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			
İ	For 7-1/2" to 9-1/8" Flange Widths	700T-1623	2	makes makes		
	For 3-5/8" to 6" Flange Widths and Patented Track	7001-1024		700T-1625		
	For 6-1/4" to 8-5/8" Flange Widths				2 2	
-	For 8-7/8" to 11-1/4" Flange Widths		1	700T-1626	2	
14	Ring - Retaining	700T-1628		700T-1627	2	
15	Pinion		1 1	700T-1628	I	
16	Key Pinion	700T-1629	1 ! !	700T-1630]	
17	Screw — Hex Cap	700T-1631]	700T-1631	1 1	
18	Ring — Retaining	700T-1632	4	700T-1632	4	
19		700T-1633	4	700T-1633	4	
20	Bushing Plate and Tuke Association	700T-1634	2	700T-1634	2	
21	Plate and Tube Assembly	700T-1635	1 1	70 0T -1635	1	
1	Nut - Self-locking	700T-1636	4	700T-1636	4	
22	Shaft — Hand Chain Wheel	700T-1637	1 1	700T-1637	1	
23	Key — Hand Chain Wheel	700T-1638	1	70 0 T-1638	1	
24	Washer	700T-1639	2	70 0T -1639	2	
25	Guide – Chain	700T-1640	1 1	70 0 T-1640	1	
26	Wheel – Hand Chain	700T-1641	1 1	700T-1641	1	
27	Ring — Retaining	700T-1642	2 1	700T-1642	2	
28	Roller		1. [
}	1" Diameter	700T-1643	1 1	700T-1643	1	
1	1-1/4'' Diameter	700T-1644	1 1	700T-1644	l i	
*	Chain — Hand (Not Shown)		1 1		· '	
	Standard	700T-1645	As Reg'd.	700T-1645	As Reg'd.	
	Spark Resistant	700T-1646	As Reg'd.		As Reg'd.	
	Link - Open (Not Shown)	700T-1040	1	700T-1648	As neq a.	
	- p	7001-1047	<u> </u>	7001-1047	<u> </u>	

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

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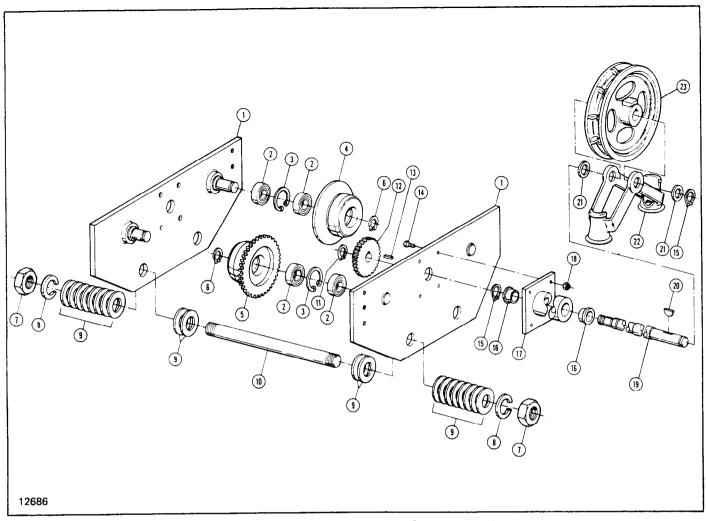


Figure 7. Hand Geared Rigid Mount Trolley Assembly. (4" ϕ Wheels - 6" c/c Pins.)

Ref. No.	Part Number	Description	Qty. Req'd.
1		Plate Assembly — Side	
'	700T-1700	For 4" to 6-1/4" Flange Widths and Patented Track	2
1	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 2 8
2	700T-1703	Bearing — Ball	8
2 3	700T-1704	Ring - Retaining	4
4	/ / / / / /	Wheel - Plain	
'	700T-1705	Standard	2
	700T-1706	Patented Track	2 2
	700T-1707	Spark Resistant	2
5	, , , , , , , , ,	Wheel - Geared	
	700T-1708	Standard	2
1	700T-1709	Patented Track	2 2 2 4
	700T-1710	Spark Resistant	2
6	700T-1711	Ring – Retaining	
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 2 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 1
12	700T-1719	Pinion	1
13	700T-1720	Key – Pinion	1
14	700T-1721	Screw – Hex Cap	4

Figure 7. Hand Geared Rigid Mount Trolley Assembly - (4" ϕ Wheels - 6" c/c Pins) (Continued).

Ref. No.	Part Number	Description	Ωty. Req'd.
15	700T-1722	Ring Retaining	2
16	700T-1723	Bushing	2
17	700T-1724	Plate and Tube Assembly	1
18	700T-1725	Nut - Self-locking	4
19	700T-1726	Shaft - Hand Chain Wheel	1
20	700T-1727	Key — Hand Chain Wheel	1
21	700T-1728	Washer	2
22		Guide — Chain	ļ
	700T-1729	For 8-5/8" O.D. Hand Chain Wheel	1
	700T-1730	For 11-5/8" O.D. Hand Chain Wheel	1
23	ļ	Wheel — Hand Chain	l .
	700T-1731	8-5/8" Outside Diameter	1
	700T-1732	11-5/8" Outside Diameter	1
*		Chain — Hand (Not Shown)	1
	700T-1733	Standard	As Req'd.
	700T-1734	Spark Resistant	As Req'd.
\ \	700T-1735	Link - Open (Not Shown)	1

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

NOTES

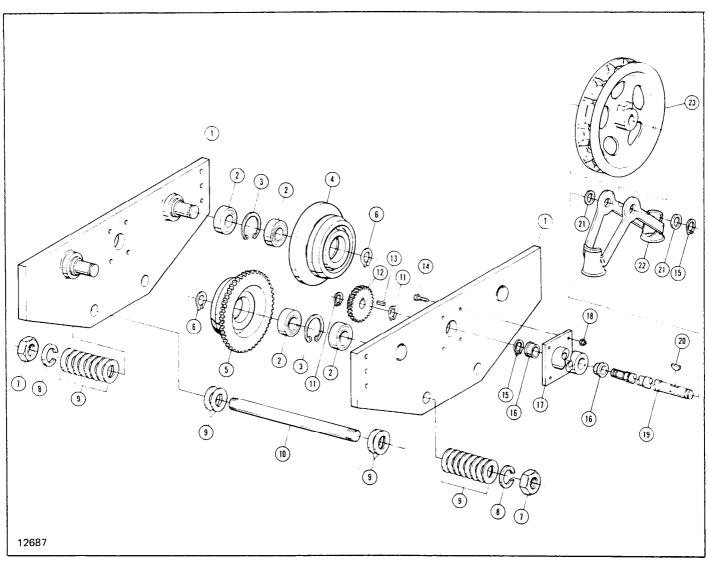


Figure 8. Hand Geared Rigid Mount Trolley Assembly. (6-1/2" & 8" ϕ Wheels.)

		6-1/	2"		8"	φ Wheels	
Ref.		1-1/4" φ Pins	1-1/2" φ Pins	Qty.	9" c/c Pins	16" c/c Pins	Qty.
No.	Description	Part Number	Part Number	Req'd.	Part Number	Part Number	Req'd.
1	Plate Assembly — Side For 4'' to 6-1/4'' Flange Widths and Patented Track For 6-3/8'' to 8-5/8'' Flange Widths For 8-3/4'' to 11'' Flange Widths	700T-1800 700T-1802 700T-1804	700T-1801 700T-1803 700T-1805	2 2 2 2			
	For 6" to 8-1/2" Flange Widths For 8-5/8" to 11-1/8" Flange Widths For 11-1/4" to 13-3/4" Flange Widths	 			700T-1806 700T-1807 700T-1809	700T-1806 700T-1808 700T-1810	2 2 2
3 4	Bearing Ball Ring Retaining Wheel Plain	700T-1811 700T-1813	700T-1811 700T-1813	8 4	700T-1812 700T-1814	700T-1812 700T-1814	8 4
	Standard Patented Track Spark Resistant	700T-1815 700T-1817 700T-1818	700T-1815 700T-1818	2 2 2	700T-1816 700T-1819	700T-1816 700T-1819	2 2
5	Wheel – Geared Standard Patented Track Spark Resistant	700T-1820 700T-1822 700T-1823	700T-1820 700T-1823	2 2 2	700T-1821 —— 700T-1824	700T-1821 700T-1824	2
6 7	Ring – Retaining Nut – Hex Jam	700T-1825 700T-1827	700T-1825 700T-1825 700T-1828	4 4	700T-1824 700T-1826 700T-1829	700T-1824 700T-1826 700T-1829	2 4 4

Figure 8. Hand Geared Rigid Mount Trolley Assembly – (6-1/2" & 8" ϕ Wheels) (Continued).

		6-1/2	2"		8"	φ Wheels	
Ref.		1-1/4" φ Pins	1-1/2" φ Pins	Qty.	9" c/c Pins	16" c/c Pins	Qty.
No.	Description	Part Number	Part Number	Req'd.	Part Number	Part Number	Req'd.
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
11	Ring — Retaining	700T-1845	700T-1845	2	700T-1845	700T-1845	2
12	Pinion*	700T-1846	700T-1846	1	700T-1846	700T-1846	1
13	Key - Pinion	700T-1847	700T-1847	1	700T-1847	700T-1847	1
14	Screw - Hex Cap	700T-1848	700T-1848	4	700T-1849	700T-1849	4
15	Ring — Retaining	700T-1850	700T-1850	2	700T-1850	700T-1850	2
16	Bushing	700T-1851	700T-1851	2	700T-1851	700T-1851	2
17	Plate and Tube Assembly	700T-1852	700T-1852	1	700T-1852	700T-1852	1
18	Nut — Self-locking	700T-1853	700T-1853	4	700T-1853	700T-1853	4
19	Shaft – Hand Chain Wheel	1					
	16-1/8" Long	700T-1854	700T-1854	1			
00	19-1/8" Long	700T-1855		1	700T-1855	700 T -1855	1 1
20	Key - Hand Chain Wheel	700T-1856	700T-1856	1	700T-1856	700T-1856	1
21	Washer	700T-1857	700T-1857	2	700T-1857	700T-1857	2
22	Guide – Chain						
1	For 11-5/8" O.D. Hand Chain Wheel	700T-1858	700T-1858	1			
	For 14-1/8" O.D. Hand Chain Wheel	700T-1859		1	700T-1859	700T-1859	1
23	Wheel – Hand Chain	1					
	11-5/8" Outside Diameter	700T-1860	700T-1860	1	- -		
**	14-1/8" Outside Diameter	700T-1861		1	700T-1861	700T-1861	1
	Chain – Hand (Not Shown)			As			As
	Standard	700T-1862	700T-1862	Reg'd.	700T-1862	700T-1862	Rea'd.
				As			As
	Spark Resistant	700T-1863	700T-1863	Req'd.	700T-1863	700T-1863	Req'd.
	Link - Open (Not Shown)	700T-1864	700T-1864	1	700T-1864	700T-1864	1

^{*}Pinion shoulder away from side plate for 6-1/2" ϕ wheels and toward side plate for 8" ϕ wheels. *Specify length of hand chain required. Standard length equals two times hoist lift plus 2'-6".

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PARTS ORDERING INFORMATION

The use of replacement parts other than INGERSOLL-RAND Material Handling will invalidate the Company's warranty. For prompt service and genuine INGERSOLL-RAND Material Handling parts, provide your nearest Distributor with the following:

- 1. Complete trolley model number and serial number of trolley on which the parts are to be used.
- 2. Part number and part description as shown in this manual.
- 3. Quantity required.

For your convenience and future reference it is recommended that the following information be recorded.

Trolley Model Number.....

Trolley Serial Number.....

Date Purchased....

Return Goods Policy

Ingersoll-Rand will not accept any returned goods for warranty or service work unless prior arrangements have been made and written authorization has been provided from the location where the goods were purchased.

NOTICE

• Continuing improvement and advancement of design may cause changes to this trolley which are not included in this manual. Manuals are periodically revised to incorporate changes. Always check the manual edition number on the front cover for the latest issue.

When the life of the trolley has expired, it is recommended that the trolley be disassembled, degreased and parts separated as to materials so that they may be recycled.

For additional information contact:

Ingersoll-Rand Material Handling

2724 Sixth Avenue South Seattle, Wa 98124 USA Phone: (206) 624-0466

Fax: (206) 624-6265

or

Ingersoll-Rand Material Handling Samila, Doual Operations

111, avenue Roger Salengro 59450 Sin Le Noble, France Phone: (33) 27-93-08-08 Fax: (33) 27-93-08-00

Recommended Spare Parts for your Ingersoll-Rand 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.

One set of wheel bearings One set of wheels

When ordering parts always furnish complete trolley model number, serial number and capacity of trolley on which the parts are to be used.

HOIST AND WINCH LIMITED WARRANTY

Ingersoll-Rand Company (I-R) warrants to the original user its Hoists and Winches (Products) to be free of defects in material and workmanship for a period of one year from the date of purchase.

I-R will repair, without cost, any Product found to be defective, including parts and labor charges, or at its option, will replace such Products or refund the purchase price less a reasonable allowance for depreciation, in exchange for the Product. Repairs or replacements are warranted for the remainder of the original warranty period.

If any Product proves defective within its original one year warranty period, it should be returned to any Authorized Hoist and Winch Service Distributor, transportation prepaid with proof of purchase or warranty card.

This warranty does not apply to Products which I-R has determined to have been misused or abused, improperly maintained by the user, or where the malfunction or defect can be attributed to the use of non-genuine I-R parts.

I-R makes no other warranty, and all implied warranties including any warranty of merchantability or fitness for a particular purpose are limited to the duration of the expressed warranty period as set forth above.

I-R's maximum liability is limited to the purchase price of the Product and in no event shall I-R be liable for any consequential, indirect, incidental, or special damages of any nature rising from the sale or use of the Product, whether based on contract, tort, or otherwise.

Note: Some states do not allow limitations on incidental or consequential damages or how long an implied warranty lasts so that the above limitations may not apply to you.

This warranty gives you specific legal rights and you may also have other rights which may vary from state to state.

IMPORTANT NOTICE

It is our policy to promote safe delivery of all orders. This shipment has been thoroughly checked, packed and inspected before leaving our plant and receipt for it in good condition has been received from the carrier. Any-loss or damage which occurs to this shipment while enroute is not due to any action or conduct of the manufacturer.

VISIBLE LOSS OR DAMAGE

If any of the goods called for on the bill of lading or express receipt are damaged or the quantity is short, do not accept them until the freight or express agent makes an appropriate notation on your freight bill or express receipt.

CONCEALED LOSS OR DAMAGE

When a shipment has been delivered to you in apparent good condition, but upon opening the crate or container,

loss or damage has taken place while in transit, notify the carrier's agent immediately.

DAMAGE CLAIMS

You must file claims for damage with the carrier. It is the transportation company's responsibility to reimburse you for repair or replacement of goods damaged in shipment. Claims for loss or damage in shipment must not be deducted from the Ingersoll-Rand invoice, nor should payment of Ingersoll-Rand invoice be withheld awaiting adjustment of such claims as the carrier guarantees safe delivery.

You may return products damaged in shipment to us for repair, which services will be for your account and form your basis for claim against the carrier.

United States Office Locations

For Order Entry and Order Status:

Ingersoil-Rand Distribution Center 510 Hester Drive P.O. Box 618 White House, TN 37188 Phone: (615) 672-0321 Telex: 786573 Fax: (615) 672-0801

For Technical Support:

ingersoll-Rand Material Handling 2724 Sixth Avenue South P.O. Box 24046 Seattle, WA 98124-0046 Phone: (206) 624-0466

Telex: 328795 Fax: (206) 624-6265

Regional Sales Offices

Atlanta, GA 111 Ingersoll-Rand Drive Chamblee, GA 30341 Phone: (404) 936-6230

Detroit, MI 23192 Commerce Drive Farmington Hills, MI 48335 Phone: (313) 476-6677 Fax: (313) 476-6670

Houston, TX 2500 East T.C. Jester Suite 150 Houston, TX 77008 Phone: (713) 864-3700

Los Angeles, CA 5533 East Olympic Blvd. Los Angeles, CA 90022 Phone: (213) 725-2826

Milwaukee, WI 12311 W. Silver Spring Dr. Milwaukee, WI 53225 Phone: (414) 461-0973

Philadelphia, PA 900 E. 8th Ave., Suite 103 P.O. Box 425 King of Prussia, PA 19406 Phone: (215) 337-5930

International

Offices and distributors in principal cities throughout the world. Contact the nearest Ingersoll-Rand office for the name and address of the distributor in your country or write/fax to: Ingersoll-Rand Material Handling P.O. Box 24046 Seattle, WA 98124-0046 USA Phone: (206) 624-0466 Telex: 328795 Fax: (206) 624-6265

Canada National Sales Office Regional Warehouse Toronto, Ontario 51 Worcester Road Rexdale, Ontario M9W 4K2 Phone: (416) 675-5611

Phone: (416) 675-5611 Fax: (416) 675-6920

Regional Sales Offices

Calgary, Alberta 333 11th Avenue S.W. Calgary, Alberta T2R 0C7 Phone: (403) 261-8652

Montreal, Quebec 3501 St. Charles Blvd. Kirkland, Quebec H9H 4S3 Phone: (514) 695-9040 British Columbia 201-6351 Westminster Hwy Richmond, B.C. V7C 5C7

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Latin America Operations ingersoll-Rand Production Equipment Group

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Telex: 441617TLS UI Fax: (305) 559-7505

Europe, Middle East and Africa Ingersoll-Rand Material Handling Samlia, Doual Operations 111, avenue Roger Salengro 59450 Sin Le Noble, France Phone: (33) 27-93-08-08 Fax: (33) 27-93-08-00

Asia - Pacific Ingersoll-Rand (Japan) Ltd. Kowa Bldg. No. 17 2-7 Nishi-Azabu 1-chome Minato-ku, Tokyo 106, Japan Phone: (03) 3403-0641/7 Fax: 81 3 3401-2049