PTA CANADA®

OPERATIONS MANUAL
BEAM TROLLEY

Part Number: _____

Serial Number: _____

Date of Purchase: _____

IMPORTANT SAFETY INFORMATION

Please read, understand and follow all safety information contained in these instructions prior to the use of this device. Retain these instructions for further use. These instructions are applicable for **Beam Trolleys** offered by Premium Tool & Abrasives Co. Ltd.

INTENDED USE

This device is designed to be used in the design and manufacture of cranes or monorails in accordance with ANSI/ASME B30.11. If a below-the-hook lifting device or sling is used with a hoist, refer to ANSI/ASME B30.9 “Safety Standard for Slings” or ANSI/ASME B30.20 “Safety Standard for Below-The-Hook Lifting Devices”. Only accessories specifically recommended by PTA Canada should be used with this tool. Use in any other manner or with other accessories could lead to unsafe operating conditions.

WARNING

This unit must only be used in compliance with all applicable safety regulations and standards, including ASME B30.11, concerning installation, use, maintenance and inspection of Monorails and Underhung Cranes.

WARRANTY

Premium Tool & Abrasives warrants its Beam Trolleys for a period of 1 year from the purchase date against manufacturing defects and will repair or replace (at its option) without charge any items returned. Repairs or replacements are warranted as described for the remainder of the original warranty period. Providing proof of purchase is strictly the responsibility of the customer. This warranty is void if the item has been damaged by accident or unreasonable use, neglect, improper service, or other causes not arising out of defects in material or workmanship. No other expressed warranty is given or authorized. Premium Tool & Abrasives disclaims any implied warranty of MERCHANTABILITY or FITNESS for any period beyond the expressed warranty and shall not be liable for incidental or consequential damages.
To obtain warranty service, please request a returned goods authorization number (RGA) from your nearest Authorized Warranty Repair Centre or from Premium Tool & Abrasives. Warranty claim items must be shipped to Premium Tool & Abrasives prepaid or delivered to 10761 - 181 ST, NW. Edmonton, AB, Canada, T5S 1N3.

FOR OTHER PRODUCT CATALOGUES, ASSISTANCE OR A DISTRIBUTOR IN YOUR AREA, PLEASE CALL:

1 800 661 6576

Find us online at: www.premiumtool.com

IMPORTANT SAFETY INSTRUCTIONS

- Read, understand and follow the safety information contained in these instructions prior to using this tool. Keep these instructions for further reference.
- This manual is a supplement to OSHA and ASME standards. Use this trolley in accordance with ASME B30.11.
- Maintain a beam trolley inspection report and inspect the trolley with a frequency compliant with ASME B30.11.
- Only trained and qualified personnel shall operate and maintain this equipment.
- Before attaching a below-the-hook lifting device or moving a load, confirm that the beam trolley is in good condition and functioning properly. Never use a beam trolley when malfunction, unusual performance, damage, or extensive wear are found.
- Always operate safely and never lift people or a load over people.
- Never lift loads heavier than the working load limit (WLL) as indicated on the trolley and test certificate.
- Never leave a suspended load unattended.
- Only use this trolley for vertical lifting. Avoid lateral loading the beam trolley.
- Remove all grease, oil, dirt, corrosion and mill scale from the supporting beam at the point where the trolley is to be attached.
- Never modify the beam trolley. Never weld on or drill through any beam trolley parts. Approval from PTA is required for all nonstandard maintenance.
- Use only genuine PTA parts when repairing beam trolleys.
- Never remove or obscure the name plate or other markings on the beam trolley.
- Temperature range: -20ºC to +60ºC

PRODUCT SPECIFICATIONS

PLAIN MANUAL BEAM TROLLEY

CAPACITY	PART NO.	A	B	C	D	E	F	G	H	I	J
1/2 TON	TM0400	9-1/2”	8-3/8”	7-7/8”	1-7/16”	15/16”	9/16”	4-5/16”	2-3/8”	1/8”	1”
1 TON	TM0401	10-1/2”	10”	9-1/16”	1-7/8”	1-3/16”	9/16”	4-15/16”	2-15/16”	1/8”	1”
2 TON	TM0403	12”	11-7/8”	10-13/16”	2-1/4”	1-7/16”	3/4”	5-15/16”	3-1/2”	1/8”	1”
3 TON	TM0404	14-1/8”	13-5/8”	13-3/8”	2-15/16”	1-3/4”	1”	7-1/4”	4-3/8”	1/8”	1”
5 TON	TM0405	14-5/8”	14-7/8”	15-1/2”	3-13/16”	2-3/8”	1-5/16”	8-11/16”	4-15/16”	1/8”	1”
10 TON	TM0406	15-7/8”	17-1/2”	19-11/16”	4-1/2”	3-1/8”	2”	11”	5-15/16”	1/8”	1-9/16”

CAPACITY	PART NO.	FLANGE WIDTH	MINIMUM CURVE RADIUS	SHIPPING WEIGHT	12” EXT. SHAFT
1/2 TON	TM0400	2-1/2” - 6”	36”	17.6 LBS	TMP2515E
1 TON	TM0401	2-1/2” - 8”	40”	26.5 LBS	TMP2530E
2 TON	TM0403	3-1/2” - 8”	43”	48.5 LBS	TMP2545E
3 TON	TM0404	4” - 8”	51”	89.3 LBS	TMP2560E
5 TON	TM0405	4-1/2” - 8”	55”	114.2 LBS	TMP2575E
10 TON	TM0406	5” - 8”	67”	220.5 LBS	TMP2589E

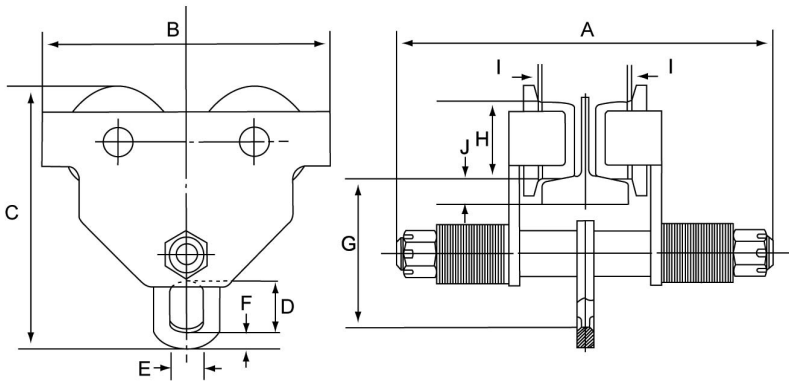

Figure 1

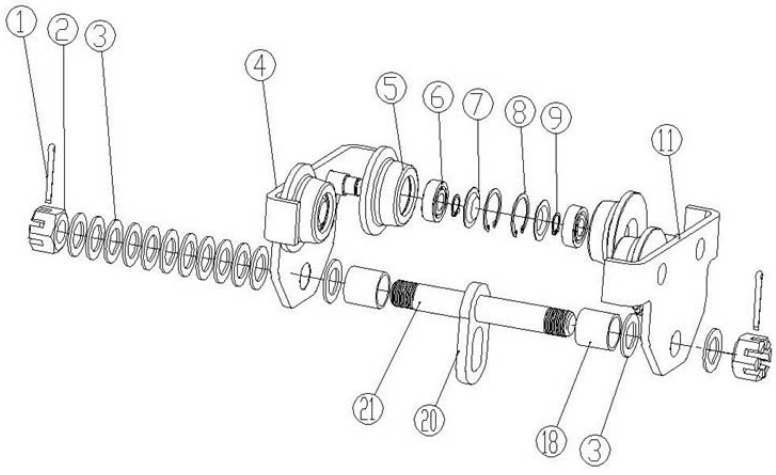

Figure 2

GEARED BEAM TROLLEY

CAPACITY	PART NO.	A	B	C	D	E	F	G	H	I	J
1 TON	TM0420	12-5/8”	10”	9-1/16”	1-7/8”	1-3/16”	9/16”	4-15/16”	2-15/16”	1/8”	1”
2 TON	TM0421	13-13/16”	11-7/8”	10-13/16”	2-1/4”	1-3/8”	3/4”	5-15/16”	3-1/2”	1/8”	1”
3 TON	TM0422	15-3/4”	13-9/16”	13-3/8”	2-15/16”	1-3/4”	1”	7-1/4”	4-7/16”	1/8”	1”
5 TON	TM0423	16-3/4”	14-13/16”	15-1/2”	3-13/16”	2-3/8”	1-5/16”	8-11/16”	4-15/16”	1/8”	1”
10 TON	TM0424	19-5/16”	17-1/2”	19-11/16”	4-1/2”	3-1/8”	2”	11”	5-15/16”	1/8”	1-9/16”

CAPACITY	PART NO.	FLANGE WIDTH	MINIMUM CURVE RADIUS	SHIPPING WEIGHT	12” EXT. SHAFT
1 TON	TM0420	2-1/2” - 6”	40”	41.2 LBS	TMP2530E
2 TON	TM0421	3” - 6-1/2”	43”	59.1 LBS	TMP2545E
3 TON	TM0422	3” - 8”	51”	103 LBS	TMP2560E
5 TON	TM0423	3-1/2” - 8”	55”	131.2 LBS	TMP2575E
10 TON	TM0424	5” - 8”	67”	235.9 LBS	TMP2589E

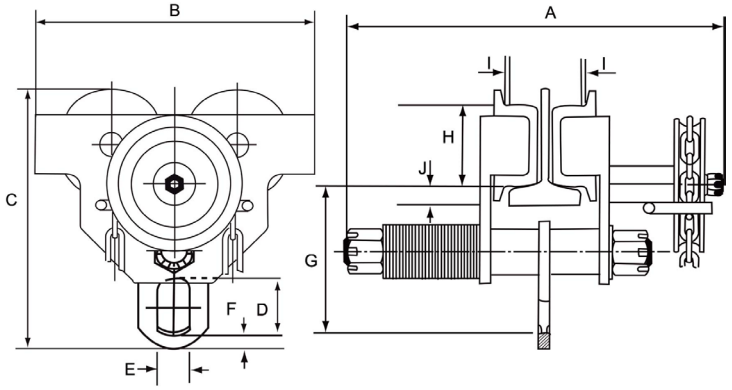

Figure 3

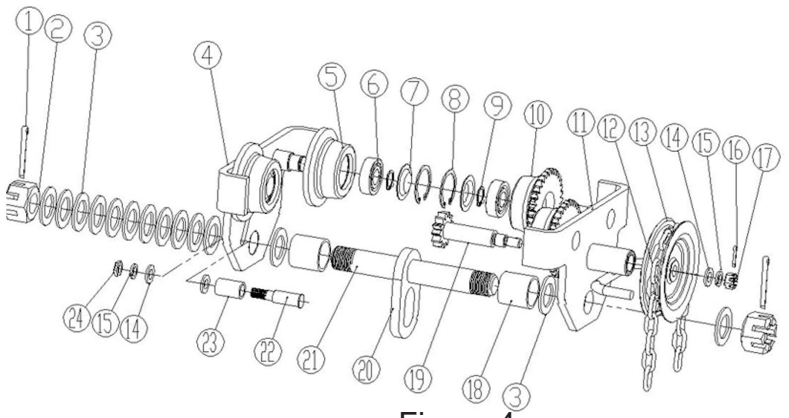

Figure 4

USAGE INSTRUCTIONS

1 OPERATION AND INSTALLATION

- To install the beam trolley, measure the width of your beam. This measurement should equal the sums of the minimum flange width and spacers needed. Always use at least one spacer.
- Distribute the needed spacers equally between the sides. Place them in between the fixing spacer (Part 18, Fig. 2 & 4) and the side plates (Part 4 & 11, Fig. 2 & 4).
- Put the remainder of the spacers on the exterior of the side plates (Part 3, Fig. 2 & 4).
- Hand-tighten the nuts to hold the trolley side plates together.
- Gently pull the trolley downward to take up any play and even out the cross shaft holes.
- Make sure the load point on the cross shaft (Part 20, Fig. 2 & 4) is centred with the centre of the rail.
- Tighten each cross shaft nut until tight, aligning the slots in the nut with the hole in the shaft.
- Insert the cotter pins through each nut. Spread the cotter pin end open.
- For manual trolleys, manipulate the load along the track by pulling the load or by the hook of the attached hoist.
- For geared trolleys, pull hand chain in desired direction for precise load movement
- Avoid collisions with the end stops or other trolleys, as damage may result.

2 INSPECTION & MAINTENANCE

- Inspect the trolley before each lift in accordance with ASME B30.11 (Page 4). Complete inspection log if necessary.
- Avoid damage to the wheels. Keep dirt and grit away from the wheels and supporting track while in use.

3 PREVENTATIVE MAINTENANCE

- Under Normal Service, the beam trolley and parts will be meticulously inspected for cracks, deformation, damage and proper functioning by a qualified person.
- All repairs and repair procedures must follow ASME B30.11.
- Repaired and maintained beam trolleys must have an approval sticker with the year and month of service and the name and address of the repairer.

WARNINGS AND PRECAUTIONS

DO	DO NOT
1. DO read and understand the operator's manual before using trolley.	1. DO NOT lift loads over anyone at anytime.
2. DO consult Operator's manual or PTA when in doubt.	2. DO NOT use a trolley that has been overloaded or damaged.
3. DO inspect the trolley regularly.	3. DO NOT side load or swing loads.
4. DO use correct trolley for the job.	4. DO NOT leave a load suspended without supervision.
5. DO make sure the hoist attached is supported at the hook saddle.	5. DO NOT exceed permitted load carrying capacity.
6. DO store in a no-load condition.	6. DO NOT grind, weld or modify the trolley in any way.
7. DO report malfunctions or unusual performance of the trolley and remove from service until the issues are resolved.	7. DO NOT use the trolley in a way that could result in shock or impact loads being applied to the trolley.

ASME/ANSI/OSHA INSPECTION COMPLIANCE

- New and reinstalled lifters shall be inspected by a designated person prior to initial use to verify ASME B30.11 compliance.
- Inspection procedures are divided into three categories based upon intervals of inspection.
- **Every lift**: Visual inspection by the operator before and during use. No written record necessary. Visual inspection shall include:
  - a) Surface of the load or trolleying parts for scale, grease, oil, paint, water, ice, moisture, dirt and/or coatings
  - b) Condition and operation of moving/functional parts
- **Frequent Inspection**: Visual inspection by operator or designated person depending on use. Records not required.
  - a) Normal service - Monthly
  - b) Heavy service - Weekly to monthly
  - c) Severe service - Daily to weekly
- Frequent Inspection shall include visual inspection of:
  - a) Inspect in accordance with Every Lift guidelines
  - b) Structural members for deformation, cracks or excessive wear on any part of the beam trolley
  - c) Loose or missing guards, fasteners, covers, stops or nameplates
  - d) All functional operating mechanisms for anything interfering with normal operation
  - e) Connection points between trolley and hoist and/or support structure in accordance with ANSI/ASME B30.11

  Periodic inspection: Visual inspection by a qualified person making dated records or apparent external conditions to provide the basis for a continuing evaluation.
- Inspection frequency based on use:
  - a) Normal service - Yearly
  - b) Heavy service - Semi-annually
  - c) Severe service - Quarterly
- Periodic inspection shall include visual inspection of:
  - a) Inspect in accordance with Every Lift and Frequent Inspection guidelines
  - b) Loose bolts or fasteners
  - c) Cracked, worn or corroded parts such as trolley wheels, load shafts, or load shackles
  - d) Evidence of damage to body
  - e) Applicable labels and markings for legibility
- Equipment not in use for more than 1 month must be inspected in accordance with Frequent Inspection criteria.
- Equipment not in use for more than 1 year must be inspected in accordance with Periodic Inspection criteria.

ASME MINIMUM INSPECTION FOR BELOW THE HOOK DEVICES

	Normal Service		Heavy Service		Severe Service	
	Visual Monthly (1)	Record Yearly (2)	Visual Weekly to Monthly (1)	Record Semi annually (3)	Visual, Daily to Weekly (3)	Record Weekly (3)
Frequent Inspection - structural deformation, cracks or excessive wear of any part of the beam trolley	x		x		x	
Loose or missing guards, fasteners, covers, stops, handles or nameplates	x		x		x	
All functional operating mechanisms and automatic hold and release mechanisms for misadjustments interfering with operation	x		x		x	
Periodic Inspection - loose pins, washers and screws		x		x		x
Cracked, bent or worn body pieces, shackles, handles, screws		x		x		x
Removed or obscured identification and specification plates or stickers		x		x		x

1) By operator or designated person with records not required.
2) Visual inspection by designated person making records of apparent external conditions to provide the basis for a continuing evaluation.
3) As in Note 2, unless external conditions indicate that disassembly should be done to permit detailed inspection.