

# SVERO

# SVERO TYPE 27

0,5 – 1 ton

READ THIS MANUAL BEFORE USING THESE PRODUCTS. This manual contains important safety, installation and operation information This manual provides important information for all personnel involved with the safe installation and operation of these products. Even if you feel you are familiar with this or similar equipment, you should read this manual before operating the product.

**SVERO** recognizes that most companies who use hoists have a safety program in force in their plants. In the event you are aware that some conflict exists between a rule set forth in this publication and a similar rule already set by an individual company, the more stringent of the two should take precedence. Safe Operating Instructions are provided to make an operator aware of unsafe practices to avoid and are not necessarily limited to the following list. Refer to specific sections in the manual for additional safety information. Safe Operating Instructions are provided to make an operator aware of unsafe practices to avoid and are not necessarily limited to the following list.

# SAFETY INFORMATION

Make this manual available to all persons responsible for the installation, operation and maintenance of these products.

- Do not use for lifting, supporting, or trans-porting people or lifting or supporting loads over people.
- Always operate, inspect and maintain in accordance with any federal, state or local regulations and any other applicable safety codes.
- The supporting structures and load-attaching devices used in conjunction with this trolley must provide an adequate safety factor to handle the rated load, plus the weight of the trolley and attached equipment. This is the customer's responsibility. If in doubt, consult a registered structural engineer.
- To avoid an unbalanced load which may damage the trolley, the hoist must be centered under the trolley.
- Ensure capacity of hoist does not exceed the rated capacity of the trolley assembly.
- To avoid an unbalanced load, center hanger shaft between trolley plates using properly installed spacer washers.
- Trolley wheels ride on the top of the lower flange of the beam.
- Install manual chain hoists so that hoist hand chain is on opposite side of trolley hand chain.
- Visually inspect components for distortion, wear and damage during installation. Replace any item indicating damage, distortion and/or excessive wear.
- Depending on the size you select, the trolley alone may weigh more than 400 lb (180 kg). If parts of the trolley or hoist are dropped, they can cause severe injure or damage property. Adequately support the trolley when lifting into place on the beam.
- Severe injury can be caused by:
  - 1) Falling under a moving load,
  - 2) Being caught between a moving load and an object,
  - 3) Tripping over an unseen object. To avoid injury, push to move the trolley, do not pull. Pushing will allow you to stay out of the path of the load and also look in the direction you are moving.

# SAFE OPERATING INSTRUCTIONS

Safe Operating Instructions are provided to make an operator aware of dangerous practices to avoid and are not necessarily limited to the following list. Refer to specific sections in the manual for additional safety information. If this trolley is used in conjunction with a hoist, also refer to the hoist manual for additional safe operating instructions.

- 1) Before each shift, the operator should inspect the trolley for wear or damage.
- 2) Never use a trolley that inspection indicates is damaged.
- 3) Only attach a hoist having a rated capacity equal to or less than the capacity of the trolley.
- 4) Only operate a trolley when the load is centered under the trolley. Do not "side pull" or "yard."
- 5) Make sure all people are clear of the load path. Do not lift a load over people.
- 6) Avoid collision or bumping of trolley.
- 7) Ensure stops are securely installed at both ends of the beam prior to using trolley.
- 8) Never splice a hand chain by inserting a bolt between links.
- 9) Do not swing a suspended load.

# INSTALLATION

1) To avoid an unbalanced load which may damage the trolley, the hoist must be centered under the trolley.

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2) Ensure capacity of hoist does not exceed the rated capacity of the trolley assembly.



- 3) To avoid an unbalanced load, center hanger shaft between trolley plates using properly installed spacer washers.
- 4) Before installing, read "SAFETY INFORMATION."
- 5) The total clearance between the beam and the trolley wheel flanges is 1/16 to 1/8 in (1.6 to 3.2 mm) maximum per side. (Refer to Dwg. T-01 & T-02).
- 6) Trolley wheels ride on the top of the lower flange of the beam.
- 7) Trolleys have universal wheels for mounting on flat or tapered beams.
- 8) Install manual chain hoists so that hoist hand chain is on opposite side of trolley hand chain.
- 9) Visually inspect components for distortion, wear and damage during installation. Replace any item indicating damage, distortion and/or excessive wear.
- 10) Depending on the size you select, the trolley alone may weigh more than 400 lb (180 kg). If parts of the trolley or hoist are dropped, they can cause severe injure or damage property. Adequately support the trolley when lifting into place on the beam.

#### OPERATION

The four most important aspects of operation are:

- 1) Follow all safety instructions when operating.
- 2) Allow only people instructed in safety and operation of this product to operate.
- 3) Subject each trolley to regular inspections and a scheduled maintenance program.
- 4) Be aware of the hoist and trolley capacity and weight of load at all times. Do not overload.

#### **INITIAL OPERATING CHECKS**

- 1) After trolley installation ensure the side plates are vertical.
- 2) With hoist installed, verify that hoist is centered below trolley.
- 3) Raise a load equal to the lower of the rated capacities of either the trolley or hoist a few inches (cm) off the floor.
- 4) To move an unloaded hoist/trolley, push on the hoist load chain.
- 5) To move a loaded hoist/trolley, push on the load or the hoist load hook shank.
- 6) When operating the trolley keep load as close to the floor as practical.

#### LUBRICATION

Trolleys are equipped with sealed bearings which require no lubrication.

#### **Geared Pinion Shaft**

Lubricate pinion before installing in geared side plate. For temperatures -29° to 10° C use EP 1 grease or equivalent. For temperatures -1° to 49° C use EP 2 grease or equivalent.

#### **Geared Trolley Wheels**

Lubricate exposed trolley drive pinion and wheel teeth. Brush with grease as often as necessary to keep teeth liberally covered. If the grease becomes contaminated with sand, dirt or other abrasive materials, clean off old grease and brush on new. For temperatures -29° to 10° C use EP 1 grease or equivalent. For temperatures -1° to 49° C use EP 2 grease or equivalent.

#### INSPECTION

There are two types of inspection: the frequent inspection performed by the operator and periodic inspections performed by personnel trained in inspection and maintenance of the trolley. Careful inspection on a regular basis will reveal potentially dangerous conditions while still in the early stages, allowing corrective action to be taken before the condition becomes dangerous. Any deficiency revealed through inspection must be reported to an appointed person. A determination must be made as to whether a deficiency constitutes a safety hazard before resuming operation of the trolley or hoist.

#### **Records and Reports**

Some form of inspection record should be maintained for each trolley, listing all points requiring periodic inspection. A written report should be made quarterly on the condition of the critical parts (e.g. wheels, bearings, side plates and hoist hanger shaft) of each trolley. These reports should be dated, signed by the person who performed the inspection, and kept on file where they are readily available to authorized personnel.

# **Frequent Inspection**

On trolleys in continuous service, frequent inspection should be made at the beginning of each shift. In addition, visual inspections should be conducted during regular service for any damage or evidence of malfunction.

1. **OPERATION**. Operate the trolley so that it travels 1 meter. During the 1 meter of travel, check for visual signs or abnormal noises which could indicate a problem. Check for smooth operation. Do not operate the trolley until all problems have been corrected.

# **Periodic Inspection**

Frequency of periodic inspection depends on the severity of usage:

NORMAL	HEAVY	SEVERE
yearly	semiannually	quarterly

Disassembly may be required for HEAVY or SEVERE usage. Keep accumulative written records of periodic inspections to provide a basis for continuing evaluation. Inspect all the items in "Frequent Inspection." Also inspect the following:

- 1) **FASTENERS**. Check retainer rings and nuts. Replace if missing or damaged and tighten if loose.
- ALL COMPONENTS. Inspect for wear, damage, distortion, deformation and cleanliness. If external evidence indicates the need, disassemble. Check shafts, wheels, bearings and side plates. Replace worn or damaged parts. Clean and reassemble.
- 3) **SUPPORTING STRUCTURE**. Check for distortion, wear and continued ability to support load.
- 4) **TROLLEY**. Check that the trolley wheels track the beam properly and total clearance between each wheel and beam equals 1.6 to 3.2 mm. Check side plates for spreading due to bending. Replace as necessary.
- 5) LABELS. Check for presence and legibility. Replace if necessary.

# MAINTENANCE

- Never perform maintenance on the trolley while it is supporting a load.
- After performing any maintenance on the trolley, test trolley, as described in the "OPERATION" section, before returning trolley to service.
- When cutting the weld side of a hand chain link, do not cut or nick the opposite side. A damaged link must be replaced to prevent premature failure. A falling hand chain can injure personnel.
- Proper use, inspections and maintenance will increase the life and usefulness of your **SVERO** equipment. During assembly lubricate gears, nuts, bolts and all machined threads with applicable lubricants. Use of antiseize compound and/or thread lubricant on capscrew and nut threaded areas prevents corrosion and allows for ease of disassembly of component.

Trolley wheel bearings are sealed and require no lubrication. If trolley wheel rotation is rough or noisy, replace trolley wheel bearing. Threaded components on this trolley are metric. Verify and match thread sizes before assembly. Check operation of trolley according to the instructions in the "INSPECTION" and "OPERATION" sections

# Hand Chain Adjustment or Replacement (Refer to Dwg. C-02 and C-03)

When cutting the weld side of a hand chain link, do not cut or nick the opposite side. A damaged link must be replaced to prevent premature failure. A falling hand chain can injure personnel.

- To create a "C" link, cut the welded side of the link with a hack saw. (Refer to Dwg. C-02) Clamp one side of the "C" link in a vise and bend it open by using pliers to grip the exposed part of the link. (Refer to Dwg. C-03)
- 2) If you are replacing the hand chain, disconnect it at the "C" link and carefully remove the hand chain.
- 3) To replace chain:
  - a) Cut a length of chain 2 times the required hand chain drop plus 1 foot (30 cm).
  - b) Run the new chain up through the left hand chain guide, around the hand wheel, making sure the hand chain is seated in the hand wheel pockets, and back down through the right hand chain guide.
- 4) To adjust chain length:
  - a) Add or remove a length of chain 2 times the desired amount of chain adjustment.

- b) To prevent the hand chain from twisting maintain an even number of links
- 5) Connect the hand chain ends with the "C" link(s), make the total number of links even, and bend the "C" link(s) shut.
- 6) Make sure the hand chain is not twisted. To untwist, open a "C" link and remove one hand chain link.

#### **1 YEAR LIMITED WARRANTY**

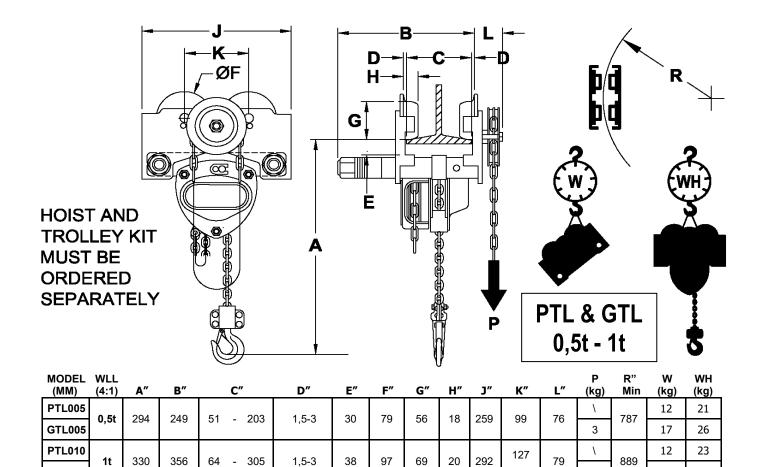
We make every effort to assure that our products meet high guality and durability standards and we warrant to the original consumer of our products that each product be free from defects in material and workmanship as follows: 1 Year limited warranty on all our products. The warranty does not apply to defects due directly or indirectly to misuse, negligence or accidents, repairs or alterations outside our facilities or to a lack of maintenance. We limit all warranties to the period specified above from the date the product was purchased at retail. Please retain your dated sales receipt as proof of purchase to validate the warranty period. Except as stated herein, any implied warranties or merchantability and fitness are excluded. Some states do not allow limitations on how long the warranty lasts; hence the above limitation may not apply to you. We shall in no event be liable for death, injuries to persons or property or for incidental, contingent, special or consequential damages arising from the use of our products. Some states do not allow the exclusions or limitation of incidental or consequential damages; hence the above limitations or exclusions may not apply to you. To take advantage of this warranty, the product must be returned for examination, postage prepaid to an authorized service station. Proof of purchase date and an explanation of the complaint must accompany the product. If our inspection discloses a defect we will either repair or replace the product or refund the purchase price, if we cannot quickly provide a repair or replacement, if you are willing to accept such a refund. We will return repaired products or the replacement at our expense, but if we find that there is no defect, or that the defect resulted from causes not within the scope of this warranty, then the user must bear the cost of returning the product. This warranty gives you specific legal rights, and you may also other rights that vary from state to state. have

#### EC DECLARATION OF CONFORMITY

SVERO LIFTING AB Momarken 19, S-556 50 Jönköping,

declares that above SVERO trolley models -20, -21, -24 have been manufactured in conformity with the requirements of the EC Machinery Directive 2006/42/EG.

Håkan Magnusson (Manager)

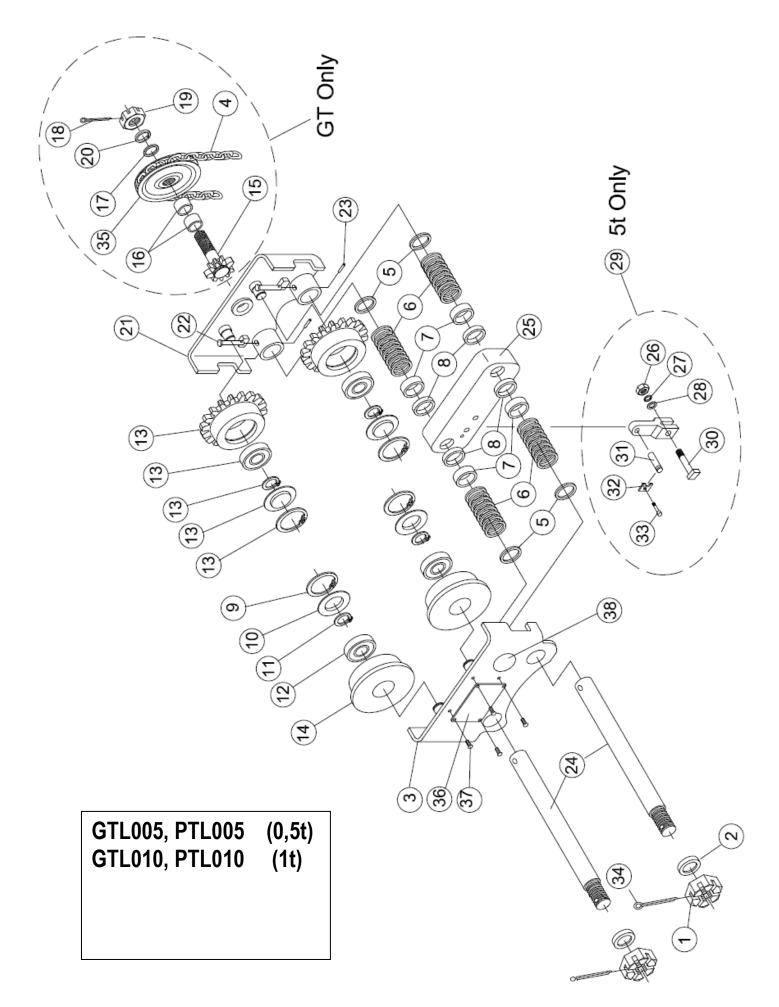


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GTL010



#	G & PTL005 (0,5t)	G & PTL010 (1t)	
1	P-GTL005-3-8	P-GTL010-3-8	
2	P-GTL005-3-6	P-GTL010-3-6	
2	P-GTL005-3-7	P-GTL010-3-7	
3	P-GTL005-2-1	P-GTL010-2-1	
4	C5X24Z		
6	P-GTL005-3-5	P-GTL010-3-5	
7	P-GTL005-3-3	P-GTL010-3-3	
	P-GTL005-3-2	P-GTL010-3-2	
9	P-GTL005-2-1.5	P-GTL010-2-1.5	
10	P-GTL005-2-1.4	P-GTL010-2-1.4	
11	P-GTL005-2-1.3	P-GTL010-2-1.3	
12	P-GTL005-2-1.2	P-GTL010-2-1.2	
13	P-GTL005-1-1.1	P-GTL010-1-1.1	
14	P-GTL005-2-1.1	P-GTL010-2-1.1	
15	P-GTL005-15	P-GTL010-15	
16	P-GTL005-16	P-GTL010-16	
17	P-GTL005-1-3	P-GTL010-1-3	
18	P-M2.5X25 COTTER		
19	P-GTL005-1-5	P-GTL010-1-5	
20	P-GTL005-1-4	P-GTL010-1-4	
21	P-GTL005-1-1	P-GTL010-1-1	
22	P-GTL005-3-10	P-GTL010-3-10	
23	P-GTL005-3-10		
24	P-GTL005-3-1	P-GTL010-3-1	
25	P-GTL005-3-4	P-GTL010-3-4	
33	P-GTL050-33		
34	P-GTL005-3-9	P-GTL010-3-9	
35	P-GTL010-1-2		
36	P-NPL-TL005	P-NPL-TL010	
37	P-M2.5X6 SCREW DRIVE		
38	P-WARN-LP		