

MAINTENANCE

Keep your shop crane clean and well lubricated. Before each use or every 3 months, whichever comes first, lubricate all pivot points of the legs, boom and wheel axils with a light machine oil or motor oil. Also wipe down the surface of the ram and pump piston with an oily rag to protect them from corrosion. Once a year, apply grease to the caster swivel bearings.

STORAGE

Your shop crane comes equipped with fold-up legs for ease of storage. Simply pull the retaining pins, remove the leg pins, swing the legs up to the vertical position, and re-insert the leg pins through the leg support plates and replace the retaining pins. Also during storage, the ram and pump piston should be in the fully down or retracted position. The will protect their precision machined surfaces from corrosion.

LIMITED WARRANTY...

SNAP-ON® WARRANTS TO ITS CUSTOMERS THAT THE COMPANY'S SNAP-ON BRANDED PRODUCTS ARE FREE FROM DEFECTS IN WORKMANSHIP AND MATERIALS.
Snap-on® will repair or replace its Blue-Point® branded products which fail to give satisfactory service due to defective workmanship or materials, based upon the terms and conditions of the following described warranty plans attributed to that specific product. This product carries one year warranty. during this warranty period, Snap-on® will repair or replace at our option any part or unit which proves to be defective in material or workmanship.

Other important warranty information...

This warranty does not cover damage to equipment or tools arising from alteration, abuse, misuse, damage and does not cover any repairs or replacement made by anyone other than Snap-on® or its authorized warranty service centers. The foregoing obligation is Snap-on's sole liability under this or any implied warranty and under no circumstances shall we be liable for any incidental or consequential damages.

Note: Some states do not allow the exclusion or limitation of incidental or consequential damages so the above limitation or exclusion may not apply to you. This warranty gives you specific legal rights and you may also have other rights which vary from state to state. Repair kits and replacement parts are available for many of Snap-on® products regardless of whether or not the product is still covered by a warranty plan.

For warranty service information, call toll-free 1-888-448-6746, or contact your local Blue-Point® warranty center on the enclosed list.

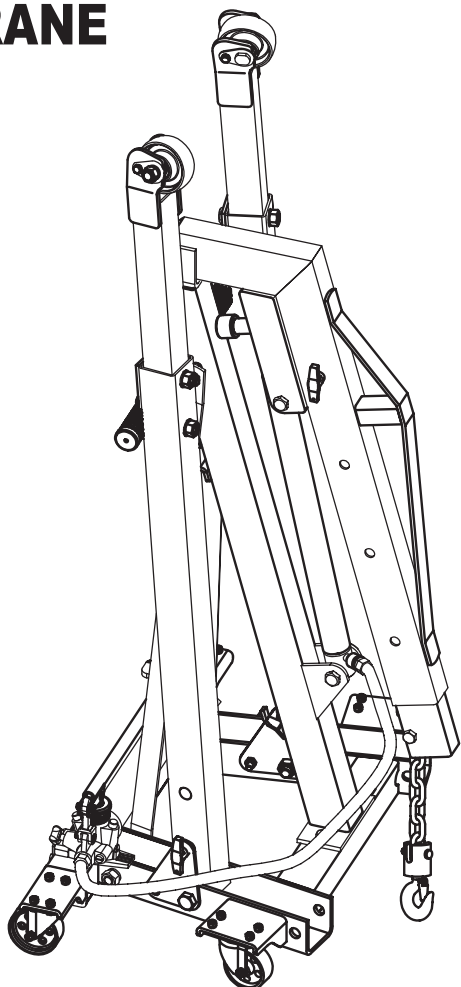
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FOR CUSTOMER SERVICE
1-888-448-6746
Printed In China



Model YA778

2 Ton Capacity
FOLDING HYDRAULIC
SHOP CRANE



FOR YOUR SAFETY

PLEASE READ THESE INSTRUCTIONS CAREFULLY AND RETAIN THEM FOR FUTURE USE

REF #	PART #	DESCRIPTION	QTY	REF #	PART #	DESCRIPTION	QTY
1	Base	Base	1	26	YA778-26	Retaining Pin	1
2	Base	Base	1	27	YA778-27	Retaining Pin	1
3	Support Strap	Support Strap	2	30	YA778-30	Hose Only	1
4	YA778-4	Swivel Caster 3-1/2"	2	31C	YA778-31C	Hose Only	1
5	YA778-5	Swivel Caster 3"	2	31		Bolt M16-90	1
6	Bolt M8-70	Bolt M8-70	16	32		Pump Anchor	1
7	Nut M8	Nut M8	16	33		Boom Extension	1
8	Washer 18	Washer 18	3	34		Boom Extension	1
9	Bolt M14-95	Bolt M14-95	2	35		Boom Extension	1
10	Nut M14	Nut M14	3	36		Bolt M18-100	1
11	Washer 14	Washer 14	3	37		Bolt M18-75	1
12	Bolt M16-20	Bolt M16-20	2	38		Bolt M16-75	8
13	Nut M16	Nut M16	8	39		Pump Anchor	1
14	Bolt M16-100	Bolt M16-100	6	40		Pump Anchor	1
15	Washer M16	Washer M16	6	41		Filler Cap	1
16	Front Leg	Front Leg	2	42		Bolt M16-90	4
17	Extension Leg	Extension Leg	2	44	YA778-44	Dowel Pin	1
18	Front Wheel	Front Wheel	2	45		Dowel Pin	1
19	YA778-19	Front Wheel	2	46		Handle	1
20	Leg Retaining Bar	Leg Retaining Bar	4	46		Handle	1
21	Nut M18	Nut M18	3				
22	Washer 18	Washer 18	3				
23	Nut M10	Nut M10	2				
24	Nut M10	Nut M10	2				
25	Nut M10	Nut M10	2				
26	YA778-26	Retaining Pin	2				
27	YA778-27	Retaining Pin	2				

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WARNING!

- STUDY AND UNDERSTAND AND FOLLOW ALL WARNINGS AND INSTRUCTIONS BEFORE USING THIS STAND.
- DO NOT EXCEED RATED LOAD CAPACITY OF THE LOAD LEVELER.
- USE ONLY CHAINS AND SLINGS WITH A RATED CAPACITY GREATER THAN THE WEIGHT OF THE LOAD BEING LIFTED.
- USE ONLY ON HARD LEVEL SURFACES CAPABLE OF SUSTAINING A FULL CAPACITY LOAD.
- LOWER LOAD TO LOWEST POSSIBLE POINT BEFORE ATTEMPTING TO MOVE THIS HOIST.
- DO NOT ATTEMPT TO MOVE A LOADED HOIST ACROSS A SURFACE THAT IS UNEVEN OR HAS CARCKS OR OTHER OBSTACLES THAT COULD IMPEDE MOVEMENT.
- DO NOT ALLOW LOAD TO SWING OR DROP SUDDENLY WHILE LOWERING OR MOVING.
- DO NOT MAKE ALTERATIONS TO THIS HOIST OR LOAD LEVELER.
- KEEP BODY AND ALL BODY PARTS FROM UNDER LIFTED LOAD AT ALL TIMES.
- BEFORE MOVING, MAKE SURE THAT HOIST IS FREE TO MOVE AND WILL CLEAR ALL OBSTRUCTIONS.
- MAKE SURE ALL PERSONS STAY CLEAR OF SUSPENDED LOAD.
- NEVER LEAVE A SUSPENDED LOAD UNATTENDED.
- USE ONLY TORIN QUALITY ADAPTORS AND/OR ATTACHMENTS.
- KEEP THIS MANUAL FOR FUTURE USE.
- FAILURE TO HEED THESE WARNINGS MAY RESULT IN PERSONAL INJURY, PROPERTY DAMAGE AND/OR DEATH.

BOOM POSITION	HOOK/UPPER LIMIT	HOOK/LOWER LIMIT
2 TON	67"	5"
1-1/2 TON	71"	FLOOR
1 TON	75"	FLOOR
1/2 TON	80"	FLOOR

DESCRIPTION

This shop crane (hoist) is a device intended primarily for use in removing and reinstalling automotive engines, but may be used in any application (when appropriate) involving lifting and maneuvering loads. The hoist incorporates an extendable multi-position boom for use when an extended reach is required. It must be noted, however, that each boom position has its own rated capacity and as the boom is extended, the rated capacity goes down. The hoist is equipped with wheels and casters for mobility, and the legs are capable of folding upwards, leaving the hoist with a small footprint for ease of storage.

OWNER/OPERATOR RESPONSIBILITY

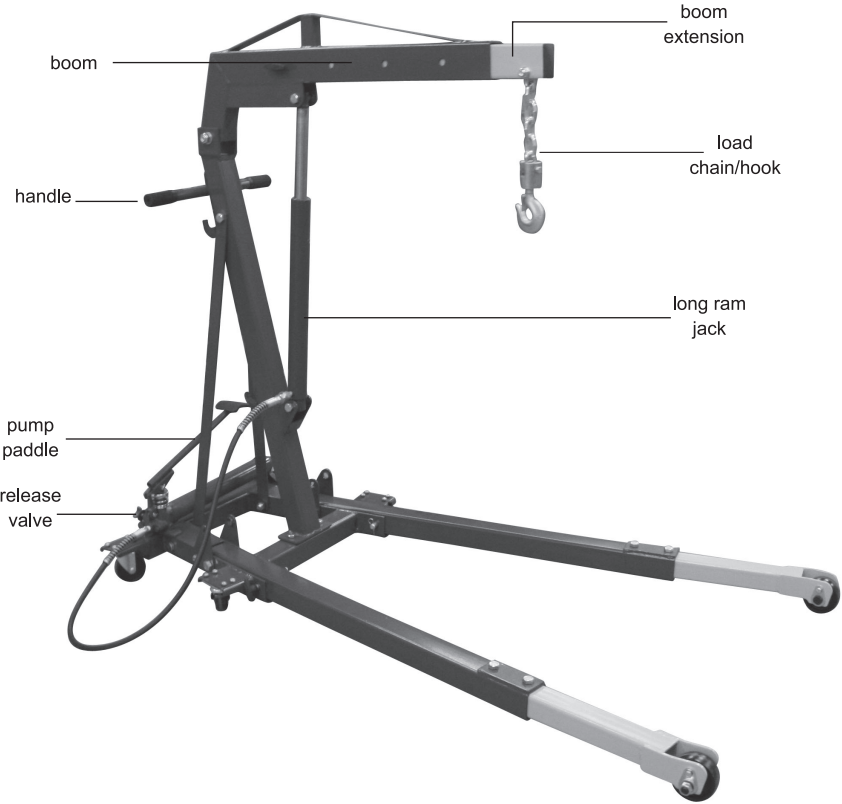
The owner and/or operator of this product must have a complete understanding of all warnings and instructions including inspection and maintenance procedures contained in this manual and on the product labels before using this product. Anyone involved in the use and/or operations of this device must be careful, competent and qualified in its safe operation and use. If the operator is not fluent in English, instructions and warnings must be read to and discussed with the operator in the operator's native language, ensuring comprehension and understanding. It is also the responsibility of the owner/operator to study and keep this manual and all product warning labels intact and legible for future reference. Replacement labels and manuals are available upon request.

OPERATION - SHOP CRANE

Set the boom extension to an appropriate position giving consideration to the weight of the load to be lifted. Close the release valve on the ram by turning the valve handle on the hydraulic ram all the way to the right (Clockwise) DO NOT over tighten. The hydraulic ram on the hoist uses speed set flow control technology that allows the user to manually lift the boom into position. Simply lift the boom to the desired position and hold for a second or two and the boom will stay in place. Then pump the paddle up and down until the hook reaches the desired height. Attach the load to be lifted to the load hook using the load leveler, pump the paddle up and down until the load reaches the desired height. There is a red mark ram that indicates when its fully extended. When the red mark becomes visible, DO NOT attempt to a minimum height at all times for any given location. When transferring a load to another type of support system (such as placing an engine on a engine stand), be sure that all connections are tight before lowering the boom and transferring load. Lower the boom by slowly turning the release valve to the left (counterclockwise). Be very careful when opening the release valve, as opening it too much too quickly can allow the load to drop very suddenly and rapidly.

IMPORTANT NOTE

It is possible that during shipment and handing, air can get into the hydraulic system causing poor lifting performance. To purge air from the system, fully open the release valve by turning (counterclockwise) 1/4 - 1/2 turn (90-180°). While holding the boom down, pump the paddle up and down rapidly several times.



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INSPECTION

A complete visual inspection shall be made before each use of the hoist. Check for broken or cracked welds, leaks, bent or damage metal, excessive rust and bent, damage, loose or missing parts. Check the surface of the ram and pump piston for corrosion and/or pitting. Check that the wheels and casters operate smoothly and properly. If signs of anything other than smooth and proper operation is found, IMMEDIATELY inspect as described above to determine if it is suitable for use. If you are unsure about the condition of your shop crane, please call our customer service hotline at 1-888-448-6746.

TOOLS NEEDED FOR ASSEMBLY

- One 14mm box end wrench
- One 14mm wrench of any type
- Two wrenches of any type in each of the following sizes: 22mm, 24mm, 27mm.
- NOTE: a) All fasteners are metric. Inch approximations have been given for ease or identification.
- b) Bolt head hex size matches nut hex size for all nut/bolt combinations.

ASSEMBLY INSTRUCTIONS

- DO NOT tighten bolts until instructed.
- Inventory all fasteners against parts list.
- Secure and tighten two 3" Casters (5) to base (1), using M8x20 Bolts (6), M8 Nuts (7) and Lock Washers (8).
- Secure and tighten two 3-1/2" Casters (4) to rear Base (1) using M8x20 Bolts (6), M8 Nuts (7) and Lock Washers (8).
- Attach legs (17) to base (1): Note: When attaching legs there is a right leg and a left leg. When assembled correctly, the front wheels will be parallel to each other. IF ASSEMBLED INCORRECTLY, the front wheels should be turned away from each other. Install retaining bars (20) to outside of each side of base (between welded pins, as shown). fasten with M18x125 bolts (21), M18 nuts (22) and 18 lock washer (26). Keep finger tight at this time.
- Install dowel pins (27) to each leg and secure with retaining clip (28).
- Attach mast (2) to base (1) using M14x95 bolts (9), M14 nuts (10) and 14 washers (11).
- Attach mast support straps (3) to mast (2) as shown using M16x100 bolt (15), M16 nut (13) and 16 washer (16).
- Attach master support straps (3) to base (1) using M16x20 bolts (12), M16 nuts (13) and 16 washer (14). Note: Be sure the straps are secured under the bolt head as shown, NOT under the nut and washer.
- Now go back and tighten all bolts and nuts on the mast, base and legs.
- Attach bottom of ram (29A) to mast (2) using M16x90(8.8), Bolt (30), M16 nut (16) and 16 washer (13).
- Attach boom (33) to mast (2) using M18x100(8.8) bolt (36), M18 nut (22) and 18 washer(23).
- Connect free hose end of portable pump (29B) to ram (29A) at the connection sleeve at the base of the ram (29A). Hand tighten snugly.
- Extend ram (29A) piston by pumping (29B) to extend the position for attaching to boom (33) as shown.
- Slide boom extension (34) into boom (33) and secure at one of the four holes (based on the load requirement) along the boom (33) using dowel pin (44), retaining clip (28).
- Secure load hook and chain (35) to boom extension (34) using M14x65 (8.8) bolt (41), M14 nut (10) and 14 washer (11).
- Attach handle (46) to mast (2) using M8x12 bolt (45) and lock washer (8).

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