



## Performance Tool W41049 1 Ton Folding Engine Crane Owner's Manual

[Home](#) » [Performance Tool](#) » Performance Tool W41049 1 Ton Folding Engine Crane Owner's Manual 



**1 TON  
FOLDING ENGINE CRANE  
Item Number W41049  
OWNER'S MANUAL**



## Contents

1 W41049 1 Ton Folding Engine Crane
2 SPECIFICATIONS:
3 GENERAL SAFETY
4 IMPORTANT SAFETY INFORMATION
5 PARTS LIST
6 ASSEMBLY INSTRUCTIONS
7 OPERATION
8 TROUBLESHOOTING
9 CARE AND MAINTENANCE
10 Documents / Resources
10.1 References

## W41049 1 Ton Folding Engine Crane

**WARNING:** READ, UNDERSTAND AND FOLLOW ALL INSTRUCTIONS AND WARNINGS BEFORE OPERATING THIS TOOL. FAILURE TO DO SO MAY RESULT IN PERSONAL INJURY AND/OR PROPERTY DAMAGE AND WILL VOID WARRANTY.

### SPECIFICATIONS:

Max. Capacity	2,000 lbs.
Base Length	63 in.
Base Width	35 in.
Height Range	75 to 84-3/8 in.
Boom Range	35-1/4 to 45-7/8 in.


Specifications are subject to change without notice.


### SAFETY GUIDELINES / DEFINITIONS


This instruction manual is intended for your benefit. Please read and follow the safety, installation, maintenance and troubleshooting steps described within to ensure your safety and satisfaction. The contents of this instruction manual are based upon the latest product information available at the time of publication. The manufacturer reserves the right to make product changes at any time without notice.


**WARNING:** Read and understand this entire instruction manual before attempting to assemble, install, operate or maintain this product. Failure to comply with the instructions may result in serious personal injury and/or property damage!

The following signal words are used to emphasize safety warnings that must be followed when using this product:

 **DANGER:** Indicates an imminently hazardous situation that, if not avoided, WILL result in death or serious injury.

 **WARNING:** Indicates a potentially hazardous situation that, if not avoided, COULD result in death or serious injury.


 **CAUTION:** Indicates a potentially hazardous situation that, if not avoided, MAY result in minor or moderate injury.

 **NOTE:** Indicates important information, which if not followed, MAY cause damage to equipment.

### UNPACKING AND INSPECTION

After opening the carton, unpack your new product and related parts and accessories. Please inspect it carefully for any damage that may have occurred during transit. Please check it against the photograph on carton. If any

parts are missing, please call customer service at 1-[800-497-0552](tel:800-497-0552) between 6 a.m. and 5 p.m. Pacific time.


 **WARNING:** DO NOT operate this product if damaged during shipment, handling or misuse. Do not operate the product until the parts have been replaced or the fault rectified. Failure to do so may result in serious personal injury or property damage. All damaged parts must be repaired or replaced as needed prior to operating this product. Check to see that all nuts, bolts and fittings are secure before putting this product into service.


If you have any questions, or require assistance with damaged or missing parts, please contact our customer service department at 1-[800-497-0552](tel:800-497-0552). Please have the serial number, model number, and date of purchase available for reference when calling.

## GENERAL SAFETY

- Keep the area clean and well lit. Cluttered or dark areas can cause accidents.
- Be aware of what you are doing and use common sense while using the tool. Do not use a tool when you are tired or under the influence of drugs, alcohol or medication. A moment of distraction while using a tool can cause serious personal injury.
- Use safety equipment. Always wear eye protection. Safety equipment such as dust masks, non-slip safety shoes, helmets or ear protection used in appropriate conditions will reduce the risk of injury.
- Do not rush. Maintain proper footing and balance at all times. This allows better control of the tool in unexpected situations.
- Dress appropriately. Do not wear loose clothing or jewelry. Keep hair, clothing and gloves away from moving parts. Loose clothing, jewelry or long hair can get caught in moving parts.
- Keep the tool away from children and do not allow tool to be used by people who are not familiar with the operation of the tool. Tools are dangerous in the hands of inexperienced operators.
- Never use a tool other than for its intended purpose.

## IMPORTANT SAFETY INFORMATION

 **WARNING!** Failure to obey these warnings may result in loss of load, damage to engine crane, and/or engine crane failure resulting in personal injury or property damage.

 **WARNING!** Do not overload engine crane beyond rated capacity of each specified boom position. Overloading can cause damage to or failure of the crane.

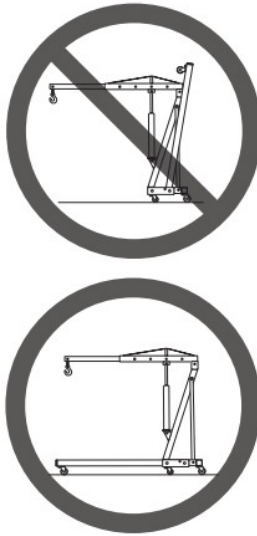
Always use crane on hard, level surface capable of sustaining the load. Use of crane on other than hard level surfaces can result in crane instability and possible loss of load.

Boom and load must be in lowest possible position before moving. Move load slowly and smoothly to avoid uncontrolled swinging and possible loss of load.

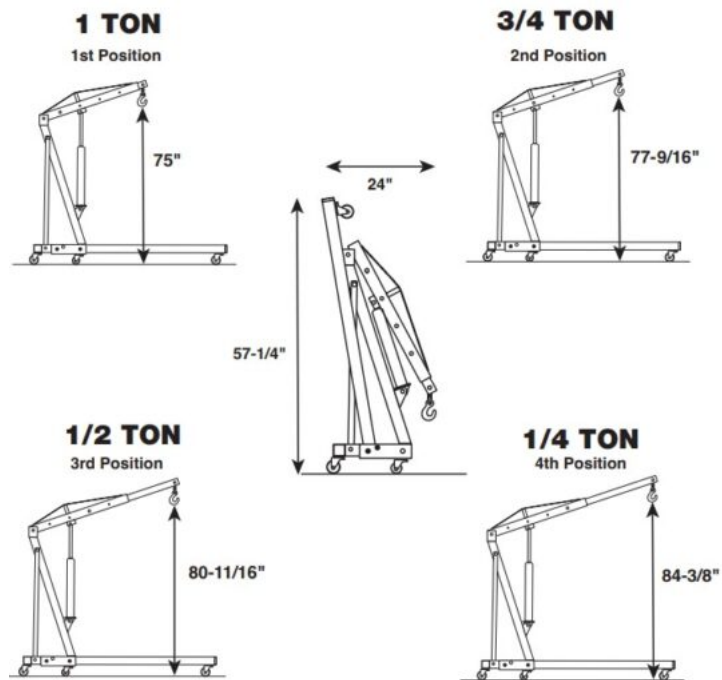
Be sure all personnel are clear of the load before lowering.

FRONT LEGS MUST ALWAYS BE LOCKED IN DOWN POSITION BEFORE APPLYING LOAD AND/OR RAISING BOOM (See Fig. 2C, page 6).

BOOM MUST BE IN FULLY LOWERED POSITION BEFORE RAISING LEGS. LEGS MUST NEVER BE RAISED WHEN CRANE IS CARRYING LOAD. LEGS MUST BE LOCKED IN PLACE WHEN RAISED (See Fig. 2D, page 6). NEVER WORK UNDER LOAD.



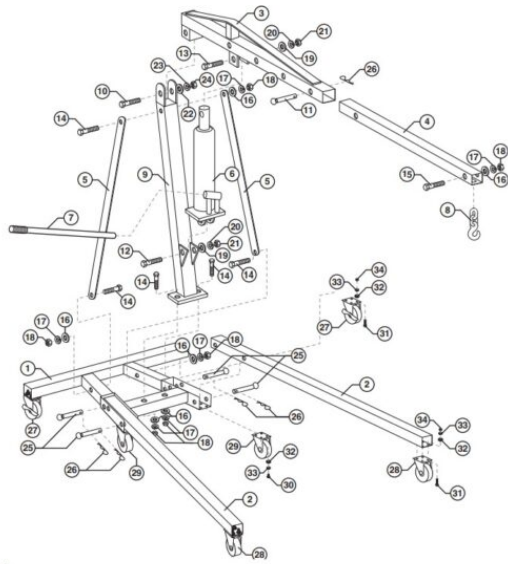
## CONFIGURATIONS



## PARTS LIST

No.	Description	Qty.
1	Frame Base	1
2	Front Leg	2
3	Boom	1
4	Boom Extension	1
5	Support Brace	2
6	Ton Hydraulic Ram	1
7	Pump Handle	1
8	Chain & Hook	1
9	Main Support Post	1

10	Bolt M18 x 110 mm	1
11	Boom Pin 95 mm	1
12	Bolt M16 x 90 mm	1
13	Bolt M16 x 80 mm	1
14	Bolt M14 x 100 mm	5
15	Bolt M14 x 80 mm	1
16	Washer M14	6
17	Lock Washer M14	6
18	Nut M14	6
19	Washer M16	2
20	Lock Washer M16.	2
21	Nut M16.	2
22	Washer M18	1
23	Lock Washer M18	1
24	Nut M18	1
25	Frame Pin 110 mm	4
26	Hair Pin	5
27	3-1/2 in. Locking Casters	2
28	3-1/2 in. Casters	2
29	3 in. Casters	2
30	Caster Bolt M8 x 12 mm	8
31	Caster Bolt M8 x 20 mm	16
32	Caster Washer MB	24
33	Caster Lock Washer M8	24
34	Caster Nut M8	16



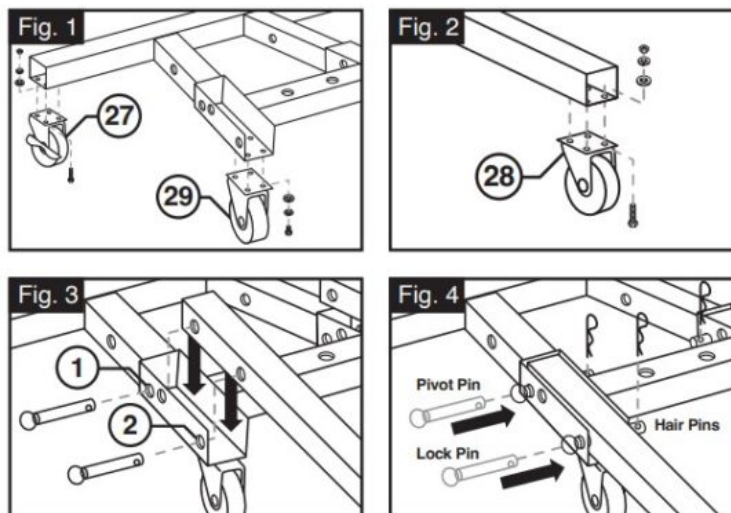
## TOOLS REQUIRED

1. 14, 16 & 18 mm sockets, 14, 16 & 18 mm wrenches or adjustable wrench

## ASSEMBLY INSTRUCTIONS

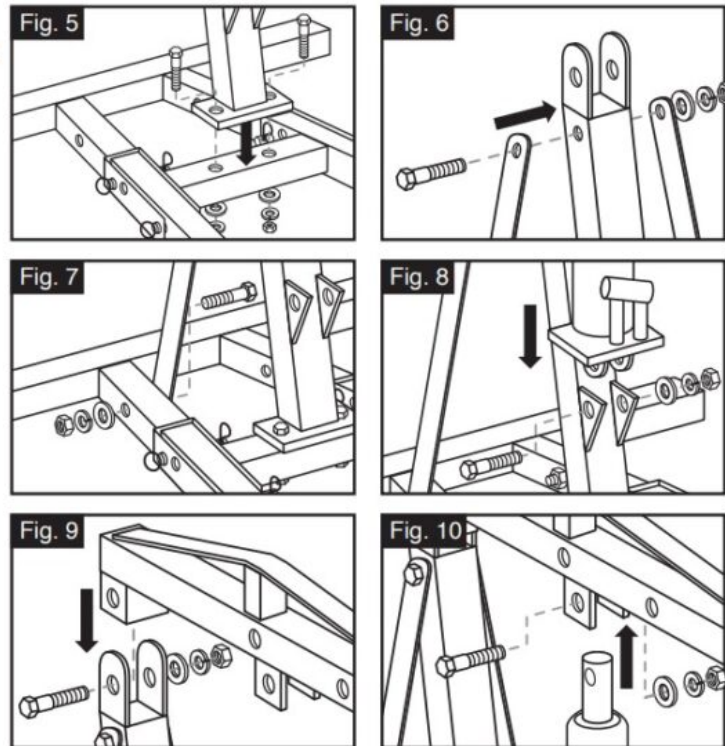
**NOTE:** All fasteners should be only “hand tight” until step 14. Also, double check that you’re using the correct bolts in the correct place. Do not completely tighten any bolts until you are fully finished with assembly or else parts may not line up properly.

1. Attach 3-1/2 in. Locking Casters (27) to the rear of the Frame Base (1) using M8 x 20 bolts (31), M8 washers (32), M8 lock washers (33) and M8 nuts (34) (Fig. 1).
2. Attach 3 in. Casters (29) to the front of the Frame Base using M8 x 12 bolts (30), M8 washers and M8 lock washers (Fig. 1).
3. Attach 3-1/2 in. Casters (28) to the Front Legs (2) using M8 x 20 bolts, M8 washers, M8 lock washers and M8 nuts (Fig.2).

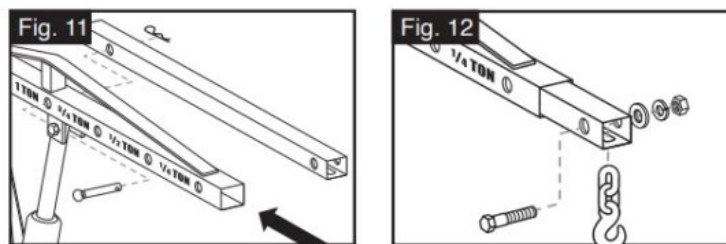


4. Attach Front Legs to Frame Base using all four Frame Pins (25). On each leg, insert one pin through Frame Base and Front Leg at rear hole #1 (See figures 3 & 4). This pin serves as a pivot pin and remains in hole #1 permanently. Insert a second pin through the Frame Base and Front Leg at forward hole #2. This serves as a Lock Pin to lock leg in down position (Fig. 3).
5. Insert Hair Pins (26) through each Frame Pin, to secure in place (Fig. 4).
6. Attach Main Support Post (9) to Frame Base using M14 x 100 bolts (14), M14 washers (16), M14 lock washers (17) and M14 nuts (18) (Fig. 5).

7. Attach top of Support Braces (5) to top of Main Support Post using M14 x 100 bolt, M14 washer, M14 lock washer and M14 nut (Fig. 6).
8. Attach bottom of Support Braces to Frame Base using M14 x 100 bolts, M14 washers, M14 lock washers and M14 nuts (Fig. 7).
9. Attach bottom of Hydraulic Ram (6) to Main Support Post using M16 x 90 bolt (12), M16 washer (19), M16 lock washer (20) and M16 nut (21) (Fig. 8).



10. Attach Boom (3) to Main Support Post using M18 x 110 bolt (10), M18 washer (22), M18 lock washer (23) and M18 nut (24) (Fig. 9).
11. While a helper holds Boom up, attach top of Hydraulic Ram to Boom using M16 x 80 bolt (13), M16 washer, M16 lock washer and M16 nut (Fig. 10).
12. Slide Boom Extension (4) into Boom, making sure that the slot for the chain & hook faces down. Secure Boom Extension at desired capacity position (1 Ton, 3/4 Ton, 1/2 Ton or 1/4 Ton), with Boom Pin (11) & Hair Pin (Fig. 11).



13. Install Chain & Hook (8) with M14 x 80 bolt (15), M14 washer, M14 lock washer and M14 nut (Fig 12).
14. Tighten all fasteners.

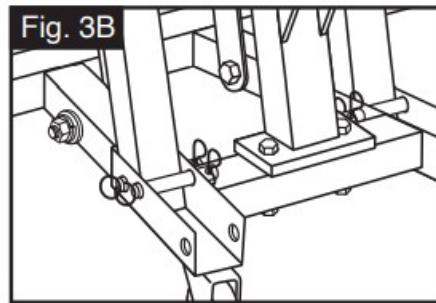
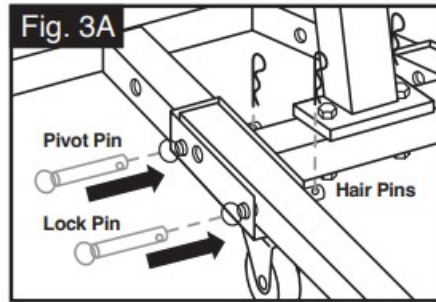
## OPERATION

Refer to the vehicle manufacturer's approved service manual for proper engine removal procedures.

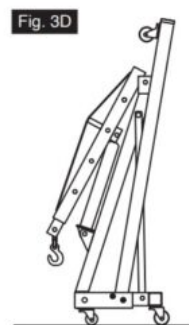
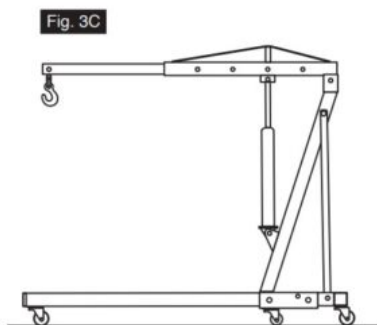
**NOTE:** Be aware of the load weight. Always position the boom extension at the correct location for the load you are lifting; 1/4 Ton, 1/2 Ton, 3/4 Ton, or 1 Ton.

This folding crane features an easy-to-use Frame Pin locking system. The rear Frame Pin acts as a Pivot Pin (Fig. 3A) and is a permanent fixture after being installed. The forward Frame Pin acts as a Lock Pin to safely lock the legs in the Down/Operational

position or to lock the legs in the Up/Storage position (Fig. 3B).



1. FRONT LEGS MUST ALWAYS BE LOCKED IN DOWN POSITION BEFORE APPLYING A LOAD AND/OR RAISING THE BOOM (Fig. 3C).
2. To raise the load, close the release valve and pump handle to raise the boom to the desired height.
3. To lower the load, SLOWLY turn the release valve counterclockwise.
4. THE BOOM MUST BE IN A FULLY LOWERED POSITION BEFORE RAISING LEGS. LEGS MUST NEVER BE RAISED WHEN CRANE IS CARRYING LOAD. LEGS MUST BE LOCKED IN PLACE WHEN RAISED (Fig. 3D).

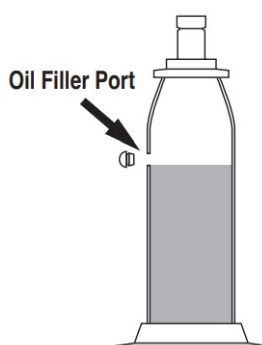


## TROUBLESHOOTING

Your Performance Tool Engine Crane was constructed with quality materials and workmanship and will give you many years of trouble-free use when cared for as described in the "Care & Maintenance". However, as with any mechanical device, periodic adjustments are necessary to maintain a peak level of performance. Should your crane hydraulic ram be displaying any of the following symptoms, the simple procedures shown below should correct the problem. **WARNING:** Remove jack from service before making adjustments.

Will not lift load	●	●	●
Will not hold load			●
Will not lift to full height	●	●	
Pump feels “spongy” under load	●	●	
Handle raises under load			●
Handle lowers under load			●

## CHECK AND FILL OIL



Check & fill oil here.

Oil must be level with bottom edge of port.

Power unit may be low on fluid. With the jack on a level surface and in the down position, remove the filler plug and add clean hydraulic jack fluid to the level of the filler hole.

Power unit may be air bound. Open the release valve a minimum of 2 full turns. Then pump the handle a minimum of 20 full strokes to purge air from the system.

Valves may not be closing completely.

To seat valves: a.) Close release valve.

b.) With the jack in the fully lowered position, manually raise the lifting arm as high as possible.

c.) Open the release valve and allow the jack to descend to the lowered position.

**NOTE:** The problems listed above with more than one solution may have a combination of causes. Please be sure that all solutions listed for each problem have been checked, to eliminate the possibility of further trouble. Some solutions may need to be repeated for best results.

## CARE AND MAINTENANCE

1. Replace worn or damaged parts with Performance Tool® replacement parts. Be sure that only qualified personnel perform repairs. This will ensure that the safety of the crane is maintained.
2. Visual inspection must be made before each use of the crane, checking for cracks, cracked welds, and missing and/or damaged parts. Any crane that appears to be damaged in any way must be removed from service immediately.
3. BECAUSE OF THE POTENTIAL HAZARDS ASSOCIATED WITH THE MISUSE OF EQUIPMENT OF THIS TYPE, NO MODIFICATIONS SHALL BE MADE TO THE PRODUCT.

## STORAGE

1. Store the crane with the boom in the fully lowered position and the hydraulic ram valve closed when not in use to prevent machined surfaces from exposure. Keep all moving parts clean and well-lubricated.

2. We recommend cleaning the crane directly after each use.
3. Clean the crane with a damp cloth and a little soap. Ensure that no water enters the crane or the bottle jack.

## 1 YEAR WARRANTY

PERFORMANCE TOOL® extends only the following warranties, and only to original retail purchasers. These warranties give specific legal rights. Except where prohibited by local law, the law of the State of Washington governs all warranties and all exclusions and limitations of warranties and remedies. There may be other rights which vary from state to state.

PERFORMANCE TOOL® warrants the product to be free from defects in materials and workmanship under normal use and service. A defective product may be returned for a free replacement within 90 days from the date of purchase, provided that product is returned to place of purchase immediately after discovery of defect. After 90 days and up to one year from date of purchase, PERFORMANCE TOOL® will replace at no charge any parts which our examination shall disclose to be defective and under warranty. These warranties shall be valid only when a sales receipt showing the date of purchase accompanies the defective product or defective part (s) being returned. For part (s) after 90 days, please remit your request, postage prepaid to:

**PERFORMANCE TOOL, P.O. Box 88259 Tukwila, WA 98138**

These warranties exclude blades, bits, punches, dies, bulbs, fuses, hoses, and other consumables which must be replaced under normal use and service. These warranties shall not apply to any product or part which is used for a purpose for which it is not designed, or which has been repaired or altered in any way so as to affect adversely its performance or reliability, nor shall these warranties apply to any product or part which has been subject to misuse, neglect, accident or wear and tear incident to normal use and service.

PERFORMANCE TOOL® does not authorize any other person to make any warranty or to assume any liability in connection with its products.

Except for warranties of title and the limited express warranties set forth above, PERFORMANCE TOOL® makes no express or implied warranties of any kind with respect to its products. In particular, PERFORMANCE TOOL® makes no implied warranty of merchantability and no implied warranty of fitness for any particular purpose, except that for goods purchased primarily for personal, family or household use and not for commercial or business use, PERFORMANCE TOOL® makes an implied warranty of merchantability (and, if otherwise applicable, an implied warranty of fitness for a particular purpose), but only for the particular qualities or characteristics, and for the duration, expressly warranted above.


The laws on limitation of implied warranties may differ from state to state, so the above limitations may not apply in all cases.

PERFORMANCE TOOL® shall not be liable for consequential, incidental or special damages resulting from or in any manner related to any product, or to the design, use, or any inability to use the product. The sole and exclusive remedy for a defective product or part shall be the repair, or replacement thereof as provided above. The laws on limitation of remedies or on consequential, incidental or special damages may vary from state to state, so the above limitations may not apply in all cases.

© Copyright 2024 WILMAR LLC., P.O. Box 88259 Tukwila, WA 98138



## Documents / Resources

	<p><a href="#">Performance Tool W41049 1 Ton Folding Engine Crane</a> [pdf] Owner's Manual W41049 1 Ton Folding Engine Crane, W41049, 1 Ton Folding Engine Crane, Folding Engine Crane, Engine Crane, Crane</p>
---	---

## References

- [User Manual](#)

## **Manuals+, Privacy Policy**

This website is an independent publication and is neither affiliated with nor endorsed by any of the trademark owners. The "Bluetooth®" word mark and logos are registered trademarks owned by Bluetooth SIG, Inc. The "Wi-Fi®" word mark and logos are registered trademarks owned by the Wi-Fi Alliance. Any use of these marks on this website does not imply any affiliation with or endorsement.