Pro-Tech TOOLS

Hydraulic engine hoist, 2t crane



Instructions for use

Translation of the original instructions

Home

Do not attempt to use this machine before familiarizing yourself with the entire manual and before learning how to operate it. Keep this manual so that you can use it later. Pay particular attention to the safety
Instructions. Failure to observe the safety rules may result in injury to persons operating the machine in the of the machine, or may cause damage to the machine and the object being lifted. Pay particular to the warnings and safety labels located on the machine. Never remove or damage these
Labels.

Designation

This workshop crane is used exclusively for work in the workshop when assembling and disassembling power units and other heavy vehicle components.

Under no circumstances may it be used to lift persons or animals.

Basic safety rules

This equipment may be used by qualified persons over 18 years of age who have been trained in work practices and environmental protection.

Never work under the influence of , which include some .

There should always be a first aid kit in the workplace, and if you work alone, carry a mobile phone or other form of contact that you can use to summon help in the event of an accident.

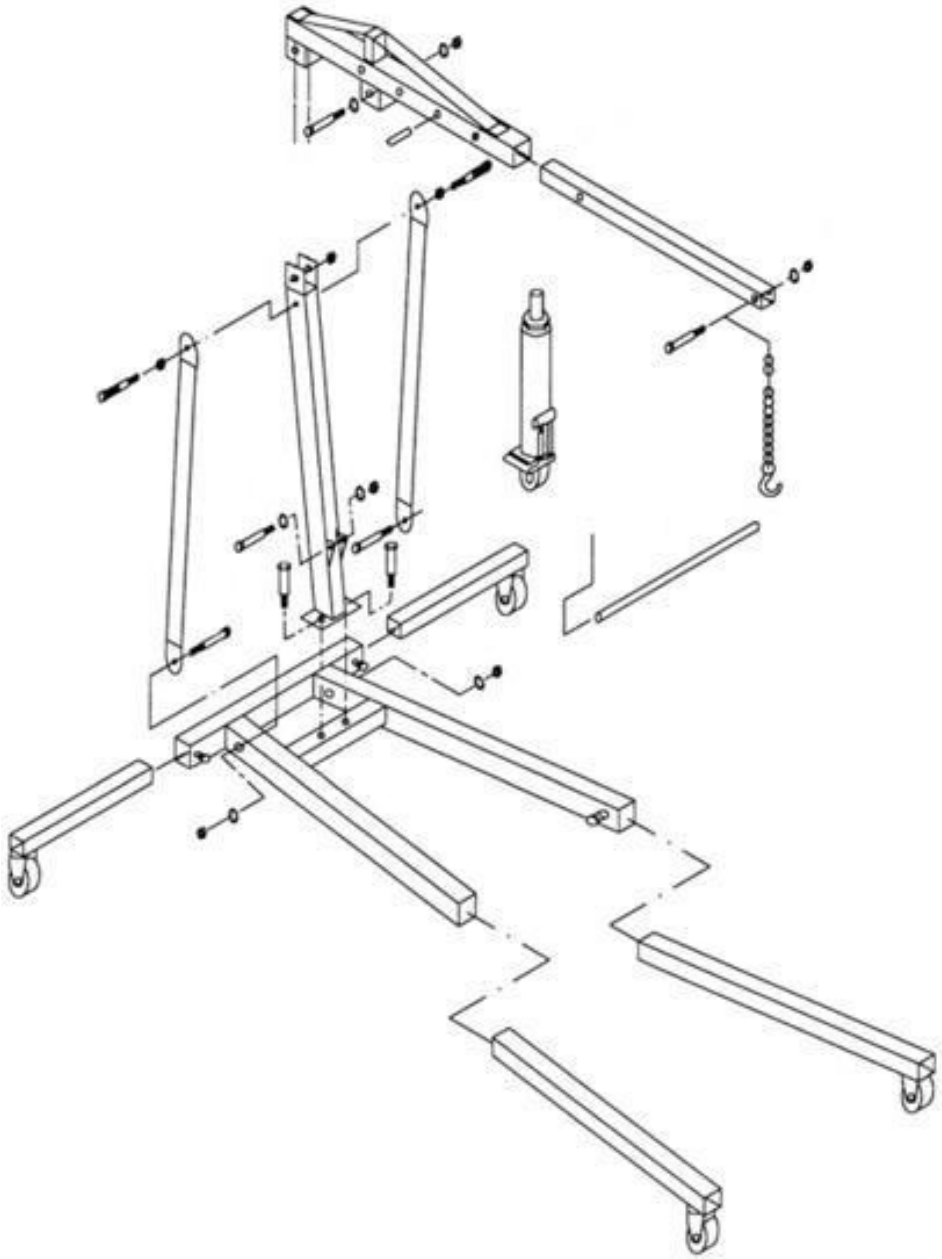
The workplace must be well lit and tidy; a messy workplace often leads to dangerous situations.

Installation of the crane

Before using the crane, it must be assembled according to the assembly drawing shown. The bolts and nuts included in the package are essential for assembling the crane.

The best solution is to unpack all the elements and check the completeness of the package according to the picture. Make sure all components have been removed before discarding the packaging. Plastic bags can be dangerous, so never unpack equipment in the presence of children or animals.

Assembly drawing



The drawings and contents of this manual may differ slightly from the actual product or accessory. This is due to continuous design improvements.

Safety rules

1. Plastic bags and packaging materials pose a danger to small children and animals.

2. Make sure you know your machine and are familiar with the procedures. Familiarize yourself with the dangers associated with misuse.

3. All persons using this machine must know how to use the machine safely and be aware of any hazards that may occur during its use.

4. Pay particular attention to the safety instructions on the labels. Never remove damage these labels. If the labels are damaged or illegible, contact the machine supplier.

5. Keep your workplace clean. A messy workplace can lead to accidents.

6. Never work in a tight space or in a poorly lit room. Ensure that the floor is sturdy and stable and that you have freedom of movement. Maintain a stable posture while working.

7. Keep your eyes on the progress of your work and focus on it while you are doing it. If you cannot concentrate, stop the work.

8. Keep the equipment clean.

9. Keep handles clean and grease-free.

10. Make that children, unauthorised persons and animals do not have access to your workshop.

11. Never put your hands and feet in the work area.

12. Never leave the machine running unattended.

13. Use the machine only for purposes consistent with its intended use.

14. Wear personal protective equipment such as safety goggles, protectors, mask, safety work boots, etc.

15. Do not lift too large loads and use both for this purpose.

16. Never work under the influence of alcohol or .

17. Do not use the machine if you feel weak or dizzy.

18. The introduction of any modifications or improvements to the machine is strictly prohibited. DO NOT USE THE MACHINE if you find any damage, cracks, etc.

19. Never perform maintenance while the equipment is in use.

20. If you notice any unusual symptoms or hear any strange sound, stop the equipment immediately and stop working.

21. Always remove tools such as wrenches and screwdrivers from the machine after using them.

22. Before using the machine, make sure that all screws are tightened securely.

23. Regularly carry out maintenance. Before using the equipment, check that it is in good condition and that it is not damaged.

24. Only use original spare parts for repairs.

25. The use of accessories or that have not been approved by the manufacturer may cause injury to operators.

26. Use the appropriate tools for specific types of work. Do not overload the equipment or its accessories.

27. Do not overload the machine. Apply a load during the work such that it can be carried out at a comfortable speed. The warranty does not cover damage caused by overloading.

28. Do not expose the tool to extremely high temperatures or direct .

29. This machine is not intended for use in conditions of high humidity or under water.

30. When not in use, store the device in a dry and safe place out of the reach of children.

31. Before use, check that all safety features are working properly and efficiently. that all moving parts are in good and working order.

32. Before using the machine, make sure that no parts are cracked or blocked. Check that all parts are attached and assembled designed. Be alert to any conditions that may adversely affect the proper operation of the machine.

33. Unless specified in this manual, ensure that all damaged parts and safety features are repaired or replaced immediately.

34. Machines or tools must not be used until they are fully assembled.

35. Only lift objects weighing no more than the crane's maximum lifting capacity.

36. Keep your hands at a safe distance from the moving parts of the machine.

37. Lower lifted objects slowly. Avoid sudden stops or starts.

38. This equipment is designed for use on durable, smooth and flat surfaces.

39. The equipment can only be installed, dismantled and transported when the lifting mechanism is in the lowest position.

40. Take extra care when lowering the load. Injury can occur when lowering the load.

41. Small leaks of hydraulic fluid from pumps and other hydraulic equipment are normal and are not a fault. If the hydraulic fluid level is too low, it should be topped up regularly.

42. The hydraulic cylinder cannot be subjected to stresses/loads greater than the maximum permissible value. The piston rod should not be tested and extended using excessive force. This may cause complete ejection from the hydraulic cylinder.

43. If the load on the hydraulic cylinder is not centered, pump carefully. If you have to use unusually high force when pumping, stop working and adjust so that the load is more centred. This will reduce the force required for pumping.

44. Keep tools at a safe distance from fire and sources to prevent damage.

45. Hydraulic fluid spilled on the ground creates a risk of slipping and injury. If you notice spilled hydraulic fluid, clean it up immediately. Use a suitable cleaning wool or other absorbent material. In accordance with the rules of the Waste Management Act, the absorbent or wool must be properly stored in a closed metal container and then taken to an authorised waste collection centre.

46. You cannot mix different hydraulic fluids (e.g. from different manufacturers).

47. Hydraulic fluid change intervals must be observed.

48. Make that the hydraulic fluid used is clean. Contamination of the fluid significantly shortens its service life and can cause irreversible damage to the machine.

49. Use safety plugs and covers to prevent dirt from entering the equipment.

50. Before performing any maintenance work on the hydraulic equipment, turn off the air supply and be sure to slowly reduce the air pressure. It is necessary to allow the pressure to equalize.

51. Do not work near flammable materials.

Description of pictograms used on the crane



It is forbidden to stay under a lifted load!



Be careful when lifting the object.



Read the instructions with an understanding of their content in case of doubt, do not start



work. Wear head protection.



Wear work gloves.



Wear safety footwear with reinforced uppers.

Correct operation

The crane can be used to lift objects and carry them in a straight line or around a perimeter. The weight of the object to be lifted must not exceed 2 tonnes.

It is forbidden to use the crane on uneven or soft ground.

The crane hook is equipped with a safety latch. When lifting, always check the latch is in place. The loads are lifted on the principle of pumping hydraulic fluid into the hydraulic cylinder. The pumping is controlled by a control lever. To lower the item, loosen the control screw located at the bottom of the hydraulic pump.

Remember to lower the load slowly. Lowering too quickly can cause injury or damage to the crane its surroundings. Turn the control screw slowly.

Be sure to check the arm extension, its lateral position and the weight of the object. The crane may tip over on its side.

Do not exceed the permissible load capacity. Excessive loads can permanently damage the hydraulic pump. Such damage is not covered by warranty repair.

WARNING: Using the crane on uneven surfaces can lead to dangerous situations, the equipment is then not stable.

Lifting

1. Make sure the release valve is fully closed.

2. Start pumping in a pendulum motion to raise the arm.

3. After removing the engine from the vehicle, lower it onto the workbench or mount it on a stand.

4. The crane is not adapted to support the lifted load and, as a result, in practice the load falls slowly and excessive wear occurs on the internal components of the hydraulic cylinder.

Lowering the load

To lower the load, slowly release the release valve. It is located at the bottom of the hydraulic cylinder.

IMPORTANT: The speed of lowering the load depends on the opening of the release valve, sudden opening will cause the load to fall. This can lead to dangerous situations and damage to the lifted object.

Maintenance, inspection and storage

IMPORTANT: Always check the condition of the crane before starting work to ensure that the structure, especially the hook and welded elements, are not damaged.

Wheel axles should be lubricated with a copper lubricant to prevent the build-up of dust that can lead to excessive wear.

Hydraulic fluid top-up

Before starting to refill or change the fluid, clean the area around the filler cap, holes and drain cap with a cloth. This will prevent dirt from entering the machine, damaging it, or causing premature wear.

Check the hydraulic fluid level when the pump is positioned vertically.

The pump is factory filled with high quality hydraulic fluid. Use only approved hydraulic fluids.

After prolonged use, the fluid needs to be changed to ensure the longevity of the machine. The fluid can be drained by removing the cap and opening the release valve. Make that no contaminants can enter the system. Top up the hydraulic fluid/oil using a high quality fluid.

Storage

During storage it is necessary to secure all places that are not covered with a layer of varnish against corrosion using a special agent or technical petroleum jelly.

The crane should be stored in a dry place with a preferably constant ambient temperature.

Disposal

At the end of its useful life, the equipment must be disposed of in accordance with applicable laws and regulations. The product is made of metal and plastic parts, which can be recycled as long as they are separated from each other. Dismantle all parts. Separate all parts according to the type of material they are made of (e.g. metal, rubber, plastic, etc.).

The separated parts should be taken to the nearest recycling point for further processing.

Technical data

maximum load capacity: 2 t

easily movable with 6 wheels boom

length at 2 t lift: 950 mm

arm length at lift from 100 to 155 cm lifting height

at 2 t: 2000 mm

lifting height at 0.5 t: 2400 mm base

dimension: length 1700 mm, rear

wheelbase: 1070 mm

height of base skids: 170 mm weight:

70 kg