Pro-Tech TOOLS

Drywall lifter 335cm



Instructions for use

Translation of the original instructions

Home

The drywall lifter allows one person to lift a drywall panel up to 128 x488 cm without assistance. The panel can be lifted up to a maximum height of 335 cm for attachment to flat ceilings or (with the lifting cradle tilted) to sloping ceilings or side walls. For higher ceilings, an extension accessory is available to increase the maximum lift.

The lift cradle lowers to a height of 135 cm from the floor for panel loading and can carry up to 68 kg. This manual explains how to assemble the hoist, operate it, disassemble it after use for easy transport and storage, and order spare parts. We recommend that you read the Important Safety Precautions and Operation sections below before attempting to use the hoist.

Important safety precautions

WARNING	To protect yourself from serious injury, use common sense and observe the following safety precautions when working with a drywall jack.

ALWAYS read this manual before use and pay close attention to all warnings.

ALWAYS check the instrument thoroughly before each day of use, paying special attention to the condition of the cable.

ALWAYS allow the hoist to reach working room temperature before use (repositioning cold unit into a warm room may cause condensation which could affect the operation of the winch brake).

Always make sure the brake drum is clean and dry before use.

NEVER use the hoist if any of the cross arm supports are not secured by a retaining spring.

ALWAYS keep the work area clear of obstructions.

ALWAYS wear protective when operating this hoist.

ALWAYS be aware of obstructions overhead when lifting the plasterboard. NEVER use the hoist for any purpose other than lifting drywall.

NEVER lift more than one sheet of plasterboard at a time. Never lift more than 68 kg.

Installation

Components

The dry construction hoist is supplied as several components that must be assembled before use:

Mounting the tripod base.

A frame assembly that includes a winch assembly and standard telescopic lifting sections. Cradle assembly without removable cross arms.

Two cradle assemblies with cross arms.

Installation procedure

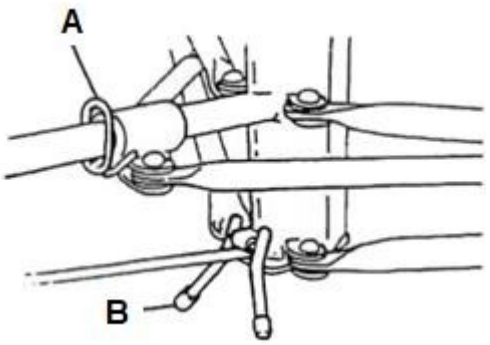
1. Adjust the tripod base:

Figure 1

a. Place the base on the floor and place it on the castors.

b. Push on the caliper sliding ring. Keep the ring depressed while swinging out both front legs until the caliper ring fits into the locking hole on the underside of the slide tube. (See Figure 1)

c. To prevent the tripod base from moving backwards during assembly, lower the support as shown.

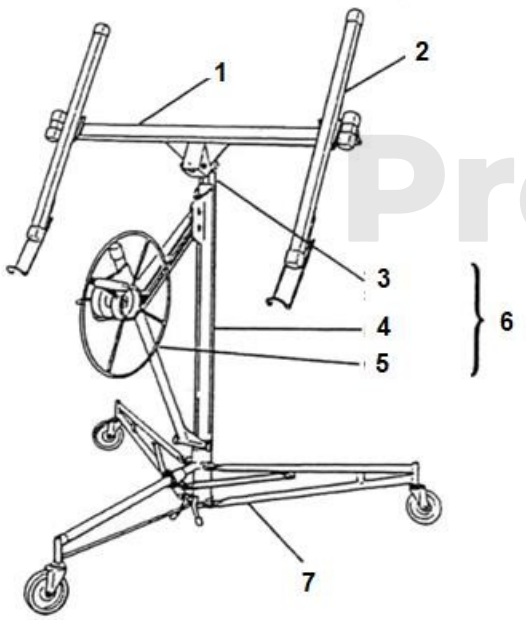


2. Set the frame assembly on the two "V" angles on the tripod base and lower the frame about 1 inch until the angles secure it.

Make sure the frame is pushed all the way down and that it is firmly fixed at the angles before proceeding.

A) Push the caliper sliding ring
B) Set (start) the reverse stop

Components of the plasterboard lifter



1. Cradle

2. Cross arm

3. Telescopic sections

4. Column

5. Reel

6. Frame assembly

7. Tripod base

3. Attach the handle to the winch wheel. Tighten the nut, then loosen it slightly to allow the handle to turn freely.

4. Move the winch assembly to the working position:

a. Hold the winch wheel and brake arm as shown in Figure 2. Rotate the winch wheel slightly forward while lifting the brake arm to release the brake.

b. Lift the brake arm fully up. Grasp the winch post and grasp the brake arm firmly with your thumb. (Figure 3)

c. Place your right hand on top of the frame. Continue to grasp the brake arm as necessary to prevent the rope from moving backwards, and pull the winch assembly up to you. (Figure 4)

d. When the winch is fully extended (away from the frame cover), release the brake arm and unhook the retention hook so that it no longer secures the telescopic parts inside the frame cover.

5. Push the winch assembly slightly backwards towards the frame. This will automatically engage the sliding bar lock to keep the winch fully extended. (Figure 5)

IMPORTANT: Before proceeding, make sure that the slide bar lock is fully engaged, i.e. turned as clockwise as possible.

Figure 2

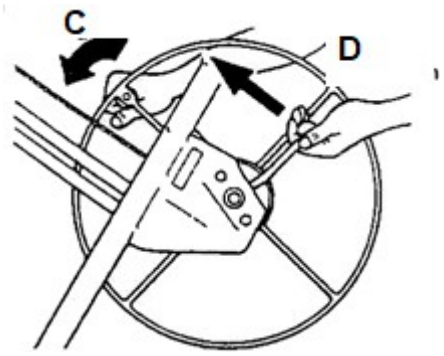
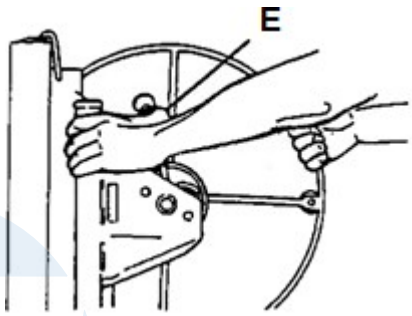
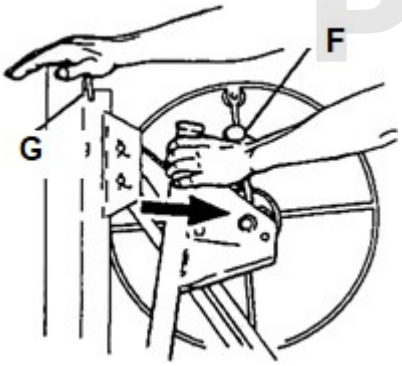


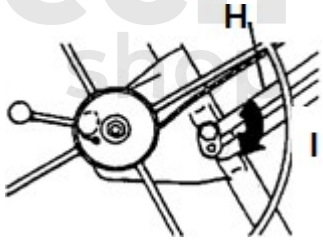
Figure 3



C) Turn the wheel forward
D) Raise the brake arm
E) Grasp the broken arm with your thumb to prevent kickback Figure 4

Figure 5





F) Continue to grasp the broken arm
G) Holding hook
H) Sliding rail
I) Turn the slide bar lock to secure

Installation procedure (continued)

6. Attach the cradle to the frame (Figure 6):
   a. Insert the cradle post into the hole at the top of the frame.
   b. Secure the cradle to the frame by snapping the hinged latch upwards so that it hooks over the pin on the cradle.
7. Attach the cross arms to the cradle:

   NOTE: The cross arms are interchangeable.

   a. Slide the cone plates on the cross arms into the cone socket on the cradle. (Figure 7)
   b. Push each cross arm forward into the socket until the spring tab on the bottom of the cross arm snaps into place in the socket. (Figure 8)

⚠ WARNING

To prevent injury, the slide bar lock must be fully engaged when the winch is extended.

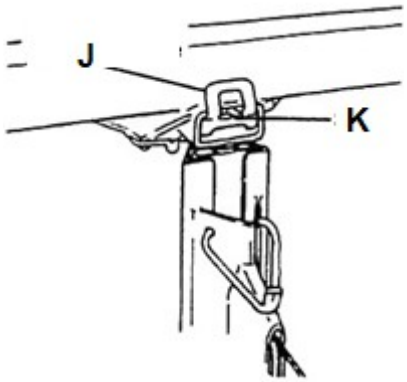


Figure 6

J) Snap the latch upwards to secure the cradle
K) Pin

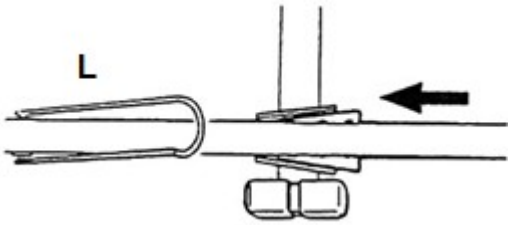


Figure 7

L) View from above

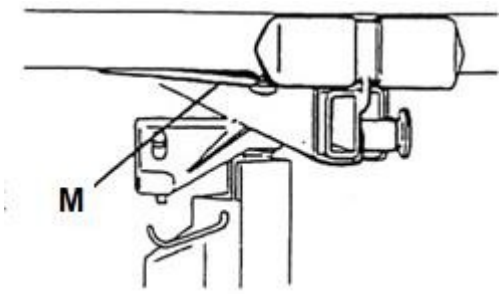


Figure 8

M) Spring tongue

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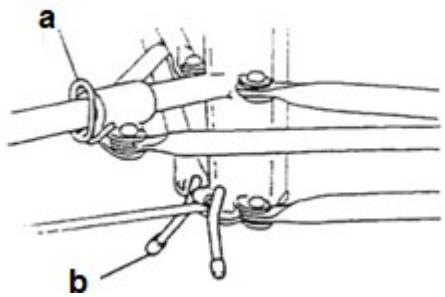
Operator controls

Sliding ring

Press on the sliding caliper ring to release the two front legs so that you can swivel them into the jack's working position, or into its storage position. A spring-loaded pin clicks into the hole on the underside of the slide tube to secure the hinged legs in position.

Backstop

Turn the support downwards to prevent the base from tipping backwards, or upwards to allow the unit to rotate freely.



a) Sliding ring **b) Backstop**

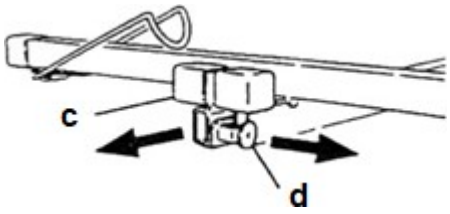
Jib

The booms on the cross arms extend to support the longer plasterboard panel.

To extend the boom, pull out the locking pin with your right hand until you can extend the boom with your left hand. The locking pin can snap in and lock the boom in one of three positions: fully retracted; extended 21 inches; or extended 33 inches.

IMPORTANT: Never load drywall or use a jack unless the locking pins are locked in one of these three positions, or if the jibs are extended beyond the 33-inch position.

To prevent damage, always fully retract the booms before transporting or storing the hoist.

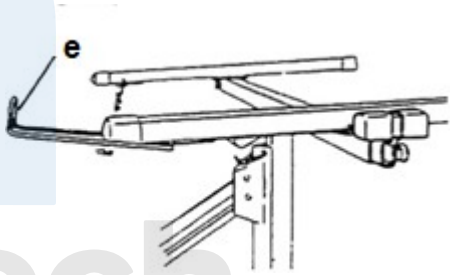


c**) Boom** **d) Locking pin**

Panel support hooks

Open the support hook on each cross arm to support the plasterboard panel when loading it or when tilting the cradle.

To prevent damage, always close the support hooks before transporting or storing the jack.



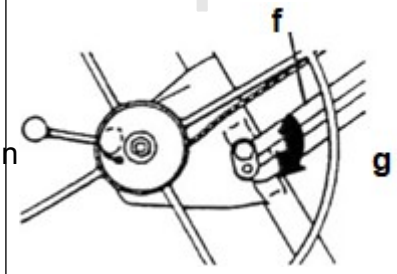
e) Panel support hook

Slide bar lock

The slide bar lock holds the winch assembly in the operating (fully extended) position.

To fold the winch assembly to the frame (when disassemblin the unit for transport or storage), release the lock by turning counterclockwise when lifting the sliding bar.

When the unit is reassembled for operation, extending the winch assembly to the stop and then pushing it back slightly towards the frame automatically secures the lock.



f) Sliding rod
g) Turn the slide bar lock to secure

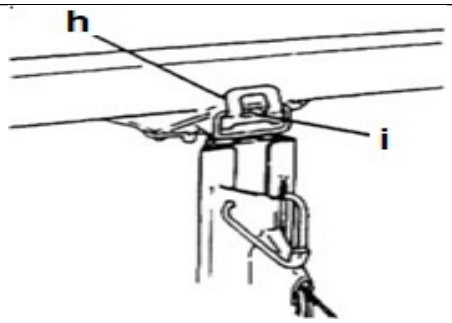
Never tighten the nut on the slide bar lock or you will not be able to fold the unit for transport and storage.

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Operator controls (continued)

Tilt latch

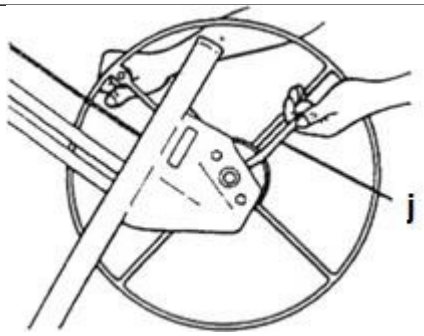
To tilt the cradle (to load a dry wall panel, or to raise the board to a side wall or sloped ceiling); or to remove the cradle from the frame, turn the tilt latch outward and downward. To secure the cradle to the frame without tilting, turn the latch upwards to engage the pin on the cradle.
NOTE: When the cradle is in the horizontal (non-tilted) position, it also tilts sideways by up to 10°.



h) Tilt latch **i) Pin**

Brake arm

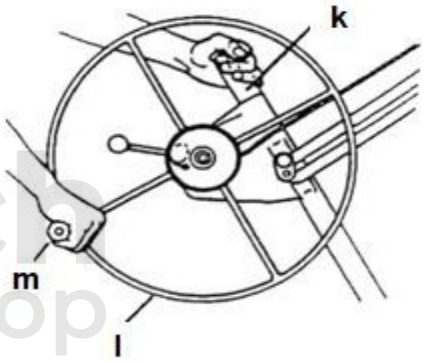
The spring brake holds the cradle at whatever height you lift it to with the winch wheel crank. To lower the cradle, control the reverse rotation of the winch by grasping the wheel handle while gently lifting the brake arm to release the brake.



j) Brake arm

Winch wheel, handle and post

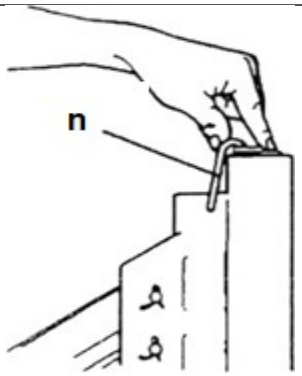
By turning the winch (using the wheel crank), a rope is wound or unwound, which raises or lowers the cradle. When winding the winch, grasp the post as a lever.



(k) Winch post **l) Winch wheel**
m) Winch handle

Fixing hook

A fixing hook secures the telescopic parts inside the frame for transport and storage.



n) Fixing hook

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Operating procedure

IMPORTANT: Read "Important Safety Precautions" on page 3 before using the hoist.

WARNED

To avoid serious injury, follow all "Important Safety Precautions", page 3.

Safety check before operation

Before you start working with the jack every day:

- Thoroughly inspect the unit for wear or damage. Pay particular attention to the cable.
- Make sure the jack is at room temperature before using it.
- Make sure the winch brake drum is clean and dry before operation.

WARNED

ALWAYS wear protective headgear when working.

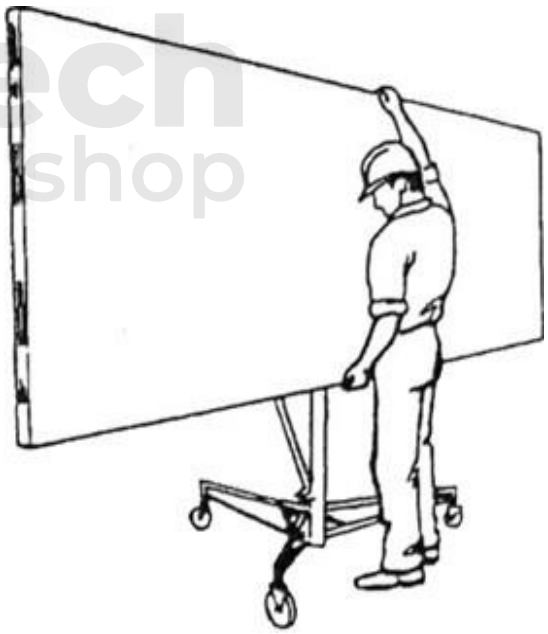
WARNED

To avoid injury:

- Use only for lifting plasterboard.
  panel.
- Lift only one at a time

Inserting a panel of plasterboard

1. Adjust (lower) the stop so that the jack does not rotate backwards. {see page 7).
2. Open the support hooks on both cross arms by turning them. Make sure the cradle is turned so that the support hooks are on the opposite side to the winch wheel.
3. Extend the crossarm tabs on the cradle as needed to fully support the length of the drywall panel (see page 7).
4. Release the tilt latch to tilt the cradle (see page 8).
5. Hold the drywall panel with the face paper towards the tilted cradle and load the panel onto the jack as shown. Set the panel on the support hooks and carefully support it on the cross arms.
6. If you are installing the panel on a flat ceiling, tilt the cradle to a horizontal position and secure the tilt latch. If you are installing the panel on a side wall or sloped ceiling, leave the cradle tilted.
7. Lift the rear stop on the base and carefully screw the jack to the position where the panel will be installed



Operating procedure

To lift the panel

IMPORTANT: Always lower the support before lifting the pane onto a sloped ceiling or side wall.

Turn the winch wheel in the direction shown (hold the post to hold the lever) until the panel is at the desired height.

The brake is cushioned to automatically keep the cradle at the selected height when you stop turning.

Starting the panel

1. Grasp the wheel handle with your right hand to limit the reel from turning backwards.

2. Hold on to the winch handle. Carefully release the brake with your left hand and slowly turn the wheel backwards to lower the cradle to the desired height.

Dismantling and storage

Always store the hoist in a dry and protected place. To disassemble the hoist for more compact storage, see page 11.

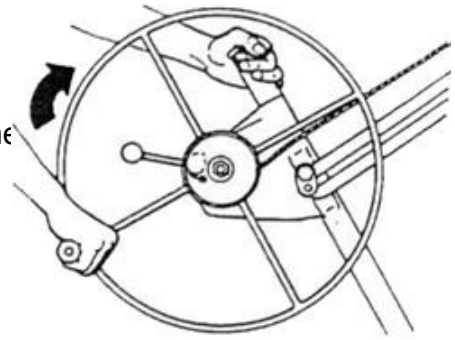


Figure 11

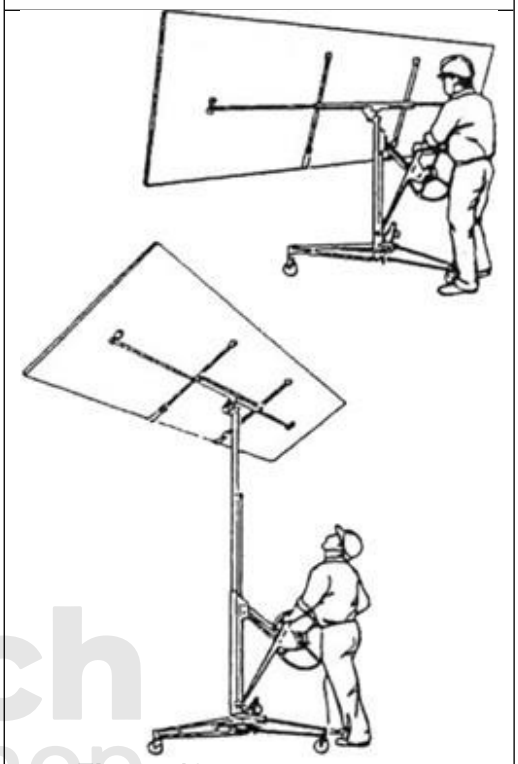


Figure 12
Figure 13

⚠ WARNED

To avoid serious injury, watch out obstructions when lifting the panel.

⚠ ATTENTION

The cradle descends rapidly when the brake arm is released.

Operate the winch with your right hand on the wheel handle BEFORE releasing the brake.

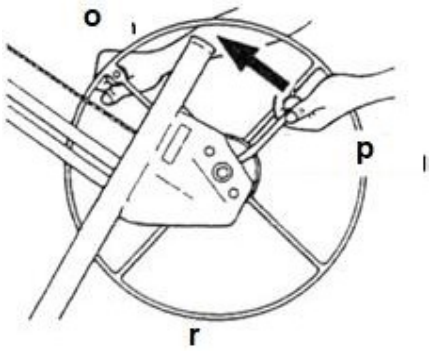


Figure 14
o) Limit reverse rotation of the winch
p) Carefully release the brake
r) Launching the panel

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Dismantling

Drywall lifter for transport or compact storage;

1. Turn the cradle all the way down.
2. Slide the cradle booms all the way in until they lock. Close the panel support hooks.
3. Remove the cross arms by squeezing the spring tab and sliding the cross arm out of the tapered housing.
4. Unlock the cradle tilt latch. Lift the cradle (about 7.5cm.) until you can remove it from the frame.
5. Turn the winch wheel one full turn forward as shown. This will raise the inner telescopic part.
6. Unlock the winch assembly by lifting the slide bar with your left hand while turning the slide bar lock with your right hand.
7. Hold the slide bar lock in this disengaged position (step 6) and push on the telescopic parts in the frame with your left hand. The winch assembly will slide towards the frame housing.
8. Turn the telescopic parts all the way down. Swing out the fixing hook as shown and swing the telescopic sections back up slightly until the hook secures them.
9. In this position, hold the fixing hook with your left hand and turn the winch forward with your right hand.

   The winch assembly folds up against the frame. When the slide bar touches the frame, tighten the cable by turning the wheel again (just enough to keep the winch assembly in this position).

10. Carefully lift the frame by about 2.54 cm to release it from the tripod base.
11. To fold the base, push in the sliding ring and turn the front legs inwards until they snap into the closed position.

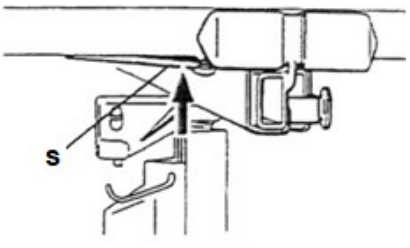


Figure 15
s) Press the spring tongue to release the cross arm

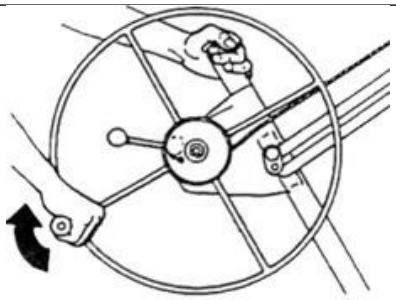


Figure 16

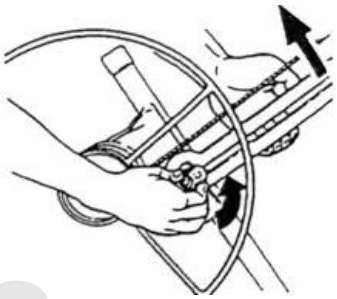


Figure 17

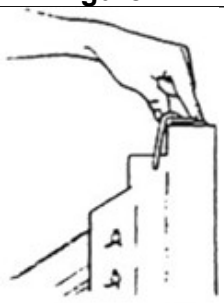


Figure 18

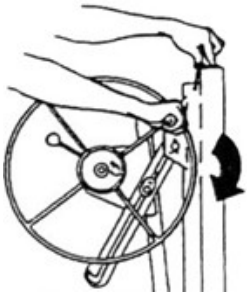


Figure 19

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Maintenance

Check the cable before each working day. At the first sign of wear, replace it (see instructions supplied with the replacement cable).

Oil the rope pulleys occasionally. Tilt the telescopic parts to gain access to the inner rope pulley. Never allow oil or lubricant to contact the surface of the winch brake drum.

Occasionally oil the rocker bearings.

If the telescopic parts of the frame do not work smoothly, apply household paraffin to the sliding surfaces.

Extension Accessories (sold separately)

For higher ceilings, an extension accessory is available which increases the maximum lift to 470 cm (instead of the standard 3350 mm).

The accessory consists of two telescopic sections with a length of 182 cm, which replace the standard 122 cm sections in the frame. In the telescopic sections a longer rope is pre-installed which must be attached to the winch drum.

Installation of accessories

Removal of standard telescopic sections

1. Loosen the tension on the rope until you release it from the anchor lug in the winch. Pull the rope through the hole in the winch drum. (Figure 20)
2. Using large pliers, grasp the top end of both telescopic parts and lift them off the frame body as a unit. Pulling the free end of the rope towards the winch wheel will help lift the telescopic sections.

Remove the telescopic parts (and cable) completely from the frame cover.

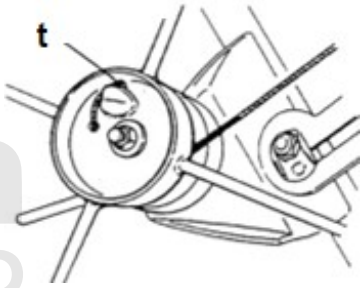


Figure 20
t) Release the cable from the anchoring bracket

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Extension accessories (continued)

Installation of longer telescopic parts

1. Insert the loose (crimped) end of the accessory cable down into the pocket at the top of the frame cover.

   IMPORTANT: The cable must be routed through the top of the pulley.

2. Pull the cable through the pocket and slide the new telescopic parts down into the frame.

3. Route the free end of the rope under and around the winch hub and through the hole into the winch drum.

4. Firmly secure the crimped end of the cable by the anchoring lug inside the drum.

5. Turn the winch wheel forward to release the slack in the cable.

WARNED

To avoid serious injury, the cable must pass over the top of the pulley in the frame pocket.

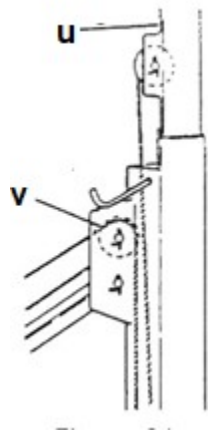


Figure 21
u) Telescopic sections
v) Route the cable over the top of the pulley

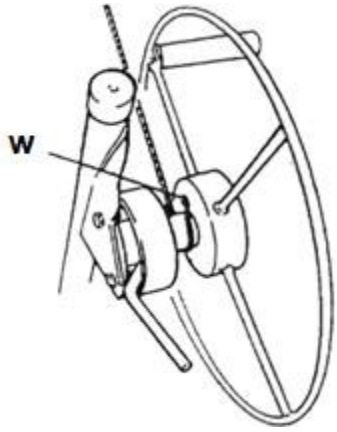


Figure 22
w) Wind the cable around the winch hub and into the drum

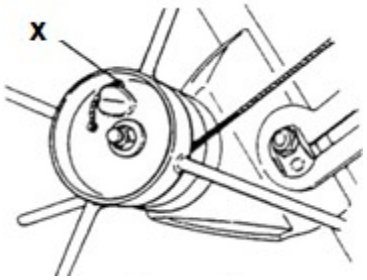
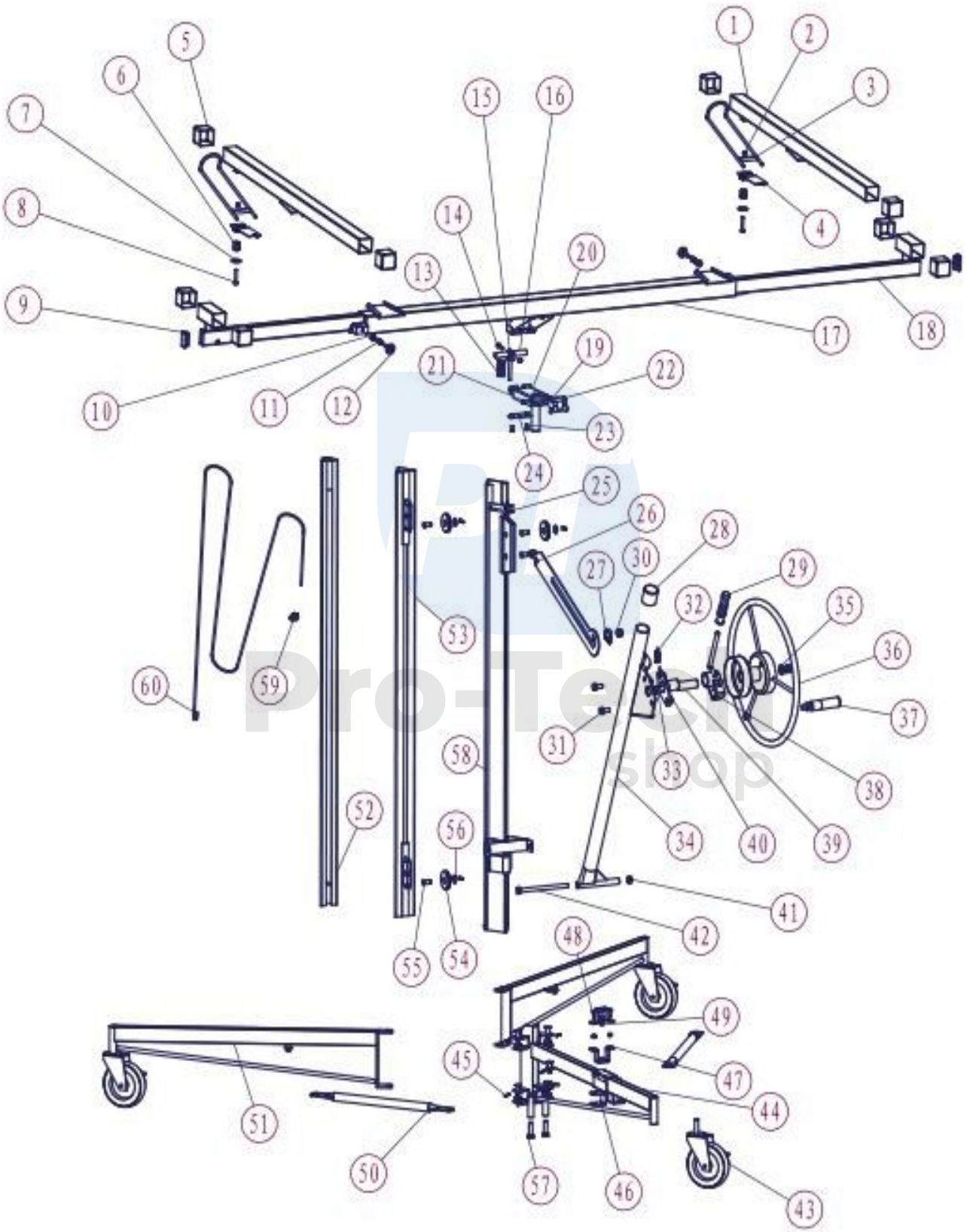


Figure 23
x) Secure the cable behind the anchoring lug

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Parts diagram



List of parts

Seriol NO.	Description	Specification	Quality
1	main bracket support rod		2
2	hex nut	M6 x 1	3
3	support rod		2
4	spring pressing plate		2
5	pipe cap 2		8
6	spring pressing plate		2
7	flat washer	6N	2
8	hexagon bolts	M6 x 35	2
9	pipe cap 2		2
10	Pad	6N	2
11	resetting the spring		2
12	T-pin		2
13	adjustment spring		1
14	hexagon bolts	M6x25	1
15	spring rod		1
16	spindle		1
17	cross bar		1
18	assistance console		2
19	hexagonal self-locking nut	M6	6
20	steering gear base		1
21	hexagon bolts	M6x60	1
22	safe lock		1
23	hexagon bolts	M6x10	2
24	pressing plate		1
25	horn		1
26	diagonal pull		1
27	non-adjustable screw		1
28	rubber sleeve		1
29	brake handle		1
30	hex nut	M12	2
31	hexagon bolts	M10x20	2
32	tension spring		1
33	hexagon bolts	M12x120	1
34	side plate		1
35	flat washer	12N	1
36	round handle		1
37	rubber round handle		1
38	rubber brake handle		1
39	positioning device		1
40	solid excitation shaft plate		1
41	hex nut	M10	1
42	hexagon bolts	M10x150	1
43	wheel with brake	5 寸	3
44	main carrier brake		1
45	Spit	2.5 x 18	12
46	sliding lock		1
47	spring plate		2
48	hexagon bolts	M6x14	2
49	resetting the spring		1
50	support brake		2
51	assistance console		2

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52	inner pillar		1
53	middle pillar		1
54	guide wheel		3
55	shaft pin		4
56	flat washer	10 N	12
57	hexagon bolts	M10X35	2
58	outer pillar		1
59	rope lock		1
60	wire rope	4 mm	1

Technical data Min.

Stroke: 135 cm Max.

335 cm

Max. 128 cm x 488 cm Max. 130 cm x

60 cm x 19 cm

Weight: 53 kg

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