

PS - PSW PULL-UP SETS

INSTALLATION

See Page 2 for all illustrations, see below for product photos. The Ps set consists of wall cleats, a platform pulley, a swivel pulley, and nylon rope. PSW pull-up sets consists of one PSW winch with rubber wheel, a platform pulley, a swivel pulley, one cable clamp, and 50' of aircraft cable.

PS SET

When installing the PS set, install the wall cleats as shown. Follow directions below for installing the pulleys.

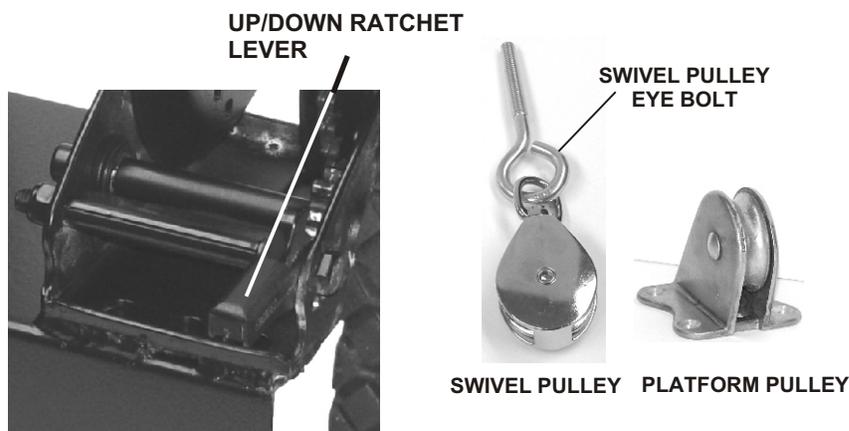
PSW SET

1. Install the wheel operated winch on a column or similar mounting surface. The winch mounting plate can be installed using 5/16" diameter steel bolts, or it can be welded to a metal surface. It should be positioned as close as possible to the work area and mounted approximately 4'0" above the finished floor.
2. Bolt the platform pulley directly above the winch approximately 18" below the surface on which the swivel pulley will be installed.
3. Bolt the swivel pulley to the roof joist or similar structure. The eye of the swivel pulley bolt should be directly below the mount surface with both bolts above the mounting surface. See the attached sketch. Be sure that the location chosen for the swivel pulley will allow the flexible tubing to "drape" when in the raised position. The cable should be essentially vertical between the swivel pulley and the attachment point on the tubing assembly when the tubing assembly is in the raised position.
4. Attach one end of the cable to the winch using through one of the holes in the winch. See next page for the procedure. Run the cable through the platform pulley and the swivel pulley. Using the cable clamp, attach the cable to the tubing assembly.

NOTE: Cable or nylon rope should be attached to adapters, slings, or wrapped around metal collars. It should not be wrapped around flexible tubing as it will damage the tube.

MAINTENANCE

The winch should be cleaned and lubricated every three months. Pulleys should be lubricated every six months. Nylon rope should be inspected every 6 months.

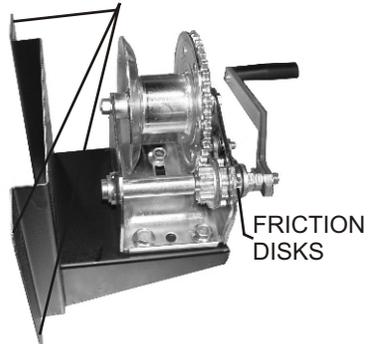


CAR-MON

INSTALLATION - OPERATION - MAINTENANCE

WALL MOUNTED BRAKE WINCH

MOUNTING HOLES IN EACH CORNER OF WALL BRACKET



OVERVIEW AND PRECAUTIONS FOR USING BRAKE WINCH

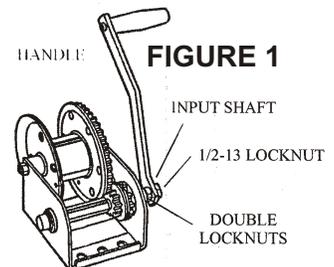
1. Read, understand and follow all instructions before installing and/or using product. NEVER allow anyone unfamiliar with the operating instructions to use this product.
2. The manufacturer or Car-Mon cannot be held liable for improper installation, use, or maintenance of this product.
3. Do not get oil or grease on the friction disks, This could allow the load to slip or fall.
4. Do not let anyone be positioned under or around the load being lifted.
5. Always inspect the cable. NEVER use with a frayed cable.
6. A loud clicking sound from the ratchet must be heard when lifting the load. If a loud clicking sound is not heard, do not use and replace ratchet components immediately. When lowering the load, no clicking will be heard because the braking system is activated.
7. Failure to operate the winch in a safe manor could result in serious bodily harm and/or damage to the equipment.

MOUNTING INSTRUCTIONS

1. Assemble handle onto input shaft end. Tighten the 1/2-13 locknut against handle. Note: Do not remove or adjust the double locknuts on long end of input shaft. They are an important part of the braking system and must be intact.
2. Mount the winch securely to a wall or beam capable of supporting at least 5 times the load the winch will be pulling.

CABLE ATTACHMENT TO DRUM

1. Always be sure the cable is pulling straight off the winch, not at an angle. This will prevent the cable from rubbing against the sides of the drum, which can damage the cable. When tube is in full down position, there must be a MINIMUM of three winds of cable on the drum at all times. There is 100' of cable supplied. Excess cable MUST be cut off. There should be no more than 3 wraps of cable on the drum when the hose is fully extended.
2. Run cable through side of drum hole as shown at right. Push cable through the aluminum sleeve and crimp tightly so that it cannot be pulled out.



Attach aluminum sleeve to end of cable and crimp tightly



Cable In/Cable Out decal



Thread cable through hole in side of drum

OPERATING INSTRUCTIONS

1. Turning the handle counter-clockwise actuates the brake. The brake system is designed to hold the load whenever the handle is released.

TO PULL CABLE IN OR RAISE LOAD

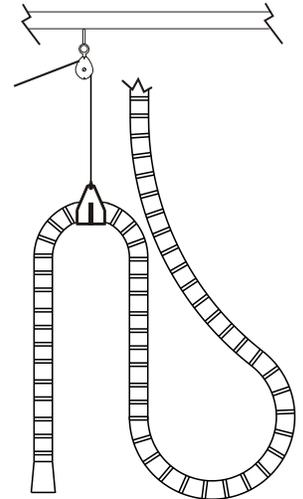
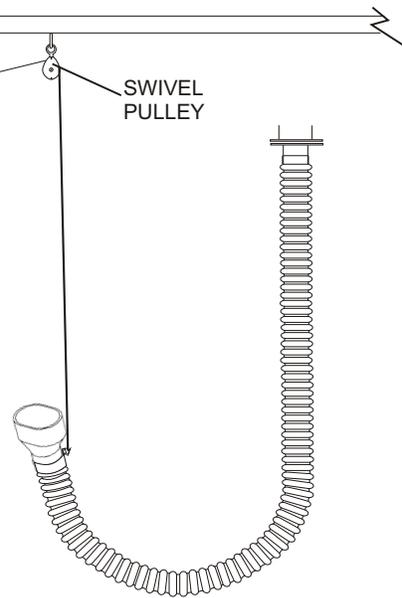
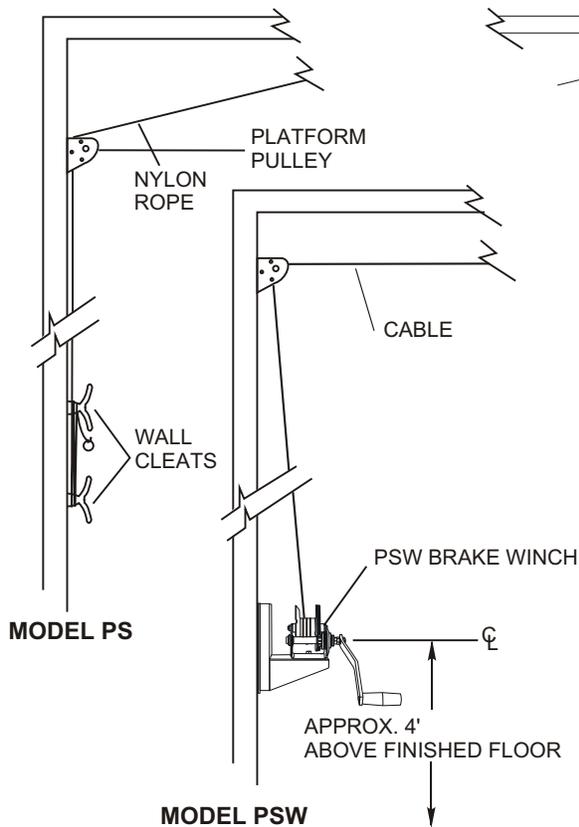
1. The cable must be securely fastened to the object being lifted and to the winch drum.
2. Always be sure that the cable and cable attachments are not damaged and are strong enough for the load. Assure there is adequate safety factor, of at least three times the maximum load for all components used.
3. Referring to the "Cable In/Cable Out" decal (see above) on the winch, turn the handle clockwise to lift. The ratchet MUST make a loud clicking sound.

TO LET CABLE OUT OR LOWER LOAD

1. Referring to the "Cable In/Cable Out" decal on the winch, turn the handle counter-clockwise to lower. No clicking will be heard because the brake system is activated.

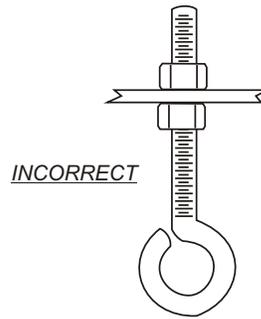
MAINTENANCE

1. Maintain a film of lithium grease on all gear teeth and to the O.D. of drum bearing at all times. Keep ratchet pawl pivot, bushings and pinion threads lubricated with automotive engine oil at all times.
2. Keep friction disks free of grease or oil.
3. Check brake friction disks for wear. If less than 1/16" thick, cracked, or broken, they must be replaced.
4. During each usage, check for proper ratchet operation. When cranking cable in, a loud clicking sound must be heard from the ratchet. If a loud clicking sound is not heard, do not use and replace damaged components immediately. When cranking cable out, there is no clicking and the ratchet pawl must be fully engaged into the ratchet gear teeth.

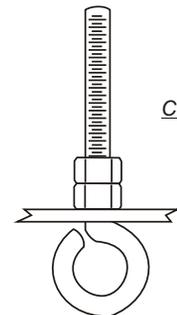


STANDARD CONFIGURATION WITH PULL-UP SET CONNECTION AT EXHAUST ADAPTER

OPTIONAL CONFIGURATION WITH PULL-UP SET CONNECTION TO CAR-MON TUBING SLING



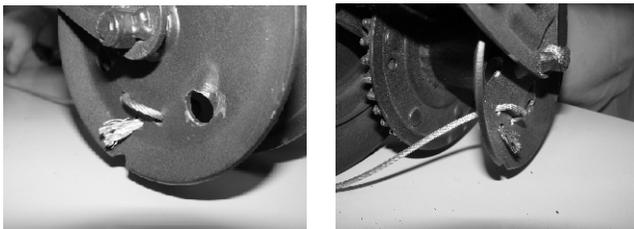
INCORRECT



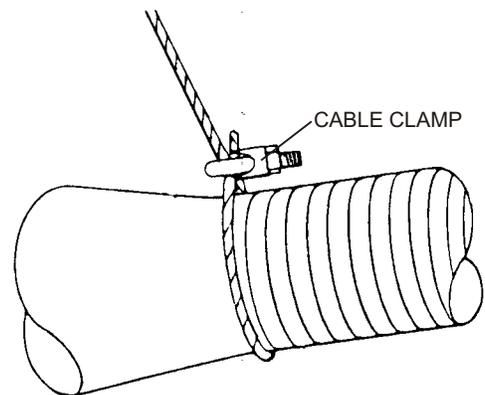
CORRECT

INSTALLATION OF SWIVEL PULLEY EYE BOLT

ATTACHING CABLE TO THE PSW DRUM



Wrap the cable through the holes in the side of the winch as shown.



CABLE CLAMP