EASYHOISTS

HARD TOP HOISTS

INSTALLATION INSTRUCTIONS

CAUTIONS AND GENERAL SAFETY

We highly recommend that the installer or operator of the Easy Hoists hard top hoist/storage system fully read and understand this page before beginning installation or operation.

1. Improper installation may cause personal injury, and/or property damage.
2. Easy Hoists Ltd will not be held liable for improper installations or misuse of the Easy Hoists hoist. It is intended for hard top removal/replacement or storage ONLY.
3. The Easy Hoists cradle is to be used only with the supplied winch. All warranties are void if used with any other winch or cable/rope and pulley system.
4. Check all joists and fixing points for strength before installing this hoist. If there is doubt regarding their strength, add extra support.
5. If your ceiling seems to "sag" when raising your hard top, we recommend that extra support should be added to your ceiling.
6. Always expose a joist or wall timber (if covered with plasterboard or similar) to ensure you are fixing to sound material that is strong enough.

7. Hooks and other fixings must be in the centre of wall timbers and ceiling joists. Coach screws require pilot holes.
8. If your ceiling does not have joists, we recommend that a qualified builder or carpenter installs this hoist. Special precautions may need to be taken.
9. By installing or having this Easy Hoists hard top hoist installed you accept all responsibility for events that may or may not occur from its use. You agree not to hold Easy Hoists Ltd liable for any accidents due to misuse, improper installation, neglect to the hoist, and/or negligence to these cautions. Easy Hoists Ltd will not reimburse you for improper installations.

PREPARING FOR THE INSTALLATION

1. Familiarize yourself with the structure of the garage.
   - Where & which way the ceiling joists run along the ceiling
   - How the walls are constructed, etc.
2. Back your car into the garage. This will help you to determine proper placement for the Easy Hoists hard top hoist.
   Note: Backing your car into the garage will place your hard top further into the garage thus, in most cases, clearing a fully raised garage door. In some instances, you can drive your car front first into the garage, but this depends entirely upon your particular situation, depth of garage etc.
3. Allow enough room between the wall and rear bumper, and between the wall and side of your car. (You may need to open your door, walk around the back of your car, etc…)
4. Decide where to mount the Easy Hoists winch.
   - On the wall at the rear of the car (the cable length does not allow for long distance mounting between ceiling pulley, second pulley and winch, so the side of the garage next to where the hoist pulley will be located is optimal) or
   - To the side of the car. We recommend the winch be mounted to the wall at the side of the car for accessibility (see above).
5. **Take caution in choosing a wall for mounting the winch**
   - The best wall to mount the winch is the wall that is to the outside of the house if the internal walls are made of timber and plaster board.
   - The Easy Hoists hoist/storage system is designed to have the winch mounted to a wall and NOT to the ceiling.
6. **Before installation, please take note of the following:**
   - Pilot holes of sufficient size must be drilled into the centre of the ceiling joists and wall studs. This is necessary to place fixings securely into them and to prevent the coach screws from breaking during insertion. Never use a joist that is cracked or splitting. **IDEA**: For greater strength and security of installation, use a 2”x6”x48” piece of lumber (or equivalent) that will be mounted to the ceiling perpendicular to ceiling joists. This avoids the need to open the ceiling for direct pulley to joist mounting. In the 2x6 drill (2) pilot holes at each joist location to screw into the ceiling joists (16” spacing depending on local building practices but may be different in your location – use an electric stud finder to confirm) with wood screws long enough to pass through the 2x6 and at least 2” into the ceiling joists. By way of example if joist spacing is every 16”, you’ll need to drill a total of (6) pilot holes.

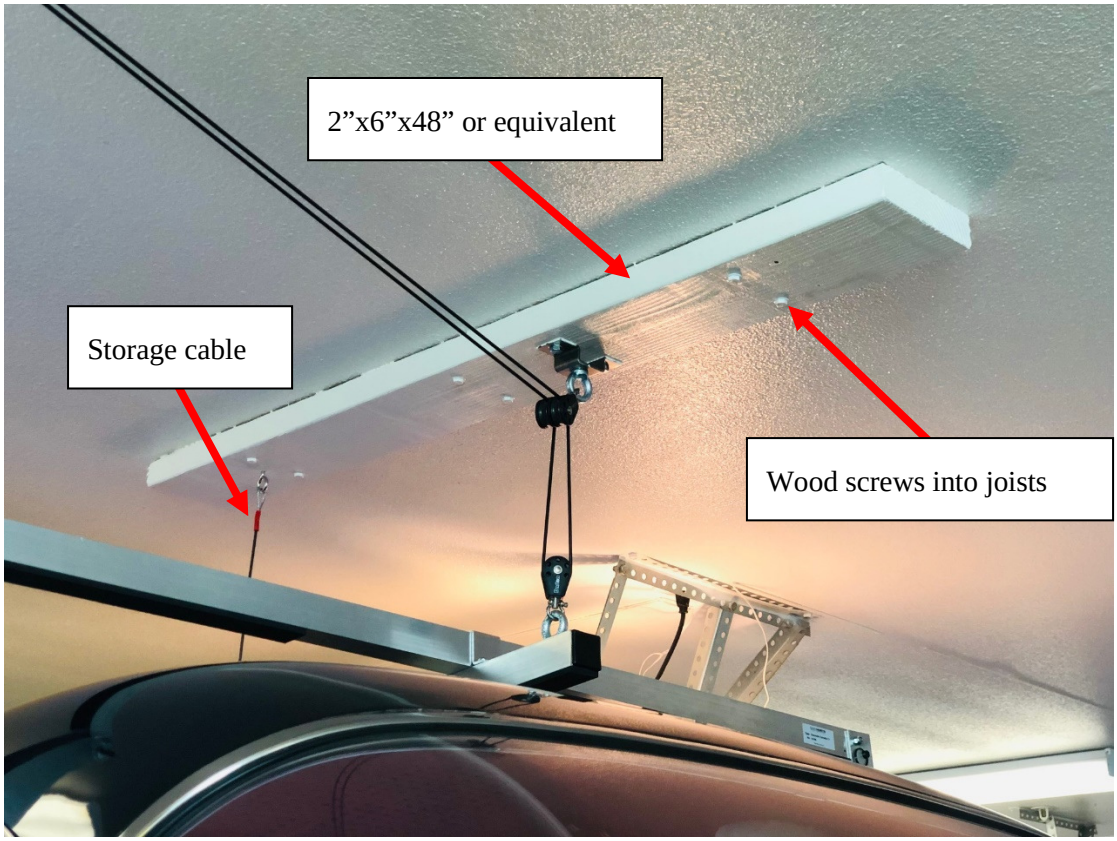
Please read these instructions <u>completely</u> before starting.

FITTING THE MAIN LIFTING POINT AND DOUBLE PULLEY

Note: DO NOT mount into plasterboard alone. The lifting points MUST be mounted into a solid wood ceiling joist or other sufficiently strong material (see previous section for optional installation IDEA).

1. With the car parked in the garage (reversed in), place the hoist cradle on top of the car so that you can determine where the large lifting eye at the rear of the cradle will be located when the cradle is fitted.
2. Locating the position of the double pulley: Locate the nearest ceiling joist to the lifting eye. In most garages, the joists will run side to side so you may find that you must go slightly in front or behind the ideal position and move the car accordingly. It is important that the ceiling attachment of the double pulley is directly above the lifting eye. Remember that you don't have to leave the car in that location, it just needs to be there when you fit or remove the hard top.
   Note: If you have an "up & over" garage door, it is vital that you check that the front of the hoist is further into the garage than the raised door. This is to ensure that the stabilizing cable can be fitted to the raised hardtop. The stabilizing cable is attached to the small eye at the front of the cradle.

   If you are installing in a very tight space, you may find that you can rotate the raised hardtop by 90 degrees to secure it with the stabilizing cable.
3. Mark the proposed position of the ceiling fixing bracket on the ceiling joist, and the proposed position of the stabilizing cable. If you are using the IDEA proposed for a piece of lumber to be mounted on the ceiling, locate and mark on the ceiling the center of the joists above the center line of the car.
4. Remove the car from the garage.
5. If you have a plasterboard ceiling, locate the ceiling joist and remove enough plasterboard to expose the edges of the joist and allow the bracket to sit right up against it. This is to ensure you will drill into the exact center of the ceiling joist. If using the IDEA, this step is not required.
6. Drill pilot holes for the fixing bracket into the center of the ceiling joist. If using the IDEA, have a helper hold the 2x6 on the ceiling. Using the (6) pilot holes in the 2x6 as guides, drill pilot holes in one set of (2) holes deep enough for your wood screws while making sure the 2x6 remains straight and remains in the selected location. Start (2) long wood screws in the 2x6 pilot holes just used. Have your friend hold the 2x6 back up on the ceiling while you screw the (2) wood screws into the ceiling until tight. At this point the 2x6 will stay in place. Using the remaining pilot holes as guides, drill two more sets of (2) holes, again deep enough for the wood screw length. Install the (4) remaining wood screws, making sure all (6) screws are tight. For a clean installation, take time to paint the 2x6 and screw heads to match the ceiling. See example below.



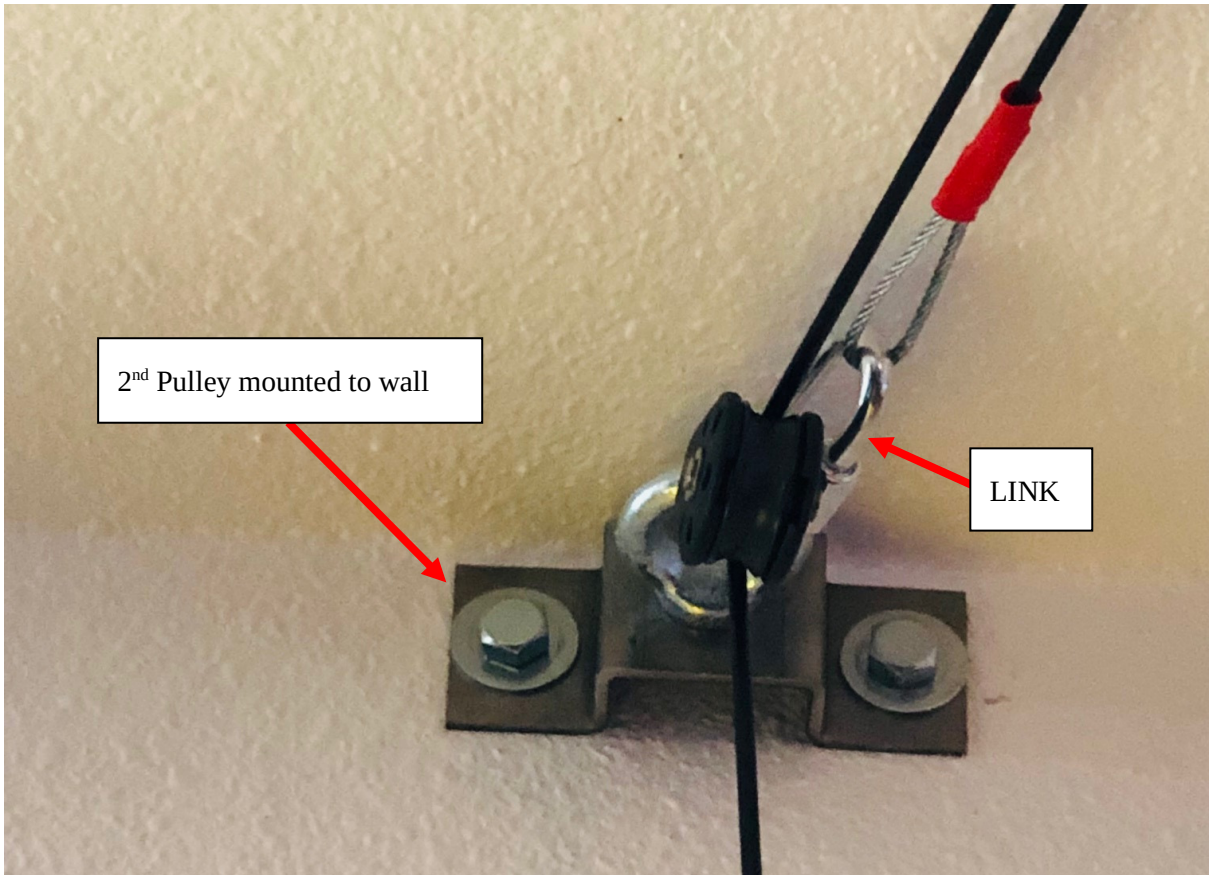
Optional Ceiling Mount **IDEA** – See notes Under Preparing For The Installation

7. Confirm the location of the ceiling lifting eye to match that on the cradle. Fix the bracket to the joist (or to the 2x6 if using the IDEA) using the coach screws provided. Attach the double pulley to the eye on the bracket by unscrewing the shackle pin, slipping the shackle onto the eye and then fixing the shackle pin back in. You should attach the pulley to the eye before fixing the bracket to the ceiling. Direction of the pulley is not important at this point since it rotates.

INSTALLING THE SECOND PULLEY

8. The second pulley (a single one) is located directly above the winch, so it is important to determine the location for the winch before fitting the second hook/pulley. Fix the second fixing bracket onto a wooden joist no more than 6 inches out from the wall using the same procedure as above. As an option you can mount it at the top of the wall if there is a solid stud or beam in that location (use a stud finder to confirm the location of wall studs). This fixing point holds the single pulley and quick link fixing which the cable will be attached to. The quick link can sometimes be a little tight to get over the lifting eye, but it will go on if you rotate it a bit and find the thinnest part of the lifting eye’s ring.

   You may wish to attach the pulley and quick link to the eye before fixing the bracket to the ceiling or wall (see example below).



Detail of Optional Wall Mount of 2nd Pulley and Final Cable Routing

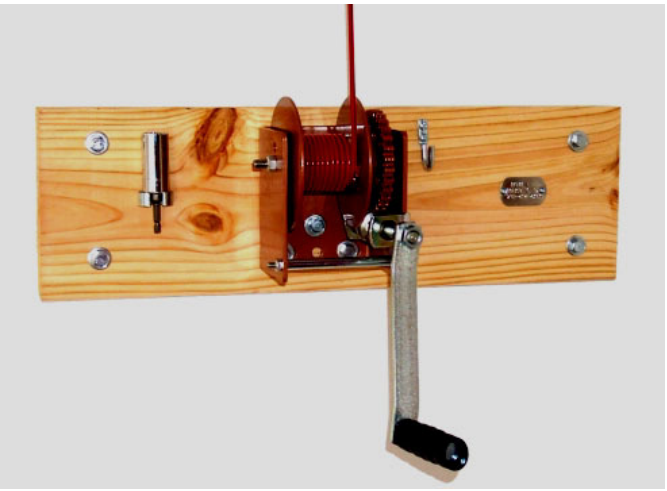
INSTALLING THE STORAGE CABLE

The storage cable is used for storing the Easy Hoist cradle when it is not in use and, once the hard top is in the cradle and in the raised position, to prevent it from swinging/rotating. It should never be allowed to support the weight of the hard top.

1. Drill a small pilot hole into the ceiling, nearest joist, or 2x6 support and screw the eyelet all the way in. See first picture above. This cable is not designed to support any weight and must never be used to take the weight of the hardtop.

Important: Remember to disconnect the storage cable before lowering your hard top.

If you fail to do this, your hard top will become unbalanced and will be in danger of slipping out of the cradle.

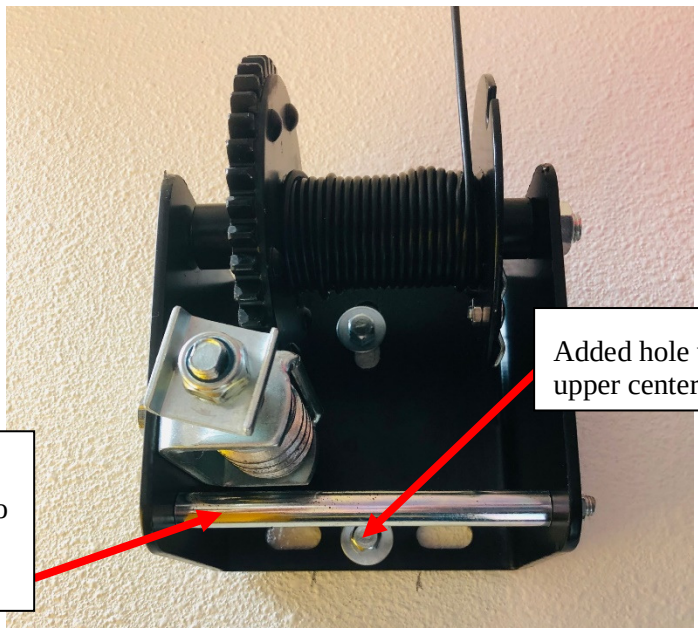


Examples of Standard Winch Mount

Please read over the next step, ***"Installing The Easy Hoists Winch***", carefully before continuing. Understanding of this step will ensure that the winch will work properly, and you will have many years of safe reliable service. It will also make it a little easier to operate.

INSTALLING THE EASY HOISTS WINCH

As you can see from the picture above, the winch is normally mounted to a wooden back board to which you also fix clips for the winch handle and other accessories. You don't have to use the backboard – you can fix the winch directly to the wall if you wish (unless you are attaching to plasterboard/stud wall in which case you MUST use a back board). If you choose to mount directly to the wall, drill a center hole (see picture for Optional Direct Mount above) temporarily remove the lower bolt and spacer, and drill a second hole through the bracket vertically in line with the upper center hole. In this way you will have (2) mounting holes vertically in line to screw directly into the wall stud.



Example of Optional Direct to Wall Stud Mount

The supplied heavy duty coach screws can be used in wood or brick. Rawlplugs are supplied if you are using them in brick/masonry. Always drill suitable pilot holes.

Walls vary greatly in their fabric so the supplied screws may not always be suitable. You may wish to substitute them for more suitable fixings for your situation. However, always make certain that the fixings are secure and durable.

Fixing to plasterboard/stud walls

If you have a plasterboard/stud wall and choose to use a wooden back board, secure it across two studs and the winch then secured to the board. In this situation the board must be at least 30mm thick or there will not be sufficient material to fix the winch safely. The three short coach screws are for fixing the winch to the board.

If the winch can be fixed through the board and into a stud, then so much the better. In this case, use two of the long coach screws and a couple of the short ones to fix the winch, and the remaining two long coach screws to fix the board to the other studs (one at each end is sufficient provided you have two coach screws going through the winch and backboard and into a stud.

See comments in “Installing The Easy Hoists Winch” above for the direct to wall mount option.

Fixing to brick or other solid walls

We recommend that you use one of the long coach screws on each end of the board, and the other two to fix the winch to the wall through the backboard. You can then use a couple of the short coach screws provide additional fixing for the winch just onto the board.

Alternatively, you can use the four long coach screws to fix the board to the wall, and then the 3 short coach screws to fix the winch to the board. In this instance, the board must be at least 30mm thick or there will not be sufficient material to fix the winch safely.

In some cases, garage walls are built using hollow bricks or breeze block. If so, you must make sure that the fixings are secure. It may be necessary to source alternative fixings for these wall types.

Notes:

- The horizontal bar on the winch is located at the bottom, and the spool at the top.
- Avoid walls that might have utilities, i.e. electricity, piping, etc. running through them.
- The winch must be positioned so that the cable runs as straight as possible from the center of the winch drum to the hook installed into the ceiling joist above. Alignment of this cable is important for the winch to work properly and safely.

Assembly of the Easy Hoists Cradle

Assembly is straightforward and simple. While assembling the Easy Hoists please remember to keep the pads off the floor.

Always keep your pads dry and clean.

Note:	The left and right swing arms are NOT interchangeable. Look for paint marks on the swing arms and on the long bar for a match.

1. Locate the cradle hardware kit.

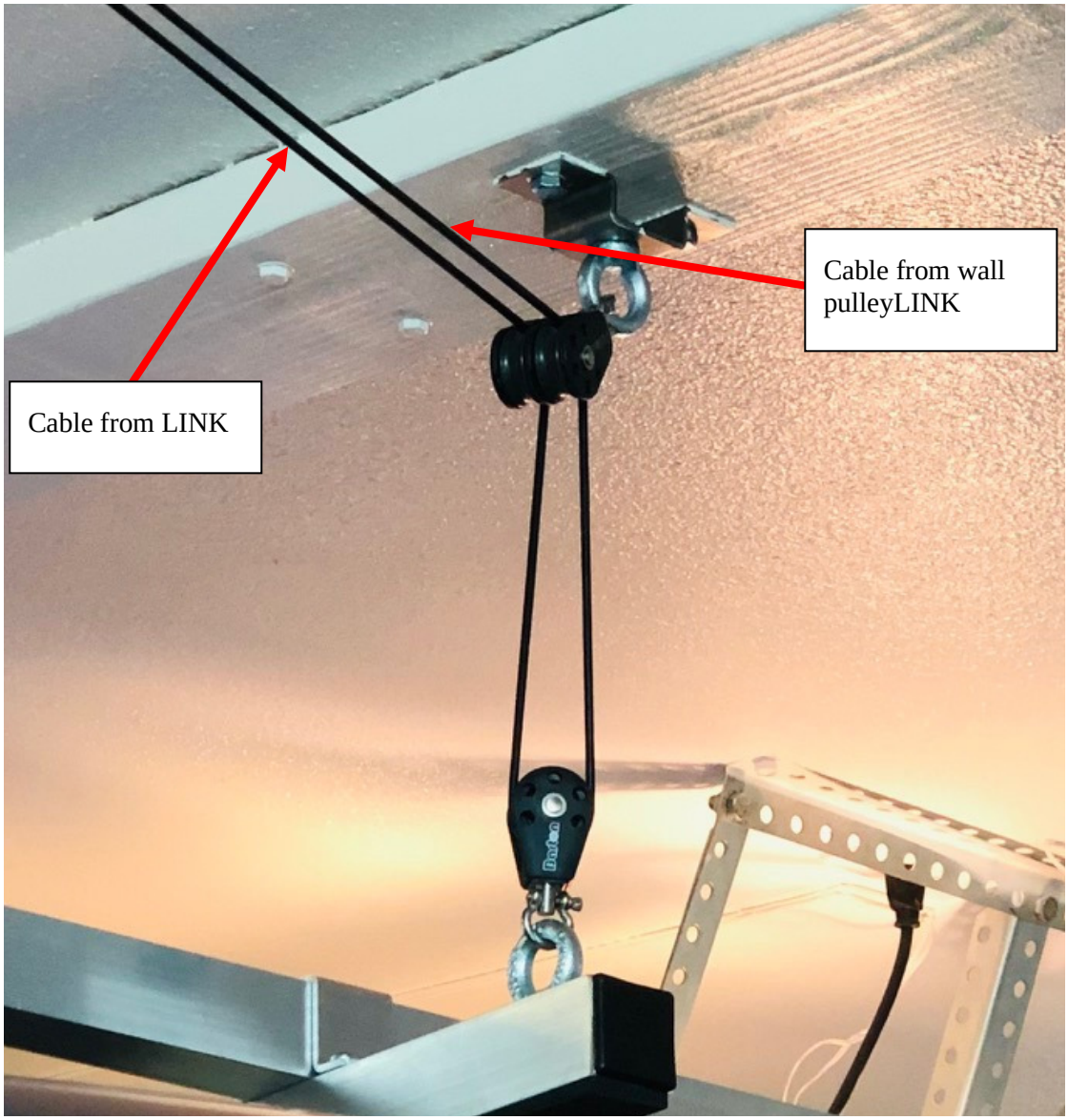
   Two 6mm bolts
   Two 6mm locknuts
   Four small washers
   Two locking pins.
   Four self-tapping screws (+ 1 spare)

2. Look for a small paint mark near the bolt hole on one of the swing arms
3. Look for a matching mark near a bolt hole of the long bar as well.
4. Attach the arm to the long bar with one bolt, two washers, and one nut.
5. The bolt will go into the upper hole of the assembly.
6. Don't over-tighten. It needs to be loose enough to pivot the swing arm up & down.
7. Insert the locking pin into the hole.
8. Repeat for the other side. The opposite side will NOT have paint marks.
9. Once the arms are assembled onto the long bar, proceed as follows to complete the cradle assembly:
10. Locate the short bar.
11. Locate the four Phillips screws.
12. On the long bar, look at the fixing holes on the joining bracket. They are in different positions to ensure correct assembly (or a red mark is used).
13. Lay the long bar on top of the short bar to form a "T".
14. Insert the screws and tighten. These screws are deliberately tight. Ensure that they are fully inserted but be careful not to over-tighten them or the holes will strip out. Larger screws must then be used.
15. If the rubber pads are not already fitted, attach one to the front of the short bar and one to each of the side arms. If the side arm brackets have two holes, use the one with the black mark next to it.
    Tie the fleeces over the rubber pads if they have not already been fitted. Tuck the tie cords under the fleece cover.
16. If it isn't already attached, fix the remaining single pulley to the lifting eye on the short bar.
17. The Easy Hoists cradle assembly is now complete.

ROUTING THE CABLE

When routing the cable through the pulleys and Easy Hoists cradle, it is important to follow the steps below for a spin free installation. The cable must be relaxed before routing.

1. Unroll the cable and stretch it out to remove all bends and twists if not already done so.
2. From the winch, thread your cable through the single pulley on the wall/ceiling above the winch.
3. Take the cable end through one side of the double pulley in the middle of the garage bay. See picture below.
4. Thread the cable end through one side of the pulley attached to the Easy Hoists cradle.
5. Take the cable end back up through the other opening of the double pulley. See picture below



6. Attach the eye of the cable end to the LINK attached to the hook above the winch. If the LINK will not pass over the lifting eye casting, open the LINK and carefully pry the LINK opening apart enough to fit over the shackle casting; the LINK design will still allow you to close it. Tighten the nut on the LINK making sure it is secure.

See Detail of Optional Wall Mount of 2nd Pulley and Final Cable Routing picture on Page 5.

7. Wind the cable onto the winch by using the power tool adapter or winch handle. (See using the power tool adapter instructions)

COMPLETION OF THE INSTALLATION

At this point the basic installation is complete.

Should you have any spare parts left over at this point, recheck all steps and ensure that none were skipped. All kits are shipped with the correct amount of parts (except for a spare self-tapping screw). If you did not have enough parts, i.e. missing screws, nuts, etc. please call us directly. We will remedy the situation immediately