

# Assembly Instructions



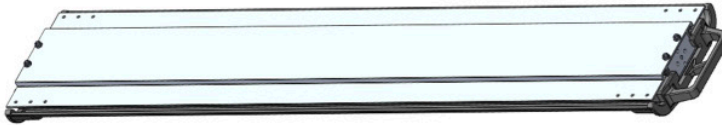
# DEFIANT



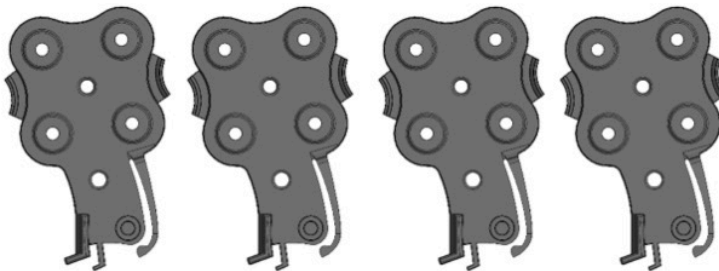
 **Bluestreak**equipment MAGNETICS  
APPLICATION DRIVEN DESIGN

Bluestreak Equipment  
1645 Hwy #3, Delhi, Ontario, Canada N4B 2W6

## What's in the Box - Parts



Magnet- 1pc  
w/ Quick Clean Off Sleeve - 1pc



Quadpod - 4pcs



Cord Cleat - 4pcs



4mm Nuts - 16pcs



Rare Earth  
Pot Magnets - 16pcs



4mm cord - 4pc



1/4" x 1-3/4" Hex Bolt



1pc T-handle - 1pc

## Tools Needed

7/16" Wrench

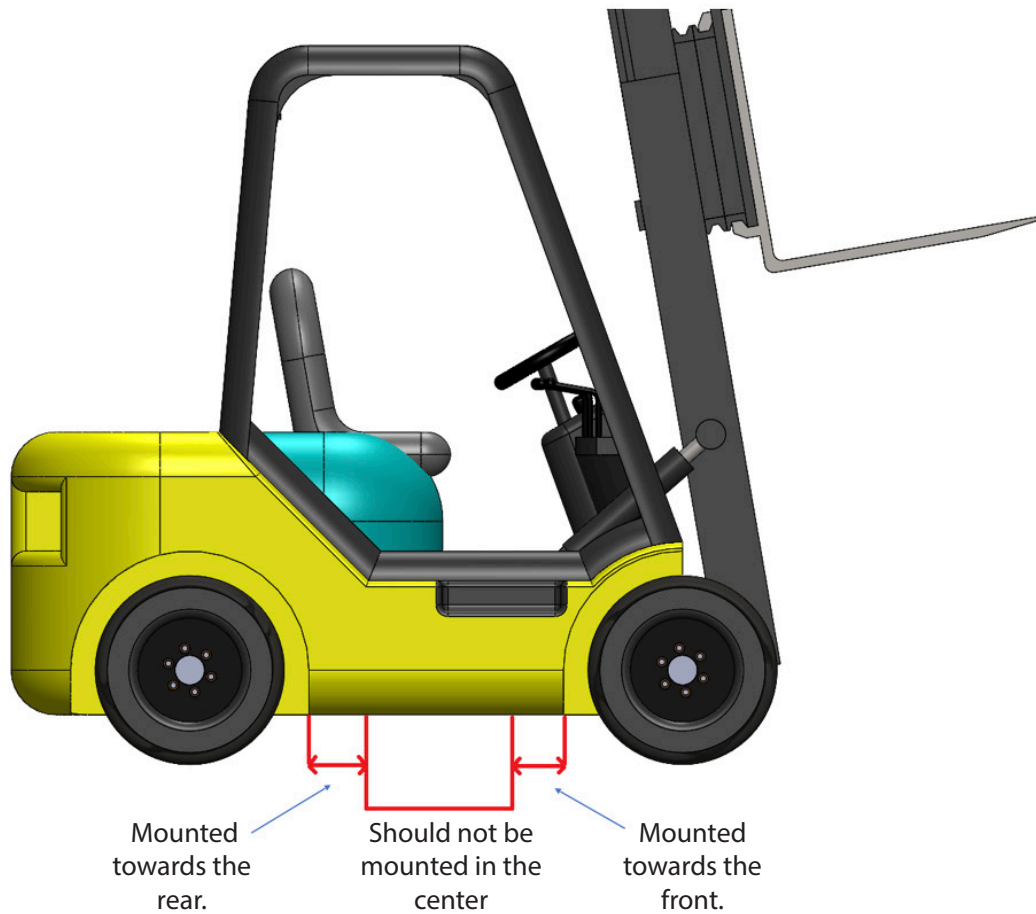


7/16" Socket



## Preliminary Info Before Assembly

The Defiant has a set of consecutive holes drilled in the flanges of the magnet housing to allow it to adapt to several different forklift sizes. You will be taking a measurement on your forklift before any assembly so that you can identify which holes you will be using when mounting the Quadpods.



The Defiant is intended to be mounted within the wheelbase of the forklift, in close proximity to either the front or rear wheels. The illustration above represents appropriate mounting locations. It should not be mounted at the center of the forklift.

It is also a requirement that the quad pods be attached to a flat, solid steel member underneath the forklift. If either of the front or rear locations on the chassis/ underbody have many holes or are not flat, you must choose a different mounting location. The next page illustrates some examples.

## Examples Of Mounting Locations On Prime Mover



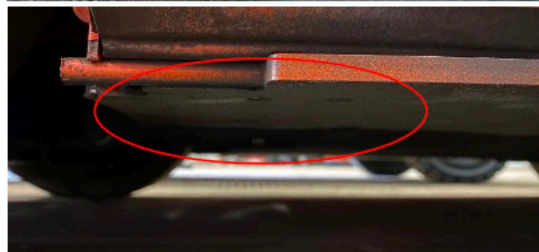
Not Ideal – The magnet should not be mounted where there are any large voids in the underbody. The magnet pods need full contact with a thick steel surface.



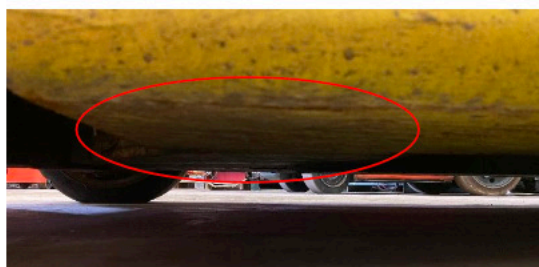
Not Ideal – The magnet should not be mounted where there are any large voids, loose metal, or heavy rust. Surface rust should be wire brushed before installation.



Not Ideal – The magnet should not be mounted where there are large protrusions from the underbody or chassis. The magnet needs to be able to mount flat.



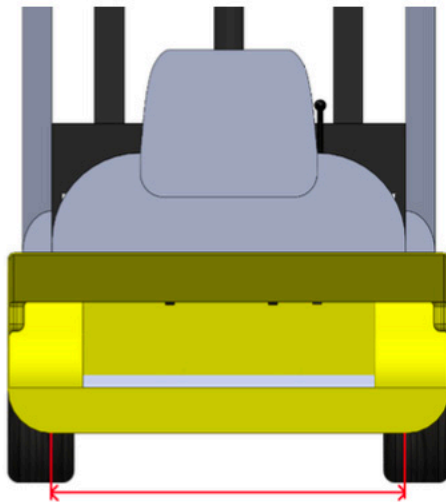
Ideal– The magnet can be mounted easily on the flat plate on the underbody.



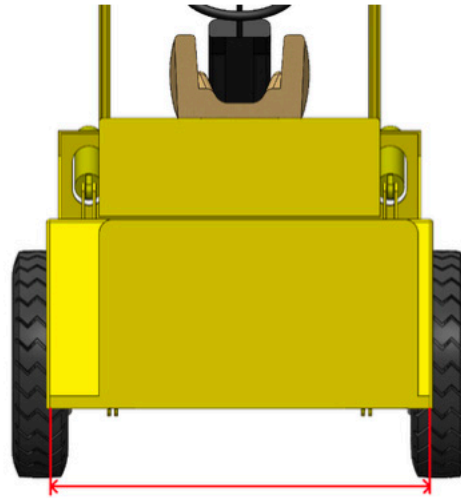
Ideal– The magnet can be mounted easily on the flat plate on the underbody.

## Step 1. Take Measurements Of Your Forklift/Prime Mover

Once the mounting position has been determined, you must take a measurement of the width of the chassis or underbody at that position. The measurement should be taken as the widest possible point on the underbody. A few illustrations are presented below:



Widest possible on the flat bottom.



Widest possible on the flat bottom.

If there are any obstructions widthwise on the underbody of the forklift, the mounting location must be moved to ensure the sweeper is mounted in a correct way. This is critical to ensure the sweeper does not fall off during normal operation. The illustration below shows an exhaust pipe that is lower than the chassis itself. The location illustrated below would not be ideal for mounting the sweeper as the exhaust would interfere with the magnet housing.



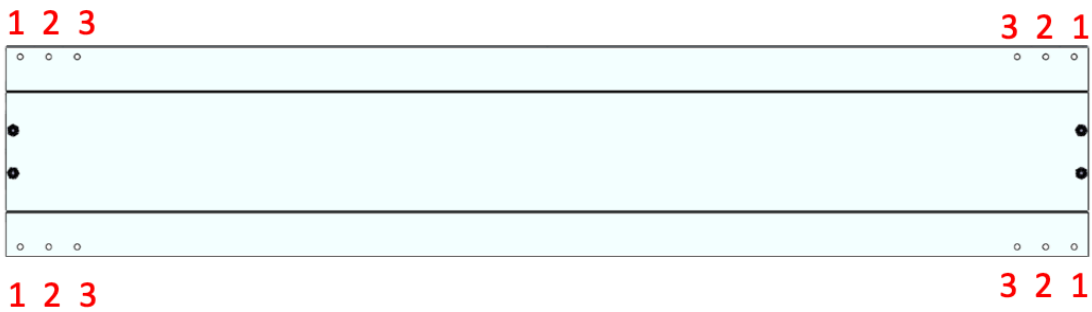
Solution: The sweeper should be moved closer to the rear wheel when mounting so that the exhaust pipe does not interfere with the sweeper.

## Step 2. Identify The Mounting Holes To Be Used

With the measurement recorded, use the charts below to identify the set of holes that work best for your forklift. The table below shows holes for both versions of the Defiant assemblies.

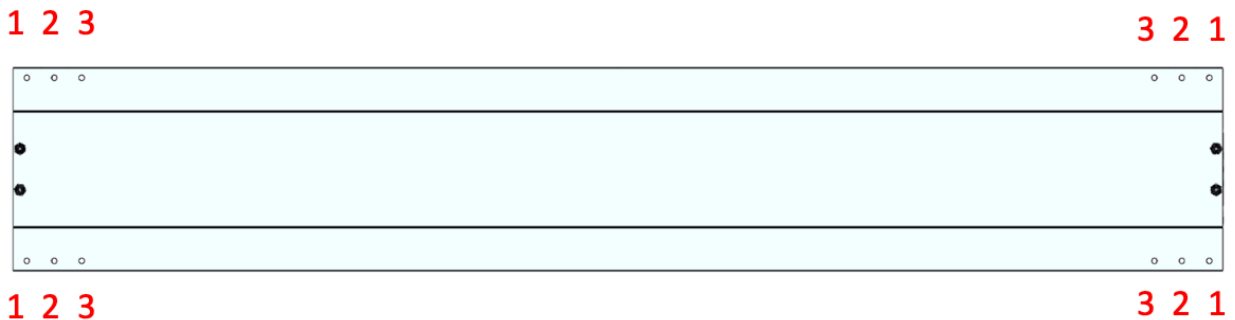
For Defiant 36:

Measurement	Hole Location
36in [91.4cm] or larger	1
34-36in [86.4-91.4cm]	2
33-34in [83.8-86.4cm]	3



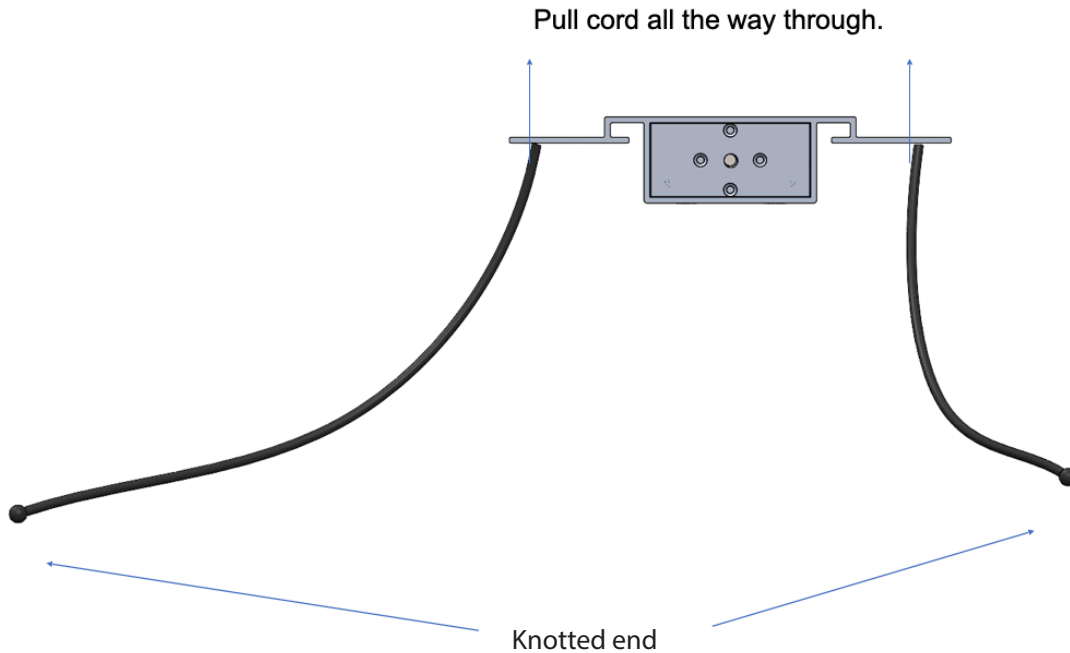
For Defiant 42:

Measurement, inches [cm]	Hole Location
42in [106.7cm] or larger	1
40-42in [101.6-106.7cm]	2
39-40in [99.1-101.6cm]	3

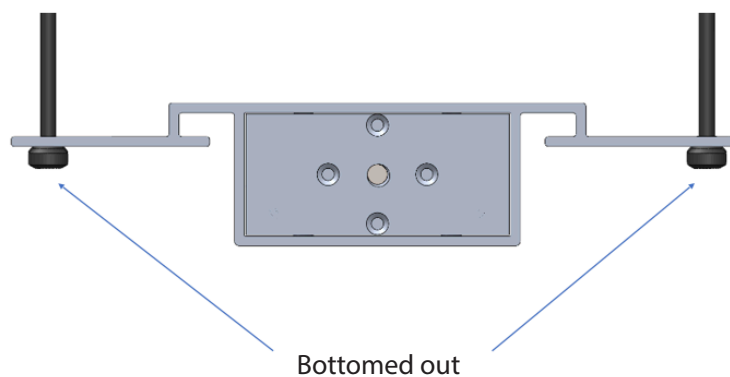


## Step 3. Insert The Cords Into The Magnet Housing

Once you have determined the optimal hole locations, obtain the 4 cords from the plastic bags. Install the four cords into the aluminum magnet housing. This is best done by pulling the sleeve off if it is not already off. The end without the knot should be inserted from the bottom of the housing through to the top. When pulled taught, the knot end will rest on the underside of the housing as shown.

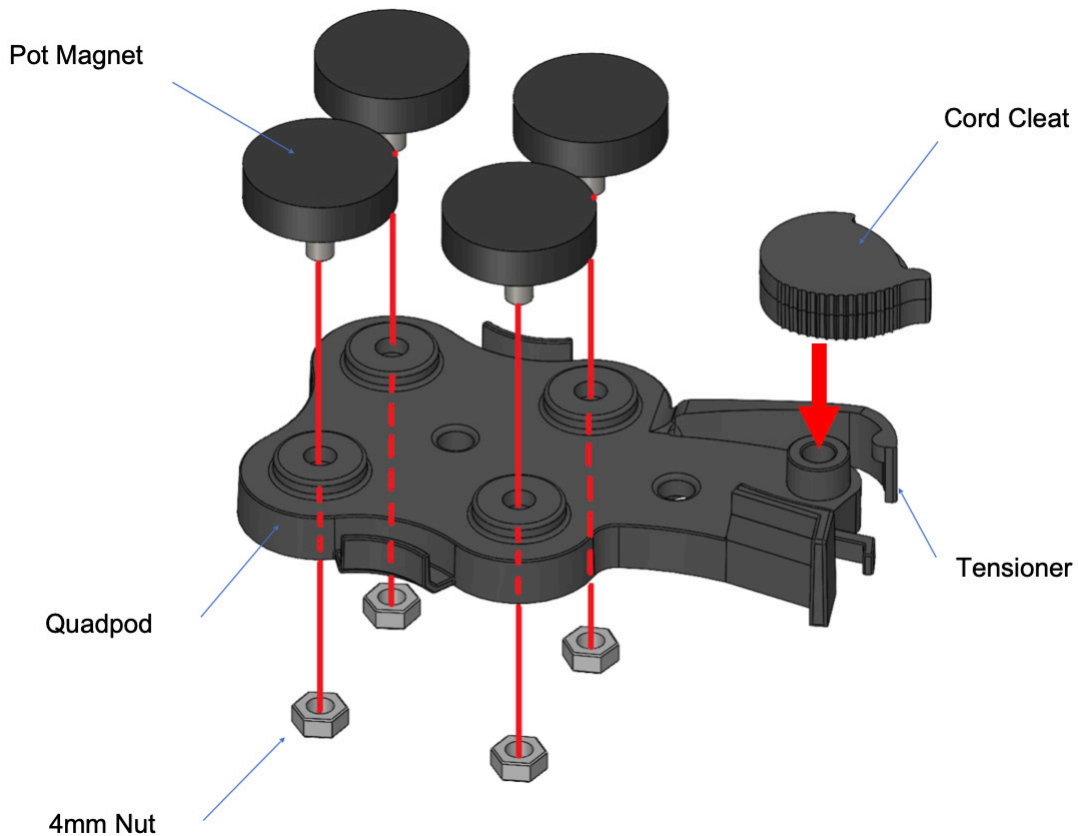


When completed, the knotted ends will be pressed up against the bottom of the magnet housing.



## Step 4. Assemble the magnet Pods

Note: No tools are required for this step.



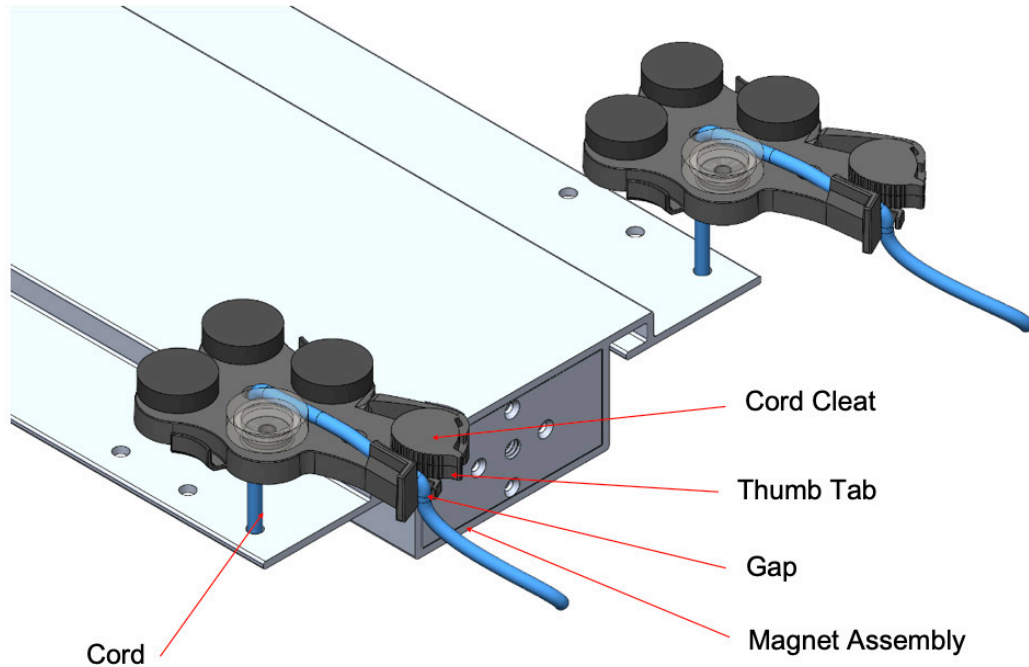
To install the pot magnets into the Quadpod, place a 4mm nut into the bottom of the Quadpod in the hex shaped recess. Screw the Pot magnet down into the Quadpod using your fingers until it tightens fully. Finger tight is ok. Repeat for the other 3 Pot Magnets.

To install the cord cleat onto the quadpod, pull the tensioner outwards slightly so that it can be slipped over the boss feature in the quadpod frame. The tensioner will provide constant tension on the cord cleat and will not allow the assembly to come undone easily.



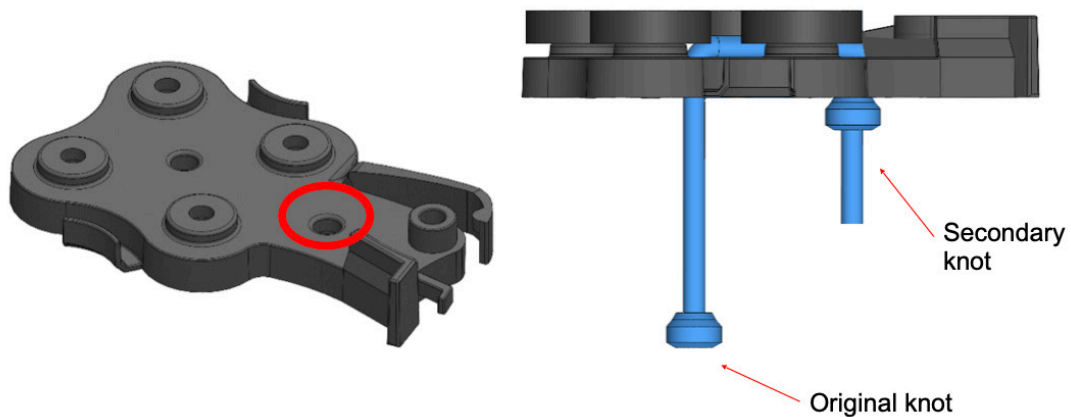
## Step 5. Attach The Quadpod Frames To The Magnet

Note: No tools are required for this step.



Insert the 4mm black cord through the hole in the center of the Pot Magnets. Then place the cord through the adjustable gap on the left side of the Cord Cleat. Use the thumb tab to open the gap to help insert the Cord. Repeat this procedure for all four corners.

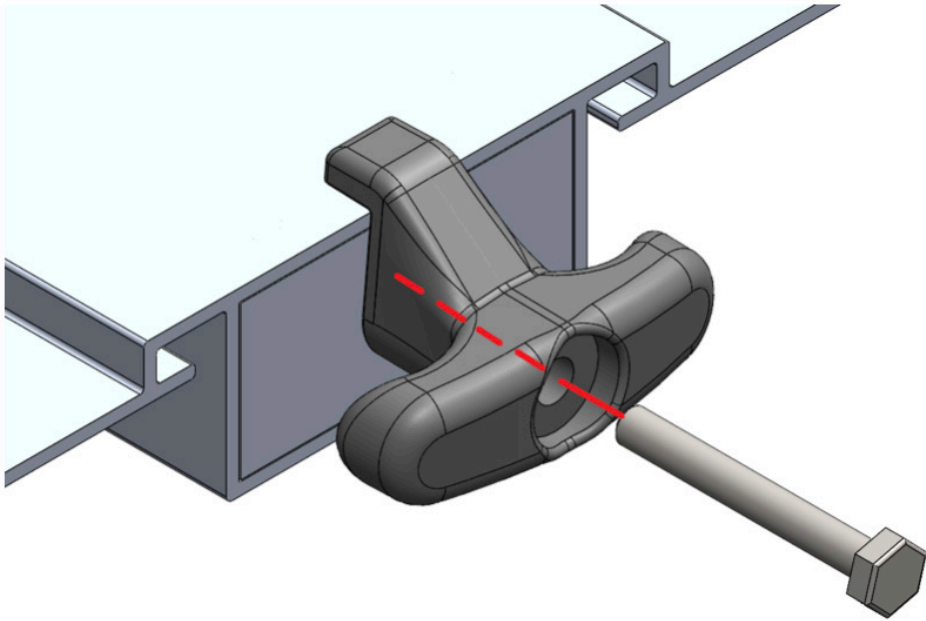
You may leave the cord loose on the end until it is mounted underneath the forklift. It will be tied back in further step.



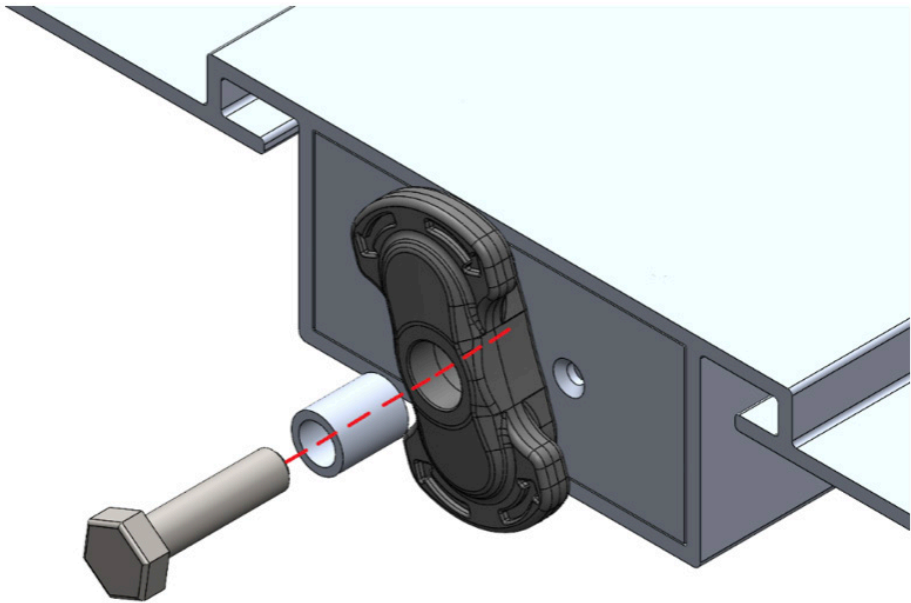
Note: You will see a second hole in the body of the Quadpod. This should only be used if the cord cleat or tensioner fails for whatever reason. If this happens, simply pass the rope in a U-shape and tie a knot at the appropriate height beneath the quadpod. Additional pods can be purchased if required as well.

## Step 6. Attach the T-Handle and Swivel Latch

Obtain the 0.25"-20 x 1.75" long hex bolt and the T-handle. Install this into the end cap of the magnet housing, as illustrated below. This should be installed on the cap that has the single tapped hole. Tighten fully using a 7/16" socket.

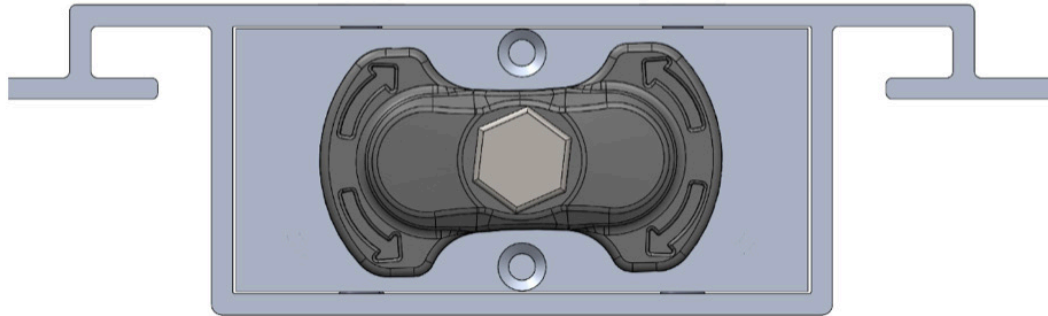


The swivel latch assembly is installed from factory, however an exemplary illustration is presented below in case these parts ever need to be replaced. Place the bushing into the swivel latch, then install it into the end cap of the magnet housing using the 0.25" x 1" bolt, as illustrated below. The stainless-steel head of the spring pin in the swivel latch should match the dimples in the end cap.

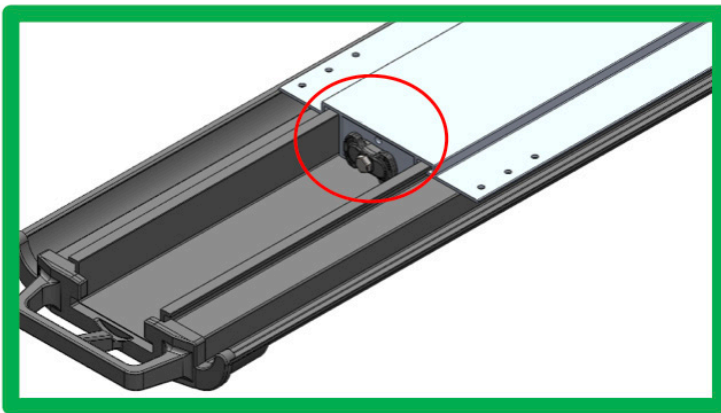


## Step 7. Re-install the Quick Clean Off Sleeve

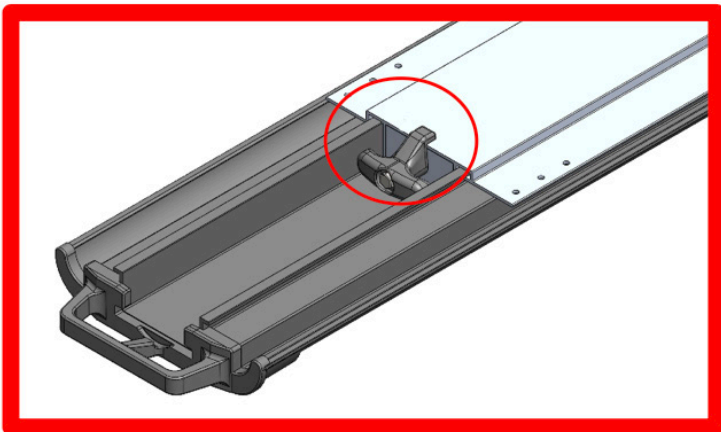
Pivot the swivel latch so that it allows the sleeve to slide on to the magnet housing. The swivel latch is an indexable mechanism that can pivot 360 degrees in any direction but must be as illustrated below whenever removing or reinstalling the sleeve on the magnet housing.



Slide the sleeve into position on the magnet housing. The sleeve should always be slid on from the latch side so that it is able to be locked in position. The illustration below shows the correct and incorrect orientation when reinstalling the quick clean off sleeve.



The sleeve is being put on the correct way. The handle should always meet with the switch latch.

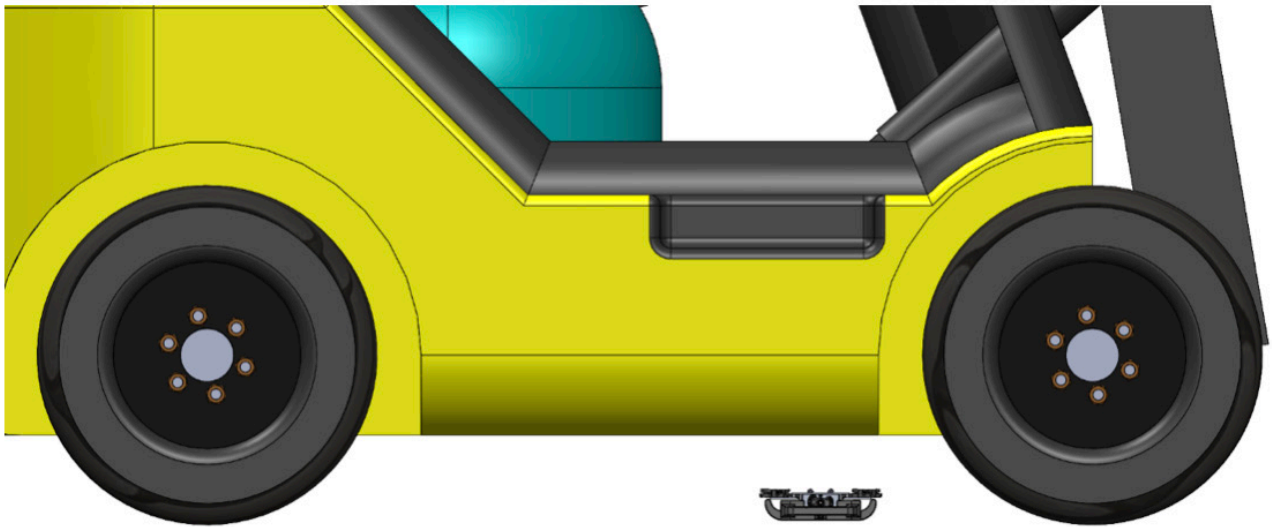


The sleeve is being put on the wrong way. The two handles are on the same side.

## Step 8. Clean/Prep Forklift For Installtion

It is important that the surface the quadpod magnets will be sticking to is clean and free of grease, oil, dirt and other contaminants. Any of these substances will drastically affect the holding power of the quadpod on the chassis of the forklift and could cause the unit to fall off the forklift.

Use a rag and a degreaser to thoroughly wipe the areas where the magnet will be mounted. If there is any surface rust, use a wire brush to remove as much as possible.



Place the magnet on the ground adjacent to the forklift and slide it underneath the forklift until it is roughly centered on the vehicle from left to right. The assembly should be positioned to the front or rear of the forklift as indicated in a previous step.

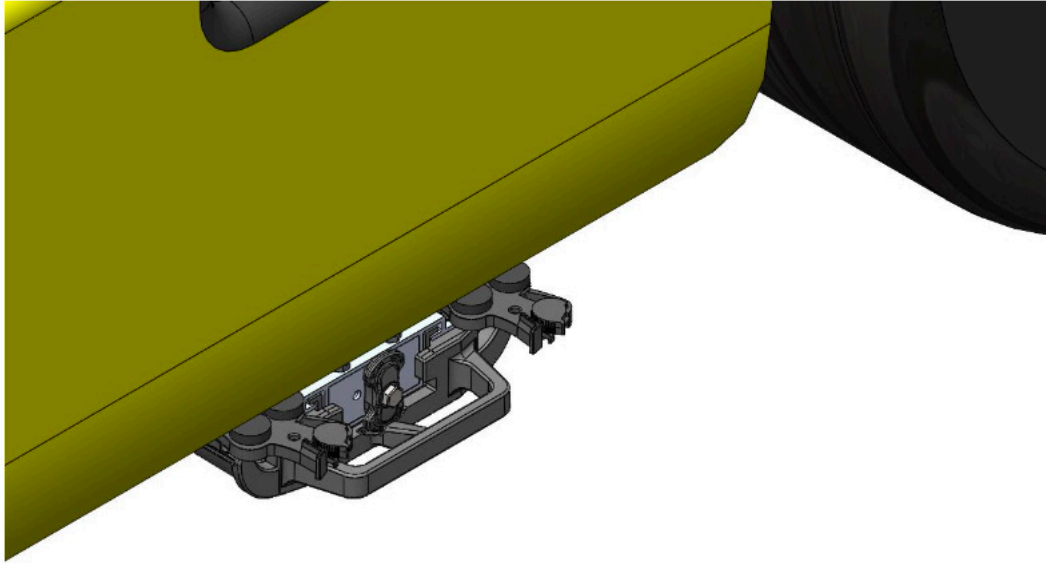


The above illustration shows the mounting from the front. The assembly should be roughly centered left to right on the underbody before lifting the quadpods up into place. It is recommended to have two people to install the sweeper so that it is mounted straight. Be sure to keep your fingers clear of the pot magnets when lifting the quadpods into place. It is recommended to hold the cord cleat side of the quadpod when mounting so that your hands are free of the magnet surface.

## Step 9. Complete The Install Of The Magnetic Sweeper

Attach the four quadpod assemblies to the underside of the vehicle directly above where the cord comes out of the top of the magnet assembly. It is not recommended for the rope to be any other angle other than vertical.

Also, ensure each of the quadpod assemblies is oriented such that the cord cleat is facing outwards toward you. This will allow you to adjust the height of the sweeper easily as necessary.



Once the assembly is mounted you can refer to the "Operating Instructions" included with your product for information on how to use the magnetic sweeper.