

# Operating Instructions



# DEFIANT



 **Bluestreak**equipment MAGNETICS  
APPLICATION DRIVEN DESIGN

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

## Setting Up Sweeper Prior To Use

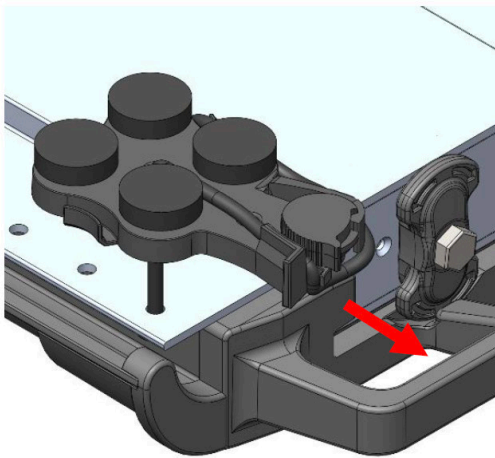
The Defiant comes 90% assembled with only the T-handle and hanging magnet pods to assemble on to the main magnet housing.

Follow the separate "Assembly Instructions" provided to assemble and set up the sweeper.

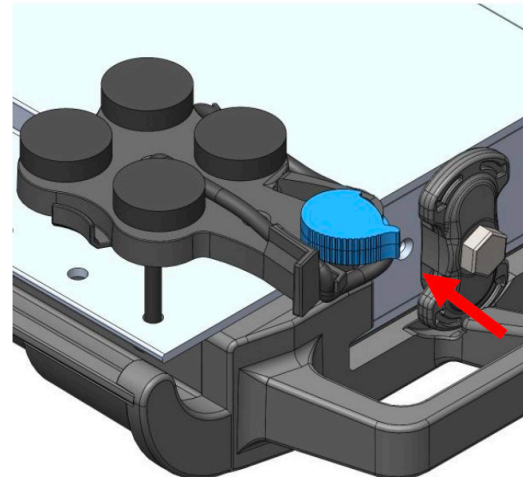
When finished, the Defiant should hang freely and not obstruct normal operation of the prime mover.

## Overview of Operation - Sweep Height Adjustment

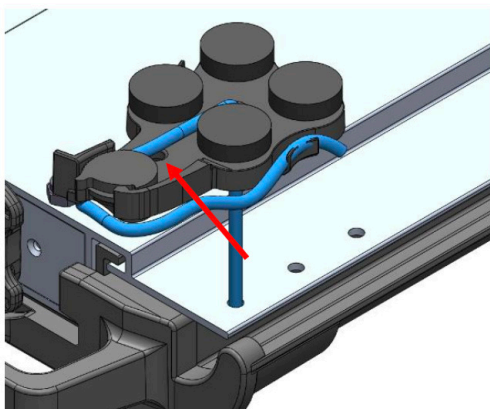
Adjusting the sweep height is made easy using the cord cleat on the end of each of the quadpod assemblies. To raise the sweeper, simply lift up on the magnet housing and pull the cord towards you. The cord cleat is self-locking and applies constant pressure to the cord, so you do not need to articulate the cleat itself when raising the sweeper. When lowering the sweeper, the cord cleat should be drawn back with your thumb, while letting the cord out away from you.



Raise – Lift magnet housing and pull cord.



Lower - Draw back cord cleat and slowly release cord

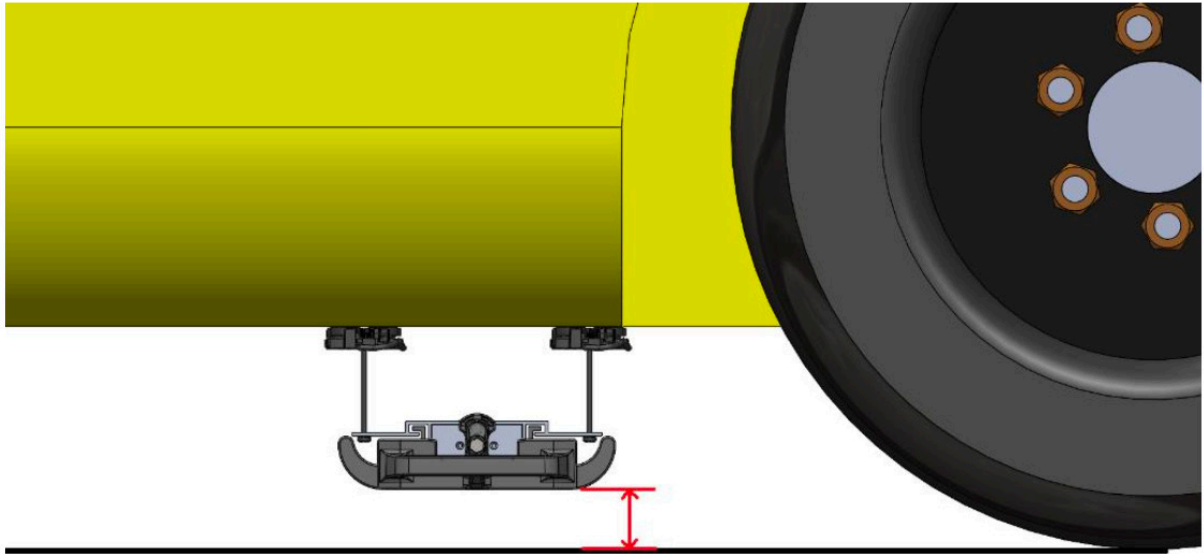


After performing any height adjustment, the excess cord should be routed into the tabs located on either side of the quadpod. This keeps the appearance tidy, but more importantly keeps the rope from dragging on the ground.

If the length of the unused cord (extending outside the cord cleat) is longer than 5" it is highly recommended to pass the cord through the hole (red arrow) and tie a knot on the underside to prevent the cord from ever falling out. There are several ways to tie back/tie off the rope, perform one that ensures the rope will not dangle during normal operation.

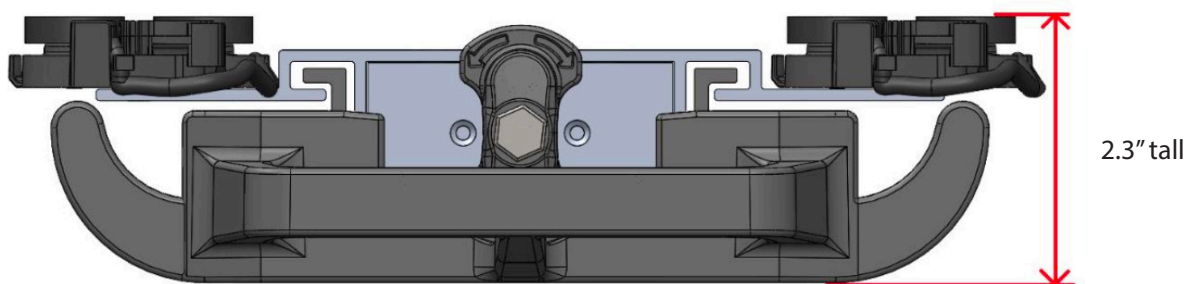
## Overview of Operation - Recommended Ground Clearance

The recommended sweep height or ground clearance for the Defiant is 1-2". Ground clearance of 1" is only recommended when operating the magnetic sweeper over smooth concrete or paved surfaces. On some electric forklift models, the ground clearance may be under 1". It is up to the operator to ensure the Defiant is not damaged under normal use.



1-2" Ground Clearance

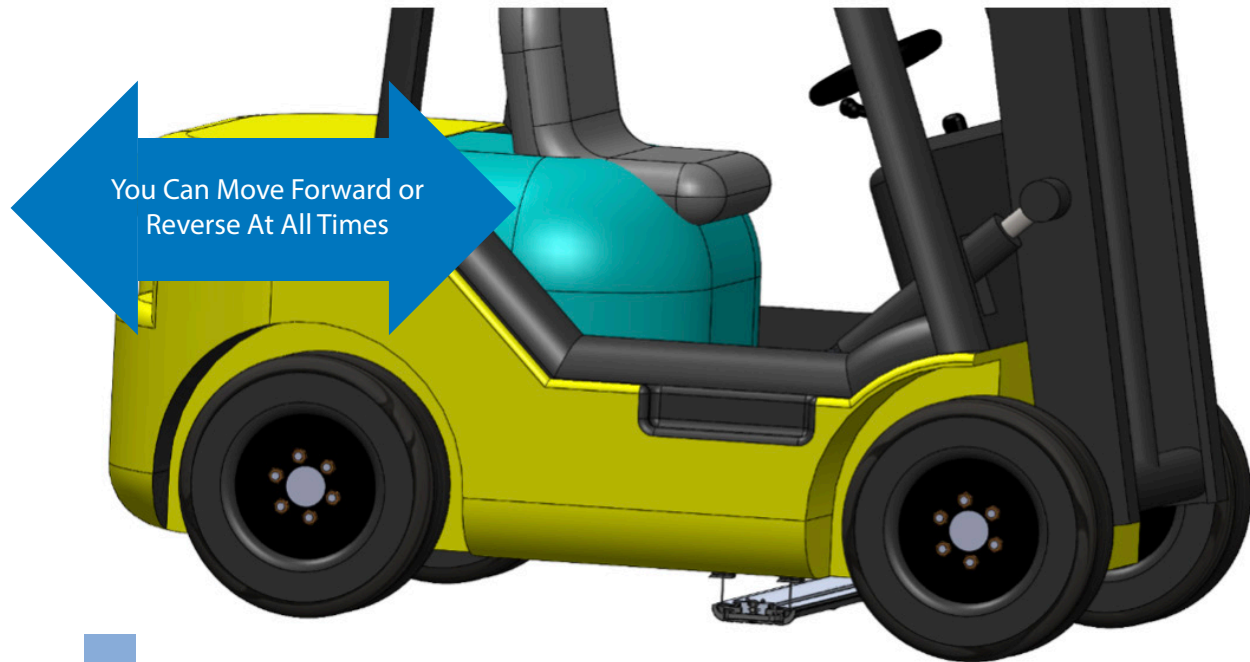
Whenever performing height adjustment for ground clearance or pickup performance, ensure that all cords are equally as tight to distribute the weight evenly across all the cords. The sweeper should always remain mounted level and should never be raked forward or backward to avoid damage to the sweeper.



The illustration above shows the tightest configuration that the sweeper can achieve. Some electric models of forklifts with low ground clearance will require that the pods be touching the aluminum housing. The sweep heights on some electric models may be lower than 1" in this scenario. Keep this in mind when operating the magnetic sweeper to avoid premature damage.

## Overview of Operation - Operating the Prime Mover

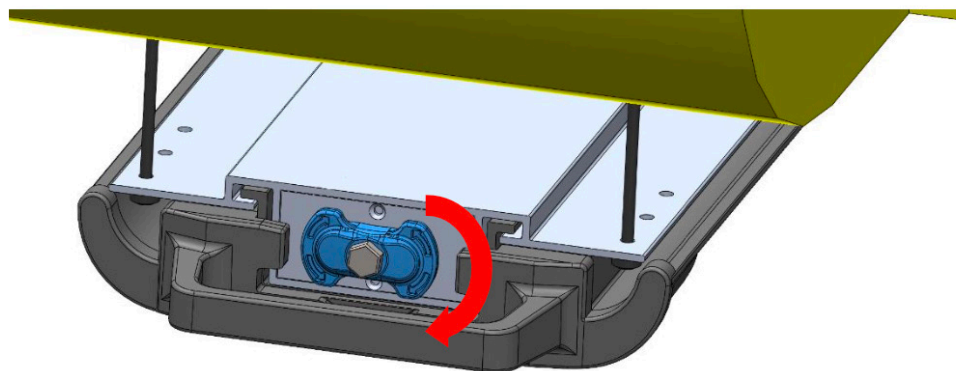
The sweeper should not frequently contact the ground during normal operation. If this is the case, you should raise the sweeper to avoid damage. The sweeper will collect debris from up to 4 inches so even at 2 or more inches there is still optimal performance.



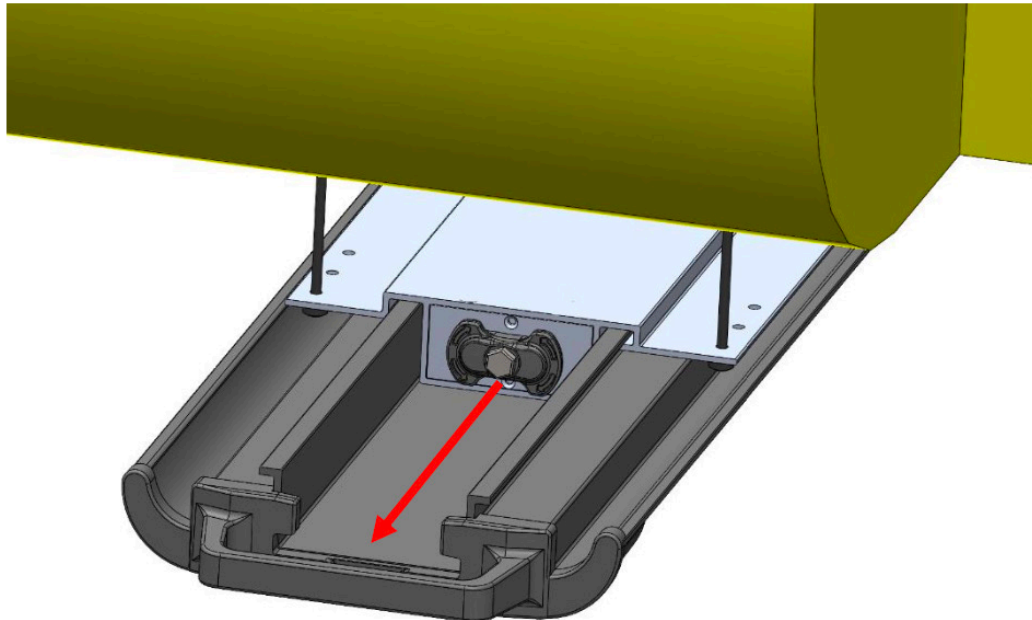
## Overview of Operation - Removing Metal Debris

Once debris is collected, the quick clean off sleeve can be used to pull the debris out from underneath the magnet.

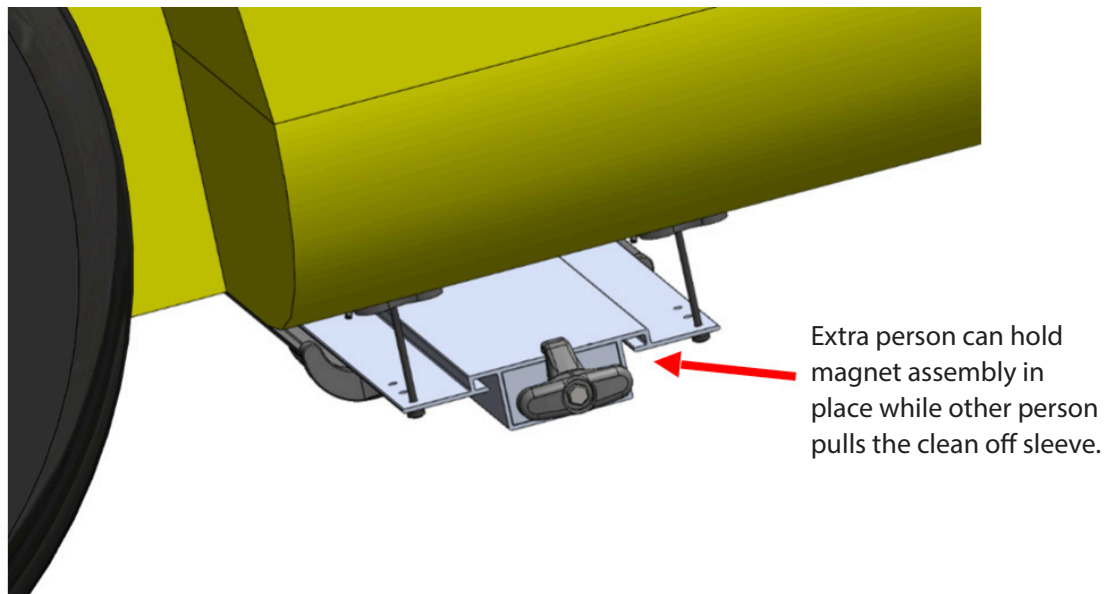
- a) Stop the vehicle and put the forklift parking brake on,
- b) Locate the end of the sleeve containing the handle and flip the swivel latch to unlock the sleeve. The latch will index itself once turned 90 deg. in either direction (see illustration below)



c) The sleeve can now be pulled from underneath the forklift



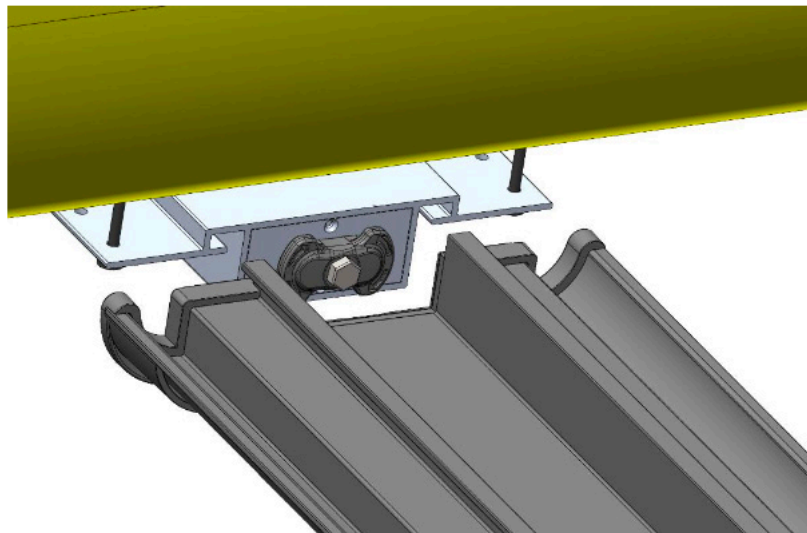
When cleaning the magnet off it may be helpful to have an additional person holding the T-handle from the other side of the sweeper. When trying to pull a large amount of debris off, this reduces the possibility of the assembly swinging and pulling the entire sweeper off the base of the forklift.



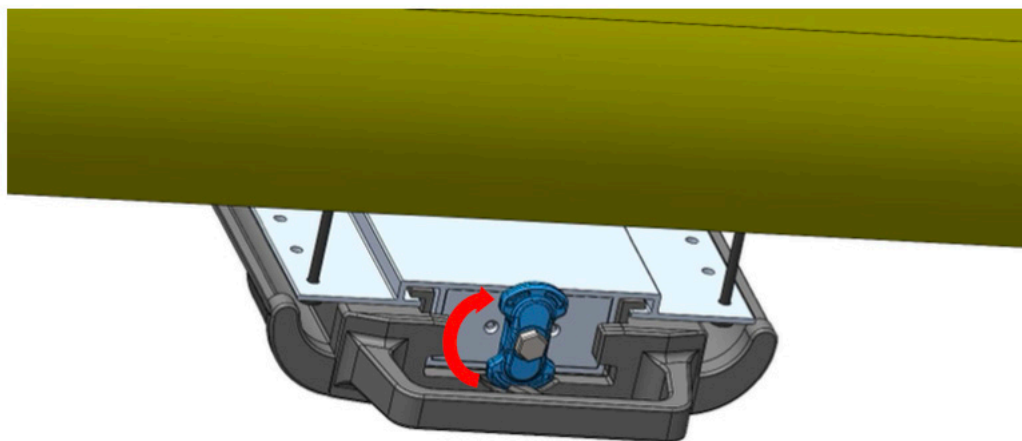
It is highly recommended that the sweeper be cleaned off often, to avoid a situation where a large amount of debris is making it hard to pull the sleeve off. This is especially the case with the Defiant as it is packed with rare earth magnets that have strong pulling and holding power. In the event that you cannot get the sleeve off for whatever reason, it is recommended to pull the sweeper off the bottom of the prime mover and clean off the debris by hand to a point where the sleeve can be fully removed.

After pulling the sleeve off, a pile of debris will be left on the side of the forklift. Sweep up and deposit this material in a scrap bin or other designated area.

Some debris may get pulled back to the edge of the magnet while pulling the final few inches of the sleeve off. Use a glove or rag to remove this debris before trying to re install the sleeve on the magnet.

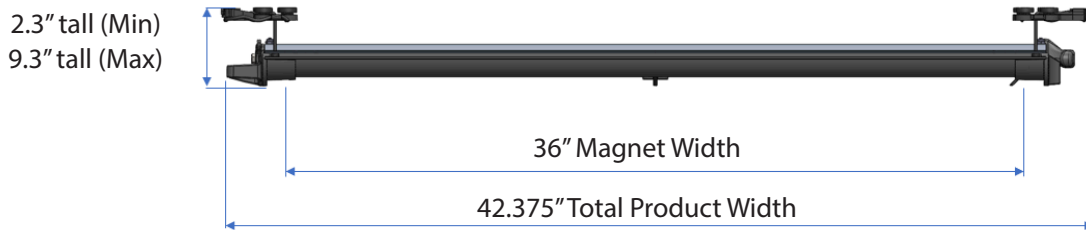


Align the sleeve back with the grooves on the magnet housing. Slide the sleeve on fully and twist the latch to secure it in place. It does not matter which way you turn the swivel latch, so long as it is turned until it indexes itself in a vertical position.

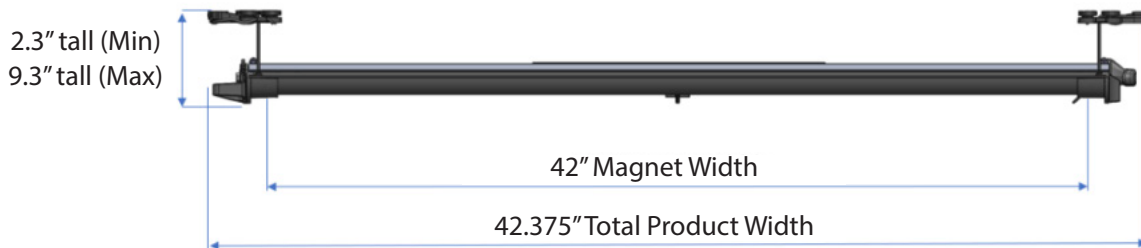


# Sweeping Width Vs. Product Width

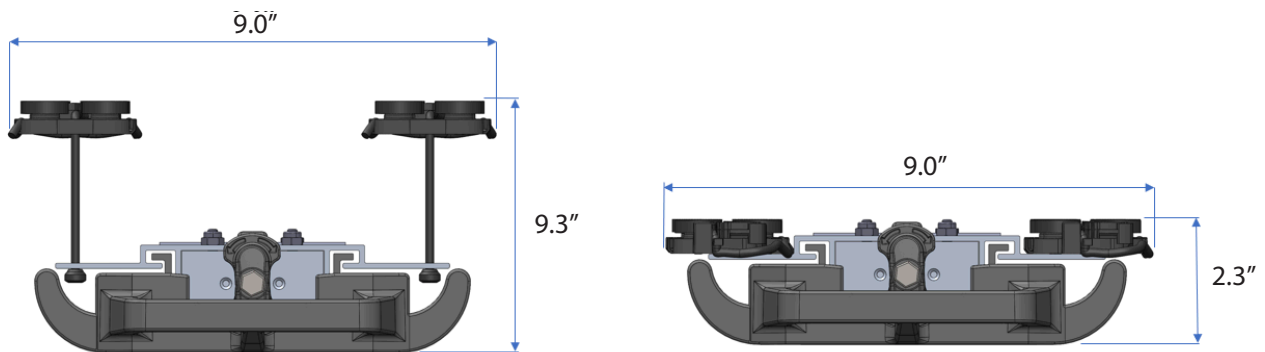
Front View – Defiant 36



Front View – Defiant 42



Side View – Defiant 36, Defiant 42



Max Dimensions (side view)

Min Dimensions (side view)

## Parts Availability

Parts are available for the Vigilant magnetic sweeper from directly from Bluestreak Equipment at [www.bluestreakequipment.com](http://www.bluestreakequipment.com).

## Parts Availability

### Daily

- Visually inspect the quadpods, cord, and sleeve to ensure there is no visible damage that would hinder operating the prime mover or the magnetic accessory itself.
- Remove and repair or replace parts, as necessary.
- Tie back any loose cords on the quadpod frame

### Every Month

- Inspect the attachment for any loose or worn parts that may need to be replaced.
- If the attachment is not being used on the vehicle, store your attachment in a shed or cover with a water-proof tarp to protect it from the weather.
- Store in an area not frequented by children.