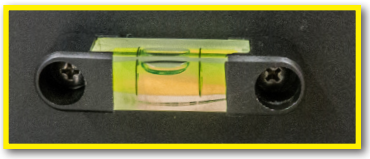
PCB-627



DATE OF BULLETIN:

1-10-2014

THIS BULLETIN SUPERSEDED BULLETIN(S):

None

MODELS AFFECTED:

All ORBITZ Models, Cylindrical Models, Disc Machine Riders & the Magnum ProPolish Disc Deck.

MACHINE SYMPTOMS:

Unusual Brush Clutch Wear, Uneven Brush Fiber Wear, Uneven Water Flow & Cleaning Performance, and Uneven Wear of Side Wipers & Water Control.

SCOPE OF BULLETIN:

To inform about the causes and consequences of a unleveled deck, how to level a deck, as well as mention all Machine Models where Deck Levels are now Standard.

MATERIALS REQUIRED:

None

REVISIONS:

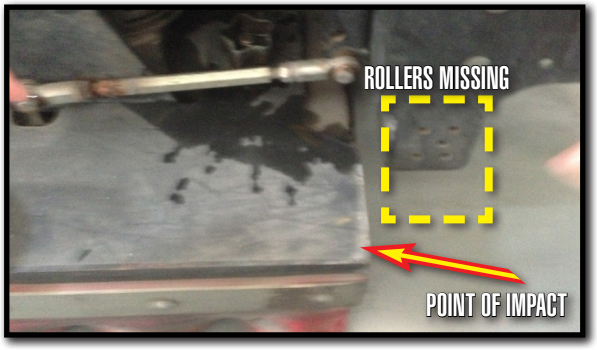
Deck Levels -

- Reduces 8-point Driver to Brush Clutch Wear Due to Improper Alignment
- Ensures Equal Cleaning of Left and Right Brushes
- Ensures Even Water Flow Left to Right
- Improved Water Control / Improved Side Wiper Performance
- Increased Brush Life
- Better Sweeping Performance from Cylindrical
- Critical that ORBITZ Deck is Flat

Deck Arms -

- All Decks for Cylindrical, ORBITZ, and Rider Disc scrubbers come standard with Adjustable Arms. These have RH & LH threads allowing the ability to loosen / tighten arms by adjusting the thread to result in increase / decrease in arm length.

NOTE: It is common for adjustable arms to be bent or break from collision. In fact they are designed to be the failure point in an attempt to protect the more expensive or more difficult to service parts such as the Deck or the Frame.



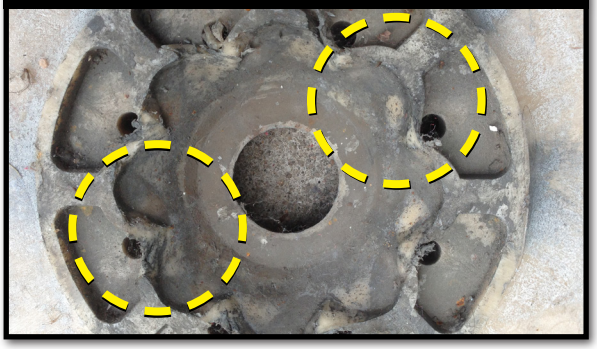
These images show where a Disc Deck suffered impact damage due to the Side Rollers not being installed during installation, however instead of there being damage to the deck, the Adjustable Arm was only damaged. This is an intentional 'weak point' for the machine to fail as it is an inexpensive and easy to replace part that will fail if Side Doors or Rollers don't protect against collision.

This machine suffered from very common complaints:

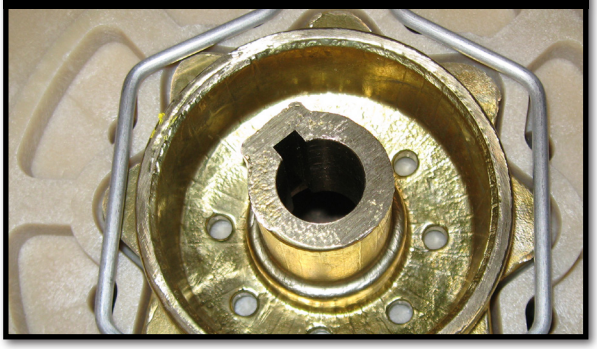
1. Uneven water flow to left brush.
2. Uneven scrubbing - more cleaning on left side than right.
3. Poor water control on turns.
4. 8-point driver wearing out prematurely.
5. Pad driver center hub torn up quickly.

All of these are caused because of the Deck being unleveled due to the damaged Adjustable Arm being welded back together ***(See Above Image in Yellow Circle)*** and not being able to adjust it from that point on. Replacing these Arms prevents further issues.

Drive to Brush Clutch Wear

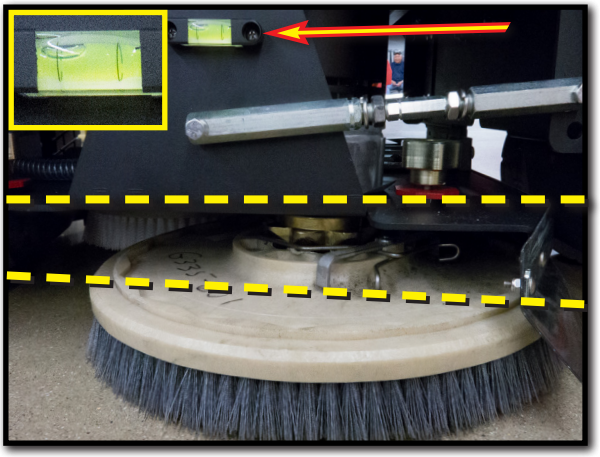


Brand New Brush and Driver



Disk Decks:

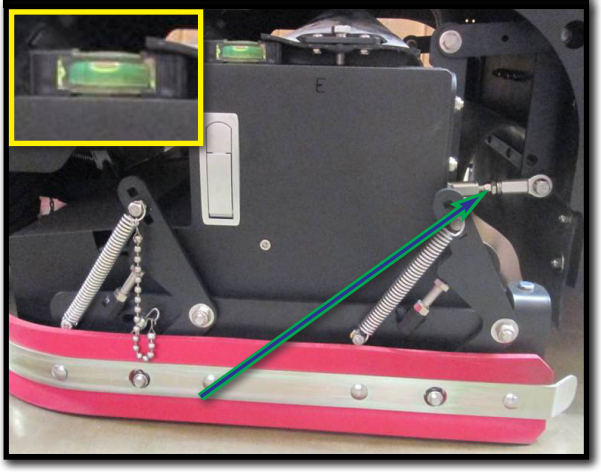
NOTICE: The Scrub deck Level Gauge displays that the deck is NOT level. If the Brush Driver is not level while scrubbing, the 8 points that engage to the Brush Clutch may wear and cause failures in Brush scrubbing performance. This will also cause uneven distribution of water to the Brushes due to gravity drawing more towards one side than the other. Measurement of Adjustable Arms should be taken to confirm that both are the same.



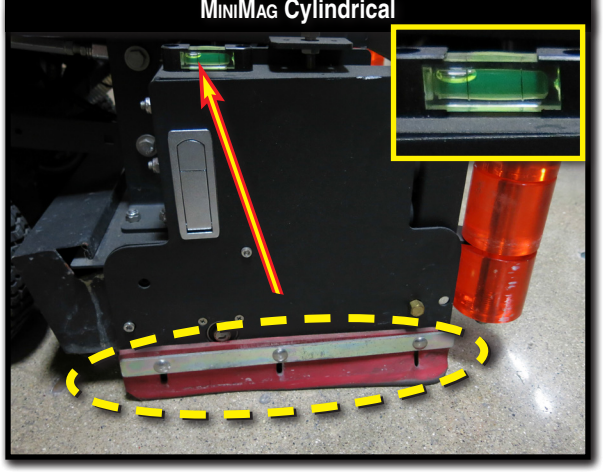
Cylindrical Decks:

NOTICE: When Decks aren't level, Water Control will drop due to uneven Wiper/Shroud support. This will cause uneven wear on the Wipers/Shrouds which entail means prematures replacements. Also when a Cylindrical Deck is out of level ***(See the Yellow/Red Arrow)***, the front or back brush will wear more, causing lower scrubbing and sweeping performance as well as premature wear to Wipers and Brushes ***(As seen in 1 - Front Brush & 2 - Rear Brush)***. Always check adjustable arms ***(See the Blue/Green Arrow)***.

Level Deck - GTX Cylindrical

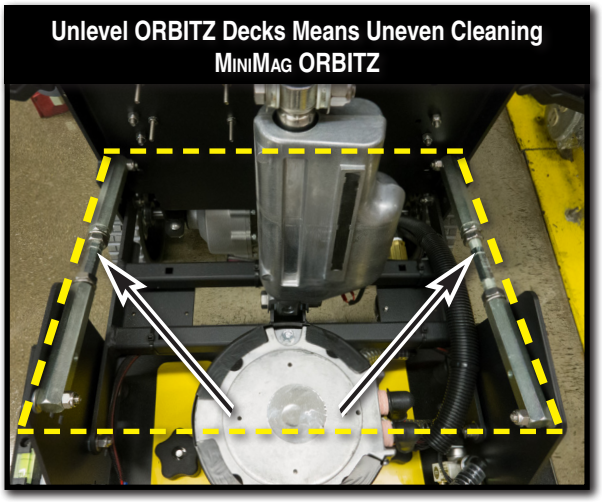


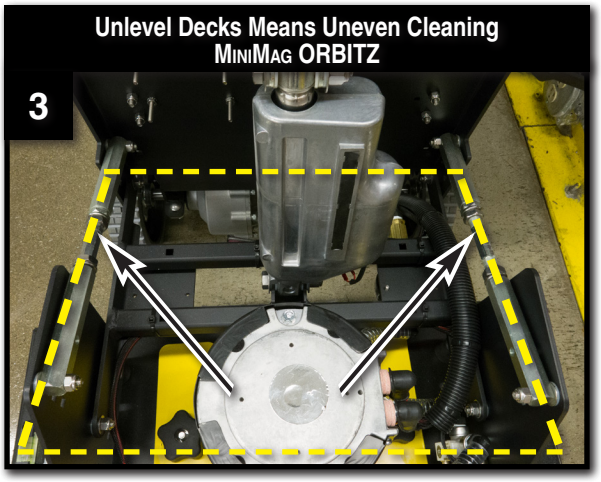
Unlevel Decks Lower Side Wiper Performance
MiniMag Cylindrical



ORBITZ Decks:

NOTICE: When ORBITZ Decks aren't level, Periodic Cleaning and Floor Coating Removal processes will result in uneven performance and productivity. ORBITZ Grip Face will also receive uneven wear and cause premature failures. As the ORBITZ Deck's applications require full surface contact, having a level Deck is critical.

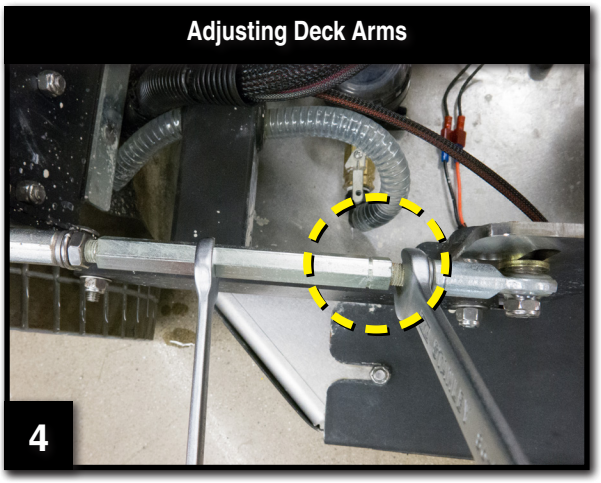




Deck Arms Adjustments -

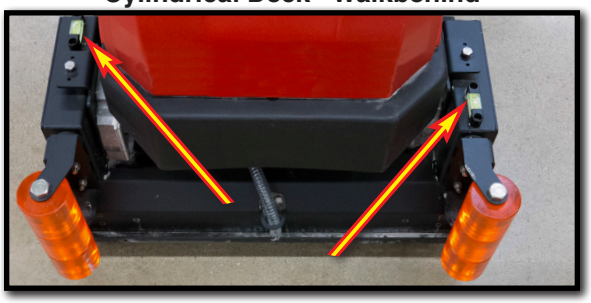
NOTICE: These Adjustable Arms are not the same length - notice the difference in visible threading on the arms ***(See Image 3)***. Always check the Adjustable Arms first if your Deck is not Level. To adjust these arms, loosen the Nuts locking the Arm in place, and adjust accordingly. There are two different threads - the Left Hand threads are noted by a line cut in the Arm ***(See Image 4)***. The process of adjusting these Adjustable arms is to loosen both Nuts on each side of the Arm and only turning the Center Arm for adjustments. Loosen both sides of Nuts on the Arms, adjust Center arm on one side, adjust Center Arm on other side, and then double check the first side before tightening everything in place. Always hold the Center Arm while tightening the Nuts. Never Level a Deck when the Deck is fully touching the ground. Lower Deck till just before it touches the ground before Leveling ***(See Image 5)***. Use the Power Switch or Key to stop Actuator Stroke.

NOTE: Not necessary to remove Arm to adjust length.

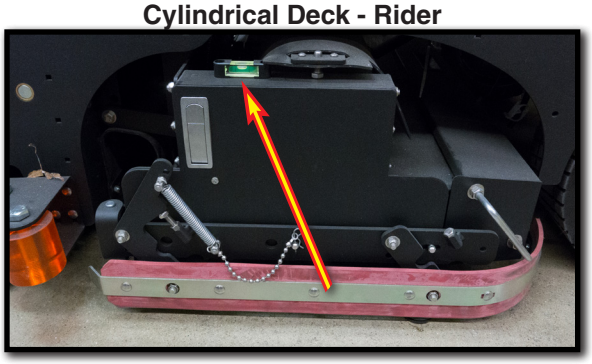


Deck Level Locations -

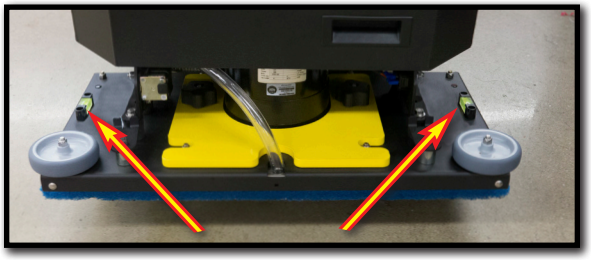
Cylindrical Deck - Walkbehind



Cylindrical Deck - Rider

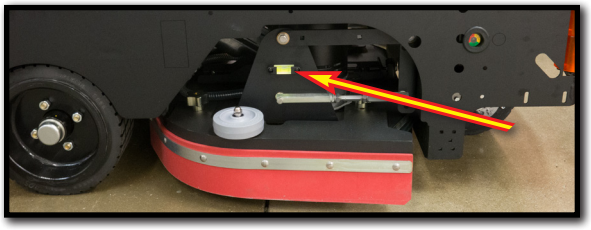


ORBITZ Deck - Walkbehind

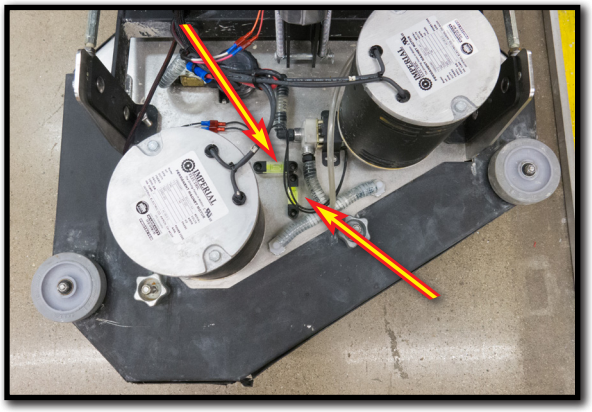


ORBITZ Deck - Rider

Disc Deck - Rider



MAGNUM ProPolish Deck



NOTE: ProPolish deck has 2 Levels - Left/Right & Forward/Backward