

# MANTAINANCE

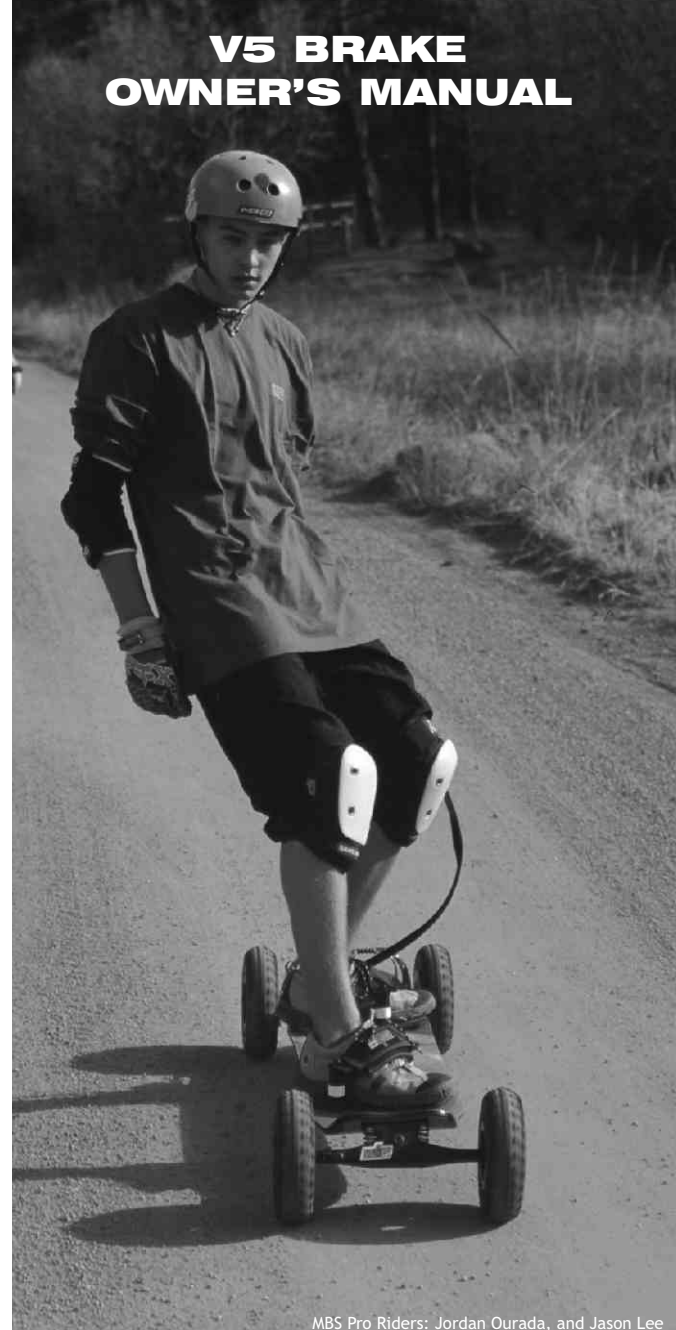
Maintain your brake system by checking that all parts are secure, and properly adjusted before and after each ride. This includes but is not limited to the following:

- Check that Cable Adjustment Screw is "Closed" as described in the BRAKE ADJUSTMENT section of this manual.
- Check condition of brake pads. Tighten brake pads that are loose. Replace brake pads that show excessive wear.
- Check that pads are rebounding from rotor correctly. Adjust pad rebound if necessary as described in the BRAKE ADJUSTMENT section of this manual.
- Check that the Brake Cable and Cable Casing are in good condition. Replace frayed or damaged parts.
- Lubricate the brake cable by applying a lubricant inside the cable casing. Bicycle chain lubricant works best for this purpose. This will improve the pad rebound by decreasing the friction between the cable and cable casing.

Important! Always check that brake is working correctly and to your satisfaction prior to mountainboarding.

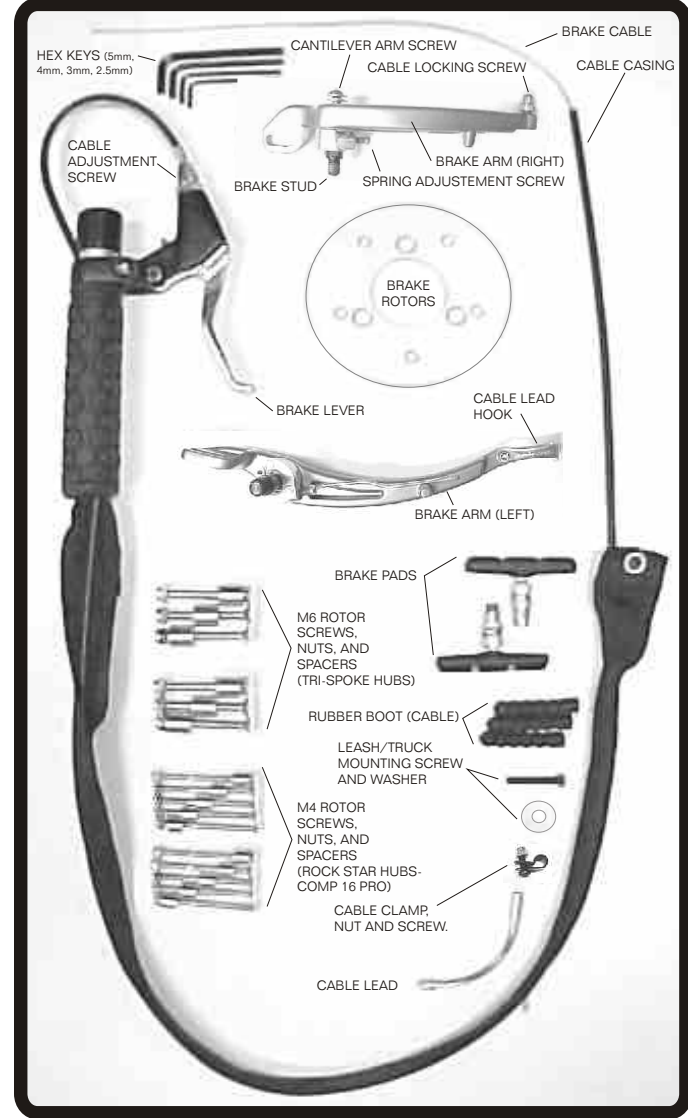


## V5 BRAKE OWNER'S MANUAL



MBS Pro Riders: Jordan Ourada, and Jason Lee

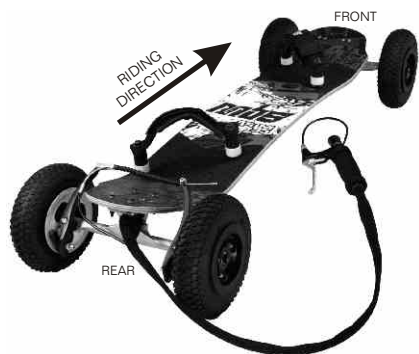
# V5 BRAKE PARTS



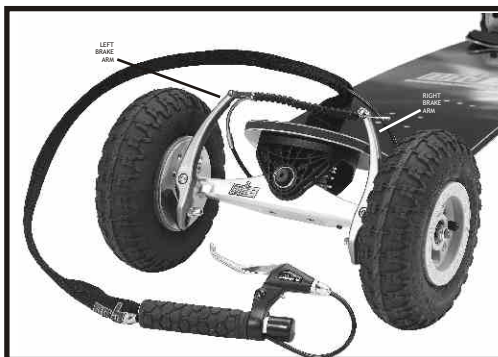
# 1. TOOLS

- Hex keys (5mm, 4mm, 3mm, 2.5mm)
- Small adjustable wrench.
- Screwdriver (phillips head)
- Wire Cutters / Crimpers
- Safety Glasses

## 2. GENERALLY ASSEMBLY NOTES



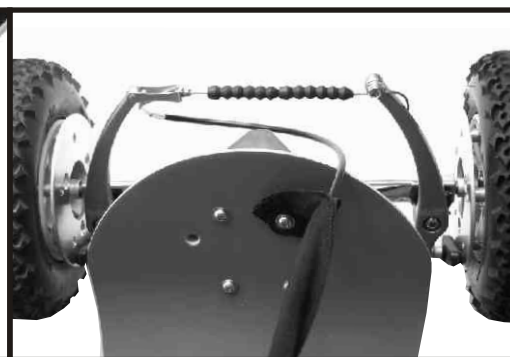
The brake system should be mounted onto the rear side of the board.



BRAKE ASSEMBLED ON MATRIX TRUCK



BRAKE ASSEMBLED ON ATS TRUCK



BRAKE ASSEMBLED ON VECTOR TRUCK  
(Note that brake arm orientation is different compared to ATS / MATRIX trucks)

### 3a. ASSEMBLE METAL ROTORS ONTO TRI-SPOKE / ROCKSTAR HUBS (TWISTAR HUBS SKIP THIS SECTION)

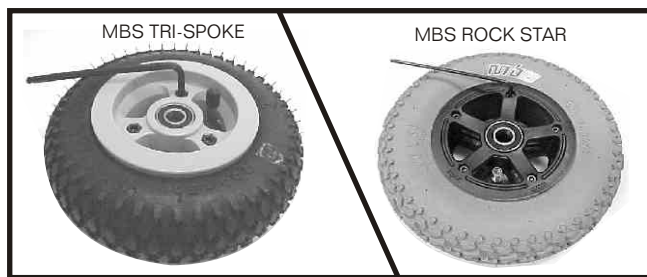
**⚠ WARNING** - Deflate tires before disassembling wheels! Failure to do so will cause the wheel to explode when disassembled.  
3.1. Deflate tires and remove the two rear wheels by unscrewing axle nuts.

3.2. Lay wheels on table with valve stem pointing upward.

3.3. Unscrew hub screws.

3.4. Remove top half of hub. Flip tire and tube over so that valve stem points down toward the bottom half of the hub (the half with the nuts installed). This step assures that your valve stem will be accessible after the rotor is installed.

3.5. Replace top half of hub onto the bottom half of the hub.



3.6. Exploded view of hub with brake rotor for visual reference.

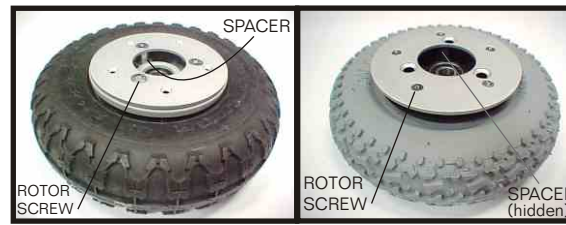
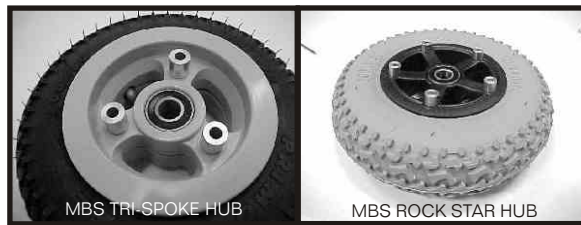
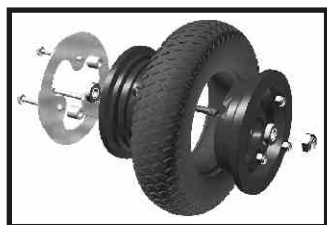
3.7. Place Brake Rotor Spacers over the hub screw holes.

3.8. Place Brake Rotor on top of the Brake Rotor Spacers and align all holes.

3.10. Re-inflate tubes. Typical pressure is 30 psi. Warning - Never inflate tubes above the maximum pressure specified for tires and hubs.

3.9. Carefully Insert long silver rotor rcrews through the brake rotor holes and brake rotor spacers. Tighten to engage the nuts on the opposite side of the hub.

3.11. Repeat steps other rear 1wheel.



Note: This same procedure applies for aluminum Rock Star Pro hubs, but longer brake spacers are required. Contact MBS to obtain longer spacers - [www.mbs.com](http://www.mbs.com)



### 3b. ASSEMBLE METAL ROTORS ONTO TWISTAR HUBS

3.1. Remove the two rear wheels from board by unscrewing axle nuts.

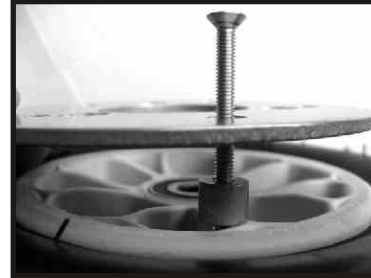
3.2 Lay wheels on table with MBS hub logos facing down. Valve stem should also be facing down.



3.3 Locate the brake hardware holes in the Twistar hub as shown below. This is where the rotor screws will go.



3.4 Begin attaching rotor to hub as shown below. Spacers should be placed between hub and rotor for each screw.



Note: Only tighten finger-tight until all screws are in.

3.5 Once all screws are in, tighten each one using the 2.5mm hex key provided.



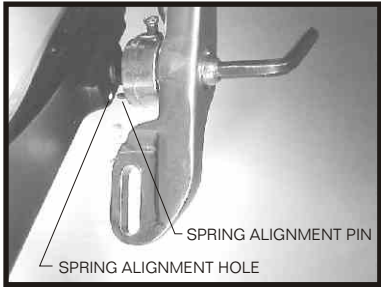
Note: The rotor screws thread directly into the Twistar hubs. No nuts required.

3.5 Assembled wheel with rotors should look as follows.



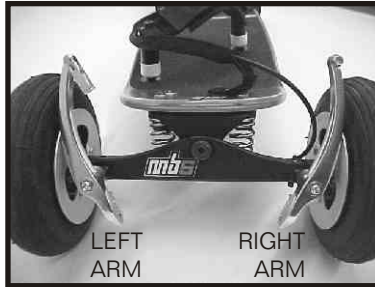
### 4. ASSEMBLE BRAKE ARMS ONTO TRUCKS

4.1. Use hex key to screw brake arms into brake stud holes in bottom truck. Important! Guide the "SPRING ALIGNMENT PIN" into the "SPRING ALIGNMENT HOLE" as you do this (detail shown below).

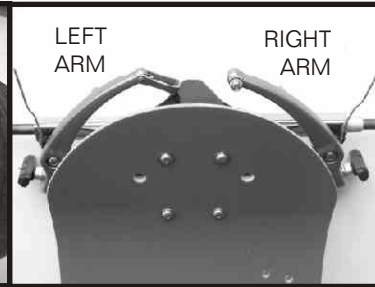


Note: Brake arm assembly on VECTOR truck is different than ATS and MATRIX trucks. On the MATRIX / ATS trucks, the brake arms mount to the front face of the truck. On the VECTOR trucks, the brake arms mount to the PIN" into the SPRING ALIGNMENT HOLE as top side of the truck. Refer to the pictures below for details.

MATRIX / ATS TRUCKS



VECTOR TRUCKS



4.2. Slide wheels onto the axle with rotors facing inward.

4.3. Tighten axle nuts all the way down. Loosen 1/4 turn so wheel spins freely.

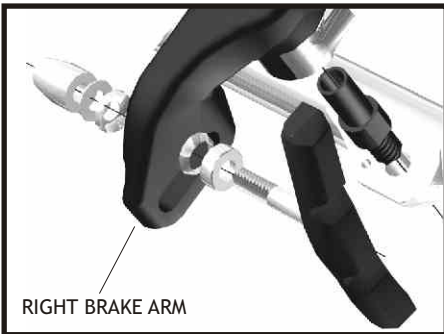


4.2. Place rebound spring in the groove on the back of each brake arm. This gives the brake arm rebound.



### 5. ATTACH BRAKE PADS TO BRAKE ARMS

5.1. Assemble brake pads onto brake arms as shown below. Note: In some cases pads may already be assembled on brake arms.

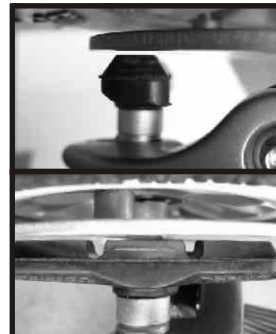


5.2. Push inward on the top of each brake arm so that the brake pad is pressed flush against the rotor. Align pad with the edge of the rotor. Pad should not hang over the edge.



5.3 Check that pad sits flush on the rotor. Examples of good and bad pad alignment shown below.

GOOD ALIGNMENT



BAD ALIGNMENT

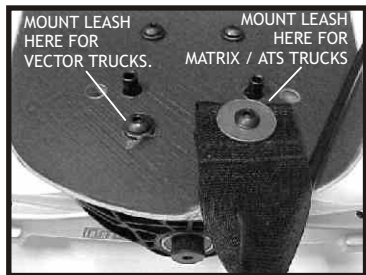


5.4. Tighten the brake pad using a 5mm hex. Note: Continue to push inward on the top of the brake arm in order to hold the pad in place as you tighten hardware.



## 6. ATTACH LEASH TO DECK / ROUTE BRAKE CABLE

6.1. Attach leash to deck. The extra large washer goes on top of the leash as shown below. For MATRIX / ATS trucks, replace the normal truck mounting screw with the longer screw provided.

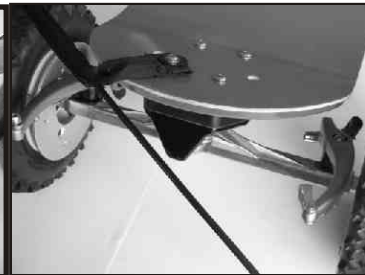


6.2. For MATRIX trucks, route the brake cable as shown in the pictures below. For VECTOR and ATS trucks, the cable is not routed through the truck. It will just form a loop in front of the truck in later steps.

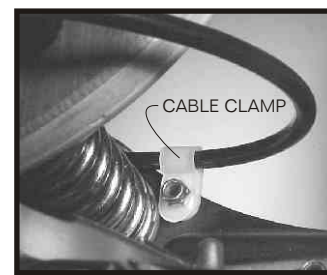
MATRIX TRUCKS



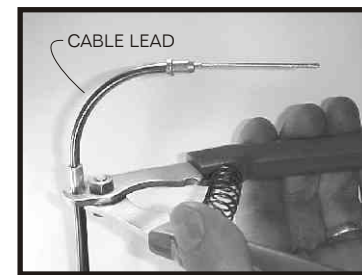
VECTOR TRUCKS



6.3. For MATRIX trucks, attach Cable Clamp to truck using 7mm wrench and phillips head screwdriver.



6.4. Slide cable lead onto the end of the brake cable. Lightly crimp the end of the cable lead onto the cable casing.

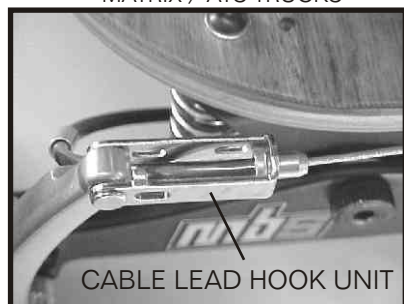


## 7. ATTACH CABLE TO BRAKE ARMS

7.1. Insert Cable Lead into the Cable Lead Hook located at the top of the left brake arm.

7.2. Slide Rubber Cable Boots over the end of the brake cable.

MATRIX / ATS TRUCKS



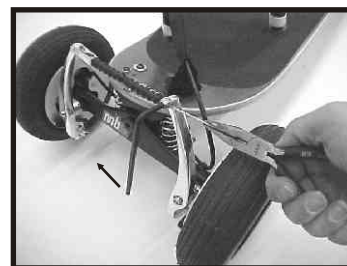
VECTOR TRUCKS



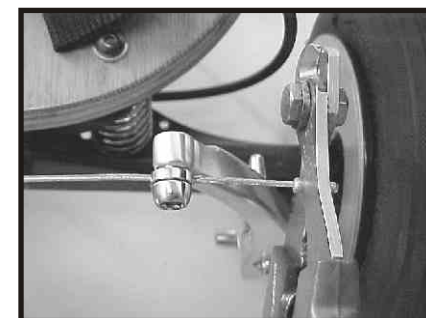
7.3. Pull brake cable through the notch provided in the right brake arm. Note: Notch is below cable locking screw (not above). Tighten screw lightly.

7.5. Use pliers to pull the slack out of the cable so that each brake pad is spaced approximately 1/16" (1.5mm) from its rotor.

7.6. Tighten cable locking screw completely (enough to prevent the cable from slipping when the brake is applied heavily).



7.7. Clip the excess brake cable and crimp the Cable End onto the end of the brake cable.



## 8. BRAKE ADJUSTMENT

8.1. Squeeze and release the brake handle lever several times to identify which side has the weakest rebound.

8.2. For coarse adjustment, slide cable casing through the truck clamp toward the brake arm with the weak rebound (Matrix Trucks Only).



8.3. For fine adjustment of rebound, go to the side with the weak rebound and tighten the spring adjustment screw 1/2 turn. Repeat this step until the two brake arms rebound evenly (equal spacing between pad and rotor).

Note: For the best result try to keep brake cable and leash fully extended when testing rebound (similar to when your riding position).



8.4. If cable casing rubs against the brake rotor, pull excess cable casing up through the brake handle and into the loop at the end of the brake handle.



8.5. Check often to make sure that the cable adjustment screw and lock nut are "closed" and securely tightened. "Closed" means that the cable slots are not aligned.

