



Technical Bulletin

Date: February 19, 2020

Product Line: Bambi

Product: Mobility Sled

Model(s): 4 Wheel

Subject: Wheel & Brake Upgrade

Action: Not required

Revision

Date	Revision Summary
-	-

Background

The wheels on the 4 Wheel Mobility Sled have changed from a 15" foam-filled tire to a 16" pneumatic tire. The pneumatic tires will not be susceptible to developing flat spots like the foam-filled tires when the sled is loaded and stored. In addition, the pneumatic tires are more durable and will perform better when towing the sled, especially on uneven surfaces.

The brake has changed from a magnetic mechanism to a spring-loaded mechanism. This improves the ability of the brake to stay fully disengaged, making the sled roll more easily and prevent instances of the brake engaging unintentionally. To accommodate the change to a larger diameter wheel, the mounting position of the brake has changed as well.

All new Mobility Sleds will have 16" pneumatic wheels and spring-loaded brakes.

Recommendations

It is not required to change the wheels or brake if you have not experienced issues.

Upgrading the Mobility Sled to 16" pneumatic wheels requires upgrading the brake mechanism to the new spring-loaded design. Also, modification to the gooseneck fabrication (PN 012780) is required to allow clearance for the larger diameter wheel.



To perform the upgrade, a kit is available that includes all the required parts:

Part #	Description
016155	WHEEL & BRAKE, UPGRADE KIT, MOBILITY SLED, 4 WHEEL

Refer to **Mobility Sled Wheel & Brake Upgrade: Installation Instructions** for more information.

This Technical Bulletin is available on the SEI website:
<https://www.sei-ind.com/category/bambi-safety-bulletins/>

For further details, please contact the following SEI representative(s).

Contact

SEI Bambi Engineering
604-946-3131
bambieng@sei-ind.com



Mobility Sled Wheel & Brake Upgrade: Installation Instructions

Application

This set of instructions is applicable to all Mobility Sleds (PN 012770) currently equipped with 15" foam-filled wheels and magnetic brake mechanisms.

Completing the included procedure will upgrade a Mobility Sled with 16" pneumatic wheels and spring-loaded brake mechanisms.

Contact SEI Industries if it is unclear how your Mobility Sled is configured, or if these instructions are applicable.

Kit Contents

To perform the upgrade, the kit below is required:

Part #	Description
016155	WHEEL & BRAKE, UPGRADE KIT

The contents of this kit are:

Item	Part #	Description	Qty
1	016120	WHEEL, 16", PNEUMATIC, 3/4" BEARING, 3" HUB	2
2	016128	WHEEL, 16", PNEUMATIC, 1" BEARING, 4" HUB	2
3	012773	MOUNT, BRAKE	4
4	012772	CAM, BRAKE	2
5	001869	WASHER, FLT, 3/8 x 5/8, AN, SS	4
6	000430	SCREW, 1/4-20 x 1-1/4, SC, SS	2
7	016142	SCREW, 1/4-20 x 1/4, SC, SS	2
8	015916	BOLT, SHL, 1/4 x 1-1/4 x 1/4-20, HX, SS	2
9	001655	NUT, HX, 1/4-20, SS	2
10	001663	NUT, HX, JAM, NYL, 1/4-20, SS	2
11	015858	SPRING, EXT, 0.375 x 0.048 x 1.75	2



Tools Required

- 1-1/8" wrench
- 9/16" wrench
- 1/2" wrench
- 7/16" wrench
- 3/8" wrench
- 1-1/8" socket & socket wrench
- 9/16" socket & socket wrench
- 7/16" socket & socket wrench
- 3/16" hex key
- Philips screwdriver
- Angle grinder with metal grinding or metal cutting disc (or metal file)

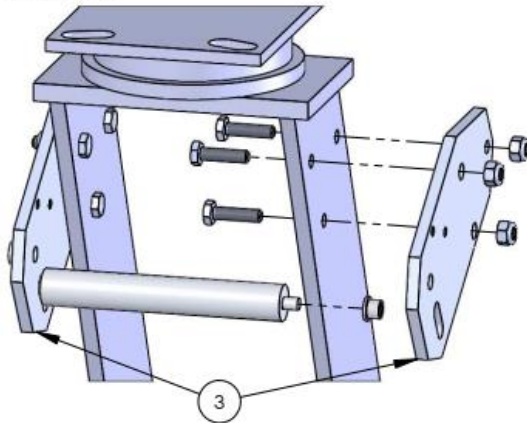
Procedure

1. Remove both front wheel caster assemblies from the Mobility Sled. Do this by removing the four 3/8" bolts holding the assembly to the gooseneck fabrication.
2. Remove the wheels from the casters by removing the wheel's axle. Take note of the number of washers on each side of the wheel's hub for reassembly.
3. Disassemble the brake assembly and reassemble with the new parts included in the kit. Follow the steps given in *Brake Mechanism Assembly Instructions* in the **Appendix**. Repeat this step for the other brake assembly.
4. Install the new front wheels (Item 2) onto the casters by reinstalling the axle, washers, and axle nut. Pay attention to the indicated direction on the tire (if any).
5. Perform adjustment on each brake assembly so it can properly engage and disengage the tire. Refer to *Brake Mechanism Adjustment* in the **Appendix**.
 - a. Loosen the two mounting bolts on each side of the brake assembly to allow it to pivot.
 - b. Position the brake assembly at a distance from the tire so that the braking pin locks the wheel when the kick plate is lowered (engaged), and is free to move when the kick plate is raised (disengaged).
 - c. Tighten the mounting bolts.
 - d. Repeat steps 'a' to 'c' for the second brake assembly.
6. Complete the modification to both gooseneck fabrications (PN 012780) as shown in *Gooseneck Modification Drawing* in the **Appendix**. The intent is to create clearance for the larger diameter wheels. Removing more material, within reason, should not cause any adverse effects.
7. Reinstall the front wheel caster assemblies back onto the gooseneck fabrications.
8. Remove the rear wheels from the rear axles by removing the cotter pin and washer. Install the new rear wheels (Item 1) on the rear axles, then the washers and cotter pins.
9. Test the function of the Mobility Sled to turn and roll without interference or brakes dragging, and hold in place while the brakes are engaged. Perform adjustments if necessary.

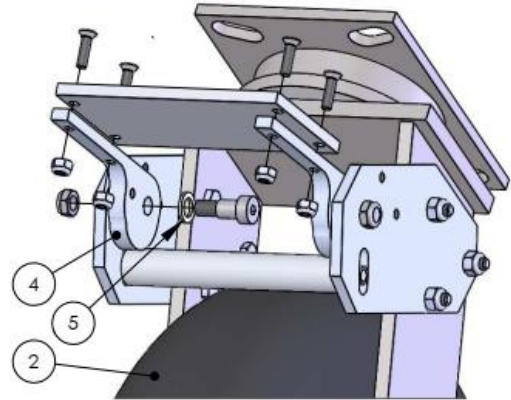
Appendix

Brake Mechanism Assembly Instructions

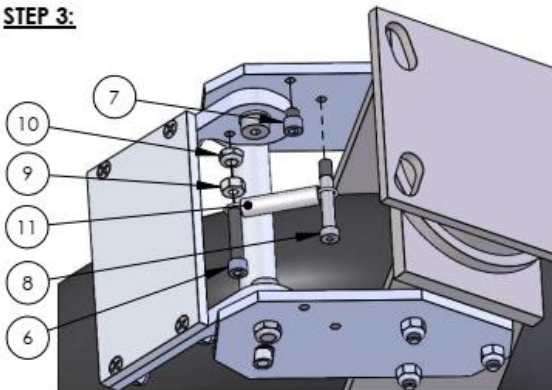
STEP 1:
WHEEL REMOVED.



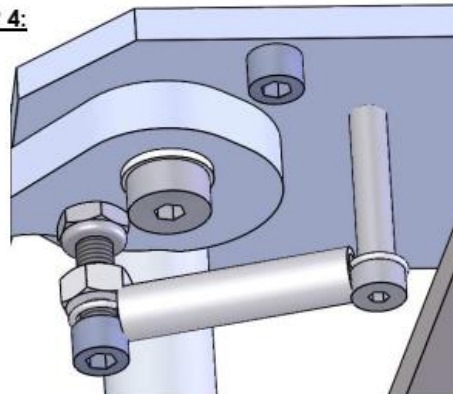
STEP 2:



STEP 3:

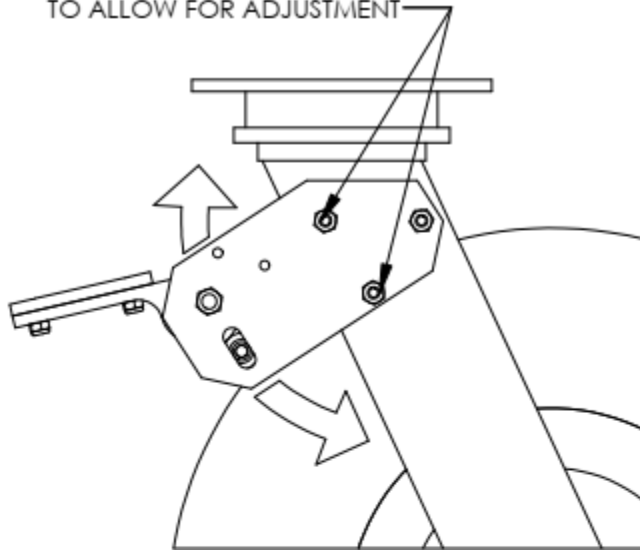


STEP 4:

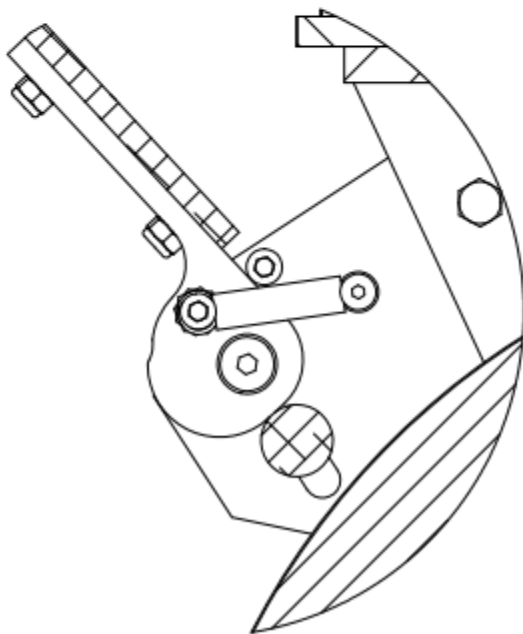


Brake Mechanism Adjustment

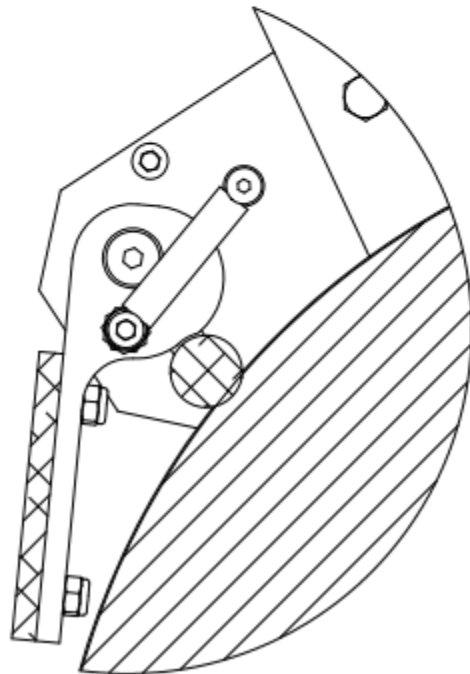
HOLES DRILLED OVERSIZE
TO ALLOW FOR ADJUSTMENT



BRAKE DISENGAGED



BRAKE ENGAGED



Gooseneck Modification Drawing

Part #	Description
012780	GOOSENECK, FABN, MOBILITY SLED, 4 WHEEL

