Wheel Bearing Procedure (updated 11.20.25)

In all styles of **Official Soap Box Derby Wheels** occasionally a wheel bearing will slide out of its position in the wheel during the action of wheel swaps. This isn't a safety issue, as there isn't enough space on the spindle for the bearing to slide out during the action of a race.

If a bearing slides out in-between A/B or 1/2 Phase.

Step 1: Alert an Official.

Step 2: Have the Official use the palm of their hand to reinsert the bearing into the wheel or utilize the approved tools to re-insert the bearing gently back into the wheel. (see page 3)

Step 3: Put all wheels back on to original phase starting position and re-run A or 1 Phase.

If a bearing slides out after B or 2 Phase.

Step 1: Alert an Official.

Step 2: Have the Official use the palm of their hand to reinsert the bearing into the wheel or utilize the approved tools to re-insert the bearing gently back into the wheel. (see page 2)

Step 3: Put wheels back on your car and wait for your next heat. The previous race is officially over.

Repair Procedure

This approved repair procedure is only recommended for a wheel that has had an actual bearing slide out of position. This procedure is **NOT** recommended for a wheel that has **NOT** previously had an issue.

Step 1: Remove Bearing

Step 2. Use 80 grit Sandpaper and sand plastic part of the wheel in a circular direction.

Step 3: Sand the outside of the bearing the same direction

- This will allow for more grip strength helping prevent the bearing from sliding back out.

Step 4: Mix J-B Weld High Strength Automotive Epoxy Paste per the manufacturer's instructions.

Step 5: Apply a lite amount of J-B Weld High Strength Automotive Epoxy Paste and smooth along the inside of the wheel and outside of the bearing. A thin amount is all that is needed.

Step 6: Use a Q-Tip to make sure its smooth and thin. Be sure to not allow it to press inside the wheel.

Step 7: Use a long 1/2" threaded bolt with large nuts and washers to slowly press the bearing back into place.

Step 8: Make sure there is no excess epoxy inside or outside the bearings.

Step 9: Finished

Approved Tools

1. 1/2" Bolt – 2 large Washers (1 for each side of the wheel) – 1/2" nut – 1/2 Socket and Ratchet Wrench (Page 3)
2. J-B Weld High Strength Automotive Epoxy Paste| SKU: 8265S(Page 4)

ISBD is not responsible for any mishandling or damage caused during this process.

- J-B Weld: https://www.jbweld.com/product/j-b-weld-twin-tube

- Ace Hardware: https://www.acehardware.com/departments/automotive-rv-and-marine/auto-tools-and-maintenance/automotive-adhesives/81387?store=17746&clientId=550c37c9ba3d0621f829ae51&locationId=5f88cf047f109b40283fc2cf&gclsrc=aw.ds&gad_source=1&gad_campaignid=11555750852&gbraid=0AAAADtqLJGZHNZ0df37pTponm1xDgTwp&gclid=CjwKCAiAlfvIBhA6EiwAcErpyRABeu21BTxmOKiMXKOtnk-tJSgj73vUzrKUJL3MlwYfqzovyP3xyxoCWZoQAvD_BwE

- Home Depot: https://www.homedepot.com/p/J-B-Weld-Two-1-oz-Twin-Tube-Cold-Weld-Epoxy-8265-s/100189012