

# McFarlane Aviation Wheel Balancer

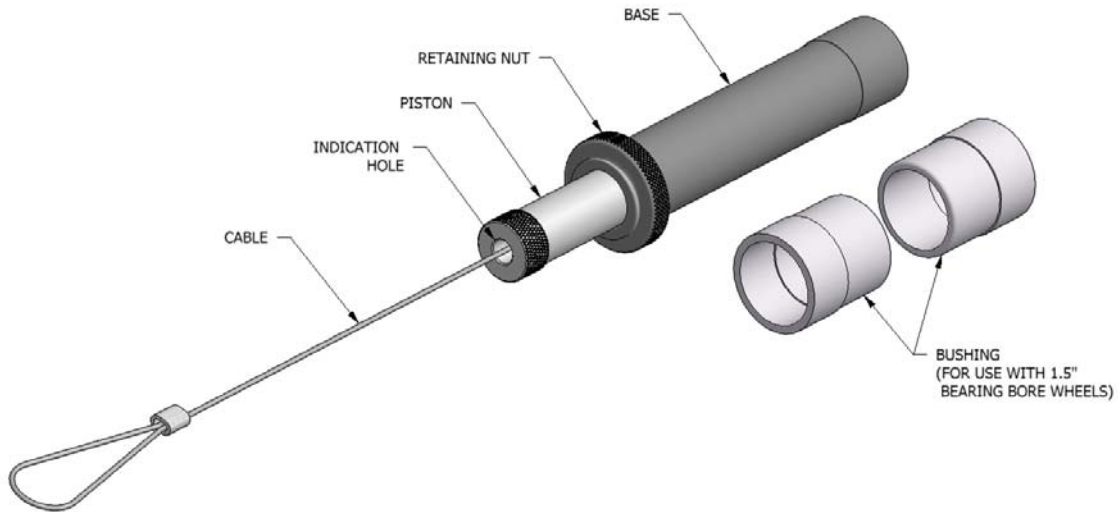


Figure 1 - Tool Components

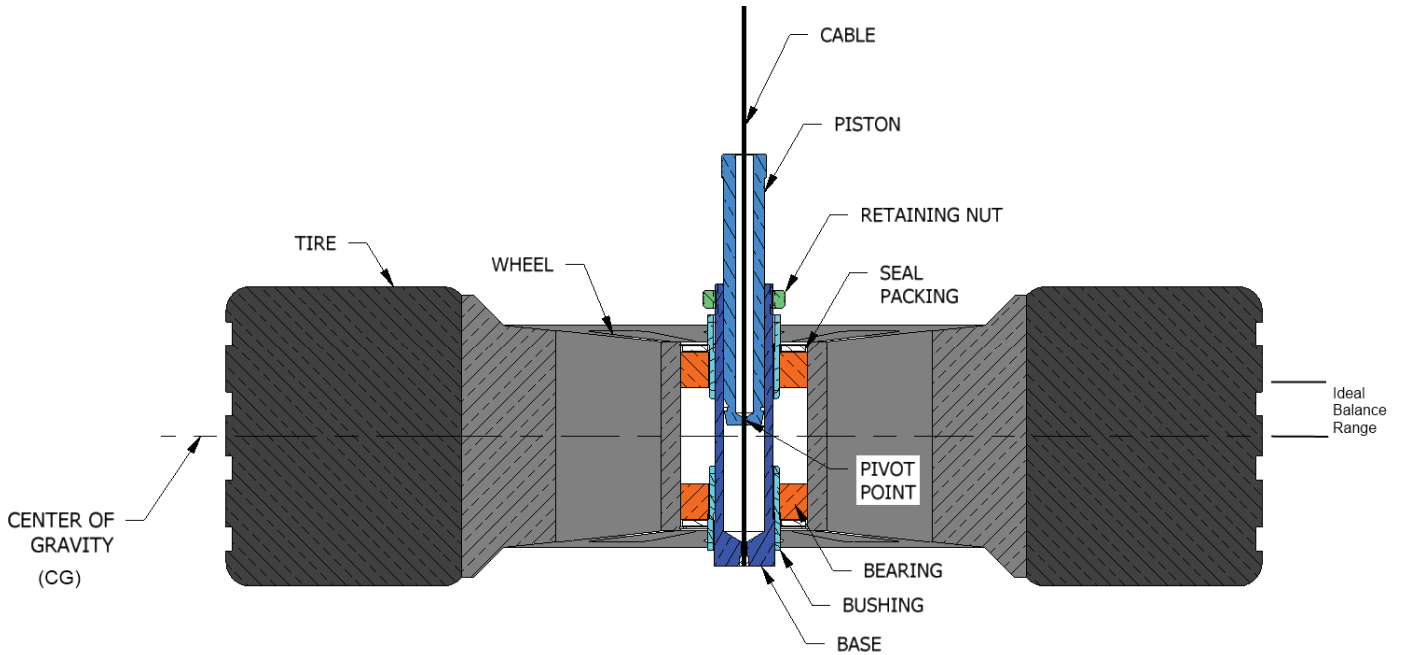


Figure 2 - Wheel Assembly and Tool

Project Engineer: <i>[Signature]</i>	Quality Manager: <i>[Signature]</i>
Date: 10/3/11	Date: 10-3-11
Engineering Manager: <i>[Signature]</i>	Manufacturing Manager: <i>[Signature]</i>
Date: 9/30/11	Date: 9-30-11

**McFarlane** McFarlane Aviation, Inc.  
696 East 1700 Road  
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Drawing: **WHEEL BALANCER INSTRUCTIONS**

Size: **A** Scale: **NA** Drawn: **SD** Sheet: **1** of **2**

Drawing Number: **6652** REVISION

~	08/18/2011	ORIGINAL
		<b>REVISION</b>

"X": Bold letter indicates revision level.

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# McFARLANE AVIATION SUSPENSION TYPE STATIC WHEEL BALANCER

## INSTRUCTIONS

**Note:** This wheel balancer is to be used while the bearings are installed.  
Failure to do this will result in improper balancing of the wheel.

1. Remove the **Retaining Nut**, ensure the surface of the balancer **Base** and inner wheel bearing is clean and free of debris. See below for the specific mounting instructions for 1 ¼" and 1 ½" axles. If the wheel is equipped with a brake disc or drum, balance the wheel with these in place. Wheel seals may be left in place, or not.

### 1 ¼" Axle

Insert the **Wheel Balancer Tool** through the wheel bearings and seals, and replace the **Retaining Nut**.

### 1 ½" Axle

Slide the **Bushing** over the **Base**. With the **Bushing** installed, insert the **Wheel Balancer Tool** through the wheel bearings and seals. Slide the second **Bushing** over the top of the **Base** and slide it through the seals until the lip contacts the bearing. Once this is in place, replace the **Retaining Nut**.

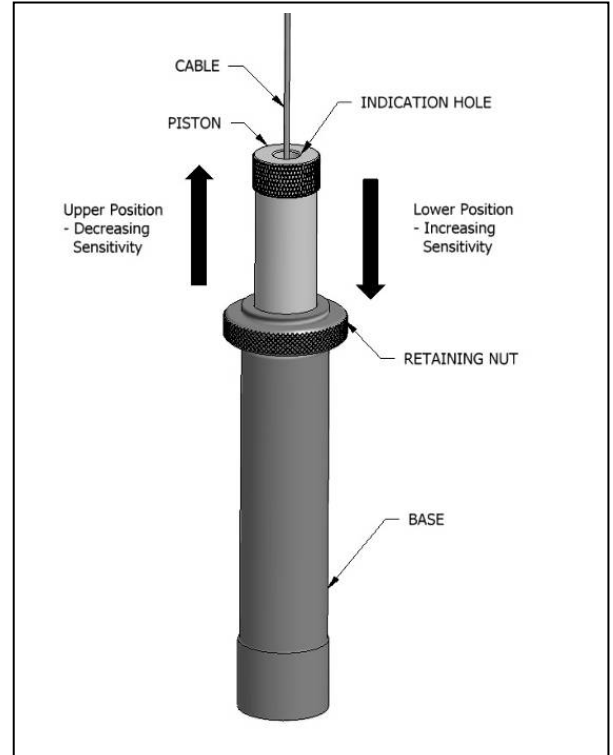
**Note:** *The Retaining Nut keeps the balancer in the wheel while handling. It does not tighten against anything.*

2. Hang the cable from any fixed point (such as a bar clamped in a vice) so that the wheel is suspended and free of any obstructions.
3. Raise the piston to the upper most position. Wait for the wheel to come to rest and loosely add weights as needed to balance wheel. Balance is achieved when **Cable** is centered in the **Indication Hole**.
4. Lower the piston for greater sensitivity. Adjust weight to balance.
5. Repeat Step 4 until desired balance precision is achieved.

**Note:** *The lower the **Piston**, the more sensitive the tool will become. If the **Pivot Point** is below the **Center of Gravity**, balancing will become impossible and the **Cable** will stay touching the **Indication Hole** edge in whatever position you place it. If this happens, move the piston upward, above the **CG**, and verify the balance.*

6. Remove the wheel from the balancer and fix the weights to the wheel. For best *dynamic* balance results, weights should be evenly divided between the top and bottom wheel surface. Reinstall the wheel on the balancer and check the final balance, adjusting weights if required.

**Note:** *The final piston height might not remain the same for both sides of the wheel, since distance to the **CG** may not be equal.*



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