

McFarlane Aviation Wheel Balancer

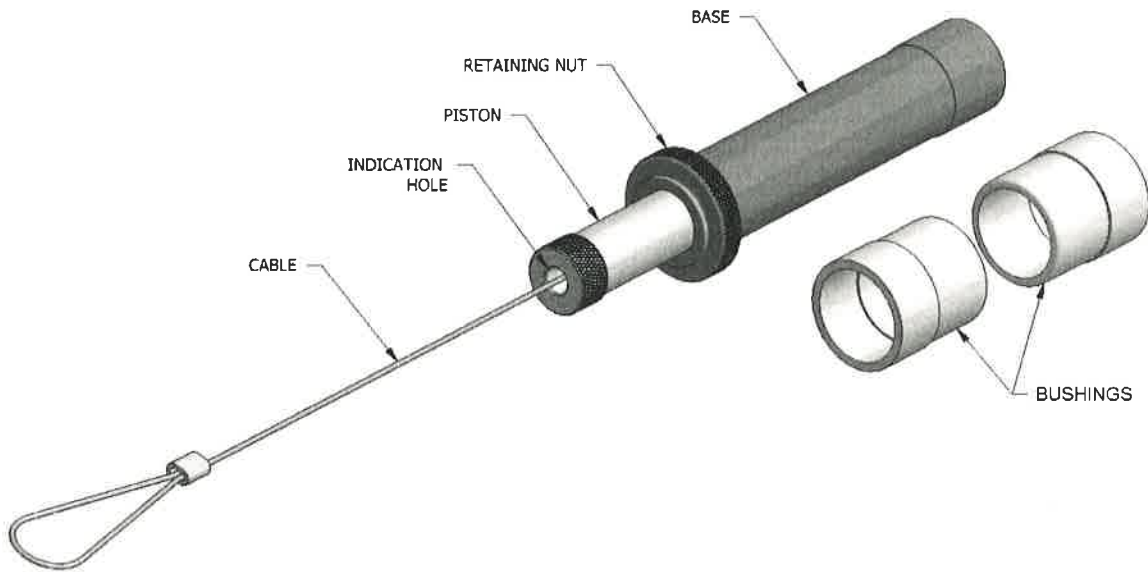


Figure 1 - Tool Components

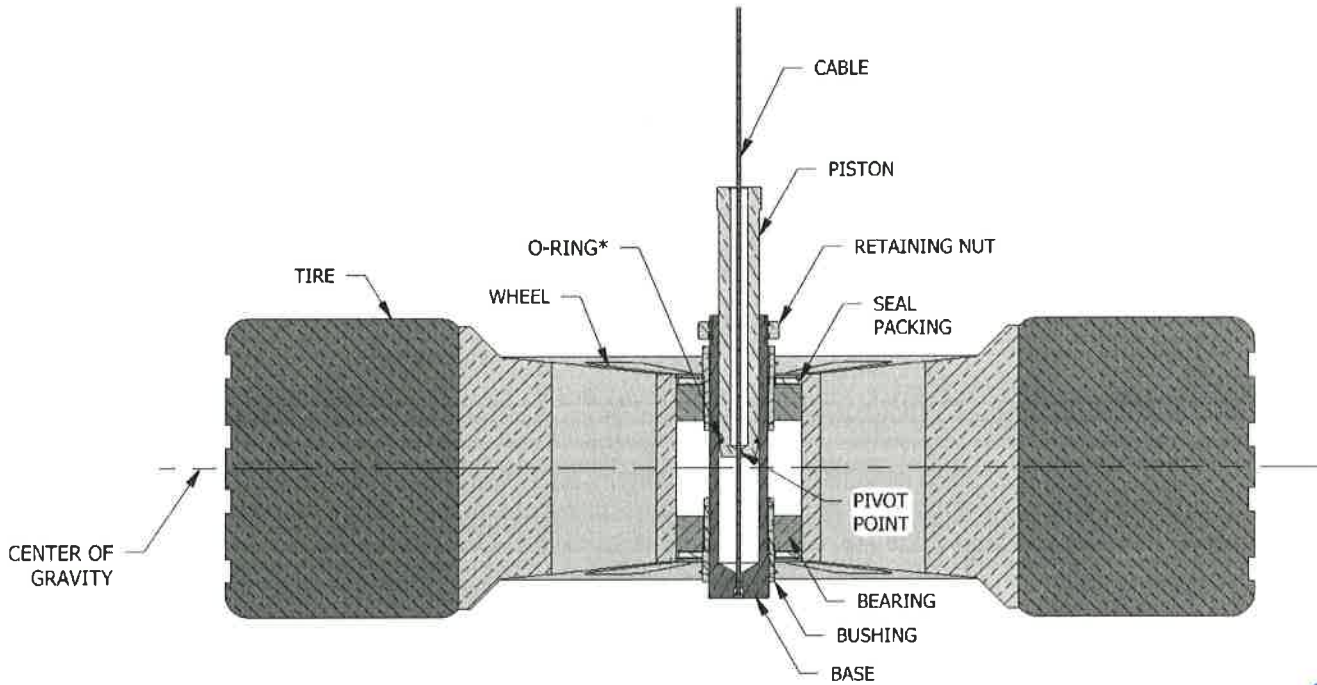


Figure 2 - Wheel Assembly and Tool

* Replacement O-Rings:
 TOOL128 – M83248/1-013
 TOOL129 – M83248/1-016

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C	05/16/2017	ADD NOTE 7.
B	03/29/2016	UPDATE FIGURE 2, ADD REPLACEMENT O-RING NOTE
A	01/22/2016	UPDATE INSTALLATION INSTRUCTIONS FOR NEW BALANCE SIZES.
~	08/18/2011	ORIGINAL

Drawing: WHEEL BALANCER INSTRUCTIONS			
Size: A	Scale: NA	Drawn: SD	Sheet: 1 of 2
Drawing Number: 6652			REVISION

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"X": Bold letter indicates revision level.

REVISION

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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 bearings are clean and free of debris. See below for the specific mounting instructions for wheels that do and do not require the bushings. 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. Before proceeding to the next step, verify whether or not you need a bushing. If the inner diameter of your wheel's bearings is larger than the **Base** diameter of the balancer, use the **Bushing Instructions**, if not, use the **Base Instructions**.

Base Instructions

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

Bushing Instructions

First, verify that you are using the right **Bushing** for your wheel. Slide the bushing into the wheel, small diameter first, and verify that it slides into the bearing with minimal effort.

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

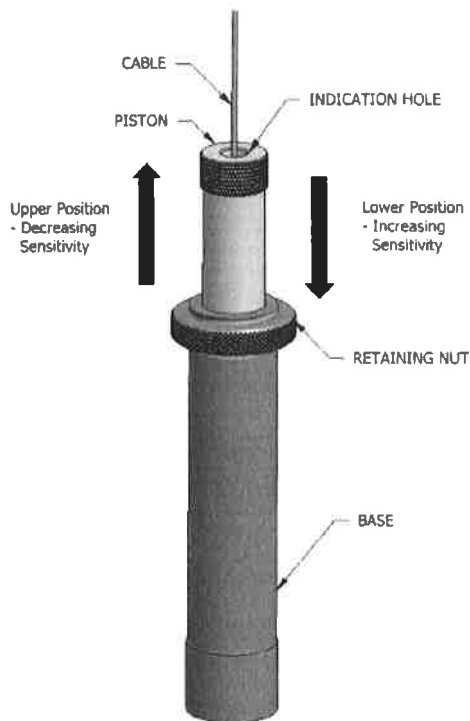
Note: *The Retaining Nut keeps the balancer in the wheel while handling. It does not tighten against anything.*

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.
7. **When finished using the balancer, pull the slack from the cable as the piston is lowered. Failure to do so can result in a kink or other damage to the cable, creating a bias in the assembly, rendering it inaccurate.**

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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