

# **Balancer Operation Instructions (MZ-3A through MZ-11 models)**

Rev 2.2 (4/13/17)

### **Selecting the Correct Tool Balancer Model**

- 1. Select the proper tool balancer for loading the weight of a tool/object that's going to be suspended.
- 2. When selecting the tool balancer, you need to consider total load of a tool object (including tool, power cord/cable, air hose or other attachments).

#### **Example**

Weight of Power Tool + Weight of Attachment = Weight of Total Load 6 lbs + 2 lbs = 8 lbs

Select Tool Balancer model MZ-11

3. In an another scenario if the total weight load is 11 lbs, which is the maximum capacity of the MZ-11, then it's recommended to select the next size tool balancer as it could shorten the life of the smaller model.

## Mounting

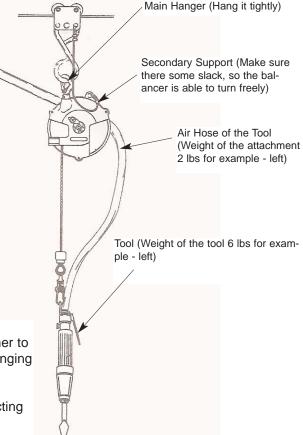
- Both the Main Hanger and the Secondary Hanger should be used together to hold the balancer securely. The Main Hanger should be attached to a hanging device. Then a security chain, wire, etc. should be connected to the Secondary Hanger.
- 2. Check if the weight of the tool being loaded is appropriate before connecting it to the Load Hook.
- 3. The tool balancer should be in a position to operate smoothly.
- 4. When installing two or more tool balancers on a trolley system, avoid the possibility of the balancers colliding.
- 5. Always ensure the top hook (Main Manger) is free to rotate.

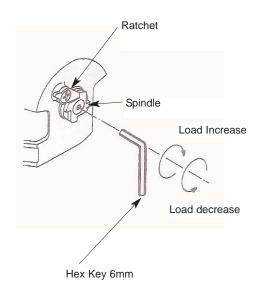
#### **Tension Adjustment (Spiral spring)**

- 1. When adjusting the tension, remove the tool from the bottom load hook before operating the adjustment.
- 2. To increase the tension, turn the "spindle" clockwise. To decrease the tension, turn the "spindle" counterclockwise. You can judge approximate weight through the gauge.
- Avoid adjusting the tension above or below the rated capacity of the tool balancer. If the spring is set above maximum capacity, it will shorten the stroke of the cable and decrease the life of the spring. And, if the spring is set lower than the minimum capacity, the safety device will act and stop operation prematurely.

#### Replacing Parts of a Tool Attached to Tool Balancer

1. The following procedure should be followed if it's necessary to replace any parts on the tool attached to the tool balancer. The Tool should be removed from the Tool Balancer.







## **Balancer Operation Instructions (MZ-3A through MZ-11 models)**

Rev 2.2 (4/13/17)

#### Replacement of Cable

- 1. Loosen the Spiral spring by turning the spindle to the left until the cable is sent out and the cable set bolt appears.
- 2. Remove cable set-bolt and take out cable set from drum.
- 3. Remove the collar and the shock absorber from the cable and set them to a new cable.
- 4. Attach the new cable to the drum by firmly tightening the cable set bolt.
- 5. Tighten the Spiral spring by turning the spindle to the right, Adjust the tightness of the spring to ensure that it conforms to the hung load.

#### Procedures for disassembling / assembling.

When the tool balancer is to be disassembled, the procedure should be followed.

- 1. Take attached equipment off the load hook. Then detach tool balancer from trolley, beam or device that it's attached to.
- 2. Remove the cable from the drum, according to the cable replacement procedures Collar above.
- 3. Remove the cover. Take of the drum cover, the Spiral spring and the drum together from the case.
- 4. Remove the drum cover from the drum and take out the spiral spring. Note: When removed, the Spiral spring will rapidly expand. Use proper case.
- 5. Remove the spindle from the case.
- 6. The assembly procedure is the opposite sequence to disassembly.

#### **Load and Operation Inspection**

- 1. Wind the spiral spring by turning the spindle to the right.
- 2. Hang the balancer and adjust the spiral spring. Attach the weight within the proper capacity range (the middle load of the capacity) to the spring hook. Adjust the spiral spring by performing the operation inspection for all the strokes. (It will make the adjustment easier if the load of the balancer is preset for reassembling).

#### Maintenance and Inspection

For the purpose of preventing of accidental falling, inspection should be carried out at least one time monthly.

- 1. Make sure the bolts of the respective parts are not loosened.
- 2. Make sure the top hook and load are not worn-out or damaged.
- 3. Make sure cable is not torn or worn-out. (Take time to check out the condition of a tear or kink of wire rope and damage of locking part of the end of the cable.)

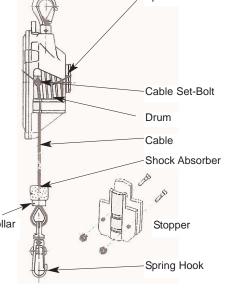
#### After Service

- 1. Make sure safety device operate correctly.
- 2. In the event that any part of tool balancer is broken or damaged, it should be repaired immediately.

### Mountz Calibration & Repair Services

Mountz Inc. features an experienced calibration and repair staff. Our trained technicians can calibrate and repair most any tool. Mountz provides rapid service with quality that you can trust as we offer three state-of-the-art calibration lab and repair facilities that can calibrate up to 20,000 lbf.ft.

Since 1965, Mountz's in-depth knowledge of torque is reflected in our tool's craftsmanship and our ability to provide solutions to both common and uncommon torque applications. We perform calibrations in accordance with ANSI/NCSL-Z540. Mountz is dedicated solely to the manufacturing, marketing and servicing of high quality torque tools.



Spindle

