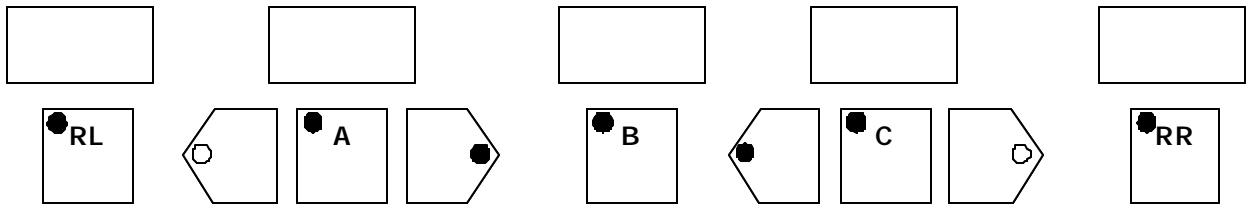
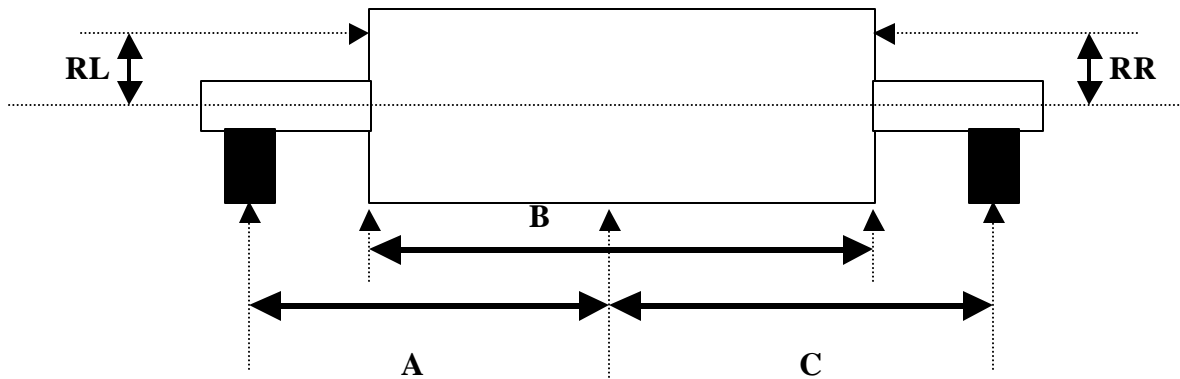


Force and Couple Balancing Procedure



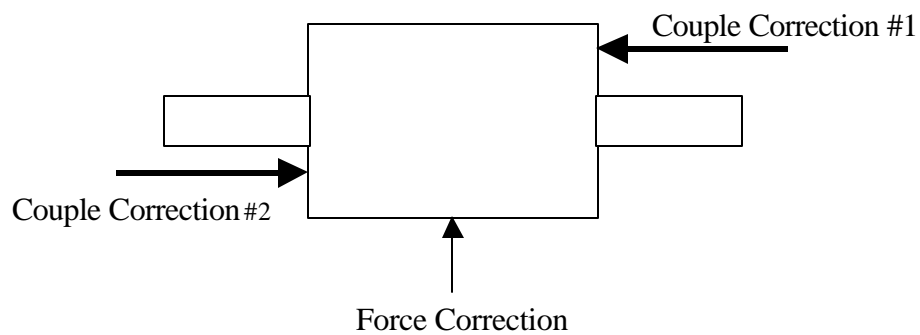
FORCE AND COUPLE BALANCING IS NORMALLY RESERVED FOR PARTS SUCH AS FANS, IMPELLERS, OR ANY PART THAT HAS "WINDAGE".

1. Place the part to be balanced on to the machine.

2. Measure the correction radius from center plane of part to the location where the correction is to be made. Press the **RR** button and insert this dimension into the **RR** window.
3. Measure the distance from the center of the right bearing to the center of the part. Press the **C** button and insert this dimension into the **C** window.
4. Measure the distance from the right and left correction points. Press the **B** button and insert this dimension into the **B** window.
5. Measure the distance from the center of the part to the center of the left bearing. Press the **A** button and insert this dimension into the **A** window.
6. Measure the distance from the center plane of the part to the location where the correction is to be made. Press the **RL** button and insert this dimension into the **RL** window.
7. Press the **RL** button once more so that red light goes out.
8. Press the Left **IN** and Right **IN** buttons on the lower panel if the part to be corrected is in between the roller bearings. For counter levered or other parts refer to the manual for proper set up of the **IN/OUT** buttons.
9. Press the **FORCE/COUPLE** button so that the light is illuminated.
10. On the Microprocessor front panel, press the **GM** button for unbalance reading in grams, press the **IN** button for inches, and press either the **ADD** or **REMOVE** button depending on your correction limits.
11. Install indicator disk or reflective tape to the right end of the part being balanced. If using reflective tape alone, be sure photo eye hits tape at 12:00.
12. Align photo eye to reflect against disk or part, a red light will illuminate on the back of the photo eye. Turn part 360° to ensure the photo eye does not reflect off of any other area of the part.
13. If you notice a slight static unbalance, spin the part up to a slower than normal balance RPM. Normal balance RPM is within 50 RPM of the calibration speed. i.e. if normal balance speed is 600 RPM, run the part at 200 to 300 RPM. Being sure to take part up to speed slowly.

14. Make correction by adding or removing weight as follows; The LEFT amount shown is the FORCE unbalance. This weight should be removed at the angle indicated from the center of the part or equally split between the two sides.

The RIGHT amount and angle correction should be done to the right side of the part and the same correction should be done to the left side of the part, but done at an angle 180° from the indicated RIGHT angle.



15. Spin part up to normal balance speed slowly. Make correction by adding or removing weight as directed in step 14. Repeat until desired tolerance is met.