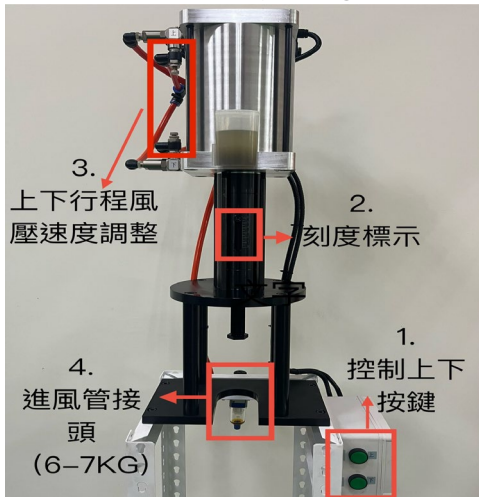


Spring Assembly Machine – Function Description

1. Controls for spring machine up/down movement
2. Scale markings
3. Adjustment of air pressure speed for up/down stroke
4. Air inlet connector (pressure: 6–7 KG)
5. Power socket (voltage: 110V–220V)

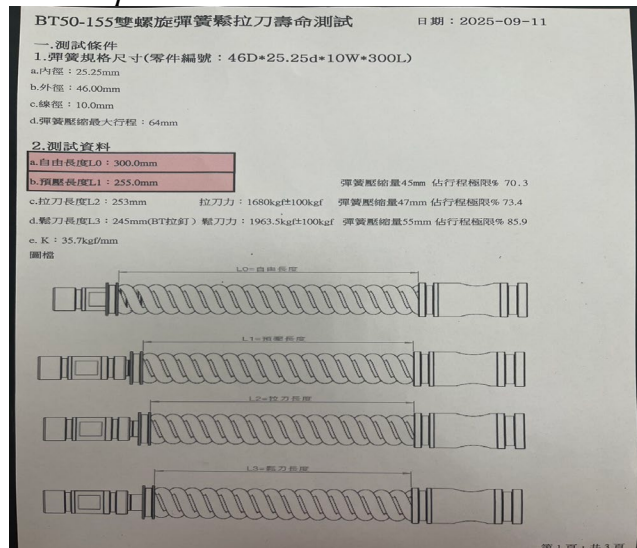


Spring Assembly Procedure (Example: BT50-155)

1. Spring Preload Setup

For assembling the BT50-155 model, the spring with a free length of 300 mm needs to be preloaded to 255 mm.

(Technical parameters and measurements are recorded for reference.)



2.

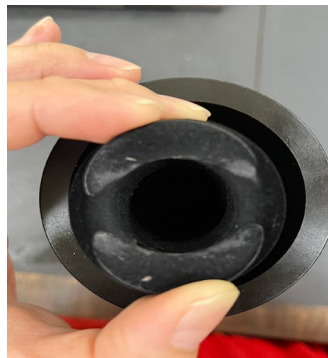
Preload Scale Adjustment

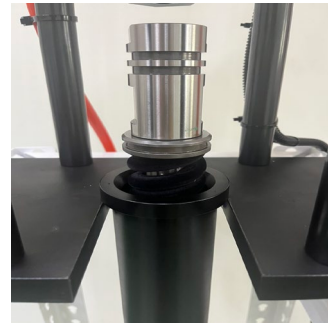
Set the scale on the spring assembly machine to a preload distance of **45 mm**.



3. Component Placement

- Place the washer into the fixture with the **large outer chamfer facing downward**.
- Insert the spring into the fixture and adjust the spring orientation so it is **symmetrical by 180 degrees**.
- Place the other washer into the pull rod with the **large outer chamfer facing the pull rod's flat surface**.
- Apply a thin layer of **molybdenum disulfide (MoS_2)** lubricant to the pull rod.
- Insert the pull rod into the spring and place the entire fixture set onto the press platform.





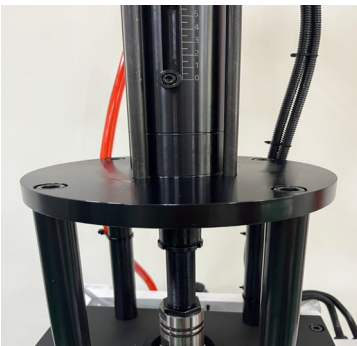
4. Alignment Adjustment

Adjust the **impact screw** to contact the pull rod's flat surface, ensuring both are properly centered.



5. Compression and Locking

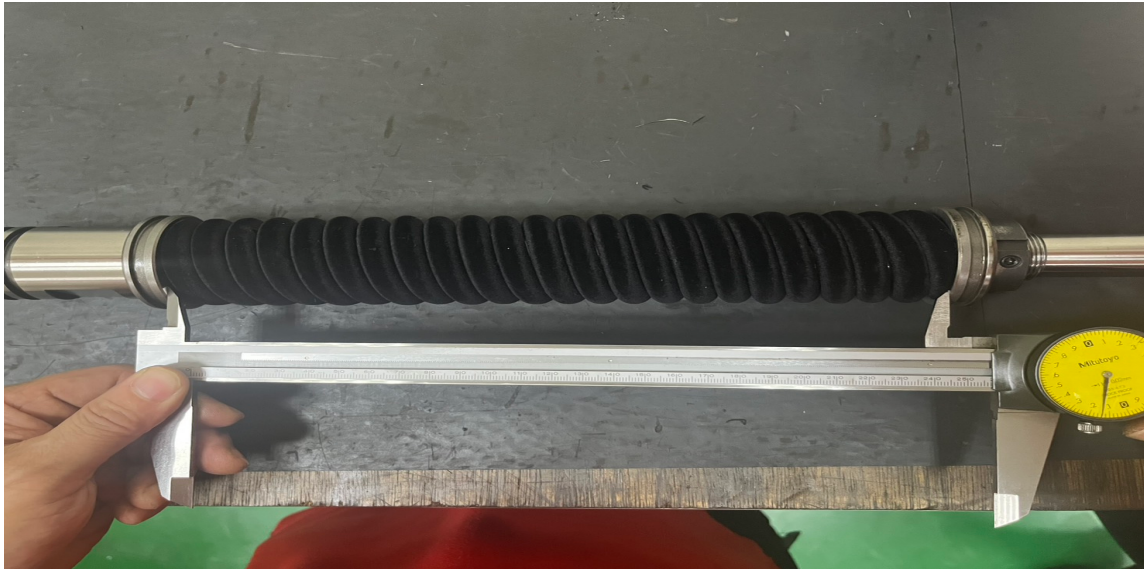
Press the **down key** on the controller until the scale returns to zero, then **tighten the precision nut** on the pull rod to secure it.



6. Measurement and Verification

After completion, remove the pull rod and **measure the spring compression**.

If there is any deviation from the required value, make further adjustments.



7. Final Installation

Before inserting into the main spindle, **apply a thin layer of molybdenum disulfide** on the spring surface to ensure smooth assembly.

