

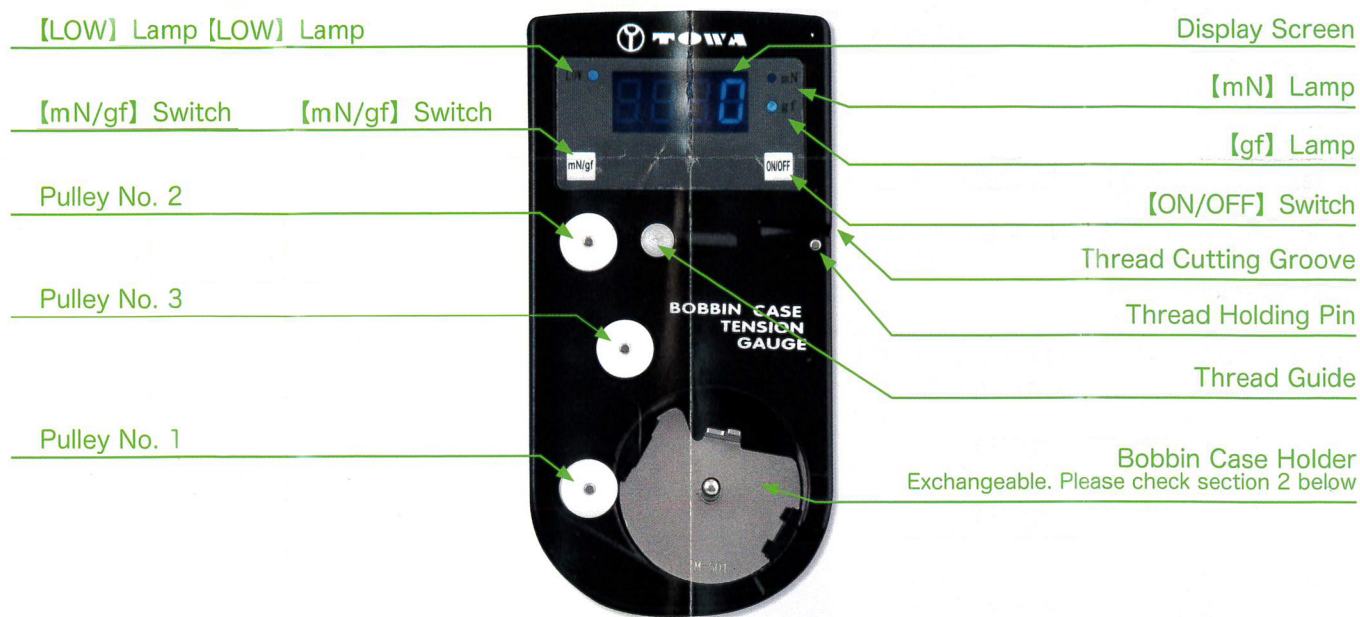


BOBBIN CASE DIGITAL TENSION GAUGE

Service Manual

Thank you for purchasing our product. Please read this instruction manual before using the Bobbin Case Tension Gauge.

1 Part Names



LOW Lamp: When this light is on, the battery is low. Please change the batteries soon (3 AAA batteries facing the correct direction)

mN Lamp: When this light is on, the measurement unit is set to [mN].

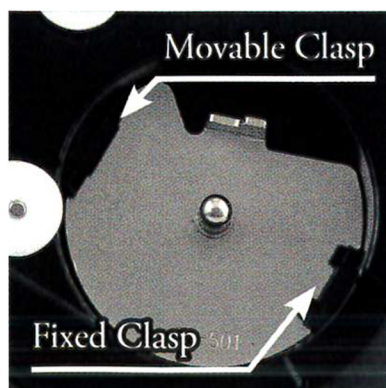
gf Lamp: When this light is on, the measurement unit is set to [gf].

Display Screen: Usually displays the tension reading. In case of any irregularity, it will display one of the readouts below:

[OF]: The maximum "plus" value was exceeded.

[-]: Indicates "sleep" mode.

2 Bobbin Case Classification Table



TM-501
TM-502

BC-DB1, BC-DBZ
BC-DBM

Industrial Use Rotary Types
All Large Types

How to switch bobbin cases

- 1- Push down the movable clasp and release the bobbin case holder.
- 2- Insert a new bobbin case into the fixed clasp and push it into the movable clasp to complete the operation.



BOBBIN CASE DIGITAL TENSION GAUGE

3 How to Use



- 1- Hold the [ON/OFF] switch for over 7 seconds to turn the device on or off.
 - 2- Use the [mN/gf] switch to choose the desired measurement range.
 - 3- Press the [ON/OFF] switch again to reset.
 - 4- Insert a threaded bobbin into the bobbin case and pull the thread out of the tension spring. Set the bobbin case by matching the pointed end of the latch with the bobbin case stopper. After threading the thread through pulley #1, #2, #3 and the thread guide, carefully pull the thread to the right. At this time the digital display should begin to show the thread tension.
 - 5- Adjusting the thread tension: Turn the bobbin case adjustment screw to adjust the tension to the desired amount.
 - 6- Cutting away extra thread: After measuring and adjusting the thread tension, keep holding down the unneeded thread at the thread guide and insert it into the thread cutting groove, then push down to cut it off.
 - 7- After finishing measurement, hold the [ON/OFF] switch for approximately 1-2 seconds to turn the device off.
- If the device is left alone for 50 seconds after measurement, it will go into sleep mode [-] and 5 minutes after that it will automatically shut off.
 - Pressing the [ON/OFF] switch or touching pulley #3 while the device is in sleep mode will turn the device back on.

4 How to Measure Needle Thread



- 1- Thread the needle thread through pulley #3, then through the thread guide. Next wrap the needle thread around the thread holding pin (2-3 times) and hold the end of the thread against the device body with your finger to keep it in place. While doing so, measure the thread tension.

5 Other Precautions

- 1- As this device is a precise measuring apparatus that has been carefully tested and adjusted, please do not drop it, hit it against anything or disassemble it.
- 2- There are several adjustments necessary for garment sewing. Among them is the measuring of thread tension of the under thread in the bobbin case before starting any sewing work when the material or cloth to be sewn has been changed to a new one.
- 3- Please keep this device away from thinner oil, benzene oil, alcohol or petroleum.