

Thank you for purchasing the Monarch Tension Gauge. Your gauge was designed and manufactured from the finest materials available to offer years of trouble free service

## **Initial Use**

The gauge is shipped with the torsional spring disengaged. To activate the spring, simply place one arm of the spring under the hex head portion of the fixed plate post and depress the other spring arm to clip in the groove of the movable arm post as shown in Figure 1.

# **TG1000 Instruction Manual**

**A**WARNING Always disconnect machine from power source prior to using the gauge and only reconnect power after the gauge is safely stored away.



Figure 1



Figure 2

## Operation

Operation of the Monarch tension gauge is intended to be simple and intuitive. To use the gauge, simply depress the lever arm and clip onto the back edge of the bandsaw blade by placing the two fixed pins on one side of the blade and the movable pin on the other side and then gently release the lever. Care should be taken with the placement of the pins to be behind the teeth so that the pins have full contact with the blade band as illustrated in Figure 2.

#### **Tensioning the Blade**

The gauge can remain in place while the blade is being tensioned and an updated reading can be indicated by a quick cycling of the lever arm to view a new reading. It is recommended that the tension be increased to the desired number versus over-tensioning and then releasing tension to a desired number. Tension readings are more accurate while increasing tension incrementally.

# **Blade Tension Chart**

The chart in Figure 3 is intended to serve as a general guide to get the tension close to a workable setting but should only be considered as a guide. Numerous variables across blade manufacturers in blade thickness, hardness, material types, etc. will have an effect on what a particular blade's optimum Monarch number will ultimately be. It is recommended that an initial setting begin with the chart but further working experience, and the subsequent adjusting of the tension either up or down, generate your adjusted Monarch number. At that point, it is advised to record the new Monarch number on the bandsaw blade box or note it on the inside of vour bandsaw access door and refer to it for future set-ups. Once a "blade specific" tension number is recorded, your gauge will allow you to quickly replicate that desired tension on all future set-ups for a fast and easy return to optimum performance.

# **Spring Calibration Adjustment**

The adjustment slot for the spring is designed for factory calibration in order to ensure all Monarch gauges read equally. It is recommended that if the gauge is going to be stored for long period of time that the torsional spring be released from the hard stops and clipped back in place before use. Releasing the spring allows the gauge to be stored in its shipping box and stored away safely.

# Care

Your tension gauge is made of all stainless steel and plastic components so it should be mostly impervious to the common shop issues of humidity and rust. A simple wipe down with a dry cloth of a frequency of your choosing is all that is recommended. In the event the gauge is dropped onto a hard surface, a quick inspection would be recommended to ensure that the pins are not displaced, spring disengaged or an unfamiliar frictional rub is induced.

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	Range
1/8"	19 - 21
3/16"	22 - 23
1/4"	25 - 26
3/8"	30 - 31
1/2"	32 - 34
5/8"	40 - 42
3/4"	44 - 45
1"	49 - 50
	Figure 3

For more information and videos on the use of this gauge, please visit us at: www.monarchindustrialinc.com