# Spring Buffer

Fig. 1

## Description and Use

The Spring Buffer is used when the material being processed is exceptionally heavy and damage might occur if an employee were to move material against the stop with too much force.

The use of the spring buffer will extend belt life, allow the processing of materials heavier than normal, and protect your TigerStop from abuse and negligence in its operation.

## Installation

The Spring Buffer is easily mounted to the flip-away stop using the bolts in the PVC attachment blocks (Fig. 2).

Fig. 2

Fig. 3

With the SB Spring Buffer attached to the stop block as far back as possible, minimum extension is -76mm or minus 3 inches.

−76mm
−3"

With the SB Spring Buffer attached to the stop block as far forward as possible, maximum extension is 406mm or 16 inches.
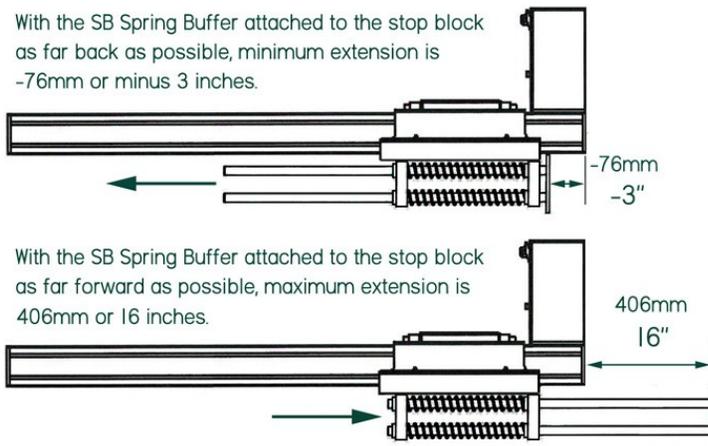
406mm
16"

Fig. 4

The Spring Buffer can be attached to the flip-away stop as far back as possible for a minimum extension of -76mm or minus 3 inches beyond the end of the TigerStop beam, or as far forward as possible for a maximum extension of 406mm or 16 inches (Fig. 4).

After adjusting the Spring Buffer to the desired position, it is locked down by means of bolts in the PVC attachment blocks (Fig. 2).

**TigerStop®**
*fast and accurate...every time*

▶*IMPORTANT! After adding a spring buffer…*

- Version 5.03+, **Run Auto Setup 3 times** to re-zero your machine (page 3).
- Version 3.5 ~ 4.72, **Calibrate** your machine to re-zero it (page 4).

## Parts Specifications

Component parts of the Spring Buffer can be ordered from TigerStop Customer Service in case of damage or loss.

The Spring Buffer is assembled using the hardware and other parts as shown (Figs. 5, 6).
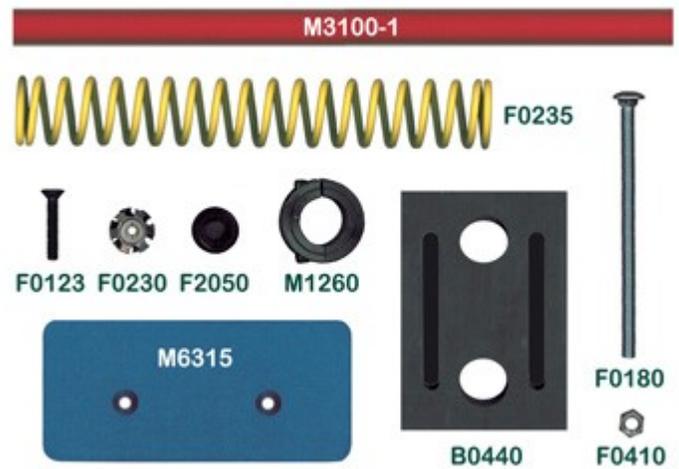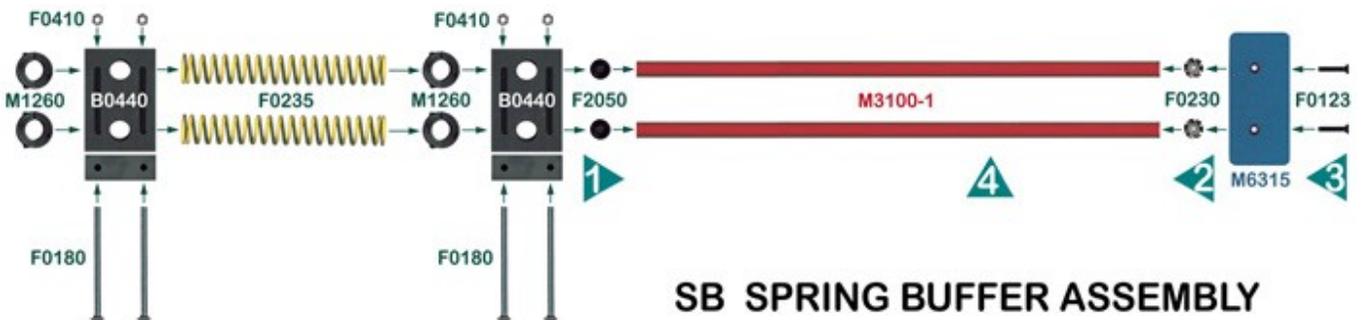


Fig. 5



Fig. 6

## Assembly Instructions

The Spring Buffer comes fully assembled from the factory, but if it is necessary to disassemble and reassemble it, follow these steps. It is not possible to assemble the M3100-1 tube and its components without a special tool. If you need to replace this part, order the tube pre-assembled with end cap and star nut.

1. Attach both M3100-1 tubes to the M6315 foot plate using (2) F0123 bolts.
2. Slide a B0440 plastic way block onto the two tubes about 2/3 of the way down (shown above ⚠), with the slots facing away from the foot plate end.
3. Loosen the set screws on (2) M1260 collars and slide them onto the tubes and up against the B0440 way block.
4. Tighten down one of the M1260 collars. Push the B0440 way block against it, so the second M1260 collar can be positioned exactly parallel to the first one, and tighten the collar down.
5. Slide the (2) F0235 springs onto the tubes.
6. Slide the other B0440 way block onto the tubes and push against the springs to tension them slightly. Repeat steps 5 and 6.
7. Insert the (4) modified F0180 bolts into the holes in the edges of the B0440 way blocks. Push them all the way in, add (4) F0410 hex nuts to the bolts where they protrude on the other side of the way blocks, and tighten down.

## *Run Auto Setup 3 times for maximum accuracy*

```
XH              Ready
Position = Current
Next     =
Menu Incr PrSet List
```
A   B   C   D

1. At the Ready screen press [A] to select **Menu.**

```
XH              Menu
Password =
```

2. Enter the password and press ✓ok.

The TigerStop password is set to the serial number at the factory.

```
XH  ← Select → Menu
A-Setup    C-Options
B-Offset   D-PartList
   A   B   C   D
```
A   B   C   D

3. Press [A] to access **Setup.**

4. ◁ | ▷ to scroll to Auto Setup.

```
XH  ←RunSetup→ Setup
Run the Auto Setup
routine?
Press START to run
```

Make sure the feed table is clear. Nothing should lie in the path of the stop.

5. Press [START] to run auto setup.

```
XH  ←RunSetup→ Setup
Position =  ##.###in
Moving to first
calibration point.
```

The stop moves into position for the user to make a sample cut.

```
XH  ←RunSetup→ Setup
Cycle the tool.
Measure the part.
Press OK to continue
```

6. When the stop is in position, cut the sample piece and measure it. It should be close to the display length.

7. Press ✓ok to continue.

```
XH  ←RunSetup→ Setup
Enter measured value
New value=
Press START to move.
```

8. Enter the actual length of the sample cut.
9. Press [START] to continue.

```
XH  ←RunSetup→ Setup
Position =  ##.###in
Moving to second
calibration point.
```

The stop moves to a second position for another sample cut.

```
XH  ←RunSetup→ Setup
Cycle the tool.
Measure the part.
Press OK to continue
```

10. When the stop is in position, cut the sample piece and measure it. It should be close to the display length.

11. Press ✓ok to continue.

```
XH  ←RunSetup→ Setup
Enter measured value
New value=
Press START to move.
```
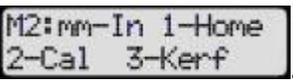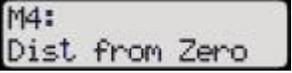
12. Enter the actual length of the sample cut.
13. Press [START] to continue. The display flashes "Success!" and then quickly reverts to the Auto Setup screen.
14. Press [STOP] to exit Menu.

## Version 3.5 ~ 4.72

### *Calibrate TigerStop*

Calibrate TigerStop to re-set its distance from zero after adding an attachment to the flip-away stop.

1. From a position at least 12" out, enter a length of 10". Press **1** **0** **START**. The stop moves inbound to a position 10" from the saw blade.

2. Cut a piece of stock at this length and carefully measure it. It should be right on 10". If it is accurate, no need to calibrate. Be sure to use an accurate measuring tool. TigerStop can be only as accurate as you make it!

3. If the sample cut measured 10¼" instead of 10", the machine must be calibrated.

4. Press **Program List** **Space Calib**. The M2 menu displays `M2:mm-In 1-Home` `2-Cal  3-Kerf`.

5. Press **2**. The M4 menu displays `M4:` `Dist from Zero`. You enter the actual measured length of your sample piece at this screen.

6. Press **1** **0** **Space Calib** **1** **/** **4** **Program List**. This will save the original position of 10" as 10.25", correcting the inaccuracy.

7. Cut another sample piece using the same procedure, starting at step 1 above.

8. If the sample piece measures the same as the position shown on screen, TigerStop is calibrated. If it is still off, repeat the process.