

Spring Buffer Heavy Duty

For use with TigerTurbo and TigerStop HD2

Description and Use

The Spring Buffer Heavy Duty (Fig. 1) is an impact-absorbing pusher for use with TigerTurbo and TigerStop HD2.

Used with TigerTurbo, the Spring Buffer Heavy Duty can extend belt life by reducing the effects of accidental impacts.

Used with TigerStop HD2, it can help prevent damage to the rack and pinion drive system caused by accidental impacts.

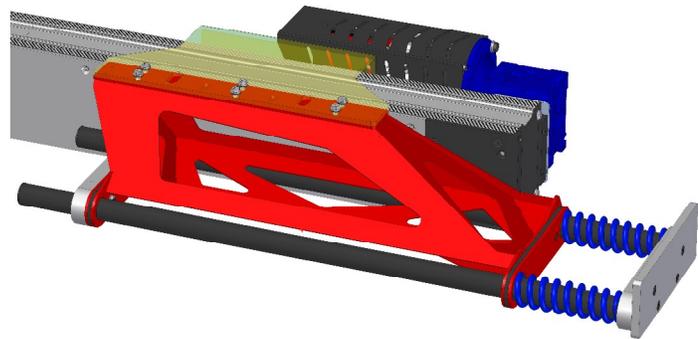


Fig. 1 - Spring Buffer Heavy Duty LEFT-hand

► **The SBHD is not ambidextrous. Order an SBHD-R right-hand or an SBHD-L left-hand.**

Installed correctly...

- The straight side of the SBHD faces the fence beam.
- The slanted side of the SBHD faces the operator.
- The springs and pusher face the direction of material flow, that is, **towards** the saw or other tool.



CAUTION!

Springs are under pressure.
Loosen back clamp screws slowly and carefully to adjust the preload or for maintenance. Sudden release of spring tension could cause bodily injury.

Fig. 2

CAUTION! The springs are loaded!

Do not loosen the clamp at the back end of the buffer tubes without taking precautions.

Sudden release of spring tension could result in bodily injury.

You will need:

Bolts (6)
Lock washers (6)
Washers (6)

1/2" box wrench

Installation

The Spring Buffer Heavy Duty is easily mounted to the TigerTurbo or HD2 carriage.

1. Remove the standard pusher arm if one is installed. Follow the steps in reverse order in Installing Pusher Arm.
2. Using six bolts, lock washers and flat washers, install the SBHD to the TigerTurbo or HD2 carriage through the same holes the pusher arm was mounted by, and in the same manner.
3. Re-zero your machine by running Auto Setup (versions 5.0 or higher) or by running Calibration (versions 4.6~4.7).

Versions 5.0 + ►



Versions 4.6 ~ 4.7 ►



Run Auto Setup (Version 5.0 or higher)

```
%H Ready
Position = Current
Next =
Menu Incr List PrSet
```



```
%H Menu
Password =
```

```
%H < Select > Menu
A-Setup B-Offset
C-Options D-PartList
A B C D
```



```
%H <RunSetup> Setup
Run the Auto Setup
routine?
Press START to run
```

```
%H <RunSetup> Setup
Position = ##.###in
Movins to first
calibration point.
```

```
%H <RunSetup> Setup
Cycle the tool.
Measure the part.
Press OK to continue
```

```
%H <RunSetup> Setup
Enter measured value
New value=
Press START to move.
```

```
%H <RunSetup> Setup
Position = ##.###in
Movins to second
calibration point.
```

```
%H <RunSetup> Setup
Cycle the tool.
Measure the part.
Press OK to continue
```

```
%H <RunSetup> Setup
Enter measured value
New value=
Press START to move.
```

At the Ready Screen...

1. Press [A] to select **Menu**
2. Enter the password and press . The TigerStop password is set to the serial number at the factory.
3. Press [A] to access **Setup**.
4.  to scroll to Auto Setup.

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

5. Press [START] to run auto setup.

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

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

7. Press  to continue.

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

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

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

11. Press  to continue.

12. Enter the actual length of the sample cut.
13. Press [START] to continue. The display flashes "Success!" and reverts to the Auto Setup screen.
14. Press [STOP] to exit Menu.

Recalibrate (Versions 4.6 ~ 4.7)

Calibrate TigerStop to set its distance from zero. Calibrate whenever the saw blade is changed, or when you add or remove a stop attachment, such as a gangstop or pusher foot.

From a position at least 12" out, enter a length of 10".

1. Press   . 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 exactly 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!

If the sample cut measured 10¼" instead of 10"...

3. Press  .

```
M2:mm-In 1-Home
2-Cal 3-Kerf
```

4. Press  for Calibrate, and enter the actual measured length of your sample piece at this screen.

```
M4:
Dist from Zero
```

5. Press       . This saves the original position of 10" as 10.25", correcting the inaccuracy.
6. Cut another sample piece using the same procedure, starting at step 1 above. If the sample piece measures the same as the position shown on screen, TigerStop is calibrated. If it is still off, repeat the process.

Installing the Pusher Arm

These instructions illustrate pusher arm installation on the **HD2** carriage, but they also apply to the **TigerTurbo**, which has a different carriage shape but the same 6-hole configuration for attaching the pusher arm.

The pusher arm (Fig. 1) is installed or removed following the steps below.

You will need:

- Bolts (6)
- Lock washers (6)
- Washers (6)
- 1/2" box wrench

1. Remove carriage cover (Figs. 2, 3, 4). The pusher arm is secured to the carriage by six bolts and lock washers.
2. Remove bolts and washers from pusher arm (Fig. 5).
3. Position pusher arm under the carriage and bolt it into place (Figs. 6, 7).
4. Replace the carriage cover (Fig.8).



Fig. 1



Fig. 2



Fig. 3



Fig. 4



Fig. 5



Fig. 6



Fig. 7



Fig. 8

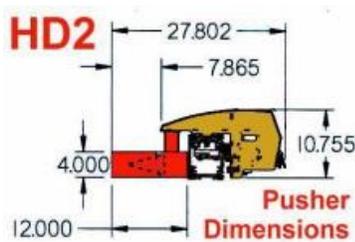


Fig.9

The pusher arm (section view, Fig. 9) is the standard HD2 and TigerTurbo carriage attachment.

- Overall length is 40¼" (102cm).
- The dimensions of the pusher surface are 4" high X 12" wide (102mm X 305mm).

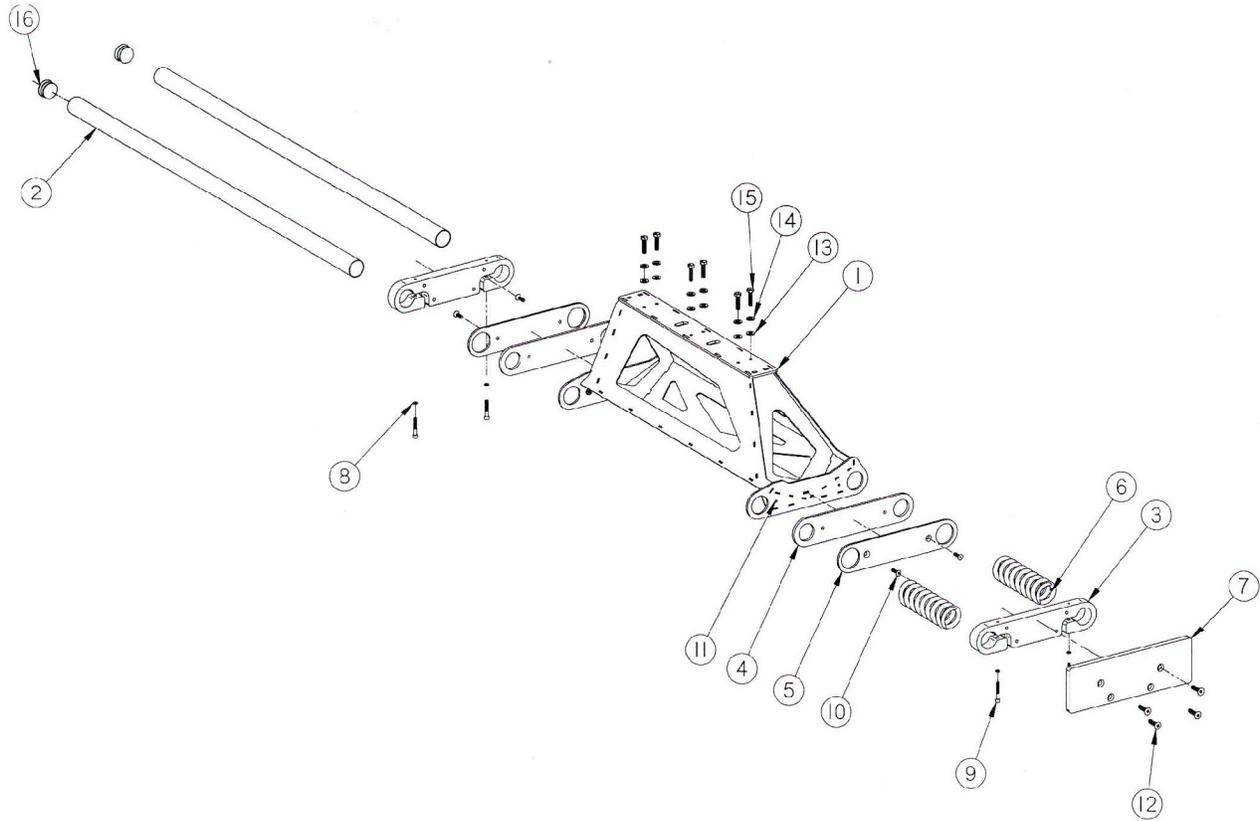
TigerStop LLC

Warranty

TigerStop System Products, TigerStop, TigerFence, TigerCrossCut, TigerRip Fence, Heavy Duty (HD2), TigerTurbo, TigerSaw, Accessory Products and Spare Parts

Please visit www.tigerstop.com for the latest TigerStop Warranty information.

SBHD Parts List



Key	Part #	Description	Qty
1		Spring Buffer HD weldment	1
2		Spring Buffer HD tube	2
3		Spring Buffer HD bracket	2
4		Spring Buffer HD glide	2
5		Spring Buffer HD glide clamp	2
6		Spring Buffer HD spring	2
7		Spring Buffer HD head	1
8		1-4 washer shim	4
9		1-4-20 x 1.5" socket head cap screw	4
10		1-4-20 x .875" socket flat head cap screw	4
11		1-4-20 Nut Whiz-Lock	4
12		5-16-18 x 1.25" flat head socket cap screw	4
13		5-16 washer	6
14		5-16 lock washer	6
15		5-16-18 x 1.25" bolt hex head	6
16		Tube plug 1.5" round	2



© 2007 TigerStop LLC

Assembly Plant, 12909 N.E. 95th Street, Vancouver, WA 98682 U.S.A. - TEL: 360-254-0661 - FAX: 360-260-0755

Safety First!

- Any automatic equipment can be dangerous if used improperly, and this includes TigerStop and its line of automation equipment: TigerStop, TigerPro, TigerFence (standard and SLR), TigerCrossCut, TigerTurbo and HeavyDuty2, and TigerSaw.
- But before you put your tape measure away and start making a TigerStop machine your newest best friend, **please read and consider the following safety reminders**, some of which may relate to the operation of your other power tools as well.
- If a warning is also found elsewhere in this manual, or on a label affixed to the machine, the reference is shown in parentheses.



General Warnings

WARNING: TigerStop, TigerFence, TigerCrossCut, TigerRip Fence, HeavyDuty2 and TigerTurbo are machine components intended for use in conjunction with other potentially dangerous machinery. The use of these components does not make that machinery safe. TigerStop LLC's products are not intended to substitute, in any manner, for safety requirements in general, or in conjunction with other machinery. These components must be incorporated into machinery by persons qualified to design safety features to make the machine as safe as possible and to ensure that it meets federal, state and local law with respect to safety and all other regulatory requirements. In addition, TigerStop, TigerStop Heavy Duty 2 (HD2) and TigerTurbo are machine components that should only be operated by qualified persons trained in safe operating procedures. Illustrations of TigerStop, TigerStop Heavy Duty 2 (HD2) and TigerTurbo components in use do not show, and are not intended to show, safety features necessary to make the machinery safe to operate.

(Label covering end cap of fence extrusions)



Installation Warnings

WARNING: TigerStop (TigerFence SLR, TigerFence, TigerCrossCut, TigerTurbo, HeavyDuty2) must be installed in accordance with all local, state, and federal regulations, as well as common sense safety requirements. Use only trained professionals when installing TigerStop machines with existing equipment to ensure a safe and proper work station that will in no way endanger the operator or any other personnel. Do not operate without proper training, both in TigerStop operation, and in the operation of adjoining equipment.

(Installation Guides of: TigerStop, TigerFence, TigerFence SLR, TigerCrossCut, TigerTurbo, HD2)

FOUR IMPORTANT CAUTIONS:

- Do not randomly drill and tap holes in the TigerStop fence beam for mounting or for any other purpose. This might damage the drive system. All fastening or attachment to the fence beam **MUST** be made by inserting T-bolts or T-nuts **WITH** washers!
- It is **CRITICAL** — especially if **NOT** using TigerStop attachment brackets (BR3x3) — that if T-nuts are used, the bolts are prevented from tightening through them and into the aluminum fence beam. Again, it is imperative that washers be used!
- Uneven tightening of the bolts used to fasten down TigerStop to its mounting support can introduce a slight twist or other deformation in the beam. This will result in inaccurate measurement and premature failure of the drive belt or other components.
- The motor box (compartment) contains DC voltage with potentially **FATAL** amperage. **NEVER** attempt any unauthorized actions inside the motor box!

(linked from TigerStop Installation, Feed Table Installation, Ledge Stand)

CAUTION: NEVER drill holes into the HD2 fence beam for any reason!

(HD2 Installation)

CAUTION: NEVER drill holes into the TigerTurbo fence beam for any reason!

(TigerTurbo Installation)

CAUTION: Washers **MUST** be used to prevent damage to the fence beam by over-tightening!

(Mounting TigerStop to a Feed Table)



Interconnects

WARNING: Using a TigerStop interconnect does not relieve you of the responsibility for making sure that your saw or other tool has all the necessary safety equipment in place.

(Standard Interconnect Kit, Advanced Interconnect Kit)



Operation

DANGER: This machine can start, move, and stop automatically. Keep hands and loose clothing clear of moving parts while operating. Moving parts can crush and cut. When used with saws or other cutting equipment, bodily injury and death may result if operated without safety guards on all machines. Do not operate with guards removed. Operators must wear adequate eye and ear protection. High voltage **DANGER**—Do not open motor compartment or controller keypad. No user-serviceable parts inside.

(TigerStop Quick Reference Card, ALSO label of motor end plate or amplifier cover)

DANGER! CAUTION! Keep hands and loose clothing clear of moving parts while operating. Moving parts can crush and cut. To comply with ANSI Safety Standard B11-19 paragraph 4.2.1, "The user shall be responsible for ensuring that safeguarding is provided, integrated, installed, maintained and used in accordance with the requirements of this standard." When used with saws or other cutting equipment, bodily injury and death may result if operated without safety guards on all machines. Do not operate with guards removed. Keep the work area clean and well-lit to avoid accidental injury. Do not use TigerStop in a dangerous environment. Using power tools in wet locations or in rain can cause shock or electrocution! Do not operate near flammable liquids or in gaseous or explosive atmospheres! Wear proper apparel, no loose clothes or jewelry which could get pulled into moving machinery or materials. Wear non-slip footwear, safety glasses, ear protection, and a dust mask. Do NOT operate this machine under the influence of drugs or alcohol! **POWER:** Use only 3-wire extension cords, 3-prong grounded plugs and 3-pole receptacles. No one should operate this machine except fully qualified personnel. Read the TigerStop Manual for complete instructions. **HIGH VOLTAGE DANGER:** Do not open motor compartment or controller keypad. DC voltage with potentially FATAL amperage! Disconnect power before servicing.

(Label covering motor box or amplifier end cap)

CAUTION: The springs are loaded! Do not loosen the clamp at the back end of the buffer tubes without taking precautions. Sudden release of spring tension could result in bodily injury.

(Spring Buffer Heavy Duty)

IMPORTANT CAUTIONS - READ AND UNDERSTAND BEFORE OPERATING TIGERSTOP MACHINES!



DANGER! Don't get pinched by the push feeder. Keep your hands away when in motion!



Keep the work area clean and well lit to avoid accidental injury.



Do not use TigerStop machines in a dangerous environment. Using power tools in damp or wet locations or in rain can cause shock or electrocution!



Do not operate near flammable liquids or in gaseous or explosive atmospheres!



Wear proper apparel, no loose clothes or jewelry which could get pulled into moving machinery or materials.

Wear non-slip footwear, safety glasses, ear protection, and a dust mask.



Use only 3-wire extension cords that have 3-prong grounding-type plugs and 3-pole receptacles that accept the tool's plug. Do NOT operate this or any machine under the influence of drugs or alcohol!



Do not open motor compartment or controller keypad. DC voltage with potentially **FATAL** amperage! Disconnect power before servicing.



No one should operate this machine except fully qualified personnel. Read the Manual!

