

# Controller & Amplifier Installation Guide



February 2017 Mk1

**Order Number:**

**RGA:**

## **TigerStop Serial Number:**

Note: The TigerStop serial number is also your TigerStop password.

## **Factory Scale:**

Note: Your TigerStop was scaled at the factory using a laser interferometer to ensure the highest level of accuracy. For beset results, we recommend using the factory scale.

## **Software Version:**

Damaged controllers and amplifiers will need to be returned to TigerStop to redeem the parts core charge. The new part arrived in a box with a Return Goods Authorization sticker already on the outside. Place the old part in this same box and return to the address on the sticker.

TigerStop, LLC  
12909 NE 95th Street  
Vancouver, WA 98682

**KEEP THIS BOX**

**RGA#** \_\_\_\_\_

**Please return part(s) by \_\_\_/\_\_\_/14 to receive credit.**

All goods must be received within 30 days or your credit card/account will be charged.

If shipping from outside the US, please note on shipping documents: **"Core Return, of no value. Export tracking # (tracking number from original shipment)."**

Use this box to return goods for credit. Please transfer above RGA# if you return in different box.

Ship via UPS or FedEx to:

TigerStop LLC, 12909 NE 95<sup>th</sup> St., Vancouver, WA 98682

# Safety First!

IMPORTANT SAFETY INFORMATION. READ ALL WARNINGS BEFORE OPERATING THIS PRODUCT.



## GENERAL WARNINGS

WARNING: Installation of your TigerStop Product must be done by a person trained in the safe design and installation of automation products, and in the safe operation of power equipment. Ensure that such installation meets all legally required safety requirements and guidelines, and that proper guarding and safety devices are provided on all sides of the equipment to preclude unintended access during operation. Consult with and follow the recommendations of a qualified safety engineer.

WARNING: TigerStop Products are components intended for use in conjunction with potentially dangerous machinery. The use of TigerStop Products does not make other machinery safe. TigerStop Products are not intended to substitute, in any manner, for safe operating practices in general, or for safety features present in other machines designed to make those machines as safe as possible. **TIGERSTOP PRODUCTS, IF USED OR INSTALLED IMPROPERLY, MAY CAUSE PERSONAL INJURY OR DEATH AND SHOULD ONLY BE OPERATED BY PERSONS TRAINED IN THEIR SAFE OPERATING PROCEDURES.** Illustrations of TigerStop Products in use do not show, and are not intended to show, all safety features and practices necessary for their safe operation.



## INSTALLATION WARNINGS

WARNING: TigerStop Products must be installed in accordance with all local, state, and federal regulations. Only personnel properly trained in the safe design and installation of automation machinery and related power equipment should install TigerStop Products onto other equipment, to ensure a safe and proper work station. TigerStop Products should not be operated without proper training, both in the operation of TigerStop Products, and in the operation of related equipment.

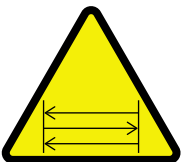
### IMPORTANT CAUTION:

The motor box (compartment) contains DC voltage with potentially FATAL amperage. NEVER attempt any unauthorized actions inside the motor box.



## 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. All installations must meet all legally required safety requirements and guidelines. Installation and training should be done following the recommendations of a qualified safety engineer.



## 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 a saw 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.

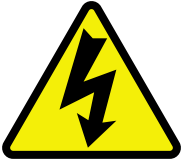


DANGER! Don't get pinched by the push feeder. Keep your hands away when in motion!

**IMPORTANT SAFETY INFORMATION. READ ALL WARNINGS BEFORE OPERATING THIS PRODUCT.**



Keep the work area clean and well lighted 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, long hair 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 tools plug for 120VAC. Use only 5-wire cords and plugs when using 3 phase.



Do not open motor compartment or controller keypad. DC Voltage with potentially FATAL amperage!  
Disconnect power before servicing. No user-serviceable parts inside.

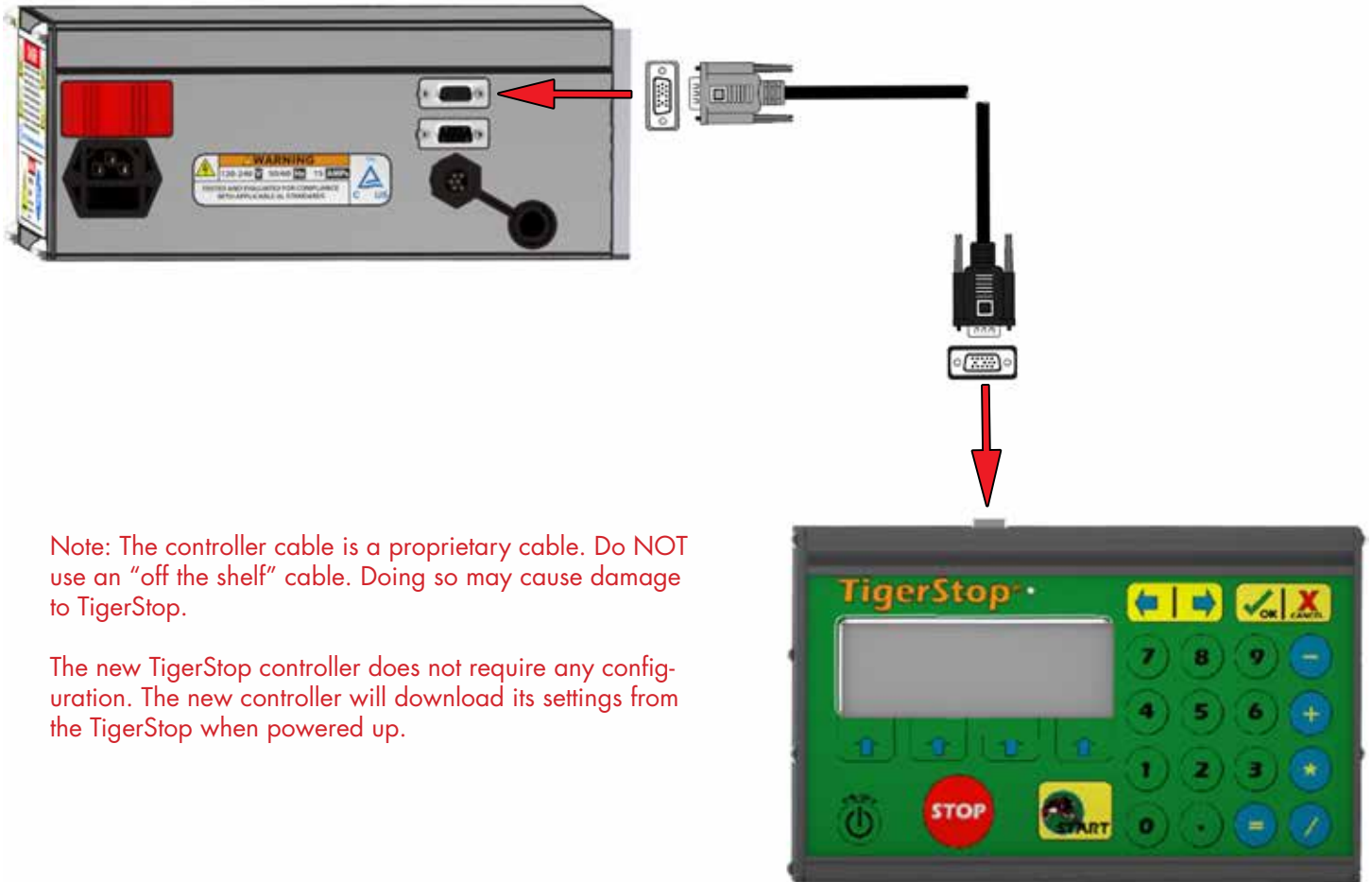
DO NOT operate this or any machine under the influence of drugs or alcohol!



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

# Controller Replacement

**WARNING!** Read all instructions before performing any parts installation! **NEVER** power up system while motor box is open! **ALWAYS** lock out/tag out TigerStop machinery before installing parts!

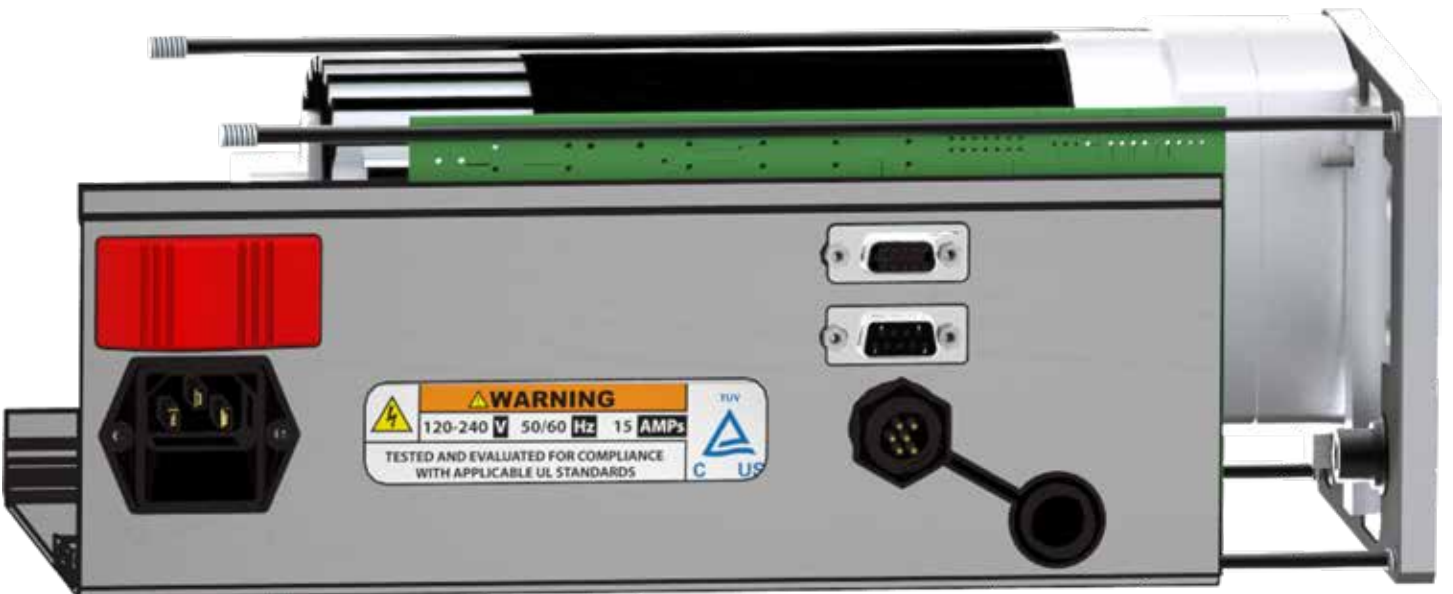


Note: The controller cable is a proprietary cable. Do NOT use an "off the shelf" cable. Doing so may cause damage to TigerStop.

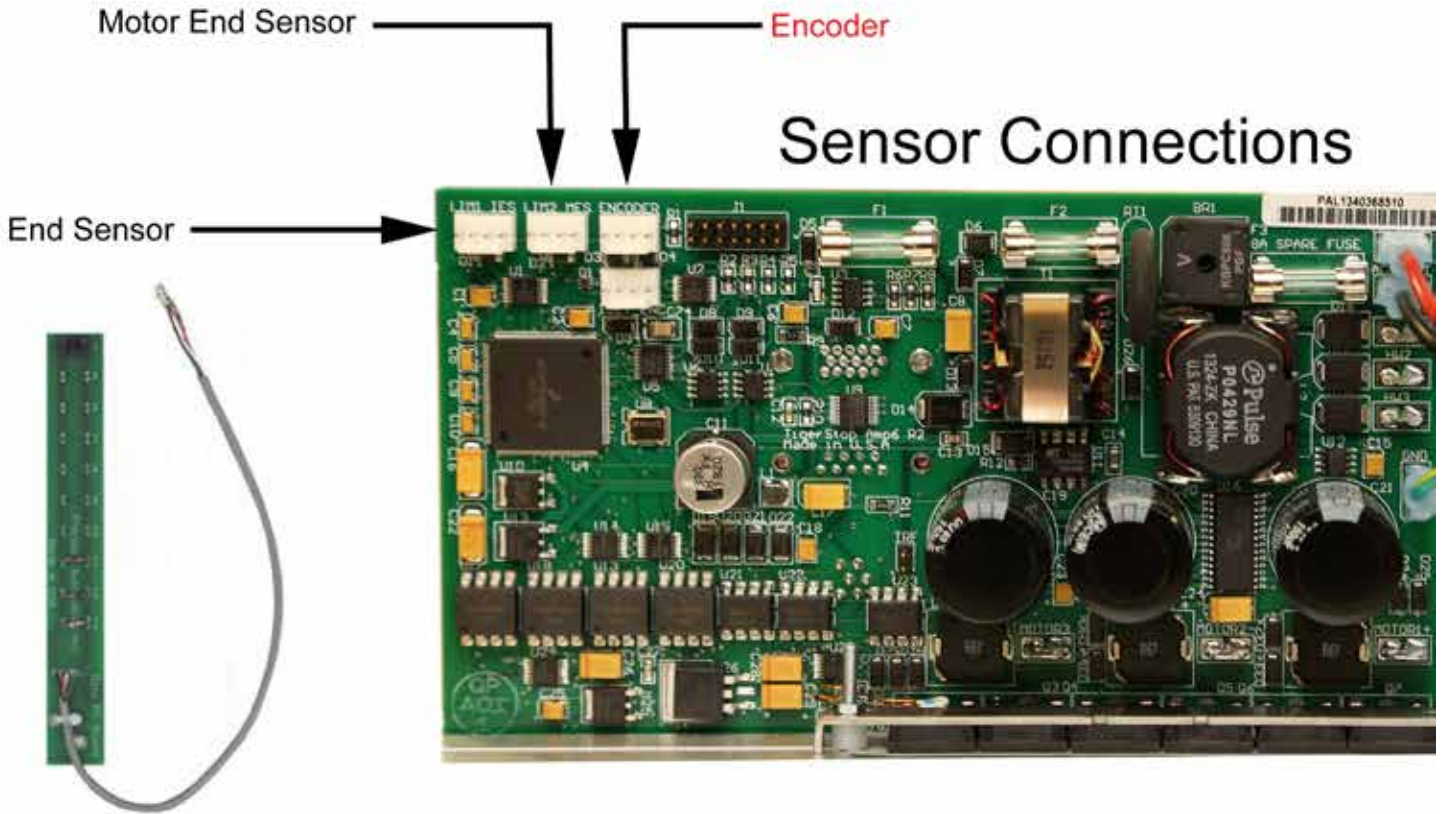
The new TigerStop controller does not require any configuration. The new controller will download its settings from the TigerStop when powered up.

# Amplifier Replacement

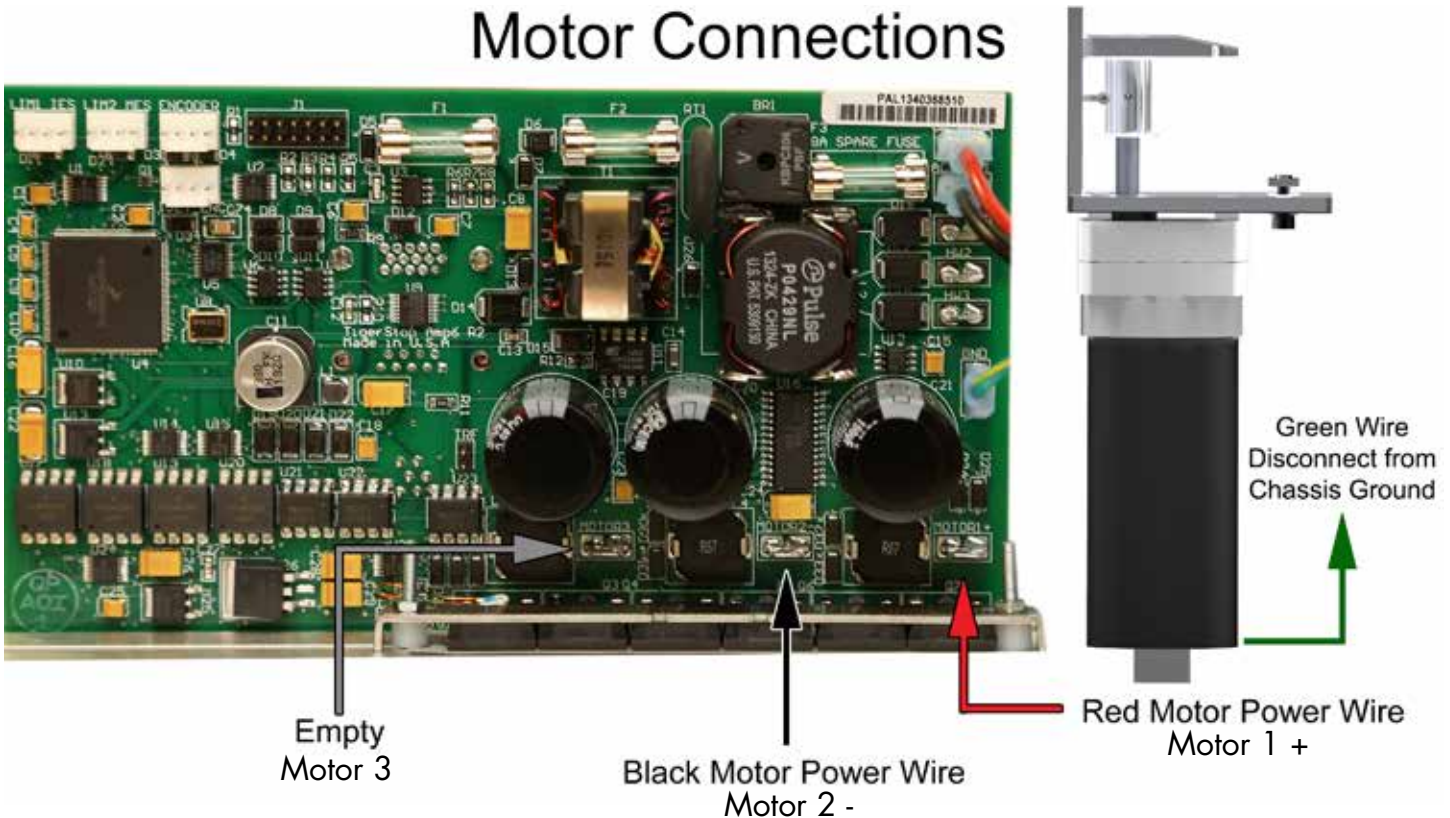
**WARNING!** Read all instructions before performing any parts installation! **NEVER** power up system while motor box is open! **ALWAYS** lock out/tag out TigerStop machinery before installing parts!



# Unplug Amplifier Connections



# Motor Connections



# Reliance Motor Instructions

If your TigerStop has a Reliance motor, the corner of the motor adjacent to the amplifier chassis must be cut away using an angle grinder before installing the new amplifier. Failure to do so can damage the amplifier.



## Reassembly and Setup

When replacement is complete, reassemble the TigerStop motor box. NEVER apply power to TigerStop with the motor box open. Doing so can cause serious bodily harm!

### Power Up

When the TigerStop motor box has been reassembled, power up and run the TigerStop home routine.

### Home Routine

When TigerStop is powered up, it performs the home routine. The Home Routine is a 3 step process where TigerStop will move to its farthest possible location.

1. Power up TigerStop by toggling the power switch on the side of the motor box.
2. Press **START** when prompted.
3. TigerStop will perform the 3 stages of the Home Routine.

```
%C HR #1 Start  
Position = ##.###in  
First Home Stage,  
Movins to Home End.
```

```
%C HR #2 Start  
Position = ##.###in  
Second Home Stage,  
Backins off limit.
```

```
%C HR #3 Start  
Position = ##.###in  
Final Home Stage,  
Movins to Home End.
```

TigerStop will now display the Ready Screen.

### Find the End Limits

The Find End Limits routine will tell TigerStop how far it can travel. You must perform this routine after an amplifier replacement.




```
XH Ready
Position = Current
Next =
Calib Show
```

```
XH Ready
Position = Current
Next =
Menu Incr PrSet List
```

```
XH Menu
Password =
```

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


```
XH ←FindLim → Setup
Find the end limits?
Press START to run
```

1. At the Ready Screen, press the [Show] soft key to show the menu options.
2. Press the [Menu] soft key to access the menu options.
3. TigerStop requires a password to access the menu options. Enter your TigerStop password and press [=].  
*Note: By default, the TigerStop password is set to the serial number.*
4. Press the [Setup] soft key to enter the Setup menu.
5. Press  until you get to the Find Lim setting.
6. Follow the prompts on screen to run the routine.  
*Note: TigerStop will move its entire travel during this routine. Keep area clear!*

## Calibrate

When the Find End Limit routine has finished, you will need to calibrate. Calibration controls TigerStop accuracy and will need to be performed after any amplifier replacement.

```
XH ← Calib → Setup
Enter distance
from zero= ##.###in
Done
```

1. From the Find Lim screen, press  until you get to the calibration setting.
2. Carefully measure how far TigerStop is from your tools zero point.
3. Enter this measurement and press the [Done] soft key.





