

Date Created: 28/09/2016

Product: Pegasus S3/S4

Title: Electric Brake Wiring Loom



SAFETY! Before attempting to make any adjustments or carry out maintenance on the mower, review the hazard identification table (section 3a of your Operator Manual) and take all necessary precautions.



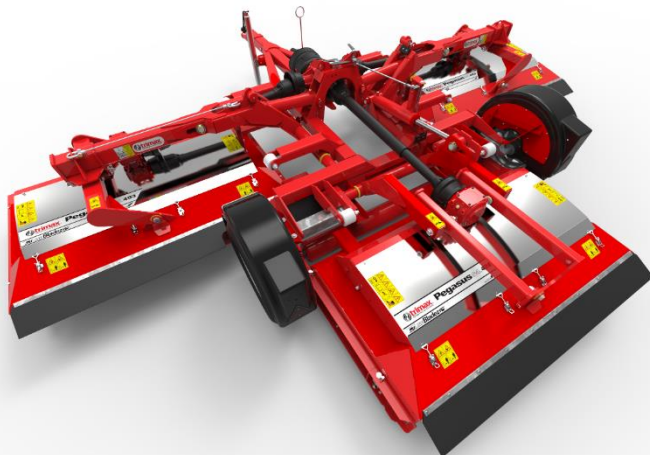
Prior to starting this procedure, isolate the power supply to the Pegasus Electric Brakes and Tail Lights. Firstly, switch the Tractor Ignition to the **OFF** position, then disconnect the Electric Brakes Power Cable and Tail Light Power Cable from the Tractor.

DO NOT work on live electrical equipment, as this is dangerous and may cause damage to electrical components and/or injury!

Caution:

Circuitry supplied suits **12-VOLT NEGATIVE EARTH SYSTEMS ONLY!**

Trimax or its agents will not be held liable for any damage or warranty claims occurring as a result of improper wiring!



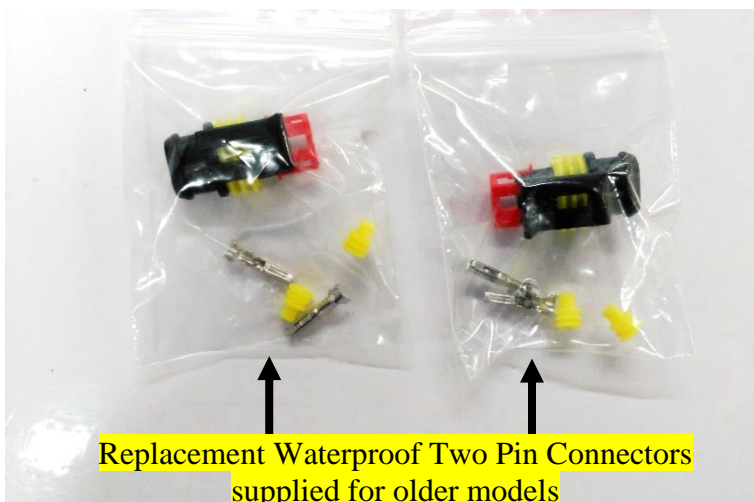
Position the Pegasus on a smooth, hard and level surface.

Ensure the surrounding area is clear of obstructions and personnel.

Lower the Mower Decks down onto the Ground.

Trace and remove the Electric Brake Wiring Loom and Brake Controller from the Pegasus Chassis.

This runs from the front of the Chassis to the two Brake Drums fitted to the Rear Axles. Disconnect the Brake Drum Plugs from the Wiring Loom.

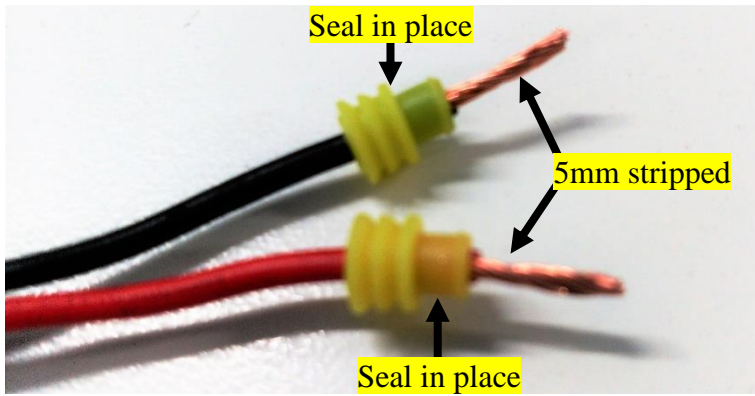


IMPORTANT:

On older models, the Brake Drum Plugs will require replacing with the supplied Waterproof Two Pin Connectors to connect with the replacement Loom.

These are supplied with the Loom and are shown in the image opposite.

The fitment of these connectors is covered on **PAGE 2** of this document.

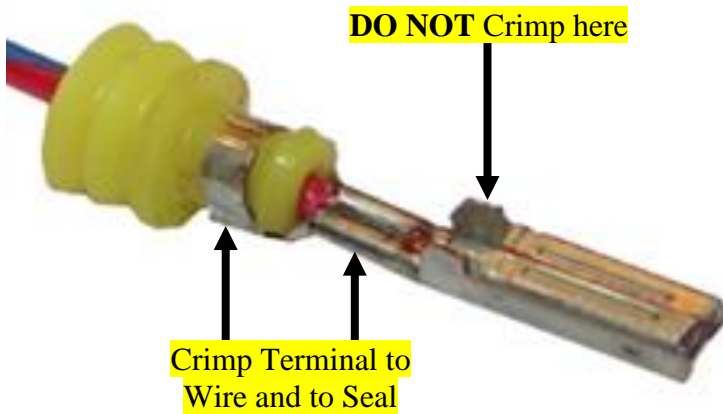


First, snip off the existing Plug from the Brake Drum as close to the Plug as possible.

Strip off **5mm (3/16")** of the insulation from each of the Brake Drum Wires.

Twist up the exposed wire.

Slide a Seal over each of the Brake Drum Wires in the orientation shown. Keep the small end of the seal in line with the edge of the Insulation.



Fit a Terminal over the exposed wire.

The larger Clamp on the Terminal fits over the narrow end of Seal, pinch this slightly to hold in place.

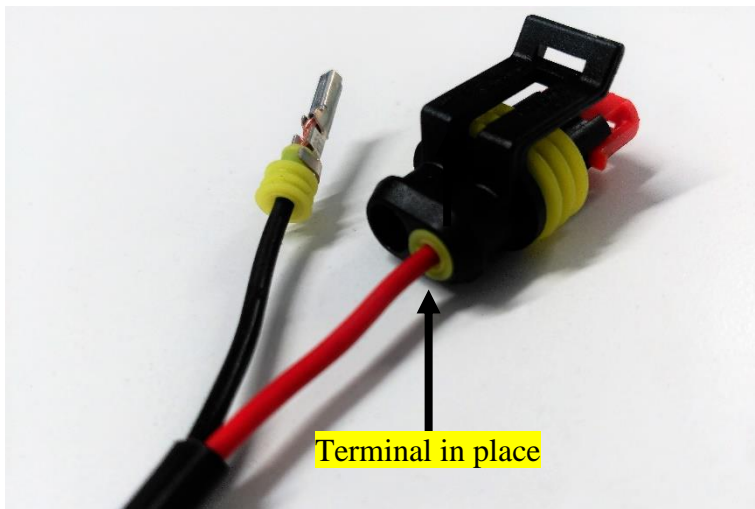
Using a Crimping Tool, carefully crimp the Terminal and Seal in place on the Wire.

One shown.



Note:

DO NOT Crimp the area shown, these tags retain the terminal in the Terminal Holder!



Repeat for the other Wire.

Insert the terminals into the back of the Terminal Holder, the clamp side of the terminals faces the Clip on the Terminal Holder.

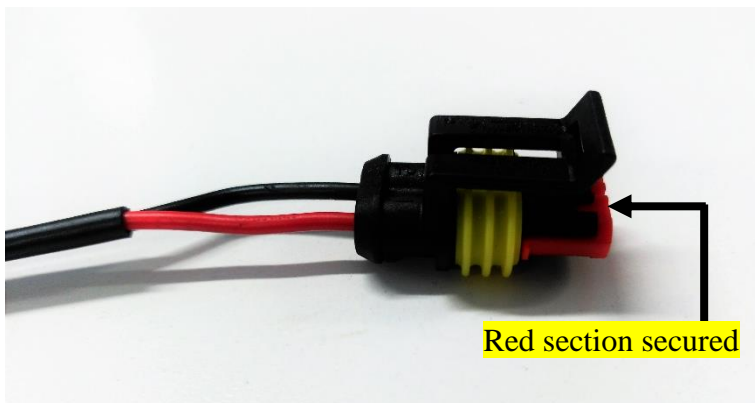
These will “click” into place when correctly located.

Push the Seals into the back of the Terminal Holder.



Note:

The terminals can go in either side of the Terminal Holder as the Brakes are **NOT** polarity specific!



Once both of the Terminals are in place in the Terminal Holder, press the **RED** section of the holder back into place. The legs either side may need to be pulled out slightly.

This will “click” into place when correctly located.

Repeat the above for the other Brake Drum.



Note:

The **RED** section aligns Terminals and locks them in place.



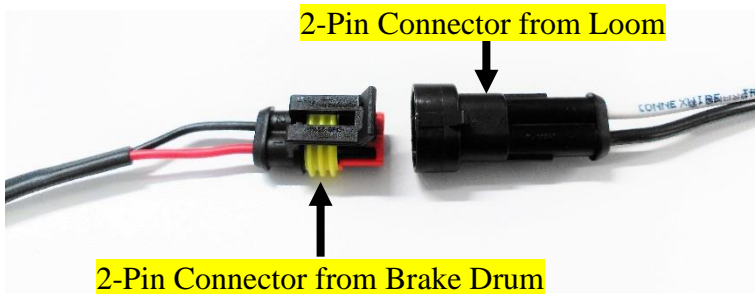
Run the Loom through the Chassis.

On Pegasus S3, a conduit runs through the Chassis from front to rear, the loom can be fed through this. Cable ties are used across the Rear Cross Member to retain the Brake Loom to the Tail Light Loom.

- SEE **PAGE 8** FOR A TOP DOWN IMAGE OF **PEGASUS S3** CHASSIS.

On Pegasus S4, Wiring Retaining Strips are located around the Chassis, Cable Ties are used throughout to retain **BOTH** the Tail Light and Brake Looms.

- SEE **PAGE 9** FOR A TOP DOWN IMAGE OF **PEGASUS S4** CHASSIS.



Once the Loom is in place, plug each of the Brake Drum Connectors into the Connectors on the Loom.

Check that **BOTH** of these have “clicked” into place.



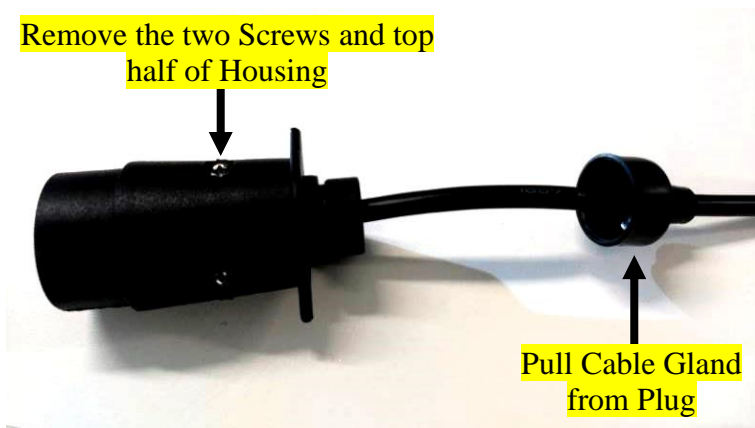
Identify the 7-Pin Round Adaptor Plug.

Disconnect this from the Tractor.

An Auxiliary Wire will need to be fitted inside the 7-Pin Round Adaptor Plug.

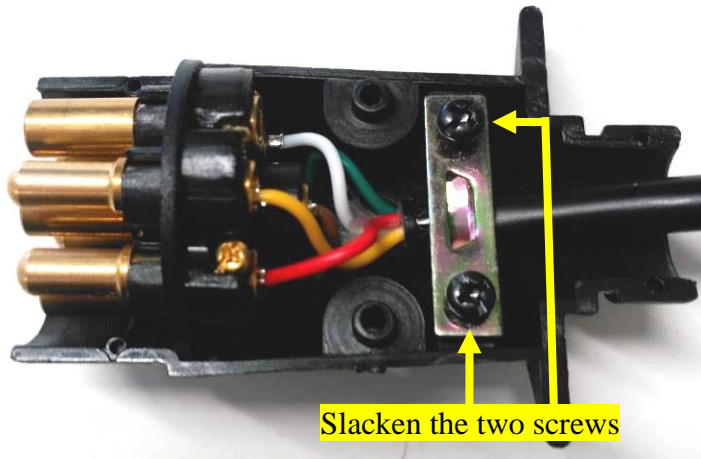
This Auxiliary Wire is what provides the trigger for the Braking System.

This applies for **Pegasus S3 and S4**, the Plugs have a slightly different appearance, the process is the same! These are both shown opposite.

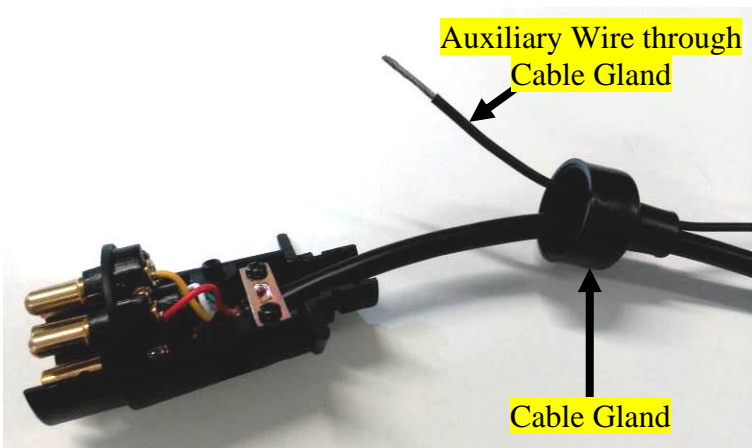


Remove the Cable Gland from the Rear of the 7-Pin Round Adaptor Plug, this simply pulls off the back of the Plug.

Then remove the two screws from the Plug and remove the top half of the Plug Housing. Place the screws somewhere safe!



Once the casing is removed, slacken the two screws used to retain the Strain Relief Bracket.

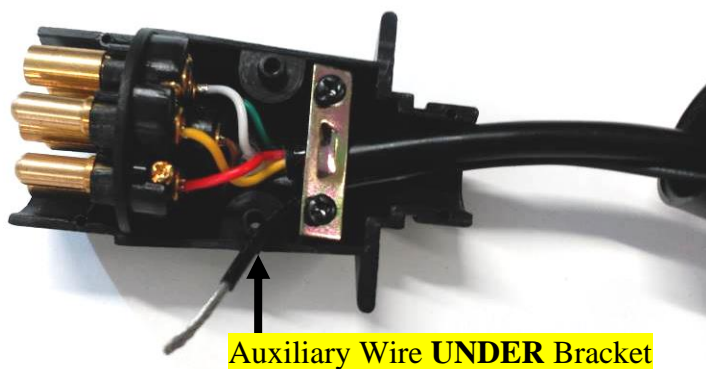


Feed the Auxiliary Wire from the Brake Loom through the **REAR** of the Cable Gland as shown.




Note:

A small Flat Bladed Screwdriver can be used to carefully open up the Cable Gland slightly if needed.



Pass the Auxiliary Wire **UNDER** the Strain Relief Bracket.

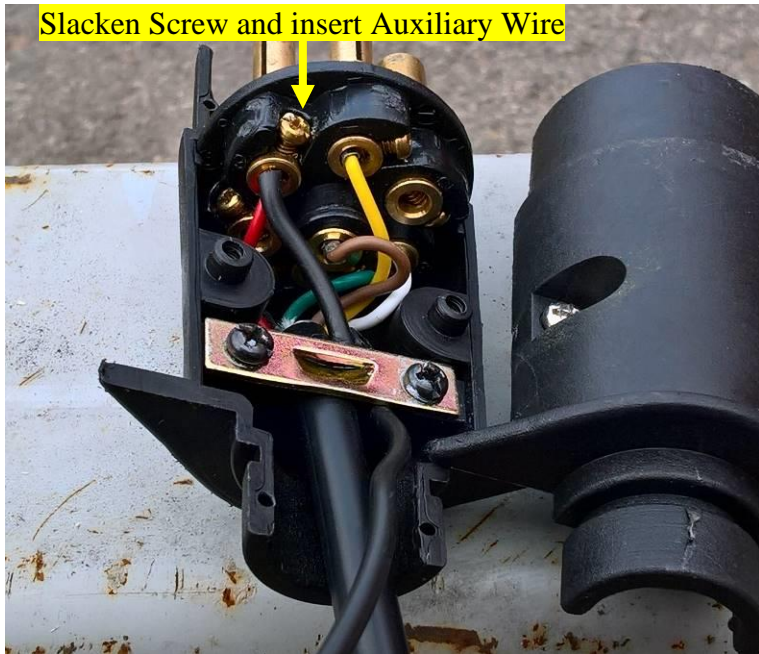
 7-Pin Round Plug Wiring Chart		
Pin #	Circuit	Colour
# 1	Left hand turn signal	Yellow
# 2	Reversing signal	Black
# 3	Earth return	White
# 4	Right hand turn signal	Green
# 5	Service brakes	Blue
# 6	Brake lights/Stop lamps	Red
# 7	Rear lamps, clearance and side marker lamps	Brown

Using the chart provide opposite, identify the # 6 Wire.

This is the Wire used for the Brake Lights/Stop Lamps.

Each of the 7 positions in the Plug are labelled with a small number moulded into the plastic housing.

This will be used to feed power to the Brake Loom Auxiliary Wire when the Brake Lights/Stop Lamps are powered, activating the Brakes.



Slacken Screw and insert Auxiliary Wire

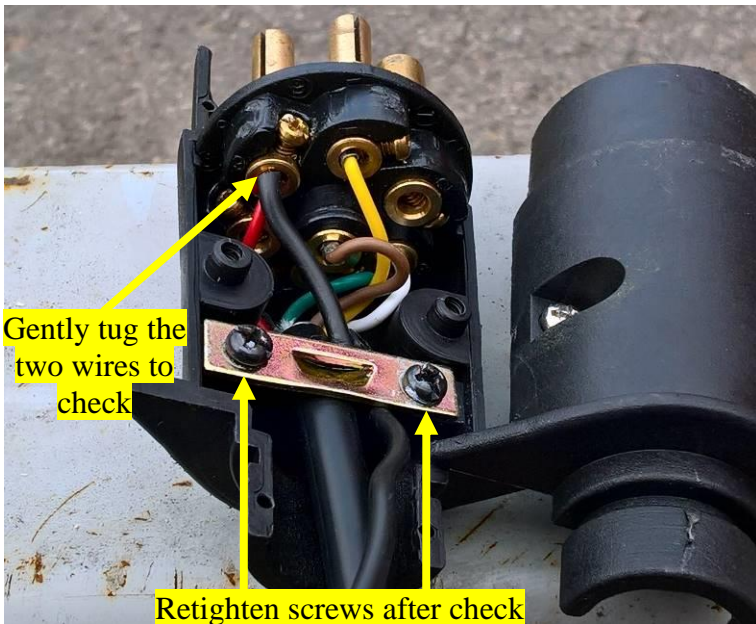
Once the # 6 Wire is identified, slacken the small Screw used to retain the #6 Wire in the Pin.

Insert the **BLACK** Trigger Wire into this Pin. Ensure that the # 6 Wire is still in the Pin also! Retighten the small Screw to secure **BOTH** the # 6 Wire and the Black Trigger Wire.



Note:

It is **CRITICAL** that the correct position is used! Failure to do so can cause the Brakes to malfunction and/or activate at the wrong time!



Gently tug the two wires to check

Retighten screws after check

Give the Wires a gentle tug to ensure that **BOTH** wires are secure.

Once secure, retighten the screws to secure the Strain Relief Bracket.

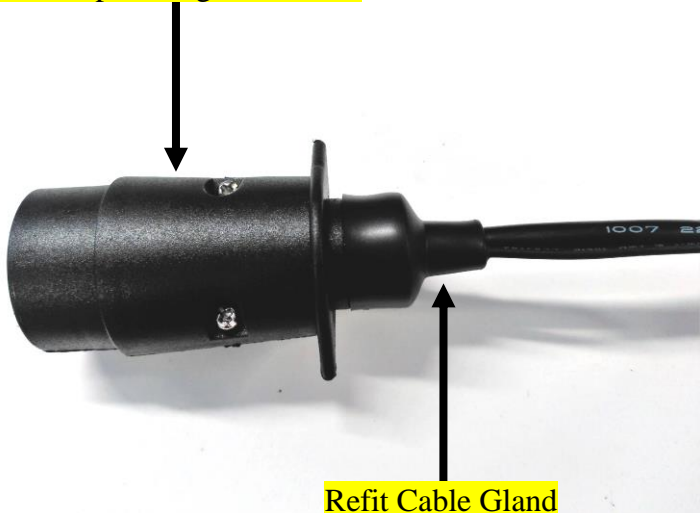
Ensure all Wires are clear of the edges of the Housing so they are not pinched when refitting the Top Housing.



Note:

It is **CRITICAL** that the correct position is used! Failure to do so can cause the Brakes to malfunction and/or activate at the wrong time!

Refit Top Hosing and screws



Refit Cable Gland

Refit the top half of the Plug Housing.

Ensure that this sits down **Hard** against the bottom half of the Housing.

Reinsert and tighten the Screws.

Refit the Cable Gland over the rear of the Plug Housing.

Plug this back into the Tractor.



Mount the Brake Control in the desired location in the tractor cabin using either the supplied industrial strength Velcro or the mounting holes.

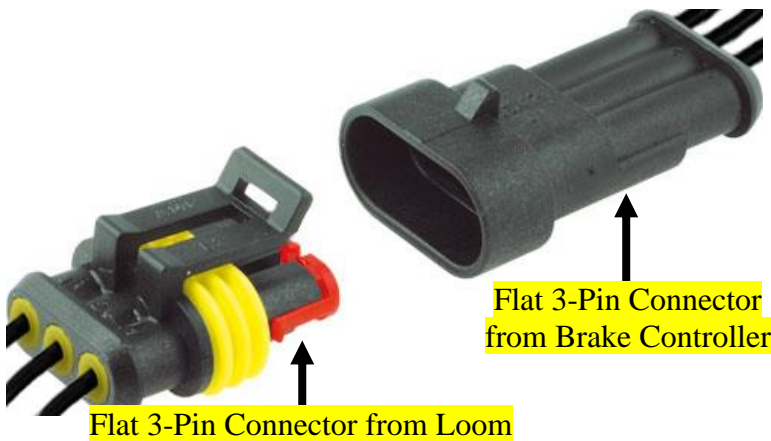
Ensure that the mounting location does not interfere with the operation of any controls. Ensure that the Override Switch in the Brake Controller cannot be switched accidentally!

If the Velcro is used, ensure mounting surfaces are smooth and clean. Once mounted, allow 24 hours for the adhesive to cure before attempting removal



Note:

Due to the large number of tractor configurations, this has to be determined by the end user at the time of fitment.



Run the Flat 3-Pin Waterproof connector from the Brake Controller Enclosure to the matching 3 Pin waterproof connector attached to the end of the Loom. Push these together until they “Click” into place.

Route all electrical cables clear of the tractor tyres, driveshaft and other moving parts.

Leave sufficient slack to allow for movement when executing tight turns or cresting a rise in the ground.



Connect the Male Three Pin 25a Plug from the Brake Control Enclosure to the Auxiliary power supply socket present on the Tractor.



Note:

If an Auxiliary power supply socket is not present, please contact your local Tractor Dealer to see if a female three pin socket is available for your tractor.

If this is not possible, please contact Trimax Mowing Systems, a wiring loom can be supplied with fitment instructions.



DANGER!

Be aware that the transport brakes may not function to their full capacity until the brake shoes have bedded in!

Try the brakes in a safe area and adjust them if necessary before driving on public roads.

Adjustments

1. Park the mower in a suitable place, engage the parking brake, stop the tractor engine, ensure all controls are in neutral, remove the ignition key and wait for all moving parts to stop.
2. Simply turn the large knob on the Brake Controller enclosure to vary the braking force. To help the brakes bed in the knob should be wound fully round in the clockwise direction.
3. Try the brakes in a safe area and adjust them if necessary before driving on public roads.

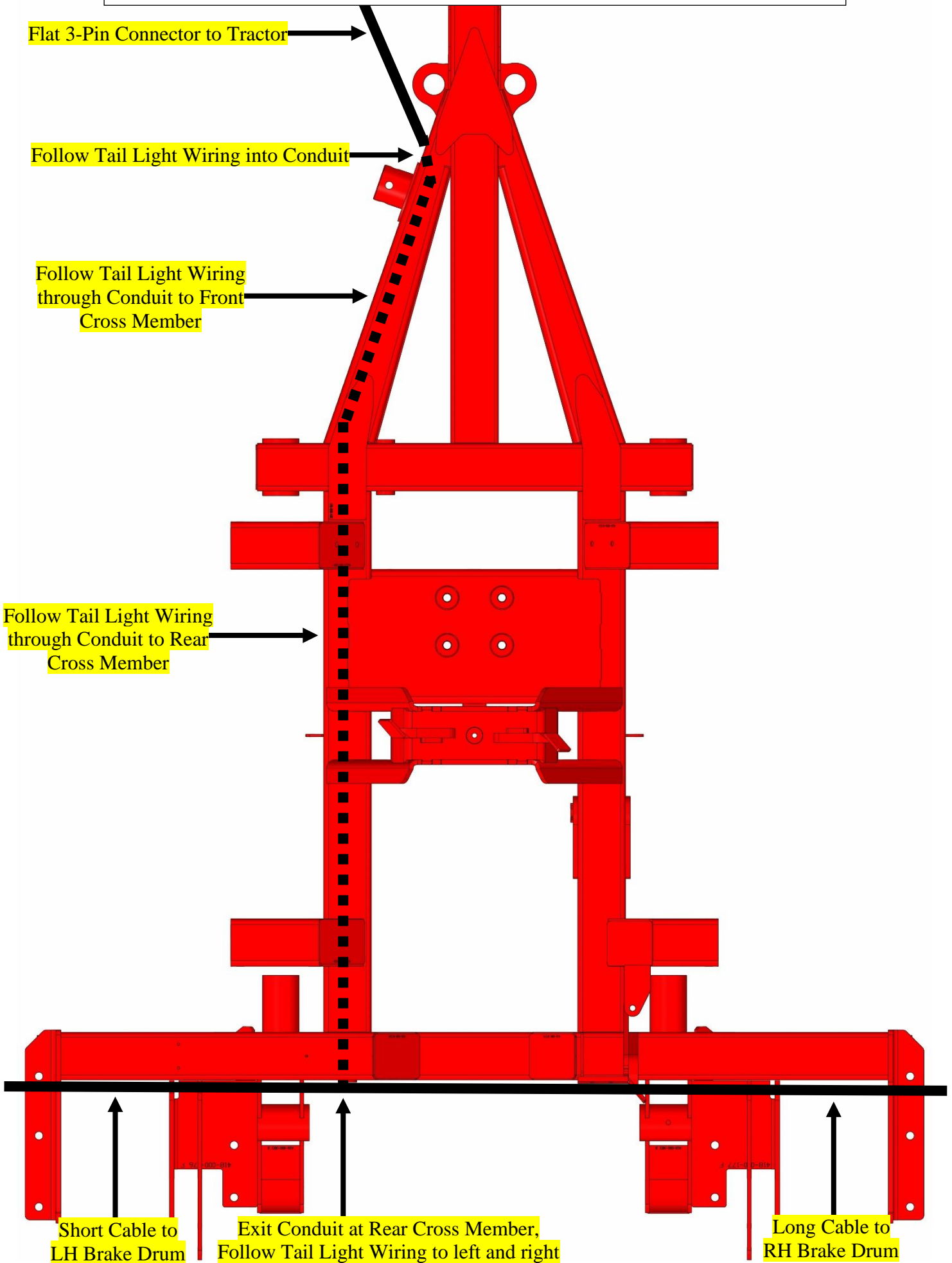


Note:

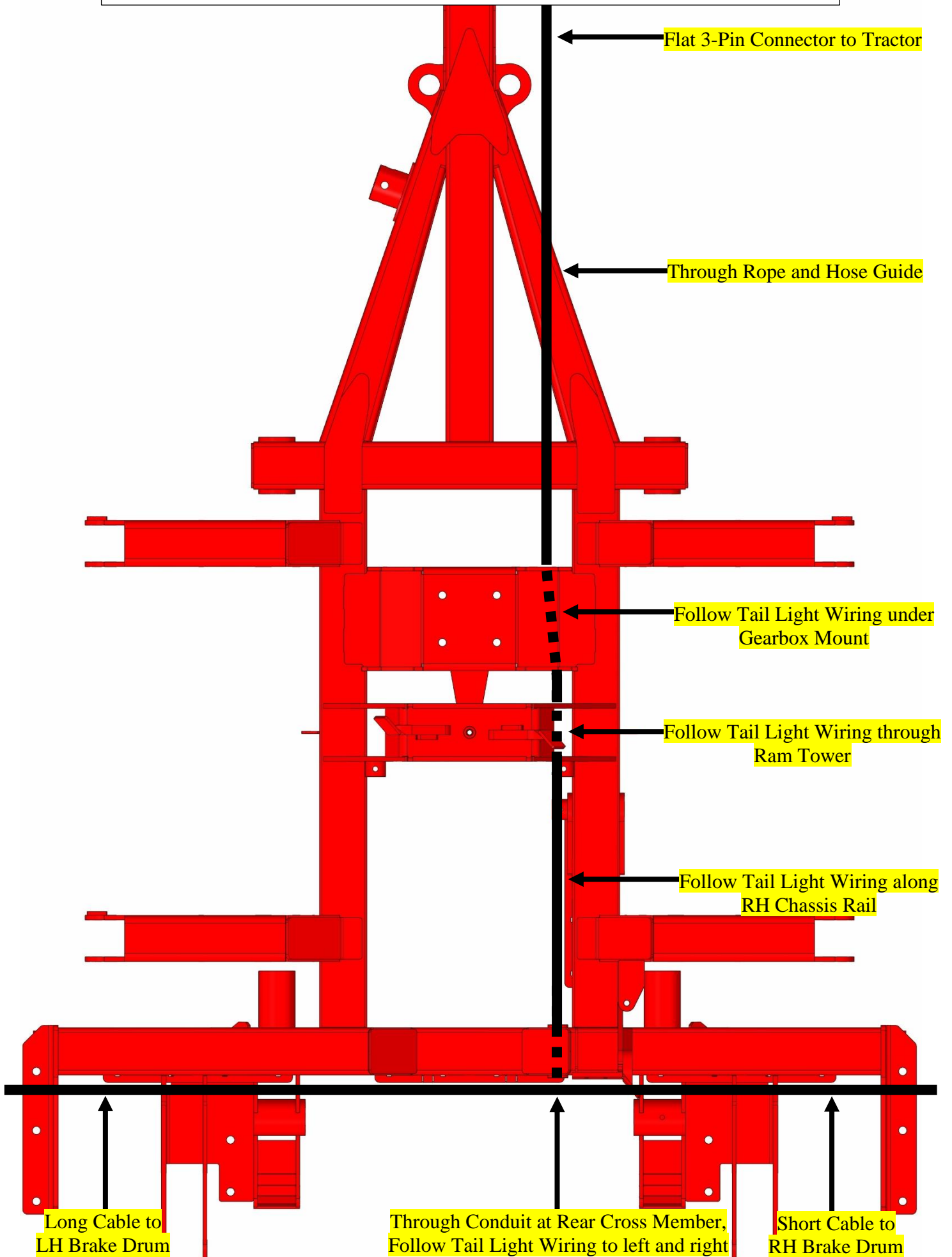
With regular use the brakes will become more and more effective until they may begin to cause the wheels to lock up when the brakes are applied.

If this happens the brake controller must be wound back to between half and full power; the exact position will vary somewhat.

Pegasus S3 ONLY: Top view of Cable Positions



Pegasus S4 ONLY: Top view of Cable Positions



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