

**Paul Yaffe's
Bagger
Nation™**

STEALTH

· LICENSE FRAME ·



**INSTALL
INSTRUCTIONS**

EVERYBODY WANTS A CLEAN REAR END!



PAUL YAFFE ORIGINALS
DESIGN & DEVELOPMENT

STEALTH III

LICENSE FRAME

Thank you for choosing Paul Yaffe's Bagger Nation. Please read through these instructions completely BEFORE beginning the installation process.

Having a complete understanding of this installation process will better help you determine if undertaking this task is best suited for you or your local H-D / Custom shop. We have included everything needed to complete a Stealth III License Holder installation on a 2009 - Present H-D touring model equipped with the factory light bar / plate holder pictured on step 1.

These instructions outline installing the Stealth III WITHOUT removing the rear wheel or rear fender. It's doable, however if you have the means, dropping the rear wheel makes access to the inside of the rear fender 100% easier and/or removal of the rear fender for install makes the job that much easier. Again, just sayin....

LET'S GET STARTED!





1. Support your motorcycle securely. We recommend a floor jack or motorcycle rated lift.



FIG. 1

With the frame supported, remove right side slip-on muffler and both lower shock bolts.

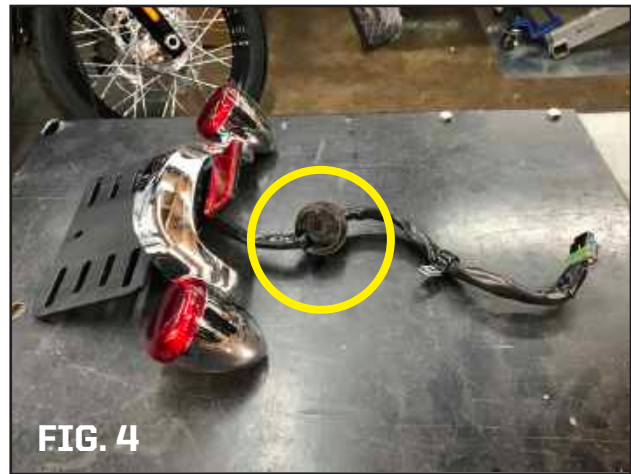
This will allow you to raise the rear of the bike approximately 6" to gain better access to underside of rear fender. (Figure 1)

2. The black plastic cover that protects the wire connections for the Tri-Bar rear lighting snaps off and exposes the wire connectors.

Remove the cover and pull the right side plug out of the Tri-Bar light by gently spreading the grey retaining tabs. Next, remove the 1/4" nylock nut & washer above the Tri-Bar box. (Figure 2)



FIG. 2



3. Remove the (2) 5/16" flange bolts that secure the H-D light bar / license holder to the fender. The light bar and connected wire harness should now be free to remove from the fender. (Figure 3)

NOTE: the top hat harness grommet will stay with the harness when removed. (see Figure 4)



**This is how your fender should look at this point.
Let's continue to step #4**



4. Using a number 27 torx bit, remove the (2) black screws that retain the license back plate and reflector plate to the light bar. (Figure 5)

(RETAIN THESE SCREWS FOR LATER USE)



5. License back plate and reflector plate removed. (Figure 6)



6. Using a 5/64 allen wrench, remove the (2) button head screws that retain the H-D license light to the light bar. (Figure 7)

Cut the (2) wires as close to the light as possible, leaving you the longest retained wire length. (Figure 8)



FIG. 9



7. Strip about 1/2" of insulation off of each of the light wires (twist & tin w/ solder optional). Slide wires through the orange rubber insulator as shown.(Figure 9)

FIG. 11

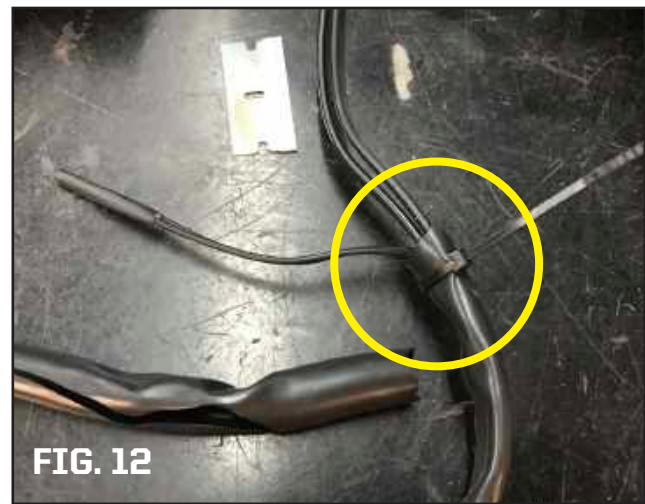


FIG. 11a

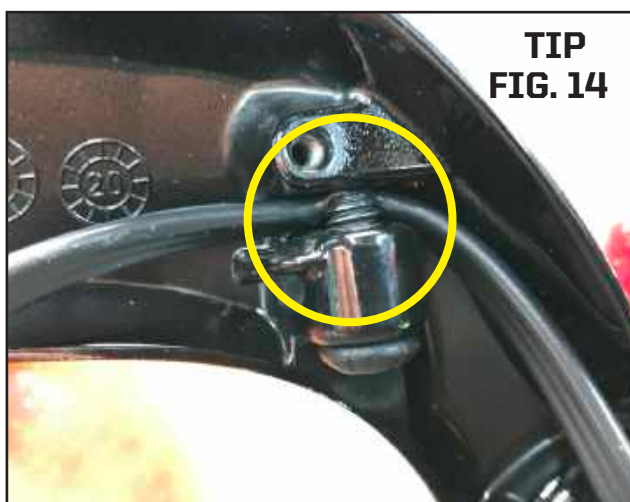
8. Crimp (2) Deutsch pins on the light wire ends. A simple butt connector / wire stripper tool works well for this. (Figure 11-11a)

9. Trim about 6" of the plastic sheath away that covers the light wires and wrap a zip tie around where your cut end, to keep it from spreading.

This will allow you access to the license light wires from the inside of the fender later when we attach the female Deutsch connector. (Figure 12)



10. Push right & left taillight wires into the slots created by removing the license plate holder. Re-use the two black torx screws to secure the wires into the slots. (Figure 13)



TIP: Push the wires firmly into the slots to prevent the screws from crimping the wires.

Some torque will be required to bottom the screws out beyond their intended depth.



FIG. 15

- Now it's time to drill a new oval hole that will be hidden from view after reassembly. Using a flexible ruler, measure from inner edge of each light bar mount hole. It should be 5.75" ($5\frac{3}{4}$) across. (Figure 15)

For easier install, print and use the template on page 15. Then double-check your work with the following instructions before drilling.

Center the ruler in the light bar holes and mark center at 2.875" ($2\frac{7}{8}$) From that center mark, measure down 1.375" ($1\frac{3}{8}$) and mark. This will be the center of the 1.5" x .500" oval hole you'll cut. From the oval center, measure left & right .750 and mark. These will be your center punch points to drill (2) .500" holes...

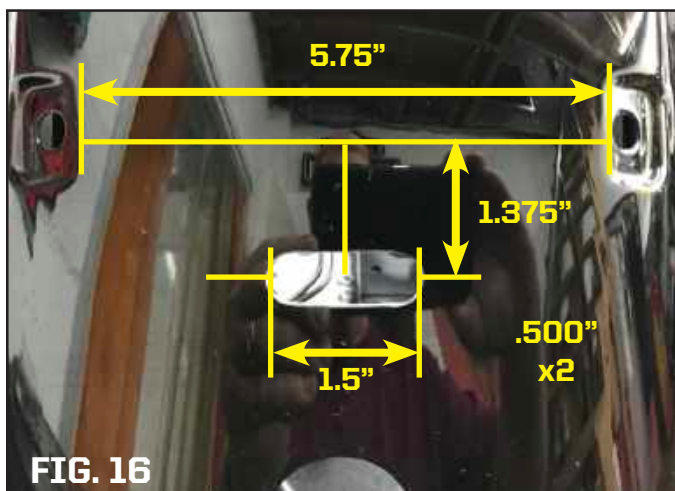


FIG. 16

TIPS: Protect your drilling area with masking tape to prevent accidental paint damage

Always center punch BEFORE you drill on paint / Always drill a small pilot hole BEFORE you drill a larger hole

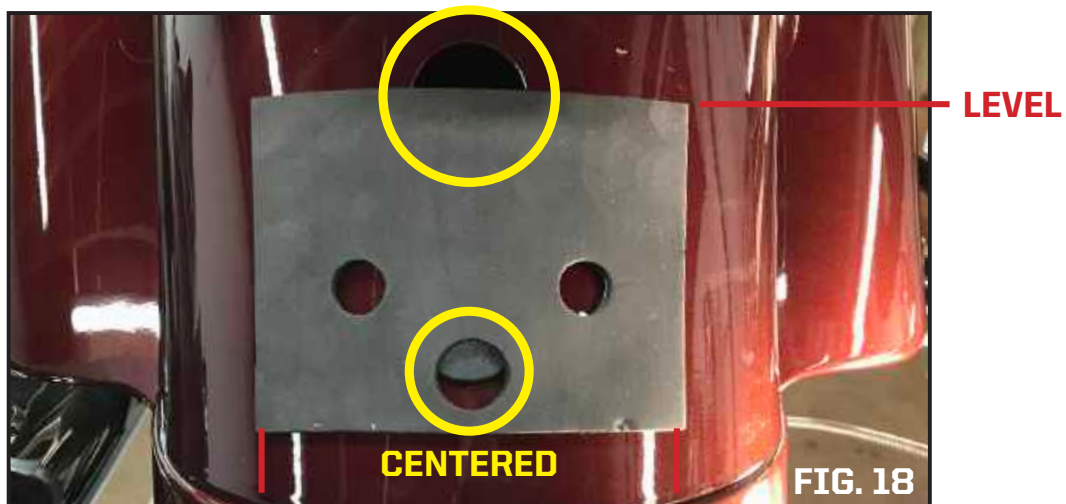
Invest in a Uni Bit which will drill a "clean" hole and won't tear the light gauge H-D fender metal.

Drill the two .500" holes. Then cut the "bridge" between the two holes to create an oval. Remove any sharp edges with a file or emery cloth. (Figure 16)



- 12.** Now that your oval hole is complete, locate the grommet (provided). Remove the P-clamp and top hat grommet from the light bar wire.

Work the cut grommet over the light bar harness and install the harness through your oval hole. Squeeze the grommet into the oval hole seating it in place. Attach the light bar to the fender using retained flare bolts. Center the light bar, level & tighten.



- 13.** Now that the light bar has been decluttered and its wires discreetly relocated, it's time to install the Stealth III License Plate Frame!

Locate the plate holder back pad (included) and center it under the light bar with the top of pad covering about half of the large hole in the fender and the bottom hole in pad covering about half the plastic bolt cover that's glued to the fender.

Making sure you're happy with placement and the pad is centered and level, peel the backing and stick pad to the fender. This will serve as a template to drill the two needed mounting holes. (Figure 18)

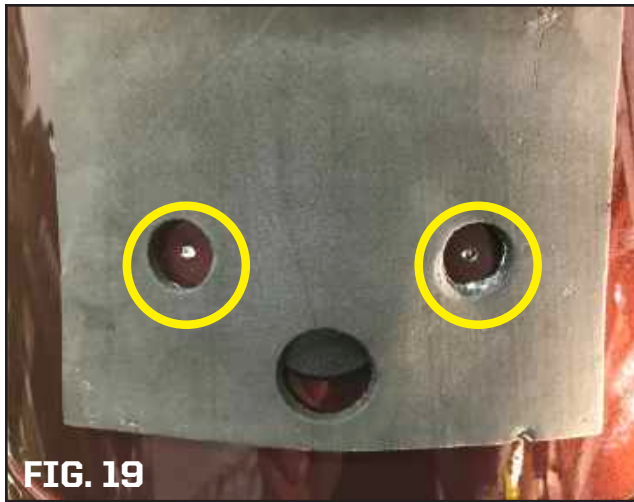


FIG. 19

14. Mark the center of the (2) upper holes in the pad. Center punch the two holes and drill a small pilot hole through the fender and the fender support bracket which resides inside the fender. (Figure 19-20)

Next, drill the two small holes out to .250" (1/4"). Slide the plate frame wires through the half-exposed wire hole and fit the Stealth III mounting bosses into the holes in the pad.

You should get your first look at this point at just how trick your cleaned up rear end is going to look!

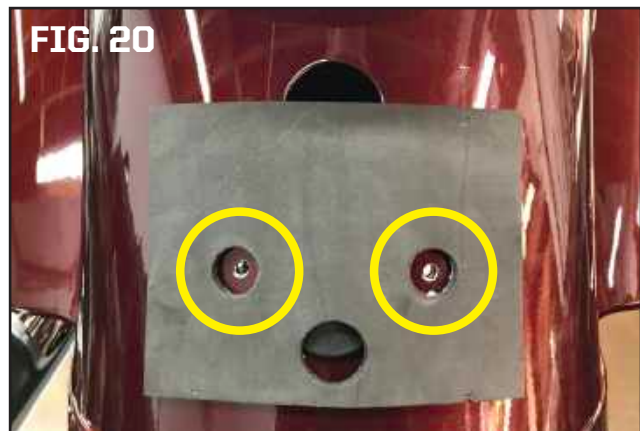


FIG. 20



Looking good so far.

We've got a couple more steps before final install of the Stealth III License frame.

15. Turning your attention to the inside of the fender, you can now reinstall the P-Clamp around the wire harness and secure in its original location.

You can also plug in the harness to its original location on the right side of the Tri-Bar box and snap on the protective cover. At this time you'll also check hole alignment using the (2) longest bolts provided. (Figure 21)



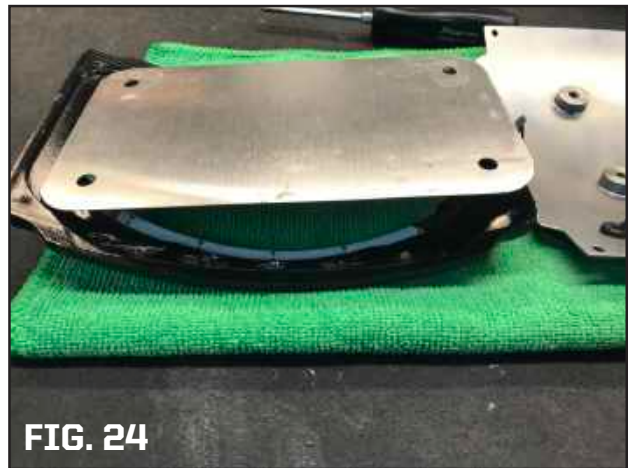
Note: Just getting the bolts started in the plate frame mount bosses with your fingers at this time is fine.



16. Install the (2) Deutsch pins (installed earlier) in the narrow side of the female Deutsch connector (provided) making sure the pins click into place and are seated.

Pushing the orange rubber seal into place in the end of the connector makes this easier. Once the pins are seated, lock them in place by inserting the orange Deutsch lock tab into the female (receiving) end of the connector. (Figure 22)

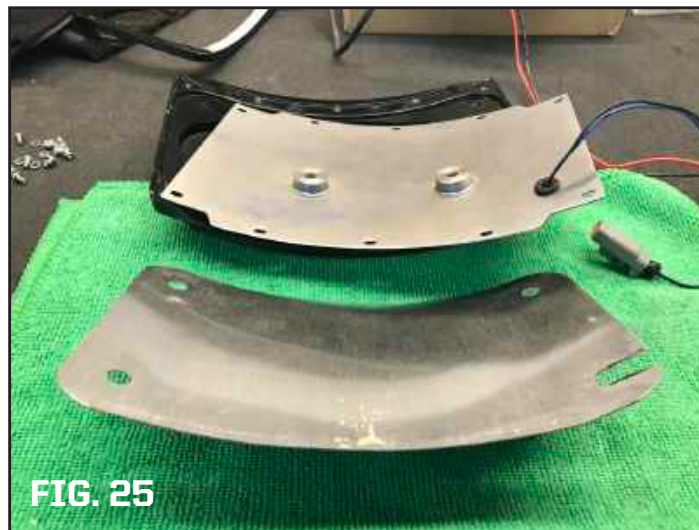
TIP: Before locking Deutsch pins in place, check continuity by inserting pins into Stealth III male plug (attached to Stealth III) and turn the bike on to make sure LED's light. If no light, reverse pin location and try again.



17. At this time, remove the mocked up Stealth III Plate Holder. Remove all the small phillips head screws from the back of the plate holder to allow front and back pieces to separate. (Figure 23-29)

You'll need to gently bend your license plate to follow the arch of the Stealth III Plate Holder. I use my thigh to accomplish this.

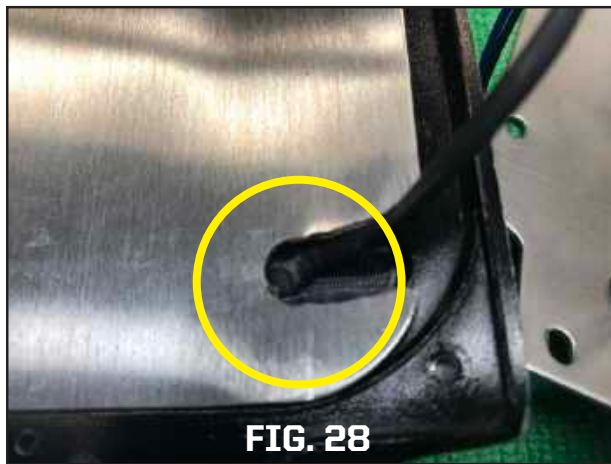
It is common to need to trim your plate edges slightly to allow it to seat in the recessed pocket in the license frame. A tin snip or good strong scissor makes easy work out of this.



NOTE: I prefer to install the Stealth III with the hidden LED strip pointing upwards from the bottom. Top or bottom is a matter of personal preference.

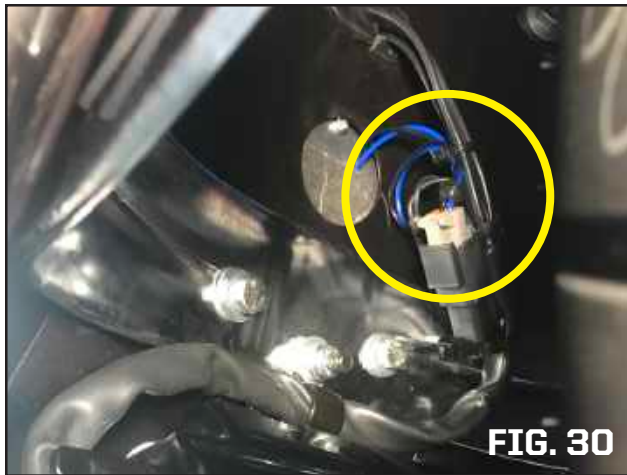
The light is more visible when the LED is on top. I prefer it hidden...it's your call.

Once you've decided, you'll need to trim a notch in the plate to clearance the light wires. After you've completed these steps, reassemble the Stealth III License Plate Holder using all the phillips head screws removed.



Tip: Plug the Stealth III Plate Holder into the female Deutsch connector one more time to double check light function / your connections. If all systems are go it's time for Step #18- The Final Install!

17. Now that your Stealth III License Holder is completely assembled and tested, you can mount it to your fender. Using the (2) longest bolts provided and the (2) Flat washers and (2) lock washers, install the backing plate mount bosses into the two holes in the pad.



Note: The license light wire should be guided through the upper large hole in fender between back plate and pad.

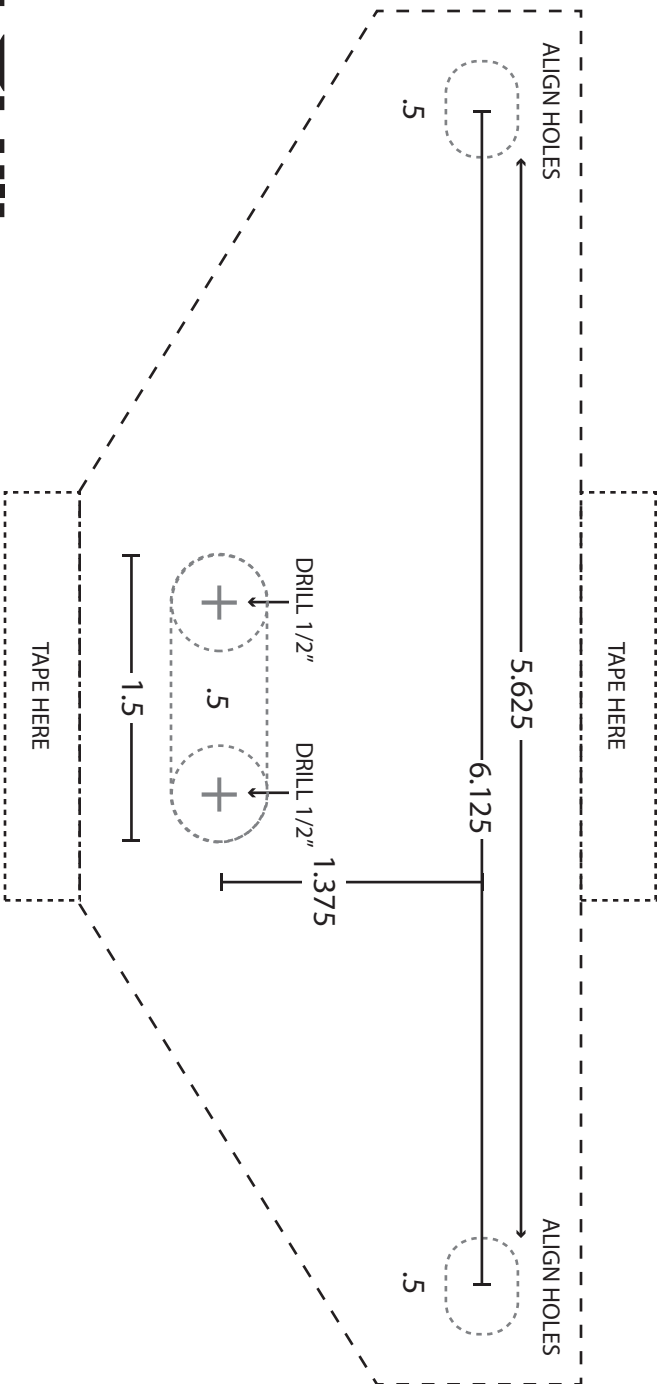
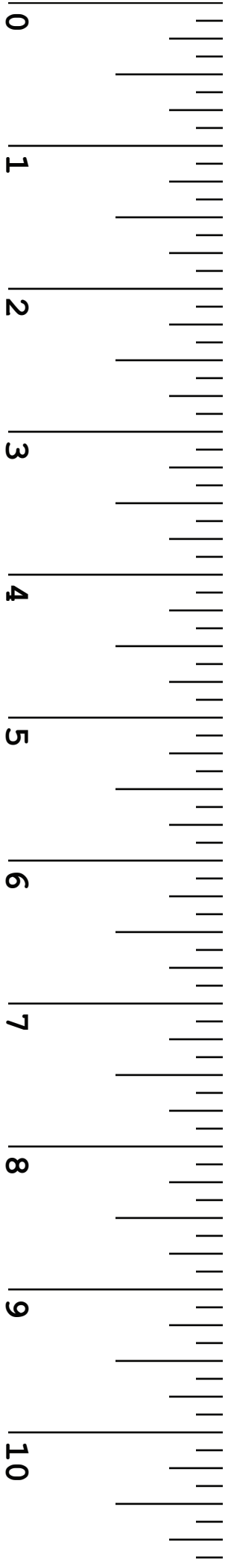
Tighten the Stealth III License Holder to your fender. Plug the male Deutsch connector from license frame into the female Deutsch connector you assembled previously. Double the extra wire up a time or two and secure it to the main light bar harness using the last zip tie (provided). This should conclude the installation process! Congratulations, you've successfully cleaned up your rear end! (Figure 30)

After reinstalling your lower shock bolts to factory specs and your right side slip-on muffler you should be ready to show off your super clean badass rear end to your friends! (Figure 31)

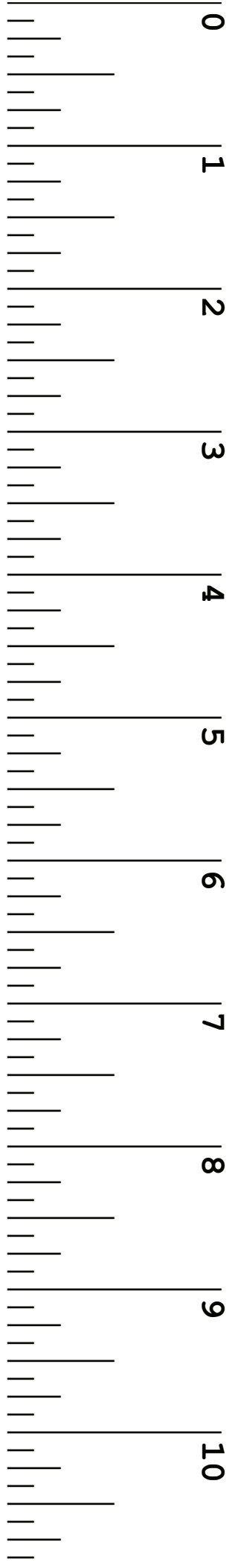


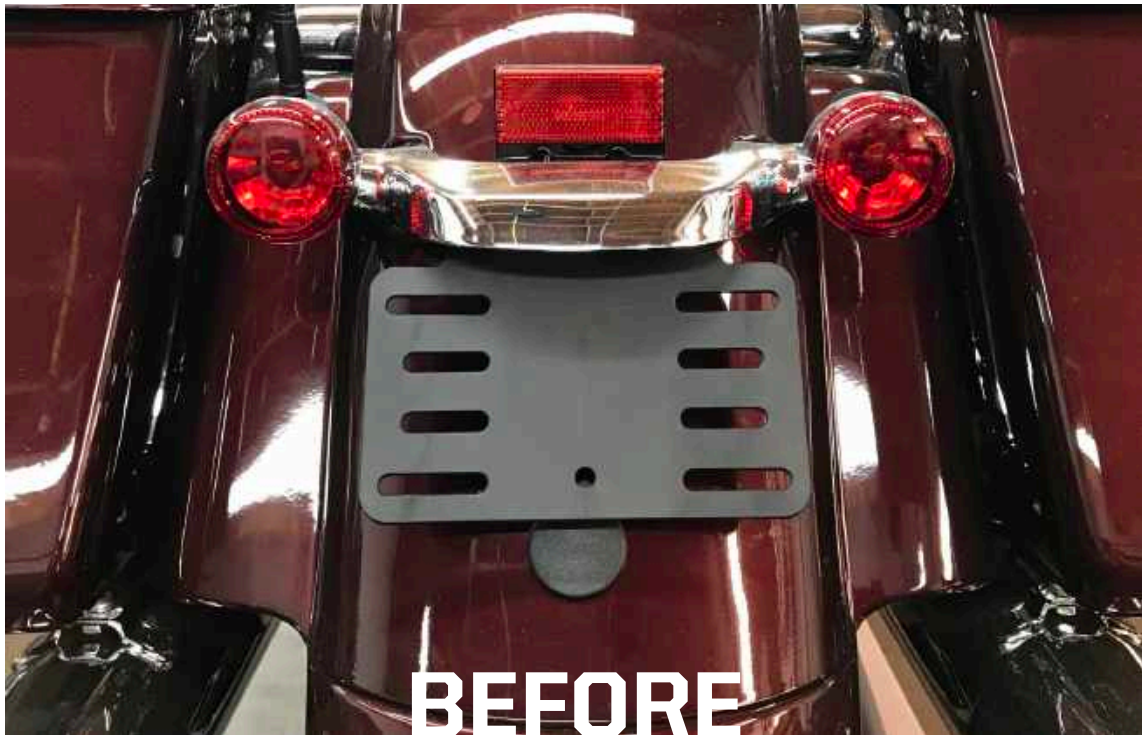
FIG. 31

Thanks for choosing Paul Yaffe's Bagger Nation and we look forward to serving you again in the future!



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