



FULL METAL™
F E N D E R S

Thank you for buying our Full Metal Fenders™. We designed these beauties to be safe, functional, and beautiful on any bike. It will take some time and patience to get them set up juuust right. If time and patience are two things you are a bit short on, have your local bike shop do the installation. They've installed a lot of fenders and usually have a trick or two up their sleeves for making fenders work with uncooperative frame designs.

Have fun. Stay dry.

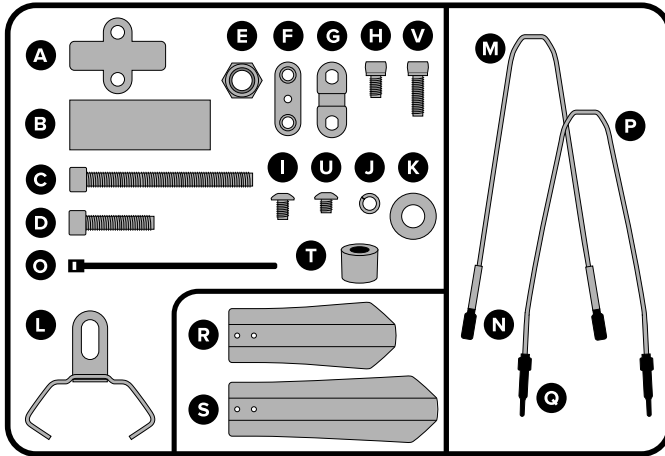


Warnings

- Before riding, check to make sure your toes do not hit the front fender when turning the wheel from side to side. If your toe hits the fender, we do not recommend using fenders.
- Check hardware before each ride to make sure everything is properly installed and secure.
- Portland Design Works is not liable for injury or damage resulting from improper use or improper installations.
- Not for off-road use.



Parts



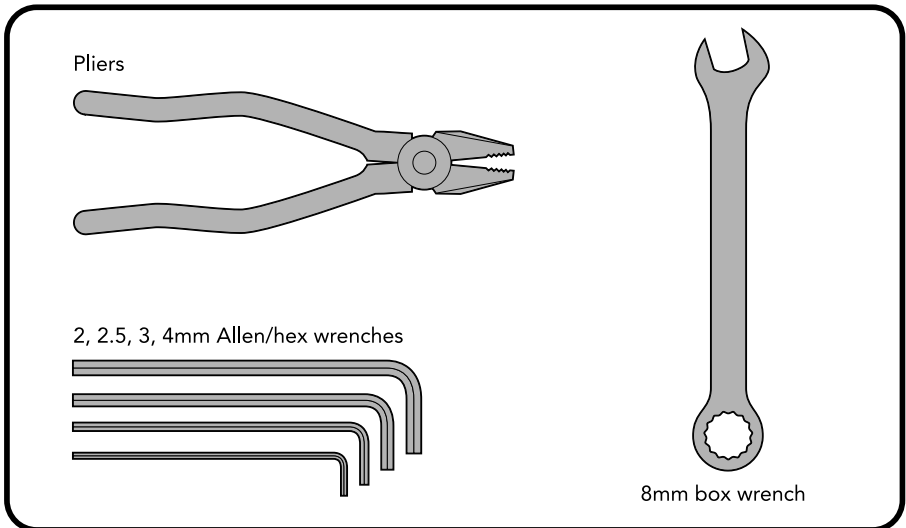
- A) Anti-rattle sticker (x3)
- B) Anti-rattle sticker (x1)
- C) 60mm bolt
- D) 25mm bolt
- E) Nyloc nut (x2)
- F) Bottom stay bracket (x5)*
- G) Top stay bracket (x3)
- H) 10mm long bolt (x3)
- I) 8mm long bolt (x6)
- J) Washer (x6)
- K) Large washer (x4)
- L) Rear bracket
- M) Front Fender stay (x1)
- N) Safety tab (x2) (pre-installed)
- O) Zip Ties (x2)
- P) Rear fender stay (x2)
- Q) Rear stay tabs (x4) (pre-installed)
- R) Front mudflap (x1)
- S) Rear mudflap (x1)
- T) 10mm spacer (x8)
- U) 6mm bolt (x4)**
- V) 20mm long bolt (x2)

If you need any spare or specialized parts we have them available at ridepdw.com.

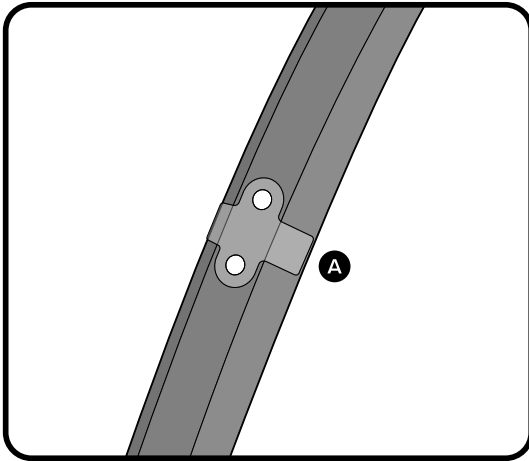
*1x Bottom stay bracket attaches mudflaps to packaging

**2x 6mm bolts attach mudflaps to packaging

Tools (not included)

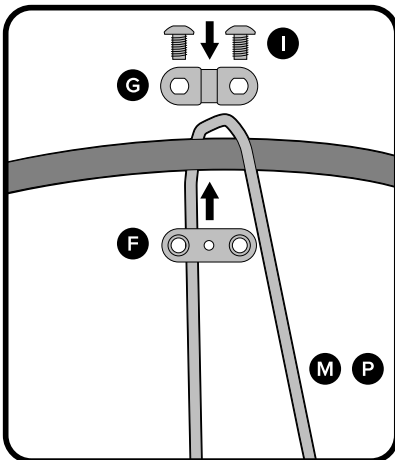


Step 1



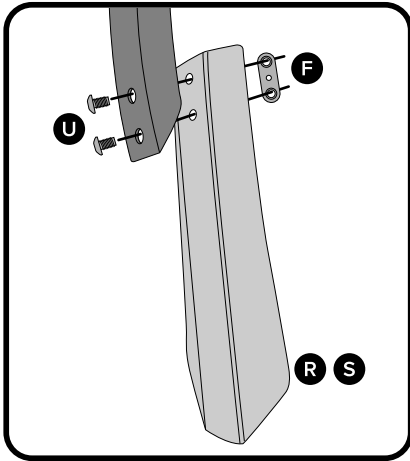
Apply anti-rattle stickers (A) to front and rear fenders. Make sure fender surface is clean before applying.

Step 2



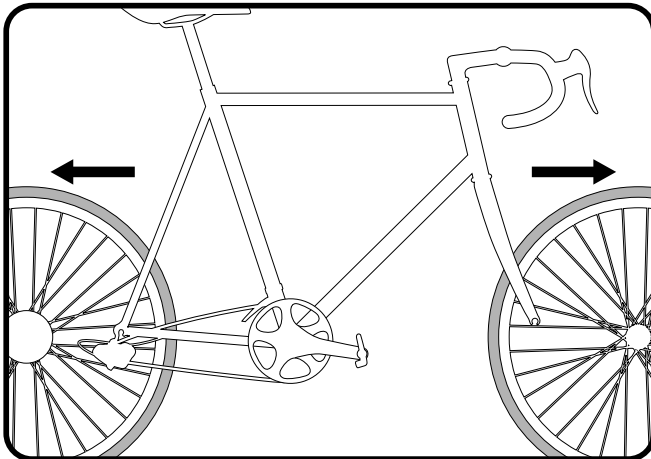
Attach front fender stay (M) to front fender and rear fender stays (P) to rear fender using 8mm long bolts (I) and stay brackets (F,G). Make sure the flat side of the bottom stay brackets (F) are flat against the underside of the fenders. With stays perpendicular to the fenders, tighten bolts with a 3mm Allen/hex wrench.

Step 3



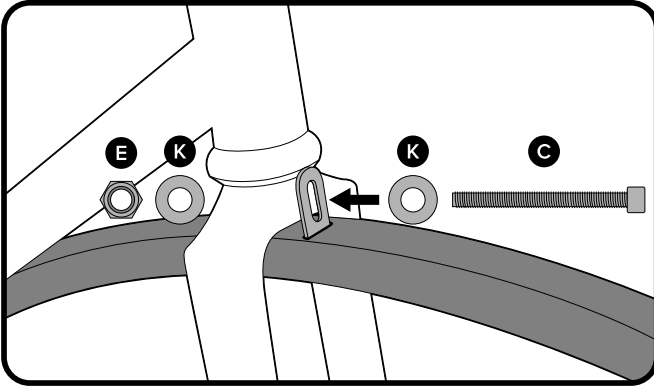
Crease the front (R) and rear (S) mudflaps along fold lines and install on fenders with 3mm allen wrench. Be sure to install the mudflaps in the inside of the fenders.

Step 4



Remove wheels from bike.

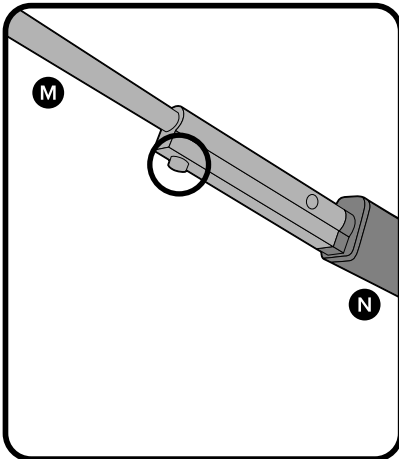
Step 5



Use the 60mm bolt (C), two large washers (K), and a nyloc nut (E) to bolt front fender to the fork crown. You'll need a 4mm Allen/hex wrench and 8mm box wrench.

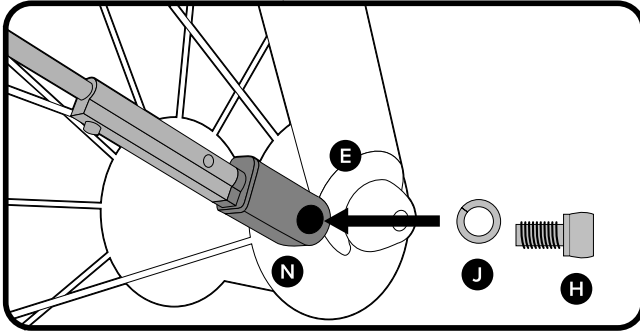
Note: If your fork only has a hole on the front or back of the fork crown, use a shorter bolt to attach the hanger to that hole.

Step 6



With a 2mm Allen/hex wrench, loosen the 2mm bolts on the safety tabs (N) so they can slide up and down the stays (M).

Step 7



With a 4mm Allen/hex wrench, attach the safety tabs (N) to the eyelets on the fork with 4mm bolts (H) and washers (J). Hold the safety tabs (N) as you tighten the bolts (H) to prevent them from rotating. Make sure the bolts are secure but do not crank them down with all of your might or you could break the hardware.

If your brakes or dropouts interfere with mounting, use one or more of the included spacers (T) to space the safety tab (N) out from the frame. You will need to use longer bolts if you use the spacers.

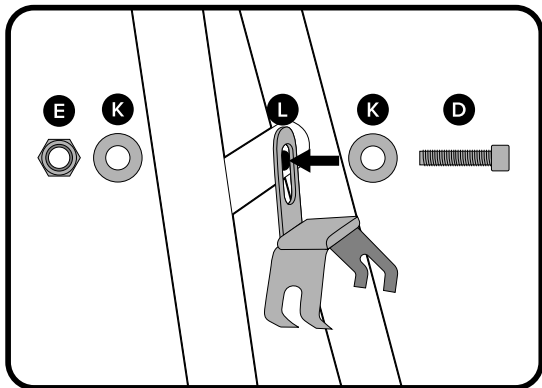
Step 8

Position the fender so it is a safe distance away from the tire. Tighten the 2mm bolts on the safety tabs (N).
Note: You may need to cut down the stays if they are too long. A hacksaw or strong cable cutter can be used.

Step 9

Spin wheel the check for rubbing and adjust as necessary. Double check that all the hardware is tight. Congratulate yourself. Take a breather and continue to step 10.

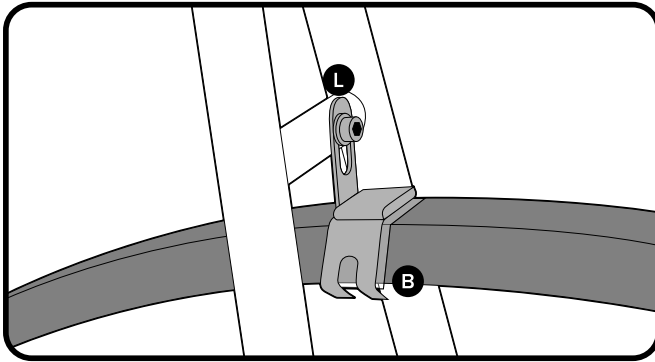
Step 10



Use the 25mm bolt (D), two large washers (K), and a nyloc nut (E) to bolt the rear bracket (L) to the seatstay bridge. You'll need a 4mm Allen/hex wrench and 8mm box wrench. Do not tighten completely as you will want to adjust the rear bracket (L) up or down once you have the rear wheel installed again.

Note: We have a special rear hanger to accommodate brake bridge holes that are on the underside of the brake bridge available at ridepdw.com

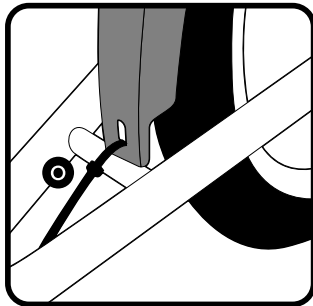
Step 11



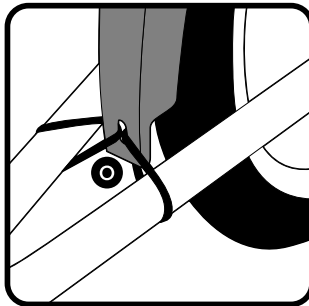
Slide rear fender through the rear bracket (L) until the hole on the front end of the fender lines up with the chainstay bridge or chainstays.

With a pencil, mark where the rear bracket (L) hits the fender. Slide the rear fender back and attach anti-rattle sticker (B) to this area that will be under the rear bracket (L).

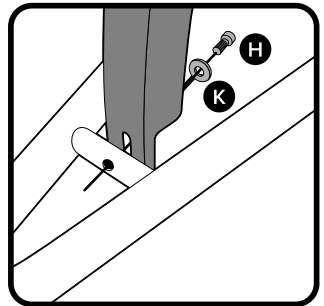
Step 12



If your bike has a chainstay bridge, use one zip tie (O) to affix the rear fender to the chainstay bridge.

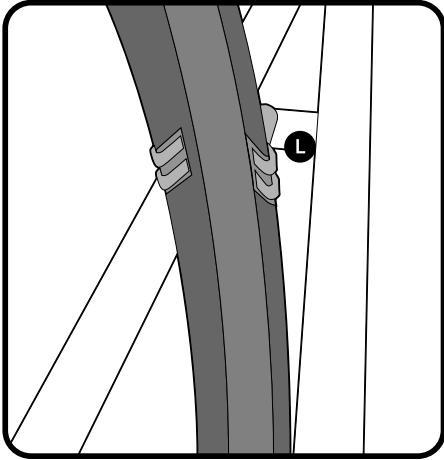


If your bike has no chainstay bridge, use two zip ties (O) to affix the fender to the chainstays.



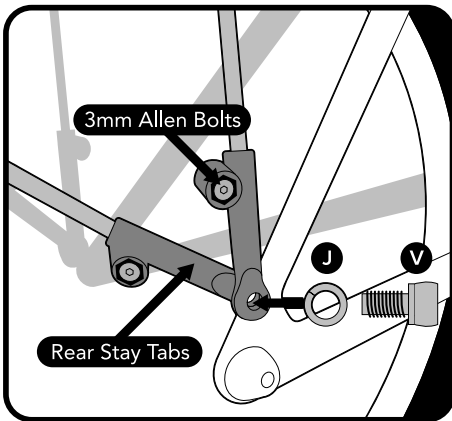
If your bike has a chainstay bridge with a threaded eyelet, use a 10mm long bolt (H) and large washer (K) to attach the rear fender. You may need to add spacers between the fender and chainstay bridge to bring the fender closer to your tire.

Step 13



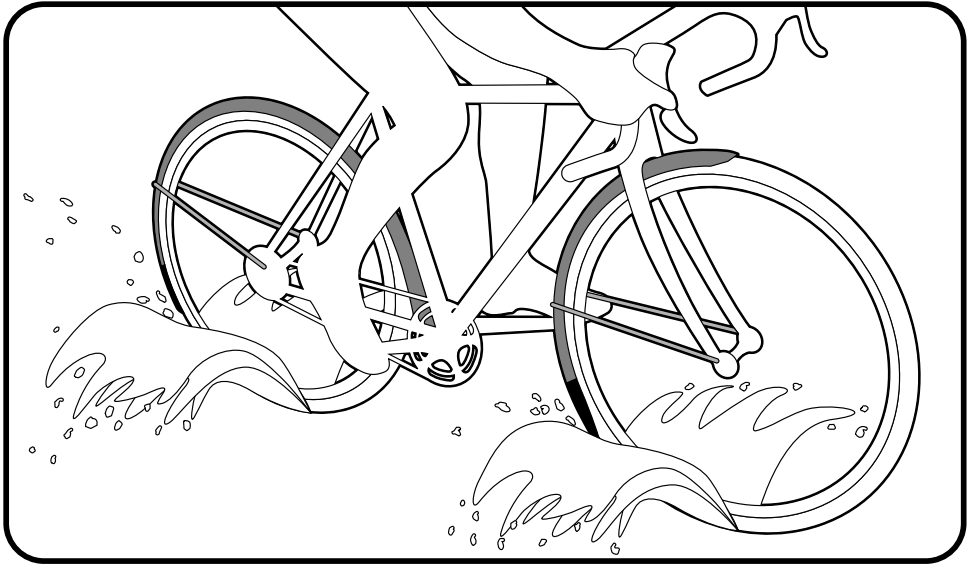
Crimp rear bracket (L) tabs under the rear fender with pliers. Make sure all four tabs are crimped flat against the underside of the fender.

Step 14



With a 4mm Allen wrench, attach the rear stay tabs to the eyelets on both sides of the dropouts with 20mm long bolts (V) and lock washers (J). With a 3mm Allen wrench, loosen the 3mm bolts on the safety tabs and position the fender a safe distance from the tire. Tighten the 3mm bolts on the safety tabs.

Step 15



Double check that your wheels spin freely and all bolts are tight, then go ride through the nearest puddle!