Velo Orange Fender Installation Instructions

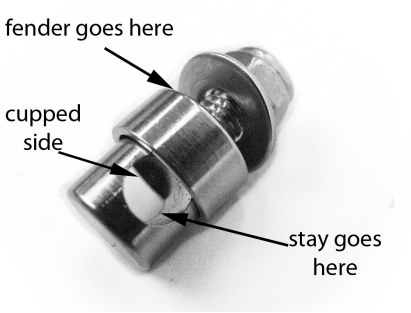
Tool list:

- Allen wrench set
- Hacksaw or big wire cutter for cutting stays
- Felt tip marker
- Phillips head screwdriver
- Pliers
- Drill with 5mm bit and punch (only for bikes with brazed-on fender mounts)
- Small file (optional)

Attaching the fender stays to the fenders:

Attach the stays to the front and rear fender using eyelet bolts as described below. Note that some fender models come with one eyelet bolt per fender; others come with two.

1. Thread the stay into the eyelet bolt's hole.
2. Place the "cup washer" over the bolt with the hollow side facing the stay.
3. Insert the threaded portion of the bolt through the hole in the fender. For two bolt fenders, insert them one at a time, rotate the second into place - it may be necessary to flex things a bit to fit.



4. Place the washer under the nut; thread on the nut, but don't tighten it fully yet.



Attaching the front fender directly to the fork crown:

Many well designed frames, including VO frames, have a threaded boss under the fork crown.

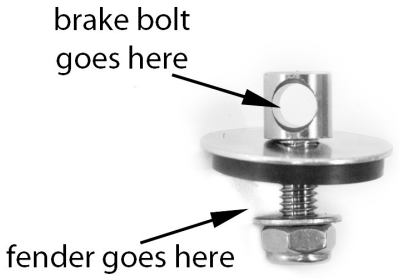
1. Remove your front wheel.
2. Place a 5mm screw with washer through the front fender hole. The screw head and washer should be inside the fender.
3. Place a leather washer over the screw on the outside of the fender. The leather washer absorbs vibrations and cushions the fender, helping to prevent cracking at the bolt hole.
4. Screw the fender to the the underside of the fork crown.
5. Since the fork crown on most bikes is not perfectly tangent to the wheel, you'll need to align the fender to the wheel. Simply hold the fender on either side of the fork crown and apply a little pressure to line it up with the wheel. This will make a little dent in the fender around the mounting screw and allows the fender to line up with the wheel.
6. Replace your wheel and check the fender's alignment.
7. If you're using small tires, you may want to space the fender downward; stack some presta-valve locknuts on the screw above the leather washer to move the fender downward.



Attaching the front fender to the fork on other bikes:

If your bike doesn't have a fender boss under the fork crown you'll use a fork crown daruma or an L-bracket to attach the fender to the fork crown. Let's cover the daruma first, since that's the preferred method and applicable to most bikes with steel forks.

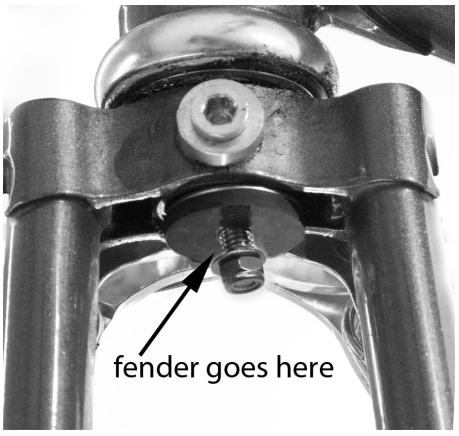
1. The daruma fits over the brake bolt inside the fork crown. Unbolt your front brake. If your bike has canti brakes or has no front brake, use a a 6mm or ¼" bolt around 50mm long from the hardware store.



2. Hold the daruma inside the fork crown and slide the brake bolt through the hole in the daruma.



3. Re-tighten the brake bolt nut so the brake is reinstalled.
4. Place the large metal washer, then the rubber washer, over the threaded end of the daruma. See photo below.
5. Slide the fender onto the daruma.
6. Secure the fender using the smaller flat washer and nut. Don't over-tighten the nut.

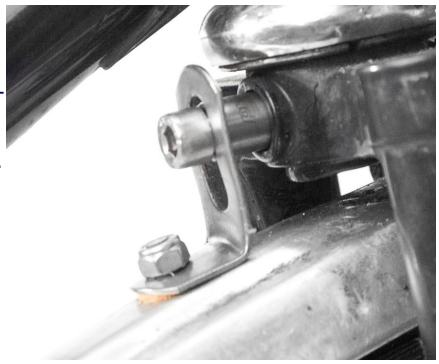


7. Since the fork crown on most bikes is not perfectly tangent to the wheel, you'll need to align the fender to the wheel. Simply hold the fender on either side of the fork crown and apply a little pressure to line it up with the wheel. This will make a little dent in the fender around the mounting screw and allows the fender to line up with the wheel.
8. Replace your wheel and check the fender's alignment.

Attaching the front fender with an L-bracket:

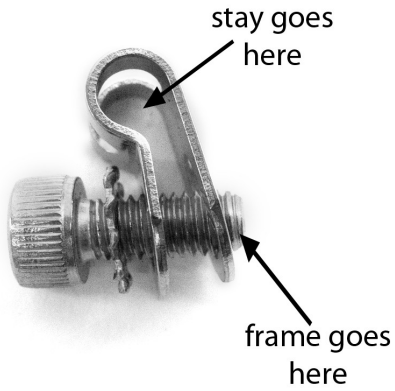
Some forks, such as carbon forks or forks with little room in the fork crown, require that the front fender be attached with a L-bracket.

1. Attach the L-bracket to the front fender with a 5mm screw and nut. The nut goes on top so that you can access it easily with a wrench
2. If your bike uses nutted brakes, loosen the brake nut and attach the L-bracket to the back of the fork using the brake bolt.
3. If your bike uses recessed brake bolt nuts, you can use Sheldon's Fender Nuts or you can install the L-bracket in front of the fork crown.

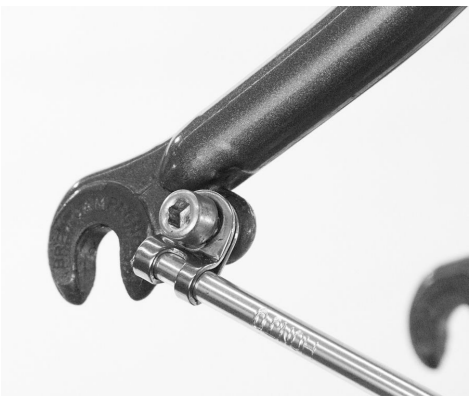


Attaching the fender stays to the fork eyelets:
R-clips are used to attach the stays to the fork eyelets. If your bike has two eyelets on each side, it's best to attach the fenders to the rear eyelets and the rack to the front eyelets. Modern bikes have eyelets that are are threaded for 5mm screws, but some older European frames have odd-sized or unthreaded eyelets; in these cases you can find screws and nuts to fit them at the local hardware store

1. Place the R-clips on the stays and screw them to the eyelets on your front dropout with 5mm screws. Place a lock washer under the head of the 5mm screw, but don't tighten the screws yet. Removing your wheel makes this easier.



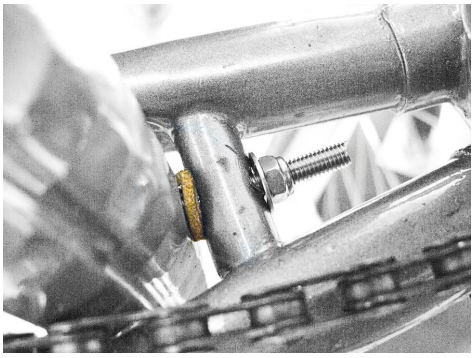
2. Adjust the stays for a perfect fender gap by sliding them in the R-clips. Also check that the fender is centered over the tire. The stays are extra long and must be cut to length. Mark the stays with a felt tip marker.
3. Unscrew the R-clips and cut the stays to length with a hacksaw or large wire cutter. It's a good idea to file down the ends so they aren't sharp.



4. Tighten the R-clips and fork crown attachment.

Attaching the rear fender to the chainstay bridge:
On VO and other well-designed frames there are bosses at the brake bridge and the chainstay bridge, and there is plenty of room for the fenders. Other frames have an un-threaded hole and require a bolt and nut

1. Remove the rear wheel.
2. Check to see that there is sufficient room at the chainstay bridge to fit the fender. It's common to have to flex the fenders in a little to make them fit.
3. Attach the front of the fender to the chainstay bridge. If there is a threaded boss simply screw in a 5mm bolt. Use a leather washer between the fender and bridge and a metal washer inside the fender.
4. If the chainstay bridge hole is unthreaded, attach the fender with a screw and nut. Use a leather washer between the fender and bridge and a metal washer inside the fender.
5. Some frames don't have a hole in the chainstay bridge, but fenders can still be installed with a p-clamp.



Attaching the fender at the seatstay bridge boss:
As with the chainstay bridge, some bikes have a threaded boss under the seatstay bridge for fender attachment. Other bikes will require using a crimp-on bracket or L-bracket.

1. If your frame has a threaded boss under the seatstay you'll need to drill a hole for the attachment screw. (This hole can't be pre-drilled at the factory since its location would vary with each frame size and model). Mark the location of the hole by holding the fender against the boss. Make a small indent with a punch or sharp nail. Drill the hole with a 5mm bit.
2. Attach the fender with a 5mm screw. Use a leather washer between the fender and bridge and a metal washer inside the fender.



Attaching the fender at the seatstay bridge with a bracket:

1. If your bike doesn't have fender bosses use the crimp-on bracket to attach the fender. Hold the fender against the bridge to determine the bridge's location. Fold the arms of the bridge under the fender. Check the fender's alignment. Crimp the bracket arms closed with pliers. You can use an L-bracket instead; see above.
2. Attach the bridge to the brake bolt. If you have cantilever brakes you'll need to use a screw and nut to attach the crimp-on bracket to the seat stay bridge.



3. A few bikes don't have a hole in the seat stay bridge. In that case you can use a p-clamp to attach the fender.



Attach the fender stays to the rear eyelets:

1. Attach the stays to the dropout eyelets as you did for the front fender.
2. Trim the stays to length.
3. Check that all the screws, nuts, and bolts are tight.

