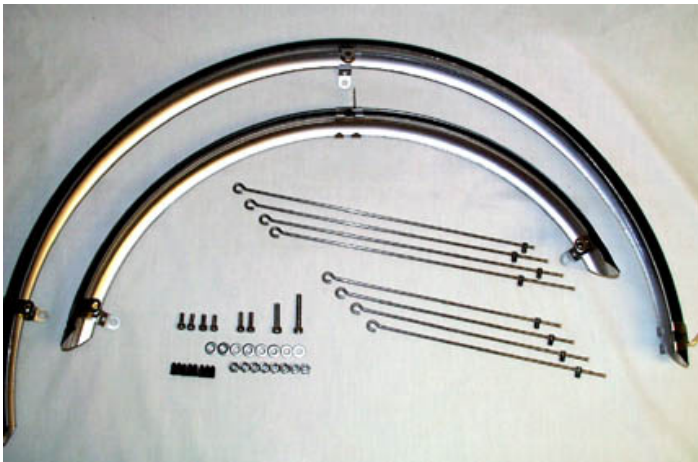


## TECH TALK

### Fender Installation

Installing fenders on a recumbent can be confusing business. Here we are showing the proper way to install fenders on a V-Rex. The general idea is the same for most fenders and can be applied to almost any installation.



All of the hardware you should need for a typical installation is included with your fenders:

- 4 Small 15mm Allen Bolts
- 2 Small 20mm Allen Bolts
- 1 Large 30mm Allen Bolt
- 1 Large 40mm Allen Bolt
- 10 Nylon Lock Nuts
- 6 Washers (6mm I.D.)
- 4 Washers (7mm I.D.)
- 4 Fender Braces (26cm)
- 4 Fender Braces (33cm)
- 8 Rubber Brace Caps

Tools you'll need:

- 5mm Allen Wrench
- 4mm Allen Wrench
- 10mm Crescent Wrench
- 9mm Crescent Wrench



Start with the rear fender. Attach the forward mounting tab to the frame with the 30mm Allen bolt, two 7mm washers and a nylon locknut. Tighten straight and secure.



Thread the fender braces through the mounting tabs as shown (left).



Loosely attach all four long fender braces to the fender tabs with a nylon locknut as shown. Be sure the fender braces can move freely.



Attach and tighten the looped ends of the fender braces to the bicycle frame mounts with a 20mm allen bolt and a 6mm washer. One bolt will hold both fender braces on a side. **NOTE:** *Be sure the drive-side bolt does not protrude past the inside of the dropout. If the end of the bolt extends into the driveline, the chain could hit the bolt when you shift into your smallest cog. Add washers or source a shorter bolt so the end of the drive-side bolt is flush with the inside of the dropout.*



Slide the tail end of the fender on the braces until the arc of the fender matches the arc of the tire. Hold the fender in place and tighten the two rear mounting locknuts. You may need to flex the fender to match the tire profile correctly.



Now press the top of the fender down to match the profile of the tire. Hold it in place and tighten the two top mounting locknuts. Be sure both sides are even and that there is no tire contact.



Moving to the front of the bike, attach the front fender to the hole in the top of the fork with the 40mm allen bolt, two 7mm washers and a nylon locknut. The long half of the fender should be to the rear of the bike. Be sure there is no brake interference and tighten securely.



Thread the four shorter fender braces through the fender tabs just like the rear fender. Loosely thread on a nylon locknut to each. Attach the **front braces** to the **forward mounting tabs** on the bike's fork. Use the 15mm allen bolt and a 6mm washer. Align the front of the fender to the arc of the tire and tighten the locknuts. **NOTE:** *This will cause the rear of the fender to stick out - that's okay!*



Attach the two **rear braces** to the **rear mounting tabs** on the bike's fork with the remaining two 15mm allen bolts and 6mm washers. Press the rear of the fender down to match the profile of the tire. Hold it in place and tighten the two rear mounting locknuts. Be sure both sides are even and that there is no tire contact.



Your fenders are installed! Take the black rubber caps and press them onto the tips of the fender braces to protect your clothing and skin from sharp edges. It should be unnecessary, but you may trim any excess fender brace with a grinder if desired.