

# BIG CEE ENGINEERING

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## **KLR650 Shark fin installation instructions**

- 1) Jack up bike and remove the rear wheel.
- 2) Check the shark fin for fit on the carrier. The “flat” side goes towards the wheel, and the milled side goes against the carrier so it will face out once the bike is reassembled. The chamfered edge may need additional filing to clear the fillet on your piece.
- 3) Install but do not tighten the two M6 (blue) screws and lockwashers. (Loctite too!)
- 4) Install the reinforcing block with the three long M5 (silver) screws, with the beveled edge against the axle carrier (see diagram). Tighten fully.
- 5) Make sure that the reinforcing block is against the carrier, and tighten the two M6 screws.

## **“No-Hole” Instructions**

If your KLR axle carrier doesn't have the tapped holes for the M6 screws, you can drill and tap your own:

- 1) Install the reinforcing block with the bevel side up, using the three longer M5 screws. Loctite and tighten fully.
- 2) When the sharkfin is mounted, the reinforcing block should be centered against the bottom portion of the axle carrier, and the beveled surface should be snug against the beveled angle of the axle carrier. (See figures.) You may also be restricted by the hole for the casting date stamp, so center on that if necessary. Clamp shark fin in this position.
- 3) Transfer the centers of the two 6 mm holes to the axle carrier. These were drilled with a “B” drill, but you can also use a 6 mm or other drill of similar size. Just drill in enough to dimple the axle carrier. NOTE: If you do not have an M6x1 tap, you can also use a ¼-20 or ¼-28 SAE tap and matching screws. You will have to drill out the through holes in the sharkfin to ¼”, so you can use that drill to dimple the axle carrier as well.
- 4) Remove the steel bracket that is screwed to the other side of the axle carrier.
- 5) Using the proper tap drill, drill through the axle carrier and tap the holes. For M6x1 threads, the preferred drills are (in order of preference) #10, #9, 5 mm, or #8. For ¼-20, use a #7 drill, and for ¼-28, use a #3 drill.
- 6) Install the screws. If you are not using the M6 screws, the substitute screws should be short enough to avoid protruding beyond the other side of the axle carrier.
- 7) Re-install the steel bracket.

Thank you!

The fine print: I will gladly replace any parts that are defective through manufacture. However, because of the wide variety of riding styles and trail conditions that these parts will encounter, I cannot guarantee their survivability in all impacts.

AXLE CARRIER

SHARK FIN

M6 SCREWS (2)

M5 SCREWS (3)

BRACKET

MILLED SIDE

CHAMFER MAY NEED EXTRA FILING

HOLES MATCH EXISTING HOLES  
IN AXLE CARRIER

BRACKET MOUNTING HOLES

FLAT SIDE NEXT TO DISK

MILLED SIDE OUT

