

SUBJECT: 2011-2012 OPTIBIKE MOTORIZED BOTTOM BRACKET REMOVAL PROCEDURE

TIME-FRAME: 20 MINUTES

TECHNICALITY: MODERATE

TOOLS NEEDED: 2.5MM HEX, 4MM HEX, 5MM HEX, 8MM HEX, 10MM SOCKET, MOLEX CONNECTOR REMOVAL TOOL, SQUARE TAPER CRANK PULLER, 1 ¾" OPEN ENDED WRENCH

1. Remove the rear wheel. The bike should be in a stand. Adjust the Rohloff gear shifter to 14th gear. Then remove the Rohloff gear mech from the rear wheel mount by loosening the finger bolt. Open the quick-release and rotate the chain tensioner towards the rear of the bike and remove the rear wheel.















2. Using the 4MM hex wrench, remove the chain-guide. Then remove the chain from the chain-ring.





3. Using the 8MM hex wrench remove the crank bolts from the crank arms. Then using the square taper crank puller, remove the crank-arms from the MBB.











4. Place the square taper crank puller so that the chain ring will not move. Then using the $1\frac{3}{4}$ " open ended wrench, remove the chain ring lock nut. Next, remove the chain-ring from the MBB.













5. Using the 5MM hex and the 10MM socket tool, remove the rear shock from the two shock mounts. Then lift the rear triangle and zip tie the rear triangle so that the battery bottom is fully exposed.









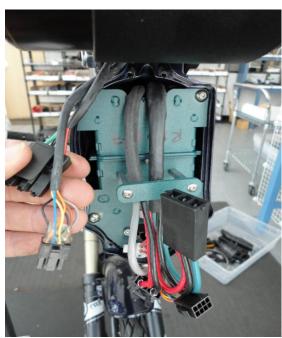




6. Using the 2.5MM hex wrench, remove the four M4 bolts holding the battery bottom on.



7. Unplug the 8 pin and 3 pin MBB connectors. Using the Molex connector pin removal tool, remove the large 3 pin connector from the pins.





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8. Feed the MBB cables through frame and swing-arm. Using the 5MM hex wrench, loosen the MBB pinch bolts enough to be able to slide the MBB out to the non-drive side. Be careful to not lose the MBB stop pin, which should be quick-welded into the swing-arm grove. You have now successfully removed the MBB.









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