



## UBCO 2X2 - Allocated Repair Times

The purpose of this document is to provide a comprehensive list of all repair procedures and the specified allocated repair times. These times will assist with warranty and repair invoice approval. Repairs may exceed the allocated time. Justification of exceeded time should accompany the invoice. Approval is for the UBCO reviewer's discretion.

SERVICE TASK	ALLOCATED TIME (1.0 = 60min)
<b>BATTERY</b>	
Battery plug replacement	0.25 (15 mins)
BMS replacement	1.0 (60 mins)
<b>BRAKE SYSTEM</b>	
Front brake unit replacement	0.5 (30 mins)
Rear brake unit replacement	0.75 (45 mins)
Brake pad set replacement per calliper	0.25 (15 mins)
Brake system bleed	0.75 (45 mins)
<b>ELECTRICAL</b>	
Horn replacement	0.17 (10min)
Motor controller replacement	0.25 (15 mins)
VMS replacement	0.5 (30 mins)
Indicator replacement	0.08 (5min)
Taillight replacement	0.17 (10min)
Rear Motor cable replacement	0.5 (30 mins)
Front Motor cable replacement	0.25 (15 mins)
Display cable replacement	0.25 (15 mins)
<b>FRAME</b>	
Seat replacement	0.17 (10min)
Foot peg replacement	0.17 (10min)
Kickstand replacement	0.17 (10min)
Frame replacement	2.5 (150 mins)
<b>HANDLEBAR</b>	
Ethrottle replacement	0.25 (15 mins)
Digital display replacement	0.25 (15 mins)
Lever guard installation	0.25 (15 mins)
Headlight replacement	0.25 (15 mins)
Handlebar grips replacement	0.25 (15 mins)

SERVICE TASK	ALLOCATED TIME (1.0 = 60min)
<b>INSPECTION</b>	
Assemble 2X2 from box	0.25 (15 mins)
Pre-Delivery Inspection (PDI)	1.0 (60 mins)
<b>SINGLE HUB MOTOR SERVICE</b>	
Motor service	0.5 (30 mins)
Motor service + Planetary gear replacement	0.67 (40min)
Motor service + Bearing replacement	0.67 (40min)
Motor service + Planetary gear & Bearing replacement	0.83 (50min)
Motor service + Hall sensor replacement	1.0 (60 mins)
Motor service + Temperature sensor replacement	1.0 (60 mins)
Motor service + Hall sensor + Temperature sensor	1.17 (70 mins)
Replacement motor core assembly including gears	0.75 (45 mins)
<b>SERVICE</b>	
10hr service	0.5 (30 mins)
Fleet service incl replacement of both brake pad sets	0.83 (50 mins)
Intermediate service	1.0 (60 mins)
Full service (includes the service of both Hub motors)	2.0 (120 mins)
Full service + Planetary gear replacement	2.17 (130 mins)
Full service + Planetary gear & Bearing replacement	2.33 (140 mins)
<b>SUSPENSION</b>	
Rear suspension pair replacement	0.5 (30 mins)
Swing arm replacement	0.75 (45 mins)
Front fork replacement	0.5 (30 mins)
Front fork boot replacement	0.75 (45 mins)
<b>WHEEL ASSEMBLY</b>	
Wheel replacement	0.17 (10min)
Tyre Inner tube replacement using a tyre machine	0.25 (15 mins)
Brake rotor replacement	0.5 (30 mins)
Tyre replacement	0.25 (15 mins)
Spoke replacement	0.5 (30 mins)
Complete spoke replacement & rebalance	2.0 (120 mins)