Victory
CrossRoads
CrossCountry
CrossCountry Tour
HardBall

Electric Reverse
Installation Instructions

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Warnings and considerations:

1. **Disclaimer** - These instructions assume a level of understanding of motorcycle repair and maintenance beyond that of a “beginner” and/or “novice” and California Sidecar cannot be liable for an installer’s failure to understand or follow these instructions as written. Likewise, California Sidecar cannot be responsible if any of the steps are omitted or shortcuts are taken, or parts other than those supplied by California Sidecar, are used in installing this trike kit.

2. **“WARNINGS”** are all printed in bold type and capitalized. They mean to use extreme care in a given step so as not to damage the part, motorcycle, and/or yourself.

3. **Always** wear safety glasses when using hand and/or power tools.

4. When working in and around the fuel system, **always** work in a well-ventilated area, free from sparks and open flames.

5. All directional references to the “right side” and the “left side” are as you were seated on the motorcycle.

6. All directional references to “forward” mean to the front of the motorcycle while “back” means the rear of the motorcycle unless otherwise stated.

7. Please consult the appropriate Service Manual for your motorcycle if further detail is necessary.
INSTALL REVERSE AND ALL ITS PARTS DURING INSTALLATION AND BEFORE THE TRIKE BODY IS INSTALLED.

Assembly:

1. After 28 MM and 50 MM drive belts are tensioned and all clamping bolts are tightened, adjust angle of reverse housing by loosening the 5 fasteners that attach the reverse housing to the jackshaft housing. See blue arrow below. Rotate housing rearward until it rests on its stop and retighten fasteners.
2. Check the Tension of the Reverse belt.
3. Sonic Tension Meter specs:
   - MASS  004.7
   - WIDTH 021.0
   - SPAN  0176
4. Reverse Belt Tension:
   - SINGLE SPAN TENSION: 49-55 lbs.
5. To tension belt you most loosen the 3 fasteners Red 1 – 3
6. Using a 3/8 drive breaker bar insert it in the square drive hole (red arrow), then retighten the 3 fasteners
7. Check tension. If it is not correct go back to step 5 and redo.
8. Follow this procedure until the proper tension is achieved.
9. When the proper belt tension is achieved re-torque the fasteners as follows: 1 to 50ft-lbs, 2 and 3 to 35 ft-lbs
10. Note: after operating the reverse (backing up the trike) several times the belt tension will loosen as the belt “wears in”. This is normal and does not require the belt to be retensioned.
Wiring:

1. Secure Reverse module to Rear Mount Plate with cable ties turned 90°
2. Disconnect the Negative battery terminal
3. Plug both harnesses into the Reverse module
4. Route the Blue and white wires to the Reverse motor
5. Route long harness up thru hole in frame along the OEM brakelines. Blue Arrow
6. Pull the brown wire out of the long harness where the green wire is
7. Locate the Engine run wire Purple/Yellow. Green Arrow
8. Connect the Green wire to Purple/Yellow
9. Locate the Neutral wire Black/Pink. Brown Arrow
10. Connect the Brown wire to Black/Pink
11. Remove the two fasteners on the rear of the fuel tank and lift up using a 2 x 4 to support fuel tank
12. Connect the long Positive Battery cable to the Electric Motor using the 5/16 eyelet end and the Red boot
13. Route the cable along the OEM brakelines with the Reverse Harness. Red Arrow
14. Continue along the frame with both the cable and the harness
15. Route the harness up to the neck and into the fairing area
16. Route the cable down the front of the frame with the OEM harness to the battery area
17. Remove outer Fairing
18. Using a 1/2 inch drill bit. Drill thru the inner fairing below the RT speaker, opposite of the 12V outlet
19. Ensure the rubber washer is on the Reverse switch, then insert the wire thru fairing and install nut and tighten
20. Connect the harness to Reverse switch
21. Locate the Left handlebar harness connector. Find the Grey horn button wire and cut it
22. Connect the Yellow wire to the button side of the harness
23. Connect the Black wire to the harness side going to the horn
24. Reinstall the fairing
25. At the fender plug locate the White/Pink wire (Brake light) and connect to the Red/Yellow
26. Locate the Green/Pink wire (Tail light) and connect it to the Red wire
27. Install the black negative cable and white wire to the lower long mounting bolt on the Reverse motor. Route the negative cable to the Ground post on the RT side of the Motorcycle frame under the side cover area
28. Plug the Blue wire spade connector into the Reverse Motor
29. Install the Midi Fuse Holder on the RT side of the Battery box
30. Install the 100AMP fuse, flat washer, the long cable from the electric motor on the top post, flat washer & nut

31. Install the short cable on the bottom post with a flat washer, cable, flat washer & nut.
32. Close the Red rubber cover
33. Connect the other end to the Positive post on the battery
34. Ensure that all wires and miscellaneous components are secured to the frame with cable ties

FINISHED
Operating the Electric Reverse:

1. Start trike. Reverse will not activate if trike is not running.
2. Place trike transmission in neutral. Reverse will not activate if trike is in gear. Placing trike in gear after reverse has been activated will deactivate reverse.
3. Depress the reverse button and the RED led will light. This indicates that reverse is activated.
4. Press the horn button to back up the trike.
5. If trike brakes are applied while backing up the reverse will pause until the brakes are released.

From all of us at California Sidecar.
Enjoy the ride!

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