

ELECTRIC REVERSE



INSTALLATION INSTRUCTIONS

Revised 7 - 10

1.) HOUSING

- 1 - Electric Reverse housing
- 1 - Adjuster plate
- 1 - Sprocket and Gear
- 1 - 7/16-20 x 2 1/2 SHCS
- 1 - 7/16-20 T-nut

2.) SPROCKET

- 1 - Sprocket Assm.
 - 1 - 60 Groove Sprocket
 - 1 - Jack Shaft Extension
 - 5 - 1/4 - 28 X 1 Flat Head SCS
 - 5 - 1/4 - 28 Top Lock Nuts
- 1 - 5/8 - 11 x 2 1/2 L.H. SHCS
- 1 - 5/8 Split Dowel Bushing
- 1 - Belt

3.) ELECTRICAL

- 1 - Starter Motor
- 1 - Electric Reverse Control Module
- 2 - Wiring Harness
 - 1 - Reverse Switch
- 1 - Cable Set
- 3 - Scotch lock connector
- 2 - Butt connector
- 1 - Neoprene strip
- 1 - 21" Cable Tie
- 1 - Terminal Boot

4.) HARDWARE BAG

- 2 - 7/16-20 x 2 1/2 SHCS
- 2 - 5/16-18 x 1 1/2 SHCS
- 1 - Neoprene strip
- 1 - 21" Cable Tie
- 1 - Instructions

**ALL ORDERS ARE DOUBLE
CHECKED TO ELIMINATE
SHIPPING ERRORS.**

FILLED BY: _____

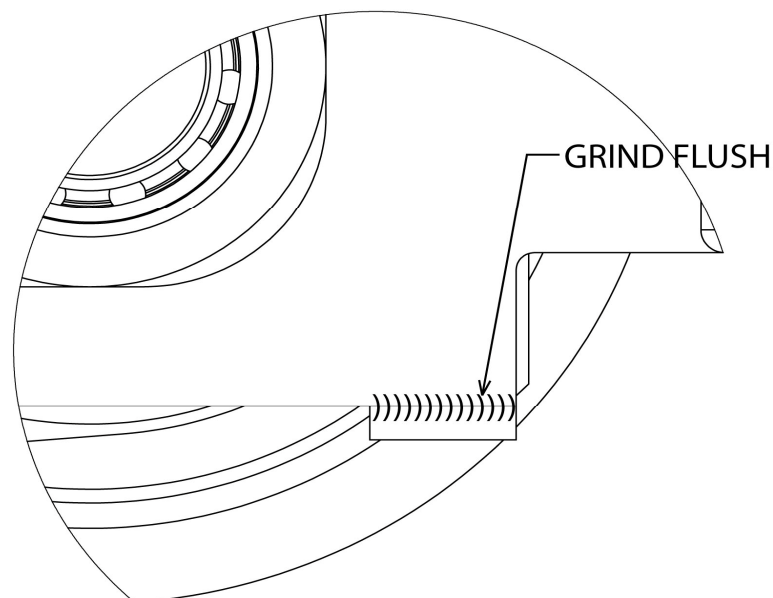
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Warnings and considerations:

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.

Disassembly:

1. Place motorcycle on lift.
2. Place a suitable Jack under the Frame of the Motorcycle and tie down securely.
3. Remove the Seat and disconnect both Negative and Positive battery cables.
4. Remove Side Covers, Trike body, Fuel Tank, and Front Fairing Cover (if equipped).
5. Remove and **DISCARD** the 3/8 – 24 x 1 LEFT HAND SHCS from the right side of the Jack Shaft.
6. Clean and inspect bearing and its seal. Ensure that Service Bulletin # 4 has been completed.
7. Remove the two 5/16 – 18 x 1 1/4 SHCS clamping bolts from the right side of the Jack Shaft housing.
8. Ensure that the right front lower corner of the Drive Support is free from any weld overhang. Grind weld smooth and touch up with paint.



9. Remove the right side upper hex bolt, nyloc nut, and washers from the Subframe Link.

Assembly:

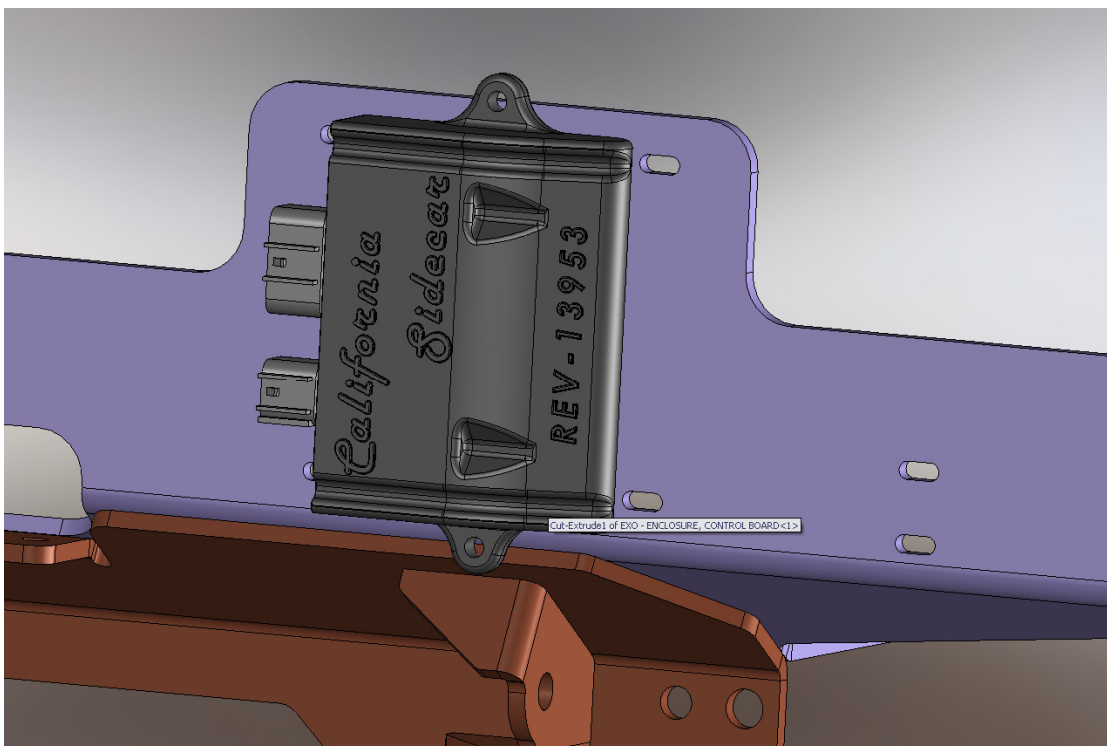
- 1. Lower the Reverse housing in from the top. It may be necessary to loosen and move the Backrest mount.**
- 2. Install two 5/16 – 18 x 1 1/2 SHCS thru the Reverse housing into the Jack Shaft housing. Apply thread locking agent.**
- 3. Loosely install the Adjuster Plate with one 7/16 – 20 x 2 1/2 SHCS thru the adjuster plate boss and Reverse housing, thread into the T-nut.**
- 4. If equipped with a Preloader. Remove two mounting bolts, and three Allen screws, flip mount around and reinstall.**
- 5. Install the Motor with two 7/16 – 20 x 2 1/2 SHCS thread into the Adjuster Plate.**
- 6. Loosely install belt.**
- 7. Install the Assembled sprocket and Jack Shaft extension with new 3/8 – 24 x 1 LEFT HAND SHCS, apply thread locking agent and torque to 60 FTLBS.**
- 8. Check the tension and alignment on 37 MM and 90 MM drive belts. Tighten all fasteners. Tension Reverse belt.**
- 9. Sonic Tension meter specs for Reverse belt:**
 - MASS 004.7**
 - WIDTH 021.0**
 - SPAN 0213**
- 10. Reverse Tension:**
 - SINGLE SPAN TENSION is 49-55 lbs.**
- 11. Always loosen Reverse belt before retensioning the 37 MM and 90 MM belts.**
- 12. Reinstall Subframe link with fasteners removed in step 9 of Disassembly.**

DAYTONA MODELS:

1. Using two sided tape install Reverse module on the intermediate mount. Plugs pointing up and forward.
2. Using a 1/2 inch drill bit. Drill thru the inner fairing opposite of the odometer trip reset button.
3. Ensure the rubber washer is on the Reverse switch, then insert the wire thru fairing and install nut and tighten.

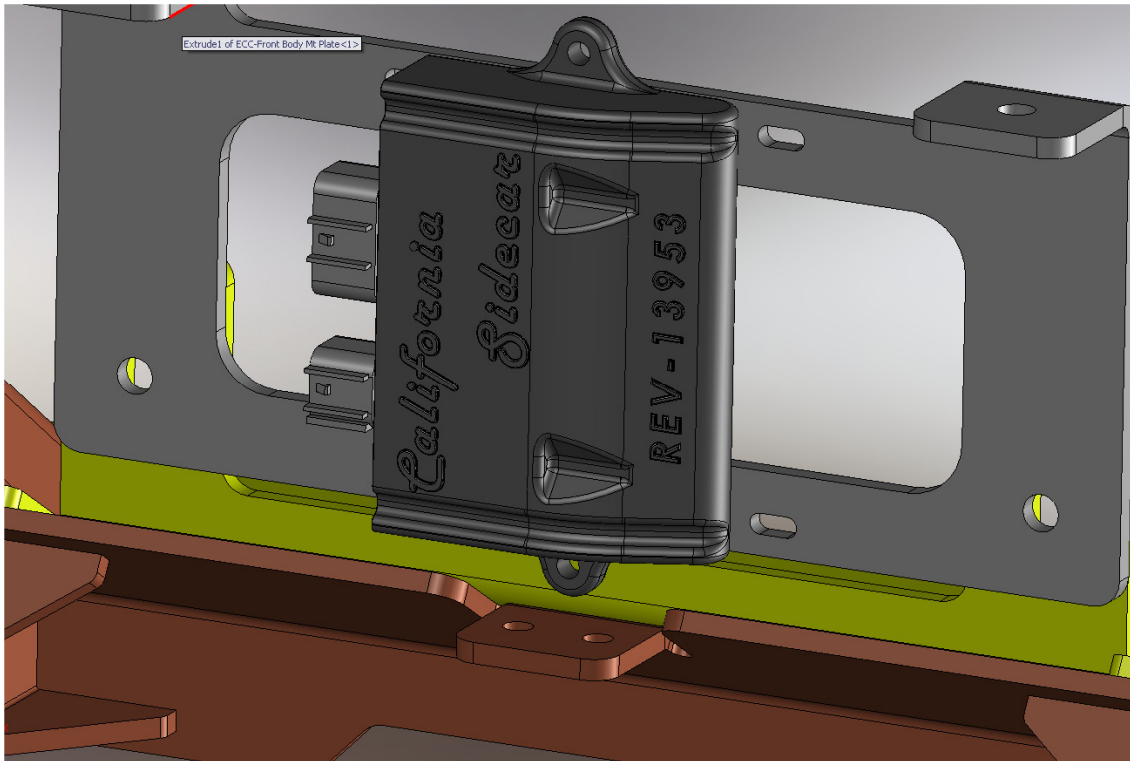
VOLUSIA MODELS:

1. Using two sided tape install Reverse module on the Upper Mount Plate or if applicable, secure to Rear Mount Plate with cable ties.
2. Using a 1/2 inch drill bit. Drill thru the right side head light tin opposite of the spot light switch.
3. Ensure the rubber washer is on the Reverse switch, then insert the wire thru the head light tin and install nut and tighten.



CUSTOM MODELS:

1. Install Reverse module on the Adjustable 90° Support Bracket with two zip ties using slots provided.
2. Remove the ignition coil cover. Using a 1/2 inch drill bit. Drill thru the top left of the ignition coil cover.
3. Ensure the rubber washer is on the Reverse switch, then insert the wire thru the cover and install nut and tighten.



Wiring:

1. Plug both harnesses into the Reverse module.
2. Route the single blue wire to the Reverse motor.
3. Route the long wire harness up under the seat and fuel tank into the head light area.
4. Connect the harness to Reverse switch.
5. Using a scotch lock, connect the brown wire to the tan neutral wire at neutral light.

6. In the left handlebar harness. Locate yellow/black horn wire and cut. Using butt connectors. Connect yellow wire to the button side and black wire to the harness side.
 7. Locate the yellow/green wire (fuel pump) just behind the fuel tank. Using a scotch lock, connect to the green wire.
- NOTE:** If installing Reverse on a carbureted bike. Connect the green wire to either the orange/white accessory wire or the blue tail light wire at the fender plug.
8. Locate the red/yellow wire (brake light) under the seat at the fender plug. Using a scotch lock, connect to the red/yellow wire.
 9. Install the black negative cable and white wire to the lower long mounting bolt on the Reverse motor. Route the negative cable to the battery.

DAYTONA MODELS:

1. Install terminal boot onto red positive cable.
 2. Connect the red positive cable and the red wire to the stud on the Reverse motor solenoid.
- NOTE:** The red and white wire may also be routed directly to battery.
3. Route the positive cable under the battery box to the motorcycle starter solenoid stud.
 4. Using provided cable tie, secure the positive cable to the Reverse motor.
 5. Ensure that all wires and miscellaneous components are secured to the frame with cable ties.

VOLUSIA AND CUSTOM MODELS:

- 1. Install terminal boot onto red positive cable.**
- 2. Connect the red positive cable to the stud on the Reverse motor solenoid.**
- 3. Connect the red wire to the orange/white wire (accessory) at the fender plug.**
- 4. Using provided cable tie, secure the positive cable to the Reverse motor.**
- 5. Ensure that all wires and miscellaneous components are secured to the frame with cable ties.**

Operating the Electric Reverse:

- 1. With the Trike in neutral. Start the engine.**
- 2. Depress the reverse switch and the red LED will light up.**
- 3. Press the horn button and the trike will then back up.**
- 4. If the brakes are applied the reverse will pause until the brakes are no longer being used.**

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

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