



Performance Sport Trailers

YAMAHA ROADLINER & STRATOLINER

With CORBIN SADDLEBAGS

Trailer Hitch Installation Instructions

READ ALL INSTRUCTIONS BEFORE YOU START

ATTENTION INSTALLER: THESE INSTRUCTIONS MUST BE GIVEN TO THE END USER!!!

YAMAHA MOTOR CORPORATION INC., AND/OR ANY AFFILIATE OR SUBSIDIARY HAS NEITHER APPROVED OR ENDORSED *BUSHTEC* MFG. & SALES INC., ITS PRODUCTS, TRAILERS OR HITCHES. USE OF A TRAILER OR TRAILER HITCH ON ANY MOTORCYCLE COULD VOID YOUR WARRANTY AND MAY INCREASE YOUR CHANCES OF INJURY OR DEATH IN AN ACCIDENT SITUATION.

Important information is distinguished by the following notation:

NOTE: Provides key information to make procedures easier and clearer.

CAUTION: Indicates special procedures that must be followed to avoid damage to the motorcycle, trailer or accessories.

WARNING: Indicates special procedures that must be followed to avoid serious injury and/or death to a motorcycle operator or others.

WARNING: THIS HITCH SYSTEM HAS BEEN EXCLUSIVELY DESIGNED FOR USE ONLY ON A STOCK YAMAHA ROADLINER OR STRATOLINER WITH STOCK EXHAUST AND CORBIN HARD SADDLEBAGS. IT WILL NOT WORK ON ANY OTHER MOTORCYCLE. ANY MODIFICATION TO ANY PART OF THIS HITCH, INCLUDING BUT NOT LIMITED TO ALTERING THE SUPPLIED HARDWARE OR IMPROPER INSTALLATION COULD CAUSE INJURY OR DEATH AND IMMEDIATELY VOIDS ANY AND ALL WARRANTIES.

WARNING: INSTALLATION OF THE *BUSHTEC* HITCH SYSTEM SHOULD BE PERFORMED BY A QUALIFIED MECHANIC. THESE INSTALLATION PROCEDURES ARE ONLY A GUIDE AND SHOULD BE USED IN CONJUNCTION WITH THE FACTORY SERVICE MANUAL AND THE NECESSARY MECHANICAL SKILLS.

WARNING: THE END USER OF THIS PRODUCT ASSUMES ALL LIABILITY AND RESPONSIBILITIES THAT MAY ARISE DUE TO BUT NOT LIMITED TO,



NEGLIGENCE FROM IMPROPER INSTALLATION OR USE, INCLUDING OVERLOADING, EXCEEDING THE RECOMMENDED LOAD LIMITS AND IMPROPER MAINTENANCE.

WARNING: ALL HITCH HARDWARE SHOULD BE CHECKED PRIOR TO EACH USE. FAILURE TO DO SO COULD RESULT IN INJURY OR DEATH.

YAMAHA ROADLINER & STRATOLINER HITCH SYSTEM CONTENTS

1	Hitch Hoop	2	5/16-18 x 3/4" Gr. 8 Hex Bolt
2	ST-102 Struts	2	8mm x 1.25mm Nylock Nuts
1	Stainless Steel Lock w/ Cap		
1	Electronic Relay Isolator Package		

CAUTION: THESE STEPS MUST BE PERFORMED IN THE FOLLOWING ORDER:

1. Place the motorcycle on level ground.
2. Remove left and right saddlebags. Set aside.
3. Remove the passenger footpegs and front saddlebag mount brackets, both left and right sides.

NOTE: The curved support struts mount inside the fender to the rear mount stud that replaces the factory rear fender bolt on each side supplied by Corbin with the saddlebags. These studs secure the rear fender to the chrome side supports and provide the mount stud for the saddlebag. The radius of the struts will follow that of the tire and fender.

4. Install the left side strut with the countersunk hole in the strut over the rear stud inside the fender and the countersunk side facing toward the tire. Secure with the supplied Nylock nut. Do not tighten.
5. Repeat step 4 for right side.
6. Carefully place hoop around rear tire with hitch pin facing up and the front hitch tabs between the frame and the Corbin front saddlebag mount brackets at the factory the passenger peg mount position.
7. Reinstall the passenger footpegs using the Corbin supplied bolts through the peg mount, Corbin saddlebag tab, hitch tab, and the frame. Do not tighten.

NOTE: On the right side, slide the wire plate between the frame and the hoop tab.

8. Locate the threaded boss on the inside of the hoop toward the rear at each side which will be used for attaching the hoop to the bottom of the strut. Install the supplied 5/16-18 x 3/4 inch Grade 8 Hex Bolts through the bottom strut hole into the threaded boss. Repeat for other side. Do not tighten.
9. Center the hitch pin on the rear tire and tighten bolts in following order; front hitch bolts securing passenger pegs; Nylock nuts securing upper strut to stud;



lower strut bolts. Check that all hardware is tight and that the hitch clears all moving parts.

Installation of all the hitch components is now complete. Recheck all bolts to insure tightness and alignment of hitch.

WARNING: PLEASE FOLLOW ALL INSTALLATION INSTRUCTIONS ON THE PREVIOUS PAGES AND ABIDE BY ALL NOTES, CAUTIONS AND WARNINGS!

WIRING INSTALLATION

CAUTION: These instructions are for a stock motorcycle installation. Installation of brake flashers or turn signal conversion modules require attaching the trigger wire connections for the relay forward of any module connections.

1. Remove the rider and passenger seat per the owner's manual.
2. Find a secure location for the relay package that will allow all wires to run from the relay to necessary locations. This may be under one of the side covers.

NOTE: The red wire and black wire from the relay package will go DIRECTLY to the 12V positive and negative terminals of the battery. The four white wires with colored stripe will connect to the rear fender light harness under the rider seat using the supplied T-taps and male disconnects. The green, blue, yellow, brown and white wires from the relay are output wires that will connect to the trailer wiring harness supplied separately (with a new trailer).

3. Locate the wiring harness entering the rear fender for lighting. Remove a 2 to 3 inch section of the protective covering. Locate the following color wires and install a T-tap onto each wire identified. **NOTE:** Spread out the connectors so that they do not overlap.

<u>MOTORCYCLE</u>	<u>FUNCTION</u>	<u>RELAY PICKUP</u>
Blue	Running/ Tail Lights	White with Green Stripe
Yellow	Brake Lights	White with Blue Stripe
Green	Right Turn	White with Yellow Stripe
Brown	Left Turn	White with Brown Stripe

Connect the white with striped wires as indicated above using the supplied male disconnects and previously installed T-taps.



Performance Sport Trailers

4. Route the red wire to the 12V positive battery terminal and the black wire to the 12V negative terminal using the supplied ring connectors to secure to battery terminals.
5. Route the wire harness with plug down to the rear of the hitch near the pin allowing enough slack to attach the trailer.

CAUTION: Secure the harness so that it can not be pulled into the rear wheel of the motorcycle.

Connect the relay outputs to the harness wires as follows:

<u>BUSHTEC HARNESS</u>	<u>FUNCTION</u>	<u>RELAY OUTPUT</u>
Green	Running/ Tail Lights	Green
Blue	Brake Lights	Blue
Yellow	Right Turn	Yellow
Brown	Left Turn	Brown
Black	Interior Light/ Accessory	Green

Bushtec recommends connecting the Interior Light to the running light circuit. If the interior light is left on but the ignition is turned off, the interior light will be turned off.

6. If removed, reinstall the side cover with the Allen bolt.
7. Reinstall the rider and passenger seat per the owner's manual.
8. Reinstall the saddlebags.

CHECK ALL HARDWARE TO MAKE SURE IT'S TIGHT. CHECK ALL ELECTRICAL CONNECTIONS.

FINAL TRAILER HOOKUP

1. With motorcycle reassembled, check if trailer is equipped with tongue stand, it is secured in the up position. Place the heim joint down over the hitch pin. Place the lock over the pin in the fully unlocked position. Hold the lock and turn the key ¼ turn. Remove the key. Lift on the lock to ensure it is engaged. Install dust cover.
2. Connect safety chain to link under hitch pin.
3. Place harness over top of chassis neck and connect to bike side harness, aligning the catch and lock. Snap to lock. Check lighting and you are ready to tow.

WARNING: DUE TO THE NATURE OF TOWING A TRAILER AND THE ENGINEERING INVOLVED WITH THIS HITCH OR ANY MOTORCYCLE HITCH, ALL HARDWARE MUST BE CHECKED BEFORE, DURING AND AFTER YOU TOW TO INSURE THE PROPER WORKING ORDER OF THIS PRODUCT!



Performance Sport Trailers

350 LBS. MAXIMUM GVWR

55 LBS. MAXIMUM TONGUE WEIGHT

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