



Raider/Roadliner/Stratoliner Forward Control Installation Instructions



Thank you for choosing a Supreme Legends USA product.

Supreme Legends adjustable forward controls are designed to give riders a relaxed, more comfortable riding position for cruising. Some adjustments may require a different shift rod and/or bolts.

We hope that you will be pleased with your purchase. Should you have any questions, please contact our customer service department at (714) 504-0715 or visit us on the web at

www.supremelegendsusa.com.

IMPORTANT WARNING!

IT IS CRITICAL THAT ALL SUPREME LEGENDS USA PRODUCTS AND ACCESSORIES BE PROPERLY AND SECURELY ATTACHED TO YOUR VEHICLE. IMPROPER ATTACHMENT COULD RESULT IN A MOTORCYCLE ACCIDENT, AND COULD CAUSE SERIOUS BODILY INJURY OR DEATH TO YOU OR OTHERS. YOU ARE RESPONSIBLE FOR SECURING THE PRODUCTS AND/OR ACCESSORIES TO YOUR MOTORCYCLE, CHECKING THE PRODUCTS AND/OR ACCESSORIES PRIOR TO USE AND PERIODICALLY INSPECTING THE PRODUCTS AND/OR ACCESSORIES FOR ADJUSTMENT, WEAR AND DAMAGE. THEREFORE, YOU MUST READ AND UNDERSTAND ALL OF THE INSTRUCTIONS, NOTES AND WARNINGS SUPPLIED WITH YOUR SUPREME LEGENDS USA PRODUCTS AND/OR ACCESSORIES PRIOR TO INSTALLATION OR USE. IF YOU DO NOT UNDERSTAND ALL OF THE INSTRUCTIONS, NOTES AND WARNINGS, OR IF YOU HAVE NO MECHANICAL EXPERIENCE AND ARE NOT THOROUGHLY FAMILIAR WITH THE INSTALLATION PROCEDURES, YOU SHOULD HAVE THE PRODUCT AND/OR ACCESSORIES INSTALLED BY A PROFESSIONAL MECHANIC.

SUPREME LIMITED WARRANTY

Supreme Legends USA offers a limited 18 month, non-transferrable warranty from the date of purchase, to the original purchaser, on all parts included with this kit to be free of manufacturing defects in materials and workmanship, excluding normal wear and tear. If the condition of an item requires warranty service, please contact Supreme Legends USA immediately.

The limited warranty is applicable only if the instructions are followed and the products are used properly. Supreme Legends USA will determine if it is necessary to return an item for evaluation and validity of warranty claim. If an article is found to be defective upon inspection by Supreme Legends USA, we will repair or replace the defective article at our discretion without charge. The customer will pay freight to Supreme Legends USA and we will pay any applicable return freight. A Return Merchandise Authorization (RMA) form, provided by a customer service representative, must be included with all returned product, along with a copy of the original receipt. All items must be packaged in such a fashion as to eliminate any further damage. Unauthorized returns will not be accepted.

SUPREME LIMITED WARRANTY (continued)

Normal wear and tear of Supreme Legends USA products or damage resulting from misuse, accidents, improper installation, alterations or abuse (including tampering or damage in transit) are not covered by this Limited Warranty.

The purchaser acknowledges that Supreme Legends USA has no control over the attachment of its products to motorcycles and/or motor vehicles or the attachment of items to Supreme Legends USA products. Accordingly, Supreme Legends USA cannot assume responsibility for any damage to property arising out of improper attachment or use of its products. In addition, this Limited Warranty applies only to Supreme Legends USA products and not to other products used in conjunction with Supreme Legends USA products. This Limited Warranty is in lieu of all other warranties, expressed or implied, and does not cover consequential damages of any kind that may arise from the use or misuse of any Supreme Legends USA product.

FOREVER SUPREME

We know how hard people try to keep their motorcycles looking new, but all parts will wear over time. We developed this program to show our customers that we care. And if you were our customer once you are entitled to be our customer for life. If you have an old registered Supreme Legends USA part you can trade it in and receive the following discounts on a new part of equal or lesser value.

Second Year-15% off
Third Year & Beyond- 10% off

DISCLAIMER

THE INSTALLATION OF SUPREME LEGENDS USA PRODUCTS MAY ADVERSELY AFFECT OR VOID YOUR MOTORCYCLES FACTORY WARRANTY. WE ARE NOT RESPONSIBLE FOR ANY ISSUES RELATED TO YOUR MOTORCYCLES FACTORY WARRANTY. OUR PRODUCTS ARE DESIGNED TO BE INSTALLED AT THE SOLE DISCRETION OF THE MOTORCYCLES OWNER. SUPREME LEGENDS USA HOLDS NO RESPONSIBILITY FOR MODIFICATIONS TO YOUR MOTORCYCLE AND/OR ITS PERFORMANCE OR WARRANTY DUE TO THE INSTALLATION OF OUR PRODUCTS.

YOU UNDERSTAND AND AGREE THAT WE MAKE NO REPRESENTATIONS OR WARRANTIES OF ANY KIND, EXPRESSED OR IMPLIED AS TO ANY MATTER WHATSOEVER, INCLUDING THE CONDITION OF THE PRODUCT OR ANY COMPONENT PARTS THEREOF, ITS MERCHANTABILITY OR ITS FITNESS FOR ANY PARTICULAR PURPOSE.

EXCEPT AS OTHERWISE PROVIDED HEREIN, WE SHALL NOT BE LIABLE FOR DAMAGES, INCLUDING SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES WHETHER IN CONTACT OR IN TORT ARISING OUT OF OR IN CONNECTION WITH THE PERFORMANCE OF ANY PRODUCT OR ANY COMPONENT PART THEREOF IN ITS USE BY YOU, AND SHALL NOT BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES ARISING OUT OF OR IN CONNECTION WITH YOUR USE OF THE PRODUCT.

INDEMNITY & RELEASE

- a. You understand and agree that many factors beyond our control affect the operational safety of the product including, but not limited to the installation of the product according to the instructions provided with the product;
- b. You also understand and agree that the installation of the product may involve the use of tools, equipment and construction methods which may present safety hazards which are beyond our control.
- c. Except as otherwise proved herein, you will protect, indemnify, save harmless and release us, our authorized agents, employees, officers, directors and shareholders from and against all liabilities, obligations, claims, damages, penalties, causes of action, costs and expenses, imposed upon or incurred by or asserted against us and our authorized agents, employees, officers, directors and shareholders or any of our assignees, by you or any third party by reason of any assembly, use, maintenance, possession or operation of the product, any loss, damage or destruction of the product as of and after delivery and any other act or event relating to or caused by the product, including but not limited to, consequential or special damages or any kind, or any failure on your part to perform or comply with any of the terms and conditions hereof, or any and all liability for property loss or damage, or any and all damages resulting from death or personal injuries, including loss of services, which any person may sustain on account of, arising out of, or in connection with any use, maintenance, possession or operation of the product. In the event that any action, suit or proceeding is brought against us or any of our authorized agents, employees, officers, directors or shareholders by reason of any such occurrence, you will, upon request and at your expense, resist and defend such action, suit or proceeding or cause the same to be resisted and defended by counsel designated and approved by us.



Before you get started...

Thank you for choosing Supreme Legends USA products. We believe you will find our products to be second to none in both style and quality!

Before beginning your installation, please note the following:

- Though our products allow for user friendly installation, Supreme Legends USA recommends all installation of our product to be done by a qualified mechanic or individual.
- Some controls may require additional components not included with your kit. Some instructions may or may not be included such as installation of a brake line or brake banjo switch, minor adjustment of shift rods, or installation of a kickstand bracket on 2000 up FXST models. (extended 2" or 3" models will require longer brake lines and possibly longer shift rods)
- Please remember to use thread locking compound (we recommend Loctite blue 242) on any components which could come loose by vibration. Be certain to verify your mounting bolts, toe and foot pegs. Though we apply Loctite to some of our bolts, we DO NOT apply any to our pegs so that you may make final clocking/comfort adjustments for your particular application. DO NOT USE RED!!
- We recommend using an appropriate motorcycle lift when possible. Be certain the lift can maintain the weight of your bike without question, and be certain to secure the bike as necessary during installation of the controls.
- Be certain to dispose of all fluids properly
- BE AWARE OF WHICH TYPE OF BRAKE FLUID YOU ARE USING IN YOUR LINES. NEVER MIX DOT 4 AND DOT 5 TOGETHER. SUPREME LEGENDS USA WILL NOT BE HELD RESPONSIBLE FOR DAMAGE INCURRED TO YOUR VEHICLE DUE TO INCORRECT INSTALLATION OF PRODUCT OR USE OF INCORRECT FLUID. PLEASE CONSULT YOUR LOCAL DEALER.
- Remember that with this installation you are modifying your motorcycle, and though our controls are assembled to a "stock" comfortable fitment, there will be adjustment necessary to ensure adequate comfort for your shifting foot, as well as ensuring all shifting is occurring appropriately.
- Any models requiring the electronic banjo brake switch will require minor wiring, and a good amount of brake bleeding to ensure adequate pressure is allowed to actuate the brake light through the switch.
- Always be sure to have a helping hand available. Though most of the installation is a "one man show", it's always good to have a second set of hands available.

Please feel free to give us a call at (714) 504-0715 if you have any questions!

ENJOY YOUR NEW CONTROLS!



INSTALLATION KIT INCLUDES:

1. 47" Brake Line (fitting to fitting- also includes 45 deg. threaded banjo fitting)
2. Banjo brake switch w/ (4) crush washers
3. (4) 3/8-16 Flat head cap screws
4. (4) 3/8-16 Button head cap screws
5. Left handed M8 x 1.25 male rod end
6. AIS canister relocating bracket*
7. (2) 1/4-20 x 1/2" Button head cap screws*
8. (2) M6x1x12mm Socket head cap screws*
9. (2) reversible frame brackets
10. Shift side plate spacer
11. Brake side plate spacer
12. 5/16-24 x 3/4" Button head cap screw (not shown)

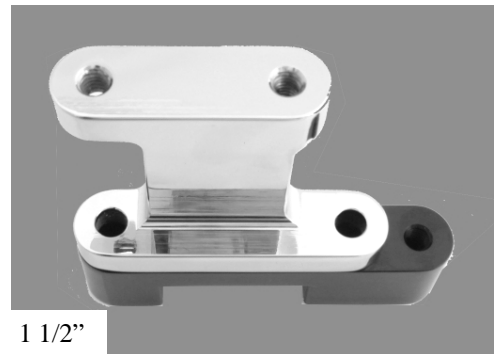


*Items 6-8 are included but not necessary for models without AIS canisters.

Adjustability Notes

(Shift side shown here)

1 1/2 Inch Forward: This adjustment puts your foot peg approximately 1 1/2" forward and 1" up from your stock position. Purchase of a shorter shift rod may be necessary. Modification of your existing rod is possible but not recommended. For this location, your frame bracket will be located with the plate spacer directly over the counter bored holes, and bolting down into your actual frame holes. (4) stainless M10 x 1.25 x 60-75MM socket head cap screws are required for this position, which can be purchased at better hardware stores or direct from Supreme Legends USA.



1 1/2"

2 1/2 Inch Forward: This adjustment puts your foot peg approximately 2 1/2" forward and 1" up from your stock position. You may use your existing shift rod for this location. Your frame bracket will be flipped towards the front with the 3/8-16 tapped holes in front of the frame bolts.



2 1/2"

INSTALLATION

Important Installation Notes:

- ◆ Please read entire instruction booklet prior to installation. This will familiarize you with the tools required to install this product and how the included items fit and operate
- ◆ Before attempting installation of this kit, make sure to check package to be sure you have received all the necessary items included with this product and that the kit is the correct unit for your motorcycle
- ◆ Prior to attempting any work on your motorcycle, disconnect the battery to eliminate any possibility of damage to the electrical system due to a short circuit
- ◆ This kit requires the replacement of the motorcycles factory rear master cylinder. Never reuse brake fluid or use fluid from a container that has previously been opened. Use only the factory recommended DOT replacement fluid.
- ◆ We recommend that you obtain your bike's factory service manual for detailed instructions on the removal of stock parts necessary for the installation of this kit
- ◆ Supreme Legends USA recommends that installation of all products be installed only by professional mechanics familiar with Yamaha motorcycles and their respective braking systems.

Preparation

Position motorcycle on a quality motorcycle lift with a weight rating greater than the weight of your motorcycle. Make sure motorcycle is securely positioned and locked down before attempting any work. Raise motorcycle to a comfortable position for installation procedure.

You understand and agree that the product is designed to be installed and used as described in the assembly instructions. You agree not to make any modifications to the product and agree not to use any parts, components, or accessories in connection with the installation and the use of the product that are not authorized and approved by us.

NOTE: *** You will need to relocate your horn once you remove your existing controls. Though we do not provide a location, we recommend relocating your horn in a conspicuous place in the front of the bike where the sound can be heard clearly.***

Installation Steps

Installing the Shift Control

Step 1: (Only on CA, and other state models which may be equipped with AIS canisters-all others may go to step 2) Remove your canister from it's mount by first removing the rubber return lines from the hard lines. Then remove the bolts which attach the canister to the mounting bracket. Be certain not to lose the clips from the rubber lines.

Step 2: Loosen the nuts on your existing shift rod. Next remove the rod completely from both rod ends by unscrewing in the appropriate direction. Please note the end towards the front of the bike is the "left handed" end, and also has a wrench flat. You will use this to identify the end later in the installation. Remove the nut off the existing control rod end to use later.

Step 3: Remove your stock controls from the frame, being sure to remove the wire clip from the bracket (press the small tab down at the back of the clip) before removing the control completely. Tuck clip into frame.

Step 4: Using the stock bolts which you removed, install the frame spacer in the desired position, using TLC.
*Note-Middle 1 1/2" forward position will require purchase of appropriate length bolts (M10 x 1.25 x 60-75MM)

Step 5: Using the provided 3/8-16 button head bolts (or M10 bolts for middle position) fasten the plate spacer to the frame spacer, being sure to use TLC. (Shift side spacer is shown in this picture. Brake side will be mirror image)

Step 6: Install the left handed rod end (provided) onto your new shift side control using the 5/16-24 bolt provided, again, being sure to use TLC

Step 7: Using the provided 3/8-16 flat head bolts, install the shift side control onto the plate spacers. Use the TLC.

Step 8: (Only on models equipped with AIS canisters-all others may go to step 15)
Using the provided 1/4" button head bolts, install the canister relocating bracket onto the back of the shift plate loosely. The bracket may be moved all the way forward or back as needed per your control's adjustment. Use TLC.

If moving bracket all the way back, insert the M6 socket head bolts into bracket. Slide bracket back to plate while allowing clearance for bolts to be tightened. Secure 1/4" bolts on the back of the plate. Install your canister onto new bracket.

***If you have a flat top style peg, we recommend doing this step later so that adjustments may be made without removing the canister.



Step 4



Step 5

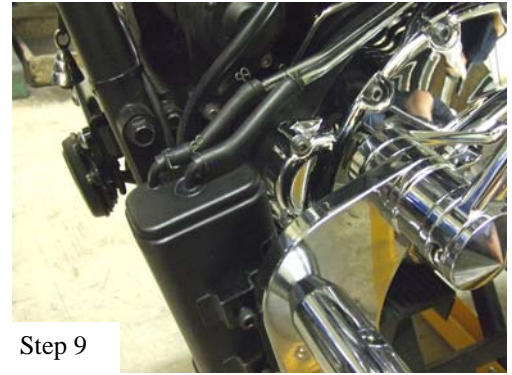


Step 8

Step 9: Reconnect your rubber lines to the hard lines as necessary.

Step 10: Install the left handed nut you removed from the stock control rod end onto the new rod end (remember...it's left handed). Next install the left handed side of your stock shift rod about 1 1/2 turns onto the new end, then begin installing the other end onto the stock rod end. Continue tightening until shift lever lifts up as far as possible.
(For 1/2 and 1 1/2" locations, a different shift rod may be required)

***Adjustment WILL be necessary to attain final rider comfort position. Adjustment at the rear shift link will be required, and this can be done by removing the bolt completely from the link, and moving the link back a few splines as necessary, Tighten nuts and replace the bolt into the link when adjustment has been attained. Front and rear shift linkage should be at the approximate same angle for best shifting leverage.



Step 9



Step 10

Installing the Brake Control

Step 1: Locate the factory brake switch and snip the wires about 2" from the switch. Leave the wires hanging for later use.

Step 2: Remove the stock bolts which hold your stock control to the frame. Once the bolts have been removed, turn the control as necessary to expose the cotter pin (below right) which holds the stock master cylinder push rod in place. Remove clip as necessary and remove control completely.

Step 3: Locate your stock rear master cylinder. Remove the two center bolts on the protective skirt.

Step 4: Remove banjo bolt from stock rear master cylinder (shown removed only for reference-you must remove the banjo bolt and drain fluids before removing master cylinder). Allow fluid to begin draining. Be certain to have a container to capture all fluids, and be certain to dispose of all fluids properly.

Step 5: You may now remove the master cylinder completely from the frame (as shown in step 4) and leave it to hang momentarily to drain. Be sure to capture any additional fluid which may drain.

***Note-the frame mounted cable ties which hold the lines going to the rear caliper are reusable if removed cautiously with a small flat head screwdriver.

Step 6: Remove your seat as necessary to expose your existing rear master cylinder reservoir, being sure to have wiped your hands of all fluids before touching the seat or any painted surfaces.

Step 7: Return to your master cylinder, and using a set of pliers, remove the clip which holds the main fluid line to the master cylinder. Remove line completely from master cylinder, and allow all remaining fluid to drain.

Step 8: Once fluid has been drained (look at your reservoir to verify) you can remove the banjo bolt at the rear caliper to allow residual fluid in line to drain completely.



Step 1



Step 2



Step 3



Step 4



Step 7

Step 9: Once all fluid is drained, you may remove your stock master cylinder reservoir. Remove the screw and begin pulling the reservoir slowly, while pulling on the rubber line as well, to slowly remove the line through the frame. Be certain not to allow contact between brake fluid and any painted surfaces. Wipe with a clean rag immediately if this should occur. Replace seat as necessary.



Step 10: Begin removing your existing brake line, by first removing the bolts (2) which secure it to the frame and swing arm. Next back the line through the support bracket (towards the top to clear the hose brackets) and remove the brake line completely from the bike. All components from the stock control should now be completely removed.



Step 11: Using the stock bolts which you removed, install the frame spacer in the desired position, using TLC.
***Note-Middle 1 1/2" forward position will require purchase of appropriate length bolts (M10 x 1.25 x 60-75MM)

Step 12: Using the provided 3/8-16 button head bolts (or M10 bolts for middle position) fasten the brake side plate spacer to the frame spacer, being sure to use TLC.



Step 13: Using the provided 3/8-16 flat head bolts, install the brake side control onto the plate spacers. Don't forget the TLC.

Step 14: Begin routing your new brake line from the rear caliper. Secure the 45 degree banjo side of the brake line to the caliper being sure to use crush washers on either side of the fitting. Be sure to gap your line by leaving a slight bend below the caliper and attach to the bracket using a cable tie.



Step 15: Continue routing line through the same locations which you removed your previous line until you reach the new master cylinder. Cable tie the line as necessary to ensure line is away from heat where possible.

Step 16: Install the new brake line up to the master cylinder. Orient the threaded 45 degree banjo fitting appropriately. Using the banjo brake switch, install the banjo fitting being sure to use crush washers on either side of the fitting. Once attached, snug up the female fitting on the line onto the banjo fitting. Do not over-torque!!!



Step 17: Connect the brake switch with the stock wires which were snipped in step 1. Polarity is unimportant as this is a simple open/close switch. Removable connections are best to allow for removal of brake switch during services.

Final Assembly

Step 1: Re-Connect battery terminals to battery.

Step 2: Unbolt master cylinder lid and fill with manufacturers recommended DOT brake fluid. (Remember to never reuse or mix old and new brake fluid, and never mix DOT 4 and DOT 5 brake fluids together). Bleed the brakes per your service manual. Check fluid level in reservoir periodically and fill as necessary to maintain full capacity of reservoir. ***Bleeding may take a bit of extra time with banjo brake switch

Step 3: Check to make sure that horn is functioning correctly.

Step 3: Press Brake pedal and watch brake light for illumination. The brake switch is a pressure switch and will not illuminate if brakes are not properly bled.

Step 4: Re-check all bolts for tightness***

Step 5: Enjoy your new Supreme Legends forward controls and be sure to always ride safely.

***We highly recommend use of Loc-tite #242 (blue) on all fasteners except banjo bolts to ensure they remain tight. Torque all bolts to factory specifications.



WARNING: FAILURE TO BLEED ALL THE AIR OUT OF THE BRAKE SYSTEM WILL RESULT IN POOR BRAKING AND/OR INCONSISTENT BRAKE PEDAL PRESSURE.

