

Instruction 51-1514
1-24-07

Copyright © 2006
by S&S Cycle, Inc.

All rights reserved.
Printed in the U.S.A.

S&S[®] Cycle, Inc.

235 Causeway Blvd.
La Crosse, Wisconsin 54603
Phone: 608-627-1497 • Fax: 608-627-1488
Technical Service Phone: 608-627-TECH (8324)
Technical Service Email: sstech@sscycle.com
Website: www.sscycle.com



Because every industry has a leader

Installation Instructions: Frame Lock™

DISCLAIMER:

S&S parts are designed for high performance, off road, racing applications and are intended for the very experienced rider only. The installation of S&S parts may void or adversely effect your factory warranty. In addition such installation and use may violate certain federal, state, and local laws, rules and ordinances as well as other laws when used on motor vehicles used on public highways, especially in states where pollution laws may apply. Always check federal, state, and local laws before modifying your motorcycle. It is the sole and exclusive responsibility of the user to determine the suitability of the product for his or her use, and the user shall assume all legal, personal injury risk and liability and all other obligations, duties, and risks associated therewith.

The words Harley®, Harley-Davidson®, H-D®, Sportster®, Evolution®, and all H-D part numbers and model designations are used in reference only. S&S Cycle is not associated with Harley-Davidson, Inc.

SAFE INSTALLATION AND OPERATION RULES:

Before installing your new S&S part it is your responsibility to read and follow the installation and maintenance procedures in these instructions and follow the basic rules below for your personal safety.

- Gasoline is extremely flammable and explosive under certain conditions and toxic when breathed. Do not smoke. Perform installation in a well ventilated area away from open flames or sparks.
- If motorcycle has been running, wait until engine and exhaust pipes have cooled down to avoid getting burned before performing any installation steps.
- Before performing any installation steps disconnect battery to eliminate potential sparks and inadvertent engagement of starter while working on electrical components.
- Read instructions thoroughly and carefully so all procedures are completely understood before performing any installation steps. Contact S&S with any questions you may have if any steps are unclear or any abnormalities occur during installation or operation of motorcycle with a S&S part on it.
- Consult an appropriate service manual for your motorcycle for correct disassembly and reassembly procedures for any parts that need to be removed to facilitate installation.
- Use good judgement when performing installation and operating motorcycle. Good judgement begins with a clear head. Don't let alcohol, drugs or fatigue impair your judgement. Start installation when you are fresh.
- Be sure all federal, state and local laws are obeyed with the installation.
- For optimum performance and safety and to minimize potential damage to carb or other components, use all mounting hardware that is provided and follow all installation instructions.
- Motorcycle exhaust fumes are toxic and poisonous and must not be breathed. Run motorcycle in a well ventilated area where fumes can dissipate.

IMPORTANT NOTICE:

Statements in this instruction sheet preceded by the following words are of special significance.



WARNING

Means there is the possibility of injury to yourself or others.



CAUTION

Means there is the possibility of damage to the part or motorcycle.

NOTE

Other information of particular importance has been placed in italic type.

S&S recommends you take special notice of these items.

WARRANTY:

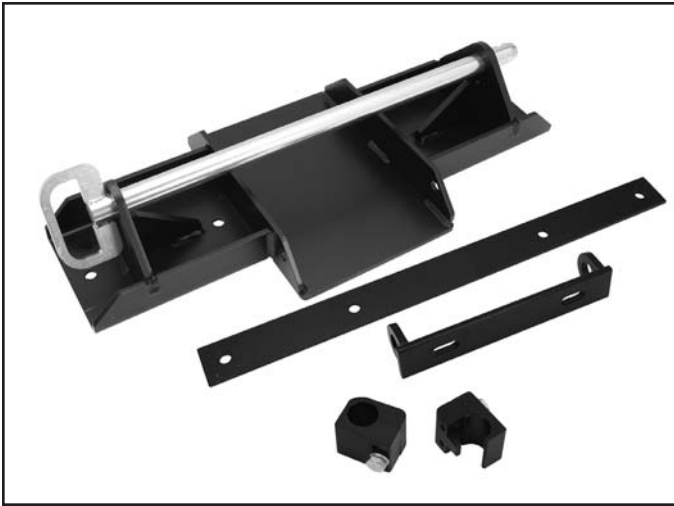
All S&S parts are guaranteed to the original purchaser to be free of manufacturing defects in materials and workmanship for a period of twelve (12) months from the date of purchase. Merchandise that fails to conform to these conditions will be repaired or replaced at S&S's option if the parts are returned to us by the purchaser within the 12 month warranty period or within 10 days thereafter.

In the event warranty service is required, the original purchaser must call or write S&S immediately with the problem. Some problems can be rectified by a telephone call and need no further course of action.

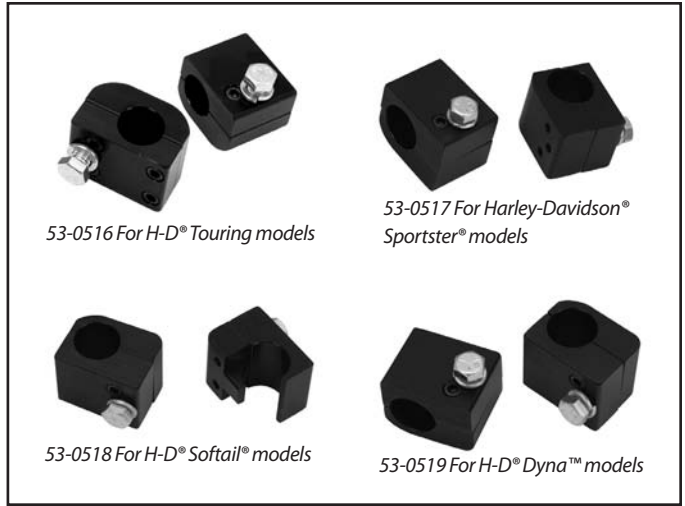
A part that is suspect of being defective must not be replaced by a Dealer without prior authorization from S&S. If it is deemed necessary for S&S to make an evaluation to determine whether the part was defective, a return authorization number must be obtained from S&S. The parts must be packaged properly so as to not cause further damage and be returned prepaid to S&S with a copy of the original invoice of purchase and a detailed letter outlining the nature of the problem, how the part was used and the circumstances at the time of failure. If after an evaluation has been made by S&S and the part was found to be defective, repair, replacement or refund will be granted.

ADDITIONAL WARRANTY PROVISIONS:

- (1) S&S shall have no obligation in the event an S&S part is modified by any other person or organization.
- (2) S&S shall have no obligation if an S&S part becomes defective in whole or in part as a result of improper installation, improper maintenance, improper use, abnormal operation, or any other misuse or mistreatment of the S&S part.
- (3) S&S shall not be liable for any consequential or incidental damages resulting from the failure of an S&S part, the breach of any warranties, the failure to deliver, delay in delivery, delivery in non-conforming condition, or for any other breach of contract or duty between S&S and a customer.
- (4) S&S parts are designed exclusively for use in Harley-Davidson® and other American v-twin motorcycles. S&S shall have no warranty or liability obligation if an S&S part is used in any other application.



Typical complete Frame Lock™ kit



53-0516 For H-D® Touring models

53-0517 For Harley-Davidson® Sportster® models

53-0518 For H-D® Softail® models

53-0519 For H-D® Dyna™ models

Clamp set for each model

FRAME LOCK™ BASE INSTALLATION

- 1- Start installation by deciding where the Frame Lock base will be mounted. It is best to position the motorcycle in the trailer to ensure adequate clearance between handlebars and wall of trailer, additional motorcycles, doors, etc.
- 2- Once location has been determined use Frame Lock base station to mark where holes must be drilled. It is best to start with a small drill and work up to a full ½-inch drill for the final size. Position the support bar under trailer floor. Pass customer supplied ½-inch diameter Grade 5 bolts (length depends on floor type—be sure that approximately ½" of thread is showing after tightening) through the Frame Lock base plate and support bar. Secure the assembly by placing a nylon nut on the bottom and tightening to 78 ft-lbs of torque.

FRAME LOCK CLAMPS AND EYELET BRACKET INSTALLATION

For Harley-Davidson® Touring models

- 1- Installation starts on the right (carburetor) side of the motorcycle with the two-hole frame clamp.
- 2- Loosen the clamp that holds wires to the frame.
- 3- Measure 7⅛" to 7½" from the transmission cross member and feed the two-hole top clamp (rounded profile) in place.



Picture 1



Picture 2

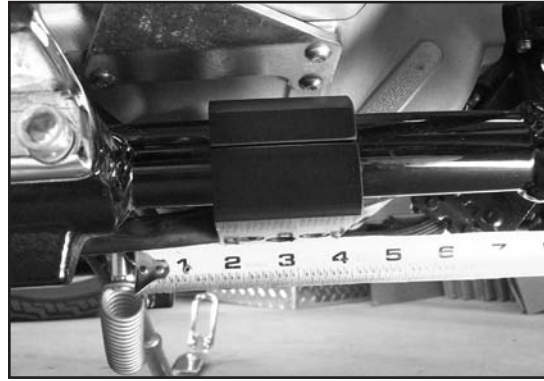
- 4- Install the bottom clamp and two included sockethead screws snug, but not tight at this time.
- 5- Measure the same distance from the transmission cross member (7⅛" or 7½") as you did on the carburetor side of the bike and install the four-hole top clamp (rounded profile). Install the bottom clamp and tighten the four sockethead screws, snug but not tight at this time. Mark the position of the clamp with tape on either side of the bracket (both sides of the bike) at this time.

For Harley-Davidson® Dyna™ Models

- 1- Both sides of the Dyna installation are the same.
- 2- Install the large side of the clamp to the inside of the frame.
- 3- Position the clamp (left and right) with 1½" forward of space between the front of the cross member and the rear of the clamp.
- 4- Install the clamp with the socket-head screws snug but not tight.
- 5- Move to step 6 and continue installation.



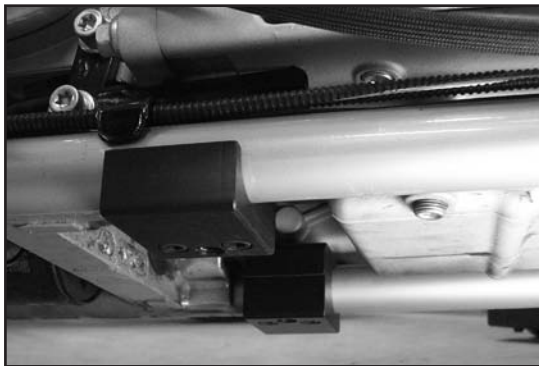
Picture 3



Picture 4

For Harley-Davidson® Softail® Motorcycles

- 1- The ¾ round clamp mounts on the right (carburetor) side of the motorcycle.
- 2- Position the clamps with 1 ¾" of space between the cross member and the rear of the clamps.
- 3- Remember the large portion of the clamp is mounted to the inside of the frame.
- 4- Install the clamp with the socket-head screws snug but not tight.
- 5- Move to step 6 and continue installation.



Picture 5



Picture 6

For Harley-Davidson® Sportster® Motorcycles

- 1- The notched clamp is mounted on the right (clutch) side.
- 2- The large side of the clamp is mounted towards the outside of the frame.
- 3- There needs to be 2¾" between the cross member and the back side of the clamp. If you have to remove the wiring harness clips, they can be mounted in holes on top of the Frame Lock™ clamps.
- 4- Install the clamp with the socket-head screws snug but not tight.
- 5- Move to step 6 and continue installation.



Picture 7



Picture 8

6- Mount the eyelet bracket with the included hex bolts securely. This will level the frame clamps.



Picture 9

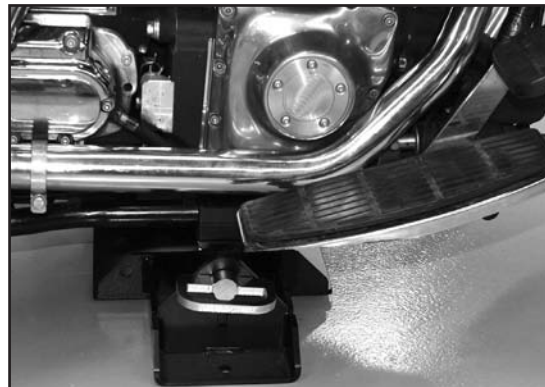
7- Remove the eyelet bracket and tighten the sockethead screws in the frame clamps.

⚠ CAUTION

Do not ride motorcycle with eyelet bracket in place for any reason. Eyelet bracket must be removed when motorcycle comes out of Frame Lock™ mount.

ATTACH MOTORCYCLE TO FRAME LOCK™ FOR TRANSPORTATION

1- Attach eyelet bracket to frame clamps and tighten hex bolts securely. Position motorcycle squarely and centered over Frame Lock base unit.



Picture 10

2- Slide the pin through the Frame Lock and eyelet bracket. Use a cotter pin or padlock (both customer supplied) to lock the pin in place. Slide the pin in place while you are seated on the motorcycle. It is not necessary to have someone assist you with pin insertion. If the holes do not line up perfectly it means you are not straight on the Frame Lock base. Turning the handlebars left or right will move the motorcycle horizontally to allow the pin to slide in. Be sure to install a locking device (customer supplied) in the pin once it is inserted.

REMOVING MOTORCYCLE FROM FRAME LOCK

- 1- Remove the pin while you are seated on the motorcycle.
- 2- Roll the motorcycle away from the Frame Lock base plate. Remove the eyelet bracket before riding the motorcycle.

⚠ CAUTION

Do not ride motorcycle with eyelet bracket in place for any reason. Eyelet bracket must be removed when motorcycle comes out of Frame Lock mount.