

Instruction 510-0930

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Version 3

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Installation Instructions: S&S® Grand National® Slip-On Muffler for 2022 Harley-Davidson® Nightster (550-1074)

DISCLAIMER:

Qualified manufacturer declared U.S. 50-State legal emissions replacement part on 2022 Harley-Davidson® Nightster.

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 judgment when performing installation and operating motorcycle. Good judgment begins with a clear head. Don't let alcohol, drugs or fatigue impair your judgment. 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.

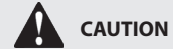
IMPORTANT NOTICE:

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.

Installation Steps

1. Tools Required:

- 15mm 3/8" Drive Deep Well Socket
- 13mm 3/8" Drive Socket
- 13mm 1/4" Drive Deep Well Socket
- 10mm 1/4" Drive Deep Well Socket
- 8 mm 1/4" Drive Socket
- 4mm 1/4" Drive Hex Socket
- 3/8" Drive Ratchet
- 1/4" Drive Ratchet
- 13mm Combination Wrench
- 14mm Combination Wrench
- 17mm Combination Wrench
- Torque Wrench (ft./lbs)
- Torque Wrench (in./lbs)

2. Removal of Stock Muffler:

- a. Using the 15mm deep well socket and 3/8" drive ratchet, loosen the nut on the stock muffler clamp until the clamp rotates and slides freely.
- b. Using the 8mm socket and 1/4" drive ratchet to loosen the collector heat shield clamps and remove the collector heat shield. It might help to loosen the header heat shield clamps also.
- c. If equipped, disconnect the stock oxygen sensor from the harness.
- d. Use the 17mm wrench to remove the oxygen sensor plug (or oxygen sensor if equipped) from the stock muffler.
- e. Using the 10mm socket and 1/4" drive ratchet, remove the 2x flanged hex head screws from the rear muffler mount bracket under the muffler. Save the 2 flanged hex head screws for reuse with the S&S muffler.
- f. Using the 10mm deep well socket and 1/4" drive ratchet, loosen the v-band clamp on the rear header. Using the 13mm deep well socket and 1/4" drive ratchet, or a 13mm combination wrench, loosen the flange nuts holding the front header tube to the exhaust port.
- g. Remove the muffler from the bike by sliding it rearward leaving the clamp on the header in front of the rearmost heat shield clamp.
- h. Verify the muffler inlet gasket came off with the muffler and clean any remnants off of the header.

3. S&S Muffler Installation:

- a. Verify the S&S gasket is fully seated in the muffler inlet and carefully install the S&S muffler onto the header, taking care to not damage the gasket. Once the muffler inlet is past the rearmost heat shield clamp, position the muffler clamp on the inlet similar to the stock installation.
- b. Continue sliding the muffler forward (align upper bracket hole with rubber mounted pin in frame mount) until the lower bracket slotted holes are centered over the bike bracket holes and the pin is seated.
- c. Using the 4mm hex socket and 1/4" drive ratchet, install the included M6 button head rear muffler mount screws. Do not

tighten yet. Alternatively the (2) stock hex head screws that were saved earlier can be reused...

- d. Hand thread the nut on the threaded pin in the rubber mounted bushing on the frame mount. Do not tighten yet.
- e. Position the muffler clamp on the inlet so the slots are fully covered and using the 15mm deep well socket and 3/8" drive ratchet torque the nut to 42 lb-ft
- f. Torque the (2) muffler mount screws to 15-18 lb-ft.
- g. Using the 13mm socket, 3/8" drive ratchet and 13mm combination wrench, tighten the nut and pin on the frame mount to the S&S muffler, torque to 15 lb-ft.
- h. Using the 13mm deep well socket and 1/4" drive ratchet, or alternatively the 13mm combination wrench, tighten the front header exhaust port flange nuts to 20 ft-lbs. Using the 10mm deep well socket and 1/4" drive ratchet to tighten the v-band clamp on the rear header to 15-18 ft-lbs.
- i. Reinstall the collector heat shield and using the 8mm socket and 1/4" drive ratchet tighten all heat shield clamps to 30-45 in-lbs
- j. Reconnect the oxygen sensor electrical plugs (if equipped). Apply anti seize to the threads and install it in the S&S muffler tightening to 15-18 lb-ft.
- k. Before operating the motorcycle, clean pipes and mufflers with soap and water or window cleaner. Any grease or oil will permanently burn onto pipes. Dry thoroughly.
- l. Check all mounting hardware to be sure it is tight before and after the first operation of the motorcycle. Periodically, check tightness of all mounting hardware.

HELPFUL HINTS TO MAINTAIN FINISH OF EXHAUST PIPES

AND MUFFLERS

- Make sure ignition timing is set correctly. Air filters must be serviced at regular intervals.
- Intake air leaks can cause engine to run lean and overheat, and thus discolor pipes.
- Make sure there are no exhaust leaks at the junction of the cylinder head and the exhaust pipe.
- Use fans to ensure that the exhaust system is not over heated when Dyno tuning.
- Avoid long periods of idling.
- Avoid the use of pressure washers, harsh chemicals or abrasive cleaners. If water gets into muffler during washing, remove moisture to prevent corrosion. Start the engine to warm up exhaust system.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	551-1865	MUFFLER, ASSEMBLY, GRAND NATIONAL, 4.5", BLACK, 2022 NIGHTSTER	1
2	551-1861	SHELL, MUFFLER, POWDERCOATED, 4.5", BLACK, 2022 NIGHTSTER	1
3	551-1851	BAFFLE, ASSEMBLY, MUFFLER, 4.5", 2022 NIGHTSTER	1
4	551-1858	INSULATION, MUFFLER, PILLOW PACK, ROLLED, 4.37" OD X 2.5" ID X 9.5"	1
5	551-1251	CAP, END, MUFFLER, GRAND NATIONAL, POWDERCOATED, 4.5", BLACK, DIE CAST	1
6	500-0569	SCREW, SHC, HIGH TEMP LOCK PATCH, 10-32 X 3/4", STAINLESS STEEL	3
7	500-0441	SCREW, BHC, HIGH TEMP LOCK PATCH, 1/4-20 X 3/8", STAINLESS STEEL	2
8	551-1857	Gasket, Muffler, 3.37" OD x 3.15" ID x 2", Stainless Grafoil	1
9	551-1274	BAFFLE, ASSEMBLY, MUFFLER, DIE CAST END CAP, 4.5", SAE J2825, 2"	1
10	551-1866	HARDWARE KIT, MUFFLER, 2022 NIGHTSTER	1
551-1866 - HARDWARE KIT - BILL OF MATERIALS			
11	500-1353	SCREW, BHC, HIGH TEMP LOCK PATCH, M6 X 22, STAINLESS STEEL	2

