



Assembly Instructions for Stealth Air Cleaner for Indian Challenger

Part Number : 170-0810

DISCLAIMER:

Many S&S parts are designed for high performance, closed course, racing applications and are intended for the very experienced rider only. The installation of S&S parts may void or adversely affect 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. 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.

Disclaimer: Exempt from emissions tampering regulations under CARB EO# D-355-XX for all 2020-2024 Indian Challenger and Pursuit models

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.

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 an 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.

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.

What's Included:

- High-Flow Air Filter for Indian Challenger for replacement of primary air filter
- Teardrop Air Cleaner Cover
- Cover Mounting Screws (1/4-20 x 1") - Sold as 2-Pack
- Stealth (Secondary) Air Filter
- Backplate
- Intake Coupler
- Frame Adapter
- Frame Adapter Gasket
- Worm-Drive Clamps - Qty of 2
- Backplate Mounting Screws (M6 x 1.0 x 25mm) - Qty of 3
- Carbon Canister Relocation Bracket
- Canister Relocation Bracket Screw (M6 x 1.0 x 16mm)
- Canister Extension Lines - Qty of 2
- Can. Ext. Line Elbow Fittings - Qty of 2
- Hose Clamps - Qty of 8

WARNING

- The safety of the motorcycle rider is dependent on proper installation of this product. If you are not certain of your capabilities or do not have the correct tools for this installation, please consult a shop to have it done. Improper installation of this product could result in injury or death to the rider.
- Ensure the kickstand is all the way down and the motorcycle is stable on level ground before working on it.

Primary Air Filter Replacement

Disassembly

1. Disconnect the negative battery cable from the motorcycle and route it away from any metal parts in the area.
2. Remove the stock air cleaner following the service manual for the specific year and model bike you are working on.
3. Discard OEM the air filter responsibly.

Installation

1. Replace OEM air cleaner with S&S Air Cleaner Replacement.
2. Leave the fuel tank off until the rest of your Stealth Air Cleaner Kit has been installed.

Carbon Canister Relocation

1. Remove the three screws securing the RH bracket cover and remove the RH cover.
2. Disconnect all lines from the carbon canister.
3. Remove the three screws securing the canister bracket and remove the bracket assembly.
4. Lubricate with isopropyl alcohol and slide the canister mounting sleeve (keeping the canister in its band) off of the factory canister bracket.
5. Dispose of the factory bracket and cover responsibly.
6. Remove the canister from the band.
7. Retain black elbow fittings shown in picture 1.
Note purge / vent line positions.



Picture 1

8. Locate S&S carbon canister relocation bracket and install canister sleeve onto bracket arms, lubricate with iso. alcohol as needed.
9. Install retained elbow fittings in purge and tank vent line ports.
10. Install purge and tank vent lines onto the canister as shown in picture 2. Lubricate with iso. alcohol as needed.



Picture 2

11. Install hose clamps over the reused elbow fittings.
12. Loosely place hose clamps over each hose before installing the provided elbow fittings to open ends of canister extension lines. Do not clamp yet.
13. Remove the cooling fan shroud.
14. Modify the shroud as shown in the picture. Cut along the dotted line, resulting in the shroud in the lower half of picture 3.



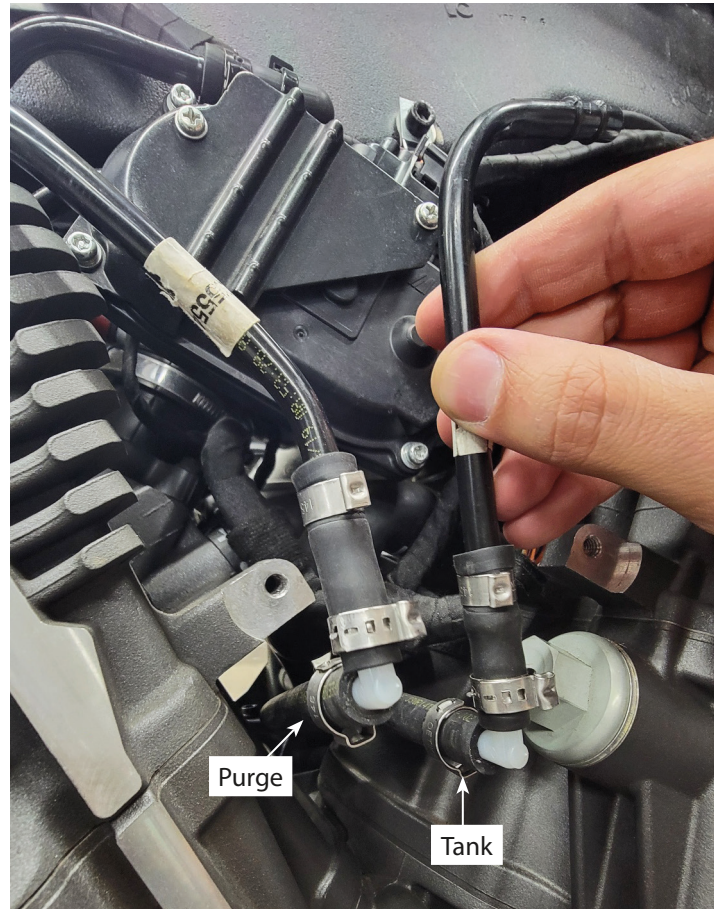
Picture 3

15. Remove the three screws securing the LH bracket cover and remove the LH cover.
16. Remove the forward most coil bracket mounting screw.
17. Guide the Canister extension lines through the "V" of the engine.
18. Mount the Canister Bracket assembly using the provided M6 x 16mm screw and coil bracket mounting screw previously removed. Tighten to 72 in-lb / 8.1 N·m.



Picture 4

19. Reinstall modified fan shroud.
20. Attach purge and tank vent lines as shown in picture 5.



Picture 5

21. Tighten remaining hose clamps.

Stealth Air Cleaner Assembly

1. Remove the airbox hatch cover, located on the right side of the frame.
 - a. Retain M6x1.0x10mm shoulder screw (Polaris PN 7519203) for reuse. Discard hatch cover responsibly.
2. Move connector to location shown and zip tie to prevent connector from resting on engine. (*Shown in picture 5*)



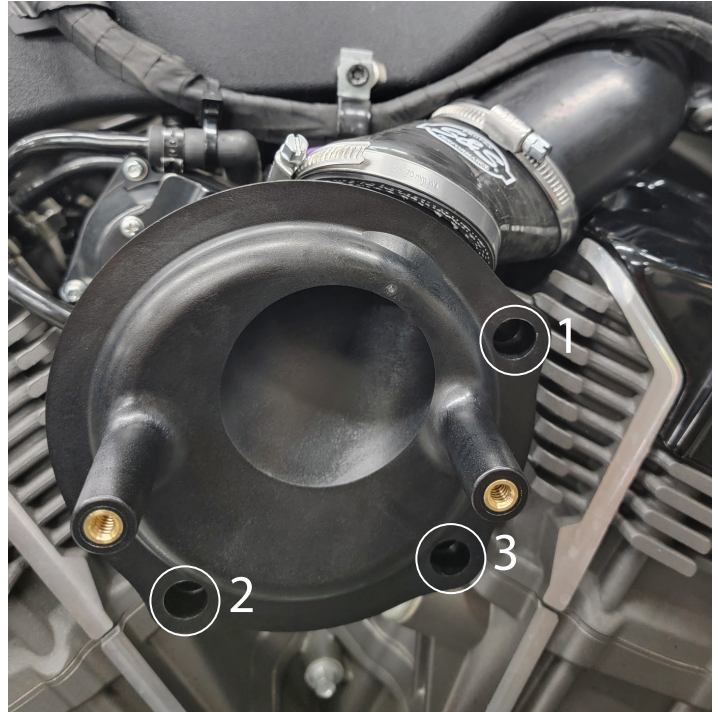
Picture 5

3. Apply the Frame Adapter Gasket to the Frame Adapter, adhesive side toward the Frame Adapter.
4. Install Frame Adapter onto the airbox hatch. Secure using saved M6x1.0x10mm shoulder screw. Do not fully tighten yet.
5. Fit Intake Coupler over Frame adapter with logo upright and facing out, as shown in picture. Note the position of the clamp screw head. Do not tighten yet.



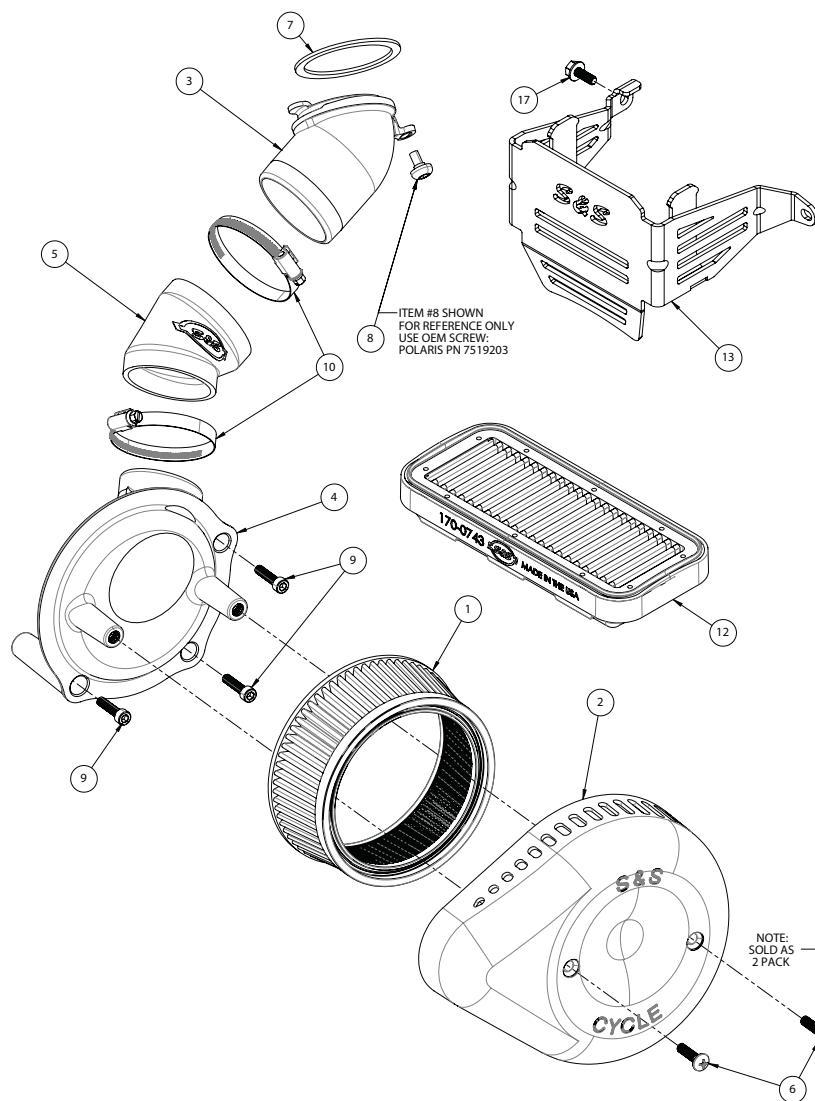
Picture 6

6. Locate the three Backplate mounting screws (M6 x 1.0 x 25mm) and apply a drop of blue threadlocker to the threads of each screw.
7. Slide the Intake Coupler over the Backplate runner and mount the Backplate to the engine as shown; start the upper right screw, then start the lower left screw. Finally, start the lower right screw. Tighten each Backplate mounting screw evenly until the backplate is snug.



Picture 7

8. Tighten all three Backplate mounting screws to 72 in-lbs / 8.1 N-m
9. Center the Intake Coupler between the Backplate and Frame Adapter.
10. Tighten worm drive clamps to 24 in-lbs / 2.7 N-m
11. Tighten Frame Adapter screw to 24 in-lbs / 2.7 N-m
12. Locate the two Teardrop Cover mounting screws and apply a drop of blue threadlocker to the threads of each screw.
13. Place the cover over the air filter, making sure the grooves on the inside of the cover engage with the slot in the air filter.
14. Align the Teardrop Cover / Secondary Filter assembly with the mounting screw holes on the Backplate. Install the air cleaner cover screws with a Phillips screwdriver. Tighten screws to 72 in-lb / 8.1 N-m.
15. Reinstall the fuel tank and seat per the service manual for your motorcycle.
16. Reconnect battery.
17. Install CARB EO Product Identification Label. Included with this S&S Air Filter is a CARB EO label. This label must be permanently installed on or near the system and must be visible when the system is installed. S&S recommends placing the label on the frame near the manufacturer's labels.



Stealth Air Cleaner Assembly

Item No.	Part No.	Description	Qty
1	170-0043	Filter, Air, Tapered, Standard Pleated, 5.500" x 6.000" x 2.375", Cotton, Stealth Air Cleaner Kit	1
2	170-0540	Cover, Air Cleaner, Stealth, Teardrop, Slasher, Gloss Black	1
3	170-0776	Adapter, Frame, S&S® Stealth Air Cleaner, Intake Runner, Indian® Challenger	1
4	170-0774	Backplate, Air Cleaner, Stealth, Injection Molded Plastic, Indian® Challenger	1
5	170-0775	Coupler, Air Cleaner, Stealth, Silicone, Polyester Reinforced, 2020-up Indian Challenger	1
6	50-7015	Washer, Flat, .255" x .438" x .024", Rubber Coated, Steel	3
7	500-0711	Screw, Air Cleaner Mounting, 1/4-20 x 1", Black, 2 Pack	1
8	170-0778	Gasket, Frame, Stealth Air Cleaner, Indian® Challenger	1
9	7519203	Screw, M6x1.0, 10, Hex, But, Shld, Blk	1
10	LFT-0060	Screw, Socket Head Cap, M6 x 1.0 x 25mm, FTR750 Indian®	3
11	500-1746	Clamp, Hose, Worm Drive, SAE #36	2
12	170-0745A	Filter, Air, CARB EO# D-355-43, Replacement, Packaged, 4 Ply, 2020-'22 Indian® Challenger Models	1
13	170-0815	Bracket, Relocation, Canister, Evaporative Emissions, Gloss Black, 2020-up Indian® Challenger	1
The following parts are not shown in the exploded view			
14	170-0806	Line, Canister, 30R11 x 1/4" ID, 2020-up Indian® Challenger	2
15	170-0807	Fitting, Elbow, 90°, Barbed, 1/4", Nylon	2
16	500-1891	Clamp, Hose, Pinch Style, 1/2" - 3/7/64, Stainless Steel	8
17	500-1905	Screw, Hex Head, Flanged, M6 x 1.0 x 16mm, Stainless Steel	1

