

WANT POWER?

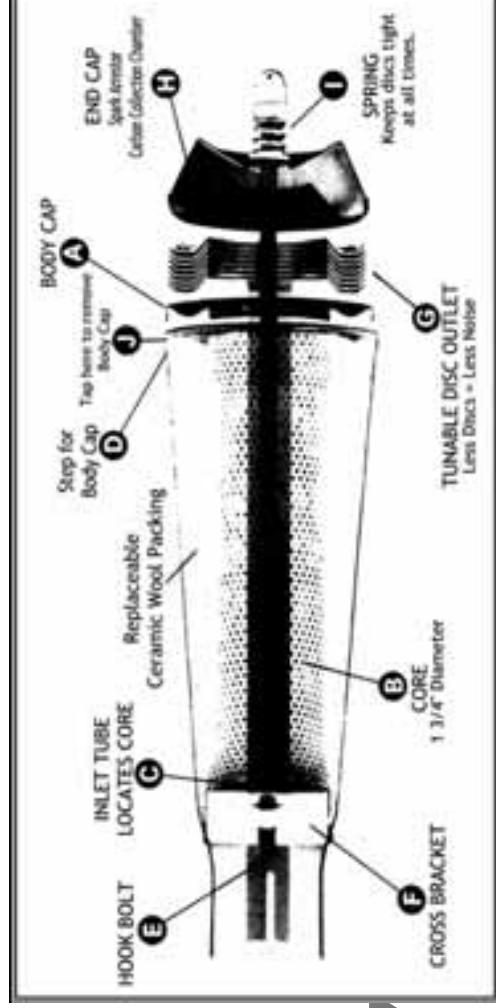
POWERROLL



SUPERTRAPP®

READ THIS!

3" Steel U.S. Forest Service Approved Spark Arrestor



Disassembly & Reassembly Instructions

DISASSEMBLY & REPACKING INSTRUCTIONS

1. Remove Body Cap (A) from Body.
2. Stuff Body with packing material:
 - a. Peel off a layer about 1/3 of the ceramic pad thickness.
 - b. Wrap the remaining 2/3 of the pad tightly around Core with long side going around core).
 - c. Push Core (B) into Body making sure it fits over tube (C) inside inlet end. Press end of Body against a flat surface to make sure Core is seated.
 - d. Use pieces of extra ceramic wool to pack end of Body.
 - e. NOTE: The ceramic wool must be packed tightly to prevent the small fibers from blowing out.
3. Replace Body Cap (A) by tapping lightly with hammer until it seats squarely on step (D) in Body. Make sure inner lip on Body Cap fits inside Core.
4. Install Hook Bolt (E) in Cross Bracket (F) so that it fits into slots EXACTLY as shown.
5. Mount Diffuser Discs (G) and End Cap (H) making sure V-notches around the outer edge interlock. (See Tuning Guide for recommendations on the number of discs to use).
6. Install washer, spring (I) and dimpled lock nut and tighten until the spring closes completely. NOTE: This spring will keep tension on the discs when the bolt gets hot and expands.
7. For double security, use the standard nut supplied as a jam during testing. Use two wrenches to tighten the nuts against each other.

8. For safety, use the acorn nut on the end of the remaining bolt threads. When you have determined the proper number of discs, cut off the excess threads and replace the standard nut with the acorn nut. Always oil bolt threads before removing or replacing the nuts.

IMPORTANT ASSEMBLY POINTS

- It is illegal to increase the gap between the discs. This small (.023") gap is designed to retain hot carbon particles and is essential to both the spark arrestor and silencer operation. The back-pressure can be lowered more efficiently by adding discs.
- To remove the Body Cap for cleaning or repacking, tap around end of Body as shown in (J) of cut-a-way.
- The discs are likely to settle during initial operation, however, DO NOT RETIGHTEN WHEN HOT.

CLEANING

The End Cap (H) or accessory Resonator is the spark arrestor's carbon collection chamber and requires periodic cleaning to insure efficient engine operation. The collection capacity is sufficient for months of normal use but the discs may become plugged if the chamber overflows.

The discs are made of stainless steel are designed to resist collapsing and clogging. However, they should be inspected periodically and cleaned of any deposits around the inner lip.

The discs may be brushed or chemically cleaned. Caustic agents such as oven cleaners are very effective if the discs are preheated.

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POWROLL HEADPIPE INSTALLATION INSTRUCTIONS

Powroll pipes are designed for maximum performance while maintaining reasonable sound levels. However, with added performance, you can expect a rise in exhaust system sound levels. Some Powroll units are appropriate only for closed-course use. Please follow the sound level requirements for your riding areas.

- ▶ Carefully wash bike before removing old exhaust system. Be especially concerned with the areas around the stock pipe.
- ▶ Familiarize yourself with stock mounting locations and pipe routing, then remove the system.
- ▶ Assemble the Powroll exhaust system & place it on the machine (use a new OEM exhaust pipe flange gasket). Note mounting locations on the new pipe, and check your mounting hardware kit. Be sure you have the correct bracket and bolts to mount the Powroll pipe.
- ▶ Install springs and mounting hardware, finger tighten all bolts. Wiggle head pipe until everything comes into alignment. Check to be sure all body work, hoses, wires and cables clear the exhaust system.
- ▶ Start the engine and check for excessive exhaust leakage (a small amount of leakage is normal until carbon builds up at joints). There will be some smoke coming off the exterior of the exhaust system. When this occurs, turn the engine off. A few gentle heat cycles will cure the pipe coating and ensure a good appearance.
- ▶ When engine and exhaust system have cooled, re-check mounting hardware for tightness. Do not attempt to check anything while engine is running or still warm!

SUPERTRAPP TUNING INSTRUCTIONS (for use with Powroll systems)

The Supertrapp 3" steel muffler can be tuned by adding and removing disks. NEVER run your Powroll system without the end cap or disks, this can damage your engine (and will reduce horsepower!). A basic rule of thumb: More disks = increased top end, and louder exhaust note. Less disks = increased torque and quieter exhaust note.

Below are recommendations by displacement. These are baseline numbers, and are a good starting point. Usually, an engine that is close to stock configuration will run best with less disks, and a highly modified engine will like more. Engines, which are running very long duration camshafts and other extreme modifications, run better with more disks. Engines with broad powerbands typically run best with fewer disks.

These are just baseline numbers to get you in the ballpark. Try less disks, then more, see what you like best! Just be sure to check your jetting.

Engine Displacement	Qty of Disks
0 - 50cc's	3-4
51 - 75cc's	4-6
76 - 100cc's	6-8
101 - 199cc's	8-10
200 - 249cc's	10-12
250cc & Up	16-18

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POWROLL JETTING INSTRUCTIONS

YOUR POWROLL EXHAUST SYSTEM IS FREER FLOWING, AND WILL CREATE MORE POWER WITH CORRECT JETTING CHANGES.

FAILURE TO PROPERLY RE-JET YOUR CARBURETOR CAN RESULT IN ENGINE DAMAGE!

Jetting depends upon several factors, including altitude, fuel density and engine modifications. Typically increasing the main jet at least 2 sizes, and moving the clip down one position on the needle is a good starting point. Start from this over-rich setting and work down until plug reading is correct and the engine runs smoothly. If you have questions, or have not worked with a four stroke carburetor before, check out our jetting specifications and 'jetting 101' on our website at http://www.powroll.com/tech_specs_jetting.htm