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INSTRUCTION SHEET FOR PART No.5460

NO. 5460 IS A KIT TO REPLACE THE FAN MOTOR AND FAN BLADE ON JIMS FORCEFLOW CYLINDER HEAD COOLER.

Tools and supplies needed for this job:

- 1/2" and 7/16" socket and ratchet wrench
- Torque wrench
- 2.5 mm Allen wrench
- 5/32" Allen wrench
- Blue Loctite

Caution: *Be sure to keep hands and fingers clear of the fan blade. Keep all wiring routed away from the fan blade as well as the cylinder fins. Be sure to read 5400-is instruction sheet in addition to this before beginning the job.*

Remove the Forceflow cooler from the motorcycle:

1. Remove the acorn nut and JIMS logo disk from the top of the Forceflow mount.
2. Remove the acorn nut and washer from the bottom of the Forceflow mount and pull the cooler housing assembly from the motorcycle. It is best to have a helper hold this assembly.
3. Disconnect the white 4 position connector from the Forceflow assembly by depressing the 2 lock tangs and pulling apart. Remove the 2 horn connector wires from the bikes original horn connectors. When Forceflow assembly is free, set it down on a padded surface with the fan blade facing up.
4. Remove the 3 screws that attach the cover to the backing plate with a 5/32" Allen wrench. Pay special attention to the rear screw as it has a bumper and spacer that must be replaced in their proper location upon re-assembly. Remove the outer cover and set aside. Take notice of how the wiring is routed so you can duplicate this after motor installation.
5. Remove the fan blade and end cover by grabbing the center hub with your hand and pulling straight up. If necessary gently pry up with 2 flat screwdrivers, prying against backing plate on opposite sides of the fan blade. Once the fan blade is removed, remove the end cover by pressing it out of the fan blade with a 3/8" dowel or similar tool.
6. Disconnect the 2 wires from the old motor. Remove the 2 screws that hold the motor to the backing plate with a 2.5mm Allen wrench.
7. Install the replacement motor to the backing plate with 2 No. 5421 Allen screws using blue Loctite. The motor should have the red terminal facing up toward the switch. Install the spade connectors onto the new motor being certain the black wire connects to the terminal with the red dot, and bend the connectors 90° to the outside for cover clearance. **See Fig. 1.**
8. Install the fan blade, noting that the motor shaft has a flat or D shape that must engage the fan blade which has the same D shape. With tapered end toward motor, push firmly down on the fan blade making sure the fan is perpendicular to the motor shaft. Press fan on until there is .068" gap between the fan blade base and the backing plate. The end cap is cosmetic and is not necessary and we recommend leaving it off. If you want to install it, press the end cover into the fan blade hub until flush.

PARTS AVAILABLE SEPARATELY

QTY.	DESCRIPTION	PART NO.
1	MOTOR, DETMAR	5404
1	MACHINED FAN BLADE	5405
2	SCREW, 3mm x .5 x 10mm, SHCS	5421
1	INSTRUCTION SHEET	5460-IS
1	INSTRUCTION SHEET	5400-IS



Performance Parts For Harley-Davidson Motorcycles



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INSTRUCTION SHEET FOR TOOL #5460

9. Re-install the cover using blue Loctite on the screws. Make sure wiring is routed snug through the grommet and clear of the fan blade. Be sure and replace the spacer and bumper on the rear screw.
10. Re-install the connectors to the horn harness and the main Forceflow wiring harness.
11. Mount the Forceflow unit to the 2 isolator mounts and replace hardware using blue Loctite. Grab the housing and wiggle it to make sure the fan does not contact the cylinder fins.
12. Test the fan by riding the motorcycle for about five miles. Get the engine hot enough so that the thermostat reaches 140 degrees. Sometimes it is best to shut the engine off after riding while leaving the ignition on. As the heat of the motor radiates up toward the thermostat, the fan should turn on. **Do Not Use A Heat Gun To Heat Thermostat For Testing!**

CAUTION: WEAR SAFETY GLASSES OVER YOUR EYES.
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