



INDY SPECIALTY, LLC

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PATRIOT 850 FLOWMASTER HEAD INSTRUCTIONS

1. Drain the coolant by removing one of the lower coolant hoses from the motor. Be sure to use a few drain pans under the sled to catch the spilling coolant. A Mity-Vac style suction drain works great to remove coolant without spilling
2. Remove the rear coolant hose and the smaller coolant hose near the oil tank. Remove the spark plug wires and remove the spark plugs from the head. Unplug the coolant temp sensor out of the center of the factory head. Remove temp sensor
3. Loosen the bolt to the knock sensor and remove it from the head as well
4. You can now start loosening and removing the head bolts. Remove head from the engine
5. You can reuse cylinder o-rings or purchase new ones from your local dealer if you choose to do so. If your sled has ever overheated, it is best to replace the gaskets then.
6. Install the O-rings in your kit over the spark plug openings of the domes. Install the domes into the billet headcover. The direction of the domes does not matter. You are now ready to install the Flowmaster Billet head on the engine.

7. Lightly grease the factory O-rings in the groove of the cylinders. Place the head on the engine. A trick is to put a set of spark plugs into the domes as it makes it easier to set the head on without the domes falling out. Make sure the O-rings are still in place and did not move or get pinched. Supplied head bolt o-rings need to be installed on each head bolt, use a small amount of 2-stroke oil or grease for lubrication, then install and hand tighten bolts. Using a calibrated torque wrench, torque the head bolts in a criss-cross pattern to 24ft-lbs.
8. Reconnect the coolant hose in the rear of the head and the smaller hose on the right side of the head near the oil tank. You will need do thread in the large fitting, be sure to use thread tape for proper sealing. Screw-in and tighten the coolant temp sensor as well as the knock sensor and torque that to 168in-lbs.
9. Fill sled with 50/50 coolant mix. Start the sled and add coolant as necessary until it maintains coolant in the overflow tank and all tunnel coolers are warm through out

THANK YOU FOR CHOOSING **INDY SPECIALTY FOR ALL YOUR POLARIS MOTOR NEEDS**

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