

47cc Pocketbike Head Kit Installation Instructions

Contents:

1 - machined cylinder	1 - base gasket
1 - billet head shell	1 - NGK CMR7H spark plug
1 - dome	
1 - .020" copper head gasket	Some kits also include:
4 - 6x85mm allen bolt	1 - piston
4 - 6mm flat washer	2 - piston rings
4 - 6mm lock washer	1 - piston pin
	2 - piston pin clips

What tools you will need:

5mm allen wrench
Torque wrench

Specs for machining cylinder:

40mm - height from base to top of cylinder 2.290", top lip diameter 1.955" w/minimum of .120" tall

44mm - height from base to top of cylinder 2.275", top lip diameter 1.955" w/minimum of .120" tall

Please Note: This is not an installation for beginners. This should be done by an experienced high-performance mechanic only. Improper installation can result in damaged parts!

Step 1: Remove the exhaust pipe, cylinder, and base gasket. Remove the stock piston if your kit came with a new one. Wipe the cylinder mounting surface of the cases clean.

Step 2: Clean the new machined cylinder thoroughly and apply a thin coat of oil to the cylinder wall.

Step 3: Install the new base gasket, we recommend using a gasket sealer such as Threebond 1211 on the case surface only. This allows for future removal of the cylinder without damaging the gasket.

Step 4: If your kit came with a new piston, install the piston. If there is an arrow on top of the piston it should point towards the exhaust port side of the cylinder. If there is a port window in the piston, it should be opposite the exhaust port.

Step 5: Install the machined cylinder onto the piston, carefully compressing the rings to install the piston into the cylinder.

Step 6: Install the dome into the head shell and then place the copper gasket into the head shell. You can use small dabs of grease to hold the gasket into place. The copper head gasket will seal the surface between the dome and the top of the cylinder. Note: the copper head gasket is reusable and does not need to be replaced unless damaged. It can also be easily straightened when bent. The kit is supplied with a .020" head gasket, this puts the assembled squish (piston to dome) clearance at approximately .030". We also have .015" and .025" copper head gaskets available for an additional cost.

Step 7: Place the head and dome assembly onto the top of the cylinder. The flat side should face the coil. Be careful as the dome may fall out of the head shell when holding upside down. Use the 4 6x85mm allen bolts and place a 6mm lock washer and then a 6mm flat washer onto each bolt. Evenly hand tighten all 4 bolts in a criss-cross pattern, making sure that the head shell is being tightened down level.

Step 8: Torque the head bolts in a criss-cross pattern to 6 ft/lbs, then to 8-10 ft/lbs. Make sure to tighten all bolts evenly and do not over tighten. Over tightening and/or tightening the head down crooked can cause damage to the parts and cause the product to not function properly.

Step 9: Carefully rotate the engine a few times to make sure everything operates smoothly. If it does not turn smoothly, you will need to inspect everything carefully to find the problem.

Step 10: Install the spark plug and tighten.

Step 11: Re-check installation and torque all bolts after initial 15 minutes of running time. Periodical maintenance is also required. This is a performance item and it must be maintained.