



ENGINE PORT POLISHING KIT

#4362

INSTRUCTIONS FOR PORTING AND POLISHING CAST IRON OR ALUMINUM ENGINE COMPONENTS

CAUTION: CUTTING STONE, ABRASIVE ROLLS OR WHEELS SHOULD NOT BE OPERATED ABOVE 18,000 RPM. BE SURE TO WEAR EYE PROTECTION WHEN USING ABRASIVE TOOLS.

1. DISASSEMBLE HEADS AND MAKE SURE ALL SURFACES ARE CLEAN BEFORE STARTING, APPLY DYE OR INK MARKER TO INTAKE AND EXHAUST SURFACES. FASTEN GASKET IN PLACE AND SCRIBE INNER EDGE.
2. USE TAPERED CUTTING STONE FOR INITIAL CUT ON PORTS (INTAKE/EXHAUST) AND TO REMOVE FLASHING. KEEP CUTTING STONE MOVING BACK AND FORTH SO IRREGULAR SURFACES ARE NOT CREATED. DO NOT GRIND OUTSIDE OF SCRIBED LINES.
3. AFTER USING TAPERED CUTTING STONE ON PORTS, USE ABRASIVE ROLLS WITH DIFFERENT LENGTH MANDRELS TO EXTEND INSIDE PORTS TO BLEND AND POLISH. USE LARGER ROLLS ON INTAKE PORTS, SMALLER ROLLS ON EXHAUST PORTS.

IMPORTANT: WHEN MOUNTING GRINDING/POLISHING CARTRIDGE ROLLS, TAPERED MANDREL MUST BE INSERTED INTO GLUED END OF ROLL TO PREVENT UNWINDING. THREAD MANDREL INTO ROLL AND TURN UNTIL TIGHT.

4. FOR FINAL BLENDING AND POLISHING, USE THE 1" FLEX FLAP WHEEL AND THE BUTTERFLY FLAPPER. (CUT A 1" X 4" STRIP OF ABRASIVE CLOTH, FOLD IN HALF AND INSERT INTO SPLIT END OF SLOTTED MANDREL).
5. CLEAN ALL INTAKE AND EXHAUST VALVES, THEN INSERT VALVES IN HEAD TO PROTECT VALVE SEATS. USE TAPERED CUTTING STONE, ABRASIVE ROLLS AND FLAP WHEEL TO "CLEAN UP" COMBUSTION CHAMBERS. BLEND IN ALL SHARP EDGES. BE CAREFUL, DO NOT REMOVE TOO MUCH METAL IN THE COMBUSTION CHAMBER, THIS WILL REDUCE COMPRESSION. DO NOT GRIND SPARK PLUG HOLE THREADS AND AREA AROUND VALVE SEATS.
6. FROM COMBUSTION CHAMBER SIDE, BLEND AREA BELOW VALVE SEAT DOWN INSIDE VALVE POCKET. STAY 1/8" AWAY FROM VALVE SEAT TO AVOID NICKING OR GOUGING OF SEAT.

CONTENTS OF KIT:

	QTY
TAPERED CUTTING STONE	1
GRINDING/POLISHING ROLLS-ASSORTED SIZES AND GRITS	28
1" FLEX FLAP WHEEL	1
MANDRELS-SLOTTED AND TAPERED STYLE-LONG/SHORT	3
ABRASIVE ROLL 1" X 5"	1