D120 Porting Kit

A 21-piece kit to port and Gas flow 4 stroke engines
2 cyl. 250cc and over
4 cyl. 750cc and over

This kit contains the following:
1 off 6mm dia A24 mounted grinding wheel
1 off tapered A3 mini mounted grinding wheel
4 off 10mm dia. plain & tapered cartridge rolls in coarse & fine grades
4 off 12mm dia. plain & tapered cartridge rolls in coarse & fine grades
4 off 19mm dia. plain'& tapered cartridge rolls in coarse & fine grades
2 off mandrels (1 for cartridge rolls and 1 for felt cones)
1 off 30mm dia. x 10mm flap wheel
1 off wire de-carb brush
2 off felt cones (1-12mm dia. and 1-19mm dia.)
1 off 80gram bar polish

What is Porting?
The inlet and exhaust passages in the cylinder head of an engine are known as 'ports'.
Porting an engine is achieved by smoothing out and polishing the ports to allow the more efficient flow of the induction and exhaust gasses.

How does this improve performance?
An engines performance is dependent upon the volume of air it draws in on the induction stroke, how well it mixes this air with the fuel, how well it burns it and how well it exhausts the spent gasses. The more air the better the performance. With air (gasses), velocities through the ports at approximately 300 ft/sec, any rough surfaces will have a considerable slowing down effect. This applies equally to the exhaust, if these gasses are slow in reaching the cylinder then the fresh charge is slow in entering. Turbulence, or movement of the air during combustion is also desirable in a well running engine. Polishing the combustion chamber not only helps this but in addition assists in preventing any build up of carbon deposits.

Can anybody do it?
Yes, if you have the skill to carry out a cylinder head overhaul and decoke. If so, then you should have no trouble with porting. All that is required is an electric drill and the necessary porting tools for smoothing and polishing the airways. These are supplied with this kit.

Why is Porting not done in manufacture?
Porting is an operation that is essentially a manual operation and does not therefore lend itself to mass production methods. Subsequently very little (if any) machining is carried out during the manufacturing process.