

INSTRUCTIONS FOR OPERATING 1 3/4" TO 2 3/4" CYLINDER HONE

If dry honing, clean each cylinder thoroughly with an approved solvent and wipe dry. Be sure there is no oil or grease left in cylinder to get on stones. If stones should clog with gummed oil or other material, clean with wire brush. **ALWAYS KEEP STONES CLEAN.**

Honing with a honing oil will produce a smoother finish and generally remove material faster than dry honing. If honing oil is not available, a mixture of 8 parts kerosene to 1 part oil will suffice. Keep cylinder walls wet so fluid will wash away material you are removing from cylinder walls.

Select and install proper stone and guide block set for cylinder bore. The hone is furnished with medium (180) grit stones.

Check to make sure stones are parallel their full length. Use a caliper and measure across the stones at top, center and bottom. Correct any taper in stones by dressing with the abrasive paddle supplied.

Expand hone in cylinder and see that the guide block lightly contact cylinder when stones are bearing firmly against walls. **IMPORTANT! Do not expand hone beyond the point where more than 3/16" of the jaw extends out of the hone body. Keep at least 1/8" of the jaw engaged in the hone body at all times.**

Begin honing at lower or smaller end of cylinder, using medium pressure on stone. Hone there until stones cut through glazed surface and begin enlarging that portion. Then make occasional passes up and down to true entire length of bore. When the uneven pull of drill ceases, the cylinder is nearly true. Continue honing full length of cylinder using a reciprocating motion until desired measurement and finish are achieved. Care should be taken to avoid excessive tension on the tool since this could cause the stones to break. The recommended honing RPM will vary with the cylinder diameter. The equation to determine honing RPM is: 1200 divided by the cylinder diameter. A 3" cylinder diameter would require 400 RPM.

CAUTION: Do not take the hone out of the cylinder or allow to pass too far through the cylinder while it is running as it might damage the tool or cause personal injury. The operator should not wear loose clothing while honing and rotating parts should be avoided. **WARNING: WEAR SAFETY GOGGLES.**

If guide blocks do not wear as fast as stones, causing them to bear tightly, cut blocks down with abrasive dresser supplied. If they bear too tightly, chattering will result. Don't fail to cut down the blocks when tight. Always use same blocks with stones.

When honing is completed, scrub and wipe cylinder thoroughly to remove all loose or embedded grit. The use of soap and water, followed by a light oiling to prevent rust, will help to clean the cylinder walls.

NOTE: When honing an aluminum block, do not use stones supplied with hone. Use special stones that are made especially for use with aluminum.