



Dear Husqvarna Dealer,

On the following pages you will find how to modify a 390 CR, OR, or WR cylinder 1980 model to a 420. All cylinder work should be done after the cylinder has been bored to accept the new 420 piston. Remember to chamfer all ports after work is completed. The clearance between piston and cylinder wall should be 3.5 to 4.5 thousandths (0.0035-0.0045) of an inch.

Only the 1980, 390 CR, OR, and WR has a liner thick enough to accept the 420 piston.

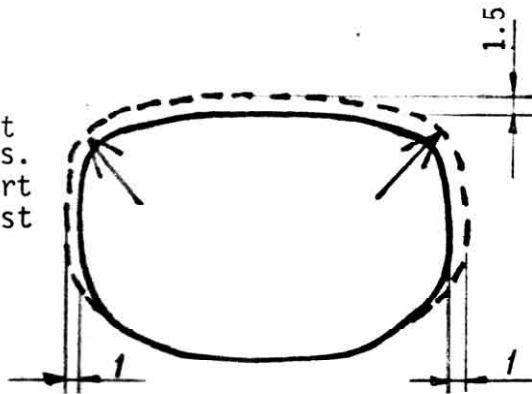
Regards,

HUSQVARNA TECHNICAL SERVICES

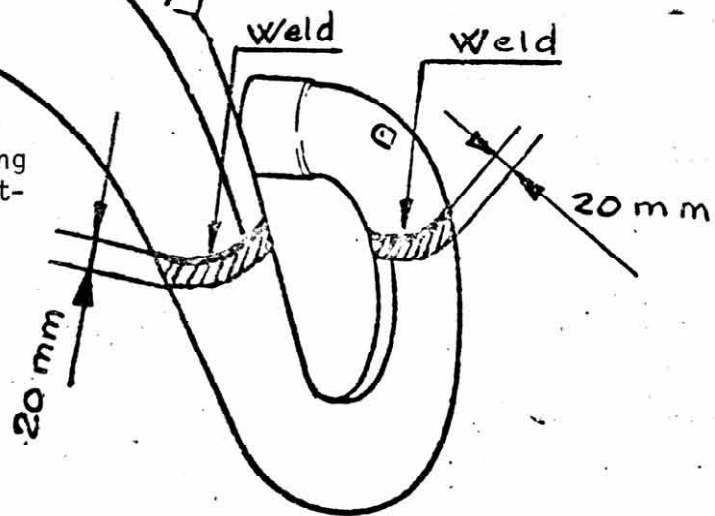
HTS/ms

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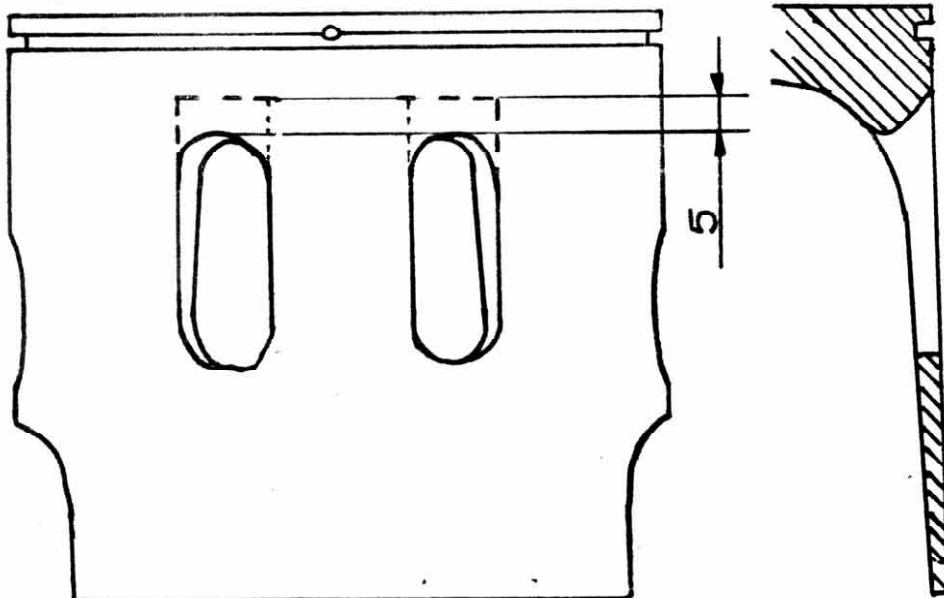
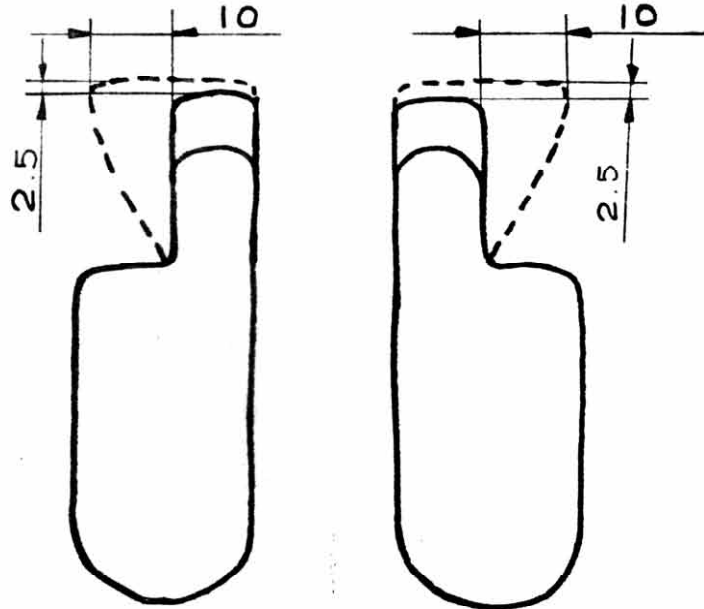
Raise the exhaust port 1.5mm and widen it 1mm on each side as the dotted line shows. Be careful with the upper edge on the port especially where the arrows show. It must be a smooth radius between the top edge and the side edges.



Shorten the exhaust pipe, by cutting 20mm (3/4 in.) off, below the existing welds as figure shows. Thereby shortening the pipe a total of 40 mm.



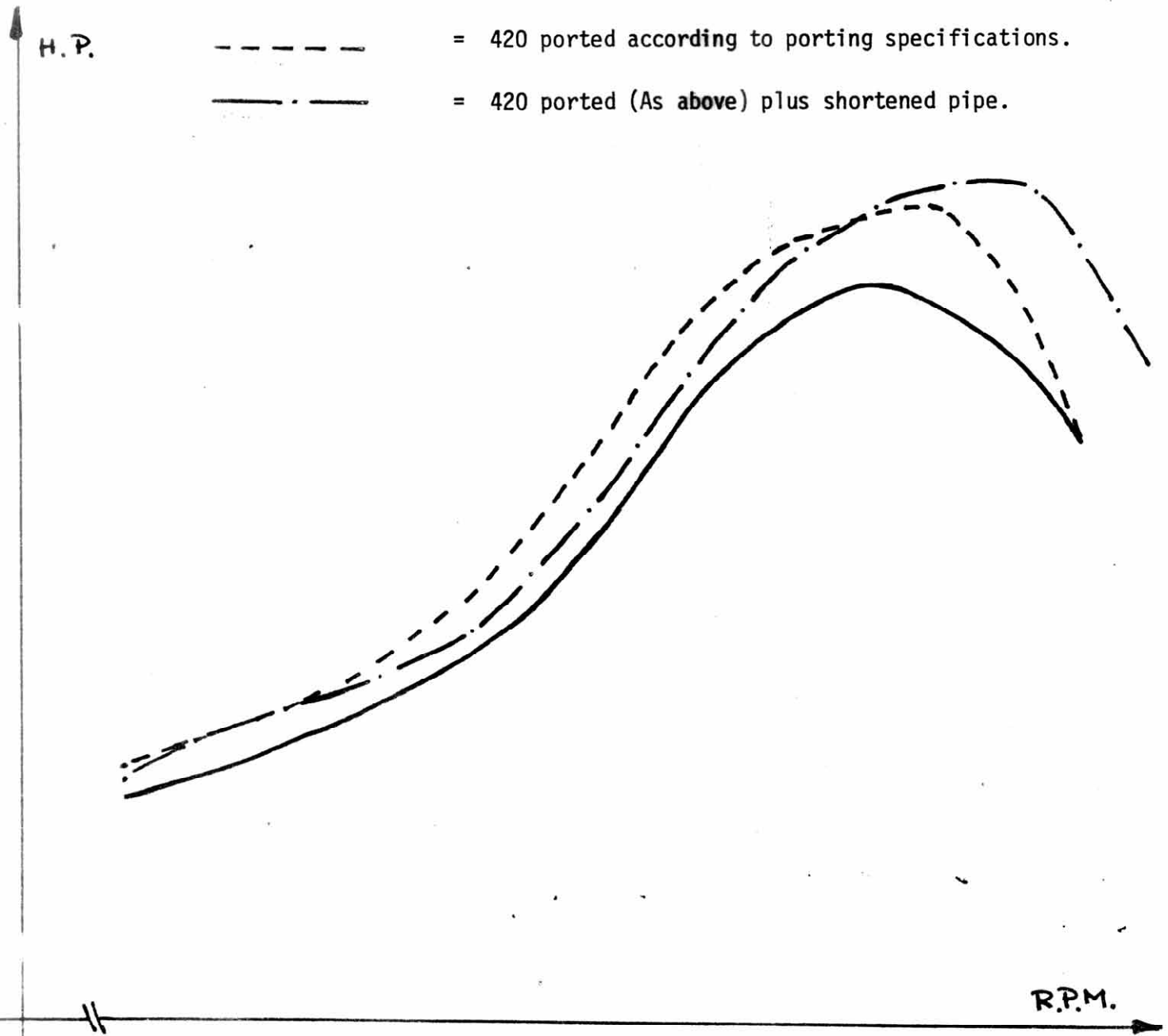
Widen the two boost ports 10mm as shown, also raise them to the same height as the two transfer ports (about 2.5mm). It is important that the boost port angle remains the same.



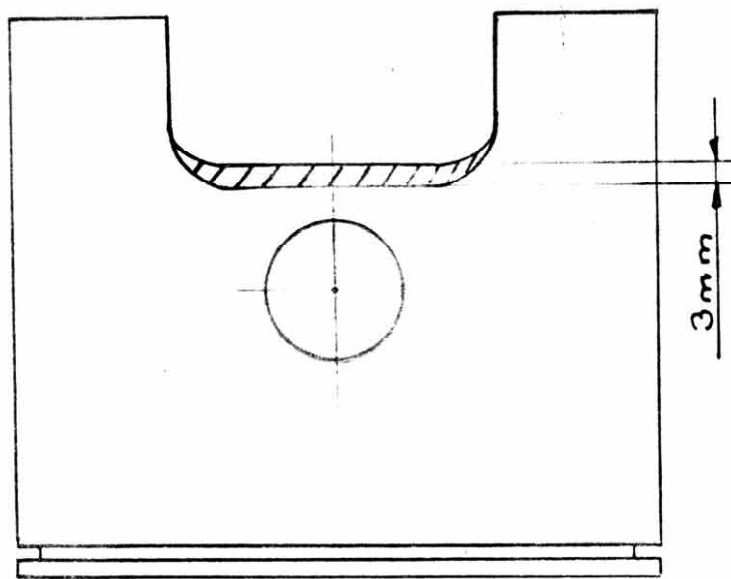
Widen the piston slots 1.5mm each and raise them 5mm, as the left figure shows. The figure on the right shows a cut through one of the piston slots and the approximate angle of the port when raised.



- = Standard 390 CR
- - - = 420 ported according to porting specifications.
- · - = 420 ported (As above) plus shortened pipe.



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420 piston must be used with needle bearing, part number - 16-11-838-01

420 Piston # 16 11 781 01