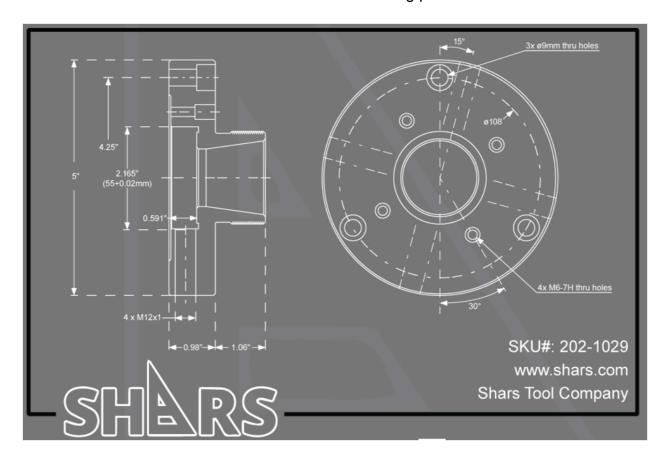
Shars ER40 DI-4 Chuck

Shars' SKU Nos. 202-1029 chuck and 202-748 backing plate





Instructions for trimming the backplate (from the Shars' listing for the backplate):

- Fully machined back plate can be directly mounted onto our 5" ER40 zero set adjustment collet chuck.
- Bolt circle diameter: 4.25"
- Adapter boss diameter: 2.26"
- Adapter boss height: 0.53"
- A light skim cut is required on the adapter boss OD and the face of the adapter's contact area. The clearance between adapter boss OD and the chuck counterbore ID should be from 0.0078" to 0.0129". The adapter boss nose should not be in contact with the bottom of the chuck counterbore. The gap between the adapter boss and the bottom of the counterbore should be around 0.0787".

My approach to machine the adapter-

- 1. I skim cut the adapter plate face that the chuck lands on to assure flatness and no skew. I removed ~.010" of face material.
- Trued up the circumferential surface of the adapter by removing ~15
 thousandths of material. (Could have removed twice that much since it is a
 bit oversize.) This was simply cosmetic, no impact to the performance of
 the chuck.
- 3. I allowed 0.010" clearance of the boss for the set-tru movement needed. I trimmed the OD of the boss by this amount and this was within the Shars' recommendation.
- 4. I assured that the boss nose is ~.2 mm short from touching the chuck when installed by trimming off the nose end.
- 5. Checked the runout of the face after machining with a 10ths indicator and there was no measurable runout.