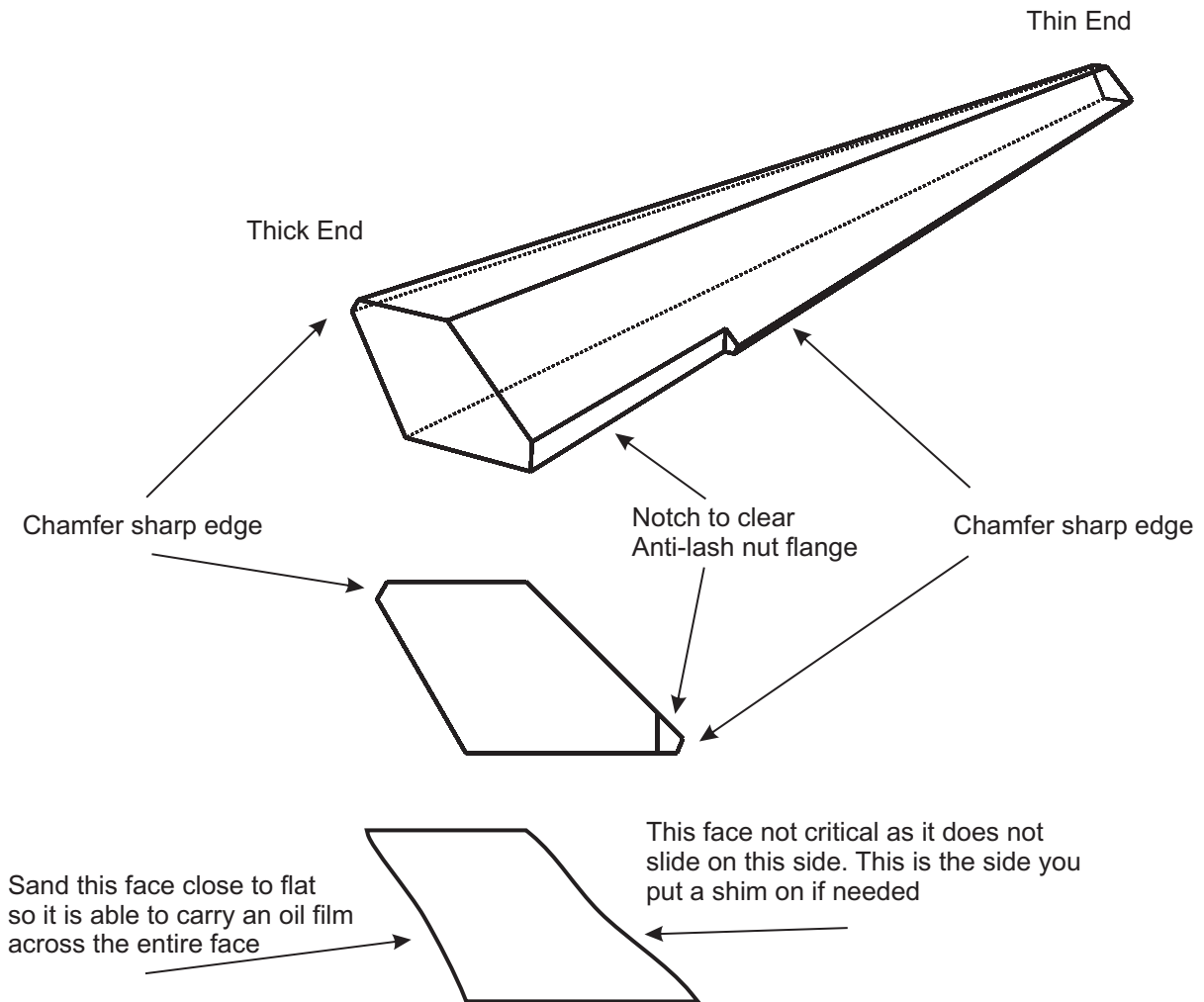




Preparing a Sherline Gib

When using a Sherline stock gib, it needs to be “blueprinted” to fit and work correctly with A2Z upgrade parts. The same treatment will also greatly improve the performance of a stock Sherline factory mill.

The gib and dovetail system is intended to work on a film of #2 way oil. As received the stock molded gibs are cupped on the face. This causes too much pressure on the edges that are touching so that they push through the oil film and bottom out, plastic on metal. The cup on the main surface causes this surface to be too far away from the dovetail leading to a gap that is bigger than an oil film can support. To achieve optimum performance, flatten the indicated face by laying a sheet of 240 grit sand paper on the bench and rubbing the face against it until close to flat. You will see the discrepancy on the face as soon as you take the first stroke. Once the sliding face of the gib is close to flat, finish it up by using some 400 grit paper. Then put a chamfer on the indicated edges and a 1/16” (1.5mm) notch to clear the anti-lash nut. When assembling and during use, maintain a wet film of oil on all dovetail and way surfaces. When lubricated correctly, way lube will drip off the machine just like on the big industrial iron.



Exaggerated profile of stock molded gib as received
Molding shrinkage causes faces to not be flat. This causes a contact only on the edge with the center too far away to support a proper film of #2 way oil.