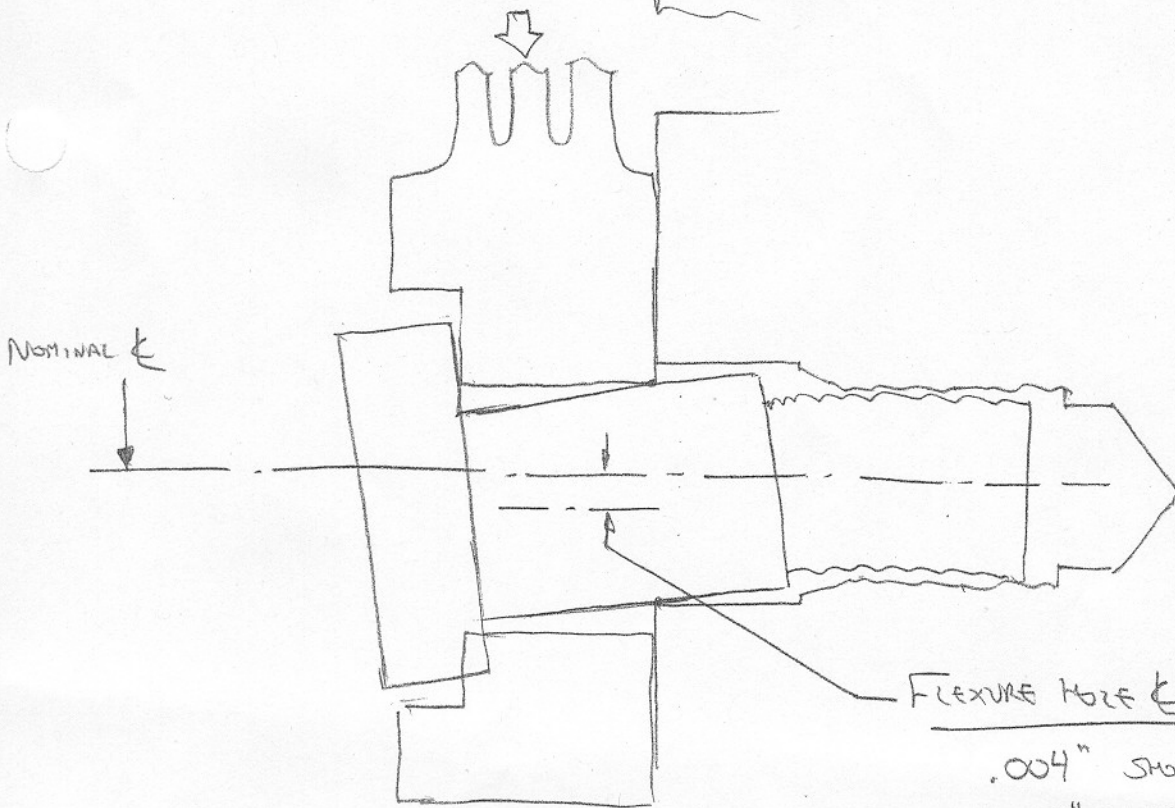
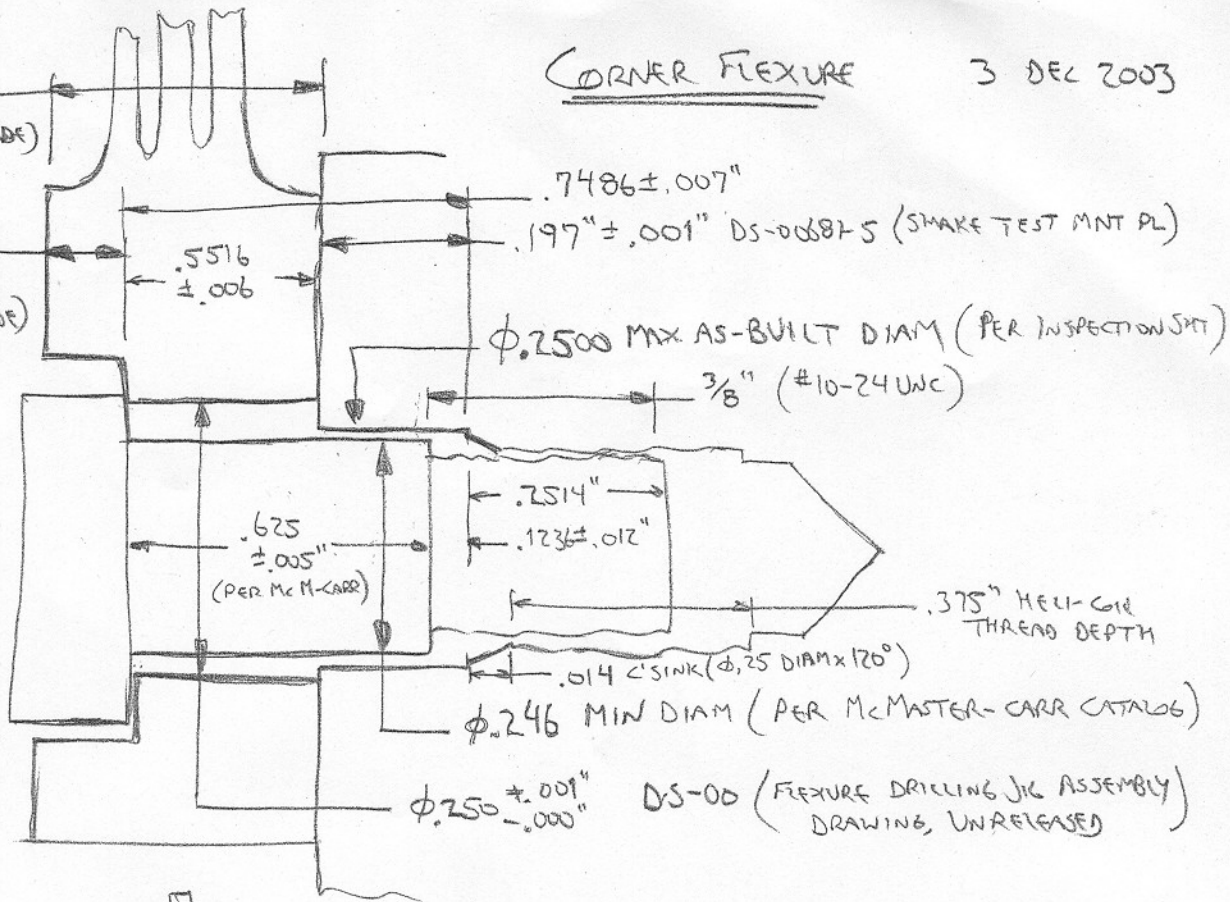


CORNER FLEXURE

3 DEC 2003

$16.5 \pm .05$ mm
($.650 \pm .002$ ")
DS-00422-3 (3-BURR)

$2.5 \pm .1$ mm
($.0984 \pm .004$ ")
DS-00422-3 (3-BURR)



FLEXURE HOLE & OFFSET:

- $.004$ " SHOULDER RATTLE IN FLEXURE
- $.001$ " OVERSIZE OF FLEXURE HOLE
- $.004$ " SHOULDER BOCT BENDING IN C-BORE HOLE

$.009$ " OR $\pm .0045$ "

CORRESPONDS TO
46 HZ OSCILLATION

① SHOULDER BOLT CLEARANCES

- FIT IN FLEXURE AND GRID ARE TOO SLOPPY
- THIS ALLOWS RATTLING WHICH BENDS SHOULDER BOLT AT THREADS AND RESULTS IN LOSS OF PRE-LOAD

REC → TIGHTEN FITS CONSIDERABLY INTO GRID AND/OR TORQUE SHOULDER DOWN TO GRID TO PRODUCE CANTILEVERED PIN

REC → TIGHTEN FIT IN FLEXURE TO PREVENT RATTLING. USE TAPER OR EXPANDABLE FEATURE IF NEEDED

② FLEXURE BLADE PINNING TO ^{TRAY} CORNER BRACKET

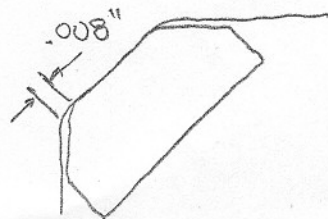
- BLADE SLIPS INTO BRACKET SUT WITH A MILD INTERFERENCE FIT WHICH CANNOT BE COUNTED ON TO RESTRAIN IT
- 2 PINS LOCATE THE BLADE AND CARRY ALL SHEAR LOADS.
- ACCORDING TO DRAWING TOL'S, PIN FIT INTO BLADE IS LOOSE: $.002''$ RADIAL CLEARANCE. THIS WOULD ALLOW ROTATION OF THE BLADE WRT THE BOTTOM TRAY

REC → MATCH-REAM THESE HOLES FOR AN INTERFERENCE FIT

REC → REDUCE HOLE DIAMETRAL TOLERANCE AND NOM HOLE SIZE FOR INTERFERENCE FIT

③ FLEXURE BLADE 45° MOUNTING SURFACE

- FLEXURE MOUNTS TO GRID ON 45° CHAMFER IN GRID CORNER AND FLEXURE BLADE BASE
- WIDTH OF LAND ON BLADE ONLY PROVIDES $\pm .008''$ CLEARANCE TO EDGE OF LAND ON GRID, ASSUMING PERFECT FORM AND FIT
- WHEN FEATURE TOL'S ARE ADDED, THIS COULD CAUSE FLEXURE TO RIDE UP ON SIDE OF GRID
- THERE IS INDICATION OF WEAR MARKS ON VIBE TEST STAND SUGGESTING THAT THIS HAPPENED



REC → REDUCE WIDTH OF BLADE BASE TO PROVIDE AMPLE CLEARANCE TO GR

3 DEC 2003

④ VIBE TEST FIXTURE

- FIXTURE WAS NOT BUILT TO PRINT, BUT TO VERBAL INSTRUCTIONS, SO THIS CAN'T SERVE AS A TEMPLATE FOR THE GRID

- TOL'S ON DRAWING APPER LOOSE AND DRAWING HAS CLEARLY NOT BEEN CHECKED (DOUBLE-DIMENSIONING, ILL-DEFINED DATUMS AND DIM'S, ETC)

REC → REVISE DRAWINGS TO MATCH REQUIRED DIMS AND TOLS, SO IT CAN BE USED AS A TEMPLATE FOR GRID FABRICATION

REC → CHECK THIS AGAINST BOTTOM TRAY DRILLING FIXTURE TO ENSURE THAT INTERFACES FIT-UP AS EXPECTED