

Trip Report
M/710 Manufacture/Assembly Review
Mayfield Facility
July 20, 1999

The Mayfield facility requested a M/710 review to discuss manufacturing and assembly processes. A M/710 EET firearm was used as a visual sample of the components and assembly procedure. Attending the meeting were representatives from manufacturing engineering, purchasing, accounting, production, purchased part inspection, and R&D engineering. The M/710 was broken down part by part with detailed discussions around purchased versus manufacture, possible processes to manufacture, critical dimensions, relative function, and material selection. The following is a list of design issues to be addressed and/or corrected based on the review.

Bolt Head Drawing - E-3000338

Missing dimensions for extractor assembly pocket
Verify heat treat process is not a salt bath, due to salt build-up in ejector hole.

Recoil Bracket - B-300361

Investigate use of standard Woodruff key

Stock -

Provide CAD surface model for mold build quoting purposes

Barrel - E-305315

Request length adjustment from 24" to 20", due to black oxide tank height and blank material cost.

Request minimum caliber to be .270, due to length of gundrill requirements.

Verify heat treated section of barrel hub remain within receiver overlapped region to avoid visible difference in surface finish.

Request change from REM SPEC 155 material to standard cold rolled material based on gundrilling issues experienced with M/597 barrels.

Receiver Insert - E-300327

C Datum target callouts on drawing

A Datum change from 1.043 OD to .710 ID

Name of inspection house to perform first article inspection of receiver inserts.

Side Plate - C-300333

A & B Datum switch with A datum target callouts

Firing Pin Tip - C-300335

Permissible flat callout for tip geometry

Cost reduction possibility – Add collar to firing pin vs. tip.

In addition to issues stated above, Mayfield has requested a listing of R&D vendors that have production capabilities. R& D has been asked to also provide approximately 20 samples of all receiver insert assembly components (mostly add used M/700 components) for assembly process development and practice. Follow up meetings will be scheduled as required.

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