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RESEARCH TEST AND MEASUREMENT REPORT

REPORT# 890891
W.O.# 481152
JUNE 26, 1989

MODEL 700 EJECTOR PIN STOP WASHER DESIGN ACCEPTANCE

Report# 890891

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Work Order# 481152

MODEL 700 EJECTOR PIN STOP WASHER DESIGN ACCEPTANCE

ABSTRACT:

Research and Development finds the material change of the Model 700 Ejector Pin Stop Washer, from 8640 to 4130, to be acceptable. The evaluation consisted of dry cycle testing of twenty Model 700 Bolts. Ten Bolts had Ejector Pin Stop Washers of 8640 material and ten Bolts had Ejector Pin Stop Washers of 4130 material.

Prepared by: D.R. Thomas
Date Prepared: June 26, 1989

proofread and cleared by:

J.R. SNEDEKER,
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J.R. Snedeker
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TO: J.R. Snedeker
FROM: D.R. Thomas

INTRODUCTION:

On March 3, 1989 the Research Test Lab received a request from F.E. Martin to conduct a Design Acceptance Evaluation of the 4130 material Ejector Pin Stop Washer.

SCOPE OF THE TEST:

To determine if the Ejector Pin Stop Washer made from the proposed 4130 material would deform or wear excessively during dry cycle.

TEST RESULTS:

The sample of the 4130 Ejector Pin Stop Washers was found to be acceptable with no apparent wear or deformation after dry cycle testing.

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REPORT TEXT:

GENERAL:

Twenty bolts were used for the dry cycle test:
Ten control (8640 material) and ten of 4130 material.
Testing was done by R.Howe in the dry cycle testing room located in
building 52-1-A.

TEST PROCEDURE:DRY CYCLE:

Each of the twenty test bolts were placed in a Test Lab action, in the bolt action cock and fire dry cycle machine. Nine of each material type were dry cycled to 25,000 cycles each. One of each material type was dry cycled to 50,000 cycles. All twenty Bolts were cut off approximately 1 5/8 inches from the locking lug end, and the Ejector Pin Stop Washers were examined. All test samples regardless of dry cycle level showed only slight visual difference, with no apparent wear or deformation.