



SUMMARY REPORT: RGA 5665

Reference: IAFC "Near Miss" Concern #06-499

Hurst JL 60 Hydraulic Ram (30545)

February 12, 2007

Background

A Hurst JL 60 Hydraulic Ram was received from Artesia Fire Equipment, the Hurst Jaws of Life dealer in New Mexico, on January 5, 2007 under Hurst Returned Good Authorization number 5665. The initial reason for the return was "failure to operate and loss of fluid." Artesia provided a loaner unit to the customer for immediate use.

Evaluation

Receipt and evaluation of the product was conducted by Hurst Service. The product is identified with Hurst Serial Number 30545 bearing an August 17, 1984 date of manufacture. The overall condition of product, as initially described by the customer, is "well used". There are impact marks, wear points, and debris deposits on most surfaces. There are no previous Hurst Service records for this product.

The ram piston is extended 85 mm from its retracted position. The manifold will not operate and the handle return to neutral is jammed. The top surface of the cylinder has a centrally located crack from the base towards the center of the cylinder and manifold location. The front handle bracket and front handle are missing. These missing parts together as well as the hydraulic lines were not included in product return. The sheared front bracket mounting bolts are located in the cylinder. The crack has a single vein that runs longitudinally with the cylinder length. The fluid connections are functional.

Analysis

Further analysis of the product was conducted by Hurst engineering and quality. Key components, including the cylinder features, were examined for material hardness; bore diameter and alignment; and the port diameter and location. All features were found to be within specification. No unusual conditions were found during the inspection of the cylinder.

Conclusion

Based on extensive evaluation and analysis, it is not possible to determine the root cause of the problem.

Recommendation

It is the recommendation from the evaluation that the product be replaced.