

SECURITY CLASS: UNCLASSIFIED
 COML. CLASS : UNCLASSIFIED

1 Scope

Aircraft G200 S/N 165 had an incident during landing.

As per NTSB requirement the Landing Gear Selector valve (LGSV) was removed and sent to IAI for investigation.

This document summarizes the test that was conducted at IAI on LGSV IAI p/n 25w716012-503 (SHL p/n 4017.0000.000) s/n IL-179

2 Applicable Documents

The documents listed in this section form a part of this document to the extent specified herein. Unless otherwise specified, the most recent approved issue will be applicable.

In the event of conflict between this document and the documents listed in this section, this document shall govern. When listed documents are referenced herein, a short form citing normally the basic number of the document is used; revision letters, amendment indicators, notices, supplements and dates are omitted.

SAE AS1241	Low Density Fire Resistant Phosphate Ester Hydraulic Fluid (SKYDROL)
0-4017.0000.000 C	Selector Valve Landing Gear Assembly Drawing
7-4017.0000.001	ATP For Landing Gear Selector Valve P/N 4017
ATR4017CMM	Acceptance Test Report for Selector Valve G200

3 Test Matrix

Table 1 –Test Matrix

Test Title	Section	Note
Pretest Inspection	4.1	Visual Inspection
Acceptance Test (ATP)	4.2	
Checks Out side of ATP Scope	4.3	
Post Test Inspection	4.4	Visual Inspection

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4 Test Results

4.1 Pretest Inspection

Upon receiving the test unit, the test unit was removed from its packing container, and visually inspected for any irregularity.

No irregularity was found.

4.2 Acceptance Test

ATP section Per CMM No. ATR4017CMM was performed.

See Appendix 1 for data sheet test results.

The test unit was found to be within the CMM limits.

4.3 Checks Out side of ATP Scope

By Pass Flow Rate vs. LGSV Lever Angle

1. Beginning of by pass flow - 20°
2. Lever angle at 3gpm by pass flow – 20.5°
3. Lever angle at 6gpm by pass flow – 21.5°
4. Lever angle at 10gpm by pass flow – 22.5°

LGSV Control Lever After Detent Release

1. Operating torque from down position (part of ATP) – 19 lb-in
2. Operating torque at transition (between detents) – 14 lb-in

4.4 Post Test Inspection

After completion of the ATP, the test unit was disassembled, and all parts were subjected to visual inspection, No irregularity was found, for teardown inspection photographs see Appendix 2 Figure 1 to Figure 8

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5 Conclusion

LGSV was found to operate properly, all tests were found to be within component maintenance manual requirements.

All internal parts were found to be in good condition with no abnormal wear or other irregularities.