

1. Approving Competent Authority/Country CAA UK		2. AUTHORISED RELEASE CERTIFICATE CAA FORM 1		3. Form Tracking Number. C-2643056	
4. Organisation Name and Address.  AEM Limited HAINE INDUSTRIAL PARK RAMSGATE KENT CT12 5HE UNITED KINGDOM				5. Work Order/Contract/Invoice Work Order No: FP115447 Customer Order No: R398268	
6. Item	7. Description	8. Part No.	9. Qty.	10. Serial No.	11. Status/Work
1	HYDRAULIC SHUTTLE VALVE	5059-2	1	371	INSPECTED/TESTED
12. Remarks INSPECTED AND TESTED I.A.W. PNEUDRAULICS CMM 32-40-02, REVISION 1, DATED 22/05/1992 FAA Release The work identified in Block 11 and described herein has been accomplished in accordance with 14 CFR part 43 and in respect to that work, the items are approved for return to service under					
Certificate No: CA5Y772M					
13a. Certifies that the items identified above were manufactured in conformity to: ☒ approved design data and are in a condition for safe operation. ☐ non-approved design data specified in block 12			14a. ☒ Part-145.A.50 Release to Service ☐ Other regulation specified in Block 12 Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12, was accomplished in accordance with Part-145 and in respect to that work the items are considered ready for release to service.		
13b. Authorised Signature:			14b. Authorised Signature 		14c. Certificate/Approval Ref No. UK.145.00014
13c. Approval/Authorisation No.			14d. Name Jeremy Butler		14e. Date (dd mmm yyyy) 08 Aug 2022
13d. Name			13e. Date (dd mmm yyyy)		
USER/INSTALLER RESPONSIBILITIES					
This certificate does not automatically constitute authority to install the item(s).					
Where the user/installer performs work in accordance with regulations of an airworthiness authority different than the airworthiness authority specified in block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts items from the airworthiness authority specified in block 1.					
Statements in blocks 13a and 14a do not constitute installation certification. In all cases aircraft maintenance records must contain an installation certification issued in accordance with the national regulations by the user/installer before the aircraft may be flown.					

1. Approving Competent Authority/Country EASA		2. AUTHORISED RELEASE CERTIFICATE EASA FORM 1  AEM Limited HAINE INDUSTRIAL PARK RAMSGATE KENT CT12 5HE UNITED KINGDOM		3. Form Tracking Number. E-2643056	
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EASA Form 1 - MF/CAO/145 Issue 3					

Test Record Form



WO No	FP115447	Serial No	371
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Part Number	5059-2	Description	Hydraulic Shuttle Valve
Customer	AJ WALTER	Quantity	1
Test Data Ref	CMM 32-40-02	Revision	1

Op	Test Details	Mech	Insp																
10	Test Ref: 2 B – Preparation for Test. Ref Fig 1 ensure correct test set up. <table border="1"> <tr> <td>Date:</td><td>04/08/2022</td><td>Rig No.:</td><td>208</td></tr> </table>	Date:	04/08/2022	Rig No.:	208	<i>Pass</i>													
Date:	04/08/2022	Rig No.:	208																
20	Test Ref: 2 C 1 – Proof Pressure Test. With Valve in position A and 4500 psi applied at INA Port, after 2 mins record: <table border="1"> <tr> <td>Distortion / Permanent Set</td><td>=</td><td>YES / NO</td></tr> <tr> <td>External Leakage</td><td>=</td><td>NIL</td></tr> </table> With Valve in position B and 4500 psi applied at INB Port, after 2 mins record: <table border="1"> <tr> <td>Distortion / Permanent Set</td><td>=</td><td>YES / NO</td></tr> <tr> <td>External Leakage</td><td>=</td><td>NIL</td></tr> </table> <table border="1"> <tr> <td>Date:</td><td>04/08/2022</td><td>Result:</td><td>PASS/FAIL</td></tr> </table>	Distortion / Permanent Set	=	YES / NO	External Leakage	=	NIL	Distortion / Permanent Set	=	YES / NO	External Leakage	=	NIL	Date:	04/08/2022	Result:	PASS/FAIL	<i>Pass</i>	
Distortion / Permanent Set	=	YES / NO																	
External Leakage	=	NIL																	
Distortion / Permanent Set	=	YES / NO																	
External Leakage	=	NIL																	
Date:	04/08/2022	Result:	PASS/FAIL																
30	Test Ref: 2 C 2 – Shuttling Pressure Test. With Valve in position A and flow to Port INB, record: <table border="1"> <tr> <td>Pressure (Shuttling)</td><td>=</td><td>105 psi</td></tr> <tr> <td>Leakage (Port INA)</td><td>=</td><td>0 cc</td></tr> </table> With Valve in position B and flow to Port INA, record: <table border="1"> <tr> <td>Pressure (Shuttling)</td><td>=</td><td>112 psi</td></tr> <tr> <td>Leakage (Port INA)</td><td>=</td><td>0 cc</td></tr> </table> <table border="1"> <tr> <td>Date:</td><td>04/08/2022</td><td>Result:</td><td>PASS/FAIL</td></tr> </table>	Pressure (Shuttling)	=	105 psi	Leakage (Port INA)	=	0 cc	Pressure (Shuttling)	=	112 psi	Leakage (Port INA)	=	0 cc	Date:	04/08/2022	Result:	PASS/FAIL	<i>Pass</i>	
Pressure (Shuttling)	=	105 psi																	
Leakage (Port INA)	=	0 cc																	
Pressure (Shuttling)	=	112 psi																	
Leakage (Port INA)	=	0 cc																	
Date:	04/08/2022	Result:	PASS/FAIL																

Test Record Form



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Op	Test Details	Mech	Insp																																																
40	Test Ref: 2 C 3 – Internal Leakage Test. 5059-2 SHUTTLE VALVE ONLY With the following pressures applied at Port INB, record leakage at Port INA: <table border="1"> <thead> <tr> <th>Pressure at INB</th><th></th><th>Leakage at INA</th></tr> </thead> <tbody> <tr> <td>150 psi after 1 min</td><td>=</td><td>0 drops</td></tr> <tr> <td>5 psi after 6 mins</td><td>=</td><td>0 drops</td></tr> <tr> <td>50 psi after 1 min</td><td>=</td><td>0 drops</td></tr> <tr> <td>150psi after 1 min</td><td>=</td><td>0 drops</td></tr> <tr> <td>300 psi after 1 min</td><td>=</td><td>0 drops</td></tr> <tr> <td>1000 psi after 1 min</td><td>=</td><td>0 drops</td></tr> <tr> <td>3000 psi after 3 mins</td><td>=</td><td>0 drops</td></tr> </tbody> </table> With the following pressures applied at Port INA, record leakage at Port INB: <table border="1"> <thead> <tr> <th>Pressure at INA</th><th></th><th>Leakage at INB</th></tr> </thead> <tbody> <tr> <td>150 psi after 1 min</td><td>=</td><td>0 drops</td></tr> <tr> <td>5 psi after 6 mins</td><td>=</td><td>0 drops</td></tr> <tr> <td>50 psi after 1 min</td><td>=</td><td>0 drops</td></tr> <tr> <td>150psi after 1 min</td><td>=</td><td>0 drops</td></tr> <tr> <td>300 psi after 1 min</td><td>=</td><td>0 drops</td></tr> <tr> <td>1000 psi after 1 min</td><td>=</td><td>0 drops</td></tr> <tr> <td>3000 psi after 3 mins</td><td>=</td><td>0 drops</td></tr> </tbody> </table>	Pressure at INB		Leakage at INA	150 psi after 1 min	=	0 drops	5 psi after 6 mins	=	0 drops	50 psi after 1 min	=	0 drops	150psi after 1 min	=	0 drops	300 psi after 1 min	=	0 drops	1000 psi after 1 min	=	0 drops	3000 psi after 3 mins	=	0 drops	Pressure at INA		Leakage at INB	150 psi after 1 min	=	0 drops	5 psi after 6 mins	=	0 drops	50 psi after 1 min	=	0 drops	150psi after 1 min	=	0 drops	300 psi after 1 min	=	0 drops	1000 psi after 1 min	=	0 drops	3000 psi after 3 mins	=	0 drops	Piggy	
	Pressure at INB		Leakage at INA																																																
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Test Record Form



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Op	Test Details	Mech	Insp																																																
50	Test Ref: 2 C 4 – Internal Leakage Test. 5060-3 and 5060-4 SHUTTLE VALVE ONLY With the following pressures applied at Port INB, record leakage at Port INA: <table border="1"> <thead> <tr> <th>Pressure at INB</th><th></th><th>Leakage at INA</th></tr> </thead> <tbody> <tr><td>240 psi after 1 min</td><td>=</td><td>drops</td></tr> <tr><td>5 psi after 6 mins</td><td>=</td><td>drops</td></tr> <tr><td>50 psi after 1 min</td><td>=</td><td>drops</td></tr> <tr><td>240 psi after 1 min</td><td>=</td><td>drops</td></tr> <tr><td>300 psi after 1 min</td><td>=</td><td>drops</td></tr> <tr><td>1000 psi after 1 min</td><td>=</td><td>drops</td></tr> <tr><td>3000 psi after 3 mins</td><td>=</td><td>drops</td></tr> </tbody> </table> With the following pressures applied at Port INA, record leakage at Port INB: <table border="1"> <thead> <tr> <th>Pressure at INA</th><th></th><th>Leakage at INB</th></tr> </thead> <tbody> <tr><td>150 psi after 1 min</td><td>=</td><td>drops</td></tr> <tr><td>5 psi after 6 mins</td><td>=</td><td>drops</td></tr> <tr><td>50 psi after 1 min</td><td>=</td><td>drops</td></tr> <tr><td>240 psi after 1 min</td><td>=</td><td>drops</td></tr> <tr><td>300 psi after 1 min</td><td>=</td><td>drops</td></tr> <tr><td>1000 psi after 1 min</td><td>=</td><td>drops</td></tr> <tr><td>3000 psi after 3 mins</td><td>=</td><td>drops</td></tr> </tbody> </table> NOT APPLICABLE Date: Result: PASS/FAIL	Pressure at INB		Leakage at INA	240 psi after 1 min	=	drops	5 psi after 6 mins	=	drops	50 psi after 1 min	=	drops	240 psi after 1 min	=	drops	300 psi after 1 min	=	drops	1000 psi after 1 min	=	drops	3000 psi after 3 mins	=	drops	Pressure at INA		Leakage at INB	150 psi after 1 min	=	drops	5 psi after 6 mins	=	drops	50 psi after 1 min	=	drops	240 psi after 1 min	=	drops	300 psi after 1 min	=	drops	1000 psi after 1 min	=	drops	3000 psi after 3 mins	=	drops	<i>Pujar</i> N/A	
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List of Verification Equipment Used During Test Procedures

Description	QC Number
Pressure Gauge 0-100 psi	QC102
Pressure Gauge 0-3000 psi	QC105
Pressure Gauge 0-6000 psi	QC206
Stop Watch	QC1894

Name	Signature	Date
L.BUJOK	<i>Pujar</i>	04/08/2022