

1. Approving Civil Aviation Authority/Country: FAA/United States		2. AUTHORIZED RELEASE CERTIFICATE FAA Form 8130-3, AIRWORTHINESS APPROVAL TAG		3. Form Tracking Number: R411879	
4. Organization Air Transport Components Name and Address: FAA: Z6AR209Y EASA: 145.5116 900 North Fiesta Blvd Gilbert, AZ 85233				5. Work Order/Contract/Invoice Number: 016807	
6. Item:	7. Description:	8. Part Number:	9. Quantity:	10. Serial Number:	11. Status/Work:
1	ACTUATOR ASSY	65C32956-4	1 EA	TSC426	REPAIRED
12. Remarks:					
REPAIRED UNIT IAW CMM 32-30-13, REV #47 DATED NOV 01/20.					
Certifies that the work specified in Block 11/12 was carried out in accordance with EASA Part-145 and in respect to that work the component is considered ready for release for service under EASA Part-145 Approval Number: "EASA 145.5116".					
13a. Certifies 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. ☒ 14 CFR 43.9 Return 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 Title 14, Code of Federal Regulations, part 43 and in respect to that work, the items are approved for return to service.					
13b. Authorized Signature:		13c. Approval/Authorization No.:		14c. Approval/Certificate No.: Z6AR209Y	
13d. Name (Typed or Printed):		13e. Date (dd/mm/yyyy):		14e. Date (dd/mm/yyyy): 18/Jul/2023	
Gregory Dandurand					
User/Installer Responsibilities					
It is important to understand that the existence of this document alone does not automatically constitute authority to install the aircraft engine/propeller/article.					
Where the user/installer performs work in accordance with the national regulations of an airworthiness authority different than the airworthiness authority of the country specified in Block 1, it is essential that the user/installer ensures that his/her airworthiness authority accepts aircraft engine(s)/propeller(s)/article(s) from the airworthiness authority of the country 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.					



Air Transport Components

900 North Fiesta Blvd
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FAA: Z6AR209Y
EASA: 145.5116

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Work Order Teardown Report

Life Limited : N	F.O.B. : Account No. [10109] AJ WALTER AVIATION LTD. Attn: Ms. REBECCA WILDERS THE HEADQUARTERS MAYDWELL AVENUE SLINFOLD, WEST SUSSEX, . RH13 0AS UNITED KINGDOM Tel. : 44 1403 798511
PMA Y/N : N	
DER Y/N : N	
Verified PN : Y	
Verified SN : Y	
RO Instructions : RP	
ATC Capes : Y	
Shipping Damage : N	
ATTN: :	
For Customer : AJ WALTER AVIATION LTD.	
S.O. No. : 016341	Line No. : 1

Cust P.O. : R411879	P/N : 65C32956-4	Vendor :
Department : Hydraulics	Desc : ACTUATOR ASSY	Lead Time :
Mechanic : Christian Ponce	S/N : TSC426	Trace :
ATA : 32-30-13	MFG :	Manual :
Supplier : BOEING	Qty : 1	Cond As: SV
Completed P/N : 65C32956-4	S/N As : TSC426	Revision :
		Into Bin Loc : [w/h]: 5
Company : 1	Division : 01	Department :
Order Date : Jun-26-2023	Received Date : Jun-01-2023	Due Date : Jun-08-2023
		Print Date : Jul-18-2023

WORK ORDER No. 016807

Preliminary Insp.

NO SHIPPING DAMAGE NOTED.
DUAL RELEASE REQUIRED.
UNIT RECEIVED IN DIRTY CONDITION.
PART NUMBER ON UNIT. SERIAL NUMBER ON UNIT.
UNIT REVIEW SHOWS SIGNS OF WEAR.
NO AD'S FOUND DURING PRELIMINARY INSPECTION.
BOEING CMM 32-30-13 REQUIRED.

Work Instructions

REPAIR AS REQUIRED IAW MFG SPECS.
DUAL RELEASE REQUIRED.

Corrective Action

Continued on next page...



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WORK ORDER No. 016807

DIRTY. MINOR WEAR. PACKINGS, RINGS, HARDWARE, SELAS, BEARINGS, PINS, RETAINERS, STRAP, PLATING WORN. POLISH, BLENDING, TESTING, FINAL REQUIRED. PERFORMED SIDE LOAD TEST. WITH A MINIMUM OF 4748 TO 5832 POUND FORCE, THE BEARINGS MIGRATED LESS THAN .003 INCHES. UNIT PASSED ALL TESTS WITH NO DEFECTS FOUND. PRESSURE TEST PERFORMED WITH FULL ACTUATION OF RETRACTION AND EXTENSION ACCUMULATING PRESSURE UP TO BUT NOT EXCEEDING 4500 PSI WITH 0.00 LEAKAGE NOTED. SNUBBING VALVE TEST PERFORMED WITH ACCUMULATED PRESSURE OF 3000 PSI TO RETRACT PORT WITH NO DEFECTS NOTED. 25 CYCLES OPERATED AT 3000 PSI WITH APPLIED FORCE OF 28 LBS.

REPAIRED UNIT IAW CMM 32-30-13, REV #47 DATED NOV 01/20.

Item	Part Number / Description	Part Status	Qty	Cond	Discrepancy / Disposition
PARTS & MATERIALS					
01	NAS1612-10A	32 - Installed Component	1 EA	NE	Disc. : _____ Disp. : _____
	O-RING Trace: PARKER				
02	NAS1612-6	32 - Installed Component	1 EA	NE	Disc. : _____ Disp. : _____
	PACKING Vendor: WENCOR Trace: PARKER Alt: NAS1612-6A				
03	BACS34A25A	32 - Installed Component	1 EA	NE	Disc. : _____ Disp. : _____
	SCRAPER SEAL Vendor: B Trace: BOEING				
04	S33121-333-1	32 - Installed Component	1 EA	NE	Disc. : _____ Disp. : _____
	SEAL Vendor: B/WENCOR Trace: TRELLEBORG				
05	NAS1611-333A	32 - Installed Component	1 EA	NE	Disc. : _____ Disp. : _____
	O-RING				

Continued on next page...



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WORK ORDER No. 016807

06	Vendor: WENCOR, LLC. Trace: INTERNATIONAL SEAL C 69-77076-1	32 - Installed Component	1 EA NE	Disc. : _____ Disp. : _____
07	LOCK WASHER Vendor: B Trace: BOEING Alt: **SEE MEMO** 1728-B	32 - Installed Component	2 EA NE	Disc. : _____ Disp. : _____
08	LUBE FITTING Vendor: WENCOR Trace: ALEMITE Alt: 1728B 10-61903-5	32 - Installed Component	1 EA NE	Disc. : _____ Disp. : _____
09	BEARING Vendor: WILSON Trace: SPECLINE NAS1612-10A	32 - Installed Component	1 EA NE	Disc. : _____ Disp. : _____
10	O-RING Trace: PARKER MS28782-9	32 - Installed Component	1 EA NE	Disc. : _____ Disp. : _____
11	RING Vendor: WESCO AIRCRAFT Trace: COORSTEK NAS1611-111	32 - Installed Component	2 EA NE	Disc. : _____ Disp. : _____
12	PACKING Trace: PARKER MS28783-19	32 - Installed Component	4 EA NE	Disc. : _____ Disp. : _____
	RING			Disp. : _____

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13	NAS1611-241 PACKING Vendor: WENCOR, LLC. Trace: PARKER	32 - Installed Component	2 EA NE	Disc. : _____ Disp. : _____
14	NAS1612-4A ORING Trace: PARKER Alt: NAS1612-4	32 - Installed Component	1 EA NE	Disc. : _____ Disp. : _____
15	NAS1612-2A O-RING Vendor: W Trace: PARKER	32 - Installed Component	1 EA NE	Disc. : _____ Disp. : _____
16	KSC218124B BEARING Trace: KAMATICS	32 - Installed Component	1 EA NE	Disc. : _____ Disp. : _____
18	NAS1611-338 PACKING 191 Vendor: WENCOR, LLC.	32 - Installed Component	1 EA NE	Disc. : _____ Disp. : _____
19	MS28782-41 RING 192 Vendor: TURBO RESOURCES Trace: AVIACSA	32 - Installed Component	2 EA NS	Disc. : _____ Disp. : _____
21	MS16562-214 PIN Trace: FLIGHTSTAR	32 - Installed Component	1 EA NS	Disc. : _____ Disp. : _____

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Work Order Teardown Report

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23	NAS1611-113A O-RING Vendor: W Trace: INTERNATIONAL SEAL C	32 - Installed Component	1 EA NE	Disc. : _____ Disp. : _____
24	MS28782-11 RETAINER Vendor: BDIST Trace: FREUDENBERG	32 - Installed Component	2 EA NE	Disc. : _____ Disp. : _____
25	69-35587-8 STRAP 270 Vendor: B Trace: BOEING	32 - Installed Component	1 EA NE	Disc. : _____ Disp. : _____
27	MS28782-9 RING Vendor: WESCO AIRCRAFT Trace: COORSTEK	32 - Installed Component	3 EA NE	Disc. : _____ Disp. : _____
28	MS28783-19 RING	32 - Installed Component	1 EA NE	Disc. : _____ Disp. : _____

Authorized Signature : *Mike Charron*



COMPONENT MAINTENANCE MANUAL

TESTING AND FAULT ISOLATION

 WU:016817
 7/18/23
 HZI stand
 ATC
 016
 7/18/23

1. General

- A. This procedure contains the data necessary to do a test of the main landing gear retract actuator assembly after an overhaul or for fault isolation.
- B. Refer to the Standard Overhaul Practices Manual (SOPM) for the SOPM subjects identified in this procedure.
- C. Refer to IPL Figure 1 for item numbers.

2. Test Equipment and Materials

NOTE: Equivalent substitutes can be used.

- A. Hydraulic Test Stand that can supply hydraulic fluid pressure from 0-5400 psi.
- B. Hydraulic fluid -- BMS 3-11 (SOPM 20-60-03)

3. Test Preparation

- A. Consumable Materials

NOTE: Equivalent substitutes may be used.

Reference	Description	Specification
D00153	Fluid - Hydraulic Fluid, Fire Resistant (Interchangeable And Intermixable With BMS 3-11 Type V)	BMS3-11 Type IV

- B. Test setup

- (1) Hold the actuator assembly tightly, such as in a fixture.
- (2) Install hydraulic fittings and connect the unit to the test equipment.
- (3) Do this test at room temperature. Use hydraulic fluid, D00153.
- (4) Tolerance on pressure values is ± 2 percent unless shown differently.

4. Test



DO NOT APPLY COMPRESSED AIR TO PORT AT ANY TIME. IF COMPRESSED AIR IS APPLIED, THE UNIT CAN OPERATE ACCIDENTALLY. THIS CAN CAUSE INJURY TO PERSONNEL AND DAMAGE TO EQUIPMENT.



DO NOT CYCLE UNIT AT PROOF PRESSURE OF 4500 PSI. THE USUAL PRESSURE IS 3000 PSI FOR THE OPERATION OF THE UNIT. PROOF PRESSURE CAN CAUSE DAMAGE TO INTERNAL PARTS.

- A. Pressure Test

- (1) Extend the piston rod (195) fully. Apply a pressure of 2-10 psi to the extend port for 2 minutes. Make sure there is no external leakage.
- (2) With the piston rod (195) fully extended, apply a pressure of 4500 psi to the extend port for 2 minutes. Make sure there is no external leakage.
- (3) Retract the piston rod (195) fully. Do steps TESTING AND FAULT ISOLATION, Paragraph 4.A.(1) and TESTING AND FAULT ISOLATION, Paragraph 4.A.(2) again.

- B. Leakage Test

32-30-13

TESTING AND FAULT ISOLATION

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Nov 01/2017



COMPONENT MAINTENANCE MANUAL

W0:016807
CP 7/18/23
HII stand
ATC 3470T
ATC 602LT

ATC
016

7/18/23

- Leakage (1) Extend the piston rod (195) fully. Apply a pressure of 3000 psi to the extend port. Make sure the leakage from the retract port is not be more than five drops per minute.
- Leakage (2) Retract the piston rod (195) fully. Apply a pressure of 3000 psi to the retract port. Make sure the leakage from the extend port is not be more than five drops per minute.

C. Snubbing Valve Test

- PASS (1) Retract the piston rod (195) fully. Apply a pressure of 3000 psi to the extend port. Make sure the piston rod (195) extends at a constant rate between 1.10 inches from a fully retracted position and 1.30 inches from a fully extended position.
- PASS (2) Extend the piston rod (195) fully. Apply a pressure of 3000 psi to the retract port. Make sure the piston rod (195) retracts at a constant rate between 1.30 inches from a fully extended position and 1.10 inches from a fully retracted position.

D. Cycle Test

- PASS 28 lbs (1) Remove pressure from both retract and extend ports. Operate the unit in one complete cycle. Make sure the force necessary is not more than 75 lbs.
- PASS (2) Operate the unit through 25 cycles at a pressure of 3000 psi. Control the flow of hydraulic fluid, D00153 from the head end assy (160) to 6 gpm during retraction. The total leakage from the rod seal must not be more than one drop and the unit must operate smoothly.

5. Post Test Procedure

- A. Decrease the pressure to zero. Disconnect the hydraulic lines. Drain all hydraulic fluid, D00153.

6. Trouble Shooting

- A. Refer to TESTING AND FAULT ISOLATION, Table 101 for probable cause and corrective procedure for any test failure.

Table 101: Troubleshooting

TROUBLE	POSSIBLE CAUSE	CORRECTION
External leakage at the head end (53).	Defective O-rings (130)	Replace defective parts. Refer to DISASSEMBLY.
External leakage at the rod end, more than the limits at the scraper.	Defective seal (45)	Replace defective parts. Refer to DISASSEMBLY.
Operation not smooth.	Contamination between sliding surfaces of valve (255) or in restrictor bores.	Disassemble and examine parts. Refer to DISASSEMBLY.

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TESTING AND FAULT ISOLATION

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