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PRODUCT REFERENCE MEMO

NOTICE OF PRODUCTION CHANGE TO 60-5, 60-5A, 60-5B, and 60-5C PARKING BRAKE VALVE ASSEMBLY

1. PLANNING INFORMATION

- A. APPLICABILITY:** Any Parker Part Number 60-5, 60-5A, 60-5B and 60-5C Parking Brake Valve Assembly (PBV) which has been successfully installed and checked for proper operation is not affected. All other installations should be confirmed on the Aircraft as defined herein:

| Airframe Manufacturer | Aircraft Model |
|-----------------------------|--|
| American Champion | 8-KCAB Super Decathlon, 8-GCBC Scout, 7-GCBC Explorer, 7-GCAA Adventure, 7-ECA Aurora, 7-KCAB Citabria, 7-EC |
| Adam Aircraft | A500 |
| Barney Oldfield | Buddy Baby Lakes |
| Bede Jet | BD-5T, 5B, and 5J |
| Cessna | 172, 182, T182T, 206, 208, 350, 400 |
| Diamond (Hoffmann Aircraft) | HK36, DA20, DA40, DA42, DA50 |
| Dean Wilson Aviation | Whitney Boomerang |
| Eagle Aircraft | Eagle 150B |
| General Avia | F-15E, F-15F, F20, F-22, F-22R |
| Gippsland | GA-8 GA200C |
| Grob-Aerospace | G115A, B, C, C2, D, D2 & G120 |
| Hoffmann Helicopters | SA-341 Gazelle |
| Northrop | Predator B |
| Partenavia | P-64, P-66, P-68, |
| Pilatus Aircraft | PC-12 |
| Quartz Mountain Aerospace | QMA 11E |
| Pacific Aerospace Ltd. | Pacific Aviation 750XL, CT/4E, Cresco |
| Slingsby | Firefly, T67M260, T67M200, 67M MK2, 767C |
| Symphony Aircraft | Symphony SA-160 |
| Sherpa | K300, C400 |
| Stoddard Hamilton | Glasair I, II, III, IIRG, SII and Glastar |
| Tost | Libelle, BE-101 |
| Zenair Aircraft | CH601, CH640, CH701, CH801 |

- B. REASON:** Notification of production change to cam configuration

- C. DESCRIPTION:** The 60-5, 60-5A, 60-5B and 60-5C parking brake valves provide a means of parking the aircraft for extended periods. Recent changes to the internal cam which controls the




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ON-OFF function allows the PBV to more closely meet the published mounting and operational information found in the Parker AWBCMM0001 Component Maintenance Manual.

This document provides the necessary instructions to perform an operational / functional Check of the 60-5, 60-5A, 60-5B and 60-5C parking brake valve configurations and general adjustment guidance to supplement published Airframe Maintenance Manuals, (AMM).

- D. COMPLIANCE: OPTIONAL-**Perform the accomplishment instructions at earliest convenience before next annual inspection or within the next 100 flight hours of operation, whichever comes first. All installations should be confirmed on the Aircraft as defined herein.
- E. MANPOWER:** 3/4 hour
- F. MATERIAL-COST AND AVAILABILITY:** Refer to **3. MATERIAL INFORMATION.**
- G. WEIGHT AND BALANCE:** Not affected.
- H. TOOLING:** No additional special tooling is required.
- I. OTHER PUBLICATIONS AFFECTED:** Parker Aircraft Wheel and Brake Component Maintenance Manual AWBCMM0001.

2. ACCOMPLISHMENT INSTRUCTIONS:

- (1) Locate the mounting position of the parking brake valve.
- (2) Locate the pilot control knob which operates the parking brake valve.
- (3) Inspect the rigging of the cable to verify any slack is per the Airframe Service Manual.
- (4) Confirm 'BRAKE ON': Apply the parking brake in the manner prescribed by the AFM, typically:
 - (a) Depress both toe pedals.
 - (b) Move the pilot control to the 'BRAKE ON' position.
 - (c) Release toe pedals.
- (5) Apply the parking brake in the manner prescribed by the AFM and verify that the aircraft does NOT move when the pilot control knob is in the 'BRAKE ON' position.
- (6) Confirm the parking brake valve is closed by witnessing that the aircraft can **NOT** be moved and verifying that the PBV lever is left of vertical as indicated by the  shown in FIGURE 1.

CAUTION: DO NOT ATTEMPT THIS MANEUVER WITHOUT ASSISTANCE CAPABLE OF STOPPING THE AIRCRAFT. APPLY THE BRAKES TO STOP THE AIRCRAFT AS REQUIRED.

- (7) If the aircraft does **NOT** move when the pilot control knob is in the 'BRAKE ON' position then the PBV 'BRAKE CLOSED' function has been confirmed.

(8) If inspection shows that the parking brake does **NOT** provide a 'BRAKE ON' condition when the pilot control knob is in the 'BRAKE ON' position then adjust the cable at the park brake valve per the published AMM as follows:

(a) FIGURE 1 shows the appropriate angular orientation of the valve lever relative to the desired valve function. Units bearing a manufacture date of 8/08 and after the park brake valve should provide a 'BRAKE ON' condition when the lever is vertical. The cam orientation includes additional margin to the right of vertical as indicated by the ☆ to assure proper installation when the PBV lever is vertical. See FIGURE 1.

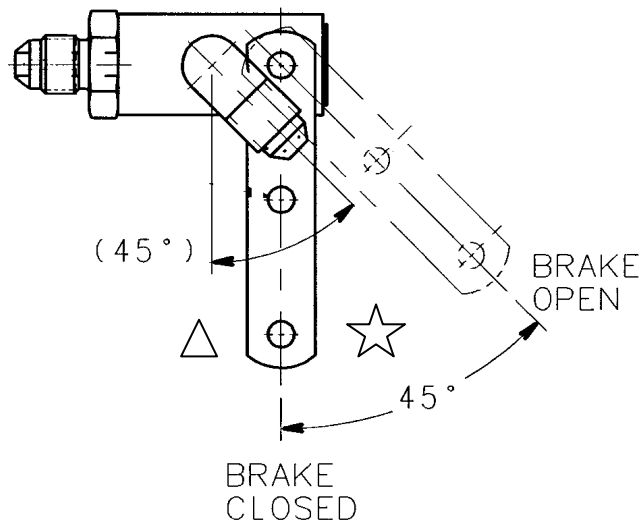


FIGURE 1 60-5 SERIES PARKING BRAKE VALVE

- (b) On units manufactured prior to TBD the 'BRAKE CLOSED' condition was achieved at a position to the left of vertical as indicated by the Δ in FIGURE 1.
- (c) Secure the pilot control cable to the PBV lever such that the PBV lever is slightly left of vertical as indicated by the Δ in FIGURE 1 while the pilot control knob is in the 'BRAKE ON' position.
- (9) If inspection shows that the parking brake does **NOT** provide a 'BRAKE ON' condition when the pilot control knob is in the 'BRAKE ON' position then repeat the adjustment process to attain the 'BRAKE ON' function.
- (10) "BRAKE OFF" confirmation: Release the parking brake in the manner prescribed by the AFM and verify that the aircraft DOES move when the pilot control knob is in the 'BRAKE OFF'.
- (11) Release the parking brake in the manner prescribed by the AFM, typically:
 - (a) Depress both toe pedals
 - (b) Move the control into 'BRAKE OFF' position.
 - (c) Release Toe Pedals.



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- (12) Confirm that the parking brake valve is open when the pilot control knob is in the 'BRAKE OFF' position by witnessing that the aircraft can be moved.

CAUTION: DO NOT ATTEMPT THIS MANEUVER WITHOUT ASSISTANCE CAPABLE OF STOPPING THE AIRCRAFT. APPLY THE BRAKES TO STOP THE AIRCRAFT IF REQUIRED.

- (13) If the aircraft moves when the pilot control knob is in the 'BRAKE OFF' position and the PBV lever is right of vertical as indicated by the ☆ shown in FIGURE 1 then the PBV 'BRAKE OPEN' position has been confirmed to be correctly set and the position AND the pilot control knob is in the 'BRAKE OFF' position and verify that the aircraft DOES move. The PBV will be OPEN and allow fluid flow.
- (14) If inspection shows that the parking brake provides a 'BRAKE OFF' condition when the pilot control knob is in the 'BRAKE OFF' position then the PBV 'BRAKE OPEN' function has been confirmed.
- (15) Record the inspection activity in the aircraft log noting date inspected, flight hours on parking brake valve, and flight hours at time of inspection

Additional information can be found in Parker's Aircraft Wheel and Brake Component Maintenance Manual AWBCM0001 available on-line at: www.parker.com

3. **MATERIAL INFORMATION:** Part configuration change to the internal cam component. Change will be effective Mid July 2008.

A. **MATERIAL-REQUIREMENTS:** Not applicable.

B. **LIST OF COMPONENTS:** Not applicable.

C. **INTERCHANGEABILITY:** Not applicable.

D. **PARTS DISPOSITION:** Not applicable.