



# Model Communiqué

## *Hawker Series*

*Hawker 1 to 1000 including special variants*

**Communiqué # HK-0036  
August, 2011**

### **ATA 32 - Landing Gear**

#### **CONTINUED SERVICEABILITY**

To ensure the continued serviceability of both nose and main landing gear, the following items should be taken into account:

1. Tire wear and pressure.
2. Nose gear wheel balance - check regularly. A flat spot on the nose tires could indicate that the wheels need to be rebalanced.
3. Lubricate the gear on a regular basis whether maintenance is due or not. A Publications Change Request (PCR) has been submitted to address this issue.
4. If there is regular use of runways with uneven surfaces, inspect for wear at shorter intervals.
5. Based on experience, it may be necessary to check the torque link gaps before they are due.
6. Check extension of the gears by using the Pressure/Extension Graphs in the Aircraft Maintenance Manual (AMM), Chapter 12-32. The preferred method to service the leg is with the airplane on jacks.

The Aircraft Flexible Maintenance Schedule (AFMS) is written as a guide and therefore if rough runways are utilized on a regular basis, there may be reason to check for wear earlier than the AFMS suggests.

#### **NOSE GEAR AXLE BEARING PLATE**

Hawker Beechcraft Corporation (HBC) has received reports of the nose wheel tie bolts contacting the thicker bearing cover plates. To resolve this issue, Kit 140-8004-0005 is available to replace the Part Number (P/N) 140-810395-0001 or -0003 plates with a new grooved plate. The new P/N plate is 140-810023-0001. The plates are available separately, as the same bolts are used for all thicker plates. All plates should be replaced in pairs. Replacement shims, P/N 25UN103, may also be required for shimming the new plates. Installation instructions in the Overhaul (Component Maintenance) Manual are identical for all thicker plates.

## **EMERGENCY BRAKE PRESSURE LOSS WITH BRAKE LEVER IN PARK**

HBC has received reports of brake pressure loss from the emergency system, which resulted in Brake Control Valve (BCV) replacement. Some of the leaks could have been attributed to the rigging of the Emergency Pressure Reducing Valve (EPRV). Investigation has shown that there is extra travel of the EPRV when the hand brake lever is selected to PARK BRAKE from EMERGENCY. This extra travel can produce pressure above 1900 psi that will be felt at the BCV, which will then act as the ultimate pressure reducing valve. If more than 1900 psi is supplied to it, the excess will be released into the return, which may lead to rejection of either the BCV or EPRV. This leak to return may lead a mechanic to reject either the BCV or EPRV.

The AMM is being revised to include the following information:

1. The BCV must be installed and rigged correctly.
2. The pressure being supplied by the emergency system should be between 1400 and 1600 psi when selected to the EMERGENCY position.
3. If the pressure is higher than 1600 psi, the cable to the EPRV will have to be lengthened to obtain 1400 to 1600 psi.
4. If the pressure is between 1400 and 1600 psi, select PARK BRAKE and ensure the pressure is not above 1900 psi and check for a leak to return.
5. If the PARK BRAKE position is producing a leak to return, lengthen the cable until the flow stops and check the pressure. Repeat the check with the pressure at the EMERGENCY position.

NOTE - When making adjustments, the pressure may be at the lower end of the range to ensure it is not above 1900 psi at the PARK BRAKE position.  
Pressure gages will be required at the brake units.

The BCV is tested with a pressure of 1900 +/-30 psi to ensure there is not a leak to return. Therefore, there could be leakage at 1870 psi. The EPRV is set for a value between 1750 and 1900 with a travel of 5/8-inch (0.625"). To resolve the possibility of overlapping pressures, the EPRV and brake BCV must be rigged concurrently. The Normal Pressure Reducing Valve (NPRV) is also set between 1750 and 1900 psi; although this has historically been set between 1750 and 1850 psi to ensure a difference between the NPRV and the BCV.

## **MSB 32-4068 - Nose Landing Gear Drag Stay Assembly Design Improvement**

Some questions have arisen concerning this Mandatory Service Bulletin. HBC would like to provide clarification as follows:

The basis for the bulletin is to ensure the bushing diameter of the upper arms is a minimum of 1.5018 inches, along with a smaller diameter roller, which produces a smaller overcenter angle. These changes do two things:

1. Provide a clearance between the bushing and the attachment pin at low ambient temperatures.
2. Reduce the load required to move the drag stay out of the overcenter position.

Answers to questions:

- a) The Service Bulletin is against all 25-8UN3-\*\*\*A drag stays per the effectivity listed.
- b) The bushing diameter may already be within the specified diameter and therefore, no further work would be required.
- c) The term "reaming" is used to open the hole to the required diameter and give a smooth finish. A honing tool would be a suitable tool to do the work.
- d) Reamer and other forms of producing a larger diameter are not listed so as to allow individual Authorized Service Centers (ASC) to use tooling that is suitable for their location.
- e) The test fixture is for rigging checks, if required.
- f) Rigging checks per the Component Maintenance Manual (CMM) Section 32-20-35, Page 101, state that the gaps can be set without the special tooling by installing in the airplane and using the airplane as the tool and using the AMM.
- g) The new tool, Item 4 in the CMM, Section 32-20-35, Page 901, is not required unless the gaps cannot be achieved. It is unlikely that the tooling will be required to accomplish MSB 32-4068.

**Should an owner/operator or service center have any questions or concerns, contact Hawker Beechcraft Customer Support at 1-800-429-5372 or 1-316-676-3140.**