

DUNCAN INTELLIGENCE

Challenger Landing Gear Corrosion

- Scott Shefke

During a recent 120-month gear restoration on a Challenger 601, Duncan Aviation Technicians discovered that corrosion recurred in two areas that had been machined to a maximum oversize during a previous 60-month inspection. Messier only allows two oversize machining processes to be done on the side stay actuator eye-end bearing bore and in the cylinder bearing bore to remove corrosion. These two locations do not have seals to prevent corrosion or debris from causing damage to these parts. Because these parts are expensive to replace, we recommend these two locations be greased regularly (per the MM) to prevent accumulation of moisture and to flush out debris.

Challenger Hydraulic Pump Replacement

- Scott Shefke

Anyone who has had to replace a 3A or 3B pump certainly has been confused by what pump to order. To help shed some light if you pre- or post- service S.B. 601-0163 "Drain reorientation," look at the lines coming off the pump. For hydraulic pump 3A, look for part numbers 600-75239-860 and 600-75123-109. If this is installed it means the service bulletin has been incorporated. For hydraulic pump 3B, the view orientation will be from aft looking forward and the bottom of the pump is where the pump attaches to the electric motor. Now look for part number 600-75123-99. If this line attaches to a forty-five degree union at the top view upper half of the pump housing, this pump has been modified by the service bulletin as well. To further assist you in identification, the old installation at hydraulic pump 3B will have a straight union and the attaching hose will all mount to the top view lower half of the pump housing.

Challenger 300 Wing Navigation Light Replacement

- Scott Shefke

Wing navigation lights need to be replaced often. Care must always be taken during installation in order not to over-torque these lenses or they will crack. The Challenger 300 has a specific torque and torque sequence, a technician should not overlook using the manual, to ensure there is no damage to the lens upon installation.

So You Want to File for a "Mode S" Exemption?

Are you planning to travel to Europe without a Mode S Exemption? If you wish to declare compliance with Mode S Enhanced Surveillance (EHS) or apply for exemption, you may use a downloaded Excel-based form found online at: www.euro-control.int/msa/public/standard_page/modes_trans_arrange_coord_cell.html.

The following Excel based forms available are as follows:

- Reason 1 - Aircraft Not Mode S Enhanced Surveillance Capable
- Reason 2 - Delayed Installation
- Reason 3 - Taken Out of Service
- Reason 4 - Test, Delivery, or Maintenance Flights or Occasional Access Flights

Also found on the Exemption Coordination Cell (ECC) webpage are various means to return the completed forms.

Scott Shefke, Technical Representative, can be reached by phone at:

- 1.800.228.4277 - main
- 402.479.1681 - direct
- 402.430.6066 - cell

or via email at:

- Scott.Shefke@duncanaviation.com

