

Advisory Wire

REFERENCE NO: AW300-29-0056, Rev. 01

ATA: 29-12

EFFECTIVITY: Challenger 300
Challenger 350

SUBJECT: Hydraulic Fluid – System Transfer

1. REFERENCES:

- 1.1 Challenger 300/350 Flight Manuals
- 1.2 Challenger 300/350 Aircraft Maintenance Manual (AMM)

2. INTRODUCTION:

This revision to the Advisory Wire (AW) is to include all BD100-1A10 models and make minor corrections to the Description section to reflect the latest ref 1.1 and 1.2 revisions.

This AW was originally issued to inform Operators of possible excessive hydraulic fluid transfer between systems and actions that can be taken to reduce the possibility of occurrence.

3. DESCRIPTION:

Operators have reported hydraulic fluid transferring from one system to another over a period of time. The fluid transfer can occur during maintenance and/or normal aircraft parking operation. Although the transfer of fluid is possible from the left to the right system, the most commonly seen transfer is and from the right to the left system and from the right to the auxiliary system.

Fluid transfer between the two main systems occurs through the brake shuttle valves. These valves port fluid from the main brake systems or the parking brake system to actuate the brakes. While it is normal for a small amount of fluid to be transferred from one system to another, excessive fluid transfer may occur if the setting and releasing of the PARK/EMER BRAKE handle is not done in specific sequence.

In order to prevent fluid transfer between the two main systems, the setting and releasing of the PARK/EMER BRAKE handle must be done in a specific sequence. The brake pedals must be depressed prior to and during the setting the PARK/EMER BRAKE handle. Once the PARK/EMER BRAKE handle is in the locked position, the brake pedals can be released. The same sequence must be followed to release the PARK/EMER BRAKE. The Ref 1.1 and 1.2 manuals have been revised to reflect this procedure.

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Fluid transfer from the right system to the auxiliary system occurs through the Switching Valve. The transfer occurs when the right system Direct Current Motor Pump (DCMP) is selected ON, the Auxiliary DCMP is selected OFF and the right system pressure drops below 2500 psi (for example, when spoilers are operated).

To prevent excessive hydraulic fluid transfer from the right system to the auxiliary system, the auxiliary system should be switched to AUTO each time a maintenance task is performed using the right DCMP. If the auxiliary system cannot be operated, monitor reservoir quantity during maintenance and service the right and auxiliary reservoirs prior to returning the aircraft to service. The Ref 1.2 manuals have been revised to reflect this procedure.

4. ACTION:

Flight crews and maintenance personnel should be aware of the information contained in this Advisory Wire and are reminded to follow the Ref. 1.1 and 1.2 instructions.

Should you have any questions pertaining to this AW or require additional information, please contact your Bombardier Field Service Representative (FSR) or the Customer Response Center (CRC).