

# Civil Aviation Authority EMERGENCY MANDATORY PERMIT DIRECTIVE



Number: 2012-002-E

Issue date: 6 June 2012

In accordance with 22(1) of Air Navigation Order 2009 as amended the following action required by this Mandatory Permit Directive (MPD) is mandatory for applicable aircraft registered in the United Kingdom operating on a UK CAA Permit to Fly.

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Type Approval Holder's Name:		Type/Model Designation(s):
BRP - Powertrain GmbH & Co. KG		Rotax 912
Title:	Fuel Pump - Pressure side fuel hose replacement	
Manufacturer:	BRP - Powertrain GmbH & Co. KG	
Applicability:	Rotax 912UL and 912ULS series engines	
Reason:	Reports from service have indicated that certain fuel pumps part number (P/N) 893114 may be fitted with a pressure side fuel hose which does not meet specification.  This condition, if not corrected, may result in rubber particles detaching from the hose and entering the fuel flow, leading to irregularities in the carburettor function, possible in-flight engine shutdown and forced landing.  This MPD therefore instructs immediate inspection of the fuel system for contamination and replacement of the pressure side fuel hose used on engines fitted with certain serial numbers (S/N) of fuel pump P/N 893114. A new hose part number is called up as a replacement for the suspect fuel hose.  This MPD also prohibits installation of an engine with an affected fuel pump on an aircraft, unless the fuel pump installation has satisfied the requirements of this MPD.	
Effective Date:	7 June 2012	

# Compliance/Action:

1. For Rotax 912UL and 912ULS engines of the following serial numbers:

Note: serial number ranges quoted are inclusive.

912UL S/N. 6,770.549 to 6,770.552 6,770.674 to 6,770.685

0,110.014 (0 0,110.000

912ULS S/N. 6,779.365 to 6,779.367

6,779.378 to 6,779.382 6,779.522 to 6,779.553 6,779.560 to 6,779.561 6,779.582 to 6,779.601 6,779.603 to 6,779.623

6,779.676 to 6,779.705

6,779.709

6,779.853 to 6,779.882 6,779.890 to 6,779.893 6,779.908 to 6,779.913 6,779.962 to 6,779.991 6,780.017 to 6,780.019 6,780.053 to 6,780.054 6,780.064 to 6,780.072

6,780.074 to 6,780.075 6.780.077 to 6.780.079

6.780.087

These engines are known to have been delivered with fuel hoses which are now considered not to meet specification. Before next flight accomplish the following actions, if not already accomplished.

- 1.1. If no fuel pump change has been carried out since entry into service, carry out fuel system inspections and replace the pressure side hose with a new side hose P/N 874336, in accordance with the full instructions of BRP-Powertrain ASB 912-061R1.
- 1.2. If a fuel pump change has been carried out since entry into service, determine the P/N and S/N of the replacement fuel pump fitted. If this fuel pump is P/N 893114 with a S/N included in table 1, carry out fuel system inspections and replace the pressure side hose with a new side hose P/N 874336, in accordance with the full instructions of BRP-Powertrain ASB 912-061R1.
- 2. For all other Rotax 912UL and 912ULS series engines:

These engines are only potentially affected if they have had a fuel pump replacement after 31 October 2011. Determine from records whether a fuel pump replacement has been carried out since this date. If no replacement has been carried out, then no further action is required.

# **Compliance/Action:**

- 2.1 If the engine has had a fuel pump replacement since this date, then accomplish the following actions before next flight, if not already accomplished:
- 2.2 Determine the P/N and S/N of the replacement pump fitted. If this pump is P/N 893114 with a S/N included in table 1, carry out fuel system inspections and replace the pressure side hose with a new hose P/N 874336 in accordance the full instructions of BRP-Powe ASB 912-061R1.
- 3. Ensure any hose removed from service as a result of this MPD is not re-used.
- 4. From the effective date of this MPD, do not install an engine having an affected fuel pump P/N 893114 with a S/N as listed in table 1 on an aircraft unless this MPD has been satisfied.

# Table 1 –Fuel pump Part No. 893114 – Serial Nos. Covered by this MPD

11.3117 to 11.3325 inclusive
11.4036 to 11.4355 inclusive
11.4516 to 11.4595 inclusive
12.0251 to 12.0270 inclusive

# Ensure compliance with this MPD is recorded in the aircraft logbook

### **Reference Publications:**

BRP-Powertrain ASB-912-061ULR1 dated 31 May 2012. (ASB-912-061R1 is referenced in this bulletin).

The use of later revisions of this document is acceptable for compliance with this MPD. A subsequent re-issue of this document as "SB" rather than an "ASB" document may also be used to satisfy this MPD.

## Remarks:

- This MPD was not posted for consultation because of the urgency of the requirement.
- Enquiries regarding this Mandatory Permit Directive should be referred to: Airworthiness Evaluation and Surveillance, Civil Aviation Authority, Safety Regulation Group, Aviation House, Gatwick Airport South, West Sussex RH6 0YR.

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