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TITLE Trelleborg "HYDRO K" HOSE disbonding

**CLASSIFICATION** Compulsory

**COMPLIANCE** Within next 25hours.

**APPLICABILITY** All Pegasus & Cyclone airsports aircraft with hose

production code marking "25 99"

**INTRODUCTION** It has been discovered that one batch of "Hydro K" hose has been produced with the inner lining incorrectly bonded to the fabric reinforcement and outer rubber casing. This may allow the inner lining tube to collapse producing a blockage. The following explains how to detect the faulty hose:

#### **ACTION**

The HYDRO K HOSE is a 6mm bore reinforced black rubber hose which can be used for fuel systems, fuel pressure gauges, coolant carburetter heaters for Rotax 912 engines and possibly other applications

The hose can be recognised by the words Hydro K printed in blue at intervals along its length, together with an interrupted blue line all along the hose. Other printing is on the hose but has changed over time. A production code is moulded into the hose in small numbers at approx 600mm intervals.

All stock hose, of all production codes, supplied since 30<sup>th</sup> April 2001 has been checked and found to be satisfactory. Users of hose supplied prior to this date are requested to check their installations as described below. Any faulty disbonded hose will be exchanged free of charge until 30<sup>th</sup> September 2001.

At the same time, hoses should be inspected for general condition including chafing and external cracking.

## **Fuel systems**

Either remove hoses and check for obstruction of the hose, or carry out a fuel flow check in accordance with BCAR Section S ( with minimum fuel in tank, at least 125% of maximum power fuel flow for pumped systems).

Engine	Full throttle & rpm max fuel flow
Rotax 912	241/h at 5,500
Rotax 582/40kw (Quantum)	231/h at 6,000
Rotax 582 high power (AX2000)	271/h at 6,500
Rotax 462LN (XL except XL tug)	171/h at 5,500
Rotax 462HP (Q Wing, XL tug)	201/h at 6,500
Rotax 503-1v	18l/h at 6,500
Rotax 503-2v	191/h at 6,500
Rotax 508 (Chaser)	141/h at 7000
Rotax 447 (XL and Q wing)	181/h at 6,500
Rotax 377 (Chaser)	16l/h at 6,500
HKS 700e	241/h at 6,200



#### Fuel pressure gauge system

Check that the fuel pressure reading rises to correct range when engine is running.

# Coolant carburetter heat system for 912 engine series

Check that the temperature of both the carburetter heater coils rises with the coolant temperature. Ensure the carburettor heat tap is ON. If in doubt, remove hoses and check for obstructions.

# Other applications

Remove hose and check for obstructions. Checking can be done using a low pressure air line (approx 15-30 psi (1-2bar) and checking for free flow.

### **Action**

Check all possibly affected hose within 25 hours, or before next flight if there is a suspected fuel starvation problem. Any faulty hose should be returned to Cyclone Airsports before 30<sup>th</sup> September 2001. It will be exchanged for new hose.

It is recommended to photograph or sketch the pipe routing prior to removal. If in doubt, consult the parts manual or ask the factory.

Ensure new hoses are fitted securely, using clamps. Ensure the hoses are routed to production standard, so as to avoid chafeing, kinking, contact with hot parts. The routing must also allow for relative movement in operation without applying tension to the hose.

Ease new hose over the connections using a little lubricant, e.g. WD40. Use new clamps where necessary. Be careful not to cut the hose with the edge of the nipple, which can cause a blockage when replacing hoses.

Check for leaks, security, function, chafing of new hose on runup.

Fill in the technical log, "SB 104, Hydro K hose inspection carried out" when completed.

# ISSUED BY W.G.Brooks DATE 12/7/01

Chief	Date	Sales	Date
Engineer		Director	
Production	Date	Managing	Date
Manager		Director	