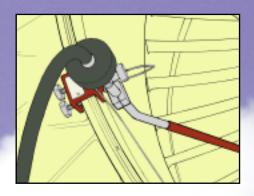
# A.T.Juniper (Liverpool) Ltd.

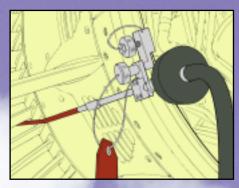
Short engine wash probes for use with the:

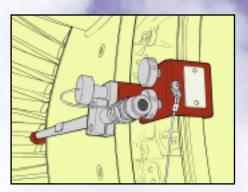
**2x25 Gallon Compressor Wash Rig** (JMP/CFM56/D/4777/C200 - NSN 1730-99-668-7936)

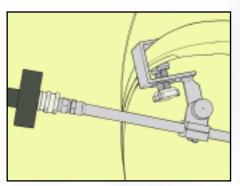
**2x25 Gallon Universal Compressor Wash Rig** (JMP/HER/D/1144/C600 - NSN 4940-99-849-9712)

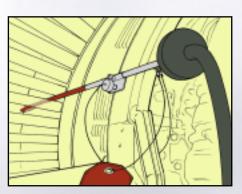
**2x50 Gallon Compressor Wash Rig** (JMP/LUFT/D/4972/C500)











Juniper also produce a range of long probes for use with the engine thrust reverser doors closed. The full list is on the website.



Prepared by:

A.T.Juniper (Liverpool) Ltd. Marshall Works 5-17 Bleasdale Road Liverpool L18 5JB United Kingdom

## CONTACT

Tel: +44 (0) 151 733 1553 Fax: +44 (0) 151 734 3166 Email: gse@juniper-liverpool.com Web: www.juniper-liverpool.com

## The Juniper short probe range has been developed for the following engine groups:

## CFM56, CF6, GE90, GEnx, CF34

PowerJet SaM 146

**Rolls Royce** 

RB211, V2500, TRENT

P&W

4000. JT9D



### Engine Preparation - Refer to appropriate Aircraft Maintenance Manual.

Open left and right thrust reversers on the engine to be washed in accordance with the instructions detailed in the appropriate AMM.

#### **CAUTION:**

## Ensure the engine fan is held securely during the fitting of the engine probes.

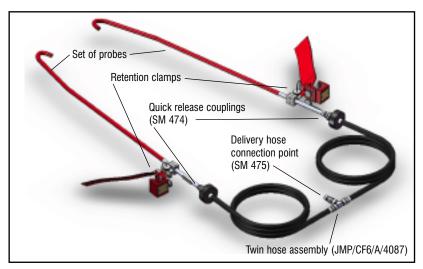
Attach the engine probe retention clamps to the fan reverser inner or outer support ring. Generally, for smaller fan engines (such as the CFM) this will be in the 10.00 and 2.00 o'clock positions, and for larger fan engines (such as the CF6) in the 8.00 and 4.00 positions, aft looking forward.

Guide the probes through the fan outlet guide vanes (OGV's) from the aft end at locations adjacent to the retention clamps, locating them over the booster/fan splitter so that the nozzles point between the booster inlet guide vanes into the booster.

Put each probe aft mount on the probe retention clamp screw and fit the retention knobs.

Adjust each probe aft mount to hold the probes safely in place using the allen key provided. Connect the twin hose assembly (provided with all compressor wash rigs) to both of the engine probes whilst holding the probes securely to avoid movement, making sure that the probes are attached securely to the engine with the hoses attached. Connect delivery hose from the wash rig to the twin hose assembly. Probe installation is now complete.

## CAUTION: Check that probe nozzle is clear of the back of the fan.



The twin hose assembly connected to the probes, awaiting connection to the rig.





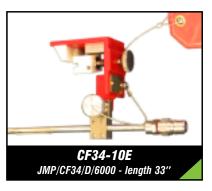
















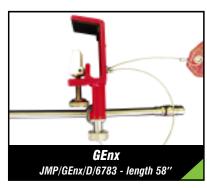






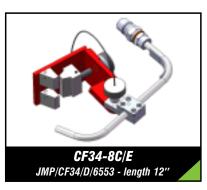


















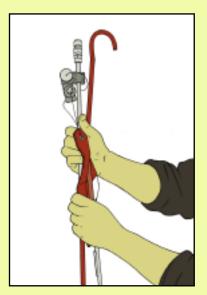






## **CAUTION:** The probes should be handled carefully and stored in the following manner to avoid damage.

When returning the probes to the correct compartment in the stowage box they should first be placed 'top to tail' into the supplied equipment bag after draining them thoroughly.







**NOTE:** The storage boxes are supplied in one of two standard sizes dependant on the size of probes ordered: **Small box:** (height) 39" x (width) 24" x (depth) 15½" **Large box:** (height) 48½" x (width) 24" x (depth) 15½"



## A.T.Juniper (Liverpool) Limited

Marshall Works, 5-17 Bleasdale Road, Allerton, Liverpool L18 5JB Tel: +44 (0)151 733 1553 or +44 (0)151 609 0428

Also At: Ash House, Prenton Way, North Cheshire Trading Estate, Wirral CH43 3DU

Email: gse@juniper-liverpool.com Web: www.juniper-liverpool.com