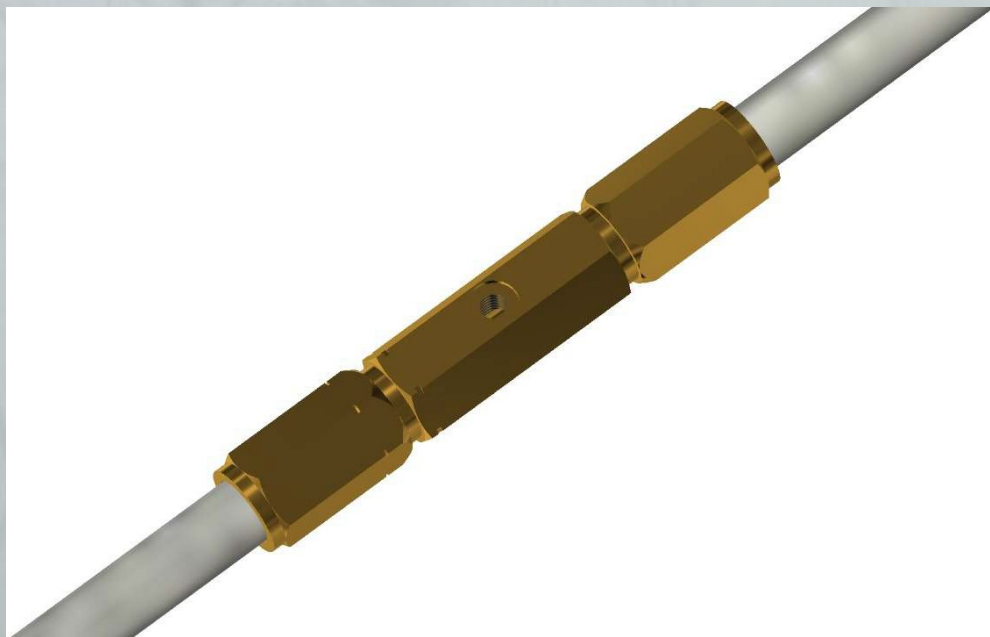




**REPAIR COUPLING INSTRUCTION MANUAL FOR 8mm
THERMOPLASTIC HIGH PRESSURE FOG LATERAL**





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INTRODUCTION

This Repair Coupling was developed as an infield repair solution for our 8mm Thermoplastic High Pressure (HP) Fog Lateral where the hydraulic swaged fitting has failed for one reason or another. In the past the HP Fog Lateral was removed for re-swaging of the Fog Nozzle Connector; now with the development of this Repair Coupling the replacement of the failed connector can be undertaken with the HP Fog Lateral in place.

This Repair Coupling is made using the latest machining technology and composed of three elements, the body, a left hand and right hand threaded Swage Nut. All components are constructed from an inert brass alloy. The Repair Coupler body is tapped with THREE 12/24 UNC ports allowing the Repair Coupling to be used for 180 degree or 120 degree HP Fog Nozzle systems.

For the ease of an infield repair, a Swage Nut spanner has been developed that allows for both the left hand and right hand threaded Swage Nuts to be held fast while the Repair Coupler body is rotated allowing the threaded male ends to screw into the Swage Nuts.

Once the male threaded ends of the Repair Coupler are screwed fully into the Swage Nuts the assembly is complete. Please note, the length of the Repair Coupler body has been designed to compensate for the removal of the original swaged coupler including the section of thermoplastic hose captured in the swaged ferrules.

COMPONENT PART NUMBERS

Name	Part Number	Description
Repair Coupling	FLRC8R2-06	Fog Lateral Repair Coupler BR 180-120D 8mm
Assembly Spanner		

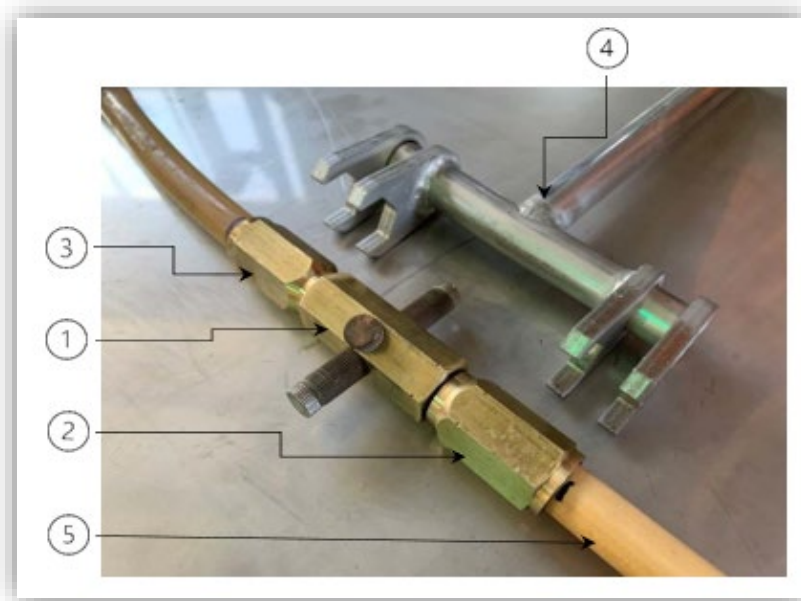


COMPONENTS

No.	Part	Material
1	Fog Connector Body	C268 Brass-Copper Alloy
2	Swage Nut Left Hand	C268 Brass-Copper Alloy
3	Swage Nut Right Hand	C268 Brass-Copper Alloy
4	Swage Nut Spanner	SS 304
5	Thermoplastic HP Hose	SAE 100R7

NOTE: additional items required for the installation of the Repair Coupling

1. 19mm open flat spanner
2. Lubrication gel (Hydra slip or KY Gel as options)



SAFETY PRECAUTIONS

⚠ WARNING!

HIGH-PRESSURE LEAKS ARE DANGEROUS AND MAY CAUSE PERSONAL INJURY. MAKE SURE TO SHUT OFF FLUID FLOW AND RELEASE RESIDUAL PRESSURE IN THE LINE BEFORE ATTEMPTING TO REPAIR.

NOTE:

While the information in this manual is presented in good faith and believed to be accurate, AIS Greenworks disclaims any implied warranty of merchantability or fitness of particular purpose and makes no express warranty except as may be stated in its written agreement with and for its customers. In no event shall AIS Greenworks be liable to anyone for any indirect, special, or consequential damages.

This information and specifications in this document are subject to change without notice.



FIELD ASSEMBLY

1.



The Repair Coupling will replace 55mm of HP FogLateral. Mark either side of the failed swaged connector.

2.



Using a sharp knife cut out the section to be replaced.

3.



Scribe a witness mark 30mm down from both cut ends.



4.



Disassemble the Repair Coupler, keeping note of the witness notches on the left hand threaded items.

5.



Apply water based lubricant to the inside **only** of both thermoplastic hose ends.

NB: Suggested Lubricant such as:

1. Hydra-slip (available from Irrigation and Engineering shops)
2. Durex KY Jelly (available from Chemists)

6.



Screw Swage Nuts onto both hose ends to the depth of the witness marks made in step 3.

NOTE: NO lubricant is to be used on the outside surface of the thermoplastic hose or inside the Swage Nuts.



7.



Apply water-based lubricant to the tapered ends of the male threaded sections of the Repair Coupler Body.

NOTE: DO NOT place lubricant on the Thread

8.



Fit Repair Coupler body tapered ends into Swage Nuts noting that the left-hand thread NOTCHES are aligned for the Nut and Body.

9.



Rotate the Repair Coupling Body by hand to get it started.

NOTE: Making the repair to the fog lateral in situ, you will need to spread the Swage Nuts to fit the Repair Coupling body. This is a benefit as it will apply end thrust to the Swage Nuts while screwing the Repair Coupling body into the Swage Nuts.



10.



Prior to using the 19 mm spanner to screw the Repair Coupling together, measure the gap between the Repair Coupling Hex body and the Swage Nut, if the gap differs more than 1 mm unscrew the body until you feel it clicking as the start of the threads ride over one another, once this is happening in both Swage Nuts you can revert back to screwing the Repair Coupling together. Please check the gap again.

11.



Once the Repair Coupling is fully screwed together check that both witness marks on the thermoplastic hose are against the Swage Nut as in step #6. If the gap has grown by less than 1 mm the assembly is complete.

NOTE: If greater than 1mm you will need to disassemble the Repair Coupling and start the process again from step #5.

Common cause for this to occur is insufficient lubrication was used inside the thermoplastic hose (step #5) and /or on the end male thread (step #7)

12.



Once the Repair Coupling installation is complete fit the two Fog Nozzles and one plug, then using the spanners rotate the Repair Coupling body to align the Fog Nozzles on the Repair Coupling to those on the HP Fog Lateral.

13.

Once your HP Fog Lateral is repaired and ready for pressurising, it is important that you inspect the repair during the first couple of Fogging sequences. Inspection can be undertaken from the ground, however if you are going to test the repair from the position of repair it is important you are wearing the correct PPE and aware of any and all potential risks.



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