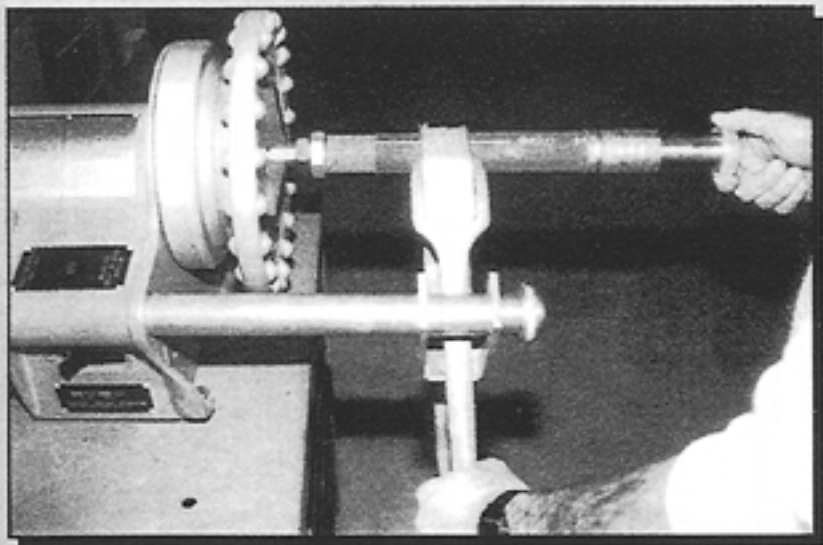
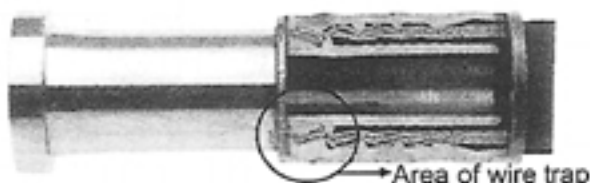


HOW TO ASSEMBLE INTERNAL SKIVE-STYLE HOSE AND FITTINGS



Foreward

Internal Skive Fittings are designed specifically for use on select spiral wrapped wire reinforced hydraulic hose assemblies. The wire entrapment created by this assembly procedure is designed to be utilized for high pressure applications. For your safety and the safety of the personnel and equipment working near these high pressure lines, follow these instructions carefully. **Do not deviate from these instructions** or premature hose failure may occur.



References

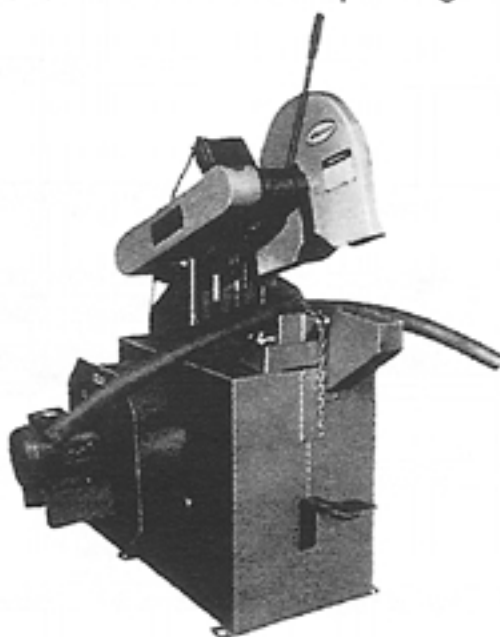
- Aeroquip Fluid Products Handbook
- Aeroquip Crimp Specifications Bulletin

Hose Preparation

Cutting the Hose

Use only an abrasive type blade for cutting spiral hose. A steel blade is not acceptable. Cut the hose at a 90° angle.

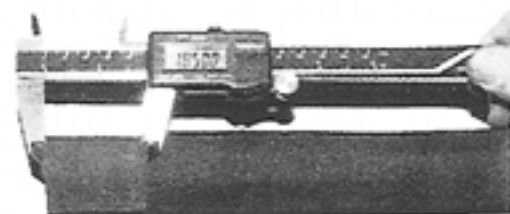
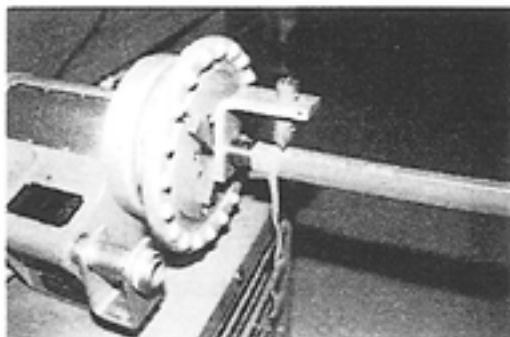
Note: A square cut is important to allow for the proper internal skive depth measurement. Follow cut-off saw manufacturer's recommendations and procedures. Safety glasses should be worn when operating the cut-off saw.



Skiving the Hose

Reference the crimp specifications bulletin and find the hose style and size to be skived. Select the designated external skive tool for that specific hose style and size (FT1231-size).

To make the skiving process simple and easy, Aeroquip recommends using an Aeroquip FT1097 assembly machine. For proper machine operation, see FT1097-1-2-500 operator's manual. Simply install the skive tool into the machine and rotate the tool in a counter clockwise direction. Remove the designated length of hose cover using the preset external skive tool. This information is designated as "Length A" in the crimp specifications bulletin.



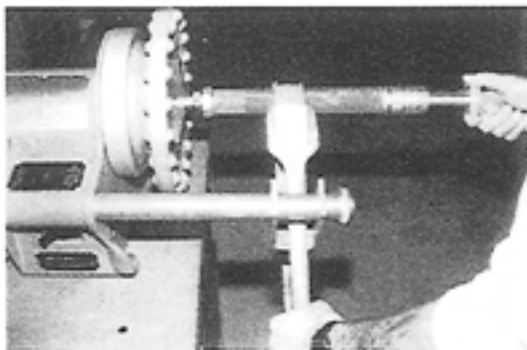
Verify that the required amount (depth or thickness) of hose cover material has been removed so that the top reinforcement wire is showing. Now skive the inside of the hose using the designated internal skive tool called out in the crimp specifications bulletin (FT1240-100-size or FT1240-150-size). The amount of hose tube material to be removed is listed as "Length E". Once again, the Aeroquip FT1097 assembly machine is recommended for this task. Simply place the appropriate internal skive tool in the FT1097 and ensure the tool rotates in a clockwise direction.



The use of a hose strap wrench is recommended. The strap wrench should be placed around the hose approximately 6 inches from the end of the hose.



CAUTION: The handle of the strap wrench should be placed in the safety clevis of the FT1097 machine. Keep hand near the free end of the wrench handle for maximum force and safety.



With the skive tool rotating in a clockwise direction, push the hose onto the skive tool nose and allow the skive tool to pull the hose onto the cutting surface. Some pressure may be required to ensure the hose bottoms against the shoulder of the skive tool.

Remove the hose from the skive tool and verify the length of the internal skive, as listed in the crimp specifications bulletin under "Length E". Verify that the rubber is removed over the full length.



Adjustment of internal skive tool is required if "E" dimension is not correct. Readjust tool for proper skive length.

Internal skive tool wear will occur after many uses. For resharpening information, please contact the Aeroquip Customer Service Department.

Note: If necessary, for FC254-08 hose only. Skive cover, then install socket on hose. Internal skive the hose with socket in place. Adjustment of internal skive tool may be necessary to allow for socket shoulder thickness.

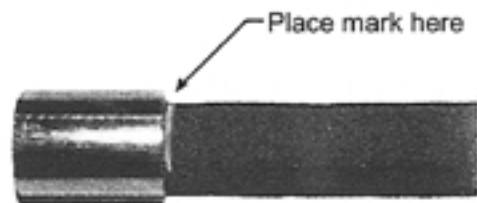
Cleaning of Hose

Clean hose using either bottle brushes (Aeroquip Part FT1238-size) or use the "Contamination Eliminator" (Aeroquip Part FF11300 series) air pressurized cleaning tool. For more information on purchasing this tool, contact the Aeroquip Customer Service Department.



Preassembly

Place the designated socket, referenced in both the handbook and crimp specifications bulletin, over the hose end until the socket shoulder contacts the hose end. **Mark the hose cover at the skirt end of the socket.**



Insert the nipple into the hose until the nipple shoulder bottoms out against the socket shoulder. Slight rotation of the nipple during the insertion process will aid in the process. Aeroquip lube, P/N 222070, may be used sparingly to aid in nipple insertion.

Verify proper fitting insertion by holding the socket against the nipple shoulder and checking that the mark on the hose cover is still within 1/8" of the mark.



WARNING! Failure to fully insert the fitting onto the hose may lead to premature failure of the hose assembly and may result in personal injury.

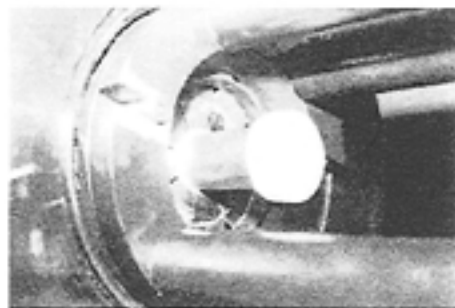
Crimping of Hose Assembly

Reference the crimp specifications bulletin and identify the "figure number" which corresponds to the hose style and size that you are working with. Check the designated "crimp diameter" identified as the "B" dimension and "crimp position" of the socket identified as the "C" dimension in the crimp specifications bulletin.

Verify that you have inserted the correct "crimp die cage" into the Aeroquip crimp machine. The crimp die(s) specified are listed in the crimp specifications bulletin under the column heading of "Die Suffix Number".

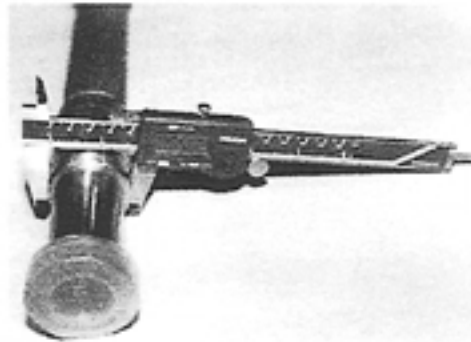


CAUTION: Ensure you read and adhere to all footnotes in the Crimp Specifications Bulletin with particular emphasis immediately next to the die suffix numbers.

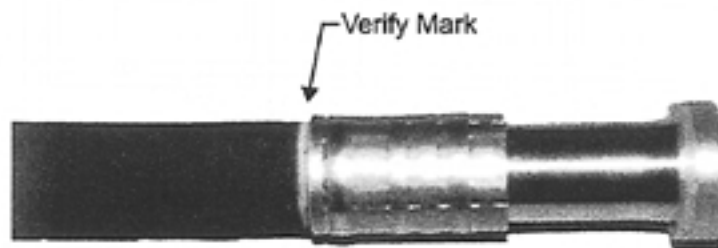


Hose Assembly Inspection

Upon completing the crimp, verify that both the "B" and "C" dimensions are within the proper tolerances per the crimp specifications bulletin. Measure the "B" dimensions as designated in the corresponding figure drawn in the crimp specifications bulletin.



Verify that the mark on the hose cover is either at the edge of the socket end or has been covered over by the socket during the crimping procedure. If the socket position has moved away from the mark on the cover, the crimp was not successful and cannot be used.



Visually check the hose assembly after fully crimping the fitting onto the hose. Check the inner tube as well as the socket skirt end where it meets the hose for bulging. If bulging is present, the hose assembly must not be used.

Proof Testing

The hose assembly should be proof tested at twice the recommended working pressure of the hose.



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