

Technical Service Bulletin

May 2017 TSB356.02

HYDRAcube Disassembly Procedure

This Technical Service Bulletin is related to removing HYDRAcube headers from the modules.

Introduction

On occasion, a module may need to be removed from the skid. The isolated module needs to undergo bubble testing to isolate damaged fiber(s). To perform this test, the module is removed from the skid and module headers must be detached. This same procedure should be followed when implementing o-ring or header replacements. Diligence is required to prevent part damage.

A mechanical lifting device is recommended to move the modules. The estimated time for removal and re-installation of headers and related components is approximately 15 minutes per module.

Tools Needed:

1. Crow bar
2. Universal Wing Nut or Gator Grip (optional)
3. Wooden blocks (need to raise module to remove headers)
4. Crescent Wrench or Similar Tool
5. 17 mm and 5/8" Wrench
6. PPE according to feed water type

To Dismantle Module:

1. Stop HYDRAcube skid.
2. Release system pressure.
3. Drain feed and filtrate sides of rack.
4. Disconnect all flange or similar type connections on one side of the rack to be able to separate HYDRAcube headers by approximately 1". See Figure 1. This will be necessary to avoid damaging gaskets and molded parts on the headers.



Section to
disconnect

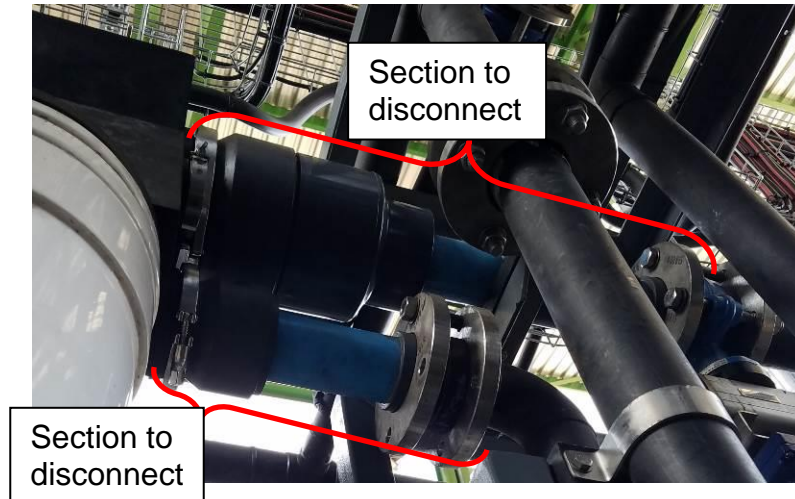


Figure 1: Example of flange connections at end of module that can be disconnected.

5. Disconnect all sanitary clamps from top and bottom (2x6" clamps, 2x4" clamps, and 2x2" or 3" clamps) on one side of the module that is to be removed. See Figure 2.
NOTE: There may be some residual liquid in the module that will come out.

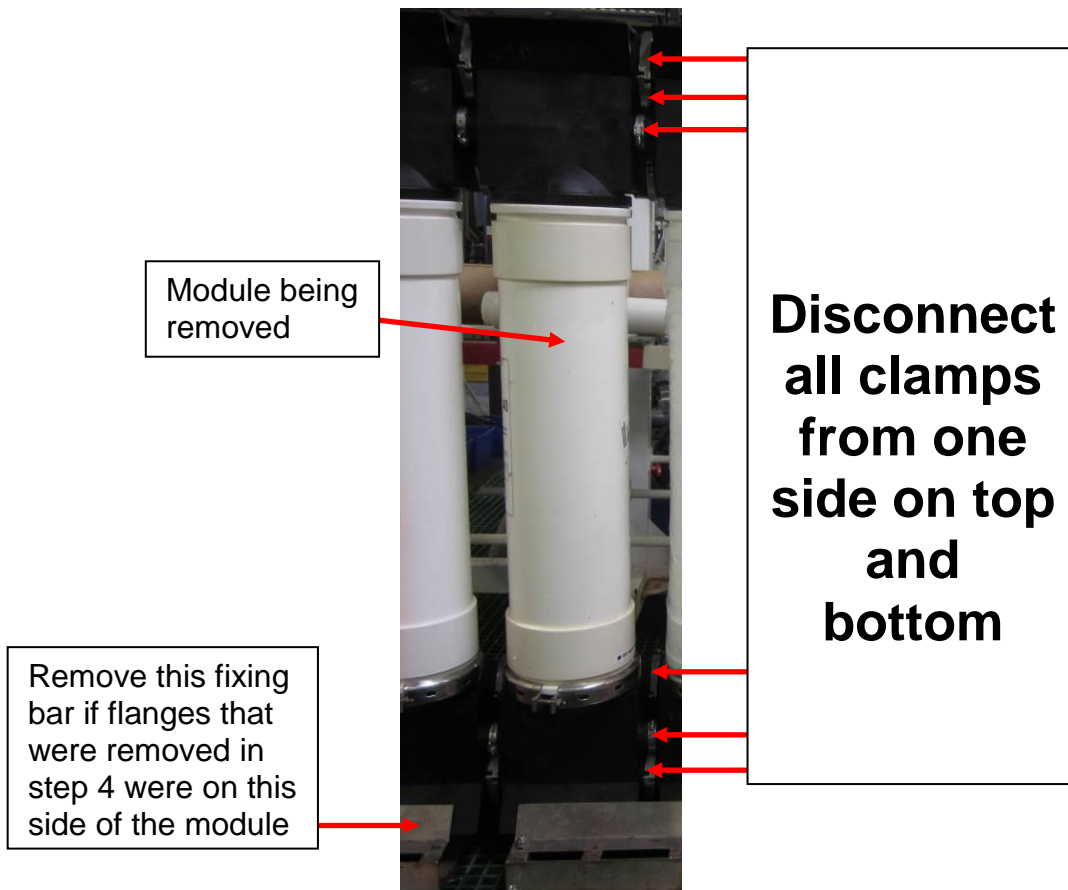


Figure 2: Disconnect clamps on one side of module

6. Remove the front fixing bar from frame(s) such that you may slide one section. You will need to remove the front fixing bars on the same section that had the flanges

removed. See Figure 2. Leave the other front fixing bars in place. **NOTE:** Any additional straps or braces that are in place should be removed at this time as well.

CAUTION: As these modules are freely standing, a temporary strap around the modules is recommended to ensure modules do not tip over.

7. Use a crowbar or wooden block to separate the headers, while taking care not to damage the shells or any other module components. It may be necessary to use some padding on areas where the crowbar will touch the module. See Figure 3.



Figure 3: Crowbar with padding to separate modules.

8. Disconnect all sanitary clamps on top and bottom (2x6" clamps, 2x4" clamps, and 2x2" or 3" clamps) on the other side of the module that is to be removed and again separate this module from the rest.
9. Lay the module horizontally on wooden blocks to facilitate removal of the headers by keeping the headers off the ground.
10. Remove bolts, washers, and nuts from stainless steel clamps at both top and bottom of module.
11. Disconnect clamps from module on both top and bottom.

CAUTION: Ensure headers do not fall off while clamps are being removed.

12. Pull, **DO NOT ROTATE**, on the headers to remove from the module shell.

CAUTION: Do not use any metallic tools to loosen headers from shell. Shell and headers are made from plastic and irreversible damage on sealing surfaces may occur.

13. Pull, **DO NOT ROTATE**, concentrate and feed adaptors from all modules if they remained in the module while pulling off the headers.
14. Module is now completely disassembled.

To assemble HYDRAcube skids, please refer to TSB 352.

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