



TOTALFLOW

Technical Bulletin 155

NGC Controller Module Interface Gasket Torque Specification Notice

Totalflow Technical Bulletin
Version 1.0, Revision AC (8 October 2007)





Purpose

To describe a procedure to verify the proper gasket sealing interface between the NGC-82XX's analytical module and the feed through assembly. Proper sealing will prevent possible carrier and calibration gas leaks.

Description

It has come to our attention that a small number of NGC-8206 gas chromatographs were found to have a small leak between the analytical module and feed through assembly. These leaks were due to the 5/16" hex head screw becoming loose during shipment.

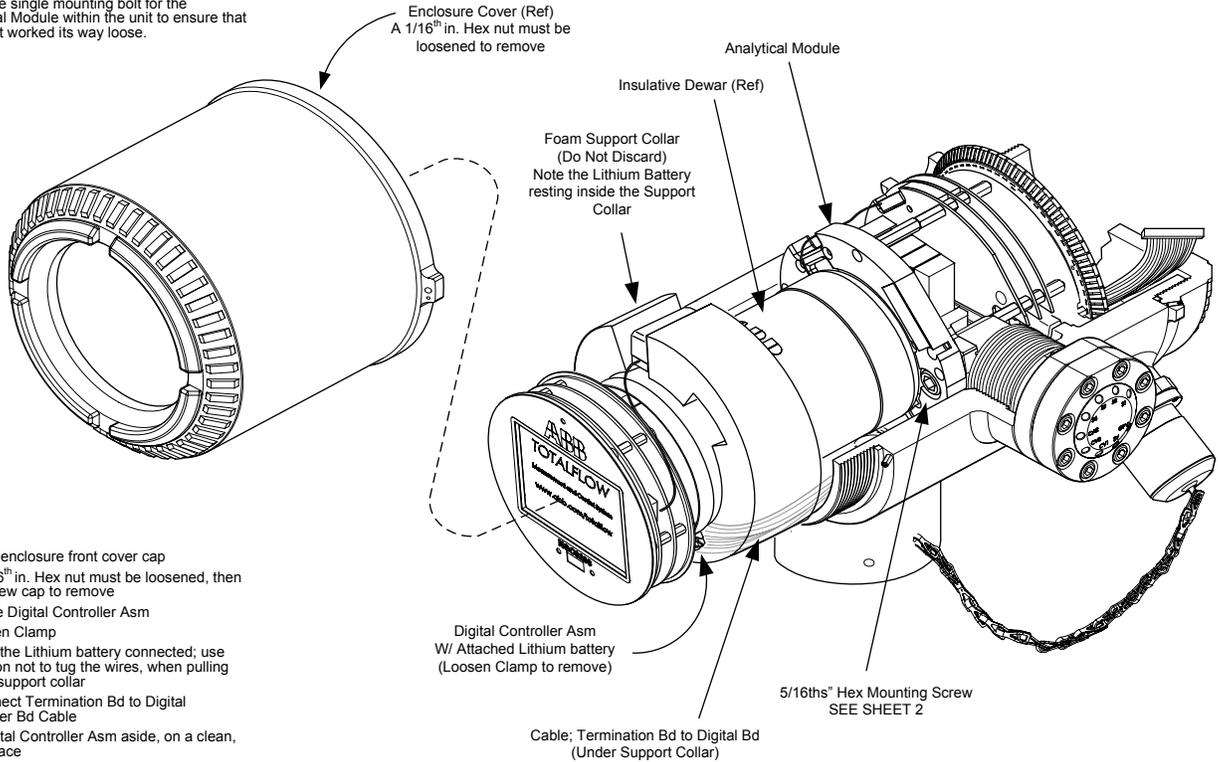
ABB recommends this screw be tightened to either 10 ft/lbs or hand tight using a 5/16" hex head driver prior to startup or the next time a site visit is scheduled.

Step-by-Step Procedure for tightening the hex head screw:

1. Place unit in hold mode
2. Collect all historical data
3. Save off configuration data using PCCU's save/restore utility (if not already backed up)
4. Remove power
5. Shut off stream, carrier and calibration valves to NGC feed through manifold
6. Continue by following the steps outlined in the two drawings below

NOTES:

1. **WARNING:** This drawing does not illustrate completely the installation methods required for hazardous locations. Prior to any installation in a Classified Hazardous Location, verify installation methods by the Control Drawing referenced on the product's name tag and national and local codes.
2. After shipment and/or handling the NGC unit, check the single mounting bolt for the Analytical Module within the unit to ensure that it has not worked its way loose.



Steps:

- A. Remove enclosure front cover cap
 - A 1/16th in. Hex nut must be loosened, then unscrew cap to remove
- B. Remove Digital Controller Asm
 - Loosen Clamp
 - Keep the Lithium battery connected; use caution not to tug the wires, when pulling from support collar
- C. Disconnect Termination Bd to Digital Controller Bd Cable
- D. Set Digital Controller Asm aside, on a clean, dry surface
- E. Remove Support Collar

Continue to SHEET 2

REF:N/A

ABB	TOTALFLOW Products	ACTION	DOC TYPE	TITLE	DWG NO.	REV	SHEET
		x	UD	ANALYTICAL MODULE, HEX MOUNTING SCREW TORQUE SPECIFICATION	x	AA	1 OF 2

NOTES, cont:

F. Unscrew and remove Dewar (there is no need to remove the cylinder wall canister)

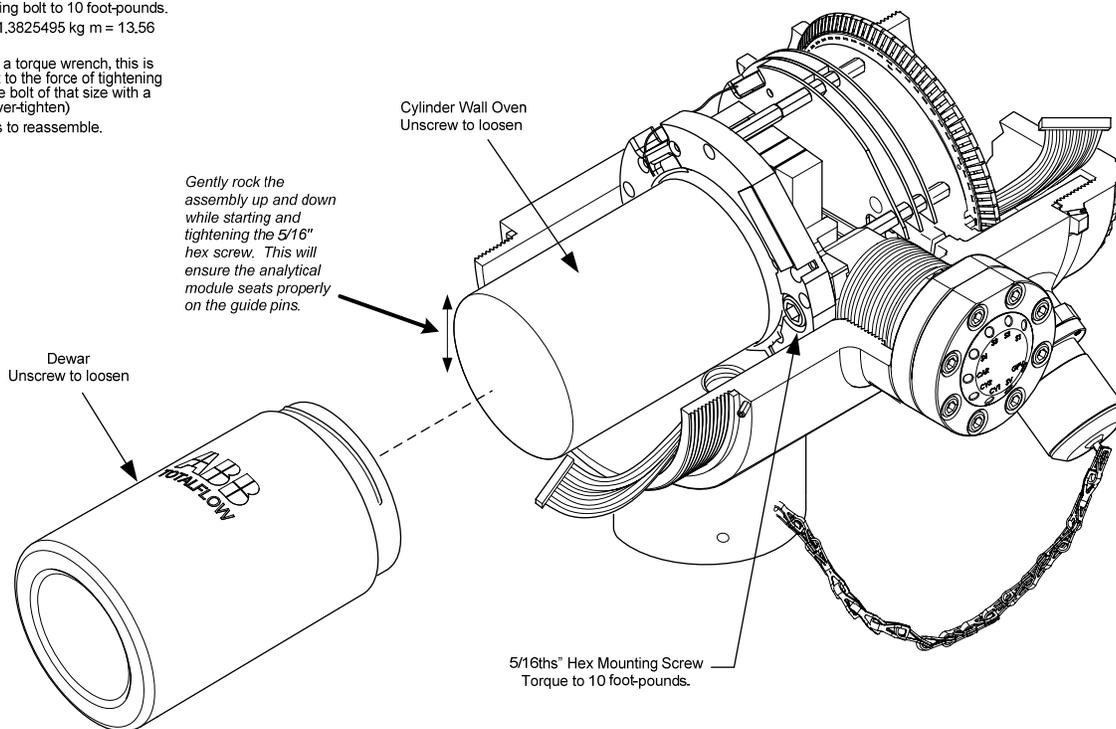
G. Position the analytical module in position using the alignment pins. Gently rock the cylinder canister up and down while tightening the 5/16" hex screw

H. Tighten 5/16" Mounting bolt to 10 foot-pounds.

- 10 foot-pounds = 1.3825495 kg m = 13.56 Newton-metres.

(For those without a torque wrench, this is roughly equivalent to the force of tightening a normal machine bolt of that size with a wrench- Do Not over-tighten)

I. Reverse the process to reassemble.



REF:NA

	TOTALFLOW Products	ACTION x	DOC TYPE UD	TITLE ANALYTICAL MODULE, HEX MOUNTING SCREW TORQUE SPECIFICATION	DWG NO. x	REV AA	SHEET 2 OF 2
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Note1: If a torque wrench is not available then using the supplied hex head driver contained in the optional NGC tool kit (or customer supplied 5/16" hex wrench), take both hands and snug the hex head screw.

Note2: As noted in the drawing above: Gently rock the assembly up and down while starting and tightening the 5/16" hex screw. This will ensure the analytical module seats properly on the guide pins.

Conclusion

The steps provided above are intended to verify a proper seal between the analytical module and feed through manifold. These steps will ensure that a leak will not develop and potentially result in a premature carrier or calibration bottle replacement. If you have purchased a portable NGC chromatograph It may be necessary to periodically torque the 5/16" hex head screw depending on the vibration levels encountered on any particular unit. If you have technical questions concerning this bulletin contact our service organization at (800) 442-3097 option #2.

