

Status	2 - Disposition Needed	Trend	07-Out Of Tolerance
Department	NCSX	Division	NCSX Field Period Assembly
Source/Org	VENDOR		
Item Dwg/Part#	NCSX-CSPEC-121-02-06	Procurement #	S005243-F
RAP#	3245	Job Doc #	S005243-F
Vendor	MAJOR TOOL AND MACHINE, INC.		
RAP Title	Vacuum Vessel Subassembly Component Receipt Inspection		

HoldTag Applied

Nonconforming Condition (include requirement(s) violated):

VSA-3, The following items were found to have a magnetic permeability greater than the 1.02 Mu maximum allowed by NCSX-CSPEC-121-02-06 section 3.2.4. Items found were either higher than reported by the vender, were not reported by the vender, or the vender reports were not specific enough (port 12 covers).
 Items: Port 4A Cover; Port 4B Cover; Port 4A Flange; Port 4B Flange; Port 12A Cover; Port 12B Cover; Ports 11A, 11B, 10A, 10B, 6A and 6B Hardware.
 See attached pages for item descriptions and details.
 (D-NCSX-FPA-QA1-00)

Rev. 1 - 12/20/06 - Reinspected port 12A cover with new permeability gauge #5906 with values of 1.4, 1.5, and 1.6. Revised data sheet for the port 12A cover is attached.

Lot Size Recd	0	Sample Size Insp	0	<input type="checkbox"/> Lot Rejected	# Rejected	0
Reported By	Phelps C	Validated By	Malinowski F	Validated Date	12/20/06	

Disposition: Rework*__ Repair*__ Use As Is*__ Return To Vendor*__ Scrap*__

Rev 0: The VVSA #3 port 12A covers are significantly higher, 1.7 over the entire back side and edges, and is NOT acceptable. The permeability must be below 1.2 overall.
 Only very small regions (less than 1 square inch cumulatively) may be up to 1.7; machined edges may be up to 1.6.

For rework or repair of vendor supplied equipments, fill in information below:

#Hours	_____	\$Est Labor	_____	\$G&A	_____
\$Material	_____	\$Burden	_____	\$Total	_____
Disposition By	_____	Date	_____		
Supervisor's Concur	_____	Date	_____		
Eng. Dept. Head Concur	_____	Date	_____		
WCO/Other	_____	Date	_____		
PQA/QC Mgr Dispos Concur	_____	Date	_____		
QC Field Verification By	_____	Date	_____		

Distribution

Cog M. Viola
Insp Phelps C

Proj. Doc Control (when closed)

QC Files
 Malsbury J
 Boscoe J
 Malinowski F
 Edwards J
 Nelson B
 Reiersen W
 Williams M
 Tyrrell M

Disposition: Rework___ Repair ___ Use As Is___ Return to Vendor___ Scrap___

For rework or repair of vendor supplied equipment, fill in information below:

Hours _____ \$ Est Labor _____ \$ G&A _____
\$ Material _____ \$ Burden _____ \$ Total _____

Disposition by _____

~~Supervisor's Concurrence~~ RLM _____

Eng. Dept. Head Concurrence _____

Other (i.e., WCO/FPE) Concurrence _____

PQA/QC Mgr Disposition Concurrence _____

QA Field Verification by _____

VVSA-3 Items Above Magnetic Permeability Tolerance

Item	Permeability Readings (Mu)					Vender NCR
	Front Face	Edge - Face	Edge - Middle	Edge - Back	Back Face	
Port 12A	>1.1 <1.2	>1.2 <1.3	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	MTM NCR 19063
Cover	>1.1 <1.2	>1.2 <1.3	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	"Port 12 Cover"
	>1.1 <1.2	>1.1 <1.2	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.04 <1.05 Mu
	>1.1 <1.2	>1.1 <1.2	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.1 <1.2	>1.1 <1.2	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	MTM NCR 19176
	>1.1 <1.2	>1.1 <1.2	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	"Port 12 Cover"
	>1.1 <1.2	>1.1 <1.2	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.3 <1.4</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 >1.3 <1.4 Mu
	>1.1 <1.2	>1.1 <1.2	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.1 <1.2	>1.1 <1.2	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.2 <1.3	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.1 <1.2	>1.1 <1.2	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.1 <1.2	>1.2 <1.3	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.1 <1.2	>1.2 <1.3	>1.3 <1.7 [<u>>1.6 <1.7</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.1 <1.2	>1.1 <1.2	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.3 <1.4</u>]	
	>1.1 <1.2	>1.1 <1.2	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.1 <1.2	>1.1 <1.2	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.09 <1.1	>1.1 <1.2	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.08 <1.09	>1.1 <1.2	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.08 <1.09	>1.1 <1.2	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.08 <1.09	>1.1 <1.2	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.09 <1.1	>1.1 <1.2	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.09 <1.1	>1.2 <1.3	>1.3 <1.7 [<u>>1.6 <1.7</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.1 <1.2	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.5 <1.6</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.1 <1.2				>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.09 <1.1				>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.08 <1.09				>1.3 <1.7 [<u>>1.5 <1.6</u>]	
	>1.08 <1.09				>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.06 <1.08				>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.08 <1.09				>1.3 <1.7 [<u>>1.5 <1.6</u>]	
	>1.09 <1.1				>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.09 <1.1				>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.1 <1.2				>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.08 <1.09				>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.08 <1.09				>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.06 <1.08				>1.3 <1.7 [<u>>1.4 <1.5</u>]	
	>1.06 <1.08				>1.3 <1.7 [<u>>1.4 <1.5</u>]	

Notes: Measurements taken in a 3" x 3" grid.
 Available Test Values: 1.02, 1.03, 1.04, 1.05, 1.06, 1.08, 1.09, 1.1, 1.2, 1.3, 1.7, 1.8, 2.0
 Reference NCR #3676

Revision 1 All areas originally found to be >1.3 <1.7 were reinspected with new Severn permeability gauge #5906
 12/20/2006 which includes the following values 1.4, 1.5, 1.6. New values are listed next to original values in [brackets] above.