

REF: ITAG144 Rev A

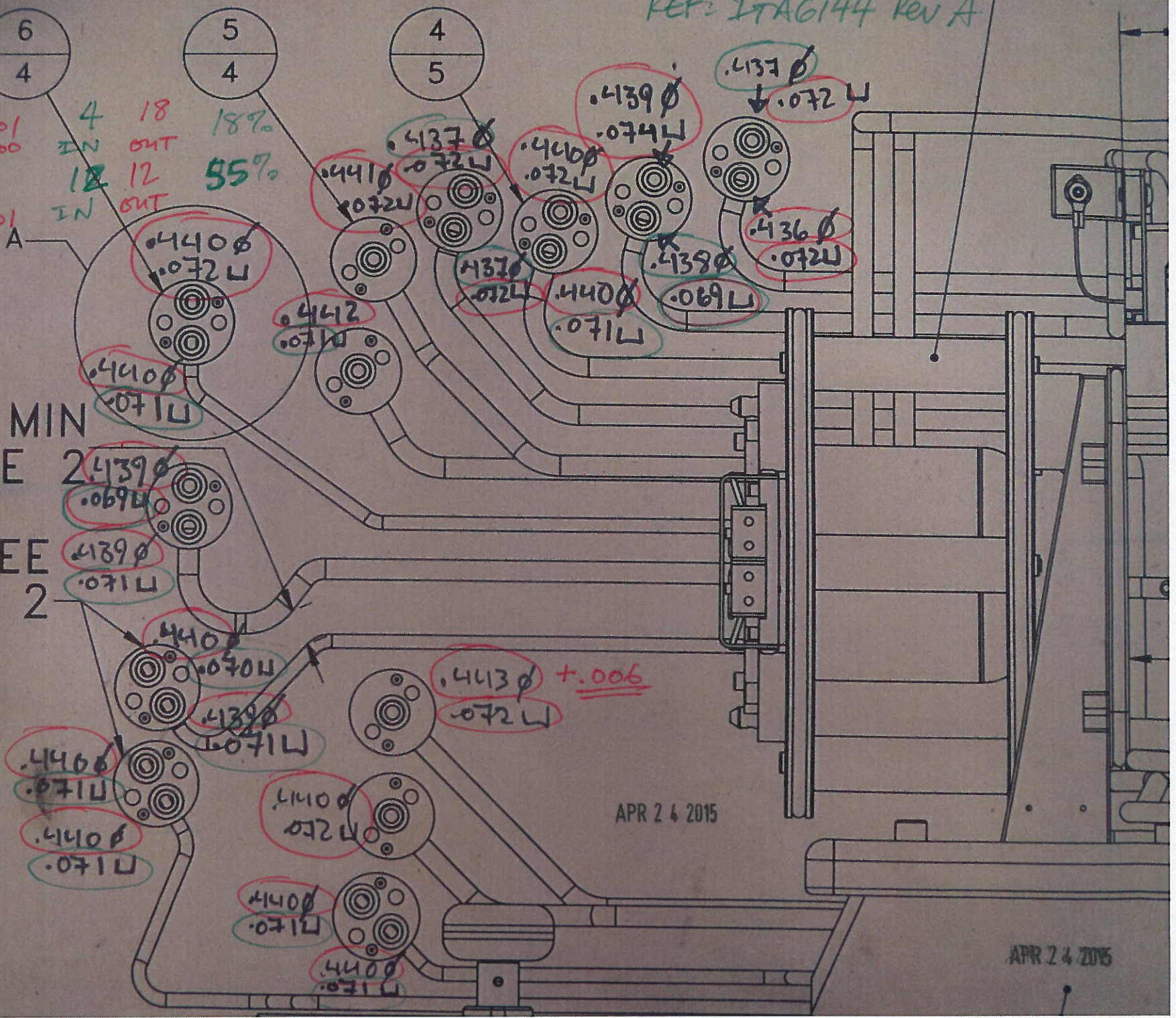


$\phi$  SPECL  
 $.437 \pm .001$   
 $-.000$   
 $\downarrow$  SPECL  
 $.070 \pm .001$

4 18  
 IN OUT  
 12 12  
 IN OUT  
 18%  
 55%

0.668 MIN  
SEE NOTE 2

SEE  
NOTE 2

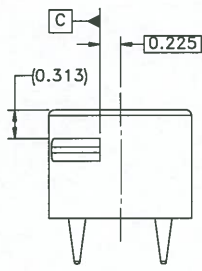


$.4413 \phi + .006$   
.072 W

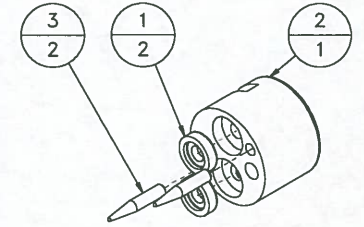
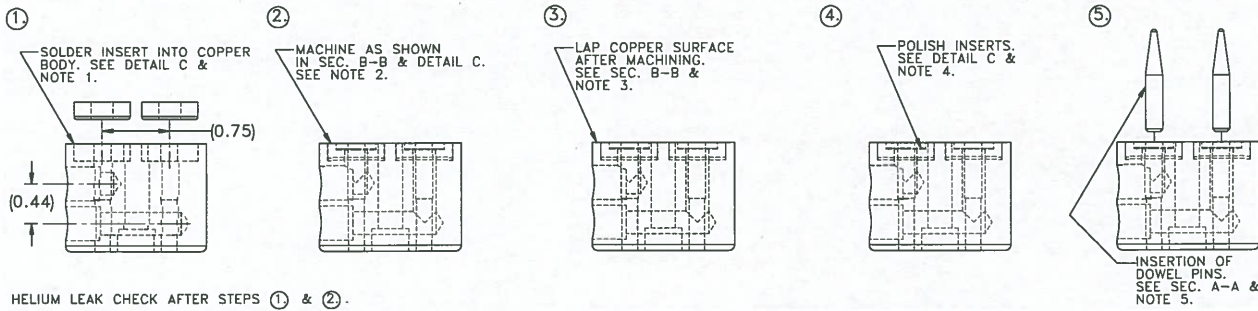
APR 24 2015

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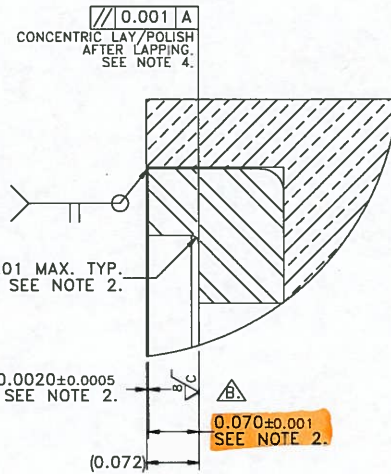
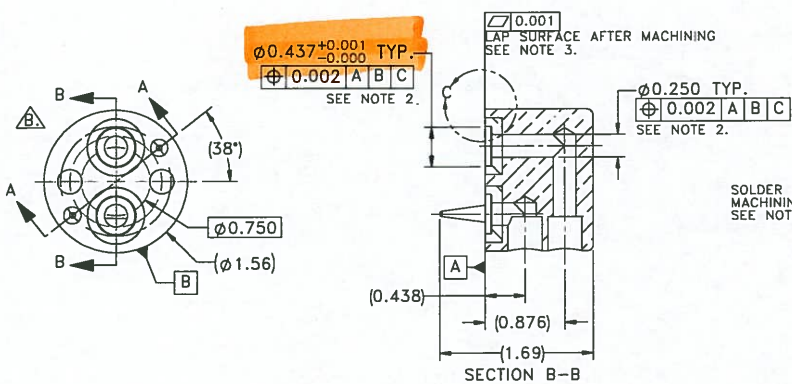
ITEM	REF No.	DESCRIPTION	MATERIAL	QTY.
1	ITA6022	WATER CONX. BLOCK INSERT	AISI 316	2
2	ITA6063	WATER CONX. BLOCK OUTER HALF TYPE A	Copper	1
3	ITA6064	DOWEL PIN DETAIL	AISI 304	2



ASSEMBLY/MACHINING SEQUENCE:



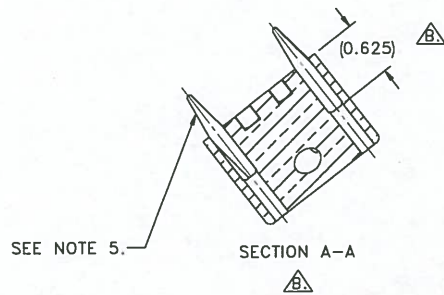
EXPLODED ISOMETRIC VIEW NOT TO SCALE



DETAIL C SCALE 8 : 1

- NOTES:
- USE SOLDER 97.5% LEAD, 1.5% SILVER, 1% TIN, MELT TEMP. 590-595F. MCMASTER-CARR #7667A23. USE EUTECTOR FLUX #157. CLEAN RESIDUE WITH SOAP AND WATER. HELIUM LEAK CHECK AFTER SOLDERING.
  - MACHINE AFTER SOLDERING. HELIUM LEAK CHECK INSERTS AFTER MACHINING.
  - LAP COPPER SURFACE AFTER MACHINING. MATCH WITH LAPPING PLATE AND PRUSSIAN BLUE TO ENSURE MIN. 80% CONTACT AREA WITH MATING BLOCK.
  - POLISH BASE OF SEAL GROOVE IN STEEL INSERTS AFTER LAPPING TO Ra= 8µ INCH FINISH, TO REMOVE CONCENTRIC MACHINING LAY.
  - AFTER POLISHING, PRESS FIT DOWEL PINS (ITEM 3) SUCH THAT THE TAPER TRANSITION LINE IS AT DATUM SURFACE "A".
  - THIS DRAWING REFERS TO LEGACY AUTOCAD DWGS. ITA2342 REV F. (JAN. 09) AND ITA2340 REV E. (SEP. 06)

APR 24 2015



SECTION A-A

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TOLERANCES UNLESS OTHERWISE SPECIFIED	
DECIMALS .X	± 0.1
.XX	± 0.01
.XXX	± 0.005
ANGULAR	± 1.0°
SURFACE FINISH	125 µ inch

ALL DIMS IN INCHES

DESIGNED L.U.	SUB-ASSY N/A
DRAWN M. ILAGAN	ASSEMBLY ITA6021
CHECKED G. MINOR	
REA # 1970	
TRACKING # P-312	

REV	DATE	REVISION DESCRIPTION	BY	APPD
B	12/4/2013	ECO-3055 - Updated views, added surface finish spec.	Keith C Ng	G. Minor
A	11/7/2013	ECO-3022 - CHANGE CONTROL APPLIES	Mark Ilagan	F. AMES

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VANCOUVER, BRITISH COLUMBIA  
CANADA V6T-2A3

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**TYPE A OUTER WATER CONX. BLOCK ASS'Y SOURCE TRAY ASSEMBLY ISAC TARGET MODULE**

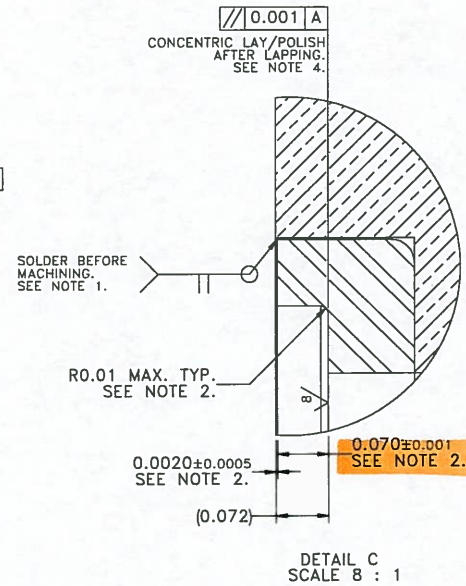
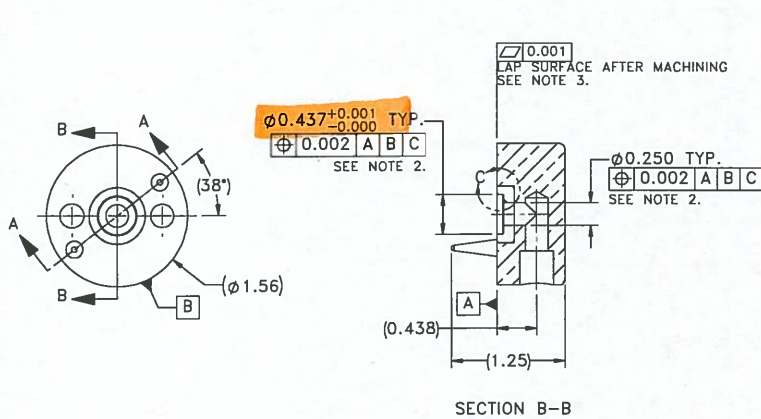
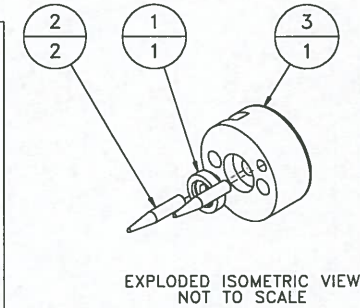
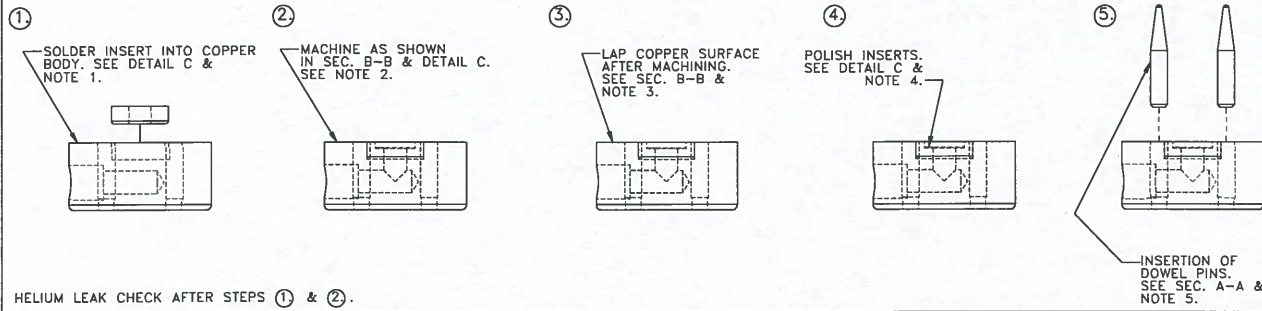
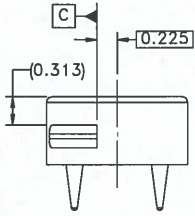
SCALE 1:1  
DATE 25 OCT 2013

DWG NO. ITA2447  
THIRD ANGLE PROJECTION

SIZE SHEET 1 OF 1  
REV B

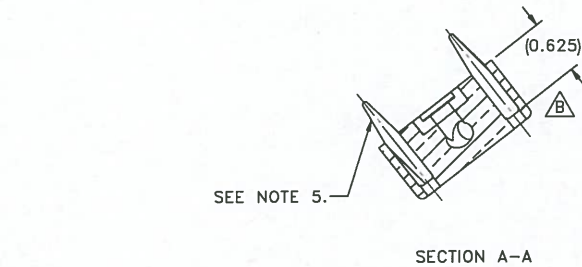
ITEM	REF No.	DESCRIPTION	MATERIAL	QTY.
1	ITA6022	WATER CONX. BLOCK INSERT	AISI 316	1
2	ITA6064	DOWEL PIN DETAIL	AISI 304	2
3	ITA6065	WATER CONX. BLOCK OUTER HALF TYPE B	Copper	1

ASSEMBLY/MACHINING SEQUENCE:



NOTES:

- USE SOLDER 97.5% LEAD, 1.5% SILVER, 1% TIN, MELT TEMP. 590-595F. MCMASTER-CARR #7667A23. USE EUTECTOR FLUX #157. CLEAN RESIDUE WITH SOAP AND WATER. HELIUM LEAK CHECK AFTER SOLDERING.
- MACHINE AFTER SOLDERING. HELIUM LEAK CHECK INSERTS AFTER MACHINING.
- LAP COPPER SURFACE AFTER MACHINING. MATCH WITH LAPPING PLATE AND PRUSSIAN BLUE TO ENSURE MIN. 80% CONTACT AREA WITH MATING BLOCK.
- POLISH BASE OF SEAL GROOVE IN STEEL INSERTS AFTER LAPPING TO  $R_{a}=8\mu$  INCH FINISH, TO REMOVE CONCENTRIC MACHINING LAY.
- AFTER POLISHING, PRESS FIT DOWEL PINS SUCH THAT THE TAPER TRANSITION LINE IS AT DATUM SURFACE "A".
- THIS DRAWING REFERS TO LEGACY AUTOCAD DWG. ITA2371C REV. F (SEPT. 06) AND ITA2344C REV. E (JAN. 09).



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TOLERANCES UNLESS OTHERWISE SPECIFIED	
DECIMALS .X	$\pm 0.1$
.XX	$\pm 0.01$
.XXX	$\pm 0.005$
ANGULAR	$\pm 1.0^\circ$
SURFACE FINISH	125 $\mu$ Inch

ALL DIMS IN INCHES

DESIGNED L.U.	SUB-ASSY N/A
DRAWN M. ILAGAN	ASSEMBLY ITA6021
CHECKED G. MINOR	
REA # 1970	
TRACKING # P-312	

REV	DATE	REVISION DESCRIPTION	BY	APPD
B	1/28/2015	ECO-3587 - ADDED COUNTERBORE FEATURE REFERENCE DIMENSION	Mark Ilagan	F. AMES
A	11/19/2013	ECO-3038 - CHANGE CONTROL APPLIES	Mark Ilagan	F. AMES



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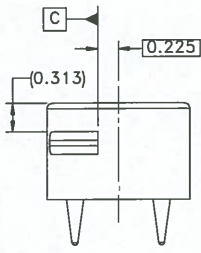
CANADA'S NATIONAL LABORATORY FOR PARTICLE AND NUCLEAR PHYSICS

**TYPE B OUTER WATER CONX. BLOCK ASS'Y SOURCE TRAY ASSEMBLY ISAC TARGET MODULE**

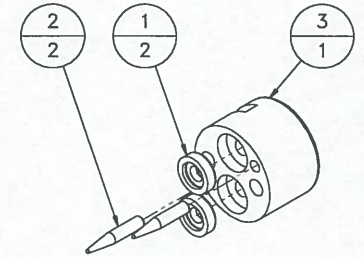
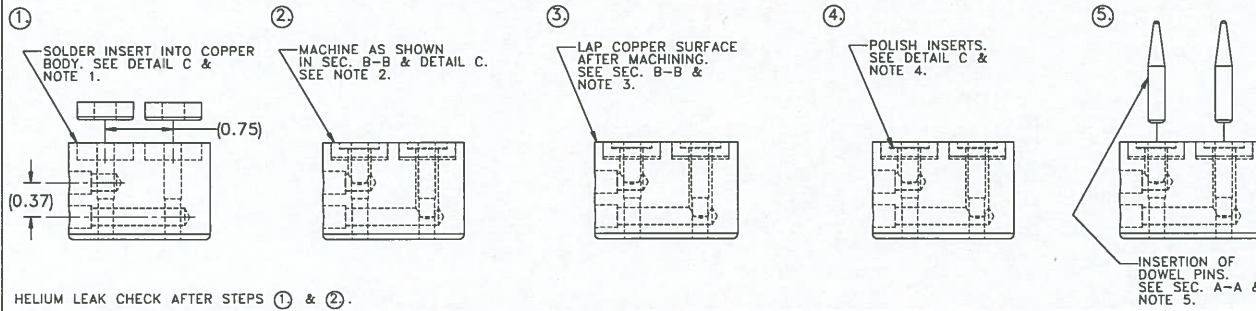
SCALE 1:1	THIRD ANGLE PROJECTION	DWG NO. ITA2448	SIZE C	SHEET 1 OF 1	REV B
DATE 8 NOV 2013					

APR 24 2015

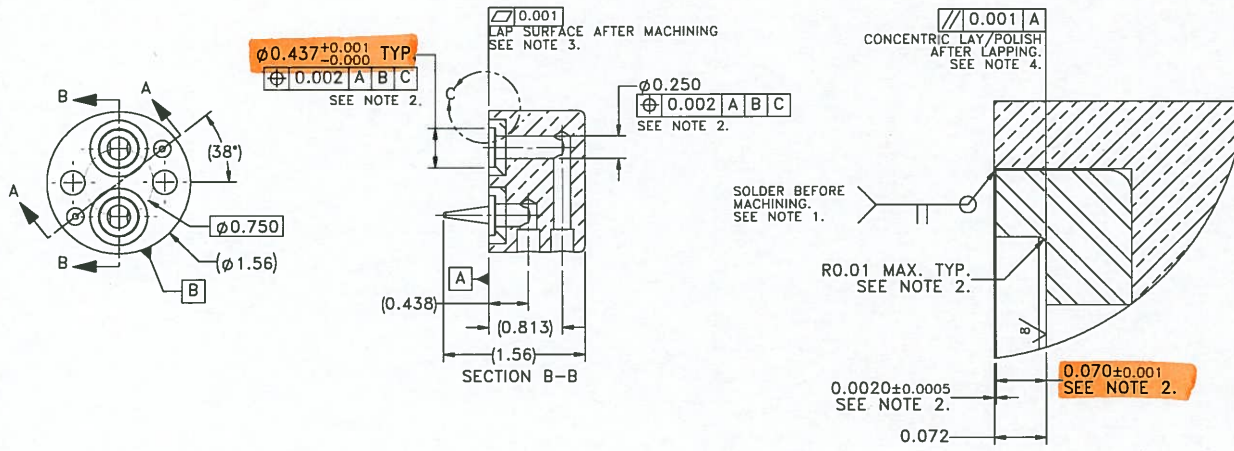
ITEM	REF No.	DESCRIPTION	MATERIAL	QTY.
1	ITA6022	WATER CONX. BLOCK INSERT	AISI 316	2
2	ITA6064	DOWEL PIN DETAIL	AISI 304	2
3	ITA6066	WATER CONX. BLOCK OUTER HALF TYPE C	Copper	1



ASSEMBLY/MACHINING SEQUENCE:



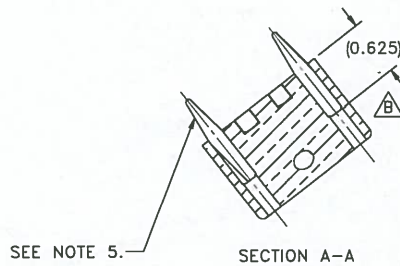
EXPLODED ISOMETRIC VIEW NOT TO SCALE



NOTES:

- USE SOLDER 97.5% LEAD, 1.5% SILVER, 1% TIN, MELT TEMP. 590-595F. MCMMASTER-CARR #7667A23. USE EUECTOR FLUX #157. CLEAN RESIDUE WITH SOAP AND WATER. HELIUM LEAK CHECK AFTER SOLDERING.
- MACHINE AFTER SOLDERING. HELIUM LEAK CHECK INSERTS AFTER MACHINING.
- LAP COPPER SURFACE AFTER MACHINING. MATCH WITH LAPPING PLATE AND PRUSSIAN BLUE TO ENSURE MIN. 80% CONTACT AREA WITH MATING BLOCK.
- POLISH BASE OF SEAL GROOVE IN STEEL INSERTS AFTER LAPPING TO Ra= 8μ INCH FINISH, TO REMOVE CONCENTRIC MACHINING LAY.
- AFTER POLISHING, PRESS FIT DOWEL PINS (ITEM 2) SUCH THAT THE TAPER TRANSITION LINE IS AT DATUM SURFACE "A".
- THIS DRAWING REFERS TO LEGACY AUTOCAD DWGS. ITA2372 REV. F (OCT. 06) AND ITA2347C REV. E (JAN. 09).

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TOLERANCES UNLESS OTHERWISE SPECIFIED	
DECIMALS .X	± 0.1
.XX	± 0.01
.XXX	± 0.005
ANGULAR	± 1.0°
SURFACE FINISH	125 μ inch

ALL DIMS IN INCHES

DESIGNED L.U.	SUB-ASSY N/A
DRAWN M. ILAGAN	
CHECKED G. MINOR	ASSEMBLY ITA6021
REA # 1970	
TRACKING # P-312	

REV	DATE	REVISION DESCRIPTION	BY	APPD
B	1/28/2015	ECO-3587 - ADD COUNTERBORE FEATURE REFERENCE DIMENSION	Mark Ilagan	F. AMES
A	11/19/2013	ECO-3038 - CHANGE CONTROL APPLIES	Mark Ilagan	



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CANADA'S NATIONAL LABORATORY FOR PARTICLE AND NUCLEAR PHYSICS

TYPE C OUTER WATER CONX. BLOCK ASS'Y  
SOURCE TRAY ASSEMBLY  
ISAC TARGET MODULE

SCALE 1:1	DWG NO. ITA2449	SIZE SHEET 1 OF 1	REV B
DATE 8 NOV 2013	THIRD-ANGLE PROJECTION		