



California Institute of Technology
Massachusetts Institute of Technology

DCN No. E040356-00-D

Document Change Notice (DCN)

Sheet 1 of 2

DOCUMENT No. (DOC-REV-GP.ID)	TITLE	NEW REV
E990034-00-B-D	Small Optics Cleaning Procedure	C

CHANGE DESCRIPTION (FROM/TO):

Paragraph 1- From: Class 100 laminar flow bench / sink
 To: Class 100 laminar flow bench / sink with an ionizing bar from Terra Universal 11”L with 2 emitters –Part# 2005-05A

Paragraph 3- From: Dry nitrogen cylinder, 99.99% pure
 To: Dry nitrogen needs to be at least 99.995% pure with a water vapor content under 1 part per million (ppm). The N2 shall be dispensed from an ionizing gun fitted with a 0.2 micron filter.

Paragraph 5- From: Berkshire Fastsorb 820 tissue
 To: AlphaSorb 10

Paragraph 6 – From: Berkshire Lenx 90 tissue
 To: Alpha 10 from Texwipe.

Paragraph 7 – From: Crystallizing dish for washing
 To: Pyrex container

REASON FOR CHANGE: ~~Up-dated materials and revised process~~

ACTION: Incorporate Change Attach DCN to Drawings Other Action (specify):

DISPOSITION OF HARDWARE (IDENTIFY SERIAL NUMBERS)	DCN DISTRIBUTION												
<input checked="" type="checkbox"/> No hardware was affected (record change only):	<table border="0"> <tr> <td>G. Billingley</td> <td>Coyne</td> <td>D.Cook</td> </tr> <tr> <td>Shoemaker</td> <td>G. Traylor</td> <td>Tyler</td> </tr> <tr> <td>Weiss</td> <td>M. Zucker</td> <td>F. Raab</td> </tr> <tr> <td>Worden</td> <td>J. Romie</td> <td></td> </tr> </table>	G. Billingley	Coyne	D.Cook	Shoemaker	G. Traylor	Tyler	Weiss	M. Zucker	F. Raab	Worden	J. Romie	
G. Billingley		Coyne	D.Cook										
Shoemaker		G. Traylor	Tyler										
Weiss		M. Zucker	F. Raab										
Worden		J. Romie											
<input type="checkbox"/> List S/Ns which comply already:													
<input type="checkbox"/> List S/Ns to be reworked/scrapped:													
<input type="checkbox"/> List S/N’s to be built with this change:													
<input type="checkbox"/> List S/Ns to be retested per this change:													
<input type="checkbox"/>													

SAFETY, COST, SCHEDULE, REQUIREMENTS IMPACT? NO YES (If YES, enter CR (CCB) or TCP (TRB) #)

APPROVALS:	DATE	OTHER APPROVALS (SPECIFY)	DATE
ORIGINATOR: H. Armandula	08/11/04		
TASK LEADER: G. Billingsley			
GROUP LEADER: D. Coyne			

DCC RELEASE:



Document Change Notice (DCN)

CHANGE DESCRIPTION (FROM/TO):

Paragraph 9 – From: (Holders should be cleaned with Liquinox solution and...

To: (Holders should be cleaned with Liquinox solution as prepared below and...

Paragraph 10- From: Gloves - Ansell Edmont Latex 90-576

To: VWR Certi-Clean Class 100 Latex Gloves or Accu Tech Ultra Clean 91300 Gloves.

Paragraph 11 – From:... increase temperature to 70 degrees C

To: ... increase temperature to 50 degrees

Step 1 – From: Line the bottom of the Pyrex dish with 3-4 sheets of Lenx 90 tissue cut to size.

To: Line the bottom of the Pyrex dish with a piece of Alpha 10 tissue cut to size

Step 3 – From: Warm the solution to 70 degrees C.

To: Warm the solution to 50 degrees C - Added: turn off hot plate

Step 4 – From: Soak the immersed parts, keeping the dish on the hot plate, for 15 min. at 70 degrees C.

To: Soak the immersed parts, keeping the dish on the hot plate, for 15 min. at 50 degrees C.

Step 7-From: With a soft lens tissue (Lensx 90)...

To: With a soft lens tissue (Alpha 10)

Step 11 – Deleted NOTE: If the water does not sheets off the mirror surface at this time, repeat steps 4 through 11.

Step 12- From ...“several sheets of Lens 90 tissue”

To: ...a sheet of AlphaSorb 10 wipe

Step 13 - From “With the ionizing gun, utilizing pure, dry nitrogen and low pressure (45/50 lbs / in.2), slowly blow the edges of the mirror and the coated surfaces starting from the top and working towards the bottom. Ensure that no water remains on the surfaces.”

To: Allow the water to dry off for 15 minutes insuring that the particle count under the flow bench meets the spec of Class 10 clean room (ISO4), would not contain more than 10 particles bigger than half a micron in a cubic foot of air.

Step 14 - From “Inspect the mirror surfaces for streaks or water marks in a dark room, over a dark background, with a high intensity light”

To: Inspect for remnants of water at the bottom of the optic. If any are present, carefully remove with the corner of a folded Alpha 10 wipe dampened with methanol.

Final inspect the surfaces of the mirrors for streaks or water marks in a dark room, over a dark background, with a high intensity light”

Step 17- From: “Wet a Lenx 90 tissue with warm (70 degrees C) Liquinox solution.”

To: Wet a Alpha 10 wipe with warm (50 degrees C) Liquinox solution.

Step 21 – From: Place the mirror, resting on its edge over several sheets of Lenx 90 tissue.

To: Place the mirror, resting on its edge over one AlphaSorb 10 wipe.