

# GLAST LAT Tracker Subsystem

## TOWER ASSEMBLY and TEST FLOW CHART

**Tower P/N:**

LAT-DS-00722

**Revision number:**

3

**Tower S/N:**

13

**Assembly supervisor**

Emilio Rapposelli

**Assembly operator 1**

Francesco Bellardi

**Assembly QA responsible**

Aldo Troianiello

**Assembly operator 2**

Carmelo Sgro

**Tower  
Assembly**

**Tray Assembling**

**Top Tray (n° 18)**

<b>IDENTIFICATION:</b>		
<b>tray type:</b>	<b>tray S/N:</b>	<b>tray weight (gr):</b>
T	020	
<b>VISUAL INSPECTION:</b>		
<b>Date (mm/dd/yyyy):</b>	<b>Note</b>	
8/11/2005 10:16:04 AM		
<b>Flag</b>		
OK		
<b>MOUNTING:</b>		
<b>Date (mm/dd/yy):</b>	<b>Note</b>	
8/11/2005 10:16:05 AM		

**Mid Tray (n° 17)**

<b>IDENTIFICATION:</b>		
<b>tray type:</b>	<b>tray S/N:</b>	<b>tray weight (gr):</b>
M	211	1180

<b>VISUAL INSPECTION:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note</b>
8/11/2005 10:51:30 AM	
<b>Flag</b> <input type="checkbox"/> OK	

<b>MOUNTING:</b>	
<b>Date (mm/dd/yy):</b>	<b>Note</b>
8/11/2005 10:51:31 AM	

**Mid Tray (n° 16)**

<b>IDENTIFICATION:</b>		
<b>tray type:</b>	<b>tray S/N:</b>	<b>tray weight (gr):</b>
M	134	1195

<b>VISUAL INSPECTION:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note</b>
8/11/2005 11:04:48 AM	
<b>Flag</b> <input type="checkbox"/> OK	

<b>MOUNTING:</b>	
<b>Date (mm/dd/yy):</b>	<b>Note</b>
8/11/2005 11:04:49 AM	

**Mid Tray (n° 15)**

<b>IDENTIFICATION:</b>		
tray type:	tray S/N:	tray weight (gr):
<input type="text" value="M"/>	<input type="text" value="234"/>	<input type="text" value="1180"/>

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
<input type="text" value="8/11/2005 11:17:42 AM"/>	<input type="text"/>
Flag <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
Date (mm/dd/yy):	Note
<input type="text" value="8/11/2005 11:17:43 AM"/>	<input type="text"/>

**Mid Tray (n° 14)**

<b>IDENTIFICATION:</b>		
tray type:	tray S/N:	tray weight (gr):
<input type="text" value="M"/>	<input type="text" value="133"/>	<input type="text" value="1180"/>

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
<input type="text" value="8/11/2005 11:29:08 AM"/>	<input type="text"/>
Flag <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
Date (mm/dd/yy):	Note
<input type="text" value="8/11/2005 11:29:11 AM"/>	<input type="text"/>

**Mid Tray (n° 13)**

<b>IDENTIFICATION:</b>		
<b>tray type:</b>	<b>tray S/N:</b>	<b>tray weight (gr):</b>
<input type="text" value="M"/>	<input type="text" value="170"/>	<input type="text" value="1200"/>

<b>VISUAL INSPECTION:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note</b>
<input type="text" value="8/11/2005 11:44:37 AM"/>	<input type="text"/>
<b>Flag</b> <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
<b>Date (mm/dd/yy):</b>	<b>Note</b>
<input type="text" value="8/11/2005 11:44:38 AM"/>	<input type="text"/>
<input type="text"/>	

**Mid Tray (n° 12)**

<b>IDENTIFICATION:</b>		
<b>tray type:</b>	<b>tray S/N:</b>	<b>tray weight (gr):</b>
<input type="text" value="M"/>	<input type="text" value="153"/>	<input type="text" value="1190"/>

<b>VISUAL INSPECTION:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note</b>
<input type="text" value="8/11/2005 12:01:56 PM"/>	<input type="text"/>
<b>Flag</b> <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
<b>Date (mm/dd/yy):</b>	<b>Note</b>
<input type="text" value="8/11/2005 12:01:57 PM"/>	<input type="text"/>
<input type="text"/>	

**Mid Tray (n° 11)**

<b>IDENTIFICATION:</b>		
tray type:	tray S/N:	tray weight (gr):
<input type="text" value="M"/>	<input type="text" value="233"/>	<input type="text" value="1175"/>

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
<input type="text" value="8/11/2005 12:16:56 PM"/>	<input type="text"/>
Flag <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
Date (mm/dd/yy):	Note
<input type="text" value="8/11/2005 12:16:56 PM"/>	<input type="text"/>

**Mid Tray (n° 10)**

<b>IDENTIFICATION:</b>		
tray type:	tray S/N:	tray weight (gr):
<input type="text" value="M"/>	<input type="text" value="223"/>	<input type="text" value="1180"/>

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
<input type="text" value="8/11/2005 12:29:17 PM"/>	<input type="text"/>
Flag <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
Date (mm/dd/yy):	Note
<input type="text" value="8/11/2005 12:29:18 PM"/>	<input type="text"/>

**Mid Tray (n° 09)**

<b>IDENTIFICATION:</b>		
tray type:	tray S/N:	tray weight (gr):
<input type="text" value="M"/>	<input type="text" value="212"/>	<input type="text" value="1180"/>

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
<input type="text" value="8/11/2005 3:15:59 PM"/>	<input type="text"/>
Flag <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
Date (mm/dd/yy):	Note
<input type="text" value="8/11/2005 3:16:00 PM"/>	<input type="text"/>
<input type="text"/>	

**Mid Tray (n° 08)**

<b>IDENTIFICATION:</b>		
tray type:	tray S/N:	tray weight (gr):
<input type="text" value="M"/>	<input type="text" value="208"/>	<input type="text" value="1180"/>

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
<input type="text" value="8/11/2005 3:38:01 PM"/>	<input type="text"/>
Flag <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
Date (mm/dd/yy):	Note
<input type="text" value="8/11/2005 3:38:04 PM"/>	<input type="text"/>
<input type="text"/>	

**Mid Tray (n° 07)**

<b>IDENTIFICATION:</b>		
<b>tray type:</b>	<b>tray S/N:</b>	<b>tray weight (gr):</b>
M	235	1205

<b>VISUAL INSPECTION:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note</b>
8/11/2005 3:44:53 PM	
<b>Flag</b> <input type="checkbox"/> OK	

<b>MOUNTING:</b>	
<b>Date (mm/dd/yy):</b>	<b>Note</b>
8/11/2005 3:44:52 PM	

**Heavy Tray (n° 06)**

<b>IDENTIFICATION:</b>		
<b>tray type:</b>	<b>tray S/N:</b>	<b>tray weight (gr):</b>
H	070	2625

<b>VISUAL INSPECTION:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note</b>
8/11/2005 4:17:49 PM	
<b>Flag</b> <input type="checkbox"/> OK	

<b>MOUNTING:</b>	
<b>Date (mm/dd/yy):</b>	<b>Note</b>
8/11/2005 4:17:49 PM	

**Heavy Tray (n° 05)**

<b>IDENTIFICATION:</b>		
tray type:	tray S/N:	tray weight (gr):
<input type="text" value="H"/>	<input type="text" value="072"/>	<input type="text" value="2630"/>

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
<input type="text" value="8/11/2005 4:19:26 PM"/>	<input type="text"/>
Flag <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
Date (mm/dd/yy):	Note
<input type="text" value="8/11/2005 4:19:27 PM"/>	<input type="text"/>
<input type="text"/>	

**Heavy Tray (n° 04)**

<b>IDENTIFICATION:</b>		
tray type:	tray S/N:	tray weight (gr):
<input type="text" value="H"/>	<input type="text" value="075"/>	<input type="text" value="2630"/>

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
<input type="text" value="8/11/2005 4:33:32 PM"/>	<input type="text"/>
Flag <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
Date (mm/dd/yy):	Note
<input type="text" value="8/11/2005 4:33:33 PM"/>	<input type="text"/>
<input type="text"/>	

**Heavy Tray (n° 03)**

<b>IDENTIFICATION:</b>		
<b>tray type:</b>	<b>tray S/N:</b>	<b>tray weight (gr):</b>
H	068	2620

<b>VISUAL INSPECTION:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note</b>
8/11/2005 4:45:35 PM	
<b>Flag</b> <input type="checkbox"/> OK	

<b>MOUNTING:</b>	
<b>Date (mm/dd/yy):</b>	<b>Note</b>
8/11/2005 4:45:35 PM	

**Light Tray (n° 02)**

<b>IDENTIFICATION:</b>		
<b>tray type:</b>	<b>tray S/N:</b>	<b>tray weight (gr):</b>
L	027	

<b>VISUAL INSPECTION:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note</b>
8/11/2005 5:03:18 PM	
<b>Flag</b> <input type="checkbox"/> OK	

<b>MOUNTING:</b>	
<b>Date (mm/dd/yy):</b>	<b>Note</b>
8/11/2005 5:03:19 PM	

**Light Tray (n° 01)**

<b>IDENTIFICATION:</b>		
tray type:	tray S/N:	tray weight (gr):
<input type="text" value="L"/>	<input type="text" value="028"/>	<input type="text" value="930"/>

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
<input type="text" value="8/11/2005 5:17:05 PM"/>	<input type="text"/>
Flag <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
Date (mm/dd/yy):	Note
<input type="text" value="8/11/2005 5:17:06 PM"/>	<input type="text"/>
<input type="text"/>	

**Bottom Tray (n° 00)**

<b>IDENTIFICATION:</b>		
tray type:	tray S/N:	tray weight (gr):
<input type="text" value="B"/>	<input type="text" value="022"/>	<input type="text" value="2125"/>

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
<input type="text" value="8/11/2005 5:23:39 PM"/>	<input type="text"/>
Flag <input type="text" value="OK"/>	

<b>MOUNTING:</b>	
Date (mm/dd/yy):	Note
<input type="text" value="8/11/2005 5:23:41 PM"/>	<input type="text"/>
<input type="text"/>	

Cables +X (C0-C1)

**C-0**  
**(-Y corner)**

**cable +XC0 sn:**

C0-027

**VISUAL INSPECTION:**

**Date (mm/dd/yyyy):** **Flag:** **Note:**

8/11/2005 5:44:15 PM OK 80g

**MOUNTING:**

**Date (mm/dd/yy):** **Note:**

8/11/2005 5:44:16 PM

**C-1**  
**(+Y corner)**

**cable +XC1 sn:**

C1-010

**VISUAL INSPECTION:**

**Date (mm/dd/yyyy):** **Flag:** **Note:**

8/11/2005 5:58:07 PM OK 75g

**MOUNTING:**

**Date (mm/dd/yyyy):** **Note:**

8/11/2005 5:58:08 PM

**Cables +Y (C2-C3)**

**C-2  
(+X corner)**

**cable +YC2 sn:**

C2-P-003

**VISUAL INSPECTION:**

**Date (mm/dd/yyyy):** **Flag:** **Note:**

9/19/2005 12:53:08 PM OK

**MOUNTING:**

**Date (mm/dd/yy):** **Note:**

9/19/2005 12:53:09 PM assembled after env test

**C-3  
(-X corner)**

**cable +YC3 sn:**

C3-P-002

**VISUAL INSPECTION:**

**Date (mm/dd/yyyy):** **Flag:** **Note:**

8/18/2005 10:35:42 AM OK

**MOUNTING:**

**Date (mm/dd/yyyy):** **Note:**

8/18/2005

**Cables -X (C4-C5)**

**C-4  
(-Y corner)**

**cable -XC5 sn:**

C4-022

<b>VISUAL INSPECTION:</b>		
<b>Date (mm/dd/yyyy):</b>	<b>Flag:</b>	<b>Note:</b>
8/11/2005 5:59:35 PM	OK	

<b>MOUNTING:</b>	
<b>Date (mm/dd/yy):</b>	<b>Note:</b>
8/11/2005 5:59:37 PM	assembled after env test

**C-5  
(+Ycorner)**

**cable -XC6 sn:**

C5-P-002

<b>VISUAL INSPECTION:</b>		
<b>Date (mm/dd/yyyy):</b>	<b>Flag:</b>	<b>Note:</b>
9/19/2005 12:53:48 PM	OK	

<b>MOUNTING:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note:</b>
9/19/2005 12:53:49 PM	assembled after env test

**Cables -Y (C6-C7)**

**C-6  
(+X corner)**

**YC6 sn:**

C6-P-002

**VISUAL INSPECTION:**

**Date (mm/dd/yyyy):** **Flag:** **Note:**

8/18/2005 10:35:39 AM

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**MOUNTING:**

**Date (mm/dd/yy):** **Note:**

8/18/2005 10:35:42 AM

New Pioner Cable

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**C-7  
(-X corner)**

**YC7 sn:**

C7-P-002

**VISUAL INSPECTION:**

**Date (mm/dd/yyyy):** **Flag:** **Note:**

8/18/2005 10:27:38 AM

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**MOUNTING:**

**Date (mm/dd/yyyy):** **Note:**

8/18/2005 10:27:40 AM

New Pioner Cable

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<i>1st FUNCTIONAL TEST CPT:</i>		
Start Date (mm/dd/yy): <input type="text"/>	Note: <input type="text" value="skipped"/>	Flag: <input type="text"/>
End Date (mm/dd/yy): <input type="text"/>	Note: <input type="text"/>	

*Sidewalls Assembling*

*Sidewalls  
+X*

serial nb:

<i>VISUAL INSPECTION:</i>	
Date (mm/dd/yyyy): <input type="text" value="10/16/2005 12:32:17 PM"/>	Note <input type="text"/>
Flag <input type="text" value="OK"/>	
<i>MOUNTING:</i>	
Date (mm/dd/yyyy): <input type="text" value="10/16/2005 12:32:21 PM"/>	Note <input type="text"/>

**Sidewalls  
-X**

serial nb:  
013

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
10/16/2005 12:32:37 PM	
Flag <input type="checkbox"/> OK	

<b>MOUNTING:</b>	
Date (mm/dd/yyyy):	Note
10/16/2005 12:32:40 PM	

**Sidewalls  
+Y**

serial nb:  
013

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
10/16/2005 12:32:42 PM	
Flag <input type="checkbox"/> OK	

<b>MOUNTING:</b>	
Date (mm/dd/yyyy):	Note
10/16/2005 12:32:44 PM	

**Sidewalls  
-Y**

serial nb:  
013

<b>VISUAL INSPECTION:</b>	
Date (mm/dd/yyyy):	Note
10/16/2005 12:32:45 PM	
Flag <input type="checkbox"/> OK	

<b>MOUNTING:</b>	
Date (mm/dd/yyyy):	Note
10/16/2005 12:32:47 PM	

<b>ALIGNMENT:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note:</b>
8/16/2005	
<b>Flag:</b> <input type="text" value="OK"/>	

<b>BASE PLATE ASSEMBLING:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note:</b>
8/17/2005	
<b>Flag:</b> <input type="text" value="OK"/>	

<b>2nd FUNCTIONAL TEST :</b>		
<b>Start Date (mm/dd/yy):</b>	<b>Note:</b>	
	skipped. Full functional test performed on 8/18 (INFN/PI-gamma-60)	
<b>End Date (mm/dd/yy):</b>	<b>Note:</b>	<b>Flag:</b> <input type="text"/>

<b>TOWER Turn Over :</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note:</b>
8/18/2005	
<b>Flag:</b> <input type="text" value="OK"/>	

<b>BRACKET ASSEMBLING:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note:</b>
8/18/2005	
<b>Flag:</b> <input type="checkbox"/> OK	

<b>SHIPPING TO ALENIA:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note:</b>
8/19/2005	
<b>Flag:</b> <input type="checkbox"/> OK	

<b>THERMO-VACUUM:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note:</b>
9/5/2005	ended 9/8/2005
<b>Flag:</b> <input type="checkbox"/> OK	

**Test  
@ALENIA**

<b>VIBRATIONAL:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note:</b>
9/14/2005	
<b>Flag:</b> <input type="checkbox"/> OK	

<b>SHIPPING TO INFN/PISA:</b>	
<b>Date (mm/dd/yyyy):</b>	<b>Note:</b>
9/15/2005	
<b>Flag:</b> <input type="checkbox"/> OK	

<b>Verify</b>	<b>TOWER BOX VISUAL INSPECTION:</b> <b>Date (mm/dd/yyyy):</b> 9/16/2005 <b>Flag:</b> <input type="text" value="OK"/>	<b>Note:</b> 
	<b>MEASUREMENT CMM:</b> <b>Date (mm/dd/yyyy):</b> 9/20/2005 <b>Flag:</b> <input type="text" value="OK"/>	<b>Note:</b> 
	<b>FUNCTIONAL TEST:</b> <b>Date (mm/dd/yyyy):</b> 9/19/2005 <b>Flag:</b> <input type="text" value="OK"/>	<b>Note:</b> INFN/PI-gamma-75
	<b>PACKAGING:</b> <b>Date (mm/dd/yyyy):</b> 9/21/2005 <b>Flag:</b> <input type="text" value="OK"/>	<b>Note:</b> 
	<b>SHIPPING TO SLAC:</b> <b>Date (mm/dd/yyyy):</b> 9/22/2005 <b>Flag:</b> <input type="text" value="OK"/>	<b>Note:</b> 