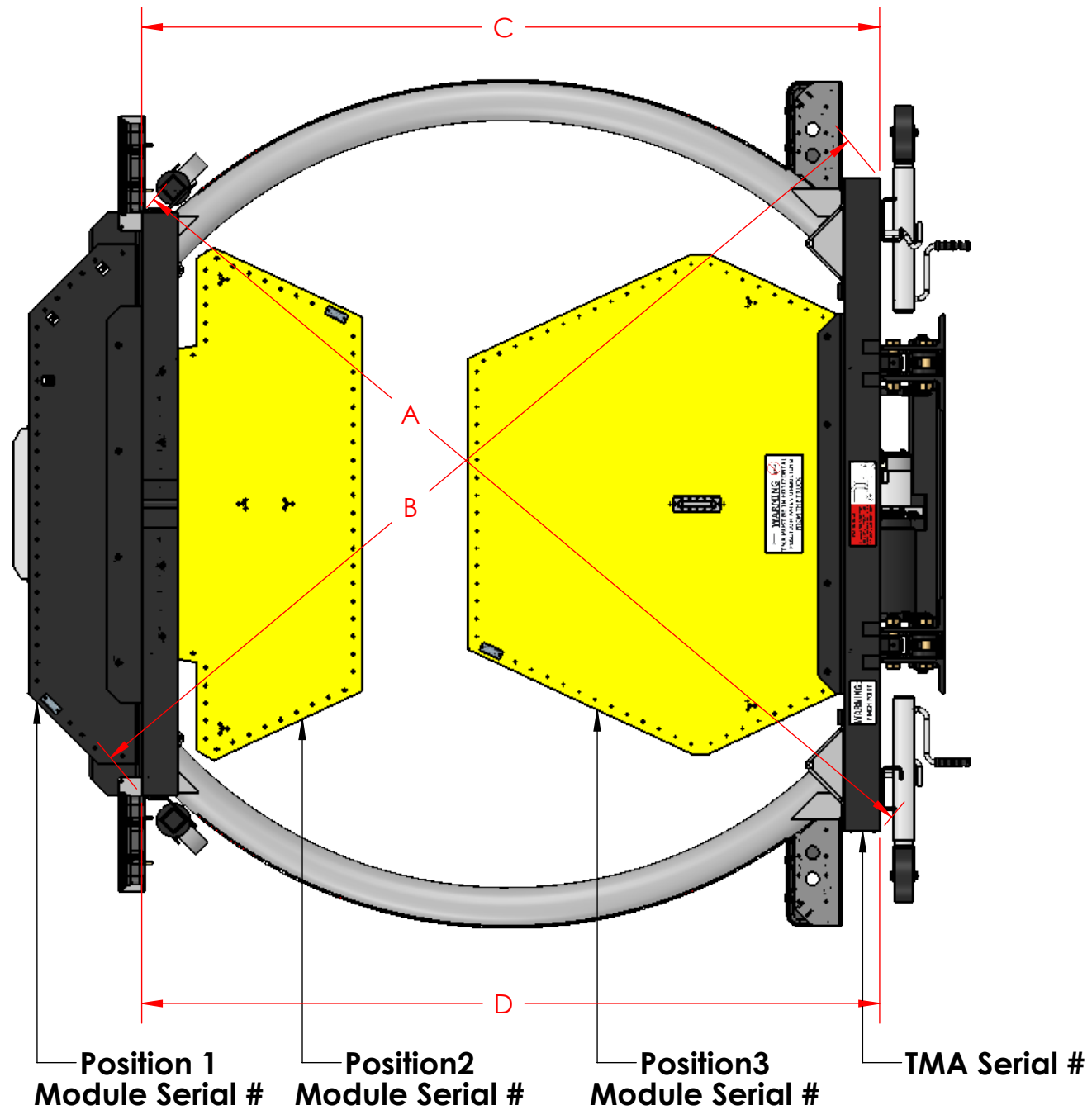


# Scorpion II Metro TMA

# Scorpion II Metro TMA Post Impact Survey Measurements

The purpose of the survey measurements is to determine whether or not the tube assemblies are still serviceable. Tube assemblies that are no longer in spec must be replaced before the Metro TMA can be returned to service as a life saving piece of equipment.

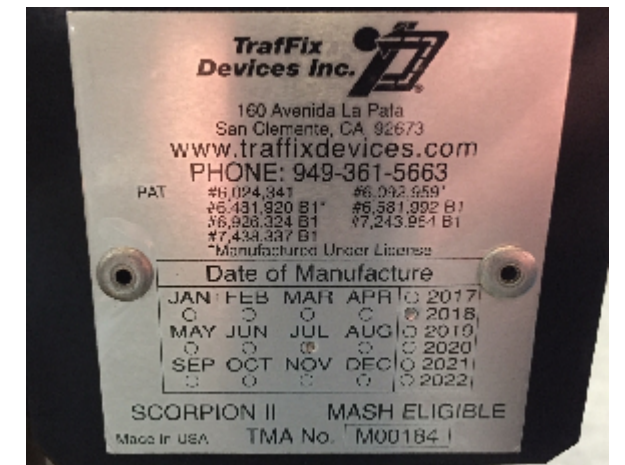


A = \_\_\_\_\_

B = \_\_\_\_\_  
**As Built: 106" [2,692 mm]**  
**Difference between A and B must be less than 1" [25 mm]**

C = \_\_\_\_\_  
**Min: 79-3/4" [2,026 mm]**  
**Max: 80-3/4" [2,051 mm]**

D = \_\_\_\_\_  
**Min: 79-3/4" [2,026 mm]**  
**Max: 80-3/4" [2,051 mm]**



### Instructions

- Record the Metro TMA serial number and each energy absorbing module serial number in the spaces provided.
- Perform measurements A through D and record the values in the spaces provided.
- Dimension limits specified are valid for the MASH tested Scorpion II Metro TMA.
- All measurements must fall within the min/max values indicated for the tube assemblies to remain in service.
- If any measurements fall outside the acceptable limits, please consult with an appropriate TrafFix Devices representative.
- Any tube assemblies that are deemed "out of spec" must be destroyed by fully cutting the upper and lower tube.
- In some cases, it may be necessary to take measurements at the bottom as well as the top if damage is observed on the lower portion of the tube assemblies. Both top and bottom measurements must fall within the min/max values defined.

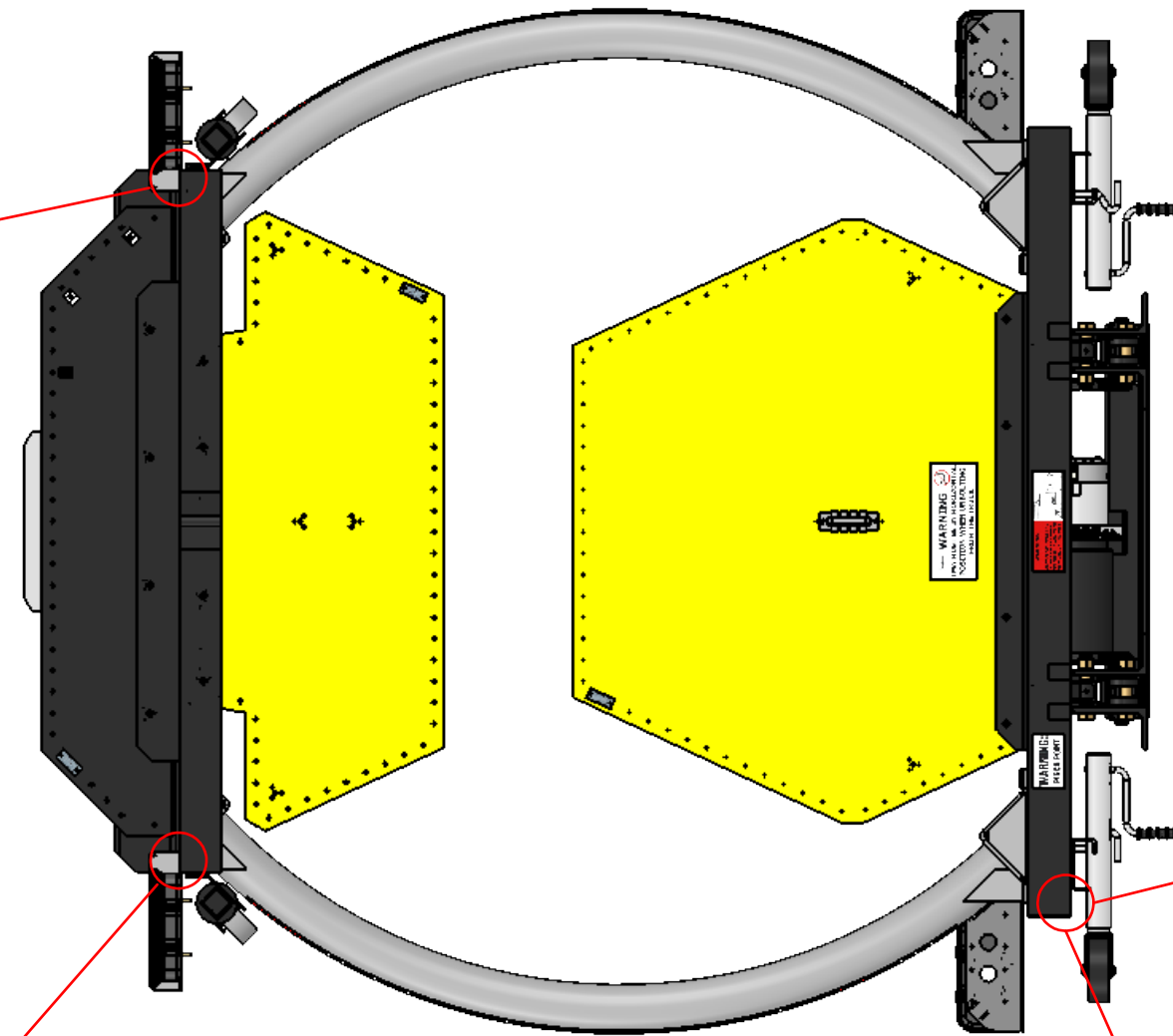
**TrafFix Devices Inc.**  
 160 Avenida La Pata  
 San Clemente, CA 92673  
 (949) 361-5663  
 FAX (949) 361-9205  
 www.traffixdevices.com

TITLE:  
**Scorpion II Metro TMA Post Impact Measurements and Survey**

SIZE <b>B</b>	DRAWING NO. 1000-238	REV <b>A</b>
------------------	-------------------------	-----------------

DRAWN BY: C. Jaime	DATE: 9/28/23 GM	APPROVED BY:	DATE: 9/28/23	SHEET 1 OF 4
-----------------------	---------------------	--------------	------------------	--------------

# Survey Measurement Closeup Views



Closeup View of Measurements A & B



Closeup View of Measurements C & D



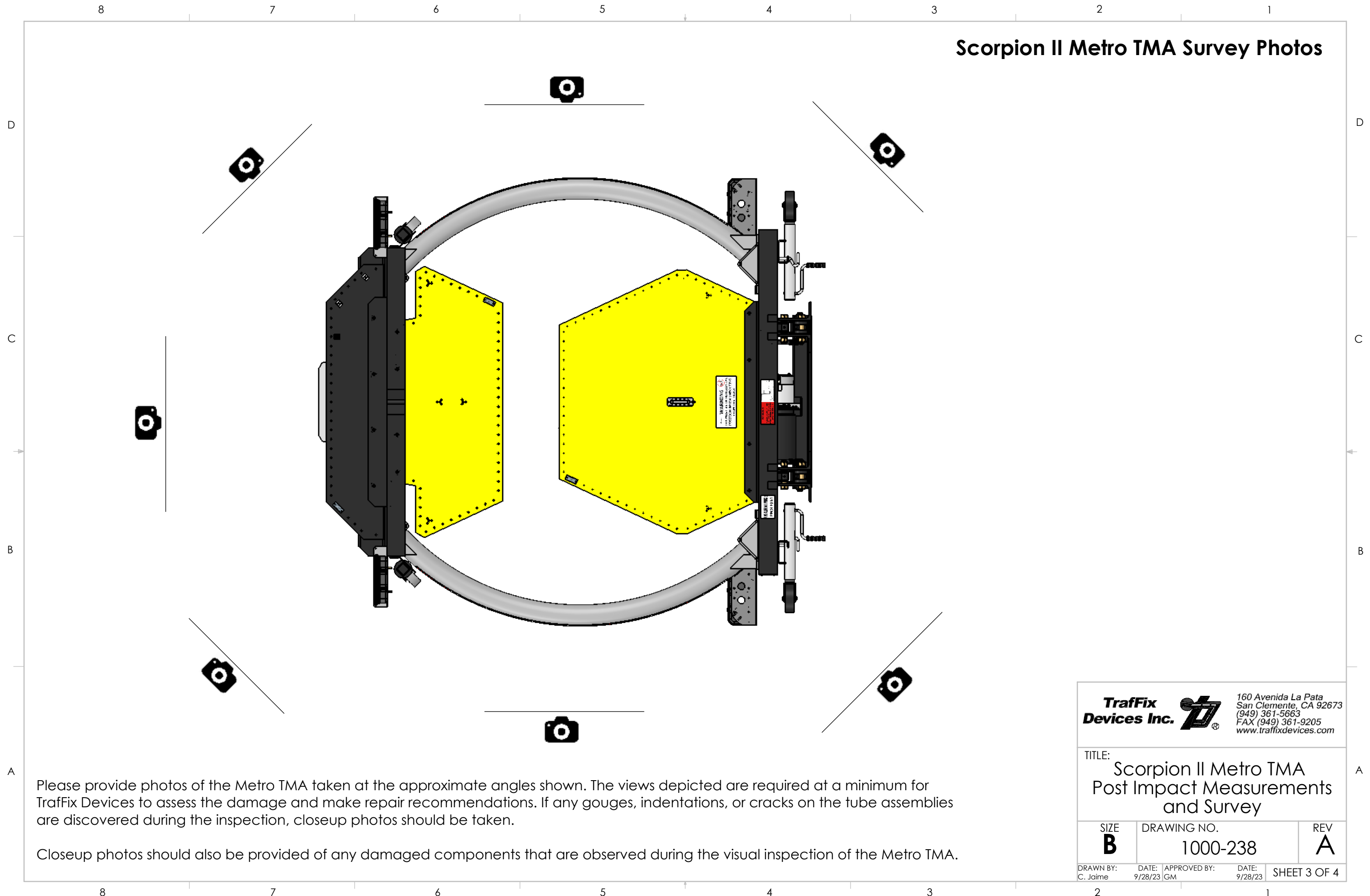
**Traffix Devices Inc.**  160 Avenida La Pata  
San Clemente, CA 92673  
(949) 361-5663  
FAX (949) 361-9205  
www.traffixdevices.com

TITLE: Scorpion II Metro TMA  
Post Impact Measurements  
and Survey

SIZE <b>B</b>	DRAWING NO. 1000-238	REV <b>A</b>
------------------	-------------------------	-----------------

DRAWN BY: C. Jaime	DATE: 9/28/23	APPROVED BY: GM	DATE: 9/28/23	SHEET 2 OF 4
-----------------------	------------------	--------------------	------------------	--------------

# Scorpion II Metro TMA Survey Photos



Please provide photos of the Metro TMA taken at the approximate angles shown. The views depicted are required at a minimum for Traffix Devices to assess the damage and make repair recommendations. If any gouges, indentations, or cracks on the tube assemblies are discovered during the inspection, closeup photos should be taken.

Closeup photos should also be provided of any damaged components that are observed during the visual inspection of the Metro TMA.

**Traffix Devices Inc.**  160 Avenida La Pata  
San Clemente, CA 92673  
(949) 361-5663  
FAX (949) 361-9205  
www.traffixdevices.com

TITLE:  
**Scorpion II Metro TMA  
Post Impact Measurements  
and Survey**

SIZE <b>B</b>	DRAWING NO. <b>1000-238</b>	REV <b>A</b>
------------------	--------------------------------	-----------------

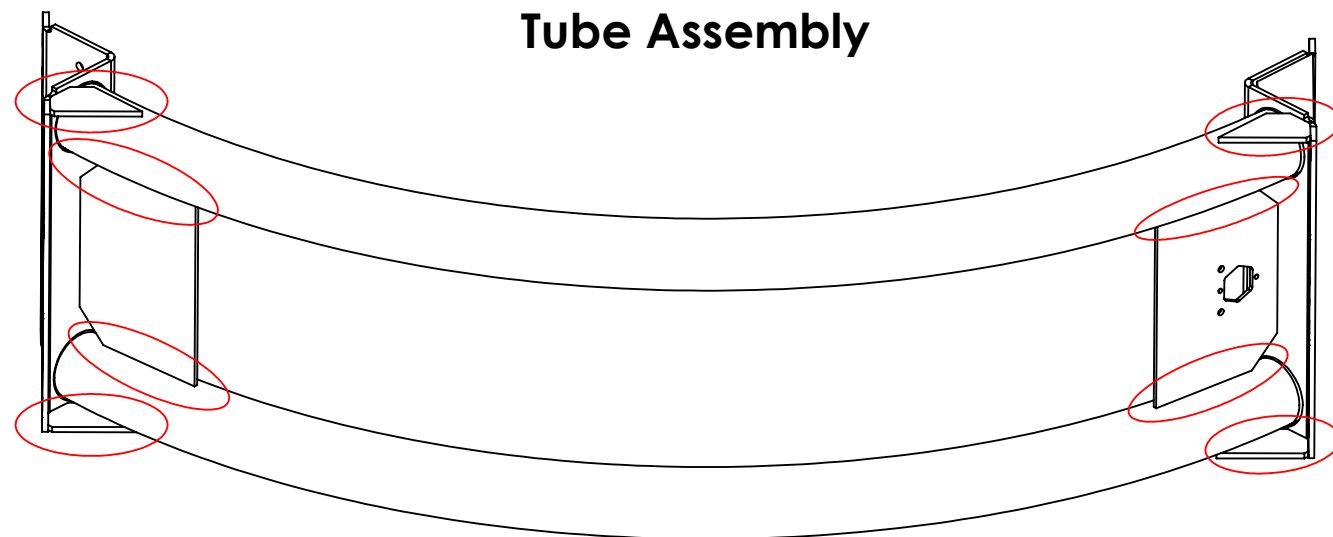
DRAWN BY: C. Jaime	DATE: 9/28/23	APPROVED BY: GM	DATE: 9/28/23	SHEET 3 OF 4
-----------------------	------------------	--------------------	------------------	--------------

### Inspection on Tube Assemblies

Conduct a visual inspection of all welds on the tube assemblies. Pay close attention to the areas outlined in red. Check for the presence of cracks in the welds and the tubes themselves. Inspect for any signs of material deformation such as gouges, chips, dents, or scrapes along the entire length of the top and bottom tubes.

If the tube assemblies pass the post impact measurement inspection but cracks, gouges, or other damage is discovered, please contact Traffix Devices' Engineering Department for advisement on repair. Please be prepared to provide photos of any damage discovered and appropriate measurements to indicate size and depth of damage.

### Tube Assembly



### Examples of Tube Deformation



### Examples of Cracks That Can Occur



**Traffix Devices Inc.**  160 Avenida La Pata  
San Clemente, CA 92673  
(949) 361-5663  
FAX (949) 361-9205  
www.traffixdevices.com

TITLE:  
Scorpion II Metro TMA  
Post Impact Measurements  
and Survey

SIZE <b>B</b>	DRAWING NO. 1000-238	REV <b>A</b>
------------------	-------------------------	-----------------

DRAWN BY: C. Jaime	DATE: 9/28/23	APPROVED BY: GM	DATE: 9/28/23	SHEET 4 OF 4
-----------------------	------------------	--------------------	------------------	--------------