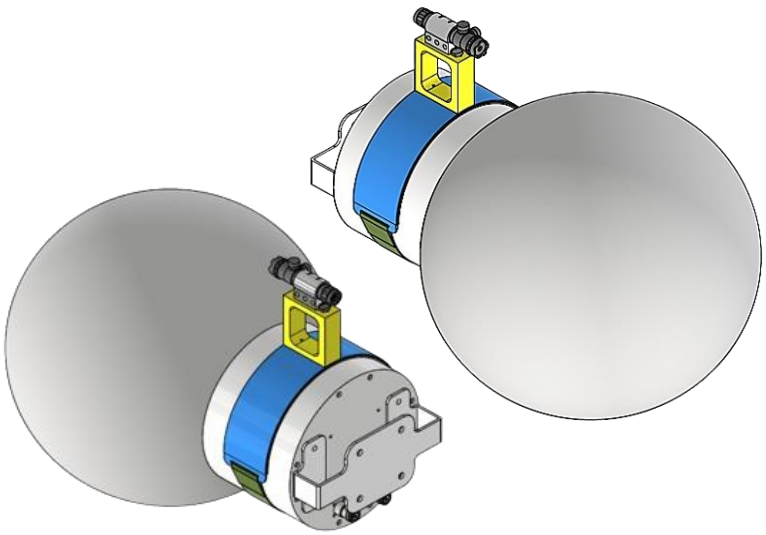
MATSING®

LENS TECHNOLOGY ENABLED

MS-SB17-H

Antenna Alignment Guide

Matsing Lens Tools: MLT-SBA-C2586



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Revision History:

Date	*Description*	*Rev By*	*Check By*	*Rev no*
18-Jun-2025	*Initial Release*	*RL*	*Pavel*	*0*
02-Jun-2026	*General update*	*RL*	*Pavel*	*1*

1. Safety Instructions

1.1 Required Tools

• Ensure all necessary hand tools and **calibrated torque wrenches** are available.

⚠ **General:** **Inspect** tools and equipment before lifting/assembly.

⚠ **Personal Protective Equipment (PPE):** All personnel must wear **appropriate PPE** at all times.

⚠ **Work-at-Height:** **Only certified personnel** with proper fall-protection may install and adjust the MLT.

⚠ **Environmental:** The device is **weather-resistant** but not waterproof. In case of moisture ingress, remove batteries and allow to dry completely.

⚠ **Laser Safety:** Adhere to **Class 2 Laser Safety Protocols** (EN60825-1). Never aim lasers at personnel, reflective surfaces, or aircraft.

2. Applicable Antenna Models, MLT Tools & Dimensions

Item	Antenna Model	MLT Tools	Size (cm)		
			Length	Height	Width
1	MS-SB17-H	MLT-SBA-C2586	63.0	45.0	45.0

Figure 1: Antenna Model & Dimensions

3. Standard Procedure for Laser Installation

3.1 MLT and Laser Set Required

• **MLT-SBA-C2586:** 1 set of lasers and mountings.

Figure 2: SBA MLT

3.2 Standard Configuration (USA Parts)

• **1 set** of Laser sight/rails.

• **Picatinny** Rail: As laser bed.

• **Pinty** Laser sight: Laser alignment.

Figure 3:"Picatinny" Rail

Figure 4: "Pinty" Laser Sight

3.3 USA Parts Assembly

Step 1: Install laser beds.

Step 2: Insert laser sight and secure it.

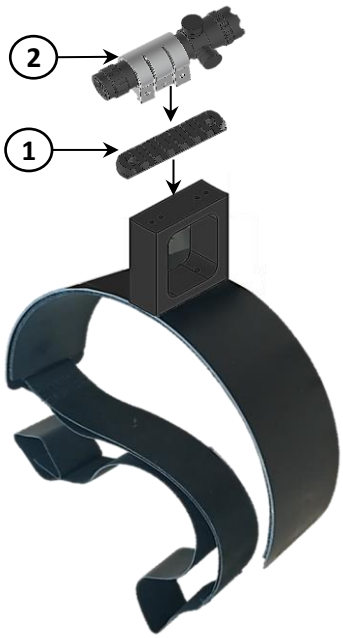

Figure 5: USA Part Assembly

3.4 Alternative Configuration (Europe Parts)

- **Ø22mm** Holder clamp: For Ø16-20mm laser.
- **Ø15mm** Holder clamp: For Ø11-15mm laser.
- **1 set** of Laser pointer/clamps. (Laser Class 2 ≤1 mW EN60825-1)

Figure 6: Ø22mm Holder

Figure 7: Ø15mm Holder

Figure 8: ≤1mW Laser Pointer

3.5 Europe Parts Assembly

Step 1: Install holder clamp.

Step 2: Insert laser pointer and clamp it.

Note: This alternative process is typically used for alignment tools outside of the USA. Please ensure compliance with regional laser regulations.

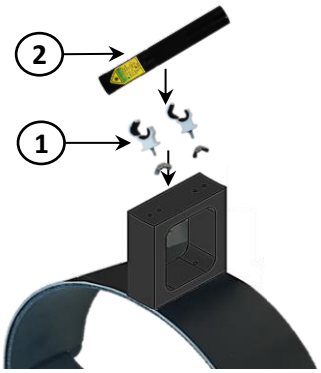

Figure 9: Europe Part Assembly

4. Standard Procedure for MLT Mounting and Positioning

4.1 Mounting

Step 3: Wrap the Velcro tape over the antenna body.

Step 4: Pull the Velcro tape tight and secure it to the body.

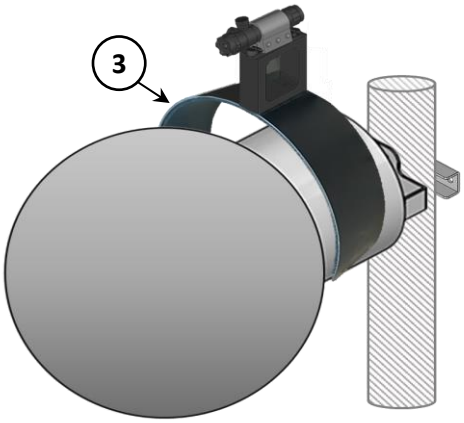

Figure 10: MLT Mounting

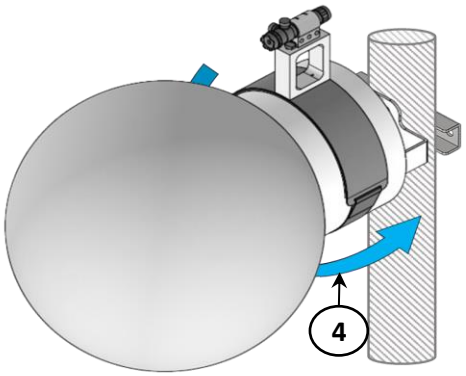

Figure 11: MLT tightening

4.2 Positioning

Step 5: Loosen the pole bracket for laser positioning.

Step 6: Once position is confirmed, re-tighten the pole bracket.

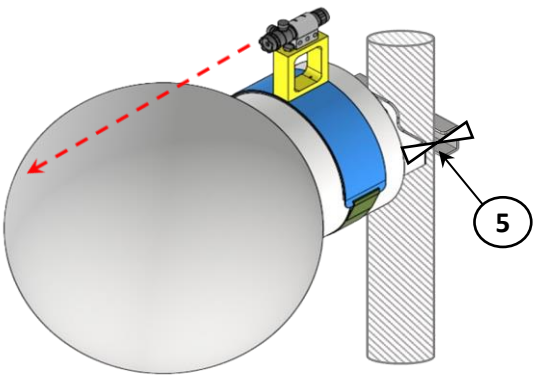

Figure 12: MLT Positioning

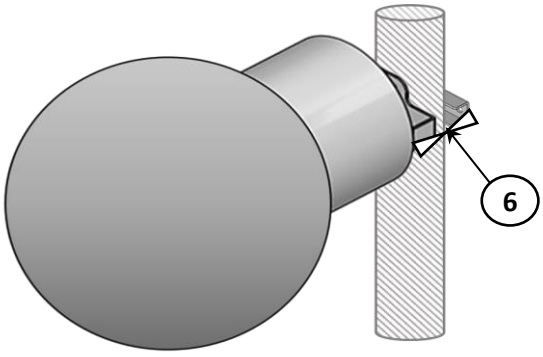

Figure 13: Position Secured.