

SM-A02

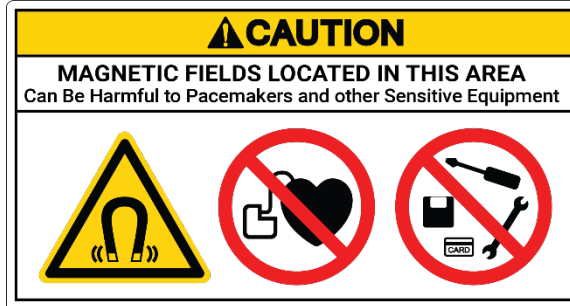
Magnetic Mount Arm

QUICK INSTALL GUIDE Version 1.2



Note: Please read this manual thoroughly before operating this unit and retain it for future reference.

IMPORTANT

The SM-A02 should be installed in a **restricted access location** where access can only be gained by service personnel or users who have been instructed about the reasons for the restrictions applied to the location and about any precautions that shall be taken; and access is through the use of a tool or lock and key, or other means of security, and is controlled by the authority responsible for the location.



Symbols

Symbol	Description
 CAUTION!	Indicates a situation which, if not avoided, could result in damage, data loss or malfunction to product.
 NOTE!	Indicates useful or supplemental information about the use of product.

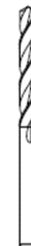
Tools



Allen Key 3/16"



Socket 9/16"



Drill Bits 1/4"



Torque Wrench

Mount Magnetic Bases

The magnetic base is suitable for steel plates of 1/4 inch or thicker. The contact surface must be flat and smooth, free of oil and rust, a thin layer paint is acceptable. Magnets must be in direct contact with the steel plate to make full use of the magnetic retention force.

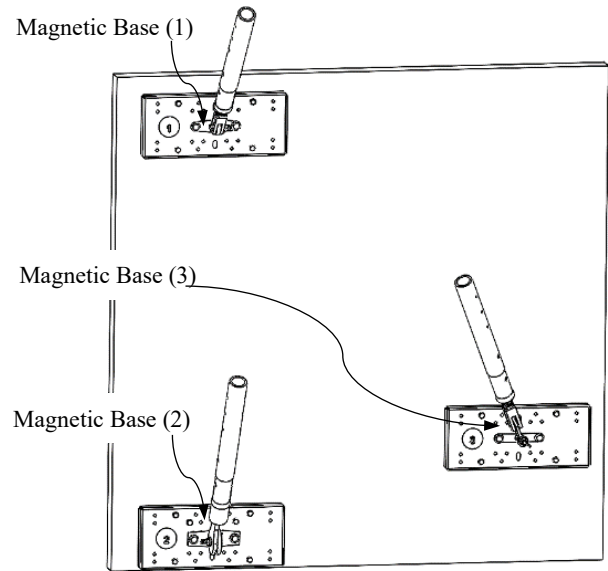




Fig. 1

	<ul style="list-style-type: none"> • Powerful attraction forces can cause serious injury, always wear gloves when handling magnets to prevent pinching. • Keep magnets at least 8” away from sensitive electronic and storage devices.
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	<ul style="list-style-type: none"> • The magnets provide strong attraction to the steel wall, however, excessive load and high wind pressure may cause the structure to overload and move the magnetic base. Where possible, place the magnet against an object protruding from plane and use it as an obstacle to prevent magnetic bases from sliding.
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Install Fiberglass Tube (1) into Magnetic Base (1), align fiberglass tube holes with locking pin hole “B” or “C”, install the locking pin to fix the fiberglass tube.

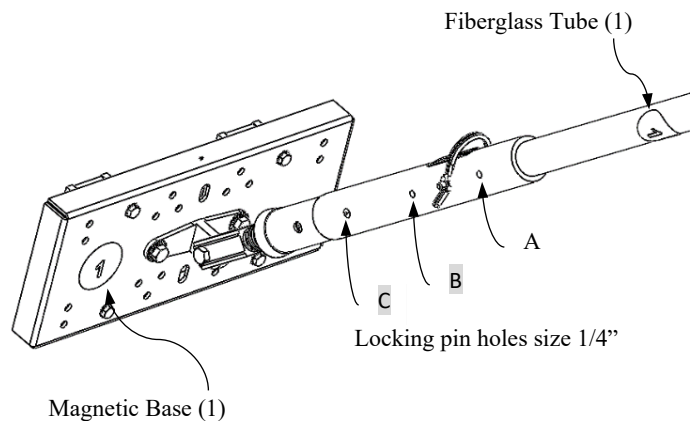


Fig. 2

Install Adjustable-Angle Connectors (2 pcs.) to Fiberglass Tube (1), placed at recommended dimension “X” and “Y” refer to the **SM-A02 Product Drawing**, and tighten set screws slightly to maintain its temporary position.

Insert metal Adapter into top Fiberglass Tube (1), with #10 tapping screws (2 pcs included).

Connect Fiberglass Tube (1) and 3’ Short Bar with Tee Through-Hole Connector and tighten set screws.

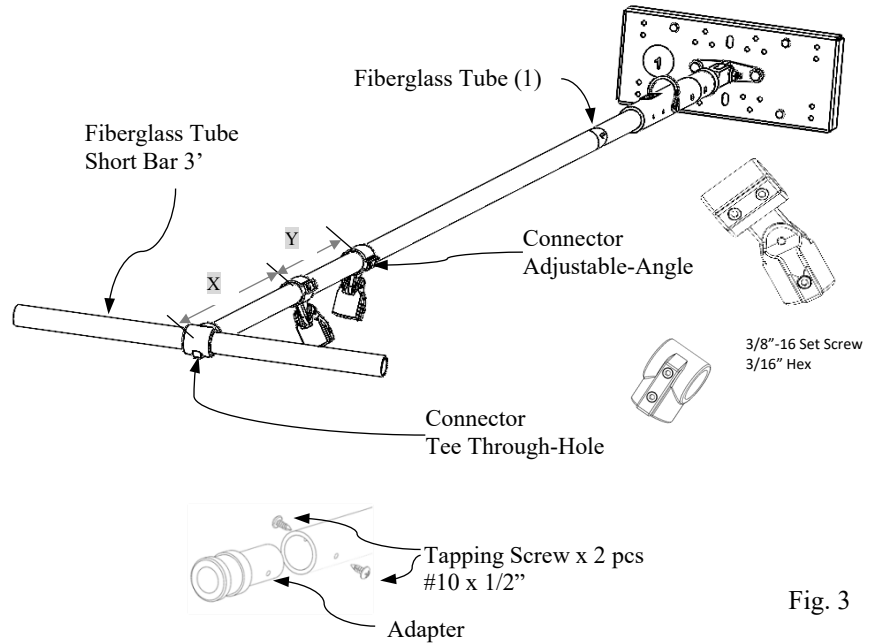


Fig. 3

Connect Adjustable-Angle Connectors to Fiberglass Tube (2) & (3), tighten set screw to the metal Adapter.

Raise the structure and install Fiberglass Tube (2) & (3) into Magnetic Bases. Adjust the structure and evaluate whether the target distance meets expectations, if so, continue to next step.

Otherwise, lower the structure to a safe and operable height, reposition the Adjustable-Angle Connectors, then raise the structure up again, and re-evaluate the target distance.

Once the optimal location is determined make sure tighten all set screws.

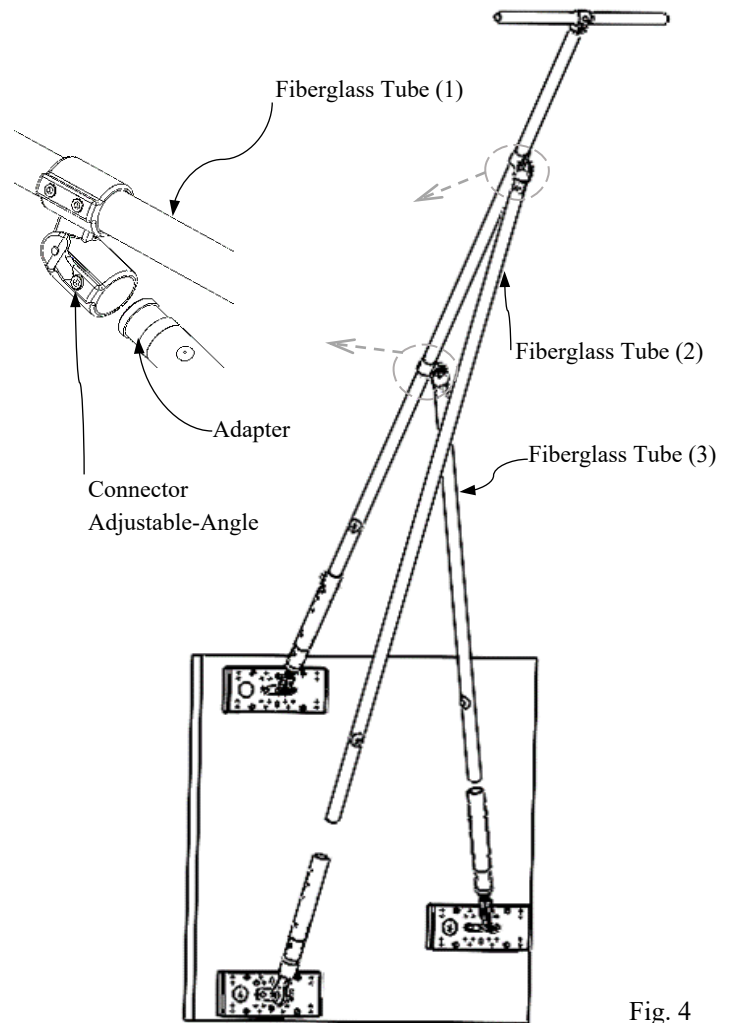


Fig. 4

Fix the tooth lock joint. Use 9/16" socket and torque wrench to tighten the 3/8-16 lock nut to at least 160 inch.lb.

The overlap distance range between the fiberglass tube and the magnetic base is 5" - 9". Ensure that the locking pin hole "B" is blocked by the fiberglass tube to meet the minimum overlap requirement of 5". Using the locking pin hole "A" as a guide, drill 1/4" holes in the fiberglass tubes (2) & (3), and install the locking pins to fix fiberglass tubes.

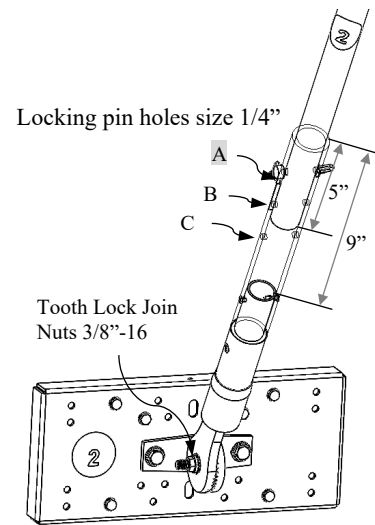


Fig. 5

Bracing connects Fiberglass Tube (1) & (2) to share loads and stabilize the structure.

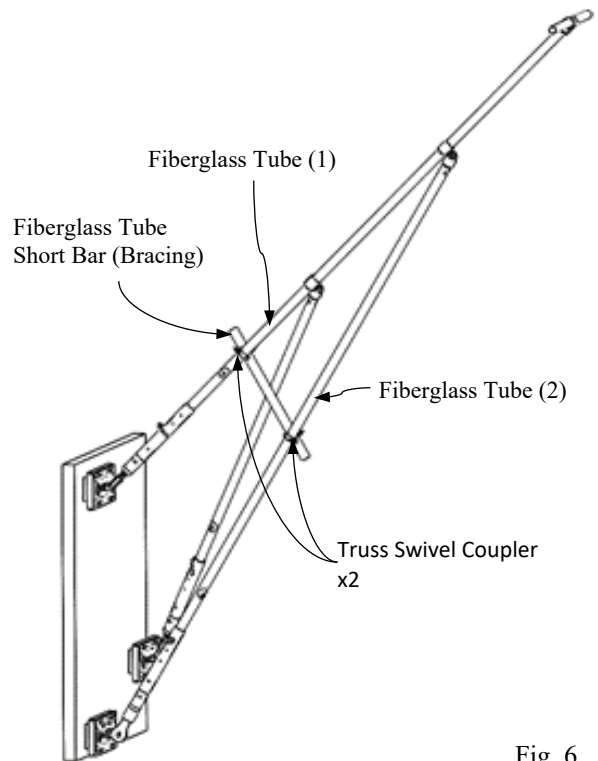
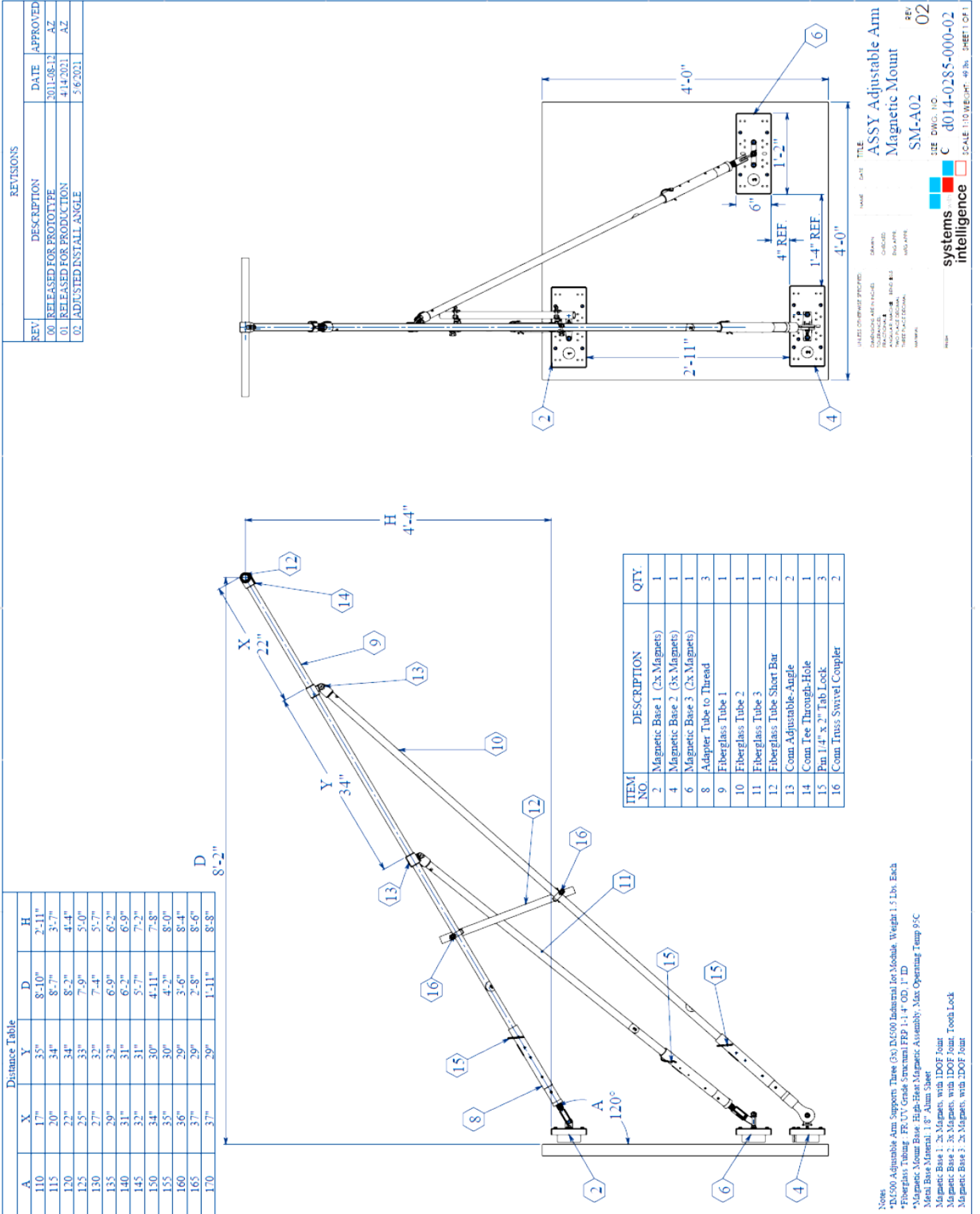


Fig. 6

SM-A02 Product Drawing



REVISIONS

REV	DESCRIPTION	DATE	APPROVED
00	RELEASED FOR PROTOTYPE	2011-08-12	AZ
01	RELEASED FOR PRODUCTION	4-14-2021	AZ
02	ADJUSTED INSTALL ANGLE	5-6-2021	

NAME: DATE: TITLE: ASSY Adjustable Arm Magnetic Mount
 DRAWN: CHECKED: MAGNETIC MOUNT: HIGH-HEAT MAGNETIC ASSEMBLY: MAX OPERATING TEMP 95C
 MATERIAL: 1/8" ALUM SHEET
 SHEET NO: 02
 REV: 02
 SIZE: DIMG. NO: C
 Dwg. No: 014-0285-000-02
 SCALE: 1:10 WEIGHT: 49.2lb. SHEET 1 OF 1

Notes:
 *DM500 Adjustable Arm Supports Three (3x) DM500 Industrial for Module. Weight 1.5 Lbs. Each
 *Fiberglass Tubing: FR, UV, Grade Structural FRP 1-1/4" OD, 1" ID
 *Magnetic Mount Base: High-Heat Magnetic Assembly, Max Operating Temp 95C
 *Magnet Base Material: 1/8" Alum Sheet
 Magnetic Base 1: 2x Magnets, with 1DOF Joint
 Magnetic Base 2: 3x Magnets, with 1DOF Joint, Tooth Lock
 Magnetic Base 3: 2x Magnets, with 2DOF Joint