



ANTENNA



PERMANENT VEHICLE MOUNTING KITS





**PERMANENT VEHICLE
MOUNTING KIT
GENERAL SPECIFICATIONS**



**THERE ARE 5 ANTENNA MOUNTING RF CONNECTOR TYPES FOR OUR
PERMANENT VEHICLE MOUNTING KITS AND THEY ARE ALL IP67 RATED
PROVIDING HIGH-LEVEL PROTECTION AGAINST DUST & MOISTURE**



SWA'S PERMANENT VEHICLE MOUNTING KITS

Southwest Antennas' thru-hole permanent vehicle antenna mounting kits work for multiple applications including ground vehicles or equipment enclosures. Like popular NMO style vehicle antenna mounts, these kits allow for any Omni-directional antenna with one of 5 connector types to be deployed for mobile applications.

These kits allow for professional-quality antenna mounts to be added to almost any vehicle for operators of tactical radio systems, MIMO / MANET mesh radios, and similar radios or transceivers.

Kits come with 17 feet of integrated LMR-195 low-loss RF cable with pigtail lead, which is suitable for crimping to any compatible RF connector. This product ships with bare pigtail lead to aid in installation through small holes, under liners, and behind vehicle trim and to allow for easy trimming of any excess cable length prior to installation completion.

Note: This product can be used as a drop-in replacement for existing NMO antenna mounts sized for 3/4 inch thru-hole installation. For installation into a vehicle without any existing antenna mount, an appropriate location on the vehicle will need to be determined, and a 3/4-inch hole drilled through the vehicle's roof or trunk with appropriate tools.

MOUNTING KIT FEATURES

- 3/4 inch thru-hole permanent vehicle antenna mounting kit
- DC to 8.0 GHz frequency coverage with Right Angle RF connector on mount
- For use with any Omni-directional antenna with compatible RF connector
- Integrated 17-foot LMR-195 cable with pigtail lead
- Lead can be trimmed and crimped to connector supplied or any compatible RF connector of the user's choice for radio compatibility
- Matte black finish
- IP-67 rated when properly installed with O-ring and silicone sealant



COMMON MOUNTING KIT USE CASES



ANTENNA PERMANENT VEHICLE MOUNTING KITS

TOP THREE APPLICATIONS

01 MILITARY

Our permanent mounting kits are ruggedized and combat tested and proven.

02 PUBLIC SAFETY

From public safety vehicles to police controlled bomb squad robots, our mounts fit easily into all sorts of cramped spaces.

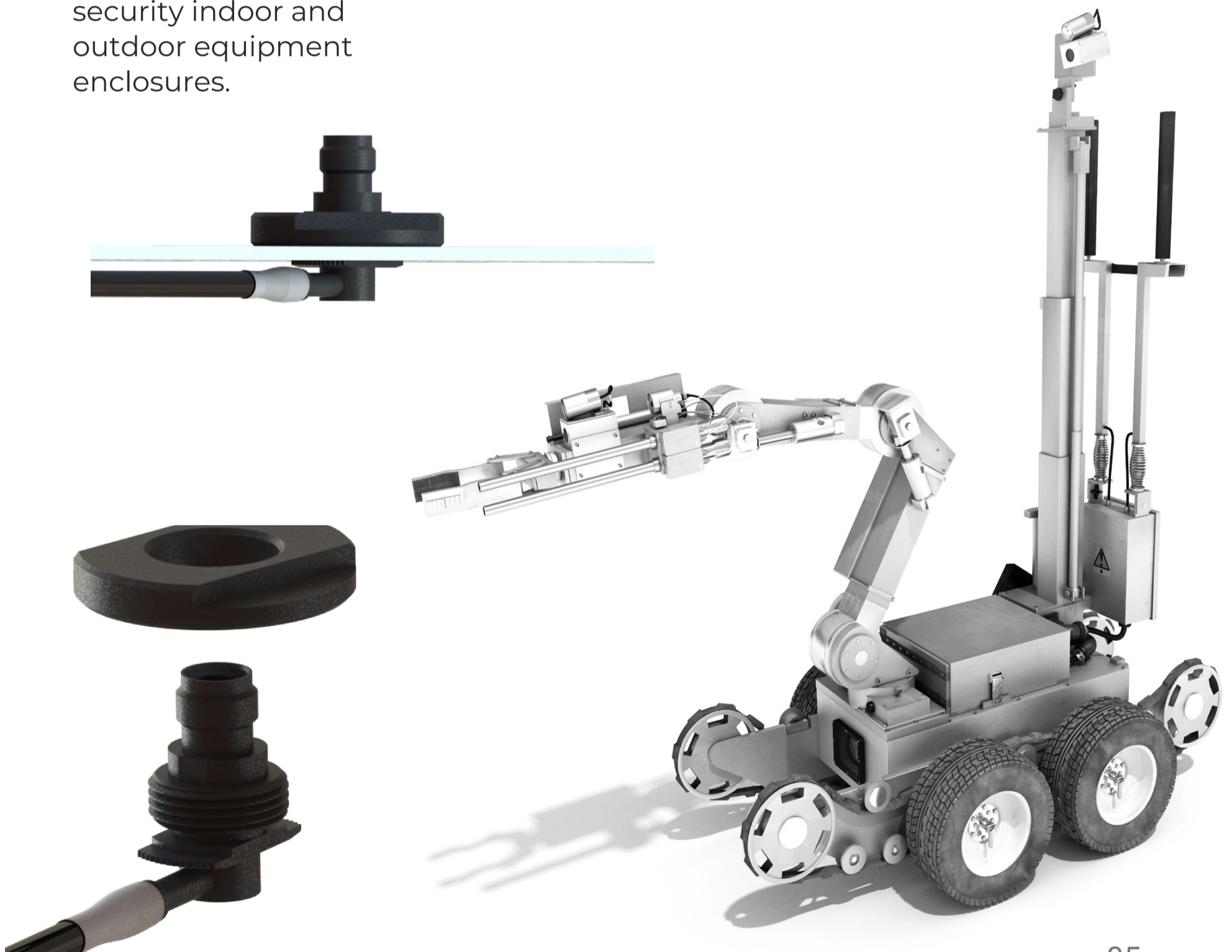
03 SECURITY

These antenna mounting kits are perfect for high security indoor and outdoor equipment enclosures.

INSTALLATION MADE EASY

See page 12 & 13 for installation instructions.

These may be permanent mounting kits but you can always change out the antenna and install a different frequency antenna with the same mating connector.

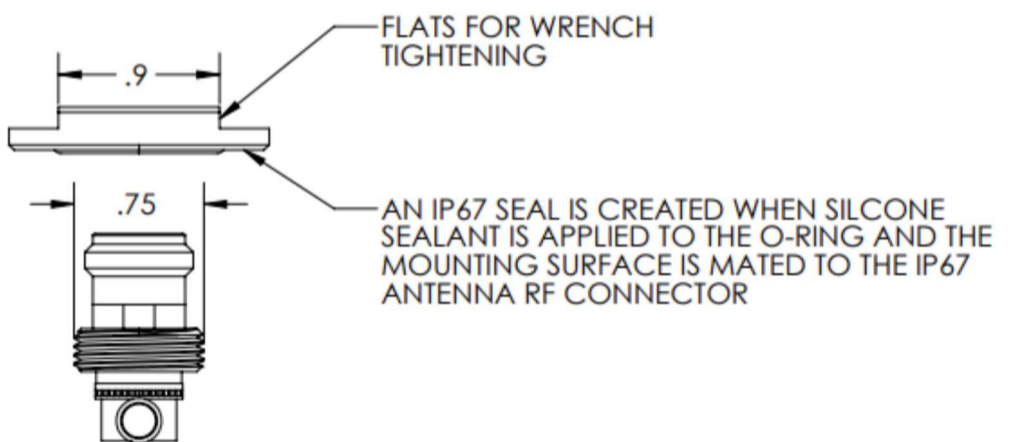
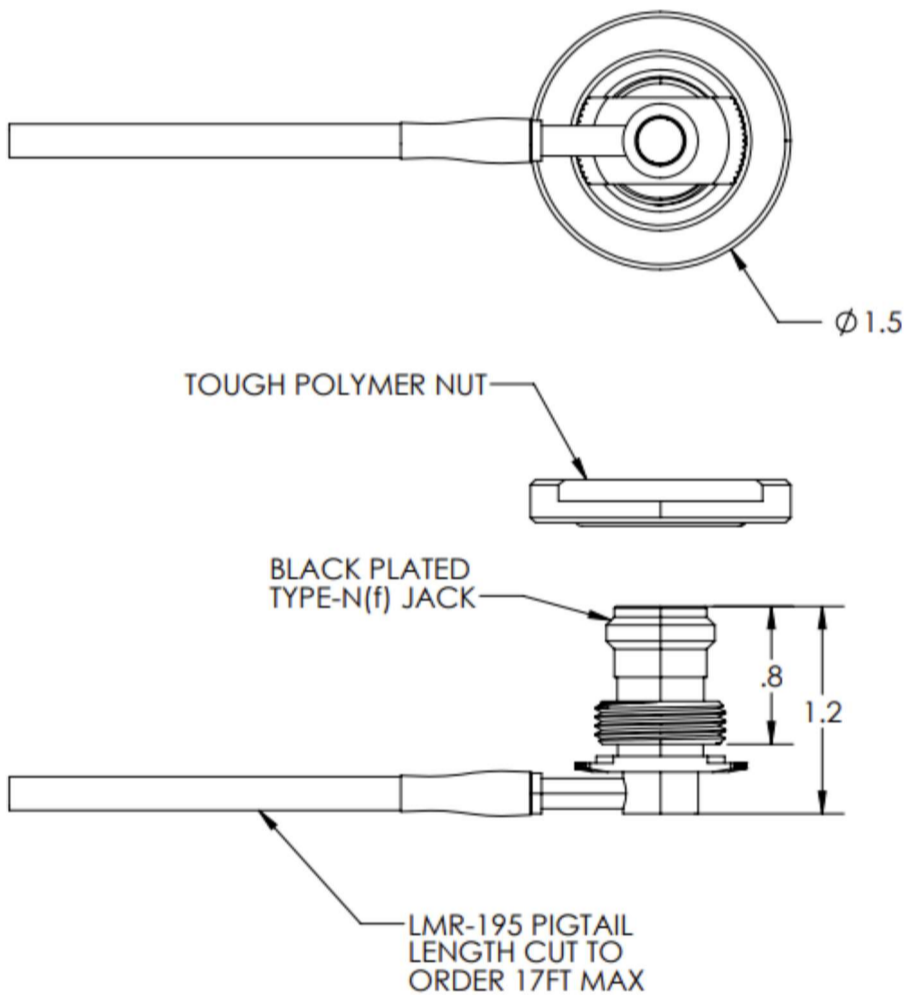


1072-001-X PERMANENT VEHICLE MOUNT, TYPE-N(F) JACK TO PIGTAIL



1072-001-X ELECTRICAL SPECS.

Frequency	Connector Insertion Loss	VSWR
0-2 GHz	0.3 dB max	1.5 : 1
2-4 GHz	0.5 dB max	
4-6 GHz	0.6 dB max	
6-8 GHz	1.25 dB max	



DROP IN REPLACEMENT
3/4 INCH MOUNT HOLE

- 1072-001-1 - Type-N(m)
- 1072-001-2 - TNC(m)
- 1072-001-3 - SMA(m)
- 1072-001-4 - RP-TNC(m)
- 1072-001-5 - SMA(m)

- 1072-001-6 - PL-259(m)
- 1072-001-7 - Type-N(f) Bulkhead
- 1072-001-8 - TNC(f) Bulkhead
- 1072-001-9 - SMA(f) Bulkhead

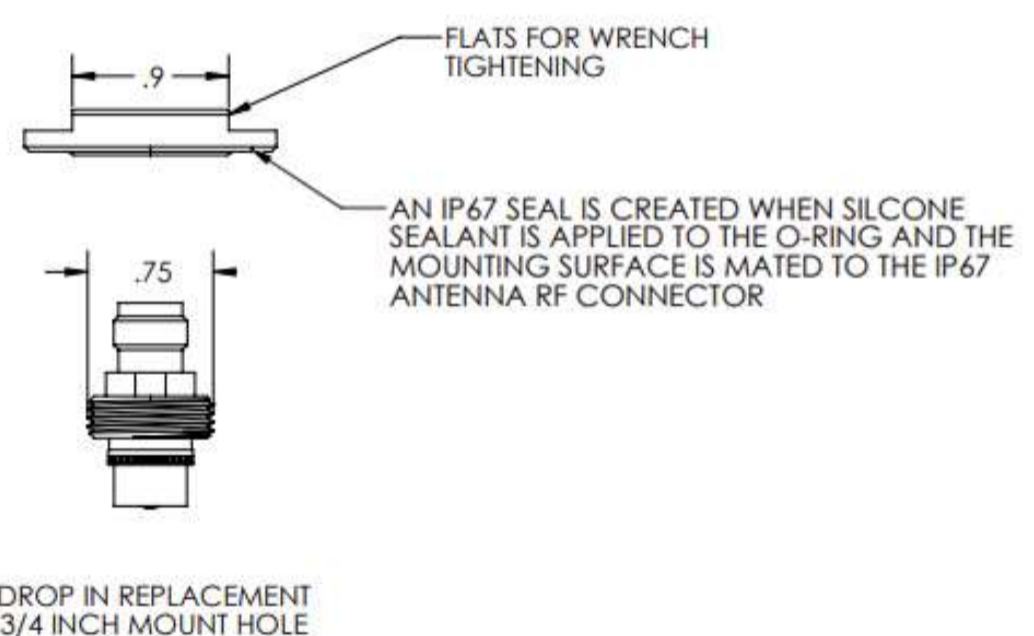
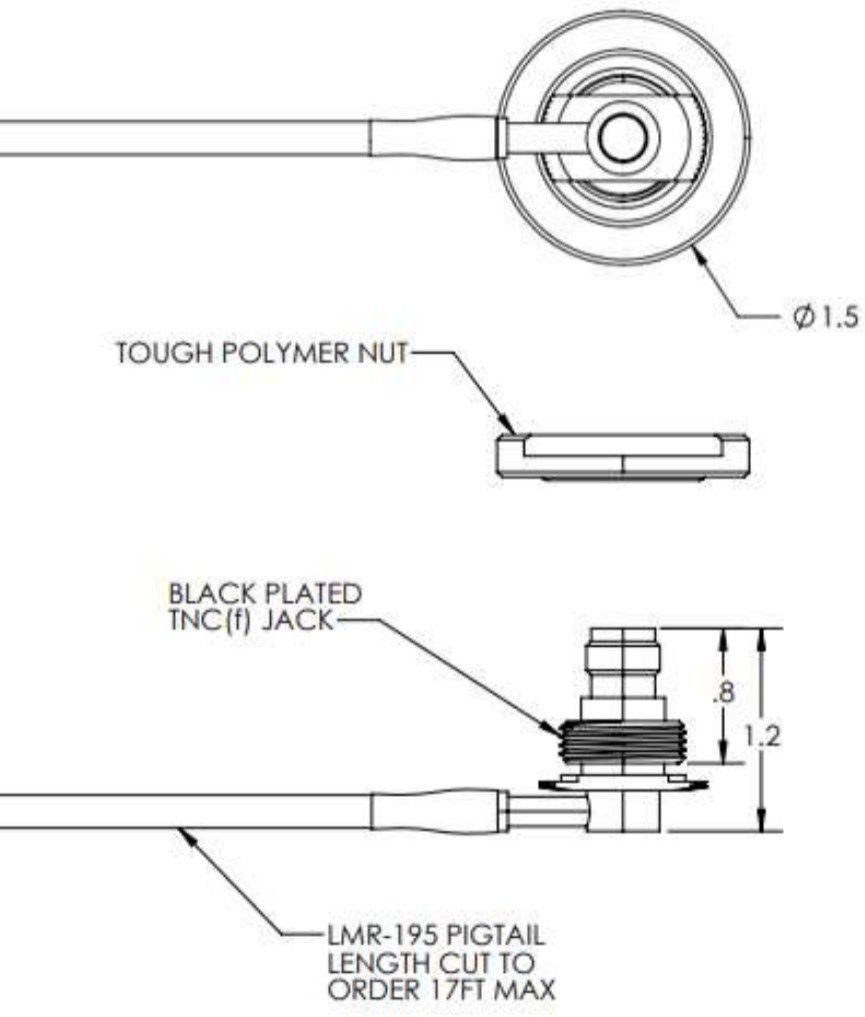
See page 11 & 14
For More Connector
and Tool Information



1072-002-X PERMANENT VEHICLE MOUNT, TNC(f) JACK TO PIGTAIL



1072-002-X ELECTRICAL SPECS.		
Frequency	Connector Insertion Loss	VSWR
0-2 GHz	0.3 dB max	1.5 : 1
2-4 GHz	0.4 dB max	
4-6 GHz	0.5 dB max	
6-8 GHz	0.9 dB max	



- 1072-002-1 - Type-N(m)
- 1072-002-2 - TNC(m)
- 1072-002-3 - SMA(m)
- 1072-002-4 - RP-TNC(m)
- 1072-002-5 - SMA(m)

- 1072-002-6 - PL-259(m)
- 1072-002-7 - Type-N(f) Bulkhead
- 1072-002-8 - TNC(f) Bulkhead
- 1072-002-9 - SMA(f) Bulkhead

See page 11 & 14
For More Connector
and Tool Information

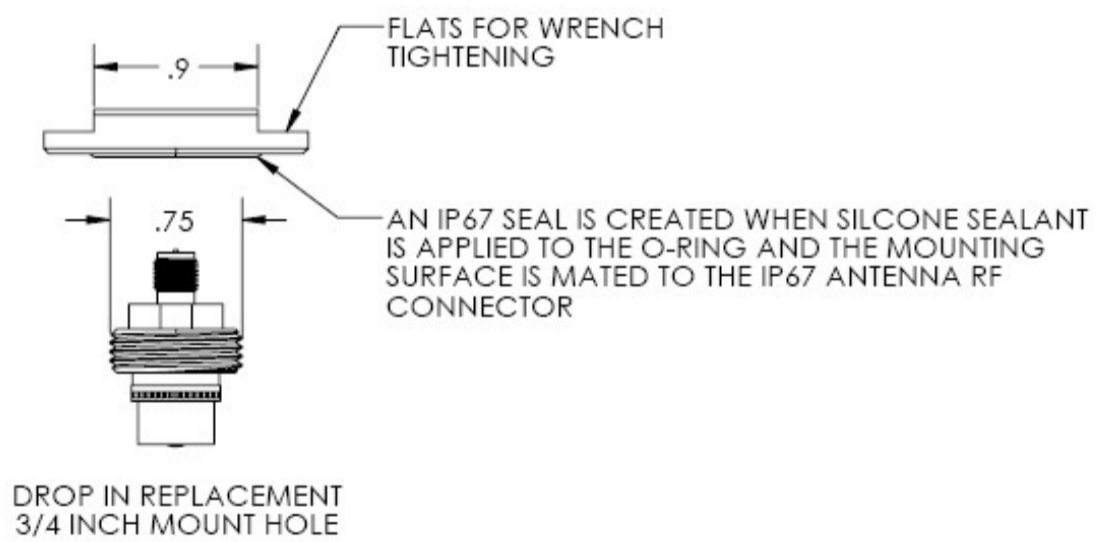
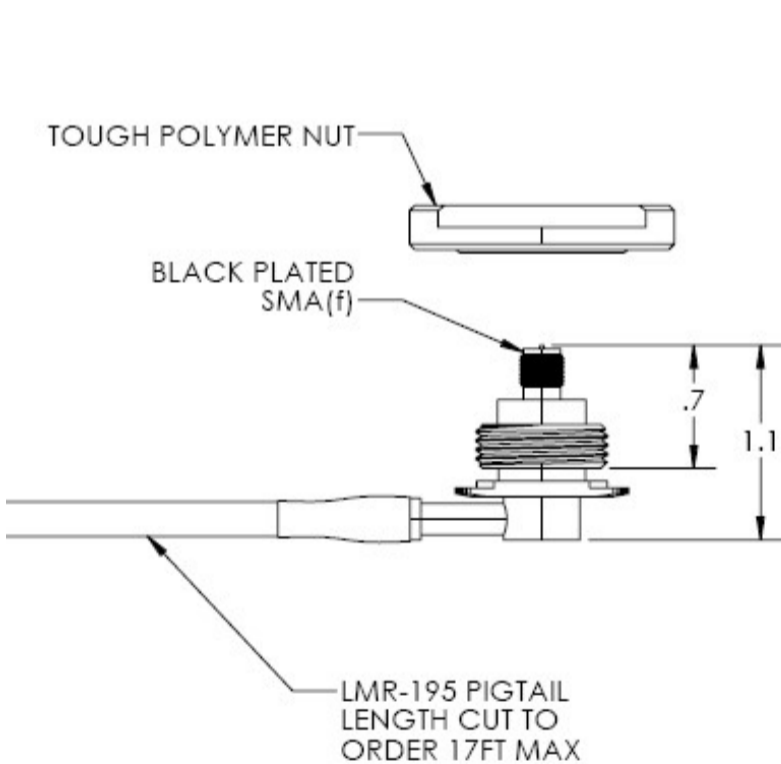
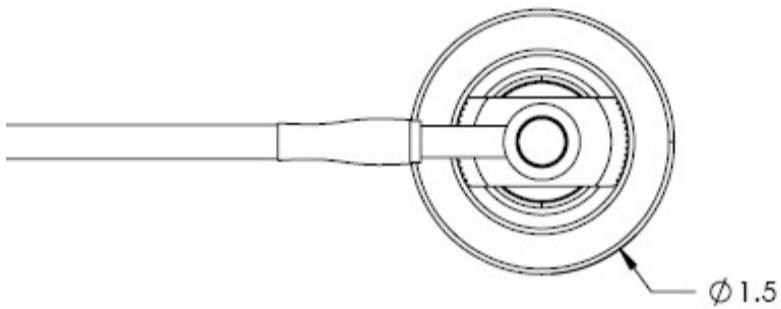


1072-003-X PERMANENT VEHICLE MOUNT, SMA(F) JACK TO PIGTAIL



1072-003-X ELECTRICAL SPECS.

Frequency	Connector Insertion Loss	VSWR
0-2 GHz	0.3 dB max	1.5 : 1
2-4 GHz	0.5 dB max	
4-6 GHz	0.6 dB max	
6-8 GHz	1.25 dB max	



- 1072-003-1 - Type-N(m)
- 1072-003-2 - TNC(m)
- 1072-003-3 - SMA(m)
- 1072-003-4 - RP-TNC(m)
- 1072-003-5 - SMA(m)

- 1072-003-6 - PL-259(m)
- 1072-003-7 - Type-N(f) Bulkhead
- 1072-003-8 - TNC(f) Bulkhead
- 1072-003-9 - SMA(f) Bulkhead

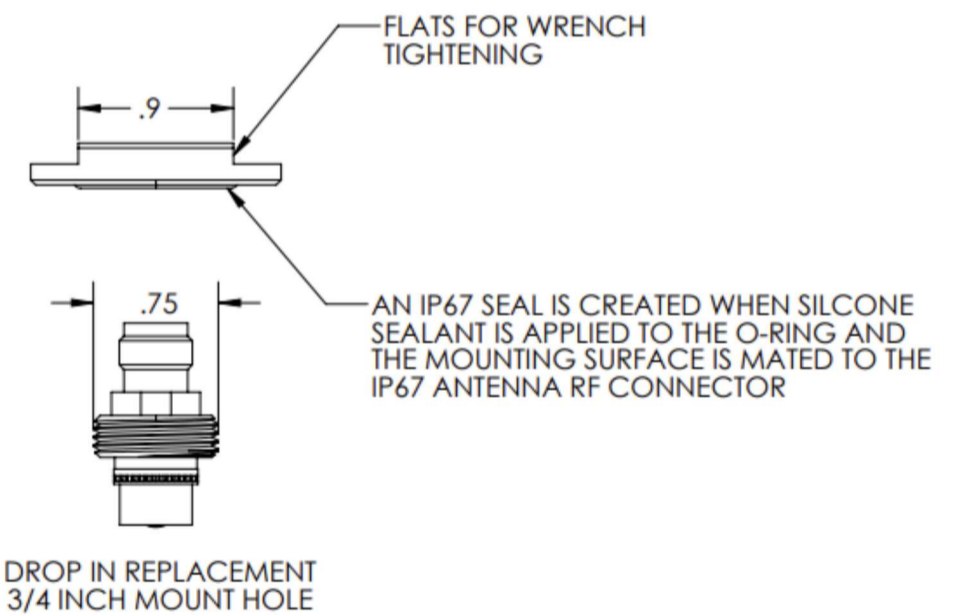
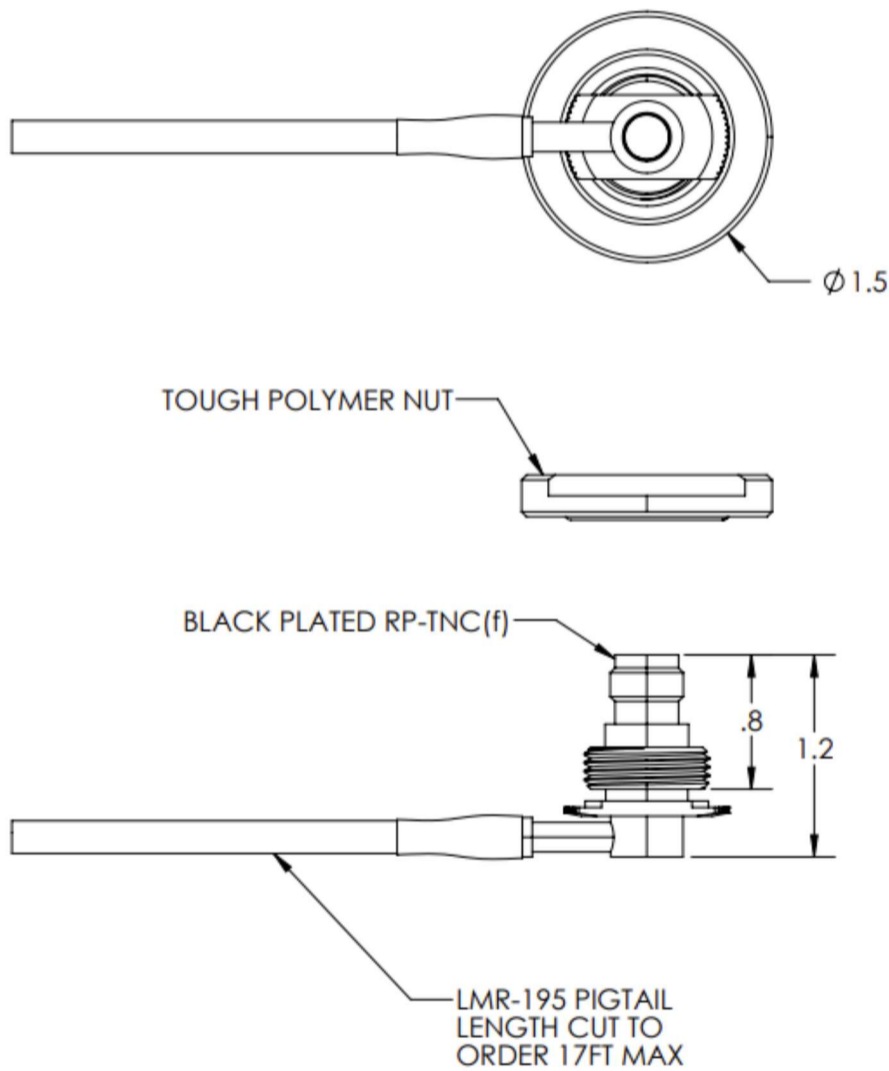
See page 11 & 14
For More Connector
and Tool Information



1072-004-X PERMANENT VEHICLE MOUNT, RP-TNC(F) JACK TO PIGTAIL



1072-004-X ELECTRICAL SPECS.		
Frequency	Connector Insertion Loss	VSWR
0-2 GHz	0.3 dB max	1.5 : 1
2-4 GHz	0.4 dB max	
4-6 GHz	0.5 dB max	
6-8 GHz	0.9 dB max	



- 1072-004-1 - Type-N(m)
- 1072-004-2 - TNC(m)
- 1072-004-3 - SMA(m)
- 1072-004-4 - RP-TNC(m)
- 1072-004-5 - SMA(m)

- 1072-004-6 - PL-259(m)
- 1072-004-7 - Type-N(f) Bulkhead
- 1072-004-8 - TNC(f) Bulkhead
- 1072-004-9 - SMA(f) Bulkhead

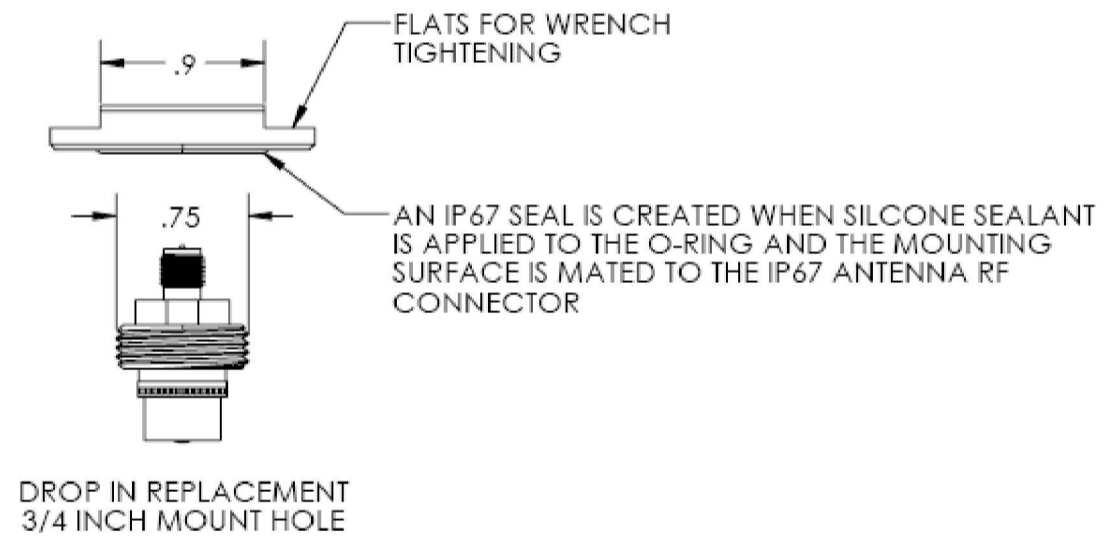
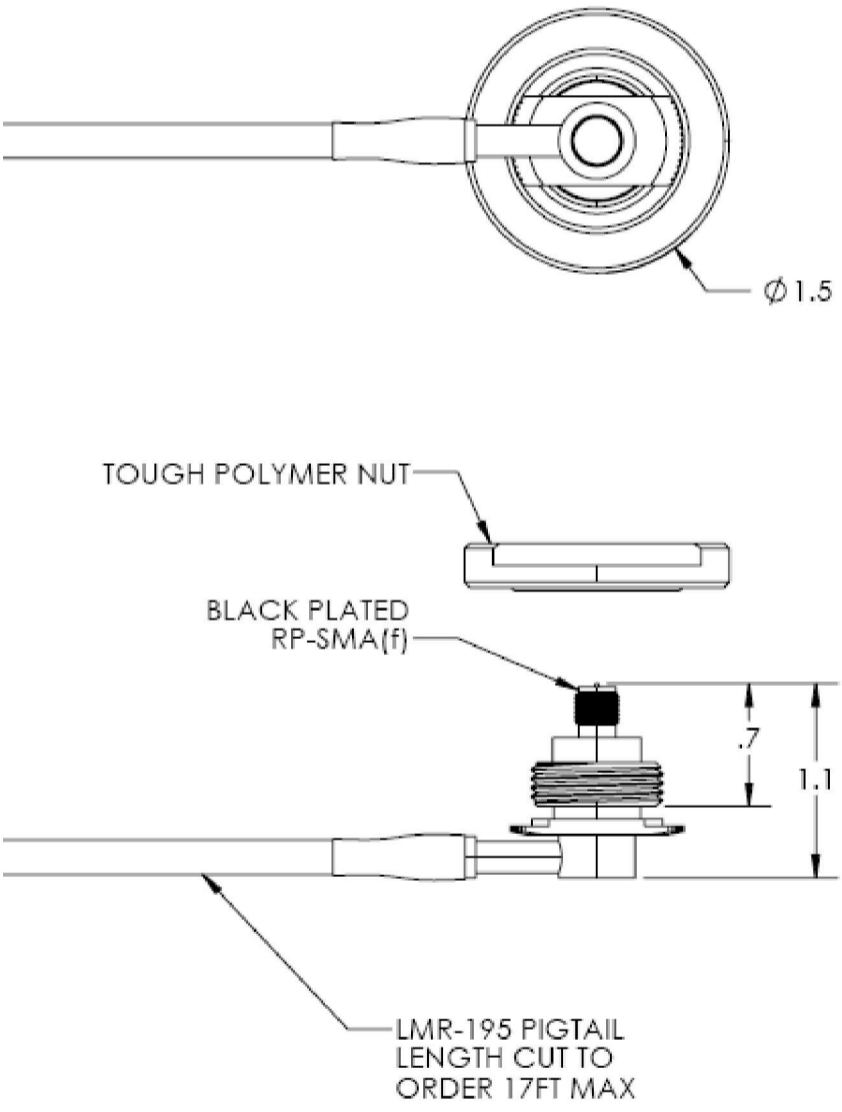
See page 11 & 14
For More Connector
and Tool Information



1072-005-X PERMANENT VEHICLE MOUNT, RP-SMA(F) JACK TO PIGTAIL



1072-005-X ELECTRICAL SPECS.		
Frequency	Connector Insertion Loss	VSWR
0-2 GHz	0.3 dB max	1.5 : 1
2-4 GHz	0.5 dB max	
4-6 GHz	0.6 dB max	
6-8 GHz	1.25 dB max	



- 1072-005-1 - Type-N(m)
- 1072-005-2 - TNC(m)
- 1072-005-3 - SMA(m)
- 1072-005-4 - RP-TNC(m)
- 1072-005-5 - SMA(m)

- 1072-005-6 - PL-259(m)
- 1072-005-7 - Type-N(f) Bulkhead
- 1072-005-8 - TNC(f) Bulkhead
- 1072-005-9 - SMA(f) Bulkhead

See page 11 & 14
For More Connector
and Tool Information



THE MOUNTING KITS HAVE THE RF CONNECTOR THAT MATES TO THE ANTENNA RF CONNECTOR. ON THE OTHER END OF THE PIGTAIL YOU HAVE THE RF CONNECTOR THAT MATES WITH YOUR RADIO WHICH IS SHIPPED LOOSE AND CRIMPS TO THE PIGTAIL RF CABLE PRIOR TO INSTALLATION COMPLETION.

PLEASE CHOOSE FROM THE RF CONNECTORS BELOW THAT MATE WITH YOUR RADIO RF CONNECTOR. CONSULT YOUR RADIO MANUAL FOR RF CONNECTOR REQUIREMENTS.



1 - Type-N(m)



2 - TNC(m)



3 - SMA(m)



4 - RP-TNC(m)



5 - RP-SMA(m)



6 - PL-259(m)
UHF Connector



7 - Type-N(f)
Bulkhead Mount



8 - TNC(f)
Bulkhead Mount



9 - SMA(f)
Bulkhead Mount

THE LAST DIGIT OF THE PART # INDICATES WHICH RF CONNECTOR IS SHIPPED LOOSE WITH THE MOUNTING KIT.

VEHICLE MOUNT INSTALLATION INSTRUCTIONS

These instructions are meant to provide an outline and are directed at users with prior vehicle mount installation knowledge.

Please reference RF connector manufacturer details for information on trimming the cable and crimping the RF connector. When cutting the cable, it is recommended to leave a minimum of 6" of RF cable length from the mount.

WARNING: Ensure no EMC (Electromagnetic Compatibility) issues are introduced by adding additional equipment and the product will not interfere with vehicle safety, such as the SRS (Supplemental Restraint System).

SUPPLIES:

- Gloves & Safety Glasses
- Rag or Paper Towel & Residue-Free Cleaner to Clean Mounting Surface
- 1/4" Drill Bit for Pilot Hole (optional)
- Blue Painter's Tape- at least 1" wide
- 3/4" Hole Saw (available on the Southwest Antennas website)
- Drill
- Vacuum or Brush to Clean Debris
- RTV Silicone (available on the Southwest Antennas website)
- 15/16" Wrench
- Alcohol Wipe- minimum 70% alcohol (available on the Southwest Antennas website)

DISCLAIMER:

Southwest Antennas is not responsible or liable for any incidental, indirect, or consequential damages, or any loss of profits or revenue, whether incurred directly or indirectly, or any intangible losses resulting from the use or inability to use or access this product, kit, instructions, material contained in it, or any action or decision taken as a result of using the products.

INSTRUCTIONS:

1. Ensure the surface the antenna will be mounted to is clean and free of grease, wax, or residue. Use an alcohol wipe (minimum 70% alcohol) to wipe down the threads of the polymer nut and the threads where the nut attaches.

2. Drill a pilot hole to help get the desired placement. For the hole saw available on the SWA website, the outer hole saw can be unscrewed and the center drill bit can be used for the pilot hole.



3. On the outside of the vehicle, apply masking tape to where the hole will be drilled to help protect the vehicle and create a cleaner cut.

4. Use the $\frac{3}{4}$ hole saw to drill a hole from the outside of the car to the inside. Deburr and file sharp edges of hole.

CAUTION: Be careful of sharp edges and metal fragments.

5. Remove tape and clean debris with a vacuum (using a vacuum is strongly recommended rather than blowing away or wiping away debris to avoid scratching the vehicle). Clean any leftover dust and ensure all surfaces are clean.

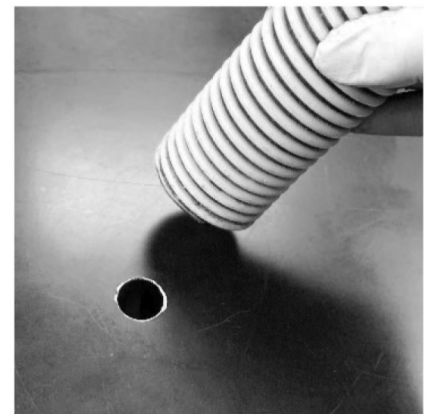
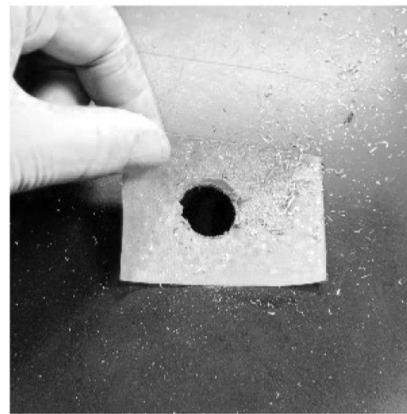
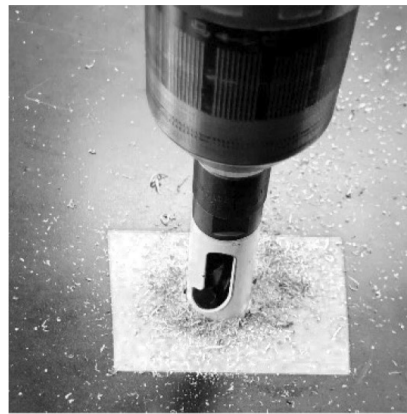
6. Remove the polymer nut from the cable assembly. Ensure the black O-ring is completely inserted in the circular groove of the polymer nut.

7. Insert the cable assembly through the drilled hole. If needed, the connector can rest on the edge of the hole to temporarily hold it in place as shown. Apply a $\frac{1}{4}$ " wide bead of silicone around the entire circumference of the drilled hole. On the threads where the polymer nut was attached, apply silicone completely around the top threads as shown.

8. Hand-tighten the polymer nut onto the connector threads with the O-ring facing downward toward the vehicle surface. Confirm the threads aren't cross-threaded. Ensure silicone comes out and is distributed around the edge of the polymer nut. While holding the base of the connector, use a $\frac{15}{16}$ " wrench to tighten the polymer nut until the assembly is tight and snug to the vehicle surface. Be careful not to overtighten.

9. Use an alcohol wipe (minimum 70% alcohol) to smooth out the silicone to create a smooth, even fillet that is free of gaps or holes. If necessary, add small amounts of silicone to fill gaps. Clean off any excess silicone.

10. Allow silicone to cure for 24 hours.



TOOLS YOU MAY NEED TO INSTALL YOUR VEHICLE MOUNT.

1072-006 MOUNTING TOOLS GROUP KIT



Included:

1. 3/4 inch thru-hole drill bit & hole saw
2. Silicone Sealant .
3. Alcohol Prep Wipes
4. Crimping Tool

1072-006-X OR PURCHASE THEM SEPARATELY BELOW



1072-006-1

3/4 inch thru-hole
drill bit & hole saw



1072-006-2

Silicone
Sealant



1072-006-3

Alcohol
Prep Wipes



1072-006-4

Crimping
Tool

NOT SEEING WHAT YOU'RE LOOKING FOR?

**DID YOU KNOW THAT A LARGE PORTION OF WHAT WE DO IS
CUSTOMIZED ANTENNA SOLUTIONS. GIVE US A CALL TO LEARN MORE.**

**FROM LARGE MIMO
SECTOR ANTENNAS**



**DUAL BAND 12X12 MIMO
360° SECTOR ARRAY,**

**TO TINY CONCEALMENT
ANTENNAS**



**DUAL BAND OMNI
CONCEALMENT ANTENNA**

AND EVERYTHING IN BETWEEN





southwest antennas

**CONNECTING
PEOPLE
TO THEIR
MISSION**

