

MARINCO®

**Dual Trumpet Mini Air Horn
10108 & 10121**

Installation Instructions

Dual Trumpet Mini Air Horn

10108 & 10121

Required for Installation and Not Included With this Horn:

- #10 Size Pan-head Mounting Screws (2)
- 8mm Bolt (1) or 1/4" Pan-Head Screws (2) (For Compressor Mounting)
- 1/4" Female Quick-Connect Tabs (2)
- Horn Button Rated For 20 Amps
- 20 Amp Fuse & Fuse Carrier
- Red Stranded Wire (For Positive)*
- Black Stranded Wire (For Negative)*

* See Wiring Chart For Wire Size

Tools Required for Installation:

- Phillips-Head Screwdriver
- 7/16" Drill Bit
- Electric Drill
- Soldering Gun & Solder (Optional)
- Crimping/Cutting Pliers

Installation Instructions

Horn Installation

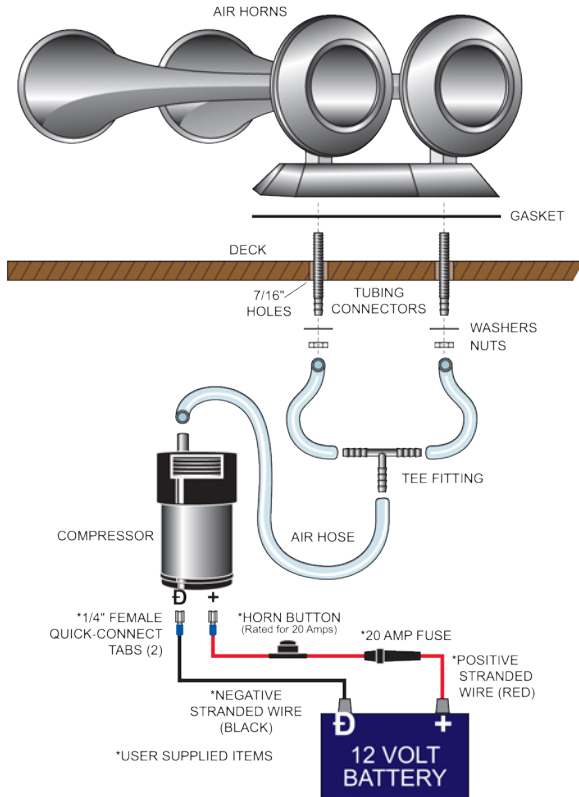
- 1) Determine the mounting position of the horn. Be careful to select a location with minimum deck curvature and where a minimum amount of spray will hit the horn when the boat is underway. Whenever possible, the horn should be mounted with the two trumpets pointing downward so that it does not collect water spray.
- 2) Screw the tubing connector into the nut on the base of the horn and tighten securely.

Note: The tubing connector provided will work for decks up to 3/4" thick. For thicker decks, counter-bore the deck hole from under the deck surface.

- 3) Using the horn base gasket as a template, determine the location for the tubing connector hole.
- 4) Mark and drill a 7/16" hole through the deck. Before drilling, check to make sure you are not going to drill through something vital, such as wiring or plumbing.
- 5) Place the gasket on the horn base. Place the horn assembly on the deck with the tubing connectors fitted into the holes.
- 6) From under the deck surface, place the washer and nut on the tubing connector and tighten until snug.
- 7) Cut two 4" lengths of air hose. Connect each 4" air hose to the tubing connectors by sliding them over the fittings and pressing them up about 3/4". Connect the other end of each 4" air hose to the three-prong tee fitting. If you have difficulty getting the air hose onto the tee fitting, heat the air hose by placing it into a pan of hot (not boiling) water until it is soft, then slide it over the tee fitting.

Dual Trumpet Mini Air Horn

10108 & 10121



Installation Instructions

Compressor Installation

- 1) For maximum efficiency the compressor should be mounted as close as possible to the horn. A shorter length of air hose will improve performance. The compressor should be mounted on a firm surface where it will be protected from moisture and high temperatures, but is still accessible for maintenance purposes. The compressor should be mounted vertically with the air port facing up.
- 2) The compressor can be mounted two ways: by using the metal mounting strap or the mounting side-bracket on the compressor.

Strap

- Place the strap over the center of the compressor.
- Install the strap nut and bolt through the holes in the bottom of the strap and tighten until the strap is snug around the compressor.
- Mount the compressor and strap using two 1/4" size pan-head screws of appropriate length.

Side-bracket

- install an 8mm bolt and "hang" the compressor on the bolt.

- 3) Trim the air hose to the proper length using a sharp knife.
- 4) Install the air hose onto the compressor by sliding it over the air port opening. Be sure there are no kinks in the air hose that will impede air flow.
- 5) Lubricate the compressor every 4-5 months to prevent possible loss of air volume. To lubricate the compressor, remove the air hose from the compressor air port and place 3 to 4 drops of light machine oil into the air port opening. Do not over lubricate. Let the oil set for a few minutes and then activate the compressor momentarily to distribute the oil.

Failure to activate the compressor before re-connecting the air hose may result in oil being blown onto the horn diaphragm and contaminating it.

- 6) Re-connect the air hose.

Dual Trumpet Mini Air Horn

10108 & 10121

Compressor Wiring

NOTE: The following items are needed to complete the wiring of the horn and are NOT included: horn button, 20-amp fuse and fuse carrier, two 1/4" female quick-connect tabs and the proper length and gauge of stranded wire (see Wire Size chart).

- 1) Select the proper stranded wire size for the length of wire you will need from the Wire Size chart.
- 2) The length of wire should be sufficient to allow enough slack to prevent undue tension at the connection points.
- 3) Connect the wires as shown in the wiring diagram. It is recommended that the quick-connect tabs be soldered to the stranded wire for the best and most reliable connection to the compressor. Suggestion: Use the Marinco Direct Connect Multi Connection Battery Terminals (Part #12VTR) to connect the wiring to the battery.
- 4) If horn volume is weak, recheck all the wiring and air hose connections.

Wire Size Chart for 12V Installation

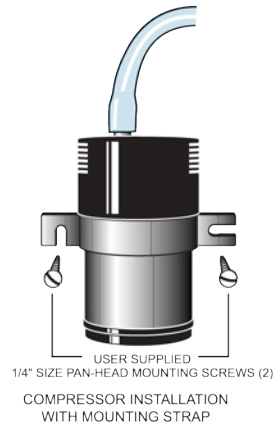
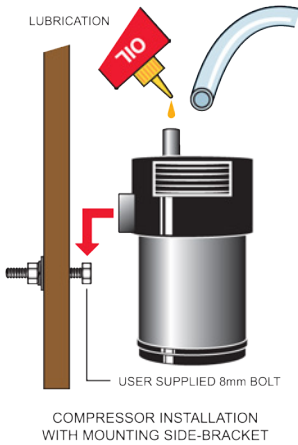
Length of Wire*		Wire Size	
0-20 Feet	(0-5 Meters)	14 AWG	(1.9 mm)
21-30 Feet	(6-9 Meters)	12 AWG	(2.3 mm)
31-50 Feet	(10-15 Meters)	10 AWG	(3.0 mm)
51-80 Feet	(16-24 Meters)	8 AWG	(4.0 mm)
Over 80 Feet	(Over 24 Meters)	6 AWG	(5.3 mm)

AWG: American Wire Gauge

*As measured from the battery to the compressor and back to the battery (round trip).

To replace an electric horn with this air horn you may need to replace the wiring with a heavier gauge wire and fuse that will carry 20 amps as shown in the Wire Size Chart.

Installation Instructions



Troubleshooting Tips

If the air horn does not produce any sound or is low in volume, check the following:

- 1) Check to see if the 20A fuse has blown.
- 2) Check the air hose for kinks that could impede air flow.
- 3) Check the wiring for broken or frayed wires. Check the compressor with a DC volt meter. Make sure there is 12 volts across the two compressor terminals while the horn button is being pushed.
- 4) Check the horn diaphragm. Remove the 5 phillips head screws on the horn end cap and remove the plastic diaphragm. Inspect the diaphragm for contamination. If there is dirt or oil on it, clean with a soft dry cloth and re-install. In the unlikely event that the diaphragm is torn, call AFI customer service for replacement part #20147.
- 5) Check compressor lubrication. If the compressor has not been lubricated on a regular basis (every 4-5 months) it could lose air volume. Lubricate as per instruction #4 under "Mounting The Compressor".
- 6) It is very important that when lubricating the compressor, the oil is allowed to settle and the compressor is activated BEFORE re-attaching the air hose. Failure to do this may result in oil being blown onto the diaphragm and contaminating it.