

# Dual Trumpet Air Horn 10106 & 10122

**Installation Instructions** 

## **Dual Trumpet Air Horn**

10106 & 10122

## 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

#### Horn Installation

- 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 trumpet pointing downward so that it does not collect water spray.
- 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.

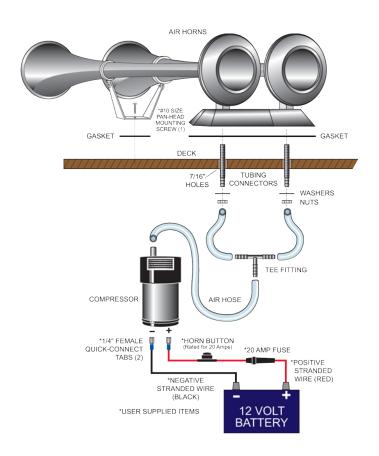
- 3) Using the horn base gasket as a template, determine the location for the tubing connector hole.
- 4) Mark and drill a 7/16" hole through the deck. Before drilling, check to make sure you are not going to drill through something vital, such as wiring or plumbing.
- 5) Place the gasket on the horn base. Place the horn assembly on the deck with the tubing connectors fitted into the holes.
- 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

# Install the horn support bracket (optional).

- Open up the larger of the two clamp rings and place it around the neck of the trumpet.
- Open up the smaller of the two clamp rings and place it around the neck of the longer trumpet.
- Attach the base of the support bracket to the clamp ring using the two small machine screws; do not tighten all the way.
- 4) Slide the support bracket assembly forward until each clamp ring is equally snug around each trumpet. Finish tightening the two machine screws.
- 5) Place the small gasket under the base of the support bracket and attach the bracket to the deck with a #10 size pan-head set screw of appropriate length.

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#### **Compressor Installation**

- 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.

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10106 & 10122

#### **Compressor Wiring**

- 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

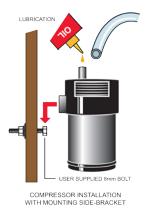
Length of Wire*		Wire Size	
0-20 Feet	(0-5 Meters)	14 AWG	(1.9 mm)
21-30 Feet	(6-9 Meters)	12 AWG	(2.3 mm)
31-50 Feet	(10-15 Meters)	10 AWG	(3.0 mm)
51-80 Feet	(16-24 Meters)	8 AWG	(4.0 mm)
Over 80 Feet	(Over 24 Meters)	6 AWG	(5.3 mm)

AWG: American Wire Gauge

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.

<sup>\*</sup>As measured from the battery to the compressor and back to the battery (round trip).

### 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 reinstall. In the unlikely event that the diaphragm is torn, call Marinco 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.