

**Installation Instructions** 

## Tools (Not Included):

- Phillips Head Screwdriver
- Pencil or Felt Tip Pen.
- Electric Drill
- 3-1/2" Hole Saw for Compact Horns
- 4" Hole Saw for Trumpet Horns
- 1/8" Twist Drill
- 3/16" twist drill for installing compact horns
- Wire Cutters & Crimping Tool

#### Materials:

- Wooden Block 3/4" Thick 1" x 2" (not required for Compact Horns)
- Waterproof adhesive or fiberglass resin and cloth
- Horn Button.
- Electrical Wire (determine length needed then refer to wire size chart tor correct gauge)
- Wire Connectors
- 30 AMP In-Line Fuse Holder and Fuse (Air Horns only)

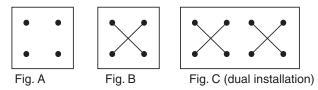
Horn Type	Interior Clearance Needed For Mounting	Part Number
Compact Single	6" High 5'/2" Wide x 4"Deep	11050
Air Dual Trumpet	18 '/2" High x 10" Wide x 3" Deep	11058
Air Mini Trumpet	13" High x 5" Wide x 3" Deep	11059

- You must have room on the interior of the mounting surface to house the horn assembly. The chart below will give you the clearance dimensions needed. The mounting surface should be relatively flat and free of any extreme compound curves.
- A large hole (3 1/2" or 4") is needed for installation. Be sure that you will not be drilling into an area that houses electrical wiring or controls.
- **IMPORTANT:** Your concealed horn is designed to operate with the horn motor above the grill opening and on a mounting surface whose angle is no more than 45° from vertical. Within this angle, any water that might enter through the grill opening will be free to drain back out through the grill.
- IMPORTANT: Failure to mount the horn motor above the grill opening will allow water to accumulate in the motor. Improper mounting will result in horn failure and void your warranty protection.

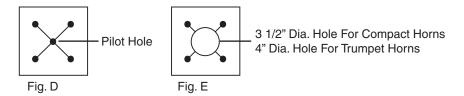
#### Please read through all instructions prior to assembly

After you have determined a suitable horn location on the boat and made sure that there is adequate interior room for the horn assembly proceed with the following.

 Working from the boat exterior, use the horn grill as a template to mark the four mounting holes on the mounting surface (Fig. A). Using a straight edge, connect the holes with lines forming an X (Fig. B). For Dual Horn installation (Fig. C).

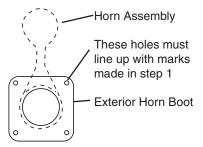


- 2) At the point where the two lines intersect, you will need to drill a large diameter hole (Fig. E).
- For Compact Horns use a 3 1/2" hole saw .
- For Trumpet Horns (air or electric) use a 4" hole saw.

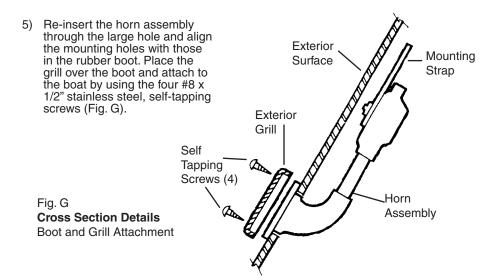


Note: We suggest you drill a 1/8" pilot hole prior to using the hole saw (Fig. D).

- 3) Working from outside, insert the horn and rubber boot assembly through the large hole. With the horn assembly pointing up in its mounting position, align the mounting holes in the rubber boot with those marked in step one. If they do not line up properly, re-mark the holes using the rubber boot as a template (Fig. F).
- Remove horn assembly and drill the 4 mounting holes. Use a 1/8" diameter drill to accept the #8 self tapping stainless steel screws.



Note: If mounting COMPACT HORNS, move directly to Step 7.



6) (For Trumpet Horns Only.) Working from the inside, position a 3/4" thick block of wood between the horn mounting bracket and the interior mounting surface. Glue or glass-in the block in this position (Fig. H). When the block is firmly in place, attach horn mounting bracket to the wood block using the 3/8" x 1/2" pan head screws (included).

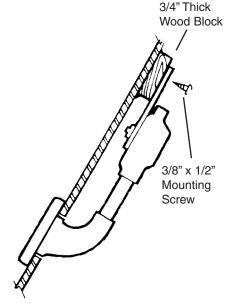
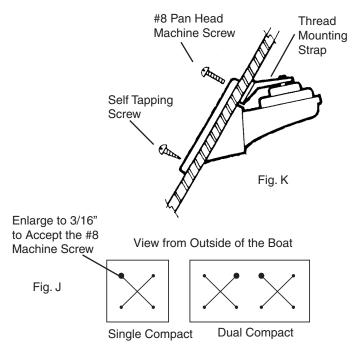


Fig. H Cross Section Details Horn Assembly Mounting to Bulkhead  (For Compact Horns Only,) When mounting Compact Horns you will need to enlarge one (two if Dual Horns) of the grill mounting holes. See illustrations.

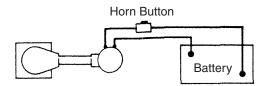


Re-insert the horn assembly through the large hole and align the mounting holes with those in the rubber boot. Place the grill over the boot and attach to the boat by using the self-tapping screws (3 if single horn, 6 If dual) to secure the grill and rubber boot to the boat. Place the #8 machine screw through the remaining enlarged hole and thread into the horn motor mounting bracket.

# WIRING INSTRUCTIONS

#### **Electric Horns**

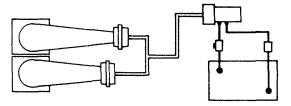
- 1) Connect wires as shown in diagram.
- 2) Length of wire should be sufficient to avoid any tension at connection points.
- 3) Refer to wiring chart below for proper gauge wire.
- 4) If volume is weak, recheck connections.



Wire Size		Wire Size (Metric)	
Length of Wire to be Used	Recommended Wire Size	Length of Wire to be Used	Recommended Wire Size
0-20 feet	14AWG	0-5 meter	l.5 mm
21-40 feet	12AWG	6-10 meter	20 mm
41-60 feet	10AWG	11-20 meter	2.6 mm
61 feet & over	8AWG	21 meter & over	3.2 mm

### Air Horns

- 1) Connect wires as shown in diagram.
- 2) Length of wire should be sufficient to avoid any tension at connection points.
- 3) Refer to wiring chart below for proper gauge wire.
- 4) If volume is weak, recheck connections.



#### **Compressor Mounting**

- 1) Select a desired mounting position on a firm surface where it is protected from moisture and high temperature. NOTE: Mounting location must be accessible for maintenance purposes.
- 2) At the same time, install compressor in a location which will assure the shortest possible length of tubing from horn to compressor.
- 3) Install compressor securely with two 5/16" fasteners (not included).
- 4) 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 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. Re-connect the air hose.

**NOTE:** Compressor draws 24-26 AMPS requiring the use of a 30 AMP fuse (see drawing on page 6).

Wire	Size
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Length of Wire	Recommended Wire Size	
to be Used	12 Volt Operation	24 Volt Operation
0-20 Feet	12 AWG	21 AWG
21-40 Feet	9 AWG	18 AWG
41-60 Feet	7 AWG	16 AWG
61 Feet & over	5 AWG	14 AWG

Length of Wire	Recommended Wire Size		
to be Used	12 Volt Operation	24 Volt Operation	
0-5 Meter	205 mm	0.723 mm	
6-10 Meter	2.91 mm	1.02 mm	
11-20 Meter	3.57 mm	1.29 mm	
21 Meter & over	4.62 mm	1.63 mm	

Warranty information: www.marinco.com/limited-warranty



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