

# 12V COMPACT TWIN AIR HORN (HN54)

Installation Guide

(Please read the instructions before use)

Power source: DC 12V

### Introduction

This horn is designed to replace your existing horn. Before removing any components and commencing any installation, it is advisable to carefully read through these instructions and retain for future use.

#### **Positioning your Horn**

It is very important to pay attention to the following points when installing your horn:

- 1. Mount the horn away from engine heat sources to prolong its use.
- 2. Mount the horn pointing slightly downwards to protect from moisture, road surface water, car / vehicle washes, etc.
- 3. Mount the horn to a solid surface to ensure it's securely attached.

# Fitting

#### VERY IMPORTANT

Before commencing any removal of old components and installing new ones, please ensure that the vehicle is parked in a safe place away from the road with the handbrake firmly on. Isolate the horn circuit by removing the corresponding fuse in the fuse box or the battery needs to be disconnected. First disconnect the ground (-) terminal and only then disconnect the positive (+) terminal. This minimises the chance of a short-circuit. Make sure that the cables will not accidentally rebound off the terminal posts. A folded towel in between should be sufficient.

#### **General Instructions**

- Use a wire of at **least 2.5 mm<sup>2</sup>** to connect the horn.
- If wires need to be extended, use wire of at least the same thickness. If the wire is too thin the performance of the horn will decrease.
- Use fitting, isolated electrical connectors, like Faston connectors. Crimp these onto the wire using the correct tools. The terminals should be fastened in such a way that they cannot be disconnected from the wire by hand.



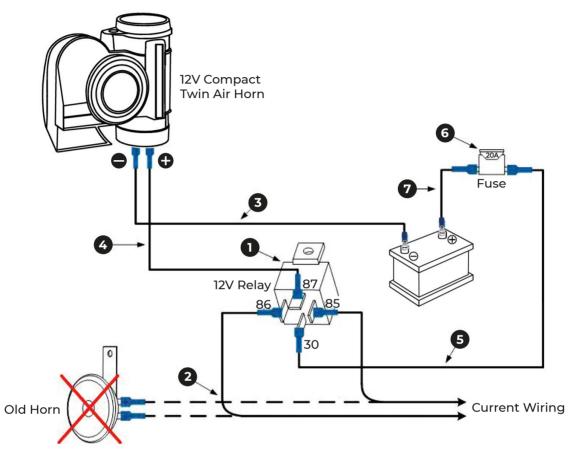
- Make sure that the wires cannot be damaged mechanically. Secure them with cable ties. Pay extra attention to places where they might come into contact with sharp elements of the chassis.
- Always use the included relay for installation. This air horn uses 18 amperes. A standard horn relay cannot process this current and would quickly melt.
- Place the relay with contacts facing down in a place where water and dirt can reach it as little as possible.
- In the installation manual we **use coloured wires**. Of course, you can use only black wires, but that implicates you will have to be more careful.

#### Installing a horn with built-in compressor

- Remove the old horn.
- Place the new horn where water and dirt can reach it as little as possible. Place the new horn upright as much as possible, but at an angle of no more than 25 degrees.

#### Installing a horn with separate compressor

- Remove the old horn.
- Install the air horns horizontally or with the opening pointing slightly downward.
- Find a place for the compressor in the immediate vicinity of the air horns. Install the compressor upright as much as possible. Place the compressor where water and dirt can reach it as little as possible.
- Connect the air horns to the compressor by using the included hoses. Keep the hoses short and prevent sharp curves. Subsequently make the connections as indicated on the packaging.
- Make sure that the parts are not placed too close to warm objects, such as the radiator.



## Electrical connection (see installation scheme)

- 1. Find a place to install the relay. The place of the former horn is probably fine, as long as the relay cannot be damaged by water and dirt.
- 2. Move or extend the 2 wires that went to the old horn and connect these to the connections 85 and 86 of the relay (order does not matter). In order to extend the wires, make two pieces of wire with Faston males on one side and Faston females on the other. **Remark:** If the former horn only has 1 connecting wire, it uses the chassis as ground. In this case, the wire should be connected to connection 86 of the relay. Subsequently connect a short piece of wire to one side with a Faston female and to the other side with a Faston ring. Move the Faston female to connection 85 of the relay. Screw the Faston ring onto a spot on the chassis (ground). The place of the former horn is a good spot. Use a knurled ring to ensure a good electrical contact. Such a ring has probably turned up when removing the former horn.
- 3. Draw a (black) wire from the minus (-) terminal of the compressor of the new horn to a suitable ground (-) connection. This should preferably be the ground (-) terminal of the battery. Crimp a Faston ring to the battery side and a Faston female to the other end of the wire.
- 4. Draw a (red) wire from the positive (+) terminal of the compressor of the new horn to connection 87 of the relay. Crimp Faston females on both ends of the wire.
- 5. Draw a (red) wire from connection 30 of the relay to a place near the positive (+) terminal of the battery. Crimp a Faston female on both ends of the wire.
- 6. Connect the wire to the fuse holder of the floating fuse to the battery side. You can stick the fuse holder to the side of the battery with double-sided tape. Place a 25A fuse in the fuse holder.
- 7. Place a (red) wire between the positive (+) terminal of the battery and the floating fuse. Make sure that this wire is as short as possible and is mechanically well protected. Crimp a Faston female on the fuse side and a Faston ring on the battery side.
- 8. Reconnect the battery, including the new wires. It is safest to first connect the positive (+) and then the ground (-) terminal. Put back the protective caps onto the battery terminals. Now, the horn can be used.