

Hella 003001981

Hella 3PD 003 001-981 Air/Electric Horn Instruction Manual

Model: 003001981

1. INTRODUCTION

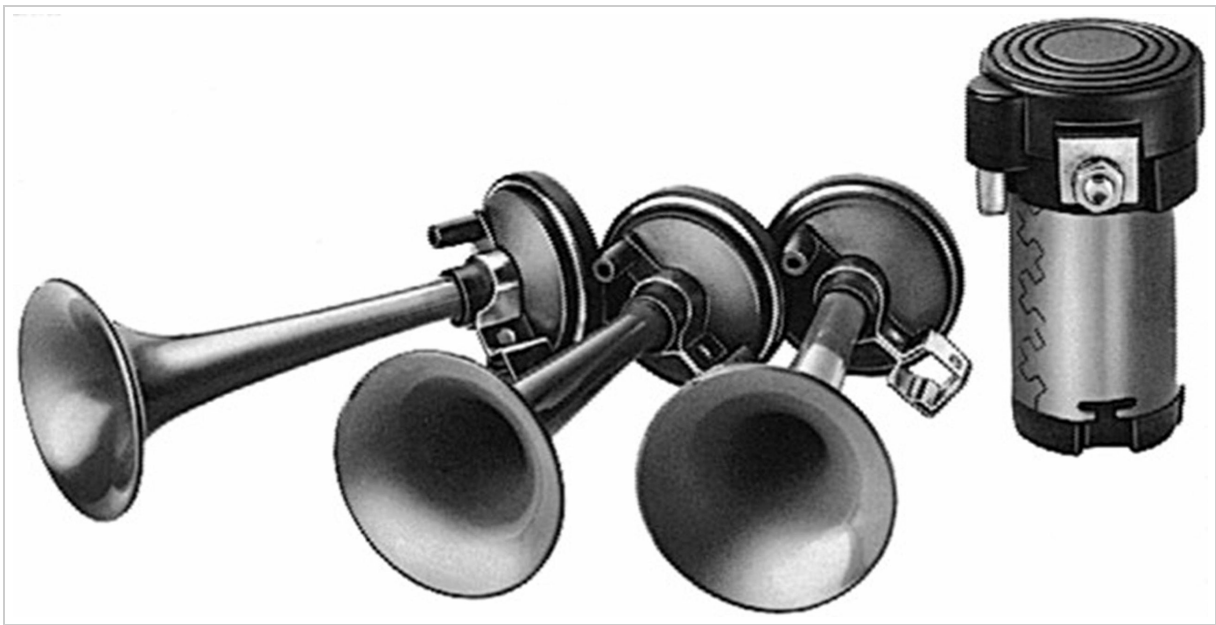
This manual provides essential information for the proper installation, operation, and maintenance of your Hella 3PD 003 001-981 Air/Electric Horn kit. Please read these instructions carefully before proceeding with installation or use to ensure safe and effective performance.

2. SAFETY INFORMATION

- **High Sound Level:** This horn produces a sound level of 118 dB(A). Prolonged exposure to this sound level can cause hearing damage. Avoid sounding the horn directly near people or animals.
- **Electrical Safety:** Installation involves working with vehicle electrical systems. Disconnect the vehicle's battery before beginning any electrical work to prevent short circuits or electrical shock.
- **Professional Installation:** If you are unfamiliar with automotive electrical systems or pneumatic installations, it is recommended to seek professional assistance for installation.
- **Secure Mounting:** Ensure all components are securely mounted to prevent detachment during vehicle operation.
- **Air System Integrity:** Verify all air connections are tight and free of leaks to ensure proper horn function.

3. PRODUCT OVERVIEW

The Hella 3PD 003 001-981 is a multi-tone trumpet horn kit designed for automotive applications. It operates on a 12-volt electric-pneumatic system, utilizing an electric compressor to generate air pressure for the three distinct horn units. The kit is designed for universal fitment.



This diagram illustrates the physical dimensions of the three horn units and their connection to the electric-pneumatic compressor. The lengths of the individual horns are indicated as 166mm, 217mm, and 158mm.

4. SETUP AND INSTALLATION

This horn kit is designed for a 12-volt vehicle electrical system. The mounting type for electrical connections is a flat plug-in connector. The kit does not include additional accessories or an E quality seal, which may need to be considered for specific regional regulations or installation requirements.

Installation Steps:

1. **Choose Mounting Location:** Select a suitable, secure, and dry location for the compressor and horn units. Ensure the horns are positioned to project sound effectively and are protected from direct water spray.
2. **Mount Components:** Securely mount the electric-pneumatic compressor and the three horn units using appropriate hardware (not included). Ensure there is no obstruction to the horn's sound output.
3. **Connect Air Lines:** Connect the air lines from the compressor to the three horn units. Ensure all connections are tight and free of kinks or leaks. The diagram in Section 3 shows a typical air line distribution.
4. **Electrical Wiring:**
 - Connect the compressor's positive (+) terminal to a fused 12V power source, typically through a relay triggered by the vehicle's existing horn button circuit.
 - Connect the compressor's negative (-) terminal to a good chassis ground.
 - Ensure all electrical connections are secure and insulated to prevent short circuits.
5. **Test Functionality:** Reconnect the vehicle's battery. Briefly activate the horn to verify proper operation and sound output.

5. OPERATING INSTRUCTIONS

The Hella Air/Electric Horn operates in conjunction with your vehicle's existing horn activation system. Once properly installed, pressing your vehicle's horn button will activate the electric-pneumatic compressor, which in turn will sound the three multi-tone trumpet horns.

- Ensure the vehicle's ignition is on for the horn to function.

- Avoid prolonged continuous activation to prevent overheating of the compressor.

6. MAINTENANCE

Regular maintenance helps ensure the longevity and optimal performance of your horn kit.

- **Cleaning:** Periodically clean the exterior of the horn units and compressor to remove dirt and debris. Use a damp cloth; avoid harsh chemicals.
- **Inspect Connections:** Regularly check all electrical connections for corrosion or looseness. Ensure air lines are securely attached and free from damage or leaks.
- **Mounting Security:** Verify that all components remain securely mounted and have not loosened due to vehicle vibration.

7. TROUBLESHOOTING

If your Hella Air/Electric Horn is not functioning correctly, consider the following common issues and solutions:

- **Horn does not sound:**
 - Check the vehicle's fuse for the horn circuit.
 - Verify all electrical connections to the compressor are secure and receiving 12V power.
 - Ensure the compressor is properly grounded.
 - Inspect the horn button and its wiring.
- **Weak or inconsistent sound:**
 - Check for air leaks in the air lines or connections between the compressor and horns.
 - Ensure the compressor is receiving adequate voltage. Low voltage can affect performance.
 - Inspect the horn units for any obstructions or damage.
- **Compressor runs but no sound:**
 - This indicates an issue with the air delivery to the horns or the horns themselves. Check air lines for blockages or disconnections.
 - Inspect the horn units for internal damage.

If troubleshooting steps do not resolve the issue, contact customer support or a qualified technician.

8. SPECIFICATIONS

Brand	Hella
Model Number	003001981
Operating Mode	Electric-pneumatic
Voltage	12 Volts
Sound Level	118 dB(A)
Signal Horn Type	Multi-tone Trumpet Horn
Quantity	3 Horns (Kit)

Mounting Type	Flat Plug-in Connector
Material	Plastic
Fit Type	Universal Fit
Product Dimensions (L x W x H)	29.49 x 10.01 x 24.99 cm
Item Weight	1.14 kg
Horn Unit Lengths	158 mm, 166 mm, 217 mm
Horn Unit Diameters	71 mm, 71 mm, 76.5 mm

9. WARRANTY INFORMATION

Warranty details for the Hella 3PD 003 001-981 Air/Electric Horn are typically provided by the manufacturer or the seller at the time of purchase. Please refer to your purchase documentation or contact the point of sale for specific warranty terms and conditions.

10. SUPPORT

For technical assistance, installation queries, or further product information, please contact Hella customer support or the authorized dealer from whom you purchased the product. Have your product model number (003001981) and purchase details ready when contacting support.