

OUTLAW INSTALLATION MANUAL

127H/228H



WARNING: To ensure the longevity of your system, reading and following these instructions are recommended. Make sure to change filters and to drain the moisture from your tank on a regular basis.



Kit Overview

Thank you for your purchase! The Outlaw 127H and 228H kits are designed to bring a true, loud train horn sound to your vehicle. This horn kit includes the necessary components and wiring to install and use this horn within 4-5 hours of your time.

The horn kit can be used for more than just the horns themselves. If you have load support bags in the rear of your vehicle or other air accessories, you can utilize the air tank in the horn kit for external air. Check out the recommended add-ons on page 4 in this booklet for more information.

The components within this horn kit are covered under a **2-year manufacturer's defect warranty**. This warranty is exclusive to the original owner and <u>does not transfer</u>. The horns themselves are covered with a lifetime manufacturer's defect warranty. If at any point in their lifetime you have an issue with the sound or structural integrity of the horn, please give our team a call @ (877)-209-8179.

Hold onto the packing slip from the shipping box as proof of purchase! We will need this information for warranty!

The horn itself can be wired to the steering wheel with an on/off switch or to a separate button (like a momentary push button, or an auxiliary switch in the vehicle). The wiring section of this manual will go more in-depth with regards to wiring the horn to your liking.

Is this your first air horn kit? If so, check out the information below.

- Air leaks are extremely common after initial assembly/install. It will take some time to fully seal the system. No compressed air system is ever perfect right after assembly.
 - We recommend using a bottle of spray glass cleaner or soapy water to find the leak. Spray the tank down and spray all the fittings/air line connections. The liquid mixture will bubble wherever a leak is present.
- The air tank will hold air for weeks at a time if fully sealed.
- The compressor will shut off on its own when the tank is full.
- It takes \sim 2 minute and 30 seconds to fill the tank from 0 150 PSI.
- This system draws ~23A of current at 12 VDC.

Unterpresentation Outlaw 127H / 228	3H Installation Manual	
Outlaw 127H / 228H Kit Contents	HornBlasters Part #	
Air Source Kit(127H or 228H)	THE MC-127H or MC-228H	
 Outlaw Train Horn 3/8" Electric Solenoid Valve 	Troix AH-C3B Troix VA-6C	
(preinstalled to horn)		
 Oniversal wiring Kit 10 Feet of ½" Air Line 	CUUL VVK-HA CUUL AL-8H	
6 Feet of ¾" Air LineEar Plugs	UNIX AL-6H	
Air Line Cutter	UNIX HB-TC	
• Air Filter Relocation Kit	Unil N/A	



127H OR 228H Air Source Kit



Universal Wiring Kit



3/8" Solenoid Valve (preinstalled to horn)



Air Line (1/2" and 3/8" rolls)



Outlaw Black Train Horn

Ļ

Important Safety Tips and Information

Caution: To prevent the risk of shock or electrocution:

- Do not disassemble any electrical components of this horn kit (air compressor, air valve, etc.)
- Do not operate any component where it can fall or be submerged in water of any kind.
- Use the included components with 12v DC systems only.

Warning: To prevent injury:

- NEVER allow children to operate the compressor or air horn. Use close supervision when operating this equipment near children or animals.
- The air compressor will become very HOT during and immediately after operation. Do not touch any part of the compressor with your bare hands during or immediately after use.
- Do not operate this product near open flames or explosive materials or where aerosol products are being used.
- Do not operate this product where oxygen is being administered.
- Do not pump anything other than atmospheric air.
- Never use this product while sleepy or drowsy.
- Do not use any tools or attachments with the supplied air source unit without first determining the maximum air pressure for that tool or attachment.
- Never point any nozzle or air sprayer toward another person or any part of your body.
- The included compressor is equipped with an automatic thermal reset protector and can automatically restart after the protector resets.
- Use only in well-ventilated areas.
- Do not sound the air horn(s) near another person's or your own ear(s).
- Do not fill the included air tank above 150 PSI. Doing so may result in death or serious injury.
- Disconnect the battery negative cable before doing anything. Failure to disconnect this terminal can lead to electrical component failure.
- Use eye protection when operating drills or other power tools during the installation.
- Ensure the parking brake is engaged before you get underneath the vehicle.
- Do not wire the system without the fuse holder.
- Do not allow the compressor to run when the vehicle is off.

Make sure to read the instructions and warnings above! Failure to do so could result in injury or damage to your vehicle!

THORN BUSTERS, Duit libor Hour Hamper, Blow Hour Harnst	Outlaw 127H /	/ 228H Installation Manual	
Recommended Tools for	the Install	<i>fs</i>	
Twi.3/8" Long SocketTwi.1/2" Long SocketTwi.1/2" WrenchTwi.9/16" WrenchTwi.7/8" Wrench		 Imit 10mm Socket (or wrench) Imit 12mm Wrench Imit Drill (³/16" & ⁷/16" bits) Imit Wire Cutter / Stripper Imit Crimp Tool 	

Compatible Add-ons for this horn kit (available @ <u>www.HornBlasters.com</u>)

Tire Inflation Kit.....AA-TIK-H

Inflate the tires on your vehicle with the air tank in your horn kit! This kit features a quick connect coupler that is remotely mounted up to 15' from the air tank. A tire inflation gun is included along with other accessories.

gauge comes with a pod for mounting in any 2" hole and uses LEDs to indicate the air pressure in the tank. No airline required!

Have a suggestion? Drop us a line sales@hornblasters.com

Preparing for the Install

APPLYING TEFLON TAPE TO BRASS FITTINGS

Before the air tank can be assembled each brass fitting must be wrapped with Teflon tape to prevent air leaks. Teflon tape is used as a sealing material between the brass fitting and the thread on the tank itself so that air doesn't leak from the small gaps in between the fitting and the tank thread. Look at the image below for reference.



Start by unrolling the Teflon tape a few inches and pull it tight around the thread of the brass fitting as shown in the photo above. Wrap the Teflon tape one full turn around the fitting. As you roll the tape around the fitting, gradually pull the tape upwards towards the end of the thread. Try to get ~2-3 wraps of tape around each segment of the fitting.

Be careful not to wrap the tape over itself too many times in one spot. Doing so may result in a leak from in between the rolls of Teflon tape. In other cases, the tape may not stay in place while threading the fitting into the tank. Either may result in a leak of some sort.

Wrap Teflon tape around each fitting that doesn't already have a white/red seal applied to the thread. You can apply Teflon over the white/red seal pre-applied on the fittings if desired.

Make sure to wrap the Teflon tape around the fitting in the clockwise direction as shown above. If the tape is wrapped around the fitting backward, it will unravel as you thread the fitting into the tank. The clockwise wrap around the fitting ensures that the tape is tightened further when the fitting is threaded into the air tank.

Alternative Materials for Sealing the Tank

If you would rather use an alternative to Teflon tape, we recommend either PTFE Paste in the can or Loctite[®] 545 thread sealant. This thread sealant ensures a proper seal every time and is OEM-recommended for automotive applications.

PTFE paste can be sourced from a local hardware store such as Lowe's or Home Depot. The paste can be a bit messy but does ensure a long-lasting seal once cured.



Preparing for the Install

COMPRESSOR FILTER RELOCATION (not necessary if mounting compressor in enclosed/dry area)

Your air system includes an air filter relocation kit, as shown on the right. This kit allows you to relocate the air filter up to 6 feet away, protecting it from the elements and road debris.

INCLUDES:

- **WA** Remote Mount Air Filter Housing
- Spare Air Filters
- Hose Barb Fittings (1/4" NPT x 3/8" Tube)
- Air Line Mounting Tabs & Hardware
- 6 Ft of 3/8" Air line



Begin by attaching the female hose barb fitting to the remote mount air filter housing, as depicted in the image below. Next, attach the male hose barb fitting to the intake side of the air compressor, also shown below. Once both fittings are installed, use the provided roll of 3/8" air line to connect them together.



Position the air filter in a high and dry location to prevent it from getting wet or exposed to the elements. While the compressor is fully sealed, a wet filter can lead to water being drawn into the compressor, potentially causing problems in the future. To ensure a longer lifespan for your compressor, it's crucial to relocate the filter to a place where it remains dry. Also, be careful to avoid kinking the air line when routing the filter.

If your compressor is mounted outside where it is exposed to the elements, the filter MUST be relocated.

PREPARING FOR THE INSTALL

PLUMBING THE LINE TO THE AIR TANK

Look at the air outlet fitting on your air source. This is a compression-style tube fitting setup for $\frac{1}{2}$ " OD line. Start by removing the nut on the fitting by twisting it counter-clockwise. Locate the roll of $\frac{1}{2}$ " air line that was packed with the outlaw horns.



The line itself needs to sit flush over the barb fitting to make a proper seal.

- 1. Remove the nut from the compression fitting.
- 2. Feed the air line through the nut so that the threaded side faces towards the end of the line.
- 3. Push the air line over the barb fitting fully. Make sure the line fully covers the barb on all sides.
- 4. Tighten the nut down over the line and use a wrench to tighten it. The line should be secure to the barb fitting.

REFERENCE IMAGE

Use the included tube cutter to cut the line flush. Do not cut the line at an angle, it will leak and pop off of the compression fitting!



Outlaw 127H / 228H Installation Manual

PREPARING FOR THE INSTALL

FINDING THE BEST INSTALL LOCATION FOR THE COMPRESSOR AND TANK

The air source can be installed in the trunk of your car or SUV. While this can also fit in the engine bay on some vehicles, it isn't the ideal location due to the heat generated by the engine.

INSTALLING IN A SEDAN/SUV/COUPE (SMALLER CAR)

On most cars, the tank/compressor is usually mounted in the trunk. In the examples here, the air source kit was mounted behind the rear seats of the cabin with the air line routed underneath the seats and carpet. This install location gives you easy access to the tank and air compressor. You can easily attach a coil hose to this system and inflate your tires.



IMPORTANT INFORMATION

If you have a spare tire well in the trunk of your vehicle this also works well as an install location for the air compressor and tank. This location keeps the compressor from being too loud in the cab and still allows you to utilize the storage space in the back. This method is preferred for most if you want to keep the air source out of the way. The air line can be routed out of the tank and underneath the carpet so that it stays hidden through the vehicle.

- The compressor will generate heat as it runs. Make sure the compressor is not installed against a flammable surface. If the compressor head or any part of the compressor touches a plastic surface, it will melt! Make sure to leave at least 3-5" of clearance around the compressor head for adequate airflow.
- Position the air tank so that the air line is not making a hard bend directly out of the air fitting. A direct-bend out of the air outlet fitting will cause the fitting to leak air over time.
- The compressor will only run when the tank drops below 110 PSI. The tank can hold air for days or even weeks at a time. There is no need to let the air out.
- The system must be drained of moisture once every two weeks. We recommend mounting the system in such a way that the drain cock is easily accessible.



PREPARING FOR THE INSTALL

MOUNTING THE AIR TANK

Look at your air source. The air source has two legs with two holes each. These holes are used to secure the air source to the mounting surface we plan on using. The mounting feet can be assembled as shown below. The solid line between the flat washer and the plastic cup will be the mounting surface your compressor is installed onto.



The air tank came with a set of four bolts, nuts, washers, and rubber isolators. The rubber isolators can be installed into the feet of the tank to reduce the vibration transfer from the compressor to the mounting surface the air source is installed onto. Install the grommets into the feet of the tank before mounting it down.

The air source kit itself can be secured to your mounting surface using the supplied hardware. The hardware can be assembled in the order showing below;



Make sure the hardware is tight for each hole on the air source. The lock nuts should be fully compressed in the hardware assembly.

If the rubber grommets are not installed, the tank will rattle and make a bunch of noise up against your mounting surface. The rubber grommets will ensure vibration isn't transferred to the vehicle as strong.

Preparing for the Install

Connecting the horn to the tank

The air value on the Outlaw horn is setup with a compression fitting ready to accept the ½" line that came with the horn. The air line will plumb onto this air value the same way as the air tank. **Refer to page 7 for help with this connection.** Make sure to leave some extra line as slack in case you need to cut the end of it once or twice.

Mounting the Outlaw Horns

The outlaw horn itself can be mounted using the three mounting holes at the base of the horn. A mounting template has been supplied with the horn for your use.

Make sure to use this soft pad in between the base and the vehicle when you install the horn (it prevents metal on metal contact). The mounting hardware for the horns can be assembled in the same order as the compressor (without the rubber grommets). Make sure the horn is secure before you drive away with it!



Make sure to use ALL THREE mounting points! If you don't use all three, the horn will not be adequately supported!

Positioning the Air Tank

The air source kit can be installed either upright or sideways.

DO NOT INSTALL UPSIDE DOWN!

In most cases, we see the air source kit mounted sideways on the frame rail underneath the bed of most trucks or in the trunk of a car/sedan.

If the air tank is **mounted sideways** as shown to the right, <u>move the drain cock</u> <u>fitting to the side port of the tank.</u>

• Make sure to use Teflon tape on the drain cock, refer to page 5 for more information.





Wiring the Compressor

Preparing the Fuse Holder

The fuse holder in your Universal wiring kit is in a loop. Use a sharp pair of scissors to cut the loop in half at the dotted line shown to the right. This will make the two ends needed to connect the compressor/pressure switch to your battery.

Use a set of wire strippers and strip the insulation off each end of the fuse holder. Make sure to strip a ¼" of insulation off to expose copper wire on both ends. It should look like this;





There is a ring terminal connector in the wiring kit that accepts the larger 8-gauge wire from the fuse holder. It has a large red base. You can crimp this onto one end of the holder (doesn't matter which end). Crimp the large yellow butt connector (female on both ends) onto the opposite end of your fuse holder, so it looks like the assembly to the left.

The ring terminal will be used to connect the fuse holder to the battery. The butt connector will be used to connect the fuse holder to the rest of the circuit.

The Main Power Wire

Locate the roll of red 10-gauge wire that came with your horn kit. This wire will be used to connect the pressure switch to the fuse holder (which is connected to the battery).

This run of wire will have to connect from the pressure switch on the air tank to the butt connector on this fuse holder. You can route the wire along the bottom of your truck or underneath the carpet in your car. Make sure the wire is not routed near anything sharp that could slice into it. Route the wire from the air tank up to the fuse holder.

Strip both ends of the red wire. Crimp one end into the butt connector on the fuse holder. On the opposite end of the wire, crimp a female yellow/green terminal. You can now connect the red wire from the fuse holder to pin 87 on the relay.



Wiring the Compressor

Compressor Red Wire / Pin 30 on Relay

The red wire on the pressure switch connects directly to pin 30 on the relay. Connect the red wire directly to this pin on the relay.

Pin 86 on Relay (Key-power source)

Pin 86 can be thought of as the signal/remote wire for your compressor. When this pin receives a +12v signal, it will allow the rest of the system to run. This is what prevents the compressor from running when the vehicle is off. If this pin is connected to a constant +12v source, the compressor can run when the vehicle is off (overnight, for example). This will drain your battery.

We can route this pin to any accessory fuse on the vehicle that is only on when the key is on. Common accessory fuses include the *cigarette lighter, radio, sunroof, daytime running lights, power outlet, etc.*

DO NOT TAP INTO THE VEHICLE IGNITION, ECU, BCM, OR ANY RELATED FUSES! ACCESSORIES ONLY!

TAPPING INTO ESSENTIAL VEHICLE COMPONENTS LIKE THOSE LISTED ABOVE CAN RESULT IN IRREPARABLE DAMAGE TO YOUR VEHICLE!

The easiest way to do this is with an 'add-a-fuse' connector. These connectors allow you to safely connect a new wire to an existing fuse and retain the original fuse in the circuit. This is the safest and most reliable way to do this. Once you find a suitable accessory fuse, pull it and refer to the owner's manual for your vehicle. You can locate the fuse type and determine which 'add-a-fuse' connector you need. Most vehicles use MICRO2 or MINI blade-style fuses.

Auxiliary Switches

If your vehicle is equipped with auxiliary switches and you would rather use one of these for the compressor, simply route pin 86 to the output lead for the desired switch. The auxiliary switch will now serve as the 'key-power' source and the compressor will run when the switch is flipped '**ON**'.

*The compressor will only run if the tank is below 110 PSI

Manual On/Off Operation

You can use an on/off toggle switch to manually control the compressor. Connect pin 86 to one leg of your toggle switch. Connect the opposite side of the toggle switch to any +12v power source. When the toggle switch is flipped on, the pressure switch will allow the compressor to run.

You must turn the switch off to stop the compressor from running when you park!

Wiring the Compressor

Relay Ground Lead (pin 85) / Compressor Ground Lead

The black wire on the compressor and ground for the relay (pin 85) can be terminated to the same point for simplicity if they are within reach of each other and can be terminated to the frame or other good ground point. More on that below.

Finding a good ground

The best ground point for our products is directly on the actual frame of the vehicle. The frame itself is connected to the battery negative terminal (the frame itself can is used as a ground throughout the whole vehicle, it IS the battery negative per say). The electrical components in your kit need to be grounded to the frame (or other part that is directly connected to the frame) of the vehicle.

A common ground point for the compressor and pressure switch is the bed of the truck. The bed of a pickup truck typically doesn't work well as a ground for electronics in the vehicle because it may not provide a reliable electrical connection to the vehicle's chassis. The truck bed is often isolated from the chassis by rubber mounts and paint, which can create resistance in the electrical connection. This leads to components intermittently working or not working at all.



Take note of the difference between the 'Worst' 'Better' and 'Best' grounding methods. Ideally, you would use a self-tapping hex-head screw with a flat washer for support on the ground strap. Make sure to remove paint from the ground surface to ensure a good connection.

Most importantly, make sure you are grounded TO THE FRAME! Your ground will not work properly our products if it is not to the frame itself. If your compressor intermittently turns on/off, it is more than likely a poor/bad ground. Other symptoms of poor grounds are listed in the 'Troubleshooting' section of this manual.

Check Your Work

Now that the compressor & pressure switch is wired up, we can check our work and ensure that everything was done properly. Look at the following.

- Battery → Fuse Holder → 10-Gauge Wire → Relay Pin 30
- Pin 87 on Relay → Compressor Red Wire
- Pin 86 on Relay \rightarrow key-power source (or other switch)
- Black lead from Compressor & Pressure Switch → Frame (ground point)



Connecting the Train Horn to the Steering Wheel

Connecting our train horns to the steering wheel allows you to honk your horns by pressing the wheel like you would for the stock horn. There are two ways you can do this.

1. Tap from the OEM horn wire.

- a. Locate the factory horn underneath the hood of your vehicle. It is usually located behind the front bumper, in front of the radiator.
 - i. If you have two horns, look for one that has an electrical connector and wires connected to it.
- b. Look at the electrical connector and wires connected to the horn. There should be two wires connected to the horn(s). The two wires should be colored. One is likely black or brown while the other is white or a different color.
- c. Use the included splice connector to tap a new wire off of the OEM horn wire. The picture to the right show how the connector can be used.
 - i. Slide the OEM wire into the first slot on the t-tap.
 - ii. Insert a new lead of 18gauge wire from your kit (blue or grey) into slot 2 on the t-tap.
 - iii. Crimp the metal piece into the two wires using a pair of pliers.



- d. Connect the new lead of 18-gauge to one side of your toggle switch. Connect the opposite side of the toggle switch to the solenoid valve for the horns.
- e. Ground the black wire on the solenoid valve to the frame of the vehicle.

2. Use a Push Button

- a. Connect a wire from the solenoid valve to one leg of the push button.
- Connect the other leg of the button to any +12v power source (the battery is commonly used)
- c. Ground the black wire on the valve.

Diagrams available on the next page



CONNECTING THE HORNS TO THE STEERING WHEEL WITH A **TOGGLE SWITCH**



- Make sure that you disconnect the stock horn wire before trying to connect the OEM horn lead to the toggle switch. You can pop the OEM horn fuse if you accidentally touch the wire to bare metal.
- L Check the OEM horn lead with a test light or meter before tapping into it.



CONNECTING THE HORNS TO A PUSH BUTTON

If the battery is used as a power source for the button, a 10A fuse is strongly recommended. If you connect the battery positive to the button without a fuse, this can create safety issues later.

Finishing the Install

Testing the Compressor

Go back to your fuse holder from page 11. You can insert one of the included 30-AMP fuses into the fuse holder. Make sure it is seated into the holder all the way, it can take some force.

Connect the fuse holder to the battery positive terminal using the ring terminal we crimped onto the end. You can loosen the battery positive terminal and place the ring terminal over the screw for the post. Tighten the post down check to ensure the fuse is still intact now that everything is connected.

Get in your vehicle and turn the key over to start it.

The compressor should start to run immediately to fill the air tank. You will be able to hear it as it fills. If the compressor did not start, review the wiring instructions from the previous pages and double-check your work.

Let the compressor fill the tank all the way to 150 PSI. It should shut off at ~150 PSI. Once the tank is full and the compressor shuts off, you can either test the horns or check the tank for leaks.

Testing the Horns

Press the steering wheel (or push button) for your train horns. If you don't have any air in the tank the air valve should make a light click sound. If air is in the tank the horns will honk!

Checking for Air Leaks

Your air system will likely have a few small leaks after the initial assembly. This is normal! You can locate the leaks on the system by spraying the fittings down with a a dish soap cleaner like Dawn. Make sure the soap you use is ammonia-free! Ammonia will break down the brass and can cause the fittings to crack over a short period of time.

If you find a brass fitting with a leak at the threads, remove it from the tank and reapply the Teflon tape. Make sure to torque it into the tank well.

If you find a push-to-connect fitting that is leaking air, you can remove the line from it and cut a fresh end on the leaking end. Use a razor blade (or the included tube cutter) to cut the line flush.

Your horn kit is now installed and ready for use. If you ran into some issues along the way, check out the troubleshooting guide in the next few pages.

We really appreciate your support.



Compressor Issues

• Compressor Doesn't Turn On:

- o Try connecting directly to a battery.
 - Connect the red wire to the positive terminal. Connect the black wire to the negative terminal.
- o Double-check pin 86 on the relay for 12V power.
 - This pin needs +12v power for the system to work. If you're unsure about this, you can connect it to the battery temporarily to test with.
- o Ensure the fuse is not blown.
 - Remove the fuse from the holder and inspect it. If the blades in the center are broken, the fuse is no good.
 - If the fuse is blown, don't replace it right away. Review your wiring for potential shorts first.

• Compressor runs but doesn't fill the Tank:

- Ensure the drain cock is closed.
 - If the drain cock isn't closed all the way, the air the compressor pushes into the tank will escape out of this fitting.
- o Check for open or backward valves.
 - The air valve for the horns will allow air to leak through constantly if it is backwards. Check the arrow on the valve.
 - Ensure the valve is not receiving constant +12v power. This will cause the valve to remain 'OPEN' all the time.
- Verify the air inlet plug is removed from the compressor.
 - The air compressor was shipped with a plug in the inlet port on the compressor. If this plug was not removed, the compressor will not be able to suck in air.

• Tank Loses Pressure Quickly:

- o Spray fittings and air lines with soapy water to check for leaks.
 - Re-apply Teflon tape to any leaking fittings.
 - Re-cut the airlines if needed with a razor blade.
- o Check if the check valve was over-tightened at the time of install.
 - If the check valve was over-tightened, air could be leaking back to the compressor from the air tank. You can check this by removing the fitting (or filter) from the inlet port on the compressor. Check for back-flow when the tank is flow. Hold your finger over the port and feel for pressure buildup.



Horn Issues

- Horns Won't Honk:
 - o Check the air tank for pressure.
 - Inspect the air gauge on the tank. The tank should be filling to ~150 PSI before stopping.
 - o Inspect wiring of the horn solenoid valve.
 - Make sure the valve wiring isn't loose or cut somewhere.
 - o Test for 12V power at the horn activation source.
 - Check the power source for the horn activation.
 - Check the OEM horn wire for +12v when the wheel is pressed. If your test light/meter doesn't show anything, try the other wire.
 - Check and ensure that your +12v power source is good if you are using a button. Make sure your fuse (if installed) is not blown.

• Horns Don't Sound Right:

- o Drain moisture from the tank if horns squeak or sound high-pitched.
- o Check for obstructions at the end of each horn bell.
- Horn Honks on Its Own:
 - o Disconnect valve ground from the frame.
 - Splice from the OEM horn negative lead and route to the toggle switch.
 - o Ensure valve isn't connected to a constant power source.

• Horns Sound at Different Times:

- o Clean the horns out
 - If the horns are dirty they will not always sound off properly or at the right time.
 - Remove the back-cap from each horn bell using a Phillips head screwdriver.
 - Clean each horn out with soapy water and a microfiber cloth.