

Elston Manufacturing

X-700 and X-900

Owners Manual

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Valid for models X-700 and X-900 with 8” deep upper heater shell. See revision A for models with dimples on front of upper heater shell.

Safety Information

The heater you have purchased was designed, first of all, to be safe. However, since this heater burns propane, safety precautions are necessary for the safe and reliable operation of this product. For your safety, please take the time to read the appropriate sections of this manual before installing, servicing, or operating the heater.

⚠ WARNING Use only propane vapor for fuel. Use of a different fuel or liquid withdrawal cylinder risks fire or explosion.
Do Not Bypass or Remove Safety Equipment
Although we understand temporary measures must sometimes be made to save a load, bypassing any safety device may result in fire or explosion. For your safety, do not temporarily bypass any safety equipment, and if you do, please fix these temporary measures as quickly as possible.
Use only exact parts or manufacturer approved replacements for repair
For proper function and safety, critical parts such as hoses, regulators, guards, and controls, must match the existing part.

⚠ CAUTION Internal metal surfaces can hold significant heater after unit is shut off – Do not service heater until unit has cooled for at least 10 minutes.

NOTICE Use only in accordance with local regulations. Current regulations in your area may require that the installer of this heater or, more likely, that person servicing the propane fuel system meet certain requirements. If you are unsure what is required, please refer to the current regulations in your area or speak with the authority having jurisdiction before beginning installation.

WARNING: During operation, this heater produces carbon monoxide, a chemical known to the state of California to cause birth defects and/or other reproductive harm.

As always, apply common sense and beware the perils of ignorance. If you're not sure it's safe or don't have enough knowledge to know if it is safe, then don't do it.

Introduction to Heater

The open flame heater you have purchased is a thermostatically controlled propane heater designed for heating cargo. The heater maintains the temperature of your cargo by switching between two levels of heat output: a standing pilot and the full 18000 BTU/hr heat output.

Your heater is one of two models, either the X-700 or the X-900. Both models share the same basic heater but differ in the number and size of the propane fuel tanks they can carry. The X-700 stores a single 20lb propane bottle in the base while the X-900 stores two 20 or 30lb propane bottles.

Specifications - X-700

Dimensions.....	17 in wide x 76 in tall x 17 in deep
Weight (w/o propane tank).....	160 lbs
Rating.....	18,000 BTU
Tank Storage.....	1 20lb vapor withdrawal propane tank
Fuel Requirement.....	propane vapor(LP gas)
Fuel Consumption.....	0.7 lbs/hr max
Hours of Operation with full tank.....	24 hours (minimum)
Range of Thermostat.....	50-90°F

Specifications - X-900

Dimensions.....	26 in wide x 80 in tall x 17 in deep
Weight (w/o propane tanks).....	220 lbs
Rating.....	18,000 BTU
Tank Storage.....	2 20lb or 30lb vapor withdrawal propane tanks
Fuel Requirement.....	propane (LP gas)
Hours of Operation with full tank.....	48 hours (minimum)
Fuel Consumption.....	0.7 lbs/hr max
Range of Thermostat.....	50-90°F

The controls for the heater are located in the upper portion of the heater. The controls for the heater can be accessed by opening the small door on the side of the heater. When you look inside you should see something similar to Illustration 1.



Illustration 1: Operating Controls

When you look inside the base of the heater you will see the major components shown in Illustration 2 below. The X-700 has very similar components except it lacks the tank selection and pressure indicator and the tank clamp is a different design.



Illustration 2: X-900 Base

Operating Instructions

Please read the important safety information on page ii if you haven't already done so.

This guide assumes the heater has already been installed. For installation instruction please go to chapter 5 (page 12).

2.1 Operating Precautions

This heater is designed to provide freeze protection of cargo in trailers and truck bodies. It should not be used for heating building, buses, or recreational vehicles. Since this heater operates unattended for significant periods of time, it is very important that it is mounted and maintained properly. When this is done, it will provide you with many years of troublefree operation.

⚠ WARNING To prevent explosions and comply with federal regulations, do not use this heater when transporting Class 1 (explosive), Division 2.1 (flammable gases), Class 3 (flammable liquid) materials. If you wish to transport this heater while carrying these materials, the propane tanks must be removed.

⚠ WARNING Small amounts of carbon monoxide are produced by this heater during normal operation. A small vent is required to reduce build up of carbon monoxide and replace oxygen used during combustion. Without a vent, carbon monoxide could build up to dangerous levels. Symptoms of carbon monoxide include headache, dizziness, burning eyes and nose, nausea, and dry mouth or sore throat. If you experience these symptoms, immediately seek fresh air and seek medical attention. Ventilate the trailer to reduce the carbon monoxide to safe levels before reentering.

⚠ WARNING Never enter the cargo area after the door has been recently opened while operating a device like a phone, cigarette, or forklift that could be a source of ignition. The heater has a vent and excess flow valve(s) to prevent the build up of dangerous levels of propane in the event of a leak. However, it is possible if the heater is damaged or improperly installed for propane to build up. You may not detect the odorant in the propane soon enough to extinguish the source of ignition and prevent it from igniting the mixture.

If you smell propane or suspect flammable vapor may be present (from a spilled flammable liquid, etc.) when entering the trailer, take immediate action. Follow your company's procedure if one is established. Otherwise:

- Do not do anything that could ignite the mixture including operating a electrical switch, disconnecting an extension cord, or using your phone. Do not light matches or any other source of flame.

- Get everyone away from the area immediately.
- Call your fuel supplier and/or the fire department
- Do not reenter the area until the trailer has been aired out and declared safe.
- Have a properly trained service person repair any leaks and bring the heater back into service.

Propane has a chemical added to give it a distinctive odor. If you are not familiar with that odor, please contact your local LP supplier. They can provide you with a scratch and sniff pamphlet. Use extra caution if you smoke or strong odors are present as this can make the odor difficult to notice. Like most other odors, extended exposure can reduce your sensitivity to the smell. Since LP gas is heavier than air, please remember that the odor will be stronger at lower levels.

2.2 Normal Operation

These instructions are for the day to day use of the heater. A shortened version of these instructions can be found on the side of the heater.

2.2.1 Lighting the Heater

1) Check fuel system and turn on propane

Check that the propane tank(s) are not empty and are securely mounted in the base of the heater. Check that the gas lines and fittings between the propane tank(s) and the heater are tight and undamaged. Turn on the valve on the propane tank(s).



If you smell propane, immediately discontinue operation of the heater until the source of the leak has been found and fixed.

2) Set the main control dial to PILOT

3) Light the pilot light

Push down the main control dial (currently in the pilot position) to start the flow of propane to the pilot light. Push the red button on the spark igniter in once a second until the pilot light ignites. If the pilot light does not ignite within 15 seconds, release the main control dial to stop the flow of gas.

4) Wait for the thermocouple to warm up.

Wait approximately 30 seconds for the thermocouple to reach full temperature before releasing the main control dial.

5) Turn the main control to ON

6) Set the heater to the desired temperature.

Set the heater to the desired temperature (HI is approximately 70 while LO is approximately 30).

2.2.2 Mounting the Heater



Failure to mount the heater correctly can cause injury or fire. Always mount the heater securely, install the vent tube, and allow access to the controls in both the top and bottom of the heater.

The heater must be mounted securely to the trailer so that it can remain in place both during normal operation and during accidents such as trailer tip-overs and roll-overs. You have three options for mounting the trailer:

Wall Brackets

All heaters can be mounted to Elston-supplied wall-mounted brackets. To attach the heater to these brackets, first roll the heater up to the wall brackets so that the bottom bracket on the heater lines up with the bottom bracket on the wall. Next slide back the heater until the bottom lip on the heater bracket is inside the pocket on the bracket on the wall. After that, slide the heater left or right as necessary so that you can slide the bracket with the wing nuts at the top of the heater into the bracket on the wall. Once that bracket is in position, tighten the wing nuts to finish securing the heater to the wall.

Adjustable Mount

As an optional accessory, Elston offers an adjustable mount that allows you to secure the heater without a pre-installed mounting bracket. To secure the heater with the adjustable mount, roll the heater against the wall in the area that is marked for the heater (There should be a small hole in the floor there for the vent pipe.) Once the heater is in place, turn the handle on the front to raise the upper pad until it presses against the ceiling firmly. When the heater is secured, pulling on the handles firmly will not dislodge the heater.

Customer Solutions

Your organization may have other approved methods for securing the heater. Please check with the person responsible for this within your company. Whatever setup you use, you must not obstruct the inlet or outlets of the heater shell or use materials, such as most types of nylon strapping, against the shell of the heater that are degraded by repeated exposure to temperatures up to 250F.

Once the heater is secured to the wall, install the tube on the right side of the base of the heater into the provided hole in the floor. This tube must be installed as it is a safety device that prevents a leak in the fittings in the base of the heater from causing a dangerous gas build up in the cargo area.

2.2.3 Shutting Down the Heater

- 1) Turn the main control dial to OFF.
- 2) Close valves on the propane bottle(s)
- 3) Allow heater to cool for 5 minutes before moving or attempting to relight.

2.3 Lighting the Heater when it has set awhile

Please follow these instructions when lighting the heater for the first time this heating season or when the heater hasn't been run for a few months as the heater may be slightly more difficult to light than normal. Operation of the heater is the same as above in section 2.2 except for the lighting instructions.

1) Inspect the heater for damage and debris

Check the propane system for damage including cracked hoses, worn o-rings in the pilot light valve and tank fittings, and damaged tubing and replace any damaged components. Check inside the heater for debris especially around the pilot light and burner and remove all debris present.

2) Check fuel system and turn on propane

Check that the propane tank(s) are not empty and are securely mounted in the base of the heater. Check that the fittings between the propane tank(s) and the heater are tight and undamaged. Turn on the valve on the propane tank(s).

⚠ CAUTION If you smell propane, immediately discontinue operation of the heater until the source of the leak has been found and fixed.

3) Set the thermostat to the maximum value and main control dial to PILOT

If the temperature is above 60 degrees, you may not be able to turn the thermostat high enough for the heater to start in the next step. If you wish to continue start the heater you will need to chill the thermostat probe (we recommend an ice cube) or move the heater to a cooler area.

4) Light the pilot light

Push down the main control dial (currently in the pilot position) to start the flow of propane to the pilot light. Push the red button on the spark igniter in once a second until the pilot light ignites. If the pilot light does not ignite within 15 seconds, release the main control dial to stop the flow of gas.

5) Wait for the thermocouple to warm up.

Wait approximately 30 seconds for the thermocouple to reach full temperature before releasing the main control dial.

6) Turn the main control to ON

Turn the main control to ON. The burner should light within a couple of seconds.

7) Set the heater to the desired temperature and secure into the trailer.

Set the heater to the desired temperature (HI is approximately 70 while LO is approximately 30). Secure the heater into the trailer and place the vent tube through the hole in the floor.

Service Instructions

3.1 Every Time You Walk By the Heater

- Check the exterior of the heater and the exterior gas lines for damage
- Check that the doors on the base of the heater and the side of the heater are closed
- Check that the heater is not smoking or producing soot (if it is refer to the section on troubleshooting)

3.2 Every Time the Trailer is Loaded and Unloaded

- Check the exterior of the heater for damage and the openings of the heater for obstructions.
- Check that the heater is securely attached to the wall of the trailer and the vent tube is installed through a hole in the floor.

3.3 Annually Before the Start of the Winter Season

- Carefully inspect the propane tank, regulator, and fuel lines. Replace any damaged or deteriorated hoses, worn o-rings, and tighten any loose fittings. Check the propane system for leaks
- Replace any labels that are missing or can no longer be read.
- Check inside the heater for debris especially around the burner and remove all debris present.
- Start up and run the heater to check that everything is in working order.

Troubleshooting

If this guide doesn't fix your problem please contact the company where you purchased the heater. If you are unable to contact them or you need additional help, please contact Elston Manufacturing at 1-800-845-1385.

NOTICE For your safety, the propane should always be turned off when troubleshooting this product except when required to test the function of the heater.

What is wrong with the heater?

- A. Pilot light doesn't light
- B. Pilot light does not remain on after releasing the main control dial
- C. Main burner does not ignite or ignites slowly
- D. Main burner flame is out of adjustment

A Problem A: Pilot Light Doesn't Light

Cause: Propane tank is empty

Makes sure the propane tank is not empty. If you have a X-900, check that the tank selection lever is pointing toward a non-empty tank. When the lever is pointing toward a tank and the valve for that tank is on, you should see green in the window on the regulator when the selected tank contains propane.

Cause: Excess flow valve was triggered

If the valve on the tank is opened quickly, the initial pulse of gas into the gas lines for the heater may trigger the excess flow valve built into the heater. Close the tank valve(s) and slowly open them to reset the excess flow valve.

Cause: Problem with push button sparker

Check that the wire on the back of the push button sparker is attached and the spark is jumping to the galvanized channel on the top of the pilot light assembly. If the spark is not jumping to this location, check the wire for damage. If the wire is undamaged, the push button spark will need to be replaced.

Cause: Pilot light orifices are plugged

The gas for the pilot light travels through 2 sets of orifices, either of which can block the flow of gas. The first orifice is in the pilot light valve block and the second is in the pilot light assembly. It is also possible that some debris, such as a spider web, is in the channel in top of the pilot light assembly and blocking the flow of gas toward the spark.

B Problem B: Pilot Light Does Not Remain on After Releasing the Main Control Dial

Cause: Main control dial was not held down long enough

The main control dial must be held down for 15 seconds to ensure the thermocouple is hot enough to allow propane to flow through the control.

Cause: Pilot light is too small

If the pilot light is not touching the thermocouple the thermocouple may not get hot enough. This typically happens for one of three reasons:

1. The gas flow to the heater is restricted
Check that the selection lever on the regulator in the X-900 is pointing toward a full tank and tank valve is open at least a full turn.
2. The tank is nearly empty
3. The excess flow valve was triggered
If the valve on the tank is opened quickly, the initial pulse of gas into the gas lines for the heater may trigger the excess flow valve built into the heater. Close the tank valve(s) and slowly open them to reset the excess flow valve.
4. Pilot light orifices is partially blocked
The gas for the pilot light travels through a pair of small orifices as it enters the pilot light assembly. Check that these orifices are not partially blocked. It is also possible that some debris, such as a spider web or dead bug, is in the channel in the pilot light and blocking the flow of gas toward the thermocouple.

Cause: The thermocouple has failed

If none of the above recommendations help, the thermocouple has failed and needs to be replaced.

C Problem C: Main Burner does not ignite or ignites slowly

Cause: The pilot light is too small

Refer to the tips in problem B above for recommendations.

Cause: Gas supply problems

If the gas supply to the heater is partially restricted, the heater will only be able to get enough propane for the pilot light. Check that the selection lever is pointing toward a full tank and tank valve is open at least a full turn. If you have the tools, check that the heater is receiving 11" water column of propane vapor throughout the lighting process.

Cause: Burner is extremely dirty

If some of the slots on the burner are plugged then gas flow will not be uniform enough for a stable, easy to light flame. The smooth side of a hacksaw blade works well for

removing stubborn dirt. Be careful not to widen the slots as excessively wide slots cause the position of the flames to become unstable and requires replacement of the burner.

D Problem D: Main burner flame is out of adjustment

The flame from the burner should be mostly blue with, at most, small areas of yellow that come and go, as pictured in Illustration 3.



Illustration 3: Correctly Adjusted Burner Flame

Cause: The gas / air mixture entering the burner is incorrect

If the gas and air mixture entering the burner is incorrect than the flame will either have primarily yellow tips (see Illustration 4) or it will lift off the burner.



Illustration 4: Burner with Insufficient Air

To adjust the fuel air mix, loosen the nut holding the air adjustment disc. If the flame has yellow tips (as in Illustration 4), rotate the disk away from the burner to let in more air. If the flame is not touching the burner, rotate the disk toward the burner to let in less air. There is a range of distance between the extremes mentioned above where the good flame like that shown in Illustration 3 results. Try to adjust the disk into the middle of that range to allow for the variations as the heater is operated under the normal range of conditions. Once you have adjusted the burner so that the flame appears as it does in Illustration 3 the nut should be tightened against the air adjustment disc to hold it in place. If it is not possible to get a good flame, burner may need to be cleaned or the gas metering orifice in the brass fitting holding the air adjustment disc may be plugged.

Cause: Some slots in the burner are partially or completely blocked

If some of the slots on the burner are plugged then gas flow will not be uniform enough for a stable, easy to light flame. The smooth side of a hacksaw blade works well for removing stubborn dirt. Be careful not to widen the slots as excessively wide slots cause the position of the flames to become unstable and requires replacement of the burner.

Installation

⚠ WARNING Improper installation of this heater creates a substantial safety hazard including the risk of property damage, fire, death.

NOTICE Compliance with local regulation is the responsibility of the installer. Current regulations in your area may require that the installer of this heater or, more likely, that the installer of the propane system fueling this heater meet certain requirements and/or that the completed installation be inspected. If you are unsure what is required, please refer to the current regulations in your area or speak with the authority having jurisdiction before beginning installation.

5.1 Overview

The purpose of these instructions is to aid you in installing a fully functional heater that is safe and secure under both normal condition and, as much as possible, during an accident. However these instructions are not a substitute for personal knowledge and experience with installing propane and/or electrical systems. Please do not install those areas of the heater unless you have personal knowledge and experience in these areas.

These instructions were written with the latest standards for the US in mind and are intended to guide you in an installation that meets these standards. At the time of writing, the latest standard was the 2008 edition of NFPA 58, the Liquefied Petroleum Gas Code and part 393.77 of the Federal Motor Carrier Safety Administration rules. However, if the regulations that apply in your area conflict with these installation instructions the regulations should always be followed instead.

Throughout this guide, the word “must” is used for any instruction that if not followed would create a safety hazard and/or yield an installation that would not comply with current standards. An instruction with the word “should” is necessary either for the proper functioning of the product or improves the long-term safe operation of the product. If you are unable to follow any instructions with the words “must” or “should”, please contact us and/or the authority responsible for regulating or approving your installation to discuss how your installation can be still be completed in a way that is functional, safe, and compliant. Finally, an instruction that recommends indicates an instruction designed to maximize the working life of the product, simplify installation, or improve the appearance of the installed product.

Setup for these heaters is simple as they are designed to roll on and off cargo trailers and van bodies to provide heat as needed but does require some setup work on the trailers you plan to use the heater in. The exact setup depends on if you are using the standard mounting brackets or the optional adjustable mount.

5.2 Unpacking the Heater and Gathering Supplies

Parts Needed for Installation shipped with Heater:

- Roll on Heater

- Lower wall mount bracket
- Upper wall mount bracket
- Post -installation checklist

Additional parts required:

- (6) ½” diameter grade 5 bolts 1 to 1 ½ inches longer than the thickness of the front wall of the trailer with 12 flat washers, 6 lock washers and 6 nuts to match
- Additional lower and upper wall brackets (optional)
- Tape or paint for marking out the boundaries of the heater to ensure space remains for heater after cargo is loaded (recommended)

5.3 Mounting



WARNING Failure to mount the brackets for the heater securely or drill the hole for the vent tube will cause serious safety hazards when the heater is operated.

Every trailer or truck body where you plan to use the heater will need to be prepared to use.

The primary consideration for the placement of the heater is a position against a wall of the trailer that can easily be left open for the heater after cargo is loaded.

Setup for Standard Mounting Brackets

Install the lower bracket on the wall with the base of the bracket against the floor. Attach the bracket to supports in the wall for maximum strength in a position where the hole for the vent tube will not have to be drilled through one of the supports for the trailer floor.

Install the upper bracket centered above the lower bracket at the location shown in Illustration 5 for your model.

Next drill the 7/8” hole for the vent tube for your model in the location shown in Illustration 6.

Once both brackets are installed and the hole is drilled, check that the heater fits on the brackets and vent tube fits in the hole.

Setup for Adjustable Mount

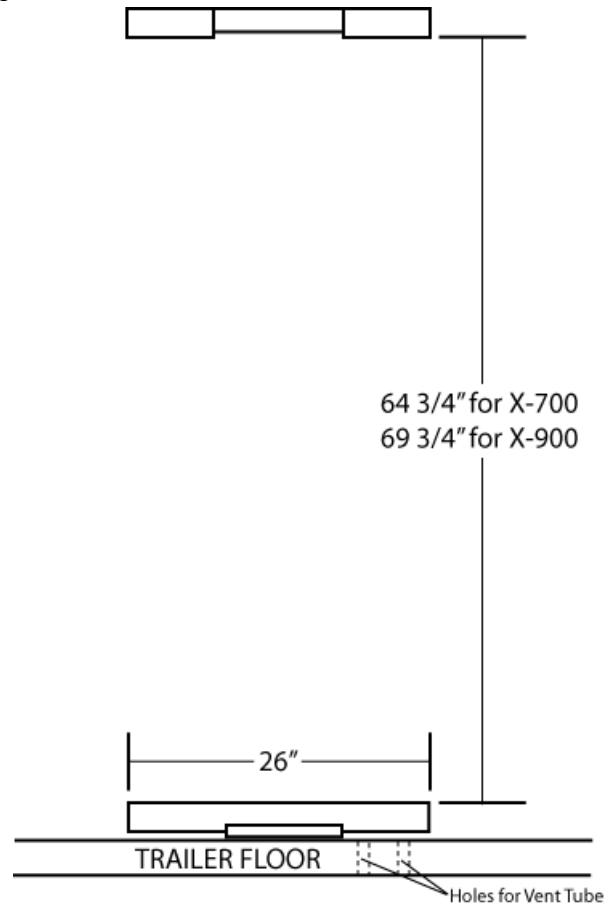


Illustration 5: Location of Wall Brackets

Drill the 7/8" hole for the vent tube for your model in the location shown in Illustration 6. Since no bottom bracket is necessary for an adjustable mount, the hole just needs to be 8 1/4" away from the wall.

Other Details

It is recommended that you mark the outline for the heater with paint or tape or similar to prevent cargo from accidentally being placed where the heater will be mounted.

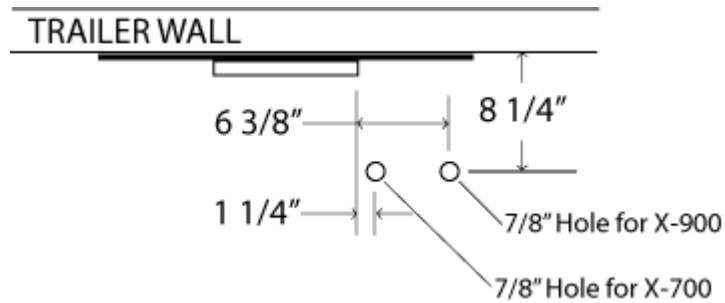
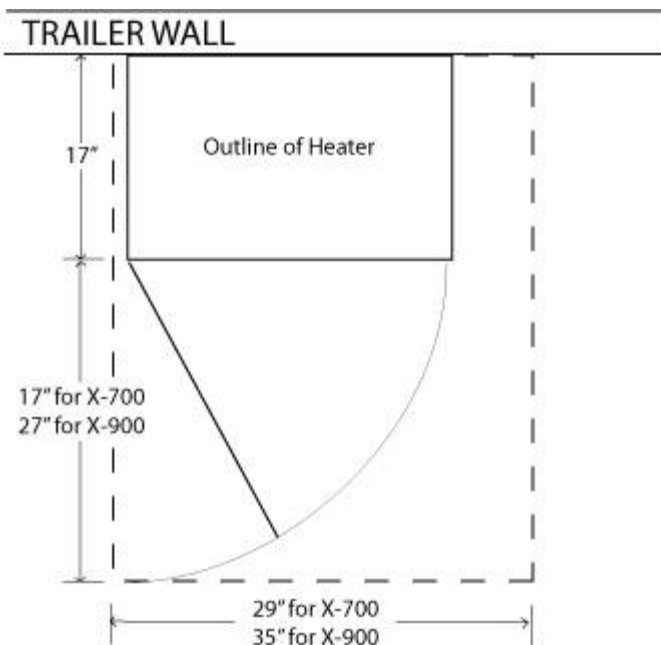


Illustration 6: Location of Vent Tube Hole

5.4 Final details

It is recommended that you mark the outline for the heater with paint or tape or similar to prevent cargo from accidentally being placed where the heater will be mounted or where it would prevent access to the heater controls. Illustration 5 shows the suggested reserved area for the heater that allows approximately 12" for access for the controls and adequate space to open the door in the base to access the tank shutoff valves and allow removal and replacement of the tanks.

It is recommended that a X-850 ventilator be mounted in the front of the trailer for proper ventilation.

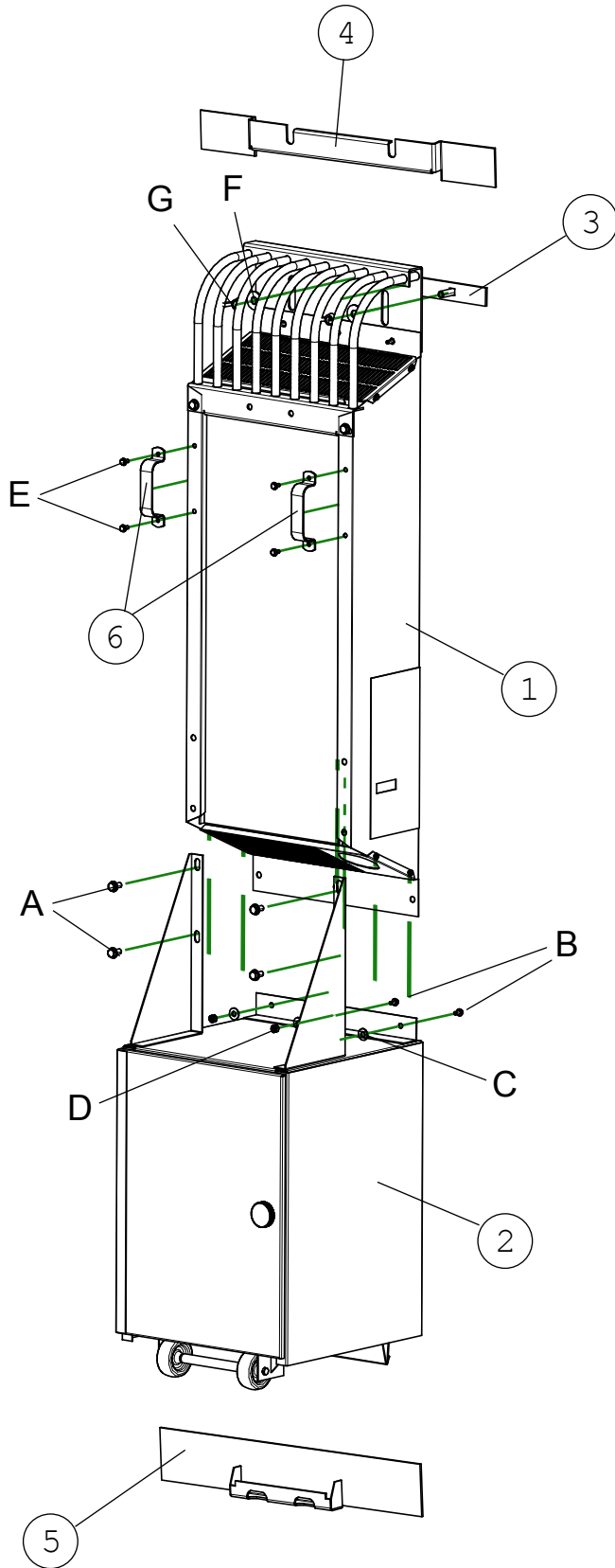


Give the installation one final check using the post-installation checklist to make sure nothing has been forgotten or improperly completed. If everything looks good, the heater is ready to be test fired. For instructions on firing up the heater for the first time please consult the quick start guide.

The installation is now complete and the heater can be placed in service.

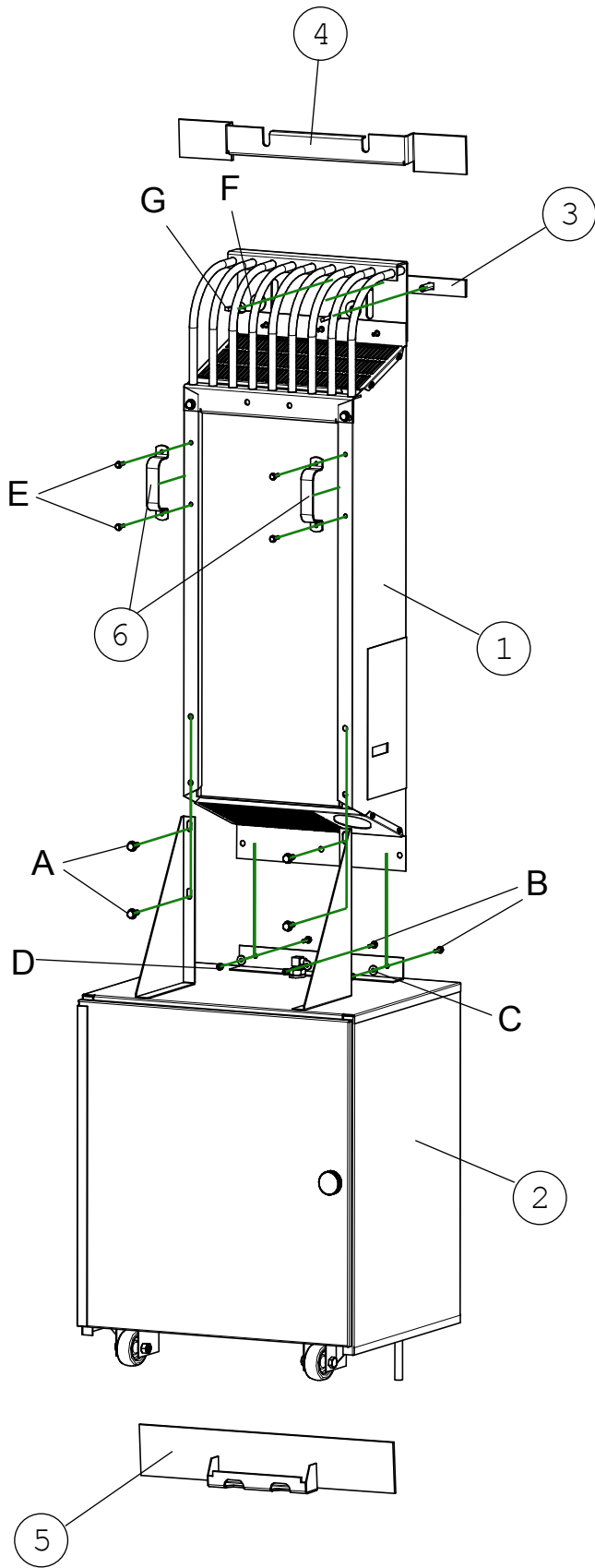
Parts List

X-700.....	A2
Complete Heater	
X-900.....	A3
Complete Heater	
H700/900-XH.....	A7
Basic Open Flame Heater (top portion of heater)	
H700/900-B.....	A8
Burner Assembly for Port Burner Heater	
H700-BC.....	A13
Bottle Carrier for X-700	
H900-BC.....	A14
Bottle Carrier for X-900	
H700-RA.....	A15
Regulator Assembly for X-700	
H900-RA	A15
Regulator Assembly for X-900	



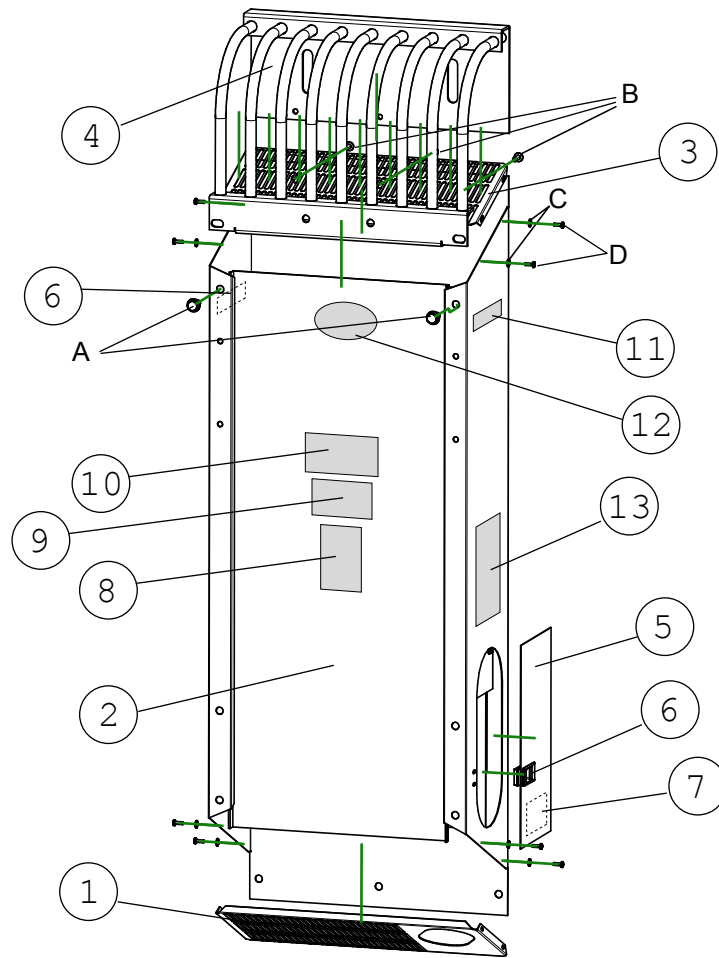
Label	Name	Part #
1	Open Flame Heater - Basic (see page A7)	H700/900-XH
2	700 Series Bottle Carrier (see page A13)	H700-BC
3	Heater to Wall Bracket	H10-104
4	Upper Wall Bracket	H10-105
5	Lower Wall Bracket	H10-135
6	Handles	H10-470
	Owners Manual	HD-34

Label	Name	Quan.
A	3/4" 3/8"-16 Flanged Hex Head Bolt	4
B	5/8" 5/16"-18 Flanged Hex Head Bolt	3
C	5/16" Flat Washer	3
D	5/16"-18 Hex Nut	3
E	1/2" 1/4"-20 Flanged Hex Head Bolt	4
F	1/2" Washer	2
G	1/2" Wing Nut	2



Label	Name	Part #
1	Open Flame Heater - Basic (see page A7)	H700/900-XH
2	900 Series Bottle Carrier (see page A14)	H900-BC
3	Heater to Wall Bracket	H10-104
4	Upper Wall Bracket	H10-105
5	Lower Wall Bracket	H10-135
6	Handles	H10-470
	Owners Manual	HD-34

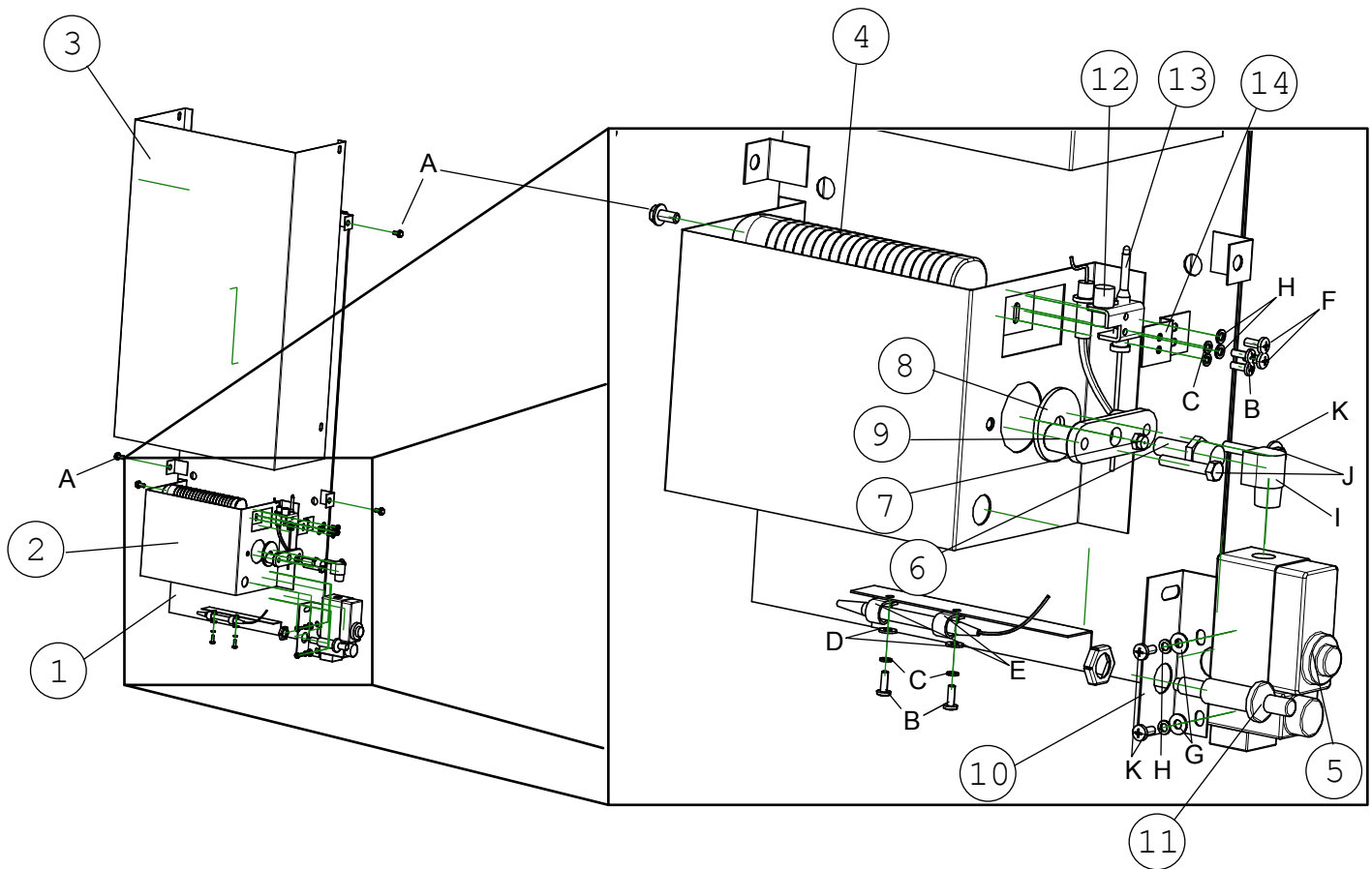
Label	Name	Quan.
A	3/4" 3/8"-16 Flanged Hex Head Bolt	4
B	5/8" 5/16"-18 Flanged Hex Head Bolt	3
C	5/16" Flat Washer	3
D	5/16"-18 Hex Nut	3
E	1/2" 1/4"-20 Flanged Hex Head Bolt	4
F	1/2" Washer	2
G	1/2" Wing Nut	2



Label	Name	Part #
	Burner Assembly (Hidden Inside 2 - See page A8)	H700/900-B
1	Lower Screen	H10-758
2	Heater Shell	H10-755
2	Upper Screen	H10-757
4	Top Guard	H10-756
5	Door w/Hinge	H10-111
6	Door Latch	H10-111
7	Service Decal (inside of door)	HD-09
8	Decal - "Turn off Propane"	HD-14
9	Decal - "Must be Vented"	HD-19
10	Decal - "Flammables"	HD-03

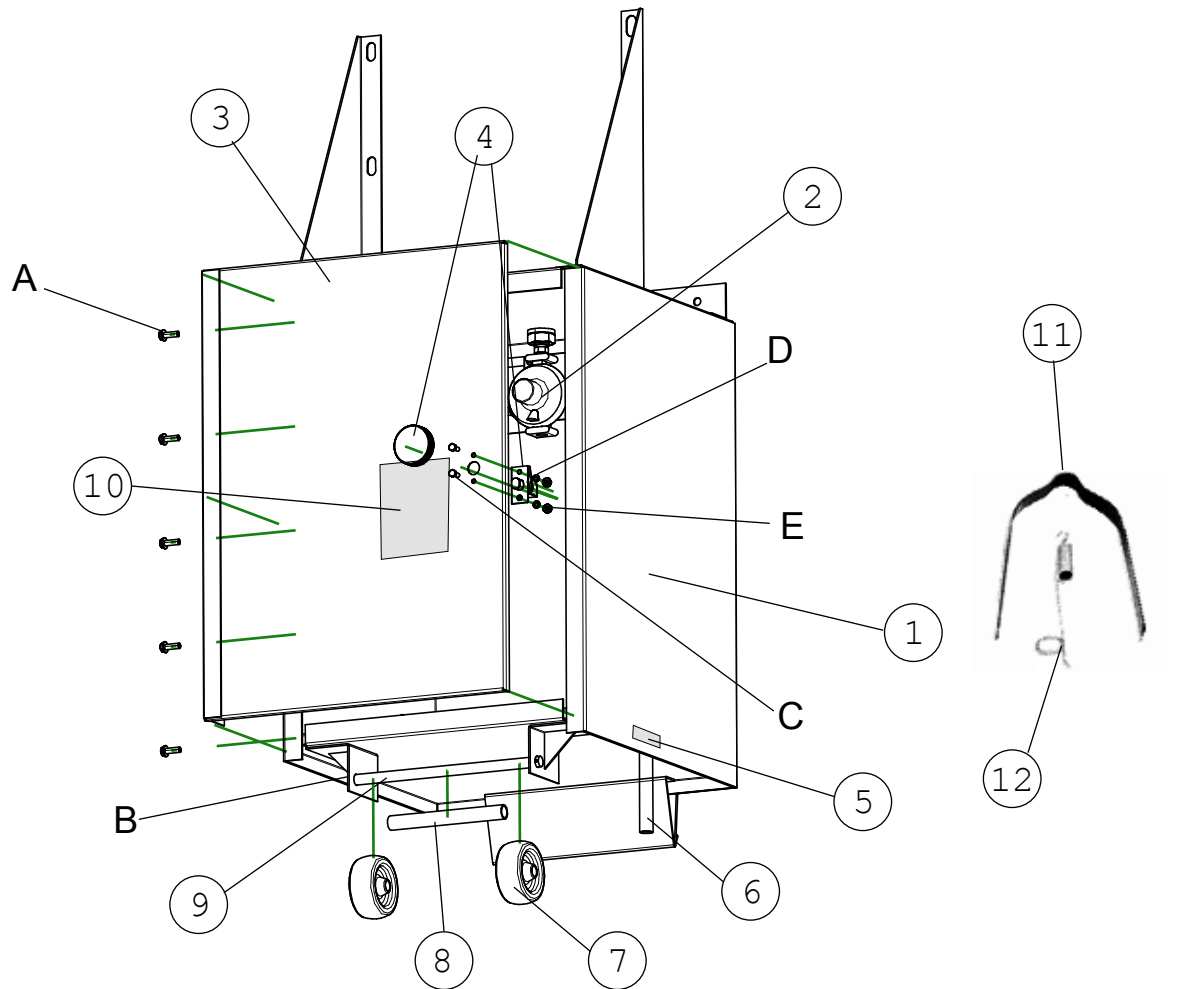
Label	Name	Part #
11	Decal - "Do Not Load Above"	HD-02
12	Product of Elston Decal	SD-02
13	Decal - Lighting Instr.	HD-10

Label	Name	Quan.
A	3/4" 3/8"-16 Flanged Hex Head Bolt	2
B	3/4" 1/4"-20 Flanged Hex Head Bolt	3
C	#8 Sheet Metal Screw	8
D	#8 Washer	8



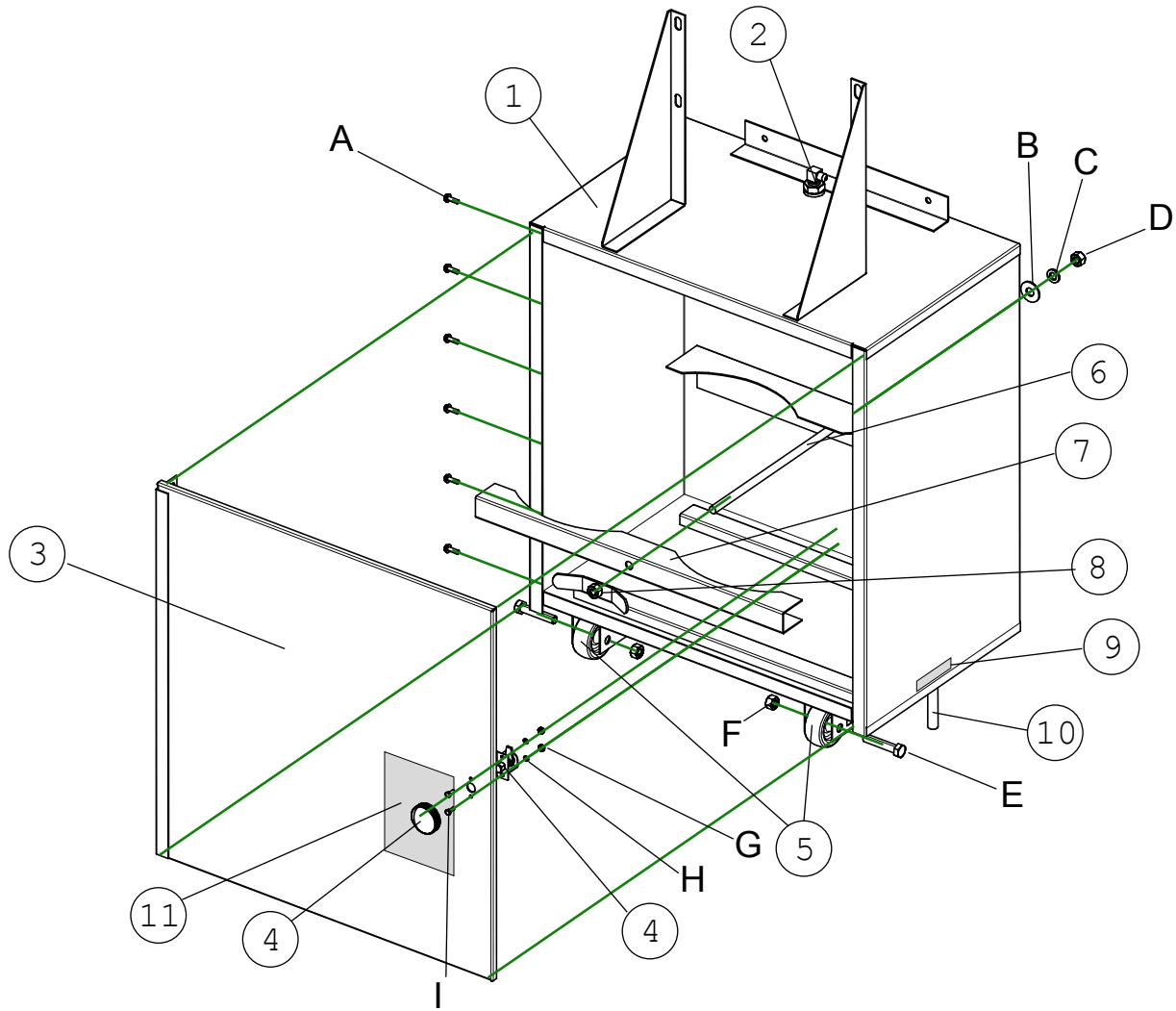
Label	Name	Part #
1	Burner Control Back	H10-720A
2	Burner Mounting Bracket	H10-722
3	Open Flame Heat Shield	H10-718C
4	Burner	H500-10
5	Control	H10-500
6	Orifice Holder	H10-48
7	Orifice	H10-41
8	Air Adjustment Disc	H10-42
9	Orifice Holder Bracket	H10-44
10	Spark Ignition Bracket	H10-703
11	Ignitor w/ Nut	H100-13
12	Pilot Light with Spark Probe	H10-705
13	Thermocouple	H500-13
14	Pilot Light Mounting Brkt	H10-716
	LP Gas Hose (not shown)	H10-303
	1/4" Formed Tubing (5 to 12)	H10-39A

Label	Name	Quan.
A	1/2" 1/4"-20 Wislock Hex Head Bolt	5
B	1/2" #8-32 Sheet Metal Screw	4
C	#8 Lock Washer	4
D	#8 Washer	2
E	1/4" Plastic Clip	2
F	1/2" #10-24 Sheet Metal Screw	2
G	#10 Washer	2
H	#10 Lock Washer	4
I	3/8" Brass Street Elbow	1
J	1" 1/4"-20 Hex Head Bolt	2
K	1/4" Washer	1
L	1/2" #10-32 Sheet Metal Screw	2



Label	Name	Part #
1	Bottle Carrier Shell	H10-759
2	Regulator Assembly (see page A15)	H700-RA
3	Door - Complete	H10-138
4	Compression Latch	H10-478
5	Decal - "Vent Tube"	HD-18
6	1/2" x 7" Hose	H10-137
7	Wheel	H10-130
8	Wheel Spacer	H10-129
9	Axle	H10-128
10	Decal - "Open Bottle Slowly"	HD-07
11	Bottle Hold Down Clip	H10-26
12	Bottle Hold Spring	H10-21

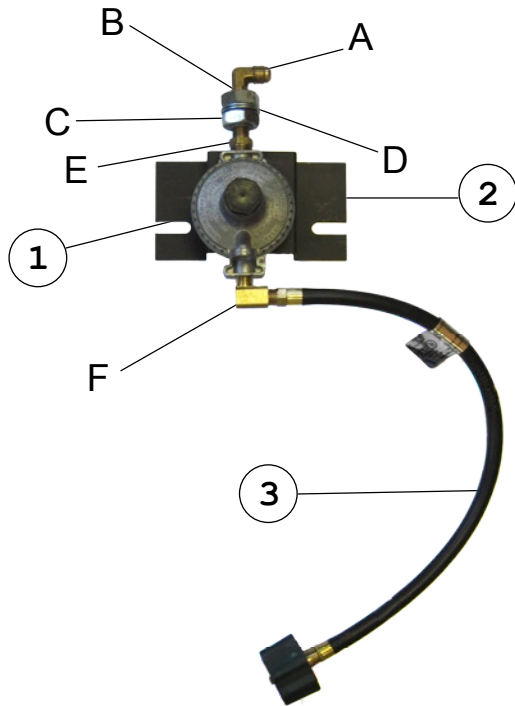
Label	Name	Quan.
A	3/4" 1/4"-20 Flanged Hex Head Bolt	5
B	1/2" Flat Washer and Hair Pin Clip	2
C	1/2" #10-24 Hex Head Machine Screw	2
D	#10 Lock Washer	2
E	#10-24 Hex Nut	2



Label	Name	Part #
1	Dual Bottle Carrier Shell	H10-760
2	Regulator Assembly (see page A15)	H900-RA
3	Door - Complete	H10-566
4	Compression Latch	H10-478
5	Wheel	H10-130
6	Threaded Rod Assembly	H10-820
7	Bottle Hold Down Bracket	H10-817
8	1/2" Butterfly Nut	H10-630
9	Decal - "Vent Tube"	HD-18
10	1/2" x 7" Vent Hose	H10-137
11	Decal - "Open Bottle Slowly"	HD-07

Label	Name	Quan.
A	3/4" 1/4"-20 Flanged Hex Head Bolt	6
B	1/2" Flat Washer	1
C	1/2" Lock Washer	1
D	1/2"-13 Hex Nut	1
E	2 1/2" 1/2"-13 Hex Head Bolt	2
F	1/2"-13 Nylon Lock Nut	2
G	#10-24 Hex Nut	2
H	#10 Lock Nut	2
I	1/2" #10-24 Hex Head Machine Screw	2

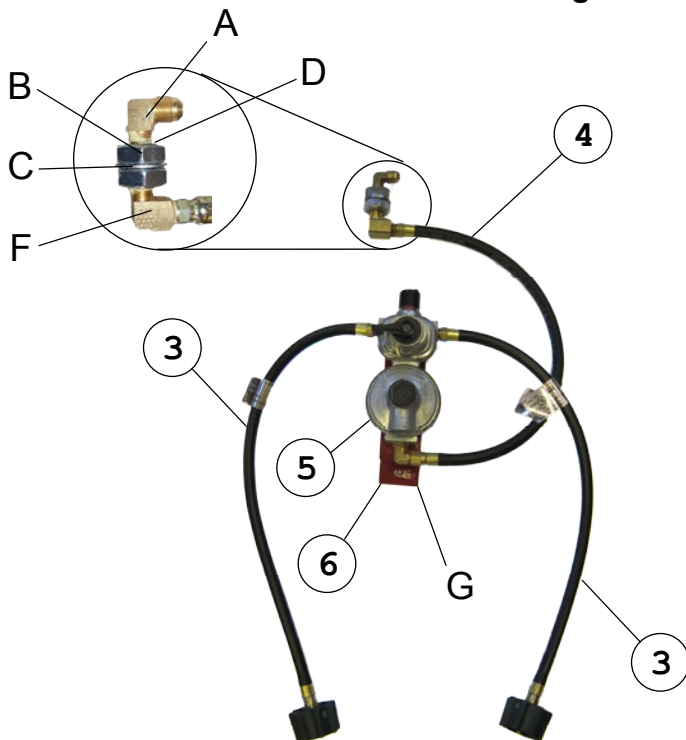
Single Regulator Assembly (H700-RA)



Label	Name	Quan.
A	1/4" Male Elbow w/ 45° Flare for 3/8" Tube	1
B	1/4" NPT Bulkhead Fitting	1
C	3/4"-14 Hex Jam Nut	2
D	3/4" Internal Lock Washer	2
E	3/8" to 1/4" Hex Nipple	1
F	1/4" Street Elbow	1

Label	Name	Part #
1	Single Stage Regulator	H10-623
2	Regulator Mounting Brkt	H10-480
3	Tank Fitting w/ Hose	H10-829

Dual Regulator Assembly (H900-RA)



Label	Name	Quan.
A	1/4" Male Elbow w/ 45° Flare for 3/8" Tube	1
B	1/4" NPT Bulkhead Fitting	1
C	3/4"-14 Hex Jam Nut	2
D	3/4" Internal Lock Washer	2
F	1/4" Street Elbow	1
G	1/4" Male Elbow w/ 45° Flare	1

Label	Name	Part #
3	Tank Fitting w/ Hose	H10-829
4	Lower Hose Assembly	H10-306
5	Dual Regulator	H10-625
6	Regulator Mounting Brkt	H10-482

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