

IMPORTANT SAFEGUARDS

Read all instructions and warnings before operating.

If this product is dealer installed, leave these instructions for the end user for future reference.



OWNER'S MANUAL FOR MARINE GRILLS

Camco Manufacturing, Inc.

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INTRODUCTION

Thank you for selecting a Kuuma marine grill. Your unit was carefully inspected and tested at our factory. Please take the time to read this manual carefully; many of its instructions are essential to the safe operation of your new barbecue.

Because of the continuing refinement of our product designs, your barbecue may possess features not discussed in the manual. We have tried to supply all the information you might need, so please take time to read this manual before installing and using your barbecue.

Kuuma Products advises strongly against unauthorized modification of this product, but we do encourage you to correct problems which may arise by undertaking the simple repairs and maintenance described in this manual.

DANGER - If you smell gas:

1. Shut off gas to the appliance.
2. Extinguish any open flame.
3. Open lid.
4. If odor continues, keep away from the appliance and immediately call your gas supplier or fire department.

DANGER

1. Do not store or use gasoline or other flammable liquids or vapors in the vicinity of this or any other appliance.
2. An LP cylinder not connected for use shall not be stored in the vicinity of this or any other appliance.

WARNING

This is an open flame, outdoor cooking appliance. Open flame cooking appliances consume oxygen and produce carbon monoxide. To avoid asphyxiation, injury, or death from exposure to carbon monoxide, maintain open ventilation when using this appliance. Do not use this appliance inside a building, a passenger compartment, a galley, or any other enclosed area.

Do not use this appliance for comfort heating.

WARNING

A minimum clearance of 24 inches from the left, right, and back of the grill must be maintained between the grill and all combustible construction.

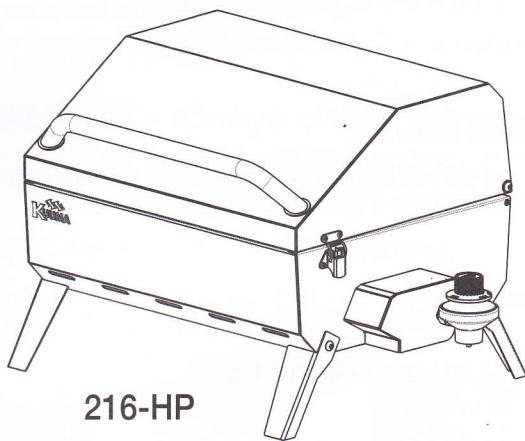
Do not use this appliance under overhead combustible construction.

Do not store spare LP cylinders under or near this appliance and never fill a cylinder above 80%. If either is violated, a fire causing death or serious injury may occur.

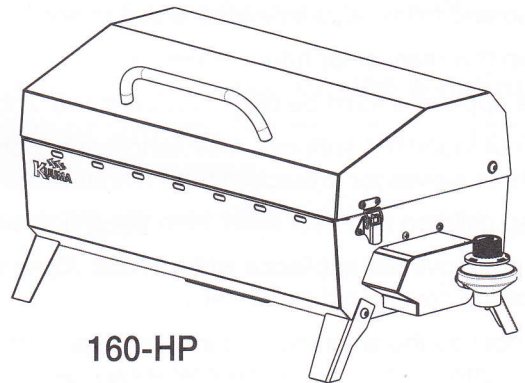
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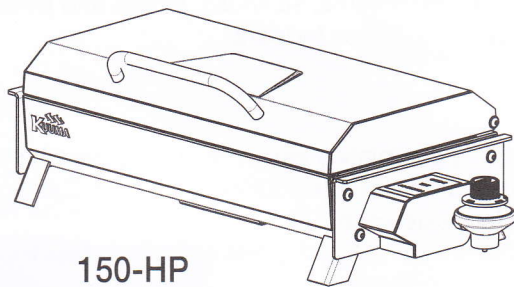
This manual covers the following models:



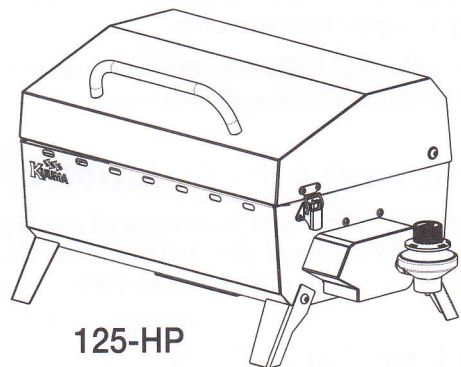
216-HP



160-HP

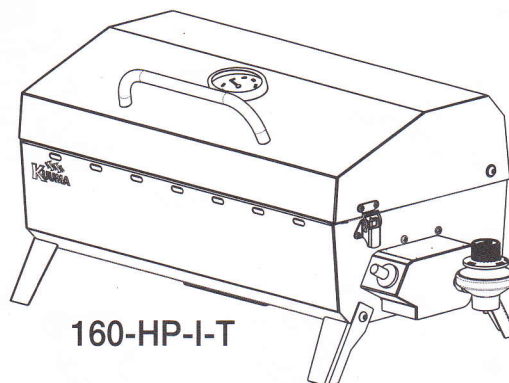


150-HP



125-HP

*Each model has the build option of including a lid mounted thermometer and or a piezo igniter. In such cases the model number will be followed by a "-T" for a thermometer or a "-I" for a piezo sparker or both "- I - T" if includes both. Below is an example that includes both.



160-HP-I-T

Operation and Maintenance

A – IMPORTANT: ALWAYS BE CAREFUL WHEN USING GAS!

- This instruction manual contains important information necessary for safe use of this appliance.
- Read and follow all warnings and instructions before using this appliance.
- Keep this manual for future reference.
- This appliance must be used **outdoors only** and away from flammable materials.
- Do not touch hot surfaces. Use handles or knobs. This appliance will be hot during and after use. Use insulated oven mitts or gloves for protection from hot surfaces.
- Keep children and pets away from the grill at all times.
- Do not move the appliance when in use. Allow the grill to cool to less than [46°C] 115°F before moving, storing, or installing cover (sold separately).
- Do not use the appliance if damaged in any manner or has leaks, call 001-336-668-7661 or email info@camco.net for technical service.
- Any modification to this appliance may be dangerous and should not be performed.
- Do not operate grill on a combustible construction.
- NEVER leave cooking food unattended. Open lid frequently and cook with lid open as much as possible when cooking at higher temperatures.
- Carbon monoxide (CO) is an odorless, clear gas that can cause flu-like symptoms, sickness, illness and possibly death if produced inside an enclosed area without proper ventilation. NEVER use indoors.

B – UNPACKING & INSTALLATION:

Unpack your grill taking care to remove all packaging materials. The grill is completely assembled, no assembly required. Inspect the grill for damage prior to use. If damage is found, do not attempt to operate your grill. Contact Camco Manufacturing by calling 001-336-668-7661 or email info@camco.net for assistance.

C – GRILL INSTALLATION:

This appliance must be securely mounted when used on a boat or placed on a sturdy, level, non-combustible surface when used on shore. Kuuma offers a full line of mounting kits and hardware (sold separately). Visit <http://www.kuumaproducts.com> for mounting option details.

The mounting location must be outdoors in an area free of overhead combustible materials and provide a minimum clearance of 24" from the sides and back.

This appliance is not intended to be installed in or on recreational vehicles.

Installation must conform with local codes or, in the absence of local codes, it must conform with either the National Fuel Gas Code, ANSI Z223.1/NFPA 54, Natural Gas and Propane Installation Code, CSA B149.1, or Propane Storage and Handling Code, B149.2, or the Standard for Recreational Vehicles, ANSI A 119.2/NFPA 1192, and CSA Z240 RV Series, Recreational Vehicle Code, as applicable.

D – GAS SUPPLY:

These grills are intended to be used with a standard 1-lb throwaway propane cylinder (CGA Connection No. 600). Only cylinders marked "propane" may be used.

The supply cylinder must be constructed and marked in accordance with the Specifications for LPGas Cylinders of the U.S. Department of Transportation (D.O.T.) or the National Standard of Canada, CAN/CSA-B339, Cylinders, Spheres and Tubes for Transportation of Dangerous Goods; and Commission, and have a CGA No 600 outlet (1"-20 UNEF-INT).

⚠ CAUTION - Always check the cylinder and seals before use. Never use a cylinder if damaged or any seals are missing from the cylinder or the appliance's regulator. Discard cylinders if dust, dirt or rust particles are in the Valve area.

IMPORTANT: Review instruction and warnings on the propane cylinder prior to use. See FIG.1-A.

CONNECTING THE GAS CYLINDER:

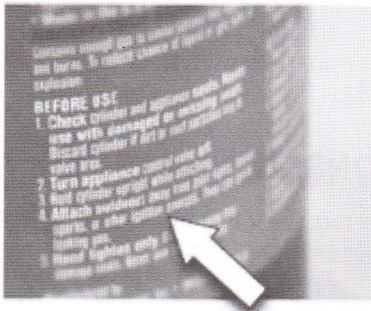




FIG. 1-A

1. Position the control regulator as shown in FIG. 1b, aligning the notch on the orifice fitting with the dimple on the burner tube.
2. Gently insert the orifice fitting into the burner tube until dimple aligns with groove on orifice fitting.
3. Rotate the regulator down 180-degrees
4. Pull back slightly on gas control to check that it is locked in place.
5. Remove cap from end of propane cylinder. Cap should always be kept on cylinder when not in use to prevent dirt and debris from entering valve. Only use 16oz (1-lb) propane fuel cylinders.
6. Verify regulator's control knob is in the "OFF"  Position, turn to "OFF"  if needed.
7. Insert threaded end of propane cylinder into regulated control valve and hand tighten. Do not use tools! Over-tightening can damage threads on regulator.
8. Perform a leak test, refer to "SECTION I – LEAK TESTING"

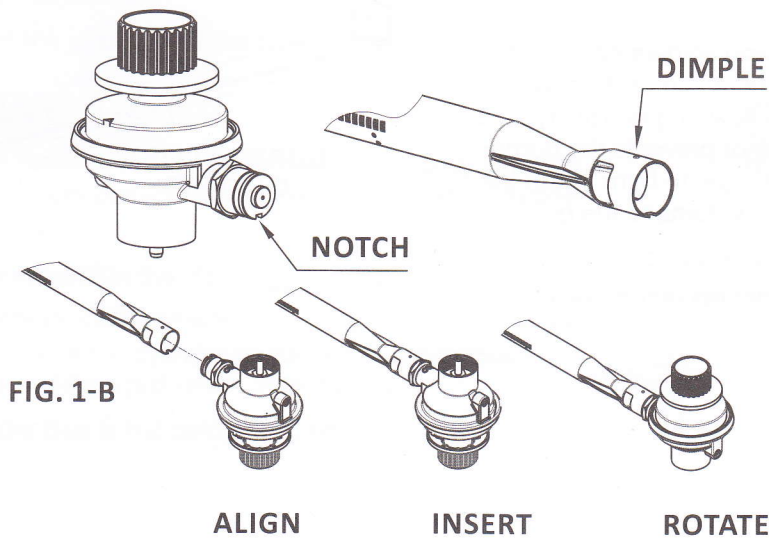



FIG. 1-B

E – LIGHTING THE BURNER:



Read all instructions before attempting to light your grill and never use the grill until the instructions have been read carefully and understood. Also, make sure that:

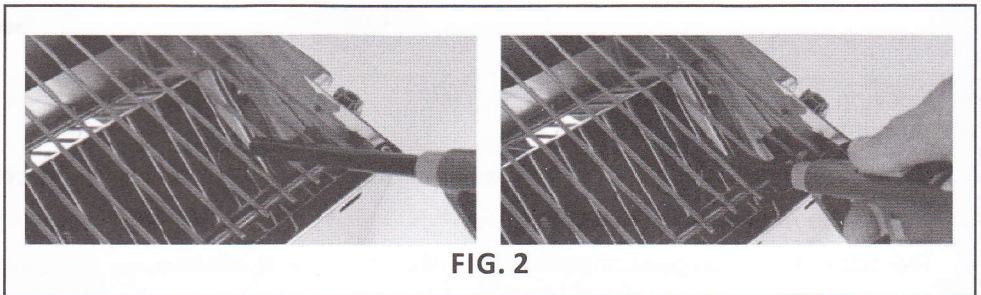
- The control valve and or regulator is in the “OFF”  position
- The gas supply is connected
- There are no leaks
- The venturi is not blocked
- It is securely mounted to one of the available Kuuma grill mounting options.


WARNING

- **LID MUST BE OPEN WHEN LIGHTING APPLIANCE BURNER.** Failure to open the appliances lid during the lighting procedure could result in a fire or explosion that could cause serious bodily injury, death or property damage.
- Do not lean over the grill when lighting. Always keep your face and body at least 18 in (46 cm) away from the grill while lighting and in use.
- Do not obstruct flow of ventilation air. Maintain a minimum clearance of 3 in (8 cm) from the back of the grill and noncombustible construction such as a concrete or brick wall.


E1 – MANUAL LIGHTING INSTRUCTIONS:

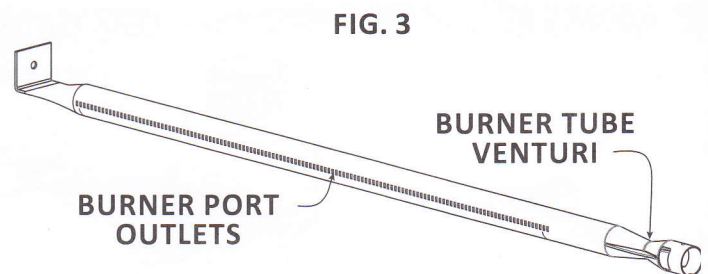
1. Verify gas supply is connected and control valve/regulator is in the “OFF”  position.
2. Open the lid of the appliance.
3. Insert a lit match or utility lighter through the access hole; keep the flame adjacent to the burner, refer to FIG. 2.
4. Depress the control knob and rotate to the “HIGH”  position.
5. Remove match or utility lighter and visually confirm ignition has occurred.
6. Turn control knob to desired setting and grill is ready for use.





IMPORTANT: If burner fails to light after three attempts, turn the control knob to the “OFF”  position and check that the burner outlet ports and the venturi tube are not blocked, refer to FIG. 3.

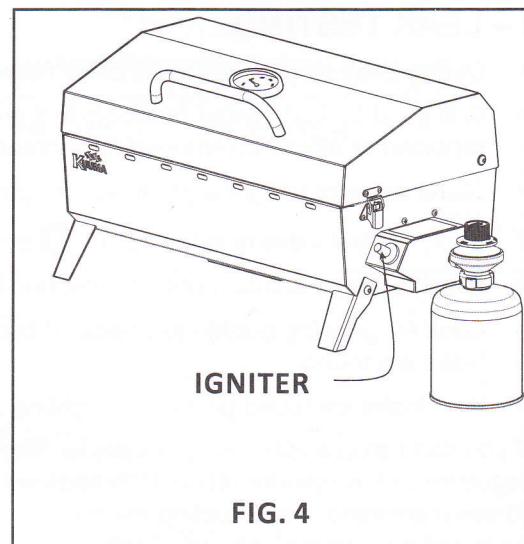
It is possible that small insects and spiders could find their way into the venturi tube and make nests or webs that could reduce or restrict the flow of gas. This typically causes a smoky, yellowish flame or prevents the burner from lighting. It could even cause gas to burn inside the burner tube, which could seriously damage the grill.

If a flame-out occurs, turn control knob to the “OFF”  position and wait 5 minutes before relighting.




E-2 PIEZO LIGHTING INSTRUCTIONS:

1. Verify gas supply is connected and control valve/regulator is in the "OFF"  position.
2. Open the lid of the appliance.
3. Depress the control knob and rotate to "HIGH"  position.
4. Repeatedly depress and release the piezo igniter until ignition occurs, refer to FIG. 4.
If ignition does not occur within 5 seconds, turn the control valve to the "OFF" position and wait 5 minutes and follow the "MANUAL LIGHTING INSTRUCTION" in section "E-1" on previous page.
5. Visually confirm ignition has occurred via access hole.
6. Turn control knob to desired setting and grill is ready for use.



F – TURNING THE APPLIANCE OFF:

1. Turn the control knob to the "OFF"  position.
2. After flame has self-extinguished, remove propane supply cylinder and allow grill to cool to [46°C] 115°F before moving, storing, or covering.

IMPORTANT

Cylinders must be stored outdoors out of the reach of children and must not be stored inside a building or any other type of enclosed area.


Do not store appliance inside a building with a propane cylinder attached.

G – OPERATION:

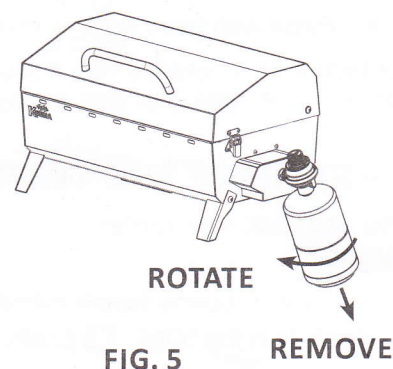
- It's recommended that protective gloves be worn to handle components which may be hot during operation.
- Before start-up, verify legs are fully open and in place and grill is on a sturdy, level non-combustible surface or securely mounted to one of the available Kuuma grill mounting options.
- When pre-heating or post-heating the appliance, never allow the grill to go above 260-290°C (500-550°F) or there will be discoloration.
- If cooking at high temperatures, open lid frequently or cook with lid open as much as possible to avoid discoloring the lid and reducing the anti-corrosion properties of the stainless steel.
- Any time fatty foods are being cooked over an open flame, flare-ups can occur. To help control flare-ups, we suggest using leaner cuts of meat or trimming excess fat from the meats being cooked.
- Excess build-up of burned marinades absorbs grease and can cause flare-ups. Always clean before use.
- Only use this appliance outdoors!
- Do not attempt to light the appliance if the odor of gas is present.

H – REMOVING GAS CYLINDER:


The gas cylinder may be removed even if it is not empty. Only replace, remove or install gas cylinders outside away from people and ignition sources.

- Verify control knob or valve is in the "OFF"  position.
- Firmly hold the regulator in one hand while grasping the cylinder in the other hand and then remove the cylinder by turning in the clockwise direction until it is free and then pull down, refer to FIG. 5.

Never discard a gas cylinder that is not completely empty.



I – LEAK TESTING:

- During Leak testing, keep grill away from open flames or sparks and do not smoke.
 - Grill must be leak tested outdoors in a well-ventilated area. Leak test must be repeated each time propane cylinder is replaced or after it is removed for storage.
 - Never attempt to light a grill if odor of gas is present.
1. Verify control valve is in the “OFF”  position and gas supply is connected.
 2. Brush a soapy solution onto connection between cylinder and regulator.
 3. Look for growing bubble to appear. If bubbles appear, re-tighten propane cylinder and repeat steps 1 & 2 until no leaks are found.
 4. If no leaks are found proceed to lighting the grill.

If you can't stop a leak, remove cylinder from the regulator and check for damaged threads, dirt and debris on the regulator or the cylinder fitting. If threads are damaged on any item, DO NOT USE the item until it is replaced. Also check to see if anything is obstructing the flow of gas at the regulator or cylinder connection. Remove any obstruction that may be found and repeat leak test steps.

See “SECTION L – ACCESSORIES” for replacement parts.

J – CLEANING AND MAINTENANCE

Never modify the grill, any modification may be dangerous and could cause injury or property damage.


To keep your new grill looking and operating properly, we recommend that the grill is thoroughly cleaned after each use. By nature, stainless steel is rust resistant; however, the buildup of grease and food in and on the grill can and will deteriorate the grill over time if not removed. A protective layer of “chromium-oxide” on the outer surface is the reason stainless steels do not rust. Oxygen coming in contact with the Chromium in the metal creates this protective layer. If food, grease or moisture covers the outer surface, oxygen can't react with the Chromium and create the protective chromium-oxide layer and surface rusting will occur. To minimize this effect:

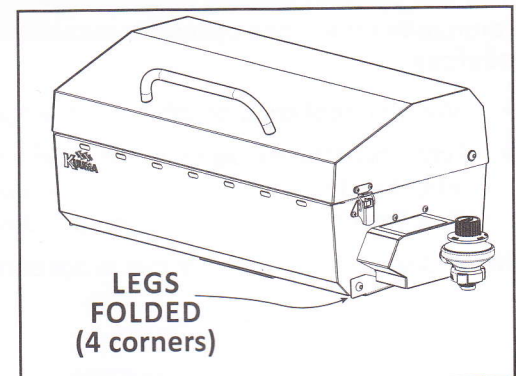
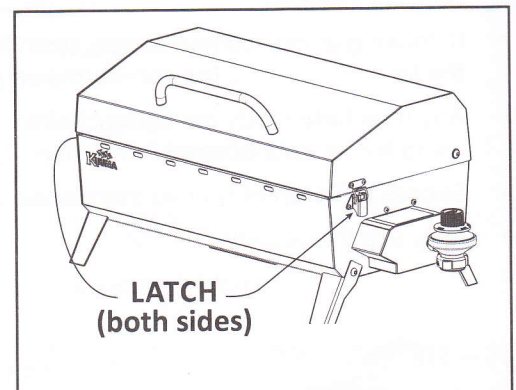
- Immediately after grilling, use a stainless steel or brass wire brush and scrub the cooking grate clean.
- After grill has cooled:
 - Remove cooking grate and rub back side with wire brush
 - Using the wire brush, rub and clean all build-up from “Heat Plate” or Lift and Clean Liner.
 - Empty any and all grease from grease tray
 - Remove any food particles or build up on or in the grill
 - Use soap and water to thoroughly clean cooking area and adjacent surfaces and the cooking grate. If needed to remove stubborn burnt-on buildups inside the grill or on the cooking grate, use a commercial oven cleaner. If an oven cleaner is used, be sure to thoroughly clean with soap and water afterwards.
 - Rinse with fresh water and then dry.

For technical assistance with disassembly or spare parts call Camco at 001-336-668-7661 or e-mail at info@camco.net

K – STORAGE AND TRANSPORT

After use, wait until appliance is cool before preparing for storage and transport.



- ☐ Remove propane supply cylinder if not already done; make sure control knob is in the “OFF”  position before doing this.
- ☐ Clean the grill
- ☐ Closed the lid and latch shut to secure
- ☐ Fold legs up to store position
- ☐ Grill is ready to carry or store



L – ACCESSORIES

Camco only recommends using accessories and replacement parts from Camco Manufacturing. Camco accepts no responsibility for damage or malfunction due to the use of accessories and/or replacement parts from other brands. Please contact Camco at 001-336-668-7661 or e-mail at info@camco.net for the latest accessories and spare parts available for your grill.

M – TROUBLE SHOOTING

Problems	Probable Cause/Remedies
The burner does not light	<ul style="list-style-type: none">- No gas flow; check that there is still gas in the cylinder- Valve is "OFF" ; turn control valve to "ON"- Obstructed gas flow; clean burner and orifice to remove obstruction- Contact your service agent
The burner does not burn smoothly or goes out	<ul style="list-style-type: none">- No gas flow; check that there is still gas in the cylinder- Obstructed gas flow; clean burner and orifice to remove obstruction- Contact your service agent
Large plume of flame on the burner surface	<ul style="list-style-type: none">- Obstructed gas flow; clean burner venturi, possible spider webs or insects inside- Contact your service agent
Insufficient heat	<ul style="list-style-type: none">- Injector or venturi tube is obstructed; clean- Contact your service agent
Excessive flare-up	<ul style="list-style-type: none">- Excessive cooking temperature; change cooking temp to low , leave lid open- Grease and/or residue build-up; clean components- Excessive fatty meats; trim fat before grilling- Excessive oils in marinades; use non-oil base- Contact your service agent
Yellow sooty flame	<ul style="list-style-type: none">- Obstructed gas flow; clean burner and valve orifice and remove any debris/spider webs- Contact your service agent
Hot spots	<ul style="list-style-type: none">- Grill not level; level grill- Grease or residue build-up; clean components- Excessive fatty meats; trim fat before grilling- Excessive oils in marinades; use non-oil base- Contact your service agent

CUSTOMER SERVICE

In case of continued difficulty, issues or questions, please contact Camco Manufacturing, Inc. customer service at:

Camco Manufacturing, Inc.

121 Landmark Drive

Greensboro, NC 27409 USA

001-336-668-7661

E-mail: info@camco.net

Website: www.camco.net

WARNING: Due to our policy of continual product development, Camco reserves the right to alter or modify this product without prior notice.

ITEM WARRANTY

LIMITED WARRANTY: Camco warrants this product to be free from defects in material and workmanship under normal use and service conditions for 12 months from the date of first purchase. Camco's liability is limited solely to the replacement of any defective product returned to us. To the extent allowable by law, Camco makes no other warranty, either expressed or implied, nor assumes any liability for incidental or consequential damages resulting from the use of this product or for breach of warranty of merchantability or fitness for a particular purpose. Submit warranty claims to Camco Manufacturing, 121 Landmark Drive, Greensboro, NC 27409.