

SECTION 2. INSTALLATION

2-1. INTRODUCTION

This section provides the installation and unpacking instructions for the Henny Penny PFG-691.

NOTICE

Installation of this unit should be performed only by a qualified service technician.



Do not puncture the fryer with any objects such as drills or screws as electrical shock or component damage could result.

2-2. UNPACKING INSTRUCTIONS

NOTICE

Any shipping damage should be noted in the presence of the delivery agent and signed prior to his or her departure.

1. Cut and remove the plastic bands from the main box.
2. Remove the box lid and lift the main box off the fryer.
3. Remove four corner packing supports.
4. Cut the stretch film from around the carrier/rack box and remove it from the top of the fryer lid.
5. Cut and remove the metal bands holding the fryer to the pallet.



All counterweights must be loaded before unlatching the lid, or personal injury could result.

6. Remove the fryer from the pallet.



Take care when moving the fryer to prevent personal injury. The fryer weighs approximately 935 lbs. (424 kg).

2-2. UNPACKING
INSTRUCTIONS
(Continued)

7. Remove the counterweights, which are strapped to the pallet under the fryer, from the pallet.



Do not drop. The counterweights weigh approximately 18 lbs. (8.1 kg) each. Handle with care, or personal injury could result.

8. Remove rear service cover.
9. Load the 7 weights into the counterweight assembly.
10. Replace rear service cover.



To avoid personal injury and assure safe operation of unit, rear service cover must be in place.

11. Cut warning tags from the lid assembly. The lid may now be unlatched.
12. Remove the accessories from inside the filter drain pan.



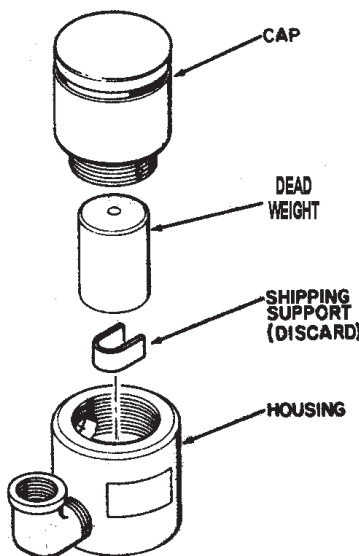
The fittings for installing the gas line are in a separate box, along with the accessories, in the filter drain pan.

13. Prepare the deadweight valve for operation



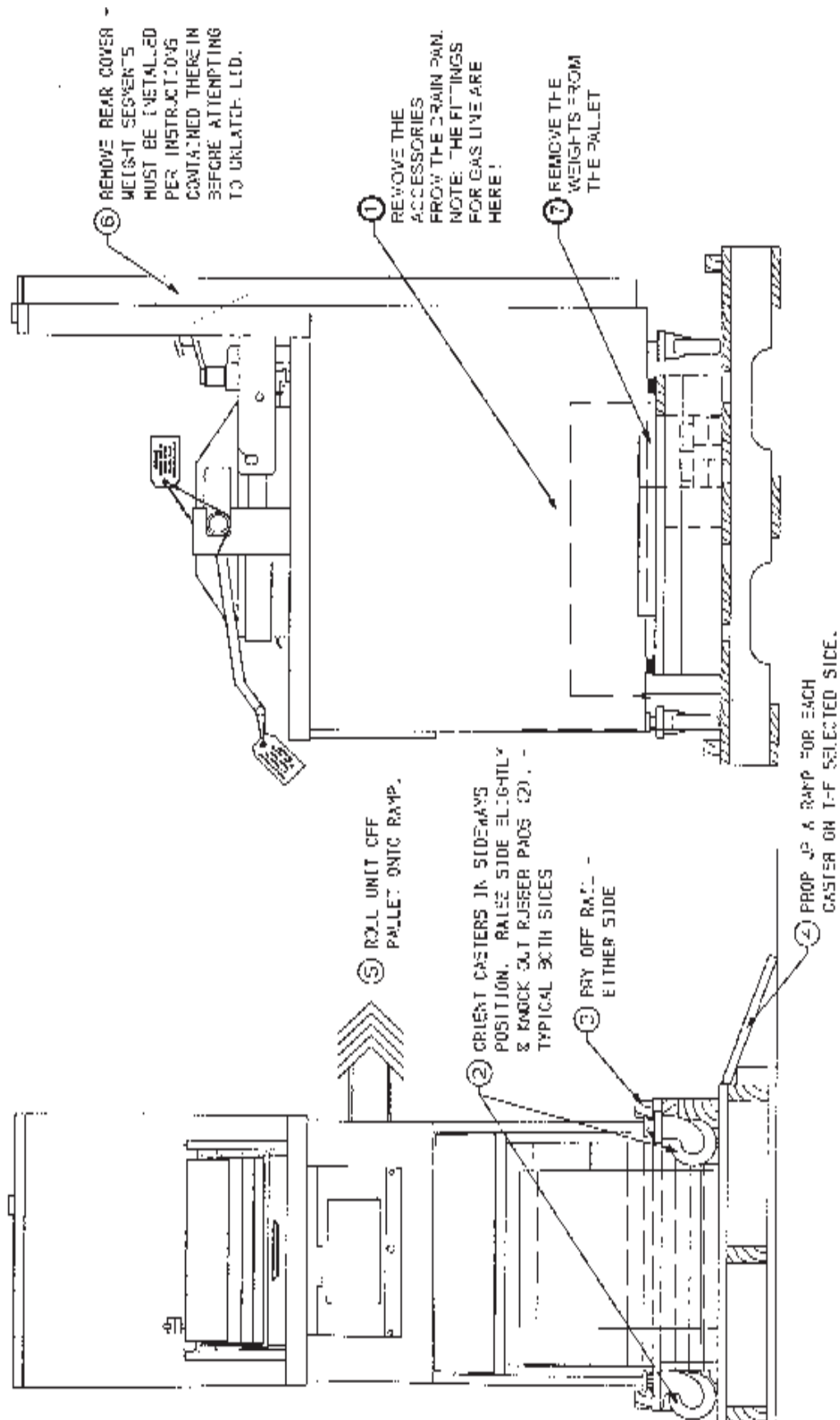
The metal shipping support is placed within the deadweight assembly housing to protect the deadweight orifice and deadweight during shipment. This support must be removed prior to installation and start-up.

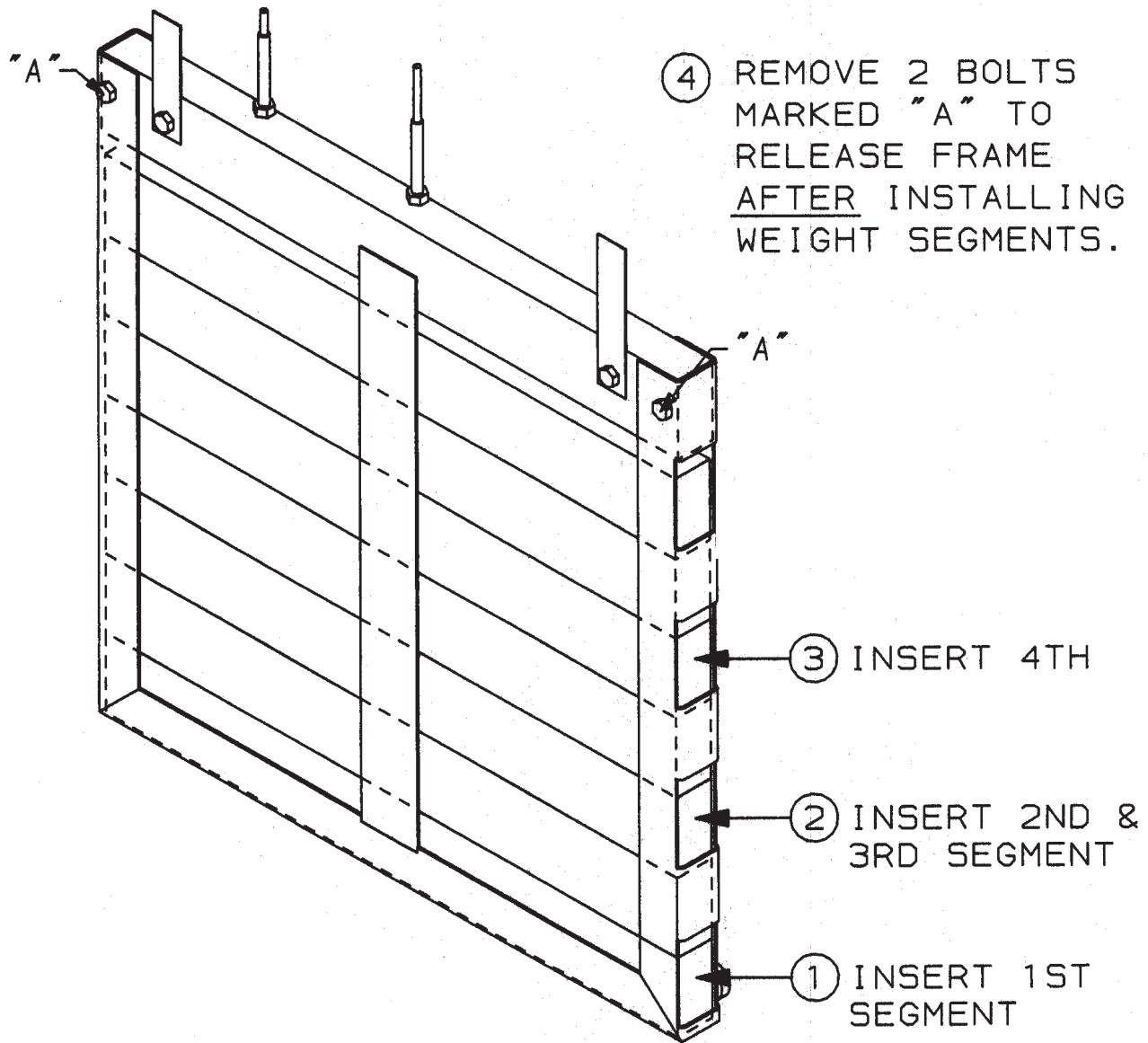
- a. Unscrew the deadweight cap.
- b. Remove the deadweight.
- c. Remove and discard the shipping support.
- d. Clean the deadweight orifice with a dry cloth.
- e. Carefully place deadweight over deadweight orifice. Replace deadweight cap, finger tight.



14. Remove the protective paper from the fryer cabinet. Clean exterior surface with a damp cloth.

Optional Ramp Unloading





- * EACH WEIGHT SEGMENT WEIGHS APPROXIMATELY 18 LBS. (8.1 KG) – HANDLE WITH CARE.
- * ALL SEGMENTS ARE IDENTICAL.
- * ALL SEGMENTS MUST BE INSTALLED AND SECURED IN THE FRAME BEFORE ATTEMPTING TO UNLATCH LID.

2-3. SELECTING THE FRYER LOCATION

The proper location of the fryer is very important for operation, speed, and convenience. Choose a location which provides easy loading and unloading without interfering with the final assembly of food orders. Operators have found that frying from raw to finish, and holding the product in warmer provides fast, continuous service. Landing or dumping tables should be provided next to at least one side of the fryer. Keep in mind the best efficiency will be obtained by a straight line operation, i.e., raw in one side and finish out the other side. Order assembly can be moved away with only a slight loss of efficiency. To properly service the fryer, 24 inches (60.96 cm) of clearance is needed on all sides of the fryer. Access for servicing can be attained by removing a side panel. Also, at least 6 inches (15.24 cm) around the base of the unit is needed for proper air supply to the combustion chamber.



To avoid a fire, install the fryer with minimum clearance from all combustible and noncombustible materials, 6 inches (15.24 cm) from side and 6 inches (15.24 cm) from back. If installed properly, the gas fryer is designed for operation on combustible floors and adjacent to combustible walls.

To avoid fire and ruined supplies, the area under the 691 fryer should not be used to store supplies.

Do not spray aerosols in the vicinity of this appliance while it is in operation.



Install fryer to prevent tipping or movement causing splashing of hot shortening. This may be accomplished by the location of the fryer or by restraining ties. Severe burns can result from splashing hot shortening.

2-4. LEVELING THE FRYER

For proper operation, the fryer must be level from side to side and front to back. Using a level placed on the flat areas around the frypot collar, adjust the leveling bolt or casters until the unit is level.



FAILURE TO FOLLOW THESE LEVELING INSTRUCTIONS CAN RESULT IN SHORTENING OVERFLOWING THE FRYPOT WHICH COULD CAUSE SERIOUS BURNS, PERSONAL INJURY, FIRE, AND/OR PROPERTY DAMAGE.

2-5. VENTILATION OF FRYER

The fryer should be located with provision for venting into adequate exhaust hood or ventilation system. This is essential to permit efficient removal of the flue gases and frying odors. Special precaution must be taken in designing an exhaust canopy to avoid interference with the operation of the fryer. Make certain the exhaust hood is designed high enough to allow for proper opening of the fryer lid. We recommend you consult a local ventilation or heating company to help in designing an adequate system.

NOTICE

Ventilation must conform to local, state, and national codes. Consult your local fire department or building authorities.

2-6. GAS SUPPLY

The gas fryer is factory available for either natural or propane gas. Check the data plate on the right side panel of the cabinet to determine the proper gas supply requirements. The minimum supply for natural gas is 7 inches water column (1.7 kPa) and, 10 inches water column (2.49 kPa) for propane.



Do not attempt to use any gas other than that specified on the data plate. Incorrect gas supply could cause a fire or explosion resulting in severe injuries and/or property damage.

2-7. GAS PIPING

Please refer below for the recommended hookup of the fryer to main gas line supply.



To avoid possible serious personal injury:

- **Installation must conform with local, state, and national codes, and be in accordance with Canadian Gas Authority Standard CSA B149- & 2, Installation Codes - Gas Burning Appliances and in accordance with Australian Gas Association current edition of AS5601 Gas Installations.**
- **The fryer and its manual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of 1/2 psig (3.45 kPa) (34.5 mbar).**

2-7. GAS PIPING

(Continued)

- **The fryer must be isolated from the gas supply piping system by closing its manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than 1/2 psig (3.45 kPa) (34.5 mbar).**
- **A standard 3/4 inch, black steel pipe and malleable fittings should be used for gas service connections.**
- **Do not use cast iron fittings.**
- **Although 3/4 inch size pipe is recommended, piping should be of adequate size and installed to provide a supply of gas sufficient to meet the maximum demand without undue loss of pressure between the meter and the fryer. The pressure loss in the piping system should not exceed 0.3 inch water column (0.747 mbar).**

Provisions should be made for moving the fryer for cleaning and servicing. This may be accomplished by:

1. Installing a manual gas shutoff valve and disconnect union, or
2. Installing a heavy-duty design (minimum 3/4") A.G.A. certified connector which complies with standard connectors for moveable gas appliances. ANSI Z21.69 (the latest edition) or CAN 1, 6.10M88. Also, a quick-disconnect coupling which complies with the Standard for Quick-Disconnect Devices for use with Gas Fuel, ANSI Z21.41 (the latest edition) or CAN 1 6.9M79. Also, adequate means must be provided to limit the movement of the fryer without depending on the connector and any quick-disconnect device or its associated piping to limit the fryer movement.
3. See the illustration on the following page for the proper connections of the flexible gas line and cable restraint.

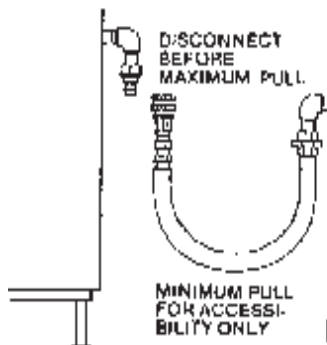
NOTICE

The cable restraint limits the distance the fryer can be pulled from the wall. For cleaning and servicing the fryer, the cable must be unsnapped from the unit and the flexible gas line disconnected. This allows better access to all sides of the fryer. The gas line and cable restraint must be reconnected once the cleaning or servicing is complete.

2-7. GAS PIPING (Continued)

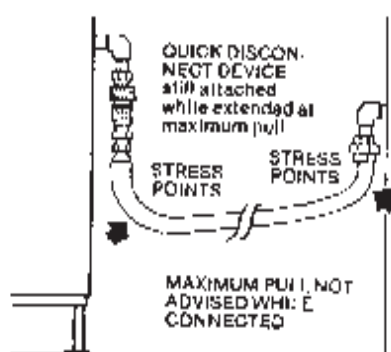
RIGHT

MINIMUM PULL of equipment away from wall permissible for accessibility to Quick Disconnect Device.



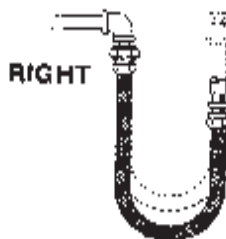
WRONG

AVOID SHARP BENDS AND KINKS when pulling equipment away from wall. (Maximum pull will kink and, even if installed properly, and reduce Connector life.)



RIGHT

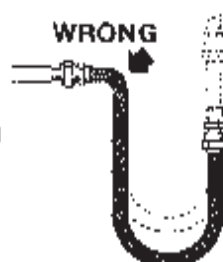
Couplings and hose should be installed in the same plane as shown at left. DO NOT OFFSET COUPLINGS... this causes torsional twisting and undue strain causing premature failure.



RIGHT

This is the correct way to install metal hose for vertical traverse. Note the single, natural loop.

Allowing a sharp bend, as shown at right, strains and twists the metal hose to a point of early failure at the coupling.



RIGHT

Maintain the minimum or larger bending diameter between the couplings for longest life.

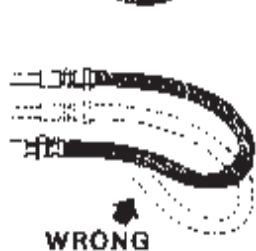
Closing in the diameter at the couplings, as shown at right, creates double bends causing work fatigue failure of the fittings.



RIGHT

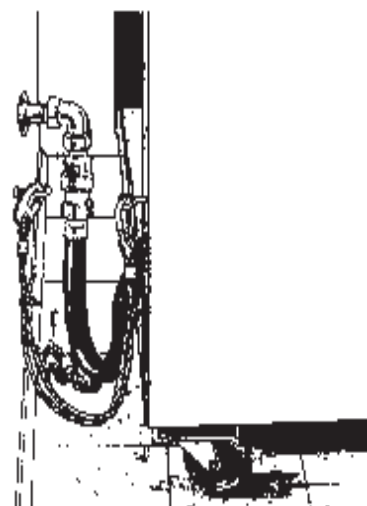
In all installations where "self-draining" is not necessary, connect metal hose in a vertical loop.

DO NOT CONNECT METAL HOSE HORIZONTALLY... unless "self-draining" is necessary, then use support on lower plane as shown at left.



CABLE RESTRAINT

Please refer to the illustration below when installing cable restraint on all moveable gas fryers.



I-bolt is to be secured to the building using acceptable building construction practices.

CAUTION

DRY WALL CONSTRUCTION

Secure I-bolt to a building stud. Do not attach to dry wall only. Also, locate the I-bolt at the same height as the gas service. Preferred installation is approximately six inches to either side of service. Cable restraint must be at least six inches shorter than flexible gas line.

CAUTION

Utilize elbows when necessary to avoid sharp kinks or excessive bending. For ease of movement, install with a "lazy" loop. Gas appliance must be disconnected prior to maximum movement. (Minimum movement is permissible for hose disconnection).

2-8. GAS PRESSURE REGULATOR SETTING

The gas pressure regulator on the gas control valve is factory set as follows:

Natural: 3.5 inches water column (0.87 kPa)

Propane: 10.0 inches water column (2.49 kPa)



MAKE SURE GAS PRESSURE IS SET CORRECTLY. FAILURE TO DO SO CAN RESULT IN SHORTENING OVERFLOWING THE FRYPOT, WHICH COULD CAUSE SERIOUS BURNS, PERSONAL INJURY, FIRE, AND/OR PROPERTY DAMAGE.

2-9. ELECTRICAL REQUIREMENTS

The gas fryer requires 120 volt, 60 Hertz, 1 phase, 10 amp, 3-wire grounded (earthed) service, or 230 volt, 50 Hertz, 1 phase, 5 amp service. The 120-volt gas fryer is factory equipped with a grounded (earthed) cord and plug for your protection against shock, and should be plugged into a three-prong grounded (earthed) receptacle. Do not cut or remove grounding (earthing) prong. A wiring diagram is located behind the right side panel and can be accessed by removing the side panel. The 230 volt plug must conform to all local, state, and national codes.



Do not disconnect the ground plug. This fryer must be adequately and safely grounded or electrical shock could result. Refer to local electrical codes for correct grounding procedures or in absence of local codes, with The National Electrical Code, ANSI/NFPA No. 70 (the current edition). In Canada, all electrical connections are to be made in accordance with CSA C22.1, Canadian Electrical Code Part 1, and/or local codes.

To avoid electrical shock, this appliance must be equipped with an external circuit breaker which will disconnect all ungrounded (unearthed) conductors. The main power switch on this appliance does not disconnect all line conductors.

2-10. TESTING THE FRYER

Each Henny Penny pressure fryer was completely checked and tested prior to shipment. However, it is good practice to check the unit again after installation.

2-11. GAS LEAK TEST

NOTICE

Prior to turning the gas supply on, be sure the gas control valve knob on the gas control valve is in the OFF position. The word OFF is at the bottom of the knob when the valve is closed.

After the piping and fittings have been installed, check for gas leaks. A simple checking method is to turn on the gas and brush all connections with a soap solution. If bubbles occur, it indicates escaping gas. In this event, the piping connection must be redone.



To avoid fire or explosion, never use a lighted match or open flame to test for gas leaks. Ignited gas could result in severe personal injury and/or property damage.

BOIL-OVER PREVENTION IN HENNY PENNY FRYERS

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN SHORTENING OVERFLOWING THE FRYPOT WHICH COULD CAUSE SERIOUS BURNS, PERSONAL INJURY, FIRE, AND/OR PROPERTY DAMAGE.

- **THE SHORTENING MAY BE STIRRED ONLY DURING THE MORNING START-UP PROCEDURE. DO NOT STIR THE SHORTENING AT ANY OTHER TIME.**
- **FILTER THE SHORTENING AT LEAST TWICE A DAY.**
- **FILTER ONLY WHEN “IDLE” IS DISPLAYED.**
- **BRUSH ALL CRACKLINGS FROM FRYPOT SURFACES AND THE COLD ZONE DURING THE FILTERING PROCESS.**
- **MAKE SURE THE COOKER IS LEVEL.**
- **BE CERTAIN THE SHORTENING IS NEVER ABOVE THE UPPER FRYPOT “FILL” LINE.**
- **BE CERTAIN THAT THE GAS CONTROL VALVE AND BURNERS ARE PROPERLY ADJUSTED (GAS UNITS ONLY).**
- **BE SURE LOAD DOES NOT EXCEED RECOMMENDED LOAD SIZE.**

FOR ADDITIONAL INFORMATION ON THESE INSTRUCTIONS, REFER TO THE HENNY PENNY SERVICE MANUAL.

FOR ASSISTANCE, CALL THE HENNY PENNY SERVICE DEPARTMENT AT

1-800-417-8405 or 1-937-456-8405