

AMERICAN RANGE

QUALITY PROFESSIONAL COOKING EQUIPMENT

OWNER'S MANUAL FOR PROFESSIONAL AAF SERIES FRYERS

MODEL NUMBERS: AAF-25W, AAF-40W, AAF-45W

FOR YOUR SAFETY	FOR YOUR SAFETY! Do not store or use gasoline or other flammable vapors or liquids in the vicinity of this or any other appliance.	FOR YOUR SAFETY
WARNING IMPROPER INSTALLATION	WARNING! Improper installation, adjustment, alteration, service or maintenance can cause property damage, injury or death. Read the installation, operating and maintenance instructions thoroughly before installing or servicing this equipment.	WARNING IMPROPER INSTALLATION

Instruction to be followed in the event the user smells gas should be posted in a prominent location. This information should be obtained by consulting the local gas supplier.

RETAIN THIS MANUAL FOR FUTURE REFERENCE.

This equipment is design engineered for commercial use only.

All ULPG fryers must have a regulator installed between the gas tank H.P. and the fryer. (To be supplied by others) If a the fryer is installed without the correct regulator; parts will be damaged and the warranty will be void. The Regulator must set the gas pressure: to 2.74 kPa at or below 2.75 kPa. Operating pressure below 2.49 kPa will affect fryer efficiency operating pressure above 3.48 kPa will damage parts and void the warranty.

Model Number: _____
Serial Number: _____
Purchase Date: _____
Installed By: _____ Date: _____
Gas Type: _____
Electrical Information: _____ _____



DESIGN



CLASS



FUNCTION



Gas Safety Certified
SAI-400281

Before installing and operating this equipment, be sure everyone involved in its operation is fully trained and aware of precautions. Accidents and problems that can be caused by failure to follow fundamental rules and precautions.

The following symbols, found throughout this manual, alert you to potentially dangerous conditions to the operator, service personnel, or to the equipment.



This is the **SAFETY ALERT SYMBOL**. This symbol alerts you to hazards which will result in severe injury or death.

DANGER

This symbol warn of immediate hazards or unsafe practices which will result in severe personal injury or death.

WARNING

This symbol warn of immediate hazards or unsafe practices which will result in severe personal injury or death.

CAUTION

This symbol refers to potential hazards or unsafe practices which may result in minor personal injury or property damage.

WARNING

Fire Hazard for your safety. Do not store or use gasoline or other flammable vapors and liquids in the vicinity of this or any other appliance. Keep area around appliances free and clear of combustibles. Purchaser of equipment must post in a prominent location, detailed instructions to be followed in the event the operator smells gas. Obtain the instructions from the local gas supplier.

WARNING

Burn Hazard. Contact with hot oil will cause severe burns. Always use caution. Oil at 200°F is more dangerous than boiling water.

WARNING

In the event a gas odor is detected, shut down equipment at the combination gas valve and contact the local gas company or gas supplier for service.

WARNING

It is recommended that this appliance be inspected by a qualified service technician for proper performance and operation on a yearly basis.

WARNING

This appliance is intended for professional use only and should be operated by fully trained and qualified personnel.

NOTICE

American Range Fryers are intended for commercial use only. Not for household use. Warranty will be void if service work is performed by other than a qualified technician, or if other than genuine American replacement parts are installed. Be sure this Operator's Manual and important papers are given to the proper authority to retain for future reference.

WARNING

DO NOT spray aerosol while the unit is in operation.

! WARNING

The appliance is NOT jet stream approved. DO NOT clean the appliance with a water jet.

! WARNING

Ensure the appliance can get enough air to keep the flame burning correctly. If the flame is starved for air it can give off a dangerous carbon monoxide gas. Carbon Monoxide is a clear odorless gas that can cause suffocation.

! WARNING

Completely shut the appliance down when shortening /oil is being drained from the appliance. This will prevent the appliance from heating up during the draining and filing process. Serious injury can occur.

! WARNING

Never add water to hot oil. Violent boiling can occur causing severe injury

! WARNING

The appliance is intended for indoor use only.

! WARNING

Never add oil to the appliance when it is at operation temperature. Splashing hot oil can cause severe injuries.

! WARNING

There is an open flame inside the appliance. The unit may get hot enough to set nearby materials on fire. Keep the area around the appliance free from combustibles.

! WARNING

This appliance is intended for professional use only and should be operated by fully trained and qualified personnel.

! WARNING

- Hot oil and hot surfaces can cause severe burns. Use caution when operating the fryer.
- Do not attempt to move the fryer when filled with hot oil or shortening
- Drain hot oil into metal containers. Do not use plastic buckets or glass containers.
- Do not operate this unit without oil in vessel.
- Do not stand on fryer to clean overhead equipment.
- Do not go near the area directly above the flue when the fryer is in operation. Severe burns may be caused.

! WARNING

If disconnection of the restraint is necessary to move the appliance for cleaning etc., reconnect it when the appliance is moved to its original installed position

! NOTICE

When this appliance is installed with casters, it must be installed with the casters supplied, a connector complying with either ANSI Z21.69 CSA 6.16 and a quick-disconnect device complying with ANSI Z21.41 CSA 6.9. It must also be installed with restraining means to guard against transmission of strain to the connector, as specified in the appliance manufacturer instructions. CE Gas Appliance Directive's 2009/142/EC (ex-90/396/EEC) Annex II, AU AS/NZS 5601, as applicable.

! NOTICE

Units must be level to assure maximum performance. Improper leveling may void warranty.

! NOTICE

All gas appliances vented through a ventilation hood or exhaust system with a damper or with a power means of exhaust shall comply AV AS/NZS 5601.

! NOTICE

Installation must conform with local codes, or in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1, National Gas Installation Code, CAN/CGA-B149.1, or the Propane Installation Code, CAN/CGA-B149.2, CE Gas Appliance Directive's 2009/142/EC (ex-90/396/EEC) Annex II, AU AS/NZS 5601, as applicable.

! NOTICE

These installations procedures must be followed by qualified personnel or warranty will be void. Local codes regarding installation vary greatly from one area to another. The National Fire Protection Association, Inc. States in its NFPA 96 latest edition that local codes are the "authority having jurisdiction" when it comes to installation requirements for equipment.

! NOTICE

Post in a prominent location the instructions to be followed in the event that an operator smells gas. Obtain this information from your local gas supplier. Installation and servicing of the equipment should be performed by authorized personnel only and to AS/NZS 5601.

IMMEDIATELY INSPECT FOR SHIPPING DAMAGE

All containers should be examined for damage before and during unloading. The freight carrier has assumed responsibility for safe transit and delivery. If damaged equipment is received, either apparent or concealed, a claim must be made with the delivering carrier.

Apparent damage or loss must be noted on the freight bill at the time of delivery. The freight bill must then be signed by the carrier representative (Driver). If the bill is not signed, the carrier may refuse the claim. The carrier can supply the necessary forms.

A request for inspection must be made to the carrier within 5 days if there is concealed damage or loss that is not apparent until after the equipment is uncrated. The carrier should arrange an inspection. Be certain to hold all contents plus all packing material.

STEP 1: UNPACK

Unpack appliance and place in the approximate installation position. Remove all shipping wire and wood blocking. Remove parts (packed in a cardboard box) from oven cavity, or cabinet body or on top of range(s). Do not remove any tags or labels until unit is installed and working properly.

STEP 2: INSTALL THE LEGS (OR CASTERS AND RESTRAINTS)

A set of legs or casters is packed with the fryer. Mounting fasteners are pre-mounted on the base plates.

1. Raise fryer sufficiently to allow legs or casters to be screwed into the base plate. For safety, "shore up" and support the fryer with an adequate blocking arrangement strong enough to support the load.
2. Screw the four legs or casters to the plate on the bottom of the fryer. When casters have been ordered, the casters having a locking-brake should be attached under the front of the fryer.
3. Lower the fryer gently. Never drop or allow the fryer to fall.
4. Use the level to make sure that the fryer is level. Each caster, or the tubular-end of each leg, can be screwed in or out to lower or raise each corner of the fryer.
5. Attach restraints as required by local codes.

STEP 3: CHECK CLEARANCES AND VENTILATIONS

Select a firm, level location for your fryer. Leave clearance, whenever possible, so that access from the rear is possible to permit cleaning. If the unit is to be set on non-combustible flooring, such as a concrete slab, 76 mm minimum toe room must be provided to prevent restriction of the air opening in the bottom of the unit.

WARNING!

There must be adequate clearance between fryer(s) and construction. Clearance must also be provided in front for servicing and for operation. Minimum clearances.

For Combustible Construction	
Sides	152mm
Rear	152mm

ALL AMERICAN RANGE FRYERS SHALL BE INSTALLED WITH AT LEAST A 400mm SPACE BETWEEN THE FRYER AND SURFACE FLAMES FROM ADJACENT EQUIPMENT. A FLAME GUARD IS ACCEPTABLE IF ALLOWED UNDER LOCAL CODE.

Ventilation and Fire Safety Systems

Your new appliance must have proper ventilation to function safely and properly. Exhaust gas temperatures can reach as high as 1100 °F (593 °C). Therefore, it is very important to install a fire safety system. Your ventilation system should be designed to allow for easy cleaning. Frequent cleaning and proper maintenance of the ventilation system and the appliance will reduce the chances of fire. Additional information can be obtained from CSA International, 8501 East Pleasant Valley Road, Cleveland, OH 44131 or visit their website at www.csa-international.org.

Due to the variety of problems that can be caused by outside weather conditions, venting by canopies or wall fans is preferred over any type of direct venting. It is recommended that a canopy extend 152mm past the appliance and the bottom edge be located 2m from the floor. Filters should be installed at an angle of 45° or more from the horizontal. This position prevents dripping of grease and facilitates collecting the run-off grease in a drip pan, unusually installed with a filter. A strong exhaust fan tends to create a vacuum in the room and may interfere with burner performance or may extinguish pilot flames.

Fresh air openings approximately equal to the fan area will relieve such a vacuum. In case of unsatisfactory performance on any appliance, check the appliance with the exhaust fan in the "OFF" position. Do this only long enough to check equipment performance, then turn hood back on and let it run to remove any exhaust that may have accumulated during the test.

The exhaust fan should be installed at least 600 mm above the vent opening at the top of the fryer.

! CAUTION

Ensure that your ventilation system does not cause a down draft at the appliance's flue opening. A down draft will not allow the appliance to exhaust properly and will cause overheating, which may cause permanent damage. Damage caused by down draft will not be covered by the warranty. NEVER allow anything to obstruct the flow of combustibles or ventilation exiting the appliance. NEVER place anything on top of the flue of the area, or block the flue in any way.

! NOTICE

NEVER connect the ventilation blower or hood directly to the flue of this appliance. The resulting increased flow of air through the combustion system will cause improper operation, poor temperature recovery, poor ignition and could extinguish the pilot.

Make sure all ventilation meet local code requirement

This unit is not intended to be connected directly to an outside flue properly in conjunction with the appliance. Inadequate ventilation may not properly evacuate appliance all emissions. Excessive or unbalanced ventilation may cause drafts, which could interfere with proper operation of the pilot and burners. Leave at least 460mm of open space between the flue of the appliance and the intake of the exhaust hood.

Initial Adjustment

After your appliance has been properly installed as described in the installation section of this manual, it will need to be adjusted to ensure that it will perform as designed. These adjustments must be performed by a qualified person. To perform these adjustments the following tools will be needed:

- Manometer
- Digital Thermometer (Temperature Probe)
- DC Millivolt Meter

Installation and servicing of the equipment should be performed by authorized personnel only and to AS5600

STEP 4: GAS CONNECTION, INSTALLATION AND SERVICING OF THE EQUIPMENT

The gas connection is located near the lower right rear corner of the fryer. The serial plate (located inside the front door of the fryer) indicates the type of gas the unit is equipped to burn (natural gas or ULPG). The fryer should be connected ONLY to the type of gas for which it is equipped.

A circuit diagram is located inside the front door of the fryer.

All American equipment is adjusted at the factory; however, pilot height should be checked at installation and adjusted, if necessary.

If the fryer is being installed at over 2,000 feet altitude and that information was not specified when ordered, contact the appropriate authorized American Service Representative or the American Service Department. Failure to install with proper orifice sizing will result in poor performance and may void the warranty.

If applicable, the vent line from the gas appliance pressure regulator shall be installed to the outdoors in accordance with local codes or, in the absence of local codes, with the National Fuel Gas Code, ANSI Z223.1, Natural Gas Installation Code, CAN/CGA-B149.1, or the ULPG Installation Code, CAN/CGA- B149.2. CE Gas Appliance Directive's 2009/142/EC (ex-90/396/EEC Annex II, AU AS/NZS 5601, as applicable.

An adequate gas supply is imperative. Undersized or low pressure lines will restrict the volume of gas necessary for satisfactory performance. A combination gas valve and pressure regulator, which is provided with each unit, is set to maintain a 1 KPA manifold pressure for natural gas or 2.49 KPA manifold pressure for ULPG. However, to maintain these conditions the pressure on the supply line, when all units are operating simultaneously, should not drop below 1.74 KPA for natural gas or 2.74 KPA for propane gas.

Fluctuations of more than 25% on natural gas or 10% on ULPG will create problems and affect burner operating characteristics. A 1/8" tap to measure the manifold pressure is located on the combination gas valve or manifold, which is on the burner manifold located directly below the burners inside the cabinet.

Purge the supply line to clean out dust, dirt, or other foreign matter before connecting the line to the unit.

It is recommended that an individual manual shutoff valve be installed in the gas supply line to the unit.

Use pipe joint compound that is suitable for use with both natural and ULPG on all threaded connections.

! CAUTION

All pipe joints and connections must be tested thoroughly for gas leaks. Use only soapy water for testing on all gases. Never use an open flame to check for gas leaks. All connections must be checked for leaks after unit has been put into operation. Test pressure should not exceed 3.48 KPA

! CAUTION

This appliance and its individual combination gas valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressure in excess of 14"WC. (1/2 PSI or 3.45 kPa). If the incoming gas pressure is in excess of 14"WC (1/2 PSI, 3.45 kPa), a proper step-down regulator will be required.

! CAUTION

Connect the gas supply directly to the connector located near the lower rear corner of the fryer. When tightening the supply pipe, be sure to hold the mating connector extending from the unit securely with a wrench. This will prevent any damage or distortion to the internal piping and controls of the unit.

BEFORE TURNING THE BURNER ON:

1. Fill the vessel with a liquid oil up to the "level" marking.
2. Do not operate fryer without oil in the vessel.
3. Do not overfill the vessel.

 **WARNING**

IF YOU SMELL GAS DURING THE LIGHTING PROCEDURE, IMMEDIATELY SHUT OFF THE LIGHTING GAS SUPPLY UNTIL THE LEAK HAS BEEN CORRECTED. AND WAIT FIVE MINUTES

LIGHTING AND SHUTDOWN INSTRUCTIONS

1. Before attempting to light this appliance, the cover if so equipped, shall be open.
2. Open the burner compartment door and turn thermostat to "OFF."
3. Turn the combination gas control knob to the "OFF" position.
4. Wait 5 minutes.
5. Press down the knob of the combination gas valve, turn it counterclockwise to the "PILOT" position (shown), and continue to press the knob down.
6. While pressing the knob down, use a lit match to ignite the pilot. Continue to press the knob down for about 30 seconds. If the pilot does not stay lit when the knob is released, wait 5 minutes before attempting to relight the pilot to allow any built up gas to dissipate. Repeat the lighting procedure and keep the knob down longer. Adjustment of pilot flame may be necessary.
7. When the pilot stays lit, turn the knob counterclockwise to the "ON" position. Do not press down on the knob in this step.
8. Do NOT turn the thermostat "ON" until the fry pot is filled with oil shortening.
9. Once the fry pot is filled with oil or shortening, set the thermostat to the desired temperature.
10. Close door.
11. For complete shut down, repeat steps 2 - 4

FILLING THE FRYPOT

1. Close drain valve completely before filling the fry pot.
2. When the fryer is new, fill the fry pot with water and clean thoroughly (see "Weekly Cleaning" on page 8) in order to remove protective coatings and any foreign matter.
3. The recommended solid shortening capacity for the fry pot (35, 55 or 75lbs) is described on the serial plate (which is located inside the front door).
4. Remove the basket support frame when filling the fry pot with solid shortening.
5. When solid shortening is used, be careful not to bend, break, or twist the thin capillary wires of the sensing elements located in the fry pot.
6. Pack solid shortening into the zone below the tubes, all spaces between the tubes, and at least an inch above the top of the tubes before lighting the fryer. If any air spaces are left around the heat tube surfaces when the heat is turned on, the tube surfaces will become red hot, burn the solid shortening, weaken the fry pot, and could result in a fire.

! CAUTION

NEVER ATTEMPT TO MELT A SOLID BLOCK OF SHORTENING ON TOP OF THE HEAT TUBES. NEVER START THE BURNERS WHEN THE FRYPOT IS EMPTY.

1. To prevent burning or scorching the solid shortening, keep the thermostat set at the lowest temperature until all the solid shortening between and above the tubes has been melted. Additional solid shortening can then be added until the desired frying depth has been reached. Min. and Max lines are embossed on fry pot rear.
2. Replace the basket support frame over the fry pot heat tubes.

! WARNING

In the event of a main burner ignition failure, a five minute purge period must be observed prior to re-establishing the ignition source.

AUTOMATIC PILOT VALVE

The Automatic Pilot Valve provides an automatic safety shutoff for the fryer when the pilot flame is extinguished. When the pilot flame is burning, the valve is held open electromagnetically by the electrical current from a thermopile in the pilot flame. When the pilot flame goes out, generation of current ceases and the valve closes automatically.

HIGH LIMIT CONTROL

American Range Fryers are equipped with a secondary heat control that prevents the oil temperature from rising above 450°F or 232°C. (Because of the accuracy tolerance of the sensor; the oil temperature may reach as high as 475°F or 246°C.) In the event the fryer shuts down due to this condition, the oil must be cooled to below 400°F or 204°C before the pilot burner can be re-ignited. When the oil has cooled, use the "Lighting" procedure on page 6 to place the fryer back in operation. If the problem persists, contact your American Service Representative or the Stoddart Service Department.

COOKING HINTS / USER TIPS

- Smoking oil means that the temperature is too high, or that the oil has broken down.
- Gum in fry pot denotes a need for thorough cleaning (see "Weekly Cleaning").
- Use different oil for oily foods (mackerel, nutmeg, etc), than for foods with water-soluble flavors (potatoes, onions, etc.).
- Taste cool oil for quality. Replace it regularly.
- Poor oil cannot produce good food.

! WARNING

ALL WATER MUST BE REMOVED BEFORE ADDING OIL OR SHORTENING NOT DOING SO CAN RESULT IN SPLATTERING OF HOT OIL

CLEANING

American equipment is constructed with the best quality materials and is designed to provide durable service when properly maintained. To expect the best performance, your equipment must be maintained in good condition and cleaned daily. Naturally, the frequency and extent of cleaning depends on the amount and degree of usage. Following daily and more extensive periodic maintenance procedures will increase the life of your equipment. Climatic conditions (e.g., salt air) may result in the need for more thorough and more frequent cleaning in order to keep equipment performing at optimal levels.

WARNING

If necessary to move the fryer for cleaning, etc, drain oil first to avoid death or serious injury. If disconnection of the restraint is necessary to move the appliance for cleaning, etc, reconnect it when the appliance is moved to its originally installed position.

CAUTION

If disconnected of the restraint is necessary to move the appliance for cleaning, etc, reconnect it when the appliance is moved to its originally installed position, some areas of frypot may be hot.

DAILY CLEANING

1. Turn thermostat knob to "OFF" position.
2. Place hot oil safe container under the drain and drain the fry pot completely.
3. Remove the basket support frame (if applicable) and flush out any sediment remaining in the fry pot with a little hot oil.
4. Wipe off the basket support frame and the inside of the fry pot with a clean cloth.
5. Close drain valve and strain the oil back into the fry pot through several thicknesses of cheesecloth, or filter it out using a filter machine.
6. Replace the basket support frame (if applicable)
7. Add oil or shortening to MIN oil level mark on rear of fry pot.
8. To resume cooking, turn the combination gas valve knob to "ON" position.

WEEKLY CLEANING

1. Follow steps 1 through 4 of the Daily Cleaning procedure. Close drain valve and fill fry pot with a solution of warm water and boil-out compound.
2. Relight the fryer and bring the solution to a gentle boil for at least five minutes.
3. Turn off main burners and let the solution stand until the gum deposits are softened and the carbon spots and burned grease spots can be rubbed off.
4. Scrub the fry pot walls and heat tubes, then drain out fry pot and rinse it with clean water.
5. Refill the fry pot with clean water and boil again.
6. Turn off gas and drain and rinse well until clean.
7. Wipe dry with a clean cloth.
8. Refill as specified in the "Filling the Fry pot" section.

MONTHLY CLEANING

Perform the Weekly Cleaning procedure. Clean around burner and orifices if lint has accumulated. Visually check that burner carry-over ports are unobstructed.

WARNING

ALL WATER MUST BE REMOVED BEFORE ADDING OIL OR SHORTENING. NOT DOING SO CAN RESULT IN SPLATTERING OF HOT OIL.

CLEANING STAINLESS STEEL SURFACES

To remove normal dirt, grease and product residue from stainless steel use ordinary soap and water (with or without detergent) applied with a sponge or cloth. Dry thoroughly with a clean cloth. Never use vinegar or any corrosive cleaner.

STAINLESS STEEL PARTS

Do not use steel wool, abrasive cloths, cleaners or powders to clean Stainless Steel surfaces. All Stainless Steel parts should be wiped regularly with hot soapy water during the day and a Stainless Steel cleaner at end of the day. To remove encrusted materials, soak in hot water to loosen the material. Then use a wood or nylon scraper. Contact factory, representative or local service company to perform maintenance and repairs.

CLEANING STAINLESS STEEL SURFACES (CONTINUED)

To remove grease and food splatter or condensed vapors that have baked on the equipment apply cleanser to a damp cloth or sponge and rub cleanser on the metal in the direction of the polishing lines on the metal. Rubbing cleanser, as gently as possible, in the direction of the polished lines will not mar the finish of the stainless steel. NEVER RUB WITH A CIRCULAR MOTION. Soil and burnt deposits that do not respond to the above procedure can usually be removed by rubbing the surface with SCOTCH-BRITE scouring pads or STAINLESS scouring pads. DO NOT USE ORDINARY STEEL WOOL, as any particles left on the surface will rust and further spoil the appearance of the finish. NEVER USE A WIRE BRUSH, STEEL SCOURING PADS (EXCEPT STAINLESS), SCRAPER, FILE OR OTHER STEEL TOOLS. Surfaces that are marred will collect dirt more rapidly and become more difficult to clean. Marring also increases the possibility of corrosive attack. Refinishing may then be required.

Darkened areas, called "heat tint," sometimes appear on stainless steel surfaces where the area has been subjected to excessive heat. These darkened areas are caused by thickening of the protective surface of the stainless steel and are not harmful. Heat tint can normally be removed by the above cleaning techniques, but tint which does not respond to that procedure calls for a vigorous scouring in the direction of the polish lines, using SCOTCH-BRITE scouring pads or a STAINLESS scouring pad in combination with a powered cleanser. Heat tint action may be lessened by not applying or by reducing, heat to equipment during slack periods.

FOR AUTHORIZED SERVICE TECHNICIAN ONLY**! NOTICE**

Warranty will be void and the manufacturer is relieved of all liability if: (A) Service work is performed by other than a qualified technician OR (B) Other than approved American Range replacement parts are installed.

! WARNING

Adjustments and service work may be performed only by a qualified technician who is experienced in, and knowledgeable with, the operation of commercial gas cooking equipment. However, to assure your confidence, contact your American Service Representative for reliable service, dependable advice or other assistance, and for genuine factory parts..

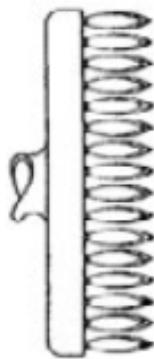
All units are adjusted at the factory. In case of problems in operation at initial installation, check type of gas and manifold pressure and compare with information listed on the serial plate.

A mill voltage circuit diagram is located inside the front door of the fryer.

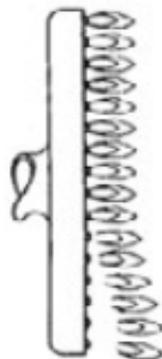
CHECKING AND ADJUSTING MAIN BURNERS

The main burners should burn with a steady blue flame, and the inner cone of the flame from each port should be about 3/4" long.

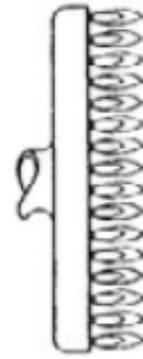
The flame from each main burner should enter each heat tube without touching the front of the fry pot or the sides, top, or bottom of each tube.



Yellow Tips
(Too little air or too much gas)



Blowing or Lifting Flames
(Too much air)



Normal Flame

CHECKING / ADJUSTING / SERVICING MAIN BURNERS

The inlet pressure for NG is 1.3KPa and ULPG is 2.75KPa.

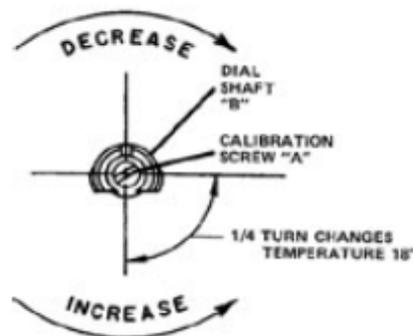
The combination gas valve (includes pressure regulator) is factory set at 4"W.C. (1.0 KPa) for natural gas and 10"W.C. (2.49KPa) for ULPG. To check the manifold pressure, do the following:

1. Turn thermostat "OFF" and combination gas valve knob to the "PILOT" setting.
2. Remove pressure tap plug from burner manifold located directly below the burners in the cabinet.
3. Install a fitting appropriate to connect a manometer.
4. Turn combination gas valve to "ON" position and thermostat to "ON." The burners will ignite. Be certain that sufficient oil is covering the tubes.
5. With burners on, read manometer.
6. If the manometer does not read 4"W.C. (1.0 KPa) for natural gas, or 10"W.C. (2.49KPa) for propane gas, adjust regulator.
7. Remove regulator adjustment screw cap.
8. With small screwdriver rotate adjustment screw "CLOCKWISE" to increase or "COUNTERCLOCKWISE" to decrease pressure. Be sure to adjust with burners "ON."
9. Turn thermostat "OFF" and set combination gas valve knob to "PILOT" position.
10. Remove manometer and replace pressure tap plug.
11. Replace adjustment screw cap.

CHECKING AND ADJUSTING CALIBRATION OF THERMOSTAT

All thermostat controls are carefully calibrated at the factory (i.e., the dial is properly set to control appliance temperatures accurately). Only a qualified appliance service technician should perform this adjustment.

1. To check appliance temperatures, use a thermocouple-type temperature test instrument or reliable thermometer. Place the thermocouple of test instrument or thermometer in the center of the fry pot.
2. Turn the control dial to the temperature setting requiring the greatest accuracy. Allow enough time for temperature to stabilize, or until several temperature readings are identical.
3. Recalibrate if setting and actual temperature differ by more than 10°F (5°C).
4. Remove dial from dial shaft "B." Be careful that dial shaft does not rotate in either direction (which would change the dial setting).
5. Hold dial shaft "B" steady and with a screwdriver turn calibration screw "A" clockwise to decrease the temperature, or counterclockwise to increase the temperature.
6. Replace dial. Let the appliance operate until the temperature has stabilized before a final check is made to determine whether or not the calibration has been corrected.
7. Once correct, seal the calibration screw with glyptol.

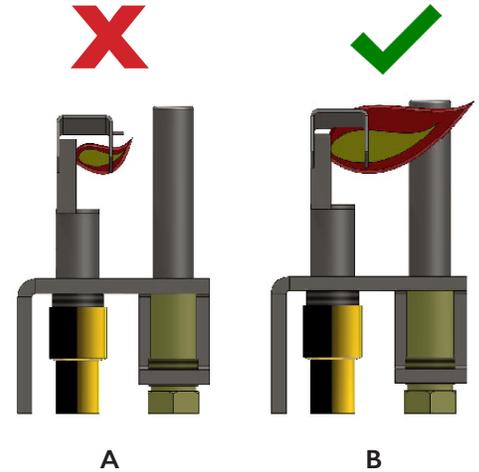
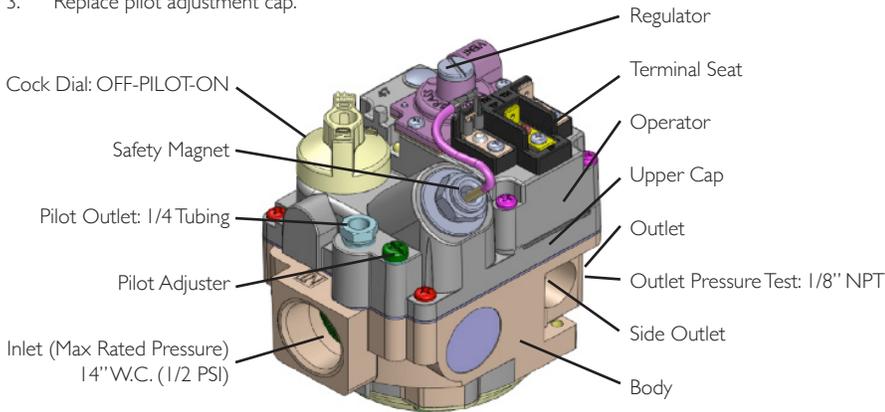


NOTE: Should the unit fail to operate contact the local authorized factory representative.
Stoddart Manufacturing 39 Forest Way Karawatha QLD 4117 +300 307 389,
to perform maintenance and repairs.

CHECKING AND ADJUSTING AUTO SAFETY PILOT

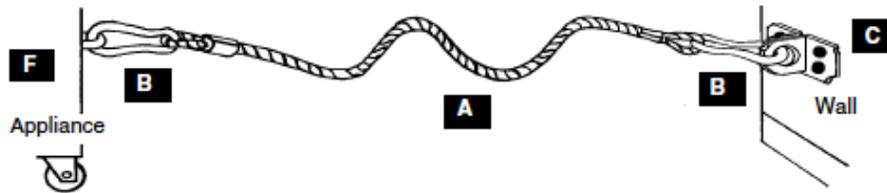
The pilot flame should surround the thermopile for 1/2". It must be larger and sharp enough to cause the thermopile to glow a dull red, or sufficient to hold the safety valve open.

1. Remove pilot adjustment cap.
2. Adjust pilot to provide properly sized flame shown in diagram B. Diagram A shows an improperly adjusted pilot.
3. Replace pilot adjustment cap.



NOTICE

This procedure requires a DC millivolt meter set to scale of 0-1000mV. Using test leads with sharp probes will help in taking the required readings.



A53223 Rev.A

This Restraining Device Must Always Be Connected When The Appliance Is In Service

The restraining device should be disconnected for movement, such as, servicing or cleaning, **ONLY AFTER GAS HAS BEEN SHUT OFF AND THE CONNECTOR HAS BEEN DISCONNECTED!**

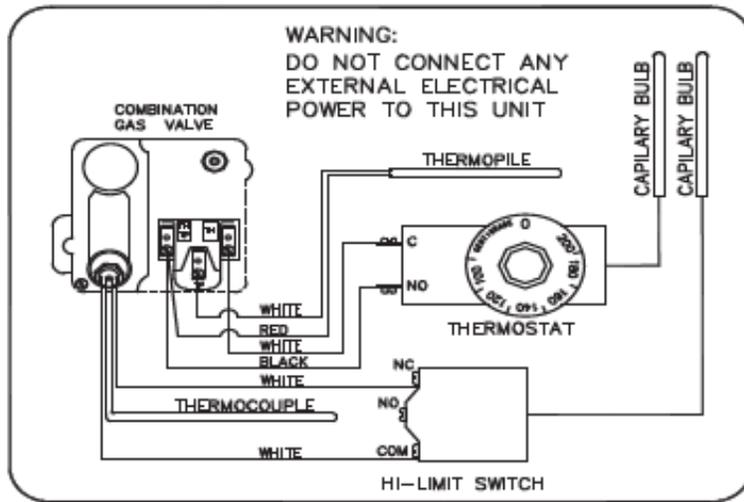
Reconnect restraining cable **BEFORE** reconnecting the gas connector and moving back to its original position.

1. Restraining device should be installed parallel (in line) with the gas appliance connector
2. Attach the staple bracket to a stud in the wall, using the four 1" #10 screws and the plastic anchors, if needed.
3. Locate a structural area (frame) on the rear side of the equipment that is in line with the wall attachment. Drill a small hole 1/4" (per manufacturer's recommendation). Please use caution when drilling hole, so that internal components are not damaged.
4. Thread the hex nut and slide one washer onto the eye-bolt. Slide the eye-bolt through the drilled hole and place a washer and the nylon lock nut onto the eye-bolt on the inside frame of the equipment and tighten securely.
5. Attach one of the spring loaded hooks to the mounted bracket on the wall (Step 2) and the other to the eye bolt (Steps 3 & 4).

NOTE: For adjustable restraining devices, the cable is manufactured to be shorter than the length of the gas connector. The length of the chain shall not exceed 80% of the length of the hose assembly. No warranty, representation or condition of any kind, express or implied (including any warranty of merchantability or of fitness) and none shall be implied by law. Shall not be liable for incidental or consequential damages.

TROUBLESHOOTING GUIDE

PROBLEM	POSSIBLE CAUSE	WHAT TO DO
Burners do not come on	Gas supply to unit off. Combination gas valve is in "OFF" or "PILOT" position. Pilot not ignited, or adjusted. Thermostat not "ON".	
Pilot will not stay ignited	Combination gas valve is in "OFF" position. Pilot gas not adjusted properly. Gas supply to unit off. Bad thermopile. Dirty thermopile connections at combination gas valve or high limit. Clogged orifice. Draft condition. Air in gas line. Improper ventilation system.	
Pilot Produces carbon deposits	Unit connected to wrong gas supply. Pressure to adjusted correctly. Pilot gas not adjusted correctly.	



AMERICAN RANGE

WWW.AMERICANRANGE.COM
 13592 DESMOND ST. PACOIMA, CA 91331
 AUSTRALIAN STANDARD
 AS 4563 COMMERCIAL CATERING GAS EQUIPMENT



MODEL NO.				SERIAL NO.			
EA	NG	ULPG	NG 2.71mm	ULPG 1.51mm	NG 90 MJ/h	ULPG 72 MJ/h	
BURNER	30 MJ/h	24 MJ/h	INJECTOR	INJECTOR	TOTAL	TOTAL	
GAS TYPE	NG	ULPG	MFD kPa	NG	ULPG	INLET kPa.	
				1.0	2.49		
							1.13 kPa 2.75 kPa
CLEARANCES			NON-COMBUSTIBLE		COMBUSTIBLE		
BACK			0"		152mm		
SIDES.			0"		152mm		

TO BE INSTALLED ON A FIRE-PROOF BASE USING 6" ADJUSTABLE LEGS OR CASTERS.
 INTENDED FOR OTHER THAN HOUSEHOLD USE. 78904 Rev. G

Product Type: Commercial Deep Fat Fryer
Brand Name: American Range
Product Type: AAF - Series Fryer
Manufactured By: American Range Corporation
Distributed By: Stoddart
 www.Stoddart.com.au
Certificate No.:

DESCRIPTION

Heavy Duty Commercial Deep Fat Fryer manufactured in Stainless Steel outer panels and incorporating a stainless steel pan in either single or double or triple pan units. Heating of the unit is by means of cast in-shot burners firing into separate combustion tubes. The burners are located behind the access door and positioned by the gas injectors on the gas manifold and held secured by locating bolts. The fryer has a "V" shape base to collect frying particles and is equipped with flame failure and over temperature control. The temperature of the oil is thermostatically controlled. The splashback incorporates the flue system from the in-shot burner tubes. The flue outlet at the top of the splashback deflects the product of combustion products from the rear walls. The outer panels are mounted off a sub frame, NB each unit has a separate inlet and regulator which is incorporated with combination flame failure valves. The unit is supplied with four adjustable legs x 150mm high or casters.

EXTERIOR PANELS: 304 X 1.2 Stainless Steel
SUB FRAME: 1.2 mm Square Base
FRY PAN: 2.0 mm Stainless Steel
REAR PANEL: 1.2 mm Aluminized Steel
BURNER IGNITION: By pilot light mounted between 2 R/H burners x 68mm down from top of burner x 8mm from L/H center burner x 95 in. from front. Refer to drawings for details.
THERMO-COUPLE ASSEMBLY: Alpha brass - TE 7 REF
PILOT: Alpha brass - B13H5-HKF and B13H5-NG
INTERRUPTER LEADS: 1 set-Part No: IL-019

HEATING OF UNIT

Is by means of cast iron ported burners vertically mounted off the gas outlet manifold from the combination gas control with ported burners face at right angles firing into the combustion tube through the body of the fryer tank. Refer to details showing burner mounting over injectors.

Number of Injectors (Orifice Hood)	NAT Gas	x3 Off
	ULPG	x3 Off
	NAT Gas	2.64mm @ 90Mj/h
	ULPG	1.50mm @ 72Mj/h
Primary Aeration:	Through Venturi Inlet	
Aeration Control of Burner:	Burner Fixed	
Burner Support:	Provided off gas manifold located over injectors.	
Vessel Clearance:	Fixed by firing into in-shot burner tubes.	

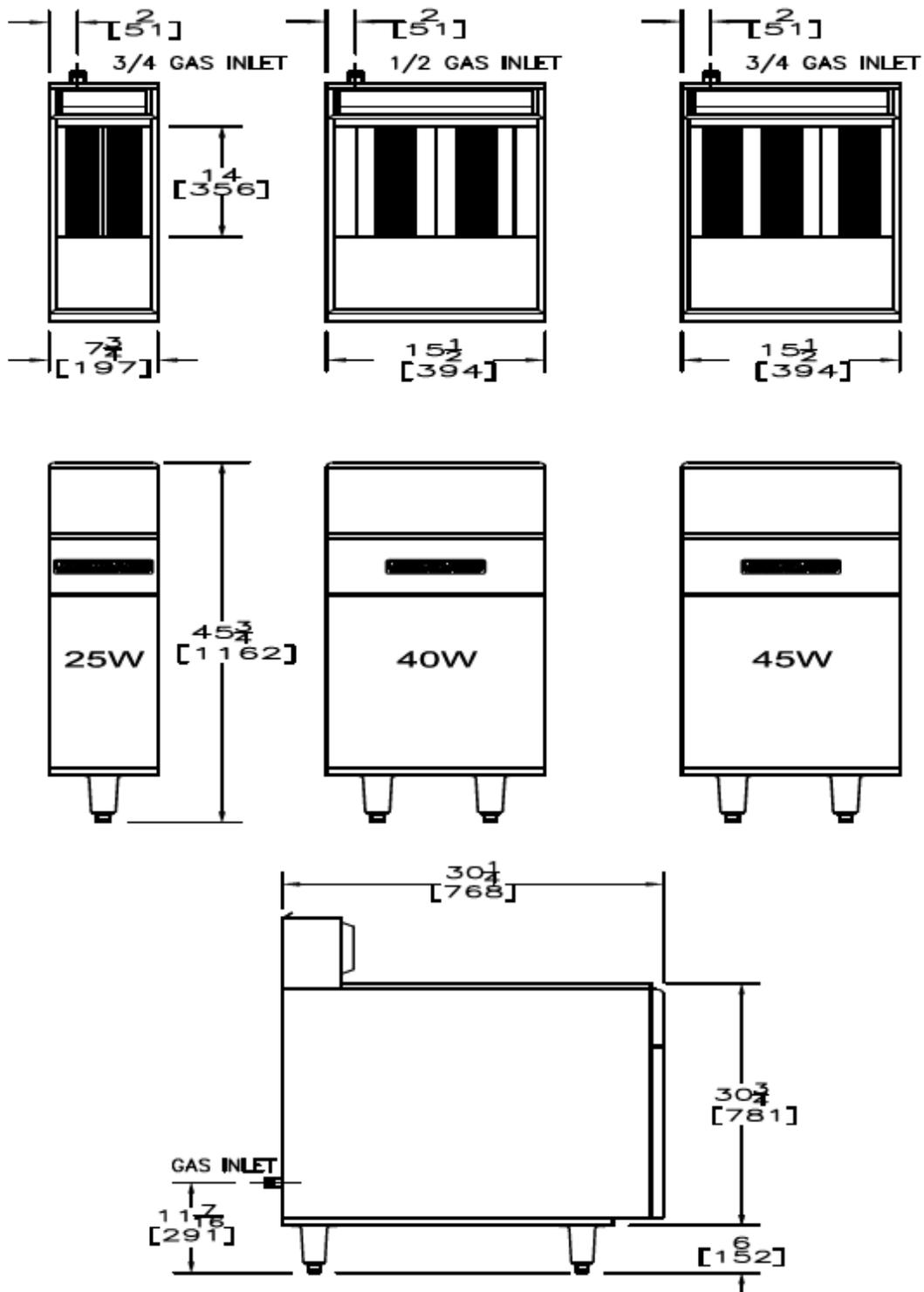
Fluid Outlet:	600H x 318W x 65D From Burner Tubes		
Overall Dimensions:	Height over Splashback	1035	
	Width	394	
	Depth (Front to Back)	770	
	Working Height	930	
	Adjustable Leg Height	150	
Gas Inlet:	19mm 3/4 BSP Connection at rear x 279mm above floor x 70mm in from left hand side.		
Gas Regulators:	Integral part of combination valve 7000 BMVR.		
Combination Control:	Robert Shaw unitrol 7000, BLMVR, with CCQ-001B Magnet Millivolt Actuated Control Flame Failure Incorporated 3/4 B.S.P (20mm)		

APPROVAL NUMBERS

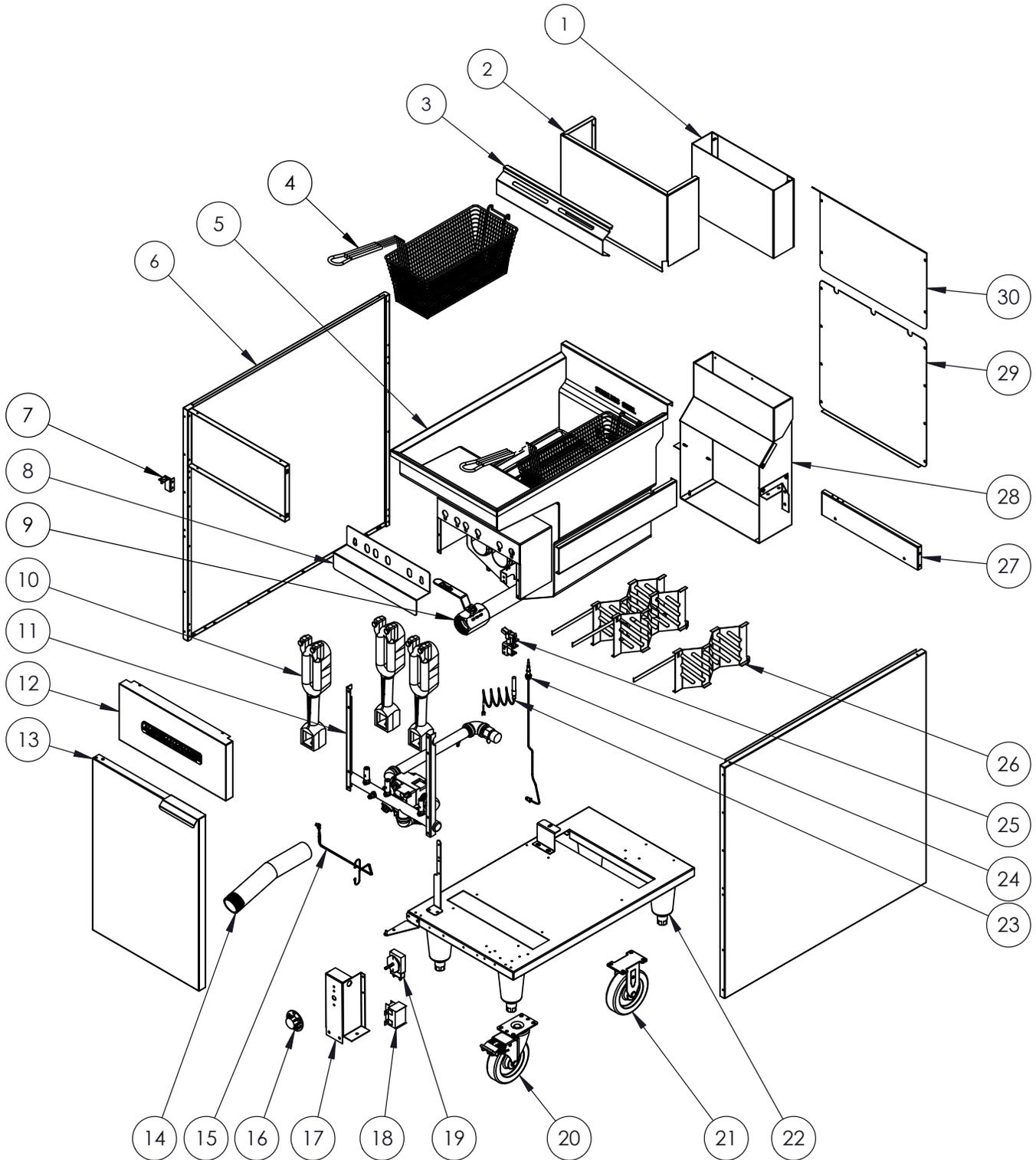
Hight Limit Approval No:	Robert Shaw LCCM 232		
Thermostat Approval No:	Robert Shaw CS 7000 (RX)		
	Located 130 in. from right hand side x 120 in. from front behind door access.		
Oil Drain Valve:	1 1/4" B.S.P (300) from base of unit		
Oil Drain Pipe:	160 from right hand side		
Oil Level Marker:	150 from top edge of pan		
Hi Limit Capillary:	750mm from top edge of pan		
Location:	Center between burner tubes x 125 from left hand of pan		
Floor:	Heat shield located on base of unit		
	670 x 380 1.2 aluminized steel		
Thermostat Capillary:	750mm from top edge of pan		
Location:	Centered between burner tubes x 115mm from left hand side		
Burner Location:	335mm above floor to burner support bar		
Overall Fry Pan:	375 front to back		
Dimensions:	Depth	459	
	Width	495	
	Coolwell 480 from top edge of pan		
Nominal Hourly:	NG	Propane	INJ
Gas Consumption:	105	90	NG 2.64
Test Point Pressure:	.90 kPa	2.60	P 1.50
Flue Size:	Vertical riser into splashback 600H x 295W x 63D		
Splashback:	496W x 245H		
Burner Ignition:	By pilot light mounted between 2 right hand burner x 68mm down from top of burner x 8mm from left hand burner x 95 in from front. Refer to drawings for details.		
Thermo-couple Assembly:	Alpha brass - TE 7 REF		
Pilot:	Alpha brass - BI 3H5-HKF and BI 3H5-NG		
Interrupter Leads:	1 set-Part No: IL-019		
Marking:	Data Plate, Test Point Pressure, Injectors, Gas Type, Serial No., Year of Manufacture, App. No., Branding Rate, Operating Instructions		

AAF - SERIES SPECIFICATIONS

AAF-25W; 40W; 45W



AAF - SERIES ASSEMBLY BREAKDOWN



NO	PART NO.	DESCRIPTION
1	81651	FLUE EXTENSION ASSY
2	A99408	RISER, VESSEL ASSEMBLY
3	5024	BASKET HANGER
4	A33000	BASKET
5	5000	AF-45 VESSEL WELD ASSEMBLY
6	5016	SIDE PANEL
7	A99219	WELD ASSEMBLY, TOP HINGE
8	5054	BAFFLE
9	A80225	BALL VALVE, DRAIN
10	71526	FRYER, BURNER
11	A15600	GAS MANIFOLD ASSEMBLY
12	5034	FRONT PANEL
13	71513	DOOR ASSEMBLY
14	A23054	DRAIN PIPE EXTENSION, 1-1/2 NPT
15	A13110	CIRCUIT INTERRUPTOR
16	A32048	KNOB, TC THERMOSTAT
17	82151	BRACKET, T-STAT & HI-LIMIT HOLDER CE
18	A10007	HI-LIMIT THERMOSTAT
19	A50400	RX THERMOSTAT
20	A35038	CASTER W/ BRAKE
21	A35037	CASTER W/O BRAKE
22	A35001	LEG
23	A11102	THERMOPILE, POWER GENERATOR
24	A11126	THERMOCOUPLE ASSEMBLY
25	A11139	PILOT ASSEMBLY
26	5012	DIFFUSER PANEL
27	81645	BOTTOM BACK PANEL
28	81648	FLUE ASSEMBLY
29	81638	COVER, BACK, 16"
30	81637	COVER, BACK EXTENSION



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