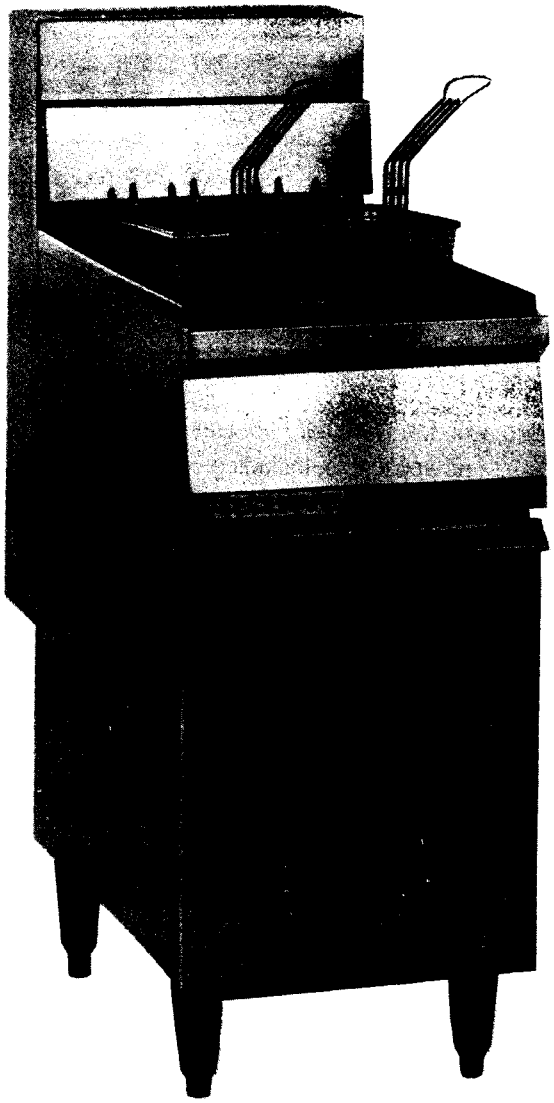
COMMERCIAL HEAVY DUTY
GAS FRYER



MODEL NOs.

FMS-W/STAINLESS STEEL TANK
FMP-W/MILD STEEL TANK

FMP 403HP	FMP 40	FMP 65	FMP 40HP	FMP 65HP
FMS 403HP	FMS 40	FMS 65	FMS 40HP	FMS 65HP

CONTENTS

STANDARD FEATURES:

- Quality construction
- Heavy duty 18 gauge Stainless Steel Unibody Construction for long life.
- Choice of 16 gauge Stainless or 14 gauge Mild Steel Tank Heliarc Welded for leakproof operation.
- 16 gauge Stainless Steel Heat Tube exchangers for maximum heat transfer.
- Heavy duty cast iron burners.
- 1¼" ball type drain valve slanted for fast draining of fats.
- Designed for maximum accessibility and service.
- Large foaming area.
- Automatic temperature control.
- Precision Thermostat for saturation free frying.
- Super fast heat up and recovery seals and cooks food to perfection.
- Design certified - CSA Listed
- NSF Listed
- MEA Listed

FOR YOUR SAFETY
DO NOT STORE OR USE GASOLINE OR OTHER FLAMMABLE VAPORS AND LIQUIDS IN THE VICINITY OF THIS OR ANY OTHER APPLIANCE.

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.

CECILWARE®

CECILWARE CORPORATION
43-05 20th Avenue, Long Island City, NY 11105 • 718-932-1414

N064A

FOR YOUR SAFETY
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SAFETY PRECAUTIONS

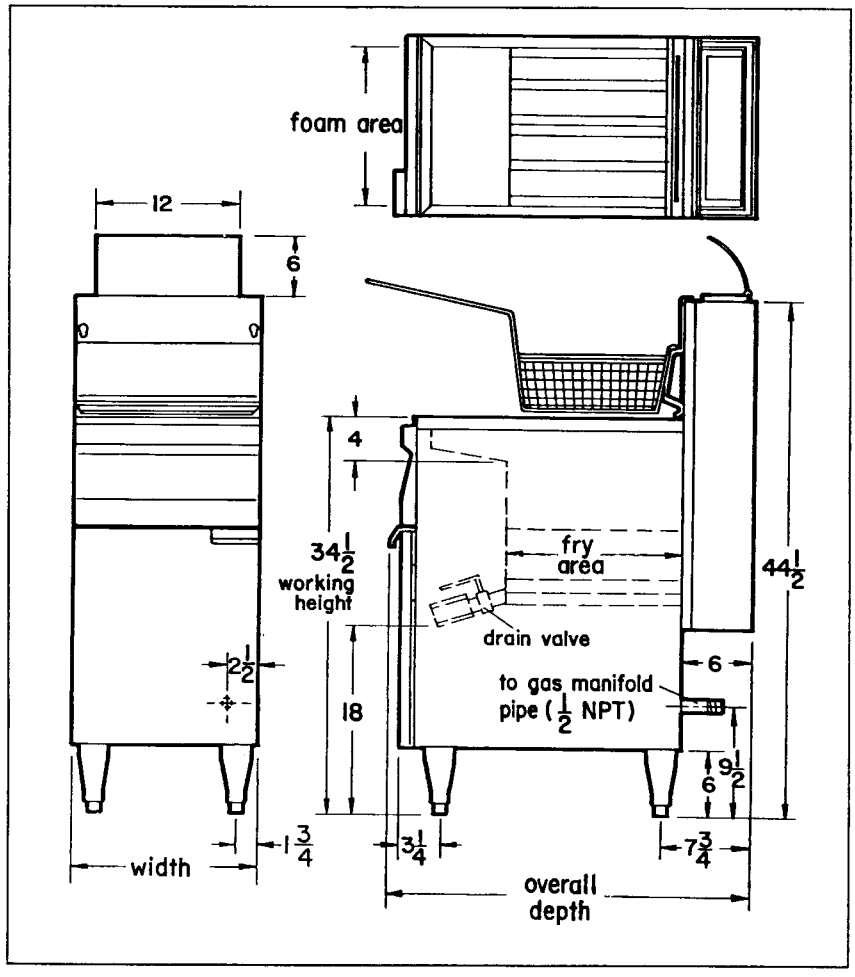
FOR YOUR SAFETY, THE FOLLOWING SAFETY PRECAUTIONS SHOULD BE FOLLOWED AND ENFORCED.

1. Instructions must be posted in a prominent location and all safety precautions taken in the event the user smells gas. Obtain this information from your local gas supplier.

   IF YOU SMELL GAS:

   1, OPEN WINDOWS
   2. DON'T TOUCH ELECTRICAL SWITCHES
   3. EXTINGUISH ANY OPEN FLAMES
   4. IMMEDIATELY CALL YOUR GAS SUPPLIER

2. LIGHTING - Follow the instructions on page 6 and on the label attached to inside of fryer door.
3. Do not place anything over the flue opening.
4. Do not place combustibles or non-combustible materials in the vicinity of the fryer as this could cause fires or obstruct air to the main burners.
5. This installation must conform with local codes, or in the absence of local codes, with the *National Fuel Gas Code,* ANSI Z223.1/NFPA 54, or the *Natural Gas and Propane Installation Code,* CSA B149.1, as applicable, including:
   a. The appliance and its individual shutoff valve must be disconnected from the gas supply piping system during any pressure testing of that system at test pressures in excess of ½ psi (3.5 kPa).
   b. The appliance must be isolated from the gas supply piping system by closing its individual manual shutoff valve during any pressure testing of the gas supply piping system at test pressures equal to or less than ½ psi (3.5 kPa).
6. Provide adequate air supply and ventilation.
7. Provide adequate clearance for air openings into the combustion chamber.
8. Provide clearance for servicing and proper operation. Minimum clearance from combustible construction: 6" from back and 6" from side.
9. Fryer must be disconnected from gas supply during any pressure testing of pipelines in excess of ½ psig, and isolated (by turning off manual gas shut-off valve) during any testing equal to or less than ½ psig.
10. Retain this manual for future reference.



GENERAL PROPORTIONS (FM 40 SHOWN)

FRYER SPECIFICATIONS

GENERAL SPECIFICATIONS

PLAIN STEEL TANK STAINLESS STEEL	FMP 403 HP FMS 403 HP	FMP 40 FMS 40	FMP 65 FMS 65	FMP 40 HP FMS 40 HP	FMP 65 HP FMS 65 HP
Width	15 1/2"	15 1/2"	20"	15 1/2"	20"
Overall Depth	30 7/8"	30 7/8"	36 7/8"	30 7/8"	37 7/8"
Working Height	34 1/2"	34 1/2"	34 1/2"	34 1/2"	34 1/2"
Overall Height	46 3/4"	46 3/4"	46 3/4"	46 3/4"	46 3/4"
Fat Capacity (Min.)	49 lbs.	43 lbs.	79 lbs.	56 lbs.	95 lbs.
Foam Area	13 3/4 x 22"	13 3/4 x 22"	18 1/4 x 28"	13 3/4 x 22"	18 1/4 x 28"
Fry Area	13 3/4 x 15"	13 3/4 x 15"	18 1/4 x 19"	13 3/4 x 15"	18 1/4 x 19"
Basket Size	12 1/8 x 6 1/2 x 5"	12 1/8 x 6 1/2 x 5"	17 x 8 1/2 x 5 3/4"	12 1/8 x 6 1/2 x 5"	17 x 8 1/2 x 5 3/4"
Shipping Weight	145 lbs.	155 lbs.	205 lbs.	165 lbs.	215 lbs.
Shipping Cube	14 cu. ft.	14 cu. ft.	21 cu. ft.	14 cu. ft.	21 cu. ft.
Gas Connection	1/2" IPS	1/2" IPS	1/2" IPS	1/2" IPS	1/2" IPS

GAS SPECIFICATIONS

BTU/HR. INPUT	110,000	115,000	135,000	135,000	160,000
NATURAL GAS	4.0" WC	3.5" WC	3.5" WC	3.5" WC	3.5" WC
PROPANE (LP) GAS	10" WC	10" WC	10" WC	10" WC	10" WC

This fryer is intended for other than household use. Design certified for use on combustible floor. Clearance for combustible construction 6 inches from side, 6 inches from back.

SECTION A - INSTALLATION AND OPERATING INSTRUCTIONS

A1 - **Unpacking** - With the container upright cut the plastic straps around shipping container and lift off top, exposing Fryer. Check Fryer for any visible damage due to exceptionally rough handling during shipping. Report damage to the delivering Freight Carrier within 15 days of delivery.

A2 - **Accessories shipped in the vessel include:**

1 - Basket Hanger
2 - Baskets
1 - Drain Pipe Extension
4 - 6 inch Adjustable Legs

Accessories available as optional:

1 - Tank Cover
1 - Large Basket
4 - Swivel Casters (2w/Locks)
1 - Quick Disconnect Connector 48" w/restraint

A3 - **Mounting of Legs or Casters** - Carefully tip Fryer on its back and screw legs or (optional) casters into the threaded base of Fryer. When installing casters make sure the swivel lock casters are mounted towards the front of Fryers. A high strength Restrainer and Quick disconnect Gas Connector must be installed when casters are used. Avoid putting any strain on rear legs or casters when tipping Fryer back to an upright position.

A4 - **Pre-Installation Instructions** - The installation of your Fryer must be made by a licensed plumber and the installation must conform with State and Local Codes, with the National Fuel Gas Code, ANSI Z223.1 • NFPA54, and the Natural Gas and Propane Installation Code, CSA-B149.1, as applicable.

A5 - **Air Supply and Ventilation** - Adequate ventilation and air supply must be provided in order for the Fryer to operate properly and efficiently. The area in front of and above the Fryer must be clear to avoid any obstruction of flow of combustion and ventilation air. **Do not**, under any circumstances, connect the Fryer flue directly to a building exhaust system or place the flue outlet directly into the plenum of the exhaust hood as it will adversely affect the gas combustion of the Fryer.

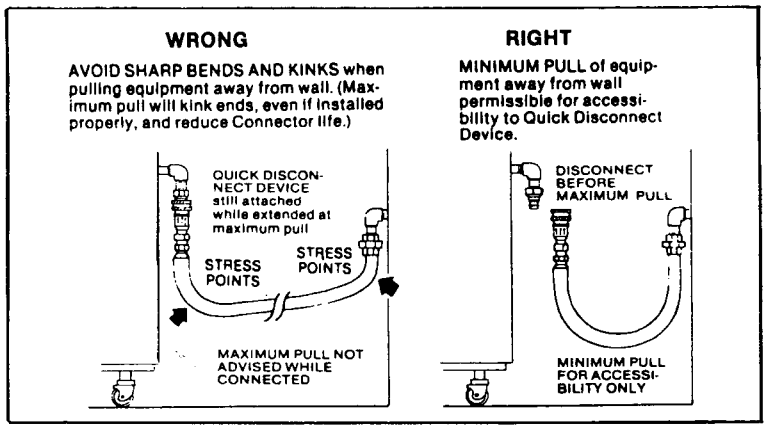
The vent system should be of such design as to allow easy access for cleaning and degreasing on a regular basis in order to prevent fires. An automatic fire extinguishing system should be an integral part of the vent design. Since the temperature of the flue gases emanating from Fryer flue can reach 1200° F, temperature sensing devices of the automatic fire extinguishing system must be sized accordingly and located so as to avoid premature turn-on. The minimum vertical distance from the top of Fryer flue to vent system filters should be **18** inches or more.

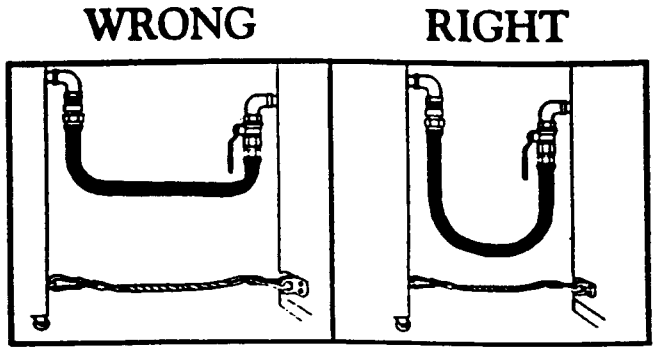
A6 - **Clearances** - Your Fryer is design certified for use on combustible floors. The minimum clearances for combustible and non-combustible construction are as follows: 6 inches from SIDE and 6 inches from BACK. Fryer must be installed with 6 inch high legs or casters (optional). At least 16 inches clearance must be provided between the frying surface of the Fryer and the surface flames from any adjacent cooking equipment.

A7 - **Gas Connection** - Before connecting Fryer to gas line, check the rating label on inside of door panel to make sure that the gas type called for on label coincides with the type of gas available on site. A ½ inch NPT gas pipe connection is provided at the rear of Fryer. An accessible manual shut-off valve must be installed in the gas supply line ahead of the fryer for future service. The size of the supply pipe must be sized to accommodate all the gas fired equipment that may be connected to the gas supply. Check with your local Gas Company as to proper pipesize. Only pipe sealant resistant to action of L.P. gas should be used on pipe joints. Before attempting to light fryer check joints for gas tightness using a soap and water solution. Do not use an open flame.

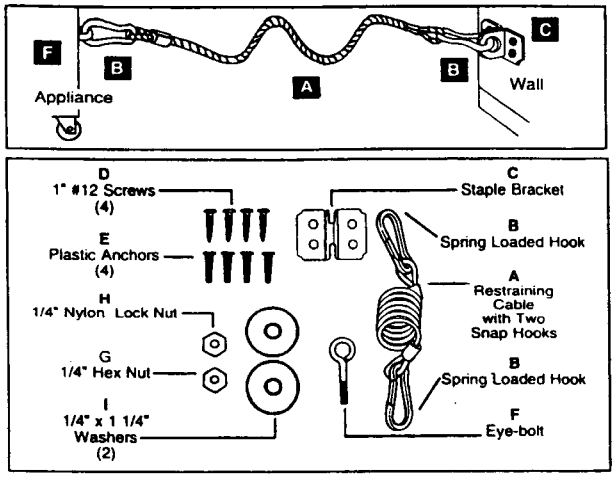
A8 - **Flexible Gas Connectors and Restraints** (See illustration 1) - For Fryers equipped with casters, installation shall be made with a Connector that complies with the Standard for - Connectors for movable Gas Appliances ANSI Z21.69 • CSA6.16 and a Quick-Disconnect Device complying with Standard for Quick-disconnect Devices for use with Gas Fuel ANSI Z21.41 • CSA 6.9. Adequate means shall be provided to limit the movement of Fryer to prevent undue strain on the Connector or Quick-disconnect Device. A high strength Restrainer and proper size Quick-disconnect Gas Connector conforming to above ANSI and/or CAN/CGA standards should be ordered from Cecilware in conjunction with our NSF approved casters. If disconnection of the Restraint is necessary for servicing of Fryer, the Restraint must be reconnected after appliance has been returned to its originally installed position.

ILLUSTRATION 1
Installation of Quick Disconnect and High Strength Restrainer.





Set the length of the restraining device so that the connector is not kinked when the restraining device is fully extended.



1. Restraining Device should be installed parallel (in line) with the gas appliance connector.
2. Attach the staple bracket (C) to a stud in the wall, using the four 1" #12 screws (D) and the plastic anchors (E), 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 manufacturers' recommendation). Please use caution when drilling hole, so that internal components are not damaged.
4. Slide the hex nut (G) and a washer (I) onto the eye-bolt (F). Slide the eye-bolt through the opening and place a washer (I) and the nylon lock nut (H) onto the eye-bolt on the inside frame of the equipment and tighten down.
5. Attach one of the spring-loaded hooks (B) to the mounted bracket on the wall (Step 2) and the other to the eye-bolt (Steps 3 and 4).

Note: For adjustable restraining devices, the cable is manufactured to be shorter than the length of the gas connector.

Instructions for an appliance equipped with casters:

(1) the installation shall be made with a connector that complies with the Standard for Connectors for *Movable Gas Appliances, ANSI Z21.69 • CSA 6.16,* and a quick-disconnect device that complies with the Standard for *Quick-Disconnect Devices for Use with Gas Fuel, ANSI Z21.41 • CSA 6.9*

(2) adequate means must be provided to limit the movement of the appliance without depending on the connector and the quick-disconnect device or its associated piping to limit the appliance movement and

(3) the location(s) where the restraining means may be attached to the appliance shall be specified.

USER INSTRUCTIONS

IMPORTANT - DO NOT ATTEMPT TO LIGHT OR OPERATE FRYER WITHOUT THE PROPER LEVEL OF FRYING FAT (OR WATER) IN TANK, AS SERIOUS DAMAGE WILL RESULT.

SECTION B - START UP PROCEDURE

B1 - **Getting Ready to Use Fryer** - make sure that all the steps of Section A are completed. Verify that gas is available up to Fryer.

B2 - **Filling and Draining of Fryer Tank** - Close Drain Valve (red handle in horizontal position) and fill initially with water to the oil level line (hot or cold water can be used). When draining tank allow hot content to cool to safe handling temperature.

B3 - **Start-up Lighting and Operating Instructions:** (See Illustration 2)

1. Turn red Thermostat Knob D counter-clockwise to its lowest or off position.
2. Partially depress and turn Control Gas Cock Dial **A** to "OFF" position.
3. Wait five (5) minutes to allow gas which may have accumulated in the main burner compartment to escape.
4. Turn Gas Cock Dial **A** to "PILOT" position.
5. Depress Gas Cock Dial **A** and light pilot **C**. Hold in depressed position for approximately ½ min. or until pilot remains lit when dial is released.

NOTE: Sufficient time must be allowed for a proper size pilot flame to heat the pilot thermocouple which holds the safety magnet in a locked-up position. Also, time must be allowed for air to escape from the lines during first operation.

6. Release Dial and turn to full "ON".

NOTE: Steps 7 - 13 help to check burner operation, initial thermostat calibration and clean the vessel.

7. To operate main burners rotate Red Thermostat Knob clockwise to 225° F. or just above the boiling point of water.

IMPORTANT: DO NOT TURN ON MAIN BURNERS UNLESS FILLING INSTRUCTIONS WERE COMPLETED. NEVER OPERATE FRYER WITHOUT THE PROPER LEVEL OF LIQUID (OIL OR WATER) IN VESSEL OR SERIOUS DAMAGE WILL RESULT AND CONSEQUENTLY WILL VOID THE WARRANTY.

8. When water comes to a boil turn the Red Thermostat Knob back to 200° F. The burners should turn off.
9. If pilot becomes extinguished, repeat above procedure.
10. For stand-by periods, turn Gas Cock Dial **A** to "PILOT" position.
11. To shut Fryer down, partially depress and turn Gas Cock Dial **A** to "OFF" position and turn Thermostat to its lowest or off position.
12. Drain the vessel by means of the Drain Valve and Extension Pipe provided. Use caution when draining hot vessel.
13. Remove Extension Pipe. Wipe away any remaining water from vessel and drain. Close Drain Valve and proceed to "Normal Daily Operation". If the latter is not convenient at this time, apply a protective coating of salt-free shortening to vessel surfaces. (Applies for Steel Tanks only).

SECTION C - NORMAL DAILY OPERATION

Follow this procedure after Fryer has already been started up for the first time or after Fryer has been shut down for maintenance.

C1 - **Filling the Vessel for Frying:** Close Drain Valve and fill to proper level (Oil level) with frying fat. If solid shortening is used, be certain shortening is pre-melted; If not, shortening must be packed tightly around the Heat Transfer Tubes before any attempts are made to turn on Fryer. Never attempt to melt a solid block of shortening by setting it on top of the Heat Tubes. Loosely packed solid shortening will create air voids around Heat Transfer Tubes of Fryer. When fired up, tubes will become red hot and in turn will cause shortening to scorch and burn creating a possible fire hazard. The safest way to melt solid shortening gradually is by turning burners "ON" for 5 seconds, then quickly "OFF" for 15 seconds. This procedure to be repeated until the tubes are covered with melted shortening. If any smoke is noticed during this melt cycle procedure, shorten the burner "ON CYCLE". Replace Crumb Screen over tubes when melted shortening has reached the "OIL LEVEL" line.

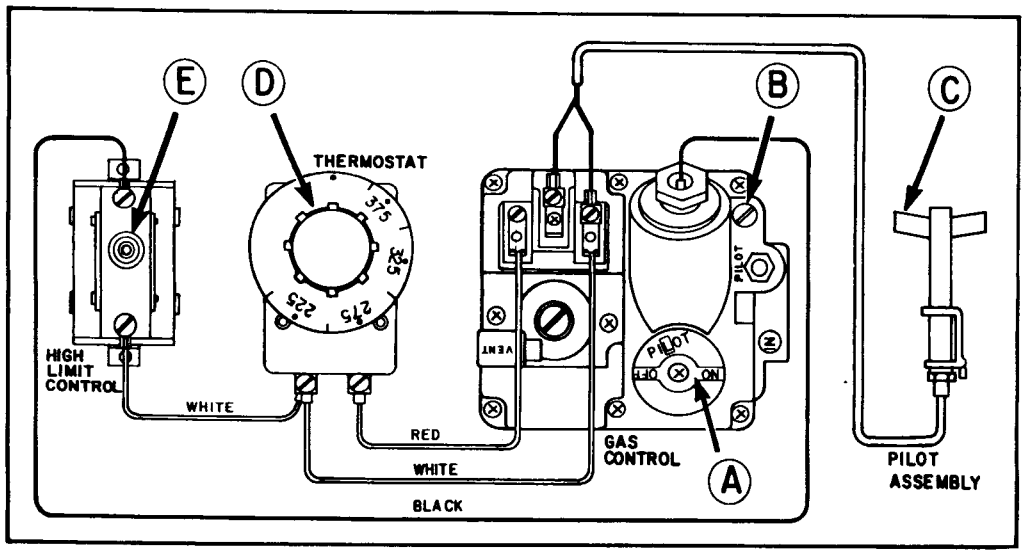
C2 - **Lighting Instructions:** Follow the instructions on data label attached to inside Door Panel or as outlined in Section B3 of this manual.

C3 - **Fryer Operations:** Set the Thermostat Knob to desired frying temperature and allow shortening to pre-heat (75°F to 350°F in 7 minutes). The Burners are thermostatically controlled and will cycle on and off to maintain correct frying temperature. The "Safety Pilot" will remain lit until the gas is shut off.

C4 - **Special Hi-Limit Safety Control:** Your fryer is equipped with an over-temperature or Hi-Limit Control which will trip and automatically shut down the Burners should operating temperatures exceed 460°F (due to operating thermostat out of calibration or low oil level in tank). To Re-set Hi-Limit Control wait 30 minutes to allow fat to cool down or add additional cool oil or shortening for faster response; then push red pin **E** on Hi-Limit Control and relight pilot following steps (1) thru (8) in Section B3.

C5 - **Shut-down and Draining:** For temporary shut down turn thermostat to lowest or off position; then turn Gas Cock Dial to "PILOT" position. To shut fryer down completely, partially depress and turn Gas Cock Dial to "OFF" position. When draining tank, allow shortening to cool to a safe handling temperature.

ILL.2 GAS CONTROL WITH DX THERMOSTAT & B MVR VALVE



SECTION D - MAINTENANCE

D1 - **Daily:**

1) Shut down Fryer as per Section C5. Drain completely (using Drain Pipe Extension) into clean suitable container or filter pump.

2) Detach Basket Hanger Bracket, remove screen and wipe clean with cloth.

3) Flush out any remaining sediment in tank using some hot oil. Wipe off and clean fry kettle.

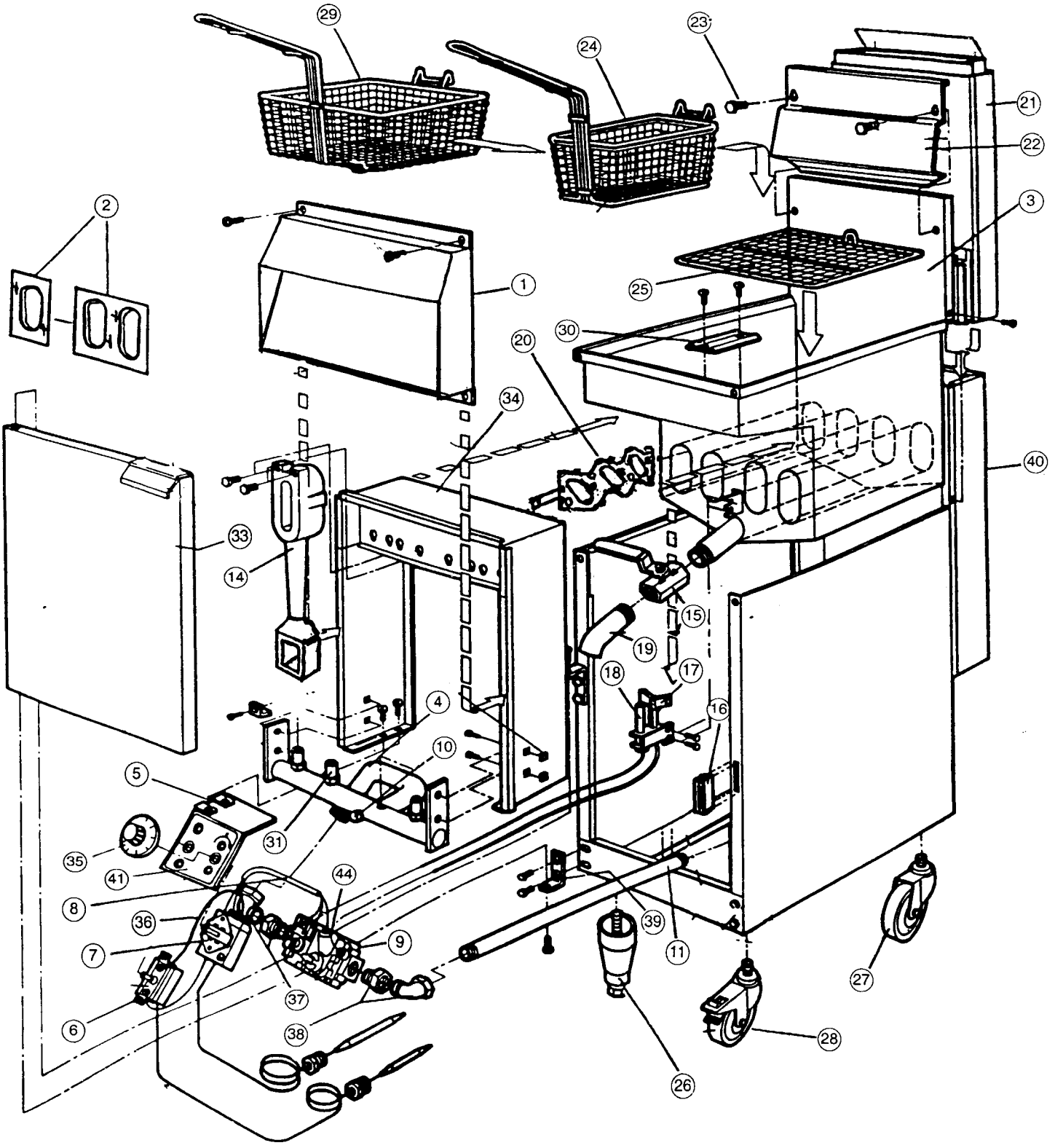
4) Close Drain Valve and strain shortening back into fryer using several layers of cheese cloth or filtering thru an oil pump equipped with a Micro-Flo filtering system. Replace Crumb Screen, Basket Hanger Bracket, detach Drain Nipple and Fryer is ready for next operation.

D2 - **Weekly:** Repeat daily maintenance procedure up to point (4). Close Drain valve and clean vessel thoroughly with a deep fat fryer cleaning compound and hot water. Drain and rinse thoroughly. Wipe dry with a clean cloth. Clean exterior stainless steel surfaces of body with stainless steel cleaner. Do not use abrasive cleaners or steel wool.

D3 - **Periodic checks:** Temperature of frying compound. Set thermostat knob to 350°F. Place a fryer thermometer in fat (1½ inches) and observe reading when burner goes out. Compare reading. If the temperatures do not coincide within 5°F, have qualified service person calibrate thermostat. See Adjustment Procedure, Section E below. Clean unit and dirt off air shutters and main burners. After long period burners and pilot should be cleaned for proper ignition and burner flame efficiency.

D4 - **Outside Service:** Should you require help contact the factory, your factory representative, or your local service company.

Illustration 3

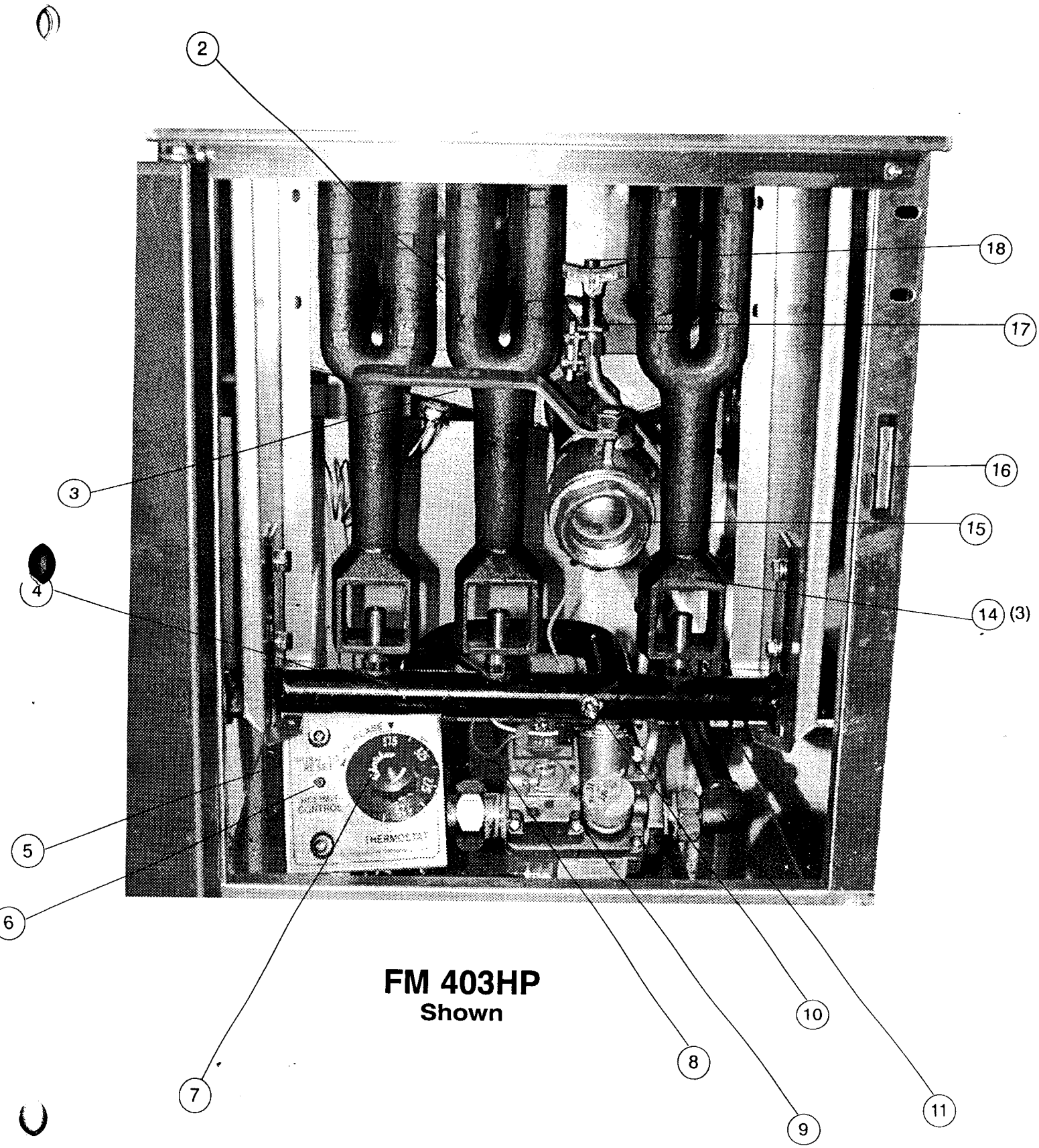


Deep Fat Fryer

Replacement Parts List

ITEM	DESCRIPTION	FMS 403HP FMP 403HP	FMS 40 FMP 40	FMS 65 FMP 65	FMS 40HP FMP 40HP	FMS 65HP FMP 65HP
1	FRONT FASCIA ASSEMBLY	U558Q	U558Q	U621Q	U558Q	U621Q
2	FLAME SHIELD (2 TUBES)	T997A	T776A	T776A	T997A	T997A
	FLAME SHIELD (1 TUBE)	T998A	—	T777A	—	T998A
* 3	FRY TANK	TA44A	T475A	T641A	TA53A	TA55A
4	BURNER MANIFOLD	F010A	F009A	F011A	F009A	F011A
5	THERMOSTAT BRACKET	U572A	U572A	U572A	U572A	U572A
6	HI-LIMIT CONTROL	L346A	L346A	L346A	L346A	L346A
7	THERMOSTAT	L345A	L345A	L345A	L345A	L345A
8	THERMOSTAT HARNESS	C946Q	C946Q	C946Q	C946Q	C946Q
9	GAS CONTROL VALVE (NAT)	L347A	L347A	L347A	L347A	L347A
	GAS CONTROL VALVE (LP)	L348A	L348A	L348A	L348A	L348A
10	BRASS PLUG	K044A	K044A	K044A	K044A	K044A
11	1/2" GAS INLET PIPE	J063A	J063A	J065A	J063A	J065A
12	AIR SHUTTER CLAMP	U574A	U574A	U574A	U574A	U574A
13	AIR BURNER SHUTTER	F167A	F167A	F167A	F167A	F167A
14	GAS BURNER	G363A	G224A	G224A	G363A	G363A
15	DRAIN VALVE	D048A	D048A	D048A	D048A	D048A
16	MAGNETIC CATCH	U008A	U008A	U008A	U008A	U008A
17	PILOT ASSEMBLY (NAT)	F179Q	F179Q	F179Q	F179Q	F179Q
	PILOT ASSEMBLY (LP)	F180Q	F180Q	F180Q	F180Q	F180Q
18	THERMOPILE TP-75	F178A	F178A	F178A	F178A	F178A
19	DRAIN PIPE	J062A	J062A	J062A	J062A	J062A
20	BAFFLE	UB32Q	UB34Q	UB64Q	UB32Q	UB76Q
21	FLUE BOX ASSEMBLY	T994Q	T894Q	T655Q	T994Q	TA41Q
22	BASKET SUPPORT BRACKET	T536A	T536A	T644A	T536A	T644A
23	BASKET HANGER FASTENER	P281A	P281A	P281A	P281A	P281A
24	FRY BASKET	V174A	V174A	V180A	V174A	V180A
25	CRUMB SCREEN	V172A	V172A	V179A	V172A	V179A
26	LEGS	M219A	M219A	M219A	M219A	M219A
27	SWIVEL CASTER (OPTIONAL)	M014A	M014A	M014A	M014A	M014A
28	SWIVEL CASTER W/LOCK	M015A	M015A	M015A	M015A	M015A
29	FRY BASKET, LARGE (OPT.)	V175A	V175A	—	V175A	—
30	BULB CLAMP	U567A	U567A	U567A	U567A	U567A
31	GAS ORIFICE, NAT (BRASS)	F256A	F166A	F166A	F265A	F263A
	GAS ORIFICE, LP (BRASS)	F257A	F177A	F225A	F266A	F264A
32	FRY TANK COVER	U589Q	U589Q	U641Q	U589Q	U641Q
33	FRONT DOOR ASSEMBLY	T534Q	T534Q	T657Q	T534Q	T657Q
34	BURNER SUPPORT ASSEMBLY	T632Q	T541Q	T646Q	TA52Q	T645Q
35	THERMOSTAT KNOB	M099A	M099A	M099A	M099A	M099A
36	5" HI-LIMIT WIRE ASSEMBLY	C945Q	C945Q	C945Q	C945Q	C945Q
37	3/4" F x 3/4" UNION ELBOW	K158A	K158A	K158A	K158A	K158A
38	1/2" F x 1/2" UNION ELBOW	K204A	K204A	K204A	K204A	K204A
39	DOOR HINGE	U579A	U579A	U579A	U579A	U579A
40	CASEBACK	T537A	T537A	T647A	T537A	TA49A
41	THERMOSTAT LABEL	NK52A	NK52A	NK52A	NK52A	NK52A
42	BANKING STRIP	U631A	U631A	U633A	U631A	U633A
43	GAS CONNECT KIT 48" WITH RESTRAINING DEVICE	UB75A	UB75A	UB75A	UB75A	UB75A

*FMP 403HP (CRS TANK) USE P/N TA43A
*FMP 40 USE P/N T531A
*FMP 65 USE P/N T638A
*FMP 40HP USE P/N TA52A
*FMP 65HP USE P/N TA54A



FM 403HP
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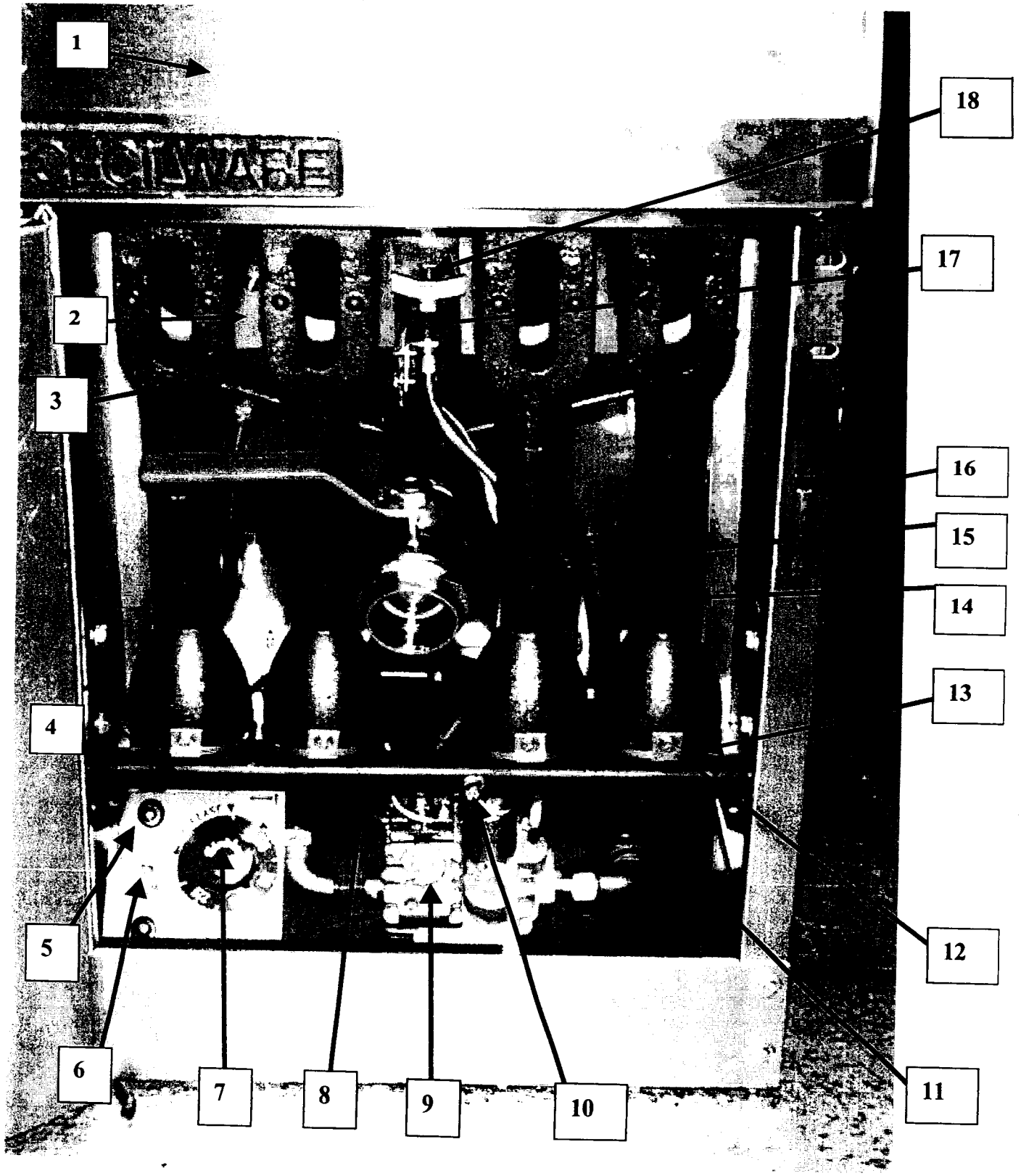

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FM 40
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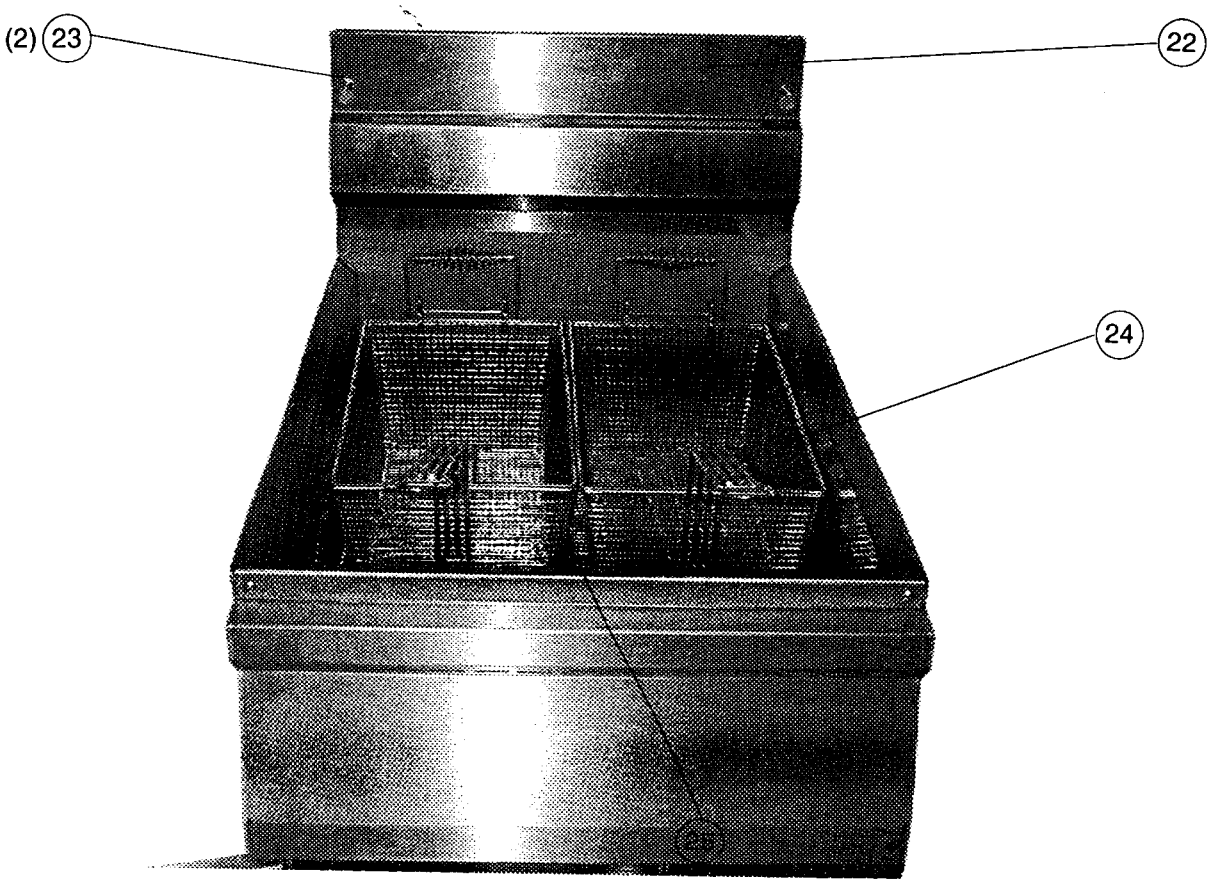
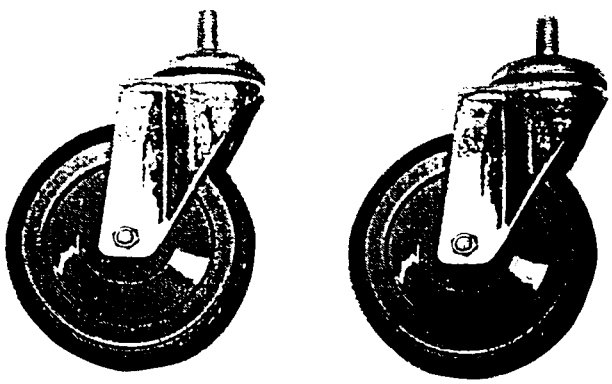
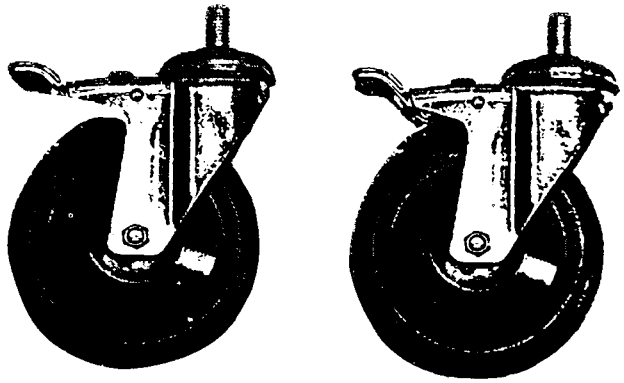

(2) 23
22
24
25


19 DRAIN PIPE
20 FM 403HP, FM 40HP,
FM 65 HP, BURNER BAFFLES
20 FM 40, FM 65
BURNER BAFFLES

ACCESSORIES FOR GAS FRYER

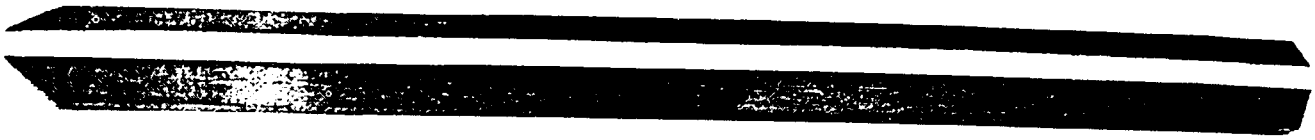


(27) SWIVEL CASTER (2)



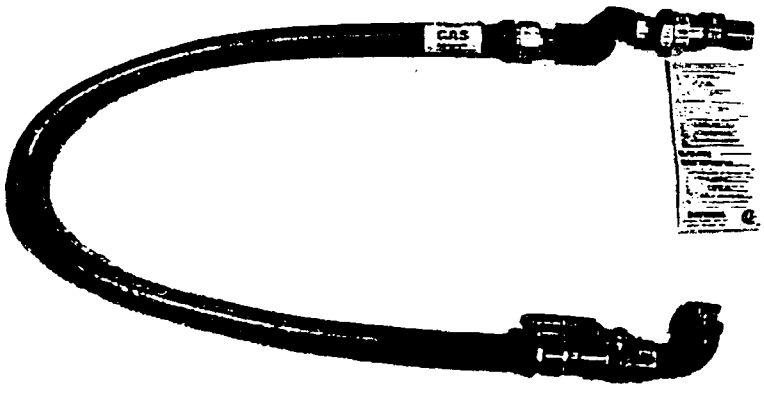
(28) SWIVEL CASTER W/LOCK (2)

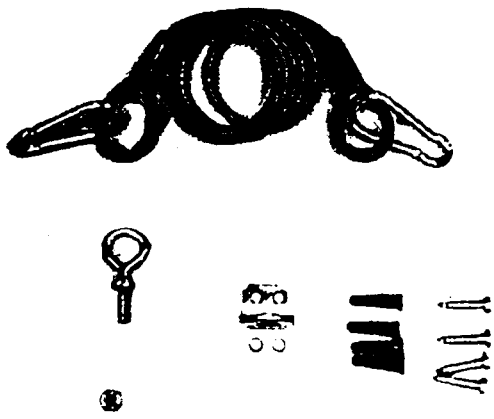
(42) BANKING STRIP 28.75" LONG



BANKING STRIP 22.81" LONG

(43) 48" GAS CONNECTOR KIT
W/RESTRAINING DEVICE





SECTION E - ADJUSTMENTS "FOR QUALIFIED SERVICE PERSONNEL ONLY"

NOTE: Only for qualified service personnel specializing in Hotel and Restaurant Cooking Equipment. Factory approval required prior to any warranty repairs.

E1 - **Safety Pilot:** Remove Pilot Adjustment Cap (B) and turn Adjustment Screw to provide properly sized flame (3/4 inch long). Replace Cap and leak test with Soap solution. Tighten cap if necessary.

E2 - **Burners:** Burners are factory set for maximum performance. Should further adjustment be required loosen Slotted Hex Screw on side of Venturi and rotate air shutter until flame with soft blue inner cone is obtained. Remove any lint accumulated if necessary.

E3 - **Thermostat Calibration:** Turn thermostat knob to 375°F and remove knob without moving thermostat shaft. Place narrow bladed screw driver (1/8") into hollow thermostat shaft and engage center adjustment screw. When thermometer reading approaches 375°F slowly turn the adjustment screw clockwise until burners go out. Turning the screw counter-clockwise will increase the temperature.

NOTE: One quarter turn will change temperature setting approximately 25°F. Replace knob and check temperature thru 3 cycles. Repeat adjustments if necessary until knob setting is correct within a few degrees.

TROUBLE SHOOTING GUIDE - For Qualified Service Persons Only

E4 - **Troubleshooting Guide**

Problems	Cause	Remedies
A. Pilot will ignite but will not remain alight when Gas Cock Dial is released.	1) Loose electrical connection at Hi-Limit Switch, Gas Control Valve or Thermostat	1) Retighten connections (see illustrations 2 and 2a).
	2) Pilot flame too low.	2) Relight and adjust (as per instructions in Section E).
	3) Dirt in pilot	3) Remove pilot burner orifice, blow out dirt, replace and relight pilot burner.
	4) Excessive draft caused by exhaust, air conditioner or air equipment	4) Reduce draft by regulating or diverting air flow.
	5) Thermopile defective.	5) Replace Thermopile.
B. Main Burners will not fire with supply gas valve open and incoming gas present.	1) Loose electrical connections at thermostat Switch or Gas Control Valve.	1) Retighten connection (see illustration 2).
	2) Defective thermostat Switch, Gas Control Valve or GS-7 hemostat.	2) Replace in that order.
C. Main Burners and Safety Pilot go out after fryer has reached operating temperature.	1) Hi-Limit Safety Switch cut-out due to out of calibration Thermostat.	1) Recalibrate Thermostat as per instructions in Section E3. If temperature is OK replace Hi-Limit switch and light pilot.
D. Main Burners do not come up to full power, flames appear lazy. Takes too long to reach operating temperatures.	1) Gas pressure drop.	1) Check gas manifold pressure by removing 1/8" NPT Plug and measuring pressure using U-Gauge Manometer. With Burners on, pressure should read 3.5" W.C. for NAT and 10.0" W.C. for PROP gas. Check Supply line sizing. See Section A "Gas Connection".
	2) Defective or incorrect Gas Control Valve.	2) Replace Gas Control Valve. (See illustration 2)
E. Frying temperature too high - shortening scorches and discolors quickly.	1) Thermostat set too high.	1) Check temperature of shortening and adjust Thermostat (as per instructions in Section E).
	2) Shortening contaminated or of low quality.	2) Filter or strain shortening. Use higher grade shortening.