

## Statement of Responsibilities

This document is for use by experienced and trained Qualified Cleveland Range, LLC Authorized Service Representatives who are familiar with both the safety procedures, and equipment they service.

Cleveland Range, LLC assumes no liability for any death, injury, equipment damage, or property damage resulting from use of, improper use of, or failure to use the information contained in this document.

Cleveland Range, LLC has made every effort to provide accurate information in this document, but cannot guarantee that this document does not contain unintentional errors and omissions.

The information in this document may be subject to technical and technological changes, revisions, or updates.

Cleveland Range, LLC assumes no liability or responsibility regarding errata, changes, revisions, or updates.

Qualified Cleveland Range, LLC Authorized Service Representatives are obligated to follow industry standard safety procedures, including, but not limited to, OSHA regulations, and disconnect / lock out / tag out procedures for all utilities including steam, and disconnect / lock out / tag out procedures for gas, electric, and steam powered equipment and / or appliances

All utilities (gas, electric, water and steam) should be turned OFF to the equipment and locked out of operation according to OSHA approved practices during any servicing of Cleveland Range equipment

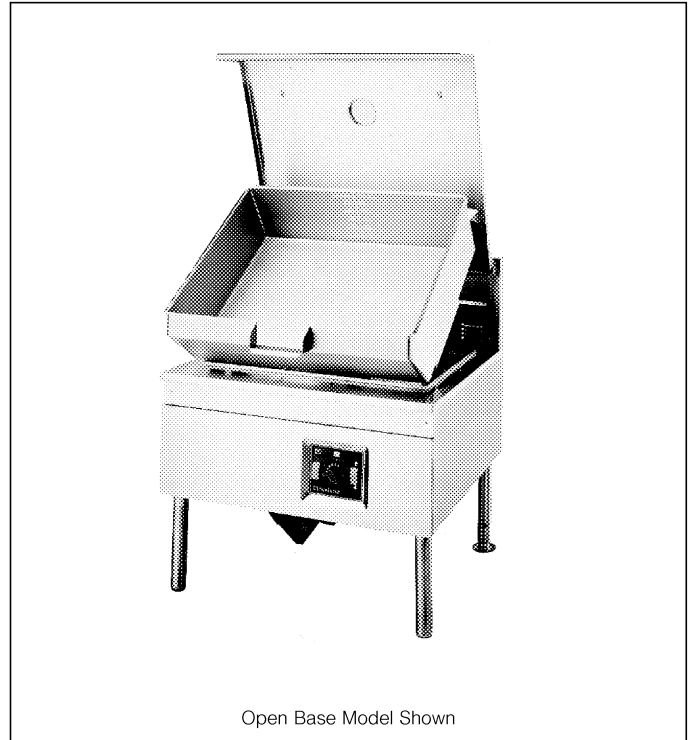
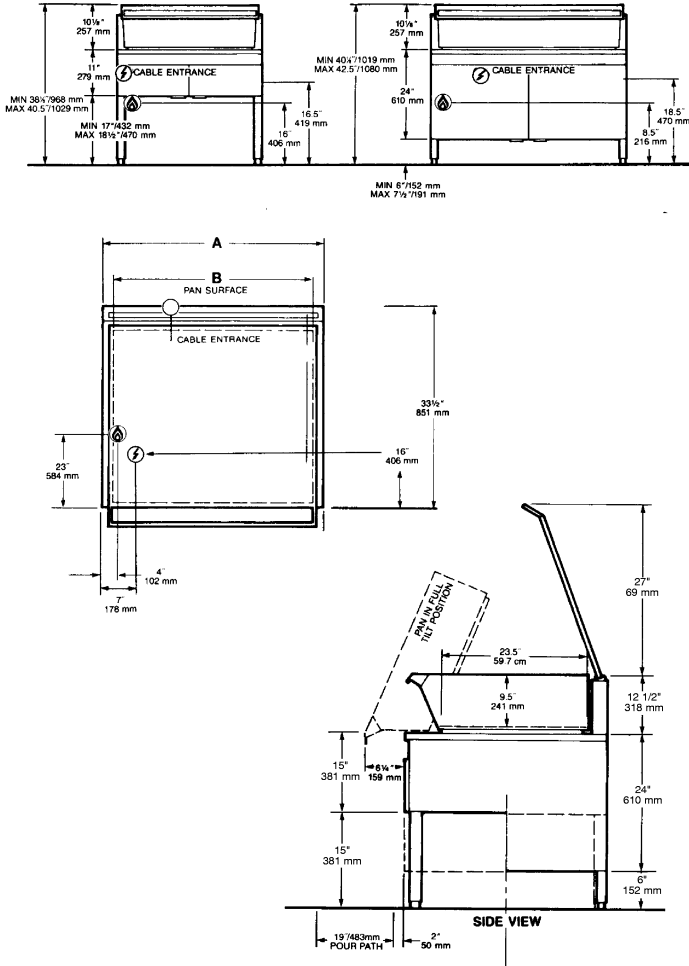
Qualified Cleveland Range, LLC Authorized Service Representatives are obligated to maintain up-to-date knowledge, skills, materials and equipment.

## GAS TILTING OPEN BASE AND MODULAR SKILLETS

MODELS:  SGL-30-TR  SGM-30-TR  
 SGL-40-TR  SGM-40-TR



ITEM NUMBER \_\_\_\_\_

JOB NAME / NUMBER \_\_\_\_\_



### SHORT FORM SPECIFICATION

Shall be CLEVELAND, Tilting Skillet; Model SG \_\_\_\_ - \_\_\_\_ - TR gas (TYPE \_\_\_\_ ) - holding no less than \_\_\_\_ Gallons; complete with Thermostatic Safety and Gas Controls; Gallon Markings; Stainless Steel Clad 5/8" Cooking Surface; Power Tilt; Spring Assist Cover with adjustable Vent. All Stainless Steel Construction.

MODEL	CAPACITY		INPUT CHART		DIMENSIONS				INSTALLATION NOTES	SERVICE CONNECTIONS	
	U.S. Gallons	Litres	NATURAL GAS		A		B				
Basic No.			B.T.U. Inputs Per Hour	Gas Inlet	in.	mm	in.	mm	COMBUSTIBLE WALL CLEARANCES For reduced clearances refer to CAN/CGA-B149 Installation Code or National Fuel Gas Code GAS PRESSURE REQUIRED Normal supply pressures SIDES 1" (25mm) BACK 6" (152mm) NATURAL 7" WC PROPANE 11" WC GAS INPUT RATINGS - Ratings shown are for natural gas installations up to 2000 feet (610m) above sea level. B.T.U. input ratings must be derated for high altitude installations. Specify altitude of project if over 2000 feet (610 meters). For other gases specify type, calorific value, specific gravity and pressure at appliance. Note: When ordering specify type of gas to be used.	 Electrical connection - direct connection required - 1 phase grounded. 3.0 ampere.	
SGL-30-TR	30	115	91,000	One 3/4" N.P.T.	36	914	32	813			 Gas connection - 3/4" N.P.T.
SGM-30-TR	30	115	91,000	One 3/4" N.P.T.	36	914	32	813			
SGL-40-TR	40	150	130,000	One 3/4" N.P.T.	48	1219	44	1118			
SGM-40-TR	40	150	130,000	One 3/4" N.P.T.	48	1219	44	1118			

Cleveland Range reserves right of design improvement or modification, as warranted.

SGL / SGM - R

SEQUENCE OF OPERATION

\* TURN POWER SWITCH ON

(INLINE FUSE TO SWITCH IS 2.5 AMP SLOW BLOW)

- A. GREEN *POWER* LIGHT IS ILLUMINATED
- B. 120 V.A.C. IS SUPPLIED TO ELECTRONIC "T" STAT
  - 1. THRU TERMINALS 6 & 7
- C. 120 V.A.C. IS SUPPLIED TO THE PRIMARY SIDE OF THE TRANSFORMER

\* TRANSFORMER STEPS 120 V.A.C. DOWN TO 24 V.A.C.

- A. 24 V.A.C. PASSES THRU TO BRIDGE RECTIFIER
  - 1. INLINE FUSE IS 15 AMP SLOW BLOW
- B. RECTIFIER CHANGES 24 V.A.C. TO 24 V.D.C.
  - 1. SUPPLYING 24 V.D.C TO START CAPACITOR
- C. CAPACITOR 24 V.D.C. PASSES THRU A RESISTOR
  - 1. LIMITS VOLTAGE TO MOTOR ON HIGH CURRENT DRAW
- D. 24 V.D.C. IS NOW APPLIED TO TILT SWITCH
  - 1. PRESS SWITCH UP
    - a. MOTOR IS ENERGIZED RAISING PAN
  - 2. PRESS SWITCH DOWN
    - b. MOTOR IS ENERGIZED LOWERING PAN

\*\* TRANSFORMER STEPS 120 V.A.C. DOWN TO 24 V.A.C.

- A. 24 V.A.C. PASSES THRU TO TILT INTERRUPT SWITCH
  - 1. LINE FUSE IS 1.25 AMP SLOW BLOW
- B. 24 V.A.C. PASSES THRU TILT INTERRUPT SWITCH
  - 1. NORMALLY CLOSED / PAN DOWN
- C. 24 V.A.C. PASSES THRU TO HIGH LIMIT
  - 1. NORMALLY CLOSED
  - 2. OPENS AT 450 DEGREES

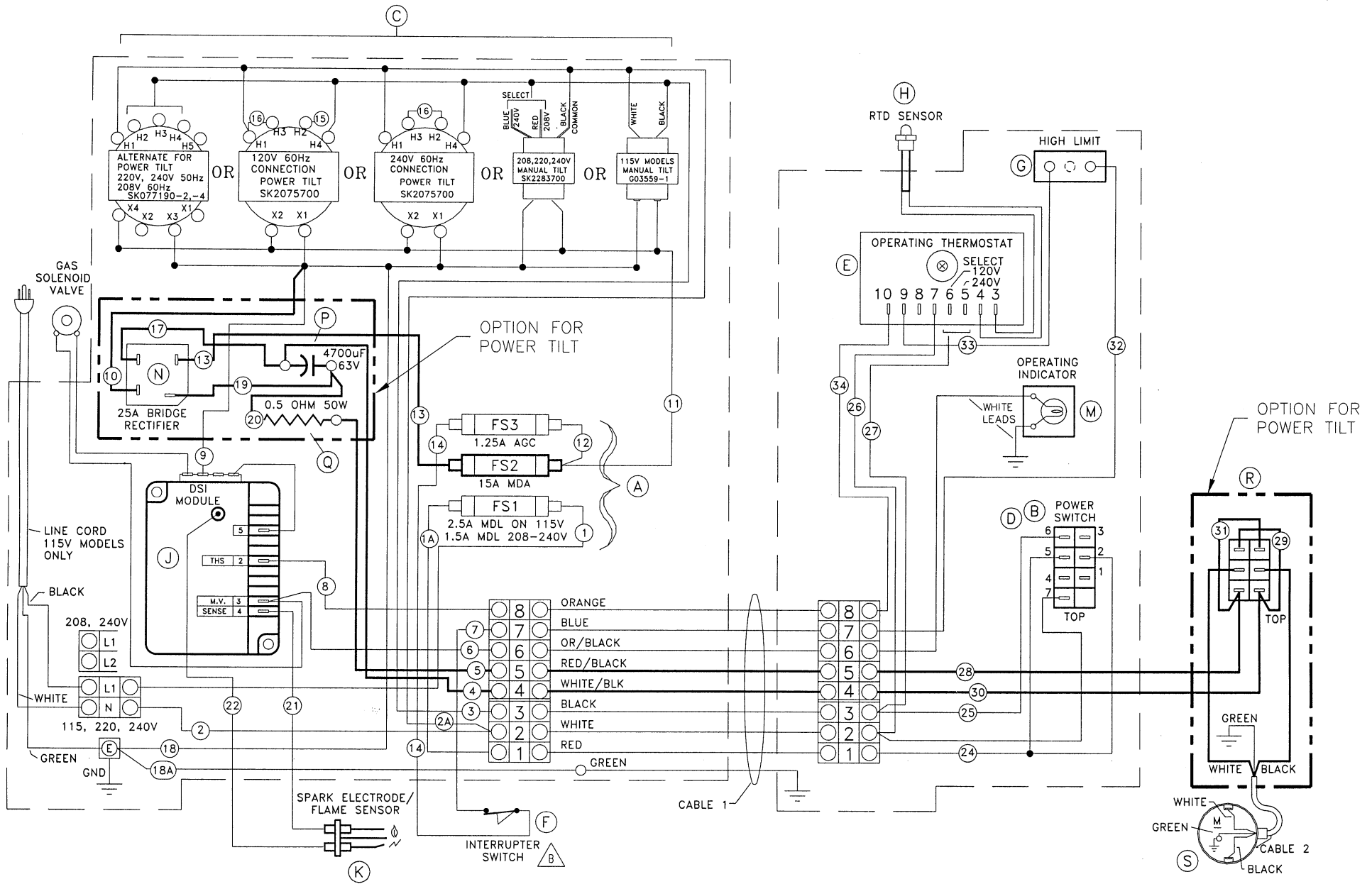
- D. 24 V.A.C. PASSES THRU TO ELECTRONIC "T" STAT
  - 1. THRU TERMINAL #9
- E. ELECTRONIC "T" STAT
  - 1. TURN KNOB TO DESIRED TEMP. (RESISTANCE)
  - 2. RTD SENSOR COMPARES (SEE RESISTANCE CHART) THRU TERMINALS 3 & 4
  - 3. "T" STAT RESISTANCE > RTD RESISTANCE
    - a. INTERNAL SWITCH CLOSES SENDING 24 V.A.C. THRU TERM #10 TO IGNITOR MODULE TERM # 2
  - 4. "T" STAT RESISTANCE < RTD RESISTANCE
    - a. INTERNAL SWITCH OPENS DROPPING 24 V.A.C. THRU TERM #10 TO IGNITOR MODULE TERM # 2
- F. IGNITION MODULE
  - 1. POWER TO TERM # 2 COMPLETES IGNITION CIRCUIT TO TERM #3
    - a. OPENS THE GAS SOLENOID
    - b. SENDS MAX. VOLTAGE TO THE IGNITOR
    - c. CREATES SPARK AND LIGHTS BURNERS
- F. THE IGNITOR SENSOR
  - 1. DETECTS FLAME BY SENSING .2 MICRO AMPS BACK TO THE MODULE THROUGH GROUND AND #4 SENSE TERM KEEPING THE GAS SOLENOID OPEN (4 SEC. TRIAL FOR 3 TRIES)
  - 2. IF NO FLAME IS DETECTED THE MODULE WILL TURN OFF THE GAS SOLENOID
- G. HEATING CONTINUES UNTIL "T" STAT = RTD SENSOR
  - 1. EQUAL RESISTANCE DROPS POWER TO IGNITION MODULE ( UNTIL PAN COOLS )

\*\*\* PROBLEMS AND FIXES

A. TEMPERATURE PROBLEMS

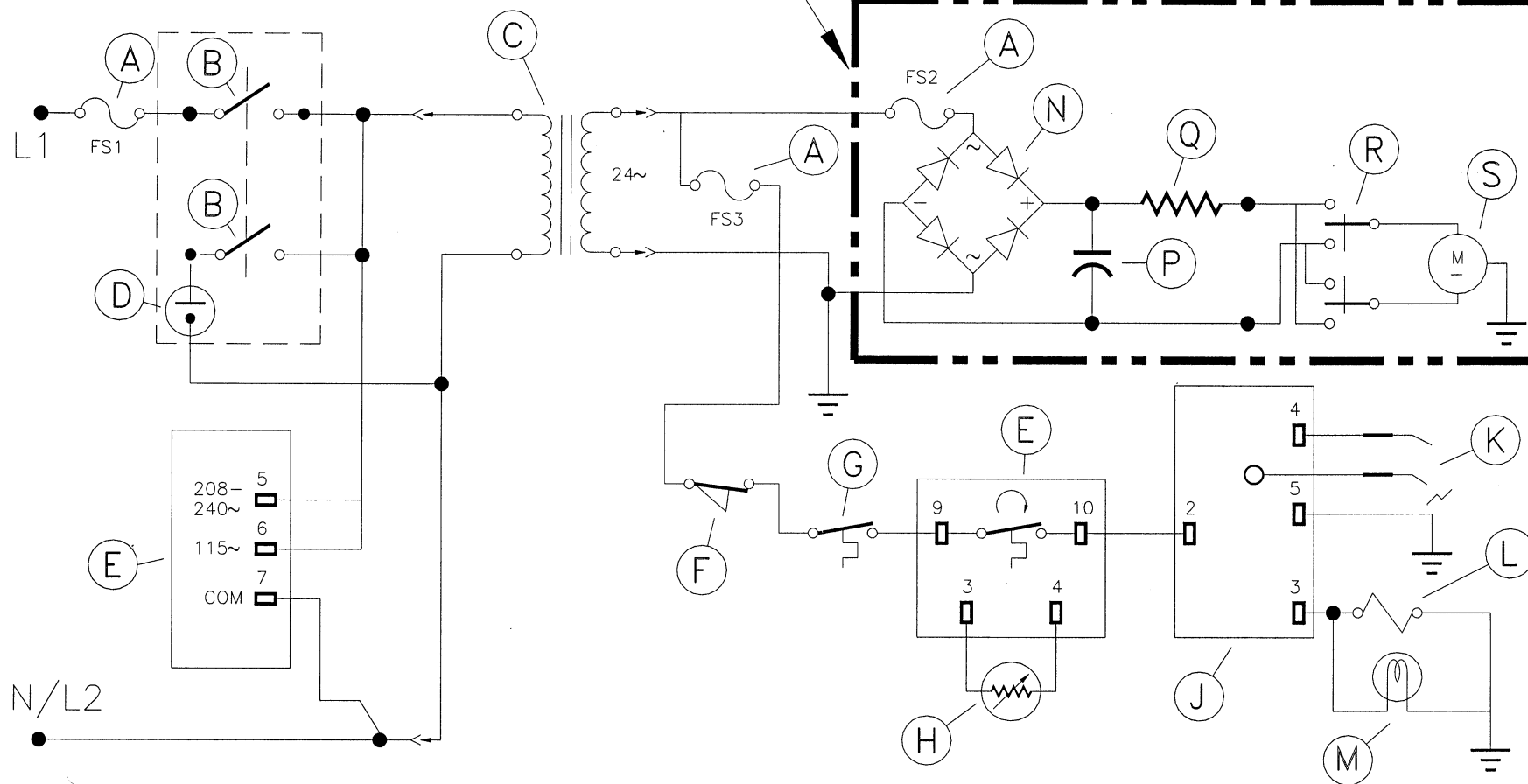
(BULLETINS 95-12 AND 95-4)

1. TEMPERATURE IS NOT CONTROLLABLE OR CONTROL CAN BE INTERMITTENT
  - a. "T" STAT SHAFT KNOB JUMPS STOP
    1. INSTALL CK 149 KIT  
(NEW STOP- SHAFT-"T" STAT)
  - b. RTD SENSOR INTERNALLY SHIFTED FROM TIP
    1. REPLACE RTD
2. NO IGNITION ( UNITS WITH GALVALUM SQUARED BOTTOM BURNERS OR WITH SAME BURNERS AND ONE S/S BURNER UNDER IGNITOR - EARLY MODELS )
  - a. HOLES IN BURNERS DO NOT LINE UP WITH IGNITOR AND FLAME SENSOR
    1. ORDER PROPER S/S BURNER KIT
3. SKILLET CALIBRATION
  - a. FOR DETERMINING PROPER PAN TEMP.
    1. SEE CALIBRATION HAND OUT



MODEL: F30,40 G-L,MR  
SGL,M-30,40TR

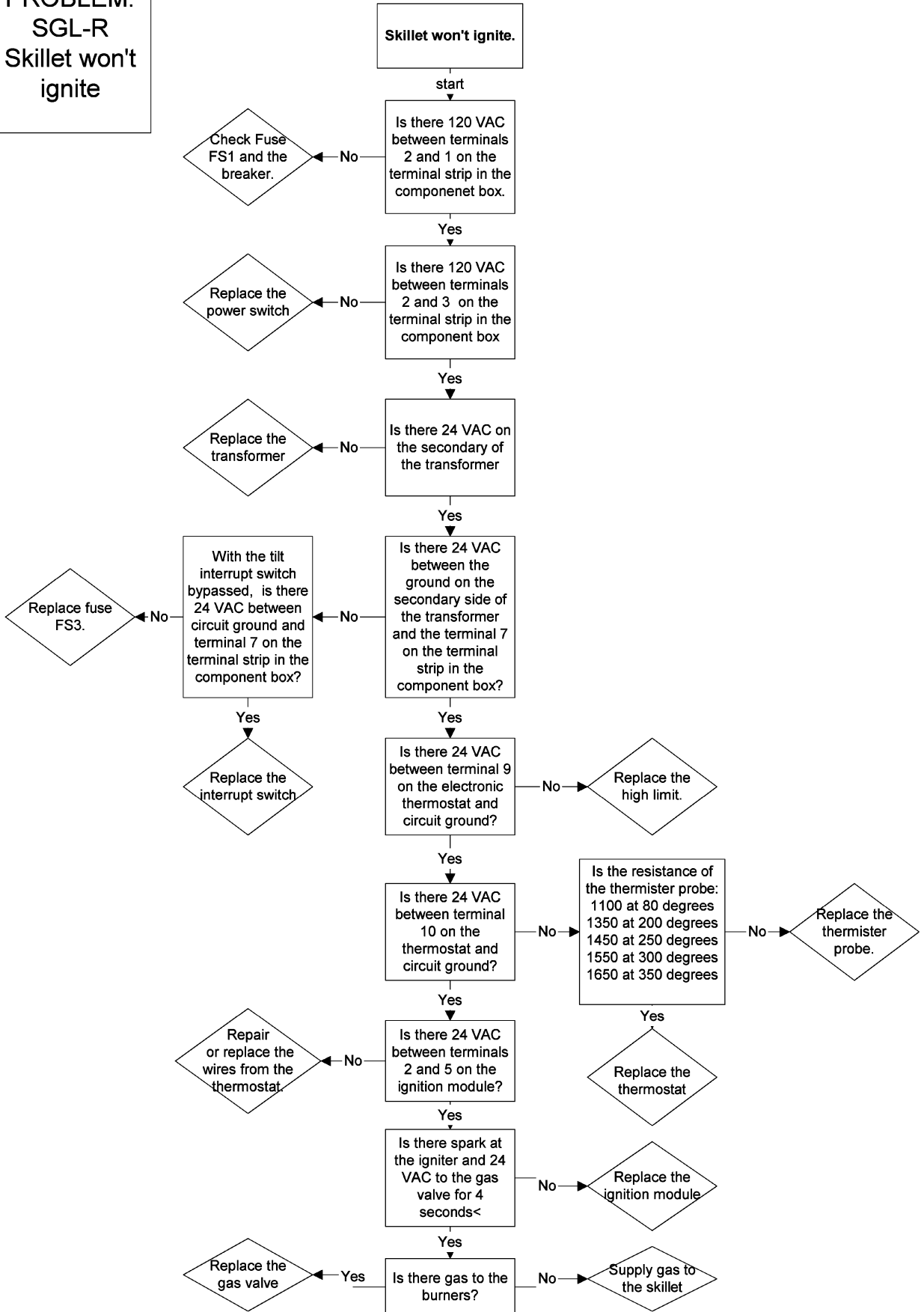
OPTION FOR  
POWER TILT



- A— FUSE
- B— POWER SWITCH
- C— TRANSFORMER
- D— PILOT—RED
- E— ELECTRONIC THERMOSTAT
- F— INTERRUPTER SWITCH
- G— HIGH LIMIT SWITCH
- H— RTD SENSOR
- I— IGNITION MODULE

- K— ELECTRODES
- L— GAS BURNER SOLENOID
- M— PILOT—YELLOW
- N— RECTIFIER
- P— CAPACITOR
- Q— RESISTOR
- R— TILT CONTROL
- S— ACTUATOR

**PROBLEM:  
SGL-R  
Skillet won't ignite**



**PROBLEM:  
Skillet short  
cycles**

