MANUAL 2100-062

GAS FURNACE TROUBLESHOOTING TABLES

REFRIGERATION, HEATING AND AIR CONDITIONING

BARD MANUFACTURING CO. • BRYAN, OHIO 43506

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The customer's complaint will virtually always fall under one or more of the following headings. This provides the first clue. It narrows the area of trouble.

I. NO HEAT
II. NOT ENOUGH HEAT
III. TOO MUCH HEAT
IV. NOISE
V. ODOR
VI. COST OF OPERATION

From this knowledge the serviceman can further reduce the possibilities and begin to zero in on the problem with a few observations of his own. All it requires is for him to "turn up the thermostat and start the furnace." Simply by looking and listening he adds to his knowledge of the trouble and the outline expands as follows.

I. NO HEAT
   A. Furnace fails to heat.
II. NOT ENOUGH HEAT
   A. Furnace cycles too often.
   B. Furnace runs continuously.
III. TOO MUCH HEAT
   A. Heating cycles are too long.
   B. Furnace runs continuously.
IV. NOISE
   A. Mechanical Noise.
   B. Air Noise.
V. ODOR
VI. COST

Now between the customer's complaint and his own observation the serviceman has in a very few minutes classified the problem. At this point he is ready to take action within the specific problem area.

I. COMPLAINT: NO HEAT A. FAULT: BURNER FAILS TO START

SOURCE	PROCEDURE		CAUSES	CORRECTION
1 Thermostat	Check Thermostat Settings	a.	Thermostat Switch Turned to "Off" or "Cool"	Switch to Heat
		b.	Thermostat Set Too Low	Turn Thermostat Higher
2 Pilot Burner and Thermocouple NOTE: For intermittent pilot system see last page.	COMBINATION VALVE If Pilot Will Not Light or Has Poor Flame Make the Following Checks: Turn On Main Gas Valve. Turn Gas Valve in Furnace to Pilot Position. Depress Pilot Reset Button and Light Pilot.	a.	Pilot Ports Restricted	Clean Ports
		b.	Internal Strainer Valve Restricted	Replace Combination Valve
		c.	Low Main Gas Line Pressure or high main gas line pressure	Check Pressure and Notify Gas Company
		d.	Plugged Orifice	Clean Orifice
		e.	Pilot Valve Adjustment Incorrect	Make Proper Adjustment
	If Pilot Lights but Does Not Stay On Make Thermocouple Millivoltage Check.	f.	Thermocouple Bad or out of position (pilot bracket bent or TC bent)	Replace Thermocouple If bracket bent, straighten or replace
3 Pilot Safety	If After Verifying that Thermocouple Millivoltage is Correct Yet the Pilot Safety Does Not Hold In, This Will Indicate a Faulty Pilot Safety.	a.	Pilot Safety Bad	Replace Combination Valve
4 Power	Check Furnace Disconnect Switch and Main Disconnect.	a.	Switch Open	Close Switch
		b.	Blown Fuse or Tripped Breaker	Replace Fuse or Reset Breaker (Check for Cause of Overload)
5 Transformer	Check 24 Volt Secondary of Transformer for Low Voltage. If There is No Voltage or Low (Less than 22 Volts) Check Voltage to Transformer Primary.	a.	Low Line Voltage Transformer Primary (Less than 105 Volts)	Check Voltage at Power Source.
		b.	24V Fuse Blown (Fused Transformer)	Correct Cause of Voltage Drop or Call Power Company
		c.	Faulty Transformer	Replace Transformer
6 Limit Control	Jumper Limit Control Terminals. If Burner Starts Fault is in the Limit Control Circuit.	a.	Limit Control Switch Open (Adjustable)	Check Dial Adjustment and Set Correctly
		b.	Limit Control Switch Faulty	Jumper Terminals. If Burner Starts Switch is Faulty - Replace Limit
		c.	Man Reset Limit Tripped Out (Down-flo	Reset Limit - Correct Cause
7 Thermostat	Touch Jumper Wire Between Thermostat Wire Connection to Transformer and Thermostat Wire Connection to Gas Valve. If Burner Starts then Fault is in Thermostat.	a.	Broken or Loose Thermostat Wires	Repair or Replace Wires
		b.	Loose Thermostat Screw Connection	Tighten Connections
		c.	Dirty Thermostat Contacts	Clean Contacts
		d.	Thermostat Not Level	Level Thermostat
		e.	FaultyThermostat	Replace Thermostat
8 Gas Valve	If After Verifying that the Pilot Safety is Holding In, and That There is Power to the Main Valve but It Does Not Open, Then the Valve is Defective.	a.	Faulty Main Gas Valve	Replace Valve
9 Burner	Observe Pilot Flame to Main Burner or Crossover Ignitor. If Gas Flow to Burner is Disrupted, There is a Possibility that Late Ignition Could Blow the Pilot Out Causing a No Heat Complaint.	a.	Pilot Displaced or Twisted. *	Correct Position of Pilot Burner
		b.	Crossover Ignitor Displaced Interrupting Gas Travel To Main Burner	Correct Position of Crossover
		c.	Crossover Ignitor Ports Plugged Preventing Gas Travel To Main Burner	Clean Ports

*In some cases when an extremely low supply pressure exists the opening of the main burner valve can cause sudden pressure drop to pilot causing pilot safety to drop out.

II. COMPLAINT: NOT ENOUGH HEAT A. FAULT: BURNER CYCLES TOO SHORT

SOURCE	PROCEDURE		CAUSES	CORRECTION
1 Thermostat	Place a Jumper Wire Between the Common and Heating Terminals at the Thermostat. If Burner Then Runs Continuously, the Fault is in the Thermostat. Remove Jumper and Check.	a.	Heat Anticipator Set Too Low	Correct Heat Anticipator Setting
		b.	Thermostat Not Level	Level Thermostat
		c.	Vibration at Thermostat	Correct Source of Vibration
		d.	Thermostat in Warm Air Draft	Shield Thermostat From Draft or Relocate
		e.	Thermostat on Warm Wall or Near Heat-producing Appliance	Remove Cause of Heat or Relocate Thermostat
2 Limit Control	Place a Jumper Wire Between Common and Heating Terminals at the Thermostat. If Burner Continues to Cycle, it is Cycling Off the Limit Control. NOTE:On Down-Flo Furnaces the heater on the Time Start Fan Control could burn out causing short burner cycles. Replace control. Also control could stick open. Replace control.	a.	Dirty Air Filter	Replace or Clean Filters
		b.	Adjustable Limit Control Set Too Low	Set Correctly as indicated on rating plate or to Maximum Stop Setting
		c.	Blower Running Too Slowly	Check Temperature Rise for 85 - 95 F. Temp. Rise
		d.	Restriction in Duct System	Remove Restriction
		e.	Blower Wheel Dirty	Clean Blower Wheel
		f.	Blower Wheel in Backwards	Reverse Blower Wheel on Shaft
		g.	Wrong Motor Rotation	Reverse Motor Rotation
		h.	Blower Motor Seized or Burned Out	Replace the Blower Motor
		j.	Blower Bearing Seized	Replace Bearings and Shaft
		k.	Faulty Limit Control	Replace Limit Control
3 Power	Check Line Voltage Connection at Furnace. If Voltage is Less Than 15% Below Rated Nameplate Voltage or exceeding 10% Over Nameplate Voltage or Fluctuates the Fault is in Power Source. Also Check the Voltage at the Main Disconnect Switch.	a.	Loose Wiring Connections	Secure Connection
		b.	Low Voltage at Power Source Causes Blower Motor Overload	Call Power Company
		c.	High Voltage at Power Source Could Cause Thermostat Heat Anticipator to Short Cycle Burner	Call Power Company
4 Air Volume	Check Filters and Temperature Rise. Temperature Rise Should be Between 85°F and 95°F.	a.	Dirty Air Filters	Change or Clean Air Filter
		b.	Restricted or Closed Registers or Dampers	Readjust Registers or Dampers
		c.	Blower Belt Loose and Slipping	Tighten Blower Belt
		d.	Dirty Blower Wheel	Clean Blower Wheel
		e.	Blower Running Too Slowly	Speed Up Blower For 85° to 95° Temperature Rise.

II. COMPLAINT: NOT ENOUGH HEAT B. FAULT: BURNER RUNS CONTINUOUSLY

1 Gas Input	Check Gas Input at Meter Check Manifold Pressure .	a.	Low Manifold Pressure	Adjust Pressure Regulator for 3.0 to 4.0" w.g.
		b.	Low Line Pressure	Notify Gas Company
		c.	Orifice Partially Plugged	Clean Orifice
		d.	Orifice Too Small	Increase Orifice Size
2 Combustion	Check Burner Flame by Observation. If Flame has Yellow Tips, is Blowing Off Ports or is not Burning on all Ports Check Causes and Corrections. Check for Diverter Spillage.	a.	Yellow Tips (CO)	Adjust Primary Air Shutter For Blue Flame
		b.	Displaced or Damaged Baffles	Reposition or Replace Baffles
		c.	Blocked Heat Exchanger Clamshell	Remove Blockage or Clean Heat Exchanger
		d.	Plugged Burner Ports	Clean Burners
3 Infiltration	Check for Excessive Negative Pressure in Building. Check for Diverter Spillage.	a.	Excessive Negative Pressure	Correct Cause for Negative Pressure or Provide for Outside Makeup Air

III. COMPLAINT: TOO MUCH HEAT A. FAULT: BURNER CYCLES ARE TOO LONG

SOURCE	PROCEDURE		CAUSE	CORRECTION
1 Thermostat	Check Thermostat	a.	Heat Anticipator Set Too High	Correct Heat Anticipator Setting
		b.	Thermostat Not Level	Level Thermostat
		c.	Thermostat in Cold Draft	Correct Cause of Draft or Relocate Thermostat
		d.	Thermostat on Cold Wall	Relocate Thermostat
		e.	Thermostat out of calibration	Recalibrate or Replace Thermostat

III. COMPLAINT: TOO MUCH HEAT B. FAULT: BURNER RUNS CONTINUOUSLY

SOURCE	PROCEDURE		CAUSE	CORRECTION
1 Thermostat	Disconnect Thermostat Wire at Transformer or Gas Valve.	a.	Shorted or Welded Thermostat Contacts	Repair or Replace Thermostat
		b.	Stuck Thermostat Bi-Metal	Clear Obstruction or Replace Thermostat
		c.	Thermostat Not Level	Level Thermostat
		d.	Shorted Thermostat Wires	Repair Short or Replace Wires
	If Burner Turns Off, Fault is in Thermostat Circuit.	e.	Thermostat Out of Calibration	Recalibrate or Replace Thermostat
		f.	Thermostat in Cold Draft	Correct Cause of Draft or Relocate Thermostat
2 Gas Valve	*If Burner Continues to Run Fault is in Gas Valve.*	a.	Gas Valve Stuck Open	Replace Gas Valve

IV. COMPLAINT: NOISE A. FAULT: COMBUSTION NOISE

SOURCE	PROCEDURE		CAUSE	CORRECTION
1 Ignition Noise	Run Burner Through Two or Three Cycles with Blower "Off" & Then with Blower "On" and Observe Type of Noise and When it Occurs In the Cycle.	a.	Hard Main Burner Flame	Reduce Primary Air to Soften Flame and Correctly Adjust Secondary Air When Adjustable
		b.	Low Pilot Flame	Readjust "B" Valve or Pilot Valve for Correct Pilot Input
		c.	Partially Plugged Pilot Orifice	Clean or Replace Pilot Orifice
	Hard Start at Beginning of Cycle or Flashback into Venturi. Observe Quality of Pilot Flame and Main Burner Flame.	d.	Partially Plugged Pilot Port	Clean Pilot Ports
		e.	Pilot Flame Liftoff Due to Excessive Pilot Gas Input	Reduce Pilot Input by Turning Down "B" Valve or Pilot Adjustment
		f.	Hard Pilot Flame	Reduce Pilot Primary Air
		g.	Displaced Pilot Burner	Reposition and Align Pilot Burner
		h.	Restricted Pilot Strainer (Where Pilot is Equipped with Separate Strainer)	Clean Pilot Strainer
		j.	Blocked Crossover Ports	Clean Crossover Ports
		k.	Blocked Main Burner Ports	Clean Main Burner Ports
		l.	Orifice Not Properly Positioned and Centered in Venturi	Correctly Position Main Burner Orifice
		m.	Displaced or Misalligned Crossover Ignitor	Realign Crossover Ignitor
		n.	Flashback Due to Excessive Primary Air	Reduce Primary Air
		o.	Flashback Due to Opened Main Burner Port	Replace Main Burner
		p.	Flashback Due to Low Manifold Pressure	Increase Manifold Pressure to valve specified on rating plate

IV. COMPLAINT: NOISE A. FAULT: COMBUSTION NOISE

SOURCE	PROCEDURE		CAUSE	CORRECTION
1 Ignition Noise (Continued)	Run Burner Through Two or Three Cycles with Blower "Off" & Then with Blower "On" and Observe Type of Noise and When it Occurs In the Cycle.	q.	Low (LP) Pressure Due to Low Tank Level	Refill LP Tank
		r.	Gas Valve or Regulator Bleed Ports Blocked (Combination controls used here are internal bleed vent type)	Clear Bleed Ports
		s.	Gas Valve Opens Slowly or Only Partially	Replace Valve
		t.	Gas Valve Leak (Does not Seat)	Replace Valve
		u.	Pressure Regulator Faulty	Replace Regulator
		v.	High Manifold Pressure	Reduce Pressure to valve specified on rating plate
2 Running Flame Noise, Resonance Or Flashback	*Noisy Flame While Running. Observe Quality of Main Burner Flame.*	a.	Hard Main Burner Flame	Reduce Primary Air to Soften Flame and Correctly Adjust Secondary Air When Adjustable
		b.	Flashback Due to Excessive Primary Air	Reduce Primary Air
		c.	Flashback Due to Opened Main Burner Port	Replace Main Burner
		d.	Flashback Due to Low Manifold Pressure	Increase Pressure to valve specified on rating plate
		e.	Burr in Burner Orifice	Remove Burr or Replace Orifice
		f.	Displaced or Damaged Baffles in Heat Exchanger	Reposition or Replace Baffles
		g.	Pilot Flame Too High	Reduce Pilot Gas Input
		h.	High Manifold Pressure	Reduce pressure to valve specified on rating plate
		j.	Blocked Heat Exchanger Clamshell	Remove Blockage or Clean Heat Exchanger
		k.	Plugged Burner Ports	Clean Burners
		l.	Orifice not Properly Positioned and Centered in Venturi	Correctly Position Main Burner Orifice
		m.	Input Too Low	Check for Cause and Correct
		n.	Input Too High	Check for Cause and Correct
3 Noise Of Extinction	*Noisy Burner Shutdown.*	a.	Flashback to Venturi (Nat) Check Valve closing too slowly	Replace Valve Reduce Primary Air
		b.	Flashback to Venturi (LP) Check valve closing too slowly	Reduce Primary Air or Check Fuel Tank Level Replace Valve
		c.	Enlarged Burner Port Causing Flash-back	Replace Burner
		d.	Orifice Not Properly Positioned and Centered in Venturi	Correctly Position Main Burner Orifice
		e.	Burr in Burner Orifice	Remove Burr or Replace Orifice

SOURCE	PROCEDURE		CAUSE	CORRECTION
1 Burner & Fuel Lines	Check Burners and Fuel Lines for Loose Fastenings and Fit.	a.	Burner Loose in Mount	Tighten & Secure Burner Mount
		b.	Fuel Lines in Loose Contact With Furnace Cabinet	Anchor or Isolate Lines
		c.	Unsupported Piping in Contact With Floor, Wall or Ceiling.	Fasten Line with Supports
2 Blower	Remove Blower Compartment Door, Start Blower and Listen for Source of Noise. Stop Blower by Disconnecting Power and Check for Noise Source. *Inspect Blower and Check for End Play and Side Play of Shaft.*	a.	Blower Bearing Loose Allowing Side Play	Secure Bearings
		b.	Blower Thrust Collar Set Too Far Out on Shaft Allowing End Play	Reset Thrust Collar To Eliminate End Play of Blower Shaft
		c.	Blower Bearing Dry & Squeaking	Inspect Bearing. If Bearing is Undamaged Then Add Lubrication
		d.	Blower Bearing Damaged	Replace Bearings. Inspect Shaft For Scoring or Undercuts.
		e.	Blower Wheel Touching Scroll	Center Blower Wheel in Scroll
		f.	Loose Blower Wheel	Check Alignment and Tighten Set Screws
		g.	Loose Metal or Debris in Bottom of Blower Scroll	Remove Debris
		h.	Cutoff Plate Loose	Tighten Cutoff Plate
		j.	Blower Wheel out of Balance	Balance or Replace Wheel
3 Running Gear	*Inspect Running Gear and Move it Back and Forth by Hand to Check for Loose Connections.*	a.	Loose Running Gear & Mounts	Secure Cushion Mounts
		b.	Worn or Damaged Blower Belt	Replace Belt
		c.	Belt Too Loose Causing Slippage	Correctly Tighten Belt
		d.	Motor and Blower Pulleys Out Of Alignment	Align Pulleys
		e.	Loose Blower and Motor Pulley	Tighten Set Screws
4 Blower Motor	Remove Blower Compartment Door, Start Blower and Listen for Source of Noise. Stop Blower by Disconnecting Power and Check for Noise Source. *Inspect Blower Motor.*	a.	Damaged and Noisy Motor Bearings	Replace Motor
		b.	Loose or Defective Motor Cushion Mounts	Tighten Mounts or Replace
		c.	Loose and Rattling Greenfield Leads to Motor	Isolate or Secure Greenfield Cable
		d.	AC Motor Hum	Check Resilient Mountings
		e.	Regenerative Motor Braking (Capacitor Motors).	Replace Capacitor or Replace Motor and Capacitor
5 Air Filter	Check Filter Assembly	a.	Filter Loose in Mounting Rails	Secure Filter Mounting
		b.	Filter Screen Contacting Blower or Running Gear	Bend Screen or Reposition Filter to Clear Blower & Running Gear
6 Controls	Listen for Source of Noisy Control and Check Control.	a.	Low Voltage to Relay Coil More Than 10% Below Rated Voltage	Correct Cause of Low Voltage
		b.	Loose Relay Mounting	Tighten Mounting or Isolate Relay From Direct Metal to Metal Contact.

IV. COMPLAINT: NOISE B. FAULT: MECHANICAL NOISE

SOURCE	PROCEDURE		CAUSE	CORRECTION
6 Controls (Continued)	*Relays*	c.	Defective Relay	Replace Relay
	Solenoid Valves	d.	Low Voltage to Solenoid Coil More Than 10% Below Rated Voltage	Correct Cause of Low Voltage
		e.	Stuck or Defective Valve	Replace Valve
		f.	Noisy Solenoid	Replace Coil or Valve
	Transformer	g.	Loose Transformer Mounting	Tighten Mounting
		h.	Noisy Humming Transformer (Loose Windings on Core)	Replace Transformer
7 Cabinet And Duct	Listen for Source of Noise and Relate it to Furnace Operation. *Burner Running Only.*	a.	Thermal Expansion of Metal Causing Oil Canning	Determine Point of Oil Canning And Stiffen or Upset or Fasten Panel at That Point to Prevent an Overcenter Popping.
	Blower Running Only.	b.	Loose Blower or Running Gear Causing Noise Transmission To Cabinet or Duct	See B3, B4, B5 and B6 See B2, B3 and B4
		c.	Loose Access Door Panels Or Casing Panels	Properly Seat Panel, Secure at Point of Engagement or Provide A Pad at That Point.
		d.	Oil Canning of Metal Due To Air Pressure Change When Blower Starts. Either in Discharge Side or Return Air Side	Determine Point of Oil Canning And Stiffen or Upset or Fasten Panel at That Point to Prevent an Overcenter Popping
		e.	Broken Spotwelded Joint	Secure Joint with Sheet Metal Screw
		f.	Fuel Lines Rattling Against Cabinet	Isolate Line From Contact With Cabinet

IV. COMPLAINT: NOISE C. FAULT: AIR NOISE

SOURCE	PROCEDURE		CAUSE	CORRECTION
1 Blower	Inspect Blower and Blower Compartment for Air Obstruction or Restriction. Turn Blower on and Listen for Source of Air Noise.	a.	Loose or Improperly Positioned Blower Cutoff Plate	Secure or Reposition Cutoff Plate
		b.	Blower Running Too Fast	Slow Blower Down for 85° to 95° Temperature Rise
		c.	Extremely Dirty or Blocked Air Filters Causing Blower To Stall	Clean or Change Filters or Remove Source of Blockage
		d.	Out of Center Blower Wheel Too Close to Cutoff Plate	Check Blower Running Gear Mounts and Repair or Reposition Them to Bring Blower Wheel Back to Center
		e.	Loose Debris in Blower Housing Causing Air Whistle	Remove Debris
2 Air Duct System	Turn Blower on and Listen for Source of Noise Along Duct System and at Registers.	a.	Air Leaks in Cabinet Joint or Duct System.	Secure Joint or Cover Opening in Ductwork
		b.	Sharp Metal Obstruction in Air Stream Causing Whistling	Remove Obstruction
		c.	Joint Edge Facing into Air Stream	Cover Edge of Joint
		d.	Overly Restricted Discharge System from Dampers or Outlets Being Closed or Covered. Causes Blower to Stall	Remove Restrictions Check Temperature Rise
		e.	Return Air Grille Close to Blower Compartment Inlet.	Line Inlet Duct with Acoustical Material

V. COMPLAINT: ODOR

SOURCE	PROCEDURE		CAUSE	CORRECTION
1 Fuel & Combustion	Check for Gas Line and Vent Leaks. Check for Diverter Spillage. Check for Pouch Spillage.	a.	Gas & Pilot Line Leak	Locate & Correct Cause of Leak
		b.	Ruptured Regulator Diaphram	Replace Regulator
		c.	Diverter Spillage	Remove Cause of Spillage
		d.	Draft Hood Leakage	Seal Leak
		e.	Air Leakage Around Pouch	Seal Leak
		f.	Displaced or Damaged Baffles	Reposition or Replace Baffles
		g.	Blocked Heat Exchanger	Remove Blockage or Clean
		h.	Leak in Flue or Vent Pipe	Seal Leak
		j.	Negative Furnace Room Pressure	Correct Cause of Negative Pressure or Install Fresh Air Intake
		k.	Blocked or Restricted Combustion Air Openings to Furnace Closet	Remove Blockage or Restriction
		l.	Cracked Heat Exchanger	Replace Heat Exchanger
2 Air System	Check Furnace Compartments, Filters and Duct System for Dirt, Oily Films, Debris and Moisture.	a.	Accumulated Dirt and Debris	Clear Debris and Vacuum Duct System
		b.	Oily Film in and Around Blower Or in Duct System	Remove Film and Locate and Correct Cause of Film
		c.	Water or Moisture	Dry and Locate and Correct Cause
		d.	Humidifier Stagnant Water	Clean Humidifier and Check
		e.	Dirty Filters	Clean or Replace Filters
		f.	Outdoor Odors Entering Fresh Air Intake	Remove Source of Odor or Relocate Intake

VI. COMPLAINT: COST OF OPERATION

SOURCE	PROCEDURE		CAUSE	CORRECTION
1 Fuel Cost	Check Combustion Quality by Observation. Check Gas Input at Meter. Check Temperature Rise. Check for Causes of Excessive Negative Pressure in House from Exhaust Fans, Fireplace, Etc. Check Building Insulation. Check for Abnormal Air Infiltration.	a.	Dirty Air Filter	Clean or Replace Filter
		b.	Poor Combustion	Determine Cause for Poor Combustion and Correct. See IIB 3.
		c.	Too High Temperature Rise	Correct Cause of High Temperature Rise. See IIB 1.
		d.	Excessive Negative Pressure In House	Correct Cause of Negative Pressure
		e.	Insufficient Insulation or Excessive Infiltration	Advise Homeowner and Recommend That it be Corrected
		f.	Too High Gas Input Causing Short Cycles at Design Temperature	Determine Cause of High Input and Reduce to Minimum Input On Furnace Rating Plate
		g.	Excessive Flue Draft	Determine Cause and Correct
		h.	Fan Control Setting Too High or Differential Too Great	Adjust Fan Control to Lower Settings or for CAC
2 Electrical Cost	Check Blower Motor for Excessive Current Draw Above Nameplate Rating. Check for Low Voltage. Check Fan Control Setting.	a.	Low Voltage (Less than 105 Volts)	Correct Cause or Call Power Co
		b.	Too Low Temperature Rise High Blower Motor Load	Slow Down Blower for 85° to 95° Rise
		c.	Faulty Blower Motor - High Amp Draw	Replace Blower Motor
		d.	Undersized Blower Motor (High Amp Over Nameplate Rating)	Increase Blower Motor Size
		e.	Blower Belt Too Tight	Loosen Belt
		f.	Blower Motor Cycling on Overload Due Tight Belt, Etc.	Determine Cause for Overload and Correct
		g.	Poor or Defective Distribution System	Correct System

S86 INTERMITTENT PILOT SYSTEM TROUBLESHOOTING TABLE