

SERVICE INSTALLER'S GUIDE

18-CH59D1-3

ALL phases of this installation must comply with NATIONAL, STATE AND LOCAL CODES

Models:

*DD060R9V3** *UD060R9V3** *UD100R9V5**
 *DD080R9V3** *UD080R9V3** *UD120R9V5**
 *DD100R9V5** *UD080R9V4** *UD140R9V5**
 *DD120R9V5** *UD100R9V3** * May be "A" or "T"
 ** May be "A" - "Z"

KIT 15815

IMPORTANT—This document is customer property and is to remain with this unit.
 Please return to service information pack upon completion of work.

Assembly Drawing No. D343813G02,
KIT COMPONENTS — APPLICATION:

Item No.	Drawing No.	Description	Qty
1	D156805P01	SILICON NITRIDE IGNITER (SiNi)	1
2	D343723P01	HARNESS-ADAPTER	1
3	D156245p01	IFC	1
4	D344308P01	MNEMONIC LABEL	1
5	D344299P02	WIRING DIAGRAM-UD	4
6	D344300P03	WIRING DIAGRAM-DD	1
7	N156P1506B	SCR 8-18 AB HXW 3/8 S	3
8	A138030P01	TIE-CABLE	4
9	A341948P02	IGNITER BRACKET	1

Use these instructions when replacing the following Integrated Furnace Controls (IFC):

White-Rodgers Dwg. No.	Trane Dwg. No.	Replacement Part No.	Description
50V61-507-05	D341420P01	CNT03078	SiNi
50V61-507-06	D341420P02	CNT05120	SiNi

⚠ WARNING

Disconnect power to the unit before removing the blower door. Failure to follow this warning could result in personal injury from moving parts.

⚠ WARNING

The cabinet must have an uninterrupted or unbroken ground according to National Electrical Code, ANSI/NFPA 70 - "latest edition" and Canadian Electrical Code, CSA C22.1 or local codes to minimize personal injury if an electrical fault should occur. A failure to follow this warning could result in an electrical shock, fire, injury, or death.

REMOVING THE EXISTING CONTROL AND IGNITER:

- Turn the thermostat to the off position.
- Disconnect all electric power and shut off the gas supply to the furnace.
- Remove the burner and blower door.

⚠ WARNING

Do not touch igniter. It is extremely hot. Failure to follow this warning could result in severe burns.

- Disconnect the igniter wire harness from the silicon carbide igniter and remove the igniter bracket from the burner assembly. Discard the igniter and bracket.

⚠ CAUTION

Label all wires prior to disconnection when servicing controls. Wiring errors can cause improper and dangerous operation. Verify proper operation after servicing.

- Disconnect all the wires from the IFC.

INSTALLING THE NEW SiNi IGNITER:

- Remove the igniter from the igniter bracket.
- Install the igniter (item 1) to the igniter bracket (item 9) using the screws provided in the kit (item 7).
- Install the igniter assembly to the burner bracket using the screw provided in the kit (item 7).
- Attach the harness adapter (item 2) to the SiNi igniter and existing wire plug.
- Secure the harness wiring with the cable ties provided in the kit (item 8).

INSTALLING THE NEW SiNi CONTROL:

- A) Attach the door switch to the platform.
- B) Attach the platform to the unit.
- C) Reconnect the wires to the IFC. Refer to the wiring diagram on the blower door for proper connection of wires.
- D) Reinstall the burner and blower doors.
- E) Reconnect all electric power and turn on the gas supply to the unit.

CAUTION

The integrated furnace control is polarity sensitive. The hot leg of the 115 VAC power must be connected to the BLACK field lead.

VERIFICATION OF PROPER OPERATION:

- A) Place the thermostat in the heating mode.
 - B) Initiate a call for heat by raising the thermostat setting 5 degrees above the room temperature.
 - C) Observe the furnace: If properly wired, the following star-up sequence should be observed:
 - The draft inducer should energize, then the igniter should start to glow.
 - After the igniter heat up time has expired, the gas valve should be energized - listen for the "click", the gas will then ignite.
 - After 45 seconds the main blower will turn on.
- When proper operation has been verified, set the thermostat back to the desired comfort set point.
- D) Sign and attach the mnemonic label (item 4) to the front of the blower door.
 - E) Attach wiring diagram D344299P02 for upflow furnace models or D344300P03 for downflow furnace models to the inside of the blower door.

Integrated Furnace Control Error Flash Codes

Green LED Flash	Amber LED Flash	Red LED Flash	ERROR
		1	Flame sensed when no flame should be present
		2	Pressure switch stuck closed
		3	1st stage pressure switch is open / not closing
		4	Open thermal limit or open rollout
		5	Open low voltage fuse
		6	1st stage pressure switch opened 5 times within on cycle--1 hour lockout
		7	System lockout retry
		8	System lockout recycle
		9	Reverse polarity or poor grounding
		10	Gas valve energized without call for heat
		12	Ignitor relay failure internal in board. Replace IFC
		Solid	Gas valve relay failure internal in board. Replace IFC
		3 Double	2nd stage pressure switch open; system reverts back to 1st stage heat
	1		1st stage call for heat
	2		2nd stage call for heat
	3		W2 call present without W1
	4		Y call present without G
	Rapid		Low flame sense current
1			Standby mode or call for cooling