



### WHAT'S NEW?



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### WHAT'S NEW

- .98 UEF for all models
  - Highest UEF for complete BTU range in the industry
- Field Gas Conversion
  - Default setup for NG, conversion included to change to LP without the need to order a gas conversion kit.
- EZ Start Plus Bluetooth App
  - Physical dipswitches are gone! Unit setup is done entirely through Bluetooth app.
- Built in Display Window
  - Remote control is optional. Maintenance Monitors and Unit Settings can be accessed through the Display Window.





### FIELD GAS CONVERSION

All NRCR Pro models are ready to be used with NG. If the jobsite has LP, a simple field gas conversion can be performed without the need to purchase any additional parts. Conversion is easy and can be done in about 5 minutes.



### **FIELD GAS CONVERSION**



Step 1





Remove the c-clip

Step 3



Carefully remove gas fitting



fitting



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**Remove NG orifice** 

Insert LP orifice (make sure o-ring and gasket aren't lost or damaged)



Secure venturi fitting

Insert gas fitting, secure c-clip and screw

### TANKLESS WATER HEATERS





### FIELD GAS CONVERSION

#### MAKE SURE TO FILL OUT AND ATTATCH GAS CONVERSION STICKER TO UNIT



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### **EZ START PLUS APP**



Initial unit setup, temperature adjustment, recirc settings and maintenance can all be handled through the new EZ Start Plus Bluetooth App!

The App will walk you through setting up the unit upon completing installation and provides an easy way to register the unit for your customers.

Error Code History can be accessed and will link you directly to help articles related to any error codes stored.

### **BUILT IN DISPLAY WINDOW**



Displays temperature setting, service reminders and error codes. Also allows you to view maintenance monitors, error code history and change installation settings. The new display window makes the remote control a truly optional item.



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### **NEW LATCHED FRONT COVER**



Easier access when performing preventative maintenance, service or operating the built in display window. Remove 2 screws at the bottom of the front cover and the latches hold the cover in place until you're ready to remove it.



## **MODEL SPECIFICATIONS**





# NRCR PRO PERFORMANCE

FLOW RATES (GPM)													
Temp Rise (F)	30	40	45	50	60	70	80	90	100	110	120	130	140
NRCR111	11.1	9.8	8.7	7.8	6.5	5.6	4.9	4.4	3.9	3.6	3.3	3.0	2.8
NRCR92	9.2	8.0	7.1	6.4	5.3	4.6	4.0	3.6	3.2	2.9	2.7	2.5	2.3



Need more flow? Quick Connect two identical NRCR Pro units and double the flow!











2 CROSSOVER VALVES

### **RECIRCULATION MODES**

- Auto Learning
- Manual Timer
- On Demand (Title 24)
- Always Off
- Always On

Recirculation Mode is selected in the Unit Settings section of the EZ Start Plus App.



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### **AUTO LEARNING MODE**



### **SETTING MANUAL SCHEDULE**



Schedule the NRCR Pro recirc times manually with the EZ Start Plus App. Simply tap the hours you want the pump to run. Want the same schedule every weekday? Adjust the schedule for one day then copy to all weekdays.

No longer requires extra purchase!





### **CUSTOMIZING RECIRC SETTINGS**

The NRCR Pro Recirc settings can be customized if needed. Programming is done through the built in display window. See Service Manual for complete directions.

Time to Learn: Determines how long a hot water fixture needs to be used before the NRCR Pro memorizes the use and runs the pump the next day. Available options are:

- 3 Seconds
- 10 Seconds (default)
- 60 Seconds

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120 Seconds.

Interval to Erase Learning Flag: determines how long the NRCR Pro will wait to erase a learned time if no hot water is used during that time. Available options are:

- 7 Days
- 14 Days (default)

Pre-Heating Adjustment: Determines how long the NRCR Pro will run the pump *before* a scheduled time to ensure the loop is heated and ready to be used at the start of the scheduled hour. Available options are:

- Pre-run Off
- 15 Minutes (default)
- 30 Minutes
- 60 Minutes.

### INSTALLATION



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### **PRE-INSTALLATION CHECKS**

Verify the following before installation and read the manual:

#### Check the gas:

- NRCR92 Max btu is 165k.
- NRCR111 Max btu is 199k.

Ensure the existing gas system can support that demand + other existing gas demands.

#### Check the power:

• NRCR Pro and all Noritz units operate on 120 VAC at 60Hz.

#### Check the vent:

- NRCR Pro uses plastic venting (PVC, CPVC and PP).
- Existing venting will likely have to be replaced unless you are replacing a similar type unit.
- Exhaust leaks into the home may lead to injury or death. Do not take shortcuts here!















### 1/2" GAS LINE CONDITIONS

 $\frac{1}{2}$ " Gas line is still an option with the new NRCR Series Pro assuming an 8" WC or higher initial starting pressure. As always, make sure to follow the gas sizing tables in the installation manual.

	4. Maximum Natural Gas Delivery Capacity (For 8 - 10.5 in. W.C. initial supply pressure)													
					3.	0 in. W.	C. Pressu	ure Drop	)					
						Len	gth (inclu	iding fitti	ngs)					
Pipe Size	10 ft	20 ft	30 ft	40 ft	50 ft	60 ft	70 ft	80 ft	90 ft	100 ft	125 ft	150 ft	175 ft	200 ft
	(3 m)	(6 m)	(9 m)	(12 m)	(15 m)	(18 m)	(21 m)	(24 m)	(27 m)	(30 m)	(38 m)	(45 m)	(53 m)	(60 m)
1/2 in.	454	312	250	214	190	172	158	147	138	131	116	105	96	90
3/4 in.	949	652	524	448	397	360	331	308	289	273	242	219	202	188
1 in.	1,790	1,230	986	844	748	678	624	580	544	514	456	413	380	353
1 1/4 in.	3,670	2,520	2,030	1,730	1,540	1,390	1,280	1,190	1,120	1,060	936	848	780	726
1 1/2 in.	5,500	3,780	3,030	2,600	2,300	2,090	1,920	1,790	1,680	1,580	1,400	1,270	1,170	1,090
2 in.	10,600	7,280	5,840	5,000	4,430	4,020	3,700	3,440	3,230	3,050	2,700	2,450	2,250	2,090
2 1/2 in.	16,900	11,600	9,310	7,970	7,070	6,400	5,890	5,480	5,140	4,860	4,300	3,900	3,590	3,340
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												TANK	LESS WATE	ER HEATERS

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### **GAS LINE CONDITIONS**

General gas guidelines.

Min	Natural Gas	LP Gas				
Min	2 E in M/C					
Min	3.5 In. W.C.	8 in. W.C.				
Max	10.5 in. W.C.	14 in. W.C.				
Rem <b>/Phi</b>	ove the <b>9/32 in. hex</b> l <b>ips screw</b> from the ta	head ap.				

Test inlet pressure after installation:

- Low demand (1 or 2 fixtures)
- Moderate demand (3 or 4 fixtures)
- High demand (5+ fixtures)
- Worst case scenario, 5+ fixtures + all other gas appliances.



### **GAS LINE CONDITIONS**

An improperly sized gas line generally results in one or more of the following issues:

- Ignition Failure (Error Code 11)
- Flame Loss (Error Code 12)
- Abnormal Combustion (Error Code 10 or 90)
- Fluctuating water temperatures
- · Abnormal noises

Other items in the gas supply system that could cause problems:

- Meter size
- Water/debris in gas line
- Earthquake safety shutoff valve (California specific)





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### VENTING GUIDELINES













### **PROGRAMMING THE UNIT**

Pro Series units no longer have physical dipswitches on the circuit board. All programming of the unit is done with the new EZ Start Plus App or the built in display window.











### **OPTIONAL WIRES**

- Quick Connect Cord
- On-Demand Switch
- Condensate Pump
- Thermo-Sensor
- CO Detector

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### **NRCR PRO SPECIFIC ERROR CODES**

- Error Code 06: Low Recirculation Flow (Only Warning Indication)
  - Check Return Line Filter.
  - Purge air in the domestic hot and return line (Dedicated Mode)
  - Check crossover valve filter (Crossover Mode)
  - Check crossover valve for correct orientation
- Error Code 63: Recirculation Abnormality (No Recirculation Flow)
  - Check Return Line Filter.
  - Purge air in the domestic hot and return line (Dedicated Mode)
  - Check that the "Crossover" connector is connected together
  - Check crossover valve filter (Crossover Mode)
  - Check crossover valve for correct orientation





### **INSIDE THE NRCR PRO**



Component List Error Codes Maintenance Monitors Unit Settings w/ Display Window Voltage Checkpoints Gas Pressures

### **BASIC MAINTENANCE**



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### **SERVICE REMINDER**

Stop c	ombustion, select se	ttings and tap [NEX	11.
Singi	e Vent (SV)		0
2 incl			0
Short	eight. t [ < 3/3/1(10m))	2	0
0-1,0	00ti(0-305m)		0
Inact	i faminilir İve		0
N/A	Curvins († 7584 -	×	0
6	BACK	NEXT	

Set "Service Reminder" setting to "Active" during setup (Default is Inactive)

Heater will use the Set Temp, Average BTU Use and Combustion Time to determine when a flush should be performed.

Once the flush has been performed correctly, the service reminder code will go away.

		0		Treatme	ent Guidelines			
			 Type of Water	Hardness Level	Treatment Device 1)	Flush Frequency 21	1) When selecting a treatment device,	
		0	Soft	0-1 gpg (0-17 mg/L)	None	None	you must consult its spec sheet and installation manual for guidelines and	NOTE:
		-	Slightly Hard	1-3 gpg (17-51 mg/L)	None	NUTE	limitations. Not all water supplies are compatible.	Water quality guidelines in the
		0	Moderately Hard	3-7 gpg (51-120 mg/L)			<ol> <li>A water test may be required.</li> <li>Install Noritz isolation valves to allow fluching</li> </ol>	water quality guidennes in the
14 ·····		0	Hard	7-10 gpg (120-171 mg/L)	Scale Shield or	Once a Vary D	<ol> <li>Flushing is required if a water treatment device is not installed</li> </ol>	manual still need to be followed.
			Very Hard	10-12 gpg (171-200 mg/L)	Water Softener	Unce a tear of	contrast sector is not instance.	Damage to the unit when used with
			 Extremely Hard	> 12 gpg (> 200 mg/L)				water hardness over 12 gpg may not
	NEXT		NOTE Da Lir •	image to the wa nited Warranty. Water in excess Poor water qual The display wind exchanger has n	ter heater as a resu of 12 gpg (200 mg/ ity (See the water o fow displayed a "C1 ot been flushed.	it of the items below L) of hardness uality list on page 1: # (service reminder	v is not covered by the Noritz America 2.) " indicating scale build-up, but the heat	be covered by the warranty.
	(i)							



### WATER QUALITY

#### Water Quality Guidelines in the Installation Manual should always be followed.

If this water heater will be installed in a location where the hardness of the supply water is high, scale build-up may cause damage to the heat exchanger.

Perform the suggested treatment and maintenance measures based on the water hardness level according to the below table.

Type of Water	Hardness Level	Treatment Device 1)	Flush Frequency 2)	<ol> <li>When selecting a treatment device,</li> </ol>					
Soft	0-1 gpg (0-17 mg/L)	Nono	None	you must consult its spec sheet and installation manual for guidelines and					
Slightly Hard	1-3 gpg (17-51 mg/L)	None	None	limitations. Not all water supplies are compatible					
Moderately Hard	3-7 gpg (51-120 mg/L)			<ul><li>2) Install Noritz isolation valves to allow function</li></ul>					
Hard	7-10 gpg (120-171 mg/L)	Scale Shield or	0	<ol> <li>Flushing is required if a water</li> <li>treatment device is not installed</li> </ol>					
Very Hard	10-12 gpg (171-200 mg/L)	Water Softener	Once a Year 3)	deathent device is not installed.					
Extremely Hard	> 12 gpg (> 200 mg/L)								

- Poor water quality (See the water quality list on page 12.)
  The display window displayed a "C1# (service reminder)" indicating scale build-up, but the heat exchanger has not been flushed.

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### DESCALING/FLUSHING

The flush connector is gone and descale mode is started with the EZ Start Plus App or the built in display.





### **EZ START PLUS APP MAINT MONITOR**

	n	EZ Start	Plus		A	EZ Star	t Plus		Inquiry No.2408050525 PM 🕋	
	Connected GQ-C3261_b095-000000 SELECT				Con	Connected GQ-C3261_b095-000000 SELECT			疱先: appdata@noritz.com	
	<b>然 MM# Info</b>				≮ MM# Info					
	# Item		Result			Item	Result		Cc/Bcc、差出人:	
You can aback and	3 Total Pu	ılg-in Time	18	×100	3	Total Pulg-in Time	18	×100	件名: Inquiry No.2408050525 PM	
record up to 2 minutes	201 Total Pu	Ilg-in Time	1,872	hour	201	Total Pulg-in Time	1,872	hour	Model Name : GQ-C3261WXQ-FF US	
of Maintenance Monitor	4 Combus	stion Time	7	x1	4	Combustion Time	7         x1         Gas Type : NG	Gas Type : NG		
data and send to Noritz	5 Combus	stion Time	0	x1k	5	Combustion Time	0	x1k	*If the Model Name/Serial#/Gas Type is not listed, please check the rating plate and fill in	
Customer Care.	202 Combustion Time 7 hour 202 Combustion Time	7	hour	the information.	III					
	6 Pump of	perating Time	0	x100	6	Pump operating Time	0	x100	Please provide information about you (the	X
	203 Pump op	perating	0	hour	20:	3 Pump operating	0	hour	Name :	$\langle \rangle$
	7 # of Igni	ition Times	2	×10	7	# of Ignition Times	2	x10	Company :	То
	8 # of Igni	ition Times	0	×10k	8	# of Ignition Times	0	x10k	Phone :	ustome
	204 # of Igni	ition Times	20	times	20	Tap to "St	top" or 2	2 times	Auto launches email	Care
	9 CO Alan	<sup>∞</sup> ∘Tap "	REC"	"		minutes	passed		after recording stopped	
	BA	ICK (	e RE	cho	0	BACK	ST(	P Q CO		
				2				2)		
ANKLESS WATER HEATERS										

### **COMMONLY USED MAINT MONITORS**

Maintenance Monitors (MM) tell you exactly what the unit is doing. They should be used in any situation regarding flow rates, temperatures and verifying what Recirculation Mode the unit is set to.

Error Code history is also found in Maintenance Monitor mode.

		Da	ita	Minimum Value for
MM	Item	Multiplier	Unit	Indication
03	Total Plug-in Time	x100	Hour	100 Hours
04	Total Combustion Time	x1	Hour	1 Hour
05	Total Combustion Time	x1000	Hour	1000 Hours
06	Total Pump Operating Time	x100	Hour	100 Hours
07	Number of Ignition Times	x10	Times	10 Times
08	Number of Ignition Times	x10000	Times	10000 Times
14	Total Flow Rate	x0.1	0.1gpm	0.1gpm
17	Recirculation Flow Rate	x0.1	0.1gpm	
30	Cold Water Thermistor	x1	F (C option)	1 F (0.5 C)
31	Hot Outlet Thermistor		F (C option)	1 F (0.5 C)
32	Heat Exchanger Thermistor		F (C option)	1 F (0.5 C)
86	Recirculation Mode	Dedicated Mode	Crossover Mode	
	Auto Recirc (Default)	11	21	
	Manual Timer Recirc	12	22	
	Recirc Always ON	13	23	
	Recirc Always OFF	14	24	
	On-Demand (Title 24) Mode	15	25	
91	Error Code History 1		Most Recent E	Fror Code
92	Error Code History 2	1	Next Most Recen	t Error Code
93	Error Code History 3	1	Next Most Recen	t Error Code
94	Error Code History 4	1	Next Most Recen	t Error Code
95	Error Code History 5	1	Next Most Recen	t Error Code
96	Error Code History 6	1	Next Most Recen	t Error Code
97	Error Code History 7	1	Next Most Recen	t Error Code
98	Error Code History 8	1	Next Most Recen	t Error Code

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### **HELPFUL CONTACT INFO**

### 866-7NORITZ (866-766-7489)

- Monday Friday: 5am to 6pm PST
- · Saturday: 6am to 3pm PST





**Gas Conversion** 













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