



Charger and Super Charger

***Commercial Gas
Water Heaters***



**Dependable, tank type water heaters for
commercial and industrial applications**

80% Thermal Efficiency

Meets ASHRAE Efficiency Standards

Charger

The Lochinvar Charger gas fired water heaters are designed to provide high efficiency, low stand-by loss and years of trouble-free service. All models meet the latest edition of ASHRAE Energy Efficiency Standards. Chargers are ideally suited for apartments, schools, food service and many other commercial and industrial requirements for hot water. They are built to ensure easy installation and maintenance.

Outstanding Features:

- Multi-flue design increases efficiency and heat transfer.
- Durable fused glass lining prolongs tank life.
- Up to two inches of Polyurethane foam insulation maximizes heat retention and lowers standby heat loss.
- Up to four magnesium tank saver anodes inhibit corrosion and prolong tank life.
- Heavy steel jacket with baked enamel finish.
- 300 psi tested tank with 150 psi approved working pressures.
- 115 VAC is required on all models above 125,000 Btu/hr.
- Automatic Reset High-Limit provides protection from overheat.
- Low silhouette drafthood.
- Spark ignition standard on models 125,000 Btu/hr and larger.
- Standing pilot millivolt system on 65,000 - 85,000 Btu/hr models.
- Hand hole cleanout permits easy access for cleaning.
- 100% pilot safety.
- Approved for 180°F operation.
- Slide out burner tray for convenient servicing on models 125,000 Btu/hr and larger.
- Combustible floor approval.
- Automatic Flue damper on all models above 125,000 Btu/hr.
- 3 year limited warranty.



Optional Equipment:

- Low Water Cut-Off.
- Temperature gauge.
- Pressure gauge.
- NSF Construction.

Super Charger

The Lochinvar Super Charger incorporates all of the high efficiency performance and design benefits of the Charger with the addition of an integrated fan induced combustion system. The result is optimum combustion with fan-assisted movement of the flue products over the multi-flue tank surface for improved heat transfer from the flue gases to the water. The Super Charger fan induced system allows installation with conventional negative draft venting using standard type “B” vent material.

Outstanding Features:

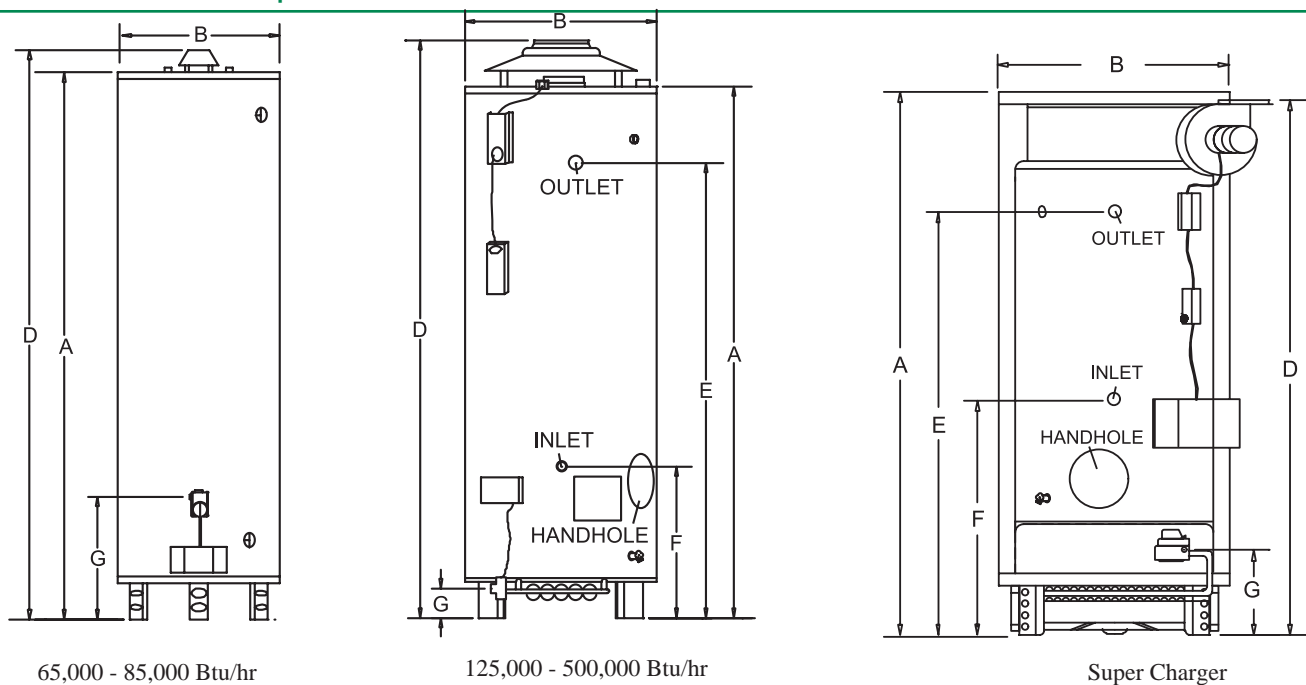
- Glass-lined tank.
- 100% pilot safety.
- Three magnesium tank saver anodes.
- Polyurethane foam insulation.
- Baked enamel jacket.
- Operating thermostat.
- Automatic Reset High-Limit.
- CSA certified.
- Standard or ASME tank construction.
- 300 psi test pressure for 150 psi working pressure.
- Approved for 180°F operation.
- Efficient multi-flue design.
- Hand hole cleanout.
- Simple 115 VAC circuitry.
- 4 second main gas shutdown.
- 3 year limited warranty.

Optional Equipment:

- Low Water Cut-Off.
- Temperature gauge.
- Pressure gauge.
- NSF Construction.



Dimensions and Specifications:



Charger Dimensions & Specifications

Model Number	Tank Const.	Btu/hr Input	Gallon Cap.	GPH @ 100°F Rise	A	B	D	E	F	G	Vent Size	Gas Conn	Water Conn	Nipple Spread	Shipping Weight
LNRO65-050*	STD	65,000	48	60	56-1/4"	22"	59-1/4"	-	-	13"	4"	1/2"	3/4" T	11"	160
CNR076-075*	STD	76,000	75	74	60-1/4"	26"	63-3/4"	-	-	16-1/2"	4"	1/2"	1" T	11"	294
CNR085-100*	STD	85,000	100	82	65"	28-1/4"	68-1/2"	-	-	15-1/2"	4"	1/2"	1-1/4" T	16"	420
CNR125-075-DF9*	STD	125,000	75	121	65"	28-1/4"	72-1/4"	54-1/4"	34"	4-3/4"	5"	3/4"	1-1/2" T/F	14-1/2"	520
CNR155-035-DF9*	STD	155,000	38	150	43"	28-1/4"	51"	34-3/4"	19-1/2"	4-3/4"	6"	3/4"	1-1/2" T/F	19"	438
CNR160-075-DF9*	STD	160,000	75	155	65"	28-1/4"	72-1/4"	34-3/4"	34"	4-3/4"	6"	3/4"	1-1/2" T/F	14-1/2"	520
CNR180-080-DF9	STD	180,000	80	175	64-1/4"	28-1/4"	72"	56"	19-1/2"	4-3/4"	6"	3/4"	1-1/2" T/F	19"	540
CNR200-080-DF9	STD	199,999	80	194	64-1/4"	28-1/4"	72"	56"	19-1/2"	4-3/4"	6"	3/4"	1-1/2" T/F	19"	540
CNR199-100-DF9	STD	199,999	100	194	65"	30-1/4"	75"	56-1/2"	23-1/2"	4-3/4"	6"	3/4"	1-1/2" T/F, 2" B	23"	725
CNR200-100-DF9	STD	199,999	98	194	75-1/2"	28-1/4"	83-3/4"	67"	19-1/2"	4-3/4"	6"	3/4"	1-1/2" T/F	19"	610
CNR250-100-DF9	STD	250,000	98	242	75-1/2"	28-1/4"	83"	67"	19-1/2"	4-3/4"	6"	3/4"	1-1/2" T/F	19"	610
CNR300-075-DF9	STD	300,000	75	291	64-1/2"	28-1/4"	74-1/2"	54-1/4"	29"	10-1/2"	7"	3/4"	1-1/2" F	19"	590
CNR370-065-DF9	STD	370,000	65	359	64-1/2"	28-1/4"	73-1/2"	54-1/4"	29"	10-1/2"	8"	1", 3/4" LP	1-1/2" F	19"	665
CNR400-080-DF9	STD	399,999	80	388	60"	30-1/4"	71"	51-1/2"	23-1/2"	10-1/2"	8"	1", 3/4" LP	1-1/2" F, 2" B	23"	800
CNA500-080-DF9	STD	505,000	80	496	60"	30-1/4"	69-1/2"	51-1/2"	23-1/2"	10-1/2"	10"	1", 3/4" LP	1-1/2" F, 2" B	23"	800
CNA251-100-DF9	ASME	250,000	98	242	75-1/2"	28-1/4"	83-1/2"	67"	19-1/2"	4-3/4"	6"	3/4"	1-1/2" T/F	19"	690
CNA301-075-DF9	ASME	300,000	75	291	64-1/2"	28-1/4"	73"	54-1/4"	29"	10-1/2"	7"	3/4"	1-1/2" F	19"	645
CNA371-065-DF9	ASME	370,000	65	359	64-1/2"	28-1/4"	73-1/2"	54-1/4"	29"	10-1/2"	8"	1", 3/4" LP	1-1/2" F	19"	720
CNA401-080-DF9	ASME	399,999	80	388	60"	30-1/4"	71-1/2"	51-1/2"	23-1/2"	10-1/2"	8"	1", 3/4" LP	1-1/2" F, 2" B	23"	835
CNA501-080-DF9	ASME	505,000	80	496	60"	30-1/4"	69-1/2"	51-1/2"	23-1/2"	10-1/2"	10"	1", 3/4" LP	1-1/2" F, 2" B	23"	835

◆ Indicates LP Inputs * These models have one aquastat.

Super Charger Dimensions & Specifications

Model Number	Tank Const.	Btu/hr Input	Gallon Cap.	GPH @ 100°F Rise	A	B	D	E	F	G	Vent Size	Gas Conn	Water Conn	Nipple Spread	Shipping Weight
CNR625-065-DF9	STD	625,000	65	606	69-1/2"	28-1/4"	69"	54-1/4"	29"	10-1/2"	8"	1", 3/4" LP	1-1/2" F	-	720
CNA626-065-DF9	ASME	625,000	65	606	69-1/2"	28-1/4"	69"	54-1/4"	29"	10-1/2"	8"	1", 3/4" LP	1-1/2" F	-	775
CNR725-080-DF9	STD	725,000	80	703	79-3/4"	28-1/4"	79-1/4"	64-1/4"	29"	10-1/2"	8"	1", 3/4" LP	1-1/2" F	-	800
CNA726-080-DF9	ASME	725,000	80	703	79-3/4"	28-1/4"	79-1/4"	64-1/4"	29"	10-1/2"	8"	1", 3/4" LP	1-1/2" F	-	880

Notes: Change "N" to "L" for LP gas models. Performance data is based on manufacturer test results.

LP Inputs

Model Number	Btu/hr Input	GPH @ 100°F Rise
CLR160-075-DF9	155,000	147
CLR200-080-DF9	190,000	184
CLR250-100-DF9	235,000	228
CLR400-080-DF9	375,000	364
CLR500-080-DF9	475,000	461
CLA251-100-DF9	235,000	228
CLA401-080-DF9	375,000	364
CLA501-080-DF9	475,000	461

FOR EASE IN ORDERING BY MODEL NUMBER



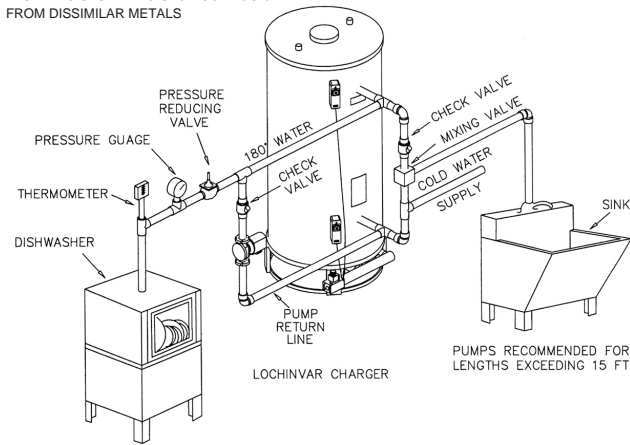
This is a natural gas Charger water heater. It has standard construction, 125 Btu/hr, and 75 gallon storage capacity. It comes with a flue damper and spark ignition.

T = Top Connections
F = Front Connections
B = Back Connections



Low NOx models are available. Consult factory.

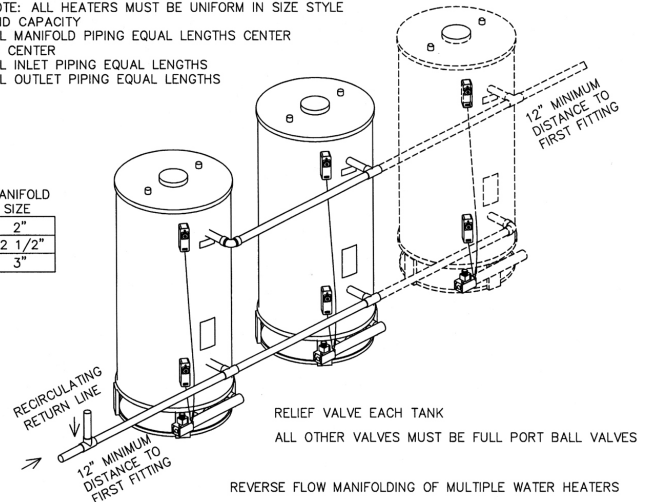
USE INSULATING COUPLING ON COMPLETE PLUMBING SYSTEM TO STOP CORROSION FROM DISSIMILAR METALS



TWO TEMPERATURE INSTALLATION

NOTE: ALL HEATERS MUST BE UNIFORM IN SIZE STYLE AND CAPACITY
ALL MANIFOLD PIPING EQUAL LENGTHS CENTER TO CENTER
ALL INLET PIPING EQUAL LENGTHS
ALL OUTLET PIPING EQUAL LENGTHS

# TANKS	MANIFOLD SIZE
2-3	2"
4	2 1/2"
5-6	3"



REVERSE FLOW MANIFOLDING OF MULTIPLE WATER HEATERS

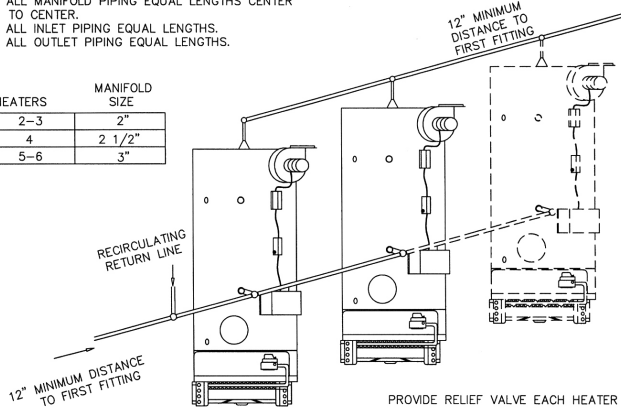
Typical Specification - Charger Models

Water heater shall be Lochinvar "Charger" Model _____ having an input of _____ Btu/hr, and a recovery of _____ GPH@100°F rise. Tank construction shall be of multi-flue design and shall have an approved working pressure of 150 PSI. The tank shall be glass-lined and fired to 1600°F for complete fusion of glass to steel, and shall have two or more magnesium anodes to provide electrolytic protection. Tank shall carry a three year limited warranty. The entire heater shall be CSA approved and shall meet or exceed the ASHRAE Standard for energy efficiency. All models shall be insulated with foam insulation for maximum heat retention. Controls will consist of an operation thermostat, automatic reset high limit, secondary overheat control, and a gas valve with 100% safety feature. All controls below 125,000 Btu/hr are self-generating and require no external power source. Models having inputs over 400,000 Btu/hr shall be provided with a flame safeguard pilot supervision providing four second gas shutdown on pilot failure (in accordance with CSA requirements). All models 125,000 Btu/hr and larger shall be provided with handhole cleanouts and slide-out burner tray for ease of inspection, cleaning and servicing.

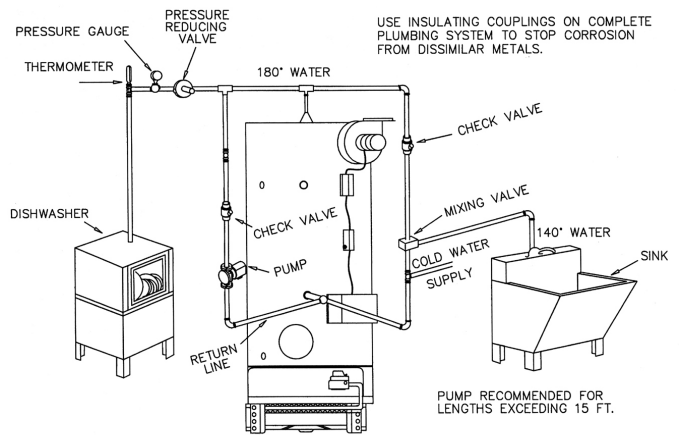
NOTE: ALL HEATERS MUST BE UNIFORM IN SIZE, STYLE AND CAPACITY.

- ALL MANIFOLD PIPING EQUAL LENGTHS CENTER TO CENTER.
- ALL INLET PIPING EQUAL LENGTHS.
- ALL OUTLET PIPING EQUAL LENGTHS.

HEATERS	MANIFOLD SIZE
2-3	2"
4	2 1/2"
5-6	3"



PROVIDE RELIEF VALVE EACH HEATER



TWO TEMPERATURE INSTALLATION

Typical Specification - Super Charger Models

Water heater shall be Lochinvar Model _____ with a storage capacity of _____ gallons, a minimum gas input of _____ Btu/hr., and a minimum recovery of _____ GPH@100°F rise. The water heater shall be listed and approved by CSA as self-contained, fan induced unit, with operating thermostat, automatic reset hi-limit, and manual reset hi-limit. This unit shall be glass lined and fired to 1600°F for complete fusion of glass to steel. The tank shall have a limited three year warranty. The tank shall have a handhole cleanout to facilitate cleaning. All models shall be provided with a flame safeguard pilot supervision providing four second gas shutdown on pilot failure.



Lochinvar[®]
High Efficiency Water Heaters, Boilers and Pool Heaters



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