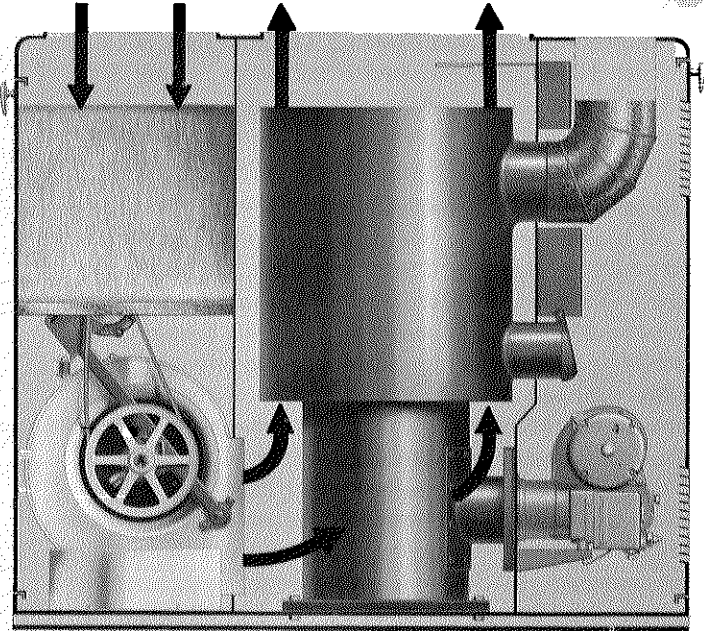




**FORCED AIR OIL FURNACES — LO-BOYS
OF7-105 AND OF7-140
91,000 to 140,000 Btuh Input
Add-On Cooling — 1-1/2 thru 4 Nominal Tons**

- Attractive Cabinet
- Rugged Heat Exchanger
- Efficient Burner
- Compact Low Height Design
- Sulky Blower
- Hammock Filter
- Sized For Air Conditioning
- Low Installation Cost
- Complete Service Access

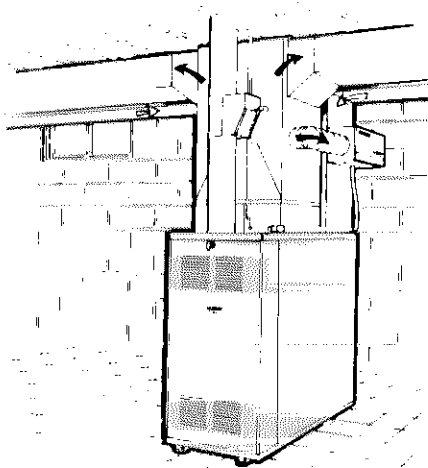


Lo-Boy Style Oil Furnaces Are Dependable And Efficient

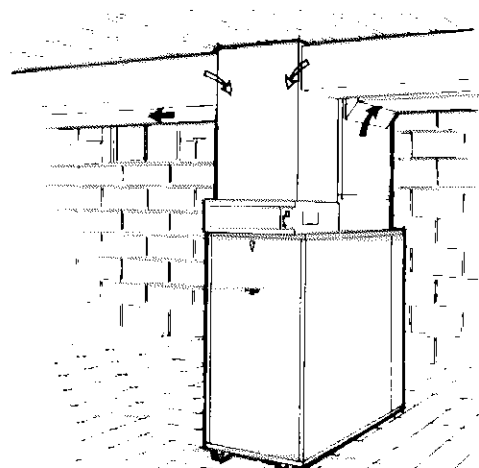
These rugged and attractive forced air oil fired lo-boy furnaces are equally applicable to residential and commercial applications. They can be installed with a Lennox direct expansion evaporator unit with remote condensing unit, electronic air cleaner and power humidifier for a complete all season Total Comfort installation. Furnace cabinet is constructed of heavy gauge steel with a durable baked-on enamel finish. Large front and rear doors provide complete service access. Quiet operating blowers have sufficient capacity to handle most cooling air volume requirements. Heat exchanger twin pass radiator and high performance oil

burner combine to give a high efficiency which is unsurpassed by any other furnaces of this size. The units are U.L. Listed. In addition, furnaces have been rated and tested according to Department of Energy (D.O.E.) test procedures and Federal Trade Commission (F.T.C.) labeling regulations in the Lennox Research Laboratory. Blower data is from actual unit tests conducted in the Lennox Laboratory air test chamber., Units are shipped factory assembled except drive kit. Installer has only to install drive kit, barometric draft regulator, mount thermostat, make duct, vent, oil line and electrical connections to complete a low cost installation.

Typical Applications



Basement Installation
(Front view of unit)
With cooling coil and humidifier



Basement Installation
(Rear view of unit)
With cooling coil and electronic air cleaner

NOTE — Specifications, Ratings and Dimensions subject to change without notice.

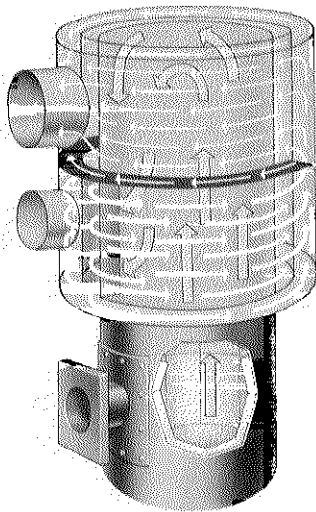
FEATURES

Rugged Cabinet — Constructed of heavy gauge cold rolled steel with die-formed rounded corners and a durable baked-on enamel finish. Heavy gauge galvanized steel inner casing encases entire heat exchanger. It directs air supply over heat exchanger for best possible heat transfer and keeps cabinet surface temperatures low. Steel channels run entire length of cabinet base for added strength and support. Adjustable leveling bolts are furnished in base section. Removal of heating section front door permits access to oil burner, inspection door and controls. Large blower access door at rear gives complete service access to blower and filter. All access doors are equipped with door handles. Vent outlet can be at the top or either side. Oil line and electrical inlet entry openings are provided. See dimensions drawing.

High Efficiency Oil Burner — Smooth operating Lennox designed oil burner perfectly blends oil and air to attain the greatest efficiency possible. Combustion head is designed to churn and mix oil and air before combustion takes place. This unmatched performance is accomplished by a time proven and tested firing head and high speed fan. Constant ignition electrodes supplied by a rugged 10,000 volt transformer guarantees a continuous safe flame. Belt drive permits high speed fan to be used with a normal speed pump. All parts are easily removed for servicing. Resiliently mounted to vestibule panel. Designed to operate on short cycles as demanded by the room thermostat. Equipped with a factory installed cadmium sulfide cell flame detector. Fuse box and fuse are furnished for sub-fusing of burner. Burner is factory installed in the unit, wired and fire tested.

Heat Exchanger — Heavy gauge steel with the Lennox "wrap around" radiator. Twin vent pass radiator gives controlled gas distribution over entire heating element. Thus, the vent gases wipe every square inch of heating surface. This results in lower stack temperatures and higher efficiency. Constructed to permit expansion and contraction without metal restraint or expansion noise.

Combustion Chamber — Consists of factory installed ceramic fiber combustion chamber which quickly attains a high surface temperature. This results in clean and quiet combustion.



Flame Inspection Door — Conveniently located at front of unit and equipped with a peep hole cover for flame viewing. Large enough opening for normal inspection mirror entry. Hinged door is designed so it cannot accidentally be left open.

Powerful Sulky Blower — Lennox designed and built "sulky" belt-driven blower. All moving parts are mounted on a rigid steel frame secured to the blower housing on resilient rubber mounts, assuring quiet operation. Motor mount design allows easy belt adjustment and pulley alignment. Blower wheel is statically and dynamically balanced. Adjustable motor pulley permits various speed adjustments. Bearings are rubber enclosed, self aligning, solid bronze groove and graphite filled. Large grease cups are furnished for lubrication.

Large Efficient Filter — Wrap around media permits abundant filter area with large dirt holding capacity. Tight edge seal prevents air from bypassing the filter. Filter mounting rack provides quick and simple replacement of media for servicing. Media is one inch thick oil impregnated fiberglass.

Draft Regulator — Furnished as standard equipment and field installs in the vent pipe.

Fan and Limit Control — Factory installed and accurately located. Fan control is temperature actuated to control blower operation and has adjustable blower off temperature setting. Limit protects against abnormal operating conditions and has a fixed temperature setting.

Primary Safety Control — Designed to be mounted on the unit wiring junction box. A thermal safety switch provides complete shutdown in case of flame failure. Factory installed and wired. A separate cadmium sulfide cell flame detector is furnished integral with oil burner.

Thermostat (Not Furnished) — Heating thermostat is optional equipment and must be ordered extra. For all season applications a heating-cooling thermostat is available with the condensing unit.

Blower Cooling Relay (Not Furnished) — Relay is optional and must be ordered extra, order no. P-8-3251. Field installs on wiring junction box.

U. L. INSTALLATION CLEARANCES (inches)

Model No.	OF7-105, OF7-140
Sides of cabinet	1
Rear of cabinet	1
Front of cabinet	24
Floor	0
Top of plenum	1
Plenum sides	2
Flue pipe	9
Horizontal warm air duct within 6' of furnace	1

NOTE — U.L. listed for alcove installation.

SPECIFICATIONS

Model Number	OF7-105	OF7-140
Input Btuh (maximum)	105,000	140,000
†Output Btuh (maximum)	78,000	105,000
†A.F.U.E.	72.5%	72.5%
Input Btuh (minimum)	91,000	105,000
Input Btuh (nozzle furnished)	91,000	119,000
Nozzle range (gph)	0.65 — 0.75	0.75 — 1.00
Nozzle furnished (gph)	0.65	0.85
Flue size (in. round)	6	7
Oil burner used (2-stage)	OHP30C-8	OHP31C-7
Blower wheel nominal diameter x width (in.)	10 x 8	12 x 9
Blower pulley bore x diam. (in.)	3/4 x 7 — O	1 x 7 — A
Blower motor & drives	(Choice from drive kit selection table)	
Tons of cooling that can be added	1-1/2, 2, 2-1/2 or 3	2-1/2, m 3, 3-1/2 or 4
Free filter area (sq. ft.) and cut size (in.)	3.9 (40 x 18 x 1)	5.4 (44 x 20 x 1)
*Number of packages in shipment	2	2
Shipping weight (lbs.)	330	395
Electrical characteristics	115 volts — 60 hertz — 1 phase	

†Annual Fuel Utilization Efficiency based on D.O.E. test procedures and F.T.C. labeling regulations.

*Packages consist of assembled furnace and drive kit.

DRIVE SELECTION

Heating Drive Kits

Furnace Model No.	Drive Kit Model No.	Motor hp	Motor Pulley (in.) & Groove	**Blower Pulley (in.) & Groove	*Rpm Range	Belt	Shipping Weight (lbs.) 1 Package
OF7-105	DK-2038 (LB-19849CA)	1/4	1/2 x 3-3/4 — OA	3/4 x 7 — O	585 — 785	3L420	15
OF7-140	DK-2003 (BM-7455)	1/4	1/2 x 3-1/4 — OA	1 x 7 — A	470 — 715	4L450	15

*At 1725 rpm motor speed.

**Factory installed in furnace package and not included in drive kit.

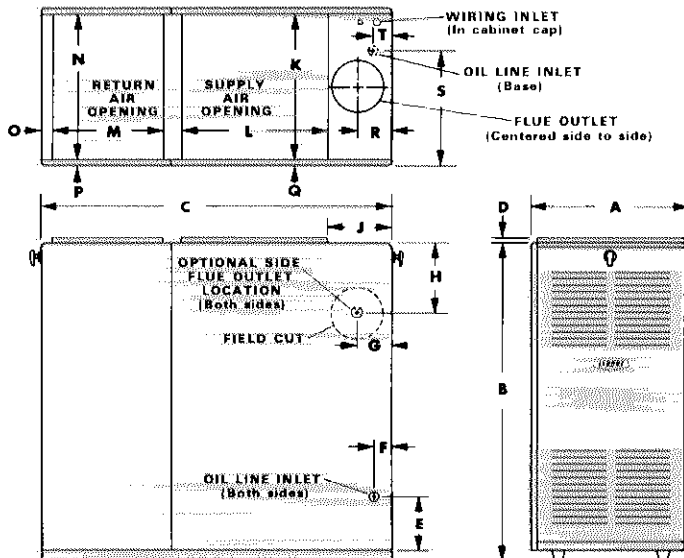
Cooling Drive Kits

Furnace Model No.	Drive Kit Model No.	Motor hp	Motor Pulley (in.) & Groove	**Blower Pulley (in.) & Groove	*Rpm Range	Belt	Shipping Weight (lbs.) 1 Package
OF7-105	1-1/2 & 2 Ton DK-2038 (LB-19849CA)	1/4	1/2 x 3-3/4 — OA	3/4 x 7 — O	585 — 785	3L420	15
	2-1/2 & 3 Ton DK-2040 (LB-19849CC)	1/3	1/2 x 4-1/8 — OA	3/4 x 7 — O	685 — 885	3L430	18
OF7-140	2-1/2 Ton DK-2003 (BM-7455)	1/4	1/2 x 3-1/4 — OA	1 x 7 — A	470 — 715	4L450	15
	3 Ton DK-2041 (LB-19849CD)	1/3	1/2 x 4-1/8 — OA	1 x 7 — A	690 — 935	4L470	18
	3-1/2 & 4 Ton DK-2044 (LB-19849CG)	1/2	5/8 x 4-1/8 — OA	1 x 7 — A	690 — 935	4L470	21

*At 1725 rpm motor speed.

**Factory installed in furnace package and not included in drive kit.

DIMENSIONS — (inches)



Model No.	A	B	C	D	E	F	G	H	J	K	L	M	N	O	P	Q	R	S	T
OF7-105	22	43	49-1/8	1/2	8-1/4	2-7/8	5-1/2	10-3/4	11	20-1/4	20-1/4	13	20-1/4	1-5/8	7/8	7/8	5-1/2	14-1/2	4
OF7-140	24	48-1/2	53-1/8	1/2	8-1/4	2-7/8	5-1/4	10-1/2	9-3/4	22-1/4	22-1/4	16-3/4	22-1/4	1-5/8	7/8	7/8	5-1/4	16-1/2	3

BLOWER DATA

OF7-105 BLOWER PERFORMANCE

Air Volume (cfm)	STATIC PRESSURE EXTERNAL TO UNIT — Inches Water Gauge																					
	0		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
700	440	.05	530	.08	610	.11	685	.14	755	.17	825	.21	885	.25	940	.30	1000	.35	1055	.41	1095	.45
800	500	.08	580	.11	655	.14	725	.17	790	.20	850	.24	915	.30	970	.35	1025	.40	1075	.45	1125	.50
900	575	.11	640	.14	700	.17	765	.21	825	.25	880	.29	940	.34	1000	.40	1050	.45	1100	.50	1150	.56
1000	630	.15	695	.18	755	.22	815	.26	870	.30	925	.35	975	.40	1030	.45	1075	.50	1125	.56	1175	.63
1200	750	.25	810	.30	860	.34	915	.39	960	.43	1010	.48	1050	.53	1100	.59	1145	.65	1185	.71	1225	.77
1400	880	.40	925	.46	975	.51	1020	.56	1065	.61	1100	.66	1140	.71	1180	.78	1220	.83	1260	.90	---	---
1600	1000	.60	1045	.66	1090	.72	1130	.78	1165	.83	1205	.89	---	---	---	---	---	---	---	---	---	---

NOTE — All cfm data is measured external to the furnace using standard return air opening and with the air filter in place.

OF7-140 BLOWER PERFORMANCE

Air Volume (cfm)	STATIC PRESSURE EXTERNAL TO UNIT — Inches Water Gauge																					
	0		.10		.20		.30		.40		.50		.60		.70		.80		.90		1.0	
	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP	RPM	BHP
800	375	.05	455	.08	530	.11	595	.14	650	.17	705	.20	750	.23	800	.26	---	---	---	---	---	---
1000	460	.10	535	.13	600	.17	650	.20	710	.24	755	.27	805	.31	845	.35	885	.38	935	.44	960	.47
1200	550	.17	615	.22	665	.25	725	.29	770	.33	820	.38	860	.42	900	.46	940	.51	975	.55	1010	.60
1400	655	.28	700	.32	740	.35	790	.40	835	.45	880	.50	920	.55	960	.60	995	.65	1030	.70	1065	.75
1600	740	.41	780	.45	825	.50	870	.55	915	.62	950	.67	985	.71	1025	.78	1055	.83	1095	.90	---	---
1800	835	.58	865	.62	910	.68	945	.74	980	.80	1020	.86	1055	.92	---	---	---	---	---	---	---	---
2000	925	.79	955	.83	990	.90	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---	---

NOTE: All cfm data is measured external to the furnace using standard return air opening and with the air filter in place.