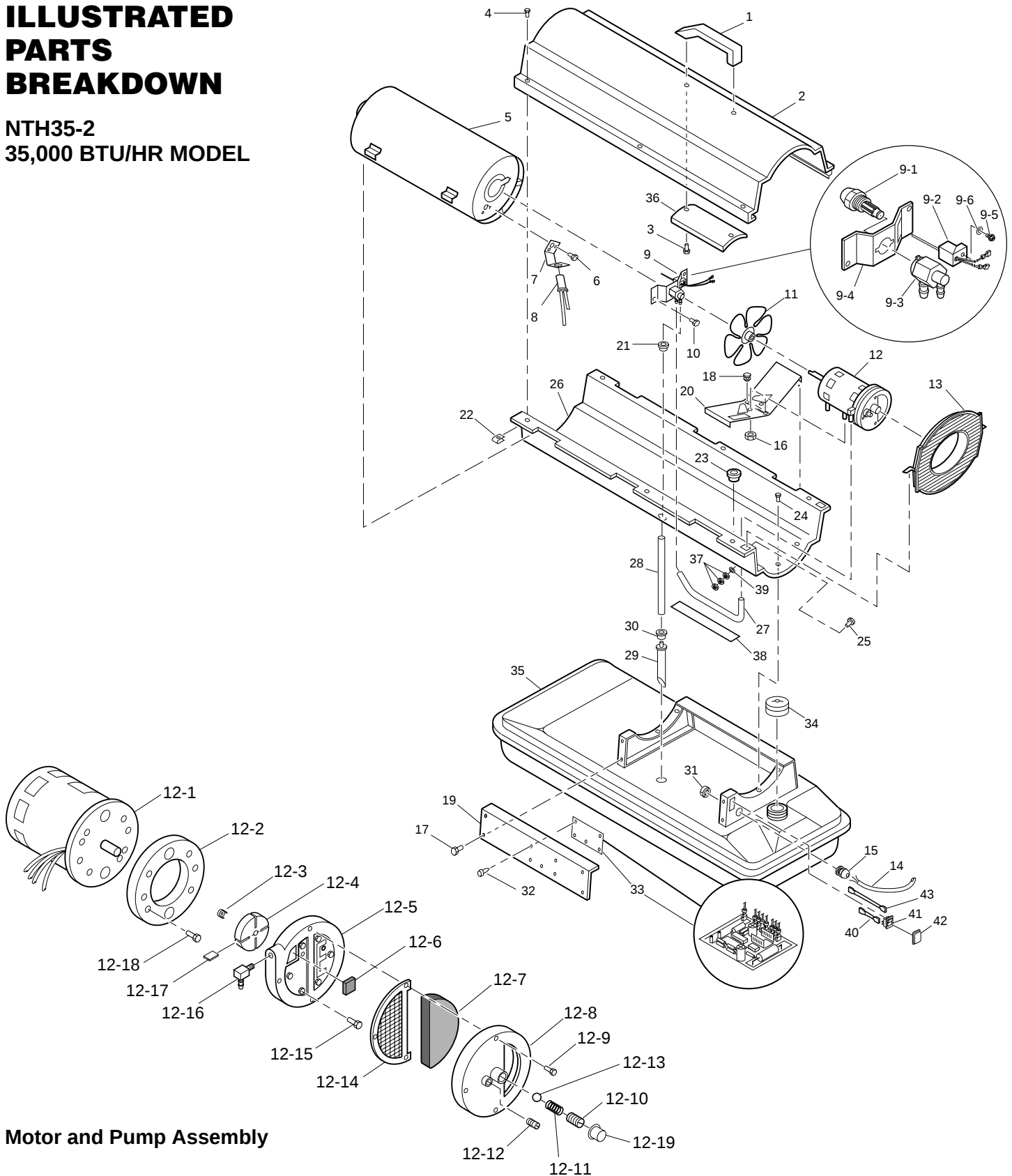


PORTABLE FORCED AIR HEATERS

ILLUSTRATED PARTS BREAKDOWN

NTH35-2
35,000 BTU/HR MODEL



Motor and Pump Assembly

OWNER'S MANUAL

PARTS LIST

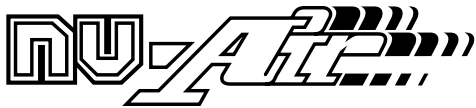
This list contains replaceable parts used in your heater. When ordering parts, be sure to provide the correct model and serial numbers (from the model plate), then the part number and description of the desired part.

NTH35-2

35,000 BTU/HR MODEL

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	M51104-01	Handle	1	14	098872-04	Power Cord	1
2	098511-256	Upper Shell	1	15	M50400	Strain Relief Bushing	1
3	M11084-29	Screw, #10-16 x 3/4"	2	16	NTC-4C	Hex Lock Nut, 1/4-20	2
4	102432-01	Screw/Lockwasher, 1/2"	6	17	102431-01	Screw/Lockwasher, 1/2"	4
5	098512-63	Combustion Chamber	1	18	M50631	Rubber Bumper	2
6	M10908-2	Screw, #6-32 x 3/8"	2	19	097461-09	Side Cover	1
7	103154-03	Photocell Bracket	1	20	101205-01	Motor Bracket	1
8	M16656-24	Photocell Assembly	1	21	M30865-02	Bushing	1
9	**	Burner Strap Assembly	1	22	M11271-8	Clip Nut	6
9-1	HA3006	Nozzle Assembly	1	23	M50104-02	Bushing	1
9-2	102548-05	Ignitor Kit	1	24	102431-01	Screw/Lockwasher, 1/2"	6
9-3	104056-01	Nozzle Adapter	1	25	RF3-4B	Screw, #10-32 x 1/2"	1
9-4	102336-01	Nozzle Adapter Bracket	1	26	098511-237	Lower Shell	1
9-5	M10908-75	Screw, #6-32 x 7/8"	1	27	M50814-06	Rubber Airline	1
9-6	103347-01	Belleville Washer	1	28	M29652-05	Fuel Line	1
10	102431-01	Screw/Lockwasher, 1/2"	2	29	108060-01	Fuel Filter	1
11	103684-01	Fan	1	30	M10990-3	Rubber Bushing	1
12	**	Motor and Pump Assembly	1	31	102861-01	Nylon Locknut	1
12-1	102001-25	Motor	1	32	102349-01	PCB Support	5
12-2	079975-03	Pump Body	1	33	104068-04	Ignition Control Assembly	1
12-3	M22009	Insert	1	34	097702-01	Fuel Cap (Includes Gasket)	1
12-4	M22456-2	Rotor	1	35	108088-01	Fuel Tank	1
12-5	M29608	Pump End Cover	1	36	M51108-01	Shell Heat-Shield	1
12-6	M29632	Lint Filter	1	37	NPF-3B	Nut, #10-32	3
12-7	M29633	Intake Filter	1	38	097785-01	Vinyl Foam Gasket	1
12-8	M29609	Filter End Cover	1	39	WLE-3	Lockwasher, #10	1
12-9	M12461-31	Screw, #10-32 x 1"	3	40	079010-39	Wire Assembly (Brown/White)	1
12-10	M27694	Adjusting Screw	1	41	105793-01	ON/OFF Switch	1
12-11	M10993-1	Pressure Relief Spring	1	42	079919-01	Switch Cover	1
12-12	M22997	Plug	1	43	079010-40	Wire Assembly (White)	1
12-13	M8940	Steel Ball, 1/4" Diameter	1	PARTS AVAILABLE - NOT SHOWN			
12-14	M29612-01	Output Filter	1		HA2210	Filler Neck Screen	1
12-15	M12461-32	Screw #10-32 x 1 1/8"	6		103814-01	Wire Tie	1
12-16	103676-01	Nylon Elbow, 90°	1		104974-01	Tradename Decal	2
12-17	M8643-2	Blade	4		106013-01	Decal Package	1
12-18	FHPF3-6C	Screw, #10-32 x 3/4"	2		105880-01	Ignition Control Assembly Fuse	1
12-19	105780-01	Plastic Cap	1				
13	M51105-01	Fan Guard	1				

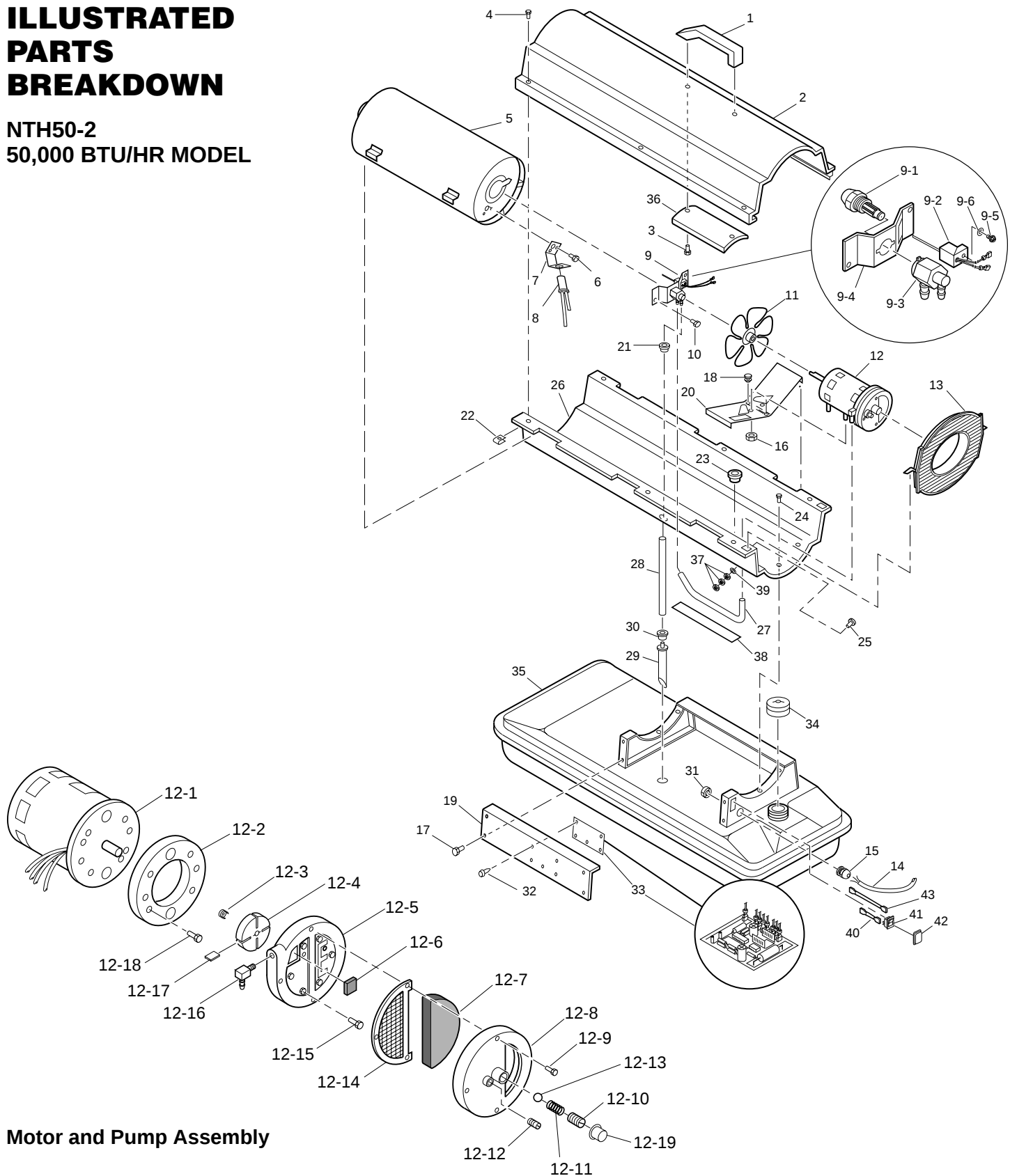
** Not available as an assembly; order parts separately



PORTABLE FORCED AIR HEATERS

ILLUSTRATED PARTS BREAKDOWN

NTH50-2
50,000 BTU/HR MODEL



Motor and Pump Assembly

OWNER'S MANUAL

PARTS LIST

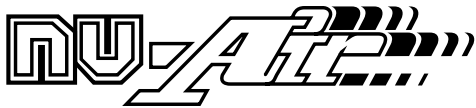
This list contains replaceable parts used in your heater. When ordering parts, be sure to provide the correct model and serial numbers (from the model plate), then the part number and description of the desired part.

NTH50-2

50,000 BTU/HR MODEL

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	M51104-01	Handle	1	14	098872-04	Power Cord	1
2	098511-256	Upper Shell	1	15	M50400	Strain Relief Bushing	1
3	M11084-29	Screw, #10-16 x 3/4"	2	16	NTC-4C	Hex Lock Nut, 1/4-20	2
4	102432-01	Screw/Lockwasher, 1/2"	6	17	102431-01	Screw/Lockwasher, 1/2"	4
5	098512-67	Combustion Chamber	1	18	M50631	Rubber Bumper	2
6	M10908-2	Screw, #6-32 x 3/8"	2	19	097461-09	Side Cover	1
7	103154-03	Photocell Bracket	1	20	101205-01	Motor Bracket	1
8	M16656-24	Photocell Assembly	1	21	M30865-02	Bushing	1
9	**	Burner Strap Assembly	1	22	M11271-8	Clip Nut	6
9-1	100735-27	Nozzle Assembly	1	23	M50104-02	Bushing	1
9-2	102548-05	Ignitor Kit	1	24	102431-01	Screw/Lockwasher, 1/2"	6
9-3	104056-01	Nozzle Adapter	1	25	RF3-4B	Screw, #10-32 x 1/2"	1
9-4	102336-01	Nozzle Adapter Bracket	1	26	098511-237	Lower Shell	1
9-5	M10908-75	Screw, #6-32 x 7/8"	1	27	M50814-06	Rubber Airline	1
9-6	103347-01	Belleville Washer	1	28	M29652-05	Fuel Line	1
10	102431-01	Screw/Lockwasher, 1/2"	2	29	108060-03	Fuel Filter	1
11	103684-01	Fan	1	30	M10990-3	Rubber Bushing	1
12	**	Motor and Pump Assembly	1	31	102861-01	Nylon Locknut	1
12-1	102001-23	Motor	1	32	102349-01	PCB Support	5
12-2	079975-02	Pump Body	1	33	104068-04	Ignition Control Assembly	1
12-3	M22009	Insert	1	34	097702-01	Fuel Cap (Includes Gasket)	1
12-4	M22456-1	Rotor	1	35	108088-03	Fuel Tank	1
12-5	M29608	Pump End Cover	1	36	M51108-01	Shell Heat-Shield	1
12-6	M29632	Lint Filter	1	37	NPF-3B	Nut, #10-32	3
12-7	M29633	Intake Filter	1	38	097785-01	Vinyl Foam Gasket	1
12-8	M29609	Filter End Cover	1	39	WLE-3	Lockwasher, #10	1
12-9	M12461-31	Screw, #10-32 x 1"	3	40	079010-39	Wire Assembly (Brown/White)	1
12-10	M27694	Adjusting Screw	1	41	105793-01	ON/OFF Switch	1
12-11	M10993-1	Pressure Relief Spring	1	42	079919-01	Switch Cover	1
12-12	M22997	Plug	1	43	079010-40	Wire Assembly (White)	1
12-13	M8940	Steel Ball, 1/4" Diameter	1	PARTS AVAILABLE - NOT SHOWN			
12-14	M29612-01	Output Filter	1		HA2210	Filler Neck Screen	1
12-15	M12461-31	Screw #10-32 x 1"	6		103814-01	Wire Tie	1
12-16	103676-01	Nylon Elbow, 90°	1		104974-01	Tradename Decal	2
12-17	M8643	Blade	4		106013-05	Decal Package	1
12-18	FHPF3-5C	Screw, #10-32 x 5/8"	2		105880-01	Ignition Control Assembly Fuse	1
12-19	105780-01	Plastic Cap	1				
13	M51105-01	Fan Guard	1				

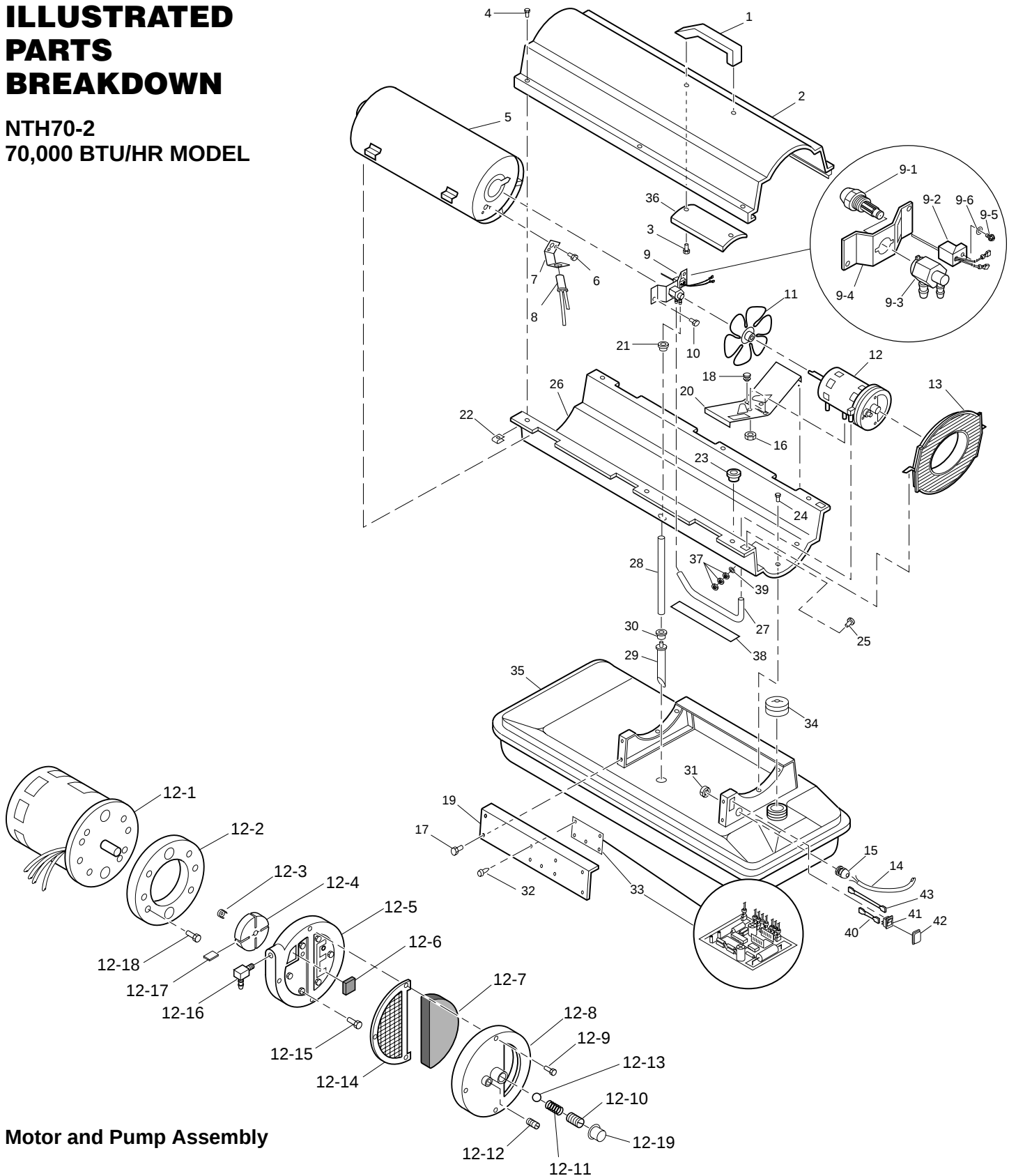
** Not available as an assembly; order parts separately



PORTABLE FORCED AIR HEATERS

ILLUSTRATED PARTS BREAKDOWN

NTH70-2
70,000 BTU/HR MODEL



Motor and Pump Assembly

OWNER'S MANUAL

PARTS LIST

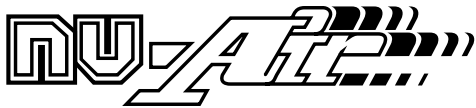
This list contains replaceable parts used in your heater. When ordering parts, be sure to provide the correct model and serial numbers (from the model plate), then the part number and description of the desired part.

NTH70-2

70,000 BTU/HR MODEL

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	M51104-01	Handle	1	14	098872-04	Power Cord	1
2	098511-256	Upper Shell	1	15	M50400	Strain Relief Bushing	1
3	M11084-29	Screw, #10-16 x 3/4"	2	16	NTC-4C	Hex Lock Nut, 1/4-20	2
4	102432-01	Screw/Lockwasher, 1/2"	6	17	102431-01	Screw/Lockwasher, 1/2"	4
5	098512-64	Combustion Chamber	1	18	M50631	Rubber Bumper	2
6	M10908-2	Screw, #6-32 x 3/8"	2	19	097461-09	Side Cover	1
7	103154-03	Photocell Bracket	1	20	101205-01	Motor Bracket	1
8	M16656-24	Photocell Assembly	1	21	M30865-02	Bushing	1
9	**	Burner Strap Assembly	1	22	M11271-8	Clip Nut	6
9-1	HA3026	Nozzle Assembly	1	23	M50104-02	Bushing	1
9-2	102548-05	Ignitor Kit	1	24	102431-01	Screw/Lockwasher, 1/2"	6
9-3	104056-01	Nozzle Adapter	1	25	RF3-4B	Screw, #10-32 x 1/2"	1
9-4	102336-01	Nozzle Adapter Bracket	1	26	098511-237	Lower Shell	1
9-5	M10908-75	Screw, #6-32 x 7/8"	1	27	M50814-06	Rubber Airline	1
9-6	103347-01	Belleville Washer	1	28	M29652-05	Fuel Line	1
10	102431-01	Screw/Lockwasher, 1/2"	2	29	108060-03	Fuel Filter	1
11	103684-01	Fan	1	30	M10990-3	Rubber Bushing	1
12	**	Motor and Pump Assembly	1	31	102861-01	Nylon Locknut	1
12-1	102001-23	Motor	1	32	102349-01	PCB Support	5
12-2	079975-02	Pump Body	1	33	104068-04	Ignition Control Assembly	1
12-3	M22009	Insert	1	34	097702-01	Fuel Cap (Includes Gasket)	1
12-4	M22456-1	Rotor	1	35	108088-03	Fuel Tank	1
12-5	M29608	Pump End Cover	1	36	M51108-01	Shell Heat-Shield	1
12-6	M29632	Lint Filter	1	37	NPF-3B	Nut, #10-32	3
12-7	M29633	Intake Filter	1	38	097785-01	Vinyl Foam Gasket	1
12-8	M29609	Filter End Cover	1	39	WLE-3	Lockwasher, #10	1
12-9	M12461-31	Screw, #10-32 x 1"	3	40	079010-39	Wire Assembly (Brown/White)	1
12-10	M27694	Adjusting Screw	1	41	105793-01	ON/OFF Switch	1
12-11	M10993-1	Pressure Relief Spring	1	42	079919-01	Switch Cover	1
12-12	M22997	Plug	1	43	079010-40	Wire Assembly (White)	1
12-13	M8940	Steel Ball, 1/4" Diameter	1	PARTS AVAILABLE - NOT SHOWN			
12-14	M29612-01	Output Filter	1		HA2210	Filler Neck Screen	1
12-15	M12461-31	Screw #10-32 x 1"	6		103814-01	Wire Tie	1
12-16	103676-01	Nylon Elbow, 90°	1		104974-01	Tradename Decal	2
12-17	M8643	Blade	4		106013-02	Decal Package	1
12-18	FHPF3-5C	Screw, #10-32 x 5/8"	2		105880-01	Ignition Control Assembly Fuse	1
12-19	105780-01	Plastic Cap	1				
13	M51105-01	Fan Guard	1				

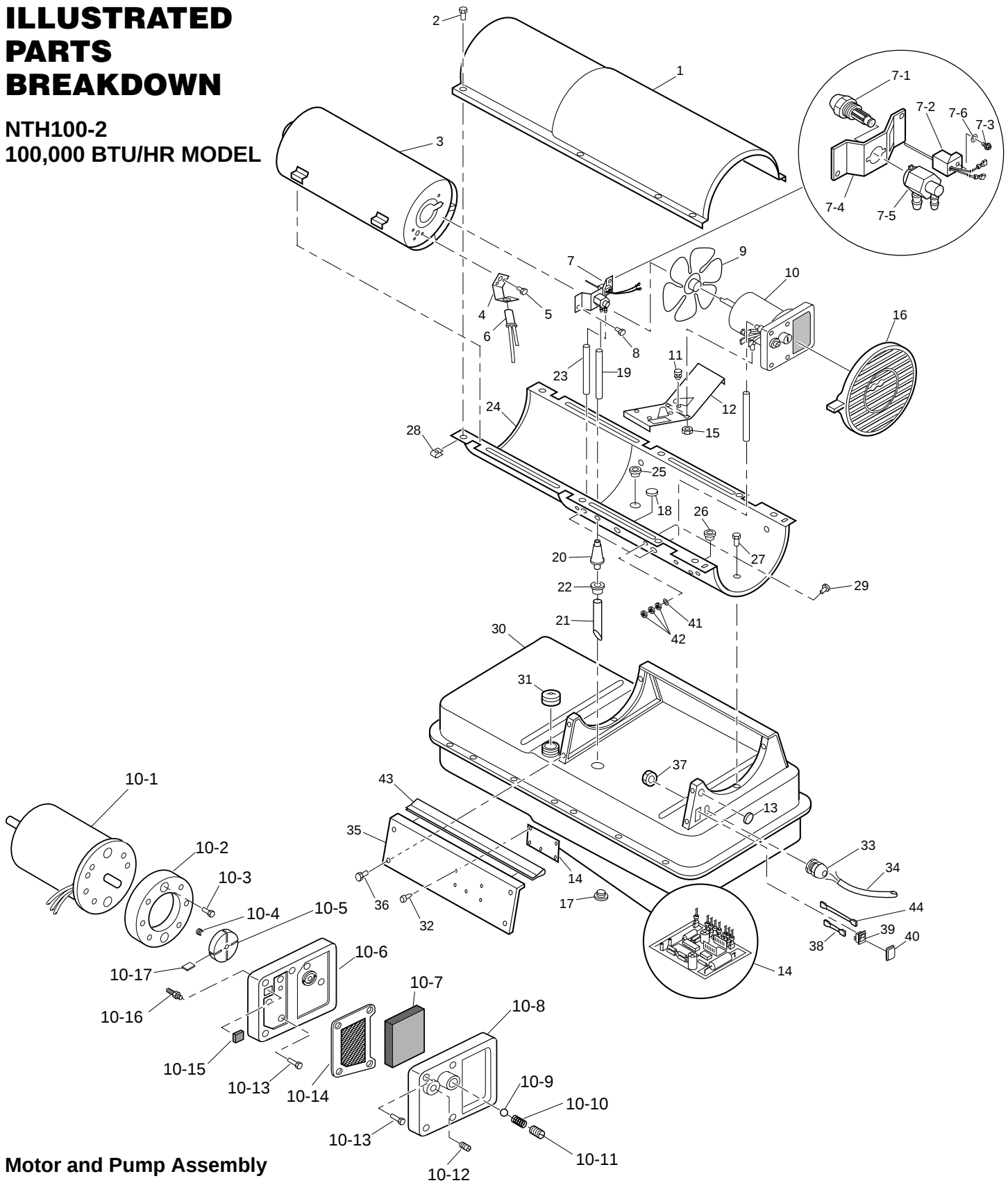
** Not available as an assembly; order parts separately



PORTABLE FORCED AIR HEATERS

ILLUSTRATED PARTS BREAKDOWN

NTH100-2
100,000 BTU/HR MODEL



Motor and Pump Assembly

OWNER'S MANUAL

PARTS LIST

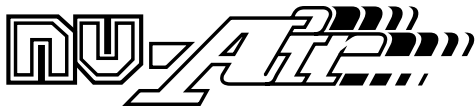
This list contains replaceable parts used in your heater. When ordering parts, be sure to provide the correct model and serial numbers (from the model plate), then the part number and description of the desired part.

NTH100-2

100,000 BTU/HR MODEL

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	098511-257	Upper Shell	1	15	NTC-4C	Hex Lock Nut, 1/4-20	2
2	102432-01	Screw/Lockwasher, 1/2"	8	16	M51114-01	Fan Guard	1
3	098512-65	Combustion Chamber	1	17	M27417	Drain Plug (Includes "o" Ring)	1
4	103971-01	Photocell Bracket	1	18	099213-01	Button Plug	1
5	M10908-2	Screw, #6-32 x 3/8"	2	19	M51345-01	Fuel Line	1
6	M16656-24	Photocell Assembly	1	20	107961-01	Fuel Filter	1
7	**	Burner Strap Assembly	1	21	M51151-01	Fuel Line Tube	1
7-1	HA3027	Nozzle Assembly	1	22	M10990-3	Rubber Bushing	1
7-2	102548-05	Ignitor Kit	1	23	M50814-03	Airline	1
7-3	M10908-75	Screw, #6-32 x 7/8"	1	24	098511-236	Lower Shell	1
7-4	102336-01	Nozzle Adapter Bracket	1	25	M50104-03	Bushing	1
7-5	104054-01	Nozzle Adapter	1	26	M50104-01	Bushing	1
7-6	103347-01	Belleville Washer	1	27	102431-01	Screw/Lockwasher, 1/2"	6
8	102431-01	Screw/Lockwasher, 1/2"	2	28	M11271-8	Clip Nut	8
9	102042-01	Fan	1	29	RF3-4B	Screw, #10-32 x 1/2"	1
10	**	Motor and Pump Assembly	1	30	108088-04	Fuel Tank	1
10-1	102001-24	Motor	1	31	097702-01	Fuel Cap (Includes Gasket)	1
10-2	079975-02	Pump Body	1	32	102349-01	P.C. Board Support	5
10-3	FHPF3-5C	Screw, #10-32 x 5/8"	2	33	M50400	Strain Relief Bushing	1
10-4	M22009	Rotor Insert	1	34	098872-04	Power Cord	1
10-5	M22456-1	Pump Rotor	1	35	M51077-15	Side Cover	1
10-6	M50545	Pump End Cover	1	36	102431-01	Screw/Lockwasher, 1/2"	4
10-7	M12179	Intake Filter	1	37	102861-01	Nylon Locknut	1
10-8	M16545	Filter End Cover	1	38	079010-39	Wire Assembly (Brown/White)	1
10-9	M8940	Steel Ball, 1/4" Diameter	1	39	105793-01	ON/OFF Switch	1
10-10	M10993-1	Relief Spring	1	40	079919-01	Switch Cover	1
10-11	M27694	Adjusting Screw	1	41	WLE-3	Lockwasher, #10	1
10-12	M22997	Plug	1	42	NPF-3B	Nut, #10-32	3
10-13	M12461-31	Screw, #10-32 x 1"	10	43	097468-01	Edge Liner	1
10-14	M12244-1	Output Filter	1	44	079010-40	Wire Assembly (White)	1
10-15	M11637	Lint Filter	1	PARTS AVAILABLE - NOT SHOWN			
10-16	M50820-02	Barb Fitting	1		HA2210	Filler Neck Screen	1
10-17	M8643	Blade	4		103814-01	Wire Tie	1
11	M50631	Rubber Bumper	2		104998-01	Tradename Decal	2
12	101206-01	Motor Mounting Bracket	1		106013-03	Decal Package	1
13	101695-01	Button Plug	1		105880-01	Ignition Control Assembly Fuse	1
14	104068-04	Ignition Control Assembly	1				

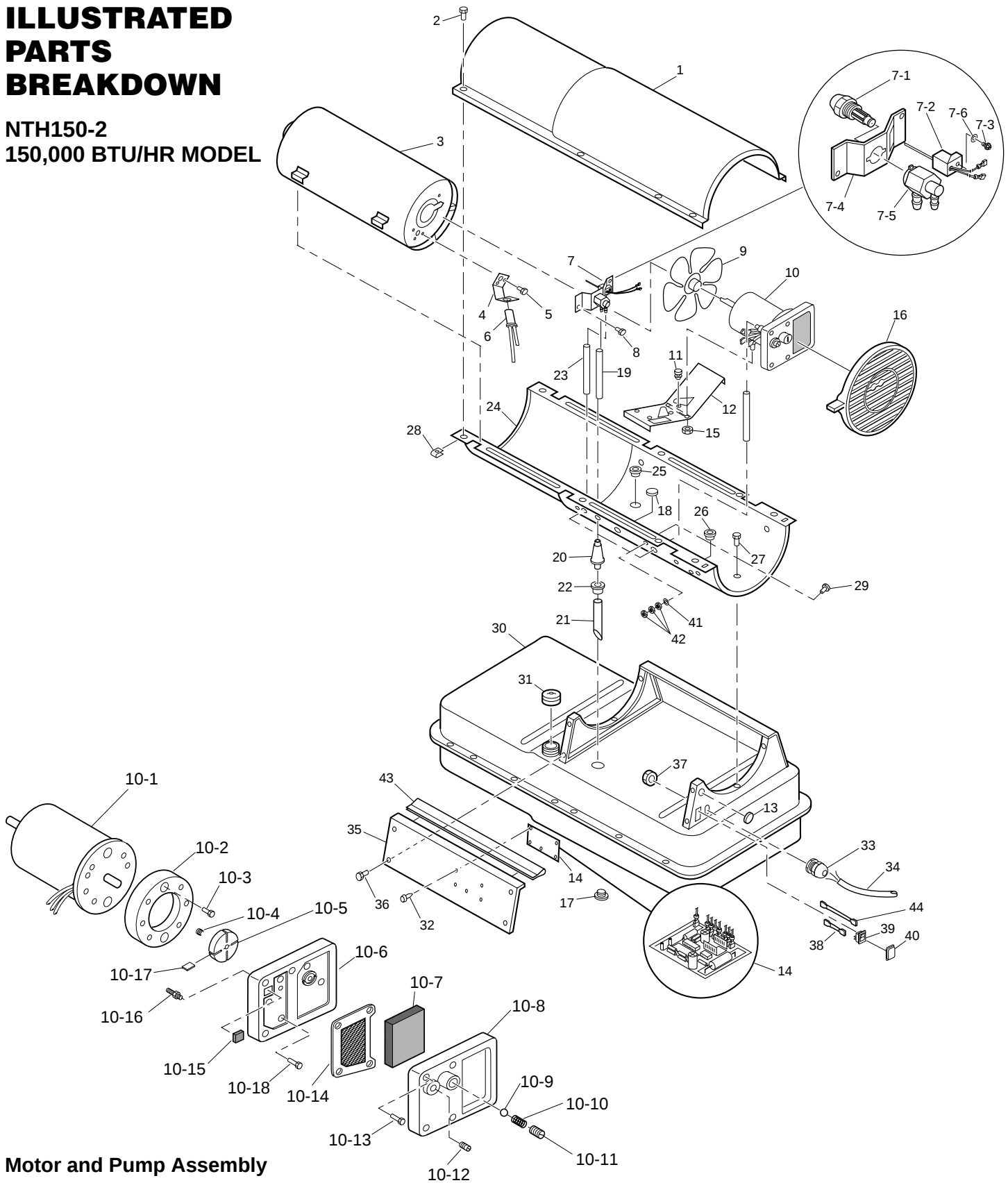
** Not available as an assembly; order parts separately



PORTABLE FORCED AIR HEATERS

ILLUSTRATED PARTS BREAKDOWN

NTH150-2
150,000 BTU/HR MODEL



Motor and Pump Assembly

OWNER'S MANUAL

PARTS LIST

This list contains replaceable parts used in your heater. When ordering parts, be sure to provide the correct model and serial numbers (from the model plate), then the part number and description of the desired part.

NTH150-2

150,000 BTU/HR MODEL

KEY NO.	PART NUMBER	DESCRIPTION	QTY.	KEY NO.	PART NUMBER	DESCRIPTION	QTY.
1	098511-257	Upper Shell	1	15	NTC-4C	Hex Lock Nut, 1/4-20	2
2	102432-01	Screw/Lockwasher, 1/2"	8	16	M51114-01	Fan Guard	1
3	098512-66	Combustion Chamber	1	17	M27417	Drain Plug (Includes "o" Ring)	1
4	103154-05	Photocell Bracket	1	18	099213-01	Button Plug	1
5	M10908-2	Screw, #6-32 x 3/8"	2	19	M51345-04	Fuel Line	1
6	M16656-24	Photocell Assembly	1	20	107961-01	Fuel Filter	1
7	**	Burner Strap Assembly	1	21	M51151-02	Fuel Line Tube	1
7-1	100735-24	Nozzle Assembly	1	22	M10990-3	Rubber Bushing	1
7-2	102548-05	Ignitor Kit	1	23	M50814-03	Airline	1
7-3	M10908-75	Screw, #6-32 x 7/8"	1	24	098511-236	Lower Shell	1
7-4	102336-01	Nozzle Adapter Bracket	1	25	M50104-03	Bushing	1
7-5	104054-01	Nozzle Adapter	1	26	M50104-01	Bushing	1
7-6	103347-01	Belleville Washer	1	27	102431-01	Screw/Lockwasher, 1/2"	6
8	102431-01	Screw/Lockwasher, 1/2"	2	28	M11271-8	Clip Nut	8
9	102042-01	Fan	1	29	RF3-4B	Screw, #10-32 x 1/2"	1
10	**	Motor and Pump Assembly	1	30	108088-05	Fuel Tank	1
10-1	102001-24	Motor	1	31	097702-01	Fuel Cap (Includes Gasket)	1
10-2	079975-03	Pump Body	1	32	102349-01	P.C. Board Support	5
10-3	FHPF3-6C	Screw, #10-32 x 3/4"	2	33	M50400	Strain Relief Bushing	1
10-4	M22009	Rotor Insert	1	34	098872-04	Power Cord	1
10-5	M22456-2	Pump Rotor	1	35	M51077-15	Side Cover	1
10-6	M50545	Pump End Cover	1	36	102431-01	Screw/Lockwasher, 1/2"	4
10-7	M12179	Intake Filter	1	37	102861-01	Nylon Locknut	1
10-8	M16545	Filter End Cover	1	38	079010-39	Wire Assembly (Brown/White)	1
10-9	M8940	Steel Ball, 1/4" Diameter	1	39	105793-01	ON/OFF Switch	1
10-10	M10993-1	Relief Spring	1	40	079919-01	Switch Cover	1
10-11	M27694	Adjusting Screw	1	41	WLE-3	Lockwasher, #10	1
10-12	M22997	Plug	1	42	NPF-3B	Nut, #10-32	3
10-13	M12461-31	Screw, #10-32 x 1"	4	43	097468-01	Edge Liner	1
10-14	M12244-1	Output Filter	1	44	079010-40	Wire Assembly (White)	1
10-15	M11637	Lint Filter	1	PARTS AVAILABLE - NOT SHOWN			
10-16	M50820-02	Barb Fitting	1		HA2210	Filler Neck Screen	1
10-17	M8643-2	Blade	4		103814-01	Wire Tie	1
10-18	M12461-32	Screw, #10-32 x 1 1/8"	6		104998-01	Tradename Decal	2
11	M50631	Rubber Bumper	2		106013-04	Decal Package	1
12	101206-01	Motor Mounting Bracket	1		105880-01	Ignition Control Assembly Fuse	1
13	101695-01	Button Plug	1				
14	104068-04	Ignition Control Assembly	1				

** Not available as an assembly; order parts separately

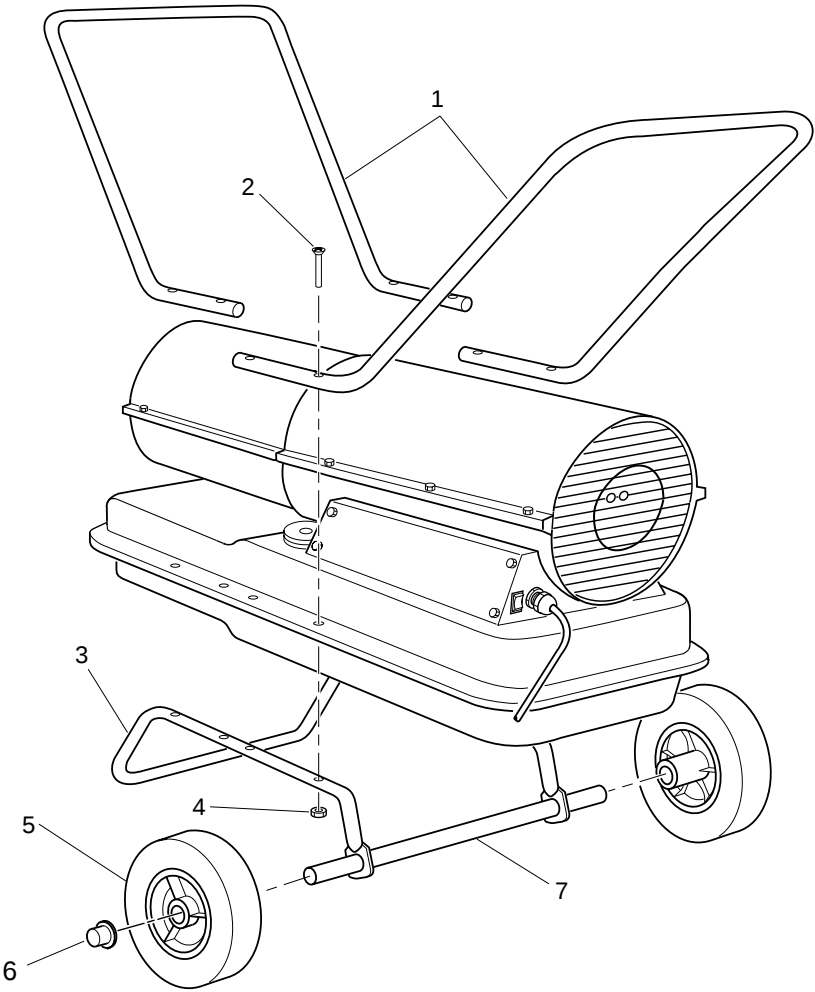


PORTABLE FORCED AIR HEATERS

WHEELS AND HANDLES

100,000 AND 150,000 BTU/HR
MODELS

KEY NO.	PART NUMBER	PART DESCRIPTION	100,000 Btu/Hr QTY.	150,000 Btu/Hr QTY.
1	HA2203	Handles	2	—
	HA2204	Handles	—	2
2	M12345-33	Screw, #10-24 x 1 3/4"	8	8
3	M12342-3	Wheel Support Frame	1	—
	M12831-3	Wheel Support Frame	—	1
4	NTC-3C	Hex Nut, #10-24	8	8
5	107426-01	Wheel (Quantity of 2)	1	1
6	M28526	Cap Nut	2	2
7	M51015-01	Axle	1	—
	M16801-2	Axle	—	1

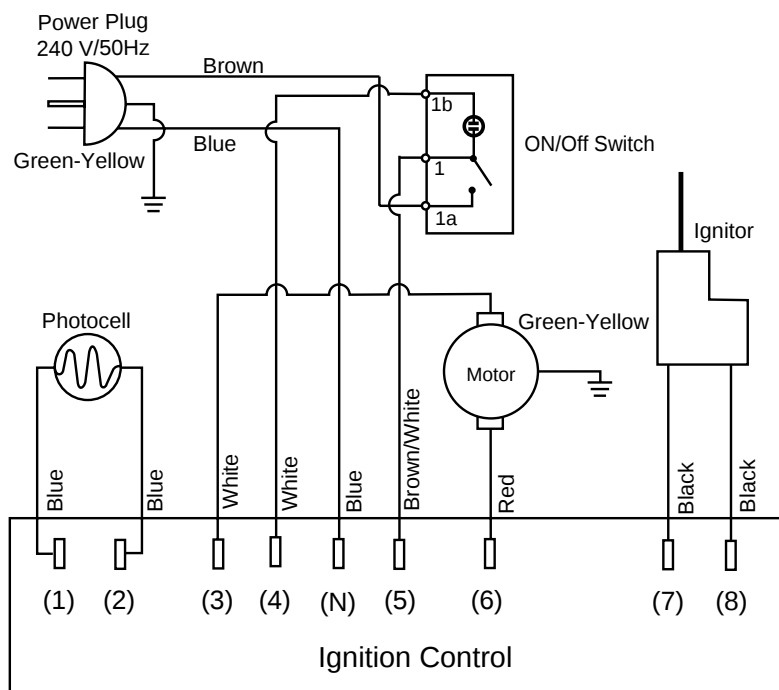


OWNER'S MANUAL

SPECIFICATIONS

Output Rating (Btu/Hr\kw)	35,000(10)	50,000(15)	70,000(20)	100,000(30)	150,000(44)
Fuel	Use Only Kerosene or No. 1 Fuel Oil				
Fuel Tank Capacity (U.S. Gal./Liters)	3.0/11.4	5.0/18.9	5.0/18.9	9.0/34	13.5/51.1
Fuel Consumption (Gal. Per Hr./ Liters Per Hr.)	.28/1.1	.37/1.40	.52/1.97	.79/3.0	1.1/4.1
Electric Requirements	240 V/50 Hz (Same All Models)				
Amperage (Normal Run)	.8	1.0	1.0	1.2	1.2
Hot Air Output (CFM/CMM)	140/4	205/5.8	225/6.4	425/12	500/14.2
RPM	1425	2850	2850	2850	2850

WIRING DIAGRAM

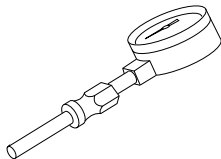




PORTABLE FORCED AIR HEATERS

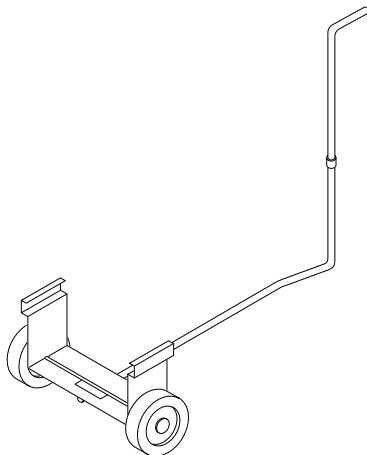
ACCESSORIES

Purchase accessories from your local dealer.



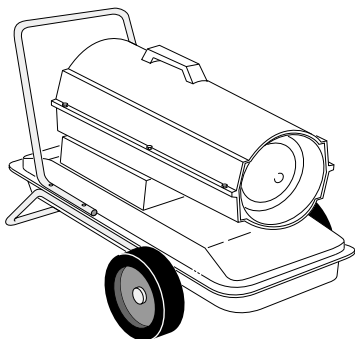
AIR GAUGE KIT - HA1180

For all models. Special tool to check pump pressure.



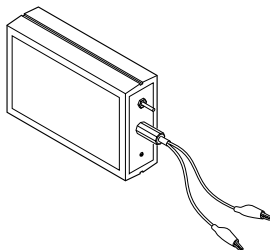
STANDARD WHEELS AND HANDLE KIT - HA1206

Makes heater even more portable and convenient. Easy to assemble. For 35/50/70,000 Btu/Hr models.



HEAVY DUTY WHEELS AND HANDLE KIT - HA1202

For heavy duty applications. Makes your heater even more portable and convenient. For 35/50/70,000 Btu/Hr models.



IGNITION CONTROL ASSEMBLY/PHOTOCELL TESTER - HA1170

Special tool used to test the ignition control assembly and photocell.