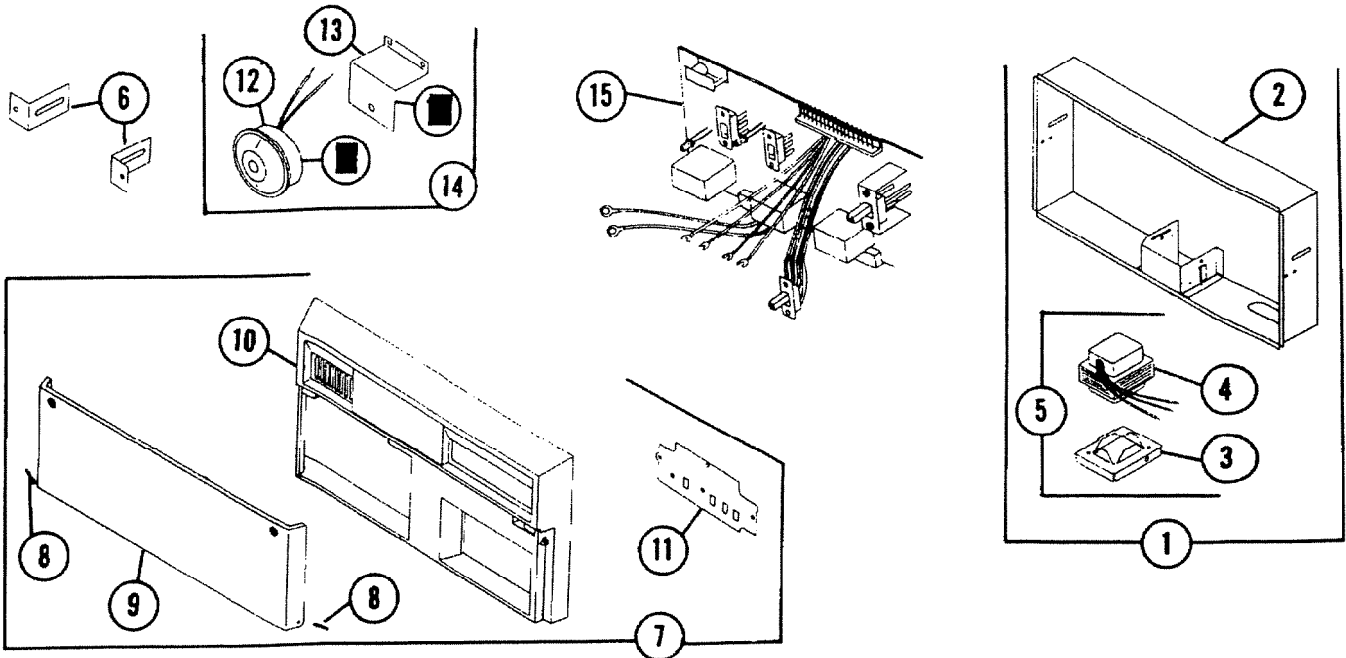


# PARTS LIST

<b>MODEL</b>	S-2100 ALARM S-21R
<b>EFFECTIVE DATE</b>	NEW JANUARY 1976



REF.	ORIGINAL PART NO	* PART DESCRIPTION	MODEL USED ON	CURRENT REPLACEMENT PART NO
1	10510-900	"A" Rough In Housing Comp.	S-21R	10510-900
2	41694	Rough In Housing	S-21R	41694-005
3	38665	Mounting Plate	S-21R	38665-005
4	30596	Transformer	S-21R	30596-000
5	41695	Transformer Assy.	S-21R	41695-000
6	38687	Mounting Brkts.	S-2100	38687-000
7	41720	Front Panel Assy.	S-2100	41720-000
8	39568	Hinge Pin	S-2100	39568-000
9	38686	Door	S-2100	38686-000
10	38683	Front Panel	S-2100	38683-000
11	38684	Inlay-Control	S-2100	38684-000
12	39498	Horn	S-2100	39498-000
13	38685	Mounting Brkt. - Horn	S-2100	38685-000
Please See Other Side				

**NuTone**

Order Parts From:  
 Paris Department c/o NuTone  
 P.O. Box 27 • Cincinnati, Ohio 45227

**NOTE:** Always order by  
 current part number

REF	ORIGINAL PART NO	PART DESCRIPTION	MODEL USED ON	CURRENT REPLACEMENT PART NO.
14	41721	Horn Assy. Comp.	S-2100	41721-000
—	41723	Envelope Assy. (Mtg. Hdwe.) (Not Shown)	S-2100	41723-000
—	69736	¼ Turn Fastener w/Retainer-Kit (Not Shown)	S-2100	69736-000
15	41719	Main P. C. Board Assy.	S-2100	41719-000
		<p>For All Electronic Parts See Service Manual No. 47177-000</p>		

## REPLACEMENT PARTS LIST

CAPACITORS: Value in micro (10<sup>-6</sup>) farads. Other specifications as noted.  
 RESISTORS: Value in ohms  $\pm 10\%$ ,  $\frac{1}{4}$  watt carbon composition, except as noted.  
 K = Kilo = 1,000. M = Mega = 1,000,000

Schematic Symbol	NuTone Part No.	Description
<b>MODEL S-188L SMOKE DETECTOR</b>		
J11	10391-900	Complete Assembly
	5073A-000	Cover
	38601-000	Mounting Plate
	5006A-000	Receptacle and Wire Assembly
	69740-000	Filter Set
	47000-000	Label, data
	47045-000	Label, instructions
<b>MODEL S-188LH SMOKE/HEAT DETECTOR</b>		
J11	5392A-000	Complete Assembly
	38601-000	Cover
	5006A-000	Mounting Plate
		Receptacle and Wire Assembly
	69740-000	Filter Set
	47000-000	Label, data
	47045-000	Label, instructions
<b>MODEL S-2100 MASTER UNIT</b>		
	10550-900	Master Unit, complete assembly
	41719-000	PC Assembly, master unit, complete
<b>CAPACITORS</b>		
C101, C102	35100-139	.01, +80%, -20%, 50V Ceramic
C103, C111 C112, C113 C104	35091-108	100, +100%, -10%, @ 25 WVDC Electrolytic
C105	35100-127	.1, +80%, -10%, 100V Ceramic
C106	35091-113	330, +100%, -10%, @ 35 WVDC, Electrolytic
C107	35091-103	4.7, +100%, -10%, @ 25 WVDC, Electrolytic
C108	35024-101	.47, $\pm 20\%$ , 75V Polyester Film
C109	35091-106	2.2, $\pm 20\%$ , @ 25 WVDC, Electrolytic
C110	35091-102	10, +100%, -10%, @ 16 WVDC, Electrolytic
C114	35100-140	.02, $\pm 20\%$ , 50V Ceramic
C115	35024-102	.15, $\pm 20\%$ , 75V, Polyester Film
	35055-103	.1, $\pm 20\%$ , 250V, Polyester Film
<b>DIODES</b>		
D101-D109, D112-D126 D110, D111	36549-000	Rectifier type, 1 Amp DC, 100 PIV; 1N4002
	Not Used	
<b>FUSES</b>		
F101	31160-000	2 Amp, AGC 3: Smoke Detector DC Power
F102	31160-000	2 Amp, AGC 3: Auxiliary Alarm Horn(s)
	39513-000	Clip, Fuse (F101 & F102); two required for each fuse
<b>LIGHT EMITTING DIODES</b>		
LED101	36637-000	Lamp, green: AC PILOT LIGHT
LED102	36636-000	Lamp, yellow: DETECTOR CIRCUIT TROUBLE INDICATOR
<b>TRANSISTORS</b>		
Q101, Q102 Q105 Q103	36613-000	NPN Silicon: TexInst TIS-98; Mot MPS-A20
	36580-000	NPN Planar Silicon, low noise: TexInst SKA-4220; Mot SPS-1216; National Semiconductor SMO-7329

Schematic Symbol	NuTone Part No.	Description
Q104, Q107	36615-000	PNP Silicon: Mot MPS-A56; Fairchild TEH 0224
Q106	36577-000	PNP Epitaxial Planar Silicon: TexInst SKA-4223
Q108	36619-000	PNP Power, Mot MJE-371
	38613-000	Heat Sink, for Q108
	15448-004	Screw #4-40 x $\frac{3}{8}$ Slit. Pan (heat sink mounting)
	11159-003	Nut, #4-40
<b>RESISTORS</b>		
R101	33101-390	39, $\frac{1}{2}$ W
R102, R104	33101-561	560, $\frac{1}{2}$ W
R110, R130		
R103	33101-220	22, $\frac{1}{2}$ W
R105, R115, R123	33081-102	1K
R106	33101-027	2.7, $\frac{1}{2}$ W
R107, R108, R121	33081-103	10K
R109, R116, R120	33081-222	2.2K
R111, R117, R136	33081-100	10
R112, R131	33081-470	47
R113	33081-473	47K
R114, R118	33028-022	2.2, 2W, wire wound
R119	33028-081	180 2W, wire wound
R122, R128	33081-123	12K
R124, R125, R137	33081-472	4.7K
R126	33081-471	470
R127	33101-122	1.2K, $\frac{1}{2}$ W
R129	33081-822	8.2K
R132	33081-223	22K
R133	33081-332	3.3K
R134	33101-470	47, $\frac{1}{2}$ W
R135	33081-221	220
<b>SWITCHES</b>		
S101, S102, S104	39515-000	Slide type, momentary, spring return; BATTERY TEST; RESET; TEST
S103	39514-000	Slide type, DPDT: TROUBLE NORMAL-LIGHT
<b>TERMINALS</b>		
	41724-000	Terminal Assembly complete; 21 required
1-21	39516-003	Terminal, PC board; 21 required
	31669-003	Screw, #6 x $\frac{3}{8}$ Slit. Tr; terminal 21 required
<b>RELAY</b>		
K101	39381-000	SPDT: Contact 1A @ 26Vdc; 0.5A @ 20Vrms; Coil nominally 12Vdc; max continuous 21.8Vdc; minimum pull-in 9.6Vdc; Coil resistance 400 ohms $\pm 10\%$ ; Sigma Instruments 78RE1-12DC
<b>HORNS AND BUZZERS</b>		
B101	39517-000	Buzzer, TROUBLE, 12V
	41721-000	Alarm Horn and Mounting Bracket Assembly
B102	36067-000	Horn, ALARM, 12V
	38686-000	Mounting Bracket for alarm horn
	11219-003	Screw, #8 x $\frac{1}{4}$ " Slit Rd., horn mounting
	20723-003	Lockwasher, #8
	90029-004	Screw, #6 x $\frac{3}{8}$ Ph. Tr., horn bracket installation; 2 required

Schematic Symbol	NuTone Part No.	Description
<b>POWER TRANSFORMER</b>		
	41695-000	Complete Assembly including transformer and mounting plate (supplied with S-21-R Rough-In Housing)
T101	30596-000	Primary, 120Vac, 60 Hz., Secondary 28Vac (14Vac each side of center tap), 30VA, Rectified DC 1.5A average. Protected in primary circuit by automatic reset thermo breaker operating at 114°C ±5°C.
	38665-005	Mounting plate for T101
<b>MISCELLANEOUS</b>		
	41720-000	Front Panel, complete assembly
	41722-000	Door Assembly
	35919-000	Fastener, ¼ turn: 2 required
	39318-000	Retainer, fastener: 2 required
	39511-000	Hinge Pin: 2 required
	39520-000	Strap
	47079-000	Label, instructions
	41723-000	Envelope Assembly, mounting hardware
	38687-005	Bracket, control unit mounting to rough-in: 2 required
	90029-004	Screw, #6 x ¾ Ph Tr, mounting bracket installation
	47115-000	Homeowners Manual
<b>MODEL S-21-R MASTER UNIT ROUGH-IN HOUSING</b>		
	10510-900	Complete Assembly
	38664-000	Junction Box
	13000-000	Ground Bracket
	15475-000	Reinforcing Plate
	13028-000	Ground Screw
	41695-000	Power Transformer Assembly (see listing under Master Unit above)
	39122-038	Screw X6-32 x 1 ¾ Slit Fit: Transformer mounting
	14823-038	Screw #8 x ¾ Slit. Pan: Transformer Bracket mounting
<b>MODEL S-2130 ALARM SHUTDOWN TIMER</b>		
<b>10560-900 - Complete Assembly</b>		
<b>CAPACITORS</b>		
C201, C205	35055-101	.41, ±20%, 100V, Polyester Film
C202	35091-108	100, +100%, -10%, @ 25WVDC, Electrolytic
C203	35100-152	.01, ±10%, 50V Ceramic
C204	35100-141	.05, +80%, -20%, 50V, Ceramic
<b>DIODES</b>		
D201-D205	36549-000	Rectifier type, 1 Amp DC, 100 PIV, 1N4002
D206	36539-000	Zener, 12V ±5%: 1N4742A
<b>RESISTORS</b>		
R201	33081-222	2.2K
R202, R210, R211	33081-104	100K
R203	33081-334	330K
R204	33101-122	1.2K, ½ W
R205	33081-224	220K
R206	34058-000	750K, Potentiometer, Oscillator/Timer Control
R207	33081-474	470K
R208	33081-105	1M
R209	33081-564	560K
R212, R213	33081-473	47K

Schematic Symbol	NuTone Part No.	Description
<b>TRANSISTORS</b>		
Q201	36580-000	NPN Planar Silicon, low noise: TextInst SKA-4220; Mot SPS-1216; National Semiconductor SMO-7329
Q202, Q203	36613-000	NPN Silicon: TextInst TIS-98; Mot MPS-A20
<b>INTEGRATED CIRCUITS</b>		
Z201	36633-000	Oscillator/Timer: Mot MC14541 CP
Z202	36629-000	Quad, 2-input NOR Gates: RCA CD4001AE; Solid State Scientific SCL 4001 AE Series; Solitron CM 4001 AE Series; Mot MC 14001 CP
<b>MODEL S-2370 BATTERY CHARGER</b>		
	10720-900	Complete Assembly
	41732-000	PC Board Assembly
<b>CAPACITORS</b>		
C301	35091-108	100, +100%, -10%, @ 25 WVDC Electrolytic
C302	35055-102	.15, ±20%, 100V, Polyester Film
C303	35091-113	330, +100%, -10%, @ 35 WVDC Electrolytic
<b>DIODES</b>		
D301	36638-000	Zener, 13V ±1%: Mot .5M13ZS1; 1N4743
D302-D308	36549-000	Rectifier type, 1 Amp DC, 100 PIV: 1N4002
<b>FUSES</b>		
F301	31160-000	2 Amp, AGC 3
	41735-000	Holder, complete assembly, for F301
<b>LIGHT EMITTING DIODES</b>		
LED301	36637-000	Lamp Green
	39527-000	Clamp, for LED301 mounting
<b>CONNECTORS</b>		
P307	39421-101	Plug, 3-pin connector
J307	41734-000	Receptacle, 3-pin, with wire, complete assembly
<b>TRANSISTORS</b>		
Q301	36605-000	NPN, Silicon, Power: Mot MPS-U05
Q302	36577-000	PNP, Epitaxial Planar Silicon: TextInst SKA-4223
Q303, Q304	36613-000	NPN, Silicon: TextInst T1S-98; Mot MPS-A20
Q305	36614-000	NPN, Silicon, single Diffused: Mot MJE-520
	38613-000	Heat Sink, for Q305
	15448-004	Screw, #4 x ¾ Slit. Pan, heat sink mounting
	11159-003	Nut, #4-40 Hex.
Q306	36606-000	PNP, Silicon: Mot MPS-K71
<b>RESISTORS</b>		
R301, R305	33101-151	150, ½ W
R302	33101-180	18, ½ W
R303, R309	33101-102	1K, ½ W
R304	33101-221	220, ½ W
R306	33030-110	5, 5W, wire wound
R307	33081-471	470
R308	33081-223	22K
R310	33101-391	390, ½ W
<b>MISCELLANEOUS</b>		
	39528-000	Insulating Pod, for battery connecting cable
	47104-000	Label, Battery-Neg.
	47105-000	Label, Battery, Pos.
	47124-000	Label, LED301
	31984-000	Clamp, Cable
	47125-000	Installation Instruction Sheet
	25075-003	Screw, #6 x ¾ Slit Rd