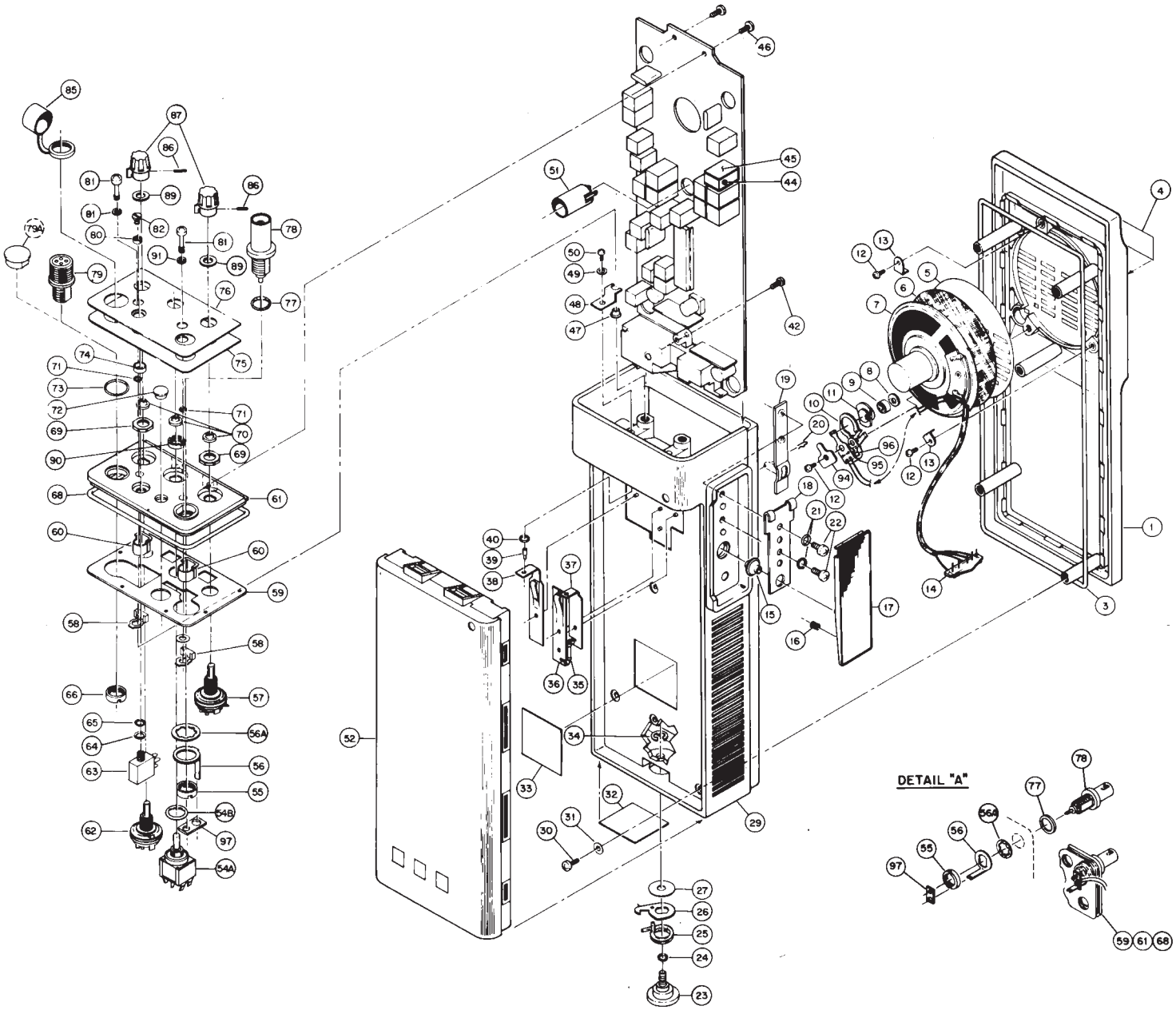
HT90 Series

Parts List



Replacement parts may no longer be available

Parts List

REF. NO.	PART NO.	DESCRIPTION
1	**0105950G05**	Assembly, Front Cover; Standard
2	----	Not used
3	**3205472P09**	Gasket, Seal
4	**3305153J01**	Label, Nameplate
5	**1105932J01**	Adhesive, Felt
6	**3505152J01**	Felt, Speaker
7	**5005181E02**	Speaker, (LS401)
8	**7505182J01**	Pad, Microphone Boot
9	----	Microphone (MK401) P/O RPX4654A
10	----	Bracket, Microphone P/O RPX4654A
11	----	Boot, Microphone P/O RPX4654A
12	**0300138651**	Screw, Phillips: 2-56 x 5⁄32″
13	**4205670D01**	Clamp, Speaker
14	----	Connector (P401) P/O RPX4654A
15	**3205332K01**	Seal
16	**4182093A07**	Spring, Actuator; coiled
17	**4505177J01**	Actuator, Push-to-Talk
18	**0705175J01**	Bracket, Actuator
19	**4105176J01**	Spring, Actuator
20	**2205390M01**	Pin, Retainer
21	**3205082E13**	Gasket, “O” Ring
22	**0305466C02**	Screw, Special; 4-40 x 0.140″
23	**4605170J01**	Stud, Latch
24	**3205082E14**	Gasket, “O” Ring
25	**4105172J01**	Spring, Latch
26	**5505150L01**	Latch, Pawl
27	**0405171J01**	Washer, Teflon
28	----	Not used
29	----	Assembly, Housing; includes items 36, 37, 38, 39 & 40
	0105954G94	Standard
	or	
	0105954G95	Silverized
30	**0300120621**	Screw, Phillips; 4-40 x 1⁄4″
31	**0484345A06**	Washer, Seal
32	----	Label, FCC Identification, not field replaceable
33	----	Label, Frequency; not field replaceable
34	**4210219A25**	Retainer, E-Clip
35	**6505214E01**	Fuse (F501)
36	----	Contact, Strap
37	----	Contact, Positive
38	----	Contact, Negative
39	----	Bushing, Strap
40	----	Gasket, “O” Ring
		*Items 36, 37, 38, & 40 are not field replaceable; order applicable Housing Assembly (item 2).
41	----	Not used
42	**0305887J01**	Screw, Slotted; 4-40 x 3⁄16″
44	**0105953G48**	PTT Switch (S202)
45	**0705162J01**	Bracket, PTT Switch
46	**0305887J01**	Screw, Slotted; 4-40 x 3⁄16″
47	**4305936J01**	Bushing, Shoulder
48	**3905567L02**	Contact
49	**0400008406**	Lockwasher
50	**0300138651**	Screw, Phillips; 2-56 x 1⁄8″
51	**4305209J01**	Sleeve
52	----	Battery (see page 90)
53	----	Not used

REF. NO.	PART NO.	DESCRIPTION
54A	**4005120E03**	Switch, Frequency; Toggle (S201)
54B	**3205082E17**	Seal, “O” Ring
55	**0205050E05**	Nut, Spanner
56	**2905658K01**	Lug
56A	----	Lockwasher, Internal Tooth (p/o item 78)
57	**0105956H97**	Switch, Volume/On-Off (R202/S204)
58	**3905195J02**	Contact
59	----	Plate, Retainer
60	----	Bushing
61	----	Panel, Control
		**Items 59, 60, and 61 are not field repairable; order Assembly 0105956H87
62	**0105956H99**	Switch, PL/Squelch Control
63	**0105950G12**	Jack, Speaker (J02) (S203-R201)
64	**0405662K01**	Washer, Insulating
65	**3205082E15**	Seal, “O” Ring
66	**0205050E07**	Nut, Spanner
67	----	Not used
68	**3205082E38**	Seal, “O” Ring
69	**0205629L02**	Nut, Hex
70	**3205933J02**	Seal, Switch
71	**3205082E11**	Seal, “O” Ring
72	**3805216J02**	Plug, Seal
73	**3205082E12**	Seal, “O” Ring
74	**4305206J01**	Sleeve
75	**6405208J01**	Plate, Pressure
76		Escutcheon, Graphic; for
	1305181J01	Basic Carrier Squelch Models
	or	
	1305181J02	Universal, Carrier Squelch Models
	or	
	1305181J09	Basic, PL Squelch Models
	or	
	1305181J10	Universal, PL Squelch Models
77	**3205082E28**	Seal, “O” Ring
78	**0900855268**	Connector, Antenna (J203) BNC
79	**RPX4630A**	Connector, Universal (J201)
79A	**3805216J01**	Plug, Seal (Basic Models)
80	**0205050E01**	Nut, Spanner
81	**0305662D17**	Screw, Captive
82	**0310129A24**	Screw, Slotted; Nylon
83	----	Not used
84	----	Not used
85	**3205217J01**	Seal, Cap
86	**0383174C02**	Screw, Set
87	**3605207J03**	Knob, Volume and Squelch
88	----	Not used
89	**0405171J02**	Washer, Nylon; Black
90	**0282653D07**	Nut, Spanner
91	**0400009777**	Lockwasher, No. 4
93	----	Not used
94	**1405135P01**	Insulator, Mic.
97	**8405878L02**	Circuit Board, Printed (see Detail “A”)

Cancelled Product HT90: Aftermarket support criteria has been met for spare parts. Items may no longer be available.

Chargers

Single Unit Chargers

NLN7493A

These units are capable of charging a battery in or out of the radio and automatically revert to a trickle charge rate when fully charged. The rapid charge battery must be used in a rapid charger to attain the 1 hour charge rate. Visual indication when the battery is fully charged is provided by the rapid charger.

NLN7493A Compact Standard Charge 120V AC

NLN7647A Standard Charge, 240V AC

NLN7648A Rapid Charge, 240V AC

Multiple Unit Chargers

These 6 compartment units accommodating either radio or battery alone can be desk, wall, or rack mounted. A switch is provided for either 117V or 234V AC operation. Other features are similar to the single unit chargers.

For systems where cost and space are the overriding concerns, the compact single unit charger with plug-in transformer is the answer. This unit will charge the radio only at the standard 16 hour charge rate.

NLN7966B

NLN7966B Rapid Charge, 120/240V AC

NLN7967A Wall Mounting Kit, for 6 unit charger

NLN7967A

Battery Maintenance System^{plus} (BMS^{plus})

Using interchangeable battery adapters (sold separately), the BMS^{plus} is capable of charging and discharging, analyzing, conditioning and cycle test on batteries; tracking battery voltage and capacity (mAh).

The BMS^{plus} offers a 3 year warranty. Its easy-to-use design supports hundreds of 2-way, cellular, and camcorder batteries with printer port* (Serial-RS-232C port – uses female 9-pin to male 25-pin cable).

WPLN4079BR

WPLN4079BR Six-Station, 110V AC, 50/60 Hz

WPLN4080BR Six-Station, 230V AC, 50/60 Hz

NDN4005B Three-Station, 110V AC, 50/60 Hz

NDN4006B Three-Station, 230V AC, 50/60 Hz

BMS^{plus} Adapter

TDN9440A Standard Adapter, HT90

Optional Adapters

****TDN9432A** Adapter, Universal Alligator Clip Lead

****TDN9527A** Adapter, Universal Dip Switch

*Compatible with the STAR Micronics SP200 series printers, available from any STAR Micronics distributor, and other printers with STAR emulation.

**Universal adapters available as an option to accommodate all radio types.

Battery Optimizing System II (BOS II)

WPLN4124AR

No other battery analyzer matches the speed, accuracy, and versatility of the Battery Optimizing System II. Ideal for large fleet, public safety, and all other users who rely on their battery performance. Now with increased power, more sophisticated programming options, and easier to use navigation paths, optimizing your batteries was never easier. Key features include:

- Support for NiCd, NiMH, Li-ion, and SLA batteries
- 100 watt power supply and programmable from 100 mAH to 4 amps per station
- Interchangeable adapters accomodate all major brands
- Includes a variety of user programs and allows for customizable programming
- Proprietary recondition cycle restores NiCd and NiMH batteries
- Increased processing power and testing resolution – including a three minute Quicktest that measures the batteries State of Health (SoH)
- Printer output for reports and labels
- Three year warranty

WPLN4124AR BOS II, Four-Station, 100-240V AC (US line cord)

WPLN4125AR BOS II, Four-Station, 100-240V AC (UK/Euro line cords)

BOS Adapter

RL-71163 Standard Adapter, HT90

Optional Adapters

RL-70115 Adapter, Universal; services Li-ion

RL-70110 Adapter, Universal; service NiCd and NiMH

Carrying Accessories

NLN7444A

Carrying Cases

Carrying case accessories provide added protection for your radio while enhancing a quality appearance. T-strap not included.

NLN7444A Urethane Case, Standard

NLN7693A Urethane Case, swivel belt loop not included

NTN5243A

Carrying Strap

NTN5243A Carrying Strap

4205297G03

T-Strap

4205297G03 Nylon T-Strap

Belt

4200865599 2˝ Wide Leather Belt, for all models

4200865599

Swivel Belt Loop

4282421J06 Leather, 2.5˝

Audio Accessories

NSN6008A

NSN6008A Lapel Speaker

NMN6095A

NMN6095A Speaker/Microphone with Coil Cord

RLN4295A

Epaulet Strap

Black leather epaulet straps secure remote speaker microphones to epaulet of shirts or jackets and attach around cord. Allows reliable communications in hostile environments with clip style strap.

RLN4295A Epaulet Strap, Small Clip

5083693B04

5083693B04 Earpiece with Volume Control

Mobile Microphone

HMN1001B Mobile Microphone

HMN1001B

Audio Accessories

Headsets

All headset accessories include adapter cables and can be plugged directly into radio. No additional equipment is required.

BDN6247A

Low to moderate noise level (less than 100 dB) lightweight headset with Electret condenser microphone and single speaker. *NOTE:* Cannot be worn with headgear.

BDN6247A In-line push-to-talk switch

BDN6248A Pendant-thumb push-to-talk switch

High noise level headset (up to 115 dB) with military noise-cancelling microphone and dual speaker. *NOTE:* Can be used with or without hard hat or fire helmet.

BDN6261A Body/foot switch that can be belt mounted

Listen Only Headphones

For all portables and pagers provided with earphone jack. Headphones are equipped with a 40 inch cable terminated with micro plug.

BDN6270A

BDN6268A Lightweight headphone with single speaker

BDN6269A Noise-attenuating headphone with dual speakers

BDN6270A Noise attenuating headphone with dual speaker for use with or without hard hat or fire helmet

Audio Accessories

Heavyduty Headsets

Heavyduty headsets include Noise-Cancelling Microphones and can be worn with or without a hardhat. Headsets are for use in noise levels up to 125 dB. The Push-To-Talk switch is located on the earcup. The Vox module is contained within the headset on voice activated units. Heavy-duty headsets require radio adapter cable.

BDN6645A

BDN6645A Push-To-Talk Headset with Boom Microphone, Requires Adapter Cable

BDN6635B

BDN6635B Voice-activated Headset with Boom Microphone, Requires Adapter Cable

Audio Accessories

BDN6636B

BDN6636B Voice-activated Headset with Throat Microphone, Requires Adapter Cable

BDN6637A Radio Adapter Cable

Helmet Kits

The following DO NOT include headgear.
NOTE: All helmet and face mask kits require a radio cable assembly (order separately).

BDN6275A

Industrial/Police helmet kits for Bullard (Industrial) headgear with military noise-cancelling microphone.

BDN6275A Single Speaker

Helmet kit for Seer 1601, 1602 1⁄2 Shell (Police) headgear with military noise-cancelling microphone.

BDN6277A Single Speaker

Audio Accessories

Cable Assemblies

NOTE: All helmet kits require one of the following cable assemblies:

BDN6288A

BDN6288A Cable assembly for Industrial Radio helmet kit with pendant-thumb push-to-talk switch

BDN6292A Cable assembly for Police Radio helmet kit with handlebar push-to-talk switch for belt mounted control box (only applies to BDN6291A)

Ear Mics

Single unit microphone and speaker worn in the ear.Eliminates the need for handheld microphones or conventional headsets. Compact, rugged design allows use under hearing protectors and protective clothing. Order cable separately.

RMN4001B

RMN4001B Ear Mic, EM200

0180359A51 Optional PTT Ring Switch for RMN4001A only

0180359A51

0180356B97 Optional PTT Ring Switch for RMN4001B only

Portable Antennas

Heliflex

Each antenna is color coded on the connector indicating frequency.

8505183K06 136-142 MHz
Dip Coated, Red

8505183K06

8505183K07 142-150 MHz
Dip Coated, Yellow

8505183K04 150-162 MHz
Dip Coated, Black

8505183K04

8505183K05 162-174 MHz
Dip Coated, White

8505183K01 440-470 MHz
Dip Coated, Black

8505183K01

8505309N07 470-512 MHz
Dip Coated, White

8505309N01 136-150 MHz
Injection Molded, Red

8505309N02 142-150 MHz
Injection Molded, Yellow

8505309N03 150-156 MHz
Injection Molded, Black

8505309N01

8505309N08 156-162 MHz
Injection Molded, Orange

8505309N04 162-174 MHz
Injection Molded, White

8505309N05 403-440 MHz
Injection Molded, Yellow

8505309N06 440-470 MHz
Injection Molded, Black

8505309N05

8505309N07 470-512 MHz
Injection Molded, White

Flexible Whip-PVC Dip Coated

8505182K01 403-512 MHz

8505182K01

Flexible Whip-Molded

NAE6340B 403-512 MHz

Portable Batteries

Nickel-Cadmium Premium

Part Number: **NLN7434A**
Volts: 12.5
Avg. mAh: 630
Height: 6-3/16″
Intrinsically Safe: Yes

Part Number: **NLN7435A**
Volts: 12.5
Avg. mAh: 630
Height: 6-3/16″
Intrinsically Safe: Yes

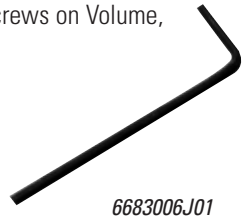
NLN7435A

Service Tools

6605607E01 Tuning Tool, Tunable Coils and Trimmer Caps

6605607E01

6683006J01 Spline Wrench (0.06″), Fits Screws on Volume, Frequency, and Squelch Knobs



6683006J01

Service Aids

Radio Test Cables

Used with RTX4005, Portable Radio Test Set, for transmitter, receiver alignment and performance checks.

RTK4038B Test Cable, Testing Done with Radio Front Cover Off

Manuals

136-174 MHz

6881022C75 Models H23/H33HMB/HMU 2W, 5W Service Manual

406-512 MHz

6881022C80 Models H24/H34HMB/HMU 1W, 4W Service Manual