# **After Sales Technical Documentation**

# NHE-5/NHK-5 NON-SERVICEABLE ACCESSORIES

# **AMENDMENT RECORD SHEET**

Amendment Number	Date	Inserted By	Comments

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# NHE-5/NHK-5 NON-SERVICEABLE ACCESSORIES

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# List of Non-Serviceable Accessories

# Battery Pack BBT-7S and BBT-3S

The BBT-7S NiCd light battery and BBT-3S NiMH slim battery pack provide an acceptable level of performance in a package (ie including phone) weighing 251 g.

#### **Product Code**

Battery pack BBT–7S: 0670126
Battery pack BBT–3S: 0670125

### **Specification**

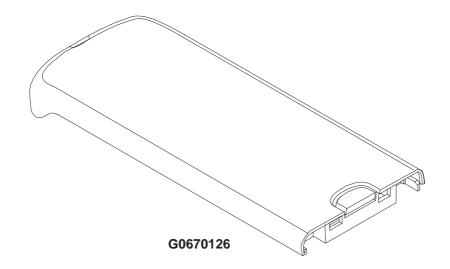
Dimensions (h x w x d):  $58 \times 132 \times 9 \text{ mm}$ 

Weight: 113 g

Capacity

BBT-7S: 450 mAhBBT-3S: 600 mAh

### **View of Battery Pack**



# Battery Pack BBT-2S and BBT-2H

The BBT–2S NiCd extended battery pack and BBT–2H NiMH ultra extended battery pack provide the best compromise between weight and performance for the average user. A extended package (ie including phone) weights 283 g and an ultra extended package 303 g.

#### **Product Codes**

Battery pack BBT–2S: 0670123
Battery pack BBT–2H: 0670124

### **Specification**

Dimensions (h x w x d): 58 x 132 x 17 mm

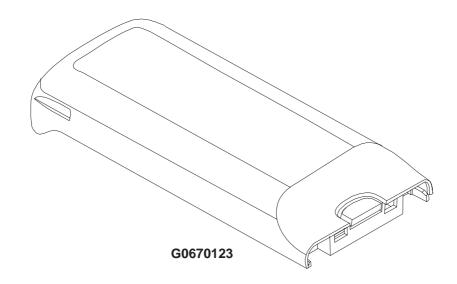
Weight

• BBT–2S: 145 g • BBT–2H: 165 g

Capacity

BBT-2S: 950 mAhBBT-2H: 1200 mAh

### **View of Battery Pack**



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# Standard Charger ACH-8

Use this durable and economical charger to charge all battery options – simply plug the charger into a wall outlet and connect the connector to the bottom of your phone. Check the charging status on the phone display.

The charging time is about 2 h 30 for the 470 mAh battery.

You can make calls while charging. However, charging is suspended for the duration of the call.

Standard charger is available for different voltage levels and comes with different wall plugs.

Standard charger can also be used as a power supply for the basic stand and desktop stand.

#### **Product Codes**

Standard charger ACH-8U (USA plug): 0675091
Standard charger ACH-8E (Euro plug): 0675089
Standard charger ACH-8X (UK plug): 0675090

#### **Specification**

Dimensions (h x w x d): 86 x 50 x 44 mm (without plug)

Weight: < 300 g

Cable length: 1950 mm

Mains plug type: see picture

Output connectors: 3.0 mm standard d.c. plug

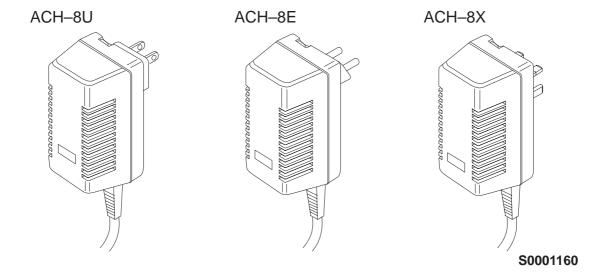
Protection: output current limiting, max. 300 mA

output voltage limiting, max. 16 V

(unloaded)

Input voltage: 180 to 250 V (110 V ACH–8U)

# **View of Standard Chargers**



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# Fast & Light Charger ACH-6

Extremely light, functionally designed fast & light charger charges your phone battery quickly.

Plug the charger into a wall outlet and connect the connector to the bottom of your phone. When not using the charger, you can wrap the cord around it and attach the loose end to the slot on top.

The charging time is approximately 45 minutes for the 470 mAh battery. Check the charging status on the phone display. You can use your phone also while charging.

Operating within voltage range 90 V...250 V AC (50 Hz...60 Hz), fast & light charger is practically current independent in normal office and household use. Like standard charger, fast & light charger is compatible with all battery options and is available with different wall plugs.

The fast & light charger can also be used with basic stand and desktop stand.

#### **Product Codes**

Fast & light charger ACH-6U (USA plug): 0675085
Fast & light charger ACH-6E (Euro plug): 0675084
Fast & light charger ACH-6A (Austr. plug): 0675086
Fast & light charger ACH-6X (UK plug): 0675087
Output cable PCC-1 (supplied with ACH-6): 0730076

### **Specification**

Dimensions (h x w x d): 75 x 29 x 42 mm (without plug)

Weight: < 150 g

Output cable length: 1950 mm

Mains plug type: see picture

Output connectors: 3.0 mm standard d.c. plug

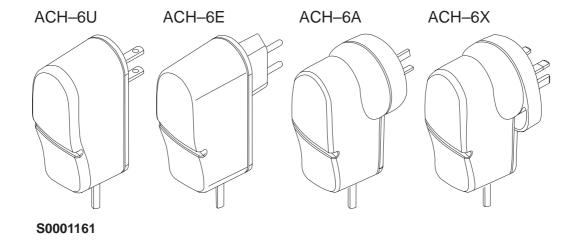
Protection: output current limiting, max. 870 mA

output voltage limiting, max. 11 V

(unloaded)

Input voltage: 90 to 250 V

# **View of Fast & Light Chargers**



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#### **Basic Stand CGH-2**

This charging stand is an economical choice for users who wish to have their phone close at hand, always ready for calls.

Charging times for the 470 mAh battery are approximately 2 h 30 or 45 min, depending on the charger used. The basic stand is used together with the standard charger or fast & light charger.

#### **Product Code**

Basic stand CGH–2: 0700038

#### **Specification**

Dimensions (h x w x d): 42 x 75 x 80 mm

Weight: 40

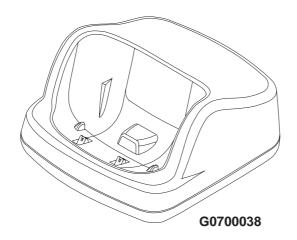
Connections: 3.0 mm d.c. jack

Charge control: none
Maximum input voltage: 16 V

Maximum input current: 820 mA/10.8 V

Protection: no damage if short circuit in output

#### View of Basic Stand



# **Desktop Stand CGH-1**

The desktop stand provides mounting place for both the phone and a spare battery.

Charging order is the phone battery first, and then the spare battery. Check the charging status of the phone battery on the phone display.

Compatible with all battery options, the desktop stand is used together with the standard charger or fast & light charger. Charging times for the 470 mAh battery are approximately 45 min or 2 h 30, respectively.

In addition, the desktop stand offers a discharging facility for the spare battery. Discharging helps extend battery life. Place the spare battery in the stand and press the discharge button. When the battery is totally discharged, recharging will begin automatically. You can also stop discharging before it is finished by pressing the button again. Recharging will begin immediately.

The discharge button is equipped with LED indication for the spare battery. A blinking red light indicates discharging. A continuous red light indicates recharging, and a green light indicates the spare battery is full. Charge until the light turns green.

#### **Product Code**

Desktop stand CGH–1: 0675078

### **Specification**

Dimensions (h x w x d):  $43 \times 75 \times 100 \text{ mm}$ 

Weight: 70 g

Connections: 3.0 mm d.c. jack

Charge control: *cell voltage (peak or negative* 

change), time control, cell

temperature

Operation input voltage: 9...16 V

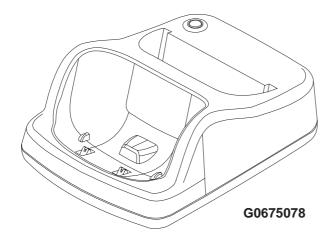
Max. input current:  $780 \pm 40 \text{ mA}$ Discharge current: 308...360 mA

Discharge end voltage:  $4 V \pm 7 \%$ 

Protection: no damage if short circuit in output

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# **View of Desktop Stand**



#### Phone Holder MBT-2

Designed to fit and complement your car's interiors, phone holder holds your phone firmly in place by its three—point hold and stiff structure.

The phone holder is attached to the vehicle's interior using mounting plate, MKE-7 or alternatively swivel mounting plates, HHS-6 or HHS-7.

#### **Product Code**

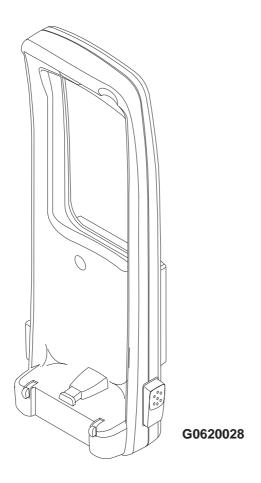
Phone holder MBT–2: 0620028

## **Specification**

Dimensions (h x w x d): 186.5 x 59.5 x 40 mm

Weight: g

#### **View of Phone Holder**



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# **Mounting Plate MKE-7**

The MKE-7 mounting plate provides a method of fixing the phone holder, the compact handsfree unit or the handset to the vehicle interior.

#### **Product Code**

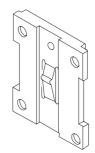
Mounting plate MKE–7: 0650021

## **Specification**

Dimensions (h x w x d): 7.3 x 45 x 48 mm

Weight: 8 g

## **View of Mounting Plate**



G0650021

# **Swivel Mounting Plate HHS-7**

The HHS-7 swivel mounting plate provides an alternative (to MKE-7) method of locating the phone holder, the basic handsfree unit or the handset.

#### **Product Code**

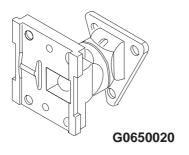
Swivel mounting plate HHS–7: 0650020

## **Specification**

Dimensions (h x w x d): 20 x 44 x 48 mm

Weight: 30 *g* 

# **View of Swivel Mounting Plate**



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# **Universal Mobile Charger LCH-6**

The universal mobile charger ensures your phone is always ready for use wherever you travel. This small charger's functional design fits well to most car lighters and interiors.

The charging time for the 470 mAh battery is about 45 minutes, and you can use your phone freely during charging.

A green light indicates that the cigarette lighter charger is ready for charging. Check the charging status on the phone display. The input voltage can be 12 or 24 V d.c., negative grounding.

Universal mobile charger can be used with all car accessories provided for your phone.

Avoid prolonged charging with universal mobile charger when the car engine in not running; this may cause the battery of your car to drain. Note also that in some cars the cigarette lighter plug is not provided with electricity if the ignition is switched off. Verify that the green led light is lit.

#### **Product Code**

Universal mobile charger LCH–6: 0675076

#### **Specification**

Dimensions (h x w x d): 29 x 35 x 84 mm

Weight: < 70 g

Cable length: 465 mm curly cable

Connectors

• input: D 21/23 mm

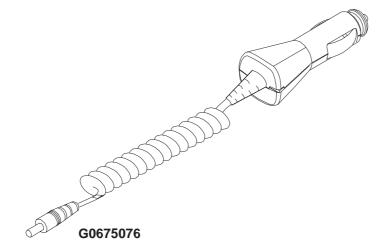
• output: 3.0 mm standard d.c. plug

Protection: input fused, output current limit

Voltage

input: 11.3...35 V
 output (nominal): 10.3 V
 Nominal output current: 780 mA
 Charging into empty battery: >= 300 mA

# **View of Universal Mobile Charger**



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# Fixed Mobile Charger LCM-1

The fixed mobile charger powers your phone from the car battery when the ignition is switched on and leaves the cigarette lighter vacant.

You can use the fixed mobile charger in any vehicle with a 12 or 24 V d.c. connection, negative grounding.

The charging time for the 470 mAh battery is only about 45 minutes.

Fixed mobile charger housing has a four pin connector for power cable, and on the opposite end a connector for the output cable, which connects the fixed mobile charger directly to the d.c. connector of your phone or to the basic handsfree unit.

#### **Product Code**

Fixed mobile charger LCM-1: 0675077

Output cable PCC-1 (supplied with LCM-1): 0730076

#### **Specification**

Dimensions (h x w x d):  $27 \times 36 \times 65 \text{ mm}$ 

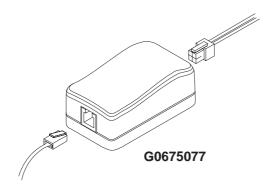
Weight: < 70 gOutput cable length: 1950 mm

Protection: input fused, output current limit

Voltage

input: 11.3...32 V
 output (nominal): 10.3 V
 Output current nominal: 780 mA
 Charging into empty battery: >= 300 mA

# **View of Fixed Mobile Charger**



#### Power Cable PCM-5

The power cable connects the fixed mobile charger, LCM-1, to the vehicle's power supply. The red wire must be connected to the + voltage supply controlled by the vehicle's ignition key via the supplied fused connector. The black wire must be attached to a good negative GND connection.

#### **Product Code**

Power cable PCM–5: 0730058

#### **Specification**

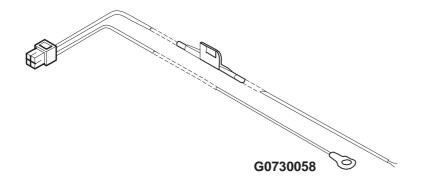
Weight:  $74 \pm 5 g$ 

Cable length

red wire: 2500 ±100 mm
 black wire: 2000 ±50 mm

Max current via contacts: 1 A

#### **View of Power Cable**



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#### Handset HSU-2

A simple handset with no display or keypad, the handset provides privacy for conversation.

Connect the handset to the bottom of basic handsfree unit PHF–5. The connector is marked with • .

When you lift handset from its holder, the HF loudspeaker and HF microphone will be muted and you can speak in privacy. When you replace the handset in its cradle, the call is terminated. However, you can press the Menu selection key of your phone a few seconds before you replace the handset to retain the call and return to handsfree mode.

#### **Product Code**

Handset HSU–2: 0640078

### **Specification**

Dimensions (h x w x d)

handset: 25 x 36 x 181 mm
 cradle: 25 x 49 x 54 mm

Weight

handset: 120 gcradle: 25 g

Cable length

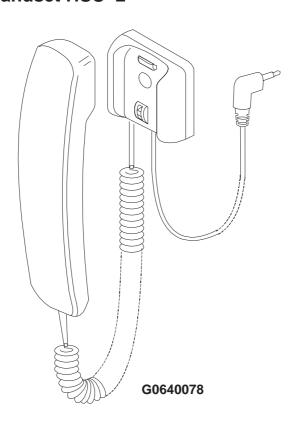
handset: 0.4 mcradle: 2 m

Handset connector: 2.5 mm stereo plug

Input signal level: 31  $mV_{RMS}$ Earpiece sound pressure:  $-7 \, dBPa$ Microphone sound pressure:  $-9 \, dBPa$ 

Output signal level: 0.85 mV<sub>RMS</sub>

# **View of Handset HSU-2**



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#### Headset HDC-2

Compact and functional, headset kit HDXK-7 (headset adapter HDA-4 and headset HDC-2) provides you with a convenient handsfree facility which you can use anywhere.

Connect headset adapter HDA–4 to the bottom of your phone, and plug the headset HDC–2 to the adapter.

In car use, you can connect the headset directly to the basic handsfree unit. (The headset adapter is not required under this configuration.) When used with external antenna adapter, this combination provides you with handsfree operation, privacy and optimum reception quality. When the headset is connected, the HF loudspeaker and microphone are disabled.

#### **Product Code**

Headset HDC-2: 0694017

#### **Specification**

Cord length:  $1500 \pm 50 \text{ mm}$ 

Weight: 13 g

Microphone sensitivity:  $-46.5 \pm 5 \, dB \, (0 \, dB = 1 \, V/Pa \, at \, 1 \, kHz)$ 

Microphone directionality: Omni–directional

Microphone supply voltage: 5 V

Earphone rated/max input: 1 mW/5 mW

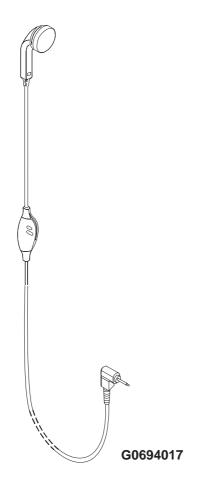
Earphone sound pressure:  $106 \pm 5 dB (at 1 kHz, 1 mW)$ 

**Impedance** 

• microphone:  $max 2.2 k\Omega at 1 kHz$ 

• earphone:  $32 \pm 7 \Omega$ 

# **View of Headset**



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# Headset Adapter HDA-4

The headset adapter provides connections between the headset, power supply and the phone. The adapter plugs into the base of the phone.

Note: When using the headset adapter, connect your charger to the adapter if you need to charge your phone.

#### **Product Code**

Headset adapter HDA–4: 0694042

#### **Specification**

Dimensions (h x w x d): 28 x 29 x 13.3 mm

Weight: 10 g

Gain

microphone: 33.5 dBearphone: 0 dB

Sound pressure

• microphone: -16...+3 dBPa (0 dBPa = 94 dB spl)

• earphone: 0 dBPa...+23 dBPa

Level at headset connector:

microphone: 1.3...11.6 mVearphone: 16...220 mV

# **View of Headset Adapter**



# **Handsfree Microphone HFM-7**

The HFM-7 microphone forms part of compact handsfree unit.

#### **Product Code**

Handsfree microphone HFM–7: 0690012

### **Specification**

Dimensions (h x w x d): 16 x 24 x 43 mm

Cable length: 3.0 m

Holders: double sided tape and screws

Connector: 2.5 mm plug, angle type

Sensitivity curve: hypercardioid

Bias supply voltage: 1.5...8 V

Bias supply current: 100...500 μA

Acoustical operating range (THD<1 %): 35...110 dB SPL (-56...+16 dBa)

Sensitivity: -41±4 dBV/Pa at 1 kHz, front signal

(measured with mic assembled on

hard plate, 30 x 30 cm)

Noise (IHF–A weighting):  $<9 \,\mu V$ 

# **View of Handsfree Microphone**



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# External Antenna Adapter AAE-1

The external antenna adapter allows an external antenna to be capacitively coupled to the phone's antenna when the phone is located in the mobile holder. The external antenna adapter is fastened to the top of the holder with two screws.

#### **Product Code**

External antenna adapter AAE–1: 0750080

#### **Specification**

Dimensions (h x w x d):  $55 \times 40 \times 30 \text{ mm}$ 

Weight: 30 g

Connection: Mini UHF/50  $\Omega$ 

Cable length: 750 mm coaxial cable

Insertion loss: < 4 dB

## **View of Antenna Adapter**

G0750080

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