

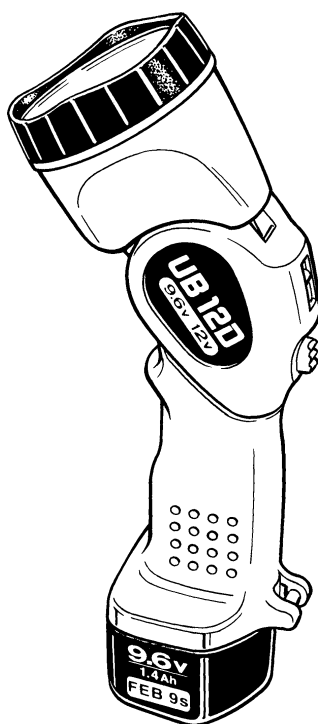
MODEL

UB 12D

HITACHI
POWER TOOLS

TORCHLIGHT
UB 12D

TECHNICAL DATA
AND
SERVICE MANUAL



LIST No. F838

Dec. 1999

REMARK:

Throughout this TECHNICAL DATA AND SERVICE MANUAL, a symbol(s) is(are) used in the place of company name(s) and model name(s) of our competitor(s). The symbol(s) utilized here is(are) as follows:

Symbols Utilized	Competitors	
	Company Name	Model Name
C	MAKITA	ML120

Notice for use

Specifications and parts are subject to change for improvement.
Refer to Hitachi Power Tool Technical News for further information.

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1. PRODUCT NAME

Hitachi Cordless Torchlight, Model UB 12D

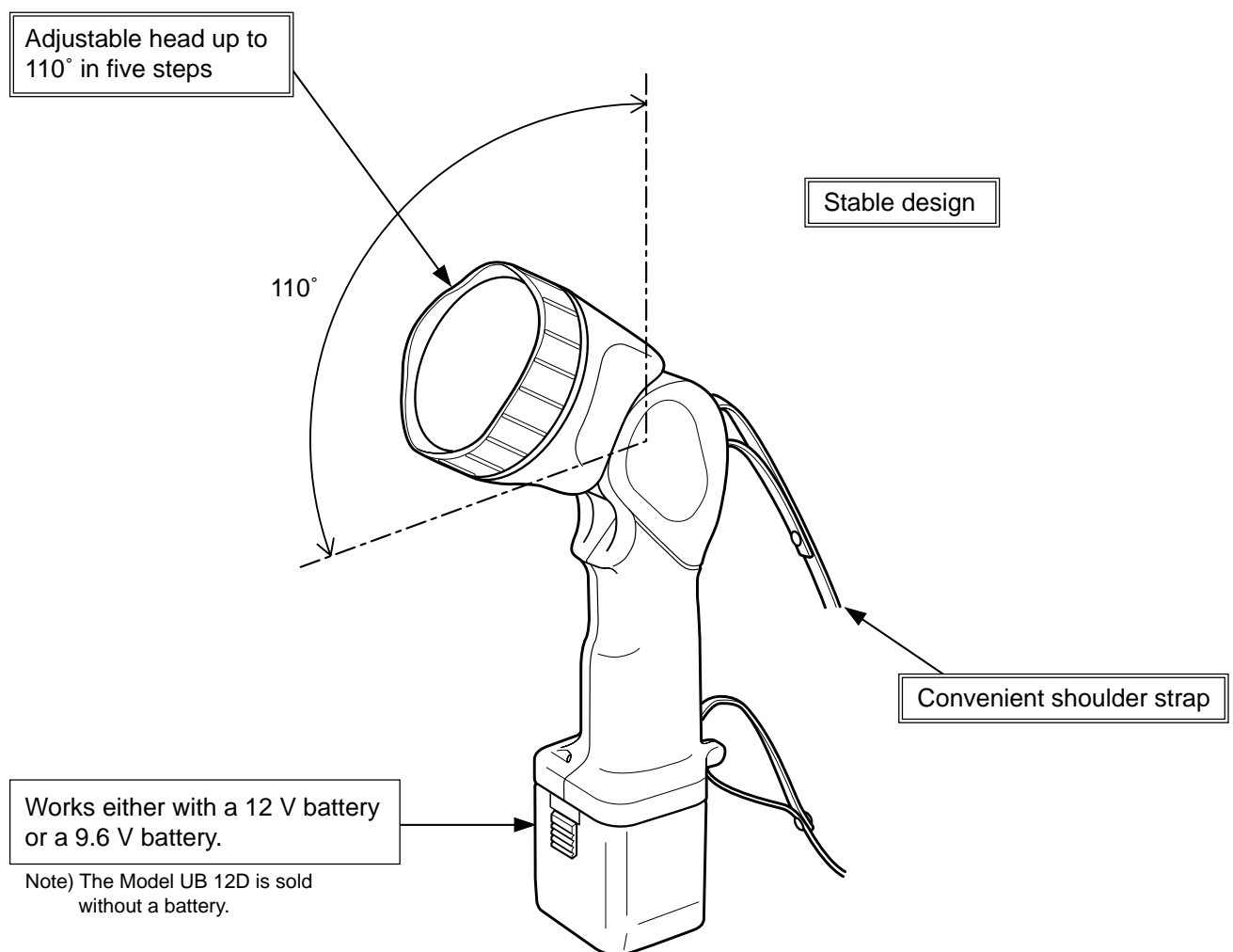
2. MARKETING OBJECTIVE

The Model UB 12D is a dual voltage torchlight powered by the Hitachi EB 9/FEB 9 series and EB 12/FEB 12 series batteries. By putting the Model UB 12D on the market, we aim to expand the market share of Hitachi electric tools and batteries.

3. APPLICATIONS

For outdoor use, construction work, etc.

4. SELLING POINTS



4-1. Selling Point Descriptions

4-1-1. Adjustable head up to 110° in five steps

The head can be adjusted up to 110° in five steps (0°, 30°, 60°, 90° and 110°).

4-1-2. Convenient shoulder strap

The Model UB 12D is suitable for long-term use thanks to the convenient shoulder strap.

4-1-3. Approx. 3-hour continuous operating time (using a fully charged EB 12B battery)

Battery	FEB 12S	EB 12B
Continuous operating time	Approx. 1.5 hours	Approx. 3 hours

(1) Continuous operating time means the lighting time using a fully charged battery, and varies in accordance with the frequency of use, battery capacity and other factors.

Accordingly, the above values are intended for reference purposes only.

(2) The EB 9M and EB 12M batteries have a remaining power indicator. When using the EB 9M or EB 12M battery in the Model UB 12D, the remaining power indicator cannot show the correct status.

This is an unavoidable phenomenon caused by the characteristics of the circuit incorporated in the EB 9M and EB 12M batteries, and is not a failure of the battery. There is no problem in using the EB 9M and EB 12M batteries except that the remaining power is not shown correctly. The remaining power indicator is restored by recharging the battery until the pilot lamp on the charger shows complete of charging.

5. SPECIFICATION COMPARISONS WITH SIMILAR PRODUCT

Item	Model	HITACHI UB 12D	HITACHI UB 3D	C
	Unit			
Battery	—	FEB 9, FEB 12 series EB 9, EB 12 series	FEB 9, FEB 12 series EB 9, EB 12 series	1200 series
Bulb	—	12 V, 0.7 A	12 V, 0.7 A	12 V, 0.7 A
Continuous operating time	—	Approx. 3 hours (using fully charged EB 12B battery) Approx. 2 hours (using fully charged FEB 12S battery)	Approx. 3 hours (using fully charged EB 12B battery) Approx. 2 hours (using fully charged FEB 12S battery)	Approx. 3 hours (using fully charged 1222 battery)
Illumination	Lx	7000 (using fully charged 12 V battery) 3500 (using fully charged 9.6 V battery)	7000 (using fully charged 12 V battery) 3500 (using fully charged 9.6 V battery)	4500
Adjustable angle	°	0 — 110 (in five steps)	0 — 90 (in two steps)	0 — 110 (in four steps)
Dimensions (without battery)	mm	89 in diameter x 252 in length	83 in diameter x 226 in length	86 in diameter x 263 in length
Weight	kg	0.28 (without shoulder strap)	0.23	0.28 (without shoulder strap)

6. PRECAUTIONS IN SALES PROMOTION (SAFETY INSTRUCTIONS)

In the interest of promoting the safest and most efficient use of the Model UB 12D Torchlight by all of our customers, it is very important that at the time of sale the salesperson carefully ensures that the buyer seriously recognizes the importance of the contents of the Handling Instructions (printed on the carton box), and fully understands the precautions.

- **Handling Instructions**

Salespersons must be thoroughly familiar with the contents of the Handling Instructions in order to give pertinent advice to the customer.

(1) Do not look directly at the light while it is turned on.

Do not shine the light directly at another person's face.

(2) Do not open the front cover immediately after using the light.

The bulb is extremely hot immediately after using the light. Wait until the bulb has cooled down before replacing the bulb.

(3) Always turn the switch off before replacing the bulb or when not in use.

Otherwise, the service life of the bulb can be shortened and a short circuit may result.

If the light is left for a long time with the switch turned on and the battery installed, the service life of the battery can also be shortened.

(4) Do not use the light in the rain.

The Model UB 12D is not water-resistant and may fail if it gets wet.

(5) Do not shock or disassemble the light.

Otherwise, inside soldering can fall off or the bulb can be broken.

(6) Do not allow the light to contact gasoline, thinner, etc.

The outer case of the Model UB 12D can be damaged by gasoline, thinner, etc. although it is made of strong synthetic resin.

(7) Do not leave the Model UB 12D in very hot locations exceeding 60 °C such as the inside of a car in summer.

Storage in such locations can cause a failure.

- **Others**

Store the Model UB 12D in a dry place at a temperature less than 40 °C. Remove the battery from the light before storage.

[Service Section]

1. REPLACEMENT OF BULB AND LENS

Turn the switch off and remove the battery before replacing the bulb or the lens.

1-1. Replacement of Bulb

- (1) Remove the front cover by turning it counterclockwise.
- (2) A spare bulb is stored in the head. Replace the expired bulb with a new one and reinstall the front cover.

1-2. Replacement of Lens

Remove the front cover and then the reflector. The lens can then be removed.

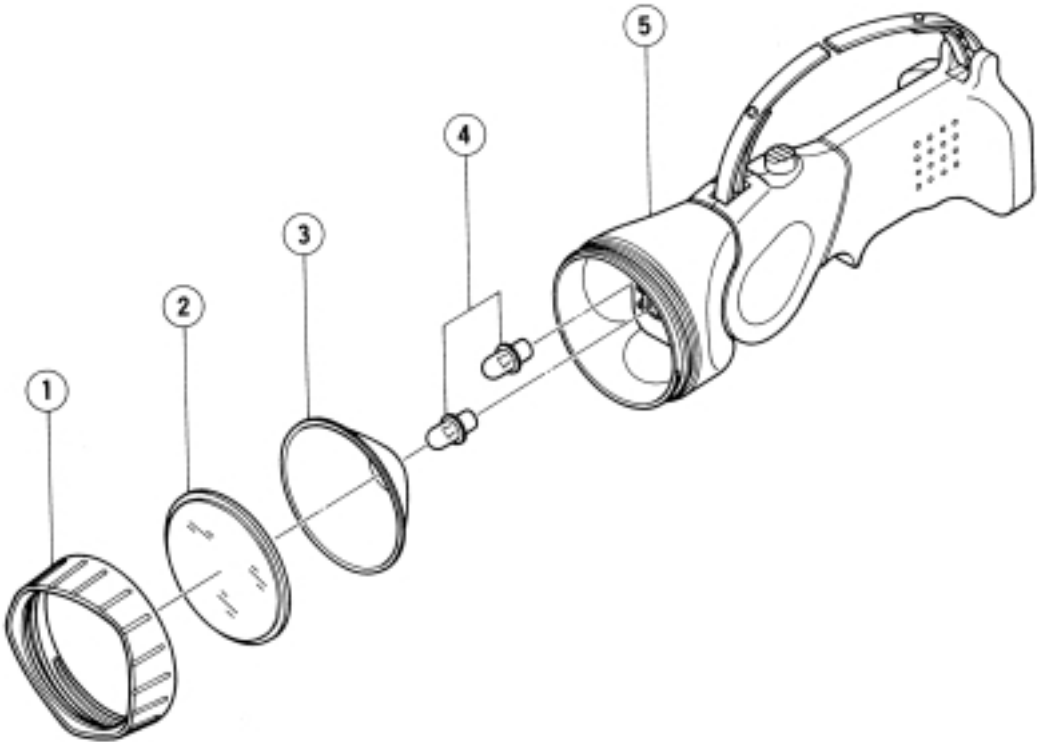
Replace the lens with a new one and reinstall the removed parts.

2. SPARE PARTS

The spare parts for the Model UB 12D are as follows.

- (1) Bulb (for Model UB 12D)
- (2) Lens

Assembly Diagram for UB 12D



PARTS

UB 12D

[illegible]