



# HUMBOLDT

## H-2987H Concrete Rebound Hammer

### STANDARDS:

ASTM C805, ASTM D5873, BS 1881: Part 202, ISO IDIS8045, ENV 206, IGJ/T 23-2001



Humboldt's Concrete Rebound Hammer provides a reliable, yet economical, alternative to the Original Schmidt Hammer. It is designed for testing concrete 4" (100mm) or more in thickness with a maximum particle size less than or equal to 1.25" (32mm), providing a quick and simple test for obtaining an immediate indication of concrete strength in various parts of a structure. The Humboldt Rebound Hammer covers a compressive strength range of 1,450 to 9,000 psi (10 to 62 MPa).

To operate, the rebound hammer is pressed against the concrete structure and the rebound values are displayed on a mechanical sliding scale. These values can then be correlated to compressive strength by using the conversion table chart affixed to the hammer. It includes a grinding stone; a cloth, carrying case; instruction booklet and conversion charts.

Concrete Test Hammers are used extensively as a fast and inexpensive nondestructive test method for determining strength of in-place concrete. Hammer tests can be used as a reliable QC test to determine strength, as well as locations for taking test core samples. They can also be used to locate damage from freezing or fire.

To operate, the plunger rod is pressed against a concrete surface until a spring-loaded mass is released, causing the mass to impact the concrete. The rebound of the mass is registered on the hammer scale and referred to as the "rebound number". Calibration curves then provide a quick conversion to indicate the strength of the concrete. Accuracy can be greatly increased when the user correlates the rebound hammer readings with actual compression tests involving breaking cylinders of the same concrete mix.



# H-2987H Concrete Rebound Hammer

Item	Part No.
Weight	2 lbs. (0.9kg)
Shipping Weight	26 lbs. (2.7kg)
Hammer Dimensions	10.5" (267mm) Long (with plunger retracted)
Carrying Case Dimensions	15.5" x 11.5" x 2.5" 394 x 292 x 64mm

## Maintenance

We recommend that you calibrate your Rebound Hammer regularly using the Humboldt Calibration Anvil, H-2972, ordered separately. For a Rebound Hammer, you should start verifying the readings after approximately 2,000 uses (or completed tests). You should also verify the readings if you have reason to suspect that your Rebound Hammer is giving you false data.

## Accessories

### Grinding Stone for Rebound Hammers

Replacement grinding stone for rebound hammers.

#### Grinding Stone

H-2975.27

Ship wt. 0.9lbs. (0.4kg)

### Calibration Anvil for Rebound Hammers

Calibration anvil ensures continued test accuracy. For use with all test hammers. Hammers should be periodically checked to determine correct performance.

#### Calibration Anvil

H-2972

Ship wt. 58lbs. (26.3kg)

### Conversion Chart Labels

Replacement conversion chart for rebound hammers.

#### Conversion Chart Label (psi)

H-2987H.7

#### Conversion Chart Label (N/mm<sup>2</sup>)

H-2975.25N

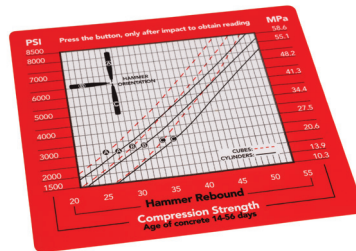
Ship wt. 0.5lbs. (0.22kg)



H-2975.27

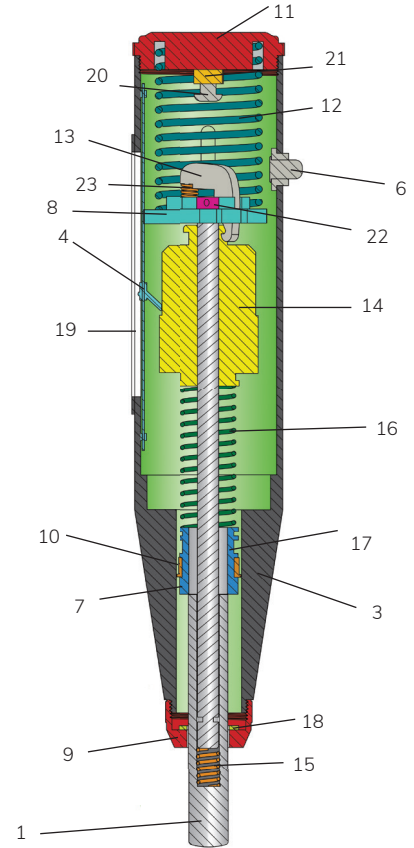


H-2972



H-2987H.7

Humboldt provides repair and calibration services for concrete rebound hammers, Call: 1.800.544.7220



### H-2987H Replacement Parts

Key	Description	Part#
1	Impact Plunger	H-2987.1
3	Housing, complete	H-2987.3
4	Rider with Guide Rod	H-2987.4
6	Push-button, complete	H-2987.6
7	Hammer Guide Bar	H-2987.7
8	Guide Disk	H-2987.8
9	Cap	H-2987.9
10	Two-part Ring	H-2987.10
11	Rear Cover	H-2987.11
12	Compression Spring	H-2987.12
13	Pawl	H-2987.13
14	Hammer Mass	H-2987.14
15	Retaining Spring	H-2987.15
16	Impact Spring	H-2987.16
17	Guide Sleeve	H-2987.17
18	Felt Washer	H-2987.18
19	Acrylic Window	H-2987.19
20	Trip Screw	H-2987.20
21	Lock Nut	H-2987.21
22	Pin	H-2987.22
23	Pawl Spring	H-2987.23



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