

## Quality Assurance

**Product Name:** Barcol Impressor (Hardness Tester)  
**Product Code:** EHT-934-1



Barcol Impressor is a portable, handheld, indentation hardness tester for soft metals (Al, Cu) and alloys, fiber reinforced plastics (FRP) and other rigid plastics. Simplicity of the instrument makes it popular and can be operated with no prior experience.

It can be used in any position and in any space that will allow clear reach for operator's hand. Hardness reading is instantly indicated on the dial, which is divided into one hundred graduations. No waiting, pre-loading or separate measurements.

Simply exert pressure against the instrument to drive the spring-loaded indenter point into the material to be tested. Indenter point must be perpendicular to the surface being tested. On very soft materials, highest reading should be used since cold flow permits the spring loaded indenter point to continue penetration.

## Operation Instructions

1. It uses a special shape indenter impressed into the specimen by a standard spring pressure and measures the indentation depth to obtain hardness value. Barcol hardness value is:  
$$HBa = 100 - h / 0.0076$$

HBa - Barcol hardness value  
h - Indentation depth (mm)  
0.0076 - Indentation depth for one unit of Barcol hardness.
2. Main testing system of Barcol Impressor is set in the frame.
3. The indenter is in full scale adjusting screw with a plunger loaded by load spring on top.
4. The test force applied on indenter by load spring through plunger is adjusted by load adjusting screw.
5. The plunger moves up and down with indenter. Thus it's dial indicator shows hardness reading through the lever.
6. Leg fixed at back of the frame will ensure that indenter is perpendicular to the test surface.
7. Tip of indenter is 0.76 mm above the surface of full scale adjusting screw. This is equivalent to 100 degree when the impressor is under nonworking condition. Indicator points at zero at this moment.

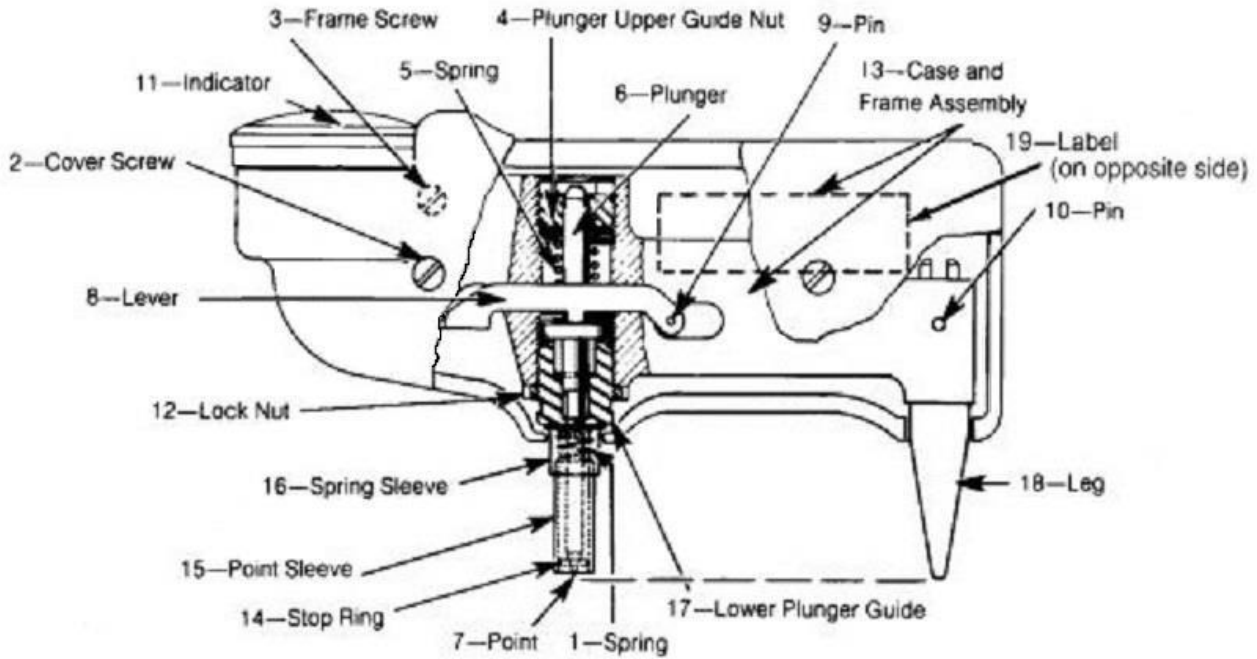
## Technical Parameters

Indenter:	26° truncated cone, head face diameter 0.157 mm Testing Range: 0 ~ 100 HBa equivalent to 25 ~ 135 HBW Resolution: 0.5 HBa
Indication Error:	Hardness Range 81 ~ 88 HBa (+/- 1HBa) Hardness Range: 42 ~ 48 HBa (+/- 2HBa)
Repeatability:	Hardness Range : 81 ~ 88 HBa (+/- 1.5 HBa) Hardness Range: 42 ~ 48 HBa (+/- 2.5 HBa)
Net Weight:	0.5 kg

## Collocation

- 1) Tester
- 2) High Value Standard Hardness Block (1 pc.)
- 3) Low Value Standard Hardness Block (1 pc.)
- 4) Spare Indenter
- 5) Calibration Wrench
- 6) Carrying case

## List of Parts for EHT-934-1 Tester



S. No.	Part No.	Description
1	EHT-934-1-1	Spring
2	EHT-934-1-2	Cover Screw
3	EHT-934-1-3	Frame Screw
4	EHT-934-1-4	Plunger Upper Guide Nut
5	EHT-934-1-5	Spring
6	EHT-934-1-6	Plunger
7	EHT-934-1-7	Point
8	EHT-934-1-8	Lever
9	EHT-934-1-9	Pin
10	EHT-934-1-10	Pin
11	EHT-934-1-11	Indicator
12	EHT-934-1-12	Lock Nut
13	EHT-934-1-13	Case and Frame Assembly
14	EHT-934-1-14	Stop Ring
15	EHT-934-1-15	Point Sleeve
16	EHT-934-1-16	Spring Sleeve
17	EHT-934-1-17	Lower Plunger Guide
18	EHT-934-1-18	Leg
19	EHT-934-1-19	Label on opposite side

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