

2023-01-30

# Cap Changer Issue

## Shank coming out during cap change

# ABB supplied Tip / Cap & Shank drawings:

## 2 HÄTTA B

### KRAV

Material  
Koppar A2/2 - ISO 5182

### Dimensioner

## 2 ELECTRODE CAP B

### REQUIREMENTS

Material  
Copper A2/2 - ISO 5182

### Dimensions

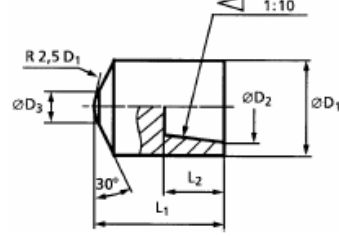


Fig 1

Tabell / Table 1

D <sub>2</sub>	Kontolk Taper plug gauge
10	
12	9003794
15	9003795

Tabell / Table 2

D <sub>1</sub>	D <sub>2</sub>	D <sub>3</sub>	L <sub>1</sub>	L <sub>2</sub> +0,5 0	Artikelnr Part No.
h11			±0,5		
13	10	5	18	8	3045707 X
16	12	6	20	9,5	9003872 X
20	15	8	22	11,5	9003873 X

Picture-1

## 3 SKAFT FÖR HÄTTA Ø16

### KRAV

Material  
Koppar A2/2 - ISO 5182

### Dimensioner

## 3 ADAPTOR FOR CAP Ø16

### REQUIREMENTS

Material  
Copper A2/2 - ISO 5182

### Dimensions

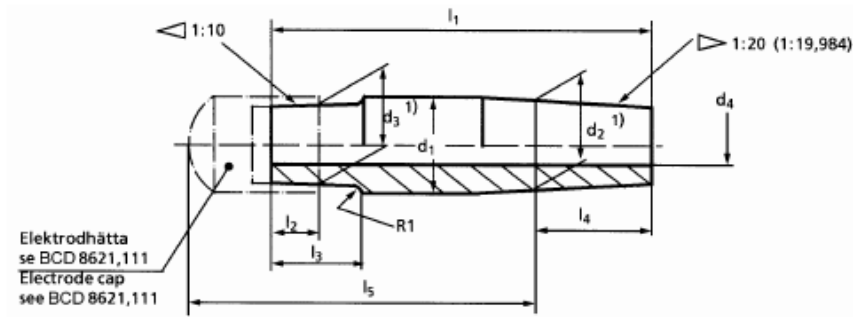


Fig 2

Tabell / Table 3

d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	Ringtolk Taper ring gauge d <sub>2</sub>	Ringtolk Taper ring gauge d <sub>3</sub>
h11	1)	1)		±0,5		±0,5		
16	15,8	12	8	8	13	18	9003793	9003796

Tabell / Table 4

l <sub>1</sub>	l <sub>5</sub>	Ritningsnr Drawing No.	Artikelnr Part No.
42	36	9931378	9931378 X
48	42	9931378	9931379 X
54	48	9931378	9931380 X
61	55	9931378	9931381 X
74	68	9931378	9931382 X
86	80	9931378	9931383 X
99	93	9931378	9931384 X
112	106	9931378	9931385 X
131	125	9931378	9931386 X

Picture-2

## 4 SKAFT FÖR HÄTTA Ø20

### KRAV

Material  
Koppar A2/2 - ISO 5182

### Dimensioner

## 4 ADAPTOR FOR CAP Ø20

### REQUIREMENTS

Material  
Copper A2/2 - ISO 5182

### Dimensions

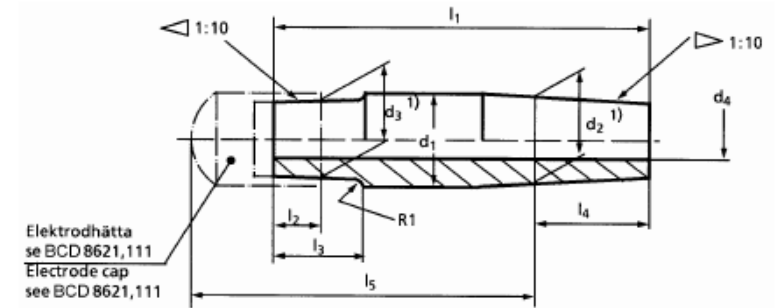


Fig 3

Tabell / Table 5

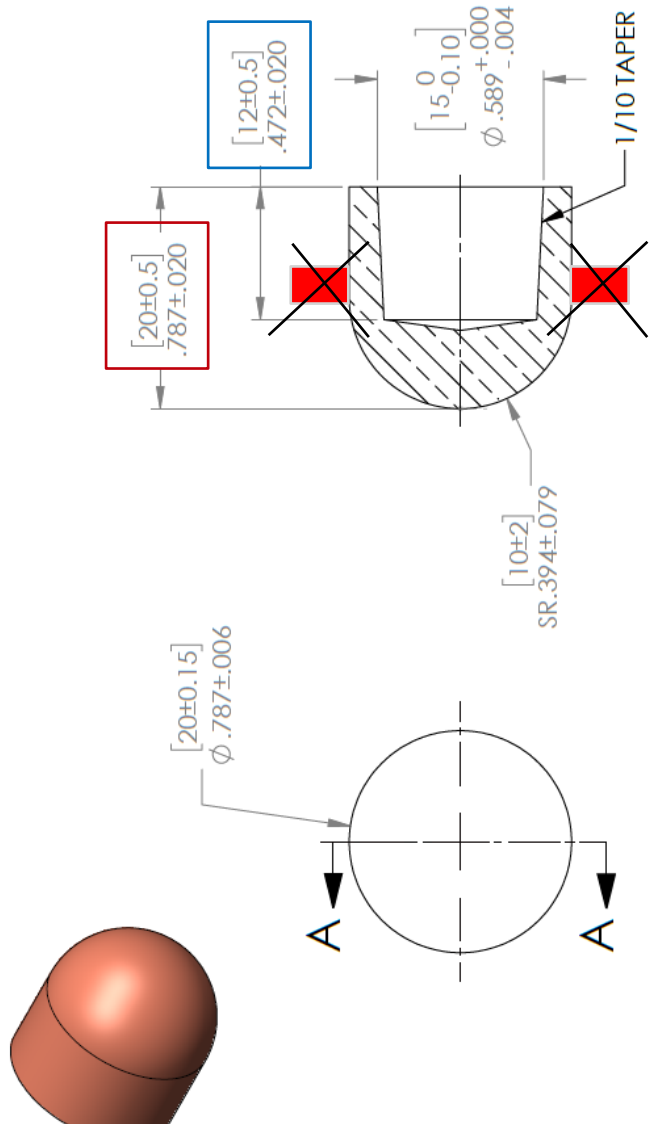
d <sub>1</sub>	d <sub>2</sub>	d <sub>3</sub>	d <sub>4</sub>	l <sub>2</sub>	l <sub>3</sub>	l <sub>4</sub>	Ringtolk Taper ring gauge d <sub>2</sub>	Ringtolk Taper ring gauge d <sub>3</sub>
h11	1)	1)		±0,5		±0,5		
20	19	15	10,5	10	15	25	9003786	9003797

Tabell / Table 6

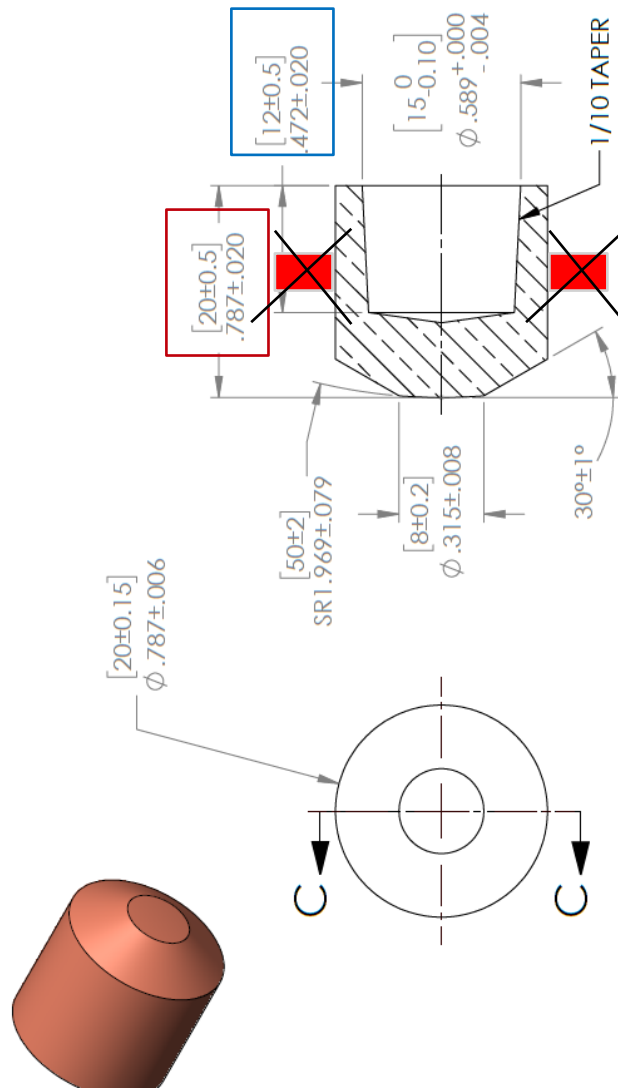
l <sub>1</sub>	l <sub>5</sub>	Ritningsnr Drawing No.	Artikelnr Part No.
54	41	9931387	9931387 X
60	47	9931387	9931388 X
66	53	9931387	9931389 X
73	60	9931387	9931390 X
86	73	9931387	9931391 X
98	85	9931387	9931392 X
111	98	9931387	9931393 X
124	111	9931387	9931394 X
143	130	9931395	9931395 X

Picture-3

# Valiant supplied Tip / Cap drawings: key variations that are affecting the cap change process



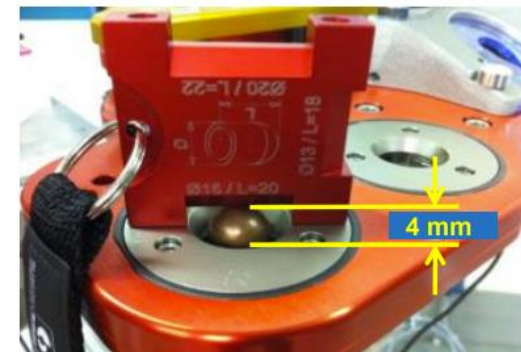
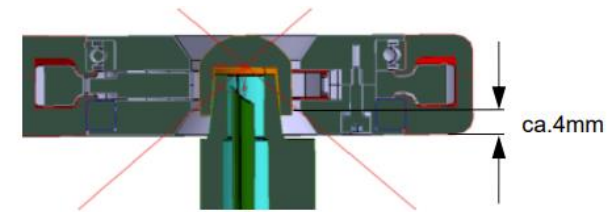
Picture-4



Picture-5

To be changed to  $22 \pm 0.5$  for  $\varnothing 20$  &  $20 \pm 0.5$  for  $\varnothing 16$  to give enough room for Tip changer jaws to grip during tip change

To be changed to  $11.5 + 0.5 / 0$  for  $\varnothing 20$  &  $9.5 + 0.5 / 0$  for  $\varnothing 16$



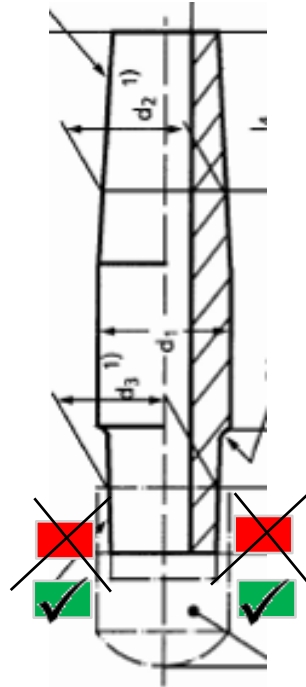
Programming tool for tip changer F13,16,20  
part-N.: 50057100003401

Programming with new caps  
F13, 18 long = 2 mm  
F16, 20 long = 4 mm  
F 20, 22 long = 6 mm

Picture-6

Action plan for ABB: -

1. ABB will prove tip changer only with ABB supplied tips/caps.
2. ABB will use the new tips/caps for the setting.
3. Shank should be at 90° w.r.t. the cap changer surface for the straight shanks.
4. Cap positioning & the cap placing should be as per picture-6. Measure the dimension (2, 4 & 8) using vernier caliper.
5. Cap changer jaws should not squeeze the cap & shank mating surface, means cap changer jaws should only squeeze the cap using solid area instead of hallow area.
6. Volvo✓ & Valiant to establish the Tip/Cap dress frequency & also Tip/Cap change frequency considering the picture-6 parameters.



**ABB**