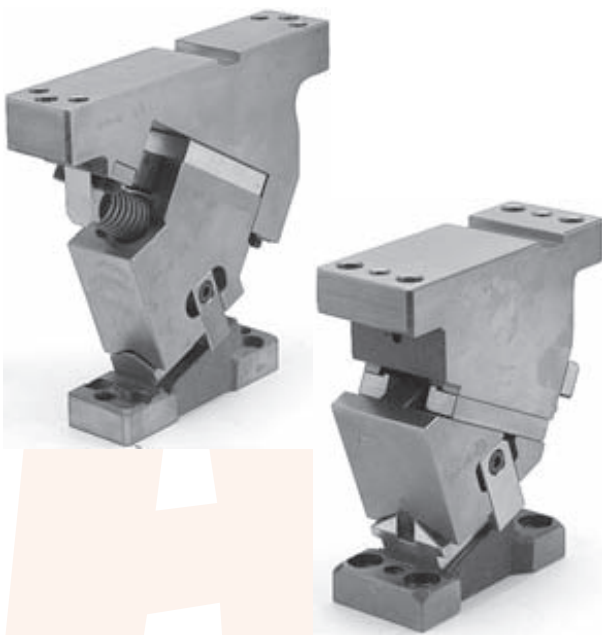# Aerial Cam Unit
– B-UCMSC/ B-UCMSF –

● Features of B–UCMSC
- Space saving design with the mount width equal to the cam width and reduction of weight.
- Automatic alignment mechanism of the V–shaped guide.
- Slider is removable from the back. This makes it possible to lay out the parts side by side.
- Available angle is 0° to 70° at increments of 5°.

● Features of B–UCMSF
- Space saving design with the mount width equal to the cam width and reduction of weight.
- Automatic alignment mechanism of the V–shaped guide.
- Slider is retractable from the back side. This makes it possible to lay out the parts side by side.
- Available angle is 0° to 70° at increments of 5°.
- 2–stage spring type is used.
- The spring force is about twice that of UCMSC.
- Durability in stamping is increased by changing the material of the cam slide guide. It is about 1.4 times that of UCMSC.
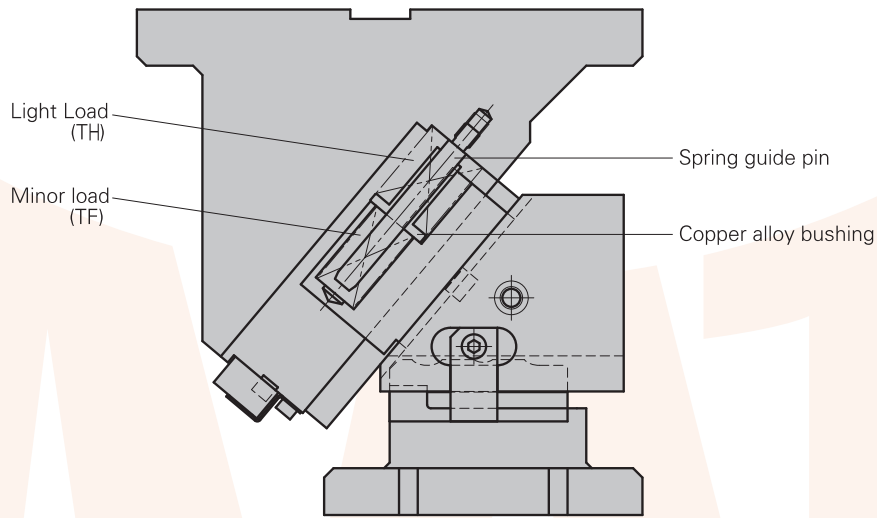
ADDTTIONALE DIE COMPONENTS
Email : mk@asianadvanced.co.th

■ Structure of B–UCMSF

Although UCMSF has the same structure as UCMSC, the 2–stage spring type is used to improve the spring force.

Copper alloy for high pressure (SO#50SP7) is used for the cam slide guide (cam bottom) to increase the force.

Light Load (TH)

Minor load (TF)

Spring guide pin

Copper alloy bushing

Performance Specifications

Catalog No.	Mount Width	Working angle (increments of 5°)	Working Force kN(tonf)		Spring Force (Final Load) N (kgf)	Shut height
			Standard Working Force (one million strokes)	Allowable Working Force (300,000 strokes)		
B-UCMSC	50	0° ~ 70°	19.6 (2.0)	39.2 (4.0)	* about 980 (100)	200
	65	0° ~ 70°	19.6 (2.0)	39.2 (4.0)	* about 1220 (124)	180 (0° ~ 45°) 190 (0° ~ 45°) 210 (60° ~ 70°)
	80	0° ~ 70°	39.2 (4.0)	78.4 (4.0)	* about 1600 (163)	270
	150	0° ~ 70°	88.2 (9.0)	132.3 (13.5)	4607.5 (470.2)	270
B-UCMSF	80	0° ~ 70°	54.9 (2.0)	109.8 (4.0)	3250.0 (331.4)	270
	150	0° ~ 70°	123.5 (12.6)	185.2 (18.9)	9540.0 (973.4)	270

* There are some difference depending on the angle.

■ **B-UCMSC50 Structure and Assembly / Disassembly**
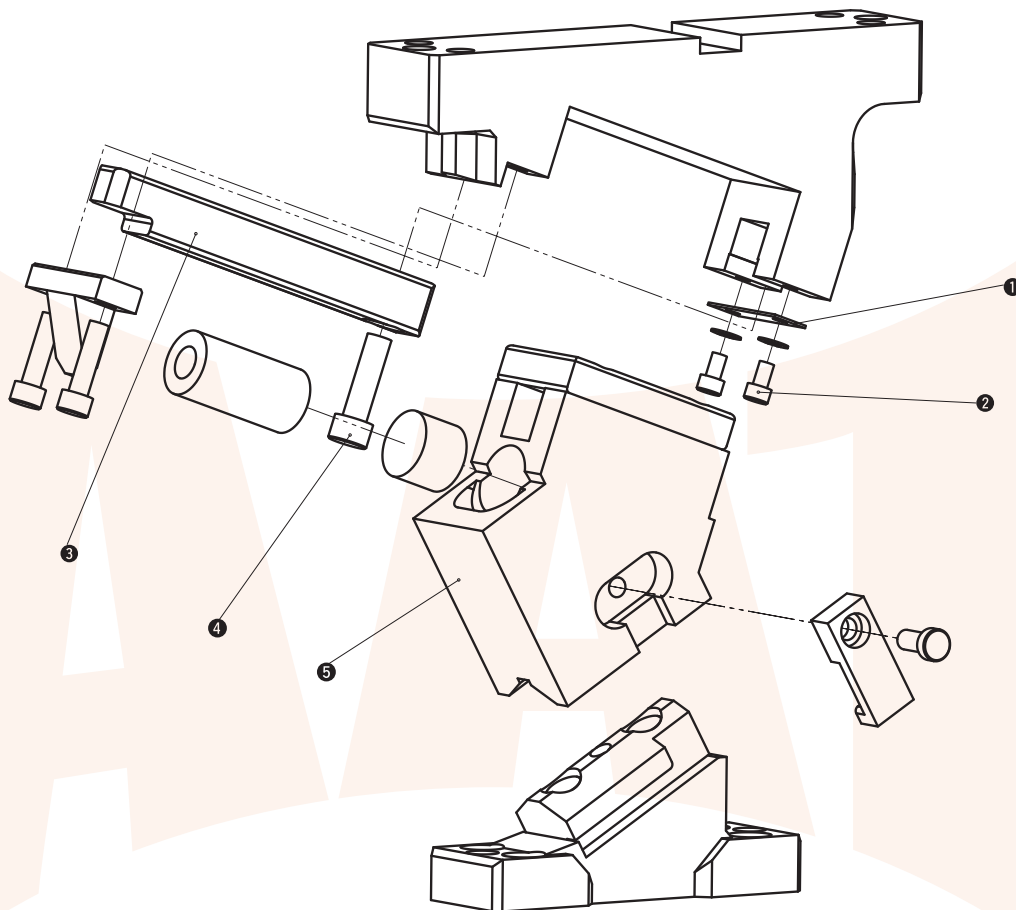
● Disassembly method of B−UCMSC50
1) Remove hexagon socket head bolt (❷) and remove safety plate (❶).
2) Remove hexagon socket head bolt (❹).
3) Shift guide bar (❸) to the back then remove cam slider (❺) from cam holder.

● Assembly method of B−UCMSC50
1) Assemble components in the reverse order of disassembly.
• Make sure that there is no foreign matter on the sliding area and assemble components.
• The clearance between the guide bar/cam slider and the cam holder is controlled. Match the stamped serial number on the holder and slider before assembly.
• When cam is disassembled and then reassembled, please do not forget to assemble all bolts proveded.

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■ B–UCMSC65 Structure and Assembly / Disassembly
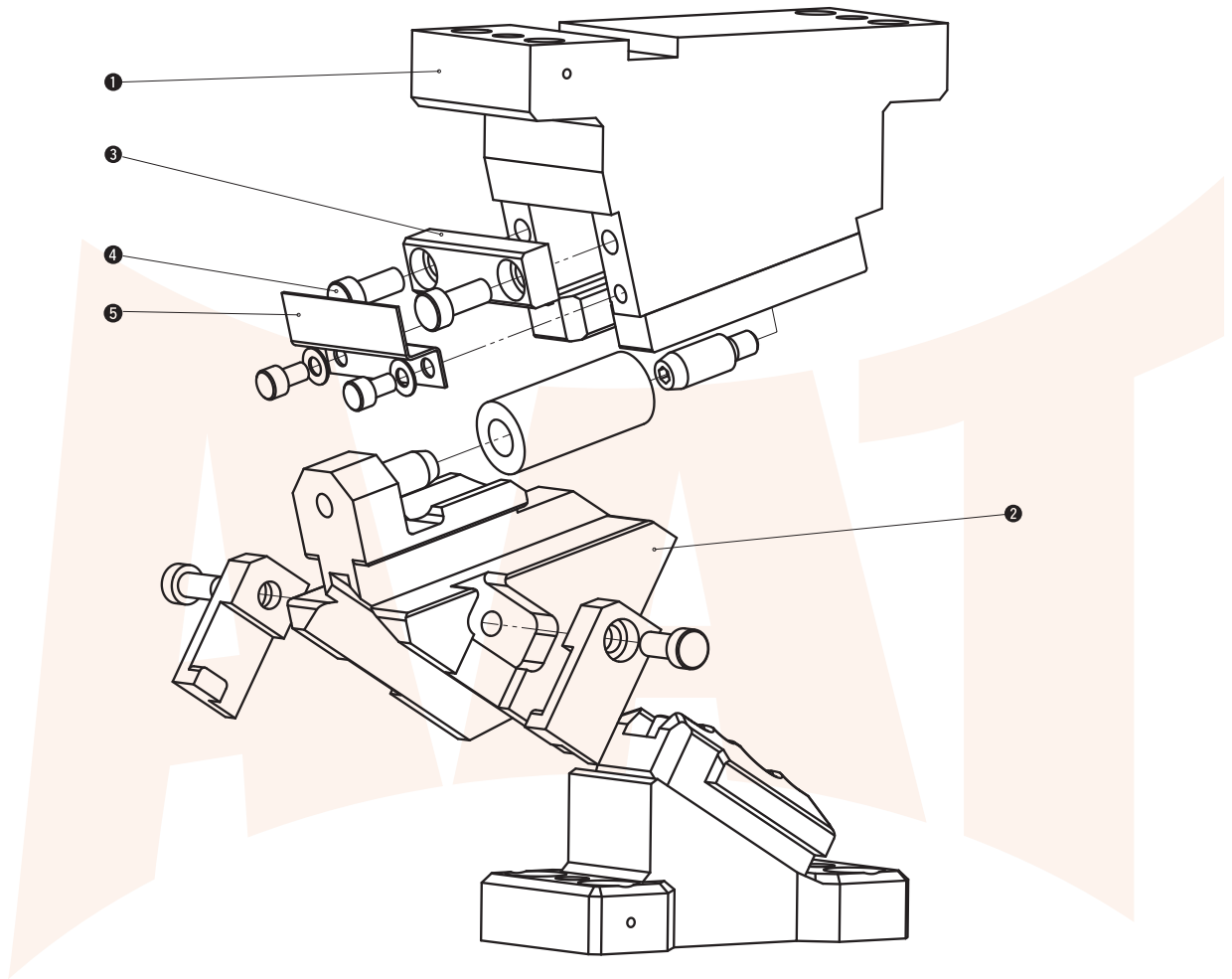
● Disassembly method of B–UCMSC65
   1) Remove safety plate(**❺**) .
   2) Loosen hexagon socket head bolt (**❹**) and remove stopper plate (**❸**).
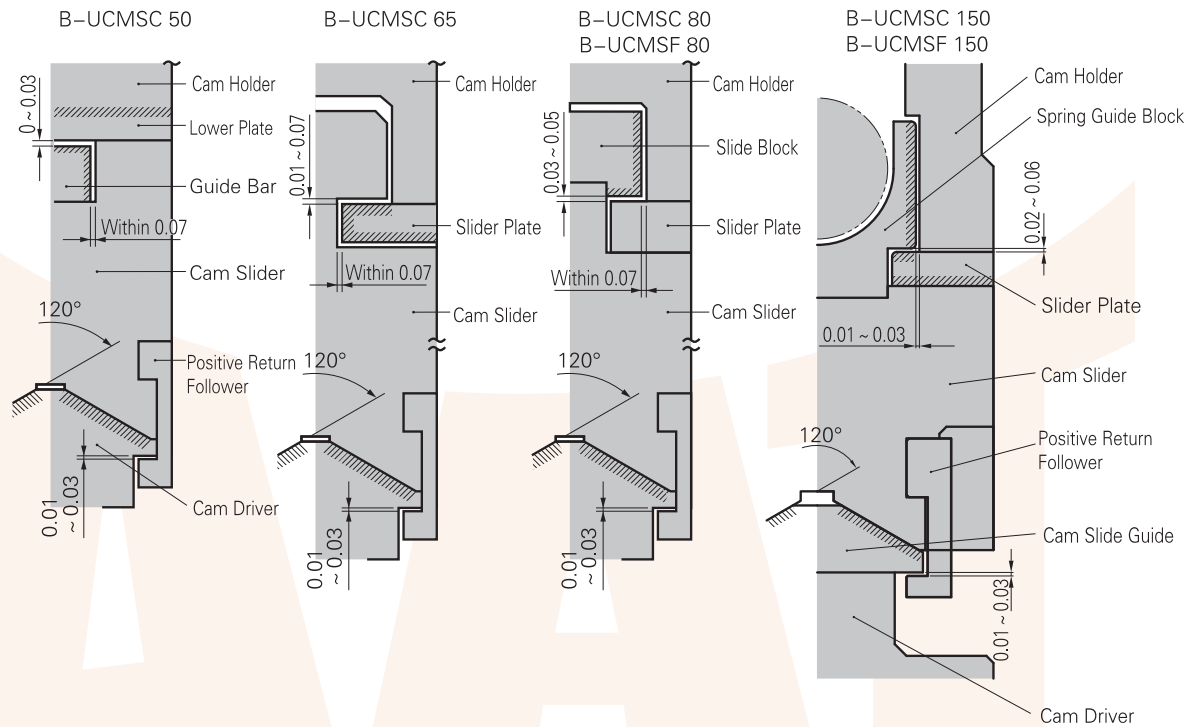   3) Pull and remove cam slider (**❷**) from cam holder (**❶**) to the rear.

● Assembly method of B–UCMSC65
  1) Assemble components in the reverse order of disassembly.
    ● Make sure that there is no foreign matter on the sliding area and assemble components.
    ● The clearance between the guide bar/cam slider and the cam holder is controlled. Match the stamped serial number on the holder and slider before assembly.
    ● When cam is disassembled and then reassembled, please do not forget to assemble all bolts provided.

Aerial Cam Unit

■ Slide Structure and Positive Return Structure

B–UCMSC 50

B–UCMSC 65

B–UCMSC 80
B–UCMSF 80

B–UCMSC 150
B–UCMSF 150

B–UCMSC 50: 0 ~ 0.03, Cam Holder, Lower Plate, Guide Bar, Within 0.07, Cam Slider, 120°, Positive Return Follower, 0.01 ~ 0.03, Cam Driver

B–UCMSC 65: 0.01 ~ 0.07, Cam Holder, Slider Plate, Within 0.07, Cam Slider, 120°, 0.01 ~ 0.03

B–UCMSC 80 / B–UCMSF 80: 0.03 ~ 0.05, Cam Holder, Slide Block, Slider Plate, Within 0.07, Cam Slider, 120°, 0.01 ~ 0.03

B–UCMSC 150 / B–UCMSF 150: Cam Holder, Spring Guide Block, 0.02 ~ 0.06, Slider Plate, 0.01 ~ 0.03, Cam Slider, 120°, Positive Return Follower, Cam Slide Guide, 0.01 ~ 0.03, Cam Driver

* Oilless System at Hatched Area
(copper powder sintered) Area

Option Code		K	TK	SC	WC	N12	N16
Catalogs No.	Detials	Key is attached for the cam holder.	T-shaped key type is used for both holder and driver.	The mount surface is pulled forward (increments of 1mm)	The mount surface width is widened to the constant size.	The dowel holes for cam holder and cam driver are changed to Ø 12H7	The dowel holes for cam holder and cam driver are changed to Ø 16H7
B-UCMSC	50	O	–	O	O	O	–
	65	O	–	O	–	–	–
	80	O	–	O	O	–	O
	150	O	O	–	–	–	O
B-UCMSF	80	O	–	O	O	–	O
	150	O	O	–	–	–	O

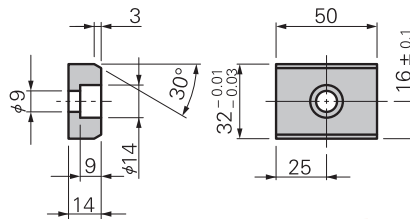## ■ Option of B-UCMSC and B-UCMSF

● **Key specification(-K)**
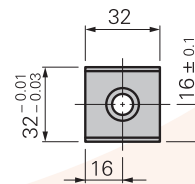
• **B-UCMSC 50/65**

LKU20-50
(with 1-M8 × 15 bolts)
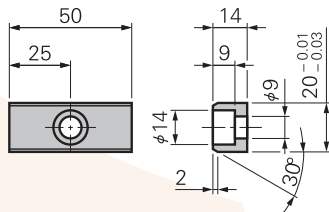
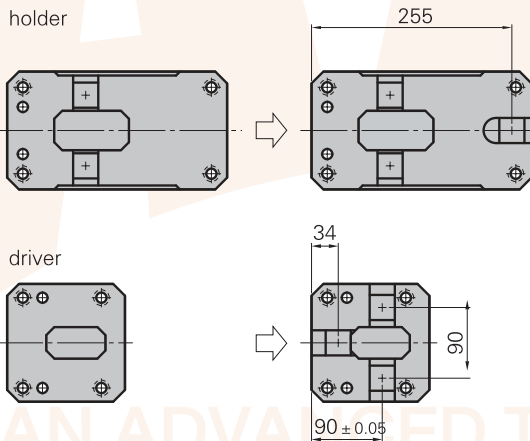• **B-UCMSC・B-UCMSF 80/150**

For 80
LKU32-50
(with 1-M8 × 15 bolts)

For 150
LKU32-32
(with 1-M8 × 15 bolts)

● **T-shaped key type(-TK)**

B-UCMSC・B-UCMSF 150

T-shaped key grooves are additionally machined as shown in the figure below.

holder

driver