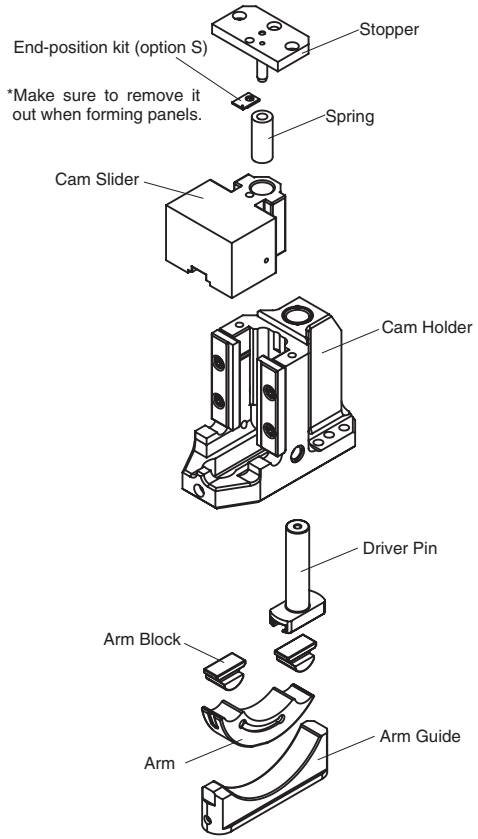
Counter Cam Unit General Description of CTCC

COMPACT TYPE

CAD FILE

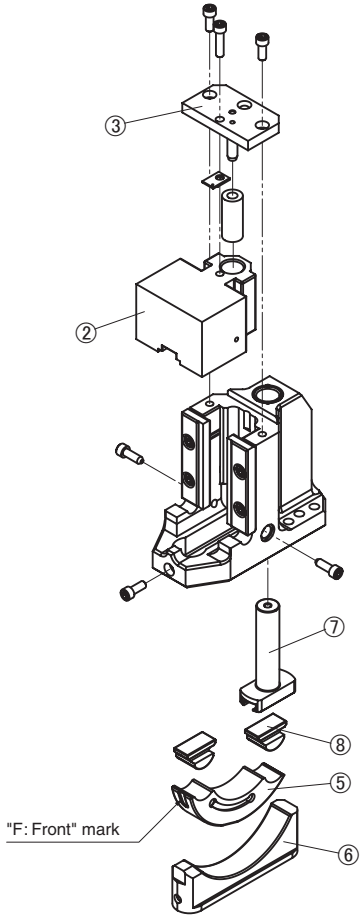
CTCC is a compact and space-saving counter cam unit for bending panels upward.

■ Structure and Features of Counter Cam Unit



- Its compact design enables to flange panels upward even in a narrow space.
- The new structure prevents the stress concentration, which does not require to install a backup.
- The end-position kit and spring can be assembled or disassembled with the whole unit mounted on the die.
- The elimination of the box-type holder enables to avoid interferences with front objects.

■ Disassembly and Assembly of CTCC



● CTCC Disassembly Procedures

1) Loosen the hexagon socket head bolt and remove the stopper plate (③).
2) Pull the cam slider (②) up and out.
3) Loosen the three hexagon socket head bolts. With the cam main unit laid down horizontally, use the M10 tap at the bottom of the arm guide (⑥) to pull it out.
4) Disassemble the arm (⑤), arm block (⑧) and driver pin (⑦).

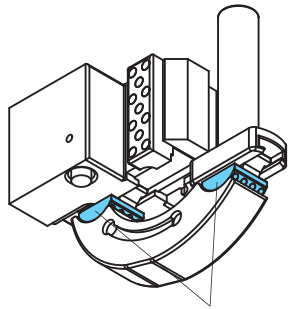
● CTCC Assembly Procedure

1) Assemble by reversing the disassembly procedure.
   - Make sure that there is no foreign matter on the sliding area and assemble components.
   - When cam is disassembled and then reassembled, please do not forget to assemble all bolts provided.

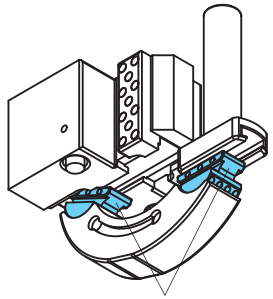
Note: Make sure to assemble the arm (⑤) with engraved "F" (= Front) mark facing in the correct direction.

Assembly Precautions

Make sure to install the two arm blocks (⑧) into each T-groove slot of the cam slider (②) and the driver pin (⑦) as shown to the right.



The two arm blocks are in the T-groove slots. (Correct)



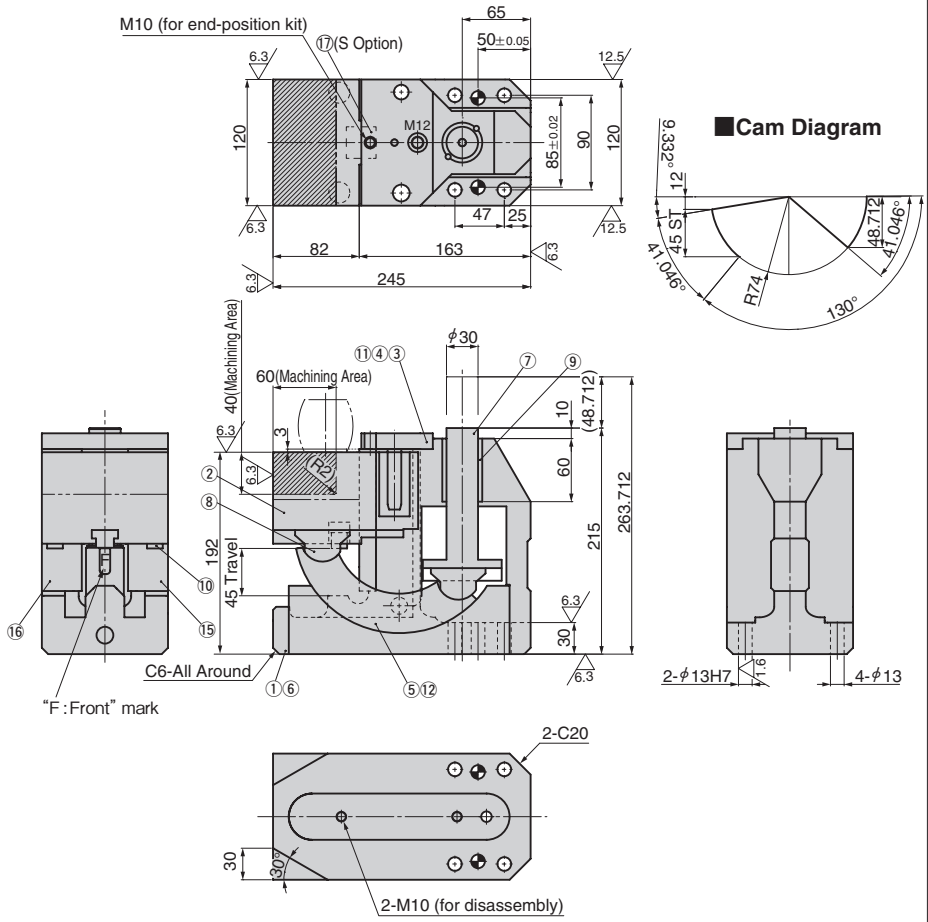
The two arm blocks are NOT in the T-groove slots. (Incorrect)

Counter Cam Unit

COMPACT TYPE

CAD FILE

CTCC120-45



■Cam Diagram

Working Force kN (tonf) (1,000,000 strokes)	Spring Force N (kgf)		Total Weight kg	Catalog No.	Cam width W	Travel S	Spring Type PS
	Initial Load	Final Load					
9.8 (1.0)	150.7 (15.3)	574.6 (58.6)	28.8	CTCC	120	45	TF27-125

※ Spring specification TF27-125 : Spring constant 9.42N/mm (0.96kgf/mm)
Guideline of spring durability 300,000 strokes

■Table of Components

No.	Description	Qty	Material and Remark
①	Cam Holder	1	FC250
②	Cam Slider	1	FC250 with Graphite
③	Stopper Plate	1	S45C(1045)
④	Spring Guide Pin	1	S45C(1045)
⑤	Arm	1	NAK55
⑥	Arm Guide	1	FC250 with Graphite
⑦	Driver Pin	1	S45C(1045)
⑧	Arm Block	2	Bronze with Graphite
⑨	Oilless Bush	1	Bronze with Graphite
⑩	Urethane Stopper	2	Urethane
⑪	Spring	1	TF27-125
⑫	Ball Plunger	2	SCM435
⑮	Holding Plate R	1	FC250 with Graphite
⑯	Holding Plate L	1	FC250 with Graphite
⑰	Locking Plate(S Option)	1	S45C

Order

Catalog No.	W	–	S
CTCC	120	–	45

Option

Option Code	Specification
N12	Dowel pin holes of holder are changed to φ12H7.
S	Locking plate and bolts are included.

■ **Installation of a positive return**

Please install a positive return of the cam slider as shown below so that the cam slider could follow the up-and-down motion of press machine.