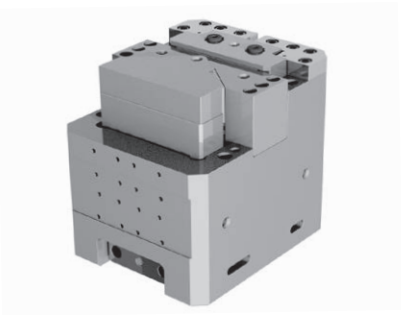
Counter Cam Unit CTCS·H/CTVS·H [Overview]

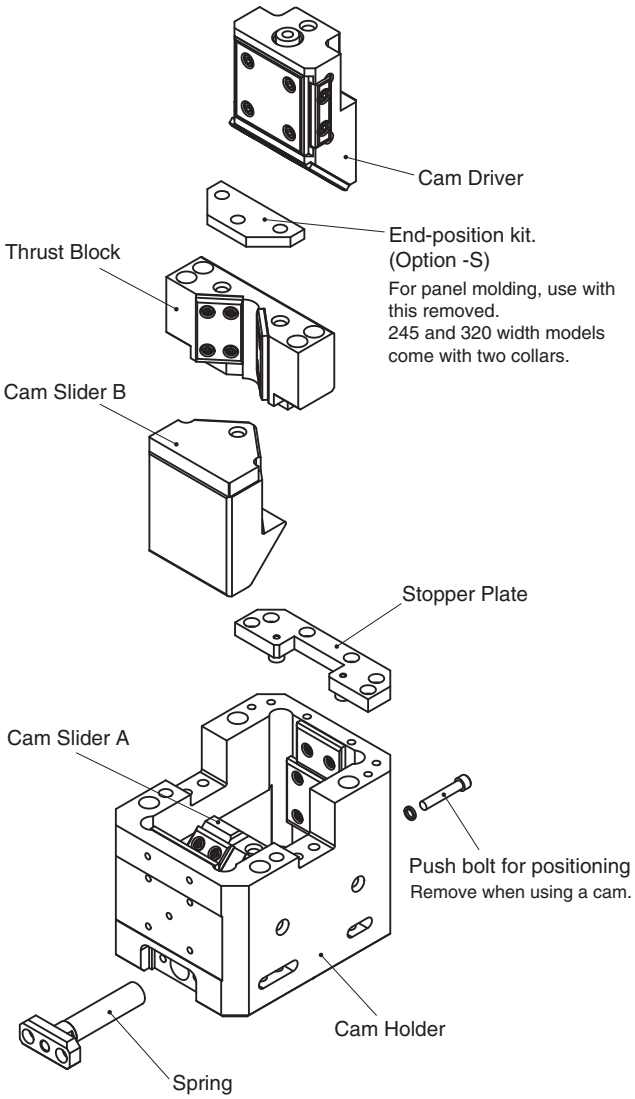
Product Information

- Mount face widths 120, 145, 245, and 320 mm.
- High rigidity structure.
- V-shaped guide.
- Built-in abnormal ascent stop mechanism.
- Built-in urethane for shock absorption in cam driver stopper.

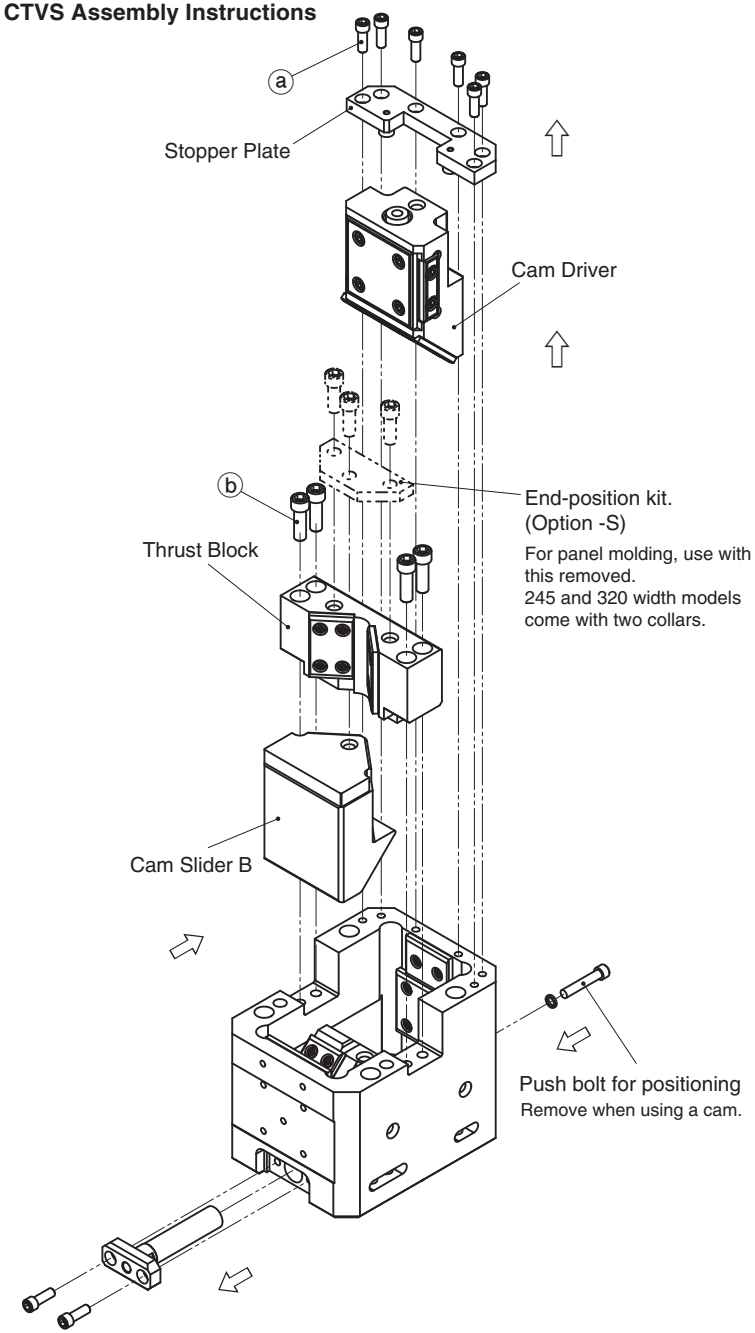


■Features

- Robust structure integrated into the casting is applied.
- The highly rigid type is reinforcing the backup wall of Cam Slider B. It is not necessary to machine the die for backup.
- V-shaped Cam Slider B is highly resistant to the reaction force on the side. (145 / 245 / 320 mm wide only)
- Urethane Stopper for shock absorption are provided on the Stopper Plate to prevent direct force on the screws.
- The Thrust Block is installed as the Stopper of Cam Slider B. This Stopper Block could prevent the Cam Slider B from lifting up over the specified stroke.
- A thread hole is drilled so that a Pushing Bolt for the end-position kit could be installed.

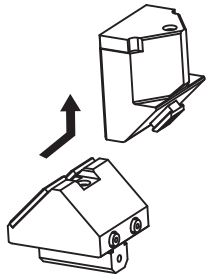


■CTCS CTVS Assembly Instructions



● Disassembly

1) Remove Hexagon Socket Head Bolts (ⓐ), to pull out Stopper Plate.
2) Pull and remove Cam Driver upward.
3) Remove Hexagon Socket Head Bolts (ⓑ), and remove Thrust Block.
4) Slide Cam Slider B with Positive Return obliquely upward and remove it. (See the figure below.)
   In the same way, slide Cam Slider B diagonally from above to assemble.



● Assembly

Assembly is the reverse procedure of disassembly.

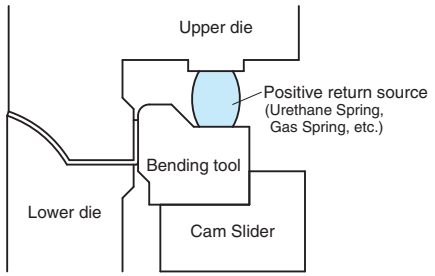
- Ensure that all parts are clean, particularly the sliding components to which a small amount of lubricant is applied and is then placed in position.
- Take care that the respective tolerances are observed when assembling Cam Slider and Cam Holder, which also should be identified by the same serial number.
- Make sure that all bolts are tighten to the recommended torque after assembly and disassembly.

⚠ Gas Spring

Please contact your local sales representative if you prefer to use a gas spring not specified in our catalog. For use and maintenance of gas spring, please contact the manufacturer directly.

■For Operation

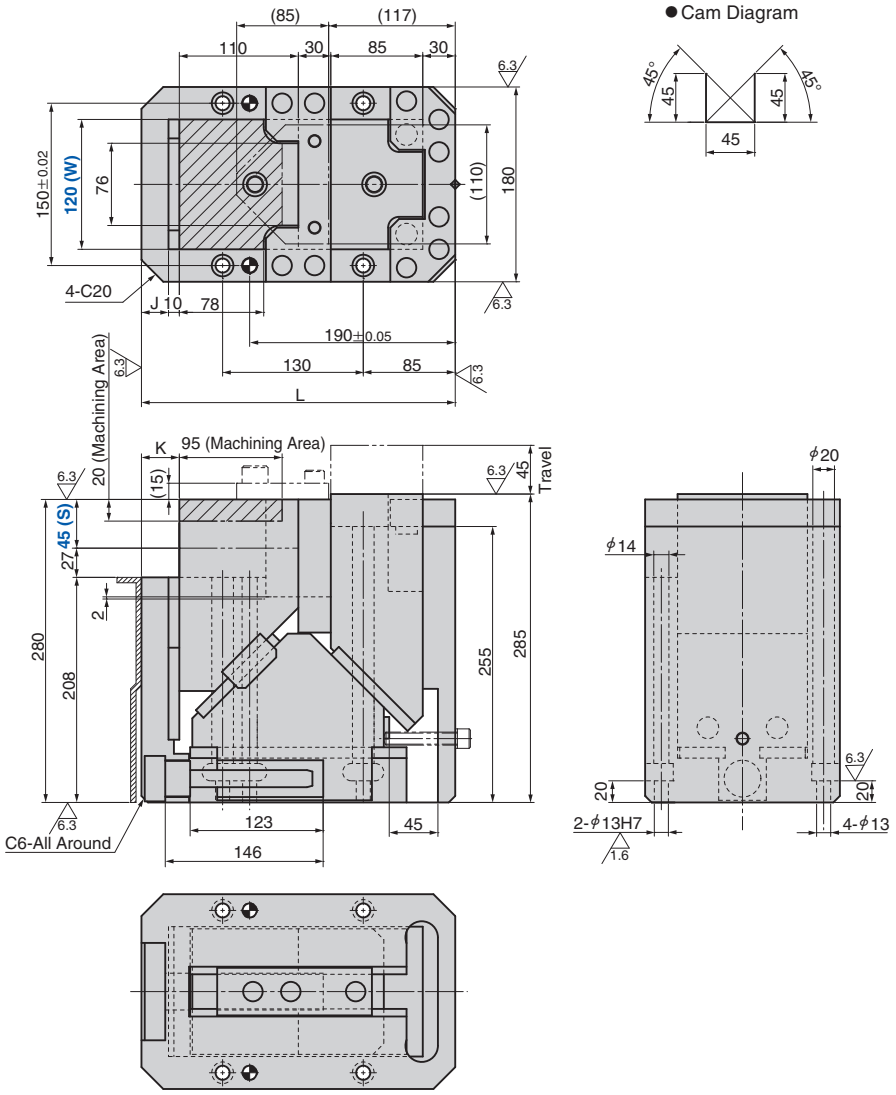
In order to make the Counter Cam Unit correctly track the up-down motion of the press, use a return assist pressure source
(Urethane Spring, Gas Spring, etc.)
(See the figure below.)



Counter Cam Unit

CTCS120-45 (Regular Type)
CTCH120-45 (Highly Rigid Type)

CAD FILE



● Cam Diagram

Working Force kN (tonf) 1,000,000 strokes	Spring Force N (kgf) Initial Load	Spring Force N (kgf) Final Load	Total Weight kg	Catalog No.	W	Travel S	Spring Type PS
29.4 (3.0)	–	2072 (211.3)	88.0	CTCS CTCH	120	45	ISO NISO
	330 (33.7)	1815 (185.1)					GK NGK

ISO: Coil Spring GK: Gas Spring (KALLER)
NGK: Without Gas Spring NISO: Without Coil Spring Parts for spring assembly are included.

Order

Catalog No.	W	–	S	–	PS	–	Option
CTCS	120	–	45	–	ISO		
CTCH	120	–	45	–	GK	–	NF

Option

Option Code	Specification
NF	Nitrogen gas not charged.
N12	φ12 mm dowel holes provided on holder.
S	Lock plate attached.

Catalog No.	J	K	L
CTCS	25	35	290
CTCH	35	45	300

■Spring Specification

No.	PS	Spring Model	Qty	Remark
25	GK	X350-80	1	Gas Spring (KALLER)
	ISO	TJM32-178	1	Coil Spring 33 N/mm (3.37 kgf/mm) Life expectancy of Coil Spring is approximately 1,000,000 strokes.

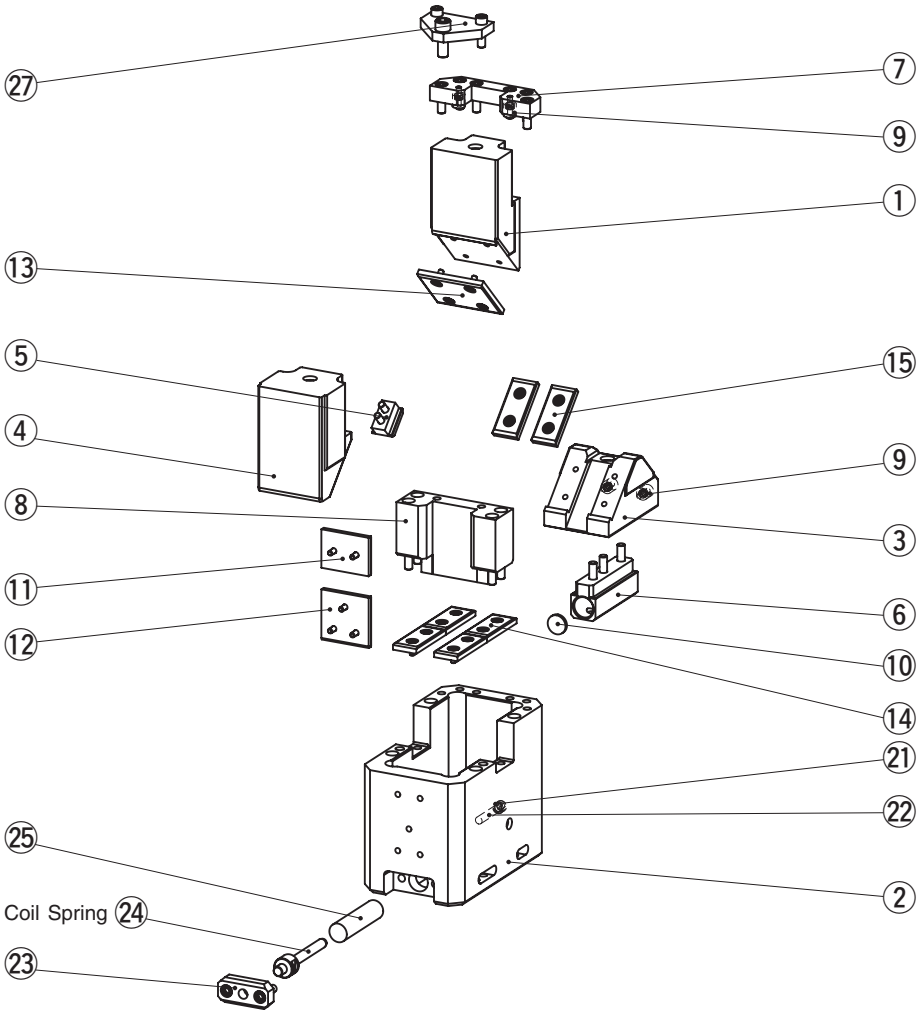
Gas filling pressure: 7.0 MPa

Refer to page 635 for Table of Components.

CTCS·CTCH [Table of Components]

Counter Cam Unit

CTCS120/CTCH120



No.	Description	Qty		Material and Remark
		Coil Spring	Gas Spring	
1	Cam Driver	1		Cast Iron with Graphite
2	Cam Holder	1		Cast Iron
3	Cam Slider A	1		Cast Iron with Graphite
4	Cam Slider B	1		Cast Iron with Graphite
5	Cam Positive Return	1		Bronze
6	Spring Guide Block	1		Bronze with Graphite
7	Stopper Plate	1		Steel
8	Thrust Block	1		Bronze with Graphite
9	Stopper	4		—
10	Spring Stopper	1		Steel
11	Wear Plate	1		Copper Powder Sintered
12	Wear Plate	1		Copper Powder Sintered
13	Wear Plate	1		Bronze with Graphite
14	Wear Plate	4		Copper Powder Sintered
15	Wear Plate	2		Copper Powder Sintered
21	Spacer	1		Steel
22	Locate Cap Bolt	1		M12x68
23	Spring Stopper A	1	—	Steel
	Spring Stopper B	—	1	Steel
24	Spring Guide Pin	1	—	Steel
25	Coil Spring	1	—	TJM32-178
	Gas Spring	—	1	X350-80-7.0MPa
27	Locking Plate (Option -S)	1		Steel

Bolts, nuts, dowels, and washers for assembly are not indicated.