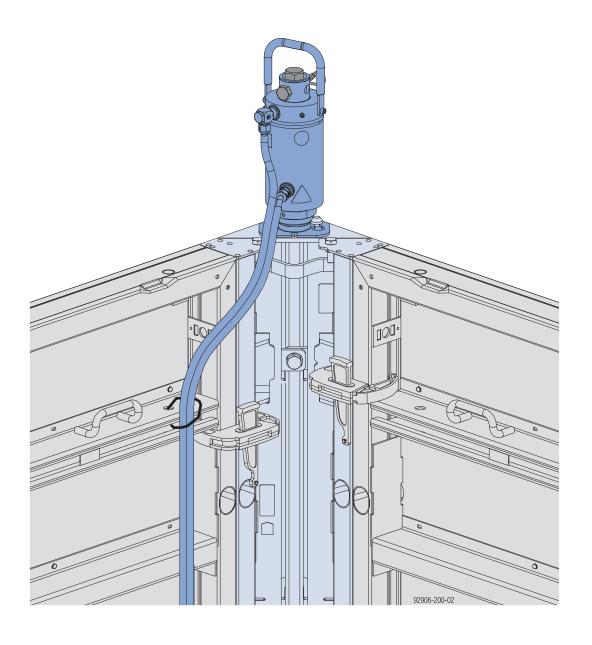


# The Formwork Experts.

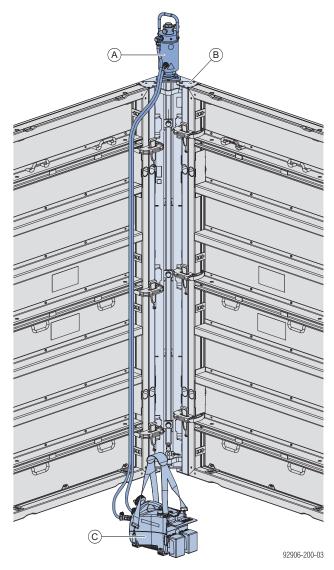
# Framax bias cut corner l hydraulic

# **Original Operating Instructions**

Please retain for future reference



# **Basic drawings of product**



- A Framax stripping cylinder I NG2
- B Framax S bias cut corner I
- C Battery hydraulic unit V2.5 200bar DA Hydraulic unit Framax V4 or Hydraulic unit V45 50/60Hz or Hydraulic unit SCP V1200 50/60Hz

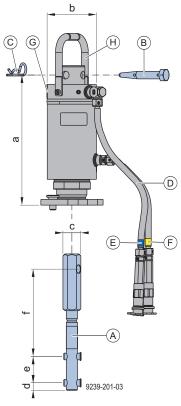


Follow the directions in the User Information booklet of the formwork system being used!

# Data on rating plate

CE						
Designation: Framax bias cut corner I hydraulic						
Max. cylinder force:	10000 kg	22000 lbs				
Year of manufacture: see rating plate						

# Framax stripping cylinder I NG2



- a ... Adjusting range from 13  $^{1}/_{2}$ " (342 mm) to 17  $^{1}/_{4}$ " (438 mm)
- b ... ø5 1/8" (ø130 mm)
- c ... Width across flats 41 mm
- d ... 3/4" (20 mm)
- e ... 2 <sup>3</sup>/<sub>4</sub>" (70 mm)
- f ... Adjusting range from 8 9/16" (217.5 mm) to 9 9/16" (242.5 mm)
- A Adapter for Framax bias cut corner I
- B Connecting pin 10cm
- C Spring cotter 5mm
- D Pair of hydraulic hoses 4.0m (pre-mounted on Framax stripping cylinder I)
- E Flatface BG2 connector (colored blue)
- F Flatface BG2 connector (colored yellow)
- **G** Rating plate
- H Handle, swiveling

### As-delivered condition:

The Adapter for Framax bias cut corner I is pinned to the Framax stripping cylinder I with a Connecting pin 10cm and secured with a Spring cotter 5mm.

Max. cylinder force: 10000 kg (22000 lbs)



# **WARNING**

Do not use the handle as a lifting point for crane transport of the Framax stripping cylinder and the formwork!

Danger of formwork dropping from crane!

Use only suitable lifting accessories and slinging points.

# Intended use

The Framax stripping cylinder I NG2 is for hydraulic actuation of the Framax bias cut corner I. With the 'Framax bias cut corner I hydraulic', formwork up to 18'-0" (5.40 meters) high can be erected and stripped without the application of manual force. Depending on requirements, the Framax stripping cylinder can be combined with various hydraulic units and accessories.

# Compatible hydraulic units

- Battery hydraulic unit V2.5 200bar DA
- Hydraulic unit Framax V4 with Battery nut runner 18 V (1800 rpm)
- Hydraulic unit V45 50/60Hz with System-pressure controller Xclimb 60 V45
- Hydraulic unit SCP V1200 50/60Hz with Coupling adapter Framax stripping cylinder I (intended use).



# **NOTICE**

Other use or use not in conformity with that stated above is non-intended use and requires the prior written approval of the Doka company!

# Boundary conditions for use



# **NOTICE**

The Framax stripping cylinder I NG2 is suitable for use at ambient temperatures from -5 °C to +55 °C.

Putting into service at temperatures below -5 °C is not permissible, because the hydraulic oil would be too viscous.

# Maintenance & inspection



# NOTICE

- Doka accepts no liability for products that have been altered!
- Repairs may be carried out only by Doka or specialist companies authorized by Doka!
- The Framax stripping cylinder I NG2 must be inspected by an expert once a year.

# Storage



### NOTICE

To avoid damage, take note of the following points:

- Store drive components protected against direct weather influences and aggressive substances.
- Always transport and store drive components in their retracted state.
- Do not transport or store drive components with other sharp-edged and heavy items.
- Always store hydraulic hoses free of kinks.

# **Assembly**



# **NOTICE**

- Install the stripping cylinder only when the Framax bias cut corner I is in the installed position.
- Stripping cylinders must always be fully retracted for installation.
- It is not permissible to install the stripping cylinder on a bias cut corner that does not have a hole for the locking pin!

This hole is a standard feature of all bias cut corners manufactured from 2005 onward.



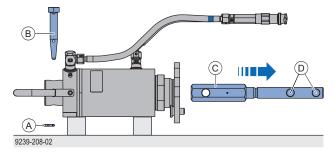
- To prevent abrasion or trapping damage, the hydraulic hoses must be secured to the neighboring formwork panel and properly laid and arranged.
- Bending radii < 10 cm are not permissible.



# **NOTICE**

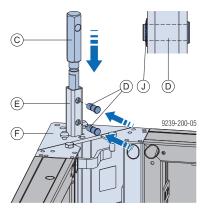
Remove the adapter with the stripping cylinder laid on its side.

- Carefully lay the stripping cylinder on its side.
- ➤ Remove Spring cotter 5mm and Connecting pin 10cm.
- > Remove the adapter from the cylinder.
- ➤ Remove both Connecting pins D17.5.



- A Spring cotter 5mm
- B Connecting pin 10cm
- C Adapter for Framax bias cut corner I
- **D** Connecting pin D17.5
- ➤ Push the adapter into the push-rod of the bias cut corner and pin it into position with two Connecting pins D17.5.

Secure both Connecting pins D17.5 with Schnorr disk springs.



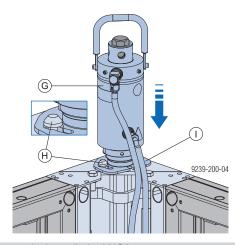
- C Adapter for Framax bias cut corner I
- D Connecting pin D17.5
- E Push-rod
- F Framax bias cut corner I
- J Schnorr disk spring K D27.7/D17.3/0.35



# **NOTICE**

It is not permissible to install the adapter in the push-rod with only one Connecting pin D17.5.

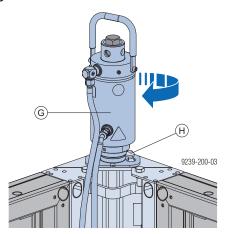
Place the stripping cylinder on the centering studs of the bias-cut corner.



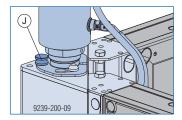
- **G** Framax stripping cylinder I NG2
- H Centering stud of bias-cut corner
- I Assembly plate

The centering studs must be seated in the recesses of the assembly plate.

➤ Twist the stripping cylinder clockwise until fully engaged.



- G Framax stripping cylinder I NG2
- H Centering stud of bias-cut corner
- Push the locking pin into the hole in the bias cut corner.



J Locking pin

# Note:

The locking pin acts as anti-twist lock for the stripping cylinder.



### **CAUTION**

Danger of crushing!

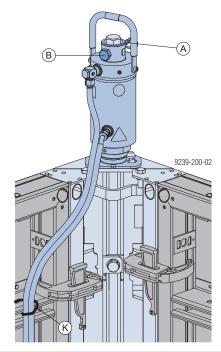
- No body parts or objects between hydraulic cylinder and assembly plate.
- ➤ Turn the adapter until it is level with the hole of the stripping cylinder.



Tighten or back off the hexagon nut (width across flats 41 mm) of the adapter to facilitate insertion of the Connecting pin 10cm into the stripping cylinder.

Width across flats: 41 mm

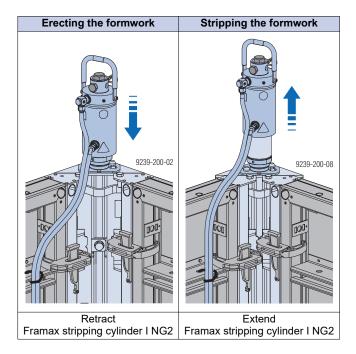
➤ Insert Connecting pin 10cm into the stripping cylinder and the adapter and secure with Spring cotter 5mm.



- A Spring cotter 5mm
- B Connecting pin 10cm
- K Fixing
- ➤ Fix both hydraulic hoses to the neighboring formwork panel and route them correctly.
- > Install hydraulics.
- > Put into service.

# Operation of the Framax bias cut corner I hydraulic

> Start up the hydraulic unit.



# **Dismantling**



# **NOTICE**

Stripping cylinders must always be fully retracted for removal.

- ➤ Remove the Connecting pin 10cm.
- > Retract the stripping cylinder.
- Switch off the hydraulic unit and disconnect the hydraulic hoses.
- ➤ Lift the stripping cylinder clear.
- ➤ Remove the adapter.
- ➤ Position pins D17.5 in the adapter holes.



# **NOTICE**

Install the adapter with the stripping cylinder laid on its side.

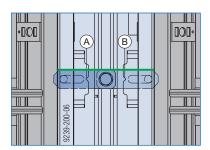
- ➤ Carefully lay the stripping cylinder on its side.
- ➤ Slip the disk springs on to the Spring cotter 5mm to keep them safe.
- Pin the adapter into the stripping cylinder with Connecting pin 10cm and secure with Spring cotter 5mm

6

# Adjustment of the Framax stripping cylinder I NG2

### Note:

In the initial position, the stripping cylinder must be fully retracted and holding plates A and B of the bias cut corner must be horizontal.

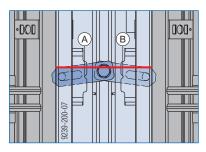


- A Holding plate A
- B Holding plate B

### Note:

Always adjust only one stripping cylinder at a time.

If holding plates A and B point up, the following steps are necessary:

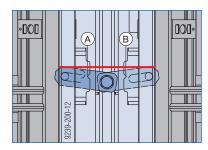


- A Holding plate A
- B Holding plate B
- 1) Remove the Connecting pin 10cm.
- Back off the hexagon nut (width-across flats 41 mm) by the desired difference.
- **3)** Extend the stripping cylinder until the Connecting pin 10cm can be reinstalled.
- 4) Secure the Connecting pin 10cm with a Spring cotter 5mm.
- 5) Fully retract the stripping cylinder.



Check that the holding plates are horizontal. If necessary, repeat steps 1 to 5.

If holding plates A and B point down, the following steps are necessary:



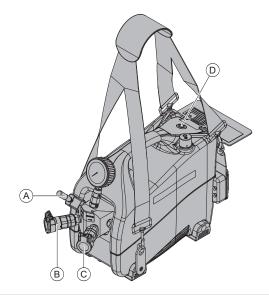
- A Holding plate A
- B Holding plate B
- 1) Extend the stripping cylinder until holding plates A and B of the bias cut corner are horizontal.
- 2) Remove the Connecting pin 10cm.
- 3) Retract the stripping cylinder.
- Tighten hexagon nut (width-across flats 41 mm) until the Connecting pin 10cm can be reinstalled.
- Secure the Connecting pin 10cm with a Spring cotter 5mm.



Check that the holding plates are horizontal. If necessary, repeat steps 1 to 5.

# Compatible hydraulic units

# Battery hydraulic unit V2.5 200bar DA



- A Control-valve lever
- B Flatface BG2 sleeve (blue)
- C Flatface BG2 sleeve (yellow)
- D ON/OFF push-button



### NOTICE

Invariably, only one stripping cylinder can be operated with the Battery hydraulic unit V2.5 200bar DA.



Follow the 'Battery hydraulic unit V2.5 200bar DA' and 'Charger 28V / Battery 28V 3Ah' Operating Instructions!

# Putting into service:

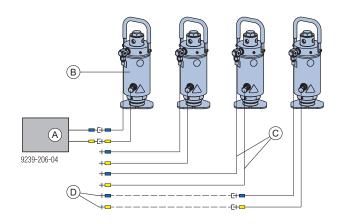


# **NOTICE**

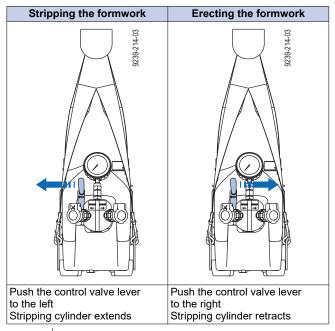
- At least one fully charged battery must be inserted for start-up.
- Press the push-button on the top of the unit to switch on
  - Push-button lights up white and the motor starts to run.
- ➤ Route the pair of hydraulic hoses from the stripping cylinder to the Battery hydraulic unit V2.5 200bar DA and connect the hoses.

### Note:

The couplings on the Battery hydraulic unit V2.5 200bar DA and the couplings on the pair of hydraulic hoses are color-coded.



- A Battery hydraulic unit V2.5 200bar DA
- B Framax stripping cylinder I NG2
- C Pair of hydraulic hoses (pre-mounted on Framax stripping cylinder I NG2)
- **D** Pair of hydraulic hoses stripping cyl. 5.00m (optional)

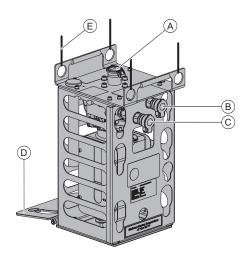




# NOTICE

After each formwork erecting or stripping operation, the pair of hydraulic hoses of the stripping cylinder have to be disconnected from the hydraulic unit.

# **Hydraulic unit Framax V4**



- A Drive hexagon socket (width-across flats 8 mm)
- **B** Flatface BG2 sleeve (yellow)
- C Flatface BG2 sleeve (blue)
- **D** Footplate
- E Carrying strap, adjustable



Follow the directions in the 'Hydraulic unit Framax V4' Operating Instructions!

➤ Route the pair of hydraulic hoses from the stripping cylinder to the Hydraulic unit Xclimb 60 V45 50/60Hz and connect the hoses.

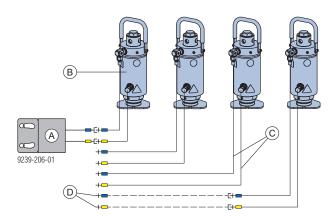


# NOTICE

Invariably, only one stripping cylinder can be operated with the Hydraulic unit V4.

### Note:

The couplings on the Hydraulic unit Framax V4 and the couplings on the pair of hydraulic hoses are color-coded.



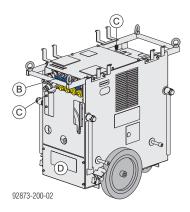
- A Hydraulic unit Framax V4
- B Framax stripping cylinder I NG2
- C Pair of hydraulic hoses (pre-mounted on Framax stripping cylinder I NG2)
- **D** Pair of hydraulic hoses stripping cyl. 5.00m (optional)



# **NOTICE**

After each formwork erecting or stripping operation, the pair of hydraulic hoses of the stripping cylinder have to be disconnected from the hydraulic unit.

# Hydraulic unit Xclimb 60 V45 50/60Hz

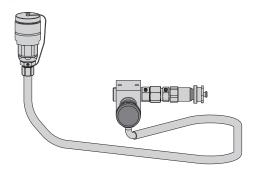


- A 'Lift' and 'Lower' hand lever
- **B** 4 pressure-side connections (Lift) Flatface BG2 sleeve (blue)
- C 4 pressure-side connections (Lower) Flatface BG2 sleeve (yellow)
- **D** Accessories cover



### **NOTICE**

System pressure controller Xclimb 60 V45 must be installed for the stripping cylinder to be operated with the Hydraulic unit Xclimb 60 V45 50/60Hz.



Required system pressure: 2900psi (200 bar)



Follow the directions in the 'Hydraulic unit Xclimb 60 V45 50/60Hz' Operating Instructions!

➤ Route the Pair of hydraulic hoses from the stripping cylinder to the Hydraulic unit Xclimb 60 V45 50/60Hz and connect the hoses.



### NOTICE

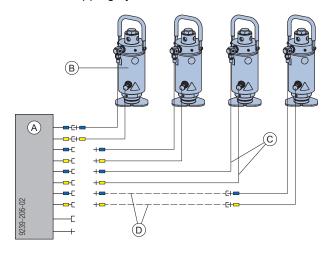
Invariably, only one stripping cylinder can be connected to and operated with the Hydraulic unit Xclimb 60 V45 50/60Hz!

### Exception:

- No one in the danger zone!
- Formwork erecting and stripping operations are under observation at all times!

### Note:

The couplings on the Hydraulic unit Xclimb 60 V45 50/60Hz and the couplings on the pair of hydraulic hoses for stripping cylinder are color-coded.



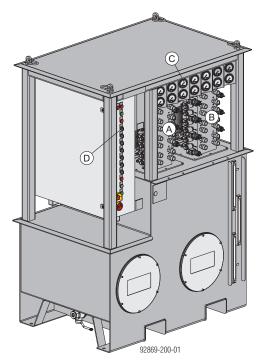
- A Hydraulic unit Xclimb 60 V45 50/60Hz
- **B** Framax stripping cylinder I NG2
- C Pair of hydraulic hoses (pre-mounted on Framax stripping cylinder I NG2)
- **D** Pair of hydraulic hoses stripping cyl. 5.00m (optional)



# **NOTICE**

After each formwork erecting or stripping operation, the pair of hydraulic hoses of the stripping cylinder have to be disconnected from the hydraulic unit.

# Hydraulic unit SCP V1200 50/60Hz

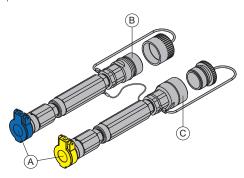


- A Valve block with motor for pump unit 1
- **B** Valve block with motor for pump unit 2
- **C** Pressure gage for system pressure cylinders 1, 2, ... (14)
- D Pre-selector switches for hydraulic circuits 1 14



# **NOTICE**

Coupling adapter B Framax stripping cyl. I has to be used for operating the stripping cylinder with the Hydraulic unit SCP V1200 50/60Hz.



- A Flatface BG2 sleeve
- **B** Threaded coupling SKS BG3 (connector)
- C Threaded coupling SKS BG3 (sleeve)



Follow the directions in the 'Hydraulic unit SCP V1200 50/60Hz' Operating Instructions!

➤ Route the Pair of hydraulic hoses from the stripping cylinder to the Hydraulic unit Xclimb SCP V1200 50/60Hz and connect the hoses.



# NOTICE

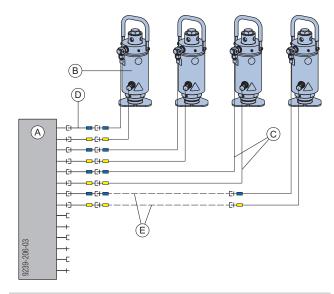
Invariably, only one stripping cylinder can be operated with the Hydraulic unit SCP V1200 50/60Hz!

# **Exception:**

- No one in the danger zone!
- Formwork erecting and stripping operations are under observation at all times!

### Note:

The couplings on the coupling adapter and the couplings on the pair of hydraulic hoses for stripping cylinder are color-coded.



- A Hydraulic unit SCP V1200 50/60Hz
- B Framax stripping cylinder I NG2
- C Pair of hydraulic hoses (pre-mounted on Framax stripping cylinder I NG2)
- D Coupling adapter B Framax stripping cyl. I
- E Pair of hydraulic hoses stripping cyl. 5.00m (optional)



# NOTICE

After each formwork erecting or stripping operation, the pair of hydraulic hoses of the stripping cylinder have to be disconnected from the hydraulic unit.

### Note

The Framax stripping cylinder I also works with the Hydraulic unit Super Climber.



EC Declaration of Conformity pursuant to EC Directive 2006/42/EC.

The manufacturer declares that by reason of its conception and design, the following product

### Framax bias cut corner I hydraulic

conforms – in the version marketed by ourselves – to the pertinent fundamental health and safety stipulations of the relevant EC Directives

# The following harmonized standards were applied:

- EN ISO 12100:2010
- EN ISO 13854:2019
- EN ISO 4413:2010
- DIN 20066

Person authorized to compile technical documentation (pursuant to European Directive on Machinery Annex II):

Robert Hauser Josef Umdasch Platz 1 A-3300 Amstetten

Amstetten, 12/06/2021

Doka GmbH Josef Umdasch Platz 1 A-3300 Amstetten

Robert Hauser CEO Sebastian Dorda Vice President -Strategy & Innovation

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	[lbs]	Article #		[lbs]	Article #
Framax S bias cut corner I Framax S bias cut corner I		588527000 588528000	Charger 28V 110V Ladegerät 28V 110V	1.8	584677000
Framax S Ausschalecke I	Galvanized, powder-coated	300320000	Eudegenal 201 1100	Follow the directions in the "Operating Instructions"!	C€
			Hydraulic unit Framax V4 Hydraulikaggregat Framax V4	Painted yellow Length: 1' (30 cm) Width: 10" (26 cm) Height: 1'-7" (48 cm) Follow the directions in the "Opera-	588981000 C€
Framax stripping cylinder I Framax-Ausschalzylinder I NG2	NG2 66.1 Painted yellow Width: 6 1/2" (16 cm)	588980500 <b>C</b> €		ting Instructions"!	
	Height: 1'-6" (45,2 cm) Follow the directions in the "Operating Instructions"!		Hydraulic unit Xclimb 60 V4 Hydraulikaggregat Xclimb 60 V45		581322000 C€
Framax stripping cylinder I Framax-Ausschalzylinder I	Painted yellow Width: 6 1/2" (16 cm) Height: 1'-6" (45,2 cm) Follow the directions in the "Opera-	588980000 C €			
Pair of hydraulic hoses stri Hydraulikschlauchpaar Ausschal:	pping cyl. 5.00m 2ylinder 5,00m	588983000	System-pressure controller Systemdruckbegrenzer Xclimb 60	<b>Xclimb 60 V45</b> 3.1 V45	581329000
Marine Control of the			Hydraulic unit SCP V1200 50 Hydraulikaggregat SCP V1200 50	<b>0/60Hz 4,850.0</b> //60Hz Painted blue	583102500
Battery hydraulic unit V2.5 Akku-Hydraulikaggregat V2,5 200		583499000 C€		Length: 5'-2" (158 cm) Width: 3'-7" (108 cm) Height: 7'-3" (221 cm) Follow the directions in the "Operating Instructions"!	C€
Battery 28V 3Ah Akku 28V 3Ah	2.4	584675000	Coupling adapter B Framax Kupplungsadapter B Framax-Auss		588982500



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Doka is one of the world leaders in developing, manufacturing and distributing formwork technology for use in all fields of the construction sector.

With more than 160 sales and logistics facilities in over 70 countries, the Doka Group has a highly efficient distribution network which ensures that equipment and

technical support are provided swiftly and professionally.

An enterprise forming part of the Umdasch Group, the Doka Group employs a worldwide workforce of more than 6000.

