

# **SP/CPX** Hydraulic Conversions

From mechanical pipelayer to hydraulic pipelayer (CPX) From dozer to hydraulic pipelayer (SP)



# **SP/CPX** CONVERSIONS

# HYDRAULIC KIT (CPX)

### For the conversion of mechanical pipelayers to fully hydraulic pipelayers

The CPX package is designed to easily convert your 571G/F/E/D, 572G/F/E, 583K/H or 594H/G Caterpillar mechanical sideboom into a fully hydraulic-controlled sideboom. Our unique single lever control reduces the number of controls from 6 to 1, and allows the operator to control both boom and load with just one joystick.

### **CONVERSION PACKAGE (SP)**

## For the conversion of Cat dozers to fully hydraulic pipelayers

SUPERIOR fabricates and installs all the components needed to convert your D7H/G, D8K/H and D9H/G Caterpillar tractor or Komatsu D155 tractor to a hydraulic pipelayer. This includes a counterweight rack, leaves, an A-frame, upper and lower hardbar, and a boom. The final process is adding the SUPERIOR hydraulic drawworks system.

### CE APPROVAL

These kits will qualify for CE approval with the inclusion of the following optional features:

- Noise-proof engine enclosure
- Blocks with anti-friction bearings
- Sturdier booms
- Electronic anti-tipping system

# WINCH SPECIFICATIONS

## FOR SP/CPX-572/583/594

MAIN PUMP		
Туре	Bosch-Rexroth axial piston variable displacement pump	
VALVES		
Туре	Bosch load-sensing mobile control block proportional directional valves	
Max capacity	286 liters/min - 75.5 U.S. gal/min	
Working pressure	320 bar - 4,642 p.s.i.	
CONTROL		
Туре	Pilot units for remote control of winch motors	
	Progressive and sensitive operations	
SERVICE PUMP		
Туре	Gear pump	
Max capacity	10 liters/min - 2.6 U.S. gal/min	
Working pressure	30 bar - 435 p.s.i.	
HYDRAULIC TANK		
Туре	Pressurized type	
Max capacity	120 liters - 32 U.S. gal	
FILTER		
Туре	Donaldson FI0500	
Max capacity	500 liters/min - 132 U.S. gal/min	

# FOR SP-D5M/D6M AND CPX-561/571

MAIN PUMP		
Туре	Bosch-Rexroth axial piston variable displacement pump	
VALVES		
Туре	Bosch load-sensing mobile control block proportional directional valves	
Max capacity	140 liters/min - 37 U.S. gal/min	
Working pressure	250 bar - 3,625 p.s.i.	
CONTROL		
Туре	Pilot units for remote control of winch motors	
	Progressive and sensitive operations	
HYDRAULIC TANK		
Туре	Pressurized type	
Max capacity	CPX-61: 125 liters - 33 U.S. gal	
	CPX-71: 85 liters - 22 U.S. gal	
	D5M/N and D6M/N: Original hydraulic tank is used	
FILTER		
Туре	Donaldson FI0500	
Max capacity	500 liters/min - 132 U.S. gal/min	

# **MAIN FEATURES**



#### Anti-Two Block

Sets a minimum distance between the top block and the hook block, preventing the 2 blocks from touching.



### **Controls**

A single joystick allows the operator to control both the load line and the boom simultaneously or separately.



### Boom Kick-Out System

This system will prevent the boom from excessive upward movement, thus ensuring you will never bend another boom.





## *Freefall System* When the button is engaged, the load free-falls all the way to the ground.



**Anti-Tipping System** It monitors different lifting operations to avoid dangerous tilting and ensures the stability of the machine.



### **Dual Hardbar** Provides maximum support to the pipelayer by converting to a totally rigid frame.

# **CONVERSION PACKAGE (SP)** For the conversion of dozers to hydraulic pipelayers

### **OVERVIEW**

SUPERIOR fabricates and installs all the components needed to convert your D5, D6, D7, D8 and D9 tractor to a hydraulic pipelayer. This includes a counterweight rack and support platform, leaves, an A-frame, upper and lower hardbar, power take-off, anti-friction blocks, and a boom. The final process is adding the SUPERIOR hydraulic drawworks system.

# CONVERSION PACKAGE (SP) COMPONENTS:



Hydraulic kit



Power take-off





Upper hardbar



Support platform



A-frame



Counterweight frame



Lower hardbar



CATER

CAT



Anti-friction blocks



# **HYDRAULIC SYSTEM**

### ALL HYDRAULIC

#### • Freefall System

When the button is engaged, the load free-falls and then immediately stops when the button is released. *IMPORTANT: Improper use of this feature may cause damage to the winch. Read all documentation before use.* 

- Boom Kick-Out System This system will ensure you will never bend another boom.
- Anti-Two Block Sets a minimum distance between the top block and the hook block, preventing collisions between them.

#### ELECTRONIC OVER HYDRAULIC

- Freefall system, Boom kick-out system and anti-two block plus:
- Anti-Tipping System Prevents tipping by calculating the maximum load that can be lifted.

FEATURE	SUPERIOR	MIDWESTERN®	CATERPILLAR®
Single lever control	<ul> <li>✓</li> </ul>	×	×
Free-fall system	V	<ul> <li>✓</li> </ul>	~
Vertical boom kick-out	V	<ul> <li>✓</li> </ul>	<ul> <li>✓</li> </ul>
Anti-two block	V	×	×
Anti-tipping system	<ul> <li>✓</li> </ul>	×	×
CE compliance	<ul> <li>✓</li> </ul>	×	<ul> <li>✓</li> </ul>



# **SINGLE JOYSTICK CONTROLLER**

SUPERIOR'S single lever control system allows the operator to control the load with one fully-directional joystick for both the boom line and the load line. The operator can activate both winches at the same time by positioning the joystick in different diagonal positions for different desired effects. With light pressure applied, the operator can inch, or with maximum pressure applied and full throttle, can go full bore. No gearing system is necessary, as our package will operate as efficiently as the two gear systems used by our competitors.

# DIMENSIONS

# Hydraulic kit for 572/583/594



		Feet	Meters
A	Width	7.5 ft	2.3 m
B	Height	5.7 ft	1.75 m
C	Length	3.75 ft	1.14 m

Hydraulic kit for 571





		Feet	Meters
A	Width	3.49 ft	1.06 m
B	Height	3.96 ft	1.21 m
C	Length	2.99 ft	.91 m

Hydraulic kit for 561/D5/D6





		Feet	Meters
A	Width	4.1 ft	1.25 m
B	Height	3.08 ft	.94 m
C	Length	2.99 ft	.91 m

# **AVAILABLE MODELS**

# **CONTACT INFORMATION**

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All information is subject to change without notice.

SUPERIOR



SP-D6M/N LGP

CPX-571

SP/CPX-583

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SP-D5M/N LGP





SP/CPX-594