

Allied Winches For Komatsu Crawler Dozers (PTO and Hydraulic)



Winches

WORKING GEAR



Allied Winches WORKING GEAR

KOMATSU WINCH CATEGORIES

The following information describes the three basic categories for winches that are manufactured by Allied Systems and available through Komatsu for crawler dozers.

PTO Mechanical Winch

This winch is mechanically driven off the engine PTO. The winch can utilize almost 100% of the available engine horsepower, providing both high winch line pull and fast line speeds. Applications include forestry, oil field, and recovery.



Photos may include optional equipment.

Hydraulic Winch, Level 1 (Standard Performance)

This winch is hydraulically driven off the crawler dozer's rear hydraulic circuit for simple "plug and play" field installation. The winch can provide a high winch line pull at a precise speed. This provides excellent line speed control for fine line speed "inching." Common industry names for this type of winch are "Rescue Winch" and "Recovery Winch." Applications include general recovery, steep slope "yo-yo", and oil field applications.



Photos may include optional equipment.

Hydraulic Winch, Level 2 (High Performance)

This winch is hydraulically driven off a dedicated crawler dozer hydraulic system. The dedicated hydraulic system supplies high flow rates and high operating pressure levels to the winch, providing both high winch line pull and fast line speeds. Common industry names for this type of winch are "High Speed Winch," "High Performance Winch," and "Forestry Winch." Applications include forestry and equipment recovery.



Photos may include optional equipment.

WORKING GEAR

Winches

POWER TAKE-OFF (PTO) WINCHES

Mechanically driven, with mechanical or electronic control (Models: W5C, W6G, and W8L)

Features

Plug and Play Simple Installation

Self-Contained Hydraulics (SCH), pump, control valve, hoses, suction strainer, and pressure filter are all inside the winch housing. This reduces installation time from $1^{1/2}$ days to 6 hours, eliminates exterior leaks, and provides easy access for parts replacement and service checks.

Heavy-Duty Frame

For incredible strength and rigidity.

Oil Brake

During braking operations, spring-applied, hydraulically released multi-disc brake is continuously cooled with hydraulic oil. This means no routine adjustments and no heat fade.

Multi-Disc Oil Clutch

"Winch-on-the-go" allows your tractor to keep moving and winching at the same time for greater productivity.

Single Lever Control

Easy, straight line lever operation.

Drawbar

Rigid drawbar is built-in, and comes standard on all large winch models.

Freespool

This disengages the drum from the gearing, allowing the winch line to be pulled out easily by hand (not available on W8L).

Built-in Hook Turner

This not only reinforces the center frame, it also guides the hook sideways in case it is accidentally pulled through the winch's throat.

Drum Flush With Frame

Reduces cable wear for longer cable life.

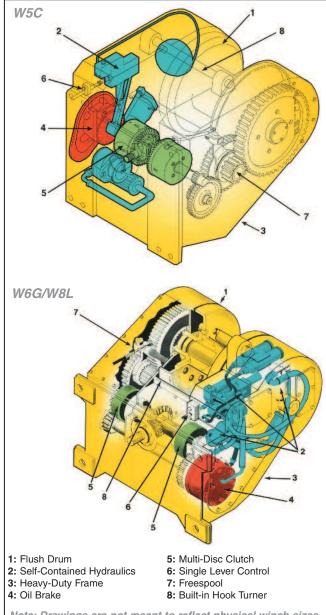
Options

Arch

Makes ground skidding easier by lifting butt-ends of logs.

Electronic controls

Simplified winch installation: only one wire harness needed to connect to the control joystick.



Note: Drawings are not meant to reflect physical winch sizes in relation to one another.

Slow Gear Ratio

For precise line speed control and increased line pull.

Fairlead

Designed for maximum line pull from all angles—strong vertical and horizontal rollers to reduce line damage.

Allied Winches WORKING GEAR

HYDRAULIC WINCHES (LEVELS 1 & 2)

With finger-tip hydraulic control

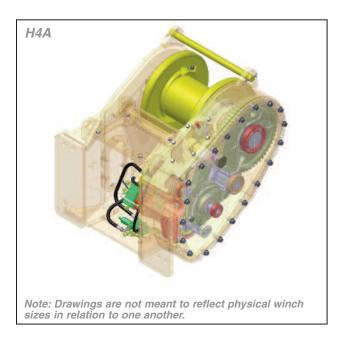
(Models: H4A, H5C, H6H, H8L and H12E)

Model H4A Features

- Motor turns only on demand—less wear and tear, quiet operation
- Single lever, finger-tip control
- Large cable capacity drum with increased throat clearance
- Welded steel frame with bolt-on attachments for easy installation
- Large covers for easy service access
- Standard freespool

Options

- Four-roller fairlead, bolt-on
- Arch, bolt-on; two-way adjustable (back tilt and roller height)
- Drawbar, bolt-on





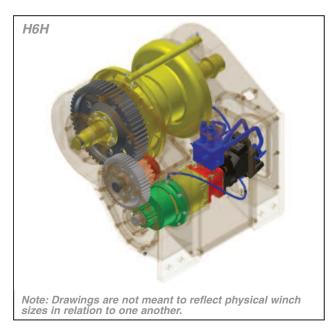


Models H5C/H6H/H8L/H12E Features

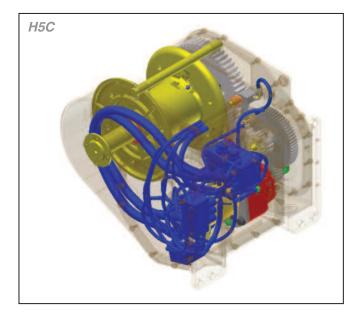
- Motor turns only on demand. No constantly turning PTO, less wear and tear
- Welded steel frame resists shock loading
- Built-in drawbar
- Large covers for easy service access
- Derived from the well-proven W5C, W6G, W8L and W12E PTO winches, with significant parts commonality
- Freespool is standard on H5C

Options

- Four-roller fairlead
- Arch (H5C, H6H)
- Extended heavy-duty drawbar (H5C, H6H)
- Freespool (H6H)



Winches





Specifications

ALLIED WINCHES FOR KOMATSU CRAWLER DOZERS

Tractor Mo	del		D31-22	D37/ 39-23	D51-22	D51-22	D61EX-15	D61EX-15	D61-23
Winch Mod	lel		H4AT	H4AT	H5CT	H5CH	W5C	W6G	H6HT
Winch Type	e Hydraulic (HYD) / Pov	ver Take-Off (PTO)	HYD	HYD	HYD	PT0	PT0	PT0	HYD
Configuration Standard / Hi-Performance (Level 1 / 2)			STD	STD	STD	HI-P			STD
Standard Gear Ratios			116/1	116/1	45/1	48/1	100/1	83/1	117/1
Standard		Maximum Line Pull (lb)*	39,700	39,650	68,500	59,750	69,200	79,600	72,750
	Bare Drum	Line speed at typical working load of (lb)	48 fpm 10,410	35 fpm 20,000	14 fpm 30,000	98 fpm 30,000	57 fpm 30,000	79 fpm 30,000	74 fpm 36,315
		Maximum Line Speed	48 fpm	86 fpm	29 fpm	128 fpm	59 fpm	82 fpm	99 fpm
		Maximum Line Pull (lb)*	22,700	22,650	39,600	32,200	65,300	46,200	39,050
	Full Drum	Line speed at typical working load of (lb)	50 fpm 10,410	35 fpm 20,000	26 fpm 30,000	95 fpm 30,000	105 fpm 30,000	140 fpm 30,000	61 fpm 36,315
		Maximum Line Speed	84 fpm	151 fpm	53 fpm	237 fpm	110 fpm	152 fpm	184 fpm

ſ	Optional	Maximum Line	72/1				
		Speed Bare Drum	94/1				
		at this Gear Ratio (shaded ratios not available for this model)	103/1			64 fpm	
			125/1 Fwd (136/1 Rev)				

	Α	Ground to highest point	43-46"	43-46"	46"	46"	54"	61"	59"
	В	Ground to drum center	32-35"	32-35"	34"	34"	42"	47"	45"
Dimensional Data	С	Ground to drawbar center	18-21"	18-21"	17"	17"	25"	28"	26"
Dimensional Data (See illustrations)	D	Tractor face to end of winch	31"	31"	39"	39"	38"	40"	46"
(,	Е	Tractor face to drum center	23"	23"	30"	30"	29"	29"	35"
	F	Tractor face to drawbar center	22"	22"	26"	26"	25"	28"	34"
	G	Winch max. width (not shown)	29"	29"	32"	32"	32"	40"	40"
		Winch without wire rope	1,510 lb	1,510 lb	2,100 lb	2,200 lb	2,300 lb	2,900 lb	2,890 lb

	Winch without wire rope	1,510 lb	1,510 lb	2,100 lb	2,200 lb	2,300 lb	2,900 lb	2,890 lb
Weights (approximate) (shaded option	Fairlead	310 lb	310 lb	450 lb	450 lb	450 lb	800 lb	875 lb
not available)	Drawbar	30 lb	30 lb	w/winch	w/winch	w/winch	w/winch	w/winch
,	Integral Arch				875 lb			

		Barrel	Wire Rope Diameter					
Wire Rope Capacity	Winch Model	Diameter	¹ /2"	³ /4"	⁷ /8"	1"	1 ¹ /8"	1 ¹ /4"
(shaded option	H4A	8.00"	422'	195'				
not available)	W5C/H5C/H5CH	8.56"		298'	215'			
(Wire rope capacity of	W6G	10.00"		376'	271'	210'		
drum based on SAE J1158 Jan 85)	H6H/H6HH	10.00"		413'	297'	230'		
J 1 1 JO Jali 0J)	W8L	12.00"			354'	275'	220'	
	H8L	12.00"			430'	334'	267'	
	H12E	14.00"				286'	229'	182'

Notes:

Maximum line pull is the lesser of the maximum line pull that the tractor will develop with the standard gear ratio or the breaking strength for the maximum recommended cable for that winch model.



Allied Systems Company reserves the right to change and/or improve specifications and performance at its own discretion without prior notice. Check with dealer for latest data.

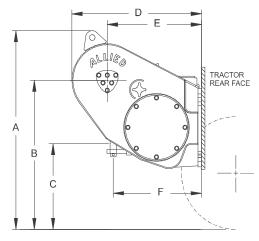
D61-23	D65-17	D68E-SS-12	D85E -18, -21	D85EX-15	D85E-SS-2	D85EX-15	D155AX-7 D275AX-5
H6HH	H6H	W8L	W8L	W8L	W8L	H8L	H12E
HYD	HYD	PT0	PT0	PT0	PT0	HYD	HYD
HI-P						STD	STD
81/1	N/A	69/1	50/1	95/1	69/1	N/A	N/A
72,750	88,800	58,200	113,000	112,500	86,000	95,800	138,800
104 fpm 36,315	63 fpm 40,000	115 fpm 30,000	105 fpm 50,000	84 fpm 50,000	95 fpm 50,000	45 fpm 50,000	46 fpm 80,000
128 fpm	73 fpm	122 fpm	144 fpm	87 fpm	103 fpm	75 fpm	80 fpm
39,050	57,500	35,700	84,300	68,500	52,807	58,800	96,000
96 fpm 36,315	77 fpm 40,000	170 fpm 30,000	105 fpm 50,000	132 fpm 50,000	110 fpm 50,000	45 fpm 50,000	48 fpm 80,000
239 fpm	137 fpm	199 fpm	242 fpm	145 fpm	168 fpm	122 fpm	124 fpm

	100 fpm			
	59 fpm			
		67 fpm		

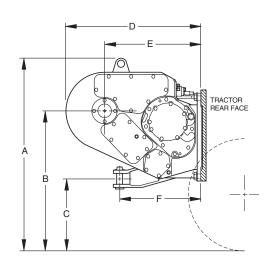
		-	-				-
59"	59"	67"	62"	68"	65"	66"	66"
45"	45"	52"	47"	53"	50"	50"	50"
26"	26"	28"	23"	28"	26"	26"	24"
46"	41"	40"	34"	42"	43"	43"	48"
35"	31"	29"	23"	30"	32"	32"	35"
34"	30"	33"	27"	34"	36"	34"	40"
40"	41"	41"	41"	41"	41"	43"	49"
2,990 lb	2,830 lb	2,915 lb	2,950 lb	3,360 lb	3,100 lb	3,400 lb	3,980 lb

w/winc	h w/w	vinch w	/winch	w/winch	w/winch	w/winch	w/winch	w/winch
875 II	o 87	5 lb	875 lb	875 lb	900 lb	900 lb	900 lb	1,230 lb
2,990 1	b 2,83	30 lb 2,	,915 lb	2,950 lb	3,360 lb	3,100 lb	3,400 lb	3,980 lb

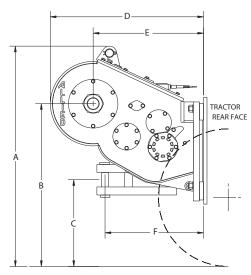
Swaged Ferrules							
Name	Length	Diameter					
Bantam	2"	1 ¹ /2"					
Light	2 ¹ /4"	2"					
Light	2 ¹ /4"	2"					
Light	2 ¹ /4"	2"					
Junior	2 ³ /8"	21/4"					
Junior	2 ³ /8"	21/4"					
Junior	2 ³ /8"	21/4"					



H4A



H5C/H5CH/W5C



W6G/H6H/H6HH/W8L/H8L/H12E

PTO Winches (W5C, W6G, and W8L)



- Freespool (W5C)
- Built-in hook turnerDrawbar

- Drum flush with frame
 - Heavy-duty frameMulti-disc oil clutch
- Self-contained hydraulics (SCH)
 Single lever control

Oil brake

Large cable capacity drum with increased

OPTIONAL EQUIPMENT

· Large covers for easy service access

• Single lever, finger-tip control

· Welded steel frame with bolt-on

attachments for easy installation

- Electronic controls
- Fairlead

- Arch (W5C, W6G)
- Slow gear ratio

• Freespool (W6G)

Hydraulic Winches (H4A, H5C, H5CH, H6H, H6HH, H8L, and H12E)



throat clearance

MODEL H4A

MODELS H5C/H6H

- Derived from the well-proven W5C and W6G winches, with significant parts commonality
- Large covers for easy service access
- Standard drawbar
- Standard freespool (H5C)
- · Welded steel frame

MODEL H4A

- Arch, bolt-on; two-way adjustable (back tilt and roller height)
- Drawbar, bolt-on
- Four-roller fairlead, bolt-on
- MODELS H5C/H6H
- Arch
- · Extended heavy-duty drawbar
- · Four-roller fairlead
- Freespool (H6H)

MODEL H8L/H12E

Standard drawbar

MODELS H8L/H12E

Four-roller fairlead

Welded frame

The attachments listed in this Specification Sheet have not been designed, tested or manufactured by Komatsu and we assume no responsibility for their performance. The attachment manufacturer (Allied Systems Company) is solely responsible for any failure, personal injury or property damage caused by the use of this equipment.

The attachment information was supplied by Allied Systems Company and its accuracy was not verified by Komatsu. The information is being provided for the convenience of Komatsu Distributors and customers as a general depiction and description of the attachment and its usage. The actual attachment may vary from the information included in this Specification Sheet. Please check with Allied Systems Company for the latest specifications.

Allied Systems Company is responsible for warranty on their products along with parts and service support. Distributors and customers should contact Allied Systems Company with questions or technical issues regarding the proper match of these attachments to their application. [Allied Systems Company, 21433 S.W. Oregon St., Sherwood, OR 97140, (503) 625-2560, www.alliedsystems.com, marketing@alliedsystems.com]

