

# MODEL H110 WINCH for Komatsu D85EX & PX-15 Crawler Dozer

# CARCO®

## for Komatsu

### MODEL DESCRIPTION:

The Carco H110 is a triple reduction, hydraulically driven, planetary winch. The fabricated steel winch frame and all working parts are designed from the beginning to handle the harshest environments and toughest jobs experienced by high-performance crawler tractors.

The ripper control circuit of the Komatsu D85EX/PX-15 standard hydraulic system is employed to provide hydraulic power to the winch. No connection to the tractor PTO is required.

The machine operator uses the standard Komatsu ripper control lever to obtain infinitely variable winch wire rope speed with positive load control in both reel-in and reel-out up to the maximum limits shown in the performance graph on reverse. Load "fallback" is prevented by a sprag-type clutch in the multi-disc static winch brake. During normal operation, the winch hydraulic motor automatically and continuously adjusts displacement to allow the maximum speed possible for the prevailing conditions of load and available hydraulic power from the tractor. A console mounted switch allows the operator to "lock" the winch motor at maximum displacement for maximum load placement precision when desired. A second console mounted switch releases the multi-disc drum clutch to allow the machine to drive away from a stationary load while maintaining sufficient tension on the winch wire rope to ensure proper spooling.

Preventive maintenance of the winch system is reduced to regular scheduled maintenance of the standard tractor hydraulic system and winch gear oil changes. There are no mechanical adjustments required on the winch either for installation or ongoing operation. Anti-friction roller bearings and precision planetary gears assure high efficiency and quiet operation.

A heavy-duty 3-roller fairlead is built into the winch frame as standard equipment to minimize wear to the winch and maximize wire rope life. The single horizontal roller supplied can be mounted in either the high or low position as required for the specific job. A second horizontal roller is available as an option.

### SPECIFICATIONS:

#### CABLE DRUM SIZE:

- Throat Clearance . . . . .7.50 in. (191 mm)
- Barrel Diameter . . . . .12.50 in. (318 mm)
- Flange Diameter . . . . .24.00 in. (610 mm)
- Barrel Length . . . . .13.25 in. (337 mm)

#### HYDRAULIC SYSTEM:

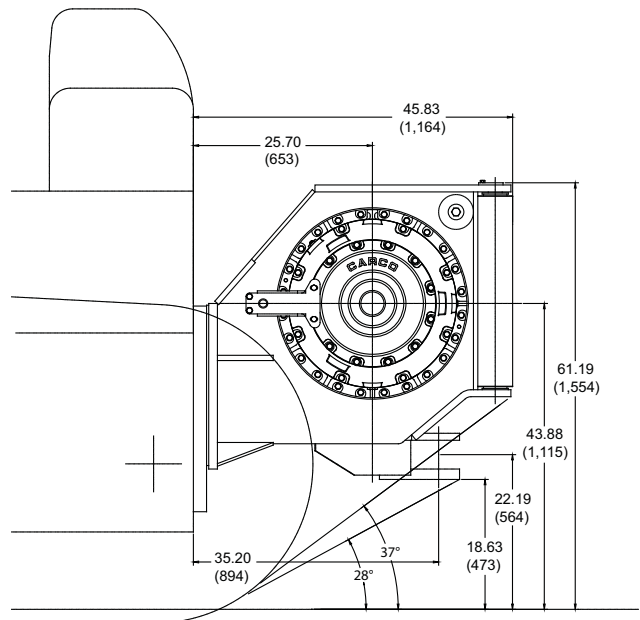
Variable displacement 107 cc piston motor with patented Braden brake valve.

#### PLANETARY GEARING:

- 245:1
- Gear oil capacity - 16 qt (15L)

#### OPTIONS:

- Second horizontal fairlead roller



Approved Cable Diameters	Maximum Theoretical Cable Capacity per SAE J1158†	Maximum Recommended Cable Capacity per SAE J706†	PACCAR Ferrule Part Number ‡
1 in (26 mm)	326 ft (99 M)	268 ft (82 M)	29427
1-1/8 in (29 mm)	261 ft (80 M)	185 ft (56 M)	29428
1-1/4 in (32 mm)	207 ft (63 M)	119 ft (36 M)	29429

† Refer to PACCAR Publication LIT2435 for more information on proper wire rope selection for PACCAR Winches.  
‡ Use six-strand IWRC RRL Wire Rope with PACCAR Ferrules.

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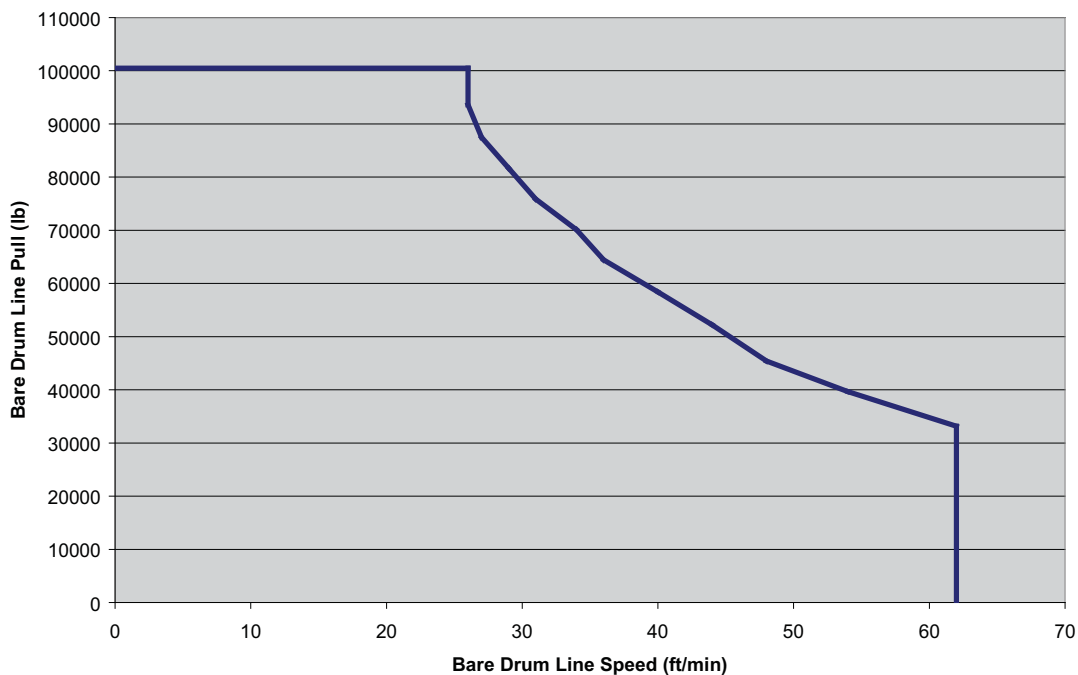
## PERFORMANCE GRAPH

Winch performance graph is based on using the full rated pressure and flow of the D85EX/PX-15 implement hydraulic system as given in Komatsu Sales and Service literature.

Performance data shown is calculated using 1-1/4 in. (32 mm) wire rope.

Maximum rated first layer line pull is 110,000 LB (489 kN) and maximum warrantable cable diameter is 1-1/4 in. (32 mm).

### KOMATSU D85EX & PX-15 Winch Performance based on 51.5 gpm (195 lpm) @ 3,270 psi (22,550 kPa) Auto Speed



The H110 winch is capable of operating anywhere from approximately 1 ft/min up to any combination of load and speed shown in the above graph.

#### Dealer Note:

Tractor must be equipped with the complete Komatsu ripper control valve group including stack valve section, pilot control valve & lever assembly, and all hoses.