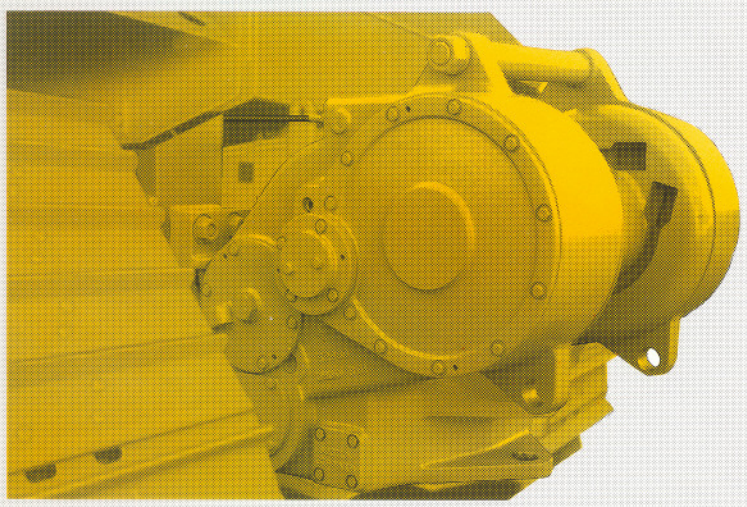
PACCAR MANUFACTURED FOR CATERPILLAR

PA55 Winch

PA55 FOR 527 SKIDDER



SUMMARY OF STANDARD FEATURES

- **Rigid cast ductile case** with integral fairlead mounting lugs and heavy duty drawbar provides durable construction for long life and maximum resale value.
- **Internal Hydraulic System** with gear pump and maintenance free spring type accumulator for easy installation and maintenance.
- **Equal speed gearing** in forward and reverse to provide smooth and predictable performance.
- **Single lever control** for hydraulically actuated multiple disc clutches and brake for ease of operation.
- **Freespool with drag adjustment** so the operator can easily pull wire rope from the drum by hand, permitting fast one man operation.
- **Caterpillar parts support** through your Caterpillar dealer...the most comprehensive total customer support system in the industry.

Rear tractor screen required for use with winch.

OVERALL OPERATION

Power flows to the winch from the engine or torque converter to the PTO shaft through directional clutches, brake and transfer gears which then drive the winch drum. The internally mounted gear type pump provides hydraulic pressure and flow for winch control and provides pressure lubrication for the brake. The directional clutches are hydraulically applied and spring released; the brake is spring applied and hydraulically released. Therefore, a loss of control oil pressure would release the clutch and cause the brake to automatically apply to hold the load.

DIRECTIONAL CLUTCHES AND BRAKE

All functions are controlled by two disc type oil clutches and one oil brake. By shifting the control lever into reel-in or reel-out, directional clutches apply and the brake releases for drum rotation. Clutch application and brake release is synchronized for smooth operation. For brake off only, the brake may be modulated to obtain partial or full brake release depending upon the amount of control lever travel.

WINCH CONTROL

A single lever controls all winch functions except freespool. This control lever moves a spool valve to control hydraulic actuation of the winch. Spring loading returns the lever to neutral, brake on, when released. The cable drum and load are held securely by the brake.

Specifications	527
Weight	1140 kg/2500 lb
Winch Length	1120 mm/44.1"
Overall Width	975 mm/38.3"
Flange Diameter	504 mm/19.9"
Drum Width	330 mm/13.0"
Drum Diameter	254 mm/10"
Cable Size:	
Recommended	19 mm/0.75"
Optional	22 mm/0.88"
Drum Capacity:	
Recommended Cable	122 m/400'
Optional Cable	88 m/290'
Oil Capacity	74 L/78 quart
Cable/Ferrule Sizes	54 mm x 65 mm/ 2.12" x 2.56"

Optional Equipment

Attachments available to adapt winch for special job requirements.

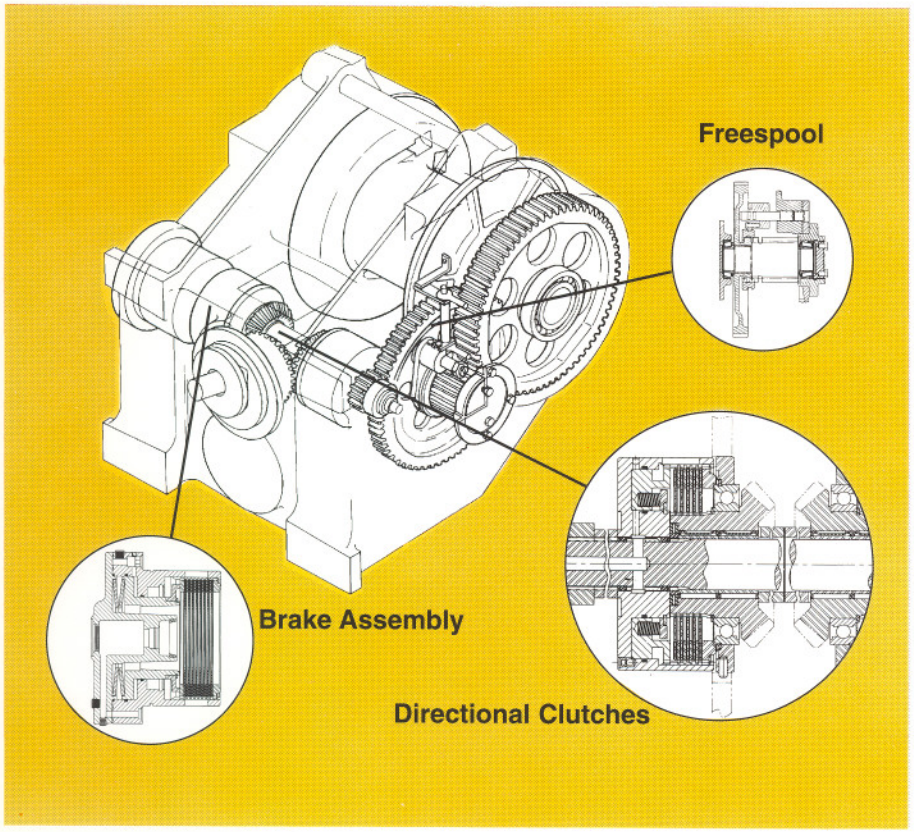
Approximate Installed weight:	Kg	Lb
Fairlead	186	410

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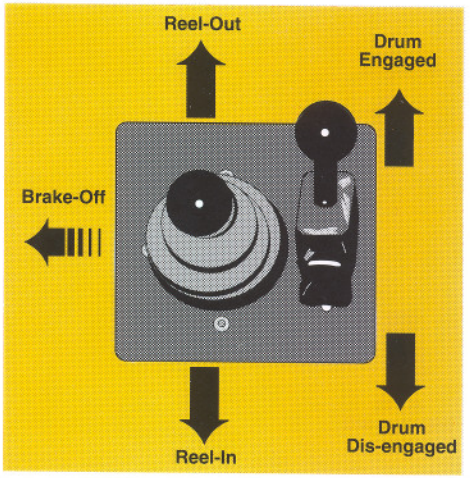
PACCAR WINCH DIVISIONS

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Dependability and efficiency are standard with rugged PA series design



Winch Controls



A single lever control synchronizes directional clutch and brake application. Slower line speed control is obtained by varying the throttle or the decelerator (not through partial movement of the control lever) and through the use of slow speed gears. The control lever is spring loaded to return automatically to the neutral or brake on position. For freespool, a second lever engages or disengages the gear train to allow wire rope to be pulled off the drum by hand. Cable drum overrun is controlled with a simple drag adjustment.

Winch Performance

Standard Speed Winch 47:1 Ratio	527 SKIDDER (No. Am.)	527 SKIDDER (Asian)
BARE DRUM:		
Rated Linepull	18,121 kg/39,950 lb	17,722 kg/39,070 lb
Maximum Linepull	31,389 kg/69,200 lb*	31,389 kg/69,200 lb*
Rated Linespeed	30 mpm/99 fpm	30 mpm/98 fpm
Maximum Linespeed	44 mpm/144 fpm	44 mpm/143 fpm
FULL DRUM:		
Rated Linepull	10,183 kg/22,450 lb	10,142 kg/22,360 lb
Maximum Linepull	17,712 kg/58,110 lb*	26,014 kg/57,350 lb
Rated Linespeed	52 mpm/172 fpm	52 mpm/171 fpm
Maximum Linespeed	77 mpm/251 fpm	76 mpm/250 fpm

* Maximum linepull limited by breaking strength of 0.88 inch (22 mm) IWRC IPS Wire Rope

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