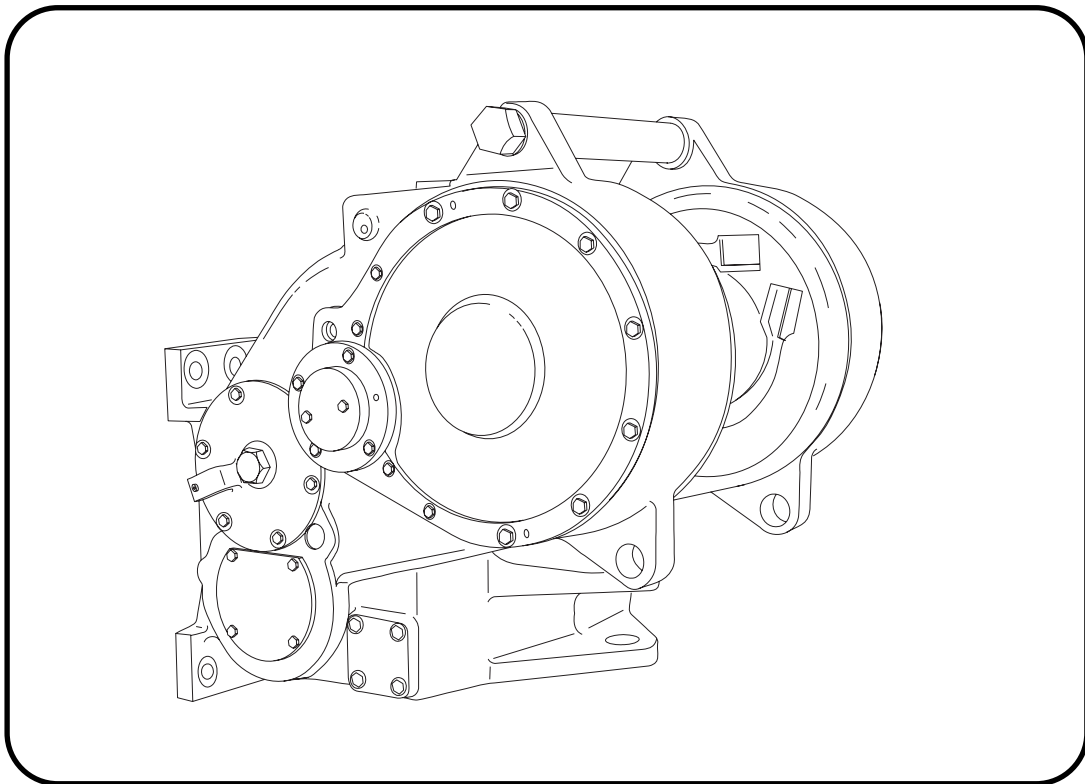


OPERATION & PREVENTIVE MAINTENANCE MANUAL WINCH MODELS PA55 & PA56 WITH ELECTRONIC CONTROLS



FOREWORD

Please read and understand this entire manual BEFORE operating or servicing your PACCAR winch. Retain this manual for future reference.

This manual contains instructions for the operation of PACCAR Models PA55 & PA56 power shift winches. When instructions apply to only one series of winch, the specific model number (PA55 or PA56 only) will appear at the beginning of the pertinent text. If not identified in this manner, the text applies to BOTH series of winches; PA55 & PA56.

Some illustrations in this manual may show details or attachments which may be different from your winch.

Also, some components may have been removed for illustrative purposes.

Continuing product improvement may cause changes in your winch which may not be included in this manual. Whenever a question arises regarding your PACCAR winch or this manual, please contact your nearest Caterpillar dealer or the PACCAR SERVICE DEPARTMENT at 1-918-251-8511, Monday - Friday, 0800 hrs - 1630 hrs CST or by FAX at 1-918-259-1575. Provide the complete winch MODEL NUMBER and SERIAL NUMBER when making inquiries.

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Safety and informational callouts used in this manual include:



WARNING - This emblem is used to warn against hazards and unsafe practice which COULD result in severe personal injury or death if proper procedures are not followed.



CAUTION - This emblem is used to warn against potential or unsafe practices which COULD result in personal injury, and product or property damage if proper procedures are not followed.

GENERAL SAFETY RECOMMENDATIONS

Safety for operators and ground personnel is of prime concern. Always take the necessary precautions to ensure safety to others as well as yourself. To ensure safety, the tractor and winch must be operated with care, concern by the operator for the equipment and a thorough knowledge of the machine's performance capabilities. The following recommendations are offered as a general safety guide. Local rules and regulations will also apply.



FAILURE TO OBEY THE FOLLOWING SAFETY RECOMMENDATIONS MAY RESULT IN PROPERTY DAMAGE, INJURY OR DEATH.

1. Read all warning tag information and become familiar with all controls BEFORE operating winch.
2. Never attempt to clean, oil or perform any maintenance on a machine with the engine running, unless instructed to do so in the Service Manual.
3. Before starting tractor, be certain all controls move freely and are placed in the "Brake-On" (neutral) position.
4. Never operate winch controls unless you are properly seated at the operators station on the tractor and you are sure personnel are clear of work area.
5. Operate winch line speeds to match job conditions.
6. Assure that personnel who are responsible for hand signals are clearly visible and that the signals to be used are thoroughly understood by everyone.
7. Never attempt to handle winch cable when the hook end is not free.
8. Leather gloves should be used when handling winch cable.
9. Ground personnel should stay in view of tractor operator and clear of winch drum. Do not allow ground personnel near winch line under tension. A safe distance of at least 1½ times the length of the cable in use should be maintained.
10. When winding cable on the winch drum, never attempt to maintain tension by allowing cable to slip through hands. Always use "hand-over-hand" method.
11. Use correct size ferrule for cable and pocket in winch drum. Never use knots to secure or attach cable.
12. Inspect rigging, winch and tractor at the beginning of each work shift. Any cable with borken strands of rigging worn or damaged should be replaced.
13. Position tractor for straightest line of pull. Use fair-lead if side pulls are frequently encountered.
14. The cable anchor or ferrule pocket in the cable drum is designed to provide a self release in the event a back-sliding load must be released from the tractor in an emergency situation. The cable anchor or ferrule alone will **NOT** support rated linepull. Therefore, a minimum of five (5) complete wraps of cable must be maintained on winch drum.
15. Be sure of tractor ground stability before winching in load.
16. Store unused chokers, slings and rigging in a neat and orderly fashion to prevent damage to equipment or injury to personnel.
17. The maximum rated bare drum line pull of the PACCAR PA55 is 69,200 LB (307.8 kN)* and 89,800 lb (399.4 kN)** for the PACCAR PA56. Do not operate the winch under loads that exceed the maximum rated bare drum line pull. If excessive loads are encountered, use a multi-part line and sheave blocks. Any attempt to exceed the capabilities of one winch (such as coupling 2 or more tractors together) is extremely hazardous.
* Breaking strength of 7/8 in. (22 mm) IPS wire rope.
**Breaking strength of 1 in. (25 mm) IPS wire rope.
18. The factory approved adaptions for PACCAR winches are designed and intended for use on specific models of crawler tractors. Changing winches between tractors is not possible in some cases because of differences in tractor models. Some changes cannot be approved by PACCAR because of safety limitations. Call a PACCAR dealer or the Factory prior to attempting winch modifications or before mounting on a different tractor.
19. PACCAR power shift winches are equipped with hydraulic accumulators. Discharge accumulator stored oil supply before removing any hydraulic lines or fittings or servicing winch. Personal injury may result from the sudden release of oil pressure. To discharge the accumulator, stop the engine, slowly cycle the Power Shift control handle into full Haul-In then Pay-Out positions a minimum of five (5) times.
20. On machines having hydraulically, mechanically and/or cable controlled equipment, be certain the equipment is either lowered to the ground or blocked securely before servicing, adjusting and/or repairing the winch. Always apply tractor parking brakes and lower equipment before dismounting the tractor.