SECTION 00 - GENERAL INFORMATION

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INTRODUCTION

This service manual provides the technical information needed to properly service and maintain the Models LS180 and LS190 skid steers. Use it in conjunction with the operator's manual which is supplied with the skid steer. Keep both manuals available for ready reference.

The LS180 and LS190 have many similarities with the major difference being a two-speed hydrostatic motor system, which is a factory option on the LS180 and standard on the LS190.

The LS180 skid steers are equipped with the 332T non-emissionized or the 332T/JF emissionized three-cylinder 60 net horsepower turbocharged engine.

The LS190 is equipped with the 450/NC emissionized four cylinder 75 net horsepower naturally aspirated engine.

Whenever working on New Holland equipment, left and right sides of the machine are determined by standing behind the unit, looking in the direction of travel.

The easiest and least time-consuming removal, disassembly, and reassembly procedure are detailed in the manual. Modifying these procedures is not recommended.

New Holland skid steers are designed with emphasis on safety for operator protection. However, careless and negligent operation can still result in serious injury to persons or property. Be sure to read and follow all safety instructions in this manual.

Your New Holland dealer is interested in your obtaining the most from your investment and will be

glad to answer any questions you may have about your skid steer. When major service is required, your dealer's staff of trained service technicians is ready to serve you.

When in need of parts, always order genuine New Holland service parts from your New Holland dealer. Be prepared to give your dealer the model and serial number of the engine and skid steer (the location of these numbers is described later in this section). Record the serial numbers here.

Skid Steer Model
Skid Steer Serial Number
Engine Model
Engine Serial Number



CAUTION A



This symbol is used throughout this book whenever your own personal safety is involved. Take time to be careful!

ABOUT IMPROVEMENTS

New Holland is continually striving to improve its products. We must, therefore, reserve the right to make improvements or changes when it becomes practical and possible to do so, without incurring any obligation to make changes or additions to the equipment sold previously.

ALL SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT NOTICE.

COMPANY POLICY

Company policy, which is one of continuous improvement, reserves the right to make changes in design and specifications at any time without notice and without obligation to modify units previously built.

All data given in this book is subject to production variations. Dimensions and weights are approximate only and the illustrations do not necessarily show skid steers in standard condition.

PARTS AND ACCESSORIES

Genuine NEW HOLLAND parts and accessories have been specifically designed for HEW HOLLAND MACHINES.

We would like to point out that "NON GENUINE" parts and accessories have not been examined and released by NEW HOLLAND. The installation and or use of such products could have negative effects upon the design characteristics of your machine and thereby affect its safety. NEW HOLLAND is not liable for any damage caused by the use of "NON GENUINE" NEW HOLLAND parts and accessories.

MODEL CODES

The range of Skid Steers described in this manual is identified in the text by the engine horsepower Pferdestarke. (PS). The skid steers listed below may not be available in all countries or markets.

ENGINE	PS	MODEL
332T/JF	60	LS180
4501NC	75	LS190

PRECAUTIONARY STATEMENTS

PERSONAL SAFETY

Throughout this manual and on machine decals, you will find precautionary statements ("CAUTION", "WARNING", and "DANGER") followed by specific instructions. These precautions are intended for the personal safety of you and those working with you. Please take the time to read them.



A CAUTION A



The word "CAUTION" is used where a safe behavioral practice according to operating and maintenance instructions and common safety practices will protect the operator and others from accident involvement.



WARNING



The word "WARNING" denotes a potential or hidden hazard which has a potential for serious injury. It is used to warn operators and others to exercise every appropriate means to avoid a surprise involvement with machinery.



A DANGER A



The word "DANGER" denotes a forbidden practice in connection with a serious hazard.

Failure to follow the "CAUTION", "WARNING", and "DANGER" instructions may result in serious bodily injury or death.

MACHINE SAFETY

Additional precautionary statement "IMPORTANT" is followed by specific instructions. This statement is intended for machine safety.

IMPORTANT: The word "**IMPORTANT**" is used to inform the reader of something he needs to know to prevent minor machine damage if a certain procedure is not followed.

SAFETY PRECAUTION INFORMATION

- 🕰 CAUTION 🕰 -



Unsafe operating practices and improper use of the skid steer and its attachments on the part of the operator can result in injuries. Observe the following safety precautions at all times:

- 1. For servicing, the skid steer should be on level terrain, engine stopped with the wheels blocked or the entire skid steer solidly supported with the wheels off the ground before servicing any component of the drivetrain.
- 2. For servicing under the operator's seat, raise the seat and pan assembly up to the raised latched position and securely latch.
- 3. Do not operate the skid steer unless the seat is latched in the operate position.
- 4. Do not service the skid steer with a raised boom unless the boom is resting on the boom lock pins.
- 5. Do not service the skid steer with the engine running unless the skid steer is properly and securely supported with all four wheels off the ground.
- 6. Use caution when servicing the unit around moving parts.
- 7. Do not tilt the boom and cab without proper instruction.
- 8. Do not tilt the boom and cab without using the proper cab tilting tool.
- 9. Reinstall all shields removed for service.
- 10. Never loosen any hydraulic connections before relieving the pressure in the hydraulic system.
- 11. Wear eye protection such as goggles, etc.
- 12. Wear ear protection such as ear plugs, etc. When you feel the noise level is uncomfort-
- 13. If any servicing or adjustments require the battery to be disconnected, disconnect the (-) negative ground cable.
- 14. When servicing electrical components, disconnect the (-) negative ground cable.
- 15. If the electronic instrument cluster (EIC) requires removal from the dash area or the skid steer disconnect the (-) negative ground

- battery cable. This will shut off power to the EIC and prevent damage to the EIC board or blowing the 5-amp fuses if the board is accidentally grounded.
- 16. If welding is required on the skid steer, disconnect the (-) negative ground cable. failure to disconnect the battery may result in damage to the EIC (Electronic Instrument Cluster) monitoring system and other electrical components.
- 17. If welding is required on an attachment, remove the attachment from the skid steer.
- 18. Give complete and undivided attention to the job at hand so that complete control of the skid steer is maintained at all times.
- 19. Drive slowly over rough ground and on slopes; keep alert for holes, ditches and other irregularities that may cause the skid steer to overturn.
- 20. Avoid steep hillside operation which could cause the skid steer to overturn.
- 21. Never transport a loaded bucket at full height. Operate the skid steer with the load as low as possible until it becomes necessary to raise the boom to discharge the load into a truck, container, etc.
- 22. Reduce speed when turning so there is no danger of the skid steer overturning.
- 23. Never drive up or back up a hill or incline with a raised boom or the skid steer could over turn.
- 24. Always look behind you before backing the skid steer.
- 25. Maintain proper transmission oil level to prevent loss of hydrostatic braking.
- 26. Do not allow passengers to ride on the skid steer at any time.
- 27. Do not allow children to operate the skid steer or ride on the skid steer at any time.
- 28. Do not allow anyone to operate the skid steer without proper instruction. OSHA requires that all operators be instructed on the proper operation of the machine before they operate the unit.
- 29. Do not operate the skid steer in any position other than while in the operator's seat with the seat belt securely fastened.



Thank you very much for your reading.

Please click here to get more information.