
SECTION 1

GENERAL INFORMATION

CONTENTS

INTRODUCTION	1-2
SAFETY INFORMATION	
Precautionary Statements	1-3
Safety Precaution Information	1-4
Safety Decals	1-8
General Safety Information	1-12
HARDWARE TORQUE SPECIFICATIONS CHART	1-15
HYDRAULIC TUBE AND FITTING INSTALLATION	1-17
HYDRAULIC TUBE AND FITTING TORQUE SPECIFICATIONS ...	1-17
PROPERLY SUPPORTING A RAISED MACHINE	1-18
CAB AND BOOM TILT PROCEDURE	1-19
CRANING THE SKID-STEER LOADER	1-25
DRILLING HOLES IN OVERHEAD DASH	1-28
ADAPTING ATTACHMENTS REQUIRING 12V ELECTRICAL POWER	1-28
HYDRAULIC SYSTEM COMPATIBILITY	1-30
ACCESSORY RELAY AND ENGINE FUSE BLOCK	1-31
SPECIFICATIONS	1-32
INDEX	1-37

INTRODUCTION

This service manual provides the technical information needed to properly service and maintain the Models L565, LX565, and LX665 skid-steer loaders. Use it in conjunction with the operator's manual which is supplied with the loader. Keep both manuals available for ready reference.

The L_ _ _ designates a factory standard built unit.

The LX_ _ _ designates a factory deluxe built unit. Options factory installed include work lights, taillights, and auxiliary boom hydraulics.

The L565, LX565, and LX665 have many similarities with the major differences being engine horsepower and lifting capacity.

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 procedures are detailed in the manual. Modifying these procedures is not recommended.

New Holland skid-steer loaders are designed with emphasis on safety for operator protection. However, careless and negligent operation can still result in serious injury to persons or damage to 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 loader. 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 loader (the location of these numbers is described later in this section). Record the serial numbers here.

Loader Model _____

Loader Serial Number _____

Engine Model _____

Engine Serial Number _____



CAUTION: 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.

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.



CAUTION: 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.



DANGER: 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 statements (“ATTENTION” and “IMPORTANT”) are followed by specific instructions. These statements are intended for machine safety.

ATTENTION: The word “ATTENTION” is used to warn the operator of potential machine damage if a certain procedure is not followed.

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

UNSAFE OPERATING PRACTICES AND IMPROPER USE OF THE SKID-STEER LOADER 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 LOADER SHOULD BE ON LEVEL TERRAIN, ENGINE STOPPED WITH THE WHEELS BLOCKED OR THE ENTIRE LOADER 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 TO THE RAISED LATCHED POSITION AND SECURELY LATCH.**
- 3. DO NOT OPERATE THE LOADER UNLESS THE SEAT IS LATCHED IN THE OPERATE POSITION.**
- 4. DO NOT SERVICE THE LOADER WITH A RAISED BOOM UNLESS THE BOOM IS RESTING ON THE BOOM LOCK PINS.**
- 5. DO NOT SERVICE THE LOADER WITH THE ENGINE RUNNING UNLESS THE LOADER 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 EARPLUGS, ETC. WHEN YOU FEEL THE NOISE LEVEL IS UNCOMFORTABLE.**
- 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 LOADER, 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 LOADER, 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 LOADER.**

18. GIVE COMPLETE AND UNDIVIDED ATTENTION TO THE JOB AT HAND SO THAT COMPLETE CONTROL OF THE LOADER 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 LOADER TO OVERTURN.
20. AVOID STEEP HILLSIDE OPERATION WHICH COULD CAUSE THE LOADER TO OVERTURN.
21. NEVER TRANSPORT A LOADED BUCKET AT FULL HEIGHT. OPERATE THE LOADER 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 LOADER OVERTURNING.
23. NEVER DRIVE UP OR BACK UP A HILL OR INCLINE WITH A RAISED BOOM OR THE LOADER COULD OVERTURN.
24. ALWAYS LOOK BEHIND YOU BEFORE BACKING UP THE LOADER.
25. MAINTAIN PROPER TRANSMISSION OIL LEVEL TO PREVENT LOSS OF HYDROSTATIC BRAKING.
26. DO NOT ALLOW PASSENGERS TO RIDE ON THE LOADER AT ANY TIME.
27. DO NOT ALLOW CHILDREN TO OPERATE THE LOADER OR RIDE ON THE LOADER AT ANY TIME.
28. DO NOT ALLOW ANYONE TO OPERATE THE LOADER 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 LOADER IN ANY POSITION OTHER THAN WHILE IN THE OPERATOR'S SEAT WITH THE SEAT BELT SECURELY FASTENED.
30. BEFORE STARTING THE ENGINE, BE SURE THAT ALL OPERATING CONTROLS ARE IN NEUTRAL AND THE PARKING BRAKE IS ENGAGED.
31. NEVER OPERATE THE LOADER ENGINE IN A CLOSED BUILDING WITHOUT ADEQUATE VENTILATION.
32. REFUEL THE LOADER OUTDOORS WITH THE ENGINE SHUT OFF. REPLACE THE FUEL CAP SECURELY. USE AN APPROVED FUEL CONTAINER. DO NOT SMOKE WHEN HANDLING FUEL. AVOID SPILLING FUEL.
33. AFTER OPERATING THE ENGINE, NEVER TOUCH THE MUFFLER, EXHAUST PIPE, ENGINE OR RADIATOR UNTIL THEY HAVE HAD TIME TO COOL.
34. DRESS APPROPRIATELY - WEAR RELATIVELY TIGHT-FITTING CLOTHING WHEN OPERATING THE LOADER. LOOSE OR TORN CLOTHING CAN CATCH IN MOVING PARTS OR CONTROLS.
35. BEFORE SERVICING THE LOADER, OR ANY OF ITS ATTACHED EQUIPMENT, BE SURE THAT THE ATTACHMENTS ARE LOWERED TO THE GROUND OR THAT THE BOOM ARMS ARE SUPPORTED BY THE BOOM LOCK PINS.
36. DO NOT WORK UNDER OVERHANGS, ELECTRIC WIRES, OR WHERE THERE IS DANGER OF A SLIDE.

37. WEAR AN APPROVED SAFETY HAT WHEN OPERATING THE MACHINE AND WHILE IN ANY WORK AREA.
38. WHEN DRIVING THE LOADER ON A ROAD OR HIGHWAY, USE WARNING LIGHTS OR WARNING DEVICES AS MAY BE REQUIRED BY LOCAL OR STATE GOVERNMENT REGULATIONS. HEADLIGHTS, WARNING LIGHTS AND SMV SIGNS ARE AVAILABLE THROUGH YOUR NEW HOLLAND DEALER.
39. KEEP THE LOADER CLEAN. DO NOT ALLOW TRASH, DEBRIS OR OTHER ARTICLES TO ACCUMULATE IN THE CAB, FLOOR OR FOOT CONTROL PEDAL AREA THAT MAY HINDER SAFE MACHINE OPERATION.
40. NEVER OPERATE THE LOADER WITH ANY OF THE SHIELDING REMOVED.
41. NEVER OPERATE THE LOADER WITHOUT WINDOWS AND/OR SCREENS IN PLACE.
42. NEVER EXTEND ANY PART OF THE BODY OUTSIDE OF THE OPERATOR'S AREA.
43. ALWAYS PROPERLY TIE DOWN THE SKID-STEER LOADER TO A TRUCK OR TRAILER BEFORE TRANSPORT.
44. MAKE SURE ALL BYSTANDERS ARE AT A SAFE DISTANCE AWAY FROM THE LOADER BEFORE STARTING THE ENGINE.
45. DO NOT ALLOW ANYONE NEAR THE LOADER WHILE THE ENGINE IS RUNNING AND THE LOADER IS OPERATIONAL.
46. WHEN USING THE SKID-STEER LOADER TO CRANE OBJECTS, DO NOT ALLOW ANYONE TO RIDE ON OBJECTS BEING CRANED.
47. DO NOT USE THE SKID-STEER LOADER AS A WORK PLATFORM FOR SUPPORTING MATERIALS.
48. DO NOT LIFT PERSONNEL OR ALLOW PERSONNEL TO WORK WHILE STANDING IN THE BUCKET OR ON OTHER ATTACHMENTS. THIS IS NOT A MAN-LIFT.

OSHA REQUIREMENTS NOW MAKE IT THE EMPLOYER'S RESPONSIBILITY TO FULLY INSTRUCT EACH OPERATOR IN THE PROPER AND SAFE OPERATION OF ALL OPERATIVE EQUIPMENT. BOTH EMPLOYER AND EMPLOYEE SHOULD THOROUGHLY FAMILIARIZE THEMSELVES WITH THE FOLLOWING SECTIONS.



CAUTION!

SOME PICTURES IN THIS MANUAL SHOW SAFETY SHIELDS REMOVED OR OPEN TO SHOW PARTS BEING SERVICED OR FOR CLARITY. ALL SHIELDS SHOULD BE CLOSED OR REPLACED PRIOR TO OPERATING THE MACHINE.

DANGER!

FASTEN SEAT BELT

BEFORE STARTING ENGINE!

THIS LOADER IS A VERY STABLE UNIT BUT IT CAN BE UPSET IF STOPPED SUDDENLY WHEN THE BUCKET IS RAISED AND LOADED.

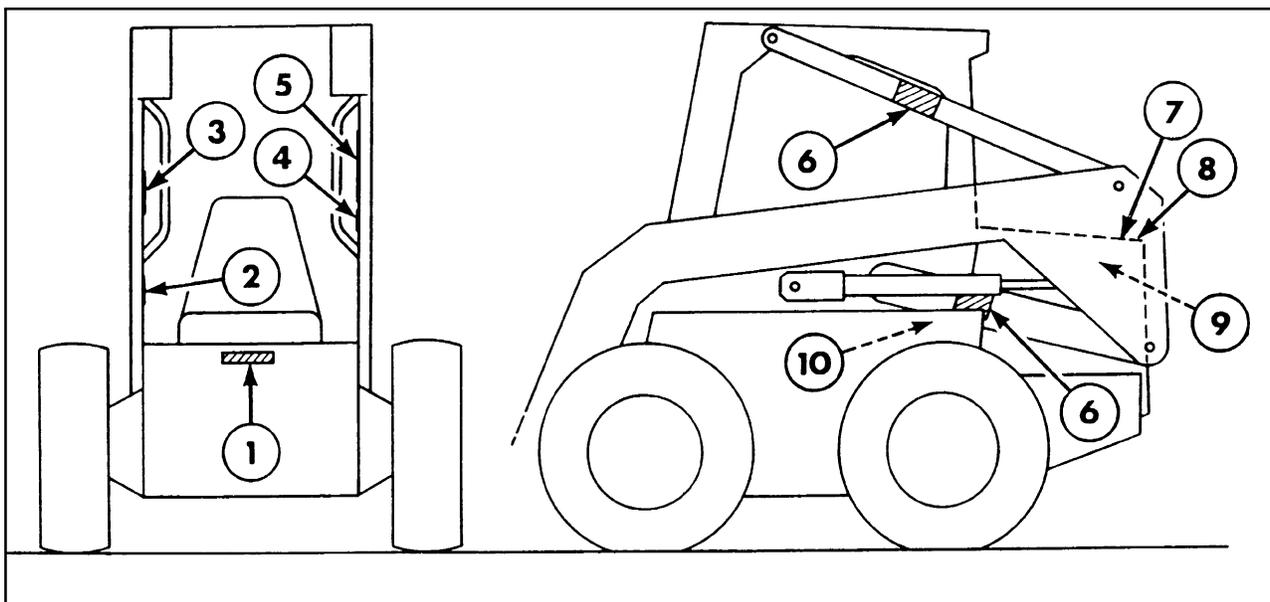
THEREFORE, DO NOT START THE ENGINE BEFORE SECURELY FASTENING THE SEAT BELT, AND CARRY THE LOAD LOW.

SAFETY DECALS

The following safety decals have been placed on your machine in the areas indicated. They are intended for the personal safety of you and those working with you. Please take this manual, walk around your machine and note the content and

location of these warning signs. Review these decals with your machine operators.

Keep the decals legible. If they are not, obtain replacements from your New Holland dealer.



1. DANGER: DO NOT ALLOW PASSENGERS TO RIDE ON THE LOADER AT ANY TIME. DO NOT GET UNDER BOOM UNLESS SUPPORTED BY THE BOOM LOCK PINS.

Part #86521685

NO RIDERS

⚠ DANGER

AVOID DEATH

- LIFT ARM STOPS MUST BE ENGAGED
- OPENING LINES FOR SERVICE OR PART FAILURE CAN CAUSE LIFT ARMS TO DROP

LC
86500517

2. CAUTION: DO NOT ALLOW ANYONE TO OPERATE THE LOADER WITHOUT PROPER INSTRUCTION.

Part #86521688

⚠ CAUTION

AVOID INJURY

- READ OPERATORS MANUAL
- KNOW LOCATION AND FUNCTION OF CONTROLS
- KEEP SAFETY DEVICES WORKING.
- KEEP SCREENS AND WINDOWS IN PLACE.
- KEEP CHILDREN AND OTHERS AWAY.
- NEVER CARRY RIDERS. LOWER LIFT ARMS, ENGAGE PARK BRAKE, STOP ENGINE AND REMOVE KEY BEFORE LEAVING.
- KEEP CAB CLEAN, ESPECIALLY PEDAL AREA.

3. **DANGER: BEFORE EXITING THE LOADER, LOWER THE LIFT ARMS AND ATTACHMENT TO THE GROUND OR REST LIFT ARMS ON THE BOOM STOPS. STOP ENGINE AND ENGAGE THE PARKING BRAKE.**

Part #86521683

! DANGER



AVOID DEATH

BEFORE REMOVING SEAT BELT AND LEAVING SEAT:

- LOWER LIFT ARMS TO GROUND OR REST LIFT ARMS ON STOPS
- STOP ENGINE
- LOCK PARK BRAKE & REMOVE KEY

U.P.I. 86500512

4. **WARNING: DO NOT OVERLOAD! NEVER LIFT MORE THAN THE MAXIMUM SAE LOAD RATING OF THE LOADER. NEVER TRANSPORT A LOADED BUCKET AT FULL HEIGHT. OPERATE THE LOADER WITH THE LOAD AS LOW AS POSSIBLE.**

Part #86521716

L565, LX565

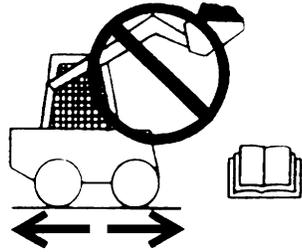
- 682 kg/1500 lbs.
(Mfg. Rating)

Part #86521717

LX665

- 770 kg/1700 lbs.
(Mfg. Rating)

! CAUTION



AVOID OVERTURN

- CARRY LOAD LOW
- AVOID STEEP SLOPES AND HIGH SPEED TURNS.
- NEVER CARRY MORE THAN 1500 LBS. (682 kg)

86500969

5. **WARNING: NEVER OPERATE THE LOADER WITHOUT THE SEAT BELT SECURELY FASTENED.**

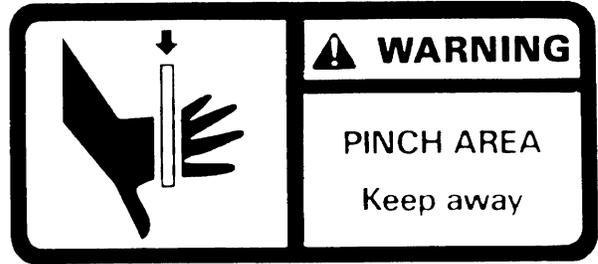
Part #86521686

!



6. **WARNING: KEEP CLEAR OF MOVING PARTS. KEEP BYSTANDERS CLEAR OF THE LOADER AT ALL TIMES UNLESS THE BOOM IS DOWN ON THE GROUND OR THE BOOM IS RESTING ON THE BOOM LOCK PINS AND ENGINE IS OFF. NEVER EXTEND ANY PART OF THE BODY OUTSIDE OF THE OPERATOR'S AREA.**

Part #86521673



7. **WARNING: KEEP CLEAR! ROTATING FAN - STOP ENGINE.**

Part #9828825



8. **WARNING: DO NOT ALLOW ANYONE NEAR THE LOADER WHILE THE ENGINE IS RUNNING AND THE LOADER IS OPERATIONAL.**

Part #86509972



Please click here and go
back to our website.

BUY NOW

**Then Instant Download the
Complete Manual.**

Thank you very much!