

PREVIEW - YOUFIXTHIS.COM

Blurred on purpose. The manual you buy has this page in full quality.

Download full manual at youfixthis.com

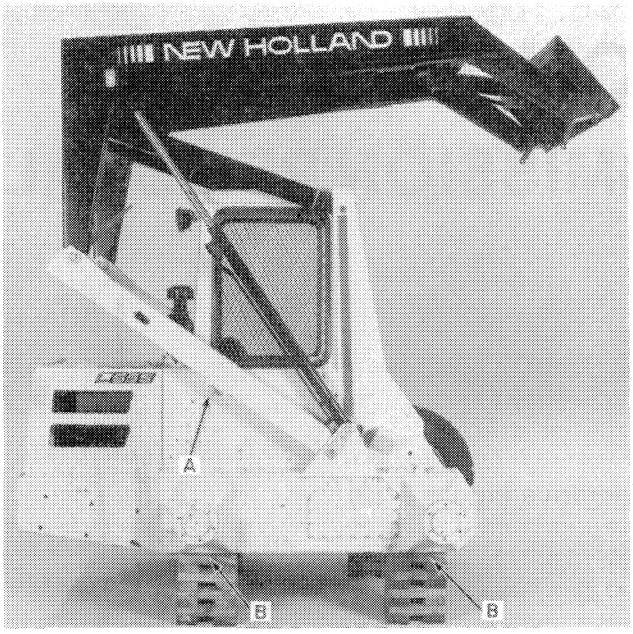
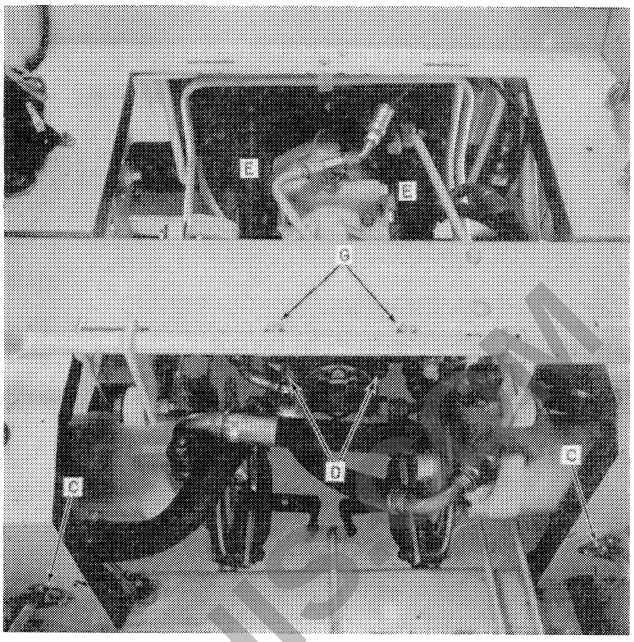


FIGURE 3-1



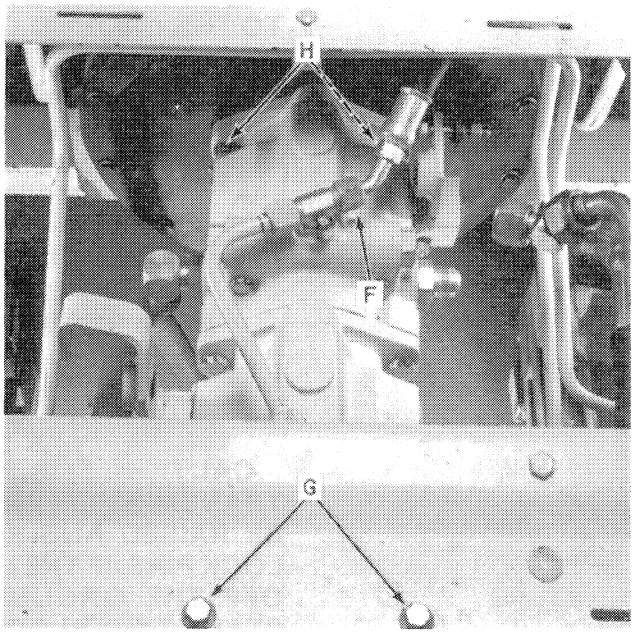
SHIELDS REMOVED FOR CLARITY. FIGURE 3-2

A. HYDROSTATIC PUMP REMOVAL

To insure maximum cleanliness of internal transmission parts, remove the tandem pump assembly as a unit, and plug all ports and lines as they are opened. Steam clean the loader before any repairs are made to the hydraulic system.

1. Raise the boom and extend the boom lock pins, A, Figure 3-1. Stop the engine. Turn the key to the "ON" position and work the boom and bucket pedals to relieve any residual hydraulic pressure before dismounting from the loader. Turn the ignition key off.
2. Jack up the loader and block it securely, B, Figure 3-1.

   NOTE: Hydrostatic pumps and motors can be removed without removing the fuel tank. Depending on the severity of the problem, you may want to remove the fuel tank at this time.
3. Remove the seat and front panel held by two overcenter latches, C, Figure 3-2.
4. Remove the suction hose and high pressure hose from the gear pump.
5. Remove the two cap screws, D, Figure 3-2, and slide the gear pump off the hydrostatic pumps.
6. Remove the steering neutralizers, E, Figure 3-2, from the pintle lever control arms.
7. Remove charge pressure line, F, Figure 3-3, and all hydraulic hoses from the hydrostatic pumps.
8. Remove the two mounting bolts, G, Figures 3-2 and 3-3.



SHIELDS REMOVED FOR CLARITY. FIGURE 3-3

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SECTION 7

BOOM AND BUCKET CYLINDERS

SPECIFICATIONS



Blurred on purpose. The manual you buy has this page in full quality.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



FIGURE 10-12

Blurred on purpose. The manual you buy has this page in full quality.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SERVICE PROBLEM EVALUATION

PROBLEM	POSSIBLE CAUSE	CORRECTION
Engine lacks power	Bad fuel	Drain fuel tank and change fuel filters
	Fuel filter plugged	Change fuel filters
	Injectors fouled	Have diesel service check and calibrate injectors
Loader creeps with control levers in neutral position.	Neutralizing spring mechanism not adjusted.	See "Steering Adjustments".
	Pintle lever loose on pump pintle shaft.	Check key and tighten clamp bolt.
	Pintle shaft broken.	Transmission will have to be removed and repaired.
Loader does not run straight when both control levers are in the forward position.	Steering lever stop bolts not adjusted correctly.	See "Steering Adjustments".
Engine runs but no ground drive.	Parking brake engaged.	Release parking brake.
	Hydraulic oil low.	Fill hydraulic reservoir with proper oil.
	Final drive gear or chain broken.	Replace gear or chain on side not driving.
Boom arms will not rise or rise slowly.	Low oil flow from pump.	Clean inlet screen.
	Low relief valve pressure.	Check pressure and replace relief cartridge if pressure is not correct.
	Seat switch unplugged.	Plug in wiring at seat or solenoid.
	Control linkage binding.	Free linkage.
	Bucket is overloaded.	Reduce load.
	Cylinder shafts are bent.	Replace.
	Cylinder seals are leaking.	Repair cylinders.
	Boom arms are binding at pivot points.	Locate and correct.
	Bucket tilt valve spool is not returning to center position.	Correct binding control linkage. Spool centering spring or spacers are damaged.
	Incorrect oil used in hydraulic system.	Change oil.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SECTION 13
SPECIFICATIONS

ENGINE Diesel

Blurred on purpose. The manual you buy has this page in full quality.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

CONTENTS

INTRODUCTION ..... inside front cover
ABOUT IMPROVEMENTS ..... inside front cover
SAFETY 0-2
SECTION 1 - OPERATION 1-1
SECTION 2 - STEERING ADJUSTMENTS 2-1
SECTION 3 - HYDROSTATIC TRANSMISSION REMOVAL 3-1
SECTION 4 - HYDROSTATIC PUMP OVERHAUL 4-1
SECTION 5 - HYDROSTATIC TRANSMISSION MOTORS 5-1
SECTION 6 - GEAR PUMP 6-1
SECTION 7 - BOOM AND BUCKET CYLINDERS 7-1
SECTION 8 - CONTROL VALVE 8-1
SECTION 9 - FINAL DRIVE 9-1
SECTION 10 - ELECTRICAL SYSTEM 10-1
SECTION 11 - SEAT ACTIVATED BOOM LOCKOUT 11-1
SECTION 12 - TROUBLESHOOTING 12-1
SECTION 13 - SPECIFICATIONS 13-1
INDEX 13-11

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



PLEASE READ CAREFULLY!

INCLUDED THROUGHOUT THIS MANUAL AND ON MACHINE DECALS YOU WILL FIND PRECAUTIONARY STATEMENTS SUCH AS "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.

PERSONAL SAFETY!

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.

ADDITIONAL PRECAUTIONARY STATEMENTS SUCH AS "ATTENTION" AND "IMPORTANT" ARE FOLLOWED BY SPECIFIC INSTRUCTIONS. THESE STATEMENTS ARE INTENDED FOR MACHINE SAFETY.

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.

IMPORTANT!

FAILURE TO FOLLOW THE "CAUTION", "WARNING", AND "DANGER" INSTRUCTIONS MAY POSSIBLY RESULT IN SERIOUS BODILY INJURY OR DEATH.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SECTION 5
HYDROSTATIC TRANSMISSION MOTORS

SPECIFICATIONS

BACK PLATE BOLTS

5/16" x 1½" Grade 5 cap screw	15-18 ft. lbs. (20-24 N·m)
5/16" x 2" Grade 5 cap screws	15-18 ft. lbs. (20-24 N·m)
Drive shaft rolling torque after assembly	5 ft. lbs. (7 N·m) maximum.

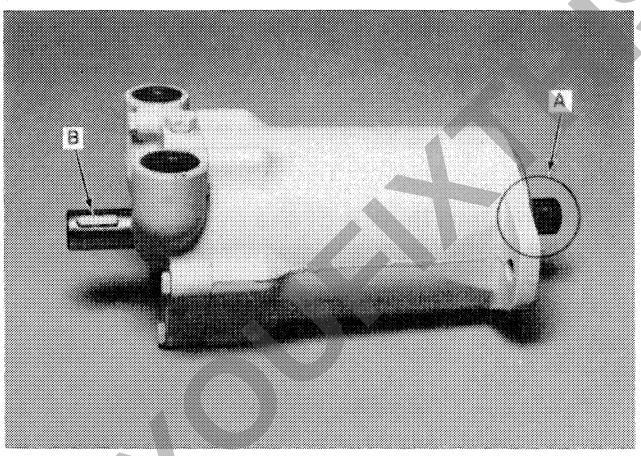


FIGURE 5-1

This section describes the basic overhaul information for the Cessna 74644DAF high torque motor. This motor consists of one rotating block with pistons on either end that travel on replaceable cam plates. This motor must be shimmed on rebuilding to insure proper hydrostatic braking of the Model L-555 loader.

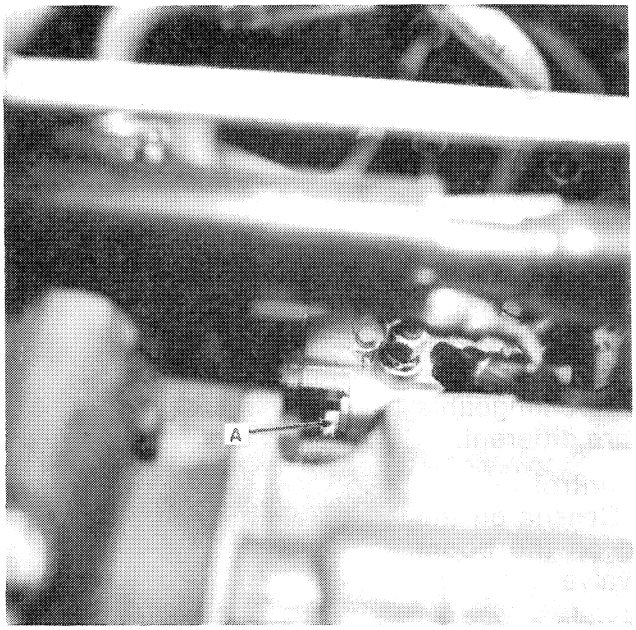
NOTE: Dealer adjustment requests for oil leak repairs, other repairs, or overhaul of the transmission motor must include the model number of the transmission motor and the date code. These are stamped in the flange of the motor housing, A, Figure 5-1.

DISASSEMBLY

A. Thoroughly clean the outside of the motor housing before disassembly and remove the key for the brake disc, B, Figure 5-1.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



SHIELDS REMOVED FOR CLARITY. **FIGURE 8-2**

SERVICING THE CONTROL VALVE

The Main System Relief Valve

The relief valve, A, Figure 8-2, is a cartridge-type relief valve, preset and stamped at the factory to 1,875 psi (129 bar). However, the system pressure will vary from 2,050-2,400 psi (141-166 bar) when the hydraulic oil temperature is 120°F (49°C).

If the system pressure does not fall into this pressure range when checked, a new relief valve should be installed. The cartridge-type relief valve is not serviceable.

WARNING: GAUGES, GAUGE FITTINGS, AND HOSES MUST HAVE OPERATING PRESSURE RATINGS AT LEAST 25 PERCENT HIGHER THAN THE HIGHEST PRESSURES OF THE SYSTEM.

NEVER ADJUST THE RELIEF VALVES TO HIGHER PRESSURES THAN THOSE SPECIFIED BY THE EQUIPMENT MANUFACTURER.

WARNING: FLUID UNDER PRESSURE CAN HAVE SUFFICIENT FORCE TO PENETRATE THE SKIN, CAUSING SERIOUS PERSONAL INJURY. ALWAYS PROTECT THE SKIN AND EYES FROM ESCAPING FLUID UNDER PRESSURE.

IF INJURED BY ESCAPING FLUID, OBTAIN MEDICAL ASSISTANCE AT ONCE. SERIOUS INFECTION OR REACTION CAN DEVELOP IF MEDICAL TREATMENT IS NOT ADMINISTERED IMMEDIATELY.



FIGURE 8-3

BEFORE DISCONNECTING THE LINES OR FITTINGS, BE SURE TO RELIEVE ALL PRESSURE. BEFORE APPLYING PRESSURE TO THE SYSTEM, BE SURE ALL CONNECTIONS ARE TIGHT AND LINES, PIPES, AND HOSES ARE NOT DAMAGED.

A. **WARNING: RAISE THE BOOM, EXTEND THE BOOM LOCK PINS, AND LOWER THE BOOM ONTO THE PINS. STOP THE ENGINE AND WORK THE BOOM AND BUCKET PEDALS TO RELIEVE HYDRAULIC PRESSURE IN THE BOOM AND BUCKET SYSTEM BEFORE DISMOUNTING.**

   PROCEDURE:

   1. **RAISE THE BOOM, EXTEND THE BOOM LOCK PINS, AND LOWER THE BOOM ONTO THE BOOM LOCK PINS.**
   2. **AFTER STOPPING THE ENGINE AND BEFORE DISMOUNTING FROM THE LOADER, TURN ON THE IGNITION SWITCH.**
   3. **PUSH BOTH THE BOOM AND BUCKET PEDALS TO RELIEVE ALL HYDRAULIC PRESSURE IN BOTH CIRCUITS.**
   4. **TURN OFF THE IGNITION SWITCH.**

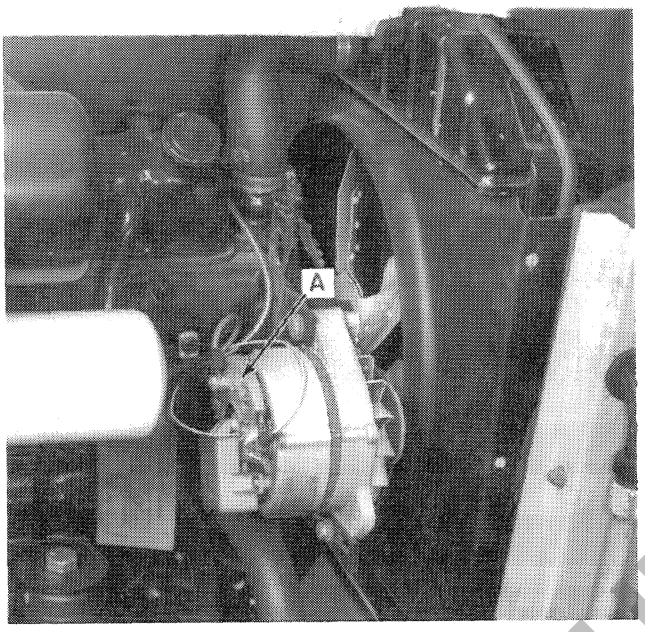
B. Install a 3000 psi (207 bar) capacity gauge in the bucket line at port, A, Figure 8-3.

C. Start the engine and run it at full throttle.

D. If the gauge is installed as shown in Figure 8-3, roll the bucket back by depressing the heel end of the bucket pedal until the system bypasses.

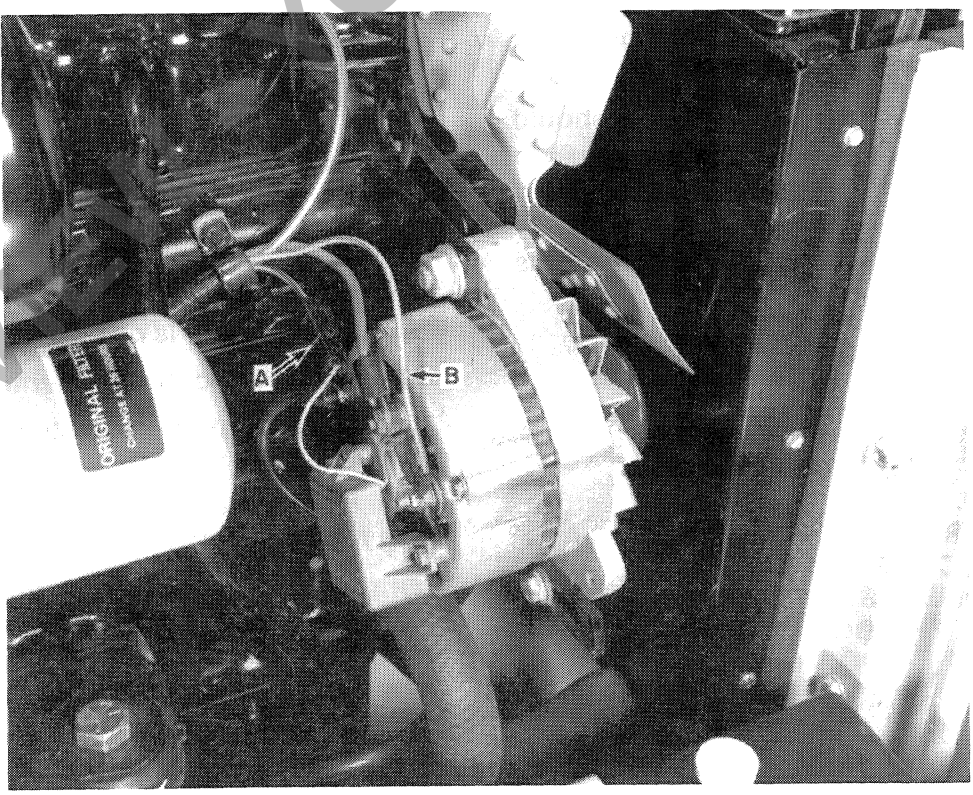
PREVIEW - YOUFIXTHIS.COM
Download full manual at youfixthis.com

SECTION 10
ELECTRICAL SYSTEM



SHIELDS REMOVED FOR CLARITY. **FIGURE 10-1**

The Model L-555 skid-steer loader uses two different style Motorola alternators. The earlier units were equipped with a series RA12N451, 37-ampere capacity alternator, which can be visually differentiated by the isolation diode plate, A, Figure 10-1. The later L-555 units have a series 8AR2069F, 37-ampere capacity alternator, which does not have a diode plate, Figure 10-2, but does have a diode trio.



SHIELDS REMOVED FOR CLARITY. **FIGURE 10-2**

PREVIEW ONLY YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 11 of 116 pages

The full manual includes:

- All 116 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

New Holland L-555 Service Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual