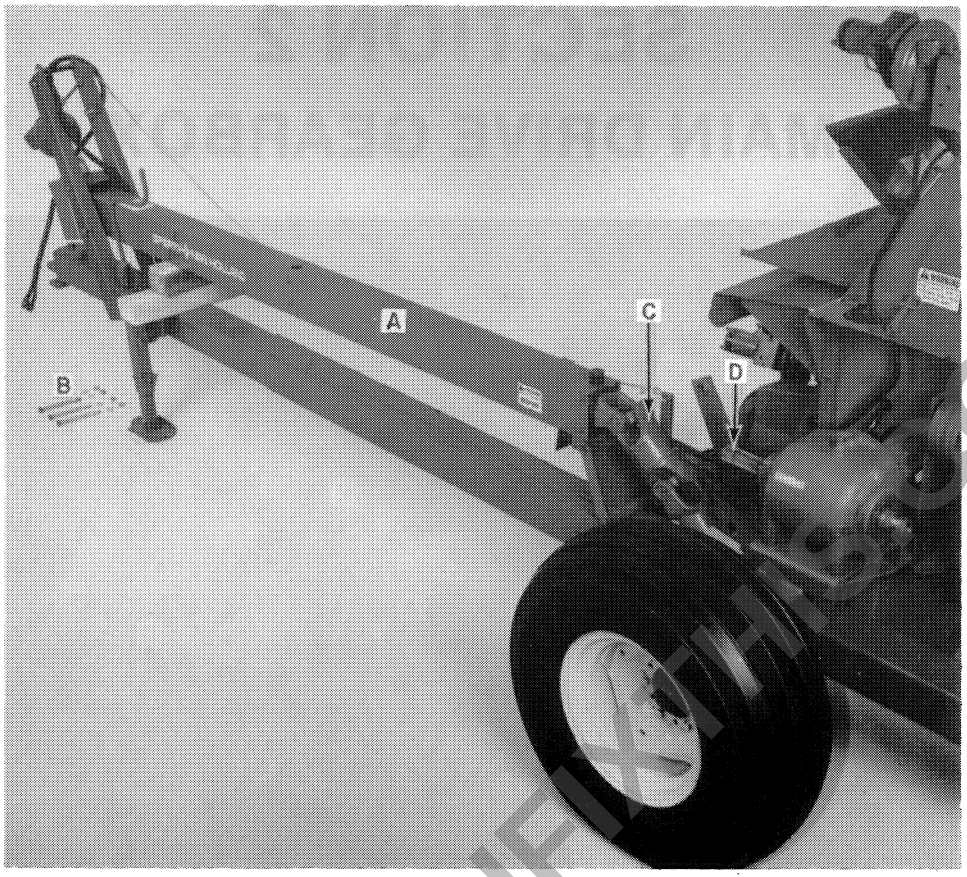


SHIELDS SHOWN REMOVED FOR CLARITY. **FIGURE 2-2**

REMOVAL

1. Removal of the main drive gearbox is easier, especially when one person is doing the work, by disconnecting the PTO universal joint, C, Figure 2-2, from the gearbox input shaft, D. Do this by removing the front PTO support mounting bolts, B, and sliding the main PTO shaft, A, forward until the universal joints, C, are fully disengaged from the splined input shaft, D. Support the PTO shaft at the front with blocking as shown in Figure 2-2.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

FIGURE 7-3

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

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

The troubleshooting flow charts listed on the following pages are organized as follows:

Symptom	Troubleshooting Flow Chart Located on Page:
A. Power lamp-off Alarm light/horn-off Solenoid-won't retract	9-13
B. Power lamp-on Alarm light/horn-always on Solenoid-won't retract	9-14
C. Power lamp-on Alarm light/horn-off (after 1-2 second delay) Solenoid-retracts (after 1-2 second delay No detection with metal present in feedroll area	9-17
D. Power lamp-on Alarm light/horn-off immediately Solenoid-retracts immediately No detection with metal present in feedroll area	9-17
E. Power lamp-on Alarm light/horn-off Solenoid-won't retract	9-18
F. System false detects	9-19
G. Power lamp-flashes on/off Alarm lamp/horn-flash on/off	9-20

After the symptoms are identified locate the heading on the following pages that matches the observed symptoms.

Under each heading is a series of simple tests. Begin at the first test and follow across or down the chart until you reach a possible cause.

Correct the cause of failure and test the system for proper operation. If the metal detector does not function properly observe the symptoms and continue troubleshooting. There can be more than one problem.

A 12-volt test lamp, a volt-ohmmeter, and a short length of wire will be sufficient to identify most problems.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SECTION 11

GENERAL INFORMATION

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

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

CONTENTS

GENERAL INFORMATION
INTRODUCTION ..... INSIDE FRONT COVER
SAFETY ..... 1-2 and 1-3

SECTION 1 - PTO DRIVELINE 1-4

SECTION 2 - MAIN DRIVE GEARBOX 2-1

SECTION 3 - REVERSING GEARBOX 3-1

SECTION 4 - FEEDROLLS AND SMOOTH ROLL 4-1

SECTION 5 - CUTTERHEAD 5-1

SECTION 6 - BLOWER 6-1

SECTION 7 - ELECTRIC CONTROLS 7-1

SECTION 8 - METAL DETECTOR 8-1

SECTION 9 - TROUBLESHOOTING 9-1

SECTION 10 - OPTIONAL EQUIPMENT 10-1

SECTION 11 - GENERAL INFORMATION 11-1

INDEX 11-8



PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

⚠ SAFETY

YOUR SAFETY IS OF UTMOST CONCERN TO SPERRY NEW HOLLAND. PLEASE FOLLOW THE SAFETY RULES LISTED, NOT ONLY FOR YOUR OWN GOOD, BUT FOR THE PEOPLE AROUND YOU.

1. DO NOT ALLOW CHILDREN OR BYSTANDERS AROUND THE MACHINE WHILE IT IS BEING ADJUSTED, SERVICED, OR OPERATED.
2. ALWAYS USE A SAFETY STAND IN CONJUNCTION WITH HYDRAULIC JACKS OR HOISTS. DO NOT RELY ON THE JACK OR HOIST TO HOLD THE LOAD COMPLETELY, AS THEY COULD FAIL.
3. ALWAYS WEAR SAFETY GLASSES WHEN USING A HAMMER, CHISEL, OR OTHER TOOLS THAT MAY CAUSE CHIPS TO FLY OFF THE WORK.
4. KEEP WORK ORGANIZED AND CLEAN. WIPE UP OIL SPILLS OF ANY KIND TO MINIMIZE THE POSSIBILITY OF A FALL. KEEP TOOLS AND PARTS OFF THE FLOOR TO FURTHER REDUCE THE POSSIBILITY OF SERIOUS INJURY.
5. BE SURE TO REINSTALL SAFETY DEVICES, SUCH AS GUARDS OR SHIELDS, AFTER ADJUSTING OR SERVICING THE HARVESTER.
6. AFTER SERVICING THE HARVESTER, BE SURE ALL TOOLS, PARTS, OR SERVICING EQUIPMENT ARE REMOVED FROM THE MACHINE.
7. WHEN USING A GAS TORCH, ALWAYS WEAR WELDING GOGGLES AND GLOVES. KEEP A FULLY CHARGED FIRE EXTINGUISHER WITHIN REACH. DO NOT HEAT OR WELD NEAR A FUEL TANK OR FUEL LINES, AND UTILIZE PROPER SHIELDING AROUND HYDRAULIC LINES.
8. ALWAYS USE THE SAFETY BLOCKING TO BLOCK HYDRAULIC CYLINDERS DURING SERVICE WORK. NEVER RELY ON THE MACHINE HYDRAULIC SYSTEM TO HOLD THE LOAD.
9. ELECTRIC STORAGE BATTERIES GIVE OFF HIGHLY FLAMMABLE GAS WHEN CHARGING, AND CONTINUE TO DO SO FOR SOME TIME AFTER RECEIVING A STEADY CHARGE. DO NOT, UNDER ANY CIRCUMSTANCES, ALLOW AN ELECTRIC SPARK OR FLAME NEAR THE BATTERY. ALWAYS DISCONNECT THE BATTERY FIRST BEFORE WORKING ON THE ELECTRIC SYSTEM.
10. HYDRAULIC FLUID ESCAPING UNDER PRESSURE CAN HAVE ENOUGH FORCE TO PENETRATE THE HUMAN SKIN. HYDRAULIC FLUID MAY INFECT A MINOR CUT OR OPENING IN THE SKIN. IF INJURED BY ESCAPING FLUID SEE A DOCTOR AT ONCE. DO NOT ATTEMPT TO REPAIR OR TIGHTEN HOSES THAT ARE UNDER PRESSURE.

    CYCLE ALL HYDRAULIC CONTROL VALVES TO RELIEVE ALL PRESSURE BEFORE DISCONNECTING THE LINES OR BEFORE PERFORMING OTHER WORK ON THE HYDRAULIC SYSTEM. MAKE SURE ALL CONNECTORS ARE TIGHT AND HOSES AND LINES ARE IN GOOD CONDITION BEFORE APPLYING PRESSURE TO THE SYSTEM. TO LOCATE A LEAK UNDER PRESSURE, USE A SMALL PIECE OF CARDBOARD. NEVER USE YOUR HANDS.
11. USE PULLERS TO REMOVE BEARINGS, BUSHINGS, CYLINDER SLEEVES, ETC. USE HAMMERS, PUNCHES, AND CHISELS ONLY WHEN ABSOLUTELY NECESSARY AND BE SURE TO WEAR SAFETY GLASSES.
12. BE CAREFUL WHEN USING COMPRESSED AIR. USE APPROVED AIR BLOW GUNS. DO NOT EXCEED 35 PSI (2.4 BAR), WEAR SAFETY GOGGLES, AND USE PROPER SHIELDING TO PROTECT EVERYONE IN THE WORK AREA.
13. DO NOT WEAR RINGS, WRIST WATCHES, OR LOOSE FITTING CLOTHING WHEN WORKING ON MACHINERY, AS THEY COULD CATCH ON MOVING PARTS AND CAUSE SERIOUS INJURY. WEAR STURDY WORK SHOES.

THE ABOVE IS ONLY A PARTIAL LIST OF SAFETY WORK RULES. IN ADDITION, ALWAYS REFER TO THE OPERATOR'S MANUAL FOR ADDITIONAL SAFE WORK RULES REGARDING THIS MACHINE.

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

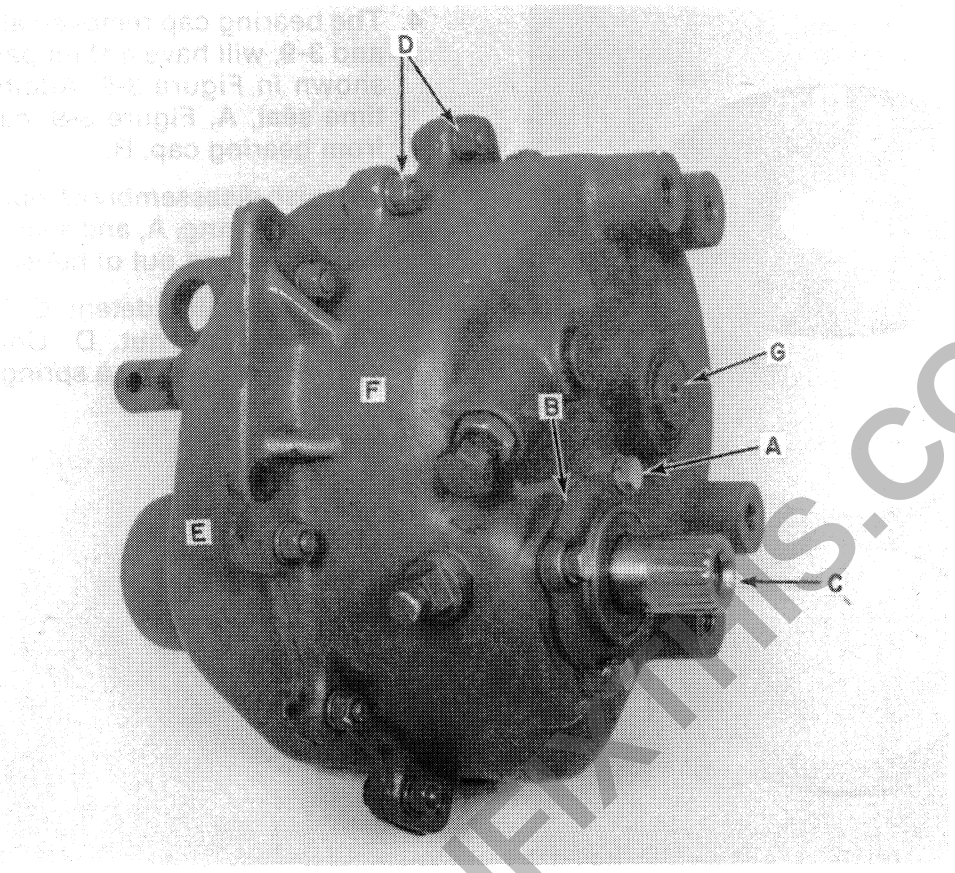


FIGURE 3-7

DISASSEMBLY

1. Remove drain plug, and drain all oil from the gearbox.
2. Remove four bearing cap bolts, A, Figure 3-7, from bearing cap, B, and slide bearing cap off input shaft, C.
3. Remove twelve housing half bolts, D, and separate the input half of housing, F, from the output half of housing, E, Figure 3-7. It is best to have the housing half, E, facing down. Lift housing half, F, off, leaving all internal components inside housing half, E, Figure 3-7, as shown in Figure 3-8.

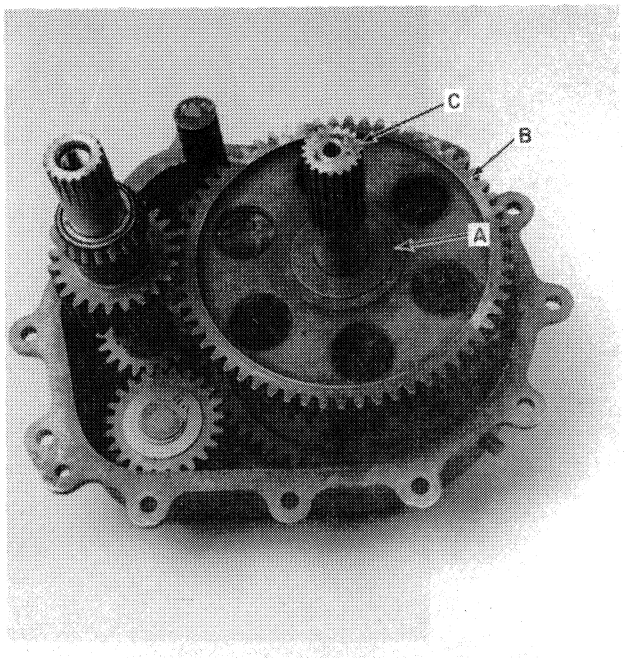
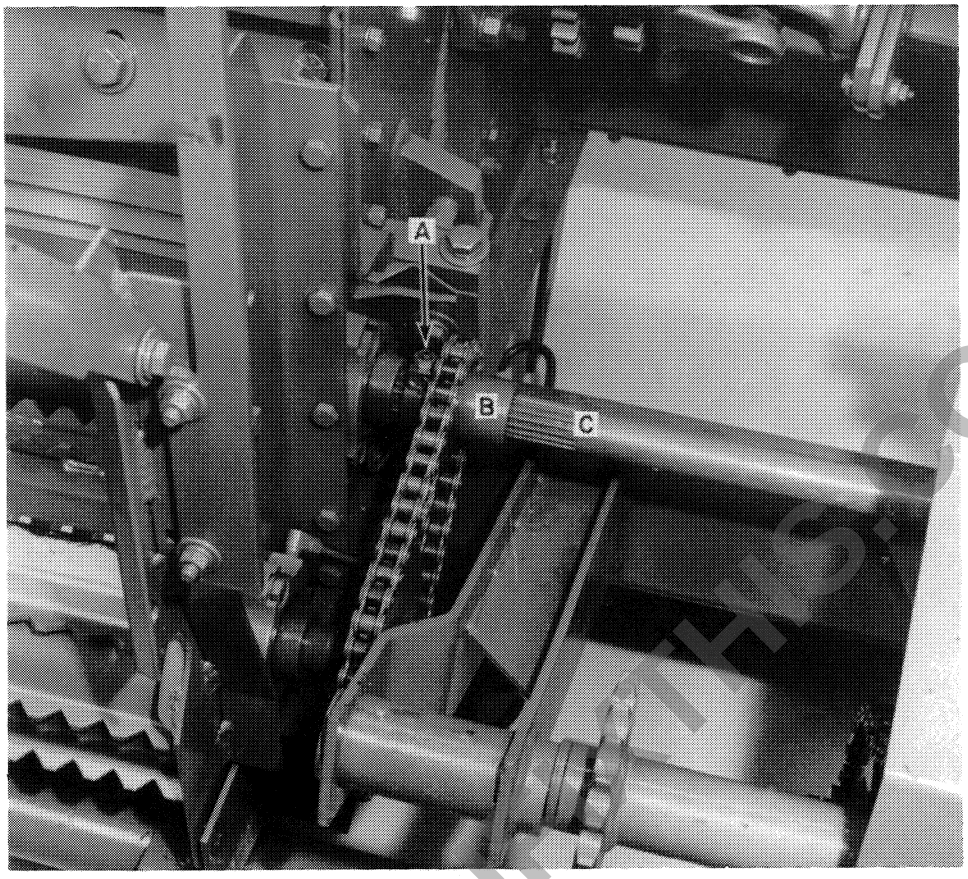


FIGURE 3-8

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



SHIELDS SHOWN OPEN FOR CLARITY.

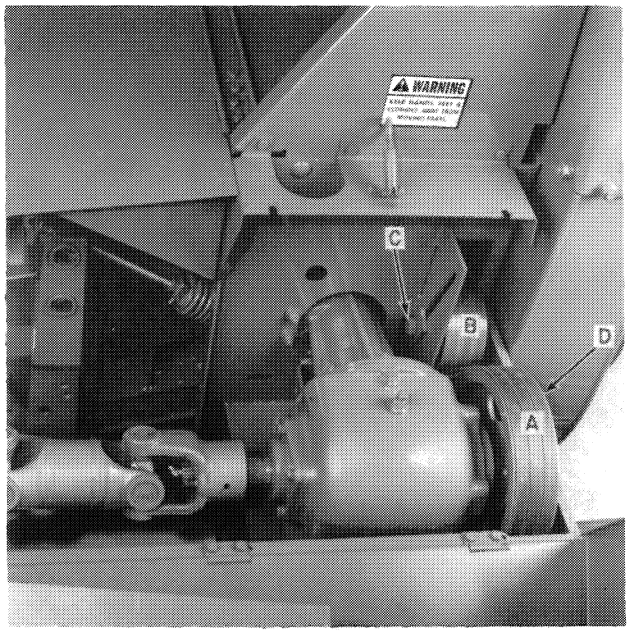
FIGURE 4-13

15. With upper front/rear and lower front feed-rolls removed, the smooth roll can be removed.

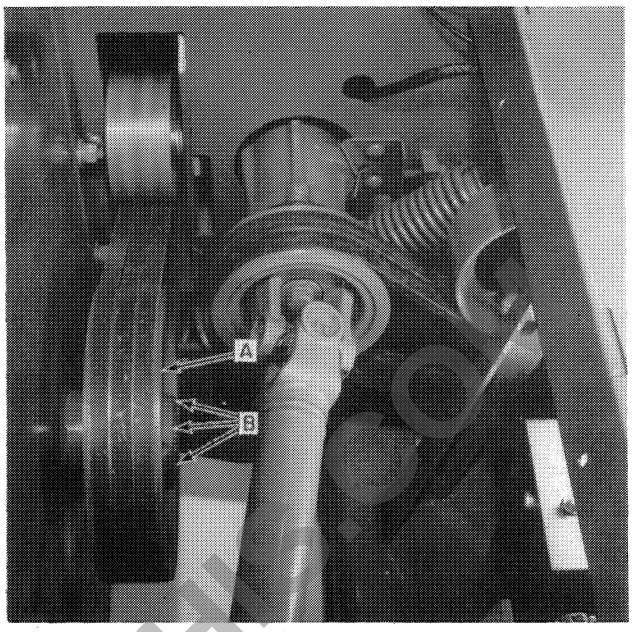
16. Loosen jam nut and set screw at A, on coupler, B, Figure 4-13. Slide this coupler to the left as shown in Figure 4-14, after removing any paint in splined area, C, Figure 4-13.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



SHIELDS SHOWN OPEN FOR CLARITY. **FIGURE 6-9**



SHIELDS SHOWN OPEN FOR CLARITY. **FIGURE 6-10**

6. Disassemble the blower drive by loosening drive belts, A, Figure 6-9, by loosening idler mount bolt, C, Figure 6-9, and raising idler, B, in its slotted mount.
7. Remove the drive belt from its driven sheave, A, Figure 6-10, and unbolt the sheave from its threaded hub by removing cap screws at B. Note that there may be a quantity of .060" (1.53 mm) shims between driven sheave, A, Figure 6-10, and its mounting hub, C, Figure 6-11, to provide for proper blower drive belt alignment.

PREVIEW ONLY

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.

Download full manual at youfixthis.com

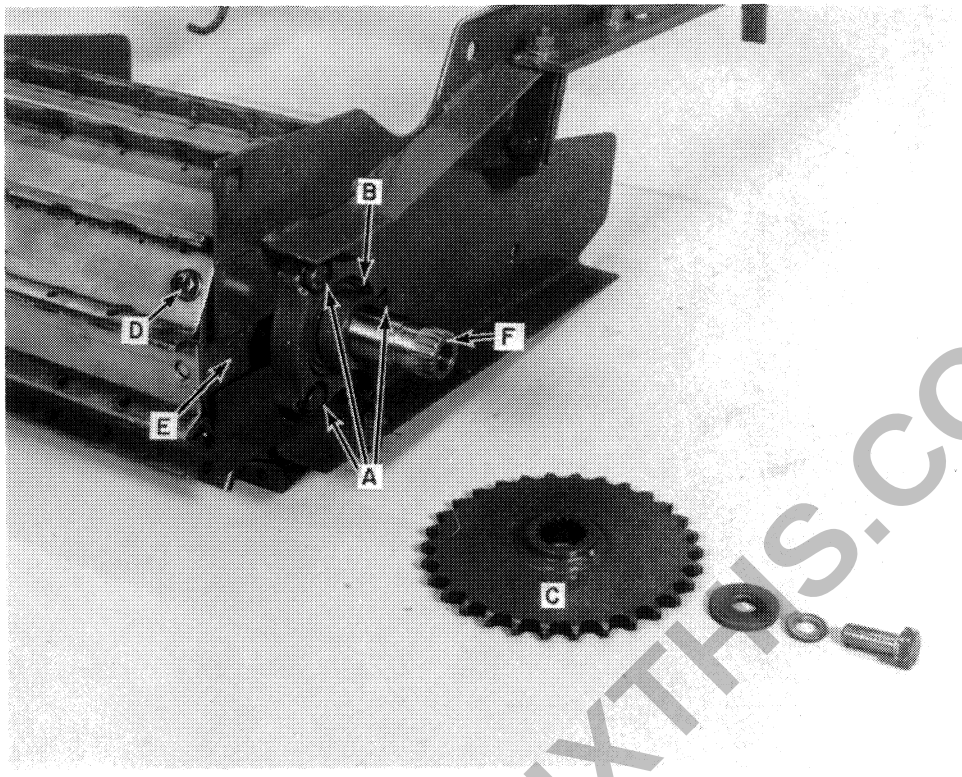


FIGURE 8-18

7. Install left-hand bearing housing and tighten the three cap screws at A, Figure 8-18. Do not install lock collar, B, Figure 8-18 at this time.
8. Install sprocket, C, Figure 8-18, and tighten cap screw.
9. Install side plates and sensor roll assembly on harvester, see "Feedrolls and Smooth Roll" section of this manual, beginning with page 4-13.
10. After completely installed, check to see that the run-out of shaft, C, Figure 8-18 is .010" or less. If excessive, the run-out can be reduced by loosening bolts, D, and cocking the end cap, E, Figure 8-18. Re-tighten bolts, D, using the cross pattern mentioned previously.
11. When addressing a sensor failure, new diodes should be installed in the control box.

LABOR GUIDE

The following labor amount is listed as a guide only. Working conditions, experience, etc., will vary the time the job actually takes.

Job Description	Man Hours
Remove and replace metal detector sensor (includuing removal of the sensor roll)	1½

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

PROBLEM	POSSIBLE CAUSE	CORRECTION
Sparking occurs and power cable circuit breaker opens when hooking power cable to tractor with control box mounted on tractor. Wire harness not connected.	Improper connection to tractor electrical system.	White wire in the power cable must be the ground, regardless of system polarity. To change system polarity on a positive ground system, do the following: A. Deflector Control System - The direction the rope is wound on the spool determines deflector travel direction. Unwind the rope from the spool and wind up in opposite direction so deflector is pulled down when control lever is pushed forward. B. Spout Control Assembly - The red and yellow wires in the motor connector block must be reversed. To remove the terminals in the block, press in the split leg part of the terminal with a small screwdriver and gently pull on the wire at the rear of the connector block. This will allow the terminal to pass the lip portion of the block. Do this to both wires. Before reinstalling the wires, be sure the split leg portion is about 1/32" (.8 mm) past the tab on the blade to insure the terminal locking in place in the block. Push the yellow wire into the top of the "T" and the red wire into the body of the "T" connector block. Make sure the wires are held securely in place.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 12 of 150 pages

The full manual includes:

- All 150 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Sperry New Holland 782 Service Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual