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Round Balers

SERVICE MANUAL

87012726

CASE IH AGRICULTURE

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638, 648, 658, 678, AND 688 ROUND BALER REPAIR MANUAL COMPLETE CONTENTS

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The following pages are the collation of the contents pages from each section and chapter of the 638, 648, 658, 678, and 688 Repair manual.

The sections used through out all New Holland product Repair manuals may not be used for each product. Each Repair manual will be made up of one or several books. Each book will be labeled as to which sections are in the overall Repair manual and which sections are in each book.

The sections listed above are the sections utilized for the 638, 648, 658, 678, and 688 Round Balers.

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Chapter 1 - General Information

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SECTION 31 - IMPLEMENT DRIVELINE

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SECTION 31 - IMPLEMENT DRIVELINE

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CHECKING MAIN DRIVE SLIP CLUTCH SETTING

Models 658, 678, 688 and Model 648 Silage Special With Slice

The main drive slip clutch is nonadjustable. The slip torque should measure:

540 RPM

1085 - 1627 N·m (800 - 1200 ft lbs)

1000 RPM

768 - 1153 N·m (567 - 850 ft lbs)

NOTE: *1000 RPM clutch can be differentiated from the 540 RPM clutch by a number stamped in the yoke base. A number 6 indicates 540 RPM. A number 1 indicates a 1,000 RPM clutch.*

NOTE: *See "Special Tools" later in this section for information on fabricating the main clutch checking tool.*

Burnish the clutch as described previously. After burnishing, allow the clutch to cool 5 to 10 minutes. With the drive chain locked, install main clutch checking tool, 1.

Attach a spring scale, 2, to the end of the handle.

Pull down on the spring scale until the clutch slips.

540 RPM units should be between 100 lbs. and 150 lbs. pull on the scale

1000 RPM units should be 71 lbs. - 106 lbs.

If the clutch does not fall within the range, perform the following:

Below Specification Range

Be sure the clutch is cool before rechecking.

a. Reinspect the metal plates between the friction disc for distortion or excessive wear.

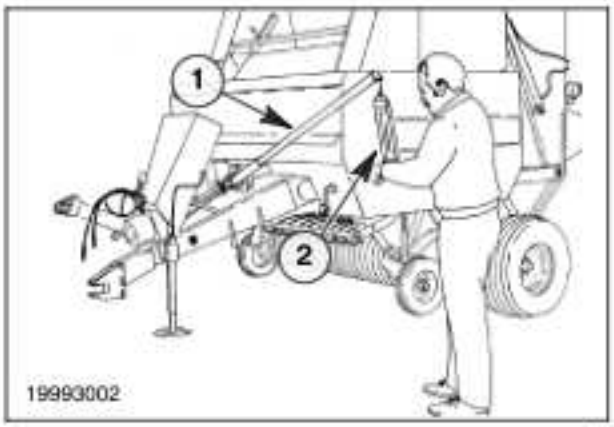
b. Replace Belleville washer.

c. Use a different spring scale to check accuracy.

Above Specification Range

Repeat burnishing procedure, let cool, and recheck.

When proper torque is obtained, remove the main clutch checking tool and the drive chain lock.



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TROUBLESHOOTING

The troubleshooting section of this manual is arranged in the following sequence:

General Information

Electrical diagrams

Error messages

Self-diagnostic tests

Actuator tests

Charts listing problems, possible causes and solutions

GENERAL INFORMATION

IMPORTANT: *Before performing any test or replacing any parts, check to be sure that all electrical connections are clean and free of rust or corrosion and that they are connected properly.*

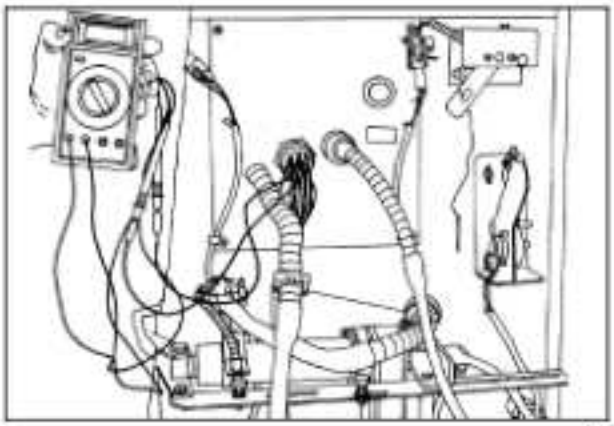
Use dielectric grease on the electrical connector pins. This grease lubricates the pins, reducing the possibility of corrosion, and provides good electrical continuity between mating parts. This grease will collect dust and dirt if left exposed, so protect all connectors when they are disconnected.

NOTE: *Before troubleshooting the electronic portion of the Bale Command Plus ™ system, be sure that the correct model and display measurement system are selected, as described in the following pages and, if possible, that the system is calibrated. Refer to the Setup/Diagnostic section in the Bale Command Plus ™ Operator's Manual for additional information.*

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If there are not 12 volts at the harness connector plug, use special tool FNH00550 leads, 1, to connect a test light or volt/ohmmeter between pins 12 and 14 for the twine actuator or between pins 10 and 16 for the net actuator at the wire harness connector at the controller. Refer to the wiring diagram. When a key is pressed, there should be 12 volts at the connector. If there are 12 volts at the controller, check the wiring between the controller and the actuator.

If there are not 12 volts at the controller (Pins 8 and 12), check the wiring between the controller and the operator's panel.

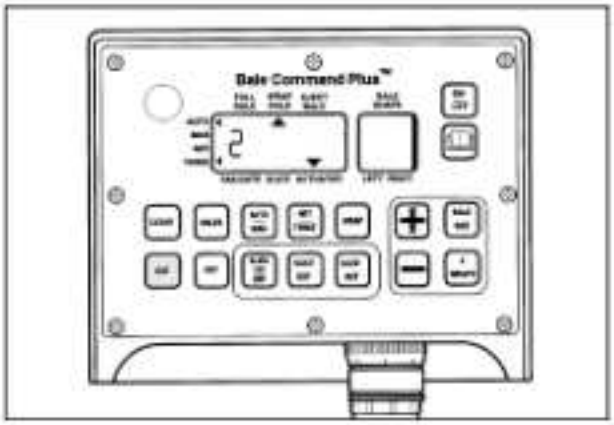


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If the wiring is good, check the keys on the operator's panel as follows:

Enter the setup/diagnostic mode by pressing and holding the OPEN BOOK key. The display should indicate "1" and the full bale size. Press and release the OPEN BOOK key repeatedly to advance to item 19. Press the OPEN BOOK key one more time to advance to item 20 (20 will not be displayed) to test the display and keys.

The display should cycle through all elements and then display 5 dashes. Press the EXTend key and the display should read "2". Press the RETract key and the display should read "4". If it does not, replace the operator's panel.



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If the wiring is good and the keys are good, replace the controller.

Press and hold the OPEN BOOK symbol for two seconds. The alarm will sound to indicate that the controller has been taken out of the setup/diagnostic mode and returned to normal operation.

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