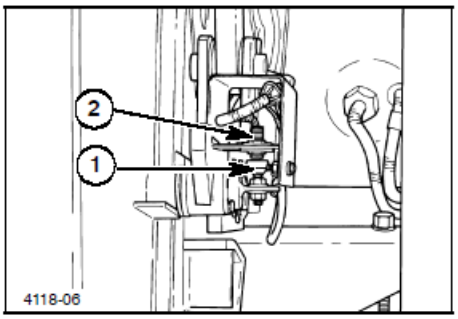
TAILGATE SENSOR

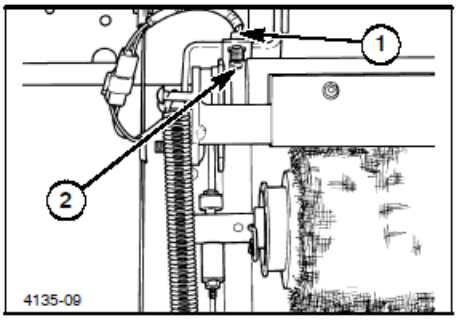
With the tailgate closed and latched, adjust magnet, 1, to a clearance of 3 mm (1/8") between the magnet and sensor, 2. The magnet should be centered under the sensor.



11

NET COUNTER ROLL SENSOR

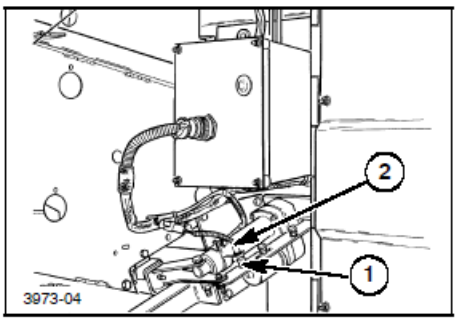
Adjust the clearance between the counter roll sensor, 1, and the magnet, 2, in the ring on the counter roll shaft to 1.5 mm (1/16"). The sensor should be centered over the magnet.



12

ACTUATOR SENSOR (TWINE TUBES)

Retract the actuator as shown. Adjust the home position magnet, 1, to a clearance of 5 mm (3/16") between the home position magnet and sensor, 2. Center the magnet under the sensor.

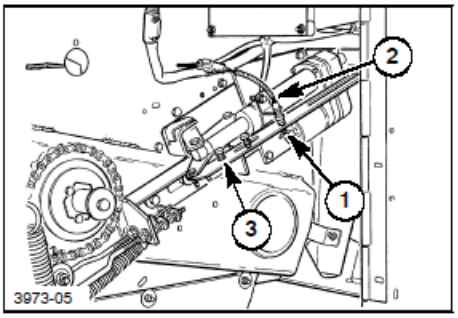


13

Extend the actuator until the actuator ratchets.

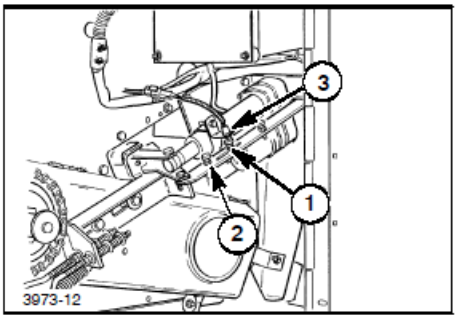
Adjust extended position magnet, 1, until the magnet and sensor, 2, have a clearance of 5 mm (3/16").

Adjust the extend magnet in the slot until it is centered under the sensor, 2. There should be 152 mm (6") from the center of the home position magnet, 3, to the center of the extended position magnet.



14

Adjust the precut magnet, 1, until it is 49 mm (1-15/16") from the center of the home position magnet, 2. Set the clearance between sensor, 3, and the precut magnet, 1, to 5 mm (3/16"). In the automatic mode, the twine tubes should stop at this point to wrap the end of the bale before moving to the home position to cut the twine. If the twine tubes are not stopping at the proper location for the end wraps, adjust the position of the precut magnet.



15

BALE SIZE SENSOR AND BRACKET

It may be necessary to check the adjustment of the bale size sensor bracket, 1, if a problem with the bale size occurs or if the sensor cannot be calibrated.

⚠ WARNING ⚠

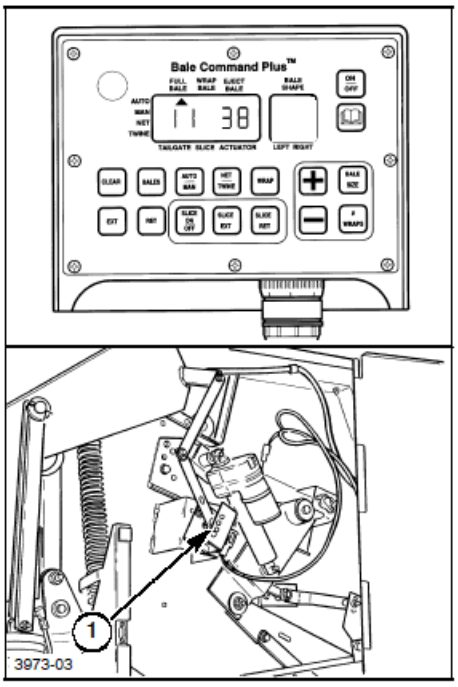
If the controller is in the automatic mode, the wrapper attachment will start moving when the sensor reaches the preset full bale size. The controller should be placed in the manual or setup/diagnostic mode before making any adjustment or troubleshooting the system.

To check the adjustment, place the controller in the SETUP/DIAGNOSTIC mode by pressing and holding the OPEN BOOK KEY. Select setup/diagnostic item 11 by pressing the OPEN BOOK key repeatedly. This will display a number between 33 and 245 on the operator's panel. When the bale chamber is empty, the number should be between 33 and 50.

If the number is not between 30 and 50, loosen the mounting bolts and rotate bracket, 1, until the lowest number is displayed.

Rotate bracket, 1, until the count increases 5 to 10 greater than the minimum and tighten the bolts. The bale size sensor is now adjusted properly.

To exit the setup/diagnostic mode, 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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NET ACTUATOR SENSOR

Setup/diagnostic item 12 is used to adjust the net actuator position sensor mount for the home position, to calibrate the sensor home position, and to check operation of the sensor, 1.

To adjust and calibrate the sensor home position:

1. Check to be sure the actuator is fully retracted. If it is not, use the RETract key to move it to the home position.
2. Enter the setup/diagnostic mode by pressing and holding the OPEN BOOK key. The display should indicate "1" and the "full bale" size.
3. Press and release the OPEN BOOK key repeatedly to advance to item 12.

   The left of the display should read "12," the NET indicator triangle should be ON and the ACTUATOR indicator triangle should be flashing. A number should appear in the right of the display. This number should be between 20 and 30 when the actuator is in the home position.
4. Loosen the sensor mounting bolts and rotate the sensor. The number on the display should change as the sensor is rotated. Rotate the bracket until the number is between 20 and 30 and then tighten the sensor mounting hardware.

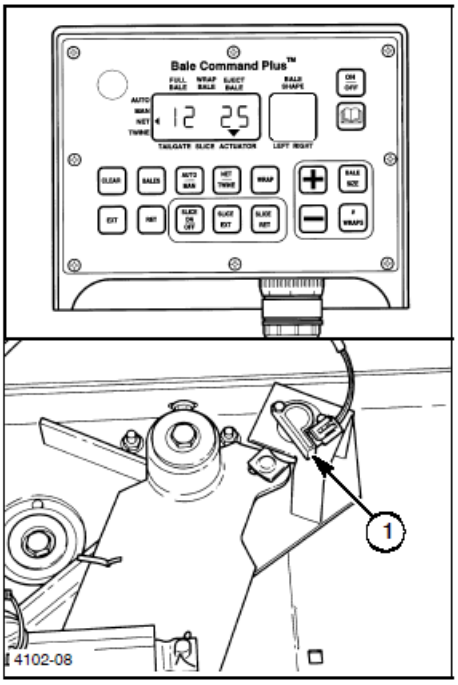
   The allowable range for the display is 11 to 245. If the numbers decrease at any time while moving toward the extended position or if the number goes up to 255, check the wiring harness for damage or a loose connection.
5. Calibrate the sensor by pressing and holding the minus (–) key for one second until the alarm activates. The actuator indicator will be on steady during the calibration.

NOTE: *The controller will not calibrate if the sensor home position reading is not between 11 and 80. An Er error message will be displayed, and the alarm will sound three short beeps.*

   The precut position is set automatically when calibrating the "home" position.
6. To advance to setup item 13, press the OPEN BOOK symbol.

   OR

   To exit the setup/diagnostic mode, 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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BALE SHAPE SENSORS

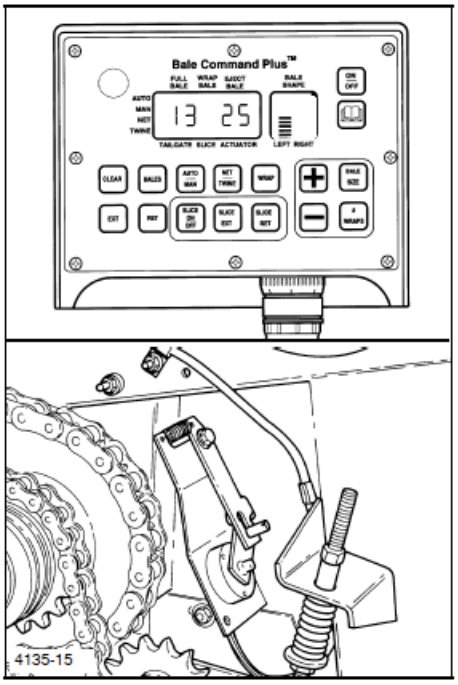
The bale shape sensor linkage must operate freely. Remove any buildup of material from the linkage. If the linkage does not operate freely, the sensor will be sending inaccurate signals to the controller.

To adjust and calibrate the sensor "empty" position:

1. Check to be sure the sensor arm is at the "empty" position. If it is not, move it to the empty position. If the linkage is binding, it should be freed before proceeding.
2. Enter the setup/diagnostic mode by pressing and holding the OPEN BOOK key. The display should indicate "1" and the "full bale" size.
3. Press and release the OPEN BOOK key repeatedly to advance to item 13 for the left or item 14 for the right.

   The left of the display should read "13" or "14", the bottom segment of the left (13) or right (14) bar graph should be ON and flashing. A number should appear in the right of the display. This number should be between 1 and 245. The allowable range for the display is 11 to 245. If the number goes to 255, check the wiring harness for damage or a loose connection.
4. To adjust the sensor, loosen the sensor mounting bolts and rotate the sensor. The number on the display should change as the sensor is rotated. Rotate the sensor until the number is between 20 and 30 and tighten the mounting bolts.
5. Calibrate the "empty" position by pressing and holding the minus (–) key for one second until the alarm activates. The lower five segments of the selected bar graph will turn on steady.

NOTE: *The controller will not calibrate if the sensor home position reading is not between 11 and 80. An Er error message will be displayed, and the alarm will sound three short beeps.*



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6. Calibrate the full position by moving the sensor arm to the "full" position and installing a 1/8" cotter pin, 1, in the hole in the arm. Allow the cotter pin to rest against the outside of the bale chamber.
7. Press and hold the plus (+) key for one second until the alarm activates. All segments of the appropriate bar graph will turn on solid.

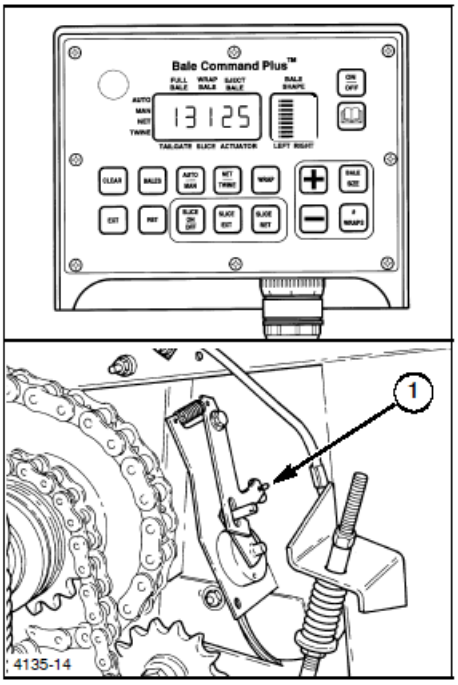
NOTE: *The controller will not calibrate if the sensor "full" position reading is not between 100 and 245. An Er error message will be displayed at the right, and the alarm will sound three short beeps.*

8. To clear an incorrect calibration, press and hold the CLEAR key for one second until the alarm activates. The bottom segment of the left bar graph will flash during the recalibration.

   Repeat the calibration procedure.
9. To advance to the next setup item - Press the OPEN BOOK symbol.

   OR

   To exit the setup/diagnostic mode, 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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BALE SLICE ACTUATOR POSITION SENSOR

Setup/diagnostic item 15 is used to adjust and calibrate the Bale Slice actuator position sensor.

To adjust and calibrate the sensor:

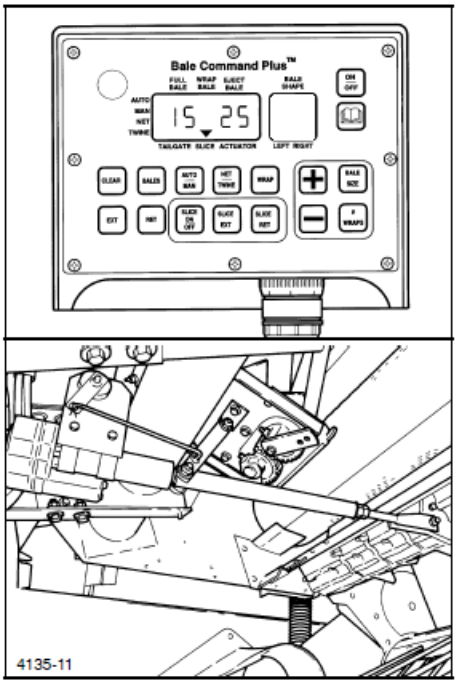
1. Check to be sure the actuator is fully retracted. If it is not, use the SLICE RETract key to move it to the home position.
2. Enter the setup/diagnostic mode by pressing and holding the OPEN BOOK key. The display should indicate "1" and the "full bale" size.
3. Press and release the OPEN BOOK key repeatedly to advance to item 15.

   The left of the display should read "15", the SLICE indicator triangle should be flashing. A number should appear in the right of the display. This number should be between 20 and 30 when the actuator is in the home position.

   The allowable range for the display is 11 to 245. If the numbers decrease at any time while moving toward the slice position or if the number goes to 255, check the wiring harness for damage or a loose connection.
4. Adjust the sensor home position by loosening the sensor mounting bolts and rotating the sensor. The number on the display should change as the sensor is rotated. Rotate the sensor until the number is between 20 and 30 and then tighten the sensor mounting hardware.

   If the sensor cannot be adjusted so the reading is between 20 and 30, it may be necessary to loosen the two clamps attaching the sensor mount and reposition the mount.
5. Calibrate the sensor home position by pressing and holding the minus (-) key for one second until the alarm activates. The SLICE indicator will be on steady during the calibration.

NOTE: *The controller will not calibrate if the sensor home position reading is not between 11 and 80. An Er error message will be displayed, and the alarm will sound three short beeps.*



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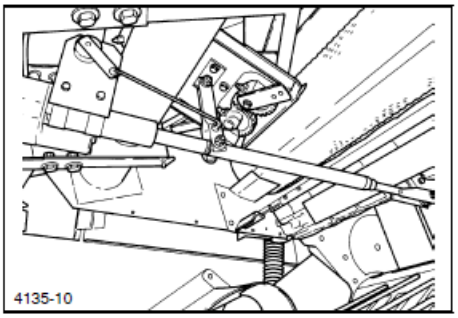
To calibrate the slicing position:

1. Move the actuator to extend the knives to the desired position using the SLICE EXTend key.
2. Press and hold the plus (+) key for one second until the alarm activates. The actuator indicator will be on steady during the calibration.

NOTE: *The controller will not calibrate if the sensor precut position reading is not BETWEEN 100 AND 240. An Er error message will be displayed at the right, and the alarm will sound three short beeps.*

3. To clear an incorrect calibration, press and hold the CLEAR key for one second until the alarm activates. The actuator indicator will be on steady during the recalibration. Repeat the calibration procedure.
4. Retract the knives to the home position using the SLICE RETract key.
5. Exit the setup/diagnostic mode by pressing and holding 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.

NOTE: *If the sensor is replaced be sure to adjust to the "home" position and then calibrate to the "home" and "slice" positions.*



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