Group ASU—ASU
Group ATC—ATC
Group CAB—CAB
Group CCU—CCU
Group FBC—FBC
Group HCU—HCU
Group ICU—ICU
Group PTF—PTF
Group PTI—PTI
Group PTQ—PTQ
Group SCO—SCO
Group SCU—SCU
Group SFA—SFA
Group SSU—SSU
Group SUP—SUP
Group TEC—TEC

Section 251—AutoPowr / IVT TRANSMISSION
Group 05—General Information
Group 10—Operational Checks
Group 15—Test And Procedure References
Group 20—AutoPowr / IVT Theory of Operation
Group 25—AutoPowr / IVT™ Transmission Schematics and Diagrams

Section 255—PowrQuad-Plus and AutoQuad-Plus Transmission
Group 05—General Information
Group 10—Operational Checks
Group 15—Tests and Adjustments
Group 20—PowrQuad-Plus and AutoQuad-Plus Theory of Operation
Group 25—Schematics and Diagrams

Section 256—DRIVE SYSTEMS
Group 10—Preliminary And Operational Checks
Group 15—Test References
Group 20—Theory Of Operation
Group 25—Schematics and Diagrams

Section 260—STEERING AND BRAKES
Group 05—Preliminary Checks
Group 10—Preliminary And Operational Checks
Group 15—Test And Adjustments
Group 20—Theory Of Operation
Group 25—Schematics and Diagrams

Section 270—HYDRAULICS
Group 05—General References
Group 10—Operational and Preliminary Checks
Group 15—Tests and Adjustments
Group 20—Theory Of Operation
Group 25—Schematics and Diagrams

Section 290—OPERATOR STATION
Group 05—Preliminary Checks
Group 10—Operational Checks
Group 15—Tests and Adjustments
Group 20—Theory Of Operation
Group 25—Schematics and Diagrams

Section 299—SERVICE TOOLS
Group 05—Dealer Fabricated Tools
Group 10—Service Tools and Kits

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5 **Electrical Circuit Check**	Perform **AutoPowr / IVT SCV II Control Lever Sensor Circuit Test** (Reference 245-ACU-012).	**OK:** GO TO 6. **NOT OK:** Problem identified: Repair as necessary. GO TO 2.

RE35951,000005C -19-30MAR03-7/8

6 **Additional Checks and Intermittent Failure Evaluation**	Perform **Troubleshooting Unresolved Problems** (Reference 210-15-101).	**OK:** GO TO 2.
	If applicable, Perform **Armrest Control Unit "Beep" Mode Test** (Reference 245-ACU-002).	**NOT OK:** Problem identified. Repair as needed. GO TO 2. **NOT OK:** Problem not identified. Replace control unit. Perform setups and calibrations as required.

RE35951,000005C -19-30MAR03-8/8

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CAB 524029.04 — Clutch Pedal Sensor Circuit Voltage Low

Code Caused By: Clutch Pedal Sensor circuit voltage below 0.3v.

OURX892,0000559 -19-17JUL02-1/8

Code Diagnosis

Alarm Level: *Information*
Displayed Text: *Operator Controls*
Control Unit Response: *Commands Park Position if Code is Generated During Clutch Cycle (Park Position Recoverable)*

Additional References:
Functional Schematics Listing (See Reference 240-25-001).
Clutch Pedal Position Sensor Theory of Operation (See Reference 245-CAB-213).
AutoPowr / IVT Clutch Pedal Position Sensor Diagnostic Wiring Diagram (See Reference 245-CAB-313).
PowrQuad-Plus / AutoQuad-Plus Clutch Pedal Position Sensor Diagnostic Wiring Diagram (See Reference 245-CAB-353).
General References List (See Reference 210-10-002).

The Following Tools May Be Required for Proper Diagnosis:
JT05791 —Digital multimeter
See Section 299, Group 10 for tool listings.

OURX892,0000559 -19-17JUL02-2/8

1 Preliminary Checks	No preliminary checks required.	**OK:** GO TO 2.

OURX892,0000559 -19-17JUL02-3/8

2 Verify Code	Recall, Record, and Clear Codes. If using SERVICE ADVISOR™: This procedure can be performed by making a connection to the vehicle and using the “Diagnostics” tab to view and clear codes. If not using SERVICE ADVISOR™ or if unable to make a connection: See Recall, Record, and Clear Codes (Reference 245-05-001) for the on-board display procedure. Recall codes again and check for return of this code.	 **OK:** Code does not return. GO TO 3. **NOT OK:** Code returns. GO TO 4.

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OURX892,0000559 -19-17JUL02-4/8

3 Code Operational Checks	1. Start vehicle. 2. Engage and disengage clutch pedal several times. 3. Check for code return. *NOTE: If problem is intermittent, repeat check until code returns. If unable to recreate code but operator reports continued problems, see Step 6 (Additional Checks and Intermittent Failure Evaluation).*	 **OK:** Code does not return. Diagnosis complete. **NOT OK:** Code returns. GO TO 4.

Continued on next page

OURX892,0000559 -19-17JUL02-5/8

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3 Code Operational Checks	1. Start vehicle. 2. Operate for 5 - 15 under normal conditions, applying brakes frequently. 3. Check for code return. *NOTE: If problem is intermittent, repeat check until code returns. If unable to recreate code but operator reports continued problems, see Step 6 (Additional Checks and Intermittent Failure Evaluation).*	**OK:** Code does not return. Diagnosis complete. **NOT OK:** Code returns. GO TO 4.

EM44581,000029D -19-02JUL03-5/8

4 System Checks	Perform **Front Brake Pressure Sensor Signal Test** (Reference 260-15-006).	**OK:** GO TO 5. **NOT OK:** Repair as needed. GO TO 2. **NOT OK:** Problem not identified but brake pressure incorrect. See Front Brake System Diagnosis (Reference 213-60C).

EM44581,000029D -19-02JUL03-6/8

5 Electrical Circuit Checks	Perform **FBC Rear Brake Pressure Sensor Circuit Test** (Reference 245-FBC-005). If problem is not identified: For AutoPowr / IVT tractors: Perform **AutoPowr / IVT Brake Pedal Sensor Module Circuit Test** (Reference 245-CAB-016). OR For PowrQuad-Plus / AutoQuad-Plus tractors: Perform **PowrQuad-Plus / AutoQuad-Plus Brake Switch Assembly Circuit Test** (Reference 245-CAB-017).	**OK:** GO TO 6. **NOT OK:** Repair as needed. GO TO 2.

EM44581,000029D -19-02JUL03-7/8

6 Additional Checks and Intermittent Failure Evaluation	Perform **Troubleshooting Unresolved Problems** (Reference 210-15-101). Perform **FBC Control Unit "Beep" Mode Test** (Reference 245-FBC-002). *NOTE: If diagnostic results call for replacing a control unit, See* **Control Unit Locations and Identification** *(Reference 245-05-100.)*	**OK:** GO TO 2. **NOT OK:** Problem identified. Repair as needed. GO TO 2. **NOT OK:** Problem not identified. Replace control unit. Perform setups and calibrations as required.

EM44581,000029D -19-02JUL03-8/8

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PTI 000127.02 — Transmission Pump Pressure/Park and Enable Pressure Sensors Conflict

Enable Pressure Sensor circuits during transmission operation for longer than 15 sec.

Code Caused By: Transmission Pump Pressure Sensor circuit is reading low compared to Park and

DP51502,00000B6 -19-15JUN06-1/8

Code Diagnosis

Alarm Level: *Information*
Displayed Text: *Transmission system*
Control Unit Response: *Limited Function*

Additional References:
Functional Schematics Listing (See Reference 240-25-001).
Transmission Pump Pressure Sensor Theory Of Operation (See Reference 245-PTI-212).
Transmission Pump Pressure Sensor Diagnostic Wiring Diagram (See Reference 245-PTI-312).
General References List (See Reference 210-10-002).

The Following Tools May Be Required for Proper Diagnosis:
JT05791—Digital Multimeter
JT05497—10 ft. Test Hose
JT03437—90° DR Elbow
JT05474—Gauge (21 bar) (300 psi)
JDG 1505—Test Block
See Section 299, Group 10 for tool listings.

DP51502,00000B6 -19-15JUN06-2/8

1 Preliminary Checks	Check to make sure Transmission Pump Pressure Sensor (B510) connector is securely plugged in.	**OK:** GO TO 2.

DP51502,00000B6 -19-15JUN06-3/8

2 Verify Code	Recall, record and clear codes. If using SERVICE ADVISOR™: This procedure can be performed by making a connection to the vehicle and using the “Diagnostics” tab to view and clear codes. If not using SERVICE ADVISOR™ or if unable to make a connection: See Recall, Record, and Clear Codes (Reference 245-05-001) for the on-board display procedure. Recall codes again and check for return of this code.	**OK:** Code does not return. GO TO 3. **NOT OK:** Code returns. GO TO 4.

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SCO 001638.02 — SCO Calibration Fault/Hydraulic Oil Temperature Low

Code Caused By: SCO was calibrated with < 45° C hydraulic oil.

DP51502,00001BF -19-02JUN03-1/8

Code Diagnosis

Alarm Level: *Information*
Displayed Text: *Hydraulic System*
Control Unit Response: *Limited Function*

Additional References:
Functional Schematics Listing (See Reference 240-25-001).
SCO Control Unit Theory of Operation (See Reference 245-SCO-201).
AutoPowr / IVT SCO Fuse and Circuit Diagnostic Wiring Diagram (See Reference 245-SCO-301).
PowrQuad-Plus / AutoQuad-Plus SCO Fuse and Circuit Diagnostic Wiring Diagram (See Reference 245-SCO-302).
General References List (See Reference 210-10-002).

The Following Tools May Be Required for Proper Diagnosis:
JT05791 —Digital Multimeter
See Section 299, Group 10 for tool listings.

DP51502,00001BF -19-02JUN03-2/8

1 Preliminary Checks	No preliminary checks required.	**OK:** GO TO 2.

DP51502,00001BF -19-02JUN03-3/8

2 Verify Code	Recall, record and clear codes. If using SERVICE ADVISOR™: This procedure can be performed by making a connection to the vehicle and using the “Diagnostics” tab to view and clear codes. If not using SERVICE ADVISOR™ or if unable to make a connection: See Recall, Record, and Clear Codes (Reference 245-05-001) for the on-board display procedure. Recall codes again and check for return of this code.	**OK:** Code does not return. GO TO 3. **NOT OK:** Code returns. GO TO 4.

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DP51502,00001BF -19-02JUN03-4/8

3 Code Operational Checks	1. Start vehicle. 2. Access PTI Address 026 and verify oil temperature is above 45°C. If necessary perform **Heat Hydraulic Oil** (Reference 270-05-002). 3. Perform **SCV V-VI Control Unit Calibration** (Reference 245-SCO-001). 4. Check for code return. *NOTE: If problem is intermittent, repeat check until code returns. If unable to recreate code but operator reports continued problems, see Step 6 (Additional Checks and Intermittent Failure Evaluation).*	**OK:** Code does not return. Diagnosis complete. **NOT OK:** Code returns. GO TO 4.

Continued on next page

DP51502,00001BF -19-02JUN03-5/8

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SCU 523935.06 — SCV I Direction Control Solenoid Circuit Current High

Code Caused By: SCV I Directional Valve solenoid current high.

DP51502,0000141 -19-02JUL03-1/8

Code Diagnosis

Alarm Level: *Information*
Displayed Text: *Hydraulic System*
Control Unit Response: *Limited Function*

Additional References:
Functional Schematics Listing (See Reference 240-25-001).
SCV I-IV Directional Solenoid Theory of Operation (See Reference 245-SCU-202).
SCV I Directional Solenoid Circuit Diagnostic Wiring Diagram (See Reference 245-SCU-304).
General References List (See Reference 210-10-002).

The Following Tools May Be Required for Proper Diagnosis:
JT05791—Digital Multimeter
DFRW126—Modified Tap Out Harness
JDG774—Jumper Harness
See Section 299, Group 10 for tool listings.

DP51502,0000141 -19-02JUL03-2/8

1 Preliminary Check	No preliminary checks required.	**OK:** GO TO 2.

DP51502,0000141 -19-02JUL03-3/8

2 Verify Code	Recall, record and clear codes. If using SERVICE ADVISOR™: This procedure can be performed by making a connection to the vehicle and using the ”Diagnostics” tab to view and clear codes. If not using SERVICE ADVISOR™ or if unable to make a connection: See Recall, Record, and Clear Codes (Reference 245-05-001) for the on-board display procedure. Recall codes again and check for return of this code.	**OK:** Code does not return. GO TO 3. **NOT OK:** Code returns. GO TO 4.

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3 Code Operational Checks	1. Start vehicle. 2. Cycle SCV I Lever through all positions. 3. Check for code return. *NOTE: If problem is intermittent, repeat check until code returns. If unable to recreate code but operator reports continued problems, see Step 6 (Additional Checks and Intermittent Failure Evaluation).*	**OK:** Code does not return. Diagnosis complete. **NOT OK:** Code returns. GO TO 4.

DP51502,0000141 -19-02JUL03-5/8

4 System Checks	No system checks required.	**OK:** GO TO 5.

Continued on next page

DP51502,0000141 -19-02JUL03-6/8

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SSU 523824.06 — Steering Wheel Position Sensor 2 Circuit Current High

Code Caused By: Steering wheel position sensor 2 channel current out of range high (above 20 milliamps).

DP51502,00002B9 -19-25MAY05-1/8

Code Diagnosis

Alarm Level: *Service Alert*
Displayed Text: *Steering System*
Control Unit Response: *AutoTrac Disabled*

Additional References:
Functional Schematics Listing (Reference 240-25-001).
Steering Wheel Position Sensor 2 Theory Of Operation (Reference 245-SSU-205).
Steering Wheel Position Sensor 2 Diagnostic Wiring Diagram (Reference 245-SSU-305).
General References List (Reference 210-10-002).

The Following Tools May Be Required for Proper Diagnosis:
JT05791 —Digital Multimeter
See Section 299, Group 10 for tool listings.

DP51502,00002B9 -19-25MAY05-2/8

1 Preliminary Checks	1. Place Key in RUN position (engine OFF).	
	2. Access SSU Address 034, Steering Wheel Position Sensor 2 Current.	**OK:** GO TO 2.
	3. Verify that the display at Address 034 meets the following specification: **SSU Address 034—Specification** Steering Wheel Position Sensor 2 Current—Milliamps..... 4 mA = Low Range 20 mA = High Range	**NOT OK:** Perform Steering Wheel Position Sensor 2 Circuit Test (Reference 245-SSU-005).

DP51502,00002B9 -19-25MAY05-3/8

2 Verify Code	Recall, record and clear codes. If using SERVICE ADVISOR™: This procedure can be performed by making a connection to the vehicle and using the ”Diagnostics” tab to view and clear codes. If not using SERVICE ADVISOR™ or if unable to make a connection: See Recall, Record, and Clear Codes (Reference 245-05-001) for the on-board display procedure. Recall codes again and check for return of this code.	**OK:** Code does not return. GO TO 3. **NOT OK:** Code returns. GO TO 4.

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DP51502,00002B9 -19-25MAY05-4/8

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PTI System - Hydro Control Diagnostics

Information for diagnosing Hydro Control electronic problems

NOTE: Service code diagnosis may resolve observable symptoms and must be performed first. Consult with customer for resolution of unrelated codes.

Recommended Diagnostic Procedures

1. Hydro Control Test (Reference 245-PTI-102).

Additional References

- PTI Control Unit Calibration (Reference 245-PTI-001).
- PTI Control Unit Theory of Operation (Reference 245-PTI-201).
- PTI System Relay, Fuse and Circuit Diagnostic Wiring Diagram (Reference 245-PTI-301).
- Control Unit Locations and Identification (Reference 245-05-100).
- AutoPowr/IVT Preliminary Checks (Reference 251-10-001).
- AutoPowr / IVT Transmission Operational Checks (Reference 251-10-002).
- AutoPowr/IVT™ System Diagnosis (Reference 213-51).
- AutoPowr / IVT Transmission Theory of Operation Listing (Reference 251-20-101).
- Transmission Schematics Diagrams And Component Location Listing (Reference 251-25-001).
- General References List (Reference 210-10-002).
- Fuse Load Center Diagram Listing (Reference 240-05-001).
- Ground Point Locations (Reference 240-05-005).
- Functional Schematics Listing (Reference 240-25-001).
- Recall, Record, and Clear Codes (Reference 245-05-001).

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Rear Hitch System - Mechanical/Hydraulic Diagnostics

Information for diagnosing Rear Hitch Mechanical/Hydraulic problems

NOTE: Service code diagnosis may resolve observable symptoms and must be performed first. Consult with customer for resolution of unrelated codes.

Recommended Diagnostic Procedures

1. Hydraulic System Preliminary Checks (Reference 270-10-001).
2. Hydraulic System Operational Checks (Reference 270-10-002).
3. Rear Hitch Operational Checks (Reference 270-10-003).
4. Rear Hitch System Diagnosis (Reference 213-70C).

Additional References

- Install Test Equipment (Reference 270-05-001).
- Heating Transmission / Hydraulic Oil (Reference 270-05-002).
- System Response to A Missing Shuttle Check Valve (Reference 270-15-009).
- Hydraulic System Theory of Operation (Reference 270-20-100).
- Rear Hitch Theory of Operation (Reference 270-20-103).
- AutoPowr / IVT Hydraulic System Schematic (Reference 270-25-100).
- PowrQuad-Plus / AutoQuad-Plus Hydraulic System Schematic (Reference 270-25-101).
- General References List (Reference 210-10-002).
- Fuse Load Center Diagram Listing (Reference 240-05-001).
- Ground Point Locations (Reference 240-05-005).
- Functional Schematics Listing (Reference 240-25-001).
- Recall, Record, and Clear Codes (Reference 245-05-001).
- Control Unit Locations and Identification (Reference 245-05-100).

DP51502,0000BB1 -19-28JUN04-1/1

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2 Operational Check

1. Start vehicle.
2. Place the Field Light Switch in the FIELD 1 position.
3. Verify that the Front Right Outer Flood Light is operational in the Low Beam mode.
4. Place the High / Low Beam Switch in the High Beam position.
5. Verify that the Front Right Outer Flood Light is operational in the High Beam mode.
6. Place the Field Light Switch in the FIELD 2 position.
7. Verify that the Front Right Outer Flood Light is operational in the High Beam mode.
8. Place the High / Low Beam Switch in the Low Beam position.
9. Verify that the Front Right Outer Flood Light is operational in the Low Beam mode.
10. Place the Field Light Switch in the Delayed Egress position.
11. Check to verify that the Front Outer Flood Light(s) are operational.

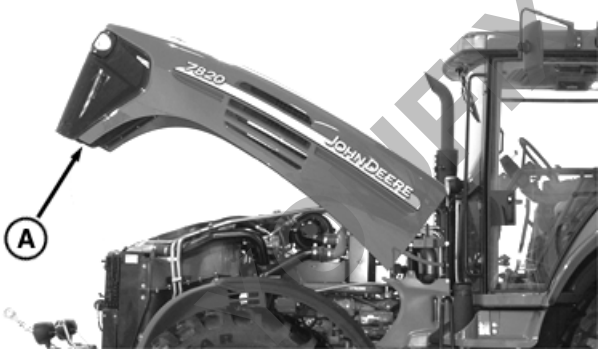
OK: Return to diagnosis in progress.

NOT OK: GO TO 3.

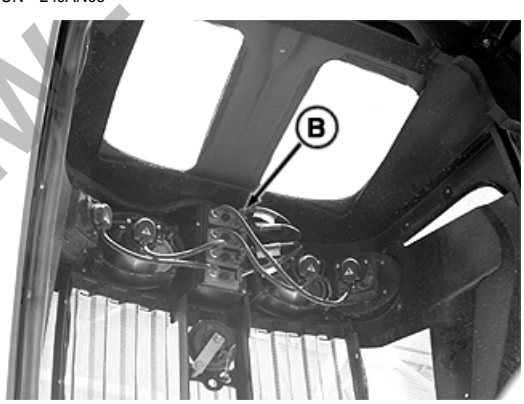
NM48376,0000DC4 -19-12JUL07-4/9

3 Access Component To Be Tested

Open vehicle hood (A) to access and disconnect the Right Outer Flood Light Ballast Supply Voltage Connector (B).



RXA0064947 —UN—24JAN03



RXA0070488 —UN—09SEP03

A—Vehicle Hood
B—Right Outer Flood Light Ballast Supply Voltage Connector

OK: GO TO 4.

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NM48376,0000DC4 -19-12JUL07-5/9

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A110— ACTIVE SEAT™ Control Unit
A940— ACTIVE SEAT™ Compressor Assembly
B940— Feedback Accelerometer Sensor
B941— Seat Position Sensor
F16— Operator Presence Switch
F45— Seat Height / Firmness Adjustment Switches
K940— ACTIVE SEAT™ Compressor Relay
S940— ACTIVE SEAT™ Operator Presence Switch
S941— ACTIVE SEAT™ Height Control Switch
S942— ACTIVE SEAT™ Firmness Control Switch
Y941— ACTIVE SEAT™ Raise / Lower Solenoid
Y942— Seat Pressure Solenoid

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F47— Fuse F47
F49— Fuse F49
W500— NA PQ+ Cab Harness
W501— R2 AutoQuad Cab Harness
W502— NA AutoPowr / IVT Cab Harness
W503— R2 AutoPowr / IVT Cab Harness
W900— NA Right Hand Console Harness
W901— R2 Right Hand Console Harness
X248— Auxiliary Power Strip
X901— Driver Information 2 Interconnect

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Reference 245-05-004l, ICU Address List

TLA	Address	Description	IVT	PowrQuad-Plus / AutoQuad-Plus
ICU	000	Initial Address	X	X
ICU	001	Recall Trouble Codes	X	X
ICU	002	ICU System Beep Mode	X	X
ICU	005	CAN Low Voltage	X	X
ICU	006	CAN High Voltage	X	X
ICU	007	ICU System Voltage	X	X
ICU	010	Keymap Options 1	X	X
ICU	011	Keymap Options 2	X	X
ICU	021	Switch Backlight Brightness Setting	X	X
ICU	022	Display Backlight Brightness Setting	X	X
ICU	023	Display Contrast Setting	X	X
ICU	024	Day Backlight Brightness Setting	X	X
ICU	025	Night Backlight Brightness Setting	X	X
ICU	026	Serial Port to Cornerpost Display Test	X	X
ICU	070	DTC Hours Purge Setting	X	X
ICU	071	4WD Decelerator Switch Setting	X	X
ICU	072	Front PTO Engagement Setting	X	X
ICU	073	Rear PTO Engagement Setting	X	X
ICU	076	Forward Start Up Gear Setting	X	X
ICU	077	Reverse Start Up Gear Setting	X	X
ICU	078	IVT Options Setting Enable	X	X
ICU	081	Fuel/Hour Setting	X	X
ICU	082	Time to Empty Setting	X	X
ICU	083	Auto Shift Gear Setting	X	X
ICU	084	IVT Commanded Speed Setting	X	X
ICU	085	Productivity Setting	X	X
ICU	086	Fuel Efficiency Setting	X	X
ICU	087	Rear Hitch Position Setting	X	X
ICU	088	Auto Shift Level Enable/Disable Setting	X	X
ICU	089	Rear Hitch Settings	X	X
ICU	090	Transmission Type Configuration	X	X
ICU	091	Fuel Tank Size Configuration	X	X
ICU	092	Transmission Oil Temperature Setting	X	X
ICU	093	Hydraulic Oil Temperature Setting	X	X
ICU	094	IVT Fuel Economy Setting	X	
ICU	095	IVT Reverse/Forward Ratio Setting	X	
ICU	096	Stored Codes Setting	X	X
ICU	097	Field Cruise Setting	X	X
ICU	098	Front PTO Lower Display Setting	X	X
ICU	099	Ground Speed Lower Display Setting	X	X
ICU	100	Rear Hitch Slip Settings	X	X
ICU	101	Language Option Setting	X	X
ICU	102	Hitch Lower Display Timeout	X	X
ICU	103	Low Fuel Level Setting	X	X
ICU	112	Radar Speed Disable Setting	X	X
ICU	120	Required Controllers Added	X	X
ICU	121	Required Controllers Deleted	X	X
ICU	137	Automatic Engine Shutdown Setting	X	X
ICU	170	Cornerpost Version Display	X	X
ICU	172	Cornerpost Backlight Brightness Setting	X	X

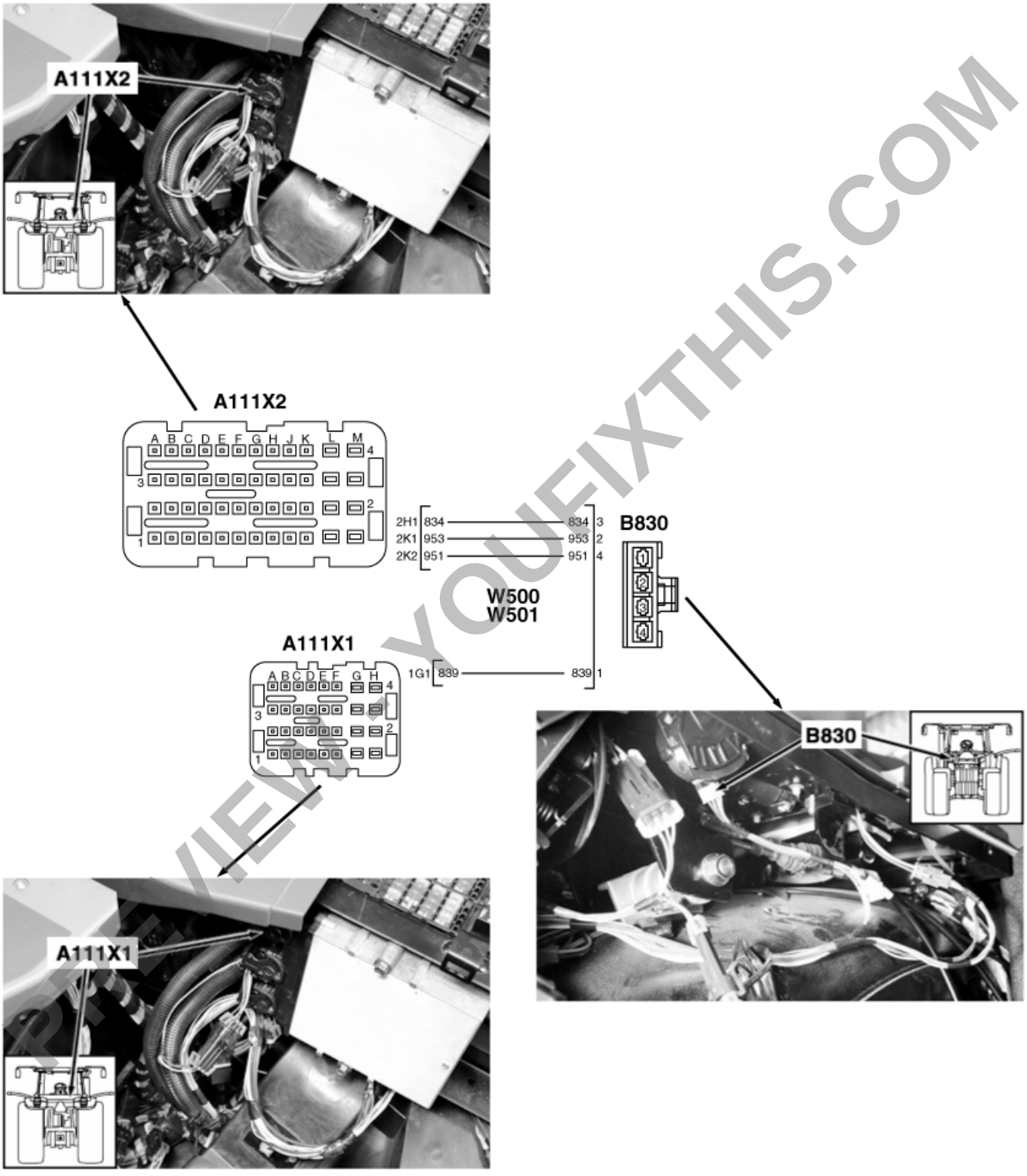
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EM44581,00003D5 -19-09MAR05-1/2

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Reference 245-ACU-328, PowrQuad-Plus / AutoQuad-Plus Rear Hitch Control Lever Diagnostic Wiring Diagram



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RXA0075946 —UN—06JUL04

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NM48376,0000BED -19-07JUL04-1/2

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Item	Measurement	Specification
CAB Address 020		
Sensor Disconnected	Jumper Not Installed	00000000
CAB Address 020		
Sensor Disconnected	Supply Voltage Range (Low)	00000480
	Supply Voltage Range (High)	00000520
CAB Address 020		
Sensor Disconnected	Supply Voltage Range (Low)	04800000
	Supply Voltage Range (High)	05200000
CAB Address 021		
Foot Throttle Position Sensor	Foot Throttle Fully Depressed (Low Range)	03500175
	Foot Throttle Fully Depressed (High Range)	04500225
CAB Address 021		
Foot Throttle Position Sensor	Foot Throttle Released (Low Range)	00500025
	Foot Throttle Released (High Range)	00760038
CAB Address 021		
Foot Throttle Position Sensor	Foot Throttle Released (Low Range)	00250000
	Foot Throttle Released (High Range)	00750000
CAB Address 021		
Foot Throttle Position Sensor	Foot Throttle Fully Depressed (Low Range)	03500000
	Foot Throttle Fully Depressed (High Range)	04500000
CAB Address 021		
Sensor Disconnected	Jumper Not Installed	00000000
CAB Address 021		
Sensor Disconnected / Jumper Installed	Supply Voltage Range (Low)	00000480
	Supply Voltage Range (High)	00000520
CAB Address 021		
Sensor Disconnected / Jumper Installed	Supply Voltage Range (Low)	04800000
	Supply Voltage Range (High)	05200000
CAB Address 022		
Brake Pedal Sensor Module	Left Brake Released (Low Range)	10000100
	Left Brake Released (High Range)	10000150
CAB Address 022		
Brake Pedal Sensor Module	Left Brake Released (Low Range)	00000350
	Left Brake Released (High Range)	00000450
CAB Address 022		
Brake Switch Assembly	Left Brake Released	00000001

Continued on next page

DP51502,00007C4 -19-07MAR05-5/8

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A110X1—PQ Multifunction Control Unit Connector 1
F16— Fuse F16
S940— Operator Presence Switch
W500—PowrQuad-Plus Cab Harness (N. A.)
W501—AutoQuad-Plus Cab Harness (Europe)
W930—Manual Seat Lower Harness
X930— Manual Seat to Cab Interconnect

NM48376,0000B50 -19-25JUN04-2/2

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A770X3—AutoPowr / IVT™ Hydraulic Control Unit Connector 3

Y771— Front Brake Solenoid

W831—Hitch, SCV I - IV, TLS and Front Brake Harness

W832—TLS and Front Brake Harness

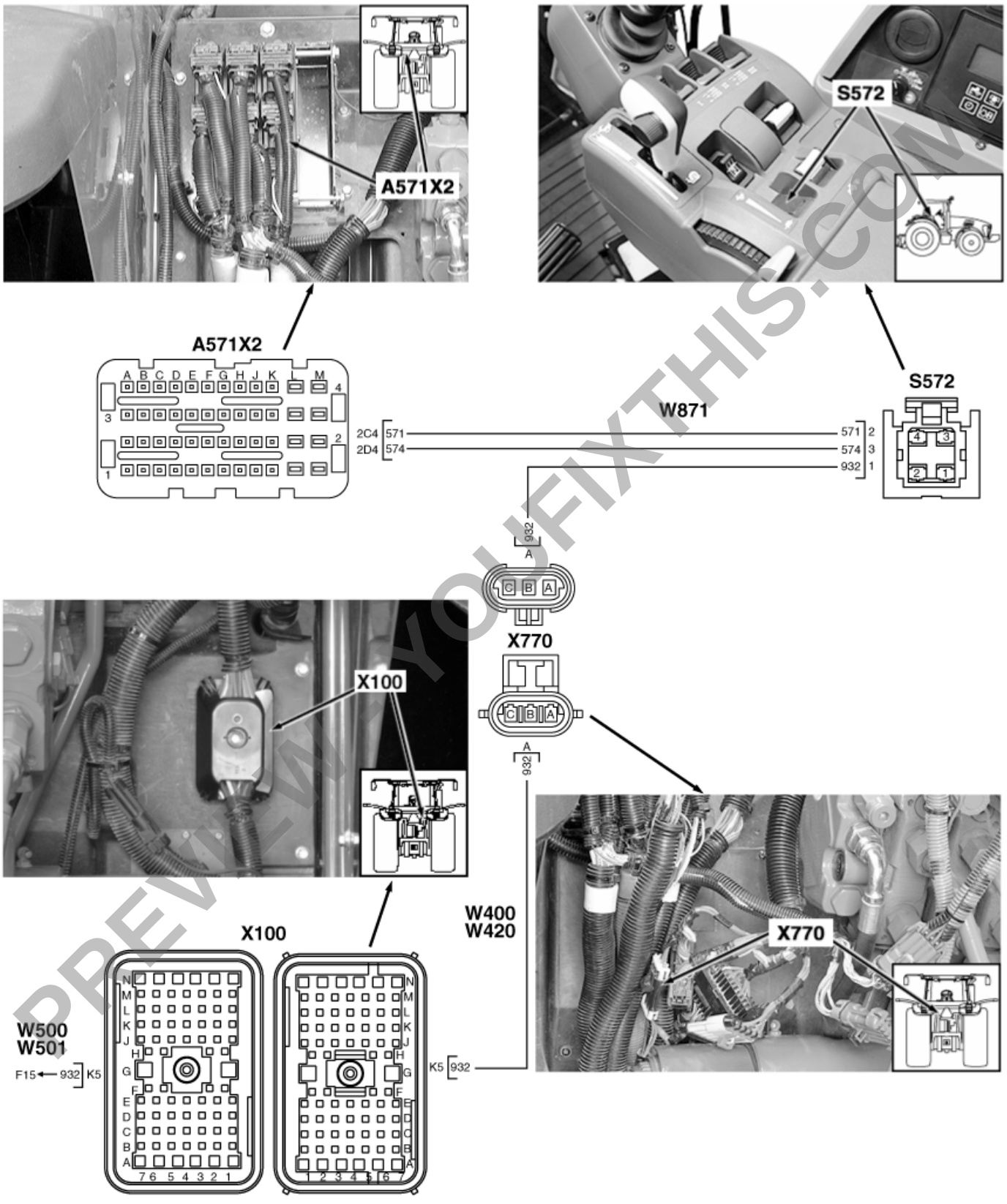
IVT is a trademark of Deere & Company

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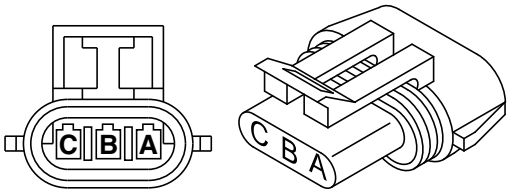
Reference 245-PTF-327, PowrQuad-Plus / AutoQuad-Plus Front PTO Switch Diagnostic Wiring Diagram



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NM48376,0000CA4 -19-30JUN04-1/2

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4 Component Supply Voltage Check	Use a JT05791 —Digital Multimeter to test for supply voltage on terminal “C” of connector for Upshift / Downshift Switches according to the specification below: Record this value_____ **Upshift / Downshift Switches—Specification** Supply Voltage—Key in RUN position (engine off)..... 12.5—14.5 V  RXA0060736 —UN—05NOV02 **A—Circuit 634** **B—Circuit 633** **C—Circuit 932** *NOTE: Use a chassis ground point rather than the ground circuit at the connector to test for supply voltage. This step of the procedure is only to test the integrity of the supply voltage circuit.*	**OK:** GO TO 5. **NOT OK:** See Upshift / Downshift Console Switch Diagnostic Wiring Diagram to diagnose a circuit malfunction (Reference 245-PTQ-320). Repair circuit 932 as needed. GO TO 1.

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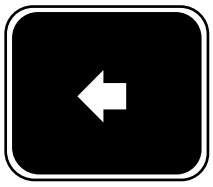
NM48376,0000AF6 -19-15SEP03-6/7

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12 SCV III Adjust Flow Rate Setting

1. Access SCU Address 103. The display should read:
   SCU.001-T
   Inp:103
   XX.X —Flow rate for SCV III
2. Press the Select Switch to change the value displayed.



RXA0064762 —UN—16JAN03

CommandCenter Select Switch

3. Turn the Command Dial to select the desired digit at address 103.
4. Press the Select Switch to change the desired digit.
5. Turn the Command Dial CW to increase the value, or CCW to decrease the value.
   Change Address 103 as follows:
   SCU.001-T
   Inp:103
   0.1 —Lowest Flow rate (approximately 0 gpm)
   Up to...
   SCU.001-T
   Inp:103
   10.0 —Highest Flow rate (approximately 30 gpm)
6. Press the Select Switch to save the value entered.

OK: GO TO 13.

NM48376,0000C1C -19-02JUL08-17/22

13 SCV IV Adjust Flow Rate Setting

1. Access SCU Address 104. The display should read:
   SCU.001-T
   Inp:104
   XX.X —Flow rate for SCV IV
2. Press the Select Switch to change the value displayed.



RXA0064762 —UN—16JAN03

CommandCenter Select Switch

3. Turn the Command Dial to select the desired digit at address 104.
4. Press the Select Switch to change the desired digit.
5. Turn the Command Dial CW to increase the value, or CCW to decrease the value.
   Change Address 104 as follows:
   SCU.001-T
   Inp:104
   0.1 —Lowest Flow rate (approximately 0 gpm)
   Up to...
   SCU.001-T
   Inp:104
   10.0 —Highest Flow rate (approximately 30 gpm)
6. Press the Select Switch to save the value entered.

OK: GO TO 14.

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NM48376,0000C1C -19-02JUL08-18/22

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Reference 251-10-001 AutoPowr / IVT Preliminary Checks

OUO1045,00000F7 -19-03MAR03-1/3

Reference

OUO1045,00000F7 -19-03MAR03-2/3

❶ **Preliminary Checks**	**Check Hydraulic Oil Condition** 1. Oil reservoir level low? Possible causes: - Improper service intervals. - External leaks. 2. Is oil milky or dirty? Possible causes: - Water in oil (milky). - Filter failure (dirty). - Metal particles (mechanical failure). 3. Oil discolored or has burned odor? (over heated) Possible causes: - Kinked pipe or crushed hoses. - Plugged oil cooler. - Wrong oil viscosity. - Internal leaks: Mechanical failure. 4. Check for external oil leaks. (See Caution about oil leak checks in Observe Safety Precautions.) With engine stopped & again with engine running. Cycle all hydraulic control levers, pedals & switches with engine running at slow idle. Possible causes: - Broken pipes, hoses or loose connections. - Leaking o-rings or seals. - Cracked housings. 5. Check for unusual noises with engine at various speeds when you operate the tractor: - transmission - brakes - differential lock - MFWD - PTO Be alert for conditions that could isolate the problem or cause further damage. **Check for:** • Disconnected or damaged wiring harnesses and connectors. • Disconnected, broken or binding operating linkage. • Kinked or dented oil lines. • Mechanical failures.	**OK:** Return to diagnosis in process. **NOT OK:** Correct any abnormal conditions and return to diagnosis in process.

OUO1045,00000F7 -19-03MAR03-3/3

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Reference 260-10-006, Front Brake Operational Test

OUO1045,0000129 -19-10DEC03-1/5

Reference

OUO1045,0000129 -19-10DEC03-2/5

1 Leak Check	1. Lock both brake pedals together, start engine, and depress and hold brake pedals with a moderate amount of force for approximately 30 seconds.	**OK:** No oil leaking from the MFWD seals. GO TO 2.
	2. Observe the Front MFWD seals. Look for hydraulic oil leakage from the inner hub seals while the brake pedals are being depressed.	**NOT OK:** Oil leaks from one or both MFWD seals while brake pedals are depressed indicates front brake piston seal leakage. Make note to repair, continue testing. GO TO 2.

OUO1045,0000129 -19-10DEC03-3/5

2 Voltage Check	1. Engine running at 1000 rpm, Access FBC Address 008. See Access Control Unit Addresses (Reference 245-05-002).	
	2. Display should be showing a voltage between 0.20 – 0.50 volts.	
	3. Depress brake pedals, and observe displayed voltage.	
	4. Voltage should increase when increased force is applied to the brake pedals.	**OK:** Voltage (pressure) correct. GO TO 3.
	5. Voltage should range between 1.50 – 3.00 volts with heavy force applied to the brake pedals.	**NOT OK:** Note malfunction. Return to diagnosis in process.

OUO1045,0000129 -19-10DEC03-4/5

3 Driving Check	1. Drive tractor to a slopped location (loading dock ramp) that would cause the tractor to easily roll without the brakes applied	
	2. Place shifter in PARK, shut engine off.	
	3. Start engine and access FBC Address 023. Display should be 0000. Do not depress the brake pedals until instructed.	
	4. Program the display to read 0650. Save this setting.	
	5. Move the shifter from the PARK position to the neutral position.	
	6. The tractor should not roll.	**OK:** Brakes operate correctly. Return to diagnosis in process.
	7. Press and release the brake pedals and the tractor should roll.	**NOT OK:** Brakes do not hold with full current supplied to the solenoid coil. Return to diagnosis in process.

OUO1045,0000129 -19-10DEC03-5/5

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❷ **Start Engine**	Start vehicle. Allow engine to run for five minutes to allow engine to reach normal operating temperature.	**OK:** GO TO 3.

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OURX892,000084A -19-09OCT02-4/6

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