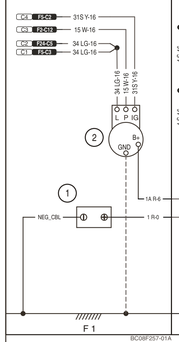
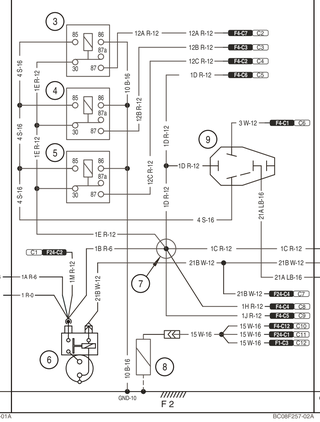
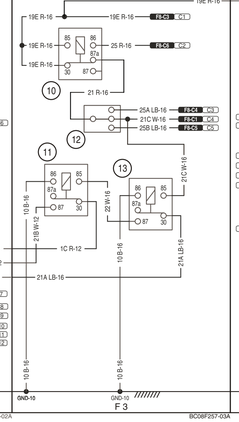
CHARGING SYSTEM



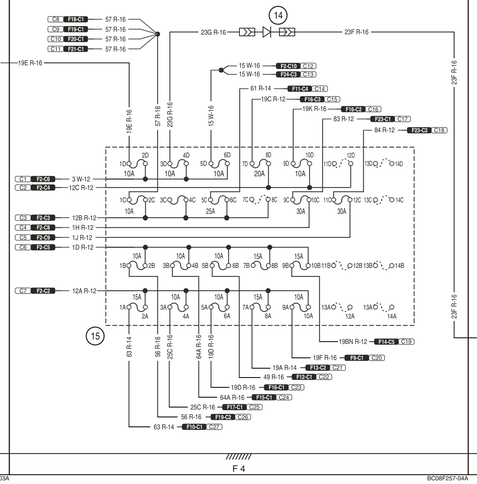
POWER RELAY, CRANKING, AND KEYSWITCH



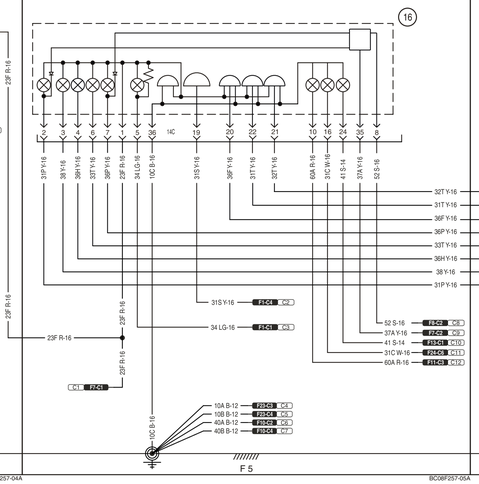
FORWARD-NEUTRAL-REVERSE (F-N-R) SELECTOR



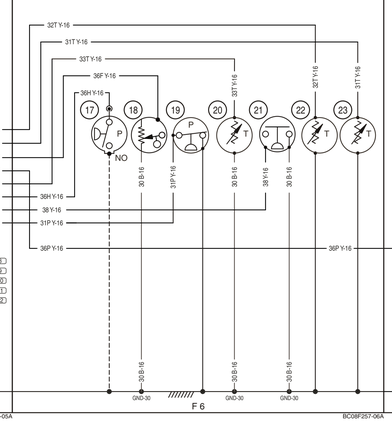
FUSE BLOCK



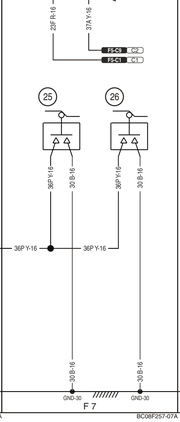
INSTRUMENT CLUSTER



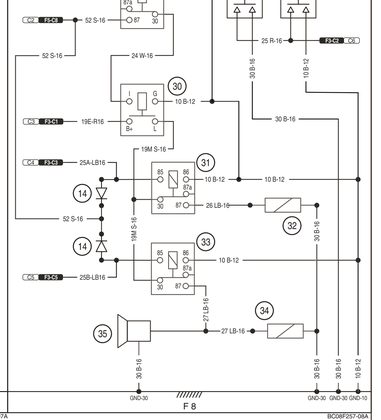
INSTRUMENT CLUSTER SENDERS AND SWITCHES



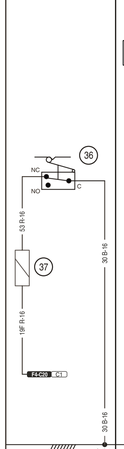
WARNING ALARM



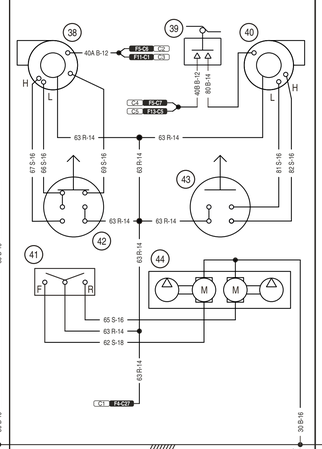
TRANSMISSION CONTROLS



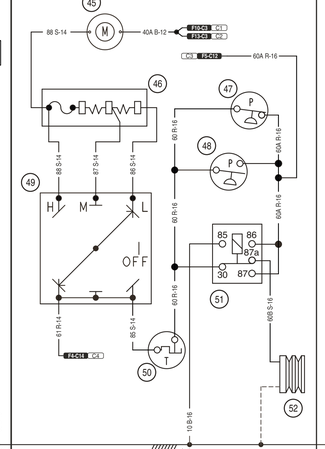
RETURN-TO-DIG



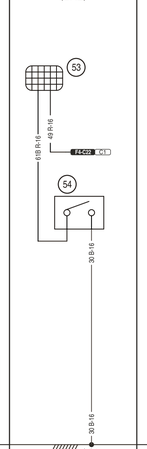
WIPERS (CAB)



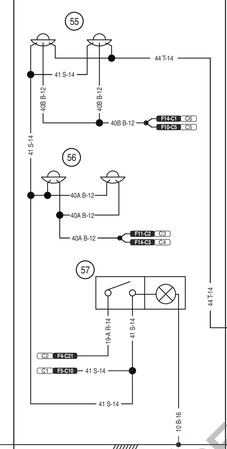
BLOWER AND AIR CONDITIONING (CAB)



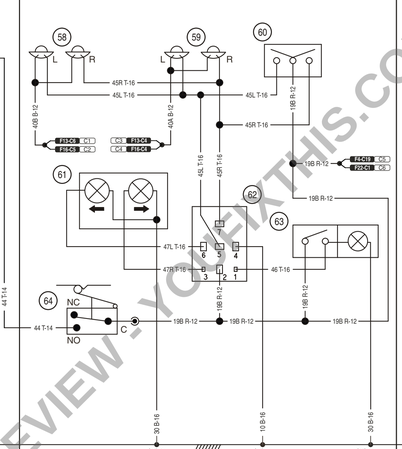
DOME LAMP (CAB)



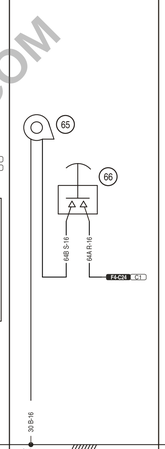
FRONT AND REAR ROAD LAMPS



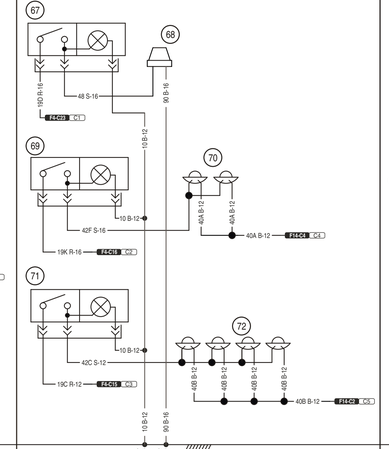
TURN SIGNAL, FLASHER, AND BRAKE LAMP SWITCHES



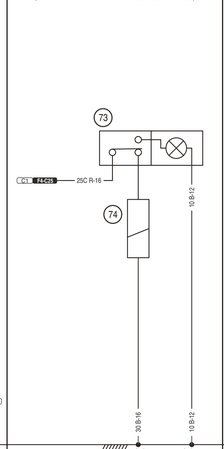
HORN



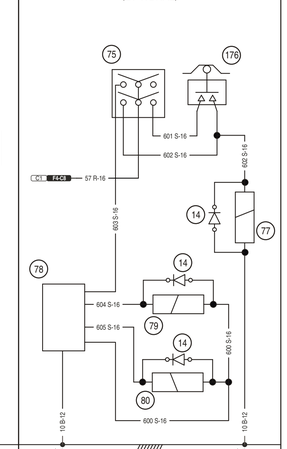
ROTATING BEACON AND WORK LAMPS



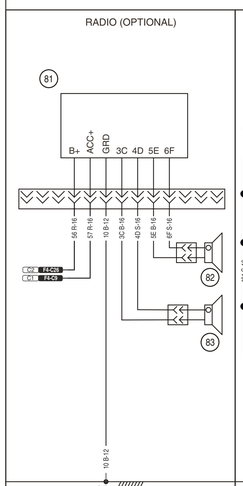
4-WHEEL DRIVE ELECTRICAL CIRCUIT (CARRARO TRANSMISSION ONLY)



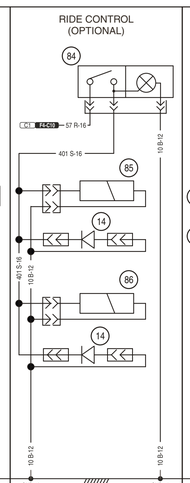
3 POINT HITCH CONTROL (OPTIONAL)



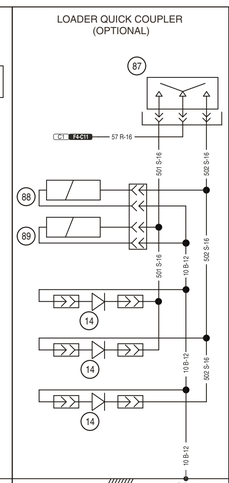
RADIO (OPTIONAL)



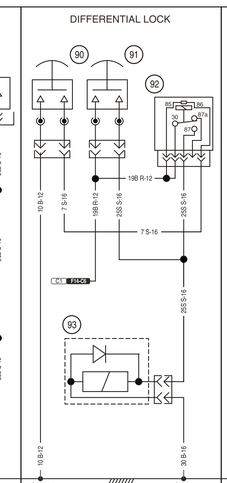
RIDE CONTROL (OPTIONAL)



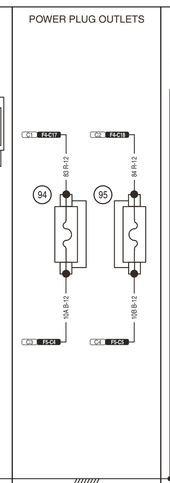
LOADER QUICK COUPLER (OPTIONAL)



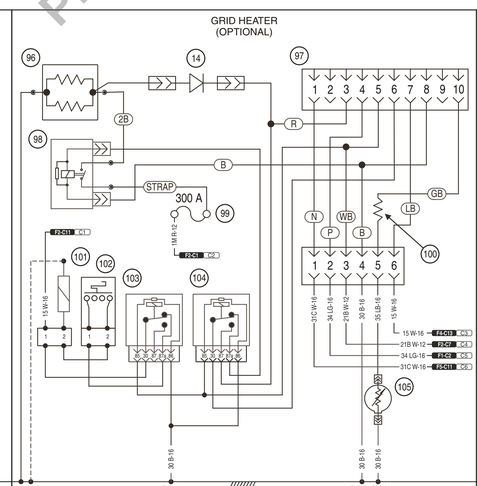
DIFFERENTIAL LOCK

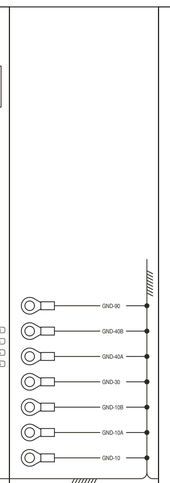


POWER PLUG OUTLETS



GRID HEATER (OPTIONAL)





FRAME NUMBER - COMPONENT NUMBER	FRAME NUMBER - COMPONENT NUMBER	FRAME NUMBER - COMPONENT NUMBER	FRAME NUMBER - COMPONENT NUMBER	FRAME NUMBER - COMPONENT NUMBER
FRAME 1 COMPONENTS 1 - 1. Battery 1 - 2. Alternator	FRAME 8 COMPONENTS 8 - 14. Diode 8 - 27. Shuttle Interlock Relay 8 - 28. Shift Handle - Clutch Cutout Switch 8 - 29. Loader Handle - Clutch Cutout Switch 8 - 30. Shuttle Interlock Timing Relay 8 - 31. Forward Relay 8 - 32. Forward Solenoid 8 - 33. Reverse Relay 8 - 34. Reverse Solenoid 8 - 35. Backup Alarm	FRAME 13 COMPONENTS 13 - 55. Tail Lamps 13 - 56. Front Driving Lamps 13 - 57. Driving Lamp Switch	FRAME 18 COMPONENTS 18 - 14. Diode (Optional) 18 - 75. 3-Point Hitch Mode Control Switch (Optional) 18 - 76. 3-Point Hitch Control Valve Switch (Optional) 18 - 77. Lock Valve Solenoid (Optional) 18 - 78. Laser Control Box (Optional) 18 - 79. Laser Solenoid (Optional) 18 - 80. Laser Solenoid (Optional)	FRAME 24 COMPONENTS 24 - 14. Diode (Optional) 24 - 96. Grid Heater (Optional) 24 - 97. Cold Start Controller (Optional) 24 - 98. Cold Start Relay (Optional) 24 - 99. 300 Ampere Fuse (Optional) 24 - 100. Resistor 3.01K ±1 Percent (Optional) 24 - 101. KKSB Solenoid (Optional) 24 - 102. KKSB Thermo Switch (Optional) 24 - 103. KKSB Cutout Relay (Optional) 24 - 104. Grid Heater Relay (Optional) 24 - 105. Cold Start Temperature Sender (Optional)
FRAME 2 COMPONENTS 2 - 3. Power Relay - #1 2 - 4. Power Relay - #2 2 - 5. Power Relay - #3 2 - 6. Starter 2 - 7. Power Junction Stud 2 - 8. Fuel Shutoff Solenoid 2 - 9. Ignition Switch	FRAME 9 COMPONENTS 9 - 36. Return-to-Dig Limit Switch 9 - 37. Return-to-Dig Solenoid	FRAME 14 COMPONENTS 14 - 58. Rear Turn Lamps 14 - 59. Front Turn Lamps 14 - 60. Turn Signal Switch 14 - 61. Turn Signal Indicator 14 - 62. Flasher Relay 14 - 63. Flasher Switch 14 - 64. Brake Lamp Switch	FRAME 19 COMPONENTS 19 - 81. Radio (Optional) 19 - 82. Left Speaker (Optional) 19 - 83. Right Speaker (Optional)	
FRAME 3 COMPONENTS 3 - 10. Clutch Relay 3 - 11. Starter Relay 3 - 12. F-N-R Switch 3 - 13. Neutral Relay	FRAME 10 COMPONENTS 10 - 38. Front Wiper Motor 10 - 39. Rear Wiper Disconnect Switch 10 - 40. Rear Wiper Motor 10 - 41. Windshield Washer Switch 10 - 42. Front Wiper Switch 10 - 43. Rear Wiper Switch 10 - 44. Windshield Washer Pump	FRAME 15 COMPONENTS 15 - 65. Horn 15 - 66. Horn Switch	FRAME 20 COMPONENTS 20 - 14. Diode (Optional) 20 - 84. Glide Ride Control Switch (Optional) 20 - 85. Accumulator Solenoid (Optional) 20 - 86. Tank Solenoid (Optional)	
FRAME 4 COMPONENTS 4 - 14. Diode 4 - 15. Fuse Block	FRAME 11 COMPONENTS 11 - 45. Blower Motor 11 - 46. Resistor Board and Thermal Fuse 11 - 47. Air Conditioner Low Pressure Switch 11 - 48. Air Conditioner High Pressure Switch 11 - 49. Blower Switch 11 - 50. Air Conditioner Thermostat 11 - 51. Air Conditioner Relay 11 - 52. Air Conditioner Compressor Clutch	FRAME 16 COMPONENTS 16 - 67. Beacon Switch 16 - 68. Rotating Beacon (Optional) 16 - 69. Front Work Lamp Switch 16 - 70. Front Work Lamps 16 - 71. Rear Work Lamp Switch 16 - 72. Rear Work Lamps	FRAME 21 COMPONENTS 21 - 14. Diode (Optional) 21 - 87. Loader Quick Coupler Switch (Optional) 21 - 88. Upper Solenoid (Optional) 21 - 89. Lower Solenoid (Optional)	
FRAME 5 COMPONENTS 5 - 16. Instrument Cluster	FRAME 12 COMPONENTS 12 - 53. Dome Lamp 12 - 53. Dome Lamp Switch	FRAME 17 COMPONENTS 17 - 73. 4 Wheel Drive Engage Switch 17 - 74. 4 Wheel Drive Solenoid	FRAME 22 COMPONENTS 22 - 90. Loader Lever Differential Lock Switch 22 - 91. Side Console Differential Lock Enable Switch 22 - 92. Differential Lock Enable Relay 22 - 93. Differential Lock Solenoid	
FRAME 6 COMPONENTS 6 - 17. Hydraulic Filter Restriction Switch 6 - 18. Fuel Level Sender 6 - 19. Oil Pressure Switch 6 - 20. Rear Axle Temperature Sender 6 - 21. Air Filter Restriction Switch 6 - 22. Transmission Temperature Sender 6 - 23. Coolant Temperature Sender			FRAME 23 COMPONENTS 23 - 94. Power Plug #1 23 - 95. Power Plug #2	
FRAME 7 COMPONENTS 7 - 24. Warning Buzzer 7 - 25. Parking Brake Switch #1 7 - 26. Parking Brake Switch #2				

ACTUATORS: LEVER, HAND, FOOT, COIL, TEMP., DIODE, PRESSURE, FLOAT LIQUID LEVEL

HOUSINGS: V VACUUM SWITCH, P PRESSURE SWITCH, LAMP, M MOTOR, T TEMPERATURE SWITCH

CONTACT CONFIGURATIONS: S.P.S.T., S.P.D.T., D.P.S.T., D.P.D.T.

MISCELLANEOUS SYMBOLS: MOMENTARY CONTACTS, MAINTAINED CONTACTS, VARIABLE RESISTOR, RESISTOR, FUSE, CIRCUIT BREAKER, MALE TERMINAL, FEMALE TERMINAL, 54 COMPONENT NUMBER

SHOWS CIRCUIT SPLICE CONNECTION (SPL-00)

SHOWS CIRCUIT CROSSING NOT CONNECTED

INDICATES EXTERNAL GROUND

INDICATES INTERNALLY GROUNDED COMPONENT

FEMALE CONNECTOR, MALE CONNECTOR, CONNECTOR NUMBER, CONNECTOR IDENTIFICATION, CONNECTOR NUMBER, INDICATES PARTIAL CONNECTOR, NOT ALL CONNECTIONS ARE SHOWN

WIRE IDENTIFICATION

B . . BLACK	O . . ORANGE
DB. . DARK BLUE	P . . . PURPLE
G . . . GREEN	R . . . RED
K . . . PINK	S . . . GRAY
LG. . LIGHT GREEN	T . . TAN
LB. . LIGHT BLUE	W . . WHITE
DG . DARK GREEN	Y . . . YELLOW

WIRE NUMBER, WIRE COLOR, WIRE SIZE (e.g. 502 / 702A G-1.0)

CIRCUIT CONTINUATION

Frame Number and Circuit Number where Circuit continues.

CIRCUIT TAGS: F1-C4, C1 F2-C5

FRAME - CIRCUIT CIRCUIT

Circuit Number assigned to Circuit in Frame.

NOTES

NOTE 1: See the Repair Manual for the Troubleshooting Procedures of the Electrical Components.

ELECTRICAL SCHEMATIC
U80B TIER 3 LOADER LANDSCAPER

Additional copies of this Hydraulic and Electrical Schematic can be ordered through Technical Publications Distribution System. The part number is 5-13650

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BC08F257-00A

66 – Horn Switch

The horn switch is located in the front console below the steering wheel.

Check Points	Reading	Possible Cause of Bad Reading
Terminal for wire 64A to ground	12 volts	Check the circuit between the horn switch and the battery (1). Also check the 10 ampere fuse in the fuse block (15) and the battery (1).
NOTE: *Have another person push in and hold the horn switch.*		
Terminal for wire 64B to ground	12 volts	Bad horn switch.

67 – Rotating Beacon Switch

The rotating beacon switch is located in the front console.

Check Points	Reading	Possible Cause of Bad Reading
NOTE: *Turn the key switch to ON.*		
Terminal for wire 19D to ground	12 volts	Check the circuit between the rotating beacon switch and power relay #1 (5). Also check the 10 ampere fuse in the fuse block (15) and power relay #1 (5).
NOTE: *Put the rotating beacon switch in the ON position.*		
Terminal for wire 48 to ground	12 volts	Bad rotating beacon switch.
NOTE: *If the readings are correct and the indicator lamp on the rotating beacon switch does not illuminate, do the following check.*		
Terminal for wire 10 to ground	Continuity	Bad ground circuit for rotating beacon switch indicator lamp.
NOTE: *If the reading was correct and the indicator lamp on the rotating beacon switch does not illuminate, replace the rotating beacon switch.*		

68 – Rotating Beacon (Opt)

The rotating beacon is located on top of the ROPS cap or canopy.

Check Points	Reading	Possible Cause of Bad Reading
Terminal for wire 90 to ground	Continuity	Bad ground circuit.
NOTE: *Turn the key switch to ON. Turn the rotating beacon switch to ON.*		
Bulb	Good	Bad bulb.
Terminal for wire 48 to ground	12 volts	Check the circuit between the rotating beacon and the rotating beacon switch (67). Also check the rotating beacon switch (67).
NOTE: *If the readings are good, replace the rotating beacon.*		

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TORQUE SPECIFICATIONS - DECIMAL HARDWARE

Use the torques in this chart when special torques are not given. These torques apply to fasteners with both UNC and UNF threads as received from suppliers dry, or when lubricated with engine oil. Not applicable if special graphities, Molydisulfide greases, or other extreme pressure lubricants are used.

Grade 5 Bolts, Nuts, and Studs



Size	Pound-Inches	Newton metres
1/4 inch	108 to 132	12 to 15
5/16 inch	204 to 252	23 to 28
3/8 inch	420 to 504	48 to 57
Size	Pound-Feet	Newton metres
7/16 inch	54 to 64	73 to 87
1/2 inch	80 to 96	109 to 130
9/16 inch	110 to 132	149 to 179
5/8 inch	150 to 180	203 to 244
3/4 inch	270 to 324	366 to 439
7/8 inch	400 to 480	542 to 651
1.0 inch	580 to 696	787 to 944
1-1/8 inch	800 to 880	1085 to 1193
1-1/4 inch	1120 to 1240	1519 to 1681
1-3/8 inch	1460 to 1680	1980 to 2278
1-1/2 inch	1940 to 2200	2631 to 2983

Grade 8 Bolts, Nuts, and Studs



Size	Pound-Inches	Newton metres
1/4 inch	144 to 180	16 to 20
5/16 inch	288 to 348	33 to 39
3/8 inch	540 to 648	61 to 73
Size	Pound-Feet	Newton metres
7/16 inch	70 to 84	95 to 114
1/2 inch	110 to 132	149 to 179
9/16 inch	160 to 192	217 to 260
5/8 inch	220 to 264	298 to 358
3/4 inch	380 to 456	515 to 618
7/8 inch	600 to 720	814 to 976
1.0 inch	900 to 1080	1220 to 1465
1-1/8 inch	1280 to 1440	1736 to 1953
1-1/4 inch	1820 to 2000	2468 to 2712
1-3/8 inch	2380 to 2720	3227 to 3688
1-1/2 inch	3160 to 3560	4285 to 4827

NOTE: *Use thick nuts with Grade 8 bolts.*

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RADIATOR

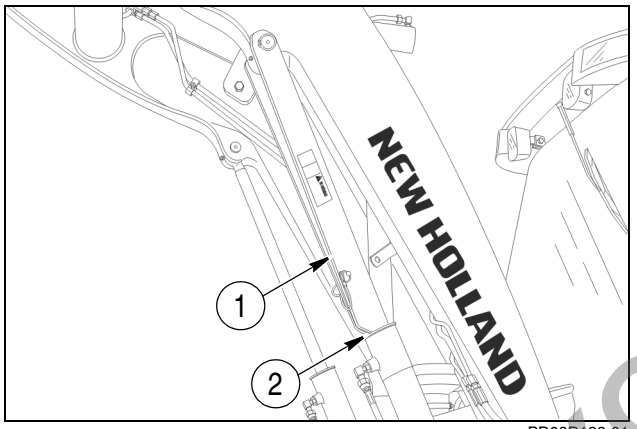
Removal

Put identification tags on all disconnected hoses and wires. Close disconnected hoses and fittings with caps and plugs.

NOTE: *The photos in this procedure may be different from your machine and are for reference only.*

IMPORTANT: *If machine is equipped with quick-attached components, disconnect them from the machine prior to proceeding.*

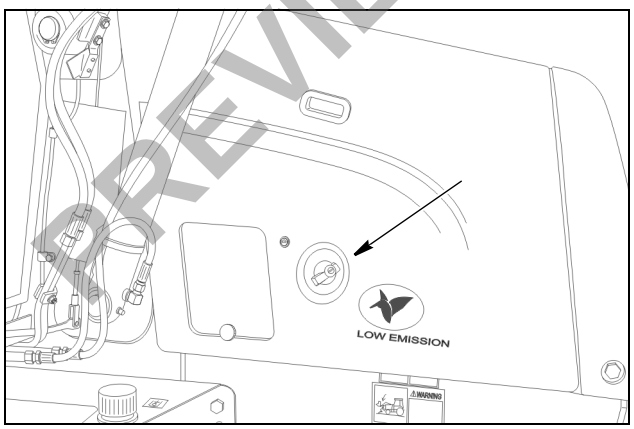
STEP 1



BD08D138-01

Park the machine on a level surface. Raise the loader and lock the support strut (1), to hold the loader. Slowly lower the loader until the support strut makes contact with the cylinder (2). Lower any rear attachments. Stop the engine and apply the parking brake.

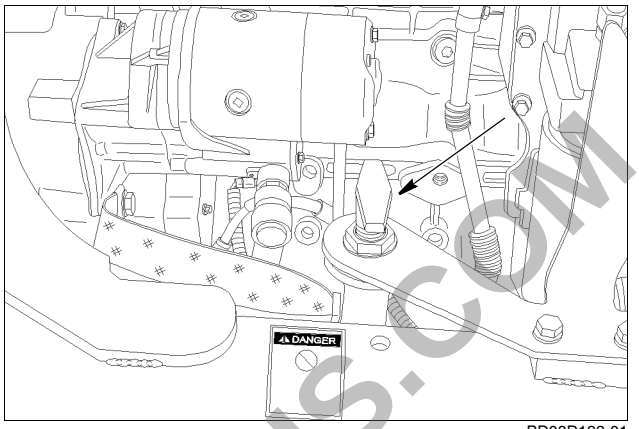
STEP 2



BD08D143-01

Remove the side panels from the machine.

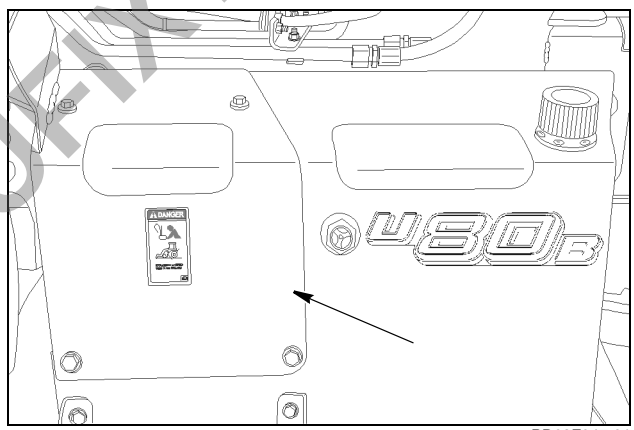
STEP 3



BD08D133-01

Put the battery disconnect switch to the OFF position.

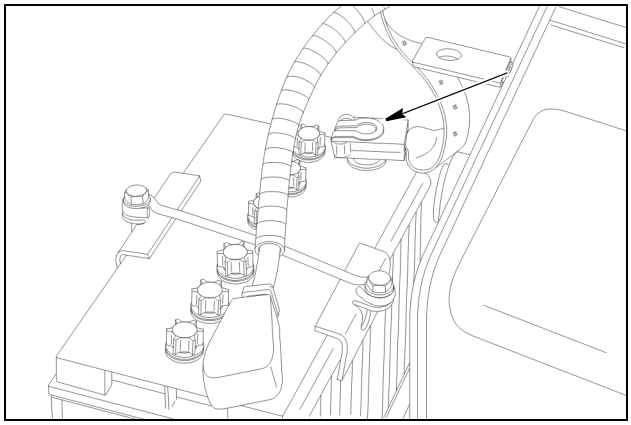
STEP 4



BD08F047-01

Remove the battery cover from the right step.

STEP 5



BD08C077-01

If the machine has only one battery, disconnect the negative battery cable from the battery.

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U80B TIER 3 LOADER LANDSCAPER
Repair Manual
Bur 87728505

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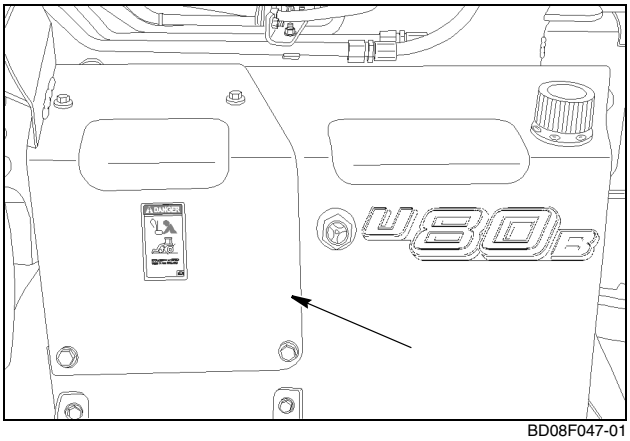
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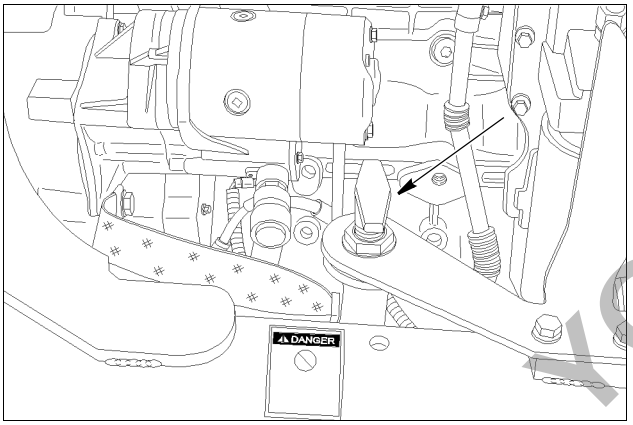
STEP 31



BD08F047-01

Install and tighten the four bolts on the battery cover on the right side of the machine.

STEP 32



BD08D133-01

Put the battery disconnect switch to the ON position.

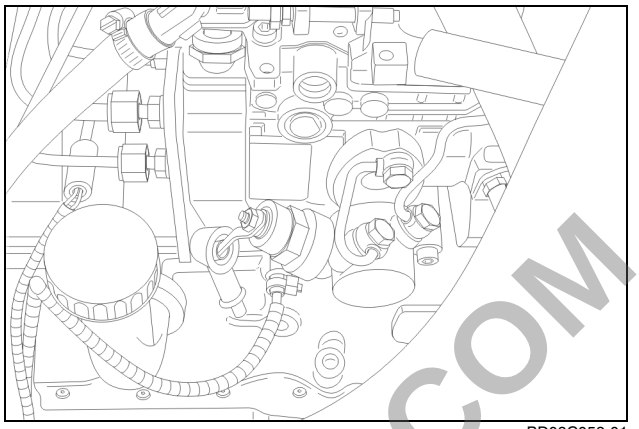
STEP 33

Fill the hydraulic reservoir.

NOTE: *During installation fill the hydraulic reservoir with the oil specified in section 1002 of this manual.*

IMPORTANT: *Before starting the engine do the following.*

1. See section 1002 Fluids and Lubricants in this manual for the correct type and quantities needed to replace lost or drained fluids and lubricants before starting the engine.



BD08C058-01

2. The turbo charger must be filled with oil. Disconnect the wire from the fuel shut off solenoid. Actuate the starter for 10 to 20 seconds to fill the turbocharger with oil. Connect the wire to the fuel shutoff solenoid.

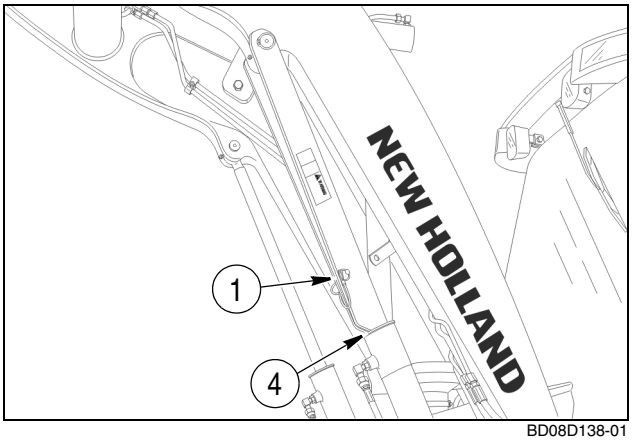
STEP 34

If the machine is equipped with air conditioning, see Section 9004 and recharge the air conditioning system.

STEP 35

Install right side engine panel.

STEP 36



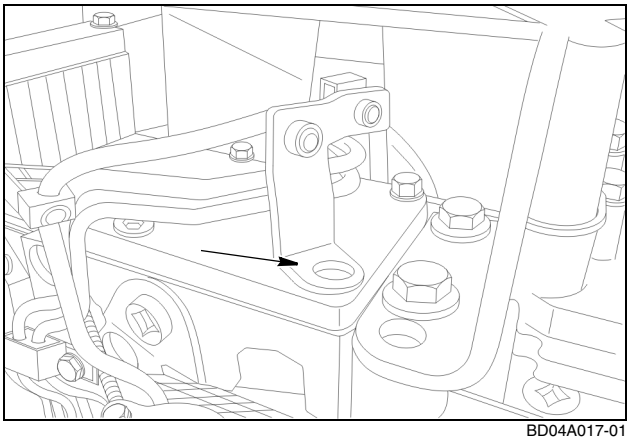
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Remove the support strut pin (1). Raise the loader arms and remove the support strut from the cylinder rod (4).

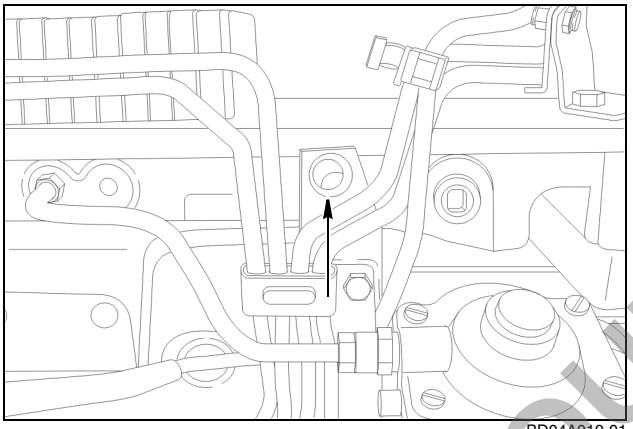
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STEP 40



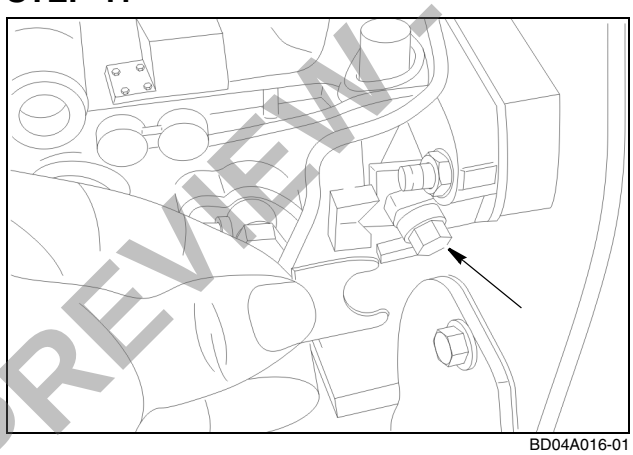
BD04A017-01



BD04A019-01

Install the injector line retaining bracket mounting bolts.

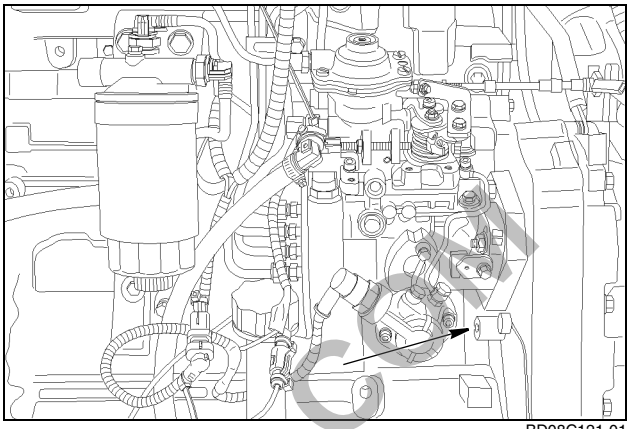
STEP 41



BD04A016-01

Loosen injector pump locking bolt and install the slotted plate, tighten the locking bolt to 9 to 10 lb-ft (12 to 14 Nm).

STEP 42



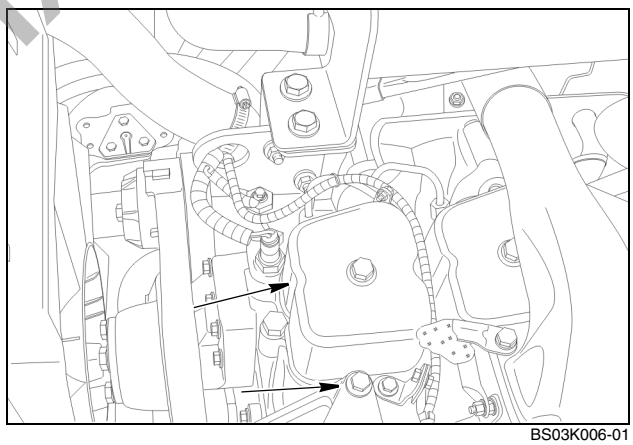
BD08C121-01

Make sure locking pin is disengaged from gear (Pin shown engaged).

STEP 43

Remove the engine turning tool and install the starter. Refer to section 4001.

STEP 44



BS03K006-01

Install the front rocker arm cover and injector line retaining bracket mounting bolt.

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39 – Rear Wiper Park Switch		
Check Points	Reading	**Possible Cause of Bad Reading**
Terminal for wire 40B to ground	Continuity	Bad ground circuit.
NOTE: *Disconnect the wires from the rear wiper park switch. Make sure the rear wiper is in the PARK position.*		
Between the terminals of the rear wiper park switch	Open	Bad rear wiper park switch.
NOTE: *Move the wiper out of the PARK position.*		
Between the terminals of the rear wiper park switch.	Continuity	Bad rear wiper park switch.

40 – Rear Wiper Motor (Cab)		
Check Points	**Reading**	**Possible Cause of Bad Reading**
NOTE: *Make sure the rear wiper is not in the PARK position.*		
Terminal for wire 40B to ground	Continuity	Bad ground circuit.
NOTE: *Turn the key switch to ON.*		
Terminal for wire 63 to ground	12 volts	Check the circuit between the rear wiper motor and power relay #1 (5). Also check the 15ampere fuse in the circuit and power relay #1 (5).
NOTE: *Turn the rear wiper switch to HIGH.*		
Terminal for wire 82 to ground	12 volts	Check the circuit between the rear wiper motor and the rear wiper switch (43). Also check the rear wiper switch (43).
NOTE: *Turn the rear wiper switch to LOW.*		
Terminal for wire 81 to ground	12 volts	Check the circuit between the rear wiper motor and the rear wiper switch (43). Also check the rear wiper switch (43).

41 – Windshield and Rear Window Washer Switch (Cab)		
Check Points	**Reading**	**Possible Cause of Bad Reading**
NOTE: *Turn the key switch to ON.*		
Terminal for wire 63 to ground	12 volts	Check the circuit between the windshield washer switch and power relay #1 (5). Also check the 15 ampere fuse in the fuse block (15) and power relay #1 (5).
NOTE: *Push the side of the rocker switch to FRONT for front windshield.*		
Terminal for wire 62 to ground	12 volts	Bad windshield washer switch.
NOTE: *Push the side of the rocker switch to REAR for rear window.*		
Terminal for wire 65 to ground	12 volts	Bad windshield washer switch.

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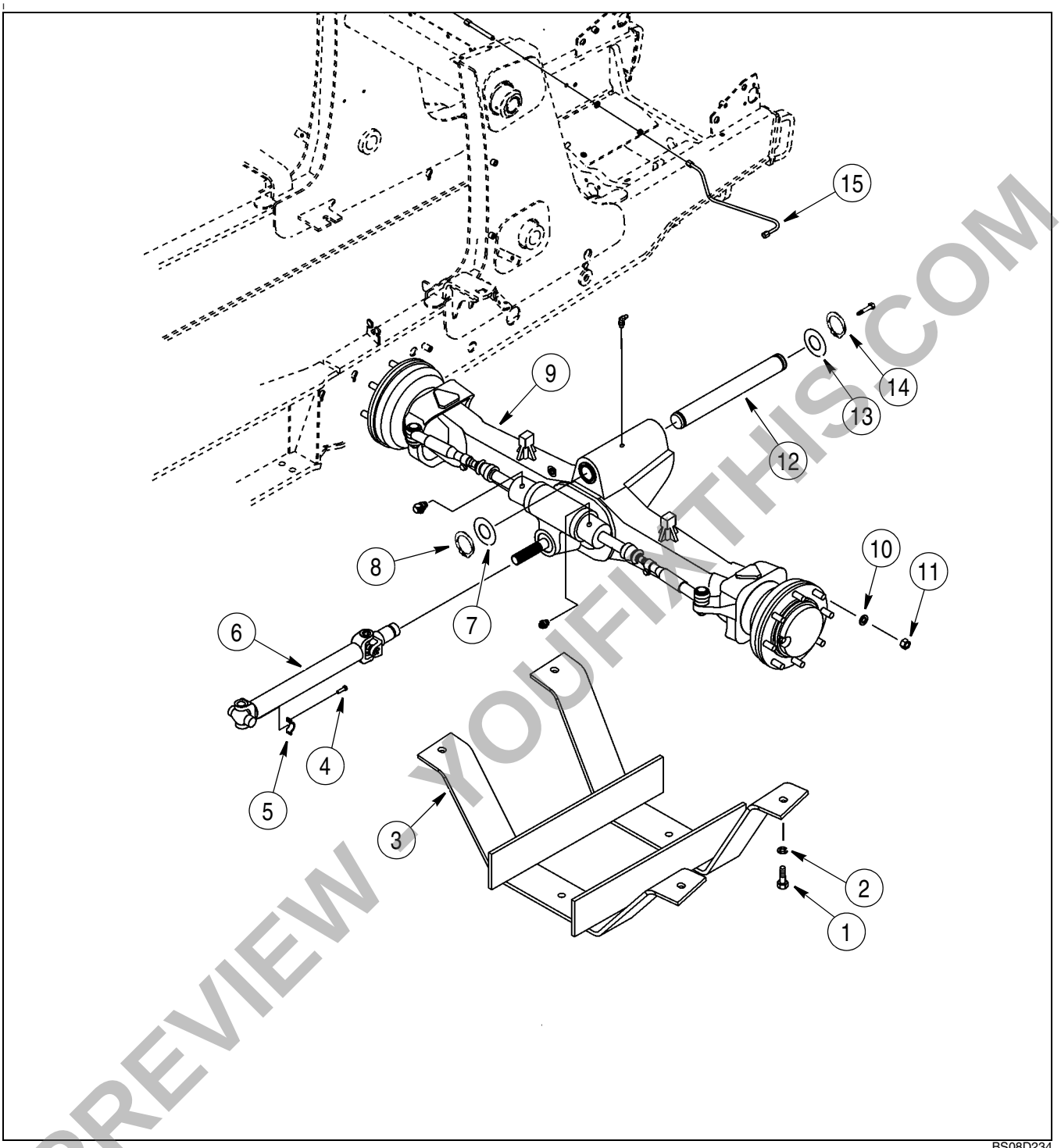
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BS08D234

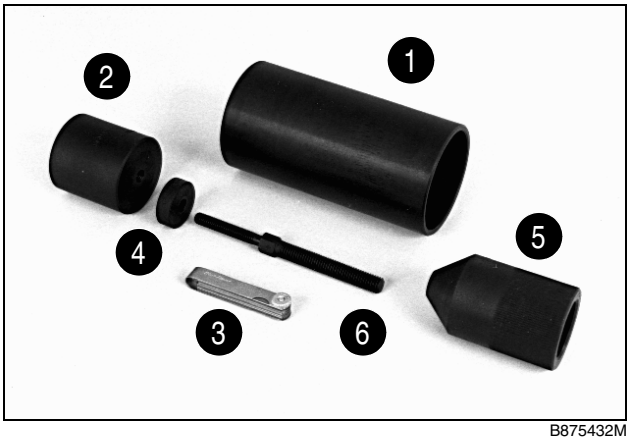
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15. LUBRICATION HOSE

FOUR WHEEL DRIVE AXLE REMOVAL

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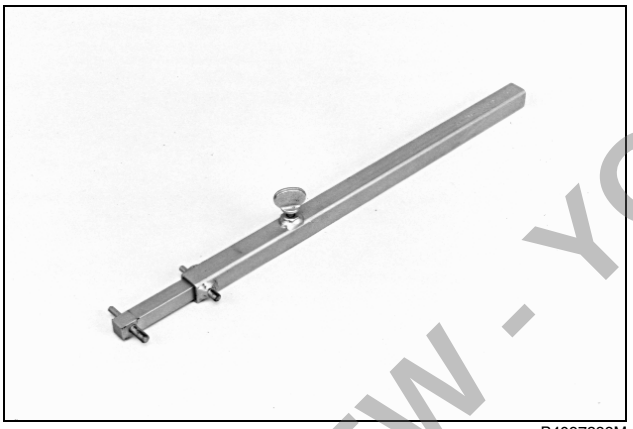
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B875432M

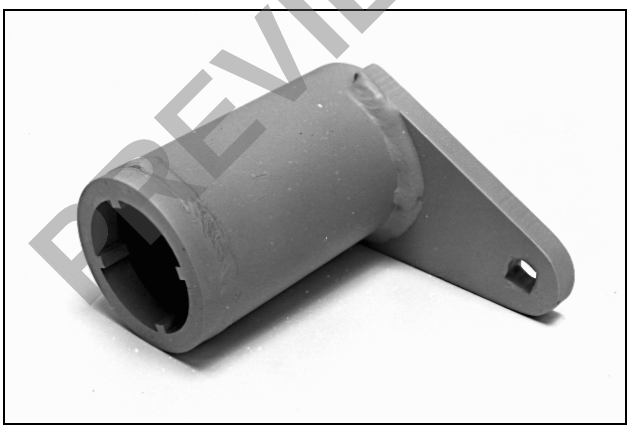
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6. CAS1596A-7 STUD

CAS1839 PINION SETTING KIT.



B4097388M

CAS1840C SPANNER WRENCH.



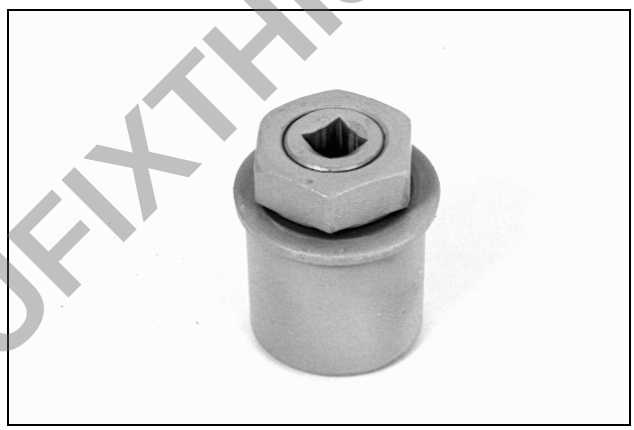
B4086290M

CAS2151A WRENCH FOR PINION NUT.



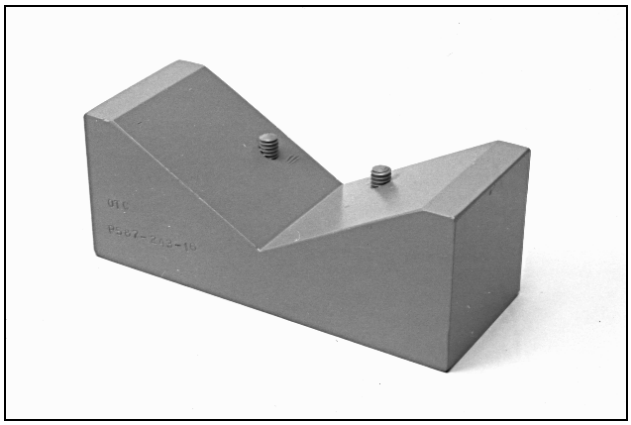
B4094788M

YOKE TO HOLD SHAFT.



B4094188M

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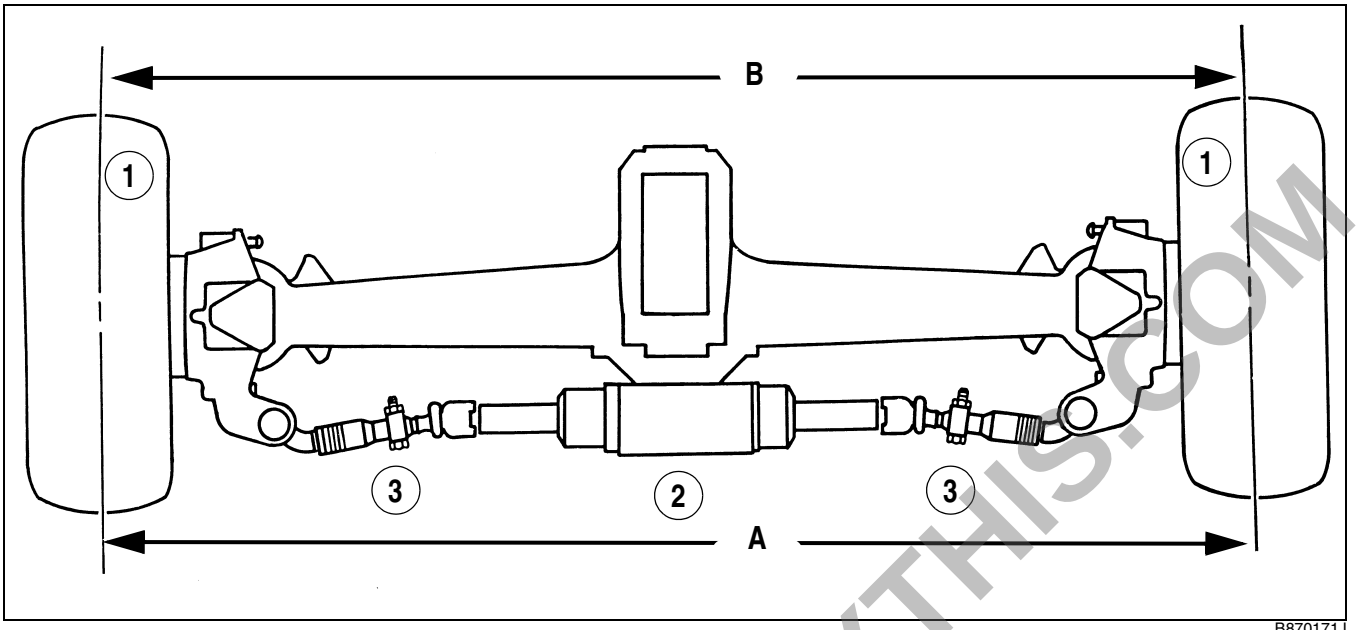
B4106888M

CAS1980 V-BLOCK. USED TO SUPPORT COUPLING WHEN REPLACING A UNIVERSAL JOINT.

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MEASURING TOE-IN



B870171J

1. MARK AROUND CENTER OF TIRE
2. STEERING CYLINDER
3. LOOSEN THE JAM NUT AND TURN THE PISTON ROD AS REQUIRED

NOTE: *MEASUREMENT B MUST BE EQUAL TO OR UP TO 5 MM (3/16 INCH) LESS THAN MEASUREMENT A*

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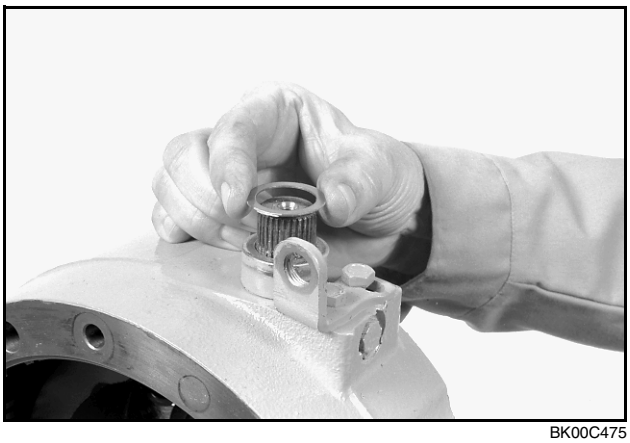
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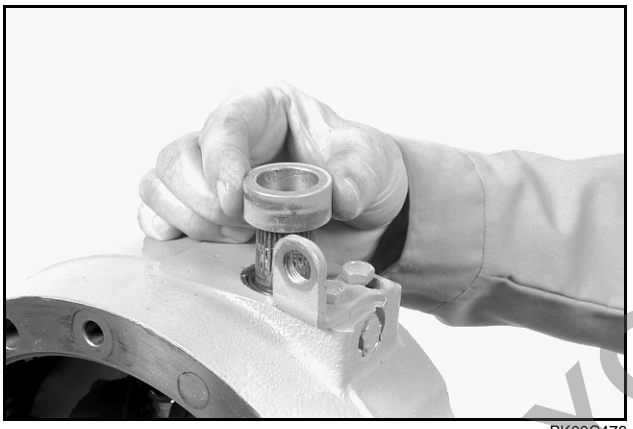
STEP 88



BK00C475

Remove the shim.

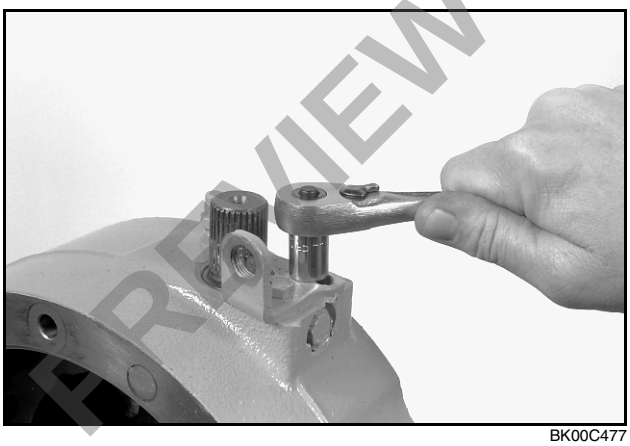
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BK00C476

Remove the bushing.

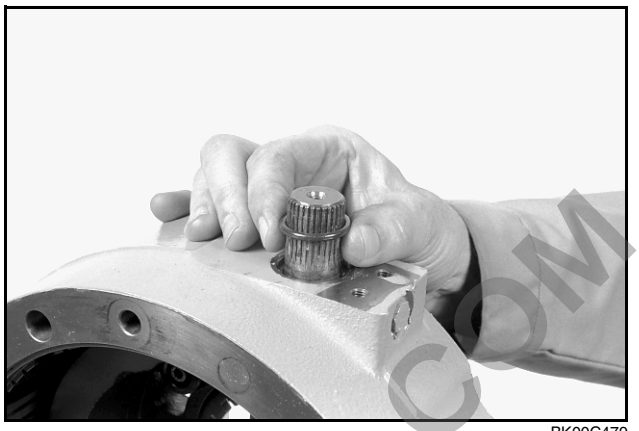
STEP 90



BK00C477

Loosen and remove the bolts from the bracket and remove the bracket.

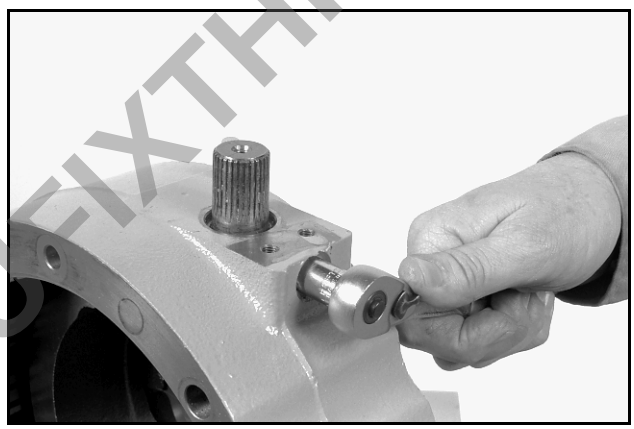
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BK00C479

Remove the O-ring from the shaft.

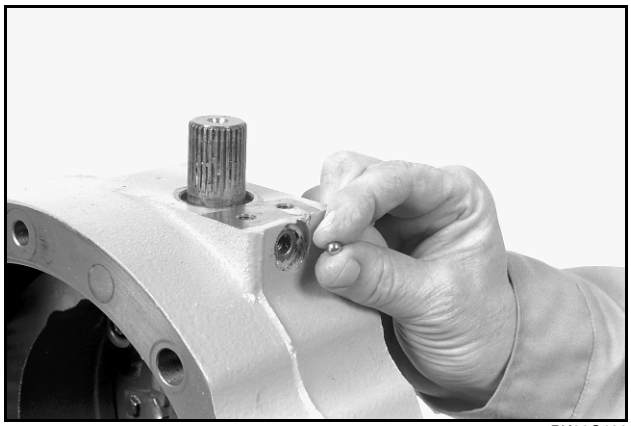
STEP 92



BK00C480

Loosen and remove the bolt.

STEP 93



BK00C482

Remove the steel ball.

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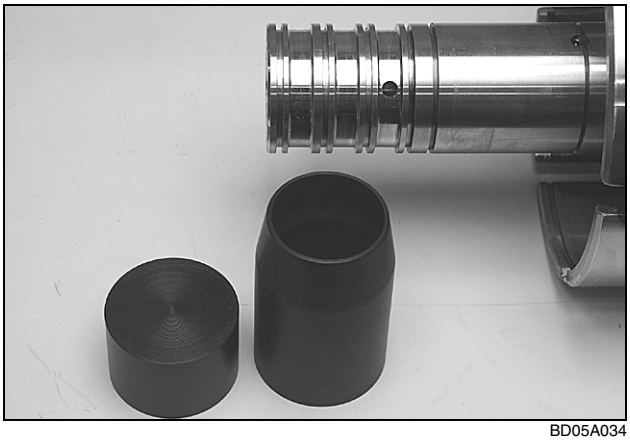
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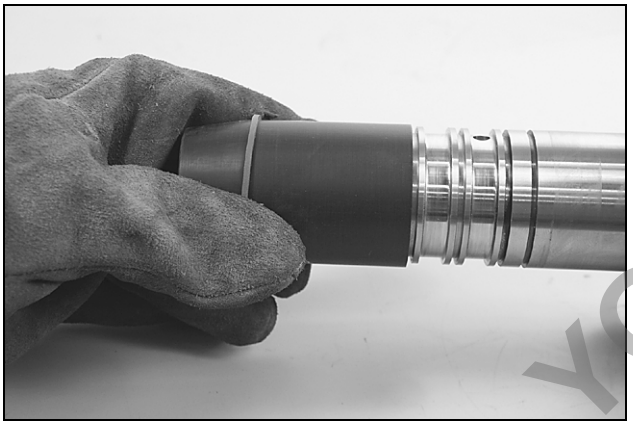
STEP 172



BD05A034

Place the 380001931 spacer into the 380001933 expander/protector.

STEP 173



BD05A074

Slide the expander/protector and the spacer onto the shaft. Heat the Teflon sealing ring to 80° to 100° C (176° to 212° F). Install the Teflon sealing ring onto the expander/protector.

STEP 174



BD05A077

Install the 380001928 pusher over the expander/protector and slide the sealing ring until it reaches the groove in the shaft. Remove the pusher, expander/protector, and spacer from the shaft.

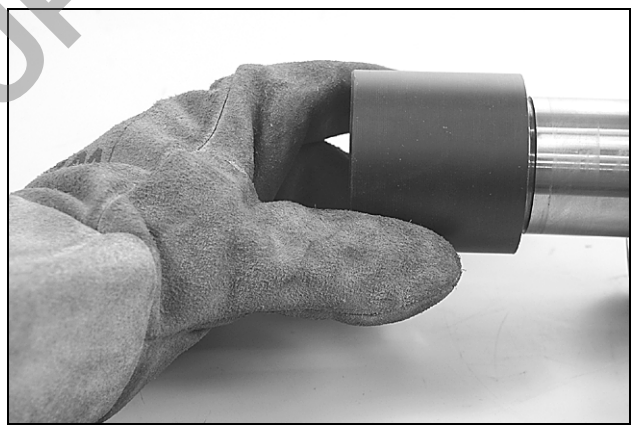
STEP 175



BD05A080

Install the end of the 380001927 seal compressor with the deep chamfer onto the shaft and over the sealing ring. Use a back and forth twisting motion to allow the seal compressor to slip over the top of the sealing ring and seat the sealing ring into the groove. Be careful not to damage the sealing ring. After the sealing ring is seated in the groove, remove the seal compressor from the shaft.

STEP 176



BD05A081

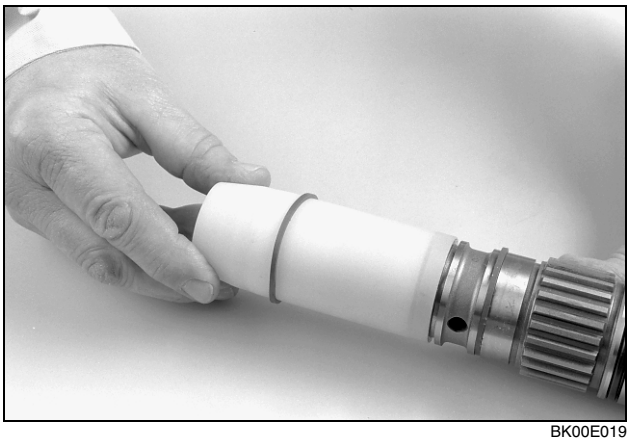
Turn the seal compressor around and slide the end with the narrow chamfer over the shaft and over the sealing ring. Leave the seal compressor in place for 15 minutes until the sealing ring has cooled and is properly sized and seated in the groove. After the sealing ring has cooled, remove the seal compressor from the shaft.

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NOTE: *For clarity, the following photo does not show the use of a heat resistant glove. To prevent injury be sure to wear a heat resistant glove when installing the Teflon sealing ring.*

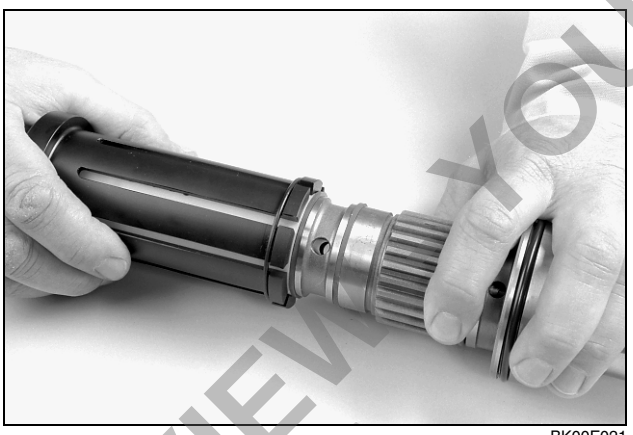
STEP 359



BK00E019

Heat the Teflon sealing ring to 80° to 100° C (176° to 212° F). Install the Teflon sealing ring onto the CAS2771-2 expander/protector.

STEP 360



BK00E021

Install the CAS2327 pusher over the expander/protector and slide the sealing ring until it reaches the groove in the shaft. Remove the pusher, expander/protector, and spacer from the shaft.

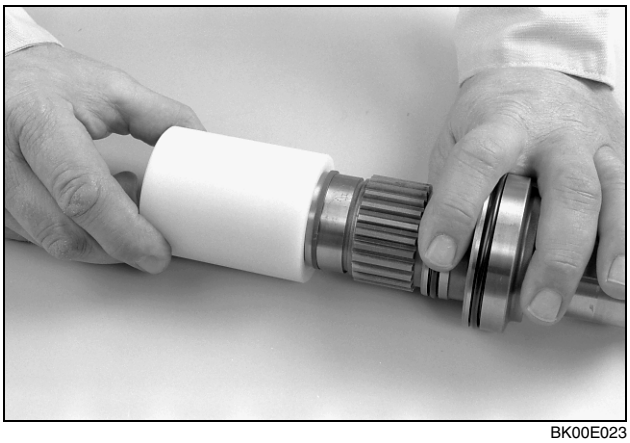
STEP 361



BK00E022

Install the end of the CAS2771-1 seal compressor with the deep chamfer onto the shaft and over the sealing ring. Use a back and forth twisting motion to allow the seal compressor to slip over the top of the sealing ring and seat the sealing ring into the groove. Be careful not to damage the sealing ring. After the sealing ring is seated in the groove, remove the seal compressor from the shaft.

STEP 362



BK00E023

Turn the seal compressor around and slide the end with the narrow chamfer over the shaft and over the sealing ring. Leave the seal compressor in place for 15 minutes until the sealing ring has cooled and is properly sized and seated in the groove. After the sealing ring has cooled, remove the seal compressor from the shaft.

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MASTER CYLINDER

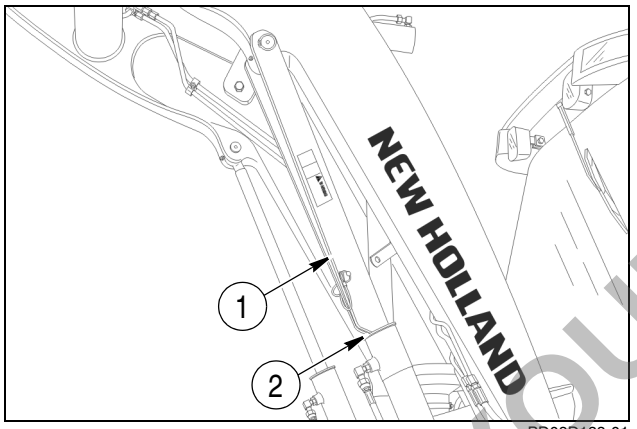
Removal

Put identification tags on all disconnected hoses and wires. Close disconnected hoses and fittings with caps and plugs.

NOTE: ***The photos in this procedure may be different from your machine and are for reference only.***

IMPORTANT: *If machine is equipped with quick-attached components, disconnect them from the machine prior to proceeding.*

STEP 1



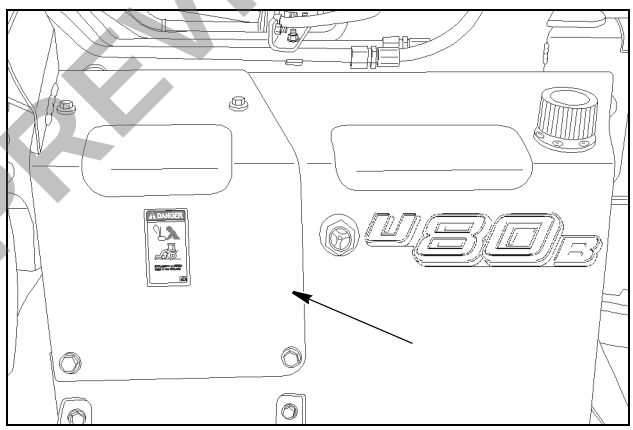
BD08D138-01

Park the machine on a level surface. Raise the loader and lock the support strut (1), to hold the loader. Slowly lower the loader until the support strut makes contact with the cylinder (2).

STEP 2

Stop the engine and apply the parking brake.

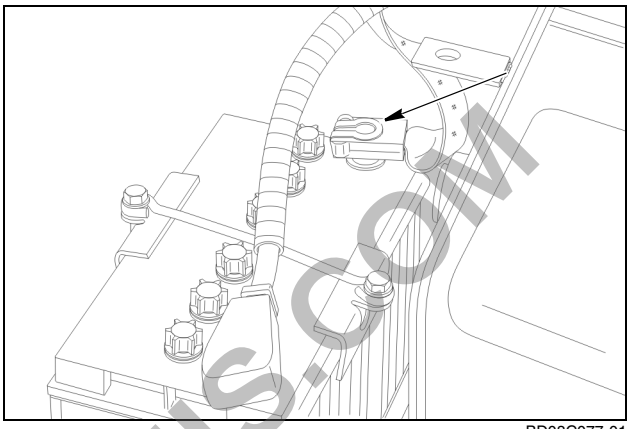
STEP 3



BD08F047-01

Remove the battery cover from the right step.

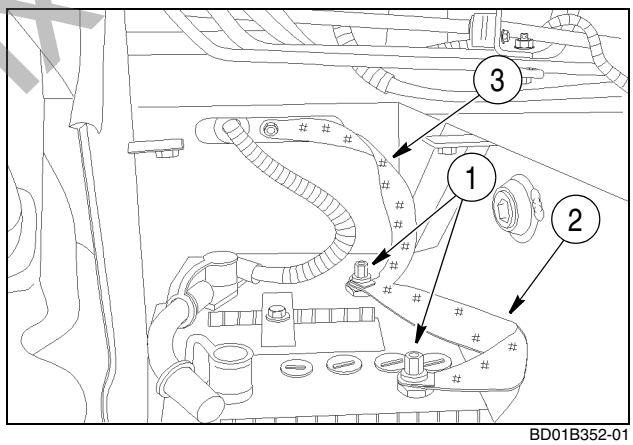
STEP 4



BD08C077-01

If the machine has only one battery, disconnect the negative battery cable from the battery.

STEP 5



BD01B352-01

If the machine has two batteries:

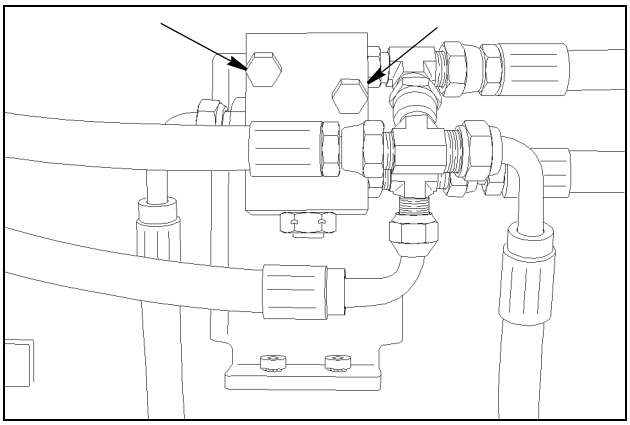
1. Remove the terminal nuts (1), and jumper strap (2), from the battery.
2. Remove the negative ground strap (3), from the battery and move the ground strap away from the battery.

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Installation

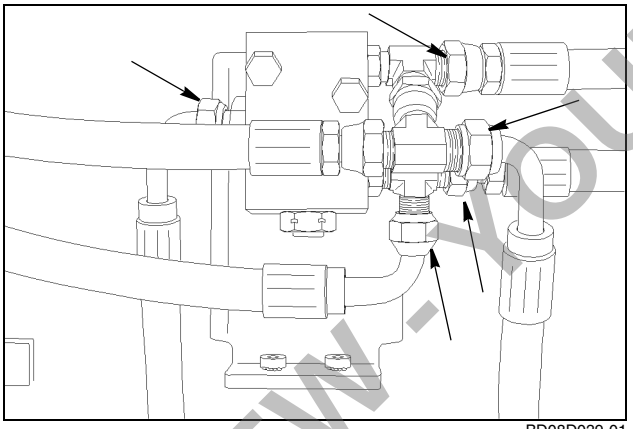
STEP 1



BD08D039-01

Position the clam lock valve on the machine. Install the two bolts and lock washers that fasten the valve to the machine. Tighten the bolts to General Bolt Torque Specifications.

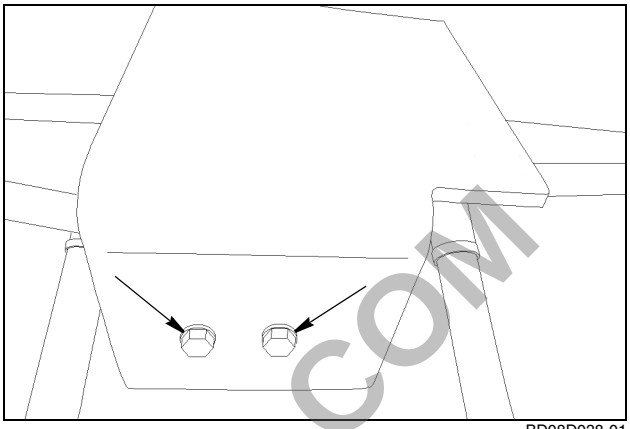
STEP 2



BD08D039-01

Remove plugs from hoses and caps from fittings. Connect the hydraulic hoses to the valve according to the identification tags. Remove and discard tags.

STEP 3



BD08D038-01

Put the guard in place. Install the two bolts and lock washers. Tighten the bolts to General Bolt Torque Specifications.

STEP 4

Turn off and disconnect the vacuum pump from the hydraulic reservoir.

STEP 5

Start the engine and let it run at low idle. Activate the clam control lever. Hold the lever in each direction for 15 to 20 seconds.

STEP 6

Stop the engine and check for leaks. Fill the hydraulic reservoir as required.

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Problem in All Circuits Controlled by Loader Relief Valve [Loader Bucket, Loader Lift, and Loader Clam (If Equipped)]

See page 9 and check the loader relief valve. Is the pressure correct?

No → See page 9 and adjust the loader relief valve.

Yes ↓

See the following topics for other circuits

Problem in All Circuits Controlled by Three-Point Hitch Relief Valve (Lift, Pitch, Tilt, Implement, and Auxiliary)

See page 10 and check the three-point hitch relief valve. Is the pressure correct?

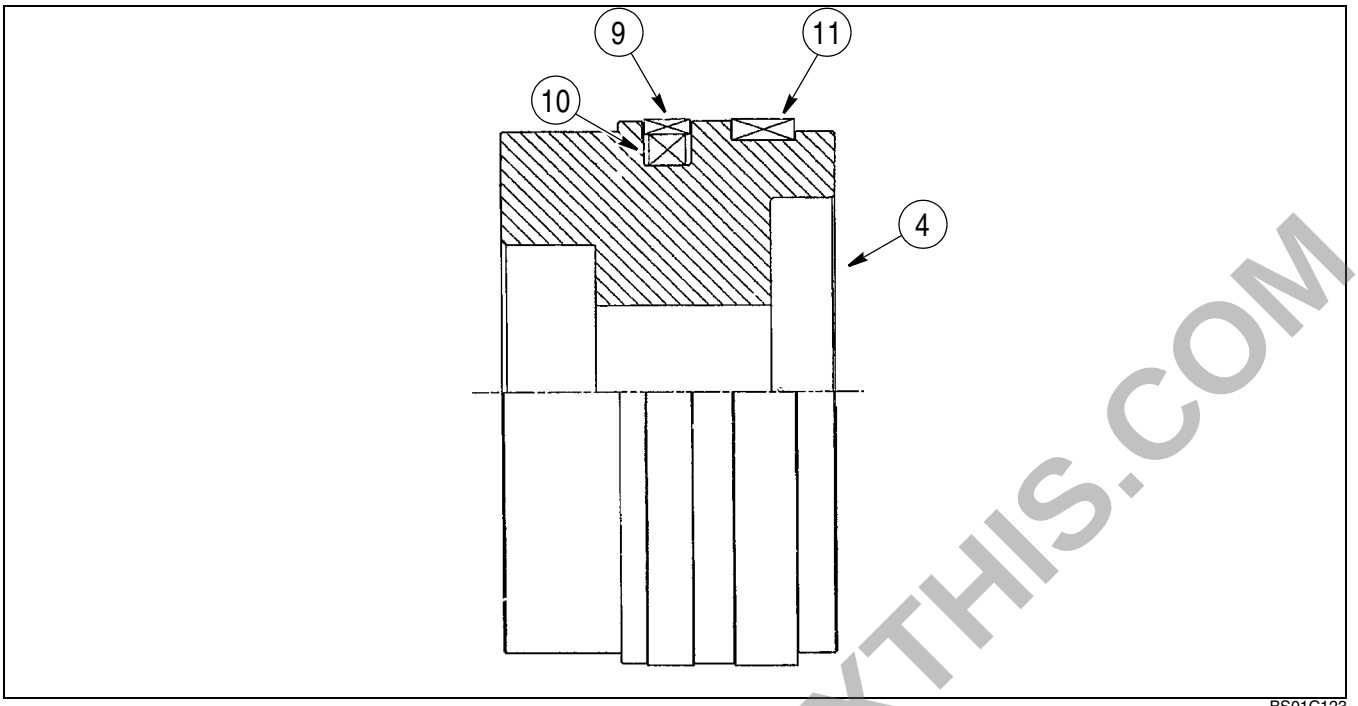
No → See page 10 and adjust the three-point hitch relief valve.

Yes ↓

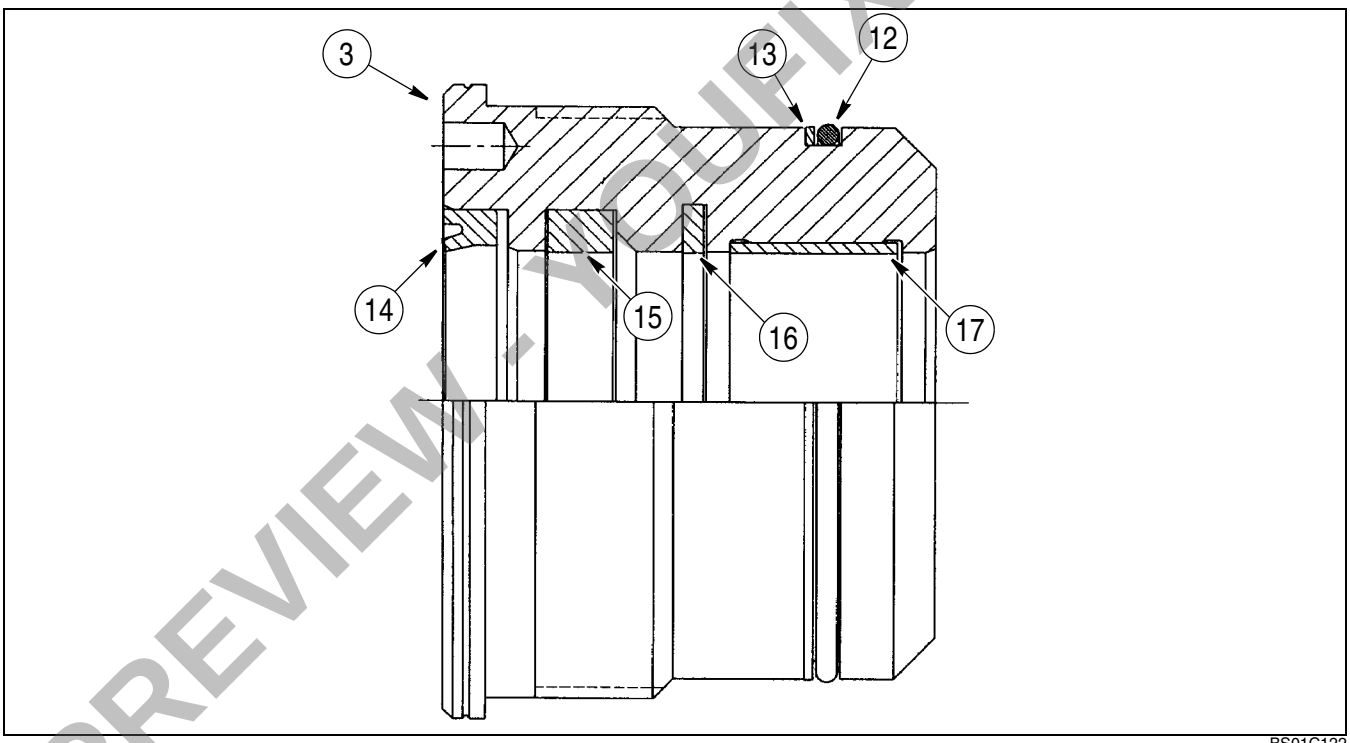
See the following topics for other circuits

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BS01C123



BS01C122

3. GLAND
4. PISTON
9. SEAL
10. BACKUP RING
11. WEAR RING
12. O-RING
13. BACKUP RING
14. WIPER
15. ROD SEAL
16. BUFFER SEAL
17. BUSHING

TYPICAL CYLINDER

NOTE: *The tilt and pitch cylinders do not have bushing (17) in the gland.*

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AIR CONDITIONING CONTROL SWITCH CHECK

Current Check

The temperature control switch is located in the instrument panel.

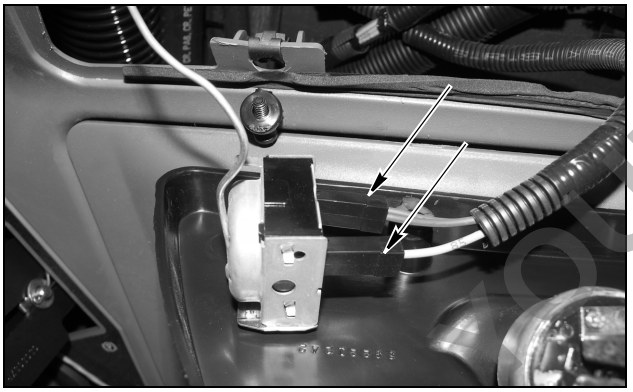
The temperature control switch senses evaporator temperature and controls current flow for compressor clutch operation.

The switch interrupts current flow to the clutch at 33° F to 37° F (0.6° C to 2.8° C) and will allow the clutch to energize at 42° to 70° F (5.6° C to 21° C) depending on switch position.

If the temperature control switch malfunctions, replace it.

Remove instrument cluster to gain access to the temperature control switch.

STEP 1



BD05H002

1. Temperature Control Switch

Engine OFF, key switch ON, and blower switch ON.

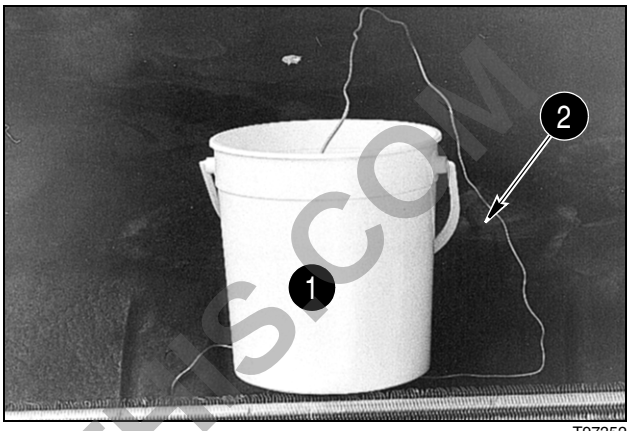
Turn temperature control switch fully clockwise.

Check voltage at temperature control switch terminal for wire No. 85. If voltage is less than 5, check blower switch.

Check Voltage at temperature control switch terminal for wire No. 60. If less than 5 volts, replace temperature control switch.

Sensing Line Check

STEP 2



T97352

1. Container of Ice and Water
2. Sensing Line

Engine OFF, key switch ON, and blower switch ON.

Turn temperature control switch fully clockwise. Remove sensing tube from evaporator.

Place end of sensing tube in a container with ice and water mixture.

STEP 3



BD05H002

1. Temperature Control Switch

When the sensing tube has cooled to the temperature of the ice and water mixture, the temperature control switch should interrupt the current flow to the compressor.

Check for current at temperature control switch terminal with the No. 60 and No. 85 wires. Use a test lamp connected to a good ground.

If current is not interrupted, replace the temperature control switch.

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10. Connect the bucket cylinder hoses with the appropriate tubes on the right side of the machine chassis upright.
11. If equipped, connect the clam cylinder hoses with the appropriate tubes on the left side of the machine chassis upright.
12. Move the loader control lever to the float position.
13. Raise the left loader lift cylinder and strut. Position the pivot pin in the loader frame bore and drive through the strut and cylinder piston rod eye.
14. Install the snap ring.
15. Connect the right loader lift cylinder in the same manner as the left lift cylinder. Install the snap ring.
16. Lubricate the pivot pins for the piston rod eyes of the lift cylinders and the pivot shaft.
17. With the engine running at low idle, extend and retract all loader cylinders three times to remove any air from the circuits.

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