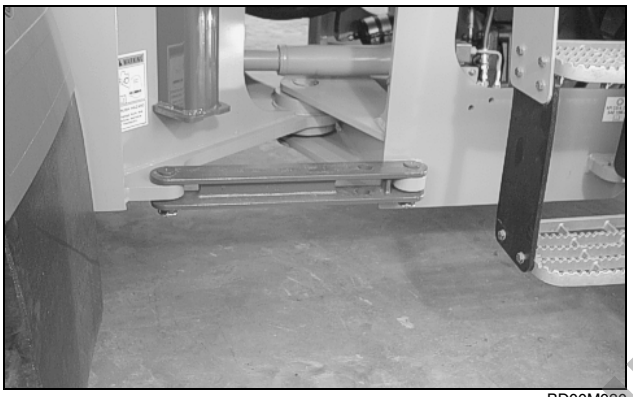
ENGINE

Removal

STEP 1

Park machine on a level surface and lower bucket to floor. Stop engine. Actuate brake pedal several times to discharge brake accumulators. Move loader control lever back and forth at least 30 times to release any pressure from hydraulic circuit.

STEP 2



BD00M030

Put articulation lock in LOCKED position.

STEP 3

Slowly loosen the filler cap for hydraulic reservoir to release air pressure in hydraulic reservoir.

STEP 4

Put master disconnect switch in OFF position.

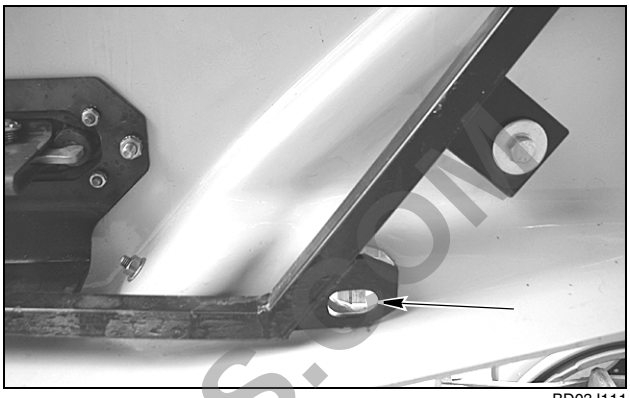
STEP 5

Disconnect battery cable from LH battery negative post. Put a plastic cap over the negative post.

STEP 6

Disconnect battery cable from RH battery positive post. Put a plastic cap over the positive post.

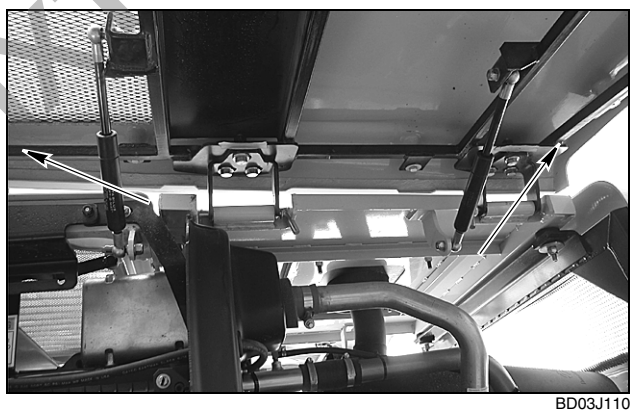
STEP 7



BD03J111

Open the engine compartment side panel, attach a lifting eye to the hole in the lower portion of the panel.

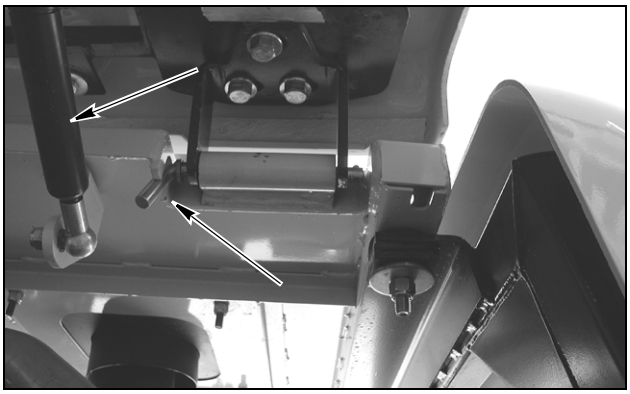
STEP 8



BD03J110

Attach lifting straps to the hinge side of the hood, attach suitable lifting equipment to the straps and take up slack in the straps.

STEP 9



BD03J112

Disconnect the gas cylinders from the side panel and hood. Remove hinge pins, remove panel from machine.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

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.*

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Test No. 1 - Torque Converter and Hydraulic Stall Together

1. Sit in the seat.
2. Start the engine and run the engine at low idle.
3. Press the brake pedal, and shift into Forward.
4. Make sure the parking brake is released (OFF).
5. Run engine at low idle. Push the clutch cutout switch to OFF. Put the transmission in manual mode. Push down and hold the brake pedal for the remainder of this procedure.
6. Make sure that the transmission is in Forward and turn the transmission control lever to third gear.
7. Increase the engine speed to full throttle.
8. Hold the bucket control lever in the ROLLBACK position.
9. Place the lift control lever in “FLOAT” and hold.
10. Check the engine speed by pressing button P1 on display panel.

NOTE: *The engine speed must be checked while the bucket is rolled back and the lift arms are moving.*

11. Release the bucket control lever.
12. Decrease the engine speed to low idle.
13. Stop the engine.

Understanding the Results of Test No. 1

1. If the engine speed was as specified, the engine, torque converter, transmission and hydraulic system are probably good.
2. If the engine speed was not as specified, do Test No. 2 and 3.

Test No. 2 - Torque Converter Stall

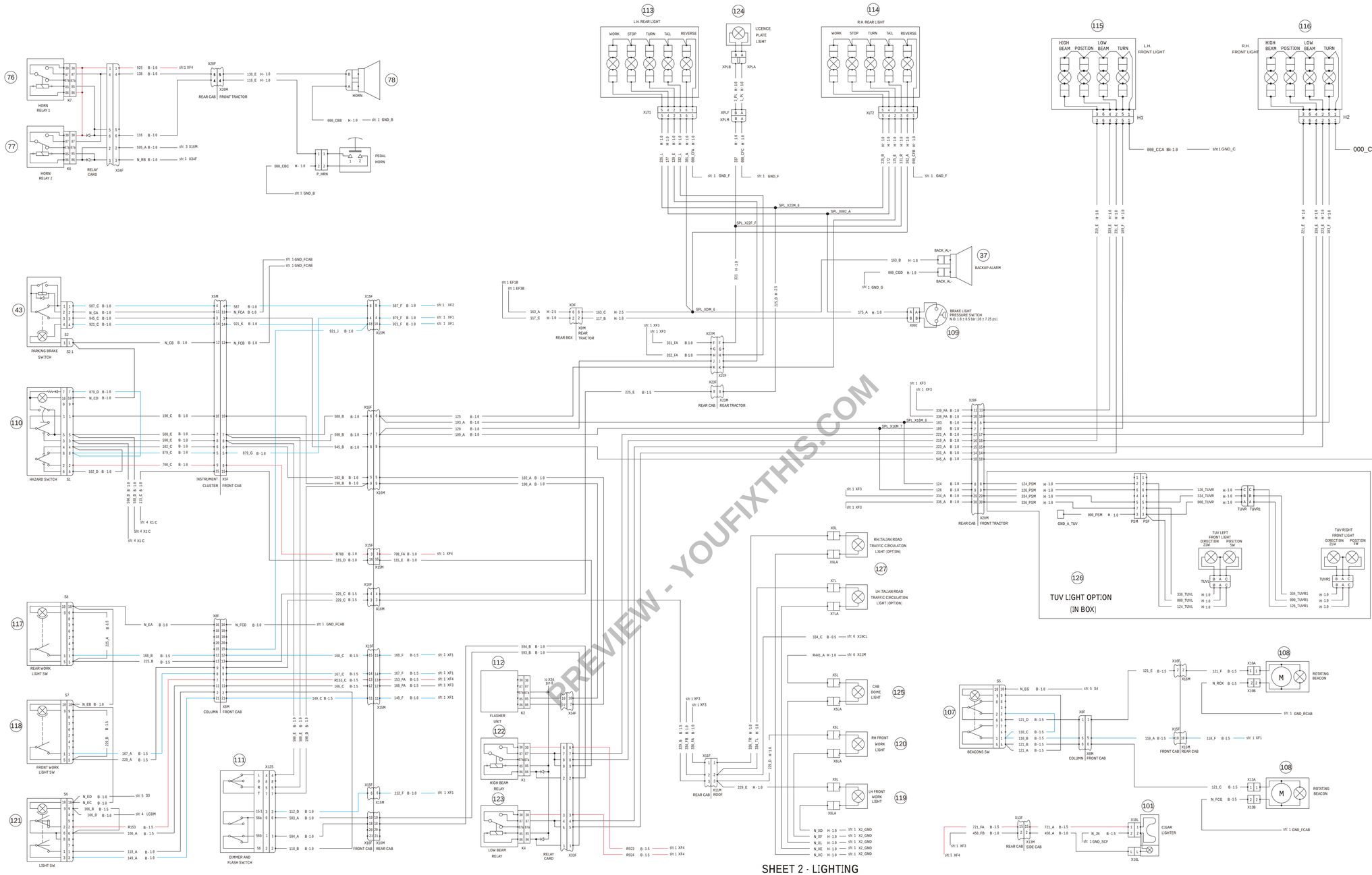
1. Sit in the seat.
2. Start the engine and run the engine at low idle.
3. Press the brake pedal, and shift into Forward.
4. Make sure the parking brake is released (OFF).
5. Run the engine at low idle.
6. Push down and hold the brake pedal for the remainder of this test.
7. Make sure that the transmission is in Forward and turn the transmission control lever to third gear.
8. Increase the engine speed to full throttle.
9. Check the engine speed by pressing button P1 on display panel.
10. Decrease the engine speed to low idle.
11. Stop the engine.

Understanding the Results of Test No. 2

1. If the engine speed was as specified, the engine, torque converter and transmission are probably good.
2. If the engine speed was more than specified, the problem can be in the torque converter or the transmission. See Section 6002 for troubleshooting information.
3. If the engine speed was less than specified, do Test No. 3.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



SHEET 2 · LIGHTING

COMPONENTS

1. Batteries
2. Master Disconnect Switch
3. Fuel Solenoid
4. Alternator
5. Starter Motor
6. Starting Relay
7. Filter Heater Relay
8. Fuel Filter Heater Thermostat
9. 1st Filter Heater
10. 2nd Fuel Filter Heater (LW130)
11. Cold Start Relay
12. Grid Heater
13. Grid Heater Temperature Sensor
14. Grid Heater Controller
15. Neutral Start Relay
16. Ignition Switch
17. Accessory Relay
18. KKSB Thermostat
19. KKSB Solenoid
20. Output Speed Sensor
21. Engine Speed Sensor
22. Intermediate Speed Sensor
23. Turbine Speed Sensor
24. Filter Maintenance Switch
25. Torque Converter Output Temperature Sender
26. Transmission Solenoid Valve and Temperature Sensors
27. Transmission Electronic Control Module
28. Transmission Shifter
29. Diagnostic Connector
30. Transmission Kick-down Switch
31. Transmission Automatic Switch
32. Declutch Switch
33. Declutch Pressure Switch
34. Transmission Enable Switch
35. FNR Switch
36. Backup Alarm Relay
37. Backup Alarm
38. Brake Warning Pressure Switch
39. Brown Box
40. Fuel Level Sender
41. Engine Coolant Temperature Sender
42. Air Filter Restriction Switch
43. Parking Brake Switch
44. Instrument Cluster
45. Digital Display Panel
46. Engine Oil Pressure Switch
47. Parking Brake Pressure Switch
48. Parking Brake Relay
49. Parking Brake Solenoid
50. Fan Reversing Switch (Option)
51. Fan Reversing Solenoid (Option)
52. Detent Switch
53. Bucket Control Valve Electromagnetic Detents
54. Boom Control
55. Bucket Control
56. Float Solenoid
57. Secondary Steering Pressure Switch (Option)
58. Secondary Steering Motor (Option)
59. Secondary Steering Solenoid (Option)
60. Secondary Steering Relay (Option)
61. Pin Engage Switch (Option)
62. Pin Engage Solenoid (Option)
63. LTS Control Switch
64. LTS Control Relay Number 1
65. LTS Control Relay Number 2
66. LTS Control Solenoid
67. Front Wiper Motor
68. Front Wiper and Washer Switch
69. Front Wiper Timer
70. Front Washer Motor
71. Rear Wiper Switch
72. Rear Washer Switch
73. Rear Washer Pump Motor
74. Rear Wiper Motor
75. Rear Wiper Timer
76. Horn Relay - Number 1
77. Horn Relay - Number 2
78. Horn
79. Central Grease Lubrication Switch (Option)
80. Seat Compressor and Switch (Option)
81. Seat Heater Switch (Option)
82. Blower Switch
83. Blower Motor Speed Resistors
84. Blower Motor
85. Air Conditioning Pressure Switch
86. Thermostat Switch
87. Compressor Clutch Relay
88. Compressor Clutch
89. Conditioner Switch
90. Heater Control Unit
91. Circuit Control Switch
92. Circuit Control Motor
93. Warm Cold Stop Cock Knob
94. Warm Cold Stop Cock Motor
95. Climate Control Unit (Option)
96. Temperature Sensors (Option)
97. Climate Control Relays (Option)
98. Recycling Motor (Option)
99. Power Converter, Recycling Motor (Option)
100. Water Valve Motor (Option)
101. Cigar Lighter
102. Power Converter - 24 volts to 12 volts (Option)
103. Power Outlet (Option)
104. 12 Volt Radio (Option)
105. Left Speaker (Option)
106. Right Speaker (Option)
107. Beacon Switch (Option)
108. Rotating Beacon (Option)
109. Brake Lamp Pressure Switch
110. Hazard Switch
111. Turn Signal, Hi/Low Beam Switch
112. Flasher Module
113. Left-Hand Rear Combination Lamp
114. Right-Hand Rear Combination Lamp
115. Left-Hand Front Combination Lamp
116. Right-Hand Front Combination Lamp
117. Rear Work Light Switch
118. Front Work Light Switch
119. Left-Hand Front Work Lamp
120. Right-Hand Front Work Lamp
121. Lamp Switch
122. High Beam Relay
123. Low Beam Relay
124. License Plate Lamp
125. Dome Lamp
126. TUV Lamps (Option)
127. Italian Road Circulation Lamps (Option)

WIRE IDENTIFICATION

1. WIRE NUMBER
2. WIRE COLOR SYMBOL
3. WIRE SIZE (mm²) TYPICAL

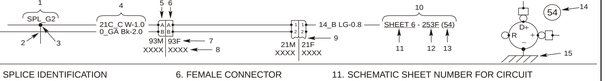
Example: 23F_A W-2.0 (1 2 3)

N = BLACK	RT = RED	H = GREY
L = BLUE	M = BROWN	BL = BLUE
GN = GREEN	SW = BLACK	B = WHITE
GE = YELLOW	V = GREEN	G = YELLOW
RN = RED/BLACK DOTTED	R = RED	

SHOWS POWER - MASTER DISCONNECT SWITCH IN ON POSITION

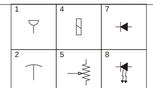
SHOWS POWER - KEY SWITCH IN ON POSITION

CIRCUIT LEGEND



1. SPLICE IDENTIFICATION
2. CIRCUIT CROSSING (NOT CONNECTED)
3. CIRCUIT CONNECTED
4. WIRE IDENTIFICATION
5. MALE CONNECTOR
6. FEMALE CONNECTOR
7. CONNECTOR IDENTIFICATION
8. HARNESS IDENTIFICATION
9. INDICATES PARTIAL CONNECTOR
10. CIRCUIT IDENTIFICATION
11. SCHEMATIC SHEET NUMBER FOR CIRCUIT CONTINUATION
12. CONNECTION POINT ON SCHEMATIC
13. COMPONENT NUMBER (IF ASSIGNED)
14. COMPONENT NUMBER
15. INDICATES INTERNALLY GROUNDED COMPONENT

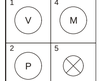
ACTUATOR SYMBOLS



1. PRESSURE
2. HAND OPERATED
3. TEMPERATURE
4. COIL
5. VARIABLE RESISTOR
6. RESISTOR
7. DIODE
8. LIGHT EMITTING DIODE

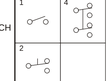
9A. MOMENTARY CONTACT
9B. MAINTAINED CONTACT

HOUSINGS



1. VACUUM SWITCH
2. PRESSURE SWITCH
3. TEMPERATURE SWITCH
4. MOTOR
5. LAMP

CONTACT SYMBOLS



1. SINGLE POLE, SINGLE THROW
2. SINGLE POLE, DOUBLE THROW
3. DOUBLE POLE, SINGLE THROW
4. DOUBLE POLE, DOUBLE THROW

FUSE AND CIRCUIT BREAKER



1. FUSE
2. CIRCUIT BREAKER, AUTOMATIC RESET
3. CIRCUIT BREAKER, MANUAL RESET

NOTES

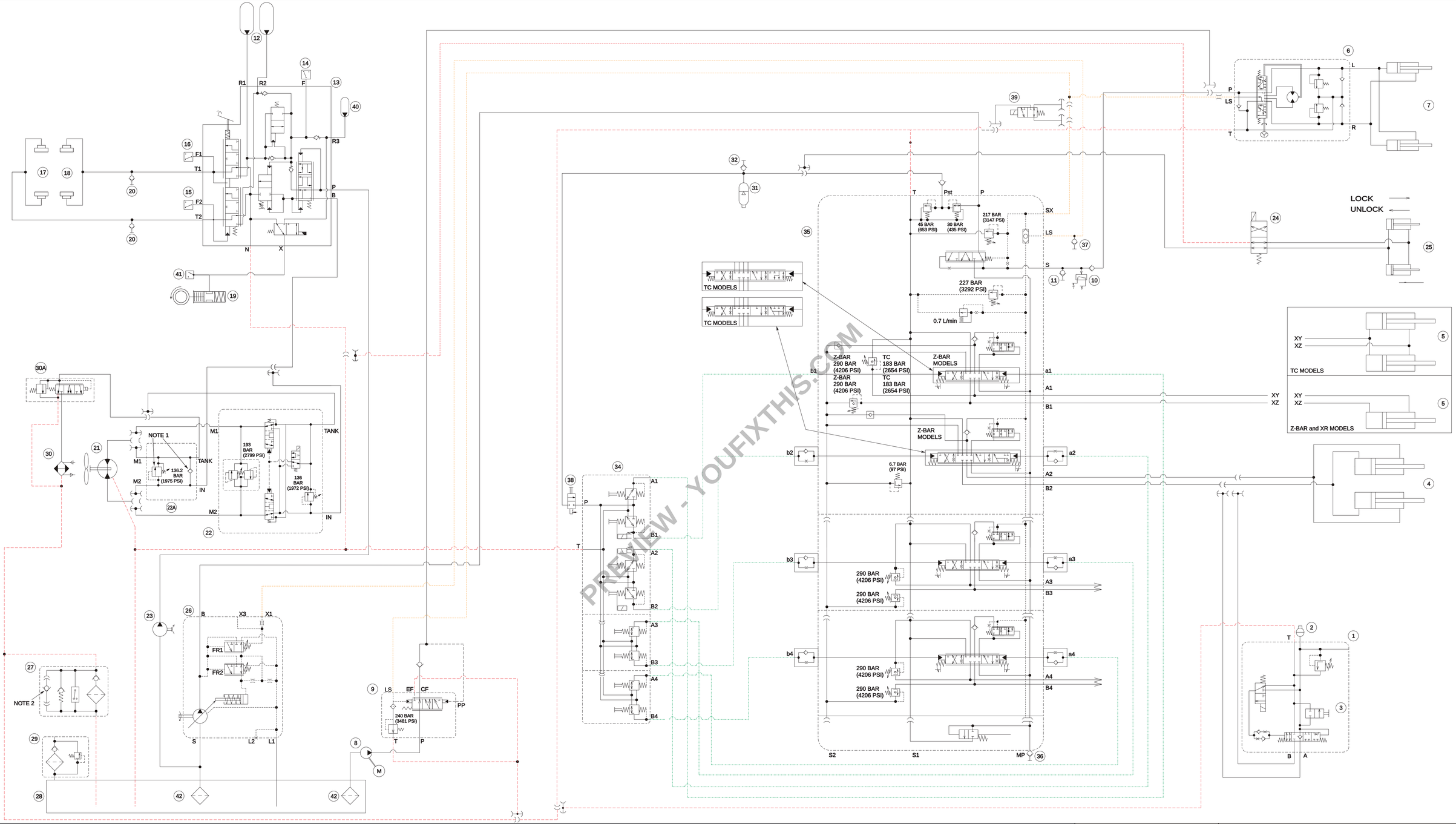
SHEET 1 · POWER CONTROL & DISTRIBUTION
SHEET 2 · LIGHTING

ELECTRICAL SCHEMATIC W110 and W130 Wheel Loaders

Additional copies of this Hydraulic and Electrical Schematic can be ordered through Technical Publications Distribution System.
The Part Number is 6-81680

BC053038

Download full manual at youfixthis.com



PREVIEW - YOUFIXTHIS.COM

COMPONENTS

1. LOAD TRAVEL STABILIZATION VALVE (OPTION)
2. LOAD TRAVEL STABILIZATION ACCUMULATOR (OPTION) PRECHARGE: 14.5 BAR (250 PSI) CAPACITY: 3.78 LITRES (231 CU IN.)
3. LOAD TRAVEL STABILIZATION ACCUMULATOR BLEEDER VALVE
4. LIFT CYLINDERS) BORE: 114.3 MM (4.5 IN) ROD: 63.5 MM (2.5 IN) STROKE: 787.7 MM (31 IN)
5. BUCKET CYLINDER (Z BAR MODELS) BORE: 127 MM (5 IN) ROD: 76.2 MM (3 IN) STROKE: 619.8 MM (24.5 IN)
5. BUCKET CYLINDER (TC MODELS) BORE: 114 MM (4.49 IN) ROD: 64 MM (2.52 IN) STROKE: 820 MM (32.28 IN)
6. STEERING CONTROL VALVE DISPLACEMENT: 740 CC/REV (45 CU IN./REV)
7. STEERING CYLINDERS (2) BORE: 69.9 MM (2.75 IN) ROD: 38.1 MM (1.5 IN) STROKE: 462.5 MM (18.26 IN)
8. AUXILIARY STEERING MOTOR AND PUMP DISPLACEMENT: 11 CC/REV (0.671 CU IN./REV)
9. AUXILIARY STEERING PRIORITY VALVE RELIEF PRESSURE: 240 BAR (3481 PSI)
10. AUXILIARY STEERING PRESSURE SWITCH 2.4 BAR (35 PSI)
11. STEERING PRESSURE DIAGNOSTIC COUPLER
12. BRAKE ACCUMULATORS (2) PRECHARGE: 55 BAR (800 PSI) CAPACITY: 3 LITRE (183 CU IN.)
13. BRAKE VALVE AND ACCUMULATOR CHARGING VALVE CUT-IN: 157 ±10 BAR (2277 ±145 PSI) CUT-OUT: 193 ± 3 BAR (2800 ± 43 PSI)
14. BRAKE WARNING PRESSURE SWITCH 133 ± 7 BAR (1929 ± 101.5 PSI) RISING
15. BRAKE LIGHT PRESSURE SWITCH 1.8 ± 0.5 BAR (26 ± 7.25 PSI)
16. DECLUTCH SWITCH 15 BAR (217.5 PSI)
17. REAR BRAKE CYLINDERS MODULATION PRESSURE: 87 TO 94 BAR (1260 TO 1363 PSI)
18. FRONT BRAKE CYLINDERS MODULATION PRESSURE: 90 TO 97 BAR (1305 TO 1407 PSI)
19. PARKING BRAKE CYLINDER
20. FRONT AND REAR AXLE BRAKE PRESSURE DIAGNOSTIC FITTINGS (2)
21. FAN DRIVE MOTOR DISPLACEMENT: 14 CC/REV (0.85 CU IN./REV)
22. FAN REVERSING VALVE (OPTION) FAN SPEED 1575 TO 1625

22A. FAN VALVE (STANDARD) FAN SPEED 1575 TO 1625

23. BRAKE HYDRAULIC PUMP DISPLACEMENT: 14 CC/REV (0.85 CU IN./REV)
24. COUPLER LOCKING VALVE (OPTION)
25. COUPLER LOCKING CYLINDERS (2) (OPTION)
26. IMPLEMENT HYDRAULIC PUMP DISPLACEMENT: 90 CC/REV (5.5 CU IN./REV) CUTOFF: 280 BAR (4061 PSI) DELTA: 22 BAR (319 PSI) DESTROKE: 280 BAR (4061 PSI)
27. HYDRAULIC FILTER ASSEMBLY BYPASS VALVE: 3.4 BAR (50 PSI) WARNING SWITCH: 2.7 BAR (40 PSI)
28. HYDRAULIC RESERVOIR TOTAL VOLUMN: 83.3 LITRES (22 U.S. GALLONS) OIL CAPACITY: 56.8 LITRES (15 U.S. GALLONS)
29. HYDRAULIC RESERVOIR BREATHER 20 MICRON BREATHER
30. HYDRAULIC COOLER

30A. COOLER BYPASS VALVE (OPTION)

31. PILOT PRESSURE ACCUMULATOR PRECHARGE: 14 BAR (203 PSI) CAPACITY: 0.75 LITRE (45.8 CU IN.)
32. PILOT PRESSURE DIAGNOSTIC COUPLER
33. NOT USED
34. CONTROLLER WITH TWO SPOOL LOADER VALVE TWO LEVER OR JOYSTICK CONTROLLER
34. CONTROLLER WITH THREE SPOOL LOADER VALVE OPTIONAL AUXILIARY
34. CONTROLLER WITH FOUR SPOOL LOADER VALVE OPTIONAL AUXILIARY
35. LOADER CONTROL VALVE TWO SPOOL (STANDARD) THREE SPOOL (OPTION) FOUR SPOOL (OPTION)
36. PUMP PRESSURE DIAGNOSTIC COUPLER
37. LOAD SENSING PRESSURE DIAGNOSTIC COUPLER
38. PILOT CONTROL ACTUATOR VALVE
39. AUXILIARY STEERING LOAD SENSE SOLENOID VALVE (OPTION - NORTH AMERICAN MODELS)
40. PARKING BRAKE ACCUMULATOR PRECHARGE: 95 +2 -1 BAR (1392 +29 -14.5 PSI) CAPACITY: 0.16 LITRE (9.7 CU IN.)
41. PARKING BRAKE SWITCH 82 ± 2 BAR (1189 ± 29 PSI)
42. 100 MESH STRAINER (2)

NOTES

1. CHECK AND RELIEF VALVES INTEGRAL TO MOTOR NOT USED WITH FAN REVERSER.
2. REVERSE FLOW CHECK VALVE (OPTION) USED ONLY WITH LOAD TRAVEL STABILIZATION.

HYDRAULIC SYMBOLS

PRESSURE
COMPONENT
RETURN
LOAD SENSE
PILOT PRESSURE
CROSSING LINES
CHECK VALVE
FILTER OR SCREEN
LINE CONNECTION
RESTRICTOR
OIL COOLER

HYDRAULIC SCHEMATIC
W130 Z-BAR AND TC WHEEL LOADER

Additional copies of this Hydraulic and Electrical Schematic can be ordered through Technical Publications Distribution System. The Part Number is 6-81680

BC053044

Download full manual at youfixthis.com

TROUBLESHOOTING

NOTE: *The battery must be at full charge and all connections clean and tight before doing any testing of the electrical system. Use a Multimeter for the following tests.*

1 – Batteries

NOTE: *See Section 4003 and check the batteries.*

2 – Master Disconnect Switch

Check Points	Reading	Possible Cause of Bad Reading
NOTE: *Disconnect cables from both terminals of master disconnect switch (main contact). Put master disconnect switch in ON position.*		
Between terminals of master disconnect switch	Continuity	If there is no continuity, the master disconnect switch (2) is bad.
NOTE: *Put the master disconnect switch in the OFF position.*		
Between terminals of master disconnect switch	Open Circuit	If there is continuity, the master disconnect switch is bad.
NOTE: *Use the same method to check the master disconnect switch (auxiliary contact).*		

3 – Engine Fuel Solenoid

Check Points	Reading	Possible Cause of Bad Reading
NOTE: *Disconnect connector FSO from fuel solenoid.*		
Between housing of fuel solenoid and ground	Continuity	Bad ground connection.
Between terminal 1 of fuel solenoid and ground	12.7 ohms at 20° C (68° F) (Nominal)	Bad fuel solenoid.
NOTE: *Put the master disconnect switch in the ON position and the ignition switch in the ON position.*		
Terminal for wire 903_M to ground	24 volts	Check wire 903_M and circuits 903_D and 903_DA, also check circuit to batteries. Bad master disconnect switch (2) or ignition switch (16). Check fuse EF6.
NOTE: *If the readings are good, replace the fuel solenoid.*		

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

MAINTENANCE SCHEDULE

Model W110 and W130

Instructions

AS REQUIRED

22 SERVICE THE AIR CLEANER IF THE AIR CLEANER WARNING LAMP ILLUMINATES ..... SEE OPERATORS MANUAL
30 REPLACE THE TRANSMISSION FILTER
IF THE TRANSMISSION FILTER RESTRICTION WARNING LAMP ILLUMINATES ..... USE NEW HOLLAND FILTER
19 CHECK THE RADIATOR COOLANT LEVEL IF THE WARNING LAMP ILLUMINATES ..... SEE OPERATORS MANUAL
6 REPLACE THE HYDRAULIC FILTER IF THE HYDRAULIC FILTER WARNING LAMP ILLUMINATES ..... USE NEW HOLLAND FILTER
CHECK THE AIR CONDITIONING DRIVE TENSION (IF EQUIPPED) NOT SHOWN ..... ADJUST AS REQUIRED

EVERY 10 HOURS OF OPERATION OR EACH DAY - WHICHEVER OCCURS FIRST

16 CHECK THE ENGINE OIL LEVEL ..... SEE OPERATORS MANUAL

EVERY 50 HOURS OF OPERATION

1 CHECK THE COOLANT RESERVOIR FLUID LEVEL ..... ETHYLENE GLYCOL AND WATER
29 CHECK THE TRANSMISSION OIL LEVEL (ENGINE RUNNING AND OIL WARM) ..... SEE OPERATORS MANUAL
5 CHECK THE HYDRAULIC RESERVOIR FLUID LEVEL ..... SEE OPERATORS MANUAL
38 LUBRICATE THE BUCKET AND BELLCRANK PIVOT POINTS (10 FITTINGS) TC ..... NEW HOLLAND AMBRA GR 75 MD GREASE
39 LUBRICATE THE BELLCRANK AND BUCKET PIVOTS (6 FITTINGS) Z-BAR ..... NEW HOLLAND AMBRA GR 75 MD GREASE

EVERY 100 HOURS OF OPERATION

7 LUBRICATE THE STEERING CYLINDER PIVOTS - ROD AND CLOSED END (4 FITTINGS) . NEW HOLLAND AMBRA GR 75 MD GREASE
40 LUBRICATE THE LOADER LIFT ARM AND CYLINDER PIVOTS (7 FITTINGS) Z-BAR ..... NEW HOLLAND AMBRA GR 75 MD GREASE
26 LUBRICATE THE FRONT DRIVE SHAFT SUPPPORT BEARING (1 FITTING) ..... NEW HOLLAND AMBRA GR 75 MD GREASE
8 LUBRICATE THE LOADER LIFT ARM AND CYLINDER PIVOTS (14 FITTINGS) TC ..... NEW HOLLAND AMBRA GR 75 MD GREASE
31 CHANGE THE FRONT/REAR AXLE OIL ..... SEE OPERATORS MANUAL
39 INITIAL TRANSMISSION CLUTCH CALIBRATION ..... SEE OPERATORS MANUAL OR SEE SERVICE MANUAL SECTION 4005

EVERY 250 HOURS OF OPERATION

19 CHECK THE RADIATOR COOLANT LEVEL ..... ETHYLENE GLYCOL AND WATER
2 CHANGE THE ENGINE OIL AND REPLACE THE ENGINE OIL FILTER ..... SEE OPERATORS MANUAL
34 CHECK THE BATTERY FLUID LEVEL ..... SEE OPERATORS MANUAL
36 CHECK THE TIRE CONDITION AND AIR PRESSURE ..... SEE OPERATORS MANUAL
12 CLEAN THE CAB AIR FILTERS (IF EQUIPPED) ..... SEE OPERATORS MANUAL

EVERY 500 HOURS OF OPERATION

3 REPLACE THE FUEL FILTER ..... USE NEW HOLLAND FILTER
33 DRAIN WATER AND SEDIMENT FROM THE FUEL TANK ..... SEE OPERATORS MANUAL
14 REPLACE THE IN-LINE FUEL FILTER ..... USE NEW HOLLAND FILTER

EVERY 1000 HOURS OF OPERATION

21 CHECK THE ENGINE VALVE CLEARANCES ..... SEE SERVICE MANUAL
6 REPLACE THE HYDRAULIC FILTER ..... USE NEW HOLLAND FILTER
30 REPLACE THE TRANSMISSION OIL FILTER ..... USE NEW HOLLAND FILTER
28 CHANGE THE TRANSMISSION OIL ..... SEE OPERATORS MANUAL
23 CLEAN THE TRANSMISSION BREATHER ..... CLEAN WITH SOLVENT
24 LUBRICATE THE UPPER AND LOWER CHASSIS PIVOTS (2 FITTINGS) ..... NEW HOLLAND AMBRA GR 75 MD GREASE
31 CHANGE THE FRONT/REAR AXLE OIL ..... SEE OPERATORS MANUAL
39 TRANSMISSION CLUTCH CALIBRATION ..... SEE OPERATORS MANUAL OR SEE SERVICE MANUAL SECTION 4005

EVERY 2000 HOURS OF OPERATION OR EACH YEAR - WHICHEVER OCCURS FIRST

4 CHANGE THE HYDRAULIC OIL ..... SEE OPERATORS MANUAL
18 DRAIN, FLUSH AND REFILL THE ENGINE COOLING SYSTEM ..... ETHYLENE GLYCOL AND WATER
22 REPLACE THE AIR CLEANER ELEMENTS ..... USE NEW HOLLAND FILTERS

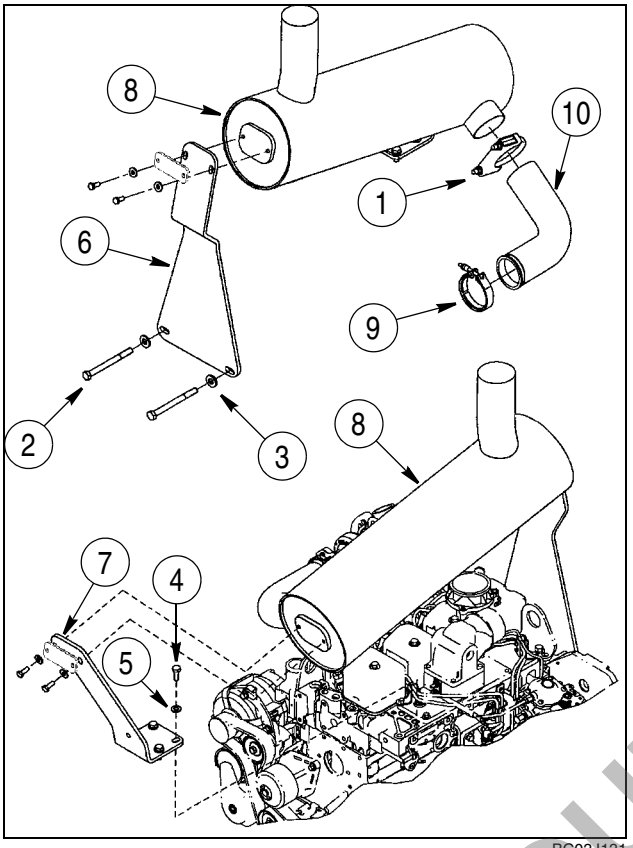
Bur 6-81190 Issued 3-06 Printed in U.S.A.

Download full manual at youfixthis.com

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

STEP 88



BC03J131

1. CLAMP
2. BOLT
3. WASHER
4. BOLT
5. WASHER
6. FRONT BRACKET
7. REAR BRACKET
8. MUFFLER
9. CLAMP
10. EXHAUST TUBE ELBOW

Put clamp (9) on exhaust tube elbow (10). Install exhaust tube elbow and clamp on turbocharger. Do not tighten clamp at this time.

STEP 89

Install and support muffler (8) and brackets (6 and 7) on engine while connecting muffler to exhaust tube elbow (10). Install two washers (5) and bolts (4) finger tight.

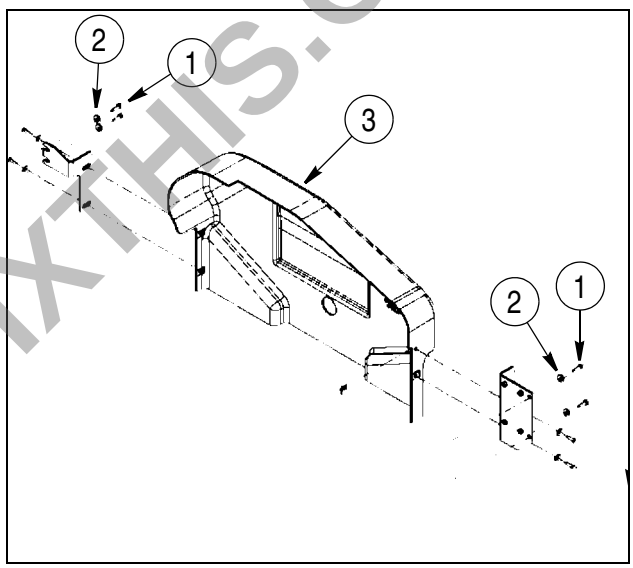
STEP 90

At front of engine, install two washers (3) and bolts (2) to secure muffler front mounting bracket (6). Tighten bolts (2) to a torque of 118 to 133 Nm (87 to 98 pound-feet). Tighten bolts (4) to a torque of 68 to 77 Nm (50 to 56 pound-feet).

STEP 91

Install clamp (1). Tighten clamp (1) to a torque of 20 to 25 Nm (15 to 18 pound-feet). Tighten clamp (9) to a torque of 4.8 to 5.2 Nm (42.5 to 46 pound-feet).

STEP 92



BC03J132

1. BOLT
2. WASHER
3. DRIVE BELT GUARD

Position drive belt guard (3) and secure using four washers (2) and bolts (1) to the frame.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Wire Identification Codes

21C RN - 1.0

Wire Name

Wire Color

N or SW= Black	BL or L= Blue	H = Grey	M = Brown	GN or V + Green
R or RT = Red	RN = Red /Black	B or WS = White	G or GE = Yellow	

Wire Size (mm^2)

0.8 mm	1.0 mm	2.0 mm	5.0 mm

Wire Identification			From Connector		To Connector	
Wire	**Circuit**	**Color, Size**	**Connector**	**Cavity**	**Connector**	**Cavity**
590_B	LH Turn Light PWR	White-1.0	X5F Front Cab/INSTR CLUS	8	X16F Rear Cab/Front Cab	7
590_C	LH Turn Light	White-1.0	S1 Hazard Switch	3	X5M Front Cab/INST CLUS	8
590_D	LH Turn Light Signal	White-1.0	X1C Combined Instrument	14	S1 Hazard Switch	3
590_E	LH Turn Light PWR	White-1.0	X5F Front Cab/INST CLUS	8	X12S Dimmer/Flasher Switch	4
593_A	Low Beam Relay PWR	White-1.0	X16F Rear Cab/Front Cab	19	X12S Dimmer/Flasher Switch	6
593_B	Low Beam Relay PWR	White-1.0	X16M Rear Cab/Front Cab	19	X33F Relay Card	1
594_A	86 Low Beam Relay	White-1.0	X12S Dimmer/Flasher Switch	1	X16F Rear Cab/Front Cab	18
594_B	High Beam Relay PWR	White-1.0	X16M Rear Cab/Front Cab	18	X33F Relay Card	2
595_A	Transmission K_D Signal	White-1.0	X16M Rear Cab/Front Cab	11	X34F Relay Card	2
595_M	Transmission K_D Signal	White-1.0	X16F Rear Cab/Front Cab	11	X6 Transmission Shifter	D
613_A	Brake Low Pressure Signal	White-0.5	X20F Rear Cab/Front TR	3	CN1 Brown Box In	3
613_B	Brake Low Pressure Signal	Grey-1.0	X20M Rear Cab/Front TR	3	XP4 Brake ACCUM Low PR SW	B
637_A	Alternator Signal	Grey-1.0	X23M Rear Cab/Front TR	10	Alt Alternator	2
637_B	Alternator Signal	White-0.5	SPL_X23F_10 Brake ACCUM Low PR Signal		CN1 Brown Box In	5
637_C	Alternator Signal	White-0.5	SPL_X23F_10 Brake ACCUM Low PR Signal		X6F Grid Heater Controller	4
663_B	Air Filter Clog Signal	Grey-1.0	X23M Rear Cab/Front TR	12	XP1 Air Filter Clog PR Switch	B
700_S	Starter Solenoid PWR	Grey-2.5	SR30 Starter Relay	1	TB3 R Tractor Fused Power	1
707_A	Alternator S	Grey-1.0	Alternator	4	XDM Rear TR/Rear TR	18
707_F	Alternator S	Grey-1.0	XDF Rear TR/Rear TR	18	TB3 R Tractor Fused PWR	1
708_C	B+ Emergency Light	White-1.0	S1 Hazard Switch	2	X5M Front Cab/INST CLUS	9
708_FA	+B Hazard	White-1.0	XF4 Fuse Block Out	2	X15M Rear Cab/Front Cab	3
711_C	Power In 24V	White-1.5	X1 Climate Relay	12	X11M Rear Cab/Roof	7
711_C	Blower Switch PWR	White-1.5	X11M_A Rear Cab/Roof (Heater)	7	B Blower Switch	+
711_F	Cab Climate	White-1.5	XF5 Fuse Block Out	3	X11F Rear Cab/Roof	7
712_A	12V Output	White-1.5	I Heater Control Unit	8	F Circuit Control Switch	A
712_B	12V Output	White-1.5	I Heater Control Unit	8	X13W Circuit Control Motor	A
721_A	Cigar Lighter Supply	White-1.5	X10L Cigar Lighter	1	X13M Rear Cab/Side Cab	15
721_FA	Lighter	White-1.5	XF4 Fuse block Out	5	X13F Rear Cab/Side Cab	15
724_F	B+ Supply	White-2.5	X13F Rear Cab/Side Cab	12	XF5 Fuse block Out	5

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

74 – Rear Wiper Motor		
Check Points	**Reading**	**Possible Cause of Bad Reading**
Terminal for wire N_RW to ground	Continuity	Bad ground circuit.
NOTE: *Put the master disconnect switch and the ignition switch in the ON position.*		
Terminal for wire 889_RW to ground	24 volts	Check fuse F6B, also check circuit 889.
NOTE: *Put the rear wiper and washer switch (77) in the ON position.*		
Terminal for wire 813_RW to ground	24 volts	Bad rear wiper switch (71).
NOTE: *If the readings are good, replace the rear wiper motor.*		

75 – Rear Wiper Delay Timer		
Check Points	**Reading**	**Possible Cause of Bad Reading**
Terminal for wire 889_RD to ground	Continuity	Bad ground circuit.
NOTE: *Put the master disconnect switch and the ignition switch in the ON position. Make sure the rear wiper switch is in the OFF position, disconnect connector X17W.*		
Terminal for wire 889_D to ground	24 volts	Check fuse F6B, also check circuit 880.
NOTE: *Put the front wiper and washer switch in the on position.*		
Terminal for wire 883_D to ground	24 volts	Bad front wiper and washer switch.

76 – Horn Relay 1		
Check Points	**Reading**	**Possible Cause of Bad Reading**
Terminal for wire 925_B to ground	24 volts	Check fuse F11A, also check wire 925.
NOTE: *Have another person push and hold the horn switch.*		
Terminal for wire 116 to ground	Continuity	Bad horn button. Check circuit 116.
Terminal for wire 138_B to ground	24 volts	Bad horn relay.

77 – Horn Relay 2		
Check Points	**Reading**	**Possible Cause of Bad Reading**
Terminal for wire N_RB to ground	Continuity	Bad ground circuit.
Terminal for wire 925_B to ground	24 volts	Check fuse F11A, also check wire 925.
NOTE: *Have another person push and hold the horn switch.*		
Terminal for wire 595_A to ground	Continuity	Bad horn button on gear shifter. Check circuit 595.
Terminal for wire 138_B to ground	24 volts	Bad horn relay.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

CONNECTOR X21M - CAB/TRANSMISSION

CAV	WIRE IDENT	CIRCUIT
A	ZF56	Trans Solenoid Valve Y1
B	ZF10	Trans Solenoid Valve Y2
C	ZF32	Trans Solenoid Valve Y3
D	ZF55	Trans Solenoid Valve Y4
E	ZF9	Trans Solenoid Valve Y5
F	ZF51	Trans Solenoid Valve Y6
G	ZF12	Output Switch Power VPS1
J	ZF39	Valve Body Temp Sender
K	ZF49	TCO Speed Sender
L	ZF46	Valve Body Temp Return
M	ZF19	Engine Speed Signal
N	ZF3	Speed Sensor GND
O	ZF41	Turbine Speed Signal
P	ZF3A	Turbine Speed GND
Q	ZF42	Intermediate Speed Signal
R	ZF3B	Intermediate Speed GND
S	ZF4	Output Speed GND
T	ZF62	Output Speed Signal
U	ZF45_A	Speed Sensor Fused Power
V	ZF17	Filter Maintenance Signal
W	ZF46B	Filter Maintenance Return
X	ZF46A	TCO Return

CONNECTOR X22F - CAB/TRANSMISSION

CAV	WIRE IDENT	CIRCUIT
A	978_B	Park Brake Switch GND
C	996_B	Park Brake Switch Signal
F	331	RH Tail Light
H	332_L	LH Tail Light
J	120_E	LH Rear Turn Light
K	125_E	RH Rear Turn Light
L	802_T	Starting Relay
M	556	Backup Alarm Relay GND
N	558	Backup Alarm Relay Power
P	876_C	Fan Reverse Switch Power
R	895_E	“M” Supply
S	801_T	“ACC” Supply
U	552_B	Engine High Temp Signal
W	528_B	Engine Coolant Temp Signal
X	503_B	Engine Oil Low Press Signal

CONNECTOR X22M - CAB/TRANSMISSION

CAV	WIRE IDENT	CIRCUIT
A	N_RCC	Park Brake Switch GND
C	996_A	Park Brake Switch Signal
F	331_FA	RH Tail Light
H	332_FA	LH Tail Light
J	120	LH Rear Turn Light
K	125	RH Rear Turn Light
L	802_RA	Starting Relay
M	ZF7	Backup Alarm Relay GND
N	ZF45_FB	Backup Alarm Relay Power
P	876_B	Fan Reverse Switch Power
R	895_F	“M” Supply
S	801_F	“ACC” Supply
U	552	Engine High Temp Signal
W	528	Engine Coolant Temp Signal
X	503	Engine Oil Low Press Signal

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

CODE	DEFINITION	POSSIBLE STEPS FOR REPAIR
71	Short circuit to battery voltage at clutch K1	1. Check the cable from the TCU to the transmission control valve. 2. Check the connectors from the TCU to the transmission control valve. 3. Check the regulator resistance. 4. Check internal wire harness of the transmission control valve.
72	Short circuit to ground at clutch K1	
73	Open circuit at clutch K1	
74	Short circuit to battery voltage at clutch K2	
75	Short circuit to ground at clutch K2	
76	Open circuit at clutch K2	
77	Short circuit to battery voltage at clutch K3	
78	Short circuit to ground at clutch K3	
79	Open circuit at clutch K3	
81	Short circuit to battery voltage at clutch K4	
82	Short circuit to ground at clutch K4	
83	Open circuit at clutch K4	
84	Short circuit to battery voltage at clutch KV	
85	Short circuit to ground at clutch KV	
86	Open circuit at clutch KV	
87	Short circuit to battery voltage at clutch KR	
88	Short circuit to ground at clutch KR	
89	Open circuit at clutch KR	
B1	Slippage at K1	Do the transmission clutch calibration procedure.
B2	Slippage at K2	Do the transmission clutch calibration procedure.
B3	Slippage at K3	Do the transmission clutch calibration procedure.
B4	Slippage at K4	Do the transmission clutch calibration procedure.
B5	Slippage at KV	Do the transmission clutch calibration procedure.
B6	Slippage at KR	Do the transmission clutch calibration procedure.
C3	Oil temperature at converter output is over the allowed threshold	1. Cool down machine. 2. Check the oil level. 3. Check temperature sensor.
D1	Short circuit to battery voltage at power supply for sensors	1. Check cables from the TCU to the sensors. 2. Check the connectors from the TCU to the sensors.
D2	Short circuit to ground at power supply for sensors	
D3	Low voltage at battery	1. Check batteries. 2. Check B+ wires from batteries to TCU. 3. Check voltage at TCU connector pin 45.
D4	High voltage at battery	
D5	Error at switch 1 for solenoid power supply	1. Check fuse A2. 2. Check cable from control valve to TCU. 3. Check connectors from control valve to TCU. 4. Replace TCU.
D6	Error at switch 2 for solenoid power supply	

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Section 5005

STEERING CYLINDERS

5005

PREVIEW - YOUFIXTHIS.COM

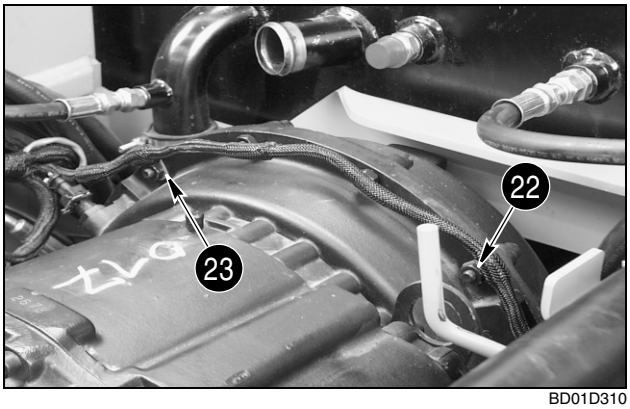
CNH America LLC.
245 E NORTH AVENUE
CAROL STREAM, IL 60188 U.S.A.

Bur 6-81340

Copyright © 2006 CNH America LLC.
All rights reserved.
Printed in U.S.A.
Issued March, 2006

Download full manual at youfixthis.com

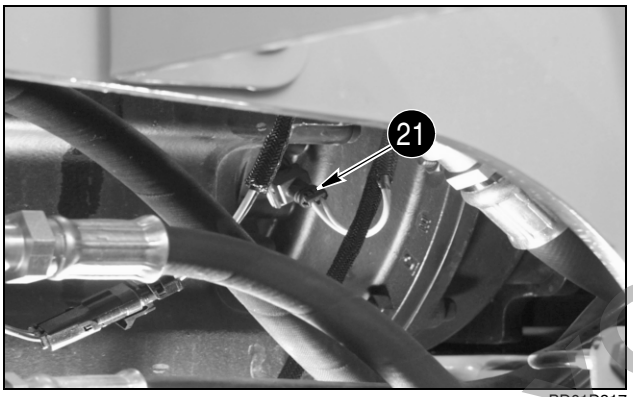
STEP 61



BD01D310

Install two socket head bolts to secure transmission wiring harness clamps (23 and 22).

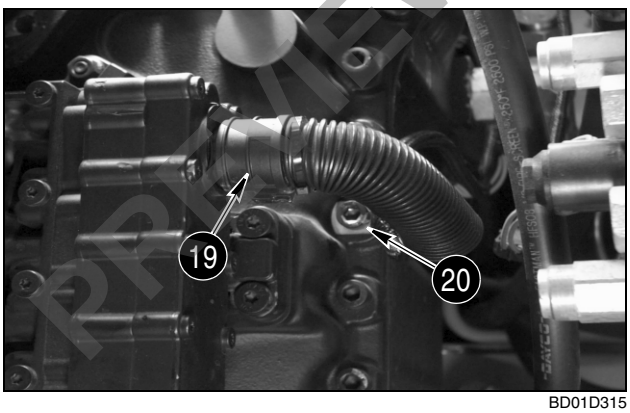
STEP 62



BD01D317

Connect transmission wiring harness connector (21) to torque converter output sender following tag installed during removal. Remove and discard tag.

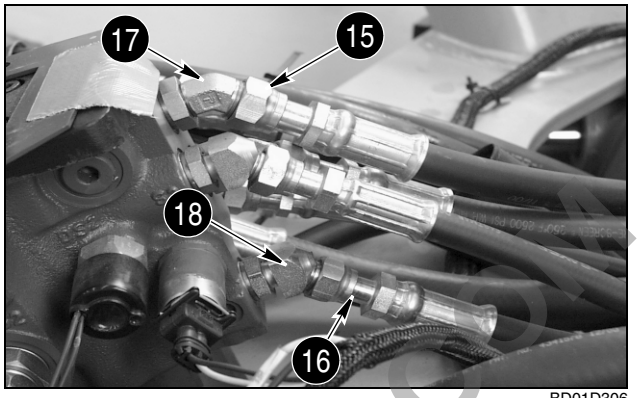
STEP 63



BD01D315

Install socket head bolt to secure wiring harness clamp (20). Connect transmission wiring harness connector (19) to control valve connector.

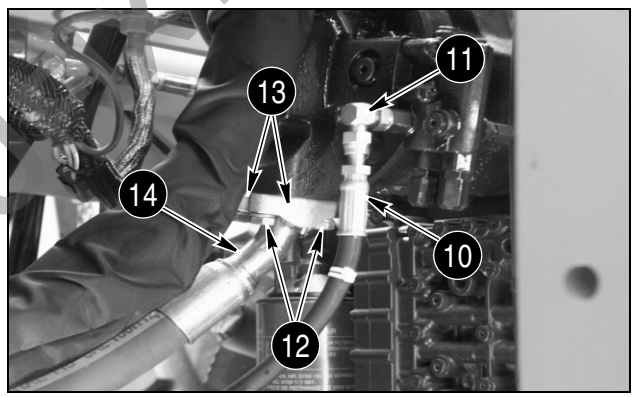
STEP 64



BD01D306

At brake valve, install new O-ring face seals in fittings (18 and 17). Connect brake to hydraulic reservoir hose (16) and brake pump pressure hose (15) following tags installed during removal. Remove and discard tags.

STEP 65



BD01D308

At hydraulic pump, remove cap from fitting (11) and plugs from hoses (14 and 10) and pump port. Install new O-ring face seal in flange head of hose (14). Position pump pressure hose (14) on pump port and secure using two split flanges (13) and four washers and bolts (12). Install new O-ring face seal in fitting (11). Connect pump load sensing hose (10) to fitting following tag installed during removal. Remove and discard tag.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Section 6003

6003

TRANSMISSION

PREVIEW - YOUFIXTHIS.COM

CNH America LLC.
245 E NORTH AVENUE
CAROL STREAM, IL 60188 U.S.A.

Copyright © 2006 CNH America LLC.
All rights reserved.
Printed in U.S.A.
Issued March, 2006

Bur 6-81400

Download full manual at youfixthis.com

TABLE OF CONTENTS

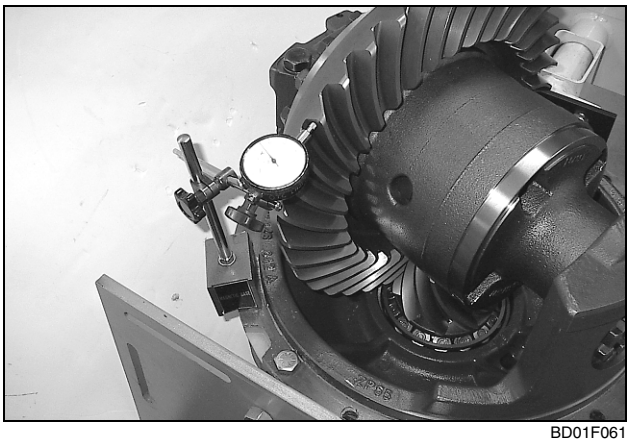
SPECIFICATIONS 3
SPECIAL TORQUES 3
SPECIAL TOOLS 3
GEAR TOOTH CONTACT PATTERNS 4
LUBRICATION 6
WEAR MEASUREMENT ON MULTI-DISC BRAKE 6
WHEEL END AND BRAKE 7
Disassembly 7
Cleaning and Inspection 13
Assembly 13
BRAKE HYDRAULICS LEAKAGE TEST 23
High Pressure Test 23
Low Pressure Test 23
DIFFERENTIAL CARRIER DISASSEMBLY 24
DIFFERENTIAL DISASSEMBLY 27
DRIVE PINION DISASSEMBLY 28
BRAKE TUBES REMOVAL 29
BRAKE TUBES INSTALLATION 30
DIFFERENTIAL CARRIER ASSEMBLY 32
Determine Shim Thickness for Correct Tooth Contact Pattern 32
Install Drive Pinion 33
Drive Pinion Bearing Rolling Torque Adjustment 34
DIFFERENTIAL ASSEMBLY 36
Adjust Backlash and Bearing Preload 41

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

Adjust Backlash and Bearing Preload

STEP 170



BD01F061

Place CAS10066A dial indicator right-angled at the outer diameter of the tooth flank (ring gear). Adjust the pinion to ring gear backlash to the low side of specifications (see numbers etched on the outer diameter of the ring gear) by alternately turning each of the adjusting nuts to move the ring gear closer to or further away from the pinion.

STEP 171

Go to the adjusting nut opposite the ring gear and loosen the nut approximately one turn to release pressure on the bearing. It should be very noticeable that pressure is released on the bearing, as the adjusting nut will turn much easier.

STEP 172

Tighten the bearing adjusting nut slowly until firm contact is made with the bearing.

NOTE: *As the adjusting nut makes firm contact with the bearing, the adjusting nut will immediately begin to turn with more effort.*

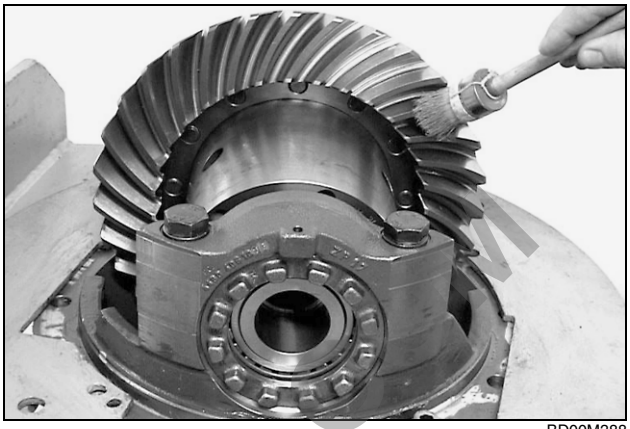
STEP 173

To adjust the differential bearing preload, note the position of the adjusting nut. Now tighten the nut two additional notches.

STEP 174

When the bearing preload is adjusted the backlash may increase slightly. Check pinion backlash to confirm that it is within specifications. If within specifications, install the adjusting nut locking roll pins. If backlash is outside of specified range, repeat Step 170 through 174 again.

STEP 175



BD00M388

Apply marking ink on several teeth of the ring gear and rotate it in both directions. Compare the obtained tooth contact pattern with the examples on pages 4 and 5.

NOTE: *If the tooth contact pattern differs, the wrong shim size was selected in Step 130. Remove differential and repeat Steps 126 though 130.*

STEP 176



BD00M389

Install pins to secure both adjusting nuts.

STEP 177

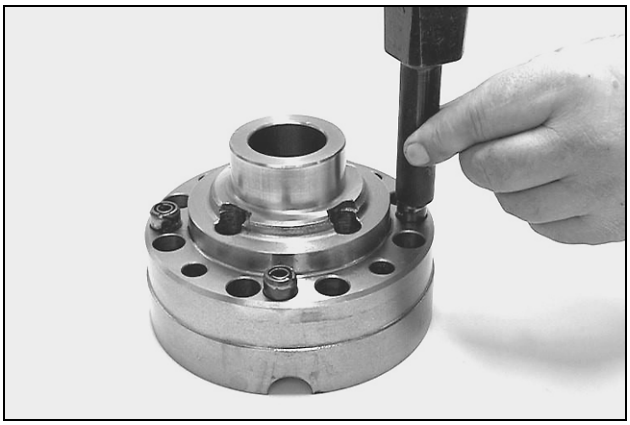
Apply sealing compound (Three Bond Type 1215) to differential mounting surface on axle housing. Install two CAS2861 alignment studs in axle housing to aid installation of differential carrier. Using suitable lifting equipment, install the differential carrier in the axle housing then remove alignment studs.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

DIFFERENTIAL ASSEMBLY

STEP 148

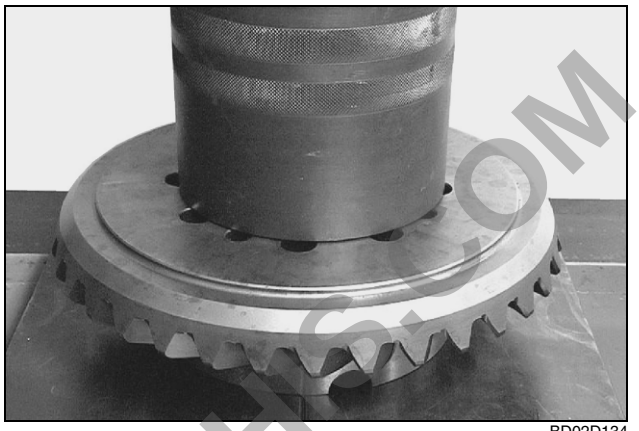


BD02D133

Install two slotted pins (2 and 3)in each of the four blind holes in the differential cage half (1). Install slotted pins so that slots are 180° from center of differential cage and slots of pins are 180° offset to each other.

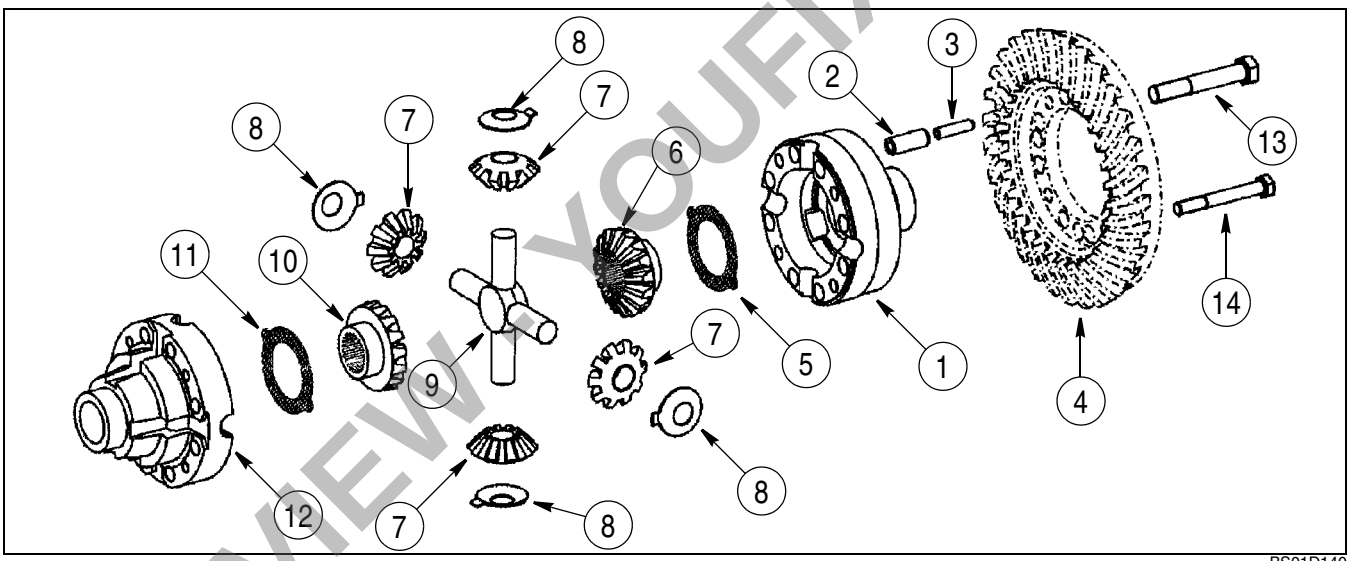
Open Differential Assembly

STEP 149



BD02D134

Using suitable size sleeve press the ring gear (4) onto the slotted pins until ring gear is against differential cage half (1).



BS01D140

1. DIFFERENTIAL CAGE HALF
2. SLOTTED PIN
3. SLOTTED PIN
4. RING GEAR
5. THRUST WASHER
6. BEVEL GEAR
7. BEVEL GEAR
8. THRUST WASHER
9. SHAFT
10. BEVEL GEAR
11. THRUST WASHER
12. DIFFERENTIAL CAGE HALF
13. BOLT
14. BOLT

STEP 150

Install thrust washer (5) then bevel gear (6) in differential cage half (1).

STEP 151

Install bevel gears (7) and thrust washers (8) on shaft (9).

STEP 152

Install shaft (9) with bevel gears (7) and thrust washers (8) on differential cage half (1). Check that teeth of bevel gears (7 and 6) mesh.

STEP 153

Install and mesh bevel gear (10) with gears (7) and install thrust washer (11) on gear (10). Install differential cage half (12). Go to Step 163.

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

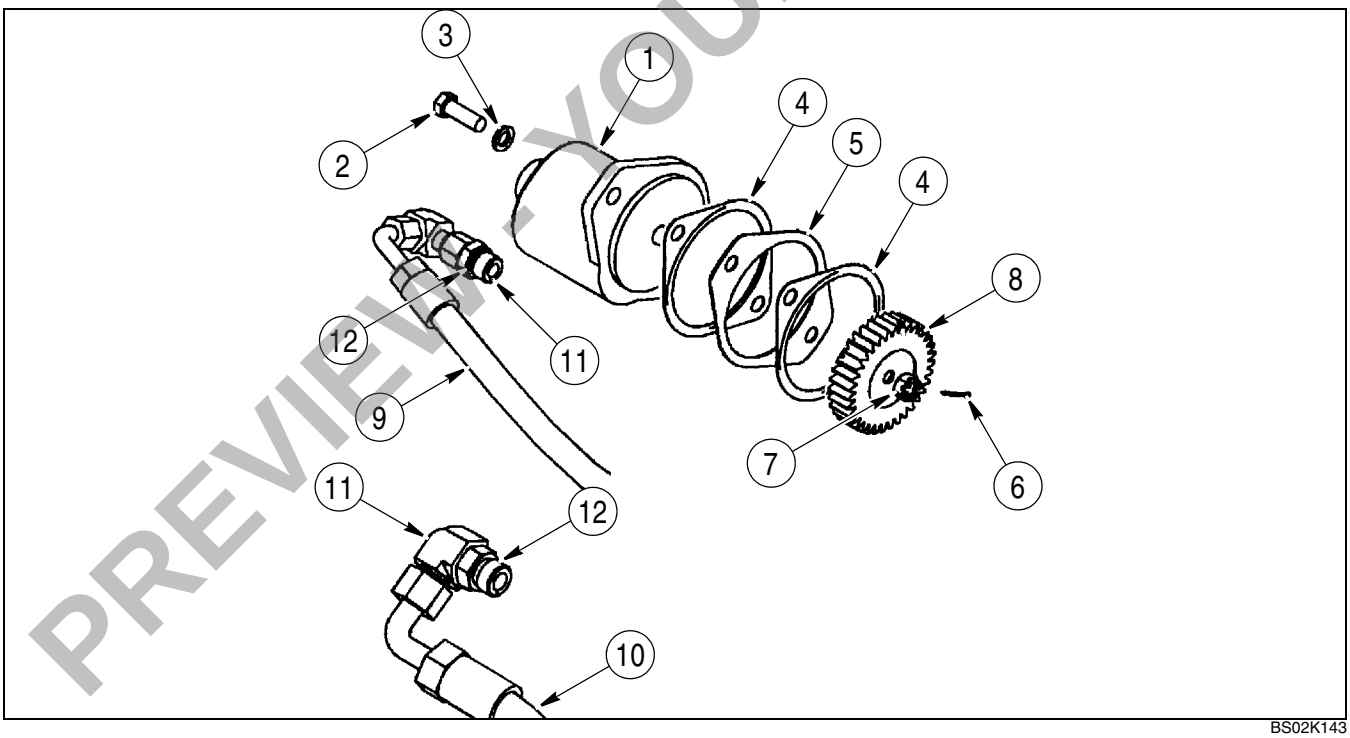
BRAKE PUMP

Removal

1. Park the machine on a level surface and lower the loader bucket to the floor. Stop the engine.
2. Put blocks on both sides of each tire to prevent machine movement.
3. Raise the engine hood and turn the master disconnect switch to the OFF position.
4. Clean the brake pump (1) and lines, refer to the illustration below.
5. Put identification tags on all lines that are connected to the brake pump (1).
6. Connect a vacuum pump to the hydraulic reservoir. Start the vacuum pump.
7. Disconnect the lines from the brake pump (1) and put plugs or caps on each line.
8. Stop the vacuum pump and remove.
9. Remove the mounting bolts (2) and lock washers (3) from the brake pump (1) and remove the brake pump (1).

Installation

1. Install the brake pump (1), mounting bolts (2) and lock washers (3). Refer to the illustration below.
2. Tighten the mounting bolts (2).
3. Connect a vacuum pump to the hydraulic reservoir. Start the vacuum pump.
4. Remove the plugs or caps and connect the lines to the brake pump (1).
5. Turn the master disconnect switch to the ON position.
6. Bleed the brake system. See Section 7002.
7. Check the hydraulic reservoir oil level and add oil as required. See Section 1002 for the correct oil.

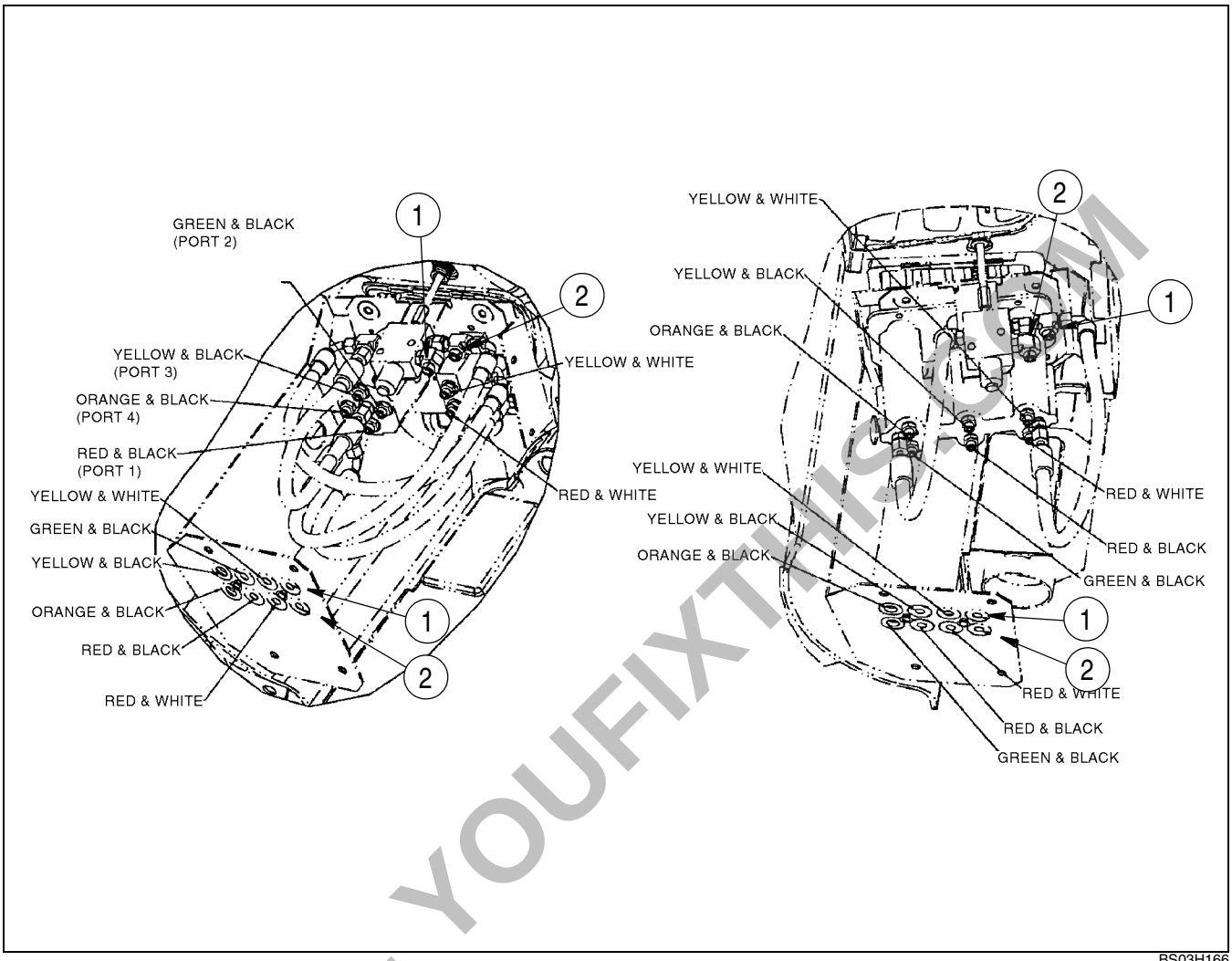


BS02K143

1. BRAKE PUMP
2. BOLT
3. WASHER
4. GASKET
5. SPACER
6. COTTER PIN
7. NUT
8. GEAR
9. PRESSURE HOSE
10. SUCTION HOSE
11. ELBOW
12. O-RING

BRAKE PUMP ILLUSTRATION

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



BS03H166

1. PILOT PRESSURE HOSE
2. PILOT TANK HOSE

JOYSTICK AND 1 LEVER HOSE ILLUSTRATION

1. PILOT PRESSURE HOSE
2. PILOT TANK HOSE

3 LEVER HOSE ILLUSTRATION

PREVIEW - YOUFIXTHIS.COM

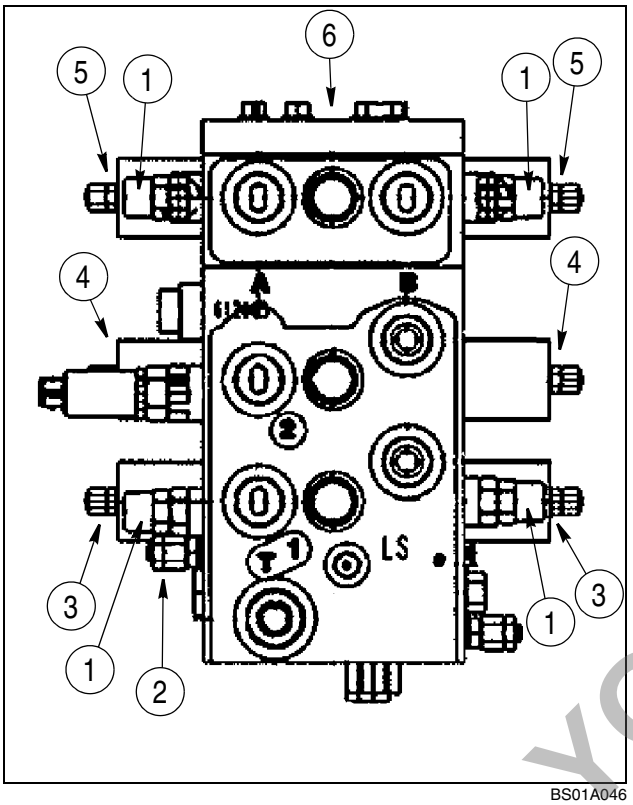
Download full manual at youfixthis.com

TESTING AND ADJUSTING THE CIRCUIT RELIEF VALVES

Pressure Check

STEP 1

Circuit relief valves are located as shown below.



BS01A046

1. CIRCUIT RELIEF VALVE
2. MAIN RELIEF VALVE
3. BUCKET SPOOL
4. LIFT SPOOL
5. AUXILIARY SPOOL
6. LOADER CONTROL VALVE

Remove the cover at the front of the machine.

STEP 2

Lower the bucket to the floor. Shut off the engine. Find an easy place to disconnect the line for the circuit to be tested.

STEP 3

Connect the hand pump to the disconnected line that goes to the loader control valve.

STEP 4

Make sure that the hand pump is full of hydraulic oil and that the temperature of the oil is approximately 21°C (70°F).

STEP 5

Operate the handle of the hand pump and read the highest pressure. Repeat this step several times to be sure of the reading.

STEP 6

Compare the reading to the specifications on Page 3.

STEP 7

If the pressure is not correct, adjust the circuit relief valve.

Adjustment

STEP 1

Loosen the lock nut. Turn the adjustment screw clockwise to increase the pressure or counterclockwise to decrease the pressure.

STEP 2

Check the pressure again. Repeat the adjustment as necessary.

Leak Test

Test for internal leakage by raising the lift arms to the top and shutting the engine off.

A. Turn the key to the “RUN” position and disengage the controller lock-out switch.

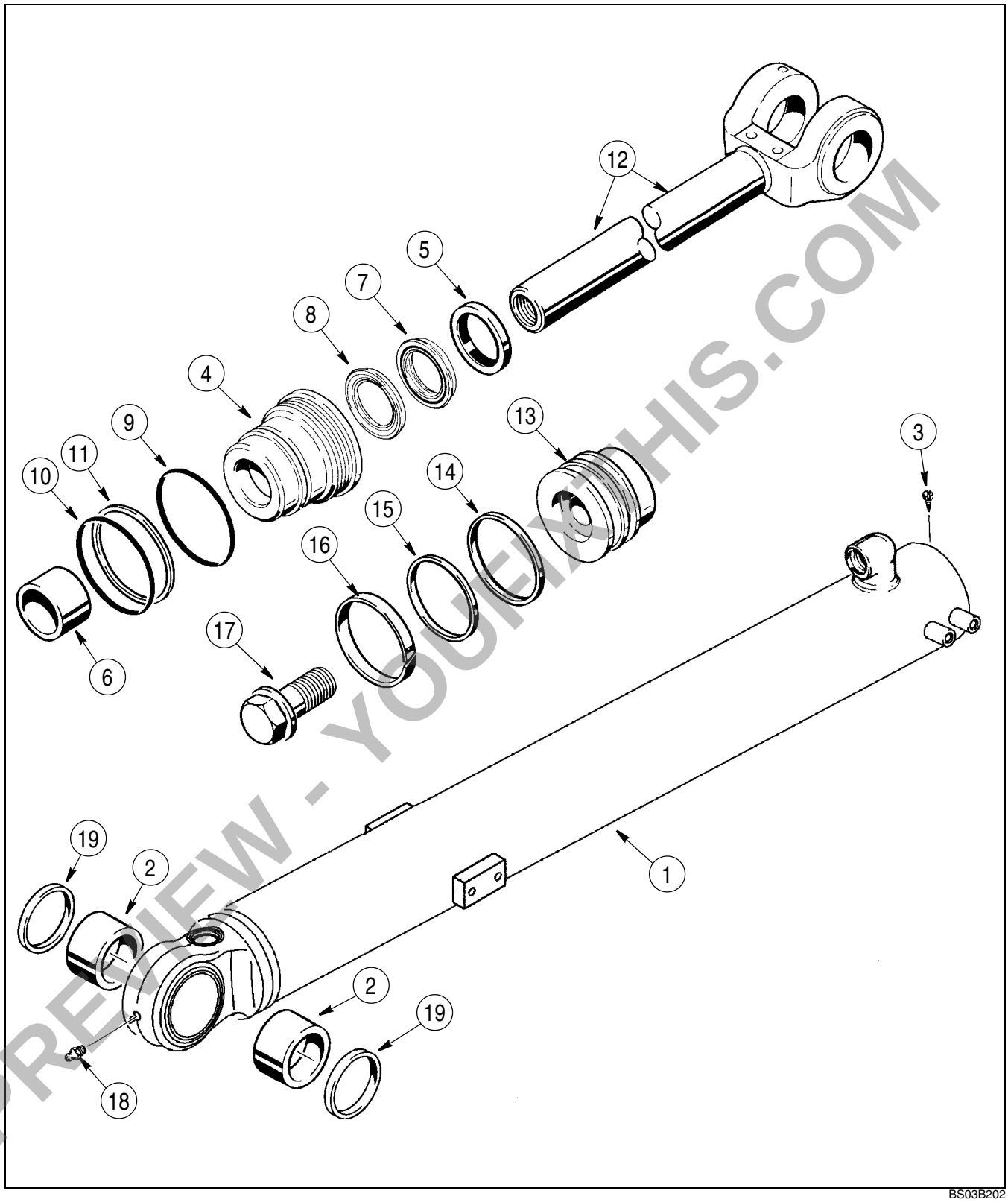
B. Wait for the buzzer to stop.

C. Repeatedly put the lift control lever into the “FLOAT” position and back to neutral. The system must allow a minimum of 10 actuations into float and still cause the lift arms to come down.

D. If 10 full actuations cannot be made, an internal hydraulic leak exists.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



1. TUBE
2. BUSHING
3. SCREW
4. GLAND
5. WIPER
6. BUSHING
7. ROD SEAL
8. BUFFER SEAL
9. O-RING
10. O-RING
11. BACKUP RING
12. PISTON ROD
13. PISTON
14. BACKUP RING
15. SEAL
16. WEAR RING
17. BOLT
18. GREASE FITTING
19. WIPER

FIGURE 3. BUCKET CYLINDER FOR TC MODELS

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

SYSTEM CHECKS

Mechanical Compressor Check

Compressor and Fan Belts	1. Too much belt wear - replace a worn belt, because a worn belt will cause too much slippage.
Compressor Mounting Brackets	1. Loose bracket mounting bolts - tighten the bolts to the correct torque. 2. Bracket has cracks or breaks - replace the bracket.
Compressor Clutch	1. The compressor belt will slip on the compressor pulley if there is compressor seizure. Remove the compressor for service or replacement. 2. Remove the dust cover and check the air gap on the compressor clutch. The gap between the front plate and pulley assembly must be 0.41 to 0.79 mm. 3. Use a socket wrench to slowly rotate the compressor clockwise. Compressor rotation should be smooth and not require much effort.
Pulley and Belt Alignment	1. The compressor pulley and the compressor drive pulley must be aligned within 1.6 mm (1/16 inch) of each other. Use a straight edge to check pulley alignment. Adjust the compressor mounting bracket if needed.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

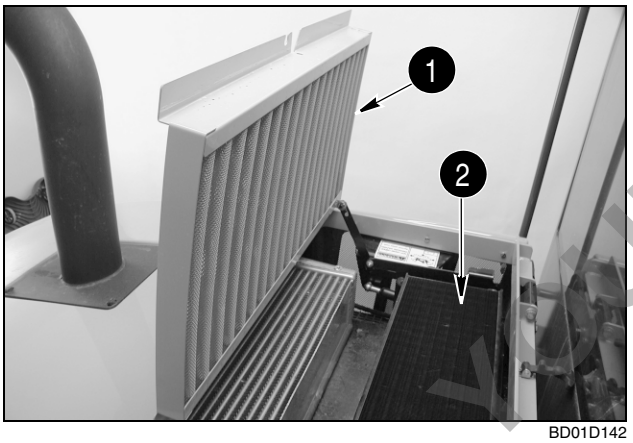
CONDENSER

Removal

STEP 45
Park the machine on a level surface and lower the bucket to the ground.

STEP 46
Place the master disconnect switch in the OFF position.

STEP 47
Discharge the air conditioning system according to the instructions in Section 9003.

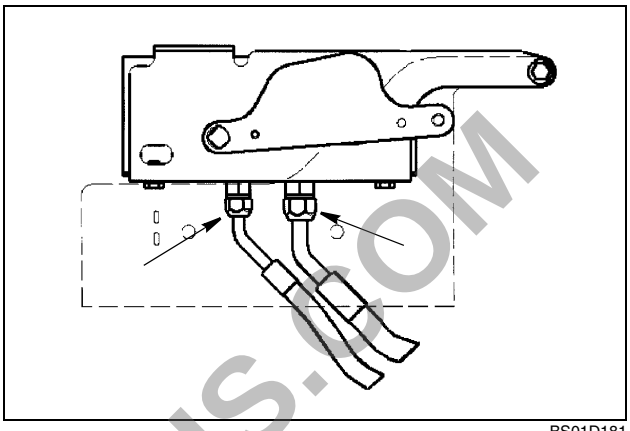
STEP 48


BD01D142

1. COVER 2. CONDENSER

Open the cover (1) to gain access to the condenser (2).

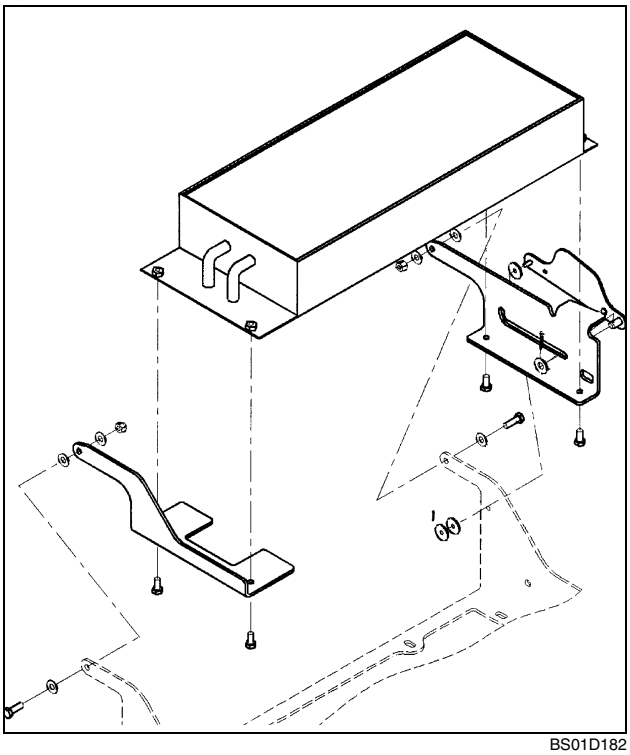
STEP 49
The condenser is connected to brackets which pivot on the cooling frame. Pivot the condenser to gain access to the mounting bolts and the hoses.

STEP 50


BS01D181

Fasten identification tags on the hoses and disconnect the hoses from the condenser.

STEP 51
Install plugs in the hoses and caps on the fittings.

STEP 52


BS01D182

Loosen and remove the bolts that fasten the condenser to the brackets.

STEP 53
Remove the condenser.

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 25 of 712 pages

The full manual includes:

- All 712 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Cnh W110, W130 Service Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual