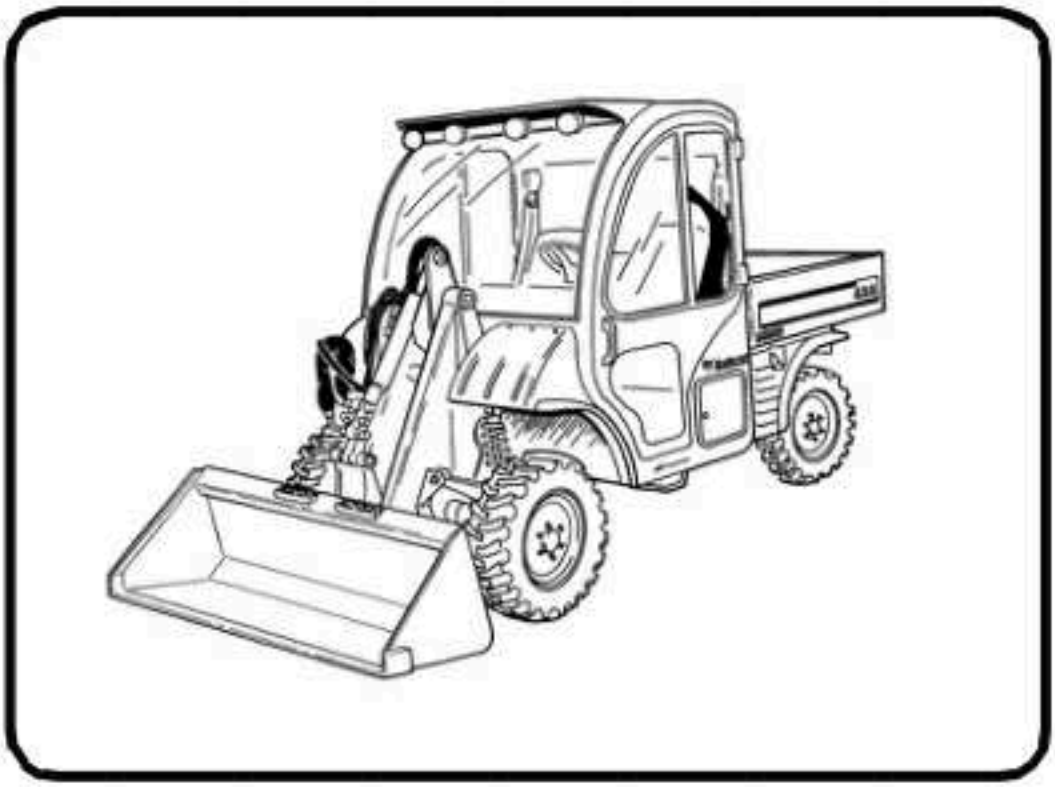
Bobcat®

Service Manual

Toolcat™ 5600 Utility Work Machine

S/N A0W111001 & Above



EQUIPPED WITH TOOLCAT INTERLOCK CONTROL SYSTEM (TICS)

6904792 (3-11)

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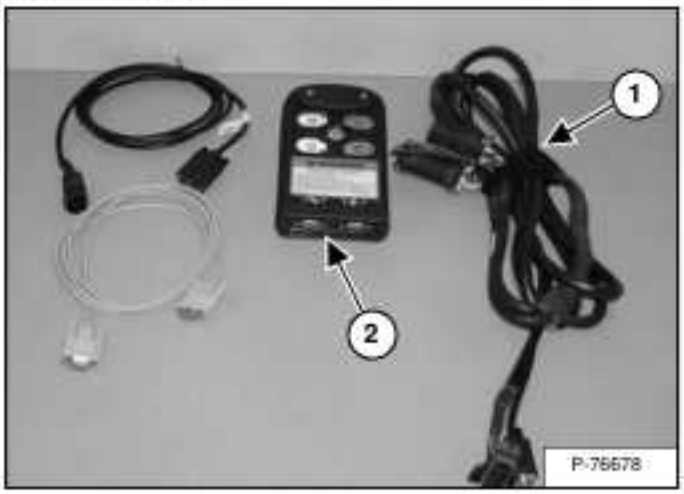
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REMOTE START TOOL (SERVICE TOOL) KIT - 6689779 (CONT'D)

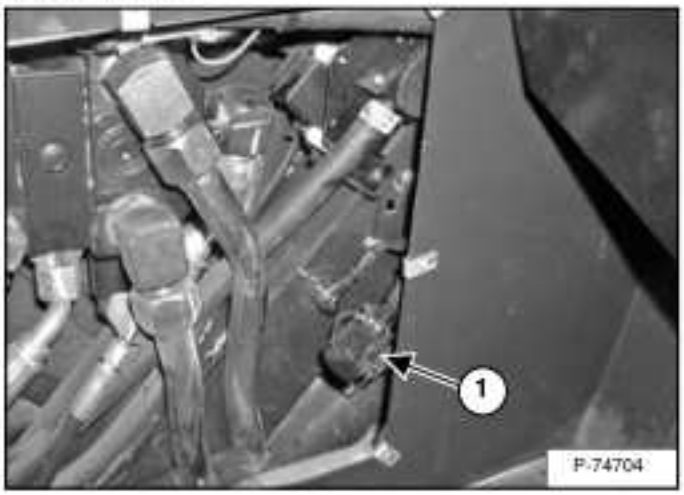
Service Tool Harness - 6689747

Figure 10-61-3



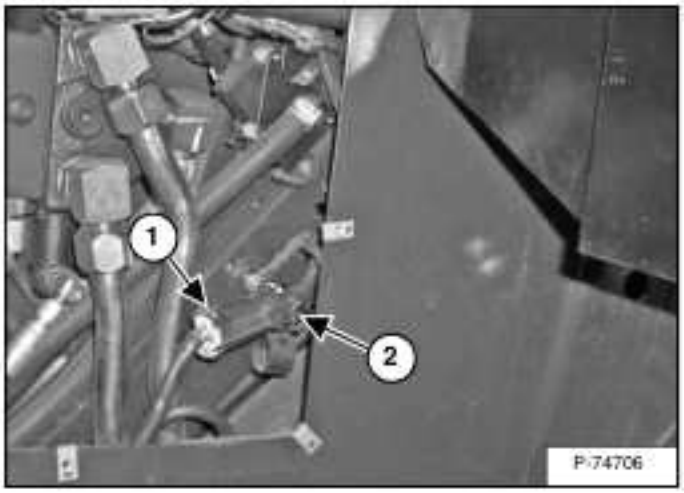
The service tool harness (Item 1) **[Figure 10-61-3]** is used to connect the remote start tool (service tool) (Item 2) **[Figure 10-61-3]** to the electrical system on the loader.

Figure 10-61-4



Utility work machine without an attachment control harness, remove the harness cap (Item 1) **[Figure 10-61-4]** and connect the Service Tool Harness from the Remote Start Tool (Service Tool).

Figure 10-61-5



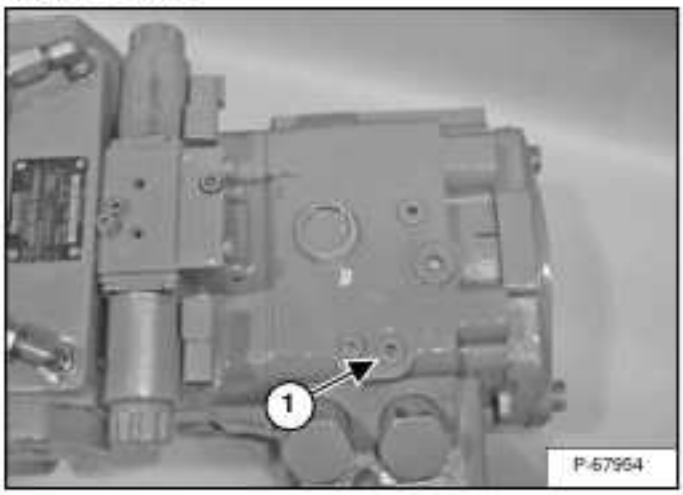
Utility work machines with an attachment control harness (7 pin or 14 pin), the attachment harness (Item 1) must be disconnected from the utility work machine harness (Item 2) **[Figure 10-61-5]**.

When the remote start procedure is completed, replace the loader connector cap (Item 1) **[Figure 10-61-4]** or reconnect the attachment control harness to the utility work machine harness **[Figure 10-61-5]**.

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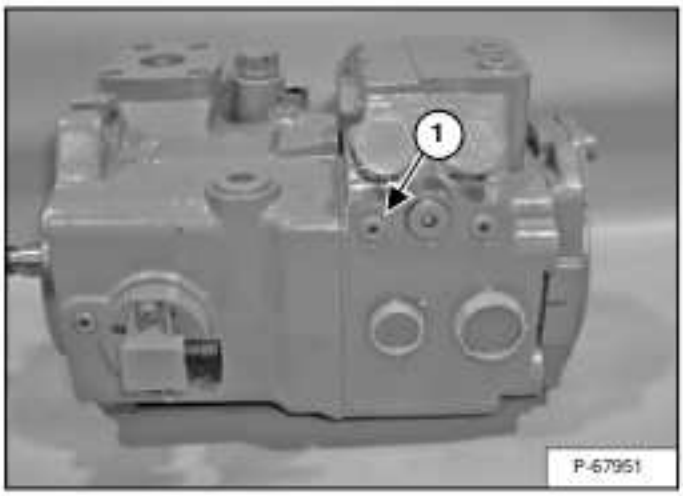
Mechanical Neutral Adjustment (Cont'd)

Figure 30-40-73



Remove the plug (Item 1) **[Figure 30-40-73]** from the MB2 port on the top of the pump, and install 51,7 MPa (517 bar) (7500 psi) pressure gauge.

Figure 30-40-74



Remove the plug (Item 1) **[Figure 30-40-74]** from the MA2 port on the bottom of the pump, and install 51,7 MPa (517 bar) (7500 psi) pressure gauge.

Figure 30-40-75

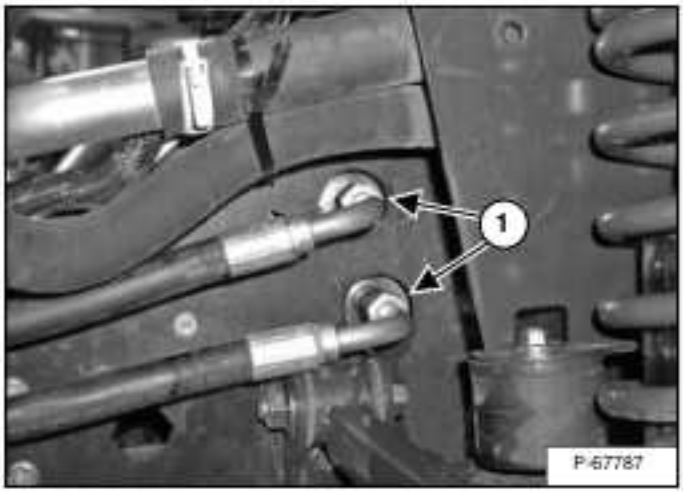
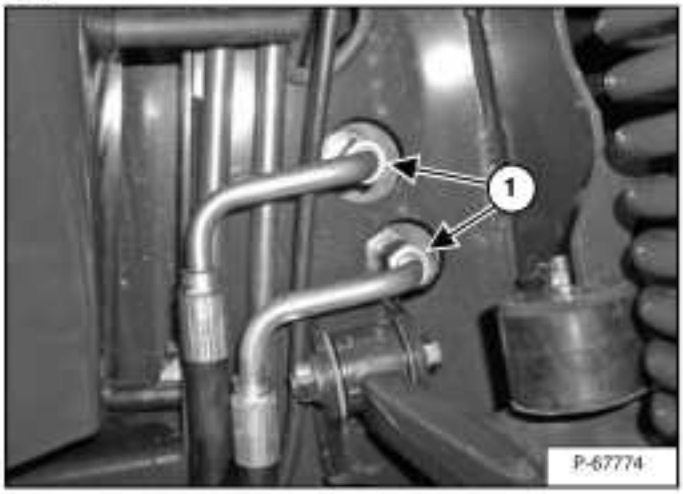


Figure 30-40-76

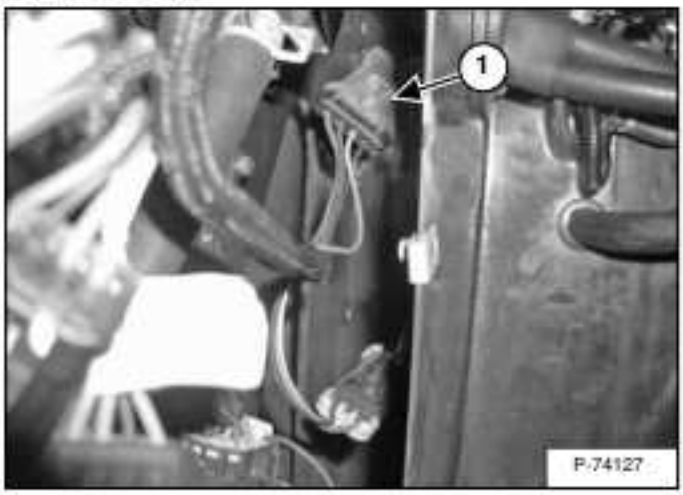


Remove drive motor hoses (Item 1) **[Figure 30-40-75]** and **[Figure 30-40-76]** from the drive motors. Plug the hoses with metal plugs. The plugs must be able to handle at least 34,5 MPa (344,7 bar) (5000 psi). Plugging the hoses eliminates leakage at the drive motors from causing errors in the pump mechanical neutral setting.

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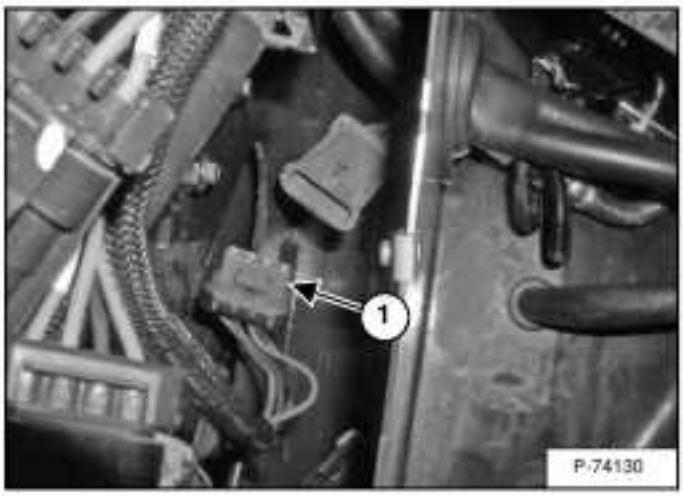
Electrical System (Cont'd)

Figure 80-30-15



Disconnect the blower fan wiring connector (Item 1) **[Figure 80-30-15]** from the utility work machine wiring harness.

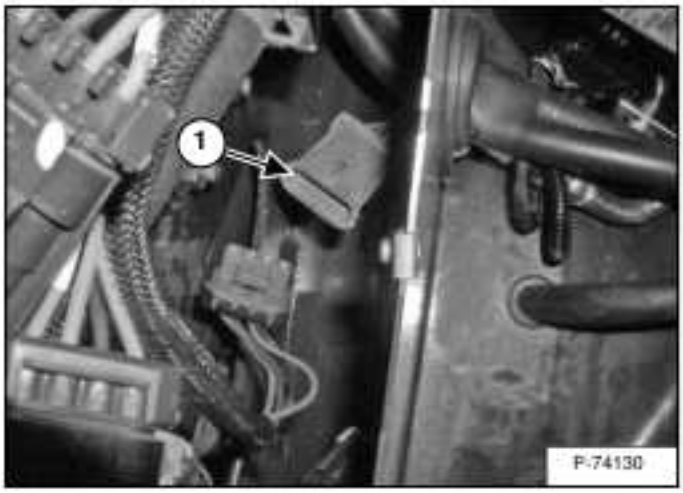
Figure 80-30-16



Check the utility work machine harness (Item 1) **[Figure 80-30-16]** for voltage. The voltage should be 12 volts.

If there is no voltage at the wiring harness, check the harness for broken wires.

Figure 80-30-17



If there is voltage at the wiring harness, check the resistance to the blower fan at the blower fan wiring connector (Item 1) **[Figure 80-30-17]**.

If there is no resistance value replace the blower fan. (See Removal And Installation on Page 80-130-1.)

If there is a resistance value check the climate controls.

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HYDRAULIC/HYDROSTATIC SCHEMATIC
5600 UTILITY WORK MACHINE
WITH HIGH FLOW OPTION
S/N A0W111001 AND ABOVE

(PRINTED MARCH 2011)
V-0886legend

LEGEND

1. HYDRAULIC RESERVOIR:
   Reservoir Capacity . . . .14.0 L (14.8 qt)
   @ center of sight glass
   System Capacity. . . . . 39.7 L (42.0 qt)
2. FILTER - CASE DRAIN (25 Micron)
3. SPRING LOADED FILTER BYPASS VALVE: 150 kPa (1,5 bar) (20 psi)
4. FILTER - HYDRAULIC (CANISTER)
5. SPRING LOADED FILTER BYPASS VALVE: 310 – 380 kPa (3,1-3,8 bar) (45-55 psi)
6. DIFFERENTIAL PRESSURE SWITCH:
7. SWITCH (Early models only)
8. HYDRAULIC PUMP . . . . . Gear Type
   22,9 Lpm (6.05 gpm) at High Engine Idle
9. HYDRAULIC PUMP . . . . . Gear Type
   34,4 Lpm (9.08 gpm) at High Engine Idle
10. HYDRAULIC PUMP . . . . . Gear Type
    71,5 Lpm (18.85 gpm) at High Engine Idle
11. CHARGE PUMP
    48,1 Lpm (12.7 gpm) at High Engine Idle
12. RELIEF VALVE - CHARGE:
    2500 kPa (25 bar) (365 psi) at High Engine Idle
    60 degrees C. (140 degrees F.) Fluid
13. RELIEF/REPLENISHING VALVE - HIGH PRESSURE: 32100 kPa (321 bar) (4650 psi)
14. VARIABLE CAPACITY DISPLACEMENT BIDIRECTIONAL HYDROSTATIC PUMP
15. SOLENOID VALVE - FORWARD/REVERSE
16. SERVO PISTON - Swash Plate
17. SHUTTLE VALVE - Motor Flushing
18. RELIEF VALVE - Motor Flushing
19. VALVE - 2 Speed
20. SERVO PISTON - Swash Plate - 2 Speed
21. FLOATING ORIFICE
22. RESTRICTOR ..... 0,25 mm (0.009 in)
23. SHUTTLE VALVE - 2 Speed
24. BIDIRECTIONAL HYDROSTATIC MOTOR - 2 Speed
25. BRAKE VALVE: 2200 kPa (22 bar) (319 psi)
26. FIXED DISPLACEMENT FAN MOTOR
27. RELIEF VALVE
    21000 kPa (210 bar) (2030 psi)
28. RELIEF VALVE – MAIN: 21500 – 20500 kPa (215 - 205 bar) (3117 - 3044 psi)
29. RELIEF VALVE - MAIN: 21500 – 20500 kPa (215 - 205 bar) (3117 - 3044 psi)
30. RELIEF VALVE - Port - With Anti-Cavitation (Lift Base): 24000 – 22500 kPa (240 - 225 bar) (3480 - 3263 psi)
31. RELIEF VALVE - Port - With Anti-Cavitation (Lift Rod): 24000 – 22500 kPa (240 - 225 bar) (3480 - 3263 psi)
32. RELIEF VALVE - Port - With Anti-Cavitation (Tilt Base): 24000 – 22500 kPa (240 - 225 bar) (3480 - 3263 psi)
33. RELIEF VALVE - Port - With Anti-Cavitation (Tilt Rod): 29000 – 27500 kPa (290 - 275 bar) (4205 - 3988 psi)
34. LOAD CHECK VALVE
35. CHECK VALVE
36. SOLENOID ACTIVATED DIRECTIONAL CONTROL VALVE - Solenoid A (See Note 2)
37. SOLENOID ACTIVATED DIRECTIONAL CONTROL VALVE - Solenoid C (See Note 2)
38. SOLENOID ACTIVATED DIRECTIONAL CONTROL VALVE - Solenoid B - (See Note 2)
39. RELIEF VALVE - Load Sense: 10000 kPa (100 bar) (1450 psi)
40. FLOW DIVIDER
41. ORIFICE ..... 0,75 mm (0.030 in)
42. ORIFICE ..... 0,6 mm (0.023 in)
43. ORIFICE ..... 1,3 mm (0.051 in)
44. FILTER
45. CHECK VALVE
46. FRONT AUXILIARY MANUAL PRESSURE BLEED-OFF VALVE
47. CHECK VALVE
48. FILTER.....(400 Micron)
49. FILTER.....(125 Micron)
50. RELIEF VALVE - Port - With Anti-Cavitation (Aux. Coupler – OPTIONAL – Use with Combo Buckets and Grapples): 24000 – 22500 kPa (240 - 225 bar) (3480 - 3263 psi)
51. DIAGNOSTIC COUPLER
52. SOLENOID ACTIVATED DIRECTIONAL CONTROL VALVE - High Flow
53. LOAD CHECK VALVE: 790 kPa (7,9 bar) (115 psi)
54. FILTER - BOB-TACH
55. ORIFICE - With 2,26 mm (0.089 in)
56. ORIFICE - With 0,64 mm (0.025 in)
57. PILOT ACTIVATED DIRECTIONAL CONTROL VALVE - HYDRAULIC POWERED BOB-TACH
58. RELIEF VALVE: 13800 kPa (138 Bar) (2000 psi)
59. RELIEF VALVE: 8300 kPa (83 Bar) (1200 psi)
60. CHECK VALVE - With 550 kPa (5,5 Bar) (80 psi) Spring
61. CHECK VALVE – With 2070 kPa (20,7 Bar) (300 psi) Spring and 0,40 mm (0.016 in) orifice
62. SOLENOID ACTIVATED DIRECTIONAL CONTROL VALVE (TWO COIL)
63. SOLENOID / PILOT ACTIVATED DIRECTIONAL CONTROL VALVE WITH PRESSURE SWITCH – Rear Auxiliary (OPTION)

NOTE 1: Unless otherwise specified springs have NO significant pressure value.

NOTE 2: In Front Steer Mode, Solenoids A & B are closed and Solenoid C is open. In 4 Wheel Steer Mode, Solenoids A & B are open and Solenoid C is closed.

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