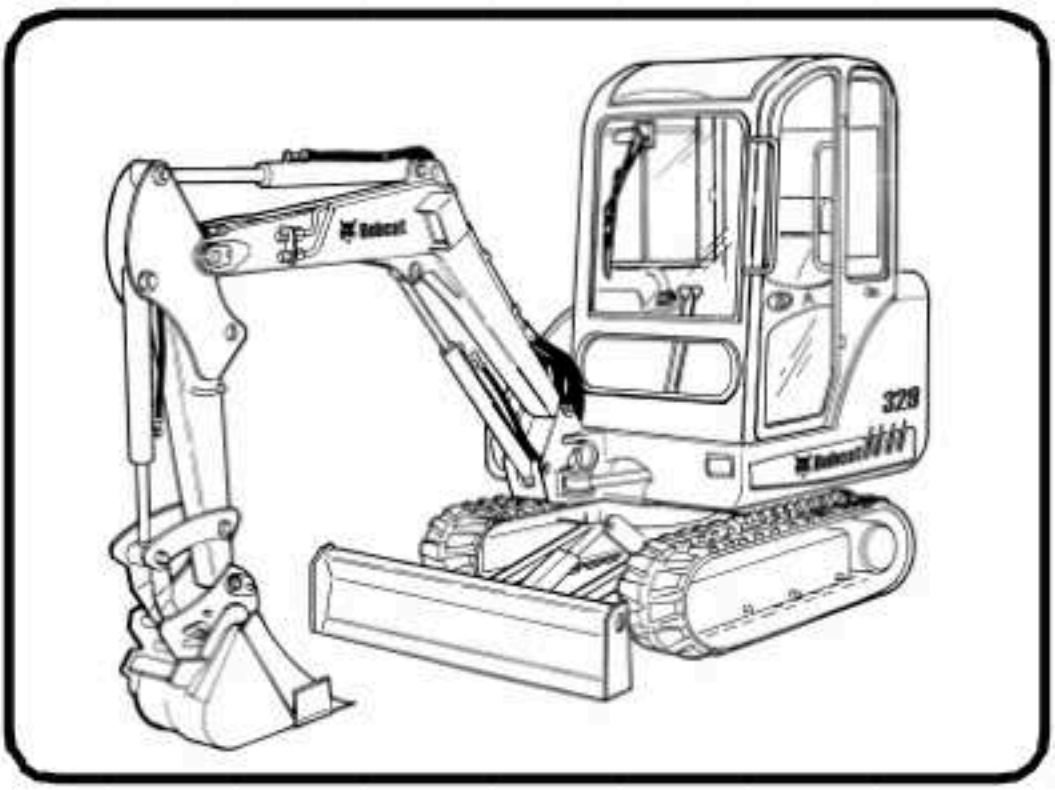
Bobcat®

Service Manual
329 Compact Excavator

S/N AACL11001 & Above
S/N A9K211001 & Above



6986946 (10-09)

Printed in U.S.A.

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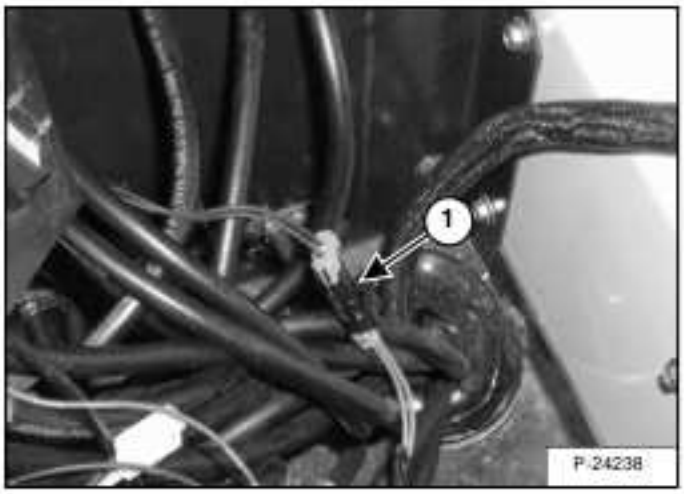
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BLADE CONTROL

Removal And Installation

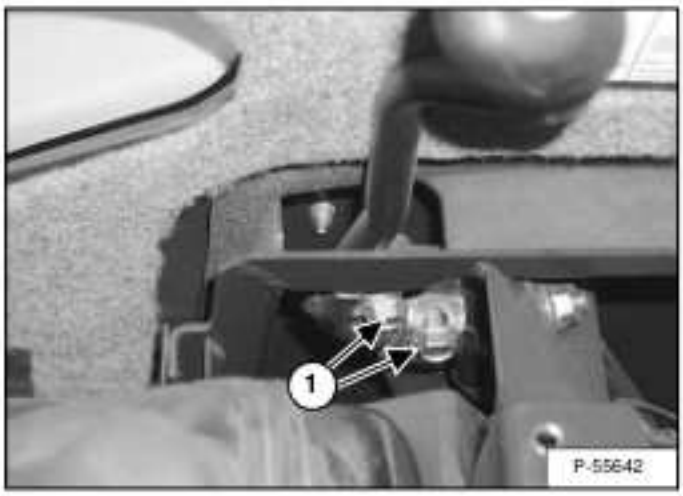
Remove the right console cover. (See Console Cover Removal And Installation on Page 40-50-1.)

Figure 40-70-1



Disconnect the two speed wire harness (Item 1) **[Figure 40-70-1]**.

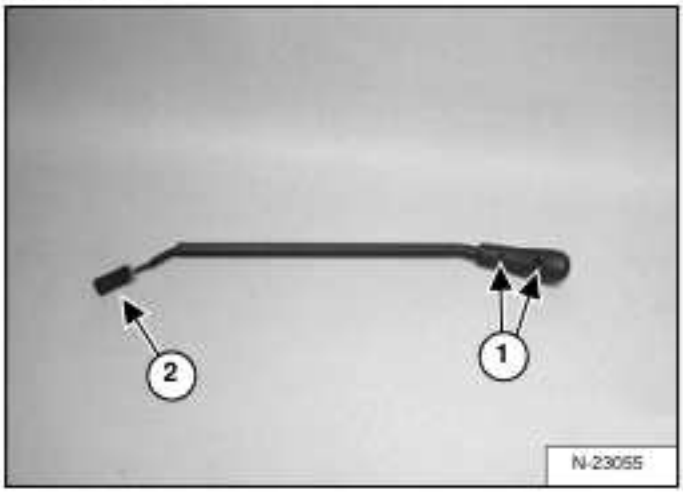
Figure 40-70-2



Loosen the bolts (Item 1) **[Figure 40-70-2]**.

Disassembly And Assembly

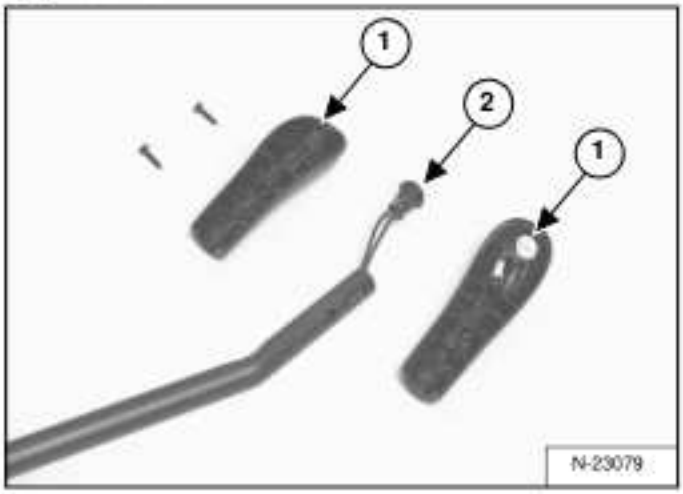
Figure 40-70-3



Remove the screws (Item 1) **[Figure 40-70-3]** from the two piece handle.

Remove the connector (Item 2) **[Figure 40-70-3]** from the wires.

Figure 40-70-4



Remove the two halves of the handle (Item 1) **[Figure 40-70-4]**.

Remove the two speed switch and wire assembly (Item 2) **[Figure 40-70-4]** from the tube.

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Bushing Removal And Installation

Figure 40-140-15

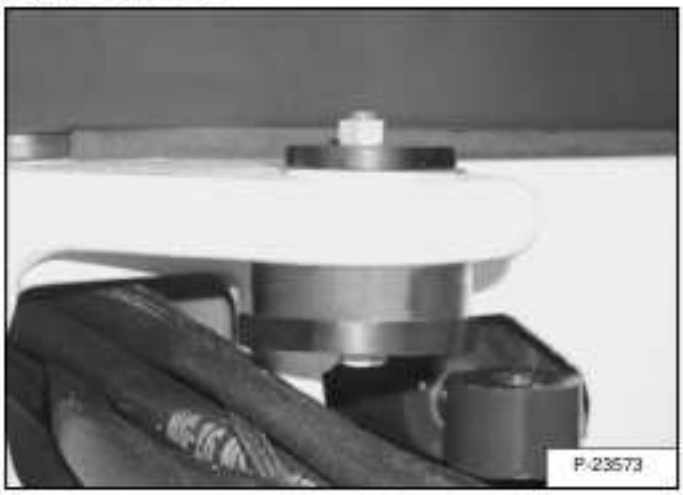
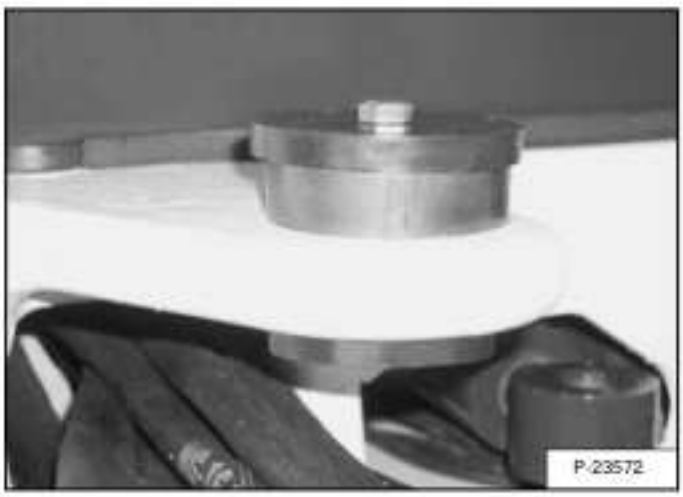


Figure 40-140-16



The same procedure is used to remove and install the bushings in the frame castings **[Figure 40-140-15]** & **[Figure 40-140-16]**.

Swing Frame Bushing Removal And Installation

IMPORTANT

Do Not point (hammer) on the boom swing bracket. Excess pressure can cause the casting to crack.

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The following parts will be needed for removal and installation of the swing frame bushings:

1. Bolt - 3/4 x 6 in. or (19 x 153 mm) long.
2. Nut - 3/4 in. or (19 mm).
3. Washer -7/8 I.D. x 3-1/8 O.D. x 3/8 in. thick or (22 mm I.D. x 79 mm O.D. x 10 mm thick.
4. Washer - 7/8 I.D. x 3-1/2 O.D. x 3/8 in. thick or (22 mm I.D. x 89 mm O.D. x 10 mm thick).
5. Washer - 7/8 I.D. x 4-1/2 O.D. x 1/2 in. thick or (22 mm I.D. 114 mm O.D. x 13 mm thick).
6. Spacer - 3-1/2 I.D. x 4-1/4 O.D. x 1-1/2 in. thick or (89 mm I.D. x 108 mm O.D. x 38 mm thick).

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Troubleshooting

The following troubleshooting chart is provided for assistance in locating and correcting problems which are most common. Many of the recommended procedures must be done by authorized Bobcat Service personnel only.

PROBLEM	CAUSE
Slow cranking speed	1, 2, 3, 4
Engine will not start	2, 5, 6, 7, 8, 9, 11, 12, 13, 14, 15, 16, 17, 19, 27, 28, 29
Difficult to start	5, 7, 8, 9, 10, 11, 12, 13, 15, 16, 17, 18, 19, 20, 25, 27, 28, 29
No power from engine	8, 9, 10, 11, 12, 13, 15, 16, 17, 21, 22, 24, 25, 26, 28, 29
Engine is mis-firing	8, 9, 11, 12, 13, 15, 16, 17, 21, 22, 24, 25, 26, 28
Too much fuel consumption	10, 12, 13, 15, 16, 17, 19, 20, 21, 23, 24, 25, 27, 28, 29
Black exhaust	10, 12, 13, 15, 16, 17, 19, 20, 21, 23, 24, 25, 27, 28, 29
Blue/white exhaust	4, 10, 15, 16, 17, 21, 23, 27, 29, 30, 50
Low oil pressure	4, 31, 32, 33, 34, 35, 37, 38, 39, 52
Engine knocking	13, 15, 16, 19, 22, 24, 25, 27, 29, 31, 40, 41, 53
Engine running rough	7, 8, 9, 10, 11, 12, 13, 17, 18, 22, 24, 25, 26, 29, 40, 53
Vibration	12, 13, 17, 21, 22, 25, 26, 29, 40, 42, 43
High oil pressure	4, 33, 36
Overheating	10, 12, 13, 15, 16, 20, 21, 40, 44, 45, 46, 47, 48, 51
Too much crankcase pressure	22, 27, 29, 30, 40, 49
Poor compression	10, 16, 21, 24, 25, 27, 28, 29, 30, 41, 53
Start and stop	9, 10, 11

KEY TO CORRECT THE CAUSE	
1. Battery capacity low	28. Worn valves and seat
2. Bad electrical connections	29. Broken or worn piston rings
3. Faulty starter motor	30. Worn valve stems or guides
4. Incorrect grade of oil	31. Worn or damaged bearings
5. Low cranking speed	32. Not enough oil in the oil pan
6. Fuel tank empty	33. Switch is defective
7. Faulty stop control operation	34. Oil pump worn
8. Plugged fuel line	35. Relief valve is stuck open
9. Plugged fuel filter	36. Relief valve is stuck closed
10. Restriction in the air cleaner	37. Broken relief valve spring
11. Air in the fuel system	38. Faulty suction pipe
12. Faulty fuel injection pump	39. Plugged oil filter
13. Faulty fuel injectors	40. Piston seizure
14. Broken injection pump drive	41. Incorrect piston height
15. Incorrect injection pump timing	42. Faulty engine mounting
16. Incorrect valve timing	43. Incorrect alignment of flywheel
17. Poor compression	44. Faulty thermostat
18. Plugged fuel tank vent	45. Restriction in water jacket
19. Incorrect grade of fuel	46. Loose alternator belt
20. Exhaust pipe restriction	47. Plugged radiator
21. Cylinder head gasket leaking	48. Plugged breather pipe
22. Over heating	49. Plugged breather pipe
23. Cold running	50. Damaged valve stem oil deflectors
24. Incorrect tappet adjustment	51. Coolant level too low
25. Sticking valves	52. Plugged oil pump pipe strainer
26. Incorrect high pressure fuel lines	53. Broken valve spring
27. Worn cylinder bores	

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WIRING SCHEMATIC

329 (S/N AACL11001 AND ABOVE)
(S/N A9K211001 AND ABOVE)

(PRINTED FEBRUARY 2008)
V-8982

CONTROL MODULE
CONNECTORS J1-J6

RIGHT HAND CONSOLE
HARNESS 6910751

LH CONSOLE
HARNESS
7103874

ENGINE HARNESS
7125660

V-8982 (1-17-08)

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