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HIGH FLOW

TURBO

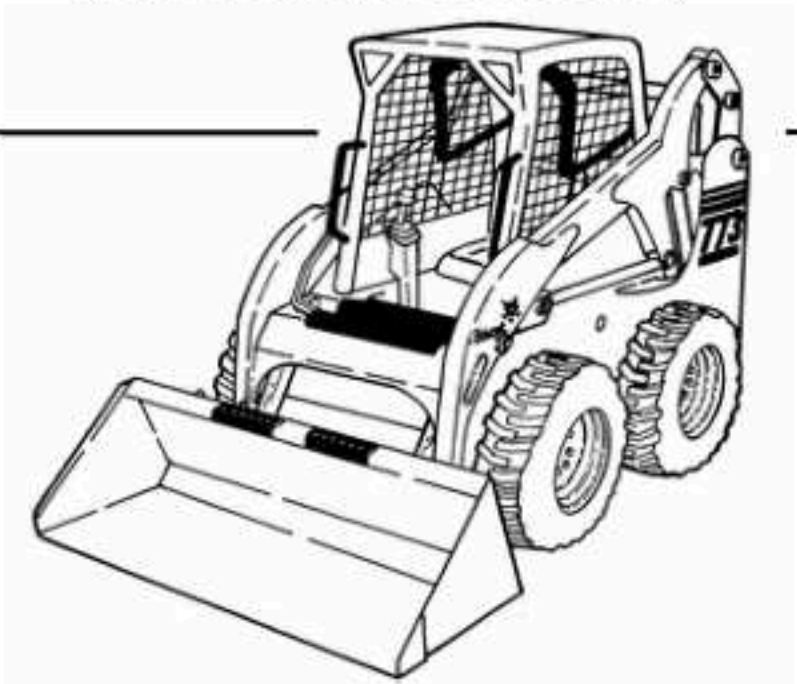
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Bobcat®

Service Manual

G Series

(S/N 517611001 & Above)
(S/N 518011001 & Above)
(S/N 518111001 & Above)
(S/N 519011001 & Above)
(S/N 519211001 & Above)
(S/N 500 K 11001 & Above)



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6900834 (3-06)

Ingersoll Rand
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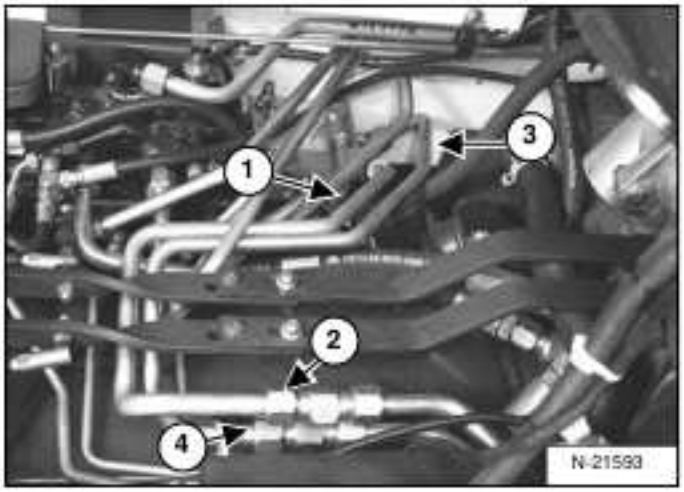
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REAR AUXILIARY DIVERTER VALVE (DUAL SHUTTLE) (CONT'D)

Removal And Installation (Cont'd)

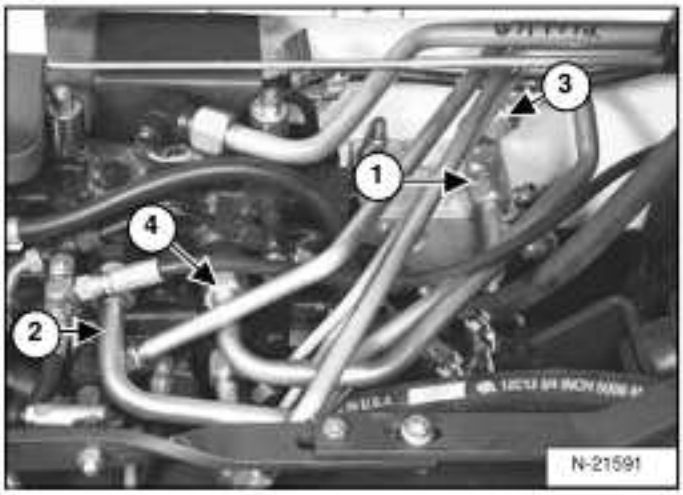
Figure 20-111-4



Disconnect and remove the tubeline connecting the "D2" port (Item 1) on the diverter valve to the tee fitting (Item 2) **[Figure 20-111-4]**.

Disconnect and remove the tubeline connecting the "D1" port (Item 3) on the diverter valve to the tee fitting (Item 4) **[Figure 20-111-4]**.

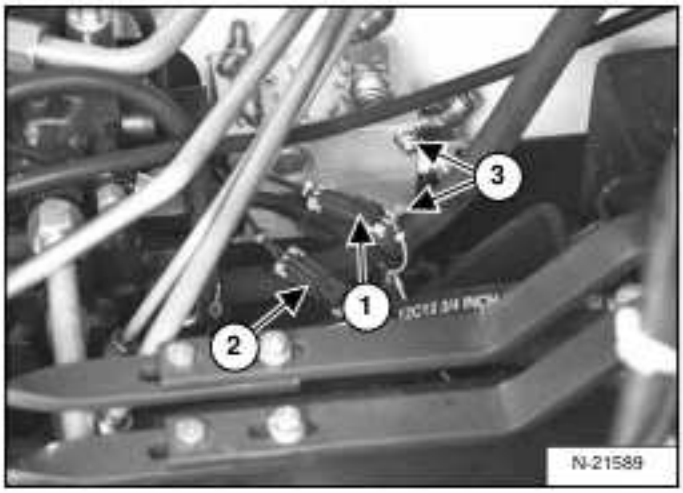
Figure 20-111-5



Disconnect and remove the tubeline connecting the "P2" port (Item 1) on the diverter valve to the front fitting (Item 2) **[Figure 20-111-5]** on the control valve.

Disconnect and remove the tubeline connecting the "P1" port (Item 3) on the diverter valve to the rear fitting (Item 4) **[Figure 20-111-5]** on the control valve.

Figure 20-111-6



Disconnect the yellow marked mainframe harness to the diverter harness (Item 1) **[Figure 20-111-6]**.

Disconnect the green marked mainframe harness to the bleed harness (Item 2) **[Figure 20-111-6]**.

Remove the mounting nuts (Item 3) **[Figure 20-111-6]**.

Installation: Tighten the mounting bolts to 25-28 ft.-lbs. (34-38 Nm) torque.

Reverse the removal procedure to install the rear auxiliary diverter valve.

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Gauge Pressure Related Troubleshooting (Cont'd)

Possible Cause	Inspection	Solution
System pressures Equal		
1. Clutch not operating.	See magnetic clutch retlated topics above.	
2. Compressor not pumping.	Equal high and low pressures.	Replace compressor.

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Crankshaft Re-Grind Data

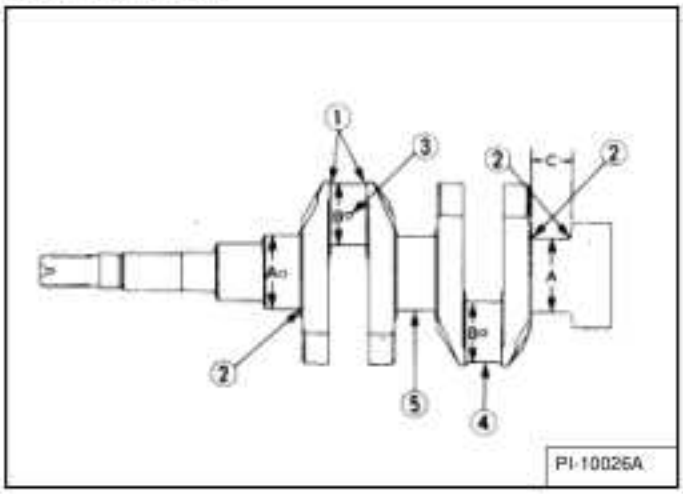
If the standard size bearing cannot be employed due to excessive wear of the crank pin and crank journal use undersize or oversize bearings.

For undersize or oversize bearing use, follow the precautions noted below.

Grind the crankpin and journal with a wheel which has specified round corner and width without shoulder **[Figure SPEC-20-1]**.

1. 0.1299-0.1457" (3,3-3,7 mm)
2. 0.1102-0.1260" (2,8-3,2 mm)
3. Be sure to chamfer the oil hole circumference to 0.0394-0.0591" (1,0-1,5 mm) radius width and oil stone.
4. The crankpin must be fine finished to higher than .04-S (0.000016"-S)
5. The crank journal must be fine-finished to higher than 0.4-S (0.000016"-S)
6. The crank journal side surface must be fine-finished to higher than 0.4-S (0.000016"-S).

Figure SPEC-20-1



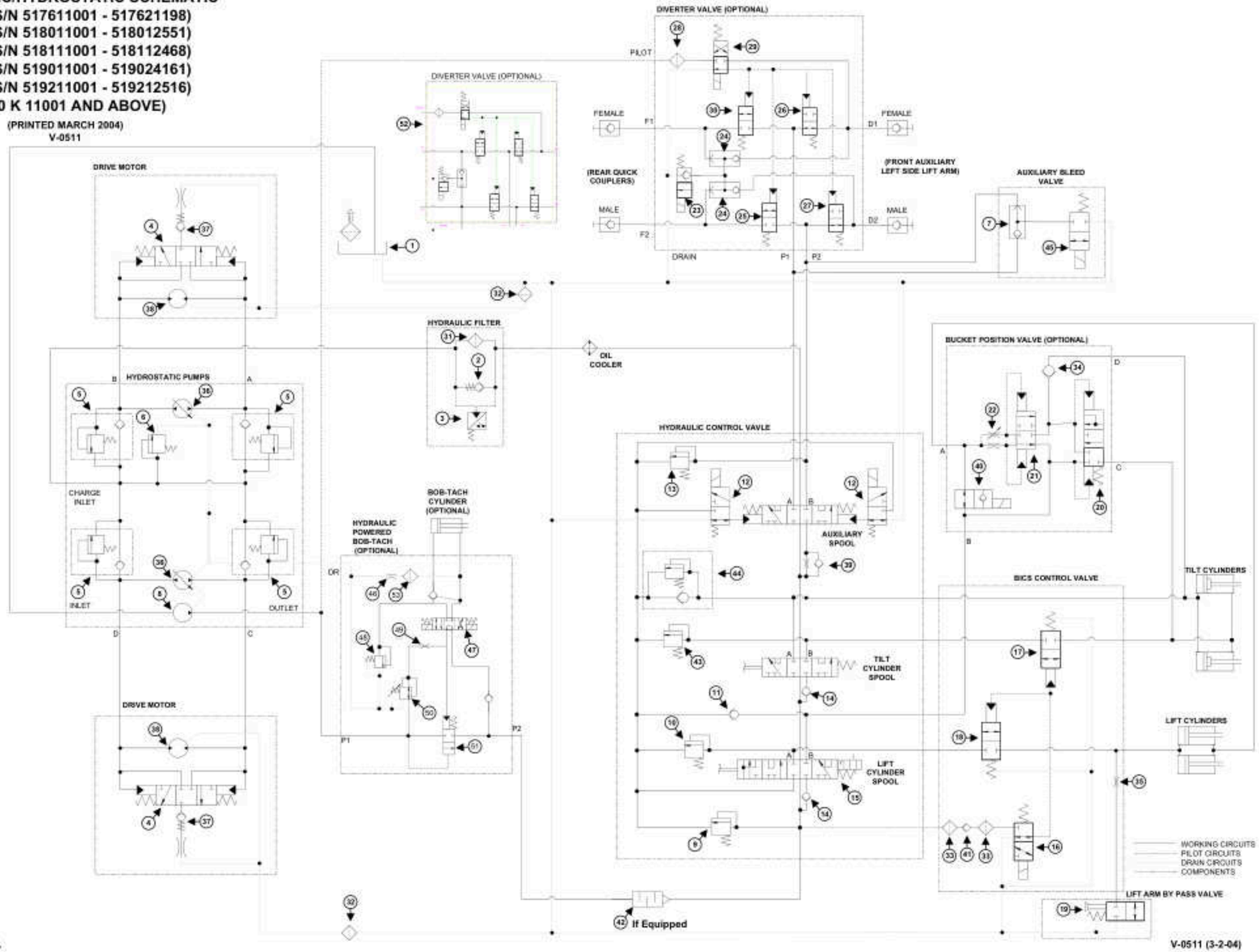
SIZE	CODE NO.	NAME OF BEARING	BEARING MARK	CRANKSHAFT PROCESSING DIM.	
-0.008" (-0,2 mm)	17331-2391-1	Crankshaft Bearing 1 0.008" minus (0,2 minus)	020 US	A	2.0363-2.037" (51,721-51,74mm)
-0.008" (-0,2 mm)	17331-2393-1	Crankshaft Bearing 2 0.008" minus (0,2 minus)	020 US		
-0.016" (-0,4 mm)	17331-2392-1	Crankshaft Bearing 1 0.016" minus (0,4 minus)	040 US		2.0284-2.0291" (51,521-51.54mm)
-0.016" (-0,4 mm)	17331-2394-1	Crankshaft Bearing 2 0.016" minus (0,4 minus)	040 US		
-0.008" (-0,2 mm)	17331-2297-1	Crank Pin Bearing 0.008" minus (0,2 minus)	020 US	B	1.8409-1.8415" (46,759-46,775mm)
-0.016" (-0,4 mm)	17331-2298-1	Crank Pin Bearing 0.016" minus (0,4 minus)	040 US		1.8330-1.8337" (46,559-46,575mm)
+0.008" (+0,2 mm)	15221-2395-1	Thrust Bearing 1-0.008"plus (0,2 mm plus)	020 OS	C	1.0315-1.0335" (26,20-26,25mm)
	19202-2397-1	Thrust Bearing 2-0.008"plus (0,2 mm plus)			
+0.016" (+0,4 mm)	15221-2396-1	Thrust Bearing 1-0.016"plus (0,4 mm plus)	040 OS		1.0394-1.0413" (26,40-26,45mm)
	19202-2398-1	Thrust Bearing 2-0.016"plus (0,4 mm plus)			

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HYDRAULIC/HYDROSTATIC SCHEMATIC

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(S/N 518011001 - 518012551)
(S/N 518111001 - 518112468)
(S/N 519011001 - 519024161)
(S/N 519211001 - 519212516)
(500 K 11001 AND ABOVE)

(PRINTED MARCH 2004)
V-0511



Printed in U.S.A.

V-0511 (3-2-04)

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