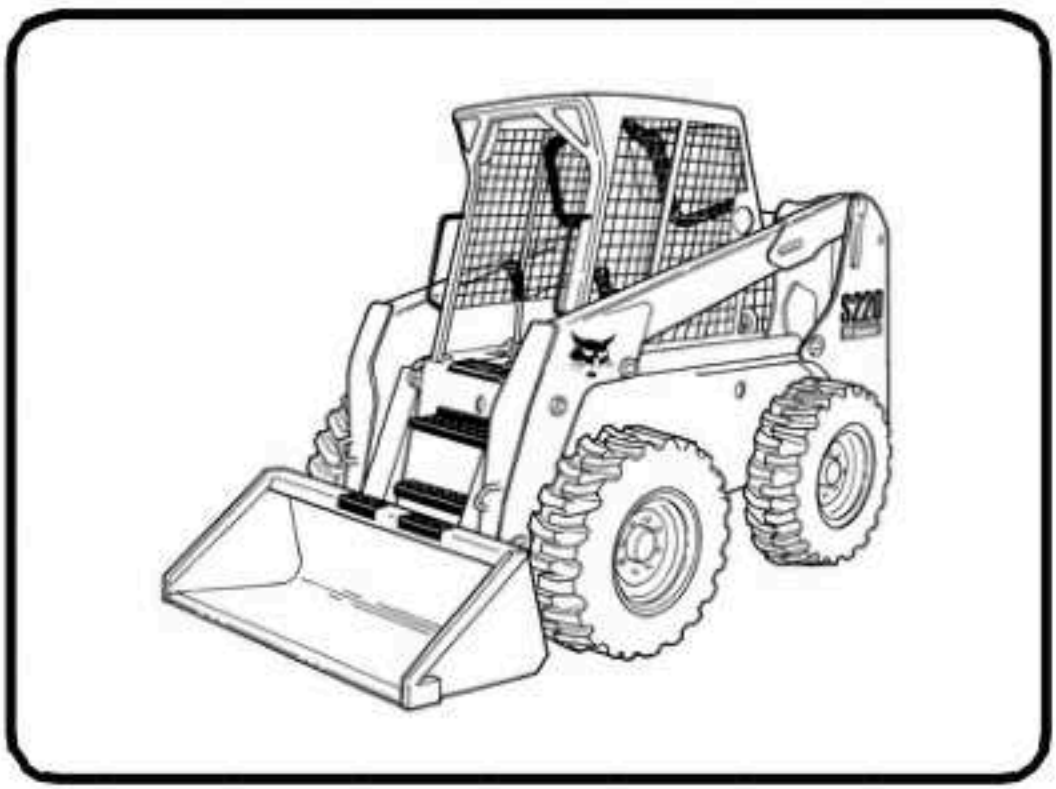
Bobcat®

Service Manual
S220 Skid-Steer Loader

S/N A5GK20001 & Above
S/N A5GL20001 & Above



EQUIPPED WITH BOBCAT INTERLOCK CONTROL SYSTEM (BICS™)

6987038 (11-10)

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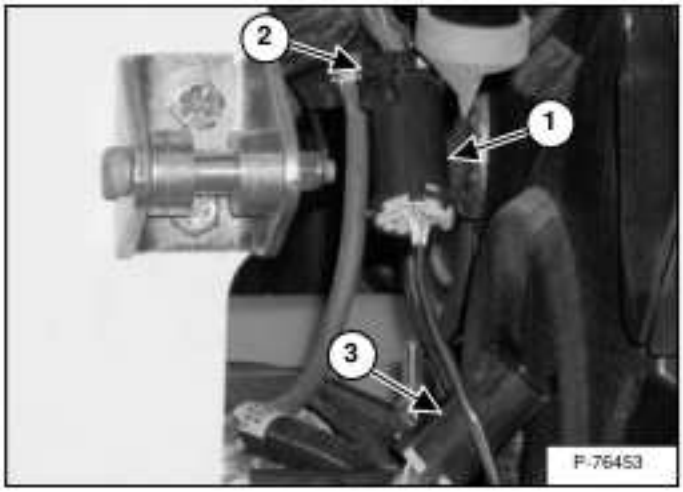
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Loader Service Tool Harness - 6689747 (Cont'd)

Figure 10-61-6



NOTE: The Remote Start Tool (Service Tool) connection harness has two connectors (Item 1) and (Item 3). The main connector (Item 1) [Figure 10-61-6] is always used for connection to the loader harness.

The second connector (Item 3) [Figure 10-61-6] is used for attachment ACD upgrades or attachment operational diagnostics only. This connector has a cap attached to it to prevent damage or corrosion when not in use.

Connect the Remote Start Tool (Service Tool) connector (Item 1) to the loader harness connector (Item 2) and the other Remote Start Tool (Service Tool) connector to the ACD harness connector (Item 3) **[Figure 10-61-6]**.

NOTE: The right instrument panel (Standard Key Panel or Deluxe Instrumentation Panel) must be in the off position or the Remote Start Tool (Service Tool) will not operate.

⚠ WARNING

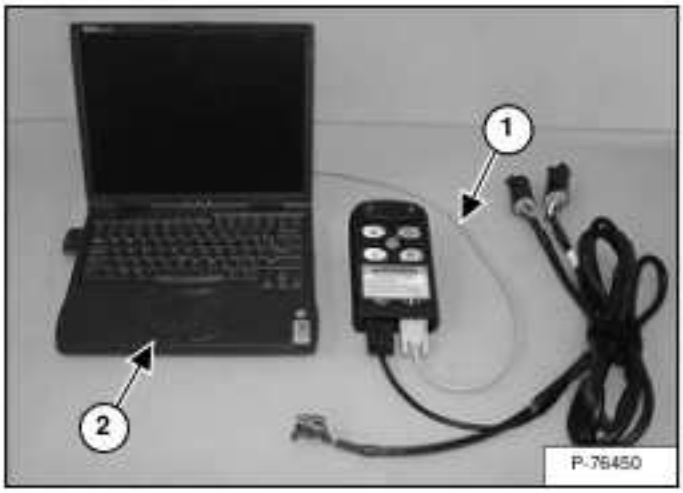
AVOID INJURY OR DEATH

- **Lift and block the machine.**
- **Check that wheels or tracks are clear.**
- **Cab ignition must be in the "STOP" position to start the engine with the Service Tool (if applicable).**
- **See machine Service Manual for more instructions.**

W-2792-0409

Computer Service Tool Harness - 6689746

Figure 10-61-7

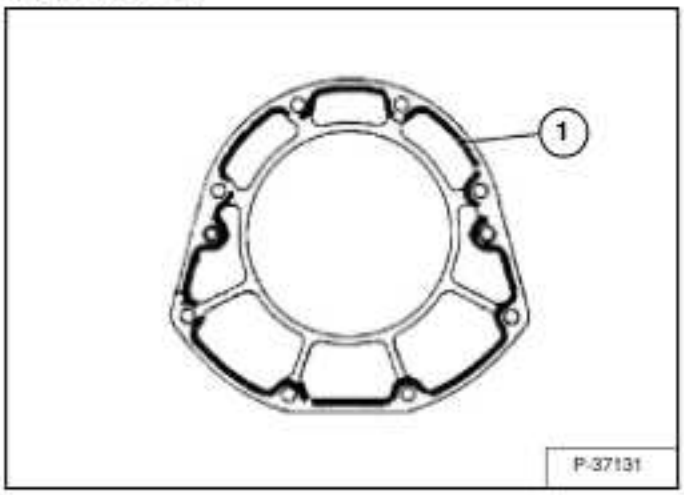


The computer service tool harness (Item 1) **[Figure 10-61-7]** is required to connect remote start tool (service tool) to the Service PC (Item 2) **[Figure 10-61-7]**.

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Crankshaft And Bearings Installation (Cont'd)

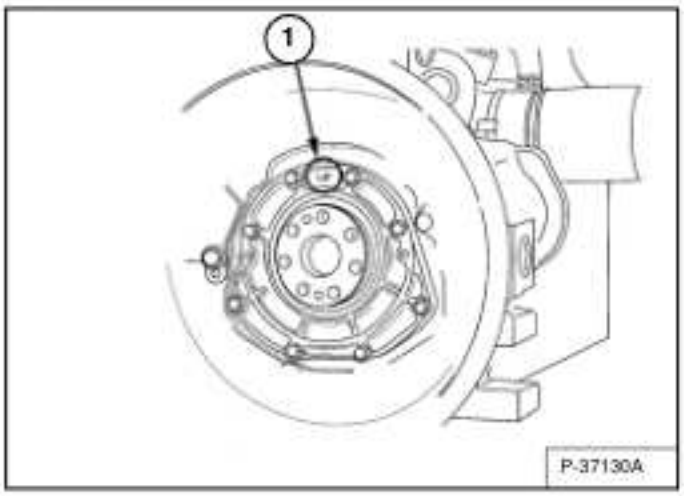
Figure 70-90-35



NOTE: When replacing the oil seal, use caution installing the seal in the bearing case cover as not to install it tilted. The seal should be flush with the cover.

Apply liquid gasket (Item 1) **[Figure 70-90-35]** to the bearing case cover evenly.

Figure 70-90-36



NOTE: Install the bearing case cover / oil seal assembly with the casting mark labeled "UP" (Item 1) [Figure 70-90-36] at the top.

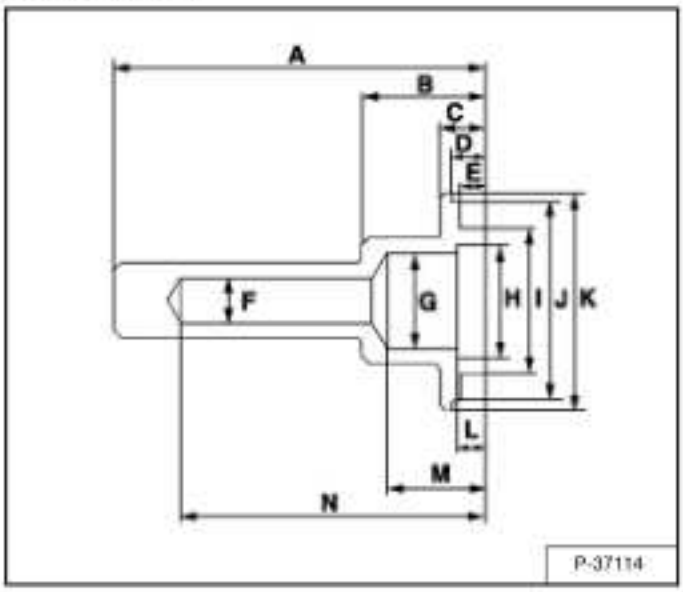
Tighten the bearing case cover mounting screws with even force on the diagonal line.

Tightening torque	Bearing Case Cover mounting screw	18 - 20 ft.-lb. (24 - 27 N•m)

Crankshaft And Bearings - Servicing

The following special tools are not provided, **[Figure 70-90-37]**, **[Figure 70-90-38]** and **[Figure 70-90-22]**.

Figure 70-90-37



Gearcase Oil Seal Replacing Tool

Application: Use to press fit the oil seal.

A	5.8582 in. (148,8 mm)
B	1.9685 in. (50 mm)
C	0.7401 in. (18,8 mm)
D	0.5394 - 0.5472 in. (13,7 - 13,9 mm)
E	0.433 in. (11 mm)
F	0.7087 in. dia. (18 mm dia.)
G	1.4961 in. dia. (38 mm dia.)
H	1.7716 in. dia. (45 mm dia.)
I	2.2795 - 2.2874 in. (57,9 - 58,1 mm)
J	3.1299 in. dia. (79,5 mm dia.)
K	3.452 in. (87 mm)
L	0.4724 in. (12 mm)
M	1.5748 in. (40 mm)
N	4.7244 in. (120 mm)

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Temperature / Pressure Chart

NORMAL EVAPORATOR RANGE	
TEMP F	PSIG
16	15.69
18	17.04
20	18.43
22	19.87
24	21.35
26	22.88
28	24.47
30	26.10
32	27.79
34	29.52
36	31.32
38	33.17
40	35.07
42	37.03
44	39.05
45	40.09
50	45.48
55	51.27
60	57.47
65	64.10
70	71.19
75	78.75
80	86.80
85	95.40
90	104.40
91	106.30
92	108.20

NORMAL CONDENSER RANGE	
TEMP F	PSIG
93	110.20
94	112.10
95	114.10
100	124.30
102	128.50
104	132.90
106	137.30
108	141.90
110	146.50
112	151.30
114	156.10
116	161.10
118	166.10
120	171.30
122	176.60
124	182.00
126	187.50
128	193.10
130	198.90
135	213.70
140	229.40
145	245.80
150	263.00
155	281.10
160	300.10
165	320.10
170	340.80

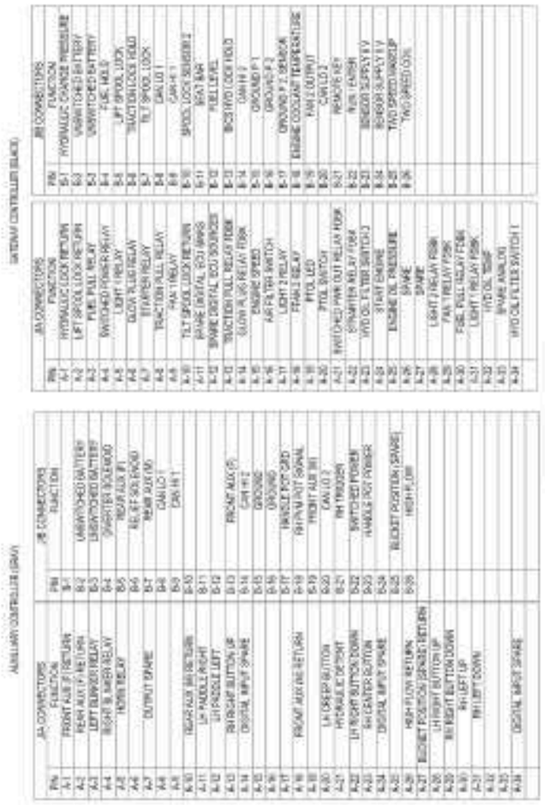
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WIRING SCHEMATIC
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S220 (S/N A5GK20001 AND ABOVE)
(S/N A5GL20001 AND ABOVE)

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