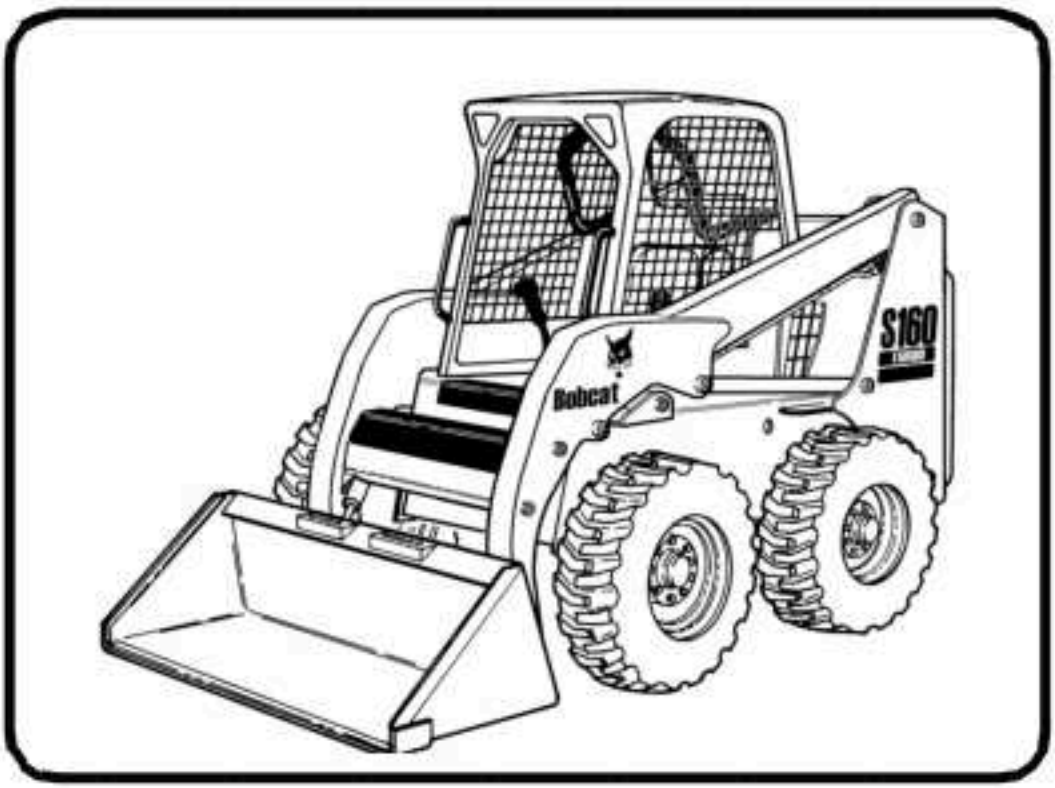
Bobcat®

Service Manual

S150, S160 Skid-Steer Loader

S/N 523811001 & Above
S/N 523911001 & Above
S/N 524011001 & Above
S/N 524111001 & Above



EQUIPPED WITH BOBCAT INTERLOCK CONTROL SYSTEM (BICS™)

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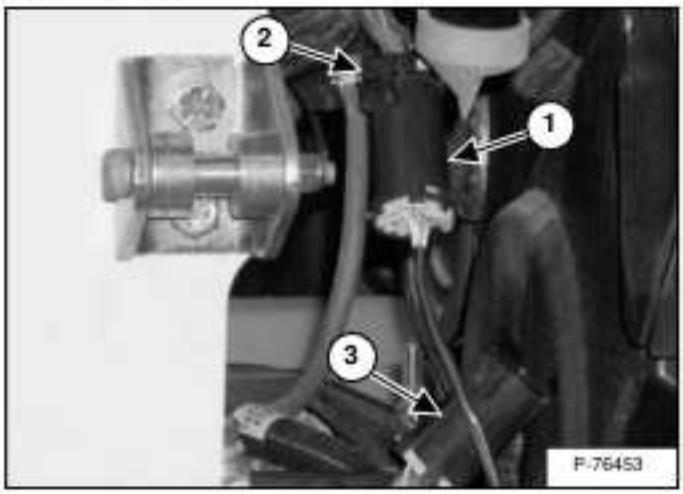
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REMOTE START TOOL (SERVICE TOOL) KIT - 7003031 (CONT'D)

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

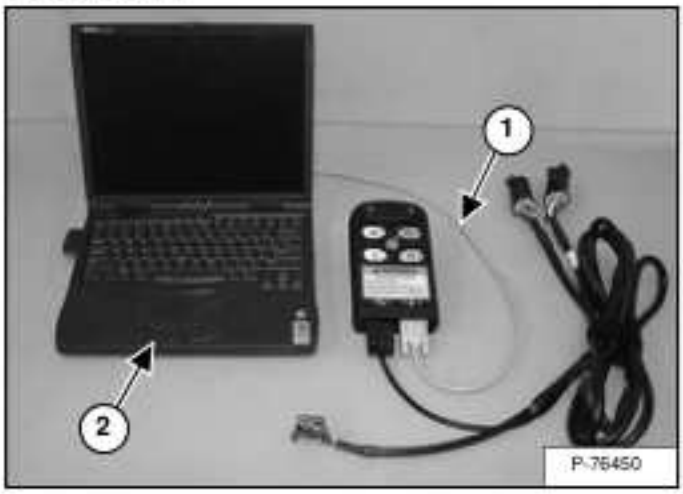
AVOID INJURY OR DEATH

- **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

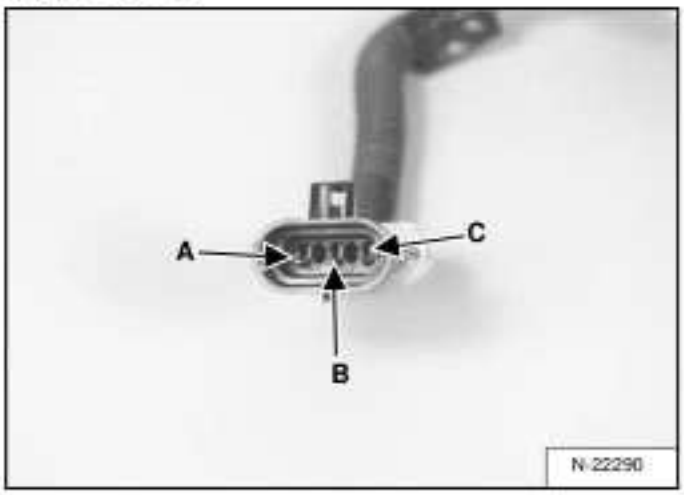


The computer service tool harness (Item 1) **[Figure 10-61-7]** is required to connect remote start tool (service tool) to the Service PC (Item 2) **[Figure 10-61-7]**.

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Checking The Electrical System (Cont'd)

Figure 80-50-30

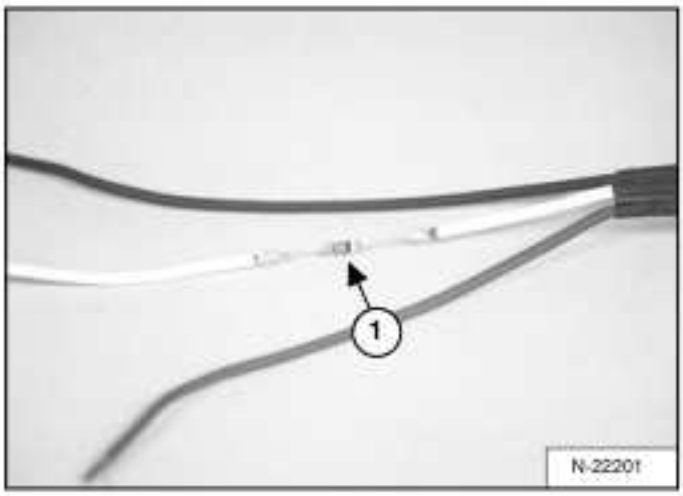


If there is voltage at the wiring harness, check the potentiometer **[Figure 80-50-30]** for resistance.

The resistance should be 10K ohm between wire terminal A and wire terminal C frame **[Figure 80-50-30]**.

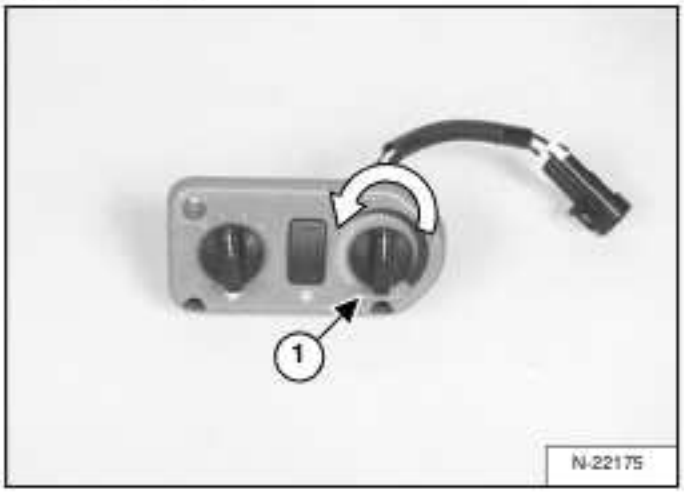
If no resistance is found replace the potentiometer.

Figure 80-50-31



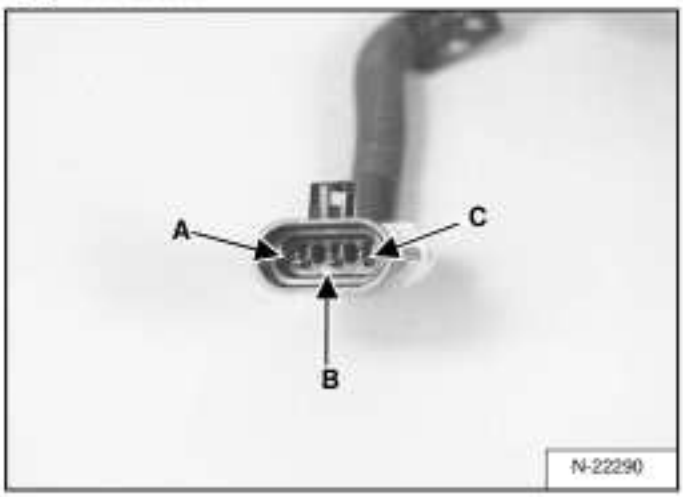
The white wire B, (Item 1) **[Figure 80-50-31]**, on the potentiometer, is a resistor wire.

Figure 80-50-32



To check the resistance of the white wire, turn the potentiometer control (Item 1) to the full A/C position **[Figure 80-50-32]**.

Figure 80-50-33



The resistance between the wire terminal A and wire terminal B frame **[Figure 80-50-33]** should be approximately 49 K ohm.

Check the resistance between the wire terminal C and wire terminal B frame **[Figure 80-50-33]** should be approximately 39K ohm.

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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 under size or oversize bearings.

For under size 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)

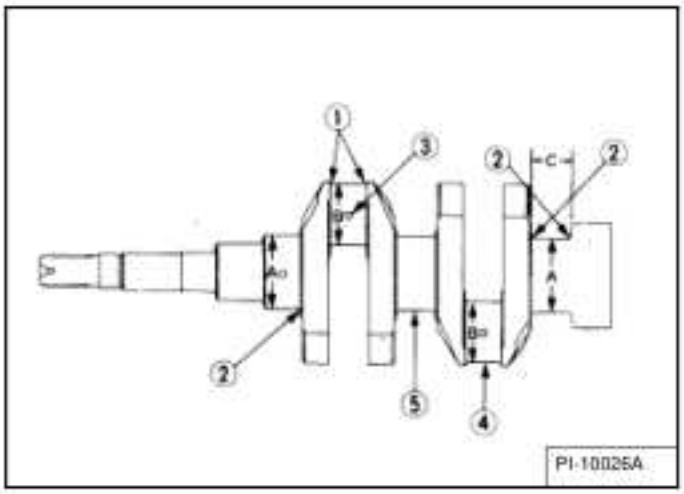
3.) Be sure to chamfer the oil hole circumference to 0.0394 - 0.0591" (1,0 - 1,5 mm) radius width and oil stone.

4.) The crankpin must be fine finished to higher than 0.04-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

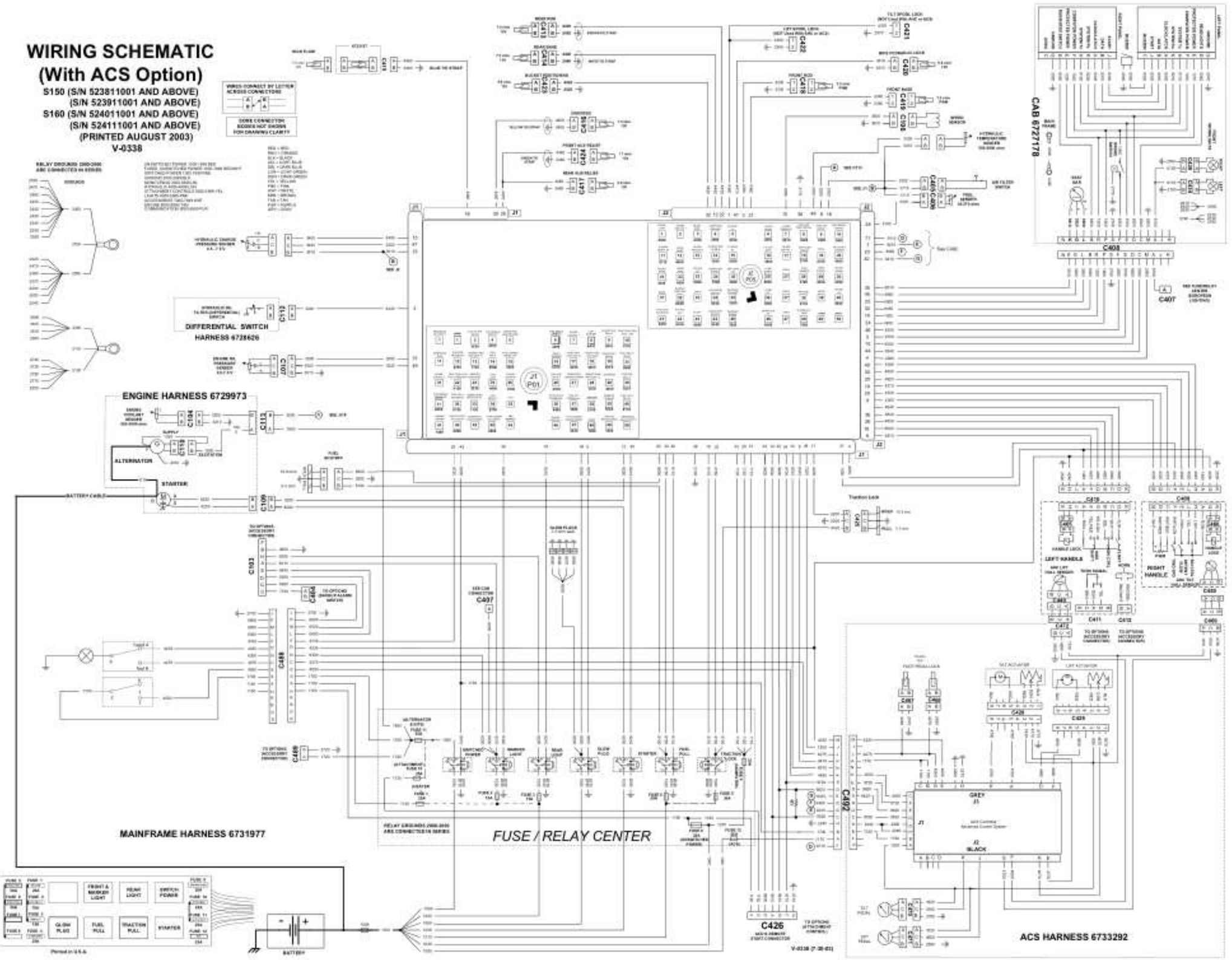


SIZE	CODE NO.	NAME OF BEARING	BEARING MARK	CRANKSHAFT PROCESSING DIM.	
-0.008" (-0,2 mm)	17331-2391-1	Crankshaft Bearing 1 0.008" minus (0,2 minus)	020 US	A	2.0363 - 2.037" (51,721 - 51,74 mm)
-0.008" (-0,2 mm)	17331-2393-1	Crankshaft Bearing 2 0.008" minus (0,2 minus)	020 US		
-0.016" (-0,4 mm)	17331-2392-1	Crankshaft Bearing 1 0.016" minus (0,4 minus)	040 US		2.0284 - 2.0291" (51,521 - 51.54 mm)
-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 - 46,575 mm)
+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 - 26,25 mm)
	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 - 26,45 mm)
	19202-2398-1	Thrust Bearing 2-0.016"plus (0,4 mm plus)			

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WIRING SCHEMATIC
(With ACS Option)

S150 (S/N 523811001 AND ABOVE)
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