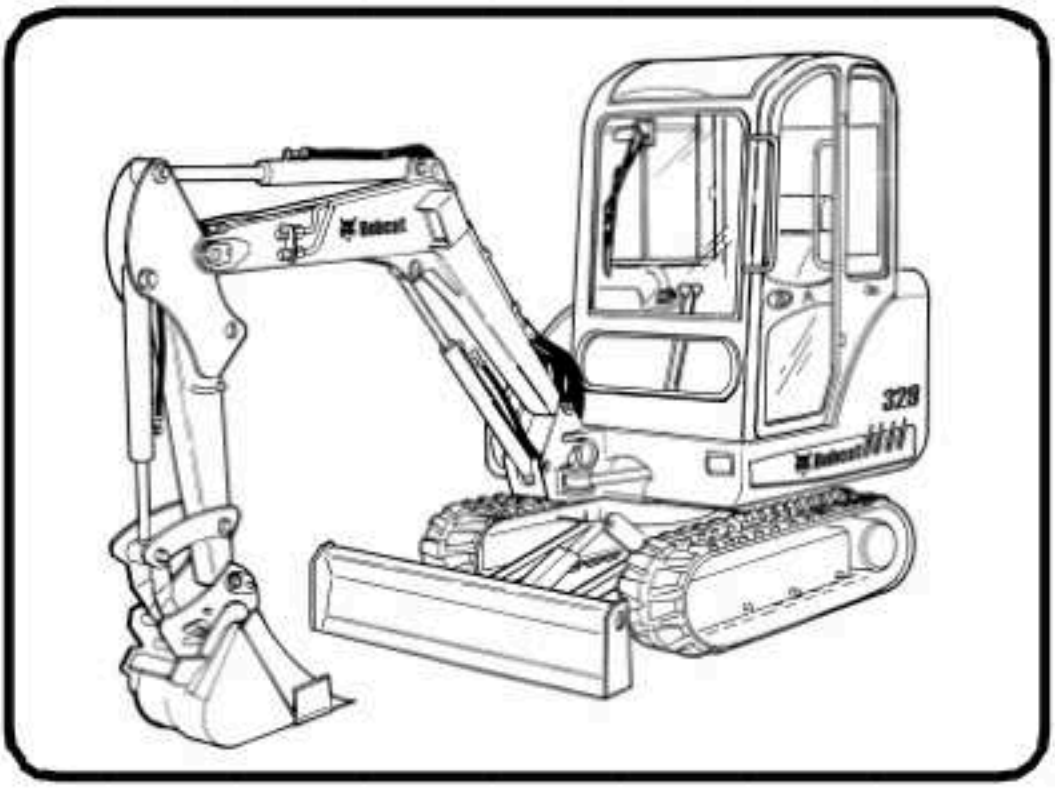
Bobcat®

Service Manual
329 Compact Excavator

S/N A2PG11001 & Above



6904771 (10-09)

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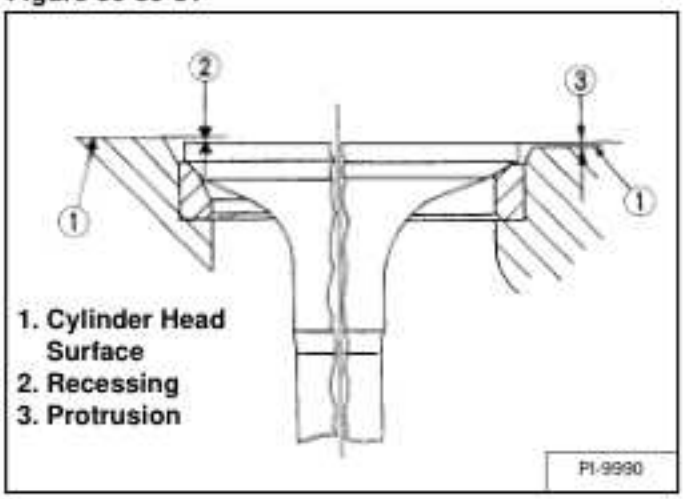
Troubleshooting The Travel Circuit

TROUBLESHOOTING THE TRAVEL CIRCUIT		
PROBLEM	**CAUSE**	**CORRECTION**
Travel system inoperable	Lever linkage incorrectly adjusted	Readjust
	Track tension too tight	Readjust
	Defective pump	Check, repair or replace
	Travel motor counter balance spool sticking	Repair or replace
	Travel motor internal leakage excessive	Repair or replace
	Travel motor defective	Repair or replace
	Travel motor gears defective	Repair or replace
	Swivel joint defective	Repair or replace
	Main relief valve pressure too low	Readjust or replace
Travel power	Track tension too tight	Readjust
	Main relief valve pressure too low	Readjust or replace
	Swivel joint leaking	Repair or replace
	Travel motor counterbalance spool sticking	Repair or replace
	Lever linkage incorrectly adjusted	Readjust
Speed too slow	Swivel joint internal leakage excessive	Repair or replace
	Control valve internal leakage excessive	Repair or replace
	Low pump pressure	Check, repair or replace
	Travel motor internal leakage excessive	Repair or replace
Travel motor seal leakage	Return line filter plugged	Inspect, clean or replace
Machine not running straight	Lever linkage incorrectly adjusted	Readjust
	Track tension not equal	Readjust
	Pump output not equal	Repair or replace
	Travel motor internal leakage not equal	Repair or replace
	Travel motor counterbalance spool sticking	Repair or replace
	Main relief valve pressure set too low	Repair or replace
	Swivel joint internal leakage excessive	Repair or replace
	Control valve internal leakage not equal	Repair or replace
Machine will not hold on slope or while digging	Travel motor counterbalance valve leakage excessive	Repair or replace
	Hose damage	Replace
Blade drops while machine is moving	Lever linkage unaligned	Readjust
	Cylinder internal leakage excessive	Repair or replace
	Control valve internal leakage excessive	Repair or replace
	Swivel joint internal leakage from travel motor pressure circuit into blade cylinder circuit	Repair or replace
High/low shift inoperative (2-speed)	Control valve defective	Replace
	Low pressure to 2-speed valve	Readjust

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Reconditioning The Valve And Valve Seat (Cont'd)

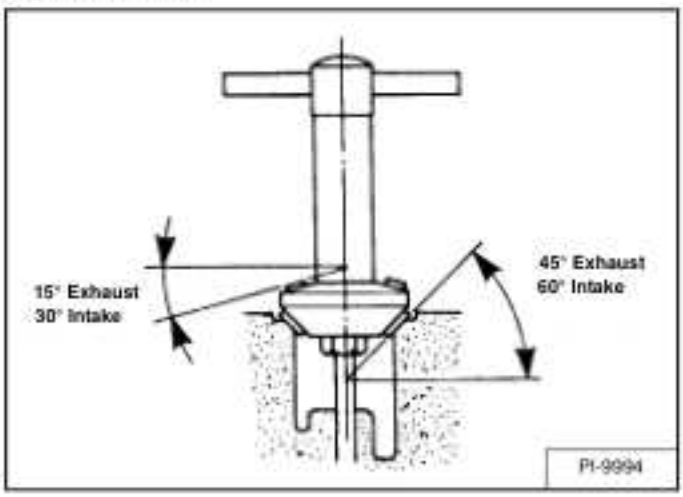
Figure 60-80-31



If the measurement exceeds the allowable limit, replace the valve or cylinder head **[Figure 60-80-31]**.

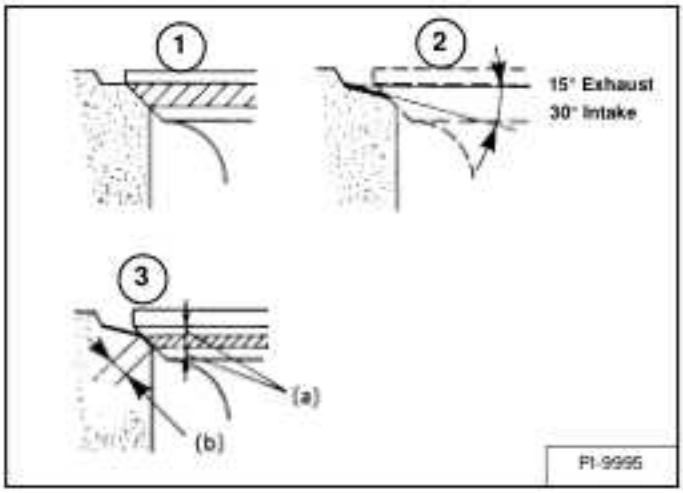
Protrusion	0.002 in. (0.05 mm)
Recessing	0.006 in. (0.15 mm)
Allowable Limit (Recessing)	0.016 in. (0.4 mm)

Figure 60-80-32



Grind the valve seat surface in the cylinder head to the correct angle **[Figure 60-80-32]**.

Figure 60-80-33



Check the seat surface and valve face (Item 1) **[Figure 60-80-33]**.

(a) identical dimensions above and below the valve seat

If the seat surface (b) is too wide, use a 30 degree cutter (Item 2) on the intake, and a 15 degree cutter on the exhaust to get the correct width (Item 3) **[Figure 60-80-33]**.

Valve Seat Width

Intake	0.0835 in. (2,12 mm)
Exhaust	0.0835 in. (2,12 mm)

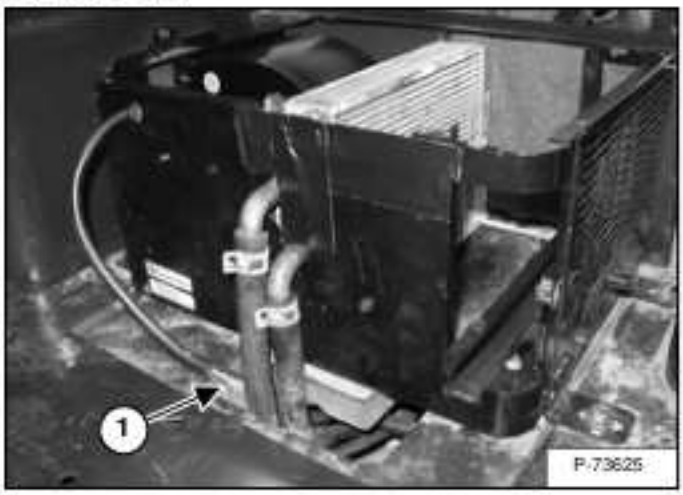
Valve Seat & Face Angle

Intake	60°
Exhaust	45°

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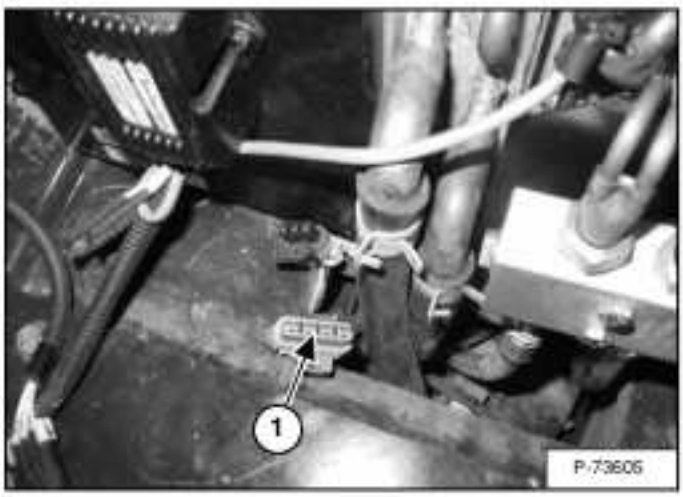
Electrical System

Figure 70-31-1



Disconnect the wire harness (Item 1) **[Figure 70-31-1]**.

Figure 70-31-2



Check the wire harness (Item 1) **[Figure 70-31-2]** for voltage to the blower fan.

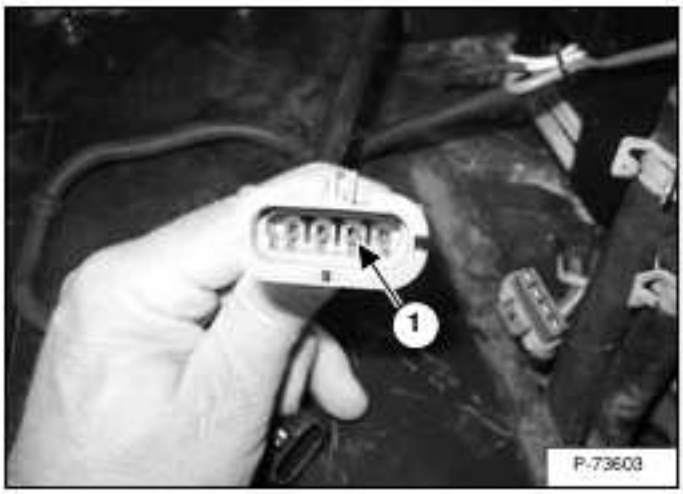
In the cab, place the blower switch in position 1. Check for voltage at the harness connector (Item 1) **[Figure 70-31-2]**, Pin 3. (YELLOW wire # 5000). The voltage should be 12 volts.

In the cab, place the blower switch in position 2. Check for voltage at the harness connector (Item 1) **[Figure 70-31-2]**, Pin 2. (RED wire # 1200). The voltage should be 12 volts.

In the cab, place the blower switch in position 3. Check for voltage at the harness connector (Item 1) **[Figure 70-31-2]**, Pin 1. (ORANGE wire # 1010). The voltage should be 12 volts.

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

Figure 70-31-3



If there is voltage at the wiring harness, check the resistance to the blower fan at the thermostat/blower fan wiring connector (Item 1) **[Figure 70-31-3]**.

Check the resistance between Pin 4 (BLACK wire # 2200) and Pin 3 (YELLOW wire # 5000).

Check the resistance between Pin 4 (BLACK wire # 2200) and Pin 2 (RED wire # 1200).

Check the resistance between Pin 4 (BLACK wire # 2200) and Pin 1 (ORANGE wire # 1010).

If there is no resistance value at any of these pins, replace the blower fan. (See BLOWER FAN (EARLIER MODELS) on Page 70-60-1.)

If there is resistance value at any of the pins, check the climate controls at the control panel inside the Excavator cab.

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WIRING SCHEMATIC

329 (S/N A2PG11001 AND ABOVE)

(PRINTED NOVEMBER 2006)
V-0843

CONTROL MODULE
CONNECTORS J1-J6

RIGHT HAND CONSOLE
HARNESS 6810761

LH CONSOLE
HARNESS
T103874

ENGINE HARNESS
7125893

V-0843 (10-13-06)

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