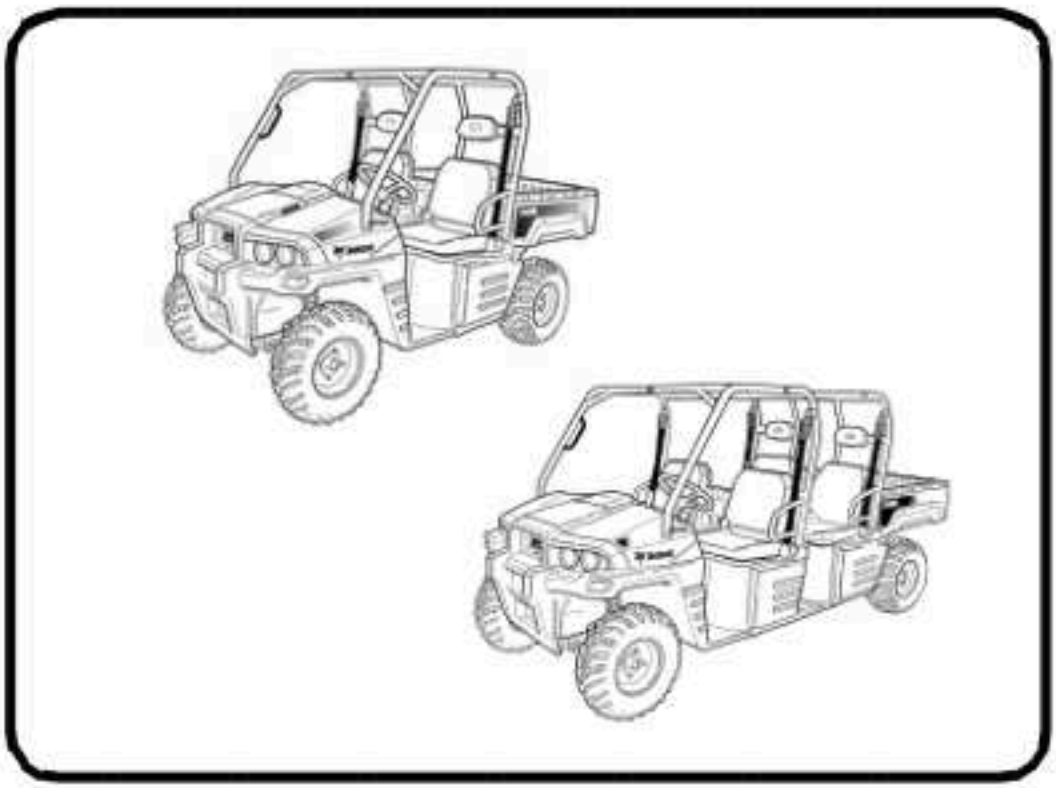
Bobcat®

Service Manual
3400, 3400XL Utility Vehicle

S/N AJNT11001 & Above
S/N AJNV11001 & Above



6989602 (9-10)

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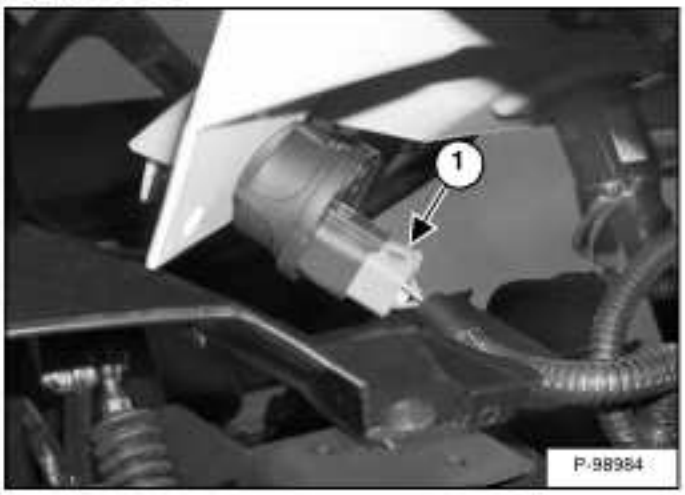
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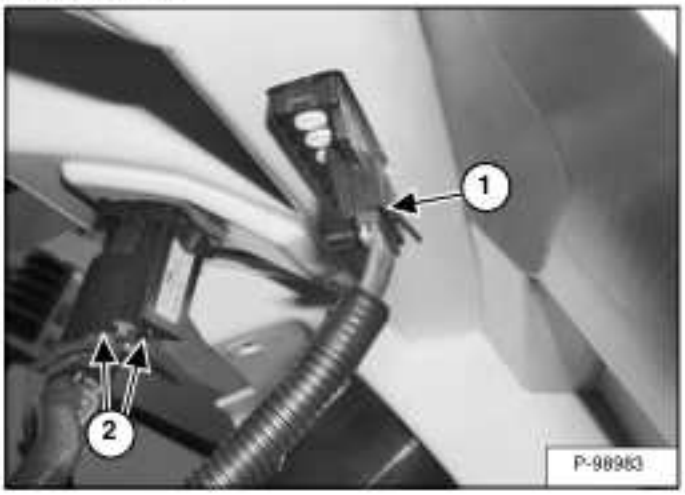
Left Dash Removal And Installation (Cont'd)

Figure 30-30-5



Raise the front of the dash and disconnect the ignition switch harness (Item 1) **[Figure 30-30-5]**.

Figure 30-30-6



Disconnect the indicator lamp harness (Item 1) and hour meter wires (Item 2) **[Figure 30-30-6]**.

Remove the dash.

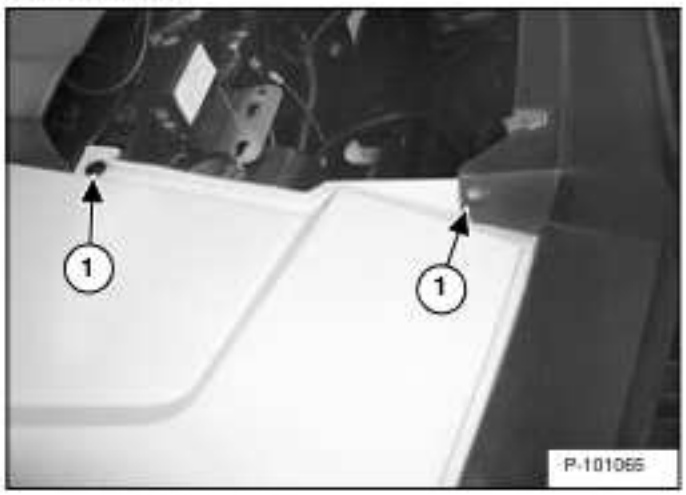
Right Dash Removal And Installation

NOTE: If the right dash is being replaced, the ROPS must be removed. (See Removal And Installation on Page 30-10-1.)

Remove the front access cover. (See Front Access Cover Removal And Installation on Page 30-30-1.)

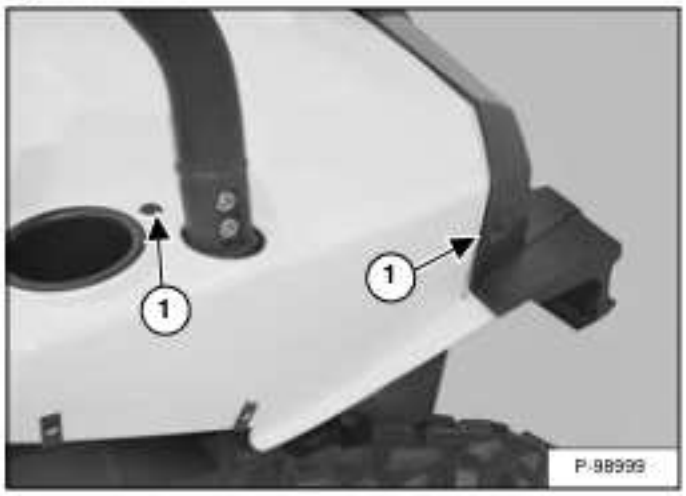
Remove the right fender flare. (See Flare Removal And Installation on Page 30-140-3.)

Figure 30-30-7



Remove the two screws (Item 1) **[Figure 30-30-7]**.

Figure 30-30-8



Remove the two screws (Item 1) **[Figure 30-30-8]**.

Installation: Tighten the nut to 28 - 32 ft.-lb. (38 - 43 N•m) torque.

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Specifications (Engine Model EH460PLE040)

Cylinder Head

Item	Factory Specification	Allowable Limit
Cylinder Warpage Limit		0.002 in. (0,05 mm)
Standard Height	3.855 in. (97,92 mm)	-
Compression Pressure	50 - 90 PSI 3,45 - 6,21 bar	-

Valves

Item		Factory Specification	Allowable Limit
Valve Seat Contacting Width	IN. EX.	0.028 in. (0,7 mm) 0.039 in. (1,0 mm)	0.055 in. (1,4 mm) 0.071 in. (1,8 mm)
Valve (Margin Thickness)	IN. EX.	0.039 in. (1,0 mm) 0.047 in. (1,2 mm)	0.031 in. (0,8 mm) 0.031 in. (0,8 mm)
Valve Stem O.D.	IN.	0.2343 - 0.2348 in. (5,950 - 5,965 mm)	-
	EX.	0.2341 - 0.2346 in. (5,945 - 5,960 mm)	-
Valve (Stem Oil Clearance)	IN.	0.0014 - 0.0024 in. (0,035 - 0,062 mm)	0.0059 in. (0,15 mm)
	EX.	0.0016 - 0.0026 in. (0,040 - 0,067 mm)	0.0059 in. (0,15 mm)
Valve (Overall Length)	IN. EX.	3.976 in. (101,0 mm) 3.984 in. (101,2 mm)	-
Valve Guide I.D.		0.2362 - 0.2367 in. (6,0 - 6,012 mm)	-
Valve Guide (Protrusion Above Head)		0.689 - 0.709 in. (17,5 - 18,0 mm)	-

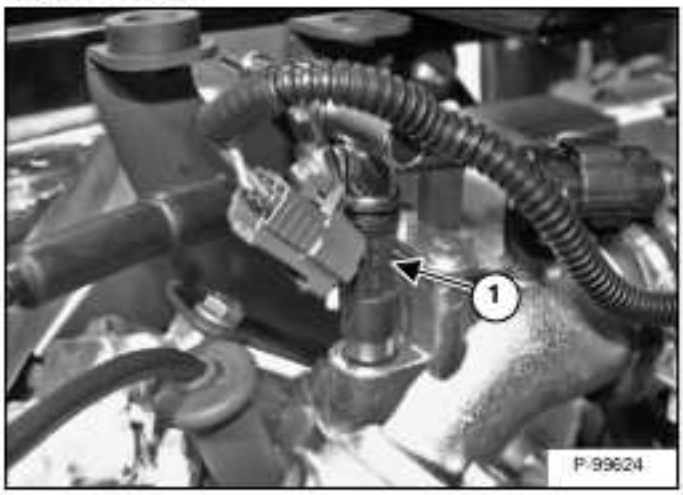
Valve Springs

Item	Factory Specification	Allowable Limit
Valve Spring (Overall Length)	1.654 in. (42,0 mm)	1.575 in. (40,0 mm)
Valve Spring (Squareness)	0.075 in. (1,9 mm)	-

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Fuel Injector Description

Figure 50-70-14



The fuel injector (Item 1) **[Figure 50-70-14]** mounts into the intake manifold, and the fuel rail attaches at the top end. A replaceable O-ring, grommet and seal on the injector prevent external fuel leakage and also insulate it from heat and vibration.

When the key switch is on, the fuel rail is pressurized. During engine operation, the ECU completes the ground circuit, and the ECU relay energizes the injector. The valve needle in the injector is opened electromagnetically, and the pressure in the fuel rail forces fuel down through the inside.

The "director plate" at the tip of the injector contains a series of calibrated openings which directs the fuel into the intake port in a cone-shaped spray pattern.

The injector is opened and closed once every other crankshaft revolution. The total amount of fuel needed for one firing is injected during each opening. The amount of fuel injected is controlled by the ECU and determined by the length of time the valve needle is held open, also referred to as the "injection duration" or "pulse width". It may vary in length from 1.5 - 8 milliseconds depending on the speed and load requirements of the engine.

Fuel Injector Inspection

Injector problems typically fall into three general categories- electrical, dirty / clogged, or leakage. An electrical problem usually causes the injector to stop functioning.

NOTE: Do not apply voltage directly to the fuel injector. Excessive voltage will burn out the injector. Do not ground the injector with the ignition "on". The injector will open / turn on if relay is energized.

If an injector is not operating, it can indicate either a bad injector, or a wiring / electrical connection problem. Check as follows:

Injector leakage is very unlikely, but in rare instances it can be internal (past the tip of the valve needle), or external (weeping around the injector body). The loss of system pressure from the leakage can cause hot restart problems and longer cranking times.

Injector problems due to dirt or clogging are unlikely due to the design of the injectors, the high fuel pressure, the use of filters and the detergent additives in the gasoline. However, symptoms that could be caused by dirty / clogged injectors include rough idle, hesitation / stumble during acceleration, or triggering of fault codes related to fuel delivery. Injector clogging is usually caused by a buildup of deposits on the director plate, restricting the flow of fuel, resulting in a poor spray pattern. Some contributing factors to injector clogging include; dirty air filters, higher than normal operating temperatures, short operating intervals and dirty, incorrect, or poor quality fuel. Cleaning of clogged injectors is not recommended; they should be replaced. Additives and higher grades of fuel can be used as a preventative measure if clogging has been a problem.

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WIRING SCHEMATIC

3400 (S/N AJNT11001 AND ABOVE)
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