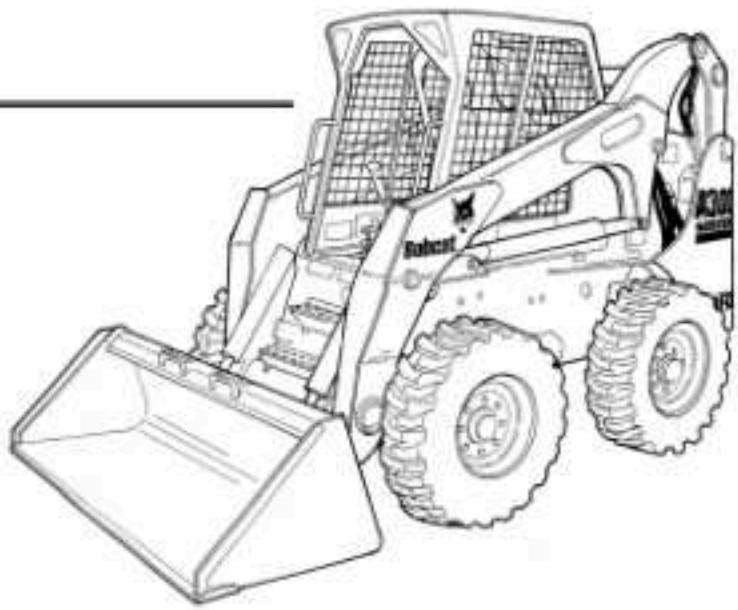
A300 TURBO

A300 TURBO HIGH FLOW

Bobcat®

Operation & Maintenance Manual

S/N 526411001 thru 526412199
S/N 526511001 thru 526512099



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS)

6902694 (3-05) Revised (12-06) (5)

Ingersoll Rand
Compact Vehicle Technologies

Printed in U.S.A.

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REFERENCE INFORMATION

Write the correct information for YOUR Bobcat Loader in the spaces below. Always use these numbers when referring to your Bobcat Loader.

Loader Serial Number _____
Engine Serial Number _____
_____
_____

NOTES:

_____
_____

YOUR BOBCAT DEALER:

_____
ADDRESS:

_____
PHONE:

_____

Bobcat Company
P.O. Box 128
Gwinner, ND 58040-0128

Bobcat Company Europe
Dréve Richelle 167
B-1410 WATERLOO
Belgium

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FOREWORD

This Operation & Maintenance Manual was written to give the owner/operator instructions on the safe operation and maintenance of the Bobcat Loader. READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR Bobcat Loader. If you have any questions, see your Bobcat dealer. This manual may illustrate options and accessories not installed on your loader.

BOBCAT COMPANY IS ISO 9001:2000 CERTIFIED V

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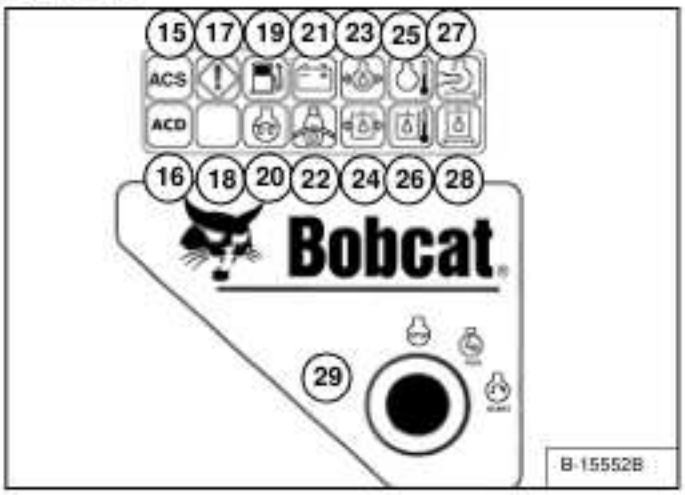
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INSTRUMENT PANEL IDENTIFICATION (CONT'D)

Right Panel (Standard - With Key Switch)

Figure OI-2



The right instrument panel shown **[Figure OI-2]** is the Standard Panel.

The table below shows the Icons and other components of the Right Standard Panel

* These functions are monitored and have SERVICE CODES associated with them. For descriptions of DIAGNOSTICS SERVICE CODES (See DIAGNOSTICS SERVICE CODES on Page SA-4.)

REF.	FUNCTION	ICON/ LIGHT	ALARM	CODE	CONDITION	DESCRIPTION
15	Advanced Control System (ACS)	ON	3 Beeps	*	Error	Error with Advanced Control System (ACS)
16	Attachment Control Device (ACD)	ON FLASH	- - - 3 Beeps	- - - *	- - - Error	Electrical controlled attachment is present. Error with Attachment Control Device (ACD)
17	General Warning	ON ON FLASH	3 Beeps 3 Beeps Continuous	* * *	Error WARNING SHUTDOWN	Error with one or more engine or hydraulic functions. Engine speed high or in shutdown. Engine speed very high. Engine will stop in 10 seconds.
18	NOT USED					
19	Fuel Level	ON FLASH	3 Beeps 3 Beeps	* *	Error WARNING	Fuel level sender system fault. Fuel level low.
20	Glow Plugs	ON FLASH	- - - 3 Beeps	- - - *	- - - Error	Air Intake Heater energized. Error with Air Intake Heater
21	System Voltage	ON	3 Beeps	*	WARNING	Voltage low, high or very high.
22	Seat Belt	ON	- - -	- - -	- - -	Light stays on for 45 seconds to remind operator to fasten seat belt.
23	Engine Oil Pressure	ON ON FLASH	3 Beeps 3 Beeps Continuous	* * *	Error WARNING SHUTDOWN	Engine Oil Pressure sender out of range. Engine oil level low. Engine oil pressure very low. Engine will shutdown in 10 seconds.
24	Hydrostatic Charge Pressure	ON ON FLASH	3 Beeps 3 Beeps Continuous	* * *	Error WARNING SHUTDOWN	Hydraulic oil pressure sender out of range. Hydraulic oil pressure low. Hydraulic charge pressure very low. Engine will stop in 10 seconds.
25	Engine Coolant Temperature	ON ON FLASH	3 Beeps 3 Beeps Continuous	* * *	Error WARNING SHUTDOWN	Engine coolant sender out of range Engine coolant temperature high. Engine coolant temperature very high. Engine will stop in 10 seconds.
26	Hydraulic Oil Temperature	ON ON FLASH	3 Beeps 3 Beeps Continuous	* * *	Error WARNING SHUTDOWN	Hydraulic oil temperature out of range. Hydraulic oil temperature high. Hydraulic oil temperature very high. Engine will stop in 10 seconds.
27	Engine Air Filter	ON FLASH	3 Beeps 3 Beeps	* *	Error WARNING	Air filter with high restriction. Air filter switch not connected.
28	Hydraulic Filter	ON FLASH	3 Beeps 3 Beeps	* *	Error WARNING	Hydraulic filter with high restriction. Hydraulic filter switch not connected.
29	Key Switch	- - -	- - -	- - -	- - -	Used to start and stop the engine.

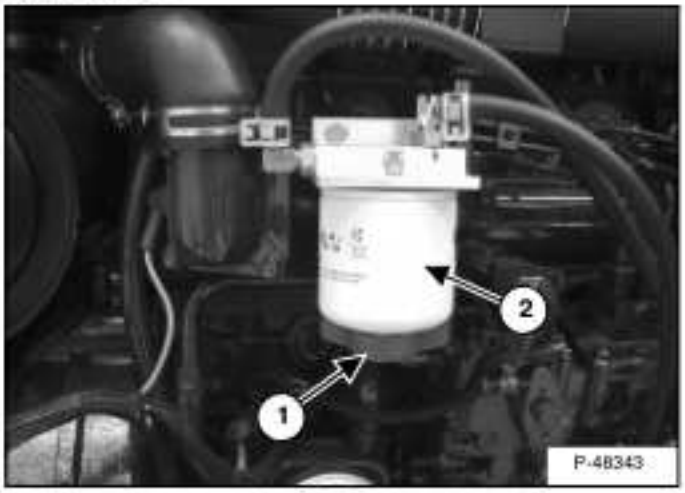
* See SYSTEM SETUP & ANALYSIS, Page SA-4 for further description of SERVICE CODES.

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Fuel Filter

For the service interval for removing water from, or replacing the fuel filter (See SERVICE SCHEDULE on Page PM-7.)

Figure PM-29



Loosen the drain (Item 1) **[Figure PM-29]** at the bottom of the filter element to remove water from the filter.

Remove the filter element (Item 2) **[Figure PM-29]**.

Clean the area around the filter housing. Put clean oil on the seal of the new filter element. Install the fuel filter, and hand tighten.

Remove air from the fuel system. (See Removing Air From The Fuel System on Page PM-20.)

⚠ WARNING

Always clean up spilled fuel or oil. Keep heat, flames, sparks or lighted tobacco away from fuel and oil. Failure to use care around combustibles can cause explosion or fire which can result in injury or death.

W-2103-1285

Removing Air From The Fuel System

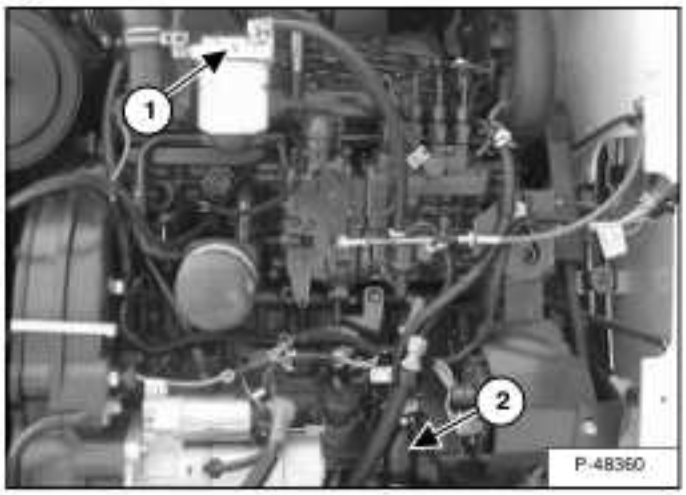
After replacing the filter element or when the fuel tank has run out of fuel, the air must be removed from the fuel system before starting the engine.

⚠ WARNING

Diesel fuel or hydraulic fluid under pressure can penetrate skin or eyes, causing serious injury or death. Fluid leaks under pressure may not be visible. Use a piece of cardboard or wood to find leaks. Do not use your bare hand. Wear safety goggles. If fluid enters skin or eyes, get immediate medical attention from a physician familiar with this injury.

W-2072-0496

Figure PM-30



Open the vent (Item 1) **[Figure PM-30]** on the fuel filter housing.

Squeeze the hand pump (priming bulb) (Item 2) **[Figure PM-30]** until fuel flows from the vent with no air bubbles.

Close the vent (Item 1) **[Figure PM-30]**.

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LOADER SPECIFICATIONS (A300) (CONT'D)

Performance

Rated Operating Capacity (SAE)	3000 lb. (1361 kg)
Tipping Load (SAE Rating)	6000 lb. (2722 kg)
Operating Weight	8350 lb. (3788 kg)
SAE Breakout Force - Lift	6600 lbf. (2994 kg)
SAE Breakout Force - Tilt	7150 lbf. (3243 kg)
Axle Torque	5957 lbf. (2701 kg) @ 4850 PSI
Travel Speed - Two-Speed Travel Low/High - Inching Speed	 6.9 mph (11,1 km/hr.) / 12.0 (19,3 km/hr.) 4.0 mph (6,4 km/hr.)

Controls

Vehicle Steering-All Wheel Steer (AWS) Vehicle Steering-Skid Steer Loader (SSL)	Direction and speed controlled with Left Hand joystick. "C" Type Pattern Direction and speed controlled with Left Hand joystick. "S" Type Pattern
Loader Hydraulics - Lift and Tilt - Front Auxiliary (Std.) - Rear Auxiliary (Option)	 Right Hand Joystick Controlled by electrical switches on Right Hand joystick Controlled by electrical switches on Left Hand joystick
Auxiliary Pressure Release	Pressure relieved through quick couplers. Push couplers in, hold for 5 seconds.
Engine	Hand lever engine speed and foot operated accelerator, keyless start switch, function error and shutdown
Starting Aid	Intake Air Heater automatically activated as needed by Instrument Panel
Service Brake	Two independent hydrostatic transmissions controlled by left hand joystick
Secondary Brake	One of the hydrostatic transmissions
Parking Brake (Two-Speed)	Spring applied pressure release multi-disk brake activated by rocker switch on center instrument panel

Engine

Make/Model	Kubota V3300-DI-T Turbo-Charged
Fuel/Cooling	Diesel/Liquid
Horsepower, Gross	80.8 HP (60.3 kW) @ 2400 RPM
Maximum Governed RPM	2600 RPM
Torque, Gross	217.6 lbf.-ft. (295,1 Nm) @ 1400 RPM
Number of Cylinders	4
Displacement	202.5 cu. in. (3,32 L)
Bore/Stroke	3.86/4.33 (98/110)
Lubrication	Pressure System with Filter
Crankcase Ventilation	Closed
Air Cleaner	Dry replaceable paper cartridge with safety element
Ignition	Diesel-Compression
Engine Coolant	Propylene Glycol / Water Mixture (53%/47%)
Starting Aid	Intake Air Heater

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Safe Operation Is The Operator's Responsibility

Safety Alert Symbol

This symbol with a warning statement means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.

WARNING

Operator must have instructions before running the machine. Untrained operators can cause injury or death.

W-2001-1285

IMPORTANT

This notice identifies procedures which must be followed to avoid damage to the machine.

I-2019-0284

WARNING

Warnings on the machine and in the manuals are for your safety. Failure to obey warnings can cause injury or death.

W-2044-1285

The Bobcat Loader and attachment must be in good operating condition before use.

Check all of the items on the Bobcat Service Schedule Decal under the 8-10 hour column or as shown in the Operation & Maintenance Manual.

Safe Operation Needs A Qualified Operator

For an operator to be qualified, he or she must not use drugs or alcoholic drinks which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine.

A Qualified Operator Must Do The Following:

Understand the Written Instructions, Rules and Regulations

- The written instructions from Bobcat Company include the Delivery Report, Operation & Maintenance Manual, Operator's Handbook, Safety Manual and machine signs (decals).
- Check the rules and regulations at your location. The rules may include an employer's work safety requirements. Regulations may apply to local driving requirements or use of a Slow Moving Vehicle (SMV) emblem. Regulations may identify a hazard such as a utility line.

Have Training with Actual Operation

- Operator training must consist of a demonstration and verbal instruction. This training is given by your Bobcat dealer before the product is delivered.
- The new operator must start in an area without bystanders and use all the controls until he or she can operate the machine and attachment safely under all conditions of the work area. Always fasten seat belt before operating.
- Operator Training Courses are available from your Bobcat dealer in English and Spanish. They provide information for safe and efficient equipment operation. Safety videos are also available.
- Service Safety Training Courses are available from your Bobcat dealer. They provide information for safe and correct service procedures.

Know the Work Conditions

- Know the weight of the materials being handled. Avoid exceeding the Rated Operating Capacity (R.O.C.) of the machine. Material which is very dense will be heavier than the same volume of less dense material. Reduce the size of the load if handling dense material.
- The operator must know any prohibited uses or work areas, for example, he or she needs to know about excessive slopes.
- Know the location of any underground lines. Call local utilities or the TOLL FREE phone number found in the **Before Operation** Section of this manual.
- Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service. Safety glasses, hearing protection or Special Applications Kits are required for some work. See your Bobcat dealer about Bobcat Safety Equipment for your model.

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