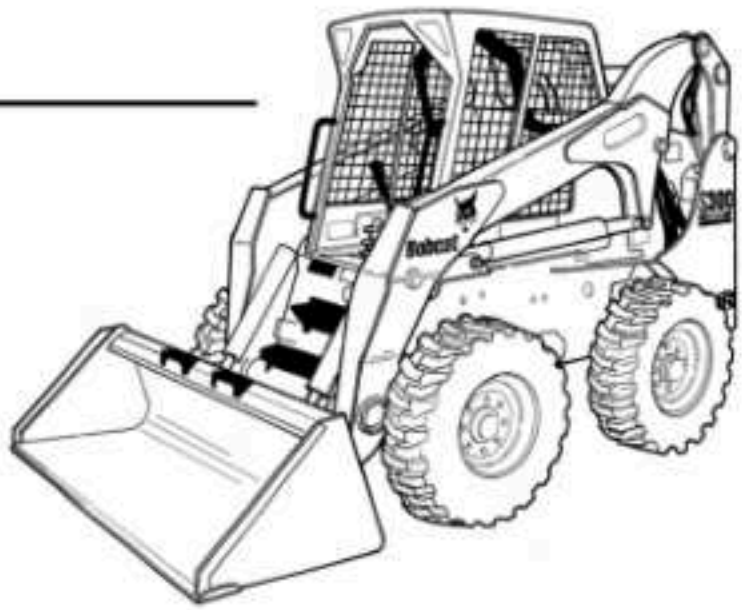
# S300 TURBO

# S300 TURBO HIGH FLOW

Bobcat®

# Operation & Maintenance Manual

S/N 521511001 & Above
S/N 521611001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS)

6901929 (9-04) Revised (12-06) (5)

Ingersoll Rand

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## CONTENTS


FOREWORD . . . . . III

SAFETY . . . . . XI

OPERATING INSTRUCTIONS . . . . . OI-1

PREVENTIVE MAINTENANCE . . . . . PM-1

SPECIFICATIONS . . . . . SPEC-1

SYSTEM SETUP & ANALYSIS . . . . . SA-1

MACHINE SIGN TRANSLATIONS . . . . . MST-1


**CALIFORNIA PROPOSITION 65 WARNING**

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

**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.

BOBCAT COMANY IS IS0 9001 CERTIFIED . . . . . V

BOBCAT LOADER IDENTIFICATION . . . . . VII

DELIVERY REPORT . . . . . VI

FEATURES AND ACCESSORIES . . . . . VIII
- Attachments . . . . . IX
- Buckets Available . . . . . IX
- Options and Accessories . . . . . VIII
- Standard Items . . . . . VIII

MOTOR OIL . . . . . V

REGULAR MAINTENANCE ITEMS . . . . . V

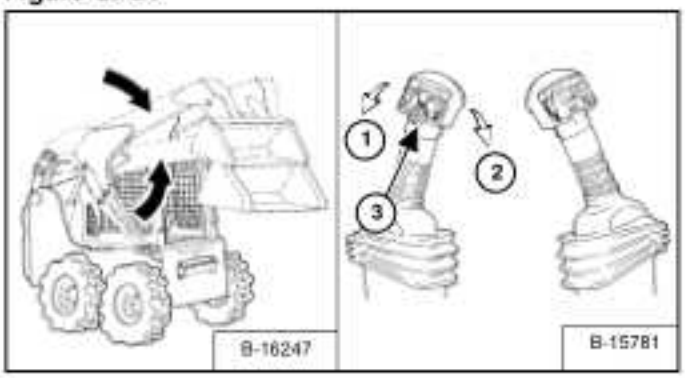
SERIAL NUMBER LOCATIONS . . . . . VI
- Engine Serial Number . . . . . VI
- Loader Serial Number . . . . . VI



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## Advanced Control System (ACS) in HAND Control Mode

Figure OI-24




*Lift Arm Operation* - (Left Hand Lever)

Move the lever outward (Item 1) **[Figure OI-24]** to raise the lift arms.

Move the lever inward (Item 2) **[Figure OI-24]** to lower the lift arms.

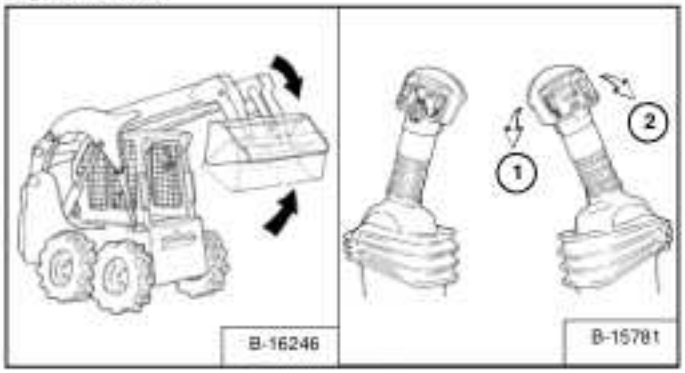
*Lift Arm Float Position* - (Left Hand Lever)

Press and hold the Float Button (Item 3) **[Figure OI-24]** while the lever is in neutral. Move the lever to lift arm down position (Item 2) **[Figure OI-24]**, then release the button.

Press Float Button again or move the lever to lift arm up position (Item 3) **[Figure OI-24]**.

Use the float position of the lift arms to level loose material while driving backward.

Figure OI-25




*Tilt Operation* - (Right Hand Lever)

Move the lever inward (Item 1) **[Figure OI-25]** to tilt the bucket backward.

Move the lever outward (Item 2) **[Figure OI-25]** to tilt the bucket forward.



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## LUBRICATING THE BOBCAT LOADER

### Lubrication Locations

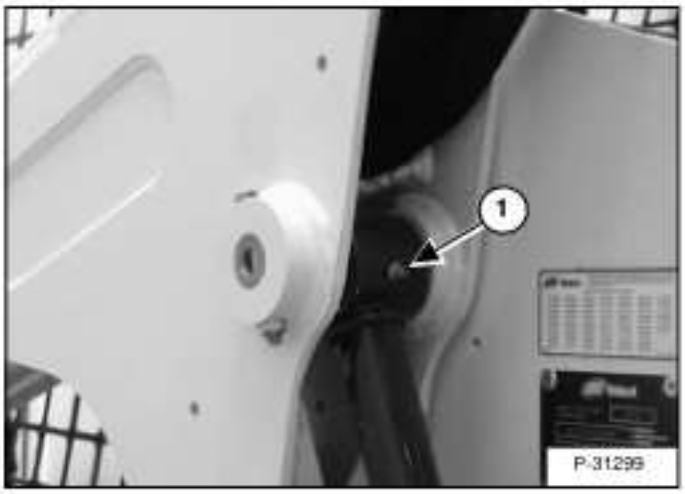
Lubricate the loader as specified for the best performance of the loader. (See SERVICE SCHEDULE on Page PM-5.)

Record the operating hours each time you lubricate the Bobcat Loader.

Always use a good quality lithium based multi-purpose grease when you lubricate the loader. Apply the lubricant until extra grease shows.

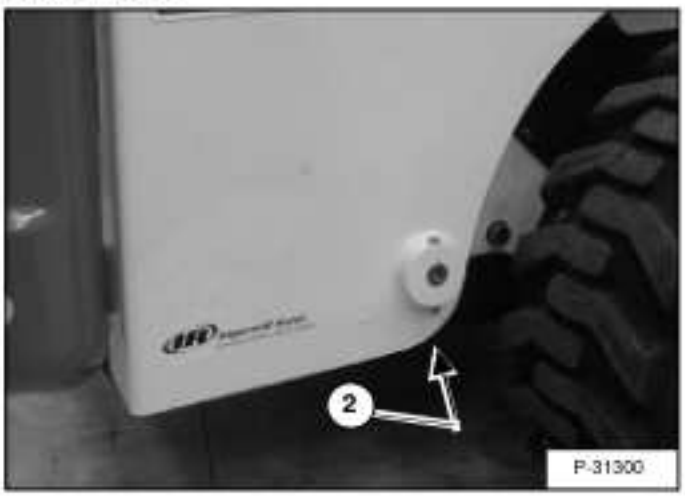
Lubricate the following:

**Figure PM-61**



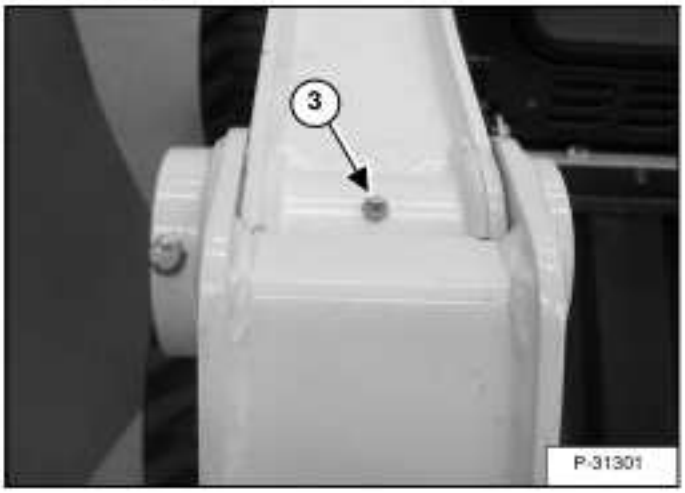

1. Rod End Lift Cylinder (Both Sides) **[Figure PM-61]**.

**Figure PM-62**



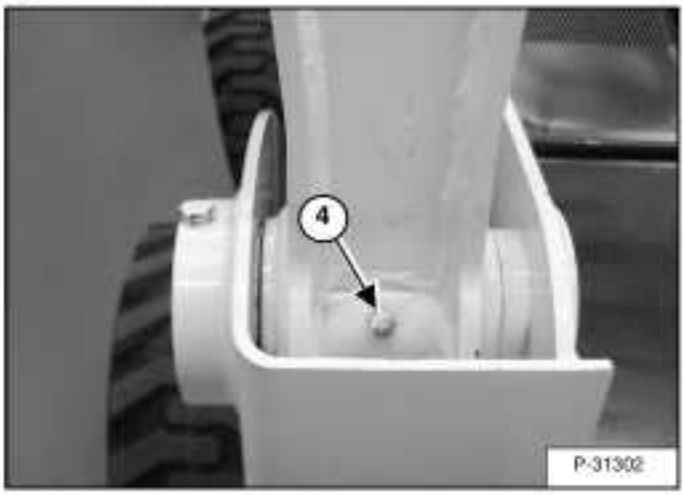

2. Base End Lift Cylinder (Both Sides) **[Figure PM-62]**.

**Figure PM-63**



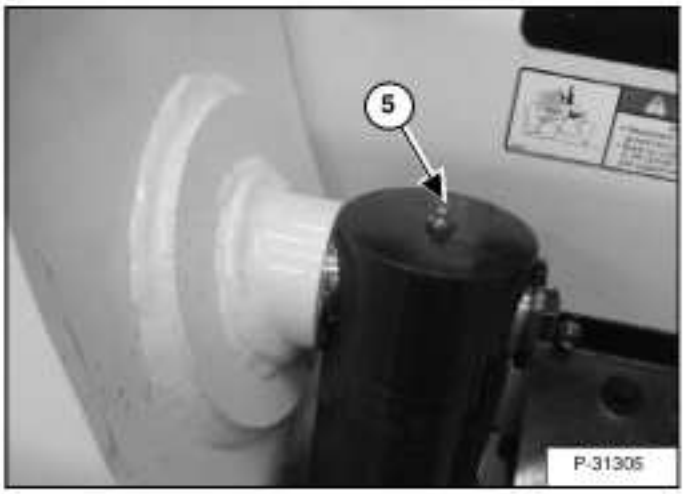

3. Lift Arm Pivot Pin (Both Sides) **[Figure PM-63]**.

**Figure PM-64**




4. Lift Arm Link Pivot (Both Sides) **[Figure PM-64]**.

**Figure PM-65**




5. Base End Tilt Cylinder (Both Sides) **[Figure PM-65]**.



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## LOADER SPECIFICATIONS (S300) (CONT'D)

### Performance

| | |
|---|---|
| Rated Operating Capacity (SAE) | 3000 lb. (1361 kg) |
| Tipping Load (SAE Rating) | 6000 lb. (2722 kg) |
| Operating Weight | 8140 lb. (3692 kg) |
| SAE Breakout Force - Lift | 6300 lbf. (2858 kg) |
| SAE Breakout Force - Tilt | 6840 lbf. (3103 kg) |
| Axle Torque | 5957 lbf. (8077 kg) |
| Travel Speed<br>- Single Speed Loader<br>- Two-Speed Loader (Opt.) Low/High | <br>7.2 mph (11,6 km/hr.)<br>7.2 mph (11,6 km/hr.) / 12.5 (20,1 km/hr.) |

### Controls

| | |
|---|---|
| Vehicle Steering | Direction and speed controlled by two hand levers |
| Loader Hydraulics<br>- Lift and Tilt<br>- Front Auxiliary (Std.)<br>- Rear Auxiliary (Option) | <br>Controlled by separate foot pedals or optional Advanced Control System (ACS)<br>Controlled by electrical switch on Right Hand steering lever<br>Controlled by electrical switch on Left Hand steering lever |
| Auxiliary Pressure Release | Pressure relieved through quick couplers. Push couplers in, hold for 5 seconds. |
| Engine | Hand lever throttle; key-type starter switch and shutdown |
| Starting Aid | Intake Air Heater automatically activated as needed by Instrument Panel |
| Service Brake | Two independent hydrostatic systems controlled by two hand operated steering levers |
| Secondary Brake | One of the hydrostatic transmissions |
| Parking Brake (Std.) | Mechanical disc, hand operated rocker switch on instrument panel |
| Parking Brake (Two-Speed Option) | Spring applied pressure release multi-disk brake activated by rocker switch in instrument panel |

### Engine

| | |
|---|---|
| Make/Model | Kubota V3300-TE Turbo-Charged |
| Fuel/Cooling | Diesel/Liquid |
| Horsepower, Maximum | 81.0 HP (60,0 kW) |
| Maximum Governed RPM | 2600 RPM |
| Torque, Maximum | 211.5 lbf.-ft. (292,2 N•m) @ 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 | Open |
| Air Cleaner | Dry replaceable paper cartridge with safety element |
| Ignition | Diesel-Compression |
| Engine Coolant | Propylene Glycol / Water Mixture |
| 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.

SI SSL-0206



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