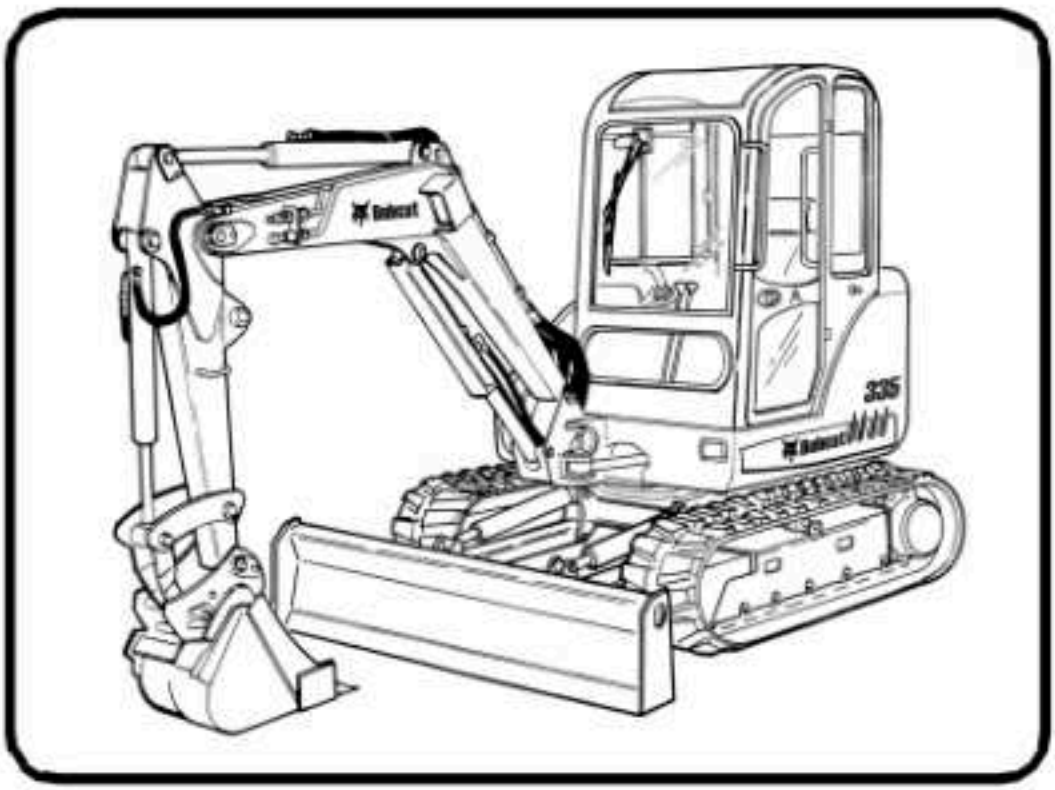
Bobcat®

Operation & Maintenance Manual
335 Compact Excavator

S/N AAD111001 & Above
S/N A9KA11001 & Above



6986948 (2-08) Revised (10-09) (1)

Printed in U.S.A.

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CONTENTS

FOREWORD III

SAFETY & TRAINING RESOURCES XI

OPERATING INSTRUCTIONS OI-1

PREVENTIVE MAINTENANCE PM-1

SYSTEM SETUP AND ANALYSIS SA-1

MACHINE SIGN TRANSLATIONS MST-1

SPECIFICATIONS SPEC-1

WARRANTY WARRANTY-1

ALPHABETICAL INDEX INDEX-1

REFERENCE INFORMATION

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

Bobcat Excavator Serial Number _____

Engine Serial Number _____

_____

_____

NOTES _____

_____

_____

_____

YOUR BOBCAT EXCAVATOR 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 Excavator. READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR MACHINE. If you have any questions, see your Bobcat dealer.

BOBCAT COMPANY IS IS0 9001 CERTIFIED V

DELIVERY REPORT VII

EXCAVATOR IDENTIFICATION VIII

FEATURES, ACCESSORIES AND ATTACHMENTS IX
- Attachments IX
- Buckets Available IX
- Falling Object Guards (FOGS) X
- Options and Accessories IX
- Special Applications Kit X
- Special Applications Kit Inspection And Maintenance X
- Standard Items IX

REGULAR MAINTENANCE ITEMS V

SERIAL NUMBER LOCATIONS VII
- Engine Serial Number VII
- Excavator Serial Number VII

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BOBCAT COMPANY IS IS0 9001 CERTIFIED

ISO 9001 is an international standard that specifies requirements for a quality management system that controls the processes and procedures which we use to design, develop, manufacture and distribute Bobcat products.

British Standards Institute (**BSI**) is the Certified Registrar Bobcat Company chose to assess the Company's compliance with the ISO 9001 at Bobcat's manufacturing facilities in Gwinner and Bismarck, North Dakota (U.S.A.), Pontchateau (France), Dobris (Czech Republic) and the Bobcat corporate offices (Gwinner, Bismarck & West Fargo) in North Dakota. Only certified assessors, like BSI, can grant registrations.

ISO 9001 means that as a company we say what we do and do what we say. In other words, we have established procedures and policies, and we provide evidence that the procedures and policies are followed.

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.

REGULAR MAINTENANCE ITEMS

 ENGINE OIL FILTER (6 Pack) 6675517	 BATTERY 6670251
 FUEL FILTER 6667352	 FLUID, Hydraulic / Hydrostatic 6903117 - (2.5 Gal.) 6903118 - (5 Gal.) 6903119 - (55 Gal.)
 AIR FILTER, Outer 6666333	 RADIATOR CAP 6646678
 AIR FILTER, Inner 6663334	 PROPYLENE GLYCOL ANTI-FREEZE, Premixed [-34° F (-37°C)] 6724094
 PRIMARY HYDRAULIC FILTER 6661248 CASE DRAIN HYDRAULIC FILTER 6516722	 PROPYLENE GLYCOL ANTI-FREEZE, Concentrate 6724354
MOTOR OIL 6903105 . . . . SAE 15W/40 CE/SG (12 qt.) 6903106 . . . . SAE 15W/40 CE/SG (1 Gal.) 6903113 . . . . . SAE 15W/40 CE/SG (2.5 Gal.) 6903107 . . . . SAE 10W/30 CE/SG (12 qt.) 6903108 . . . . SAE 10W/30 CE/SG (1 Gal.) 6903112 . . . . . SAE 10W/30 CE/SG (2.5 Gal.)	6903109 . . . . . SAE 30W CE/SG (12 qt.) 6903110 . . . . . SAE 30W CE/SG (1 Gal.) 6903111 . . . . . SAE 30W CE/SG (2.5 Gal.)

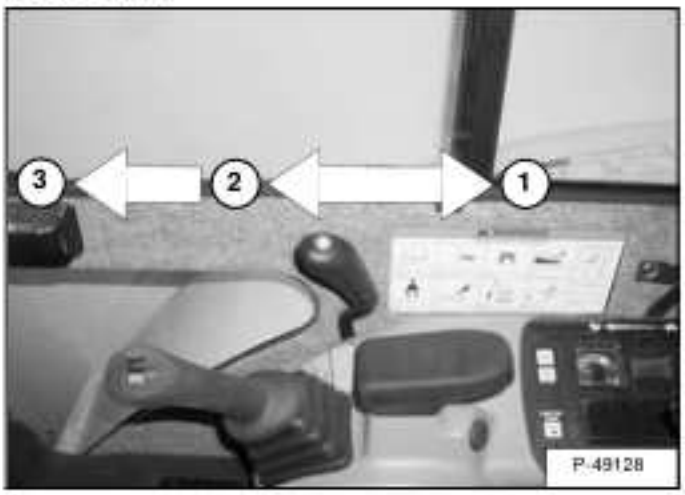
NOTE: Always verify Part Numbers with your Bobcat dealer.

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BLADE CONTROL LEVER

Raising And Lowering Blade

Figure OI-44



Pull the lever backward to raise the blade (Item 1) **[Figure OI-44]**.

Push the lever forward to lower the blade (Item 2) **[Figure OI-44]**.

Push the lever (Item 3) **[Figure OI-44]** forward until the lever is in the locked position to put the blade in the *float* position.

Pull the lever backward to unlock from the *float* position.

NOTE: Keep blade lowered for increased digging performance.

Angling Blade

Figure OI-45

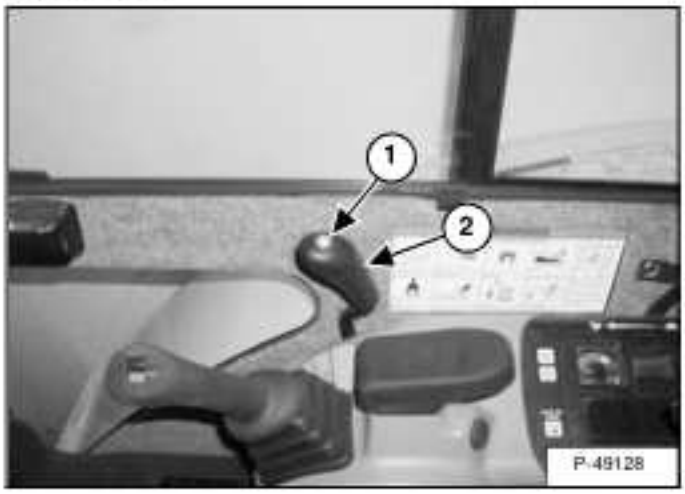
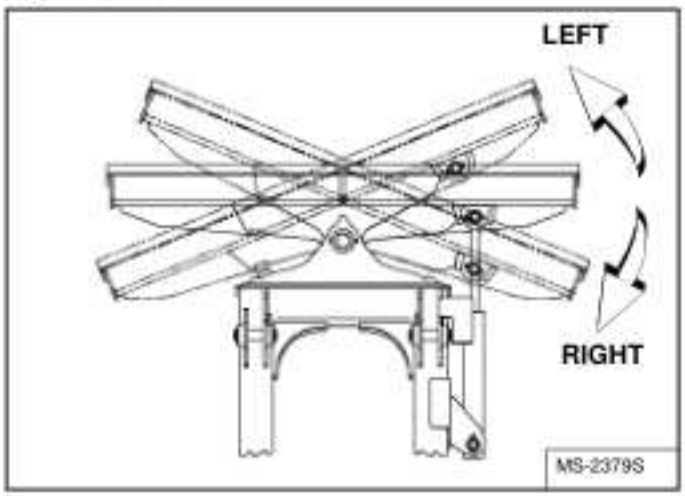


Figure OI-46



Press and hold the button (Item 1) **[Figure OI-45]** to activate the angle blade function (two beeps).

NOTE: Activating the angle blade will automatically disengage high range.

Push the lever (Item 2) **[Figure OI-45]** forward to angle the blade to the left **[Figure OI-46]**.

Pull the lever (Item 2) **[Figure OI-45]** backward to angle the blade to the right **[Figure OI-46]**.

Return the lever to neutral and release the button (Item 1) **[Figure OI-45]** to disengage angle blade.

NOTE: Releasing the button (Item 1) while using the angle blade function will revert the lever (Item 2) [Figure OI-45] back to blade raise / lower function.

NOTE: Always have the blade straight for excavating or for lifting the excavator.

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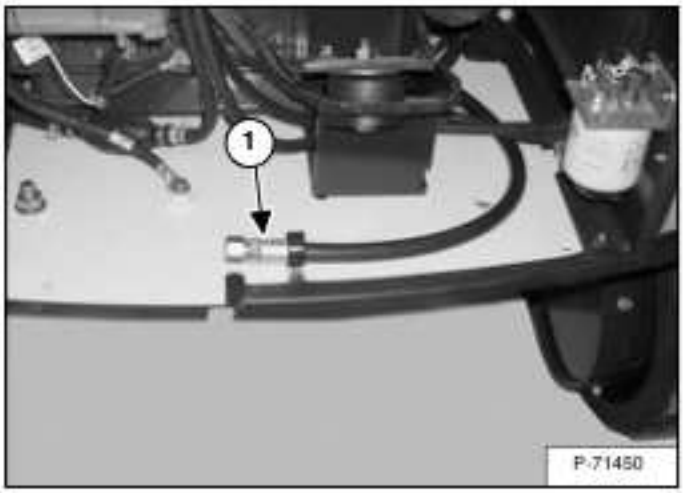
Removing And Replacing Oil And Filter

See the SERVICE SCHEDULE for the service interval for replacing the engine oil and filter. (See SERVICE SCHEDULE on Page PM-5.)

Run the engine until it is at operating temperature. Stop the engine.

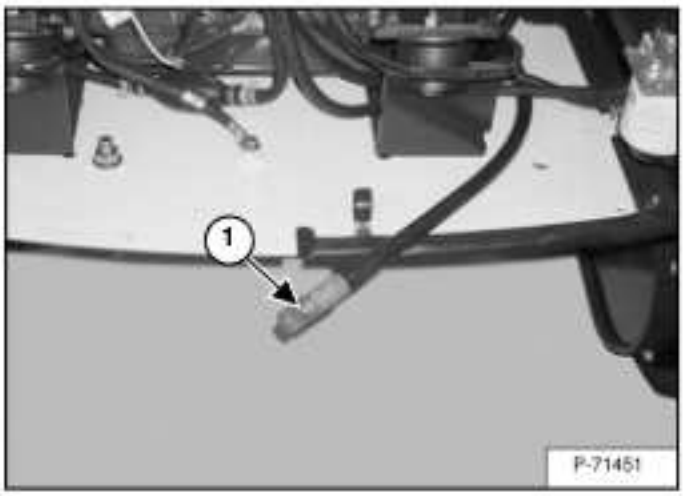
Open the tailgate.

Figure PM-25



Remove the drain hose (Item 1) **[Figure PM-25]** from the storage position.

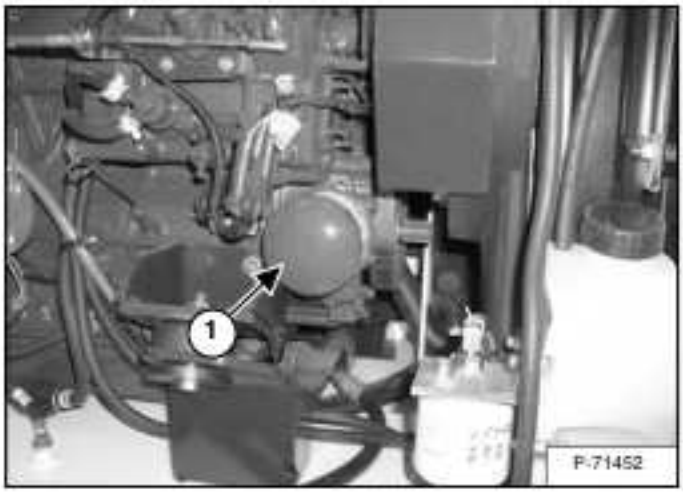
Figure PM-26



Remove the cap (Item 1) **[Figure PM-26]** from the drain hose. Drain the oil into a container.

Recycle or dispose of used oil in an environmentally safe manner.

Figure PM-27



Remove the oil filter (Item 1) **[Figure PM-27]** and clean the filter housing surface.

Use a genuine Bobcat replacement filter. Put clean oil on the filter gasket. Install the filter and hand tighten.

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(335) EXCAVATOR SPECIFICATIONS (CONT'D)

Performance

	S/N AAD111001 & Above	S/N A9KA11001 & Above
Operating weight (Canopy w/ 24 inch Bucket & Rubber Tracks)	9170 lb. (4159 kg)	9046 lb. (4103 kg)
Operating weight (Cab w/ heater and w/ 24 inch Bucket & Rubber Tracks)	9433 lb. (4279 kg)	9308 lb. (4222 kg)
Steel tracks add 100 lb. (45 kg) If Cab is equipped w/HVAC add 48 lb. (22 kg) With Long Arm add 62 lb. (28 kg) W/Angle Blade add 205 lb. (93 kg)		
Travel Speed (Low / High)	2.0 mph (3,2 km/hr.) / 3.4 mph (5,5 km/hr.)	
Digging Force (per ISO 6015) Arm Bucket	 5262 lbf. (23406 N) 7892 lbf. (35105 N)	
Boom Swing (Offset)	Left 90° / Right 50°	

Controls

Steering	Two hand levers
Hydraulics	Two hand operated levers (joysticks) control boom, bucket, arm and upperstructure slew
Auxiliary Hydraulics	Electric switch in right joystick
Auxiliary Pressure Release	Electric switch in right joystick
Engine	Hand Lever engine speed, key type start switch
Starting Aid	Glow Plugs - activated by key switch
Brakes Travel Service & Parking Swing Service Holding	 Hydraulic lock in motor circuit Hydraulic lock on motor Locking Pin

Engine

Make/Model	Kubota V2403-M-DI-E3B-BC-2
Fuel/Cooling	Diesel/Liquid (Antifreeze mixture)
Horsepower (SAE Net)	40.5 HP (30.2 Kw)
Torque @ 1400 RPM (SAE Net)	112.6 ft.-lb. (157.2 N•m)
Number Of Cylinders	Four
Displacement	148.5 ci (2.433 L)
Bore / Stroke	3.43 x 4.03 in. (87.1 x 102.3 mm)
Lubrication	Pressure System with Filter
Crankcase Ventilation	Closed Breather
Air Cleaner	Dual dry replaceable paper cartridges
Ignition	Diesel Compression
Low Idle	1195 - 1245 RPM
High Idle	2450 RPM
Engine Coolant	Propylene Glycol / water mixture (53% PG / 47% water)

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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

DANGER

The signal word DANGER on the machine and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.

D-1002-1107

WARNING

The signal word WARNING on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

W-2044-1107

The Bobcat excavator 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 Lift Capacity of the machine. Material which is very dense will be heavier than the same volume of less dense material. Reduce the size of 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, respiratory equipment, hearing protection or Special Applications Kits are required for some work. See your Bobcat dealer about Bobcat Safety Equipment for your model.

SI EXC-0208

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