

EN



**Bobcat**®

**AL275**

**S/N A01L 11001 &  
above**

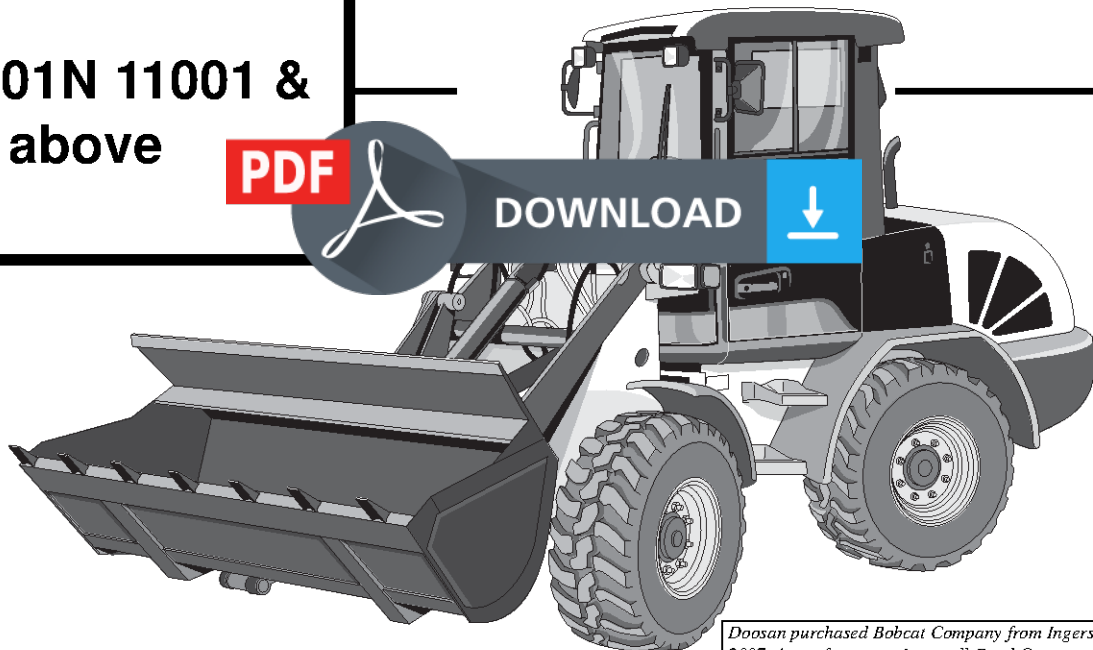
**AL350**

**S/N A01M 11001 &  
above**

**AL440**

**S/N A01N 11001 &  
above**

# Service Manual



*Doosan purchased Bobcat Company from Ingersoll-Rand Company in 2007. Any reference to Ingersoll-Rand Company or use of trademarks, service marks, logos, or other proprietary identifying marks belonging to Ingersoll-Rand Company in this manual is historical or nominative in nature, and is not meant to suggest a current affiliation between Ingersoll-Rand Company and Bobcat Company or the products of either.*



# SAFETY AND PICTOGRAMS

## Contents

Introductory remarks.....	2
Correct use.....	2
General safety notes.....	2
Operation .....	3
Danger zone .....	3
Transport of passengers.....	4
Stability.....	4
Travel operation.....	4
Operation .....	5
Guides.....	5
Danger of falling objects .....	5
Working in the vicinity of underground power lines .....	5
Working in the vicinity of overhead power lines.....	6
Operation in closed rooms.....	7
Work stoppages .....	7
Crane operations .....	7
Assembly, maintenance, repair .....	8
Towing, loading, transportation.....	9
Monitoring and inspections .....	9
Fire protection .....	10
Emergency exit .....	10
Other dangers .....	10
Failure of the hydraulics .....	10
Pictograms .....	11

## Introductory remarks

Please read the operating instructions carefully before putting an earth-moving machine into operation and strictly follow the remarks for a safe operation.

National safety regulations – e.g. the Accident Prevention Regulations, „Earth-Moving Machinery“ (VBG 40) and „Vehicles“ (VBG 12), in the Federal Republic of Germany – must also be complied with.

In addition to the operating instructions, legal regulations governing road traffic and road safety measures must also be observed. Such requirements could also apply in respect of handling hazardous goods or the wearing of personal safety equipment, for example.

Furthermore, safety laws governing work in particular locations (tunnels, adits, quarries, pontoons, contaminated areas, etc.) must likewise be observed.

## Correct use

The earth-moving machine with normal shovel equipment is only to be used for work which is suitable for the machine's functions and its attachment.

Such work includes the digging, loading, displacing and dumping out the earth, stones or other materials and the loading of these materials and the loading of these materials onto lorries, conveyor belts or other means of transportation. The transport of the loading material, however, is mainly carried out by moving the earth-moving machine.

If special attachments, such as Unishovel, side dump shovel, sweeper, forklift attachment etc. are mounted, special jobs can be done with the attachment.

Another or additional application, e.g. for transportation of passengers or using the lifting device as working platform etc. is not considered as correct use. The supplier is not liable for subsequent damage. The end-user himself bears the full risk.

It is part of the correct use to follow the operating and maintenance instructions and to carry out the maintenance as well as to follow the maintenance intervals.

## General safety notes

It is important to refrain from any working methods which impair safety.

The earth-moving machine may only be used when it is in a safe, operational condition.

The manufacturer's operating instructions must be complied with for operation, maintenance, repair, assembly and transportation.

The plant operator must provide additional special safety instructions, wherever necessary, for specific local conditions.

The operating instructions and any information pertaining to the safety must be carefully kept in the driver's cab.

The operating instructions and safety notes must be complete and fully readable.

Safety devices on earth-moving machines must not be deactivated or removed.

Protective work clothing must be worn during operation. Rings, scarves and unbuttoned jackets are to be avoided. Protective goggles, protective boots, helmets, gloves, reflecting jackets, earmuffs, etc. may be required.

Before commencing work, information must be obtained on first aid and possible means of rescue (ambulance, fire brigade, helicopters).

A check must be carried out to ensure that the first aid box is at hand and that its contents comply with regulations.

Personnel must be aware of the location and method of operation of the fire extinguishers on the earth-moving machine as well as on-site fire-warning and fire-fighting equipment.

Loose parts such as tools or other accessories must be secured to the earth-moving machine.

Open doors, windows, covers, flaps, etc. must be secured so that they cannot slam shut.

## Operation

Earth-moving machines may only be independently operated and serviced by people who

- Are physically and mentally fit
- Have been instructed in the operation or maintenance of the earth-moving machine and have demonstrated this ability to the plant operator
- Can be expected to perform their allocated duties reliably

All these people must be of the legal minimum age.

They must be designated by the plant operator to operate or service the earth-moving machine.

Operating equipment (controls) may only be activated from the driver's seat.

The earth-moving machine may only be ascended and entered using the entrances and surfaces intended for this purpose.

The operator has to ensure that the cab, steps and other walked-on surfaces of the earth-moving machine are free of dirt, grease, oil, ice and snow.

## Danger zone

- No one may enter the danger zone of earth-moving machines.
- The danger zone encompasses the area around the earth-moving machine in which people may be injured by movements of the earth-moving machine in which people may be injured by movements of the earth-moving machine during operation, its working equipments and attachments, or by swinging out or falling loads, or by falling working equipment.
- The machine operator may only work with the earth-moving machine when the danger zone is free of personnel.
- The machine operator must give a warning signal to persons who may be in danger.
- The machine operator has to stop work with the earth-moving machine if anyone remains in the danger zone despite the warning.
- To ensure no danger of crushing, a sufficient safety distance (min. 500 mm) must be kept from solid objects, e.g. buildings, excavation slopes, scaffolding, other machines, etc.

If the above safety distance cannot be maintained, the area between solid objects and the working zone of the earth-moving machine must be blocked off.



Thank you very much  
for your reading.  
Please click here  
to get more information.