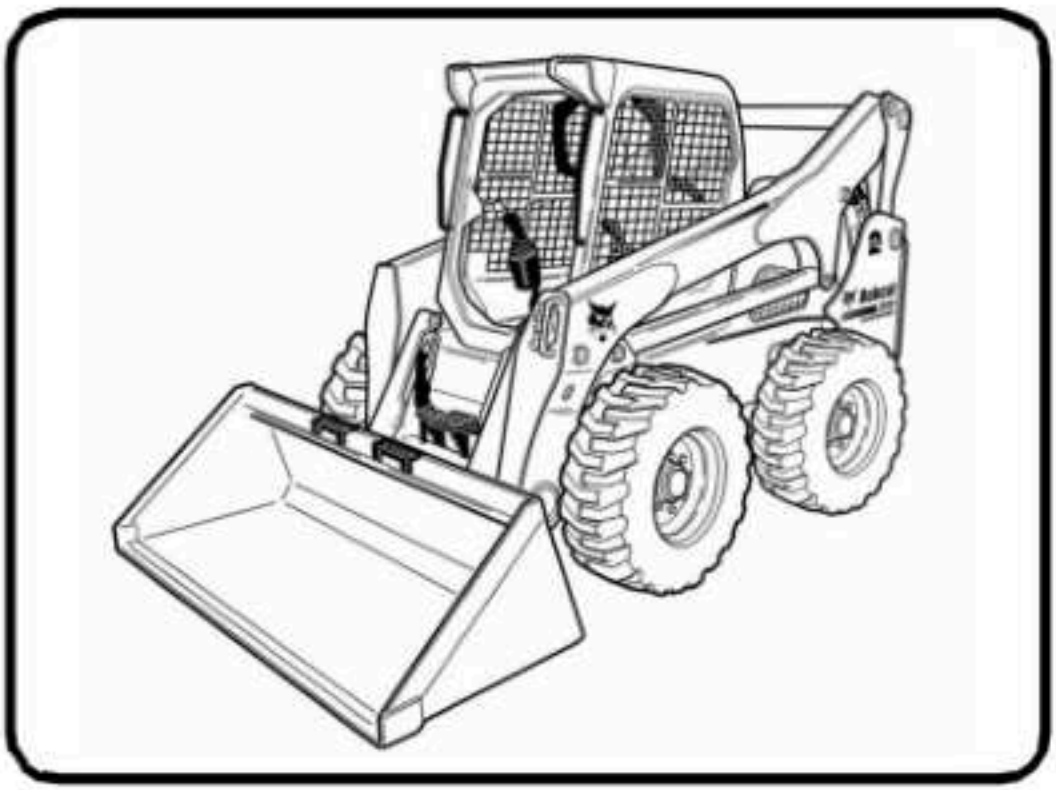
Bobcat®

Operation & Maintenance Manual
A770 All-Wheel Steer Loader

S/N ASRW11001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6990114 (2-11) Revised (3-11) (T)

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
UNITED STATES OF AMERICA

Doosan Benelux SA
Drève Richelle 167
B-1410 Waterloo
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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.

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SERIAL NUMBER LOCATIONS 8
- Loader Serial Number 8
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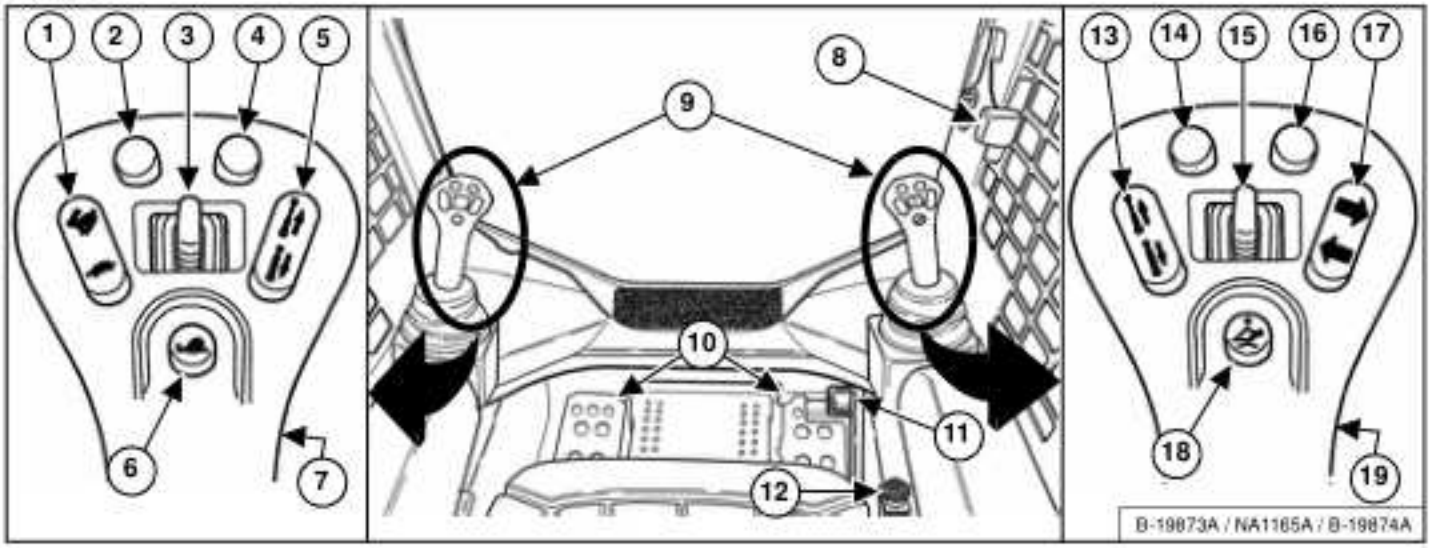
FEATURES, ACCESSORIES AND ATTACHMENTS 10
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- Options And Accessories 10
- Buckets Available 11
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- Forestry Door And Window Kit Inspection And Maintenance 13

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CONTROL IDENTIFICATION

Standard Controls

Figure 23



REF. NO.	DESCRIPTION	FUNCTION / OPERATION
1	TWO-SPEED CONTROL Also: SPEED MANAGEMENT	See TWO-SPEED CONTROL in this manual. See SPEED MANAGEMENT in this manual.
* 2	STEERING DRIFT COMPENSATION Also: DRIVE RESPONSE	See STEERING DRIFT COMPENSATION in this manual. See DRIVE RESPONSE in this manual.
3	REAR AUXILIARY HYDRAULICS (Option) Also: ATTACHMENT FUNCTION CONTROL	See REAR Auxiliary Hydraulics Operation in this manual. See ATTACHMENT CONTROL DEVICE in this manual.
* 4	STEERING DRIFT COMPENSATION Also: DRIVE RESPONSE	See STEERING DRIFT COMPENSATION in this manual. See DRIVE RESPONSE in this manual.
5	ATTACHMENT FUNCTION CONTROL	See ATTACHMENT CONTROL DEVICE in this manual.
6	SPEED MANAGEMENT	See SPEED MANAGEMENT in this manual.
7	FRONT HORN	Press the front switch to sound the front horn.
8	ENGINE SPEED CONTROL (HAND)	See ENGINE SPEED CONTROL in this manual.
9	JOYSTICKS	See DRIVING AND STEERING THE LOADER and HYDRAULIC CONTROLS in this manual.
10	FOOTRESTS	Keep your feet on the footrests at all times.
11	ENGINE SPEED CONTROL (FOOT)	See ENGINE SPEED CONTROL in this manual.
12	LIFT ARM BYPASS CONTROL	See LIFT ARM BYPASS CONTROL in this manual.
13	ATTACHMENT FUNCTION CONTROL	See ATTACHMENT CONTROL DEVICE in this manual.
* 14	NOT USED	- - -
15	FRONT AUXILIARY HYDRAULICS	See FRONT Auxiliary Hydraulics Operation in this manual.
* 16	NOT USED	- - -
17	NOT USED	- - -
18	FLOAT CONTROL	See HYDRAULIC CONTROLS in this manual.
19	CONTINUOUS FLOW CONTROL FOR AUXILIARY HYDRAULICS	See FRONT Auxiliary Hydraulics Operation (CONTINUOUS FLOW) in this manual.

* Also used as Attachment Function Control: See your attachment Operation & Maintenance Manual.

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LUBRICATING THE LOADER

Lubrication Locations

Lubricate the loader as specified for the best performance of the loader. (See SERVICE SCHEDULE on Page 111.)

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

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

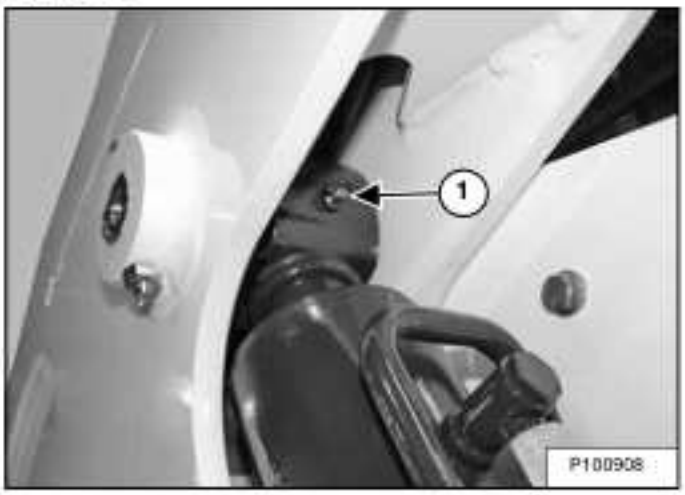
Remove attachment from the loader. (See Installing And Removing The Attachment (Hand Lever Bob-Tach) on Page 91.) ***OR*** (See Installing And Removing The Attachment (Power Bob-Tach) on Page 93.)

Tilt the Bob-Tach forward until it contacts the ground.

Stop the engine.

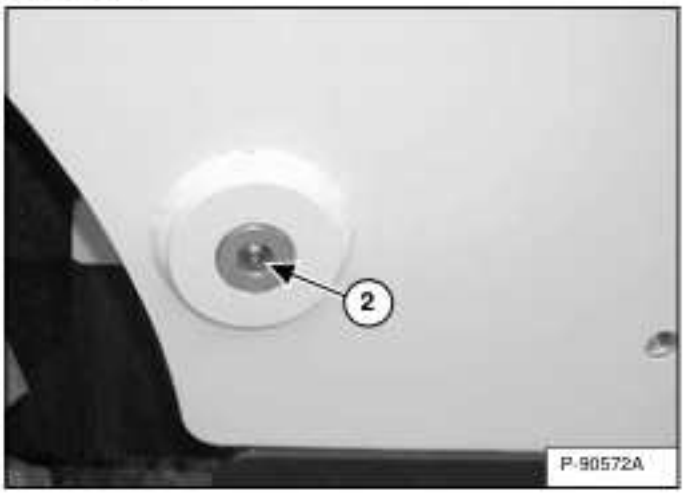
Lubricate the following:

Figure 235



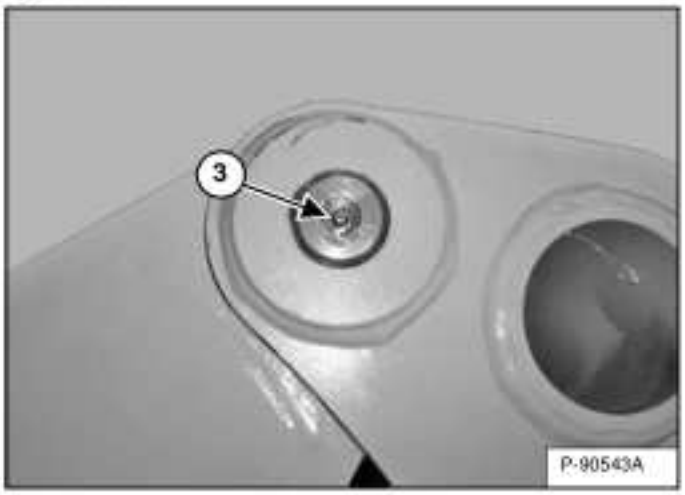
1. Rod End Lift Cylinder (Both Sides) (2) **[Figure 235]**.

Figure 236



2. Base End Lift Cylinder (Both Sides) (2) **[Figure 236]**.

Figure 237



3. Lift Arm Pivot Pin (Both Sides) (2) **[Figure 237]**.

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(A770) LOADER SPECIFICATIONS (CONT'D)

Performance

Rated Operating Capacity	1508 kg (3325 lb)
with 200 Pound Frame Mounted Counterweight Kit	1576 kg (3475 lb)
with 300 Pound Frame Mounted Counterweight Kit	1599 kg (3525 lb)
with 400 Pound Frame Mounted Counterweight Kit	1644 kg (3625 lb)
Tipping Load	3016 kg (6650 lb)
Operating Weight	4291 kg (9460 lb)
Breakout Force - Lift	2434 kg (5365 lb)
Breakout Force - Tilt	2331 kg (5140 lb)
Push Force	2829 kg (6237 lb)
Travel Speed - Low Range / High Range	0 - 11,4 km/h (0 - 7.1 mph) / 0 - 19,8 km/h (0 - 12.3 mph)

Engine

Make / Model	Kubota / V3800DI-T-E2CB Tier 2
Fuel / Cooling	Diesel / Liquid
Horsepower - ISO 9249 EEC / SAE J1349 Net - ISO 14396 Gross - SAE J1995 Gross	 65,6 kW (88.0 hp) @ 2400 rpm 67,6 kW (90.6 hp) @ 2400 rpm 68,6 kW (92.0 hp) @ 2400 rpm
Torque - ISO 9249 EEC / SAE J1349 Net - SAE J1995 Gross	 310,3 N•m (228.8 ft-lb) @ 1600 rpm 315,0 N•m (232.3 ft-lb) @ 1600 rpm
Low Idle rpm	1250 - 1400
High Idle rpm	2525 - 2650
Number of Cylinders	4
Displacement	3769 cm^3 (230 in^3)
Bore / Stroke	100 mm / 120 mm (3.94 in / 4.72 in)
Lubrication	Gear Pump Pressure System with Filter
Crankcase Ventilation	Open Breathing
Air Cleaner	Dry replaceable paper cartridge with separate safety element
Ignition	Diesel - Compression
Air Induction	Turbo-Charged
Engine Coolant	Propylene Glycol / Water Mixture
Starting Aid	Air Intake Heater - Automatically activated as needed in RUN position.

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No-Text Safety Signs (Cont'd)

6. Tipping, Rollover or Loss of Visibility (7168037)

This safety sign is located on the back side of the lift arms facing the operator.



⚠ WARNING

TIPPING, ROLLOVER OR LOSS OF VISIBILITY CAN CAUSE SERIOUS INJURY OR DEATH

Carry load low.

W-2836-0310

7. Frame Raising (7168034)

This safety sign is located on the front of the loader.



⚠ DANGER

AVOID DEATH

Attachment can be forced against the ground and cause front frame to raise.

Never go under or reach under lift arms or lift cylinder without an approved lift arm support device installed.

D-1021-0310

8. Falling Hazard (7168040)

This safety sign is located on the front of the loader.



⚠ WARNING

AVOID INJURY OR DEATH

- **Never carry riders.**
- **Never use loader as a man lift or work platform.**

W-2835-0310

9. Lift Arm Crushing (7168033)

This safety sign is located on the front of the loader.



⚠ DANGER

AVOID DEATH

Keep out of this area when lift arms are raised unless supported by an approved lift arm support device.

Moving lift arm control or failure of a part can cause lift arms to drop.

D-1020-0310

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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 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 (ROC) 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, 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 SSL-1008

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