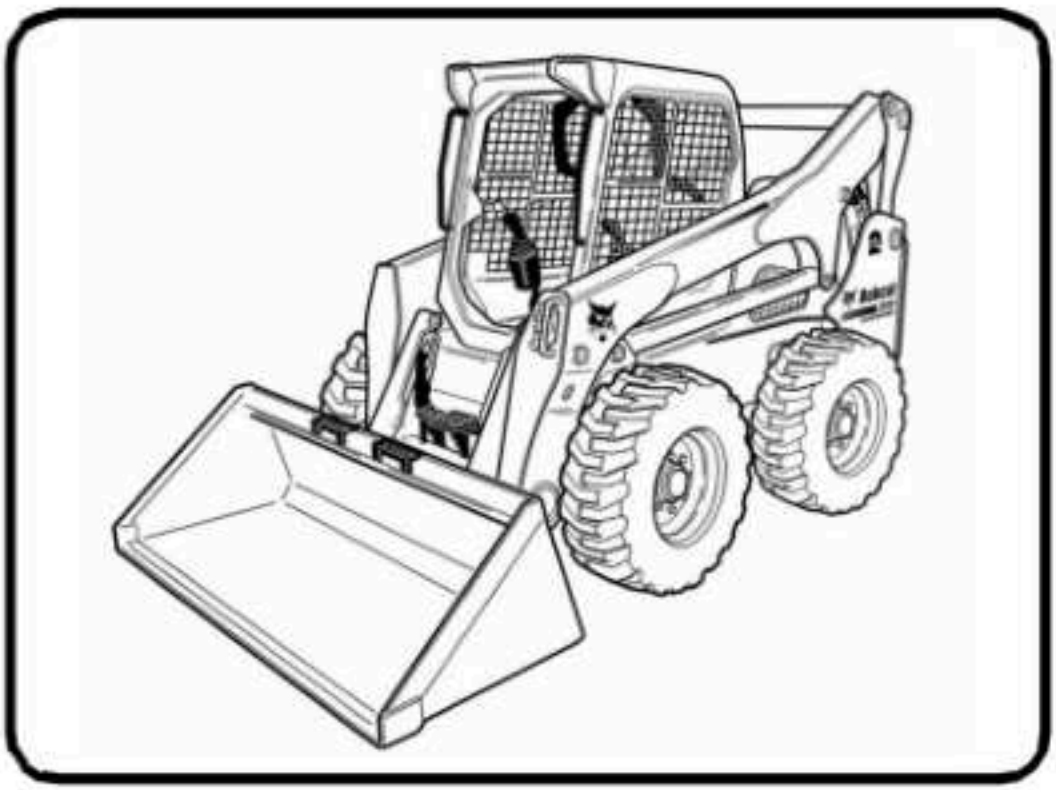
Bobcat®

Operation & Maintenance Manual
A770 All-Wheel Steer Loader

S/N A3P611001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6989479 (12-10) Revised (3-11) (1)

Printed in U.S.A.

© Bobcat Company 2011

MidWestTech | Bobcat A770 All-Wheel Steer Loader Operation & Maintenance Manual | Pu... Order the manual at mid-west-tech.com >

CONTENTS

FOREWORD 5

SAFETY & TRAINING RESOURCES 15

OPERATING INSTRUCTIONS 27

PREVENTIVE MAINTENANCE 99

SYSTEM SETUP & ANALYSIS 155

MACHINE SIGN TRANSLATIONS 169

SPECIFICATIONS 185

WARRANTY 193

ALPHABETICAL INDEX 197

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
BELGIUM

MidWestTech | Bobcat A770 All-Wheel Steer Loader Operation & Maintenance Manual | Pu... Order the manual at mid-west-tech.com >

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 IS0 9001 CERTIFIED 7

REGULAR MAINTENANCE ITEMS 7

SERIAL NUMBER LOCATIONS 8
- Loader Serial Number 8
- Engine Serial Number 8

DELIVERY REPORT 8

LOADER IDENTIFICATION 9

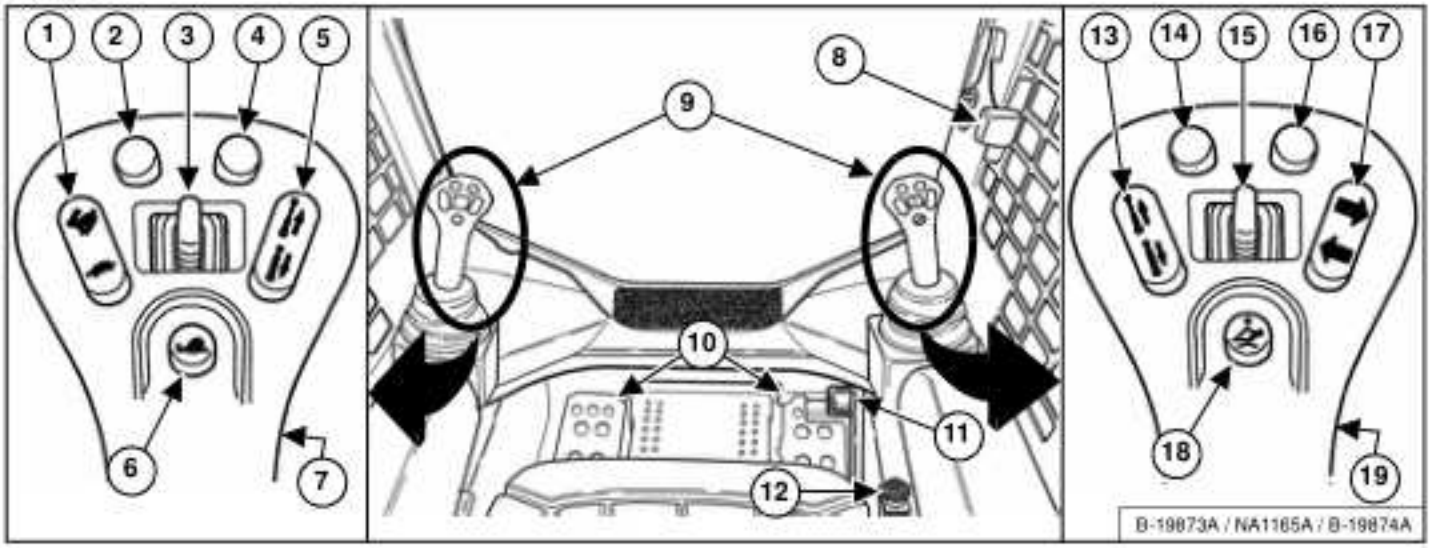
FEATURES, ACCESSORIES AND ATTACHMENTS 10
- Standard Items 10
- Options And Accessories 10
- Buckets Available 11
- Attachments 11
- High-Flow Attachments 11
- Special Applications Kit 12
- Special Applications Kit Inspection And Maintenance 12
- Forestry Door And Window Kit 13
- Forestry Door And Window Kit Inspection And Maintenance 13

MidWestTech | Bobcat A770 All-Wheel Steer Loader Operation & Maintenance Manual | Pu... Order the manual at mid-west-tech.com >

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.

MidWestTech | Bobcat A770 All-Wheel Steer Loader Operation & Maintenance Manual | Pu... Order the manual at mid-west-tech.com >

FUEL SYSTEM

Fuel Specifications

Use only clean, high quality diesel fuel, Grade No. 2 or Grade No. 1.

The following is one suggested blending guideline which should prevent fuel gelling during cold temperatures:

TEMPERATURE	NO. 2	NO. 1
-9°C (+15°F)	100%	0%
Down to -29°C (-20°F)	50%	50%
Below -29°C (-20°F)	0%	100%

At a minimum, low sulfur diesel fuel must be used in this machine. Low sulfur is defined as 500 mg/kg (500 ppm) sulfur maximum.

The following fuels may also be used in this machine:

- Ultra low sulfur diesel fuel. Ultra low sulfur is defined as 15 mg/kg (15 ppm) sulfur maximum.
- Biodiesel blend fuel - Must contain no more than five percent biodiesel mixed with low sulfur or ultra low sulfur petroleum based diesel. This is commonly marketed as B5 blended diesel fuel. B5 blended diesel fuel must meet ASTM D975 (US Standard) or EN590 (EU Standard) specifications.

Biodiesel Blend Fuel

Biodiesel blend fuel has unique qualities that should be considered before using in this machine:

- Cold weather conditions can lead to plugged fuel system components and hard starting.
- Biodiesel blend fuel is an excellent medium for microbial growth and contamination which can cause corrosion and plugging of fuel system components.
- Use of biodiesel blend fuel may result in premature failure of fuel system components, such as plugged fuel filters and deteriorated fuel lines.
- Shorter maintenance intervals may be required, such as cleaning the fuel system and replacing fuel filters and fuel lines.
- Using biodiesel blended fuels containing more than five percent biodiesel can affect engine life and cause deterioration of hoses, tubelines, injectors, injector pump and seals.

Apply the following guidelines if biodiesel blend fuel is used:

- Ensure the fuel tank is as full as possible at all times to prevent moisture from collecting in the fuel tank.
- Ensure that the fuel tank cap is securely tightened.
- Biodiesel blend fuel can damage painted surfaces, remove all spilled fuel from painted surfaces immediately.
- Drain all water from the fuel filter daily before operating the machine.
- Do not exceed engine oil change interval. Extended oil change intervals can cause engine damage.
- Before vehicle storage; drain the fuel tank, refill with 100% petroleum diesel fuel, add fuel stabilizer and operate the engine for at least 30 minutes.

NOTE: Biodiesel blend fuel does not have long term stability and should not be stored for more than 3 months.

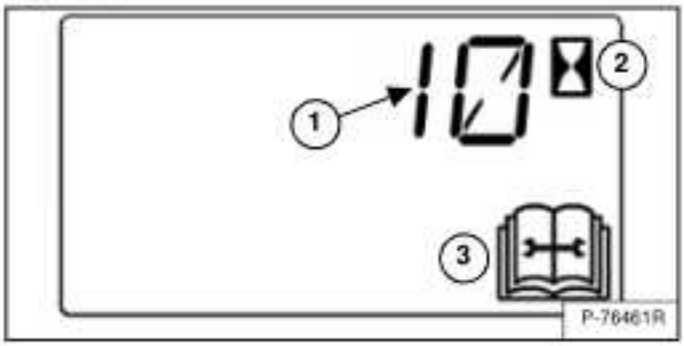
MidWestTech | Bobcat A770 All-Wheel Steer Loader Operation & Maintenance Manual | Pu... Order the manual at mid-west-tech.com >

MAINTENANCE CLOCK

Description

The Maintenance Clock alerts the operator when the next service interval is due. *EXAMPLE:* The Maintenance Clock can be set to a 500 hour interval as a reminder for the next 500 hour planned maintenance.

Figure 264



During machine operation, a two beep alarm will sound when there are less than 10 hours until the next planned maintenance.

The remaining hours before maintenance is required will appear in the data display (Item 1) for 5 seconds while the service icon (Item 3) and hourmeter icon (Item 2) **[Figure 264]** flash.

NOTE: The display will show negative numbers after counting down to zero.

The display will then revert back to the previous display and will appear for 5 seconds every time the machine is started until the maintenance clock is reset.

Figure 265



The Deluxe Instrumentation Panel, if equipped, will display a message (Item 1) **[Figure 265]** alerting the operator to service the machine.

This message will remain for 10 seconds and will appear for 10 seconds every time the machine is started until the maintenance clock is reset.

Figure 266



The Deluxe Instrumentation Panel, if equipped, will display a bar (Item 1) **[Figure 266]** showing time remaining until next service. This bar will turn red when service is past due. NEXT MAINTENANCE DUE will change to MAINTENANCE PAST DUE and display the number of hours past due.

Keys **[4]** and **[9]** can be used to adjust the service interval when the owner is logged in **[Figure 266]**.

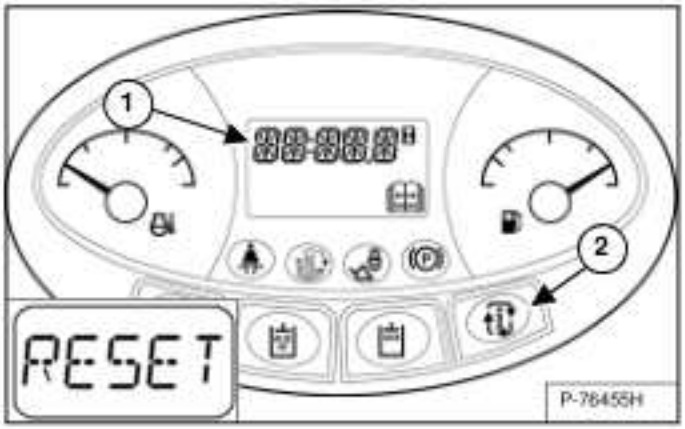
NOTE: Loaders equipped with a Standard Key Panel or Keyless Start Panel will not display the BobCARE PM℠ message or NEXT MAINTENANCE TYPE on the right panel.

Setup

See your Bobcat dealer about installation of this feature.

Reset

Figure 267



Press the information button (Item 2) until the display screen (Item 1) **[Figure 267]** shows the maintenance clock.

Press and hold the information button (Item 2) for 7 seconds until **[RESET]** (Inset) appears in the display screen (Item 1) **[Figure 267]**.

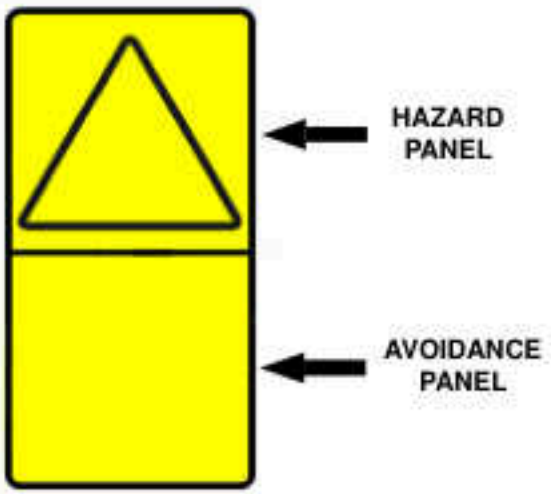
MidWestTech | Bobcat A770 All-Wheel Steer Loader Operation & Maintenance Manual | Pu... Order the manual at mid-west-tech.com >

MACHINE SIGNS (DECALS) (CONT'D)

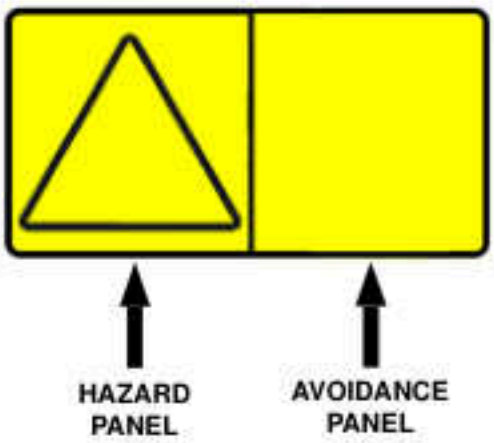
No-Text Safety Signs

Safety signs are used to alert the equipment operator or maintenance person to hazards that may be encountered in the use and maintenance of the equipment. The location and description of the safety signs are detailed in this section. Please become familiarized with all safety signs installed on the machine / attachment.

Vertical Configuration



Horizontal Configuration



The format consists of the hazard panel(s) and the avoidance panel(s):

Hazard panels depict a potential hazard enclosed in a safety alert triangle.

Avoidance panels depict actions required to avoid the hazards.

A safety sign may contain more than one hazard panel and more than one avoidance panel.

NOTE: See the numbered MACHINE SIGNS (DECALS) on Page 22 and MACHINE SIGNS (DECALS) (CONT'D) on Page 23 for the machine location of each correspondingly numbered no-text decal.

1. High Range Speeds (7184346)

This safety sign is located in the operator cab on loaders equipped with a seat belt with 3-point restraint.



WARNING

HITTING OBSTRUCTIONS AT HIGH RANGE SPEEDS CAN CAUSE SERIOUS INJURY OR DEATH

Fasten shoulder belt for additional restraint when operating at high range speeds.

W-2754-0908

2. Hot Pressurized Fluid (7169699)

This safety sign is located on the engine coolant tank cap.



WARNING

HOT PRESSURIZED FLUID CAN CAUSE SERIOUS BURNS

- **Never open hot.**
- **OPEN SLOWLY.**

W-2755-0908

MidWestTech | Bobcat A770 All-Wheel Steer Loader Operation & Maintenance Manual | Pu... Order the manual at mid-west-tech.com >