



# Operation & Maintenance Manual Compact Track Loader



T66 S/N: B4SB11001 & Above





# **OPERATOR SAFETY WARNINGS**



- Never operate without instructions. Read machine signs (decals), Operation & Maintenance Manual, and Operator's Handbook.
- Operator must have instructions before operating the machine. Untrained operators can cause injury or death.

### **SAFETY EQUIPMENT**

The Bobcat® machine must be equipped with safety items necessary for each job. Ask your Bobcat dealer for information on the availability and safe use of attachments and accessories.

- SEAT BELT: Check belt fasteners and check for damaged webbing or buckle.
- SEAR BAR: When up, it must lock loader controls.
- OPERATOR CAB (ROPS AND FOPS): It must be on the loader with all fasteners tight.
- OPERATOR'S HANDBOOK: Must be in the cab.
- SAFETY SIGNS (DECALS): Replace if damaged.
- SAFETY TREADS: Replace if damaged.
- · GRAB HANDLES: Replace if damaged.
- LIFT ARM SUPPORT: Replace if damaged.
- PARKING BRAKE
- BOBCAT INTERLOCK CONTROL SYSTEM (BICS)

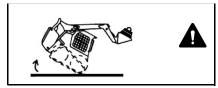
# **OPERATOR SAFETY WARNINGS**



This Safety Alert Symbol means: "Attention! Be Alert! Your Safety is Involved!" Carefully read the message that follows.



- Always fasten seat belt snugly and use the seat bar.
- Always keep feet on foot pedals or footrests when operating.



- Never exceed Rated Operating Capacity (ROC).
- Always carry bucket or attachment as low as possible.
- Do Not travel or turn with the lift arms up.
- Load, unload, and turn on flat level ground.



- Never leave loader with engine running or with lift arms up.
- To park: engage parking brake, put attachment flat on the ground, and stop the engine.

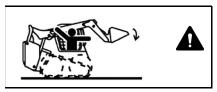


- Never use machine without operator cab with ROPS and FOPS approval.
- · Fasten your seat belt!





- · Never carry riders.
- Keep bystanders away from work area.



- · Never modify equipment.
- Use only attachments approved by Bobcat Company for this machine model.



 Do Not use machine in atmosphere with explosive dust, explosive gas, or where exhaust can contact flammable material.



Never use loader as a personnel lift or work platform.



FOREWORD	9
INTRODUCTION	9
Bobcat Company Is ISO 9001 Certified	
MANUFACTURING LOCATIONS	
North America	9
Czech Republic	
REGULAR MAINTENANCE ITEMS	
SERIAL NUMBER LOCATIONS	
Machine Serial Number Location	
Engine Serial Number Location	
DELIVERY REPORT	
LOADER IDENTIFICATION	
Front View	
Rear View	
FEATURES, ACCESSORIES, AND ATTACHMENTS	
Standard Items	
Options And Accessories	
Buckets Available	
Attachments	
High-Flow Attachments	
Clear Side Enclosed Cab Option	
Inspecting And Maintaining Clear Side Enclosed Cab Option	
Special Applications Kit	
Inspecting And Maintaining Special Applications Kit	
Forestry Door And Window Kit	
Inspecting And Maintaining Forestry Door And Window Kit	
SAFETY AND TRAINING RESOURCES	47
SAFETY INSTRUCTIONS	
Before Operation	17
Call Before You Dig	
Safe Operation Is The Operator's Responsibility	
Safe Operation Needs A Qualified Operator	
A Qualified Operator Must Do The Following	
Silica Dust Exposure	
FIRE PREVENTION	
Maintenance	
Operation	19
Electrical	19
Hydraulic System	19
Fueling	19
Starting	19
Spark Arrester Exhaust System	19
Welding And Grinding	19
Fire Extinguishers	
PUBLICATIONS AND TRAINING RESOURCES	20
PICTORIAL ONLY SAFETY SIGNS	
MACHINE SIGNS (DECALS)	22
OPERATING INSTRUCTIONS	42
INTENDED USE	42

INSTRUMENT PANEL OVERVIEWSTANDARD DISPLAY	
TOUCH DISPLAY	
LEFT CONTROL PANEL	
RIGHT CONTROL PANEL	
JOG SHUTTLE	
Jog Shuttle (Standard Display)	
Jog Shuttle (Touch Display)	
HEATING, VENTILATION, AND AIR CONDITIONING (HVAC) CONTROLS	
TOUCH DISPLAY RADIO INPUT PORTS	
KEYED IGNITION KIT	
RADIO	
Radio Identification	
Adjusting Radio Settings	
Operating Radio Timer	
Operating The Radio Clock	
REAR VIEW CAMERA SYSTEM	54
Rear View Camera System Description	54
Maintaining Rear View Camera System	54
Adjusting Rear View Camera System	55
CONTROL IDENTIFICATION	56
Standard Controls Identification	56
Selectable Joystick Controls (SJC) Identification	57
OPERATOR CAB	58
Operator Cab Description	58
Operating Loader Lights	58
Operating Front Wiper And Washer	59
Operating Front Door	59
Filling Front Washer Tank	59
Operating Side Windows	60
BOBCAT INTERLOCK CONTROL SYSTEM (BICS)	60
Bobcat Interlock Control System (BICS) Description	60
Operating Bobcat Interlock Control System (BICS)	61
SEAT BAR RESTRAINT SYSTEM	61
Seat Bar Restraint System Description	61
Operating Seat Bar Restraint System	61
PARKING BRAKE	62
Operating Parking Brake	62
Operating Hydraulic Controls With Parking Brake Engaged	62
ENGINE SPEED CONTROL	63
Operating Engine Speed Control (Hand)	63
Operating Engine Speed Control (Foot)	63
AUTO IDLE	64
Auto Idle Description	64
Operating Auto Idle	64
LIFT ARM BYPASS CONTROL	65
Operating Lift Arm Bypass Control	
EMERGENCY EXITS	
Emergency Exit Locations	
Making An Emergency Exit Through Rear Window With Latches	
Making An Emergency Exit Through Rear Window With Rubber Cord	
Removing Rear Window With Latches From Outside Loader	
Removing Rear Window With Latches From Outside Loader With Knob Kit	67

Removing Rear Window With Rubber Cord From Outside Loader	
Making An Emergency Exit Through Front Door	
Front Door Reassembly	
BACK-UP ALARM SYSTEM	
Back-Up Alarm Description	
Operating Back-Up Alarm	
DRIVING AND STEERING THE LOADER	
Available Control Configurations	
Operating Standard Controls	
Operating SJC In 'ISO' Control Pattern	72
Operating SJC In 'H' Control Pattern	
STOPPING THE LOADER	74
Stopping Loader Using Control Levers Or Joysticks	
TWO-SPEED CONTROL	74
Two-Speed Control Description	74
Operating Two-Speed	
SPEED MANAGEMENT	75
Speed Management Description	75
Operating Speed Management	75
Changing Speed Management Default Setting	76
DRIVE RESPONSE	77
Drive Response Description	
Adjusting Drive Response	77
STEERING DRIFT COMPENSATION	
Steering Drift Compensation Description	
Adjusting Steering Drift Compensation.	
LIFT AND TILT COMPENSATION	80
Lift And Tilt Compensation Description	
Adjusting Lift And Tilt Compensation	80
HYDRAULIC CONTROLS	82
Hydraulic Controls Description	82
Operating Standard Hydraulic Controls	
Operating SJC Hydraulic Controls In 'ISO' Control Pattern	
Operating SJC Hydraulic Controls In 'H' Control Pattern	
Operating Dual Direction Bucket Positioning	
Operating Automatic Ride Control.	
Operating Reversing Fan	
Operating Front Auxiliary Hydraulics	
Operating Front Auxiliary Hydraulics In Continuous Flow Mode	
Operating Front Auxiliary Hydraulics In Reverse Continuous Flow Mode	
Operating Rear Auxiliary Hydraulics	
Operating High-Flow Auxiliary Hydraulics	
Connecting And Disconnecting Standard Auxiliary Hydraulic Couplers	
Troubleshooting Auxiliary Hydraulic Couplers	
Relieving Auxiliary Hydraulic Pressure (Front Auxiliary Couplers)	
Relieving Auxiliary Hydraulic Pressure (Rear Auxiliary Couplers)	
ATTACHMENT CONTROL DEVICE (ACD)	
Attachment Control Device (ACD) Description	
DAILY INSPECTION	
Daily Inspection And Maintenance List.	
PRE-STARTING PROCEDURE	
Entering The Machine	
Operation & Maintenance Manual And Operator's Handbook Locations	94

Adjusting Seat	95
Adjusting Suspension Seat	95
Adjusting Heated Cloth Air Ride Suspension Seat	95
Adjusting Retractable Seat Belt	96
Adjusting 3-Point Restraint Seat Belt	
Lowering Seat Bar	
Adjusting Joystick Position	
STARTING THE ENGINE	
Quick Start Description.	
Starting Engine	
Warming The Hydraulic / Hydrostatic System	
Cold Temperature Starting Tips	
Cold Temperature Starting Tips:  Cold Temperature Engine Speed Control Description	
Cold Temperature Engine Speed Control Description	
MONITORING THE DISPLAY	
Monitoring Standard Display During Operation	
Monitoring Touch Display During Operation	
Derate And Shutdown Conditions	
STOPPING THE ENGINE AND LEAVING THE MACHINE	
Stopping The Engine And Leaving The Machine Procedure	
COUNTERWEIGHTS	
Counterweight Description	
Effect Of Counterweight Use On The Loader And Loader Operation	
When To Consider Using Frame Mounted Counterweights	
When To Consider Removing Frame Mounted Counterweights	
Accessories That Affect Machine Weight	
ATTACHMENTS	
Choosing The Correct Bucket	105
Pallet Fork Information	106
Inspecting Pallet Fork	106
INSTALLING AND REMOVING ATTACHMENTS (HAND LEVER BOB-TACH SYSTEM)	107
Installing Attachments	107
Removing Attachments	109
INSTALLING AND REMOVING ATTACHMENTS (POWER BOB-TACH SYSTEM)	
Installing Attachments	
Removing Attachments	
TRACK UNDERCARRIAGE SYSTEM	
Track Loader Introduction	
Compact Track Loader Operating And Maintenance Tips	
OPERATING PROCEDURE	
Inspect The Work Area	
Basic Operating Instructions	
Driving On Public Roads	
Operating On Slopes With A Full Bucket	
· · · · ·	
Operating On Slopes With An Empty Bucket	
TOWING THE MACHINE	
Towing Procedure	
LIFTING THE MACHINE	
Single-Point Lift Description	
Four-Point Lift Description.	
TRANSPORTING THE MACHINE	
Loading And Unloading Machine	
Fastening Machine To Transport Vehicle	120

REVENTIVE MAINTENANCE	122
MAINTENANCE SAFETY WARNINGS	122
MAINTENANCE SAFETY WARNINGS	
SERVICE SCHEDULE	
Maintenance Intervals	
As Indicated (Per Display)	
Every 10 Hours (Before Starting The Loader)	
First 100 Hours	
Every 100 Hours	
Every 500 Hours Or Every 12 Months	
Every 750 Hours or Every 12 Months	
Every 1000 Hours or Every 12 Months	
Every 1500 Hours or Every 24 Months	
BOBCAT INTERLOCK CONTROL SYSTEM (BICS)	
Inspecting The Bobcat Interlock Control System (BICS)	
Inspecting The Lift Arm Bypass Control	
SEAT BAR RESTRAINT SYSTEM	
Seat Bar Restraint System Control Description	
Inspecting Seat Bar Restraint System	
Maintaining Seat Bar Restraint System	
SEAT BELT.	
Inspecting And Maintaining The Seat Belt	
LIFT ARM SUPPORT	
Lift Arm Support Description	
Installing Lift Arm Support	
Removing Lift Arm Support	
BACK-UP ALARM SYSTEM	
Inspecting Back-Up Alarm System	
Adjusting Back-Up Alarm Switches	
OPERATOR CAB	
Inspecting Operator Cab	
Cab Door Sensor Description	
Raising Operator Cab	137
Lowering Operator Cab	
REAR DOOR (TAILGATE)	141
Opening And Closing Rear Door	141
Using Rear Door Stop	
Adjusting Rear Door Latch	141
REAR GRILLE	
Raising Rear Grille	142
Lowering Rear Grille	
HEATING, VENTILATION, AND AIR CONDITIONING (HVAC)	143
Cleaning HVAC Filters	
Cleaning Air Conditioning Evaporator And Heater Coil	
Cleaning Air Conditioning Condenser	
Lubricating Air Conditioning System	
Troubleshooting HVAC System	
ENGINE AIR CLEANER	
Replacing Engine Air Filter Element (Outer)	
Replacing Engine Air Filter Element (Inner)	
FUEL SYSTEM	
Fuel Specifications	147
Biodiesel Blend Fuel	

Filling The Fuel Tank	. 148
Removing Water From Main Fuel Filter	. 149
Replacing Fuel Pre-Filter	. 149
Replacing Main Fuel Filter	. 150
Replacing Fuel Tank Vent Filter	. 151
ENGINE LUBRICATION SYSTEM	. 152
Checking And Adding Engine Oil	. 152
Engine Oil Chart	. 153
Replacing Engine Oil And Filter	. 153
ENGINE COOLING SYSTEM	. 155
Cleaning Engine Cooling System	. 155
Checking And Adding Coolant	. 156
Replacing Coolant	. 157
ELECTRICAL SYSTEM	. 159
Electrical System Description	. 159
Fuse And Relay Identification	. 159
Battery Maintenance	. 164
Maintaining Battery Charge Level	. 164
Battery Service During Machine Storage	. 164
Testing The Battery	. 165
Battery Charging	. 165
Using A Booster Battery (Jump Starting)	
Replacing Battery	
HYDRAULIC SYSTEM	
Checking And Adding Hydraulic Fluid	
Hydraulic Fluid Chart	
Replacing Hydraulic Fluid	. 169
Replacing Main Hydraulic Filter	. 172
Replacing Hydraulic Case Drain Filter	
Replacing Hydraulic Charge Filter	. 175
Replacing Hydraulic Reservoir Vent Filter	
TRACK TENSION	
Checking Track Tension	
Increasing Track Tension	
Decreasing Track Tension	
HYDROSTATIC DRIVE MOTOR	
Replacing Brake Cavity Fluid	. 180
TRACK SPROCKET MAINTENANCE	. 180
Checking Track Sprocket Torque	. 180
BELTS	
Adjusting Belt (Machines Without Air Conditioning)	. 181
Replacing Belt (Machines Without Air Conditioning)	
Adjusting Belt (Machines With Air Conditioning)	
Replacing Belt (Machines With Air Conditioning)	
AUTOMATIC RIDE CONTROL ACCUMULATOR	
Checking Automatic Ride Control Accumulator Charge	
PIVOT PINS	
Checking Pivot Pin Torque	
MACHINE LUBRICATION	
Lubricating Grease Fittings	
BOB-TACH (HAND LEVER)	
Inspecting And Maintaining Hand-Lever Bob-Tach	
BOB-TACH (POWER)	

Inspecting And Maintaining Power Bob-Tach  MACHINE STORAGE AND RETURN TO SERVICE	
Machine Extended Storage Procedure	
Machine Return To Service Procedure	
SYSTEM SETUP AND ANALYSIS	
NAVIGATION (STANDARD DISPLAY)	
Navigation Bar	
Viewing Active Shortcuts	
VITALS (STANDARD DISPLAY)	
Vital Detail And Machine Performance	
SERVICE (STANDARD DISPLAY)	19 <sup>-</sup>
Record A Service	19 <sup>-</sup>
View Service Codes	19 <sup>-</sup>
SETTINGS (STANDARD DISPLAY)	
Display Settings	
Machine Settings	
Security Settings	
Security Settings (Manage Operators)	
Language Settings	
Units	
Software	
GAUGES (TOUCH DISPLAY)	
Vital Detail And Machine Performance	
Notification Drawer	
CAMERA (TOUCH DISPLAY)	
Camera Settings	199
PHONE (TOUCH DISPLAY)	
AUDIO (TOUCH DISPLAY)	
SERVICE (TOUCH DISPLAY)	
Record A Service	
View Service Schedule	
View Service Record	
View Service Codes	
ATTACHMENTS (TOUCH DISPLAY)	
Attachment Information	
SETTINGS (TOUCH DISPLAY)	
Favorites	
Display Settings	
Machine Settings	
Security Settings	
Security Settings (Manage Operators)	
Operator Statistics	
Job Clocks	
Adding And Removing Job Clocks	
Language Settings	
Units	
Camera Settings	
Bluetooth Settings	217
Audio Settings	
Dealer	
Software	
DIAGNOSTIC SERVICE CODES	

Service Codes List	219
SPECIFICATIONS	233
MACHINE DIMENSIONS	233
LOADER SPECIFICATIONS	235
Performance Specifications	235
Engine Specifications	235
Drive System Specifications	236
Control Specifications	236
Hydraulic System Specifications	
Hydraulic Cylinder Specifications	237
Electrical System Specifications	
Fluid Capacities	238
Tracks	238
Ground Pressure	238
WARRANTY	239
BOBCAT LOADER WARRANTY	239
EMISSION — RELATED WARRANTY	240
Bobcat Company	240
FEDERAL & CALIFORNIA EMISSION CONTROL SYSTEMS LIMITED WARRANTY for NON-ROAD ENGINES	
(CI)	240
OWNER'S WARRANTY RIGHTS AND OBLIGATIONS	
MANUFACTURER'S WARRANTY COVERAGE	
OWNED'S WADDANTY DESDONSIBILITIES	240

### INTRODUCTION

This Operation & Maintenance Manual was written to give the owner / operator instructions on the safe operation and maintenance of the Bobcat machine. Read and understand this Operation & Maintenance Manual before operating your Bobcat machine. If you have any questions, see your Bobcat dealer. This manual may illustrate options and accessories not installed on your machine.

### **Bobcat Company Is ISO 9001 Certified**



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

British Standards Institute (BSI) is the Certified Registrar that Bobcat Company chose to assess the company's compliance with ISO 9001 at Bobcat's manufacturing facilities in Gwinner, North Dakota (U.S.A.), Pontchâteau (France), and the Bobcat corporate offices (Gwinner, Bismarck, and West Fargo) in North Dakota. TÜV Rheinland is the Certified Registrar that Bobcat Company chose to assess the company's compliance with ISO 9001 at Bobcat's manufacturing facility in Dobriš (Czech Republic). Only certified assessors, like BSI and TÜV Rheinland, 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.

### MANUFACTURING LOCATIONS

#### North America

**Bobcat Company** 

P.O. Box 128

Gwinner, ND 58040-0128

United States of America

### Czech Republic

Doosan Bobcat EMEA s.r.o.

U Kodetky 1810

263 12 Dobřiš

Czech Republic

### **REGULAR MAINTENANCE ITEMS**



**ENGINE OIL FILTER** 

7343102



FUEL FILTER, PRE-FILTER

7348032



FUEL FILTER, MAIN

7336334



**FUEL TANK VENT FILTER** 

7340277



ENGINE AIR FILTER, OUTER

7386225



ENGINE AIR FILTER, INNER

7386224



HYDRAULIC MAIN FILTER, Kit with Orings

7414582



HYDRAULIC CASE DRAIN FILTER

7334208



HYDRAULIC CHARGE FILTER

7319444



HYDRAULIC RESERVOIR VENT FILTER

7390732



**BATTERY** 

7269857



HYDROSTATIC DRIVE MOTOR FLUID 7270874 (12 U.S. fl oz)



HYDRAULIC FLUID

6903117 (2.5 U.S. gal)

6903118 (5 U.S. gal)

6903119 (55 U.S. gal)



PROPYLENE GLYCOL COOLANT

6983128 - Premixed (U.S. gal)

6983129 - Concentrate (U.S. gal)

ENGINE OIL	1 qt
SAE 15W40	7354881
SAE 10W30	7354875
Synthetic SAE 5W-40	7403513

ENGINE OIL	1 U.S. gal
SAE 15W40	7354882
SAE 10W30	7354876
Synthetic SAE 5W-40	7403514

ENGINE OIL	2.5 U.S. gal
SAE 15W40	7354883
SAE 10W30	7354877

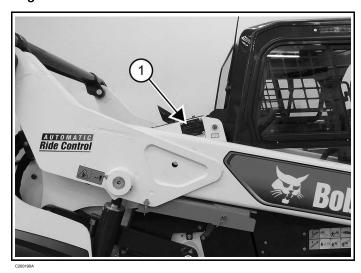
**NOTE**: Always verify Part Numbers with your Bobcat dealer.

### **SERIAL NUMBER LOCATIONS**

Always use the serial number of the machine when requesting service information or when ordering parts. Earlier or later models (identification made by serial number) may use different parts, or it may be necessary to use a different procedure to do a specific service operation.

### **Machine Serial Number Location**

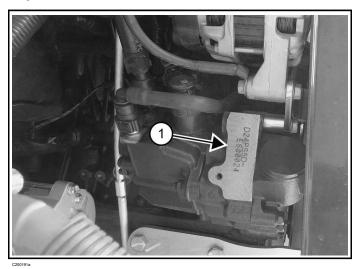
### Figure 1



The machine serial number plate (Item 1) [Figure 1] is located on the right rear of the machine frame.

### **Engine Serial Number Location**

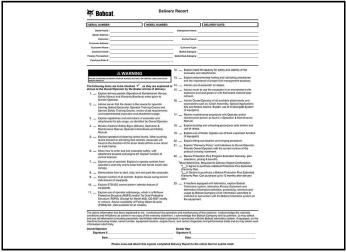
### Figure 2



The engine serial number (Item 1) [Figure 2] is located on the left side of the engine below the alternator.

### **DELIVERY REPORT**

### Figure 3



NA1547

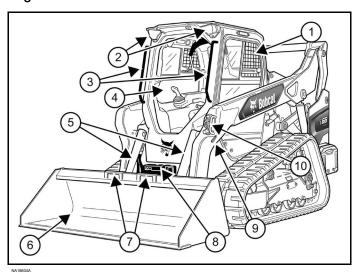
The delivery report contains a list of items that must be explained or shown to the owner or operator by the dealer when the machine is delivered.

The delivery report must be reviewed and signed by the owner or operator and the dealer.

### LOADER IDENTIFICATION

### **Front View**

### Figure 4

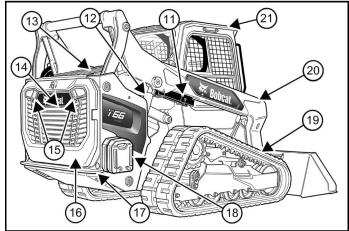


REF	DESCRIPTION
1	Operation & Maintenance Manual and Operator's Handbook
2	Front Lights
3	Grab Handles
4	Operator Seat with Seat Belt and Seat Bar
5	Tilt Cylinders
6	Bucket [A]
7	Bucket Steps
8	Step
9	Alternate Front Tie-down (Both Sides)
10	Front Auxiliary Quick Couplers

[A] Bucket — Several different buckets and other attachments are available for the Bobcat loader.

### **Rear View**

### Figure 5



NA18606

REF	DESCRIPTION
11	Lift Arm Support
12	Lift Cylinder (Both Sides)
13	Rear Grille
14	Back-up Alarm
15	Rear Work Lights and Taillights
16	Rear Door
17	Rear Tie-down (Both Sides) Front Tie-down located behind Bucket
18	Frame Mounted Counterweights (Both Sides)
19	Track [A]
20	Lift Arm
21	Operator Cab (ROPS and FOPS) [B]

- [A] Track Standard tracks are shown. Track options are available for the Bobcat loader.
- [B] ROPS Roll-Over Protective Structure per ISO 3471 and FOPS — Falling-Object Protective Structure per ISO 3449, Level I. Level II is available.

### FEATURES, ACCESSORIES, AND ATTACHMENTS

#### Standard Items

This model T66 Bobcat loader is equipped with the following standard items:

- 74 hp Bobcat Engine Turbo Tier 4 Diesel Engine
- Adjustable Seat
- Auxiliary Hydraulics: Variable Flow
- Bobcat Interlock Control System (BICS™)
- Bobcat Standard Display
- Bob-Tach® Attachment Mounting System
- · Controls: Bobcat Standard
- · Counterweights: Frame Mounted
- Enclosed Cab (includes: rear window and polycarbonate top window) ROPS and FOPS (Level I) Approved
- Engine / Hydraulic Systems Protection
- Front Horn / Back-up Alarm
- Glow Plugs (Automatically activated)
- · LED Lights: Front and Rear
- Lift Arm Support
- · Parking Brake
- · Seat Bar
- · Retractable Seat Belt
- Solid-Mounted Undercarriage with 8 Rollers
- Spark Arrester Device
- Tracks, Rubber 320 mm (12.6 in)

### **Options And Accessories**

Below is a list of some equipment available from your Bobcat dealer as Dealer and / or Factory Installed Accessories and Factory Installed Options. See your Bobcat dealer for other available options and accessories.

- · Adjustable Heated Air Ride Suspension Seat
- Adjustable Suspension Seat
- Air Conditioning
- Attachment Control Device (ACD) (7-Pin, 14-Pin)
- Auto HVAC
- Auto Idle (Available only on SJC equipped loaders)
- · Automatic Ride Control
- Auxiliary Hydraulics Coupler Guard
- Battery Disconnect Switch Kit
- Bobcat Touch Display
- Cab Door with Emergency Exit
- Cab Heater

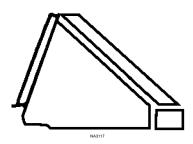
- Cab Reseal Plug Kit
- Clear Side Enclosed Cab
- Controls: Selectable Joystick Controls (SJC) (Selectable 'ISO' or 'H' Pattern Control)
- Dual Direction Bucket Positioning (With On / Off Selection)
- Engine Block Heater
- Fire Extinguisher
- FOPS Kit (Level II)
- · FOPS Window Kit
- · Forestry Door and Window Kit
- Forestry Door Wiper
- Four-Way Flashers
- Front and Rear Light Guards
- · High-Flow Auxiliary Hydraulics
- Hose Guide
- Hydraulic Muffler
- Keyed Ignition Kit
- LED Side Lighting
- Lift Kit (Four-Point, Single-Point)
- Power Bob-Tach Attachment Mounting System
- Premium LED Front Lights
- Radio
- Rear Auxiliary Hydraulics
- Rear Bumper Kit
- Rear Camera Kit
- Rear Window Wiper
- Reversing Fan
- Rotating Beacon
- Seat Belt with 3-Point Restraint (Standard on Two-Speed Models)
- Seat Belt 3 in. Wide
- · Sound Reduction Kit (Reduces noise at operator ear)
- Special Applications Kit
- Strobe Light
- Tailgate Guard Kit
- Tailgate Lock
- Torsion Suspension Undercarriage with 8 Rollers
- Track:
  - Multi-Bar Lug 320 mm (12.6 in)
  - ▶ Rubber 400 mm (15.75 in)
- Two-Speed Travel
- Windows:
  - Externally Removable Rear Window

- Polycarbonate Rear Window
- Polycarbonate Side Windows
- Side Windows

Specifications subject to change without notice and standard items may vary.

#### **Buckets Available**

Increase the versatility of your Bobcat machine with a variety of bucket styles and sizes.



Many bucket styles, widths, and different capacities are available for a variety of different applications. They include Construction and Industrial, Low Profile, Fertilizer, and Snow, to name a few. See your Bobcat dealer for the correct bucket for your Bobcat loader and application.

### **Attachments**

These and other attachments are approved for use on this model loader. Do not use unapproved attachments. Attachments not manufactured by Bobcat may not be approved.

The versatile Bobcat loader quickly turns into a multijob machine with a tight-fit attachment hook-up ... from bucket to grapple to pallet fork, and a variety of other attachments.

See your Bobcat dealer for information about approved attachments and attachment Operation & Maintenance Manuals.

- · Angle Broom
- Auger
- Bale Handler
- Blades Box, Dozer, Snow, Snow V-Blade
- · Breaker, Hydraulic
- Brush Saw
- Brushcat™ Rotary Cutter
- Buckets
- Chipper
- · Combination Bucket
- Concrete Mixer
- Concrete Pump

- Digger
- · Drop Hammer
- Dumping Hopper
- Flail Cutter
- Grader
- Grapples Farm / Utility, Industrial, Root
- Landplane
- Landscape Rake
- Laser Equipment
- Mower
- · Packer Wheel
- Pallet Fork
- Planer
- Rock Bucket
- Scarifier
- Scraper
- Seeder
- Silt Fence Installer
- Snow Pusher
- Snowblower
- · Sod Layer
- Soil Conditioner
- Spreader
- Stabilizer, Rear
- Stump Grinder
- Sweeper
- Tiller
- Tilt-Tatch™
- Tree Spade
- Trench Compactor
- Trencher
- Utility Fork
- Utility Frame
- Vibratory Roller
- Water Kit
- · Wheel Saw
- X-Change™ Frame

### **High-Flow Attachments**

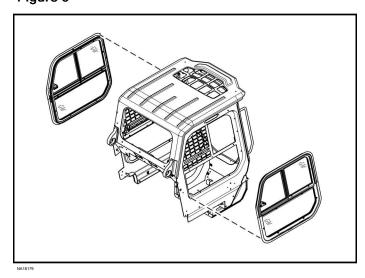
The following attachments are approved for use on High-Flow machines. See your Bobcat dealer for an updated list of approved attachments.

- Angle Broom
- Auger

- Brushcat™ Rotary Cutter
- Chipper
- Concrete Pump
- Flail Cutter
- Planer
- Snowblower
- · Soil Conditioner
- · Stump Grinder
- Tiller
- Trencher

### **Clear Side Enclosed Cab Option**

### Figure 6



Depending on machine specifications, windows are provided to function as guards. Damaged windows must be replaced with those of equivalent specification before the machine is used again. The machine must not be used with the window removed. The clear side enclosed cab windows are polycarbonate [Figure 6].

## **A** DANGER

### **MODIFICATION HAZARD**

Crushing can cause serious injury or death.

- DO NOT operate if cab side windows are damaged or missing.
- Replace damaged or missing windows with Bobcat approved parts only.

# Inspecting And Maintaining Clear Side Enclosed Cab Option

- Inspect for cracks or damage. Replace if required.
- Prerinse with water to remove gritty materials.

- Wash with a mild household detergent and warm water.
- Use a sponge or soft cloth. Rinse well with water and dry with a clean soft cloth or rubber squeegee.

### **▲** IMPORTANT

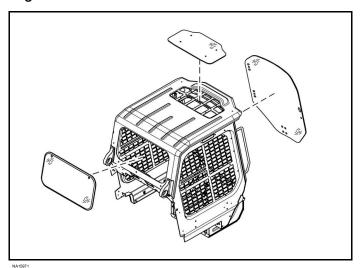
MACHINE DAMAGE HAZARD
Avoid polycarbonate window damage:
Do not use abrasive or highly alkaline cleaners.
Do not use cleaners containing ammonia.
Do not clean with metal blades or scrapers.

### **Special Applications Kit**

## **A** WARNING

IMPACT AND PUNCTURE HAZARD
Flying debris or objects entering the operator cab
can cause serious injury or death.
Some attachment applications can cause flying
debris or objects to enter the front, top or rear cab
openings. Install the Special Applications Kit and Top
Guard (if applicable) to provide added operator
protection in these applications. 4

Figure 7



Available for special applications to restrict material from entering cab openings. Kit includes 12,7 mm (0.5 in) thick polycarbonate front door and polycarbonate rear window [Figure 7].

Polycarbonate top window (standard item) must be installed for special applications to restrict material from entering cab openings.

See your Bobcat dealer for availability.

### **Inspecting And Maintaining Special Applications Kit**

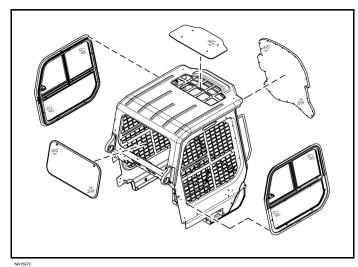
- Inspect for cracks or damage. Replace if required.
- Prerinse with water to remove gritty materials.
- Wash with a mild household detergent and warm water.
- Use a sponge or soft cloth. Rinse well with water and dry with a clean soft cloth or rubber squeegee.

## **A** IMPORTANT

MACHINE DAMAGE HAZARD Avoid polycarbonate window damage: Do not use abrasive or highly alkaline cleaners. Do not use cleaners containing ammonia. Do not clean with metal blades or scrapers.

### Forestry Door And Window Kit

### Figure 8



Available for special applications to prevent flying debris and objects from entering the cab. Kit includes 19,1 mm (0.75 in) thick <u>laminated</u> polycarbonate front door, polycarbonate side windows, and polycarbonate rear window [Figure 8].

Polycarbonate top window (standard item) must be installed as part of the Forestry Door And Window Kit to restrict material from entering cab openings.

The side windows of the clear side enclosed cab are polycarbonate and meet the side window requirements of the Forestry Door and Window kit to restrict material from entering cab openings.

# Inspecting And Maintaining Forestry Door And Window Kit

Inspect for cracks or damage. Replace if required.

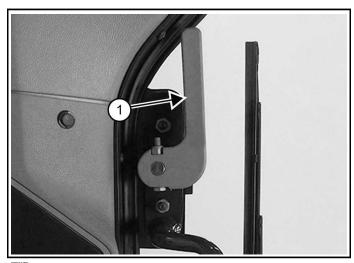
- Order part number 7349287 if door frame is damaged and needs to be replaced.
- Order kit part number 7401369 if door polycarbonate is damaged and needs to be replaced.
- Prerinse with water to remove gritty materials.
- Wash with a mild household detergent and warm water.
- Use a sponge or soft cloth. Rinse well with water and dry with a clean soft cloth or rubber squeegee.

### **▲** IMPORTANT

MACHINE DAMAGE HAZARD Avoid polycarbonate window damage: Do not use abrasive or highly alkaline cleaners. Do not use cleaners containing ammonia. Do not clean with metal blades or scrapers.

Forestry Door Emergency Exit

### Figure 9



- Inspect both emergency exit levers (Item 1)
  [Figure 9], linkages, and hardware for loose or
  damaged parts.
- Repair or replace if necessary.

### SAFETY INSTRUCTIONS

### **Before Operation**

Carefully follow the operating and maintenance instructions in this manual.

The Bobcat machine is highly maneuverable and compact. It is rugged and useful under a wide variety of conditions. This presents an operator with hazards associated with off highway, rough terrain applications, common with Bobcat machine usage.

The Bobcat machine has an internal combustion engine with resultant heat and exhaust. All exhaust gases can kill or cause illness so use the machine with adequate ventilation.

The dealer explains the capabilities and restrictions of the Bobcat machine and attachment for each application. The dealer demonstrates the safe operation according to Bobcat instructional materials, which are also available to operators. The dealer can also identify unsafe modifications or use of unapproved attachments. The attachments and buckets are designed for a Rated Operating Capacity. They are designed for secure fastening to the machine. The user must check with the dealer, or Bobcat literature, to determine safe loads of materials of specified densities for the machine - attachment combination.

The following publications and training materials provide information on the safe use and maintenance of the Bobcat machine and attachments:

- The Delivery Report is used to assure that complete instructions have been given to the new owner and that the machine and attachment are in safe operating condition.
- The Operation & Maintenance Manual delivered with the machine or attachment gives operating information as well as routine maintenance and service procedures. It is a part of the machine and can be stored in a container provided on the machine. Replacement Operation & Maintenance Manuals can be ordered from your Bobcat dealer.
- Machine signs (decals) instruct on the safe operation and care of your Bobcat machine or attachment. The signs and their locations are shown in the Operation & Maintenance Manual. Replacement signs are available from your Bobcat dealer.
- An Operator's Handbook is fastened to the operator cab of the machine. Its brief instructions are convenient for the operator. The handbook is available from your dealer in an English edition or one of many other languages. See your Bobcat dealer for more information on translated versions.
- The AEM Safety Manual delivered with the machine gives general safety information.

- Operator and Service Safety Training courses are available through your Bobcat dealer. These courses provide information on safe and efficient operation and correct service procedures.
- See the Publications and Training Resources page in this manual or your Bobcat dealer for Service and Parts Manuals, printed materials, videos, or training courses available. Also check the Bobcat website www.bobcat.com or www.bobcat.com/training.
- Online operator training courses are also available.
   Go to www.bobcatonlinetraining.com for a listing of available courses and more information.

The dealer and owner / operator review the recommended uses of the product when delivered. If the owner / operator will be using the machine for a different application(s) he or she must ask the dealer for recommendations on the new use.

### Call Before You Dig



Dial 811 (USA Only)

Dial 1-888-258-0808 (USA & Canada)

When you call, you will be directed to a location in your state / province / city for information about buried lines (telephone, cable TV, water, sewer, gas, etc.).

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.

## **A** WARNING

INSUFFICIENT INSTRUCTIONS HAZARD Untrained operators or failure to follow instructions can cause serious injury or death.

Operators must have adequate training and instruction before operating.

## **A** IMPORTANT

This notice identifies procedures which must be followed to avoid damage to the machine.

## **A** 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.

### **▲** DANGER

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

The machine and attachment must be in good operating condition before use.

Check all of the items on the Service Schedule decal in the Every 10 Hours section 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 of the machine. Material that 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.

#### Silica Dust Exposure



Silica dust can cause lung disease and is known to the state of California to cause cancer.

Cutting or drilling concrete containing sand or rock containing quartz may result in exposure to silica dust.

Do not exceed Permissible Exposure Limits (PEL) to silica dust as determined by OSHA or other job site Rules and Regulations. Use a respirator, water spray or other means to control dust.

#### FIRE PREVENTION



#### Maintenance

The machine and some attachments have components that are at high temperatures under normal operating conditions. The primary source of high temperatures is the engine and exhaust system. The electrical system, if damaged or incorrectly maintained, can be a source of arcs or sparks.

Flammable debris (leaves, straw, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it can cause a fire hazard. Clean often to avoid this accumulation. Flammable debris in the engine compartment is a potential fire hazard.

The operator's area, engine compartment, and engine cooling system must be inspected every day and cleaned if necessary to prevent fire hazards and overheating.

All fuels, most lubricants, and some coolants mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

### Operation

Do not use the machine where exhaust, arcs, sparks, or hot components can contact flammable material, explosive dust, or gases.

### **Electrical**



Check all electrical wiring and connections for damage. Keep the battery terminals clean and tight. Repair or replace any damaged part or wires that are loose or frayed.

Battery gas can explode and cause serious injury. Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting. Do not jump start or charge a frozen or damaged battery. Keep any open flames or sparks away from batteries. Do not smoke in battery charging area.

### **Hydraulic System**

Check hydraulic tubes, hoses and fittings for damage and leakage. Never use open flame or bare skin to check for

leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.

Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents.

### **Fueling**



Stop the engine and let it cool before adding fuel. No smoking! Do not refuel a machine near open flames or sparks. Fill the fuel tank outdoors.

Ultra Low Sulfur Diesel (ULSD) poses a greater static ignition hazard than earlier diesel formulations with higher sulfur content. Avoid death or serious injury from fire or explosion. Consult with your fuel or fuel system supplier to ensure the delivery system is in compliance with fueling standards for proper grounding and bonding practices.

### Starting

Do not use ether or starting fluids on any engine that has glow plugs or air intake heater. These starting aids can cause explosion and injure you or bystanders.

Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting.

### Spark Arrester Exhaust System

The spark arrester exhaust system is designed to control the emission of hot particles from the engine and exhaust system, but the muffler and the exhaust gases are still hot.

Check the spark arrester exhaust system regularly to make sure it is maintained and working properly. Use the procedure in the Operation & Maintenance Manual for cleaning the spark arrester muffler (if equipped).

### **Welding And Grinding**

Always clean the machine and attachment, disconnect the battery, and disconnect the wiring from the Bobcat controllers before welding. Cover rubber hoses, battery, and all other flammable parts. Keep a fire extinguisher near the machine when welding.

Have good ventilation when grinding or welding painted parts. Wear a dust mask when grinding painted parts. Toxic dust or gas can be produced.

Dust generated from repairing nonmetallic parts such as hoods, fenders, or covers can be flammable or explosive.

Repair such components in a well ventilated area away from open flames or sparks.

### Fire Extinguishers



Know where fire extinguishers and first aid kits are located and how to use them. Inspect the fire extinguisher and service the fire extinguisher regularly. Obey the recommendations on the instructions plate.

### PUBLICATIONS AND TRAINING RESOURCES

The following publications are also available for your Bobcat loader. You can order them from your Bobcat dealer. For the latest information on Bobcat products and the Bobcat Company, visit our website at Bobcat.com/training.



# OPERATION & MAINTENANCE MANUAL

Complete instructions on the correct operation and the routine maintenance of your Bobcat loader.



### 7353049enUS

# SKID-STEER LOADER ONLINE OPERATOR TRAINING



Provides information on safe and efficient operation and introduces the key components and safety features of skid-steer loaders.

See your Bobcat dealer to purchase an enrollment card or visit bobcatonlinetraining.com for more information.

### 7341494



### SKID-STEER LOADER OPERATOR TRAINING COURSE

Introduces operator to step-bystep basics of skid-steer loader operation.

7249275 (English)

7249278 (Spanish)



### SAFETY MANUAL

Gives basic safety procedures and warnings for your Bobcat loader.

6556500 (English and Spanish)



### **OPERATOR SAFETY DVD**

Gives basic safety instructions for many Bobcat products including loaders.

6904762 (English and Spanish)



### LOADER SAFETY VIDEO

Scan the code to watch the loader safety video or view at Bobcat.com/training.

(Mobile device with quick response code application required)



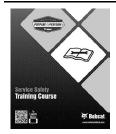
### SERVICE MANUAL



Complete maintenance instructions for your Bobcat loader.



7353050enUS



# SERVICE SAFETY TRAINING COURSE

Introduces service technicians to step-by-step basics of proper and safe maintenance and servicing procedures.

7297250



### OPERATOR'S HANDBOOK

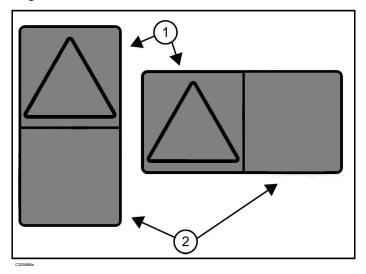
Gives basic operation instructions and safety warnings.

7418150enUS

### **PICTORIAL ONLY 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.

Figure 10



The format consists of the hazard panel(s) (Item 1) [Figure 10] and the avoidance panel(s) (Item 2) [Figure 10].

**Hazard Panels:** Depict a potential hazard enclosed in a safety alert triangle.

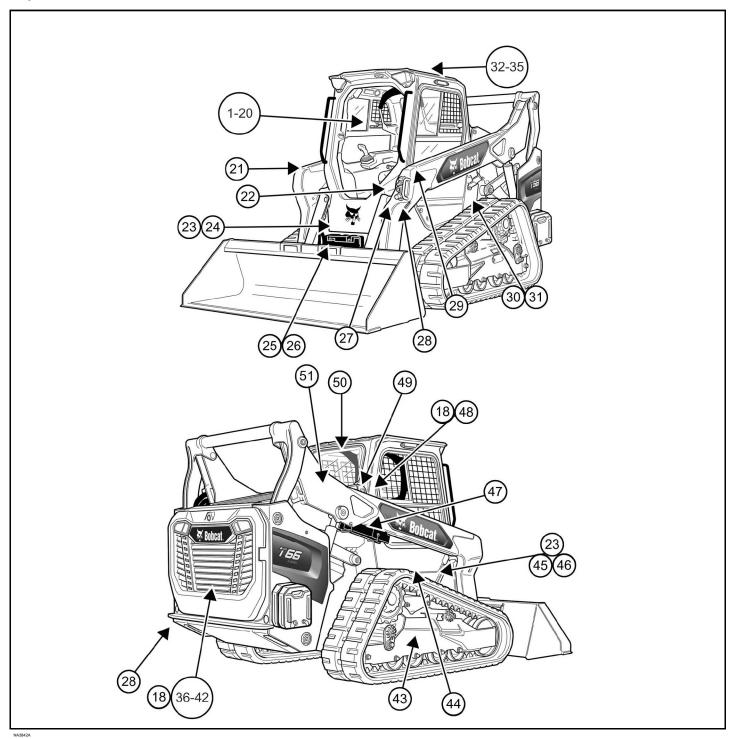
**Avoidance Panels:** Depict actions required to avoid the hazards.

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

### MACHINE SIGNS (DECALS)

Follow the instructions on all Machine Signs (Decals) that are on the machine. Replace any damaged machine signs and be sure they are in the correct locations. Machine signs are available from your Bobcat dealer.

Figure 11



# REF DECAL WARNING (IF APPLICABLE)

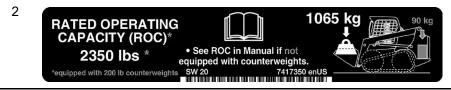
Rated Operating Capacity (7408103)

This safety sign is located inside the operator cab on the left side of loaders equipped with a solid-mounted undercarriage.



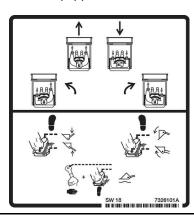
Rated Operating Capacity (7417350)

This safety sign is located inside the operator cab on the left side of loaders equipped with a torsion suspension undercarriage.



Standard Controls (7326101)

This safety sign is located inside the operator cab on the lower left side of loaders equipped with standard controls.



**WARNING DECAL REF** (IF APPLICABLE)

To Leave The Loader (7341319)

This safety sign is located inside the operator cab on the lower left side of loaders equipped with standard controls.



## **WARNING**

### **GENERAL HAZARD**

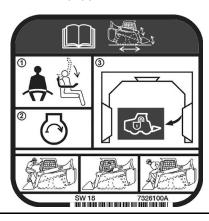
Failure to follow instructions can cause serious injury or death.

- To leave the loader safely:

  1. Lower the lift arms and put attachment flat on the ground.
- Stop the engine.
- 3. Engage the brake.
- Raise seat bar.
   Move pedals and hand controls until both lock.
- 6. Exit the loader. ◆

Standard Controls Operation (7326100)

This safety sign is located inside the operator cab on the lower left side of loaders equipped with standard controls.



REF DECAL WARNING (IF APPLICABLE)

SJC Controls (7368056)

This safety sign is located inside the operator cab on the left armrest of loaders equipped with SJC controls.



# **M** WARNING

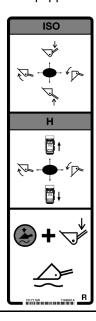
# UNINTENDED MACHINE MOVEMENT HAZARD

Accidental loader movement can cause serious injury or death.

- Drive, lift arm and tilt functions operate on different joysticks in each control mode.
- Know and understand the selected control mode before operating. READ AND UNDERSTAND THE OPERATION & MAINTENANCE MANUAL FOR MORE

SJC Controls (7168081)

This safety sign is located inside the operator cab on the right armrest of loaders equipped with SJC controls.



7

**WARNING REF DECAL** (IF APPLICABLE)

To Leave The Loader (7330860)

This safety sign is located inside the operator cab on the lower left side of loaders equipped with SJC controls.



## WARNING

**GENERAL HAZARD** 

Failure to follow instructions can cause serious injury or death To leave the loader safely:

- 1. Lower the lift arms and put attachment flat on the ground.
- Stop the engine.
- 3. Engage the brake.
- 4. Raise seat bar.
- 5. Exit the loader.

### General Hazard Warning (7323814)

This safety sign is located inside the operator cab on the lower right side.



## WARNING

### **GENERAL HAZARD**

Untrained operators or failure to follow instructions can cause serious injury or death.

Operators must have adequate training and instruction before operating the machine. Read Operation & Maintenance Manual and Handbook. Never modify equipment or use attachments not approved by **Bobcat Company.** 

- On slopes, keep heavy end of machine uphill.
- Do not travel or turn with lift arms up. Load, unload, and turn on flat level ground. DO NOT exceed Rated Operating Capacity (See decal in cab). 4

9

This as a preview PDF file from best-manuals.com



Download full PDF manual at best-manuals.com