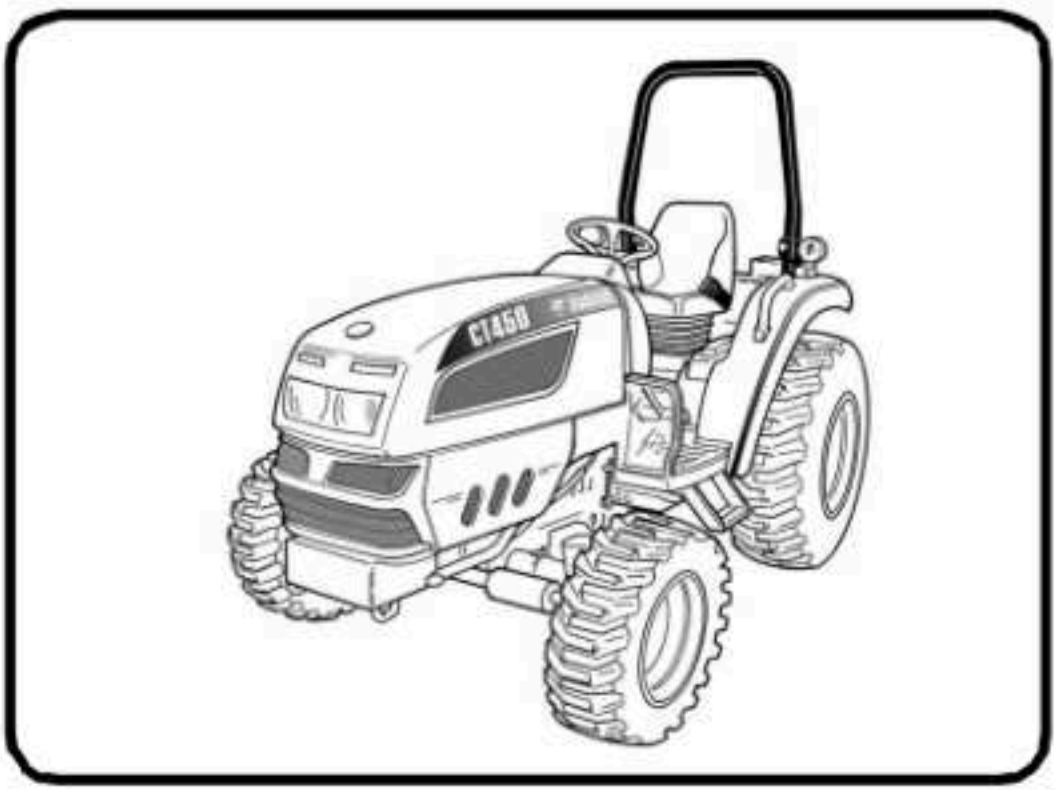
Bobcat

AU
NZ

Operation & Maintenance Manual
CT450 Compact Tractor
Hydrostatic Transmission (HST) & Mechanical Transmission (SST)

(HST) S/N ABHM11001 & Above
(SST) S/N AKBP11001 & Above



6987087 AU/NZ (12-09) Revised (3-10) (3)

Printed in U.S.A.

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REFERENCE INFORMATION

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

Compact Tractor Serial Number _____

Engine Serial Number _____

Loader Serial Number (If Equipped) _____

NOTES:

_____

_____

_____

YOUR BOBCAT DEALER:

_____

ADDRESS:

_____

PHONE:

_____

Bobcat Company
P.O. Box 128
Gwinner, ND 58040-0128
UNITED STATES OF AMERICA

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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 compact tractor. READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR BOBCAT COMPACT TRACTOR. If you have any questions, see your Bobcat dealer. This manual may illustrate options and accessories not installed on your compact tractor.

BOBCAT COMPANY IS IS0 9001 CERTIFIED 7

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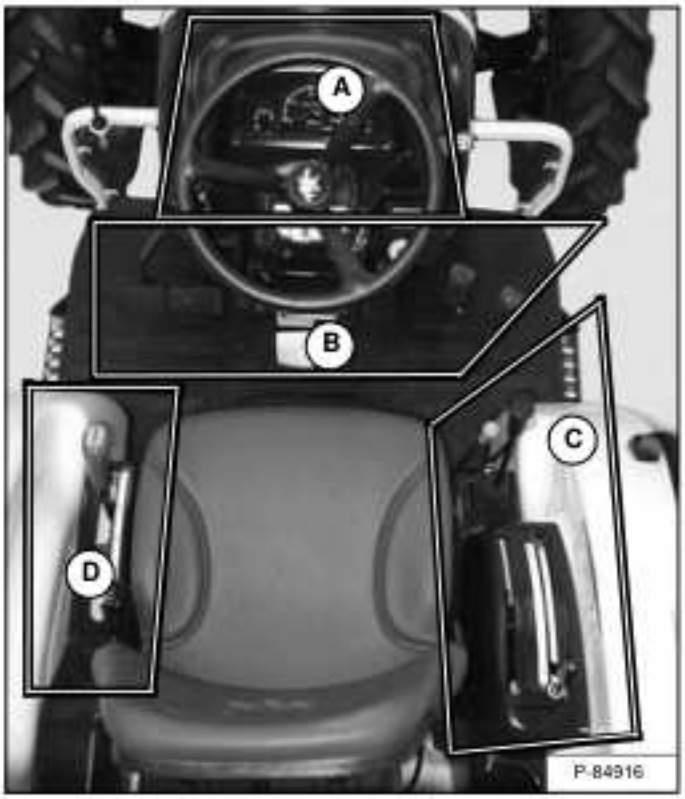
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Overview (HST)

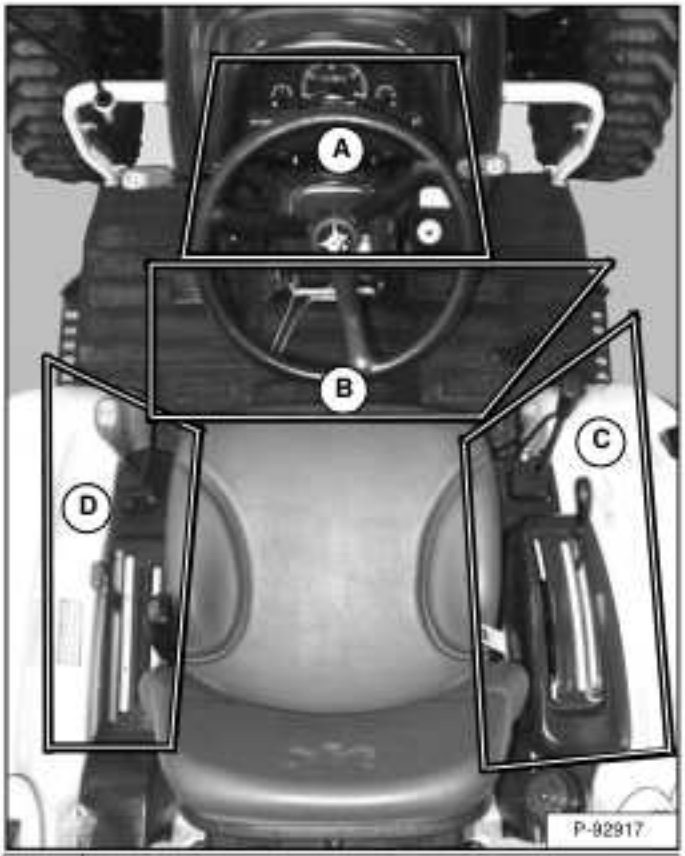
Figure 7



REF	DESCRIPTION
A	Instrument Panel (See Instrument Panel on Page 32.)
B	Floor Controls (See Floor Controls (HST) on Page 33.)
C	Right Console (See Right Console on Page 34.)
D	Left Console (See Left Console (HST) on Page 34.)

Overview (SST)

Figure 8



REF	DESCRIPTION
A	Instrument Panel (See Instrument Panel on Page 32.)
B	Floor Controls (See Floor Controls (SST) on Page 33.)
C	Right Console (See Right Console on Page 34.)
D	Left Console (See Left Console (SST) on Page 34.)

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SERVICE SCHEDULE

Chart

Maintenance work must be done at regular intervals. Failure to do so will result in excessive wear and early failures. The service schedule is a guide for correct maintenance of the Bobcat product.

⚠ WARNING

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death. W-2003-0903

SERVICE SCHEDULE		HOURS						
ITEM	SERVICE REQUIRED	8-10	50	100	200	400	800	1000
Engine Oil	Check the oil level and add as needed. Do not overfill.							
Hydraulic (Trans / Diff) Fluid	Check level and add as needed.							
Engine Air Filter and Air System	Check condition indicator (if equipped). Check for leaks and damaged components. Do not use compressed air to clean elements.							
Engine Cooling System	Clean debris from oil cooler, radiator, screen and grills. Check coolant level cold, add premixed coolant as needed.							
Safety Interlock System (Neutral Start and Operating)	Check for proper function.							
Seat Belt	Check the condition of seat belt and mounting hardware. Repair or replace as needed.							
Tires	Check for wear, damaged tires and ensure for proper sized tires and correct air pressure.							
Parking Brake	Check operation and have dealer adjust if required.							
Clean Pedals	Clean brake pedals, travel control pedals, and footrest area.							
General Items	Check for loose or broken parts, damaged operator cab, instrument operation, loose wheel nuts / bolts, oil leaks and damaged or missing signs (decals). Replace floormat if damaged or missing.							
PTO	Inspect the splines. Replaced damaged or missing shields and guards.							
Three-Point Linkage	Check operation and condition of pins, links and sway bars.							
Loader (If Equipped)	Check mounting hardware for loose or broken parts.							
Wheel Nuts and / or Bolts	Check for loose wheel nuts / bolts and tighten to correct torque. See TIRE MAINTENANCE in this Manual.	[1]						
Front Differential	Check fluid level and add as needed.							
Grease Fittings	Grease all machinery pivot points with multipurpose lithium based grease.							
Engine Oil and Filter	Replace oil and filter. Use CF / CG4 or better grade oil and Bobcat filter.		[2]					
Spark Arrestor Muffler	Empty Spark Chamber (if equipped).							
Battery	Check for damage, hold downs, cables, connections and electrolyte level. Add distilled water as needed.							
Fan / Alternator Belt	Check for damage and correct tension. Adjust or replace as needed.		[2]					
Engine Air Filter	Check primary filter element and clean as needed. Replace every year.							
Brakes	Check free travel of pedals and adjust as necessary		[2]					
Clutch (If equipped)	Check free travel of pedal and adjust as necessary							
Fuel Lines	Check hose condition and clamp tension. Replace and adjust as necessary.		[2]					
Fuel Filter	Replace filter element.							
Hydraulic Oil Filter	Replace the filter element.		[2]					
Hydrostatic Oil Filter (HST Only)	Replace the filter element.		[2]					
Hydraulic, Hydrostatic and Power Steering Hoses and Tubelines	Check for damage and leaks. Repair or replace as needed.							
Radiator Hoses and Clamps	Check hose condition and clamp tension. Replace and/or adjust tension as needed.							
Toe In	Check front axle toe in. Adjust if necessary.							
Hydraulic (Trans / Diff) Fluid	Replace the fluid and filter.		[2]					
Differential Oil - Front	Replace the front differential oil.		[2]					
Clutch Housing (If equipped)	Drain water from clutch housing.							
Engine Valves	Check and adjust							
Engine Coolant	Flush the cooling system. Replace the coolant. (or every 2 years)							

[1] Check every 8 hours for the first 24 hours.
[2] Perform at first 50 hours, then as scheduled.

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COMPACT TRACTOR CAPACITIES

Compact Tractor Loader Lift Capacity

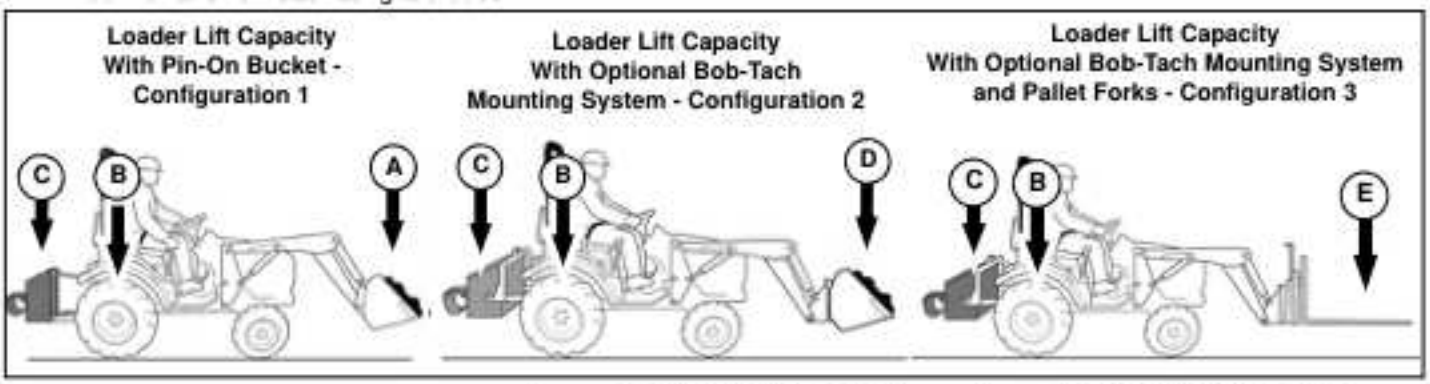
The compact tractor lift capacity with the loader and standard bucket, correct rear ballast, and tires with the correct load rating is listed in the chart below.

The following items will **reduce** the loader lift capacity:

- Use of larger buckets or attachments which moved the load center forward.
- The loader is equipped with the optional Bob-Tach mounting system.
- If the weight of the rear ballast is reduced.
- Tires with a lower load rating are used.

Ballast (Rear)

The correct rear ballast must be installed on the compact tractor for maximum loader lift capacity. Install a three-point hitch ballast box (see chart below) **and** fill the rear tires with liquid ballast. Both compact tractor rear tires must be filled to 75% full with calcium chloride mixture of 5 lb. / Gal. of water (or 0.6 kg / liter of water).



		9TL S/N AL4F00101 & Above, AKPW00101 & Above		9TL S/N AE3500101 & Above	
		(**A**) 68 in. (1727 mm) Pin-On Bucket	(**D**) 68 in. (1727 mm) Bob-Tach Bucket	(**A**) 72 in. (1829 mm) Pin-On Bucket	(**D**) 72 in. (1829 mm) Bob-Tach Bucket
Bucket Weight		264 lb. (120 kg)	280 lb. (127 kg)	265 lb. (120 kg)	268 lb. (122 kg)
Rear Ballast Box Weight (**C**) (NOTE: Weight (**C**) does not include liquid ballast. Also add liquid ballast (**B**) for maximum loader lift capacity.)		1110 lb. (503 kg)	1110 lb. (503 kg)	1110 lb. (503 kg)	1110 lb. (503 kg)
Loader lift capacity at full height with Bucket (Model 9TL Loader and Liquid Ballast (**B**) and Rear Ballast (**C**) installed)	Measured at pivot pin	2713 lb. (1231 kg)	2655 lb. (1204 kg)	2600 lb. (1179 kg)	2450 lb. (1111 kg)
	Measured at 500 mm from pivot	2030 lb. (921 kg)	1950 lb. (885 kg)	2050 lb. (930 kg)	1900 lb. (862 kg)
Loader lift capacity at 59 in. lift height with Bucket (Model 9TL Loader and Liquid Ballast (**B**) and Rear Ballast (**C**) installed)	Measured at pivot pin	3191 lb. (1447 kg)	3057 lb. (1387 kg)	N/A	N/A
	Measured at 500 mm from pivot	2537 lb. (1151 kg)	2392 lb. (1085 kg)	N/A	N/A
Boom breakout force	Measured at pivot pin	4090 lb. (1855 kg)	4063 lb. (1843 kg)	N/A	N/A
	Measured at 500 mm from pivot	3028 lb. (1373 kg)	2919 lb. (1324 kg)	N/A	N/A
Bucket rollback force measured at 500 mm from pivot pins	Measured at maximum lift height	3002 lb. (1362 kg)	2819 lb. (1279 kg)	N/A	N/A
	Measured at 59 in. lift height	3599 lb. (1632 kg)	3411 lb. (1547 kg)	N/A	N/A
	Measured at ground level	2622 lb. (1189 kg)	2336 lb. (1060 kg)	N/A	N/A
(**E**) Loader lift capacity at full height with 42 in. (1067 mm) pallet forks (Model 9TL Loader and Liquid Ballast (**B**) and Rear Ballast (**C**) installed). Pallet forks weight 364 lb. (165 kg)	Measured at 24 in. (610 mm) in front of pallet fork frame	N/A	1350 lb. (612 kg)	N/A	1350 lb. (612 kg)
(**B**) Liquid Ballast Weight – Both rear tires filled to 75% full with calcium chloride mixture of 5 lb. / gal. of water (0.6 kg / liter of 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 machine and attachment / implement 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 and the attachment / implement.

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 / implement safely under all conditions of the work area. Fasten seat belt securely when Roll-Over Protective Structure (ROPS) is up and locked. DO NOT wear the seat belt if ROPS is down.

Know the Work Conditions

- Know the weight of the materials being handled. Avoid exceeding the machine and attachment / implement load capacities. 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, hearing protection, or respiratory equipment are required for some work. See your Bobcat dealer about Bobcat Safety equipment for your machine.

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