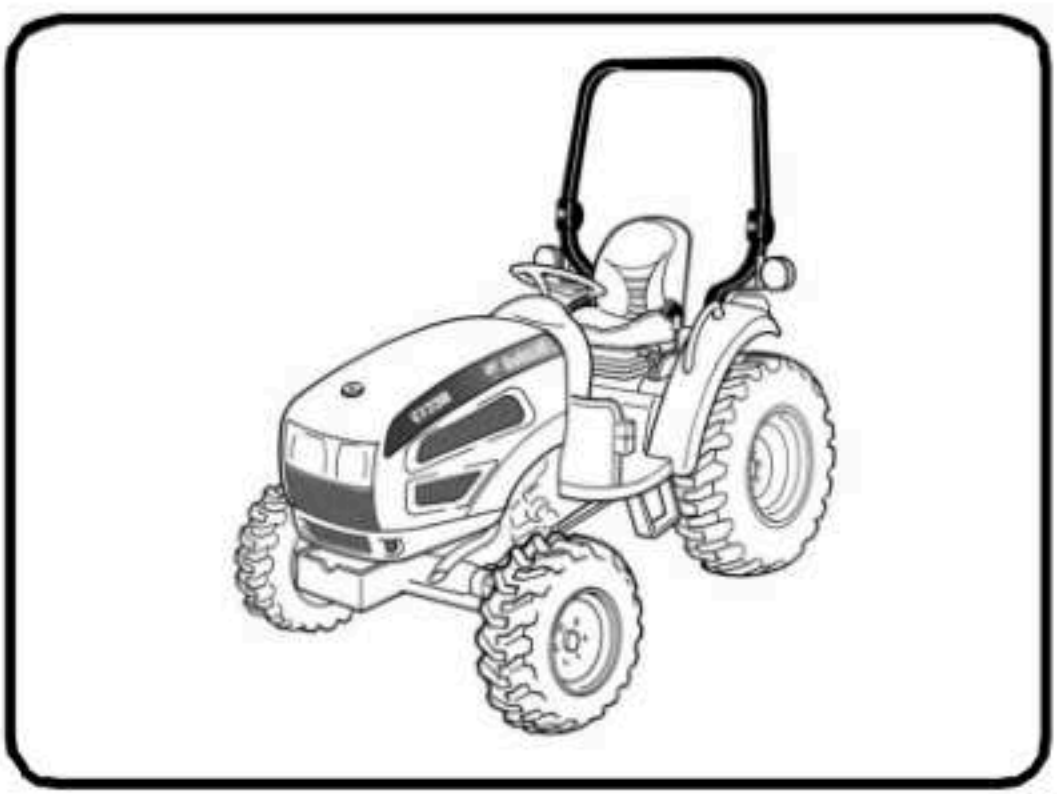
Bobcat

AU
NZ

Operation & Maintenance Manual
CT230 Compact Tractor

S/N ABFP11001 & Above



6987066 AU/NZ (5-09) Revised (3-10) (3)

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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

Doosan Benelux SA
Drève Richelle 167
B-1410 Waterloo
BELGIUM

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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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SERIAL NUMBER LOCATIONS 8
- Compact Tractor Serial Number 8
- Engine Serial Number 8
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COMPACT TRACTOR IDENTIFICATION (WITH OPTIONAL THREE-POINT IMPLEMENT AND FRONT BALLAST) 12

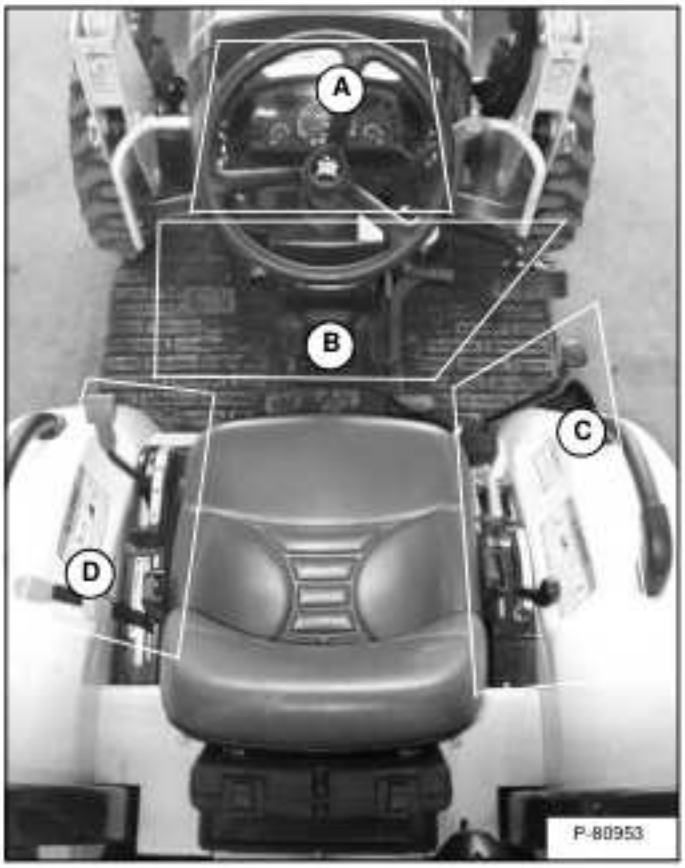
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OPERATOR CONTROLS AND INSTRUMENT PANELS

Overview

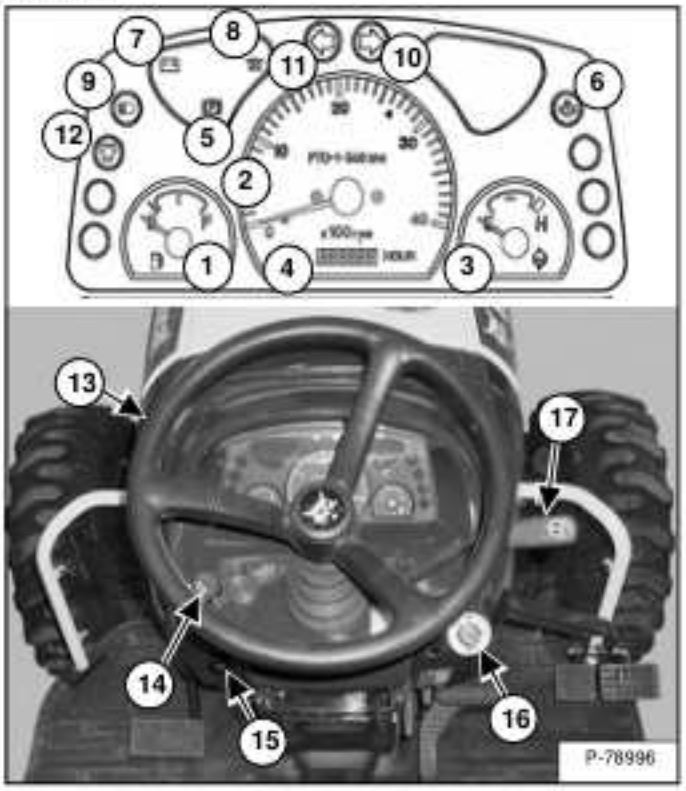
Figure 7



REF	DESCRIPTION
A	Instrument Panel (See Instrument Panel on Page 31.)
B	Floor Controls (See Floor Controls on Page 32.)
C	Right Console (See Right Console on Page 33.)
D	Left Console (See Left Console on Page 33.)

Instrument Panel

Figure 8



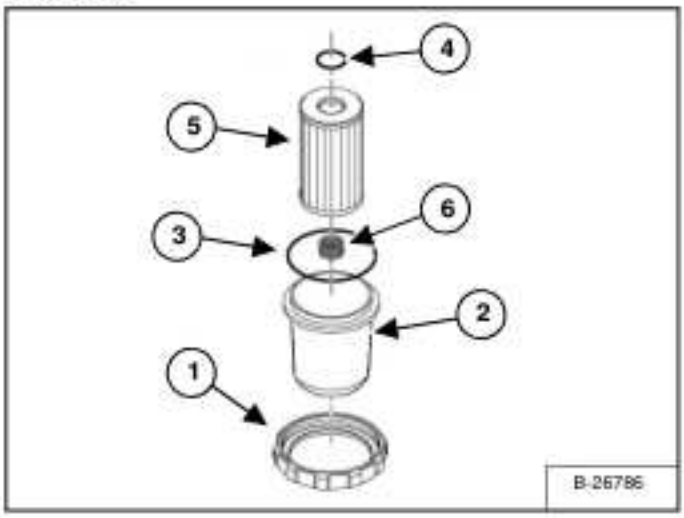
REF	DESCRIPTION	FUNCTION / OPERATION
1	Fuel Gauge	Shows amount of fuel in the tank.
2	Tachometer	Shows engine RPM.
3	Engine Temperature Gauge	Shows engine coolant temperature.
4	Hourmeter	Records the total operating hours of compact tractor.
5	Parking Brake Indicator Light	Light comes on when parking brake is activated. Off when brake is released.
6	Engine Oil Pressure Warning Light	Light comes on when pressure is below allowable range. STOP the engine if the light comes ON.
7	Charging System Light	Light comes on when battery voltage is low.
8	Glow Plug Light	Light comes on when glow plugs are activated. (Glow plugs may stay activated after starting.)
9	High Beam Indicator Light	Light is on when the front lights are on high.
10	Right Directional Signal Indicator	On when turn signal switch is activated for right turn.
11	Left Directional Signal Indicator	On when turn signal switch is activated for light turn.
12	PTO Indicator Light	On when PTO is engaged (rear or mid).
13	Steering Wheel	----
14	Lights / Turn Signal Switch / Horn	OFF/ LOW/ HIGH Beam; Lever up for right turn, Lever center position OFF, Lever down for left turn. Push for horn.
15	Hazard / Flasher Lights Switch	Press to right to activate flasher, Press to left to turn OFF.
16	Key Switch	(See STARTING THE ENGINE on Page 59.)
17	Engine Speed Control Lever	Move lever back to increase engine RPM, forward to decrease engine RPM.

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Fuel Filter

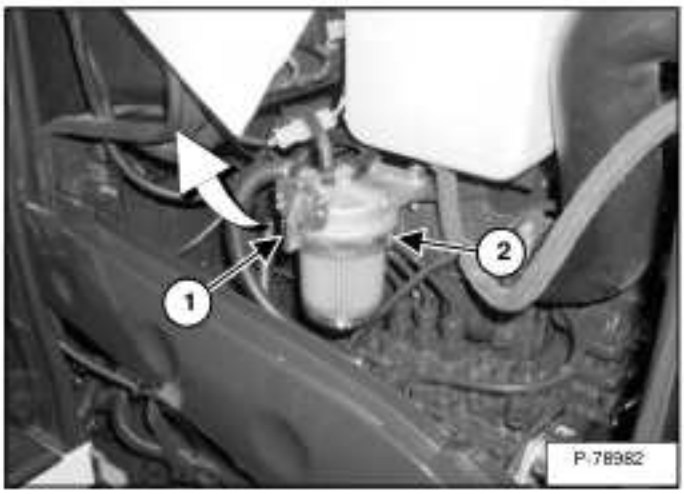
Remove water from or replace the fuel filter at the correct interval. (See SERVICE SCHEDULE on Page 131.)

Figure 204



The fuel filter assembly consists of the following: Locking Collar (Item 1), Bowl (Item 2), O-ring (Item 3), O-ring (Item 4), Filter (Item 5), and Spring (Item 6) **[Figure 204]**.

Figure 205



Removing Water:

The fuel filter is located under the engine cover on the right side of the engine **[Figure 205]**.

Clean the area around the filter housing.

Move the fuel shut off lever to the OFF position (Item 1) **[Figure 205]**.

Place a drain pan under the fuel filter.

Remove the locking collar (Item 2) **[Figure 205]** at the filter element and remove the fuel bowl and filter.

Remove the filter and drain the fuel, water and any sediment into the drain pan. Dispose of the used fuel in an environmentally safe manor.

Reinstall the filter and bowl. Turn the lever to the ON position **[Figure 206]**.

Replacing Filter:

Clean the area around the filter housing.

Move the fuel shut off lever to the OFF position (Item 1) **[Figure 205]**.

Place a drain pan under the fuel filter.

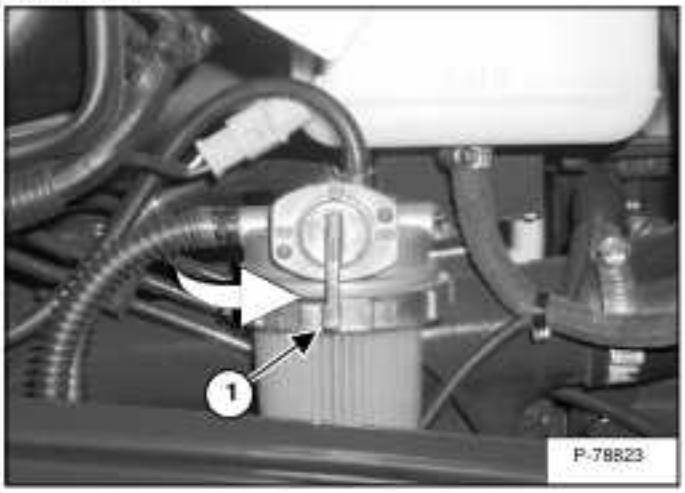
Remove the locking collar (Item 2) **[Figure 205]** at the filter element and remove the fuel bowl and filter.

Remove the filter and drain the fuel, water and any sediment into the drain pan. Dispose of the used fuel and filter in an environmentally safe manor.

Put clean oil on the O-rings.

Install the new fuel filter, bowl and locking collar.

Figure 206



Return the shutoff lever to the ON position (Item 1) **[Figure 206]**.

Remove air from the fuel system. (See Removing Air From The Fuel System on Page 152.)

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COMPACT TRACTOR CAPACITIES

Compact Tractor Loader Lift Capacity

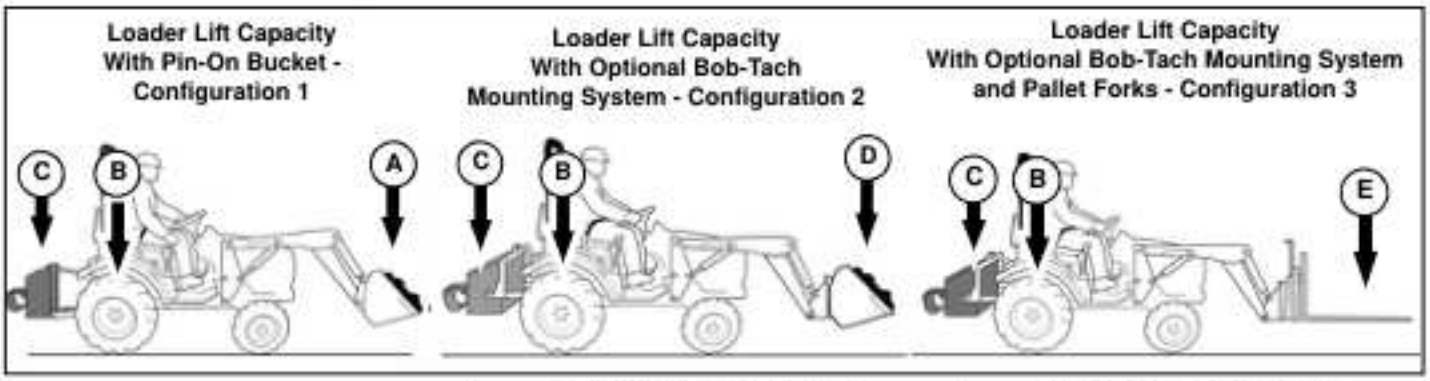
The compact tractor lift capacity with the loader and standard bucket, correct rear ballast, and tires with the correct load rating is listed in the chart below.

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. There are two options for installing the correct rear ballast. Option 1 is to install a three-point hitch ballast box (see chart below). Option 2 is to install a three-point hitch ballast box **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).



		7TL S/N AL4D00101 & Above, AKPD00101 & Above		7TL S/N A91100101 & Above	
		(**A**) 62 in. (1575 mm) Pin-On Bucket	(**D**) 62 in. (1575 mm) Bob-Tach Bucket	(**A**) 60 in. (1524 mm) Pin-On Bucket	(**D**) 60 in. (1524 mm) Bob-Tach Bucket
Bucket Weight		188 lb. (85 kg)	223 lb. (101 kg)	205 lb. (93 kg)	205 lb. (93 kg)
Rear Ballast Weight (**C**) without liquid (**B**) ballast installed		880 lb. (400 kg)	880 lb. (400 kg)	880 lb. (400 kg)	880 lb. (400 kg)
Rear Ballast Weight (**C**) with liquid (**B**) ballast installed		646 lb. (294 kg)	646 lb. (294 kg)	646 lb. (294 kg)	646 lb. (294 kg)
Loader lift capacity at full height with Bucket (Model 7TL Loader and Liquid Ballast (**B**) and or Rear Ballast (**C**) installed)	Measured at pivot pin	1514 lb. (688 kg)	1417 lb. (644 kg)	1605 lb. (730 kg)	1480 lb. (673 kg)
	Measured at 500 mm from pivot	1108 lb. (504 kg)	1032 lb. (469 kg)	1225 lb. (557 kg)	1090 lb. (495 kg)
Loader lift capacity at 59 in. lift height with Bucket (Model 7TL Loader and Liquid Ballast (**B**) and or Rear Ballast (**C**) installed)	Measured at pivot pin	1689 lb. (768 kg)	1506 lb. (685 kg)	N/A	N/A
	Measured at 500 mm from pivot	1264 lb. (575 kg)	1168 lb. (531 kg)	N/A	N/A
Boom breakout force	Measured at pivot pin	2213 lb. (1006 kg)	2171 lb. (987 kg)	N/A	N/A
	Measured at 500 mm from pivot	1644 lb. (747 kg)	1571 lb. (714 kg)	N/A	N/A
Bucket rollback force measured at 500 mm from pivot pins	Measured at maximum lift height	2420 lb. (1100 kg)	2767 lb. (1258 kg)	N/A	N/A
	Measured at 59 in. lift height	2655 lb. (1207 kg)	2878 lb. (1308 kg)	N/A	N/A
	Measured at ground level	2194 lb. (997 kg)	1989 lb. (902 kg)	N/A	N/A
(**E**) Loader lift capacity at full height with 42 in. (1067 mm) pallet forks (Model 7TL Loader and Liquid Ballast (**B**) and or 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	752 lb. (342 kg)	N/A	740 lb. (336 kg)

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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.

SI CT-1008

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