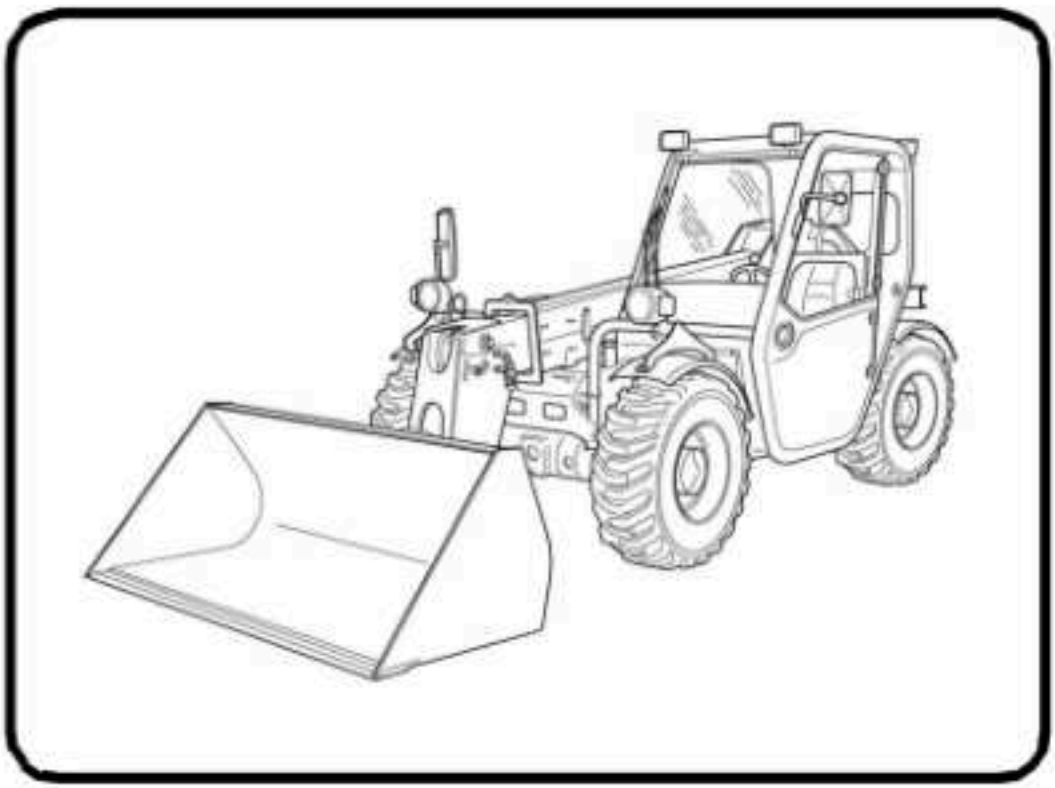
Bobcat®

Operation & Maintenance Manual
V417 VersaHANDLER®
Telescopic Tool Carrier (TTC)

S/N AC1C13000 & Above (With Cab)
S/N AC1D13000 & Above (With Canopy)



6989570 (2-10)

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REFERENCE INFORMATION

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

VersaHANDLER 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

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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 VersaHANDLER Telescopic Tool Carrier (TTC) which is a type of Rough Terrain Forklift. READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR Bobcat VersaHANDLER. If you have any questions, see your Bobcat VersaHANDLER dealer. This manual may illustrate machines with additional options and accessories not installed on your VersaHANDLER.

BOBCAT COMPANY IS IS0 9001 CERTIFIED 7

REGULAR MAINTENANCE ITEMS 7

SERIAL NUMBER LOCATION 8
- VersaHANDLER Serial Number 8
- Engine Serial Number 8
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DELIVERY REPORT 8

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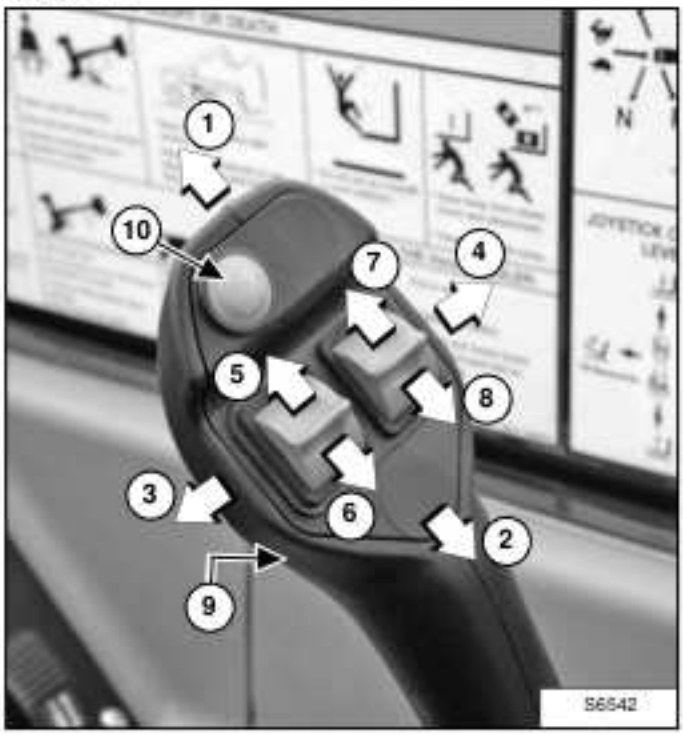
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HYDRAULIC CONTROLS

Hydraulic Control Lever (Joystick)

Figure 35



The Joystick controls the movement of the boom and attachment **[Figure 35]**.

1. Lower Boom
2. Raise Boom
3. Tilt Attachment Backward
4. Tilt Attachment Forward
5. Extend Telescopic Boom
6. Retract Telescopic Boom
7. Controls the function of the Front Auxiliary Hydraulics (Example: Close grapple teeth).
8. Controls the function of the Front Auxiliary Hydraulics (Example: Open grapple teeth).

The above joystick functions (Items 1 - 8) are proportional, the farther you move the control, the faster the hydraulic functions operate.

For the front auxiliary hydraulics functions (Items 7 and 8), front auxiliary hydraulics must first be enabled (See Center Instrument Panel on Page 28.) (See Item 13)

9. Continuous Auxiliary Hydraulics Flow ON/OFF - Default flow direction is similar to (Item 7). To reverse direction, simultaneously operate the right thumbwheel while pressing button (Item 9).

10. Boom Float Button used in combination with Item 9 to engage the float control function (If Equipped) (See Leveling The Ground Using Float (If Equipped) on Page 65.)

NOTE: If equipped with secondary auxiliary hydraulic couplers, the switch (Item 1) [Figure 38] must be pressed to the top for switch (Item 7 and 8) [Figure 35] to supply flow to the primary front auxiliary hydraulic couplers.

⚠ WARNING

AVOID INJURY OR DEATH

Diesel fuel or hydraulic fluid under pressure can penetrate skin or eyes, causing serious injury or death. Fluid leaks under pressure may not be visible. Use a piece of cardboard or wood to find leaks. Do not use your bare hand. Wear safety goggles. If fluid enters skin or eyes, get immediate medical attention from a physician familiar with this injury.

W-2072-0807

⚠ WARNING

AVOID BURNS

Hydraulic fluid, tubes, fittings and quick couplers can get hot when running machine and attachments. Be careful when connecting and disconnecting quick couplers.

W-2220-0396

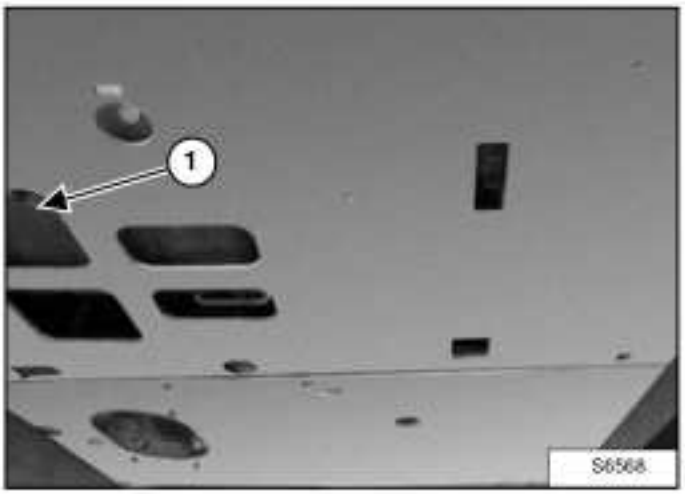
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Removing And Replacing Oil And Filter

See the SERVICE SCHEDULE for the service interval for replacing the engine oil and filter. (See SERVICE SCHEDULE on Page 77.)

Run the engine until it is at operating temperature. Stop the engine.

Figure 106



Remove the oil plug (Item 1) **[Figure 106]** from the engine oil pan through the opening in the bottom of the engine compartment.

Drain the oil into a container and recycle or dispose of used oil in an environmentally safe manner.

Install the oil plug (Item 1) **[Figure 106]**.

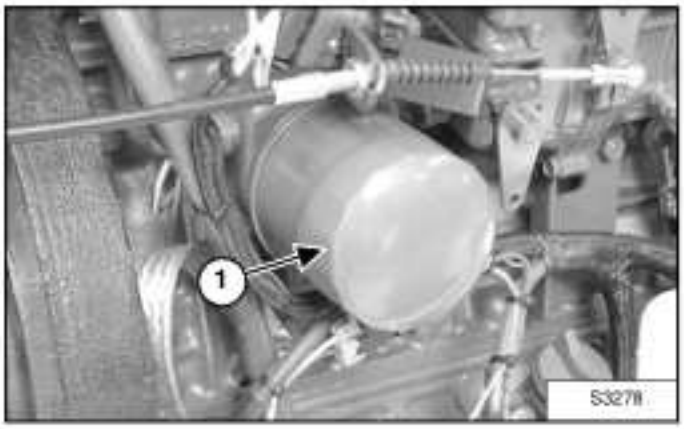
⚠ WARNING

AVOID INJURY OR DEATH

Always clean up spilled fuel or oil. Keep heat, flames, sparks or lighted tobacco away from fuel and oil. Failure to use care around combustibles can cause explosion or fire.

W-2103-0508

Figure 107



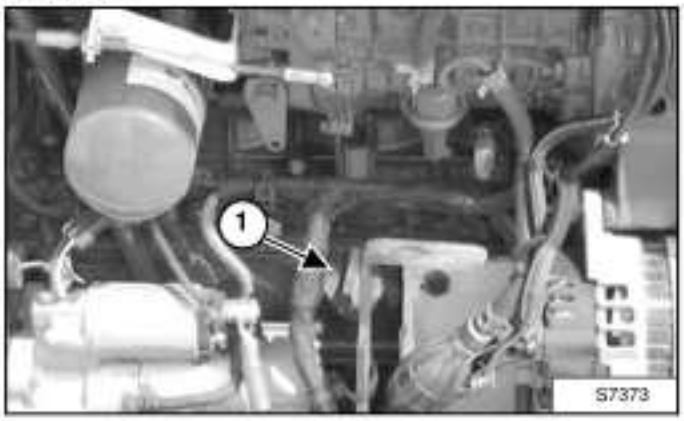
Open the engine cover. (See ENGINE COVER on Page 82.).

Remove the oil filter (Item 1) **[Figure 107]**.

Clean the filter housing surface.

Put clean oil on the new oil filter gasket. Install the filter and hand tighten.

Figure 108



Remove the fill cap (Item 1) **[Figure 108]**.

Put oil in the engine. (See Capacities on Page 143.) (See Engine Oil Chart on Page 88.)

Install the fill cap, start the engine and let it run for several minutes.

Stop the engine, and check for leaks at the oil filter.

Remove the dipstick (Item 1) **[Figure 104]** and check the oil level. Add oil as needed if it is not at the top mark on the dipstick.

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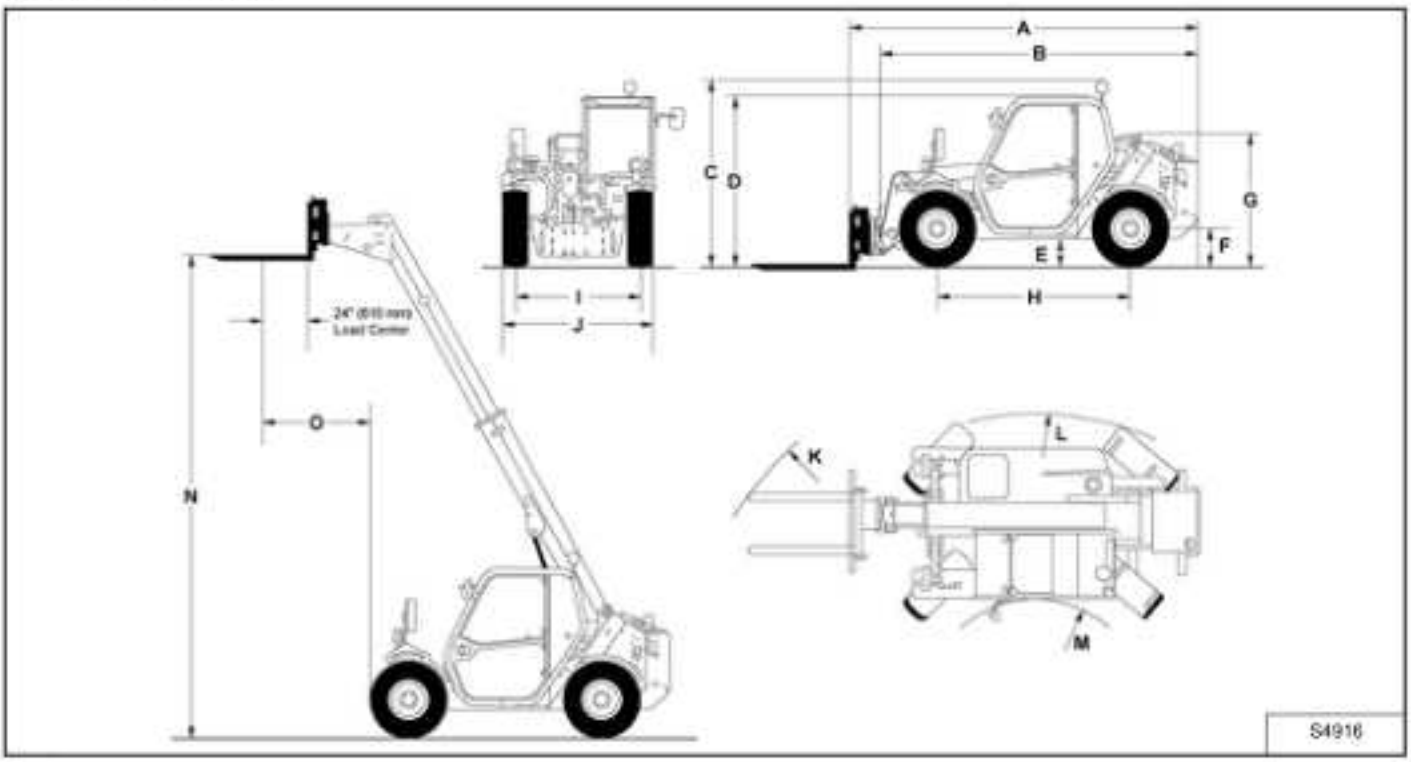
WARNING

Each attachment and each VersaHANDLER TTC have different Load Capacity Charts. For example: An 84 inch bucket used on a V518 will have its own chart; that same 84 inch bucket when used on a V723 will have a different chart. Be sure you use the correct chart for your attachment and VersaHANDLER TTC combination. W-2493-0204

Dimensions are given for machine equipped with standard tires and may vary with other tire types.

- All dimensions are shown in inches. Respective metric dimensions are given in millimeters enclosed by parentheses.
- Where applicable, specifications conform to SAE, ASME or ISO standards and are subject to change without notice.

Machine Dimensions



A	156.8 in. (3984 mm)
B	141.1 in. (3585 mm)
C	86.0 in. (2185 mm)
D	78.1 in. (1985 mm)
F	16.9 in. (430 mm)
G	61.1 in. (1553 mm)
H	90.6 in. (2300 mm)
I	58.5 in. (1485 mm)
J	72.4 in. (1840 mm)
K	168.5 in. (4280 mm)
L	124.8 in. (3170 mm)
M	59.0 in. (1500 mm)
N	206 in. (5230 mm)
O	42 in. (1067 mm) (24" load center)

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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 VersaHANDLER 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

- OSHA Rule 29 CFR 1910.178 (l) requires employers to train employees operating Rough Terrain Forklifts.
- 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 or structures 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.

Know the Work Conditions

- Know the weight of the materials being handled. Avoid exceeding the Rated Load Capacity of the machine (as indicated on the Load Capacity Charts). 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, respiratory equipment, hearing protection or Front Window Guard are required for some work See your Bobcat dealer about Bobcat Safety Equipment.

SI VH-0208

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