# V417

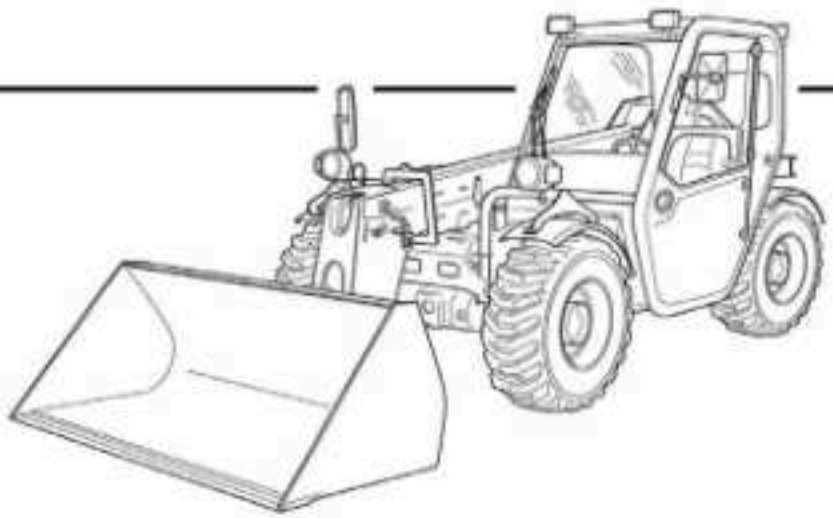
Bobcat®

VersaHANDLER®

Telescopic Tool Carrier (TTC)

# Operation & Maintenance Manual

**V417 - S/N A7MK11001 & Above** (With Cab)
**V417 - S/N A7ML11001 & Above** (With Canopy)



Bobcat
Printed in U.S.A.

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**CALIFORNIA**
**PROPOSITION 65 WARNING**

Diesel engine exhaust and some of its constituents are known to the State of California to cause cancer, birth defects and other reproductive harm.

**REFERENCE INFORMATION**

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

VersaHANDLER Serial Number _____

Engine Serial Number _____

NOTES:

_____

_____

YOUR VersaHANDLER DEALER:

_____

ADDRESS:

_____

PHONE:

_____


Bobcat Company
P.O. Box 128
Gwinner, ND 58040-0128

Bobcat Company Europe
Drève Richelle 167
B-1410 WATERLOO
Belgium







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**BOBCAT COMPANY IS ISO 9001:2000 CERTIFIED**

**ISO 9001:2000** is an international standard that controls the processes and procedures which we use to design, develop, manufacture and distribute Bobcat products.

British Standards Institute (**BSI**) is the Certified Registrar Bobcat Company chose to assess the Company's compliance with the ISO 9001:2000 standard. The BSI registration certifies that Bobcat's manufacturing facilities in Gwinner and Bismarck, North Dakota (North America), Pontchateau (France), Dobris (Czech Republic) and the Bobcat corporate offices (Gwinner, Bismarck & West Fargo) in North Dakota are in compliance with ISO 9001:2000. Only certified assessors, like BSI, can grant registrations.

ISO 9001:2000 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.

**REGULAR MAINTENANCE ITEMS**

| | |
|---|---|
|  ENGINE OIL FILTER (6 Pack)<br>6678233 |  HYDRAULIC HIGH PRESSURE FILTER<br>6919493 |
|  FUEL FILTER<br>6667352 |  HYDRAULIC PRIMARY FILTER<br>6661248 |
|  AIR FILTER, Outer<br>6910725 |  COOLANT PRESSURE CAP |
|  AIR FILTER, Inner<br>6910726 |  BATTERY<br>6918358 |
|  FLUID, Hydraulic / Hydrostatic<br>6903117 - (Two -2.5 Gal. containers)<br>6903118 - (5 Gal.)<br>6903119 - (55 Gal.) | **MOTOR OIL**<br>6903105 . . . . . SAE 15W/40 CE/SG (12 qt.)<br>6903106 . . . . . SAE 15W/40 CE/SG (1 Gal.)<br>6903113 . . . . . SAE 15W/40 CE/SG (2.5 Gal.)<br>6903107 . . . . . SAE 10W/30 CE/SG (12 qt.)<br>6903108 . . . . . SAE 10W/30 CE/SG (1 Gal.)<br>6903112 . . . . . SAE 10W/30 CE/SG (2.5 Gal.)<br>6903109 . . . . . SAE 30W CE/SG (12 qt.)<br>6903110 . . . . . SAE 30W CE/SG (1 Gal.)<br>6903111 . . . . . SAE 30W CE/SG (2.5 Gal.) |
|  Propylene Glycol<br>Premixed - 6724094<br>Concentrate - 6724354 | |

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



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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 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.

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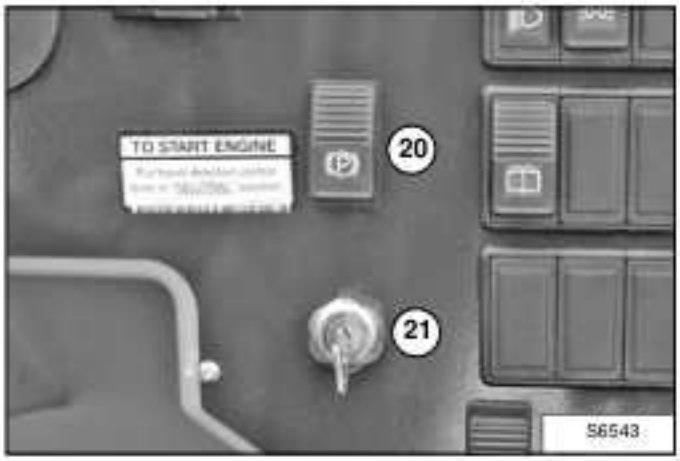
VERSAHANDLER SERIAL NUMBER ..... V



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### Right Instrument And Indicator Panel (Cont'd)

Figure OI-7

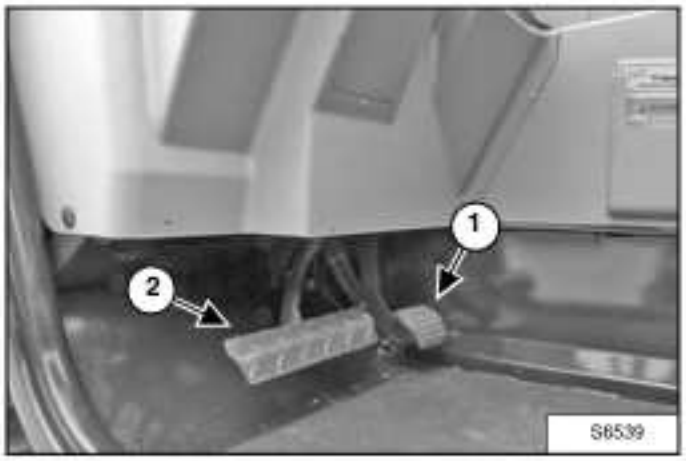



20. **Parking Brake Switch (Red Light)** - Press the bottom of the switch to engage the parking brake (Light is ON). Press the top of the switch to release the parking brake (Light is OFF).

21. **Key Switch** - To start and stop the engine (See STARTING THE ENGINE on Page OI-13).

### Accelerator Pedal

Figure OI-8




The accelerator pedal (Item 1) **[Figure OI-8]** is on the right side below the steering console.

Press the accelerator pedal down to increase engine speed. Release foot pressure to decrease engine speed.

**NOTE: When the accelerator pedal is released and engine RPM returns to low idle speed, the Brake Control System will activate and the brakes will engage.**

### Brake Pedal And Inching Control

The brake pedal (Item 2) **[Figure OI-8]** is on the left of the accelerator pedal.

Press the brake pedal a small amount to decrease travel speed and control inching (gradual travel of the machine). Press the pedal farther down to stop forward or reverse travel of the machine.

**NOTE: Approximately the first half of the total brake pedal travel is for INCHING control.**



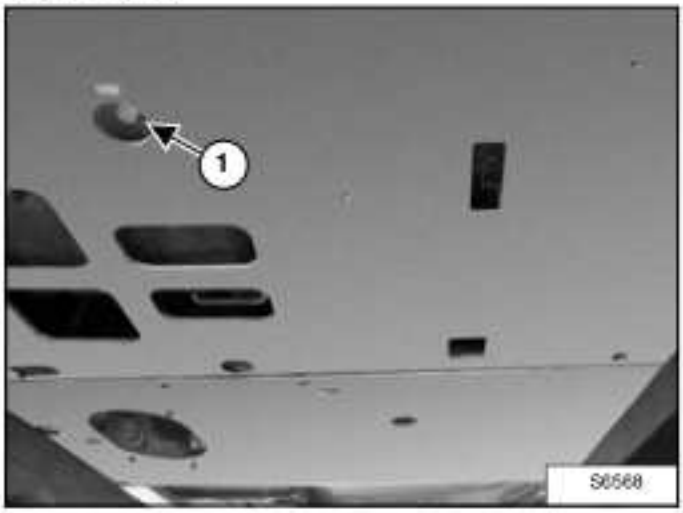
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### Replacing Oil And Filter

For the correct service interval for replacing the engine oil and filter (See SERVICE SCHEDULE on Page PM-4.).

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

**Figure PM-21**




Remove the oil plug (Item 1) **[Figure PM-21]** at the bottom of the engine compartment.

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

**NOTE: Oil at engine operating temperature is extremely hot. Take all necessary precautions to avoid injury and make sure the container is heat resistant.**

Install the oil plug (Item 1) **[Figure PM-21]**.

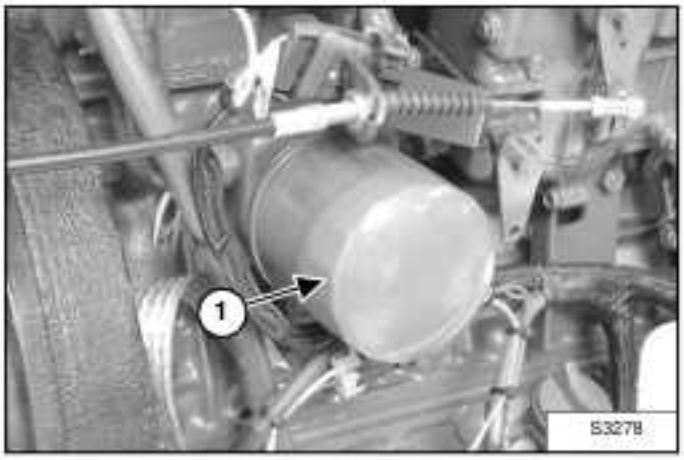
**⚠ WARNING**

**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 PM-22**



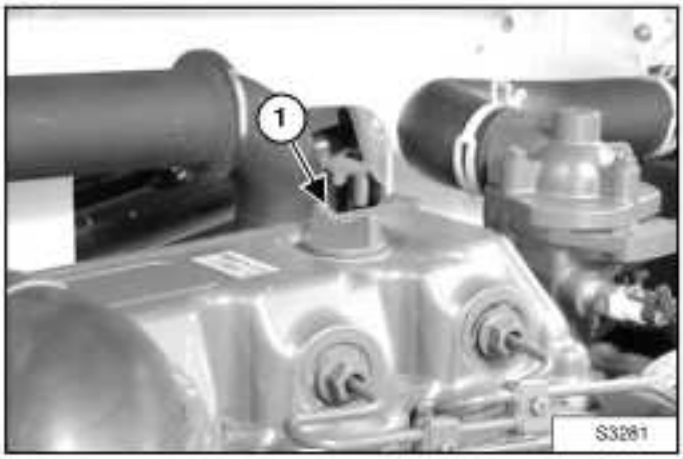

Open the engine cover. (See Page PM-8).

Remove the oil filter (Item 1) **[Figure PM-22]**.

Clean the filter housing surface.

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

**Figure PM-23**




Remove the fill cap (Item 1) **[Figure PM-23]**.

Put oil in the engine. (See Capacities on Page SPEC-5.) (See Oil Chart on Page PM-12.)

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.

Let the engine cool.

Remove the dipstick (Item 2) and check the oil level. Add oil as needed if it is not at the top mark **[Figure PM-23]** on the dipstick.

Recycle or dispose of the fluid in an environmentally safe manner. Reinstall the dipstick.



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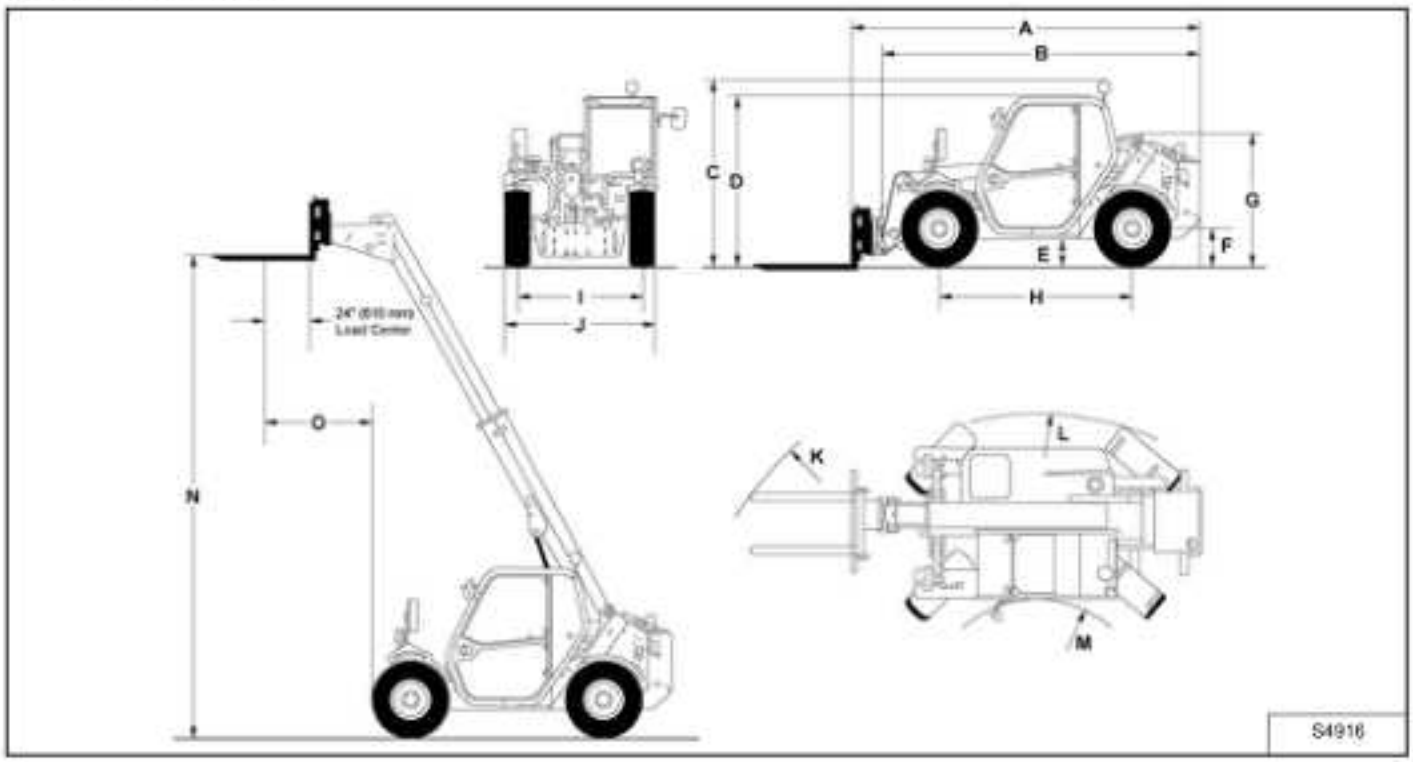
**⚠ WARNING**

**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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