V638

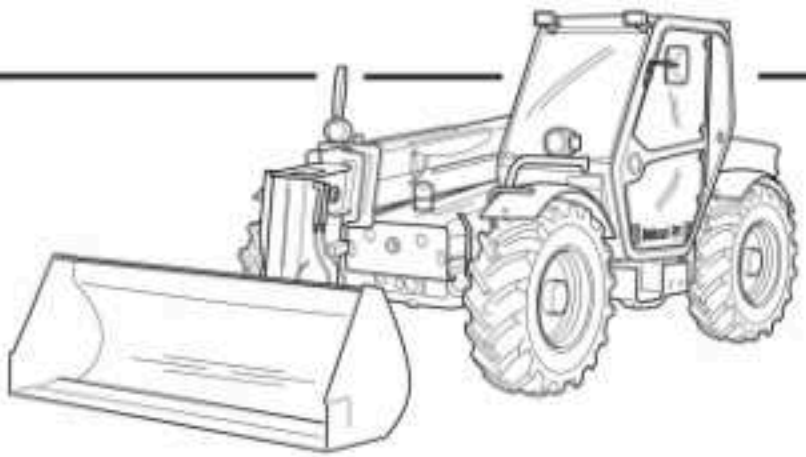
Bobcat®

VersaHANDLER®

Telescopic Tool Carrier (TTC)

Operation & Maintenance Manual

V638 - S/N A8HM11001 & Above (With Cab)
V638 - S/N A8HN11001 & Above (With Canopy)



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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 _____
Axle Housing Serial Number _____
Hydrostatic Motor Serial Number _____
Hydrostatic Pump 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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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.

BOBCAT COMPANY IS ISO 9001:2000 CERTIFIED V

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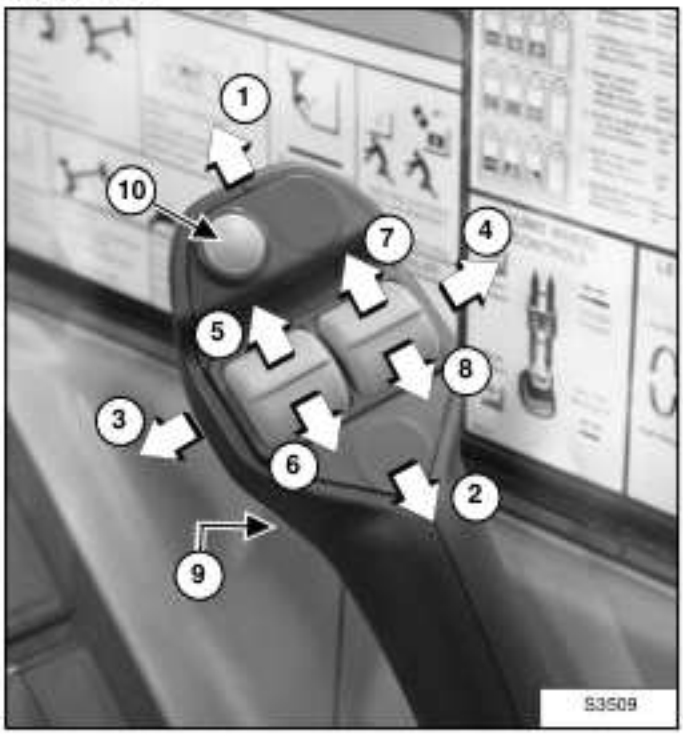
SERIAL NUMBER LOCATION VI
Engine Serial Number VI
VersaHANDLER Serial Number. VI

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HYDRAULIC CONTROLS

Hydraulic Control Lever (Joystick)

Figure OI-12



The Joystick controls the movement of the boom and attachment **[Figure OI-12]**.

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 thru 8) are proportional; The farther you move the control, the faster the hydraulic functions operate. Joystick functions (Item 7 and 8) are also used to operate the locking device for attachments. (See Installing The Bucket Or Attachment on Page OI-16.)

9. Secondary Auxiliary Hydraulics - For momentary operation of the Secondary Auxiliary Hydraulics, press and hold button then turn thumbwheel (Items 7 and 8) to control an attachment function such as change the angle of the angle broom.
10. Detent Enable Button - This button must be pressed first before using the auxiliary switch button. This button prevents the auxiliary hydraulics from activating when starting the engine.

⚠ WARNING

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-2072-0496

⚠ 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.

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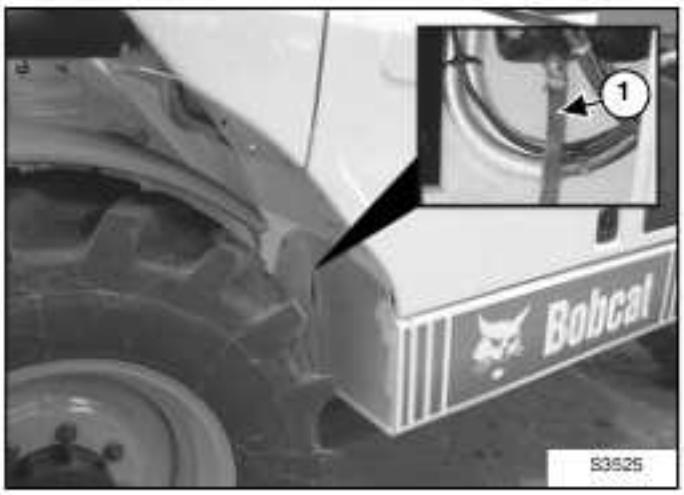
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Replacing Oil And Filter

See the SERVICE SCHEDULE for the service interval for replacing the engine oil and filter. (See SERVICE SCHEDULE on Page PM-5.)

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

Figure PM-21



Remove the access panel at the rear of the engine compartment. Route the hose (Item 1) **[Figure PM-21]** out through the access hole. Remove the cap.

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

Install cap and put the drain hose into the engine compartment, install the access cover.

⚠ WARNING

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 which can result in injury or death.

W-2103-1285

Figure PM-22



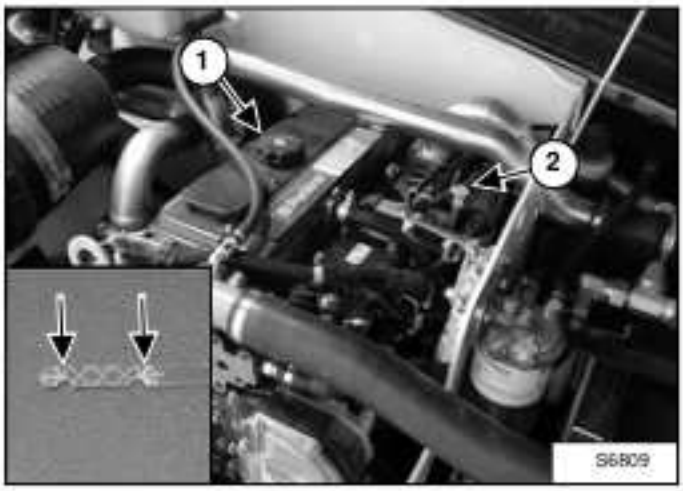
Open the engine cover. (See ENGINE COVER on Page PM-8.).

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 filler cap (Item 1) **[Figure PM-23]**.

Put oil in the engine. (See Drive System on Page SPEC-5.) (See Oil Chart on Page PM-14.)

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

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VERSAHANDLER TELESCOPIC TOOL CARRIER (TTC) SPECIFICATIONS (CONT'D)

Performance Specifications

Operating Weight	**V638** 18,275 lb. (8307 kg)	**V638 with optional stabilizers** 18849.5 lb. (8550 kg)
Maximum Rated Capacity	*6700 lb. (3045 kg)	*7716.17 lb. (3500 kg)
*Rated Load Capacity can change depending on which approved attachment is used		

- Where applicable, specifications conform to SAE, ASME or ISO standards and are subject to change without notice.

Engine

Make/Model	PERKINS 1104D-44TA (Turbo-charged)
Fuel/Cooling	Diesel/Liquid
Horsepower (SAE Net)	100 HP (74,5 kW)
Number of Cylinders	Four
Lubrication	Pressure System W/Filter
Air Cleaner	Dry replaceable cartridge w/safety element
Max Torque (ISO 14396)	410 N•m @ 1400 rpm

Fan Pump

Cylinder capacity	16 cm^3
Max work pressure	(175 bar)
ventilator speed: normal/ reducted (motor 2400 rpm)	3200 RPM
ventilator speed: normal/ reducted (motor 810 rpm)	1100 RPM

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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

WARNING

Warnings on the machine and in the manuals are for your safety. Failure to obey warnings can cause injury or death.

W-2044-1285

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-1007

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