V518

Bobcat®

VersaHANDLER

Service Manual

(S/N 367011001 - 367013000)



Ingersoll Rand
Compact Vehicle Technologies

6901769 (3-06)

Printed in U.S.A.

© Bobcat Company 2006

MidWestTech | Bobcat V518 VersaHANDLER Service Manual | Publication 6901769_3_06 Order the manual at mid-west-tech.com >

CONTENTS

FOREWORD II

SAFETY INSTRUCTIONS V

SERIAL NUMBER LOCATIONS IX

DELIVERY REPORT X

BOBCAT VERSAHANDLER IDENTIFICATION XI

SAFETY AND MAINTENANCE 10-01

HYDRAULIC SYSTEM 20-01

HYDROSTATIC SYSTEM 30-01

DRIVE SYSTEM 40-01

MAIN FRAME 50-01

ELECTRICAL SYSTEM AND ANALYSIS 60-01

ENGINE SERVICE 70-01

HEATING, VENTILATION, AIR CONDITIONING 80-01

SPECIFICATIONS SPEC-01

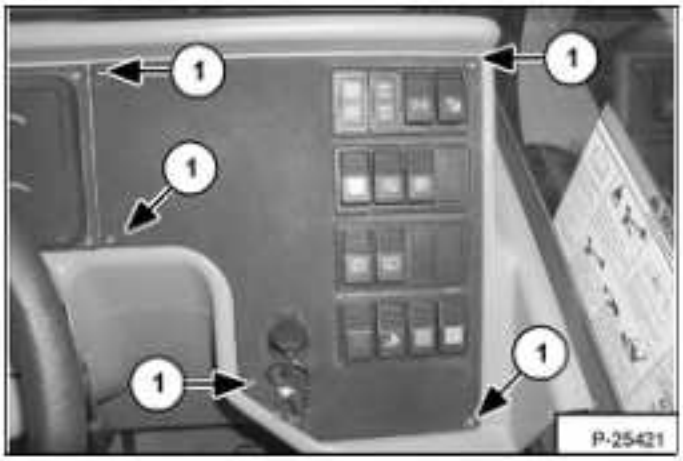
MidWestTech | Bobcat V518 VersaHANDLER Service Manual | Publication 6901769_3_06

Order the manual at mid-west-tech.com >

SWITCH PANEL

Removal And Installation

Figure 60-90-1



Remove the five screws (Item 1) **[Figure 60-90-1]**.

Figure 60-90-2



Unplug the harness connectors from the back of the switch panel **[Figure 60-90-2]**.

NOTE: Mark all connectors for ease of assembly.

Figure 60-90-3

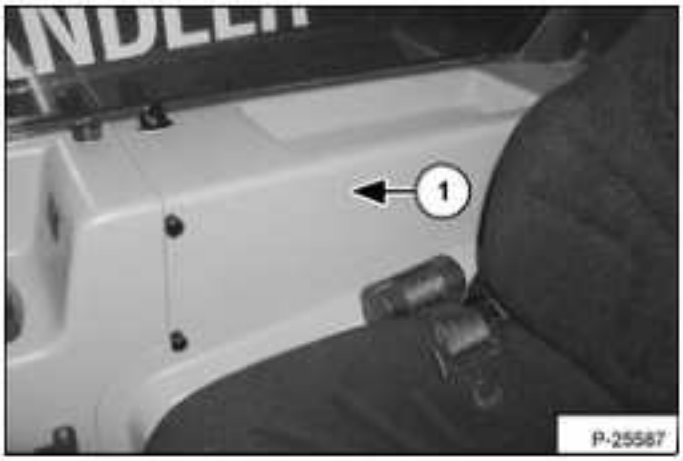


Remove the switch panel **[Figure 60-90-3]**.

MidWestTech | Bobcat V518 VersaHANDLER Service Manual | Publication 6901769_3_06 Order the manual at mid-west-tech.com >

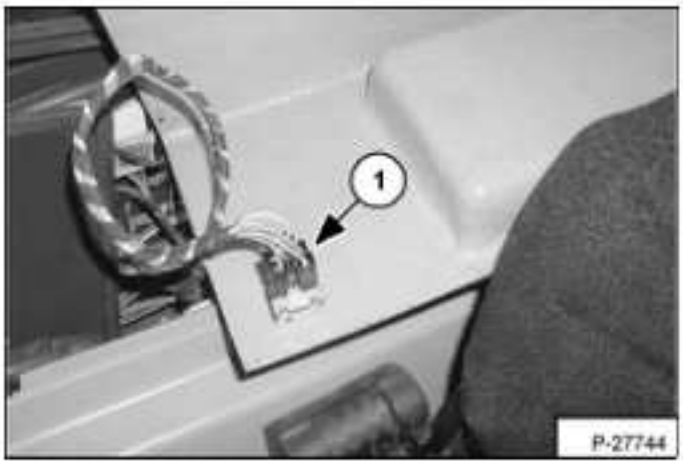
Checking The Electrical System (Cont'd)

Figure 80-50-16



Remove the fuse box cover (Item 1) **[Figure 80-50-16]**.

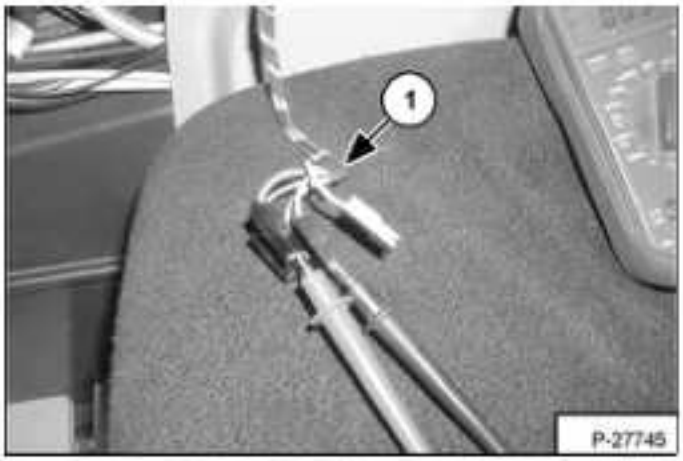
Figure 80-50-17



Disconnect the main wire harness connectors (Item 1) **[Figure 80-50-17]** from the switch.

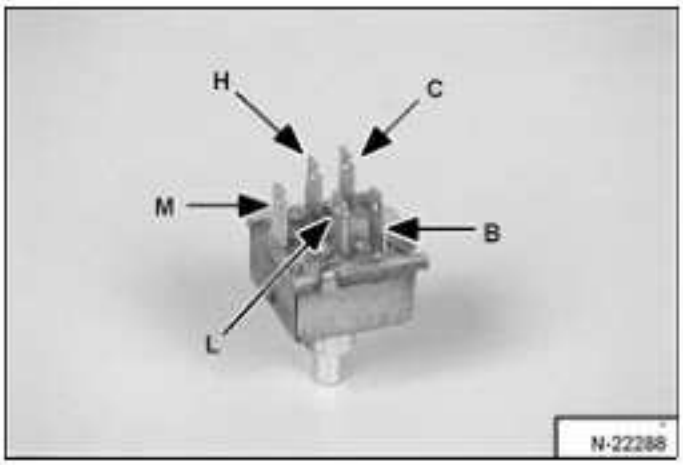
NOTE: Mark the wires for correct assembly.

Figure 80-50-18



Check the main harness (Item 1) **[Figure 80-50-18]** for voltage. The voltage should be 12 volts if there is no voltage check the harness for broken wires.

Figure 80-50-19



If there is voltage at the main harness check the blower switch **[Figure 80-50-19]** for resistance.

With the switch in the **OFF** position, there should be zero resistance between all terminals.

With the switch in the **1** position, there should be resistance between **C** terminal and the **B** terminal. And also between the **C** terminal and the **L** terminal frame **[Figure 80-50-19]**.

With the switch in the **2** position, there should be resistance between **C** terminal and the **B** terminal. And also between the **C** terminal and the **M** terminal frame **[Figure 80-50-19]**.

With the switch in the **3** position, there should be resistance between **C** terminal and the **B** terminal. And also between the **C** terminal and the **H** terminal frame **[Figure 80-50-19]**.

If any of the above resistance tests fail, replace the blower switch.

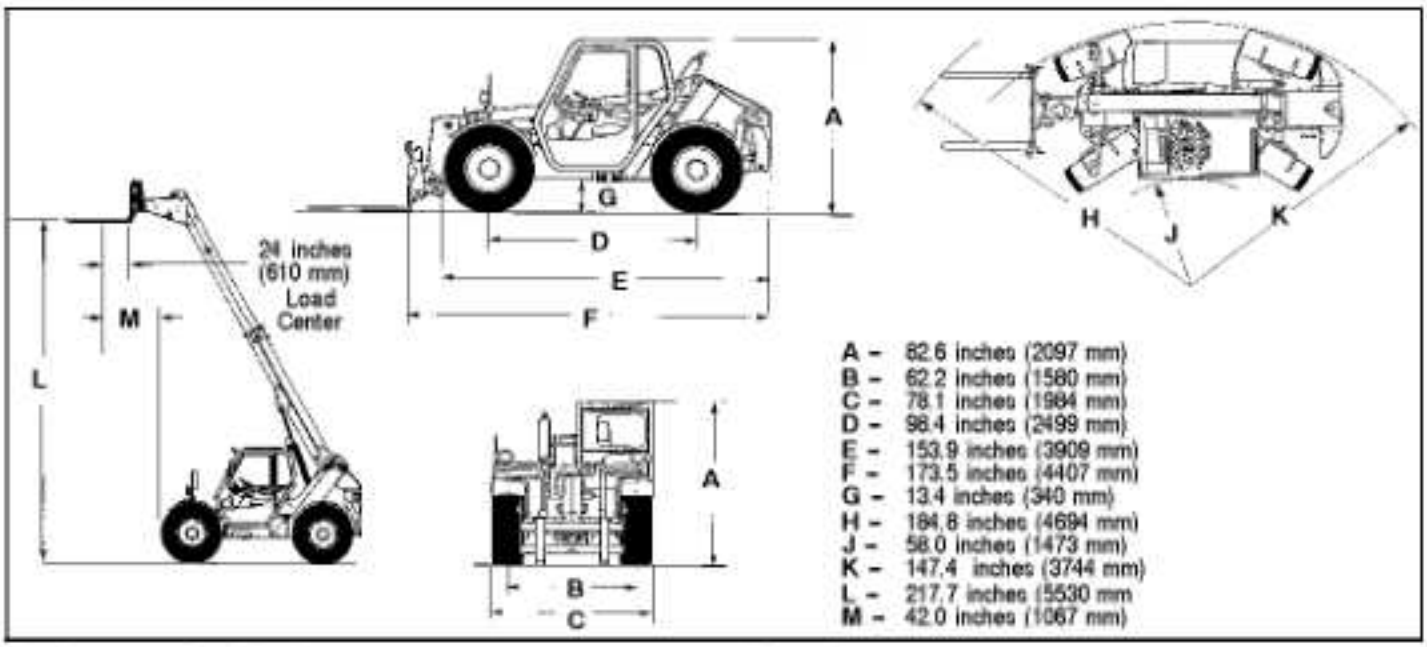
MidWestTech | Bobcat V518 VersaHANDLER Service Manual | Publication 6901769_3_06 Order the manual at mid-west-tech.com >

⚠ 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 V623 will have a different chart. Be sure you use the correct chart for your attachment and VersaHANDLER TTC combination. W-2395-0301

- 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.

Dimensional Specifications



Performance Specifications

Operating Weight	10846 lbs. (4920 kg)
Maximum Rated Capacity	*5500 lbs. (2495 kg) *6500 lbs. (2948 kg)

* Rated Load Capacity can change depending on which approved attachment is used.

Controls

Steering	Steering Wheel w/ 3 Mode Selections (2-Wheel, 4-Wheel)
Hydraulics	Joystick w/ switches
Auxiliary Hydraulics	Electrical Switches on Joystick
Parking Brake	Hand Operated Lever

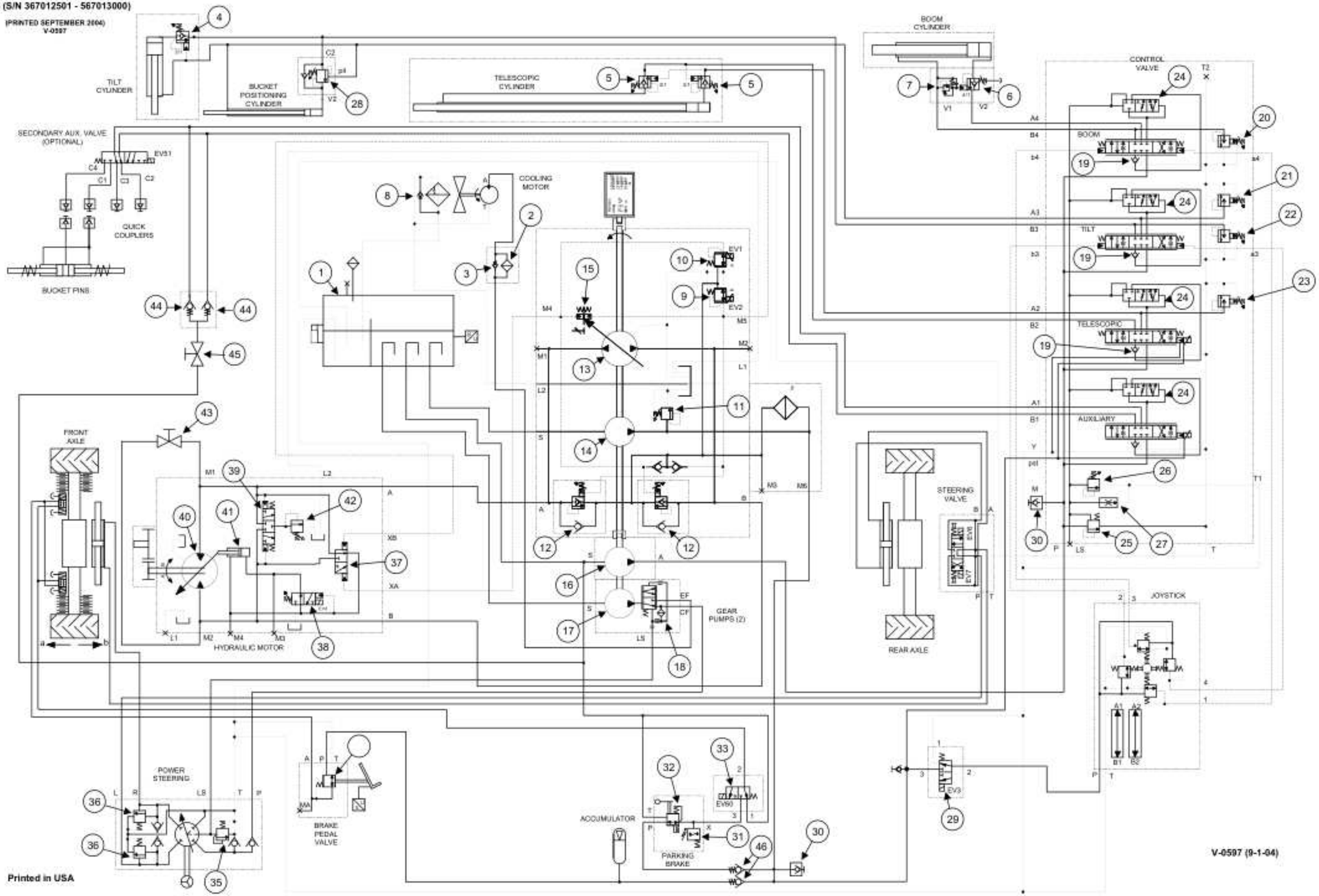
Engine

Mak/Model	PERKINS 1004-40T (Turbocharged)
Fuel/Cooling	Diesel/Liquid
Horsepower (SAE net)	105 HP (79 kW)
Number of Cylinders	Four
Lubrication	Pressure System W/Filter
Air Cleaner	Dry replaceable cartridge w/ safety element

MidWestTech | Bobcat V518 VersaHANDLER Service Manual | Publication 6901769_3_06 Order the manual at mid-west-tech.com >

HYDRAULIC SCHEMATIC
V518 (S/N 367012501 - 567013000)

(PRINTED SEPTEMBER 2004)
V-0597



Printed in USA

V-0597 (9-1-04)

Order the manual at mid-west-tech.com >