V638

Bobcat®

VersaHANDLER

Service Manual

S/N A2ZV11001 & Above (with Cab)
S/N A2ZW11001 & Above (with Canopy)



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Ingersoll Rand
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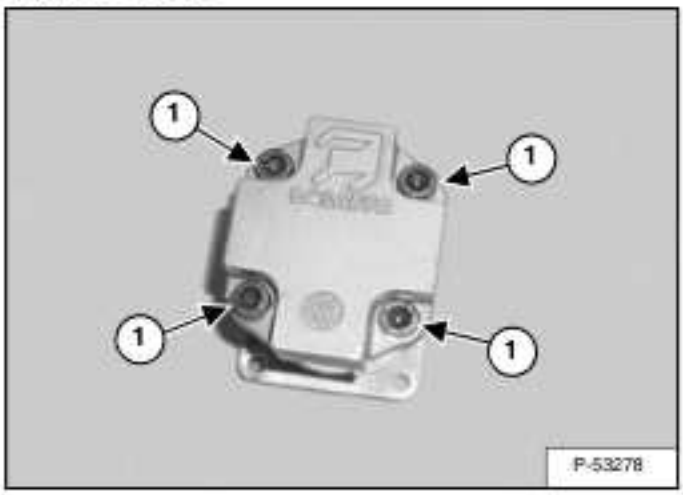
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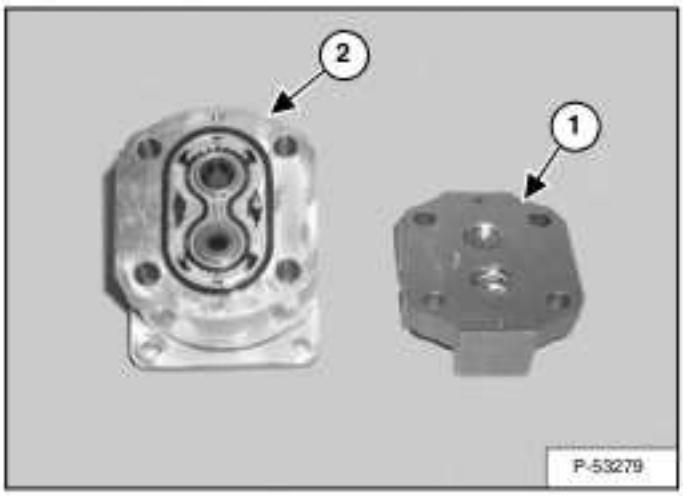
Figure 20-140-18



Remove the four bolts (Item 1) **[Figure 20-140-18]** from the end.

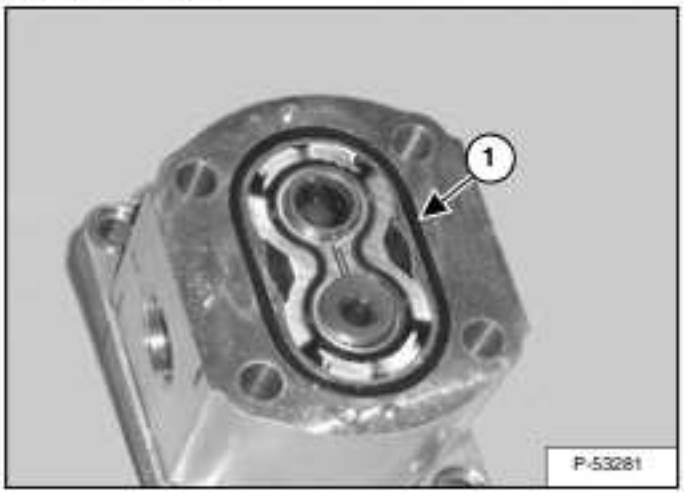
Assembly: Tighten bolts to 32-35 ft.-lbs. (43-47 N•m) torque.

Figure 20-140-19



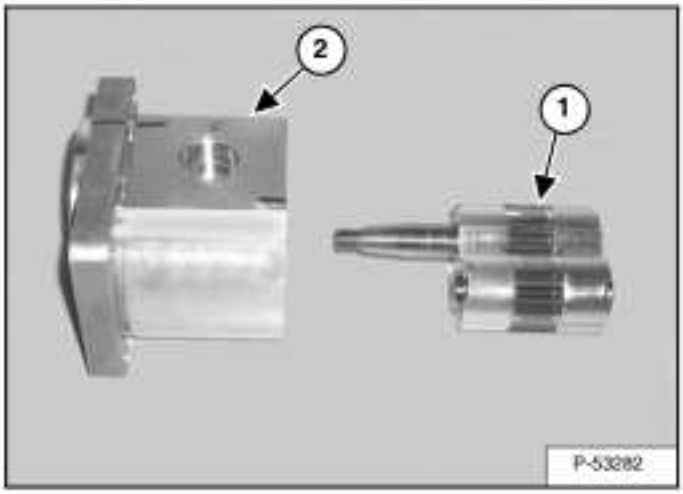
Remove the end cover (Item 1) from the main housing (Item 2) **[Figure 20-140-19]**.

Figure 20-140-20



Remove the quad ring (Item 1) **[Figure 20-140-20]** from the housing.

Figure 20-140-21

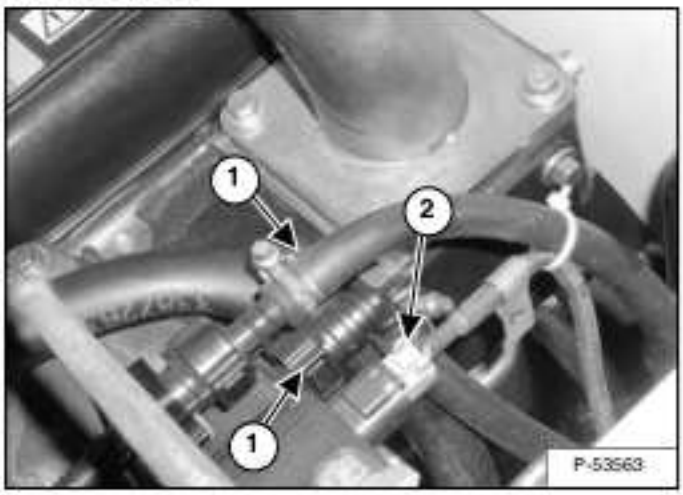


Remove the gear assembly (Item 1) from the housing (Item 2) **[Figure 20-140-21]**.

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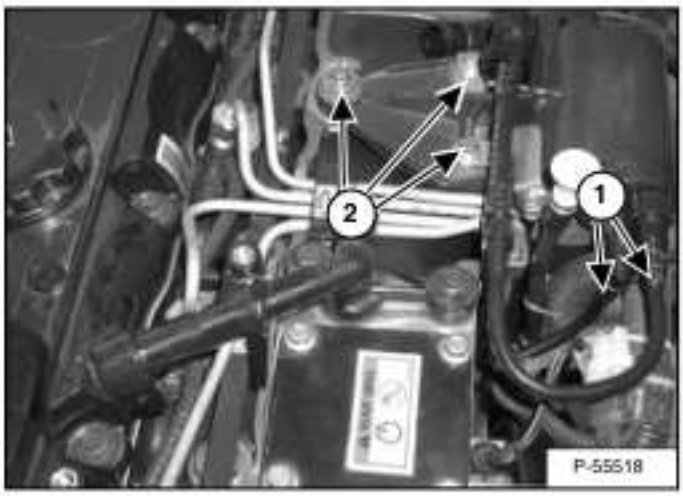
Fuel Lift Pump Removal And Installation

Figure 70-70-35



Remove the two fuel lines (Item 1) and electrical harness (Item 2) **[Figure 70-70-35]** from the fuel lift pump/filter assembly.

Figure 70-70-36



Remove the two fuel lines (Item 1) and three bolts (Item 2) **[Figure 70-70-36]** and remove the fuel lift pump/filter assembly.

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VERSAHANDLER SPECIFICATIONS (CONT'D)

Performance Specifications

Operating Weight	**V638** 18,275 lbs. (8307 kg)	**V638 with optional stabilizers** 18849.5 lbs. (8550 kg)
Maximum Rated Capacity	*6700 lbs. (3045 kg)	*7716.17 lbs. (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 1104C-44T (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

Controls

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

Steering	Proportional hydraulic steering via a conventional steering wheel
Hydraulics	Electro-hydraulic joystick
Auxiliary Hydraulics	Electric Switches on Joystick
Parking Brake (switch applied)	Electric valve with switch activates spring applied, pressure release multi disc brake.

Drive System

Main Drive	Hydrostatic 4 wheel drive
Transmission	Infinitely variable hydrostatic piston pump, driving 1 fully reversing hydrostatic motor
Final Drive	Front Differential with reduction gear box, Rear Differential, Planetary Axles with Oil Lubrication.

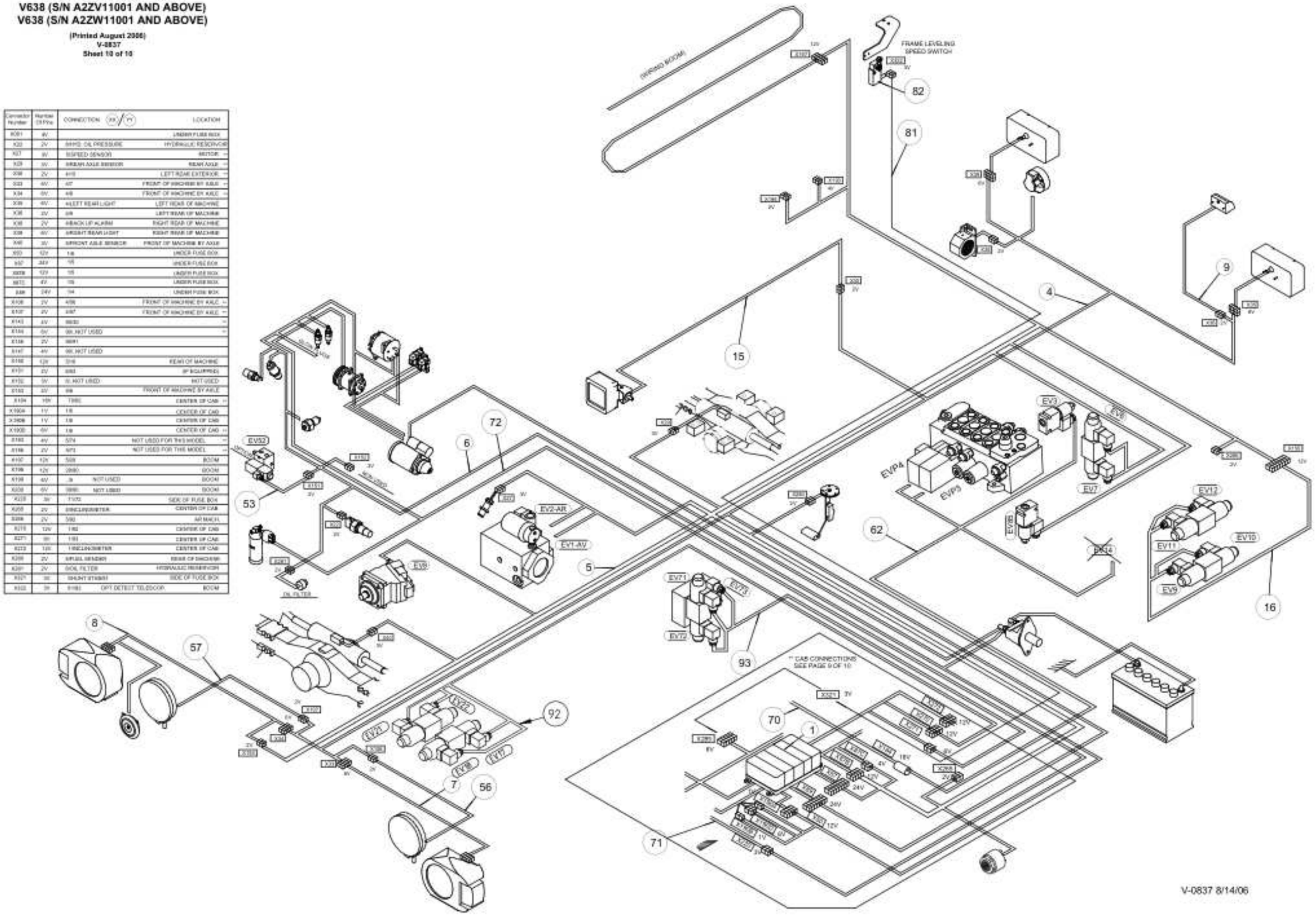
Travel Speed	**V638**
Low Range	0 - 4.7 mph (7.6 kph)
High Range	0 - 18.37 mph (30.1 kph)

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ELECTRICAL SCHEMATIC
V638 (S/N A2ZV11001 AND ABOVE)
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(Printed August 2006)
V-0837
Sheet 10 of 10

Connector Number	Number Of Pins	CONNECTION	LOCATION
X001	4V		UNDER FUSE BOX
X02	2V	SWING CYL PRESSURE	HYDRAULIC RESERVOIR
X07	3V	SSPEED SENSOR	MOTOR
X09	3V	BREAK AXLE SENSOR	REAR AXLE
X09	2V	4W3	LEFT REAR EXTERIOR
X33	4V	4I7	FRONT OF MACHINE BY AXLE
X34	6V	4I8	FRONT OF MACHINE BY AXLE
X35	4V	4LEFT REAR LIGHT	LEFT REAR OF MACHINE
X36	2V	4I9	LEFT REAR OF MACHINE
X38	2V	4BACK UP ALARM	RIGHT REAR OF MACHINE
X39	4V	4RIGHT REAR LIGHT	RIGHT REAR OF MACHINE
X40	3V	5FRONT AXLE SENSOR	FRONT OF MACHINE BY AXLE
X50	12V	1I8	UNDER FUSE BOX
X57	24V	1I5	UNDER FUSE BOX
X58	12V	1I5	UNDER FUSE BOX
X59	12V	1I5	UNDER FUSE BOX
X59	24V	1I4	UNDER FUSE BOX
X106	2V	4I6	FRONT OF MACHINE BY AXLE
X107	2V	4I6*	FRONT OF MACHINE BY AXLE
X143	2V	8I30	
X144	6V	9I6 NOT USED	
X146	2V	9I91	
X147	4V	9I6 NOT USED	
X150	12V	3I18	REAR OF MACHINE
X151	2V	8I83	(IF EQUIPPED)
X152	5V	9I NOT USED	NOT USED
X153	2V	6I8	FRONT OF MACHINE BY AXLE
X154	16V	7I66	CENTER OF CAB
X190A	1V	1I8	CENTER OF CAB
X190B	1V	1I8	CENTER OF CAB
X190D	5V	1I8	CENTER OF CAB
X193	4V	5I74	NOT USED FOR THIS MODEL
X196	2V	5I71	NOT USED FOR THIS MODEL
X197	12V	5I28	BOOM
X198	12V	2I80	BOOM
X199	4V	3I NOT USED	BOOM
X208	6V	9I90 NOT USED	BOOM
X218	3V	T1I72	SIDE OF FUSE BOX
X255	2V	8INCLINOMETER	CENTER OF CAB
X259	2V	5I93	AIR MACH.
X270	12V	1I82	CENTER OF CAB
X271	3V	1I81	CENTER OF CAB
X272	12V	1INCLINOMETER	CENTER OF CAB
X299	2V	6FUEL SENDER	SIDE OF SHOCKER
X301	2V	5OIL FILTER	HYDRAULIC RESERVOIR
X327	3V	1SHUNT STATE1	SIDE OF FUSE BOX
X332	3V	5I161 OPT DETECT TELESCOPE	BOOM



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