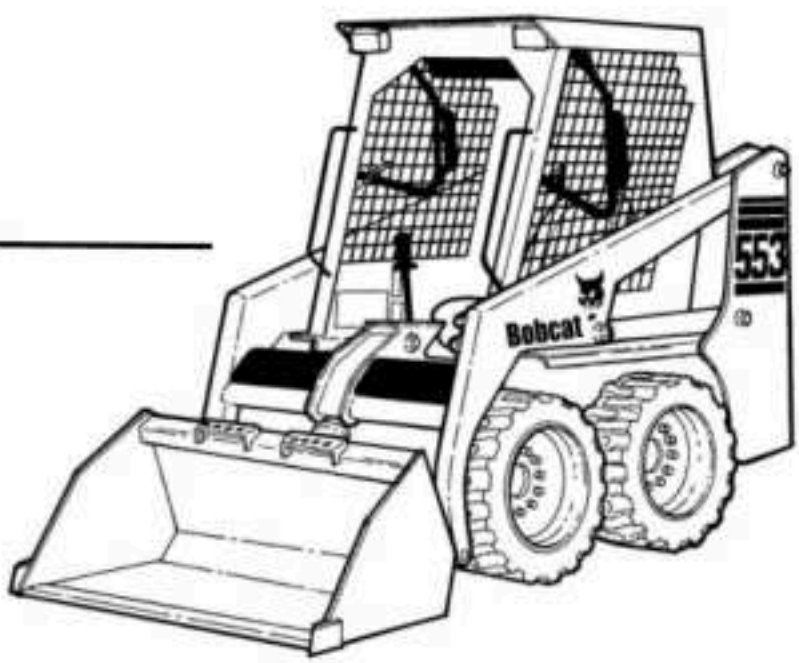
553

Bobcat®

Service Manual

S/N 520311001 & Above
S/N 520411001 & Above



EQUIPPED WITH
BOBCAT INTERLOCK
CONTROL SYSTEM (BICS™)

6901824 (3-06)

Ingersoll Rand
Printed in U.S.A.

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REMOTE START

Procedure

⚠ WARNING

Never work on a machine with the lift arms up unless the lift arms are secured by an approved lift arm support device. Failure to use an approved lift arm support device can allow the lift arms or attachment to fall and cause injury or death.

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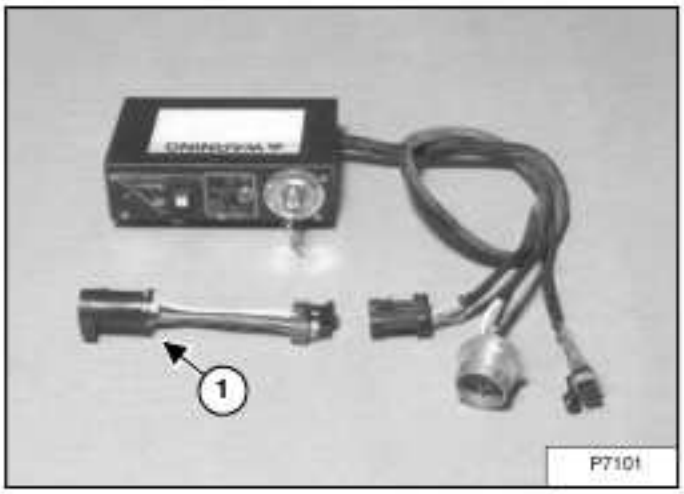
⚠ WARNING

Put jackstands under the front axles and rear corners of the frame before running the engine for service. Failure to use jackstands can allow the machine to fall or move and cause injury or death.

W-2017-0286



Figure 10-60-1



The tool listed below will be needed to do the following procedure:

MEL1492B - Remote Start Switch

The Remote Start Switch is required when the service technician is adjusting the steering linkage, checking the hydraulic/hydrostatic system.

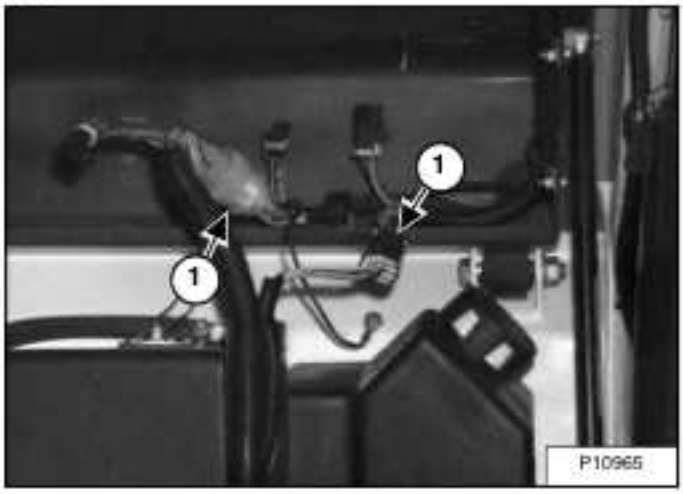
Lift and block the loader. (See LIFTING AND BLOCKING THE LOADER on Page 10-10-1.)

Raise the lift arms and install an approved lift arm support device. (See Installing Lift Arm Support Device on Page 10-20-1.)

Raise the operator cab. (See Raising The Operator Cab on Page 10-30-1.)

NOTE: On current model loaders, the connector on the BICS harness is round (7-pin) connector, not a rectangular (8-pin) connector. Use the adapter harness (Item 1) [Figure 10-60-1] to connect the remote start switch to the loader harness.

Figure 10-60-2



Disconnect the operator cab wire harness (Item 1) **[Figure 10-60-2]** from the engine wire harness.

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HYDROSTATIC SYSTEM INFORMATION

Troubleshooting Chart

The following troubleshooting chart is provided for assistance in locating and correcting problems which are most common. Many of the recommended procedures must be done by authorized Bobcat Service Personnel only.

⚠ WARNING

Check for correct function after adjustments, repairs or service. Failure to make correct repairs or adjustments can cause injury or death.

W-2004-1285

PROBLEM	CAUSE
No drive on one side, in one direction.	1, 2, 3, 4, 5, 19
No drive on one side in both directions.	2, 3, 5, 6, 7, 8
The loader does not move in a straight line.	2, 3, 4, 6, 7, 8, 9, 10, 19
The hydrostatic system is overheating.	4, 11, 12, 13, 14, 15
The oil light comes ON.	16, 17, 18

KEY TO CORRECT THE CAUSE
1. The hydrostatic system has a fluid leak.
2. The steering linkage needs adjustment.
3. The high pressure replenishing valve(s) are defective.
4. The shuttle valve in the hydrostatic motor has a defect.
5. The balance plate in the hydrostatic motor seals are defective.
6. The hydrostatic pumps have a defect.
7. The final drive chain is broken.
8. The hydrostatic motor has a defect.
9. The tires do not have the correct tire pressure.
10. The tires are not the same size.
11. The hydraulic fluid is not at the correct level.
12. The oil cooler has a restriction. (Externally or Internally.)
13. The temperature sending switch is not operating correctly.
14. The control valve is not operating correctly.
15. The loader is not being operated at the correct RPM.
16. The sender has a defective.
17. There is low charge pressure.
18. The charge relief has a defect.
19. Steering lever is obstructed.

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Drive System

Main Drive	Hydrostatic 4-wheel drive
Transmission	Infinitely variable tandem hydrostatic piston pumps, driving two fully reversing hydrostatic motors
Final Drive	#60 HS endless roller chain and sprockets in sealed chaincase with oil lubrication
Axle Size	1.75 (44,5), Heat treated
Wheel Bolts	(6) 9/16"

Capacities

Cooling System	9 qts. (8,5 L)
Fuel	10 gals. (38 L)
Engine Oil W/Filter	5.4 qts. (5,1 L)
Hydraulic Reservoir	2.3 gals. (8,7 L)
Hydraulic/Hydrostatic System	4.8 gals. (18,2 L)
Chaincase Reservoir	4 gals. (15 L)

Tires

Floatation	27 x 8.50-15, 4 ply rating
Recommended Pressure	Inflate tires to MAXIMUM pressure shown on the side wall of the tire. DO NOT mix brands of tires used on the same loader.

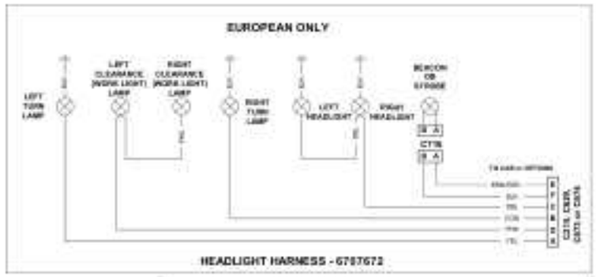
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WIRING SCHEMATIC

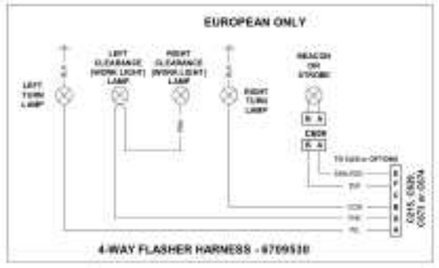
OPTIONS

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HEADLIGHT HARNESS - 6707672



4-WAY FLASHER HARNESS - 6709530

