Bobcat

325
328

Service Manual

S/N 232511001 & Above
S/N 232411001 & Above
(D Series)



Ingersoll Rand

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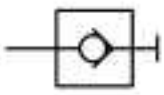
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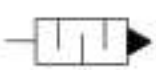
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Glossary Of Hydraulic / Hydrostatic Symbols

FLOW LINES and CONNECTIONS

SYMBOL	DESCRIPTION
	WORKING CIRCUITS - Continuous, Solid Line - Working (Main) Line, Return Line (line conducting fluid from working devices to the reservoir) and Feed line (main line conductor).
	PILOT PRESSURE - Dashed Line - Pilot Line (Line which conducts control fluid).
	DRAIN CIRCUITS - Dotted Line - Drain Line (drain or bleed line - line conducting fluid from a component housing to the reservoir.
	COMPONENTS - Long Chain Line - Enclosure outline for several components assembled in one unit.
	MECHANICAL CONNECTIONS - Double Line (Shaft, Lever, Piston Rod).
	CONNECTED JUNCTION OF OIL LINES (Flow Line Connection).
	OIL LINES CROSSING (NOT Connected).
	COUPLER - Quick - Acting Coupling (uncoupled, closed by non-return valve).

BASIC and MISCELLANEOUS SYMBOLS

SYMBOL	DESCRIPTION
	RESTRICTION - Line with Fixed Restriction - Affected by Viscosity (property of resistance to flowing fluid).
	VARIABLE ADJUSTMENT RESTRICTION - Regulated or Variable Restriction.
	TEMPERATURE CONTROL - (Indication of temperature).
	TEMPERATURE INDICATOR - (temperature measurement - thermometer).
	FILTER (strainer or screen) - For fluid conditioning.
	VENTED AND FILTERED RESERVOIR (reservoir open to atmosphere).
	PRESSURIZED, VENTED AND FILTERED RESERVOIR (Reservoir uses a pressured cap).
	OIL COOLER (heat exchanger) - The arrows in the diamond indicate the extraction of heat (heat dissipation).
	PRESSURE SENSOR - Varies electric signal with pressure.
	DIFFERENTIAL PRESSURE SWITCH - Switch activates when pressure difference reaches specified level.
	PRESSURE SWITCH - Switch activates when pressure reaches specified level.
	MUFFLER (silencer) - Reduces noise.

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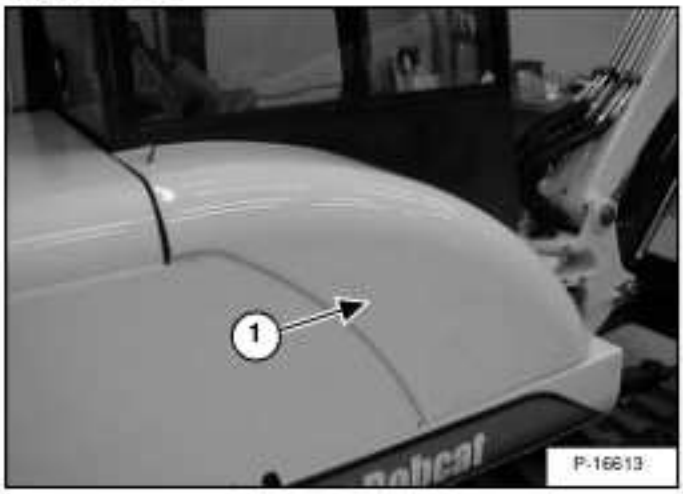
ENGINE SPEED CONTROL

Removal And Installation

Remove the right upper console cover. (See Console Cover Removal And Installation on Page 40-50-1.)

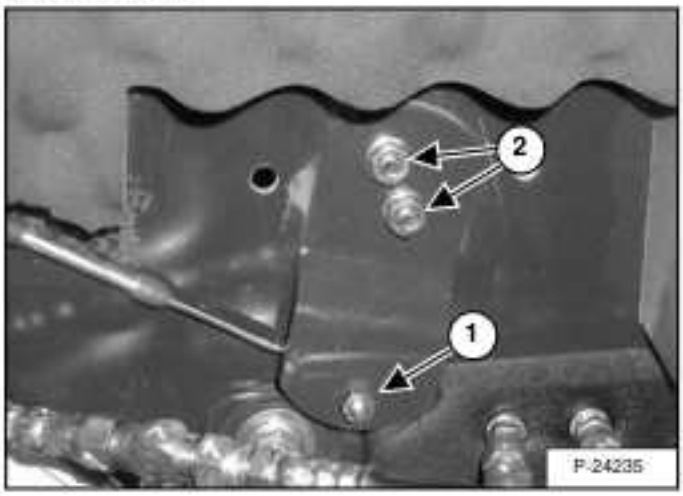
Remove the right lower console base. (See Console Base Removal And Installation on Page 40-50-2.)

Figure 40-70-1



Open the right side cover on the excavator (Item 1) **[Figure 40-70-1]**.

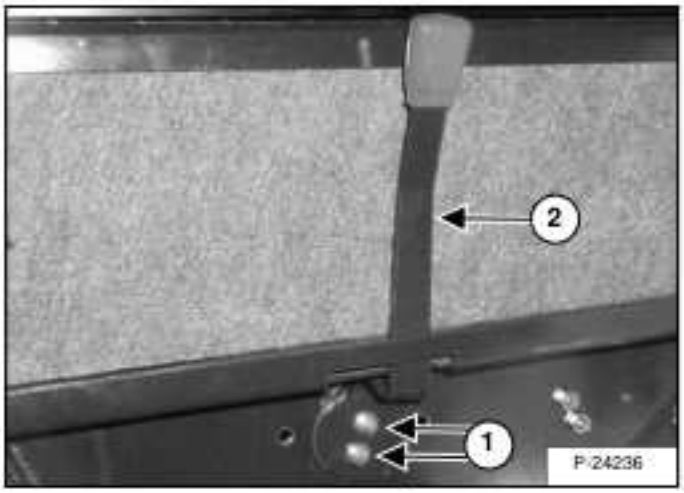
Figure 40-70-2



Remove the linkage cable nut (Item 1) **[Figure 40-70-2]**.

Remove the two speed control lever mount nuts (Item 2) **[Figure 40-70-2]**.

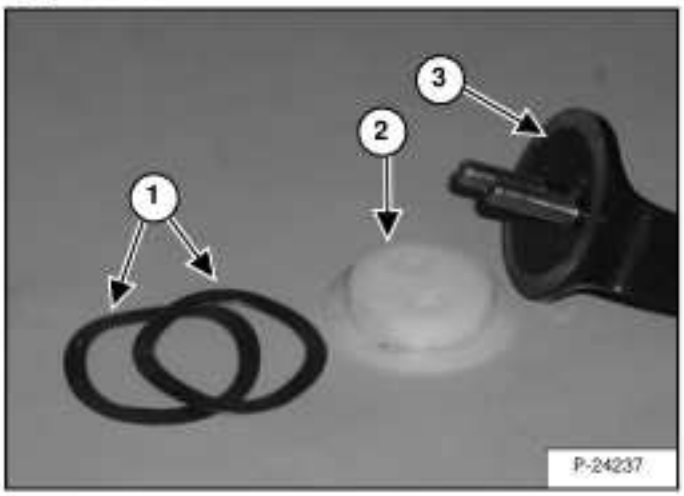
Figure 40-70-3



Remove the two speed control bolts (Item 1) **[Figure 40-70-3]**.

Remove the speed control lever (Item 2) **[Figure 40-70-3]**

Figure 40-70-4



Remove the two wave washers (Item 1), spacer (Item 2) from the lever (Item 3) **[Figure 40-70-4]**.

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Lifting Capacity

⚠ WARNING

OVERLOAD CAN TIP THE EXCAVATOR AND CAUSE INJURY OR DEATH

- Do not lift or hold any load that exceeds these ratings at their specified load radii and height.
- Total rated load is shown. The weight of all lifting devices must be deducted to determine the net load that can be lifted.

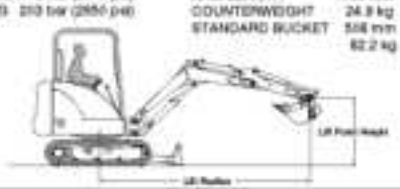


Where applicable, specifications conform to ISO Standards. Specifications are subject to change without notice. Lift Point is bucket hinge point with standard bucket attached and bucket cylinder fully extended.

EXCAVATOR MODEL 325

CIRCUIT PRESSURES
WORKING 172 bar (2500 psi)
HOLDING 210 bar (2850 psi)

BOOM LENGTH	2000 mm	(78.7 in)
ARM LENGTH	1050 mm	(41.3 in)
COUNTERWEIGHT	24.9 kg	(55.0 lb)
STANDARD BUCKET	508 mm	(20.0 in)
	82.2 kg	(181.3 lb)



LIFT POINT HEIGHT mm (in)	RATED LIFT CAPACITY OVER BLADE, BLADE DOWN - kg (lb)			RATED LIFT CAPACITY OVER BLADE, BLADE UP - kg (lb)			RATED LIFT CAPACITY OVER SIDE, BLADE UP - kg (lb)		
	LIFT RADIUS - mm (in)		LIFT @ MAXIMUM RADIUS kg (lb) @ mm (in)	LIFT RADIUS - mm (in)		LIFT @ MAXIMUM RADIUS kg (lb) @ mm (in)	LIFT RADIUS - mm (in)		LIFT @ MAXIMUM RADIUS kg (lb) @ mm (in)
	2000 (78.7)	3000 (118.1)		2000 (78.7)	3000 (118.1)		2000 (78.7)	3000 (118.1)	
3000 (118.1)			*326 (719) @ 2870 (113)			*311 (686) @ 2870 (113)			*326 (719) @ 2870 (113)
2000 (78.7)		*365 (805)	*350 (772) @ 3510 (138)		*355 (782)	*335 (738) @ 3510 (138)		*381 (796)	*343 (756) @ 3510 (138)
1000 (39.4)	*909 (2004)	*494 (1089)	*374 (825) @ 3710 (146)	*886 (1955)	*474 (1044)	280 (618) @ 3710 (146)	705 (1553)	*470 (1036)	267 (589) @ 3710 (146)
Ground	*1111 (2449)	*567 (1249)	*414 (913) @ 3560 (140)	777 (1714)	405 (893)	305 (672) @ 3560 (140)	660 (1455)	367 (808)	274 (603) @ 3560 (140)
-1000 (-39.4)	*936 (2063)	*448 (983)	*437 (964) @ 3010 (118)	*936 (2063)	*446 (983)	*433 (954) @ 3010 (118)	748 (1648)		*431 (951) @ 3010 (118)

41644 * Rated Hydraulic Lift Capacity SW 06 050927

Weights

	325
Operating Weight (Includes Canopy and 24" Bucket)	
W/Rubber Track	6145 lbs. (2788 kg)
W/Steel Track	6291 lbs. (2854 kg)
(Includes Cab and 24" Bucket)	
W/Rubber Track	6408 lbs. (2907 kg)
W/Steel Track	6554 lbs (2973 kg)
Travel Speed	
(Low)	1.2 MPH (1.9 km/hr.)
(High)	1.9 MPH (3.1 km/hr.)

Controls

Vehicle	Two Hand Levers or Optional Foot Levers control speed & direction.
Excavator Functions	Two hydraulic joysticks control boom, arm, bucket and cab swing. A foot pedal controls boom offset and the blade is controlled by a separate lever.

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WIRING SCHEMATIC

325 (S/N 232311001 AND ABOVE)
328 (S/N 232411001 AND ABOVE)
(PRINTED FEBRUARY 2010)
V-9052

WIRES CONNECT BY LETTER ACROSS CONNECTORS

SOME CONNECTOR BODIES NOT SHOWN FOR DRAWING CLARITY

CONTROL MODULE CONNECTORS J1-J6

J3 J4 J1 J5 J6 J2

RIGHT HAND CONSOLE HARNESS 6809045

LH CONSOLE HARNESS 6809045

CAB AND WIPER WIRING (IF SO EQUIPPED) HARNESS 6802664 AND 6802665

BOOM LIGHT HARNESS 6808415

ENGINE HARNESS 6809047

C457 C458 C462 C461 C463 C464 C465 C468 C469 C455 C453 C101 C102 C103 C104 C161 C158 C159 C413 C414 C415 C416 C419 C420

V-9052 (2-5-01)

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