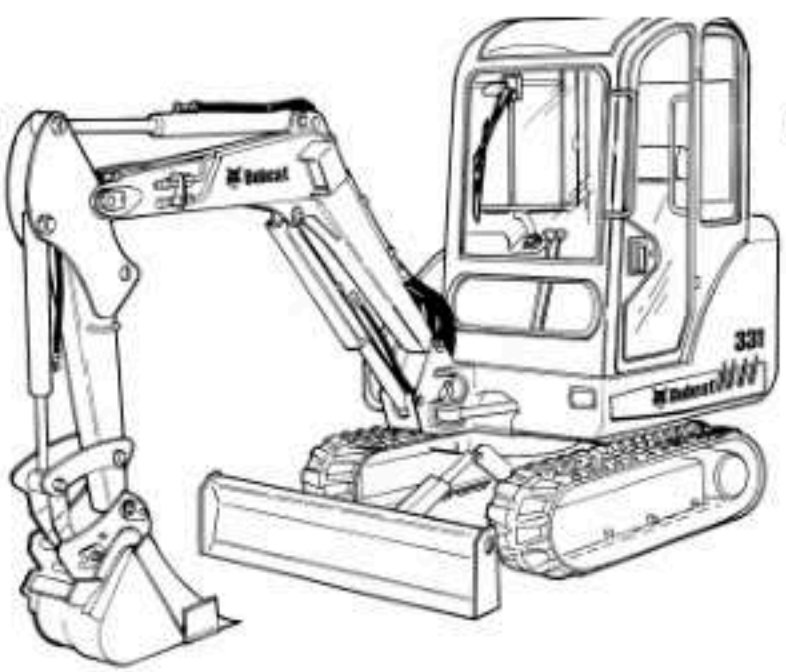
331
331E
334

Bobcat®

Service Manual

331 - S/N 234313000 & Above
331E - S/N 234412000 & Above
334 - S/N 234513000 & Above
(G Series)



Ingersoll Rand
Compact Vehicle Technologies

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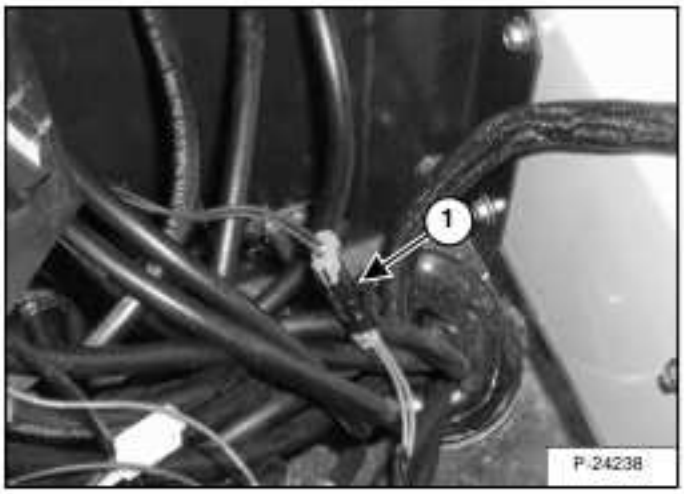
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BLADE CONTROL

Lever Removal And Installation

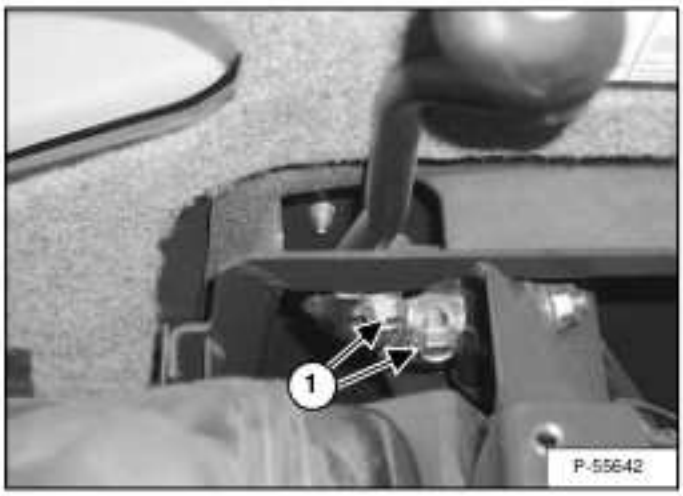
Remove the right console cover. (See Console Cover Removal And Installation on Page 40-50-1.)

Figure 40-80-1



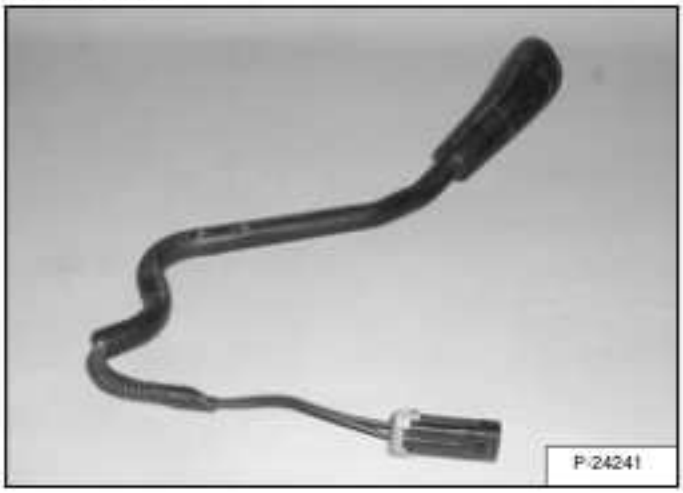
Disconnect the two speed wire harness (Item 1) **[Figure 40-80-1]**.

Figure 40-80-2



Loosen the bolts (Item 1) **[Figure 40-80-2]**.

Figure 40-80-3



Remove the blade control lever from the excavator **[Figure 40-80-3]**.

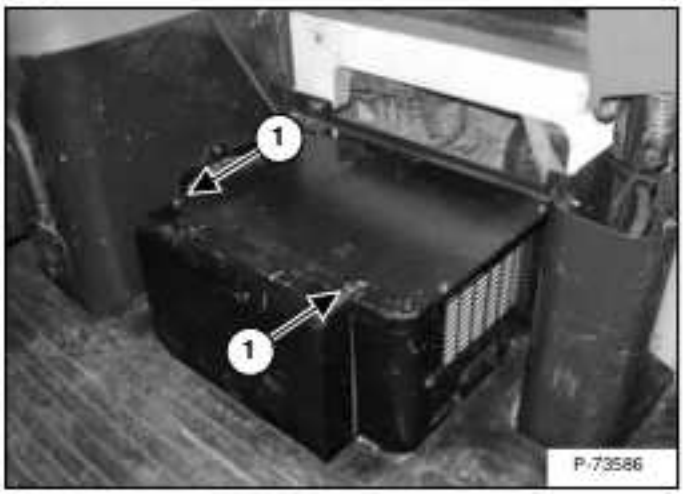
NOTE: If the two-speed switch needs to be replaced, the complete blade control lever must be replaced.

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Cleaning The A/C Evaporator Coil & Heater Coil

Remove the seat and seat mount. (See Removal And Installation on Page 40-40-1.)

Figure 70-81-3



Remove the bolts (Item 1) **[Figure 70-81-3]**.

Remove the front cover.

Remove the fresh air filter from the unit. (See HEATER AIR FILTER (WITH CAB OPTION ONLY) on Page 10-61-1.)

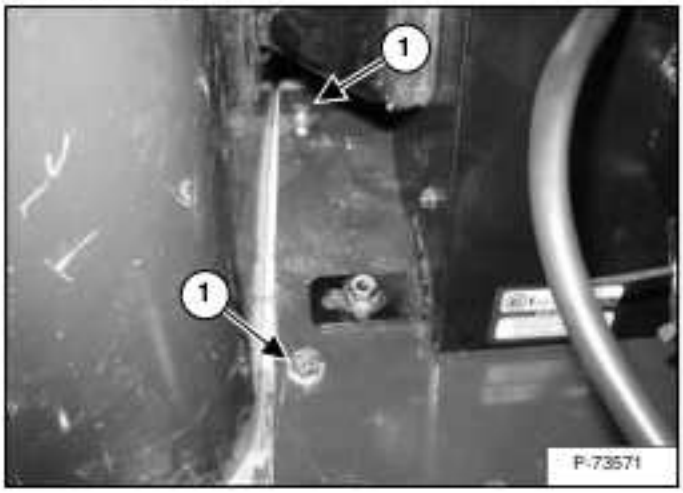
Remove the floormat and floor plate. (See Removal And Installation on Page 40-120-1.)

Figure 70-81-4



Remove the bolts (Item 1) **[Figure 70-81-4]** from the left side of the cab.

Figure 70-81-5



Remove the bolts (Item 1) **[Figure 70-81-5]** from the right side of the cab.

Figure 70-81-6



Move the unit forward. Remove the bolts (Item 1) **[Figure 70-81-6]** from the access cover.

Remove the access cover.

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All dimensions are given in inches. Respective metric dimensions are given in millimeters enclosed by parentheses.

Valve Springs

Free Length	1.642-1.661 (41,7-42,2)
Allowable Limit	1.622 (41,2)
Fitted Length	1.378 (35,0)
Compress to Fitted Length	26.4 lb. (117,6 N)
Allowable Limit	22.5 lb. (100,0 N)
Inclination Allowable Limit	0.039 (1,0)

Valve Timing

Intake Valve (Open)	9 degrees B.T.D.C.
(Close)	45 degrees A.B.D.C.
Exhaust Valve (Open)	50 degrees B.B.D.C.
(Close)	12 degrees A.T.D.C.

Rocker Arms

O.D. of Rocker Arm Shaft	0.5501-0.5506 (13,97-13,98)
I.D. of Rocker Arm	0.5512-0.5519 (14,0-14,02)
Clearance Between Rocker Arm & Shaft	0.0006-0.0018 (0,02-0,05)
Allowable Limit	0.004 (0,1)

Camshaft

Journal O.D.	1.572-1.573 (39,93-39,95)
Cylinder Block Bore I.D.	1.575-1.576 (40,0-40,025)
Oil Clearance	0.002-0.0036 (0,05-0,091)
Allowable Limit	0.006 (0,15)
Alignment Allowable Limit	0.0004(0,01)
Cam Lobe Height	1.335 (33,9)
Allowable Limit	1.333 (33,85)
End Clearance	0.0028-0.0087 (0,07-0,22)
Allowable Limit	0.012 (0,3)

Tappet

Clearance Between Tappet & Guide	0.0008-0.0024 (0,02-0,062)
Allowable Limit	0.0028 (0,07)
Tappet O.D.	0.943-0.944 (23,96-23,98)
Tappet Guide I.D.	0.945-0.946 (24,0-24,021)

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WIRING SCHEMATIC

331 (S/N 234313121 AND ABOVE)
331E (S/N 234412011 AND ABOVE)
334 (S/N 234513113 AND ABOVE)
(PRINTED JULY 2007)
V-0634

CONTROL MODULE
CONNECTORS J1-J6

RIGHT HAND CONSOLE
HARNESS 6819761

LH CONSOLE
HARNESS
6817244

ENGINE HARNESS
6817272 331/331E/334

HYDRAULIC X CHASSIS
OPTION CONNECTOR

V-0634 (6-25-07)

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