VIBRATORY PLATE COMPACTOR BC90

Bobcat®

Operation/ Maintenance And Parts Manual



An Ingersoll-Rand business

Printed in U.S.A.

6902028 (7-02) Revised (3-03)

©Bobcat Company 2003

MidWestTech | Bobcat BC90 Vibratory Plate Compactor Operation/Maintenance And Parts... Order the manual at mid-west-tech.com >

BC90 PLATE COMPACTOR
OPERATION AND MAINTENANCE MANUAL
COMMUNICATION NO. 6902028

This manual should be used with all related supplemental books, engine and transmission manuals, and part books. Related Service Bulletins should be reviewed to provide information regarding some of the recent changes.

If any questions arise concerning this publication or others, contact your local distributor for the latest available information.

Contents of this manual are based on information in effect at the time of publication and are subject to change without notice.

CONTENTS SECTION

SAFETY PRECAUTIONS AND GUIDELINES	1
INTRODUCTION	2
SYMBOL IDENTIFICATION AND METRIC CONVERSION	3
OPERATING INSTRUCTIONS	4
FUEL AND LUBRICATION SPECIFICATIONS	5
INITIAL BREAK-IN MAINTENANCE	6
TROUBLE SHOOTING AND GENERAL MAINTENANCE	7
10 HOUR OR DAILY ROUTINE MAINTENANCE	8
50 HOURS OR WEEKLY ROUTINE MAINTENANCE	9
100 HOURS OR MONTHLY MAINTENANCE	10
250 HOURS OR QUARTERLY ROUTINE MAINTENANCE	11
500 HOURS OR SEMI-ANNUAL ROUTINE MAINTENANCE	12
1000 HOURS OR ANNUAL ROUTINE MAINTENANCE	13
ROUTINE ADJUSTMENTS	14
MISCELLANEOUS AND OPTIONAL EQUIPMENT	15
SCHEMATICS	16
SPECIFICATIONS	17
PARTS MANUAL	18

MidWestTech | Bobcat BC90 Vibratory Plate Compactor Operation/Maintenance And Parts... Order the manual at mid-west-tech.com >

SECTION 9 - 50 HOUR OR WEEKLY ROUTINE MAINTENANCE

Contents **Page**

ENGINE OIL 1

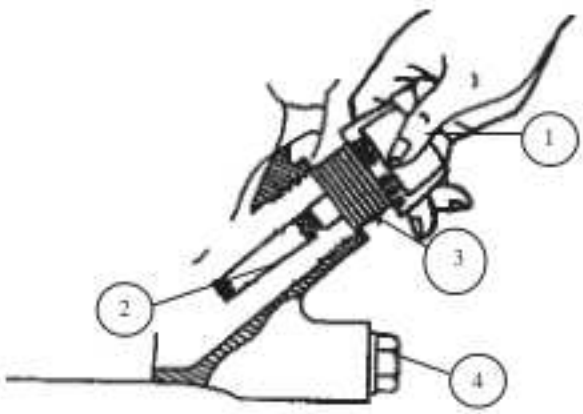
CHECK AND CHANGE ENGINE OIL

Before checking or refilling engine oil, be sure the machine is located on a stable level surface and stopped.
When checking oil do not thread the oil gauge (1, Figure 9-1) into oil filler to check oil level. If the oil level is below the lower level
(2, Figure 9-1) line on the dipstick, refill with the proper oil to the upper level (3, Figure 9-1)(to the neck of oil filler).

When changing oil stop the engine, loosen the drain plug (4, Figure 9-1), reintall the drain plug before refilling oil.
Add new oil at the oil gague (1, Figure 9-1) port.

Always use the best grade and clean oil. Contaminated oil, poor quality oil and shortage of oil cause damage to engine or shorten the engine life.

Figure 9-1



Changing and filling:

Capacity of engine oil	0.6 liters (0.63 US quarts)
Recommend engine oil	SAE 10W30

Use class SE, SF (API classification) or higher grade oil.

Initial oil change ..... After 20 hours of operation.
Thereafter ..... Every 50 hours of operation.

MidWestTech | Bobcat BC90 Vibratory Plate Compactor Operation/Maintenance And Parts... Order the manual at mid-west-tech.com >

TABLE OF CONTENTS
BC90

TITLE PAGE

Table of Contents ..... A
Abbreviations Used In This Manual ..... B

ENGINE AND VIBRATION UNIT

A

Vibration Plate, Engine, Handle And Clutch A.1.2
Vibration Unit Assembly A.2.2

For Internal Breakdowns - See Section I.

ROLLOVER CAGE AND WATER TANK

B

Rollover Cage Assembly And Water Tank Assembly B.1.2
Water Tank Assembly - Old Type (Steel) B.2.2

CARRYING CART, TOOL KIT AND DECALS

C

Carrying Cart Assembly, Standard Tool Kit And Decal Set C.1.2

INTERNAL BREAKDOWNS

I

Honda Engine (588364446) - Internal Breakdown I.1.2

MANUALS

P

Manual List P.1.2

WORD INDEX

W

Word Index W.1.2

NUMERIC INDEX

X

Numeric Index X.1.2

MidWestTech | Bobcat BC90 Vibratory Plate Compactor Operation/Maintenance And Parts... Order the manual at mid-west-tech.com >

SECTION 7 - TOUBLE SHOOTING - GENERAL MAINTENANCE

Contents

	Page
TROUBLE SHOOTING	1
GENERAL MAINTENANCE	2
TIMING BELT REPLACEMENT	3

TROUBLESHOOTING

1) Engine fails to start.

a) Spark plug is defective	Clean or replace.
b) Air in the fuel system.	Bleed air completely.
c) Fuel tank is empty.	Fill Tank
d) Carburetor is clogged.	Clean or replace, if necessary.
e) Excessive fuel.	Open fuel drain cock and drain excess fuel. Clean spark plug.

2) Engine runs irregularly.

a) Fuel line sucks air.	Retighten the fuel pipe joints and bleed air.
b) Air cleaner is clogged.	Clean air cleaner or replace element.
c) Engine stalls during operation.	Clean fuel system and retighten the fuel pipe joints.
d) Low compression.	Replace head gasket or retighten spark plug.

3) Machine fails to vibrate.

a) Incorrect setting RPM of engine.	Adjust.
b) Throttle cable is slacked.	Adjust.
c) Centrifugal clutch is slipped.	Overhaul or replace, If necessary.
d) Belt is slipped.	Adjust or replace, If necessary.

4) The travelling is bad or the vibration is diffuse.

a) Incorrect setting RPM of engine.	Adjust.
b) Air cleaner is clogged.	Clean air cleaner or replace element.
c) Centrifugal clutch is slipped.	Overhaul or replace, If necessary.
d) Belt is slipped.	Adjust or replace, If necessary.

MidWestTech | Bobcat BC90 Vibratory Plate Compactor Operation/Maintenance And Parts... Order the manual at mid-west-tech.com >

SECTION 17 - SPECIFICATIONS

Contents Page

SPECIFICATIONS 1
ENGINE RPM SETTINGS 1

SPECIFICATIONS

MODEL	BC90
WEIGHT	195 pounds
VIBRATION FREQUENCY	6000 CPM
CENTRIFUGAL FORCE	3300 pounds
TRAVEL SPEED	75 to 82 feet per minute
OVERALL LENGTH	40.9 inches
OVERALL HEIGHT	37.8 inches
PLATE SIZE	23 inches x 19 inches
ENGINE (MAKE & MODEL)	Honda GX120K1 air cooled,
ENGINE HORSEPOWER	3.5 HP (3600 RPM)
FUEL TANK CAPACITY	3.9 quarts
FUEL	Automotive gasoline
STARTING SYSTEM	Recoil starter

ENGINE RPM SETTINGS

NOTE
For engine rpm settings, refer to the engine manual.

MidWestTech | Bobcat BC90 Vibratory Plate Compactor Operation/Maintenance And Parts... Order the manual at mid-west-tech.com >

ITEM	COMM. NO.	DESCRIPTION	QTY	DIMENSIONS/NOTES
1	IR54474697	Oil Alert Unit	1	
4	IR54474739	Fan Cover	1	
7	IR54474796	Side Plate	1	
10	IR54474804	Stop Switch Cord Clamp	1	
11	IR54474812	Shroud	1	
13	IR54474820	Engine Stop Switch Harness	1	
14	IR59244145	Engine Stop Switch	1	
15	IR59244152	Stop Switch Cord	1	
17	IR54474838	Label: Specification	1	
18	IR54474846	Label: Oil Alert	1	
21	IR59242990	Flange Bolt	4	M6 x 12mm
22	IR59244764	Flange Bolt	1	M6 x 20mm
24	IR59244103	Flange Bolt	1	M6 x 8mm

MidWestTech | Bobcat BC90 Vibratory Plate Compactor Operation/Maintenance And Parts... Order the manual at mid-west-tech.com >