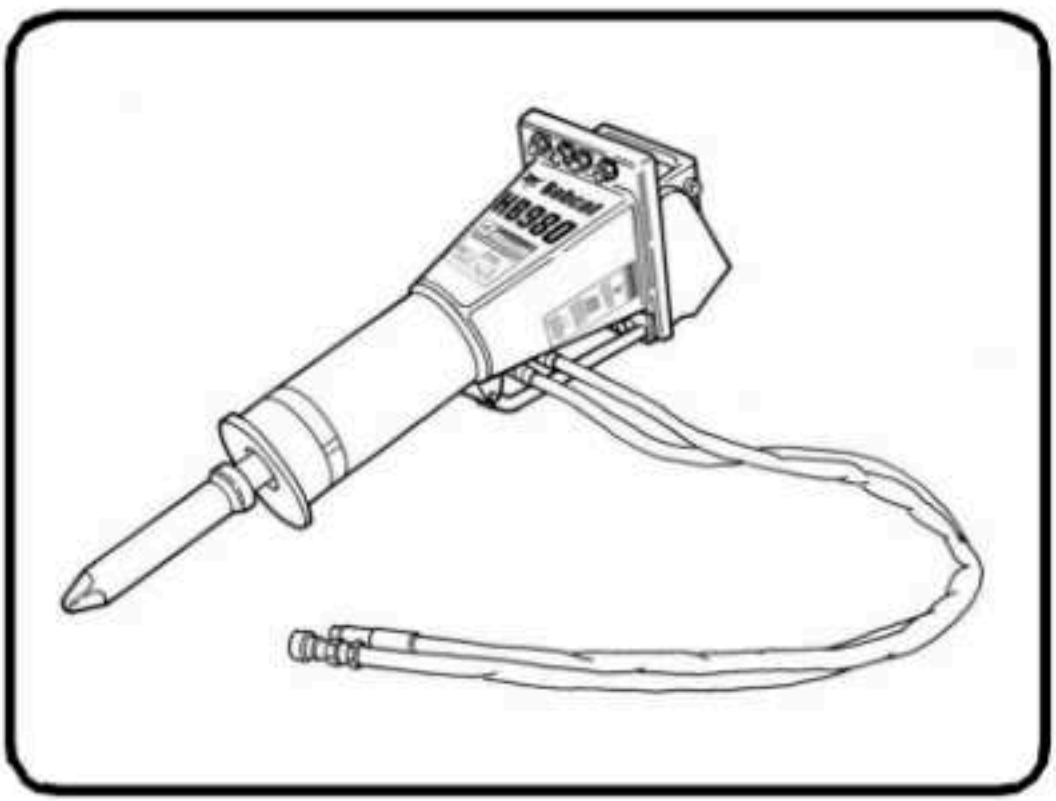
Bobcat®

Operation & Maintenance Manual
HB Series Hydraulic Breaker

(HB280) S/N A5T500101 & Above
(HB680) S/N A00W00101 & Above
(HB880) S/N A00X00101 & Above
(HB980) S/N A00Y00101 & Above
(HB1180) S/N A01R00101 & Above



6904104 (7-10) Revised (10-10) (10)

Printed in U.S.A.

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REFERENCE INFORMATION

Write the correct information for YOUR Bobcat HB series breaker in the spaces below. Always use these numbers when referring to your Bobcat HB series breaker.

Breaker Serial Number _____

NOTES:

_____

_____

_____

_____

YOUR BOBCAT DEALER:

_____

ADDRESS:

_____

PHONE:

_____

Bobcat Company
P.O. Box 128
Gwinner, ND 58040-0128
UNITED STATES OF AMERICA

Doosan Benelux SA
Drève Richelle 167
B-1410 Waterloo
BELGIUM

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FOREWORD

This Operation & Maintenance Manual was written to give the owner / operator instructions on the safe operation and maintenance of the Bobcat breaker. READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR BOBCAT BREAKER. If you have any questions, see your Bobcat dealer. This manual may illustrate options and accessories not installed on your breaker.

BOBCAT COMPANY IS ISO 9001 CERTIFIED 13

SERIAL NUMBER LOCATION 15
- Attachment Serial Number 15

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- Falling Object Guard Structure (FOGS) For Excavators 20
- Special Applications Kit For Excavators 21

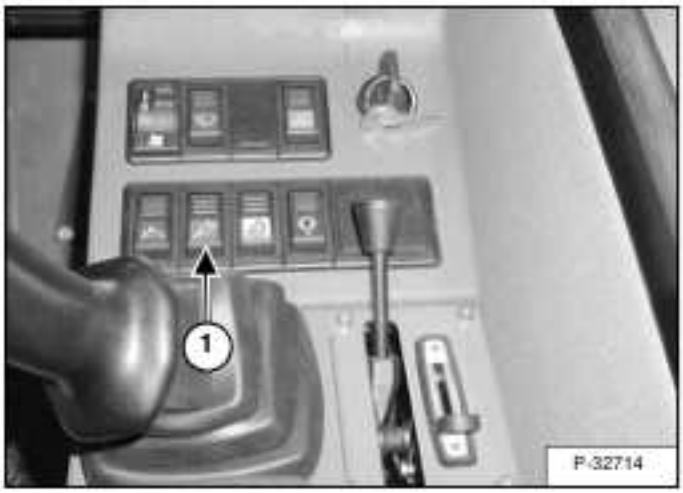
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OPERATING PROCEDURE WITH EXCAVATORS (CONT'D)

Control Functions (Cont'd)

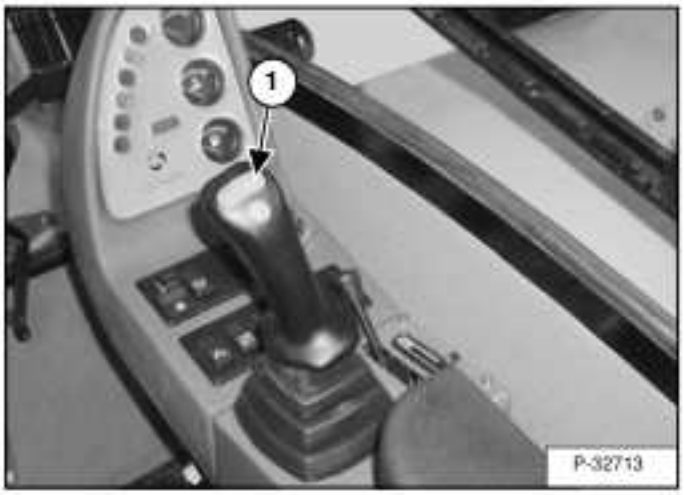
442 Excavator Auxiliary Hydraulics

Figure 175



Press the switch (Item 1) **[Figure 175]**. The switch will be illuminated.

Figure 176



Press and hold the switch (Item 1) **[Figure 176]** to provide hydraulic flow to the hydraulic breaker.

Release the switch to stop hydraulic flow.

316 Excavator Auxiliary Hydraulics

Figure 177

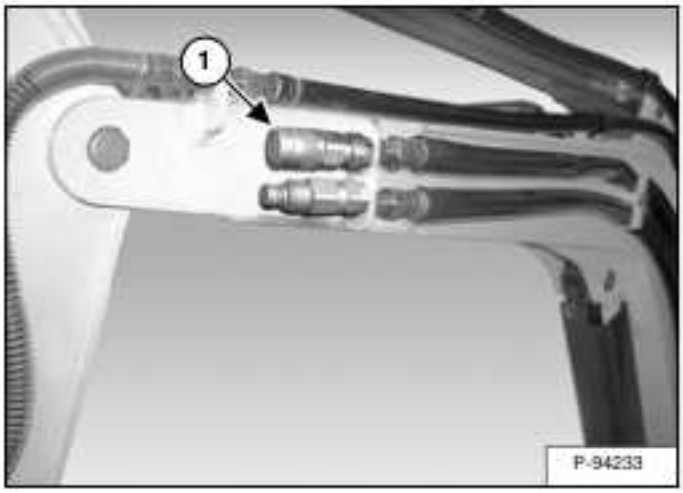
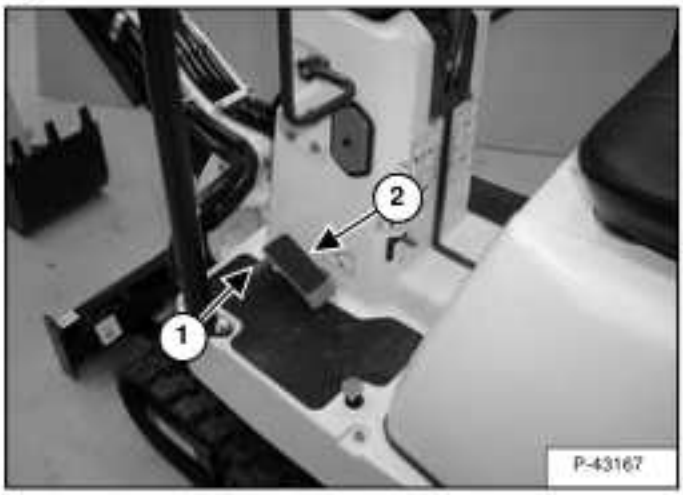


Figure 178



Pull the locking pin out (Item 1) **[Figure 178]** to allow the pedal to pivot.

Press the auxiliary Hydraulics Pedal (Item 2) **[Figure 178]** to provide hydraulic pressure to the top hydraulic line (Item 1) **[Figure 177]**. Release the pedal to stop hydraulic flow.

When you are not using the auxiliary hydraulics, engage the locking pin so that you can use the pedal as a footrest.

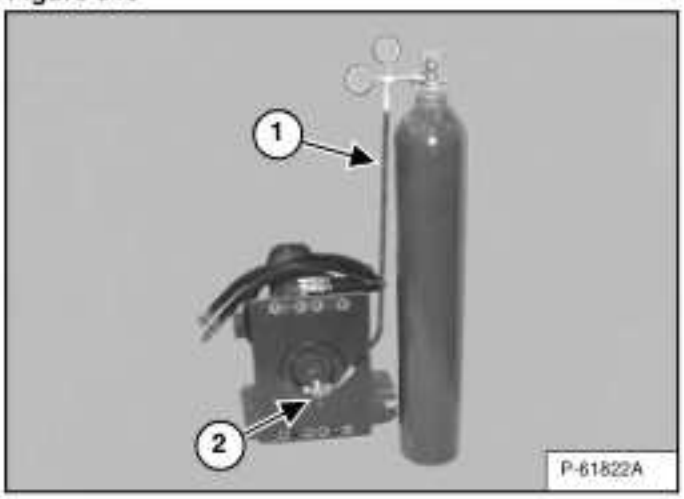
Only the top auxiliary line is pressurized. The bottom line is for return oil flow.

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Nitrogen Chamber (Cont'd)

Charging The Nitrogen Chamber (Cont'd)

Figure 319



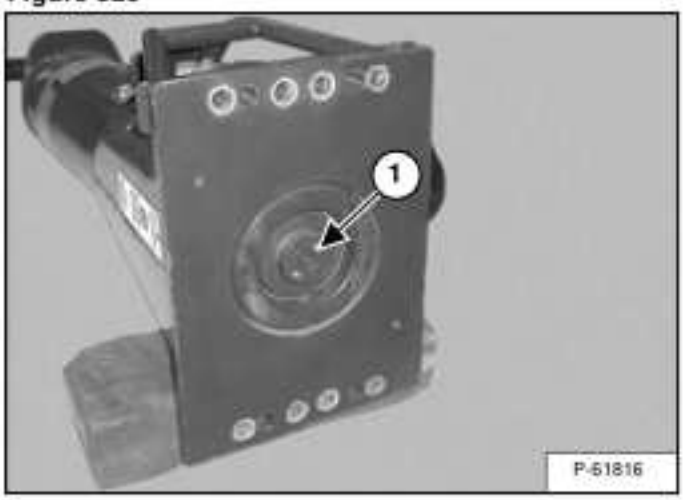
Connect the nitrogen hose (Item 1) to the charging tool (Item 2) **[Figure 319]**.

Using the regulator valve on the nitrogen tank, slowly fill the chamber to the 32 bar (464 psi).

Close the valve on the nitrogen tank.

Disconnect the hose and charging tool.

Figure 320



NOTE: Inspect the O-ring on the plug (Item 1) [Figure 320] for damage. Replace if necessary.

Install and tighten the plug (Item 1) **[Figure 320]**.

Tighten the plug to 37 N•m (27 ft-lb) torque.

Lubrication Locations

⚠ WARNING

AVOID BURN INJURY

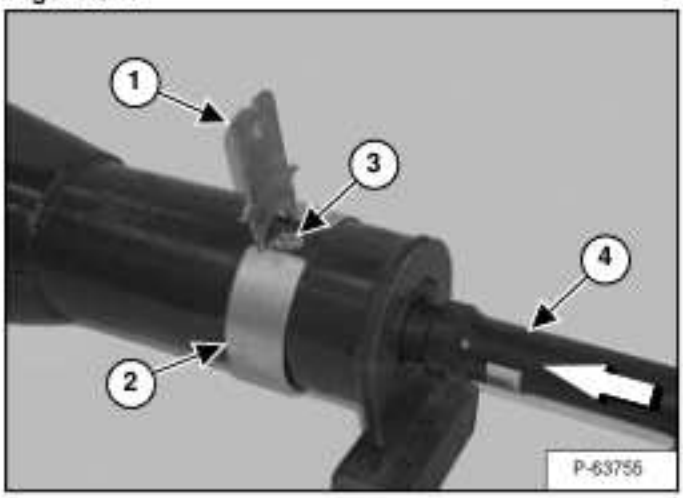
Breaker tool can be hot after use. Let breaker tool cool or use gloves when handling tool.

W-2204-0905

Put the breaker in the horizontal position.

Fully lower the breaker to the ground and stop the engine.

Figure 321



Use the maintenance tool (Item 1) to turn the retainer band (Item 2) until the grease fitting (Item 3) is accessible. Push the tool (Item 4) **[Figure 321]** fully into the breaker.

NOTE: Do not use an electric or pneumatic grease gun. Over greasing may damage the seal.

NOTE: Failure to push the tool up inside the breaker before greasing may cause seal damage.

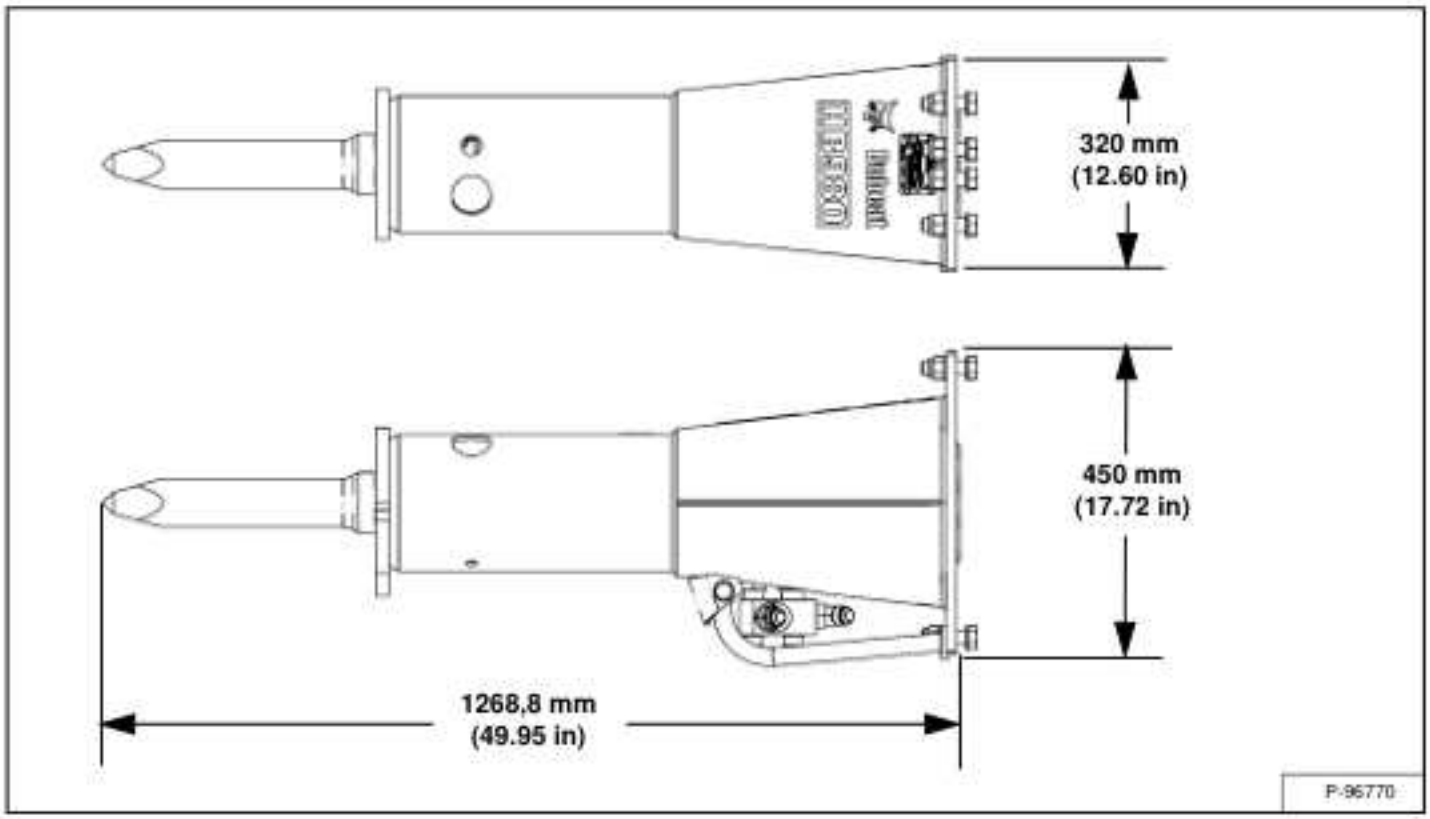
Apply grease (5 - 6 pumps) to the upper end of the tool at the grease fitting (Item 3) **[Figure 321]** every 4 hours of operation or sooner if the tool looks dry.

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(HB980) HYDRAULIC BREAKER SPECIFICATIONS

Dimensions

- All dimensions are shown in millimeters. Respective imperial dimensions are given in inches enclosed by parentheses.
- Where applicable, specifications conform to **SAE and ISO** standards and are subject to change without notice.



Performance

Breaker Weight	228 kg (502 lb)
Blow Rate	
Soft Ground	855 - 1060 bpm
Hard Ground	1170 - 1450 bpm
Operating Pressure	120 bar (1750 psi)
System Pressure	148 bar (2150 psi)
Impact Class	678 kN/m (500 lbf)
CIMA Energy Rating	382 kN/m (282 lbf)
Nitrogen Charge Pressure	32 bar (465 psi)
Bit Diameter	72,1 mm (2.84 in)
Bit Working Length	356 mm (14.0 in)

Hydraulic System

Hydraulic Flow	45 - 80 L/min (11.9 - 21.1 U. S. gpm)

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SAFETY INSTRUCTIONS

Safe Operation Is The Operator's Responsibility

Safety Alert Symbol

This symbol with a warning statement means: "Warning, be alert! Your safety is involved!" Carefully read the message that follows.

WARNING

Operator must have instructions before operating the machine. Untrained operators can cause injury or death.

W-2001-0502

IMPORTANT

This notice identifies procedures which must be followed to avoid damage to the machine.

I-2019-0284

DANGER

The signal word DANGER on the machine and in the manuals indicates a hazardous situation which, if not avoided, will result in death or serious injury.

D-1002-1107

WARNING

The signal word WARNING on the machine and in the manuals indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.

W-2044-1107

The Bobcat machine and attachment must be in good operating condition before use.

Check all of the items on the Bobcat Service Schedule Decal under the 8 - 10 hour column or as shown in the Operation & Maintenance Manual.

Safe Operation Needs A Qualified Operator

For an operator to be qualified, he or she must not use drugs or alcoholic drinks which impair alertness or coordination while working. An operator who is taking prescription drugs must get medical advice to determine if he or she can safely operate a machine and the attachment.

A Qualified Operator Must Do The Following:

Understand the Written Instructions, Rules and Regulations

- The written instructions from Bobcat Company include the Delivery Report, Operation & Maintenance Manual, Operator's Handbook, Safety Manual and machine signs (decals).
- Check the rules and regulations at your location. The rules may include an employer's work safety requirements. Regulations may apply to local driving requirements or use of a Slow Moving Vehicle (SMV) emblem. Regulations may identify a hazard such as a utility line.

Have Training with Actual Operation

- Operator training must consist of a demonstration and verbal instruction. This training is given by your Bobcat dealer before the product is delivered.
- The new operator must start in an area without bystanders and use all the controls until he or she can operate the machine and attachment safely under all conditions of the work area. Always fasten seat belt before operating.

Know the Work Conditions

- Know the weight of the materials being handled. Avoid exceeding the machine load capacities. Material which is very dense will be heavier than the same volume of less dense material. Reduce the size of load if handling dense material.
- The operator must know any prohibited uses or work areas, for example, he or she needs to know about excessive slopes.
- Know the location of any underground lines. Call local utilities or the TOLL FREE phone number found in the *Call Before You Dig* Section of this manual.
- Wear tight fitting clothing. Always wear safety glasses when doing maintenance or service. Safety glasses, respiratory equipment, hearing protection, Special Applications Kits or a Front Window Guard are required for some work. See your Bobcat dealer about Bobcat Safety equipment for your machine.

SI ATT-0509

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