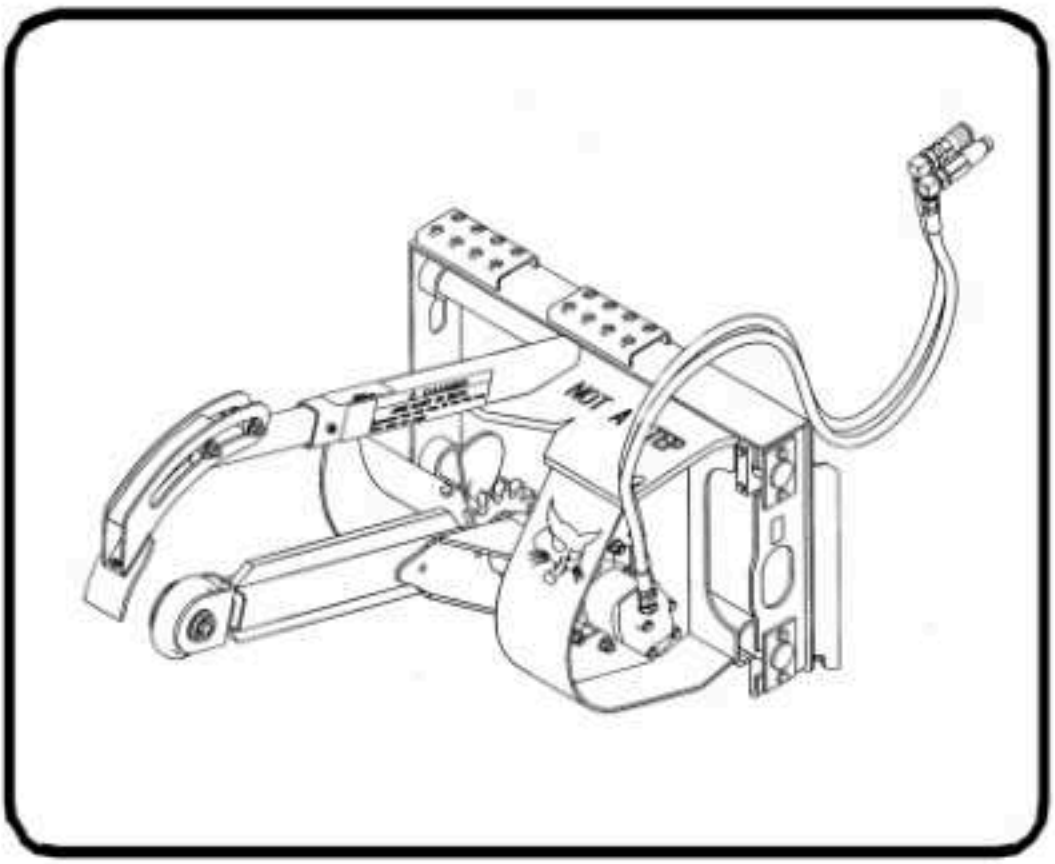
Bobcat®

Operation & Maintenance Manual
Trencher

(LT112 Trencher) S/N 045200101 & Above
(MX112 Trencher) S/N 045100101 & Above
(LT113 Trencher) S/N 233800101 & Above



6902550 (4-05) Revised (1-10) (3)

Printed in U.S.A.

©Bobcat Company 2010

MidWestTech | Bobcat LT112, MX112, LT113 Trencher Operation & Maintenance Manual |...

Order the manual at mid-west-tech.com >

CONTENTS

CONTENTS 1

FOREWORD 3

SAFETY & TRAINING RESOURCES 9

OPERATING INSTRUCTIONS 17

PREVENTIVE MAINTENANCE 75

MACHINE SIGN TRANSLATIONS 101

SPECIFICATIONS 105

WARRANTY 111

ALPHABETICAL INDEX 115

REFERENCE INFORMATION

Write the correct information for YOUR trencher attachment in the spaces below. Always use these numbers when referring to your trencher.

Trencher Serial Number _____

NOTES:

_____

_____

_____

YOUR BOBCAT DEALER:

_____

ADDRESS:

_____

PHONE:

_____

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

Bobcat Company Europe
Drève Richelle 167
B-1410 WATERLOO
BELGIUM

MidWestTech | Bobcat LT112, MX112, LT113 Trencher Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

FOREWORD

This Operation & Maintenance Manual was written to give the owner / operator instructions on the safe operation and maintenance of the trencher attachment. READ AND UNDERSTAND THIS OPERATION & MAINTENANCE MANUAL BEFORE OPERATING YOUR TRENCHER. If you have any questions, see your Bobcat dealer.

BOBCAT COMPANY IS IS0 9001 CERTIFIED 5

SERIAL NUMBER LOCATION 6
Attachment Serial Number 6

DELIVERY REPORT 6

ATTACHMENT IDENTIFICATION 7

FEATURES AND ACCESSORIES 8
Standard Items 8
Optional Items 8

MidWestTech | Bobcat LT112, MX112, LT113 Trencher Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

FIRE PREVENTION



Maintenance

The machine and some attachments have components that are at high temperatures under normal operating conditions. The primary source of high temperatures is the engine and exhaust system. The electrical system, if damaged or incorrectly maintained, can be a source of arcs or sparks.

Flammable debris (leaves, straw, etc.) must be removed regularly. If flammable debris is allowed to accumulate, it can cause a fire hazard. Clean often to avoid this accumulation. Flammable debris in the engine compartment is a potential fire hazard.

The operator's area, engine compartment and engine cooling system must be inspected every day and cleaned if necessary to prevent fire hazards and overheating.

All fuels, most lubricants and some coolants mixtures are flammable. Flammable fluids that are leaking or spilled onto hot surfaces or onto electrical components can cause a fire.

Operation

Do not use the machine where exhaust, arcs, sparks or hot components can contact flammable material, explosive dust or gases.

Electrical



Check all electrical wiring and connections for damage. Keep the battery terminals clean and tight. Repair or replace any damaged part or wires that are loose or frayed.

Battery gas can explode and cause serious injury. Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting. Do not jump start or charge a frozen or damaged battery. Keep any open flames or sparks away from batteries. Do not smoke in battery charging area.

Hydraulic System

Check hydraulic tubes, hoses and fittings for damage and leakage. Never use open flame or bare skin to check for leaks. Hydraulic tubes and hoses must be properly routed and have adequate support and secure clamps. Tighten or replace any parts that show leakage.

Always clean fluid spills. Do not use gasoline or diesel fuel for cleaning parts. Use commercial nonflammable solvents.

Fueling



Stop the engine and let it cool before adding fuel. No smoking! Do not refuel a machine near open flames or sparks. Fill the fuel tank outdoors.

Starting

Do not use ether or starting fluids on any engine that has glow plugs. These starting aids can cause explosion and injure you or bystanders.

Use the procedure in the Operation & Maintenance Manual for connecting the battery and for jump starting.

Spark Arrestor Exhaust System

The spark arrestor exhaust system is designed to control the emission of hot particles from the engine and exhaust system, but the muffler and the exhaust gases are still hot.

Check the spark arrestor exhaust system regularly to make sure it is maintained and working properly. Use the procedure in the Operation & Maintenance Manual for cleaning the spark arrestor muffler (if equipped).

SI ATT-0509

MidWestTech | Bobcat LT112, MX112, LT113 Trencher Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

OPERATING PROCEDURE WITH EXCAVATORS (CONT'D)

Control Functions (Cont'd)

Figure 77



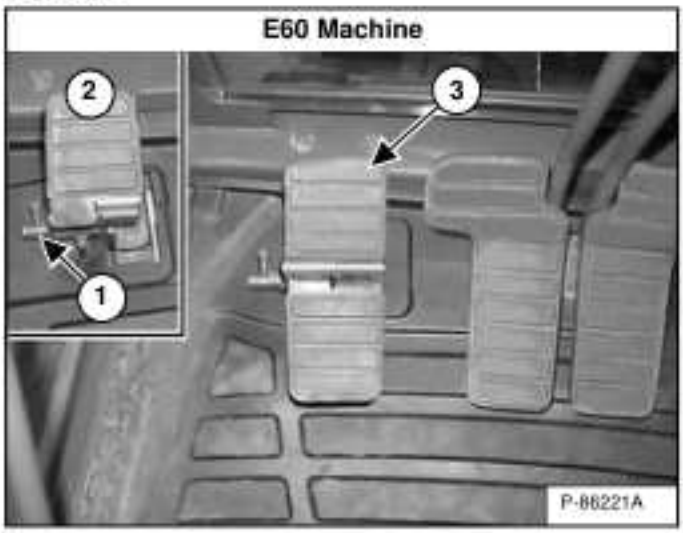
Move the switch (Item 1) **[Figure 77]** on the right control lever to the right to start the trencher.

Continuous Flow

Press the front switch (Item 2) **[Figure 77]** on the front of the right control lever for constant flow of fluid to the couplers. The trencher will start to rotate.

Press the front switch (Item 2) **[Figure 77]** a second time to stop the trencher.

Figure 78



Release the pedal lock (Item 1) and pivot the heel of the pedal to the rear (Item 2) **[Figure 78]**.

Push the toe of the pedal (Item 3) **[Figure 78]** to start trencher rotation.

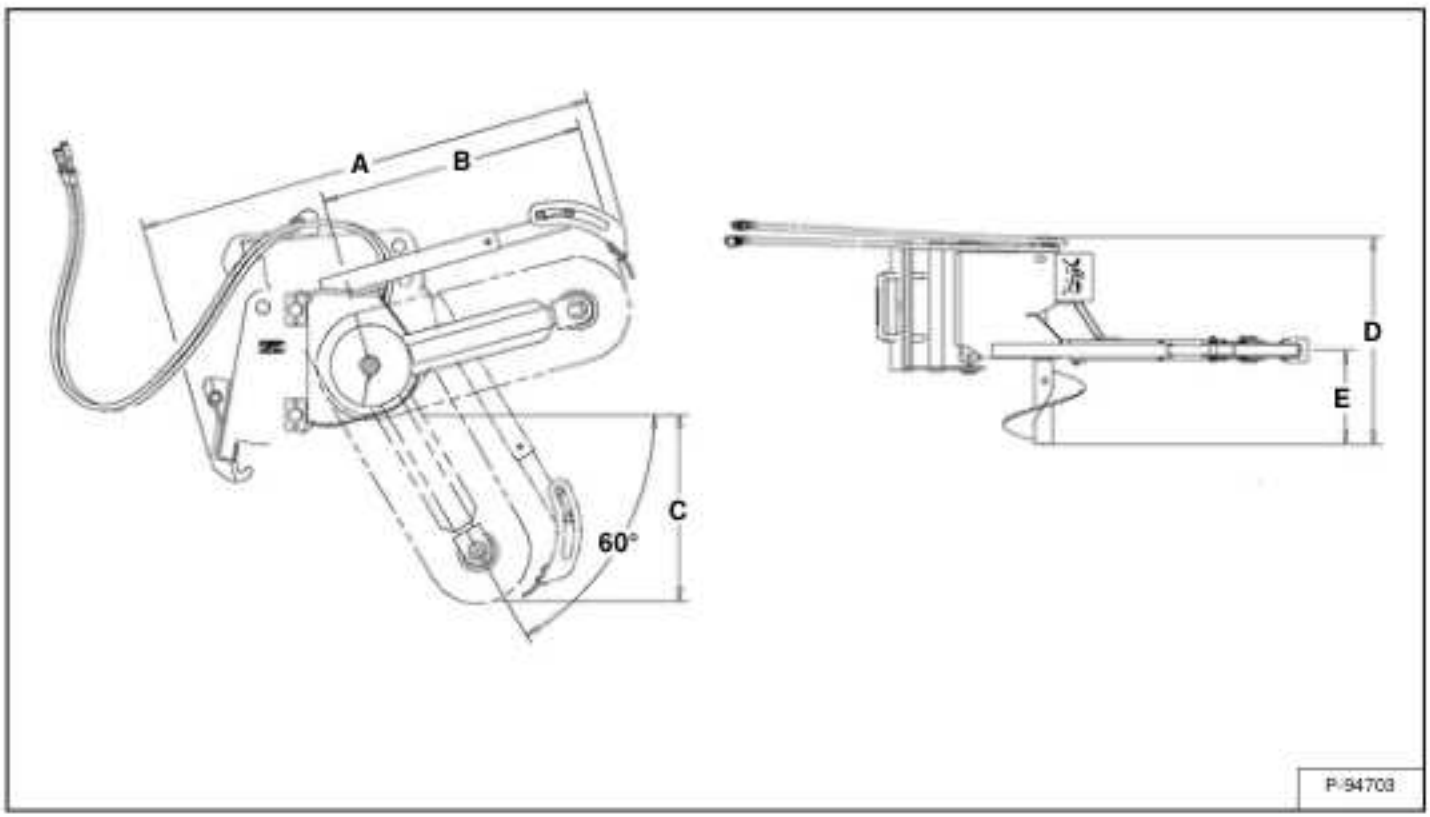
NOTE: The secondary auxiliary hydraulics (foot pedal) are required to operate the trencher on E60 excavators.

MidWestTech | Bobcat LT112, MX112, LT113 Trencher Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

(MX112) TRENCHER SPECIFICATIONS

Dimensions

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



DESCRIPTION	MX112 (2 FT.)
Overall Length (A)	68.2 in. (1732 mm)
Standard Boom Length (B)	39.4 in. (1000 mm)
Digging Depth @ 60° (C)	2 ft. (0,6 m)
Frame Width (D)	30.6 in. (777 mm)
Auger Clearance (E)	13.8 - 15.8 in. (351 - 401 mm)

Performance

DESCRIPTION	MX112 (2 FT.)
Operating Weight (Without Teeth)	570 lb. (256 kg)
Flow Range	13 - 20 GPM (49 - 76 L/min)
Maximum Operating Pressure	3000 PSI (20684 KPa)
Chain Size	1.654 in. (42 mm)
Chain Speed @ 15 gpm (57 L/min)	345 FPM (105,2 m/min)
Chain Tightener	Grease Cylinder
Auger Diameter	12.0 in. (305 mm)
Chain Width	4 - 8 in. (101 - 203 mm)

MidWestTech | Bobcat LT112, MX112, LT113 Trencher Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >

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

MidWestTech | Bobcat LT112, MX112, LT113 Trencher Operation & Maintenance Manual |... Order the manual at mid-west-tech.com >