



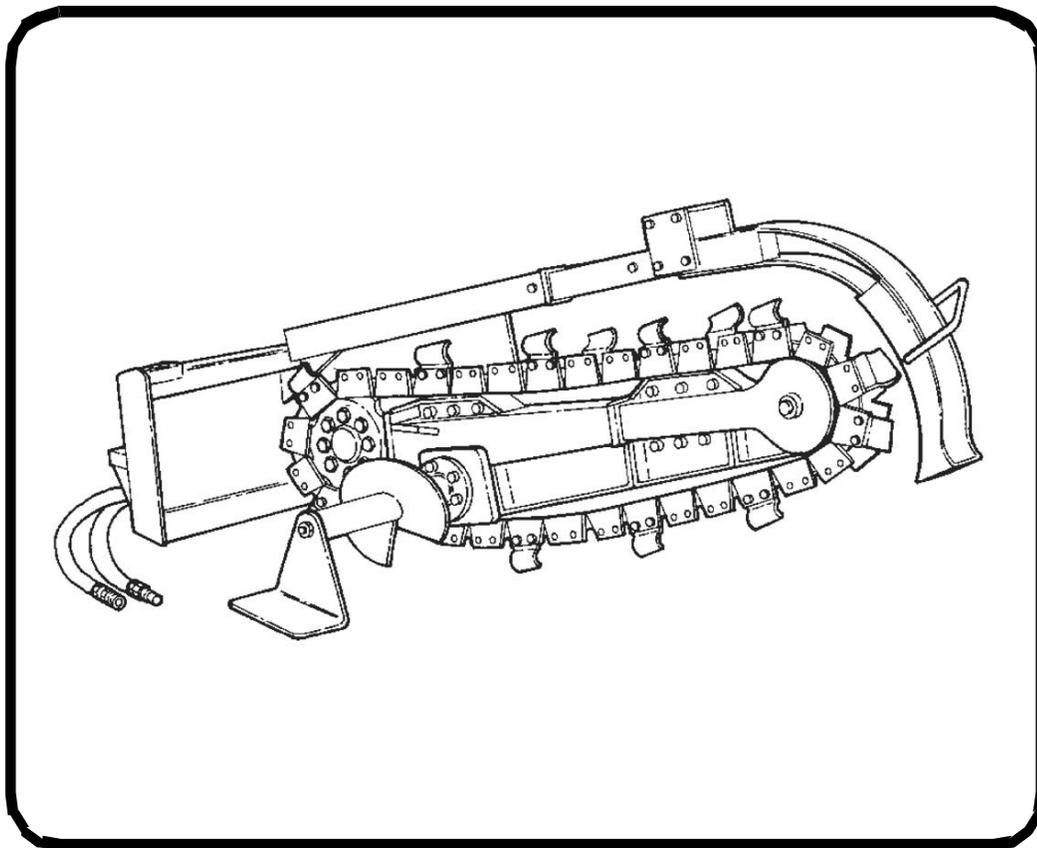
Bobcat®

Service Manual

Trencher

(LT 102) S/N 233600101 & Above
(LT 102A) S/N 233700101 & Above
(MX 102) S/N 233900101 & Above
(LT 203) S/N 706200101 & Above
(LT 204) S/N 420400101 & Above

(LT 303) S/N 420500101 & Above
(LT 304) S/N 690900101 & Above
(LT 305) S/N 247100101 & Above
(LT 405) S/N 705100101 & Above
(LT 405) S/N 610000101 & Above



Sample of manual. Download All 220 pages at:

<https://www.aresairmanual.com/downloads/2010-bobcat-lt102-lt102amx102lt203lt204lt303lt304lt305lt405-trencher-service-repair-workshop-manual/>

Product: 2010 Bobcat LT102, LT102A, MX102, LT203, LT204, LT303, LT304, LT305, LT405 Trencher Service Repair Workshop Manual
Full Download: <https://www.arepairmanual.com/downloads/2010-bobcat-lt102-lt102amx102lt203lt204lt303lt304lt305lt405-trencher-service-repair-workshop-manual/>

Sample of manual. Download All 220 pages at:
<https://www.arepairmanual.com/downloads/2010-bobcat-lt102-lt102amx102lt203lt204lt303lt304lt305lt405-trencher-service-repair-workshop-manual/>

MAINTENANCE SAFETY



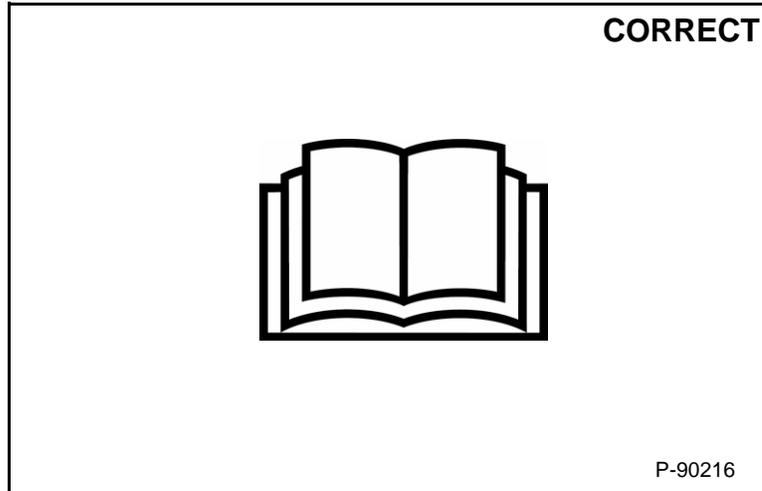
WARNING

Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.

W-2003-0807



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



-  Never service attachments / implements without instructions. See Operation & Maintenance Manual and Attachment / Implement Service Manual.
-  Cleaning and maintenance are required daily.
-  Never service or adjust attachment / implement with the engine running unless instructed to do so in manual.
-  Always lower the attachment / implement to the ground before lubricating or servicing.
-  Avoid contact with leaking hydraulic fluid or diesel fuel under pressure. It can penetrate skin or eyes.
-  Stop, cool and clean engine of flammable materials before checking fluids.
-  Keep body, loose objects and clothing away from moving parts, electrical contacts, hot parts and exhaust.
-  Safety glasses are needed for eye protection from electrical arcs, battery acid, compressed springs, fluids under pressure and flying debris or when tools are used. Use eye protection approved for type of welding.



Bobcat®

CONTENTS

SAFETY & MAINTENANCE	10-01
HYDRAULIC SYSTEM	20-01
MAIN FRAME	30-01
SPECIFICATIONS	SPEC-01
ALPHABETICAL INDEX	INDEX-01



Bobcat®

FOREWORD

SERIAL NUMBER LOCATION	1-7
Attachment Serial Number	1-7
DELIVERY REPORT	1-11
ATTACHMENT IDENTIFICATION	1-12



Bobcat®

SERIAL NUMBER LOCATION

Attachment Serial Number

Figure 1

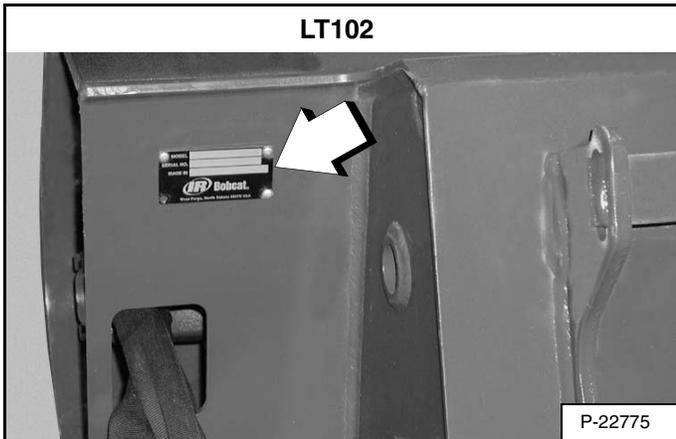


Figure 2

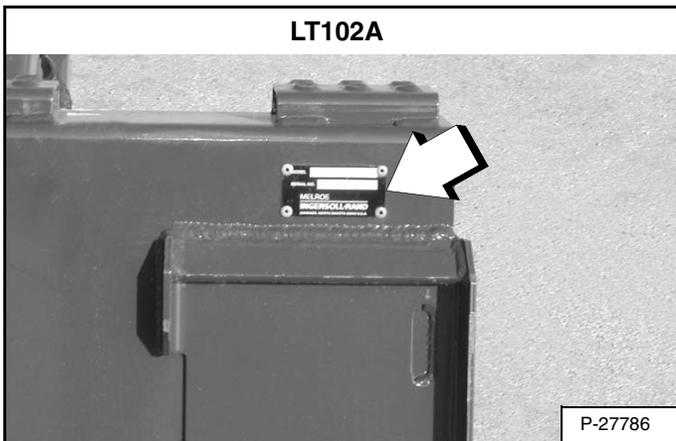


Figure 3

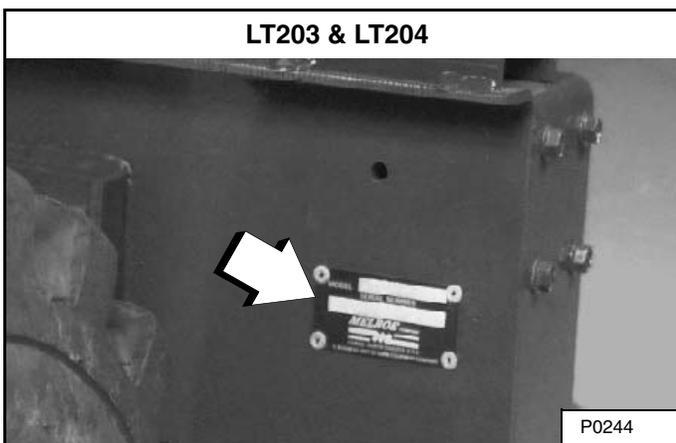


Figure 4

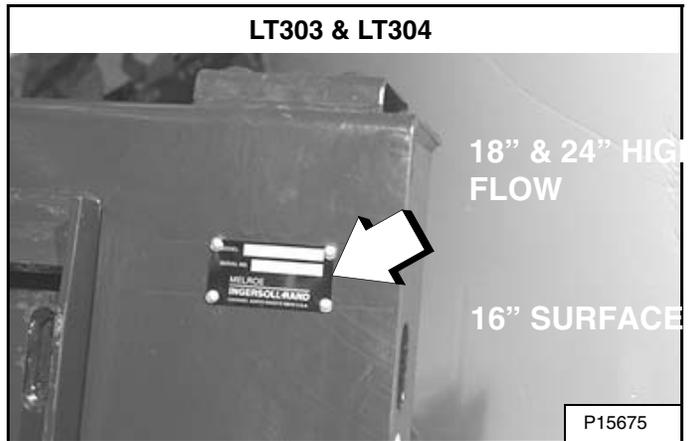


Figure 5

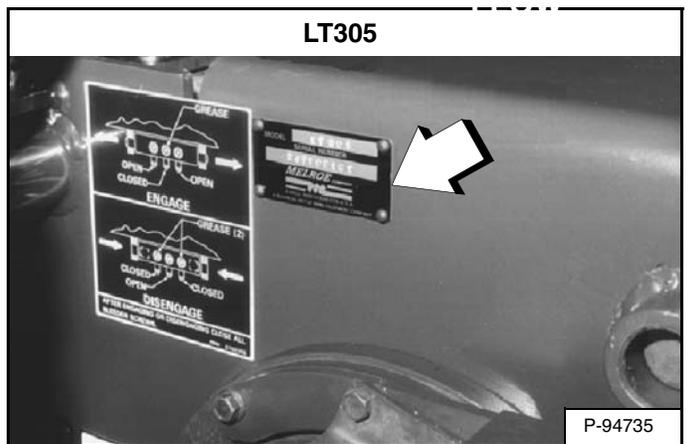
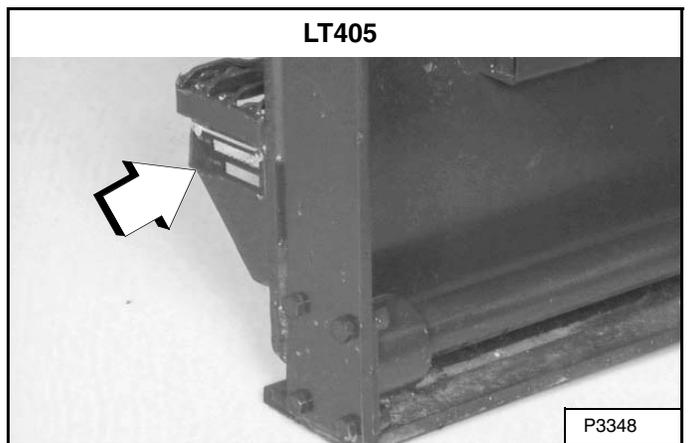


Figure 6

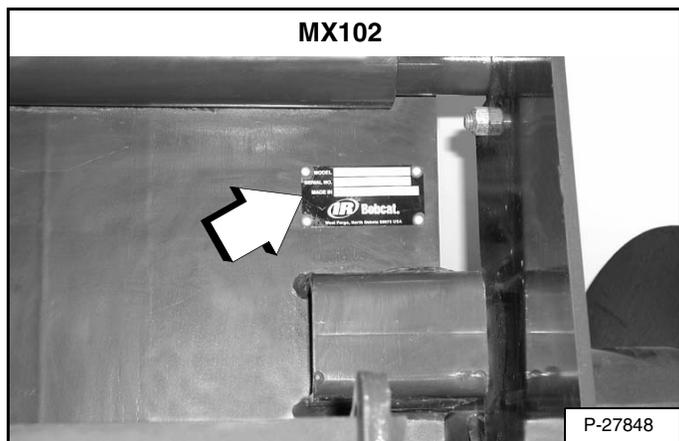


Always use the serial number of the trencher when requesting service information or when ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use a different procedure in doing a specific service operation [Figure 1], [Figure 2], [Figure 3], [Figure 4], [Figure 5], & [Figure 6].

SERIAL NUMBER LOCATION (CONT'D)

Attachment Serial Number (Cont'd)

Figure 7



Always use the serial number of the trencher when requesting service information or when ordering parts. Early or later models (identification made by serial number) may use different parts, or it may be necessary to use a different procedure in doing a specific service operation [Figure 7].

DELIVERY REPORT

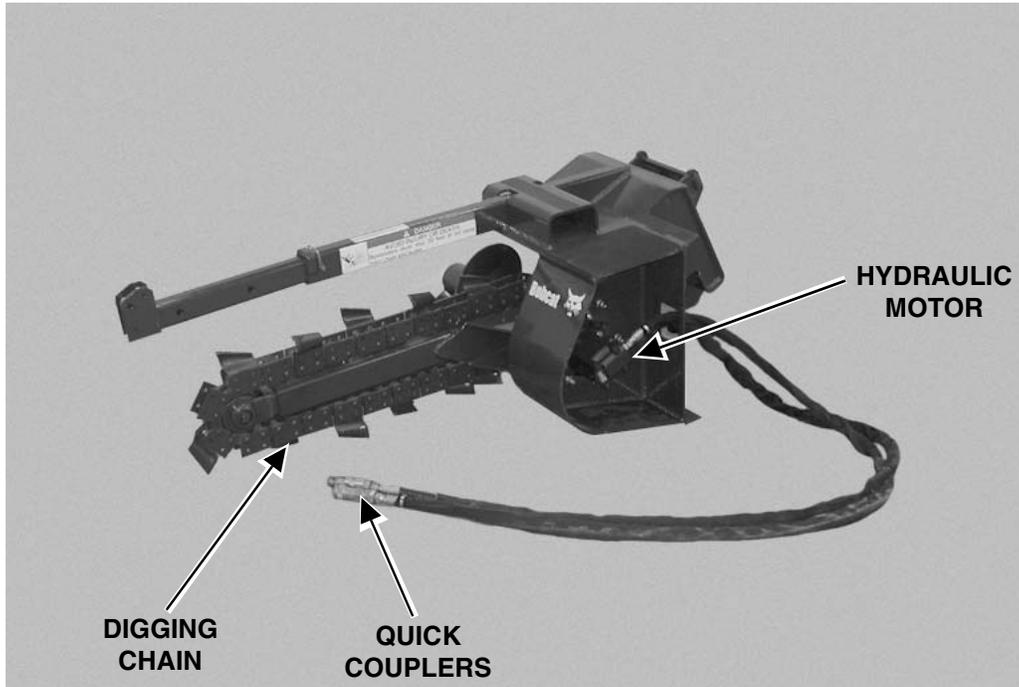
Figure 8

The diagram shows a form titled "DELIVERY REPORT". The form is divided into several sections. At the top right, the title "DELIVERY REPORT" is printed. Below the title, there are several lines of text and a small table or grid. On the left side, there is a section titled "WARNING" in a bold, black box, followed by several lines of text. The bottom right corner of the form contains the alphanumeric code "P-20022".

The delivery report [**Figure 8**] must be completed by the dealer and signed by the owner or operator when the trencher is delivered. An explanation of the form must be given to the owner.

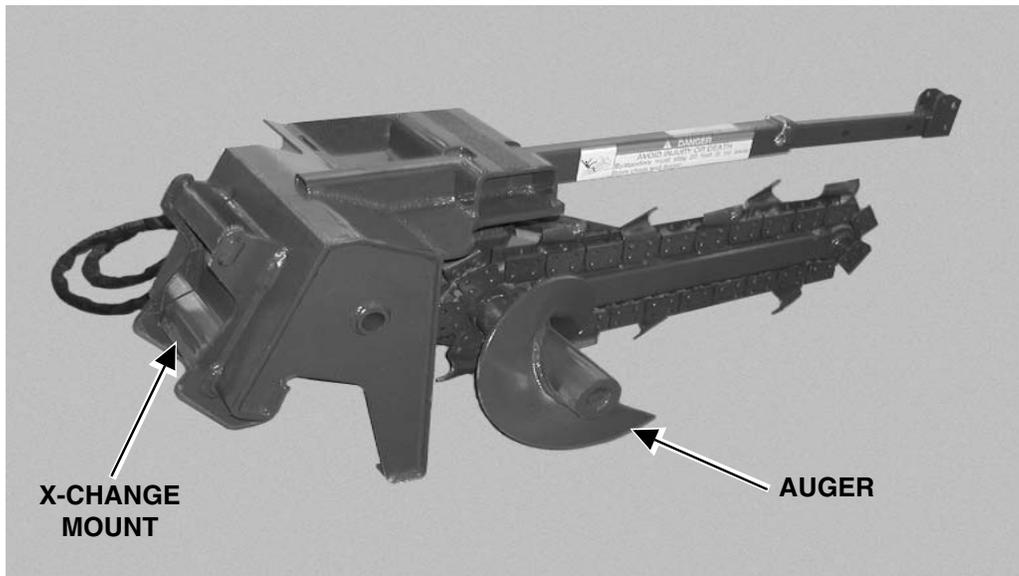
ATTACHMENT IDENTIFICATION

LT102



P-22776

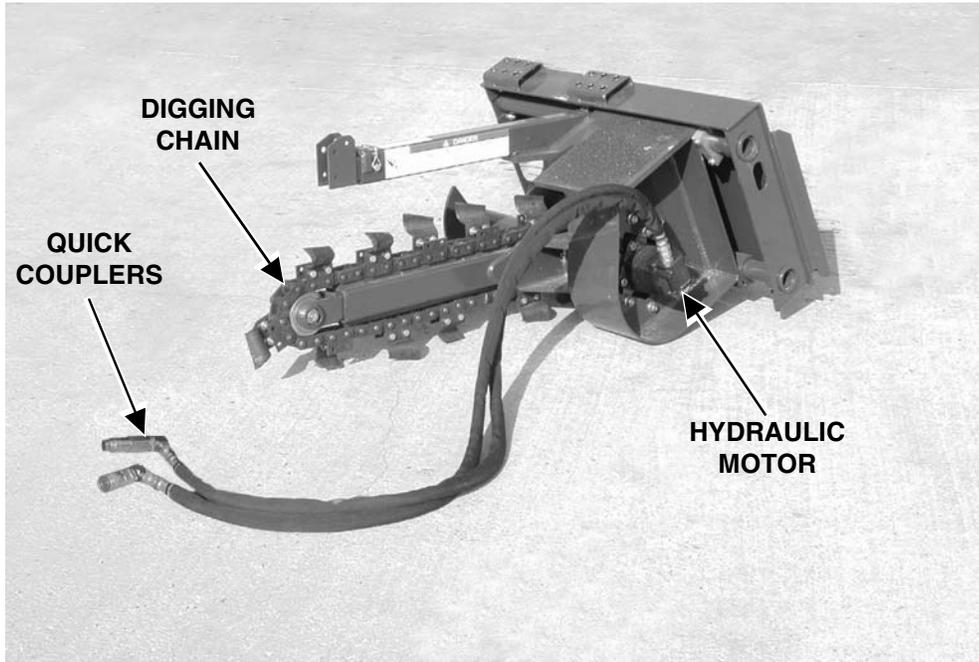
LT102



P-22777

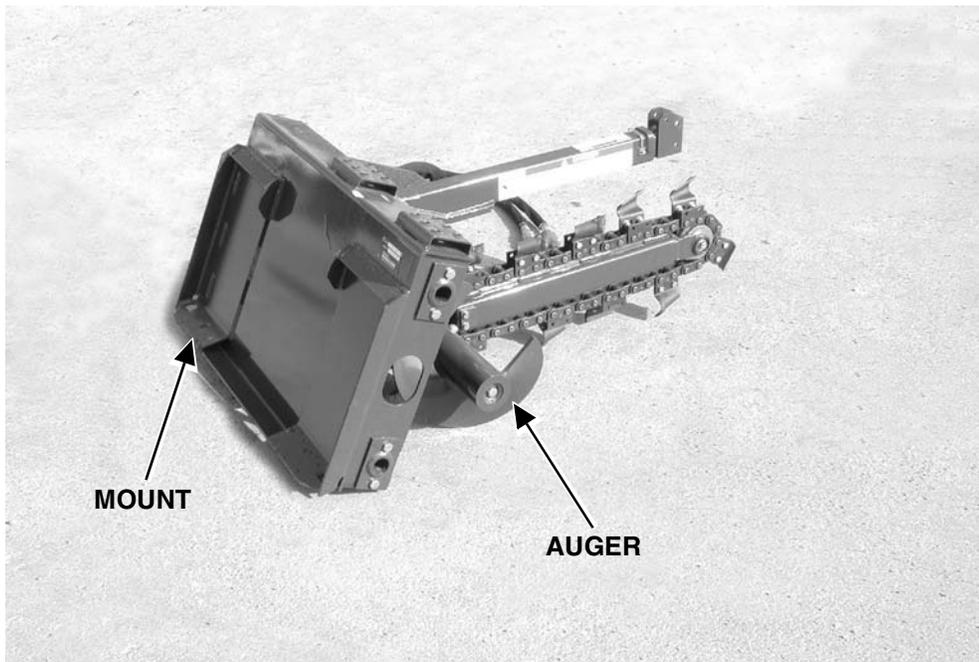
ATTACHMENT IDENTIFICATION (CONT'D)

LT102A



P-27784

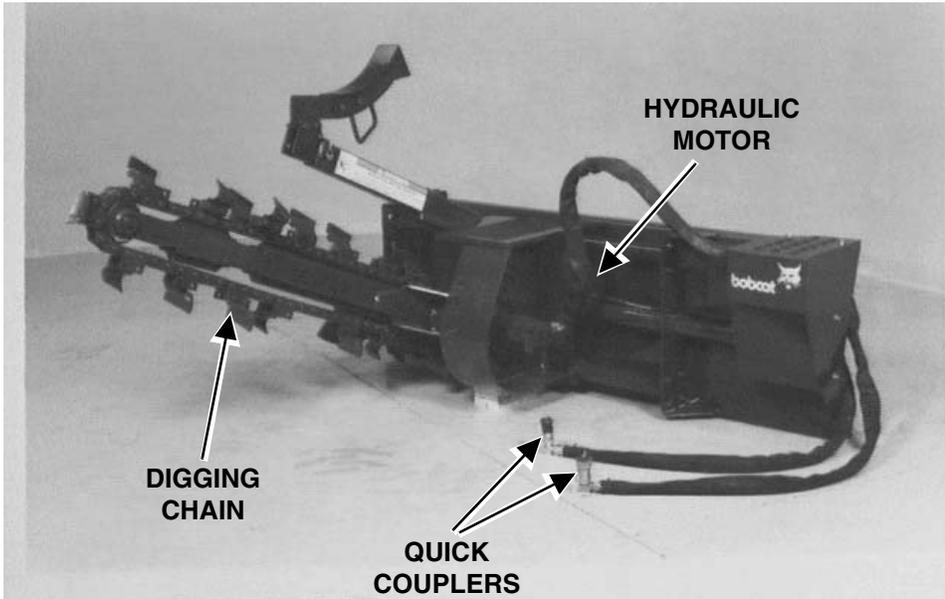
LT102A



P-27785

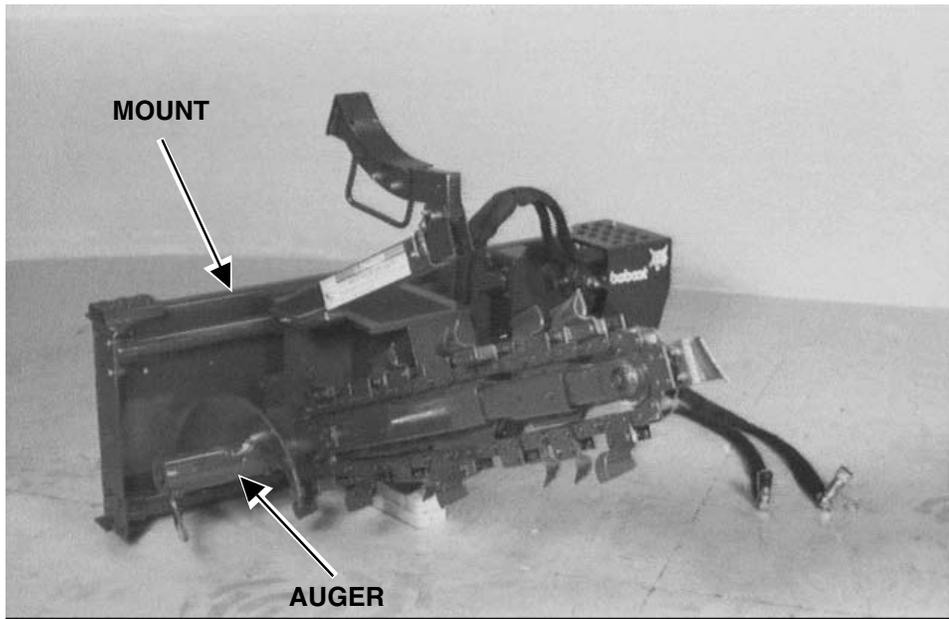
ATTACHMENT IDENTIFICATION (CONT'D)

LT203 & LT204



P5741

LT203 & LT204

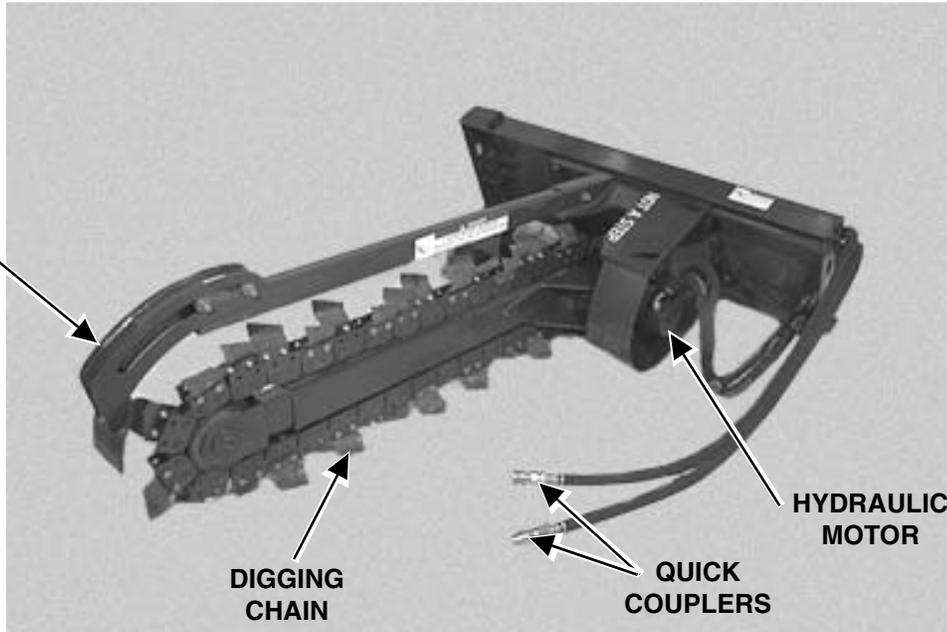


P5742

ATTACHMENT IDENTIFICATION (CONT'D)

LT303 & LT304

TRENCH
CLEANER



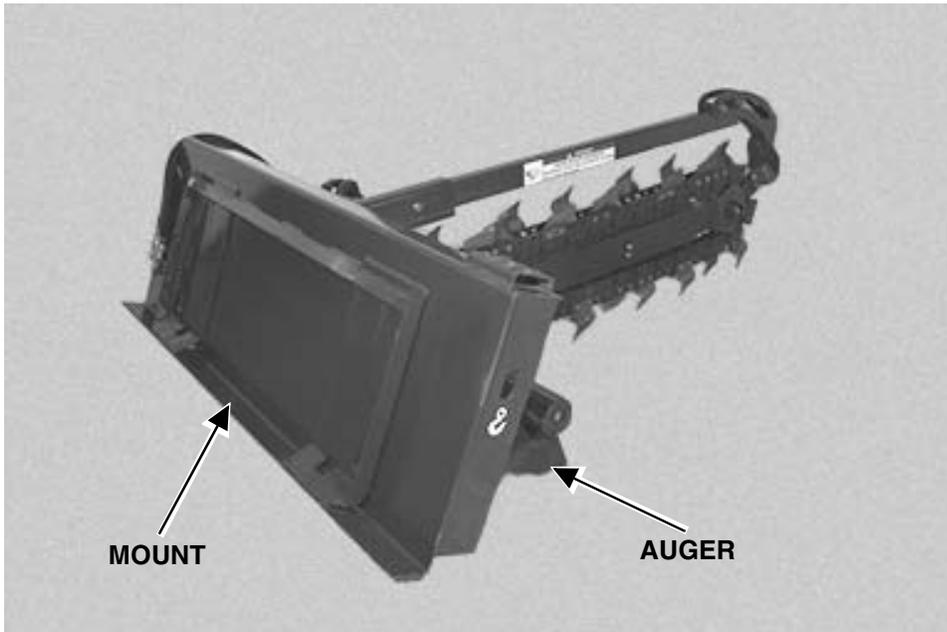
DIGGING
CHAIN

HYDRAULIC
MOTOR

QUICK
COUPLERS

P15672

LT303 & LT304



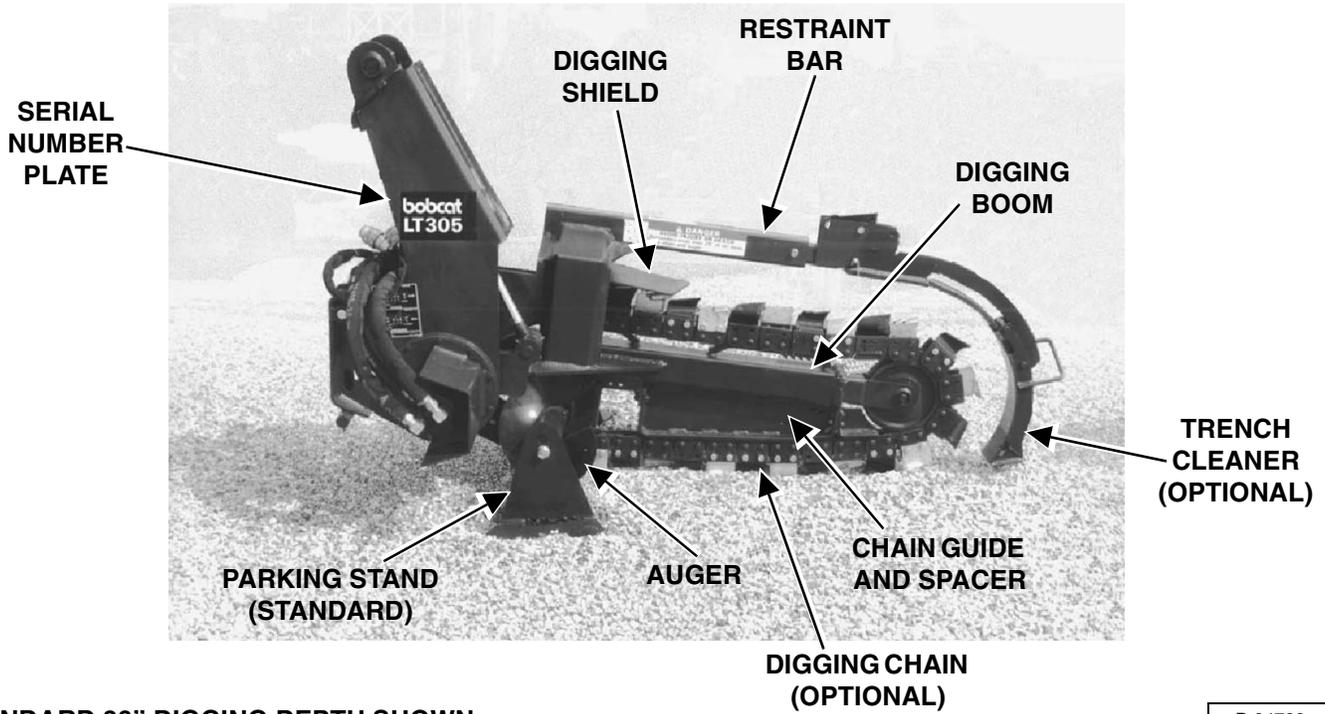
MOUNT

AUGER

P15673

ATTACHMENT IDENTIFICATION (CONT'D)

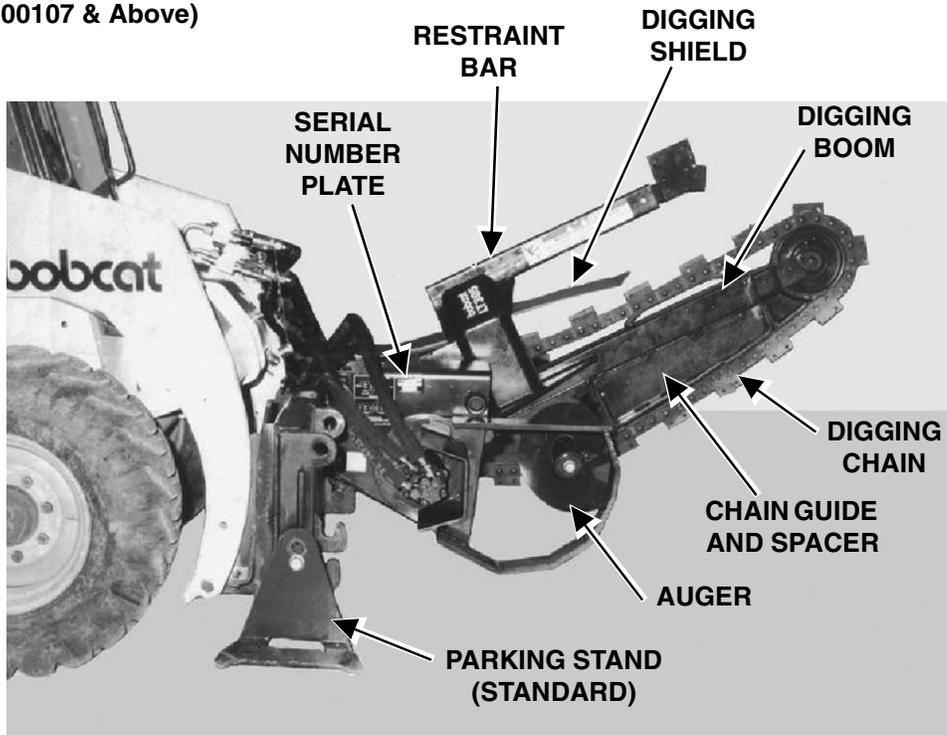
LT305 (S/N 247100101 - 247100106)



STANDARD 36" DIGGING DEPTH SHOWN

P-94732

LT305 (S/N 247100107 & Above)

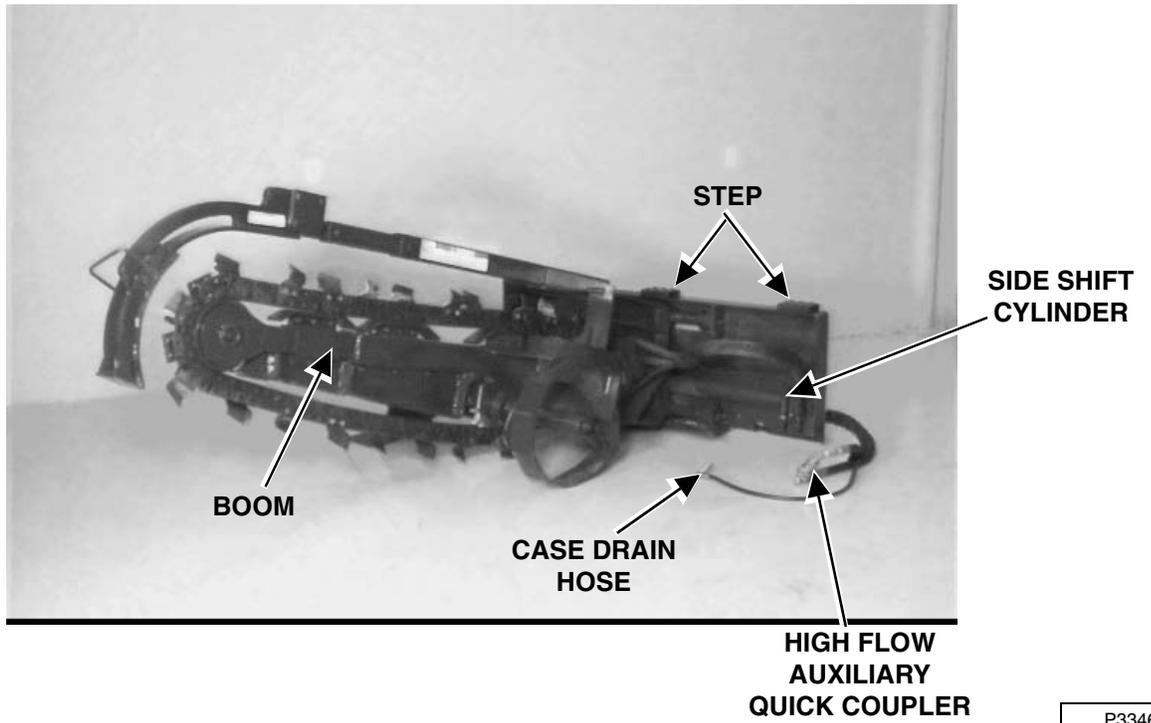


STANDARD 36" DIGGING DEPTH SHOWN

P-94733

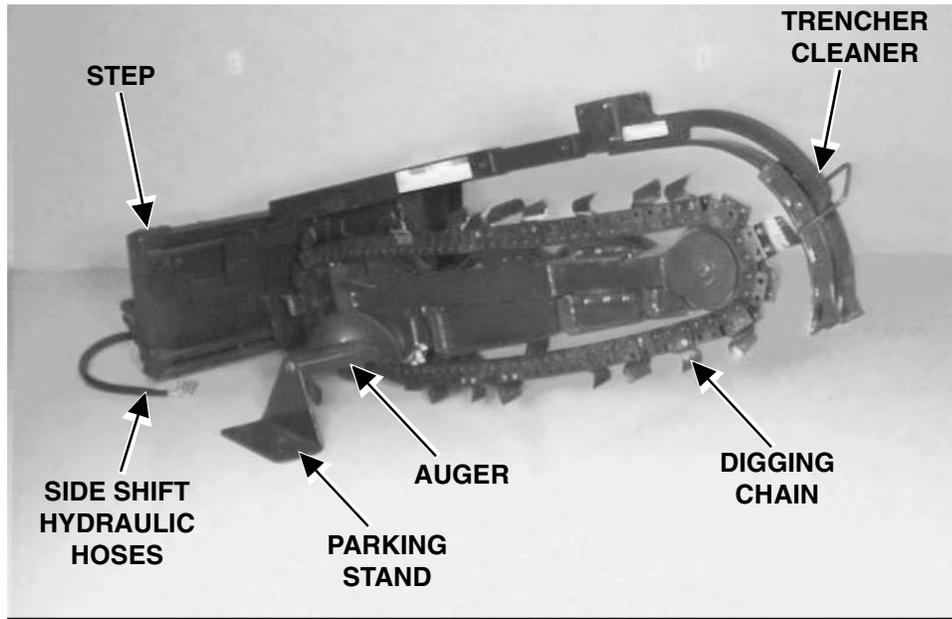
ATTACHMENT IDENTIFICATION (CONT'D)

LT405



P3346

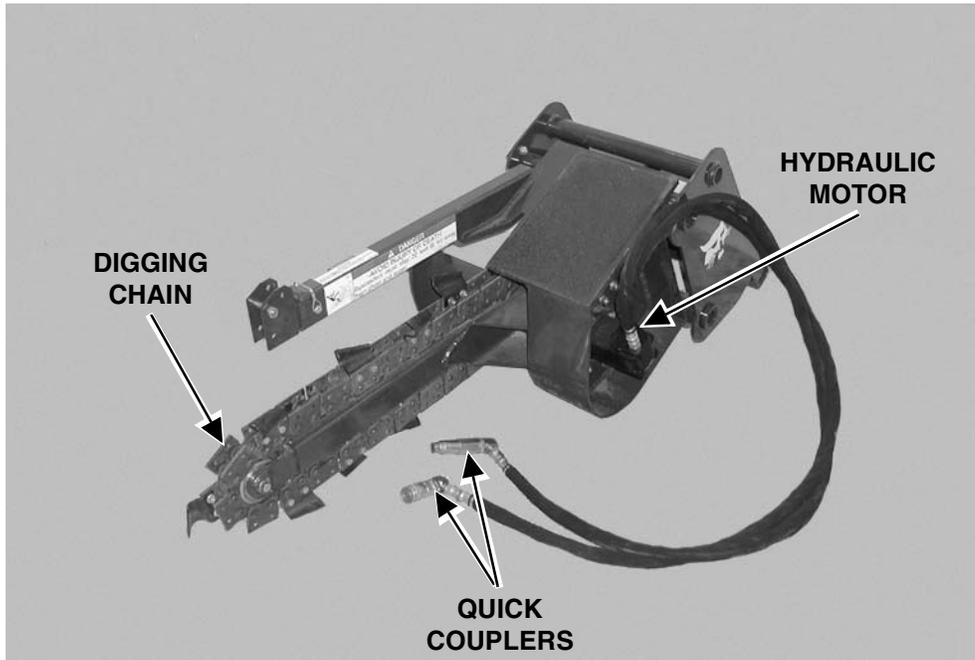
LT405



P3347

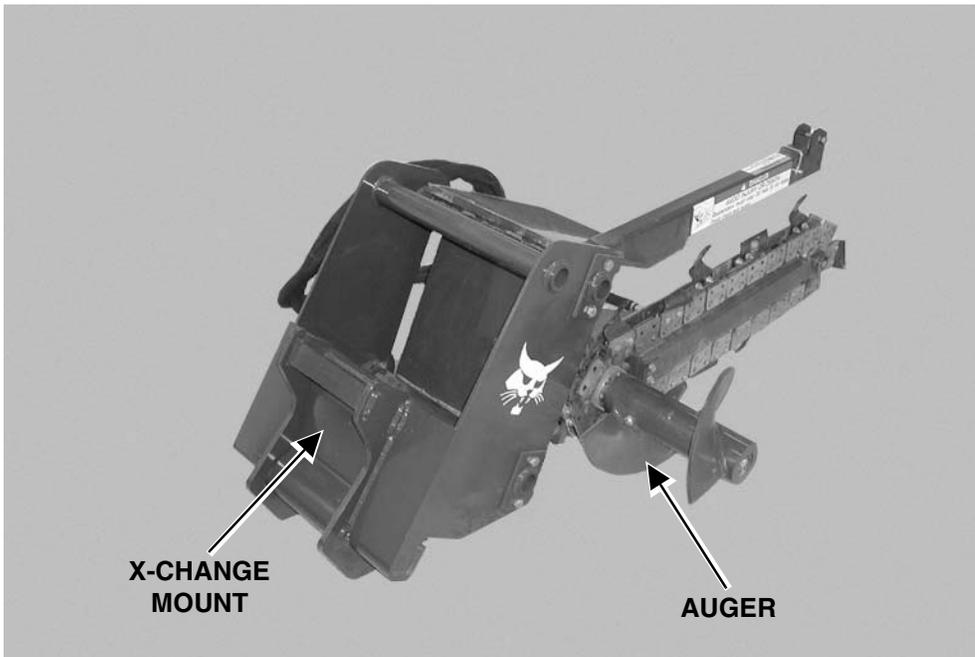
ATTACHMENT IDENTIFICATION (CONT'D)

MX102



P-27850

MX102



P-27851

SAFETY & MAINTENANCE

TROUBLESHOOTING	10-10-1
Chart	10-10-1
DAILY INSPECTION	10-20-1
Attachment Mounting Frame	10-20-1
Bob-Tach	10-20-1
X-Change™	10-20-3
Chain Guide Inspection	10-20-3
ATTACHMENT STORAGE AND RETURN TO SERVICE	10-30-1
Storage	10-30-1
Return To Service	10-30-1



Bobcat®

TROUBLESHOOTING

Chart

 <b style="font-size: 24pt; margin-left: 10px;">WARNING	<p>Instructions are necessary before operating or servicing machine. Read and understand the Operation & Maintenance Manual, Operator's Handbook and signs (decals) on machine. Follow warnings and instructions in the manuals when making repairs, adjustments or servicing. Check for correct function after adjustments, repairs or service. Untrained operators and failure to follow instructions can cause injury or death.</p> <p style="text-align: right; font-size: 10pt;">W-2003-0903</p>
--	---

If the attachment is not working correctly, check the hydraulic system of the machine thoroughly before making any repairs on the attachment. Attachment problems can be affected by a hydraulic system that is not operating to specifications. Connect a flow meter to the machine to check the hydraulic pump output, relief valve setting and tube lines to check flow and pressure. (See the machine's Service Manual for the correct procedure to connect the flow meter.)

Use the following troubleshooting chart to locate and correct problems which most often occur with the attachment.

PROBLEM	CAUSE	CORRECTION
Trencher does not mount properly on the Bob-Tach.	Bob-Tach wedges are not fully retracted.	Retract Bob-Tach wedges.
	Mud, dirt or stones are lodged between the Bob-Tach and the trencher mount.	Remove debris from between Bob-Tach and trencher mount.
Trencher does not operate.	No hydraulic flow.	Activate front auxiliary hydraulics.
		Check quick couplers connections. Check for damaged hose ends and fittings.
Trencher does not lock properly on the trenching attachment adapter (LT305 only).	Loose, damaged or missing grease fittings on the attachment, grease cylinder.	Replace grease fittings.
Digging chain does not stay adjusted to correct tension.	Damaged grease cylinder.	Repair or replace grease cylinder.

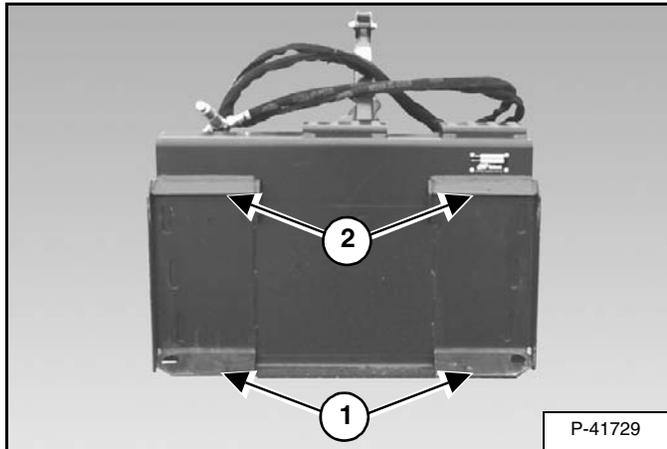


Bobcat®

DAILY INSPECTION

Attachment Mounting Frame

Figure 10-20-1



Inspect the Bob-Tach wedge mounts (Item 1), mounting flange (Item 2) [Figure 10-20-1] and all welds on the trencher for wear and damage each time the trencher is removed from the machine.

Frequently inspect the trencher to ensure that all components are secure and that all bolts and nuts are thoroughly tightened.

Bob-Tach

Hand Lever Bob-Tach

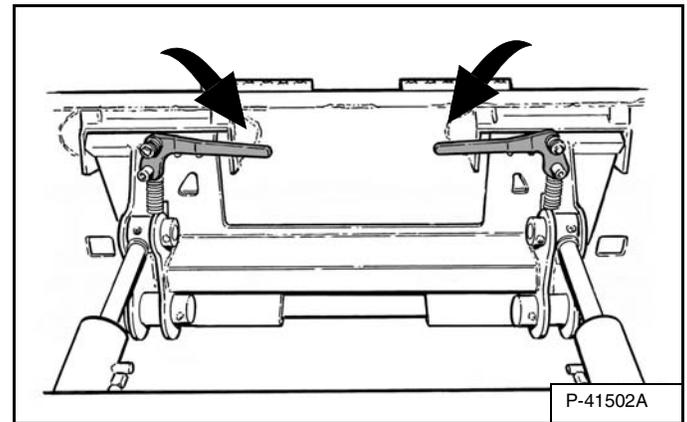


AVOID INJURY OR DEATH

The Bob-Tach wedges must extend through the holes in the attachment mounting frame. Levers must be fully down and locked. Failure to secure wedges can allow attachment to come off.

W-2715-0208

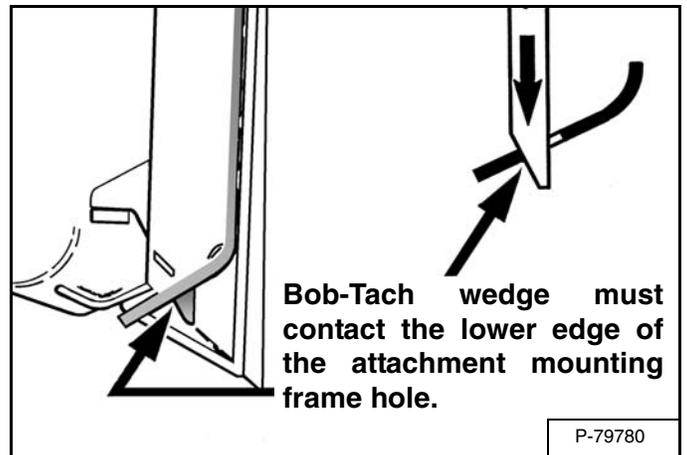
Figure 10-20-2



Push down on the Bob-Tach levers until they are fully engaged in the locked position [Figure 10-20-2] (wedges fully extended through the attachment mounting frame holes).

The levers and wedges must move freely [Figure 10-20-2].

Figure 10-20-3



The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 10-20-3].

NOTE: If the wedge does not contact the lower edge of the hole, the attachment will be loose and can come off the Bob-Tach.

Inspect the mounting frame on the attachment. (See the machine's Operation & Maintenance Manual for inspecting the Bob-Tach). Replace any parts that are damaged, bent or missing. Keep all fasteners tight. Look for cracked welds. Contact your Bobcat dealer for repair or replacement parts.

Lubricate the wedges. (See the machine's Operation & Maintenance Manual for the correct procedure.)

DAILY INSPECTION (CONT'D)

Bob-Tach (Cont'd)

Power Bob-Tach

WARNING

AVOID INJURY OR DEATH

The Bob-Tach wedges must extend through the holes in the attachment mounting frame. Levers must be fully down and locked. Failure to secure wedges can allow attachment to come off.

W-2715-0208

Figure 10-20-4

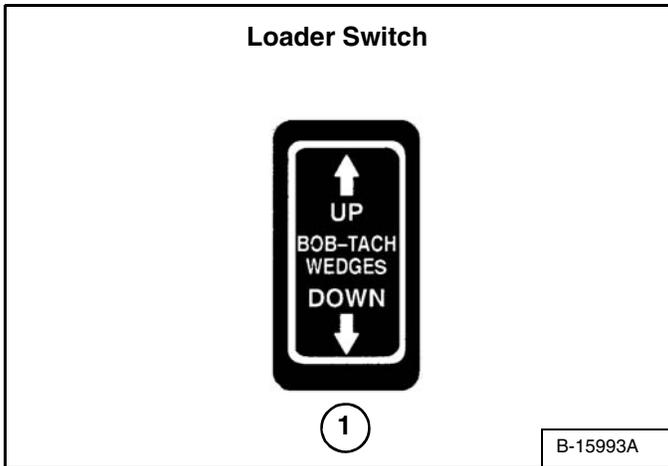
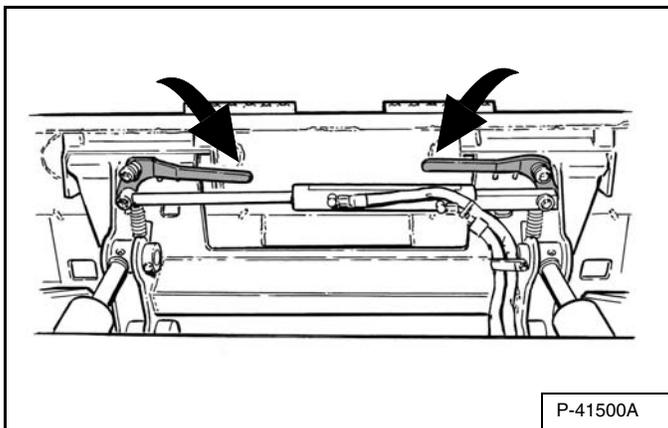
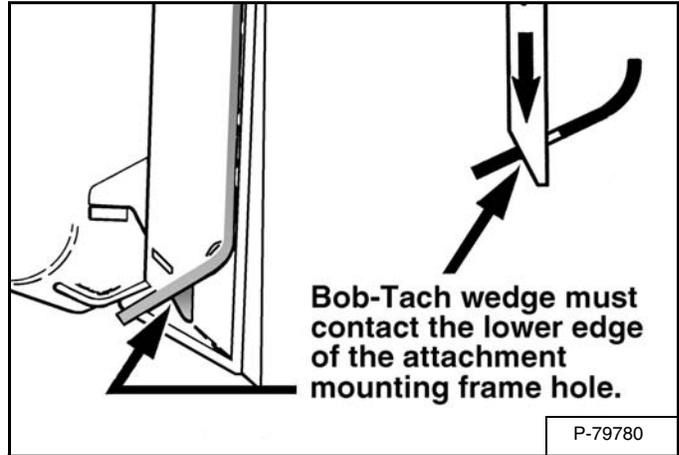


Figure 10-20-5



Push and hold the BOB-TACH “WEDGES DOWN” switch (Item 1) [Figure 10-20-4] until the levers are fully engaged in the locked position [Figure 10-20-5] (wedges fully extended through the attachment mounting frame holes).

Figure 10-20-6



The wedges must extend through the holes in the attachment mounting frame, securely fastening the attachment to the Bob-Tach [Figure 10-20-6].

NOTE: If the wedge does not contact the lower edge of the hole, the attachment will be loose and can come off the Bob-Tach.

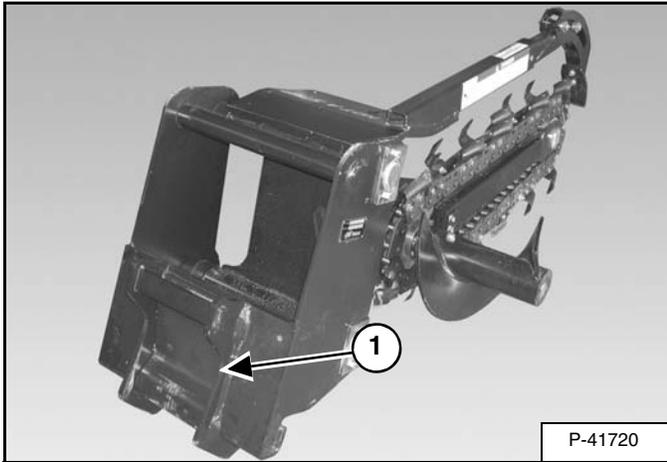
Inspect the mounting frame on the attachment. (See the machine's Operation & Maintenance Manual for inspecting the Bob-Tach). Replace any parts that are damaged, bent or missing. Keep all fasteners tight. Look for cracked welds. Contact your Bobcat dealer for repair or replacement parts.

Lubricate the wedges. (See the machine's Operation & Maintenance Manual for the correct procedure.)

DAILY INSPECTION (CONT'D)

X-Change™

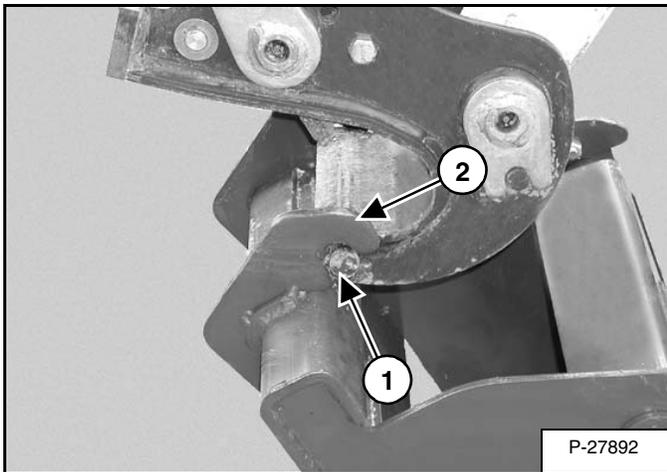
Figure 10-20-7



Inspect the X-Change mount (Item 1) [Figure 10-20-7] and all welds on the trencher for wear and damage each time the trencher is removed from the machine.

Frequently inspect the trencher to ensure that all components are secure and that all bolts and nuts are thoroughly tightened.

Figure 10-20-8

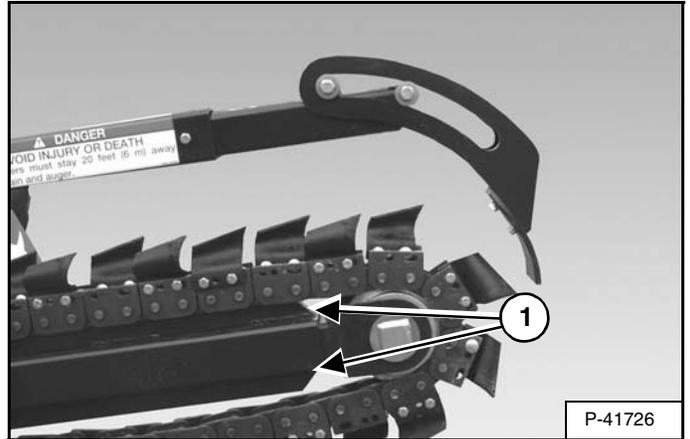


Inspect the X-Change for wear or damage. Inspect the X-Change pins (Item 1) and hooks (Item 2) [Figure 10-20-8] (on the attachment) and all hardware for wear or damage.

Repair or replace damaged parts.

Chain Guide Inspection

Figure 10-20-9



Inspect the top and bottom chain guide (Item 1) [Figure 10-20-9] for wear and damage.



Bobcat®

ATTACHMENT STORAGE AND RETURN TO SERVICE

Storage

Sometimes it may be necessary to store your Bobcat attachment for an extended period of time. Below is a list of items to perform before storage:

- Thoroughly clean and wash the attachment.
- Lubricate the attachment.
- Inspect the upper and lower mounts, mounting pins and all welds on the attachment for wear and damage.
- Check for loose hardware, missing guards, or damaged parts.
- Replace worn or damaged parts.
- Check for damaged or missing decals. Replace if necessary.
- Place the attachment in a dry protected shelter.
- Place the attachment flat on the ground.

NOTE: In muddy conditions or to prevent the attachment from freezing to the ground, put the attachment on planks or blocks before removing the attachment from the machine.

Return To Service

After the Bobcat attachment has been in storage, it is necessary to follow a list of items to return the attachment to service:

- Check for damaged or missing decals. Replace if necessary.
- Be sure all shields and guards are in place.
- Lubricate the attachment.
- Check for loose hardware, missing or damaged parts.
- Check for leaks. Repair as needed.
- Check oil level in the gearbox(es).
- Install and operate attachment, check for correct function.



Bobcat®

HYDRAULIC SYSTEM

HYDRAULIC CYLINDER	20-10-1
Checking For Internal Leakage	20-10-1
Removal And Installation (LT203 & LT204)	20-10-2
Removal And Installation (LT303 & LT304)	20-10-3
Removal And Installation (LT405)	20-10-5
Parts Identification	20-10-6
Disassembly	20-10-8
Assembly	20-10-11
Torque Specifications	20-10-17
HYDRAULIC MOTOR (LT102, LT102A, LT203, LT204 & MX102)	20-20-1
Removal And Installation	20-20-1
Parts Identification	20-20-2
Disassembly	20-20-3
Inspection	20-20-7
Assembly	20-20-8
HYDRAULIC MOTOR (LT303 & LT304)	20-21-1
Removal And Installation	20-21-1
Parts Identification	20-21-3
Disassembly	20-21-4
Inspection	20-21-7
Assembly	20-21-8
HYDRAULIC MOTOR (LT405) (S/N 705100101 & ABOVE, S/N 610000526 & BELOW)	
.....	20-22-1
Removal And Installation	20-22-1
Parts Identification	20-22-3
Disassembly	20-22-4
Assembly	20-22-11
HYDRAULIC MOTOR (LT405) (S/N 610000527 & ABOVE)	20-23-1
Removal And Installation	20-23-1
Parts Identification	20-23-4
Disassembly	20-23-5
Inspection	20-23-9
Assembly	20-23-10
DRIVE CARRIER (LT405) (S/N 610000527 & ABOVE)	20-30-1
Removal And Installation	20-30-1
Parts Identification	20-30-2
Disassembly	20-30-3
Assembly	20-30-8

Product 2010 Bobcat LT102, LT102A, MX102, LT203, LT204, LT303, LT304, LT305, LT405 Trencher Service Repair Workshop Manual	20-40-1
Full Download: https://www.aresairmanual.com/downloads/2010-bobcat-lt102-lt102amx102lt203lt204lt303lt304lt305lt405-trencher-service-repair-workshop-manual/	20-40-1
Removal And Installation (LT203 & LT204)	20-40-2
Removal And Installation (LT303 & LT304)	20-40-3
Parts Identification	20-40-4
Disassembly	20-40-5
Assembly	20-40-5

Sample of manual. Download All 220 pages at:
<https://www.aresairmanual.com/downloads/2010-bobcat-lt102-lt102amx102lt203lt204lt303lt304lt305lt405-trencher-service-repair-workshop-manual/>