



# 8in and 12in Chain Conversion Kit for Model 22490 36in Soil Chain

Model No. 117-3480

Model No. 117-3481

Form No. 3362-839 Rev A

## Installation Instructions

# Installation

## Loose Parts

Use the chart below to verify that all parts have been shipped.

Description	Qty.	Use
Left-hand soil tooth	3	Configure an 8 Inch (20 cm) Chain (Model 117-3480)
Right-hand soil tooth	3	
8 inch (20 cm) spacer	3	
Bolt (3/8 x 2-1/2 inches)	12	
Locknut (3/8–24 inch)	12	
8 inch (20 cm) crumber deflector plate	1	
Locknut (3/8–16 inch)	2	
Bolt (3/8 x 1 inch)	2	Configure a 12 Inch (30.5 cm) Chain (Model 117-3481)
Left-hand soil tooth	6	
Right-hand soil tooth	6	
8 inch (20 cm) spacer	2	
Bolt (3/8 x 2-1/2 inches)	8	
10 inch (25 cm) spacer	2	
Bolt (3/8 x 3-1/2 inches)	8	
12 inch (30.5 cm) spacer	2	
Bolt (3/8 x 3-1/2 inches)	8	
Locknut (3/8–24 inch)	24	
12 inch (30.5 cm) crumber deflector plate	1	
Locknut (3/8–16 inch)	2	
Bolt (3/8 x 1 inch)	2	

## Pre-installation Procedures

1. If you have a removable trencher attachment, install the trencher on the traction unit.
2. Start the traction unit and move it to a flat surface with access to the trencher boom from all sides.
3. Lower/raise the trencher boom so that it is parallel with the ground.
4. Run the chain slowly forward until the link with the clevis pin securing it is at the nose of the chain. The tooth after this is position A (Figure 1).
5. Place a block under the boom to prevent it from lowering, stop the engine, and remove the key.



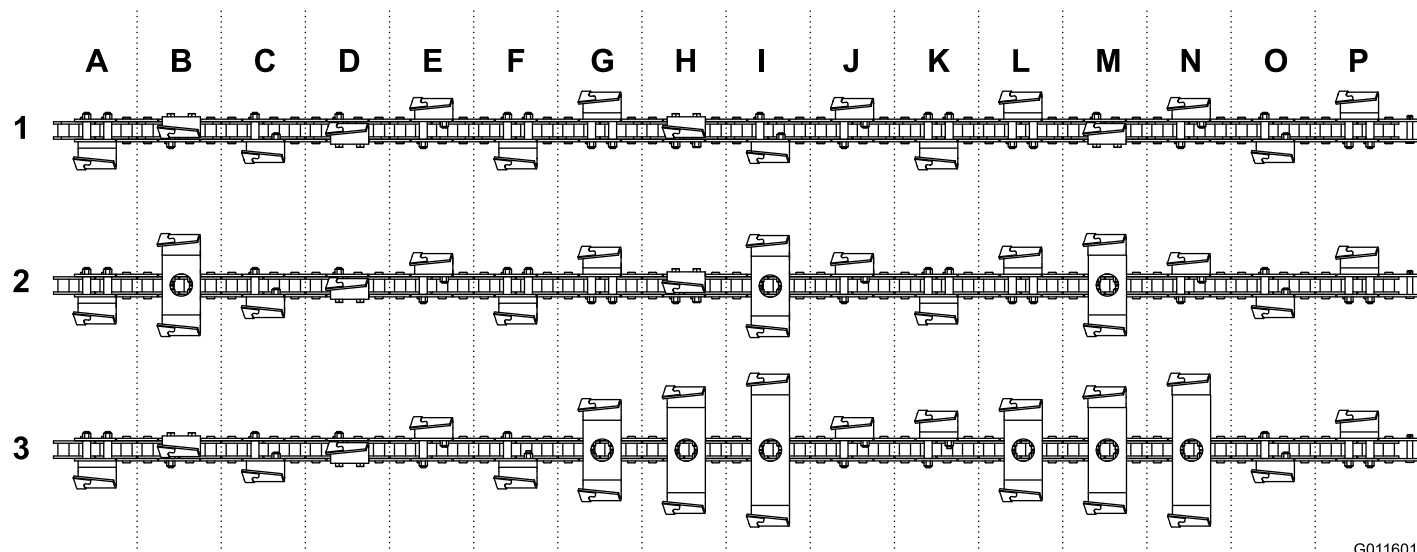
**The moving teeth and auger will severely cut hands, feet, or other body parts.**

- **Keep hands, feet, and any other part of your body or clothing away from moving teeth, auger, or other parts.**
- **Before working on the chain, lower the trencher to the block, stop the engine, wait for all moving parts to stop, and remove the key.**



The trencher may lower when in the raised position after stopping the engine, crushing anyone under them.

Place a block under the trencher boom to keep it from lowering.



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**Figure 1**

Refer to this figure through the installation.

- |  |  |
|--|--|
| 1. Original 6 inch (15 cm) chain configuration | 3. 12 inch (30.5 cm) chain configuration |
| 2. 8 inch (20 cm) chain configuration          |  |

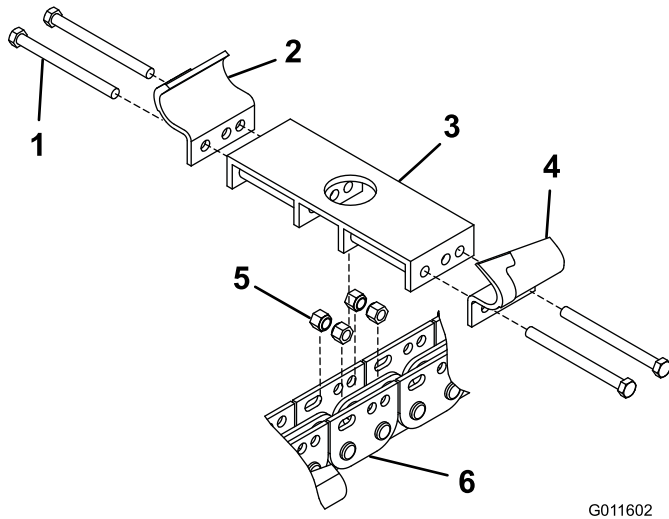
**Important:** It will be necessary start the engine and run the chain forward to access all chain positions during the installation. After doing so each time, ensure that you lower the trencher to the block, stop the engine, and remove the key.

**Note:** It may be helpful to locate all of the positions shown in Figure 1 on the chain before starting and mark them with a marker or wax pencil.

## Configuring an 8 Inch (20 cm) Chain (Model 117-3480)

**Note:** Note, the spacers provided are a few inches (cm) shorter than named; the name indicated the total width once combined with two teeth.

1. Remove the tooth and spacers from chain position **B** (Figure 1).
2. Install an 8 inch (20 cm) spacer, a left-hand soil tooth, and a right-hand soil tooth to chain position **B**, using 4 bolts (3/8 x 2-1/2 inches) and 4 locknuts (3/8-24 inch) (Figure 2).



**Figure 2**

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- |                          |                         |
|--------------------------|-------------------------|
| 1. Bolt                  | 4. Left-hand soil tooth |
| 2. Right-hand soil tooth | 5. Locknuts             |
| 3. Spacer                | 6. Chain link position  |

3. Torque the bolts and nuts to 27 to 33 ft-lb (37 to 45 N-m).
4. Repeat steps 1 through 3 for chain positions **I** and **M**.
5. If you have a crumber installed, install the new deflector plate as follows.
  - A. Remove the deflector plate and fasteners from the end of the crumber.
  - B. Install the 8 inch (20 cm) deflector plate using 2 bolts (3/8 x 1 inch) and locknuts (3/8-16 inch).

## Configuring a 12 Inch (30.5 cm) Chain (Model 117-3481)

**Note:** Note, the spacers provided are a few inches (cm) shorter than named; the name indicates the total width once combined with two teeth.

1. Remove the teeth and spacers from chain positions **G, H, and I** (Figure 1).
2. Install an 8 inch (20 cm) spacer, a left-hand soil tooth, and a right-hand soil tooth to chain position **G**, using 4 bolts (3/8 x 2-1/2 inches) and 4 locknuts (3/8-24 inch) (Figure 2).
3. Install an 10 inch (25 cm) spacer, a left-hand soil tooth, and a right-hand soil tooth to chain position **H**, using 4 bolts (3/8 x 3-1/2 inches) and 4 locknuts (3/8-24 inch) (Figure 2).
4. Install an 12 inch (30.5 cm) spacer, a left-hand soil tooth, and a right-hand soil tooth to chain position **I**, using 4 bolts (3/8 x 4-1/2 inches) and 4 locknuts (3/8-24 inch) (Figure 2).
5. Torque the bolts and nuts to 27 to 33 ft-lb (37 to 45 N-m).
6. Remove the teeth and spacers from chain position **K** (Figure 1).
7. Remove the teeth and spacers from chain position **L** and install them into position **K** (Figure 1).
8. Remove the teeth and spacers from chain positions **M and N** (Figure 1).
9. Install an 8 inch (20 cm) spacer, a left-hand soil tooth, and a right-hand soil tooth to chain position **L**, using 4 bolts (3/8 x 2-1/2 inches) and 4 locknuts (3/8-24 inch) (Figure 2).
10. Install an 10 inch (25 cm) spacer, a left-hand soil tooth, and a right-hand soil tooth to chain position **M**, using 4 bolts (3/8 x 3-1/2 inches) and 4 locknuts (3/8-24 inch) (Figure 2).
11. Install an 12 inch (30.5 cm) spacer, a left-hand soil tooth, and a right-hand soil tooth to chain position **N**, using 4 bolts (3/8 x 4-1/2 inches) and 4 locknuts (3/8-24 inch) (Figure 2).
12. Torque the bolts and nuts to 27 to 33 ft-lb (37 to 45 N-m).
13. If you have a crumber installed, install the new deflector plate as follows.
  - A. Remove the deflector plate and fasteners from the end of the crumber.
  - B. Install the 12 inch (30.5 cm) deflector plate using 2 bolts (3/8 x 1 inch) and locknuts (3/8-16 inch).



**Count on it.**