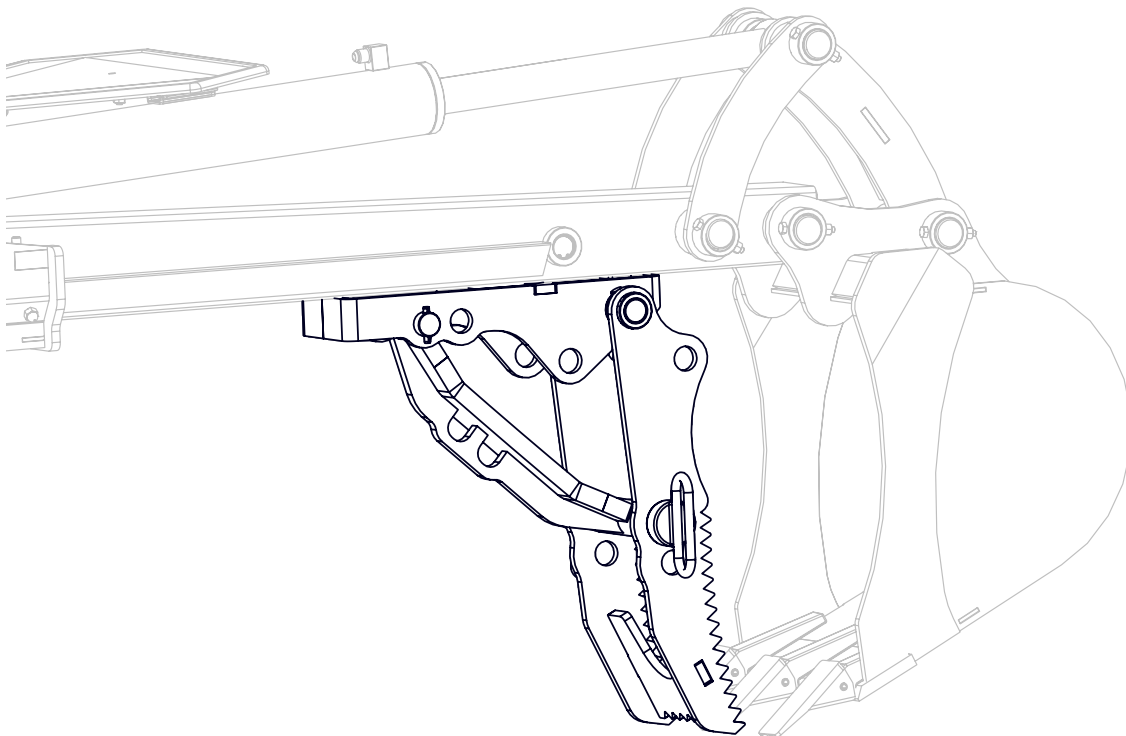


INSTALLATION INSTRUCTIONS

BT5250 Weld-on Mechanical Thumb



1. Safety

1.1 Safety Alert Symbol



This Safety Alert Symbol means:

ATTENTION! BE ALERT!

YOUR SAFETY IS INVOLVED!

The **Safety Alert Symbol** identifies important safety messages on the Wallenstein equipment and in this manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.

1.2 Why is SAFETY important?

Three Big Reasons:

- Accidents Disable and Kill
- Accidents Cost
- Accidents Can Be Avoided

1.3 Signal Words

The signal words **DANGER**, **WARNING** and **CAUTION** determine the seriousness level of the warning messages in this manual. The appropriate signal word for each message in this manual has been selected using the following guidelines:

DANGER –

Indicates an imminently hazardous situation that, if not avoided, **will** result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for functional purposes, cannot be guarded.


WARNING –

Indicates a potentially hazardous situation that, if not avoided, **could** result in death or serious injury, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

CAUTION –

Indicates a potentially hazardous situation that, if not avoided, **may** result in minor or moderate injury. It may also be used to alert against unsafe practices.

IMPORTANT – To avoid confusing equipment protection with personal safety messages, a signal word **IMPORTANT** indicates a situation that if not avoided, could result in damage to the machine.

 **NOTE:** *(plus text) – indicates an additional explanation for an element of information.*

If there are any questions not answered in this manual, additional copies are required, or the manual is damaged, please contact your dealer or Wallenstein at 4144 Boomer Line, St. Clements, ON, N0B 2M0 Phone (519) 699-9283 or Fax (519) 699-4146.

2. Warranty



LIMITED WARRANTY

Wallenstein products are warranted to be free of defects in materials and workmanship under normal use and service, for a period of

Five Years for Consumer Use

Two Years for Commercial/Rental Use

from the date of purchase, when operated and maintained in accordance with the operating and maintenance instructions supplied with the unit. Warranty is limited to the repair of the product and/or replacement of parts.

This warranty is extended only to the original purchaser and is not transferable.

Repairs must be done by an authorized dealer. Products will be returned to the dealer at the customer's expense. Include the original purchase receipt with any claim.

This warranty does not cover the following:

- 1) Normal maintenance or adjustments
- 2) Normal replacement of wearable and service parts
- 3) Consequential damage, indirect damage, or loss of profits
- 4) Damages resulting from:
 - Misuse, negligence, accident, theft or fire
 - Use of improper or insufficient fuel, fluids or lubricants
 - Use of parts or aftermarket accessories other than genuine Wallenstein parts
 - Modifications, alteration, tampering or improper repair performed by parties other than an authorized dealer
 - Any device or accessories installed by parties other than an authorized dealer
- 5) Engines. Engines are covered by the manufacturer of the engine for the warranty period they specify. For the details of your engine warranty, see your engine owner's manual. Information about engine warranty and service is also available in the FAQ section at www.wallensteinequipment.com

3. Parts Breakdown

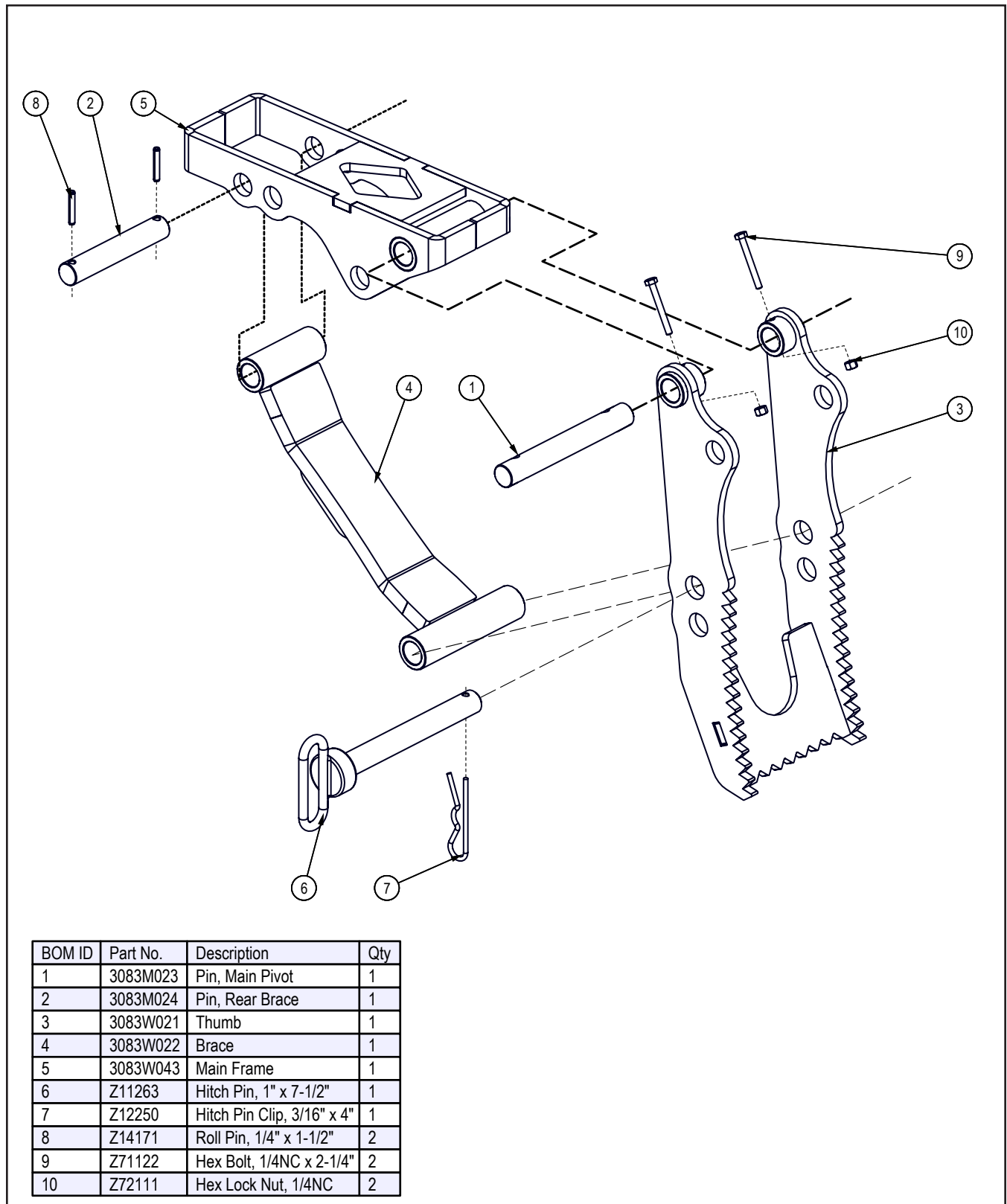


Fig. 5—Weld-on thumb parts breakdown

IMPORTANT! The BT5250 Weld-on Thumb is designed for small tractor-mounted backhoes with a maximum bucket digging force of 4,000 lb. Installing it on machines larger than that risks damaging the thumb assembly and voiding warranty.

IMPORTANT! A fire extinguisher should be easily accessible during all welding work.

- When performing any welding operation on this machine, specific electrical components may need to be disconnected. Refer to the machine operator's manual.
- Welding should only be done in a well-ventilated and prepared area and not in places that contain combustible liquids, such as fuel tanks, hydraulic pipes or similar items. Store flammable objects in a safe place before starting.
- Welding must be performed by a trained welder with proper service instructions. Know the material to be welded and select the correct welding procedure and materials (electrodes, rods, wire) that provide a weld metal strength equivalent to the original material.
- Heated paint gives off poisonous gases. Therefore, paint must be removed from an area with a radius of at least 4 in (10 cm) before carrying out welding, grinding or gas cutting. In addition to the health hazard, the weld is of inferior quality and strength if the paint is not removed.
- Do not allow weld spatter to contact hydraulic components. Damage could occur to cylinder rods, hoses and hydraulic fittings.

! WARNING!

Use only lifting devices with sufficient capacity to safely support the expected weight being lifted. Use a hoist when lifting components that weigh 50 lb (23 kg) or more to avoid back injury.

! WARNING!

Never work under equipment unless it is securely blocked. Do not depend on tractor hydraulic system to hold machine or attachment in place.

4. Procedure

Read and understand these instructions thoroughly before beginning the installation.

1. Place the backhoe dipperstick boom in a horizontal position. The centerline of the dipperstick boom should be parallel to the ground. The sides of the bucket should be perpendicular to the ground.

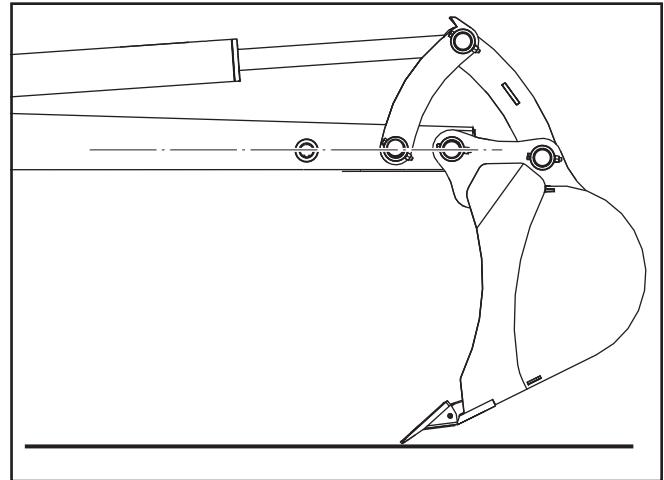


Fig. 1—Backhoe dipperstick boom horizontal

2. Position the Weld-on Thumb main frame on the underside of the dipperstick boom (1), so that the thumb jaw just meets the bucket teeth.

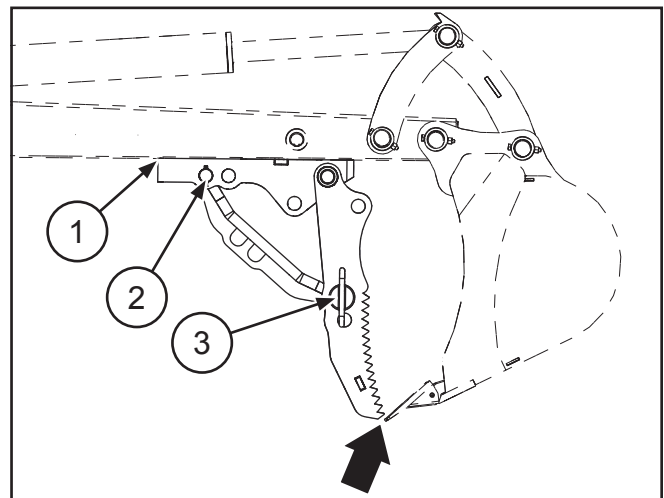


Fig. 2—Position thumb frame

3. Adjust the rear brace pin (2) and the hitch pin (3) positions to get the main frame (1) as close as possible.
4. Center the thumb main frame on the dipperstick boom.

5. Check left to right alignment making sure thumb talons are centered (4) and align with the bucket teeth.

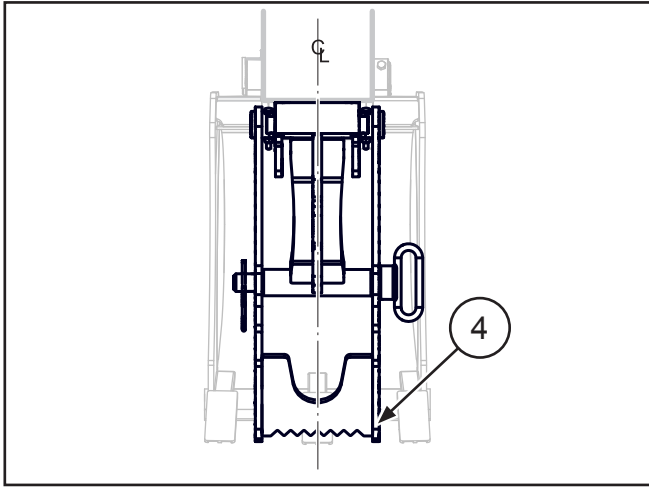


Fig. 3—Center thumb on dipperstick boom

IMPORTANT! Improper alignment could impair BT5250 Weld-on Thumb performance and damage the machine arm or attachments.

6. Cycle the movement of the bucket to confirm the thumb functions as expected.
7. Mark the thumb position, then remove it from the underside of the dipperstick boom.

WARNING!

If sand blasting or grinding off paint, wear an approved respirator. Work outside or in a well-ventilated area.

8. Remove the paint from the area where the thumb main frame is to be welded onto the dipperstick.

IMPORTANT! When performing any welding operation on the machine, specific electrical components may need to be disconnected. Refer to the machine operator's manual before welding.

9. Disassemble the weld-on thumb, then clamp the thumb main frame to the underside of the dipperstick.

NOTE: Welding the main frame to the dipperstick boom is easier if the weld-on thumb is disassembled.

10. Place a full 3/8 fillet weld around the plate (as much as possible depending on backhoe dipperstick shape and size). Weld inside the center diamond shape as well, if possible. (Place a full 3/8 fillet weld wherever the main frame contacts the dipperstick.)

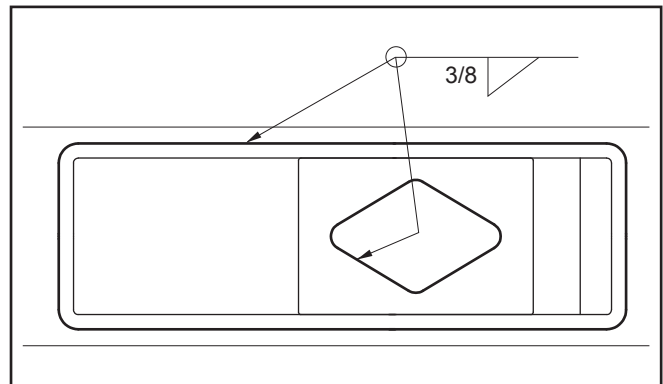


Fig. 4—Apply full weld around the plate

11. After welding, clean, prime and repaint bare surfaces.
12. Reassemble the Weld-on Thumb.
13. Reconnect any of the machine's electrical harnesses and connections that were previously disconnected.

5. Testing

- Test the functions of the thumb assembly and bucket before putting the machine into operation. Cycle the movement of the bucket to confirm the thumb functions as expected.