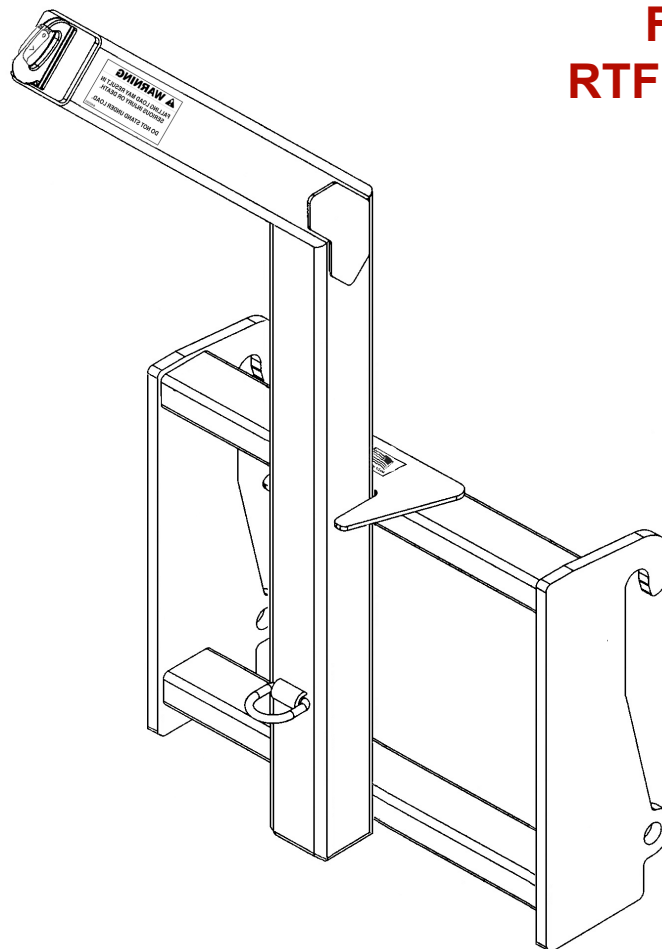




OPERATOR'S AND PARTS MANUAL

TREE BOOM

**FOR
RTFL & WL**



SERIAL NUMBER: _____

MODEL NUMBER: _____

Manual Number: 76817
Part Number: 76817
Rev. 3 August 2018

TABLE OF CONTENTS

PREFACE.....	3
SAFETY PRECAUTIONS	4-7
SAFETY STATEMENTS	4
GENERAL SAFETY PRECAUTIONS.....	4-6
EQUIPMENT SAFETY PRECAUTIONS	7
INSTALLATION AND OPERATION	9
OPERATING EQUIPMENT	9
OPERATING TIPS.....	9
SAFE OPERATING TEMPERATURES.....	10
SPECIFICATIONS.....	10
STORAGE.....	11
GENERAL INFORMATION.....	11
PREPARATION FOR STORAGE	11
REMOVING FROM STORAGE.....	11
LIMITED WARRANTY	13
PARTS	
TREE BOOM ASSEMBLY #12505	16-17
TREE BOOM ASSEMBLY #12609	18-19
TREE BOOM ASSEMBLY #12916	20-21

FOREWORD

Although Bradco has various tree booms available, we are continually designing new sizes and mountings. If your combination is not listed, please contact the factory. We have extensive mounting information available to generate the product you need.

Below is a listing of the tree booms that are currently available. See the “Parts” section of this manual for the assemblies “Shown”.

DESCRIPTION & MOUNT	ASSEMBLY #
CASE	
Tree Boom, 8,000 LB. Capacity-CASE 636 (Shown)	12505
CATERPILLAR	
Tree Boom, 8,000 LB. Capacity-CAT 902/906/908 (Shown)	12609
INGERSOLL RAND	
Tree Boom, 8,000 LB. Capacity-IR 530-1056 (Shown)	12505
JCB	
Tree Boom, 8,000 LB. Capacity-JCB 214S & Q-Fit (Shown)	12916

PREFACE

GENERAL COMMENTS

Congratulations on the purchase of your new attachment! This product was carefully designed and manufactured to give you many years of dependable service. Only minor maintenance (such as cleaning and lubricating) is required to keep it in top working condition. Be sure to observe all maintenance procedures and safety precautions in this manual and on any safety decals located on the product and on any equipment on which the attachment is mounted.

This manual has been designed to help you do a better, safer job. Read this manual carefully and become familiar with its contents.

WARNING! Never let anyone operate this unit without reading the "Safety Precautions" and "Operating Instructions" sections of this manual.



Always choose hard, level ground to park the vehicle on and set the brake so the unit cannot roll.

Unless noted otherwise, right and left sides are determined from the operator's control position when facing the attachment.

NOTE: The illustrations and data used in this manual were current (according to the information available to us) at the time of printing, however, we reserve the right to redesign and change the attachment as may be necessary without notification.

BEFORE OPERATION

The primary responsibility for safety with this equipment falls to the operator. Make sure the equipment is operated only by trained individuals that have read and understand this manual. If there is any portion of this manual or function you do not understand, contact your local authorized dealer or the manufacturer to obtain further assistance. Keep this manual available for reference. Provide the manual to any new owners and/or operators.

SAFETY ALERT SYMBOL



This is the "Safety Alert Symbol" used by this industry. This symbol is used to warn of possible injury. Be sure to read all warnings carefully. They are included for your safety and for the safety of others working with you.

SERVICE

Use only manufacturer replacement parts. Substitute parts may not meet the required standards.

Record the model and serial number of your unit on the cover of this manual. The parts department needs this information to insure that you receive the correct parts.

SOUND AND VIBRATION

Sound pressure levels and vibration data for this attachment are influenced by many different parameters: some items are listed below (not inclusive):

- prime mover type, age, condition, with or without cab enclosure and configuration
- operator training, behavior, stress level
- job site organization, working material condition, environment

Based on the uncertainty of the prime mover, operator, and job site, it is not possible to get precise machine and operator sound pressure levels or vibration levels for this attachment.

NOTE: A list of all Paladin Patents can be found at <http://www.paladinattachments.com/patents.asp>.

M-934 10-22-13-5

SAFETY STATEMENTS



THIS SYMBOL BY ITSELF OR WITH A WARNING WORD THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY OR THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.



DANGER

THIS SIGNAL WORD INDICATES A HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, WILL RESULT IN DEATH OR SERIOUS INJURY.



WARNING

THIS SIGNAL WORD INDICATES A HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN DEATH OR SERIOUS INJURY.



CAUTION

THIS SIGNAL WORD INDICATES A HAZARDOUS SITUATION WHICH, IF NOT AVOIDED, COULD RESULT IN MINOR OR MODERATE INJURY.

NOTICE

NOTICE IS USED TO ADDRESS PRACTICES NOT RELATED TO PHYSICAL INJURY.

GENERAL SAFETY PRECAUTIONS

WARNING!



READ MANUAL PRIOR TO INSTALLATION

Improper installation, operation, or maintenance of this equipment could result in serious injury or death. Operators and maintenance personnel should read this manual, as well as all manuals related to this equipment and the prime mover thoroughly before beginning installation, operation, or maintenance. **FOLLOW ALL SAFETY INSTRUCTIONS IN THIS MANUAL AND THE PRIME MOVER'S MANUAL(S).**



READ AND UNDERSTAND ALL SAFETY STATEMENTS

Read all safety decals and safety statements in all manuals prior to operating or working on this equipment. Know and obey all OSHA regulations, local laws, and other professional guidelines for your operation. Know and follow good work practices when assembling, maintaining, repairing, mounting, removing, or operating this equipment.



KNOW YOUR EQUIPMENT

Know your equipment's capabilities, dimensions, and operations before operating. Visually inspect your equipment before you start, and never operate equipment that is not in proper working order with all safety devices intact. Check all hardware to ensure it is tight. Make certain that all locking pins, latches, and connection devices are properly installed and secured. Remove and replace any damaged, fatigued, or excessively worn parts. Make certain all safety decals are in place and are legible. Keep decals clean, and replace them if they become worn or hard to read.

GENERAL SAFETY PRECAUTIONS

WARNING!



PROTECT AGAINST FLYING DEBRIS

Always wear proper safety glasses, goggles, or a face shield when driving pins in or out, or when any operation causes dust, flying debris, or any other hazardous material.

WARNING!



LOWER OR SUPPORT RAISED EQUIPMENT

Do not work under raised booms without supporting them. Do not use support material made of concrete blocks, logs, buckets, barrels, or any other material that could suddenly collapse or shift positions. Make sure support material is solid, not decayed, warped, twisted, or tapered. Lower booms to ground level or on blocks. Lower booms and attachments to the ground before leaving the cab or operator's station.

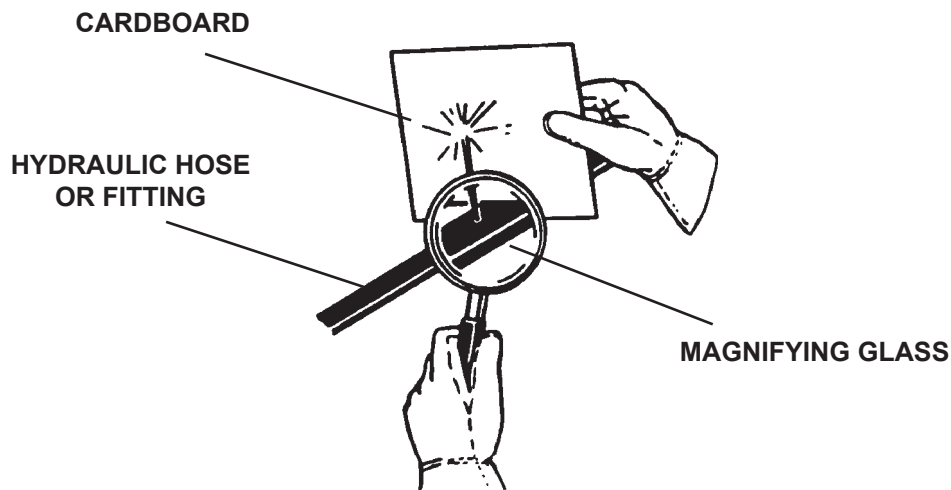
WARNING!



USE CARE WITH HYDRAULIC FLUID PRESSURE

Hydraulic fluid under pressure can penetrate the skin and cause serious injury or death. Hydraulic leaks under pressure may not be visible. Before connecting or disconnecting hydraulic hoses, read your prime mover's operator's manual for detailed instructions on connecting and disconnecting hydraulic hoses or fittings.

- Keep unprotected body parts, such as face, eyes, and arms as far away as possible from a suspected leak. Flesh injected with hydraulic fluid may develop gangrene or other permanent disabilities.
- If injured by injected fluid, see a doctor at once. If your doctor is not familiar with this type of injury, ask him or her to research it immediately to determine proper treatment.
- Wear safety glasses, protective clothing, and use a piece of cardboard or wood when searching for hydraulic leaks. **DO NOT USE YOUR HANDS! SEE ILLUSTRATION.**



GENERAL SAFETY PRECAUTIONS

WARNING!



DO NOT MODIFY MACHINE OR ATTACHMENTS

Modifications may weaken the integrity of the attachment and may impair the function, safety, life, and performance of the attachment. When making repairs, use only the manufacturer's genuine parts, following authorized instructions. Other parts may be substandard in fit and quality. Never modify any ROPS (Roll Over Protection Structure) or FOPS (Falling Object Protective Structure) equipment or device. Any modifications must be authorized in writing by the manufacturer.

WARNING!



SAFELY MAINTAIN AND REPAIR EQUIPMENT

- Do not wear loose clothing or any accessories that can catch in moving parts. If you have long hair, cover or secure it so that it does not become entangled in the equipment.
- Work on a level surface in a well-lit area.
- Use properly grounded electrical outlets and tools.
- Use the correct tools for the job at hand. Make sure they are in good condition for the task required.
- Wear the protective equipment specified by the tool manufacturer.



SAFELY OPERATE EQUIPMENT

Do not operate equipment until you are completely trained by a qualified operator in how to use the controls, know its capabilities, dimensions, and all safety requirements. See your machine's manual for these instructions.

- Keep all step plates, grab bars, pedals, and controls free of dirt, grease, debris, and oil.
- Never allow anyone to be around the equipment when it is operating.
- Do not allow riders on the attachment or the prime mover.
- Do not operate the equipment from anywhere other than the correct operator's position.
- Never leave equipment unattended with the engine running, or with this attachment in a raised position.
- Do not alter or remove any safety feature from the prime mover or this attachment.
- Know your work site safety rules as well as traffic rules and flow. When in doubt on any safety issue, contact your supervisor or safety coordinator for an explanation.

WARNING!



CALIFORNIA PROPOSITION 65 WARNING

This product may contain a chemical known to the state of California to cause cancer, or birth defects or other reproductive harm. www.P65Warnings.ca.gov

EQUIPMENT SAFETY PRECAUTIONS

WARNING! KNOW WHERE UTILITIES ARE



Observe overhead electrical and other utility lines. Be sure equipment will clear them. When digging, call your local utilities for location of buried utility lines, gas, water, and sewer, as well as any other hazard you may encounter.

WARNING!



EXPOSURE TO RESPIRABLE CRYSTALLINE SILICA DUST ALONG WITH OTHER HAZARDOUS DUSTS MAY CAUSE SERIOUS OR FATAL RESPIRATORY DISEASE.

It is recommended to use dust suppression, dust collection and if necessary personal protective equipment during the operation of any attachment that may cause high levels of dust.

WARNING!



REMOVE PAINT BEFORE WELDING OR HEATING

Hazardous fumes/dust can be generated when paint is heated by welding, soldering or using a torch. Do all work outside or in a well ventilated area and dispose of paint and solvent properly. Remove paint before welding or heating.

When sanding or grinding paint, avoid breathing the dust. Wear an approved respirator. If you use solvent or paint stripper, remove stripper with soap and water before welding. Remove solvent or paint stripper containers and other flammable material from area. Allow fumes to disperse at least 15 minutes before welding or heating.

WARNING!



END OF LIFE DISPOSAL

At the completion of the useful life of the unit, drain all fluids and dismantle by separating the different materials (rubber, steel, plastic, etc.). Follow all federal, state and local regulations for recycling and disposal of the fluid and components.



OPERATING THE PRIME MOVER

- Do not exceed the lifting capacity of your prime mover.
- When operating on slopes, drive up and down, not across. Avoid steep hillside operation, which could cause the prime mover to overturn.
- Reduce speed when driving over rough terrain, on a slope, or turning, to avoid overturning the vehicle.
- An operator must not use drugs or alcohol, which can change his or her alertness or coordination. An operator taking prescription or over-the-counter drugs should seek medical advice on whether or not he or she can safely operate equipment.
- Don't obstruct your vision when traveling or working.
- Use extreme caution when traveling over rough terrain. A swinging load can cause machine tipover.
- Always check locking pins before operating any attachment.
- Visual verification of proper hook engagement is required in all instances.
- Specified lift capacities must not be exceeded. Do not lift any load in excess of the rated capacity of the weakest component.
- Knowledge in safe hook operation is required before using this attachment. Do not use if worn or damaged, or if the safety latch is damaged or missing.
- Never use a hook in alkaline or acidic conditions. Do not use a hook when temperatures are below -40 F°. Remove hook from service if heated above 1000° F.
- No hoisting, lowering, swinging, or traveling should be done while anyone is on the load or life hook assembly.
- Never lift, move, or swing a loaded attachment over anyone.

M-1450 8-7-18-2

**THIS PAGE
IS INTENTIONALLY
BLANK**

INSTALLATION AND OPERATION

OPERATING EQUIPMENT

The MAJOR tree boom is used to lift, move, or set trees and other objects. Although the following operating tips may help in the safe operation of the tree boom, check with the manufacturer of the tree boom hook for the correct usage and proper attaching of your load.

WARNING!



Load disengagement can cause severe injury or death. The use of a hook with a safety latch does not preclude the inadvertent detachment of a slack sling or a load from the hook. Visual verification of proper hook engagement is required in all instances.

WARNING!



Specified lift capacities must not be exceeded. Do not exceed the lesser of the load rating of the attachment or prime mover. Always observe lift capacity limits listed in the machine and attachment specifications. Do not ever exceed the lifting capacity of the prime mover or the attachment itself.

Due to the variety of material handling devices such as slings, chains, ropes, etc., do not lift any load in excess of the rated capacity of the weakest component.

OPERATING TIPS

Use the correct attaching procedure for your type of load and lifting device, such as basket hitch, choker hitch, vertical hitch, etc.
Never use a sling or chain that is damaged or defective.
Do not shorten slings or chains with knots or bolts.
Be sure load is properly balanced and secure when lifting.
Keep bystanders clear of loads about to be lifted, and clear of suspended loads.
Do not place hands or fingers between the sling and the lift hook, or between the sling and the load while it is being tightened around the load.
Shock loading is prohibited.
Do not pull a sling from under a load when the load is resting on the sling.

INSTALLATION AND OPERATION

WARNING!



SAFE OPERATING TEMPERATURES

Different materials react differently to different temperatures. If the material of your device is not listed below, check with the manufacturer.

SAFE OPERATING TEMPERATURE EXAMPLES

Alloy steel chains and slings shall be permanently removed from service if heated above 1000° F. When exposed to service temperatures in excess of 600° F, maximum working load limits shall be reduced in accordance with the chain or sling manufacturer's recommendations. Alloy steel chains and slings used in extremely cold conditions (-40° F), also reduce their working load limits.
Natural and synthetic fiber rope slings, except for wet frozen slings, may be used in a temperature range from -20° F to 180° F without decreasing the working load limit.
Synthetic web slings or polyester and nylon shall not be used at temperatures in excess of 180° F. Polypropylene web slings shall not be used at temperatures in excess of 200° F.
Metal mesh slings, which are not impregnated with elastomers, may be used in a temperature range from -20° F to 550° F without decreasing the working load limit.
Metal mesh slings impregnated with polyvinyl chloride or neoprene may be used only in a temperature range from 0° to 200° F without decreasing the working load limit.
Fiber core wire rope slings of all grades shall be permanently removed from service if they are exposed to temperatures in excess of 200° F.
When non-fiber core wire rope slings of any grade are used at temperatures above 400° F or below -60° F, recommendations of the sling manufacturer regarding use at that temperature shall be followed.

SPECIFICATIONS

	#12505	#12609	#12916
Lift Capacity	8,000 pounds	8,000 pounds	8,000 pounds
Weight	515 pounds	450 pounds	712 pounds

STORAGE

GENERAL INFORMATION

The following storage procedure will help you to keep your attachment in top condition. It will also help you get off to a good start the next time your equipment is needed. We therefore strongly recommend that you take the extra time to follow these procedures whenever your attachment will not be used for an extended period of time.

PREPARATION FOR STORAGE

1. Clean the attachment thoroughly, removing all mud, dirt, and grease.
2. Inspect for visible signs of wear, breakage, or damage. Order any parts required, and make the necessary repairs, to avoid delays when starting next season.
3. Tighten all loose nuts and capscrews.
4. Touch up all unpainted and exposed areas with paint, to prevent rust.
5. Replace decals, if damaged or in unreadable condition.
6. Store the attachment in a dry and protected place, with a cover, if possible. Leaving the attachment outside will materially shorten its life.

REMOVING FROM STORAGE

1. Remove all protective coverings.

**THIS PAGE
IS INTENTIONALLY
BLANK**

LIMITED WARRANTY

In order to provide you with the most UP-TO-DATE Warranty information, Paladin Warranty Statement and Warranty Procedures along with Warranty Registration and Claim Forms have been moved to our website at www.paladinattachments.com.

**THIS PAGE
IS INTENTIONALLY
BLANK**

PARTS

The following section contains detailed diagrams and parts lists which include your attachment. Please use these diagrams and parts lists to locate replacement parts, prior to contacting the parts department.

When servicing your attachment, remember to use only original manufacturer replacement parts. Substitute parts may not meet the standards required for safe, dependable operation.

To facilitate parts ordering, have the model and serial number of your product ready, to ensure that you receive the correct parts for your specific attachment.

The model and serial number for your attachment should be recorded in the space provided on the cover of this manual. This information may be obtained from the serial number identification plate located on your attachment. **See the parts diagram for your attachment for the location.**

NOTE: Most daily and emergency orders received by 2:00 P.M. will be shipped the same day received, with “Emergency-Machine-Down” orders receiving first priority.



PARTS DEPARTMENT

(734) 996-9116

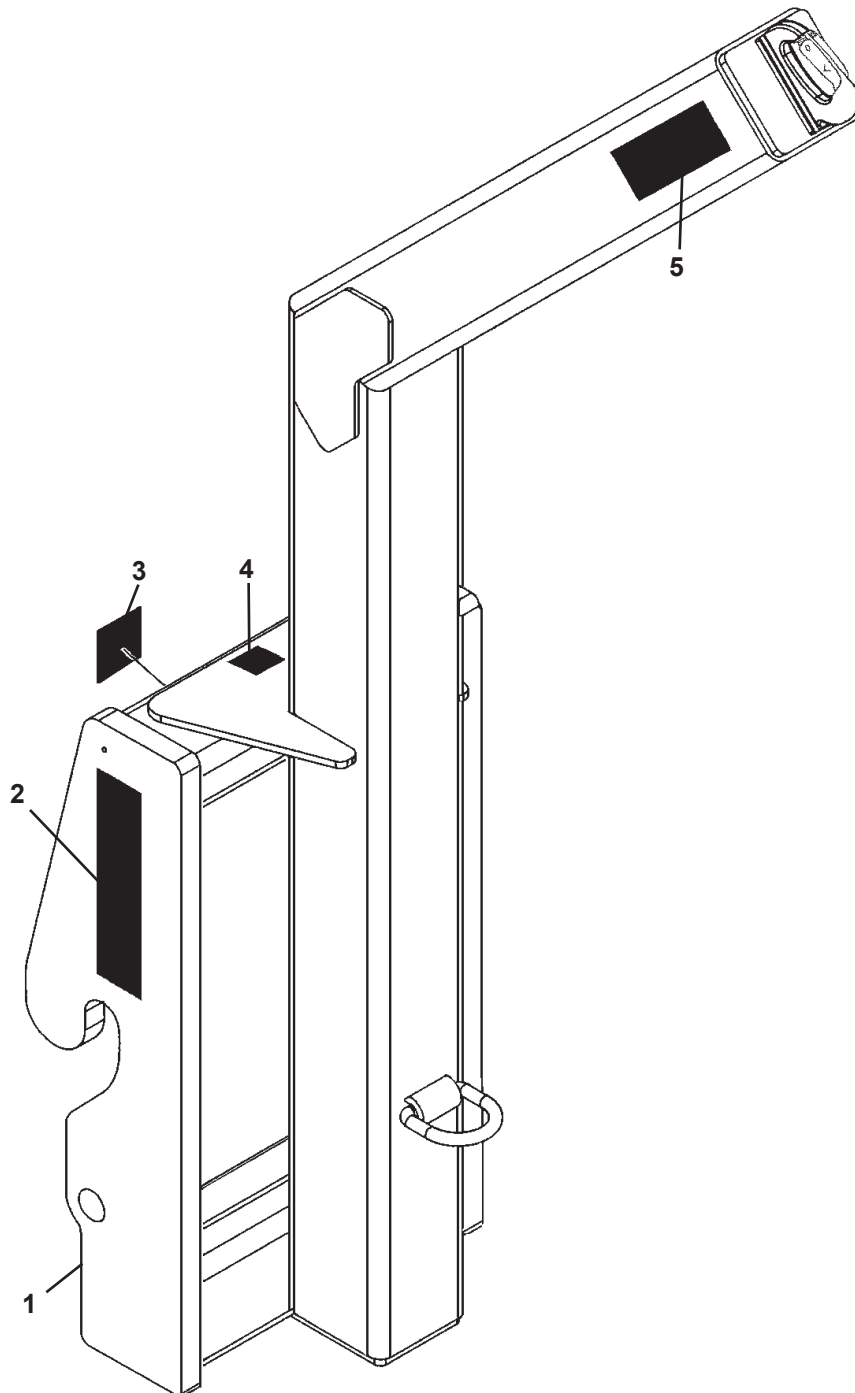
(800) 456-7100

We Encourage Fax Orders

(734) 996-9014

TREE BOOM

ASSEMBLY #12505



M-1432 1-27-10-2

TREE BOOM

ASSEMBLY #12505

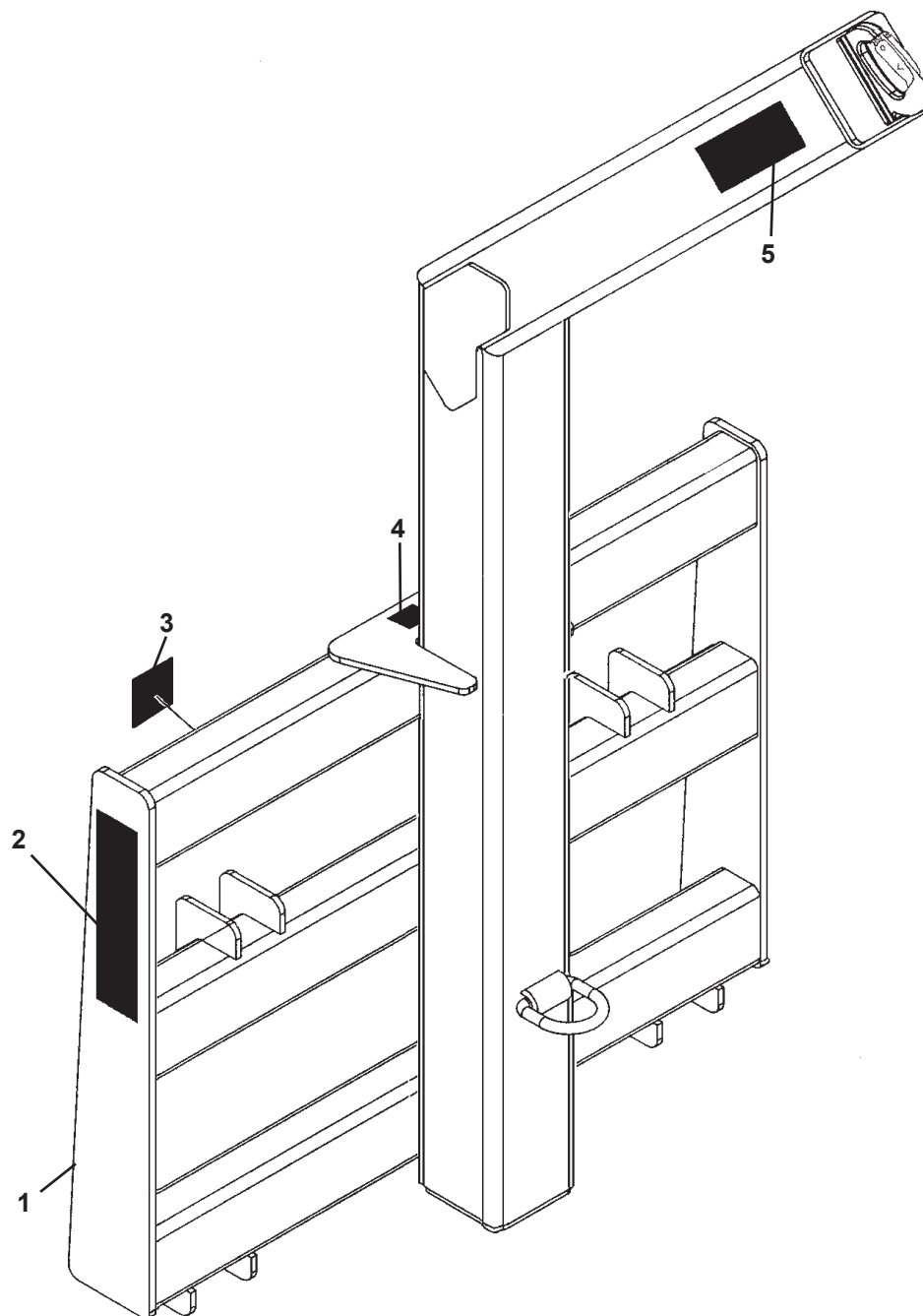
<u>ITEM</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	17487	Boom
		14363	Replacement Hook, Weld-On With Safety Latch
		17786	Replacement Safety Latch
2	2	Varies	Logo
3	1	-----	Serial Number Identification Tag Location
4	1	4338	Made in USA Decal
5	2	40595	Warning - Falling Load

TREE BOOM

ASSEMBLY #12609

⚠ WARNING
FALLING LOAD MAY RESULT IN
SERIOUS INJURY OR DEATH.
DO NOT STAND UNDER LOAD.

#40595



M-1434 1-27-10-2

TREE BOOM

ASSEMBLY #12609

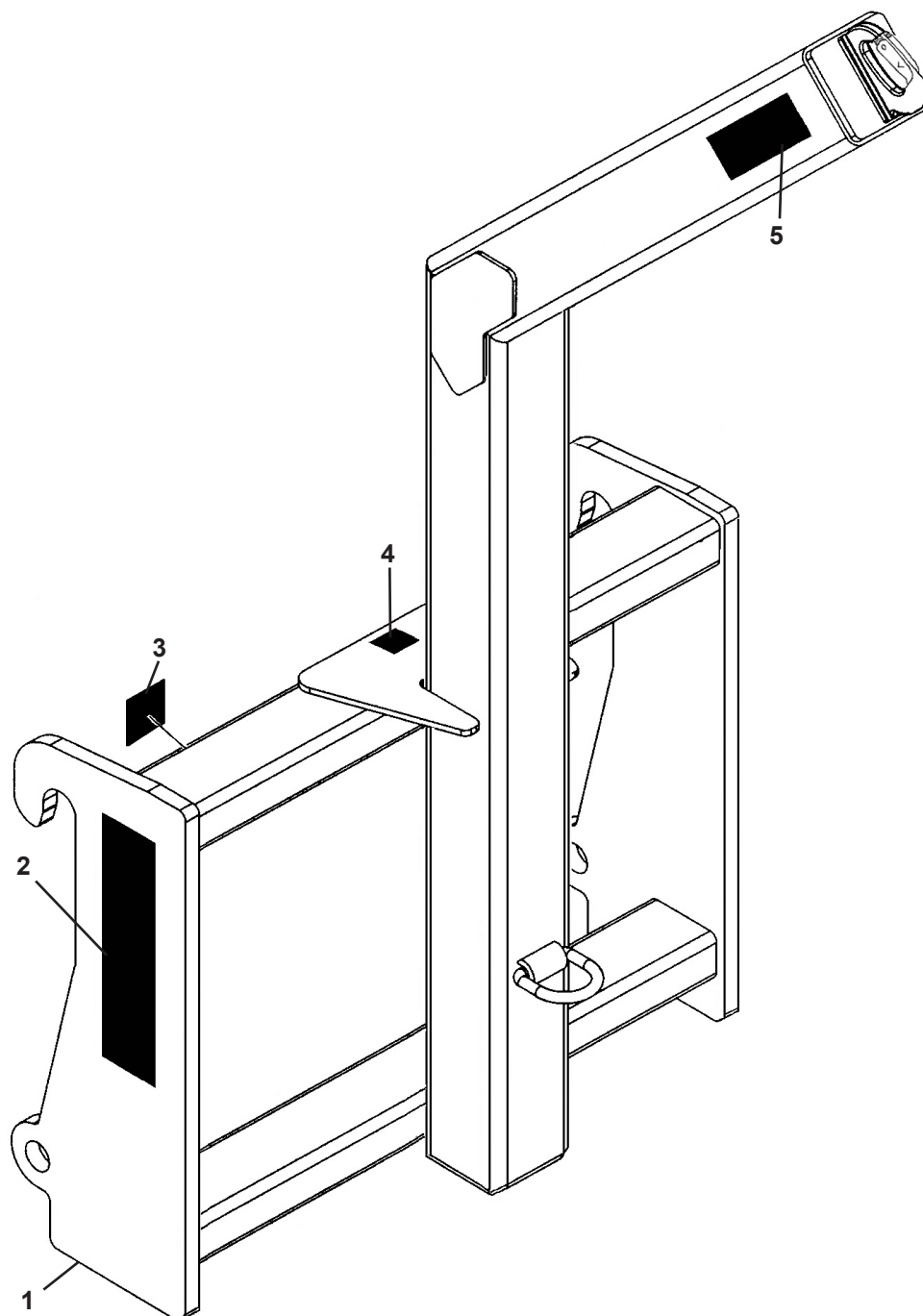
<u>ITEM</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	19825	Boom
		14363	Replacement Hook, Weld-On With Safety Latch
		17786	Replacement Safety Latch
2	2	Varies	Logo
3	1	-----	Serial Number Identification Tag Location
4	1	4338	Made in USA Decal
5	2	40595	Warning - Falling Load

TREE BOOM

ASSEMBLY #12916

⚠ WARNING
FALLING LOAD MAY RESULT IN
SERIOUS INJURY OR DEATH.
DO NOT STAND UNDER LOAD.

#40595



M-1430 1-27-10-2

TREE BOOM

ASSEMBLY #12916

<u>ITEM</u>	<u>QTY.</u>	<u>PART NO.</u>	<u>DESCRIPTION</u>
1	1	107015	Boom
		14363	Replacement Hook, Weld-On With Safety Latch
		17786	Replacement Safety Latch
2	2	Varies	Logo
3	1	-----	Serial Number Identification Tag Location
4	1	4338	Made in USA Decal
5	2	40595	Warning - Falling Load



(563) 922-2981
(800) 456-7100

www.paladinattachments.com