# **Junior Log Arch**

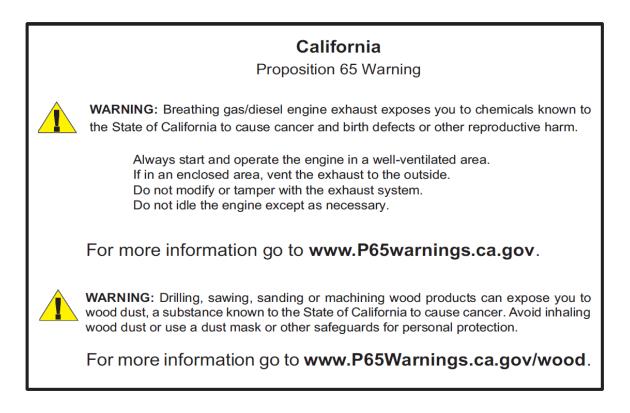
Safety, Operation, & Parts Manual

Safety is our #1 concern!

Form # 2616



WARNING! Read and understand this manual before using this machine.



## Active Patents assigned to Wood-Mizer, LLC

Wood-Mizer, LLC has received patents that protect our inventions which are a result of a dedication to research, innovation, development, and design. Learn more at: *woodmizer.com/patents* 

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Wood-Mizer, LLC 8180 West 10th Street Indianapolis, Indiana 46214

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## Wood-Mizer<sup>®</sup> LLC Limited Product Warranty



Wood-Mizer LLC ("Warrantor"), an Indiana corporation with its principal place of business at 8180 West Tenth Street, Indianapolis, IN 46214-2400 USA, warrants to the purchaser ("Purchaser") that for the time periods specifically stated herein and subject to the terms, conditions and limitations stated herein, the equipment manufactured by the Warrantor will be free from defects in material and workmanship attributable to Warrantor so long as, during the warranty periods stated herein, the equipment is installed, operated and maintained in accordance with the instructions provided by Warrantor.

PRODUCT	MODEL CLASS	LENGTH OF	WARRANTY	EFFECTIVE DATE	
PRODUCT	MODEL CLASS	USA & CANADA NON USA & CANAD			
Portable Sawmills, Resaws, Edgers	LT, LX, HR, EG	Two years	One year		
Portable Sawmills with Chassis	LT28, LT35, LT40, LT50, LT70, LX450	Two years, excluding the chassis, which chas- sis shall have a five year warranty	One year	Date of purchase	
Industrial Sawmills, Resaws, Edgers	WM, HR, EG, TVS, SVS	One year	One year	Date of purchase or date of	
TITAN Industrial	WB, TV, HR, EG, EA, MR	One year	One year	installation / training (if applica- ble), whichever occurs first, not to	
Material Handling	TWC, IC, TD, LD, GC, CR, CB, CC	One year	One year	exceed 6 months from date of purchase	
Blade Maintenance Equipment	BMS, BMT, BMST	One year	One year		
Options and Accessories	Various	One year*	One year*		
Moulders, Extractors	MP, MD	Two years	One year		
Kilns	KS, KD	One year	One year	Date of purchase	
Slab Flattener	MB	Two years	One year		
Pallet Equipment	PD, PC	One year	One year		
Log Splitters	FS	One year	One year		
Replacement Parts	Various	90 days	90 days		

\* Warranty on Options will match the warranty on the primary equipment when purchased on same invoice.

#### Exclusions from 90 Day, Limited One Year and Two Year Warranty

Warrantor shall have **no** responsibility under this warranty for any wear components, including, but not limited to: belts, blade guides, blades, electric motor brushes, drum switches, filters, fuses, hoses, bearings (excluding cylindrical drive bearings), bushings, cable carriers, and spark plugs. All wear components are furnished **"as is"**, without any warranty from Warrantor. This limited warranty does not cover any defects caused by misuse, negligence, alterations, damage due to overload, abnormal conditions, excessive operation, accident, or lack of performance of normal maintenance services.

Several components which are used in the manufacture of the equipment but not manufactured by Warrantor such as cant hooks, power plants, laser sights, batteries, tires, and trailer axles have warranties provided by the original equipment manufacturer (written copies available upon request). Warrantor does not separately warrant such items. Components or equipment manufactured by third parties are not covered by this warranty. Warrantor, however, will provide reasonable assistance to the Purchaser to make claims against any warranties applicable to such component parts as provided by such original equipment manufacturers. Components or equipment manufactured by third parties are not covered by this Warranty.

#### **Five Year Limited Chassis Warranty**

The limited five year chassis warranty described above, DOES NOT extend to (a) any damage stemming from accident, improper towing, overload, abuse, misuse, abnormal conditions, negligence, excessive operation, or lack of maintenance, (b) rust caused by exposure to corrosive atmospheric conditions, or (c) the sawmill head, carriage, axle, brakes, or any hydraulic or electrical components attached to the chassis.

#### Warrantor's Obligations as To Defects

In the event that the equipment fails to perform due to defective materials or workmanship attributable to Warrantor under normal use and service within the established warranty period, Purchaser's sole and exclusive remedy and Warrantor's sole liability shall be to replace or repair, in Warrantor's sole and subjective discretion, any defective part at Warrantor's principal place of business without cost to the Purchaser if such defect exists. The determination of whether a product is defective shall be made by Warrantor in Warrantor's sole and subjective discretion. The Purchaser must notify Warrantor prior to shipping any defective part. Warrantor, at its sole discretion, may cover expenses incurred in shipping the defective part to Warrantor for evaluation; provided, however, that Warrantor will not be responsible for labor, travel time, mileage, removal, installation or incidental or consequential damages. However, any part in excess of 140 pounds must be returned by the Purchaser, to the Warrantor's nearest authorized facility at the Purchaser's expense, if return is requested by Warrantor. Warrantor shall have a reasonable time within which to replace or repair the defective part. If Warrantor determines that the product is not defective under the terms of this warranty in Warrantor's sole and subjective discretion, then Purchaser shall be responsible for any expenses incurred by Warrantor. Warrantor determines that the product is not defective under the terms of this warranty in Warrantor's sole and subjective discretion, then Purchaser shall be responsible for any expenses incurred by Warrantor.

#### Limitations and Disclaimers of Other Warranties

EXCEPT FOR THE EXPRESS WARRANTY PROVISIONS STATED ABOVE, WARRANTOR DISCLAIMS ALL WARRANTIES, EXPRESS AND/OR IMPLIED, INCLUDING WITHOUT LIMITATION, THE IMPLIED WARRANTIES OF MERCHANTABILITY, AND FITNESS FOR A PARTICULAR PURPOSE, NONINFRINGEMENT AND TITLE. No representation or other affirmation of fact by representatives of Warrantor, whether verbal or in writing, including photographs, brochures, samples, models, or other sales aids, shall constitute a warranty or other basis for any legal action against Warrantor. There are no other representations, promises, agreements, covenants, warranties, guarantees, stipulations or conditions, express or implied, by Warrantor except as expressly set forth herein. THE ORIGINAL PURCHASER AND ANY INTENDED USER OR BENEFICIARY OF THIS EQUIPMENT, SHALL NOT BE ENTITLED TO RECOVER ANY INDIRECT, SPECIAL, PUNITIVE, EXEMPLARY, CONSEQUENTIAL, SPECIAL, OR INCIDENTIAL DAMAGES OR LOSES, INCLUDING BUT NOT LIMITED TO, DAMAGES OF LOST PRODUCTION, LOST REVENUE, LOST PRODUCT, LOST PROFITS, LOST BUSINESS, LOSS OF USE, LOSS OF GOODWILL, OR BUSINESS INTERRUPTION, FROM WARRANTOR FOR ANY REASON WHATSOEVER INCLUDING WITHOUT LIMITATION WARRANTY OR DEFECT IN THE PRODUCT REGARDLESS OF THE SOLE, JOINT AND/OR CONCURRENT NEGLIGENCE, BREACH OF CONTRACT, BREACH OF WARRANTY, STRICT LIABILITY IN TORT OR STATUTORY CLAIMS OR OTHER LEGAL FAULT OR RESPONSIBILITY OF EITHER WARRANTOR OR PURCHASER OR ITS EMPLOYEES OR AGENTS. Warrantor does not warrant that its equipment meets or complies with the requirements of any particular safety code or governmental requirements.

Defective items replaced under the terms of this warranty become the property of Warrantor.

#### **Design Changes**

Warrantor reserves the right to change the design of its products from time to time without notice and without obligation to make corresponding changes in or to its products previously manufactured.

#### **Rights of Purchasers**

The validity and effect of this limited warranty as well as its interpretation, operation and effect, shall be determined exclusively by the principles of law and equity of the State of Indiana, USA. This limited warranty gives Purchaser specific legal rights. Purchaser may also have other rights, which may vary from state to state. Some states may not allow limitations as to the duration of implied warranties or to the exclusion or limitation of incidental or consequential damages, so some of the limitations and exclusions detailed set forth above may not apply. In the event that any one or more of the provisions of this warranty shall be or become invalid, illegal or unenforceable in any respect, the validity, legality and enforceability of the remaining provisions of this warranty shall not be affected thereby.

#### Interpretations

This Warranty constitutes the entire warranty agreement between Warrantor and Purchaser and supersedes any prior understandings or agreements pertaining to the same subject matter. This warranty cannot be amended except in writing which refers to this warranty which is signed by both Warrantor and Purchaser.

# **SECTION 1 INTRODUCTION**

## 1.1 About This Manual

This manual replaces any previous information received on your Wood-Mizer<sup>®</sup> equipment.

The information and instructions in this manual do not amend or extend the limited warranties for the equipment given at the time of purchase.

## 1.2 Getting Service

For contact information, sales, service, parts, and additional manuals, sign into your account on <u>https://wood-</u> <u>mizer.com</u>, or call inside the USA: 1-800-553-0182 or from outside the USA: 317-271-1542

## 1.3 Specifications

Equipment specification are included in the Online Manuals, which are found at <u>https://apps.woodmizer.com/Manu-</u> <u>als/Manuals.aspx?parent=0.</u>



# SECTION 2 GENERAL SAFETY

# 2.1 Safety Symbols

The following symbols and signal words call your attention to instructions concerning your personal safety. Be sure to observe and follow these instructions.



**DANGER!** indicates an imminently hazardous situation which, if not avoided, will result in serious injury or death.



**WARNING!** suggests a potentially hazardous situation which, if not avoided, could result in serious injury or death.



**CAUTION!** refers to potentially hazardous situations which, if not avoided, may result in minor or moderate injury or damage to equipment.

**NOTICE** indicates vital information.

## 2.2 Safety Instructions

## **OWNER/OPERATOR'S RESPONSIBILITY**

The procedures listed in this manual may not include all ANSI, OSHA, or locally required safety procedures. It is the owner/operator's responsibility and not Wood-Mizer LLC to ensure all operators are properly trained and informed of all safety protocols. Owner/Operators are responsible for following all safety procedures when operating and performing maintenance to the equipment.

### **OBSERVE ALL SAFETY INSTRUCTIONS**

**NOTICE** Read the entire Operator's Manual before operating this equipment.

Note all safety warnings throughout this manual and those posted on the machine.

Be able to access this manual at all times while operating this equipment.

Read additional manufacturer's manuals and observe their applicable safety instructions.

Only persons who have read and understood the entire operator's manual should operate this equipment.

This equipment is not intended for use by or around children.

#### It is the owner/operator's responsibility to comply with all applicable federal, state, and local laws, rules, and regulations regarding the ownership, operation, and transporting your equipment.

Operators should become thoroughly familiar with and comply with these applicable laws for operating and transporting equipment.

### WEAR SAFETY CLOTHING



**WARNING!** Secure all loose clothing and jewelry before operating the equipment.

Always wear eye, ear, and foot protection when operating or servicing the equipment.

### **KEEP SAFETY LABELS IN GOOD CONDITION**

**NOTICE** Ensure that all safety decals are clean and readable. Replace all damaged safety decals to prevent personal injury or damage to the equipment. Contact your local distributor, or call your Customer Service Representative to order more decals.

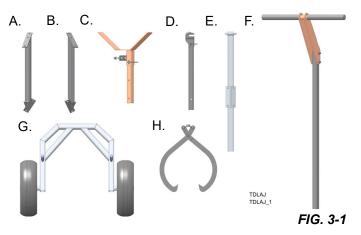
**NOTICE** If replacing a component that has a safety decal affixed to it, ensure the new component also has the safety decal affixed in the same place.

# SECTION 3 SETUP

## 3.1 Unpack the Log Arch

- 1. Remove any straps and hardware securing Log Arch to skid.
- 2. Remove all contents from skid.
- 3. Ensure all items are included with skid. See FIG. 3-1.

# Report any transport damage to Wood-Mizer and shipping agent immediately.

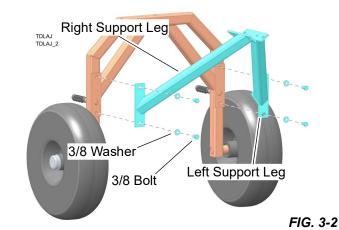


- A. (1) Right Leg Support
- B. (1) Left Leg Support
- C. (1) Cradle Assembly
- D. (1) Hook Assembly
- E. (1) Backbone Tube
- F. (1) Handle Assembly
- G. (1) Wheel Assembly
- H. (1) Hook Assembly
- I. (1) Fastener Kit (not pictured)

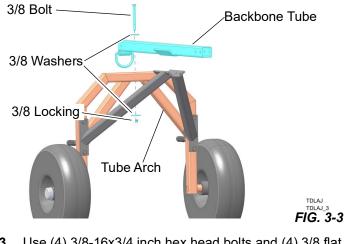
## 3.2 Assemble the Log Arch

# Do NOT tighten fasteners all the way in steps 1 through 3. Fasteners will be fully secured in step 4.

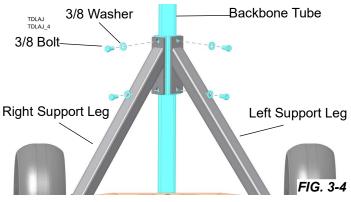
1. Use (4) 3/8-16x3/4 inch hex head bolts and (4) 3/8 flat washers to attach (2) Leg Supports. See FIG. 3-2.



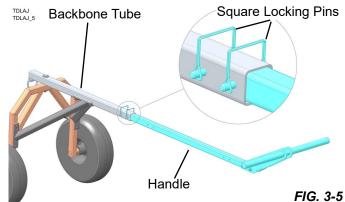
2. Use (1) 3/8-16x4 inch hex head bolt, (2) 3/8x1-1/2x1/8 fender washers, and (1) 3/8-16 flanged nylon locking nut to attach Backbone Tube to Tube Arch. See FIG. 3-3.



**3.** Use (4) 3/8-16x3/4 inch hex head bolts and (4) 3/8 flat washers to secure Backbone Tube to (2) Leg Supports. See FIG. 3-4.



- 4. Fully tighten ALL fasteners installed in steps 1-3.
- **5.** Use (2) square locking pins to secure Handle to Backbone Tube. See FIG.3-5.



6. Use (2) 3/8-16x2-1/2 inch hex head bolts, (2) 3/8 flat washers, and (2) 3/8-16 flanged nylon locking nuts to secure Cradle to Handle. See FIG. 3-6.

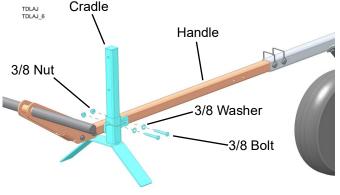
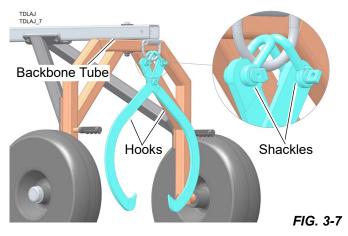
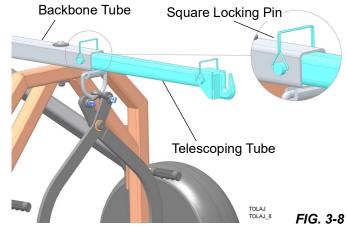


FIG. 3-6

7. Use (2) 5/16 Shackles to hang Hooks off Backbone Tube Weldment. See FIG. 3-7.



8. Use (1) square locking pin to secure Telescoping Tube inside of Backbone Tube. See FIG. 3-8.

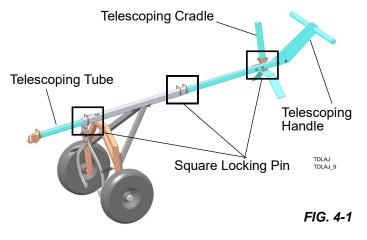


9. Assembly complete.

# **SECTION 4 OPERATION**

## 4.1 Junior Log Arch Telescoping Features

The Junior Log Arch uses Square Wire Locking Pins to in three locations to lock telescoping features into place. See FIG. 4-1.

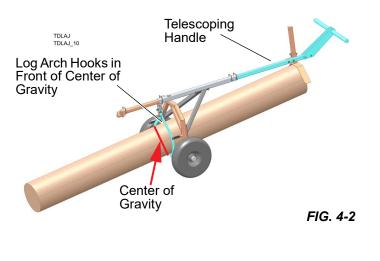


## 4.2 Junior Log Arch Double-Hook Operation

- 1. Straddle log between wheels of Log Arch.
- 2. Roll Log Arch into lifting position.

**NOTE:** The Log Arch hooks should be slightly in front of the log's center of gravity. This will allow the end of the log nearest the Log Arch handle to rest against the Telescoping Cradle. See FIG. 4-2.

- **3.** Adjust Telescoping Handle so it rests near end of log, as shown in FIG. 4-2.
- 4. Place Hooks around log, as shown in FIG. 4-2.



**5.** Adjust Telescoping Cradle to level out log, as shown in FIG. 4-3.

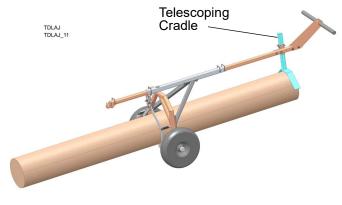


FIG. 4-3

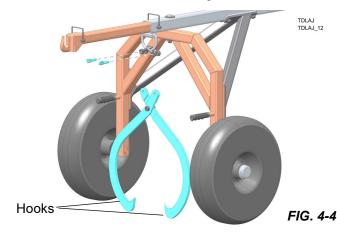
6. Push Handle down and pull log to desired location.

**NOTE:** The end of the log furthest from the Handle may drag on the ground in some instances depending on the shape and weight distribution of the log.

## 4.3 Junior Log Arch Single-Hook Operation

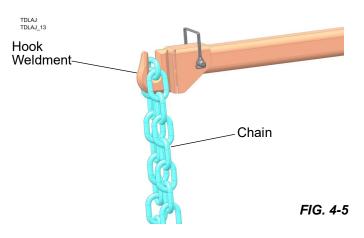
The Single-Hook attachment is used to haul shorter objects with a chain.

1. Remove Double-Hooks from Log Arch. See FIG. 4-4.

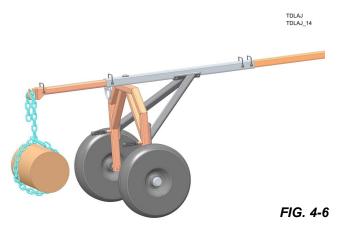




2. Attach Chain to Hook attachment, as shown in FIG. 4-5.



**3.** Wrap Chain around object and hook Chain to itself. See FIG. 4-6.



4. Push handle down and pull object to desired location.

# SECTION 5 REPLACEMENT PARTS

## 5.1 How To Use The Parts List

- Use the table of contents to locate the assembly that contains the part you need.
- Go to the appropriate section and locate the part in the illustration.
- Use the number pointing to the part to locate the correct part number and description in the table.
- Parts shown indented under another part are included with that part.

## To Order Parts

- From the continental US, call **1-800-525-8100** to order parts. Have your customer number, vehicle identification number, and part numbers ready when you call.
- From other international locations, contact the Wood-Mizer distributor in your area for parts.

## 5.2 Sample Assembly

REF	PART #	DESCRIPTION COMMENT		QTY.
	012345	SAMPLE ASSEMBLY, COMPLETE	INCLUDES ITEMS 1-6	1
1	F02222-22	Sample Part		1
2	F03333-33	Sample Part		2
	098765	Sample Subassembly	Includes items 3-6	1
3	S04444-44	Subassembly Sample Part		1
4	K55555	Subassembly Sample Part		1
	054321	Sample Sub-Subassembly	Includes items 5-6	2
5	022222	Sub-Subassembly Sample Part		1
6	F10234-56	Sub-Subassembly Sample Part		1

The Sample Assembly, Complete, part number 02345 (top level assembly) includes two parts (F0222-22 and F0333-33) and the 098765 subassembly.

Subassembly 098765 contains two parts(S04444-44 and K55555) and two copies of sub-subassembly 054321.

Each sub-subassembly 054321 contains two parts (022222 and F10234-56).



### Torque Values 5.3

Grade	Grade		SAE 5	SAE 8
Grade Mark				$\left\langle \begin{array}{c} \\ \end{array} \right\rangle$
Bolt Dia.	Threads. Per In.	Units	SAE 5	SAE 8
6	32	in-lbs (Nm)	20 (2.3)	-
8	32	in-lbs (Nm)	24 (2.7)	30 (3.4)
10	24	in-lbs (Nm)	35 (4.0)	45 (5.1)
10	32	in-lbs (Nm)	40 (4.5)	50 (5.7)
12	24	in-lbs (Nm)	50 (5.7)	65 (7.3)
1/4	20	in-lbs (Nm)	95 (10.7)	125 (14.1)
1/4	28	in-lbs (Nm)	95 (10.7)	150 (17.0)
5/16	18	ft-lbs (Nm)	17 (22.6)	23 (31.2)
5/16	24	ft-lbs (Nm)	20 (27.1)	25 (33.8)
3/8	16	ft-lbs (Nm)	30 (40.7)	40 (54.2)
3/8	24	ft-lbs (Nm)	35 (47.5)	45 (61.0)
7/16	14	ft-lbs (Nm)	50 (67.8)	65 (88.1)
7/16	20	ft-lbs (Nm)	55 (74.6)	70 (94.9)
1/2	13	ft-lbs (Nm)	75 (101.7)	100 (135.6)
1/2	20	ft-lbs (Nm)	85 (115.3)	110 (149.2)
9/16	12	ft-lbs (Nm)	105 (142.4)	135 (183.1)
9/16	18	ft-lbs (Nm)	115 (155.9)	150 (203.4)
5/8	11	ft-lbs (Nm)	150 (203.4)	195 (264.4)
5/8	18	ft-lbs (Nm)	160 (217.0)	210 (284.8)
3/4	10	ft-lbs (Nm)	170 (230.5)	220 (298.3)
3/4	16	ft-lbs (Nm)	175 (237.3)	225 (305.1)
7/8	9	ft-lbs (Nm)	302 (409.5)	473 (640.9)
7/8	14	ft-lbs (Nm)	300 (406.8)	400 (542.4)
1	8	ft-lbs (Nm)	466 (631.8)	714 (967.4)



Metric Bolt Head Identification



Metric Grade 10.9

	COA	RSE THRE	AD		FINE THREAD					
Diameter &	Metri	ic 8.8	Metri	c 10.9	Diameter &	Metr	ic 8.8	Metri	c 10.9	Wrench Size
Thread Pitch	N-m	lbs-ft	N-m	lbs-ft	Thread Pitch	N-m	lbs-ft	N-m	lbs-ft	
6 x 1.0	8	6	11	8						10 mm
8 x 1.25	20	15	27	20	8 x 1.0	21	16	29	22	13 mm
10 x 1.5	39	29	54	40	10 x 1.25	41	30	57	42	16 mm
12 x 1.75	68	50	94	70	12 x 1.25	75	55	103	76	18 mm
14 x 2.0	109	80	151	111	14 x 1.5	118	87	163	120	21 mm
16 x 2.0	169	125	234	173	16 x 1.5	181	133	250	184	24 mm
18 x 2.5	234	172	323	239	18 x 1.5	263	194	363	268	27 mm
20 x 2.5	330	244	457	337	20 x 1.5	367	270	507	374	30 mm
22 x 2.5	451	332	623	460	22 x 1.5	495	365	684	505	34 mm
24 x 3.0	571	421	790	583	24 x 2.0	623	459	861	635	36 mm
30 x 3.0	1175	867	1626	1199	30 x 2.0	1258	928	1740	1283	46 mm

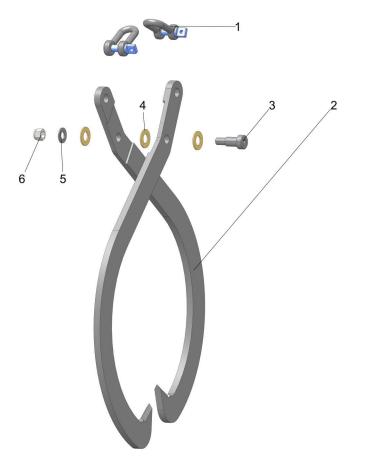
# 5.4 Junior Log Arch, Complete

TD117810 TD117810_1

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	117810	Assy, Junior Log Arch		1
	117772	Assy, Hook w/ Pin		1
1	117797	Wldmnt, Weld-On Hook		1
2	014151	Pin, 3/8x2 1/4 Sq Wire Lock		4
3	117785	Tube, Small Log Arch Telescoping		1
4	117780	Assy, Log Arch Hooks	(See Section 5.5)	1
5	117890	Assy, Log Arch Sub	(See Section 5.6)	1
6	117792	Assy, Log Arch Handle	(See Section 5.7)	1
7	117809	Assy, Log Arch Cradle	(See Section 5.8)	1
8	135102	Weldment, Backbone Tube		1
9	F05007-126	Bolt, 3/8-16x4 HH Gr5		1
10	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		1
11	F05011-104	Washer, 3/8 x 1-1/2 x 1/8 Znc H		2
12	135101	Weldment, Left Support Leg		1
13	135100	Weldment, Right Support Leg		1
14	F05007-118	Bolt, 3/8-16x3/4 HH Gr5		8
15	F05011-3	Washer, 3/8 Flat SAE		8



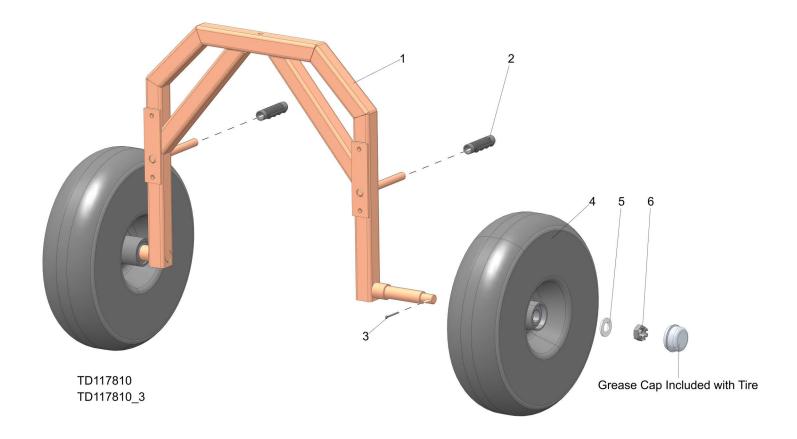
# 5.5 Log Arch Hooks



TD117810 TD117810\_2

REF	PART #	DESCRIPTION	COMMENTS	QTY.
	117780	Assy, Log Arch Hooks		1
1	057574	Shackle, 5/16 Screw Type		2
2	117779	Hook, Log Arch		2
3	F05008-212	Bolt, 1/2x3/4 Shoulder 3/8-16 SS 18-8		1
4	036597	Bearing, 1/2x1 Bronze Thrust Washer		3
5	F05011-3	Washer, 3/8 SAE Flat		1
6	F05010-10	Nut, 3/8-16 Hex Nyloc		1

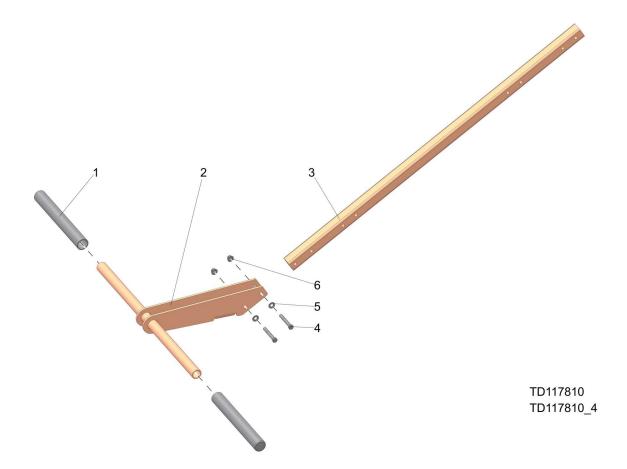
# 5.6 Log Arch Sub



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	117890	Assy, Log Arch Sub		1
1	135103	Wldmnt, Tube Arch		1
2	004742	Grip, 5/8 ID Hand		2
3	F05012-49	Pin, 1/8x1 1/2 Cotter		2
4	135104	Tire w/ Wheel 4.80 x 8 x 16 OD		2
	P289	Insert, Brg Race 1in TRB Brg		4
	P190	Bearing, 1IN ID Tapered Roller		4
	P191	Seal, 1 1/4 ID TRB Bearing		2
	P195	Cap, Hub		2
5	F05011-62	Washer, 3/4 SAE Flat		2
6	P434	Nut, 3/4-16 Castle		2

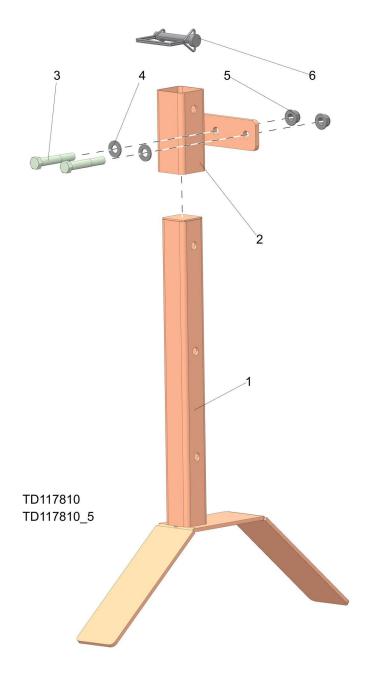


# 5.7 Log Arch Handle



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	117792	Assy, Log Arch Handle		1
1	065840	Grip, Rubber, 1 1/4 IDx12		2
2	117793	Weldment, Log Arch Handle		1
3	117889	Tube, Extended Main Log Arch		1
4	F05007-206	BOLT, 3/8-16X2 3/4 HH Gr5		2
5	F05011-3	Washer, 3/8 Flat SAE		2
6	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		2

# 5.8 Log Arch Cradle



REF	PART #	DESCRIPTION	COMMENTS	QTY.
	117809	Assy, Cradle		1
1	117808	Weldment, Cradle		1
2	117894	Weldment, Telescoping Mounting Assembly		1
3	F05007-228	Bolt, 3/8-16x 2-1/2 HH Gr8 Zc		2
4	F05011-3	Washer, 3/8 Flat SAE		2
5	F05010-222	Nut, 3/8-16 Flanged Hex Nylock		2
6	014151	Pin, 3/8x2 1/4 SQ Wire Lock		1