

## OPERATORS MANUAL



HT-974  
HT-974XL  
HT-974XL-36

Header Transports



J. & M. Mfg. Co., Inc.  
284 Railroad Street - P.O. Box 547  
Fort Recovery, OH 45846  
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[www.jm-inc.com](http://www.jm-inc.com)

Rev. 5.27.2015

## To The Dealer

Read manual instructions and safety rules. Make sure all items on the Dealer's Pre-Delivery and Delivery Check Lists are completed before releasing equipment to the owner.

The dealer must complete the Warranty Registration found on the Dealer Portal website located at [dealer.jm-inc.com](http://dealer.jm-inc.com) and return it to J. & M. Mfg. Co., Inc. at the address indicated on the form. Warranty claims will be denied if the Warranty Registration has not been submitted.

### EXPRESS WARRANTY:

J. & M. Mfg. Co. Inc. warrants against defects in construction or materials for a period of ONE year. We reserve the right to inspect and decide whether material or construction was faulty or whether abuse or accident voids our guarantee.

Warranty service must be performed by a dealer or service center authorized by J. & M. Mfg. Co., Inc. to sell and/or service the type of product involved, which will use only new or remanufactured parts or components furnished by J. & M. Mfg. Co., Inc. Warranty service will be performed without charge to the purchaser for parts or labor based on the Warranty Labor Times schedule. Under no circumstance will allowable labor times extend beyond the maximum hours indicated in the Warranty Labor Times schedule for each warranty procedure. The purchaser will be responsible, however, for any service call and/or transportation of the product to and from the dealer or service center's place of business, for any premium charged for overtime labor requested by the purchaser, and for any service and/or maintenance not directly related to any defect covered under the warranty. Costs associated with equipment rental, product down time, or product disposal are not warrantable and will not be accepted under any circumstance.

Each warranty term begins on the date of product delivery to the purchaser. Under no circumstance will warranty be approved unless (i) the product warranty registration card (attached to the inside of the Operator's Manual) has been properly completed and submitted to the equipment manufacturer, and (ii) a warranty authorization number has been issued by the equipment manufacturer. This Warranty is effective only if the warranty registration card is returned within 30 days of purchase.

This warranty does not cover a component which fails, malfunctions or is damaged as a result of (i) improper modification or repair, (ii) accident, abuse or improper use, (iii) improper or insufficient maintenance, or (iv) normal wear or tear. This warranty does not cover products that are previously owned and extends solely to the original purchaser of the product. Should the original purchaser sell or otherwise transfer this product to a third party, this implied, with respect to tires or other parts or accessories not manufactured by J. & M. Mfg. Co., Inc. Warranties for these items, if any, are provided separately by their respective manufacturers.

THIS WARRANTY IS EXPRESSLY IN LIEU OF ALL OTHER WARRANTIES OR CONDITIONS, EXPRESS, IMPLIED OR STATUTORY, INCLUDING ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR PARTICULAR PURPOSE.

In no event shall J. & M. Mfg. Co., Inc. be liable for special, direct, incidental or consequential damages of any kind. The exclusive remedy under this Warranty shall be repair or replacement of the defective component at J. & M. Mfg. Co., Inc.'s option. This is the entire agreement between J. & M. Mfg. Co., Inc. and the Owner about warranty and no J. & M. Mfg. Co., Inc. employee or dealer is authorized to make any additional warranty on behalf of J. & M. Mfg. Co., Inc.

The manufacturer reserves the right to make product design and material changes at any time without notice. They shall not incur any obligation or liability to incorporate such changes and improvements in products previously sold to any customer, nor shall they be obligated or liable for the replacement of previously sold products with products or parts incorporating such changes.

### SERVICE:

The equipment you have purchased has been carefully manufactured to provide dependable and satisfactory use. Like all mechanical products, it will require cleaning and maintenance. Lubricate the unit as specified. Observe all safety information in this manual and safety signs on the equipment.

For service, your authorized J. & M. dealer has trained mechanics, genuine J. & M. service parts, and the necessary tools and equipment to handle all your needs.

Use only genuine J. & M. service parts. Substitute parts may void warranty and may not meet standards required for safety and satisfactory operation. Record the model number and serial number of your equipment in the spaces provided:

**Model No:** HT-974 Header Wagon **Serial No:** \_\_\_\_\_ **Date of Purchase:** \_\_\_\_\_

**Purchased From:** \_\_\_\_\_

Provide this information to your dealer to obtain correct repair parts.

## Table of Contents

2 .....	To The Dealer
4 .....	To The Owner
5 .....	Bolt Torque Chart
6 .....	Safety Rules
7 .....	Specifications
8 .....	Initial Operation and Maintenance
9 .....	Adjusting Wheel Toe-In
10-16.....	Repair Parts
17-19.....	Set-Up Instructions

### TO THE OWNER:

The purpose of this manual is to assist you in operating and maintaining your header wagon in a safe manner. Read it carefully. It furnishes information and instructions that will help you achieve years of dependable performance and help maintain safe operating conditions. If this machine is used by an employee or is loaned or rented, make certain that the operator(s), prior to operating:

1. Is instructed in safe and proper use.
2. Reviews and understands the manual(s) pertaining to this machine.

Throughout this manual, the term **IMPORTANT** is used to indicate that failure to observe can cause damage to equipment. The terms **CAUTION**, **WARNING** and **DANGER** are used in conjunction with the Safety-Alert Symbol, (a triangle with an exclamation mark), to indicate the degree of hazard for items of personal safety. When you see this symbol, carefully read the message that follows and be alert to the possibility of personal injury or death.



This Safety-Alert symbol indicates a hazard and means  
**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**



**DANGER** Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury.



**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.



**CAUTION** Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury.

**IMPORTANT** Indicates that failure to observe can cause damage to equipment.

**NOTE** Indicates helpful information.

## General Information

### BOLT TORQUE CHART

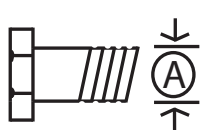
Always tighten hardware to these values unless a different torque or tightening procedure is listed for specific application.

Fasteners must always be replaced with the same grade as specified in the manual parts list.

Always use the proper tool for tightening hardware: SAE for SAE hardware and Metric for Metric hardware.

Make sure fastener threads are clean and you start thread engagement properly.

All torque values are given to specifications used on hardware defined by SAE J1701 & J1701M (JUL 96)



### SAE SERIES TORQUE CHART



SAE Grade 2  
(No Dashes)


SAE Bolt Head  
Identification

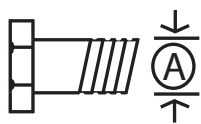


SAE Grade 5  
3 Radial Dashes



SAE Grade 8  
6 Radial Dashes

 Diameter (Inches)	Wrench Size	MARKING ON HEAD					
		SAE 2		SAE 5		SAE 8	
		LBS.-FT.	N-m	LBS.-FT.	N-m	LBS.-FT.	N-m
1/4	7/16"	6	8	10	13	14	18
5/16	1/2"	12	17	19	26	27	37
3/8	9/16"	23	31	35	47	49	67
7/16	5/8"	36	48	55	75	78	106
1/2	3/4"	55	75	85	115	120	163
9/16	13/16"	78	106	121	164	171	232
5/8	15/16"	110	149	170	230	240	325
3/4	1-1/8"	192	261	297	403	420	569
7/8	1-5/16"	306	416	474	642	669	907
1	1-1/2"	467	634	722	979	1020	1383

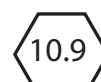


### METRIC SERIES TORQUE CHART



Metric  
Grade 8.8

Metric Bolt Head  
Identification



Metric  
Grade 10.9

Diameter & (Millimeters) Thread Pitch	Wrench Size	Grade 8.8				Grade 10.9				Diameter & (Millimeters) Thread Pitch
		COARSE THREAD				FINE THREAD				
		MARKING ON THREAD				MARKING ON THREAD				
		Metric 8.8		Metric 10.9		Metric 8.8		Metric 10.9		
6 x 1.0	10 mm	8	6	11	8	8	6	11	8	6 x 1.0
8 x 1.25	13 mm	20	15	27	20	21	16	29	22	8 x 1.0
10 x 1.5	16 mm	39	29	54	40	41	30	57	42	10 x 1.25
12.1.75	18 mm	68	50	94	70	75	55	103	76	12.1.25
14 x 2.0	21 mm	109	80	151	111	118	87	163	120	14 x 1.5
16 x 2.0	24 mm	169	125	234	173	181	133	250	184	16 x 1.5
18 x 2.5	27 mm	234	172	323	239	263	194	363	268	18 x 1.5
20 x 2.5	30 mm	330	244	457	337	367	270	507	374	20 x 1.5
22 x 2.5	34 mm	451	332	623	460	495	365	684	505	22 x 1.5
24 x 3.0	36 mm	571	421	790	583	623	459	861	635	24 x 2.0
30 x 3.0	46 mm	1175	867	1626	1199	1258	928	1740	1283	30 x 2.0

### TIGHTENING WHEEL NUTS

Standard 9/16" wheel studs and nuts should be tightened to torque 121 Ft.-Lbs. During initial operation of the header wagon and then checked for proper torque after every 10 hours of use. Failure to do so may damage wheel nut seats. Once seats are damaged, it will become impossible to keep nuts tight.

## Safety Rules



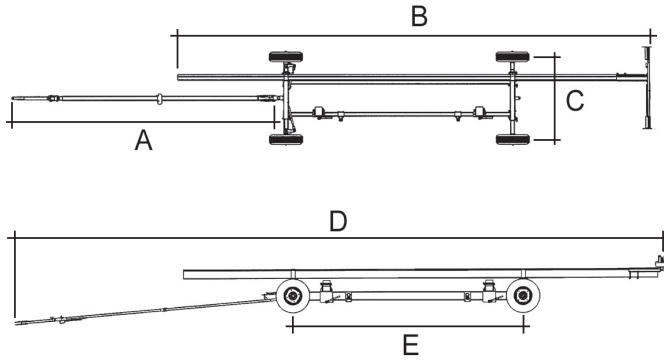
**ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!**

- Safety is a primary concern in the design and manufacture of our products. Unfortunately, our efforts to provide safe equipment can be erased by an operator's single careless act. In addition, hazard control and accident prevention are dependent upon the awareness, concern, judgment, and proper training of personnel involved in the operation, transport, maintenance and storage of equipment.
- Make certain that the operator(s), prior to operating is instructed in safe and proper use and reviews and understands the manual(s) pertaining to this machine.
- Read this manual before you operate this machine. If you do not understand any part of this manual, or need more information, contact the manufacturer or your authorized dealer.

### SAFETY

- Understand that your safety and the safety of other persons are measured by how you service, and operate this machine. Know the positions and functions of all controls before you try to operate them. Make sure to check all controls in a safe area before starting your work.
- The safety information given in this manual does not replace safety codes, federal, state or local laws. Make certain your machine has the proper equipment as designated by local laws and regulations.
- A frequent cause of personal injury or death is from persons falling off equipment and being run over. Do not permit persons to ride on this machine.
- Travel speeds should be such that complete control and machine stability is maintained at all times. Where possible, avoid operating near ditches, embankments and holes. Reduce speed when turning, crossing slopes and rough, slick or muddy surfaces.
- Collision of high speed road traffic and slow moving machines can cause personal injury or death. On roads, use flasher lights according to local laws. Keep slow-moving-vehicle emblem visible. Pull over to let faster traffic pass.
- Make sure that the header is fastened securely to the transport before moving.
- Make sure that everyone is clear of equipment before applying power or moving the machine. NEVER position yourself under or near header when mounting on header transport.
- Never adjust, service, clean or lubricate the header transport until all power is shut off.
- Make sure that the implement is fastened securely to the tractor by using the proper hitch pin, clip and safety chains.
- Before unhooking the implement from the towing unit, be sure to properly block the wheels to prevent the implement from moving.
- Never overload the header transport. Overloading the header transport is dangerous and can cause extensive damage.
- Do NOT exceed speeds in excess of 25 MPH. The header transport is designed for heavy loads at slow speeds. Also be sure slow moving vehicle emblem is attached to rear of wagon.
- IMPORTANT: Use caution when transporting. Be alert of the transport unit's overall width when approaching obstacles, such as post signs and poles, along the road. Check the transport width of the unit to ensure clearance before entering bridges.
- **COMPLY WITH ALL SAFETY WARNINGS AND CAUTIONS IN THIS MANUAL AND IN THE COMBINE OPERATORS MANUAL.**
- **WARNING: BE SURE ALL LIGHTS ARE WORKING PROPERLY BEFORE HIGHWAY TRAVEL.**

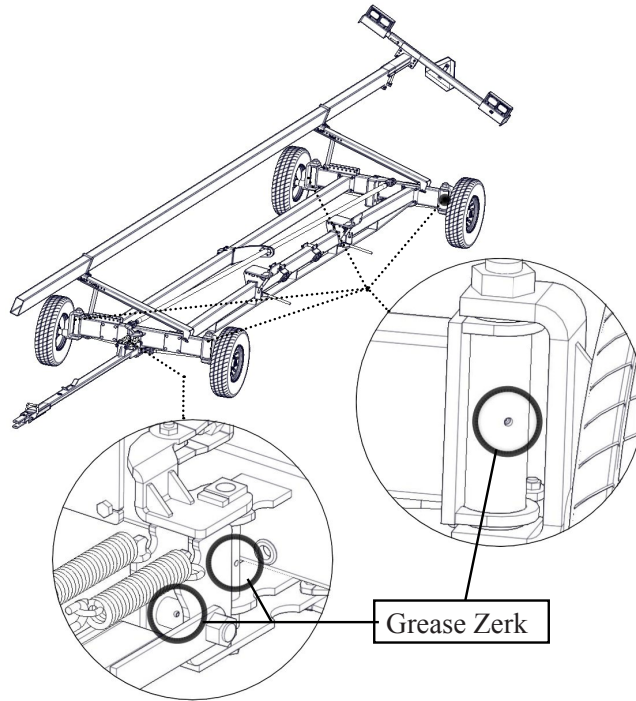
## Specifications



DIMENSIONS			
	HT-974	HT-974XL	HT-974XL-36
A	12'-0"	15'-0"	17'-0"
B	27'-0"	32'-0"	38'-0"
C	6'-2"	6'-2"	6'-2"
D	33'-6"	39'-9"	44'-9"
E	13'-0"	16'-6"	16'-6"

SPECIFICATIONS	HT-974	HT-974XL	HT-974XL-36
Weight	1,540 lbs.	1,755 lbs.	1,830 lbs.
Capacity (Net)	7,500 lbs.	7,500 lbs.	9,400 lbs.
Spindle Size	1 3/4" Diameter	1 3/4" Diameter	1 3/4" Diameter
Wheel Size	14" x 6" - 6 Bolt	14" x 6" - 6 Bolt	15" x 6" - 6 Bolt
Tire Size	215/75R14D	215/75R14D	215/75R15D
Steel Upper Bar	4" x 6"	4" x 6"	4" x 6"
Upper Bar Length	25'	30'	36'
Box Channel Axle Frame	6"	6"	6"

## Initial Operation / Maintenance



### INITIAL OPERATION / MAINTENANCE

**BE CERTAIN THAT ALL POWER IS SHUT OFF BEFORE SERVICING THE HEADER TRANSPORT**

Before the header transport is put into service:

- Has the Slow-Moving Vehicle Emblem been properly positioned at the rear of the header transport?
- Have all danger, warning, caution and important signs on the equipment been read and understood? If employees or others use or are near this equipment, make sure that they also have read and understood all danger, warning, caution, and important signs on the equipment and have also read the operators manual.
- Are all braces, bolts, nuts, lug bolts and lug nuts properly fastened?
- Has the header transport been properly fastened to the towing unit? Use a good quality hitch pin with clip and safety chains.
- Are the rear amber extremity lights properly positioned? Extend lights within 16" of the left and right extremities of the header.

### OPERATING INSTRUCTIONS/ MAINTENANCE

- Adjust the brackets on the header transport to best fit your make and model header. When mounting the header, NEVER position yourself under or near the header.
- Do not exceed the load and size limits of the unit.
- Keep the tires properly inflated. Both under inflation and over inflation can greatly reduce tire life.
- Inspect bracing and welds periodically and repair immediately if needed. Failure to repair could cause extensive damage and greatly reduce the life of the unit.
- Repack the bearings in the hub assembly once a year or as needed. Use a good quality bearing lubricant such as Bearing Guard MK1 or equivalent.
- Insert the amount of grease needed into all of the grease zerks shown in the image above.
- Be sure to check the hub nuts often and keep them properly tightened.
- Check alignment of tires yearly. Adjust the push pull bar to realign the tires if needed.

## Always Position Knee Brace For Optimal Load-Bearing Support



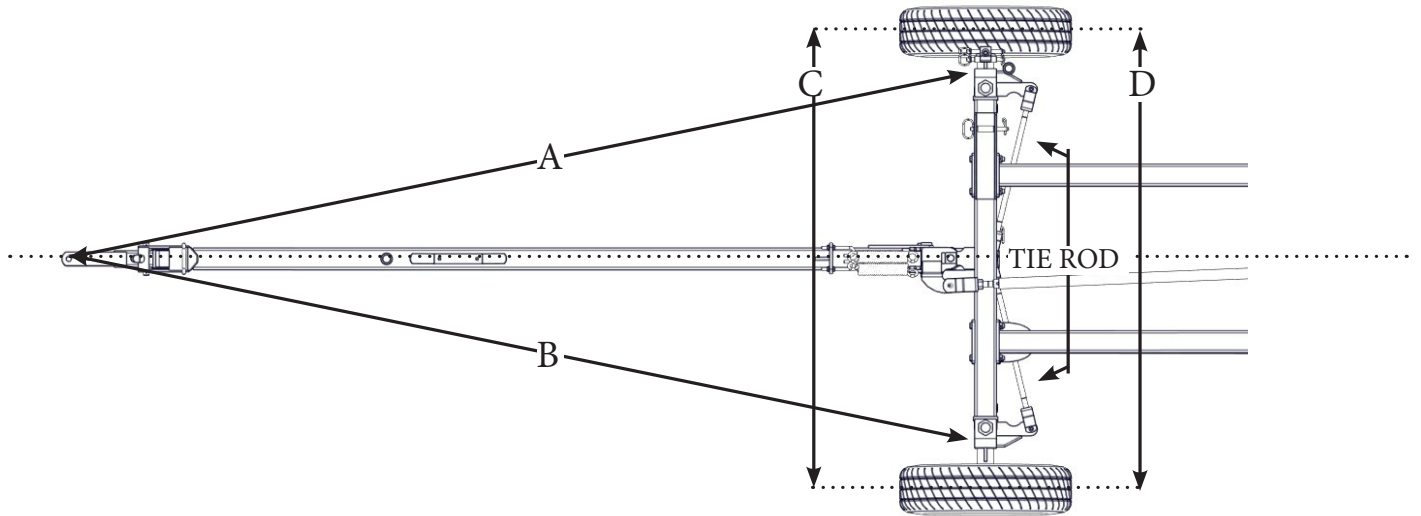
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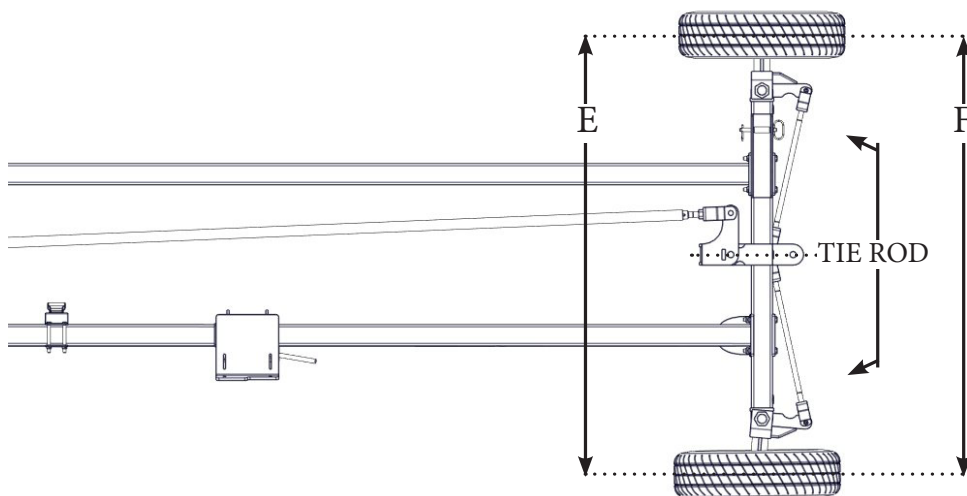
## Service

### *Adjusting the Wheel Toe-In*

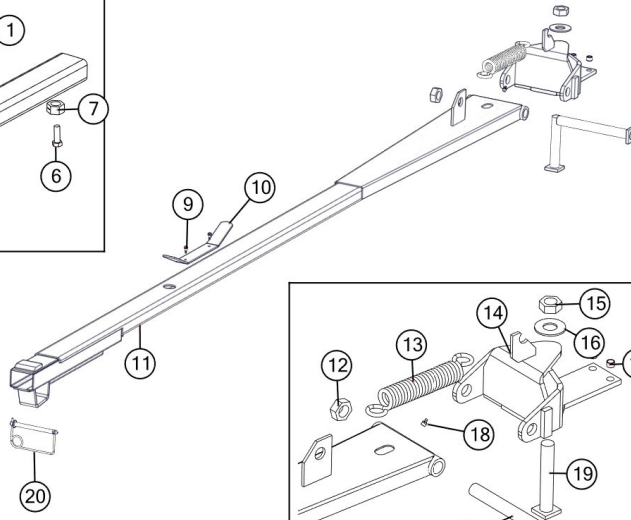
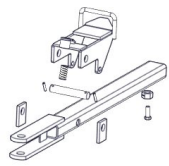
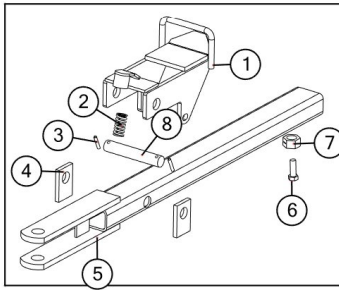
1. Locate the tongue in the straight and horizontal position. Check this by measuring reference lines "A" and "B". These measurements are the same when the tongue is straight forward.
2. To adjust the toe-in of the tire on the front axle, measure the distance between the wheels at the centerline of the tires. Dimension "C" should be  $\frac{1}{8}$ " to  $\frac{1}{4}$ " shorter than dimension "D". If not, loosen the locknuts on both ends of both front tie rods. Adjust both front tie rods evenly as needed. Re-tighten the locknuts and recheck the dimensions.



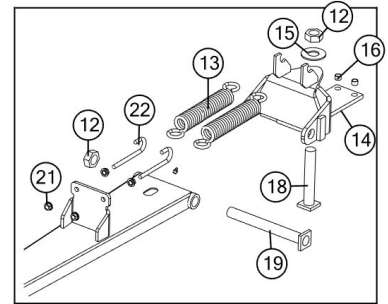
3. To adjust the toe-in of the tires on the rear axle, measure the distance between the wheels at the centerline of the tires. Dimension "E" should be  $\frac{1}{8}$ " to  $\frac{1}{4}$ " shorter than dimension "F". If not, loosen the locknuts on both ends of the rear-most tie rod. Adjust this tie rod as needed. Re-tighten the locknuts and recheck the dimensions.



## Tongue Assembly



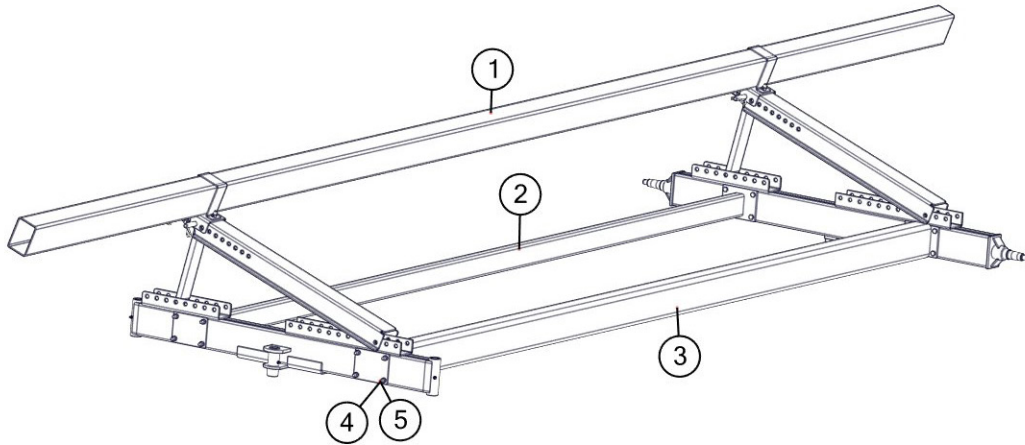
JM0030108 & JM0030106



JM0030160

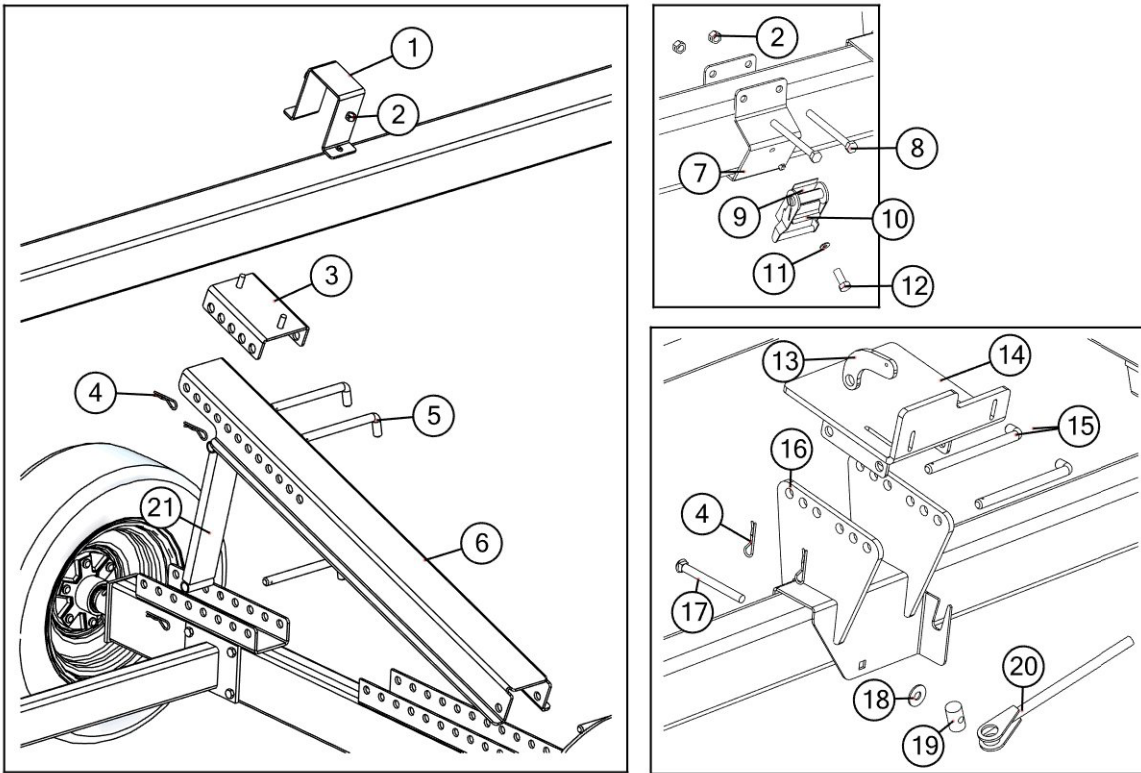
#	Description	Part. No
1	Flapper Weldment	JM0030414
2	Small Spring	JM0001688
3	1/4" x 1-3/8" Z ROLL PIN	JM0009896
4	Spacers	JM0003032
5	Short Inner Tongue (used w/ JM0030106 & JM0030108)	JM0001683
5	Long Inner Tongue (used w/ JM0030160)	JM0030165
6	7/8"-9 x 2" Gr5 Z Hex Bolt	JM0002108
7	Spacer	JM0001649
8	1" Flapper Pivot Shaft	JM0027732
9	1/4" x 3/4" Self Tapping Screw	JM0001570
10	Light Cord Holder	JM0001438
11	12' Outer Tongue Weldment (974 Specific)	JM0030108
11	Outer Tongue Weldment (14' 7" with 1 spring)	JM0030106
11	14' 7" Outer Tongue Weldment - 2 Springs	JM0030160
12	1-1/4"-7 Gr5 Z Hex Nut	JM0001700
13	Tongue Spring (24T,HT) 3/8" x 1-3/4" x 12-1/2"	JM0014200
14	974 HT Hitch Swivel Weldment (8-6 Ton and 974 HT)	JM0030131
15	1-1/4" USS Flat Washer	JM0010112
16	5/8" x 3/4" x 1/2" Bronze Bushing	JM0003189
17	1/8" NPT	JM0009756
18	10 Ton Vertical Hitch Pin Weldment	JM0027665
19	10 Ton Horizontal Hitch Pin Weldment	JM0027667
20	1/2" x 7" Lynch Pin	JM0030476
21	1/2"-13 Gr5 Z SF Hex Nut	JM0002153
22	1/2"-13 Gr5 Z J-Bolt	JM0002168

## Main Frame & Bars



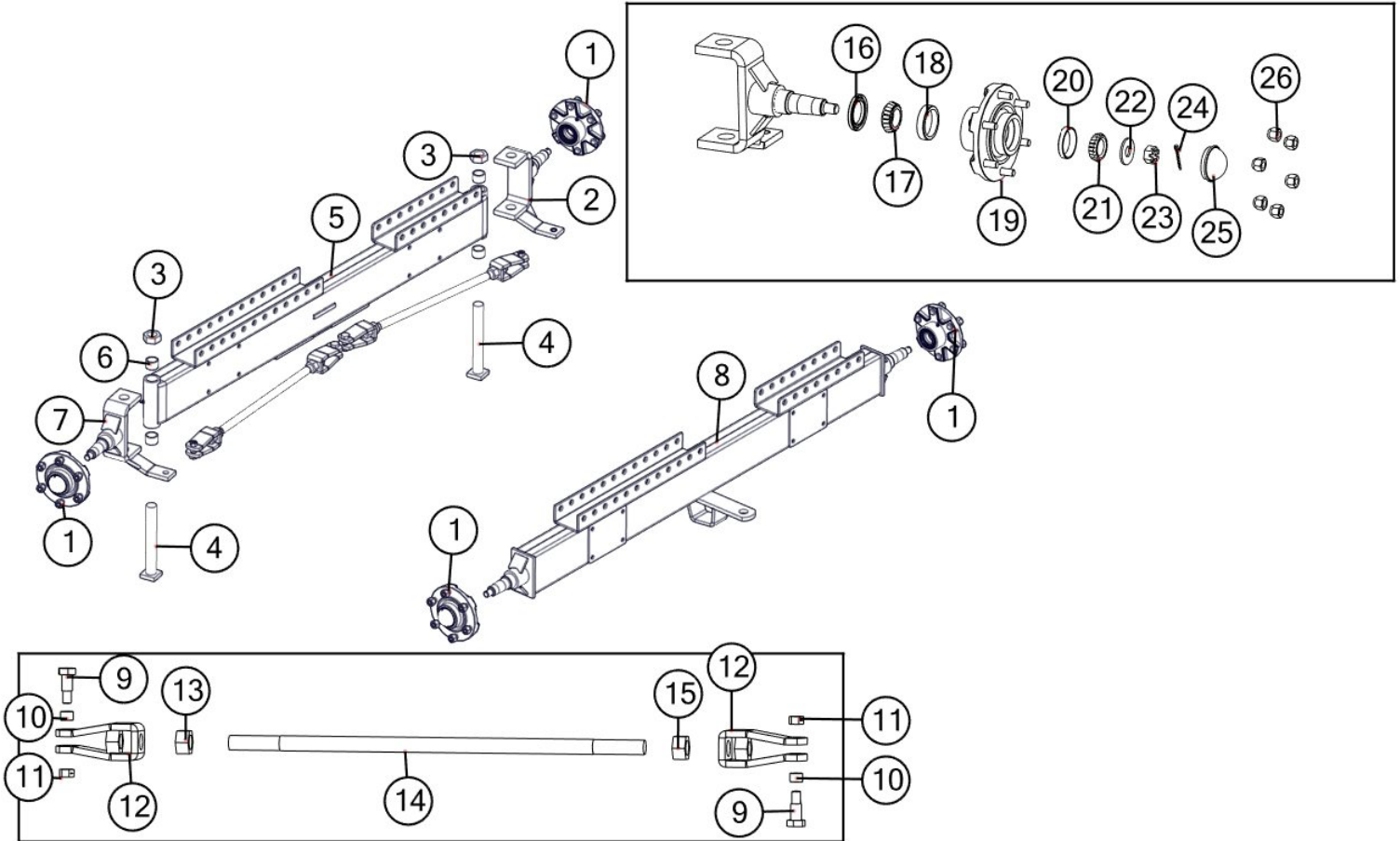
#	Description	Part. No
1	Steel Upper Bar (4" x 6" x 25') (HT974)	JM0030203
1	Steel Upper Bar (4" x 6" x 30') (HT974XL)	JM0030201
1	Steel Upper Bar (4" x 6" x 36') (HT974XL-36)	JM0030205
2	Small Lower Bar (2" x 4" x 152")	JM0030175
2	Small Lower Bar (2" x 4" x 194")	JM0030197
3	Large Lower Bar 152" (HT-974)	JM0030179
3	Large Lower Bar 194" (HT974XL & HT974XL-36)	JM0030188
4	1/2"-13 x 4-1/2" Gr5 Z Hex Bolt	JM0008548
5	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0001511

## Brackets and Mounts



#	Description	Part. No
1	Header Bar Clamp Bracket	JM0028447
2	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0001511
3	Upper Bar Slide Mount	JM0015133
4	3/16" Hairpin	JM0001657
5	3/4" x 8" L Pin (For 3/4" Channel Mount)	JM0029738
5	Hitch Pin (5/8" x 6 1/2") (For old 5/8" Channel Mount)	JM0003079
6	Upper Bar Channel Mount (3/4")	JM0029588
7	60 Deg. Ratchet Strap Bracket	JM0002314
8	1/2"-13 x 5-1/2" Gr5 Z Hex Bolt	JM0001498
9	Long Tie-Down Strap and Hook, (replaces TDS-1)	JM0029979
10	2" Tie-down Ratchet (10,000 lb.)	JM0003084
11	3/8" Z Flat Washer	JM0003061
12	3/8"-16 x 1" Gr8 Z Hex Bolt	JM0001485
13	Header Stop Gusset	JM0003075
14	Upper Header Wagon Mount (Mac Don) Left-hand	JM0014351
14	Upper Header Wagon Mount (Mac Don) Right-hand	JM0032565
15	3/4" x 12" Pin for Adj. Header Mount	JM0003076
16	High Pro Mount Weldment 4 x 6 Left-Hand	JM0007140
16	High Pro Mount Weldment 4 x 6 Right-Hand	JM0032573
16	Low Pro Mount Assembly 4 x 6	JM0003072
17	5/8"-11 x 6-1/2" Gr5 Z Carriage Bolt	JM0001651
18	5/8" USS Flat Washer	JM0003073
19	Header Saddle Mount Bolt(Coupler)	JM0001653
20	Clamp Handle Assembly	JM0001656
21	Support Arm	JM0003077

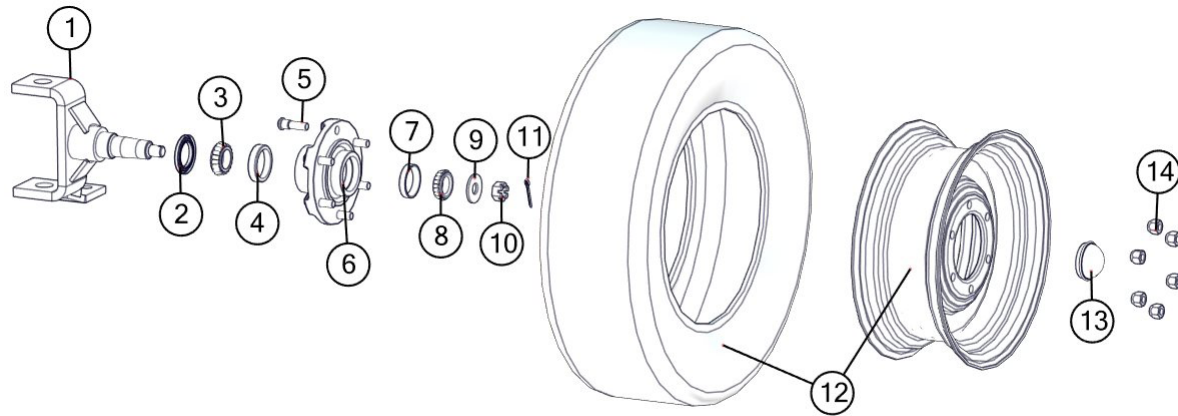
## Axle Weldments



#	Part. No.	Description
1	G-25 Hub w/ studs, cups, & nuts.	JM0026566
2	1-3/4" Spindle and "U" Assembly (Right)	JM0030141
3	1-1/4"-7 Gr5 Z Hex Nut	JM0002158
4	1-1/4" x 10-1/4 Spindle Bolt (Total Length)	JM0019324
5	Front Axle, Less Hub, Spindle Assembly and Hitch (HT) (FA-974)	JM0030103
6	1-1/4" x 1-1/2" OD x 1" LG Bronze Bushing	JM0002248
7	1-3/4" Spindle and "U" Assembly (Left)	JM0030136
8	974 Header Wagon Rear Axle Weldment	JM0030097
9	5/8" dia. x 1" Shoulder Bolt	JM0002408
10	5/8" x 3/4" x 1/2" Bronze Bushing	JM0003189
11	1/2"-13 Gr5 Z Centerlock Hex Nut	JM0001511
12	Tie Rod End, Right (clevis type) new style, 6-10 Ton	JM0030149
12	Tie Rod End, Left (clevis type) new style, 6-10 Ton	JM0003168

#	Part. No.	Description
13	7/8"-9 Gr5 Z Hex Nut	JM0002126
14	7/8 x 24-1/2" Tie Rod (974)	JM0030104
15	7/8"-14 Gr5 Z Left Handed Hex Nut	JM0027686
16	Grease Seal, 6-8 Ton	JM0026572
17	Large Inner Bearing for 6-8 Ton	JM0019563
18	Large Cup for 6-8 Ton	JM0026565
19	1/2"-20 x 1-7/8" Stud	JM0019559
20	Small Cup for 6-10 Ton	JM0026564
21	Small Outer Bearing for 6-10 Ton	JM0019564
22	3/4" USS Flat Washer	JM0010006
23	3/4"-10 Gr5 Z Castle Hex Nut	JM0002130
24	1-1/2" Cotter Pin	JM0014348
25	Dust Cap, 6-10 Ton	JM0026567
26	1/2" - 20 Lugnut	JM0003062

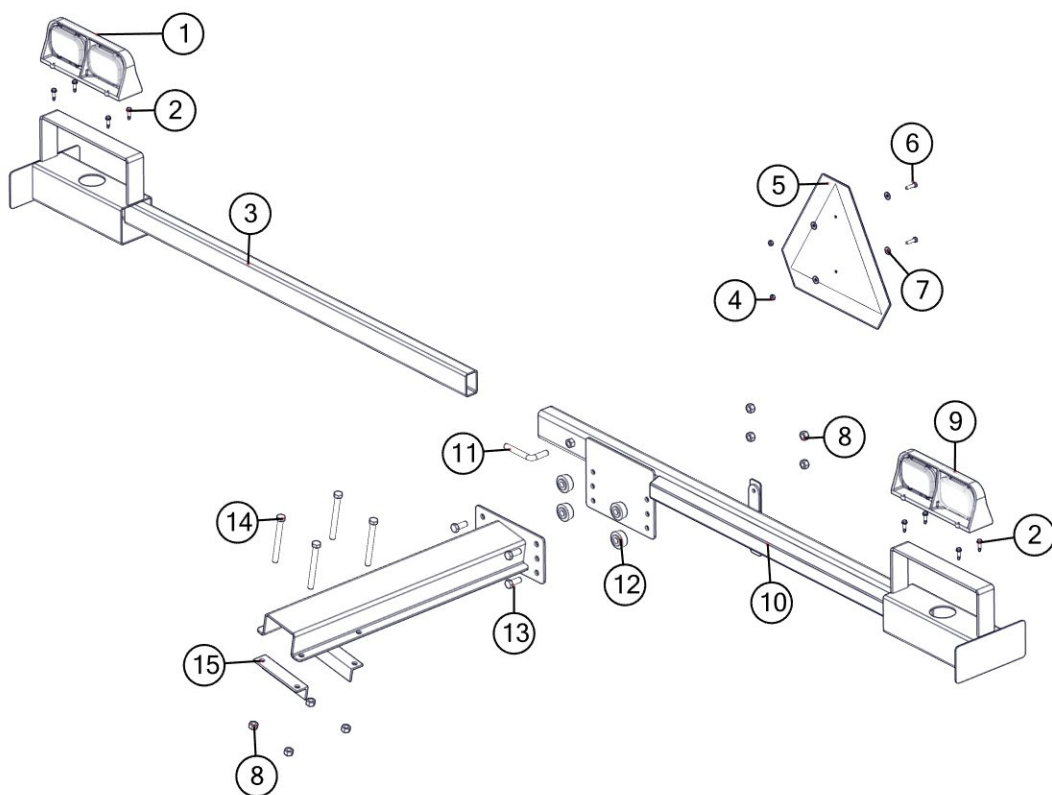
## Spindle & Tire Assemblies



#	Part. No.	Description
1	1-3/4" Spindle and "U" Assembly (Right)	JM0030141
1	1-3/4" Spindle and "U" Assembly (Left)	JM0030136
2	Grease Seal, 6-8 Ton	JM0026572
3	Large Inner Bearing for 6-8 Ton	JM0019563
4	Large Cup for 6-8 Ton	JM0026565
5	1/2"-20 x 1-7/8" Stud	JM0019559
6	G-25 Hub w/ studs, cups, & nuts. (6-Bolt)	JM0026566
7	Small Cup for 6-10 Ton	JM0026564
8	Small Outer Bearing for 6-10 Ton	JM0019564
9	3/4" USS Flat Washer	JM0010006
10	3/4"-10 Gr5 Z Castle Hex Nut	JM0002130
11	1-1/2" Cotter Pin	JM0014348
12	14" Wheel & Tire Assembly (HT974)(14 x 6)	JM0019536
12	14" Wheel (HT974)	JM0019535
12	14" Tire 215/75R14D (HT974)	JM0019529
12	15" Wheel & Tire Assembly (HT974XL, HT974XL-36)(15 x 6)	JM0030452
12	15" Wheel (HT974XL, HT974XL-36)	JM0030449
12	15" Tire 215/75R15E (HT974XL, HT974XL-36)	JM0030451
13	Dust Cap, 6-10 Ton	JM0026567
14	1/2" - 20 Lugnut	JM0003062

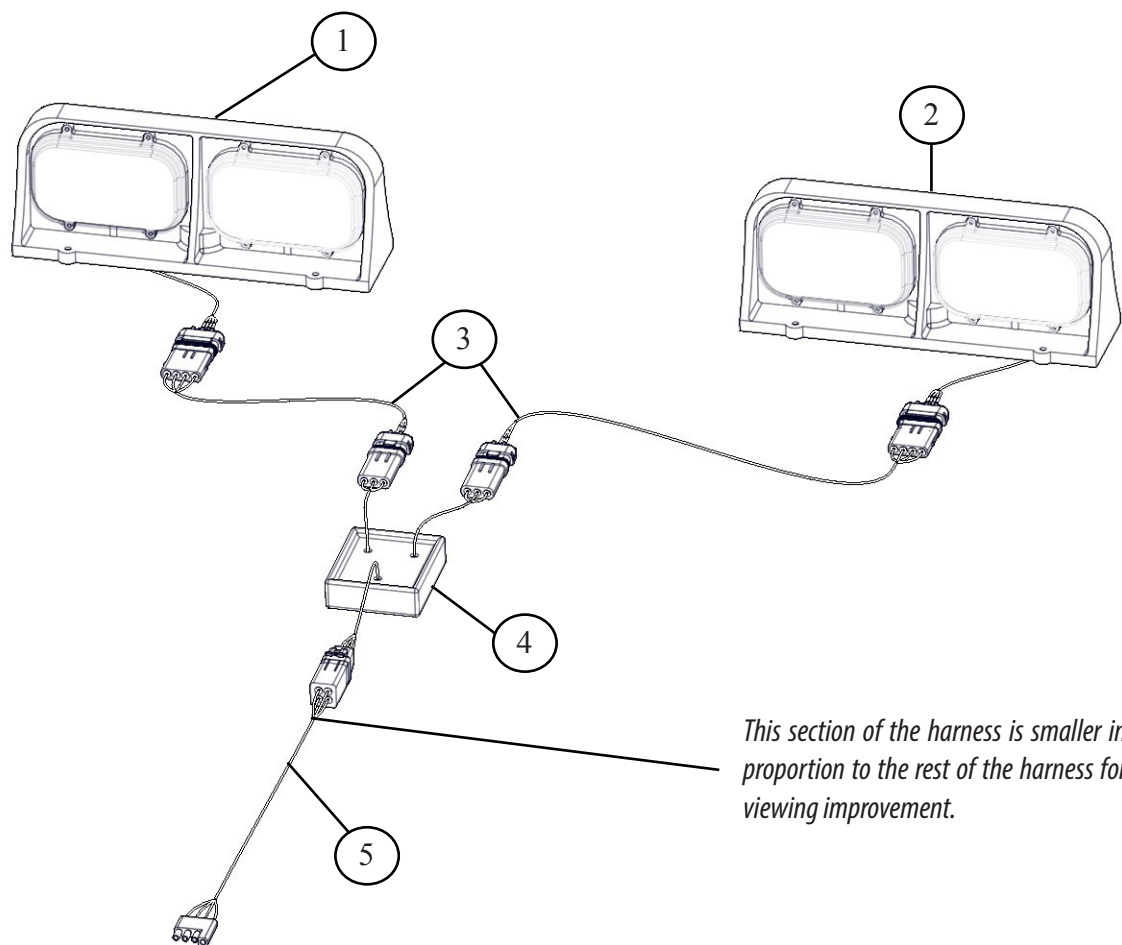


## Light Bar Assembly



#	Part. No.	Description
1	Light Assembly Right (LED)	JM0001682
2	1/4" x 1" Self Tapping Screw	JM0001716
3	Telescoping Arm	JM0001375
4	1/4"-20 Gr5 Z Centerlock Hex Nut	JM0001505
5	SMV Sign	JM0001616
6	1/4"-20 x 1" Gr5 Z Hex Bolt	JM0002095
7	1/4" USS Flat Washer	JM0003090
8	1/2"-13 Gr5 Z Hex Nut	JM0002124
9	Light Assembly Left (LED)	JM0001680
10	Light Mounting Bracket	JM0001374
11	1/2"-13 x 2" Gr5 Z L Bolt	JM0021419
12	Damper	JM0001869
13	1/2"-13 x 1-1/4" Gr5 Z Hex Bolt	JM0001513
14	1/2"-13 x 5" Gr5 Z Hex Bolt	JM0001594
15	Angle Iron Support	JM0001440

## Light Kit



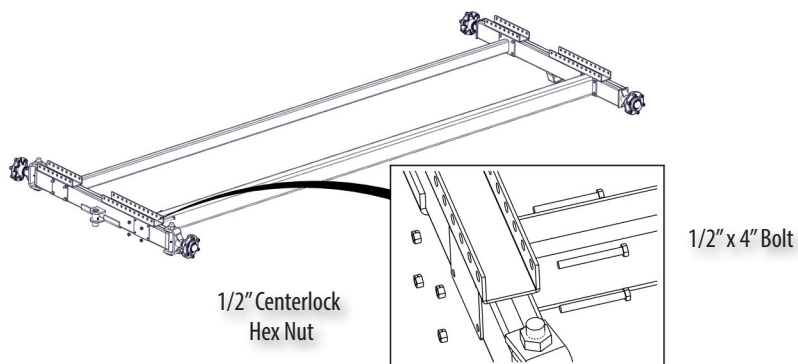
#	Part. No.	Description
1	JM0001682	R/H Rear Light
2	JM0001680	L/H Rear Light
3	JM0007166	Short Harness
4	JM0007445	Light Enhancer
5	JM0007436	Main Harness



## Set Up Instructions

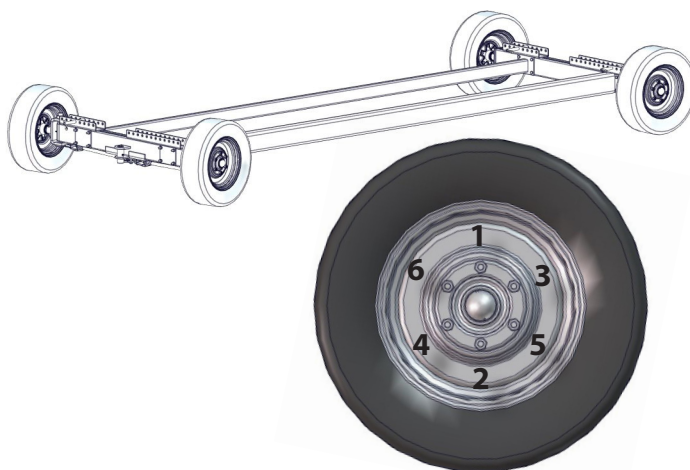
### • Front & Rear Axle

Secure the front and rear axle to the frame bars. Use (8) 1/2" x 4" zinc hex bolts and (8) 1/2" centerlock hex nuts to install each axle. Tighten all of the hex nuts.



### • Wheels & Tires

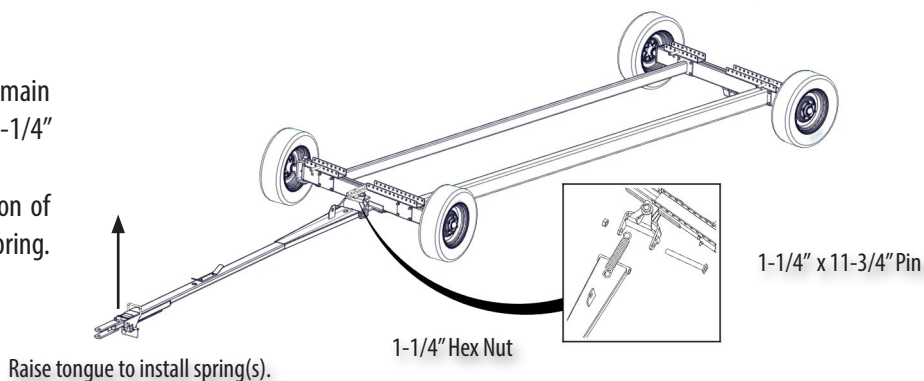
Install all four tires. Attach the tires using (6) 1/2" lugnuts. Tighten lugnuts in a star pattern according to the figure below.



### • Tongue Assembly

Install the tongue assembly. Attach the tongue to the main frame using a 1-1/4" x 11-3/4" pin weldment and a 1-1/4" hex nut. Tighten hardware once installed.

Install the tongue spring. Raise the adjustable portion of the tongue in the air to assist in installing the tongue spring.



## Set Up Instructions

### • **Support Arms**

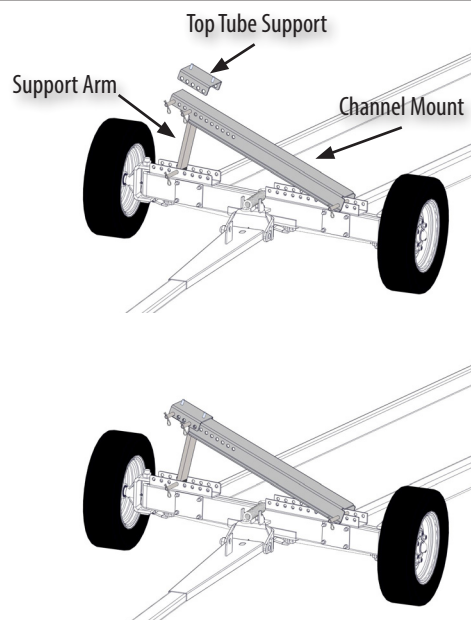
Install the support arm, channel mount and top tube support onto the front and rear axles.

First attach the support arm onto the right side of the front axle. Use a "L" pin and a 3/16" hair pin to fasten.

Next attach the channel mount on the left side of the front axle. Use a "L" pin and a 3/16" hair pin to fasten.

Now fasten the top tube support to the channel mount and the support arm. Use (2) "L" pins and (2) 3/16" hair pin to fasten.

Repeat with the rear axle.



**Always Position Knee Brace For Optimal Load-Bearing Support**

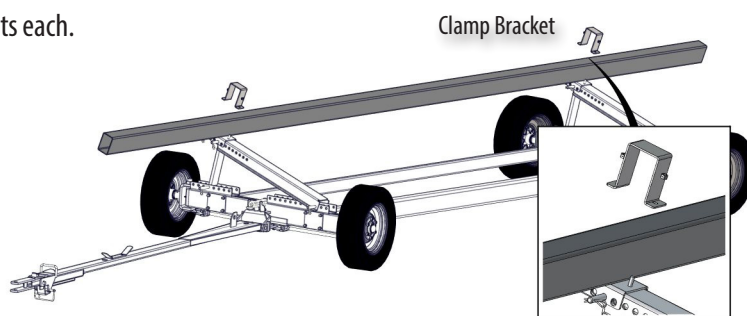


### • **Upper Bar**

Install the upper bar. Secure the upper bar with 2 clamp brackets.

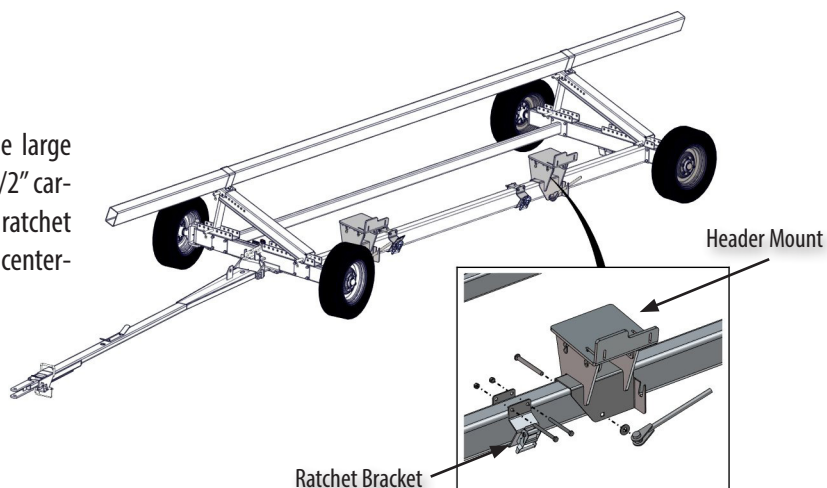
Fasten the clamp brackets with (2) 1/2" centerlock hex nuts each.

Fasten hardware once installed.



### • **Header Mount & Ratchet Bracket**

Place the header mounts and ratchet brackets on the large lower bar. Secure the header mount using a 5/8" x 6-1/2" carriage bolt and the clamp handle assembly. Secure the ratchet bracket using (2) 1/2" x 5-1/2" hex bolts and (2) 1/2" centerlock hex nuts.



## Set Up Instructions

### • Light Bar

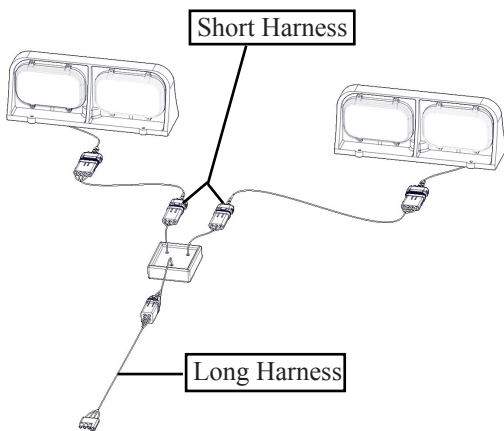
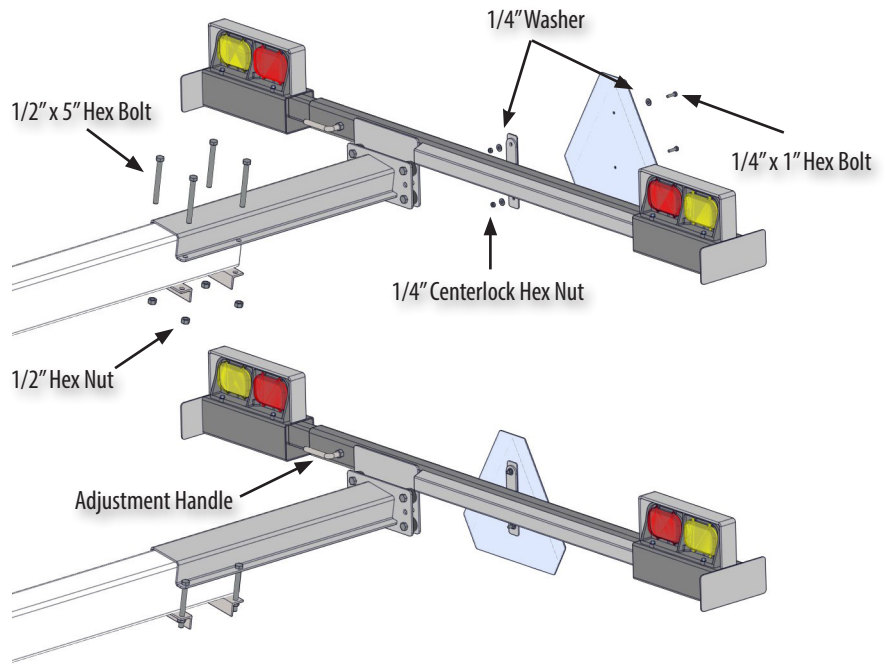
Install the light bar. Secure the light bar using (4) 1/2" x 5" hex bolts and (4) 1/2" hex nuts.

Tighten hardware once installed.

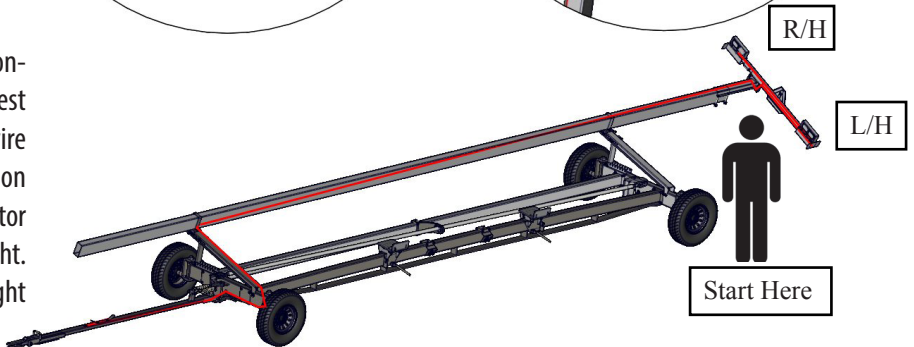
Install the SMV sign. Secure using (2) 1/4" x 1" hex bolts, (2) 1/4" washers, and (2) 1/4" centerlock hex nuts.

Tighten hardware once installed.

Adjust the light bar loosening the adjustment handle and moving the right portion of the light bar. Tighten the adjustment handle once in desired position.



1) Run the short harness, starting with the 4 way flat connectors go through the light bar starting on the side nearest to the rear axle. Facing the light bar from the front, the wire will need to be run from left to right through the channel on the outside of the light bar. Connect the 4 way flat connector to the 4 way flat connector coming out of the left hand light. Now run what's remaining of the short harness to the right side through the inside of the main tube on the light bar.



2) Connect the 3 way flat connector that is coming off of the short harness to the 3 way flat connection coming out of the light enhancer.

3) Connect the light enhancer to the long harness with the two 4 way square connectors.

4) Run the 3 male 1 female flat connector to the front of the top bar. Run the end of the connector through the top bar. There is a hole for the wire to come out of the bottom of the top bar near the front of the wagon. Now run it through the front axle, starting at the bottom rear left hand side to the middle front hole. Next go down the tongue, to the cord wrap. For transportation connect the 4 way flat connector to the vehicle and wrap the remaining cord around the cord wrap.



