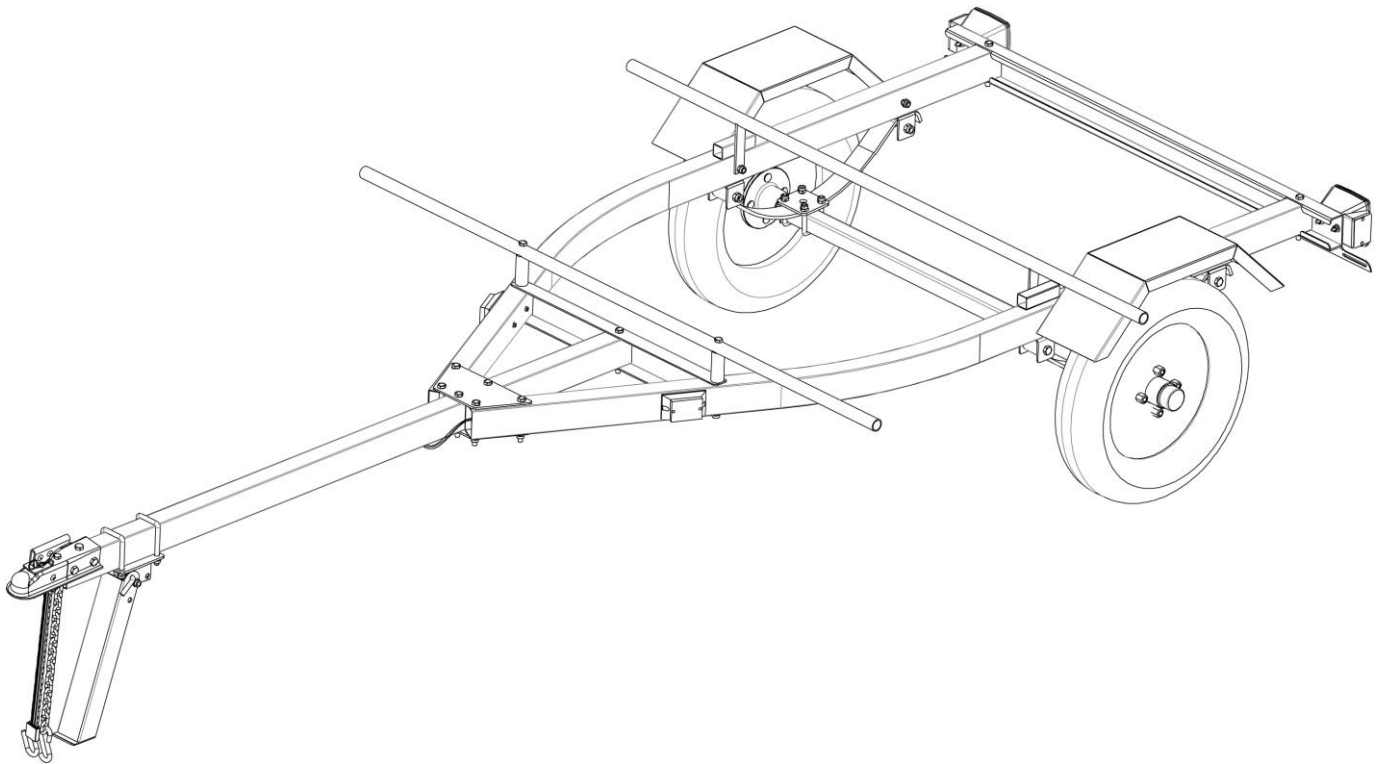




Ruff-Sport Trailer

Revision: A1



LC1-8792G Ruff-Sport Trailer
Shipping Weight: 205 lbs
Max Load Capacity: 400 lbs
Coupler Capacity: Class II, 2" ball
Tires: 4.80-12(D) tubeless, 4PR

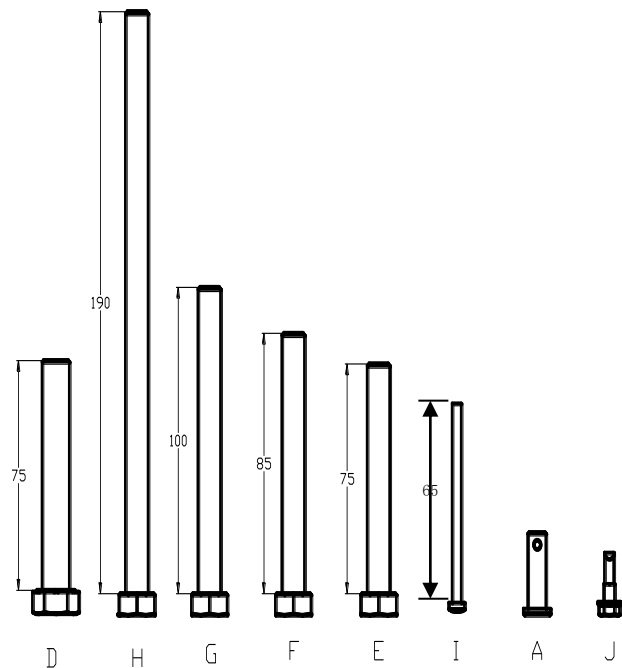


Approximate Assembly Time
3 - 5 hours

Parts List & Assembly Instructions

Trailer Parts		
NO	Item	Qty
1	Coupler	1
2	Chain	1
3	Towbar	1
4	Stand Base	1
5	Stand Leg	1
6	Cross Bar Rear	1
7	Cross Bar Front	1
8	Cross Bar Spacer	2
9	Right Side Rail	1
10	Left Side Rail	1
11	Connecting Plate	2
12	Connecting Rod	1
13	Side Running Light	2
14	Spring (single leaf)	2
15	Spring Plate	2
16	Axle	1
17	Hub Assembly	2
18	Tire/Rim Assembly	2
19	Fender	2
20	Cross Member	1
21	License Plate Bracket	1
22	Left Tail Light	1
23	Right Tail Light	1
24	Wiring/Plug Assembly	1

Hardware		
NO	Item	Qty
A	Safety Pin (coupler)	1
B	Hairpin Cotter (coupler)	1
C	Pin $\frac{3}{8}$ " (Stand)	1
D	Bolt M12 x 75mm	6
E	Bolt M10 x 75mm	4
F	Bolt M10 x 85mm	1
G	Bolt M10 x 100mm	9
H	Bolt M10 x 190mm	2
I	Bolt M4 x 65mm (side running lights)	4
J	Self-tap Screw (ground wire)	1
K	U-Bolt M10 (stand)	2
L	U-Bolt M10 (springs)	4
M	Nut M10 (nylon lock)	28
N	Nut M12 (nylon lock)	6
O	Nut M4 (nylon lock)	4
P	Lug Nut M12 (hub)	8
Q	Castle Nut $\frac{7}{8}$ " (axle)	2
R	Flat Washer (axle)	2
S	Cotter Pin (axle)	2
T	Bearing L44643 (hub)	2
U	Dust Cap (hub)	2
V	Nut M6 (Tail lights)	4



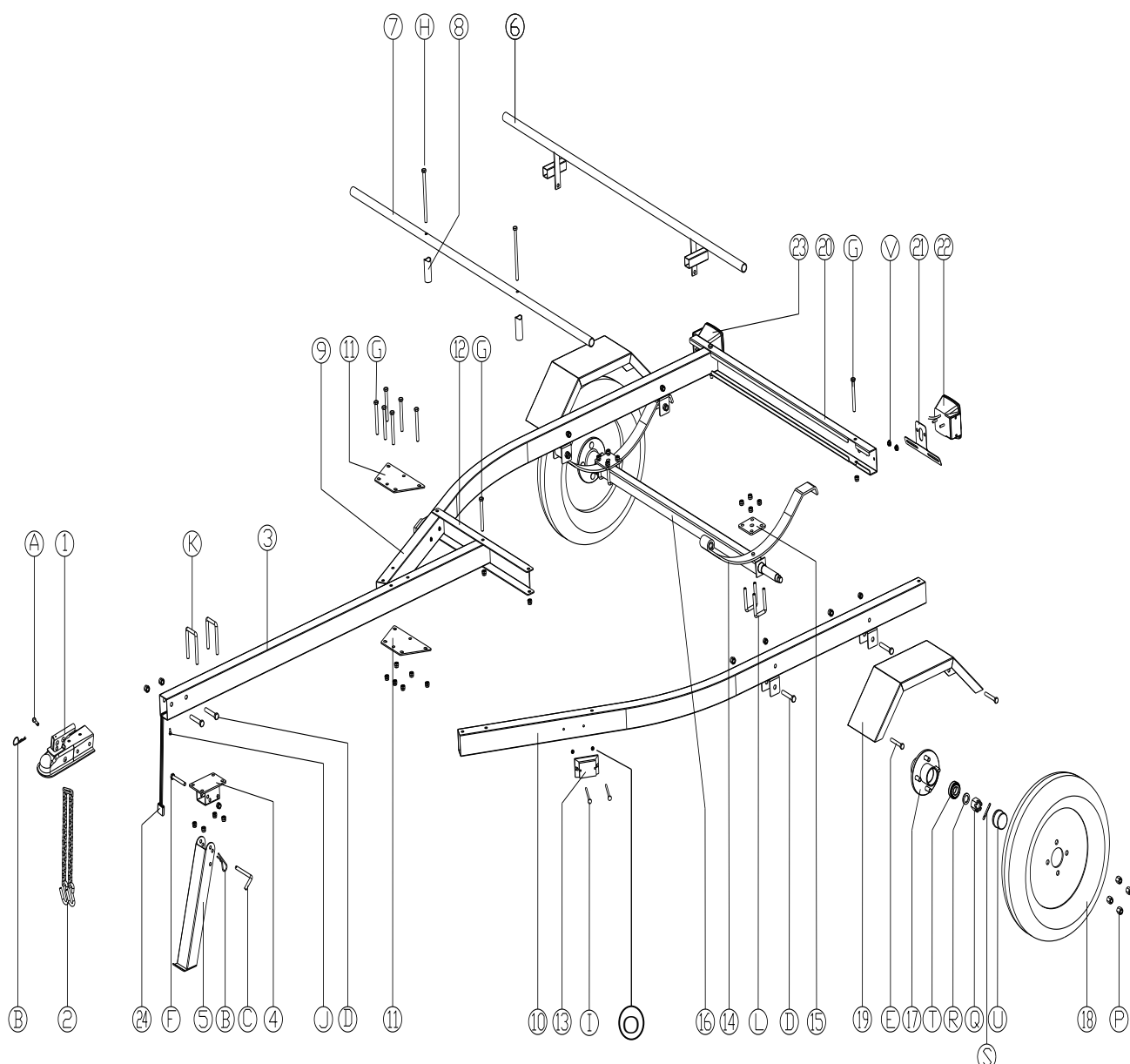
Parts List

Bolts - (image not full scale)

The tools you will need:

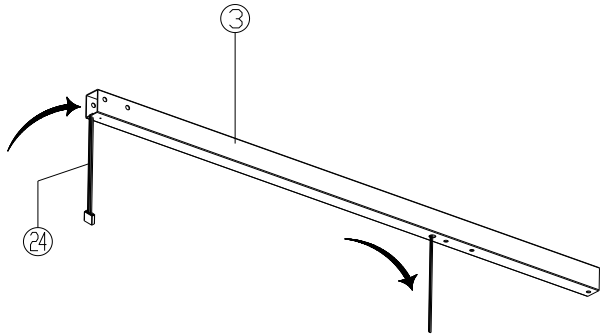
- phillips head screw driver
- pliers
- wire stripper/cutter
- tape measure
- plastic/rubber mallet
- knife
- box wrenches (7mm, 17mm, 18mm, 19mm, 21mm)
- sockets (7mm, 10mm, 17mm, 18mm, 19mm, 21mm)
- adjustable wrench or channel lock pliers
- torque wrench
- grease gun and grease
- electrical tape

Identify and layout all bolts and fasteners before starting assembly



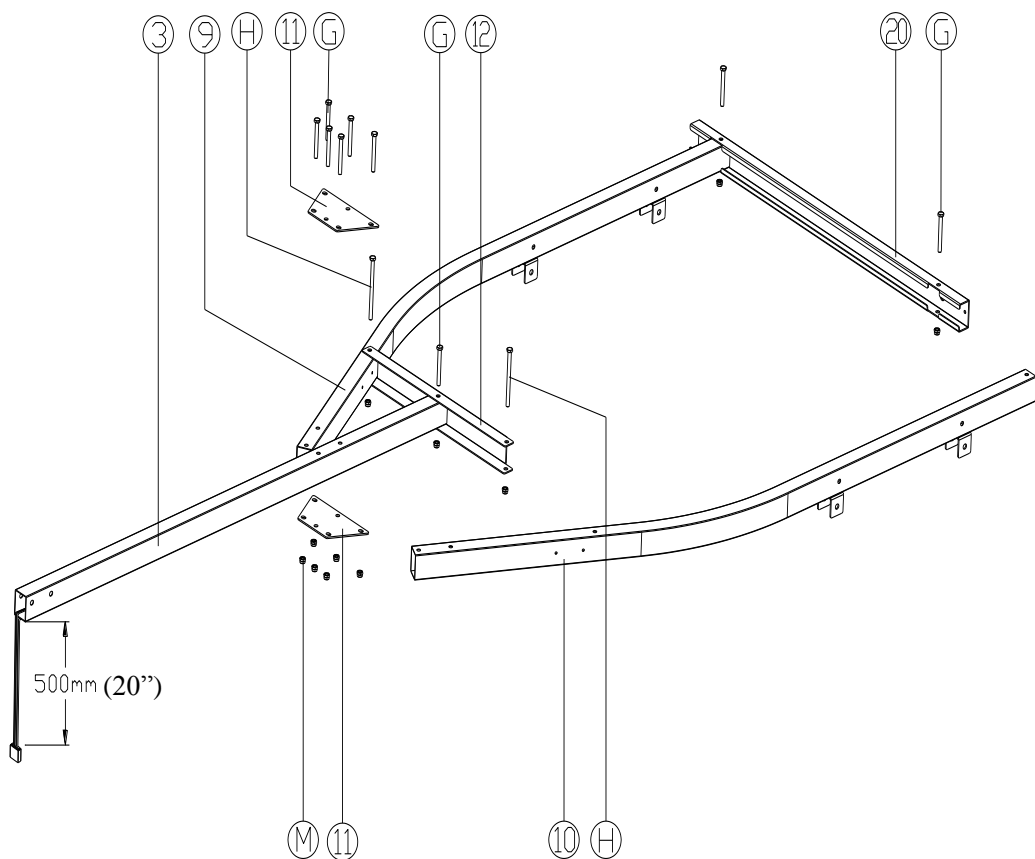
EXPLODED PARTS VIEW

STEP 0: Locate “CERTIFICATE OF ORIGIN” document packed with Towbar (3) in BOX 2 OF 4.



STEP 1

STEP 1: Route tail end of Wire/Plug Assembly (24) into open hitch end of Towbar (3) and out the 9/16” hole in the bottom. Tip Towbar and use gravity to help snake the wires through. Alternately, to help feed/pull the wires through the Towbar, a wiring fish tape can be constructed from 3 wire coat hangers that are twisted together end to end. (Final wiring will be completed in subsequent steps; be careful not to damage wires during the assembly process)



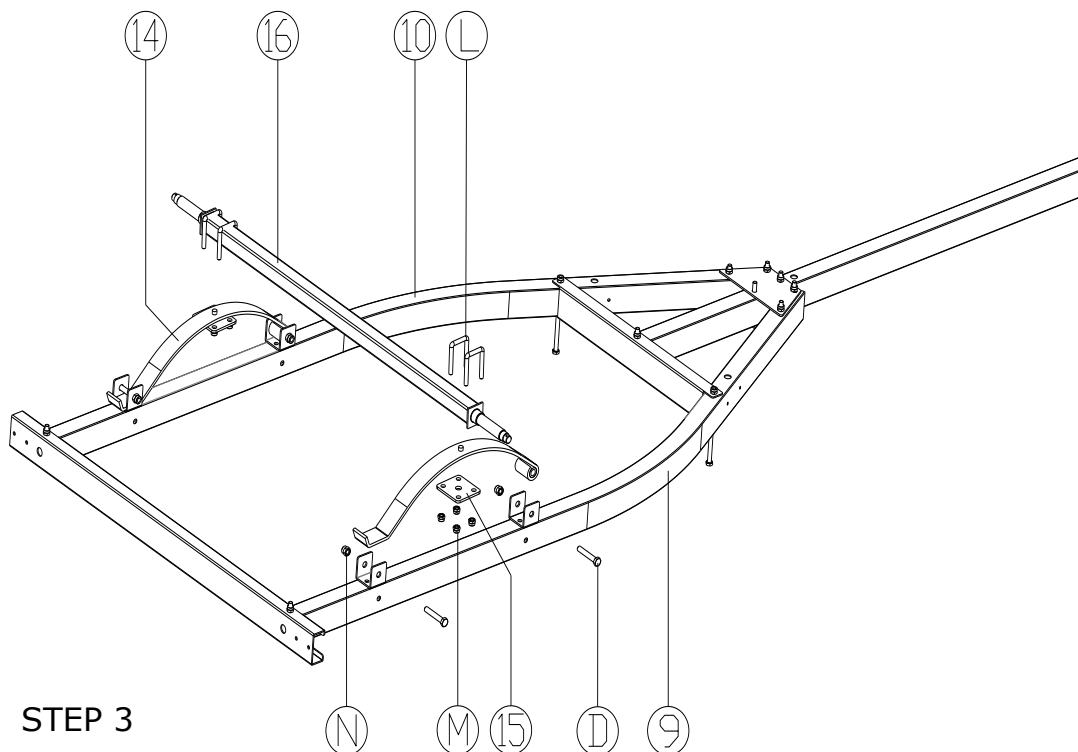
STEP 2

ASSEMBLY STEPS

STEP 2: Lay out Towbar (3), Right Side Rail (10), Left Side Rail (9), Connecting Plates (11), Connecting Rod (12), and Cross Member (20) as shown.

Assemble using M10x 100mm Bolt (G) quantity 9, M10x 190mm Bolt (H) quantity 2 and M10 Nut (M) - quantity 11. Do not fully tighten nuts until all the parts (3, 9, 10, 11, 12 & 20) are positioned. Leave the bolts (H) finger tight at this time.

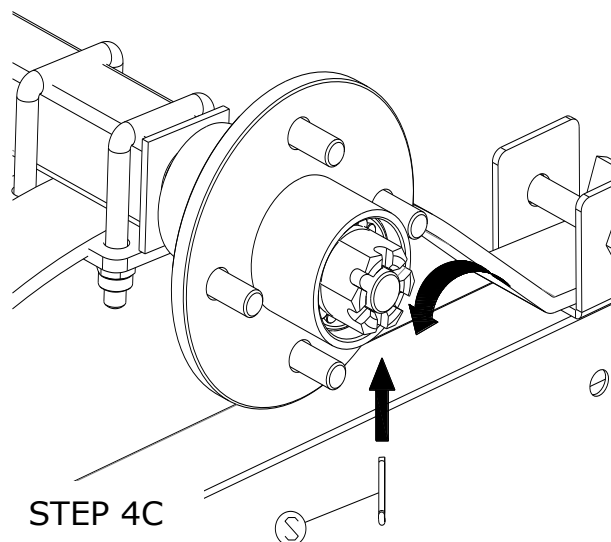
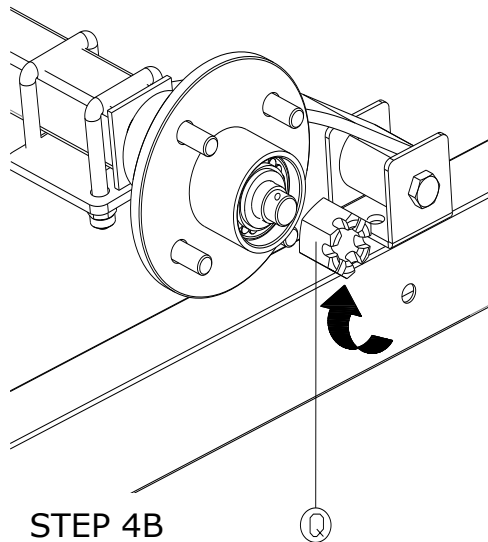
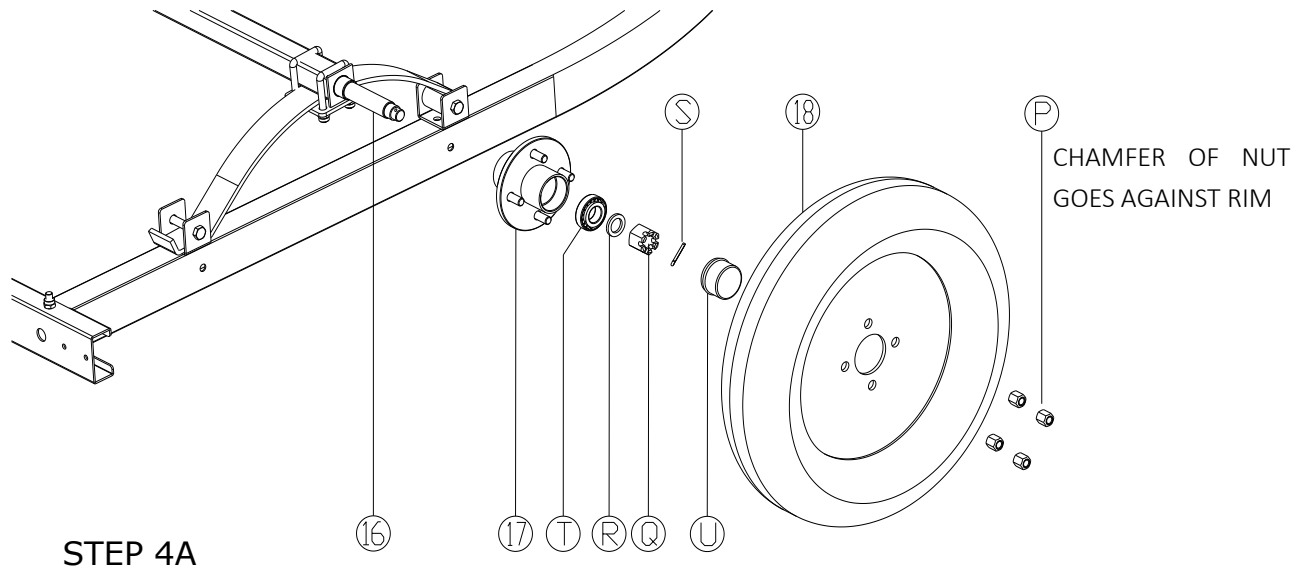
After Bolts (G) are tightened, turn frame upside down with the assistance of a helper. Use temporary blocking to stabilize frame and prevent damage while assembling.



STEP 3: Insert Spring (14) into U-brackets of Right Side Rail (10) with the eye of the spring forward as shown. Secure with M12 x 75mm Bolt (D) quantity 2 and M12 Nut (N) quantity 2. Assemble Spring (14) into Left Side Rail (9) in same manner.

Place Axle (16) on top of Springs (14) so the hex heads of bolts through the springs engage into the locating holes in the Axle (16). Place Spring Plate (15) under Spring and pass two U-Bolts (L) through Axle and Spring Plate. Secure together using M10 Nuts (M). Be sure that center hole of Spring Plate is fit over the small locating bolt in the Spring. Assemble both sides in the same manner. Fully tighten all nuts.

ASSEMBLY STEPS

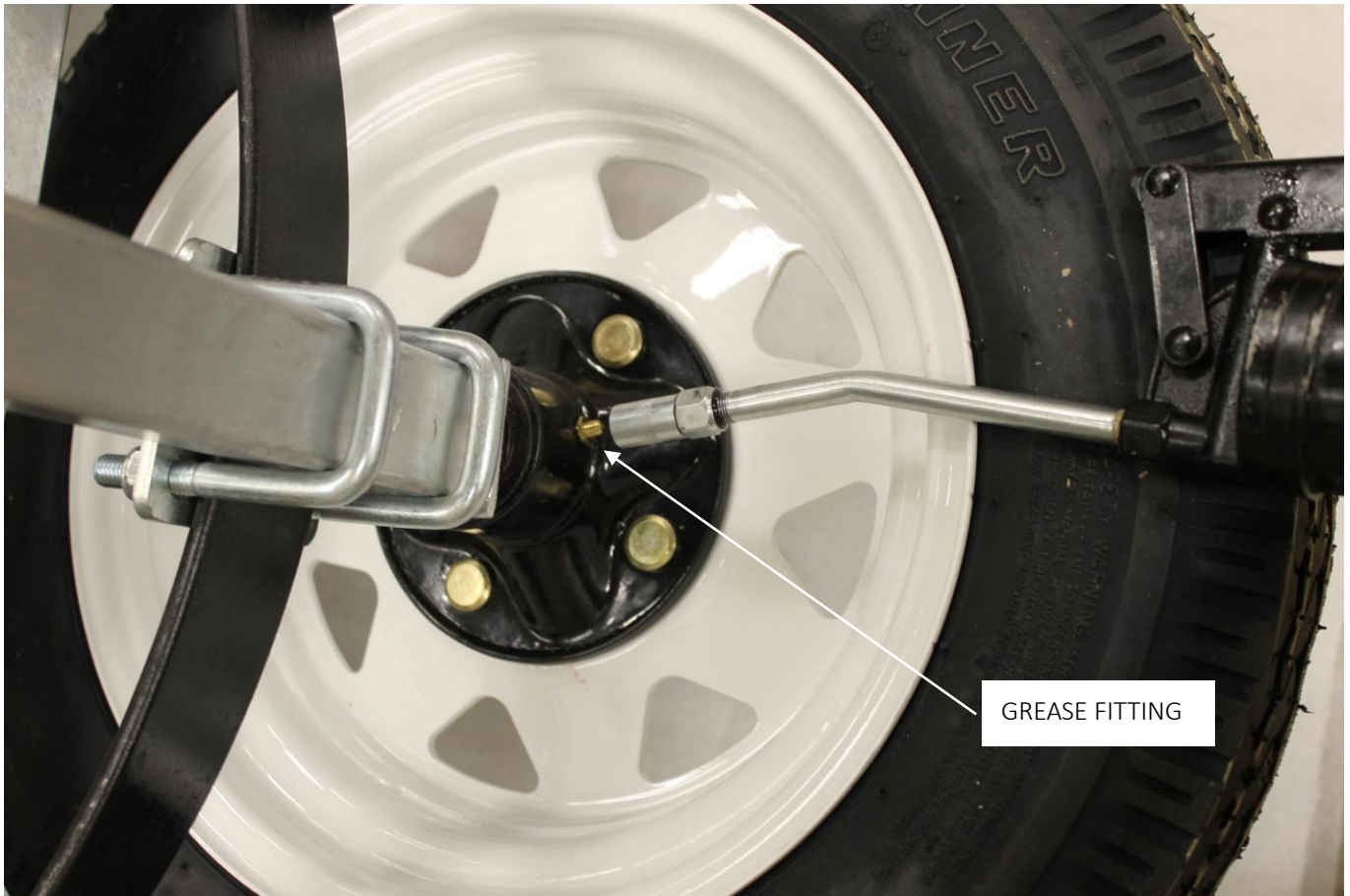


STEP 4A: Clean Axle (16) bearing surfaces and apply extra grease on step surface where the inner seal rides. Carefully slide Hub Assembly (17) onto Axle spindle. Then assemble outer Bearing (T) and Flat Washer (R) as shown. Repeat assembly on other side.

STEP 4B: Tighten Castle Nut (Q) snugly against Flat Washer (R) using a wrench.

ASSEMBLY STEPS

STEP 4C: Back off Castle Nut until Cotter Pin (S) can be inserted through slot in the Castle Nut (Q) and the hole in the Axle spindle. Insert Cotter Pin fully and bend over end of axle. Assembled Hub should rotate freely but there should be no axial play between the hub and axle. Repeat assembly on other side.

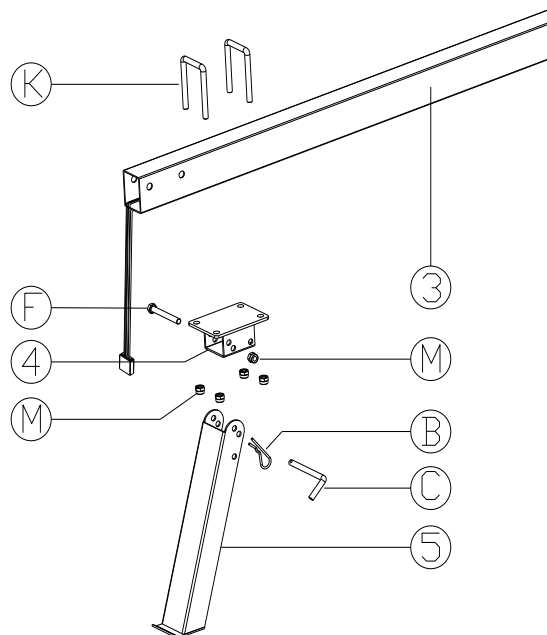


Step 4 Continued: Fill Dust Cap $\frac{1}{4}$ full of grease and carefully tap it into the Hub Assembly using a plastic or rubber mallet. Use grease gun to add grease to the grease fitting located on the hub 17. Repeat assembly on other side.

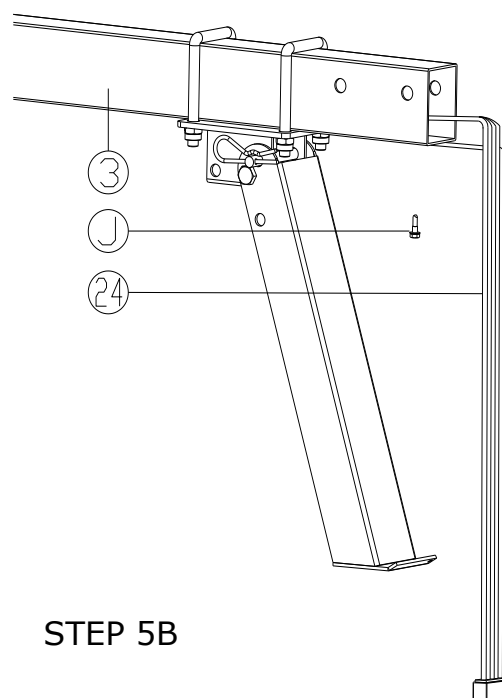
Slide Tire/Rim Assembly (18) onto Hub Assembly (17) with air valve facing outboard. Assemble Lug Nuts $\frac{1}{2}$ " (P) with chamfered edge inward toward Rim and tighten to 80-90 ft*lbs. Repeat assembly on other side. Retorque Lug Nuts after first 50 miles of use.

Turn frame right side up with the assistance of a helper. The trailer will be sitting on its tires. Use temporary blocking to lift Towbar off the ground.

ASSEMBLY STEPS



STEP 5A

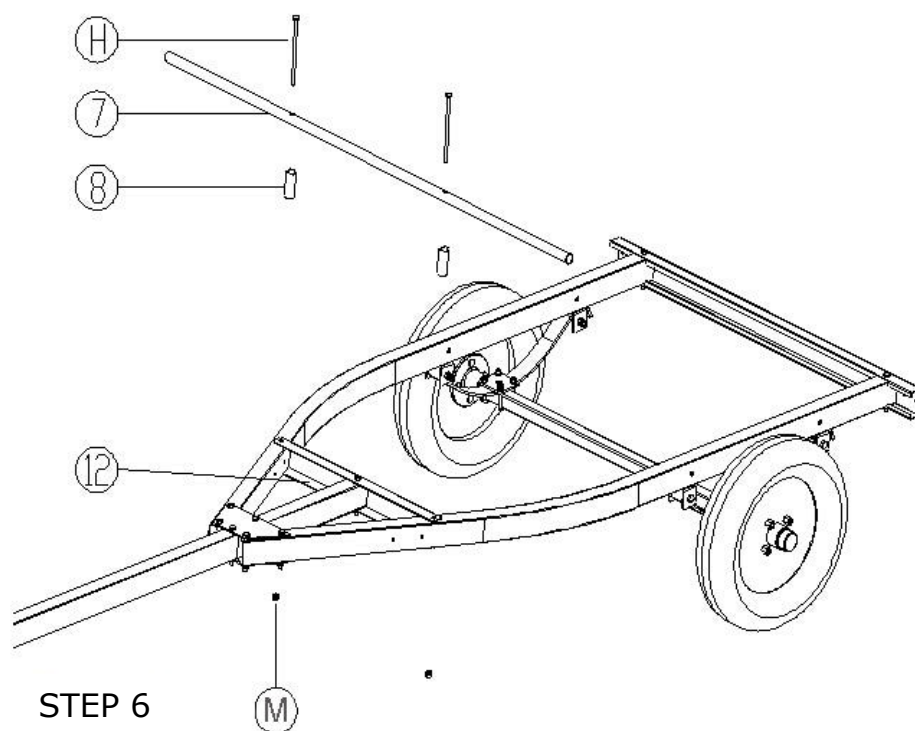


STEP 5B

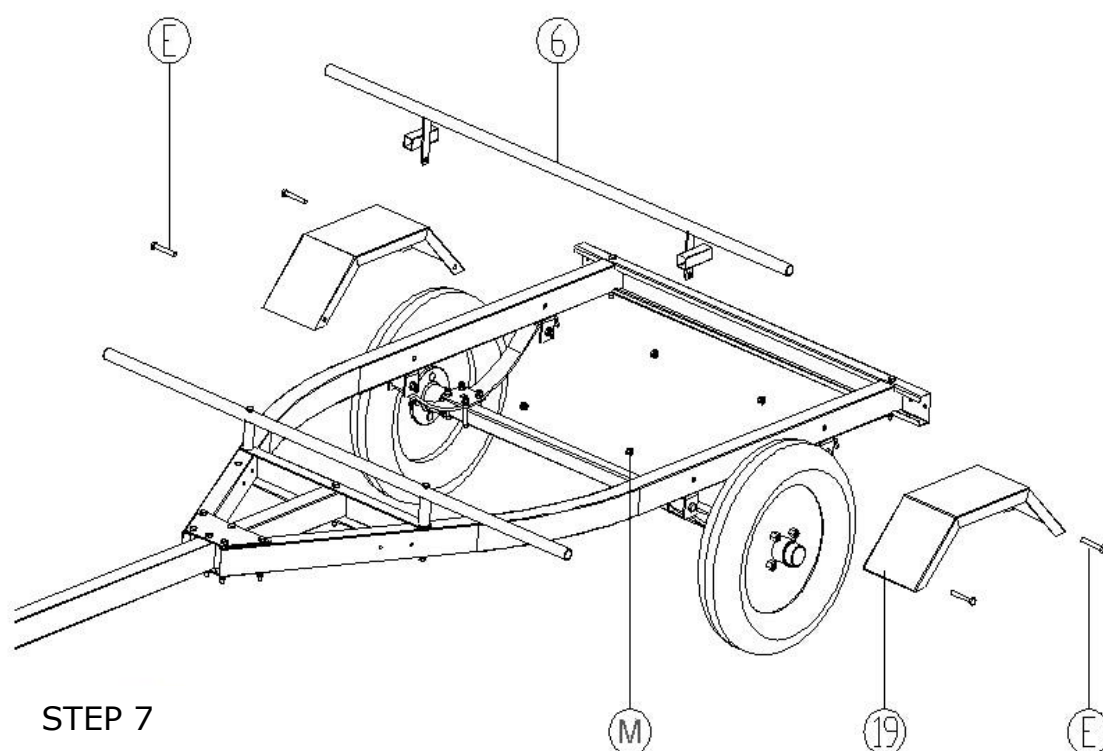
STEP 5A: Place the front edge of Stand Base (4) 6" from front edge of Towbar (3) and fasten together with U-Bolts (K) and M10 Nuts (M) as shown. Place Stand Leg (5) over Stand Base and fasten together with M10 x 85mm Bolt (F) and M10 Nut (M) as shown. Insert Pin (C) in top hole when Stand Leg is extended.

STEP 5B: Strip back approx. 1" of the insulation on the white ground wire of the Wiring/Plug Assembly (24). Wrap wire under head of Self-tap Screw (J) and screw into small hole on bottom of Towbar (3) as shown.

ASSEMBLY STEPS

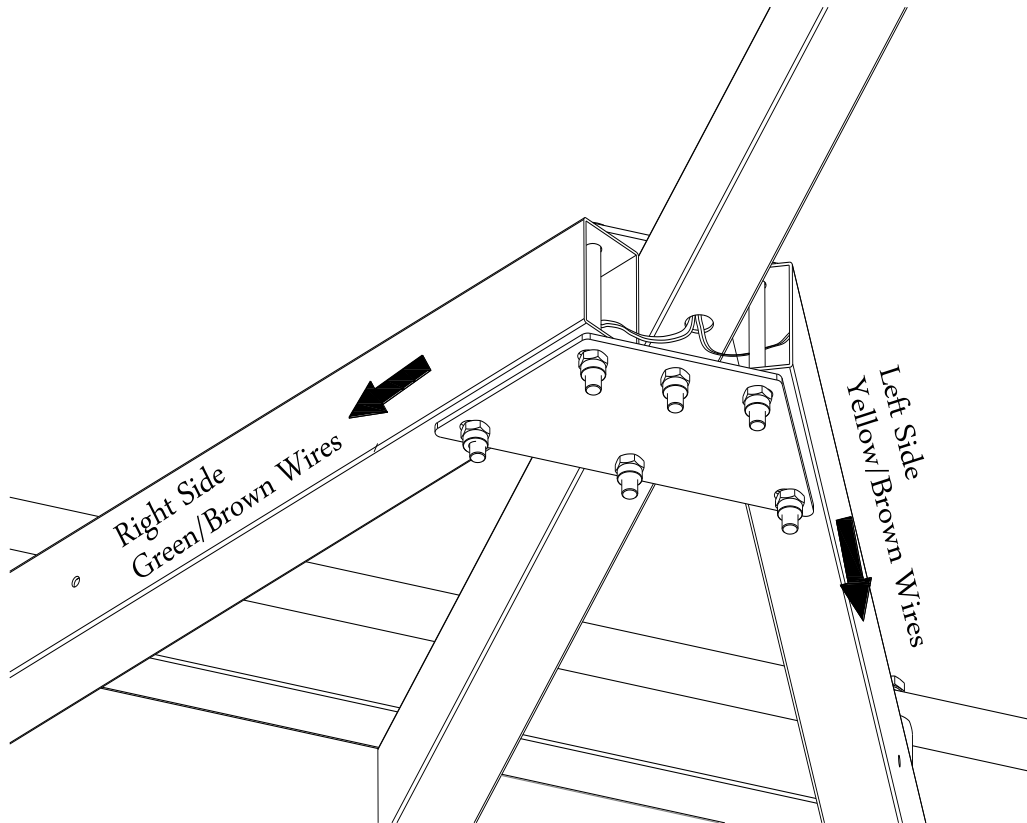


STEP 6: Loosen and remove the 2 Bolts (H) and M10 Nuts (M) that were hand tight. Pass Bolts (H) through Cross Bar Front (7) and through Cross Tube Spacers (8). Assemble back onto trailer with Bolts (H) passing through Connecting Rod (12). Fully tighten M10 Nuts (M).



ASSEMBLY STEPS

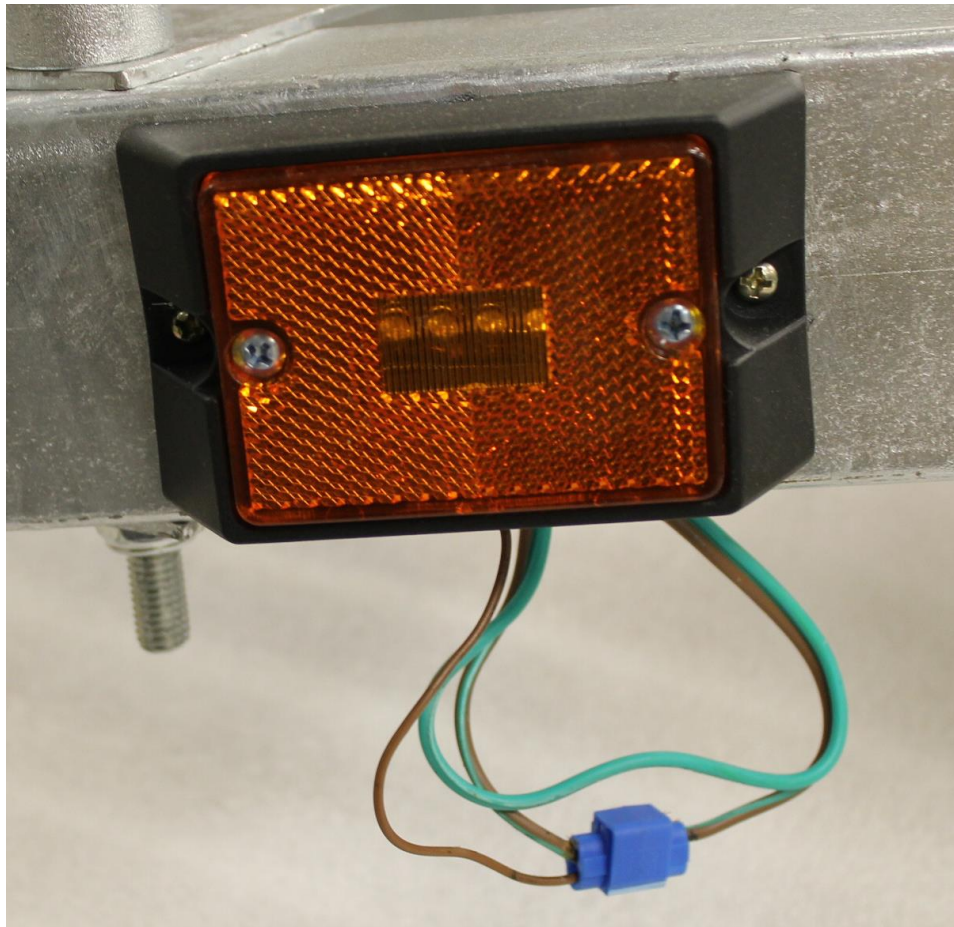
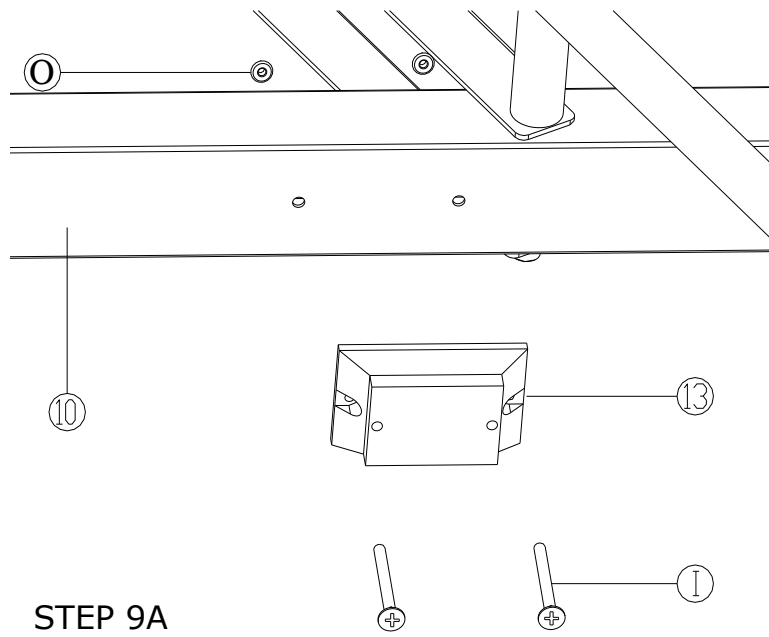
STEP 7: Fasten Fenders (17) to Side Rails using M10 x 75mm Bolts (E) and M10 Nuts (M). The Cross Bar Rear (6) can be positioned in front or behind the fender depending on what the trailer will be carrying. Capture the Cross Tube Rear (6) with Bolts (E). Fully tighten all nuts.



STEP 8 (bottom view looking aft)

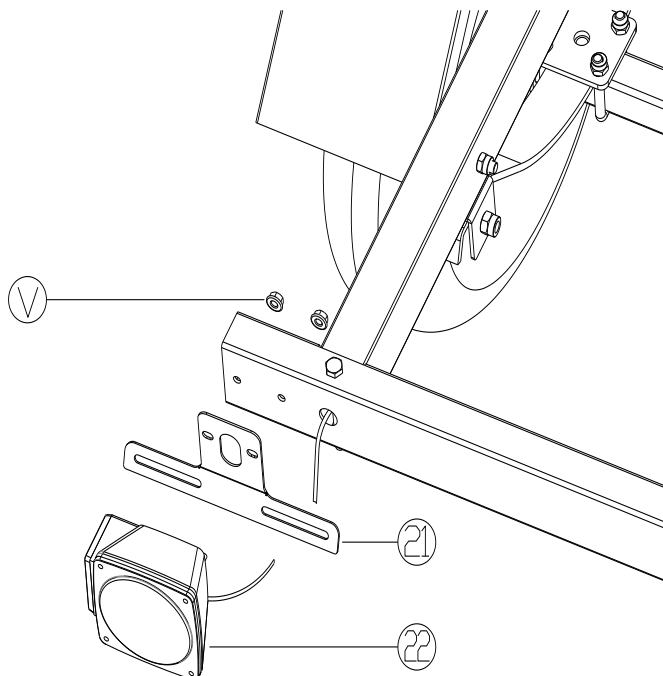
STEP 8: Route wires from hole in Towbar (3) through Left and Right Side Rails (9,10) and out the holes in the Cross Member (20). Green/Brown Wires pass through the Right Side Rail and Yellow/Brown Wires pass through the Left Side Rail. To help feed/pull the wires through the side rails, a wiring fish tape can be constructed from 3 wire coat hangers that are twisted together end to end. Adjust Wiring/Plug Assembly so the Plug is approximately 20" from the end of the Towbar.

ASSEMBLY STEPS

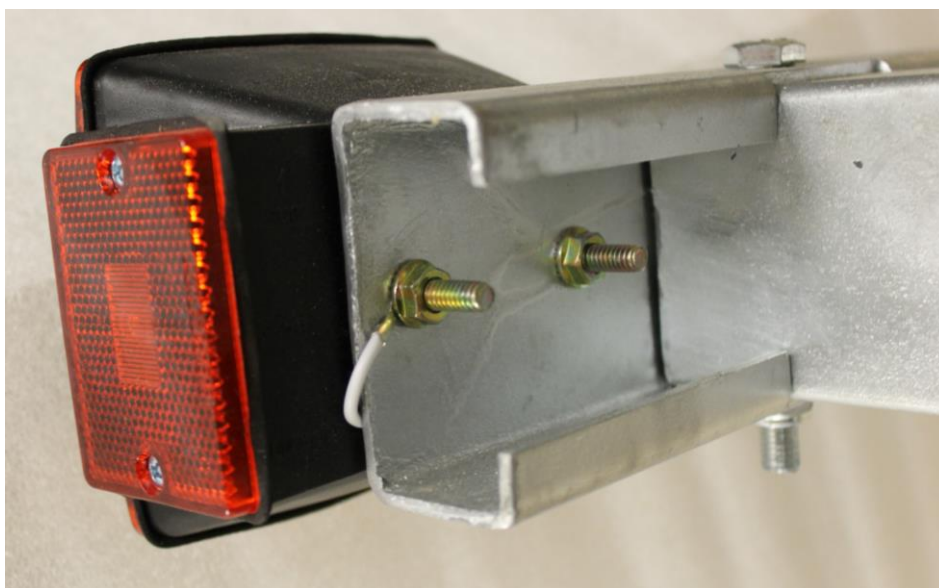


ASSEMBLY STEPS

STEP 9A: Route brown wire out of the bottom of Side Running Light (13) and fasten light to Right Side Rail with M4 x 65mm Bolts (I) as shown. Repeat procedure for left side. Pull a loop of the Brown wire through the hole in the Right Side Rail located directly below the Side Running Light. Use a knife to carefully cut between the insulation and separate the wires for a length of approx. 1-½". The brown wire of the Side Running Light will connect to the brown wire. Use a pliers to squeeze the connector closed and snap-over the connector latch. Wrap connection in electrical tape. Repeat procedure for left side attaching Side Running Light to the Brown wire.



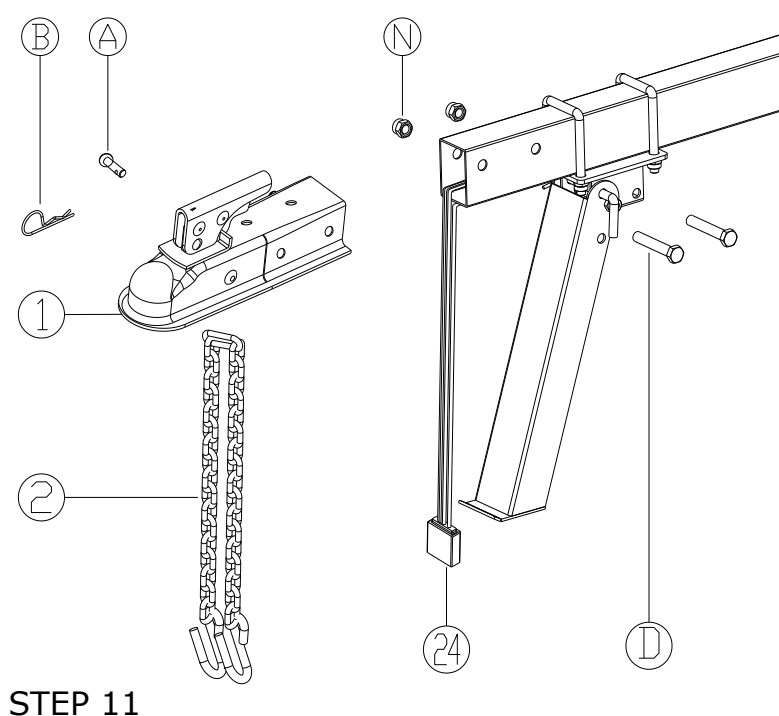
STEP 10A



STEP 10B

ASSEMBLY STEPS

Assemble Left Tail Light (22) and License Plate Bracket (21) with M4 Nuts (V). If assembling LED Tail lights, capture ground wire under one of the M4 Nuts (V) as shown in image. Assemble Right Tail Light (23) with M4 Nuts (V) in the same manner as left sans License Plate Bracket. Strip wires back $\frac{3}{8}$ - $\frac{1}{2}$ " and connect using wire nuts. Soldering wire connections is also a good alternative. Match wire colors: left side will be yellow and brown-right side will be green and brown. Wrap connections in electrical tape. Extra wire can be stuffed back into frame.

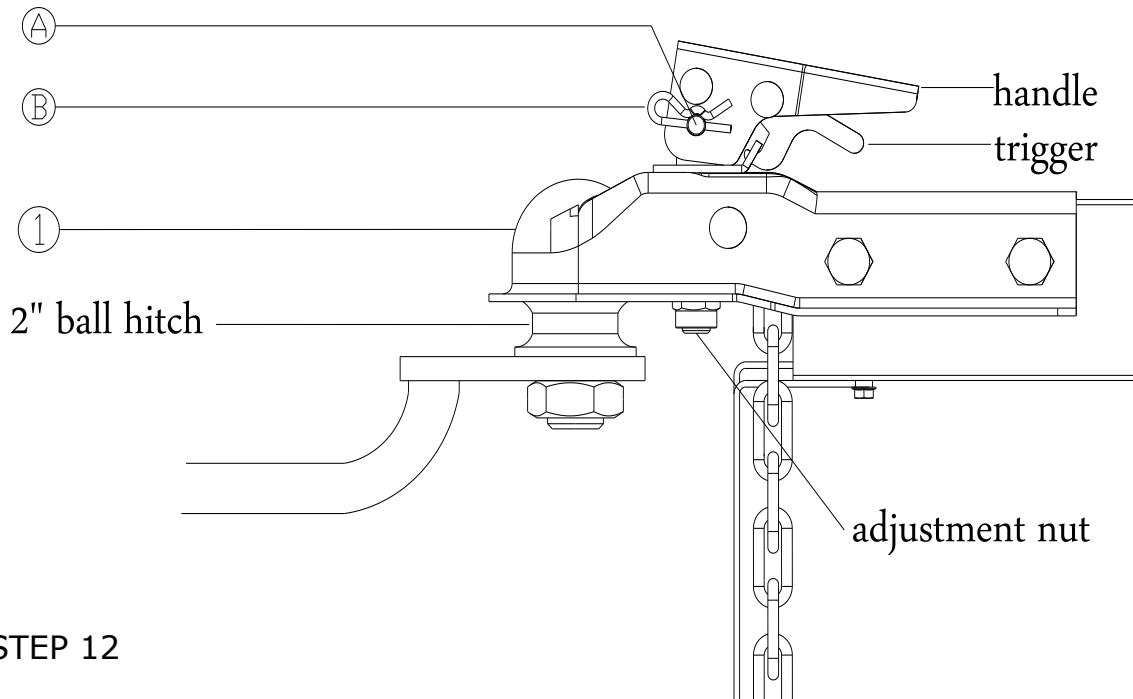


STEP 11

STEP 11: Assemble Coupler (1) onto Towbar using M12 x 75mm Bolts (D) and M12 Nuts (N) through the Coupler side.

Assemble Chain (2) to Coupler (1) using the front M12 x 75mm Bolt (D) and M12 Nut (N). Find the center link so that Chain is the same length on each side as shown. Fully tighten M12 Nuts (N).

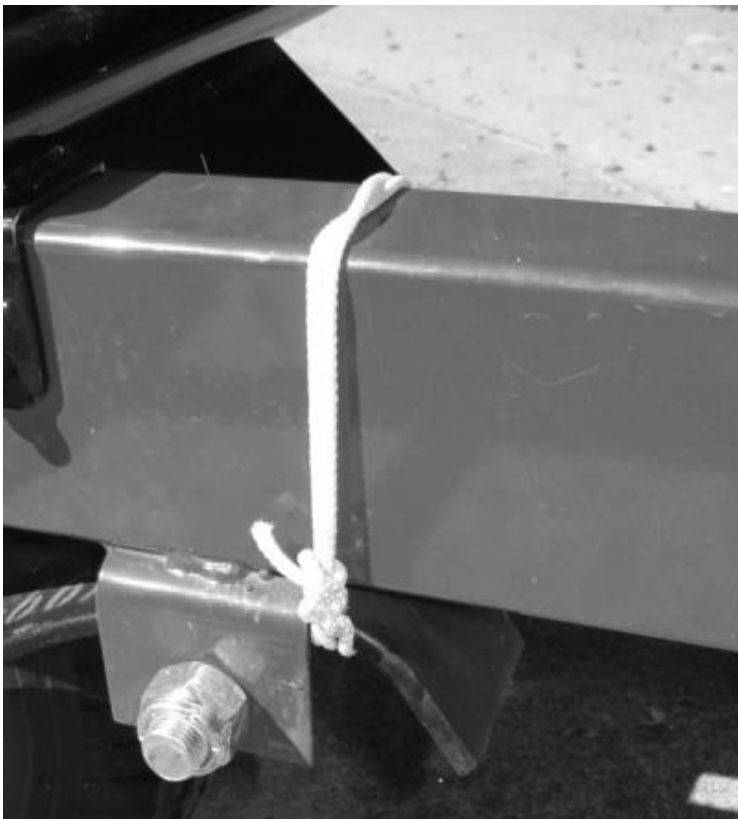
ASSEMBLY STEPS



STEP 12

STEP 12: Coupler (1) can only be used with a 2" ball hitch and must be adjusted before first use. Remove Hairpin Cotter (B), Safety Pin (A), release coupler handle, and hitch to vehicle. Latch handle down until trigger lock engages. Pull up and down on the coupler to see if the ball is captured snugly in the coupler. There should be no play between the ball and coupler. If there is play, tighten the adjustment nut until no play is present. If the nut is too tight, the handle will not lock.

Note: Grease can be used to reduce friction between the ball and Coupling (1).



ASSEMBLY STEPS

OPTIONAL ASSEMBLY STEP

STEP 13: When an unloaded Right-On Trailer is towed, the Leaf Springs (14) will rattle in the Side Rail supports as the trailer passes over bumps. This rattling noise is not a maintenance or safety issue. However, this rattle can be quieted by lashing the Leaf Spring (14) against the Side Rails (9,10) as shown below. Lashing will not affect the performance of the trailer when it is loaded or unloaded.

SAFE USE AND OPERATION OF THE LC1-8792G Ruff-SPORT TRAILER

1. Double Check Assembly Steps:

- Recheck that the instructions were followed and all fasteners are tightened.
- Confirm that all lights are working.
- Confirm that coupler is adjusted properly and fits snugly to 2" ball hitch.
- Confirm tire pressure of 30-60 PSI

2. Trailer Licensing:

- Consult your State Department of Motor Vehicles for information on proper licensing.
- Prior to assembling your trailer, take out the "CERTIFICATE OF ORIGIN FOR A VEHICLE" from the cardboard carton. This document is shipped with the Towbar (3) in the BOX 2 OF 4.

3. Towing Vehicle:

- Make sure vehicle is capable of towing the load.
- Excessive speed increases chances of a car-trailer accident. Recommended maximum speed is 60 M.P.H.
- Know how to properly control your towing vehicle-trailer combination under all conditions. Remember the loaded weight of the trailer will increase braking and stopping distances.

4. Safety Chains:

- Be sure to use Safety Chains. Do not allow chains to drag on ground.
- Check that both Safety Chains are the same length and are not damaged.

5. Loading:

- Never overload the trailer. The maximum load for the trailer is 400lbs.
- Never carry a passenger on the trailer.
- Check that load is properly strapped-down to the trailer.

SAFE USE

6. Lights:

- Check that lights are working before every use and periodically during trips.
- Replace any broken lenses, reflectors, or bulbs.

7. Tires:

- Check tires for wear and proper inflation before every use and periodically during trips.
- Tire pressure should be kept at 30-60PSI
- Check and tighten Lug Nuts. Torque 80-90 ft*lbs. (Retorque after first 50 miles)

8. Maintenance:

- Inspect hitch and ball for damage before every use.
- Use a grease gun to add additional grease to the Hub Assemblies (17) periodically and before long trips.
- Disassemble, inspect, and repack wheel bearings with automotive grease yearly or every 4000 miles.
- This trailer uses a 1" diameter bearing – L44643
- This dolly trailer should never need to be submerged in the water during use.
- If you are unable to repack wheel bearings, take trailer to service garage for advice and service.

Reporting safety defects

If you believe that your vehicle has a defect which could cause a crash or could cause injury or death, you should immediately inform the National Highway Traffic Safety Administration (NHTSA) in addition to notifying Jinhua Yongqiang Vehicles Factory.

If NHTSA receives similar complaints, it may open an investigation, and if it finds that a safety defect exists in a group of vehicles, it may order a recall and remedy campaign. However, NHTSA cannot become involved in individual problems between you, your dealer or Jinhua Yongqiang Vehicles Factory.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1-888-327-4236 (TTY: 1-800-424-9153); go to <http://www.safercar.gov> ; or write to: Administrator, NHTSA, 1200 New Jersey Avenue SE., Washington, DC 20590. You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.
Jinhua Yongqiang Vehicles Factory: Tel: 0086-579-8221-7338 for advice and service.

LC1-8792G Ruff-Sport Trailer

Right-On Trailer Co. LLC
3025 McCully Drive NE
Atlanta, GA 30345
rightontrailer@comcast.net
www.rightontrailer.com

Manufactured for Right-On Trailer Co. by
Jinhua Yongqiang Vehicles Factory
1008 Longqian South Street,
Jinhua, Zhejiang, China

SAFE USE