



INSTRUCTION GUIDE FOR:

## CONVOY MODULAR BIKE CARRIER

59307 (1-1/4 in. Hitch)\_59308 (2 in. Hitch)\_59310 (Add-on Unit)

These instructions contain **IMPORTANT** safety information. Please read and keep for future reference.

### **WARNING**

- Your bike carrier must be inspected for signs of wear, corrosion and fatigue before each use. **DO NOT** use if bent or deformed.
- Make sure your bike carrier is secure before every trip. Check at each stop to ensure your bike carrier is secure.
- **DO NOT** exceed your bike carrier's rated capacity. The capacity is listed on the next page.
- Do not attempt to drill, weld, or modify your bike carrier or any of the system components.
- This carrier is designed for typical use and applications (on paved or smooth gravel roads). Do not use this carrier on a vehicle that will be driven on rough roads, or where the carrier (and bikes) will be subjected to significant or constant jarring and/or shock, or any vehicle with very stiff springs that will transfer the load shocks directly to the carrier and the bikes.
- The recommended minimum ground clearance is 14". This may not be sufficient ground clearance depending on the application. Damage to bicycles or carrier due to ground clearance problems are not covered by warranty.
- Bike tires should be at least 6 inches away from exhaust pipe.
- **DO NOT** use this bike carrier with recreational vehicles, trailers or in off road situations.
- **DO NOT** use your bike carrier for purposes other than those for which it was designed.
- **REDUCE YOUR SPEED.** Your vehicle can handle differently when transporting bicycles.
- **FREQUENTLY** check your bike carrier and that the bikes are secure. Bikes can shift or your bike carrier can loosen during travel. Readjust as needed. If movement continues, stop use.
- **ALWAYS** unload bikes before removing your bike carrier from hitch.
- Check local and state laws governing projection of objects beyond the perimeter of a vehicle.
- **ALWAYS** obey all posted speed limits and be aware of traffic conditions. Adapt your speed to the conditions of the road and the load being carried.
- The proper attachment of this product in accordance with the enclosed instructions is critical to its proper performance.
- **NOTICE:** Your bike carrier will not prevent property damage that may result from improper loading, securing, or driving. Insure all locks are locked, that all pins are secured, and that all straps are properly attached prior to moving the vehicle.



# CAPACITY

## HITCH CAPACITY

59307 1-1/4 IN. HITCH MOUNT \_\_\_\_\_ Pages 4-9



**MAXIMUM CAPACITY PER BIKE**

PART	DESCRIPTION	1 Bike	2 Bike
59307	1-1/4 in. Hitch - Main Unit	50 lbs.	
59310	Add-on Unit		50 lbs.

**WARNING:** Serious damage to racks and/or vehicle may occur if more than 1 add-on unit is used on a 1-1/4 in. hitch.

## UNIT CAPACITY

EACH UNIT (59307, 59308, and 59310) holds:

- Bikes with up to 48 in. wheel bases
- Bikes with wheels 20 in. - 29 in. high
- Bikes with tires up to 5 in. wide

Bikes are spaced apart by 10.5 in. from bike-to-bike.

59308 2 IN. HITCH MOUNT \_\_\_\_\_ Pages 4-9



**MAXIMUM CAPACITY PER BIKE**

PART	DESCRIPTION	1 Bike	2 Bike	3 Bike	4 Bike
59308	2 in. Hitch - Main Unit	80 lbs.			
59310	With Add-on Unit(s)		75 lbs.	55 lbs.	45 lbs.

**WARNING:** Serious damage to racks and/or vehicle may occur if more than 3 add-on units are used on a 2 in. hitch.

**NOTE:** This carrier can hold bikes by the wheel or frame. Please read the instructions carefully for proper loading directions.

59310 ADD-ON UNIT \_\_\_\_\_ Page 10



**MAXIMUM CAPACITY PER BIKE**

PART	DESCRIPTION	1 Bike	2 Bike	3 Bike	4 Bike
59310	Add-on Unit for 1-1/4" Hitch		50 lbs.		
59310	Add-on Unit for 2" Hitch		75 lbs.	55 lbs.	45 lbs.

**WARNING:** Serious damage to racks and/or vehicle may occur if more than 3 add-on units are used on a 2 in. hitch or if more than 1 add-on unit is used on a 1-1/4 in. hitch.

2 in. base unit shown assembled with 3 add-on units

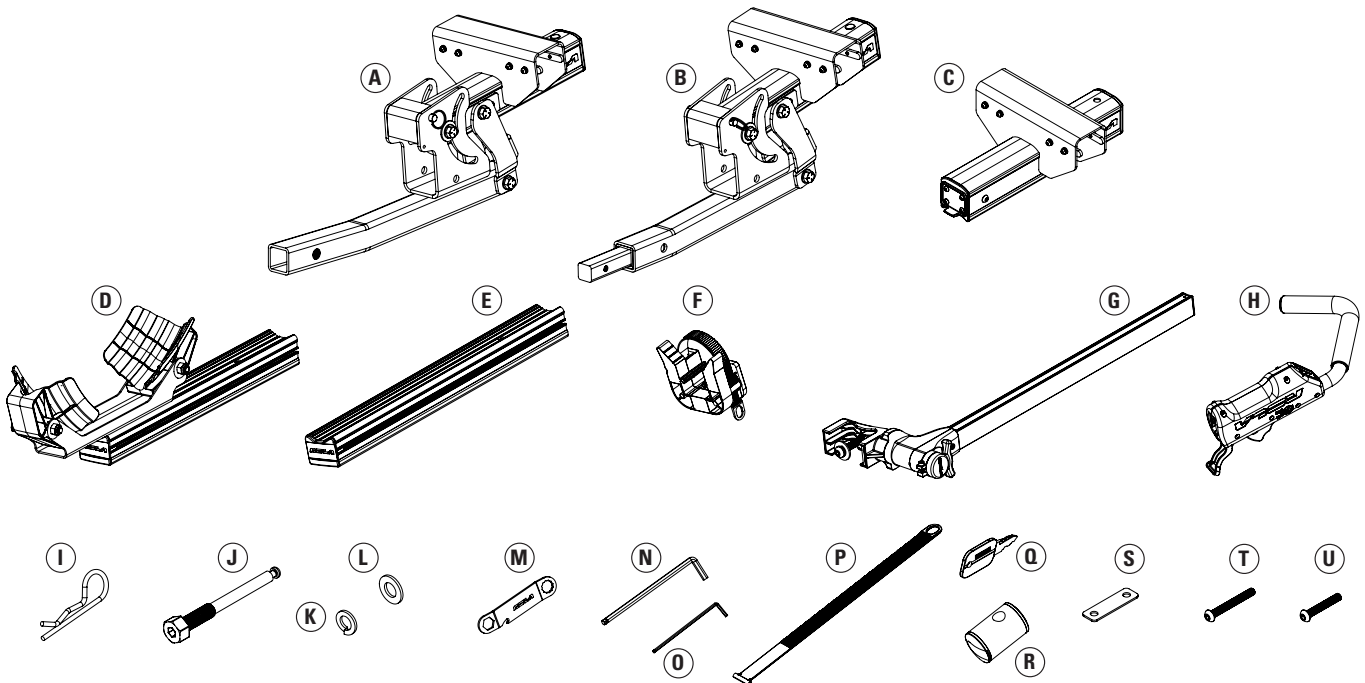


# ASSEMBLY INSTRUCTIONS

## PARTS LIST

**Tools required for assembly (all included):** (1) 4mm allen wrench, (1) 8mm allen wrench, (1) 19mm wrench.

PART	DESCRIPTION	QTY.	59307 1-1/4 in. BASE UNIT	59308 2 in. BASE UNIT	59310 ADD ON UNIT
A	Single Bike Center Support	1	✓		
B	Single Bike Center Support	1		✓	
C	Add-On Bike Center Support	1			✓
D	Front Wheel Tube with Cradle	1	✓	✓	✓
E	Rear Cradle Tube	1	✓	✓	✓
F	Rear Cradle with Strap	1	✓	✓	✓
G	Rotating Arm Assembly - Arm	1	✓	✓	✓
H	Rotating Arm Assembly - Grip	1	✓	✓	✓
I	Hitch Pin Clip	1	✓	✓	
J	12mm Anti-Rattle Hitch Pin Bolt	1	✓	✓	
K	12mm Lock Washer (Add-On Unit Has 3)	2	✓✓	✓✓	✓✓✓
L	12mm Flat Washer (Add-On Unit Has 1)	2	✓✓	✓✓	✓
M	19mm Wrench	1	✓	✓	
N	8mm Allen Wrench	1	✓	✓	✓
O	4mm Allen Wrench	1	✓	✓	✓
P	Fat Tire Bike Cradle Strap	1	✓	✓	✓
Q	Rola Lock Key	2	✓✓	✓✓	✓✓
R	Hitch Pin Bolt Lock	1	✓	✓	
S	Add-On Support Plate	1			✓
T	M12 x 1.75 x 100 Button Head Screw	2			✓✓
U	M12 x 1.75 x 80 Button Head Screw	1	✓	✓	✓



# ASSEMBLY INSTRUCTIONS

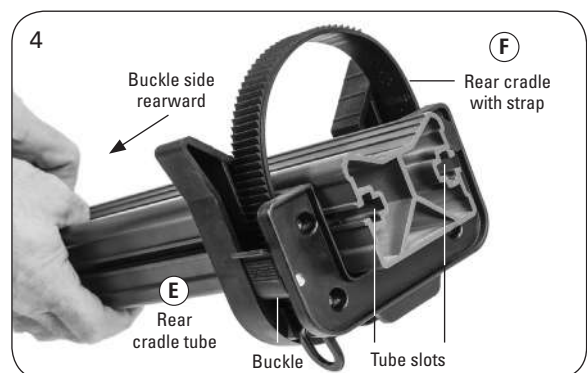
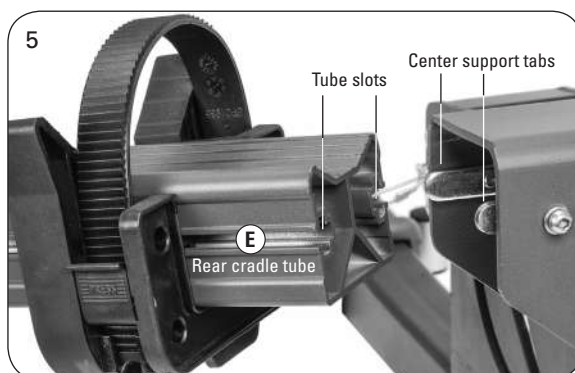
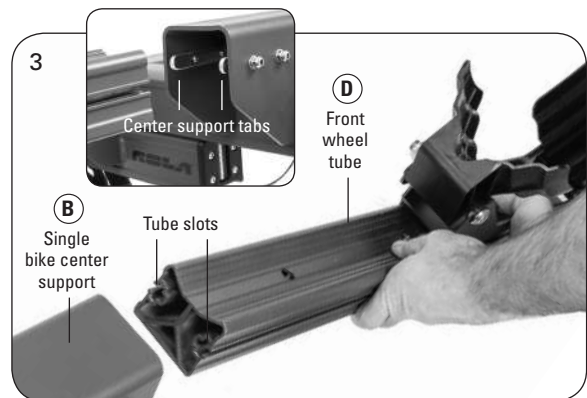
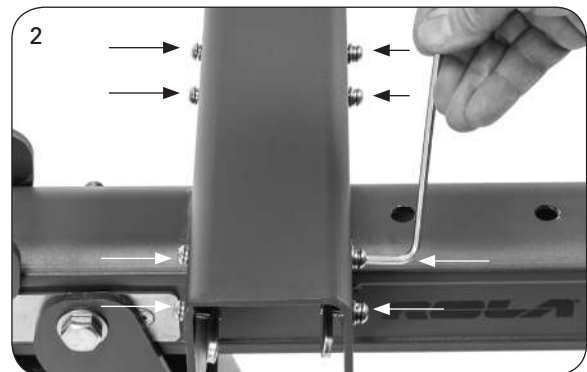
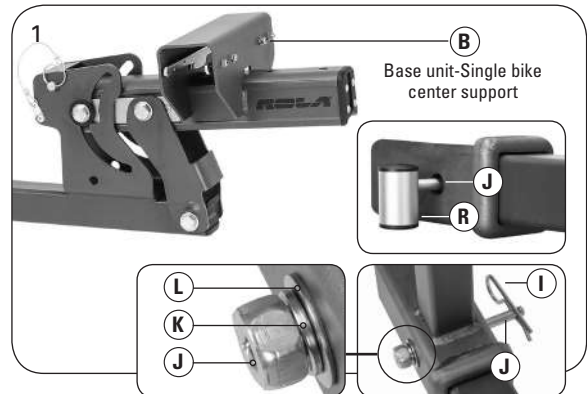


## 59307 1-1/4 in. / 59308 2 in. Base Units

### CENTER SUPPORT ASSEMBLY

Assembly is shown using vehicle receiver. If vehicle is not available, assembly can be done on ground or table.

1. Slide single bike center support (A or B) into vehicle receiver. Secure 12mm anti-rattle hitch pin bolt (J) with either 19mm wrench (M) or 8mm allen wrench (N). Install supplied hitch pin clip (I) or hitch pin bolt lock (R) to end of hitch pin bolt (J). **FIG 1.**
2. Loosen (8) screws with 4mm allen wrench (O), but do not remove. **FIG 2.**
3. Connect front wheel tube (D) to single bike center support (A or B) by aligning tube slots with center support tabs. Then, slide front wheel tube (D) into single bike center support (B) until it is seated against the internal stop (approximately 4"). **FIG 3.**
4. Slide rear wheel cradle with strap (F) onto rear cradle tube (E) with buckle side facing rearward. **FIG 4.**
5. Connect rear cradle tube (E) to single bike center support (A or B) by aligning tube slots with center support tabs, then slide rear cradle tube (D) into single bike center support (A or B) until it is seated against the internal stop (approximately 4"). **FIG 5.**
6. Tighten (8) screws with 4mm allen wrench (O). **FIG 2.**



# ASSEMBLY INSTRUCTIONS

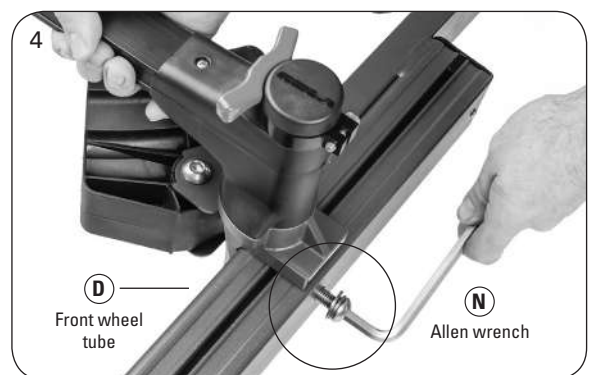
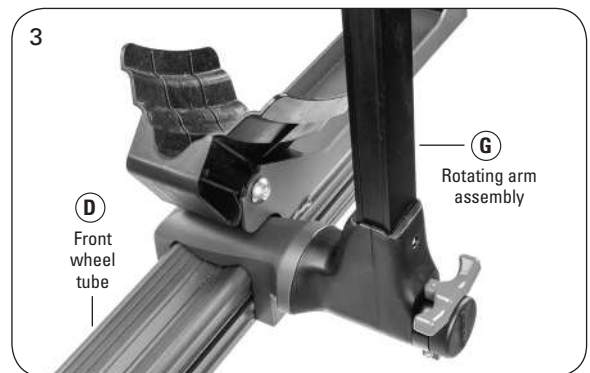
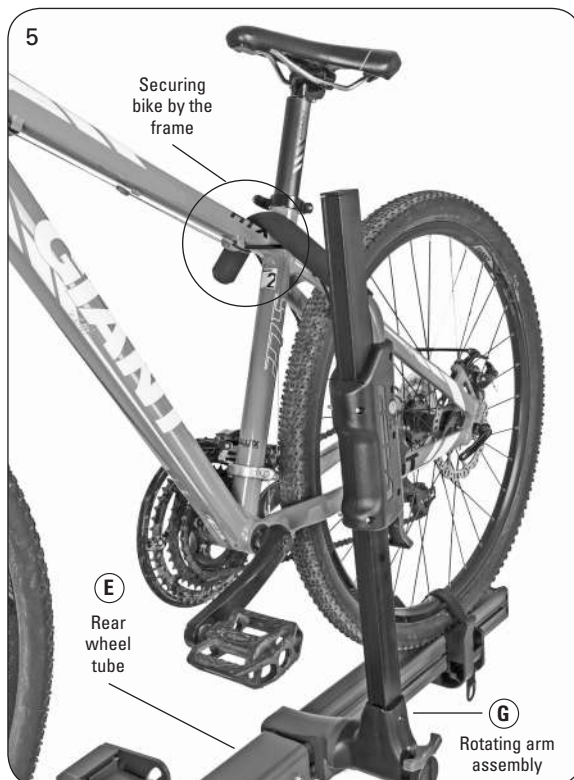
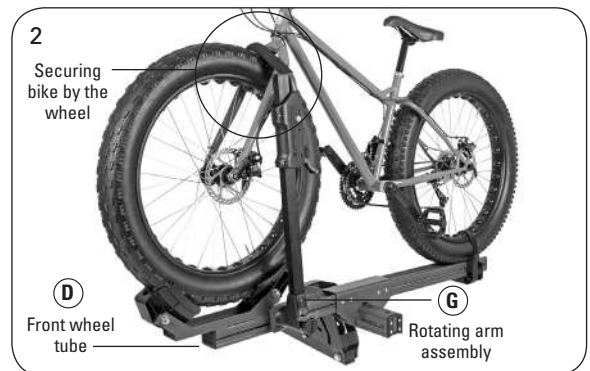
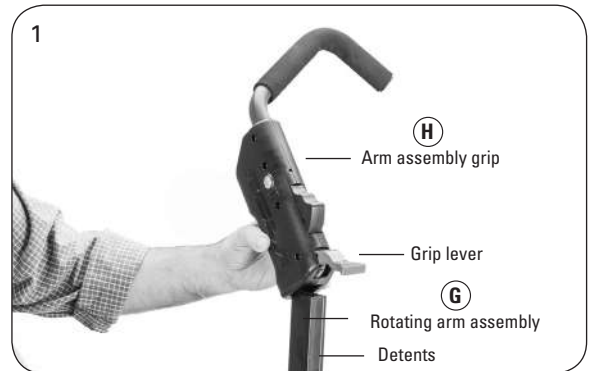


## 59307 1-1/4 in. / 59308 2 in. Base Units

### ARM ASSEMBLY

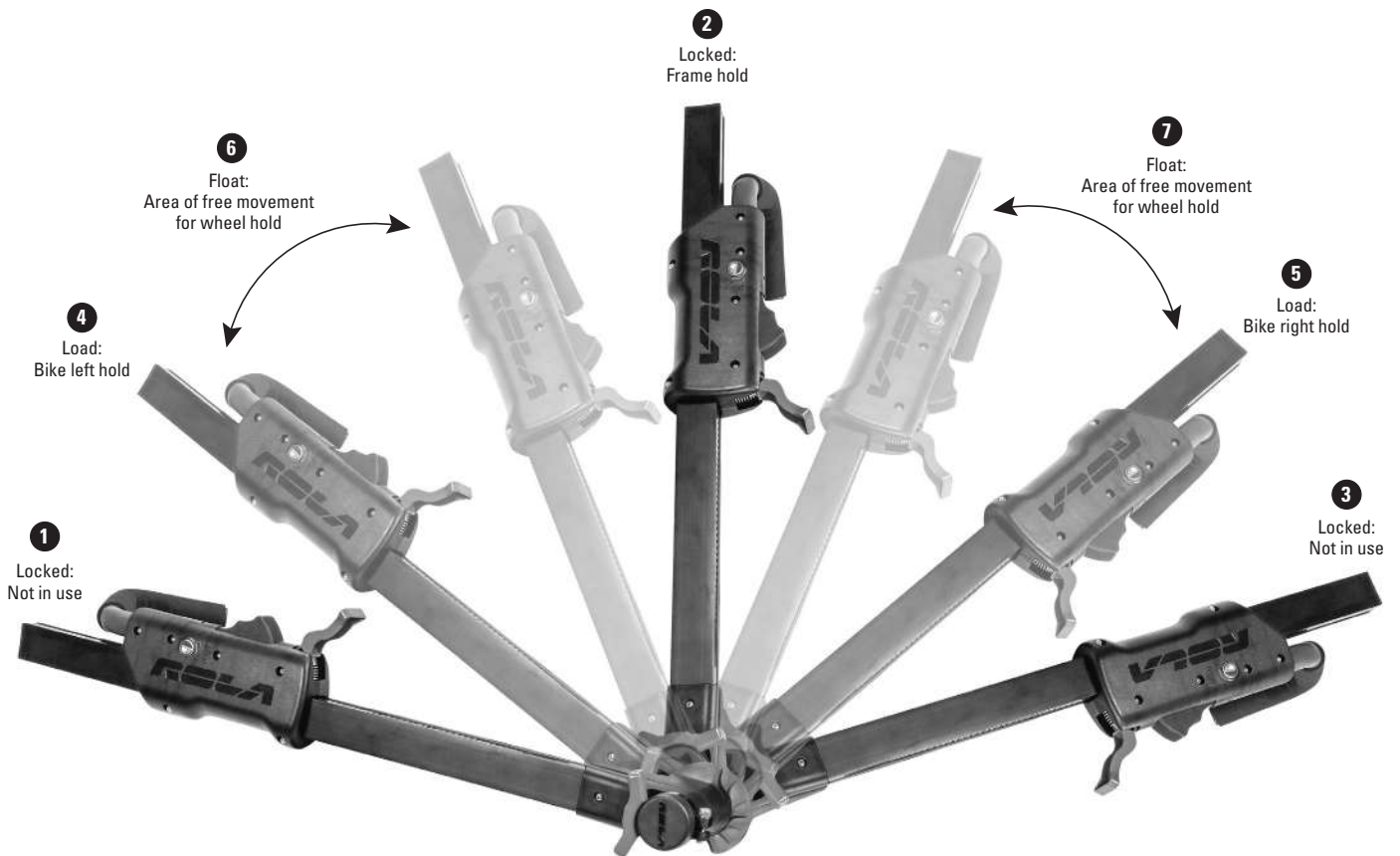
1. Slide arm assembly grip (H) onto rotating arm assembly (G) with grip lever on same side as detents. **Fig 1.**
2. To secure bike by *wheel* as in **Fig 2**, attach rotating arm assembly (G, H) to front wheel tube (D) using bolt (U), flat washer (L) and lock washer (K). **Fig 3.** Tighten securely with supplied allen wrench (N). **Fig 4.**
3. To secure by bike by *frame* as in **Fig 5**, attach arm assembly (G, H) to rear wheel tube (E) using bolt (U), flat washer (L) and lock washer (K). Tighten securely with supplied allen wrench (N). **Fig 4.**

**Note:** For frame mounting, hook must be as close to top tube/seat tube intersection as possible.



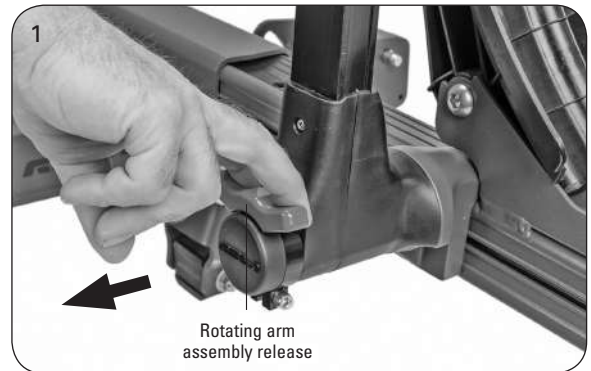
### ROTATING ARM ASSEMBLY FUNCTIONS

1. Locked positions:
  - When not in use: **Position 1**
  - Frame hold: **Position 2**
  - When not in use: **Position 3**
2. Wheel hold positions:
  - Left load: **Position 4**
  - Right load: **Position 5**
3. Areas of free movement for wheel hold positioning:
  - **Area 6**
  - **Area 7**



### ROTATING ARM ASSEMBLY FUNCTIONS (continued)

1. To release rotating arm assembly from locked position, pull rotating arm assembly release outward. **FIG 1.**
2. To lower grip, pull grip downward. **FIG 2.**
3. To raise grip, press grip trigger and push upward. **FIG 3.**
4. Grip can be locked with supplied key. **FIG 4.**
5. To insure bike is secure, squeeze the grip lever. If you have pulled down hard enough on grip to secure bike, you will not be able to squeeze the grip lever. **FIG 5.**



# ASSEMBLY INSTRUCTIONS

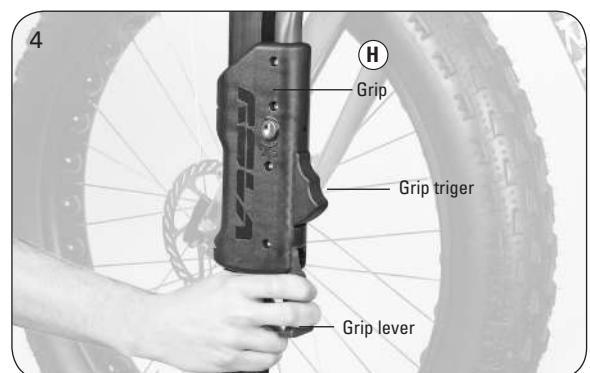
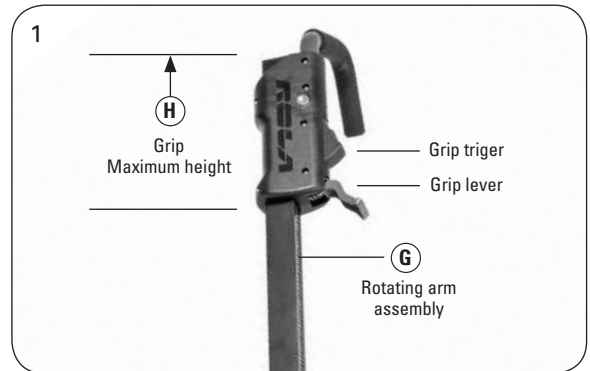


## 59307 1-1/4 in. / 59308 2 in. Base Units

### LOADING BIKES

#### Securing by the front wheel:

1. Be sure rotating arm assembly (G) is on the front cradle tube side (D). See page 6 figure 4 for reference. Place rotating arm assembly (G) in the "unlocked" position. Depress grip trigger and move grip up shaft to maximum height. **FIG 1.**  
**Note:** It may be easier to remove grip completely, depending on bike style.
2. Lift bike onto carrier and position front wheel on front wheel tube cradle (D). **FIG 2.** While supporting bike with one hand, rotate arm assembly upward over wheel. Center "V" shape in hook over wheel near fork and pull downward on grip to secure **FIG 3.**  
**Note:** With some fork/wheel combinations, arm assembly may actually lock in the vertical position, but this is not necessary.
3. If you are unsure that you have pulled down hard enough on grip, push down on the grip lever, which will move the grip downward one more detent. Lock the grip. **FIG 4.**
4. Secure rear tire by aligning rear cradle strap (F) with rear axle of bike. Place strap through spokes (rotate tire as needed) and slide into buckle. Pull downward on strap. **FIG 5.**  
**NOTE:** If your strap is too short, or if you have a fat tire bike, replace with longer strap (P) (supplied). Refer to page 12 for strap replacement instructions.





# ASSEMBLY INSTRUCTIONS



## 59307 1-1/4 in. / 59308 2 in. Base Units

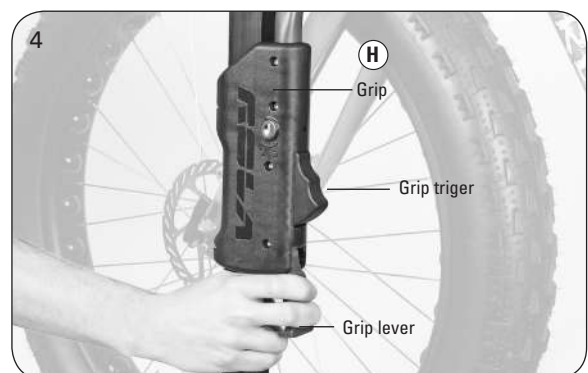
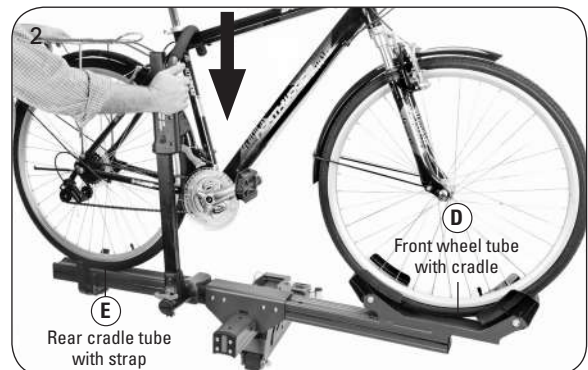
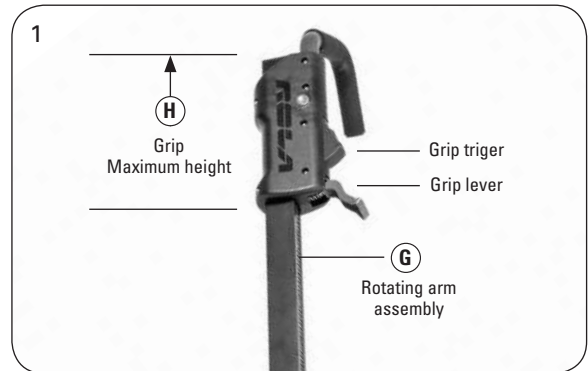
### LOADING BIKES (continued)

#### Securing by the frame:

1. Be sure rotating arm assembly (G) is on the rear cradle tube side (E). See page 6 figure 4a for reference. Place rotating arm assembly (G) in the "unlocked" position. Depress grip trigger and move grip up shaft to maximum height. **FIG 1.**  
**Note:** It may be easier to remove grip completely, depending on bike style.
2. Lift bike onto carrier and place front wheel onto front wheel tube cradle (D). While supporting bike with one hand, rotate arm assembly (G) upward to vertical position **FIG 2.** **Note:** Arm assembly (G) must be locked in the vertical position to properly secure frame. Reinstall grip (H) (if removed). Center "V" shape in hook frame and pull downward on grip to secure **FIG 3.\***
3. If you are unsure that you pulled down hard enough on grip, push down on the grip lever. This will move the grip downward one more detent and lock the grip. **FIG 4.**
4. Secure rear tire by aligning rear cradle strap (F) with rear axle of bike. Place strap through spokes while rotating tire as needed, then slide into buckle. Pull downward on strap. **FIG 5.**

\* **NOTE:** For frame mounting, hook must be as close to top tube/seat tube intersection as possible **FIG 3.**

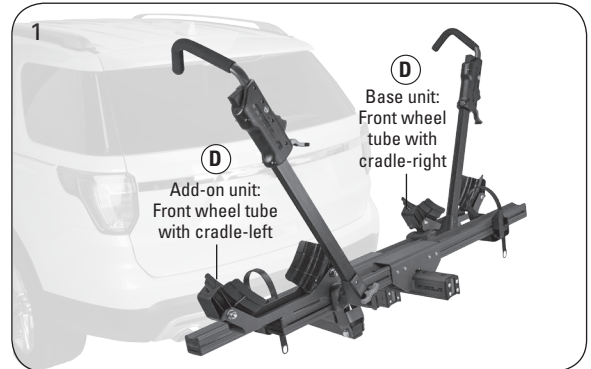
**NOTE:** If your strap is too short, or if you have a fat tire bike, replace with longer strap (P) (supplied). Refer to page 12 for strap replacement instructions.



## 59310 Add-on Unit

### ADD-ON CARRIER ASSEMBLY

1. Assembly for add-on unit will be in the **OPPOSITE** direction of the base unit that this add-on unit is being connected to. **FIG 1**.
2. For step 2, refer to page 4 "CENTER SUPPORT ASSEMBLY" steps 2 through 6.
3. For step 3, refer to page 5 "ARM ASSEMBLY".



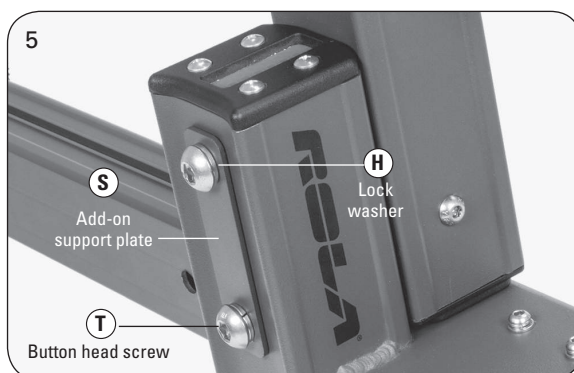
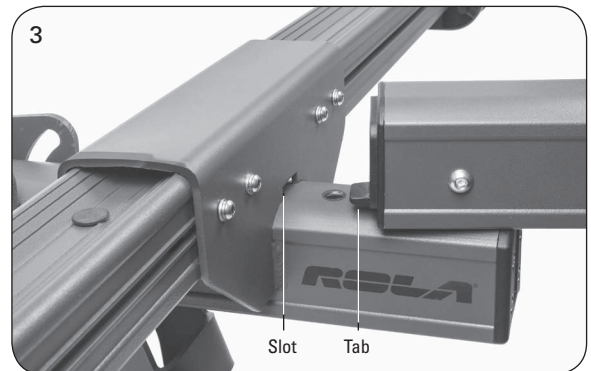
### ATTACHING ADD-ON UNIT TO BASE UNIT

1. Remove caps from base unit. **FIG 2**.
2. Engage tab on add-on unit with slot on base unit. **FIG 3**.
3. Secure with (2) M12x1.75x100 button head screws (T), (2) 12mm Lock washers (H) and (1) add-on support plate (S). **FIG 4 & 5**.
4. Tighten screw to 35 ft. lbs. with supplied allen wrench (K).



### LOADING BIKES TO ADD-ON UNIT

1. For this step, refer to pages 8 & 9 "LOADING BIKES".



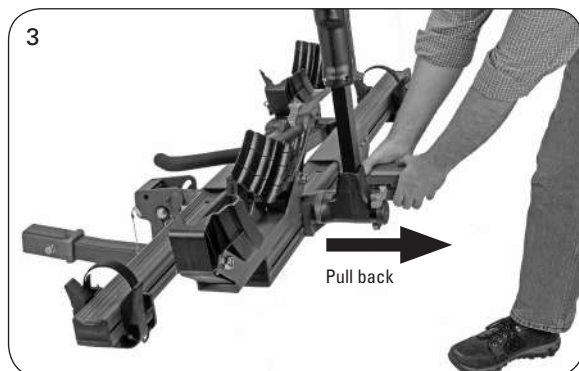
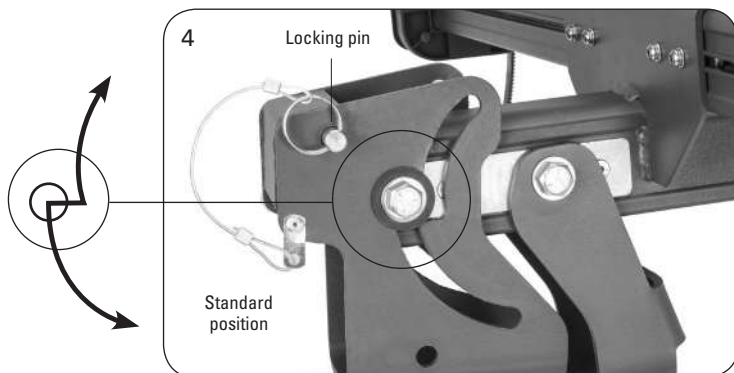
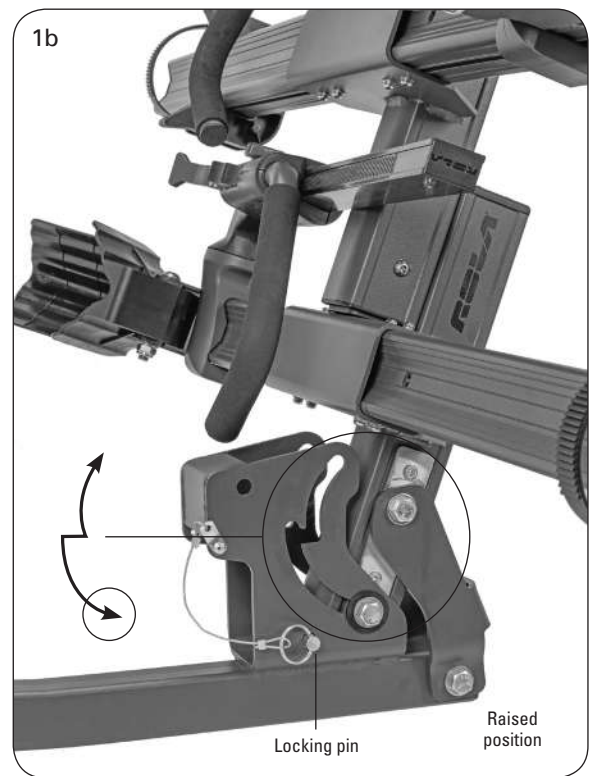
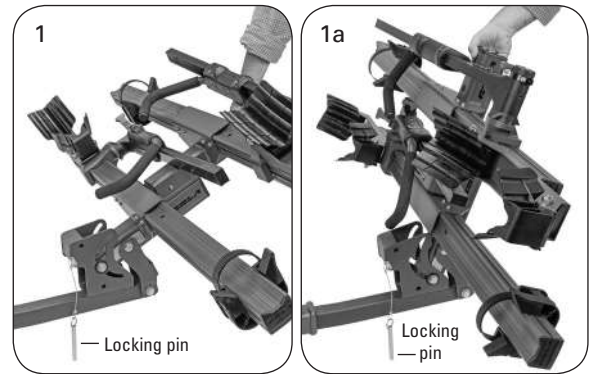
# ASSEMBLY INSTRUCTIONS



## 59307 1-1/4 in. / 59308 2 in. Base Units / 59310 Add-on Unit

### RAISING OR LOWERING CARRIER

1. Carrier can tilt upward when empty for added clearance or when removing from vehicle. To tilt carrier upward, pull locking pin, tilt upward and reinstall locking pin in lower hole to secure. **FIG 1, 1a & 1b.**
2. Carrier can tilt downward with bike for hatch/trunk clearance when parked. **Fig 2.** To tilt carrier downward, pull locking pin from the rear and firmly hold carrier while lifting it approximately 1/2" while pulling back. **Fig 3.** Once it has disengaged from its seat, it will align with slot and can be lowered. **FIG 3.**  
**IMPORTANT:** DO NOT travel with carrier in this lowered position.
3. To raise carrier back into standard position, lift while pushing towards vehicle. Carrier will slide back into its seat.  
**IMPORTANT:** Be sure to reinstall locking pin. **FIG 4.**



# ASSEMBLY INSTRUCTIONS



## 59307 1-1/4 in. / 59308 2 in. Base Units / 59310 Add-on Unit

### CRADLE STRAPS

#### Strap placement for transport or storage:

To avoid damaging or loosing strap when storing or transporting an empty carrier, fold strap through slot on the bottom of the rear cradle. **FIG 1.**

#### Changing straps:

To remove strap, pull strap downward in line with slot and rotate. **FIG 2.**

To install strap, make sure serrations are facing down and align tip of the "T" with cradle hole. Then push into place until seated. **FIG 3.**

### CARRIER MAINTENANCE

- Regularly wipe dirt and grime from carrier.
- Lubricate at noted points in **FIG 4.**
- Lubricate all locks.

