

BURLEY®

BURLEY® HITCH MANUAL



Standard Hitch – QR



Classic Hitch

Nuted Solid Axle Standard Hitch

Alternative Hitch

Nuted Solid Axle 9.5mm

Long QR 140 x 160mm

Nuted Solid Axle 10.5mm

Short QR 126 x 135mm

Owner's Instruction and Safety Manual

BURLEY® HITCH MANUAL

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WARNING

Burley has engineered its Standard, Classic and Alternative Hitches exclusively for Burley Trailers. Use of any Burley Hitch on a Non-Burley Trailer may result in an accident and serious injury or death.

Identify and Remove Currently Installed Hitch

The Burley Standard QR (Metal) Hitch comes with all 2007+ trailer models. To remove this hitch from the trailer tow bar, open and remove the retaining pin from the hitch receiver end.

The Burley Classic (Plastic) Hitch was featured on pre-2007 models. Removing this hitch from the trailer tow bar requires a 1/8" hex key and a wrench. Insert the hex key into the socket head on the bolt the hitch coupler. Holding the nut on the underside of this bolt with the wrench, rotate the hex key. Remove the loosened bolt from the hitch receiver end. Loosen and remove the second bolt, which passes through the tow bar and the safety strap grommet.

The Burley QR Alternative Hitch

The Burley QR Alternative Hitch includes a 1 3/4" long, 1/4-20 bolt, a nylock nut and D-ring. It is packaged with a standard length safety strap to accommodate frames with both seat and chain stays.

Longer safety straps with D-loops (required for mono-stay frames), are available from Burley as an accessory. If you are unsure as to what type of frame configuration you have, contact your Authorized Burley Dealer.

Preparation For Bicycles with Both Seat and Chain Stays:

1. From the top of the tow bar, insert the bolt through the metal grommet at the end of the standard length safety strap and through the tow bar. The bolt must pass through the hole in the black hitch flex connector in the tow bar end.
2. Install the D-ring and new nylock nut on the bottom of the bolt and tighten it securely.

Preparation For Mono-Stay Bicycles:

1. From the top of the tow bar, insert the bolt through the D-ring clip at the end of the long safety strap, and then through the hole in the black hitch flex connector in the tow bar end.
2. Install the new nylock nut on the bottom of the bolt. Tighten securely.

Installation

The Quick-Release Alternative Hitch is available in two lengths. The short length fits bikes with a rear hub over locknut dimension (O.L.D.) between 126mm and 135mm (most single bikes). The long length fits bikes with an O.L.D. between 140mm and 160mm (most tandem bikes). Please note that drop-out thickness will vary between bike frames. Carefully identify your O.L.D. measurement to determine safe use of this hitch. If you are not sure how to calculate O.L.D., please contact your Authorized Burley Dealer.

NOTE:

The quick-release skewer must insert a minimum of 11mm into the adjusting nut to function properly. The Alternative Hitch replaces the quick release mechanism on the rear wheel. The consumer **MUST** be thoroughly informed on how to safely operate this and traditional quick-release mechanisms. Proper adjustment of the quick release must be checked before every ride.

WARNING

Failure to properly secure the quick-release mechanism of the Alternative Hitch may lead to an accident resulting in serious injury or death.

1. Remove the entire quick-release assembly from the rear wheel of the bicycle and set it aside.
2. Install the wheel between the dropouts. Make sure that the left dropout is snug against the axle lock nut. Measure the distance that the wheel axle is recessed in the left dropout. If the axle is recessed less than 1.5mm from the exterior face of the dropout, the Alternative Hitch body cannot engage the dropout properly. You must then remove the wheel and file or grind the hollow axle end. Repeat the measurement and file or grind as necessary to ensure that the axle end is recessed 1.5mm from the exterior face of the dropout.

! WARNING

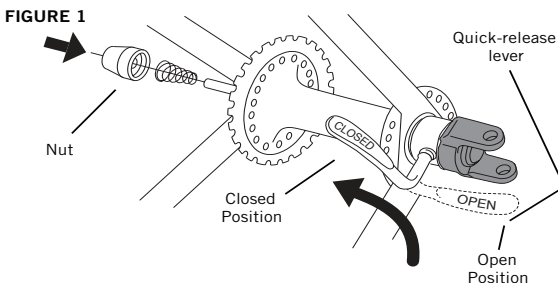
Never install the Alternative Hitch on a bicycle with an axle end less than 1.5mm from the face of the left side dropout. An axle less than 1.5mm from the dropout face will prevent the Alternative Hitch from engaging the dropout properly and lock the wheel in the frame, possibly resulting in an accident and serious injury.

3. Loosen and remove the nut and the single quick-release spring from the Alternative Hitch quick-release assembly.
4. Insert the skewer of the Alternative Hitch into the hollow axle from the non-drive side of the wheel like you would with a traditional quick-release skewer. (Caution: DO NOT install a quick-release spring on the hitch side of the quick-release assembly.)
5. Install the single quick-release spring on the “nut” (drive) side of the quick-release assembly. Thread the adjusting nut onto the skewer.
6. The quick-release lever is marked for “open” (concave) and “closed” (convex) positions.

! WARNING

Never install a quick-release spring on the hitch (non-drive) side of the Alternative Hitch. The spring will interfere with complete engagement of the hitch, which could result in an accident and serious injury.

7. Secure the assembly by moving the quick-release lever from the open to the closed position. A properly adjusted quick release lever should leave an imprint on your palm when the lever is rotated to the closed position. Use the nut to adjust the quick-release lever for a snug fit. (Figure 1)



8. Open and readjust as necessary until the wheel is tightly clamped. Do a final check to the tightness of the wheel by grabbing the rim and attempting to move the wheel in the dropout. If you are unfamiliar with the use of quick-release levers, contact your Authorized Burley Dealer.

NOTE:

Confirm that the wheel is centered in the frame and adjust the brakes as necessary.

9. Inspect the amount of threads protruding from the nipped end of the quick-release skewer. The threaded rod is very sharp and can cause injury if extending beyond the nut. If the threads extend 4mm or more out of the nut, you will have to cut the quick release skewer down to a shorter length.
 - a) Mark the skewer threads 2-4mm from the end of the nut with a permanent marker, remove the nut and single spring, and set aside. As an option, count the number of threads needed to cut the skewer down to size and use this figure as a guide after removing the skewer.
 - b) Slide the skewer out and thread on a nut (to chase the threads after cutting) beyond the cutting line. Use a M5x0.8P nut; this is the standard metric size for most bike racks and accessories.
 - c) Place the skewer in a vice and using a suitable metal cutting blade, cut the skewer down to the appropriate length.
 - d) File the end until smooth and back the nut off the skewer to chase the threads. Reinstall the skewer.

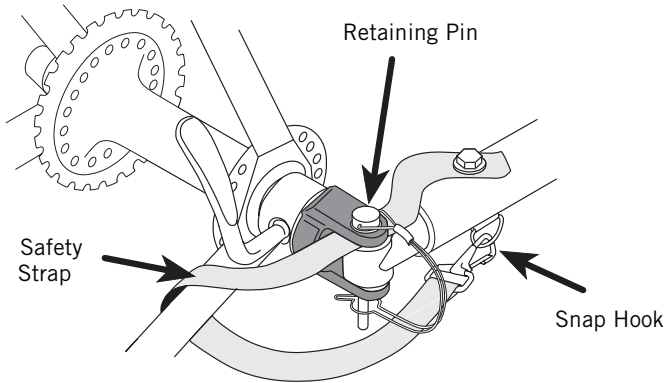
NOTE:

The stock Burley Quick-Release Alternative Hitch has been designed to fit a specific range of bicycle geometries. Cutting the skewer down to fit a particular model may inhibit the skewer from safely retaining the wheel on a different model. Be sure each bicycle you may want to use the hitch on meets the minimum requirements as defined in this manual.

Attachment of the Trailer to the Alternative Hitch For Frames with Seat and Chain Stays:

1. Insert the hitch receiver end into the composite “ears” of the Alternative Hitch.
2. Align the hole in the hitch receiver end with the holes in the hitch ears and insert the retaining pin with attached safety strap.
3. Rotate the pin’s spring clip and close the pin.
4. Wrap the safety strap end over the chain stay of the bicycle frame and attach its snap hook to the D-ring on the trailer tow bar. (Figure 2)

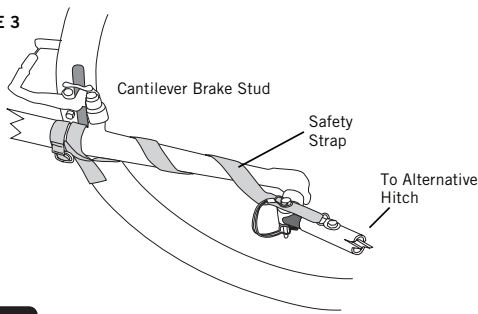
FIGURE 2



Attachment of the Trailer to the Alternative Hitch For Frames with Mono Stays:

1. Insert the hitch receiver end into the composite “ears” of the Alternative Hitch.
2. Align the hole in the hitch receiver end with the holes in the hitch ears and insert the retaining pin with attached safety strap.
3. Rotate the pin’s spring clip and close the pin.
4. Coil the free end of the long safety strap around the non-drive side stay. Wrap to shorten the excess strap length as needed.
5. Secure the strap end by running the strap through the D-buckles above the cantilever stud (or other permanent frame projection) and around the stay—not around the cantilever stud. (Figure 3)

FIGURE 3



NOTE: The mono-stay strap comes with a clip and D-ring which should be attached to the top of the tow bar under the head of the tow bar coupler bolt.

NOTE: A generous safety strap length enables the strap to be tightened securely around the non-drive side stay. Coil the excess free end of the strap around non-drive side stays and tuck the end under the coiled strap to avoid contact with the wheel hub and spokes.

! WARNING

Never install an Alternative Hitch with standard length safety strap on a mono-stay bicycle. Mono-stay bicycles require an Alternative Hitch with long safety strap that allows the safety strap to be secured around the mono-stay and above the left side cantilever brake stud. Failure to properly attach the appropriate safety strap on a mono-stay bicycle can lead to the trailer separating from the bicycle, resulting in serious injury or death.

The Burley Solid Axle Alternative Hitch

The Burley Solid Axle Alternative Hitch replaces the non-drive (left) side axle nut on your solid axle hub. Burley has (2) versions of the Solid Axle Hitch available—a 9.5mm – 26 TPI nut and a 10.5mm – 26 TPI nut for your convenience and flexibility.

NOTE: Your solid axle must protrude no less than 14mm and no more than 22mm from your drop-out to use this Alternative Hitch. Failure to install your original equipment serrated washer may cause your axle to rotate, causing internal gear hub malfunction.

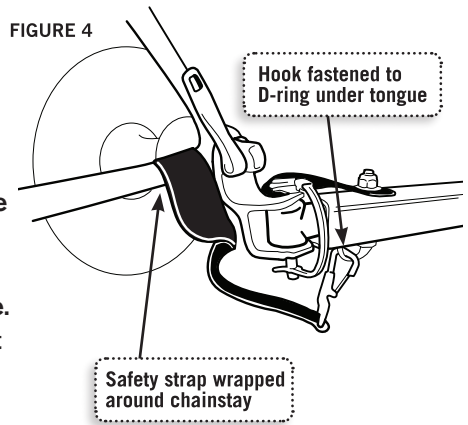
1. Remove your axle nut by turning the nut counterclockwise. Do not remove the washer if provided as original equipment on your bike.
2. Identify the correct nut diameter needed for your axle.

3. Insert a 6mm hex wrench between the ears into the hex receiver and tighten the nut assembly by turning the wrench clockwise. Follow the hub nut tightening torque recommendations provided by the hub maker. As a guideline, 14.75-ft. lbs. is a common axle nut torque.
4. To attach the trailer to this hitch, follow the preceding instructions in the “Attachment of the Trailer to the Alternative Hitch” section that are appropriate for your bicycle frame (with mono-stays or with seat and chain stays).

The Burley Standard QR Hitch

The Burley Standard QR Hitch is attached to the left rear dropout (the non-chain ring side) of your bicycle.

1. Remove the quick release lever assembly from your bike and set it aside.
2. Line up the hole on the flat side of the hitch upper arm with the left rear dropout hole.
3. Reassemble the quick release lever through the hitch and dropout, but don't tighten it yet.
4. Slide the hitch receiver end of the tow bar between the two hitch side arms, and line up the holes. The hitch should clear any racks, bags, or fittings you have on your bicycle. If there is any interference, contact your Authorized Burley Dealer.
5. Open the retaining pin and insert the pin through the holes.
6. Rotate the pin's spring clip and close the pin.
7. Now tighten the quick release lever, with the lever pointing to the rear of the bike. A properly adjusted quick release lever should leave an imprint on your palm when the lever is rotated to the closed position.
8. Wrap the safety strap around the inside of the chain stay twice and then over the hitch body. Fasten the hook to the D-ring on the underside of the tow bar end. (Figure 4)



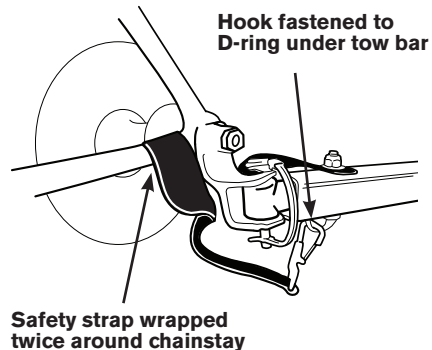
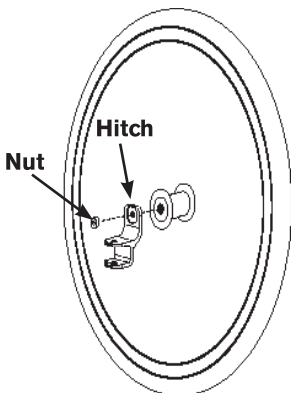
The Burley Nutted Solid Axle Standard Hitch

The Burley Nutted Solid Axle Standard Hitch was designed to quickly and safely attach to most bicycles with 9.5 mm or 10.5 mm nutted axles. It is attached to the left rear dropout (the non-chainring side) of your bicycle.

1. Remove nut (and washer, if possible) from bike and set it aside.
2. Line up hole on flat side of hitch upper arm with left rear dropout hole, and slide hitch onto axle.
3. Replace only the nut on axle, but don't tighten it yet.
4. Slide hitch receiver end of tow bar between the two hitch side arms, and line up holes.
5. Open retaining pin and insert pin through holes.
6. Rotate pin's spring clip and close pin.
7. Now tighten nut on axle, ensuring there is adequate thread engagement.
8. Wrap safety strap twice around inside of chain stay and then over hitch body. Fasten hook to D-ring on underside of tow bar end.

WARNING

Inadequate engagement of nut's threads on the axle may cause trailer to detach from bike, causing a serious accident. You may need to replace nut with a different one. Do not operate trailer without hitch safety strap properly installed. A dangling safety strap can contact spokes and damage rear wheel or cause an accident, resulting in serious injury. The hitch must not interfere with racks, bags, or fittings. Inspect hitch and tow bar frequently for damage or loose fasteners. Interfering parts or damaged hitch can cause an accident, resulting in serious injury. For parts or questions, contact your Authorized Burley Dealer.



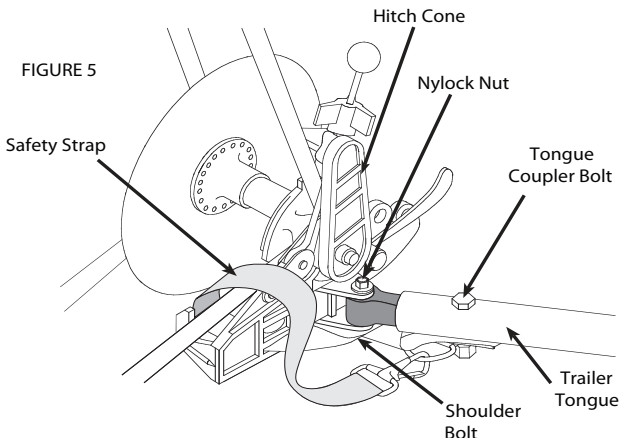
The Burley Classic Hitch

Preparation: The Burley Classic Hitch includes a 1 3/4" long, 1/4 -20 bolt, a nylock nut and a D-ring. The safety strap and black hitch flex connector are already attached to the hitch.

1. If necessary, remove old safety strap from trailer tow bar. Save tow bar coupler bolt and nut.
2. From above, insert existing tow bar coupler bolt through the tow bar, coupler and outer safety strap grommet on new hitch. Install new D-ring and existing nut and tighten securely.
3. Slide tow bar flex connector between hitch arms and line up holes. From bottom, insert new bolt through inner grommet on safety strap and up through flex connector and hitch arms. Install new washer and nut, and tighten securely.

Attachment of the Trailer to Your Bicycle

1. Loosen the knob on the eye bolt until the two arms are spread fully apart.
2. Slip the lower hitch arm under the chain stay and the upper arm above the seat stay.
3. Wedge the hitch cone all the way back into the angle formed by the stays at the wheel.
4. Tighten the knob until the arms are firmly clamped against the stays. Wrap the safety strap around the inside of the chain stay, over the hitch body, and back to the D-ring at the end of the tow bar. Make sure that the cone is wedged securely into the stays. The knob should be finger-tight; do not overtighten. The hitch should clear any racks, bags, or fittings you have on your bicycle. (Figure 5)



IMPORTANT:

Remove the trailer from your bicycle when it's not in use to prevent deforming the plastic hitch.

Maintenance

Do not use or store your trailer at temperatures below 32° F (0°C), as the hitch flex connector can become brittle and possibly break.

Classic (Plastic) Hitch:

Because of ultraviolet degradation, we recommend that this hitch be replaced every five years under normal use. In sunny or smoggy locations or for trailers that are stored outdoors, the hitch should be inspected every two to three years by your Authorized Burley Dealer, and replaced if there are any signs of damage.

Burley Hitch Limited Warranty

Burley hitches are warranted from date of purchase against defects in materials and workmanship under normal use and service. Burley will repair or replace parts it determines to be defective for a period of five years. The Burley hitch owner must present the hitch for repair at place of purchase, with an original sales receipt or similar proof of purchase. This warranty applies only to the original owner and is nontransferable. Burley can not be responsible for failure due to improper assembly, modification of parts or instructions, neglect, abuse, accident, and/or normal wear. The warranty does not cover any hitch used for rental, competition, or commercial use.

Burley neither assumes nor authorizes any person to assume any other liability in connection with this Burley product, and there are no oral agreements or warranties collateral to or affecting this agreement.

This warranty gives you specific rights. You may also have other rights which vary by state or country.

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