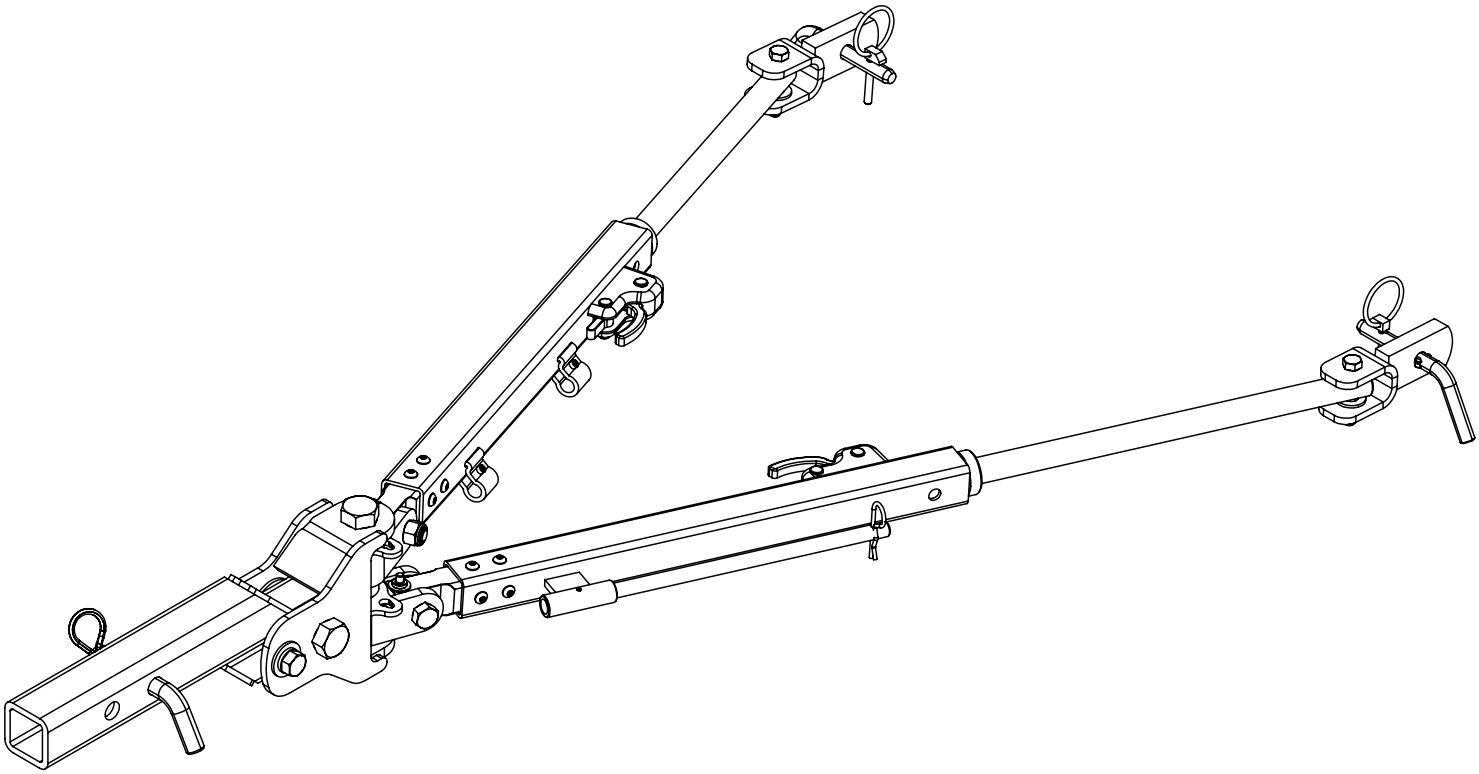
etrailer.com®

ETTB20040, Rev 13
03/17

etrailer SD - e98971

SELF-ALIGNING TOW BAR - 6,000 LB CAPACITY



OPERATOR MANUAL

WARNING: Ensure that the towing vehicle exceeds the combined weight of towed vehicle and tow bar by 500 lbs and has a rated capacity higher than the towed vehicle weight.

Ensure that the towed vehicle weight does not exceed the listed rating for this tow bar.

Failure to adhere to these listed warnings may result in tow bar failure, vehicle separation, damage to the towing / towed vehicle, or severe injury or death.

TABLE OF CONTENTS

Safety Definitions....4
Equipment Safety Guidelines....4
Remember....4
Lighting, Marking, and Braking....4
Decal Locations & Care....5
Before Operation....5
During & Following Operation....6
Highway and Transport Operations....6
Performing Maintenance....7
Bolt Torque....8
Important Notice....9
Safety and Maintenance....9
Installation and Operating Instructions....10-11
Unhooking Tow Bar....11
Tow Bar Parts Breakdown....12-13
Warranty Policy....14

SAFETY

Take note! The safety alert symbol found throughout this manual is used to call your attention to instructions involving your personal safety and the safety of others. Failure to follow these instructions can result in injury or death.

THIS SYMBOL MEANS ATTENTION
BECOME ALERT - YOUR SAFETY IS INVOLVED!

Signal Words

Note use of following signal words **DANGER**, **WARNING**, and **CAUTION** with safety messages. Appropriate signal word for each has been selected using following guidelines:

CAUTION:

Indicates a potentially hazardous situation that, if not avoided, may result in minor or moderate injury. It may also be used to alert against unsafe practices.

DANGER:

Indicates an imminently hazardous situation that, if not avoided, will result in serious injury or death. This signal word is to be limited to the most extreme situations typically for tow bar components which, for functional purposes, cannot be guarded.

WARNING:

Indicates a potentially hazardous situation that, if not avoided, could result in serious injury or death, and includes hazards that are exposed when guards are removed. It may also be used to alert against unsafe practices.

If you have questions not answered in this manual, or require additional copies, please contact:

etrailer
1507 East Highway A
Wentzville, MO 63385
(800) 298-8924

SAFETY...YOU CAN LIVE WITH IT!

EQUIPMENT SAFETY GUIDELINES

Every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid accidents by observing and following the precautions in this section. To avoid personal injury, study the following precautions and insist those working with you to follow them.

Replace any caution, warning, danger or instruction safety decal that is not readable or is missing. Location of such decals is indicated in this manual.

Do not attempt to operate this tow bar under the influence of alcohol or drugs.

Review safety instructions with all users.

Operator should be a responsible adult. **DO NOT ALLOW PERSONS TO OPERATE OR ASSEMBLE THIS TOW BAR UNTIL THEY HAVE DEVELOPED A THOROUGH UNDERSTANDING OF SAFETY PRECAUTIONS AND HOW IT WORKS.**

Do not paint over, remove, or deface any safety signs or warning decals on your tow bar. Observe all safety decals and practice instructions on them.

Never exceed limits of a tow bar. If its ability to do a job safely is in question **DON'T TRY IT**.

REMEMBER

Your best assurance against accidents is a careful and responsible operator. If there is any portion of this manual or function you do not understand, contact etrailer.com for assistance.

LIGHTING, MARKING, AND BRAKING

It is the owner's responsibility to know lighting, marking, and towed vehicle braking requirements of local highway authorities and to install and maintain equipment to provide compliance with regulations. Accessory equipment to maintain compliance can be found at etrailer.com.

SAFETY DECAL LOCATIONS

Types of safety decal and locations on the tow bar are shown in the illustration below. Good safety requires that you familiarize yourself with various safety decals, type of warning, and particular function related to that area, that requires your SAFETY AWARENESS.

WARNING



CAUTION



SAFETY DECAL CARE

- Keep safety decal clean and legible at all times.
- Replace safety decals that are missing or have become illegible.
- When installing replacement parts, ensure that all safety decals are updated at the same time.
- Safety decals are available from etrailer.com.

How to install safety decals:

- Be sure installation surface is clean and dry.
- Decide on exact position before removing backing paper.
- Remove smallest portion of split backing paper.
- Align decal over specified area and carefully press small portion with exposed sticky backing in place.
- Slowly peel back remaining paper and carefully smooth remaining portion of decal into place.
- Small air pockets can be pierced with a pin and smoothed out using piece of decal backing paper.

BEFORE OPERATION

- Carefully study and understand this manual.
- Give tow bar a visual inspection for any loose bolts, worn parts, or cracked welds, and make necessary repairs. Follow maintenance safety instructions included in this manual.
- Be sure there are no tools lying on tow bar, towing vehicle or towed vehicle.
- Do not use tow bar until you are sure that area is clear, especially around children and animals.
- Practice operation of your tow vehicle and its attachments. Completely familiarize yourself and other operators with its operation before use.
- Securely attach tow bar to towing vehicle. Verify the capacity of your receiver hitch, ensure that the receiver hitch capacity exceeds the listed capacity of the tow bar.
- Criss-cross safety cables under tow bar and secure to mounting loops on towing vehicle.
- Do not allow anyone to stand between vehicles when connecting tow bar to towed vehicle.
- Make sure tow rating on towing vehicle exceeds the weight of the towed vehicle.
- To prevent swaying of towed vehicle ensure all tires are inflated to specifications. Failure to inflate tires evenly will result in towed vehicle to pull unevenly.

⚠ DURING OPERATION

- Always follow state and local regulations regarding towed vehicle braking and auxiliary lighting when towing. Be sure to check with local law enforcement agencies for your own particular regulations. Only safety cables (not elastic or nylon/plastic tow straps) should be used to retain connection between towing vehicle and towed vehicle in event of separation.
- Do not load towed vehicle with cargo. Towed vehicles exceeding weight limits will overload tow bar and may cause serious injury and damage.
- Beware of bystanders, PARTICULARLY CHILDREN! Always look around to make sure it is safe to start engine of towing vehicle and moving towed vehicle. This is particularly important with higher noise levels, as you may not hear people shouting.
- NO PASSENGERS ALLOWED- Do not carry passengers anywhere on or in towed vehicle.
- When halting operation, even periodically, set towing vehicle's parking brake, shut off engine, and remove ignition key.
- Be extra careful on inclines.
- MANEUVER TOWING VEHICLE AT SAFE SPEEDS.
- Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.
- Avoid loose gravel, rocks, and holes; they can be dangerous for vehicle operation or movement.
- Allow for increased length of towed vehicle when making turns.
- Do not work under raised components or attachments unless securely positioned and blocked.
- Keep all bystanders and pets clear of work area.
- Operate towing vehicle from operator's seat only.
- As a precaution, recheck hardware on tow bar every 200 miles and correct any problems.
- Follow maintenance safety procedures.

⚠ FOLLOWING OPERATION

- Following operation, or when unhooking, stop towing vehicle, set parking brake, shut off engine and **remove ignition key**.
- Store tow bar in area away from human activity.
- Do not permit children to play on or around stored tow bar.
- Make sure parked vehicle is on hard, level surface.
- Wheel chocks may be needed to prevent vehicle from rolling.

⚠ HIGHWAY AND TRANSPORTATION OPERATIONS

- Adopt safe driving practices:
  - Always drive at safe speed relative to local conditions and ensure that your speed is low enough for an emergency stop.
  - Reduce speed prior to turns to avoid risk of overturning.
  - Always keep towing vehicle in gear to provide engine braking when going downhill. Do not coast.
  - **Do not drink and drive!**
- Comply with state and local laws governing highway safety.
- Local laws should be checked for all highway lighting and marking requirements.
- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver: Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
- Watch for obstructions overhead and to both sides while towing vehicle.
- Operate with maximum visibility at all times. Make allowances for increased length and weight when making turns and stopping.

PERFORMING MAINTENANCE

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Make sure there is plenty of ventilation. Never operate engine of towing vehicle in a closed building. Exhaust fumes may cause asphyxiation.
- Before working on tow bar, stop towing vehicle, set parking brake, turn off engine and **remove ignition key**.
- Always use proper tools or equipment for job at hand.
- Use extreme caution when making adjustments.
- When replacing bolts, refer to owner's manual.
- Follow torque chart in this manual when tightening bolts and nuts.
- After servicing, be sure all tools, parts and service equipment are removed.
- Do not allow grease or oil to build up.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your tow bar to original specifications. Manufacturer will not claim responsibility for use of unapproved parts and/or accessories or other damages as a result of their use.
- If tow bar has been altered in any way from original design, manufacturer does not accept any liability for injury or warranty.
- A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this tow bar.
- A service kit is available (sold separately) that covers routine maintenance items that will extend the life of your tow bar.
- Replacement parts are available at etrailer.com (sold separately)

TORQUE SPECIFICATIONS

BOLT TORQUE DATA FOR STANDARD NUTS, BOLTS, AND CAP SCREWS.

Tighten all bolts to torques specified in chart unless otherwise noted. Check tightness of bolts periodically using bolt chart as guide. Replace hardware with same grade bolt.

NOTE: Unless otherwise specified, high-strength Grade 5 hex bolts are used throughout assembly of equipment.

Torque figures indicated are valid for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

*GRADE or CLASS value for bolts and cap screws are identified by their head markings.

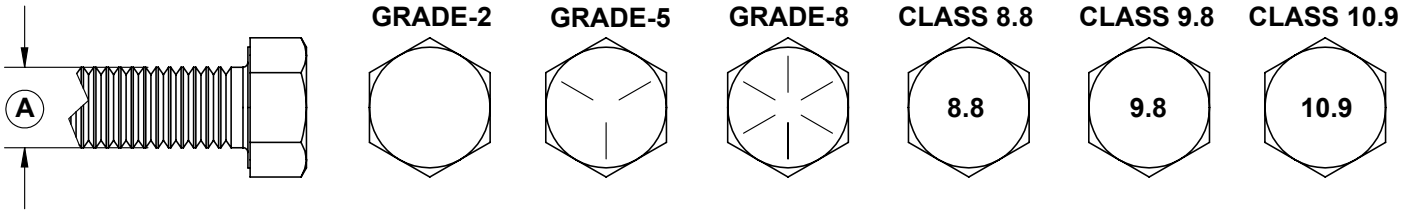
Bolt Torque for Standard bolts*

"A"	GRADE 2 lb-ft	(N.m)	GRADE 5 lb-ft	(N.m)	GRADE 8 lb-ft	(N.m)
1/4"	6	(8)	9	(12)	12	(16)
5/16"	10	(13)	18	(25)	25	(35)
3/8"	20	(27)	30	(40)	45	(60)
7/16"	30	(40)	50	(70)	80	(110)
1/2"	45	(60)	75	(100)	115	(155)
9/16"	70	(95)	115	(155)	165	(220)
5/8"	95	(130)	150	(200)	225	(300)
3/4"	165	(225)	290	(390)	400	(540)
7/8"	170	(230)	420	(570)	650	(880)
1"	225	(300)	630	(850)	970	(1310)

Torque all 1/4" button head screws to 6 ft/lbs and apply Blue LOCTITE® to threads.

Bolt Torque for Metric bolts*

"A"	CLASS 8.8 lb-ft	(N.m)	CLASS 9.8 lb-ft	(N.m)	CLASS 10.9 lb-ft	(N.m)
6	**9**	**(13)**	**10**	**(14)**	**13**	**(17)**
7	15	(21)	18	(24)	21	(29)
8	23	(31)	25	(34)	31	(42)
10	45	(61)	50	(68)	61	(83)
12	78	(106)	88	(118)	106	(144)
14	125	(169)	140	(189)	170	(230)
16	194	(263)	216	(293)	263	(357)
18	268	(363)	--	--	364	(493)
20	378	(513)	--	--	515	(689)
22	516	(699)	--	--	702	(952)
24	654	(886)	--	--	890	(1206)



IMPORTANT NOTICE!

Refer to towed vehicle's owner's manual to verify that it is suitable for towing.

Be sure to check if towed vehicle requires additional equipment such as a transmission lube pump, free-wheel hubs, driveline disconnect or axle locks. Failure to properly equip towed vehicle will result in severe damage to towed vehicle's transmission.

Be sure that towed vehicle's steering wheel is unlocked and free to turn. Check manufacturer's specifications for the proper way to unlock steering wheel.

Be sure to check that receiver on towing vehicle is not inset too far. When attaching an etrailer towing product it is important that turning clearance is adequate. A receiver that is inset too far on a towing vehicle will shorten turning radius. Failure to check this may result in towing or towed vehicle damage. It may be necessary to install a receiver extension to allow for proper turning clearance.

WARNING:

FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN LOSS OF TOWING VEHICLE CONTROL, SEPARATION OF THE TOW BAR FROM THE TOWING VEHICLE, SEPARATION OF THE TOWED VEHICLE FROM THE TOW BAR, CAUSING SEVERE PERSONAL INJURY, DEATH, OR PROPERTY DAMAGE.

WARNING: ADDITIONAL SAFETY ITEMS. Safety is of utmost importance at all times. To prevent personal injury or property damage, observe the following:

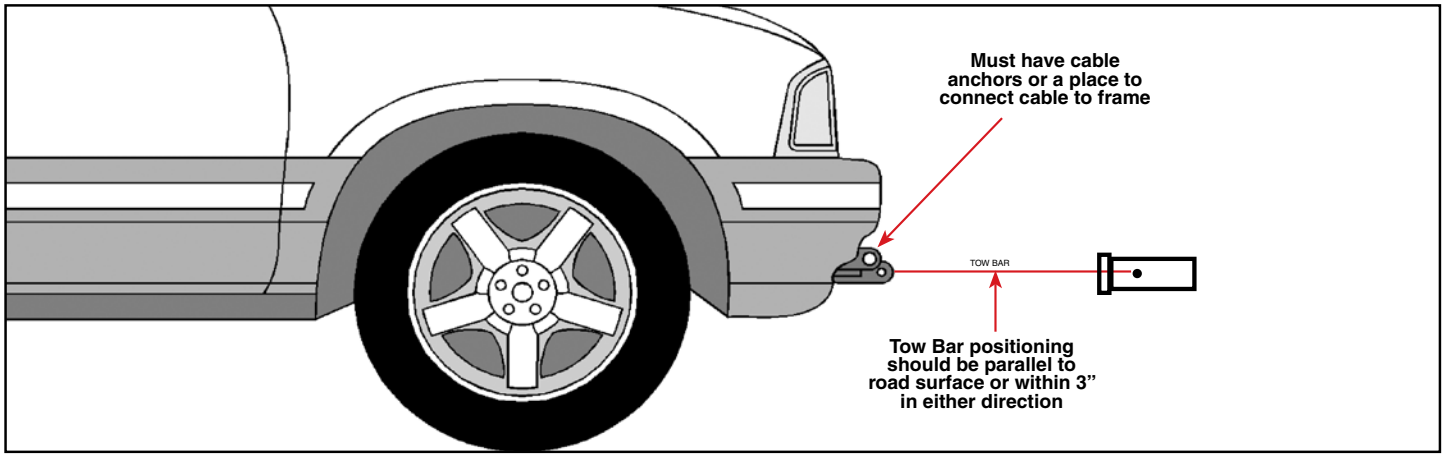
- Before allowing anyone to hook up or operate the etrailer SD, be sure they have read and understand the proper operating procedure.
- This tow bar must be used with a Class III rated hitch or higher.
- Be sure the steering components of the towed vehicle are properly aligned.
- The male receiver tube must fit snugly in the hitch receiver and the safety pin must be in position to lock the receiver and tube together.
- **NOTE:** Do not attempt to back up with the tow bar and towed vehicle connected. Backing up with the tow bar and towed vehicle connected could result in severe damage to the tow bar and/or the towed vehicle.
- **For automatic transmissions:** Consult your vehicle owner's manual for towing suitability with the drive shaft connected. Otherwise, the towed vehicle will have to be equipped with a transmission pump or drive shaft disconnect.
- Be sure the **SAFETY CABLES with retainers** are hooked to both the towing and towed vehicles using the criss-cross method.
- Do not use coiled safety cables with this tow bar. Always use straight safety cables.
- Do not load the towed vehicle with anything as you may exceed the towing capacity of the tow bar.
- Check to make sure that all lights are in proper working order.
- Make sure all auxiliary lights are securely attached to the towed vehicle.

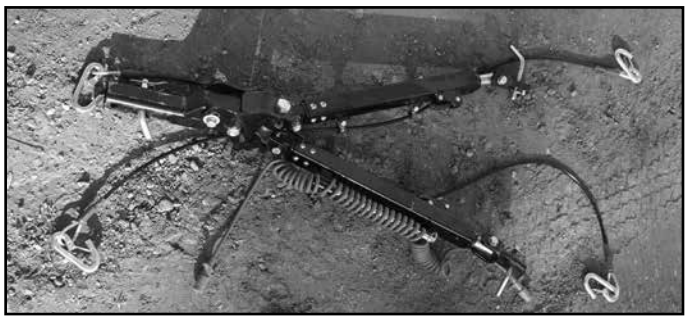
MAINTENANCE

Periodically check all bolts and nuts to ensure proper tension or torque.

- Check all pivot points for wear or breakage.
- Replace any worn or damaged parts with O.E.M. parts only.
- An occasional spray of lubricant may be required inside the latch trigger area of the extending legs.
- **DO NOT** lubricate any of the pivot points of the etrailer SD. The pivot points contain self-lubricating washers and do not need additional lubrication.
- Keep the etrailer SD covered when stored on or off the towing vehicle.
- Make sure all bolts are properly tightened and those requiring a set torque are up to specifications.

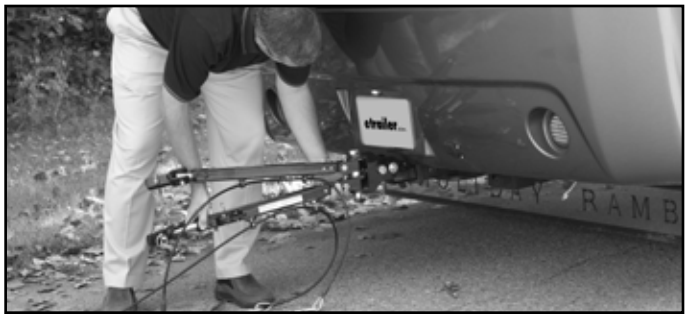
Thank you for purchasing etrailer.com products.





Step 1. Out of the box, the etrailer SD tow bar is setup with the safety cables installed and ready for you to tow. Install the electrical cable (optional) by placing the coil over the wire support rod. Secure the cable with the cable locking hair pin.

HOOKING UP THE VEHICLE TO BE TOWED



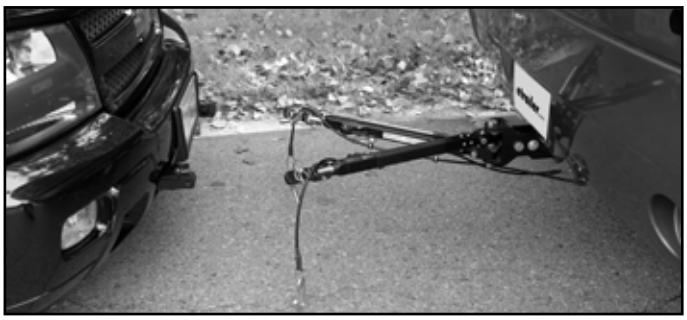
Step 2. Insert the etrailer SD into a Class III or greater receiver hitch.



Step 3. Insert receiver pin through receiver until pin passes through. Secure pin with the receiver hair pin. Criss-cross safety cables underneath pivot assembly and attach to chain anchors on towing vehicle. Do not use coiled safety cables with this tow bar. Always use straight safety cables.



Quick-Lock pin must be closed properly. Fold ring of Quick-Lock pin to the side of the pin that allows ring to snap against pin. If you have folded its ring the wrong way it will not snap against pin.

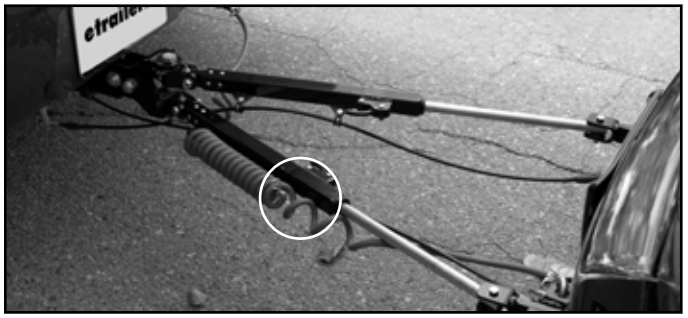


Step 4. Position the vehicle to be towed approximately 24" behind the towing vehicle. Perform a tow bar check, look for any loose fasteners, condition of safety cables, excessive movement in connecting leg shaft when the shaft is extended and locked. If any excessive movement or loose fasteners, the tow bar will need to be serviced before towing. The vehicles **do not** have to be in straight alignment to complete the hook-up. **Engage towed vehicle and towing vehicle parking brake.**

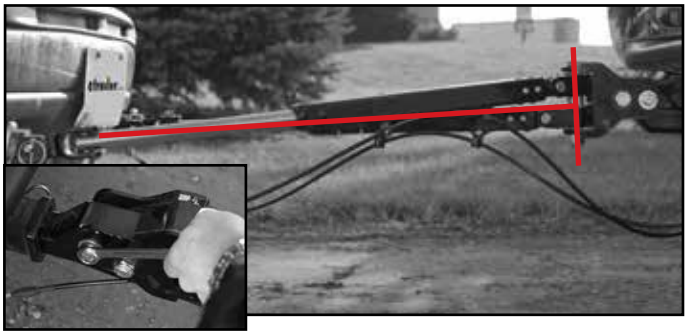


Step 5. Slide and twist the legs into position to attach them to the base plate on towed vehicle. Secure to base plate using the two attaching pins and 1/4" quick-lock pin. Attach safety cables (see below). Now connect the lighting cable between the towing vehicle and the towed vehicle lighting system or auxiliary light bar. The coiled section of the cable will be stored on the support rod. **Towing vehicle must be larger and at least 500 lbs. heavier than the towed vehicle and tow bar combined.**

Step 6. Hook safety cables to chain anchor of base plate.
Note: Make sure safety clip is in working order.

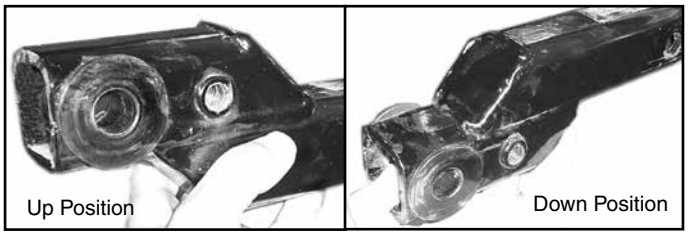


Step 7. Leave the electrical cable storage pin (circled above) out for the locking procedure in step 6. When step 6 is complete, position cable on storage rod leaving enough slack and insert pin.



Step 8. Once you are secured to the tow bar, release towed vehicle parking brake and slowly back up the towed vehicle straight back until one leg latches. Determine which leg latched by having an assistant tell you. If you are by yourself put towed vehicle in neutral or park and apply parking brake. Get out and check to see which leg latched. To latch the second leg, turn the top of towed vehicle's steering wheel into the direction of the leg that first latched, and slowly back up again. This will latch the second leg. Once both legs are latched, straighten wheels on towed vehicle and shut vehicle off. Adjust tow bar receiver head so the vertical bolt is perpendicular to the base plate height of towed vehicle. **Tighten the 1/2" bolts on each side of joint head to 85 ft/lbs.** If manual transmission, shift to neutral, unlock steering wheel and make sure parking brake is released. **Note: For 4-wheel-drive units, shift transfer case into neutral also. Reminder:** Consult vehicle's manufacturer for towing suitability of manual or automatic transmission vehicles.





NOTE: The etrailer SD comes with a 1-1/2" off-set receiver that can be flipped to help level the tow bar with the towed vehicle. The receiver is in the up position from factory. To change to the lower position, remove both 1/2" bolts and washer from side of receiver joint head. Remove the 3/4" nut and bolt, slide receiver out of receiver joint head and flip receiver into the down position. Slide receiver back into the receiver joint head and reinstall the fasteners.

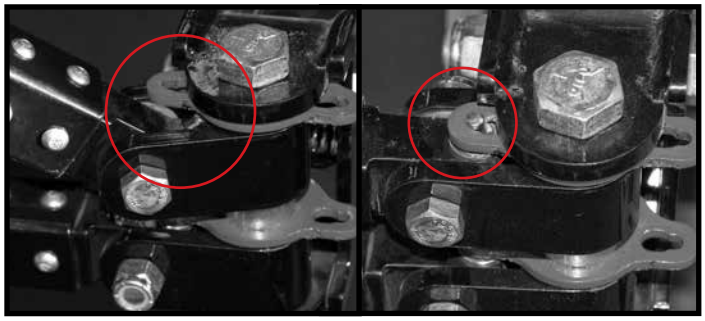
UNHOOKING THE TOWED VEHICLE

Step 1. Begin unhooking your unit by first applying both vehicle parking brakes and unhook your lighting and safety cables. **Failure to have parking brakes applied could allow towed vehicle to roll forward. This could result in limited space between towing vehicle and towed vehicle.**



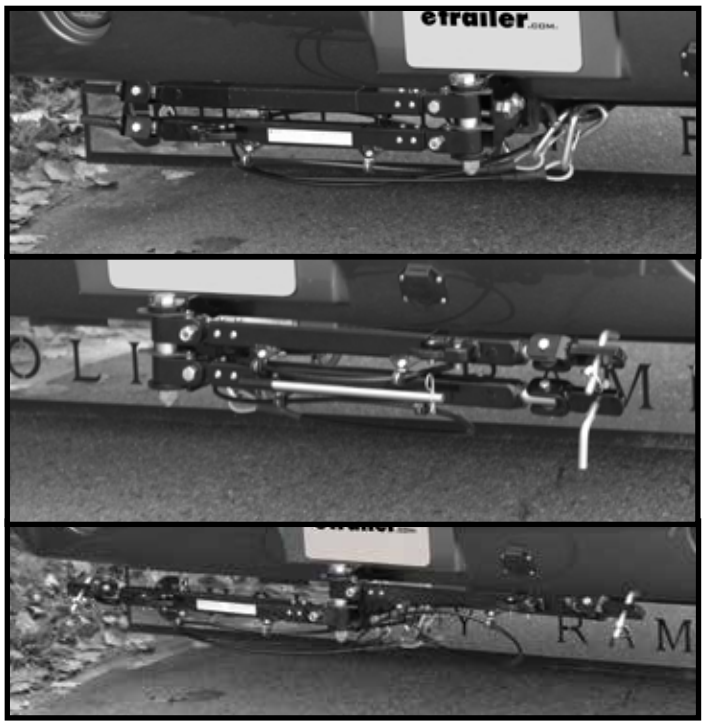
Step 2. Use the latch trigger handle to release the connecting legs between the two vehicles by pressing down on the latch trigger handle.

Step 3. Remove pins that attach tow bar to towed vehicle. Slide the extendable legs back into tube. Position electrical cable on storage rod and insert pin to prevent cable from sliding off.



Step 4. Now take the bottom leg and lift up high enough for storage pin to clear under storage plate. Turn leg under storage and push leg down so pin locks into plate. Repeat for top leg.

NOTE: Your tow bar can store in three storage positions; both arms left, both arms right, or one arm to each side.

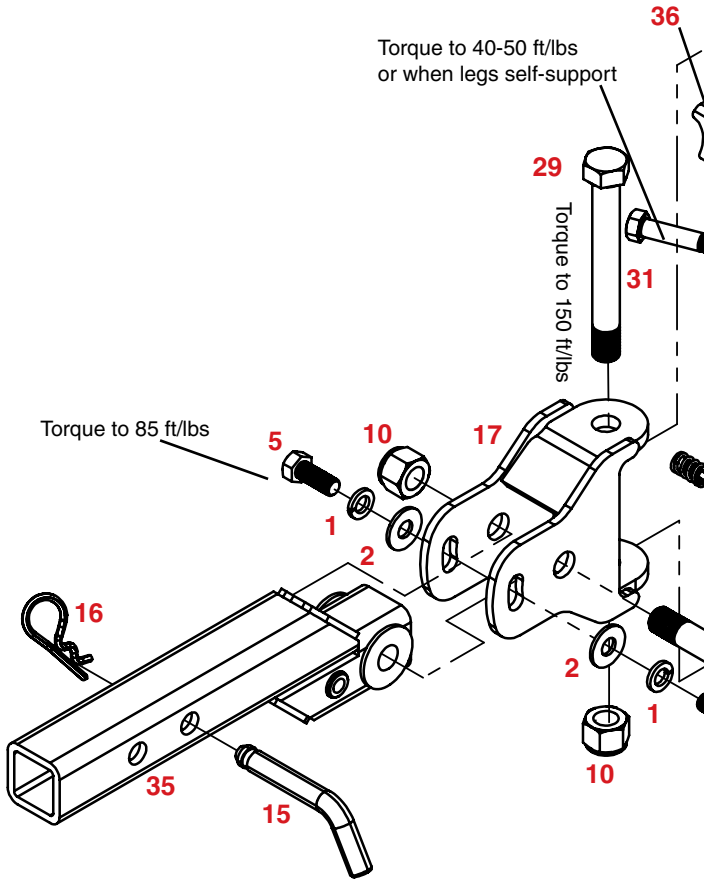


Item no. e98971

ITEM	DESCRIPTION	QTY
1	.50 LOCK WASHER	2
2	.50 FLAT WASHER	2
3	HAIR PIN, .120 WIRE X 2.375	1
4	WASHER, FLAT, .25	2
5	BOLT, .50NC X 1.25	2
6	NUT, .50NC LOCK, NY. INSERT	2
7	LYNCH PIN	2
8	WASHER, MACHINE, .75 X 14GA NR(PLATED)	1
9	NUT, .375NC NYLON LOCK	2
10	.75NC NYLON INSERT LOCK NUT	2
11	WIRE SUPPORT ROD	1
12	CLEVIS SPACER WASHER	4
13	ATTACHING PIN	2
14	ROLL PIN, .156 X .75	1
15	RECEIVER PIN	1
16	HAIRPIN, RECEIVER PIN	1
17	RECEIVER JOINT	1
18	ALUMINUM CLEVIS	2
19	TRIGGER HANDLE	2
20	COMPRESSION SPRING	2
21	SCREW, SOCKET BUTTON .25-.20 X .50 SS	16
22	RAIL CLIP HOLDER	4
23	SCREW, SOCKET HD, #8-32 X .625 SS	4
24	PLASTIC BUSHING, .50 ID X .75 LG	2
25	FLANGED BUSHING, .75 ID	4
26	CLEVIS GROOVED PIN, .313 X 1.25, SS	4
27	RETAINING RING F/ .313 SHAFT	4
28	SAFETY CABLE 54” DOUBLE HOOKS	2
29	BOLT, .75 NC x 6.00 w/ 4.75 SHANK	1
30	BOLT, .75 NC X 3.75 W/ 2.50 SHANK	1
31	BOLT, .50NC X 2.25 W/1.75 SHANK SS	2
32	CLEVIS SPACER WASHER	4
33	STORAGE PIN	2
34	RETAINING E-CLIP, SS F/ .25 SHAFT	2
35	TOW BAR RECEIVER, 1.5 DROP/RISE	1
36	SPRING, COMPRESSION	2
37	CLEVIS BOLT, .375 NC X 2.25 LG, 1.50 SHANK	2
38	CONNECTING LEG, LEFT	1
39	CONNECTING LEG, RIGHT	1
40	FRONT ADAPTER F/SD TB	2
41	CONNECTING CLEVIS F/SD	2
42	STORAGE PLATE, SPRING LOADED	2
43	SPACER	1
44	LATCH SEAR	2
45	CONNECTING LEG SHAFT	2

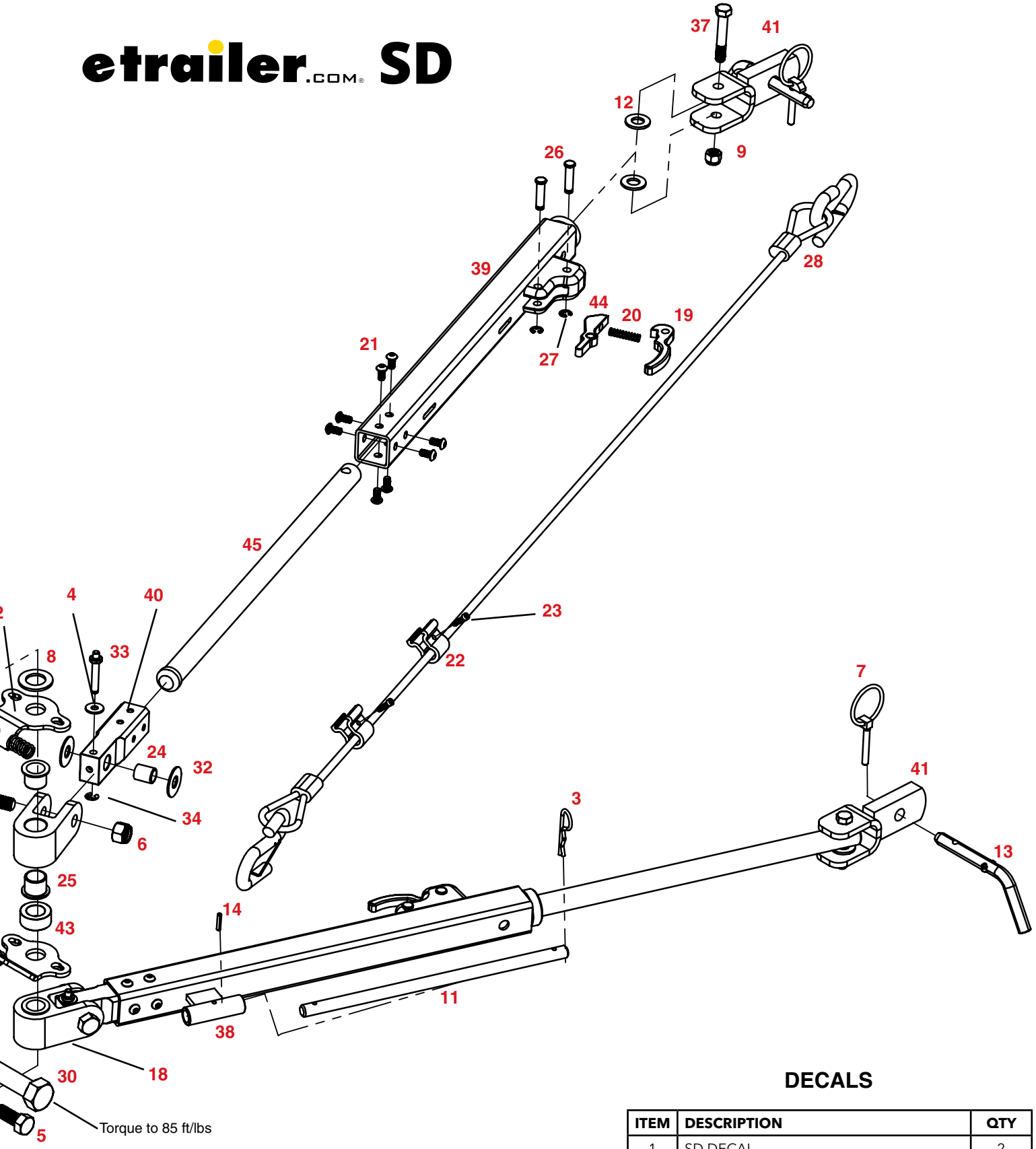
Please order replacement parts by Item and Description.

Before towing, perform a tow bar safety check. Look for any loose fasteners, condition of safety cables, excessive movement in connecting leg shaft when the shaft is extended and locked. If any excessive movement or loose fasteners are found, the tow bar will need to be serviced before towing. If tow bar needs servicing, contact etrailer.com for assistance.



US Patent #’s - 6,764,092, 6,612,604,
6,502,847, 7,837,216, 8,573,630 & 8,573,629

etrailer.com SD



DECALS

ITEM	DESCRIPTION	QTY
1	SD DECAL	2
2	USER INSTRUCTION DECAL	1
3	WARNING DO NOT EXCEED WEIGHT LIMITS & MANUFACTURER'S PATENT/ HITCH RATING DECAL	1
Please order replacement parts by Item and Description.		

WARRANTY:

Your etrailer tow bar has a Lifetime Limited warranty to be free from defects in materials and workmanship under normal use and service from date of purchase. Any part of the etrailer tow bar found in the judgment of the manufacturer to be defective in materials or workmanship will be repaired or replaced at the manufacturer's option.

1507 Highway A, Wentzville, MO 63385
(800) 298 - 8924

More etrailer product information can
be found online: www.etrailer.com