

Wilson Trailer Company



GOOSENECK LIVESTOCK TRAILER OWNERS MANUAL

This manual has been prepared to help you operate your new Wilson trailer successfully, economically, and safely. Should you have any questions, we ask that you contact a Wilson Trailer Company factory representative immediately for a clear explanation.

We thank you for expressing your confidence in us through the purchase of your new Wilson Gooseneck trailer.

We want you to know that it was designed to meet your specific needs for a livestock trailer and was built for long life and low cost operation. With regular, proper maintenance and your common sense use, we are confident that it will do so.



Additional owner's manuals and decal kits for this trailer are available without charge.

This manual Includes:

- Certificate of Limited Warranty
- Disclaimer and Exclusive Remedies to Which the Sale is Subject

MODEL NO.

SERIAL NO.



This safety alert symbol is to raise your awareness to important messages in this manual. When you see this symbol, be alert to the possibility of personal injury and carefully read the message that follows.

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Normal Trailer Operation



This Wilson trailer is designed for operation within legal highway speed limits on reasonable road surfaces for the type of service it was built to perform, in accordance with the noted weight restrictions.

Normal use means the loading, unloading and transportation of uniformly distributed legal loads, in a manner which does not subject the trailer to stresses or impacts greater than imposed by reasonable use.

This trailer was built to carry cargo within the two weight ratings on the identification plate located on the road side of the trailer near the front.

The GAWR (gross axle weight rating) is the structural capability of the lowest rated member of the running gear component: suspension and spring system, hub, wheels and drums, rims, bearings, brakes, axles, or tires.

The GVWR (gross vehicle weight rating) is the structural capability of the trailer when supported by the kingpin and axles with the load uniformly distributed throughout the cargo space.

CAUTION

The maximum load indicated on the identification plate may not be a legal load on the highway you plan to use. States have differing laws and regulations affecting vehicle lengths and weights on roads that are not a part of the primary interstate road system.

Loading and Transport of Livestock

The loading of the trailer is important! Keep the center of gravity as low as possible. Proper placement of the larger animals should be considered.

Because load types vary, the driver needs to drive with appropriate care and within the limits of the load.

The well being of the gooseneck livestock trailer is dependent on the stock density, ventilation, skill of driving, and quality of roads. **Frequent inspection of livestock and careful driving cannot be over-emphasized!**

Modification of Trailer

Any modification made to the trailer must comply with DOT and NHTSA regulations and must not compromise the gross vehicle weight rating (GVWR) of the trailer.
(Rev. 12-98)

 **WARNING**

Any operation of the trailer outside the limitations stated in this manual will void any responsibility of Wilson Trailer Company for any of its results.

 **CAUTION**

Personal Injury, death, and property damage may result from improper operation or unsafe practices. Be sure to read and follow all decals and emblems carefully.

Decals and Emblems

The following section contains the decals and emblems used on Wilson Gooseneck Trailers. Due to differences in configurations and equipment, your trailer may or may not use all the decals and emblems listed. Newer trailers may also have decals and emblems that differ from older trailers. Replace damaged or missing decals promptly.

ABB-01505-B



ABB-01505-F/G



AAA-06891-LQ



AAA-05604-C



AAA-05604



ACC-02800-G



Foreman Ranch Hand

AAA-05564

THIS VEHICLE IS CONSTRUCTED UNDER ONE OR MORE OF THE FOLLOWING U.S. OR CANADA PATENTS:

3292967	2970861	202879
4153289	4293158	4277096
4305694	1105526	4114944

OTHER PATENTS APPLIED FOR

WILSON TRAILER COMPANY • SIOUX CITY, IOWA

AAA05564

ACC-02800-F



ACC-02800-H



Roper

ACC-02800-M



Ranch Hand

ACC-02800-P



Roper

AAA-06891-IT

FMCSA PERIODIC INSPECTION

This vehicle has passed inspection in accordance with 49 CFR 396.17 through 396.23. The inspection report is located at:

WILSON TRAILER COMPANY
4408 South Lewis Boulevard
Sioux City, Iowa 51106
Telephone (712) 252-6500

JAN	FEB	MAR	APR	MAY	JUN	JUL	AUG
SIX	SEV	OCT	NOV	DEC	2018	2019	2021

DATE OF INSPECTION

AAA06891IT





AAA-06462-BT

CHECK NUTS PERIODICALLY. TORQUE TO 110-120 FT.LBS.
WTC 10-18 AAA06462BT

AAA-06462-BV

CHECK NUTS PERIODICALLY. TORQUE TO 275-325 FT.-LBS.
WTC 10-18 AAA06462BV

AAA-06462-CK

CHECK NUTS PERIODICALLY. TORQUE TO 85-95 FT.LBS.
WTC 1-19 AAA06462CK

AAA-06891-AK

ALIGNMENT CHECK
For extended tire wear, suspension alignment must be checked after an initial break in period and at regular intervals.
WTC 8-18 AAA06891AK

AAA-06462-CD

CAUTION
Make certain rollup, swing and half slide gates at the rear end are closed while trailer is being operated or parked.
WTC 9-18 AAA06462CD

AAA-06891-CZ

CAUTION
 Strong acid cleaners containing hydrofluoric acid, sulfuric acid, or phosphoric acid can damage trailer structure and finish.
To avoid structural damage, wash your trailer with a mild caustic or alkaline cleaner, followed by a thorough warm water rinse. (max pH = 9).
Structural damage can result from use of strong acidic cleaner.
WTC 8-18 AAA06891CZ

AAA-06462-AW

CAUTION
Door and gate locks which show excessive wear should be replaced immediately.
WTC 8-18 AAA06462AW

AAA-06891-GT

CAUTION
 Do not pour any fluid into service glachhand.
Doing so will result in valve failure and void warranty.
WTC 8-18 AAA06891GT

AAA-06462-BO

CAUTION
Check battery before towing. Charged battery required for proper operation of the breakaway brake application.
WTC 9-18 AAA06462BO

AAA-06462-BP

CAUTION
Be certain that coupler lock handle is completely engaged before towing trailer.
WTC 9-18 AAA06462BP

AAA-06462-BO

CAUTION
Do not attach cable to the hitch ball. Cable must be attached to the towing vehicle for the proper operation of the vehicle.
WTC 9-18 AAA06462BO

AAA-06462-BL

WARNING
 To prevent personal injury, stand clear of swinging gates until slam locks are engaged.
WTC 8-18 AAA06462BL

AAA-06891-C

WARNING
 Check wheel nuts after initial 50 to 100 miles of service. See Owner's Manual for correct torque requirements. Failure to do so may result in equipment damage or personal injury.
WTC 8-18 AAA06891C

AAA-06891-H

WARNING
 Failure to use properly matched wheels, studs, brake drums, or capnuts will result in equipment damage, and could result in injury or DEATH if wheel comes off.
WTC 8-18 AAA06891H

AAA-06891-GC

WARNING
 Equipment damage or crushing and injury can occur when air suspension leaks off.
Exhaust air suspension before disconnecting from trailer.
WTC 8-18 AAA06891GC

AAA-06891-GB

NOTICE
The Owner's Manual contains important information regarding safe and proper operation of this trailer. Read Owner's Manual before using trailer.
WTC 10-18 AAA06891GB

AAA-06891-EB

NOTICE
This trailer is equipped with automatic forward adjust brakes. To ensure the proper operation of the adjusters, please inspect the brakes for proper adjustment every 3000 miles or as necessary thereafter. If brake adjustment is required use the procedures in the Dexter Service Manual.
WTC 9-18 AAA06891EB

AAA-06891-MA

NOTICE
Please be aware that staining, discoloration, and corrosion can and may appear on aluminum trailers. This can appear at any time for various reasons and is beyond the control of Wilson Trailer.
Exposure to cleansers, highway treatment, and de-icing chemicals along with general weather conditions or a combination of the above can be cause for staining and corrosion.
Wilson Trailer is not responsible for these occurrences and any staining or discoloration is not covered by Wilson Trailer warranty.
WTC 8-18 AAA06891MA

ABB-01545-A

IMPORTANT OPERATING INSTRUCTIONS
BEFORE TRAVELING, BE SURE THAT:
1. Divide gates are secured in either "OPEN" or "CLOSED" position. In stationary dock models, gates must be closed and latched.
2. Rollup end gates are closed.
3. Clean out doors are closed and latched.
4. Roof hatches and trap doors are closed.
5. Lift doors are resting firmly on dock rails with slack cables.
WTC 8-18 ABB01545A

AAA-06891-EC

INFORMATION
This trailer is equipped with manual adjust brakes. Check the brake adjustment after the first 200 miles and every 3000 miles or as necessary thereafter. If brake adjustment is required use the procedure in the Dexter service manual.
WTC 9-18 AAA06891EC

Safety

(Rev. 4-19)



Over-The-Road Safe Handling

- a. Traveling at freeway speeds for long periods of time and failing to recognize the high speed of travel and reducing it before entering freeway interchanges or other curves requiring a reduced and controlled speed.
 - b. Lack of familiarity with the vehicle characteristics to recognize its safe speed with relation to posted speed limits on curves, which are usually determined with automobile traffic in mind.
 - c. Failure to reduce speed sufficiently when approaching congested traffic such as might be found at traffic signals on highways. With the advent of today's more powerful and higher torque engines, the original practice of maintaining momentum to avoid acceleration in traffic is outmoded.
6. Tire Characteristics: High pressure truck/trailer tires have different characteristics under high speed cornering conditions than do passenger car tires. As an extreme example, it is fairly common knowledge that a skilled race car driver can consistently "drift" his racer around tight turns where very high lateral "g" forces are encountered. However, truck/trailer tires which are designed for carrying high loads over long distances have substantially different characteristics, and their lateral stability becomes unpredictable when lateral forces approach 0.4 g. This means that commercial vehicles must be operated in a conservative manner when cornering.
7. Braking and Acceleration: Either braking or accelerating while cornering can significantly reduce the stability of the vehicle and should be avoided. The best driving practice is to decelerate to a safe conservative speed before entering a corner or approaching congested traffic, and then to apply only moderate power until a straight path has been reestablished.

(Rev. 6-02)

Wheel Torques

Proper torquing and retorquing the wheel nuts are critical to prevent the premature loss of wheel equipment

Wheels must be checked and retorqued after 50 to 100 miles of use. This is important every time you change a wheel.

Steps for Determining Correct Load Limit - Trailer

Determining the load limits of a trailer includes more than understanding the load limits of the tires alone. On all trailers there is a Federal certification/VIN label that is located on the forward half of the left (road) side of the unit. This certification/VIN label will indicate the trailer's Gross Vehicle Weight Rating (GVWR). This is the most weight the fully loaded trailer can weigh. It will also provide the Gross Axle Weight Rating (GAWR). This is the most a particular axle can weigh. If there are multiple axles, the GAWR of each axle will be provided.

If your trailer has a GVWR of 10,000 pounds or less, there is a vehicle placard located in the same location as the certification label described above. This placard provides tire and loading information. In addition, this placard will show a statement regarding maximum cargo capacity. Cargo can be added to the trailer, up to the maximum weight specified on the placard. The combined weight of the cargo is provided as a single number. In any case, remember: the total weight of a fully loaded trailer can not exceed the stated GVWR

For trailers with living quarters installed, the weight of water and propane also need to be considered. The weight of fully filled propane containers is considered part of the weight of the trailer before it is loaded with cargo, and is not considered part of the disposable cargo load. Water however, is a disposable cargo weight and is treated as such. If there is a fresh water storage tank of 100 gallons, this tank when filled would weigh about 800 pounds. If more cargo is being transported, water can be off-loaded to keep the total amount of cargo added to the vehicle within the limits of the GVWR so as not to overload the vehicle. Understanding this flexibility will allow you, the owner, to make choices that fit your travel needs.

When loading your cargo, be sure it is distributed evenly to prevent overloading front to back and side to side. Heavy items should be placed low and as close to the axle positions as reasonable. Too many items on one side may overload a tire. The best way to know the actual weight of the vehicle is to weigh it at a public scale. Talk to your dealer to discuss the weighing methods needed to capture the various weights related to the trailer. This would include the weight empty or unloaded, weights per axle, wheel, hitch or king-pin, and total weight.

Excessive loads and/or underinflation cause tire overloading and, as a result, abnormal tire flexing occurs. This situation can generate an excessive amount of heat within the tire. Excessive heat may lead to tire failure. It is the air pressure that enables a tire to support the load, so proper inflation is critical. The proper air pressure may be found on the certification/VIN label and/or on the Tire Placard. This value should never exceed the maximum cold inflation pressure stamped on the tire.





Steps for Determining Correct Load Limit - Trailer

TIRE AND LOADING INFORMATION			
The weight of cargo should never exceed 907 kg or 2000 lbs.			
TIRE	SIZE	COLD TIRE PRESSURE	SEE OWNER'S MANUAL FOR ADDITIONAL INFORMATION
FRONT	20.5x8.0-10(E)	621kPA or 90 PSI	
REAR			
SPARE			

1. Locate the statement, "The weight of cargo should never exceed XXX kg or XXX lbs.," on your vehicle's placard.
2. This figure equals the available amount of cargo and luggage load capacity.
3. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage load capacity.

The trailer's placard refers to the Tire Information Placard attached adjacent to or near the trailer's VIN (Certification) label at the left front of the trailer.

Trailers Over 10,000 Pounds GVWR

NOTE: These trailers are not required to have a tire information placard on the vehicle.

Determine the empty weight of your trailer by weighing the trailer using a public scale or other means. This step does not have to be repeated.

Locate the GVWR (Gross Vehicle Weight Rating) of the trailer on your trailer's VIN (Certification) label.

Subtract the empty weight of your trailer from the GVWR stated on the VIN label. That weight is the maximum available cargo capacity of the trailer and may not be safely exceeded.

Steps for Determining Correct Load Limit - Tow Vehicle

1. Locate the statement, "The combined weight of occupants and cargo should never exceed XXX lbs.," on your vehicle's placard.
2. Determine the combined weight of the driver and passengers who will be riding in your vehicle.
3. Subtract the combined weight of the driver and passengers from XXX kilograms or XXX pounds.
4. The resulting figure equals the available amount of cargo and luggage capacity. For example, if the "XXX" amount equals 1400 lbs. and there will be five 150 lb. passengers in your vehicle, the amount of available cargo and luggage capacity is 650 lbs. (1400-750 (5 x 150) = 650 lbs.).
5. Determine the combined weight of luggage and cargo being loaded on the vehicle. That weight may not safely exceed the available cargo and luggage capacity calculated in Step # 4.
6. If your vehicle will be towing a trailer, load from your trailer will be transferred to your vehicle. Consult the tow vehicle's manual to determine how this weight transfer reduces the available cargo and luggage capacity of your vehicle.

Glossary of Tire Terminology

Accessory weight

The combined weight (in excess of those standard items which may be replaced) of automatic transmission, power steering, power brakes, power windows, power seats, radio and heater, to the extent that these items are available as factory-installed equipment (whether installed or not).

Bead

The part of the tire that is made of steel wires, wrapped or reinforced by ply cords and that is shaped to fit the rim.

Bead separation

This is the breakdown of the bond between components in the bead.

Bias ply tire

A pneumatic tire in which the ply cords that extend to the beads are laid at alternate angles substantially less than 90 degrees to the centerline of the tread.

Carcass

The tire structure, except tread and sidewall rubber which, when inflated bears the load.





Glossary of Tire Terminology

Chunking

The breaking away of pieces of the tread or sidewall.

Cold inflation pressure

The pressure in the tire before you drive.

Cord

The strands forming the plies in the tire.

Cord separation

The parting of cords from adjacent rubber compounds.

Cracking

Any parting within the tread, sidewall, or inner liner of the tire extending to cord material.

CT

A pneumatic tire with an inverted flange tire and rim system in which the rim is designed with rim flanges pointed radially inward and the tire is designed to fit on the underside of the rim in a manner that encloses the rim flanges inside the air cavity of the tire.

Curb weight

The weight of a motor vehicle with standard equipment including the maximum capacity of fuel, oil, and coolant, and, if so equipped, air conditioning and additional weight optional engine.

Extra load tire

A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

Groove

The space between two adjacent tread ribs.

Gross Axle Weight Rating

The maximum weight that any axle can support, as published on the Certification / VIN label on the front left side of the trailer. Actual weight determined by weighing each axle on a public scale, with the trailer attached to the towing vehicle.

Gross Vehicle Weight Rating

The maximum weight of the fully loaded trailer, as published on the Certification / VIN label. Actual weight determined by weighing trailer on a public scale, without being attached to the towing vehicle.

Glossary of Tire Terminology

Hitch Weight

The downward force exerted on the hitch ball by the trailer coupler.

Innerliner

The layer(s) forming the inside surface of a tubeless tire that contains the inflating medium within the tire.

Innerliner separation

The parting of the innerliner from cord material in the carcass.

Intended outboard sidewall

The sidewall that contains a white-wall, bears white lettering or bears manufacturer, brand, and/or model name molding that is higher or deeper than the same molding on the other sidewall of the tire or the outward facing sidewall of an asymmetrical tire that has a particular side that must always face outward when mounted on a vehicle.

Light truck (LT) tire

A tire designated by its manufacturer as primarily intended for use on lightweight trucks or multipurpose passenger vehicles.

Load rating

The maximum load that a tire is rated to carry for a given inflation pressure.

Maximum load rating

The load rating for a tire at the maximum permissible inflation pressure for that tire.

Maximum permissible inflation pressure

The maximum cold inflation pressure to which a tire may be inflated.

Maximum loaded vehicle weight

The sum of curb weight, accessory weight, vehicle capacity weight, and production options weight.

Measuring rim

The rim on which a tire is fitted for physical dimension requirements.

Pin Weight

The downward force applied to the 5th wheel or gooseneck ball, by the trailer kingpin or gooseneck coupler.





Glossary of Tire Terminology

Non-pneumatic rim

A mechanical device which, when a non-pneumatic tire assembly incorporates a wheel, supports the tire, and attaches, either integrally or separately, to the wheel center member and upon which the tire is attached.

Non-pneumatic spare tire assembly

A non-pneumatic tire assembly intended for temporary use in place of one of the pneumatic tires and rims that are fitted to a passenger car in compliance with the requirements of this standard.

Non-pneumatic tire

A mechanical device which transmits, either directly or through a wheel or wheel center member, the vertical load and tractive forces from the roadway to the vehicle, generates the tractive forces that provide the directional control of the vehicle and does not rely on the containment of any gas or fluid for providing those functions.

Non-pneumatic tire assembly

A non-pneumatic tire, alone or in combination with a wheel or wheel center member, which can be mounted on a vehicle.

Normal occupant weight

This means 68 kilograms (150 lbs.) times the number of occupants specified in the second column of Table I of 49 CFR 571.110.

Occupant distribution

The distribution of occupants in a vehicle as specified in the third column of Table I of 49 CFR 571.110.

Open splice

Any parting at any junction of tread, sidewall, or innerliner that extends to cord material.

Outer diameter

The overall diameter of an inflated new tire.

Overall width

The linear distance between the exteriors of the sidewalls of an inflated tire, including elevations due to labeling, decorations, or protective bands or ribs.

Ply

A layer of rubber-coated parallel cords.

Glossary of Tire Terminology

Pneumatic tire

A mechanical device made of rubber, chemicals, fabric and steel or other materials, that, when mounted on an automotive wheel, provides the traction and contains the gas or fluid that sustains the load.

Production options weight

The combined weight of those installed regular production options weighing over 2.3 kilograms (5 lbs.) in excess of those standard items which they replace, not previously considered in curb weight or accessory weight, including heavy duty brakes, ride levelers, roof rack, heavy duty battery, and special trim.

Radial ply tire

A pneumatic tire in which the ply cords that extend to the beads are laid at substantially 90 degrees to the centerline of the tread.

Recommended inflation pressure

This is the inflation pressure provided by the vehicle manufacturer on the Tire Information label and on the Certification / VIN tag.

Reinforced tire

A tire designed to operate at higher loads and at higher inflation pressures than the corresponding standard tire.

Rim

A metal support for a tire or a tire and tube assembly upon which the tire beads are seated.

Rim diameter

This means the nominal diameter of the bead seat.

Rim size designation

This means the rim diameter and width.

Rim type designation

This means the industry of manufacturer's designation for a rim by style or code.

Rim width

This means the nominal distance between rim flanges.

Section width

The linear distance between the exteriors of the sidewalls of an inflated tire, excluding elevations due to labeling, decoration, or protective bands.





Glossary of Tire Terminology

Sidewall

That portion of a tire between the tread and bead.

Sidewall separation

The parting of the rubber compound from the cord material in the sidewall.

Special Trailer (ST) tire

The "ST" is an indication the tire is for trailer use only.

Test rim

The rim on which a tire is fitted for testing, and may be any rim listed as appropriate for use with that tire.

Tread

That portion of a tire that comes into contact with the road.

Tread rib

A tread section running circumferentially around a tire.

Tread separation

Pulling away of the tread from the tire carcass.

Treadwear indicators (TWI)

The projections within the principal grooves designed to give a visual indication of the degrees of wear of the tread.

Vehicle capacity weight

The rated cargo and luggage load plus 68 kilograms (150 lbs.) times the vehicle's designated seating capacity.

Vehicle maximum load on the tire

The load on an individual tire that is determined by distributing to each axle its share of the maximum loaded vehicle weight and dividing by two.

Vehicle normal load on the tire

The load on an individual tire that is determined by distributing to each axle its share of the curb weight, accessory weight, and normal occupant weight (distributed in accordance with Table I of CRF 49 571.110) and dividing by 2.

Weather side

The surface area of the rim not covered by the inflated tire.

Glossary of Tire Terminology

Wheel center member

In the case of a non-pneumatic tire assembly incorporating a wheel, a mechanical device which attaches, either integrally or separably, to the non-pneumatic rim and provides the connection between the non-pneumatic rim and the vehicle; or, in the case of a non-pneumatic tire assembly not incorporating a wheel, a mechanical device which attaches, either integrally or separably, to the non-pneumatic tire and provides the connection between tire and the vehicle.

Wheel-holding fixture

The fixture used to hold the wheel and tire assembly securely during testing.

Tire Safety - Everything Rides On It

The National Traffic Safety Administration (NHTSA) has published a brochure (DOT HS 809 361) that discusses all aspects of Tire Safety, as required by CFR 575.6. This brochure is reproduced in part below. It can be obtained and downloaded from NHTSA, free of charge, from the following web site:

http://www.nhtsa.dot.gov/cars/rules/TireSafety/ridesonit/tires_index.html

Studies of tire safety show that maintaining proper tire pressure, observing tire and vehicle load limits (not carrying more weight in your vehicle than your tires or vehicle can safely handle), avoiding road hazards, and inspecting tires for cuts, slashes, and other irregularities are the most important things you can do to avoid tire failure, such as tread separation or blowout and flat tires

These actions, along with other care and maintenance activities, can also: improve vehicle handling, help protect you and others from avoidable breakdowns and accidents, improve fuel economy, and increase the life of your tires.

This booklet presents a comprehensive overview of tire safety, including information on the following topics: basic tire maintenance, uniform tire quality grading system, fundamental characteristics of tires, and tire safety tips.

Use this information to make tire safety a regular part of your vehicle maintenance routine. Recognize that the time you spend is minimal compared with the inconvenience and safety consequences of a flat tire or other tire failure.





Safety First - Basic Tire Maintenance

Properly maintained tires improve the steering, stopping, traction, and load-carrying capability of your vehicle. Underinflated tires and overloaded vehicles are a major cause of tire failure. Therefore, as mentioned above, to avoid flat tires and other types of tire failure, you should maintain proper tire pressure, observe tire and vehicle load limits, avoid road hazards, and regularly inspect your tires.

Finding your Vehicle's Recommended Tire Pressure and Load Limits

Tire information placards and vehicle certification labels contain information on tires and load limits. These labels indicate the vehicle manufacturer's information including:

- Recommended tire size
- Recommended tire inflation pressure
- Vehicle capacity weight (VCW-the maximum occupant and cargo weight a vehicle is designed to carry)
- Front and rear gross axle weight ratings (GAWR- the maximum weight the axle systems are designed to carry).

Both placards and certification labels are permanently attached to the trailer near the left front.

Understanding Tire Pressure and Load Limits

Tire inflation pressure is the level of air in the tire that provides it with load-carrying capacity and affects the overall performance of the vehicle. The tire inflation pressure is a number that indicates the amount of air pressure- measured in pounds per square inch (psi)-a tire requires to be properly inflated. (You will also find this number on the vehicle information placard expressed in kilopascals (kpa), which is the metric measure used internationally.)

Manufacturers of passenger vehicles and light trucks determine this number based on the vehicle's design load limit, that is, the greatest amount of weight a vehicle can safely carry and the vehicle's tire size. The proper tire pressure for your vehicle is referred to as the "recommended cold inflation pressure." (As you will read below, it is difficult to obtain the recommended tire pressure if your tires are not cold.)

Because tires are designed to be used on more than one type of vehicle, tire manufacturers list the "maximum permissible inflation pressure" on the tire sidewall. This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

Checking Tire Pressure

It is important to check your vehicle's tire pressure at least once a month for the following reasons:

- Most tires may naturally lose air over time.
- Tires can lose air suddenly if you drive over a pothole or other object or if you strike the curb when parking.
- With radial tires, it is usually not possible to determine underinflation by visual inspection.

For convenience, purchase a tire pressure gauge to keep in your vehicle. Gauges can be purchased at tire dealerships, auto supply stores, and other retail outlets.

The recommended tire inflation pressure that vehicle manufacturers provide reflects the proper psi when a tire is cold. The term cold does not relate to the outside temperature. Rather, a cold tire is one that has not been driven on for at least three hours. When you drive, your tires get warmer, causing the air pressure within them to increase. Therefore, to get an accurate tire pressure reading, you must measure tire pressure when the tires are cold or compensate for the extra pressure in warm tires.

Steps for Maintaining Proper Tire Pressure

Step 1: Locate the recommended tire pressure on the vehicle's tire information placard, certification label, or in the owner's manual.

Step 2: Record the tire pressure of all tires.

Step 3: If the tire pressure is too high in any of the tires, slowly release air by gently pressing on the tire valve stem with the edge of your tire gauge until you get to the correct pressure.

Step 4: If the tire pressure is too low, note the difference between the measured tire pressure and the correct tire pressure. These "missing" pounds of pressure are what you will need to add.

Step 5: At a service station, add the missing pounds of air pressure to each tire that is underinflated.

Step 6: Check all the tires to make sure they have the same air pressure (except in cases in which the front and rear tires are supposed to have different amounts of pressure).





Safety First - Basic Tire Maintenance

If you have been driving your vehicle and think that a tire is underinflated, fill it to the recommended cold inflation pressure indicated on your vehicle's tire information placard or certification label. While your tire may still be slightly underinflated due to the extra pounds of pressure in the warm tire, it is safer to drive with air pressure that is slightly lower than the vehicle manufacturer's recommended cold inflation pressure than to drive with a significantly underinflated tire. Since this is a temporary fix, don't forget to recheck and adjust the tire's pressure when you can obtain a cold reading.

Tire Size

To maintain tire safety, purchase new tires that are the same size as the vehicle's original tires or another size recommended by the manufacturer. Look at the tire information placard, the owner's manual, or the sidewall of the tire you are replacing to find this information. If you have any doubt about the correct size to choose, consult with the tire dealer.

Tire Tread

The tire tread provides the gripping action and traction that prevent your vehicle from slipping or sliding, especially when the road is wet or icy. In general, tires are not safe and should be replaced when the tread is worn down to 1/16 of an inch. Tires have built-in treadwear indicators that let you know when it is time to replace your tires. These indicators are raised sections spaced intermittently in the bottom of the tread grooves. When they appear "even" with the outside of the tread, it is time to replace your tires. Another method for checking tread depth is to place a penny in the tread with Lincoln's head upside down and facing you. If you can see the top of Lincoln's head, you are ready for new tires.

Tire Balance and Wheel Alignment

To avoid vibration or shaking of the vehicle when a tire rotates, the tire must be properly balanced. This balance is achieved by positioning weights on the wheel to counterbalance heavy spots on the wheel-and-tire assembly. A wheel alignment adjusts the angles of the wheels so that they are positioned correctly relative to the vehicle's frame. This adjustment maximizes the life of your tires. These adjustments require special equipment and should be performed by a qualified technician.

Tire Repair

The proper repair of a punctured tire requires a plug for the hole and a patch for the area inside the tire that surrounds the puncture hole. Punctures through the tread can be repaired if they are not too large, but punctures to the sidewall should not be repaired. Tires must be removed from the rim to be properly inspected before being plugged and patched.

Tire Fundamentals

Federal law requires tire manufacturers to place standardized information on the sidewall of all tires. This information identifies and describes the fundamental characteristics of the tire and also provides a tire identification number for safety standard certification and in case of a recall.

Information on Passenger Vehicle Tires:

P

The "P" indicates the tire is for passenger vehicles.

Next number

This three-digit number gives the width in millimeters of the tire from sidewall edge to sidewall edge. In general, the larger the number, the wider the tire.

Next number

This two-digit number, known as the aspect ratio, gives the tire's ratio of height to width. Numbers of 70 or lower indicate a short sidewall for improved steering response and better overall handling on dry pavement.

R

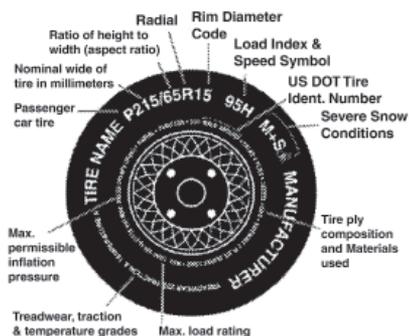
The "R" stands for radial. Radial ply construction of tires has been the industry standard for the past 20 years.

Next number

This two-digit number is the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.

Next number

This two- or three-digit number is the tire's load index. It is a measurement of how much weight each tire can support. You may find this information in your owner's manual. If not, contact a local tire dealer. Note: You may not



Safety First - Basic Tire Maintenance

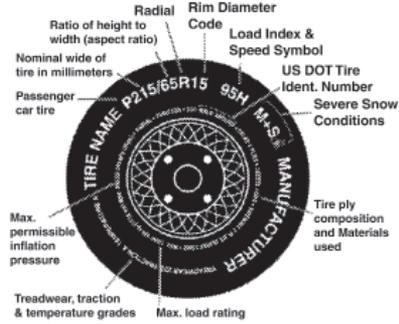
Information on Passenger Vehicle Tires:

M+S

The “M+S” or “M/S” indicates that the tire has some mud and snow capability. Most radial tires have these markings; hence, they have some mud and snow capability.

Speed Rating

The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time. The ratings range from 99 miles per hour (mph) to 186 mph. These ratings are listed below. Note: You may not find this information on all tires because it is not required by law.



Letter Rating	Speed Rating
Q	99 mph
R	106 mph
S	112 mph
T	118 mph
U	124 mph
H	130 mph
V	149 mph
W	168* mph
Y	186* mph

* For tires with a maximum speed capability over 149 mph, tire manufacturers sometimes use the letters ZR. For those with a maximum speed capability over 186 mph, tire manufacturers always use the letters ZR.

U.S. DOT Tire Identification Number

This begins with the letters “DOT” and indicates that the tire meets all federal standards. The next two numbers or letters are the plant code where it was manufactured, and the last four numbers represent the week and year the tire was built. For example, the numbers 3197 means the 31st week of 1997. The other numbers are marketing codes used at the manufacturer’s discretion. This information is used to contact consumers if a tire defect requires a recall.

Information on Passenger Vehicle Tires:

Tire Ply Composition and Materials Used

The number of plies indicates the number of layers of rubber-coated fabric in the tire. In general, the greater the number of plies, the more weight a tire can support. Tire manufacturers also must indicate the materials in the tire, which include steel, nylon, polyester, and others.

Maximum Load Rating

This number indicates the maximum load in kilograms and pounds that can be carried by the tire.

Maximum Permissible Inflation Pressure

This number is the greatest amount of air pressure that should ever be put in the tire under normal driving conditions.

UTQGS Information:

Treadwear Number

This number indicates the tire's wear rate. The higher the treadwear number is, the longer it should take for the tread to wear down. For example, a tire graded 400 should last twice as long as a tire graded 200.

Traction Letter

This letter indicates a tire's ability to stop on wet pavement. A higher graded tire should allow you to stop your car on wet roads in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as "AA", "A", "B", and "C".

Temperature Letter

This letter indicates a tire's resistance to heat. The temperature grade is for a tire that is inflated properly and not overloaded. Excessive speed, underinflation or excessive loading, either separately or in combination, can cause heat build-up and possible tire failure. From highest to lowest, a tire's resistance to heat is graded as "A", "B", or "C".

R

The "R" stands for radial. Radial ply construction of tires has been the industry standard for the past 20 years.

Next Number

This two-digit number is the wheel or rim diameter in inches. If you change your wheel size, you will have to purchase new tires to match the new wheel diameter.





Safety First - Basic Tire Maintenance

UTOQS Information:

Next Number

This two-or three-digit number is the tire's load index. It is a measurement of how much weight each tire can support. You may find this information in your owner's manual. If not, contact a local tire dealer. You may not find this information on all tires because it is not required by law.

M+S

The "M+S" or "M/S" indicates that the tire has some mud and snow capability. Most radial tires have these markings; hence, they have some mud and snow capability.

Speed Rating

The speed rating denotes the speed at which a tire is designed to be driven for extended periods of time. The ratings range from 99 miles per hour (mph) to 186 mph. These ratings are listed below. You may not

Letter Rating	Speed Rating
Q	99 mph
R	106 mph
S	112 mph
T	118 mph
U	124 mph
H	130 mph
V	149 mph
W	168* mph
Y	186* mph

Additional Information on Light

Truck Tires:

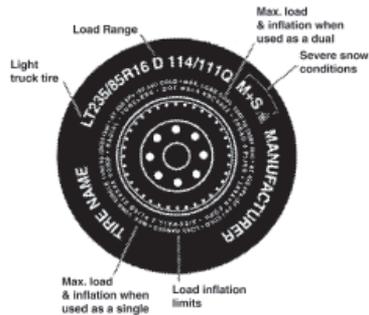
Tires for light trucks have other markings besides those found on the sidewalls of passenger tires.

LT

The "LT" indicates the tire is for light trucks or trailers.

ST

An "ST" is an indication the tire is for trailer use only.

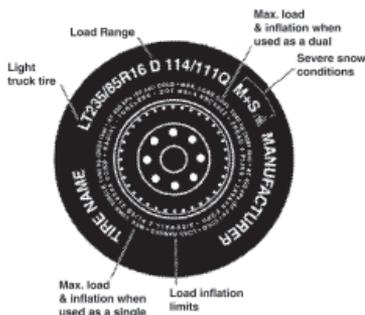


Additional Information on Light Truck Tires:

Max. Load Dual kg (lbs) at kPa (psi).

Cold

This information indicates the maximum load and tire pressure when the tire is used as a dual, that is, when four tires are put on each rear axle (a total of six or more tires on the vehicle).



Max. Load Single kg (lbs) at kPa (psi).

Cold

This information indicates the maximum load and tire pressure when the tire is used as a single.

Load Range

This information identifies the tire's load-carrying capabilities and it's

Tire Safety Tips

Preventing Tire Damage

- Slow down if you have to go over a pothole or other object in the road.
- Do not run over curbs or other foreign objects in the roadway, and try not to strike the curb when parking.

Tire Safety Checklist

- Check tire pressure regularly (at least once a month), including the spare.
- Inspect tires for uneven wear patterns on the tread, cracks, foreign objects, or other signs of wear or trauma.
- Remove bits of glass and foreign objects wedged in the tread.
- Make sure your tire valves have valve caps.
- Check tire pressure before going on a long trip.

Do not overload your vehicle. Check the Tire Information and Loading Placard or User's Manual for the maximum recommended load for the vehicle.

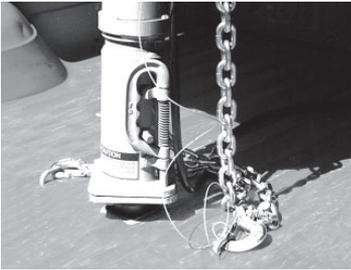


⚠ WARNING

Be careful when making inspections, hookups, and repairs to avoid personal injury. Make sure parking brakes are properly activated or that wheel chocks are in place to avoid sudden or unexpected movement of the trailer which could result in bodily injury.

IMPORTANT: It is the Operator's responsibility to conduct a safe and accurate pre-trip inspection of the vehicle including brake condition and proper adjustments and be satisfied that the vehicle is in safe operating condition. See 49 CFR Parts 383 and 396.

Safety Chains



The safety chains should cross behind the coupler and hook individually to the attachment points in the tow vehicle (shown in photo to the left). They **MUST NOT** be attached to the ball.

Coupler Attachment

After hook-up, check for positive engagement of the hitch ball and coupler. Be certain that coupler lock handle is completely engaged before towing the trailer. Also, check to insure that coupler adjustment set screws are torqued to a minimum 125 FT/LBS. (Rev. 4-12)

⚠ CAUTION

Do not attach cable to hitch ball. Cable must be attached to the towing vehicle for the proper operation of the vehicle. (AAA06462BO)

Be certain that coupler lock handle is completely engaged before towing trailer. (AAA06462BP)

Coupler bolts must be torqued to a minimum 125 ft/lbs (Rev. 4-12)

Brake and Electrical Controls



Connect the 6-way plug and check for proper operation of stop lights, turn signals, and running lights. Repair malfunctioning light equipment prior to trip. Check and clean all lights and reflectors. Proper operation requires clean and positive contact between electrical connections. Be sure the plug on the light cable and the trailer connector are free of corrosion. Inspect all wiring to see it is not

Brake Controls



Check brakes for proper operation before each trip. On trailers with electric or electric/hydraulic brakes, fasten the breakaway switch actuating cable securely to the towing vehicle. Make certain the breakaway battery is fully charged. Your breakaway battery kit contains a tow charger which can keep your battery charged. The charger is hooked to the clearance light circuit and will charge while running lights are being used.



CAUTION

Check battery before towing. Charged battery required for proper operation of the breakaway brake application. (AAA06462BQ)

On trailers with vacuum brakes, drain moisture from the system air tank daily. If the trailer is equipped with hydraulic brakes, check the brake fluid level before each trip. (Rev. 7-02)

Tires



Check tires frequently for cuts and abrasions. Check air pressure before each trip and keep inflated as recommended by the tire manufacturer. Remove foreign objects that may be lodged in tire treads.





Gates



Before traveling, be sure that all divide gates are locked in either a fully open or fully closed position. All roll-up gates must be closed and ropes secured.



CAUTION

Make certain rollup, swing and half slide gates at the rearend are closed while trailer is being operated or parked.

(AAA06462CD) (Rev. 1-02)

Wheels and Rims



Check all wheel nuts for the proper torque after the first 50 to 100 miles of service and before each succeeding trip. Refer to the torque requirements for the correct procedure and specifications if necessary.

Check all metal surfaces thoroughly while making tire inspections and during tire changes and look for cracks or distortions in the wheel studs. Do not move the trailer when any of these conditions exist. If your axles are equipped with oil lubricated hubs, check the oil level and fill to the required level indicated on the oil cap if necessary.
(Rev. 3-93)

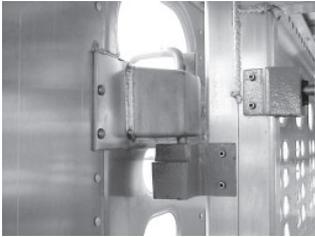


WARNING

Check wheel nuts after initial 50 to 100 miles of service. See Owner's manual for correct torque requirements. Failure to do so may result in equipment damage and personal injury. (AAA06891C)

Insufficient mounting torque can cause wheel shimmy, resulting in damage to parts and extreme tire wear. Excessive mounting torque can cause studs and capnuts to break and discs to crack in stud hole area.

Door Locks



Check all gate locks, access door locks, side door locks, and rear door locks before each trip to insure that they are in proper working order. Any doors, gate locks or keepers which show excessive wear should be replaced immediately. Care should be taken to keep the area around the door frame clear of any debris or animal wastes. A build-up of animal waste may result in more pressure being applied to locks than they were designed to withstand.

 **CAUTION**

Door and gate locks which show excessive wear should be replaced immediately.

Side Structure



Check the trailer sides for inconspicuous damage to the top and bottom rails as well as the side structure. Any problems observed in the side structure should be corrected immediately to prevent the damage from extending further. Unrepaired damage could affect the safe load carrying capacity of the side structure.

Punched side trailers are built with aluminum side skin. Do Not use the holes to hang heavy objects on the side. Do Not use the holes to tie animals. This could damage the side skin.

Contact Wilson Trailer Company immediately for information on proper support of mounting brackets for such applications.

 **WARNING**

Failure to follow these procedures may result in unnecessary wear and part malfunction. It may also create difficulties with the mechanical operation of the trailer, and, could possibly result in personal injury and/or property damage.



Operation of Brakes



Your trailer brakes are designed to work together with your towing vehicle brakes to stop the combined load. When one does the stopping for both, the overload causes heat build-up which can result in brake wear, a direct loss of braking power and increased brake lining wear.

WARNING

Jack-knifing can occur if the tow vehicle brakes are used alone, allowing the trailer to push the vehicle. This can result in equipment damage and personal injury.

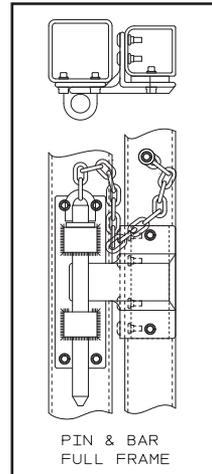
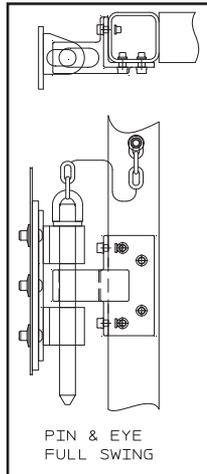
Complete details for making adjustments on or replacement within your braking system can be found in the brake manufacturer's supplement provided with this manual. See Notice: Gooseneck Trailer Brakes. (Page 4-5) Proper synchronization of tow vehicle to trailer braking can only be accomplished by road testing. Follow the instructions found in the manufacturer's supplement for correct synchronization procedures.

Operation of Gates



All divide gates are provided with two locks. Be sure both locks are completely engaged before towing the trailer.

All divide gates with an outside release is provided with an additional pin & eye or pin & bar.
(Rev. 4-12)





⚠️ WARNING

To prevent personal injury, stand clear of swinging gates until slam locks are engaged. (AAA06462BL) (Rev. 1-02)

Operation of Coupler



The coupler installed on your trailer is of steel pipe design and is adjustable in height to meet different vehicle hitch heights (maximum extension is eight inches). The coupler should be adjusted so that your trailer is level when towed, not nose up or nose down. To adjust the coupler, back towing vehicle under the coupler. Level your trailer using the trailer landing gear, then loosen the two coupler set screws and lower the inner unit over the tow vehicle hitch ball. Tighten the coupler set screws to 125 foot pounds minimum of torque. The coupler is now set to the correct height for your vehicle. (Rev. 4-12)

⚠️ CAUTION

Be certain that coupler lock handle is completely engaged before towing trailer. (AAA06462BP) (Rev. 1-02)

Fifth Wheel and King Pin Engagement (If equipped)

After hook-up, check for positive engagement of the lower fifth wheel and king pin. Apply trailer brakes and attempt to move the tractor forward to ensure that the fifth wheel and king pin are positively locked.

⚠️ CAUTION

Plastic king pin liners (lube plate) cannot be installed on Wilson Trailer Company king pin assemblies. A lube plate changes the king pin interface dimensions of the fifth wheel lock. This may result in coupling difficulties, premature lock wear and, potentially, a dropped trailer



Fastenings



Floors, deck rails, coupler assemblies, and tandem sub-assemblies are attached to the trailer side with zinc plated and stainless steel fasteners.

CAUTION

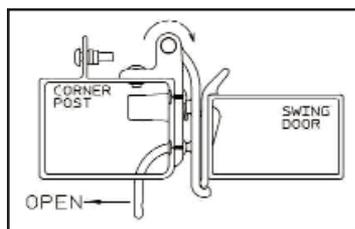
Each month, check to see that all zinc plated steel fasteners are in place. If any are missing or loose, they should be replaced immediately.

Gate and Ramp Hinges



Gate and ramp hinges are provided with grease fittings. They should be lubricated on a regular basis in order to avoid unnecessary wear.

Operating Slam Catch



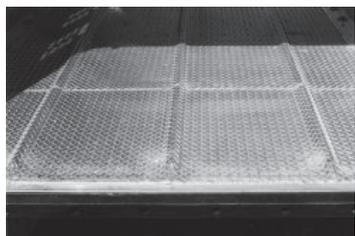
Rear Slam Catch

Gate and ramp hinges are provided with grease fittings. They should be lubricated on a regular basis in order to avoid unnecessary wear.

CAUTION

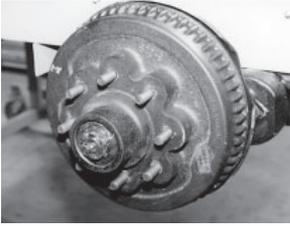
Engage lock rod before moving trailer.

Floor



Your Wilson gooseneck trailer is constructed with aluminum treadplate floors to reduce slipping. Never use sand or abrasive materials for animal bedding as this will cause excessive floor wear. The most important part of floor maintenance is cleaning.

Wheel Bearings



Wheel bearings and cups should be inspected for corrosion or wear every 12 months or 12,000 miles. Bearing adjustment and proper lubrication is essential to the function and reliability of your trailer axles. Please refer to the Dexter Axle "Operations Maintenance Service Manual" for the proper lubricant specifications.



CAUTION

When new bearings are needed, they must always be replaced in sets of a cone and a cup.

Oil or Grease Seals



7,000 lb Torflex axles are standard with E-Z Lube spindles. This feature allows the bearings to periodically lubricate without removing hubs from the axle. Please refer to the Dexter Axle "Operation Maintenance Service Manual" for additional details.

The 8,000 - 10,000 lb Torflex axles and wheel bearings must be manually lubricated. The bearings and cups should be inspected and/or lubricated every 12 months or 12,000 miles. Please refer to the Dexter Axle "Operation Maintenance Service Manual" for additional details.

Optional Oil Bath Bearings

The oil level should be checked prior to each trip

IMPORTANT NOTICE - WASHOUT REQUIRED

Feed companies are manufacturing feeds for livestock that produce highly corrosive acids in the animal waste. These animal acids are highly corrosive to aluminum.

Even with the best materials and design, you must wash out your trailer thoroughly as often as possible, or at least once a week to minimize corrosion damage to your trailer. (Rev. 2-93)

NOTICE

Please be aware that staining and discoloration can and may appear on aluminum trailers. This can appear at anytime for various reasons and is beyond the control of Wilson Trailer.

Exposure to cleansers, highway treatment, and de-icing chemicals along with general weather conditions or a combination of the above can be cause for staining and corrosion.

Wilson Trailer is not responsible for these occurrences and any staining or discoloration is not covered by Wilson Trailer warranty. (Rev. 8-15)



Wilson Trailer Washing

(Does not pertain to livestock trailer interior sanitizing procedures)

Trailer washing is an important step in decreasing future maintenance. The trailer should be washed with soap and water using a relatively soft bristle brush. Various chemicals can cause severe corrosion damage to aluminum. The use of acid or alkaline cleaners outside of the recommended pH range will void the warranty.

Improper washing may permanently stain bare aluminum or damage painted surfaces. Painted and natural skin trailers do not have a clear topcoat to protect from damage.

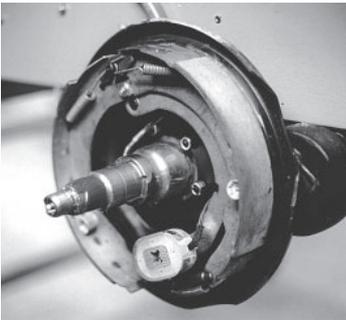
A number of products hauled in the trailer will also lead to corrosion if the products are allowed to build up. Products that build up on the aluminum and steel members in the tandem and king pin areas should be routinely washed off.

Steps for washing:

- Trailer must be cool, in shade. Do not wash a hot trailer.
- Wet surfaces with cool, 70-80 deg F, water. Do not use a "hotsy".
- Wash with cool soap and water mix having a pH between 5 and 8. (test pH with a pool/spa test strip). Use a soft bristle brush.
- Immediately rinse thoroughly with water which can be cool or warm.
- Dry in shade.

(Rev. 12-21)

Brakes



See Notice: Gooseneck Trailer Brakes (Page 35). Adjust your trailer brakes after the first 200 miles and then after every 3,000 miles or 3 months of use. The brake drum should be inspected every 12 months or 12,000 miles. Inspect the drum surface for excessive wear or heavy scoring. If worn more than .020", oversized drums should be turned. The maximum rebores should not exceed .090".



On trailers with electric brakes, also inspect the inner surface of the brake drum that contacts the brake magnet. If the surface is scored or worn unevenly, it should be refaced by removing not more than .030" of material.

Check the brake magnet for wear and current draw every 6 months or 6,000 miles.



CAUTION

It is important that the wheel bearing bores are not contaminated by metallic chips resulting from drum turning or refacing. Make certain that wheel bearing cavities are clean before reinstalling bearings and seals. The presence of contaminants will cause premature wheel bearing failure.

Brake Adjustment

This section applicable to trailers equipped with Dexter Axles. Taken from Dexter Axle Service Manual.

NOTICE

GOOSENECK TRAILER BRAKES

- All 7,000 lb axles have automatic forward adjusting brakes.
- Manual adjusting brakes require proper maintenance to prevent problems from developing.
- All 8,000 - 10,000 lb axles have automatic forward adjusting brakes.
- The automatic forward adjusting brakes still require periodic inspection and adjustment as necessary.



Brakes need to be adjusted (1) after the first 200 miles of operation when the brake shoes have "seated", (2) at 3,000 mile intervals, (3) or as use and performance requires. The brakes should be adjusted in the following manner:



Brake Adjustment (Continued)

1. Jack up trailer and secure on adequate jack stands. Check that the wheel and drum rotate freely.
2. Remove the adjusting hole cover from the adjusting slot on the bottom of the brake backing plate.
3. With a screwdriver or standard adjusting tool, rotate the star wheel of the adjuster assembly to expand the brake drums. Adjust the brake shoes out until the pressure of the linings against the drum make the wheel difficult to turn.
4. Then rotate the star wheel in the opposite direction until the wheel turns freely with a lining drag.
5. Replace the adjusting hole cover and lower the wheel to the ground.
6. Repeat the above procedure on all brakes.

Wheels and Tires



Wheels are a critical component of your running gear system. When replacing the trailer wheels it is critical to match the capacity ratings and to ensure that they are equal or greater than the original equipment supplied by the manufacturer.

(Rev. 3-93)



CAUTION

Do not attempt to repair or modify a wheel. Even minor modifications can have a great effect. Do not install a tube to correct a leak through the rim. If the rim is cracked, the air pressure in the tube may cause the pieces of the rim to explode with great force and can cause serious injury or death.

Torque Requirements



It is extremely important to apply and maintain proper wheel mounting torque to your trailer axle. Torque is a measure of the amount of tightening applied to a fastener (nut or bolt) and is expressed as length times force. A force of 90 pounds applied at the end of a wrench one foot long will yield 90 foot pounds of torque. Torque wrenches are the best method to assure that the proper amount of torque is being applied to a fastener.

Torque Requirements

Be sure to use only the fasteners matched to the cone angle of your wheel (usually 60 or 90 degrees).

The proper procedure for attaching your wheels is as follows:

1. Start all bolts or nuts by hand to prevent cross threading.
2. Tighten bolts or nuts in the sequence detailed below.
3. The tightening of the fasteners should be done in stages. Following the recommended sequence, first tighten all the fasteners to 20-25 ft.lb., and finally to the required torque based on the size of the wheel nut (see chart).
4. Wheel nuts/bolts should be torqued before first road use and after each wheel removal. Check and retorque after the first 50-100 miles.

Wheel Nut Torque Guide

<u>Nut Size</u>	<u>Torque (ft.lbs.)</u>
1/2"-20 (Cone)	90-120
9/16"-18 (Cone)	90-120 Steel
9/16"-18 (Cone)	120-140 Aluminum

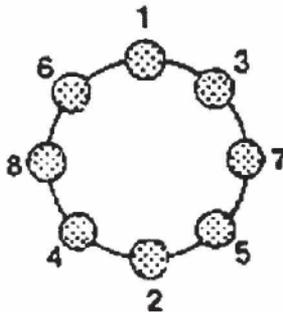
(Note 1) 5/8"-18 (Cone) 190-210
 5/8"-18 (flanged nut) 275-325 (One-Piece)

(Note 2) 5/8"-18 (flanged nut) 140-160 (Two-Piece)

Note 1: This is when nut is used in conjunction with the reinforcing ring.

Note 2: This two piece flange nut is used on the Alcoa Aluminum Dual

**TORQUE
SEQUENCE**



8-BOLT



Breakaway Battery Charger Installation Instructions (for ABCD: Accelerated Battery Charging Device)

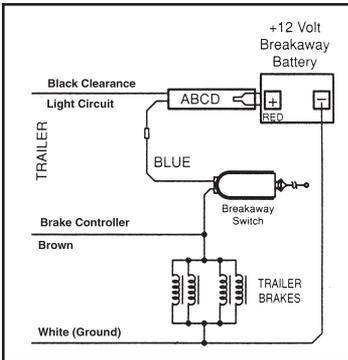
IMPORTANT

Check condition of battery prior to installation and prior to each trip.

IMPORTANT FACTS TO REMEMBER

1. Improper installation of the breakaway battery will destroy the brake control. The negative terminal must attach to ground and positive terminal must attach to the breakaway switch.
2. Check your breakaway system periodically to insure that wiring and connections are secure. A short or an open circuit can result in a no-brake condition.
3. If excessive discharging of the breakaway battery occurs, check battery and recharge using a Heavy Duty Two Stage/Maintenance Charger. If using a commercial (AC to DC) make certain the 12 volt charge is limited to 1.2 amps or less.
4. The breakaway battery charger is connected to the Clearance Light Circuit. Therefore the breakaway battery charges only when the clearance lights are on.

(Rev. 6-02)



Battery Data Chart

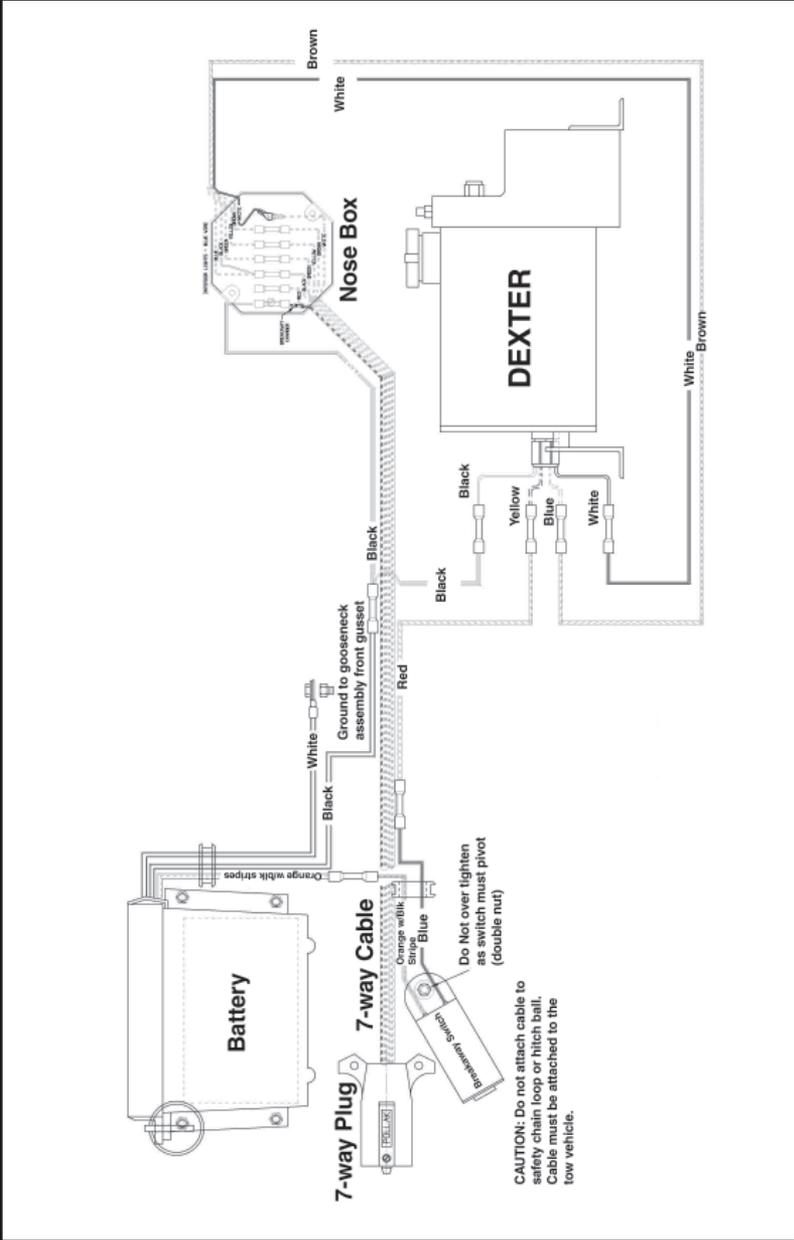
- 12 Volt
- P/N 2023-5 amp/hr-max discharge current 20 hr. rate = 250 mA
- Max Discharge Current - 40 amps
- Max charge current must be limited to 1.2 amps
- Length = 3.54"
- Width = 2.76"
- Height = 4.13"
- Weight = 3.8 lbs.
- Terminals: Fasten Tab .187"x.032"
- Service Life: Under normal operating conditions, 4-5 years in standby applications or 200-1000 charge/discharge cycles depending upon depth of discharge and rate of charge.

12 Volt Sealed Lead-Acid Battery (Breakaway Battery)

To maximize the life of the battery the following conditions should be met:

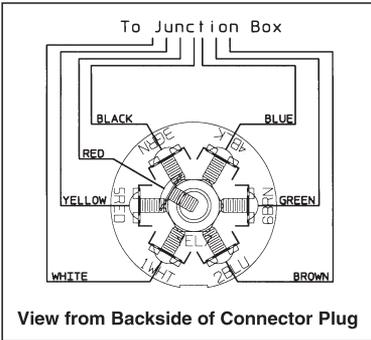
1. Avoid over or undercharge. This is the single worst enemy of lead-acid batteries.
2. Batteries should be stored in a discharged state or at elevated room temperatures.
3. Avoid exposing batteries to heat! Service life is shortened considerably at ambients above 30o C (86oF).
4. Due to the characteristics of this battery, after six to nine months of storage, the battery should be recharged.
5. Charge the battery at the proper rate. Current should be limited to less than 1.2 amps. Charge current above 1.2 amps will result in shortened service life. Ideal charging is provided by Tekonsha Tow Charger, P/N 2024.
6. Provide adequate air circulation when charging battery. **DO NOT** charge battery in any other container besides a TEKONSHA P/N 2018, battery box.
- 7. DO NOT PLACE BATTERIES IN CLOSE PROXIMITY TO OBJECTS WHICH CAN PRODUCE SPARKS OR FLAMES.**
8. Do not expose battery case to organic solvents or adhesives.
- 9. DO NOT ATTEMPT TO DISASSEMBLE BATTERIES. CONTACT WITH SULFURIC ACID MAY CAUSE HARM.**
- 10. FASTEN BATTERIES TIGHTLY AND MAKE PROVISIONS FOR SHOCK ABSORPTION IF EXPOSURE TO SHOCK OR VIBRATION IS LIKELY.**
11. Do not throw batteries into fire; batteries so disposed may rupture or explode.

Electric/Hydraulic Brake Application System



Electrical Connector Wiring Diagram

(Standard 7-Way RV)

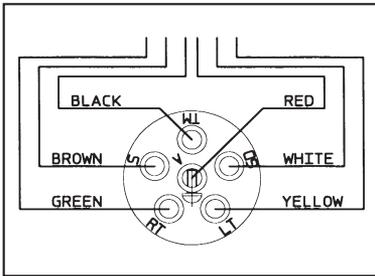


A 7-way plug may be installed on the power cable on your trailer. Each wire carries current from your vehicle's electrical source, through a circuit, to the various electrical devices on the trailer. Individual circuits may be traced by the various wire colors shown on the following wiring diagrams, which show the wire color and the electrical device it serves.

- 3GRN = Interior & Exterior Lights (black)
- 1WHT = Ground (white)
- 5RED = Left Turn (yellow)
- 6BRN = Right Turn (green)
- 2BLU = Electric Brakes ONLY (brown)
- YEL7 = Back-up Lights (red) optional
- 4BLK = AUXILARY (Blue)

Electrical Connector Wiring Diagram

(Optional 6-Way)



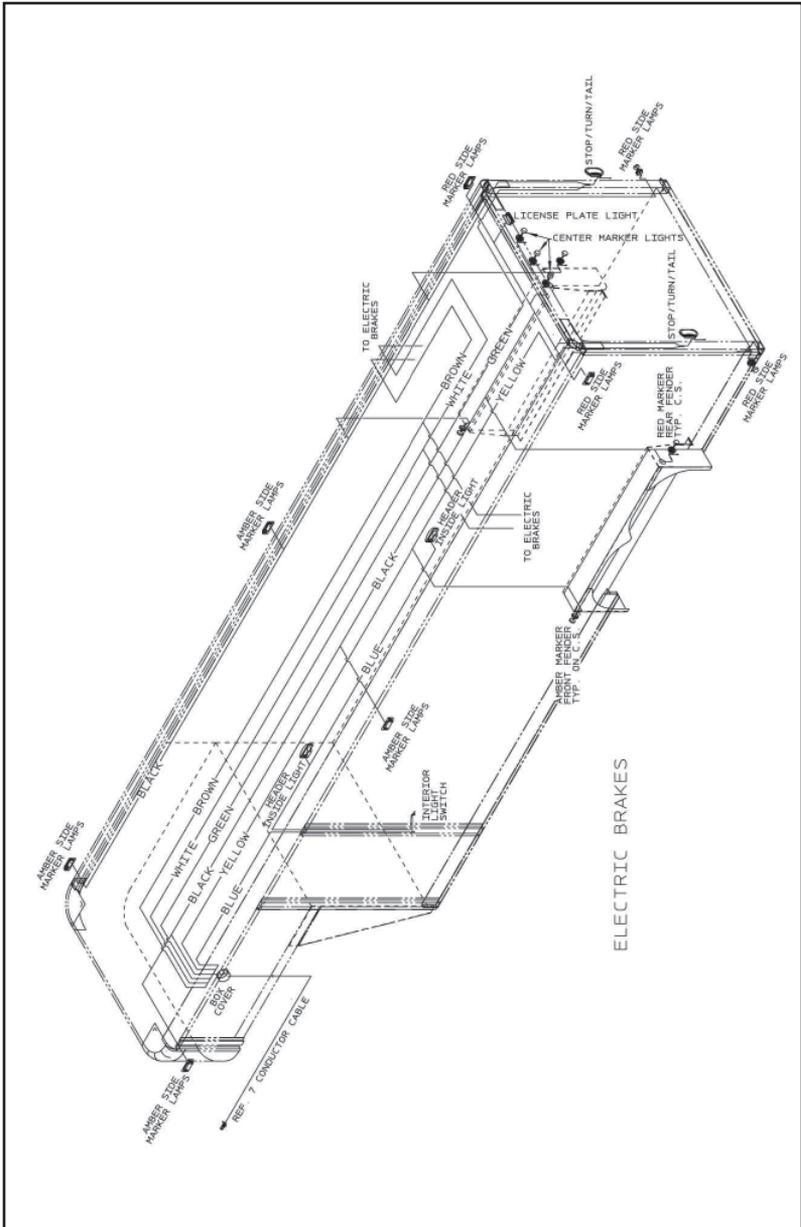
A 6-way plug is attached to the front of the power cable on your trailer. Each wire carries current from your vehicle's electrical source, through a circuit, to the various electrical devices on the trailer. Individual circuits may be traced by the various wire colors shown on the following wiring diagrams, which show the wire color and the electrical device it serves.

- TM = Interior & Exterior Lights (black)
- GD = Ground (white)
- LT = Left Turn (yellow)
- RT = Right Turn (green)
- S = Electric Brakes ONLY (brown)
- A = Accessory Back-up Lights (red) optional

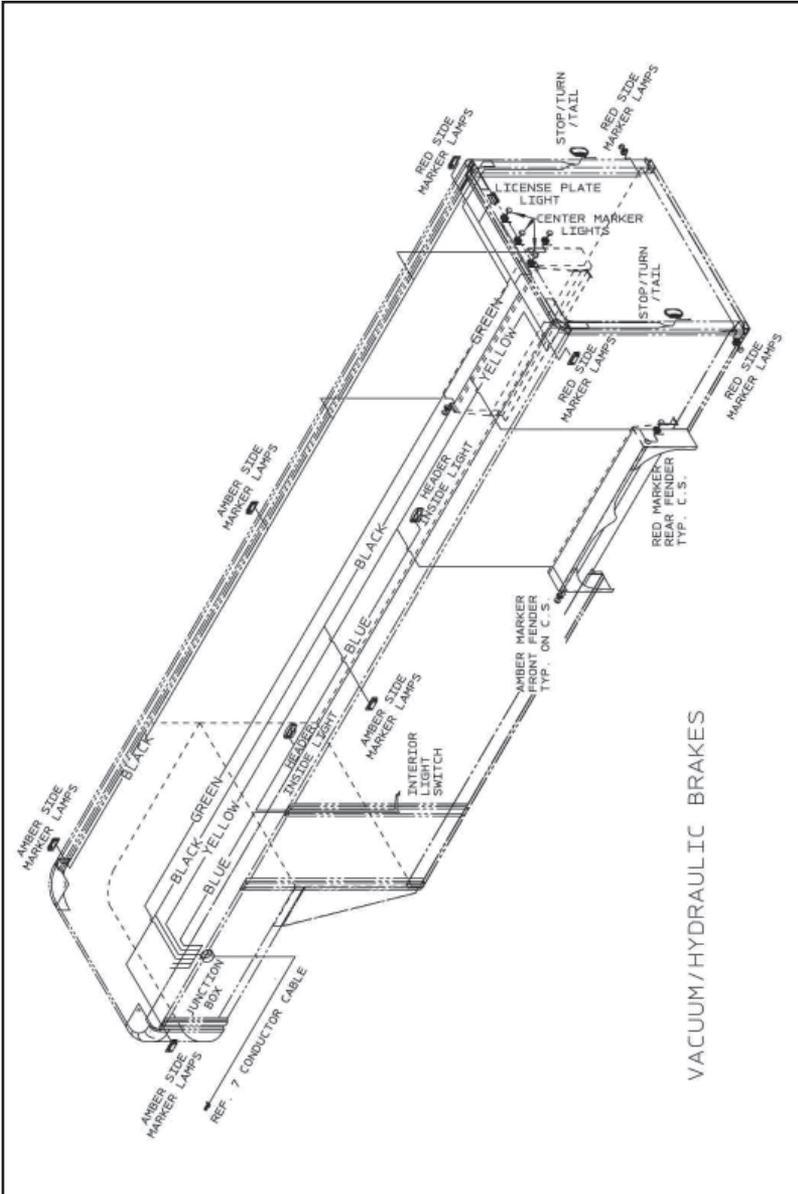


Electric Brakes - Wiring Diagram

Electrical System



Vacuum/Hydraulic Brakes - Wiring Diagram



Electrical Troubleshooting

IMPORTANT NOTICE

Be sure all electrical connections are in a clean and dry location and all connections are complete.

DO NOT cut into the system. Cutting any part of the electrical system will void electrical warranty.

Be sure all electrical connections are greased properly for clean and secure connections.

TOOLS NEEDED:

Flat Screw Driver

Test Light

Black Tape

Wiring Pliers

Wire Connectors

Shrink Tube

Dielectric Grease ONLY

No Lights

1. Check 6-way plug to see if plugged in.
2. Inspect all lights and connections for power. One light with no power could short out entire system.
3. Trace wire on light with no power back to starting point. Check for bare, pinched, or corroded wires.
4. (Rev. 1-95)

Dim Lights

1. Check 6-way plug to see if plugged in.
2. Check all grounds. Make sure you have clean grounds.
3. Check for corrosion. Corrosion may occur on wires, connections, lights (bulbs), and light.

Clearance Light Not Working

1. Check for power at 6-way plug.
2. Check for proper ground behind light. Make sure you have a clean ground.
3. Check for corrosion. Corrosion may occur on wires, connections, lights (bulbs), and light.
4. Check for burned out light.
5. Check for unplugged wires. Make sure connections are complete.





Electrical Troubleshooting

Turn Signal (Rear) Not Working

1. Check for power at 6-way plug.
2. Check for proper ground behind light. Make sure you have a clean ground.
3. Check for corrosion. Corrosion may occur on wires, connections, lights (bulbs), and light.
4. Check for unplugged wires. Make sure connections are complete.
5. Check for burned out light.

Stop Light Not Working

1. Check for power at 6-way plug.
2. Check for proper ground behind light. Make sure you have a clean ground.
3. Check for corrosion. Corrosion may occur on wires, connections, lights (bulbs), and light.
4. Check for unplugged wires. Make sure connections are complete.
5. Check for burned out light

Interior Light Not Working

1. Check for power at 6-way plug.
2. Check for proper ground behind light. Make sure you have a clean ground.
3. Check for corrosion. Corrosion may occur on wires, connections, lights (bulbs), and light.
4. Check for unplugged wires. Make sure connections are complete.
5. Check for burned out light.

Electrical Troubleshooting

License Plate Light Not Working

1. Check for power at 6-way plug.
2. Check for proper ground behind light. Make sure you have a clean ground.
3. Check for corrosion. Corrosion may occur on wires, connections, lights (bulbs), and light.
4. Check for burned out light.
5. Check for unplugged wires. Make sure connections are complete.

Only One Side Working

1. Check all grounds on side not working. Make sure you have a clean ground.
2. Check for damaged or pinched wires.

Lighted Sign Not Working (Optional)

1. Check for power at 6-way plug.
2. Check for proper ground behind light. Make sure you have a clean ground.
3. Check for corrosion. Corrosion may occur on wires, connections, lights (bulbs), and light.
4. Check for unplugged wires. Make sure connections are complete and sealed.
5. Check for burned out light.

Back Up Lights Not Working (Optional)

1. Check 6-way plug. Check connections from 6-way plug all the way to wire that connects to back up lights.
2. Check all grounds connected to back up lights. Make sure you have a clean ground.
3. Check lights.

(Rev. 1-95)





Troubleshooting Guide for Vacuum/Hydraulic Brakes

Trailer Brakes Do Not Apply

Malfunction

- a. Slave Booster on trailer out of hydraulic fluid
- b. Excessive Air in trailer hydraulic system.
- c. Vacuum supply line not connected or crossed; or vacuum control and supply lines crossed.
- d. Slave booster works, but puts out no pressure.
- e. Brake pads worn out.
- f. Combo or relay valve filter clogged with dirt.
- g. Slave booster not functioning.
- h. Combo valve not operating properly.
- i. Combo valve tied into low pressure side of frame mounted booster.

Corrective Action

- a. Refill reservoir
- b. Rebleed trailer hydraulic system.
- c. Reconnect correctly.
- d. Hydraulic piston pushed off push rod in booster, repair or replace booster.
- e. Replace brake pads.
- f. Clean or install new filter element.
- g. Replace booster.
- h. Remove and replace.
- i. Connect to line from output end of truck booster (line to truck brakes).

Combo Valve Will Not Decrease Vacuum in Control Line When Truck Brakes are Applied

Malfunction

- a. Supply and control reversed.
- b. Combo diaphragm leaking.
- c. Restricted or plugged hydraulic line to combo.
- d. Master cylinder out of hydraulic fluid.

Corrective Action

- a. Reverse vacuum line hookup.
- b. Remove and replace valve.
- c. Replace line.
- d. Refill.

Trailer Brake Application Lags Behind Application of Brakes on Towing Vehicle

Malfunction

- a. Supply and control reversed.
- b. Combo diaphragm leaking.
- c. Restricted or plugged hydraulic line to combo.
- d. Master cylinder out of hydraulic fluid.

Corrective Action

- a. Reverse vacuum line hookup.
- b. Remove and replace valve.
- c. Replace line.
- d. Refill.

Trailer Brakes Drag on Acceleration

Malfunction

- a. No closed check valve on truck or leaking valve, causing break away check valve to go shut before trailer booster completely releases.
- b. Spring too weak in trailer break away valve.

Corrective Action

- a. Clean or replace engine check valve or clean.
- b. Remove check valve, clean, replace spring or open check valve assembly.





Trailer Brakes Drag After Release

Malfunction

- a. Breakaway check valve malfunctioning.
- b. Hand control partially applied.
- c. Control vacuum line restricted.
- d. Caliper or wheel cylinder frozen.
- e. Dash or engine check valve missing or not holding vacuum.
- f. Mashed or crimped hydraulic

Corrective Action

- a. Replace spring and clean break away valve.
- b. Release hand control or adjust.
- c. Remove restriction or replace line.
- d. Repair or replace.
- e. Clean and check valve or replace with new.
- f. Replace mashed or crimped section.

Trailer Brakes Will Not Lock Up

Malfunction

- a. Trailer overloaded.
- b. Incorrect size combo valve.
- c. Air in trailer hydraulic system.
- d. Booster at maximum stroke.
- e. Vacuum low.
- f. Slave booster out of hydraulic fluid.
- g. Combo valve connected into low pressure side of frame mounted booster.

Corrective Action

- a. Reduce load carried.
- b. Install proper size valve.
- c. Rebleed hydraulic system.
- d. Rebleed hydraulic system or replace booster.
- e. Stop vacuum leak or repair truck engine.
- f. Refill reservoir and check for leaks
- g. Connect into high pressure side of booster.

Combo Valve Clatters and/or Brake Pedal Surges When Truck Brakes are Applied

Malfunction

- a. Air not completely eliminated from truck hydraulic system.
- b. Combo valve mounted in such a position that it will not allow bleeding.
- c. Dirt under poppet seat of combo valve.
- d. Truck booster or hydraulic boost unit faulty.

Corrective Action

- a. Rebleed system.
- b. Remount with hydraulic port up.
- c. Remove and replace valve.
- d. Replace or repair vacuum booster or hydraulic boost.

Trailer Brakes Lock Up and Will Not Release

Malfunction

- a. No closed check valve on truck or valve not holding, causing trailer break away valve to lock closed.
- b. Caliper or wheel cylinder frozen.
- c. Trailer hydraulic lines mashed or crimped.
- d. Hand control on combo valve applied.
- e. Combo valve stuck in the applied position.
- f. Vacuum control line broken, disconnected, or plugged.
- g. Trailer break away valve spring too weak, causing valve to close as booster tries to release, or valve installed backwards.

Corrective Action

- a. Clean or replace truck closed check valve.
- b. Repair or replace.
- c. Repair or replaced mashed or crimped section.
- d. Release hand control.
- e. Remove or replace.
- f. Remove line, connect line, or remove restriction.
- g. Replace spring and install open check seat toward booster.





When Trailer Brakes are in Full Application, Truck Brakes Only Partially Apply; or When Truck Brakes are Full Application, the Trailer Brakes Only Partially Apply

Malfunction

- a. Incorrect size combo valve installed on truck.
- b. Excessive air in trailer brake system would result in partial trailer brake application.

Corrective Action

- a. Remove and replace.
- b. Rebleed trailer hydraulic system.

Engine Will Not Reach Normal Vacuum, or it Runs Rough After Combo Valve Installation

Malfunction

- a. Vacuum leak in truck or trailer vacuum sytem.
- b. Engine out of tune or burned valves.
- c. Dust plugs not installed in quick couplers.

Corrective Action

- a. Stop Leak.
- b. Tune engine valves.
- c. Install plugs.

Trailer Brakes can be Applied with Hand Control But Not with Foot Control

Malfunction

- a. Incorrect size of combo valve.
- b. Combo valve not connected to truck master cylinder.
- c. Combo valve not tied into high pressure side of frame mounted booster.
- d. Master cylinder out of hydraulic fluid.

Corrective Action

- a. Replace with proper valve.
- b. Connect hydraulic line from combo to truck master cylinder.
- c. Connect into high pressure side.
- d. Refill master cylinder.

Trailer Brakes can be Applied with Foot Control But Not with Hand Control

Malfunction

- a. Hand control not traveling full stroke.
- b. Cable has pulled out of lever on valve.
- c. Cable kinked.

Corrective Action

- a. Eliminate restriction. Lever should travel 1-7/8" at pull cable eye.
- b. Replace cable.
- c. Replace cable.

Truck System will Not Hold a Vacuum After Engine has Been Stopped

Malfunction

- a. Dash check valve leaking.
- b. Leak in existing truck vacuum system.
- c. Leak in truck trailer vacuum system.
- d. Hand controls in applied position.
- e. Quick couplers leaking.

Corrective Action

- a. Replace check valve.
- b. Stop leak.
- c. Stop leak.
- d. Release hand control.
- e. Replace plugs.

Master Cylinder on Towing Vehicle Loses Fluid

Malfunction

- a. Hydraulic fittings or lines leaking.
- b. Leaking master cylinder on truck.
- c. Caliper or wheel cylinder leaking on truck.
- d. Seal failure in combo valve.

Corrective Action

- a. Tighten and rebleed.
- b. Remove and replace.
- c. Repair or replace.
- d. Remove and replace.





Troubleshooting Guide for Electric Brakes

Brakes Do Not Apply

Malfunction

- a. Open circuits.
- b. Severe under adjustment.
- c. Faulty Controller.
- d. Short circuit.

Corrective Action

- a. Check all connections and trace circuit for break.
- b. Adjust brakes.
- c. Test and correct.
- d. Trace circuit for shorts and check ground.

Weak Brakes

Malfunction

- a. Grease or oil on magnets or linings.
- b. Loose or corroded connections.
- c. Worn linings or magnets.
- d. Worn brake drums.
- e. Improper synchronization.
- f. Under adjustment.
- g. Excessive trailer load.

Corrective Action

- a. Clean or replace
- b. Clean and correct cause of corrosion.
- c. Replace.
- d. Machine or replace.
- e.
- f. Re-synchronize.
- g. Adjust brakes.
- h. Reduce trailer load.

Locking or Dragging Brakes

Malfunction

- a. Incorrect adjustment.
- b. Improper synchronization.
- c. Faulty controller.
- d. Loose, bent, or broken brake components.
- e. Out of round brake drums.
- f. Faulty break away switch.
- g. Loose or worn wheel bearings.

Corrective Action

- a. Adjust brakes.
- b. Re-synchronize.
- c. Test and correct.
- d. Replace components.
- e. Machine or replace.
- f. Repair or replace.
- g. Replace bearings and examine hub.

Intermittent or Surging Brakes

Malfunction

- a. Faulty controller.
- b. Loose wire connections.
- c. Shorts in wiring.
- d. Improper ground.
- e. Broken magnet leads.
- f. Out of round drums.
- g. Loose wheel bearings.

Corrective Action

- a. Test and correct.
- b. Check all connections.
- c. Trace and repair wiring.
- d. Check ground. Do Not replace through hitch.
- e. Check magnets and replace if necessary.
- f. Machine or replace.
- g. Check and adjust bearings.





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 Wilson Trailer Company.

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 Wilson Trailer Company.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free 888-327-4236 (TTY: 1-800-424-9153); go to <http://www.safercar.gov>; or write to: Administrator, NHTSA, 1200 New Jersey Avenue S.E., Washington DC 20590. You can also obtain other information about motor vehicle safety from <http://www.safercar.gov>.
(Rev. 8-08)

Keep Informed

All information contained in this manual, including illustrations, dimensions, and specifications are based on the latest product information available at the time of publication approval.

Changes are being made continually to improve the product. The right is reserved to make changes in materials, equipment, design, specifications, and models, and to discontinue models without additional notice or obligations.

Keep informed about continued product changes by remaining in contact with a Wilson Trailer Company authorized gooseneck representative on a regular basis.

Customer Assistance

When it comes to service, repair and parts, remember that your Wilson Trailer Company authorized gooseneck representative knows your vehicle best. Contact him to help you with these matters. He is sincerely interested in seeing that your trailer needs are completely satisfied.

If you need help in locating the Wilson Trailer Company authorized gooseneck representative nearest you, call us at 800-798-2002 and ask for Dealer Information Services.

If you are looking for the nearest Wilson repair facility refer to the following **Authorized Repair Facility** list.

Tire Registry Information

The purpose of tire registration is to enable the tire manufacturer to contact you directly in the event of a recall. While a recall is unlikely, it's important to make sure your tires are properly registered.

You can find a complete and up-to-date list of current tire manufacturers whose tires are commonly used on Wilson trailers at the following link on our website:

<http://www.wilsontrailer.com/tire-registry-information>

(Rev. 09-20)

Authorized Service Centers for Gooseneck ONLY

(Go to www.wilsontrailer.com for more Authorized Repair Facilities)

California Custom Trailers 10391 E Stockton Blvd. Elk Grove CA 95624	Ph #800-524-3689 Fax #916-714-7995
Tri Corners Trailer Sales & Service 29470 Hwy 34 P.O. Box 464 Wray CO 80758	Ph #970-332-5006
Olsen's Outdoor Power 2800 East 7th Street Atlantic IA 50022	Ph #800-383-4108
Stock Trailer City 144 North 7th Street Denison IA 51442	Ph #712-263-5824 Fax #712-252-9862
Carroll Distributing Trailer 205 South Iowa Ave Ottumwa IA 52501	Ph #641-684-4052 Fax #641-684-4622
Avalon Service Center Inc. 20756 Hwy 52 N Rickardsville IA 52039	Ph #800-866-1552 Fax #563-552-1555
Double O Trailer Service 225 E 19th Street Paris KY 40361	Ph #866-768-7825 Fax #859-987-4247
Lum Hughston Trucking LLC 3701 W Stoney Corners Rd PO Box 36 McBain MI 49657	Ph #231-825-2424 Fax #231-825-2449
Arena Trailer Sales 28195 Harry Ave Randolph MN 55065	Ph #507-263-4488 Fax #507-263-4225
Ironside Trailer Sales Inc. 345 2nd Ave NW PO Box 273 Harmony MN 55939	Ph #507-886-4600 Fax #507-886-4602





Authorized Service Centers for Gooseneck ONLY

(Go to www.wilsontrailer.com for more Authorized Repair Facilities)

Stenberg's Supply
32530 US 10
Motley MN 56466 Ph #218-352-6598
Fax #218-352-6309

Dahlberg Sales Inc.
East Hwy 12
PO Box 203
Willmar MN 56201 Ph #320-235-4180
Fax #320-235-4180

Mo-Kan Trailer Sales
13196 State Hwy 171
Asbury MO 64832 Ph #417-642-5852
Fax #417-642-5853

King City Motors
110 S Connecticut
PO Box 506
King City MO 64463 Ph #660-535-4814
Fax #660-535-4823

Martens Trailer Sales
25043 Dogwood Lane
PO Box 609
Kirksville MO 63501 Ph #660-665-2660
Fax #660-665-2660

Evans Trailer & Equipment Inc.
8575 E Hwy 60
Rogersville MO 65742 Ph #866-387-0433
Fax #417-753-7260

Napoleon Oil
102 Broadway
PO Box 237
Napoleon ND 58561 Ph #701-754-2684

Cow Country Sales and Service LLC
902 West Hwy 2
Box 200
Hyannis NE 69350 Ph #877-450-2356
Fax #308-458-2591

Northeast Nebraska Tire
54603 Hwy 20
PO Box 28
Osmond NE 68765 Ph #800-748-3514
Fax #402-748-3316

Ship's Cycle
1375 Mountain City Hwy
Elko NV 89801
Ph #888-860-8171
Fax #509-837-2346

Fullenkamps Frenchtown
11465 Mangen Rd
Versailles OH 45380
Ph #866-217-7440
Fax #937-526-9120

Carl's Trailer Sales Inc.
10958 US Hwy 212
PO Box 98
Belle Fourche SD 57717
Ph #800-861-4032
Fax #605-892-4272

M & J Auto Inc.
121 W Hwy 18
PO Box 308
Gregory SD 57533
Ph #605-835-9909
Fax #605-835-9908

Pioneer Garage Inc.
525 Commercial Ave NE
PO Box 129
Highmore SD 57345
Ph #800-666-5176
Fax #605-852-2795

A-Bar-K Trailer Sales
1003 E Rice Street
Sioux Falls SD 57103
Ph #605-335-8934
Fax #605-335-3091

Schuchards Westside GMC Truck
1800 9th Ave SW
PO Box 1506
Watertown SD 57201
Ph #800-526-0078
Fax #605-886-8055

Poulsen Trailer Sales Inc.
2900 S Hwy 89-91
Logan UT 84321
Ph #800-752-5636
Fax #435-753-8835

Meade Tractor Company
19209 Lee Hwy
PO Box 2497
Abingdon VA 24212
Ph #800-245-2024
Fax #276-628-9231





New Trailer Certificate of Limited Warranty



The following warranty is given to the owner of each new Wilson trailer sold by Wilson Trailer or its authorized dealers in the United States and Canada during the period of time and upon the conditions set out in the Extended Warranty Schedule.

Warranty Coverage

Wilson Trailer will repair or replace, at its option, any factory-installed part that is defective in material or factory workmanship under normal use, maintenance and service. Normal use excludes any operation in excess of GVWR (gross vehicle weight rating) and any use the Owner's Manual states is not recommended. Warranty repairs will be made and adjusted in accordance with the Extended Warranty Schedule as it appears on the following page. Any repaired or replaced parts are covered only for the remainder of this warranty. All parts replaced under this warranty become the property of Wilson Trailer.

This warranty begins on the date the trailer is delivered to the first retail purchaser or the date it is first placed into service as a demonstrator or leased trailer, whichever comes first.

The warranty registration must be completed and returned to Wilson Trailer within 14 days after the day the trailer is delivered to the owner. Failure to return the warranty registration to Wilson Trailer within the specified time will void the warranty.

This coverage applies only to Gooseneck trailers from 16' - 32' belly floor lengths with GVWR of 25,000 pounds or less. The trailers must be towed by trucks rated at no greater than a 2 ton rating. Use of tow vehicles other than specified voids all warranty.

Non-Coverage Items

This warranty does not cover the following items:

- Tires.
- Axles, wheels, tires, suspension, trailer frame and other components and structure damaged through the use of single axle dump valves.
- Non-standard features or items specified by the purchaser.
- Parts that fail due to lack of required maintenance or use of non-equivalent parts.
- Normal wear or deterioration on any part.
- Any trailer normally driven outside the United States or Canada.
- The replacement of expendable maintenance items when the replacement is not due to a defect in material or factory workmanship.
- Any preowned trailer.

(Rev. 07-16)

To Get Warranty Service

Parts claimed to be defective in material or workmanship must be brought to the attention of Wilson Trailer or the selling dealer by taking the trailer to the dealer or by written notification within ten (10) days of discovery, and any repairs or replacement must be commenced within forty-five (45) days thereafter. Wilson Trailer has the right to inspect the claimed defect and determine whether the part is covered by this warranty. If you cannot get warranty service, or you are dissatisfied with the service or with a warranty decision, contact Technical Service and Claims Manager, Wilson Trailer, P.O. Box 6300, Sioux City, IA 51106.

Owner's Responsibility

As the owner of this trailer, you have the responsibility to perform the required maintenance at the proper intervals and make reasonable and normal use of the trailer.

Limitations and Disclaimers

Wilson Trailer disclaims any responsibility for any loss of time or use of the parts or trailers in which the parts are installed, transportation, cargo loss, or other incidental or consequential damage. Any implied warranties, including the implied warranty of merchantability and fitness for a particular purpose, are limited to the duration of this written warranty. Wilson Trailer makes no warranty as to quality or performance of its trailer other than set forth above.

Some states do not allow limitations on how long an implied warranty lasts, or the exclusion or limitation of incidental or consequential damages, so the above limitations or exclusions may not apply to you. This warranty gives you special legal rights, and you may also have other rights which vary from state to state.

(Rev. 07-16)





Extended Warranty Schedule

Per Written Warranty Conditions Covering Defect in Material and Workmanship as to Construction and Assembly and Installation Only

Use Vendor's Warranty Schedule for:

- Axles
- Hubs & Drums
- Electric Brake Components
- Hydraulic Brake Components
- Wheels
- Ball Type Couplers
- 5th Wheel Couplers

Contact Local Tire Representative for:

- Tires

NOTE

% Allowable to owner (from date in service to original purchaser) for Material and Labor excluding component parts and accessories.

1-60 Months (100%)

- Bottom Rail
- Floor Crossbars
- Roof Header
- Roof Bows
- Undercarriage Assemblies

1-12 Months (100%)

- Side Panels
- Metal Flooring
- Front Assembly
- Rear Assembly
- Metal Doors
- Metal Gates
- Metal Roof Skin
- Lights and Wiring

This warranty shall not apply from owner operation exceeding GVWR rating of the trailer.

Vendor Warranties for PSGN (08/01/2012)

CARLISLE WHEELS

Structural	Lifetime	100% Parts ONLY
Coatings	90 Days	100% Parts ONLY
Out of Round or Bent Lip	1-24 Months	100% Parts ONLY

DEXTER AXLE

Torflex	1-60 Months	100% Parts & Labor
Bearings for Torflex	1-24 Months	100% Parts & Labor
Spring	1-24 Months	100% Parts & Labor

DEXTER HUB & DRUMS

	1-12 Months	100% Parts & Labor
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DEXTER BRAKE COMPONENTS

	1-12 Months	100% Parts & Labor
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DEXTER WHEELS

	1-12 Months	100% Parts & Labor
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GROTE LIGHTS

Original Owner	120 Months	Parts ONLY
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All Grote warranty must be run through Grote direct, not Wilson Trailer at 1-800-628-0809, ext. 300 Customer

REDLINE VAC OVER HYDRAULIC BRAKES

	1-12 Months	100% Parts & Labor
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REDLINE AIR OVER HYDRAULIC BRAKES

	1-12 Months	100% Parts & Labor
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DEXTER ELECTRIC/HYDRAULIC BRAKES

Brake Actuators	1-24 Months	100% Parts ONLY
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BALL TYPE COUPLER

Gooseneck Coupler	1-12 Months	100% Parts & Labor
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REDNECK

Bulldog Brand	1-60 Months	100% Parts ONLY
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BINKLEY JACK STAND

	1-24 Months	100% Parts & Labor
	25-60 Months	100% Parts





CEQUENT™ Bulldog Gooseneck Coupler

TRAILER PRODUCTS

Read, Understand, Follow and Save These Instructions

- Read, understand and follow all instructions before installing and using this product. Never allow anyone unfamiliar with these instructions to use this product.
- Read, understand and follow all instructions provided by the manufacturer of the product(s) on which this product will be installed.
- Installation of this product must conform to the following mounting instructions.
- Save these instructions for use as a reference in the future.



WARNING

Failure to follow these warnings and instructions may result in property damage, serious bodily injury, and/or death.

- Purchaser/owner must ensure that product is installed according to these instructions.
- Purchaser/owner must not alter or modify the product.
- Operator and bystanders should never position any body part under any portion of this product or the load being supported.
- Do Not allow children to play on or around this product or the load being supported.
- Weigh your trailer plus added load. Do not exceed the lesser of coupler, hitch, vehicle, ball, or trailer weight ratings (including load).
- Use only a 2-5/16" ball rated equal to or greater than the capacity of this coupler. If uncertain, contact Cequent Trailer Products at 800-604-9466 or www.cequentgroup.com.
- Always secure load, vehicle and trailer (by blocking wheels) before latching/unlatching coupler.
- If equipped with a load bearing pin, set screw must be torqued to 75-100 ft.lbs. Otherwise set screws must be torqued to 150-170 ft.lbs. Jam nut(s) must be torqued to 80-90 ft.lbs. Periodically check for proper torque and tighten if necessary. Check for wear on inner tube if retightening is needed.
- If equipped with a load bearing pin, it must be fully inserted through both the inner and outer tubes in order for the coupler to support its rated load.
- Do not tow unless the load bearing pin is fully inserted and retaining pin is installed.

- Do not exceed 8" maximum extension for this gooseneck coupler. Measure the coupler extension as the difference between fully retracted and fully extended positions. Couplers with properly installed load bearing pins and square adjustable gooseneck couplers only extend within this range.
- Keep the ball pocket, latch, and handle clean.
- All welding must be performed by an AWS certified welder.
- This product rated according to SAE J2638.

Before Towing:

- Check vehicle, hitch, ball and coupler for signs of wear or damage. Ensure that the coupler opens, closes, and the handle springs closed when released.
- Replace bent, broken, or worn parts before using this product.
- Ensure that the hitch ball is fully seated in the coupler ball pocket and the latch is closed.
- Make sure that the trailer safety chains are properly connected to the towing vehicle and trailer.
- Make sure that all trailer lighting is hooked up and working properly.

Installation Instructions



WARNING

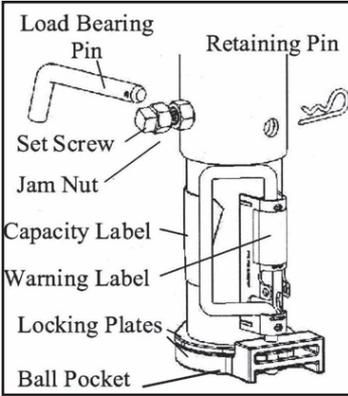
Failure to follow all installation instructions could result in coupler failure.

Before mounting the coupler confirm that there will be no interferences from the tow vehicle, tongue, ground, and any other mounted accessories while stationary or in motion. The set screw(s) must be facing the towing vehicle. Before installing, check for interference in extended and retracted positions. Check for interference again after installation is complete. Weld size, gusseting requirements, coupler height, and orientation are dependent on trailer design and customer requirements, however, the outer tube must be supported completely by attaching gussets as low as possible to the outer tube. Avoid heat damage to coupler during welding, and do not weld over or near any holes or hardware on the coupler. All welding must be performed by an AWS certified welder. The outer tube must be rigidly attached to the trailer in order for the coupler to support its maximum rated load according to SAE J2638. Coupler must remain vertical after installation to ensure proper pivoting. After installation, check to make sure that coupler operation has not been impaired in any way. Do not use coupler if its operation has been impaired. After assembly and painting, but prior to being used, any enclosed labels must be affixed to the coupler and premask removed.



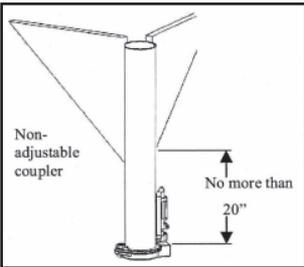


25,000# and 30,000# Gooseneck Coupler Installation Guidelines:



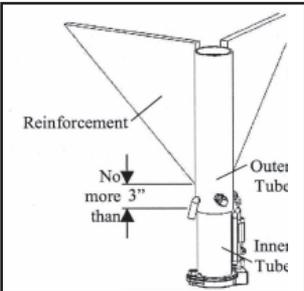
1. Be sure that the coupler will reach the towing vehicle to couple with the hitch ball while the load bearing pin is installed properly, or within the extension of the coupler if the coupler is a square adjustable gooseneck. If equipped with a load bearing pin, it must be fully inserted through both the inner and outer tubes and the retaining pin installed in order for the coupler to support its rated load.
2. Tighten the set screw and jam nut to minimize vibrations in the coupler during towing. Set screw must be torqued to 75-100 ft.lbs. Jam nut(s) must be torqued to 80-90 ft.lbs.
3. Never use the set screw as a replacement for the load bearing.

Gusseting:

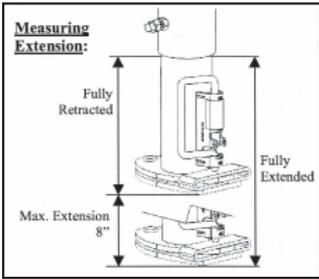


To support the coupler's rated load, reinforcements must extend down the outer tube within 3" above the bottom of the outer tube. The coupler must be held rigid and vertical, and must not be damaged by heat during installation.

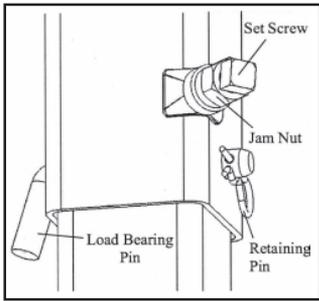
Note: Reinforcement for non-adjustable couplers must be within 20" above locking plates.



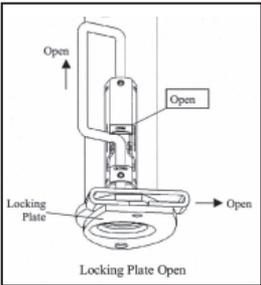
20,000# Round 25,000# Square Gooseneck Coupler Installation Guidelines:



1. Do not exceed 8" maximum extension for this gooseneck coupler.
2. Tighten the set screws and jam nut to secure the coupler during towing. If equipped with a load bearing pin and single set screw, the set screw must be torqued to 75-100 ft.lbs. For non-load bearing pin models with two set screws, torque set screws to 150-170 ft.lbs. Jam nut(s) must be torqued to 80-90 ft.lbs.
3. Never use set screw or any other device as a replacement for the load bearing pin.

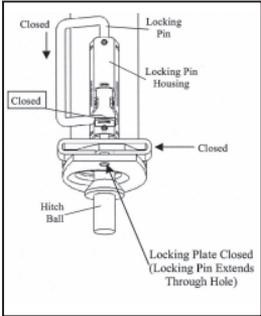


Operation



To Couple:

1. Block trailer wheels.
2. Align hitch ball beneath coupler.
3. Set the locking pin in the open position.
4. Slide the locking plate into the open position and lower the trailer onto the hitch ball.
5. Visually check that the hitch ball is fully seated in the coupler.
6. Slide the locking plate into the closed position.
7. Set the lock pin in the closed position to close the coupler.



To Uncouple:

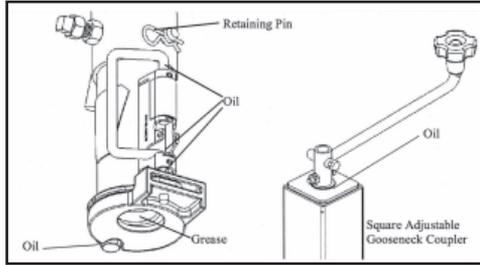
1. Block trailer wheels.
2. Set the locking pin in the open position.
3. Slide the locking plate into the open position and raise the trailer from the hitch ball.



Maintenance

Keep ball pocket and mechanism clean. The following procedures should be performed at least annually:

- Check set screw torque.
- Grease ball pocket.
- Oil pivot points with SAE 30 weight motor oil.
- Inspect retaining pin and replace if necessary.



How to Order

Use only Cequent Trailer Products' parts. Replacement parts are available through Cequent Trailer Products' Customer Service Department, 715-693-1700 or 800-604-9466. Please specify product model number.

Limited Three Year Warranty

Warranty: Cequent Trailer Products, Inc. (“We”) warrants to the original purchaser (“You”) that the product will be free from defects in material and workmanship for a period of three years under normal use and service, ordinary wear and tear excepted. If the product does not comply with this warranty, We will replace the product without charge to You and within a reasonable time or, at Cequent’s option, refund the purchase price. This warranty is not transferable.

Limitations on the Warranty: The warranty does not cover the following: (a) normal wear and tear; (b) damage through abuse, neglect, misuse, or as a result of any accident or in any other manner; (c) damage from misapplication, overloading, or improper installation; (d) improper maintenance; (e) a product altered in any manner by anyone other than us.

Obligations of Purchaser: To make a claim, contact us at 1050 Indianhead Drive, Mosinee, WI 54455, 1-800-604-9466, identify the product, and follow the instructions that will be provided. Any returned product that is replaced or refunded becomes the property of Cequent. You will be responsible for shipping costs to us. Please retain your purchase receipt to verify date of purchase. This must be produced to honor warranty claim.

Remedy Limits: Repair or replacement is the purchaser’s sole remedy under this or any other warranty on the product, whether express or implied. We shall not be liable for service or labor charges incurred in removing or replacing product or any incidental or consequential damages of any kind. We expressly disclaim any implied warranty of merchantability or fitness for particular purpose after the three-year warranty period. Some states do not allow the exclusion of incidental or consequential damages or limitation of an implied warranty so the above exclusion and limitation may not apply to you.

Legal Rights: This warranty gives you specific legal rights, and You may have rights other which vary from state to state. **ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON ANY PRODUCT SHALL BE LIMITED TO THREE YEARS FROM THE DATE OF RETAIL PURCHASE TO YOU.** Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

This warranty is governed by the laws of the United States of America and is void where prohibited.

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www.cequentgroup.com





CEQUENT™ **12,000 lb Square Jack**
TRAILER PRODUCTS

Read, Understand, Follow, and Save These Instructions

- Read, understand and follow all instructions before installing and using this product. Never allow anyone unfamiliar with these instructions to use this product.
- Read, understand and follow all instructions provided by the manufacturer of the product(s) on which this product will be installed.
- Installation of this product must conform to the following mounting instructions.
- Save these instructions for use as a reference in the future.



WARNING

Failure to follow these warnings and instructions may result in property damage, serious bodily injury, and/or death.

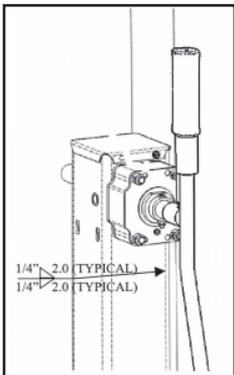
- Purchaser/owner must ensure that product is installed according to these instructions. Purchaser/owner must not alter or modify the product.
- Operator and bystanders should never position any body part under any portion of this product or the load being supported.
- Do Not allow children to play on or around this product or the load being supported.
- Fully retract and/or rotate jack before towing.
- When using the drop leg, make certain the drop leg pin is fully inserted before using the jack.
- Secure the load, vehicle and trailer from rolling (by blocking wheels)when operating jack or coupling trailer.
- Jack capacity is limited to the lesser of the jack, footplate, or caster wheel capacity.
- Never exceed maximum rated capacity. Refer to stamped markings or decals on product to obtain capacity. If uncertain, contact Cequent Trailer Products at 800-604-9466 or www.cequentgroup.com
- These jacks are designed for vertical loading. Excessive side forces may cause jack failure and must be avoided.
- If this product has a pivot tube mount, make certain the pivot pin is fully inserted through both sides on the pivot tube and the pivot mount.
- If this product has a drop leg, never attempt to adjust the drop leg when the jack is under load.

- Keep clear of pinch point at drop leg pin. The drop leg will naturally drop or retract very quickly depending on model.
- Keep clear of holes in drop leg.
- All welding must be performed by an AWS certified welder.
- Always replace bent, broken, or worn parts before using product.
- These jacks are designed for mounting to flat surfaces only.

Installation Instructions

Before mounting the jack confirm that there will be no interference from the tow vehicle, tongue, ground, and any other mounted accessories while stationary or in motion. Before installing, check for interference in all positions including handle swing (in both gears, if applicable) and swivel positions if applicable. Check for interference again after installation is complete.

Direct Mount to Load-Bearing Member:

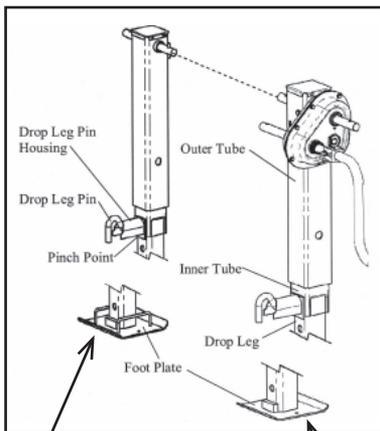


1. All welding must be performed by an AWS certified welder.
2. Three 2" long 1/4" fillet welds must be placed on both sides of the jack along the contacting surface. The welds should be as far apart as possible to maximize strength under load.
3. If mounting in a tandem application, align the jacks carefully so they raise and lower together and share the load equally.

2-Speed Shift Pattern:

The jack handle moves 5/8"-3/4" while shifting. This clearance must be accounted for during installation.

- High gear is engaged when the shaft is pushed in.
- Low gear is engaged when the shaft is pulled out.



Non-Spring Return Drop Leg
(Equipped w/handles)

Spring Return Drop Leg
(Not Equipped w/handles)

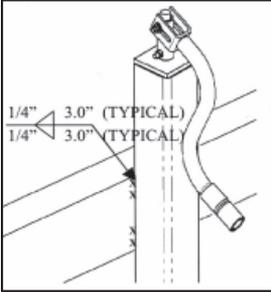
CAUTION

Spring return drop leg has high tension return spring.



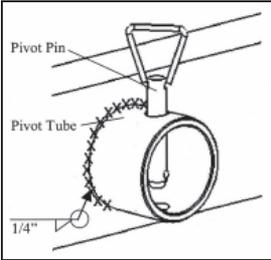


CEQUENT™ 12,000 lb Square Jack
TRAILER PRODUCTS



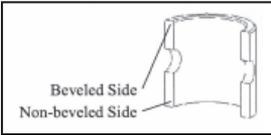
Direct Mount:

1. All welding must be performed by an AWS certified welder.
2. Place the jack at the desired location. Weld 3" in 2 locations on both sides of the jack using a 1/4" fillet weld.

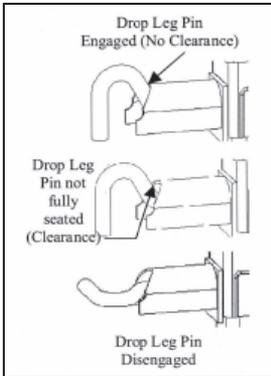


Weld-on Pivot Tube Mounting Instructions:

1. All welding must be performed by an AWS certified welder.
2. The non-beveled side of the pivot tube is welded to the tongue.
3. Place the weld-on pivot tube against the tongue and weld all around with a 1/4" fillet weld. Align one set of pivot mount holes vertically.
4. Mate the jack to the pivot tube and secure the supplied pin.



Drop Leg Operation



Spring Return Drop Leg Operation:

1. Verify that the jack is not supporting any load.
2. If extended, place your foot on foot plate to control the return of the drop leg.
3. Disengage drop leg pin by rotating to the disengaged position.
4. Carefully move the drop leg to the desired position using your foot.
5. Engage the drop leg pin by rotating it to the engaged position and into the desired adjustment hole.



WARNING

Drop leg will naturally retract very quickly.

- Verify that the drop leg pin is fully inserted into the jack by checking for no clearance between the drop leg pin and housing. If you see clearance, you must adjust the drop leg to fully seat the pin into the hole location. You may need to lubricate the drop leg pin assembly as described in the maintenance section. If you are unable to fully seat the pin **DO NOT USE**.

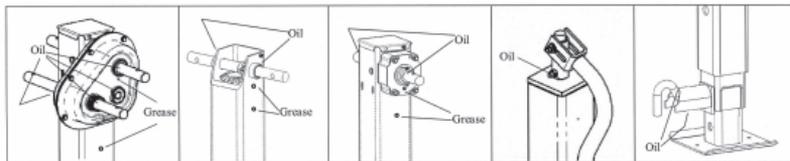
Non-Spring Return Drop Leg Operation:

- Verify that the jack is not supporting any load.
- If retracted, grasp the handle of foot plate to control the fall of the drop leg.
- Disengage drop leg pin by rotating to the disengaged position.
- Carefully move the drop leg to the desired position.
- Engage the drop leg pin by rotating it to the engaged position and into the desired adjustment hole.
- Verify that the drop leg pin is fully inserted into the jack by checking for no clearance between the drop leg pin and housing. If you see clearance, you must adjust the drop leg to fully seat the pin into the hole location. You may need to lubricate the drop leg pin assembly as described in the maintenance section. If you are unable to fully seat the pin **DO NOT USE**.

 WARNING	Drop leg will naturally fall.
---	---

Maintenance

The following procedures should be performed at least annually: The gears, bushings, and screw of the jack must be kept lubricated. For side-wind models, apply a small amount of automotive grease with a grease gun at the lubrication points found on the side of the jack near the input shaft. Rotate the jack handle to distribute the grease evenly. A lightweight oil must be applied to the input shaft bushings at both sides of the jack or gear box. For top-wind models, the screw-stem should be lubricated with a light-weight oil. If equipped, the drop leg pin and spring must be kept clean and lubricated with a light-weight oil.



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Remedy Limits. Repair or replacement is the purchaser’s sole remedy under this or any other warranty on the product, whether express or implied. We shall not be liable for service or labor charges incurred in removing or replacing product or any incidental or consequential damages of any kind. We expressly disclaim any implied warranty of merchantability or fitness for particular purpose after the three-year warranty period. Some states do not allow the exclusion of incidental or consequential damages or limitation of an implied warranty so the above exclusion and limitation may not apply to you.

Legal Rights. This warranty gives you specific legal rights, and You may have rights other which vary from state to state. **ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE ON ANY PRODUCT SHALL BE LIMITED TO THREE YEARS FROM THE DATE OF RETAIL PURCHASE TO YOU.** Some states do not allow limitations on how long an implied warranty lasts, so the above limitation may not apply to you.

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