

Drop-Deck Manual

Drop-Deck, Drop-Deck Tilt, Pan, Drop-Deck Specials



Parts Department

Phone: **320-593-4595**Toll Free: 866-239-2221
Fax: 320-693-5703



A forward from Towmaster to our valued customers.

This manual includes operations, parts and service information for our current Towmaster trailers. We have put forth our best effort to provide you with common operations and replacement part information, however, Towmaster builds many custom trailers for various customers and cannot guarantee that your particular unit's features are outlined in this manual. If you encounter this problem please contact your dealer. If they cannot be of assistance please feel free to call our Parts Department.

To ensure a more productive call have your trailer's VIN number (serial number) ready as that will be needed to locate the correct replacement parts and answer your technical questions. As a reminder, we do not sell most parts directly; we only sell parts through our dealer network.

The Team at Towmaster will make every effort to get you up and running and keep your trailer ownership as trouble free as possible.

Trailer VIN:	
Date Purchased:	
Dealer Purchased From:	

Current and complete warranty details are available at Towmaster.com.

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 Monroe Towmaster, LLC.

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 Towmaster.

To contact NHTSA, you may either call the Auto Safety Hotline toll-free at 1-800-424-9393 or write to:

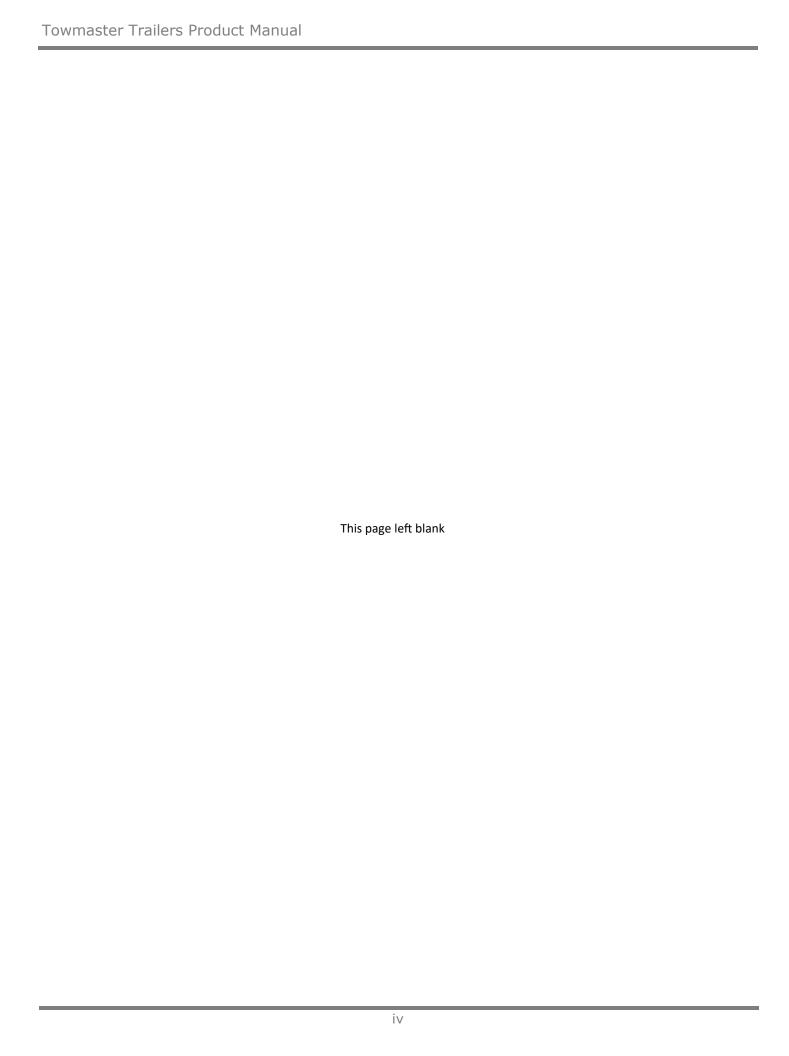
NHTSA

U.S. Department of Transportation
400 7th Street SW NSA-11
Washington, DC 20590

You may also obtain other information about motor vehicle safety from www.safecar.gov.

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SECTION A

Payload / GVWR / Tires / Swing Clearance

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GAWR, GVWR, and Payload Ratings

All payload ratings are approximate and are at 55 MPH.

Towmaster determines the GAWR and GVWR ratings of its trailers using the following determinations:

GAWR

GAWR is determined by using the weakest link between the axle capacity rating and the combined wheel and tire rating.

GVWR

GVWR is determined by taking a fleet average weight, plus payload capacity rating (as determined by the manufacturer).

Payload Capacity

Payload is determined by one of the following calculations:

If your state recognizes weight transfer to the tow vehicle transfer, then calculate payload with this formula:

GVWR - Trailer Weight = Payload Capacity

If your state ONLY recognizes GAWR or trailer capacity rating and does NOT recognize weight transfer to the tow vehicle to transfer load, then calculate using this formula:

GAWR OR Trailer capacity - Trailer Weight = Payload Capacity

Trailer weight can fluctuate depending upon dryness of the wood deck, options installed and deck length. The best way to get the actual weight of the trailer is to scale it. Our published weights and capacities are for reference only.

Tire/Wheel Load Ratings

Tire Size	Load Range	Tire Ply	Tire/Wheel Capacity	PSI	МРН	(S)ingle (D)ual	Bolt Pattern	Approx. Tire Dia. (in.)
ST225/75Rx15	D	8	2540	65	65	S	6 on 5.5 in ø	28.3
ST225/75Rx15	D	8	2540	65	65	S	8 on 6.5 in ø	28.3
235/80Rx16	E	10	3520	80	55	S	8 on 6.5 in ø	30.8
235/85Rx16	E	10	3640	80	65	S	6 on 5.5 in ø	31.7
235/85Rx16	E	10	3640	80	65	S	8 on 6.5 in ø	31.7
235/85Rx16	E	10	3305	80	65	D	8 on 6.5 in ø	31.7
235/85Rx16	G	14	3750	110	65	S	Upgrade	31.7
235/85Rx16	G	14	3415	110	65	D	Upgrade	31.7
235/75Rx17.5	Н	16	5675	125	62	D	8 on 275mm ø	30.9
215/75Rx17.5	Н	16	4805	125	62	S	8 on 6.5 in ø	29.7
215/75Rx17.5	Н	16	4540	125	62	D	8 on 275mm ø	29.7
235/75Rx22.5	Н	16	5070	120	62	D	10 on 285.75mm ø	35.9
255/70Rx22.5	Н	16	5070	120	62	D	10 on 285.75mm ø	36.1
275/75Rx22.5	Н	16	6395	125	75	D	10 on 285.75mm ø	38.2

Tire Safety Information

Per federal law, trailer manufacturers are required to place a tire and loading information decal near the serial tag on a trailer as well as detailed information on loading and tires in the owner's manual on all trailers with a GVWR (Gross Vehicle Weight Rating) of 10,000 lbs. or less. This section of our manual covers the required information.

This portion of the User's Manual contains tire safety information as required by 49 CFR 575.6.

Section 1.1 contains "Steps for Determining Correct Load Limit - Trailer".

Section 1.2 contains "Steps for Determining Correct Load Limit - Tow Vehicle".

Section 1.3 contains a Glossary of Tire Terminology, including "cold inflation pressure", "maximum inflation pressure", "recommended inflation pressure", and other non-technical terms.

Section 1.4 contains information from the NHTSA brochure entitled "Tire Safety – Everything Rides On It".

This section, as well as the preceding subsections, describes the following items;

Tire labeling, including a description and explanation of each marking on the tires, and information about the DOT Tire Identification Number (TIN).

Recommended tire inflation pressure, including a description and explanation of:

- A. Cold inflation pressure.
- B. Vehicle Placard and location on the vehicle.
- C. Adverse safety consequences of under inflation (including tire failure).
- D. Measuring and adjusting air pressure for proper inflation.
- E. Tire Care, including maintenance and safety practices.

Vehicle load limits, including a description and explanation of the following items:

- A. Locating and understanding the load limit information, total load capacity, and cargo capacity.
- B. Calculating total and cargo capacities with varying seating configurations including quantitative examples showing / illustrating how the vehicles cargo and luggage capacity decreases as combined number and size of occupants' increases. This item is also discussed in Section 3.
- C. Determining compatibility of tire and vehicle load capabilities.
- D. Adverse safety consequences of overloading on handling and stopping on tires.

1.1. 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.

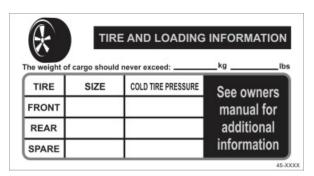
1.1. Steps for Determining Correct Load Limit – Trailer (continued)

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 under-inflation 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.

1.1.1. Trailers 10,000 Pounds GVWR or Less



- 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.

- 1.1.2. Trailers Over 10,000 Pounds GVWR (Note: These trailers are not required to have a tire information placard on the vehicle)
- 1. 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.
- 2. Locate the GVWR (Gross Vehicle Weight Rating) of the trailer on your trailer's VIN (Certification) label.
- 3. 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.

1.2. 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. $(1400-750 (5 \times 150) = 650 \text{ lbs.})$.
- 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.

1.3. 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.

<u>Carcass</u>

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

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.

<u>CT</u>

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.

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.

Non-pneumatic rim

A mechanical device which, when a non-pneumatic tire assembly incorporates a wheel, supports the tire, and attaches, either integrally or separably, 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.

Ply separation

A parting of rubber compound between adjacent plies.

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.

<u>Rim</u>

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.

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.

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.

1.4. 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. 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
- Increase the life of your tires

This area 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
- 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.

1.5. 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.

1.5.1. 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.

1.5.2. 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.

1.5.3. 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.

1.5.4. 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).

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.

1.5.5. 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.

1.5.6. 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.

1.5.7. 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.

1.5.8. 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.

1.5.9. 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.

1.5.9.1. Information on Passenger Vehicle Tires

<u>P</u>

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 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. Note: You may not find this information on all tires because it is not required by law.

Letter Rating	Speed Rating (mph)
Q	99
R	106
S	112
Т	118
U	124
н	130
V	149
W	168*
Υ	186*

^{*} 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.

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.

1.5.9.2. 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

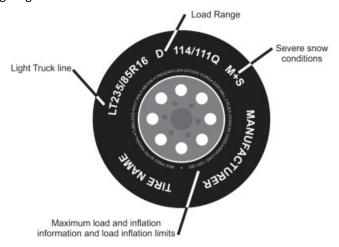
This letter indicates a tire's ability to stop on wet pavement. A higher graded tire should allow you to stop your car on wet roads in a shorter distance than a tire with a lower grade. Traction is graded from highest to lowest as "AA", "A", "B", and "C".

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".

1.5.9.3. Additional Information on Light Truck Tires

Please refer to the following diagram.



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.

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 its inflation limits.

1.6. 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

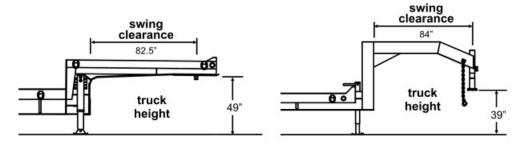
- Check tire pressure regularly (at least once a month), including the spare.
- Inspect tires for uneven wear patterns on the tread, cracks, foreign objects, or other signs of wear or trauma.
- Remove bits of glass and foreign objects wedged in the tread.
- Make sure your tire valves have valve caps.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

More information may be found at http://www.natm.com.

Gooseneck Swing Clearance

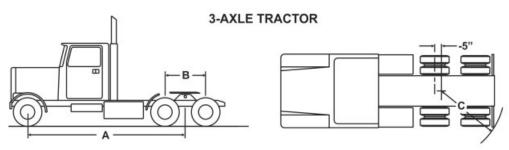
(A-Frame / Rigid Gooseneck / Hydraulic Tail)

These are the standard swing clearance dimensions on our goosenecks. Please specify swing clearance and truck height when ordering if you require a different clearance dimension.

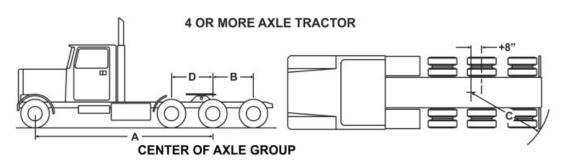


Detachable Gooseneck Swing Clearance

Use the chart below to determine the proper gooseneck length to fit your tractor. Detachable gooseneck trailers come in a variety of gooseneck length options. These dimensions will help determine the swing clearance needed. If you have any questions, please call the factory for clarification.



DIMENSION	DESCRIPTION
A=	Wheel Base
B=	Drive Axle Spacing
C=	Center of Forward Drive Axle, minus (-) 5 inches to outer edge of rear tire or mud flap



DIMENSION	DESCRIPTION		
A=	Wheel Base		
B=	Drive Axle Spacing		
C=	Center of Forward Drive Axle, plus (+) 8 inches to outer edge of rear tire or mud flap		
D=	Other Axle Spacing		
	Number of Axles		
Y N	Lift Axle		

SECTION B

Safety & Operations

Safety Overview	B-2
Wheel Torque	B-5
Cargo Loading	B-6
Towing Guide	B-9
General Operations	R-11

Safety and Operations

General Safety Overview

An Owner's Manual that provides general trailer information cannot cover all of the specific details necessary for the proper combination of every trailer, tow vehicle and hitch. You must read, understand and follow the instructions given by the tow vehicle and trailer hitch manufacturers, as well as the instructions in this manual.

Our trailers are built with components produced by various manufacturers. Some of these items have separate instruction manuals. Where this manual indicates that you should read another manual, and you do not have that manual, contact your dealer for assistance.

The safety information in this manual is denoted by the safety alert symbol:



This symbol means **ATTENTION! BECOME ALERT! YOUR SAFETY IS INVOLVED!** The level of risk is indicated by the following signal words:

! DANGER—Indicates a hazardous situation, which if not avoided, WILL result in death or serious injury

! WARNING—Indicates a hazardous situation, which if not avoided, could result in death or serious injury.

! CAUTION—Indicates a hazardous situation, which if not avoided, could result in minor or moderate injury.

NOTICE — Indicates a situation that could result in damage to the equipment or other property.

Major Hazards

Loss of control of the trailer or trailer/tow vehicle combination can result in death or serious injury. The most common causes for loss of control are:

- Improper sizing the trailer for the tow vehicle, or vice versa.
- Excessive Speed: Driving too fast for the conditions.
- Improper braking and steering under sway conditions
- Overloading and/or improper weight distribution.
- Not keeping lug nuts tight.
- Failure to adjust driving behavior when towing a trailer.
- Not maintaining proper tire pressure
- Improper or mis-coupling of the trailer to the hitch.

Improper Sizing Of Trailer To Tow Vehicle

Trailers that weigh too much for the tow vehicle can cause stability problems, which can lead to death or serious injury. The additional strain put on the engine and drive-train may lead to serious tow vehicle maintenance problems.

Do not exceed the maximum towing capacity of your tow vehicle. The towing capacity of your tow vehicle, in terms of maximum Gross Trailer Weight (GTW) and maximum Gross Combined Weight Rating (GCWR) can be found in the tow vehicle Owner's Manual.

! DANGER —Use of an under-rated hitch, ball or tow vehicle can result in loss of control leading to death or serious injury. Make certain your hitch and tow vehicle are rated for your trailer.

! WARNING — Driving too fast for conditions can result in loss of control and cause death or serious injury. Adjust speed down when towing trailer. With ideal road conditions, the maximum recommended speed for safely towing a trailer is 55 mph. Driving too fast can cause the trailer to sway, thus increasing the possibility for loss of control. Also your tires may overheat, increasing the possibility of a blowout.

Adjust Driving When Towing Trailer

When towing a trailer, you will have decreased acceleration, increased stopping distance, and increased turning radius.

The trailer will change the handling characteristics of the tow vehicle, making it more sensitive to steering inputs and more likely to be pushed around in windy conditions or when being passed by large vehicles. In addition, you will need a longer distance to pass, due to slower acceleration and increased length. With this in mind:

- When encountering trailer sway, take your foot off the accelerator, and steer as little as possible in order to stay on the road. Use small "trim-like" steering adjustments. Do not attempt to steer out of the sway; you'll only make it worse. Also do not apply the tow vehicle brakes to correct trailer swaying. On the other hand, application of the trailer brakes alone will tend to straighten out the combination, especially when going downhill.
- Check rearview mirrors frequently to observe trailer and traffic.
- Be aware of trailer height, especially when approaching bridges, roofed areas and trees.
- Be alert for slippery conditions. You are more likely to be affected by slippery road surfaces when driving a tow vehicle with a trailer, than driving a tow vehicle without a trailer.
- Anticipate the trailer "swaying." Swaying can be caused by excessive steering, wind gusts, roadway edges, or by the trailer reaction to the pressure wave created by passing trucks and busses.
- Use lower gear when driving down steep or long grades. Use the engine and transmission as a brake. Do not ride the brakes, as they can overheat and become ineffective.

Trailer Not Properly Coupled To Hitch

It is critical that the trailer be securely coupled to the hitch, and that the safety chains and emergency breakaway brake lanyard are correctly attached. Uncoupling may result in death or serious injury to you and to others.

! WARNING — Proper selection and condition of the coupler and hitch are essential to safely towing a trailer. A loss of coupling may result in death or serious injury. Hitch size must match coupler size. Be sure hitch load rating is equal to or greater than load rating of the coupler. Be sure hitch components are tight before coupling trailer to tow vehicle. Observe hitch for wear, corrosion and cracks before coupling. Replace worn, corroded or cracked hitch components before coupling trailer to tow vehicle.

! WARNING — An improperly coupled trailer can result in death or serious injury. Do not move the trailer until:

- Coupler is secured and locked to hitch.
- Safety chains are secured to tow vehicle.
- Trailer jack(s) are fully retracted.
- · Trailer brakes are checked.
- Tires and wheels are checked.
- Breakaway switch is connected to tow vehicle;
- The trailer lights are connected and checked.
- Load is secured to trailer.

Proper Use Of Safety Chains

Safety chains are provided so that control of the trailer can be maintained if your trailer comes loose from the hitch.

! WARNING — Improper rigging of the safety chains can result in loss of control of the trailer and tow vehicle, leading to death or serious injury, if the trailer uncouples from the tow vehicle. Cross chains underneath hitch and coupler with enough slack to permit turning and to hold tongue up, if the trailer comes loose.

Fasten chains to frame of tow vehicle. Do not fasten chains to any part of the hitch unless the hitch has holes or loops specifically for that purpose.

Proper Connection Of Breakaway Brake

If equipped with brakes, your trailer will be equipped with a breakaway brake system that can apply the brakes on your trailer if your trailer comes loose from the hitch. You may have a separate set of instructions

for the breakaway brake if the trailer is so equipped. The breakaway brake system, including battery, must be in good condition and properly rigged to be effective.

! WARNING — An ineffective or inoperative breakaway brake system can result in a runaway trailer, leading to death or serious injury if the coupler or hitch fails. Breakaway lanyard must be connected to the tow vehicle, NOT to any part of the hitch.

Before towing trailer, test the function of the breakaway brake system. If the breakaway brake system is not working, do not tow the trailer. Have it serviced or repaired.

Matching Trailer And Hitch

! DANGER — Be sure hitch and tow vehicle are rated for the Gross Vehicle Weight Rating (GVWR) of your trailer.

Use of a hitch with a load rating less than the load rating of the trailer can result in loss of control and may lead to death or serious injury. Use of a tow vehicle with a towing capacity less than the load rating of the trailer can result in loss of control, and may lead to death or serious injury.

Worn Tires, Loose Wheels And Lug Nuts

Inspect all trailer tires before each tow. If a tire has a bald spot, bulge, cut, cracks, or is showing any cords, replace the tire before towing.

If a tire has uneven tread wear, take the trailer to a trailer service center for diagnosis. Uneven tread wear can be caused by tire imbalance, axle misalignment or incorrect inflation.

Tires with too little tread will not provide adequate frictional forces on wet roadways and can result in loss of control, leading to death or serious injury.

Improper tire pressure causes increased tire wear and may reduce trailer stability, which can result in a tire blowout or possible loss of control. Therefore, before each tow you must also check the tire pressure.

The proper tire pressure is listed on the Certification / VIN label, normally mounted on the front left side of the trailer, and should be checked when tires are cold. Allow 3 hours cool-down after driving as much as 1 mile at 40 mph before checking tire pressure.

! WARNING — Inflate tires to pressure stated on the Certification / VIN label. Improper tire pressure may cause unstable trailer. Blowout and loss of control may occur. Death or serious injury can result. Make sure of proper tire pressure before towing trailer.

The tightness of the wheel nuts or bolts is very important in keeping the wheels properly seated to the hub. Before each tow, check to make sure they are tight.

! WARNING — Metal creep between the wheel rim and wheel nuts or bolts may cause rim to loosen. Death or injury can occur if wheel comes off. Tighten lug nuts or bolts before each tow.

The proper tightness (torque) for wheel nuts or bolts and tightening sequence is listed in the Inspection, Service and Maintenance section of this manual. Use a torque wrench to tighten the lug nuts and use the crisscross star pattern sequence. Improper tightening of the lug nuts voids the axle warranty.

Wheel nuts or bolts are also prone to loosen after first being assembled. When driving a new trailer (or after wheels have been remounted), check to make sure they are tight after the first 10, 25 and 50 miles of driving and before each tow thereafter.

Failure to perform this check can result in a wheel separating from the trailer and a crash, leading to death or serious injury.

!WARNING — Wheel nuts or bolts are prone to loosen after being first assembled. Death or serious injury can result.

Check wheel nuts or bolts for tightness on a new trailer, and after re-mounting a wheel at 10, 25 and 50 miles.

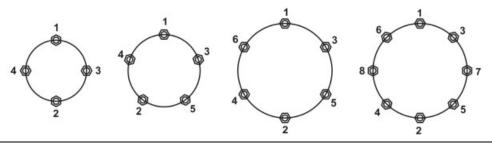
! WARNING — Inadequate wheel nut or bolt torque can cause a wheel to separate from the trailer, leading to death or serious injury. Verify wheel nuts or bolts are tight before each tow.

Wheel Torque Requirements

All torque specs are ft.-lbs.

Wheel Size	1st Stage	2nd Stage	3rd Stage
12"	20-25	35-40	50-75
13"	20-25	35-40	50-75
14"	20-25	50-60	90-120
15"	20-25	50-60	90-120
16"	20-25	50-60	90-120
16.5"x6.75"	20-25	50-60	90-120
16.5"x9.75"	55-60	120-125	175-225
14.5" Demount	Tighten sequentially to ——>		85-95
17.5"	50-60	190-200	275-325

Torque Sequence



Improper Loading

The total weight of the load you put on the trailer, plus the empty weight of the trailer itself, must not exceed the trailer's Gross Vehicle Weight Rating (GVWR).

If you do not know the empty weight of the trailer plus the cargo weight, you must weigh the loaded trailer at a commercial scale. In addition, you must distribute the load in the trailer such that the load on any axle does not exceed the Gross Axle Weight Rating (GAWR).

If your trailer is equipped with a Tire & Loading Information Placard, mounted next to the Certification / VIN label, the cargo capacity weight stated on that placard is only a close estimate. The GVWR and GAWR are listed on the Certification / VIN label normally located on the front left side of the trailer.

! WARNING — An overloaded trailer can result in failure or loss of control of the trailer, leading to death or serious injury. Never load a trailer so that the weight on any tire exceeds its rating. Never exceed the trailer Gross Vehicle Weight Rating (GVWR) or axle Gross Axle Weight Rating (GAWR).

Unsafe Load Distribution

Improper front/rear load distribution can lead to an unstable trailer or poor tow vehicle handling. Poor trailer stability results from tongue weights that are too low, and poor tow vehicle stability results from tongue weights that are too high.

Refer to the "Loading and Unloading" section for more information.

In the following table, the second column shows the rule of thumb percentage of total weight of the trailer plus its cargo (Gross Trailer Weight, or "GTW") that should appear on the tongue of the trailer. For example, a large trailer with a loaded weight of 6,000 pounds, should have 10-15% of 6,000 pounds (600-900 lbs.) on the hitch.

Tongue Weight as a Percentage of Loaded Trailer Weight			
Type of Hitch Percentage			
Dall Hitah an Dina C Dinata	10%-15% for large trailers		
Ball Hitch or Ring & Pintle	6%-10% for small trailers		

The numbers quoted are for example purposes only and should be tailored to the specific trailer.

For questions regarding the actual percent of tongue weight for the trailer, check with the manufacturer for specifics.

The trailer will have the proper weight distribution if the load is evenly distributed in the dump body. For non-flowable (discrete) loads locate the load such as to provide the proper tongue weight. After loading, be sure to check that none of the axles are overloaded.

Uneven left/right load distribution can cause tire, wheel, axle or structural failure.

Unsafe Load Distribution—con't.

Be sure your trailer is evenly loaded left/right. Towing stability also depends on keeping the center of gravity as low as possible.

!WARNING — Improper tongue weight (load distribution) can result in loss of control of the trailer, leading to death or serious injury. Make certain that tongue weight is within the allowable range.

Be sure to:

- Distribute the load evenly, right and left.
- Keep the center of gravity low.
- Distribute the load front-to-rear to provide proper tongue weight (see chart).

A flowable load must be evenly distributed throughout the body.

Shifting Cargo

Since the trailer "ride" can be bumpy and rough, you must secure the cargo so that it does not shift while the trailer is being towed.

! WARNING — A shifting load can result in failure, or to loss of control of the trailer, and can lead to death or serious injury. You must tie down all loads with proper sized fasteners, chains, straps, etc. to prevent the load from shifting while towing.

If the door latch is equipped with a catch that has a hole for a linchpin, use a linchpin to prevent the door latch from opening.

! WARNING — If a door opens, your cargo may be ejected onto the road, resulting in death or serious injury to other drivers. Always secure door latch after closing. Place a linchpin in the catch.

Inappropriate Cargo

The trailer may be designed for specific cargo. If your trailer is designed for specific cargo, only carry that cargo in the trailer. A trailer must not be used to carry certain items, such as people, containers of hazardous substances or containers of flammable substances.

! WARNING — Do not transport people inside or on your trailer. Besides putting their lives at risk, the transport of people in or on a trailer is illegal.

! WARNING — Do not transport flammable, explosive, poisonous or other dangerous materials in your trailer. The exception is fuel in the tank of a vehicle or equipment being hauled.

Inoperable Brakes or Lights

If your trailer has electric brakes, your tow vehicle will have an electric brake controller that sends power to the trailer brakes.

Before towing the trailer, you must operate the brake controller while trying to pull the trailer in order to confirm that the electric brakes operate. While towing the trailer at less than 5 mph, manually operate the electric brake controller in the tow vehicle cab. You should feel the operation of the trailer brakes.

If your trailer has hydraulic "surge" brakes, pull the emergency breakaway brake lanyard to check the operation of the surge mechanism.

Be sure that the electric brakes and all of the lights on your trailer are functioning properly before towing the trailer. Electric brakes and lights on a trailer are controlled via a connection to the tow vehicle, generally a multi-pin electrical connector.

! WARNING — Improper electrical connection between the tow vehicle and the trailer will result in inoperable lights and electric brakes, and can lead to collision.

Before each tow:

- Check that the electric brakes work by operating the brake controller inside the tow vehicle.
- Check that all lights and turn signals work.

You must provide mirrors that allow you to safely observe approaching traffic. Standard mirrors usually do not provide adequate visibility for viewing traffic to the sides and rear a towed trailer.

Trailer Modifications

Modification of the trailer structure or alteration of your trailer can make the trailer unsafe and will void all warranty options. Before making any alteration to the trailer, contact your dealer or the manufacturer and describe the alteration you are contemplating.

Trailer Towing Guide

Driving a vehicle with a trailer in tow is vastly different from driving the same vehicle without a trailer in tow. Acceleration, maneuverability and braking are all diminished with a trailer in tow. It takes longer to get up to speed; you need more room to turn and pass, and more distance to stop when towing a trailer.

You will need to spend time adjusting to the different feel and maneuverability of the tow vehicle with a loaded trailer. Because of the significant differences in all aspects of maneuverability when towing a trailer, the hazards and risks of injury are also much greater than when driving without a trailer.

You are responsible for keeping your vehicle and trailer in control, and for all the damage that is caused if you lose control of your vehicle and trailer.

Find an open area with little or no traffic for your first practice. Before you start towing the trailer, you must follow all of the instructions for inspection, testing, loading and coupling. Also, before you start towing, adjust the mirrors so you can see the trailer as well as the area to the rear of it.

Drive slowly at first, 5 mph or so, and turn the wheel to get the feel of how the tow vehicle and trailer combination responds. Next, make some right and left hand turns. Watch in your side mirrors to see how the trailer follows the tow vehicle. Turning with a trailer attached requires more room.

Stop the rig a few times from speeds no greater than 10 mph. If your trailer is equipped with brakes, try using different combinations of trailer/electric brake and tow vehicle brake. Note the effect that the trailer brakes have when they are the only brakes used. When properly adjusted, the trailer brakes will come on just before the tow vehicle brakes.

It will take practice to learn how to back up a tow vehicle with a trailer attached. Take it slow. Before backing up, get out of the tow vehicle and look behind the trailer to make sure that there are no obstacles.

Some drivers place their hands at the bottom of the steering wheel, and while the tow vehicle is in reverse, "think" of the hands as being on the top of the wheel. When the hands move to the right (counter- clockwise, as you would do to turn the tow vehicle to the left when moving forward), the rear of the trailer moves to the right.

Conversely, rotating the steering wheel clockwise with your hands at the bottom of the wheel will move the rear of the trailer to the left, while backing up. Be careful not to allow the trailer to turn too much, because it will hit the rear of the tow vehicle. To straighten the rig, either pull forward, or turn the steering wheel in the opposite direction.

Safe Trailer Towing Guidelines

Before towing, check coupling, safety chain, brakes, tires, wheels and lights.

Check the lug nuts or bolts for tightness.

Recheck the load tie downs to make sure the load will not shift during towing.

Check coupler tightness after towing 50 miles. Adjust the brake controller to engage the trailer brakes before the tow vehicle brakes. Follow the brake controller manufacturer's literature.

Use your mirrors to verify that you have room to change lanes or pull into traffic.

Use your turn signals well in advance.

Allow plenty of stopping space for your trailer and tow vehicle.

Safe Trailer Towing Guidelines—con't.

Use lower gears for climbing and descending grades. Do not ride the brakes while descending grades; they may get so hot that they stop working. Then you will potentially have a runaway tow vehicle and trailer.

Do not apply the tow vehicle brakes to correct extreme trailer swaying. Instead, lightly apply the trailer brakes with the hand controller.

Make regular stops, about once each hour. Confirm that:

- The coupler is secure to the hitch and is locked.
- Electrical connectors are made.
- There is appropriate slack in safety chains.
- There is appropriate slack in breakaway lanyard.
- The tires are not visibly low on pressure.
- The cargo is secure and in good condition. Slow down for bumps in the road.

Do not brake while in a curve unless absolutely necessary. Instead, slow down before you enter the curve.

Do not drive so fast that the trailer begins to sway due to speed. Generally never drive faster than 55 m.p.h.

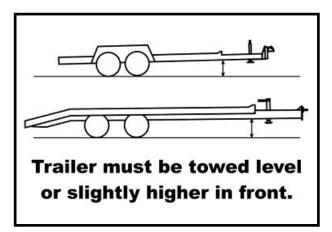
Allow plenty of room for passing. A rule of thumb is that the passing distance with a trailer is 4 times the passing distance without a trailer.

Towing Tips and Checklist

✓	Tip
	Check over-all condition of trailer: tie downs, ramps, hitch for proper operation.
	Make sure the trailer coupler and towing coupler are the same size and proper capacity.
	Back tow vehicle up to trailer, and hook up. Using a "spotter" is the easiest method.
	Trailer must be connected to tow vehicle before loading or unloading.
	Lock tow vehicle brakes before loading and unloading trailer, and use chock blocks.
	After connected to tow vehicle, make sure trailer is level, or slightly higher in front, adjust as needed.
	Attach safety chains (crossing them), electrical plug and break-a-way switch (electric brakes). Make they are not dragging.
	Check for proper tire pressure on trailer and tow vehicle.
	Check all lighting on trailer and tow vehicle for proper operation. Make sure running lights are on.
	Make sure deck is clear of all debris before loading and before heading out onto the road.
	Secure cargo or equipment to trailer, secure load on all 4 corners if possible, do not over-tighten binders.
	Secure all loading ramps, deck latches (tilt models) and make sure jack stand is in up position, and stow chock blocks.
	After traveling a short distance, stop and make sure load is secure, and that all tie downs are tight.
	Allow for greater braking distance when pulling a trailer, and generally travel at slower speeds.

General Operation

Before you begin towing, make sure you understand the basic operation of the equipment and understand how to load and unload your trailer.



PROPER TOWING POSITION

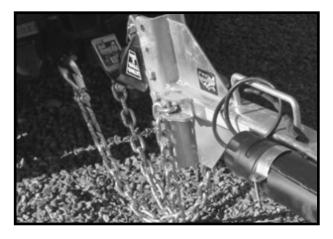
When properly loaded and attached to the tow vehicle, the hitch of the trailer MUST be level or slightly higher than level for proper towing.

Adjust couple height as necessary to achieve proper tongue height.



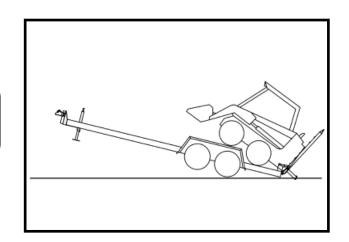
BREAK-AWAY SAFETY SYSTEM

Make sure the Break-Away Safety System battery is fully charged. Attach cable directly to tow vehicle (not to a chain link).



SAFETY CHAINS

When attaching safety chains to tow vehicle, cross the chains underneath the tongue.



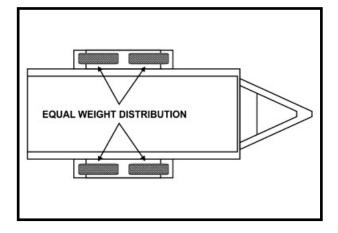
LOADING / UNLOADING

Trailer MUST BE SECURELY attached to tow vehicle BEFORE loading or unloading equipment.



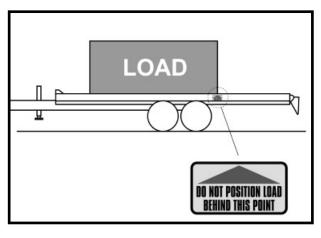
PROPER LOAD DISTRIBUTION

The load must be properly distributed between the axles and from side to side on the trailer.



PROPER LOAD DISTRIBUTION

All tires on the trailer must have equal weight distribution.

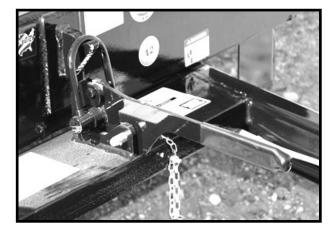


TILT-BED TRAILERS

DO NOT POSITION LOAD BEYOND LOAD-BEARING POINT on tilt-bed trailers.

Tilt Bed Trailer Latch Operation

Our tilt-bed trailer decks are held to the frame using one of two styles of latches.



UNLOCKING / LOCKING U-BOLT LATCH

Make sure you are standing clear of the tilt deck.

Remove the keeper pin and slowly lift on the latch handle.

Carefully move the U-Bolt away from the latch hook.

Reverse operation when locking tilt-bed to frame.

If adjustment is necessary, tighten nuts on U-bolt.



UNLOCKING LEVER LATCH

Make sure you are standing clear of the tilt-deck.

Remove keeper pin and lift latch handle.

While lifting latch handle, place the keeper pin back into position to hold latch handle out of the way until deck is tilted.



LOCKING LEVER LATCH

BEFORE tilting deck back onto frame, remove keeper pin so that the latching lever is in down position.

Deck should automatically latch to frame.

Push latch handle securely down and replace keeper pin.

Operating Ramps

We use two styles of ramp hold-ups on our drop-deck trailers.



SOLID-BAR RAMP HOLD-UPS

Make sure you are standing clear of ramp. If ramp is too heavy, have a second person help lift the ramp.

While holding ramp upright, remove the keeper pin and slowly remove hold-up bar.

Set hold-up bar on the ground and slowly set down the ramp.

Reverse operation to store ramp in transport position.



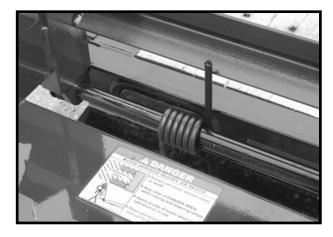
AUTO-LATCH RAMP HOLD-UPS

Make sure you are standing clear of ramp. If ramp is too heavy, have a second person help lift the ramp.

While holding ramp upright, lift the Auto-Latch handle.

Set ramp onto the ground.

Lift ramp to upright position. Auto-Latch lever should lock ramp into place. See that the ramp is secure before letting go of the ramp.



RAMP SPRINGS

Some ramps may not come equipped with helper springs. Helper springs may be added or in some cases, springs may need to be replaced.

SECTION C

General Maintenance



General Maintenance & Operation

General Maintenance Overview

This section is an overview of the general maintenance required to keep your trailer running safe and at its best. Further maintenance may be required.

TIRES

Check daily, and maintain proper inflation.

WHEEL NUTS

Check weekly and maintain proper torque specifications.

WHEEL BEARINGS

Check every 3000 miles, grease as necessary. If equipped with an oil bath hub, check oil level daily. Use manufacturer's recommended oil for oil bath hubs. Check for overheating and excessive wear when operating in extreme conditions (mud, water, sand, etc.). Also inspect when hub is pulled for any reason.

BATTERY

Keep battery charged. Check battery break-away system regularly for proper charge.

ELECTRICAL PLUG

Check trailer plug and truck receptacle for damage or corrosion, and make sure they fit tight. Replace if necessary.

LIGHTS / WIRING

Inspect all lights for proper operation daily, and replace if necessary. Connect power source, preferably tow vehicle to trailer, and check all lights for proper operation or loose connections. Check wiring for damage or corrosion. Replace as needed.

PARKING JACK

Check for any physical damage or improper operation due to corrosion. Replace if severely damaged or rusted. Check bolts for tightness daily and be sure lock washers and/or lock nuts are used.

TIE DOWN RINGS

Check daily for physical damage to D-rings, clips, welds, or area around clips. Repair or replace immediately.

SUSPENSION BOLTS

After an initial break-in period of 150 miles and periodically thereafter every 1000 mile, check all nuts and bolts for proper torque. Check eye bushings in springs for wear and replace part if wear shows.

DECK CUSHION CYLINDER

Check for leaks and replace or repair cylinder as necessary.

COUPLER

Inspect visually and replace if showing excessive wear.

GENERAL MAINENTANCE CON'T.

BRAKE CONTROLLER

Check controller daily for proper operation both automatic with tow vehicle foot pedal and manually. Replace if defective or damaged. Adjust for proper braking effect for load being towed. Trailer braking should be adjusted so that trailer brakes react and apply at the same time as tow vehicle brakes come on, never after tow vehicle brakes.

MAGNETS

Check at any indication of braking problems, at brake replacement, at bearing inspection, or any time a hub is pulled. Magnets should be replaced if bare wire is showing at wear surface, surface of magnet is gouged, scored, or magnet is worn unevenly.

BRAKE CLEANING/INSPECTION

Trailer brakes must be inspected and serviced at yearly intervals or more often as use and performance requires. Magnets and shoes must be changed when they become worn or scored thereby preventing adequate vehicle braking. Clean the backing plate, magnet arm, magnet, and brake shoes. Make certain that all the parts removed are replaced in the same brake and drum assembly. Inspect the magnet arm for any loose or worn parts. Check shoe return springs, hold down springs, and adjuster springs for stretch or deformation and replace if required. ASBESTOS DUST HAZARD! Since some brake shoe friction materials contain asbestos, certain precautions need to be taken when servicing brakes: (1) Avoid creating or breathing dust. (2) Avoid machining, filing or grinding the brake linings. (3) Do not use compressed air or dry brushing for cleaning. (Dust can be removed with a damp brush.)

BRAKE ADJUSTMENT

Brakes should be adjusted (1) after the first 200 miles of operation when the brake shoes and drums have "seated," (2) at 3000 mile intervals, (3) or as use and performance requires. The brakes should be adjusted in the following manner:

- 1. Jack up trailer and secure on adequate capacity jack stands. Do not lift or place supports on any part of the suspension system. 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 starwheel of the adjuster assembly to expand the brake shoes. Adjust the brake shoes out until the pressure of the linings against the drum makes the wheel very difficult to turn. (With drop spindle axles, a modified adjusting tool with about an 80 degree angle should be used.)
- 4. Rotate the starwheel in the opposite direction until the wheel turns freely with a slight lining drag.
- 5. Replace the adjusting hole cover and lower the wheel to the ground. Repeat the above procedure on all brakes.

GREEN BRAKES

A "green brake" is an unground, unburnished brake. Normal manufacturing tolerances dictate that there is a break-in period required after which the lining will seat into a perfect concentric situation. During this break-in period, the user must be aware that additional brake adjustments will be mandatory to achieve optimum braking performance.

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SECTION D

Decals

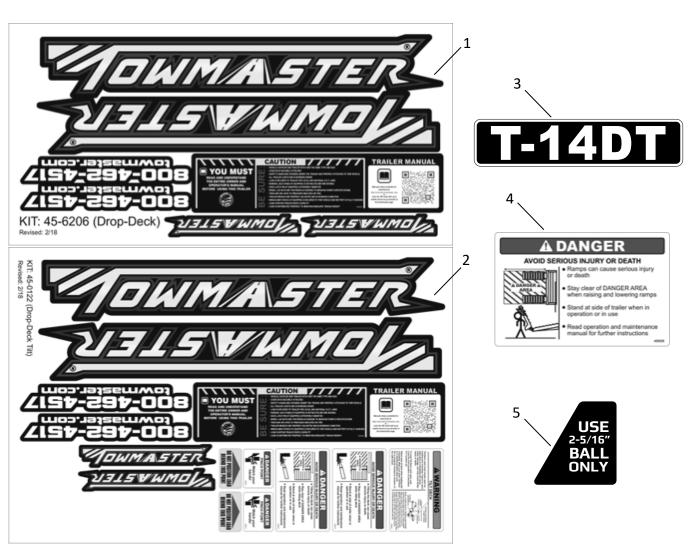
Decals

Every Towmaster trailer is equipped with logo and safety decals. Each trailer receives one Decal Kit and two Model Number Decals, along with miscellaneous information decals provided by some component vendors. Towmaster makes all of our decals available to purchase for replacement, sold as a kit. If any decals are damaged or faded, we suggest they be replaced. The following information shows decal placement and available kits.

Due to updates in wording, materials, and design, the replacement kits you receive may not be exactly like the ones that came on your trailer. When ordering decal kits, you will receive the most current kits available.

All trailers receive a CAUTION overview decal. It explains briefly safety aspects of using the trailer. For full safety instructions, know your D.O.T. laws and read the manual. Should the trailer manual be missing, you can scan the QR code on the decal and read the PDF version.

ITEM	PART#	QTY	DECAL DESCRIPTION
1	456206	1	DROP-DECK DECAL KIT - ALL DROP-DECK TRAILERS
2	450122	1	DROP-DECK TILT DECAL KIT - ALL DROP-DECK TILT BED TRAILERS
3	N/A	2	MODEL NAMEPLATE DECALS - SPECIFY MODEL NAME
4	450029	2	RAMP SAFETY DECAL
5	450004	2	USE 2-5/16" BALL DECAL (2-5/16" HITCH ONLY)



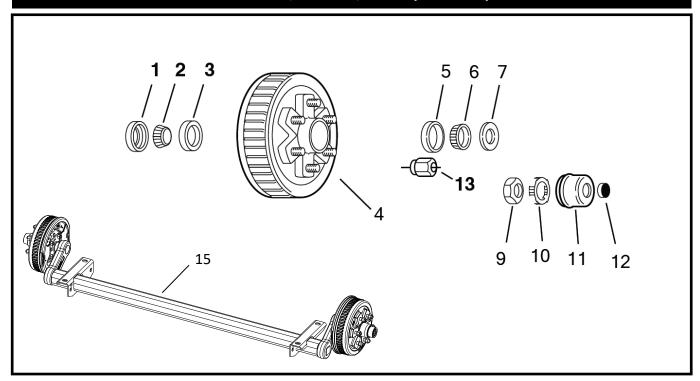
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SECTION E

Axles / Suspension / Wheels & Tires

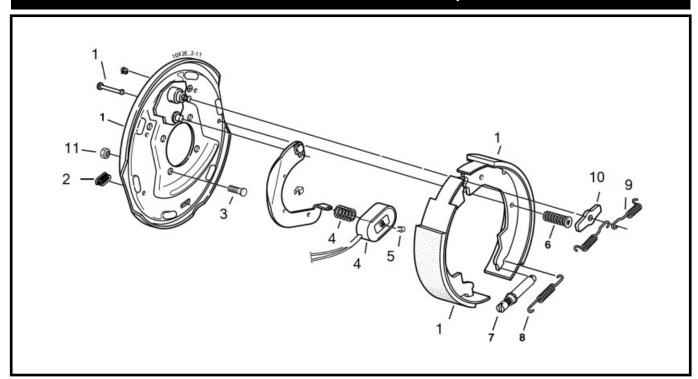
3.5K	E-2
6K/7K	E-5
7.2K	
8K	
10K	
12K	
Wheels and Tires	E-21

3.5K HUB / DRUM / AXLE (E-Z LUBE)



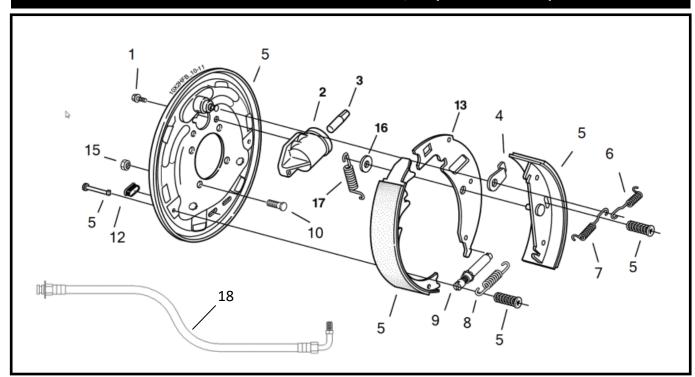
ITEM #	PART #	DESCRIPTION
	253505	HUB & DRUM 3.5K ASY, 6-BOLT
1	250002	SEAL GREASE 3.5 AXLE 2.565 FOR EZ LUBE
2	253510	BEARING INNER CONE
3	353512	RACE INNER
4	256161	STUD WHEEL 1/2-20 X 2.5" DEX 5-BOLT ON 4 1/2" CENTERS
5	253518	RACE OUTER 10" X 2 1/4" HUB
6	253520	BEARING OUTER CONE 10"
7	253522	WASHER SPINDLE 3.5K 6K
9	251526	NUT SPECIAL JAM 1-14 UNS
10	251524	SPINDLE NUT RETAINER
11	253528	CAP GREASE 3.5K EZ LUBE
12	353530	PLUG GREASE CAP FOR EZ LUBE
13	370701	NUT 1/2-20 CONE WHEEL
15	230012	3.5K TORFLEX AXLE ELECTRIC BRAKES (TILT) COMPLETE (22.5° UP), EZ LUBE HUBS
15	230014F	3.5K TORFLEX AXLE HYDRAULIC FREEBACKING BRAKES (TILT) COMPLETE (22.5° UP), EZ LUBE HUBS

3.5K ELECTRIC BRAKE 10" x 2-1/4"



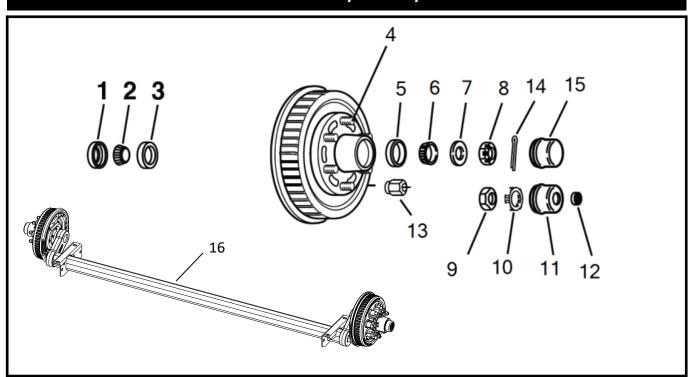
ITEM #	PART #	DESCRIPTION
	313501	ASY BRAKE KIT 3.5K ELEC LH
	313503	ASY BRAKE KIT 3.5K ELEC RH
1	313505	SHOE LINING KIT 3.5K
2	313507	DUST PLUG FOR ADJUSTER SLOT
3	313509	BOLT BRAKE MOUNTING
4	313515	KIT MAGNET 10 X 2 X 2 1/4 BRAKE FOR ONE BRAKE, GREEN (INCL. ITEM 5)
5	313511	MAGNET CLIP 6K AXLES & UNDER
6	313517	SPRING HOLD DOWN (PAIR)
7	313519	ASY ADJUSTER 3.5 6 & 7K
8	313521	SPRING ADJUSTER SCREW
9	313523	SPRING RETRACTOR ONE PR
10	313525	WASHER ANCHOR POST
11	313620	NUT BRAKE MOUNTING
	_	

3.5K HYDRAULIC BRAKE 10" x 2-1/4" (FREEBACKING)



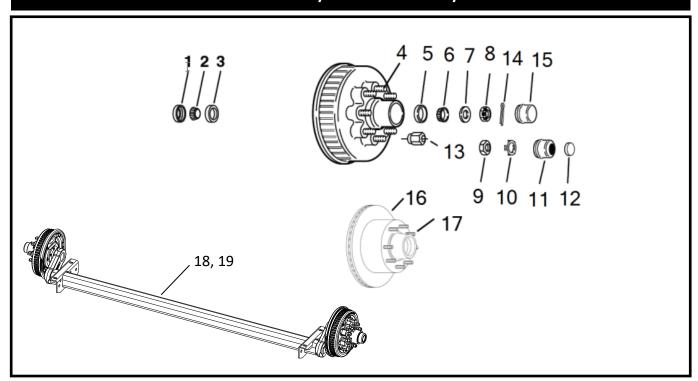
ITEM #	PART #	DESCRIPTION
	313705	ASY BRKT HYD 3.5K FB LH
	313710	ASY BRKT HYD 3.5K FB RH
1	313610	SCREW AND WASHER ASY
2	313606	BRAKE CYLINDER LH
2	313608	BRAKE CYLINDER RH
3	316370	PUSH ROD 12" X 2" HYD BRAKE
4	316320	TRAVEL LINK (FOR HYD FREE BACKING)
5	313715	SHOE & LINING KIT (FREE BACKING)
6	316325	SPRING SHOE LEVEL RETURN
7	316023	SPRING RETRACTOR 12 X 2 GREY
8	313720	ADJUSTING SCREW SPRING
9	313519	ASSEMBLY ADJUSTER 3.5, 6 & 7K
10	313509	BRAKE MOUNTING BOLT
11	353010	ASY HOSE BRAKE 18"
12	313507	DUST PLUG FOR ADJUSTER SLOT
13	313725	SHOE LEVEL
14	316350	LOCK NUT 12" X 2" HYD (FREE BACKING)
15	313620	BRAKE MOUNTING NUT
16	316360	WASHER 12" X 2" HYD (FREE BACKING)
17	316365	SPRING PRIMARY SHOE RETURN (FREE BACKING)
18	353010	RUBBER BRAKE HOSE ASY

6K HUB 6-BOLT / DRUM / AXLE



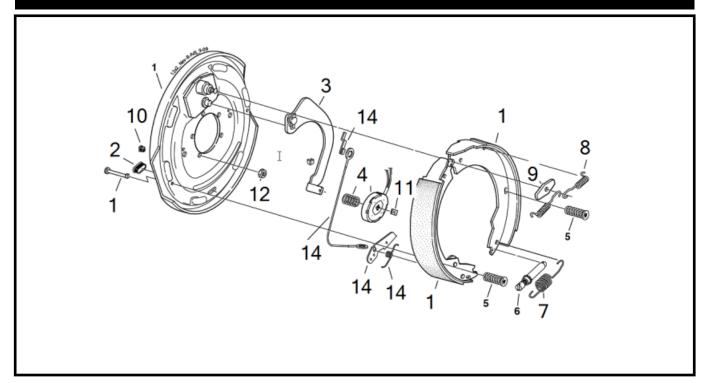
ITEM #	PART #	DESCRIPTION
	256000	HUB DRUM ASY 6K NON EZ 12 X 2 6 ON 5.5
	256005	HUB DRUM ASY 6K W/ EZ 12 X 2 6 ON 5.5
1	250005	SEAL
2	256010	INNER BEARING
3	256012	RACE INNER 6K HUB
4	256161	STUD WHEEL 1/2-20 X 2.5" DEX
5	256018	RACE OUTER 6K HUB
6	256020	OUTER BEARING
7	253522	WASHER SPINDLE 3.5K 6K
8	253524	NUT SPINDLE
9	251526	NUT SPECIAL JAM 1-14 UNS
10	251524	SPINDLE NUT RETAINER
11	256028	CAP GREASE W/ EZ LUBE 6K
12	253530	PLUG GREASE CAP FOR EZ LUBE
13	370701	NUT 1/2-20 CONE WHEEL
14	256016	PIN COTTER NON EZ
15	256026	CAP GREASE NON EZ LUBE 6K
16	230007	6K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP), EZ LUBE HUBS
16	230009F	6K TORFLEX AXLE HYDRAULIC FREEBACKING BRAKES COMPLETE (10° UP), EZ LUBE HUBS
16	232507	6K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP), EZ LUBE HUBS
16	230003	6K TORFLEX AXLE ELECTRIC BRAKES FSA COMPLETE (10° UP), NON-EZ LUBE HUBS
16	230013F	6K TORFLEX AXLE HYDRAULIC FREEBACKING BRAKES COMPLETE (10° UP), NON-EZ LUBE HUBS

7K HUB 8-BOLT / DRUM OR DISC / AXLE



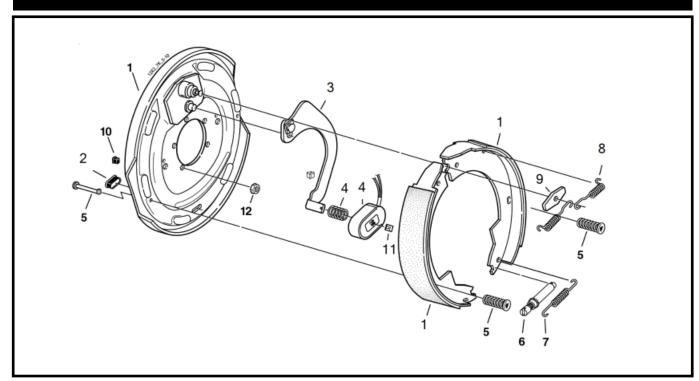
	255000	HUB DRUM ASY 8-BOLT NON-EZ
	255005	HUB DRUM ASY 8-BOLT EZ
1	250005	SEAL, GREASE
2	256010	BEARING
3	256012	RACE INNER HUB
4	256161	STUD WHEEL 1/2-20 X 2.5" DEX
5	259010	RACE FOR 14125A BEARING
6	259015	BEARING, OUTER
7	253522	WASHER SPINDLE
8	253524	NUT SPINDLE
9	251526	NUT SPECIAL JAM 1-14 UNS
10	251524	SPINDLE NUT RETAINER
11	255010	CAP GREASE 8-BOLT W/ EZ
12	253530	PLUG GREASE CAP FOR EZ LUBE
13	370701	NUT 1/2-20 CONE WHEEL
14	256016	PIN COTTER NON EZ
15	255020	CAP DUST 8 BOLT NON EZ
16	256020	7K DISC HUB ASSY INCLUDES STUDS
17	256015	PRESS-IN STUD WHEEL 1/2-20 X 1.84" DEX
18	230083	7K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP) NON-EZ LUBE
18	237419	7K TORFLEX AXLE HYDRAULIC BRAKES COMPLETE (10° UP) NON-EZ LUBE
18	237410	7K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP) EZ LUBE
18	237420F	7K TORFLEX AXLE HYDRAULIC FREEBACKING BRAKES COMPLETE (10° UP) EZ LUBE
19	230098	7K TORFLEX AXLE HYDRAULIC DISC BRAKES COMPLETE (22.5° UP) EZ LUBE
19	237425	7K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (22.5° UP) EZ LUBE
19	237426F	7K TORFLEX AXLE HYDRAULIC FREEBACKING BRAKES COMPLETE (22.5° UP) EZ LUBE

6K ELECTRIC BRAKE 12" x 2" NEV-R-ADJUST



ITEM #	PART #	DESCRIPTION
	316002	ASY BRK 6K ELEC LH, FORWARD SELF-ADJUST
	316004	ASY BRK 6K ELEC RH, FORWARD SELF-ADJUST
1	316032	SHOE LINING KIT 6K (INCLUDES ITEM #5) - LH
1	316033	SHOE LINING KIT 6K (INCLUDES ITEM #5) - RH
2	313507	DUST PLUG FOR ADJUSTER SLOT (4 PAK)
3	316006	ARM ACTUATING LH 12"
3	316007	ARM ACTUATING RH 12"
4	316037	KIT, MAGNET 12" X 2" (INCL. ITEM 11)
5	313517	SPRING HOLD DOWN (PAIR)
6	316034	ASSEMBLY ADJUSTER 3.5, 6 & 7K—LH
6	316035	ASSEMBLY ADJUSTER 3.5, 6 & 7K—RH
7	316036	SPRING ADJUSTER SCREW
8	316023	SPRING RETRACTOR 12 X 2 GREY
9	313525	WASHER ANCHOR POST
10	316027	GROMMET BRAKE ASY 12V WIRE
11	313511	MAGNET CLIP 6K AXLES & UNDER
12	316031	NUT BRAKE MOUNTING
13	316112	BOLT 3/8" FOR 12" BRAKE (NOT SHOWN)
14	316038	KIT, LH & RH BRAKE ADJUSTER

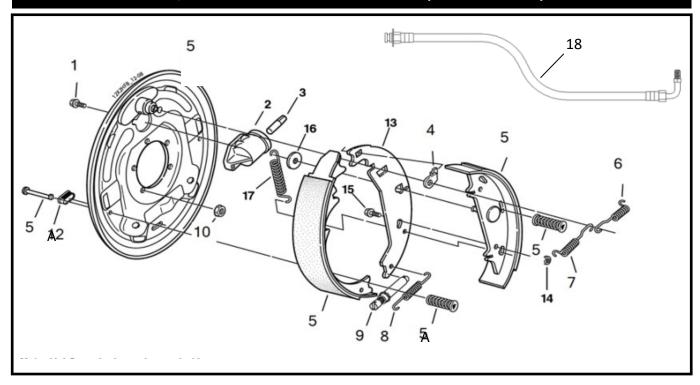
7K ELECTRIC BRAKE 12" x 2"



ITEM #	PART #	DESCRIPTION
	311434	BRAKE ASY 7K LH
	311436	BRAKE ASY 7K RH
1	311432	SHOE & LINING KIT (INCLUDES #5)
2	313507	DUST PLUG FOR ADJUSTER SLOT (4 PAK)
3	316011	ARM ACTUATING LH 12"
3	316013	ARM ACTUATING RH 12"
4	311430	KIT, MAGNET (INCL. ITEM 11)
5	313517	SPRING HOLD DOWN (PAIR)
6	313519	ASSEMBLY ADJUSTER 3.5, 6 & 7K
7	313521	SPRING ADJUSTER SCREW
8	316023	SPRING RETRACTOR 12 X 2 GREY
9	313525	WASHER ANCHOR POST
10	316027	GROMMET BRAKE ASY 12V WIRE
11	313511	MAGNET CLIP 6K AXLES & UNDER
12	316031	NUT BRAKE MOUNTING
13	316112	BOLT 3/8" FOR 12" BRAKE (NOT SHOWN)

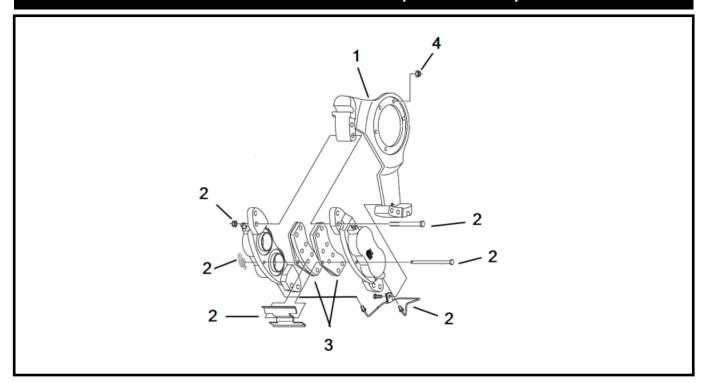
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6K/7K HYDRAULIC BRAKE 12" x 2" (FREEBACKING)



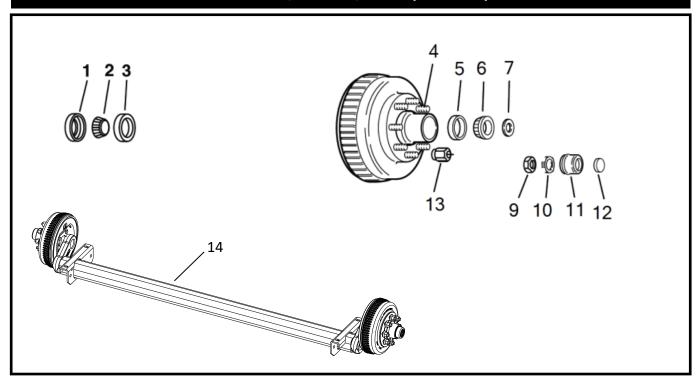
ITEM #	PART #	DESCRIPTION
	316305	ASY BRKT HYD 6K RB LH
	316310	ASY BRKT HYD 6K RB RH
1	313610	SCREW AND WASHER ASY
2	313606	BRAKE CYLINDER LH
2	313608	BRAKE CYLINDER RH
3	316370	PUSH ROD 12" X 2" HYD BRAKE
4	316320	TRAVEL LINK (FOR HYD FREE BACKING)
5	316330	SHOE & LINING KIT FB LH (INCL. 5A)
5	316332	SHOE & LINING KIT FB RH (INCL. 5A)
5A	313517	SPRING HOLD DOWN (PAIR)
6	316325	SPRING SHOE LEVEL RETURN
7	316106	SPRING RETRACTOR 12 X 2 GRAY
8	316340	ADJUSTING SCREW SPRING
9	316335	ASSEMLBY ADJUSTER 3.5 6 & 7K
10	316375	BRAKE MOUNTING BOLT
11	353010	ASY HOSE BRAKE 18"
12	313507	DUST PLUG FOR ADJUSTER SLOT (4 PK)
13	316345	SHOE LEVER
14	316350	LOCK NUT 12" X 2" HYD (FREE BACKING)
15	316355	BRAKE MOUNTING NUT
16	316360	WASHER 12" X 2" HYD (FREE BACKING)
17	316365	SPRING PRIMARY SHOE RETURN (FREE BACKING)
18	353010	RUBBER BRAKE HOSE ASY

7K HYDRAULIC DISC BRAKE (FREEBACKING)



ITEM #	PART #	DESCRIPTION
	313660	ASY BRAKE DISC 7K
1	313700	LH ANCHOR YOKE
	313701	RH ANCHOR YOKE
		CALIPER ASY KIT FOR LH OR RH CONSIST OF: CALIPER MOUNTING NUT, CALIPER MOUNTONG BOLT, COTTER RING, TUBE CLAMP, ANTI-RATTLE SPRING, BLEEDER SCREW, ADAPTER FITTING, PAD RE-
2	313702	TAINING PIN, CROSS OVER HYDRAULIC LINE, HEX BOLT, ASY CALIPER HALF
3	313703	BRAKE PAD KIT (AXLE SET)
4	313704	3/8" BRAKE MOUNTING NUT-WASHER ASY

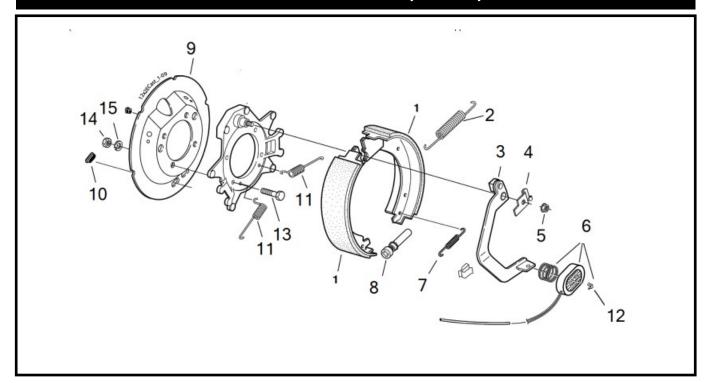
7.2K HUB / DRUM / AXLE (E-Z LUBE)



ITEM#	PART #	DESCRIPTION
	25-4012C	HUB DRUM 7.2K ASY EZ
1	258010	SEAL UNTIZED OIL 8K 3.376" OD, 2.25" ID
1	250005	SEAL UNTIZED GREASE 8K 3.376" OD, 2.25" ID
2	256010	BEARING, INNER
3	256012	RACE INNER HUB
4	254023	STUD DRIVE-IN 5/8
5	258015	RACE OUTER BEARING CUP
6	258020	BEARING, OUTER
7	256022	WASHER SPINDLE
8		
9	251526	NUT SPECIAL JAM 1-14 UNS
10	251524	SPINDLE NUT RETAINER
11	255010	CAP GREASE 6K 8 BOLT W/ EZ
12	253530	PLUG GREASE CAP FOR EZ LUBE
13	258032	5/8" FLANGED WHEEL NUT
14	230084	7.2K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP), EZ LUBE HUBS
14	1921979	7.2K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP), EZ LUBE HUBS
14	230087	7.2K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP), EZ LUBE HUBS

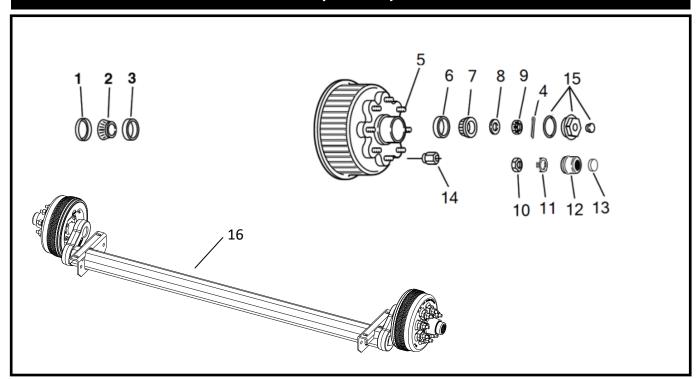
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7.2K ELECTRIC BRAKE 12-1/4" x 2-1/2"



ITEM #	PART #	DESCRIPTION
	311504C	BRAKE ASY 7.2K ELEC CAST LH
	311502C	BRAKE ASY 7.2K ELEC CAST RH
1	311515CL	SHOE KIT 7.2K ELEC CAST LH
1	311515CR	SHOE KIT 7.2K ELEC CAST RH
2	311518	SHOE RETURN SPRING 7.2K-15K
3	311511	ARM ACTULATING LH 7.2K
3	311513	ARM ACTULATING RH 7.2K
4	311015	RETAINER SHOW HOLD DOWN LH
4	311017	RETAINER SHOW HOLD DOWN RH
5	311535	FLANGE NUT
6	311010	KIT, MAGNET 7.2K STYLE OVAL (INCL. ITEM 12)
7	313521	SPRING ADJUSTER SCREW
8	311519	ADJUST 7.2K
9	311540	SHIEL DUST 7.2K BRAKE ASY
10	313507	DUST PLUG FOR ADJUSTER SLOT (4 PAK)
11	311322	SPRING ENTERING 7.2-15K
12	313512	MAGNET CLIP 7.2K AXLE & UP
13	311329	WASHER
14	311330	HEX NUT
15	311331	LOCK WASHER

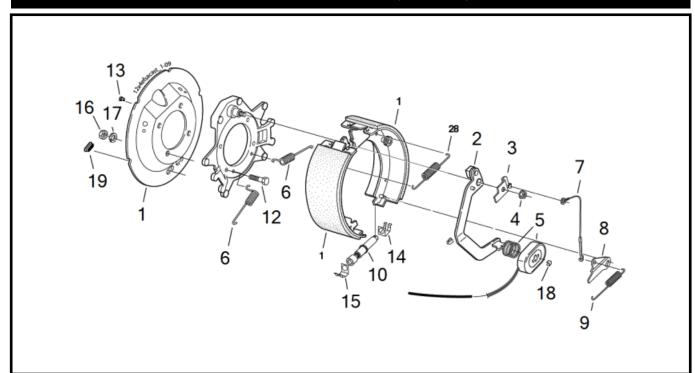
8K HUB / DRUM / AXLE



ITEM #	PART #	DESCRIPTION
	258002	HUB DRUM ASY EZ 8K
	258000	HUB DRUM ASY 8K OIL BATH
1	258010	SEAL UNTIZED OIL 8K 3.376" OD, 2.25" ID
2	256010	RACE INNER CONE
3	256012	RACE INNER HUB
4	256016	PIN, COTTER NON-E-Z LUBE
5	256160	STUD DRIVE-IN 5/8" X 2-13/16" 8K
5	251015	STUD DRIVE-IN 5/8" X 3-1/8" 10K (CAN SUBSTITUTE FOR 256160)
6	258015	RACE OUTER 8K HUB BEARING CUP
7	258020	BEARING OUTER
8	256022	WASHER SPINDLE
9	253524	NUT SPINDLE
10	251526	NUT SPECIAL JAM 1-14 UNS
11	251524	SPINDLE NUT RETAINER
12	255010	CAP GREASE 6K 8 BOLT W/ EZ
13	253530	PLUG GREASE CAP FOR EZ LUBE
14	258032	NUT 5/8-18 FLANGED WHEEL
15	258035	KIT OIL CAP INCLUDES CAP 21-35, O-RING 10-45, PLUG 46-32
16	230030	8K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP), EZ LUBE HUBS
16	230036	8K TORFLEX AXLE HYDRAULIC BRAKES COMPLETE (10° UP), EZ LUBE HUBS
16	230094	8K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP), OIL BATH
16	1921978	8K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP), EZ LUBE HUBS
16	230049	8K TORFLEX AXLE HYDRAULIC DISC BRAKES COMPLETE (10° UP), EZ LUBE HUBS
16	230069	8K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP), OIL BATH

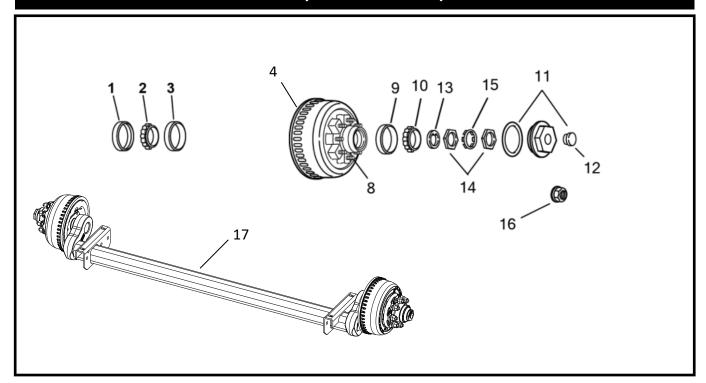
*PLEASE CALL WITH V.I.N. TO ASSURE CORRECT AXLE REPLACEMENT

8K ELECTRIC BRAKE 12-1/4" x 3-3/8"



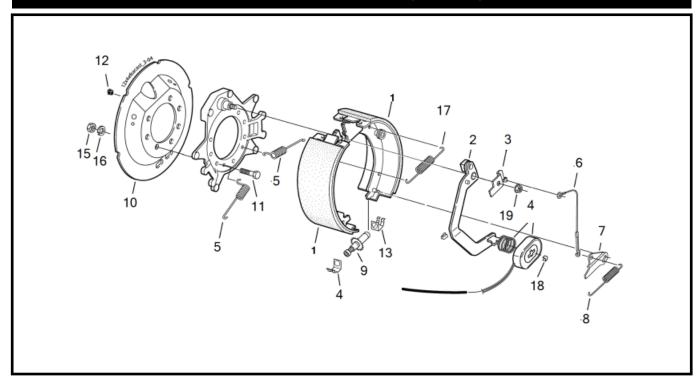
ITEM #	PART #	DESCRIPTION
	310829C	ASY BRAKE 8K ELEC CAST LH
	310831C	ASY BRAKE 8K ELEC CAST RH
1	310901C	SHOE KIT 8-10K ELEC RH CAST
1	310903C	SHOE KIT 8-10K ELEC LH CAST
2	311007	ARM ACTUATING LH 12 1/4" X 4"
3	311015	RETAINER SHOW HOLD DOWN LH
3	311017	RETAINER SHOW HOLD DOWN RH
4	311535	FLANGE NUT
5	311347	KIT, MAGNET 8K GD (INCL. ITEM 18)
6	311322	SPRING ENTERING 7.2-15K
7	311025	CABLE ADJUSTER
8	311323	LEVER ADJUSTER LH
8	311324	LEVER ADJUSTER RH
9	311325	SPRING ADJUSTER
10	311326	ASY ADJUSTER LH
10	311327	ASY ADJUSTER RH
11	311328	SHIELD DUST 8K BRAKE ASY
12	311329	WASHER
13	316027	GROMMET BRAKE ASY 12V WIRES
14	311368	CLIP ADJUSTER BARREL END
15	311367	CLIP ADJUSTER THREAD END
16	311330	HEX NUT
17	311331	LOCK WASHER
18	313512	MAGNET CLIP 7.2K AXLE & UP
19	313507	DUST PLUG FOR ADJUSTER SLOT (4 PAK)

9-10K HUB / DRUM OR DISC / AXLE



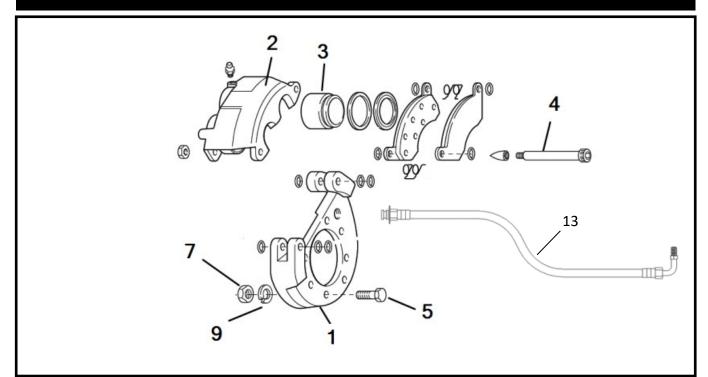
ITEM #	PART#	DESCRIPTION
1	250901	SEAL OIL UNTITIZED 3.88 OD .2875 ID
2	251019	BEARING, INNER
3	251017	RACE, INNER
4	250125	HUB/DRUM W/RACES
8	251015	STUD DRIVE-IN 5/8" 10K
9	256012	RACE, OUTER
10	256010	BEARING, OUTER
11	251022	KIT, OIL CAP INCL CAP 21-88, O-RING GASKET 10-50, PLUG 46-32
12	251009	CAP OIL PLUG 8K TO 15K
13	250903	WASHER TANG 1 1/2" FOR 9K 10K GD
14	250935	SPINDLE NUT
15	250937	SPINDLE WASER
16	258032	NUT 5/8-18 FLANGED WHEEL
17	1920003	10K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP), OIL BATH HUBS

9-10K ELECTRIC BRAKE 12-1/4" x 3-3/8"



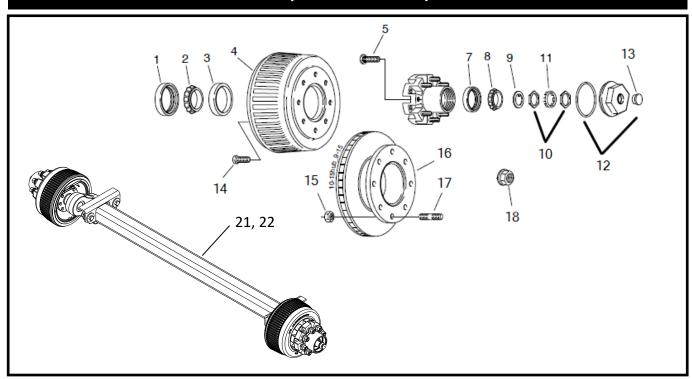
ITEM #	PART #	DESCRIPTION
	310929C	ASY BRAKE 9-10K ELEC CAST LH
	310931C	ASY BRAKE 9-10K ELEC CAST RH
1	310903C	SHOE KIT 8-10K ELEC LH CAST
1	310901C	SHOE KIT 8-10K ELEC RH CAST
2	311007	ARM ACTUATING LH 12 1/4" X 4"
2	311009	ARM ACTUATING RH 12 1/4" X 4"
3	311015	RETAINER SHOW HOLD DOWN LH
3	311017	RETAINER SHOW HOLD DOWN RH
4	311011	KIT, MAGNET 9-10K GD (INCL. ITEM 18)
5	311322	SPRING ENTERING 7.2K-15K
6	311351	CABLE ADJUSTER 7.2K-15K
7	311323	LEVER ADJUSTER LH
7	311324	LEVER ADJUSTER RH
8	311325	SPRING ADJUSTER
9	311326	ASY ADJUSTER LH
9	311327	ASY ADJUSTER RH
10	311363	KIT DUST SHIELD 9K & 10K GD
11	311352	BRAKE MOUNTING SCREW
12	316027	GROMMET BRAKE ASY 12V WIRES
13	311367	CLIP ADJUSTER THREAD END
14	311368	CLIP ADJUSTER BARREL END
15	311353	BRAKE MOUNTING BOLT
16	311354	BRAKE MOUNTING LOCKWASHER
17	311518	SHOE RETURN SPRING 7.2K-15K
18	313512	MAGNET CLIP 7.2K AXLE & UP
19	311535	FLANGE NUT

10K HYDRAULIC DISC BRAKE



ITEM#	PART #	DESCRIPTION
	313650	ASY BRK HYD DISC 10K, 12K
1	313651	ANCHOR YOKE ASY INCLUDES 6 O-RINGS
2	313630	CALIPER ASY INCLUDES O-RING, CALIPER PISTON, CALIPER SEAL, DUST BOOT
3	313652	CALIPER PISTON
4	313653	SHOULDER SCREW 5/8 X 5
5	313654	HEX SCREW 7/16-20 X 1.75
6		
7	313620	HEX NUT 7/16-20
8		
9	313654	LOCK WASHER
10	313632	KIT CALIPER REPAIR INCLUDES O-RING, BLEEDER SCREW, CALIPER SEAL, DUST BOOT
11	313631	KIT BRAKE REPLACEMENT PAD INCLUDES BRAKE PAD, ANTI-RATTLE SPRING, O-RING, HEX LOCK- NUT, INSTALLATION TOOL
13	353010	RUBBER BRAKE HOSE ASY

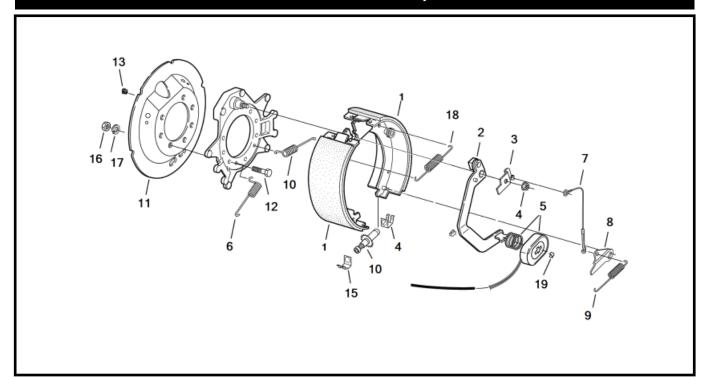
12K HUB / DRUM OR DISC / AXLE



ITEM #	PART #	DESCRIPTION
	251200	HUB ASY COMPLETE 12K
1	251001	SEAL OIL UNTITIZED 4.50D 3.125ID 10K HUB
2	251203	BEARING INNER 12K HUB
3	251205	RACE INNER 12K HUB
4	251207	DRUM BRAKE ONLY 10K/12K/15K
4	251208	DRUM BRAKE ONLY 12K ABS
5	251015	STUD DRIVE-IN 5/8" 10K
6		
7	251217	RACE OUTER 12K
8	251219	BEARING OUTER 12K
9	251025	WASHER TANG 1 3/4" FOR 10K
10	311037	NUT 1 3/4" FINE THREAD 10K, 12K, 15K
11	311039	WASHER TONGUE TYPE 1 3/4" FOR 10K, 12K, 15K
12	251021	KIT OIL CAP INCL CAP 21-36, O-RING GASKET 10-50, OIL CAP PLUG 46-32
13	251009	CAP OIL PLUG 8K TO 15K
14	250910	BOLT DRUM MOUNTING 1/2-13 X 1 3/4
15	251026	ROTOR MOUNTING NUT
16	316018	BRAKE ROTOR
17	251027	ROTOR MOUNTING STUD
18	258032	NUT, FLANGE WHEEL 5/8"
21	230065	12K TORFLEX AXLE ELECTRIC BRAKES COMPLETE (10° UP), OIL BATH HUBS
22	230091	12K SPRING HYDRAULIC DISC BRAKES COMPLETE, OIL BATH HUBS

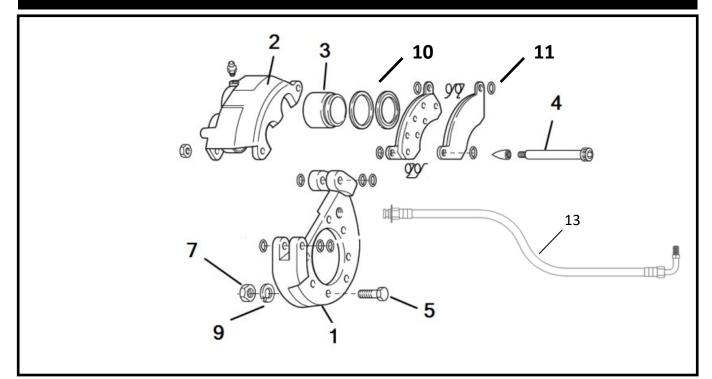
*PLEASE CALL WITH V.I.N. TO ASSURE CORRECT AXLE REPLACEMENT

12K ELECTRIC BRAKE 12-1/4" x 5"



ITEM#	PART #	DESCRIPTION
	311229C	ASY BRAKE 12K ELEC CAST LH
	311231C	ASY BRAKE 12K ELEC CAST RH
1	311201C	SHOE KIT 12-15K ELEC CAST LH
1	311203C	SHOE KIT 12-15K ELEC CAST RH
2	311344	LH ACTUATOR ARM ASY
2	311345	RH ACTUATOR ARM ASY
3	311015	RETAINER SHOW HOLD DOWN LH
3	311017	RETAINER SHOW HOLD DOWN RH
4	311342	FLANGE NUT
5	311211	KIT, MAGNET 12K NEW STLYE OVAL (INCL. ITEM 19)
6	311322	SPRING ENTERING 7.2K-15K
7	311351	CABLE ADJUSTER 7.2K-15K
8	311323	LEVER ADJUSTER LH
8	311324	LEVER ADJUSTER RH
9	311325	SPRING ADJUSTER
10	311326	ASY ADJUSTER LH
10	311327	ASY ADJUSTER RH
11	311365	DUST SHIELD METAL 12K & 15K
12	311352	BRAKE MOUNTING SCREW
13	316027	GROMMET BRAKE ASY 12V WIRES
14	311367	CLIP ADJUSTER THREAD END
15	311368	CLIP ADJUSTER BARREL END
16	311353	BRAKE MOUNTING BOLT
17	311354	BRAKE MOUNTING LOCKWASHER
18	311518	SHOE RETURN SPRING 7.2K-15K
19	313512	MAGNET CLIP 7.2K AXLE & UP

12K HYDRAULIC DISC BRAKE



ITEM#	PART #	DESCRIPTION
	313650	ASY BRK HYD DISC 10K, 12K
1	313651	ANCHOR YOKE ASY INCLUDES 6 O-RINGS
2	313630	CALIPER ASY INCLUDES O-RING, CALIPER PISTON, CALIPER SEAL, DUST BOOT
3	313652	CALIPER PISTON
4	313653	SHOULDER SCREW 5/8 X 5
5	313654	HEX SCREW 7/16-20 X 1.75
6		
7	313620	HEX NUT 7/16-20
8		
9	313654	LOCK WASHER
10	313632	KIT CALIPER REPAIR INCLUDES O-RING, BLEEDER SCREW, CALIPER SEAL, DUST BOOT
11	313631	KIT BRAKE REPLACEMENT PAD INCLUDES BRAKE PAD, ANTI-RATTLE SPRING, O-RING, HEX LOCK- NUT, INSTALLATION TOOL
13	353010	RUBBER BRAKE HOSE ASY

TIRE & WHEEL ASSY / TIRES



TIRE & WHEEL COMBO (SEE BELOW)

(TIRE BRAND MAY VARY, HUB CAP AND
WHEEL NUTS NOT INCLUDED)

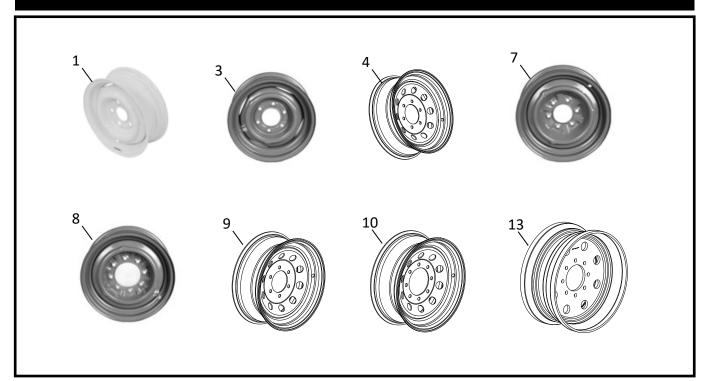


TIRE (SEE BELOW)

(TIRE BRAND MAY VARY)

ITEM	PART #	DESCRIPTION
1	276096	TIRE & WHEEL 175/80R13 "C" 6-PLY, 5-BOLT WHT MOD
2	275000	TIRE & WHEEL 225/75R15 "D" 8-PLY, 6-BOLT CHROME MOD
3	275005	TIRE & WHEEL 225/75R15 "D" 8-PLY, 6-BOLT WHT MOD
4	275083	TIRE & WHEEL 235/85R16 "E" 10-PLY, 8-BOLT WHT MOD
5	275072	TIRE & WHEEL 235/85R16 "G" 14-PLY, 6-BOLT WHT MOD
6	275084	TIRE & WHEEL 235/85R16 "G" 14-PLY, 8-BOLT WHT MOD
7	275086	TIRE & WHEEL 235/85R16 "E" 10-PLY, 8-BOLT ALUM MOD
8	275087	TIRE & WHEEL 235/85R16 "E" 10-PLY, 6-BOLT ALUM MOD
9	276021	TIRE & WHEEL 235/85R16 "E" 10-PLY, 8-BOLT WHT MOD (MICHELIN)
10	276010	TIRE & WHEEL 235/85R16 "E" 10-PLY, 6-BOLT WHT MOD
11	276020	TIRE & WHEEL 235/85R16 "E" 10-PLY, 8-BOLT WHT MOD
12	276081	TIRE & WHEEL 215/75R17.5 "H" 16-PLY, 8-BOLT WHT MOD (MICHELIN)
13	1920010	TIRE & WHEEL 215/75R17.5 "H" 16-PLY, 8-BOLT ALUM MOD ALCOA
14	276082	TIRE & WHEEL 235/75R17.5 "H" 16-PLY, 8-BOLT WHT MOD
19	270070	TIRE ST175/80R13 "C" 6-PLY
20	270050	TIRE ST205/75R15 "C" 6-PLY
21	270020	TIRE 225/75R15 "D" 8-PLY
22	270090	TIRE 235/85R16 "E" 10-PLY
23	270044	TIRE 245/75R16 "G" 14-PLY
24	270043	TIRE 235/85R16 "G" 10-PLY
25	270041	TIRE 235/85R16 "G" 12-PLY
26	270040	TIRE 215/75R17.5 "H" 16-PLY
27	270042	TIRE 235/75R17.5 "H" 16-PLY

WHEELS



ITEM	PART #	DESCRIPTION
1	270700	WHEEL 4.5 X 13 5 BOLT WHT
3	270102	WHEEL 6 X 15 6 BOLT OEM
4	270104	WHEEL 6 X 15 6 BOLT WHT MOD ROUND
7	270108	WHEEL 6 X 16 6 BOLT OEM
8	270109	WHEEL 6 X 16 8 BOLT OEM
9	270110	WHEEL 6 X 16 6 BOLT WHT MOD ROUND
10	270111	WHEEL 6 X 16 8 BOLT WHT MOD ROUND
13	270631	WHEEL 6.75 X 17.5 8 BOLT WHT MOD ROUND

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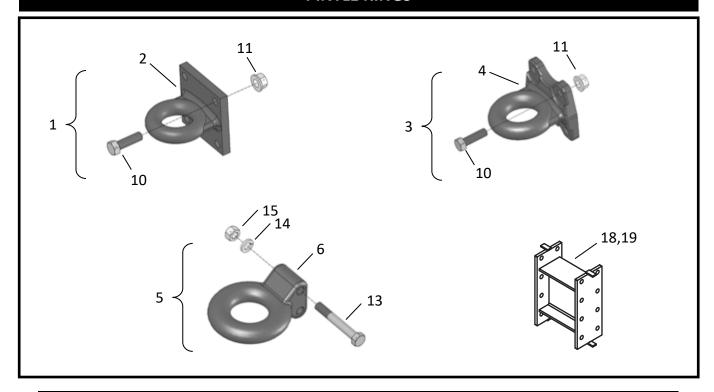
SECTION F

Couplers / Actuators

Pintle Rings	F-2
Ball Couplers	F-3
Hydraulic Actuators	F-4
Fifth-Wheel Hitches	F-7

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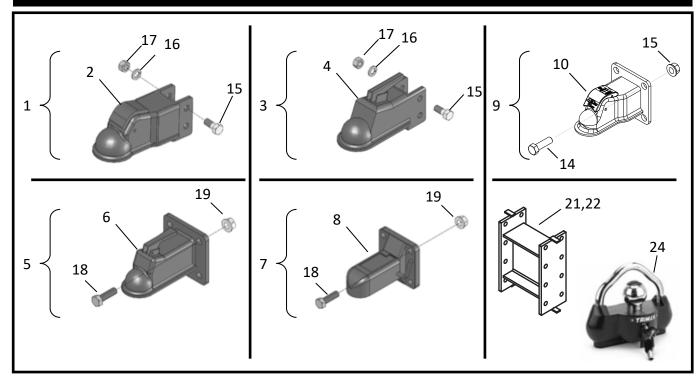
PINTLE RINGS



ITEM	PART #	DESCRIPTION
1	1930000	KIT: 2.5" PINTLE 4 BOLT
2	330014	PINTLE RING ID 2-1/2" 4-BOLT
3	1930001	KIT: 3" PINTLE 4-BOLT 66K
4	330050	3" PINTLE RING 4-BOLT 66K
5	330004K	KIT: PINTLE 3" HYD/CHNL 2-BOLT
6	330004	PINTLE 3" HYD CHNL 2-BOLT
10	360051	BOLT 3/4-10 X 2-1/2 GR8
11	1J12	NUT, FLANGE TOP-LOCK 3/4-10 HEX GR8
13	360400	BOLT 5/8-11 X 4-1/2 GR8
14	360408	WASHER 5/8" LOCK
15	360410	NUT 5/8-11 NC
18	120340	HITCH EXT W/MOUNT, 12", 4-BOLT (DO NOT USE FOR ADJUSTING HITCH HEIGHT)
19	120342	HITCH EXT W/MOUNT, HEAVY-DUTY, 12", 4-BOLT (DO NOT USE FOR ADJUSTING HITCH HEIGHT)

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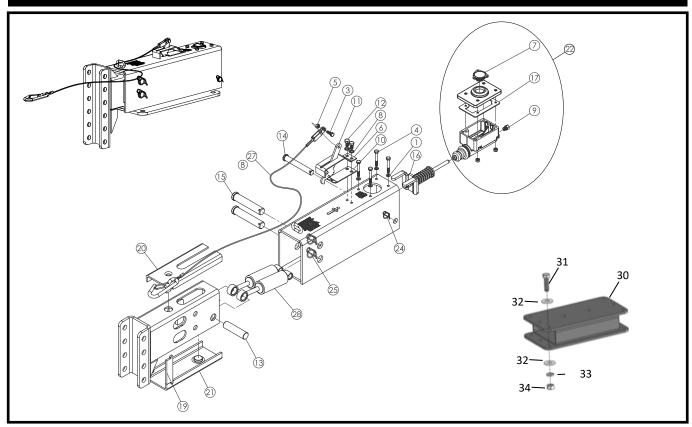
BALL COUPLERS



ITEM	PART #	DESCRIPTION
1	330053K	KIT: 2" BALL HYD/CHAN 2B
2	330053	BALL COUPLER 2" 10K CHNL 2B
3	330010K	KIT: BALL COUPLER 2-5/16" CHNL
4	330010	BALL COUPLER 2-5/16" 10K CHNL 2B
5	1930028	KIT: COUPLER 2-5/16" 4-BOLT 21K
6	330017	2-5/16" 4-BOLT COUPLER 21K
7	1971782	KIT: COUPLER 2-5/16" 4 BOLT 25K
8	330065	2-5/16" 4-BLT CPLR 25K 25/32" HOLE FL PLT MNT
9	1978583	KIT: BALL COUPLER 2" FL PLT
10	1919825	BALL COUPLER 2" FL PLT
15	360403	BOLT 5/8-11 X 1.50 NC GR8
16	360408	WASHER 5/8" LOCK
17	360410	NUT 5/8-11 NC
18	360051	BOLT 3/4-10 X 2 1/2 GR8
19	1J12	NUT, FLANGE TOP-LOCK 3/4-10 HEX GR8
21	120340	HITCH EXT W/MOUNT, 12", 4-BOLT (DO NOT USE FOR ADJUSTING HITCH HEIGHT)
22	120342	HITCH EXT W/MOUNT, HEAVY-DUTY, 12", 4-BOLT (DO NOT USE FOR ADJUSTING HITCH HEIGHT)
24	720071	UNIVERSAL COUPLER LOCK

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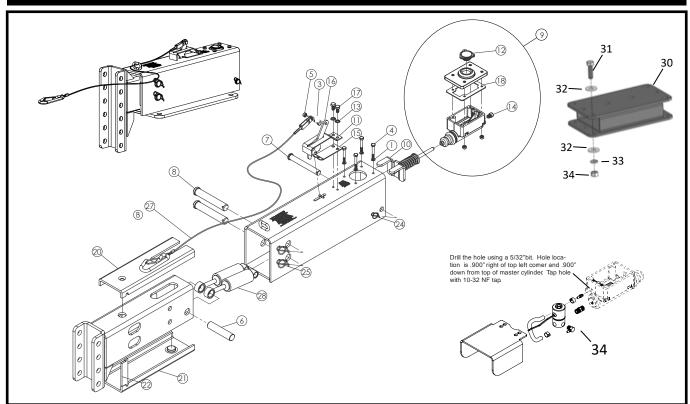
DA10 HYDRAULIC ACTUATOR



ITEM	PART #	DESCRIPTION
	352090	ACTUATOR 12.5K COMPLETE (DA10) - CHANNEL HITCH PLATE
1	360016	WASHER, .25 SPRING LOCK
2		
4	360209	BOLT, .25NC X 2 HEX GR.5
6	352064	EMERGENCY LEVER GUIDE
7	352026	MASTER CYLINDER CAP ASSEMBLY
		O-RING (REPLACEMENT)
8	360103	WASHER, .313 EXTERNAL TOOTH LOCK
9	352024	BRAKE FITTING .125 FULL FLOW
10	352014	SPRING, SAFETY LEVER
11	352016	EMERGENCY LEVER
12	352063	BOLT, .313 NC X .625 HEX GR.5
13	352107	PIN, FRONT SHOCK
14	352111	COLD HEADED CLEVIS PIN, .625
15	352109	COLD HEADED CLEVIS PIN, .875
16	352113	PUSH ROD ASSY
17	352022	CORK GASKET (MASTER CYL)
18		
19	353910	SPACER
20	352104	SLIDE CHANNEL TOP
21	352106	SLIDE CHANNEL BOTTOM
22	352020	MASTER CYLINDER ACTUATOR, COMPLETE
22A		
23		
24	352006	RUE RING LOCK COTTER, 5/8 SHAFT
25	352061	RUE RING LOCK COTTER, 7/8 SHAFT
26		
27	352028	SAFETY CABLE
28	352006	SHOCK DAMPER
30	1978518	ASY 3" RISER/SPACER ACTUATOR
31	360051	BOLT, 3/4-10 x 2-1/2 Gr.8
32	360302	WASHER 3/4 FLAT
33	360046	WASHER 3/4" LOCK
34	360048	NUT 3/4-10 HEX GR8

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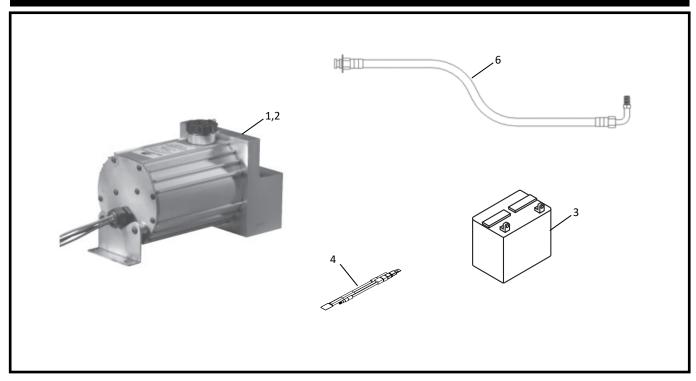
DA20 HYDRAULIC ACTUATOR



ITEM	PART#	DESCRIPTION
	352080	ACTUATOR 12.5K COMPLETE (DA20) - CHANNEL HITCH PLATE
	352085	ACTUATOR 12.5K COMPLETE (DA20) - FLAT HITCH PLATE
	352086	ACTUATOR 12.5K COMPLETE (DA20) - FLAT HITCH PLATE SOLENOID BYPASS
1	360016	WASHER, .25 SPRING LOCK
2		
4	360209	BOLT, .25NC X 2 HEX GR.5
6	352008	PIN, FRONT STOCK
7	352012	COLD HEADED CLEVIS PIN, .625
8	352010	COLD HEADED CLEVIS PIN, .875
9	352020	MASTER CYLINDER ACTUATOR, COMPLETE
10	352018	PUSH ROD ASSY
11	352064	EMERGENCY LEVER GUIDE
12	352026	MASTER CYL CAP ASSY
		O-RING (REPLACEMENT)
13	360103	WASHER, .313 EXTERNAL TOOTH LOCK
14	352024	BRAKE FITTING .125 FULL FLOW
15	352014	SPRING, SAFETY LEVER
16	352016	EMERGENCY LEVER
17	352063	BOLT, .313 NC X .625 HEX GR.5
18	352022	CORK GASKET
19		
20	352003	SLIDE CHANNEL TOP
21	352005	SLIDE CHANNEL BOTTOM
22	353910	SPACER
23		
23A		
24	352060	RUE RING LOCK COTTER 5/8 SHAFT
25	352061	RUE RING LOCK COTTER 7/8 SHAFT
26		
27	352028	SAFETY CABLE
28	352009	SHOCK DAMPER
29	1978518	ASY 3" RISER/SPACER ACTUATOR
30	360051	BOLT, 3/4-10 x 2-1/2 Gr.8
31	360302	WASHER 3/4 FLAT
32	360046	WASHER 3/4" LOCK
33	360048	NUT 3/4-10 HEX GR8
34	353700	FREE BACKING SOLENOID KIT

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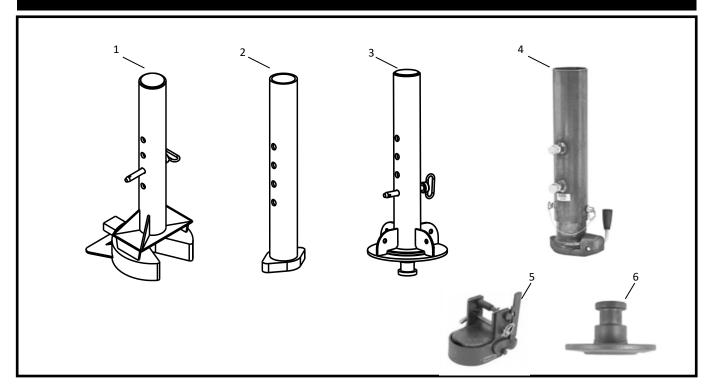
DEXTER ELECTRIC/HYDRAULIC ACTUATOR



1		
ITEM	PART #	DESCRIPTION
1	355031	ACTUATOR, ELECTRIC/HYDRAULIC 1000 PSI DRUM
2	355032	ACTUATOR, ELECTRIC/HYDRAULIC 1600 PSI DRUM
3	350230	BATTERY, 12V 900mA
4	351808	CHARGER
6	-	HOSE, HYDRAULIC, BUILT TO FIT (CALL)

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FIFTH-WHEEL COUPLERS



ITEM	PART #	DESCRIPTION
1	120480	WLD 5TH WHEEL MINI ROUND STYLE 32k
2	330049	ASY COUPLER GN 2 5/16" 20K
3	1959720	WLD KING PIN W/ PIN HOLES
4	330097BP	TUBE INNER LONG GN 2 5/16" BX1
5	330025	HITCH 2 5/16" AUTO LOCKING
6	332809	2" KING PIN, WELD ON

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SECTION G

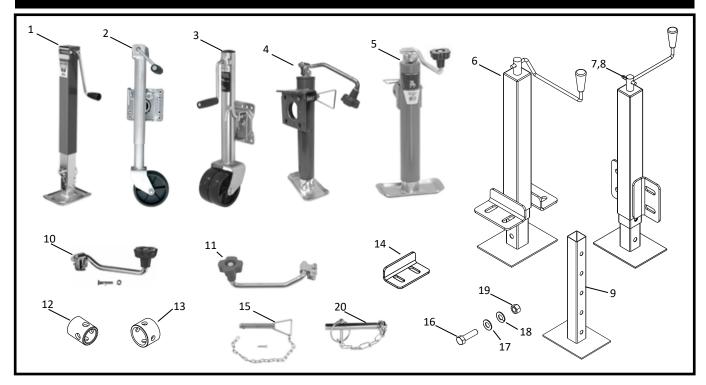
Parking Jacks

Up to 7K	G-3
12K	G-4
25K	G-6
Electric (12K and 25K)	G-7

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UP TO 7K

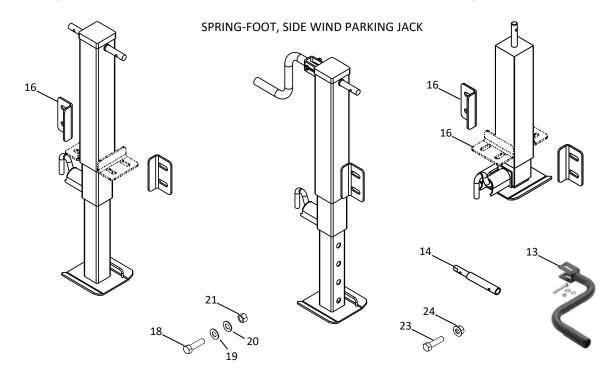


ITEM	PART#	DESCRIPTION
1	335070	750 LB. PARKING JACK ASSY, SIDE WIND
2	335008	1200 LB. PARKING JACK, SINGLE WHEEL
3	335004	1500 LB. PARKING JACK, DUAL WHEEL FRONT WIND
4	335000	2K PARKING JACK ASSY, SWING-UP TOP WIND
5	335005	5K PARKING JACK, TOP WIND, 15"
6	120109	7K PARKING JACK, TOP WIND, SIDE PULL
7	1908417	7K PARKING JACK, DROP-LEG, 15"
8	1930016	7K PARKING JACK, DROP-LEG, TOP WIND, SIDE PULL
9	335023	REPLACEMENT LEG/FOOT
10	335009	JACK HANDLE 5K DL SWING UP
11	335021	HANDLE 7K DROP-LEG JACK
12	335011	MOUNT, INNER JACK 5K SWING-UP
13	335013	MOUNT, OUTER JACK 5K SWING-UP
14	060535	MOUNT BRKT JACK
15	335156	ASY PIN/CHAIN 7K TW
16	360132	BOLT, 5/8-11 X 2.25 NC GR8
17	360406	WASHER, FLAT 5/8
18	360408	WASHER, LOCK 5/8
19	360410	NUT, 5/8-11 NC
20	370248	PIN SNAP RING ASY

12K

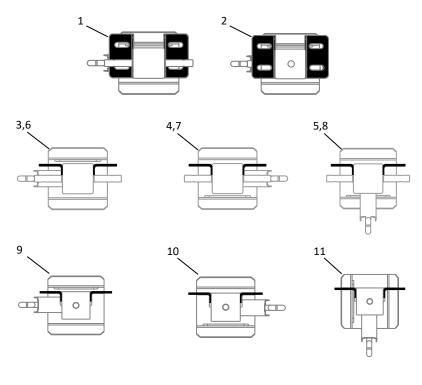
DROP-LEG, SIDE WIND PARKING JACK

DROP-LEG, TOP WIND PARKING JACK



ALL PARKING JACK ASSEMBLIES COME WITH BRACKETS WELDED IN PLACE, JACK HANDLES, AND PRIMED. MOUNTING HARDWARE NOT INCLUDED.

MOUNT CONFIGURATIONS

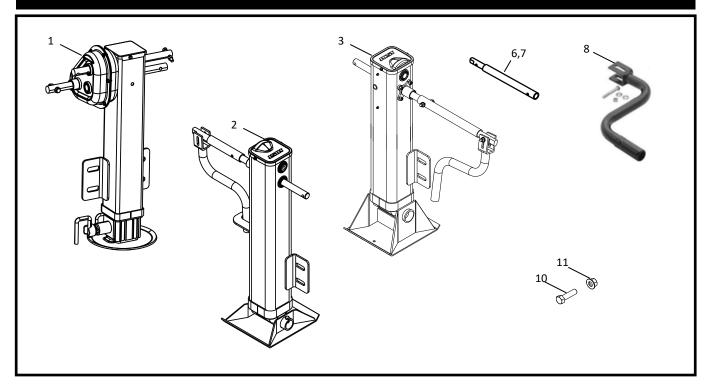


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12K

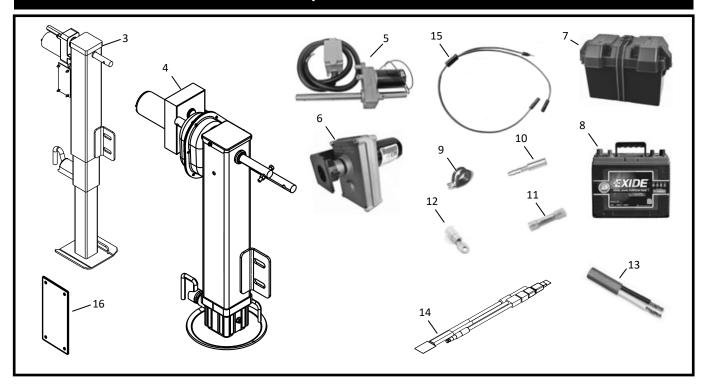
ITEM	PART #	DESCRIPTION
1	128245	12K PARKING JACK ASSY, DROP-LEG, HORIZONTAL MOUNT, SIDE WIND, SIDE PULL
2	335040	12K PARKING JACK ASSY, DROP-LEG, HORIZONTAL MOUNT, TOP WIND, SIDE PULL
3	1930019	12K PARKING JACK ASSY, DROP-LEG, VERTICAL MOUNT, SIDE WIND, LEFT PULL
4	1951894	12K PARKING JACK ASSY, DROP-LEG, VERTICAL MOUNT, SIDE WIND, RIGHT PULL
5	1903755	12K PARKING JACK ASSY, DROP-LEG, VERTICAL MOUNT, SIDE WIND, FRONT PULL
6	1930055	12K PARKING JACK ASSY, SPRING-FOOT, VERTICAL MOUNT, SIDE WIND, LEFT PULL
7	1947879	12K PARKING JACK ASSY, SPRING-FOOT, VERTICAL MOUNT, SIDE WIND, RIGHT PULL
8	1973512	12K PARKING JACK ASSY, SPRING-FOOT, VERTICAL MOUNT, SIDE WIND, FRONT PULL
9	1941578	12K PARKING JACK ASSY, DROP-LEG, VERTICAL MOUNT, TOP WIND, LEFT PULL
10	1940393	12K PARKING JACK ASSY, DROP-LEG, VERTICAL MOUNT, TOP WIND, RIGHT PULL
11	1908102	12K PARKING JACK ASSY, DROP-LEG, VERTICAL MOUNT, TOP WIND, FRONT PULL
12		
13	335034	12K JACK HANDLE W/HARDWARE
14	128458	JACK HANDLE EXTENSIOON, 7 IN.
15		
16	060535	MOUNT BRACKET
17		
18	360132	BOLT, 5/8-11 X 2.25 NC GR8
19	360406	WASHER, FLAT 5/8
20	360408	WASHER, LOCK 5/8
21	360410	NUT, 5/8-11 NC
22		
23	1A06040	BOLT, 3/8-16 X 2.25 NC, GR8
24	1J06	NUT, 3/8-16 FLANGE GR8
25		
26		
27		
28		
29		
30		





ITEM	PART #	DESCRIPTION
1		
2	1957222	25K PARKING JACK ASSY, 2 SPEED, SHORT FOOT
3	1980159	25K PARKING JACK ASSY, 2 SPEED, TALL FOOT
6	1958772	JACK HANDLE EXTENSION, 16.5"
7	128458	JACK HANDLE EXTENSION, 10.5"
8	335034	JACK HANDLE
10	1A06040	BOLT, 3/8-16 X 2.25 NC, GR8
11	1J06	NUT, 3/8-16 FLANGE GR8

12K/25K ELECTRIC



ITEM	PART #	DESCRIPTION
	1978580	12K ELECTRIC PARKING JACK KIT (INCL. BATTERY, BATTERY BOX, AND CONNECTOR)
	1978581	25K ELECTRIC PARKING JACK KIT (INCL. BATTERY, BATTERY BOX, AND CONNECTOR)
3	1955927	12K PARKING JACK ASSY, ELECTRIC
4	1962300	25K PARKING JACK ASSY, ELECTRIC
5	394310	ELECTRIC MOTOR, 12K JACK SINGLE-SPEED
6	394309	ELECTRIC MOTOR, 25K JACK TWO-SPEED
7	350215	BATTERY BOX, DEEP CYCLE
8	350220	BATTERY, 12V MARINE (BRAND MAY VARY)
9	370830	CLAMP, 1/2 IN. PARTIAL CUSHION
10	392018	PLUG, 16-14 GA PERMA SEAL MALE
11	393020	CONNECTOR, 12-10 GA PERMA SEAL
12	393045	TERMINAL, 3/8 RING
13	393051	WIRE, 14 GA CONDUCTOOR GRAY
14	351808	CHARGING UNIT, STD
15	397242	CONNECTOR, WYE PIGTAIL
16	1919114	MOUNT, ELECTRIC JACK SWITCH
17	393031	WIRE DUCT, SPLIT LOOM 5/8 IN. /FT (NOT SHOWN)

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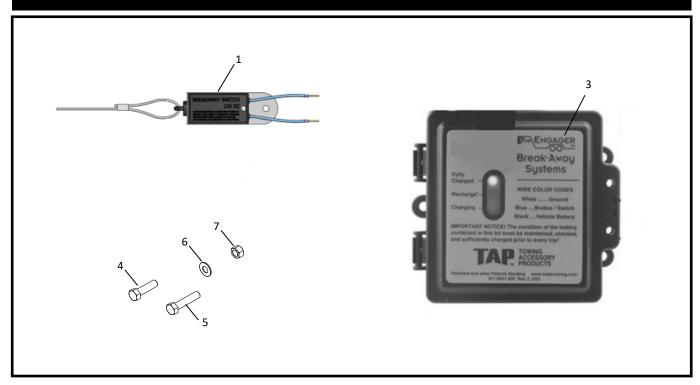
SECTION H

Lights / Electrical

BATTERY BREAK-AWAY	H-2
LIGHTING	H-3
WIRING HARNESS	H-4
ELECTRICAL DILIGS	шс

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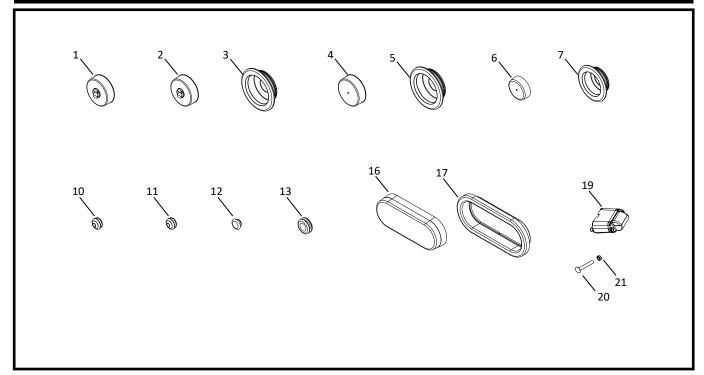
BATTERY BREAK-AWAY KIT



ITEM	PART #	DESCRIPTION
	397224	KIT, BREAK-AWAY SAFETY SYSTEM
1	350201	BREAK-AWAY SWITCH
2	350203	BREAK-AWAY BATTERY (NOT SHOWN)
3	350205	BREAK-AWAY DECAL
4	360017	BOLT 1/4-20 X 1 1/4' NC GR 5
5	360109	BOLT 1/4-20 X 1 3/4 NC GR 5
6	360205	WASHER 1/4 FL USS
7	360206	NUT 1/4-20 NYLOCK

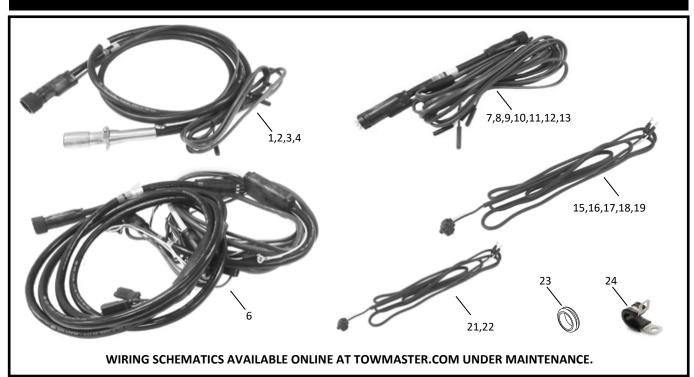
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LIGHTING



ITEM	PART #	DESCRIPTION
1	1918001	LIGHT, LED MARKER—AMBER, 2-1/2" PC
2	1918002	LIGHT, LED MARKER—RED, 2-1/2" PC
3	393000	GROMMET, RUBBER 2-1/2" RECESSED
4	1918004	LIGHT, LED MARKER—RED, 2-1/2" PC
5	393005	GROMMET, RUBBER 2-1/2" FLUSH
6	390304	LIGHT, LED MARKER—RED, 2" PC
7	390086	GROMMET, RUBBER 2" FLUSH
10	390100	LIGHT, LED 3/4 DOT—RED PC WITH GROMMET
11	390101	LIGHT, LED 3/4 DOT—AMBER PC WITH GROMMET
12	390190	LIGHT, LED 3/4 DOT—RED WITH PLUG
13	394214	GROMMET 3/4 ID X 1-3/8 OD X 1/4
16	392760	LIGHT, LED OVAL—RED, 2-1/4" X 6"
17	393001	GROMMET, RUBBER OVAL 2-1/4" X 6"
19	1978489	LIGHT, LED LICENSE, WITH MOUNTING HARDWARE
20	361021	SCREW #8-32 X 2 PN HEAD ZP
21	360815	NUT #8-32 NYLOC

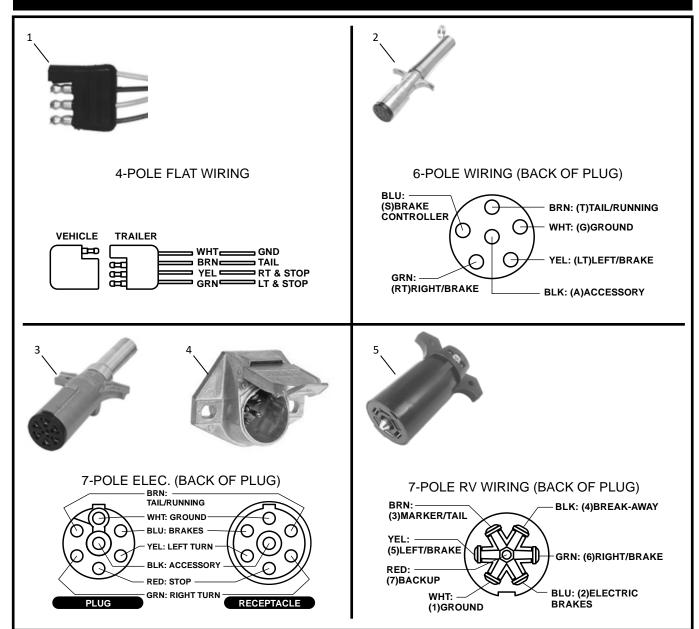
WIRING HARNESS



ITEM	PART #	DESCRIPTION
1	397282	NOSE LEAD, 4-FLAT
2	397272	NOSE LEAD, 6-POLE (SHOWN)
3	397281	NOSE LEAD, 7-POLE
4	397275	NOSE LEAD, 7-POLE RV
6	397266	KIT, MAIN HARNESS 7-WIRE (PANS/DROP-DECK/DROP-DECK TILT)
7	1920031-48	HARNESS SIDE MARKER LEAD 48"
8	1920031-60	HARNESS SIDE MARKER LEAD 60"
9	1920031-72	HARNESS SIDE MARKER LEAD 72"
10	1965236	HARNESS SIDE MARKER LEAD 72" (DD)
11	1920031-102	HARNESS SIDE MARKER LEAD 102"
12	1920031-160	HARNESS SIDE MARKER LEAD 160"
13	1965238	HARNESS SIDE MARKER LEAD 160" (DD)
15	397277	LEAD, 24"
16	397278	LEAD, 36"
17	1918005	LEAD, 48"
18	397296	LEAD, 96"
19	397274	LEAD, ABS EXTENSION
21	1920051	HARNESS BRAKE LEAD SINGLE AXLE
22	397273	HARNESS BRAKE LEAD TANDEM AXLE
23	394212	GROMMET, RUBBER 1-1/2" ID X 2-1/8" OD X 1/4
24	370830	CLAMP 1/2" PARTICAL CUSHION

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ELECTRICAL CONNECTORS



ITEM	PART #	DESCRIPTION
1	390011	4-POLE FLAT CONNECTOR PLUG (TRAILER SIDE)
2	395005	6-POLE ROUND CONNECTOR PLUG
3	399023	7-POLE CONNECTOR PLUG
4	399025	7-POLE CONNECTOR RECEPTACLE
5	390046	7-POLE RV CONNECTOR PLUG

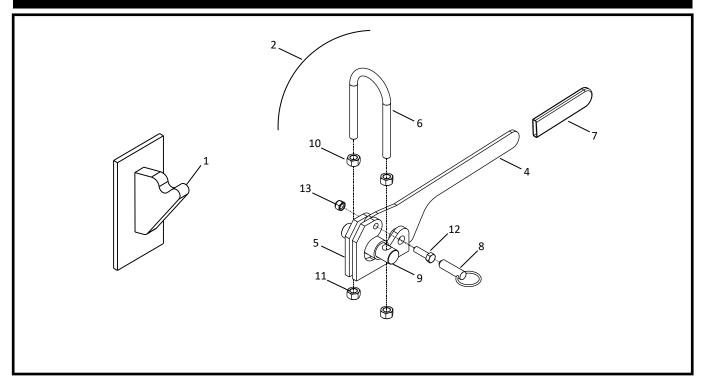
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SECTION J

Frame / Deck

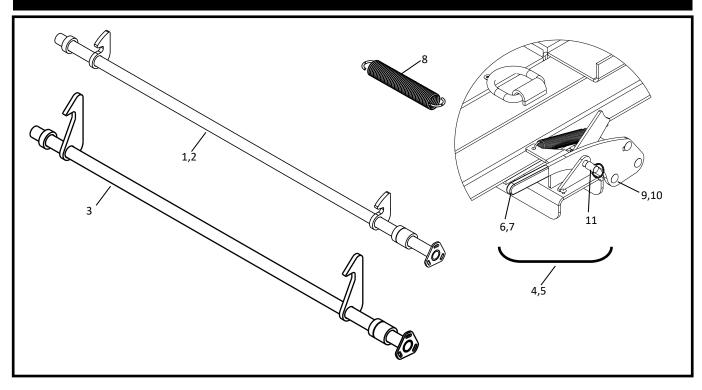
TILT BED DECK LATCH	J-2
TILT BED CYLINDERS	J-4
TOOL TRAY LIDS	J-6
LIGHT BRACKETS	
TIE DOWNS	J-11
FENDERS	I-12

TILT BED DECK LATCH UP TO 5K



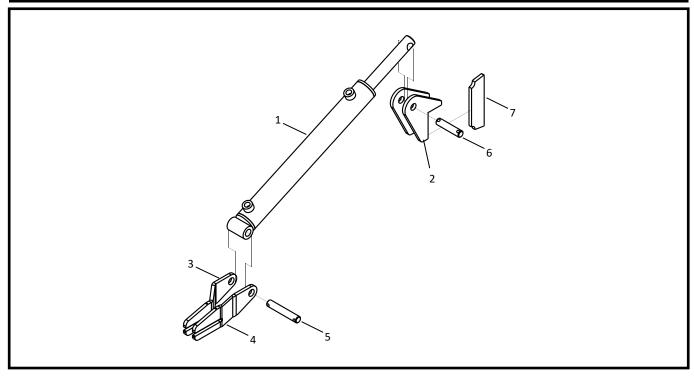
ITEM	PART #	DESCRIPTION
1	1978615	LATCH HOOK WELDMENT
2	160004	KIT, DECK LATCH, DROP-DECK TILT, UP TO 5K
4	120066	HANDLE, LATCH
5	060216	MOUNT, LATCH
6	070024	PIN, U-BOLT SWIVEL
7	370232	GRIP BLK .875 X 6.0"
8	370231	ASY, PIN/CHAIN 9/16 X 1-1/2
9	360305	BOLT, U 1/2 X 3 ROUND
10	360060	NUT, 1/2-20 HEX NF
11	360021	NUT, 1/2-20 NYLOCK
12	360004	BOLT, 3/8-16 X 1-1/4 NC GR 5
13	360002	NUT, 3/8-16 NYLOCK

TILT BED DECK LATCH 9K AND UP



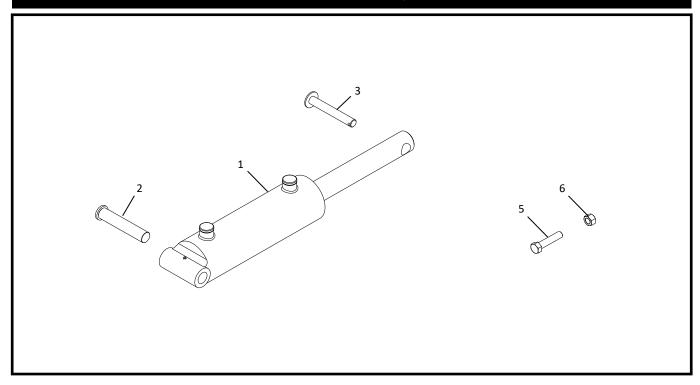
ITEM	PART #	DESCRIPTION
1	1952544	KIT, LATCH SYSTEM, DROP-DECK TILT 9K-14K
2	126597	KIT, LATCH SYSTEM, DROP-DECK TILT
3	1902664	KIT, LATCH SYSTEM, DROP-DECK TILT 18K-20K
4	1978617	DECK LATCH ASY, DROP-DECK TILT 9K-16K
5	1978618	DECK LATCH ASY, DROP-DECK TILT 18K-20K
6	1951622	HANDLE LATCH MNT
7	370232	GRIP BLK .875 X 6.0"
8	370535	SPRING RAMP LATCH HOLD UP
9	361009	BOLT, 3/8-16 X 1 CARRIAGE
10	360035	NUT, 3/8-16 CENTER LOCK
11	370230	PIN HITCH 3/32" X 2 1/2"

DECK CUSHION CYLINDER, 5K



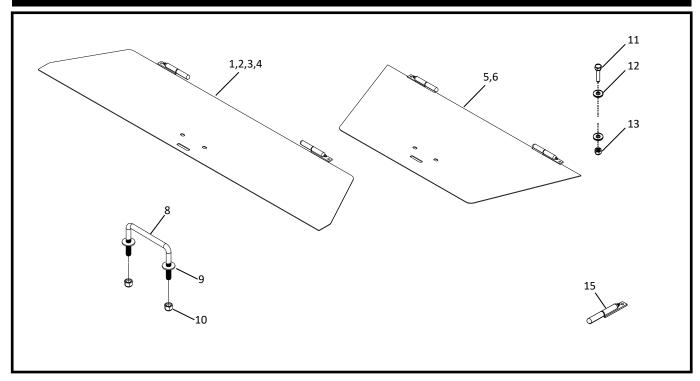
ITEM	PART #	DESCRIPTION
11 2141	1971689	KIT, CUSHION CYL, 5K
1	370292	CYLNDER, HYD 2" X 16.0"
2	063265	MOUNT, UPPPER
3	1967915	MOUNT CYL CUSH LOWER CS
4	1967914	MOUNT CYL CUSH LOWER RS
5	070204	PIN, LOWER CYL
6	070203	PIN, UPPER CYL
7	068407	GUSSET, BGBRD 7" CHNL CUSH CYL

DECK CUSHION CYLINDER, 9K AND UP



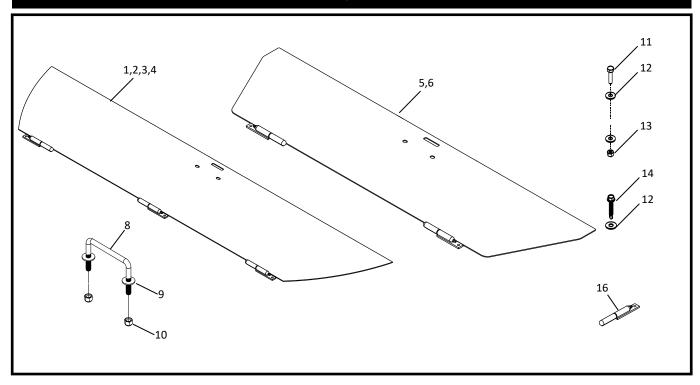
ITEM	PART #	DESCRIPTION
1	370300	CUSHION CYL, 6K AND UP
2	120102	PIN CYLINDER MNT
3	1978531	WLD PIN DD TILT
5	360047	BOLT 3/4-10 X 3.00 NC GR 8
6	360049	NUT 3/4-10 NYLOCK ZP

TOOL TRAY LIDS, DROP-DECK



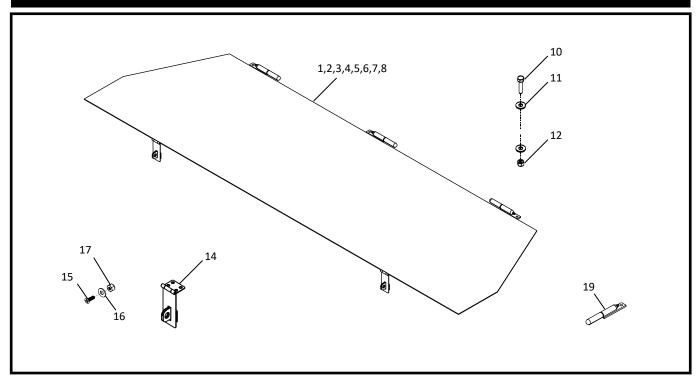
ITEM	PART #	DESCRIPTION
1	1946417	KIT TOOLBOX LID, BOLT-ON, DROP-DECK UP TO 12K (14K ON TC)
2	1946416	TOOLBOX LID, BOLT-ON, DROP-DECK UP TO 12K (14K ON TC)
3	1978468	KIT TOOLBOX LID, BOLT-ON, DROP-DECK 14K AND UP (EXCEPT TC)
4	1978469	TOOLBOX LID, BOLT-ON, DROP-DECK 14K AND UP (EXCEPT TC)
5	1978466	KIT TOOLBOX LID, BOLT-ON, PAN
6	1978467	TOOLBOX LID, BOLT-ON, PAN
8	360335	BOLT U SQUARE 4" WI X 2 5/8" L
9	360005A	WASHER, 3/8 FENDER
10	360002	NUT, 3/8 NYLOCK
11	360335	BOLT U SQUARE 4" WI X 2 5/8" L
12	360205	1/4 WASHER
13	360206	NUT, 1/4 NYLOCK
15	1902300	WLD HINGE BOLT-ON TBL
	-	

TOOL TRAY LIDS, DROP-DECK TILT



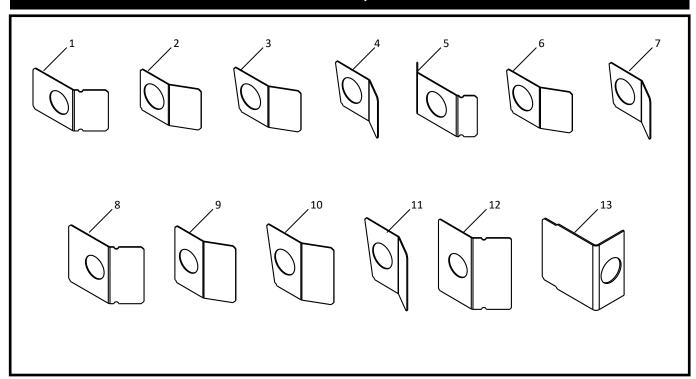
ITEM	PART #	DESCRIPTION
1	1965746	KIT TOOLBOX LID, BOLT-ON, DROP-DECK TILT UP TO 14K
2	1947872	TOOLBOX LID, BOLT-ON, DROP-DECK TILT UP TO 14K
3	1967527	KIT TOOLBOX LID, BOLT-ON, DROP-DECK TILT 16K
4	1952810	TOOLBOX LID, BOLT-ON, DROP-DECK TILT 16K
5	1978510	KIT TOOLBOX LID, BOLT-ON, DROP-DECK TILT 18K AND UP
6	1978509	TOOLBOX LID, BOLT-ON, DROP-DECK TILT 18K AND UP
-		, , , , , , , , , , , , , , , , , , , ,
8	360335	BOLT U SQUARE 4" WI X 2 5/8" L
9	360005A	WASHER, 3/8 FENDER
10	360002	NUT, 3/8 NYLOCK
11	360335	BOLT U SQUARE 4" WI X 2 5/8" L
12	360205	1/4 WASHER
13	360206	NUT, 1/4 NYLOCK
14	360026	SCREW .250-20 X 1.500 TEK
16	1902300	WLD HINGE BOLT-ON TBL

TOOL TRAY LIDS, GOOSENECK



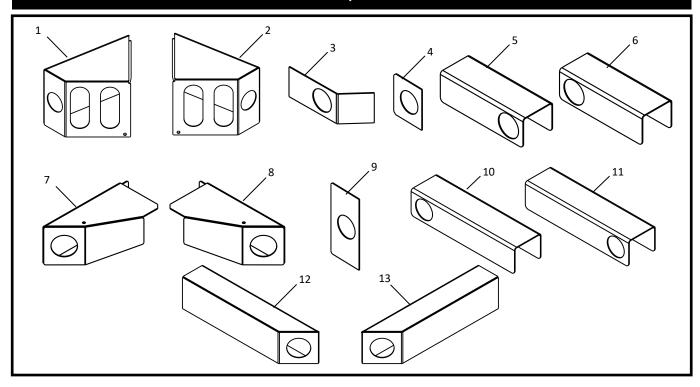
ITEM	PART #	DESCRIPTION
1	1979565	KIT TOOLBOX LID BOLT-ON, DROP-DECK GOOSENECK UP TO 12K
2	1979566	TOOLBOX LID BOLT-ON, DROP-DECK GOOSENECK UP TO 12K
3	1978511	KIT TOOLBOX LID BOLT-ON, DROP-DECK GOOSENECK 14K AND UP
4	1978512	TOOLBOX LID BOLT-ON, DROP-DECK GOOSENECK 14K AND UP
5	1978513	·
		KIT TOOLBOX LID BOLT-ON, DROP-DECK TILT GOOSENECK UP TO 14K
6	1978514	TOOLBOX LID BOLT-ON, DROP-DECK TILT GOOSENECK UP TO 14K
7	1978515	KIT TOOLBOX LID BOLT-ON, DROP-DECK TILT 16K AND UP
8	1978516	TOOLBOX LID BOLT-ON, DROP-DECK TILT 16K AND UP
10	360207	BOLT 1/4-20 X 1.00 NC GR 5
11	360205	1/4 WASHER
12	360206	NUT, 1/4 NYLOCK
14	370100	HASP LOCK TOOL BOX LIDS
15	362050	SCREW #8-32 X .625 FH PHILLIPS BLK OXIDE
16	360818	WASHER FLAT #10
17	360815	NUT #8-32 NYLOC
19	1902300	WLD HINGE BOLT-ON TBL

LIGHT BRACKETS, DROP-DECK



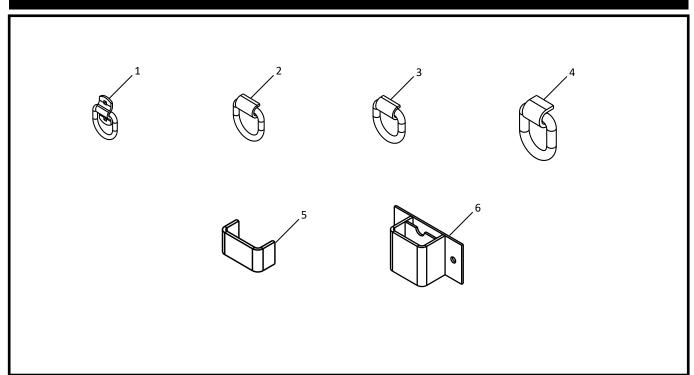
PART #	DESCRIPTION
1962293	FRONT MARKER BRKT, (USED ON T-9D, T-10D, T-12D, TC-9D, TC-10D, TC-12D)
1962294	REAR MARKER BRKT, (USED ON T-9D, T-10D, T-12D, TC-9D, TC-10D, TC-12D)
1965736	FRONT MARKER BRKT BVT, (USED ON T-9D, T-10D, T-12D, TC-9D, TC-10D, TC-12D, T C-14D)
1965737	REAR MARKER BRKT BVT, (USED ON T-9D, T-10D, T-12D)
1971623	MARKER LIGHT BRKT MID, (USED ON T-9D, T-10D, T-12D, TC-9D, TC-10D, TC-12D)
1981203	REAR MARKER CS BRKT BVT, (USED ON T-9D, T-10D, T-12D)
1981202	REAR MARKER RS BRKT BVT, (USED ON T-9D, T-10D, T-12D)
1965858	FRONT MARKER BRKT, (USED ON TC-14D)
1965859	REAR MARKER BRKT, (USED ON TC-14D)
1965871	FRONT MARKER BRKT BVT, (USED ON TC-14D)
1965872	REAR MARKER BRKT BVT, (USED ON TC-14D)
1965530	FRONT MARKER BRKT, (USED ON T-14D, T-16D, T-18D, T-20D, T-24D)
1965850	REAR MARKER BRKT, (USED ON T-14D, T-16D, T-18D, T-20D, T-24D)
	1962293 1962294 1965736 1965737 1971623 1981203 1981202 1965858 1965859 1965871 1965872 1965530

LIGHT BRACKETS, DROP-DECK TILT



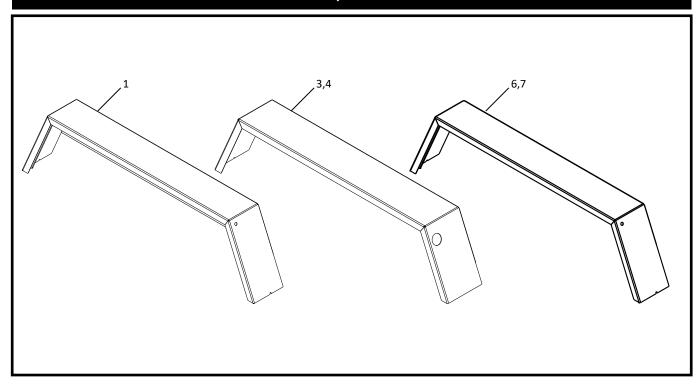
ITEM	PART #	DESCRIPTION
1	120347L	WLD LIGHT BOX LH, (USED ON T-3DT, T-5DT)
2	120347R	WLD LIGHT BOX RH, (USED ON T-3DT, T-5DT)
3	060553	LIGHT BRKT FRONT, (USED ON T-3DT, T-5DT)
4	1908362	BRKT LIGHT, (USED ON T-9DT, T-10DT, T-12DT, T-14DT, T-16DT)
5	1965617	MOUNT LIGHT RS, (USED ON T-9DT, T-10DT, T-12DT, T-14DT, T-16DT)
6	062956	MOUNT LIGHT CS, (USED ON T-9DT, T-10DT, T-12DT, T-14DT, T-16DT)
7	126112	WLD LIGHT BOX LH, (USED ON T-9DT, T-10DT, T-12DT, T-14DT, T-16DT)
8	126110	WLD LIGHT BOX RH, (USED ON T-9DT, T-10DT, T-12DT, T-14DT, T-16DT)
9	1906042	BRKT LIGHT, (USED ON T-18DT, T-20DT)
10	1902696	MOUNT LIGHT RS, (USED ON T-18DT, T-20DT)
11	1902695	MOUNT LIGHT CS, (USED ON T-18DT, T-20DT)
12	1902674	WLD LIGHT BOX LH, (USED ON T-18DT, T-20DT)
13	1902676	WLD LIGHT BOX RH, (USED ON T-18DT, T-20DT)

TIE DOWNS



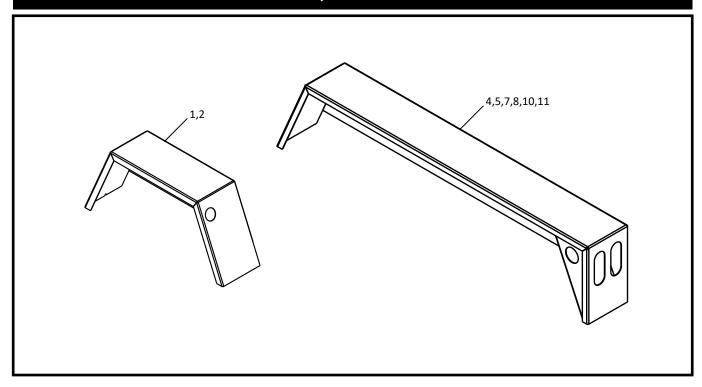
ITEM	PART #	DESCRIPTION
1	370015	D-RING AND CLIP 1/2"
2	370000	D-RING AND CLIP 5/8"
3	370008	D-RING AND CLIP 3/4"
4	370009	D-RING AND CLIP 1"
5	050219	POCKET, STAKE DROP-DECK, 1-5/8" DEEP
6	123998	POCKET, STAKE, BOLT-ON, PAN

FENDERS, DROP-DECK



ITEM	PART #	DESCRIPTION
1	1965625	FENDER ASSY RS/CS, (USED ON T-9D, T-10D, T-12D & TC-9D, TC-10D, TC-12D, TC-14D)
3	1978448	FENDER ASSY CS , (USED ON T-9P T-10P T-12P)
4	1978447	FENDER ASSY RS, (USED ON T-9P T-10P T-12P)
6	1965796	FENDER ASSY RS/CS, (USED ON T-14D T-16D T-18D T-20D T-24D)
7	1965878	OPEN FENDER ASSY RS/CS, (USED ON T-14D T-16D T-18D T-20D T-24D)

FENDERS, DROP-DECK TILT



ITEM	PART#	DESCRIPTION
1	1978446	FENDER ASSY CS, (USED ON T-3DT T-5DT)
2	1978445	FENDER ASSY RS, (USED ON T-3DT T-5DT)
4	120324	FENDER ASSY CS, (USED ON T-9DT T-10DT T-12DT T-14DT)
5	120322	FENDER ASSY RS, (USED ON T-9DT T-10DT T-12DT T-14DT)
7	123869	FENDER ASSY CS, (USED ON T-16DT)
8	123868	FENDER ASSY RS, (USED ON T-16DT)
10	1902704	FENDER ASSY CS, (USED ON T-18DT T-20DT)
11	1902703	FENDER ASSY RS, (USED ON T-18DT T-20DT)

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SECTION K

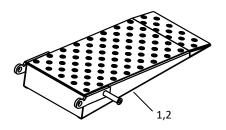
Ramps

Drop-Deck Tilt	K-3
Drop-Deck Std Width (up to 12K)	K-4
Drop-Deck Full Width (up to 12K)	K-6
Pan Deck Std Width	K-8
Pan Deck Full Width	K-10
Drop-Deck Std Width (14K-24K)	K-11
Drop-Deck Full Width (14K-24K)	K-12
Misc. Hardware / Springs	K-14
Ramp Hardware	K-16

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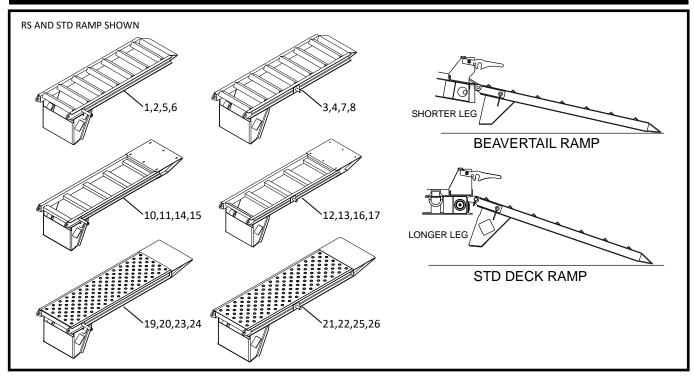
DROP-DECK TILT RAMPS, 3FT (UP TO 16K)

RS RAMP SHOWN



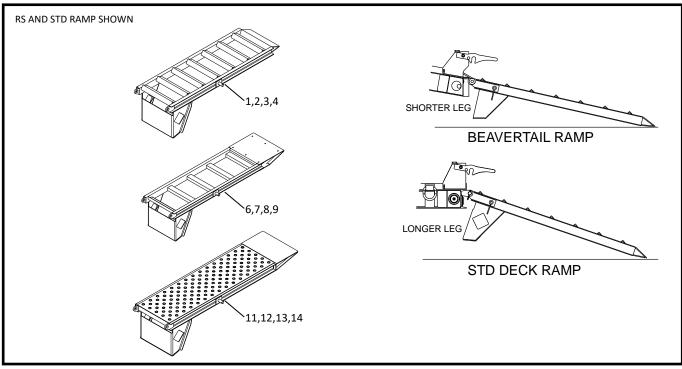
ITEM	PART #	DESCRIPTION
1	124129	RAMP, PUNCH PLATE TOP, RS 16X36 (SL) ATL
2	1901033	RAMP, PUNCH PLATE TOP, CS 16X36 (SL) ATL

DROP-DECK STANDARD WIDTH RAMPS, 5FT (UP TO 12K)



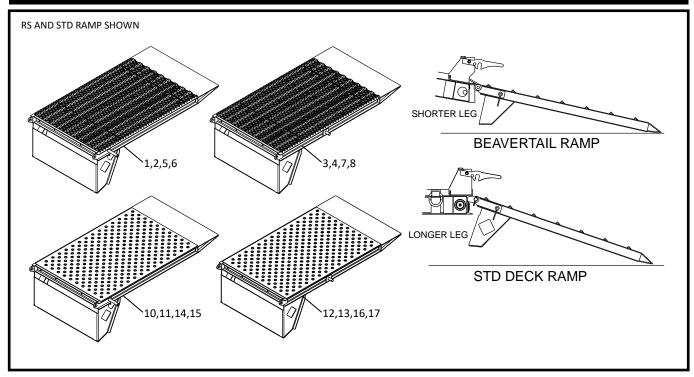
ITEM	PART #	DESCRIPTION
1	1964964	RAMP STD RS 16x60 CLT, ATL
2	1964965	RAMP STD CS 16x60 CLT, ATL
3	1964966	RAMP STD RS 16x60 CLT, FBHU
4	1964967	RAMP STD CS 16x60 CLT, FBHU
5	1964968	RAMP BVT RS 16x60 CLT, ATL
6	1964969	RAMP BVT CS 16x60 CLT, ATL
7	1964970	RAMP BVT RS 16x60 CLT, FBHU
8	1964971	RAMP BVT CS 16x60 CLT, FBHU
10	1964972	RAMP STD RS 16x60 WOOD, ATL
11	1964973	RAMP STD CS 16x60 WOOD, ATL
12	1964974	RAMP STD RS 16x60 WOOD, FBHU
13	1964975	RAMP STD CS 16x60 WOOD, FBHU
14	1964976	RAMP BVT RS 16x60 WOOD, ATL
15	1964977	RAMP BVT CS 16x60 WOOD, ATL
16	1964978	RAMP BVT RS 16x60 WOOD, FBHU
17	1964979	RAMP BVT CS 16x60 WOOD, FBHU
19	1966643	RAMP STD RS 16X60 STAR, ATL
20	1966644	RAMP STD CS 16X60 STAR, ATL
21	1966645	RAMP STD RS 16X60 STAR, FBHU
22	1966646	RAMP STD CS 16X60 STAR, FBHU
23	1966647	RAMP BVT RS 16X60 STAR, ATL
24	1966648	RAMP BVT CS 16X60 STAR, ATL
25	1966649	RAMP BVT RS 16X60 STAR, FBHU
26	1966650	RAMP BVT CS 16X60 STAR, FBHU

DROP-DECK STANDARD WIDTH RAMPS, 6FT (UP TO 12K)



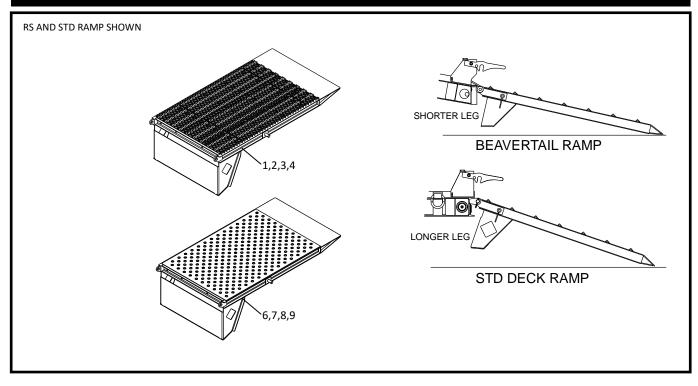
ITEM	PART #	DESCRIPTION
1	1966690	RAMP STD RS 16x72 CLT, FBHU
2	1966691	RAMP STD CS 16x72 CLT, FBHU
3	1966692	RAMP BVT RS 16x72 CLT, FBHU
4	1966693	RAMP BVT CS 16x72 CLT, FBHU
6	1966887	RAMP STD RS 16x72 WOOD, FBHU
7	1966888	RAMP STD CS 16x72 WOOD, FBHU
8	1966885	RAMP BVT RS 16x72 WOOD, FBHU
9	1966886	RAMP BVT CS 16x72 WOOD, FBHU
11	1966700	RAMP STD RS 16X72 STAR, FBHU
12	1966701	RAMP STD RS 16X72 STAR, FBHU
13	1966702	RAMP BVT RS 16X72 STAR, FBHU
14	1966703	RAMP BVT RS 16X72 STAR, FBHU

DROP-DECK FULL-WIDTH RAMPS, 5FT (UP TO 12K)



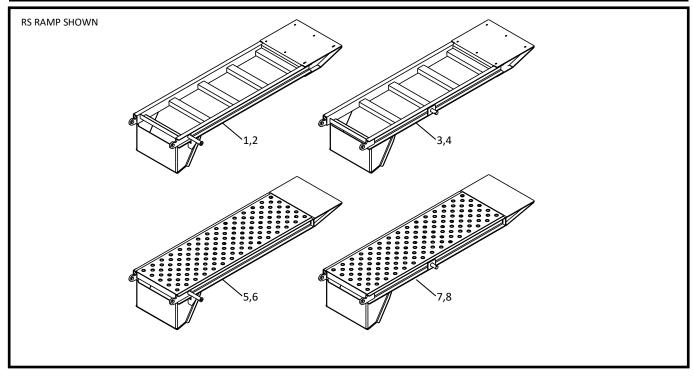
ITEM	PART #	DESCRIPTION
1	1964980	RAMP STD RS 36x60 EXP, ATL
2	1964981	RAMP STD CS 36x60 EXP, ATL
3	1964982	RAMP STD RS 36x60 EXP, FBHU
4	1964983	RAMP STD CS 36x60 EXP, FBHU
5	1966715	RAMP BVT RS 36x60 EXP, ATL
6	1964985	RAMP BVT CS 36x60 EXP, ATL
7	1964986	RAMP BVT RS 36x60 EXP, FBHU
8	1964987	RAMP BVT CS 36x60 EXP, FBHU
10	1964988	RAMP STD RS 36x60 STAR, ATL
11	1964989	RAMP STD CS 36x60 STAR, ATL
12	1964990	RAMP STD RS 36x60 STAR, FBHU
13	1964991	RAMP STD CS 36x60 STAR, FBHU
14	1964992	RAMP BVT RS 36x60 STAR, ATL
15	1964993	RAMP BVT CS 36x60 STAR, ATL
16	1964994	RAMP BVT RS 36x60 STAR, FBHU
17	1964995	RAMP BVT CS 36x60 STAR, FBHU

DROP-DECK FULL-WIDTH RAMPS, 6FT (UP TO 12K)

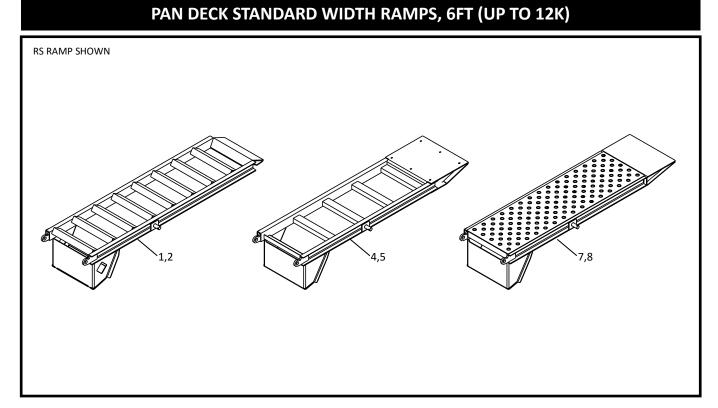


ITEM	PART #	DESCRIPTION
1	1966704	RAMP STD RS 36x72 EXP, FBHU
2	1966705	RAMP STD CS 36x72 EXP, FBHU
3	1966706	RAMP BVT RS 36x72 EXP, FBHU
4	1966707	RAMP BVT CS 36x72 EXP, FBHU
6	1966708	RAMP STD RS 36x72 STAR, FBHU
7	1966709	RAMP STD CS 36x72 STAR, FBHU
8	1966710	RAMP BVT RS 36x72 STAR, FBHU
9	1966711	RAMP BVT CS 36x72 STAR, FBHU
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PAN DECK STANDARD WIDTH RAMPS, 5FT (UP TO 12K)

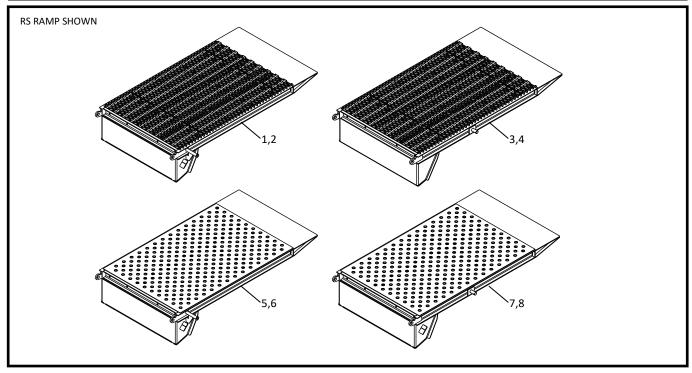


ITEM	PART #	DESCRIPTION
1	1966523	RAMP STD RS 16x60 WOOD, ATL
2	1966524	RAMP STD CS 16x60 WOOD, ATL
3	1966525	RAMP STD RS 16x60 WOOD, FBHU
4	1966526	RAMP STD CS 16x60 WOOD, FBHU
6	1966625	RAMP STD RS 16X60 STAR, ATL
7	1966626	RAMP STD CS 16X60 STAR, ATL
8	1966627	RAMP STD RS 16X60 STAR, FBHU
9	1966628	RAMP STD CS 16X60 STAR, FBHU



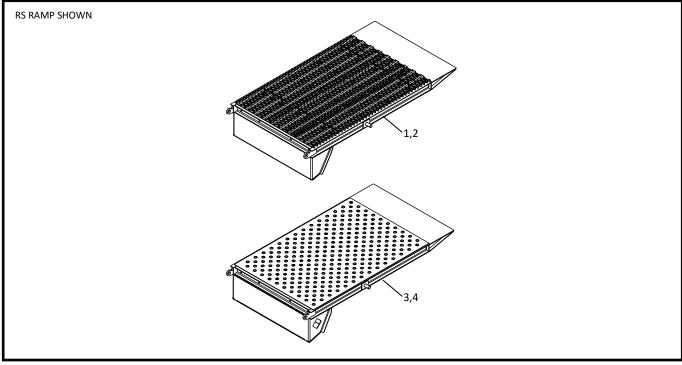
ITEM	PART#	DESCRIPTION
1	1966635	RAMP STD RS 16x72 CLT, FBHU
2	1966636	RAMP STD CS 16x72 CLT, FBHU
4	1966639	RAMP STD RS 16x72 WOOD, FBHU
5	1966640	RAMP STD CS 16x72 WOOD, FBHU
7	1966653	RAMP STD RS 16x72 STAR, FBHU
8	1966654	RAMP STD CS 16x72 STAR, FBHU

PAN DECK FULL WIDTH RAMPS, 5FT (UP TO 12K)



ITEM	PART #	DESCRIPTION
1	1966641	RAMP STD RS 36x60 EXP, ATL
2	1966642	RAMP STD CS 36x60 EXP, ATL
3	1966529	RAMP STD RS 36x60 EXP, FBHU
4	1966530	RAMP STD CS 36x60 EXP, FBHU
6	1966531	RAMP STD RS 36x60 STAR, ATL
7	1966532	RAMP STD RS 36x60 STAR, ATL
8	1966533	RAMP STD RS 36x60 STAR, FBHU
9	1966534	RAMP STD RS 36x60 STAR, FBHU

PAN DECK FULL WIDTH RAMPS, 6FT (UP TO 12K)

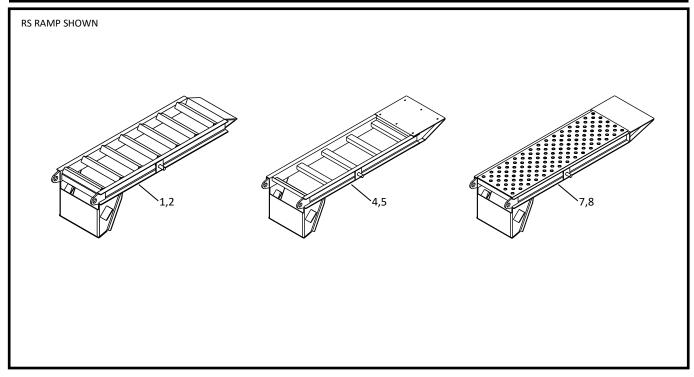


ITEN 4	DART II	DESCRIPTION
ITEM	PART #	DESCRIPTION
1	1966655	RAMP STD RS 36x72 EXP, FBHU
2	1966656	RAMP STD CS 36x72 EXP, FBHU
4	1966657	RAMP STD RS 36x72 STAR, FBHU
5	1966658	RAMP STD RS 36x72 STAR, FBHU

RAMP LEGEND: RS=ROAD SIDE, CS=CURB SIDE, STD=STANDARD DECK, BVT=BEAVERTAIL, ATL=AUTO-LATCH, FBHU=FLATBAR HOLD-UP

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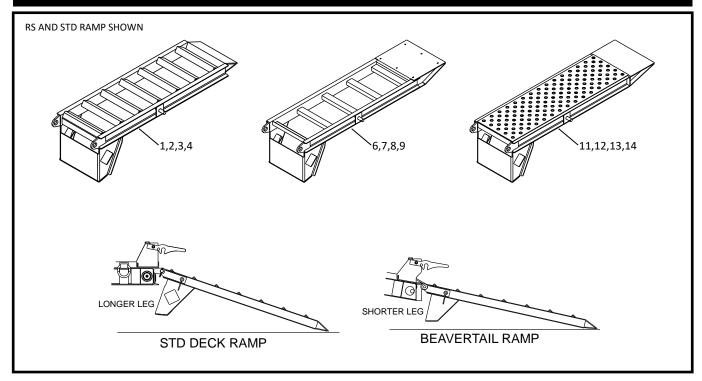
DROP-DECK STANDARD WIDTH RAMPS, 5FT (14K-24K)



ITEM	PART #	DESCRIPTION
1	1966538	RAMP BVT RS 16x60 CLT, FBHU
2	1966539	RAMP BVT CS 16x60 CLT, FBHU
4	1966542	RAMP BVT RS 16x60 WOOD, FBHU
5	1966543	RAMP BVT CS 16x60 WOOD, FBHU
7	1966718	RAMP BVT RS 16x60 STAR, FBHU
8	1966719	RAMP BVT CS 16x60 STAR, FBHU

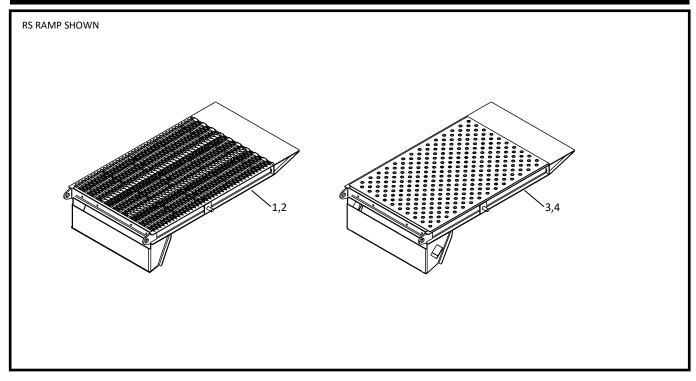
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DROP-DECK STANDARD WIDTH RAMPS, 6FT (14K-24K)



ITEM	PART #	DESCRIPTION
1	1966572	RAMP STD RS 16x72 CLT, FBHU
2	1966573	RAMP STD CS 16x72 CLT, FBHU
3	1966574	RAMP BVT RS 16x72 CLT, FBHU
4	1966575	RAMP BVT CS 16x72 CLT, FBHU
6	1966576	RAMP STD RS 16x72 WOOD, FBHU
7	1966577	RAMP STD CS 16x72 WOOD, FBHU
8	1966578	RAMP BVT RS 16x72 WOOD, FBHU
9	1966579	RAMP BVT CS 16x72 WOOD, FBHU
11	1966721	RAMP STD RS 16x72 STAR, FBHU
12	1966720	RAMP STD CS 16x72 STAR, FBHU
13	1966716	RAMP BVT RS 16x72 STAR, FBHU
14	1966717	RAMP BVT CS 16x72 STAR, FBHU

DROP-DECK FULL-WIDTH RAMPS, 5FT (14K-24K)

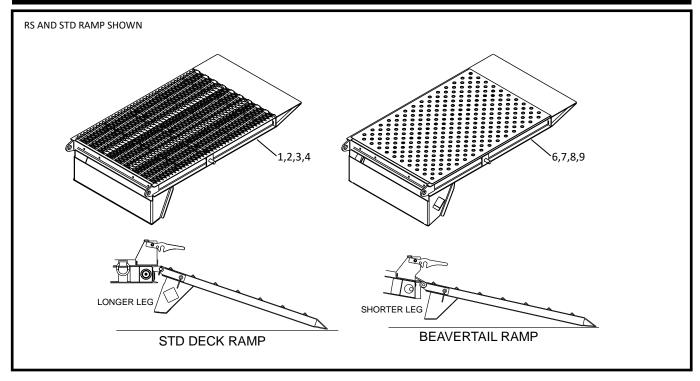


ITEM	PART#	DESCRIPTION
1	1966546	RAMP BVT RS 36x60 EXP, FBHU
2	1966547	RAMP BVT CS 36x60 EXP, FBHU
4	1966550	RAMP BVT RS 36x60 STAR, FBHU
5	1966551	RAMP BVT CS 36x60 STAR, FBHU

RAMP LEGEND: RS=ROAD SIDE, CS=CURB SIDE, STD=STANDARD DECK, BVT=BEAVERTAIL, ATL=AUTO-LATCH, FBHU=FLATBAR HOLD-UP

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DROP-DECK FULL-WIDTH RAMPS, 6FT (14K-24K)

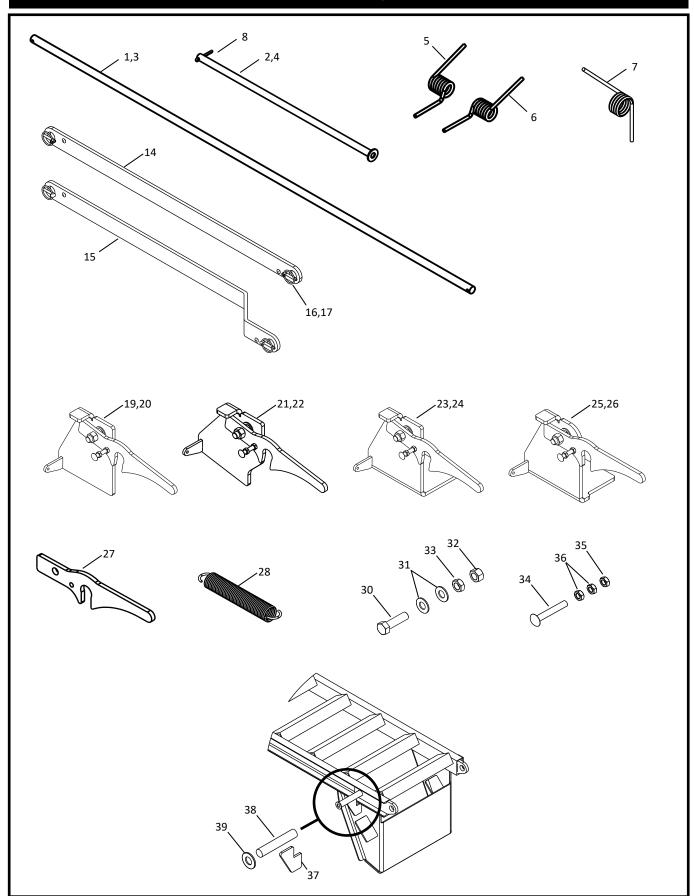


ITEM	PART #	DESCRIPTION
1	1966580	RAMP STD RS 36x72 EXP, FBHU
2	1966581	RAMP STD CS 36x72 EXP, FBHU
3	1966582	RAMP BVT RS 36x72 EXP, FBHU
4	1966583	RAMP BVTCS 36x72 EXPF, BHU
6	1966584	RAMP STD RS 36x72 STAR, FBHU
7	1966585	RAMP STD RS 36x72 STAR, FBHU
8	1966586	RAMP BVT RS 36x72 STAR, FBHU
9	1966587	RAMP BVT RS 36x72 STAR, FBHU

RAMP LEGEND: RS=ROAD SIDE, CS=CURB SIDE, STD=STANDARD DECK, BVT=BEAVERTAIL, ATL=AUTO-LATCH, FBHU=FLATBAR HOLD-UP

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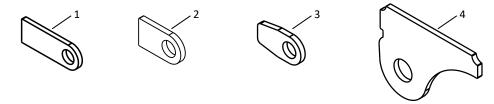
MISC. HARDWARE / SPRINGS



MISC. HARDWARE / SPRINGS

ITEM	PART#	DESCRIPTION
1	070013	RAMP, ROD (FULL WIDTH PAN)
2	070018	ROD RAMP 33.50"
3	070210	RAMP ROD FW LGDD
4	1908420	RAMP ROD DD 35.25"
5	370560	SPRING RAMP INSIDE LH C-10/DD
6	370561	SPRING RAMP INSIDE RH C-10/DD
7	370590	SPRING RAMP T-14/18DD
8	370241	COTTER PIN 5/16" X 3"
9	370234	ROLL PIN 5/16" X 1 1/2" (NOT SHOWN)
10	370235	ROLL PIN 5/16" x 3.0" (NOT SHOWN)
11	370603	RIVET, 3/16" (NOT SHOWN)
12	370596	WASHER, 3/16" (NOT SHOWN)
14	166283	RAMP HOLD-UP C-DD
15	1909590	RAMP HOLD-UP C-DD RRSP
16	373150	1/4" LYNCH PIN W/CHAIN
17	373151	PIN LYNCH W #12 CHAIN
19	1965749	ATL ASY RS—INCL. BRACKET, LEVER, HARDWARE, SPRING (W/LIP)
20	1965988	ATL ASY CS—INCL. BRACKET, LEVER, HARDWARE, SPRING (W/LIP)
21	1965748	ATL ASY RS BVT—INCL. BRACKET, LEVER, HARDWARE, SPRING (W/LIP)
22	1965743	ATL ASY CS BVT—INCL. BRACKET, LEVER, HARDWARE, SPRING (W/LIP)
23	1965771	ATL ASY RS TC—INCL. BRACKET, LEVER, HARDWARE, SPRING (NO LIP)
24	1965990	ATL ASY CS TC—INCL. BRACKET, LEVER, HARDWARE, SPRING (NO LIP)
25	1967616	ATL ASY RS TC BVT—INCL. BRACKET, LEVER, HARDWARE, SPRING (NO LIP)
26	1967617	ATL ASY CS TC BVT—INCL. BRACKET, LEVER, HARDWARE, SPRING (NO LIP)
27	061384	LATCH HANDLE RAMP
28	370535	SPRING RAMP LATCH HOLD-UP
29	1965580	SPRING RETAINER
30	360132	BOLT 5/8-11 X 2 1/4 NC GR8
31	360406	WASHER FL 5/8"
32	360409	NUT 5/8-11 CENTER LOCK NUT GR8
33	360033	NUT 5/8-11 NY-LOCK JAM
34	361013	BOLT 3/8-16 X 2 1/2 CARRIAGE
35	360035	NUT 3/8-16 CENTER LOCK
36	360120	NUT 3/8-16 CENTER LOCK JAM
37	066938	GUSSET RAMP LEG
38	070121	ROD, RAMP, HOLD-UP DD
39	360406	WASHER FLAT 5/8"

RAMP MOUNTS



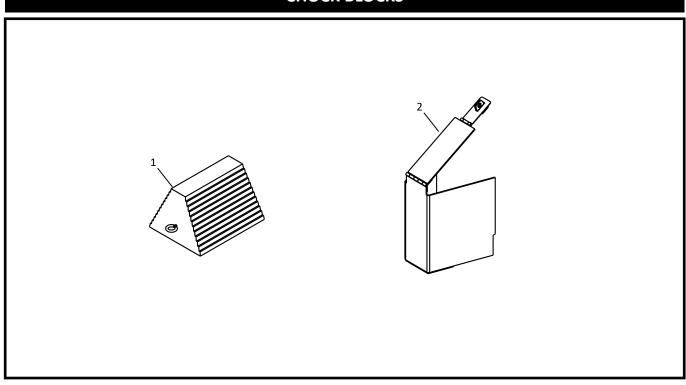
ITEM	PART #	DESCRIPTION
1	060072	RAMP MOUNT, LONG (1" HOLE, 4" LONG)
2	060071	RAMP MOUNT, SHORT (1" HOLE, 3" LONG)
3	060262	MOUNT, RAMP EAR, TRAILER (1" HOLE)
4	1965516	MOUNT, RAMP LARGE DROP-DECK (1-1/2" HOLE)
6	070109	PIN, SHORT HOLD-UP (NOT SHOWN)
8	373150	1/4" LYNCH PIN W/CHAIN (NOT SHOWN)
9	370603	RIVET, 3/16" (NOT SHOWN)
3	370003	RIVET, 3710 (NOT SHOWN)

SECTION L

Miscellaneous

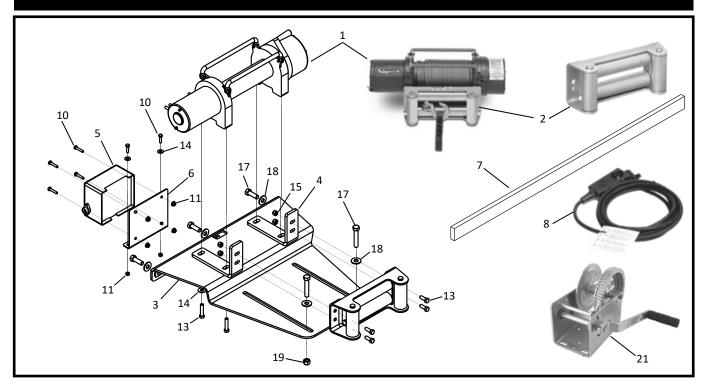
CHOCK BLOCK PARTS	L-2
WINCHES AND COUNTER-WEIGHTS	L-3
SPARE TIRE MOUNTS	L-4
PALLET FORK HOLDERS	L-€
OTHER PARTS/SAFETY CHAINS	L-7

CHOCK BLOCKS



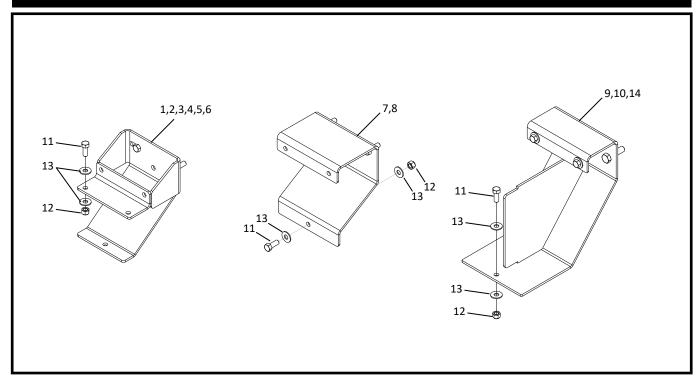
ITEM	PART #	DESCRIPTION
	375005	CHOCK BLOCK. RUBBER
	1976731	HOLDER, CHOCK BLOCK, DT

WINCH



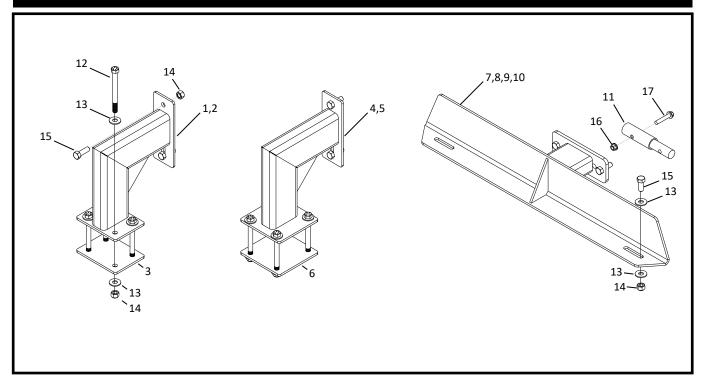
ITEM	PART #	DESCRIPTION
	1968853	KIT, 8K WINCH, DT
1	371986	WINCH, 8K
2	372003	CABLE GUIDE
3	067992	MOUNT PLATE, DECK
4	068423	CABLE GUIDE MOUNT
5		
6	064430	CONTROLLER BOX MOUNT
7	050934	COUNTERWEIGHT (FOR DT TRAILERS)
8	394109	KIT, REMOTE CONTROL SWITCH, 12 FT CORD
10	260207	POLT 1/4 20 V 1 NG CD F
	360207	BOLT 1/4-20 X 1 NC GR 5
11	360206	NUT 1/4-20 NY-LOCK
13	360111	BOLT 3/8-16 X 1 GR 5
14	360202	WASHER 3/8 FLAT BLACK
15	360002	NUT 3/8-16 NY-LOCK
17	361058	BOLT 1/2-13 X 2-3/4 NC GR8
18	360010	WASHER 1/2" FLAT USS
19	360030	NUT 1/2-13 NYLOC
	070005	
21	372002	WINCH, 3.5K HAND CRANK

SPARE TIRE MOUNTS (DROP-DECK)



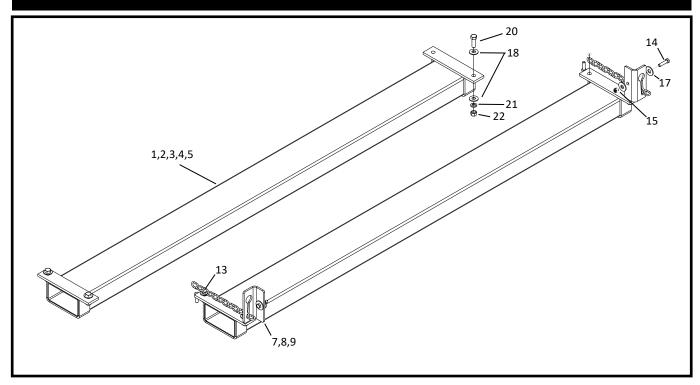
ITEM	PART #	DESCRIPTION
1	1978450	KIT, SPARE TIRE MOUNT (DROP-DECK UP TO 12K)
2	124036	SPARE TIRE MOUNT WLDMNT (DROP-DECK UP TO 12K)
3	1978451	KIT, SPARE TIRE MOUNT (TC DROP-DECK UP TO 12K)
4	124042	SPARE TIRE MOUNT WLDMNT (TC DROP-DECK UP TO 12K)
5	1978452	KIT, SPARE TIRE MOUNT (TC DROP-DECK 14K)
6	1945080	SPARE TIRE MOUNT WLDMNT (TC DROP-DECK 14K)
7	1978453	KIT, SPARE TIRE MOUNT (PAN)
8	2101097	SPARE TIRE MOUNT WLDMNT (PAN)
9	1978454	KIT, SPARE TIRE MOUNT (DROP-DECK 14K AND UP)
10	1944281	SPARE TIRE MOUNT WLDMNT (DROP-DECK 14K AND UP)
11	360071	BOLT, 1/2-20 X 1-1/2 UNF, GR5
12	360007	NUT, 1/2-20, GR5
13	360010	WASHER, 1/2 FLAT
14	1942449	KIT, SPARE TIRE MOUNT (DROP-DECK 14K AND UP W/OPEN FENDER)

SPARE TIRE MOUNTS (DROP-DECK TILT)



ITEM	PART #	DESCRIPTION
1	1978460	KIT, SPARE TIRE MOUNT (DROP-DECK TILT, 3K)
2	1978461	SPARE TIRE MOUNT WLDMNT (DROP-DECK TILT, 3K)
3	1978462	SPARE TIRE MOUNT BASE, BOLT-ON (DROP-DECK TILT, 3K)
4	1978455	KIT, SPARE TIRE MOUNT (DROP-DECK TILT, 5K)
5	1978459	SPARE TIRE MOUNT WLDMNT (DROP-DECK TILT, 5K)
6	1978456	SPARE TIRE MOUNT BASE, BOLT-ON (DROP-DECK TILT, 5K)
7	1909176	KIT, SPARE TIRE MOUNT (DROP-DECK TILT, UP TO 12K)
8	120247	SPARE TIRE MOUNT WLDMNT (DROP-DECK TILT, UP TO 12K)
9	1909707	KIT, SPARE TIRE MOUNT (DROP-DECK TILT, 14K AND UP)
10	120248	SPARE TIRE MOUNT WLDMNT (DROP-DECK TILT, 14K AND UP)
11	1909175	PARKING JACK HANDLE EXTENSION (DROP-DECK TILT UP TO 12K)
12	360161	BOLT, 1/2-13 X 5-1/4, GR8
13	360010	WASHER, 1/2 FLAT
14	360030	NUT, 1/2-13 NYLOCK, GR8
15	360020	BOLT, 1/2-13 X 1-1/4, GR5
16	1J06	NUT, 3/8-16 NYLOCK
17	1A06032	BOLT, 3/8-16 X 2, FLANGE HEX, GR5

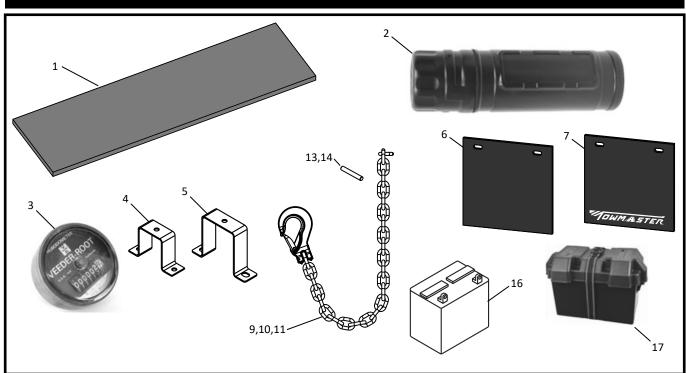
PALLET FORK HOLDERS



ITEM	PART #	DESCRIPTION
	1976886	KIT, PALLET FORK HOLDER, BOLT-ON, DROP-DECK UP TO 12K (14K ON TC), 78"
	1978478	KIT, PALLET FORK HOLDER, BOLT-ON, DROP-DECK 14K AND OVER (EXCEPT TC), 78"
	1978470	KIT, PALLET FORK HOLDER, BOLT-ON, DROP-DECK TILT UP TO 14K, 78"
	1978485	KIT, PALLET FORK HOLDER, BOLT-ON, DROP-DECK TILT, 16K, 75"
	1978508	KIT, PALLET FORK HOLDER, BOLT-ON, DROP-DECK TILT, 18K, 74"
1	1976885	PALLET FORK HOLDER TUBE WLD, DROP-DECK UP TO 12K (14K ON TC)
2	1978479	PALLET FORK HOLDER TUBE WLD, DROP-DECK 14K AND OVER (EXCEPT TC)
3	1978471	PALLET FORK HOLDER TUBE WLD, DROP-DECK TILT UP TO 14K
4	1978586	PALLET FORK HOLDER TUBE WLD, DROP-DECK TILT, 16K
5	1978508	PALLET FORK HOLDER TUBE WLD, DROP-DECK TILT, 18K
7	062030	CHAIN KEEPER ATTACHEMNT HOLDER, DROP-DECK
8	1978472	CHAIN KEEPER ATTACHEMNT HOLDER, RS, DROP-DECK TILT
9	1978473	CHAIN KEEPER ATTACHEMNT HOLDER, CS, DROP-DECK TILT
11	1978480	SPACER, BOLT-ON (NOT PICTURED)
13	370007	3/16" PROOF COIL CHAIN, 12" LGTH
14	360006	BOLT, 3/8-16 X 1-1/2" GR8
15	360002	NUT, 3/8 NYLOCK
17	360005A	WASHER, 3/8 FENDER
18	360010	WASHER, 1/2 FENDER
20	360031	BOLT, 1/2 X 2, GR8
21	360018	WASHER, 1/2 LOCK
22	360008	NUT, 1/2 GR8



OTHER PARTS



ITEM	PART #	DESCRIPTION
1	375002	8" WIDE RUBBER RUNNER
2	376071	REGISTRATION HOLDER
3	375011	HUBOMETER
4	060737	HUBOMETER MOUNT, 6-BOLT
5	060744	HUBOMETER MOUNT, 8-BOLT
6	370812	MUDFLAP, SMALL PLAIN
7	370816	MUDFLAP, SMALL LOGO
9	370003	SAFETY CHAIN, 3/8" X 40", GR43 W/SAFETY HOOK
10	370014	SAFETY CHAIN, 3/8" X 40", GR70 W/SAFETY HOOK
11	370002	SAFETY CHAIN, 1/2" X 40", GR70 W/SAFETY HOOK
13	070007	SAFETY CHAIN ANCHOR, 3/8" CHAIN
14	070004	SAFETY CHAIN ANCHOR, 1/2" CHAIN
16	350220	BATTERY, 12V
17	350215	BOX, BATTERY

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