XL HDG/HDGS OPERATION MANUAL





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TRAILER SPECIFICATIONS

| MODEL | XL | HDG/S |
|-----------------------|----|----------|
| VIN# | | |
| | | |
| DISTRIBUTED CAPACITY | | LBS |
| CONCENTRATED CAPACITY | L | .BS INFT |
| OVERALL LENGTH | | |
| OVERALL WIDTH | | |



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 XL Specialized Trailers.

If NHTSA recieves 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 compaign. However, NHTSA cannot become involved in any individual problems between you, your dealer, or XL Specialized Trailers.

To contact NHTSA you may either call the Vehicle Safety Hotline, toll-free, at 1-800-327-4236 or write to:

Administrator, NHTSA

400 Seventh Street SW

Washington, DC 20590

You can obtain more information about motor vehicle safety from <u>www.safecar.gov</u>



TRAILER REGISTRATION

Trailers must be registered within 10 days of sale to First User in order for the trailer to be covered under warranty. Fill out the electronic form on our website:

https://www.xlspecializedtrailer.com/warranty/trailer-registration





Most accidents happen because of neglect or carelessness. Avoid needless accidents by following all of the safety precautions listed below.

THE USER IS RESPONSIBLE FOR INSPECTING THEIR TRAILER AND FOR HAVING PARTS REPAIRED OR REPLACED WHEN CONTINUED USE OF THE PRODUCT WOULD CAUSE DAMAGE OR EXCESSIVE WEAR TO OTHER PARTS. IT IS THE USER'S RESPONSIBILITY TO DELIVER HIS TRAILER TO A X-L DEALER FOR SERVICE OR REPLACEMENT OF DEFECTIVE PARTS, WHICH ARE COVERED BY THE STANDARD WARRANTY. IT IS THE RESPONSIBILITY OF THE USER TO READ THE OPERATION MANUAL AND UNDERSTAND THE SAFE AND CORRECT OPERATING PROCEDURES AS PERTAINS TO THE OPERATION OF THE PRODUCT, AND TO LUBRICATE AND MAINTAIN THE PRODUCT ACCORDING TO THE MAINTENANCE SCHEDULE IN THE SERVICE MANUAL.

- 1. When performing adjustments or maintenance on a trailer, first lower it to the ground or block it securely at a workable height.
- 2. Detach the trailer in a safe area.
- 3. Flags or other warning devices should be used when parked with over width loads.
- 4. Loose-fitting clothing should not be worn, to avoid catching on various parts.
- 5. Equipment should only be operated by those who are authorized to do so.
- 6. Make certain everyone is in the clear before starting, raising, or lowering the trailer if the unit is designed to do so.
- 7. Reduce speed on hillsides or curves so there is less danger of tipping.
- 8. Avoid driving too close to the edge of ditches or creeks.
- 9. Stop the engine, lock the brakes, and remove the ignition key before dismounting from the tractor.
- 10. A first aid kit should be provided for immediate treatment of all scratches, cuts, etc.
- 11. Never stand between tractor and trailer while tractor is being backed up to trailer hitch.
- 12. Do not transport wide loads on public roads without proper reflectors. Wide load and slow-moving vehicle emblems must be used in daylight and have approved warning light at night and other periods of poor visibility.
- 13. Observe all laws and regulations while transporting on public roads. Check the local highway regulations.
- 14. Carefully maintain control of equipment at all times when traveling on the highway.
- 15. Due to the width and height of some equipment, use extra caution on highways, farm roads, and when approaching bridges, overpasses, and underpasses.



1. INTRODUCTION

- 1.1 Tractor and low bed or heavy-duty platform trailer combinations may have different operational characteristics than typical tractor-trailer combinations due to gross weights, large differences between loaded and unloaded weights, suspension characteristics, and articulation.
- 1.2 Tractor and truck trailer combinations have safe operating limits just as automobiles, trains, and airplanes have operating limits. These limits are affected by the interaction of the vehicle characteristics, maintenance, load, roadway, weather, the skill of the driver, and vehicle speed. Knowledge of how these factors affect the vehicle's operating limits and defensive driving techniques should result in safer driving.

2. PURPOSE

- 2.1 The purpose of this chapter is to describe how tractor and truck trailer control and stability limits are affected by the vehicle characteristics, maintenance, roadway, weather, and driver operation and how to compensate for these factors. Knowledge of these factors will assist operators in productive use of this equipment.
- 2.2 The information in this bulletin has been gathered from a number of research reports and accident summaries. These sources of information are referenced in the Bibliography at the end of this manual.
- 2.3 First and foremost, DO NOT operate the trailer until you have read, and you fully understand the instruction and operating manual supplied to you by the manufacturer of the trailer. It is also important that each and every person who operates the trailer and/or is responsible for the loading and operating of the trailer be given the opportunity to read the manuals.

3. PRE-TRIP INSPECTION

- 3.1 There are some items on every vehicle combination that can be and should be inspected prior to every trip that require no special knowledge, training, or sophisticated equipment.
- 3.2 Brakes
 - 3.2.1 Function test. Operate the brake pedal and hand control valve to determine if air is being supplied to the brake chambers. Use an observer or place marks on push rods to determine if the brakes are operating. Visually inspect the brake chambers and slack adjusters for problems caused by road hazards.
 - 3.2.2 Keeping brakes in proper adjustment is imperative to stable, straight line braking and maintaining minimum stopping distances. Visually inspect the air brake hoses and glad-hands to determine if air loss is occurring. Air leaks can reduce braking capability. Anti-lock devices, if provided, should be maintained and inspected routinely. Their use can prevent wheel lock-up, improve stopping capability and reduce the probability of jackknife.
- 3.3 Automatic Slack Adjusters
 - 3.3.1 As automatic slack adjusters become more widely used, it is important to point out that they do require periodic maintenance. Primarily, they should be greased at specific intervals. When they are being serviced, they should be checked for proper operation by checking the brake adjustment.



- 3.4 Tires and Wheels
 - 3.4.1 Many operators use a tire billy to check air in tires, but the purchase of a good tire gauge would eliminate the guessing. Before moving the trailer, check the air pressure in the tires as a drop of 10 PSI in the tire pressure can reduce the carrying capacity of the tire by as much as 20% on certain tires. This reduced capacity could cause tire failure and loss of control of the trailer. Low tire pressure also is the main cause of poor tire life which can be very costly.
 - 3.4.2 At the same time tires are checked, inspect wheels for cracks around the lugs. These can be observed in most cases by rust lines. These wheels should be replaced immediately.
 - 3.4.3 There is no reason for any set of duals to be wobbling on any vehicle or tractor trailer combination. Installing duals with proper shop techniques will result in wheels running true. The result is increased tire mileage, smoother ride, and less stress on structural components, all providing a safer vehicle.
- 3.5 Towing Device and Suspension
 - 3.5.1 Be sure the fifth wheel is locked to the king pin before pulling away. Visual inspection of the locking device is better than relying solely on applying air to the trailer brakes, and jerking against the king pin.
 - 3.5.2 Inspect fifth wheel mountings for any tell-tale sign of failure or damage to load bearing components. Inspect the pintle hooks, lunette eyes, and drawbars on connector dollies by visually observing them for any unusual appearances such as bent members, cracks in welds, or chipped paint where structural members have received high load.
 - 3.5.3 Inspect the suspensions by observing if the vehicle is leaning to one side, which may indicate a broken spring or faulty air valve on air suspensions. Visually inspect radius arms to be sure they are in place and look at the spring hangers to see if springs are in the hangers and that the hangers are not bent or otherwise damaged.
- 3.6 Frame

Before beginning any trip, make a thorough inspection of the trailer for cracks in the structure. Typical locations of cracks are at welds, at changes in beam depths, above suspension components, and at the upper coupler. Experience may also indicate other areas that need to be checked.

3.7 Safety Chains

Check all safety chains and their attachment to both the towed and the towing vehicle. Make certain the chains are of adequate size and are in good condition. Also make certain that all attachment devices are properly installed, and all nuts are tight.

3.8 State Laws

Before any trip to an area where you are not accustomed to traveling, check the state laws with regard to bridge requirements, especially if the trailer being towed has liftable axles.

3.9 Driver Safety

Be cautious when climbing on and off the trailer. If the trailer is dirty, snow covered or wet, the top of trailer can be extremely slippery, and could cause injury.



4. LOADING TRAILER AND HAULING LOAD

- 4.1 Load
 - 4.1.1 Vehicle handling limits can be greatly affected by the weight of a load, its placement, the amount of weight distributed over the tractor axles, and whether or not the load is secured properly.
 - 4.1.2 Overloading a vehicle should never be permitted. Overloads result in tire blowouts, spring breakage, frame breakage, insufficient braking capacity and will severely alter a vehicle's handling characteristics. All vehicles are designed with a maximum load capability and to best utilize these vehicles in the safest manner, the loads as shown on the certification label should not be exceeded.
 - 4.1.3. One of the major contributing factors to vehicle rollover is a high center of gravity on tall loads. Extreme caution should be used in maneuvering a vehicle, tractor trailer combination, or any unit that has a tall load. This can be done by reducing speed. Fifth wheel placement on tractors can have an adverse effect on handling characteristics. Avoid moving the fifth wheel behind the centerline of the tandem on the tractor in an attempt to improve the ride. The result will be reduced steering load and loss of steering control. (3,4) Steering control is affected also if the fifth wheel is placed too far forward, since this position places too
- 4.2 Axle Loads
 - 4.2.1 Check axle loads against the GVWR and the GAWR of the power vehicle and the trailer to ensure that loading is within the limits of the vehicles being used.



IMPROPER LOAD PLACEMENT CAN HAVE A DETRIMENTAL EFFECT ON BRAK ING, EVASIVE MANEUVERS, AND HANDLING CHARACTERISTICS OF A VEHICLE COMBINATION TRUCK TRAILER OR COMBINATION TRACTOR TRAILER.

4.3 Road Surface

Uneven terrain, steep grades and crowned roads, especially rural roadways, freeways, exit ramps, curves, bumps and depressions introduce forces into a tractor trailer combination that could result in an accident if proper precautions and driving techniques are not followed.

Even a vehicle that meets all maintenance and load requirements can become hazardous when excessive speeds and certain roadway characteristics are combined.

4.3.1 Grades

Trucks are more likely to have accidents on grades than on level terrain. Rural non-freeways have the worst grade accident experience, particularly downgrades. Furthermore, the steeper downgrades have the greatest accident frequency. (8)

On a downgrade, the force of gravity works against the driver in maintaining control of his vehicle, particularly if the road is covered with rain, snow, ice, or loose material. On upgrades, the problem is spinning out due to insufficient traction at the drive wheels, particularly on snow and ice.

Failure to control speed by down shifting has resulted in 6% of the interstate truck accidents.(9) Drivers should use the same gear in descending a long grade as they would in climbing it.Gear selection should be made before descending a grade to minimize the chance of missing a shift. (10)



Great care must be taken to avoid excessive use of brakes on long downgrades, as over-heated brakes are dangerously inefficient. Drivers should use engine compression as the principal means of controlling speed on long grades. (10) Unless the road is slippery, the brakes should not be fanned (alternately applied and released) since fanning brakes on a long downhill grade may reduce air pressure below the minimum pressure needed for proper brake operation. (10)

If the low air pressure warning device operates at any time, drivers must stop immediately in the safest available place and correct the loss of air pressure before proceeding.

It is very dangerous to brake on a downgrade using only the trailer brakes. If this is done, the trailer brakes heat up and fade and the tractor brakes alone will not be able to stop the combination by themselves. Only by downshifting and using all brakes can the brake temperatures be held to a safe level.

4.3.2 Exit and Entrance Ramps

Sixteen (16%) percent of tractor semi-trailer overturns occur at exit and entrance ramps of super highways. (11) All exit ramps are not uniform in curvature and banking and may not have a speed advisory sign proper for all truck and load combinations. Recent information indicates that jackknifing can occur without brakes being applied if a tractor semi-trailer enters a curved exit ramp at a too high rate of speed. (4)

4.3.3 Level, Straight Roads

Many overturns appear to occur due to the driver falling asleep and driving off the pavement. A high crowned road, coupled with excessive speed, can cause trailer sway and loss of stability. Driver attentiveness is essential.

4.3.4 Bumps and Depressions

Driving over a bump or depression in the road surface or running off the pavement and back on can cause the vehicle to sway and result in momentary reduction of lateral friction. Reduced speed and increased driver attentiveness are the best deterrents. VERY LOW VEHICLES CAN BE HUNG UP AT ELEVATED RAILROAD CROSSINGS OR DRIVEWAYS, SO PAY CLOSE AT-TENTION TO THE ROAD SURFACE WHEN USING THESE VEHICLES.

4.3.5 Curves

The forces trying to roll a vehicle over increase according to the square of the speed and are inversely proportional to the radius of a curve, i.e., the smaller the radius, the greater the force trying to pull the vehicle over. Therefore, the tighter the curve, the slower the speed must be in order to avoid rollover. In order to round a curve without skidding, there must be friction keeping the tire from skidding sideways. However, the tire/road interface can generate only so much friction. Part of the friction is used up when the tire is accelerating or braking. Thus, accelerating or braking on a curve can reduce the tire side friction and result in a skid. If the trailer tires skid, trailer swing occurs. If the rear tractor tires skid, tractor swing and jackknifing occurs.

4.4 Weather

A major factor in the causes of accidents is weather. Rain, ice, snow, and high winds can each contribute significantly to an accident when combined with excessive speed, sudden lane changes, or other factors that put lateral forces into a tractor trailer combination.



Slippery roads can increase stopping distances and reduce the ability of a vehicle to perform maneuvers. (12) However, a study has shown that drivers often do not reduce their speed when the pavement is slippery and thus exceed the stopping and maneuvering limits of their vehicle. (13)

A tire's friction must be shared between friction required for braking or accelerating and that required to keep from skidding sideways. When the road is wet, the available tire/road friction may be half that of a dry road. If hard braking or rapid acceleration occurs, there may be little or no friction available to prevent tire lateral movement and skidding results. Many tractors have the capability to rapidly accelerate when coming off a ramp or curve. If this is done on slippery pavement, skidding may occur. On icy roads it is important to avoid deceleration, which can lock up the drive wheels. Avoid backing off the throttle suddenly, down shifting, or use of any engine retarder brake. Sudden deceleration may result in the trailer pushing the tractor around. (12,14)

Properly inflated tires get the best traction on icy roads. Don't attempt to let air out of the tires to gain traction. On ice, proper selection of drive wheel tires can make a 20 percent improvement in traction. Single reinforced chains can increase that traction by 500 percent. The interaxle lock should be used to avoid wheel spin. (14) Cross winds at bridges and near large structures such as grain elevators and passing trucks and buses may cause vehicle sway and sideways movement sufficient to push the combination off a slippery road.

4.4.1 Hydroplaning

As a result of recent studies (15,16), the National Transportation Safety Board has concluded drivers of heavy trucks need to be made aware of the dangers of hydroplaning in wet weather. Hydroplaning occurs when water on the road builds up under the tires and literally lifts them clear of the pavement. Major contributing factors are: (1) excessive speed; (2) inadequate tread depth, which reduces the dispersion of water between the tire and roadway; and (3) under-inflation, which results in deformation of the tread permitting water buildup. (17)

The Board recommends tires be replaced at a tread depth of 4/32 inch for high-speed operation on wet pavement. Above all, drivers should be made aware hydroplaning can affect large trucks and combinations, and the surest means of prevention is reduced speed on wet pavement. (17)

ATTENTION: THESE ITEMS MENTIONED ARE VERY BASIC TO VEHICLE SAFETY AND ARE ITEMS INSPECTED BY STATE AGENCIES. FOR THE PURPOSE OF THIS DOCU-MENT, ATTENTION IS CALLED TO THEM RELATIVE TO A VEHICLE'S STABILITY AND ITS ABILITY TO PERFORM CERTAIN EVASIVE MANEUVERS SAFELY. THE USE OF THESE WILL BY NO MEANS REPLACE A PROPER MAINTENANCE AND PREVENTIVE MAINTENANCE PROGRAM.

4.5 Jackknife

When the tractor's rear wheels are locked up, a jackknife results in the tractor rotating through about 120 degrees in one to two seconds until the cab strikes the trailer. (9) In severe cornering maneuvers, such as exiting a ramp at high speed, a directional instability may occur without tractor rear wheel lockup. This also results in a jackknife motion although the rotational rate is lower than that of a drive axle lockup jackknife. (4)



A jackknife can be prevented by avoiding rapid acceleration and deceleration, by reducing speed on curves, and by controlled braking to avoid wheel lockup. Rolling wheels are necessary to keep control. When brakes are on, they slow the vehicle. When the brakes are off, steering control is maintained. Anti-lock devices automatically fan the brakes. (14) However, most vehicles built before 1975 and after 1979 have not been equipped with anti-lock and therefore fanning the brakes is the best method of avoiding wheel lockup. Brakes should not be fanned except on slippery pavement where this type of braking gives better control, reduces danger of skidding and gives a shorter stop. Fanning reduces air pressure and serves no useful purpose on dry pavement. (10)

Tests have shown that a driver cannot recover from a jackknife when the angle between tractor and trailer is greater than 15 degrees unless the tractor is equipped with front wheel drive. (14,18)

Vertical hinged-steering and the load divider dolly rear steering trailer combinations are subject to some decrease in roll stability while turning. This is because the rear most axles are swung inboard during a turn, decreasing their contribution to roll resistance. The tighter the turn, the less roll resistance.

This decrease in roll stability is normally very slight and without consequence. However, accidents can occur due to an accumulation of minor negative factors which singly are of no great consequence. Other factors which may contribute to loss of roll stability are:

- A High Center of Gravity
- B High Speed Turns
- C Side Slopes, or Super Elevation in Turns
- D Emergency Braking while Turning Sharply or at high Speeds

The prudent operator should avoid conditions where several of these factors are combined. The factor under greatest control by the operator is the vehicle's speed.

5. VEHICLE

- 5.1 Tractor and truck trailer combinations are designed to provide maximum directional control and roll stability within the constraints of highway size and weight limits and utility. Any combination can be rolled over by driving too fast around a curve, making too abrupt a maneuver, or by leaving the roadway. Locking up the wheels on an axle of a combination can result in a jackknife or trailer swing out.
- 5.2 Some truck trailer combinations are less resistant to roll during an abrupt lane change due to a "whipping action". The opposite is the case for the tractor semi-trailer combination, which is relatively more roll resistant in abrupt lane changes (the long wheelbase tends to stabilize the combination compared to a steady turning maneuver). (1)
- 5.3 Long wheel base, multi-axle trailers with spread/steering axles present new operational concerns. The rear steering found on these rigs dramatically affects performance and must be taken into account.

6. THE DRIVER

- 6.1 The driver can compensate for the characteristics and condition of his vehicle, for the road conditions and weather.
- 6.2 Either braking or accelerating while cornering can significantly reduce the controllability and stability of the vehicle and should be avoided. The best driving practice is to decelerate to a safe conservative speed before entering a corner or approaching congested traffic and then apply only moderate power until an essential straight path has been established.



6.3 It is imperative that a safe speed always be maintained. The safe speed is that speed at which control can be maintained over the vehicle at all times. This speed will allow an emergency change of lane maneuver, travel off an exit ramp with a tightening radius and recovery from pavement drop-off or wet pavement. This speed will vary from one combination of vehicle to another and takes into consideration such factors as road conditions, weather, traffic, visibility, type of load, and experience of the driver.





AIR/ELE AND PONY MOTOR CONTROLS



RIDE HEIGHT BLOCK CLEARED



GOOSENECK SUPPORT ARM



RELEASE LOCK PIN

OPERATION INSTRUCTIONS

HYDRAULIC DETATCH INSTRUCTIONS

- Ensure trailer is on level ground
- If running a wet kit, turn on the PTO
- turn off the red supply line, and disconnect the air and electric
- Start the self contained motor
- Raise the trailer enough for the lock plate to clear the ride height blocks
- Rotate ride height block clockwise to ensure that the lock plate will clear the ride height block
- Lower the front of the main deck to sit on the ground. Continue to lower the main deck until there is a 3/8" gap at the rear of the base
- Lower the gooseneck support arm to transfer the weight ot the tractor frame
- Pull the air lock pin to release the pin into the gooseneck
- Turn the hydraulics off
- Move the tractor forward to fully detach the neck





AIR LOCK PIN IN LOCKED POSITION



LOCK PIN AUTOMATICALLY ENGAGED



RAISE DECK TO CLEAR RIDE HEIGHT BLOCK



REATACH AIR/ELEC

OPERATION INSTRUCTIONS

HYDRAULIC ATTACH INSTRUCTIONS

- Ensure the aiur lock pin is in the LOCKED postion
- Back the tractor up to the trailer until the lock pin engages into the lock plate. You will hear the pin engage in this process
- Start your hydraulics
- Raise the gooseneck support arm into the stored position, placeing all the weight back into the trailer
- Raise the front of the main deck, allowing the lock plate to clear the ride height block
- Rotate the ride height block to the appropriate ride height position
- Turn off the Hydraulic suppy and reatatch the air and electrical connections



OPERATION INSTRUCTIONS



FLIPPER SWITCH OFF



RAISING POSITION



LOWERING POSITION

RAISE AND LOWER

- When vehicle is in motion, switch must be in the off position for notmal height control valve.
- To raise the the trailer, place the flipper switch into the on position.
- Rotate the raise and lower valve clockwise to raise the trailer.
- To lower the trailer, Place the flipper switch into the on position and rotate the raise and lower valve counter-clockwise.
- To return abck to normal operation of the trailer, place the flipper switch to the off position, the trailer will return to ride height





This maintenance manual has been prepared to assist you in retaining the safety, performance and reliability that is built into every XL Specialized Trailers. It is of the utmost importance that the trailer receives periodic inspections, maintenance and repair, once parts are determined defective. Maintenance should be performed by XL Specialized Trailers dealers, or other qualified service centers that normally perform service work. The XL Specialized Trailer operator's manual, covers periodic inspections, safety and maintenance. If you have any questions pertaining to this manual, or any other XL Specialized Trailers manual, please do not hesitate to contact the Customer Service Dept. at (877) 283-4852 for answers.

It is important to have a Trailer Preventative Maintenance (TPM) program. The US Department of Transportation requires that the maintenance records be kept on every commercial highway vehicle.

It is a great advantage to keep up to date records, of regularly scheduled TPM inspections, and to ensure all of these checks are performed. A consistent and recorded TPM program, will assure you will get the most from your XL Specialized trailer.

SAFETY WARNING

Before any service or maintenance work is performed, ensure trailer is properly supported if raised up in the air. Make sure wheels are chocked, if on ground, to make sure trailer does not roll during work.

All personal protective items should be uses, such as safety glasses and hard hats, when work is being performed on XL Specialized trailers.

REPLACEMENT PARTS

All replacement parts should be from the original equipment manufacturer or vendor. This ensures the parts fit properly and do not damage the integrity of the trailer.

For common replacement parts, refrence pages 36-40



1. MAINTENANCE TIPS

- 1.1 Breaking in a New Trailer
 - 1.1.1 The most critical time a new trailer's life is in its first 1000 miles or first month. During this time, the trailer components will "settle" and maintenance technicians should be notified of any over/ underinflated tires and thread fasteners that have worked themselves loose. Fasteners should be re-torqued to specifications provided in this manual.

1.2 Wheels

1.2.1 Tests have shown, that after the initial torqueing of wheel lug nuts from the factory, after 50-100 miles, the lug nuts will lose up to 250 ft-lbs. This is caused by the new wheel components "seating in" together. Retightening of the wheel lug nuts, will compensate for the loss of normal "clamp" force. If these lugs are not retightened to original spec, and additional clamp force is lost, components will be damaged. Wheel re-torqueing should occur after initial break in (50-100 miles) and then every 25,000 miles after that.

1.3 Tires

1.3.1 Tires are the most expensive consumable on trailers and should be checked and cared for regularly to retain life of tires. While the tires were properly inflated at the factory, when they were mounted, tire pressure will be affected by the ambient temperature at the inflation time. If the tires were mounted in a 80°F environment and put into service at a 20°F environment, tire pressure can drop 10 psi for every 20°F of temperature drop. All tires should be checked and verified with a quality air gauge, and rechecked at every tractor refuel.

1.4 Air-Spring Suspension

- 1.4.1 All fasteners on the air spring suspension are crucial to the safety and life of your trailer. Pivot bushing bolts can loosen during the first few weeks of use, and can cause premature bushing wear. If these bolts are not checked, handling issues can occur in the trailer, and can cause premature tire wear.
- 1.5 Air Brake Operation
 - 1.5.1 During the break in period of a new trailer, a certain amount of burnishing will occur in the brake linings. This is normal and can cause brake adjustment loss. If brakes do become out of adjustment, the trailer will have increased stopping distances and potential handling issues. Brake adjustment should definitely be checked and adjusted at first TPM inspection.
- 1.6 Winter/Freezing
 - 1.6.1 Winter weather can cause components on the trailer to improperly function. Brakes can become sluggish or inoperative in cold winter months and snow, sleet and slush can cause connections to become loose due to sagging wires. Frozen slush and mud can build up on trailer components, such as air lines, brake components, etc. and should be removed regularly to ensure proper function.
 - 1.6.2 Sodium chloride is used on many national highways to help with the clearing of snow and ice. This solution can cause increased corrosion on even the most maintained trailer. During the winter months, the trailer should be cleaned and washed after every trip. This corrosion can develop very, very quickly if not properly cleaned.



- 1.6.3 Enclosed air systems for the air operated equipment should be drained regularly of the built up moisture in the system. The air tanks should be drained daily to prevent freezing in the system. Treatment of moisture in the air system should be through the tractor only, because additives can cause damage to the trailer air components.
- 1.7 Washing/Cleaning
 - 1.7.1 Improper use of chemicals to wash the trailer can cause the trailer paint to streak and fade. The paint can actually yellow and look tarnished, all from trying to make the trailer look nice and clean. Also it is important to NOT wash your trailer for 30 days after pickup. This allows the paint to completely cure and protect your trailer for a long time.
- 1.8 Annual FHWA Inspection
 - 1.8.1 It is the responsibility of the carrier or end user to make their trailer is operated under this Federal requirement. During this inspection, make sure the kingpin, safety equipment, welds, etc. are checked and corrected as required.

2. AIR SYSTEM



BEFORE ANY AIR SYSTEM MAINTENANCE IS PERFORMED, CHOCK THE WHEELS AND COM-PLETELY EXHAUSE THE SYSTEM WITH DRAIN COCKS.

The air system on these trailers is one of the most important systems to maintain regularly. The air system should closely follow a Trailer Preventative Program (TPM) to ensure proper function.

Proper operation of air system requires tight seal between all air components. Inspect all components for crack housings and seal damage. Some components have an in-line filter, if so; these filters must be checked and cleaned regularly to prevent a failure in the air system. Air hoses should be checked for cracks or frays, and to make sure the lines are not rubbing up against anything on the trailer. Any component for be faulty should be repaired or replaced immediately.

Air system must be clean and tanks should be drained of built up moisture daily. See WINTER/ FREEZING MAINTENANCE section.

If you use Teflon tape or other sealer material on fittings, make sure to not allow pieces of the sealer material to enter the system. If foreign material is introduced into the system, components can get clogged and a failure in the system can occur.

The air system needs to be tight and here are a few ways to check your system. Charge the air system to at least 105 psi and shut off the engine. Listen for air leaks and watch the air gauge with no brakes applied; pressure loss should not exceed more than **3 psi in 1 minute**. Now apply the brakes for 2 minutes, and pressure loss should not exceed **4 psi in 1 minute**. Note: at XL Specialized Trailers, safety is **#1**, so we check our system to ensure pressure loss is no more than **2 psi in 2 minutes**.



3. ELECTRICAL SYSTEM

The electrical system used on every XL Specialized trailer meets or exceeds all federal and state requirements. Wherever required by law, lamps and reflectors are marked by the manufacturer stating that each complies.

Clean all lamps, electrical devices, reflectors regularly to provide the most amount of visibility to ensure the most safety. Replace all burnt out or damaged lamps with factory equivalent parts. Reflective tape and reflectors should be replaced if damaged.

If components are repaired or replaced, repack connection with approved grease to protect connection from weather and corrosion. Inspect all wiring that it is not damaged, properly supported and protected. Make sure all connections are tight and minimal tension on the plugs. Frayed or damaged wiring should be replaced immediately with OEM parts.

ELECTRICAL CONNECTION CHANGE NOTICE TO ALL USERS AND OWNERS

Federal Motor Carrier Safety Administration Standard No. 121, Air Brake Systems, requires all truck and tractor manufacturers on or after March 1, 1997, to provide constant power for trailer antilock brake system (ABS). These manufacturers use a single 7-way electrical connection that has constant power to center pin for ABS when key switch is on. If you any questions about your wiring on the trailer, please contact XL Specialized Trailers customer service department at (877) 283-4852.

WARNING: IF TRAILER IS EQUIPPED WITH ANTI LOCK BRAKES (ABS), CENTER PIN MUST MAINTAIN CONSTANT POWER AT 12 VOLTS FOR EFFECTIVE ABS FUNCTION.

| PIN | COLOR | CIRCUIT |
|-----|--------|--------------------------------|
| 1 | WHITE | GROUND |
| 2 | BLACK | CLEARANCE, SIDE MARKER, AND ID |
| 3 | YELLOW | LEFT TURN AND HAZARD |
| 4 | RED | STOP LAMP |
| 5 | GREEN | RIGHT TURN AND HAZARD |
| 6 | BROWN | TAIL, LICENSE LAMP |
| 7 | BLUE | ABS CONTINIOUS POWER |

FAILURE TO COMPLY WITH THIS WARNING CAN RESULT IN DAMAGE, SERIOUS INJURY OR DEATH



4. AXLES/BRAKES

Axles

Axles should be inspected for cracks, wear and leaks every **50,000 miles or 6 months**. The following should be checked:

- The entire axle tube should be checked for cracks. If cracks are found, re-welding of axle tube is prohibited. An axle replacement is necessary.
- Check all components welded to the axle for cracks; spiders, camshaft brackets, air chamber brackets and suspension components. If cracks are found, and penetrate into axle tube, re-welding is prohibited and axle will need to be replaced.
- Axle should be checked for straightness. Refer to TMC's RP 708 regarding the inspection.
- Spindle should be checked for wear, cracks, rust and pitting. If cracks are visible, axle must be replaced immediately. Surface rust or slight pitting can be polished out with emery cloth.

Oil Seals and Hub Caps

There are a wide variety of seals on the market, so please refer to manufacturer of the oil seal for proper installation. Always replace oil seals whenever the hub is removed. This will ensure a leak-free operation. Make sure to clean fill hole and plug completely before reassembly. This will prevent any foreign material from entering the hub and wheel end.

Hub Cap Installation

- Clean all hub cap components; face of hub, hub cap and gasket.
- Place the gasket...NEVER REUSE A GASKET.
- Install the hub cap. Install bolts and washers around hub cap and torque to 15 ft-lbs.
- Open fill plug and fill hub to level designated on hub cap. Once to full mark, spin the hub and wait a few minutes, and recheck.

Wheel Bearings

Inspect the inner and outer bearings, cups and cones for excessive wear or damage regularly. This allows the wheel bearings and hub to operate smoothly for the life of the trailer. Check wheel bearings every 1000 miles. Change oil when you replace seals, reline brakes or once a year. XL Specialized Trailers uses SAE 80-90 oil for wheel end lubrication.

When servicing wheel end components, be very careful to handle components carefully, not to damage wheel bearings or seals. Damage to any of these components can cause premature failure and/or poor operation. Wipe a film of oil on all components to prevent rust from starting.



Wheel Bearing installation and Adjustment

- Clean all components completely to make sure smooth operation. Coat all parts with recommended lubricant before installing.
- Install inner bearing into hub. Then install inner seal. IT IS IMPORTANT TO USE THE CORRECT TOOL TO INSTALL SEAL. ANY OTHER TOOL COULD DAMAGE SEAL AND CAUSE LEAKS.
- Install outer bearing into hub, and then install onto axle spindle.
- After the bearings and hub are installed on the spindle, install inner nut onto spindle, then torque to **200 ft-lbs** while spinning the wheel hub assembly.
- Back off the inner nut (1) full turn. Rotate the wheel.
- Re-torque the inner nut to **50 ft-lbs** while spinning the wheel hub assembly.
- Back off adjusting nut 1/4 -1/3 turn
- Install locking washer, then spindle lock star washer on spindle to nearest hole.
- FAILURE TO BACK OFF THE INNER ADJUSTING NUT CAN CAUSE BEARING TO HEATING UP AND CAUSING FAILURE TO WHEEL END. THIS COULD LOCK UP WHEEL OR CAUSE WHEEL TO COME OFF.
- Install outer jam nut and torque to **300-400 ft-lbs**.
- Bend over 1 or 2 legs of the lock star washer over jam nut.
- Using a dial indicator, check wheel end play. Acceptable wheel end play is 0.001"-0.003". If not within range, re-adjust as needed.
- Verify wheel end spins freely when adjustment is complete.

Brakes

Brake maintenance and lubrication is a very important component of your TPM program. Brake system components, such as actuators, automatic slack adjusters, shoes, drums and camshafts, are all vital to the safe operation of the trailer. If any of these components are not inspected and maintained regularly, increased stopping distances, shorter brake life and increase chance of trailer jack knifing can occur. The TPM program should also be adjusted if need be, based on past experiences and expected severity of operation.

To keep brakes running smoothly, a brake inspection should be performed every 25,000 miles or more frequently if determined by your TPM program. During these regular inspections, the following should be checked:

- Spiders, Cam Shafts, Bearings & Bushings
- Anchor Pins
- Brake shoes, Brake Lining, Drums

If any of the above show signs or wear or damage replace immediately with OEM parts before trailer is put back into service.





WARNING: BRAKE LINERS THAT ARE CONTAMINATED WITH LUBRICANT CANNOT BE SAL-VAGED OR CLEANED. THEY MUST BE REPLACED.

Inspect the axle for lubricant leakage; worn or damaged seals can cause leakage, and I found, investigate and replace damaged seals as need be. Bad seals can prevent smooth operation of brake actuating components and can ultimately lead to brake failure.

Brake actuating components should be lubricated according to your TPM program to ensure smooth operation. A high quality lithium grease should be used to have the most protection of components. Each axle has grease fittings located at the outer cam bushing, inner cam bushing and slack adjuster. See below for locations.

To lubricate, wipe off fittings with clean rag or towel. Using a hand-held grease gun, add grease to each component through appropriate fitting. Once grease is visible through any opening or purge point of the component, stop filling. The component is now properly greased.



5. TIRES

Tires are by far the highest costing consumable on any trailer, so tire care is of the utmost importance. It is the one thing that connects the trailer to the load.

Tire Safety

- Tire pressure should be checked regularly. XL recommend every time the tractor is re-fueled.
- Inspect tires for improper wear, bulges, cracks and foreign objects.
- Make sure to check tire load rating and speed rating of tires.
- Regularly, at time of pressure check, check tire tread life. Check wear bars on tire and should be replaced when tread is down to manufacturer spec depth.
- NEVER use a re-treaded tire, only use new tires when a replacement is needed.





Tire Inflation

Tire inflation is the most important factors in tire care. A proper inflated tire will present a more stable ride, maximum road contact and the stability needed for these heavy haul low boy trailers. Heat generated by the tires is also dissipated more rapidly and evenly on properly inflated tires. The maximum tire pressure can be found on the side wall, but generally, optimum tire pressure is 90% of that rating.

OVERINFLATION

Tires that are over inflated will be more susceptible to road hazards such as potholes, debris, etc. The following can occur with an over inflated tire:

- Increased tire wear, specifically in center part
- Damage can occour more easily

UNDERINFLATION

Tires that are under inflated increase tire wear, generates heat and over-flexed sidewalls. The following will occur on an under inflated tire:

- Excessive heat generation, which can lead to bead failure, cord failure or separation
- Easier for tire beads to separate
- Fuel economy go down drastically
- Increased wear on tire, specifically on shoulder part

MAINTAINING PROPER TIRE PRESSURE

- Pressure must be adjusted to the load. Loads of different size and weight, willaffect the amount of pressure in tire for trip.
- Check tire pressures often, as stated before, every time tractor is re-fueled.
- Tire pressure can change with a change in ambient temperature, so regular checks prevent improper inflation.
- Tire pressure can decreased naturally over time. Leaks usually occur around faulty valves. Check with soapy water to make sure seal is tight.
- Whenever checking and adjusting tire pressures, make sure tire is cooled down after trip. Pressures will rise on a warm tire after a trip, so gauge will read incorrectly.

Wheels

Wheels should be checked regularly since they can be damaged easily. Checks for the wheel are specified below:

• Rim Base Cracks, Rim Base Distortion, Mounting ring, Tubeless Rim Leaks





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LOADING GUIDELINES



A trailer with the load rating of XX,XXX lb Distributed can support this weight across the entire length of the main deck and spread across the full width of the decking (Shown in Red)



A trailer with the load rating of XX,XXX lb IN 16' can support this load across and centered in the specified length of 16' of the main deck and spread across the full width of the decking (Shown in Red



DECAL REPLACEMENTS



XL Specialized Trailers Logo Part Number: DEC XLLOGO AAC



XL Manchester, IA Part Number: DEC COLOGO ABB - White DEC COLOGO ABC - Black



XL Logo Part Number: DEC BIGXLS ABW - WHITE DEC BIGXLS ACB - BLACK



XL Logo Part Number: DEC BIGXLS ABX - WHITE DEC BIGXLS ACA - BLACK



XL HDG Decal - White Part Number: DEC XLCAMO AWS- 60 HDG DEC XLCAMO AYG - 70 HDG DEC XLCAMO AVP - 80 HDG DEC XLCAMO AVP - 90 HDG DEC XLCAMO AVY - 100 HDG DEC XLCAMO ATW - 110 HDG DEC XLCAMO AUQ - 120 HDG



XL HDG Decal - Black

Part Number: DEC XLCAMO AYT - 70 HDG DEC XLCAMO BCG - 80 HDG DEC XLCAMO AYV - 90 HDG DEC XLCAMO BAP - 100 HDG DEC XLCAMO AWP - 110 HDG DEC XLCAMO AXG - 120 HDG



DECAL REPLACEMENTS



NOTICE

DO NOT HIGH PRESSURE WASH OR USE ANY DETERGENT ON **TRAILER FOR 30 DAYS TO ALLOW** PAINT TO COMPLETELY CURE

WARNING: This product can expose you to chemicals including lead, which is known to the State of California to cause cancer and birth defects, or other reproductive harm. For more information go to www.p65warnings.ca.gov

Do Not Side Load Part Number: DEC DNSLOA AAA WASH NOTICE Part Number: DEC DNWASH AAA LEAD CANCER CAUTION Part Number: DEC PROP65 AAA

THIS TRAILER IS USING HIGH STRENGTH STEEL

DO NOT WELD WITHOUT PERMISSION

WELD CAUTION

Part Number: DEC CATWEL AAA



HUB WARNING

Part Number: DEC WALHUB AAA

ANCHORING DEVICE RATINGS

| THIS TRAILER MAY CONTAIN ONE OR N FOLLOWING ANCHORING DEVICES. TIE (BINDERS, CHAINS, STRAPS, ETC.) HAV | IORE OF THE DOWN COMPONENTS E SEPARATE RATINGS. |
|--|---|
| 1" D-RING | 15.000 LBS |
| 3/4" D-RING | 9,000 LBS |
| STAKE POCKET | 6,500 LBS |
| CHAIN DROP | 9,100 LBS |
| STAKE POCKET/PIPE SPOOL | 6,500 LBS |
| | |

ANCHOR DEVICE RATINGS

Part Number: DEC ANCHOR AAA

| BOORDER BROOM. (DIP RECTRING THERE ON THE GROWE. 1 IN THE REPORT. 1 INCOM THE WER. | A GENERATING THAT IS AN A CONTRACT THAT THAT THAT THAT IS A CONTRACT AND THAT THAT THAT THAT THAT THAT THAT THA | |
|--|---|--------|
| | | |
| -001 | | APPRUV |
| | | |

WELD CAUTION Part Number: DEC MDTACH AAA

APPROVED Part Number:

DEC APPROV AAA



LIQUID FILLED AIR GAUGE CHART Part Number: *CONTACT XL



Picture shown may not resemble all models.

HHENDRICKSON





TABLE 1.

| ITEM NUMBER | DESCRIPTION | PART NO. | QTY. PER SUSP. | NOTES | |
|-------------|--|-----------|-------------------|---|--|
| 1 | BEAM ASSEMBLY | | | | |
| | Standard | S-24186-1 | 1 | Roadside | All Models Excent Steer Ayles |
| | | S-24186-2 | 1 | Curbside | All Models Except Steel Axies |
| | Steer (Not Shown) | S-29303-1 | 1 | Roadside | Steer Axles Only |
| | | S-29303-1 | 1 | Curbside | |
| 2 | FRAME BRACKET | | | | |
| | Standard travel, | S-22827-1 | 2 | Roadside | 7.5" & 0" Dido Hoight 10" Divot Hoight |
| | shock mount | S-22827-2 | 2 | Curbside | 7.5 & 9 Hide Height, 10 Fivel Height |
| | Standard travel, | S-22827-3 | 2 | Roadside | |
| | limited jounce, remote shock mount | S-22827-4 | 2 | Curbside | 7.5" & 9" Ride Height, 10" Pivot Height |
| 3 | FRAME BRACKET C-CHANNEL | | | | |
| | | A-1631-19 | 1 | All Models | |
| 4 | TRI-FUNCTIONAL® II BUSHING KIT ² | | | | |
| | | S-24691 | 2 | Includes bushing, bushing tube spacers, round head bolt, prevailing torque hex nut, hardened washers and lube | |
| 5 | BUSHING TUBE SPACER | | | | |
| | | S-21099 | 4 | All Models | |
| 6 | QUIK-ALIGN® PIVOT BOLT KIT | | | | |
| | | S-24679 | 2 | Includes round head bolt, hardened washers, prevailing torque hex nut | |
| 7 | ALIGNMENT COLLARS | | | | |
| 7a | Eccentric | S-20925 | 2 | Alignment hole is off center | |
| 7b | Concentric | S-20925 | 2 | Alignment hole is centered | |
| 8 | BUSHING TUBE SPACER KIT | | | | |
| | | S-26369 | 2 | Includes round head bolt, hardened washers, prevailing torque hex nut and bushing tube spacers | |
| 9 | U-BOLT KIT | | | | |
| 9a | 19.5" or Larger Tires | S-21140/4 | 4 | Includes (1) st needed | epped U-bolt and hardware; axle spacer is not |
| 9b | 17.5" Tires | S-22894/4 | 4 | Includes (1) fla needed with fl | attened U-bolt and hardware; axle spacer is attened U-bolt |
| 10 | AXLE SPACER | | | | |
| | | S-20701 | 4 | Axle spacer is flattened U-bo | not needed with stepped U-bolt. For use with olt, Must order with 9a |

2. Bushing tool S-21307 is required to correctly re-bush the suspension



Picture shown may not resemble all models.

HHENDRICKSON





TABLE 2. FOR PARTS 11 & 12 ONLY

| ITEM | DESCRIPTION | (11) SHOCK PART NUMBER | (11) QTY. PER SUSP. | (12) SHOCK STRAP PART NUMBER ³ | (12) QTY. PER SUSP |
|---|--|---|---|---|---|
| A | STANDARD SHOCK MOUNT | | | | |
| | 3.5" TO 4" RH | S-23548 | 2 | C-23086-11 | 1 |
| STANDARD TRAVEL | 5.5" TO 6.5" RH | S-23650 | 2 | C-23086-3 | 1 |
| | 7.5" TO 14" RH | S-23649 | 2 | C-23086-5 | 1 |
| STANDARD TRAVEL - HIGH | 5.5" TO 6.5" RH | S-23744 | 2 | C-23086-10 | 1 |
| DAMPING | 7.5" TO 14" RH | S-23743 | 2 | C-23086-5 | 1 |
| LIMITED JOUNCE | 6.5" TO 12" RH | S-23649 | 2 | C-23086-5 | 1 |
| LIMITED JOUNCE - HIGH DAMPING | 6.5" TO 12" RH | S-23649 | 2 | C-23086-5 | 1 |
| EXTENDED REBOUND | 6.5" RH | S-23651 | 2 | C-23086-4 | 1 |
| EXTENDED REBOUND - HIGH DAMPING | 6.5" RH | S-24579 | 2 | C-23086-8 | 1 |
| В | REMOTE SHOCK MOUNT ⁴ | | | | |
| | 5.5" TO 6.5" RH | S-23650 | 2 | S-14587-9 | 1 |
| STANDARD TRAVEL | 7 5" TO 9" BH | 0.000/0 | - | | |
| | 7.5 10 5 111 | S-23649 | 2 | S-14587-10 | 1 |
| | 12' TO 14" RH | S-23649 S-2212 | 2 2 | S-14587-10 S-14587-3 | 1 |
| STANDARD TRAVEL - HIGH | 12' TO 14" RH 5.5" TO 6.5" RH | S-23649 S-2212 S-23744 | 2 2 2 | S-14587-10 S-14587-3 S-14587-11 | 1 1 1 |
| STANDARD TRAVEL - HIGH DAMPING | 12' TO 14" RH 5.5" TO 6.5" RH 7.5" TO 9" RH | S-23649 S-2212 S-23744 S-23743 | 2 2 2 2 | S-14587-10 S-14587-3 S-14587-11 S-14587-10 | 1 1 1 1 |
| STANDARD TRAVEL - HIGH DAMPING EXTENDED REBOUND | 12' TO 14" RH 5.5" TO 6.5" RH 7.5" TO 9" RH 6.5" TO 9" RH | S-23649 S-2212 S-23744 S-23743 S-2212 | 2 2 2 2 2 2 | S-14587-10 S-14587-3 S-14587-11 S-14587-10 S-14587-3 | 1 1 1 1 1 |
| STANDARD TRAVEL - HIGH DAMPING EXTENDED REBOUND EXTENDED REBOUND - HIGH DAMPING | 12' TO 14" RH 5.5" TO 6.5" RH 7.5" TO 9" RH 6.5" TO 9" RH 6.5" TO 9" RH | S-23649 S-2212 S-23744 S-23743 S-2212 S-23316 | 2 2 2 2 2 2 2 2 | S-14587-10 S-14587-3 S-14587-11 S-14587-10 S-14587-3 S-14587-3 | 1 1 1 1 1 1 1 |
| STANDARD TRAVEL - HIGH DAMPING EXTENDED REBOUND EXTENDED REBOUND - HIGH DAMPING C | 12' TO 14" RH 5.5" TO 6.5" RH 7.5" TO 9" RH 6.5" TO 9" RH 6.5" TO 9" RH ANGLED AND FRAME CLEARANCE MOUNTING | S-23649 S-2212 S-23744 S-23743 S-2212 S-23316 | 2 2 2 2 2 2 2 | S-14587-10 S-14587-3 S-14587-11 S-14587-10 S-14587-3 S-14587-3 | 1 1 1 1 1 1 1 |
| STANDARD TRAVEL - HIGH DAMPING EXTENDED REBOUND EXTENDED REBOUND - HIGH DAMPING C STANDARD TRAVEL | 12' TO 14" RH 5.5" TO 6.5" RH 7.5" TO 9" RH 6.5" TO 9" RH 6.5" TO 9" RH 6.5", TO 9" RH | S-23649 S-2212 S-23744 S-23743 S-2212 S-23316 S-23651 | 2 2 2 2 2 2 2 2 2 2 2 2 2 | S-14587-10 S-14587-3 S-14587-11 S-14587-10 S-14587-3 S-14587-3 | 1 1 1 1 1 1 1 1 1 |

| ITEM | DESCRIPTION | PART NO. | QTY. PER SUSP. | NOTES |
|------|----------------------------|----------|-------------------|---|
| 13 | SHOCK BOLT KIT | | | (1) SHOCK BOLT IS REQUIRED PER SHOCK |
| | Standard Shock Mount | S-24024 | 2 | |
| | Standard Shock Mount Lower | S-23642 | 2 | |
| | Standard Shock Mount Upper | S-2157/2 | 1 | |
| | Remote Shock Mount | S-2157/2 | 2 | |
| 14 | REMOTE SHOCK MOUNT | | | ALSO ORDER SHOCK BOLT KIT S-2157/2 |
| | Upper Assembly | A-5431 | 2 | |
| | Lower Assembly | S-2723 | 2 | |
| 15 | SHOCK STRAP CLEVIS | | | ONLY NEEDED FOR STANDARD SHOCK MOUNT INCLUDED IN SHOCK STRAP KIT |
| | | B-20919 | 2 | |

3. Shock strap kits: includes (2) straps, (2) clevis and (4) nylon ties

4. Shock strap clevis not included and not needed for remote shock mount



GOOSENECK REPLACEMENT

PLEASE HAVE VIN NUMBER READY BEFORE CONTACTING XL



| ITEM | DESCRIPTION |
|------|-----------------------|
| 1 | KINGPIN |
| 2 | GOOSENECK SUPPORT ARM |
| 3 | LIGHT BRACKET |
| 4 | CYLINDER PIN |
| 5 | SUPPORT ARM CYLINDER |



TABLE 4.

| ITEM | DESCRIPTION |
|------|--------------------------------|
| 1 | LIGHT BRACKET |
| 2 | CYLINDER PIN/GUSSETS |
| 3 | RIDE HEIGHT HANDLE |
| 4 | RIDE HEIGHT LOCK |
| 5 | GOOSENECK SUPPORT ARM |
| 6 | KINGPIN |
| 7 | GOOSENECK SUPPORT ARM CYLINDER |
| 8 | CYLINDER TUBE |
| 9 | BASE COVER |



GOOSENECK REPLACEMENT



TABLE 5.

| ITEM | DESCRIPTION |
|------|--------------------|
| 1 | RIDE HEIGHT BLOCK |
| 2 | RIDE HEIGHT HANDLE |
| 3 | BASE CYLINDER PIN |
| 4 | PIVOT PIN |
| 5 | BASE COVER |
| 6 | NECK CYLINDER PIN |



MAIN DECK REPLACEMENT



TABLE 6.

| ITEM | DESCRIPTION |
|------|-------------------------|
| 1 | BENT D-RINGS |
| 2 | U PLATE |
| 3 | FRONT FLIP RAMP BRACKET |
| 4 | OUTRIGGER |



MAIN DECK REPLACEMENT



TABLE 7.

| ITEM | DESCRIPTION |
|------|------------------------------------|
| 1 | PULLOUT RAMP ASSEMBLY |
| 2 | ALUMINUM PULLOUT LOCK PIN ASSEMBLY |
| 3 | ALUMINUM PULLOUT - 2 BEAM ASSEMBLY |
| 4 | ALUMINUM PULLOUT - 3 BEAM ASSEMBLY |



REAR DECK REPLACEMENT



TABLE 8.

| ITEM NO. | DESCRIPTION |
|----------|-------------------------------|
| 1 | BUMPER |
| 2 | FLAT D-RINGS |
| 3 | STAKE POCKETS OR BENT D-RINGS |
| 4 | WHEEL COVERS |
| 5 | BOOM TROUGH COVERS |
| 6 | ALUMINUM TAIL LIGHT PACKAGE |
| 7 | OVERSIZED LOAD SIGN |



FREQUENTLY ASKED QUESTIONS

Why is my suspension riding high while driving?

Check that the raise and lower lever is set to the OFF position when in normal operation. Refrence page 20 for instuctions.

Can I weld on my XL Specialized Trailer?

No, do not weld on your trailer. See decal on page 32. Contact XL Specialized Trailers for guidance.

