

HT Original®

HT COMPOSITE®

HT COMPOSITEXT[®]

HT DropFrame®





HT ThermoTech®

Operator's Manual

This manual contains important safety and operations information.

Read manual carefully and keep with trailer at all times.



Operator's Manual Instructions for PDF

Welcome to the new Operator's Manual!

- 1. To get to the Table of Contents on page 3, either a) hit the page down key, or b) use your mouse and scroll down using the scroll bar at far right of the page.
- 2. Select a subject and click on it. It will automatically go to the desired section.
- 3. To return to the Table of Contents, click on the gray text at the bottom of each page. An example is shown.

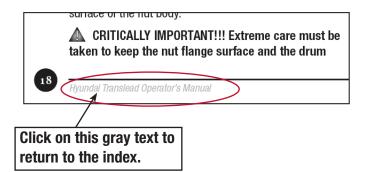




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4. There is also an index of illustrations on page 4. From the index page, scroll down to the next page or hit the page down key. Click on the name of any of the illustrations that pertain to your needs. When you are ready to return to the illustration index, click on the illustration. To return to the main index from the index of illustrations, again just click on the gray text at the bottom of the page.

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Hyundai Translead Operator's Manual Introduction –

Your new Hyundai Translead trailer is the culmination of years of design and experience. With proper care and operation, it should provide years of profitable service. It is very important to read through this manual and acquaint yourself with the safety procedures required around any large equipment.

Owning any vehicle operated on public or private roadways carries with it the responsibility to maintain that vehicle so that all systems operate safely, as well as to ensure that any operator of said vehicle follows all safety procedures set forth in this manual. Please have all operators become familiar with the safe operation of this trailer.

Periodic safety inspections are essential to maintain the systems that affect the load bearing capabilities, as well as those that provide for safe transit. Such inspections, and others not listed herein, are the responsibility of the owner and assigns who may operate this vehicle. These safety inspections should be performed with regularity and records kept of each inspection with any

discrepancies reported to the maintenance department. Assistance in implementing a sound Trailer Preventive Maintenance Program may be found in a "Trailer Maintenance Manual" available from the Truck Trailer Manufacturers Assn. (TTMA) at www.ttmanet.org or 703-549-3010.

The U.S. Department of Transportation requires you maintain permanent records of all maintenance performed on this, and all others vehicles, with each referenced by its VIN. The VIN (Vehicle Identification Number) must always referenced. The VIN Plate is located on the outside, lower front wall of the trailer.

Any questions or correspondence directed to Hyundai Translead, or a Hyundai Translead Trailer Dealer, should always include the VIN of that particular trailer.



Vehicle Identification

In accordance to Federal Law, each trailer has a unique Vehicle Identification Number (VIN). The VIN Plate is located on the outside, lower of the front wall of the trailer. Other important data on this plate includes the model designation, date of manufacture and the Gross Vehicle Weight Rating (GVWR) and the Gross Axle Weight Rating (GAWR). IMPORTANT: Check each state for maximum legal loads allowed.

Any records for this trailer or any reference to this trailer in any correspondence should include the VIN.

WARNING! Removal or alteration of a VIN Plate is prohibited by Federal Law.



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10160	KG	295/75R22.5(G)	689	kPa
GAWR ALL AXLES	5	TIRES-DIMENSION	COLD TIRE INFL DU	IALS
	L	00/07	65000	LBS
DATE OF MAIN	FACTURE	05/07 G	wr 29483	KG

Use of This Operator's Manual

The purpose of this Operator's Manual is to provide recommended guidelines for the safe operation of this vehicle. It is important to follow these recommendations and to use extreme caution during the operation of this trailer. Doing so, in addition to performing important maintenance procedures, will help to ensure dependable vehicle performance in a safe manner. All persons who operate this trailer should familiarize themselves with these recommendations.

All illustrations, descriptions and specifications contained in the manual were in effect when the Operator's Manual was approved for use. As is common practice, Hyundai Translead, Inc. reserves the right to discontinue trailer models, and/or change standard and optional specifications at any time without notice.

For the latest edit of this document, or a replacement copy, contact the Trailer Sales Department at Hyundai Translead, Inc. www.translead.com, 619.574.1500, or toll free at 800.251.0871.

Safety Alerts

It is most important to understand and follow safety procedures at all times. Information contained herein was accurate at the date of writing this document. Hyundai Translead reserves the right to change standard trailer specifications without notice.

In this manual safety alerts will precede certain instructions, indicating potential danger that may be involved. Take note of these alerts illustrated below when they appear.

Important Information

These alerts apply to all persons who use, operate or perform maintenance on this vehicle. This information should be taken seriously, as indicated by the alerts to prevent or minimize the possibility of injury and/or death. Prudent safety precautions are required to operate or service all heavy vehicles.

If you feel 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 Hyundai Translead. 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 Hyundai Translead.

To contact NHTSA, you may call the Vehicle Safety Hotline toll-free at 1.888.327.4236 (TTY:1.800.424.9153); or got to http://www.safecar.gov; or write to: Administrator, NHTSA, 1200 New Jersey Ave. S.E., Washington, DC 20590.

You can also obtain other information about motor vehicle safety from http://www.safecar.gov.

Safety Instructions

It is important to always comply the following to ensure the highest degree of safety.

- Operation pursuant to safety guidelines set by various governmental entities, including:
 - Operate all vehicles in accordance with Federal, State, Provincial and local statues, as well as temporary rules and regulations, i.e. in construction or other warning zones.

- All operators must be properly licensed.
- Perform all of the U.S. Department of Transportation required inspection, repair, and maintenance.
- Maintain the documentation with identifying information, including company number, make, serial number or VIN, year, and tire size; (i) A schedule of inspections to be performed, including type and due date; and (ii) Inspection, repair, and maintenance records.
- Never transport people in a trailer. It is illegal and can lead to serious injury and/or loss of life.
- Never transport hazardous materials without proper permit and safeguards.
- 2. Perform scheduled maintenance and proper repair, including:
 - All components and the entire trailer must be inspected according to a regular schedule.
 - Never depart on a delivery with a trailer with damaged or inoperable systems.

- Ensure that any maintenance, especially alterations, to the trailer is performed by a qualified individual.
- Ensure that any repair or replacement of any part or component is done using approved parts, components and procedures.
- Perform pre-trip safety inspections, as well as regular inspections during rest stops, including:
 - Check the brake system and each set of brakes individually for prescribed adjustment and correct operation.
 - Visually check all lights while parking lights and emergency flashers are activated to ensure each light operates properly.
- Check all light lenses to make sure they are clean.
- Inspect each tire for adequate tread, any damage and proper inflation.
- Carefully check the truck fifth-wheel connection to the trailer kingpin.
- Check to ensure that locking pins on a sliding running gear a fully seated.

- Thoroughly inspect the trailer exterior including sides, front, rear, roof and the under carriage for any damage and/or corrosion.
- 4. Use safety cautions during operation of the vehicle, including:
 - Enter and exit the trailer with extreme caution maintaining three-point body (both hands and one foot or both feet and one hand) to trailer contact.
 - The driver is totally responsible for each movement of the trailer. It is recommended a person be a "spotter" when backing into tight or crowded areas to ensure the safety of persons and/or prevent damage to the trailer or other objects.
 - Never operate any equipment that you have not read and understand the safety labels attached to the trailer. Comply with all safety instructions.
 - Never perform maintenance or inspection on, climb on or into, a trailer unless it is properly secured on a solid and level surface.
 - Never climb on or into a trailer using steps that are not firmly and properly attached. Always maintain a

three point contact (both hands and one foot or both feet and one hand) during access or egress.

Systems Below the Bottom Rails The Upper Coupler and Kingpin –

The Upper Coupler transfers the weight of the front of the trailer to the Fifth Wheel Plate of the truck tractor. This heavy component incorporates the kingpin that is the key connection component for the truck/trailer connection. Maintaining both is vital for safe operation of any truck/trailer combination.

Any damage to the upper coupler or kingpin and any fasteners to the adjacent trailer structure can compromise the structural integrity of the trailer. Never allow the trailer to be operated without an inspection of the upper coupler and kingpin for damage, reporting any damage immediately to your supervisor.

When repairs are required, be sure a certified repair facility uses certified fasteners identical to ones both in size and strength rating as used by the original equipment manufacturer. Any structural repairs to the upper coupler

or installation of a replacement kingpin must be done with extreme caution to replicate the original structure.

Never operate a trailer without first making a visual inspection to ensure proper coupling and locking by the fifth wheel jaws.

This visual inspection is required by law, as instances can occur when a pull test will not dislodge an improperly coupled trailer. Listening for the lock to close is insufficient as a test. A visual inspection is mandatory.

Proper Coupling and Uncoupling Operation –

No trailer should be operated unless it has been properly coupled and visually inspected.

- 1. Thoroughly inspect the upper coupler and kingpin for damage, excessive wear or corrosion.
- Place the truck tractor straight in front of the trailer as close to center as possible. Never approach the trailer from an angle as landing gear can be damaged.
- Activate inflation of air suspension then back closer to trailer making sure fifth wheel is centered and STOP. Using the landing gear, adjust the height of

the trailer so the pickup plate (leading edge of upper coupler) is just below the height of fifth wheel pivot point. It is important that the fifth wheel make solid contact and slightly lift the front of the trailer to assure the jaws will capture the kingpin.

- Back up slowly until the fifth wheel and kingpin make contact. Slowly pull forward to test the coupling.
- Exit truck and visually inspect coupling.

Never operate a trailer without first making a visual inspection to ensure proper coupling and locking by the fifth wheel jaws.

This visual inspection is required by law, as instances can occur when a pull test will not dislodge an improperly coupled trailer. Listening for the lock to close is insufficient as a test. A visual inspection is mandatory.

Any visual inspection must include using a flashlight to ensure:

That the fifth wheel jaws have closed completely encapsulating the kingpin shank.

The locking lever is in the locked position.

The upper coupler and fifth wheel plate are touching with no light between the two.

- Inspect and connect both the air supply line glad hands and the electrical 7-way plug making sure both the air supply lines and the electrical line to the truck have adequate slack and have proper clearance.
- Retract the landing gear legs using low gear until the sand shoes have cleared the ground and then high gear until the legs are fully retracted. Be sure to stow the landing gear crank handle in the keeper.

The Landing Gear -

The landing gear assembly includes the roadside and curbside legs, mounting hardware spanning crossmembers, sturdy fore and aft bracing, lower cross bracing, a cross crank shaft and a crank handle. All of the above are structural components except for the crank shaft and crank handle. These components must be visually inspected on a regular basis to ensure safe support of the trailer front when not coupled to a truck tractor.

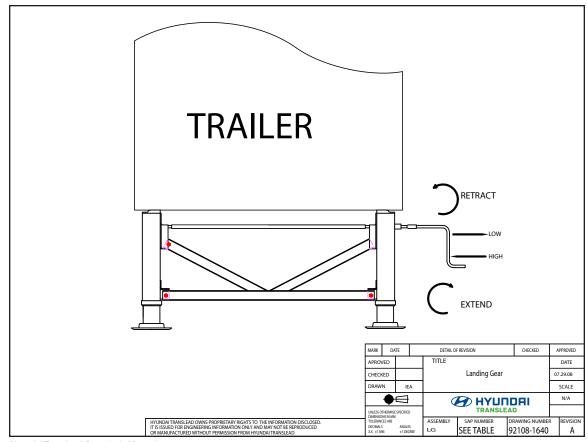
Landing gear legs have two speeds for raising and lowering the lower leg sections. Low gear should be used when lowering the legs after the sand shoes reach the ground. High gear is for faster operation when there is no weight load on the legs. Push handle and crankshaft in for **high gear** and pull crankshaft and handle out for **low gear**. Clockwise turns extend legs. Counterclockwise retract.

Important – Both internal and external gear boxes share the same crank direction. For further information and lubrication specifications, contact the manufacturer of the landing gear legs or Hyundai Translead at www.translead.com.

Closely follow the instructions below to avoid potentially dangerous situations which may result in serious injury or death.

- Prior to operation of the landing gear, visually inspect all bracing at each attachment point including the "hinge bolt" that allows the handle to fold out of the way.
- 2. Uncouple trailers only on level and solid surfaces.

- Always ensure trailer parking brakes are engaged or wheels are well chocked before beginning the coupling or uncoupling process.
- Never uncouple the trailer from the truck without first fully extending the landing gear legs to make contact with ground and support the trailer weight.
- Remove crank handle from keeper and engage in the operating position and select low or high gear. Make sure the handle shank is fully engaged with the crankshaft. The "hinge bolt" is not adequate to use to crank the landing gear.
- Before using the landing gear, ensure you have secure footing and that should the gear fail you could immediately escape the handle.
- 7. Before moving the trailer, make sure the landing gear lower leg is in the fully retracted position and the crank handle properly placed in its keeper.
- 8. All moveable parts, bushings and bearing should be regularly lubricated in accordance with the landing gear leg manufacturer's specifications.



Running Gear

Suspensions -

Leaf spring suspension components are the leaf spring assemblies, equalizer bushings, spring seats, spring hangers and the torque arms and U-bolts. Regular scheduled inspections and maintenance are required for a satisfactory service life of the suspension.

Important – The leaf springs must always be securely clamped to the axle and spring seats to prevent any movement within the U-bolts. A less than tight connection can cause misalignment of the axles resulting in excessive tire wear and poor trailer tracking.

Precise specifications for inspections and torque bolts are available from the suspension manufacturer or from www.translead.com.

Air Spring Suspension (Air Ride Suspension) components are the frame brackets, axle connections, air springs (air bags and bells), shock absorbers, suspension links and the necessary plumbing with a height control valve.

The above components work together to provide a cushioned and level platform upon which the trailer can

operate under all legal loads for which it was designed. Trailers come equipped with a spring brake priority to ensure the release of the spring brakes prior to air directed to the reservoir to inflate the air springs (air bags). The height control valve regulates the air pressure in the system to control the ride height of the trailer.

IMPORTANT!

Do not move the trailer before truck tractor air gauges indicate the system is fully charged and stabilized.

U.S. DOT requires air spring suspension systems be checked prior to and after operation with particular attention to:

- Inspect each air bag for damage and sufficient inflation.
- 2. Inspect all shock absorbers for damage or internal leakage.
- 3. Inspect the height control valve for secure attachments and proper operation.

Complete information on individual air suspensions systems is available through the system manufacturer or at www.translead.com.

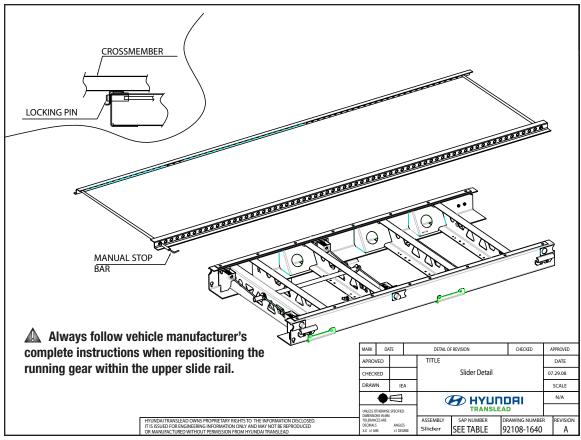
Sliding Suspension (Slider) provide the ability to adjust the position of the running gear beneath the trailer to affect the turning radius and/or adjust the amount of weight between the truck tractor drive axles and the trailer axles. A sliding suspension is commonplace on many trailers.

The components are an upper slide rail securely attached to the underside of the trailer crossmembers. This rail is perforated at equal intervals to accept the bullet-nosed locking pins from the running gear (bogie) top rail. Operation of these locking pins is either manually by pulling the release handle or air-actuated. The suspension can be repositioned in 4" or 6" increments within the length of the upper running gear rail.

IMPORTANT!

- Only slide the suspension when the trailer is on a level surface and the truck tractor and trailer are in a straight line. Check clearance in front of the truck tractor and behind the trailer making sure of adequate clearance for movement of both.
- After activating the parking brake, the locking pins must be disengaged, either by activating the air release system or manually. If manually, exit the

- truck, walk to the slide lock release handle. Take time to assure a secure footing and then activate the release mechanism.
- 3. After returning to the driver seat and with the trailer parking brakes activated, very slowly drive forward or backward to reposition the trailer atop the suspension now locked in place. If the pins have not disengaged their position, it may be necessary to rock forward and backward to dislodge the pins. Once they are free, position the trailer above the suspension at the desired location.
- 4. Once the desired position is achieved, release the locking pins, either by air activation or manually, by shifting to neutral, checking that the parking brakes are locked and exiting the truck tractor and walking to release the locking pin release lever.
- 5. Once the locking pins have been released for entry into the perforations in the upper slide rail, it is mandatory that the driver visually inspect the locking pins to assure all have been seated properly in the upper slide rail. Note that there are both 2-pin and 4-pin design "slider" locking mechanisms. Then and only then can the trailer be considered ready for operation.



Hubs

Inspection -

Carefully inspect hubs and wheel ends for damage before moving a trailer. Cracked or damaged wheels, loose lug nuts or missing studs are hazardous and can lead to, or cause, wheel loss and catastrophic consequences including serious injury or loss of life.

Check lubrication levels (if liquid lubrication is used) and for leaks around hub gaskets and seals.

A leaking seal can cause wheel bearing damage and failure of the entire wheel end assembly.

Lubrication of Flange Nuts and Studs

It is extremely important to maintain precise torque/ tension between the nut body and the flange so as to renew the lubricant on the threads. Each time a wheel is removed for any reason, it is vital to again lubricate the threads and between the flange and the interfacing surface of the nut body.

CRITICALLY IMPORTANT!!! Extreme care must be taken to keep the nut flange surface and the drum

surfaces (indicated by "X's" in the illustration) totally free from lubricant, dirt or other contaminants.

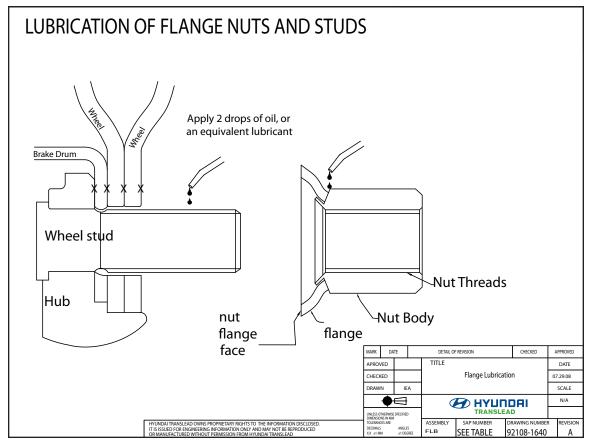
Over lubrication is not desirable. It is negative as it makes each component difficult to handle, and it attracts dirt and grime causing an undesirable appearance on the wheel face.

Most any quality lubricant is sufficient. WD-40[™], engine oil, any anti-seize compound such as Permatex[™] #133A or spray lube such as Lubriplate[™] Spray Lube 'A'. Never-Seez[™] is not a lubricant, but is satisfactory.

Lubrication -

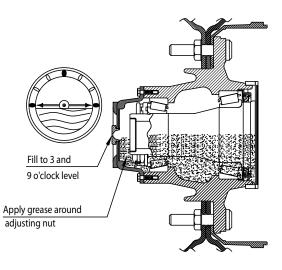
Either oil or semi-fluid grease are used to lubricate wheel bearings within the wheel end assembly. If oil is used, regularly during pre-trip inspections, check the oil level in each hub, adding oil of the proper viscosity to the level indicated on the hub cap. To overfill can cause leaks.

If semi-fluid grease is the lubricant, it will be noted on a label on either the wheel end or possibly on the bottom rail of the trailer above the running gear. Lack of an oil level viewing window also will indicate semi-fluid grease lubrication. Without a method to visually check for proper lubrication, you must carefully inspect each wheel end



LUBRICATION FILL OIL (STATIC) Fill to oil level line

LUBRICATION FILL SEMI-FLUID GREASE (No.00)



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for evidence of leakage before moving the trailer. With semi-fluid grease lubrication, evidence of leakage is indicated by grease around the inner hub seal. Grease on the tire, or any portion of the wheel indicates leakage that requires immediate attention.

Adherence to the Technology and Maintenance Council (TMC) Recommended Practice No. 631A is strongly recommended pertaining to the inspection, lubrication and maintenance of wheel end systems. This document recommends that semi-fluid grease levels be maintained at, but not above the 3 and 9 o'clock positions (a 50% fill of the cavity).

⚠ Be especially careful to follow guidelines listed below to avoid potentially hazardous overfill which may result in serious injury or death.

- Never mix oil or semi-fluid grease lubricants in any wheel end assembly.
- Always use the same type of oil or semi-fluid grease in any wheel end assembly.
- For product recommendations, consult the wheel end manufacturer or a qualified local lubricant supplier.

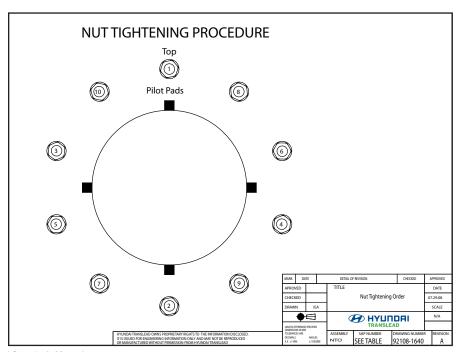
Nut Tightening Procedure –

Following the recommended procedure of tightening lug nuts in the proper sequence is extremely important to the proper seating of hub-piloted wheels. IT IS VERY IMPORTANT TO FOLLOW THIS PROCEDURE!

- First, rotate the hub so one of the pilot pads is located at the top. Next evenly coat the pilot pads with a non-water based lubricant making sure the drum is properly positioned on the raised step of the top pilot pad. Properly adjusted brakes facilitates keeping the drum in the desired position.
- Lubricate the flange nuts and the stud threads by placing two drops of any common lubricant on the threads of each stud and in the crevice between the flange nuts body and its attached flange.
- Once the wheel is properly positioned on the pilot pads, and start flange nuts, which have RIGHT HAND metric threads.
- 4. Snug the top nuts Rotate the hub so one of the pilot pads is located at the top to about 50-100 lb-ft torque. Subsequently snug remaining nuts following the prescribe order as shown.

- STARTING AT THE TOP will help insure that the drum and wheel(s) seal properly on the pilot pads.
- 5. It is very important to assure that the mating surfaces of the wheel(s) and the drum are flush.

6. Begin once more with the top nuts and tighten to 450-500 lb-ft following the same sequence.



Air System

Never move any trailer with visual indication from dash instruments indicating adequate, inadequate or insufficient air pressure for brakes or if an audible warning is sounding.

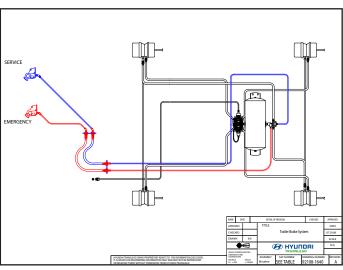
Trailer air supply is delivered from the truck tractor.

The trailer air system consists of plumbing throughout the trailer, the gladhands for both "service" and "emergency", reservoirs and the suspension and brake valves. It is vital for the safe operation of a trailer to regularly inspect each link in the air system.

Regular draining of condensation from the reservoirs and inspecting that liquid for contaminants is vital to assure proper operation of the air system. Solid matter can enter the system through the glad hands on the trailer or at either end of the hose connections. Use of an air dryer system on all tractors is strongly recommended.

Always follow the guidelines below to avoid potentially hazardous situations.

- Consistently monitor truck tractor dash air gauges for minimum levels.
- Regularly check and clean gladhand screens and open all reservoir petcocks on both the truck tractor and the trailer to drain liquid condensation.
- Never move a trailer until the air pressure gauges indicate the system is fully charged and stabilized.



Brake System

The brake system consists of an air delivery system including plumbing, reservoir, emergency valve, service valve, and ABS (anti-lock brake) system. The ABS system includes wheel speed sensors, tone rings, external warning lamp and electronic actuated pneumatic control module(s). The brake system also includes foundation brakes made up of slack adjusters, S-cams, brake chambers and brake shoes or pads.

The trailer brake system is operated by, and in conjunction with, the truck tractor brake system. There are two functional systems – the Supply or Emergency and the Service. The Supply side is connected to the truck tractor via the red gladhand and provides a constant air supply that releases the parking brakes and maintains consistent air pressure in the reservoir. The Service side connects through the blue gladhand and provides a signal for trailer brake activation when the truck tractor brakes are applied.

When the truck tractor brakes are applied, a signal is sent via the service air line to the trailer service valve. The relay valve in turn sends air to the brake chambers proportionately to the signal it received, and the trailer

foundation brake chambers convert the air pressure to mechanical force through the slack adjusters, cam shaft actuating the brake shoes or pads.

Trailers are equipped with spring applied emergency/ parking brakes. Parking brakes are activated by the pull/push switch on the truck tractor dash or when no. or insufficient, air pressure is present causing the emergency/parking brake spring to mechanically apply the brakes. A spring brake priority valve sends air to release the spring emergency/parking brakes prior to charging the reservoir for inflation of an air suspension system. It is vital to not move a trailer until the dash instruments indicate the entire system is fully charged and stabilized. In some instances of routine maintenance or emergency situations, it may be necessary to move the trailer without the air system being charged. The spring brake can be "caged" "or "backed off" manually releasing the brake. Extreme caution should be taken when performing this action. Follow the brake chamber manufacturer's instructions for this procedure.

Never move a trailer with any brake defects or with brakes out of adjustment!

1. Visually inspect the air hoses, the gladhands on both

the truck tractor and the trailer for any damage or wear. Repair or replace as required.

- Make sure the truck tractor and trailer gladhands and screens are clean and free of contamination or debris prior to connecting.
- Make sure the tractor is equipped with an air dryer system.
- Inspect the trailer brakes and adjust (or have adjusted) following the DOT mandated requirements and preventive maintenance program.
- Never introduce to the air system anti-freeze or any additive.
- 6. Routinely open all reservoir petcocks to drain moisture from the system.
- Monitor the truck tractor air gauges being alert for signs of unusual air consumption.

Trailer brake systems should be inspected frequently for serviceability by a qualified mechanic for any discrepancy, such as loose fittings, missing or disabled components. Missing or damaged components can result in an accident or place the trailer out-of-service. No trailer should be moved when any brake discrepancy is

noted. Brake systems will perform properly with regular attention to specifications as well as inspection for damage and wear which is a part of any comprehensive maintenance program.

The Anti-lock Brake System continuously monitors wheel rotation speed. In extreme braking situations should a wheel lose traction with the road surface and lock, the sensors transmit this dynamic to the ECU (Electronic Control Unit) which regulates air pressure to that brake to release the brake for an instant to regain traction. Should the ABS malfunction, and an indicator light located on the right rear bottom rail will illuminate. Non Anti-lock Brake functions will continue, but it is extremely important to report the situation and to have the ABS system repaired.

The ABS indicator light is located at the trailers lower-left, rear corner on or near the bottom side rail. It should illuminate briefly when electrical power is first applied to the anti-lock brake system. If this indicator lamp fails to illuminate when power is applied, it may be defective and should be checked and/or repaired. If it remains illuminated while power is applied, this indicates the ABS system should be checked and repaired by a qualified

technician. The trailer should not be moved and also reported. Failure to take this action can cause property damage, serious injury and even death!

While ABS technology can assist you to bring your combination vehicle to a controlled, safe stop in severe braking situations, ABS cannot compensate for excessive speed, lack of good judgment, failure to being alert or improper driver reactions. Ultimately vehicle safety is the driver's responsibility. Drivers are ultimately responsible for their safety and those in and around the vehicle for which they are responsible.

Technical assistance and detailed information is available from the manufacturer of the system installed on your trailer or for information contact Hyundai Translead at www.translead.com.

Always securely chock all trailer wheels both fore and aft to prevent trailer movement before manually releasing the spring brakes. IMPORTANT! See the manufacturer's service manual for details on how to manually release a spring brake.

As standard, brake chamber suppliers attach a caging bolt to the exterior housing for emergency release

situations. To cage this powerful spring brake carefully follow the instructions below:

- 1. Remove the plastic cap.
- Insert the special release bolt in the center hole opening. Be sure the formed end of the bolt engages the piston until it bottoms out.
- Turn the release bolt ¼ turn clockwise and pull the bolt outward to lock the formed end into the piston.
- 4. Install a flat washer and release nut on the end of the release bolt and tighten the nut down against the surface.
- 5. Use a ¾" open end wrench to turn the nut clockwise to tighten against the surface.
- As you perform #5, check the service Chamber pushrod to ensure it is retracting.
- Continue to turn the wrench clockwise until the spring is fully compressed and the camber piston is fully retracted.

To reactivate the spring brake from a released position, carefully perform the above steps in reverse order.

When spring brakes are caged or deactivated the trailer will not have emergency or parking brakes. The trailer must not be driven in traffic or parked without all wheels being securely chocked both fore and aft.

It is of extreme importance to understand a caged spring brake chamber eliminates the emergency breakaway feature of the system and represents a potential danger.

No trailer should ever be released into service while any spring brake is inoperative.

Never attempt to disassemble or repair a spring brake chamber. Serious personal injury could result from accidental sudden release of the high energy spring!

Service brakes and parking brakes must be inspected by the driver before and after trailer use. NEVER operate a trailer with defective brakes.

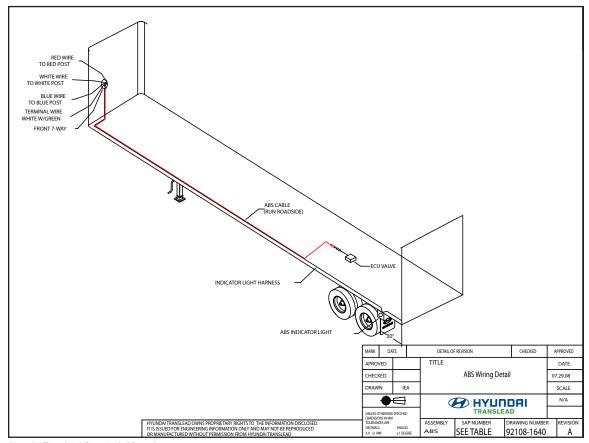
1. Visually check to ensure the chamber plastic end cap is in place to prevent dirt and contaminants.

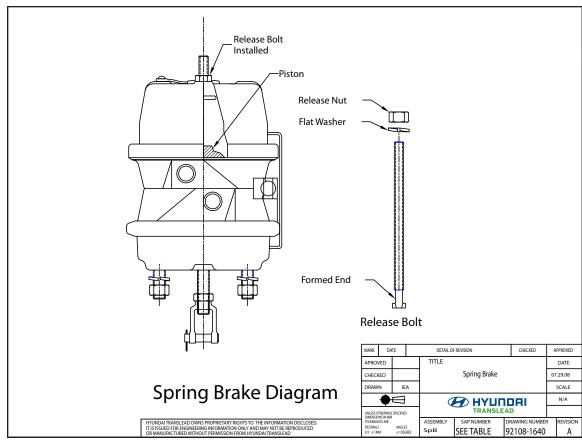
- 2. Visually inspect all components of the brake system for broken, missing or damaged parts and corrosion.
- 3. Ensure the service brake chamber clamping is secure and not damaged.
- 4. If a defect is suspected, place the vehicle out of service until a qualified technician can perform repairs.

Before entering traffic, check the operation of the trailer brakes to ensure they are in proper working order. Operate the foot pedal, dash control valve and hand valve to verify the brakes apply and release each time. Listen and be alert for air leaks during each type of brake application.

Slack Adjusters –

Slack adjusters function as levers in the brake system. Slack adjusters convert the linear force of the brake chamber into torque forcing the brake shoes against the drums. The automatic slack adjusters installed on the trailer maintain a constant brake shoe to drum clearance ensuring constant brake shoe force.





Rear Impact Guard

The rear impact guard consists of both vertical and horizontal structural components, forward bracing and numerous welds, hardware and a certification label or a plate. The rear impact guard is integral with the trailer rear frame and under-structure.

Rear impact guards are required by Federal Law and must meet specifications listed in Federal Motor Vehicle Safety Standards 49 CFR Sections 571.223 and 571.224. These federal standards include requirements on strength and energy absorption, dimensional measurements as to width and road surface to lower horizontal member clearance and certification of testing. At the time of manufacture a label or plate attesting to the certification is placed on the forward-facing surface of the lower horizontal member verifying it meets all standards. This label must be in place or highway traffic enforcement officers can ticket the operator of the vehicle.

The driver should routinely inspect the rear impact guard prior to moving the trailer. This inspection should verify that there are no cracks in the welds, all fasteners are intact and secure and no structural members are bent

or deformed so as to not meet the dimensional requirements of the above referenced FMVSS. Any rear impact guard that has sustained damage so that it no longer meets these standards must be replaced or repaired to it original condition. Repair parts or replacement impact guards are available from Hyundai Translead at www.translead.com or Toll Free at 800.251.0871.

The Rear Impact Guard must be regularly inspected and properly maintained.

Any guard that has been damaged so that it no longer complies requirements of Federal Motor Vehicle Safety Standards must be replaced or repaired to its original condition.

IMPORTANT NOTICE REGARDING ACCIDENTS INVOLVING THE REAR IMPACT GUARD (RIG)

It is extremely important that photographs of any accident involving this vehicle's rear impact guard (RIG) be taken to accurately show the condition of the trailer and structure and any vehicle or vehicles involved.

These photographs should be done at the time of the accident and before any repairs are performed.

Photographs should be:

- General overall views of the trailer and impacting vehicle or vehicles from different angles showing relative positioning of all involved vehicles to each other and to the roadway.
- 2.) General views of the relative condition of the trailer structure.
- 3.) General views of damaged areas.
- Close-up views of the damaged areas including any surrounding structures

Tire Care

Limiting Factors and Load Limits –

It is imperative to maintain recommended tire pressure in all tires and to not exceed load limits. Tire pressure should always be measured when cold. The total load weight per tire must not exceed the manufacturer's specified load rating. Each tire has its size, load limit, maximum air pressure and date of manufacture molded into the sidewall of each tire. The Vehicle Identification Plate (VIN), located on the bottom front of the trailer, states the Gross Axle Weight Rating (GAWR), the tire size, the load rating and inflation pressure.

Follow the guidelines below to avoid potentially hazardous situations, which may result in serious injury or death!

- Before moving the trailer inspect each tire for sidewall damage or cuts, dry rot, nails or other objects embedded in the rubber in the tread or sidewalls.
- Thoroughly inspect the treads for stones or other objects, as well as larger objects such as bricks lodged between the duals.
- 3. Check the tread depth on all tires to ensure

- sufficient depth to meet DOT compliance, as well as even wear around and across the tires.
- 4. Make sure any two tires mounted on the same axle end are of the same diameter.
- 5. Carefully inspect tire valve stems for bends or damage ensuring each has a valve cap.
- 6. Never operate a trailer with any tire having low or no air pressure.
- Always when replacing tires or rims make sure the replacements are of the same size, type and load rating.

Be aware that tires in service beyond six or seven years from their manufactured date may require replacement due to dry rot or cracking.

Above the Bottom Rails

Electrical System –

The electrical system includes a 7-way connector box, wiring, conduit, lamps and various other accessories.

Regular inspections are required to assure for safe operation of the vehicle.

The electrical system of your Hyundai Translead trailer meets or exceeds all federal and state requirements in effect at the time of manufacture.

NOTE: Hyundai Translead's front marker lights are PC-rated (visible over 180 degrees) and mounted so as to provide protection from damage from the sides. All front lights comply with FMVSS-108.

To ensure proper operation, the trailer must be connected to a truck tractor supplying adequate and reliable 12 volt DC electrical current from the tractor "pig-tail" to the trailer's 7-way connector. This receptacle provides a hinged cover that also locks the 7-way plug into the connector and protects it from dirt and moisture when it is not being used. A standard wiring diagram for Hyundai Translead trailers is illustrated below.

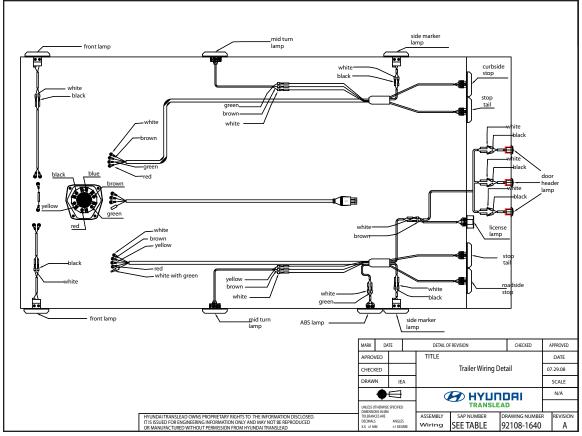
To achieve the best performance and extend the overall life of the trailer electrical system:

- Always keep lamp lenses and reflectors clean for optimum visibility and safety.
- Regularly inspect wiring, as well as all junctions and ground connections, to assure solid connections. Clean and grease junctions with dielectric grease as necessary.

- 3. Regularly inspect the wiring harness for damage or unsupported wiring.
- Never use a test probe "spike" to pierce insulation.
 Moisture intrusion into the system can travel (wick) great distances within the insulation causing serious corrosion to critical connections.
- 5. In maintaining the electrical system, use only original components.

Always turn the trailer lights off whenever backed up to a loading dock.

▲ Never operate the trailer with any nonfunctioning lights!



Floor System

Floor -

The floor system consists of floor boards, crossmembers, lower sidewalls and fasteners. In the case of refrigerated vans, the floor boards are of extruded aluminum rather than laminated wood as in dry vans. Additionally there is a sub-floor and composite floor sills above crossmembers. In both instances, the components act as an integral system. Both, regular and thorough inspections are required to check for damage or loose components.

▲ Inspect all components of the floor system before loading and after unloading.

Visually assure there are:

- No delaminated or broken wooden boards or punctures through the floor. (dry vans)
- No deformed, wavy or cracked aluminum floor boards or punctures through the aluminum or cracked welds. (reefers)
- No missing or loose fasteners in the floor boards or scuff bands.

- No damaged or through punctures in the base of the sidewalls.
- 5. (Check underneath trailer) No bent, deformed or cracked crossmembers or through punctures in the sub-floor in the case of reefer vans.
- Do not expose any part of the floor system or body components to corrosive materials or solvents. Such exposure may void the warranty of the trailer.

Recommendations:

- 1. Never damage or compromise the integrity of wood floor boards by excessive nailing in any one area.
- Use of dock boards and/or leveling equipment is highly recommended during forklift entry into the trailer.
- 3. All flooring repairs must be accomplished using materials with identical section properties, thickness and type/specification of wood or aluminum.

▲ Loading –

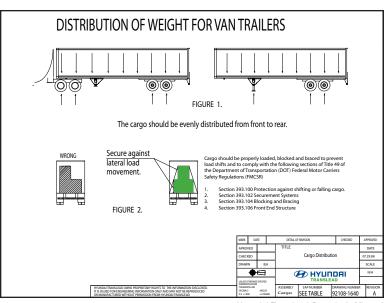
1. Improper loading, load distribution or cargo securement can cause damage to the floor system.

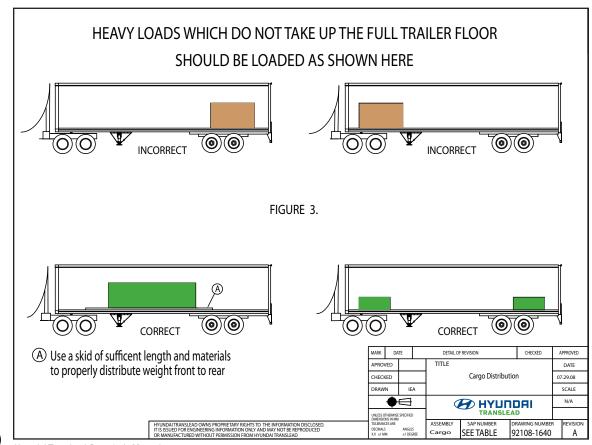
- 2. Avoid the use of pallets with small sized footprints to reduce the chance of floor puncture.
- The sliding suspension should be placed in the rear most position during loading.
- 4. Ensure trailer is on a solid and level surface while loading.
- Chock wheels, or engage "dock locking devices", to prevent the trailer from moving forward during loading. Should a trailer move away from the dock, the loading device and operator could fall between the dock and the trailer.

▲ Load Distribution –

Cargo should be properly loaded, blocked and braced to prevent load shifts and to comply with the following sections of Title 49 of the Department of Transportation (DOT) Federal Motor Carriers Safety Regulations (FMCSR) at the FMCSA Official Web site – www.fmcsa.dot.gov.

- 1. Section 393.100 General rules for protection against shifting or falling cargo.
- 2. Section 393.102 Securement Systems
- 3. Section 393.104 Blocking and Bracing
- 4. Section 393.106 Front End Structure





Roof System

The trailer roof system includes the roof sheet, roof bows and fastener connections to the top side rails. Regular roof inspections are important to ensure safe operation of the trailer.

Standard roof sheet material is one piece, full-length aluminum or optional fiberglass translucent material. The roof system is a critical component of the structural integrity of the monocoque trailer design. The roof sheet and roof bows act as a unit to provide structural stability for both side walls.

Damage to the roof system can cause instability of the upper side walls resulting in buckling and total collapse of the trailer.

Never transport people in a trailer. Always visually check to ensure no one is in the trailer prior to closing the doors and moving the trailer.

Door Systems

Swing Doors -

The trailer swing door system consists of the rear frame, two door panels with perimeter molding, gasket seals, hinges, door-locking hardware, lock rod keepers top and bottom and door hold backs. Regular inspection of the swing door system is important to ensure safe operation and transfer of cargo.

The swing door system provides a full-width access to the trailer rear for loading and unloading. When properly closed, the rear door lock rods and the top and bottom keepers secure the closure and are instrumental in holding the rear frame and trailer sides square during transit. It is most important that the lock rods and keepers temporarily unitize the doors and the rear frame for water and near air tight seals. Swing doors when properly operated and regularly maintained will provide years of safe dependable service.

Follow the guidelines below to avoid potentially hazardous situations, which may result in death or serious injury!

- 1. When opening swing doors, be alert for cargo that may have shifted against the doors during transit.
- 2. Use extreme caution during high wind conditions when opening, closing or in the vicinity of swing doors.
- Always open swing doors a full 270° against the outside trailer sidewalls and securely engage the door hold back securement devices.
- Never move a trailer with the swing doors open, except in backing into or pulling away from a loading dock.
- Drivers should never position themselves within the swing radius of a swing door without first checking the security of the door to the hold back security device.
- Before operating swing doors, carefully inspect all hardware including hinges, lock rods and keepers and door hold backs to ensure there are no damaged or broken components.

Regularly check door systems including doors, hinges, lock rods, lock rod keepers and door hold back securement devices for damage or distortion caused by impact to loading docks. Door seals are subject to wear and damage. They will require routine checks and repair

or replacement of damaged or worn parts to ensure a weatherproof closure to protect cargo.

Overhead Doors -

Trailer overhead door systems consist of horizontal door panels (slats), door tracks, a door operating mechanism and locking hardware. Regular inspection of the overhead door system is most important for safe and smooth door operation.

Travel of the door, both up and down, is assisted by a pretensioned spring. A properly adjusted door should stay in any position when properly counterbalanced by this spring. When the locking lever is released, the door should not rise before you provide lift or descend before you pull it down. If the door does not operate properly, it should be adjusted by a qualified technician.

It is important to read, understand and comply with all instructions and labels affixed to or provided with the door.

A High tensioned springs can cause serious injury or death! All repairs and adjustments must be made by a trained and qualified technician.

Before Operating -

- Inspect all fasteners and tighten or replace loose or damaged fasteners on the lift handle, lock, pull strap, hinges and roller track. If the pull strap is frayed or damaged, replace it immediately.
- 2. Do not tie anything to extend the length of the pull strap. Longer pull straps are available if required.
- Never operate an overhead door with a broken counterbalancing spring. The door can fall with significant force when released.

During Operation –

- Check the locking handle movement. Lubricate with light oil if movement is stiff. Any worn or damaged parts of the latch/locking assembly should be replaced.
- If vertical door movement is difficult, lubricate the rollers and the counterbalance spring bearings.
 Damaged or worn parts should be replaced by a qualified technician. Do not operate the door if it is extremely difficult to raise or lower.
- 3. Check cable attachment points. Worn or frayed cables should be replaced. Cable drums should be

- snug against the bearings. Any repairs should be done by a qualified technician.
- Check to be sure the tracks and door openings are not damaged or obstructed through the full travel of the door and rollers.
- Never move the trailer with the door open, except when backing into or pulling away from a loading dock.

The frequency of door maintenance will vary with climatic conditions and work applications.

Lubrication –

Use a dry, spray lubricant to fully lubricate the counterbalance bearings, rollers, hinges and the locking handle on a regular basis according to the manufacturer's recommendations. Before lubrication, wipe dirt and residue from the roller tracks. Do not use any petroleum based lubricant on the rubber door seals. Further information on any particular brand of overhead (roll-up) door system can be found at the manufacturer's web site.

IMPORTANT!

Always visually and audibly check for persons inside any trailer before closing the door(s).

Sidewalls & Front

The sidewalls and trailer front are integral components of monocoque trailer design and work in conjunction with the roof system, the floor system, trailer front and the rear frame to carry the load in the trailer. Damage to sidewalls may cause deformation or collapse of the trailer causing serious injury or death!

Sidewalls -

Regularly inspect side sheets for any damage. Dents and dings, deep scrapes may involve upright posts. Have such damage inspected by a qualified trailer facility to determine if the sidewall structural integrity has been compromised requiring immediate repair. Bends, scrapes, cracks or broken bottom side rails, top side rails or the rear frame may require immediate attention by a qualified technician. Check for loose or missing rivets or fasteners, damaged rivet or fastener heads in the sidewalls and both top and bottom side rails. Report any damage immediately.

Front -

Inspect the trailer front assembly for damage, loose or missing rivets or fasteners. Especially check the top front for tree limb damage that may allow intrusion of moisture into the trailer. All seams should be checked before each trip.

Refrigerated Trailer Cooling Unit

For reefer trailers, it is very important to pay close attention to the security of the cooling unit mounting and follow the manufacturer's service recommendations. Full technical information is available from your local dealer or the manufacturer's web site.

Safety Equipment

It is your responsibility to use all steps, hand holds and other safety devices regularly and with extreme caution. Regularly check these devices for secure attachment and proper maintenance. Use extreme caution on wet surfaces and remove all ice or mud prior to use. Steps or ladder rungs should never be used, and not intended for use, to perform maintenance of any kind on the trailer front and cooling unit.

- Always maintain a three-point contact (both hands and one foot or both feet and one hand) when ascending or descending trailer steps or ladder rungs.
- Never use steps that are not firmly attached or properly maintained. Be sure retractable steps are fully extended and locked into the use position before ascending.
- Use extreme caution when stepping onto or off of trailer steps. Always be extremely careful when exiting steps onto any other surface.
- Retractable steps must always be returned and secured in their stowed position prior to the movement of the trailer.
- 5. All interior lights must be turned off before closing the trailer door(s)!

Pre-Trip Inspection

Trailer Pre-Trip Inspection –

The first and important step to completing a safe trip is a full and comprehensive Pre-Trip Inspection of the trailer. The following list provides a guide for a systematic

inspection. Operators of any motorized vehicle and attached vehicles are responsible for a thorough inspection prior to every departure and safe operation of the combination vehicle while on private property and public roads. Drivers are the best safety measure, and their Pre-Trip Inspection must include, but not be limited to, the following checks:

Having completed a full pre-trip inspection of the truck tractor that will pull the trailer, the driver should properly couple to the correct trailer before beginning the trailer pre-trip inspection.

Details of the inspection process are contained under the section for each particular part or system of the trailer elsewhere in this manual.

- Check for current registration, DOT Inspection, all necessary license plates and an accurate Bill of Laden.
- Check to ensure the electrical cord from the truck tractor is fully inserted in the 7-way connector and retained by the spring loaded connector closure.
 Further ensure that the cord is unobstructed and not restricted.

- Check to ensure that the air delivery hoses from the truck tractor are unobstructed, free of chaffing and correctly and securely attached to the gladhands. Listen for escaping air leaks.
- Check to verify the fifth wheel jaws are engaged and locked securely around the kingpin.
- Check to make sure the landing gear legs are in the upper most position and the crank handle is properly stowed in its keeper.
- Turn on all lights and check each one for illumination and clean the light lenses of those that are reachable.
- Check all tires for proper inflation, any damage and tread depth.
- If the trailer is equipped with a sliding suspension, check to make sure its position is correct for the load and the areas you will travel. Make absolutely sure all the locking pins are completely engaged in the upper slide rail. Note that there are both 2-pin and 4-pin locking mechanisms on "sliders". Check to ensure that all of the "hold down" brackets are firmly attached.

- If the trailer is equipped with air spring suspension (air ride) visually inspect each air spring (air bag) for damage, ensure it is inflated to the proper level and listen for escaping air.
- Check the brakes to ensure they are properly adjusted and functioning properly. This includes the ABS system and warning light.
- Check the wheels for any loose or missing lug nuts, cracked rims and the oil level in the wheel end hub cap.
- Check to assure that the mud flaps are securely attached to the brackets and that the brackets are firmly secure to the trailer.
- Check to ensure the doors are fully seated and locked. Unless secured with locks or door seals, check to ensure no person is in the trailer.
- Check the rear impact guard for soundness with no weld cracks, bent or broken bracing and a straight lower horizontal member. Verify certification label or plate is in place.

- When first driving away and before leaving the area, apply the service brakes and gently rock the trailer fore and aft making sure the sliding suspension is properly locked in place. Exit the cab and visually check all the locking pins again. Complete a last walk around looking for any item hanging beneath the truck or trailer.
- When in doubt, double check that item.

It is highly recommended that vehicle operators become familiar with the "North American Standard Out-of-Service Criteria" which can be obtained through the Commercial Vehicle Safety Alliance (CVSA) at www.cvsastore@CVSA.org.

Always follow the vehicle manufacturer's when operating the sliding suspension or any other part of the trailer.

No trailer should ever be operated in such a condition or manner to likely cause an accident or breakdown of the vehicle.

The above list is not all inclusive, but a suggested list. All operators are responsible for ensuring compliance with all applicable state and U.S. DOT regulations.

For More Information

For more information –

Following the information in the manual, and with proper care and maintenance, your Hyundai Translead trailer should perform well and provide years of safe and dependable service. For further information on the operation of this vehicle, please contact your sales representative, the dealership or Hyundai Translead at 800.251.0871 or www.translead.com.

For specific operational or maintenance information concerning vendor supplied components on your Hyundai Translead trailer, you may wish to contact the applicable manufacturer directly at their web site or by telephone. Hyundai Translead will be glad to provide their contact information if you are unable to access them.

Your Hyundai Translead trailer has been designed and manufactured to ensure compliance with all Department of Transportation (DOT) safety requirements enforce at the date of manufacture. Trailers receive a final inspection certification. If you detect a defect that could cause an accident or wish to report an accident or injury, contact the Director of Quality Assurance, Hyundai Translead, Inc., 8880 Rio San Diego Drive, San Diego, CA 92108 or www.translead.com.

The entire Hyundai Translead team wishes to thank you for selecting what we believe to be the best trailer product available. Always inspect, maintain and operate your trailer(s) in a prudent and safe manner.

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