

Head Transport Owners Manual



NOTE: THIS SAFETY ALERTS SYMBOLS FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND THE SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH.



SIGNAL WORDS:

Note the use of the signal words DANGER, WARNING and CAUTION with the safety messages. The appropriate signal word for each has been selected using the following guidelines.



DANGER: Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to the most extreme situations typically for machine components which, for fictional purposes, cannot be quarded.



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



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

EQUIPMENT SAFETY GUIDELINES



Safety of the operator is one of the main concerns in designing and developing a new piece of equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you or for you, follow them.

Replace any CAUTION, WARNING, DANGER or instruction safety decal that is not readable or missing. Locations of such decals are indicated in this booklet.

Do no attempt to operate this equipment under the influence of drugs or alcohol.

Review the safety instructions with all users annually.

This equipment is dangerous to children and persons unfamiliar with its operation. The operator should be a responsible adult familiar with farm machinery and trained in this equipment's operations. **Do not** allow anyone to operate or assemble this unit until they have read this manual and have developed understanding of the safety precautions and of how it works. Do not for any reason allow any person to ride on the head trailer or stand on the draw bar of tow vehicle.

PRE OPERATIONAL CHECKLIST

Ш	CAREFULLY STUDY AND UNDERSTAND THIS MANUAL
	PRACTICE OPERATION OF YOUR EQUIPMENT AND ITS ATTACHMENTS
	DO NOT WEAR LOOSE FITTING CLOTHING WHICH MAY CATCH IN MOVING PARTS
	WEAR PROTECTIVE CLOTHING AND SUBSTANTIAL SHOES
	ASSURE THAT ALL TIRES ARE INFLATED EVENLY TO THE CORRECT PRESSURE
	TIGHTEN LUG NUTS AND BOLTS TO THE PROPER TORQUE
	VISUAL INSPECT FOR LOOSE BOLTS, WORN PARTS OR CRACKED WELDS
	MAKE NECESSARY REPAIRS AND FOLLOW MAINTENANCE SAFETY INSTRUCTIONS
	CHECK ATTACHMENTS FOR MISSING PIN AND COTTER PINS
	MAKE NECESSARY REPAIRS AND FOLLOW MAINTENANCE SAFETY INSTRUCTIONS
	IF EQUIPPED WITH BRAKE AXLES EVENLY ADJUST BEFORE OPERATING
	BE SURE THAT THERE ARE NO TOOLS LYING ON OR IN THE EQUIPMENT
	USE HIGH STRENGTH HITCH PIN WITH A MECHANICAL RETAINER TO ATTACH TRAILER
	INSURE TONGUE IS LEVEL TO GROUND. MAY HAVE TO USE DIFFERENT RECEIVER (DAMAGE TO
	TRAILER IS POSSIBLE)
	WHEN BACKING UP DON'T ALLOW ANYONE TO STAND BETWEEN THE TONGUE & HITCH
	WHEN MOVING THE TRAILER MAKE SURE THE AREA IS CLEAR OF CHILDREN & ANIMALS

TRANSPORT OPERATION



THIS REQUIRES YOUR ATTENTION! NEVER allow anyone within close proximity during loading as injury may occur during process of moving the head onto the transport

SADDLE ADJUSTMENT

Headhunter trailers comes standard with tow wrench free adjustable mounts & saddles which can be moved along the frame by simply loosening the handle nuts on the outside of the mount assembly below the frame. The saddle is also able to be moved in order to change the placement of the head on the trailer, to do this remove the two pins from the assembly and adjust as necessary. It is imperative that both saddle pins are used to secure the saddle to the mount



RATCHET TIE DOWNS

Your unit comes with two standard ratchet tie downs, which can be moved along the length of the trailer by loosening the handle nut on the front side of the bracket attaching it to the trailer. AT LEAST TWO COMPLETE WRAPS SHOULD BE ON THE RATCHET SPOOL TO ENSURE THE STAP WILL NOT SLIP.

PLACING THE HEAD ON THE TRAILER

Ensure the head is equally spaced from front to rear. The head should rest against the
backstops on the saddles
Ensure the weight rests against a strong structure on the head. Your ratchet strap should be
used on center nearest the throat
Each saddle is adjustable and can be easily moved from front to back by loosening the handle
nuts. When in a stable position, retighten the handle nuts. The saddles are also adjustable by
removing the saddle pins and placing the pins and backstops in any of the many holes positions
provided. This will allow you to control the center point of load, thus allowing the head to rest
centered to your preference
In this final process, ensure the head is well balanced side to side. Make every attempt to not
place all the weight on one side. Modern heads may exceed 10,000 pounds, making weight and
balance a definite priority.
Always assure that the saddles are adjusted correctly

OPTIONAL ATTACHMENTS

Headhunter trailers come equipped to work for a variety of heads; however there may occasionally be a need for a special attachment in order to achieve a better fit for your head. Talk with your Dose Representative for what would work best for your head.

UNLOADING HEAD FROM TRAILER

Move the head trailer to a level location. Carefully remove the strap, as the load may have shifted during transportation. As you move the combine up to the head, ensure that no one is in between your combine and the trailer. As suggested in the loading process **NEVER** allow anyone within close proximity while unloading, as injury is always a possibility when lifting these heavy components from the trailer

HOOKING UP



- Your unit may be equipped with an extendable tongue feature to ease the process of hooking the trailer to its tow vehicle. To operate this system first remove the safety pin from the tongue latch then lift up on the latch handle while pulling forward. This will enable you to slide the hitch up to 24" while hooking the trailer up. Once the transport is hook up properly simply back the tow vehicle up to reattach the system and replace the safety pin. It is essential the system is reattached and the pin replaced for safe operation, the tongue does contain a secondary safety internally but this should never be used to pull the unit.
- Ensue the two safety chains are properly hooked to a secure point on the tow vehicle. The
 chains should be hooked up running under the tongue in a crisscross manner and not dragging
 on the ground
- Plug electrical connector into the proper 7 pole outlet on the tow vehicle
- Attach breakaway safety switch lanyard (if equipped) to secure point on the tow vehicle



ELECTRONIC BREAKAWAY SAFETY SYSTEM

Units equipped with electronic brakes will come with an electronic breakaway safety system consisting of a breakaway switch mounted to the tongue and battery box mounted to the right side of the gooseneck. This system will trigger the brakes should your transport become unhooked from the tow vehicle during transport. It is very important this system be used properly and maintained for safe operation.

PULLING THE TRAILER

Beware of bystanders, particularly children! Always look around to make sure that it is safe to
start the engine of the towing vehicle or move the unit. This is particularly important with
higher noise levels and quiet cab. As you may not hear people shouting.
NO PASSENGERS ALLOWED! Do not carry passengers anywhere on, or in, the tractor or
equipment, except as required for operation
$Check that the \ taillights, brake \ lights \ and \ turn \ signals \ work. \ Check \ that \ the \ electric \ brakes \ work \ description \ d$
by operating the brake controller inside the tow vehicle. Pull the pin from the switch and try to $$
pull the trailer. A much greater force is needed to pull the trailer when the brake is activated.
Keep hands and clothing clear of moving parts
Do not clean, lubricate or adjust your equipment while it is moving. Be especially observant of
the operating area and terrain
DO NOT operate near the edge of drop offs or banks
Do NOT operate on steep slopes as overturn may result. Operate up and down (not across)
intermediate slopes. Avoid sudden starts and stops
Select the level most possible route when transporting across fields
Avoid the edges of ditches or gullies and steep hillsides
Maneuver the tractor or towing vehicle at safe speeds
Keep all bystanders, pets and livestock clear of the work area
As a precaution, always recheck the hardware on equipment following every 100 hours of
operation. Correct all problems. Follow the maintenance safety procedures
Check your load often to ensure your load is secure; make any adjustments necessary en route
Following operation, or when unhitching, stop the tractor or towing vehicle, set the brakes,
disengage the PTO and all power drives, shut off the engine and remove the ignition keys
Do not park equipment where it will be exposed to livestock for long periods of time. Damage
and livestock injury could result
Do not permit children to play on or around the stored unit
Make sure all parked machines are on a hard, level surface and engage all safety devices
Wheel chocks may be needed to prevent unit from rolling
Store the unit in a covered area away from human activity

PERFORMING MAINTENANCE



Proper scheduled maintenance on your unit plays a vital role for years of trouble free operation and use. This section will go over the standard service procedures as well as replacement of various parts on your trailer. Before you begin please always keep the following in mind:

Good maintenance is your responsibility. Poor maintenance is an invitation for trouble
Before working on your unit, stop the tow vehicle, set the brakes, shut off the engine and
remove the keys
Always use a safety support and block the wheels when lifting the unit. Never use only a jack to
support the trailer
Always use the proper tools or equipment for the job at hand
Use extreme caution when making adjustments
Follow the torque chart in this manual when tightening bolts and nuts
Never replace bolts with less than grade five bolts unless otherwise specified. Refer to bolt
torque chart for head identification marking
Where replacement parts are necessary for periodic maintenance and servicing, genuine
factory replacement parts must be used to restore your equipment to original specifications.
The manufacturer will not claim responsibility for use of unapproved parts and/or accessories
and other damages as a result of their use
If equipment has been altered in any way from the original design, the manufacturer does not
accept any liability for injury or warranty

HUB REMOVAL AND INSPECTION

Whenever the hub equipment on your axle must be removed for inspection or maintenance the

foll	owing procedure should be followed:
	☐ Jack up the trailer and place jack stands under the trailer frame so that the weight will be off
	the tires. Never jack up or place jack stands on the axle tube or mounts
	☐ Remove the wheel assembly
	☐ Remove the grease cap by carefully prying progressively around the flange of the cap
	$\ \square$ Remove the cotter pin from the spindle nut or in the case of Safe-T-Lube, bend the tang washer
	to the free position
	☐ Unscrew the spindle nut counter clockwise and remove the washer

BRAKE DRUM INSPECTION

Remove the hub from the spindle, bring careful to not let the outer bearing fallout

There are two areas of the brake drum that are subject to wear and require periodic inspection. These two areas are the drum surface where the brake shoes make contact during stopping and the armature surface where the magnets contacts (only on electric brakes)

The drum surface should be inspected for excessive wear or heavy scoring. If worn more than .020" oversized, or the drum has worn out of round more than .015", than the drum surface should be turned. If scoring or other wear is greater than .090" on the diameter, the drum must be replaced. When turning the drum surface, the maximum re-bore diameter is 12.090"

The machined inner surface of the brake drum that contacts the brake magnet is called the armature surface. If the armature surface is scored or worn unevenly, it should be refaced to a 120 micro inch finish by removing not more than .030" of material. To insure proper contact between the armature face and the magnet face, the magnets should be replaced whenever the armature surface is refaced and the armature surface should be refaced whenever the magnets are replaced

NOTE: It is important to have wheel-bearing bores free of metallic ships and contamination. Make sure all cavities are free of contamination before reinstalling the bearing and seals

BRAKE INSPECTION

Wash all grease and oil from the bearing cone using a suitable solvent. Dry the bearings with clean, lint free cloth and inspect the rollers completely. If any pitting, marring, or corrosion is present, then replace the bearing. The bearing cup inside the hub must be inspected also.

ALWAYS REPLACE THE BEARINGS AND CUPS IN SETS

When replacing the bearing cup proceed as follows:

Place the hub on the flat work surface with the cup to be replaced on the bottom side
Using a brass drift punch, carefully tap around the small diameter end of the cup to drive it out
After cleaning the hub bore area, replace the cup by tapping in with the brass drift punch. Be
sure the cup is seated all the way up against the retaining shoulder in the hub

Replace only with bearings as specified in the accompanying Bearing Replacement Chart

Axle Capacity	Spindle Diameter	Inner Bearing/Cup	Outer Bearing/ Cup	Seal	Grease Cap
7,000 lbs.	2.25"	BR25580/BR25520	14125A/BR14276	CR22573	21-43-1

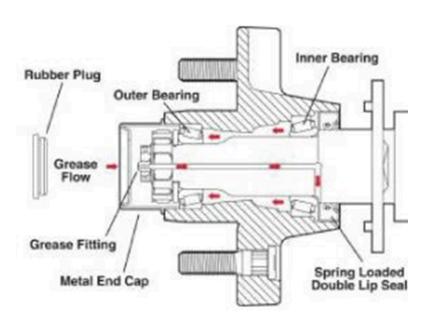
Bearings failure due to bad seal



Bearings Failure due to inadequate lubrication



SAFE-T-LUBE HUBS



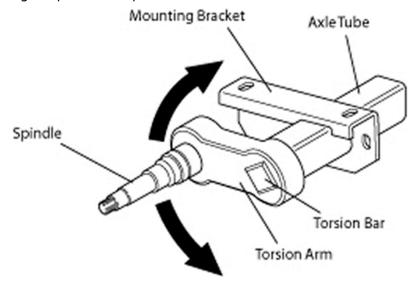
Your axle is equipped with the Safe-T-Lube Feature, the bearings can be periodically lubricated without removing the hubs from the axle. This feature consists of axle spindles that have been specially drilled and the zerk it is channeled to the inner bearing and then flows back to the outer bearing and eventually backs out the grease cap hole. The procedure is a follows:

Remove the rubber plug from the end of the grease cap
Place a standard grease gun onto the grease zerk located in the end of the spindle. Make sure
the grease gun nozzle is fully engaged on the fitting
Pump grease into the zerk. The old, displaced grease will begin to flow back out of he cap
around the grease gun nozzle
When the new, clean grease is observed, remove the grease gun, wipe off any excess, and
replace the rubber plug in the cap

NOTE: Even with the Safe-T-Lube Feature, periodic inspection and repacking must be done every 12 months or 12,000 miles. Do Not pack hub full of grease. Excessive grease may leak into brake drum causing brake failure.

RUBBER TORSION SUSPENSION

The RUBBER TORSION suspension system is a torsion arm type suspension, which is completely self-contained within the axle tube. It attaches directly to the trailer frame using brackets, which are an integral part of the axle assembly. The RUBBER TORSION axle provides improved suspension characteristics relative to leaf spring axles through the unique arrangement of a steel torsion bar surrounded by four natural rubber cords encased in the main structural member of the axle beam. The wheel/hub spindle is attached to a lever, called the torsion arm, which is fastened to the rubber-encased bar. As the load is applied, the bar rotates causing a rolling/compressive resistance in the rubber cords. This action provides the same functions as conventional spring axles with operating advantages including independent suspension



INSPECTION AND REPLACEMENT

All the components of your suspension system should be visually inspected at least every 6,000 miles for signs of excess wear, elongation of bolt holes, and loosening of fasteners.

Except for periodic inspection of the fasteners used to attach the RUBBER TORSION axle to the vehicle frame, no other suspension maintenance is required on RUBBER TORSION axles. They are, of course, subject to the maintenance and inspection procedures regarding brakes, hubs, bearing, wheels, and tires as outlined in manual.

WHEELS & TIRES

Do not attempt to mount a tire unless you have the proper equipment and experience to do the
job
Inflating or servicing tires can be dangerous. Whenever possible, trained personnel should be called to service and/or mount tires
Always order and install tires and wheels with appropriate capacity to meet or exceed the
anticipated weight to be placed on the equipment

TORQUE REQUIREMENTS

It is extremely important to apply and maintain proper wheel mounting torque on your trailer axle.

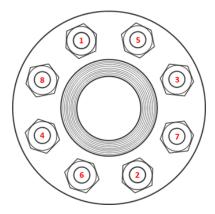
Torque is a measure of the amount of tightening applied to a fastener (nut or bolt) and is expressed as length time's force. Torque wrenches are the best method to assure proper torque specifications are met.

NOTE: Wheel nut or bolts must be applied and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible dangerous separation of wheels from axle.

Be sure to use only the fasteners that match the cone angle of your wheel. The proper procedure for attaching wheels is as follows:

☐ Start all bolts or nuts by hand to prevent cross threading

☐ Tighten bolts or nuts in the following sequence



The tightening of the fasteners should be done in stages. Following the recommended
sequence, tighten fasteners per the wheel torque chart
Wheel nuts/bolts should be torque before the first road use and after each wheel removal.
Check and re-torque after the first 10 miles, 25 miles, and again at 50 miles. Check periodically
thereafter

WHEEL TORQUE SPECIFICATIONS

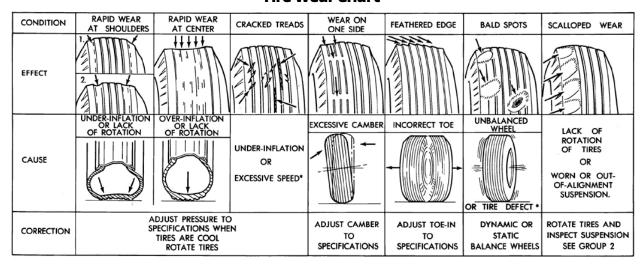
Stud Size	Lug Nut Type	Torque Specifications	Wheel Size & Type	Wheel Material
9/16	Coned	120-140 ft./lbs.	16"	Steel
9/16	Coned	120-140 ft./lbs.	16"	Aluminum

Stud Size	Lug Nut Type	Torque Specifications	Wheel Size & Type	Wheel Material
9/16	Coned	120-140 ft./lbs.	15"	Steel
9/16	Coned	120-140 ft./lbs.	15"	Aluminum



Incorrect wheel nuts or improperly tightened wheel nuts can cause the wheel to become loose and even come off. Be sure to use the correct wheel nuts.

Tire Wear Chart



* HAVE TIRES INSPECTED BEFORE USE*

LIGHTING & MARKING



It is the responsibility of the customer to know the lighting and marking requirements of the local highway authorities and to install and maintain the equipment to remain compliant with the regulations.

Depending on the electrical package you purchased on your trailer it may or may not include brakes, this is an option. Whenever possible the light package should be used. We install the standard 7-pole plug also known as the RV plug. Your safety and the safety of normal traffic using the same roads is important as you may not be traveling at the same speed and traffic can close in on a slow moving vehicle rapidly. Tractors or combines pulling the head trailer may not have an accessible receptacle, in which a slow moving vehicle placard must be installed. Consider adding on a battery-operated set of flashers.

If your package does include brakes please follow the suggested operating procedures:

Do not connect the brake safety cable to the safety chains or the same location that the chains are attached to the tow vehicle. In the event of failure your trailer brakes may not engage when you need them the most. Periodically test your brakes with the tow vehicle set up for trailer brakes. If not accessible you can and should pull the safety cable from the switch and the back-up battery will engage the brakes. After the test, reinstall the pin into the safety switch. This switch may be located on the tongue or the front axle depending on the model.

Head trailers may sit idle for extended periods of time. Connections can become corroded over time due to sand, mud, water and road salt etc. This normal corrosion will prevent the contacts from making the connection. Inspect and clean any contacts well before using to insure proper contact.

Understanding the plug on the wiring harness is very important, these ends can be pulled off and it does happen. When performing service, always look at the plug from the rear pointing forward. Using the side where the connecting screws are. Use the illustration provided to reconnect the wiring in the correct pattern, failing to do so would cause electrical components to be inoperable.



If not connected to the compatible terminal unexpected results can happen, for example: If the brake connection is in line with the turn signal connection the brakes will engage when the turn signal is operated. Be sure the receptacle on the towing vehicle is wired correctly to the trailer receptacle. See Photo Below.

	Loosen the outside set screw and remove the terminal assembly from the housing $$
	Strip wires ¼ and tightly secure them to the terminal assembly (see chart below)
	Leave at least 18in of slack between tow vehicle and trailer to turn.
	Align terminal keyway with housing key and insert assembly into housing.
\Box	Tighten set screw



BEFORE EACH TOW

Check that the taillights, brake lights and turn signals work. Check that the electric brakes work by operating the brake controller inside the tow vehicle. Pull the pin from the switch and try to pull the trailer. A much greater force is needed to pull the trailer when the brake is activated.

CHECKING BOLT TORQUE

The table shown below gives the correct torque values for several common grades of bolts and cap screws. Tighten all bolts to the torques specified in chart unless otherwise noted. Check tightness of bolts periodically using the bolt torque chart as a guide. Replace hardware with the same strength bolt if needed.

BOLT TORQUE CHART

	($\langle \Sigma \rangle$			
	SAE G	RADE 2	SAE	GRADE 5	SAE	GRADE 8	L9
SIZE		Y TORQUE UBRICATED		LY TORQUE UBRICATED	ASSEN	IBLY TORQUE LUBRICATED	ASSEMBLY TORQU LUBRICATED
1/4-20 1/4-28	66* 76*	49* 56*	8 10	75* 86*	12 14	9 10	11 13
5/16-18 5/16-24	11 12	8	17 19	13 14	20 25	18 20	21 23
3/8-16 3/8-24	20 23	15 17	30 35	23 25	45 50	30 35	33 38
7/16-14	30	24	50	35	70	55	60
7/16-20	35	25	55	40	80	60	65
1/2-13 1/2-20	50 55	35 40	75 90	55 65	110 120	80 90	95 105
9/16-12	65	50	110	80	150	110	140
9/16-18	75	55	120	90	170	130	150
5/8-11	90	70	150	110	220	170	185
5/8-18	100	80	180	130	240	180	205
3/4-10 3/4-16	160 180	120 140	260 300	200 220	380 420	280 320	290 355
7/8-9	190	140	400	300	600	460	505
7/8-14	210	155	440	320	660	500	585
1-8	220	160	580	440	900	680	775
1-14	240	170	640	480	1000	740	900
1 1/8-7 1 1/8-12	300 340	220 260	800 880	600 660	1280 1440	960 1080	1150 1325
1 1/4-7	420	320	1120	840	1820	1360	1600
1 1/4-12	460	360	1240	920	2000	1500	1750
1 3/8-6 1 3/8-12	560 640	420 460	1460 1680	1100 1260	2380 2720	1780 2040	
1 1/2-6 1 1/2-12	740 840	560 620	1940 2200	1460 1640	3160 3560	2360 2660	3250 3650

ITEMS WITH * = INCH POUNDS ALL OTHERS = FOOT POUNDS

"LUBRICATED"

MAINTENANCE SCHEDULE

Item	Function	Weekly	3 Mo or 3,000 Miles	6 Mo or 6,000 Miles	12 Mo or 12,000 miles
Lug Nut Torque	Tighten to specs outlined		х		
Tire Pressure	Inflate to specs on sidewall	х			
Brakes	Inspect for Wear & Scoring			х	
Hubs & Bearings	Inspect for Wear & Lubricate				х
Front End	Lubricate via Grease zerk		х		

DOSE STEELWORKS, INC LIMITED WARRANTY

Dose Steelworks, Inc manufactures the highest quality products for our customers through innovation, teamwork, and continuous improvement. Should the original purchaser experience manufacturer defects in materials or workmanship under normal use, Dose Steelworks, Inc. offers the below warranty coverage.

Products must be registered through Dose Steelworks, Inc. website at www.dosemanufacturing.com within 30 days from date of sale to original owner. Standard warranty covers defects outlined below for 1 year from purchase date.

This document is to certify that we warrant to the original purchaser equipment manufactured by Dose Steelworks, Inc. (referenced as Dose in the following document) identified and recorded by serial number, to be free of defects in material and workmanship under normal use and service. Should defects in either circumstance arise, Dose will replace, free of cost to the original purchaser, any part or parts that in our judgment show evidence of such defects. Manufacturer agrees to replace or repair at no charge during this period any part or parts, which have been returned to the factory within 90 days of the original warranty claim, freight prepaid, and deemed defective by factory authorized inspection. Should it not be possible to or said parts are not returned in the allotted time frame for factory inspection the manufacturer shall not be liable for any labor costs or any other costs encountered in replacing or repairing any parts involved unless approved by the manufacturer's warranty officer, but shall only be obligated to supply the necessary repair or replacement items.

Dose as the manufacturer shall not be liable for any other damage, whether direct or consequential.

Restrictions

This limited warranty will not apply to any equipment that has been operated or used in a manner not recommended by the manufacturer or that has been incorrectly repaired, altered, neglected, misused, subject to prior damage from an accident or has been used in any way, in the opinion of Dose to adversely affect in performance. This warranty also will not cover any equipment where the serial number has been altered, defaced or removed.

Limitations

This limited warranty does not apply to exterior finishes, tires, bearings, springs, axles or any other items not directly manufactured by DOSE, except to the extent of their individual manufacturers guarantee. Should an issue arise with any such item in the period of this warranty please contact Dose and we will contact the correct manufacturer to obtain their warranty policy.

Submitting a Claim

The original owner must submit all warranty claims through the dealer they purchased the trailer, within 1 year of the purchase date of the equipment. The claim must be submitted by the dealer via the Dose Warranty Request form (located at www.dosemanufacturing.com). Please include any supporting information and pictures as available. Upon submitting the claim the information shall be reviewed by the manufactures warranty officer, only after approval the proper actions shall be taken and replacement parts sent out free of charge. All defective parts must be returned to the factory within 90 days of receiving replacement parts or the company submitting the claim shall be billed for the parts cost, unless the warranty officer has provided special circumstances in writing.

Labor Reimbursement

Reimbursement for labor shall be taken on a case-by-case basis and given based on the manufacturer's recommended repair procedures and the amount of time deemed required repairing the issue.