





HEAD HAULER TRAILER OPERATOR'S MANUAL AND PARTS BOOK

DL, DLT, DLTD, AND FIXED BED MODELS 27', 32', 37', 42' AND 47'



Read and understand the manual. This manual provides information and procedures to safely operate and maintain the Head Hauler Trailer.

DUO LIFT MANUFACTURING CO., INC. HEAD HAULER TRAILERS

	WARRANTY REGISTRATION FORM & INSPECTION REPORT										
Т	WARRANTY REGISTRATION (please print) This form must be filled out by the dealer and signed by both the dealer and the customer at the time of delivery.										
C	Custom	er's Nam	ne				Dealer N	ame			-
A	Address	i					Address				_
C	City, Sta	ite, Zip C	ode				City, Stat	e, Zip Code _			_
F	Phone N	Number	()			Phone N	umber ()		_
C	Contact	Name					Check O	ne:			
8	Serial N	umber					Farm Use	е			
	Delivery	Date					Commerc	cial Use			
					LIEAD		2411 ED 140	DEL O			
DL27	DL32	DLT37	DI T42	DL27LT	DL32LT	DLT32LT	DLT37LT	DELS: DLT42LT	DLT37D	DLT42D	DLT47D
DLZI	DLOZ	DL107	DL142	DLZ/L1	DLUZLI	DLIGELI	DLIGILI	DETAZET	DETOTO	DET42D	DE147D
	I have thoroughly instructed the buyer on the above-described equipment. This review included the Operator's Manual content, equipment care, adjustments, safe operation, and applicable warranty policy.										
С	ate					_ D	ealer's Rep	. Signature _			
ir	The above equipment and Operator's Manual have been received by me and I have been thoroughly instructed as to care, adjustments, safe operation, and applicable warranty policy. Date Owner's Signature										
	DUO LIFT MFG. DEALER CUSTOMER (MAKE COPIES AND CHECK APPROPRIATE BOX)										
					(MAKE CC	PIES AND CHE	CK APPROPRI	ATE BOX)			

Please inspect the following items with the owner/ operator and check the approval box before releasing the trailer.

	Dealer / Buyer Inspection Report				
or NA	Task				
	Hitch Assembly				
	Safety chains are properly attached and have a certification tag. Chains must be in good working condition. "9.5 Front Axle Replacement" on page 50 and "4.4.5 Safety Chains" on page 21.				
	An OEM drawbar pin and retainer clip is used for towing and must be in good working condition. Do not use homemade or shop-made drawbar pins when towing this trailer. "7.2.1 Attaching Trailer to a Truck" on page 40 or "7.2.2 Attaching Trailer to a Combine" on page 41.				
	If equipped, make sure extendable tongue moves in and out. "7.2.2 Attaching Trailer to a Combine" on page 41.				
	If equipped, make sure E-Z Hook Up T-handle locks tongue from pulling forward when in the towing position. "4.4.6 Hitch Couplers" on page 21				
	Tongue Assembly				
	Tongue assembly is properly attached to trailer frame and locked in place. "9.5 Front Axle Replacement" on page 49.				
	Tongue-to-trailer safety chain is installed and clevis pins are properly retained. "4.4.5 Safety Chains" on page 21.				
	Wiring harness wire from tongue assembly to the trailer frame is routed through attached wiring clip. "9.5 Front Axle Replacement" on page 49				
	Wiring harness plug is plugged into socket at the front of the trailer. "9.5 Front Axle Replacement" on page 49.				
	Wheels and Axles				
	Wheel nuts are tightened to 80 ft. lbs. (110 N·m) for 1/2" nuts or 115 ft. lbs. (155 N·m) for 9/16" nuts on a wheels. "11.2 Trailer Specifications" on page 59				
	Inflation pressure is correct on all tires. Refer to inflation pressure on side of tire.				
	Axle-to-frame bolts are installed and properly tightened (only on torsion axle models). "9.8.9 Front and/or Rear Torsion Axles (If Equipped)" on page 55.				
	Notes				

or NA	Task
	Frame
	All grease points are lubricated. "9.4 Servicing Intervals" on page 47
	All fasteners are tightened to proper specifications. "11.3 Bolt Torque" on page 60
	Mounting chocks are installed and will tighten completely to the frame. "4.4.2 Chocks" on page 18
	Tie-down strap brackets are installed and will tighten completely to the frame. "4.4.3 Tie-Down Straps" on page 20
	Tie-down straps and tightening ratchets are installed and will tighten properly. "4.4.3 Tie-Down Straps" on page 20
	Header bar is installed with retainer bolts and jam nuts which are properly tightened. "5.3 Set Up Prior to Loading" on page 27
	Frame rail reflector tape is installed. "4.4.7 Lights and Reflective Tape for Highway Identification" on page 22.
	SMV or SIS sign, if applicable, is installed (not supplied by Duo Lift).
	All decals are legible and properly installed. "3.2 Safety Signs" on page 14.
	All pins are equipped with retainer clips.
	Wiring and Lighting
	Brake lights are in working order. "4.4.7 Lights and Reflective Tape for Highway Identification" on page 22. "4.4.8 Department of Transportation (DOT) Compliant Trailers" on page 22.
	Signal lights are in working order. "4.4.7 Lights and Reflective Tape for Highway Identification" on page 22. "4.4.8 Department of Transportation (DOT) Compliant Trailers" on page 22.
	Wiring harness plug is in working condition and fits into tow vehicle's receptacle. "7.2 Attaching/ Unhooking Trailer" on page 39/
	Note: All trailers are wired for an automotive application. Prior to towing trailer with a tractor or combine, contact Duo Lift or use a converter to allow the electrical system to function correctly.
	Breakaway Brake System (if equipped) "9.8 Breakaway Brake Systems" on page 52.
	Breakaway cable is supplied with trailer.
	Battery is charged and in good working order.
	Notes

or NA	Task
	DOT Models Only "4.4.8 Department of Transportation (DOT) Compliant Trailers" on page 22.
	Side clearance lights are working.
	Federal Annual Inspection tag is attached to frame and up-to-date.
	Fenders and mud flaps are installed.
	License plate lights are operating.
	Turn signal lights are operating.
	Brake lights are operating.
	Documentation Review
	All sections of Owner's Manual and Parts Book have been reviewed and understood by the owner.
	All safety and instructional signs have been reviewed and understood by the owner. "3.2 Safety Signs" on page 14.
	Manual is given to owner.
	Final Checks Prior to Towing "5.2 Pre-Usage Checklist" on page 26.
	Tow vehicle is large enough to safely tow the trailer with an attached header.
	OEM drawbar pin and retainer clip are properly installed.
	Safety chains are attached to the tow vehicle and crisscrossed under the hitch for added protection.
	Wiring harness is connected and all trailer lights are working properly.
	Brakes, if equipped, are working properly.
	Breakaway Brake System is functioning properly.
	Owner is instructed to check wheel bolt/nut torque at 5, 10, 25, and 50 miles; then check annually.
	Notes

DUO IFT Manufacturing Company, Inc.

Warranty

This is to certify that we warrant to the original purchaser equipment manufactured by Duo Lift Manufacturing Company, Inc., identified and recorded by serial number, to be free of defects in material and workmanship under normal use and service to replace, free of cost, to the original purchaser any part or parts of said equipment that in our judgement shows evidence of such defects; and provide further that the said part or parts shall be returned to the factory, freight prepaid, within five years of shipping date. Manufacturer agrees to replace or repair during this period of no charge any defective part or parts returned to the factory, and deemed defective by authorized factory inspection. Should it become impractical to return said parts to the factory, the manufacturer shall not be liable for any labor costs, or any other costs encountered, in repairing or replacing any part or parts involved, but will be obligated to supply only the necessary repair and/or replacement items.

Duo Lift Manufacturing Company, Inc., as the manufacturer shall not be liable for any other damage, whether direct or consequential.

No representative or other person is authorized or permitted to make any other warranty or assume for his company any liability not strictly in accordance with the foregoing. This limited warranty is in lieu of all warranties expressed or implied and of all other obligations on the part of the factory.

This limited warranty shall not apply to any item which shall have been operated in a manner not recommended by the Company nor which shall have been repaired, altered, neglected or used in any way which in the Company's opinion adversely affects its performance and results.

This limited warranty shall not apply to any equipment which has been tampered with in any way or which has been subject to misuse, neglect or accident, or which has the serial number altered, defaced, or removed.

This limited warranty does not apply to exterior finishes, tire, bearings, springs, jacks, couplers or any such items not directly manufactured by Duo Lift Manufacturing Company, Inc., except to the extent of their individual manufacturer's guarantee.

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1. Introduction

1.1 Welcome Statement

Congratulations on your choice of a Duo Lift Mfg. Co., Inc. Head Hauler Trailer to complement your harvest operation. This equipment has been designed and manufactured to meet the needs of a discerning agricultural industry.

The Head Hauler Trailer is a large, heavy-duty trailer designed to transport headers from place to place. A variety of mounting designs are available for many different types of headers and harvesting systems.

Many features incorporated into this trailer are the result of suggestions made by customers like you. Read this manual carefully to learn how to use the trailer safely and to provide maximum field efficiency. By following these instructions, in conjunction with a good maintenance program, your trailer will provide many years of trouble-free service.



Standard DL Model Trailer.



DLTD Model Trailer.

This manual covers Head Hauler Trailer models:

~	Model	/	Model
	DL27		DLT37LT
	DL32		DLT42LT
	DLT37		DLT37D
	DLT42		DLT42D
	DL27LT		DLT47D
	DL32LT		
	DLT32LT		

1.2 Safe Operation

Safe, efficient, and trouble-free operation of your Duo Lift Mfg. Co., Inc. Head Hauler Trailer requires that you, and anyone else who will be using or maintaining the Head Hauler Trailer, read and understand the information contained within this Operator's Manual.

Use this manual for frequent reference and to pass on to new users or owners.

AWARNING



To prevent personal injury or even death, be sure you read and understand all of the instructions in this manual and other related OEM equipment manuals! The Head Hauler Trailer, if not used and maintained properly, can be dangerous to users unfamiliar with its operation. Do not allow loading, towing, maintaining, adjusting, or cleaning of this trailer until the user has read this manual and has developed a thorough understanding of the safety precautions and functions of the trailer.

This trailer was designed for a specific application; towing combine headers. DO NOT modify or use this trailer for any application other than that for which it was designed.

Trailers loaded or used improperly or by untrained personnel can be dangerous; exposing the user(s) and/or bystanders to possible serious injury or death.

1.3 Operator Orientation

The directions left, right, front, and rear, as mentioned throughout this manual, are as seen from the vehicle driver's seat and facing in the direction of travel.

1.4 Serial Number Locations



Model number plate on standard DL, DLT, and DLTLT model trailers. Serial number is stamped on top of frame.



VIN, model, and serial number plate on DLTD model trailer.

Record the model number and serial number information here. Have the numbers available whenever requesting service or parts information.

Model #: ₋	 	 	
Serial #: ˌ	 	 	

1.5 Model Description

VIN #:

Model Descriptions				
DL	Standard model.			
DLT	Standard model with dual axles.			
DLTLT	Dual torsion axles with lighting package.			
DLTD	Dual torsion axles with Department of Transportation certification package.			
Lengths	27' (8.2 m), 32' (9.8 m), 37' (11.3 m), 42' (12.8 m), and 47' (14.3 m)			

1.6 Disposal of Equipment at End of Useful Life

The Duo Lift Head Hauler Trailer has been designed for the specific purpose of transporting combine headers on country roads, local highways, and on agricultural farm land. When this unit is no longer capable of doing its designed purpose, it should be dismantled and scrapped. Do not use any materials or components from this unit for any other purpose.

1.7 Unanswered Questions

If you have any questions not answered in this manual, require additional copies, or the manual is damaged, please contact your dealer or Duo Lift Mfg. Co., Inc., 2810 38th Street, Columbus, Nebraska 68601, Phone: (402) 564-8023, Fax: (402) 564-5385, Toll Free: 1-800-243-2583.

2. Safety

2.1 General Safety

Safety of the operator and bystanders is one of the main concerns in designing and developing a new piece of equipment. Designers and manufacturers build in as many safety features as possible. However, every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling the equipment.

Most work related accidents are caused by failure to observe basic safety rules or precautions. An accident can often be avoided by recognizing potentially hazardous situations before an accident occurs. As you assemble, load, tow, use, or maintain the trailer (unit). you must be alert to potential hazards. You should also have the necessary training, skills, and tools to perform any assembly or maintenance procedures.

Improper operation and maintenance of this unit could result in a dangerous situation that could cause injury or death.

If you have any questions not answered in this manual, require additional copies, or the manual is damaged, please contact your dealer or Duo Lift Mfg. Co., Inc., 2810 38th Street, Columbus, Nebraska 68601, Phone: (402) 564-8023, Fax: (402) 564-5385.

Toll Free: 1-800-243-2583.

AWARNING



Do not load or tow the unit until you read and understand the information contained in this manual.



Safety precautions and warnings are provided in this manual and on the unit. If these hazard warnings are not followed, bodily injury or death could occur to you or other persons.

Duo Lift Manufacturing Company, Inc. cannot anticipate every possible circumstance that might involve a potential hazard. The warnings in this manual and on the unit are, therefore, not all-inclusive. If a method of loading or towing not specifically recommended in this manual is used, you must satisfy yourself that it is safe for you and for bystanders. You should also ensure that the unit will not be damaged or be made unsafe by the methods that you choose.

The information, specifications, and illustrations in this manual are based on the information that was available at the time this material was written and can change at any time without notice.

2.2 Safety Alert Symbols



This is the safety alert symbol. It is used to alert you to potential personal injury hazards. Obey all safety messages that follow this symbol to avoid possible injury or death.

This manual contains DANGERS, SAFETY INSTRUCTIONS, CAUTIONS, IMPORTANT NOTICES, and NOTES which must be followed to prevent the possibility of improper service, damage to the equipment, personal injury, or death. The following key words call the readers' attention to potential hazards.

Hazards are identified by the "Safety Alert Symbol" and followed by a signal word such as "DANGER", "WARNING", or "CAUTION".

DANGER

Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury. This signal word is limited to the most extreme situations.

AWARNING

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

A CAUTION

Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.

NOTICE

Indicates that equipment or property damage can result if instructions are not followed.

SAFETY INSTRUCTIONS

Safety instructions (or equivalent) signs indicate specific safety-related instructions or procedures.

Note: Contains additional information important to a procedure.

2.3 Safety Icon Nomenclature

Pictorial icons signal a type of hazard and warn of personal protection issues, prohibited actions, and hazard avoidance.

2.3.1 Personal Protection/ Important Information Icons



Read the manual



Maintenance procedure



Damaged safety signs



Eye protection



Fire extinguisher



First aid kit



Hand protection



Head protection



Hearing protection



Inspect equipment



OEM parts only



Protective shoes



Remove key



Set parking brake



Stop engine



Think safety



Transmission in park



Use proper support



Use proper tools



Use two people when lifting heavy objects



Wear seat belt



Weight rating



SMV sign (slow moving vehicle)



SIS sign (speed identification sign)



Slow/Fast

2.3.2 Prohibited Actions Icons



Do not alter or modify



Use proper tools



Do not weld



No alcohol



No drugs



Do not ride



No young children

2.3.3 Hazard Avoidance Icons













Chock wheels



Crush hazard (foot)



Defective or broken part



Entanglement hazard



Explosive force hazard



Fall hazard



Lifting hazard



Maximum weight limit



Pinch point hazard



Projectile hazard



Rollover protection



Safety alert symbol



Safety shields



Sharp object hazard



Slipping injury



Tire pressure



Tripping injury



Do not ride



Stay clear



Safety shields or fenders

2.4 General Safety Instructions

The owner/operator is responsible for the SAFE use and maintenance of the Duo Lift Manufacturing Co., Inc. (Duo Lift) Head Hauler Trailer. Make sure anyone who is towing, loading, maintaining, or working around the Head Hauler Trailer is familiar with the operating and maintenance procedures and related SAFETY information contained in this manual. This manual provides step-by-step instructions and also alerts you to good safety practices that should be used while using the Head Hauler Trailer.

In addition to the design features of the Head Hauler Trailer, including safety signs, accident prevention is dependent upon the awareness and proper training of the people involved in the loading, use, towing, maintenance, and storage of the trailer.

In addition to this safety section, refer also to safety messages and instructions in each of the appropriate sections of this manual.

These general safety instructions apply to the overall use and maintenance of the Head Hauler Trailer.

More specific instructions on safety are found in the set up, towing, loading, maintenance, and storage sections of this manual. Refer to these sections before performing any of these tasks.

AWARNING

Failure to comply with the following safety instructions could result in serious injury and possibly even death.



Read And Understand Manual

To prevent personal injury or even death, be sure you read and understand all of the instructions in this manual and other related OEM equipment manuals! The Head Hauler Trailer, if not used and maintained properly, can be dangerous to users unfamiliar with its operation. Do not allow loading, towing, maintaining, adjusting, or cleaning of this trailer until the users have read this manual and have developed a thorough understanding of the safety precautions and functions of the trailer.

This trailer was designed for a specific application; towing combine headers. DO NOT modify or use this trailer for any application other than which it was designed.

Trailers loaded or used improperly or by untrained personnel can be dangerous; exposing the user(s) and/or bystanders to possible serious injury or death.

AWARNING



Provide User with Literature

Head Hauler Trailer owners must provide operating instructions to anyone who will be using the trailer.



Stay Clear

Under no circumstances should young children be allowed to work with or around the Head Hauler Trailer.



Impaired User Hazard

Do not attempt to load, tow, or use this trailer under the influence of drugs or

alcohol. Consult your doctor before using this trailer while taking prescription medications.

ACAUTION

The following safety instructions are provided to help prevent potential injury. Not following these instructions may lead to injury.

Personal Protection Equipment

When using this trailer, wear appropriate personal protective equipment. This list may include, but is not limited to:









- · A hard hat
- Protective shoes with slip resistant soles
- Protective goggles or glasses
- Protective clothing and gloves



Hearing Loss

Prolonged Exposure To Loud Noise May **Cause Permanent Hearing Loss!**

environments with noise-producing equipment can cause partial to permanent hearing loss. We recommend using hearing protection any time noise levels exceed 80db. Noise levels over 85db, on a long-term basis, can cause severe hearing loss. Noise levels over 90db over a period of time can cause permanent and even total hearing loss.

Hearing loss from loud noise is cumulative over a lifetime without hope of natural recovery.

SAFETY INSTRUCTIONS

The following safety instructions are provided to help prevent injury or limit equipment damage.



First Aid Kit

Have a first aid kit available should the need arise.



Fire Extinguisher

Have a fire extinguisher available for use should the need arise and know how to use it.



Think SAFETY!

Work SAFELY!

2.5 Set Up Safety

Refer to the Set Up Section 5, "5.1 User Safety Training" on page 27 for safety recommendations related to Set up of the trailer. All applicable safety recommendations in other sections should also be followed.

2.6 Loading Safety

Refer to the Loading Section 6, "6.1 Loading Safety" on page 34 for safety recommendations related to loading the trailer. All applicable safety recommendations in other sections should also be followed.

2.7 Towing Safety

Refer to the Towing Section 7, "7.1 Towing Safety" on page 39 for safety recommendations related to towing the trailer. All applicable safety recommendations in other sections should also be followed.

2.8 Storage Safety

Refer to the Storage Section 8, "8.1 Trailer Storage Safety" on page 46 for safety recommendations related to storing the trailer. All applicable safety recommendations in other sections should also be followed.

2.9 Maintenance Safety

Refer to the Service and Maintenance Section 9, "9.1 Maintenance Safety" on page 47 for safety recommendations related to service and maintenance of the trailer. All applicable safety recommendations in other sections should also be followed.

2.10 Tire Safety

Refer to the Maintenance Section 9, "9.2 Maintenance Tire Safety" on page 48 for safety recommendations related to tire safety for the trailer. All applicable safety recommendations in other sections should also be followed.

2.11 Sign-Off Form

Duo Lift Mfg. Co., Inc. follows the general Safety Standards specified by the American Society of Agricultural and Biological Engineers (ASABE) and the American National Standards Institute (ANSI). Anyone who will be using and/or maintaining the Head Hauler Trailer must read and clearly understand ALL safety, usage, and maintenance information presented in this manual.

Do not use or allow anyone else to use this trailer until all information has been reviewed. Annually review this manual before the season start-up. Make periodic reviews of safety and usage instructions for the trailer. An untrained operator is unqualified to use this trailer.

This sign-off sheet is provided for your recordkeeping to show that all personnel who will be working with the equipment have read and understand the information in this Owner's Manual and Parts Book and have been instructed in the usage of the equipment.

Sign-Off Form

Date	User's Signature	Owner's Signature
uo Lift Manufacturing Co	Inc 13	DI DIT DITIT and DITD Model Head Hauler Trailers

3. Safety Signs And Instructional Labels

3.1 General Information (Safety Signs)

The types of safety signs (hazard labels) and instructional labels are shown in the following illustrations. Good safety practices require that you familiarize yourself with the various safety signs, the type of warning, and the area or particular operation related to that area requiring your SAFETY AWARENESS.



Think SAFETY!

Work SAFELY!

Pay close attention to the safety and instructional signs attached to the tow vehicle and the trailer. Duplicate safety signs, which are attached to the trailer, can also be found in this section. If the trailer is missing a sign or one is unreadable, replace the sign before using the trailer.

SAFETY INSTRUCTIONS



Safety and Instructional Signs

- 1. Keep safety or instructional signs clean and legible at all times.
- 2. Replace any missing or hard-to-read safety or instructional signs.
- 3. Use care when washing or cleaning the trailer not to remove or damage the safety signs.
- 4. Locations for the signs and replacement part numbers are shown in this section.
- 5. Replacement parts must have safety signs attached during installation and/or before the trailer is used.
- 6. Safety signs are available from your authorized dealer or from Duo Lift at no charge.

3.2 Safety Signs

1. CAUTION — Safety Chain (#DE000064)



CAUTION

ACCIDENTAL SEPARATION HAZARD

To prevent inuury or equipment damage:

- Do not tow trailer without tongue to front axle safety chain.
- Make sure both ends of safety chain are securely attached.
- If safety chain is missing, replace it
- before towing unit.

2. WARNING — Wheel Detachment (#DE000061)

A WARNING



Wheel Detachment

Wheel nuts are prone to loosen after being first assembled due to metal creep between rim and nuts/bolts.

Inadequate wheel nut torque can cause rim to loosen resulting in a wheel separating from trailer.

To prevent serious injury or death:

- Verify wheel nuts are tight before each tow.
- Check wheel nut torque for tightness on a new trailer, and after re-mounting a wheel after 5, 10, 25, and 50 miles.



Tighten: 1/2" to 80 ft.lbs. (110 N m) 9/16" to 115 ft.lbs. (155 N m)

DE00006

3. WARNING — Travel Speed (#DE000062)

AWARNING



Travel Speed

Head Hauler Trailers are capable of highway speeds. Loss of control, at any speed, can result in serious injury or death.

When loaded with a header, travel speed must be limited per road conditions and also provide reasonable control of tow vehicle and trailer.



If travel speed is less than 25 mph (40 kph) an SMV sign must be attached to back of load.



If travel speed is 25 to 40 mph (40 to 64 kph) an SIS and SMV sign must be attached to back of load.

DE000062

WARNING

CRUSH HAZARD

To prevent injury or death:

- Do not adjust postion of chocks under a suspended header.
- If adjustment is required, move header away from trailer before repositioning.
- Stay clear of header and trailer when loading or unloading header.



SHIFTING LOAD HAZARD

To prevent inuury or equipment damage:

- Securely fasten header to prevent it from separating from trailer.
- Straps must be plaed over a structural member and securely tightened.
- Make sure tie-down brackets are tightly fastened to frame.
- Recheck tightness after towing a short distance.

5. CAUTION — General Operating Instructions (#DE000060)

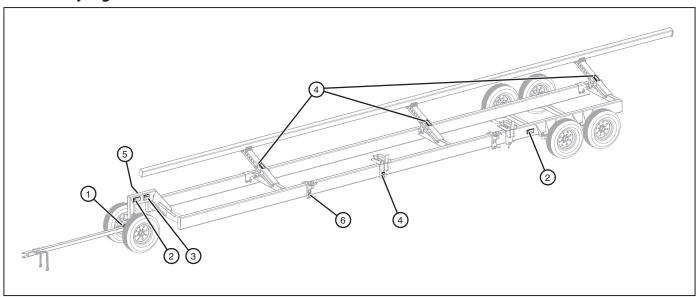
CAUT

To prevent serious injury or death:

- 1. Read and understand the Owner's Manual before using trailer.
- 2. Match capacity of town vehicle with weight of loaded trailer.
- Always refer to towing vehicle owner's manual to determine vehicle's towing capacity and ensure compatibility and maximum safety.
- 4. Attach trailer and low vehicle using the standard ball hitch or an OEM hardened hitch pin with a retainer. Do not use homemade pine. Attache safety chains to tow vehicle.
- 5. Before loading trailer, make sure engine of tow vehicle is stopped, transmission is placed in park, key is removed and parking brake is set.
- 6. Do not service, adjust or repair a loaded trailer.
- 7. Securely tie down load before moving trailer.
- 8. On off-road models, install SMV and/or SIS signs required by highway authorities before transporting. Make sure lights are working correctly.
- 9. Never exceed a safe travel speed.

- 10. Shift towing vehicle to a lower gear before going down steep downgrades to use engine as a retarding force. Keep towing vehicle in gear at all times.
- 11. Inspect all components on trailer for damage. Repair any damage before using trailer.
- 12. Make sure all hardware is properly tightened to specified torque.
- 13. Do not drink and drive.
- 14. Maintain proper trailer brake adjustment, if equipped.
- 15. Place certified safety stands under frame and chock tires before working on tires or running gears.
- 16. Do not allow riders on trailer or towing vehicle.
- 17. Make sure driver is in compliance with all regulations regarding transporting equipment on public roads.
- 18. Review safety instructions annually.
- 19. Make sure all pins and retainer clips are in place before towing.

3.3 Safety Sign Locations



Item	Part Number	Description	Qty.
1	DE000064	Caution - Safety Chain Decal	1
2	DE000061	Warning - Wheel Detachment	2
3	DE000062	Warning - Travel Speed	1
4	DE000065	Warning - Crush Hazard	5
5	DE000060	Caution - General Operating Instructions	1
6	DE000067	Caution - Shifting Load	2

3.4 How to Install Replacement Safety Signs

Clean and dry the installation area.

Note: Do not install the safety signs if the temperature is below 50°F (10°C).

Determine the exact position before you remove the backing paper.

Remove the backing paper.

Align the sign over the specified area and carefully press the sign to the part/frame.

Note: Small air pockets can be pierced with a pin and smoothed out using the piece of backing paper.

4. Machine Applications and Components

4.1 Trailer Applications

The Duo Lift Mfg. Co., Inc. Head Hauler Trailer is designed to carry and transport a variety of headers used on combines. All tie-downs and supports on the trailer are adjustable to accommodate any type, style, or size of header.





Flex Draper.

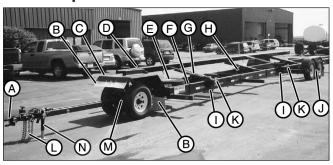


Flex Header.



Corn Head.

4.2 Component Nomenclature



Item	Description
Α	Hitch
В	Splash Guard (Dot Models)
С	Fender (Dot Models)
D	Header Bar
Е	Spare Tire (Optional)
F	Storage Basket (Optional)
G	Hat Channel Riser
Н	Hat Channel Support Arm
1	Chock
J	Rear Axle(s)
K	Tie-Down Strap and Bracket
L	Safety Chain
М	Front Wheels/Axle
N	Jack

4.3 Equipment Matching

To ensure the safe and reliable operation of the Head Hauler Trailer, it is necessary that the trailer and header bar be matched and function as one unit. Use the following list as a guide in selecting the size of trailer to use with a particular header.

1. Tow Vehicle:

It is recommended that only a 3/4 ton or larger capacity be used for towing on the road. This size of truck, plus careful driving, should provide the recommended stability and control when transporting. Match the truck capacity with the trailer capacity.

2. Length and Weight Capacity: Each trailer is designed with a specific length of header bar for the header being moved. The frame will support the weight of a header with the same length.

3. All new header bars have the length, in feet, cut into the end of each bar. Make sure the length of the header bar and the model of the trailer are the same.



NOTICE

To help prevent potential damage to the trailer and/or the header, use only the correctly-sized header bar on the trailer. Do not install a header bar, either longer or shorter than the length of the trailer. For example, do not install a 47 foot header bar on a 27 foot trailer or a 27 foot bar on a 47 foot trailer.

4.4 Trailer Components and Functions

Each trailer is designed with a variety of adjustable features that allow it to fit almost any header in use today. A customer generally purchases a Head Hauler Trailer to move and transport one header but also have the ability to accommodate different sizes and types of headers. If the trailer is used to transport only one header, it will not have to be reset or readjusted unless a new header is loaded.

Take the time to correctly set up the trailer the first time to fit the header. Section "5.3 Set Up Prior to Loading" on page 28 provides adjustment procedures to configure the components of the trailer to mate with the header. "5.3 Set Up Prior to Loading" on page 28.

4.4.1 Header Bar

The header bar is located on the right-hand side of the trailer. It is used to support the weight of the front of the header along its full length.



Adjustable Header Bar.

The Head Hauler Trailer can be used to transport auger heads, draper heads, corn heads, stripper heads, and forage harvester heads. (Contact your dealer for chocks to support forage harvester heads).



Auger Head.



Draper Head.



Corn Head.

4.4.2 Chocks

Each trailer is designed with moveable chocks to support the side of the header opposite the header bar. They can be moved to any location along the frame to provide the best support and not interfere with items attached to the header.



Adjustable chocks, pictured here, allow the greatest adjustability to carry most types of headers.



Standard Foot Configuration (2013 models).



Typical Draper Configuration (2013 models).



Draper with Gauge Wheel Configuration (2013 models).



Adjustable Chock (2014 models).



Standard Foot Configuration (2014 models).



Typical Draper Configuration (2014 models).



Draper with Gauge Wheel Configuration (2014 models).

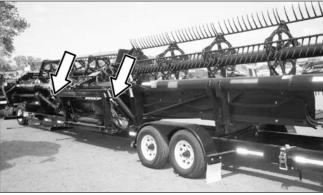
4.4.3 Tie-Down Straps

Each trailer is equipped with two or three tie-down straps, depending on the length of the trailer. Each strap can be positioned at any location along the frame to accommodate the best anchoring position for the header.









Tie-Down Straps.

4.4.4 Additional Tie-Down Locations

For additional stability, use owner-supplied tie-down straps attached to both front and rear tie-down brackets.

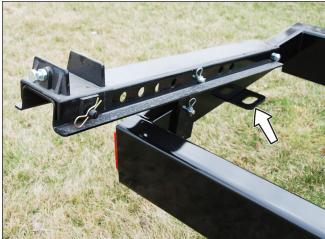
▲ WARNING

Shi Suc

Shifting Load Hazard

Sudden stops could cause the header to slide forward. To prevent potential personal injury or death, always secure the front and rear of the header to the front and rear trailer hold-down brackets.







4.4.5 Safety Chains

Safety chains connecting the tow vehicle to the trailer are a vital part of highway towing safety. Head Hauler Trailers are equipped with certified safety chains. Each chain has a certification tag attached to it.



A second type of safety chain also connects the hitch assembly to the trailer. Make sure this chain (1) is securely and properly fastened between the trailer and the hitch assembly. Also make sure the coupler latch retaining pin is correctly installed (2).



Former Style Coupling.



Current Style Coupling.

AWARNING

Unexpected Separation Hazard
If the safety chains do not have a current certification tag, do not use the trailer until properly certified chains are installed. Substandard safety chains could allow the trailer to separate from the tow vehicle, resulting in equipment damage, personal injury, or death.

4.4.6 Hitch Couplers

The trailers may be equipped with either a hitch for a hardened hitch pin and retainer or an interchangeable receiver hitch.



Fixed Clevis Hitch.



Interchangeable Ball and Receiver Hitch.

Note: When using the interchangeable hitch, make sure the bolts are tightened to the standard torque.

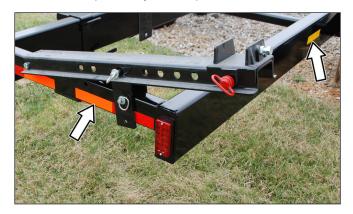
4.4.7 Lights and Reflective Tape for Highway Identification

Trailers are equipped with lights for use on public roads when towing with a truck, combine, or tractor. If the trailer is towed with a combine or a tractor, then an RV to ATA wiring harness convertor is required to allow the lights to function correctly. Contact Duo Lift to obtain a convertor.

It is the responsibility of the owner/user to know the lighting and marking requirements of the local highway authorities. Install and maintain the equipment to provide compliance with the current regulations. If required, add lights or use pilot vehicles if the trailer is not equipped with factory installed lights when transporting at night.



Ag trailers also have red and orange reflective tape on the back bumper and yellow tape on the sides.



4.4.8 Department of Transportation (DOT) Compliant Trailers

4.4.8.1 Fenders/Splash Guards

Front and rear fenders with mud flaps are mounted over the front and rear tires on DOT models.





Rear Mud Flaps on Back Axles.



Front and Rear Mud Flaps on Front Axle.

4.4.8.2 Standard Header Bar Supports (42' and 47')



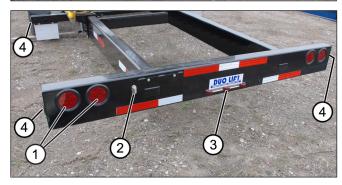
DLT42D and DLT47D Equipped with Four Header Bar Supports.

4.4.8.3 Lights

DOT trailers have all the required lighting to meet 49 CFR 393.11 (Code of Federal Regulations) standards, requiring running lights on the side of the trailer and brake lights.







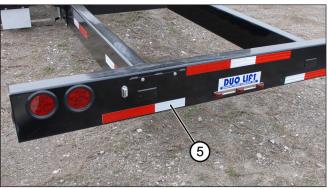
- 1. DOT brake lights and turn signals.
- 2. License plate light and mounting hardware.
- 3. Three-light ID bar.
- 4. Side clearance lights.
- 5. Front and side facing clearance light.

The complete set of DOT running lights includes items 1, 3, 4, and 5.

4.4.8.4 DOT Compliant Identification





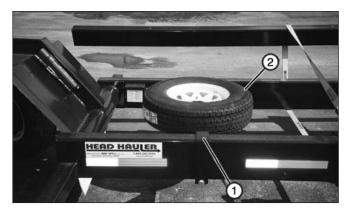


- 1. Serial number plate.
- 2. Holder for registration and insurance information.
- 3. Federal Annual Inspection tag.
- 4. Manual canister.
- 5. White and red reflective tape.

Commercial or DOT approved trailers are equipped with red and white reflective tape on all sides of the trailer.

4.4.9 Spare Tire (Optional)

Trailers can be equipped with a spare tire (2) mounting bracket (1) that fits inside the main frame. It can be positioned within the frame to provide clearance for header components or attachments.



4.4.10 Side Mount Tool Box (Optional)

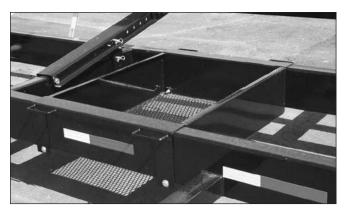
Trailers can be equipped with a side mount tool box that attaches to the outside of the frame. It can be positioned almost anywhere on the frame to provide clearance for header components or attachments.





4.4.11 Storage Basket (Optional)

Trailers can be equipped with a basket for carrying tools, components, or other items. It can be positioned within the frame to provide clearance for header components or attachments.



4.4.12 Breakaway Brake System (Optional)



The breakaway brake system is optional on ag trailers and standard equipment on all DOT trailers. This system will apply the brakes automatically and immediately 1) if the breakaway cable is attached to the tow vehicle and 2) if the trailer separates from the tow vehicle.

4.4.13 Front and/or Rear Torsion Axles (If Equipped)





Front and rear torsion axles provide a suspension system to improve handling performance when towing.

4.4.14 Front Axle

The front axle is removable, if desired. The axle attaches to the trailer with a ball and coupler.



2013 and older version.

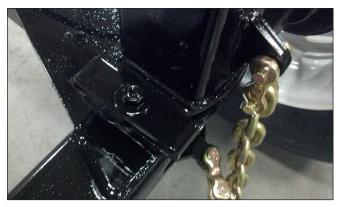


2014 and Newer Versions.

Note: Before each use, check the ball and coupler latch and the safety chain to make sure the front axle is securely attached to the trailer.



2013 and Older Latch Assembly.



2014 and Newer Latch Assembly.

4.4.15 Spare Tire Carrier (Optional)



5.1 User Safety Training

AWARNING



To prevent personal injury or even death, be sure you read and understand all of the instructions in this manual and other related OEM equipment manuals before using the Head Hauler Trailer. The Head Hauler Trailer, if not used properly, can be dangerous to users unfamiliar with its operation. Do not allow loading, towing, or adjusting of this trailer until the users have read this manual and have developed a thorough understanding of the safety precautions and functions of the trailer.

This trailer was designed for a specific application; towing combine headers. DO NOT modify or use this trailer for any application other than that for which it was designed.

Trailers loaded or used improperly or by untrained personnel can be dangerous; exposing user(s) and/or bystanders to possible serious injury or death.

SAFETY INSTRUCTIONS

The following safety instructions are provided to help prevent injury or limit equipment damage.





Train Unfamiliar Users

It is the trailer owner's responsibility to make sure any person using the trailer, especially if it is loaned or rented, has been

Review instructions frequently with existing users.

thoroughly trained on its proper and safe use.

Be certain only physically able persons use the trailer.

Users who have not read and understood this material are not qualified to use the trailer. Untrained users expose themselves and bystanders to possible serious injury or death.

If the elderly are assisting with the work, their physical limitations need to be recognized and accommodated.



Stay Clear

Under no circumstances should young children be allowed to work with or around the Head Hauler Trailer.

5.2 Pre-Usage Checklist

Efficient and safe use of the Head Hauler Trailer requires that every user read and understand all the related safety instructions outlined in this manual.

This pre-usage checklist is provided for the user/owner. It is important for both personal safety and to maintain the mechanical condition of the trailer that this checklist be followed.

Initial Set Up Checklist

(prior to using for the first time)

Item	
	Atta fran Re
	1 -

Task

ach tongue assembly to trailer me. Refer to "9.5 Front Axle placement" on page 49.



Connect wiring harness from the tongue assembly to the trailer frame using the attached wiring clamp.



Install header bar. Refer to "5.3.1 Positioning Hat Channels and Header Bar" on page 27.



Lubricate all grease points. Refer to "9.3 Lubricants" on page 47.



Check wheel nut torque on all wheels. Check again at 5, 10, 25, and 50 miles.

1/2" to 80 ft. lbs. (110 N·m) 9/16" to 115 ft. lbs. (155 N·m)

Refer to "11.2 Trailer Specifications" on page 59.

Initial Set Up Checklist (continued)

(prior to using for the first time)

Item

Task

Make sure mud flaps are installed on DOT models. Also make sure the clearance, brake, and signal lights are working properly. Refer to "4.4.8 Department of Transportation (DOT) Compliant Trailers" on page 22.



Make sure breakaway brake system battery is charged.



Make sure the safety chain connecting trailer frame to the tongue is installed. Make sure safety latch or bolt is installed. Refer to "4.4.14 Front Axle" on page **25**.



Make sure all pins are secured with a retainer pin/clip.



If equipped, make sure extension tongue is locked in place. Refer to "7.2.2 Attaching Trailer to a Combine" on page 41.



If equipped, torsion axles may be shipped loose and require installation. Make sure torsional axle bolts are tightened to the correct torque. "9.8.9 Front and/or Rear Torsion Axles (If Equipped)" on page 55.

Retighten bolts after 1/2, 5, and 10 hours of operation. Check annually after initial break-in period.

5.3 Set Up Prior to Loading

This set up procedure is a typical process that will pertain to almost any type of header. It is the responsibility of the installer to make sure the header will be securely positioned and fastened to the trailer.

AWARNING





Crush Hazard (Bystander)

When loading the trailer, make sure all bystanders, especially small children,

stay clear of the working area.

5.3.1 Positioning Hat Channels and Header Bar

AWARNING

Crush Hazard

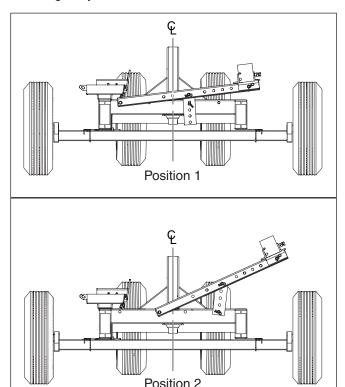
The header bar assembly is heavy and could cause crushing injuries if not properly supported. Use a hoist, crane, forklift, or other lifting device to prevent the header bar assembly from falling during the adjustment procedure.

1. If the header bar is attached, use a crane, hoist, or forklift to support and/or raise the header bar in order to adjust the hat channels. It is not necessary to remove the header bar; however, it can make adjusting of individual components much easier.

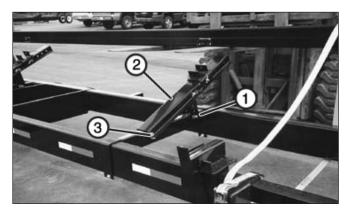


2. Adjust the height of the hat channel (Position 1).

Note: The hat channel, which controls the height of the header bar, can be placed in one of two locations. The hole nearest the frame is used when the header needs to lay flat in order to place the center of gravity near the center of the trailer. The hole closest to the middle of the trailer is used to place the header in a more inclined position; again to place the center of gravity near the center of the trailer.



- **a.** Remove bottom hat channel riser pin and retainer clip (1) from each hat channel support arm (2).
- **b.** Adjust the hat channel (header bar) to the desired angle (height).

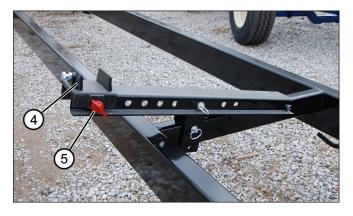


ACAUTION

Pinch Point

The hat channel assembly is constructed of pivoting parts, which when partially disconnected, can move unexpectedly, resulting in an injury. Do not place any body part between pivoting parts.

c. Adjust the position of header bar bracket (4) by moving anchor pin and retainer clip (5). The header bar must be positioned so the structural part of the header rests on the header bar. Position the header bar as wide as possible for maximum stability.



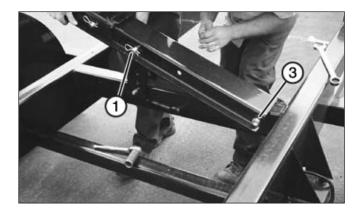
d. If the desired height or center-of-gravity cannot be achieved, move the hat channel into Position 2, following Step 3.

ACAUTION

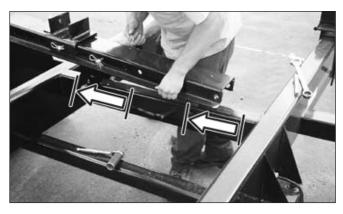
Lifting Hazard

The hat channel assembly weighs more than 50 lbs. (23 kg). To prevent possible injury, use two people or a lifting device whenever moving these parts.

- **3.** If Position 1 does not provide the desired outcome, reposition the hat channel to Position 2.
 - **a.** Support the header bar.
 - **b.** Remove pivot bolt and nut (3) and hat channel riser pin and retainer clip (1).



c. Move the hat channel and reinstall pivot bolt and nut (3) and hat channel riser pin and retainer clip (1).



Note: Do not overtighten the nut on the pivot bolt. When correctly installed, the hat channel should pivot up and down with no side play.

d. Adjust the angle of the hat channel by positioning the hat channel riser using pins (1 and 6).

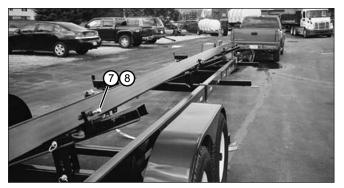


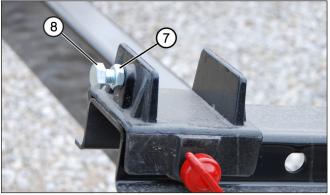
4. Install the header bar.

Note: The header bar must be positioned so the structural part of the header (cutter bar, corn head, etc.) rests fully on the bar with no overhang. The header must be placed on the trailer so the center-of-gravity is as close to the center of the trailer as possible (side-to-side and end-to-end).

Do not position the front end of the header bar beyond the front of the trailer gooseneck. Align the front of the header bar with the same plane as the front of the structural framework, as shown in Step 4c.

a. Loosen all jam nuts (7) on the anchor bolts and then loosen anchor bolts (8).





ACAUTION

Lifting Hazard

The header bar weighs more than 50 lbs. (23 kg). To prevent injury, use a hoist, crane, forklift, or other lifting device to lift the header bar.

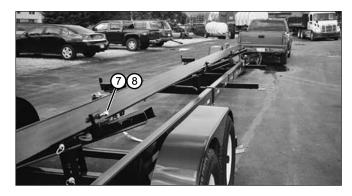
b. Lift and place header bar (9) into header bar brackets (4).



C. Align the header bar with the gooseneck (as indicated by the dashed lines). In order to prevent damage to the trailer or the header, do not allow the header bar to extend past the start of the gooseneck.



d. Retighten anchor bolts (8) and jam nuts (7).

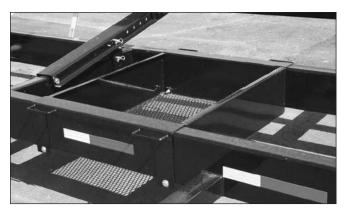


5. Recheck the tightness of all the bolts. Make sure all pins are installed with retainer clips.

5.3.2 Optional Accessories

5.3.2.1 Storage Basket (Optional)

Trailers can be equipped with a basket for carrying tools, components, or other items. It can be positioned within the frame to provide clearance for header components or attachments.



To reposition the basket:

- Loosen or remove the mounting bracket clamping bolts.
- Move the basket to the desired position using the handles on both sides to lift the basket out of the frame.
- **3.** Retighten the clamping bolts once they are repositioned.

5.3.2.2 Side-Mount Tool Box (Optional)

Trailers can be equipped with a side-mount tool box for carrying tools and other items. It can be positioned on the frame to provide clearance for header components or attachments.



To mount the tool box:

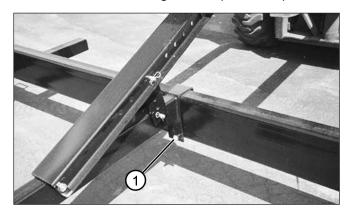
- **1.** Install the hanger brackets using the four U-bolts.
- **2.** Bolt the tool box onto the hanger brackets.

5.3.2.3 Positioning the Adjustable Center Hat Channel

On the 37' trailers, an optional adjustable middle hat channel is available. It allows the middle channel to be repositioned to provide clearance or space for other components.

Note: Move the hat channel before loading the header.

- **1.** If necessary, remove the header bar from the header bar bracket.
- **2.** Loosen and/or remove clamping bolt (1) on the bottom of the mounting bracket (both ends).



3. Reposition the hat channel to the desired location.

5.3.2.4 Mechanically Adjusting Header Bar Position (Optional Package)

The Mechanical Header Bar Adjustment Package allows one person to easily and safely move the header bar up and down or in and out without tools or an external lifting device. The jack assemblies store on the trailer when not in use.

Note: This package works on all head hauler models except the 27'.



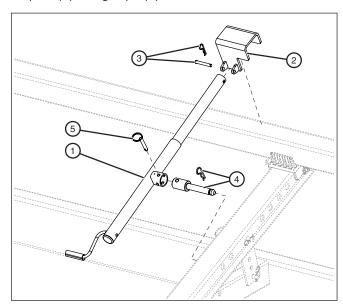
Two jack assemblies are provided in order to raise the header bar evenly. Depending on the amount of adjustment, alternate raising one jack and then the other until the desired height is reached.

SAFETY INSTRUCTIONS

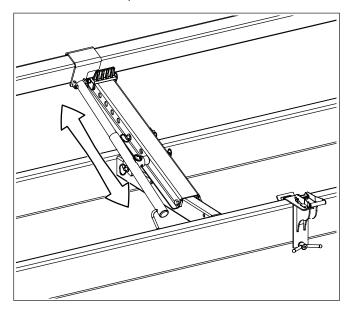
The header must be removed from the trailer before using this procedure.

Adjusting Header Bar Inward or Outward

- 1. Install frame brackets (2) onto the header bar. This bracket simply slips over the header bar.
- **2.** Install pins (4) and retainer clips into one of the bottom holes in the hat channel.
- **3.** Connect jacks (1) to frame brackets (2) using pin and retainer clips (3).
- **4.** Adjust the length of the jacks and attach them to pins (4) using clips (5).



Adjust the length of the jacks to move the header bar slightly, allowing the header bar attachment pins to be removed. By extending or retracting the jacks, adjust the header bar either inward or outward to align with the desired retainer pin hole.



Reinsert the header bar retainer pins and clips into the new locations.

If no other adjust is required, release the pressure from the jacks to prevent possible damage during transport. The jacks can remain in this storage position, if so desired.

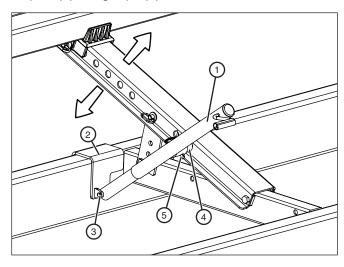
Adjusting Header Bar Upward or Downward

Install frame brackets (2) onto the trailer frame. This bracket simply slips over the frame.

Connect jacks (1) to the frame brackets using pins and retainer clips (2).

Install pin and retainer clips (4) into one of the open holes in the hat channel.

Adjust the length of the jacks and attach them to pins (4) using clips (5).



DL, DLT, DLTLT, and DLTD Model Head Hauler Trailers June 2022

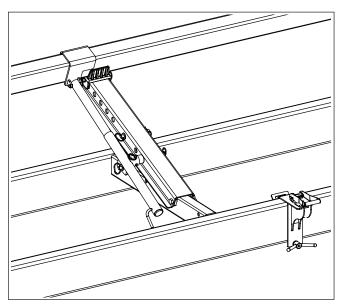
Adjust the length of the jacks to raise the hat channel/header bar slightly, allowing the riser pins to be removed.

Remove the riser pins from the hat channel and/or the hat channel riser.

By extending or retracting the jacks, adjust the hat channel either upward or downward to align the desired anchor pin hole(s).

Reinsert the riser pins and clips.

If no other adjust is required, remove the jacks or place them in the storage location, which is the same position used to move the header bar inward or outward.



NOTICE

Allowing the jack to remain connected to the trailer frame (vertical to the hat channel) can cause damage to the jack and/or the header when the trailer is loaded. Always return the mounting bracket to the header bar and reconnect the jack before towing.

6. Loading

6.1 Loading Safety

Failure to comply with the following safety instructions could result in serious injury and possibly even death.



Read And Understand Manual

Never load the trailer without reading and completely understanding this manual and the OEM instructions from the manuals on the combine and/or header.





Crush Hazard (Bystander)

When loading the trailer, make sure all bystanders, especially small children, stay clear of the working area.



Crush Hazard (Chock Wheels)

Always block (chock) the front and rear of the trailer wheels when loading a

header. Make sure the trailer is completely stable before loading.







Tow Vehicle

Before loading the trailer, make sure the

engine of the tow vehicle is stopped, transmission is placed in park, the key is removed, and the parking brake is set.

ACAUTION

The following safety instructions are provided to help prevent potential injury. Not following these instructions may lead to injury.



Fall Hazard

Serious injury may result from falling. Do not climb onto or over the trailer or the header.









Personal Protection Equipment

Wear personal protection equipment (PPE), which may include hard hat, safety glasses, safety shoes, gloves, etc. appropriate for the work site and working conditions.



Entanglement Hazard

Use caution when working around rotating equipment with long hair, loose fitting clothing, or jewelry.

A CAUTION

Clear Work Area

Clear working area of stones, branches, or other obstacles that might be hooked or snagged.

Fasten Header to Trailer

To prevent the header from disconnecting from the trailer causing damage and/or injury, securely fasten it before moving the trailer. Use all tie-down straps on the side of the trailer to hold the header. An additional tie-down on the front and rear of the trailer must also be used for added stability.

SAFETY INSTRUCTIONS

The following safety instructions are provided to help prevent injury or limit equipment damage.



Maximum Weight Limit

Never exceed the weight limits of this trailer. Refer to the "11.2 Trailer Specifications" on page 60 in this manual for maximum load ratings.

6.2 Loading Header on Trailer

1. Move the trailer to an open, dry, and flat area away from obstructions.



- 2. The trailer should be attached to a tow vehicle when being loaded. If a tow vehicle is not available, place chocks on the front and rear wheels to prevent movement.
- 3. Engage the header cylinder stop on the feeder house to prevent accidental lowering of the header when making any final adjustments to the trailer. Position the header over the trailer.



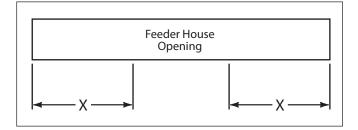


NOTICE

Always place the header so the center-of-gravity is in the middle of the trailer when loaded, both side-to-side and front-to-back.

When loading a small header on a long trailer, mount it closer to the front to maintain sufficient load/weight ratio on the front axle to maintain stability.

4. Roughly position the chocks in area "X".

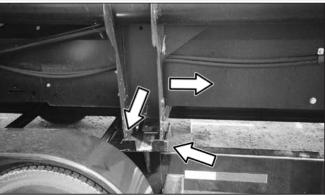


Slide the chocks as close to each end of the header as possible without interfering with any of the structural members on the header.



b. Configure the chocks for the specific header being loaded. Make sure both retainer pins are installed to hold the chock insert.

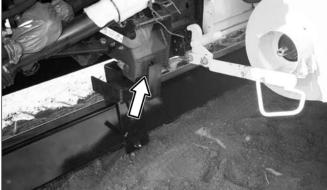




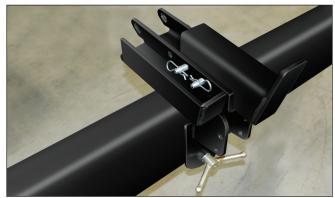
Standard Foot Configuration (2014 models).

Note: Make sure the foot of the header is firmly seated against the side and front of the chock.





Typical Draper Configuration (2014 models).



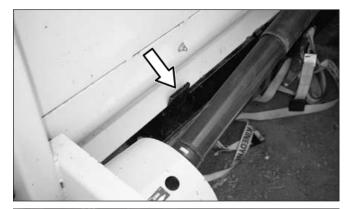


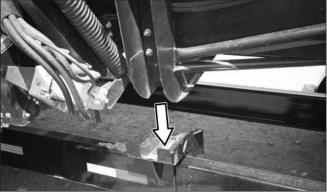
Draper with Gauge Wheel Configuration (2014 models).

5. Align the header structural member(s) with the trailer (header bar and chocks). Be sure the end of the header does not extend past the trailer frame (gooseneck of the trailer).



6. Make final adjustments to the position of the chocks and lock them to the trailer frame. Release the cylinder stops and lower the back of the header onto or into the chocks, depending on the application, as shown.





Note: Regardless of the configuration, make sure the header is firmly seated against the chock.

7. Place the front of the header onto the header bar. Make sure the structural member(s) are securely seated on the header bar. If necessary, reposition the header bar. Do not attempt to move the header bar when the header is on the trailer.





8. Make sure the throat will release and unhook the combine and back away.

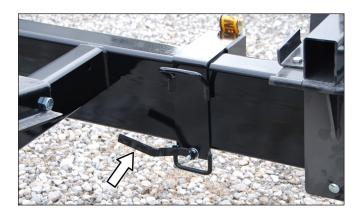
ACAUTION

Fasten Header to Trailer
To prevent the header from disconnecting from the trailer causing damage and/or injury, securely fasten it before moving the trailer. Use all the tie-down straps on the side of the trailer to hold the header. An additional tie-down on the front and rear of the trailer must also be used for added stability. Refer to Steps 9, 10, and 11.

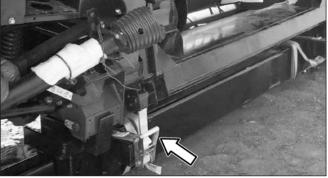
AWARNING

Damaged Tie Down Straps
Do not use straps with any damage such as cuts, tears, or abrasions. This type of damage could result in the header detaching from the trailer.

9. Position the tie-down strap brackets in the desired location and tighten the clamping handle.



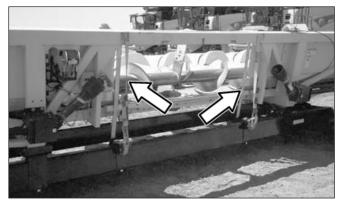
- **10.** Use a solid header frame member and secure the header to the trailer with the tie-down straps.
 - **a.** When securing a header to the trailer, the strap can be looped around just a portion of the header, as shown. Attach the strap to the top attachment bracket and tighten.





Secure The Straps Around A Structural Member.

b. When securing a header to the trailer, the strap can be looped completely around the header, as shown. Attach the strap to the lower attachment bracket and tighten.





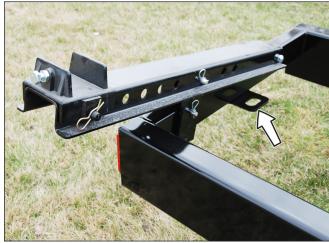
Secure The Straps Around The Complete Header.

Note: To prevent damage to the tie-down strap, place a protective material over any sharp edge that would contract the strap.

Note: Twisting the last span of strapping 1/2 turn will prevent whistling during transport.

11. Secure the ends of the header to the front and rear retaining brackets.







12. Store the excess strapping to prevent dragging.



13. The header and trailer should now be ready for towing.

7. Towing

7.1 Towing Safety

AWARNING

Failure to comply with the following safety instructions could result in serious injury and possibly even death.

Vehicle Owner/Operator Manual Always refer to the towing vehicle owner's manual, trailer towing section, to determine the vehicle's towing capacity and to ensure compatibility and maximum safety.

Operating the Tow Vehicle

Before attaching the trailer to the tow vehicle, be familiar with its controls and how to stop it quickly in the event of an emergency. Read and understand this manual and the one provided with your tow vehicle before towing the trailer.

Hitch and Retainer Pins Attach the trailer and tow vehicle using an OEM hardened hitch pin with a retainer. Do not use homemade pins. An OEM hitch assembly equipped with a ball or pintle hook is also available.

Crush Hazard Under no circumstances should young children be allowed to work with or around the Head Hauler Trailer. When moving the trailer.

make sure all bystanders, especially small children, stay clear of the working area.



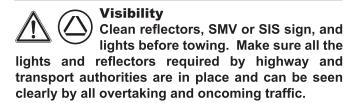
Fall and Crush Hazard

Do not allow riders on the trailer or tow vehicle.

Maximum Towing Speed Do not exceed a maximum safe travel speed, which may be lower than the recommended or posted speed. Slow down for corners and rough terrain.

Descending Hills

Shift towing vehicle to a lower gear before going down steep downgrades to use engine as a retarding force. Keep towing vehicle in gear at all times.



AWARNING

Regulations

Make sure all local, state, and federal regulations regarding the transport of agricultural equipment on public roads and highways are met. Check with the local authorities regarding trailer transport on public roads. Obey all applicable laws and regulations.

7.1.1 Towing Preparation (Inspection)

SAFETY INSTRUCTIONS

The following safety instructions are provided to help prevent injury or limit equipment damage.

Hitch Rating

Make sure the coupling device or hitch and hitch pin on the towing vehicle are rated greater than the trailer's "gross vehicle weight rating" (GVWR).

Inspect Hitch and Coupling

Inspect the coupling device for wear or damage. Make sure the hitch and coupling are compatible. DO NOT tow the trailer using a defective hitch or coupling.

Hitch Attachment

Be sure the trailer is securely attached to the tow vehicle and in good operating condition before using.

Crisscross Safety Chains

Connect and crisscross the chains under the hitch to support the hitch should an unplanned separation occur.

Breakaway Brake System

If equipped with brakes, attach the breakaway cable to the rear of the towing vehicle. Do not attach the cable to the trailer hitch. Make sure the battery is charged.

Tire Pressure

Check the tires for high/low pressure, cuts, bubbles, damaged rims, or missing lug nuts. Do not use the trailer if any damage is found.

Signal Lights on Agricultural Trailers Make sure the directional and brake lights on the trailer are connected and working properly.

SAFETY INSTRUCTIONS

Brakes

Make sure the brakes are operating properly.

Highway Safety Devices

On Department of Transportation (DOT) models, make sure all highway safety devices, such as fenders, mud flaps, and lighting, are properly installed and in working condition before using the trailer.

Additional Lighting

If required by local codes, install additional lights on the rear of the trailer to safeguard against rear-end collisions. Daybreak and dusk are particularly dangerous and front and rear escort vehicles are recommended.

7.1.2 Towing Vehicle Specifications

SAFFTY INSTRUCTIONS

The following safety instructions are provided to help prevent injury or limit equipment damage.

7.1.2.1 Towing Vehicle (Truck)



Truck Capacity

A 3/4 ton or larger capacity truck should be used for towing.

Hazard Flashers

Use hazard flashers when towing unless prohibited by law. Make sure the lights work properly before towing.

7.1.2.2 Towing Vehicle (Tractor/Combine)





Rollover Protection

If the tow vehicle is a tractor, it should be equipped with a Rollover Protective

Structure (ROPS) and a seat belt.

Hazard Flashers

Use hazard flashers when towing unless prohibited by law. Make sure the lights work properly before towing.





Right-of-Way

When towing at speeds below the posted limit, keep to the right and yield

the right of way to allow faster traffic to pass.

7.2 Attaching/Unhooking Trailer

Follow this procedure when attaching the Head Hauler Trailer to a truck, combine, or tractor.

Crush Hazard

Under no circumstances should young children be allowed to work with or around the Head Hauler Trailer. When moving the trailer, make sure all bystanders, especially small children, stay clear of the working area.





7.2.1 Attaching Trailer to a Truck

For trailers equipped with brakes, the tow vehicle must have a functional brake controller.

1. Slowly back the truck until the clevis, ball coupler, or Lunette Eye and hitch are aligned.



2. If equipped with the E-Z Hookup option, lift the T-handle on the end of the hitch and extend the hitch.





3. Install the hardened drawbar pin and retainer or connect the coupling device.



4. If equipped, back up to retract the E-Z Hookup hitch.

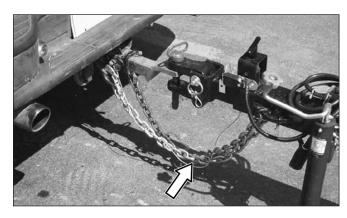
Note: Be sure the T-handle is fully engaged into the locked position before moving forward.

5. Attach the safety chains to the tow vehicle to prevent unexpected separation. Be sure to crisscross the chains under the hitch.



6. If equipped, attach the breakaway brake cable to the frame of the truck.

Note: The breakaway key must be inserted into the socket and the cable hooked to the tow vehicle.



7. If equipped, raise the jack. Pull the retaining pin, rotate the jack 90° into the storage position, and reinsert the retaining pin.



8. If equipped, connect the seven pin wiring harness to the truck. Be sure to secure it to the hitch and provide sufficient slack for turning.





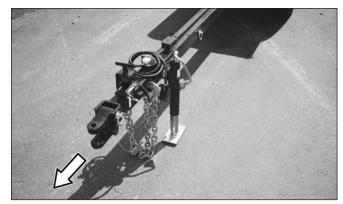
9. Reverse this procedure when unhooking the truck with the exception of releasing the E-Z Hookup hitch.

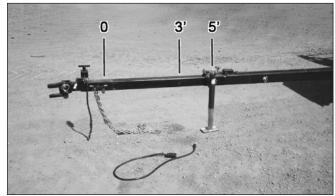
SAFETY INSTRUCTIONS

- Make sure the trailer lights and brakes, if equipped, are working properly. If the trailer's electrical equipment is not functioning properly, it may be due to incompatible or crossed wiring from the tow vehicle to the trailer.
- 2. Make sure the trailer brakes apply when the brake pedal is depressed.
- 3. If equipped with a breakaway brake system, make sure it activates and applies brakes when the cable key is pulled from its socket.

7.2.2 Attaching Trailer to a Combine

1. Extend the optional "Combine Hitch" feature to the desired length in order to reach under the back of the combine.





2. Attach the wiring harness extension. Tie up any excess or loose wiring to prevent dragging or binding.



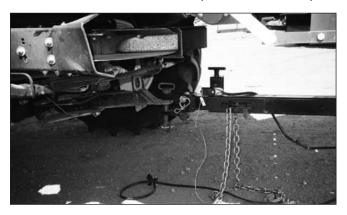
Extend the 18 inch (450 mm) E-Z Hookup tongue, if necessary.



4. Slowly back up the combine until the trailer tongue and hitch are aligned.



5. Install the hardened drawbar pin and retainer clip.



NOTICE

If towing the trailer with a drawbar, use only a certified, hardened drawbar pin with a retainer clip. Do not use homemade pins, bolts, or any other type of retaining device. Always install the retainer clip, making sure the hitch and trailer are securely fastened to the tow vehicle.

Using a pin not intended for this type of towing can result in unexpected separation of the trailer from the tow vehicle, resulting in equipment damage and personal injury.

- **6.** Back up to retract the E-Z Hookup hitch extender. Be sure the T-handle is fully engaged into the locked position before moving forward.
- **7.** Attach the safety chain to the combine to prevent unexpected separation. Be sure to crisscross the chains under the hitch.



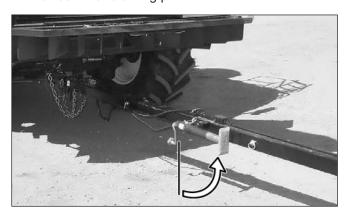
- **8.** Attach the breakaway brake cable to the frame of the combine.
- **9.** If equipped, plug in the wiring harness, if applicable. If it is not necessary to use the wiring harness, secure the cord and plug to prevent damage.

SAFETY INSTRUCTIONS

Connect the wiring harness to the combine. Position the wire to prevent dragging. Make sure all lights are working properly.



If equipped, raise the jack. Pull the retaining pin, rotate the jack 90° into the storage position, and reinsert the retaining pin.



Reverse this procedure to unhook from the combine except for the extension of the E-Z Hookup hitch.

7.3 Machine Break-In

It is recommended that the following mechanical items be checked:

- **1.** After 1/2 hour or 5 miles (8 km) of operation:
 - **a.** Re-torque all wheel bolts. 1/2" to 80 ft. lbs. (110 N·m) 9/16" to 115 ft. lbs. (155 N·m)
 - **b.** Re-torque all fasteners and tie-down hardware.
 - **C.** Make sure no electrical cables or brake wires are being pinched or crimped. Repair if damaged.
 - **d.** Inspect wiring harness.
 - **e.** Lubricate all grease fittings except wheel bearings.
 - **f.** Re-torque bolts on front and rear torsion axles, if equipped.
- 2. After 1 hour or 10 miles (16 km) of operation, re-torque all wheel bolts.
- **3.** After 2-1/2 hours or 25 miles (40 km) of operation, re-torque all wheel bolts.
- **4.** After 5 hours or 50 miles (80 km) of operation:
 - **a.** Re-torque all wheel bolts, fasteners, and tiedown hardware.
 - **b.** Inspect all electrical cables and wiring harness.
 - **c.** Re-torque bolts on front and rear torsion axles, if equipped.
- **5.** After 10 hours or 200 miles (320 km) of operation:
 - Re-torque all wheel bolts, fasteners, and tiedown hardware.
 - **b.** Inspect all electrical cables and wiring harness.
 - **c.** Start the normal servicing and maintenance schedule, as defined in the Service and Maintenance Section 9. "9. Service and Maintenance" on page **46**.
 - **d.** Re-torque bolts on front and rear torsion axles, if equipped.

7.4 Before Each Use

Before using the Head Hauler Trailer, the following areas should be checked.

	Checklist Before Each Use
~	Task
	Use only a truck, tractor, or combine of adequate power and weight to pull the trailer. Refer to "4.3 Equipment Matching" on page 17.
	Make sure the trailer is positively hitched to the towing vehicle using an OEM hardened drawbar pin and retainer clip, or ball and clip. Refer to "7.2 Attaching/ Unhooking Trailer" on page 39.
	Attach safety chains from the trailer to the tow vehicle. Crisscross chains under the hitch to support it should an unplanned separation occur. Refer to "7.2 Attaching/Unhooking Trailer" on page 39.
	Inspect wiring harness and plug for damage. Do not use trailer if damage is found.
	Check inflation pressure on all tires. Correct under- inflation or over-inflation pressures. The specified inflation pressure is on the tires.
	Make sure the wheels are securely fastened to the hubs. 1/2" to 80 ft. lbs. (110 N·m) 9/16" to 115 ft. lbs. (155 N·m) Refer to "11.2 Trailer Specifications" on page 59 .
	Check chocks and tie-down straps. Make sure everything is tight. Refer to "6.2 Loading Header on Trailer" on page 33.
	Make sure the header bar is securely fastened. Refer to "6.2 Loading Header on Trailer" on page 33.
	Make sure lights, reflectors, and SMV/SIS emblem required by local highway authorities are installed. Refer to "4.4.7 Lights and Reflective Tape for Highway Identification" on page 23 and "4.4.8 Department of Transportation (DOT) Compliant Trailers" on page 22.
	Clean and make sure taillights and signal lights are working properly. Also check all clearance and running lights on DOT models. Refer to "4.4.8 Department of Transportation (DOT) Compliant Trailers" on page 22.
	On torsion axle models, the axles may be shipped loose. Attach the axles as per "9.8.9 Front and/or Rear Torsion Axles (If Equipped)" on page 55.

8. Storage

Trailer Storage Safety 8.1

After harvest season or when the trailer will not be used for a period of time, completely inspect the trailer frame, tires, and axles. Replace or repair any worn or damaged components to prevent unnecessary downtime at the beginning of the next season.

A CAUTION



Personal Injury Hazard

Store the trailer in an area away from human activity. To prevent the possibility of serious injury, do not permit children to play on or around the stored trailer.



Crush Hazard

Block the wheels to prevent the trailer from rolling, causing personal injury.

NOTICE

To prevent damage to the trailer, store it in a dry, level area.

8.2 **Placing Trailer In Storage**

Follow this procedure before storing:

- **1.** Remove all entangled vegetation or debris.
- 2. Thoroughly wash the trailer with a pressure washer or water hose to remove all dirt, mud, or debris.
- 3. Lubricate the front axle coupler and the wheel bearings. Make sure all grease cavities have been filled with grease to remove any water residue from washing. Refer to "9.4.1 Inspection, 25 Hours or Weekly" on page 48.or "9.4.2 Inspection, Annually" on page 48.
- 4. Touch up all paint nicks and scratches to prevent rustina.
- **5.** Select an area that is dry, level, and free of debris.
- **6.** Move the trailer to its storage area (inside a building is ideal).
- **7.** Place chocks in front of and behind a rear tire.
- Do not leave the tow vehicle attached to the trailer.

8.3 Removing Trailer From Storage

When removing this trailer from storage, follow this procedure:

- **1.** Attach the trailer to the truck, tractor, or combine. "7.2 Attaching/Unhooking Trailer" on page 39.
- 2. Check:
 - a. Electrical wiring harness connections and components.
 - **b.** All hardware. Tighten, as required.
 - c. Tire pressure. The inflation pressure is listed on the side of the tire.
 - d. Wheel nuts/bolts. 1/2" to 80 ft. lbs. (110 N·m) 9/16" to 115 ft. lbs. (155 N·m)
- **3.** Replace any worn or defective parts.
- 4. Follow the Before Each Use checklist (See "7.4" Before Each Use" on page 44) before using the trailer.



5. Follow annual maintenance items, refer to "9.4.2" Inspection, Annually" on page 48.

9. Service and Maintenance

9.1 Maintenance Safety

AWARNING

Failure to comply with the following safety instructions could result in serious injury and possibly even death.











Personal Protection Equipment

Wear personal protection equipment (PPE), which may include hard hat, safety glasses, safety shoes, gloves, etc. appropriate for the work site and working conditions.



Do not use the trailer if any parts are damaged. If the trailer has a defect, immediately stop using it and remedy the problem before continuing.



No Unauthorized Modifications

Do not modify the trailer or safety devices. Do not weld on the unit.

Unauthorized modifications may impair its safe function.

If the trailer has been altered in any way from the original design, Duo Lift does not accept any liability for injury and the warranty will be voided.



Crush Hazard (Chock Wheels) Always block both rear trailer wheels when preforming maintenance. Make

sure the trailer is on a dry, flat surface.

Replacement Parts

OEM If replacement parts are necessary, genuine factory replacement parts must be used to restore the unit to its original specifications. Duo Lift will not accept responsibility for damages as a result of the use of unapproved parts.

Safety Shields and Devices When completing a maintenance or service

function, make sure all safety shields or fenders are reinstalled before placing the trailer in service.

SAFETY INSTRUCTIONS

The following safety instructions are provided to help prevent injury or limit equipment damage.



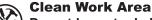


Safety Equipment

A fire extinguisher and first aid kit should be readily accessible while performing maintenance on this equipment.







Do not leave tools lying around the work area. Follow good

shop practices. Keep service area clean and dry. Be sure electrical outlets and tools are properly grounded. Use adequate light.





Use the Right Tools

Use the correct tools, jacks, hoists or other tools that have the capacity for

the job.





Proper Support

Use certified safety stands rated to support the load when working

beneath the trailer.

9.2 Maintenance Tire Safety

AWARNING

Failure to comply with the following safety instructions could result in serious injury and possibly even death.



Explosive Force Hazard

Explosive separation of a tire from the rim can cause serious injury or death.

Tire replacement, repair, and/or maintenance should be done by a qualified tire dealer or qualified repair service.

Do not attempt to install a tire without proper equipment and experience to perform the job.

Failure to follow proper procedures when installing a tire on a wheel or rim or adding air to the tire can produce an explosive force that could result in serious injury or death.

Do not substitute tires with a lesser road rating and/or capacity for the original equipment tires.



Stand to Side of Tire When Inflating

Inflated tires can explode. When inflating tires, use a clip-on chuck and extension hose.

Always stand to the side of the tire when inflating and NOT in front of or over the tire assembly.



Maintain Correct Tire Pressure

Always maintain the correct tire pressure. Do not inflate the tires above the recommended pressure.



No Welding

Never weld or heat a wheel and tire assembly. The heat can cause an increase in air pressure, resulting in a tire explosion. Welding can structurally weaken or deform the wheel.



Overloaded Trailer

Do not allow the load of the trailer to exceed the capacity of the tires.

Tire Separation Hazard

To prevent injury due to possible dangerous

separation of wheels from the axle, the wheel nuts must be maintained at the proper torque levels. Properly tightened wheel nuts prevent loose wheels and broken studs.

9.3 Lubricants

Use an SAE multipurpose high-temperature grease with extreme pressure (EP) performance. Also acceptable is an SAE multipurpose lithium base grease.

Use the Service Record checklist provided to keep a record of all scheduled maintenance.

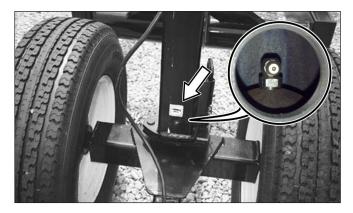
- 1. Use a handheld grease gun for all greasing.
- **2.** Wipe grease zerks with a clean cloth before greasing to avoid injecting dirt and grit.
- **3.** If zerks will not take grease, remove and clean thoroughly. Also clean the lubricant passageway. Replace zerks if necessary.
- **4.** Replace and repair broken zerks immediately.
- **5.** To repack the wheel bearings, wash and completely flush out the old grease in between the rollers using proper solvents.
- It is recommended to use a bearing packer to ensure proper placement of grease inside the bearing.
- **7.** Wheel bearing grease seals should be replaced each time the bearing is repacked using OEM seals.
- **8.** If the trailer is equipped with grease zerks in the hubs, apply grease until new grease can be seen coming out of the hub.

9.4 Servicing Intervals

The service interval is based on normal operating conditions. Severe or unusual conditions may require more frequent lubrication.

9.4.1 Inspection, 25 Hours or Weekly

1. Grease the front axle pivot.



- **2.** Check tire pressure on all wheels. Refer to inflation pressure on side of the tire.
- **3.** Make sure wheel nuts/bolts are tightened to proper torque on all wheels. For 1/2" use 80 ft. lbs. (110 N·m) or for 9/16" use 115 ft. lbs. (155 N·m). Refer to "11.2 Trailer Specifications" on page **59.**
- **4.** Make sure header bar is installed with retainer bolts and jam nuts which are properly tightened. Refer to "5.3.1 Positioning Hat Channels and Header Bar" on page **27.**
- **5.** Make sure all pins are equipped with hair pin retainer clips.

9.4.2 Inspection, Annually

1. Repack standard wheel bearings or use provided grease zerk.



- 2. Grease all lubrication points.
- **3.** Make sure torsion axle-to-frame bolts are properly tightened. Refer to "4.4.9 Spare Tire (Optional)" on page **24**.

- **4.** Make sure chocks are installed and will tighten completely to the frame. Refer to "4.4.2 Chocks" on page **18.**
- **5.** Make sure tie-down strap brackets are installed and will tighten completely to the frame. Make sure tie-down straps and tightening ratchets are installed and will tighten properly. Refer to "4.4.3 Tie-Down Straps" on page **20.**
- **6.** Make sure safety chains are properly attached and have a certification tag. Make sure chains are not worn or damaged in any way that would hinder their function. Refer to "4.4.5 Safety Chains" on page 21.
- 7. Make sure the hitch-to-trailer safety chain is installed and clevis pins are properly retained. Refer to "4.4.5 Safety Chains" on page 21.
- 8. Make sure an OEM coupling device or drawbar pin and retainer clip are being used for towing and are in good condition. Do not use homemade or shopmade drawbar pins when towing this trailer.
- **9.** If equipped, make sure the E-Z hookup tongue moves in and out. Also, make sure it does not pull completely out of the hitch. The T-handle should lock the extendable tongue from pulling forward when in the towing position. Refer to "7.2 Attaching/ Unhooking Trailer" on page **39.**
- **10.** Make sure the hitch assembly is properly attached to the trailer frame and locked in place. Refer to "7.2 Attaching/Unhooking Trailer" on page **39.**
- **11.** Make sure the wiring harness wire from hitch assembly to the trailer frame is routed through attached wiring clip and working properly. Refer to "7.2 Attaching/Unhooking Trailer" on page **39.**
- **12.** If equipped, make sure the breakaway brake cable and key are connected to the trailer. Make sure the battery is charged and in good working order. Refer to "7.2 Attaching/Unhooking Trailer" on page **39.**
- **13.** If equipped, make sure all lights are working. Refer to "4.4.7 Lights and Reflective Tape for Highway Identification" on page **22.**.
- **14.** All safety signs and reflective tape are legible and properly installed. Refer to "3.2 Safety Signs" on page **14.**
- **15.** Wash the trailer.

9.5 Front Axle Replacement

9.5.1 Front Axle Former Models

On former models, the front axle can be removed or exchanged, using a release handle, if desired. To change the front axle, follow this procedure:

ACAUTION



Clear Work Area

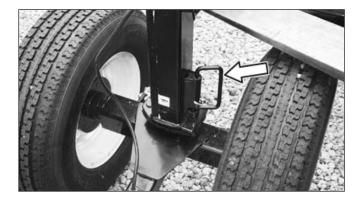
Clear the area of bystanders, especially small children

Remove the header from the trailer, if loaded.

Remove the retainer clip from the lock bracket.



Lift the lock handle to release the lock.



Detach the axle safety chain.



Unplug the wiring harness plug, if equipped.



Use a hoist, crane, or forklift to raise the frame until it clears the ball.



Remove the axle.

Move the replacement axle into position below the frame.

Lower the frame onto the new axle.

Secure it with the lock handle and install the retainer clip.

If equipped, install the plug on the wiring harness. Be sure to use the wiring clamp to secure the harness.

Reattach the axle safety chain.

9.5.2 Front Axle Current Models

Newer model trailers use a bolt-down device to retain the front axle.

The removal and installation is the same as the older models with the exception of removing a bolt to separate the front axle from the trailer frame.

9.6 Service Record

See this section for details of service. Copy these pages to continue record.

Hours and Serviced By							
Maintenance							
25 Hours of Operation							
Grease front axle pivot. Refer to "9.4.1 Inspection, 25 Hours or Weekly" on page 48.							
Make sure all pins are equipped with hair pin retainer clips.							
Check tire pressure on all tires. See correct press on side of tire.							
Make sure wheel nuts/bolts are tightened to proper torque on all wheels. Refer to "9.8.7 Wheel Bolt Torque Requirements" on page 54.							
Make sure header bar is installed with retainer bolts and jam nuts which are properly tightened. Refer to "5.3.1 Positioning Hat Channels and Header Bar" on page 27.							
Check the hitch assembly and make sure it will securely attach the trailer to the tow vehicle							
Annually							
Repack standard wheel bearings or lubricate the E-Z Lube bearings. Refer to "9.4.2 Inspection, Annually" on page 48.							
Make sure torsion axle-to-frame bolts are properly tightened. Refer to "9.8.9 Front and/or Rear Torsion Axles (If Equipped)" on page 55.							
Make sure chocks are installed and will tighten completely to the frame. Refer to "6.2 Loading Header on Trailer" on page 33.							
Make sure tie-down strap brackets are installed and will tighten completely to the frame. Make sure tie-down straps and tightening ratchets are installed and will tighten properly. Refer to "6.2 Loading Header on Trailer" on page 33							
Make sure safety chains are properly attached and have a certification tag. Make sure chains are not worn or damaged in any way that would hinder their function. Refer to "4.4.5 Safety Chains" on page 21.							
Make sure an OEM drawbar pin and retainer clip are being used for towing and are in good condition. Do not use homemade or shop-made drawbar pins when towing this trailer. Refer to "4.4.6 Hitch Couplers" on page 21.							
If equipped with a ball and coupling stye hitch, make sure it is functioning correctly. Refer to "4.4.6 Hitch Couplers" on page 21.							
If equipped, make sure the extendable tongue moves in and out. Also, make sure it does not pull completely out of the hitch. The T-handle should lock the extendable tongue from pulling forward when in the towing position. Refer to "7.2.2 Attaching Trailer to a Combine" on page 41.							
Make sure the tongue assembly is properly attached to trailer frame and locked in place. Refer to "2.5 Set Up Safety" on page 12.							
Make sure the tongue-to-trailer safety chain is installed and clevis pins are properly retained. Refer to "4.4.5 Safety Chains" on page 21.							

Hours and Serviced By Maintenance							
Make sure the wiring harness wire from hitch assembly to the trailer frame is routed through attached wiring clamp clip and working properly.							
Make sure the breakaway cable and key are connected to the trailer. Make sure the battery is charged and in good working order.							
Make sure all lights are working and that all safety signs and reflective tape are legible and properly installed.							
Wash the trailer.	·						

9.7 Welding Repairs

Before performing any type of welding repair, contact Duo Lift Manufacturing for approval. Repair welding must be done with care and

with procedures that may be beyond the capabilities of the ordinary welder.

AWARNING

Personal Injury Hazard
Repairs or modifications to the trailer, trailer tongue, or trailer hitch could result in serious injury or death should these repairs fail.

NOTICE

Anyone performing a welding repair should be certified in accordance to the American Welding Society (AWS) standards.

9.8 Breakaway Brake Systems



Note: The trailer must be unloaded for this test.

9.8.1 Testing the Breakaway Brake System Battery

Disconnect the trailer plug from the tow vehicle; otherwise, you are testing the tow vehicle's battery.

NOTICE

If the battery is weak or dead (even after charging), the battery must be replaced.

Test the system by pulling the pin out of the breakaway switch. The battery should activate the brakes. (**Note**: Do not use this kit as a parking brake). The battery should be charged and tested prior to each use of the trailer.

Allow the tow vehicle to idle forward slowly to pull the trailer forward. Make sure the brakes are engaged.

9.8.2 Charging the Breakaway Brake System Battery

The battery in the breakaway system recharges whenever it is connected to the tow vehicle. If the battery will not hold a charge, replace the battery. A 12-Volt battery charger can also be used to charge the battery.

9.8.3 Replacing the Breakaway Brake System Battery

Refer to the Parts section in this manual for a replacement battery.

NOTICE

Make sure the battery is replaced with the same type or compatible battery. The wiring leads can be connected to either battery terminal.





9.8.4 Wheel Hub Bearing Repacking Instructions

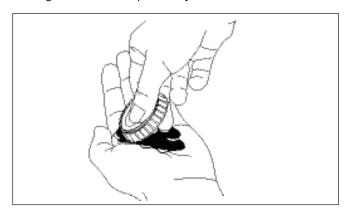
NOTICE

Do not mix Lithium, calcium, sodium or barium complex greases due to possible compatibility problems. When changing from one type of grease to another, it is necessary to ensure all the old grease has been removed.

Along with bearing adjustment, proper lubrication is essential to the proper function and reliability of your trailer axle. Bearings should be lubricated every 12 months or 12,000 miles. The method to repack bearing cones is as follows:

The use of a bearing packer to repack the bearings is strongly recommended. Follow the OEM instructions for the proper use of the bearing packer.

If a bearing packer is not available, place a quantity of grease into the palm of your hand.



Press or pull a section of the bearing rollers and cage through the grease, forcing grease into the interior of the bearing.

Rotate the bearing and repeat the process from roller-to-roller.

Continue this process until the entire bearing is completely filled with grease.

Before reinstalling the bearing cone, apply a light coat of grease on the bearing cup.

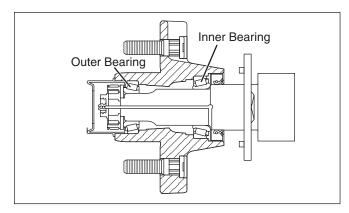
9.8.5 Hub and Bearing Installation

Press the cup of the inner and outer bearings into the hub assembly.

Install the cone of the inner bearing. Coat the inner surface of the cup with a thin coat of grease before installing the cone.

Install the double lip seal in the hub assembly.

Clean the spindle with a clean cloth.



Slide the hub onto the spindle. Use care not to damage the lip of the seal when installing the hub assembly.

Note: The inside surface of the bearing cones and the spindle shaft are machined to a very close tolerance. If either the bearing cone or spindle is damaged or dirty, the hub will not slide easily onto the spindle. Also, if the rear bearing cup is not seated squarely in the hub, it may not slide on the spindle.

Once the hub is seated against the back of the spindle, install the outer bearing cone. Make sure the taper of the cone is seated in the bearing cup (do not install the bearing cone backwards).

Install the spindle washer and castle nut. Hand tighten the castle nut.

Follow the procedure in the Wheel Bearing Preload Adjustment section.

9.8.6 Wheel Bearing Preload Adjustment

Whenever new hubs or new bearings are installed, the bearings must be preloaded.

Preloading the bearings ensures the bearing cups are completely seated in the hub. Improperly installed bearings will cause the hub to wobble.

Tighten the wheel nut using a wrench until the hub barely turns. Do not overtighten the nut.

Turn the hub five to ten revolutions to fully seat the bearings.

Loosen the castle nut.

Hand-tighten the castle nut.

Tighten the castle nut additionally until the next castle nut slot is aligned with the cotter pin hole in the spindle.

Install the cotter pin and bend the tabs around the castle nut.

NOTICE

Do not tow the trailer when the spindle nut is too tight; this will cause the bearings to overheat. Never tow the trailer with bearings too loose. A very slightly loose spindle nut will run adequately, but too loose and the rollers may come apart inside the bearings, causing the hub to fracture.

9.8.7 Wheel Bolt Torque Requirements

It is extremely important to apply and maintain proper wheel mounting torque on your trailer axle. Use a torque wrench to assure the proper amount of torque is being applied to the fastener.

Note: Wheel nuts and bolts must be installed and maintained at the proper torque levels to prevent loose wheels, broken studs, and possible dangerous separation of wheels from your axle.

Be sure to use the fasteners matched to the cone angle of your wheel.

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 the fasteners per the wheel torque requirements diagram.

A WARNING

Wheel Detachment Wheel nuts are prone to loosen after being first assembled due to metal creep between rim and nuts/bolts.

Inadequate wheel nut torque can cause rim to loosen resulting in a wheel separating from trailer.

To prevent serious injury or death:

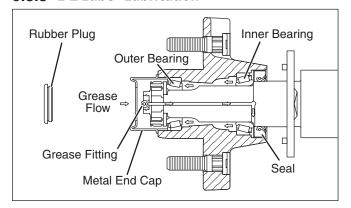
- · Verify wheel nuts are tight before each tow.
- Check wheel nut torque for tightness on a new trailer, and after re-mounting a wheel after 5, 10, 25, and 50 miles.

Tighten: 1/2" to 80 ft.lbs. (110 N m) 9/16" to 115 ft.lbs. (155 N m)

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Wheel nut/bolts should be torqued before first road use and after each wheel removal. Check and re-torque at 5, 10, 25, 50, and 100 miles. Check annually thereafter.

9.8.8 E-Z Lube® Lubrication



The procedure is as follows:

Remove the rubber plug from the end of the grease cap.

Place a standard manual grease gun onto the grease fitting located on the end of the spindle. Make sure the grease gun nozzle is fully engaged on the fitting.

While rotating the hub, pump grease slowly into the fitting. The old, displaced grease will begin to flow back out the 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.

Rotate hub or drum while adding grease.

Note: If hubs are removed from an axle with the E-Z Lube® feature, it is imperative that the seals be replaced BEFORE bearing lubrication. Otherwise, the chance of grease getting on the brake linings is greatly increased.

Note: It is strongly recommended not to use pneumatic powered grease guns as these can inject grease too fast and force grease past the seal, or in rare cases dislodge the seal.

9.8.9 Front and/or Rear Torsion Axles (If Equipped)

The front torsion axle is attached with four 5/8 -11 x 2" grade 8 bolts, each using one flat washer and a lock nut. Tighten the nuts to 200 ft. lbs. (298 N·m).



The rear torsion axle is attached with four 5/8 -11 x 2" grade 8 bolts, each using two flat washers and a lock nut. Tighten the nuts to 200 ft. lbs. (298 N·m).



10. Troubleshooting

The Duo Lift Mfg. Co., Inc. Head Hauler is a trailer that is used to transport headers from place to place. It is a simple and reliable system that requires minimal maintenance.

In this section, we have listed many of the problems, causes, and solutions to the problems that you may encounter.

If you encounter a problem that is difficult to solve, even after having read through this troubleshooting guide, please call your local distributor or dealer. Before you call, please have this Owner's Manual and the serial number from your trailer.

PROBLEM	CAUSE	SOLUTION
Trailer sways when being pulled down the	Low tire pressure.	Inflate tire to correct pressure. Check all tires.
road.	Axle is bent or out of alignment.	Call Duo Lift.
	Header is positioned too far to the rear of the trailer.	Move header forward.
Trailer pulls to one side when being towed.	One tire has low pressure.	Inflate tire to correct pressure.
	Axle(s) out of alignment.	Call Duo Lift.
	Header bar is not positioned properly.	Reposition header bar to obtain a center-of-gravity near the middle of the trailer (side-to-side) so there is even weight on both sides of the trailer. Refer to "5.2 Pre-Usage Checklist" on page 26.
The tow vehicle has difficulty in stopping.	Travelling too fast.	Slow to appropriate speed.
	Towing vehicle too lightweight.	Match capacity of truck to trailer. Refer to "4.3 Equipment Matching" on page 19.
	Bad road conditions.	Slow to appropriate speed for conditions.
Tires are experiencing excessive wear.	Axle bent or out of alignment.	Call Duo Lift.
	Bent spindle.	Call Duo Lift.
	Travelling too fast.	Slow to appropriate speed.
	Bad road conditions.	Slow to appropriate speed for conditions.
	Tire(s) exceeding recommended air pressure.	Adjust to recommended air pressure. "See proper pressure on side of tire".
Header won't fit on trailer.	Trailer out of adjustment.	Make sure the correct mounting chock is used for correct type of header. Refer to "5.2 Pre-Usage Checklist" on page 26.
	Wrong size of trailer.	Use correct size trailer.
	Header components make contact with trailer.	Turn all parts 180 degrees and load from the hat channel right side.
		Use double height flipper. This works well on DOT trailers.
Brakes are not operational.	Broken or damaged wire.	Inspect wiring and replace.
	Brakes out of adjustment.	Brake pads are too far away from the drum. Adjust pads so they do not touch drum when disengaged but provide adequate braking when engaged.
	Wiring harness plug is not compatible with tow vehicle.	May need a convertor to adapt wiring harness. Refer to "7.2 Attaching/Unhooking Trailer" on page 39.
	Excessive wear on brakes.	Brakes worn out. Brakes adjusted too close.
	Requires brake controller in truck.	Make sure controller is functioning correctly.
	Blown fuse in truck.	Replace fuse.
Lights do not work.	Wiring harness is damaged.	Inspect wiring and replace if necessary.
	Wiring harness plug is not compatible with tow vehicle.	Rewire, or use a convertor. Refer to "7.2 Attaching/Unhooking Trailer" on page 39.
	Lights are burned out.	Replace lights.
	Blown fuse.	Replace with proper fuse.

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11. Specifications

11.1 Head Hauler Information Sheet



Manufactured by **DUO LIFT** Mfg. Co., Inc.



DL, DLT, XL MODELS	<u>GVWR</u>	MAIN FRAME	<u>HEADER BAR</u>
DL27, DL27LT	12,000 Lbs.	8" X 3" X 20' X 1/4"	6" X 4" X 27' X 3/16"
DL32, DL32LT, DL32XL	12,000 Lbs.	10" X 4" X 25' X 1/4"	6" X 4" X 32' X 1/4"
DLT32LT, DLT32XL	16,000 Lbs.	10" X 4" X 25' X 1/4"	6" X 4" X 32' X 1/4"
DLT37, DLT37LT, DLT37XL	16,000 Lbs.	10" X 4" X 30' X 1/4"	6" X 4" X 37' X 1/4"
DLT42LT, DLT42XL	18,000 Lbs.	10" X 4" X 35' X 5/16"	6" X 4" X 42' X 1/4"
DLT47LT, DLT47XL	18,000 Lbs.	10" X 4" X 40' X 5/16"	6" X 4" X 46' X 1/4"

Standard Features All Models

- Black Color
- · Heavy Duty Frame
- · Heavy Duty Gooseneck with Torque Tube
- Tapered Gooseneck
- Highway Speed Wheel Hub
- Highway Speed White Spoke Wheels:
 15 x 6 6 Bolt on 5.5 (DL27 DL27LT)
 16 x 6 8 Bolt on 6.5 (DL32 DLT47D)
- Highway Speed Tires: 225/75R15D (DL27 - DL27LT) 235/80R16E (DL32 - DLT47D)
- (2) 3/8" Safety Chain
- (1) 3/8" Ball Safety Chain
- Welded On Clevis Hitch for 1" Hitch Pin
- Ag Conspicuity Tape
- Lockable Sickle Storage in Header Bar
- Front & Rear Header Tie Down Locations
- (2) Ratchets and 2" x 27' Straps
- (2) Strap Wrappers
- (2) Self Aligning Ratchet Brackets
- (2) Adjustable Header Support Chocks
- Pin-On Top Wind Tongue Jack

Optional Features

- Torsion Axles (Front & Rear)
- Electric Brakes
- Ag Lights
- Front and/or Rear Steel Fenders
- 2 5/16" Ball Coupler Bolt On
- 3" Lunette Eye Bolt On
- Additional Header Bar Support for DLT37 - DLT42LT
- Header Bar Adjustment Pkg.
- 8,000 Lb. Rear Torsion Axles for D.O.T. Models **

- Aluminum Wheels
- 215/75R LRH Tires for D.O.T. Models **
- 235/85R LRG Tires
- E-Z Hook Up Tongue
- Adjustable Length Tongue
- Spare Tire & Carrier
- Bolt On Storage Basket
- Colors: Blue, Green, Red or Yellow
- Stainless Steel Tool Box
- U-Saddle Pin-On Header Support

DL27D - DLT47D D.O.T. Models Include:

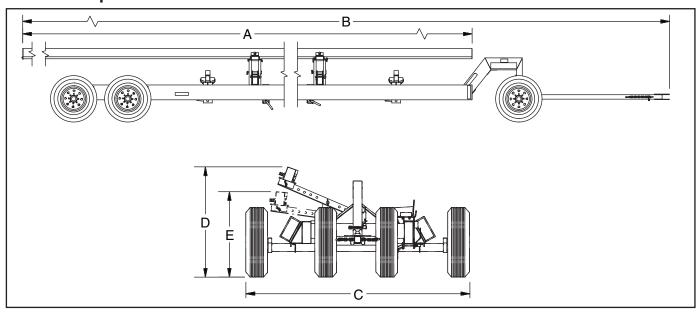
Highway Light Package, All Wheel Electric Brakes, All Torsion Axles, Extended Coverage Front and Rear Fenders, Conspicuity Tape, Splash Guards, E-Z Hook Up Tongue and Jack, Bolt-On 2 5/16" Ball Coupler, 3/8" Safety Chains and Rear Bumper According to Federal Code CFR49, (4) Ratchets, (4) Straps, (4) Strap Wrappers and (4) Self Aligning Ratchet Brackets

D.O.T. MODELS	<u>GVWR</u>	MAIN FRAME	<u>HEADER BAR</u>
DL27D	14,000 Lbs.	10" X 4" X 25' X 1/4"	6" X 4" X 27' X 1/4"
DLT32D	16,000 Lbs.	10" X 4" X 30' X 1/4"	6" X 4" X 32' X 1/4"
DLT37D	16,000 Lbs.	10" X 4" X 35' X 5/16"	6" X 4" X 37' X 1/4"
DLT42D	18,000 Lbs.	10" X 4" X 40' X 5/16"	6" X 4" X 42' X 1/4"
DLT47D	18,000 Lbs.	10" X 4" X 42' X 5/16"	6" X 4" X 46' X 1/4"

** D.O.T. Trailer Option 60237 for 8,000 Lb. Torsion Rear Axles with 215/75R 17.5 Tires ** Will Increase D.O.T. Head Hauler Trailer GVWR by 2,000 Lbs.



11.2 Trailer Specifications



MODEL DIMENSIONS	27'	32'	37'	42'	47'
Working Length (A)	27'	32'	37'	42'	47'
Transport Length (B)	38' 2"	43' 2"	47' 2"	53' 2"	58' 2"
Transport Width (C)	8'6"	8'6"	8'6"	8'6"	8'6"
Header Bar max Height (D)	3' 10"	4' 2"	4' 2"	4' 2"	4' 2"
Header Bar min Height (E)	2' 11"	3' 3"	3' 3"	3' 3"	3' 3"
Tires Size	225/75R15	235/80R16	235/80R16	235/80R16 or 215/75R17.5 LRH	235/85R16
Tire Pressure	65 psi	80 psi	80 psi	80 psi	80 psi
Tire Load Range	D	E	E	E	Е
Wheel Hub	6 Bolt	8 Bolt	8 Bolt	8 Bolt	8 Bolt
Number of Axles	1 Front / 1 Rear	1 Front / 1 Rear	1 Front / 2 Rear	1 Front / 2 Rear	1 Front / 2 Rear
GVWR	12,000	14,000	16,000	18,000	20,000
Wheel Nut Torque	1/2" - 80 ft. lbs. (110 N·m)		9/16" - 115 ft. II	os. (155 N·m)	

Specifications subject to change without notice.

11.3 Bolt Torque

11.3.1 Checking Bolt Torque

Torque figures indicated in the charts are used for non-greased or non-oiled threads and heads unless otherwise specified. Therefore, do not grease or oil bolts or capscrews unless otherwise specified in this manual. When using locking elements, increase torque values by 5%.

The table shown in 11.2.2 gives correct torque values for various bolts and capscrews. Tighten all bolts to the torques specified in the chart unless otherwise noted. Check tightness of bolts periodically, using the bolt torque chart as a guide. Always replace hardware with the same grade bolt.

AWARNING

Equipment Failure
The torque value for bolts and capscrews are identified by their head markings. Replacing higher "Grade" bolts (Grade 8) with lower Grade bolts will lead to equipment failure and could result in injury or death. Always use replacement bolts with the same Grade markings as the removed bolt.

11.3.2 English and Metric Torque Values

Bolt or Stud	English Bolt Torque Specifications*									
Diameter	Grade 2	No Marking	Grade 5	3 Radial Lines	Grade 8	6 Radial Lines				
	N·m	ft. lbs.	N·m	ft. lbs.	N·m	ft. lbs.				
1/4"	8	6	12	10	17	14				
5/16"	13	12	25	19	36	29				
3/8"	27	20	45	33	63	47				
7/16"	41	32	72	54	100	78				
1/2"	61	47	110	80	155	119				
9/16"	95	69	155	115	220	169				
5/8"	128	96	215	154	305	230				
3/4"	225	155	390	257	540	380				
7/8"	230	206	570	382	880	600				
1"	345	310	850	587	1320	700				

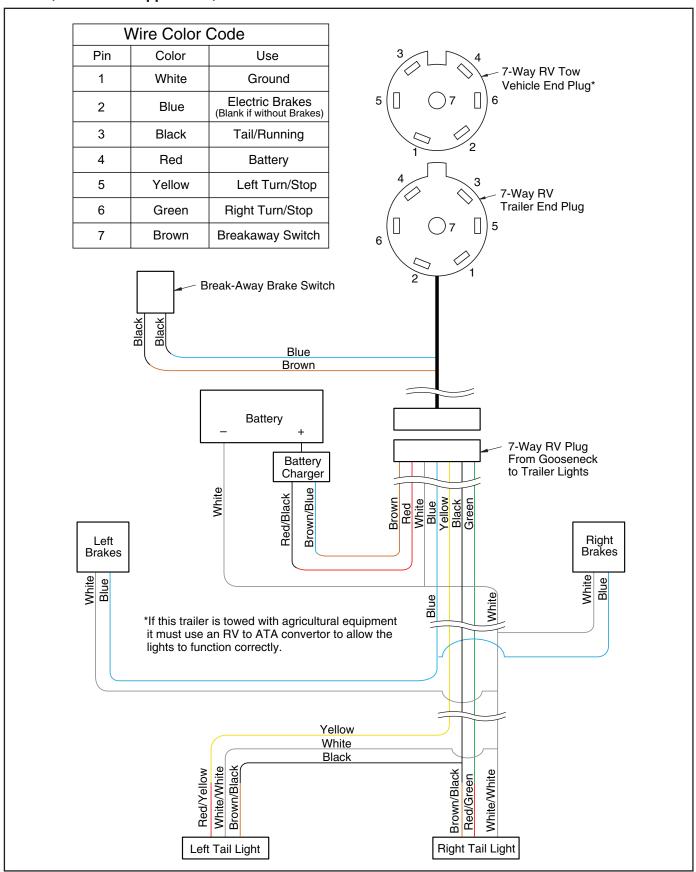
^{*}Specifications subject to change without notice. **Wheel nut torque values.

11.4 Wiring Diagram

11.4.1 Trailer Wiring Diagram Without Brakes (Automotive Application)

			2 1 5				
7-	Way Wire	Color Code	3 7-Way RV Tow				
Pin	Color	Use	5 (7) Vehicle End Plug*				
1	White	Ground					
2	Blue	N/A	1 2				
3	Black	Tail/Running	4 3 7-Way RV				
4	Red	N/A	Trailer End Plug				
5	Yellow	Left Turn/Stop	$\begin{pmatrix} & & & & & & & & & & & & & & & & & & &$				
6	Green	Right Turn/Stop	2 1				
7	Brown	N/A					
			6-Way Trailer to 7-Way RV End Plug				
6-	Way Wire	Color Code	3				
Pin	Color	Use	51				
1	Red	N/A	6-Way Plug From Gooseneck				
2	Green	Right Turn	to Trailer Lights				
3	Yellow	Left Turn	4 0 /2				
4	Black	Ground	3				
5	Brown	Tail Lights					
6	Blue	N/A	Black Yellow Brown Green				
*If this trailer is towed with agricultural equipment it must use an RV to ATA convertor to allow the lights to function correctly. Yellow White Brown							
Red/Yellow White/White Brown/Brown	7	DO NOT USE GREEN/YELLOW WIRE WITH RED BAND	Brown/Brown/Brown Hight Tail Light				

11.4.2 Trailer Wiring Diagram With Brakes (Automotive Application)



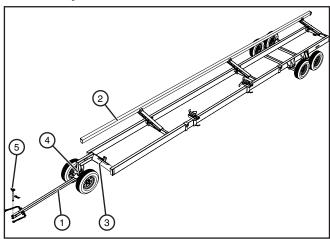
12. Parts List

12.1 General Information

Replacement parts are available from your authorized Dealer Parts Department.

The following pages contain a list of serviceable parts for the Duo-Lift Head Hauler Trailers.

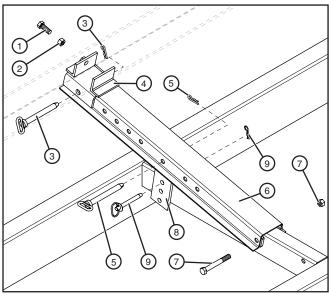
12.2 Complete Trailer



Item	Part Number	Description	Qty.
	800737	STANDARD TONGUE ASSEMBLY, 27' WITH 6-BOLT HUBS	
	800703	STANDARD TONGUE ASSEMBLY, 32'-47' WITH 8-BOLT HUBS	
1	800738	E-Z-HOOKUP TONGUE ASSEMBLY, 27' WITH 6-BOLT HUBS	1
	800608	E-Z-HOOKUP TONGUE ASSEMBLY, 32'-47' WITH 8-BOLT HUBS	
	800722	ADJUSTABLE LENGTH TONGUE ASSEMBLY, 32'-47' WITH 8-BOLT HUBS	
	800723	HEADER BAR W/ CAP, 27'	
	800724	HEADER BAR W/ CAP, 32'	
2	800725	HEADER BAR W/ CAP, 37'	1
	800726	HEADER BAR W/ CAP, 42'	
	800950	HEADER BAR W/ CAP, 47'	
3	DE000053	CANISTER, MANUAL	1
4	LT000342	WIRING HARNESS, ALL MODELS EXCEPT DOT	1
4	800891	WIRING HARNESS, GOOSENECK TO TRUCK PLUG ONLY 13'	'
5	CP000165	CLEVIS HITCH PIN WITH RETAINER CLIP, 1" x 7-1/2" DIA. LONG	1
6*	800728	CAP, HEADER BAR, WITH BOLT AND NUT	1
7*	800993	LIGHT KIT, FIELD INSTALLED, 32'-42'	1

*Not shown.

12.3 Header Bar Support

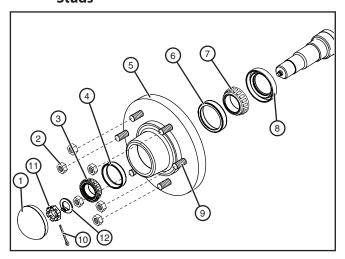


Item	Part Number	Description	Qty.
1	BT000031	BOLT, 3/4-10 x 3" GRADE 5, ZINC PLATED	1
2	NT000058	NUT, JAM, 3/4-10	1
3	CP000165	PIN, HEADER BAR BRACKET WITH RETAINER CLIP, 1" x 7-1/2"	1
	801052	HEADER BAR BRACKET 27', 2013 AND PRIOR	
4			1
	MI000208	HEADER BAR BRACKET, CAST IRON, 32' - 47', 2013 AND ON, 27' 2014 AND ON	
5	CP000025	PIN, ATTACH POINT UPPER HAT CHANNEL WITH RETAINER CLIP, 27', 2014 AND ON, 3/4" x 6"	1
6	800689	48" HAT CHANNEL, COMPLETE 1,2,3,4,5	1
7	800731	BOLT, ATTACH POINT LOWER HAT CHANNEL W/ LOCKNUT	1
8	800999	HAT CHANNEL SUPPORT, 3/8 THICK (2013 AND BEYOND)	1
9	CP000156	ADJUSTMENT PIN FOR HAT CHANNEL SUPPORT (FRAME SIDE) WITH RETAINER CLIP, 3/4" x 4-1/2"	1
NS	800617	ADDITIONAL HEADER BAR SUPPORT PACKAGE FOR 32' AND 37' MODELS INCLUDES ITEMS 1 - 9 FACTORY OR FIELD INSTALLED	1
NS	78000603	HAT CHANNEL ONLY WITH SPACERS WELDED	1

^{**}CP000027 Retaining Clip (zinc plated) included with items 3, 5, and 9.

12.4 Hub and Drum Assembly

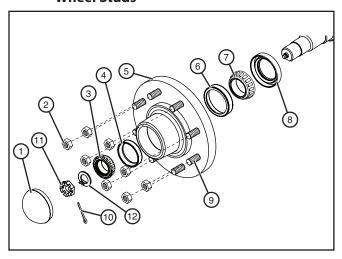
12.4.1 Hub Assembly (6-Bolt) With 1/2" Wheel Studs



Item	Part Number	Description	Qty.
1	HB000905	DUST CAP FOR 6-BOLT HUB	1
2	NT000214	WHEEL NUT 1/2-20 x 13/16 CONE TYPE	6
3	HB000200	OUTER BEARING	1
4	HB000205	OUTER RACE	1
5	HB000904*	6-BOLT HUB (NON-BRAKED) WITH 1/2" STUDS	1
6	HB000188	INNER RACE	1
7	HB000064	INNER BEARING	1
8	HB000179	SEAL	1
9	HB000908	WHEEL STUD 1/2-20 x 1-9/16"	6
10	SL000014	COTTER PIN	1
11	SL000016	CASTLE NUT, 1-14	1
12	SL000019	SPINDLE WASHER, 1" X 2" OD	1

^{*} Includes 3, 4, 6, 7, and 8.

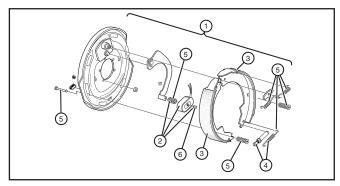
12.4.2 Hub Assembly (8-Bolt) With 1/2" or 9/16" Wheel Studs



Item	Part Number	Description	Qty.
1	HB000906	DUST CAP FOR 8-BOLT HUB	1
2	HB000214	WHEEL NUT 1/2-20 x 13/16 CONE TYPE	8
_	HB000986	WHEEL NUT 9/16-18 CONE TYPE) °
3	HB000935	OUTER BEARING	1
4	HB000953	OUTER RACE	1
5	HB000903*	8-BOLT HUB ASSEMBLY (NON-BRAKED) WITH 9/16" STUDS	1
6	HB000188	INNER RACE	1
7	HB000064	INNER BEARING	1
8	HB000179	SEAL	1
	HB000908	WHEEL STUD 1/2-20 X 1-9/16"	
9	HB000176	WHEEL STUD 9/16-18 X 2-3/4"	8
10	SB000014	COTTER PIN	1
11	SB000016	CASTLE NUT, 1-14	1
12	SB000019	SPINDLE WASHER, 1" X 2" OD	1

^{*} Includes 3, 4, 6, 7, and 8.

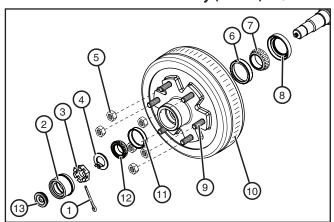
12.4.3 Electric Brake Serviceable Parts



Item	Part Number	Description	Qty.
1	BR000012	ELECTRIC BRAKE ASS'Y. 12" x 2" RH	1
'	BR000011	ELECTRIC BRAKE ASS'Y. 12" x 2" LH	'
2	BR000487	MAGNET KIT 12" X 2" FOR 7K AND 8K NARROW BRAKES	1
3	NSS*	SHOE & LINING KIT 12" X 2"	1
4	BR000440	ADJUSTER SCREW ASSEMBLY	1
5	BR000441	SPRING KIT 12" x 2" BRAKE	1
6	BR000442	MAGNET CLIP KIT	1

^{*}Do not replace brake shoes only. For long term reliability replace entire brake assembly.

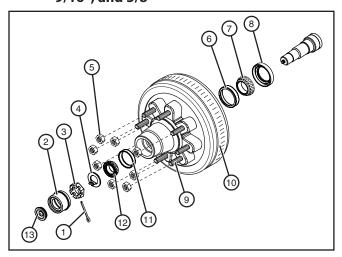
12.4.4 Hub and Drum Assembly (6-Bolt) - 1/2"



Item	Part Number	Description	Qty.
	Tarrivamber	'	
1	SL000014	COTTER PIN	1
2	HB000910	DUST CAP WITH RUBBER SEAL	1
3	SL000016	CASTLE NUT, 1-14	1
4	SL000019	SPINDLE WASHER, 1" X 2" OD	1
5	AB000214	WHEEL NUT 1/2-20 x 13/16 CONE TYPE	6
6	HB000188	INNER RACE	1
7	HB000064	INNER BEARING	1
8	HB000179	SEAL	1
9	HB000009	WHEEL STUD 1/2 X 20 X 2 3/4	6
10	HB000215*	6-BOLT BRAKED HUB ASSEMBLY	1
11	HB000205	OUTER RACE	1
12	HB000200	OUTER BEARING	1
13	HB000921	RUBBER SEAL PLUG	1

^{*} Includes 6, 7, 8, 11, and 12.

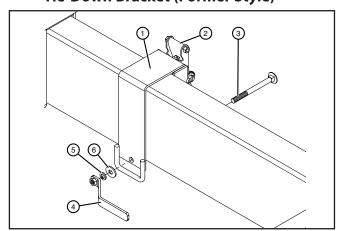
12.4.5 Hub and Drum Assembly (8-Bolt) - 1/2" 9/16", and 5/8"



Item	Part Number	Description	Qty.
1	SL000014	COTTER PIN	1 1
2	HB000910	DUST CAP WITH RUBBER SEAL	1 1
			<u> </u>
3	SL000016	CASTLE NUT, 1-14	1
4	SL000019	SPINDLE WASHER, 1" X 2" OD	1
	HB000214	WHEEL NUT 1/2-20 X 13/16", CONE	
5	HB000986	WHEEL NUT 9/16-18, CONE	8
	NT000063	WHEEL NUT 5/8-18, FLANGE	
6	HB000188	INNER RACE	1
7	HB000064	INNER BEARING	1
8	HB000179	SEAL	1
	HB000909	WHEEL STUD 1/2-20 X 2 3/4	
9	HB000176	WHEEL STUD 9/16-18 X 2-3/4"	8
	HB000970	WHEEL STUD 5/8-18 X 3"	
	HB000935	OUTER BEARING	
	HB000145	8-BOLT BRAKED HUB AS. 9/16-18	
10			1
	HB000096*	8-BOLT BRAKED HUB AS. 5/8-18	
	HB000953	OUTER RACE (1/2" AND 9/16")	
11	HB000971	OUTER RACE (5/8")	1
4.0	HB000935	OUTER BEARING (1/2" AND 9/16")	1
12	HB000972	OUTER BEARING (5/8")	1
13	HB000921	RUBBER SEAL PLUG	1

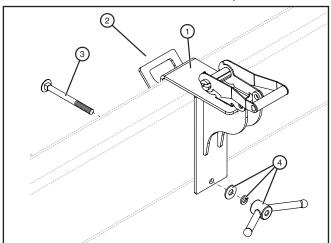
^{*} Includes 3, 4, 6, 7, and 8.

Tie-Down Bracket (Former Style)



Item	Part Number	Description	Qty.
1	800687	STANDARD TIE DOWN BRACKET FOR DL32, DL37, DL42, DL47.	1
	800741	STANDARD TIE DOWN BRACKET FOR DL27.	'
2	TD000023	RACHET AND STRAP	1
3	BT000197	BOLT, CARRIAGE 27'	1
	BT000205	BOLT, CARRIAGE 32' - 47'	_ '
4	800735	HANDLE	1
5	WA000004	LOCK WASHER, 1/2"	1
6	WA000003	FLAT WASHER, 1/2"	1

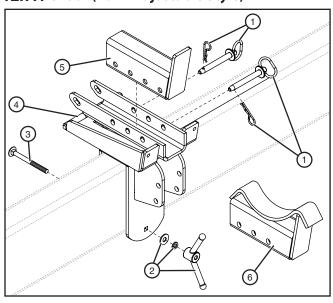
12.6 Tie-Down Bracket (Current Style)



Item	Part Number	Description	Qty.
1	801001 801016	TIE DOWN BRACKET FOR DL32, DL37, DL42, DL47. NO STRAP AND RATCHET TIE DOWN BRACKET FOR DL27.	1
2	TD000023	RACHET AND STRAP	1
3	BT000197	BOLT, CARRIAGE 27'	1
	BT000205	BOLT, CARRIAGE 32' - 47'	·
4	TD000030	CAST WING NUT	1
4	WA000003	1/2 FLAT WASHER	
4	WA000004	1/2 LOCK WASHER	

12.7 Chocks

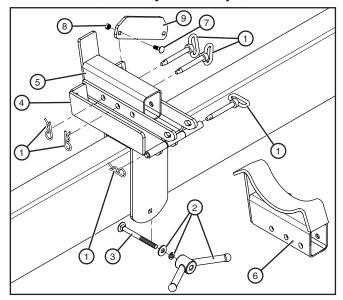
12.7.1 Chock (2014 Adjustable Style)



Item	Part Number	Description	Qty.
1*	CP000026	PIN, WIRE HANDLE WITH RETAINER CLIP	3
2	TD000030	CAST WING NUT	1
3	BT000197	CARRIAGE BOLT, 27'	1
	BT000205	CARRIAGE BOLT, 32' - 47'	<u> </u>
	801038	CHOCK BRACKET, ADJUSTABLE, FRONT, 27', COMPLETE	
	801039	CHOCK BRACKET, ADJUSTABLE, REAR, 27', COMPLETE	
	800819	CHOCK BRACKET, ADJUSTABLE, FRONT, 32' - 47', COMPLETE	1
	800820	CHOCK BRACKET, ADJUSTABLE, REAR, 32' - 47', COMPLETE	
5	800821	ADJUSTABLE CHOCK STANDARD FLAT INSERT	1
6	800829	ADJUSTABLE CHOCK U-SADDLE INSERT FOR HEADERS WITH ROUND TUBE FRAME	1
7**	800690	DOUBLE HEIGHT INSERT FOR EXTRA HEADER TO FRAME CLEARANCE	AR
4	78000596	CHOCK BASE DL27 FRONT	
4	78000597	CHOCK BASE DL 27 REAR	
4	78000509	CHOCK BASE DL32-52 FRONT	
4	78000510	CHOCK BASE DL32-52 REAR	
2	WA000003	1/2 FLAT WASHER	
2	WA000004	1/2 LOCK WASHER	

^{*}CP000027 Retaining Clip (zinc plated) included with item 1. **Not shown.

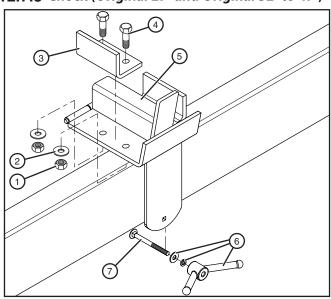
12.7.2 Chock (2013 Adjustable Style)



Item	Part Number	Description	Qty.
1*	CP000026	PIN, WIRE HANDLE WITH RETAINER CLIP	3
2	TD000030	CAST WING NUT WITH WASHERS	1
3	BT000197	CARRIAGE BOLT, 27'	
3	BT000205	CARRIAGE BOLT, 32' - 47'	
	801038	CHOCK BRACKET, ADJUSTABLE, FRONT, 27'	
4	801039	CHOCK BRACKET, ADJUSTABLE, REAR, 27'	1
4	800819	CHOCK BRACKET, ADJUSTABLE, FRONT, 32' - 47'	
	800820	CHOCK BRACKET, ADJUSTABLE, REAR, 32' - 47'	
5	800821	ADJUSTABLE CHOCK STANDARD FLAT INSERT	1
6	800829	ADJUSTABLE CHOCK U-SADDLE INSERT FOR HEADERS WITH ROUND TUBE FRAME	1
7	BT000214	CARRIAGE BOLT	2
8	NT000015	NUT, LOCK	2
9	801007	CLOSURE WITH BOLT AND LOCKNUT	1
10**	800690	DOUBLE HEIGHT INSERT FOR EXTRA HEADER TO FRAME CLEARANCE	AR

^{*}CP000027 Retaining Clip (zinc plated) included with item 1.

12.7.3 Chock (Original 27' and Original 32' to 47')

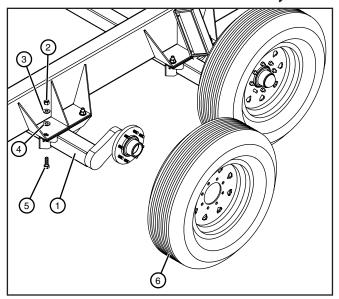


Item	Part Number	Description	Qty.
1	NT000003	NUT	4
2	WA000004	FLAT WASHER	4
3	801008	BRACKET	2
4	BT000003	BOLT	4
5	800734	ORIGINAL CHOCK, 27'	1
5	800623	ORIGINAL CHOCK, 32' - 42'	'
6	TD000030	CAST WING NUT WITH THE WASHERS	1
	BT000197	CARRIAGE BOLT, 27'	1
7	BT000205	CARRIAGE BOLT, 32' - 42'	'

^{**}Not shown.

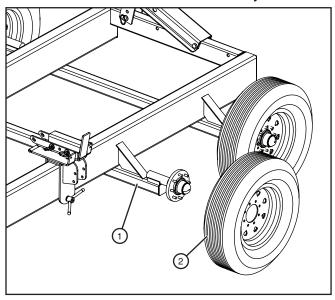
12.8 Axle Assemblies

12.8.1 Bolt-On Rear Torsion Axle Assembly



Item	Part Number	Description	Qty.
	AX000215	TORSION AXLE (IDLER), COMPLETE, DL27	
	AX000213	TORSION AXLE (IDLER), COMPLETE, DLT32, DLT37, DLT42, DLT47	
1	AX000214	TORSION AXLE (ELECTRIC BRAKES), COMPLETE, DL32, DLT37, DLT42	2
	AX000256	OPTIONAL TORSION AXLE (ELECTRIC BRAKES), COMPLETE, 8,000 LB CAPACITY DLT32-DLT47D	
2	NT000022	NUT, LOCK 5/8-11	2
3	WA000011	FLAT WASHER, 5/8	2
4	WA000012	LOCK WASHER, 5/8	2
5	BT000218	BOLT, 5/8-11 X 1-1/2", GRADE 8	2
	WL000008	WHEEL ONLY, 15x6"-1 ON 5.5" WHITE SPOKE, 27'	4
	WL000012	WHEEL ONLY, 16x6"-8 ON 6.5" WHITE SPOKE, 32' - 47'	4
	WT000046	225/75R 15D TIRE ON 15x6"-6 ON 5.5" WHITE SPOKE 5-BOLT WHEEL ASSEMBLY, 27'	4
6	WT000102	235/80R 16E TIRE ON 15x6"-8 ON 6.5" WHITE SPOKE 8-BOLT WHEEL ASSEMBLY, 32' - 47'	4
	WT000058	215/75R 17.5H TIRE ON 17.5x6.75"-8 ON 6.5" GRAY SOLID PLATE 8-BOLT WHEEL ASSEMBLY, 32' - 47'	AR
	WT000131	235/80R 16E TIRE ON 16x6"-8 ON 6.5" ALUMINUM 8-BOLT WHEEL	AR
		ASSEMBLY, 32' - 47' INCLUDES:	1
	WT000132 NT000071	CHROME DUST CAP NUT, 9/16" CHROME ACORN, LONG	8

12.8.2 Solid Mount Rear Axle Assembly

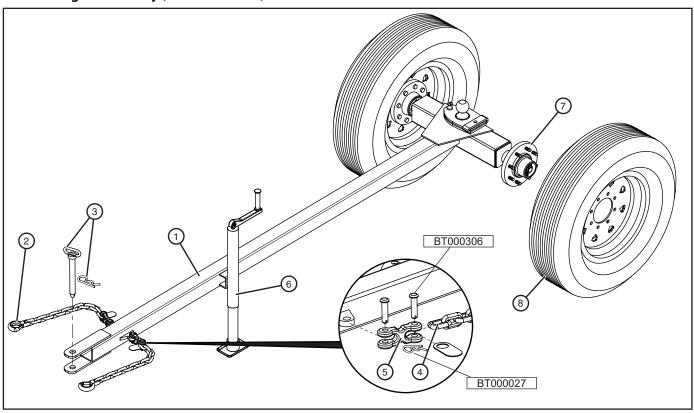


Item	Part Number	Description	Qty.
1	800701* 800702*	REAR SOLID AXLE, LESS HUBS, DL27 REAR SOLID AXLE, LESS HUBS, DL32 - DLT37	2
	WL000008	WHEEL ONLY, 15x6"-1 ON 5.5" WHITE SPOKE, 27'	4
	WL000012	WHEEL ONLY, 16x6"-8 ON 6.5" WHITE SPOKE, 32' - 47'	4
	WT000046	225/75R 15D TIRE ON 15x6"-6 ON 5.5" WHITE SPOKE 5-BOLT WHEEL ASSEMBLY, 27'	4
2	WT000102	235/80R 16E TIRE ON 16x6"-8 ON 6.5" WHITE SPOKE 8-BOLT WHEEL ASSEMBLY, 32' - 47'	4
	WT000058	215/75R 17.5H TIRE ON 17.5x6.75"-8 ON 6.5" GRAY SOLID PLATE 8-BOLT WHEEL ASSEMBLY, 32' - 47'	AR
	WT000131	235/80R 16E TIRE ON 16x6"-8 ON 6.5" ALUMINUM 8-BOLT WHEEL ASSEMBLY, 32' - 47'	AR
	WT000132	INCLUDES: CHROME DUST CAP	1
	NT000071	NUT, 9/16" CHROME ACORN, LONG	8

Welding Required for Replacing a Solid Mount Rear Axle Assembly

12.9 Tongue Assemblies

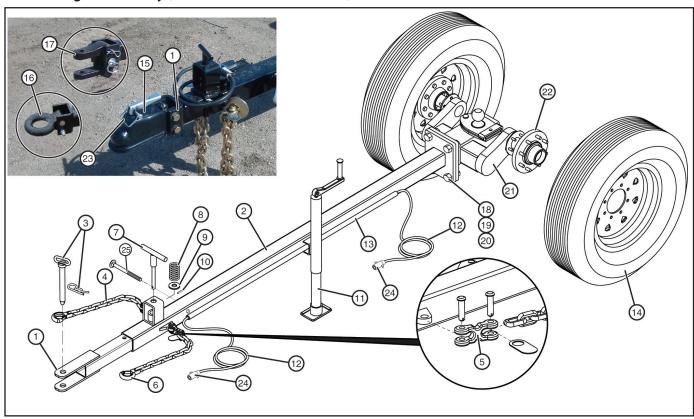
12.9.1 Tongue Assembly (Standard Hitch)



Item	Part Number	Description	Qty.
1	800703	TONGUE ASSEMBLY, DL27-47 NO HUBS	1
2	800842	SAFETY CHAIN, 3/8" x 40" w/ HOOK, LATCH & MOUNTING CLEVIS	2
	CH000043	CHAIN HOOK, 3/8" WITH LATCH	
3	CP000165	CLEVIS HITCH PIN, 1" DIA. x 7.5" LONG WITH RETAINER CLIP	1
4	CH000043	3/8" HOOK WITH LATCH	2
5	CH000060	3/8" DOUBLE CLEVIS WITH PINS	2
	JK000107	TONGUE JACK, PIPE MOUNT, 2,000 LB, TOP-WIND, 10" TRAVEL	
6	JK000089	TONGUE JACK, PIPE MOUNT, 2,000 LB, TOP-WIND, 15" TRAVEL, OPTION	1
	HB000904 HB000903	6-BOLT HUB 8-BOLT HUB	
7	CH000030	ID TAG 3/8 CHAIN	
	CH000031	3/8 X 40 SAFETY CHAIN W/ SLIP HOOK	
	BT000027 BT000306	RETAINER CLIP PIN FOR DOUBLE CLEVIS	

Item	Part Number	Description	Qty.
	WL000008	WHEEL ONLY, 15x6"-1 ON 5.5" WHITE SPOKE, 27'	4
	WL000012	WHEEL ONLY, 16x6"-8 ON 6.5" WHITE SPOKE, 32'-47'	4
	WT000046	225/75R 15D TIRE ON 15x6"-6 ON 5.5" WHITE SPOKE 5-BOLT WHEEL ASSEMBLY, 27'	4
8	WT000102	235/80R 16E TIRE ON 15x6"-8 ON 6.5" WHITE SPOKE 8-BOLT WHEEL ASSEMBLY, 32'-47'	4
	WT000058	215/75R 17.5H TIRE ON 17.5x6.75"-8 ON 6.5" GRAY SOLID PLATE 8-BOLT WHEEL ASSEMBLY, 32' - 47'	AR
	WT000131	235/80R 16E TIRE ON 16x6"-8 ON 6.5" ALUMINUM 8-BOLT WHEEL	AR
	WT000132 NT000071	ASSEMBLY, 32'-47' INCLUDES: CHROME DUST CAP NUT, 9/16" CHROME ACORN, LONG	1 8

12.9.2 Tongue Assembly (Bolt-On Torsion Front Axle)



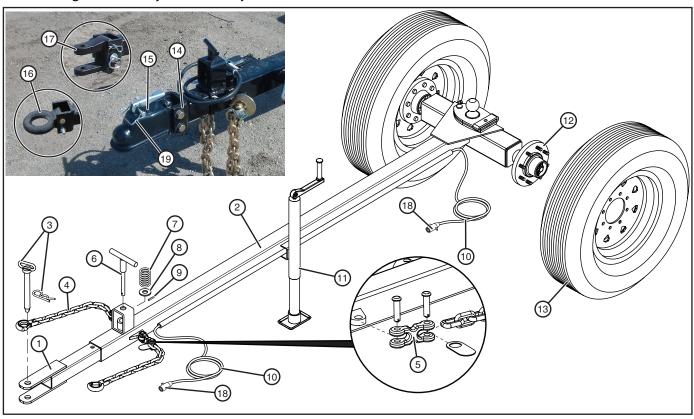
Item	Part Number	Description	Qty.
_	801059 801060	EXTENSION TONGUE AND TORSION AXLE ASSEMBLY WITH NON-BRAKED 8-BOLT HUBS AND CLEVIS HITCH EXTENSION INSERT EXTENSION TONGUE AND TORSION AXLE ASSEMBLY WITH ELECTRIC BRAKED 8-BOLT HUBS AND CHANNEL RECEIVER	AR
		HITCH EXTENSION INSERT	
	800887	EXTENSION HITCH INSERT WITH WELDED CLEVIS	
1	801053	EXTENSION HITCH INSERT WITH CHANNEL RECEIVER (USED WITH ITEMS 15, 16, 17)	1
2	801054	EXTENSION HITCH TONGUE TUBE WELD ASSEMBLY FOR TORSION FRONT AXLE	1
3	CP000165	CLEVIS HITCH PIN, 1" DIA. x 7.5" LONG, WITH RETAINER CLIP	1
4	800842	SAFETY TOW CHAIN ASSEMBLY, 3/8" x 40" W/ HOOK, LATCH, & MOUNTING CLEVIS (INCLUDES ITEMS 5 AND 6)	2
5	CH000060	DOUBLE CLEVIS CHAIN CONNECTOR, 3/8" WITH PINS AND COTTER PINS	2
6	CH000043	CHAIN HOOK, 3/8" WITH LATCH	2
7	800386	T-HANDLE LATCH PIN, WITH SPRING, WASHER, AND COTTER PIN (ITEMS 8, 9, 10)	1

Item	Part Number	Description	Qty.
8	SG000080	SPRING	1
9	SL000019	FLAT WASHER	1
10	SL000014	COTTER PIN	1
	JK000107	TONGUE JACK, PIPE MOUNT, 2,000 LB, TOP-WIND, 10" TRAVEL	1
11	JK000089	TONGUE JACK, PIPE MOUNT, 2,000 LB, TOP-WIND, 15" TRAVEL, OPTION	AR
12	800891	WIRING HARNESS, GOOSENECK TO TRUCK PLUG ONLY, 13'	1
13	LT000015	WIRING HARNESS CONDUIT	1
14	WT000058	215/75R 17.5H TIRE ON 17.5x6.75"-8 ON 6.5" GRAY SOLID PLATE 8-BOLT WHEEL ASSEMBLY, 32' - 47'	
	WT000102	235/80R 16E TIRE ON 16x6"-8 ON 6.5" WHITE SPOKE 8-BOLT WHEEL ASSEMBLY, 32' - 47'	2
	WT000131	235/80R 16E TIRE ON 16x6"-8 ON 6.5" ALUMINUM 8-BOLT WHEEL ASSEMBLY, 32' - 47' INCLUDES: WT000132 – CHROME DUST CAP NT000071 – NUT, 9/16" CHROME ACORN, LONG	

Item	Part Number	Description	Qty.
15	CP000126	COUPLER, 2-5/16" BALL, 20,000 LBS. CAP., MUST BE RETAINED BY:	AR
13	BT000224	BOLT, 5/8-11 X 2", GRADE 8	4
	NT000022	NUT, LOCK, 5/8-11	4
	CP0000004	PINTLE RING, 3" ID 25,000 LBS. CAP., MUST BE RETAINED BY:	AR
16	BT000135	BOLT, 5/8-11 X 5-1/2", GRADE 8	2
	NT000022	NUT, LOCK, 5/8-11	2
17	CP000000	CLEVIS HITCH, CAST IRON, ACCEPTS 1" HITCH PIN, MUST BE RETAINED BY:	AR
	CP000026	PIN, WIRE HANDLE WITH RETAINER CLIP	2
18	BT000224	BOLT, 5/8-11 X 2", GRADE 8	4
19	WA000011	WASHER, FLAT, 5/8"	4
20	NT000022	NUT, LOCK, 5/8-11	4
21	AX000249	FRONT TORSION AXLE ASSEMBLY, INCL. 8-BOLT NON- BRAKED HUBS	AR
21	AX000250	FRONT TORSION AXLE ASSEMBLY, INCL. 8-BOLT ELECTRIC BRAKED HUBS	AK
22		*See Hub Assembly Parts List	<u> </u>
23	CP000170	COUPLER LOCK PIN WITH 1/4" SQUARE SHAPE WIRE SNAP RETAINER	1
	LT000132	6-WAY ALUMINUM CONNECTOR (CORD END)	
24	LT000178	6-WAY ALUMINUM SOCKET WITH SPRING LOADED COVER (MOUNTS INTO TRAILER GOOSENECK) (NOT SHOWN)	1
	LT000223	7-WAY BLACK RV CONNECTOR (CONNECTS TO TOW VEHICLE)	
	BT000201	E-Z HOOK UP RETAINING BOLT 3/4"-10 X 4 1/2" GR 8 YZP BOLT	
25			1
	NT00213	3/4"-10 LOCK NUT, REVERSIBLE, ZP	

AR - As Required

12.9.3 Tongue Assembly (E-Z-Hookup Hitch)



Item	Part Number	Description	Qty.
_	800738 800608	EZ-HOOKUP TONGUE AND AXLE ASSEMBLY, 27' EZ-HOOKUP TONGUE AND AXLE ASSEMBLY, 32'-47', LESS HUBS	_
1	800887	EXTENSION HITCH INSERT WITH WELDED CLEVIS	1
2	800608	E-Z HOOK-UP, PULL PIN EXTENSION TONGUE AND AXLE ASSEMBLY, DL32 - DLT42	1
	800738	E-Z HOOK-UP, PULL PIN EXTENSION TONGUE AND AXLE ASSEMBLY, DL27	
3	CP000165	CLEVIS HITCH PIN, 1" DIA. x 7.5" LONG, WITH RETAINER CLIP	1
4	CH000043	CHAIN HOOK, 3/8" WITH LATCH	2
5	CH000007	DOUBLE CLEVIS CHAIN CONNECTOR, 3/8" WITH PINS AND COTTER PINS	2
6	800386	T-HANDLE (INCLUDES 7,8, & 9)	1
7	SG000080	SPRING	1
8	SL000019	FLAT WASHER	1
9	SL000014	COTTER PIN	1
10	LT000342	WIRING HARNESS, GOOSENECK TO TRUCK PLUG ONLY, 13'	1
	JK000107	TONGUE JACK, PIPE MOUNT, 2,000 LB, TOP-WIND, 10" TRAVEL	1
11	JK000089	TONGUE JACK, PIPE MOUNT, 2,000 LB, TOP-WIND, 15" TRAVEL, OPTION	AR

Item	Part Number	Description	Qty.
12	HB000904 HB000903	6-BOLT HUB 8-BOLT HUB	2
	WT000058	215/75R 17.5H TIRE ON 17.5x6.75"-8 ON 6.5" GRAY SOLID PLATE 8-BOLT WHEEL ASSEMBLY, 32' - 47'	
13	WT000102	235/80R 16E TIRE ON 16x6"-8 ON 6.5" WHITE SPOKE 8-BOLT WHEEL ASSEMBLY, 32' - 47'	2
	WT000131	235/80R 16E TIRE ON 16x6"-8 ON 6.5" ALUMINUM 8-BOLT WHEEL ASSEMBLY, 32' - 47' INCLUDES: WT000132 – CHROME DUST CAP NT000071 – NUT, 9/16" CHROME ACORN, LONG	
14	801053	EXTENSION HITCH INSERT WITH CHANNEL RECEIVER (USED WITH ITEMS 15, 16, 17)	1
	CP000179	E-Z LOCK COUPLER, 2-5/16" BALL, 20,000 LBS. CAP., MUST	AR
15	BT000224	BE RETAINED BY: BOLT, 5/8-11 X 2", GRADE 8	4
	NT000022	NUT, LOCK, 5/8-11	4

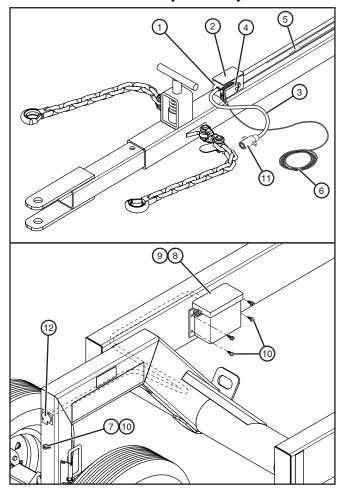
	-		
Item	Part Number	Description	Qty.
	CP000004	PINTLE RING, 3" ID 25,000 LBS. CAP., MUST BE RETAINED BY:	AR
16	BT000135	BOLT, 5/8-11 X 5-1/2", GRADE 8	2
	NT000022	NUT, LOCK, 5/8-11	2
17	CP000000	CLEVIS HITCH, CAST IRON, ACCEPTS 1" HITCH PIN, MUST BE RETAINED BY:	AR
	CP000026	PIN, WIRE HANDLE WITH RETAINER CLIP	2
	LT000132	6-WAY ALUMINUM CONNECTOR (CORD END)	
18	LT000178	6-WAY ALUMINUM SOCKET WITH SPRING LOADED COVER (MOUNTS INTO TRAILER GOOSENECK) (NOT SHOWN)	1
	LT000229	7-WAY BLACK RV CONNECTOR (CONNECTS TO TOW VEHICLE)	
19	CP000170	COUPLER LOCK PIN WITH 1/4" SQUARE SHAPE WIRE SNAP RETAINER 1/4' X 23/8" SNAPPER PIN	1
20	BT000201	E-Z HOOK UP EXTENSION INSERT RETAINING BOLT AND NUT 3/4"- 10X4 1/2" GR8 YZP	2, REVERSIBLE
	NT000013	3/4"X10 LOCKNUT	

12.9.4 Tongue Assembly (Adjustable Length)



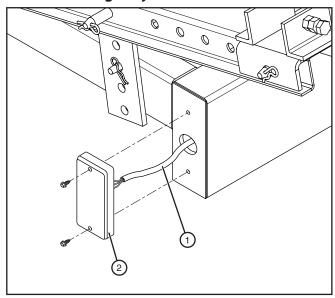
Iter	n Part Numb	r Description	Qty.
	800722	ADJUSTABLE LENGTH, 32' to 47'	

12.10 Trailer Breakaway Brake System

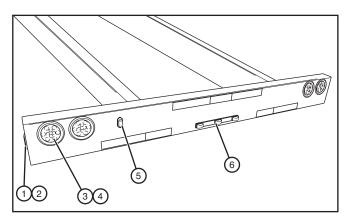


Item	Part Number	Description	Qty.
1	LT000334	JUNCTION BOX	1
2	LT000234	COVER, JUNCTION BOX	1
3	800891	LIGHTING WIRE HARNESS	1
4	BR000159	BREAKAWAY SWITCH ASS'Y, INCLUDING CABLE AND KEY	1
5	LT000015	WIRE HARNESS CONDUIT	1
6	BR000490	BREAKAWAY CABLE AND KEY	1
7	LT000157	RETAINING CLAMP	1
8	BR000345	BATTERY BOX	1
9	BR000416	BATTERY, REPLACEMENT	<u> </u>
10	BT000199	SCREW, SELF TAPPING	5
11	LT000229	7-WAY BLACK RV CONNECTOR (CONNECTS TO TOW VEHICLE)	1
12	LT000304	7-WAY BLACK RV SOCKET (MOUNTS INTO TRAILER GOOSENECK)	1
	BR000420	BREAKAWAY KIT WITH BATTERY	1
	BR000396	BREAKAWAY CHARGER	1

12.11 Brake Light System

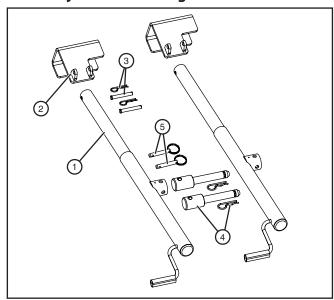


Item	Part Number	Description	Qty.
1	LT000342	Wiring Harness, all models except DOT	1
2	LT000359	LIGHT	2



Item	Part Number	Description	Qty.
1	LT000006	DOT STYLE CLEARANCE LIGHT, 2" AMBER (OLD STYLE)	2
2	LT000007	GROMMET FOR CLEARANCE LIGHT	2
3	LT000341	DOT STYLE BRAKE LIGHT, RED	4
4	LT000280	RUBBER GROMMET FOR DOT LIGHT	4
5	LT000283	LED LICENSE PLATE LIGHT	1
6	LT000284	LED 3-LIGHT ID BAR - RED, STAINLESS STEEL	1
6	LT000381	3/4 LED LIGHT, RED ID BAR NEW STYLE INDIVIDUAL LIGHTS	3
1	LT000380	3/4 LED LIGHT, AMBER, CLEARANCE LIGHT	1

12.12 Optional Mechanical Header Bar Adjustment Package



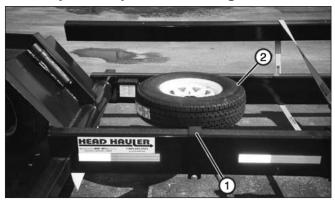
Item	Part Number	Description	Qty.
_	800951	MECHANICAL HEADER BAR ADJUSTMENT PACKAGE	1
1	JK000117	ADJUSTMENT JACK	2
2	800991	JACK FRAME BRACKETS	2
3	MI000237	FRAME BRACKET TO JACK RETAINER PINS	2
4	800995	JACK TO HAT CHANNEL RETAINER PINS WITH CLIPS	2
5	JK000119	DETENT PIN, 9/16" x 2-1/2", WITH SPLIT RING	2
3	MI000238	RETAINER CLIP, HAIRPINFOR MI000237	

12.13 Miscellaneous Parts

Item	Part Number	Description	Qty.
1	800740	DECAL KIT (SPECIFY MODEL OF TRAILER WHEN ORDERING)	AR
2	PT000016	GLOSS BLACK SPRAY PAINT, PER SPRAY CAN	AR

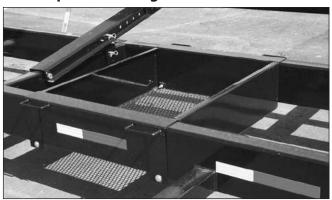
AR - As Required

12.14 Optional Spare Tire Package



Item	Part Number	Description	Qty.
	800677	SPARE TIRE CARRIER, 27'	
1	800676	SPARE TIRE CARRIER, 32' AND UP	1
	801036	WELD-ON SPARE TIRE CARRIER, GOOSENECK MOUNTED (Not Shown)	
	WT000046	225/75R 15D TIRE ON 15x6"-6 ON 5.5" WHITE SPOKE 5-BOLT WHEEL ASSEMBLY, 27'	
	WT000102	235/80R 16E TIRE ON 16x6"-8 ON 6.5" WHITE SPOKE 8-BOLT WHEEL ASSEMBLY, 32' - 47'	
2	WT000131	235/80R 16E TIRE ON 16x6"-8 ON 6.5" ALUMINUM 8-BOLT WHEEL ASSEMBLY, 32' - 47'	2
	WT000058	215/75R 17.5H TIRE ON 17.5x6.75"-8 ON 6.5" GRAY SOLID PLATE 8-BOLT WHEEL ASSEMBLY, 32' - 47' INCLUDES: WT000132 – CHROME DUST CAP NT000071 – NUT, 9/16" CHROME ACORN, LONG	

12.15 Optional Storage Basket



Item	Part Number	Description	Qty.
1	800683	OPTIONAL STORAGE BASKET, 36" x 42 "x 7" FOR 27'	1
	800684	OPTIONAL STORAGE BASKET 36" x 42" x 9" FOR 32' - 47'	

12.16 Optional Tool Box



Item	Part Number	Description	Qty.
1	800949	COMPLETE TOOL BOX KIT	1

12.17 Rear Steel Fenders (DOT Compliant Models)



Item	Part Number	Description	Qty.
1	801056	REAR STEEL FENDER, BOLT-ON FOR DOT MODELS, PAINTED BLACK	2
2	801057	SPLASH GUARD, REAR DOT FENDER, WHITE	2
3	BT00012*	BOLT, 1/2-13 x 5", GRADE 5	4
4	WA000004*	WASHER, FLAT 1/2"	4
5	NT0000004*	NUT, LOCK, 1/2-13	4
6	801062*	STEEL BACKING STRIP FOR SPLASH GUARD, 1-1/4" x 12"	2

^{*}Not shown.

12.18 Optional Front Fender



Item	Part Number	Description	Qty.
1	800618	OPTIONAL FRONT STEEL FENDER	1

12.19 Optional Extended Coverage Front Fender



Item	Part Number	Description	Qty.
	80103	EXTENDED COVERAGE FRONT STEEL FENDER WITH SPLASH GUARDS	1
2	801058	SPLASH GUARD FRONT OF FRONT FENDER, WHITE COLOR 12" x 34"	1
2	801055*	STEEL SPLASH GUARD BACKING STRIP, 1-1/4" x 17", INCLUDES HARDWARE	2
3	801061	SPLASH GUARD, REAR OF FRONT FENDER, WHITE COLOR, 12" x 12"	2
3	801062*	STEEL SPLASH GUARD BACKING STRIP, 1-1/4" x 12", INCLUDES HARDWARE	

^{*}Not shown.

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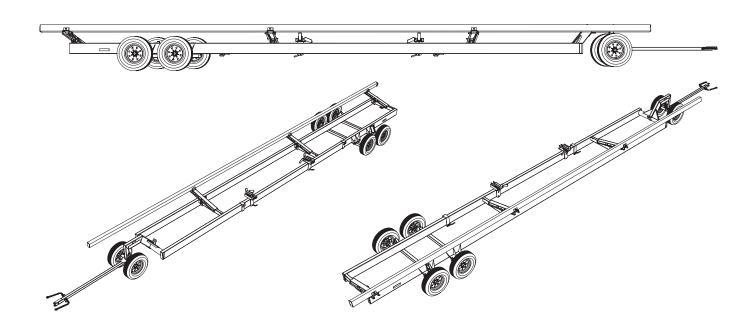
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HEAD HAULER TRAILER

OPERATOR'S MANUAL AND PARTS BOOK

DL, DLT, DLTLT, DLTD AND FIXED BED MODELS 27', 32', 37', 42' AND 47'









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