



AG SHIELD



OPERATOR'S HANDBOOK AND PARTS MANUAL MultiTrailer Mechanical (26-2 through 31ft-3)

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REV 3

-Part No 113596

Serial no. range

WARRANTY REGISTRATION-MultiTrailer

RETURN TO



AG SHIELD MANUFACTURING

BOX 9, BENITO, MB, R0L 0C0

PHONE 800-561-0132 or 204-539-2000 FAX 204-539-2130

e-mail sales @agshield.com

This form must be filled out by the dealer(if applicable) and signed by both the dealer and customer at the time of delivery, and returned to Ag Shield within 10 days to validate warranty.

Customer _____

Dealer _____

Address _____

Address _____

City, _____

City, _____

Prov. _____ Code _____

Prov. _____ Code _____

phone(_____) _____

phone(_____) _____

fax _____

fax _____

Model and size _____ ReCon 200

Model and size _____ ReCon 200

_____ 7 ft _____ 9 ft _____ Double 9 ft.

Serial no _____

Delivery Date _____

Delivery Date _____

Used for - ☐ farm ☐ custom haymaking

Used for - ☐ farm ☐ custom haymaking

DEALER INSPECTION REPORT

SAFETY

_____ Hydraulic Reservoir filled 3" top with reservoir in working position

_____ All decals installed

_____ Hydraulic connections all sealed

_____ Reflectors clean

_____ Tire pressure 80psi

_____ Guards and shields installed

_____ Review operating and safety instructions

I have thoroughly instructed the customer on the above described equipment, including the content of the Owner's Handbook, equipment care, adjustments, safe operation, and applicable warranty policy.

Date _____ Dealer signature _____

The equipment was complete with all parts in good working order except as noted below. I have received the owner's handbook, and I have been thoroughly instructed in the use of it. I have been instructed in the care, adjustments, the safe operation of the machine, and the applicable warranty policy.

Date _____ Customer signature _____

Except _____

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2.INTRODUCTION AND SIGN-OFF FORM

Congratulations! on your choice of an Ag Shield MultiTrailer. This equipment has been designed and manufactured to meet the hauling needs of the discerning farmers and custom haymakers and more.

OPERATOR ORIENTATION - The directions left, right, front and rear, as mentioned throughout this manual, are as seen from the driver's seat and facing in the normal direction of travel. The terms passenger side refers to the right and the term driver's side refers to the left. A drawing showing terms and locations is located in the parts area.

Ag Shield follows the general safety standards specified by the American Society of Agricultural Engineers (ASAE) and the Occupational Safety and Health Administration OSHA). Anyone who will be operating and/or maintaining the Ag Shield MultiTrailer must read and clearly understand ALL Safety, Operating, and Maintenance information presented in this manual.

Do not operate or allow anyone else to operate this equipment until such information has been reviewed. Review this information annually before season start-up. Make these reviews of safety and operation a standard practice for all of your equipment. An untrained operator is **not qualified** to operate this machine.

A sign off sheet is provided for your record keeping to show that all personnel who will be working with the equipment have read and understood the information in the Operators Handbook and have been instructed in the operation of the equipment.

SIGN-OFF FORM

DATE	OPERATORS SIGNATURE	EMPLOYERS SIGNATURE

3. SAFETY

SAFETY ALERT SYMBOL

This Safety Alert symbol means:
ATTENTION! BECOME ALERT!
YOUR SAFETY IS INVOLVED!

The Safety Alert symbol identifies important safety messages on the Ag Shield MultiTrailer and in the manual. When you see this symbol, be alert to the possibility of personal injury or death. Follow the instructions in the safety message.



3 Big Reasons

Accidents Disable and Kill
Accidents Cost
Accidents Can Be Avoided

SIGNAL WORDS:

Note the use of the signal words **DANGER**, **WARNING** and **CAUTION** with the safety messages. The appropriate signal word for each message has been selected using the following guide-lines:

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

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

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

1.1. SAFETY OVERVIEW

YOU are responsible for the **SAFE** operation and maintenance of your Ag Shield MultiTrailer. **YOU** must ensure that you and anyone else who is going to operate, maintain or work around the MultiTrailer be familiar with the operating and maintenance procedures and related **SAFETY** information contained in this manual. This manual will take you step-by-step through your working day and alerts you to all good safety practices that should be adhered to while operating the MultiTrailer.

Remember, **YOU** are the key to safety. Good safety practices not only protect you but also the people around you. Make these practices a working part of your safety program. Be certain that **EVERYONE** operating this equipment is familiar with the recommended operating and maintenance procedures and follows all the safety precautions. Most accidents can be prevented. Do not risk injury or death by ignoring good safety practices.

- MultiTrailer owners must give operating instructions to operators or employees before allowing them to operate the MultiTrailer, and at least annually thereafter per OSHA regulation 1928.57.
- The most important safety device on this equipment is a **SAFE** operator. It is the operator's responsibility to read and understand **ALL** Safety and Operating instructions in the manual and to follow these. All accidents can be avoided.
- A person who has not read and understood all operating and safety instructions is not qualified to operate the machine. An untrained operator exposes himself and bystanders to possible serious injury or death.
- Do not modify the equipment in any way. Unauthorized modification may impair the function and/or safety and could affect the life of the equipment.
- Think **SAFETY!** Work **SAFELY!**

1.2. GENERAL SAFETY

1. Read and understand the Operator's Manual and all safety signs before operating, maintaining, adjusting your MultiTrailer.
2. Only trained competent persons shall operate the MultiTrailer. An untrained operator is not qualified to operate the machine.



3. Have a first-aid kit available for use should the need arise and know how to use it.



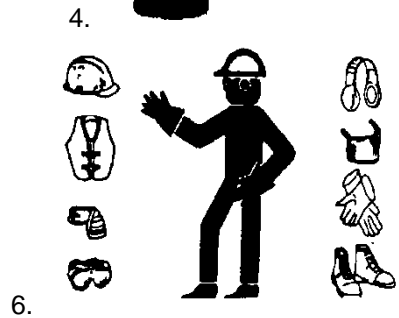
4. Have a fire extinguisher available for use should the need arise and know how to use it.



5. Do not allow riders.

6. Wear appropriate protective gear. This list includes but is not limited to:

- A hard hat
- Protective shoes with slip resistant soles
- Protective glasses or goggles
- Heavy gloves
- Hearing protection



7. Stop the engine, place all controls in neutral, set park brake, remove ignition key and wait for all moving parts to stop before servicing, adjusting, or repairing.
8. Review safety related items with all personnel annually.

1.3. MAINTENANCE SAFETY

1. Review the Operators Manual and all safety items before working with, maintaining or operating the MultiTrailer.
2. Stop the truck engine, place all controls in neutral, set park brake, remove ignition key, wait for all moving parts to stop before servicing, adjusting, or repairing.
3. Keep hands, feet, clothing and hair away from all moving and/or rotating parts.
4. Clear the area of bystanders, especially children, when carrying out any maintenance and repairs or making any adjustments.
5. Place stands or blocks under the frame before working beneath the machine.

1.4. STORAGE SAFETY

1. Store unit in an area away from human activity.
2. Do not permit children to play on or around the stored trailer.

1.5. TRANSPORT SAFETY

1. Read and understand ALL the information in the Operator's Manual regarding procedures and SAFETY when operating the MultiTrailer in the field and/or on the road.
2. Check with local authorities regarding machinery transport on public roads. Obey all applicable laws and regulations.
3. Always travel at a safe speed. Use caution when making corners or meeting traffic.
4. Make sure all the lights and reflectors that are required by the local highway and transport authorities are in place, are clean and can be seen clearly by all overtaking and oncoming traffic. Daybreak and dusk are particularly dangerous and pilot vehicles are recommended.
5. Ensure that the trailer is hitched positively to the towing vehicle. Always use a safety chains between the MultiTrailer and the pulling vehicle.

6. Keep to the right and yield the right-of-way to allow faster traffic to pass. Drive on the road shoulder, if permitted by law.
7. Always use hazard warning flashers on the MultiTrailer when transporting in over legal width condition unless prohibited by law.
8. Do not overload the trailer, and risk tire failure or inadequate braking ability leads to extended stopping distances.

1.6. REFUELING SAFETY



1. Handle fuel with care. It is highly flammable.
2. Do not refuel the machine while smoking or when near open flame or Sparks.
3. Stop engine before refueling. Clean up spilled fuel before restarting engine.

1.7. TIRE SAFETY

1. Failure to follow proper procedures when mounting a tire on a wheel or rim can produce an explosion, which may result in serious injury or death.
2. Do not attempt to mount a tire unless you have the proper equipment and experience to do the job.
3. Have a qualified tire dealer or repair service perform required tire maintenance.
4. Operate the tires at the pressures, loads, and speeds recommended by the tire manufacturer.

1.8. OPERATING SAFETY

1. Read and understand the Operator's Manual and all safety signs before using.
2. Stop engine place all controls in neutral, set park brake, remove ignition key, wait for all moving parts to stop before servicing, adjusting, or repairing.
3. Before driving your MultiTrailer across a field, be familiar with all potential hazards: trees, rocks ditches, gullies, etc. Plan your route to avoid hazards. Keep trailer width and extra width with bales loaded in mind when maneuvering to avoid obstacles.

4. Keep hands, feet, hair and clothing away from all moving and/or rotating parts.
5. Keep all shields and guards in place when operating.
6. Do not allow riders on the MultiTrailer or back of truck during operation or transporting.
7. Clear the area of all bystanders, especially children, before starting.
8. Stay away from machine when loading or unloading bales or other freight. Keep others away.
9. Before raising and especially lowering the decks near the center of trailer, make certain the operator and any other persons are clear of pinch points at front and rear of trailer
10. Before raising or lowering side flips be certain that all persons are clear of the flips, and clear of the rolling loads e.g. round bales that might unloading at that time.
11. Over center locks are provided for the side flips to prevent round bale loads from dumping onto the highway and into incoming traffic. Place the retainer in the hole to hold the arm in the locked position **before the bales are placed** each time trailer is loaded.
12. Take special care when walking on the deck id there is water, dew, frost or snow on the deck. The metal deck must be smooth to allow rear loading to the bales, and can be slippery when walking on the deck.
13. Review safety instructions annually

1.9. SAFETY DECALS

Become familiar with these decals and the hazards they are marking.



part no 113550 Danger Falling Object



part no 113555 Danger Pinch point



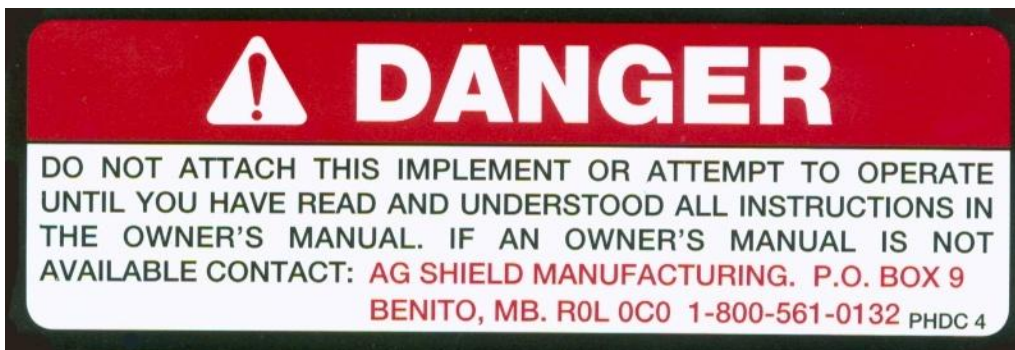
part no 113557 Warning Low Obstacle Hazard



part no 113549 Warning Overhead



part no 113554 Warning runaway



part number113507 Danger Call 800-561-0132

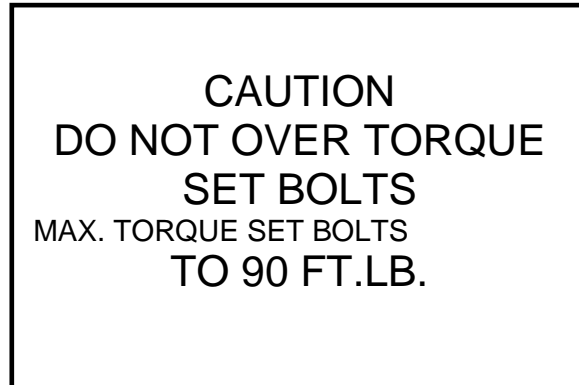
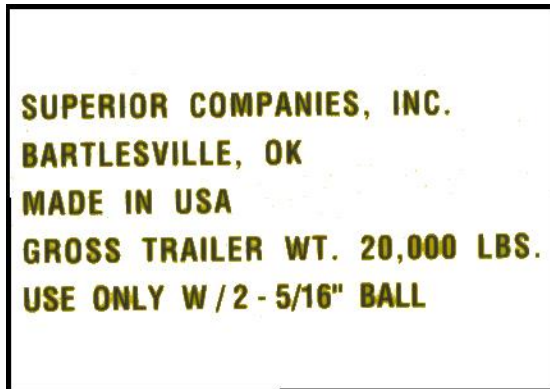
part no 113513 warning Gases

Haring

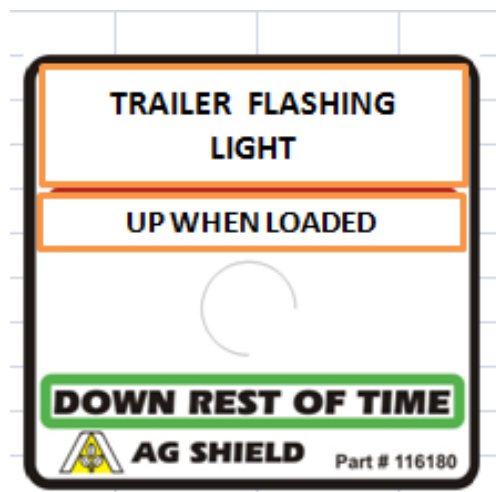
part no 450328 Haring

MultiTrailer

part no 450329 MultiTrailer



part no 116914 decal



4. SPECIFICATIONS - MultiTrailer

SPECIFICATIONS			
Model	26ft 2 axle	26ft 3 axle	31 ft 3 axle
Weight Dry(shipping)	2570 kg 5660 lb.	2765 kg 6100 lb.	3000 kg 6700 lb
Length (hitch to tip)	10.4m 409 in.	10.4 m 409 in	11.9 m 469
Width - side flips down	2.53 m 99.5 in.	2.53m 99.5"	2.53m 99.5"
Width - side flips up	126 in. 3.2m	126 in. 3.2m	126 in. 3.2m
Height –top gooseneck	1.91m 75"	1.91m 75"	1.91m 75"
Height –top deck	.93m 36.5"	.93m 36.5"	.93m 36.5"
Tire Size	LT235/85 R16E	LT235/85 R16E	LT235/85 R16E
Rim Size	16 x 6	16 x 6	16 x 6
Tire pressure	550 kPa/80 psi	550 kPa/80 psi	550 kPa/80 psi
Tire capacity (total)	6352 kg (4 x 1588) 14000 lb (4x 3500)	9528 kg (6 x 1588) 21000 lb (6 x 3500)	9528 kg (6 x 1588) 21000 lb (6 x 3500)
Wheel stud size	9/16" NF	9/16" NF	9/16" NF
Wheel nut torque	90 lb. ft.	90 lb. ft.	90 lb. ft.

5. Proper Loading of Multitrailers

There are 2 axle configurations for multi trailers, one with the axles farther ahead usually preferred for $\frac{3}{4}$ or 1 ton single tire pick ups, the other with the axles farther rearward for “dually” trucks. The frames are drilled on all trailers to accept either configuration of axles. A reasonably equipped shop will move the rear axle ahead of the forward 2 or vice versa in 4-6 man hours. Including changeover of the brake wires, fender, and the axle itself. An axle may be added to a trailer in half that time. Figure 1 Tractor loaded too far rearward shows a 26 –3 axle trailer with the axle forward or in $\frac{3}{4}$ ton mode.

In the axle forward position, approximately 10% of the weight of a level load (like bales) would be transferred to the truck via front hitch of the trailer, in the axle rearward approximately 19% of the level load is transferred to the truck. If the hitch location on the truck is 12" ahead of the rear axle center, 5-10% (150-500 lbs) of the front hitch weight can be transferred to the front axle of the pulling vehicle, again increasing stability.

Trailers need to be loaded with the center of gravity of the load ahead of the center of the trailer axles to apply some weight to the towing vehicle. Refer to Figure 1 Tractor loaded too far rearward If the trailer applies a negative weight

(upwards force to the hitch), the rear axle of the pick up truck will not control the trailer and losing control of the



combination truck and trailer is probable.

FIGURE 1 TRACTOR LOADED TOO FAR REARWARD

Figure 1 Tractor loaded too far rearward shows a trailer in ¾ ton or single wheel position forward, Figure 2 Trailer axle rearward for dual tire truck shows the 3 axle to the rear or 2 fixed axles.



FIGURE 2 TRAILER AXLE REARWARD FOR DUAL TIRE TRUCK

The chart below gives some sample weights of the actual loads on each axle with a specific load on the trailer. **This is not a recommended loading chart that is to be considered safe for your truck or conditions.**

load	Axle Position On trailer	Weight front axle of the truck	Weight on trailer hitch	Combined Weight rear axle of the truck	Weight on trailer axle	Gross combined vehicle weight GCVR
Empty	Rear/ dually	4300	1000	3500	6000	13,800
Level load 12 of x1126lb bales	Rear/ dually	4600	6000	10600	14268	24868
Level load 12 x 1412 lb bales	Rear/ dually	4750	6784	11534	16195	27729

6. Operations

There is a diagram in the parts section to show the locations of items referred to in this section In the parts section.

1.10. HOOKING UP TRAILER

Assuming that your towing vehicle is a box truck equipped with 2 5/16 ball , follow these steps:

1. Lower the end gate
2. Back the truck under the trailer ball.
3. Using the crank located on left side of trailer, lower the trailer on to the 2 5/16 ball mounted in your truck box. Attach the trailer to the truck only if the 2 5/16 ball is securely fastened to the truck, and is rated at more than 20,000 lbs.
4. Rotate the crank on jack until the jack leg is slightly clear of ground and the truck is carrying the complete weight of the trailer.
5. Stand back from the trailer and observe that the trailer deck is parallel to the ground. If the deck is not parallel, crank the jack up to relieve weight, loosen the 2 set screws on the telescoping gooseneck hitch, telescope as necessary to level the trailer, retighten the set screws and their lock nuts, and lower trailer to check for level again. **These leveling steps are important to load both or all three axles evenly, rather than overloading one axle, and under loading the other axle(s).**
6. Pull the spring latch, raise the jack leg, and allow spring latch to secure the jack leg more than 12" above the ground.
7. Lock trailer gooseneck coupler securely to the ball by inserting and keying the retainer pin to hold the pin in place. Observe that the hitch has a sufficiently large clear area around the ball to rotate without damage to components.
8. Attach safety chains to the chain rings in the bottom of the truck bed.
9. Attach the small cable that activates the brakes when unplanned disconnect occurs to the safety chain rings of the truck.
10. Plug the electrical connector into truck socket, taking care to align raise lug of the plug with the groove in the socket.
11. Raise the end gate and latch it.
12. Turn on all clearance lights, and emergency flasher to confirm that all lights are working. Repair all safety devices that are not working **before** departing
13. Look all around the trailer and truck for children, persons, and articles that might be damaged if trailer is moved.
14. Pull the truck ahead slowly and apply only the hand brake to confirm adequate electric brake

stopping power. Repair all safety devices that are not working **before** departing

15. Check for proper tire inflation for the loads anticipated.

1.11. UNHOOKING TRAILER

1. Park the truck and trailer on a level piece of ground.
2. Engage the park brake of the truck, shut off motor
3. Put blocks in front of and behind the tires to stop the trailer from rolling away after the truck is unhooked from the trailer.
4. Lower the telescoping leg on the hitch jack until close to the ground, and reengage the spring loaded pin.
5. Unlock the gooseneck ball hitch coupler from 2 5/16" ball in back of truck
6. Disconnect the safety chains, the emergency brake activation cable, and the electrical plug.
7. Turn the jack crank until the trailer rises off of the ball.
8. **Open the tailgate before driving away.**
9. Look all around the truck for children, persons, and articles that might be damaged if trailer is moved.
10. Enter the truck, restart and pull clear of the trailer,
11. Stop the truck and close the tailgate.

1.12. RAISING DECKS AND SIDES FOR ROUND BALE MOVING

6.1.1. Decks to bale hauling mode

The decks are locked down by a spring loaded latch in center of the trailer. There is a single lever for each of the decks that is responsible for the operation of that deck. The lever has 3 positions as controlled by the latch:

- a) full forward – latch down in front, and deck is locked down or may be locked down.
- b) first stop back or middle , -latch is on the top of channel, deck is unlocked and sprung up, but NOT LOCKED UP
- c) full rearward position, latch may now be placed over the frame to hold the sliding lock rearward and hold the deck up to carry round bales.

Follow these steps to raise 2 decks BEFORE LOADING bales:

1. Flip over the latch shown Figure 3 Latch Ready to raise deck to the position where the

handle will be stopped in middle position before going full range rearward.



FIGURE 3 LATCH READY TO RAISE DECK



FIGURE 4 DECK RELEASED MIDDLE STAGE

2. Push the deck lock handles rearward to the stop on the latch, the decks will spring up to bale hauling position. See Figure 4 Deck Released Middle stage
3. Raise the lever latch above the channel to allow the lever to move further rearward.
4. Move the lever rearward to slide the tabs under the decks, effectively stopping the decks from being forced down by bales that will be loaded onto the trailer. See Figure 5 deck lever latched rearward



FIGURE 5 DECK LEVER LATCHED REARWARD

5. Rotate the lever latch to lock the handle in the rearward position. The decks are now ready to haul round bales.

6.1.2. Raising Side flips to Accept & Hold Round Bales

The side flips operate on an over center principal. There is a support bracket towards each end of each side flip that hold the sides up when under the bale load. The support brackets are locked in an over center position by a rotating pipe that has loops to hold the supports locked over center to the inside. The same pipe has cams to push the supports back over center and allow the load to be released.

Follow these steps to position the side flips up to hold bales for transport.

1. Remove the retainer from both the left and right cam handles and rotate the top of the handle outward as far as will go

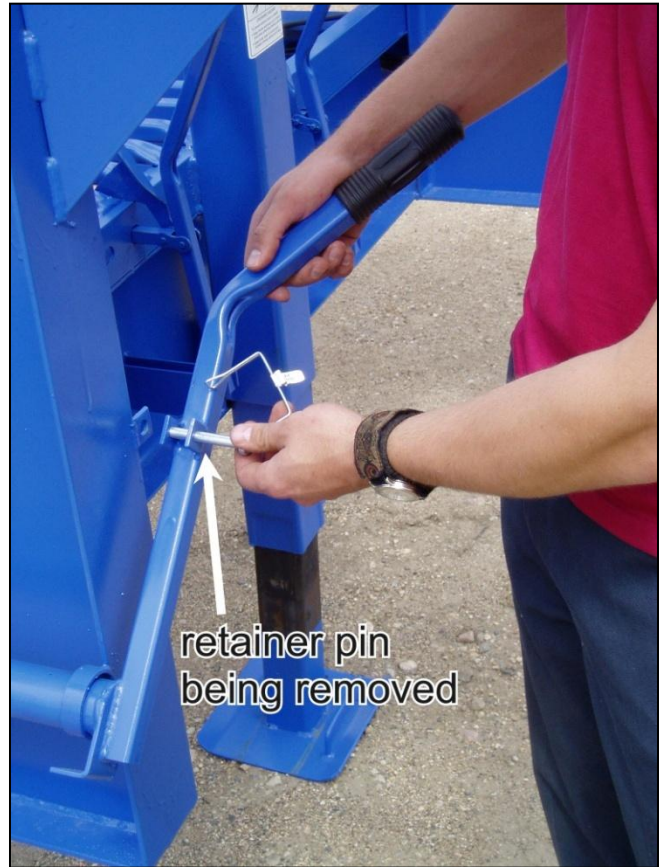


FIGURE 6 REMOVE OR REPLACE RETAINER PIN

2. Squat down, with one leg forward, (see Figure 7 Squatted to flip up side)and grasp the lower 2x2 tubing and pull OUTWARD, the tube will rotate up with spring assistance. Raise to the highest position. Do the same on the other side.

IMPORTANT TIP

DO NOT BEND OVER AT THE WAIST AND PULL ON THE SIDE FLIP AS THAT COULD POTENTIALLY DAMAGE OR STRAIN YOUR BACK



FIGURE 7 SQUATTED TO FLIP UP SIDE

3. Rotate the cam handles back to the lock position and insert the retainer. Walk along the sides of the trailer and observe that all 4 of the side supports are pulled and locked by the cam /hook.

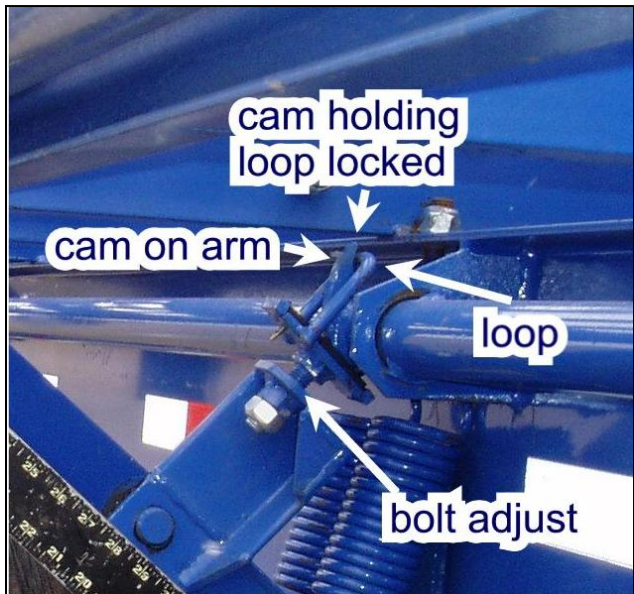


FIGURE 8 LOCKED LOOP

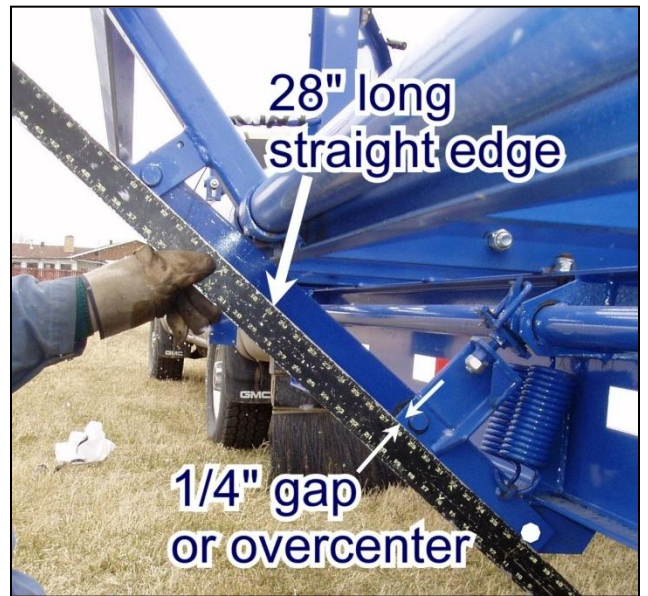


FIGURE 9 CORRECT OVERCENTER ALIGNMENT

You are ready to load bales.

If pulling the sides up seems excessively difficult consider shimming the sides out farther so that sides do not go as far down. Refer to photo

1.13. LOWERING DECKS FOR FLATBED OPERATION

1. Unlatch the levers and pull forward to allow deck to be pushed down. Step up on the trailer deck using the locked crank handle as a handrail. See Figure 10 Stepping up onto deck



FIGURE 10 STEPPING UP ONTO DECK

2. Walk to the center of the trailer and “stomp” the decks down one at a time, the spring loaded locks will hold the deck down.



FIGURE 11 LOWERING DECKS TO FLAT DECK

1.14. DUMPING LOADS OF ROUND BALES

Round bales may be dumped both sides at one location or either the passenger or driver side rows independently to allow for organized rowing of bales. E.g. dump the driver's side row and turn the truck around to dump the passenger side rows on the end to make one long row of bales. Follow these steps to dump driver's side of trailer then the passenger side in one long row:

1. Position the driver's side of trailer approximately 9 ft from the desired center of row of bales.
2. Firmly engage parking brake of truck so as there is no possibility of the truck rolling while driver is out dumping the bales.
3. **Check for children, other persons, and pets that might be hurt by the rolling bales.**
4. Remove the retainer to allow cam handle to rotate.



FIGURE 12 REMOVE OR REPLACE RETAINER IN CAM ARM

5. Position your body under the A frame, so that the moving handle will rotate away from your body. **Push cam arm handle with a single swift powerful motion to dump the bales. A slow or hesitant motion is undesirable.**



FIGURE 13 PROPER POSITION TO "PUSH" HANDLE



FIGURE 14 CAM ARM "PUSHED"

6. Rotate the cam arm back to lock position and replace the retainer .
7. Turn the trailer around **carefully**, with the trailer loaded only on one side, The center of gravity of the bales is inside the tires but it is possible to tip if speeding and turning over rough terrain,
8. Line up passenger side of trailer approximately 9 ft from desired center of rows of bales
9. Repeat steps 2 through 6 above to dump second side of trailer.
10. The trailer will be back to a 99" road travel width.

1.15. LOADING ROUND BALES- TRAILER LOADING BRAKE LOCK

Bales may be loaded with a spear from the rear, with a grapple from the side , or any combination of the 2 loads. It will be an advantage to pushed the bales on from the rear to tighten up the core of bales on each side. The tight core of bales will roll off as a single unit, and stay tight in the bale yard prevent additional weather damage.

In order to have the trailer anchored to the ground, push the trailer loading brake lock switch **UP** to engage the trailer brakes. The truck brakes, or automatic transmission park pin will get much less stress when the correctly adjusted trailer brakes are applied.



FIGURE 15 TRAILER LOADING BRAKE LOCK SWITCH

**IMPORTANT
DO NOT LEAVE THE SWITCH
ENGAGED, AND DRIVE
DOWN THE ROAD AS IT WILL
CAUSE DAMAGE TO THE
BRAKES OF THE TRAILER.**

1.16. RAMPS AND REAR STANDS FOR VEHICLES

The ramps are strong enough to support one axle in center provided that the axle weighs less than 11,000 pounds with the vehicle on a level surface, and that the tires are supported **by both sides of both ramps**. **Never attempt to load a vehicle or tractor supported by only one side of either ramp.**



When loading long low vehicles (extended cab pick up trucks), observe that the center of the vehicle frame does not hang up on rear cross member of the trailer.

Find a slight grade or raise the front of trailer to reduce the angle of the ramp to the trailer to avoid vehicle damage.

When loading equipment heavier than 5000 pounds total weight, it is recommended to use the rear stands provided. The stands have 2 settings – storage- all the way up , and loading – in lower hole as in photo below. The stand is correctly 2" above the ground. At the 2" setting, the stands will prevent heavier loads from raising the rear tires of the towing vehicle off of the ground while driving up the ramps, When the load is positioned forward, the pins may still be pulled and the stands raised before driving away with the load.



FIGURE 16 REAR STAND 2" ABOVE GROUND

Tractors and vehicles that are on the trailer may be secured by chains or straps to many solid welded locations, be certain that the chains are **not pulling on one of the 1x1 tubes**. Always secure loads to frame channels or I beams rather than 1 x 1 deck tubing. Always secure all loads to avoid movement in any direction, even in the event of an emergency stop or other maneuver.

1.17. ADJUSTING THE DECK LIFT STOP AND SPRINGS

The deck lift rear stops need to limit the upward travel of the deck so that the sliding lock may pass through the slot to hold the deck from bouncing either up or down. Refer to Deck Springs to see the turn buckle that adjust the tension on the deck springs. The springs should raise the deck just far enough to allow the slide lock to pass through the slot, with a minimum of slam against the stop pad.

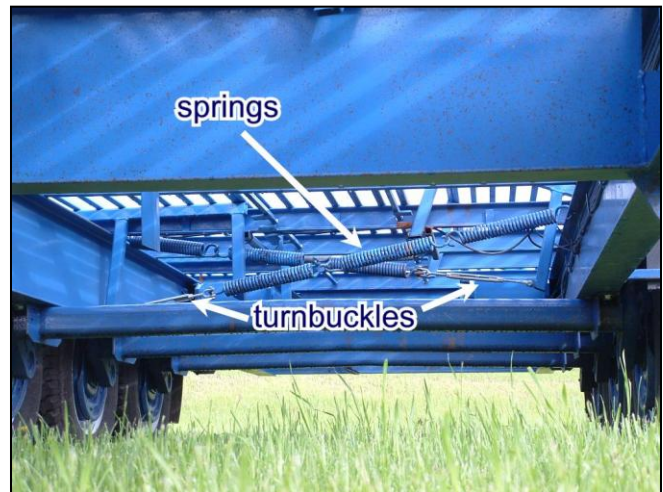


FIGURE 17 DECK LIFT SPRINGS AND TURN BUCKLES

The deck lift springs are used to assist the operator in raising the decks easily. When the deck latch lever is pushed rearward the springs should pull the decks stop pad up to the deck stop angle. At this point the slide lock may be moved further rearward to allow lock the decks up for bale transport.



FIGURE 18 REAR DECK STOP

1.18. ADJUSTING THE SIDE FLIPS AND CAMS

The side flips work on the principal of the support levers going over center. Refer to Figure 9 Correct overcenter alignment and Figure 19 Adjusting the over center Distance The bolt adjust may be threaded in or out of the lower support arm until the adjustment is correct at 1/4" as per Figure 9 Correct overcenter alignment.

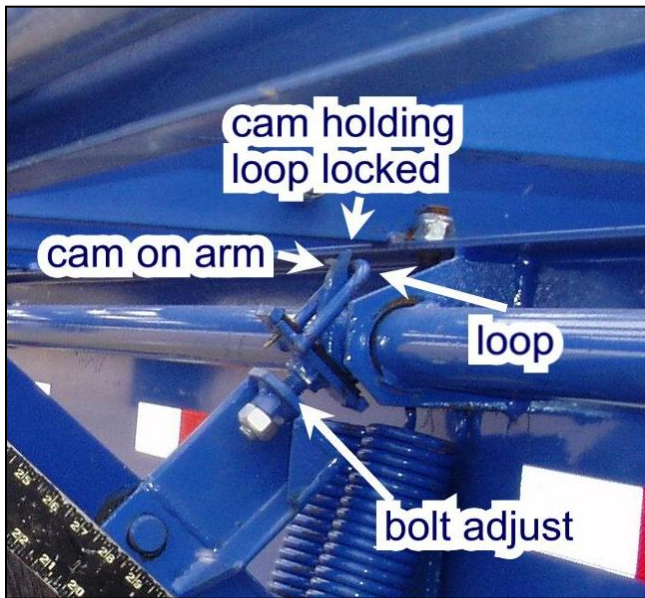


FIGURE 19 ADJUSTING THE OVER CENTER DISTANCE

The side flip springs are tightened enough to raise the side with little effort once the mechanism has been pulled over center by the person raising the side flip. If the side flip springs are tightened too tight, the side is harder to break over center to get lifted to haul bales. The spring is adjusted with a socket and extension down through the slots in the deck.

1.19. MAINTENANCE

All operations maintenance on axles is covered in "Dexter Axle –Operation, Maintenance Service Manual supplied with your trailer.

The trailer electrical systems have long life components carefully assembled to provide long and trouble free use. To extend that life, observe your electrical cables and hose periodically to see that twines and other foreign material have not pulled hoses or wires from their mount locations.

Use a quality "New Holland or Ford" tractor blue enamel to touch up paint as required.
The electrical system is an extension of the towing vehicle's 12 volt system.

1.20. LUBRICATION

There are 3 grease zerks on each side flip support on the MultiTrailer. Add grease daily or every 40 loads until excess grease is visible, more often if running on muddy or salty roads.



FIGURE 20 GREASE NIPPLE LOCATIONS

Your MultiTrailer is equipped with Dexter Torflex rubber suspension that is maintenance free. The wheel bearings should be greased every 12 months or 12,000 miles. Refer to the Dexter A Operation, Maintenance, Service manual supplied with your trailer.

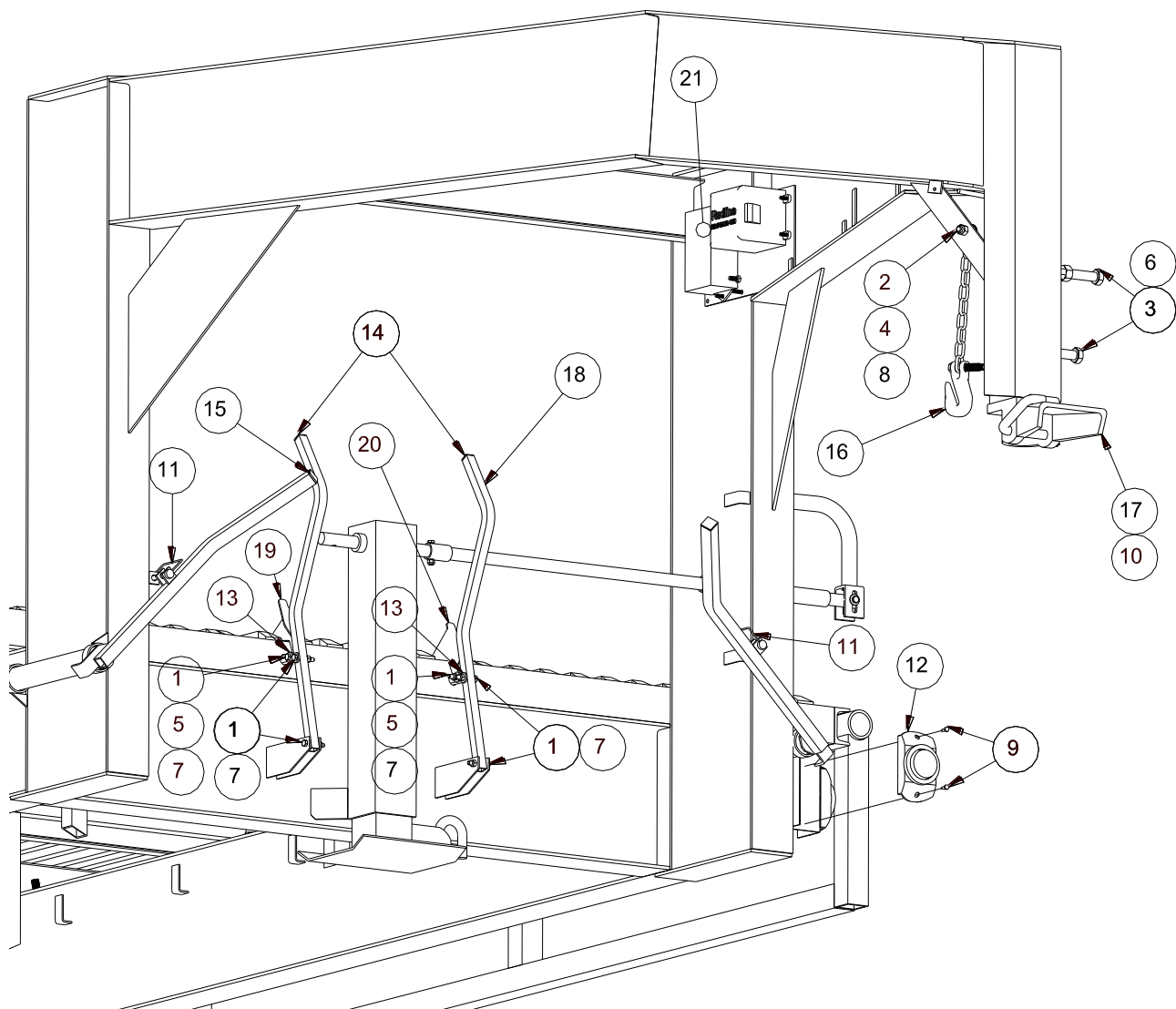
1.21. YELLOW FLASHING LIGHT OPTION

Optional kit allows for a yellow flashing light to be positioned underneath the rear trailer lights. as shown on the picture below left side. The picture to the below and right shows the double switch now installed. when loading the trailer with bales the brake switch should be turned on. Once trailer is loaded flip the top switch to turn on the flashing light. The flashing light has its own switch which allows it to be controlled whenever the user would like. simply flip the switch up when the trailer is loaded and the strobe light will flash, once trailer is unloaded flip the switch down to have the flashing light remain off.



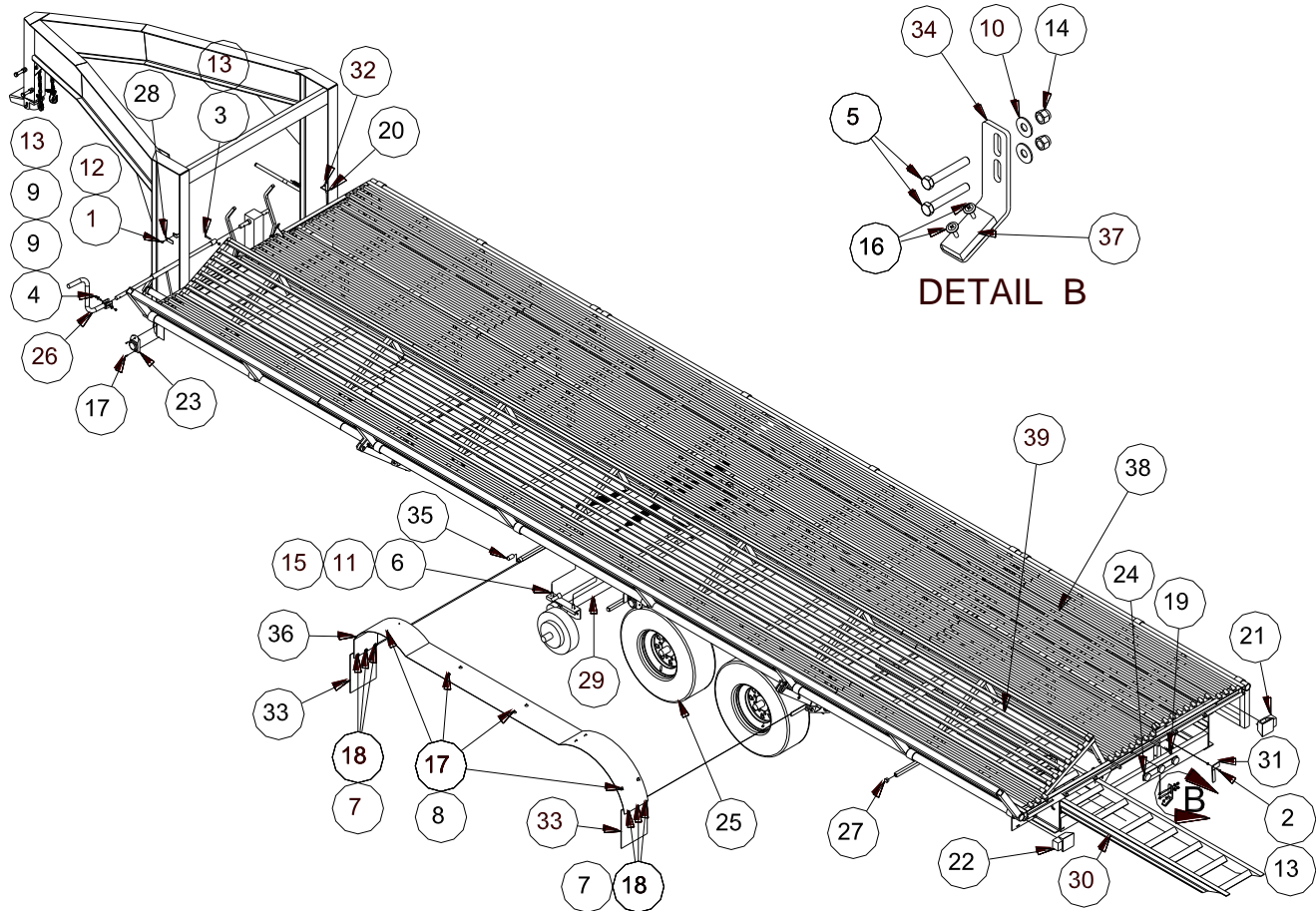
7.Parts

1.22. A FRAME HITCH PARTS



Parts List			Parts List		
ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	7	100506 bolt 5/16 X 1 3/4 gr5 pltd nc	12	6	113389 amber clearance assem
2	2	100708 bolt 1/2 X 1 3/4 gr5 pltd nc	13	2	114207 CHAIN JOINER LINK 80
3	2	100935 bolt 3/4 X 4 all thrd nc	14	2	128059 3/4 nylon plug
4	4	101106 flat washer 1/2	15	6	128062 1x1 sq tub cl240 13 ga
5	2	101143 lock washer 5/16	16	2	450280 safety hook and chain assy
6	2	102109 nut 3/4 nc std	17	1	450476 drop hitch norb
7	22	102122 nut nylok 5/16 nc gr5 pltd	18	2	450571 handle deck stop
8	2	102125 nut nylok 1/2 nc gr5 pltd	19	1	450592 push stop - lasered
9	32	103206 12 x 3/4 DRILL TAP	20	1	450597 push stop RH - lasered
10	1	104101 hairpin 11 1/8 x 2.75	21	1	450625 electrical kit mtlr 31ft mech
11	3	104507 quick pin square 3 8 X2 1 2	80	2	100503 bolt 5-16 X 1 gr5 pltd nc

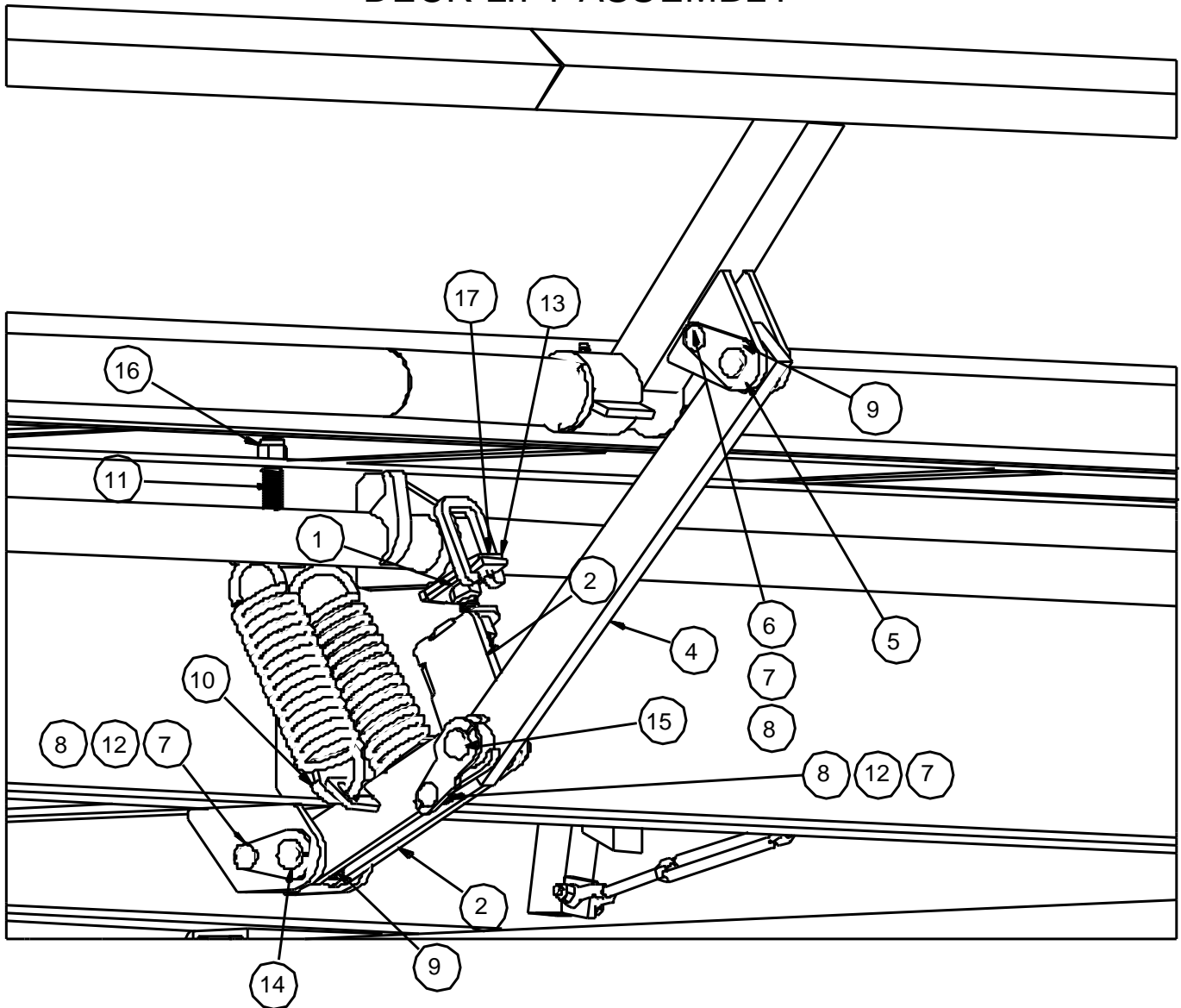
1.23. DECK PARTS



Parts List			Parts List		
ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	1	100402 bolt 1/4 X 3/4 gr5 pltd nc	21	1	113387 combo lite mkr turn
2	2	100503 bolt 5-16 X 1 gr5 pltd nc	22	1	113388 combo lite mkr turn no lic
3	7	100506 bolt 5/16 X 1 3/4 gr5 pltd nc	23	6	113389 amber clearance assem
4	1	100507 bolt 5/16 X 2 1/4 gr5 pltd nc	24	1	113396 ID light bar with lenses
5	4	100608 bolt 3/8 X 2 1/2 gr5 pltd nc	25	6	113986 tire whl assy 8 bolt 6 x 16 5.15 pilot
6	12	100825 bolt 5/8 X 2 gr8 pltd nc	26	1	116914 jack handle bracket
7	12	101101 FENDER WASHER 0.250 X 1-1/4	27	6	128062 1x1 sq tub cl240 13 ga
8	20	101102 FENDER WASHER 0.188 X 1	28	1	450168 handle retainer tab
9	14	101104 flat washer 5/16	29	3	450235 axle torflex 7 w brk assy
10	8	101105 flat washer 3/8	30	2	450260 ramp wldt 4-90
11	12	101107 flat washer 5/8	31	2	450270 lock ramp
12	1	102121 nut nylok 1/4 nc gr5 pltd	32	1	450279 EXTN WLDT CROSS SHAFT
13	22	102122 nut nylok 5/16 nc gr5 pltd	33	4	450356 flap 11 beltg
14	10	102123 nut nylok 3/8 nc gr5 pltd	34	2	450580 stop deck up wldt
15	16	102127 nut nylok 5/8 nc gr5 pltd	35	2	450589 rubber bumper
16	8	103205 screws dt 3/4X10 liner screw	36	2	450590 fender 3 axle mech
17	32	103206 12 x 3/4 DRILL TAP	37	2	450598 rubber bump stop
18	12	103212 screw sm d t 14 x 1 lg	38	1	450605 deck lift wldt RH 1 lock 31 - springs
19	2	104401 hairpin 1/4 x 4 1/2	39	1	450606 deck lift wldt LH 1 lock 31 - springs
20	3	104507 quick pin square 3/8 X2 1/2			

1.24. DECK SIDE LIFT ASSEMBLY

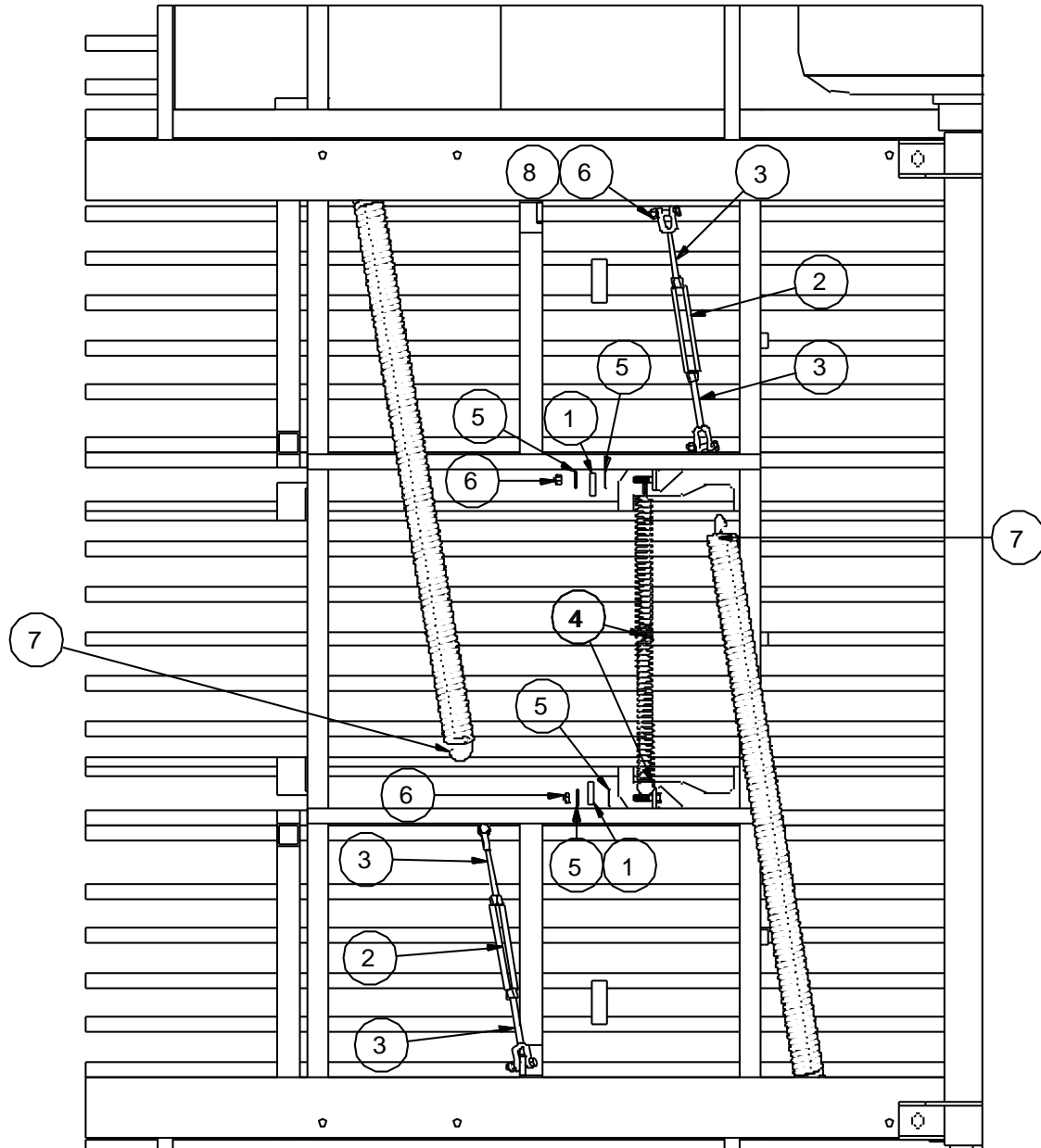
DECK LIFT ASSEMBLY



ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	4	450556 push plt wldt	10	4	450599 spring mod 4 2-1_2. x 15coilsipt
2	2	450528 link 2 side flip sprg wldt LH	11	3	450565 draw bolt side sprg wldt
2	2	450529 link 2 side flip sprg wldt RH	12	2	100504 bolt 5/16"x1 1/4" gr5 pltd hex nc
4	4	450524 link 1	13	4	450591 push plt slider pad
5	3	450531 pin upper pivot link wldt	14	2	450585 pin wldt lower linkage
6	3	100509 bolt 5/16NC 2 1/2 gr5 pltd hex	15	4	450507 pin wldt mid linkage
7	5	101104 washer flat 5/16"	16	4	102127 nut 5/8 nc nylock
8	5	102122 5/16 nylock	17	1	103205 screws dt 3/4"X10 liner screw
9	7	105609 grease zerk			

1.25. DECK SPRINGS

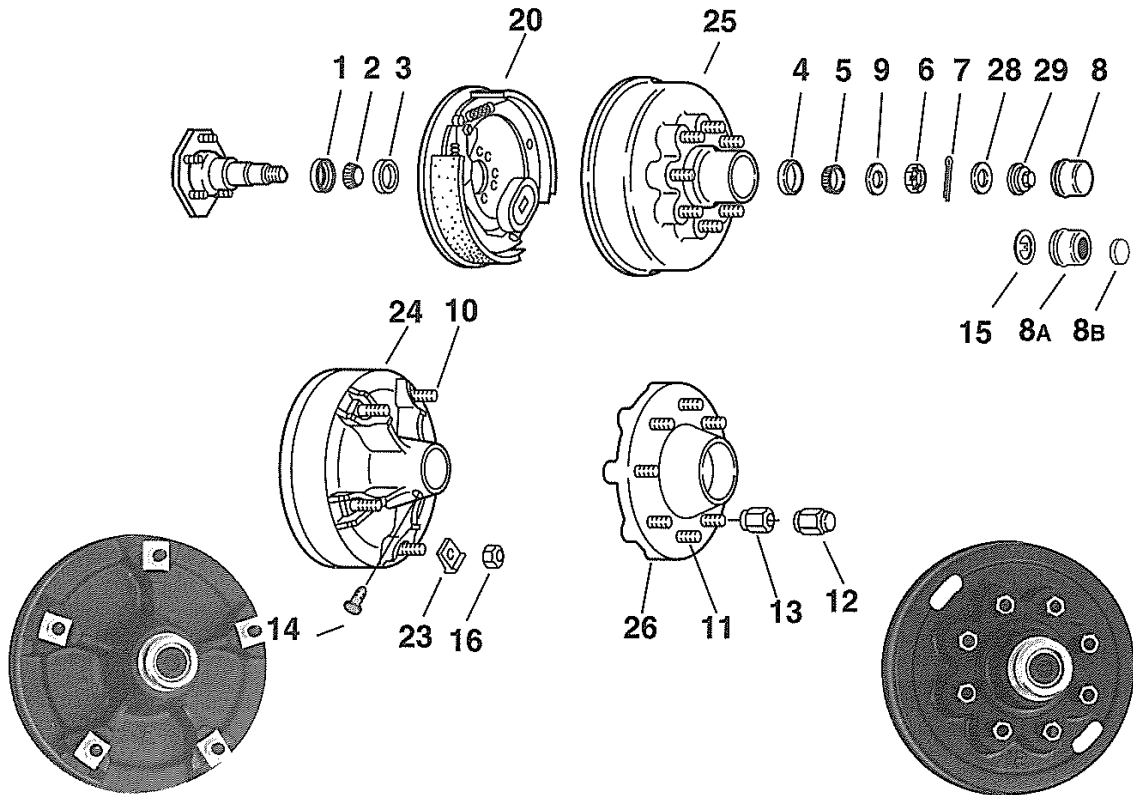
TRAILER DECK SPRINGS



ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	2	450513 latch lock	5	6	101105 washer flat 3/8"
2	2	turnbuckle body	6	6	102123 nut 3/8" nylock nc
3	4	turnbuckle yoke	7	2	Extension Spring1
4	2	113980 spring ext 8 5 lg x 1od x 135 wire	8	4	100605 bolt 3/8 X 1 3/4 hex

1.26. AXLE HUBS 7000 LB

865 AND UT HUB GROUP



STANDARD GREASE LUBE PARTS

Item	Part No.	Description
1	010-001-00	Grease Seal
	010-010-00	Grease Seal for E-Z Lube
2	031-030-02	25580 Inner Bearing Cone
3	031-030-01	25520 Inner Bearing Cup
4	031-017-01	14276 Outer Bearing Cup - 865 Hub
4	031-029-01	15245 Outer Bearing Cup - UTG Hub
5	031-029-02	15123 Outer Bearing Cone
5	031-017-02	14125A Outer Bearing Cone
6	006-001-00	Spindle Nut - E-Z Lube only
6	006-176-00	Spindle Nut
7	019-002-00	Cotter Pin (not used on E-Z Lube)
8	021-001-00	Grease Cap - UTG Hub
8	021-039-00	Grease Cap - 865 Hub
8A	021-042-01	Grease Cap E-Z Lube-UTG
8A	021-042-02	Grease Cap E-Z Lube Chrome Option-UTG
8A	021-043-01	Grease Cap E-Z Lube-865 Hub
8A	021-043-02	Grease Cap E-Z Lube Chrome Option-865 Hub
8B	085-001-00	E-Z Lube Rubber Plug
9	005-057-00	Spindle Washer
15	005-101-00	Tang Washer (E-Z Lube)
16	006-005-00	1/16-18 Nut for Rim Clamp
23	015-002-00	Rim Clamp

OPTIONAL OIL LUBE PARTS

Item	Part No.	Description
1	010-063-00	Oil Seal
29	021-035-00	Oil Cap (865 Hub)
	021-040-00	Oil Cap (UTG Hub)
28	010-045-00	865 'O' Ring
	010-059-00	UTG 'O' Ring
14	046-052-00	Oil Filter Plug
	046-032-00	Oil Cap Plug

HUBS

Item	Part No.	Description	Bolt Circle
24	008-174-05	Grease Hub & Drum w/cups & studs	Demountable
24	008-174-06	Oil Hub & Drum w/cups & studs	Demountable
25	008-219-04	Grease Hub & Drum w/cups & studs	8 on 6.50
25	008-219-13	Hub & Drum w/ 9/16" stud	8 on 6.50
25	008-219-18	Hub & Drum w/ 5/8" stud	8 on 6.50
26	008-231-09	Grease Plain Hub w/cups & studs	8 on 6.50

BRAKES

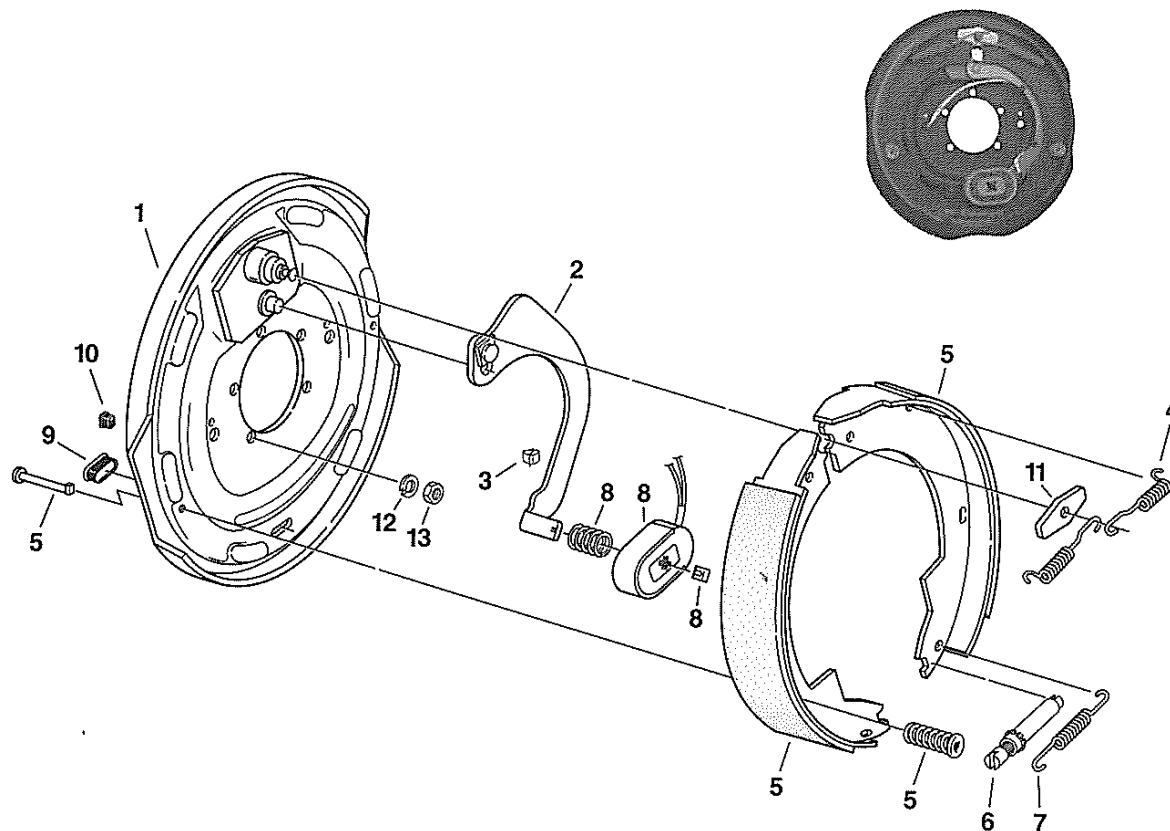
Item	Part No.	Description
20	023-105-00/023-106-00	LH/RH 12 x 2 DXQ Electric
20	023-180-00/023-181-00	LH/RH 12 x 2 Electric-7K
ns	023-338-00/023-339-00	LH/RH 12 x 2 Hyd. Uni-servo-6K
ns	023-334-00/023-335-00	LH/RH 12 x 2 Hyd. Uni-servo w/park-6K
ns	023-336-00/023-337-00	LH/RH 12 x 2 Hyd. Duo-servo-6K
ns	023-332-00/023-333-00	LH/RH 12 x 2 Hyd. Duo-servo w/park-6K
ns	023-342-00/023-343-00	LH/RH 12 x 2 Hyd. FB-6K
ns	023-340-00/023-341-00	LH/RH 12 x 2 Hyd. FB w/park-6K
ns	023-326-00/023-327-00	LH/RH 12 x 2 Hyd. 6K CSA

STUDS & WHEEL NUTS

Item	Part No.	Description
10	025-011-00	9/16-18 Stud - UTG
11	007-122-00	1/2-20 Pressed Stud
12	006-098-00	1/2-20 Stainless Steel Capped Wheel Nut
13	006-080-00	1/2-20 60° Cone Nut

1.27. AXLE BRAKE PARTS

12 x 2" 7K ELECTRIC BRAKES

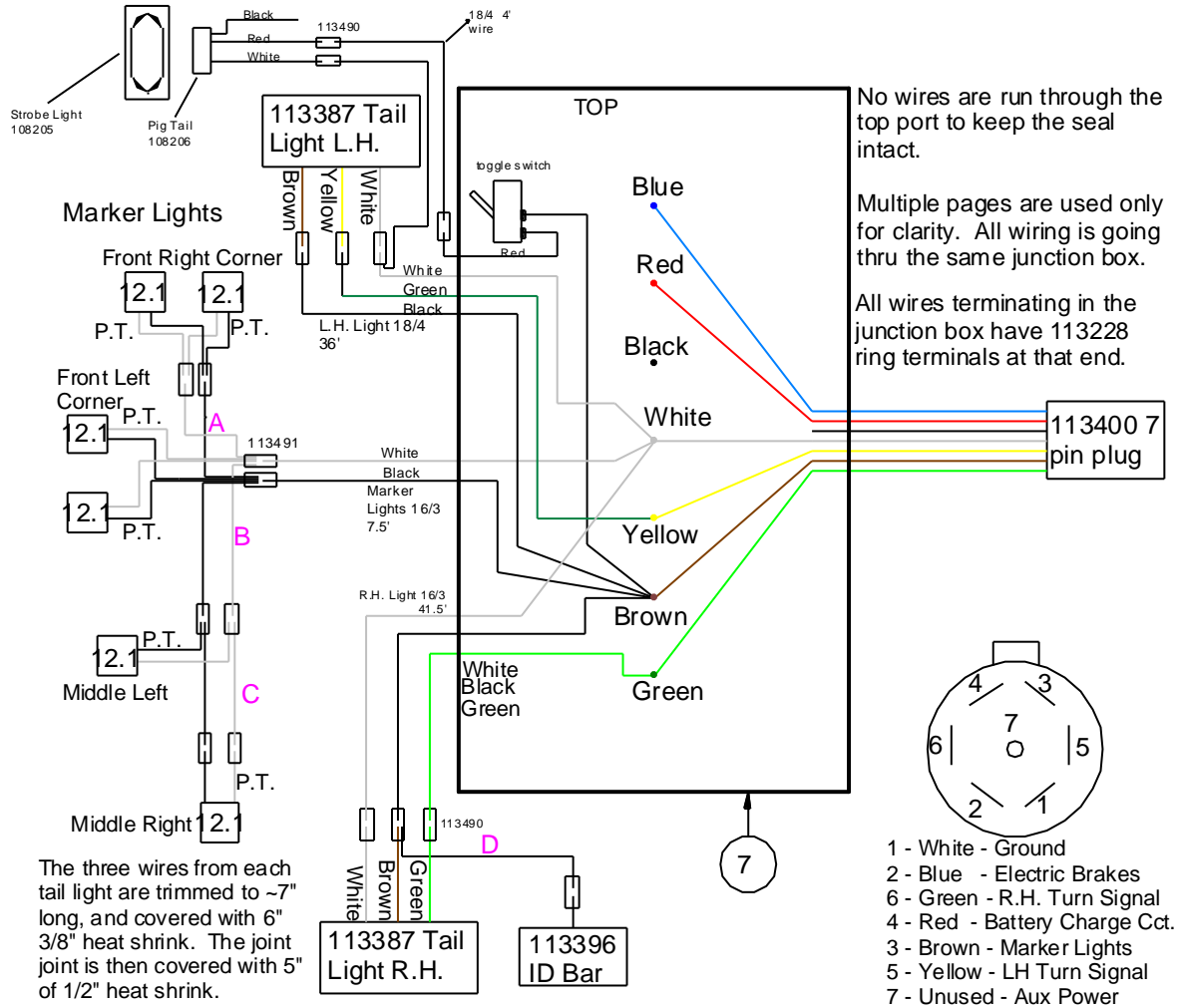


ELECTRIC 7K			
Item	Part No.	Qty/Brk	Description
0	023-180-00	1	LH Complete Brake Assembly
0	023-181-00	1	RH Complete Brake Assembly
1	036-089-10	1	Backing Plate Assembly
2	047-107-00	1	LH Actuating Lever Arm
2	047-108-00	1	RH Actuating Lever Arm
3	027-005-00	2	Wire Clip
4	046-009-00	2	Retractor Spring
5	K71-127-00	1	Shoe & Lining Kit containing: 1 #040-215-00 Primary S&L 1 #040-216-00 Secondary S&L 2 #049-011-00 Shoe Hold Down Pin #2 2 #046-077-00 Shoe Hold Down Spring
6	043-004-00	1	Adjuster Assembly
7	046-018-00	1	Adjusting Screw Spring
8	K71-125-00	1	Magnet Kit containing: 1 #042-101-01 Magnet (black wire) 1 #027-009-00 Magnet Clip 1 #046-080-00 Magnet Spring
9	046-007-00	1	Plug
10	046-016-00	1	Wire Grommet
11	005-067-00	1	Anchor Post Washer
12	005-004-00	5	Lockwasher
13	006-010-00	5	Brake Mounting Nut

1.28. WIRING DIAGRAM

450625 Electrical Kit Multitrailer with Strobe Light 31 ft

10/06/2016 ND

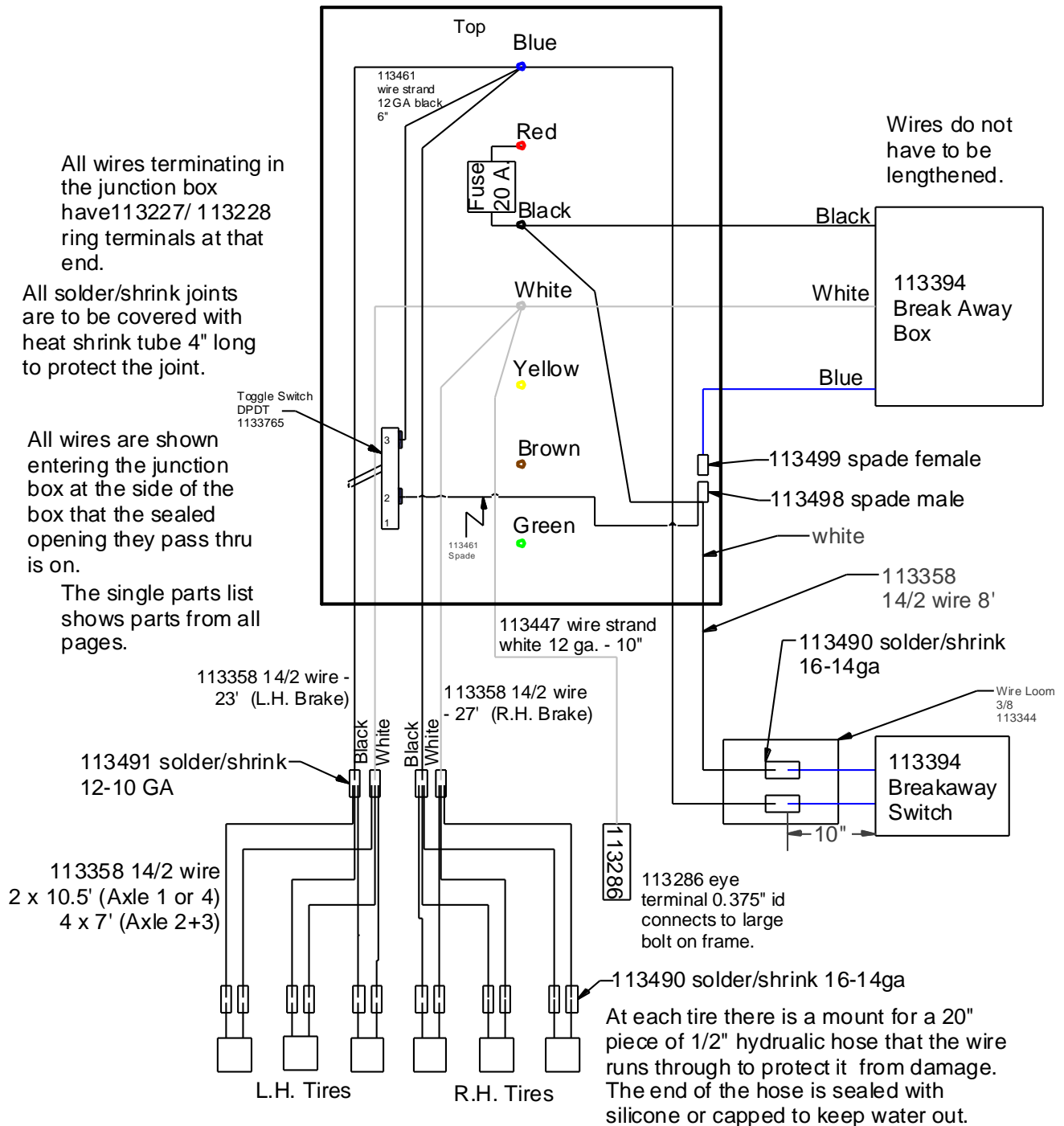


ITEM	QTY	PART NUMBER	ITEM	QTY	PART NUMBER
1	2	113211 heat shrink tubing 3/4" - 4"	11	1	113400 plug 7way RV trailer end
2	9	113213 heat shrink tubing 1/2" - 4"	12.1	6	113389 amber clearance assem
3	2	113214 heat shrink tubing 3/8" - 6"	12	1	108205 Oval Amber LED warning light
4	19	113228 ring terminal 12-10ga stud size 10	13	1	108206 Pig Tail 3 prong
5	1	113263 in line fuse holder	14	28	113490 Solder Shrink 16-14 GA
6	1	113268 fust ATO auto 20amp	15	19	113227 Ring Terminal 16-14 GA
7	1	113337 terminal box 7 wire	16	1	STVD Size 10
8	1	113387 combo lite mkr turn	17	6	113491 Solder Shrink 12-10 GA
9	1	113388 combo lite mkr turn no lic	18	1	1133765 toggle Switch
10	1	113396 ID bar three light			

1.29. WIRING DIAGRAM

450625 Electrical Kit Multitrailer 31ft Brakes

10/06/2016 ND



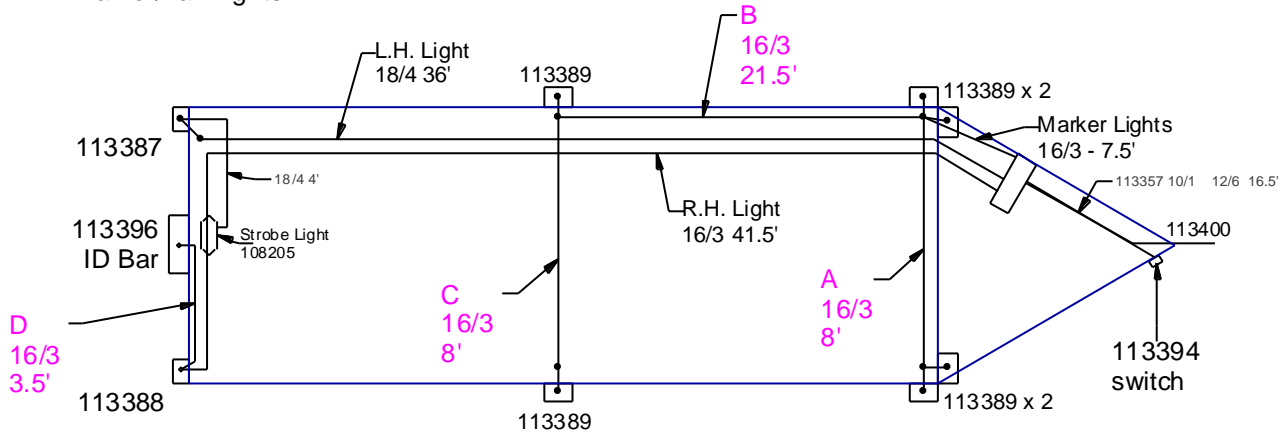
Not all trailers will have 3 axles, some will only have 2 axles.

1.30. WIRING DIAGRAM

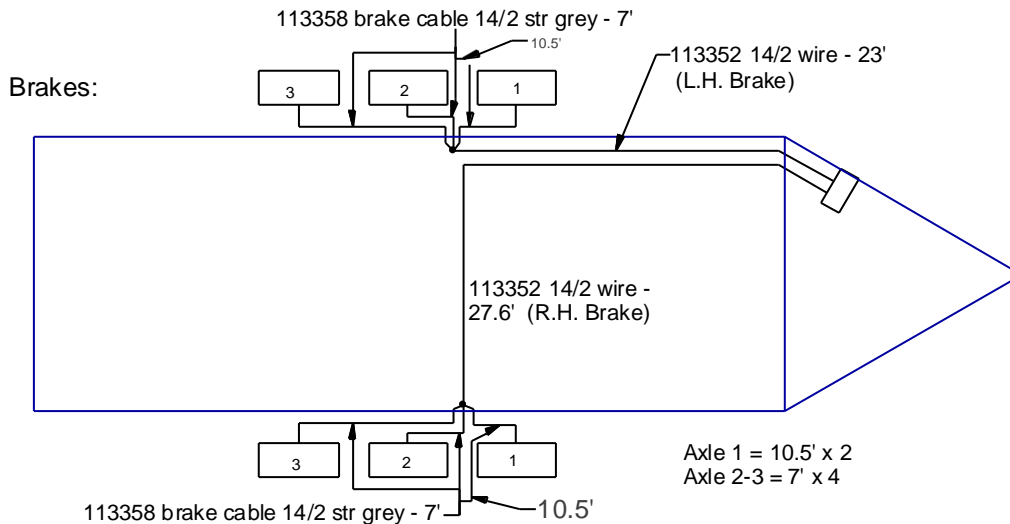
450625 Wiring Schematic

10/06/2016 ND

Marker/Tail Lights:



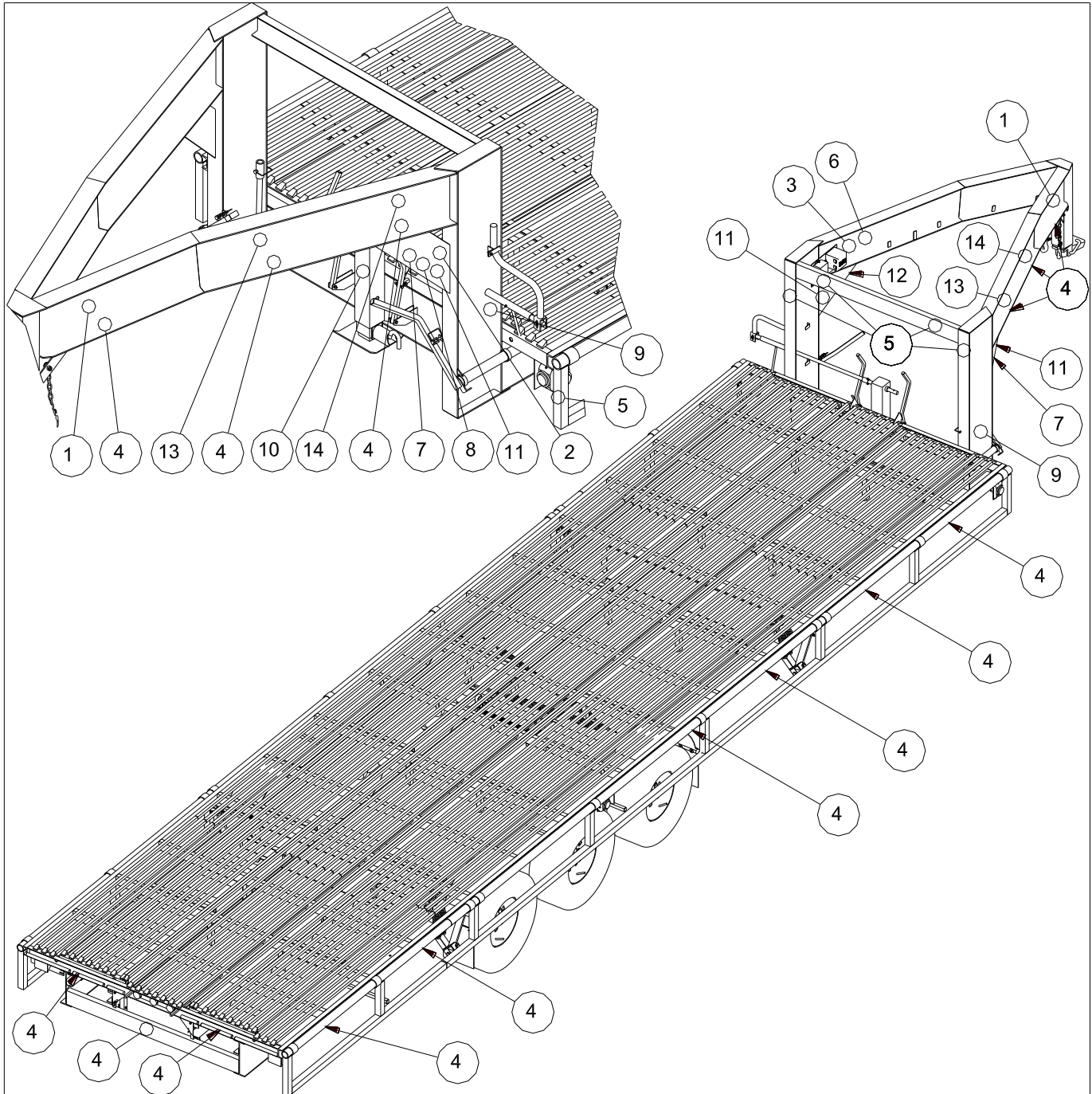
1 pig tail (P.T.) is used to join each 113389 marker light to the 16/3 wire that goes to its location.
4 pieces of 16/2 wire are used of the specified lengths, including the wire from the junction box.



This wiring diagram shows how the brake cables are run from the junction box at the front of the trailer, along the inside of the L.H. I-beam, and then join to a cable that comes from each axle. From each hub on the axle there are two wires that control the brakes.

All wires that run along the side of the multitrailer do so along the inside of the I-beam along that side. There are a number of L shaped tabs welded on along there to hold the wire in place. After the wire is placed in the tab it is struck with a hammer to bend it over so the wire cannot bounce out of place. For the wires that go to the R.H. tires, and middle marker light one of the channels near that area has a number of tabs along its backside that are used to hold the wires in place.

1.31. DECAL LOCATIONS



Parts List			Parts List		
ITEM	QT	PART NUMBER	ITEM	QT	PART NUMBER
1	2	113501 Decal - Ag Shield 3"x12"	8	1	113554 Decal - Warning Runaway Hazard W300
2	1	113507 Danger Read Owners Manual	9	2	113555 Decal - Warning Pinch Point SW202
3	1	113513 Warning Battery Exploding Gases	10	1	113556 Decal - Warning Crushing Hazard
4	10.5	113514 Reflective Tape White and Red	11	2	113557 Decal - Warning Low Obstacle Hazard
5	1.3	113517 Reflective Tape White 2" Wide	12	1	113558 Decal - Danger Transporting
6	1	113540 Conformance Label	13	2	450328 Decal - Haring
7	2	113550 Decal - Warning falling Object Hazard	14	2	450329 Decal - Multitrailer 4.5" x 31"

8. WARRANTY

1. Ag Shield Manufacturing warrants each new MultiTrailer to be free from factory defects in material and workmanship under normal use and service, when set up and operated in accordance with factory instructions for one year from the date of delivery to the original purchaser.
2. Ag Shield's obligation under this warranty is limited to the supplying of replacement parts which are defective due to factory workmanship or material.
3. Your Ag Shield Dealer is responsible for providing warranty labour. Credit for required labour is specifically agreed to on an individual case basis.
4. The warranty is void on any unit which has been tampered with, or modified in any way not authorized in writing by the factory.
5. This warranty is void on any unit which is subject to misuse, negligence or accident, or which has had the serial number tampered or removed.
6. A "Warranty Claim Form" (sample at end of handbook) must be submitted to Ag Shield with returned parts in order for parts to be considered for warranty examination.
7. A warranty registration page from the front of this manual must be returned to the factory within 30 days of purchase in order to qualify for warranty examination.
8. All returned parts must be sent to the factory freight prepaid, and warranty parts will be returned to you freight collect.
9. Replacement parts shipped pending receipt of parts for examination will be invoiced, and remain on your account until such time as examination indicates that a credit for those parts be issued or that payment is due.
10. Parts not returned for warranty examination within 30 days must be paid for at that time. Ag Shield will immediately reimburse any cash paid for items that are later determined defective.
11. Warranty terms and conditions are subject to provincial and state legislation.
12. Warranty on Dexter Torflex rubber suspension axle is handled directly by any local Dexter dealer, and is one year on hubs, drums, bearings, and 5 years on the balance of Torflex axle, both starting at the date of sale to end user customer.

WARRANTY CLAIM FORM

Dealer			Ag Shield Mfg Box 9, Benito, MB, R0L 0C0 ph 800-561-0132 fax 204-539-2130 ph 204-539-2000i			End User					
Address						Address					
City	State/Province	Zip/Postal				City	State/Province				
DATE OF SALE		DATE FAILED		REPAIR DATE		ACRES/HOURS		MODEL		SERIAL NUMBER	
LABOUR HOURS		LABOUR RATE		LABOUR AMOUNT		PARTS MUST BE RETURNED TO BENITO MB FREIGHT PREPAID TO BE CONSIDERED FOR WARRANTY. DATE SHIPPED					
QUANTITY ITEM	PART NUMBER	DESCRIPTION		PRICE EACH	TOTAL PRICE	DESCRIBE THE CAUSE OF FAILURE AND CORRECTIVE ACTION TAKEN			APPROVE /REJECT		
1											
2											
3											
4											
5											
6											
7											
8											
I CERTIFY THAT THE INFORMATION IS ACCURATE AND THAT THE PARTS WERE REPLACED ON THE MACHINE				PARTS		DATE PARTS RECD			RECD BY		
				LABOUR		ITEMS TO SUPPLIERS					
				TOTAL							

SHADED AREAS AG SHIELD USE ONLY ---PLEASE ADD DETAILS FOR ITEM NUMBERS ON BACK

ITEM

ITEM

New wiring diagram – switch number 450610 kit

New part pages,