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#### **WARRANTY POLICY & REGISTRATION**

Go online to www.demco-products.com to review Demco warranty policies and register your Demco product.

### INTRODUCTION

Thank you for purchasing a Demco Grain Cart. We feel you have made a wise choice and hope you are completely satisfied with your new piece of equipment. Proper care and use will result in many years of service.



## **WARNING:** TO AVOID PERSONAL INJURY OR DEATH, OBSERVE FOLLOWING INSTRUCTIONS:

Ensure that anybody present is clear before applying power to any machinery used in conjunction with grain cart or when moving grain cart.

Never allow anyone in, near, or on grain cart during transporting or unloading of grain. Moving grain is dangerous and can cause entrapment, resulting in severe injury or death by suffocation.

Do not exceed 20 miles per hour when towing grain cart.

### **GENERAL INFORMATION**

- 1. Unless otherwise specified, high-strength (grade5) (3 radial-line head markings) hex head bolts are used throughout assembly of this piece of equipment.
- 2. Whenever terms "LEFT" and "RIGHT" are used in this manual it means from a position behind wagon box and facing forward.
- 3. When placing a parts order, refer to this manual for proper part numbers and place order by **PART NO. and DESCRIPTION.**
- Read assembly instructions carefully. Study assembly procedures and all illustrations before you begin assembly. Note which parts are used in each step. This unit must be assembled in proper sequence or complications will result.

### SAFETY

TAKE NOTE! THIS SAFETY ALERT SYMBOL FOUND THROUGHOUT THIS MANUAL IS USED TO CALL YOUR ATTENTION TO INSTRUCTIONS INVOLVING YOUR PERSONAL SAFETY AND SAFETY OF OTHERS. FAILURE TO FOLLOW THESE INSTRUCTIONS CAN RESULT IN INJURY OR DEATH!



THIS SYMBOL MEANS

ATTENTION

### **BECOME ALERT**

### YOUR SAFETY IS INVOLVED!

#### SIGNAL WORDS:

This manual uses of the following signal words--**DANGER**, **WARNING**, and **CAUTION**-- with safety messages. The appropriate signal word has been selected using the following guidelines.

#### **DANGER:**

Indicates an imminently hazardous situation that, if not avoided, will result in death or serious injury. This signal word is to be limited to 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 alert against unsafe practices.

If you have questions not answered in this manual, require additional copies, or if your manual is damaged, please contact your dealer or DEMCO, 4010 320th St., P.O. Box 189, Boyden, IA 51234 ph: (712) 725-2311 or Toll Free: 1-800-543-3626 Fax: (712) 725-2380 or 1-800-845-6420 http://www.demco-products.com



# EQUIPMENT SAFETY GUIDELINES

Every year many accidents occur which could have been avoided by a few seconds of thought and a more careful approach to handling equipment. You, the operator, can avoid many accidents by observing the following precautions in this section. To avoid personal injury, study the following precautions and insist those working with you, or you yourself, follow them.

In order to provide a better view, certain illustrations in your owners manual may show an assembly with a safety shield removed. However, equipment should never be operated in this condition. Keep all shields in place. If shield removal becomes necessary for repairs, replace shield prior to use.

Replace any caution, warning, danger or instruction safety decal that is not readable or is missing.

Do not attempt to operate this equipment under the influence of alcohol or drugs.

Review safety instructions with all users annually.

Operator should be a responsible adult. DO NOT ALLOW PERSONS TO OPERATE OR ASSEMBLE THIS UNIT UNTIL THEY HAVE DEVELOPED A THOROUGH UNDERSTANDING OF SAFETY PRECAUTIONS AND HOW IT WORKS.

To prevent injury or death, use a tractor equipped with a roll over protective system (ROPS). Do not paint over, remove, or deface any safety signs or warning decals on your equipment. Observe all safety signs and practice instructions on them.

Never exceed limits of a piece of machinery. If its ability to do a job, or to do so safely is in question **DON'T TRY IT**.



### **LIGHTING AND MARKING**

It is the responsibility of customer to know lighting and marking requirements of local highway authorities and to install and maintain equipment to provide compliance with regulations. Add extra lights when transporting at night or during periods of limited visibility.

Lighting kits are available from your dealer or from manufacturer.



- Keep safety signs clean and legible at all times.
- Replace safety signs that are missing or have become illegible.
- Replacement parts that displayed a safety sign should also display current sign.
- Safety signs are available from your distributor, dealer parts department, or factory.

#### How to install safety signs:

- Be sure that installation area is clean and dry.
- Decide on exact position before you remove backing paper.
- Remove smallest portion of split backing paper.
- Align decal over specified area and carefully press small portion with exposed sticky backing in place.
- Slowly peel back remaining paper and carefully smooth remaining portion of decal into place.
- Small air pockets can be pierced with a pin and smoothed out using piece of decal backing paper.



### **TIRE SAFETY**

- Failure to follow proper procedures when mounting a tire on a rim can produce an explosion which may result in a serious injury or death.
- Do not attempt to mount a tire unless you have proper equipment and experience to do job.
- Inflating or servicing tires can be dangerous. Whenever possible, trained personnel should be called to service and/or mount tires.
- Always order and install tires and wheels with appropriate type and load capacity to meet or exceed anticipated weight to be placed on the equipment.
- Refer to "TIRE INFLATION CHART" in your owners manual for maximum tire pressure for a Demco Grain Cart.



### **REMEMBER**

Your best assurance against accidents is a careful and responsible operator. If there is any portion of this manual or function you do not understand, contact your local authorized dealer or manufacturer.



### **BEFORE OPERATION:**

- Carefully study and understand this manual and the Owner's Manual.
- Do not wear loose-fitting clothing which may catch in moving parts.
- · Always wear protective clothing and substantial shoes.
- It is recommended that suitable protective hearing and eye protection be worn.
- Operator may come in contact with certain materials which may require specific safety equipment relative to handling of such materials. (Examples: extremely dusty, molds, fungus, bulk fertilizers, etc.)
- Keep wheel and lug nuts tightened to specified torque.
- · Assure that agricultural implement tires are inflated evenly.
- Give unit a visual inspection for any loose bolts, worn parts, or cracked welds, and make necessary repairs. Follow maintenance safety instructions included in this manual.
- · Be sure there are no tools lying on or in equipment
- Do not use unit until you are sure that area is clear, especially around children and animals.
- Don't hurry learning process or take unit for granted. Ease into it and become familiar with your new equipment.
- Practice operation of your equipment and its attachments. Completely familiarize yourself and other operators with its operation before using.
- Make sure that brakes are evenly adjusted (if equipped with brakes)
- Use a tractor equipped with Roll Over Protection System (ROPS) and fasten your seat belt prior to starting the engine.
- Manufacturer does not recommend usage of a tractor with the ROPS removed.
- · Move tractor wheels to widest recommended settings to increase stability.
- Do not allow anyone to stand between tongue or hitch and towing vehicle when backing up to equipment.



### **DURING OPERATION**

- Beware of bystanders, **PARTICULARLY CHILDREN!** Always look around to make sure that it is safe to start engine of towing vehicle or move unit. This is particularly important with higher noise levels and quiet cabs, as you may not hear people shouting.
- NO PASSENGERS ALLOWED- Do not carry passengers anywhere on or in tractor or equipment.
- Keep hands and clothing clear of moving parts.
- Do not clean, lubricate, or adjust your equipment while it is moving.

- When halting operation, even periodically, set tractor or towing vehicles brakes, disengage PTO, shut off engine, and **remove ignition key**.
- Be especially observant of operating area and terrain. Watch for holes, rocks, or other hidden hazards. Always inspect area prior to operation.
  - DO NOT operate near edge of drop-off or banks.
  - DO NOT operate on steep slopes as overturn may result.
  - Operate up and down (not across) intermediate slopes. Avoid sudden starts and stops.
- Pick the most level possible route when transporting across fields. Avoid edges of ditches, gullies, and steep hillsides.
- Be extra careful when working on inclines.
- Maneuver tractor or towing vehicle at safe speeds.
- Avoid overhead wires or other obstacles. Contact with overhead lines could cause serious injury or death.
- Avoid loose gravel, rocks, and holes; they can be dangerous for equipment operation or movement.
- Allow for unit length when making turns.
- Do not walk or work under raised components or attachments unless securely positioned and blocked.
- Keep all bystanders, pets, and livestock clear of work area.
- · Operate towing vehicle from operators seat only.
- Never stand alongside of unit with engine running or attempt to start engine and/or operate machine while standing alongside of unit.
- Never leave running equipment unattended.
- As a precaution, always recheck hardware on equipment following every 100 hours of operation. Correct all problems. Follow maintenance safety procedures.



### **FOLLOWING OPERATION**

- Following operation, or when unhitching, stop tractor or towing vehicle, set brakes, shut off engine and **remove ignition key**.
- Store unit in an area away from human activity.
- Do not park equipment where it will be exposed to livestock for long periods of time. Damage and livestock injury could result.
- Do not permit children to play on or around stored unit.
- Make sure all parked machines are on a hard, level surface and engage all safety devices.
- Wheel chocks may be needed to prevent unit from rolling.

## **HIGHWAY AND TRANSPORT OPERATIONS**

- **SAFETY CHAINS:** If equipment is going to be transported on a public highway, always follow state and local regulations regarding safety chains and auxiliary lighting. Be sure to check with local law enforcement agencies for your own particular regulations. Only safety chains (not elastic or nylon/plastic tow straps) should be used to retain connection between towing and towed machines in event of separation of primary attaching system. Use a high strength, appropriately sized hitch pin with a mechanical retainer and attach safety chains. Criss cross chains under tongue and secure to draw bar cage, mounting loops, or bumper frame.
- Adopt safe driving practices:
  - Keep brake pedals latched together at all times. **NEVER USE INDEPENDENT BRAKING** WITH MACHINE IN TOW, LOSS OF CONTROL AND/OR UPSET OF UNIT CAN RESULT.
  - Always drive at a safe speed relative to local conditions, ensure that your speed is low enough for an emergency stop. Keep speed to a minimum.
  - Reduce speed prior to turns to avoid risk of overturning.
  - Always keep tractor or towing vehicle in gear to provide engine braking when going downhill. Do not coast.
  - Do not drink and drive!
- Comply with state and local laws governing highway safety and movement of farm machinery on public roads.
- Use approved accessory lighting, flags and necessary warning devices to protect operators of other vehicles on highway during transport. Various safety lights and devices are available from your dealer.
- Use of flashing amber lights is acceptable in most localities. However, some localities prohibit their use. Local laws should be checked for all highway lighting and marking requirements.
- When driving tractor and equipment on road under 20 m.p.h. (40 kph) at night or during day, use flashing amber warning lights and a slow moving vehicle (SMV) identification emblem.
- Plan your route to avoid heavy traffic.
- Be a safe and courteous driver. Always yield to oncoming traffic in all situations, including narrow bridges, intersections, etc.
- Be observant of bridge load ratings. Do not cross bridges rated lower than gross weight at which you are operating.

- Watch for obstructions overhead and side to side while transporting.
- Always operate equipment in a position to provide maximum visibility. Make allowances for increased length and weight of equipment when making turns, stopping unit, etc.



### PERFORMING MAINTENANCE

- Good maintenance is your responsibility. Poor maintenance is an invitation to trouble.
- Make sure there is plenty of ventilation. Never operate engine of towing vehicle in a closed building. Exhaust fumes may cause asphyxiation.
- Before working on this machine, stop towing vehicle, set brakes, shut off engine and **remove ignition key**.
- Always use safety support and block wheels. Never use a jack to support machine.
- Always use proper tools or equipment for job at hand.
- Use extreme caution when making adjustments.
- Follow torque chart in owners manual when tightening bolts and nuts.
- Never use your hands to locate a hydraulic leak on attachments. Use a small piece of cardboard or wood. Hydraulic fluid escaping under pressure can penetrate skin.
- Openings in skin and minor cuts are susceptible to infection from hydraulic fluid. Without immediate medical treatment, serious infection and reactions can occur.
- When disconnecting hydraulic lines, shut off hydraulic supply and relieve all hydraulic pressure.
- Replace **all shields** and **guards** after servicing and before moving.
- After servicing, be sure all tools, parts and service equipment are removed.
- Do not allow grease or oil to build up on any steps or platform.
- When replacing bolts, refer to owners manual.
- Refer to bolt torque chart in owners manual for head identification marking.
- Where replacement parts are necessary for periodic maintenance and servicing, genuine factory replacement parts must be used to restore your equipment to original specifications. Manufacturer will not claim responsibility for use of unapproved parts or accessories and other damages as a result of their use.
- If equipment has been altered in any way from original design, manufacturer does not accept any liability for injury or warranty.
- A fire extinguisher and first aid kit should be kept readily accessible while performing maintenance on this equipment



Torque figures indicated are valid 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%.

\* GRADE or CLASS value for bolts and capscrews are identified by their head markings.

#### BOLT TORQUE DATA FOR STANDARD NUTS, BOLTS, AND CAPSCREWS.

Tighten all bolts to torques specified in chart unless otherwise noted. Check tightness of bolts periodically, using bolt chart as guide. Replace hardware with same grade bolt.

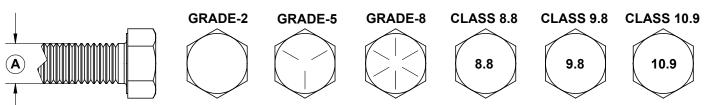
NOTE: Unless otherwise specified, high-strength Grade 5 hex bolts are used throughout assembly of equipment.

	GRADE 2 GRADE 5			GRADE 8		
" <b>A</b> "	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
1/4"	6	(8)	9	(12)	12	(16)
5/16"	10	(13)	18	(25)	25	(35)
3/8"	20	(27)	30	(40)	45	(60)
7/16"	30	(40)	50	(70)	80	(110)
1/2"	45	(60)	75	(100)	115	(155)
9/16"	70	(95)	115	(155)	165	(220)
5/8"	95	(130)	150	(200)	225	(300)
3/4"	165	(225)	290	(390)	400	(540)
7/8"	170	(230)	420	(570)	650	(880)
1"	225	(300)	630	(850)	970	(1310)

**Bolt Torque for Standard bolts \*** 

**Bolt Torque for Metric bolts \*** 

	CLASS 8.8		CLASS 8.8 CLASS 9.8		CLASS 10.9			
" <b>A</b> "	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)		
6	9	(13)	10	(14)	13	(17)		
7	15	(21)	18	(24)	21	(29)		
8	23	(31)	25	(34)	31	(42)		
10	45	(61)	50	(68)	61	(83)		
12	78	(106)	88	(118)	106	(144)		
14	125	(169)	140	(189)	170	(230)		
16	194	(263)	216	(293)	263	(357)		
18	268	(363)			364	(493)		
20	378	(513)			515	(689)		
22	516	(699)			702	(952)		
24	654	(886)			890	(1206)		



### Wheel Bearing Adjustment

- 1. Tighten castle or slotted hex nut to initial torque indicated on chart while turning hub in both directions to insure all bearing surfaces are in contact.
- 2. Back nut off and repeat step #1.
- 3. Back nut off, do not allow hub to turn.
- 4. Tighten nut to final torque indicated on chart.
- 5. Install cotter pin, if needed loosen or tighten nut to the next closest locking slot.
- 6. Check hub for end play.
- 7. If end play can be felt, start over and readjust bearings. If end play is felt again, try readjusting with a different castle or slotted hex nut.
- 8. The bearings are set correctly when no end play can be felt after adjustment.

Hub	Initial Toque	Final Torque
Dual Axle Hub	90 ft·lb	60 ft•lb
Single Axle Hub	150 ft·lb	75 ft∙lb



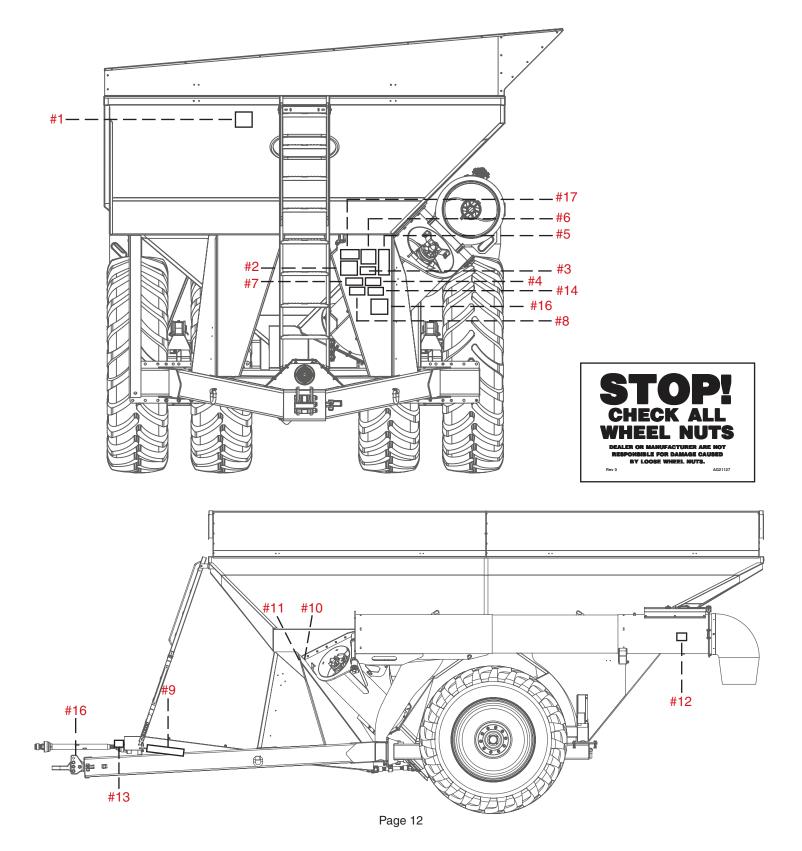
Types of safety sign and locations on equipment are shown in illustration below. Good safety requires that you familiarize yourself with various safety signs, type of warning, and area or particular function related to that area, that requires your SAFETY AWARENESS.

- #1 DANGER Do not enter grain tank when auger is running!
- #2 DANGER Keep off ladder while machine is being moved or in operation!
- #3 WARNING Read and understand the operator's manual!
- #4 WARNING Keep hands and clothing away from moving parts!
- #5 DANGER Never play in or on grain! Farm safety just 4 kids!
- #6 DANGER Electrocution can occur without direct contact with power lines !
- #7 WARNING Read manual, keep all shields in place, cleaning or clearing a clogged machine, keep hands, feet, and clothing away, do not stand or climb on machine, no riders!
- #8 WARNING Avoid bodily injuries from hydraulic oil under pressure.
- # 9 DANGER This decal is on pto shaft, Guard is missing do not operate!
- #10 DANGER Pinch point keep hands and clothing away from moving parts!
- #11 WARNING Keep all persons and objects clear while any part of this machine is in motion!
- #12 DANGER Electrocution can occur without direct contact with power lines!
- #13 DANGER Rotating driveline!
- #14 WARNING Do not exceed 20 MPH when towing Grain Cart
- #15 Decal Kit Decals #1 #14 are available as a kit.
- #16 STOP Check all wheel nuts. Dealer or Manufacturer are not responsible for damage caused by loose wheel nuts. (AG21127, Qty 2)
- #17 WARNING For increased life of the track system & grain cart, avoid sharp turns. (AG21185, Qty 1)

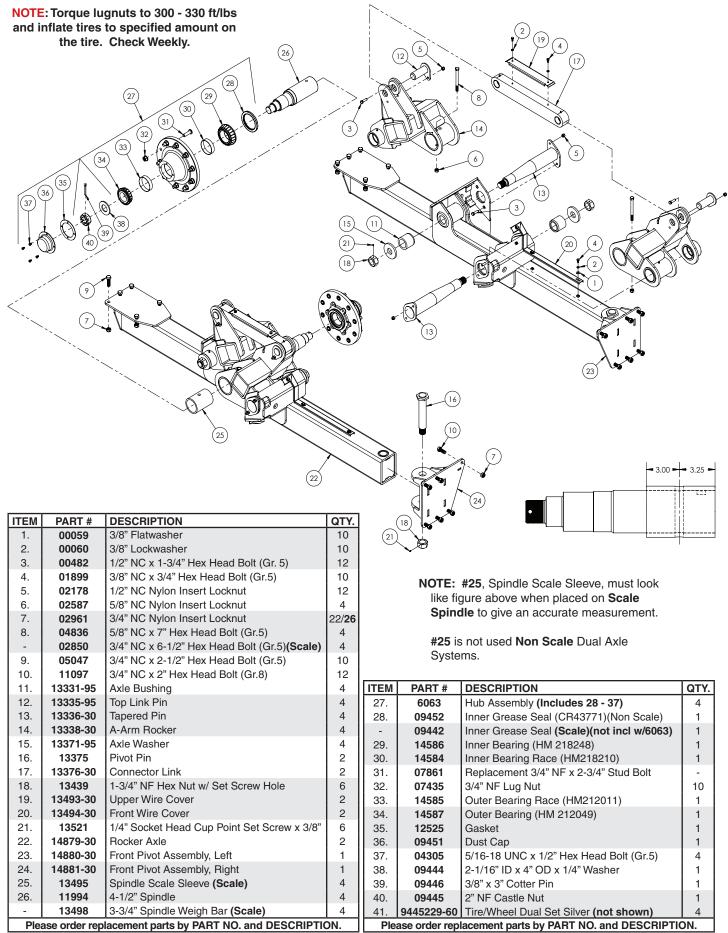
Decal #16 & #17 are not part of the decal kit.



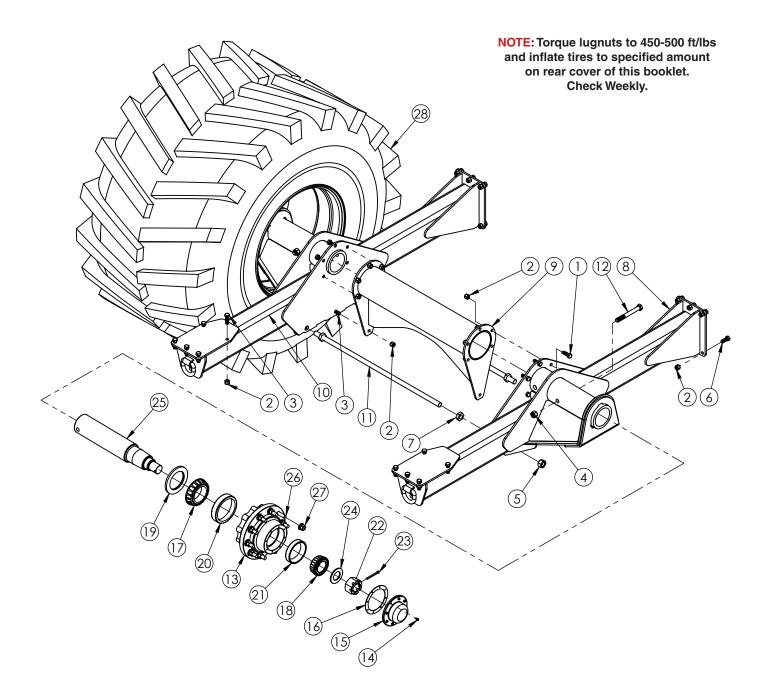
Types of safety sign and locations on equipment are shown in illustration below. Good safety requires that you familiarize yourself with various safety signs, type of warning, and area or particular function related to that area, that requires your SAFETY AWARENESS.



## **DUAL AXLE ASSEMBLY**

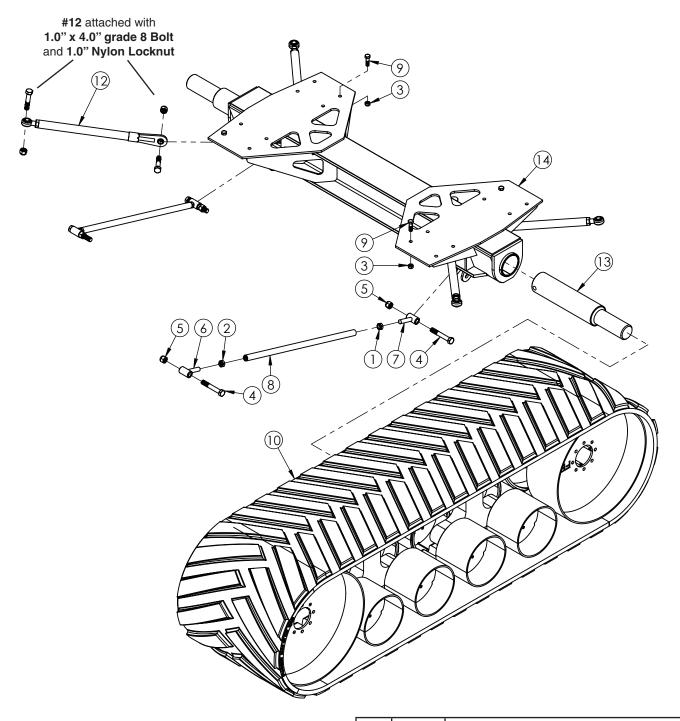


## SINGLE AXLE ASSEMBLY

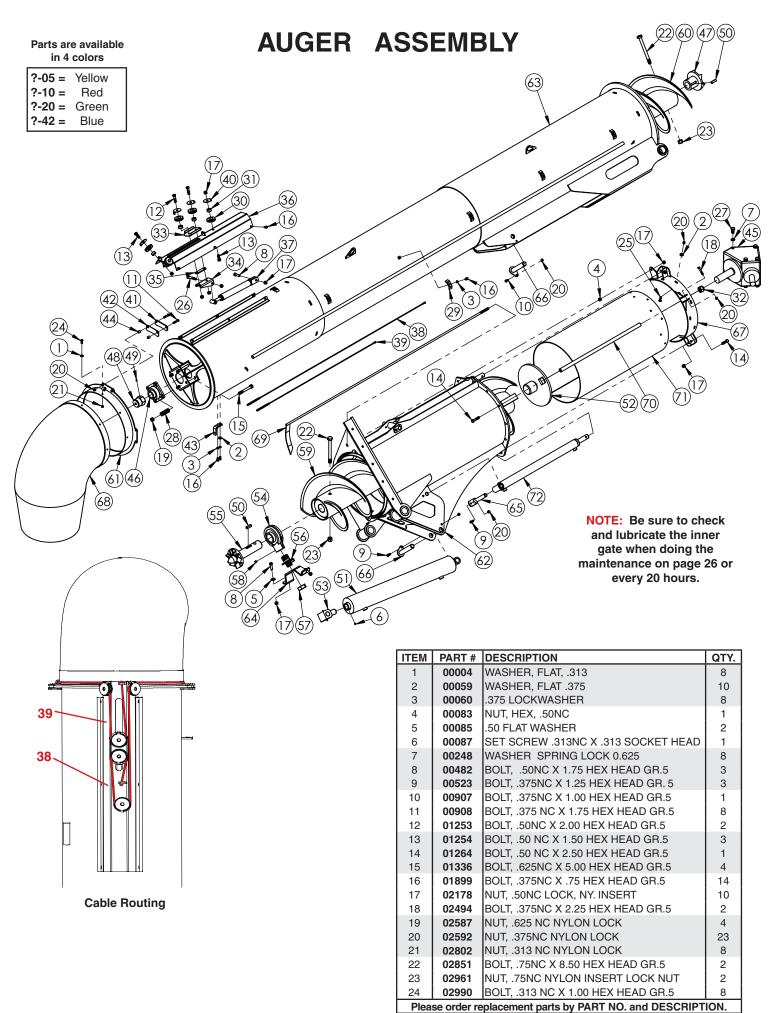


ITEM	PART #	DESCRIPTION	QTY.	ITEM	PART #	DESCRIPTION	QTY.
1	01235	BOLT 3/4" NC X 2" HEX GR5	10	16	14025	GASKET	1
2	02961	NUT 3/4" NC NYLON LOCK	34	17	14492	INNER BEARING (71455, Timken)	1
3	05047	BOLT 3/4" NC X 2-1/2" HEX GR5	12	18	14493	OUTER BEARING (663, Timken)	1
4	09455	NUT 1.0" NF NYLON LOCK	2	19	14494	INNER GREASE SEAL (POS5507556SA)	1
5	09701	NUT 1-1/4" NF	4	20	14553	INNER BEARING RACE (71750, Timken)	1
6	11097	BOLT 3/4" NC X 2" HEX GR8	12	21	14554	OUTER BEARING RACE (653, Timken)	1
7	14615	1.25"-12UNF JAM NUT	4	22	13899	NUT 2" NF CASTLE	1
8	15117-30	AXLE MOUNT ASSEMBLY, RH	1	23	13911	PIN 3/8" x 3" COTTER	1
9	15118-30	CROSS TUBE ASSEMBLY	1	24	14017	WASHER 2-1/16" ID x 4" OD x 1/4"	1
10	15119-30	AXLE MOUNT ASSEMBLY, LH	1	25	14489	SPINDLE	2
11	15120-30	AXLE TIE ROD	2	26	14026	BOLT 3/4" NF x 2-3/4" STUD (Replacement)	20
12	15134	BOLT 1.0" NF X 8-1/2" HEX GR8	2	27	14027	NUT M22 x 1.5 FLANGE (Replacement)	20
13	6053	HUB ASSEMBLY (Includes 14 - 21)	2	28	9445224-60	76 x 50 x 32 Tire/Wheel Silver	2
14	04305	BOLT 5/16" NC x 1/2" HEX GR5	8	-	9445230-60	1050/50R32 195A/B Tire/Wheel Silver	2
15 <b>13901</b> DUST CAP 1				PI	ease order	replacement parts by PART NO. and DESCRIPTIO	N.
PI	ease order	replacement parts by PART NO. and DESCRIPTION	۷.				

## TRACK AXLE ASSEMBLY



ITEM	PART #	DESCRIPTION	QTY.
1	01948	1.0"-16UNF JAM NUT LEFT HAND	2
2	01949	1.0"-16UNF JAM NUT RIGHT HAND	2
3	02961	3/4" NC NYLON INSERT LOCKNUT	16
4	09454	1.0" NF X 6-1/2" HEX HEAD BOLT GR8	4
5	09455	1.0" NF NYLON INSERT LOCKNUT	4
6	13544	TENSION ROD END, RH	2
7	13545	TENSION ROD END, LH	2
8	13546	TIE ROD	2
9	14700	3/4" NC X 2-1/2" HEX HEAD BOLT GR8	16
10	14820	TRACK CARRIAGE ASSEMBLY, LH	1
11	14821	TRACK CARRIAGE ASSEMBLY, RH (NOT SHOWN)	1
12	14822	TENSION BAR F/ TRACK AXLE	4
13	14863	TRACK AXLE PIVOT SHAFT	2
-	14823	TRACK AXLE PIVOT WEIGHBAR (Scale)	2
14	15008-30	TRACK AXLE FOR 1252 GC	1
PI	ease order	replacement parts by PART NO. and DESCRIPTION	۷.

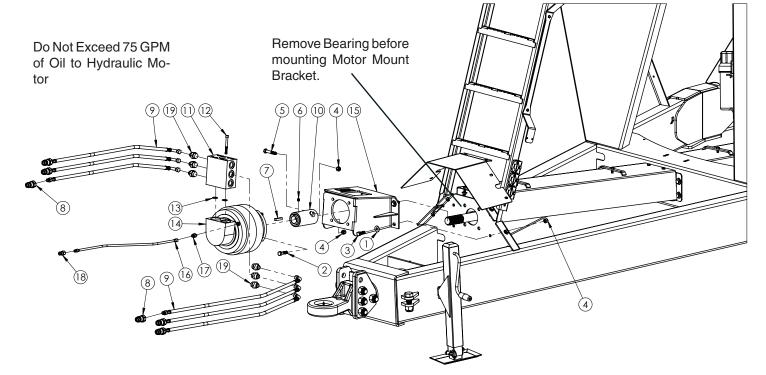


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ITEM	PART #	DESCRIPTION	QTY.
25	03526	BOLT .375NC X 1.50 FLAT HD SOCKET	9
26	05290	BOLT .50NC X 3.25 HEX HEAD GR.5	1
27	05366	BOLT, .625 NC X 1.25 HEX HEAD GR.5	8
28	09168	SPRING, COMPRESSION	4
29	09218-95	HOSE KEEPER, 2 HOSE	6
30	09282	CABLE SHEAVE	5
31	09283	SHEAVE BUSHING	5
32	12477	1"-8 UNC NYLON INSERT NUT	2
33	12512-30	TROLLEY TOP	1
34	12513-30	TROLLEY BOTTOM	1
35	12514-95	TROLLEY SPACER	1
36	12515-30	CYLINDER MOUNT/COVER	1
37	12522-30	CYLINDER ASSEMBLY, 1.50", .75 ROD	1
38	12528	CABLE LONG F/ 18" ADJUSTABLE CHUTE	1
39	12529	CABLE SHORT F/ 18" ADJUSTABLE CHUTE	1
40	12531-95	CABLE RETAINER	5
41	12549-30	MOUNT RING RETAINER BRKT	1
42	12550	PLASTIC RETAINER BRKT SPACER	1
43	12555-30	LIGHT BRACKET	1
44	12667-95	RETAINER BRACKET BUSHING	2
45	13339	GEARBOX	1
46	13411	BEARING 1.75" 4-BOLT FLANGE	1
47	13414	DRIVE CASTING OUTER W/ KEYWAY	1
48	13424-30	NUT SPACER NUT	1
Plea	se order re	placement parts by PART NO. and DESCRIPT	ION.

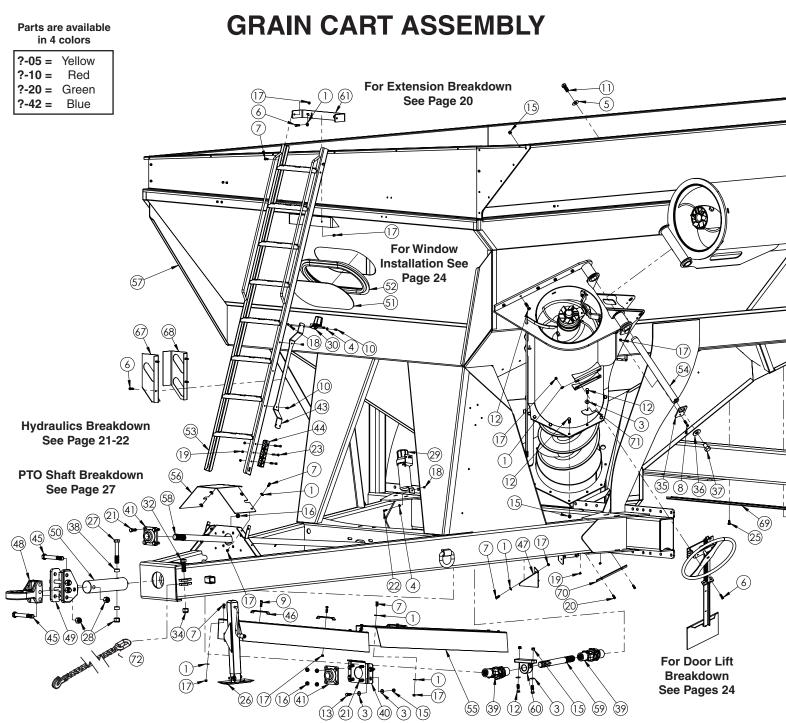
ITEM	PART #	DESCRIPTION	QTY.
49	13521	SET SCREW .25NC X .375 SOCKET CUP	2
50	13538	.50 x .50 x 1.75" KEY	2
51	13984-30	HYD CUSHION CYLINDER 4.50" X 32.00"	1
52	14005-30	LOWER DRIVE W/ SQUARE PEG HOLE	1
53	14028-30	HYDRAULIC CYLINDER END	1
54	14108	2.50" HANGER BEARING	1
55	14110	INNER DRIVE CASTING	1
56	14125	HANGER BEARING MNT SPUD	1
57	14127	1-1/2" NF JAM NUT	1
58	14313	1/2" NC x 1/2" SOCKET SET SCREW	1
59	14861-30	INNER FLIGHTING	1
60	14862-30	OUTER FLIGHTING	1
61	14887-30	ADJUSTABLE CHUTE DRIVE RING, 20"	1
62	14889-?	INNER AUGER ASSEMBLY	1
63	14892-?	20" OUTER AUGER TUBE	1
64	14894-30	HANGER BEARING MOUNT	1
65	14898-95	INNER AUGER DOOR PIN	2
66	14899-95	OUTER AUGER PIN	2
67	14932-30	INNER DOOR MOUNT	1
68	14935	DISCHARGE CHUTE	1
69	14937-30	INNER DOOR INDICATOR	1
70	14943	INNER DOOR GUIDE ROD	1
71	14944-30	INNER DOOR	1
72	15045-30	HYD. CYLINDER 2.0" BORE	2
Plea	se order re	placement parts by PART NO. and DESCRIPT	ION.

## HYDRAULIC DRIVE ASSEMBLY



ITEM	PART #	DESCRIPTION	QTY.	
1	00085	1/2" Flat Washer	4	
2	01253	1/2" x 2.25" Bolt (Gr.5)	4	
3	01254	1/2" x 1-1/2" Bolt (Gr.5)	4	
4	02178	1/2" Nylon Insert Locknut	9	
5	04797	1/2" x 2-3/4" Bolt (Gr.5)	1	
6	05256	3/8" x 1/2" Set Screw	2	
7	13535	Replacement 3/8" x 2" Square Key	1	
8	13786	Quick Coupler	6	
9	13787	5/8" x 168" Hydraulic Hose	6	
Please order replacement parts by PART NO. and DESCRIPTION.				

ITEM	PART #	DESCRIPTION	QTY.		
10	15110-30	Coupler Assembly, 1-3/4"-20 Spline x 3/8 key	1		
11	15111	FS Hydraulic Motor Valve Manifold	1		
12	**	Replacement Cap Screw	-		
13	**	Replacement O-Ring	-		
14	15112-30	FS350 Hydraulic Motor	1		
15	15114-30	Hydraulic Motor Mount	1		
16	15234	3/8" x 128" Hydraulic Hose	1		
17	15235	FTG Str #6 Male JIC to #4 British PP Male	1		
18	15236	Case Drain Quick Coupler	1		
19	15237	FTG Str #12 Male O-Ring to #10 Male JIC	6		
-	05198	Rubber Quick Coupler Cover (Not Shown)	6		
Plea	Please order replacement parts by PART NO. and DESCRIPTION.				



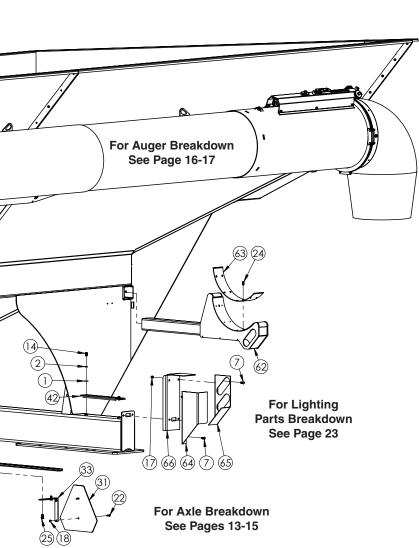
#### WARNING: BE CERTAIN ALL POWER IS OFF WHEN CONNECTING PTO OR HYDRAULIC LINES TO TRACTOR

- Connect Grain Cart to tractor using a good quality hitch pin. Attach a safety chain.
- Attach power take-off shaft to tractor. Check tractor drawbar and adjust to allow clearance.
- Raise jack stand and place to rear storage position.
- Make sure no debris is in the grain cart.
- Attach hydraulic lines to tractor.
- Connect lighting hook-up to tractor.

#### LOADING AND UNLOADING GRAIN

- With the gate indicator in the closed position, fill the box with grain.
- With the PTO disengaged, extend auger.

- Start PTO at a <u>slow rate of speed</u> until the upper and lower drives are engaged.
- Increase PTO speed and open the inner gate halfway. When grain begins to flow, open gate to full position.
- Once grain stops flowing, return gate to closed position.
- Never exceed 1000 RPM on the system.
- Never fill grain cart unless inner gate is closed.
- Disengage PTO and allow it to come to a complete stop. Auger is now ready to fold to stored position.
  <u>DO NOT PULL THE GRAIN CART UNLESS THE</u> <u>AUGER IS IN THE STORED POSITION.</u>
- Never fold or extend auger unless PTO is completely stopped.
- Never engage auger when system is moving at a high rate of speed.
- Never do maintenance work or service cart while the tractor is running.

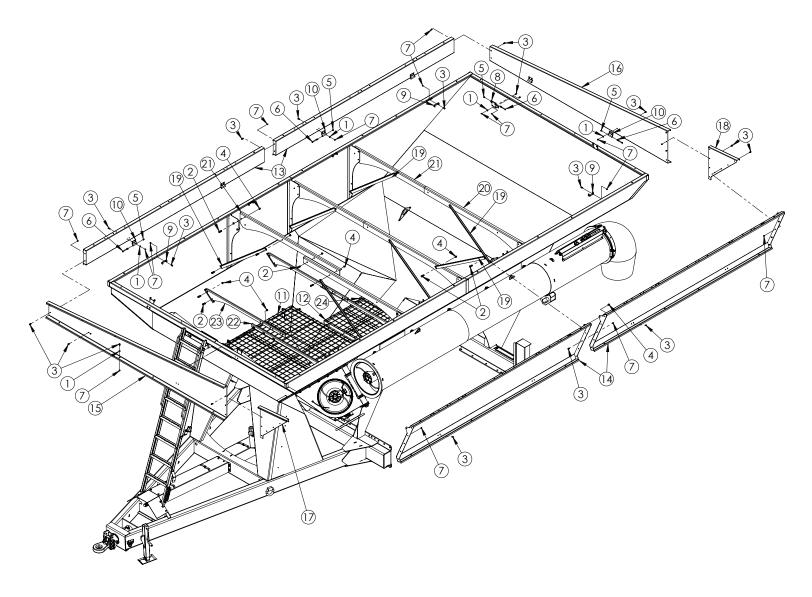


#### NOTE: Torque lugnuts and inflate tires to specified amount on the tire. Check Weekly.

ITEM	PART #	DESCRIPTION	QTY.			
-	15275-30	LIGHT TUBE COVER	2			
67	14956-30	LIGHT POD FRONT, RH	1			
68	14957-30	LIGHT POD BACK, RH	1			
-	15098-30	LIGHT TUBE F/ TRACK, RH	1			
69	14971-30	REAR SILL WIRE COVER F/ WHEEL UNIT	1			
-	15103-30	REAR SILL WIRE COVER F/ TRACK	1			
-	15104-30	SIDE SILL WIRE COVER F/ TRACK	1			
70	15390-30	DOOR STOP	1			
71	15396-30	RETAINER STRAP	1			
72	12154	SAFTEY CHAIN	1			
Ple	Please order replacement parts by PART NO. and DESCRIPTION.					

	ITEM	PART #	DESCRIPTION	QTY.
	1	00059	WASHER, FLAT .375	24
	2	00060	WASHER, LOCK .375	2
	3	00085	WASHER, FLAT .50	10
	4	00214	WASHER, FLAT, .25	4
	5 6	00492 00523	WASHER, FLAT, .75 BOLT, .375NC X 1.25 HEX HEAD GR. 5	1 6
	7	00907	BOLT, .375NC X 1.25 HEX HEAD GR. 5	26
	8	00908	BOLT, .375 NC X 1.75 HEX GR.5	1
	9	00914	BOLT, .375 NC X 1.50 HEX HEAD GR.5	3
	10	01076	BOLT .25NC X .75 GR5 HEX	4
	11	01235	BOLT .75NC X 2.00 GR5 HEX	1
	12	01253	BOLT, .50NC X 2.00 HEX HEAD GR.5	18
	13	01254	BOLT, .50 NC X 1.50 GR.5 HEX	4
$\left  \right $	14	01899	BOLT .375NC X .75 GR5 HEX	2
	15	02178	NUT, .50NC LOCK, NY. INSERT	22
	16 17	02587	NUT, .625 NC NYLON LOCK NUT, .375NC NYLON LOCK	8
	17 18	02592 02772	NUT, .25NC LOCK NYLON INSERT	28 8
	19	02802	NUT, .313 NC NYLON LOCK	3
	20	02990	BOLT .313NC X 1.00 GR5 HEX	2
	21	03698	BOLT .625NC X 1.75 GR5 HEX	8
	22	04055	.25-20NC X 1 GD5 HEX	4
	23	04221	BOLT, .313NC X 2.50 HEX HEAD GR.5	3
	24	07082	.25NC X 1.00 FLAT HD TORX	8
	25	07594	BOLT, .375 X 1.00 HEX HEAD SELF-TAPPING	6
	26	09219-30	7000# SIDE WIND JACK W/MT	1
	27	09454	BOLT 1.0NF X 6.50 GR8 HEX	1
	28	09455	NUT, 1.0NF HEX	5 1
	29 30	10241 10277	CANISTER ELECTRICAL PLUG HOLDER	1
	31	12126	SMV SIGN	1
	32	12323	HEX BOLT 1.00-8UNC X 3.00	1
ĺ	33		SMV Sign Bracket	1
	34	12477	1"-8 UNC NYLON INSERT NUT	1
	35	13010-30	AUGER PIN PLATE	1
	36		AUGER PIN WASHER	1
	37	13012	1.0"-8NC X 1.50 HEX BOLT GR5	1
	38			2
	39		UNIVERSAL JOINT 1-3/4"-20 TO 1-3/4"-6	2
	40 41		BEARING MOUNT BEARING 1.75" 4-BOLT FLANGE	1 2
	42		UPPER WIRE COVER F/ AXLE	1
	43		HOSE WRAP BRACKET	1
	44	13503	CLAMP, HYD HOSE, 1/2" 2 PLACE	3
	45	13510	BOLT 1.0NF X 7.50 GR8 HEX HEAD	4
	46	13575-30	HOSE KEEPER, 4-6 HOSES	3
	47		GEARBOX U-JOINT SHIELD	1
	48		PERFECT HITCH 3 BOLT CAT 4/5	1
	49			1
	50 51	-	PIN HITCH 3.75 OD WINDOW GRAVITY FLOW BOX	1 1
	51		WINDOW GRAVITY FLOW BOX	1
	53		1252 GC LADDER	1
	54		AUGER PIN F/ 1252	1
	55	14911-30	FRONT PTO SHIELD	2
	56		PTO SHAFT COVER/STEP	1
	57		1252 CART BOX F/ WHEEL UNIT	1
	-		1252 CART BOX F/ TRACK UNIT	1
	58		DRIVE SHAFT, 20 SPLINE	1
	59 60	14919 14921	JACKSHAFT, 20 SPLINE-6 SPLINE PILLOW BLOCK BEARING, 1.75	1
	60 61		UPPER LADDER BRACKET F/1252 GC	1
	62		AUGER CRADLE W/ LIGHT	1
	-		AUGER CRADLE W/O LIGHT	1
	63		AUGER REST STRIP	1
	64		LIGHT POD FRONT, LH	1
	65	14954-30	LIGHT POD BACK, LH	1
	66		LIGHT POD SUPPORT, LH	1
	-		LIGHT TUBE F/ TRACK, LH	1
ļ	9 Ple	ase order r	eplacement parts by PART NO. and DESCRIPTI	ON.
I	5			

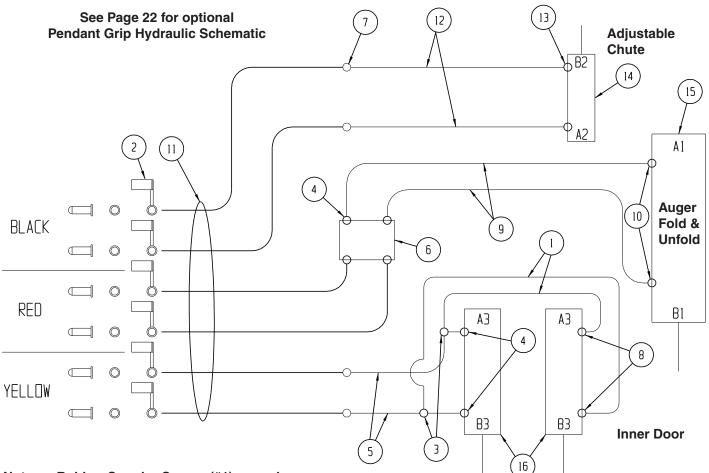
## **EXTENSION ASSEMBLY**



ITEM	PART #	DESCRIPTION	QTY.
1	00004	WASHER, FLAT, .313	32
2	01254	BOLT, .50 NC X 1.50 GR.5 HEX	49
3	01263	BOLT, .313 NC X .75 GR. 5	107
4	02178	NUT, .50NC LOCK, NY. INSERT	49
5	02592	NUT, .375NC NYLON LOCK	12
6	02769	BOLT .375NC X 4.00 GR.5 HEX	12
7	02802	NUT, .313 NC NYLON LOCK	107
8	13152-30	FRONT/BACK EXTENSION HINGE PLATE	4
9	13153-30	SIDE EXTENSION HINGE PLATE	8
10	13154-30	EXTENSION HINGE MIDDLE ASSEMBLY	12
11	14883-30	FRONT MESH F/ 1252 GC	1
12	14884-30	REAR MESH F/ 1252 GC WHEELED	1
-	15096-30	REAR MESH F/ 1252 GC TRACK	1
Please order replacement parts by PART NO. and DESCRIPTION.			ON.

ITEM	PART #	DESCRIPTION	QTY.
13	14885-30	1252 GC EXTENSION, RH	2
14	14886-30	1252 GC EXTENSION, LH	2
15	14901-30	1252 GC FRONT EXTENSION	1
16	14902-30	1252 GC REAR EXTENSION	1
17	14903-30	FRONT EXT CORNER F/1252 GC	1
18	14904-30	REAR EXT CORNER F/1252 GC	1
19	14906-30	ANGLE BRACE	7
20	14907-30	BRACE BAR, LH	3
21	14908-30	BRACE BAR, RH	3
22	14909-30	AUGER TUBE BRACE, LH	2
23	14910-30	AUGER TUBE BRACE, RH	2
24	14986-30	FENDER MESH MOUNT	2
Pleas	Please order replacement parts by PART NO. and DESCRIPTION.		

## HYDRAULIC PARTS AND ASSEMBLY

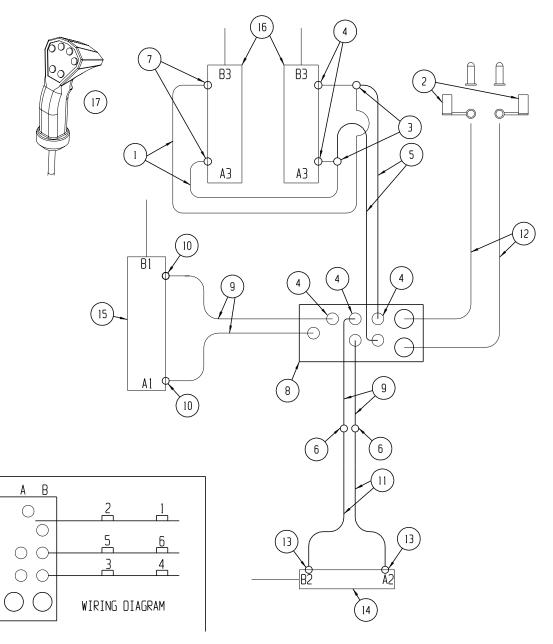


- Note: Rubber Coupler Covers (#1) are color coded to hydraulic functions.
- Black: Adjustable Chute
- Red: Auger Fold/Unfold

Yellow:	Inner	Door
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ITEM	PART #	DESCRIPTION	QTY.
1.	05190	1/4" x 48" Hydraulic Hose	2
2.	05198	Rubber Coupler Cover (Black)	2
-	12677	Rubber Coupler Cover (Red)	2
-	12678	Rubber Coupler Cover (Yellow)	2
3.	05203	Tee .563 Male Tube Fitting	2
4.	05243	Straight #6 JIC x #6 w/ O-Ring	6
5.	07071	1/4" x 72" Hydraulic Hose	2
6.	07582	Pilot Operated Check Valve	1
7.	09950	Union, #6 JIC Male 2x	4
8.	11143	Elbow #6M JIC & #6 O-Ring	2
9.	13069	1/4" x 106" Hydraulic Hose	2
10.	13442	Elbow #10M JIC x #10 O-Ring	2
11.	13883	1/4" x 18' Hydraulic Hose w/ Quick Coupler	6
-	13888	Replacement Quick Coupler #8 O-Ring	-
-	13889	Replacement #8 O-Ring	-
12.	13884	1/4" x 21.5' Hydraulic Hose	2
13.	13886	Elbow #6 O-Ring x #6M JIC w/ .041 Orifice	2
14.	12522-30	1-1/2" Bore x 8" Stroke Hydraulic Cylinder	1
15.	13984-30	4-1/2" Bore x 32" Stroke Hydraulic Cylinder	1
16.	15045-30	2" Bore x 28" Stroke Hydraulic Cylinder	2
Pleas	Please order replacement parts by PART NO. and DESCRIPTION.		

## PENDANT CONTROL HYDRAULIC SCHEMATIC

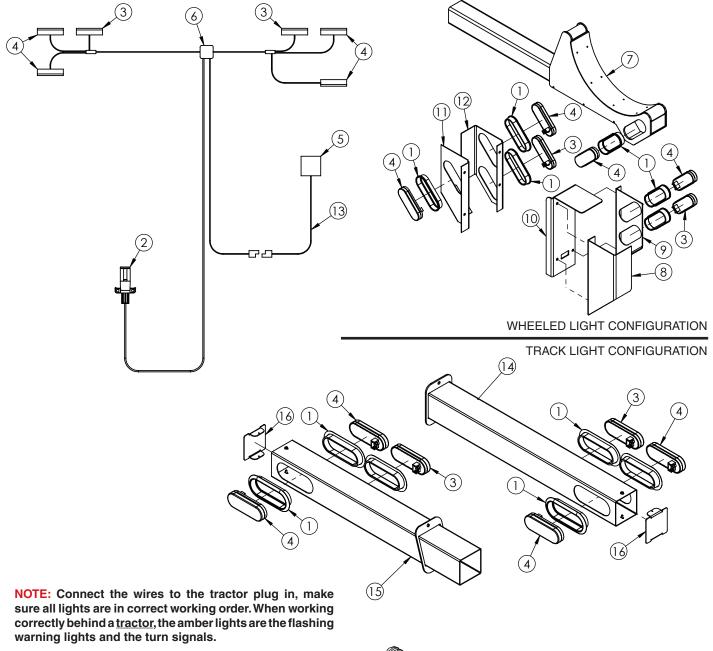


#### FIELD INSTALLATION PROCEDURE

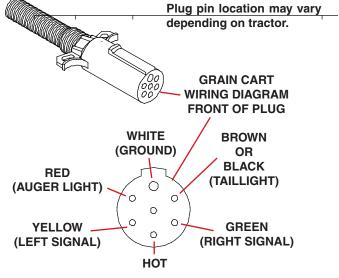
- 1. Thoroughly wash all hydraulic hoses & fittings prior to disassembly.
- 2. Remove pilot operated check valve (#3) see page 21.
- 3. Install hydraulic block (#5) where pilot operated check valve was installed.
- 4. Install hydraulic hoses to hydraulic block per pendant control hydraulic schematic.
- 5. Install wire harness from hydraulic block to grain cart hitch.
- **NOTE:** Route wire harness to prevent PTO shaft interference.
- 6. Install pendant controller (#14) in tractor cab.

ITEM	PART #	DESCRIPTION	QTY.
1.	05198	Rubber Coupler Cover (Black)	2
2.	05243	Straight #6 JIC x #6 w/ O-Ring	6
3.	09950	Union, #6 JIC Male 2x	2
4.	11143	Elbow #6M JIC & #6 O-Ring	2
5.	13064	Block With Wiring Harness	1
-	14084	Replacement Valve Cartridge, GS04	-
-	14756	Replacement Wiring Harness	-
6.	13069	1/4" x 106" Hydraulic Hose	6
7.	13442	Elbow #10M JIC x #10 O-Ring	2
8.	13884	1/4" x 21.5' Hydraulic Hose	2
9.	13885	1/2" x 192" Hydraulic Hose	2
10.	13886	Elbow #6 O-Ring x #6M JIC w/ .041 Orifice	2
11.	12522-30	1-1/2" Bore x 8" Stroke Hydraulic Cylinder	1
12.	13984-30	4-1/2" Bore x 32" Stroke Hydraulic Cylinder	1
13.	15045-30	2" Bore x 28" Stroke Hydraulic Cylinder	2
14.	13063	Pendant Controller	1
-	13566	12' Ext. Cable Pendant Controller (Opt)	-
Please order replacement parts by PART NO. and DESCRIPTION.			

## LIGHTING PARTS AND ASSEMBLY



ITEM	PART #	DESCRIPTION	QTY	
1	03652	GROMMET RUBBER OVAL	6	
2	07416	PLUG CONNECTOR, 7 WAY MALE	1	
3	14923	LED LIGHT, SEALED RED LAMP	2	
4	14924	LED LIGHT, SEALED YELLOW LAMP	4	
5	14926	LED WORK LIGHT, AUGER	1	
6	14927	MAIN WIRE HARNESS	1	
7	14947	AUGER CRADLE	1	
8	14953-30	LIGHT POD FRONT, LH	1	
9	14954-30	LIGHT POD BACK, LH	1	
10	14955-30	LIGHT POD SUPPORT, LH	1	
11	14956-30	LIGHT POD FRONT, RH	1	
12	14957-30	LIGHT POD BACK, RH	1	
-	15097-30	LIGHT POD TUBE, LH F/ TRACK (NOT SHOWN)	1	
-	15098-30	LIGHT POD TUBE, RH F/ TRACK (NOT SHOWN)	1	
13	14981	AUGER WIRE HARNESS	1	
14	15097-30	TRACK LIGHT TUBE, LH	1	
15	15098-30	TRACK LIGHT TUBE, RH	1	
16	15275-30	LIGHT TUBE COVER	2	
Plea	Please order replacement parts by PART NO. and DESCRIPTION.			

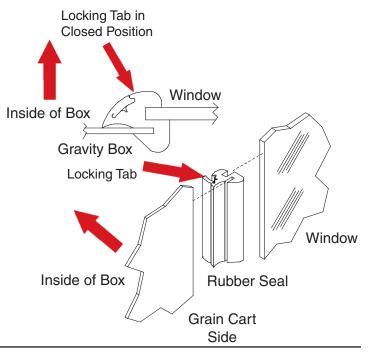


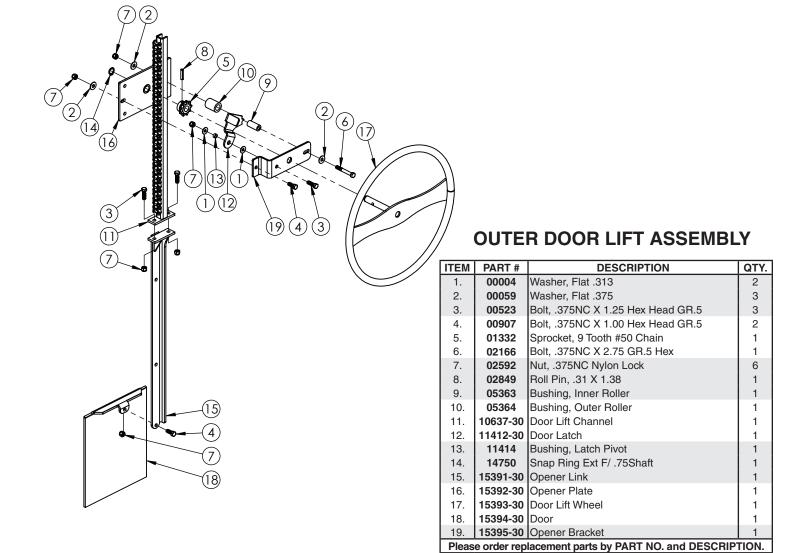
## WINDOW INSTALLATION

### **INSTALLATION PROCEDURE**

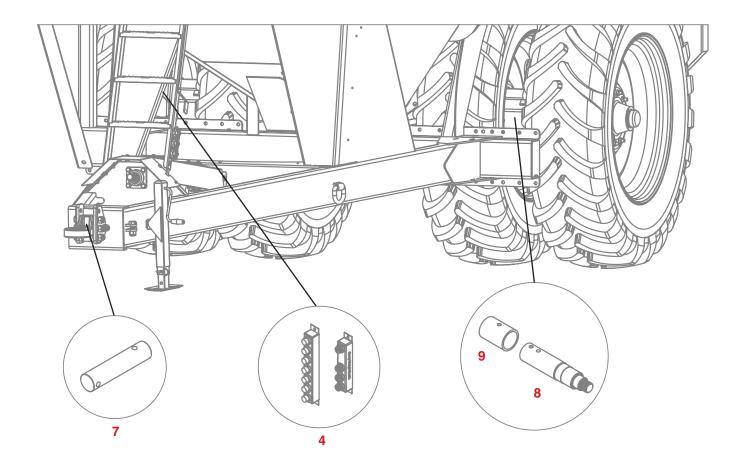
## The installation must be done from inside the box.

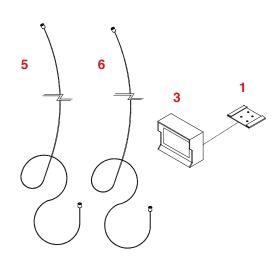
- 1. Place rubber molding in opening. Seam should begin on side of opening.
- 2. Remove the protective sheeting from both sides of the plastic window.
- 3. Slide window into groove in molding. Use a flat blade screwdriver to get molding seated correctly. Using soapy water will aid in installation
- 4. Using the flat blade screwdriver, press in the locking tab.





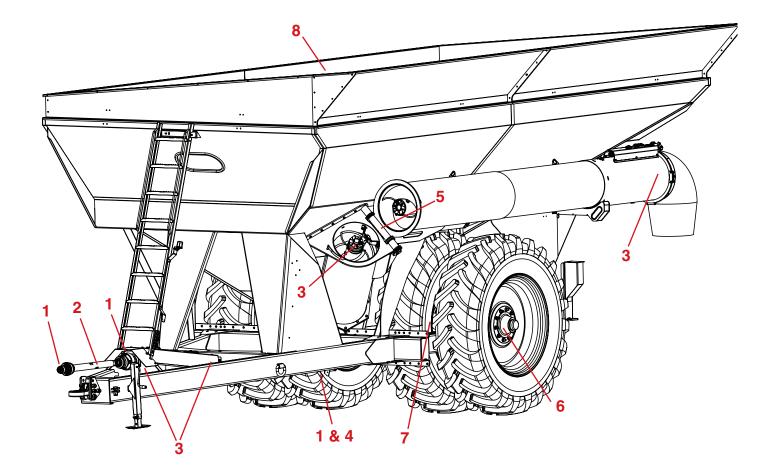
## SCALE OPTION PARTS BREAKDOWN





ITEM	PART #	DESCRIPTION	QTY
1	09440	640M Scale Bracket	1
2	09441	640M Scale Power Cord (not shown)	1
3	12259	640M Scale Monitor w/ printer port	1
4	10941	7-Port Junction Box	1
-	12257	4-Port Junction Box	1
5	12264	640M 25' Junction Box to Console Harness	1
-	-	25' Harness Junction Box to Spindle (f/ 14823 & 13907)	2
6	13266	640M 15' Junction Box Extension Cable	1
7	13983	Scale Hitch Bar w/ Harness	1
8	13498	4-1/2" Scale Spindle f/ Dual Axle w/ Harness	4
-	14823	5-1/2" Scale Pivot f/ Track Axle w/o Harness	2
-	13907	5-1/2" Scale Spindle f/ Single Axle w/o Harness	2
9	13495	Sleeve f/ Dual Scale Spindle	4
P	Please order replacement parts by PART NO. and DESCRIPTION.		

## **GREASE & LUBE**



Item #	Item	Note	
#1	U-Joints	Check and grease regularly.	
#2	РТО	Fully extend P.T.O. Shaft, then place one or two pumps of grease in each slot.	
#3	Bearing	Fixed self centering sealed bearings. <b>Do not over grease.</b> Over greasing sealed bearing will damage seals. Once a season is generally sufficient.	
#4	Gearbox	Auger gear box is filled with <b>96 oz. 80-90 gear lube</b> . To check gear box find inspection allen plug. Turn out plug. Gear lube should just start to run out. If low fill until gear lube just starts to run out. <b>DO NOT OVER FILL!</b> When gear box is full be sure to replace inspection plug.	
#5	Hinge Bushing	There is one zerk in this area inspect and grease as needed.	
#6	Axle Hubs	Axle hub with inner and outer bearings and races. Inspect regularly, pack bearing and replace inner wheel seal as needed.	
#7	Dual Axle	There are two zerks on each A-Arm and two A-Arm Assemblies on each side of cart. There are two zerks on each Connector Link. One Link per side. Grease daily.	
#8	Inner Door	Check and lubricate inner door guide rods every 20 hours of operation.	

## PTO DRIVE SHAFT PARTS BREAKDOWN

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**Check the PTO overlap length.** Try to obtain the greatest possible overlap without bottoming out the PTO shaft in its maximum operating condition. Make sure draw bar length and PTO telescoping limits are adequate for uneven terrain, gullies, levees, etc.

> **Note:** Torque Lock Pin to 75 ft-lb. Check periodically. (To remove, drive pin out from bottom.)

5

ITEM	PART #	DESCRIPTION	QTY
1		PTO Shaft Assembly (1.75"-20 Spline)	1
2	13475	PTO Shaft, Tractor Half Replacement Only	-
3	13523	Tapered Lock Pin	1
4	13541	Tractor Guard Kit, Replacement	1
5	13551	Implement Guard Kit, Replacement	1
Pleas	Please order replacement parts by PART NO. and DESCRIPTION.		

3

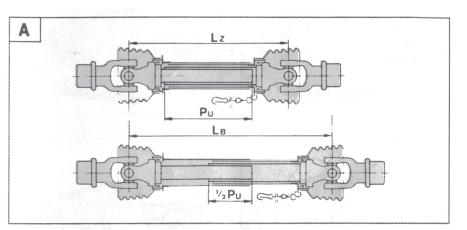
#### **1. Maximum Operating Length L**<sup>B</sup> Maximum operating length should not be more than half of telescoping member length (Pυ).

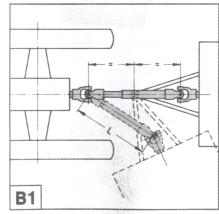
2. Maximum Joint Angles (B1 & C2) Do not exceed normal operation joint angle of 25° Ensure equal joint angles and switch off PTO if joint angles are too large and/or unequal.

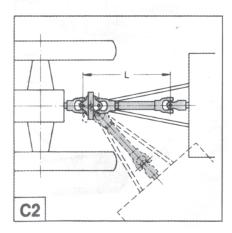
#### 3. Lubrication

Lubricate before starting work and every 8 hours of operation.

**4.** Please refer to the PTO Manufacture's Manual, which is located in the manual holder for further details regarding usage, service and lubrication grease locations.







## **GRAIN CART CHECKLIST:**

Downtime in the fields caused by field breakdowns is costly and time consuming. Many breakdowns can be eliminated by periodic equipment maintenance. By spending a little time running over this checklist, following proper after-season care, you can save time and money later on.



WARNING: To Prevent Serious Injury Or Death

• Make sure ALL guards and shields are in place.

#### • Keep hands, feet, and loose clothing away from rotating parts.

#### **Before Going To The Field :**

#### **1. HYDRAULIC HOSES**

- Check all hoses for worn or soft spots.
- Check to make sure hoses are not kinked or pinched.
- Check for leakage in any of the lines and cylinders.

#### 2. REPLACEMENT PARTS

• Replace all worn or damaged parts.

#### **3. VISUALLY INSPECT**

- Inspect tires for cracks and worn spots.
- Inspect inside of Grain Cart, make sure that all guards are in place and in good shape. Be sure auger is free from any obstructions.
- Inspect for any loose bolts, worn parts, or cracked welds, and make any necessary repairs.

## **Tire Inflation Chart**

TIRE SIZE	LOAD INDEX/PLY	RECOMMENDED TIRE PSI.			
	SINGLES				
1050/50R32	195	58 PSI			
76x50-32		50 PSI			
DUALS					
520/85R42	173	52 PSI			

#### 4. CHECK

- Tires for proper inflation.
- Lug nuts for proper torque.
- Lights for proper operation.
- Oil level in gearbox.
- Zerk locations, and grease as needed.
- All guards and shields. Replace or repair if necessary to insure proper protection.

### After Season Care:

Open inner slide gate and grease the slide rods. Open outer door to allow box to drain.

Keep auger folded back during storage.

Grease all zerk locations (see page 26 for maintenance locations).

Repack wheel bearings before storage.

Inspect tires for puncture holes or any other type of leak and repair as needed.



P.O. BOX 189 4010 320th St., BOYDEN, IA. 51234 PH: (712) 725-2311 FAX: (712) 725-2380 TOLL FREE: 1-800-54DEMCO (1-800-543-3626) www.demco-products.com Go online to www.demco-products.com for Demco warranty policies & product registration.

Tires PSI above is figured as cyclic loading @ 6mph.