



Demco

Grain Cart 1400



ASSEMBLY
OPERATION
REPLACEMENT PARTS

READ *complete manual CAREFULLY
BEFORE attempting operation.*

Doing Our Best to Provide You the Best

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.

WARRANTY POLICY, OPERATOR MANUALS & REGISTRATION

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



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**.
4. 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.

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

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.

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.

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 Street, 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>



SAFETY...YOU CAN LIVE WITH IT



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.



SAFETY SIGN CARE

- 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: extreme dust, 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 seatbelt 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 yourself and 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.

SAFETY SIGNS

DANGER
To prevent serious injury or death by suffocation!

- Never play in or on the grain.
- Flowing grain traps and suffocates victim in seconds!

Farm Safety

Just Kids

WARNING
Improper use may cause serious injury or death!

Keep off ladder while machine is being moved or in operation

WARNING
To prevent serious injury or death.

- Read operators manual before using machine.
- Keep all shields in place.
- Disengage power take off and shut off engine before servicing, cleaning or clearing a clogged machine.
- Keep hands, feet and clothing away from all moving parts.
- Do not stand or climb on machine when operating.
- No riders shall be allowed on this equipment at any time.

DANGER
Contact with electric lines will result in Serious injury or death.

Use care when moving or operating this machine near electric lines. Electrocutation can occur without direct contact.

WARNING
To prevent serious injury or death

- Stay clear of hydraulic oil under pressure.
- Relieve pressure before removing hose, valves or servicing the hydraulic system.

WARNING
To prevent serious injury or death

- Do not operate or work on this machine with out reading and understanding the operator's manual.
- If manual is lost, contact your nearest dealer for a new manual.
- Avoid unsafe operation or maintenance.

IMPORTANT
Local & State weight restrictions & regulations may affect use of this equipment on public roads and highways.

WARNING
To prevent serious injury or death, keep hands and clothing away from moving parts

PINCH POINT

CAUTION
Always tighten lug nuts to recommended torque in a star pattern.
After lug nuts are tightened to recommended torque re-torque all lug nuts every loaded mile until lug nuts retain proper torque.
After lug nuts have retained proper torque check daily.
Failure to follow this procedure will void any and all warranty of wheel and hub from damage caused by loose lug nuts.
Torque 3/4 in. lug nuts to 400 Ft. lbs.
Torque 1 in. lug nuts to 970 Ft. lbs.

WARNING
To avoid excessive wear to clevis when using as a Pintle Ring always rotate clevis 180° before using.
Always return clevis to the upright position before using as a clevis.
Failure to follow this procedure will void any and all warranty of clevis and clevis receiver.

CAUTION!
Do not exceed 20 MPH
Do not tow grain cart with auger folded out or structural damage may occur.

IMPORTANT

With *All Power Off*: grease inner door and clean slide rails every 20 hrs. and/or annually.
REV 0 AG21100

WARNING

- Failure to follow this warning could result in serious injury or death from pinching.
- Keep all persons and objects clear while any part of this machine is in motion.

#1

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	AG21181	1	Safety Decal Kit (includes decals 1-10)
11.	AG21127	2	Check All Lug Nuts
12.	AG21185	1	Track Turning Decal
C.	07278	10	Conspicuity Tape
A.	04508	4	Reflector, Amber
R.	04804	6	Reflector, Red

Please order replacement parts by
Decal Order Number.

DANGER
Contact with auger will cause serious injury or death!

Keep hands and clothing away from moving parts.

#2

DANGER
Contact with Rotating Driveline will cause serious injury or death.

Do not operate without

- All driveline guards, tractor and equipment shields in place.
- Drivelines securely attached at both ends.
- Driveline guards that turn freely on driveline.

#3

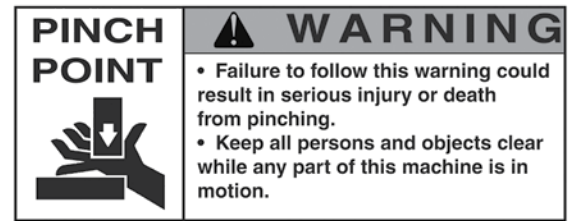
SAFETY SIGNS



#4



#5



#6



#7



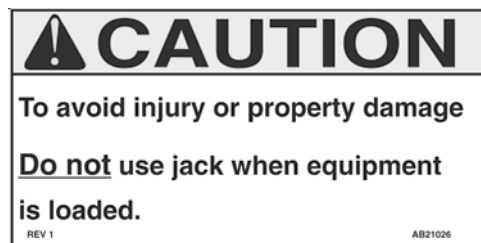
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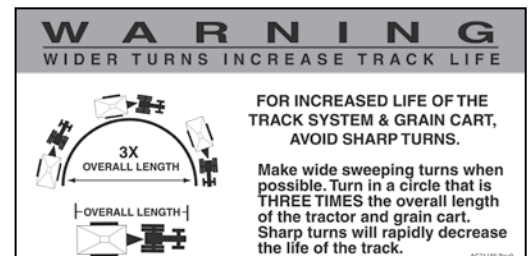
#10



#11



#9



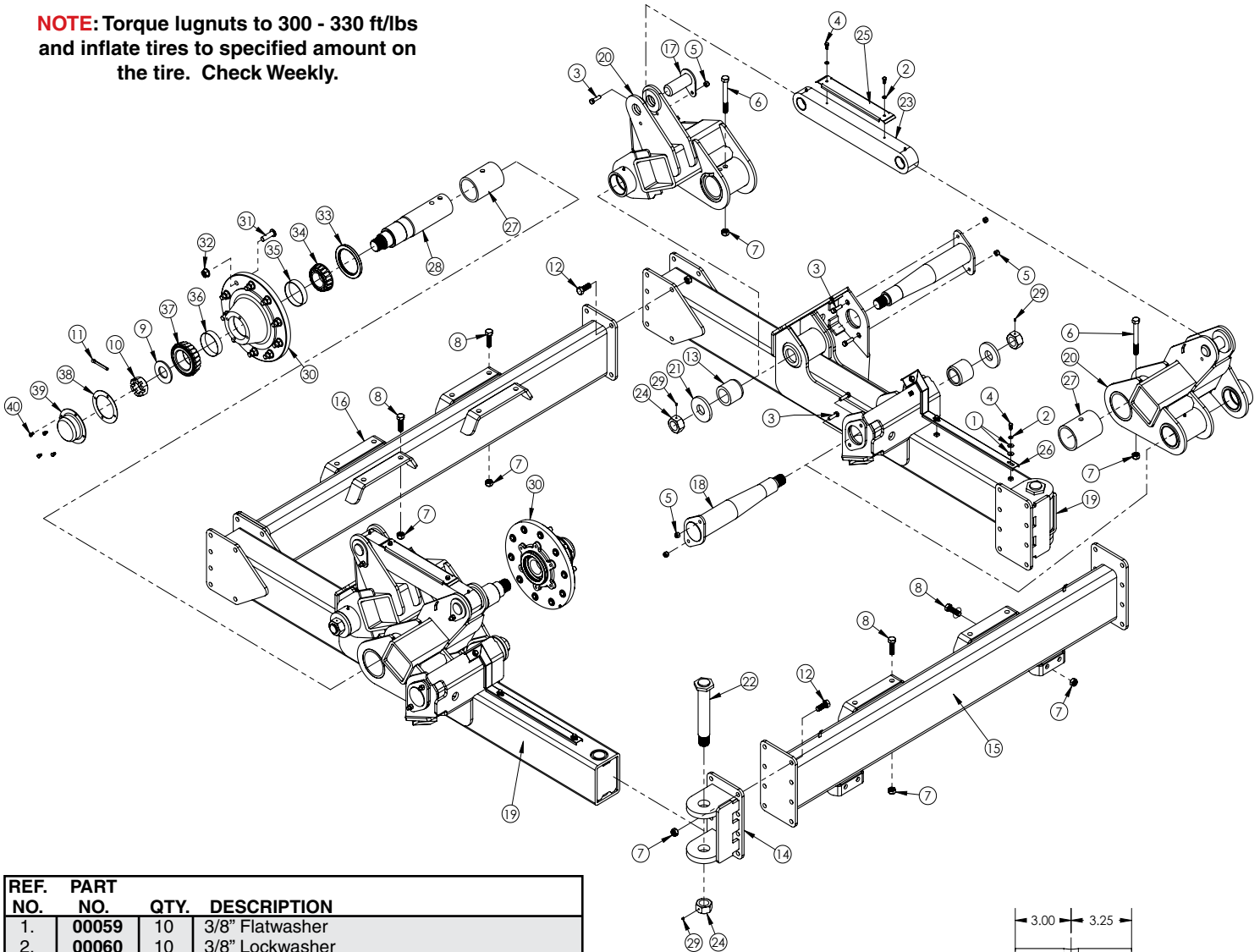
Decal for Carts with Track Axle System

#12

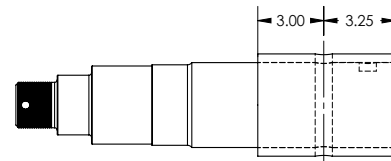
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DUAL AXLE ASSEMBLY

NOTE: Torque lugnuts to 300 - 330 ft/lbs and inflate tires to specified amount on the tire. Check Weekly.



REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	00059	10	3/8" Flatwasher
2.	00060	10	3/8" Lockwasher
3.	00482	8	1/2" NC x 1-3/4" Hex Head Bolt (Gr. 5)
4.	01899	10	3/8" NC x 3/4" Hex Head Bolt (Gr.5)
5.	02178	12	1/2" NC Nylon Insert Locknut
6.	02850	4	3/4" NC x 6-1/2" Hex Head Bolt (Gr.5) (Scale)
-	04836	-	5/8" NC x 7" Hex Head Bolt (Gr.5) (Non Scale)
7.	02961	44	3/4" NC Nylon Insert Locknut
8.	05047	16	3/4" NC x 2-1/2" Hex Head Bolt (Gr.5)
9.	09444	4	2-1/16" ID x 4" OD x 1/4" Washer
10.	09445	4	2" NF Castle Nut
11.	09446	4	3/8" x 3" Cotter Pin
12.	11097	28	3/4" NC x 2" Hex Head Bolt (Gr.8)
13.	13331-95	4	Axle Bushing
14.	13332-30	2	Front Pivot Assembly
15.	13333-30	1	Front Cross Axle
16.	13334-30	1	Rear Cross Axle
17.	13335-95	4	Top Link Pin
18.	13336-30	4	Taper Pin
19.	13337-30	2	Rocker Axle
20.	13338-30	4	A-Arm Rocker
21.	13371-95	4	Axle Washer
22.	13375	2	Pivot Pin
23.	13376-30	2	Connector Link
24.	13439	6	1-3/4" NF Hex Nut w/ Set Screw Hole
25.	13493-30	2	Upper Wire Cover
26.	13494-30	2	Front Wire Cover
27.	13495	4	Spindle Scale Sleeve
28.	13498	4	3-3/4" Spindle Weigh Bar (Scale)
-	11994	4	4-1/2" Spindle (Non Scale)
29.	13521	6	1/4" Socket Head Cup Point Set Screw x 3/8"



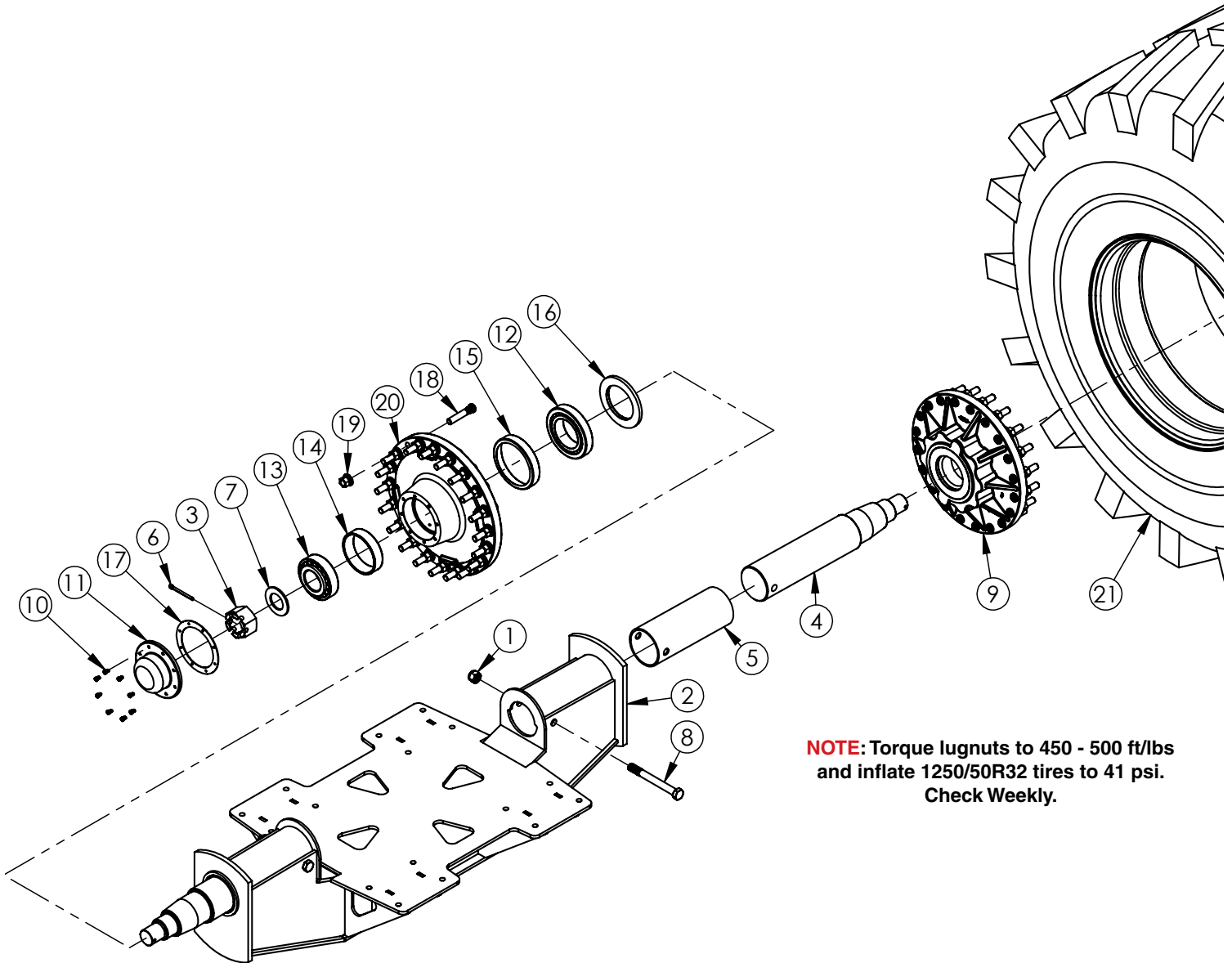
NOTE: #27, Spindle Scale Sleeve, must look like figure above when placed on **Scale Spindle** to give an accurate measurement.

#27 is not used **Non Scale** Dual Axle Systems.

REF. NO.	PART NO.	QTY.	DESCRIPTION
30.	6063	4	Hub Assembly (Includes 31 - 40)
31.	07861	-	Replacement 3/4" NF x 2-3/4" Stud Bolt
32.	07435	10	3/4" NF Lug Nut
33.	09442	1	Inner Grease Seal (Scale) (not incl w/5540)
-	09452	1	Inner Grease Seal (CR43771) (Non Scale)
34.	14586	1	Inner Bearing (HM 218248)
35.	14584	1	Inner Bearing Race (HM218210)
36.	14585	1	Outer Bearing Race (HM212011)
37.	14587	1	Outer Bearing (HM 212049)
38.	12525	1	Gasket
39.	09451	1	Dust Cap
40.	04305	4	5/16-18 UNC x 1/2" Hex Head Bolt (Gr.5)
41.	9445221-60	2	Tire/Wheel Dual Set Silver (not shown)

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

SINGLE AXLE ASSEMBLY



NOTE: Torque lugnuts to 450 - 500 ft/lbs
and inflate 1250/50R32 tires to 41 psi.
Check Weekly.

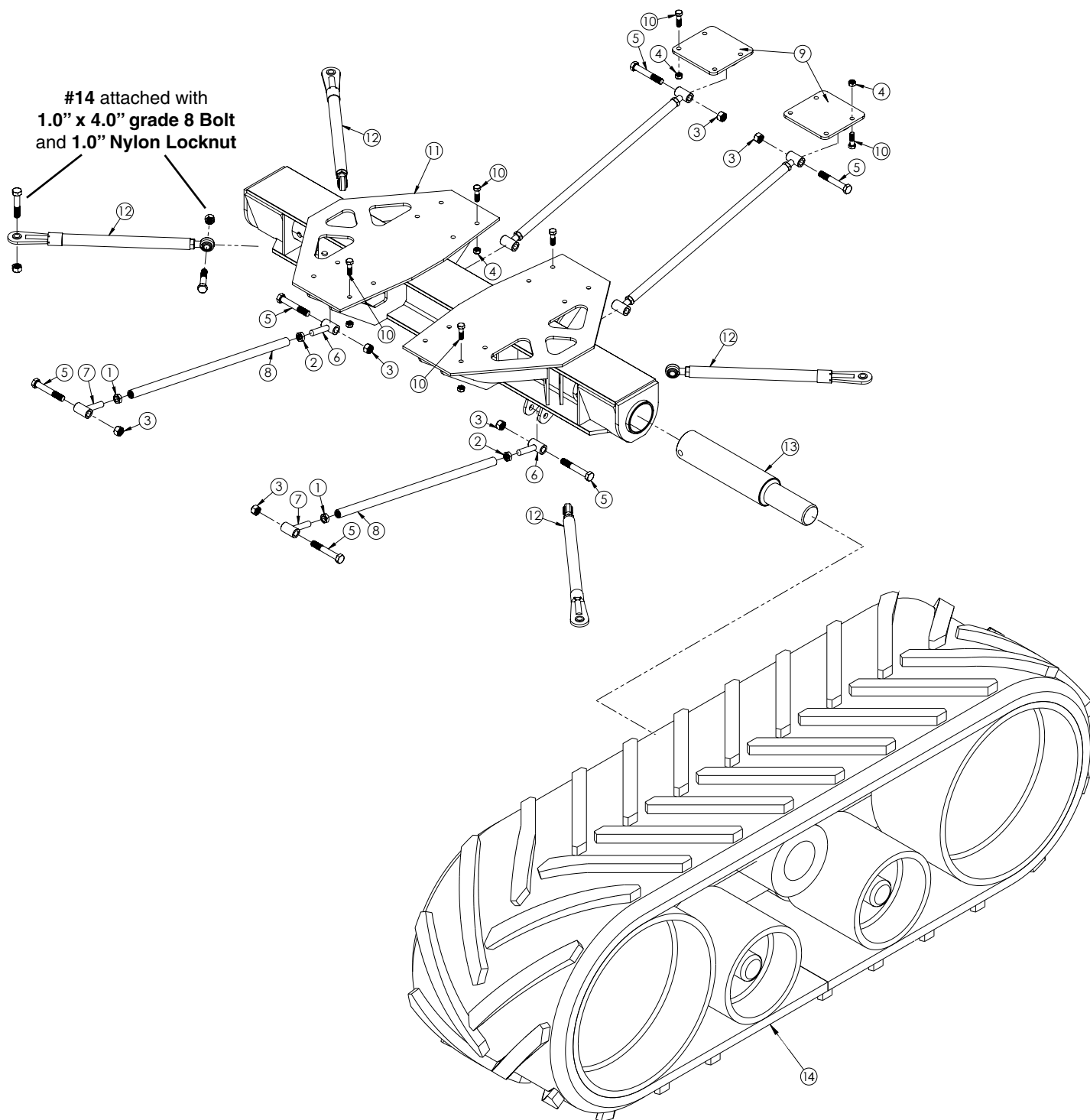
REF	PART #	QTY	DESCRIPTION
1	09455	2	1" NF Nylon Insert Locknut
2	13871-30	1	Single Axle Assembly
3	13899	1	2-1/2" NF Castle Nut
4	13906	2	5-1/2" Spindle (Non Scale)
-	13907	-	5-1/2" Spindle (Scale)
5	13909	2	Spindle Sleeve
6	13911	1	3/8" x 4" Cotter Pin
7	14017	1	2-5/8" ID x 4-1/2" OD x 1/4" Washer
8	14029	2	1" NF x 9-1/2" Hex Head Bolt (Gr.8)
9	6151	2	Hub Assembly (Includes 10-20)

Please order replacement parts by PART NO. and DESCRIPTION.

REF	PART #	QTY	DESCRIPTION
10	04305	8	5/16" NC x 1/2" Hex Head Bolt (Gr.5)
11	13901	1	Hub Cap
12	13902	1	Inner Bearing (795 TIMKEN)
13	13903	1	Outer Bearing (842 TIMKEN)
14	13904	1	Outer Bearing Race (792 TIMKEN)
15	13905	1	Inner Bearing Race (832 TIMKEN)
16	14016	1	Inner Grease Seal
17	14025	1	Hub Cap Gasket
18	14026	-	M22 x 1.5 x 4" Class 10.9 Stud Bolt
19	15830	10	M22 x 1.5, Disc Locking Flange Nut
20	15552	1	Hub w/ Races and Stud Bolts
21	9445232-60	2	Tire/Wheel Single Silver

Please order replacement parts by PART NO. and DESCRIPTION.

TRACK AXLE ASSEMBLY



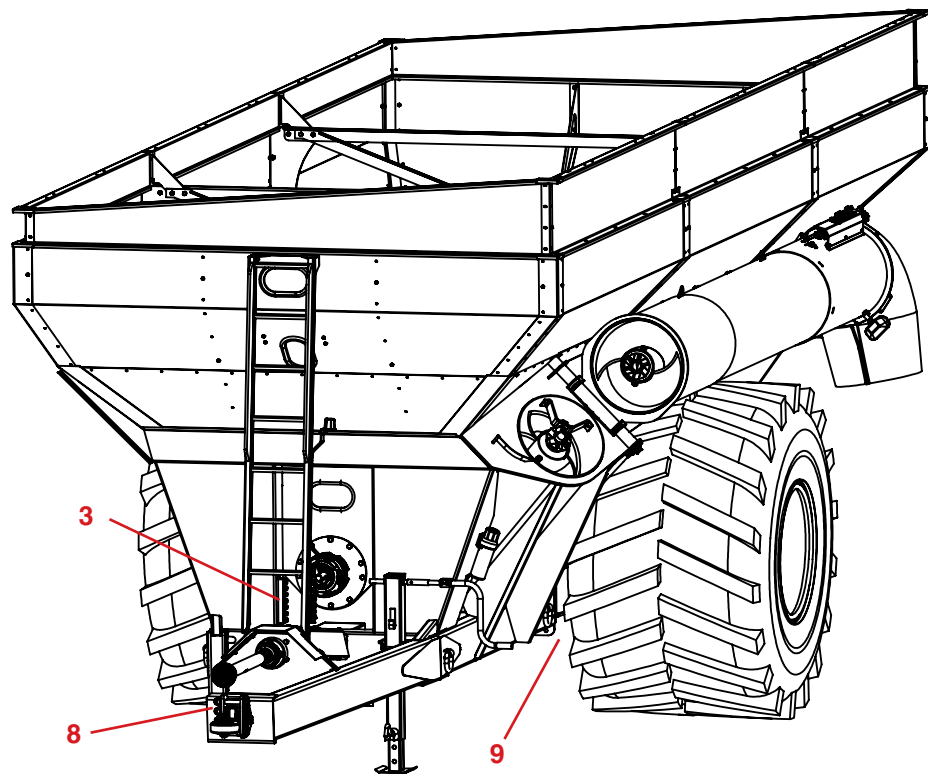
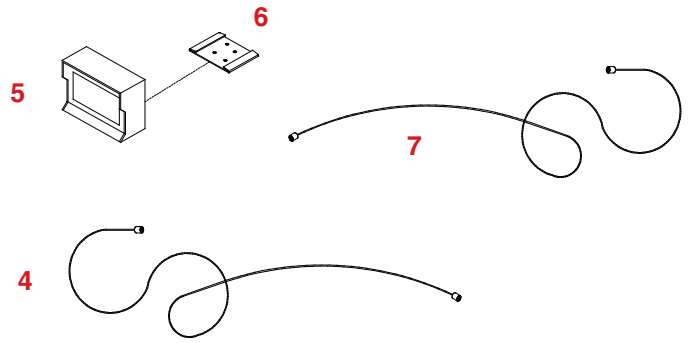
REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	01948	4	1" NF Jam Nut, Left Hand
2.	01949	4	1" NF Jam Nut, Right Hand
3.	02848	8	1" NF Nylon Insert Locknut
4.	02961	24	3/4" NC Nylon Insert Locknut
5.	09454	8	1" NF X 6.50" Hex Head Bolt (Gr. 8)
6.	13544-30	4	Tension Rod End, Right Hand
7.	13545-30	4	Tension Rod End, Left Hand
8.	13546-30	4	Tie Rod
9.	13562-30	2	Tie Rod Mount
10.	14700	24	3/4 NC x 2.50" Hex Head Bolt (Gr.8)
11.	14819-30	1	Welded Cross Axle

REF. NO.	PART NO.	QTY.	DESCRIPTION
12.	14822	4	Track Axle Tension Bar Assembly
13.	14863	2	Track Axle Pivot Shaft Non-Scale
-	14823	2	Track Axle Pivot Shaft Scale (not shown)
14.	14820	1	Track Carriage Assembly, LH
-	14821	1	Track Carriage Assembly, RH (not shown)

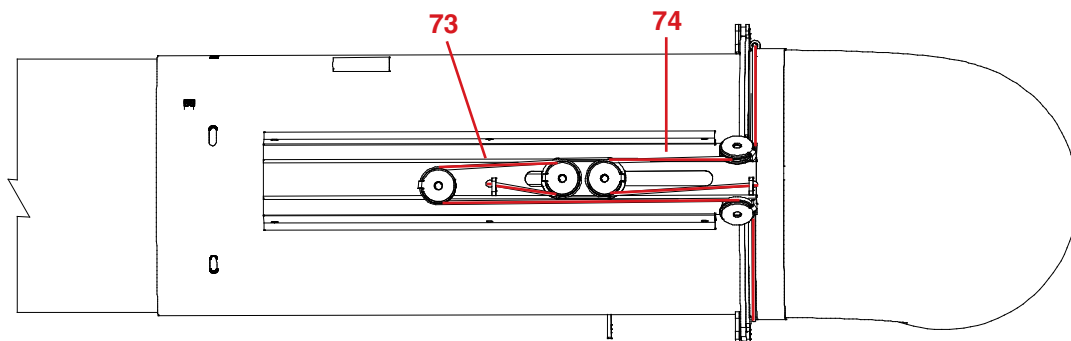
Please order replacement parts by **PART NO.** and **DESCRIPTION.**

SCALE PARTS BREAKDOWN

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	02772	2	1/4" Nylon Insert Lock Nut
2.	04055	2	1/4" NC x 1" Hex Head Bolt
3.	10941	1	7-Port Junction Box (Duals)
-	12257	1	4-Port Junction Box (Track & Single)
4.	12264	1	25' Junction Box to Console Cable
-	12264	2	Spindle to Junction Box (Single)
5.	12259	1	Scale Monitor
6.	09440	1	Scale Bracket
7.	09441	1	8' Power Cord Harness
-	13266	-	15' Extension Cable (Optional)
-	10947	1	Port Connection Cap (Duals)
8.	13983	1	Scale Hitch Bar
9.	13498	4	Dual Axle Scale Spindle
-	13907	2	Single Axle Scale Spindle
-	14823	2	Track Axle Scale Weighbar

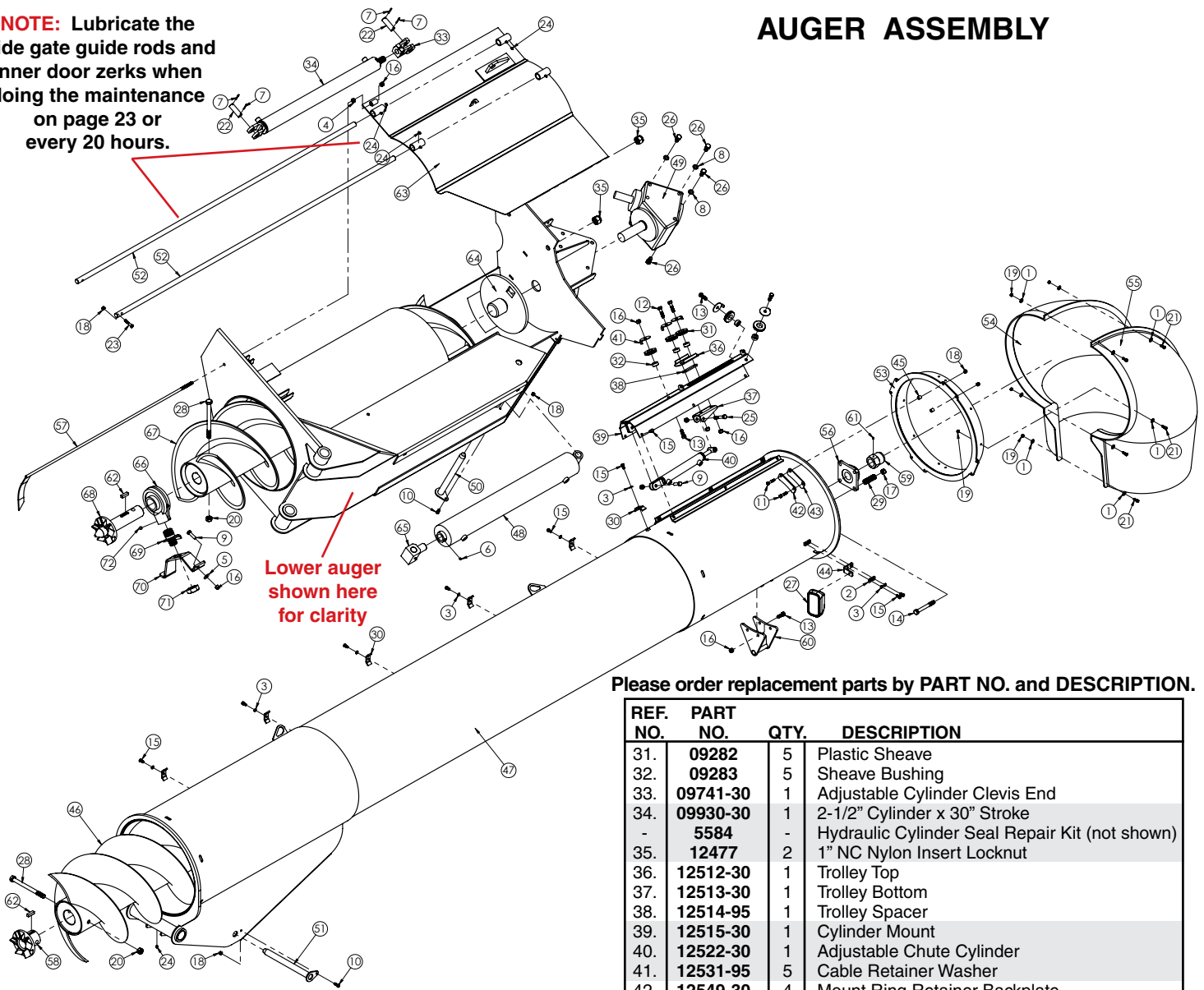


ADJUSTABLE AUGER CABLE ROUTING



NOTE: Lubricate the slide gate guide rods and inner door zerk's when doing the maintenance on page 23 or every 20 hours.

AUGER ASSEMBLY



Please order replacement parts by **PART NO.** and **DESCRIPTION.**

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	00004	54	5/16" Flatwasher
2.	00059	2	3/8" Flatwasher
3.	00060	8	3/8" Lockwasher
4.	00083	1	1/2" NC Hex Head Nut
5.	00085	2	1/2" Flatwasher
6.	00087	1	5/16" x 5/16" Socket Set Screw
7.	00116	4	5/32" x 1-1/2" Cotter Pin
8.	00248	8	5/8" Lockwasher
9.	00482	2	1/2" NC x 1-3/4" Hex Head Bolt (Gr. 5)
10.	00907	2	3/8" NC x 1" Hex Head Bolt (Gr.5)
11.	00908	8	3/8" NC x 1-3/4" Hex Head Bolt (Gr.5)
12.	01253	2	1/2" NC x 2" Hex Head Bolt (Gr.5)
13.	01254	7	1/2" NC x 1-1/2" Hex Head Bolt (Gr.5)
14.	01336	4	5/8" NC x 5" Hex Head Bolt (Gr.5)
15.	01899	8	3/8" NC x 3/4" Hex Head Bolt (Gr.5)
16.	02178	12	1/2" NC Nylon Insert Locknut
17.	02587	4	5/8" NC Nylon Insert Locknut
18.	02592	10	3/8" NC Nylon Insert Locknut
19.	02802	32	5/16" NC Nylon Insert Locknut
20.	02961	2	3/4" NC Nylon Insert Locknut
21.	02990	32	5/16" NC x 1" Hex Head Bolt (Gr.5)
22.	03738-95	2	1" Dia x 3" Cylinder Pin
23.	04226	2	3/8" NC x 2" Hex Head Bolt (Gr.5)
24.	04642	5	Grease Zerk
25.	05290	1	1/2" NC x 3-1/4" Hex Head Bolt (Gr.5)
26.	05366	8	5/8" NC x 1-1/4" Hex Head Bolt (Gr.5)
27.	14926	1	Discharge Light
28.	07681	2	3/4" NC x 9" Hex Head Bolt (Gr.5)
29.	09168	4	Upper Auger Spring
30.	09218-95	6	Hose Keeper, 2 Hose (plated)

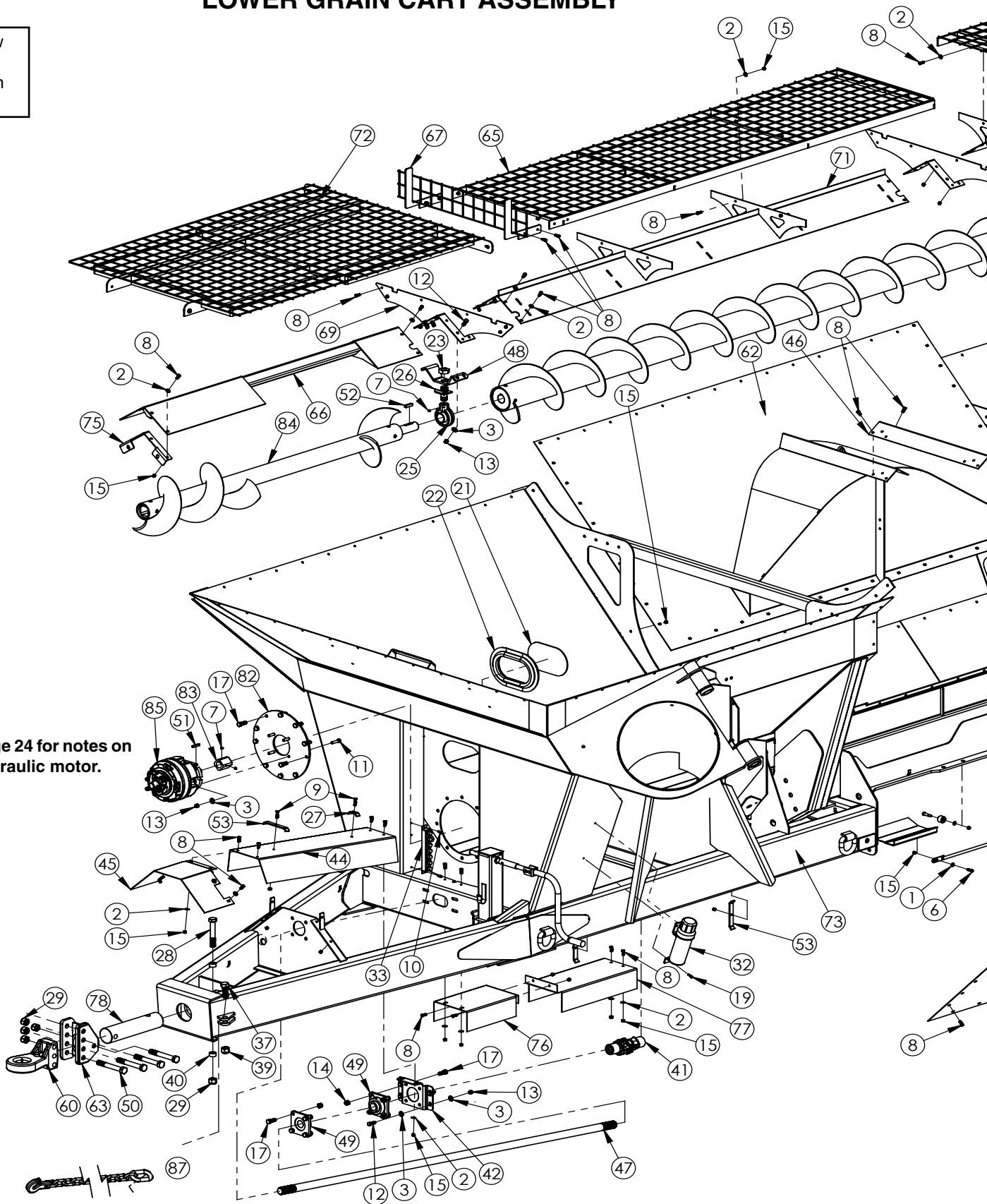
REF. NO.	PART NO.	QTY.	DESCRIPTION
31.	09282	5	Plastic Sheave
32.	09283	5	Sheave Bushing
33.	09741-30	1	Adjustable Cylinder Clevis End
34.	09930-30	1	2-1/2" Cylinder x 30" Stroke
-	5584	-	Hydraulic Cylinder Seal Repair Kit (not shown)
35.	12477	2	1" NC Nylon Insert Locknut
36.	12512-30	1	Trolley Top
37.	12513-30	1	Trolley Bottom
38.	12514-95	1	Trolley Spacer
39.	12515-30	1	Cylinder Mount
40.	12522-30	1	Adjustable Chute Cylinder
41.	12531-95	5	Cable Retainer Washer
42.	12549-30	4	Mount Ring Retainer Backplate
43.	12550	4	Plastic Mount Ring Spacer
44.	12555-30	1	Light Bracket
45.	12667-95	8	Mount Ring Bushing
46.	13311-30	1	Outer Auger Flighting
47.	13315-?	1	Outer Auger Tube
48.	13984-30	1	4.5" x 32" Cushion Hydraulic Cylinder
49.	13339	1	Gear Box
50.	13340-95	1	Lower Hydraulic Cylinder Pin
51.	13341-95	1	Upper Hydraulic Cylinder Pin
52.	13343	2	Threaded Slide Rod
53.	13345-30	1	Discharge Chute Drive Ring
54.	13402	1	Discharge Chute, Left Half
55.	13403	1	Discharge Chute, Right Half
56.	13411	1	1-3/4" Flange Bearing
57.	13413-30	1	Gauge Rod
58.	13414	1	Outer Drive Casting W/ Keyway
59.	13424-30	1	Nut Spacer
60.	13435-30	1	Auger Rest, Adjustable
61.	13521	1	1/4" NC x 3/8" Socket Head Set Screw
62.	13538	2	1/2" x 1/2" x 1-3/4" Key
63.	13978-30	1	Inner Door
64.	14005-30	1	Lower Drive
65.	14028-30	1	Hydraulic Cylinder End
66.	14108	1	2-1/2" Hanger Bearing
67.	14109-30	1	Lower Auger Flighting
68.	14110	1	Inner Drive Casting W/ Keyway
69.	14125	1	Hanger Bearing Mount Spud
70.	14126-30	1	Hanger Bearing Plate Mount
71.	14127	1	1-1/2" NF Jam Nut
72.	14313	1	1/2" NC x 1/2" Socket Head Set Screw
73.	12528	1	Long Cable (pg. 16)
74.	12529	1	Short Cable (pg. 16)

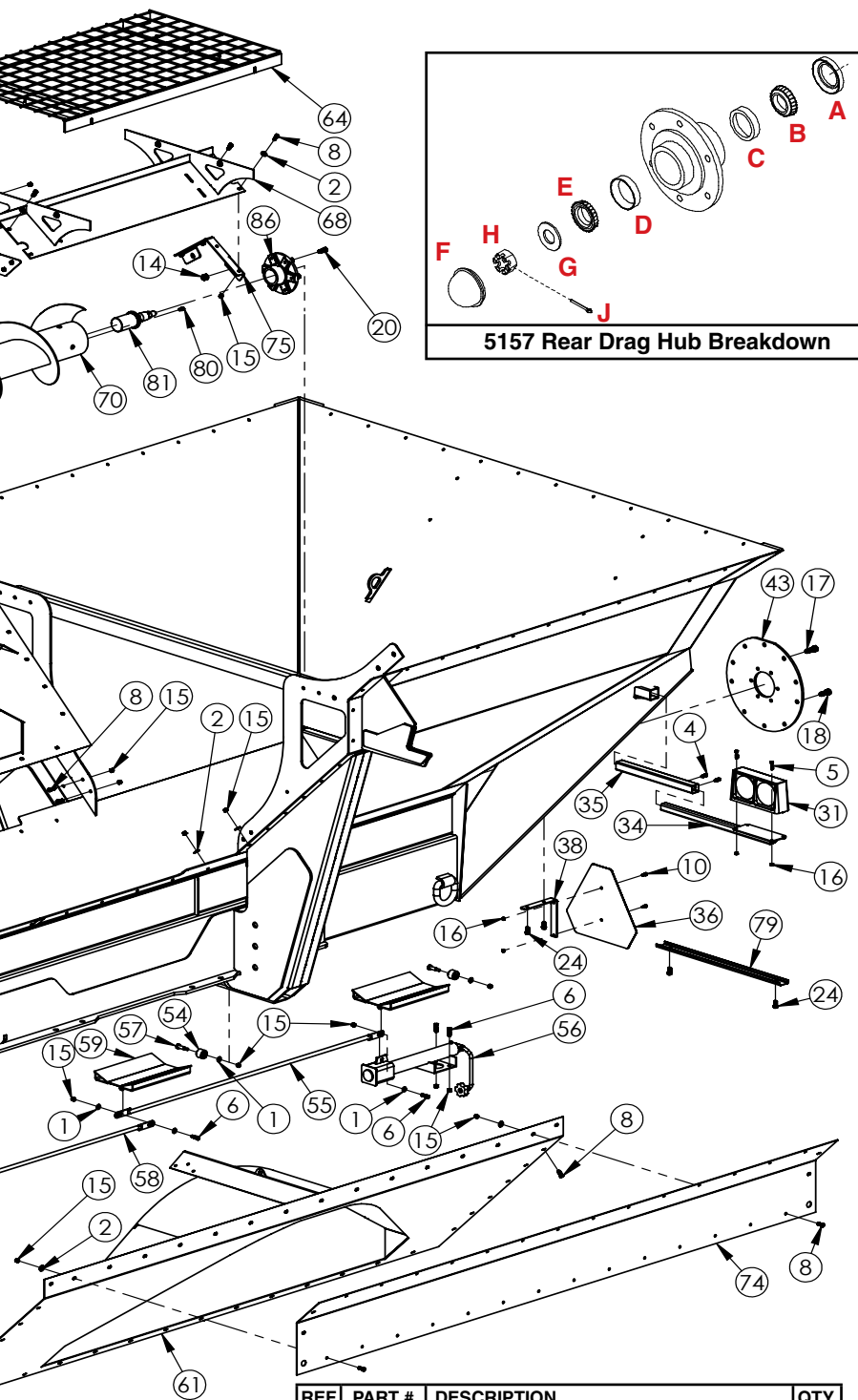
Carts are available
in 4 colors

?-05 = Yellow
?-10 = Red
?-20 = Green
?-42 = Blue

LOWER GRAIN CART ASSEMBLY

See Page 24 for notes on
Hydraulic motor.





REF	PART #	DESCRIPTION	QTY.
1	00004	WASHER, FLAT, .313	40
2	00059	WASHER, FLAT .375	128
3	00085	WASHER, FLAT .50	12
4	00095	SET SCREW .375NC X .75 SQ HD	8
5	00336	BOLT .25NC X 1.25 GR5 HEX	8
6	00523	BOLT .375NC X 1.25 HEX HD GR5	5
7	00789	SET SCREW .375NC X .375 SOCKET HD	1
8	00907	BOLT .375NC X 1.00 HEX HD GR5	154
9	00914	BOLT .375 NC X 1.50 HEX HD GR5	2
10	01076	BOLT .25NC X .75 GR5 HEX	2
11	01253	BOLT .50 NC X 2.00 HEX HD GR5	4
12	01254	BOLT .50 NC X 1.50 GR.5 HEX	8
13	02178	NUT .50NC LOCK, NY. INSERT	16
14	02587	NUT .625 NC NYLON LOCK	28
15	02592	NUT .375NC NYLON LOCK	199
16	02772	NUT .25NC LOCK NYLON INSERT	12
17	03698	BOLT .625NC X 1.75 GR5 HEX	12
18	04051	BOLT .625 NC X 1.50 GR5 HEX	16
19	04055	BOLT .25 NC X 1.00 GR5 HEX	2

Please order replacement parts by PART NO. and DESCRIPTION

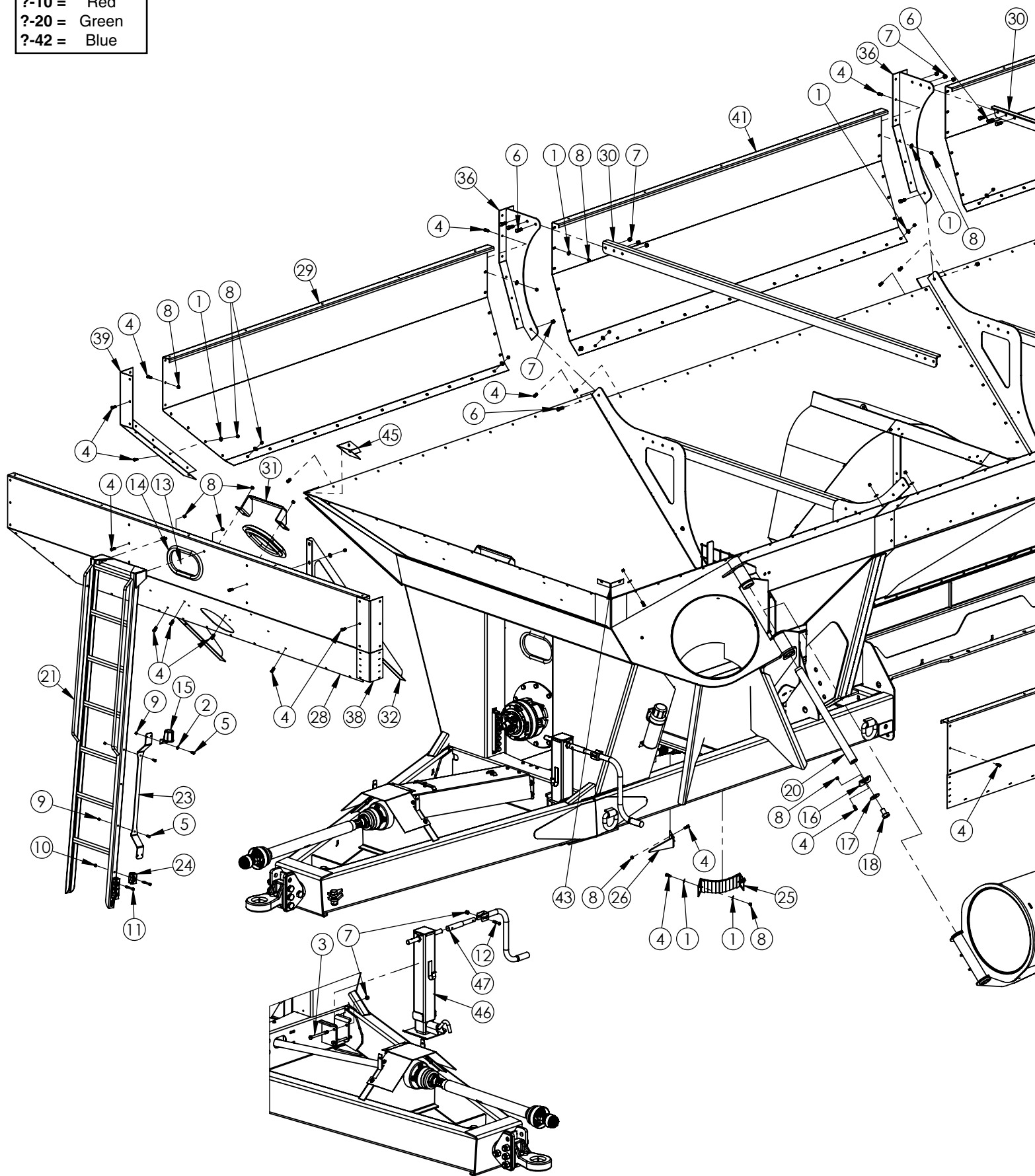
REF	PART #	DESCRIPTION	QTY.
20	05031	BOLT .50 NF X 1.25 GR5 HEX	6
21	07276	WINDOW GRAVITY FLOW BOX	1
22	14066	WINDOW GASKET SEAL	1
23	07412	TIE ROD JAM NUT	1
24	07594	BOLT .375 X 1.00 SELF-TAPPING	8
25	09185	2" HANGER BEARING	1
26	09195	HANGER BEARING MOUNT	1
27	09218-95	HOSE KEEPER, 2 HOSE	1
28	09454	BOLT 1.0NF X 6.50 GR8 HEX	1
29	09455	NUT, 1.00 NF NYLON LOCK HEX	5
30	10032	AG LIGHT (not shown)	1
31	10033	AG LIGHT	1
32	10241	DOCUMENT HOLDER	1
33	10941	JUNCTION BOX F/ WEIGHTRONIX SCALE	1
34	11565-30	LIGHT MOUNT	2
35	11568-30	LIGHT MOUNT RECEIVER TUBE	2
36	12126	SMV SIGN	1
37	12323	BOLT 1.00-8UNC x 3.00 HEX	1
38	12468-30	SMV SIGN BRACKET	1
39	12477	NUT, 1"-8UNC NYLON INSERT	1
40	13321-30	HITCH BOLT BUSHING	2
41	13326	U-JOINT	1
42	13347-30	BEARING MOUNT	1
43	13348-30	REAR ACCESS PLATE	1
44	13352-30	DRIVE SHAFT SHIELD, FRONT	1
45	13353-30	PTO SHAFT COVER	1
46	13370-30	CONNECTOR PLATE	1
47	13377	DRIVE SHAFT, 20 SPLINE	1
48	13380-30	HANGER BEARING PLATE	1
49	13411	BEARING 1.75" 4-BOLT FLANGE	2
50	13510	BOLT 1.0NF X 7.50 GR8 HEX HEAD	4
51	13535	KEY, .375 x .375 x 2.00"	1
52	13537	KEY, .50 x .50 x 2.00"	1
53	13575-30	HOSE KEEPER, 4-6 HOSES	3
54	13680	DOOR WHEEL	36
55	13681-30	CONNECTION ROD, LONG	1
56	13682-30	TROUGH DOOR JACK	1
57	13685	BOLT, SHOULDER 1/2 x 1-5/16	36
58	13695-30	CONNECTION ROD, SHORT	1
59	13743-30	BENT CLEANOUT DOOR	3
60	13979-30	PERFECT HITCH, 3 BOLT CAT 4/5	1
-	9440126	BULL PULL w/BOLTS CAT 3/4 (optional)	-
-	9440128	BULL PULL w/BOLTS CAT 5 (optional)	-
61	13980-?	LEFT FENDER ASSEMBLY	1
62	13981-?	RIGHT FENDER ASSEMBLY	1
63	13982-30	HITCH CHANNEL MOUNT	1
64	13985-30	MESH REAR ASSEMBLY	1
65	13986-30	MESH MIDDLE ASSEMBLY	1
66	13991-30	FRONT SHROUD	1
67	13992-30	VERTICAL MESH	1
68	13993-30	REAR SHROUD	1
69	13994-30	SHIELD MOUNT	2
70	14001-30	REAR DRAG AUGER F/ 1400 GC	1
71	14002-30	MIDDLE SHIELD ASSY	1
72	14003-30	FRONT MESH ASSEMBLY	1
73	14004-?	1400 GC MAINFRAME	1
74	14007-?	AUGER SIDE MIDDLE SHEET	1
75	14010-30	SHROUD SUPPORT PLATE	2
76	14011-30	MIDDLE DRIVE LINE SHIELD	1
77	14012-30	REAR DRIVELINE SHIELD	1
78	14014	PIN HITCH F/1400 GC 3.75 OD	1
-	13983	SCALE HITCH WEIGHBAR 3.725 OD	-
79	14064-30	REAR SILL WIRE COVER	2
80	14459	BOLT .375 NC X .50 SOCKET HEAD	1
81	15406	SPINDLE, 3.00 X 8.50	1
82	15512-30	FRONT DRAG AUGER PLATE	1
83	15513	MOTOR DRIVE	1
84	15514-30	FRONT DRAG AUGER F/ 1400 GC	1
85	15634-30	HYDRAULIC MOTOR, FS30 280	1
86	5157	HUB ASSEMBLY, #888 NON-BRAKING	1
87	12154	SAFETY CHAIN	1
A	00110	OIL SEAL	
B	00111	INNER CONE BEARING	
C	01464	INNER CUP	
D	01465	OUTER CUP	
E	00113	OUTER CONE BEARING	
F	00117	DUST CAP	
G	00114	7/8" FLATWASHER	
H	00115	CASTLE NUT	
J	02363	5/32 x 1-1/4" COTTER PIN	

Please order replacement parts by PART NO. and DESCRIPTION

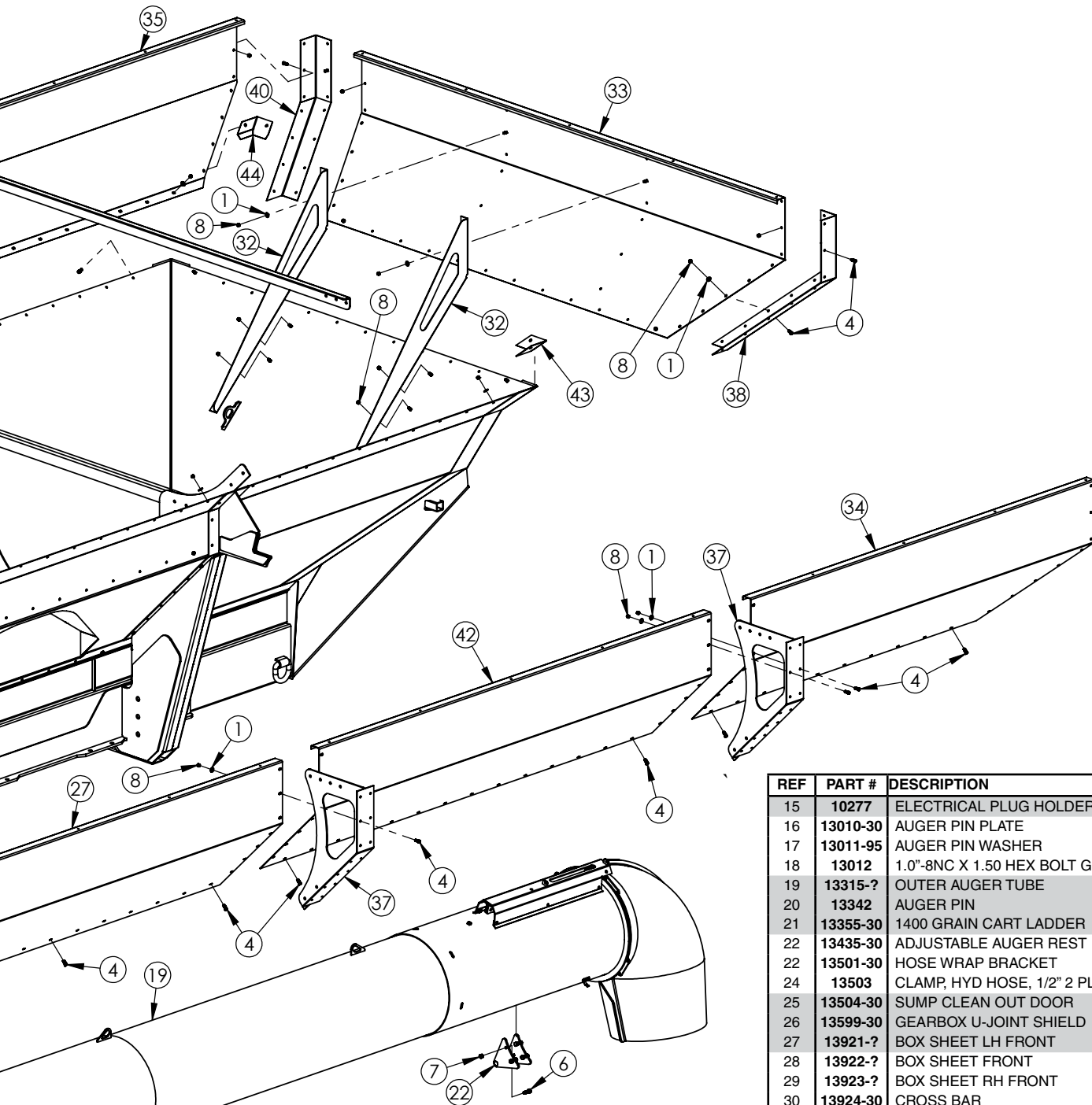
Carts are available
in 4 colors

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?-10 = Red
?-20 = Green
?-42 = Blue

UPPER GRAIN CART ASSEMBLY



UPPER GRAIN CART ASSEMBLY



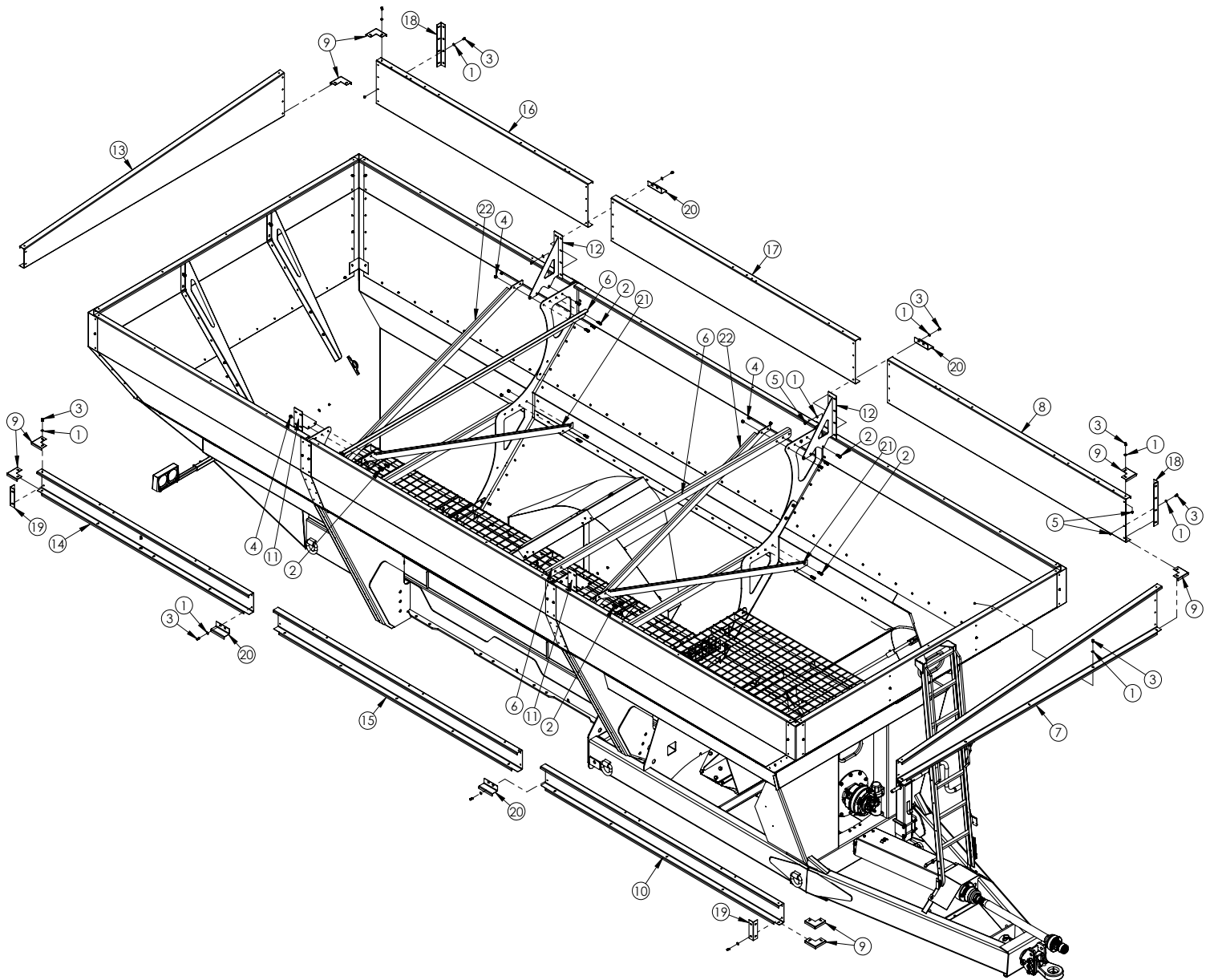
REF	PART #	DESCRIPTION	QTY.
1	00059	WASHER, FLAT .375	178
2	00214	WASHER, FLAT, .25	2
3	00349	BOLT, .50 NC X 6.00 GR5 HEX	2
4	00907	BOLT, .375 NC X 1.00 GR5 HEX	225
5	01076	BOLT, .25 NC X .75 GR5 HEX	4
6	01254	BOLT, .50 NC X 1.50 GR5 HEX	22
7	02178	NUT, .50 NC LOCK NYLON INSERT	24
8	02592	NUT, .375 NC LOCK NYLON INSERT	225
9	02772	NUT, .25 NC LOCK NYLON INSERT	4
10	02802	NUT, .313 NC LOCK NYLON INSERT	3
11	04224	BOLT, .313 NC X 3.00 GR5 HEX	3
12	07276	WINDOW GRAVITY FLOW BOX	2
13	07310	WINDOW GASKET SEAL	2
14	09219-30	7000# SIDE WIND JACK W/MT	1

Please order replacement parts by PART NO. and DESCRIPTION.

REF	PART #	DESCRIPTION	QTY.
15	10277	ELECTRICAL PLUG HOLDER	1
16	13010-30	AUGER PIN PLATE	1
17	13011-95	AUGER PIN WASHER	1
18	13012	1.0"-8NC X 1.50 HEX BOLT GR5	1
19	13315-?	OUTER AUGER TUBE	1
20	13342	AUGER PIN	1
21	13355-30	1400 GRAIN CART LADDER	1
22	13435-30	ADJUSTABLE AUGER REST	1
22	13501-30	HOSE WRAP BRACKET	1
24	13503	CLAMP, HYD HOSE, 1/2" 2 PLACE	3
25	13504-30	SUMP CLEAN OUT DOOR	1
26	13599-30	GEARBOX U-JOINT SHIELD	1
27	13921-?	BOX SHEET LH FRONT	1
28	13922-?	BOX SHEET FRONT	1
29	13923-?	BOX SHEET RH FRONT	1
30	13924-30	CROSS BAR	2
31	13925-30	STEP, BOLT-IN GRAIN CART	1
32	13926-30	BOX SHEET SUPPORT, BOLT-IN	4
33	13931-?	BOX SHEET REAR	1
34	13932-?	BOX SHEET LH REAR	1
35	13933-?	BOX SHEET RH REAR	1
36	13934-?	JOINT BRACKET, RIGHT	2
37	13935-?	JOINT BRACKET, LEFT	2
38	13936-?	BOX CORNER, LEFT	2
39	13937-?	BOX CORNER, RIGHT FRONT	1
40	13938-?	BOX CORNER, RIGHT REAR	1
41	13939-?	BOX SHEET RH MIDDLE	1
42	13940-?	BOX SHEET LH MIDDLE	1
43	14081-30	AUGER SIDE CORNER	2
44	14082-30	RIGHT REAR CORNER	1
45	14083-30	RIGHT FRONT CORNER	1
46	15478-30	AG JACK	1
47	15620-30	JACK SHAFT EXTENSION	1

Please order replacement parts by PART NO. and DESCRIPTION.

EXTENSION & BRACE ASSEMBLY

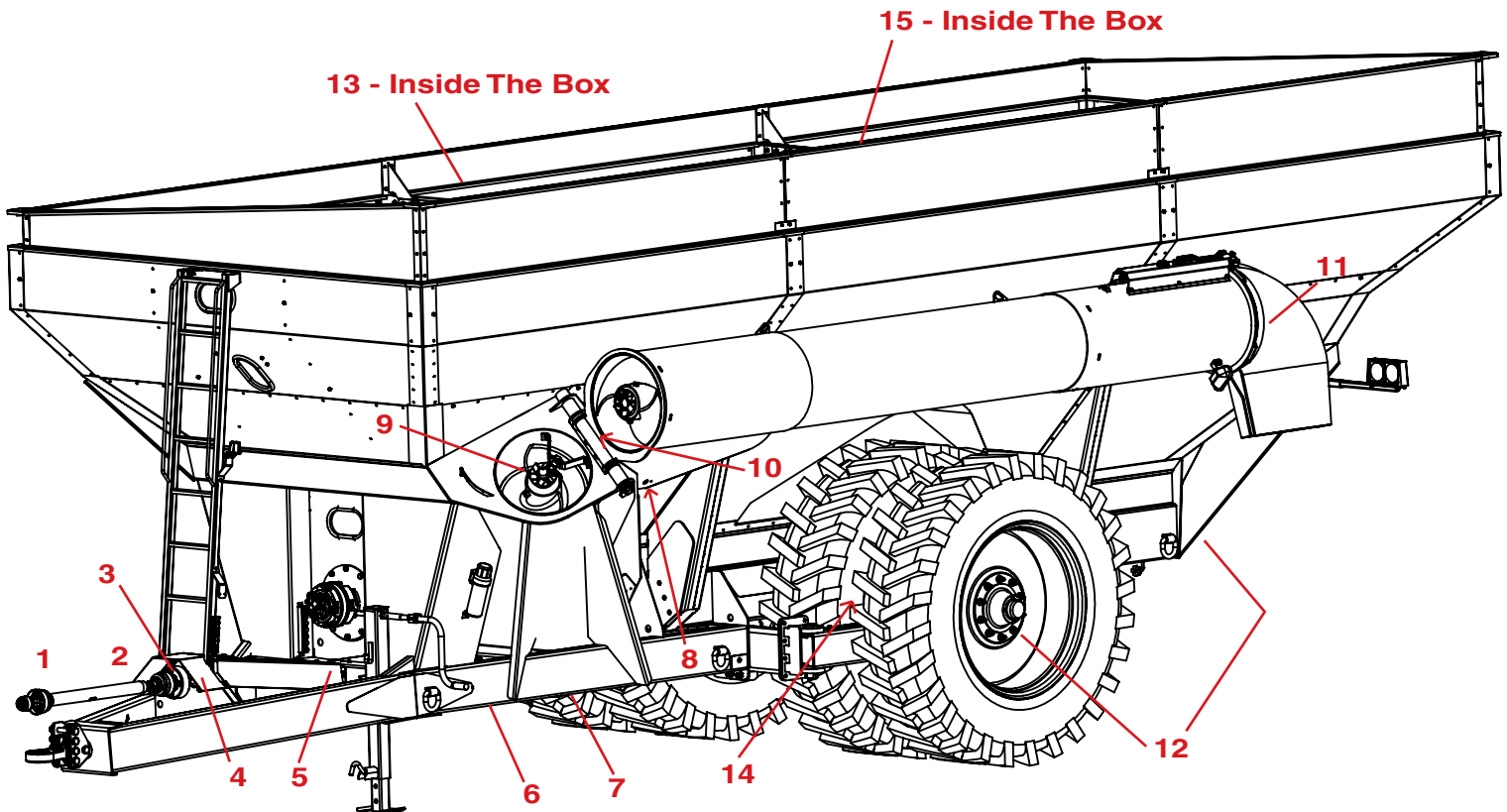


REF	PART #	DESCRIPTION	QTY.
1	00004	WASHER, FLAT, .313	102
2	01254	BOLT, .50 NC X 1.50 GR.5 HEX	22
3	01263	BOLT, .313 NC X .75 GR. 5	94
4	02178	NUT, .50NC LOCK, NY. INSERT	22
5	02802	NUT, .313 NC NYLON LOCK	94
6	13924-30	CROSS BAR	2
7	13927-30	EXTENSION FRONT F/ 1400	1
8	13928-30	EXTENSION LEFT FRONT F/ 1400	1
9	13929-30	EXTENSION CORNER CAP	8
10	13930-30	EXTENSION RIGHT FRONT F/ 1400	1
11	13941-30	EXTENSION BRACE, SHORT	2
12	13942-30	EXTENSION BRACE, TALL	2

REF	PART #	DESCRIPTION	QTY.
13	13943-30	EXTENSION REAR F/ 1400	1
14	13944-30	EXTENSION RIGHT REAR F/1400	1
15	13945-30	EXTENSION RIGHT CENTER F/1400	1
16	13946-30	EXTENSION LEFT REAR F/1400	1
17	13947-30	EXTENSION LEFT CENTER F/1400	1
18	13948-30	EXTENSION CORNER CAP, TALL	2
19	13949-30	EXTENSION CORNER CAP, SHORT	2
20	13950-30	EXTENSION COVER PLATE	4
21	14008-30	X-BRACE, SHORT	2
22	14009-30	X-BRACE, LONG	2

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

GREASE & LUBE



Reference numbers **#1 -#3 -#6** Are U-Joints -- Check and grease regularly.

Reference number **#2** - Is a Telescoping PTO Shaft with two slots in housing -- Fully extend PTO Shaft, then place one or two pumps of grease in each slot.

Reference numbers **#4 -#5 -#11** Are fixed self centering sealed bearings -- Do not over grease sealed bearings.

Reference number **#7** - Auger gear box is filled with 80-90 gear lube -- 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. **Should be about 96 oz. of 80-90 gear lube. DO NOT OVER FILL!!!** When gear box is full be sure to replace inspection plug.

Reference numbers **#8 - #10** - Is the hinge for the outer tube and folding cylinder. There are three zerks in this area -- Inspect and grease as needed.

Reference numbers **#9 -#15** - Are fixed sealed bearings -- Do not over grease sealed bearings.

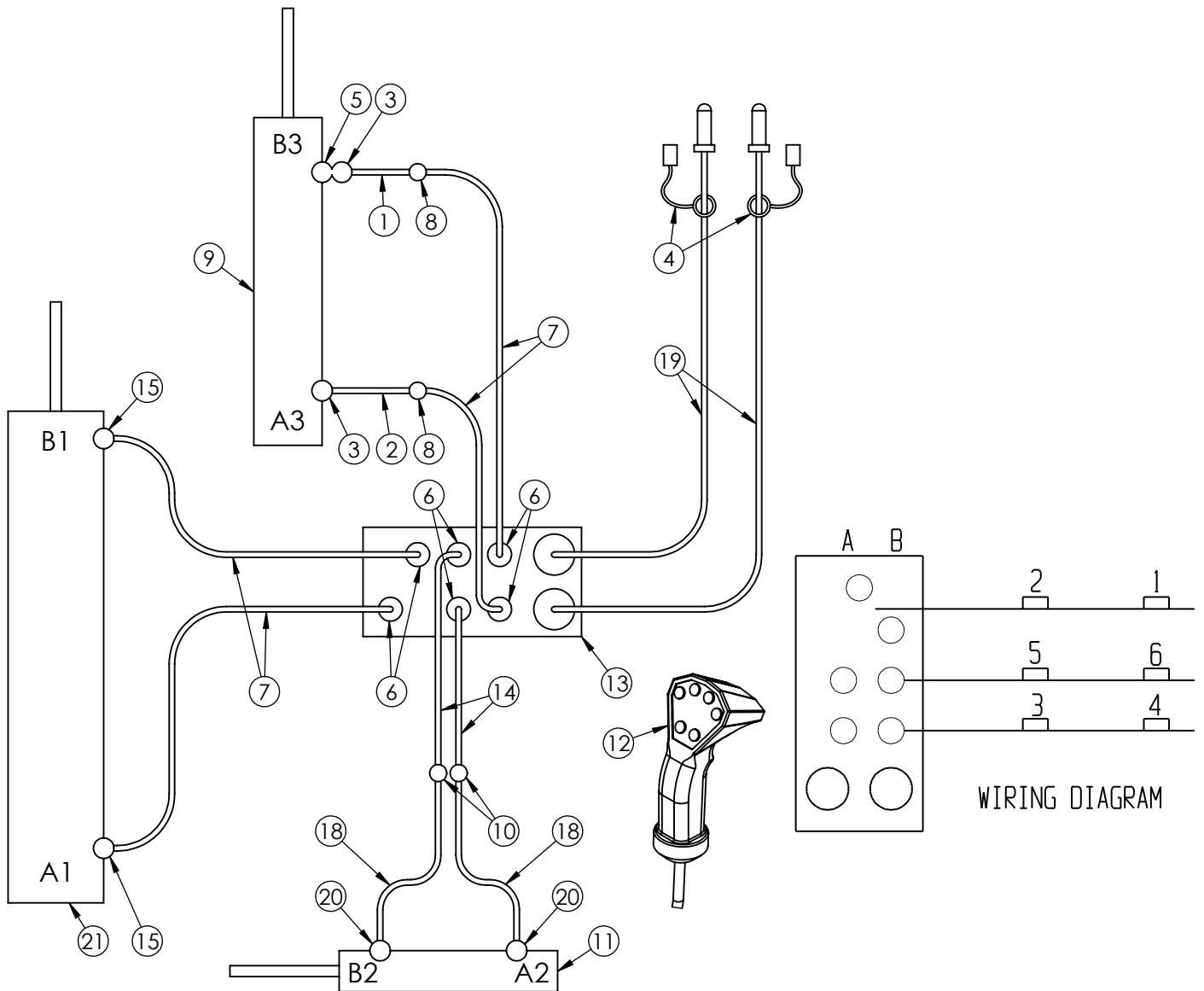
Reference number **#12** - Is the axle and drag auger hubs with inner and outer bearings and races -- Inspect regularly, pack bearing and replace inner wheel seal as needed.

Reference number **#13** - Is four bushings on the inner door. There are four grease zerks on this door-- Inspect and grease every 20 hours. **Also Lube the guide rods with a good lubricant at this time.**

Reference number **#14** - Is the Dual Axle Assembly. There are two zerks on each A-Arm Assembly and two zerks on each Connector Link.

NOTE. Grease all zerks before each use or when needed with a good quality lubricant.
Do Not over grease sealed bearings. Over greasing sealed bearing will damage seals. Once a season is generally sufficient.

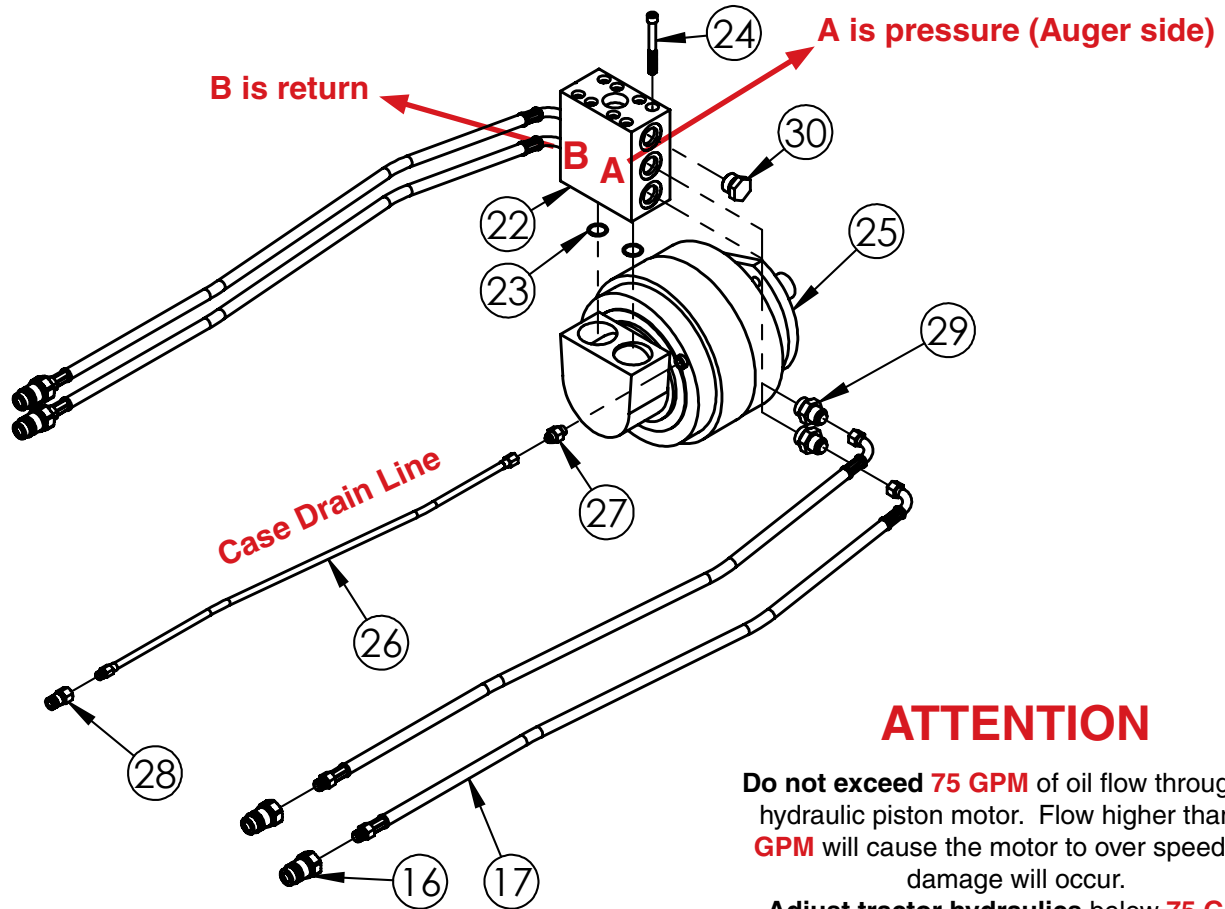
HYDRAULIC SCHEMATIC



REF	PART #	DESCRIPTION	QTY.
1	05190	1/4" x 48" Hydraulic Hose	1
2	05191	1/4" x 36" Hydraulic Hose	1
3	05195	Str. Hyd. Fitting, .375 MPT	2
4	05198	Rubber Coupler Cover (Black)	2
-	12678	Rubber Coupler Cover (Yellow)	2
-	12677	Rubber Coupler Cover (Red)	2
5	05215	3/8" MPT x 3/8" FPT Elbow Fitting	1
6	05243	Str. Hyd. Fitting W/ O-Ring	6
7	05839	1/4" x 142" Hydraulic Hose	4
8	09172	3/8" JIC Bulkhead Elbow Fitting (90°)	2
9	09930-30	2-1/2" x 30" Stroke Hydraulic Cylinder	1
10	09950	Str. Hyd. Fitting Union	2
11	12522-30	1-1/2" x 8" Stroke Hydraulic Cylinder	1
12	13063	Pendant Controller	1
-	13566	12' Ext. Pendant Controller Cable (Optional)	-
13	13064	Block With Wiring Harness	1
-	14084	Valve Cartridge, GS04	-
-	15636	Replacement Coil (not shown)	-
Please order replacement parts by PART NO. and DESCRIPTION.			

REF	PART #	DESCRIPTION	QTY.
14	13069	1/4" x 106" Hydraulic Hose	2
15	13442	Str. Hyd. Fitting W/ #10 O-Ring	2
18	13884	1/4" x 258" Hydraulic Hose	2
19	13885	1/2" x 192" Hydraulic Hose w/Quick Coupler	2
-	05197	Replacement Hyd Quick Coupler	2
20	13886	Elbow, #6 O-Ring x Male 6 JIC, w/ Orifice	2
21	13984-30	4-1/2" x 32" Stroke Cushion Hydraulic Cylinder	1
Please order replacement parts by PART NO. and DESCRIPTION.			

HYDRAULIC SCHEMATIC



ATTENTION

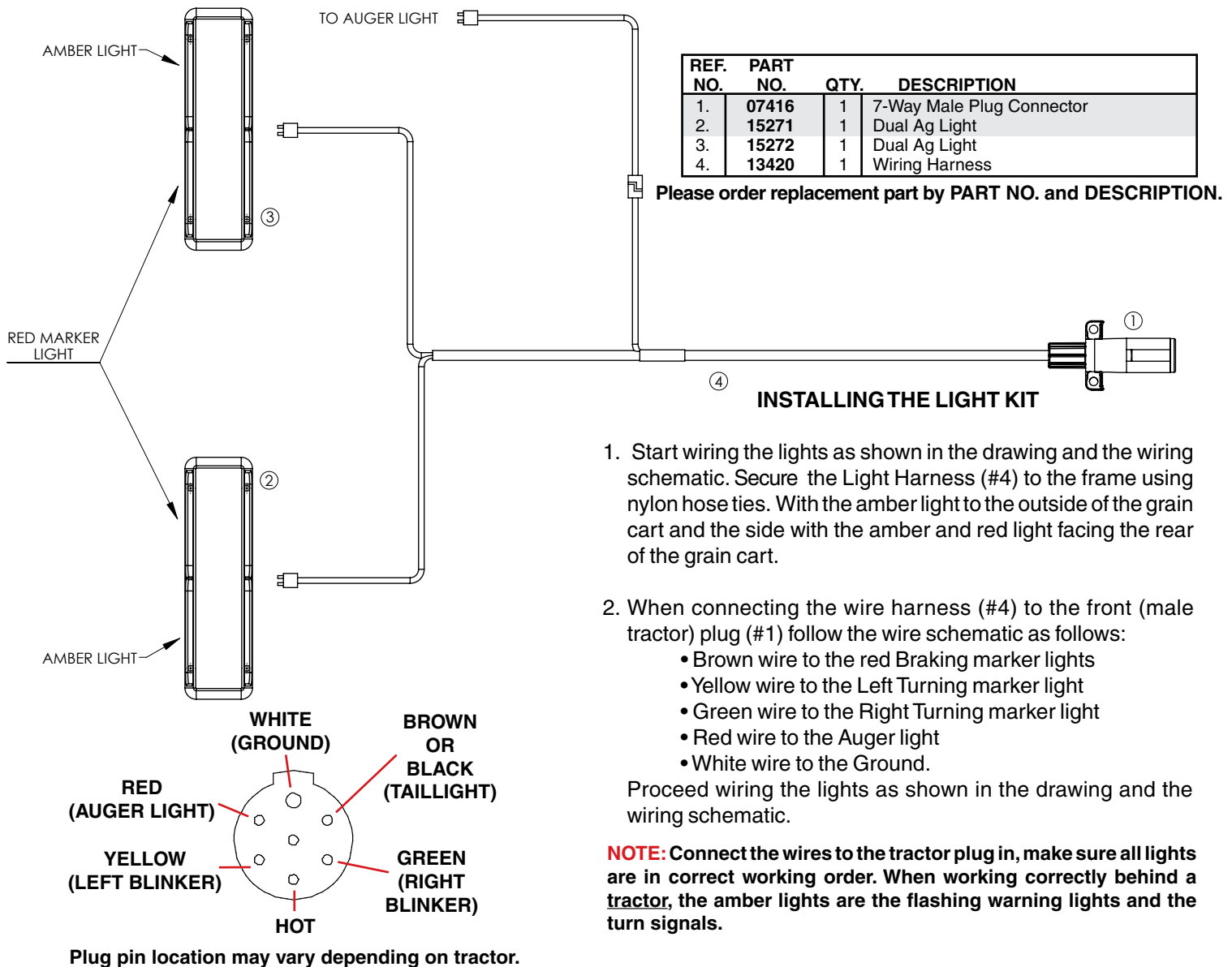
Do not exceed 75 GPM of oil flow through the hydraulic piston motor. Flow higher than **75 GPM** will cause the motor to over speed and damage will occur.

Adjust tractor hydraulics below 75 GPM before connecting hydraulic motor on grain cart. Warranty will be void if over speeding occurs. Fill motor with oil before running the 1st time.

Case Drain Line **MUST** be connected to Zero Return Port on Tractor before running Hydraulic Motor.

REF	PART #	DESCRIPTION	QTY.
16	13786	Hydraulic Quick Coupler, 5/8" O-Ring	4
17	13787	5/8" x 168" Hydraulic Hose	4
22	15111	Manifold Valve f/ FS Series Hyd Motor	1
23	**	O-Ring - Replacement only	-
24	**	Socket Head Bolt - Replacement only	-
25	15112	FS Series Hydraulic Motor	1
26	15234	3/8" x 168" Hydraulic Hose	1
27	15235	Fitting, Str #6 Male JIC to #4 British PP Male	1
28	15236	Case Drain Quick Coupler	1
29	15237	Fitting, Str #12 M O-ring to #10 M JIC	4
30	15635	Fitting, #12 M O-Ring Plug	2
Please order replacement parts by PART NO. and DESCRIPTION.			

LIGHTING PARTS AND ASSEMBLY

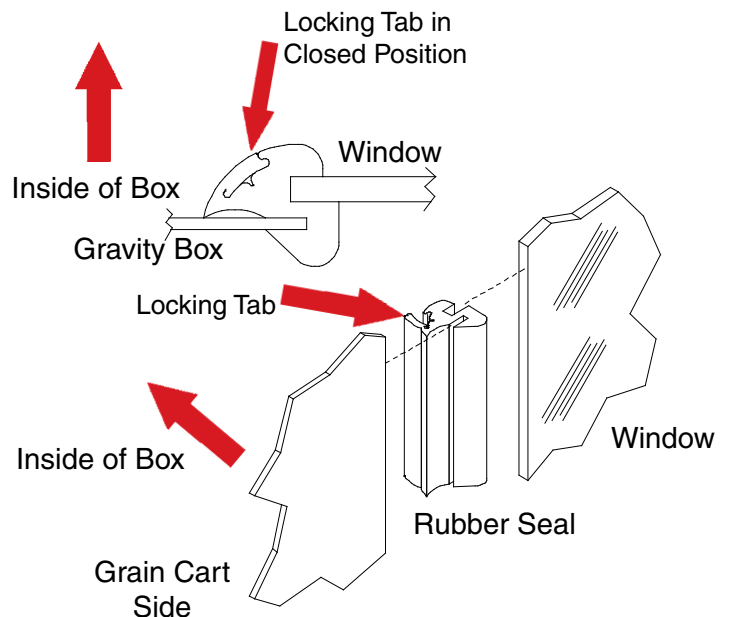


WINDOW INSTALLATION

INSTALLATION PROCEDURE

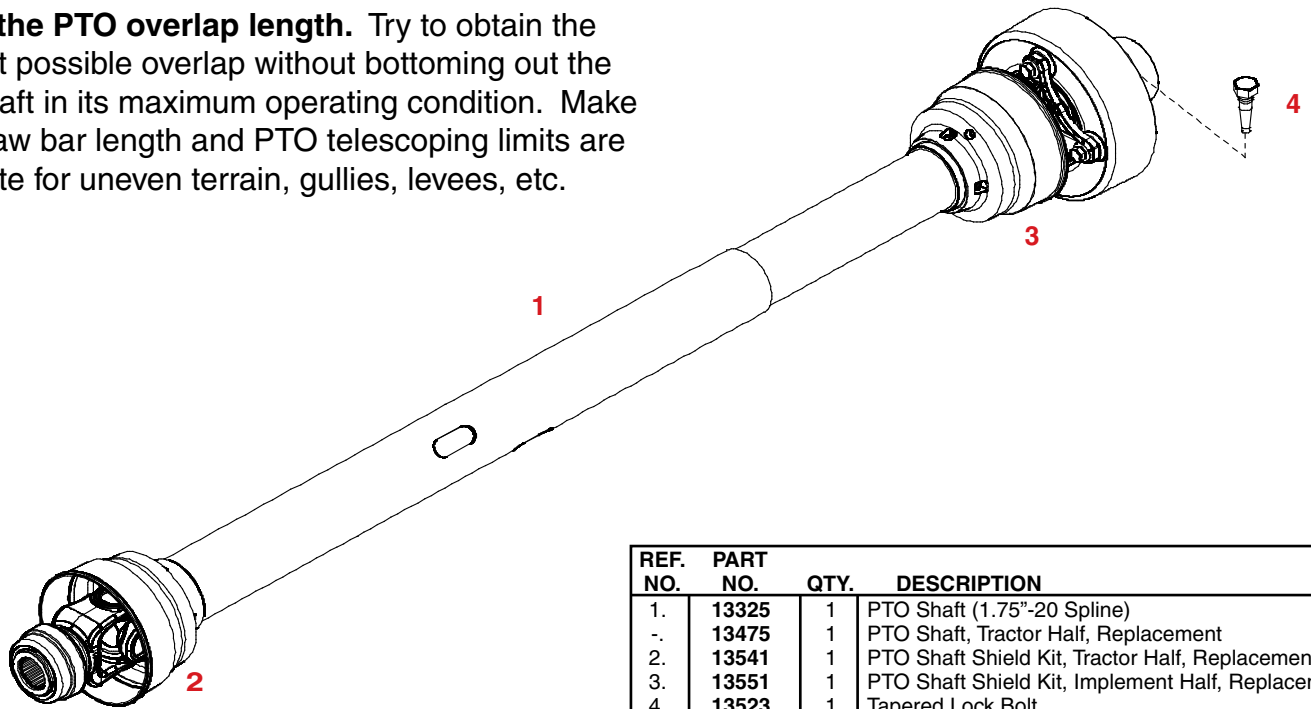
The installation must be done from inside the box.

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



PTO DRIVE SHAFT PARTS BREAKDOWN

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.



REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	13325	1	PTO Shaft (1.75"-20 Spline)
-.	13475	1	PTO Shaft, Tractor Half, Replacement
2.	13541	1	PTO Shaft Shield Kit, Tractor Half, Replacement
3.	13551	1	PTO Shaft Shield Kit, Implement Half, Replacement
4.	13523	1	Tapered Lock Bolt

Please order replacement parts by **PART NO.** and **DESCRIPTION.**

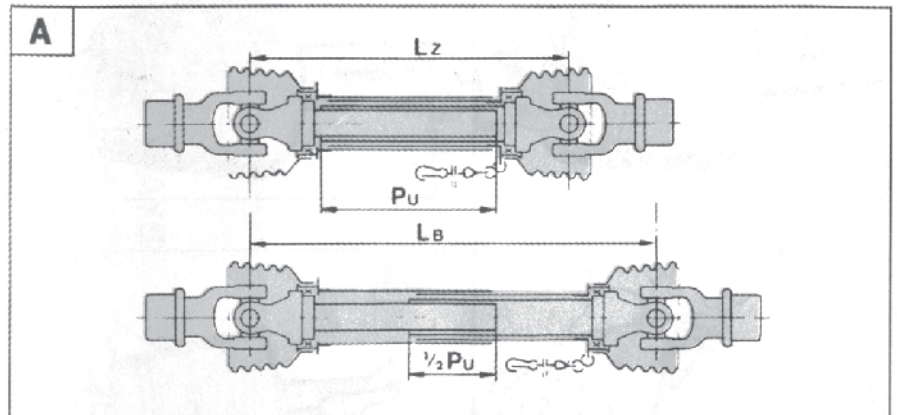
1. Maximum Operating Length L_b

Maximum operating length should not be more than half of telescoping member length (P_u).

2. Maximum Joint Angles (B1 & C2)

Do not exceed normal operation joint angle of 25° .

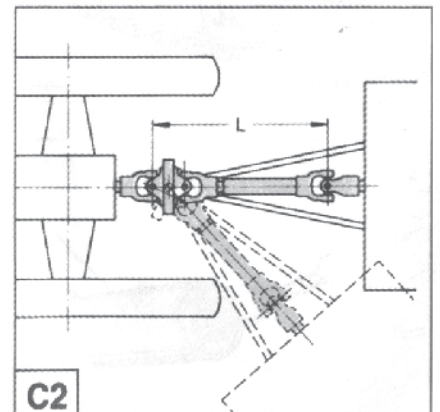
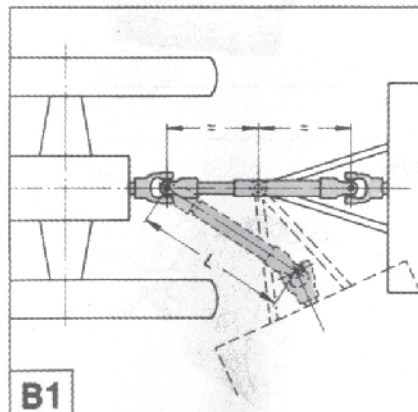
Ensure equal joint angles and switch off PTO if joint angles are too large and/or unequal.



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. 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.

TIRE SIZE	LOAD RATING	MAXIMUM PSI. (COLD)
520/85R38	170	55 psi
1250/50R32	-	41 PSI

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.

4. REPLACEMENT PARTS

- Replace all worn or damaged parts.

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 23 for maintenance locations).
- Repack wheel bearings before storage.
- Inspect tires for puncture holes or any other type of leak and repair as needed.



1400 Grain Cart Operating Instructions:

Note: Before filling box with grain, become familiar with hydraulic functions.

- With the gate indicator in the closed position, fill the box with grain. **(Never fill grain cart unless inner door is closed.)**
- With the PTO disengaged, engage the hydraulic lever for the pendant control and extend the auger. **(Never fold or extend the auger while PTO is rotating.)**
- **Engage PTO at a slow rpm.** Increase PTO rpm to desired speed. **(Never exceed 1000 RPM PTO speed.)**
- Open inner door to 1/3 to 1/2 open.
- Engage hydraulic levers for horizontal drag auger.
- Adjust inner door opening for desired grain flow.

When finished filling:

- Disengage hydraulic levers for horizontal drag auger.
- Close inner door and reduce speed on the PTO.
- When grain stops flowing, disengage PTO.
- After PTO comes to a complete stop, fold auger into transport position. **(Never fold or extend the auger while PTO is rotating.)**
 - Disengage hydraulic lever for pendant control.

Never do maintenance work or service cart while the tractor is running.

DO NOT PULL THE GRAIN CART UNLESS THE AUGER IS IN THE STORED POSITION.

- Disengage hydraulic lever for pendant control.

Never do maintenance work or service cart while the tractor is running.



Torque Specifications

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.

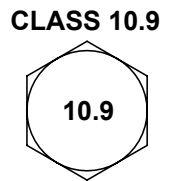
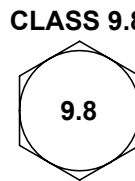
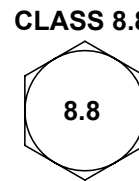
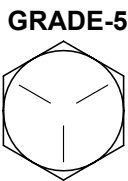
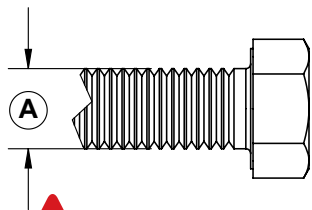
NOTE: Unless otherwise specified, high-strength Grade 5 hex bolts are used throughout assembly of equipment.

Bolt Torque for Standard bolts *

"A"	GRADE 2		GRADE 5		GRADE 8	
	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 Metric bolts *

"A"	CLASS 8.8		CLASS 9.8		CLASS 10.9	
	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. Chuck 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 bearing are set correctly when no end play can be felt after adjustment.

Hub	Initial Toque	Final Torque
10 bolt (duals)	90 ft/ lbs	60 ft/lbs
20 bolt (Super Single)	150 ft/lbs	75 ft/lbs

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