

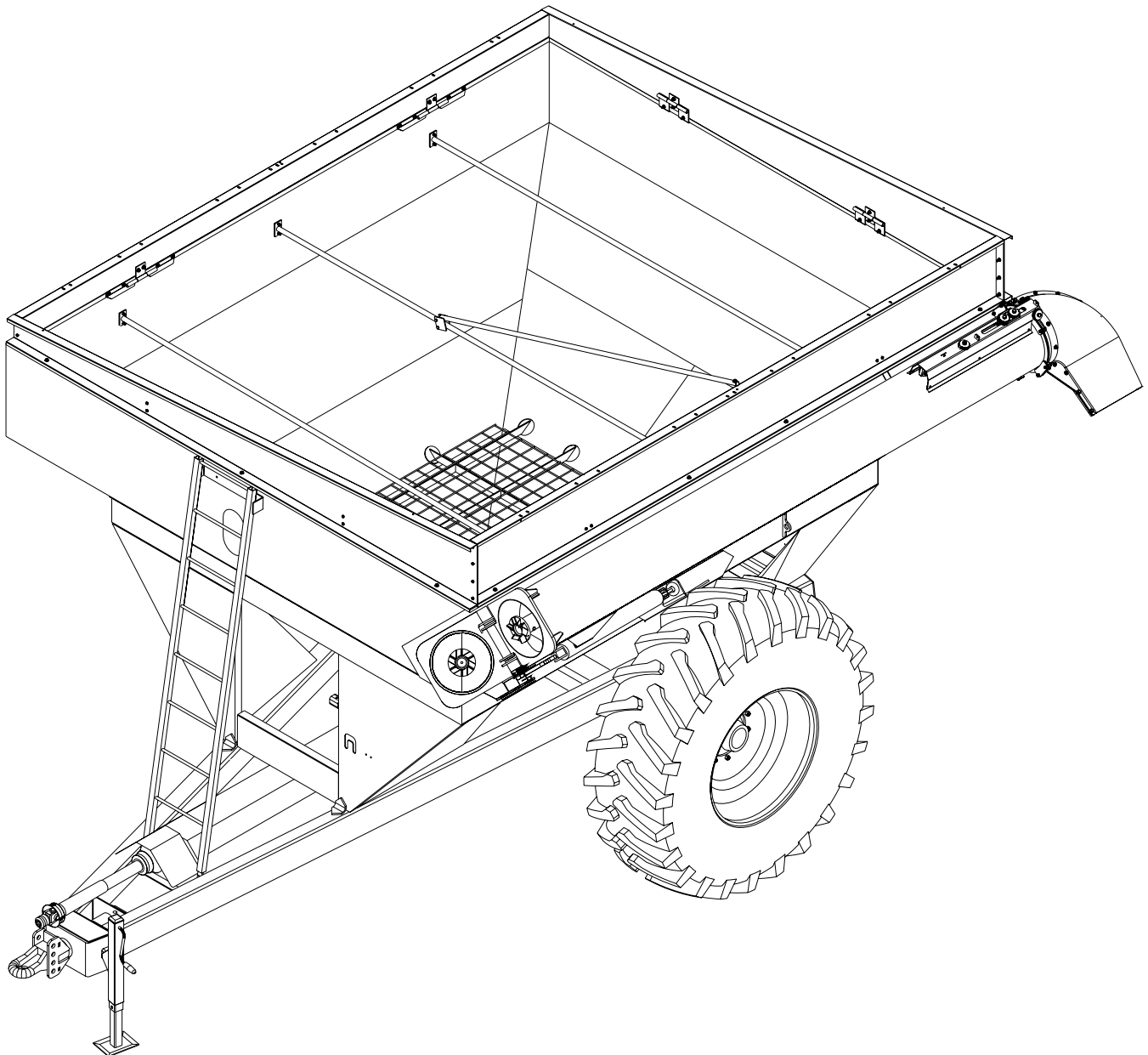


Doing Our Best to Provide You the Best

AG20016, Rev 19
11/20

GRAIN CART

650-750 BUSHEL



OPERATOR MANUAL

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.

WARRANTY POLICY, OPERATOR MANUALS & REGISTRATION

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

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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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 Street, Boyden, IA 51234
ph: (712) 725-2311 or Toll Free: 1-800-543-3626 Fax: (712) 725-2380
<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.
- **NEVER** exceed 40 psi tire inflation when using truck tires on gravity flow wagons.
- 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.



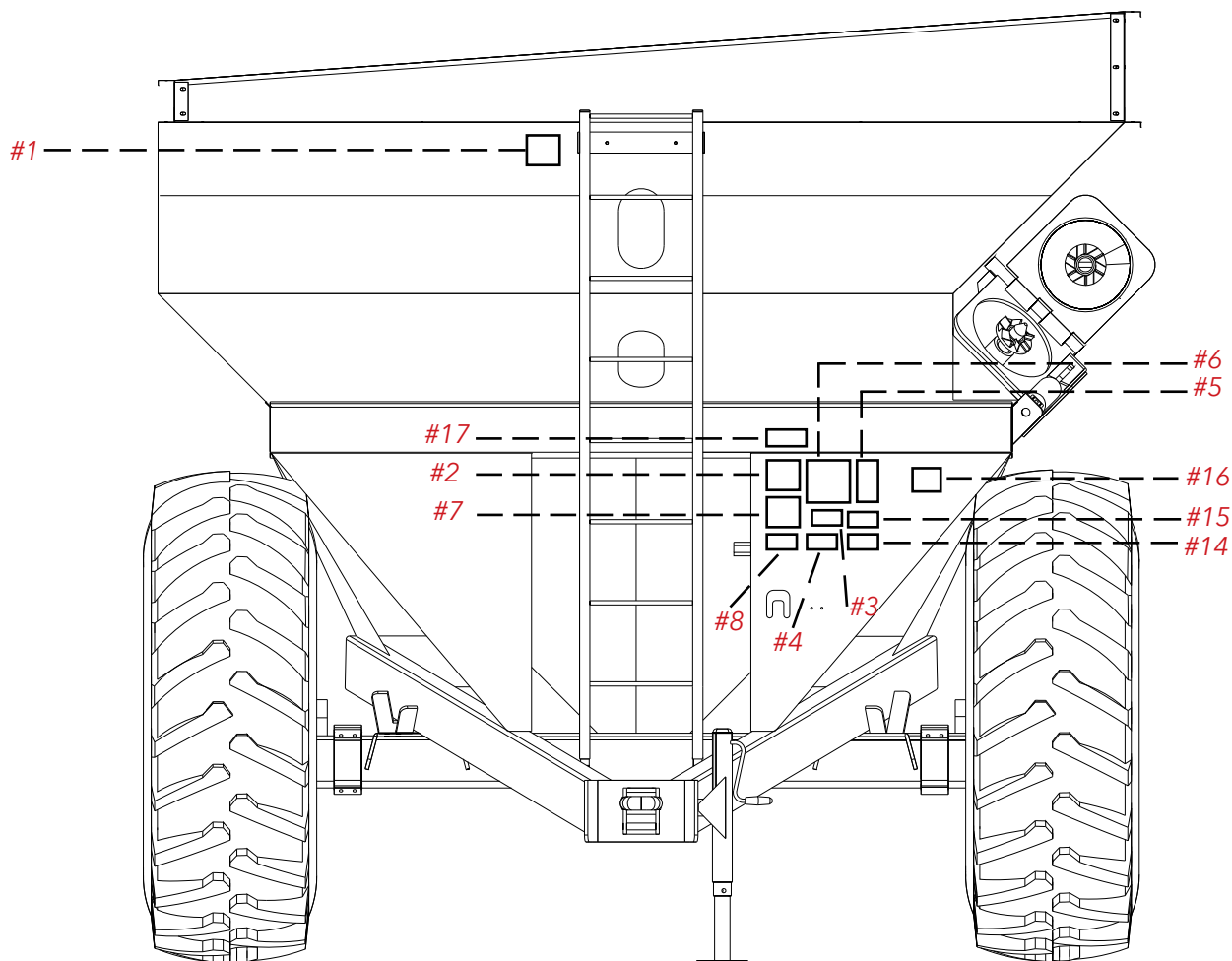
PERFORMING MAINTENANCE

- 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



SAFETY SIGN LOCATIONS

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.

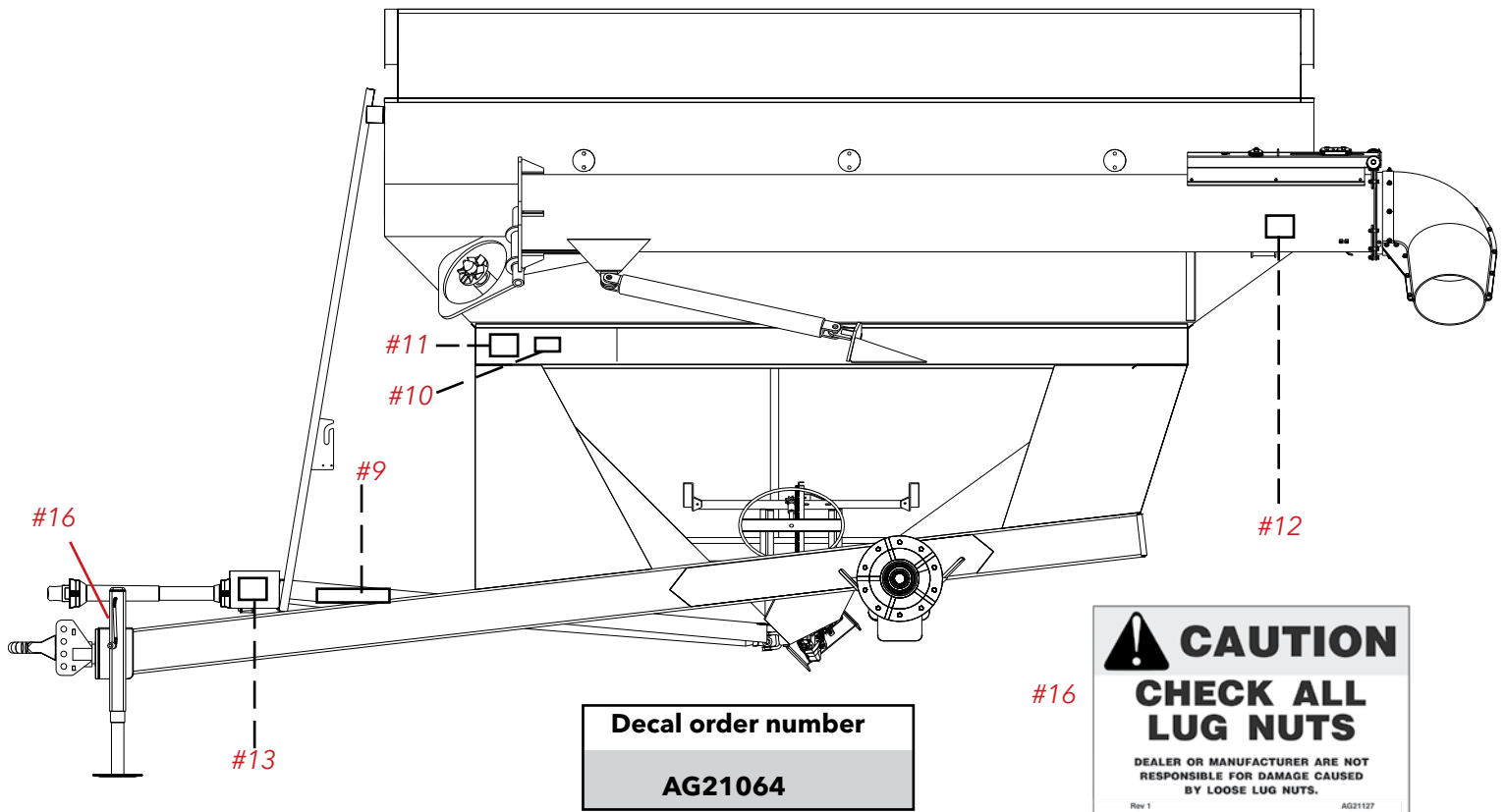


- | | |
|--------------|---|
| #1 DANGER - | Do not enter grain tank when auger is running! |
| #2 DANGER - | Keep off ladder while machine is being moved or in operation! |
| #3 WARNING - | Read and understand the operator's manual! |
| #4 WARNING - | Keep hands and clothing away from moving parts! |
| #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. |



SAFETY SIGN LOCATIONS

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.



- # 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 - Electrocutation can occur without direct contact with power lines!
- #13 DANGER - Rotating driveline!
- #14 WARNING - Do not exceed 20 mph when towing the grain cart!
- #15 WARNING - Local and state weight restrictions and regulations may affect use of this equipment on public roads and highways!
- Decal Kit - Decals #1-#15 are available as a kit.

- #16 CAUTION - Check all wheel nuts. Dealer or Manufacturer are not responsible for damage caused by loose wheel nuts. (AG21127, Qty 2)
This decal is not part of the decal kit.
- #17 WARNING - For increased life of the track system & grain cart, avoid sharp turns. (AG21185, Qty 1) This decal is not part of the decal kit.



TORQUE SPECIFICATION

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.

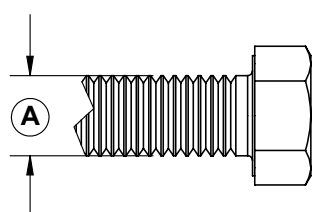
BOLT TORQUE DATA FOR STANDARD NUTS, BOLTS, AND CAPSCREWS

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.

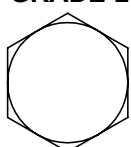
NOTE: Unless otherwise specified, high-strength Grade 5 hex bolts are used throughout assembly of equipment.

| 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) |

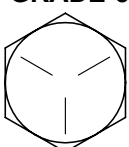
| Bolt Torque for Metric bolts * | | | | | | |
|--------------------------------|-----------|-------|-----------|-------|------------|--------|
| "A" | CLASS 8.8 | | CLASS 9.8 | | CLASS 10.9 | |
| | lb-ft | (N.m) | lb-ft | (N.m) | lb-ft | (N.m) |
| 6 | 9 | (13) | 10 | (14) | 13 | (17) |
| 7 | 15 | (21) | 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) |



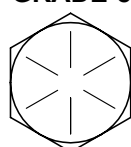
GRADE-2



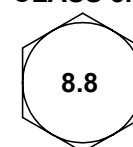
GRADE-5



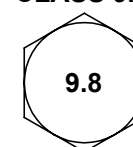
GRADE-8



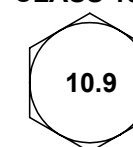
CLASS 8.8



CLASS 9.8



CLASS 10.9



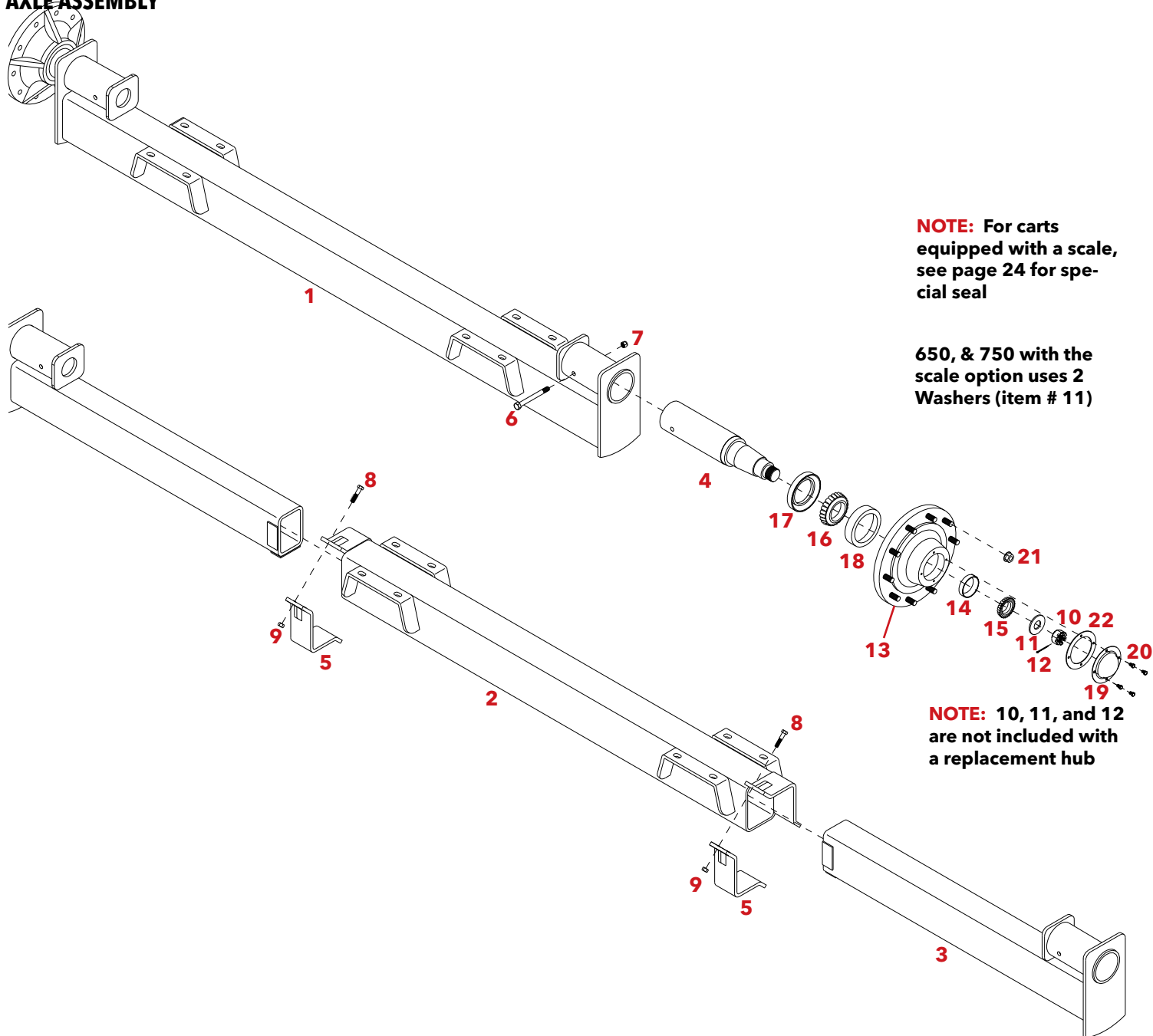
WHEEL BEARING ADJUSTMENT

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 Torque | Final Torque |
|-----------------------|-------------------------|------------------------|
| 10 Bolt Grain Cart | 75 ft/ lbs 90 ft/lbs | 50 ft/lbs 60 ft/lbs |

REPLACEMENT PARTS

AXLE ASSEMBLY

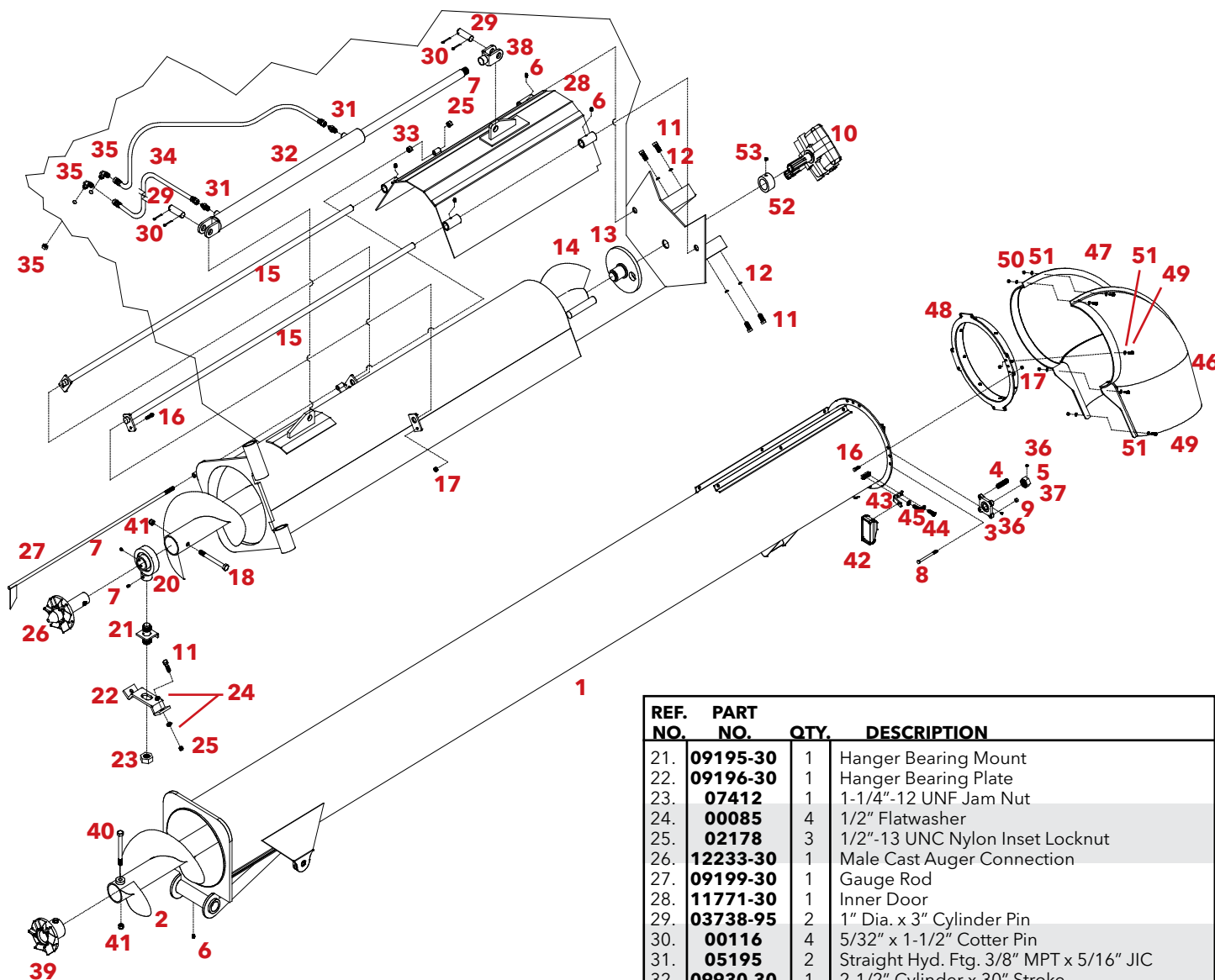


| Ref. | Part # | QTY. | DESCRIPTION |
|------|-----------------|------|--|
| 1 | 09151-30 | 1 | Fixed 120" Axle (650 Bu.) |
| - | 09668-30 | 1 | Fixed 120" Axle (750 Bu.) |
| 2. | 09205-30 | 1 | Adjustable Axle (650 Bu.) |
| - | 09684-30 | 1 | Adjustable Axle (750 Bu.) |
| 3 | 09206-30 | 2 | Axle Insert |
| 4 | 09204 | 2 | Spindle |
| 5. | 09214-30 | 2 | Axle Clamps |
| 6 | 04836 | 2 | 5/8"-11 UNC x 7" Hex Head Bolt |
| 7. | 02587 | 2 | 5/8-11 UNC Nylon Insert Locknut |
| 8. | 12036 | 8 | 1/2"-13 UNC x 2-1/2" Hex Head Bolt (Gr. 8) |
| 9. | 02178 | 8 | 1/2"-13 Nylon Insert Locknut |
| 10 | 09445 | 2 | 2"-12 UNF Castle Nut |
| 11 | 09444 | 2 | 2-1/16" ID x 4" OD x 1/4" Washer |
| 12 | 09446 | 2 | 3/8" x 3" Cotter Pin |

| | | | |
|-----|----------------|----|--|
| | ** 5540 | 2 | Hub Assembly(Includes items14-20) |
| 13 | 07861 | - | Replacement Stud bolt |
| 14. | 09448 | 1 | Outer Bearing Race |
| 15. | 09450 | 1 | Outer Bearing |
| 16. | 09449 | 1 | Inner Bearing |
| 17. | 09452 | 1 | Inner Grease Seal (non scale) |
| ** | 09442 | 1 | Inner Grease Seal (scale - not included) |
| 18. | 09447 | 1 | Inner Bearing Race |
| 19. | 09451 | 1 | Dust Cap |
| 20. | 04305 | 4 | 5/16-18 UNC x 1/2" Hex Head Bolt (Gr.5) |
| 21. | 07435 | 20 | 3/4"-16 UNF Lug Nut |
| 22. | 12525 | 1 | Hub Cap Gasket |

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

AUGER ASSEMBLY



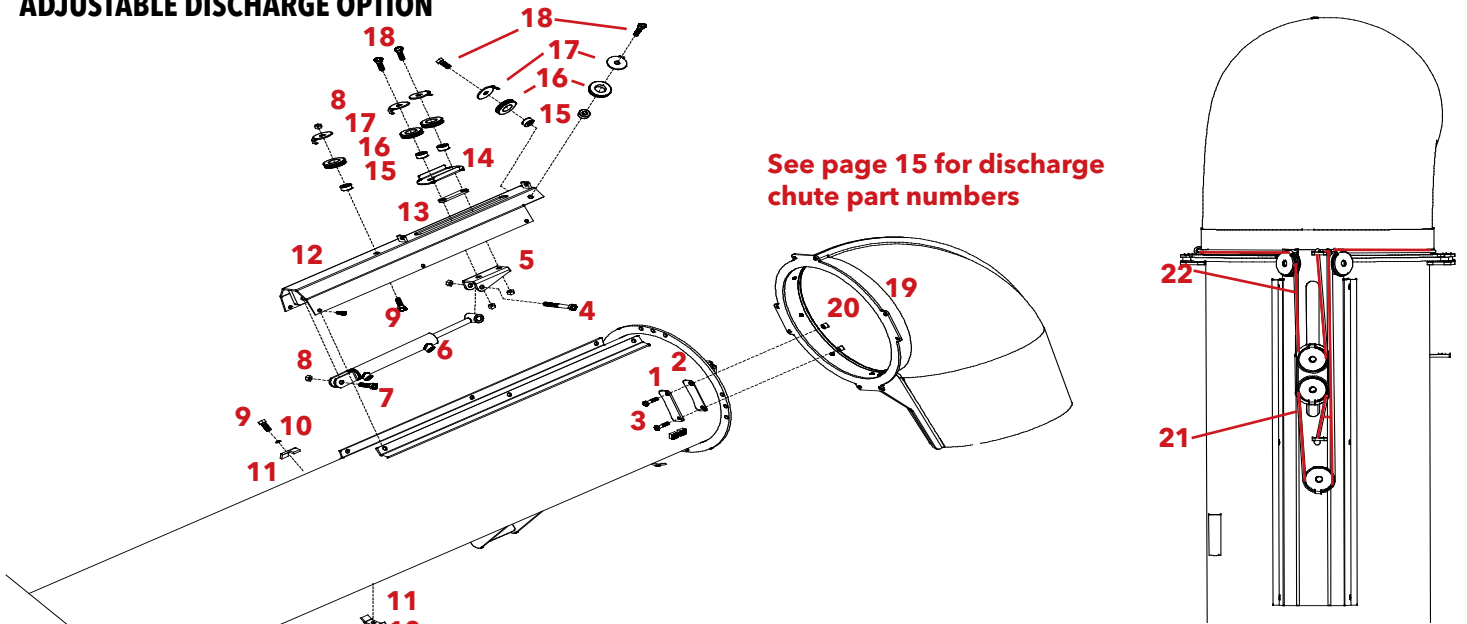
| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|---|
| 1. | 12663-? | 1 | Outer Auger Tube |
| 2. | 12565-30 | 1 | 14" Outer Auger Assembly |
| 3. | 09382 | 1 | Flange Bearing |
| 4. | 09168 | 4 | Upper Auger Spring |
| 5. | 11986 | 1 | 1-1/4"-12 UNF Hex Nut |
| 6. | 04642 | 5 | 1/4" Self Tapping Grease Zerk |
| 7. | 00789 | 6 | 3/8"-16 UNC x 3/8" Socket Head Set Screw |
| 8. | 09436 | 4 | 7/16"-14 UNC x 4-1/2" hex Head Bolt |
| 9. | 02771 | 4 | 7/16"-14 Nylon Insert Locknut |
| 10. | 07924 | 1 | Gear Box |
| 11. | 01254 | 10 | 1/2"-13 UNC x 1-1/2" Hex Head Bolt (Gr.5) |
| 12. | 00084 | 8 | 1/2" Lockwasher |
| 13. | 09193-30 | 1 | Lower Drive |
| 14. | 12567-30 | 1 | Lower Auger |
| 15. | 09203 | 2 | Slide Rod |
| 16. | 00523 | 2 | 3/8"-16 UNC x 1-1/4" Hex Head Bolt (Gr.5) |
| 17. | 02592 | 2 | 3/8"-16 Nylon Insert Locknut |
| 18. | 11099 | 1 | 3/4"-10 UNC x 5" Hex Head Bolt (Gr. 8) |
| 20. | 09185 | 1 | 2" Hanger Bearing |

| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|--|
| 21. | 09195-30 | 1 | Hanger Bearing Mount |
| 22. | 09196-30 | 1 | Hanger Bearing Plate |
| 23. | 07412 | 1 | 1-1/4"-12 UNF Jam Nut |
| 24. | 00085 | 4 | 1/2" Flatwasher |
| 25. | 02178 | 3 | 1/2"-13 UNC Nylon Inset Locknut |
| 26. | 12233-30 | 1 | Male Cast Auger Connection |
| 27. | 09199-30 | 1 | Gauge Rod |
| 28. | 11771-30 | 1 | Inner Door |
| 29. | 03738-95 | 2 | 1" Dia. x 3" Cylinder Pin |
| 30. | 00116 | 4 | 5/32" x 1-1/2" Cotter Pin |
| 31. | 05195 | 2 | Straight Hyd. Ftg. 3/8" MPT x 5/16" JIC |
| 32. | 09930-30 | 1 | 2-1/2" Cylinder x 30" Stroke |
| - | 5584 | - | Hydraulic Cylinder Seal Repair Kit (not shown) |
| 33. | 00640 | 1 | 1/2"-13 UNC Hex Head Jam Nut |
| 34. | 05191 | 2 | 36" Hydraulic Hose |
| 35. | 09172 | 2 | 3/8" JIC Bulkhead Ftg. 45° Elbow W/Nut |
| 36. | 01923 | 2 | 1/4"-20 UNC X 1/4" Socket Head Set Screw |
| 37. | 05089 | N/A | 1 1/4" Machine Washer NR |
| 38. | 09741-30 | 1 | Adjustable Cylinder End |
| 39. | 12188 | 1 | Female Cast Auger Connection |
| 40. | 10525 | 1 | 3/4"-10UNC x 6" Hex Head Bolt (Gr.8) |
| 41. | 02961 | 2 | 3/4"-10UNC Nylon Insert Locknut |
| 42. | 14926 | 1 | Discharge Light |
| 43. | 12555-30 | 1 | Light Bracket |
| 44. | 01899 | 2 | 3/8"-16 UNC x 3/4" Hex Head Bolt (Gr. 5) |
| 45. | 00060 | 2 | 3/8" Lockwasher |
| 46. | 12526 | 1 | Discharge Chute, Left |
| 47. | 12527 | 1 | Discharge Chute, Right |
| 48. | 12679-30 | 1 | Discharge Chute Drive Ring |
| 49. | 02990 | 24 | 5/16" UNC x 1" Hex Head Bolt (Gr. 5) |
| 50. | 02802 | 24 | 5/16" UNC Nylon Insert Locknut |
| 51. | 00004 | 38 | 5/16" Flat Washer |
| 52. | 13640-95 | 1 | Gearbox Collar |
| 53. | 00789 | 1 | 3/8" x 3/8" Set Screw |

Please order replacement parts by **PART NO.** and **DESCRIPTION**. Painted Parts are available in Red or Green. Add -10 behind the part number for red, -20 behind the part number for green, and -42 behind the part number for blue.

REPLACEMENT PARTS

ADJUSTABLE DISCHARGE OPTION



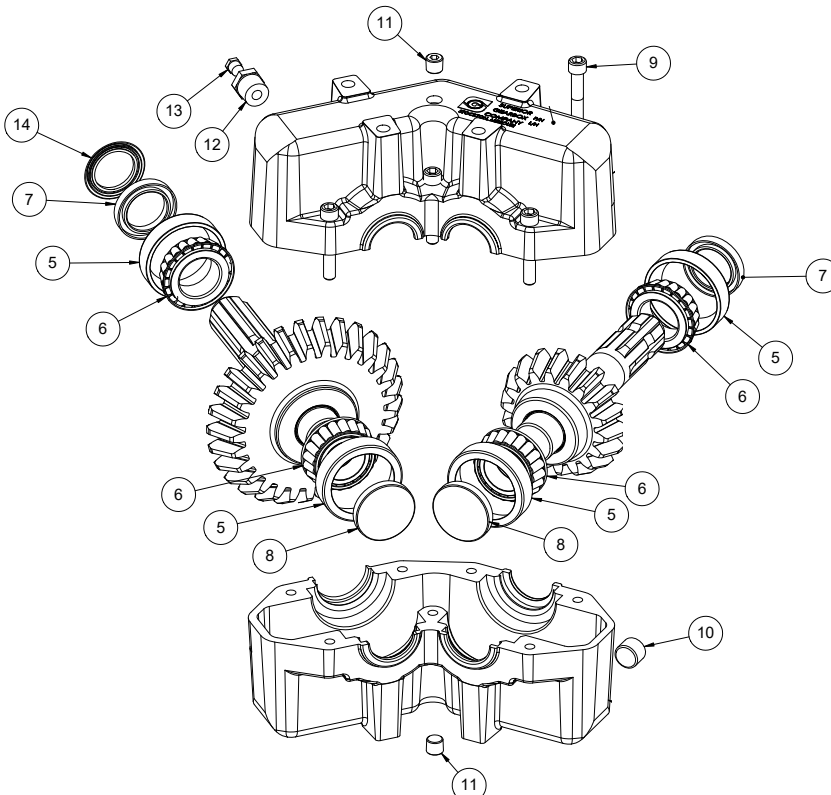
See page 15 for discharge chute part numbers

| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|---|
| 1. | 12549-30 | 4 | Ring Retainer Bracket |
| 2. | 12550 | 4 | Ring Retainer Bracket Spacer |
| 3. | 00914 | 8 | 3/8" UNC x 1 1/2" Hex Head Bolt (Gr. 5) |
| 4. | 05290 | 1 | 1/2" UNC x 3 1/4" Hex Head Bolt (Gr. 5) |
| 5. | 12513-30 | 1 | Trolley Bottom |
| 6. | 12522-30 | 1 | Hydraulic Cylinder |
| - | 5222 | - | Hydraulic Cylinder Repair Kit (not shown) |
| 7. | 00482 | 1 | 1/2" UNC x 1 3/4" Hex Head Bolt (Gr. 5) |
| 8. | 02178 | 7 | 1/2" UNC Nylon Insert Locknut |
| 9. | 01899 | 13 | 3/8" UNC x 3/4" Hex Head Bolt (Gr. 5) |

| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|-------------------------------------|
| 10. | 00060 | 7 | 3/8" Lockwasher |
| 11. | 09218-95 | 7 | 2 Place Hose Keeper |
| 12. | 12684-30 | 1 | Hydraulic Cylinder Mount |
| 13. | 12514-95 | 1 | Trolley Spacer |
| 14. | 12512-30 | 1 | Trolley Top |
| 15. | 09283 | 5 | Bushing |
| 16. | 09282 | 5 | Plastic Sheave |
| 17. | 12531-95 | 5 | Cable Retainer Washer |
| 18. | 01253 | 2 | 1/2" UNC x 2" Hex Head Bolt (Gr. 5) |
| 19. | 02592 | 8 | 3/8" UNC Nylon Insert Locknut |
| 20. | 12667-95 | 8 | Retainer Bracket Bushing |
| 21. | 12691 | 1 | Long Cable |
| 22. | 12692 | 1 | Short Cable |
| 23. | 13883 | 2 | Hydraulic Hose 192" (not shown) |
| - | 13884 | 2 | Hydraulic Hose 258" (not shown) |

Please order replacement parts by PART NO. and DESCRIPTION.

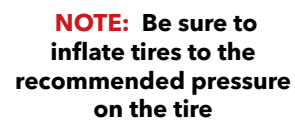
GEARBOX BREAKDOWN



| REF. NO. | PART NO. | DESCRIPTION |
|----------|----------|------------------|
| 5. | 13966 | Race |
| 6. | 13967 | Bearing |
| 7. | 13972 | Seal |
| 8. | 13971 | Seal, End Cap |
| 10. | 13973 | Plug, 1/2" |
| 11. | 13974 | Plug, 1/4" |
| 13. | 13975 | Plug, 1/8", Vent |
| 14. | 14777 | Gamma Seal |

DEMCO Replacement Parts for Gearbox # 07924

Please order replacement parts by PART NO. and DESCRIPTION.



REPLACEMENT PARTS

GRAIN CART ASSEMBLY AND OPERATION

| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|--|
| 1. | 13399 | 1 | PTO Shaft (1.375"-21 Spline) |
| - | 13398 | 1 | PTO Shaft (1.75"-20 Spline) |
| 2. | 13522 | 1 | Tapered Lock Pin, Replacement only |
| 3. | 11698 | 2 | 7/8"-9 NC x 5 1/2" Hex Head Bolt (Gr. 8) |
| 4. | 13400 | 1 | PTO Drive Shaft |
| 5. | 09159-30 | 1 | PTO Shaft Guard/Step |
| 6. | 00523 | 17 | 3/8"-16 UNC x 1-1/4" Hex Head Bolt (Gr.5) |
| 7. | 01254 | 8 | 1/2"-13 UNC x 1-1/2" Bolt (Gr.5) |
| 8. | 10633 | 2 | Flange Bearing (35 mm, 4 bolt) |
| 9. | 09455 | 3 | 1"-14 UNF Stover Lock Nut |
| 10. | 09163-30 | 1 | Category IV forged Hitch Base |
| 11. | 09164-30 | 1 | 1-1/4" Clevis Insert |
| 12. | 12404 | 1 | Hitch Shaft |
| 13. | 09454 | 3 | 1"-14 UNF x 6-1/2" Hex Head Bolt (gr.8) |
| 14. | 00116 | 4 | 5/32" x 1-1/2" Cotter Pin |
| 15. | 10678 | 2 | 7/8"-9 NC Nylon Insert Locknut |
| 16. | 09157 | 1 | Pintle Ring Mount Pivot Collar |
| 17. | 09219-30 | 1 | Jack |
| - | 5661 | - | Jack Gear Kit |
| 18. | 05328 | 1 | 1/2" x 3" Ball Lock Pin |
| 19. | 02592 | 27 | 3/8"-16 UNC Nylon Insert Locknut |
| 20. | 00059 | 11 | 3/8" Flatwasher |
| 21. | 09499 | 6 | Anti-skid Tape |
| 22. | 09160-30 | 1 | Guard Plate |
| 23. | 13466-30 | 1 | Rear Bearing Mount |
| 24. | 02178 | 3 | 1/2"-13 UNC Nylon Insert Locknut |
| 25. | 00085 | 4 | 1/2" Flatwasher |
| 26. | 00205 | 4 | 7/16" Flatwasher |
| 27. | 02771 | 8 | 7/16"-14 UNC Nylon Insert Locknut |
| 28. | 13401 | 1 | U-Joint (1-3/8"-6 Spline to 1-3/8"-6 Spline) |
| 29. | 04073 | 1 | 1/2"-13 x 3" Hex Head Bolt (Gr.5) |
| 30. | 01254 | 2 | 1/2"-13 x 1-1/2" Hex Head Bolt (Gr.5) |
| 31. | 07276 | 2 | Plexiglass Viewing Window |
| 32. | 07310 | 2 | Rubber Window Seal |
| 33. | 11995-30 | 1 | Ladder |
| 34. | 12693 | 1 | 550 Undercarriage/Box (specify Red or Green) |
| - | 12694 | 1 | 650 Undercarriage/Box(Specify Red or Green) |
| - | 12695 | 1 | 750 Undercarriage/Box(Specify Red or Green) |
| 35. | 03159 | 2 | Square Tube Cap |
| 36. | 09200-30 | 3 | Box Cross Brace |
| 37. | 10909-30 | 1 | Folding Pin |
| 38. | 00907 | 16 | 3/8"-16 UNC x 1" Hex Head Bolt (Gr.5) |
| 39. | 01108-30 | 1 | Door Lift Channel |
| 40. | 09662-30 | 1 | Lower Door |
| 41. | 02961 | 9 | 3/4"-10 UNC Nylon Insert Locknut |
| 42. | 00492 | 8 | 3/4" Flat Washer |
| 43. | 05047 | 8 | 3/4"-10 UNC x 2-1/2" Hex Head Bolt (Gr.5) |
| 44. | 5693-30 | 1 | Door Lift Assembly |
| 45. | 07412 | 2 | 1-1/4"-12 UNF Jam Nut |
| 46. | 09198-30 | 1 | Folding Cylinder Mount |
| 47. | 03738-95 | 2 | Cylinder Pin |
| 48. | 09930-30 | 1 | 2-1/2" Hydraulic Cylinder |
| - | 5584 | - | Hydraulic Cylinder Seal Repair Kit (not shown) |
| 49. | 01106-30 | 6 | Box Washer |
| 50. | 12126 | 1 | SMV Sign |
| 51. | 12468-30 | 1 | SMV Sign Bracket |
| 52. | 07594 | 2 | 3/8" x 1" Self Tapping Bolts |
| 53. | 09380-60 | 2 | 32" x 21" Rim (650/750) |
| - | 09381-60 | 2 | 32" x 27" Rim (650/750) |
| 54. | T24.5L | 2 | 24.5" x 32" x 12 Ply Tire |
| - | T30.5D | 2 | 30.5" x 32" x 12 Ply Tire |
| 55. | 07435 | 20 | 3/4"-16 UNF Lug Nut |
| 56. | 09741-30 | 1 | Adjustable Cylinder End |
| 57. | 11519-30 | 2 | Ladder Mount Peg (black) |
| 58. | 10525 | 1 | 3/4" x 6" Gr. 8 Hex Head Bolt |
| 59. | 02772 | 6 | 1/4" Nylon Insert Locknut |
| 60. | 01076 | 6 | 1/4" x 3/4" Hex Head Bolt |
| 61. | 10277 | 1 | Electrical Plug Holder |
| 62. | 10241 | 1 | Operator Manual Canister |
| 63. | 12403-30 | 1 | Hitch Receiver Channel, non-scale |
| - | 12428-30 | - | Hitch Receiver Channel, scale |
| 64. | 12154 | 1 | Safety Chain |



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

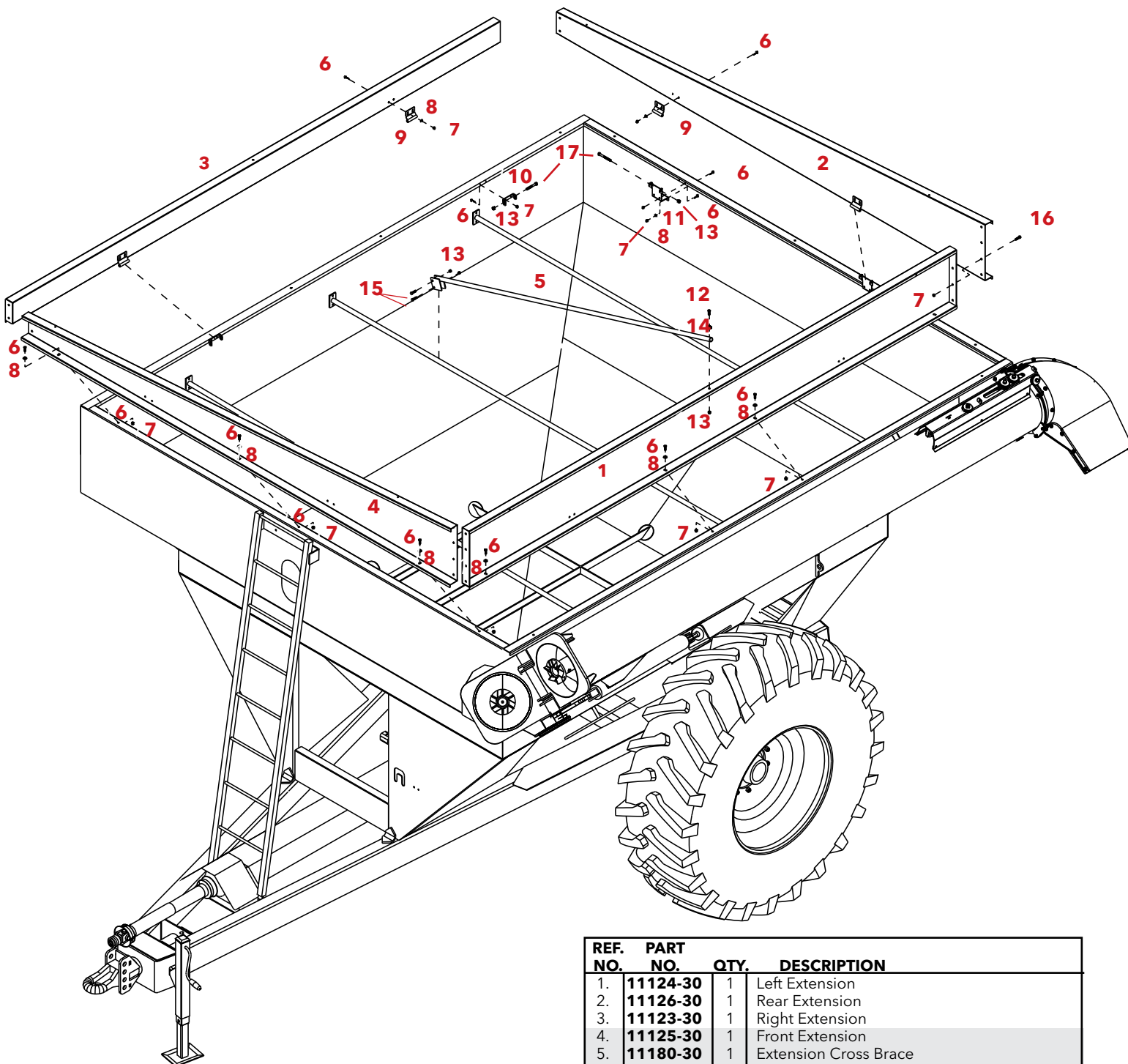
- Connect Grain Cart to tractor using a good quality hitch pin. Attach a safety chain. See Safety Manual.
- Attach power take-off shaft to tractor. Check tractor drawbar and adjust to allow clearance.
- Raise jack stand and place to rear storage position.
- Make sure no debris is in the grain cart.
- 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 **slow rate of speed** 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.
- Disengage PTO and allow it to come to a complete stop. Auger is now ready to fold to stored position. **DO NOT PULL THE GRAIN CART UNLESS THE AUGER IS IN THE STORED POSITION.**
- Never exceed 1,000 RPM on the system.
- Never fold or extend auger unless PTO is completely stopped.
- Never fill grain cart unless inner gate is closed.
- 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.

Please order replacement parts by PART NO. and DESCRIPTION. Painted Parts are available in Red, Green or Blue. Add -10 behind the part number for red, -20 behind the part number for green, and -42 behind the part number for blue.

650 BUSHEL EXTENSION ASSEMBLY

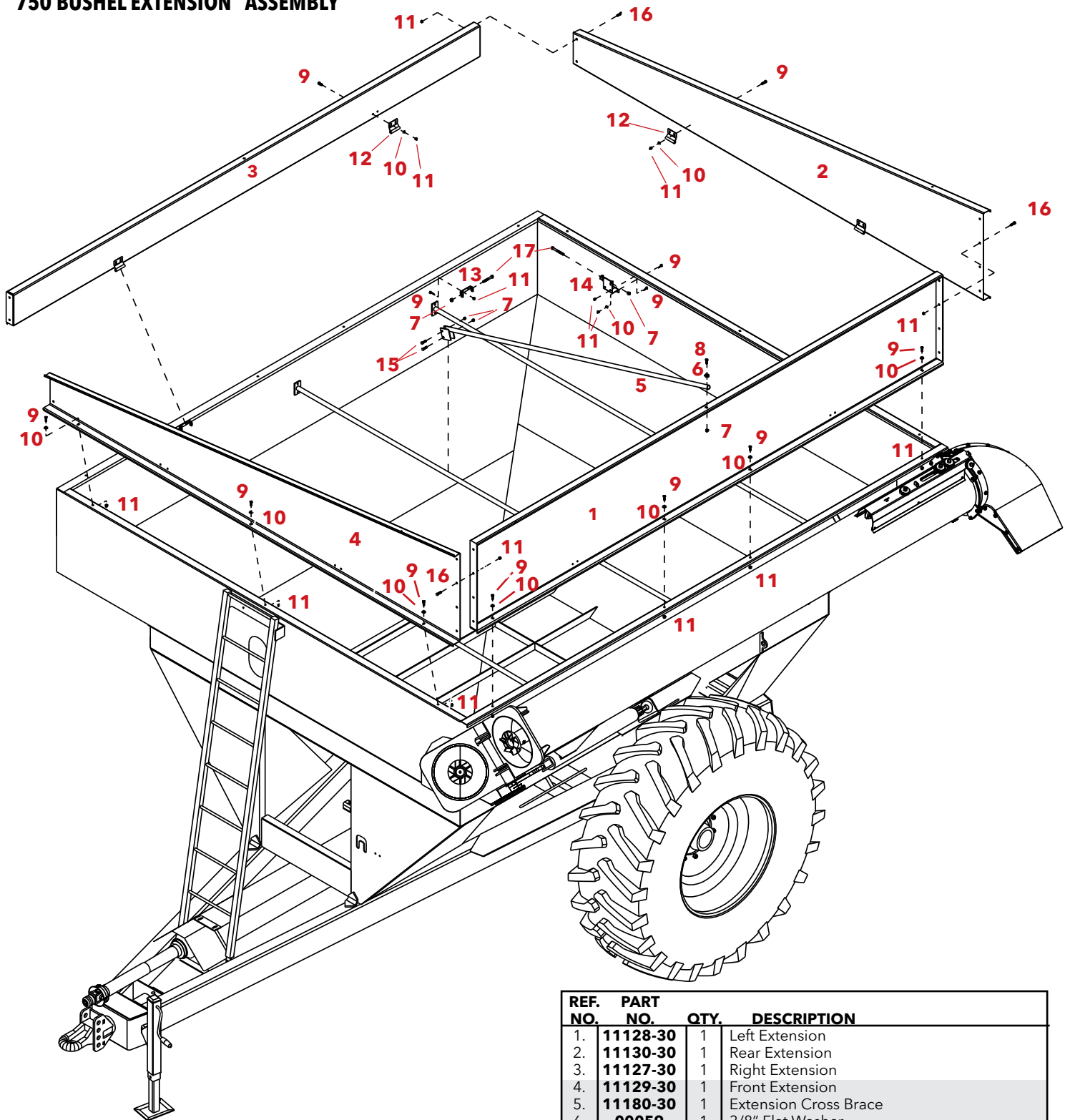


| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|-----------------|------|--|
| 1. | 11124-30 | 1 | Left Extension |
| 2. | 11126-30 | 1 | Rear Extension |
| 3. | 11123-30 | 1 | Right Extension |
| 4. | 11125-30 | 1 | Front Extension |
| 5. | 11180-30 | 1 | Extension Cross Brace |
| 6. | 01263 | 54 | 5/16"-16 UNC x 3/4" Hex Head Bolt (Gr.5) |
| 7. | 02802 | 66 | 5/16"-16 UNC Nylon Insert Locknut |
| 8. | 00004 | 38 | 5/16" Flat Washer |
| 9. | 13154-30 | 8 | Extension Hinge Middle |
| 10. | 13153-30 | 4 | Extension Hinge Side |
| 11. | 13152-30 | 4 | Extension Hinge Front/Rear |
| 12. | 13052 | 1 | 3/8" UNC X 1.25 Slotted Truss Head Bolt |
| 13. | 02592 | 11 | 3/8" -16 UNC Nylon Insert Locknut |
| 14. | 00059 | 1 | 3/8" Flatwasher |
| 15. | 04226 | 2 | 3/8" -16 UNC x 2" Hex Head Bolt (Gr. 5) |
| 16. | 02990 | 12 | 5/16" -16 UNC X 1" Hex Head Bolt (Gr. 5) |
| 17. | 02769 | 8 | 3/8" x 4" Hex Head Bolt (Gr. 5) |

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

REPLACEMENT PARTS

750 BUSHEL EXTENSION ASSEMBLY



| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|--|
| 1. | 11128-30 | 1 | Left Extension |
| 2. | 11130-30 | 1 | Rear Extension |
| 3. | 11127-30 | 1 | Right Extension |
| 4. | 11129-30 | 1 | Front Extension |
| 5. | 11180-30 | 1 | Extension Cross Brace |
| 6. | 00059 | 1 | 3/8" Flat Washer |
| 7. | 02592 | 11 | 3/8"-16 UNC Nylon Insert Locknut |
| 8. | 13052 | 1 | 3/8" UNC X 1.25 Slotted Truss Head Bolt |
| 9. | 01263 | 54 | 5/16" -16 UNC x 3/4" Hex Head Bolt (Gr. 5) |
| 10. | 00004 | 38 | 5/16" Flatwasher |
| 11. | 02802 | 66 | 5/16" -16 UNC Nylon Insert Locknut |
| 12. | 13154-30 | 8 | Extension Hinge Middle |
| 13. | 13153-30 | 4 | Extension Hinge Side |
| 14. | 13152-30 | 4 | Extension Hinge Front/Rear |
| 15. | 04226 | 2 | 3/8" -16 UNC x 2" Hex Head Bolt (Gr. 5) |
| 16. | 02990 | 12 | 5/16"-16 UNC X 1" Hex Head Bolt (Gr. 5) |
| 17. | 02769 | 8 | 3/8" X 4" Hex Head Bolt (Gr. 5) |

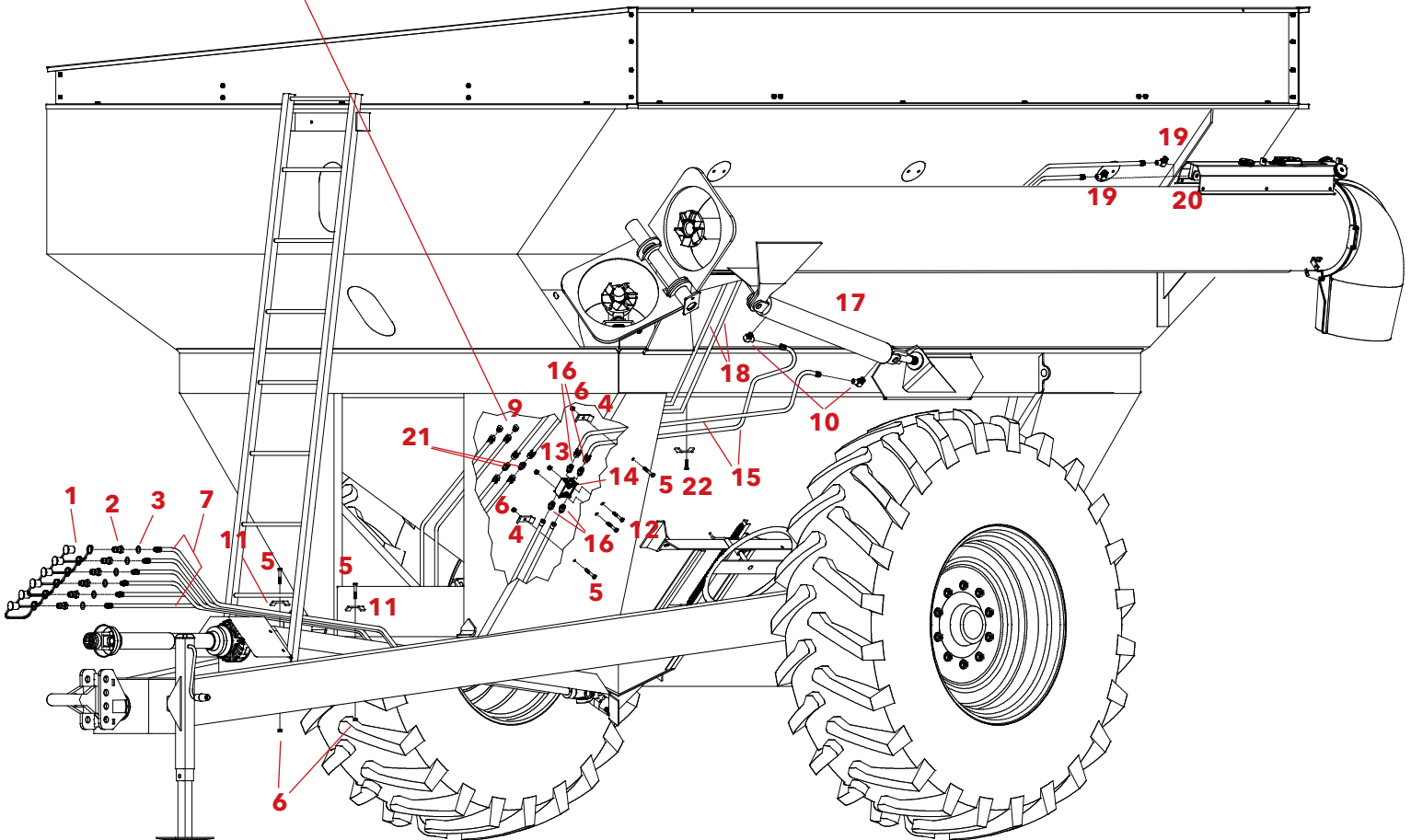
Please order replacement parts by **PART NO.** and **DESCRIPTION.**

HYDRAULICS PARTS AND ASSEMBLY

(Shown with optional Adjustable Hydraulic Discharge Chute)

For Optional Pendant/ Hydraulic Block Schematic, See Page 22

Item #8 is on opposite side of fittings inside box



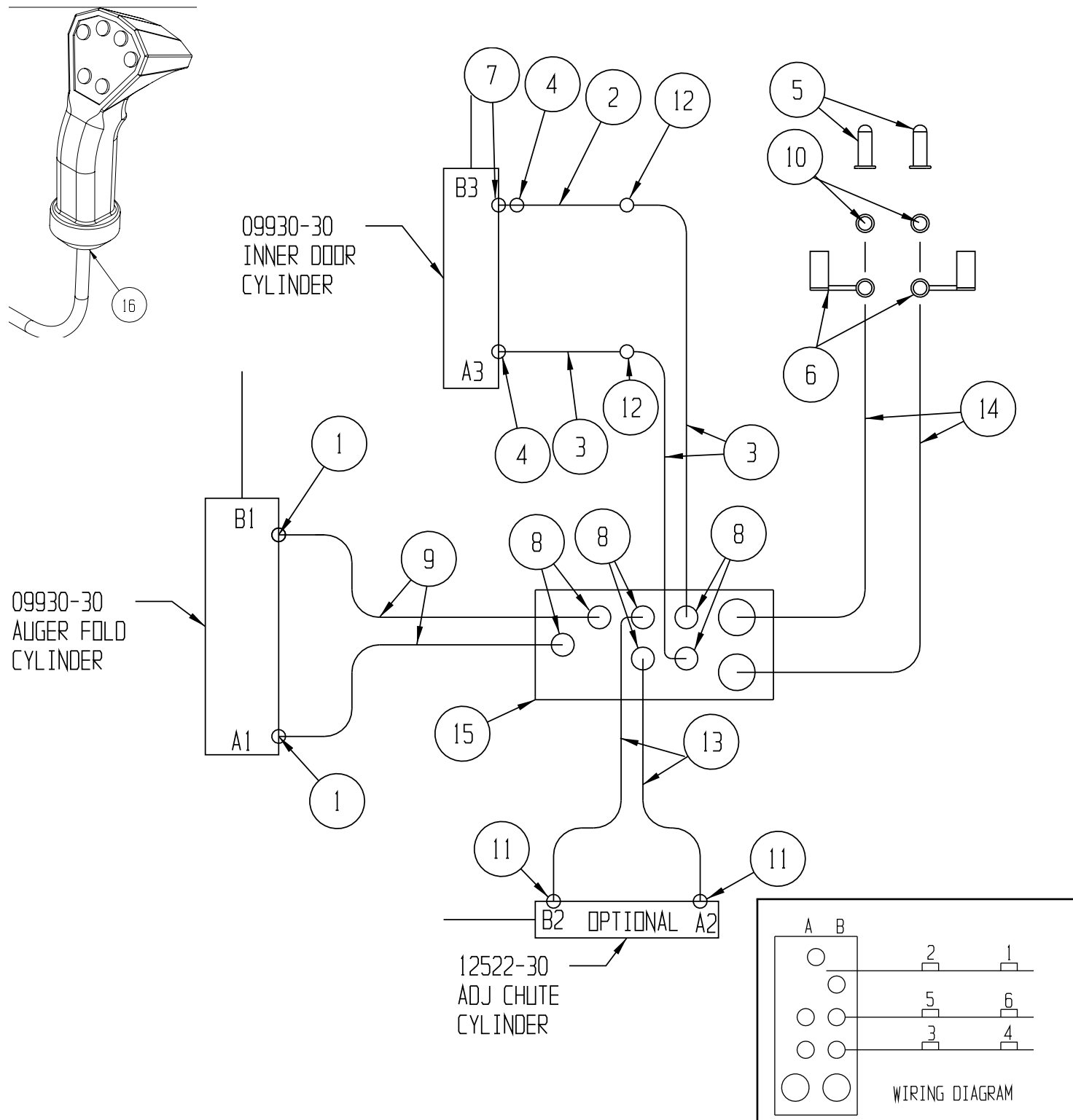
| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|---|
| 1. | 05198 | 2 | Rubber Coupler Cover (Black) |
| - | 12677 | 2 | Rubber Coupler Cover (Red) |
| - | 12678 | 2 | Rubber Coupler Cover (Yellow) |
| 2. | 13888 | - | Replacement Hydraulic Quick Coupler |
| 3. | 13889 | - | Replacement O-Ring |
| 4. | 09218-95 | 2 | Hose Keeper (2 Hose) |
| 5. | 00914 | 4 | 3/8"-16 UNC x 1-1/2" Hex Head Bolt (Gr.5) |
| 6. | 02592 | 4 | 3/8"-16 UNC Nylon Insert Locknut |
| 7. | 13883 | - | 1/2" x 18' Hydraulic Hose w/ Quick Coupler |
| 8. | 05191 | 2 | 1/2" x 36" Hydraulic Hose (Not Shown) |
| 9. | 09172 | 2 | 3/8" JIC (2X) Bulkhead Fitting Elbow 90° |
| 10. | 13882 | 2 | 3/8" MPT x #6 JIC Elb Fitting w/ .041 Orifice |

| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|--|
| 11. | 09217-30 | 3 | Hose Keeper (4 Hose) |
| 12. | 03547 | 2 | 5/16"-18 UNC X 2-1/4" Hex Head Bolt (Gr.5) |
| 13. | 02802 | 2 | 5/16"-18 UNC Nylon Insert Locknut |
| 14. | 07582 | 1 | Pilot Operated Check Valve |
| 15. | 05840 | 2 | 1/4" x 84" Hydraulic Hose |
| 16. | 05243 | 4 | Str. Hyd. Fitting w/ O-Ring |
| 17. | 09930-30 | 1 | 2-1/2" Cylinder |
| - | 5584 | - | Hydraulic Cylinder Seal Repair Kit (not shown) |
| 18. | 13884 | 2 | 1/4" Hydraulic Hose, 20' long |
| 19. | 13886 | 2 | 90° Elbow, 6 O-Ring x Male 6 JIC |
| 20. | 12522-30 | 1 | Hydraulic Cylinder |
| 21. | 09950 | 2 | Ftg Hyd Str .563"M (2X) Union |
| 22. | 07594 | 1 | Bolt, Self Tapping 3/8" x 1" |

Please order replacement parts by PART NO. and DESCRIPTION.

REPLACEMENT PARTS

OPTIONAL PENDANT CONTROL HYDRAULIC SCHEMATIC

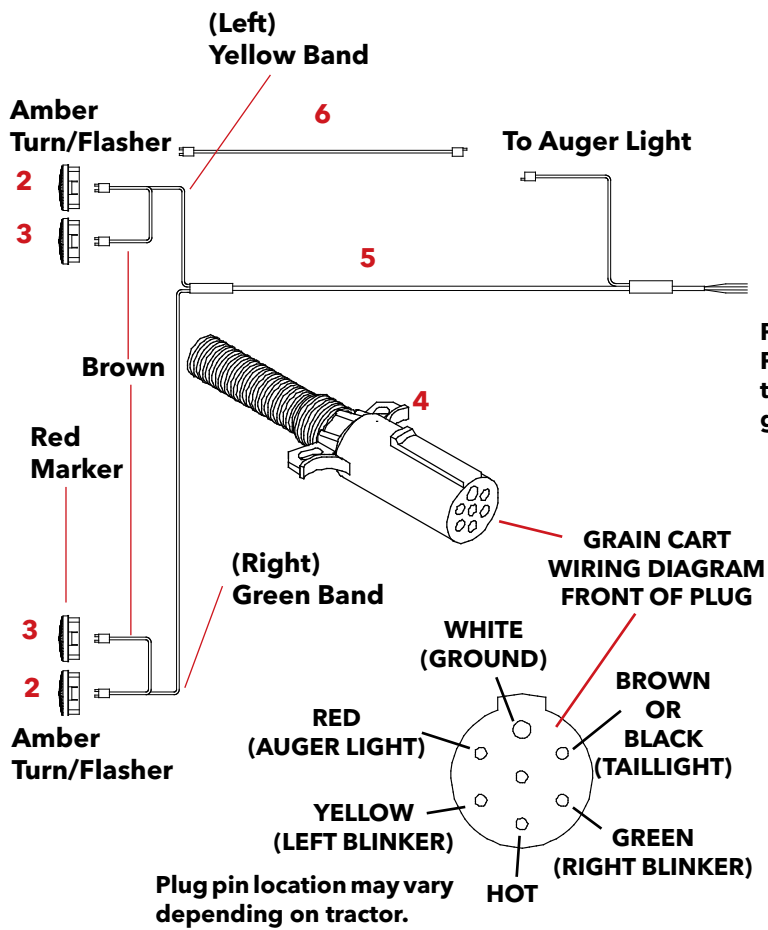
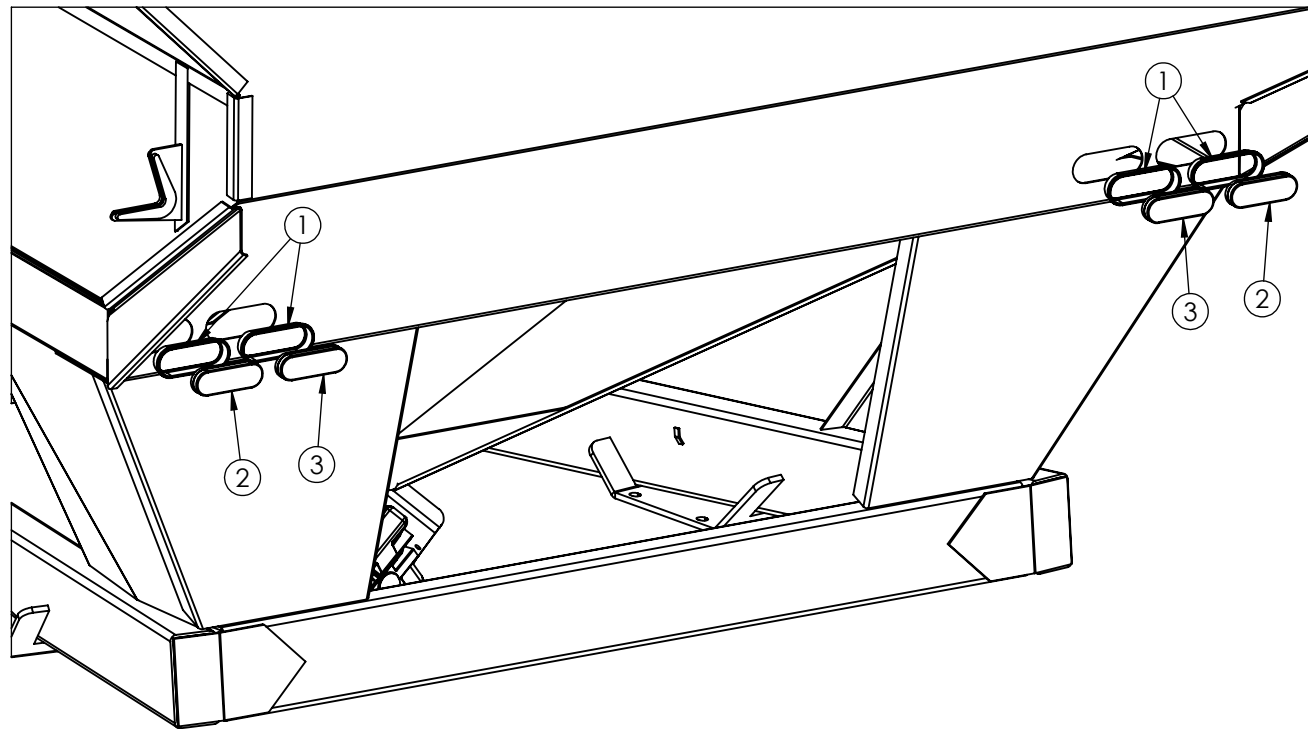


| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|---|
| 1. | 13882 | 2 | 3/8" MPT x #6 JIC Elbow W/ .041 Orifice |
| 2. | 05190 | 1 | 1/4" x 48" Hydraulic Hose |
| 3. | 05191 | 3 | 1/4" x 36" Hydraulic Hose |
| 4. | 05195 | 2 | Str. Hyd. Fitting, .375 MPT |
| 5. | 13890 | 2 | Replacement Hydraulic Quick Coupler |
| 6. | 05198 | 2 | Rubber Coupler Cover (Black) |
| 7. | 05215 | 1 | 3/8" MPT x 3/8" FPT Elbow Fitting |
| 8. | 05243 | 6 | Str. Hyd. Fitting w/ O-Ring |
| 9. | 05840 | 2 | 1/4" x 84" Hydraulic Hose |

Please order replacement parts by PART NO. and DESCRIPTION.

| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|---|
| 10. | 13891 | 2 | Replacement O-Ring |
| 11. | 13886 | 2 | 90° Elbow Hyd. Fitting w/ O-Ring w/ .41 Orifice |
| 12. | 12374 | 2 | Bulkhead Hydraulic Fitting, 45° |
| 13. | 13884 | 2 | 1/4" x 420" Hydraulic Hose |
| 14. | 13885 | 2 | 1/2" x 16' Hydraulic Hose |
| 15. | 13064 | 1 | Hydraulic Block |
| - | 14756 | - | 20' Harness |
| 16. | 13063 | 1 | Pendant Controller |
| - | 13566 | - | 12' Ext. Pendant Controller Cable (Optional) |
| - | 14084 | - | Replacement Cartridge Valve |

LIGHTING PARTS AND ASSEMBLY



| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|-------------------------------|
| 1. | 03652 | 4 | Grommet Rubber Oval |
| 2. | 14923 | 2 | LED Light, Sealed Red Lamp |
| 3. | 14924 | 2 | LED Light, Sealed Yellow Lamp |
| 4. | 07416 | 1 | 7-Way Male Plug Connector |
| 5. | 09149 | 1 | Wiring Harness |
| 6. | 14981 | 1 | Chute Light Wire Harness |

Please order replacement parts by **PART NO.** and **DESCRIPTION**. Painted Parts are available in Red or Green. Add -10 behind the part number for red and -20 behind the part number for green.

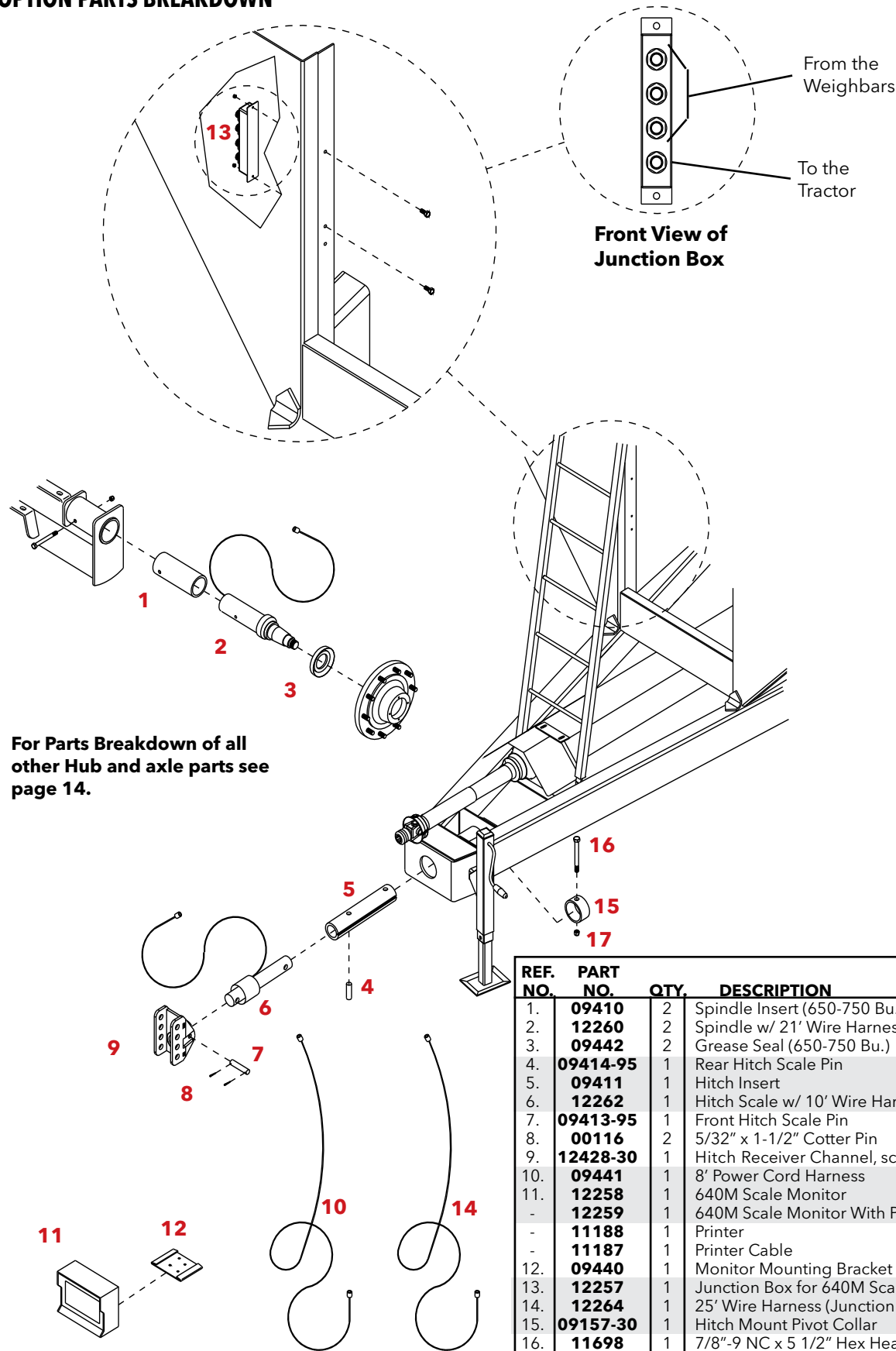
INSTALLING THE LIGHT KIT

1. Begin by inserting a Light Mounting Grommet (#1) into each mounting hole. After connecting the wire harness to the lights as shown in the schematic, press Red Light (#3) and Amber Light (#2) until they are securely mounted in the grommets.
2. Proceed wiring the lights as shown in the drawing and the wiring schematic.
3. When connecting the wire harness (#5) to the front (male tractor) plug (#4) follow the wire schematic as follows: Brown wire to the Red braking marker lights, Yellow wire to the left turning marker light, Green wire to the right turning marker light, and White wire to the ground. Proceed wiring the lights as shown in the drawing and the wiring schematic.

NOTE: Connect the wires to the tractor plug in, make sure all lights are in correct working order. When working correctly behind a tractor the amber lights are the flashing warning lights, and the turn signals.

REPLACEMENT PARTS

SCALE OPTION PARTS BREAKDOWN

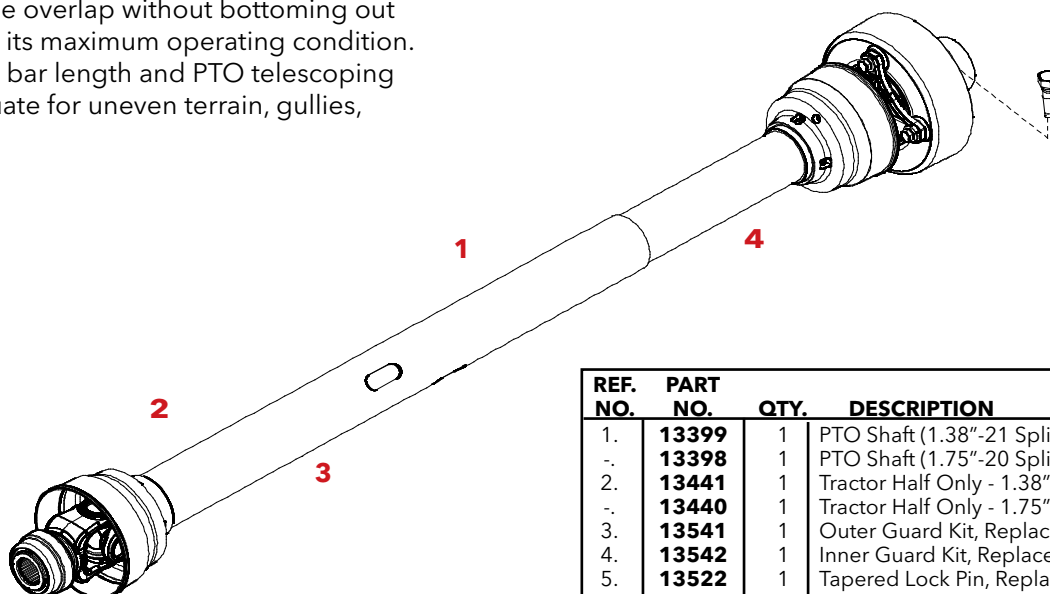


| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|--|
| 1. | 09410 | 2 | Spindle Insert (650-750 Bu.) |
| 2. | 12260 | 2 | Spindle w/ 21' Wire Harness (650-750 Bu.) |
| 3. | 09442 | 2 | Grease Seal (650-750 Bu.) |
| 4. | 09414-95 | 1 | Rear Hitch Scale Pin |
| 5. | 09411 | 1 | Hitch Insert |
| 6. | 12262 | 1 | Hitch Scale w/ 10' Wire Harness |
| 7. | 09413-95 | 1 | Front Hitch Scale Pin |
| 8. | 00116 | 2 | 5/32" x 1-1/2" Cotter Pin |
| 9. | 12428-30 | 1 | Hitch Receiver Channel, scale |
| 10. | 09441 | 1 | 8' Power Cord Harness |
| 11. | 12258 | 1 | 640M Scale Monitor |
| - | 12259 | 1 | 640M Scale Monitor With Printer Port |
| - | 11188 | 1 | Printer |
| - | 11187 | 1 | Printer Cable |
| 12. | 09440 | 1 | Monitor Mounting Bracket for 640M |
| 13. | 12257 | 1 | Junction Box for 640M Scale Unit |
| 14. | 12264 | 1 | 25' Wire Harness (Junction Box to Console) |
| 15. | 09157-30 | 1 | Hitch Mount Pivot Collar |
| 16. | 11698 | 1 | 7/8"-9 NC x 5 1/2" Hex Head Bolt (Gr. 8) |
| 17. | 10678 | 1 | 7/8"-9 NC Nylon Insert Locknut |
| 18. | 13266 | - | 15' Extension Cable (not shown) |

Please order replacement parts by PART NO. and DESCRIPTION.

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. | 13399 | 1 | PTO Shaft (1.38"-21 Spline) Complete |
| 2. | 13398 | 1 | PTO Shaft (1.75"-20 Spline) Complete |
| 2. | 13441 | 1 | Tractor Half Only - 1.38"-21 Spline |
| 2. | 13440 | 1 | Tractor Half Only - 1.75"-20 Spline |
| 3. | 13541 | 1 | Outer Guard Kit, Replacement Only |
| 4. | 13542 | 1 | Inner Guard Kit, Replacement Only |
| 5. | 13522 | 1 | Tapered Lock Pin, Replacement Only |

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

1. Maximum Operating Length L_B

Maximum operating length should not be more the half of telescoping member length (P_U).

2. Maximum Joint Angles (B1 & C2)

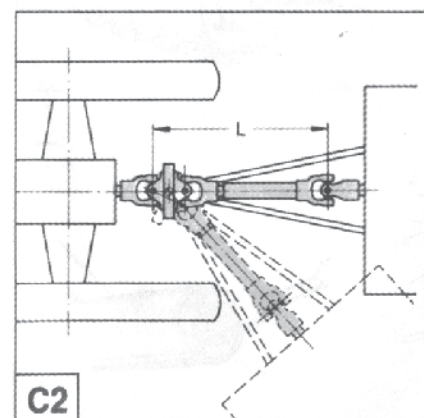
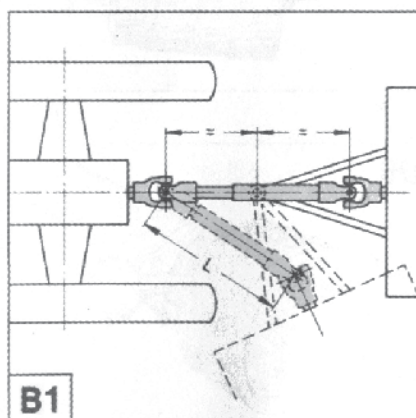
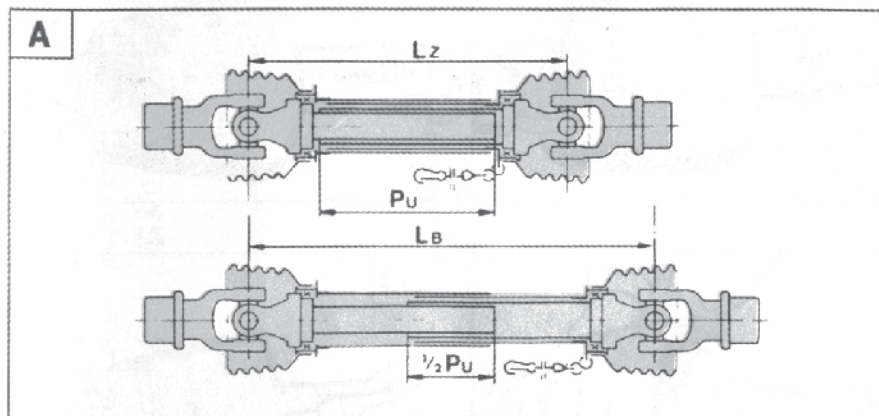
Do not exceed normal operation joint angle of 25°

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

3. Lubrication

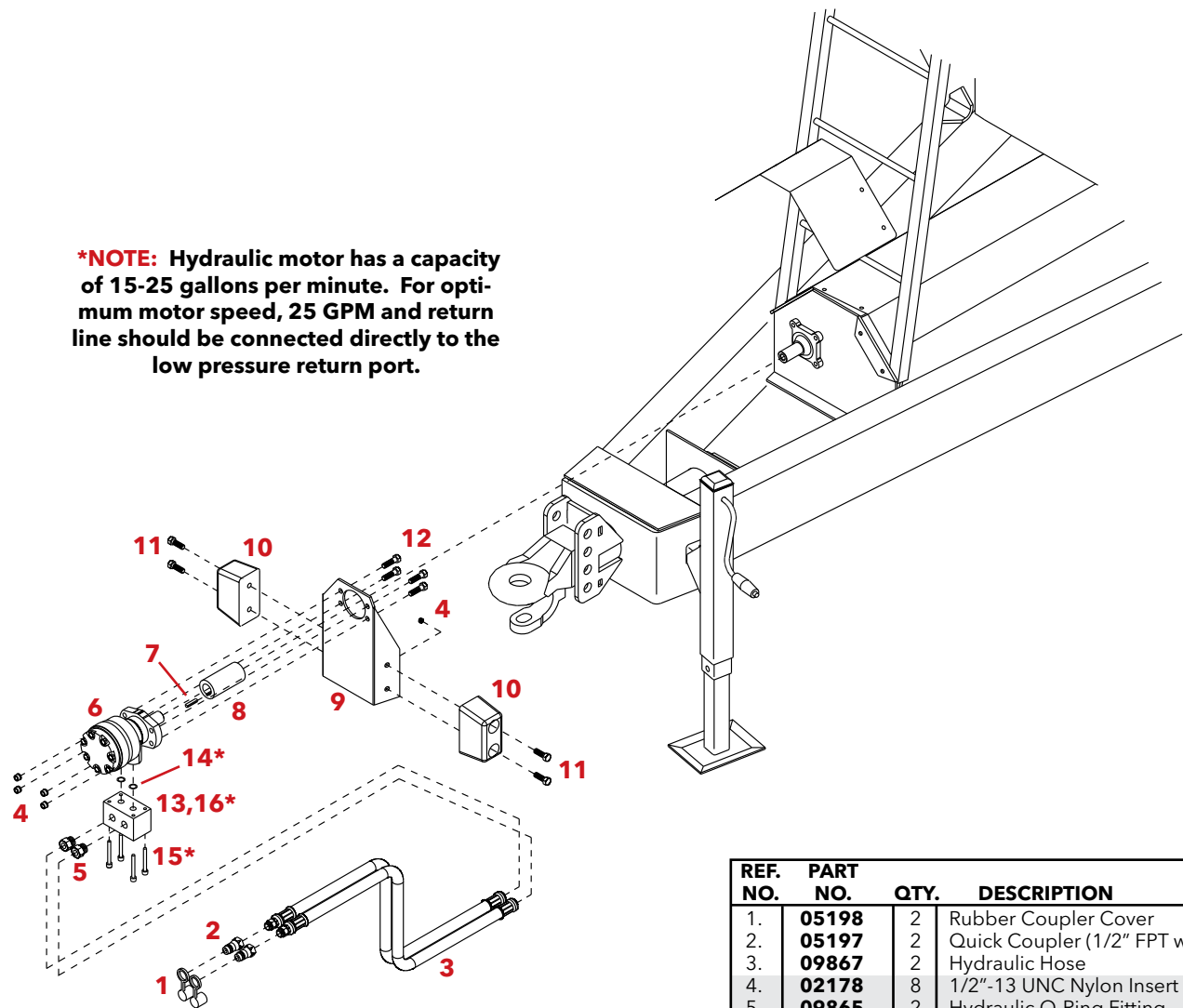
Lubricate before starting work and every 8 hours of operation.

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



REPLACEMENT PARTS

HYDRAULIC DRIVE ASSEMBLY



***NOTE:** Hydraulic motor has a capacity of 15-25 gallons per minute. For optimum motor speed, 25 GPM and return line should be connected directly to the low pressure return port.

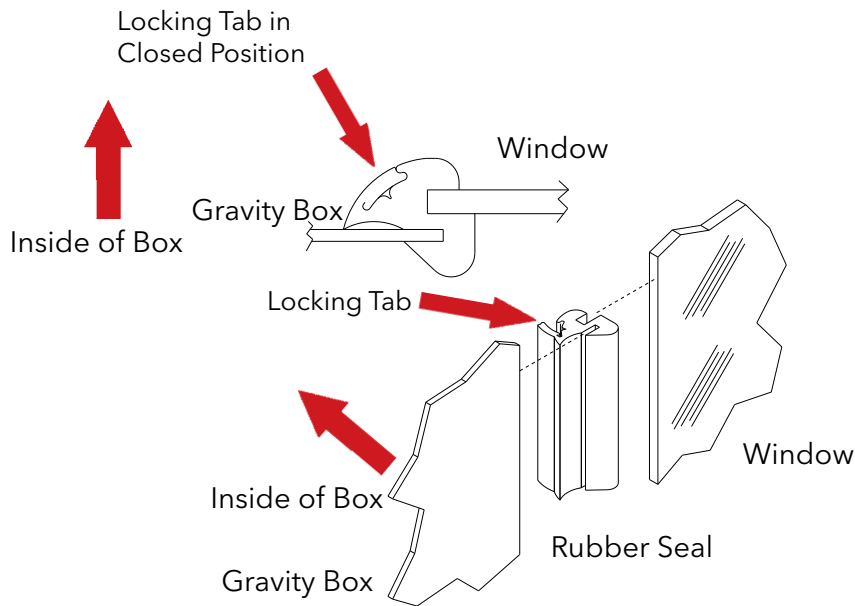
Operation

- Make sure the hydraulic motor is connected to the tractor's priority port.
- For instructions on the operation of the grain cart see page 18.

| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|----------|------|--|
| 1. | 05198 | 2 | Rubber Coupler Cover |
| 2. | 05197 | 2 | Quick Coupler (1/2" FPT with male tip) |
| 3. | 09867 | 2 | Hydraulic Hose |
| 4. | 02178 | 8 | 1/2"-13 UNC Nylon Insert Locknut |
| 5. | 09865 | 2 | Hydraulic O-Ring Fitting |
| 6. | 13783 | 1 | Hydraulic Motor W/ Key |
| 7. | 09842 | 1 | Replacement Keystock |
| 8. | 13617-30 | 1 | Shaft Coupler w/ 1/4 x 1/4" Set Screws |
| 9. | 09841-30 | 1 | Motor Mount Bracket |
| 10. | 03647 | 2 | Molded Rubber Bumper |
| 11. | 05290 | 4 | 1/2"-13 UNC x 3-1/4" Bolt Gr.5) |
| 12. | 01253 | 4 | 1/2"-13 UNC x 2-0" Bolt (Gr.5) |
| 13. | 13784 | 1 | Hydraulic Motor Mount Block (Includes *) |
| 14*. | 13794 | - | Replacement O-Ring |
| 15*. | 13793 | - | Replacement Cap Screw 2-3/4" |
| 16*. | 13792 | - | Check Valve |

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

WINDOW INSTALLATION

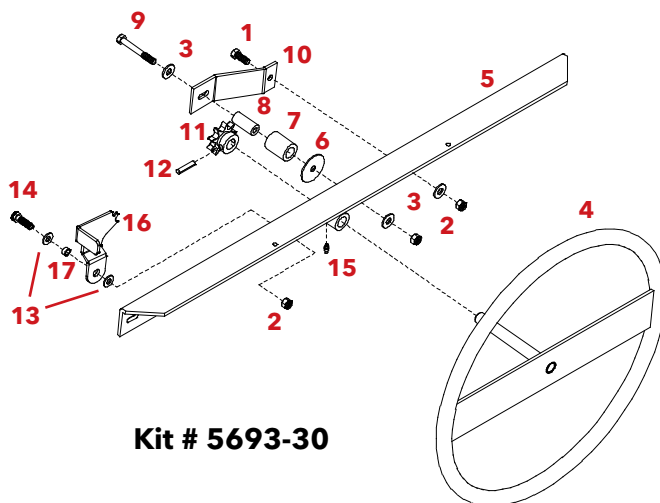


INSTALLATION PROCEDURE

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 bladescrewdriver to get molding seated correctly. Using soapy water will aid in installation
4. Using the flat blade screwdriver, press in the locking tab.

Door Lift Assembly Parts Breakdown



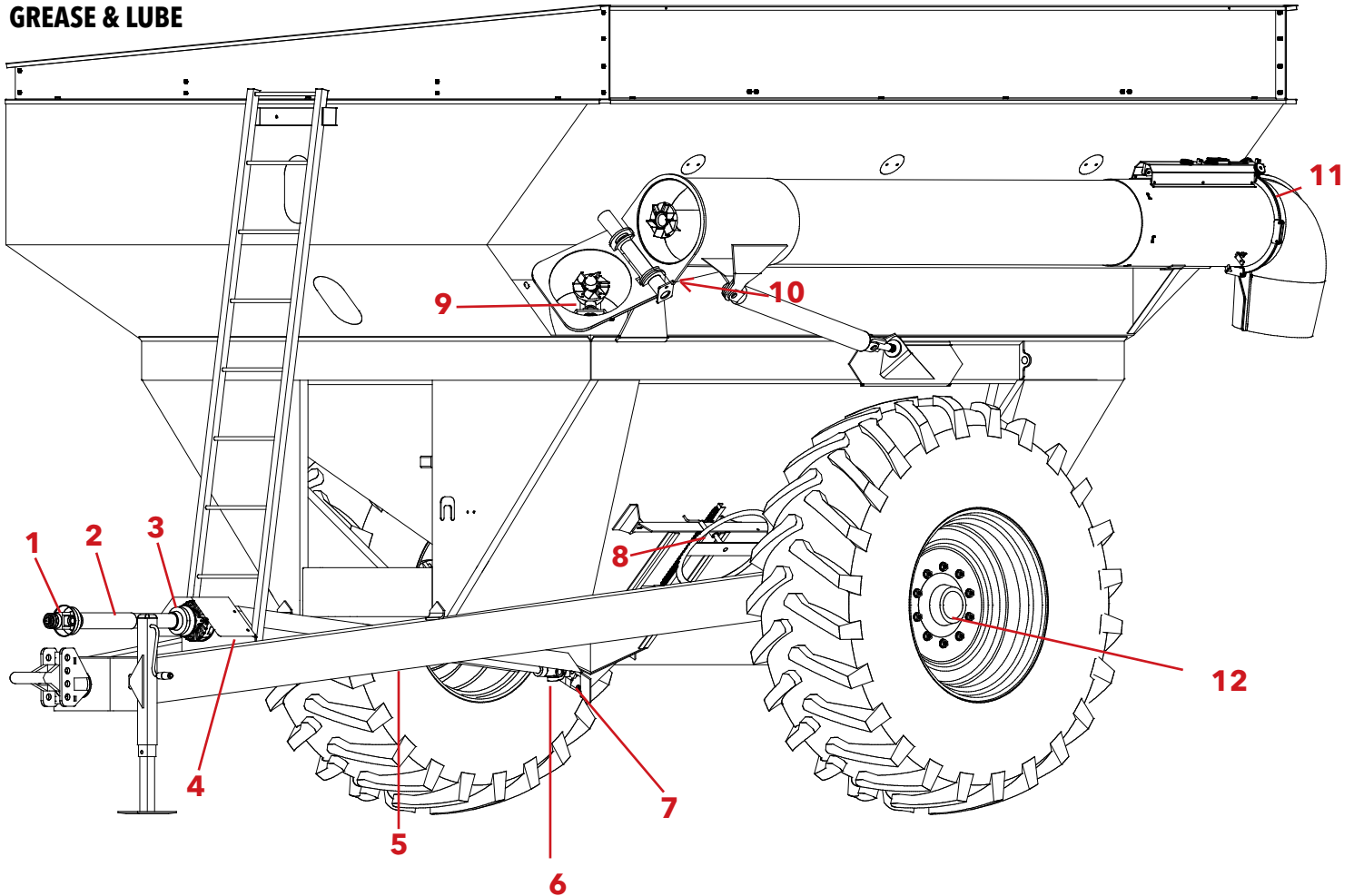
Kit # 5693-30

| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|-----------------|------|--|
| | 5693-30 | | Door Lift Assembly |
| 1. | 00907 | 1 | 3/8"-16 UNC x 1" Hex Head Bolt (Gr.5) |
| 2. | 02592 | 3 | 3/8"-16 UNC Nylon Insert Locknut |
| 3. | 00059 | 3 | 3/8" Flat Washer |
| 4. | 10629-30 | 1 | Door Lift Wheel |
| 5. | 11415-30 | 1 | Door Lift Wheel Mount |
| 6. | 01113 | 1 | 2" O.D. x 3/8" I.D. Washer |
| 7. | 05364 | 1 | 1-1/4" O.D. 3/4" I.D. Bushing |
| 8. | 05363 | 1 | 3/4" O.D. x 3/8" I.D. Bushing |
| 9. | 02207 | 1 | 3/8"-16 UNC x 3" Hex Head Bolt (Gr.5) |
| 10. | 01243-30 | 1 | Roller Blade Bracket |
| 11. | 01332 | 1 | 9 Tooth Sprocket |
| 12. | 02849 | 1 | 5/16" x 1-3/8" Roll Pin |
| 13. | 00004 | 2 | 5/16" Flatwasher |
| 14. | 00523 | 1 | 3/8-16UNC x 1 1/4" Hex Head Bolt (Gr. 5) |
| 15. | 04642 | 1 | 1/4" Grease Zerk |
| 16. | 11412-30 | 1 | Latch |
| 17. | 11414 | 1 | Latch Bushing |

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

MAINTENANCE

GREASE & LUBE



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

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

Reference numbers **#4 -#5** 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 24-26 oz. of 80-90 gear lube. **DO NOT OVER FILL!!!** When gear box is full be sure to replace inspection plug.

Reference number **#8** - Is a bushing for the turn handle of the door lift assembly -- Inspect and grease as needed.

Reference numbers **#9 -#11** - Are fixed sealed bearing -- Do not over grease sealed bearings.

Reference number **#10** - Is the hinge for the outer tube. There is one zerk in this area -- Inspect and grease as needed.

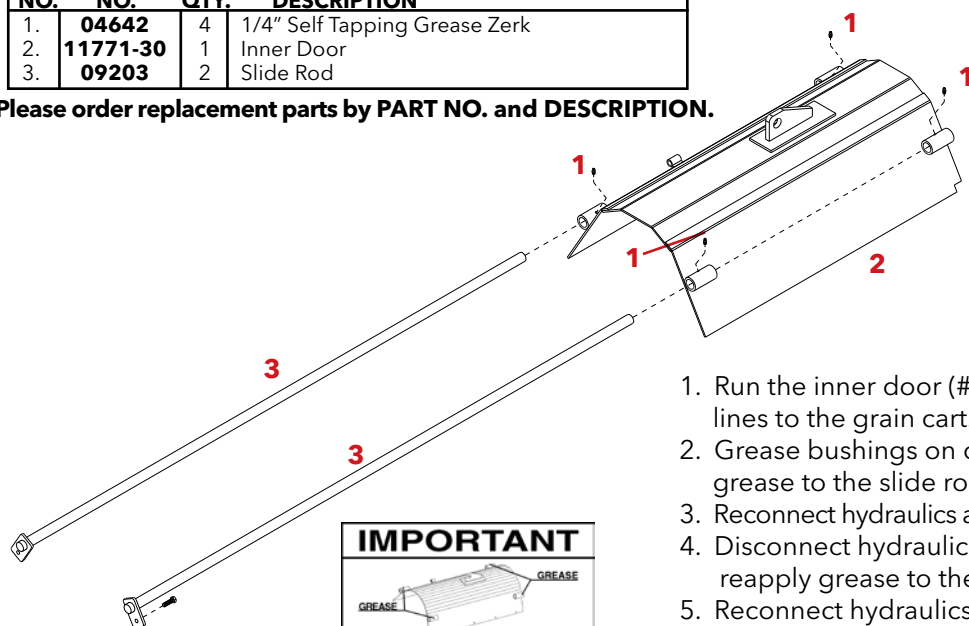
Reference number **#12** - Is the axle hub with inner and outer bearings and race -- Inspect regularly, pack bearing and replace inner wheel seal as needed.

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.

INNER DOOR MAINTENANCE / LUBE INSTRUCTIONS

| REF. NO. | PART NO. | QTY. | DESCRIPTION |
|----------|-----------------|------|-------------------------------|
| 1. | 04642 | 4 | 1/4" Self Tapping Grease Zerk |
| 2. | 11771-30 | 1 | Inner Door |
| 3. | 09203 | 2 | Slide Rod |

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

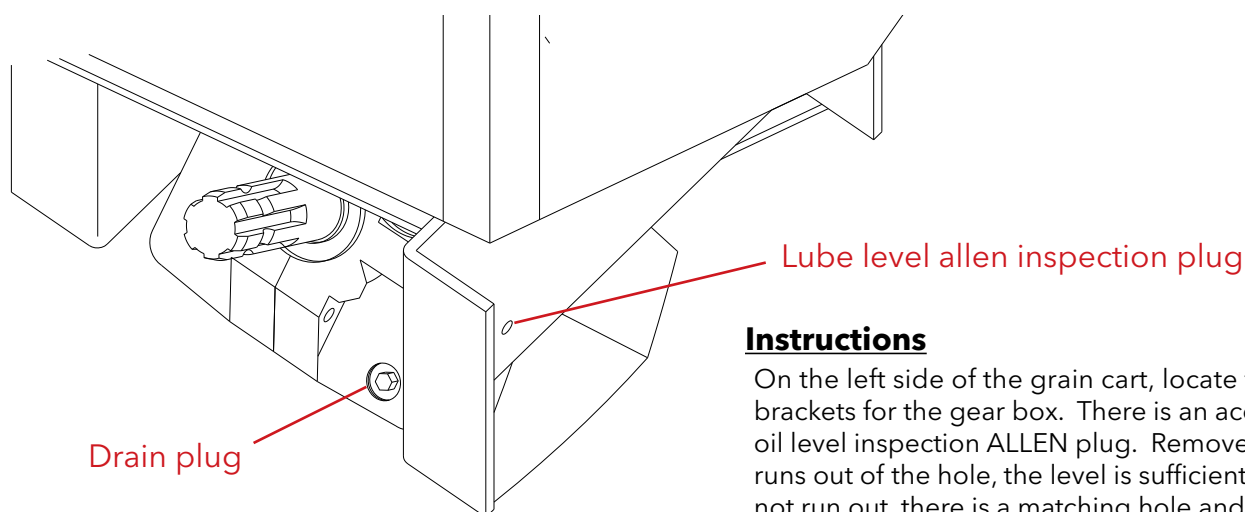


Decal AG21100 is located on the front of the grain cart

1. Run the inner door (#2) fully open and disconnect hydraulic lines to the grain cart.
2. Grease bushings on door and apply a generous coat of grease to the slide rods (#3).
3. Reconnect hydraulics and run door closed and open again.
4. Disconnect hydraulic lines to the grain cart again and reapply grease to the bushings and slide rails.
5. Reconnect hydraulics and run the door closed and open five times. Check to make sure slide rails are fully coated with grease and door operated smoothly.
6. Check and grease the zerks and slide rails **EVERY 20 HOURS AND/OR ANNUALLY.**
7. Make sure slide rails have a generous coating of grease before and after long periods of storage. Always store cart with inner door fully open and follow maintenance procedures listed on pages 28 and 29 of the manual.

To insure proper operation of inner door, these steps must be followed and proper maintenance must be performed.

LUBE INSTRUCTIONS FOR GEAR BOX



Instructions

On the left side of the grain cart, locate the mounting brackets for the gear box. There is an access hole for the oil level inspection ALLEN plug. Remove plug. If lube runs out of the hole, the level is sufficient. If lube does not run out, there is a matching hole and plug on the opposite side of the gear box for filling. Fill with a standard 80/90 gear lube until lube just starts to run out of inspection hole.

Note: Inspection of lube level must be performed on a hard, level surface with both tires inflated to the proper pressure and the tongue as level as possible.

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.

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 outer door to allow box to drain.

Keep auger folded back during storage.

Grease all zerk locations.

Repack wheel bearings before storage.

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

Tire Inflation Chart

| GRAIN CART APPLICATION | TIRE SIZE | PLY | MAXIMUM TIRE PSI. |
|-----------------------------|-----------|-----|-------------------|
| 650-750 Bushel Lug Tire | 24.5 x 32 | 12 | 32 psi. |
| 650-750 Bushel Diamond Tire | 24.5 x 32 | 12 | 32 psi. |
| 650-750 Bushel Lug Tire | 30.5 x 32 | 12 | 26 psi. |
| 650-750 Bushel Diamond Tire | 30.5 x 32 | 12 | 26 psi. |
| Duals 650-750 Lug Tire | 18.4 x 38 | 8 | 26 psi. |



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**Demco warranty policies, operator manuals, and product registration
can be found online:**

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