

Demco manufacturing

Dethmers Manufacturing Company

DOING OUR BEST TO PROVIDE YOU THE BEST

GRAIN CART

800/950 BUSHEL

OPERATORS MANUAL

ASSEMBLY
CALIBRATION
OPERATION
REPLACEMENT PARTS

READ complete manual **CAREFULLY**
BEFORE attempting operation.



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INTRODUCTION

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



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

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

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

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

GENERAL INFORMATION

1. Unless otherwise specified, high-strength (grade5) (3 radial-line head markings) hex head bolts are used throughout assembly of this piece of equipment.
2. Whenever terms "LEFT" and "RIGHT" are used in this manual it means from a position behind wagon box and facing forward.
3. When placing a parts order, refer to this manual for proper part numbers and place order by **PART NO. and DESCRIPTION.**
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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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 Metric bolts *

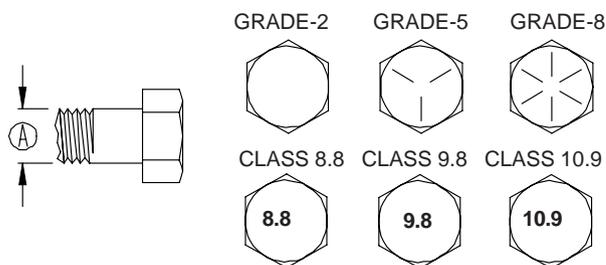
A	CLASS 8.8		CLASS 9.8		CLASS 10.9	
	lb-ft	(N.m)	lb-ft	(N.m)	lb-ft	(N.m)
6	9	(13)	10	(14)	13	(17)
7	15	(21)	18	(24)	21	(29)
8	23	(31)	25	(34)	31	(42)
10	45	(61)	50	(68)	61	(83)
12	78	(106)	88	(118)	106	(144)
14	125	(169)	140	(189)	170	(230)
16	194	(263)	216	(293)	263	(357)
18	268	(363)	--	--	364	(493)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



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.



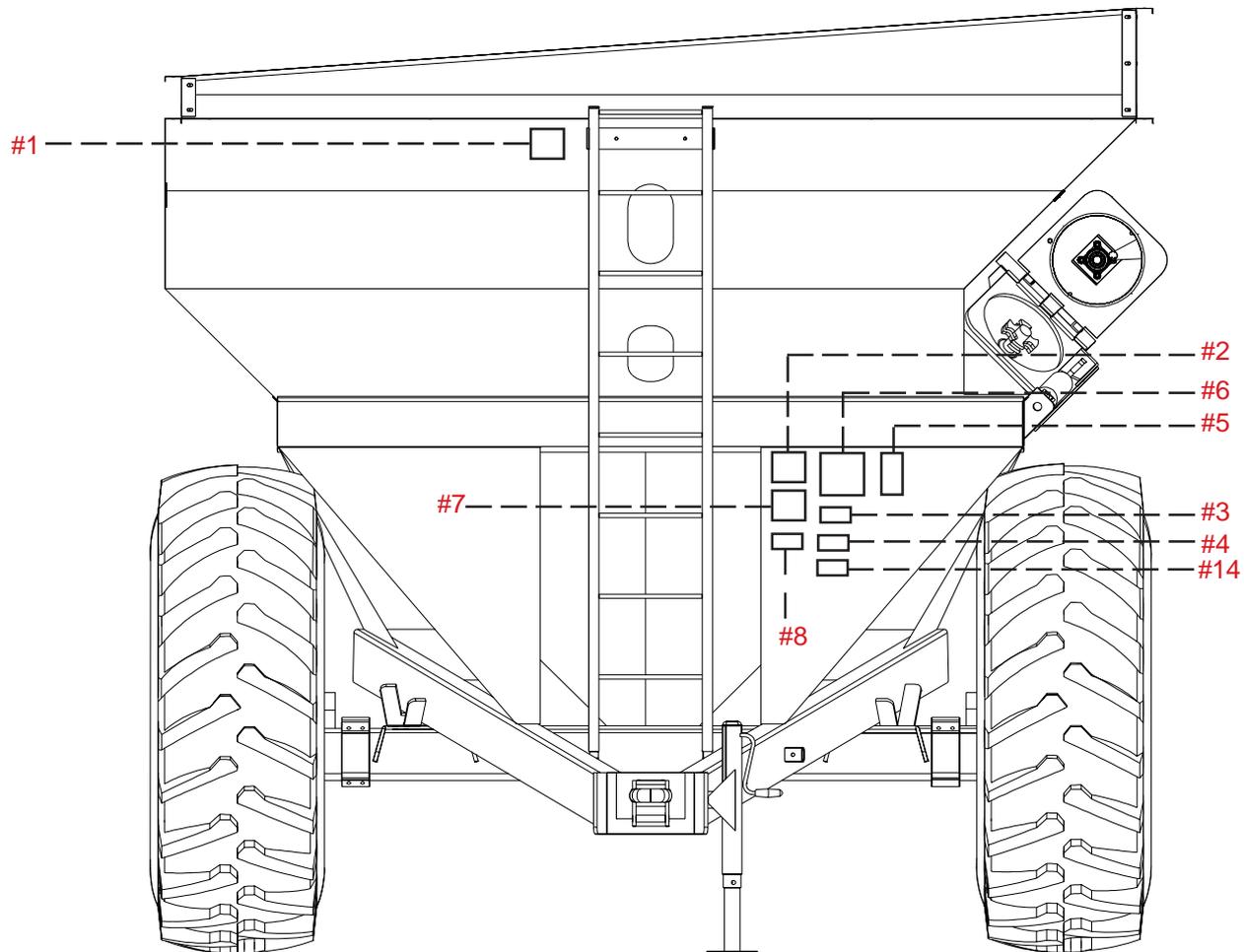
Bolt Torque for Standard bolts *

"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)



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.

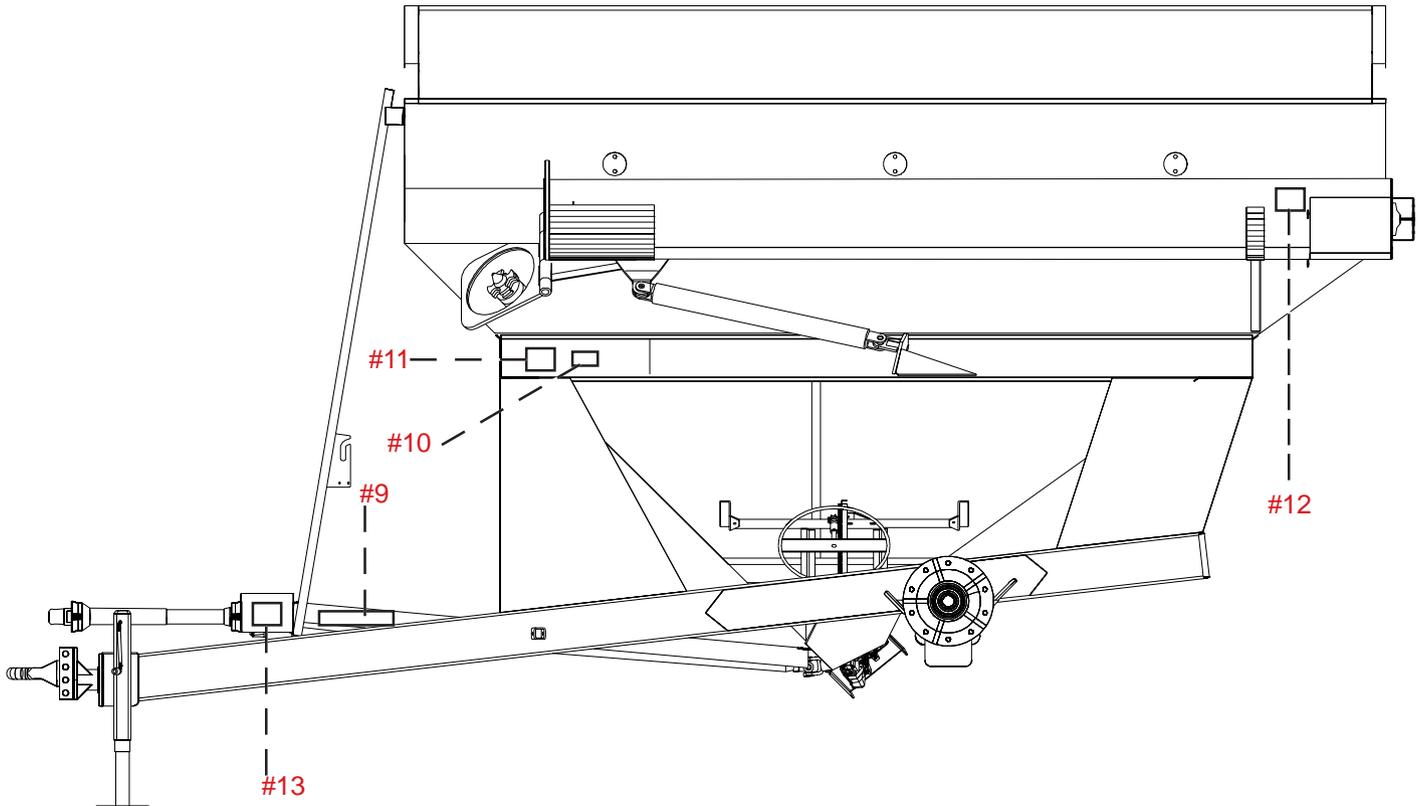


- #1 DANGER - Do not enter grain tank when auger is running!
- #2 DANGER - Keep off ladder while machine is being moved or in operation!
- #3 WARNING - Read and understand the operator's manual!
- #4 WARNING - Keep hands and clothing away from moving parts!
- #5 DANGER - Never play in or on grain! Farm 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 Grain Cart
- #15 Decal Kit- Decals #1 - #14 are available as a kit.

Decal order number

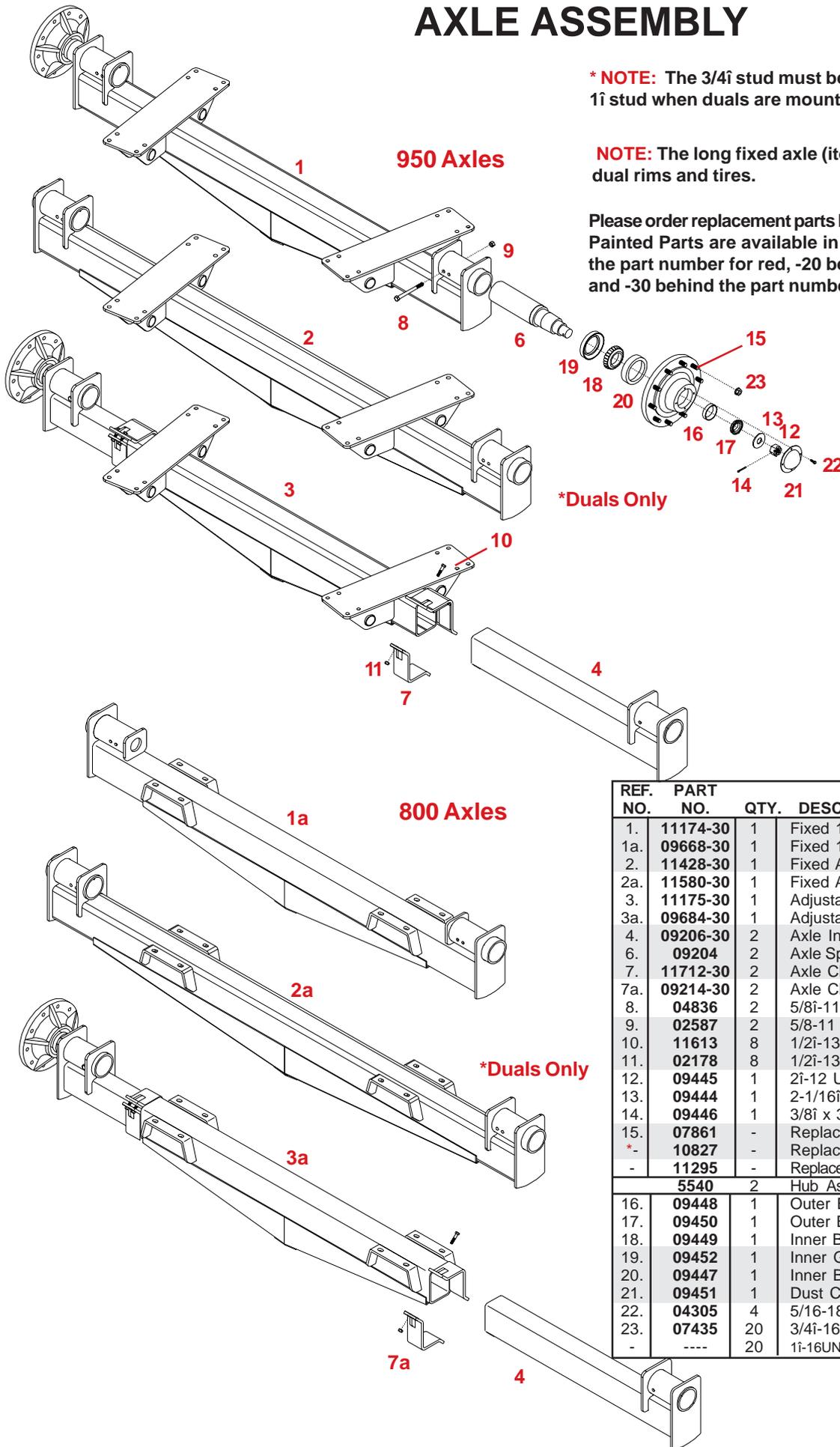
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AXLE ASSEMBLY

*** NOTE:** The 3/4" stud must be driven out and replaced with the 1" stud when duals are mounted on the hub of the grain cart

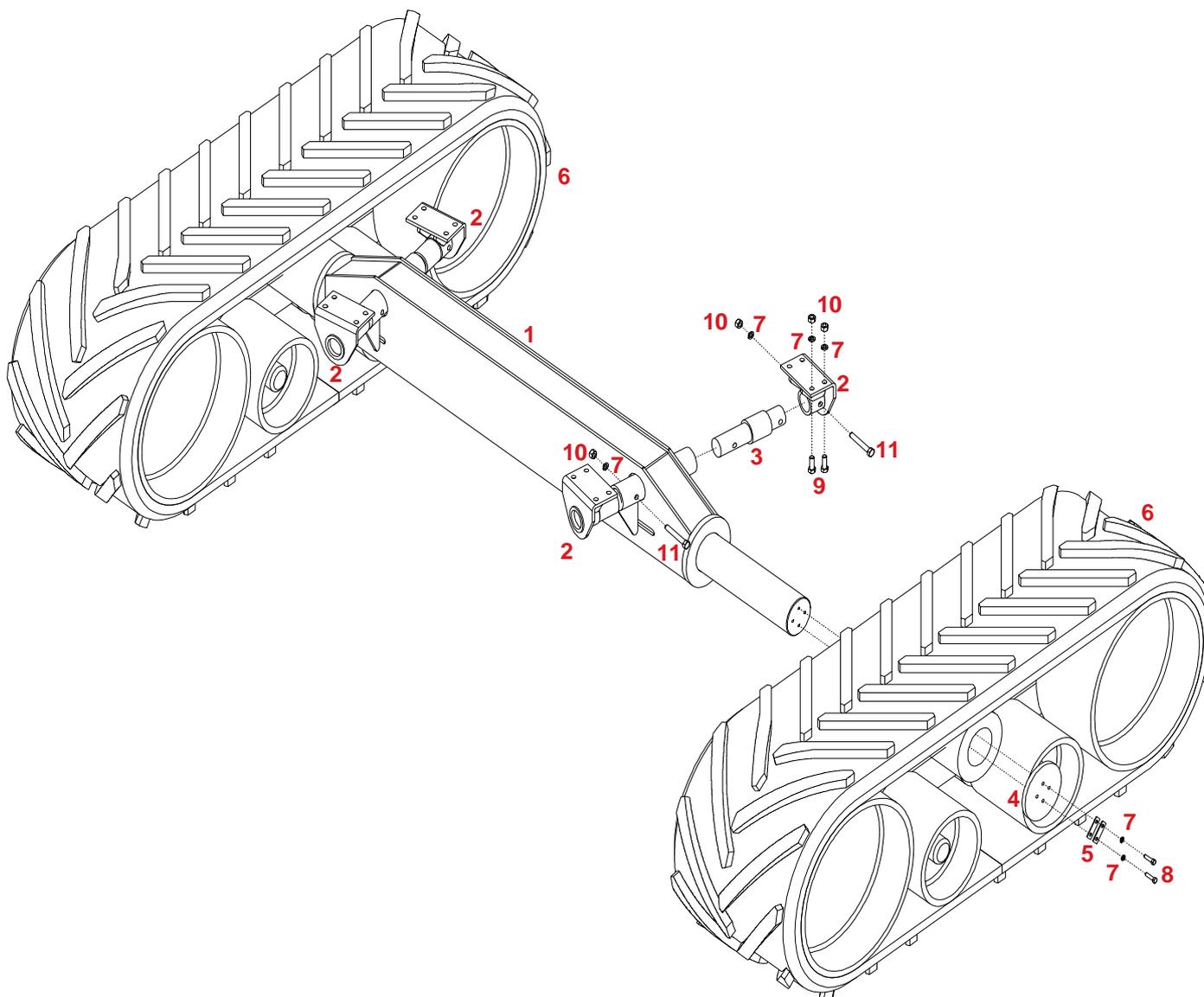
NOTE: The long fixed axle (item #2 & #2a) must be used with dual rims and tires.

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 -30 behind the part number for black.



REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	11174-30	1	Fixed 120" Axle (950)
1a.	09668-30	1	Fixed 120" Axle (800)
2.	11428-30	1	Fixed Axle for Duals only (950)
2a.	11580-30	1	Fixed Axle for Duals only (800)
3.	11175-30	1	Adjustable Axle (950)
3a.	09684-30	1	Adjustable Axle (800)
4.	09206-30	2	Axle Insert
6.	09204	2	Axle Spindle
7.	11712-30	2	Axle Clamps (950)
7a.	09214-30	2	Axle Clamps (800)
8.	04836	2	5/8-11 UNC x 7" Hex Head Bolt
9.	02587	2	5/8-11 UNC Nylon Insert Locknut
10.	11613	8	1/2-13 UNC x 2-1/2" Hex Head Bolt (Gr. 8)
11.	02178	8	1/2-13 Nylon Insert Locknut
12.	09445	1	2-1/2" UNF Castle Nut
13.	09444	1	2-1/16" ID x 4" OD x 1/4" Washer
14.	09446	1	3/8" x 3" Cotter Pin
15.	07861	-	Replacement 3/4" NF x 2-3/4" Stud Bolt
*	10827	-	Replacement 1" NF x 4" Stud (Duals ONLY)
-	11295	-	Replacement 3/4" NF x 2-3/4" Stud (35.5 x 32 only)
5540		2	Hub Assembly (Includes items 16-22)
16.	09448	1	Outer Bearing Race (HM212011)
17.	09450	1	Outer Bearing (HM 212049)
18.	09449	1	Inner Bearing (HM 218248)
19.	09452	1	Inner Grease Seal (CR43771)
20.	09447	1	Inner Bearing Race (HM218210)
21.	09451	1	Dust Cap
22.	04305	4	5/16-18 UNC x 1/2" Hex Head Bolt (Gr.5)
23.	07435	20	3/4-16 UNF Lug Nut
-	----	20	1-16 UNF Lug Nut w/ washer (Incl. with 10827 stud bolt)

TRACK AXLE ASSEMBLY

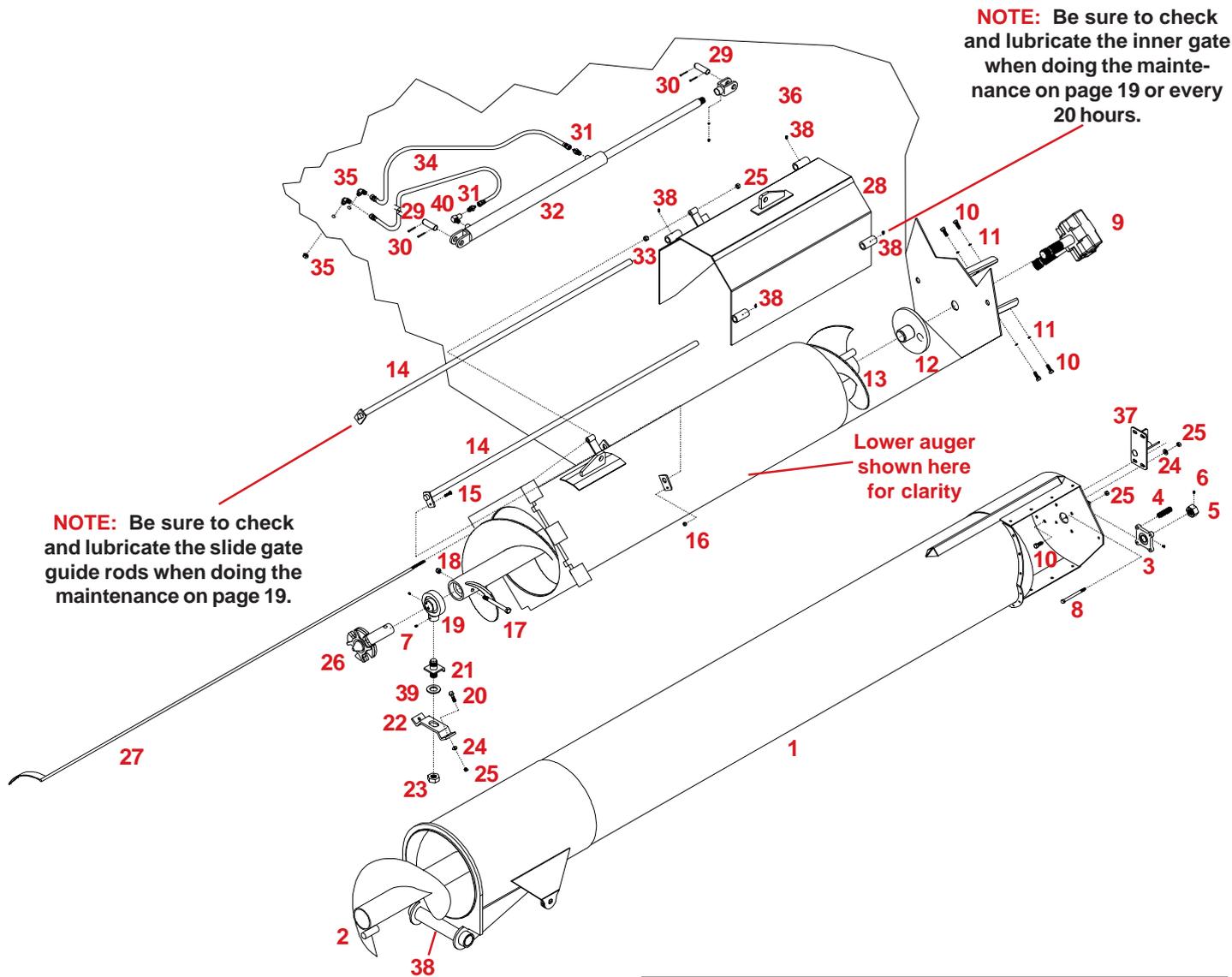


REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	10938-30	1	Track Axle
2.	10939-30	4	Axle Mounting Plates
3.	10940	4	Weigh Bar
4.	10945-30	2	Axle End Cap
5.	10946-95	4	Locking Tab (plated)
6.	11094	1	Tracks (1 pair)
7.	00254	24	1/2i Spring Lockwasher
8.	01253	8	1/2iNC X 2.00i Hex Head Bolt (Gr. 5)
9.	11097	16	3/4iNC X 2.00i Hex Head Bolt (Gr. 8)
10.	11098	24	3/4iNC Hex Nut (Gr. 8)
11.	11099	8	3/4iNC X 5.00i Hex Head Bolt (Gr. 8)

Please order replacement parts by PART NO. and DESCRIPTION.

*** NOTE:** Refer to Omnitrac/E owner/parts manual for proper maintenance and operation of the tracks on this grain cart.

AUGER ASSEMBLY

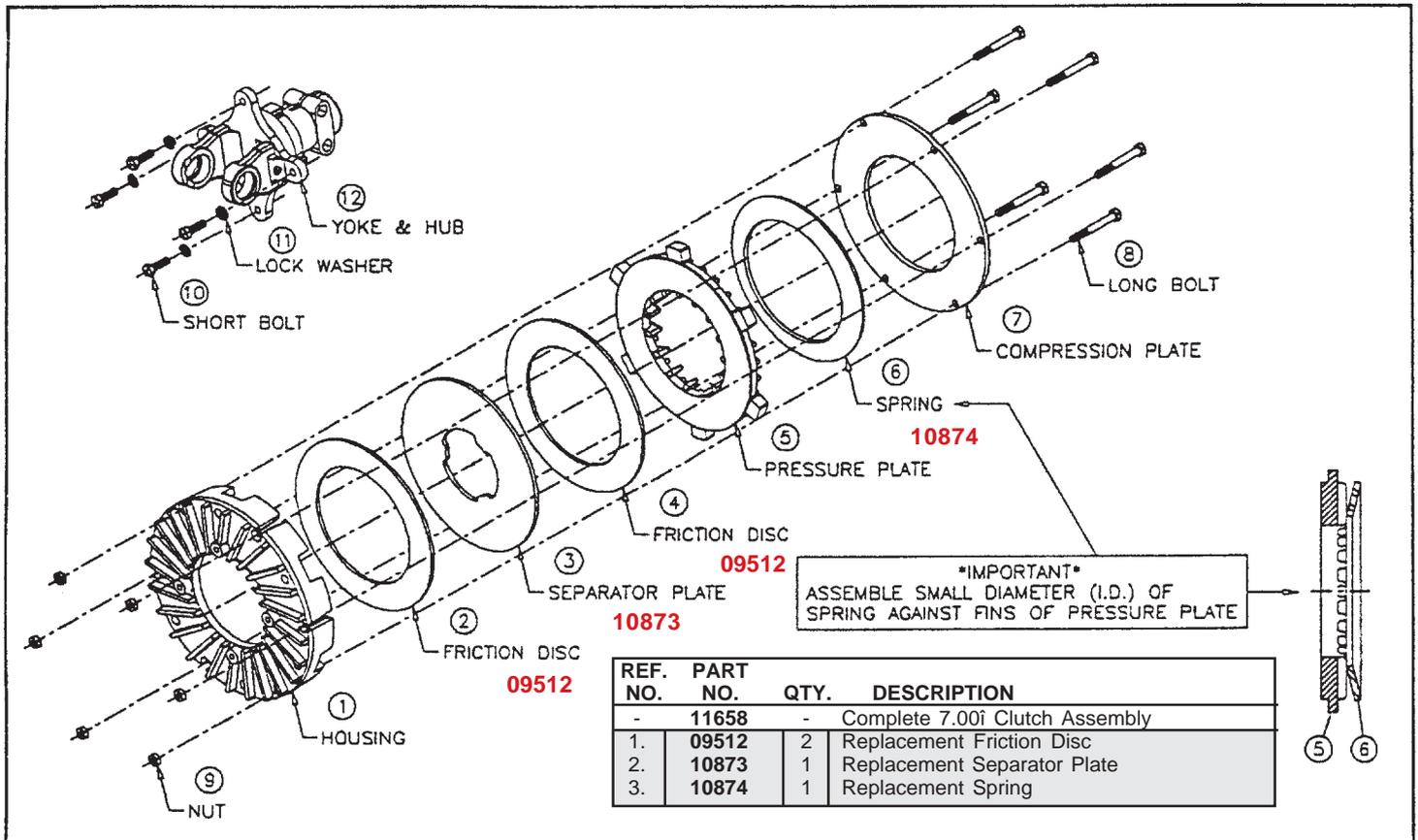


REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	11100-?	1	Outer Auger Tube
2.	11134-30	1	Outer Auger Flighting
3.	10634	1	Flange Bearing
4.	09168	4	Upper Auger Spring
5.	01922	1	1-1/2 \times 12 UNF Hex Nut w/ Set Screw Hole
6.	01923	1	1/4 \times Socket Hd. Cup Point Set Screw x 1/4 \times
7.	00789	1	3/8 \times 16 UNC x 3/8 \times Socket Head Set Screw
8.	01338	4	1/2 \times NC x 4-1/2 \times Hex Head Bolt (Gr. 5)
9.	10607	1	Gear Box
10.	01254	12	1/2 \times 13 UNC x 1-1/2 \times Hex Head Bolt (Gr.5)
11.	00084	4	1/2 \times Lockwasher
12.	10623-30	1	Lower Drive
13.	10613-30	1	Lower Auger Flighting
14.	09203	2	Slide Rod
15.	00523	2	3/8 \times 16 UNC x 1-1/4 \times Hex Head Bolt (Gr.5)
16.	02592	2	3/8 \times 16 Nylon Insert Locknut
17.	04205	1	5/8 \times 11 UNC x 5 \times Hex Head Nut (Gr.8)
18.	02587	1	5/8 \times 11 UNC Nylon Insert Locknut
19.	09185	1	2 \times Hanger Bearing

REF. NO.	PART NO.	QTY.	DESCRIPTION
20.	00482	2	1/2 \times 13UNC x 1-3/4 \times Hex Head Bolt (Gr. 5)
21.	09195-30	1	Hanger Bearing Mount
22.	10624-30	1	Hanger Bearing Plate
23.	07412	1	1-1/4 \times 12 UNF Jam Nut
24.	00085	6	1/2 \times Flatwasher
25.	02178	11	1/2 \times 13 UNC Nylon Insert Locknut
26.	10618-30	1	Male Auger Connection
27.	10604-30	1	Gauge Rod
28.	10602-30	1	Inner Door
29.	03738-95	2	1 \times Dia. x 3 \times Cylinder Pin
30.	00116	4	5/32 \times 1-1/2 \times Cotter Pin
31.	05195	2	Straight Hyd. Ftg. 3/8 \times MPT x 3/8 \times JIC
32.	09930-30	1	2-1/2 \times Cylinder x 30 \times Stroke
-	5584	-	Hydraulic Cylinder Seal Repair Kit (not shown)
33.	00083	1	1/2 \times 13 UNC Hex Head Nut
34.	05191	2	36 \times Hydraulic Hose
35.	09172	2	3/8 \times JIC Bulkhead Elbow Ftg. W/Nut
36.	09741-30	1	Adjustable Cylinder Clevis End
37.	11103-30	1	Auger Rest Bracket
38.	04642	5	Grease Zerk
39.	05089	1	1 1/4 \times Machine Washer NR
40.	05215	1	3/8 \times MPT x 3/8 \times FPT Hyd. Elbow Fitting

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.

Assembly Instructions for the 7.00" **TORQMASTER** Modular Clutch



Run-In of the **TORQMASTER** Modular Clutch

If the machine has never been used or has not been operated for (1) season, the following is recommended:

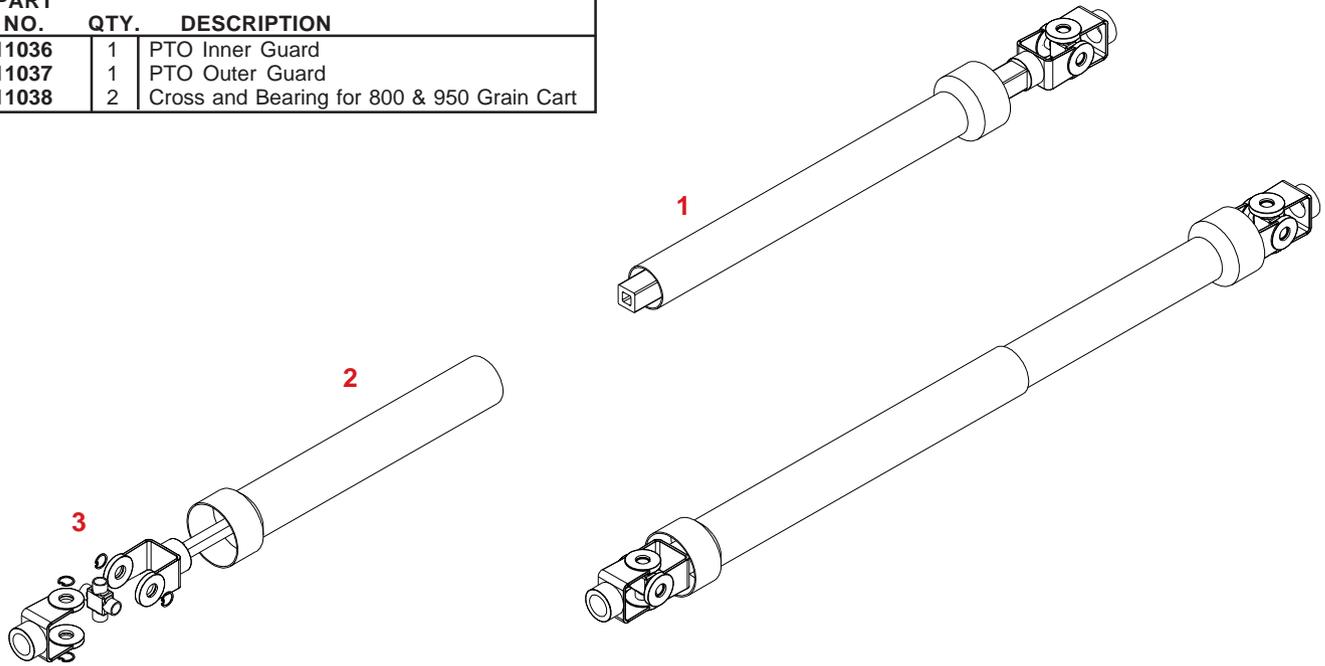
TOOLS REQUIRED:

(1) 1/2" Box wrench or socket and torque wrench

1. Make sure the tractor is off and the PTO is disengaged.
2. Disconnect the driveline from the tractor.
3. Locate the (6) bolts (Item 8) on the O.D. of the clutch pak. Loosen the bolts until they rotate freely, finger tighten each bolt, and then tighten each bolt one half turn.
4. Attach the implement to the tractor at the hitch pin, and the driveline to the tractor PTO shaft.
5. Start the tractor. Engage the tractor PTO and run for a few seconds, or until the friction clutch visibly smokes.
6. Disengage the tractor PTO and shut the tractor off.
7. Disconnect the driveline from the tractor.
8. Tighten the (6) bolts (Item 8) on the O.D. of the clutch pak until the compression plate (Item 7) is in contact with the housing (Item 1), then keep tightening each bolt to 30 ft•lbs.
9. Locate the (4) bolts (Item 10) that attach the yoke & hub (Item 12) to the clutch pak and check that each bolt is tightened to 30 ft•lbs.
10. If the friction clutch contains an integral overrunning clutch, make sure the friction clutch spins freely in one direction.

PTO DRIVE ASSEMBLY

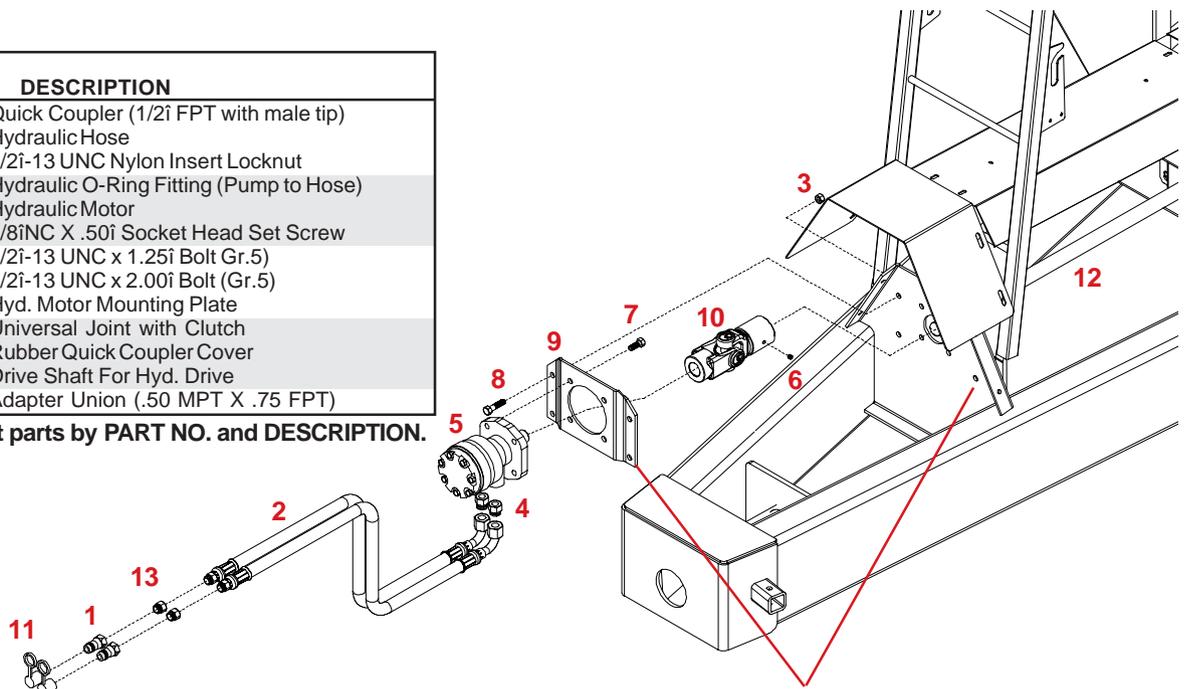
REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	11036	1	PTO Inner Guard
2.	11037	1	PTO Outer Guard
3.	11038	2	Cross and Bearing for 800 & 950 Grain Cart



HYDRAULIC DRIVE ASSEMBLY

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	05197	2	Quick Coupler (1/2" FPT with male tip)
2.	11219	2	Hydraulic Hose
3.	02178	8	1/2"-13 UNC Nylon Insert Locknut
4.	11225	2	Hydraulic O-Ring Fitting (Pump to Hose)
5.	11217	1	Hydraulic Motor
6.	05256	2	3/8"NC X .50" Socket Head Set Screw
7.	00967	4	1/2"-13 UNC x 1.25" Bolt Gr.5)
8.	01253	4	1/2"-13 UNC x 2.00" Bolt (Gr.5)
9.	11221-30	1	Hyd. Motor Mounting Plate
10.	11218	1	Universal Joint with Clutch
11.	05198	2	Rubber Quick Coupler Cover
12.	11220	1	Drive Shaft For Hyd. Drive
13.	11216	2	Adapter Union (.50 MPT X .75 FPT)

Please order replacement parts by PART NO. and DESCRIPTION.

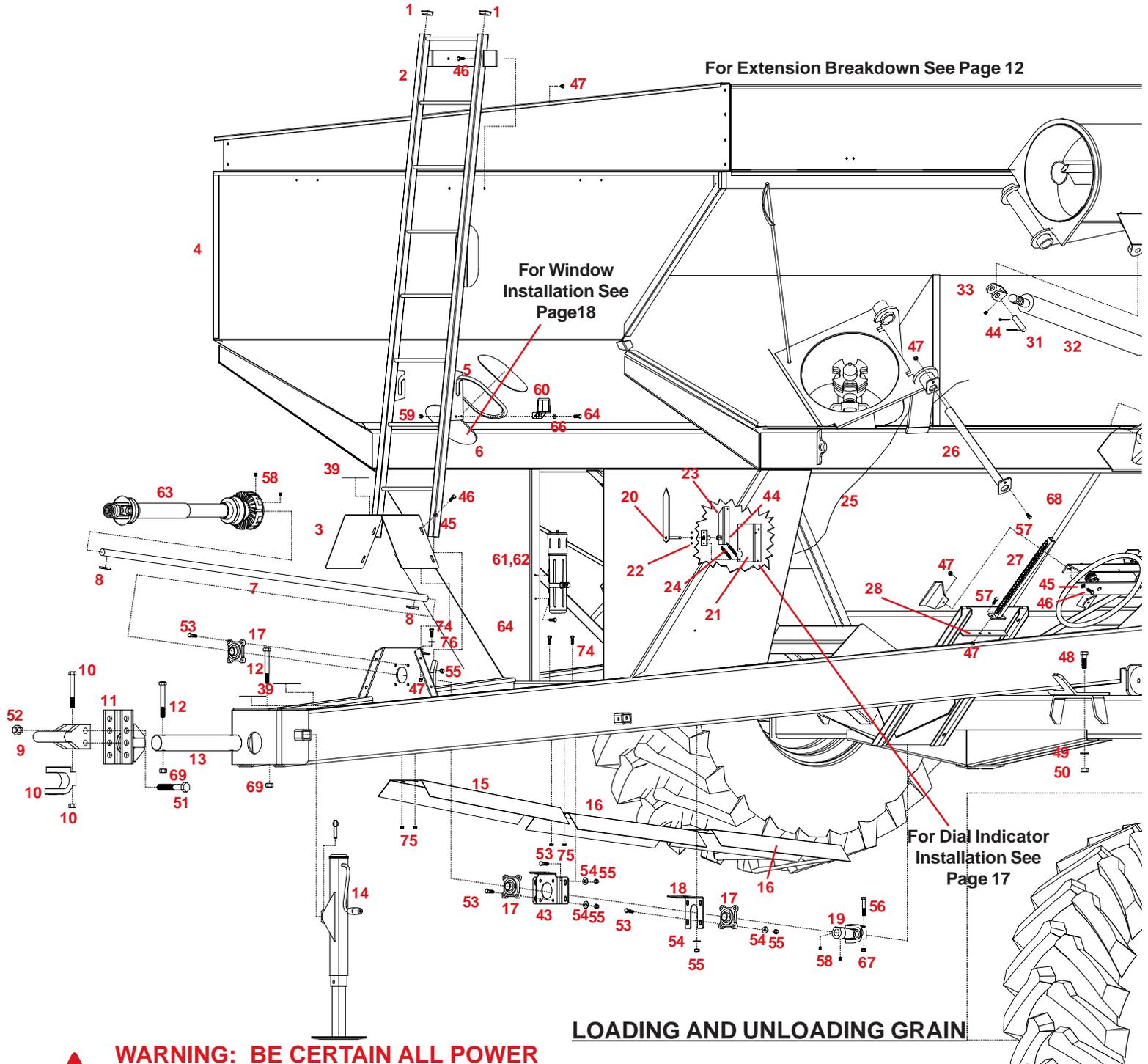


Operation

- i Make sure the hydraulic motor is connected to the tractor's priority port.
- ii The hydraulic return line should free-dump directly into the reservoir.

NOTE: IN ORDER TO MOUNT PLATE #9; FOUR .56 DIA. HOLES WILL NEED TO BE DRILLED THROUGH THE BEARING PLATE AS SHOWN

GRAIN CART ASSEMBLY



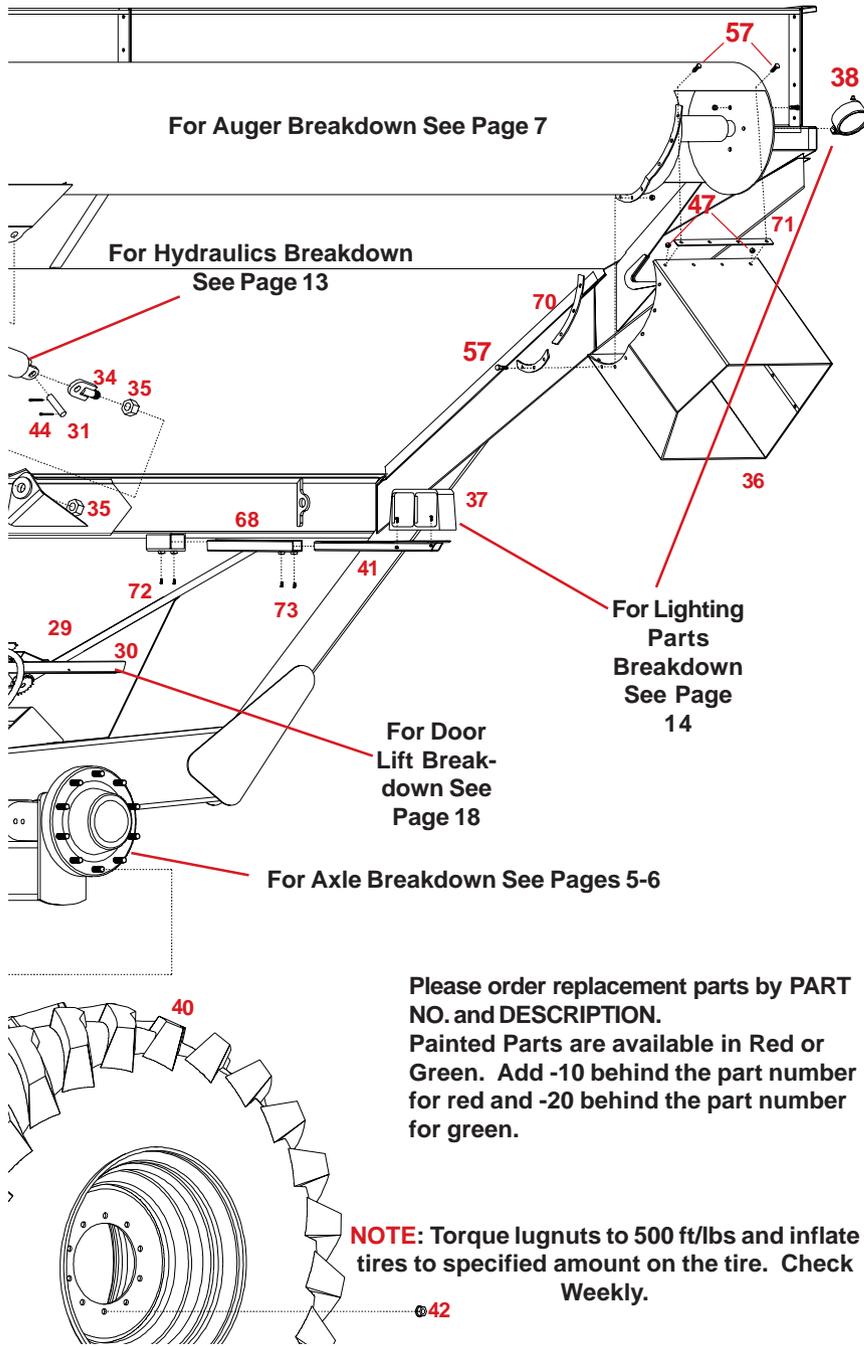
WARNING: BE CERTAIN ALL POWER IS OFF WHEN CONNECTING PTO OR HYDRAULIC LINES TO TRACTOR

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

LOADING AND UNLOADING GRAIN

- ï With the gate indicator in the closed position, fill the box with grain.
- ï With the PTO disengaged, extend auger.
- ï Start PTO at a **slow rate of speed** until the upper and lower drives are engaged.
- ï Increase PTO speed and open the inner gate halfway. When grain begins to flow, open gate to full position.
- ï Once grain stops flowing, return gate to closed position.
- ï Never exceed 1000 RPM on the system.

GRAIN CART ASSEMBLY AND OPERATION

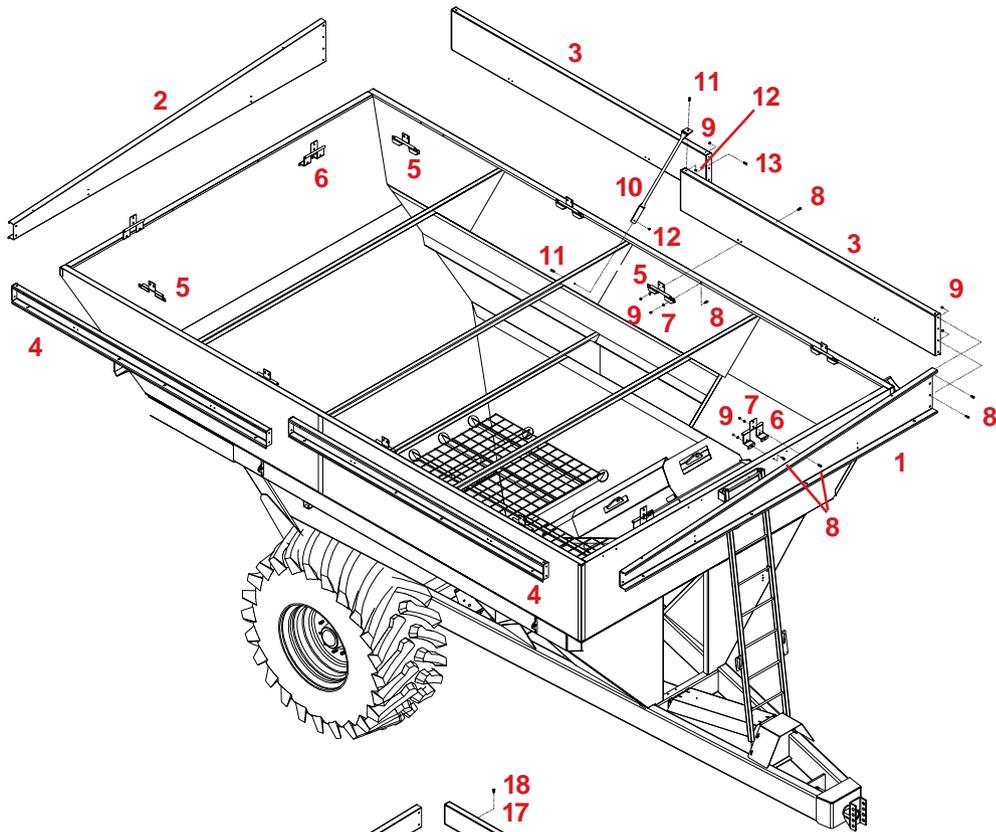


- i Disengage PTO and allow it to come to a complete stop. Auger is now ready to fold to stored position. **DO NOT PULL THE GRAIN CART UNLESS THE AUGER IS IN THE STORED POSITION.**
- i Never fold or extend auger unless PTO is completely stopped.
- i Never engage auger when system is moving at a high rate of speed.
- i Never do maintenance work or service cart while the tractor is running.

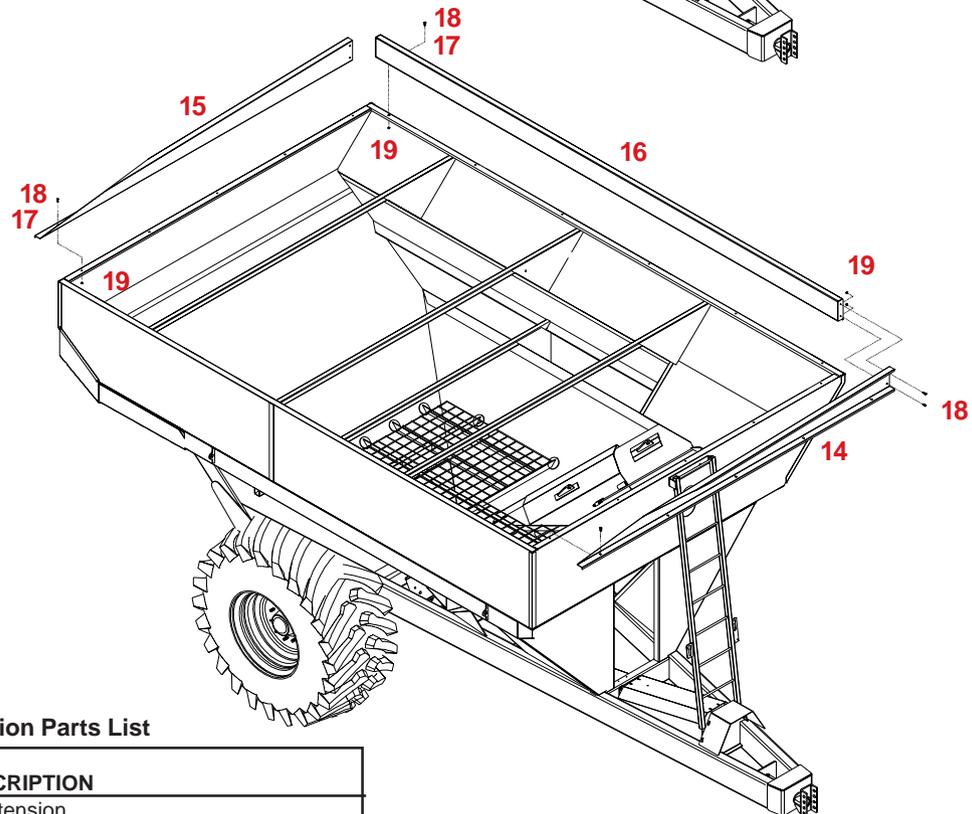
REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	03159	2	Square Cap Plug
2.	10621-30	1	Ladder
3.	10609-30	1	PTO Shaft Guard Step
4.	10595-?	1	Undercarriage/Box for 950 Grain Cart
-	11513-?	1	Undercarriage/Box for 800 Grain Cart
5.	07310	2	Rubber Grommet for Window
6.	07276	2	Window
7.	10612	1	Drive Shaft for 950 BU Grain Cart
8.	10622	2	5/16 inch x 5 1/16 inch x 2-3/4 inch Key
9.	09163-30	1	Category 4 Forged Hitch Base
10.	09164-30	1	1-1/4 inch Clevis InsertW/3/4 inch x 6 inch Gr.8 Bolt &Nut
11.	10813-30	1	Pintle Ring Mount
12.	11698	2	7/8 inch x 5 1/2 inch Hex Head Bolt Gr. 8
13.	10814	1	Hitch Pin
14.	09219-30	1	7000# Sidewind Jack with Mount
15.	10610-30	1	Front Safety Shield
16.	10611-30	2	Rear Safety Shield
17.	10633	3	35mm 4-Bolt Flange Bearing
18.	10617-30	1	Bearing Mount for Drive Shaft
19.	10615	1	Universal Joint
20.	10658-30	1	Pointer Assy.
21.	10659-30	1	Dial Indicator Plate
22.	10660-30	1	Pointer Mounting Plate
23.	10661-30	1	Pointer Brkt Assy.
24.	10673	2	Tension Spring for Pointer
25.	10080	1	Cable For Pointer
26.	10631-30	1	Folding Pin
27.	10637-30	1	Door Lift Channel
28.	10620-30	1	Lower Outside Door
29.	10629-30	1	Door Lift Wheel
30.	11525-30	1	Door Lift Mount
31.	03738-95	2	1 1/2 inch x 3 inch Cylinder pin
32.	09930-30	1	Hydraulic Cylinder
33.	09741-30	1	Adjustable Cylinder End
34.	09198-30	1	Folding Cylinder Mount
35.	07412	2	1-1/4 inch Jam Nut
36.	11102	1	Auger Discharge Rubber Boot
37.	10032	1	Left Ag Light
--	10033	1	Right Ag Light
38.	09437	1	4 inch Sealed Beam Light
39.	61681	7	1 inch Anti-Skid Tape
40.	9445208	2	Single Wheel (30.5L x 32 24 ply Tire)(Rim Incl.)
--	10401-56	2	VA27 x 32 Rim
--	9445204	2	Single Wheel (30.5L x 32 12 ply Tire)(Rim Incl.)
--	09381-56	2	DW27A x 32 Rim
--	--	2	Dual Wheel (520/85R-38 Tire)(Rims Incl.)
--	10830	4	Dual Rim
41.	11565-30	2	Light Mount
42.	07435	20	3/4 inch-16 UNF Lug Nut
43.	10816-30	1	Bearing Mount
44.	00116	5	5/32 inch x 1-1/2 inch Cotter Pin
45.	00059	12	3/8 inch Flatwasher
46.	00523	6	3/8 inch x 1-1/4 inch Hex Bolt (Gr. 5)
47.	02592	27	3/8 inch Nylon Insert Locknut
48.	05047	16	3/4 inch-10UNC x 2-1/2 inch Hex Head Bolt (Gr. 5)
49.	00492	16	3/4 inch Flatwasher
50.	02961	16	3/4 inch-10UNC Nylon Insert Locknut
51.	09454	2	1 1/2 inch-14 UNF x 6-1/2 inch Hex Head Bolt (Gr. 8)
52.	09455	2	1 1/2 inch-14 UNF Stover Locknut
53.	01254	18	1/2 inch x 1-1/2 inch Hex Head Bolt (Gr. 5)
54.	00085	20	1/2 inch Flatwasher
55.	02178	18	1/2 inch Nylon Insert Locknut
56.	05103	1	5/8 inch x 3-1/2 inch Hex Head Bolt (Gr. 5)
57.	00907	22	3/8 inch x 1 1/2 inch Hex Head Bolt (Gr. 5)
58.	05256	4	3/8 inch-16 UNC x 1/2 inch Socket Head Set Screw
59.	02772	4	1/4 inch Nylon Insert Locknut
60.	10277	1	Electrical Plug Holder
61.	10241	1	Owner's Manual Cannister
62.	10242	1	Owner's Manual Cannister Bracket
63.	10666	1	1-3/4 inch PTO Shaft
64.	04055	4	1/4 inch x 1 1/2 inch Hex Head Bolt (Gr. 5)
65.	00639	8	1/2 inch x 1-1/2 inch Set Screw w/00640 Jam Nut
66.	00214	2	1/4 inch Flatwasher
67.	02587	1	5/8 inch Nylon Insert Locknut
68.	11568-30	2	Light Mount Reciever
69.	10678	2	7/8 inch Nylon Insert Locknut
70.	11104-30	2	Auger Chute Mounting Strip
71.	11105-30	2	Auger Chute Mounting Strip
72.	00639	4	1/2 inch x 1 1/2 inch Square Head Bolt
73.	00209	4	3/8 inch x 1 1/2 inch Square Head Bolt
74.	02990	14	5/16 inch x 1 1/2 inch Hex Head Bolt
75.	02802	14	5/16 inch Nylon Insert Locknut
76.	00004	22	5/16 inch Flatwasher

800 & 950 EXTENSION ASSEMBLY

950 Grain Cart



800 Grain Cart



950 Extension Parts List

REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	10625-30	1	Front Extension
2.	10630-30	1	Rear Extension
3.	10626-30	2	Left Extension
4.	10627-30	2	Right Extension
5.	10758	8	Side Hinge
6.	10759	4	Front & Rear Hinge
7.	00004	80	5/16" Flatwasher
8.	01263	92	5/16" x 3/4" Hex Hd. Bolt Gr. 5
9.	02802	98	5/16" Locknut
10.	10668-30	1	Cross Angle Brace
11.	00907	2	3/8" X 1" Hex Head Bolt (Gr. 5)
12.	02592	2	3/8" Nylon Insert Locknut
13.	02990	6	5/16" x 1" Hex Head Bolt Gr. 5

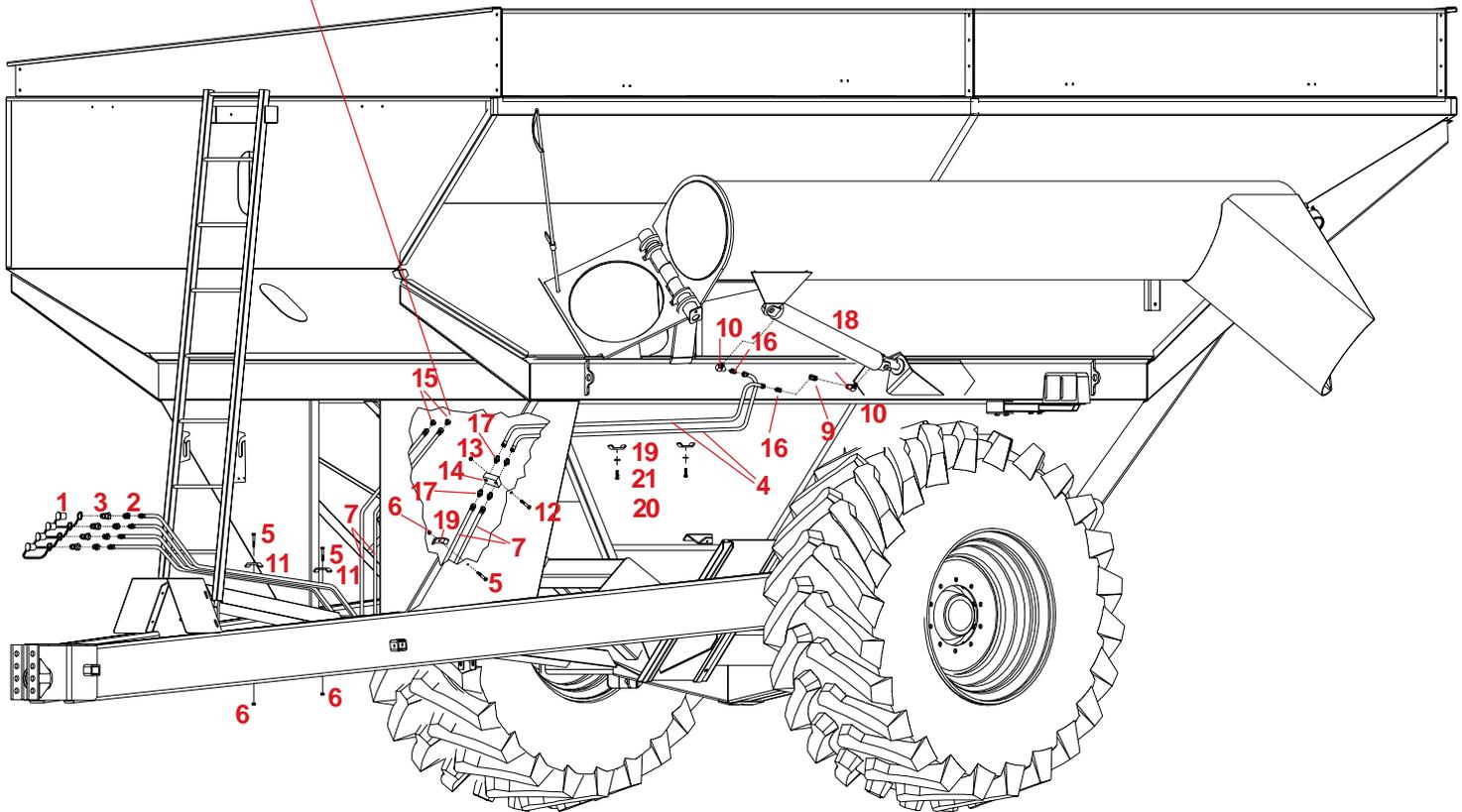
800 Extension Parts List

REF. NO.	PART NO.	QTY.	DESCRIPTION
14.	11510-30	1	Front Extension
15.	11511-30	1	Rear Extension
16.	11512-30	1	Left Extension
17.	00004	16	5/16" Flatwasher
18.	01263	20	5/16" x 3/4" Hex Hd. Bolt Gr. 5
19.	02802	20	5/16" Locknut

Please order replacement parts by PART NO. and DESCRIPTION.

HYDRAULIC PARTS AND ASSEMBLY

Item #8 is on opposite side of fittings inside box

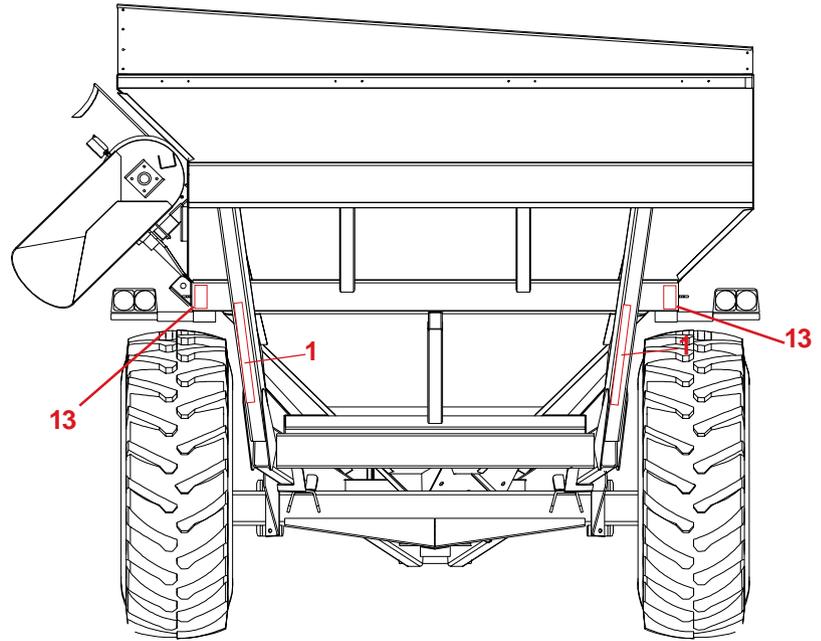
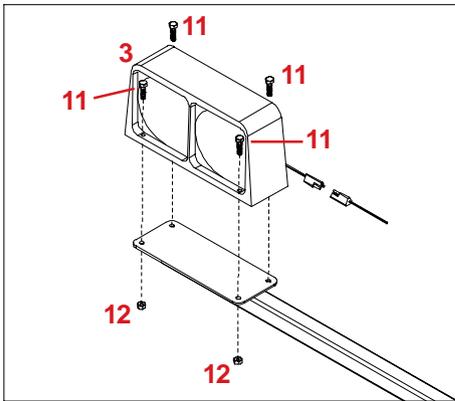
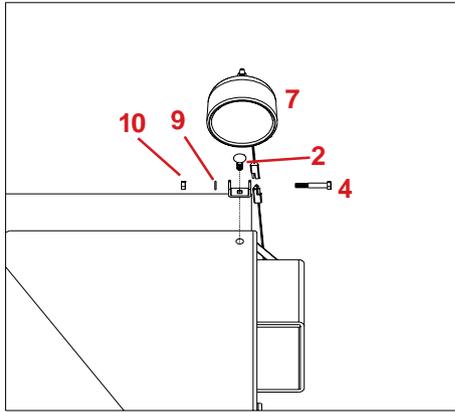


REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	05198	4	Rubber Coupler Cover
2.	05197	4	Hydraulic Quick Coupler
3.	05831	4	1/2 ⁱ MPT x 3/8 ⁱ FPT Reducer
4.	05840	2	1/4 ⁱ x 84 ⁱ Hydraulic Hose
5.	00914	3	3/8 ⁱ -16 UNC x 1-1/2 ⁱ Hex Head Bolt (Gr.5)
6.	02592	3	3/8 ⁱ -16 UNC Nylon Insert Locknut
7.	09171	4	1/4 ⁱ x 16 ⁱ Hydraulic Hose
8.	05191	2	1/4 ⁱ x 36 ⁱ Hydraulic Hose (Not Shown)
9.	03743	2	.041 ⁱ Hydraulic Swivel Restrictor
10.	05215	2	3/8 ⁱ MPT x 3/8 ⁱ FPT Elbow Fitting

REF. NO.	PART NO.	QTY.	DESCRIPTION
11.	09217-30	2	Hose Keeper (4 Hose)
12.	03547	1	5/16 ⁱ -18 UNC X 2-1/4 ⁱ Hex Head Bolt (Gr.5)
13.	07732	1	5/16 ⁱ -18 UNC Nylon Insert Locknut
14.	07582	1	Pilot Operated Check Valve
15.	09172	2	3/8 ⁱ JIC Bulkhead Elbow Fitting
16.	05195	2	Str. Hyd. Fitting, .375 MPT
17.	05243	4	Str. Hyd. Fitting W/O-Ring
18.	09930-30	1	2-1/2 ⁱ Cylinder
19.	09218-95	3	Hose Keeper (2 Hose)
-	5584	-	Hydraulic Cylinder Seal Repair Kit (not shown)
20.	00523	2	3/8 ⁱ x 1 1/4 ⁱ Hex Head Bolt Gr. 5
21.	00060	2	3/8 ⁱ Lockwasher

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.

LIGHTING PARTS AND ASSEMBLY

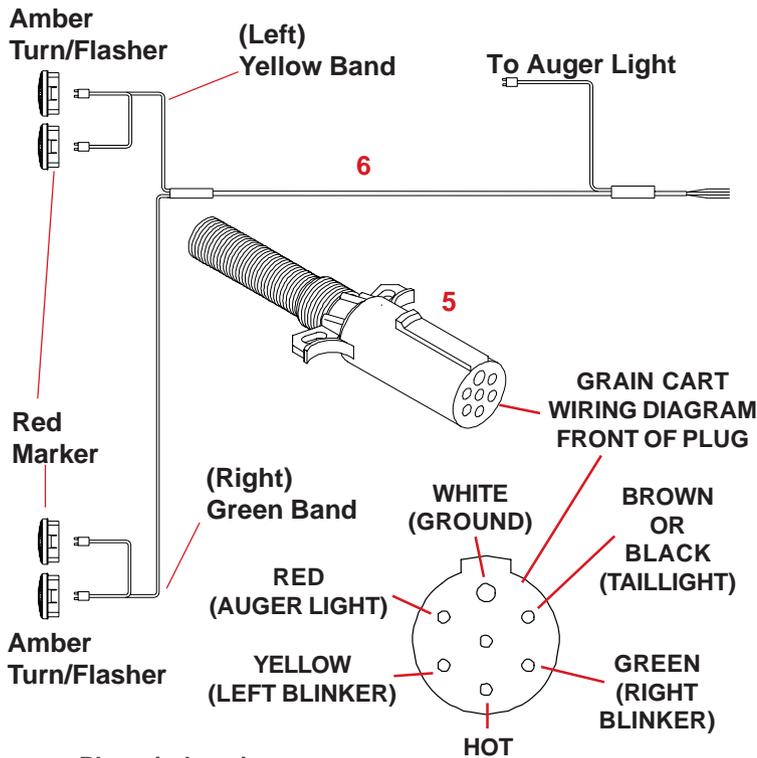


REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	07278	2	Conspicuity Tape
2.	06925	1	5/16i x 1i Carriage Bolt
3.	10032	1	Left Dual Ag Light
--.	10033	1	Right Dual Ag Light
4.	02103	1	5/16 x 2i Hex Head Bolt
5.	07416	1	7-Way Male Plug Connector
6.	10608	1	Wiring Harness
*7.	09437	1	Auger Light Kit W/Two Prong Connector
8.			
9.	00036	2	5/16i Spring Lockwasher
10.	00007	2	5/16i Hex Nut
11.	00336	8	1/4i 1-1/4i Hex Head Bolt
12.	00062	8	1/4i Nylon Insert Locknut
13.	04508	4	Amber Reflective Sticker
--.	04804	4	Red Reflective Sticker

*#7 (09437) includes item #is 2,4, & 9 along with the light and mount
Please order replacement part 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

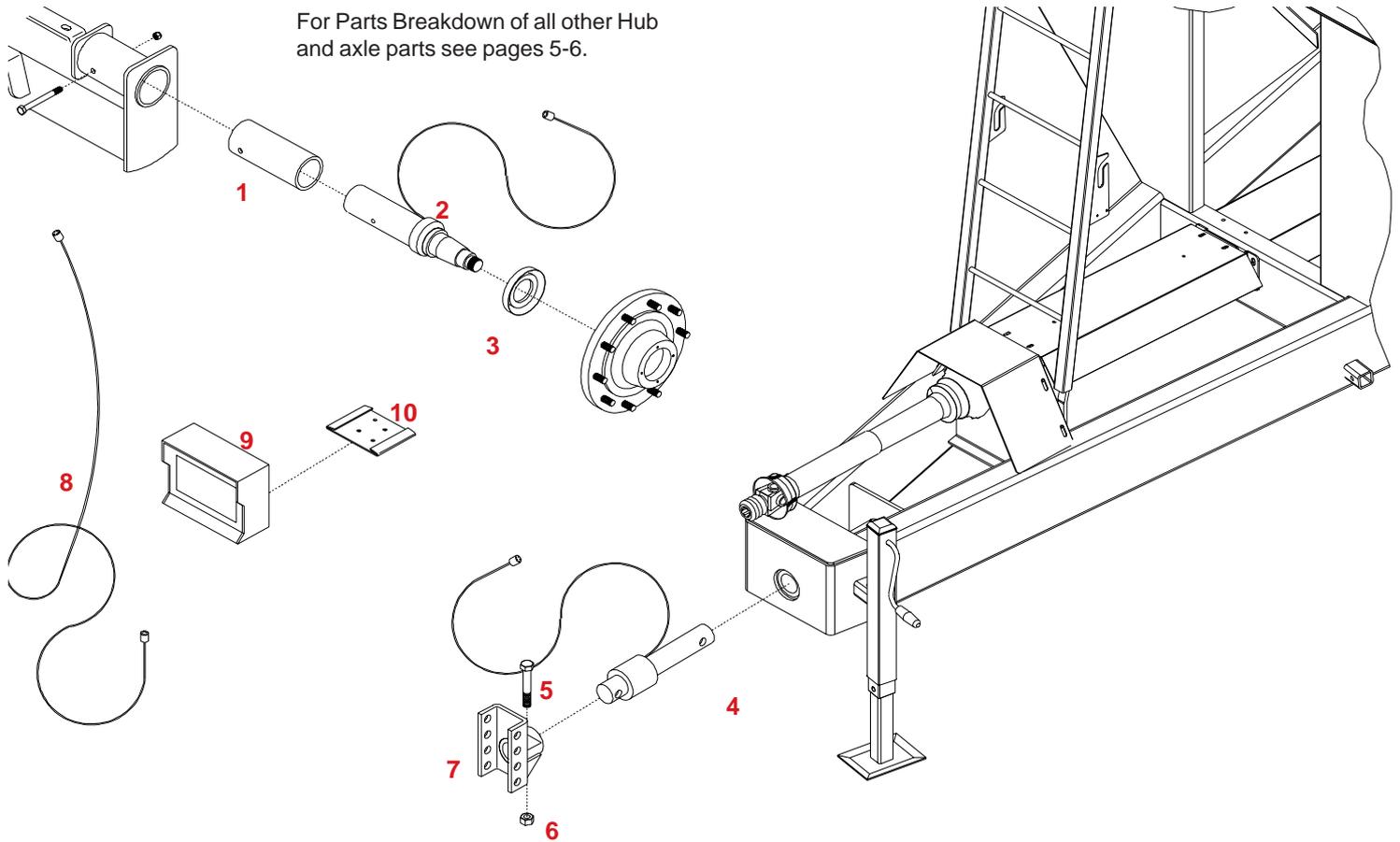
1. Start wiring the lights as shown in the drawing and the wiring schematic. Secure the Light Harness (#6) to the frame using nylon hose ties. Next Attach the lights to the fenders. With the amber light to the outside of the grain cart and the side with the amber and red light facing the rear of the grain cart, use eight 1/4i x 1-1/4i hex bolts (#11) and eight 1/4i nylon insert locknuts (#12) to attach the lights.
2. When connecting the wire harness (#6) to the front (male tractor) plug (#5) 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.



Plug pin location may vary depending on tractor.

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.

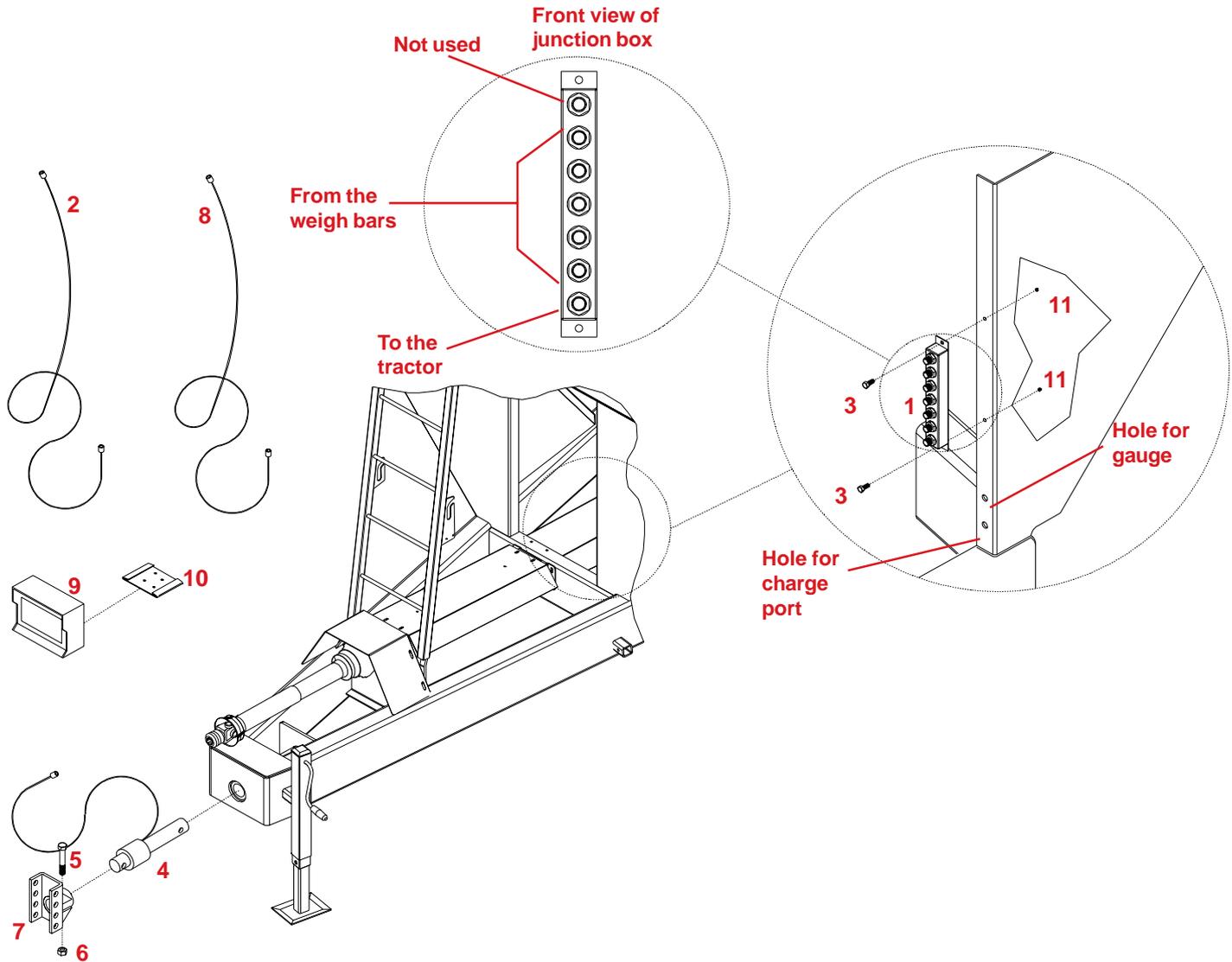
SCALE OPTION PARTS BREAKDOWN



REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	09410	2	Spindle Insert
2.	09408	2	Spindle
3.	09442	2	Grease Seal
4.	10806	1	Hitch Scale
5.	11698	2	7/8" x 5 1/2" Hex Head Bolt Gr. 8
6.	10678	2	7/8" Nylon Insert Locknut
7.	10813-30	1	Hitch Assembly
8.	09441	1	8' Power Cord Harness
9.	09439	1	Scale Monitor
10.	09440	1	Scale Bracket

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.

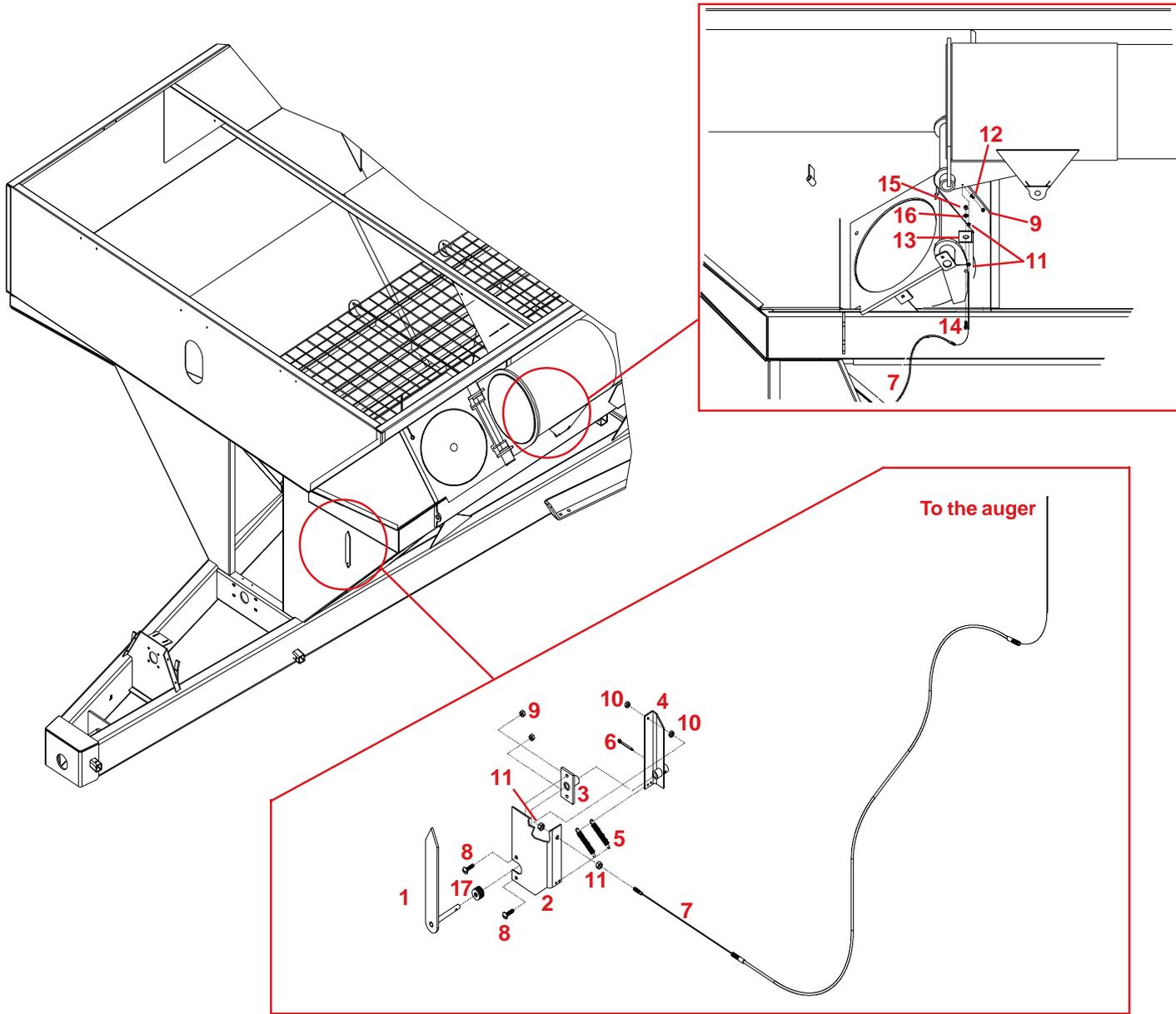
TRACK SCALE PARTS BREAKDOWN



REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	10941	1	Junction Box
2.	10942	1	8i Junction Box to Tractor Cable
3.	01263	2	5/16i NC X .75i Hex Head Bolt (Gr. 5)
4.	10806	1	Hitch Scale
5.	11698	2	7/8i x 5 1/2i Hex Head Bolt Gr. 8
6.	10678	2	7/8i Nylon Insert Locknut
7.	10813-30	1	Hitch Assembly
8.	09441	1	8i Power Cord Harness
9.	10943	1	Scale Monitor (Model 615)
10.	09440	1	Scale Bracket
11.	02802	2	5/16i Nylon Insert Locknut

Please order replacement parts by PART NO. and DESCRIPTION.

FOLDING AUGER DIAL INDICATOR PARTS BREAKDOWN



REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	10658-30	1	Pointer Assembly
2.	10659-30	1	Dial Indicator Plate
3.	10660-30	1	Pointer Mounting Plate
4.	10661-30	1	Pointer Bracket
5.	10673	2	Tension Spring
6.	00116	1	5/32" x 1-1/2" Cotter Pin
7.	10080	1	Cable For Pointer
8.	04054	2	1/4"-NC X 3/4" Slotted Round Head Bolt
9.	02772	3	1/4" Nylon Insert Locknut
10.	03267	2	#10-32 Hex Nut
11.	10466	4	5/16"-NF Hex Nut
12.	11010	1	Cable End Bolt
13.	10667-30	1	Cable Mount For Auger
14.	00914	1	3/8"-NC X 1.50" Hex Head Bolt (Gr. 5)
15.	02592	1	3/8" Nylon Insert Locknut
16.	00059	1	3/8" Flatwasher
17.	04633	7	3/8" Flatwasher (stainless steel)

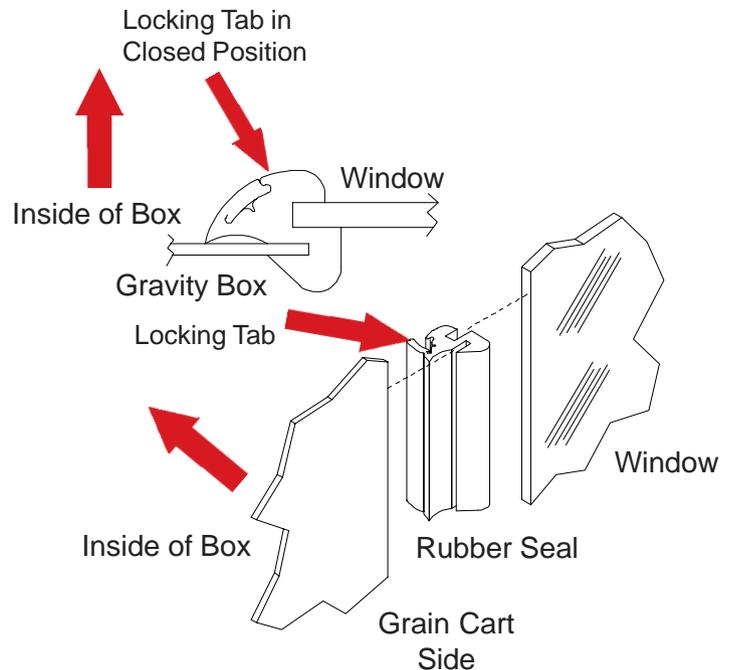
Please order replacement parts by PART NO. and DESCRIPTION.

WINDOW INSTALLATION

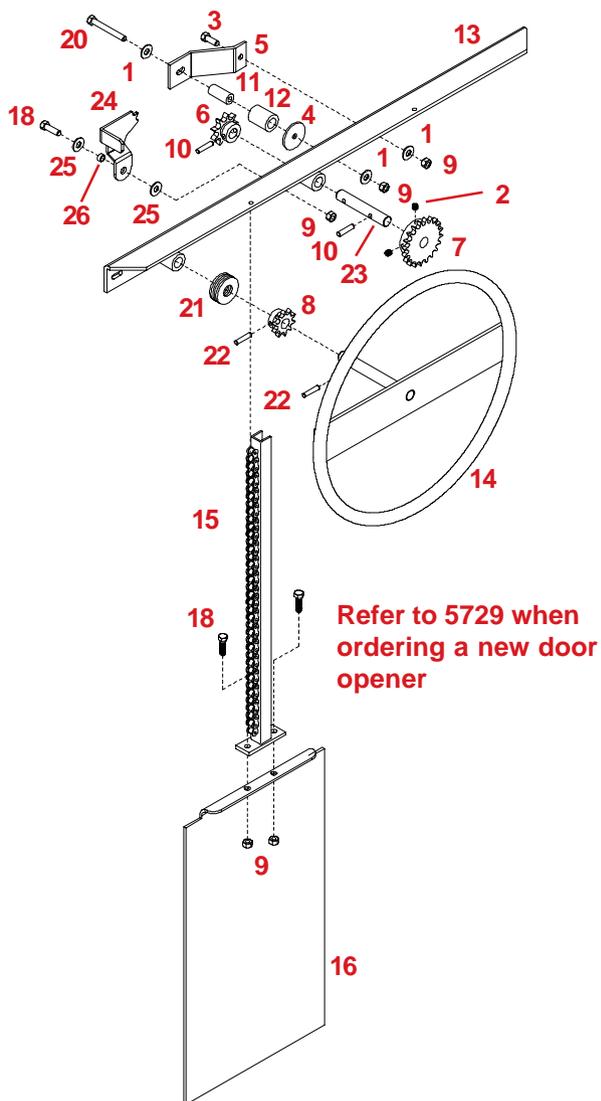
INSTALLATION PROCEDURE

The installation must be done from inside the box.

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



OUTER DOOR LIFT ASSEMBLY

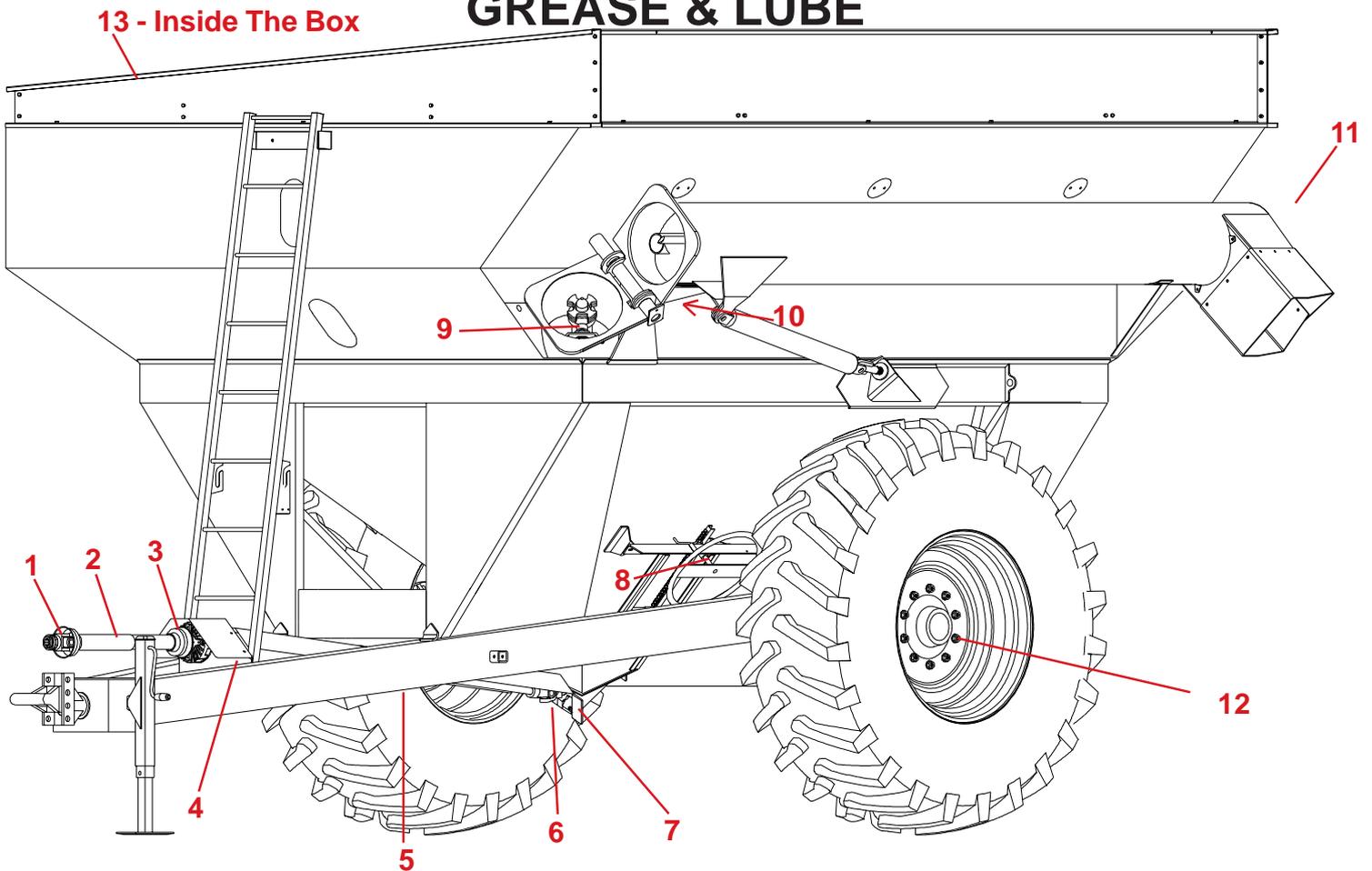


REF. NO.	PART NO.	QTY.	DESCRIPTION
1.	00059	2	3/8" Flatwasher
2.	00789	1	3/8" x 3/8" Set Screw
3.	00907	1	3/8" x 1" Hex Bolt (Gr.5)
4.	01113	1	Washer 2 OD x 3/8" ID
5.	01243-30	1	Roller Brace Bracket
6.	01332	1	Sprocket 50B9
7.	02026	1	20 Tooth Sprocket
8.	02028	1	10 Tooth Sprocket
9.	02592	3	3/8" Locknut
10.	02849	2	5/16" x 1-13/8" Roll Pin
11.	05363	1	Bushing 3/4"OD x 3/8"ID x 1-11/16" long
12.	05364	1	Bushing 1-1/4" x 3/4"ID x 1-5/8" long
13.	11525-30	1	Door Lift Mount
14.	10629-30	1	Door Lift Wheel
15.	10637-30	1	Door Lift Channel
16.	10620-30	1	Lower Door
17.	10644	1	Roller Chain (Not Shown)
18.	00523	2	3/8" x 1-1/4" Hex Bolt (Gr.5)
19.	04642	2	Grease Zerk (Not Shown)
20.	02166	1	3/8" x 2 3/4" Hex Bolt (Gr.5)
21.	02534	5	.75 Washer
22.	03096	2	1/4" x 1 1/4" Roll Pin
23.	10632	1	Shaft
24.	11412	1	Latch
25.	00004	2	5/16" Flatwasher
26.	11414	1	Bushing

INSTALLATION PROCEDURE

1. Start by attaching the lower door (#16) to the lift channel (#15) using two 3/8" x 1-1/4" bolts (#18) and two 3/8" nylon insert locknuts (#9). Leave bolts loose at this time.
2. Next assemble the door lift mount (#13) as shown. Leave the bolts loose at this time. After this is assembled, slide the lower door and lift channel into place on the grain cart. Slide the assembled lift mount over the lift channel and bolt into place using two 3/8" x 1-1/4" bolts (#18), two 3/8" flatwashers (#1), and two 3/8" locknuts (#9). Now tighten all the bolts.

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 bearings -- Do not over grease sealed bearings.

Reference number #10 - Is the hinge for the outer tube. There are two zerks in this area -- Inspect and grease as needed.

Reference number #12 - Is the axle hub 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.**

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.

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

After Season Care:

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

Keep auger folded back during storage.

Grease all zerk locations (see page 19 for maintenance 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.
950 Bushel Diamond Tire	30.5L x 32	12	26 psi.
950 Bushel Diamond Tire	30.5L x 32	24	psi.
950 Bushel Diamond Tire	35.5L x 32	20	34 psi.
Duals 950 Bushel Lug Tire	520/85R38	14	29 psi.



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