



**3750XL / 4000SWB / 4500SWB
CADMAN TRAVELLER**



OPERATOR'S, PARTS and MAINTENANCE MANUAL

2021 EDITION

TR-MAN-4000



Table of Contents

Table of Contents.....	1
4000 Series Irrigation Traveller	3
Warranty Policy.....	4
When Applying Liquid Manure	5
Safety Precautions.....	6
Safety Decals.....	7
Safety Decals Continued	8
Planning Your Application.....	9
4000 Series Traveller Start Up.....	16
4000 Series Traveller Operation	33
Parts Section	45
Required Maintenance.....	141
Sprinkler Performance Data.....	151
4000 Series Dimensions and Weight	156
Useful Information.....	158

4000 Series Irrigation Traveller

We would like to thank you for purchasing your new **Cadman 4000 Series Traveller**. You have purchased a product of superior quality that will serve your needs for a long time as long as you follow this manual and safety procedures.



Figure 1 - 3750XL Wide Body Traveller

img-01380

BEFORE operating your new **Cadman 4000 Series Traveller**, inspect the machine for any damage or parts that may have come loose during shipping. **REPORT ANY DAMAGE TO CADMAN POWER EQUIPMENT LIMITED OR YOUR LOCAL DEALER IMMEDIATELY.**

Warranty Policy

CADMAN POWER EQUIPMENT LIMITED warrants that each machine it manufactures shall be free from defects in materials and workmanship. The terms of this warranty are as follows:

- All components manufactured by **CADMAN POWER EQUIPMENT LIMITED** shall be warranted for a period of one (1) year from the date of delivery, except the frame and hose drum structures which shall be warranted for a period of three (3) years.
- **CADMAN POWER EQUIPMENT LIMITED** makes no warranty whatsoever in regard to tires, engines, and other trade accessories used on its equipment. The customer shall rely solely on the warranties offered (if any) by the respective manufacturer of these trade accessories.

The sole obligation to **CADMAN POWER EQUIPMENT LIMITED** under this warranty is limited to the repair or replacement of any part it manufactured, which, in the judgment of **CADMAN POWER EQUIPMENT LIMITED**, failed under normal and proper use and maintenance due to defective materials or workmanship. All freight charges incurred shall be the sole responsibility of the customer.

CADMAN POWER EQUIPMENT LIMITED and its dealers (who are neither authorized nor qualified to undertake any obligations on behalf of **CADMAN POWER EQUIPMENT LIMITED**) **DO NOT**, under any circumstances, accept any responsibility for any losses or costs incurred due to parts failure and/or delays during the parts replacement process.

This warranty will be considered void if any alterations or modifications have been made to the machine without the express written consent of **CADMAN POWER EQUIPMENT LIMITED** outlining the nature and the extent of such modifications. **CADMAN POWER EQUIPMENT LIMITED** will not provide any warranty express or implied to any overdue accounts.

CADMAN POWER EQUIPMENT LIMITED, whose policy is one of continuous improvement, reserves the right to change specifications and designs without notice or incurring obligation.

The warranties expressed herein are non-transferable and replace any other warranties, either written or verbal, which may have been given or implied.

When Applying Liquid Manure

Current and pending laws in agricultural regions of North America change the ways in which the agricultural community needs to manage their liquid animal waste products. As a manufacturer of agricultural equipment, we feel it necessary to make you aware that the municipal, regional and state governing bodies in your area may have created new laws or updated current laws for nutrient handling practices and procedures. The changes in these laws typically target run-off prevention and soil nutrient loading.

Run off may result from several factors. Some (but not all) of the factors are:

- Incorrect application
- Difficult application areas containing steep hills or other features that may make run off more likely to happen
- Changes in weather that would allow run off to happen (sudden storms just before or just after applying, ground frost, etc....)

Constant watch must be kept and immediate action taken when needed to prevent run off from happening.

Soil nutrient loading depends on several variables. Some (but not all) of these variables are:

- The type of crop(s) being grown
- The type of soil the crop(s) are growing in
- Nutritional value of what you are applying
- Nutritional needs of the crop(s) and soil they are growing in

Application timing, nutritional value of what you are applying, and the type of soil will determine the intake rate at which liquid may be applied. Soil analysis taken at appropriate times will help you create a correct application plan for your crop(s). In addition; local colleges, universities, and agricultural extension services are a good source of information. They may be able to help you create an application program that will help prevent problems with your application.

CADMAN POWER EQUIPMENT LIMITED is unable to provide up-to-date recommendations for the laws you must follow in your area. It is your responsibility to make yourself aware of and follow the law in your area. Please contact your local agricultural representative to obtain the latest information for legal handling and application of nutrient.

Safety Precautions

Please take the time to read and understand this manual to avoid errors and unnecessary risks. If you have any questions or concerns, please contact **CADMAN POWER EQUIPMENT LIMITED** or your local dealer/distributor.

FAILURE TO FOLLOW ALL SAFETY INSTRUCTIONS CAN RESULT IN DEATH OR SERIOUS INJURY FOR YOU AND/OR ANY SPECTATORS.

- **DO NOT** move or operate this machine until you have read and understand these instructions in this manual.
- **NEVER** allow untrained persons to operate this machine.
- **DO NOT** perform service this machine while it is in operation.
- **MAKE SURE** all mechanical and hydraulic tension has been released before attempting any service on the machine.
- **CHECK** all fasteners (nuts and bolts) regularly for tightness.
- **PERFORM REQUIRED MAINTENANCE** as prescribed or as necessary to keep this machine in safe operating condition.
- **KEEP ALL SPECTATORS** at a safe distance.
- **STAY CLEAR** of high pressure supply lines, especially when first pressurizing the system.
- **DO NOT** remove or alter any shielding on this machine.
- **MAKE SURE** that the machine is securely anchored (using a tractor) before unwinding the hose.
- **KEEP CLEAR** of all moving parts.
- **NEVER** tow this machine at speeds greater than **10 mph [16 km/h]** and be certain the tow vehicle has adequate braking capacity to maintain safe control at all times.
- **NEVER** tow this machine with the hose loaded with fluid.
- **BE AWARE** of any obstacles (i.e. mail boxes, fence posts, and other equipment) that you may encounter when transporting the machine.
- **REGULAR INSPECTION** of your pipe/hose couplings, tubing and gaskets should be a part of your regular set-up routine. Any defective parts **MUST** be replaced or repaired before the machine is put into service.



This symbol, the safety-alert symbol, indicates a hazard. When you come across the safety-alert symbol in this manual, make sure you fully understand and abide by the given instructions or warnings.

Safety Decals

Cadman Power Equipment Limited has determined the potential hazards on your 4000 Series Traveller and has labeled the machine accordingly. The safety decals on this machine are there to warn operators of potential hazards. Each safety decal on this machine contains a Signal Word Panel which shows the degree of hazard. Definitions of the Signal Words are as noted below.



Figure 2 - Danger Decal

img-00340-A

- **DANGER** - an immediate, hazardous situation that if not avoided, **WILL RESULT IN DEATH OR SERIOUS INJURY**.



Figure 3 - Warning Decal

img-00340-B

- **WARNING** - a potentially hazardous situation that if not avoided could result in death or serious injury. This includes hazards that are exposed when guards are removed.



Figure 4 - Caution Decal

img-00340-C

- **CAUTION** - a potentially hazardous situation that if not avoided may result in minor or moderate injury.

Safety Decals Continued

- All safety decals must be clean, clear, and easy to read
- Replace any decal that is not in good condition
- Replace any missing decals, it is important to double check that all labels are on your machine, especially if you have modified your machine or have had your machine serviced

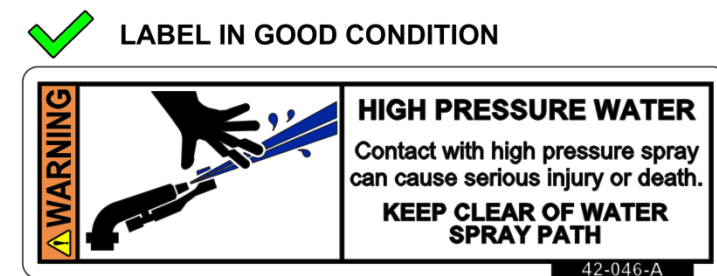
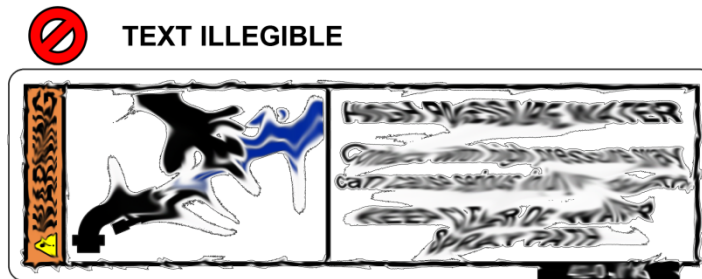


Figure 5 - Replace Decals

img-00131-B

Planning Your Application

Complete the steps shown in order to create a plan to irrigate your field:

Step 1

A) If you are using a new traveller for the first time, or a traveller that was drained before storage, you must start somewhere that will allow you to pull out the hose. You must leave at least one full coil of hose on the drum after pulling the hose out. Verify that the hose coils on the base layer are packed tightly with no gaps between coils.



Failing to leave at least one coil of hose on the traveller drum will result in damage to the hose. You also risk pulling the hose off of the drum barb. Damaging the traveller's hose and/or pulling the hose off of the drum barb will lead to pooling/ponding of water. This will muddy the area around the traveller and may cause injury to operators and/or spectators. This will also damage the traveller.

B) Check the traveller's fluid levels and verify all fluid levels are correct.

Step 2

Determine your application depth in inches. Do not irrigate deeper than the root zone of the crops you are irrigating as you will over water. Over watering your crops will result in wasting time and raising irrigation cost of your crops.

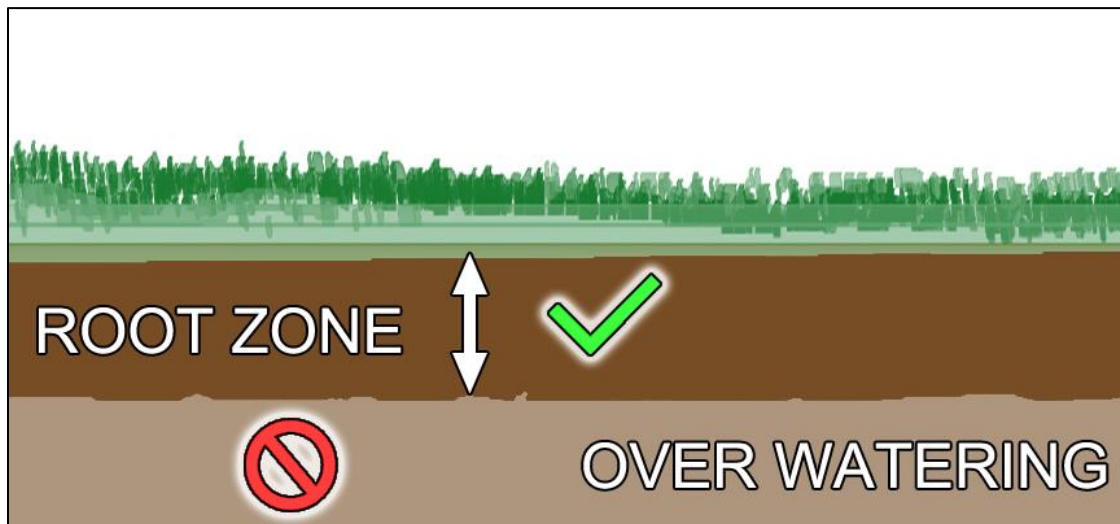


Figure 6 - Root Zone: Depth of Application

img-00197-A

Step 3

Divide your field into the least number of sections for complete coverage.

A) Choose the area you plan to irrigate. If this area is greater than what you can irrigate in one pull you need to divide the area into the least number of sections. Use the performance data tables on page 151 to determine your traveller's irrigation area.

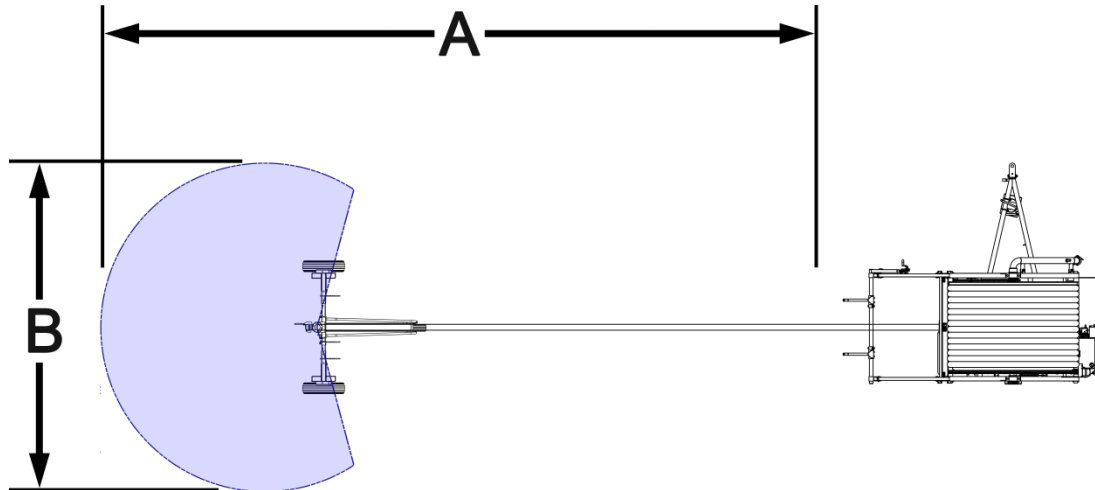


Figure 7 - Reel Coverage

img-00193-A

The total length of your irrigation pull can be calculated from the following equation:

$$A = \frac{B}{2} + C$$

A is the total irrigated length in feet.

B is the diameter of your sprinkler throw in feet. See page 151 for sprinkler performance data.

C is the length of your machine's hose. See the table below for your traveller's hose length.

4000 Series Hose Lengths:

WB MODEL	HOSE LENGTH (FT)
3750XL	1320
4000SWB	1250
4500SWB	1175

B) Avoid quarter circle irrigation pulls whenever possible. Reduce your sprinkler's nozzle size and/or lowering the operating pressure may reduce the spray so that you can irrigate your field without using quarter circle irrigation pulls. If you change your flow rate you must adjust your retrieval rate to match the new flow rate.

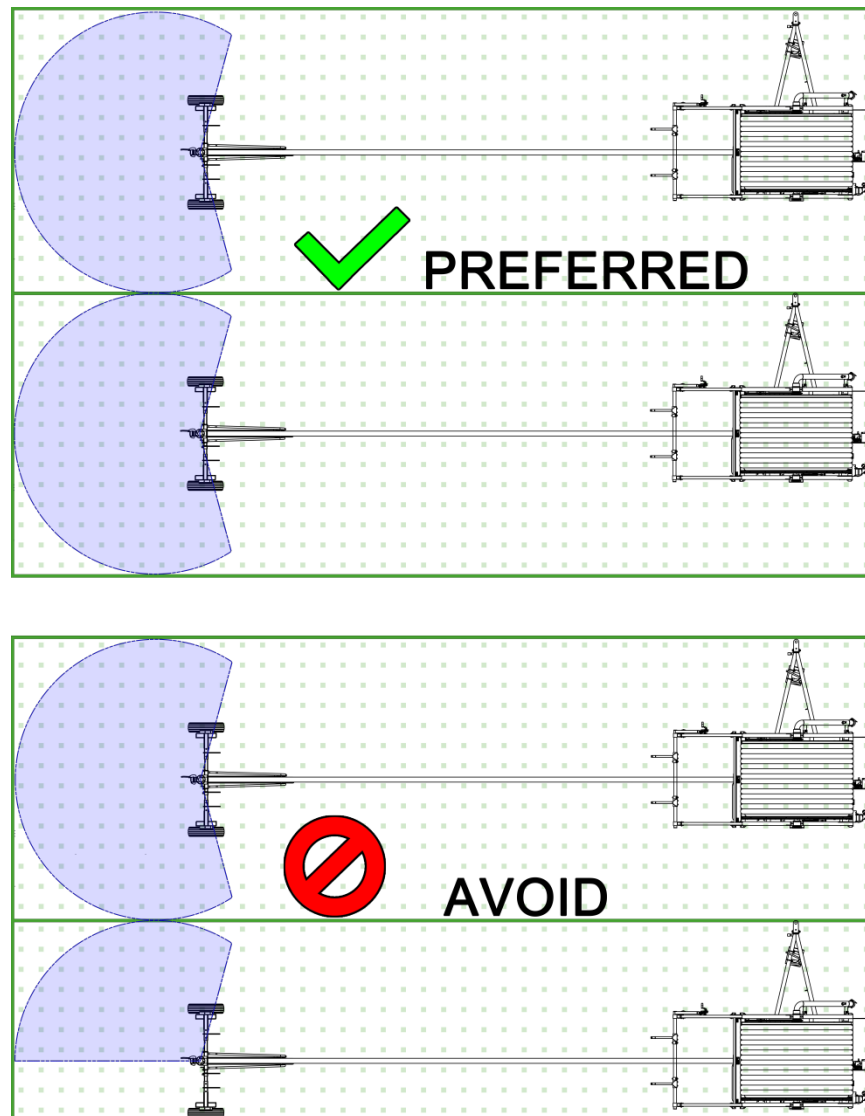


Figure 8 - Multiple Pass Setup

img-00199-A

- C) If a quarter pull unavoidable, prepare the travel lane with a shallow trench for the hose to follow. You may also add weights to the sprinkler cart to assist in the sprinkler cart track in a straight line. If you are unable to set the sprinkler cart up for a quarter circle irrigation pull then you must change your plan to use full irrigation pulls.
- D) If you need to perform a curved irrigation pull, you must pull out at least 200 feet (61 meters) of hose straight out of the machine before starting a long, gradual curve. The curve must not form a 90 degree bend.



Failing to provide a trench or furrow during a quarter circle pull or curved pull will lead to the sprinkler cart tracking unpredictably. This may result in the sprinkler cart colliding with anything in the sprinkler cart path. Collision with an unpredictably tracking sprinkler cart will cause serious injury to operators and/ or spectators. It will also cause damage to the sprinkler cart and any object it collides with.

- E) Plan to leave open travel lanes and ample head lands. Travel lanes and head lands that have been hilled and cultivated will lower the towing effort needed to pull the sprinkler cart into position. Hilled and cultivated lands will also provide guidance for the hose. Make sure to provide ample head land space to safely turn your traveller and set it up.
- F) Some crops (e.g. alfalfa, peas, potatoes, sod) will provide high resistance to pulling the hose out. If you irrigate a crop that provides high resistance for hose pull out decoupling the feeder hose at the mainline valve and pulling the hose out slower may assist hose pull out.



Decoupling the feeder hose at the mainline valve will drain the irrigation traveller's hose. The hose contains several hundred gallons of water and will muddy the area around the traveller. This may cause injury to operators and/or spectators.

G) Start your irrigation pull at the section furthest from your water source when possible. This will prevent changing water sources during a multiple pass irrigation pull.

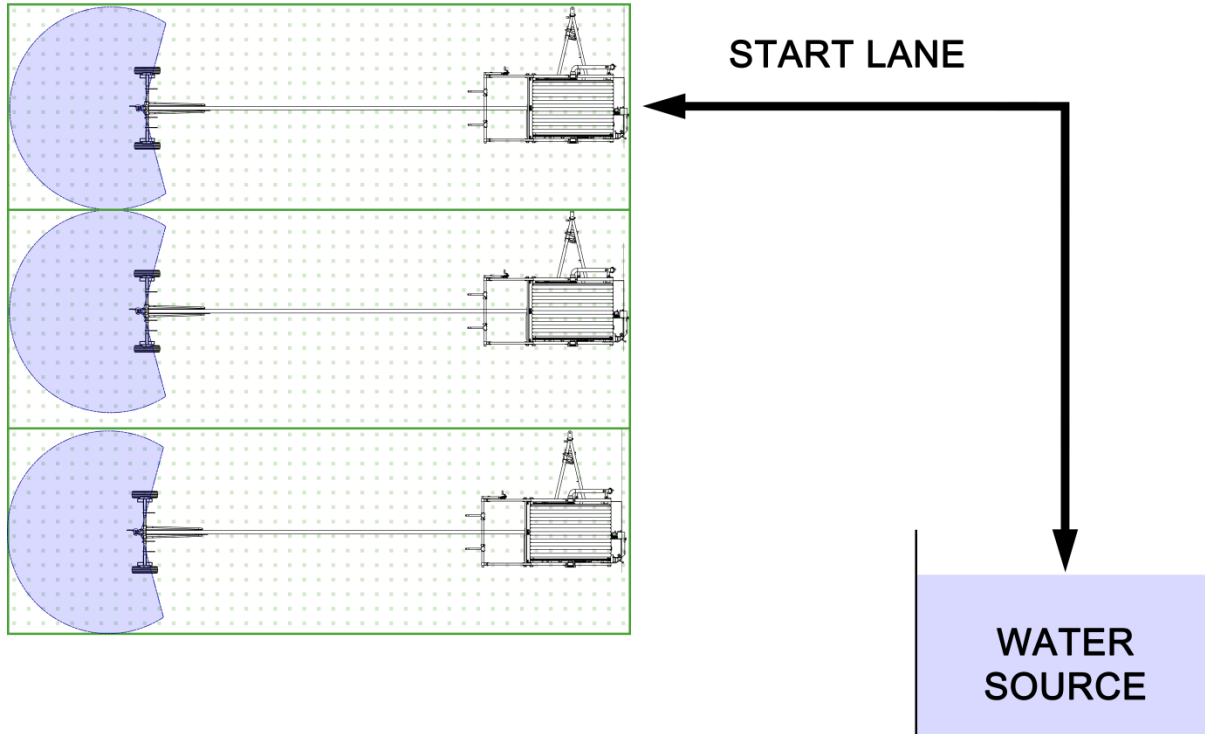


Figure 9 - Multi Pass Setup

img-00233-A

H) Pull the hose up or down sloping terrain when possible. If operating on the side of a hill cannot be avoided you must dig a hilled trench for the hose to follow in addition to adding extra weight to the sprinkler cart to prevent it from tipping and falling downhill.



Failing to provide a hilled trench and/or adding weights to the sprinkler cart will result in the sprinkler cart sliding or falling downhill during operation. This may cause serious injury and/or death to operators and/or spectators. This will also cause damage to the sprinkler cart.

Make sure to note all the obstacles in the area you want to irrigate. You will need to adjust your plan for obstacles in order to safely irrigate the area you are planning for.

- I) Determine the retrieval rate using the sprinkler data charts, system pressure, and field width. See the retrieval rate selection example below...

Retrieval Rate Selection Example

For this example a **4000SWB traveller** is fitted with a **Nelson SR150** sprinkler. The **Nelson SR150** will be using a **1.34 inch ring nozzle** operating at **90 psi**.

Use the above information to plan for a field using 300 foot lane spacing that needs 1.25 inches of irrigation depth.

- A) Use example Table 1 to find the GPM you will be pumping. For this example, cross the 1.34 inch ring diameter with the 90 psi operating pressure.

A 1.34 inch ring nozzle operating at 90 psi will irrigate at 405 GPM.

- B) Next, use example Table 2 to look up the time it will take to cover one acre in minutes by crossing the GPM from step A and the 1.25 inch irrigation depth used in this example. If the GPM from step A does not match with one of the flow rates in example table 2, the flow rate in example Table 2 that is closest to the GPM from step A is chosen.

A flow rate of 245 GPM with an irrigation depth of 0.75 inches will give a time of 68 minutes.

- C) Use example table 3 to look up the retrieve rate you need by crossing the time needed to cover 1 acre from step B with the 300 foot lane spacing.

81 minutes to cover 1 acre with a 300 foot wide lane will give a retrieval rate of 21 inches per minute.

- D) You must set the sprinkler up so that the 300 foot section is covered in addition to enough overlap to provide adequate watering at the edge of your field.



The following charts are to be used as a guide only. Always verify the application amount with rain gauges to confirm that your application is correct.

TR-MAN-4000

Operator's Manual - 4000 Series Traveller



NOZZLE PSI	Ø 0.86		Ø 0.97		Ø 1.08		Ø 1.18		Ø 1.26		Ø 1.34		Ø 1.41	
	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.
50	100	245	130	265	165	285	205	300	255	320	300	335	350	350
60	110	260	143	280	182	300	225	315	275	335	330	350	385	365
70	120	270	155	290	197	310	245	330	295	350	355	365	415	380
80	128	280	165	300	210	320	260	340	315	360	380	380	445	395
90	135	290	175	310	223	330	275	350	335	370	405	390	475	405
100	143	300	185	320	235	340	290	360	355	380	425	400	500	415
110	150	310	195	330	247	350	305	370	370	390	445	410	525	425

Table 1 - Nelson SR150 Big Gun (27° Trajectory, Ring Nozzle)

GPM	PRECIPITATION RATE (ACRE INCHES)									
	0.25"	0.50"	0.75"	1.00"	1.25"	1.50"	1.75"	2.00"	2.50"	
150	45	90	135	180	225	270	315	360	453	
200	34	68	102	136	170	204	238	272	340	
250	27	54	81	108	135	162	189	216	272	
300	23	46	69	92	115	138	161	184	226	
350	19	38	57	76	95	114	133	152	194	
400	17	34	51	68	85	102	119	136	170	
450	15	30	45	60	75	90	105	120	151	
500	14	28	42	56	70	84	98	112	136	
550	12	24	36	48	60	72	84	96	123	
600	11	22	33	44	55	66	77	88	113	
650	10	20	30	40	50	60	70	82	104	

Table 2 - Time required for watering one acre (inch/min)

MIN / ACRE	LANE SPACING (FEET)								
	200	225	250	275	300	325	350	375	400
10	----	----	----	----	----	----	----	139	131
15	----	----	139	126	116	107	100	93	87
20	131	116	104	95	87	80	75	70	65
25	105	93	84	76	70	64	60	56	52
30	87	77	70	63	58	54	50	46	44
35	75	66	60	54	50	46	43	40	37
40	65	58	52	47	44	40	38	35	33
45	58	52	46	42	39	36	33	31	29
50	52	46	42	38	35	32	30	28	26
55	48	42	38	35	32	29	27	25	24
60	44	39	35	32	29	27	25	23	22
65	40	36	32	29	27	25	23	21	20
70	37	33	30	27	25	23	21	20	19
75	35	31	28	25	23	21	20	19	17
80	33	29	26	24	22	20	19	17	16
85	31	27	25	22	21	19	18	16	15
90	29	26	23	21	19	18	17	16	15
95	28	24	22	20	18	17	16	15	14
100	26	23	21	19	17	16	15	14	13

Table 3 - Retrieval rate in inches

4000 Series Traveller Start Up

Prepare your 4000 series traveller for use in the field by completing the following steps in order:

Step 1

- A) Ensure the drive system is disengaged before towing. Move the shifter towards right as shown in the graphic below.

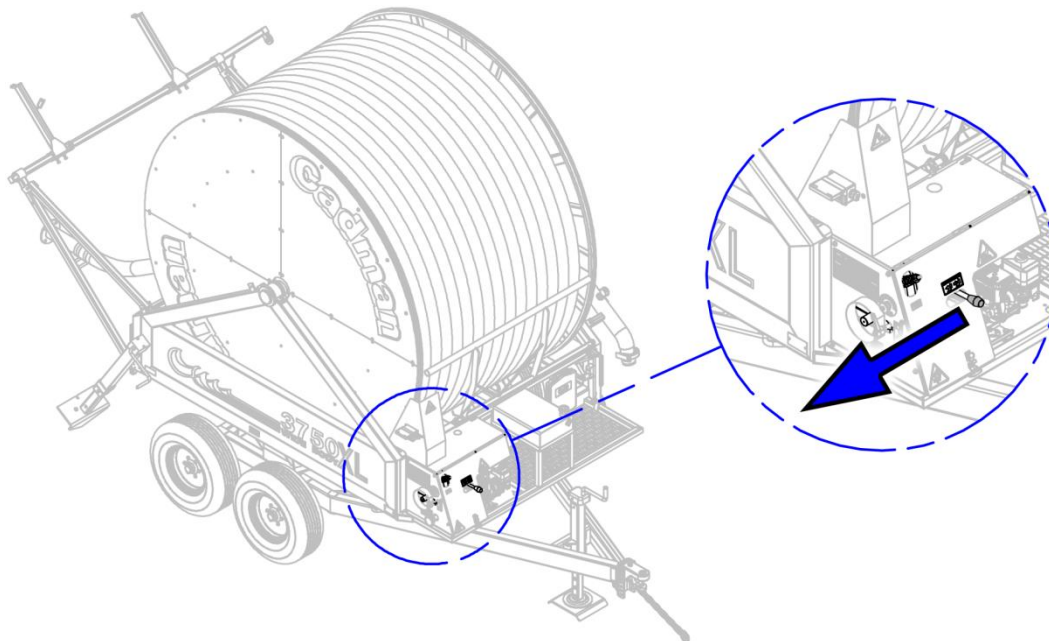


Figure 10 - Disengage Drive System

img-01427



Failure to disengage the drive system before towing will result in excess shock in the drive system. This may lead to damage to the traveller.

B) Verify the engine fuel valve is in the off position by pulling it to the right. The engine fuel valve is located on the rear side of the engine as shown. If the engine fuel valve is not off you must switch it to the off position before towing.

If you need to shut the engine fuel valve off immediately after use, avoid touching the engine.

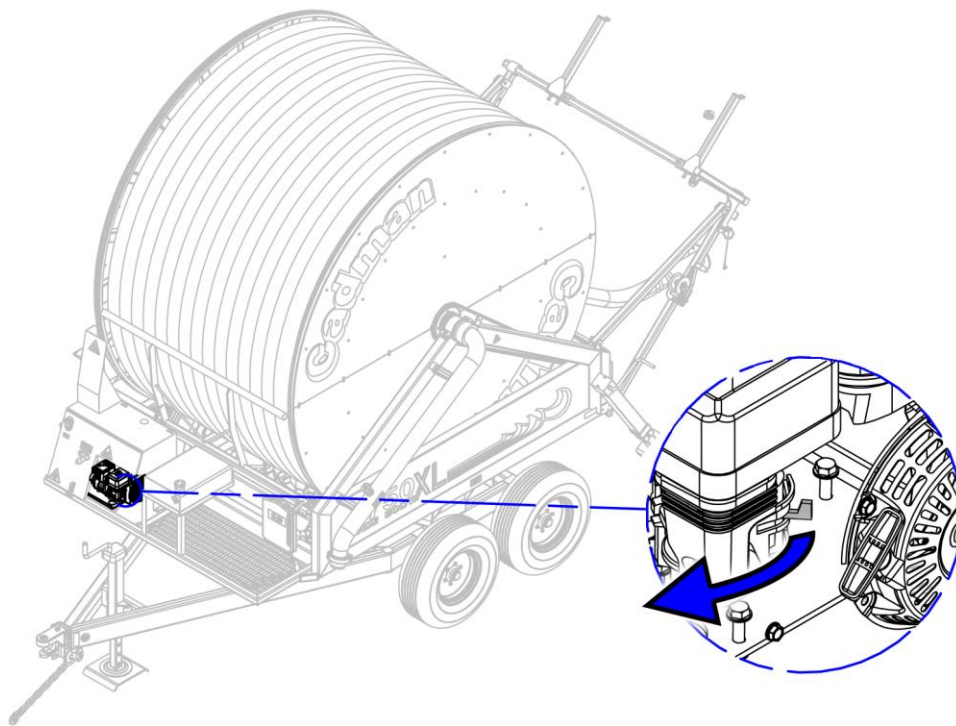


Figure 11 - Shut Fuel Valve

img-01422



Failure to verify that the engine fuel valve is off before towing will result in the fuel system remaining on during transport. This may lead to damage to the traveller.

The engine will be hot due to running continuously while doing irrigation pulls. Touching the engine during, or after an irrigation pull without time to cool down will lead to operator injury.

C) Verify that the drum brake is applied. If the drum brake is not applied, you must apply it before towing.



Failure to verify that the drum brake is applied may lead to the drum rotating during transport. This may lead to damage to the traveller.

Step 2

A) Verify that the sprinkler cart lift chains are secure.

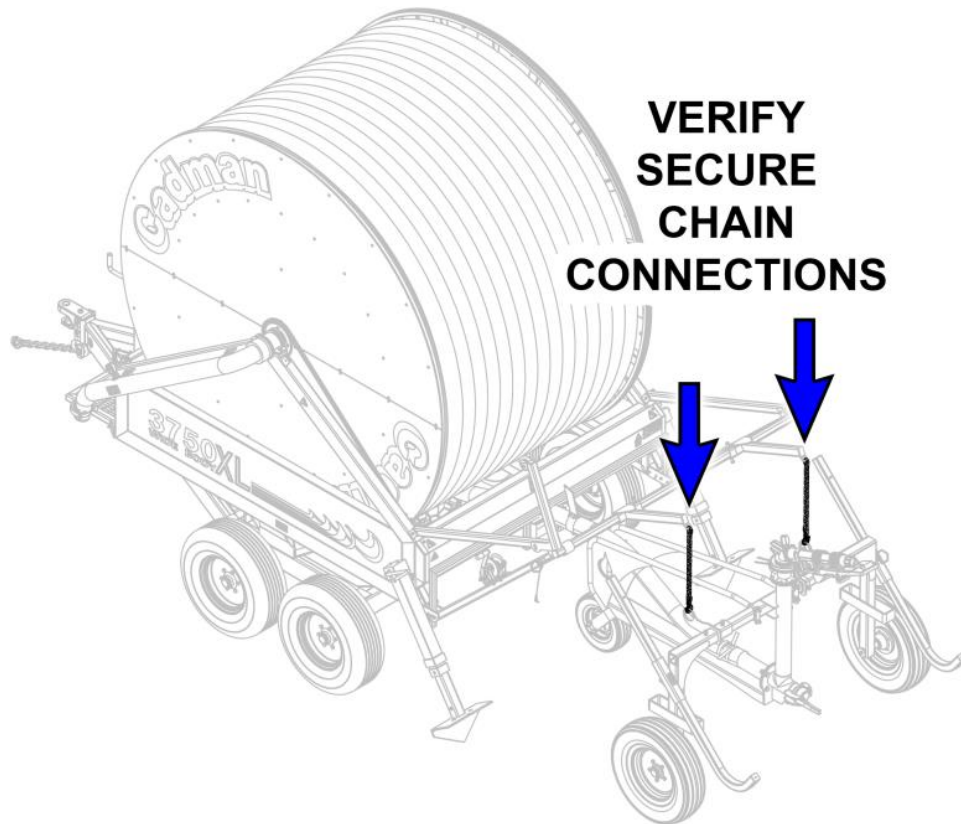


Figure 12 - Verify Sprinkler Cart Chain Connection

img-01423



Failing to verify that the sprinkler cart lift chains are secure may lead to the cart falling off the traveller during transport. This may cause serious injury and/or death to operators and or spectators. This will also damage the sprinkler cart, and may lead to damage to the traveller.

B) Hitch the traveller to your tow vehicle, and then attach the safety chain. Connect the traveller to the tractor's hydraulics. (If equipped)

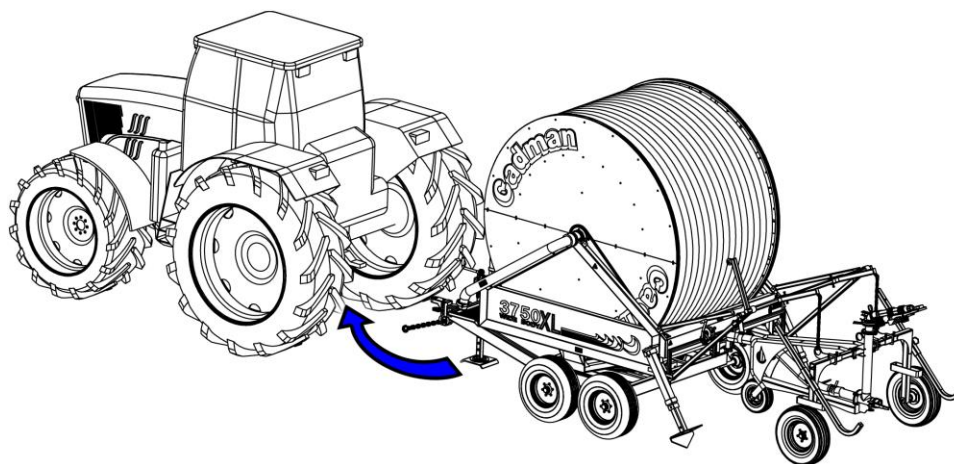


Figure 13 - Connect Safety Chains

img-01424

C) Raise the tongue jack and retract the rear stabilizers, then tow your traveller to the irrigation site. Do not exceed 10 mph (16 km/h) while towing.

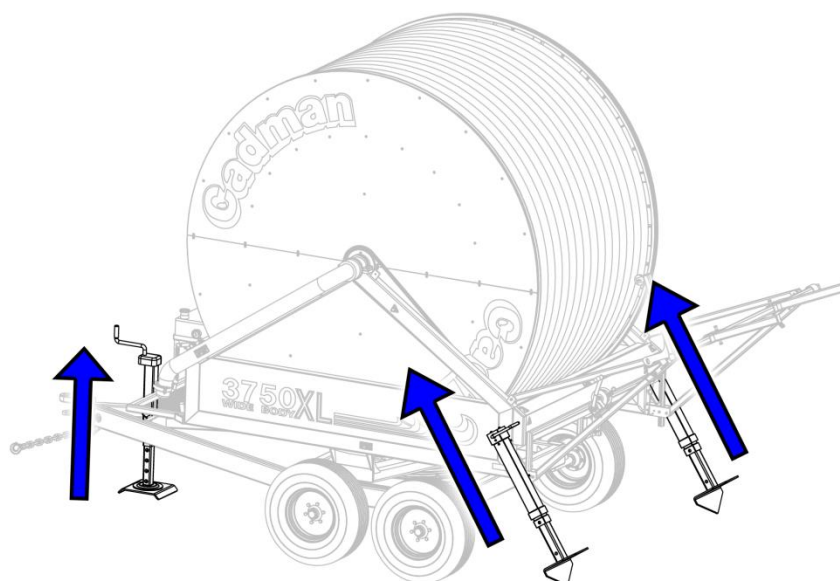


Figure 14 - Raise Tongue Jack and Stabilizers

img-01425



Towing faster than 10 mph (16 km/h) during transport may lead to wheel separation, tow vehicle/traveller separation, and/or a rollover. This will result in serious injury and/or death to operators and/or spectators. This will also damage to the traveller.

Step 3

A) Once you arrive at the irrigation site, park at a right angle to the lanes you will be irrigating.

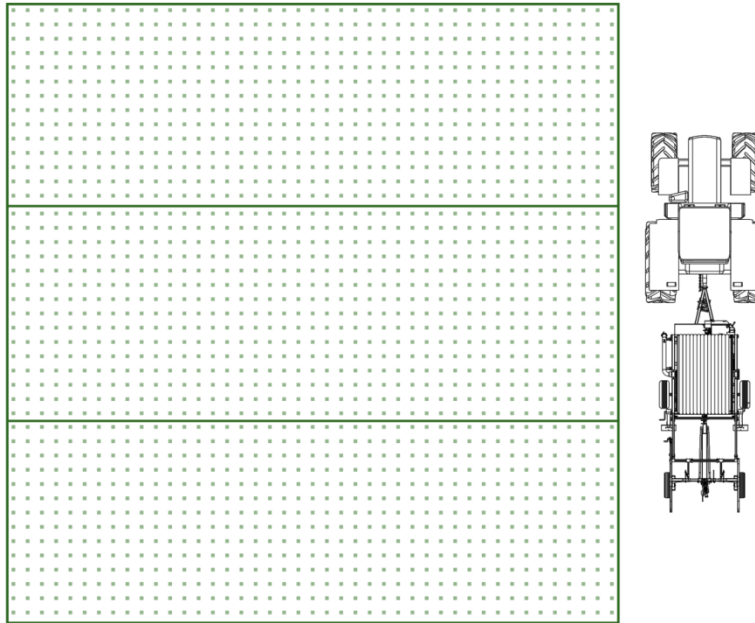


Figure 15 - Park at Right Angle to Field

img-01334

B) Verify that the traveller is resting on firm and level ground, and then lower the tongue jack to level the traveller.

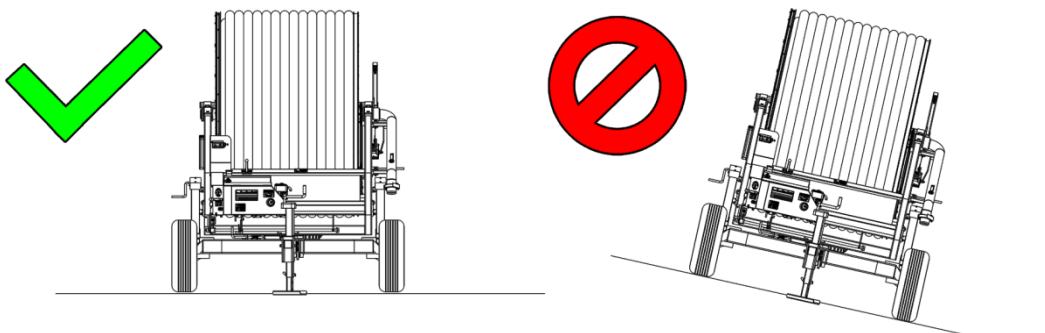


Figure 16 - Work on Firm and Level Ground (image exaggerated)

img-00119-A



Failing to work on firm and level ground will not give the traveller a steady base to irrigate from, and may result in the traveller tipping over. This will cause serious injury and/or death to operators and spectators. This will also cause damage to the traveller.

Step 4

A) Release the turntable lock by pulling and holding the turntable lock cable handle in the open position. Rotate the traveller to your start position. Lock the turntable by moving the turntable lock to the lock position.

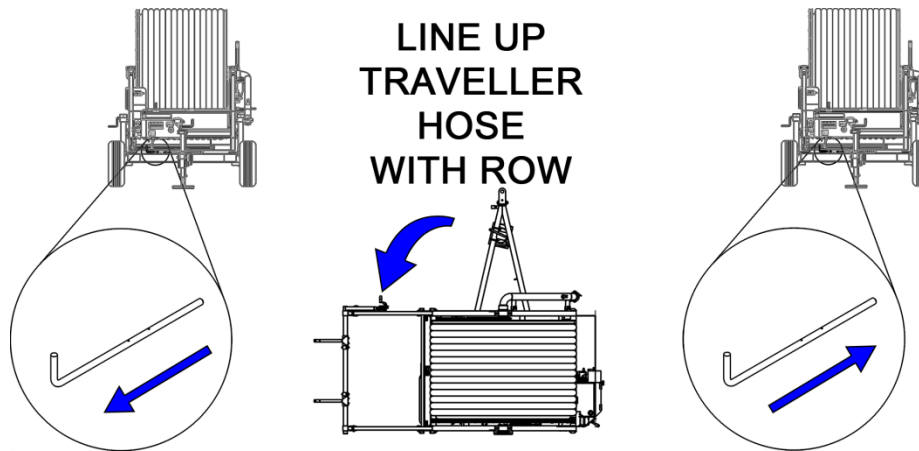


Figure 17 - Rotate Upper Frame

img-01357

B) Verify that you can pull the hose out of the traveller in a straight line after you have lined up the traveller with the row you will be irrigating. If the hose is not travelling through the indexer in a straight line, see the how to adjust the indexer on page 148.

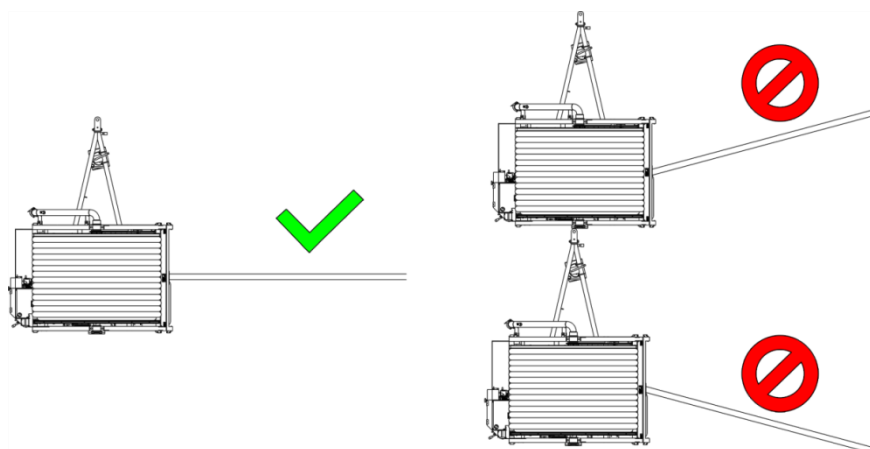


Figure 18 - Correct Upper Frame Position

img-00240-A



Failing to pull the hose out of the machine in a straight line will place excess strain on the traveller. This will lead to damage to the indexing system, hose, and/or the traveller.

C) If you need to do a rear pull, you must leave a tractor hitched to the traveller. The tractor must be left in gear in addition to applying the parking brake. You must leave the tractor hitched to the machine for the duration of the pull in order to safely stabilize the traveller.



Failing to leave a tractor hitched to the traveller during a rear pull will lead to an unstable traveller during operation. The traveller may tip, and may cause serious injury and/or death to operators and spectators. This will also damage the traveller.

Step 5

A) Use the tow vehicle's hydraulics to fully lower both stabilizers into the ground. **DO NOT** operate your traveller without both stabilizers fully lowered.

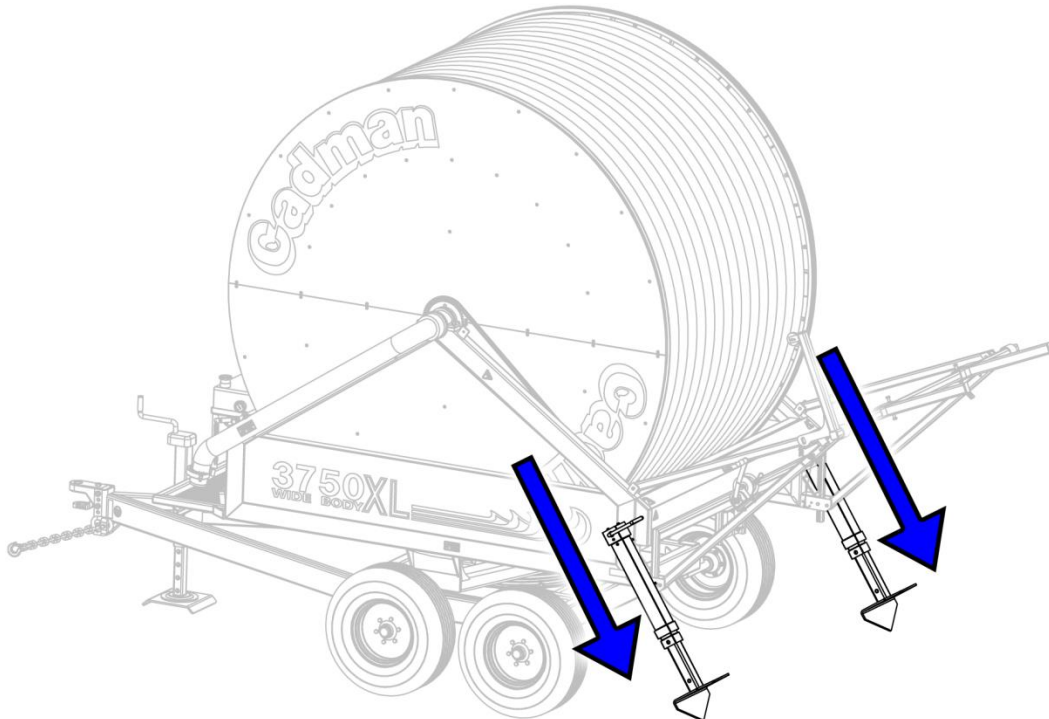


Figure 19 - Extend Stabilizers

img-01426



Failing to fully lower the traveller stabilizers for an irrigation pull will lead to an unstable traveller during operation. The traveller may tip, and may cause serious injury and/or death to operators and spectators. This will also damage the traveller.

B) Disengage the drive system.

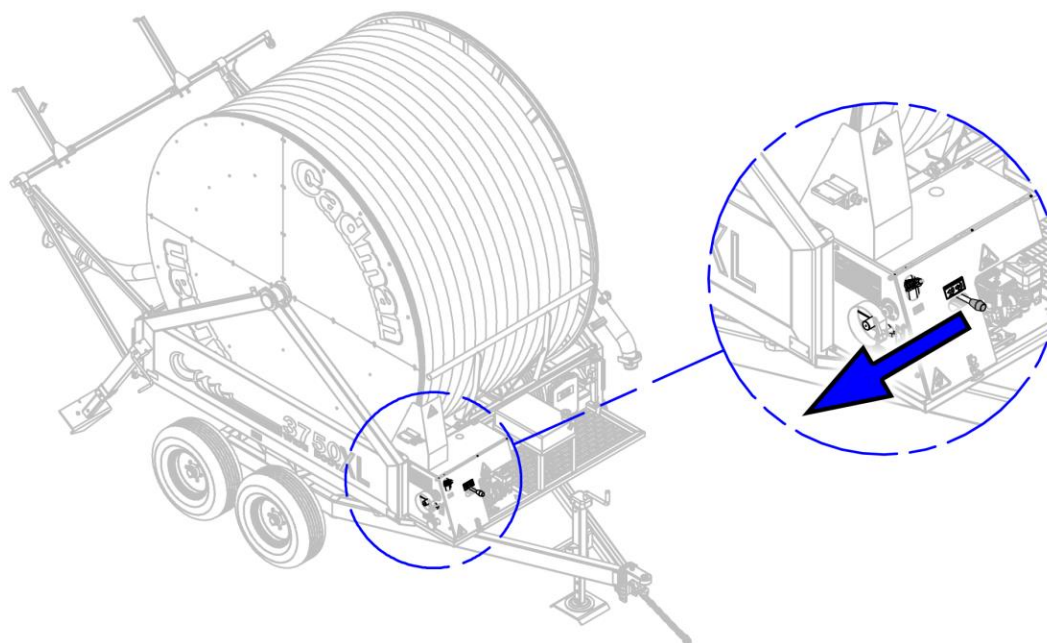


Figure 20 - Disengage Drive System

img-01427

C) Adjust the brake handle so a slight amount of brake tension is applied. There needs to be enough tension to prevent the hose from going loose on the drum if the tractor pulling out the hose stops.

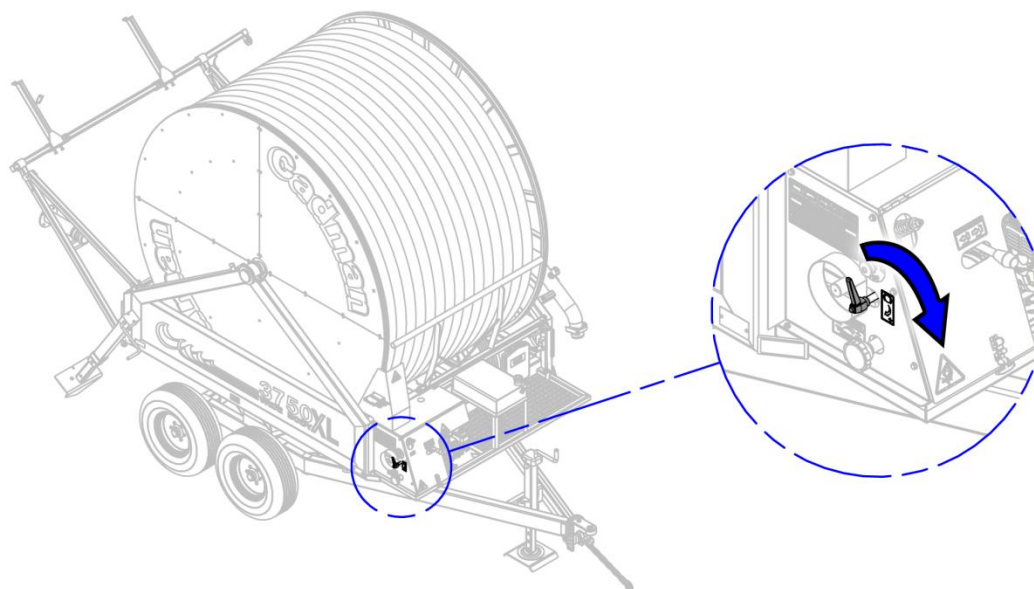


Figure 21 - Adjust Brake Tension

img-01428

Step 6

A) Set the sprinkler cart track width as wide as possible.

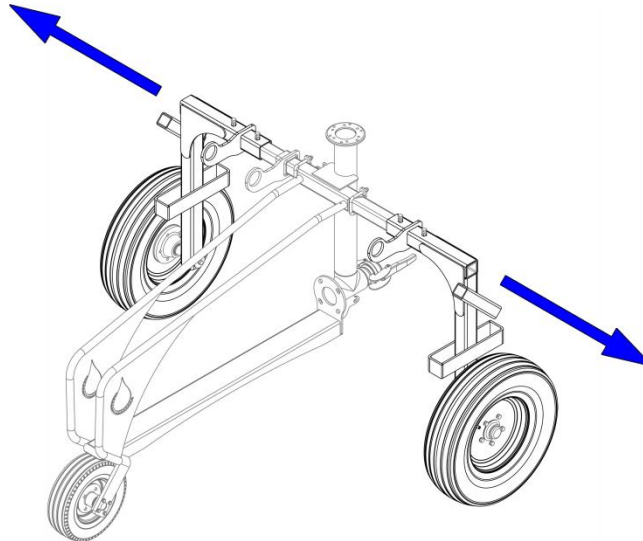


Figure 22 - Adjust Sprinkler Cart Width

img-01335

B) If your flow rate is 240 GPM or higher, or if you are irrigating on uneven terrain you must add weights to the sprinkler cart to stabilize it.

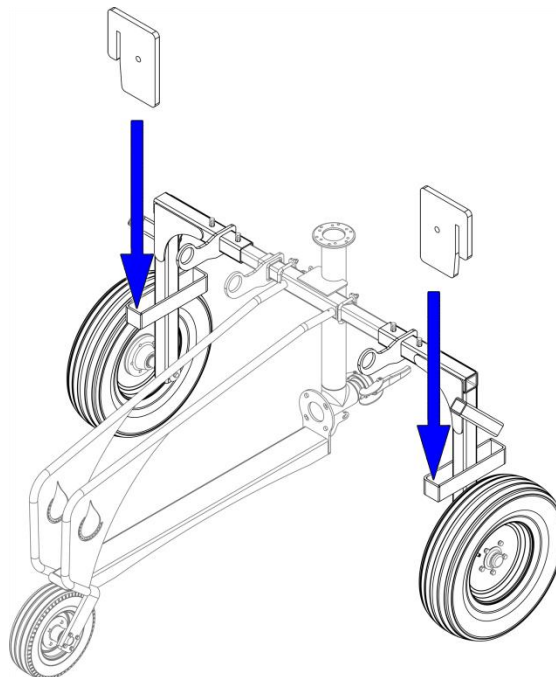


Figure 23 - Sprinkler Cart Weights

img-00258-B

Additional weight can be added by loading the rear sprinkler cart tires with ballast such as beet juice. Suitcase weights for tractors may also be used.



Failing to stabilize the sprinkler cart will lead to the cart being unstable during an irrigation pull. This may cause the sprinkler cart to tip over, and will result in serious injury and/or death to operators and/or spectators. It will also damage the sprinkler cart.

Step 7

- A) Lower the sprinkler cart to the ground using the hand winch on the cart lift, then remove the lift chains from the sprinkler cart.
- B) Attach the sprinkler cart to your tractor's draw bar using the cart tow chain, and then tow the cart to the start of the irrigation pull. You must pull the hose in a straight line while towing the sprinkler cart to its start position. Do not exceed 3 mph (5 km/h) when towing the sprinkler cart, and do not stop suddenly when stopping is needed.

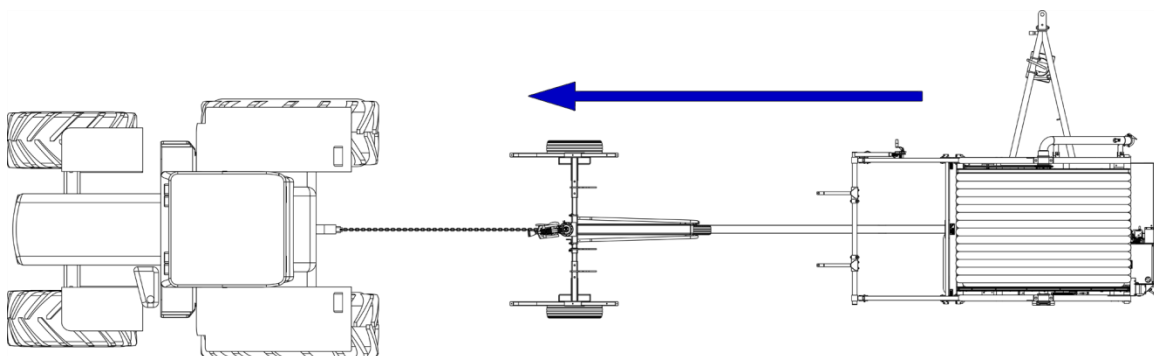


Figure 24 - Towing Sprinkler Cart

img-01136



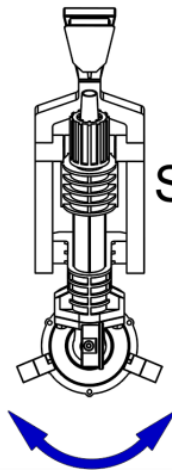
Towing above 3 mph (5 km/h) and/or stopping suddenly will result in pulling the hose out unsafely. Pulling the hose out unsafely may cause you to pull the hose off of the sprinkler cart. This may result in serious injury and/or death to operators and/or spectators. This will also damage the traveller.

Step 8

- A) Install the nozzle you will be using and tighten the nozzle cone.
- B) Set the stops on the sprinkler.

C CLAMP STOPS

WIRE STOPS



**SET FOR 210 DEGREE TO
270 DEGREE ROTATION**

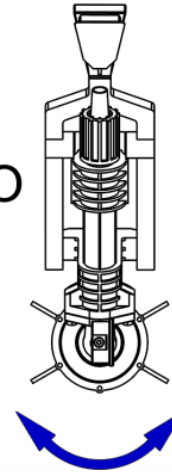


Figure 25 - Set Sprinkler Stops

img-01337

Verify that the sprinkler will irrigate away from the sprinkler cart to keep the cart's travel path dry.

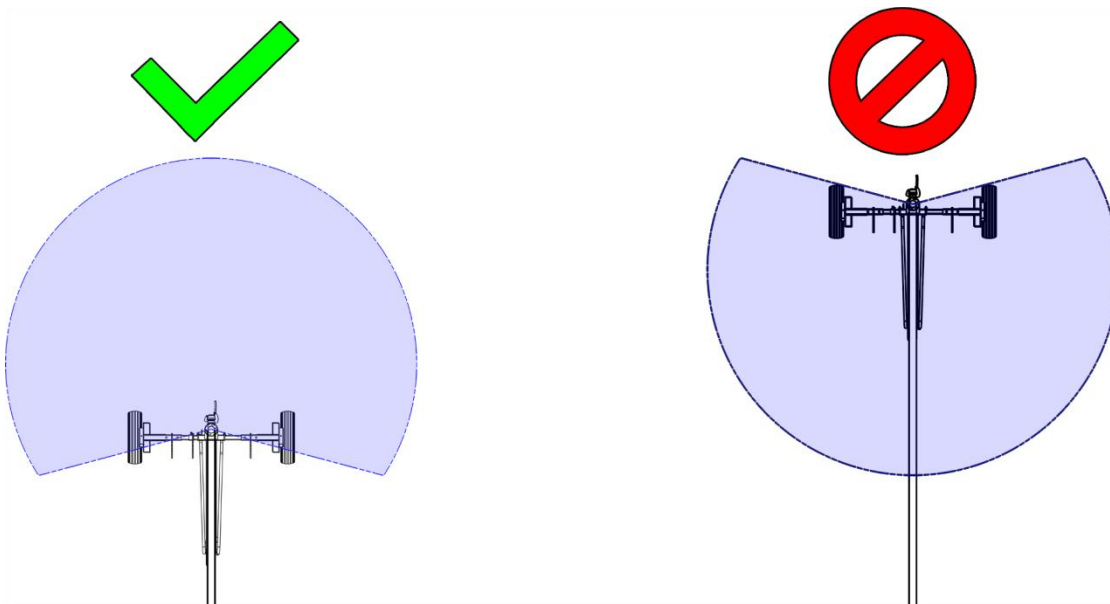


Figure 26 - Correct Spray Setting

img-00201-A

C) If you need to set your sprinkler to irrigate towards the carts travel path, you must stop the sprinkler cart at least 10 feet (3 meters) from the traveller.

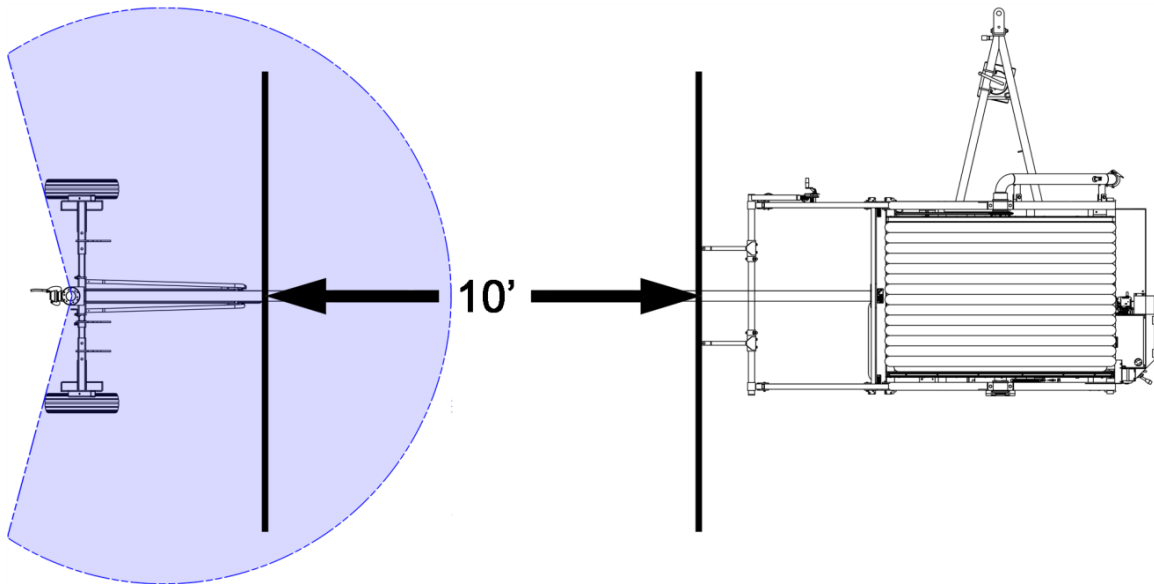


Figure 27 - Stop 10 Feet Before Traveller

img-01338



Failing to stop at least 10 feet before the traveller if you irrigate ahead of the sprinkler cart will result in the cart colliding with the traveller. This will result in serious injury to operators and/or spectators. This will also damage the sprinkler cart and/or sprinkler as well as the traveller.

Step 9

A) Verify that the area surrounding the traveller and sprinkler cart will be free and clear of all obstacles, then return to the traveller to inspect the hose wrapping on the drum.

The hose must fit tightly together with no gaps between coils. If the hose coils contain gaps then you must close all gaps between the coils before continuing.

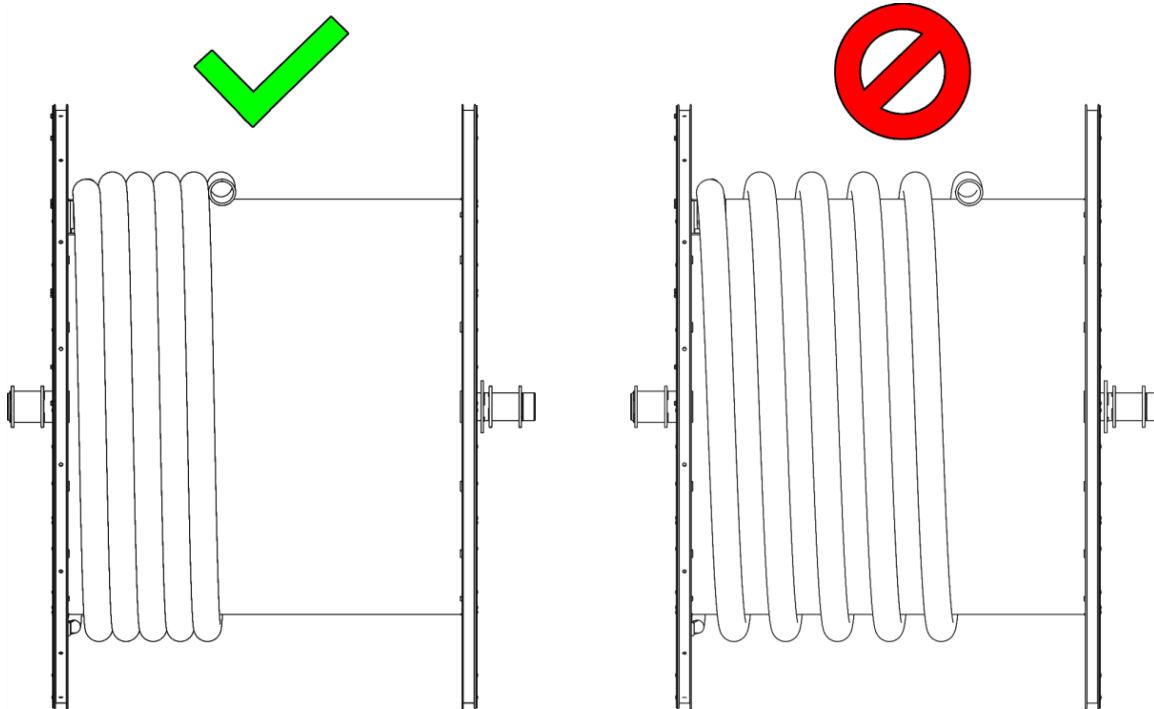


Figure 28 - Spool Condition

img-00245-A



Failing to close gaps between the coils on the hose will result in misaligning the hose during a pull. This will result in damage to the traveller's indexing system, hose, and/or drum.

B) If needed, rotate the drum using the hand crank. Remove the hand crank and store it while not in use. Do not operate the traveller for an irrigation pull with the hand crank attached to the traveller drive.

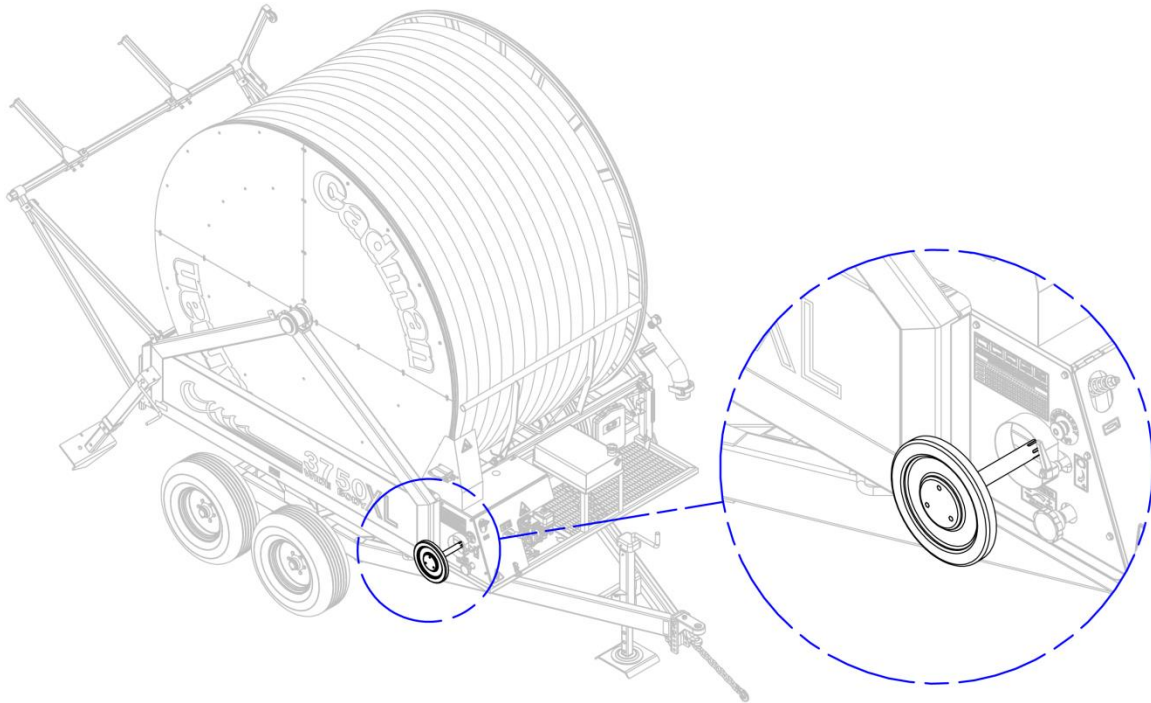


Figure 29 - Hand Crank

img-01430



Failing to remove the hand crank from the traveller drive before operating the traveller may result in an operator, spectator, and/or objects coming into contact with the hand crank. This will result in serious injury and/or death to operators/spectators.

Step 10

Verify that the hose will travel in a straight line through the indexer. If the hose is not travelling through the indexer in a straight line, see the procedure for adjusting the indexer on page 148.

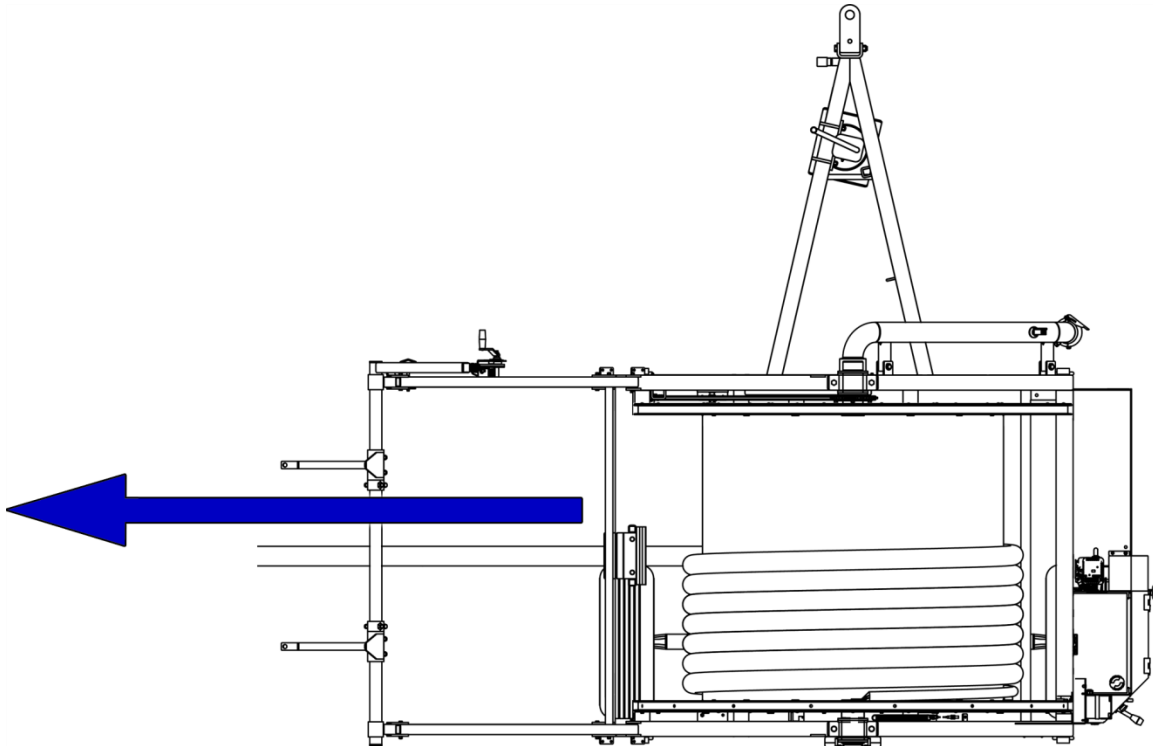


Figure 30 - Indexer/Hose Alignment

img-00238-A



Failing to adjust the hose will result in the traveller operating with the hose at an angle. This will result in improper irrigation pulls. This will also damage the traveller's indexing system, hose, and/or drum.

Step 11

Adjust the brake handle to fully apply the brake after verifying the hose fits tightly together with no gaps between coils on the drum.

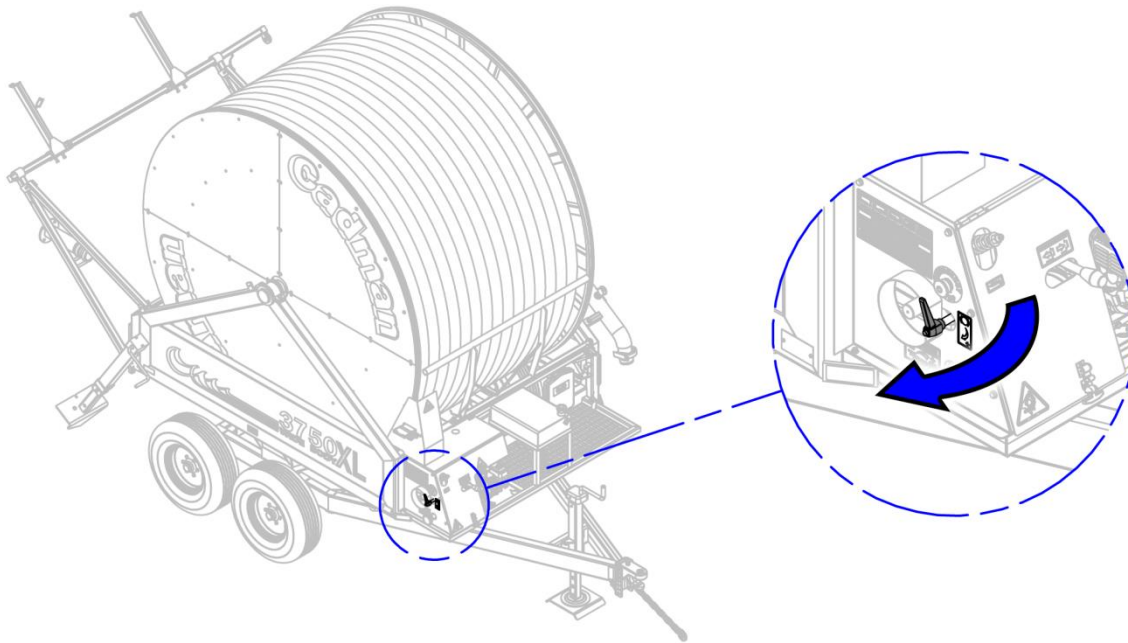


Figure 31 - Fully Apply Brake

img-01429

Step 12

A) Connect your source to the traveller's inlet pipe. Verify that the mainline connection and inlet pipe connection are secure.



Failing to verify secure connections will lead to pooling of water. This will muddy the area around the traveller and may cause injury to operators and/or spectators

B) Verify that all operators and/or spectators are free and clear of the areas around the traveller and sprinkler cart. Slowly bring everything up to a pressure of 50 psi (345 kPa) to purge air from all hoses and the traveller. Once air has been completely purged from all hoses and the traveller, slowly raise the pressure up to a maximum of 150 psi (1,034 kPa).



Failing to remain free and clear of the areas around the traveller and sprinkler cart may result contact with the sprinkler discharge. In addition, any connection that has not been secured may break free. Coming into contact with the high pressure water stream and/or any hardware from a broken connection will result in serious injury and/or death to operators and/or spectators. It may also damage the traveller.

An inlet pipe pressure range of 120 psi (827 kPa) to 150 psi (1,034 kPa) will result in a pressure range of 50 psi (345 kPa) to 110 psi (758 kPa) at the sprinkler. This will result in even, uniform irrigation pulls if you have selected an appropriate nozzle setup that receives an appropriate flow volume.

4000 Series Traveller Operation

After completing the equipment setup, begin your irrigation pull by completing the following steps in order:

Step 1

A) Verify you have enough fuel in the tank to complete an irrigation pull. Then verify that there is enough engine oil in the engine.

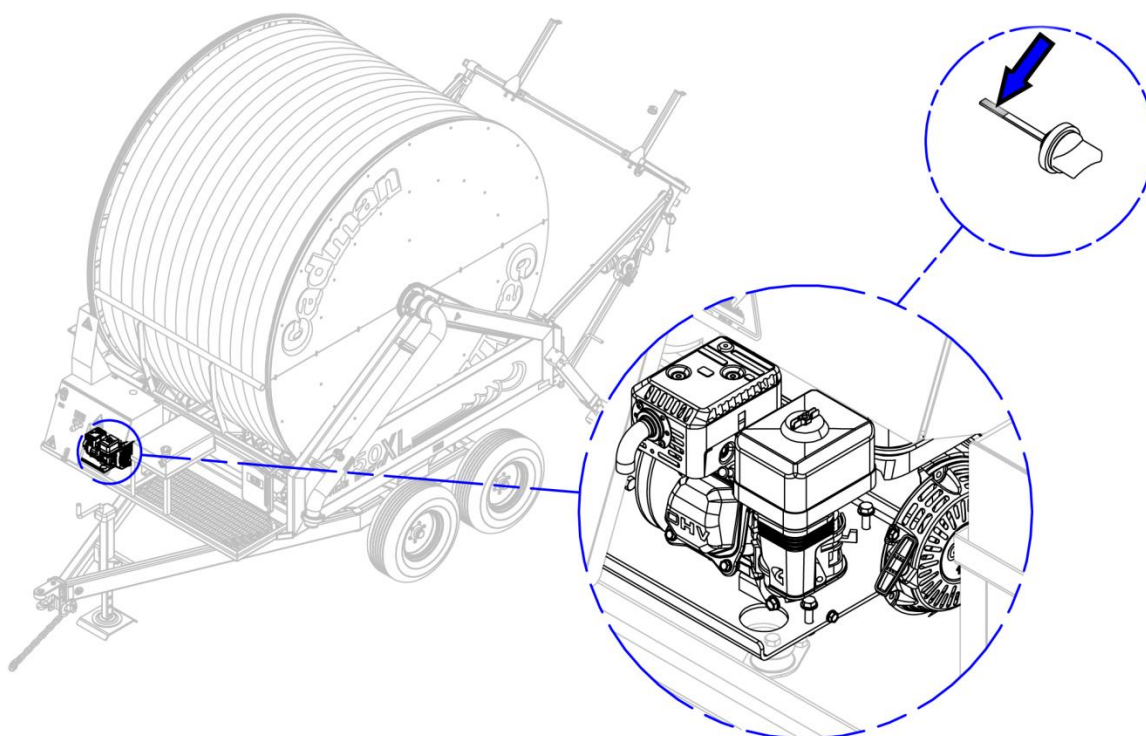


Figure 32 - Check Engine Oil

img-01431



Failing to verify the oil level may result in running the engine dry. Running the engine without oil will seize it, causing damage to the traveller.

B) When you need to refuel, verify that the engine is off. Then refill the fuel tank slowly to avoid fuel spills.



Filling the fuel tank quickly may result in fuel spills on the traveller. This may result in the engine catching fire, and may cause serious injury and/or death to operators and/or spectators. This will also damage the traveller.

For gasoline engines: minimum 87 octane rated gasoline is required, use unleaded or low lead gasoline when possible.

For diesel engines: SAE 2-D Diesel fuel oil with minimum a 40 cetane rated required.



Using diesel fuel oil in a gasoline engine will result in damage to the engine's fuel system. This may result in engine damage, and may result in the gasoline engine becoming inoperable.



Using gasoline in a diesel engine will result in damage to the engine's fuel system in addition to not lubricating the engine correctly. This may result in a seized engine. This may lead to serious injury of operators and/or spectators. This will also lead to the diesel engine becoming inoperable.

C) Open the fuel valve on the engine, and then start it.

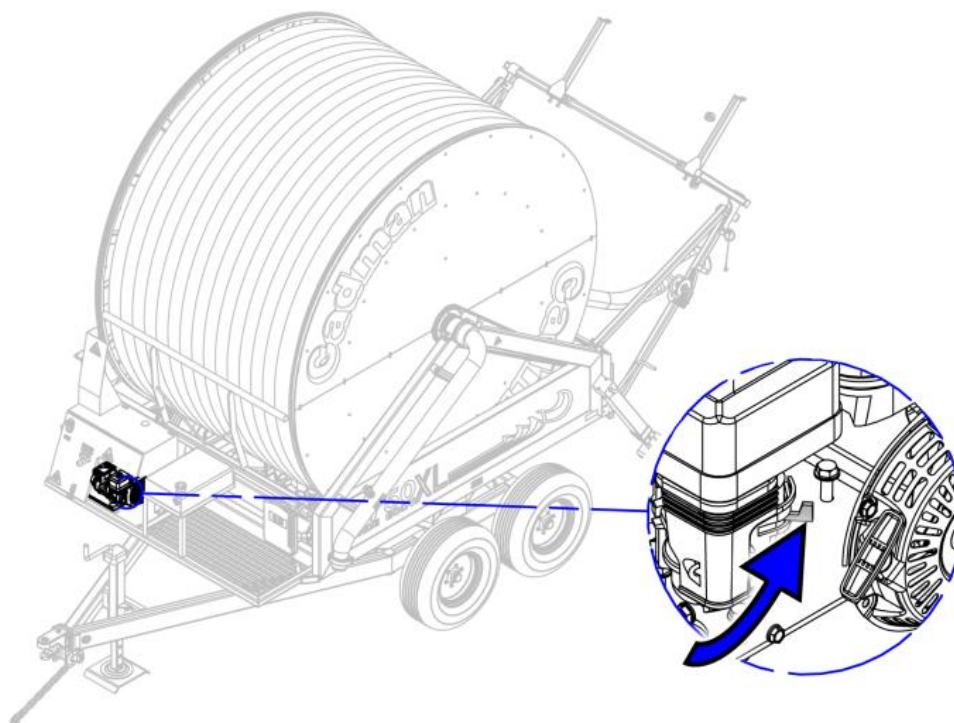


Figure 33 - Open Fuel Valve

img-01431

If the engine does not start after several attempts verify that all three engine shutoff switches are fully released.

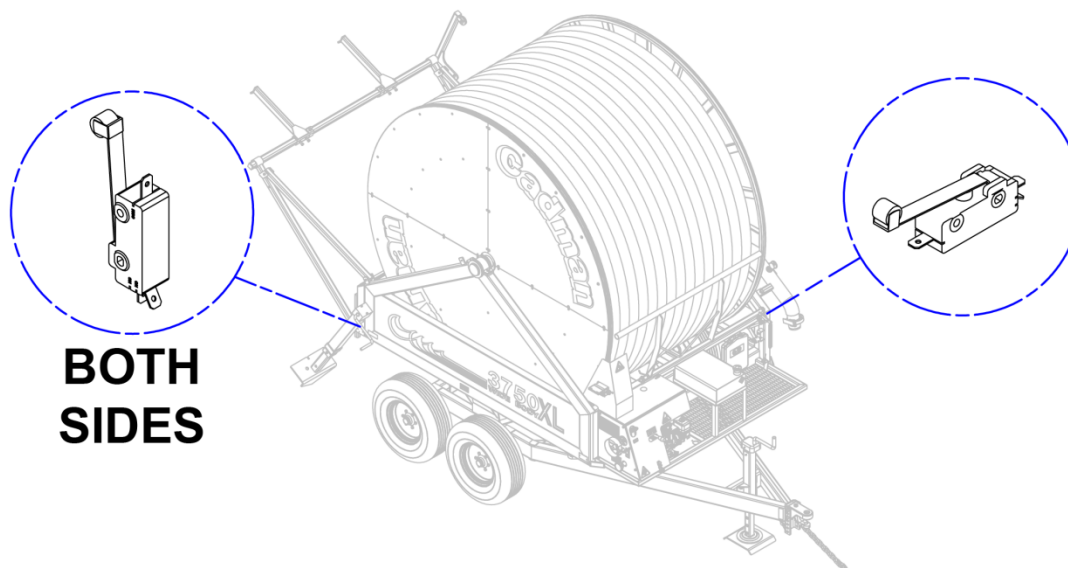


Figure 34 - Shutoff Switch Locations

img-01432

D) Once the engine is running smoothly, verify that each engine shutoff switch will shut off the engine.

To verify that the two engine shutoff switches at the rear of the traveller are working, hold one of the engine shutoff switches closed while lifting the bar to the stop position while the engine is running. The engine should automatically shut down.

Do not operate the traveller if one or more safety switches fails to shut the engine down.

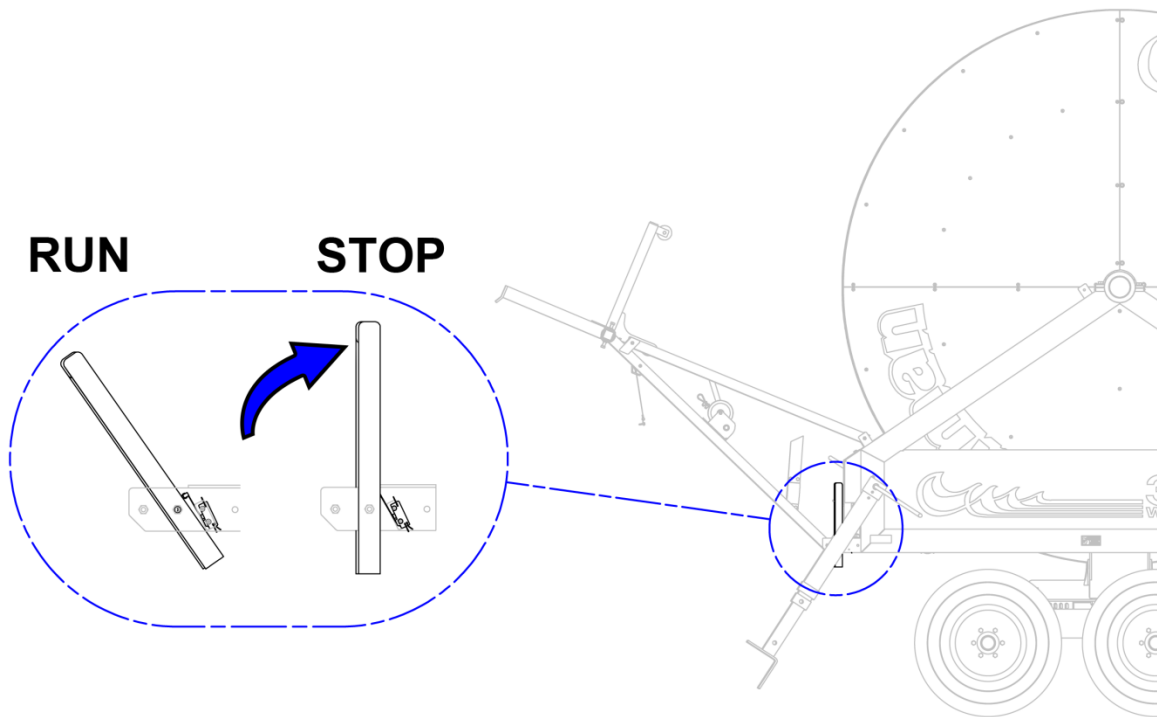


Figure 35 - Rear Shutoff Switches

img-01434

Restart the engine and repeat this step for the second engine shutoff switch.

E) To verify that the compensator bar shutoff switch is working, pull down on the compensator bar while the engine is running.

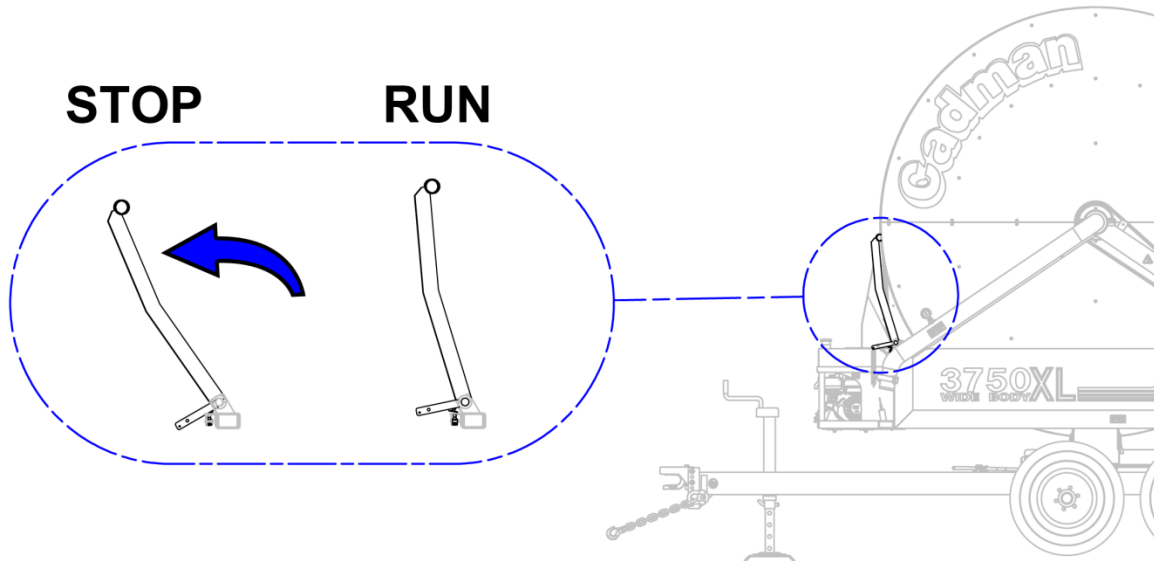


Figure 36 - Front Shutoff Switch

img-01435

The engine should automatically shut down when the compensator bar is pulled approximately 2 inches away from the outside rim of the drum.

F) If the engine does not shut off after pulling the compensator bar, you will need to adjust the front engine shutoff bolt assembly so that the engine will automatically shut down.

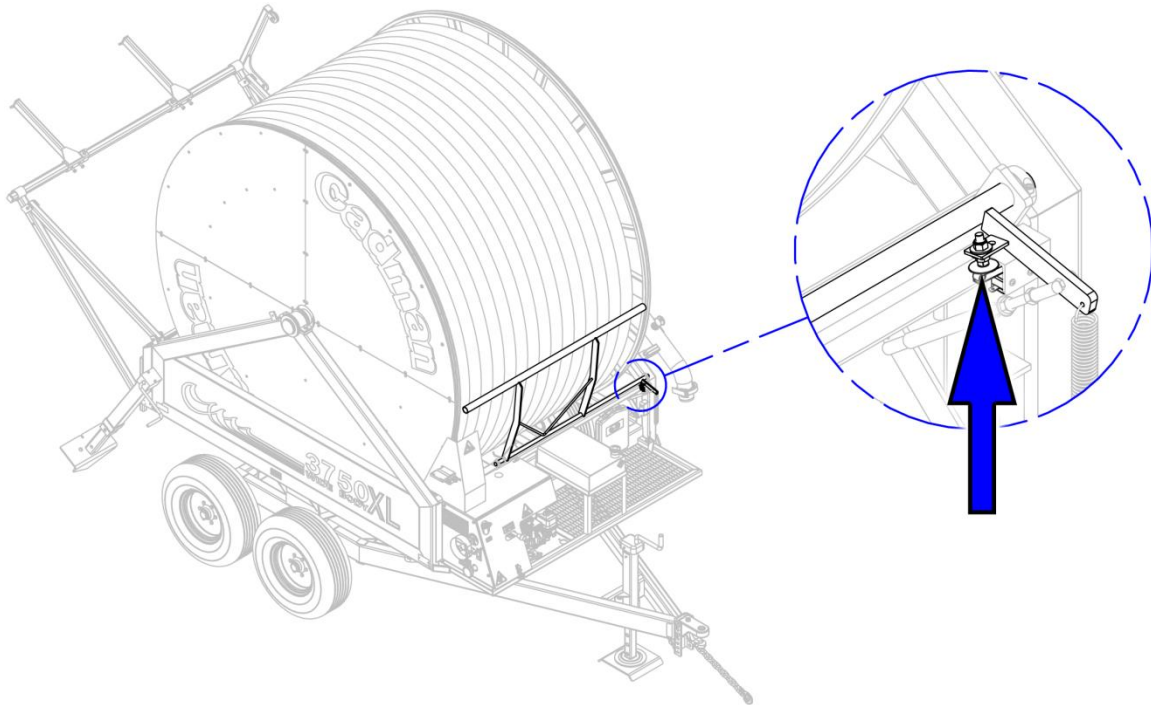


Figure 37 - Adjust Front Shutoff Switch Trigger

img-01436



Operating the traveller with one or more faulty safety switches will result in the traveller not shutting down automatically after a completed irrigation pull. This may result in serious injury and/or death to operators and/or spectators.

Step 2

A) If you are using a new traveller for the first time, verify the compensation system setup is working correctly. In addition, periodically verify the compensation systems of travellers in use are working correctly.

If the compensation system is working correctly then the pulley cam roller should rest near the top of the ramp as shown:

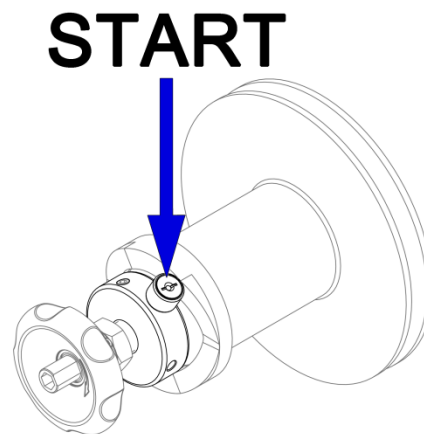


Figure 38 - Compensator Pulley Cam Start Position

img-00251-A

During the irrigation pull the pulley cam roller will shift positions as the hose wraps additional layers onto the drum as shown:

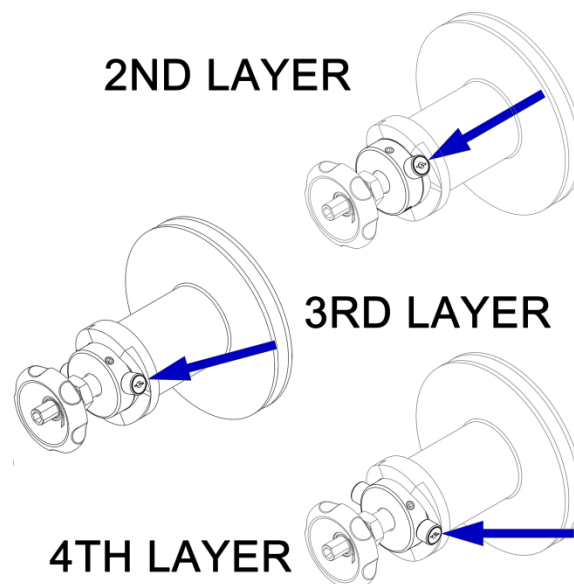


Figure 39 - Compensator Pulley Cam Positions

img-01345-A

If the pulley cam roller does not reset to the start position shown, adjust the compensator cable so that the pulley cam roller is in the start position.

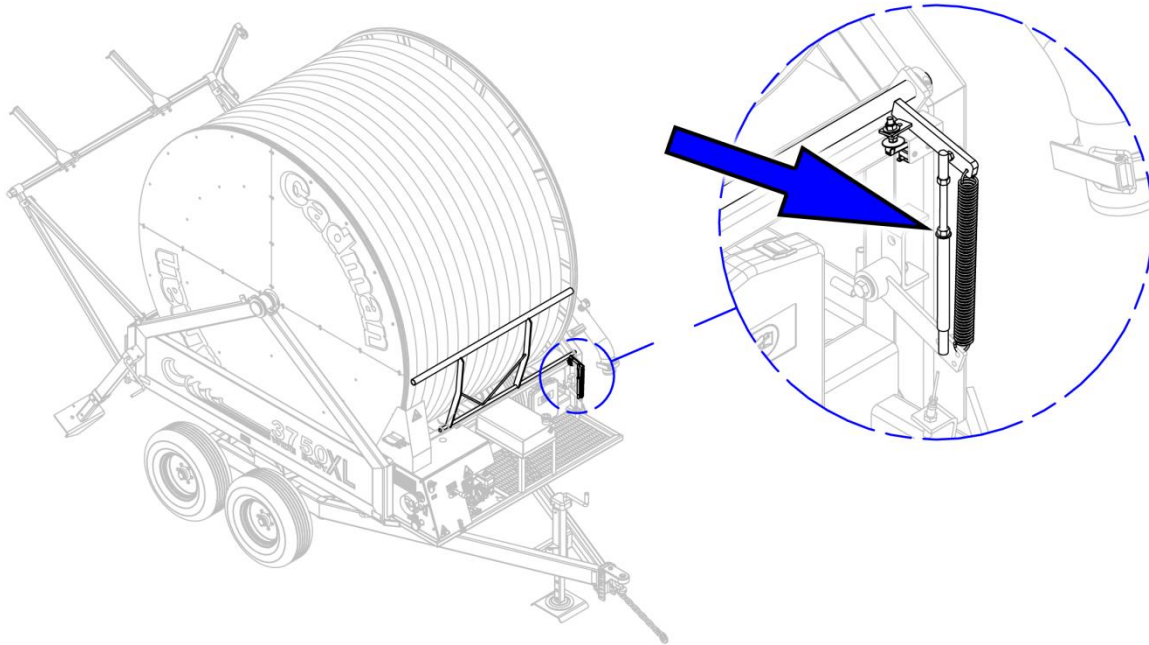


Figure 40 - Compensator Cable Adjustment

img-01437

Step 3

A) With the engine running, adjust the pulley control knob until the speedometer reads the retrieval rate you need for your current irrigation pull. Do not adjust the pulley if the engine is not running.

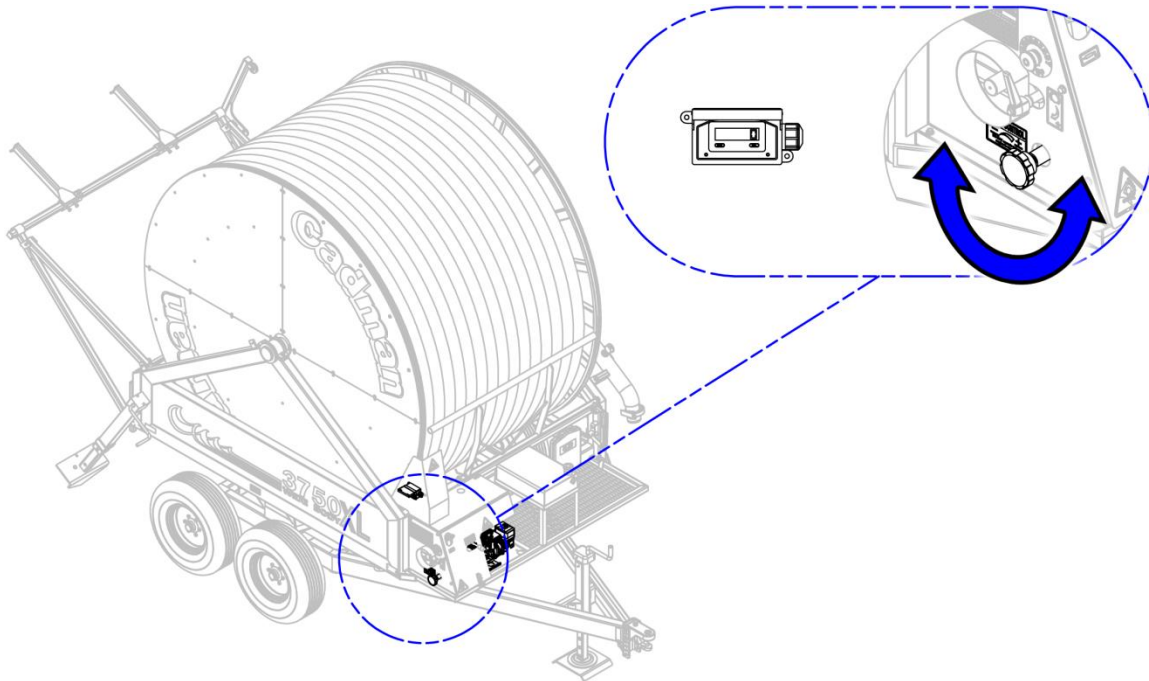


Figure 41 - Control Knob / Speedometer

img-01438



Adjusting the pulley if the engine is not running will result in permanent damage to the pulley. Operating the traveller with a damaged pulley will lead to additional damage to the traveller.

The pulley control knob should maintain its position after it's adjusted. If the pulley control knob shifts without an operator adjusting it, tighten the drag adjustment screw so that the pulley control knob will maintain its position.

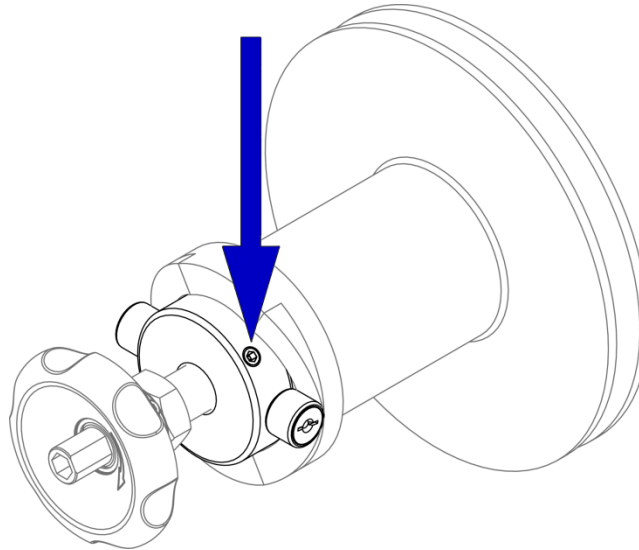


Figure 42 - Drag Screw

img-01349

B) If you set the retrieval rate on the second, third, or fourth layer then you must set the speedometer reading to match the appropriate value on the speed conversion chart. The speedometer will only give actual hose speed for the base layer.

BASE LAYER	2nd LAYER	3rd LAYER	4th LAYER	5th LAYER																					
ADJUST PULLY CONTROL KNOB UNTIL THE SPEEDOMETER READS THE APPROPRIATE VALUE FOR THE LAYER OF HOSE BEING LOADED																									
DESIRED HOSE SPEED (INCHES PER MINUTE)																									
BASE LAYER	10	12	14	16	18	20	22	24	30	35	40	45	50	55	60	65	70	75	80	85	90	95	100	110	120
2nd LAYER	9	11	13	14	16	18	20	22	27	32	36	41	45	50	54	59	63	68	72	77	81	86	90	99	108
3rd LAYER	8	10	11	13	15	16	18	19	24	28	32	36	41	45	49	53	57	61	65	69	73	77	81	89	97
4th LAYER	7	9	10	12	14	15	17	18	23	26	30	34	38	41	45	49	53	56	60	64	68	71	75	83	90
5th LAYER	6	8	9	11	13	14	15	16	20	23	26	30	34	36	40	43	47	49	53	56	60	62	66	73	79

Figure 43 - Speed Conversion Chart Label

img-00255-B



Retrieval rate will be incorrect if the appropriate hose layer setting is used. This will result in an incorrect irrigation pull, which may damage crops.

Speed Selection Example

For this example, a retrieval rate of 30 inches per minute is needed, and the hose speed will be set when the drum is on the second layer.

- A) Find the 30 inches per minute on the base layer row, and then read the 2nd layer row value that crosses with the 30 inches per minute column. The corrected Value is 27 inches per minute
- B) Set the speedometer for the corrected value of 27 inches per minute.
- C) The actual retrieval rate you will be irrigating at will be 30 inches per minute.
- D) If you need to verify the retrieval rate then measure the hose movement for 3 minutes. Divide the inches the hose has travelled by 3. This will be your retrieval rate in inches per minute.

Step 4

Engage the drive system.

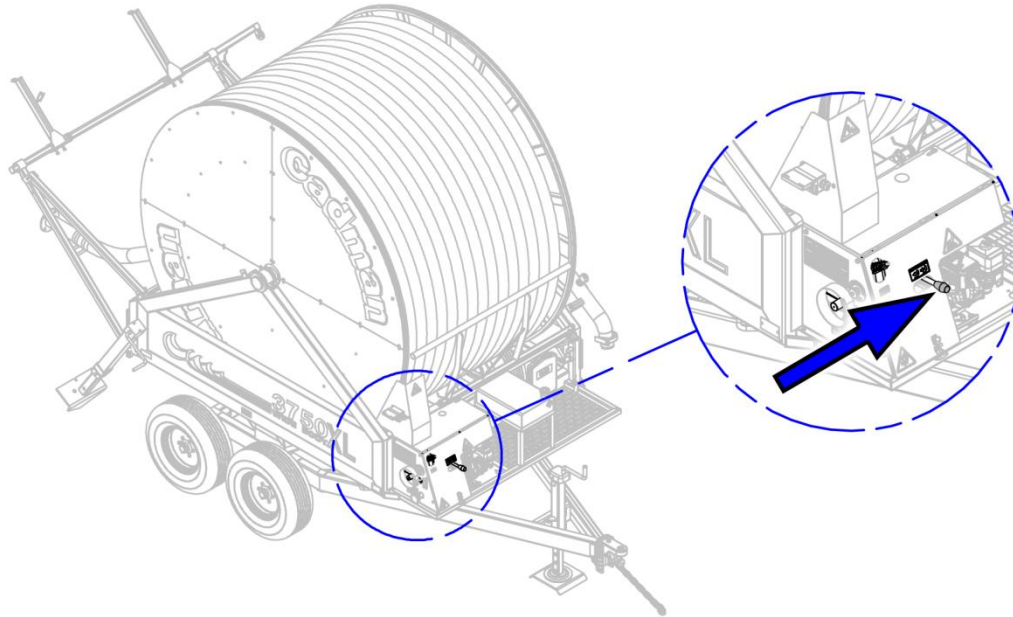


Figure 44 - Engage Drive System

img-01421

Step 5

Fully release the brake.

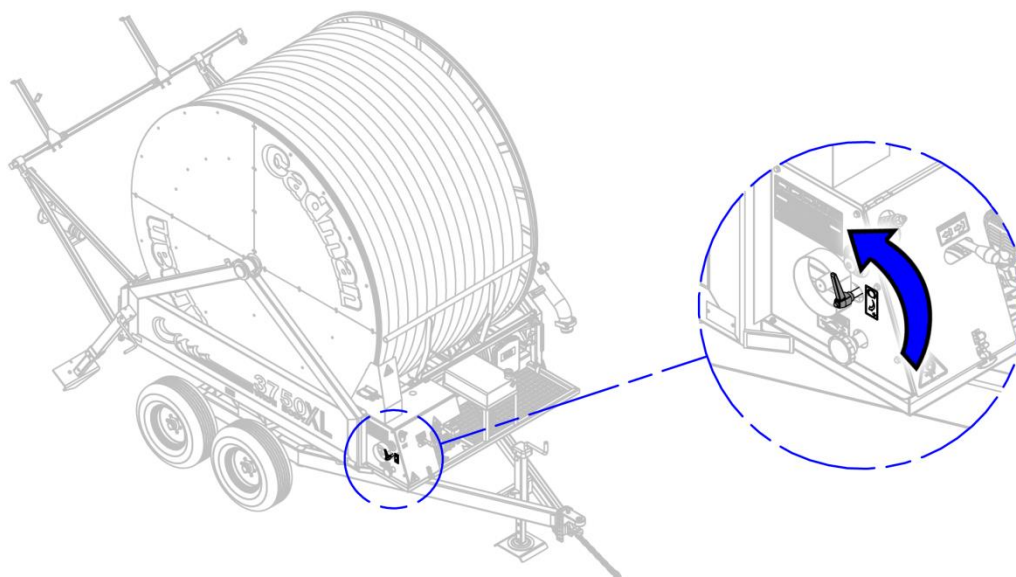


Figure 45 - Fully Release Brake

img-01429

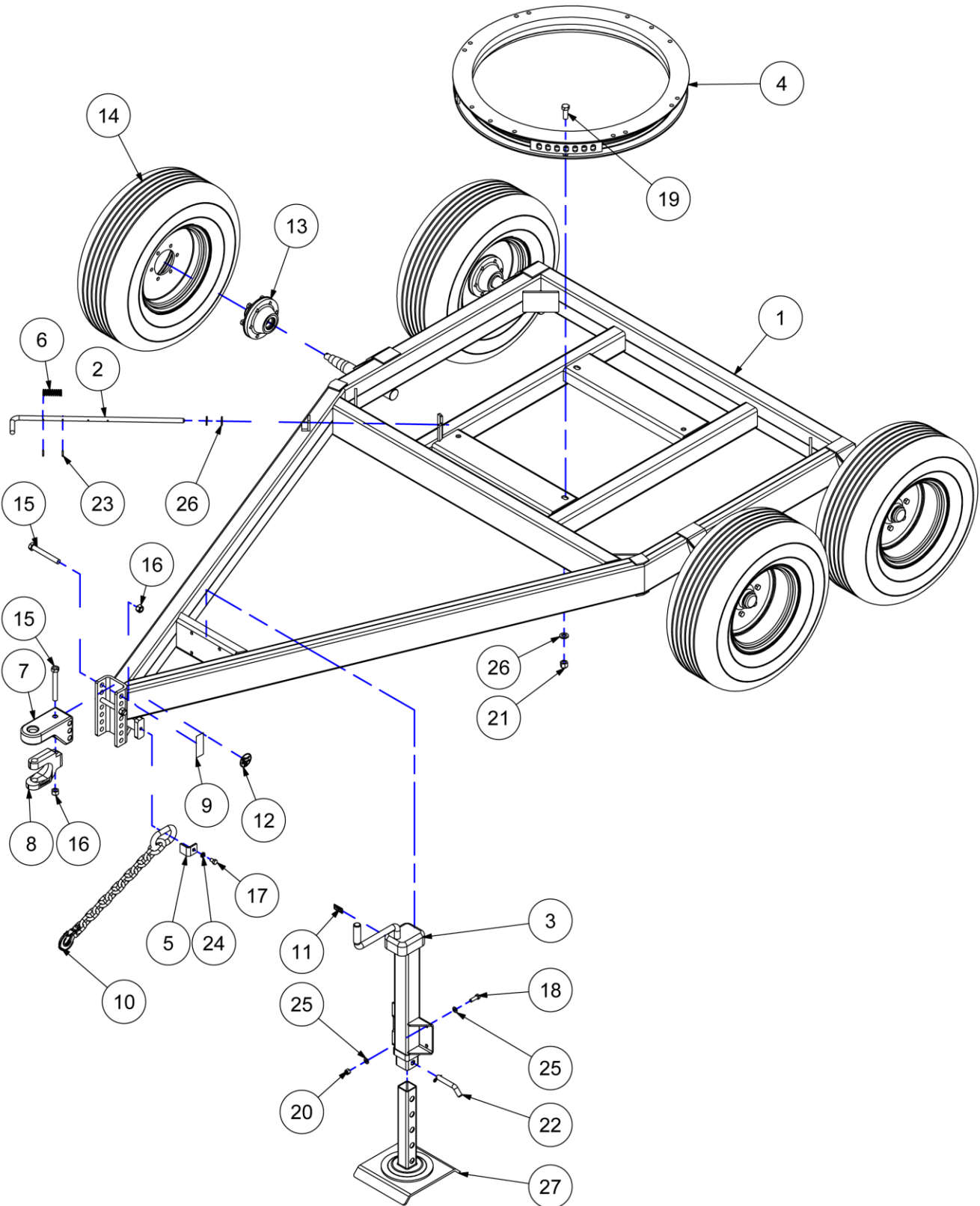


Parts Section

Lower Frame Assembly	46	Optional Hydraulic Jack Assembly ♦	94
Upper Frame Assembly	48	Optional Hand Crank Turntable ♦	96
Drum Assembly	50	Optional Hydraulic Turntable ♦	98
Hose and Barb Assembly	52	Optional Sprinkler Kit Assembly ♦	100
Indexer Assembly	54	Optional Broadcast Cart Assembly ♦	102
Cart Lift Assembly.....	60	Optional Ginseng Cart Assembly ♦	104
Electrical Wiring Assembly.....	62	Broadcast/Ginseng Cart Drive	106
Engine Assembly - GX-160.....	64	Broadcast/Ginseng Shroud Assembly	108
Pulley - Variable w/Cam - 7"	68	Broadcast/Ginseng Gearbox Assembly	110
Pulley - Spring Loaded - 7"	70	Optional Murphy Gauge Assembly ♦	112
Stabilizer Jack Assembly	72	Optional i-Water™ Control (1 of 3) ♦	114
Sprinkler Cart Assembly	74	Optional i-Water™ Control (2 of 3) ♦	116
Label Assembly	76	Optional i-Water™ Control (3 of 3) ♦	118
Label Location (1 of 2)	78	Optional Tongue Mounted Compressor ♦ ..	126
Label Location (2 of 2)	80	Optional Tongue Pump Caprari D3 ♦	128
Hub Assembly - 55-002	82	Optional Tongue Pump Caprari D0480 ♦ ...	130
Hub Assembly - 55-018	84	Optional Tongue Pump Caprari DMR80 ♦ ..	132
Hub Assembly - 55-026	86	Optional Engine/Pump Set (1 of 2) ♦	134
Hub Assembly - 55-237	88	Optional Engine/Pump Set (2 of 2) ♦	136
Hub Assembly - 55-238	90	Optional Sprinklers ♦	138
Optional Chain Jack Assembly ♦	92		

LEGEND			
●	Standard Equipment	↔	Model Variance
◆	Full Assembly	AR	As Required
◇	Optional Equipment	NS	Not Shown

Lower Frame Assembly

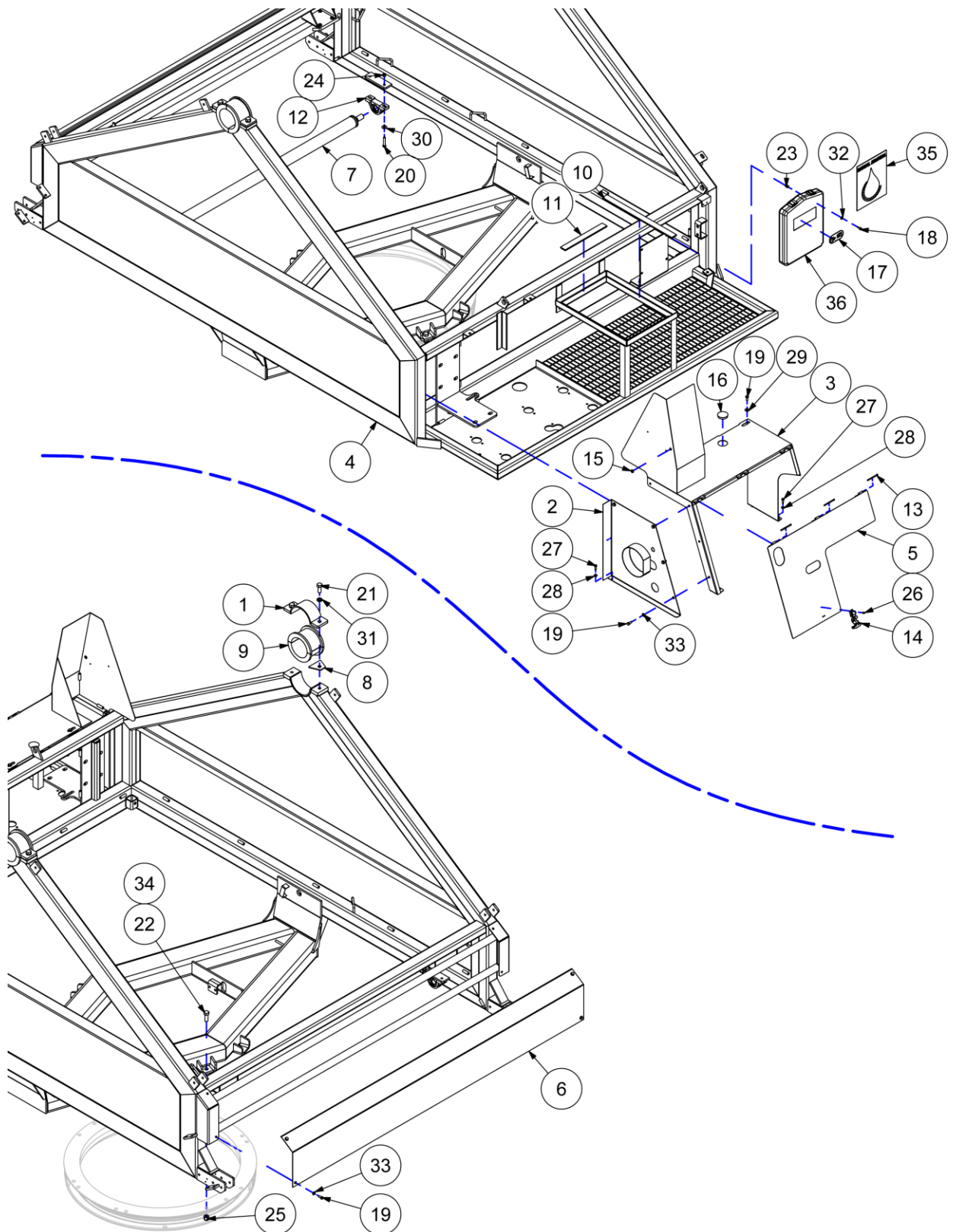




Lower Frame Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	4000 SERIES LOWER FRAME	06-100-F	1	
2	LOCKING PIN	06-601-C	1	
3	TONGUE JACK WELD	06-659	1	
4	TURNTABLE RING WELD'T.	06-688	1	
5	SAFETY CHAIN RETAINER	17-213	1	
6	COMPRESSION SPRING	40-053	1	
7	PAINTED HITCH	40-402-RED	1	
8	PAINTED CLEVIS KIT	40-403-RED	1	
9	DECAL - AMBER REFLECTIVE	40-598	2	
10	SAFETY CHAIN - 20 000 LBS	40-674	1	
11	LABEL - GREASE POINT	42-LBL-115	1	
12	LABEL - MAX TOW SPEED	42-LBL-119	1	
13	HUB ASSEMBLY - 6 BOLT - 5000	55-026	4	PAGE 86
14	WHEEL ASSY - 11L-15 8 PLY H-WAY	55-166-S	4	
15	BOLT GR.8 - 3/4-10 X 6.00	89-BLT-07510X600	3	
16	NUT LOCK GR.8 - 3/4-10	89-NUT-LOC075-10	3	
17	BOLT - 1/2-13 X 3/4	90-BLT-05013X075	1	
18	BOLT - 1/2-13 X 1 1/2	90-BLT-05013X150	4	
19	BOLT - 3/4-10 X 2.00	90-BLT-07510X200	4	
20	NUT LOCK - 1/2-13	90-NUT-LOC050-13	4	
21	NUT LOCK - 3/4-10	90-NUT-LOC075-10	4	
22	HITCH PIN - 3/4 X 3 1/2 w/COTTER	90-PIN-HT075X350	1	
23	ROLL PIN - 3/16 X 1.50 LG PLATED	90-PIN-RL018X150	2	
24	WASHER LOCK - 1/2	90-WSR-LOC050	1	
25	WASHER SAE - 1/2	90-WSR-SAE050	8	
26	WASHER SAE - 3/4	90-WSR-SAE075	4	
27	JACK FOOT - WELDMENT	C3-641-A	1	

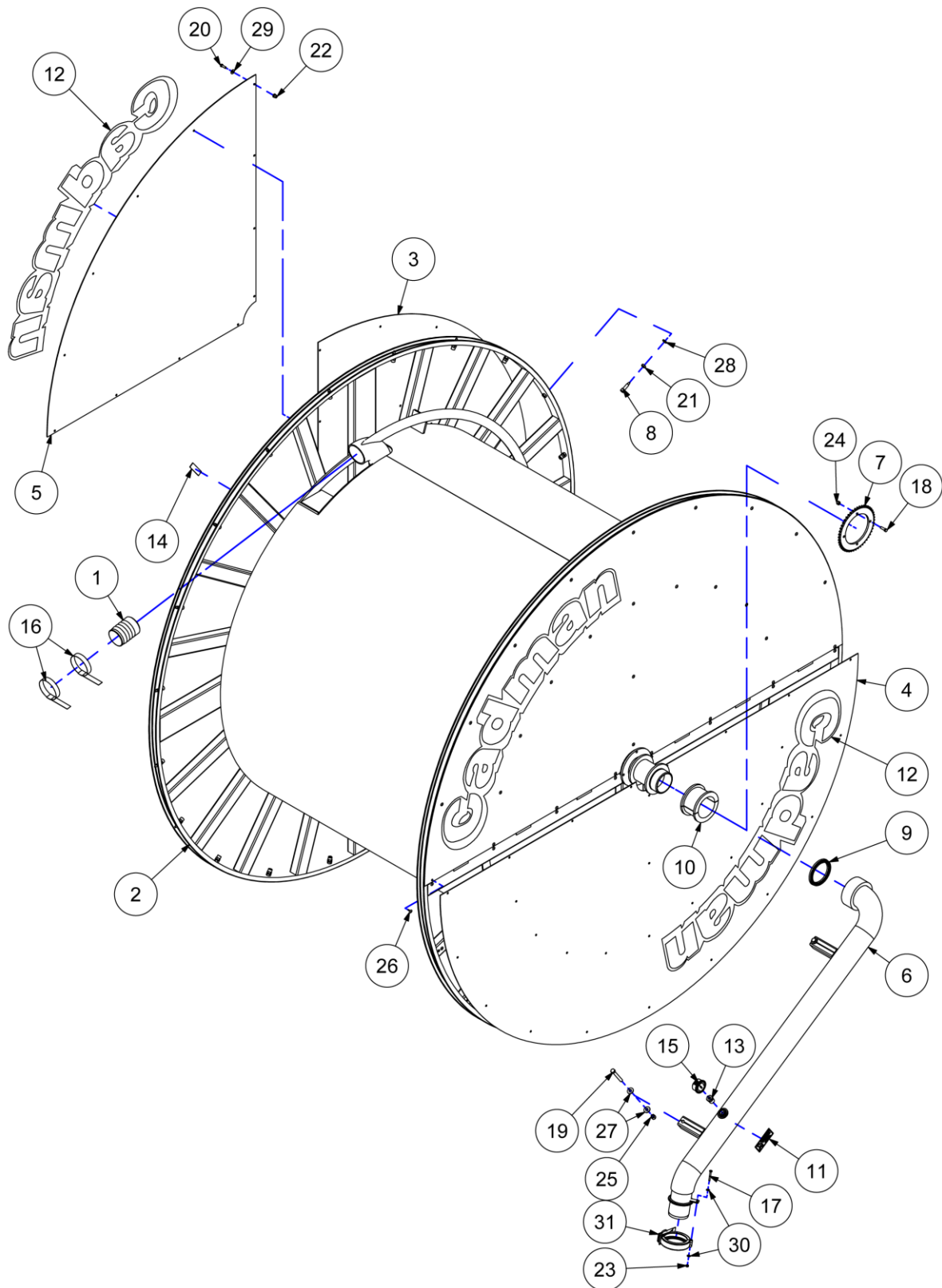
Upper Frame Assembly



Upper Frame Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	DRUM BEARING CAP	03-408-A	2	
2	END COVER WELDMENT	05-602-A	1	
3	DRIVE COVER WELDMENT	05-603-F	1	
4	UPPER FRAME WELDMENT	06-400-C	1	
5	DRIVE COVER DOOR WELDMENT	06-665-G	1	
6	INDEXER SHIELD	06-681	1	
7	HOSE ROLLER	06-684-C	1	3750XL
8	ANTI-ROTATION PLATE	07-623-A	2	
9	DRUM BEARING - 4 1/2 CUT	40-022-CUT	2	
10	ROUGH TOP BELT - 1 3/8 IN. X 20"	40-093-20	2	
11	ROUGH TOP BELT - 1 3/8 IN. X 12"	40-094	2	
12	PILLOW BLOCK BEARING - 1.00"	40-143	2	3750XL
13	HINGE PIN - 3/16 X 3.00 BRASS	40-200-C	3	
14	RUBBER LATCH KIT	40-217	1	
15	GROMMET - 1/4 ID X 5/8 OD X 1/16	40-253	1	
16	PANEL PLUG - 2.00 BLACK	42-283	1	
17	LABEL - MANUALS	42-LBL-118	1	
18	BOLT - 1/4-20 X 3/4	90-BLT-02520X075	4	
19	BOLT - 5/16-18 X 3/4	90-BLT-03118X075	10	
20	BOLT - 3/8-16 X 2.00	90-BLT-03816X200	4	3750XL
21	BOLT - 5/8-11 X 1 1/2	90-BLT-06311X150	4	
22	BOLT - 5/8-11 X 1 3/4	90-BLT-06311X175	8	
23	THREADED INSERT - 1/4-20 SHORT	90-NUT-HTR02520S	4	⊙
24	NUT LOCK - 3/8-16	90-NUT-LOC038-16	4	3750XL
25	NUT LOCK - 5/8-11	90-NUT-LOC063-11	8	
26	RIVET - 3/16 X 3/8	90-RIV-019X038	4	
27	TEK SCREW - 1/4 X 1.00	90-SCR-TEK025X100	4	
28	WASHER FLAT - 1/4 NYLON	90-WSR-FLT025NYLON	4	
29	WASHER FLAT - 5/16	90-WSR-FLT031	2	
30	WASHER FLAT - 3/8	90-WSR-FLT038	4	3750XL
31	WASHER LOCK - 5/8	90-WSR-LOC063	4	
32	WASHER SAE - 1/4	90-WSR-SAE025	4	
33	WASHER SAE - 5/16	90-WSR-SAE031	8	
34	WASHER SAE - 5/8	90-WSR-SAE063	2	
35	MANUAL - 4000 SERIES	TR-MAN-3750XL	1	
36	MANUAL BOX - LARGE ASSEMBLY	TR-MAN-LGPAK	1	

Drum Assembly

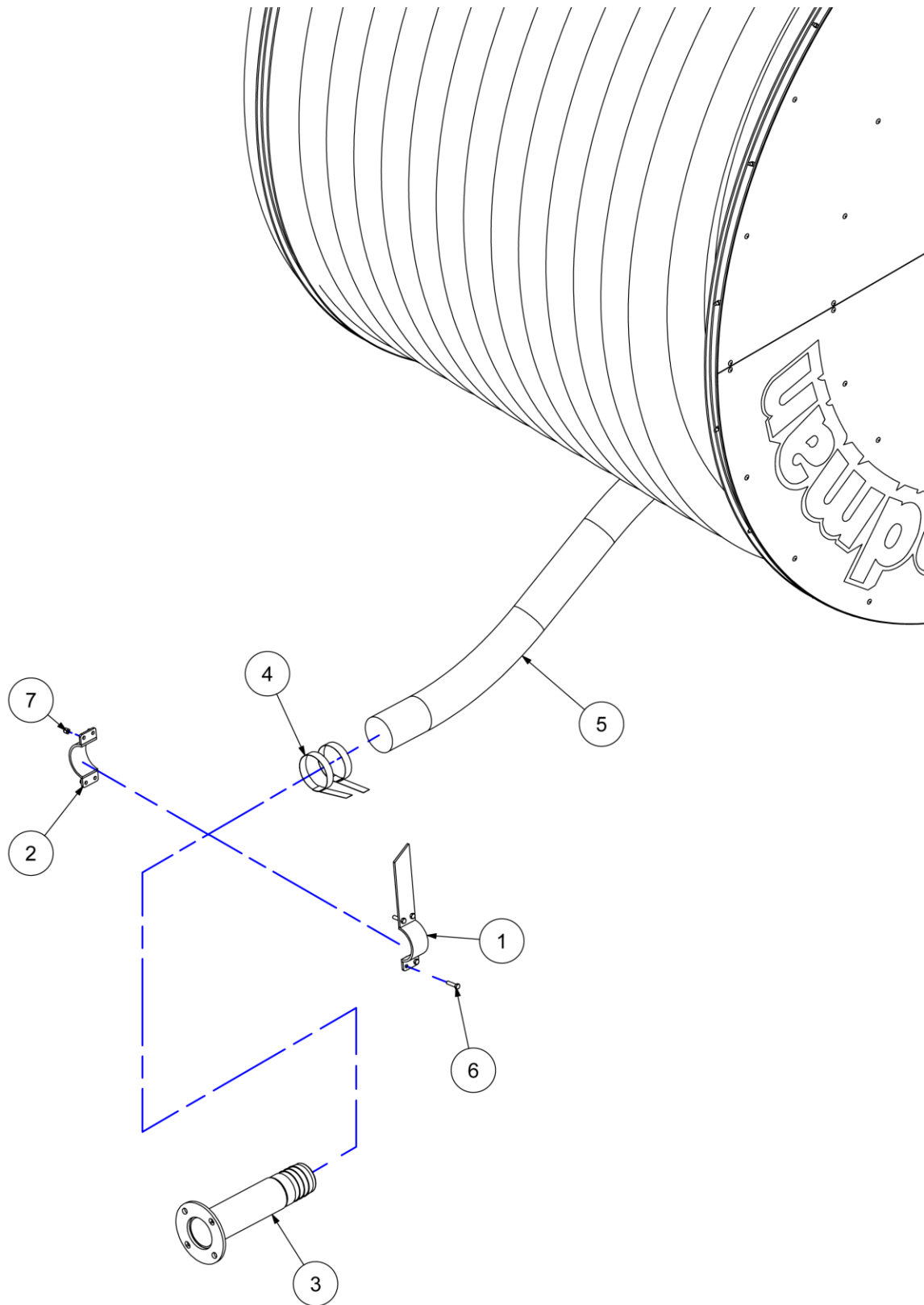




Drum Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	HOSE BARB - 3 3/4"	03-606-A	1	3750XL
↳	HOSE BARB - 4"	01-516	1	4000SWB
↳	HOSE BARB - 4 1/2"	04-673-A	1	4500SWB
2	DRUM WELDMENT	06-500-G	1	
3	DRUM QUARTER SKIN	06-546-A	1	
4	DRUM HALF SKIN	06-547-A	3	
5	DRUM ACCESS PANEL	06-548-A	1	
6	INLET ELBOW WELD'T	06-679-A	1	
7	SPROCKET - 50A48 X 6.50 P.B.	10-086	1	3750XL
↳	SPROCKET - 50A45 X 6.50 P.B.	10-048	1	4000SWB
↳	SPROCKET - 50A50 x 6.50 P.B.	10-087	1	4500SWB
8	DRUM DRIVE LUG - 80 CHAIN	15-040-B	20	
9	SEAL - 4.50" INLET ELBOW	40-015	1	
10	DRUM BEARING - 4 1/2 CUT	40-022-CUT	2	
11	LABEL - HIGH PRESS SPRAY	40-049-A	1	
12	DRUM DECAL - 3750XL - 5000SILVER	40-307-S	4	
13	REDUCER - 12 NPTM X 04 NPTF	40-NPT-RB075X025G	1	
14	VINYL FOAM TAPE - 1"	42-297	56	
15	GAUGE - 0-160 PSI WET	45-017	1	
16	CLAMP BAND IT - 6.00" SS	50-016	2	
17	BOLT - 1/4-20 X 2.00	90-BLT-02520X200	1	
18	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	4	
19	BOLT - 1/2-13 X 4.00	90-BLT-05013X400	2	
20	BOLT PLASTIC - 5/16-18 X 1.00	90-BLT-PL03118X100	12	
21	NUT JAM - 1/2-13	90-NUT-JAM050-13	20	
22	THREADED INSERT - 5/16-18 SHORT	90-NUT-KTR03118S	12	
23	NUT LOCK - 1/4-20	90-NUT-LOC025-20	1	
24	NUT LOCK - 3/8-16	90-NUT-LOC038-16	4	
25	NUT LOCK - 1/2-13	90-NUT-LOC050-13	2	
26	RIVET - 3/16 X 7/16 BLACK	90-RIV-019X045BLK	100	⊙
27	WASHER FLAT - 1/2	90-WSR-FLT050	4	
28	WASHER LOCK - 1/2	90-WSR-LOC050	20	
29	WASHER FLAT - 5/16" NYLON BLK	90-WSR-PL031X088	12	
30	WASHER SAE - 1/4	90-WSR-SAE025	2	
31	CLAMP - 4.00 RINGLOCK	IR-FCL-4	1	

Hose and Barb Assembly

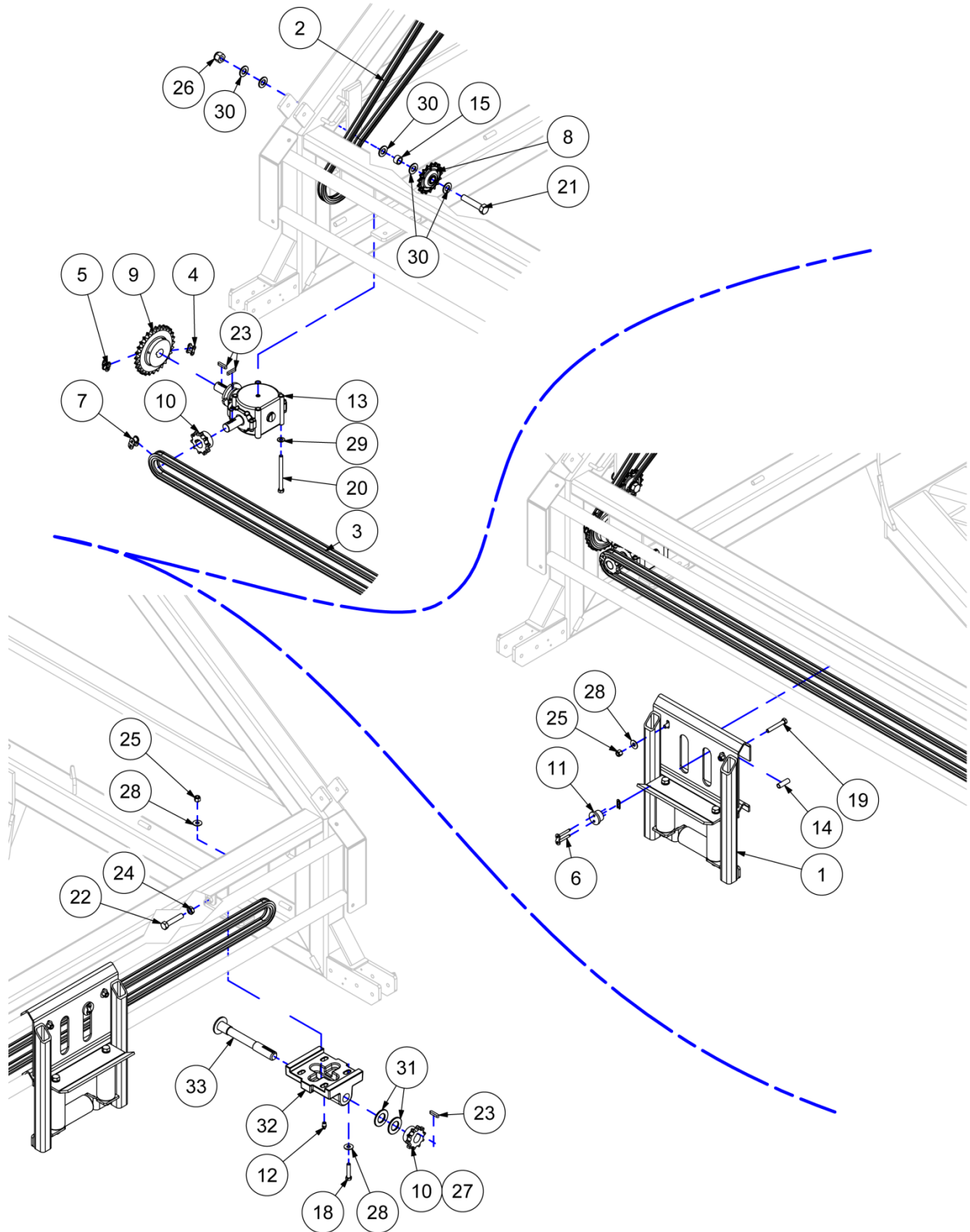




Hose and Barb Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	MARKER FLAG - 3 3/4	03-608	1	3750XL
↳	MARKER FLAG - 4.00	04-689	1	4000SWB
↳	MARKER FLAG - 4 1/2	04-686	1	4500SWB
2	CLAMP - MARKER FLAG - 3 3/4	03-609	1	3750XL
↳	CLAMP - MARKER FLAG - 4.00	04-690	1	4000SWB
↳	CLAMP - MARKER FLAG - 4 1/2	04-687-A	1	4500SWB
3	HOSE END - 3.75" FLANGED	06-627	1	3750XL
↳	HOSE END - 4.00 FLANGED	06-626-A	1	4000SWB
↳	HOSE END - 4.50" FLANGED	04-674	1	4500SWB
4	CLAMP BAND IT - 6.00 SS	50-016	2	
5	HOSE - 3.75 ID X 4.5 OD X 1320 FT	50-056-1320	1	3750XL
↳	HOSE - 4.09 ID X 4.91 OD X 1250 FT	50-004-1250	1	4000SWB
↳	HOSE - 4.50 ID X 5.315 OD X 1175 FT	50-015-1175	1	4500SWB
6	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	4	
7	NUT LOCK - 3/8-16	90-NUT-LOC038-16	4	

Indexer Assembly

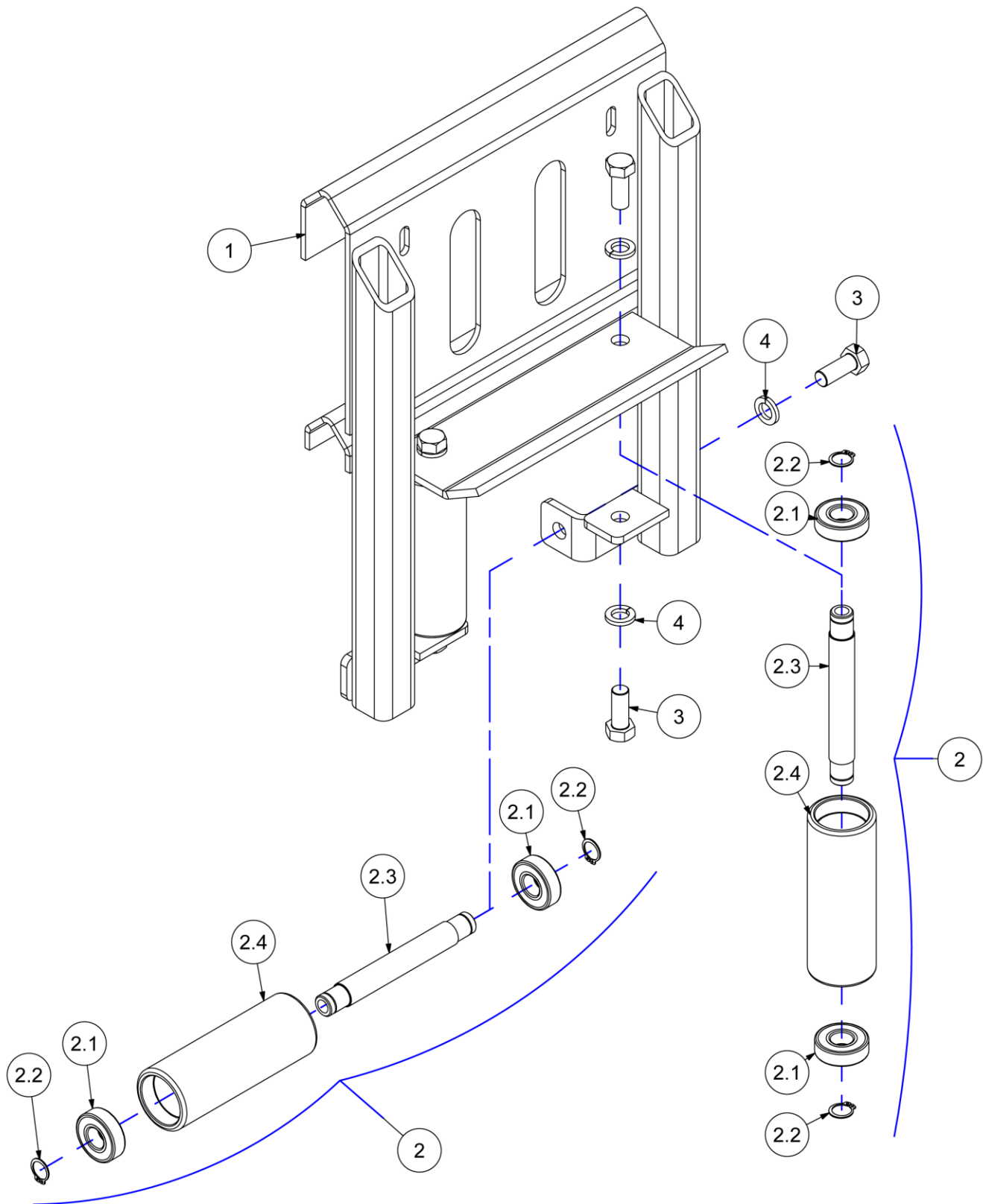




Indexer Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	HOSE GUIDE ASSEMBLY	06-622-000	1	PAGE 56
2	ROLLER CHAIN - NO. 50 X 155.25"	10-CHN-50-1X155.25	1	
3	ROLLER CHAIN - NO. 60 X 132"	10-CHN-60-1X132	1	
4	CONNECTING LINK - 50	10-LNK-50CONN	1	
5	OFFSET LINK - 50	10-LNK-50OFFSET	1	
6	CONNECTING LINK - 60-2	10-LNK-60-2CONN	1	
7	OFFSET LINK - 60	10-LNK-60OFFSET	1	
8	SPROCKET - 50-17 AETNA IDLER	10-SPT-50-17IDLER	1	
9	SPROCKET - 50B28 X 1.00 BORE	10-SPT-50B28X100	1	3750XL
↳	SPROCKET - 50B24 X 1.00 BORE	10-SPT-50B24X100	1	4000SWB
↳	SPROCKET - 50B32 X 1.00 BORE	10-SPT-50B32X100		4500SWB
10	SPROCKET - 60B10 X 1.00	10-SPT-60B10X100	2	
↳	SPROCKET - 60B13 X 1.00	10-SPT-60B13X100	2	4500SWB
11	INDEXER DRIVE BUTTON - 60 PL	15-041	1	
12	GREASE FITTING - 1/8 NPT	40-001	1	
13	RIGHT ANGLE GEARBOX - INDEXER	40-084	1	
14	WIRE LOOM	40-108	2	
15	SPACER - 5/8 ID X 1/2 LG	40-153	1	
18	BOLT - 3/8-16 X 1 3/4	90-BLT-03816X175	4	
19	BOLT - 3/8-16 X 2 1/2	90-BLT-03816X250	2	
20	BOLT - 3/8-16 X 4 1/2	90-BLT-03816X450	4	
21	BOLT - 5/8-11 X 3.00	90-BLT-06311X300	1	
22	BOLT FT - 1/2-13 X 2 1/2	90-BLT-FT05013X250	1	
23	KEY - 1/4 SQ. X 1 1/4 LG	90-KEY-SQ025X125	3	
24	NUT JAM - 1/2-13	90-NUT-JAM050-13	1	
25	NUT LOCK - 3/8-16	90-NUT-LOC038-16	6	
26	NUT LOCK - 5/8-11	90-NUT-LOC063-11	1	
27	SET SCREW - 1/2-20 X 1/2	90-SCR-ST05020X050	1	
28	WASHER FLAT - 3/8	90-WSR-FLT038	10	
29	WASHER SAE - 3/8	90-WSR-SAE038	4	
30	WASHER SAE - 5/8	90-WSR-SAE063	5	
31	WASHER SAE - 1.00	90-WSR-SAE100	2	
32	INDEXER IDLER - MACHINED	C3-303	1	
33	IDLER SHAFT - INDEXER	C3-626-B	1	

Indexer Head Assembly

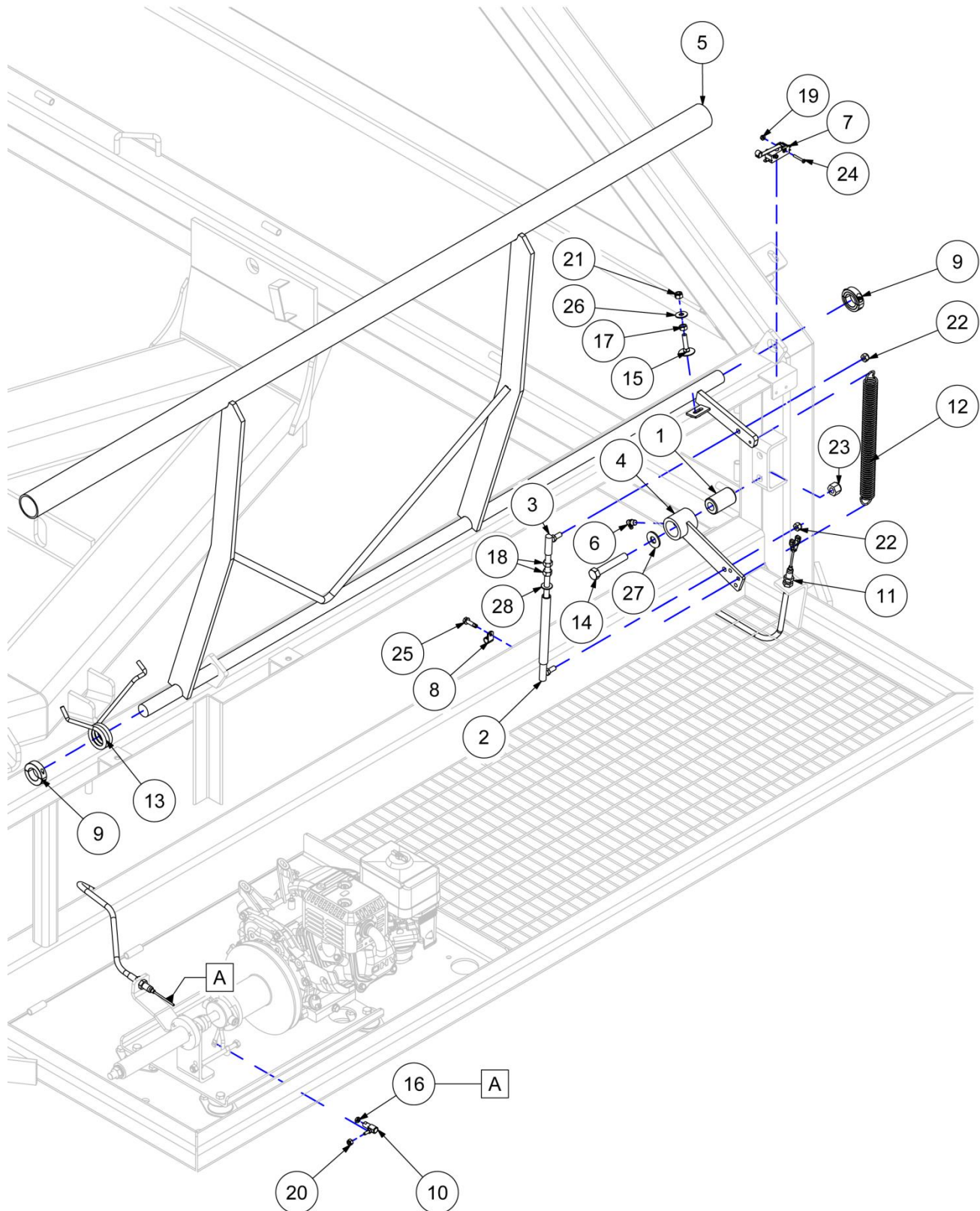




Indexer Head Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	HOSE GUIDE WELDMENT	06-622-C	1	
2	6 IN. GUIDE ROLLER ASSEMBLY	15-019	3	◆
2.1	BEARING - 6203	15-018-C	2	
2.2	SNAP RING	15-018-D	2	
2.3	ROLLER SHAFT - 6"	15-019-F	1	
2.4	6 IN. ROLLER BODY	15-019-G	1	
3	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	6	
4	WASHER LOCK - 1/2	90-WSR-LOC050	6	

Compensator Assembly

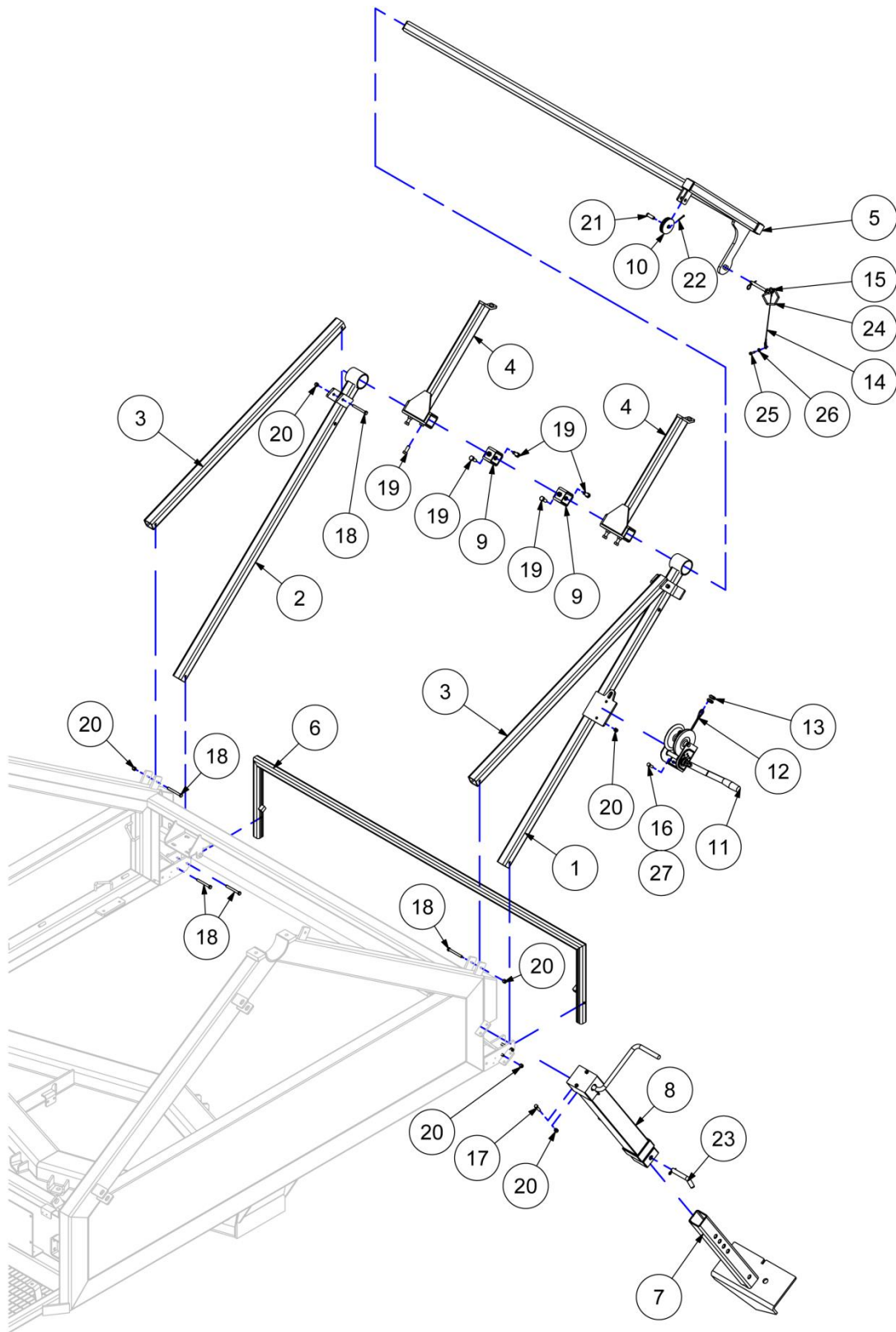




Compensator Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	PIVOT BUSHING - 1.00 X 2.00 LG	06-656-A	1	
2	PUSHROD - FEMALE	06-660	1	
3	PUSHROD - MALE	06-661-A	1	
4	DRIVEN ARM	06-663-B	1	
5	COMPENSATOR WELD'T - 4000	06-680-A	1	
6	GREASE FITTING - 1/8 NPT X 90°	40-001-90	1	
7	LIMIT SWITCH - COATED	40-020	1	
8	P-CLAMP - 3/8 NYLON	40-096	3	
9	SET COLLAR SPLIT - 1.00 DOUBLE	40-214	2	
10	BALL JOINT 10-32	40-225	1	
11	CONTROL CABLE - 4000 SERIES	40-227-A	1	
12	SPRING EXTENSION - 1 1/16 X 7	40-229	1	
13	COMPENSATOR SPRING	40-279	1	
14	BOLT - 1/2-13 X 3.00	90-BLT-05013X300	1	
15	BOLT ELEV - 5/16-18 X 1 1/2	90-BLT-EL03118X150	1	
16	NUT HEX - 10-32	90-NUT-HEX010-32	2	
17	NUT HEX - 5/16-18	90-NUT-HEX031-18	1	
18	NUT HEX - 3/8-16	90-NUT-HEX038-16	2	
19	NUT LOCK - 06-32	90-NUT-LOC006-32	2	
20	NUT LOCK - 10-32	90-NUT-LOC010-32	1	
21	NUT LOCK - 5/16-18	90-NUT-LOC031-18	1	
22	NUT LOCK - 5/16-24	90-NUT-LOC031-24	2	
23	NUT LOCK - 1/2-13	90-NUT-LOC050-13	1	
24	MACH. SCREW PAN - 06-32 X 1.00	90-SCR-RM06-32X100	2	
25	TEK SCREW - 1/4 X 1.00	90-SCR-TEK025X100	3	
26	WASHER FLAT - 5/16	90-WSR-FLT031	2	
27	WASHER FLAT - 1/2	90-WSR-FLT050	1	
28	WASHER SAE - 3/8	90-WSR-SAE038	1	

Cart Lift Assembly

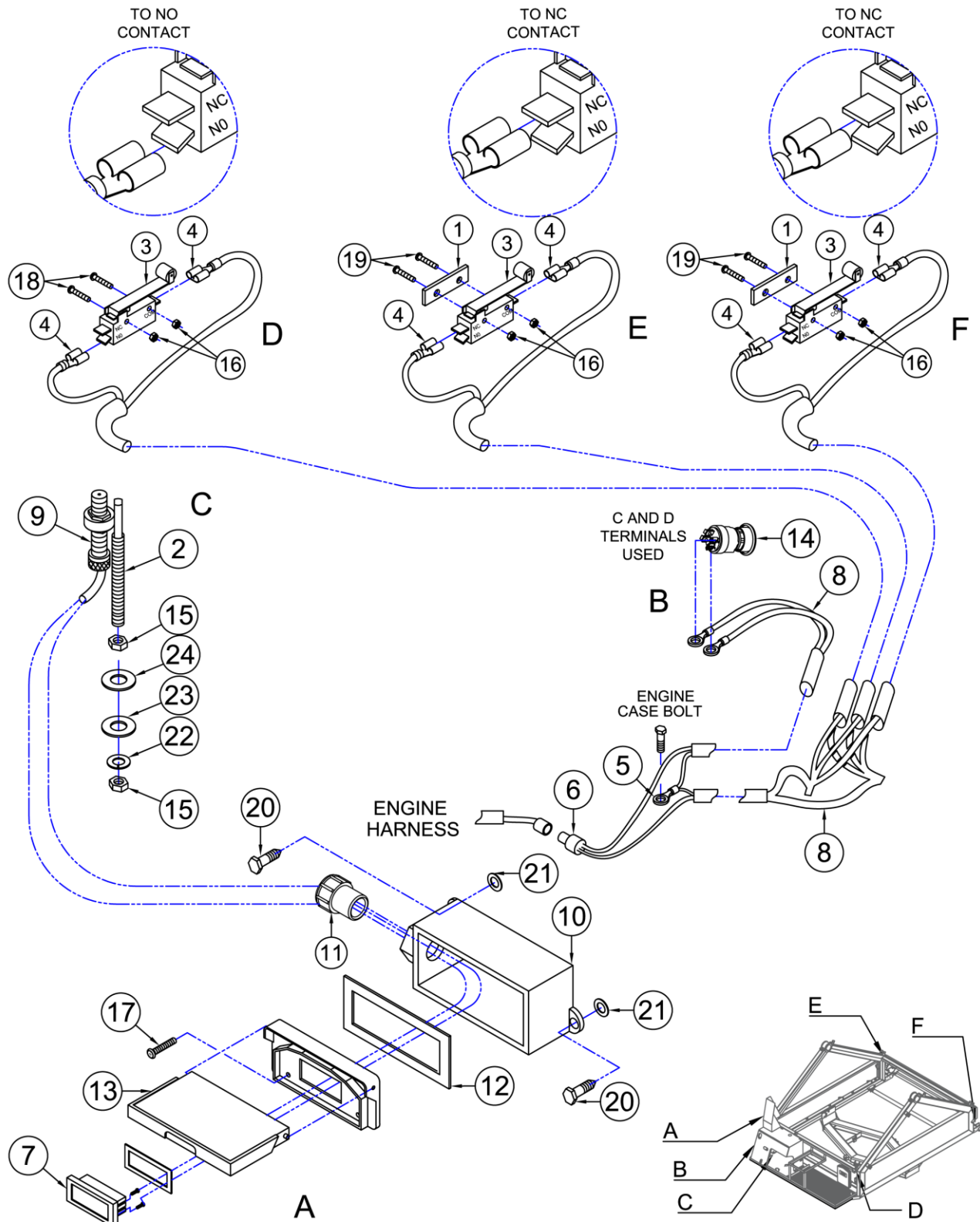




Cart Lift Assembly

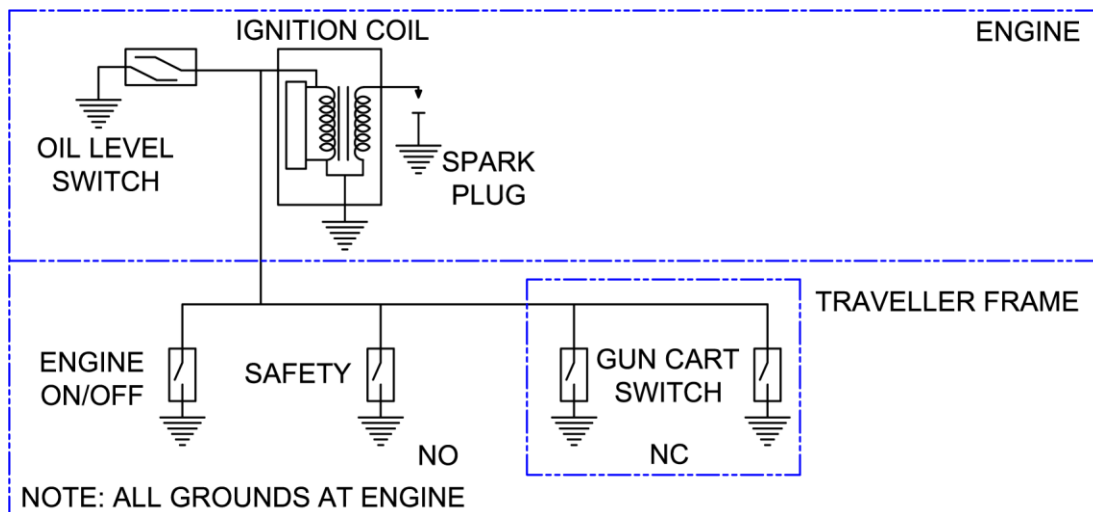
ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	BOOM ARM LEFT WELD'T	06-617-LD	1	
2	BOOM ARM RIGHT WELD'T	06-617-RB	1	
3	BOOM - BRACE	06-618	2	
4	LIFT ARM WELDMENT	06-620	2	
5	BOOM WELDMENT	06-682-A	1	
6	SHUT OFF BAR	06-683	1	
7	STABILIZER JACK LEG WELD'T	07-624	2	
8	STABILIZER JACK BODY	07-628	2	
9	BOOM STOP COLLAR WELD'T	11-454	2	
10	CABLE PULLEY ASSEMBLY - 3.00"	15-003	1	
11	1000 LB. WINCH	40-024-A	1	
12	AIRCRAFT CABLE - 3/16 IN	40-058	1	
13	CABLE CLAMP - 1/8 IN	40-060	2	
14	LANYARD - 12" STAINLESS	42-439	1	
15	RING - LANYARD	42-440	1	
16	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	2	
17	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	8	
18	BOLT - 3/8-16 X 3 1/4	90-BLT-03816X325	8	
19	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	8	
20	NUT LOCK - 3/8-16	90-NUT-LOC038-16	18	
21	CLEVIS PIN - 1/2 X 1 1/2	90-PIN-CL050X150	1	
22	COTTER PIN - 5/32 X 1.00	90-PIN-CT016X100	1	
23	HITCH PIN - 3/4 X 3 1/2 w/COTTER	90-PIN-HT075X350	2	
24	HITCH PIN - 1/2 X 3 1/2	90-PIN-HTC050X350	1	
25	TEK SCREW - 1/4 X 1.00	90-SCR-TEK025X100	1	
26	WASHER FLAT - 1/4 NYLON	90-WSR-FLT025NYLON	1	
27	WASHER FLAT - 3/8	90-WSR-FLT038	1	

Electrical Wiring Assembly

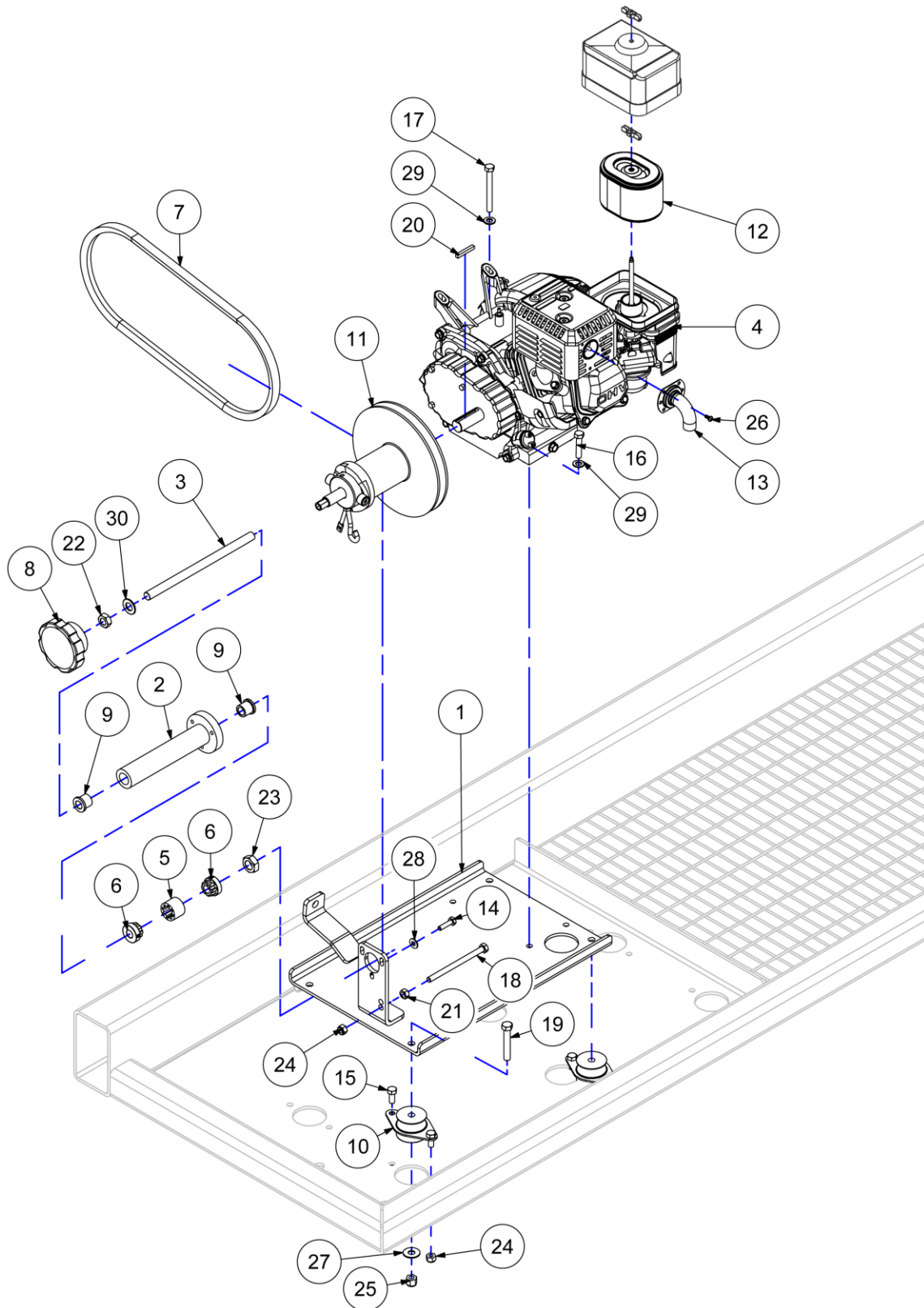


Electrical Wiring Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	SWITCH SPACER BLOCK	04-628	2	
2	PICKUP MOUNT	07-645	1	
3	SHUT OFF SWITCH	40-020-UP	3	
4	FEMALE SPADE CONNECTOR, BLUE	40-068	6	
5	TERMINAL EYE - NO. 10 BLUE	40-069	1	
6	MALE BULLET CONNECTOR, BLUE	40-070	1	
7	SPEEDOMETER KIT	40-190-RL	1	
8	WIRE HARNESS	40-202-A	1	
9	MAGNETIC PICKUP ASS'Y - 5/8	40-239-RL	1	
10	PVC BOX	40-262	1	
11	STRAIN RELIEF KIT - 3/4	40-263	1	
12	GASKET	40-264	1	
13	BOX COVER WITH LID	40-271	1	
14	SEALED PUSH/PULL SWITCH	42-268	1	
15	HEX NUT - 1/2-13	90-NUT-HEX050-13	2	
16	LOCK NUT - 06-32	90-NUT-LOC006-32	6	
17	MACH. SCREW PAN - 06-32 X 5/8	90-SCR-PHP006-32X063	4	
18	MACH. SCREW - 06-32 X 1" LG.	90-SCR-RM0632X125	2	
19	MACH. SCREW - 06-32 X 1 3/4" LG.	90-SCR-RM0632X175	4	
20	TEK SCREW - 1/4 X 1.00	90-SCR-TEK025X100	2	
21	NYLON FLAT WASHER - 1/4	90-WSR-FLT025NYLON	2	
22	WASHER FLAT - 1/2	90-WSR-FLT050	2	
23	WASHER LOCK - 1/2	90-WSR-LOC050	1	



Engine Assembly - GX-160

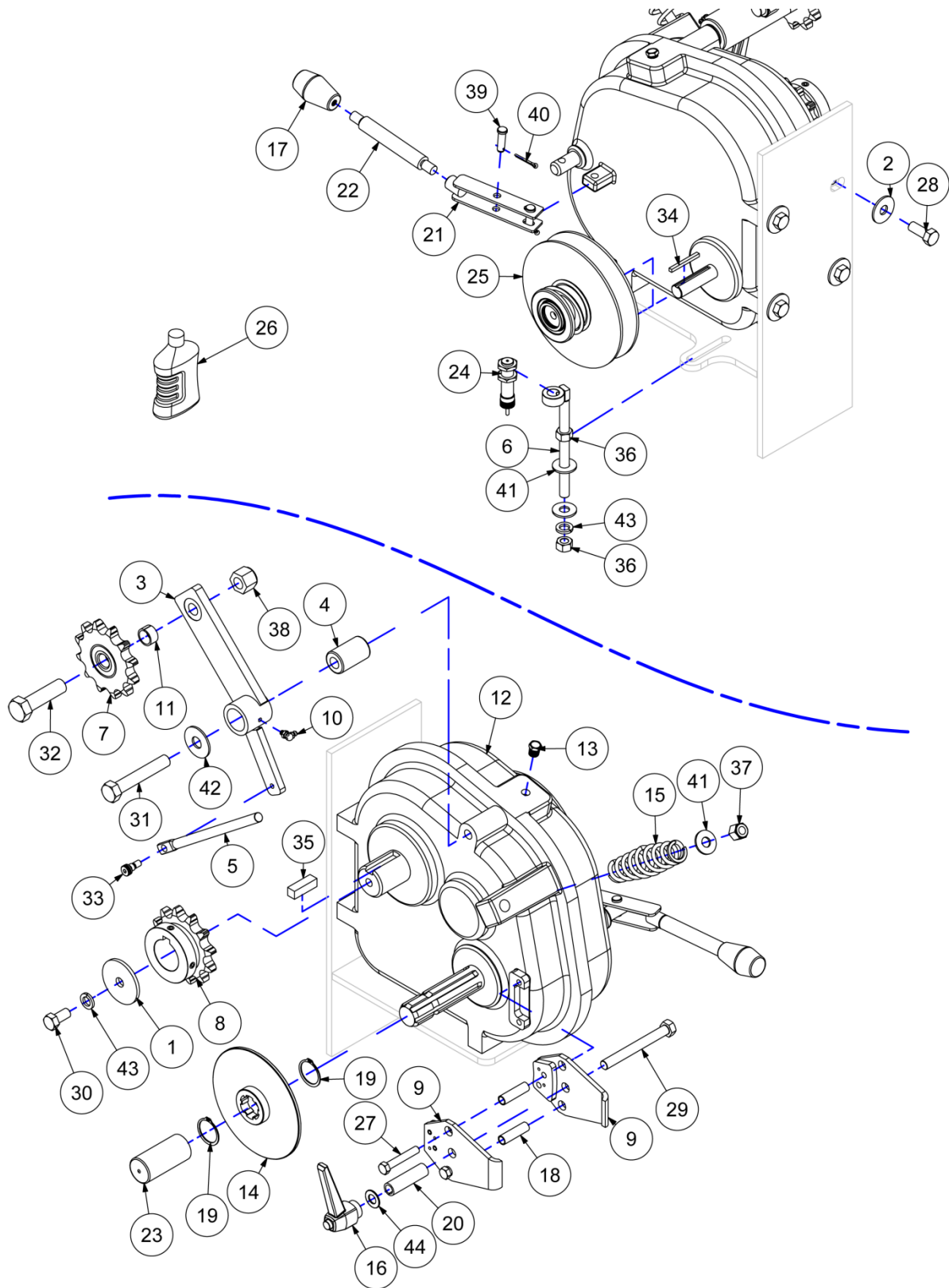




Engine Assembly - GX-160

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	ENGINE PLATE - HONDA	06-609-J	1	
2	EXTENSION HOUSING ASSEMBLY	06-640	1	
3	EXTENSION SHAFT	15-075-A	1	
4	HONDA ENGINE - GX-160	40-078-A	1	
5	COUPLING ELEMENT - 0.85 IN LG	40-165-B	1	
6	COUPLING HALF - 1/2 IN. P.B.	40-165-C	2	
7	V-BELT - BX-38	40-172	1	
8	CONTROL KNOB- 05013 X 3 1/4	40-220	1	
9	OILITE BUSHING - 1/2" ID FLANGED	40-233	2	
10	ENGINE MOUNT	40-285	4	
11	PULLEY KIT - 7" X 20mm w/CAM	40-316-A	1	PAGE 68
12	AIR FILTER - GX160	40-HDA-17210ZE1517	1	
13	EXHAUST DEFLECTOR - GX-120/160	40-HDA-18340ZE1000	1	
14	BOLT - 1/4-28 X 1.00	90-BLT-02528X100	3	
15	BOLT - 5/16-18 X 3/4	90-BLT-03118X075	8	
16	BOLT - 5/16-18 X 1 1/2	90-BLT-03118X150	3	
17	BOLT - 5/16-18 X 3.00	90-BLT-03118X300	1	
18	BOLT - 5/16-18 X 4 1/2	90-BLT-03118X450	1	
19	BOLT - 3/8-16 X 2 1/4	90-BLT-03816X225	3	
20	KEY SQ. - 5MM X 35MM	90-KEY-SQ5MMX35MM	1	
21	NUT HEX - 5/16-18	90-NUT-HEX031-18	1	
22	NUT JAM - 1/2-13	90-NUT-JAM050-13	1	
23	NUT JAM - 5/8-11 LEFT HAND	90-NUT-JAM063-18LH	1	
24	NUT LOCK - 5/16-18	90-NUT-LOC031-18	12	
25	NUT LOCK - 3/8-16	90-NUT-LOC038-16	4	
26	MACH. SCREW PAN - 08-32 X 3/8	90-SCR-PH8X038	2	
27	WASHER FLAT - 3/8	90-WSR-FLT038	4	
28	WASHER SAE - 1/4	90-WSR-SAE025	3	
29	WASHER SAE - 5/16	90-WSR-SAE031	4	
30	WASHER SAE - 1/2	90-WSR-SAE050	1	

Transmission Assembly

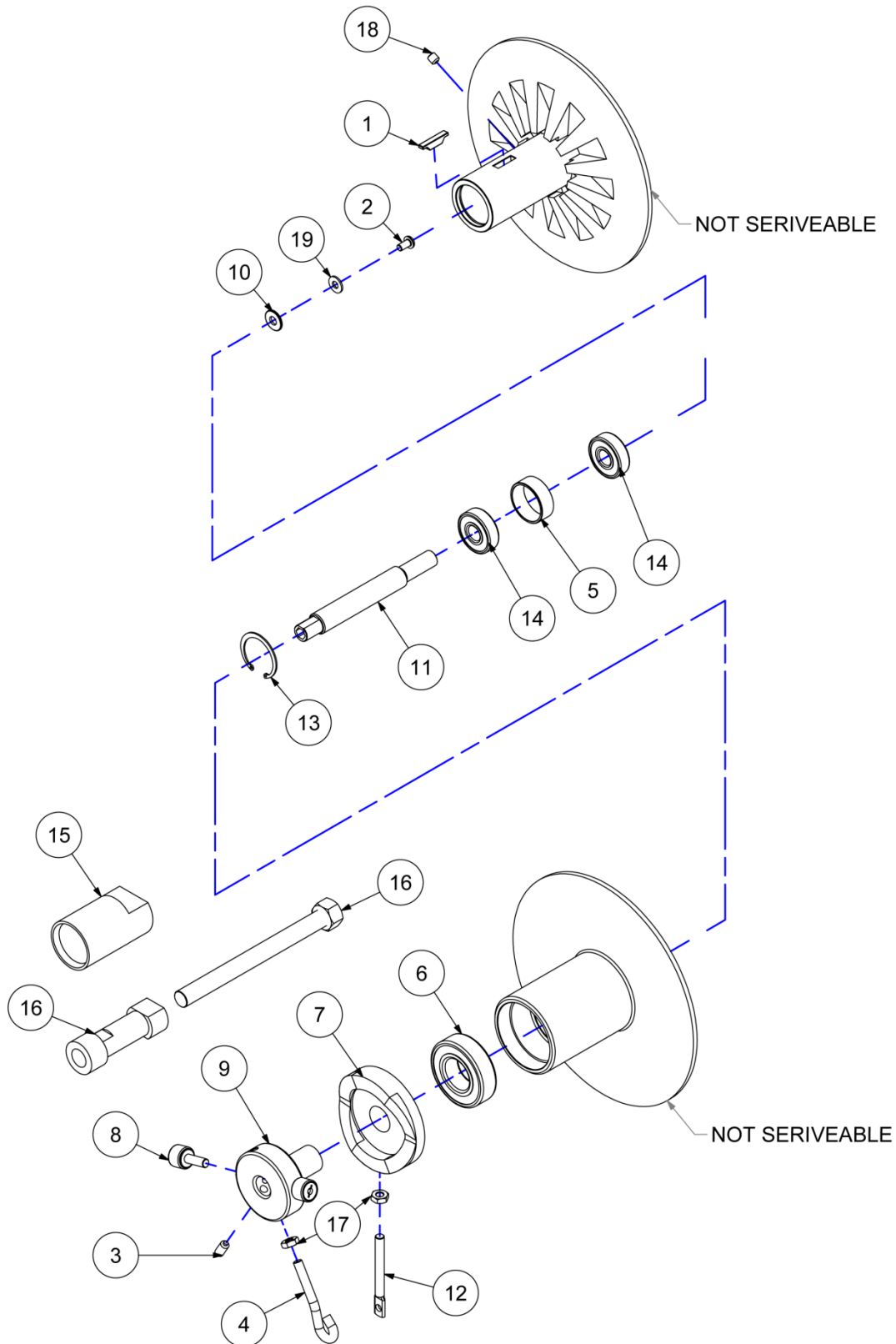




Transmission Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	SPROCKET RETAINING PLATE	01-314-B	1	
2	TRANSMISSION WASHER 12G	05-470	6	
3	DRIVE CHAIN IDLER ARM - PAINTED	06-652-D	1	
4	PIVOT BUSHING - 1.00 X 2.00 LG	06-656-A	1	
5	SPRING ADJ. ROD - 9 IN. PLATED	06-658-A	1	
6	SENSOR MOUNT	07-645	1	
7	SPROCKET - 80-12 X 3/4 IDLER	10-SPT-80-12IDLER	1	
8	SPROCKET - 80B12 X 1 3/4 BORE	10-SPT-80B12X175	1	
9	BRAKE CALIPER HALF	17-639	2	
10	GREASE FITTING - 1/4-28 X 90°	40-001-02528-90	1	
11	SPACER - 3/4 ID X 1/2 LG.	40-110	1	
12	TRANSMISSION 320:1 REDUCTION	40-169	1	
13	BREATHER - 1/4 NPT	40-169-3493	1	
14	TRANSMISSION BRAKE DISC	40-169-CM017	1	
15	IDLER TENSIONING SPRING	40-177-A	1	
16	BRAKE HANDLE	40-179	1	
17	HANDLE KNOB	40-182	1	
18	SPACER - 1/2 X 1 3/4 LG.	40-183	2	
19	RETAINING RING - 1 3/8" EXTERNAL	40-184	2	
20	SPACER - 1/2 X 2 1/2 LG	40-185	1	
21	SHIFTER FORK	40-221	1	
22	SCREW IN SHIFT HANDLE	40-222	1	
23	CAP VINYL - 1 3/8 X 3.00 LG. BLK	40-231	1	
24	MAGNETIC PICK-UP ASS'Y - 5/8	40-239-RL	1	
25	PULLEY - 7.00 X 3/4 SPRING	40-314	1	PAGE 70
26	GEAR OIL - 80W90	85-LUB-OIL/80W90	3	
27	BOLT - 3/8-16 X 2 1/4	90-BLT-03816X225	2	
28	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	6	
29	BOLT - 1/2-13 X 4 1/2	90-BLT-05013X450	1	
30	BOLT - 1/2-20 X 1.00	90-BLT-05020X100	1	
31	BOLT - 5/8-11 X 3 3/4	90-BLT-06311X375	1	
32	BOLT - 3/4-10 X 2 3/4	90-BLT-07510X275	1	
33	BOLT SHDR - 3/8 X 5/16-18 X 5/16	90-BLT-SH03118X031	1	
34	KEY - 3/16 SQ. X 2.00 IN. LG.	90-KEY-SQ019X200	1	
35	KEY - 1/2 SQ. X 1 5/8 LG	90-KEY-SQ050X163	1	
36	NUT HEX - 1/2-13	90-NUT-HEX050-13	2	
37	NUT LOCK - 1/2-13	90-NUT-LOC050-13	1	
38	NUT LOCK - 3/4-10	90-NUT-LOC075-10	1	
39	CLEVIS PIN - 3/8 X 1 1/4 LG	90-PIN-CL038X125	2	
40	COTTER PIN - 1/8 X 1.00	90-PIN-CT013X100	2	
41	WASHER FLAT - 1/2	90-WSR-FLT050	3	
42	WASHER FLAT - 5/8	90-WSR-FLT063	1	
43	WASHER LOCK - 1/2	90-WSR-LOC050	2	
44	WASHER SAE - 1/2	90-WSR-SAE050	1	

Pulley - Variable w/Cam - 7"

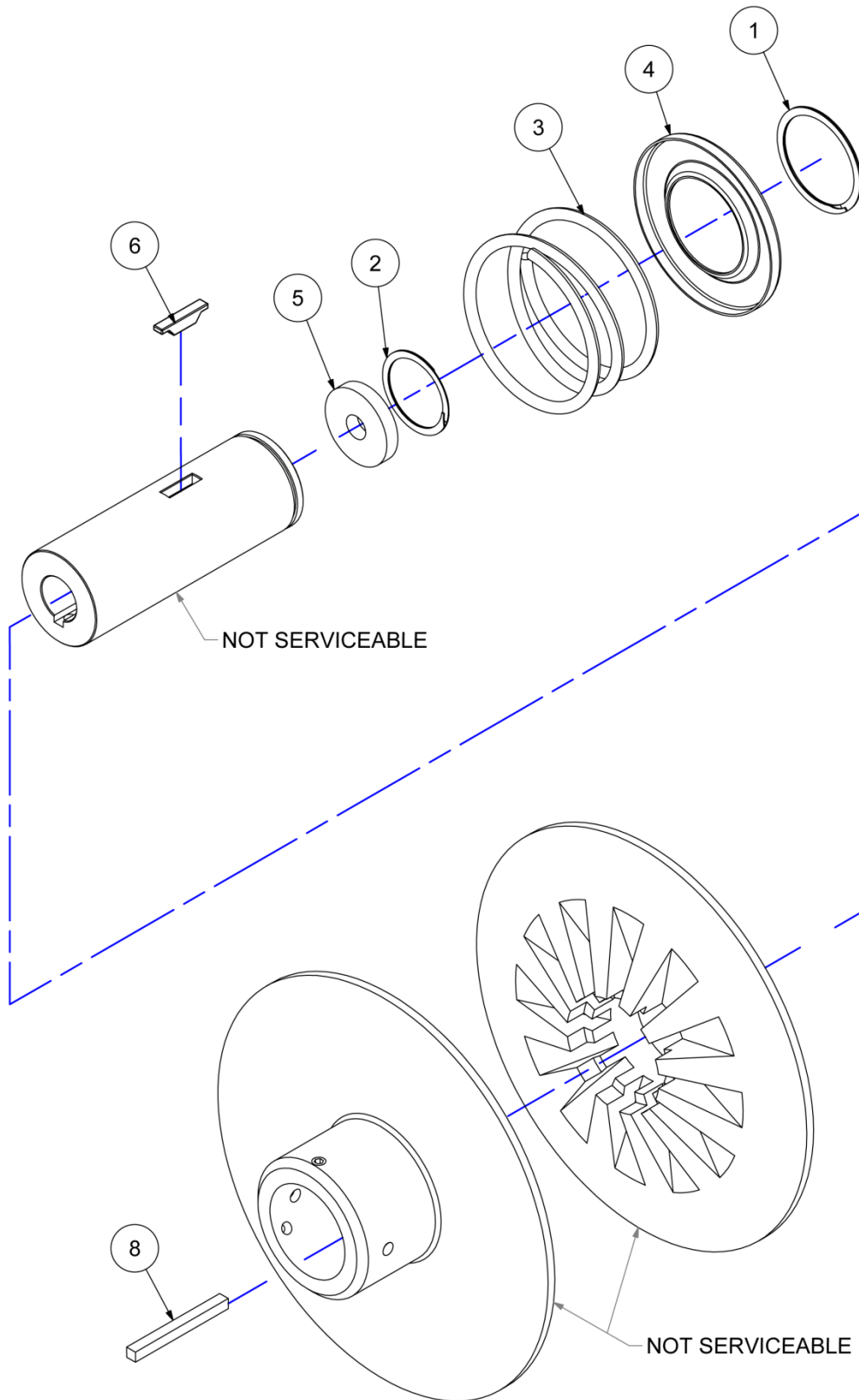




Pulley - Variable w/Cam - 7"

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	PULLEY - VARIABLE w/CAM - 7"	40-316-A	1	◆
1	SPECIAL KEY	40-129-2181	1	
2	BOLT - 10-32 X 3/8 LG	40-129-3305	1	
3	SCREW SET - 1/4-28 X 1/2 NYLON	40-129-NTSS	1	
4	TORQUE ARM	40-216-A-2596	1	
5	BEARING SPACER	40-216-B-407-074	1	
6	CAM BEARING	40-216-BRG6205	1	
7	CABLE TORQUE ARM	40-243-99	1	
8	CAM ROLLER	40-243-2589	2	
9	THRUST NUT	40-243-C	1	
10	WASHER SAE - 1/4 S.S.	40-316-206-074	1	
11	CONTROL STEM	40-316-207-291	1	
12	CABLE TORQUE ARM	40-316-2588	1	
13	SNAP RING - 1 1/4 INTERNAL	40-316-3334	1	
14	CAM BEARING	40-316-3386	2	
15	BEARING PULLER	88-TOL-SSBRGPULLER	1	
16	PULLER - PULLEY	88-TOL-SSPUL	1	
17	NUT JAM - 1/4-20	90-NUT-JAM025-20	2	
18	SCREW SET - 1/4 -28 X 1/4 LG.	90-SCR-ST02528X025	2	
19	WASHER FLAT - 10	90-WSR-FLT010	1	

Pulley - Spring Loaded - 7"

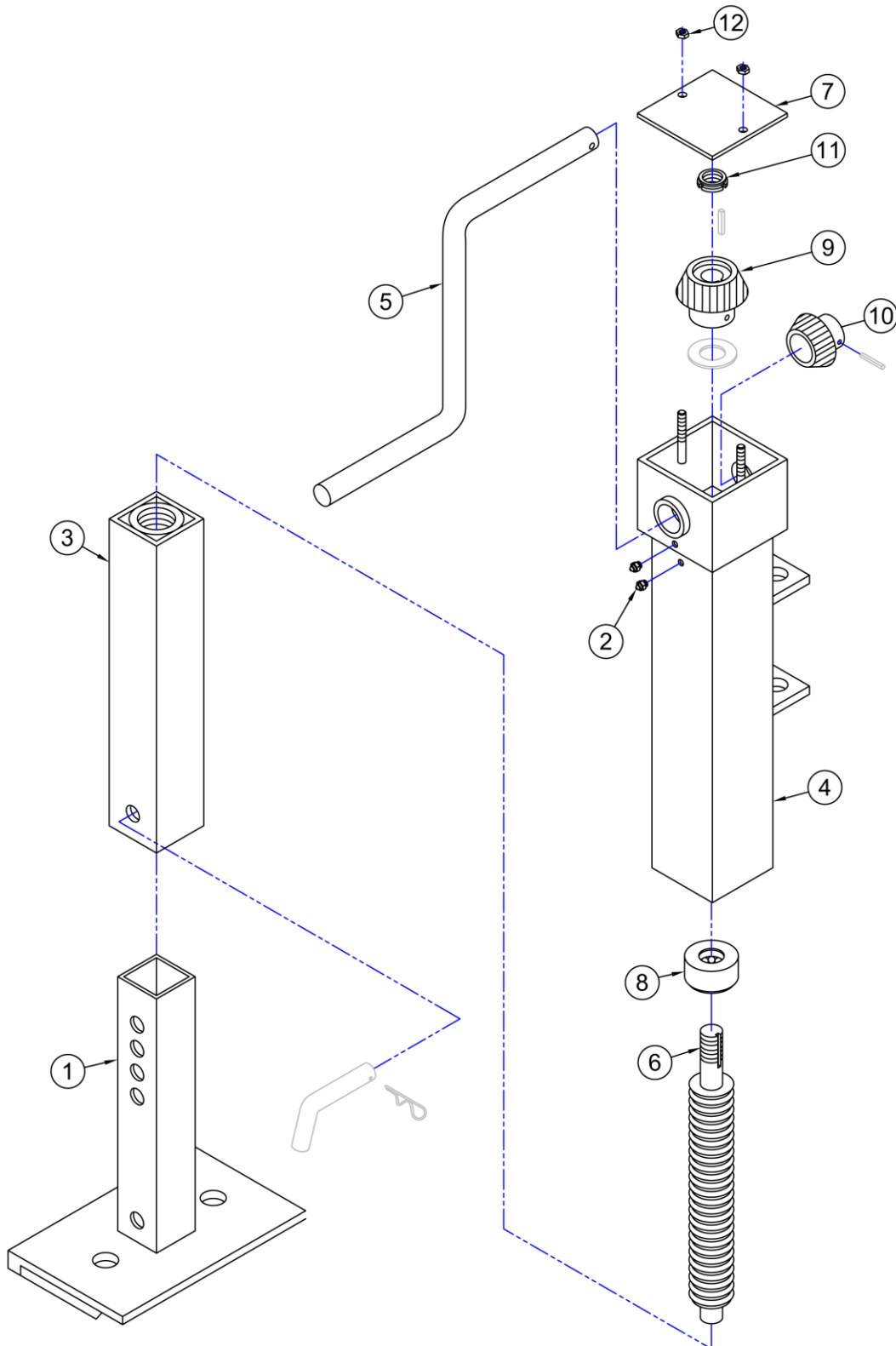




Pulley - Spring Loaded - 7"

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	PULLEY - SPRING LOADED - 7"	40-314	1	◆
1	RETAINING RING	40-128-2243	1	
2	PLUG RETAINING RING	40-128-2670	1	
3	SPRING	40-128-A-107-032	1	
4	CAP - SPRING	40-128-A-107-033	1	
5	PLUG ADAPTER	40-128-A-107-052	1	
6	SPECIAL KEY	40-129-2181	1	
7	KEY - 3/16 SQ. X 2.00 IN. LG.	90-KEY-SQ019X200	1	

Stabilizer Jack Assembly

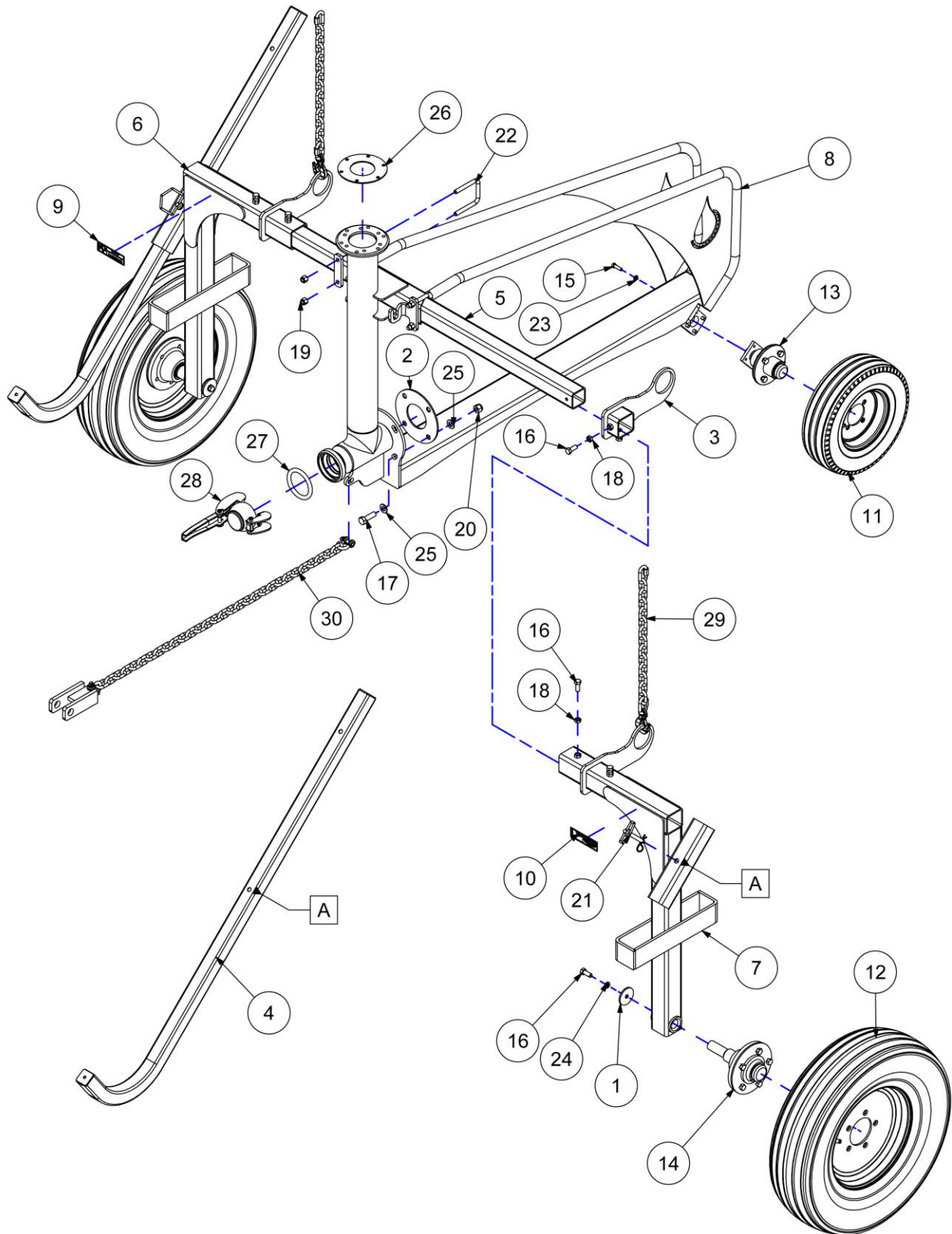




Stabilizer Jack Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	STABILIZER JACK DROP LEG	07-624	1	
↳	JACK FOOT WELDMENT	C3-641-A	1	
2	GREASE FITTING - 1/8 NPTM	40-001	2	
3	MIDDLE LEG TUBE	40-176-B	1	
4	STABILIZER JACK BODY	40-176-C	1	
5	JACK HANDLE	40-176-E	1	
6	JACK SCREW	40-176-FTK	1	
7	COVER PLATE	40-176-G	1	
8	THRUST BEARING	40-176-H	1	
9	BEVEL GEAR, 24T	40-176-J24	1	
10	BEVEL GEAR, 16T	40-176-K	1	
11	NUT LOCK	40-176-L	1	
12	NUT LOCK- M8-1.25	88-NUT-HEXM8-125	2	

Sprinkler Cart Assembly

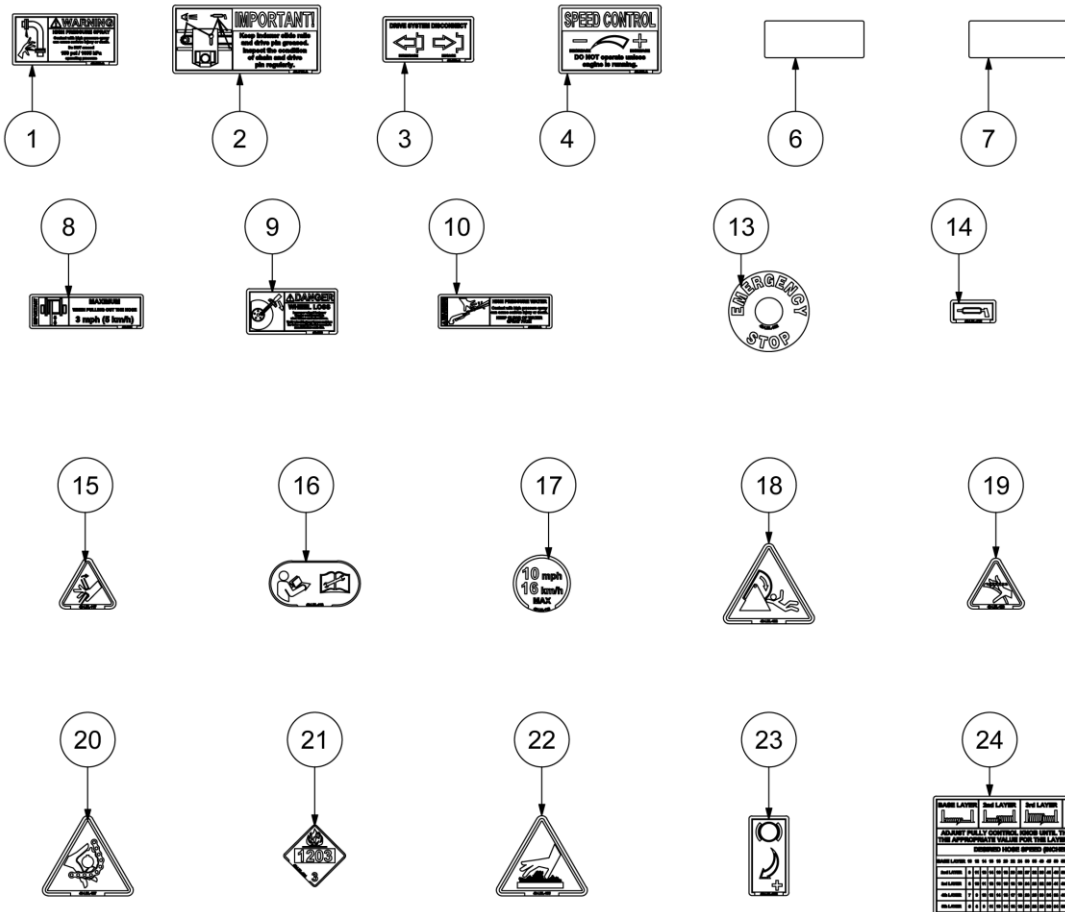
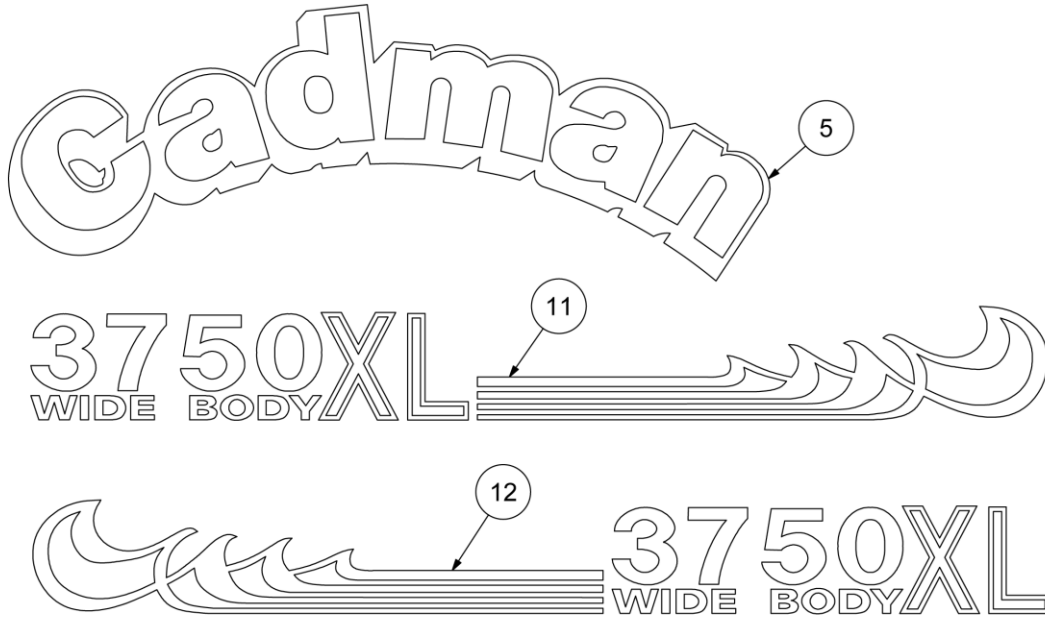




Sprinkler Cart Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
●	SPRINKLER CART - 46" GALVANIZED	TR-CRT-46-4013G		●
◆	SPRINKLER CART - 62" GALVANIZED	TR-CRT-62-4013G		◆
1	SPROCKET RETAINING PLATE	01-314-B	2	
2	HOSE FLANGE GASKET	02-216-A	1	
3	PICK UP COLLAR - LONG	02-232-A	1	
4	STABILIZER LEG WELDMENT - GALV.	04-826-A	2	
5	CROSS TUBE - GALVANIZED	04-831-72G	1	
6	CART LEG - 46" GALVANIZED	04-832-B	1	46"
↳	CART LEG - 62" GALVANIZED	04-864-B		62"
7	CART LEG - 46" GALVANIZED	04-833-B	1	46"
↳	CART LEG - 62" GALVANIZED	04-865-B		62"
8	CART BODY - 46"	04-834-C	1	46"
↳	CART BODY - 62"	04-800-E	1	62"
9	LABEL - MAX HOSE PULL	42-032	1	
10	LABEL - HIGH PRESS. WATER	42-046-A	1	
11	WHEEL ASS'Y - 4 BOLT RIM GALV	55-036-G	1	
12	WHEEL ASS'Y - 670-15 GALVANIZED	55-041-G	2	
13	HUB SUBASSEMBLY - 4 BOLT	55-237	1	PAGE 88
14	HUB SUBASSEMBLY - 5 BOLT	55-238	2	PAGE 90
15	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	4	
16	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	8	
17	BOLT - 5/8-11 X 2.00	90-BLT-06311X200	4	
18	NUT JAM - 1/2-13	90-NUT-JAM050-13	6	
19	NUT LOCK - 1/2-13	90-NUT-LOC050-13	4	
20	NUT LOCK - 5/8-11	90-NUT-LOC063-11	4	
21	HITCH PIN - 1/2 X 3 1/2	90-PIN-HTC050X350	2	
22	U-BOLT SQ - 1/2-13 X 3.00 X 4.00	90-UBT-SQ05013X400	2	
23	WASHER LOCK - 3/8	90-WSR-LOC038	4	
24	WASHER LOCK - 1/2	90-WSR-LOC050	2	
25	WASHER SAE - 5/8	90-WSR-SAE063	8	
26	GASKET - NELSON GUN FLANGE	DO-PRT-30-040-A	1	
27	GASKET - 3.00 (WIL-LOC)	IR-GKT-WL3	1	
28	END CAP - 3.00 WIL-LOC	IR-PLG-WL3	1	
29	CART LIFT CHAIN - 13 LINK	TR-CHN-13L	2	46"
↳	CART LIFT CHAIN - 5 LINK	TR-CHN-5L	2	62"
30	CART TOW CHAIN ASSEMBLY	TR-CRT-TOWCHAIN	1	

Label Assembly

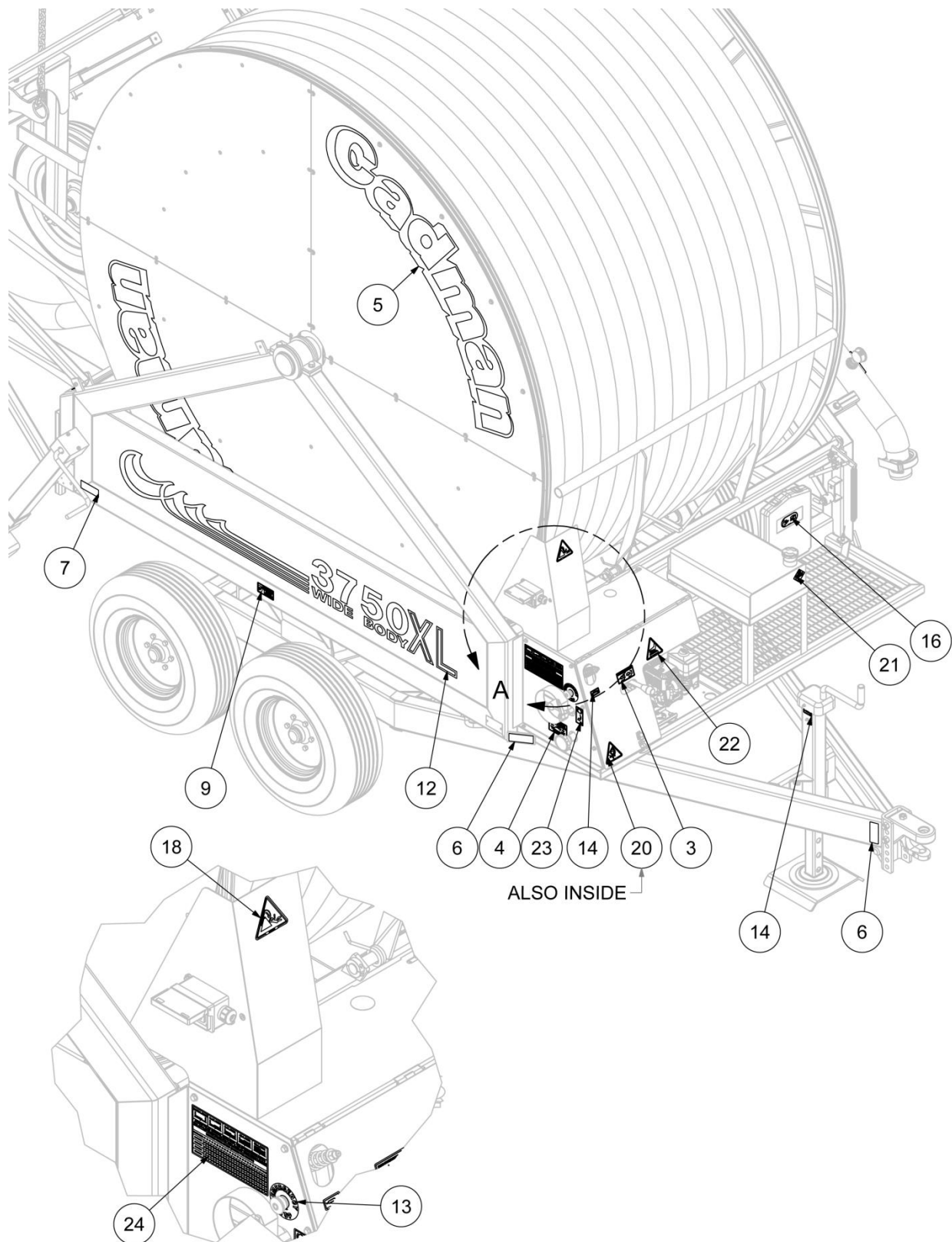




Label Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	LABEL - HIGH PRESS. SPRAY	40-049-A	1	
2	LABEL - INDEXER CONDITION	40-115-A	1	
3	LABEL - DRIVE DISCONNECT	40-151-A	1	
4	LABEL - SPEED CONTROL	40-189-A	1	
5	DRUM DECAL - 3750XL - 5000SILVER	40-307-S	4	
6	DECAL - AMBER REFLECTIVE	40-598	4	
7	DECAL - RED REFLECTIVE	40-599	4	
8	LABEL - MAX HOSE PULL	42-032	1	
9	LABEL - TORQUE WHEELS	42-035	2	
10	LABEL - HIGH PRESS. WATER	42-046-A	1	
11	PANEL DECAL - 3250XL LEFT	42-DCL-3750XLWBL	1	3750XL
↳	PANEL DECAL - 4000SWB LEFT	42-DCL-4000SWBL	1	4000SWB
↳	PANEL DECAL - 4500SWB LEFT	42-DCL4500SWBL	1	4500SWB
12	PANEL DECAL - 3750XL RIGHT	42-DCL-3750XLWBR	1	3750XL
↳	PANEL DECAL - 4000SWB RIGHT	42-DCL-4000SWBR	1	4000SWB
↳	PANEL DECAL - 4500SWB RIGHT	42-DCL4500SWBR	1	4500SWB
13	LABEL - EMERGENCY STOP	42-LBL-002	1	
14	LABEL - GREASE POINT	42-LBL-115	3	
15	LABEL - PINCH HAND HAZARD	42-LBL-117	2	
16	LABEL - MANUALS	42-LBL-118	1	
17	LABEL - MAX TOW SPEED	42-LBL-119	1	
18	LABEL - ROTATING DRUM	42-LBL-122	2	
19	LABEL - ENTANGLEMENT	42-LBL-123	3	
20	LABEL - ENTANGLEMENT HAZARD	42-LBL-127	2	
21	LABEL - GASOLINE	42-LBL-134	1	
22	LABEL - BURN HAZARD	42-LBL-135	1	
23	LABEL - BRAKE ADJUST	42-LBL-136	1	
24	LABEL - SPEED ADJUST 5 LAYER	42-LBL-152	1	

Label Location (1 of 2)

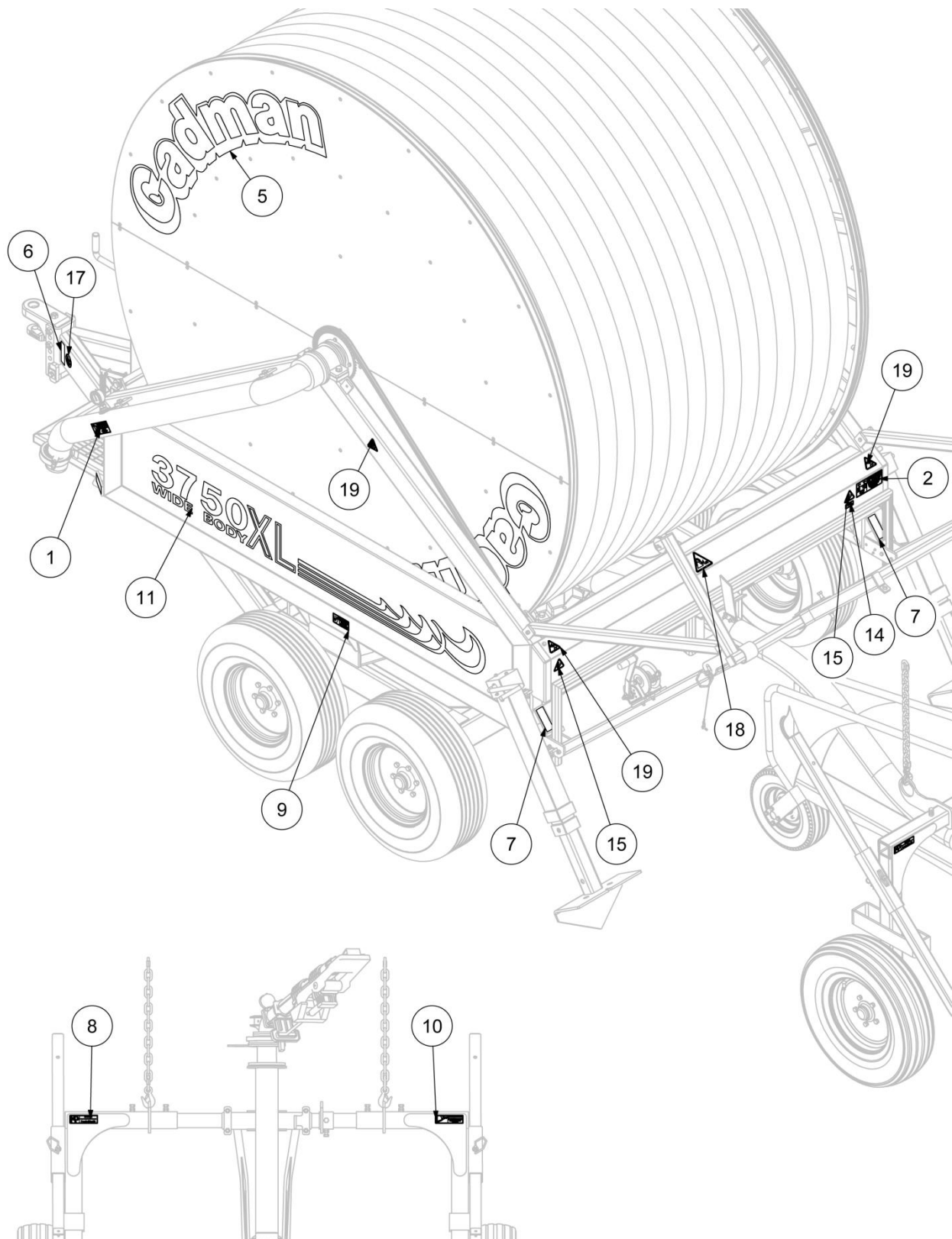




Label Location (1 of 2)

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	LABEL - HIGH PRESS. SPRAY	40-049-A	1	
2	LABEL - INDEXER CONDITION	40-115-A	1	
3	LABEL - DRIVE DISCONNECT	40-151-A	1	
4	LABEL - SPEED CONTROL	40-189-A	1	
5	DRUM DECAL - 3750XL - 5000SILVER	40-307-S	4	
6	DECAL - AMBER REFLECTIVE	40-598	4	
7	DECAL - RED REFLECTIVE	40-599	4	
8	LABEL - MAX HOSE PULL	42-032	1	
9	LABEL - TORQUE WHEELS	42-035	2	
10	LABEL - HIGH PRESS. WATER	42-046-A	1	
11	PANEL DECAL - 3250XL LEFT	42-DCL-3750XLWBL	1	3750XL
↳	PANEL DECAL - 4000SWB LEFT	42-DCL-4000SWBL	1	4000SWB
↳	PANEL DECAL - 4500SWB LEFT	42-DCL4500SWBL	1	4500SWB
12	PANEL DECAL - 3750XL RIGHT	42-DCL-3750XLWBR	1	3750XL
↳	PANEL DECAL - 4000SWB RIGHT	42-DCL-4000SWBR	1	4000SWB
↳	PANEL DECAL - 4500SWB RIGHT	42-DCL4500SWBR	1	4500SWB
13	LABEL - EMERGENCY STOP	42-LBL-002	1	
14	LABEL - GREASE POINT	42-LBL-115	3	
15	LABEL - PINCH HAND HAZARD	42-LBL-117	2	
16	LABEL - MANUALS	42-LBL-118	1	
17	LABEL - MAX TOW SPEED	42-LBL-119	1	
18	LABEL - ROTATING DRUM	42-LBL-122	2	
19	LABEL - ENTANGLEMENT	42-LBL-123	3	
20	LABEL - ENTANGLEMENT HAZARD	42-LBL-127	2	
21	LABEL - GASOLINE	42-LBL-134	1	
22	LABEL - BURN HAZARD	42-LBL-135	1	
23	LABEL - BRAKE ADJUST	42-LBL-136	1	
24	LABEL - SPEED ADJUST 5 LAYER	42-LBL-152	1	

Label Location (2 of 2)

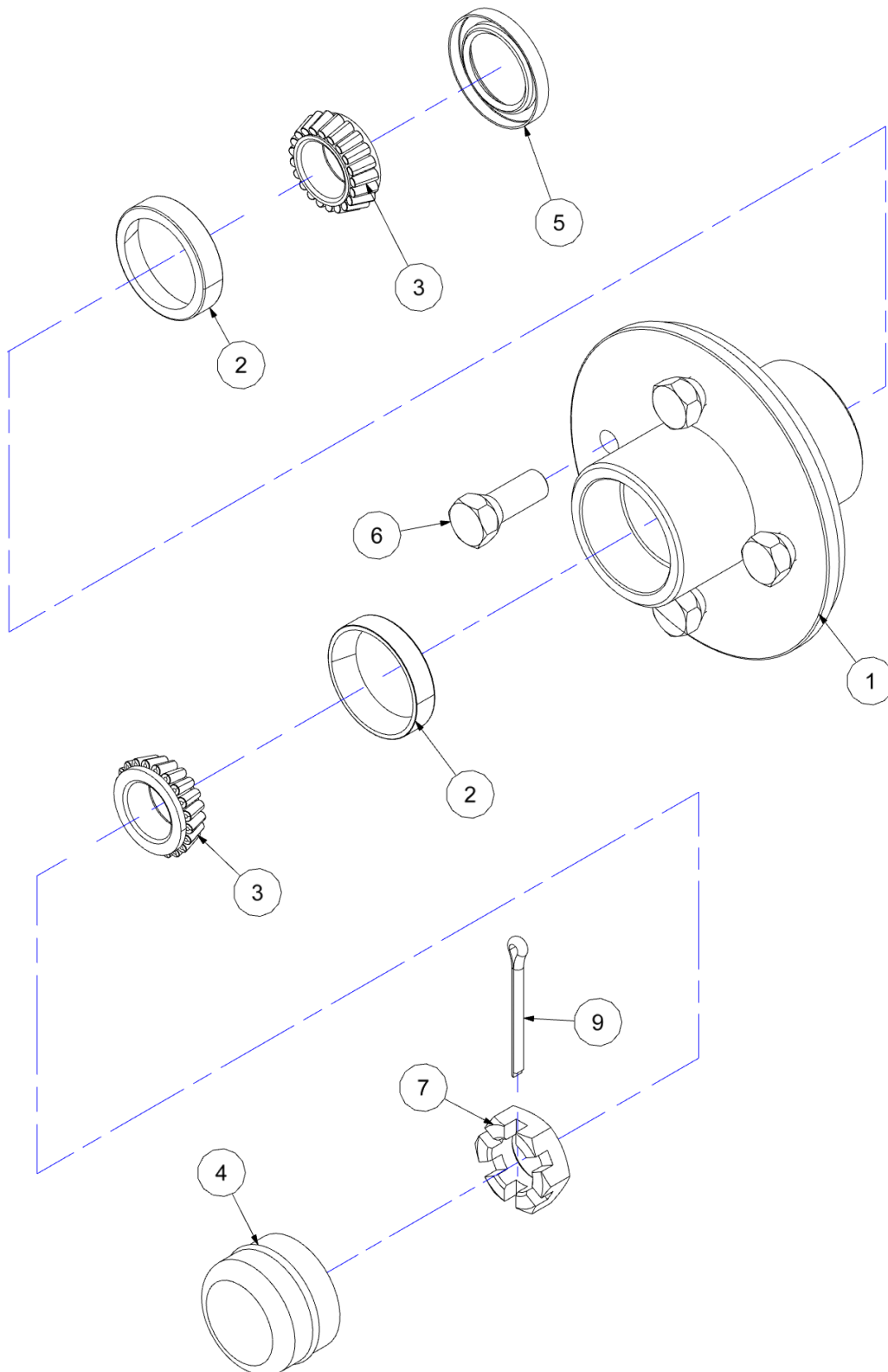




Label Location (2 of 2)

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	LABEL - HIGH PRESS. SPRAY	40-049-A	1	
2	LABEL - INDEXER CONDITION	40-115-A	1	
3	LABEL - DRIVE DISCONNECT	40-151-A	1	
4	LABEL - SPEED CONTROL	40-189-A	1	
5	DRUM DECAL - 3750XL - 5000SILVER	40-307-S	4	
6	DECAL - AMBER REFLECTIVE	40-598	4	
7	DECAL - RED REFLECTIVE	40-599	4	
8	LABEL - MAX HOSE PULL	42-032	1	
9	LABEL - TORQUE WHEELS	42-035	2	
10	LABEL - HIGH PRESS. WATER	42-046-A	1	
11	PANEL DECAL - 3250XL LEFT	42-DCL-3750XLWBL	1	3750XL
↳	PANEL DECAL - 4000SWB LEFT	42-DCL-4000SWBL	1	4000SWB
↳	PANEL DECAL - 4500SWB LEFT	42-DCL4500SWBL	1	4500SWB
12	PANEL DECAL - 3750XL RIGHT	42-DCL-3750XLWBR	1	3750XL
↳	PANEL DECAL - 4000SWB RIGHT	42-DCL-4000SWBR	1	4000SWB
↳	PANEL DECAL - 4500SWB RIGHT	42-DCL4500SWBR	1	4500SWB
13	LABEL - EMERGENCY STOP	42-LBL-002	1	
14	LABEL - GREASE POINT	42-LBL-115	3	
15	LABEL - PINCH HAND HAZARD	42-LBL-117	2	
16	LABEL - MANUALS	42-LBL-118	1	
17	LABEL - MAX TOW SPEED	42-LBL-119	1	
18	LABEL - ROTATING DRUM	42-LBL-122	2	
19	LABEL - ENTANGLEMENT	42-LBL-123	3	
20	LABEL - ENTANGLEMENT HAZARD	42-LBL-127	2	
21	LABEL - GASOLINE	42-LBL-134	1	
22	LABEL - BURN HAZARD	42-LBL-135	1	
23	LABEL - BRAKE ADJUST	42-LBL-136	1	
24	LABEL - SPEED ADJUST 5 LAYER	42-LBL-152	1	

Hub Assembly - 55-002

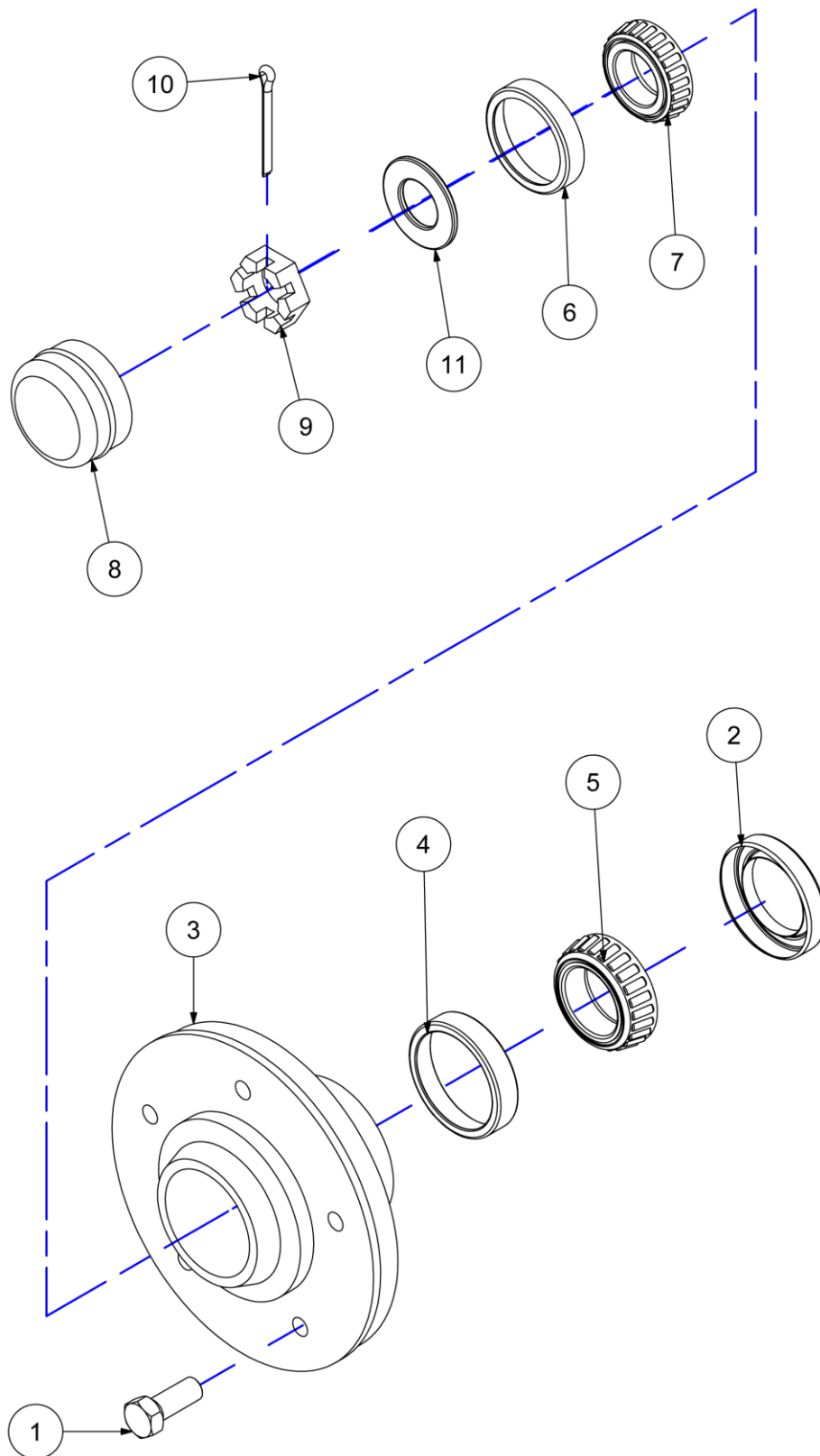




Hub Assembly - 55-002

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	HUB ASSEMBLY	55-002		◆
1	HUB - 1000 HUB	55-002-A	1	
2	BEARING-CUP - 1000 HUB	55-003	2	
3	BEARING-CONE - 1000 HUB	55-004	2	
4	DUST CAP - 1000 HUB	55-005	1	
5	GREASE SEAL - 1000 HUB	55-006	1	
6	WHEEL BOLT - 1/2-20 x 60°	55-007-60	4	
7	NUT SPINDLE - THIN	55-008	1	
8	GREASE - O.G. (WHEEL BEARING)	85-LUB-GRS/OG	AR	
9	COTTER PIN - 3/16 X 2.00	90-PIN-CT019X200	1	

Hub Assembly - 55-018

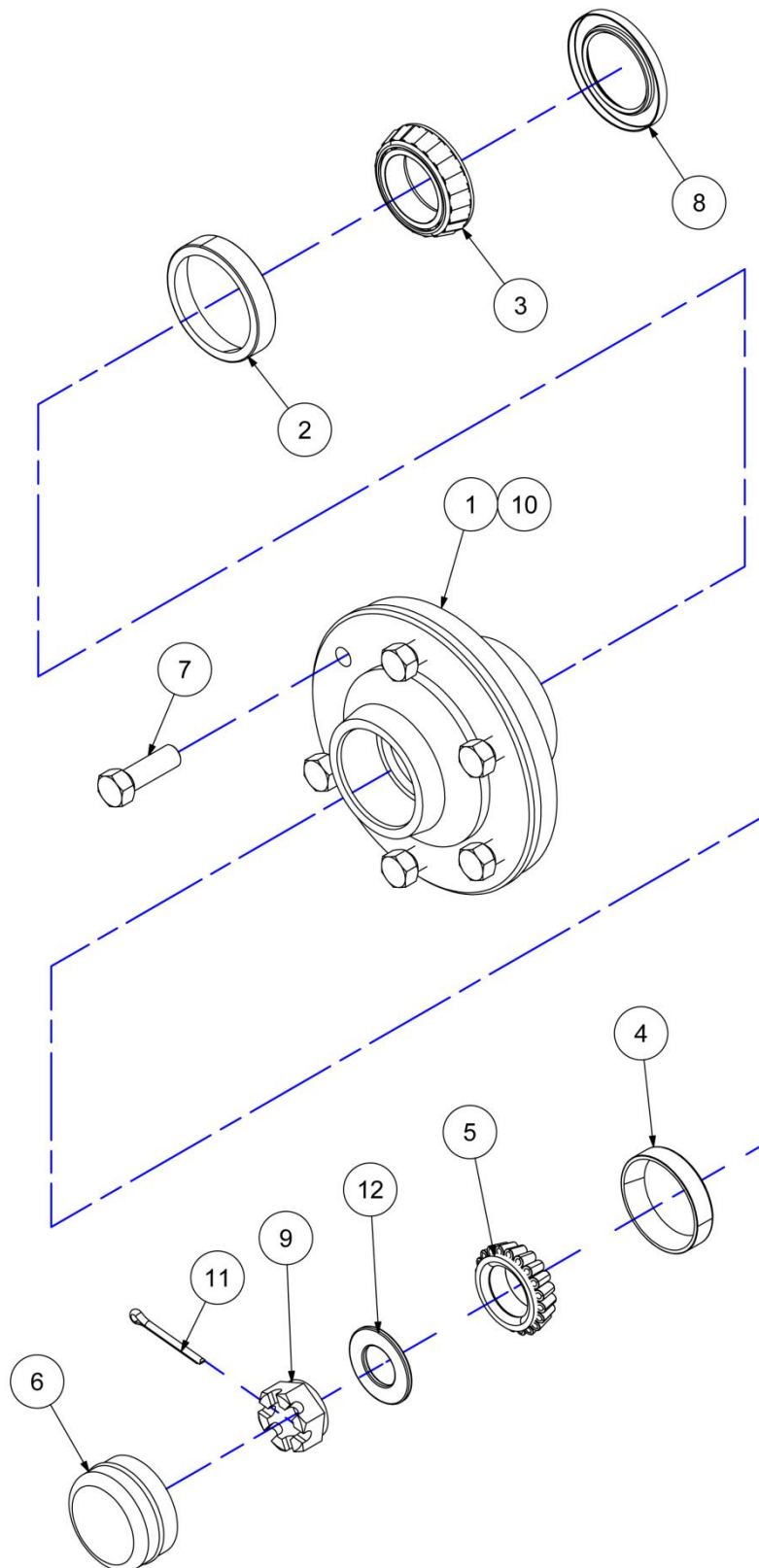




Hub Assembly - 55-018

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	HUB ASSEMBLY	55-018		◆
1	WHEEL BOLT - 1/2-20 X 45°	55-007-45	5	
2	SEAL - GREASE	55-015	1	
3	HUB - 5 BOLT	55-018-A	1	
4	INNER BEARING - CUP	55-019	1	
5	INNER BEARING - CONE	55-020	1	
6	OUTER BEARING - CUP	55-021	1	
7	OUTER BEARING - CONE	55-022	1	
8	CAP - DUST	55-023	1	
9	NUT	55-260	1	
10	COTTER PIN - 3/16 X 2.00	90-PIN-CT019X200	1	
11	WASHER SAE - 1.00	90-WSR-SAE100	1	

Hub Assembly - 55-026

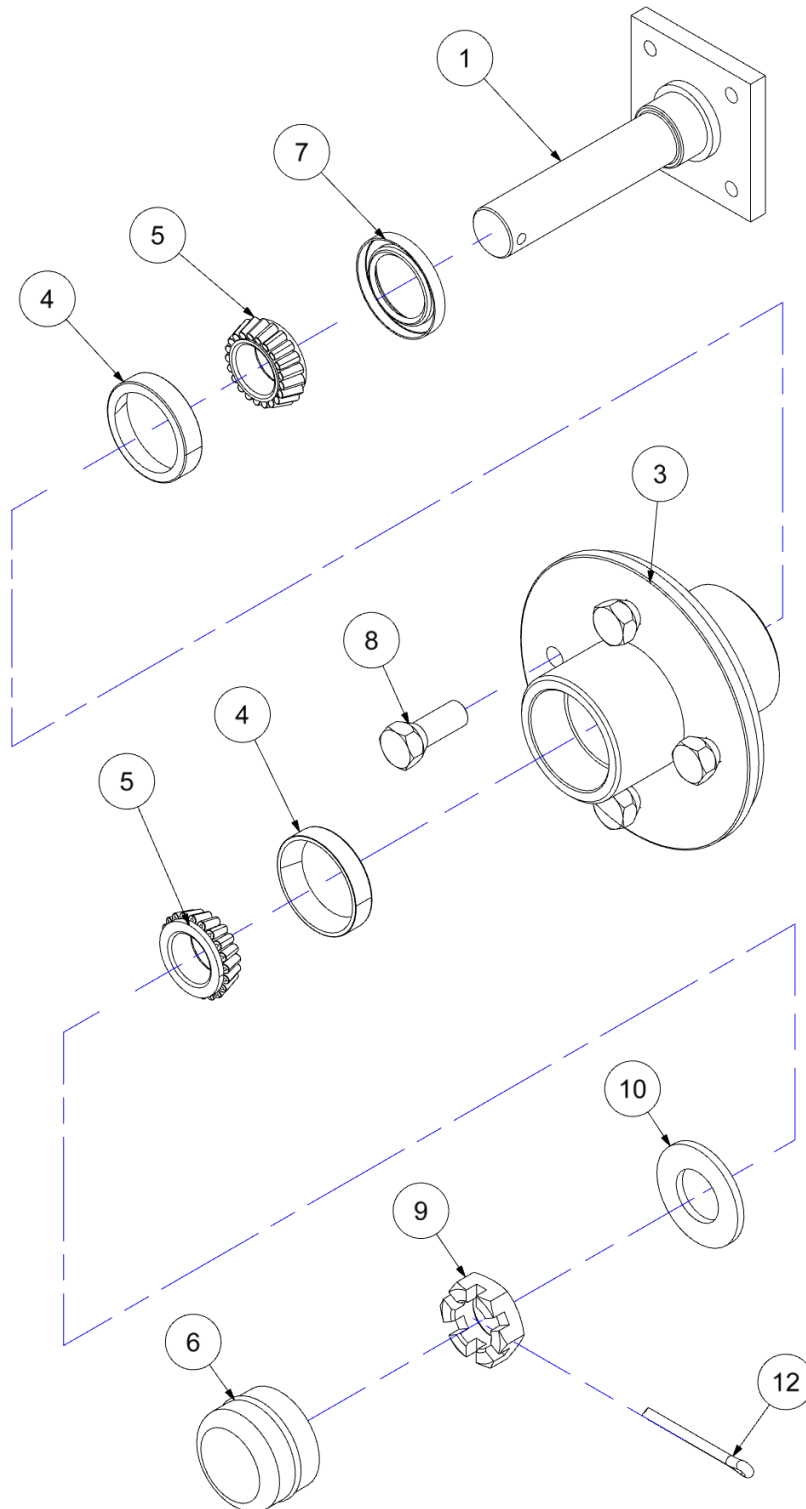




Hub Assembly - 55-026

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	HUB ASSEMBLY	55-026		◆
1	HUB ONLY - 6 BOLT	55-026-A	1	
2	OUTER CUP	55-027	1	
3	INNER CONE	55-028	1	
4	OUTER CUP	55-029	1	
5	INNER CONE	55-030	1	
6	DUST CAP	55-031	1	
7	WHEEL BOLT - 9/16-18	55-032	6	
8	GREASE SEAL	55-033	1	
9	SPINDLE NUT - 100-14	55-034	1	
10	GREASE - O.G. (WHEEL BEARING)	85-LUB-GRS/OG	AR	
11	COTTER PIN - 3/16 X 1 3/4	90-PIN-CT019X175	1	
12	WASHER SAE - 1.00	90-WSR-SAE100	1	

Hub Assembly - 55-237

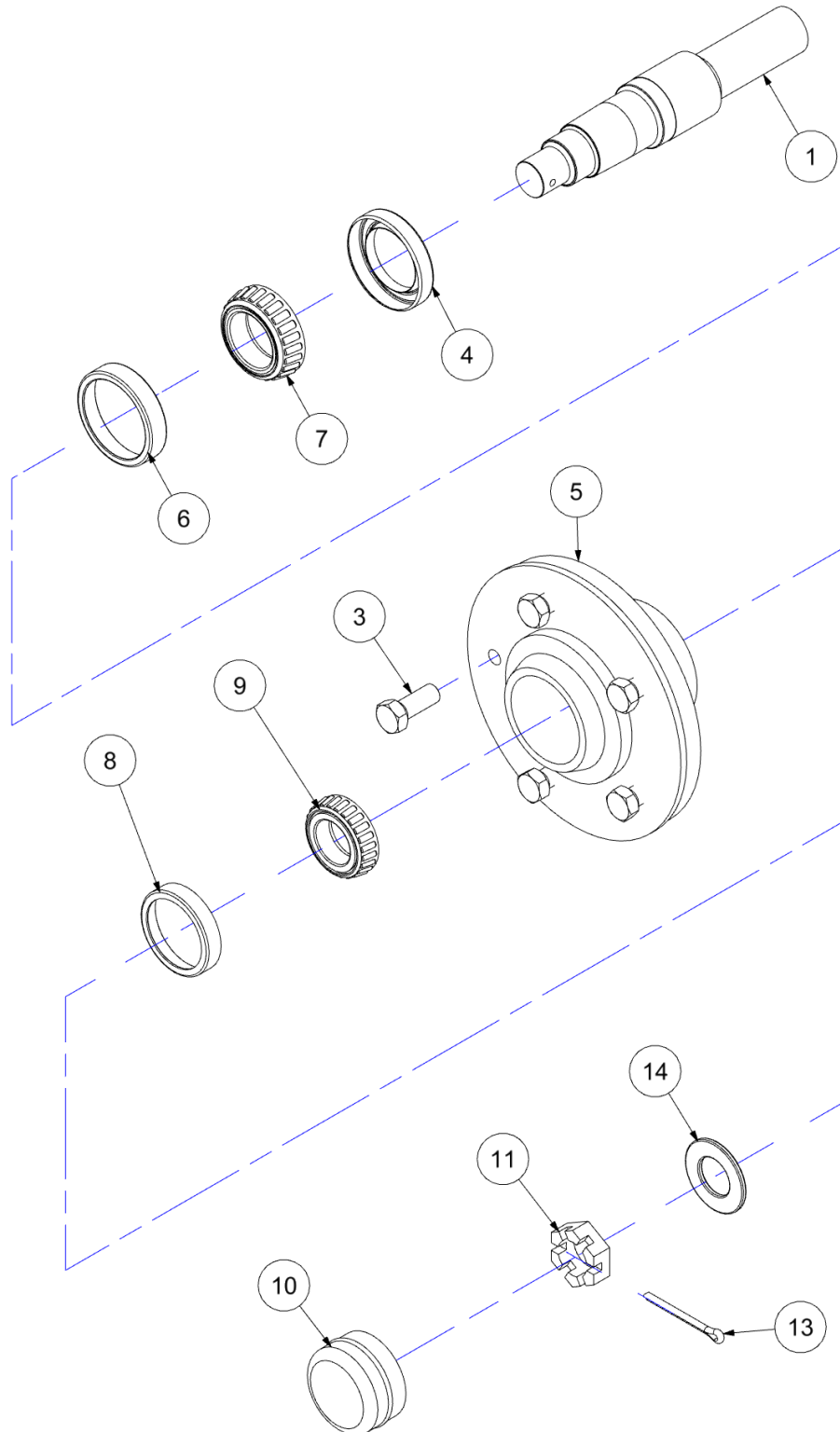




Hub Assembly - 55-237

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	HUB ASSEMBLY - 1000 LBS	55-237		◆
1	FRONT SPINDLE	02-256-A	1	
2	HUB ASSEMBLY - 4 BOLT 1000	55-002	1	
3	HUB - 1000 HUB	55-002-A	1	
4	BEARING-CUP - 1000 HUB	55-003	1	
5	BEARING-CONE - 1000 HUB	55-004	2	
6	DUST CAP - 1000 HUB	55-005	1	
7	GREASE SEAL - 1000 HUB	55-006	1	
8	WHEEL BOLT - 1/2-20 x 60°	55-007-60	4	
9	NUT SPINDLE - THIN	55-008	1	
10	WASHER	55-016	1	
11	GREASE - O.G. (WHEEL BEARING)	85-LUB-GRS/OG	AR	
12	COTTER PIN - 3/16 X 2.00	90-PIN-CT019X200	1	

Hub Assembly - 55-238

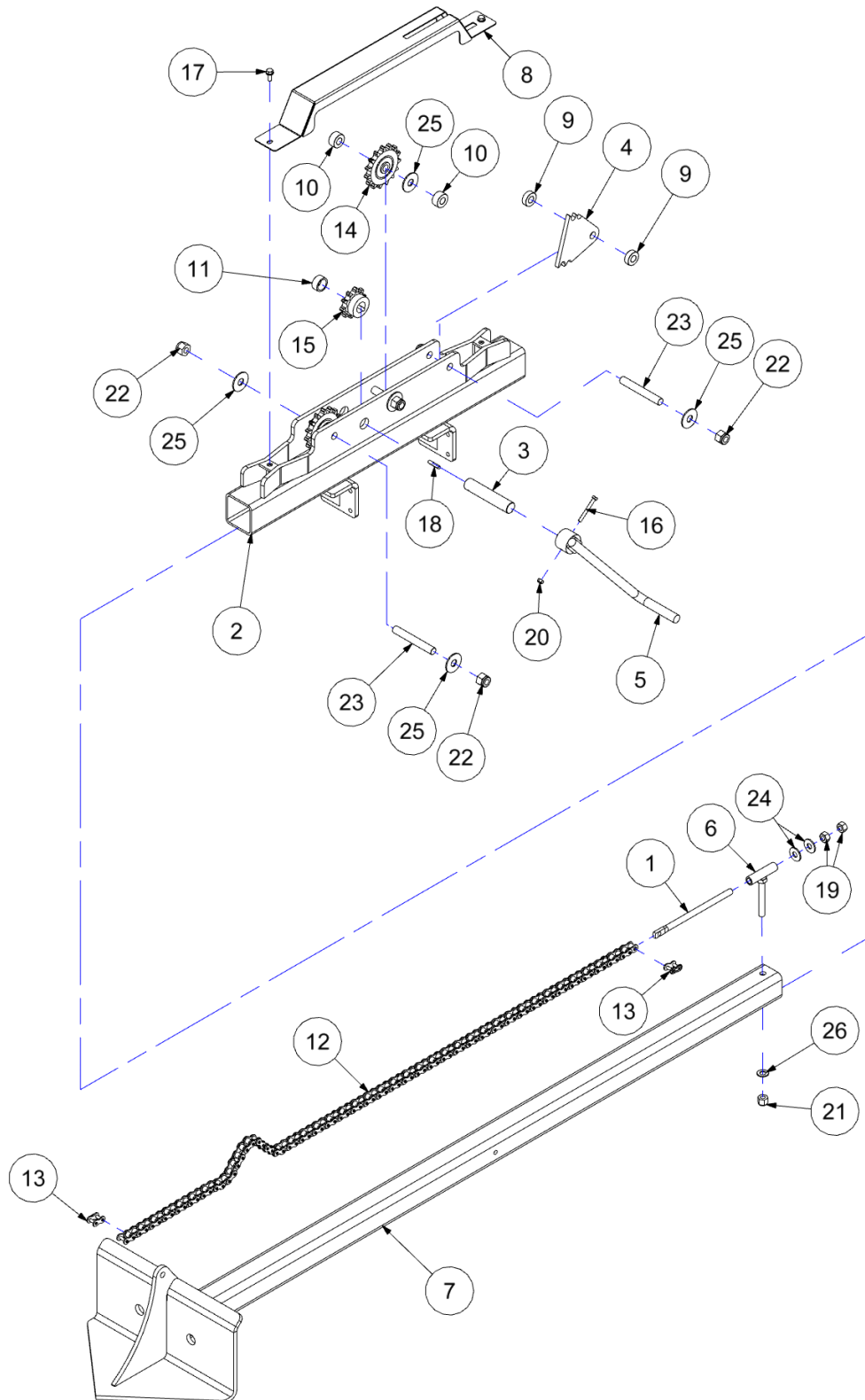




Hub Assembly - 55-238

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	HUB ASSEMBLY - 4500 LBS	55-238		◆
1	SPINDLE - 1 3/4 X 9.00	02-255-C	1	
2	HUB ASSEMBLY - 5 BOLT 4500	50-018	1	
3	WHEEL BOLT - 1/2-20 X 45°	55-007-45	5	
4	SEAL - GREASE	55-015	1	
5	HUB - 5 BOLT	55-018-A	1	
6	INNER BEARING - CUP	55-019	1	
7	INNER BEARING - CONE	55-020	1	
8	OUTER BEARING - CUP	55-021	1	
9	OUTER BEARING - CONE	55-022	1	
10	CAP - DUST	55-023	1	
11	NUT	55-260	1	
12	GREASE - O.G. (WHEEL BEARING)	85-LUB-GRS/OG	AR	
13	COTTER PIN - 3/16 X 2.00	90-PIN-CT019X200	1	
14	WASHER SAE - 1.00	90-WSR-SAE100	1	

Optional Chain Jack Assembly ♦

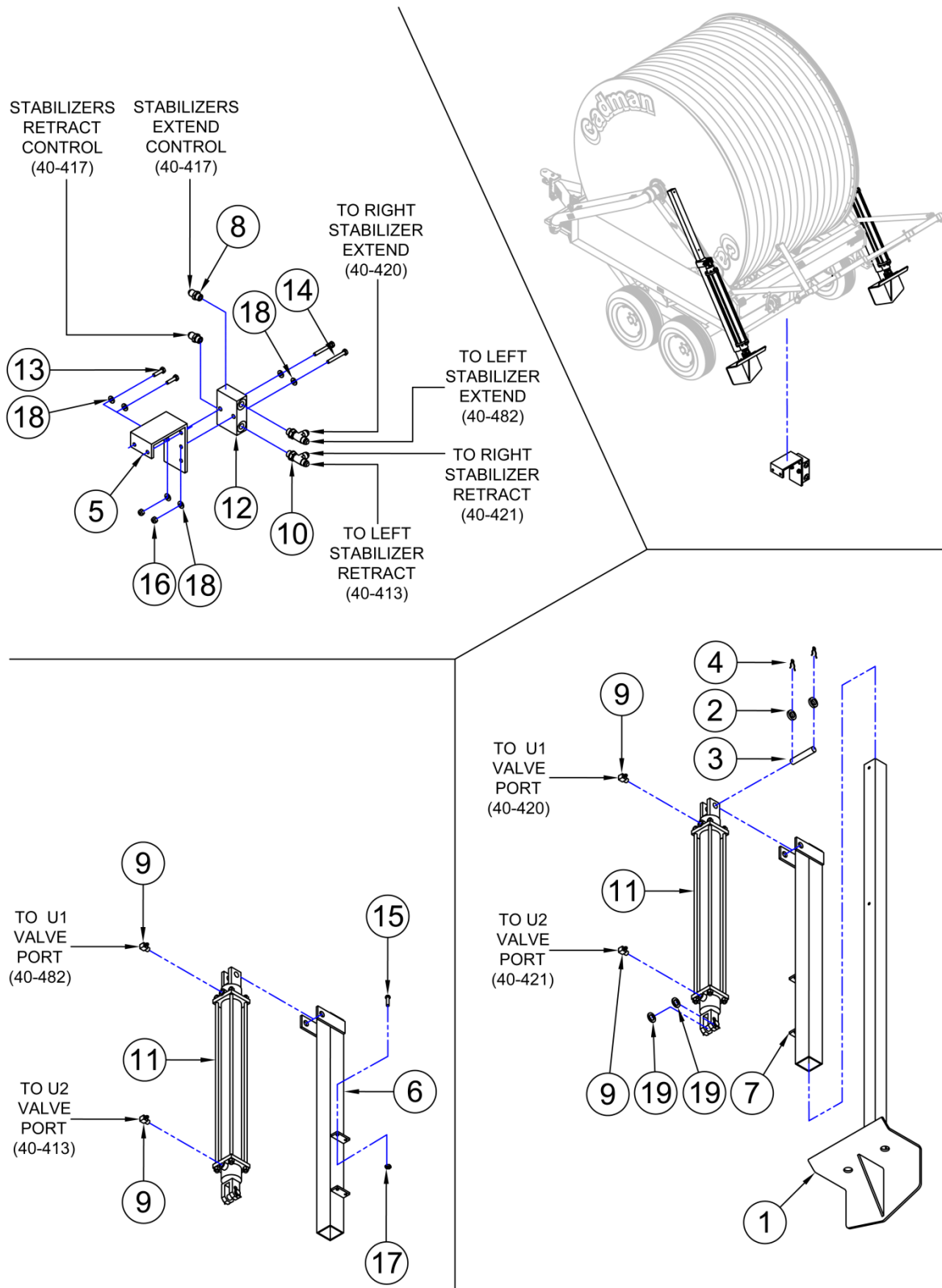




Optional Chain Jack Assembly ◆

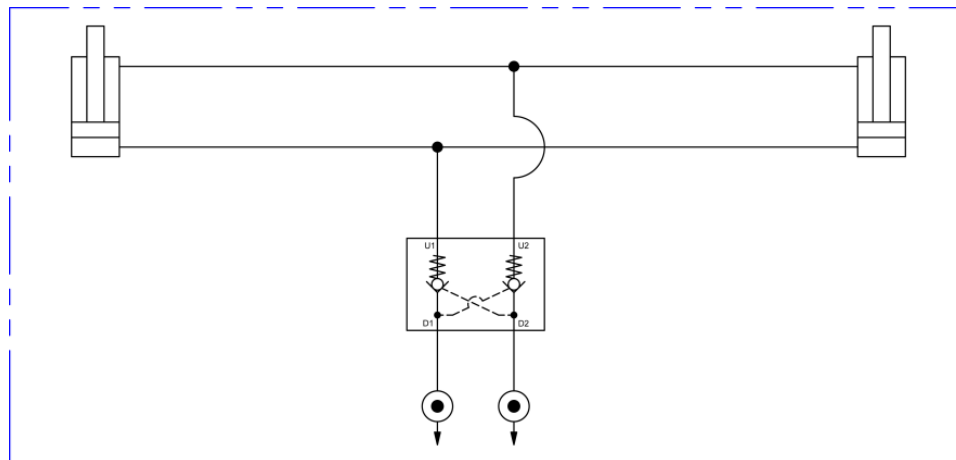
ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	CHAIN JACK OPTION	TR-OPT-CHAINJACKS	1	◆
◆	CHAIN JACK ASSEMBLY	07-825	2	◆
1	SPRING ADJ. ROD - 9 IN. PLATED	06-658-A	1	
2	BODY - CHAIN JACK	07-820	1	
3	JACK SHAFT	07-824	1	
4	CHAIN LOCK	07-826	1	
5	CRANK HANDLE	07-829	1	
6	CHAIN ADJUSTER WELDMENT	07-834	1	
7	STABILIZER LEG WELDMENT	07-836	1	
8	CHAIN GUARD	07-843-A	1	
9	SPACER - 5/8 ID X 1 1/4 OD X 7/16	07-845	3	
10	SPACER - 5/8 ID X 1 1/4 OD X 5/8	07-846	3	
11	SPACER - 1 ID X 1 1/4 OD X 9/16	07-854	1	
12	ROLLER CHAIN - 60 RIVETED	10-CHN-60-1RIV	41	
13	CONNECTING LINK - 60-2	10-LNK-60-CONN	2	
14	SPROCKET - 60-15 IDLER	10-SPT-60-15IDLER	2	
15	SPROCKET - 60B10 X 1.00	10-SPT-60B10X100	1	
16	BOLT - 1/4-20 X 2 1/4	90-BLT-02520X225	1	
17	BOLT FLG - 5/16-18 X 3/4	90-BLT-F03118X075	2	
18	KEY - 1/4 SQ. X 1 1/4 LG	90-KEY-SQ025X125	1	
19	NUT HEX - 1/2-13	90-NUT-HEX050-13	2	
20	NUT LOCK - 1/4-20	90-NUT-LOC025-20	1	
21	NUT LOCK - 1/2-13	90-NUT-LOC050-13	1	
22	NUT LOCK - 5/8-11	90-NUT-LOC063-11	6	
23	THREADED ROD - 5/8-11	90-ROD-06311X0450	3	
24	WASHER FLAT - 1/2	90-WSR-FLT050	2	
25	WASHER FLAT - 5/8	90-WSR-FLT063	8	
26	WASHER SAE - 1/2	90-WSR-SAE050	1	

Optional Hydraulic Jack Assembly ♦

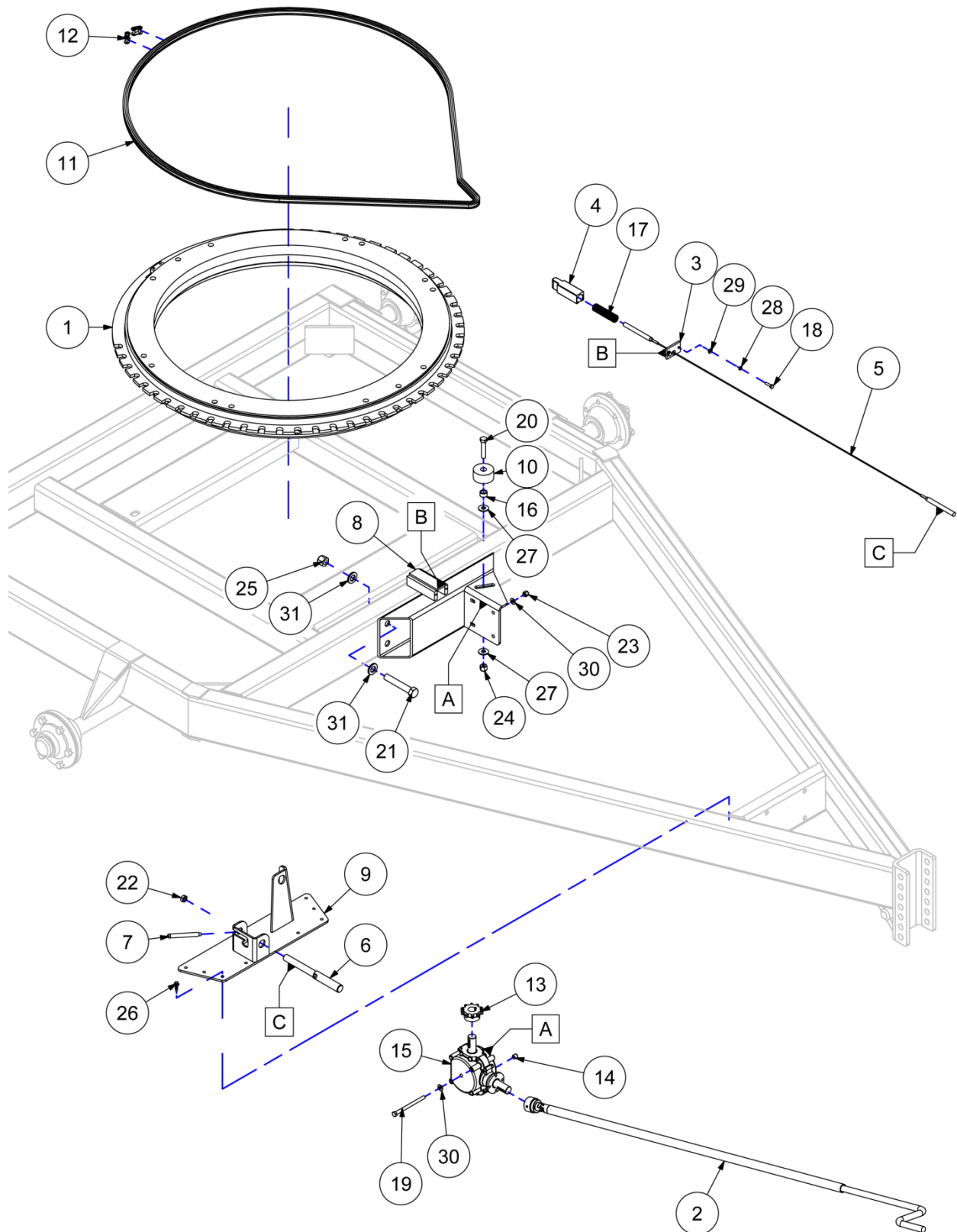


Optional Hydraulic Jack Assembly ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	HYDRAULIC JACK OPTION	TR-OPT-HSJ.C		◆
1	HYDRAULIC JACK FOOT	05-611-B	2	
2	JACK SPACER	05-625	4	
3	STABILIZER JACK PIN	05-628	2	
4	STABILIZER JACK PIN RETAINER	05-628-RP	4	
5	VALVE MOUNT BRACKET	06-689-B	1	
6	LEFT HYDRAULIC JACK BODY	06-693-A	1	
7	RIGHT HYDRAULIC JACK BODY	06-694-A	1	
8	ADAPTER - 06 JICM X 06 SAEM	25-WHD-5315X6	2	
9	ELBOW - 06 JICM X 08 NPTM X 90°	25-WHD-5515X6X8	4	
10	RUN TEE - 6 JICM X 6 SAEM X 6 JICM	25-WHD-5716X6	2	
11	HYD. CYLINDER - 2.50 BORE X 36	40-334-RED	2	
12	PILOT OPERATED CHECK VALVE	40-399-A	1	
	HYDRAULIC HOSE, 3/8" ID X 140" LG	40-413	1	NS
	HYDRAULIC HOSE, 3/8" ID X 216" LG.	40-417	2	NS
	HYDRAULIC HOSE, 3/8" ID X 140" LG.	40-420	1	NS
	HYDRAULIC HOSE, 3/8" ID X 167" LG.	40-421	1	NS
	HD BLACK CABLE TIE - 8 1/2" LG.	40-470	10	NS
	HYDRAULIC HOSE, 3/8" ID X 109" LG.	40-482	1	NS
	HYDRAULIC COUPLER TIP, 1/2"	40-563	2	NS
13	BOLT - 1/4-20 X 1.00	90-BLT-02520X100	2	
14	BOLT - 1/4-20 X 2.00.	90-BLT-02520X200	2	
15	BOLT - 3/8-16 X1 1/2	90-BLT-03816X150	8	
16	NUT LOCK - 1/4-20	90-NUT-LOC025-20	2	
17	NUT LOCK - 3/8-16	90-NUT-LOC038-16	8	
18	WASHER SAE - 1/4	90-WSR-SAE025	6	



Optional Hand Crank Turntable ♦

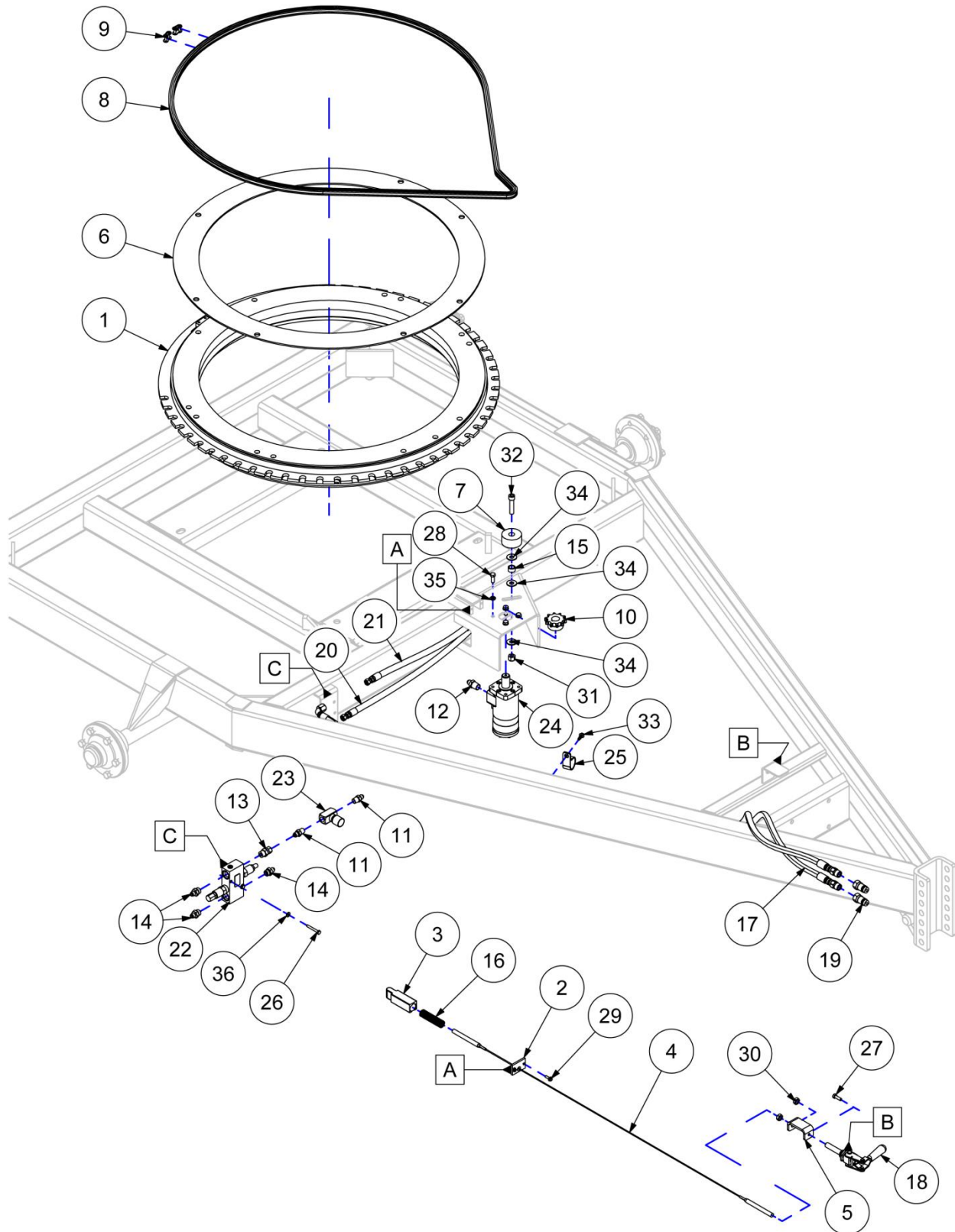




Optional Hand Crank Turntable ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	HAND CRANK TURNTABLE	TR-OPT-4000HCT		◆
1	TURNTABLE WELDMENT	05-612	1	
2	GEARBOX HANDLE	05-613	1	
3	FRONT LOCK COVER	05-619	1	
4	TURNTABLE LOCK PIN	05-620	1	
5	TURNTABLE LOCK CABLE	05-638-A	1	
6	PIN - TURNTABLE LOCK HANDLE	05-658-000	1	
7	HANDLE - TURNTABLE LOCK	05-659-000	1	
8	MOUNT - TT LOCK/GEARBOX	06-ACC-010-A	1	
9	MOUNT - TURNTABLE CRANK	06-ACC-011-A	1	
10	IDLER WHEEL - RUB BLOCK	08-653	1	
11	ROLLER CHAIN - 60 RIVETED 137"	10-CHN-60-1X137	1	
12	CONNECTING LINK - 60-2	10-LNK-60-CONN	2	
13	SPROCKET - 60B10 X 1.00	10-SPT-60B10X100	1	
14	PLUG - 1/4 BSPM SOCKET HEAD	25-WHD-9030TCSP-4	2	
15	RIGHT ANGLE GEARBOX - INDEXER	40-084	1	
16	SPACER - 5/8 ID X 1/2 LG	40-153	1	
17	LOCK SPRING	40-406	1	
18	BOLT - 1/4-20 X 1.00	90-BLT-02520X100	2	
19	BOLT - 3/8-16 X 5.00	90-BLT-03816X500	4	
20	BOLT - 1/2-13 X 2 1/2	90-BLT-05013X250	1	
21	BOLT - 3/4-10 X 4 1/2	90-BLT-07510X450	4	
22	NUT JAM - 1/2-13	90-NUT-JAM050-13	1	
23	NUT LOCK - 3/8-16	90-NUT-LOC038-16	4	
24	NUT LOCK - 1/2-13	90-NUT-LOC050-13	1	
25	NUT LOCK - 3/4-10	90-NUT-LOC075-10	4	
26	TEK SCREW - 5/16 X 1.00	90-SCR-TEK031X100	8	
27	WASHER FLAT - 1/2	90-WSR-FLT050	2	
28	WASHER LOCK - 1/4	90-WSR-LOC025	2	
29	WASHER SAE - 1/4	90-WSR-SAE025	2	
30	WASHER SAE - 3/8	90-WSR-SAE038	8	
31	WASHER SAE - 3/4	90-WSR-SAE075	8	

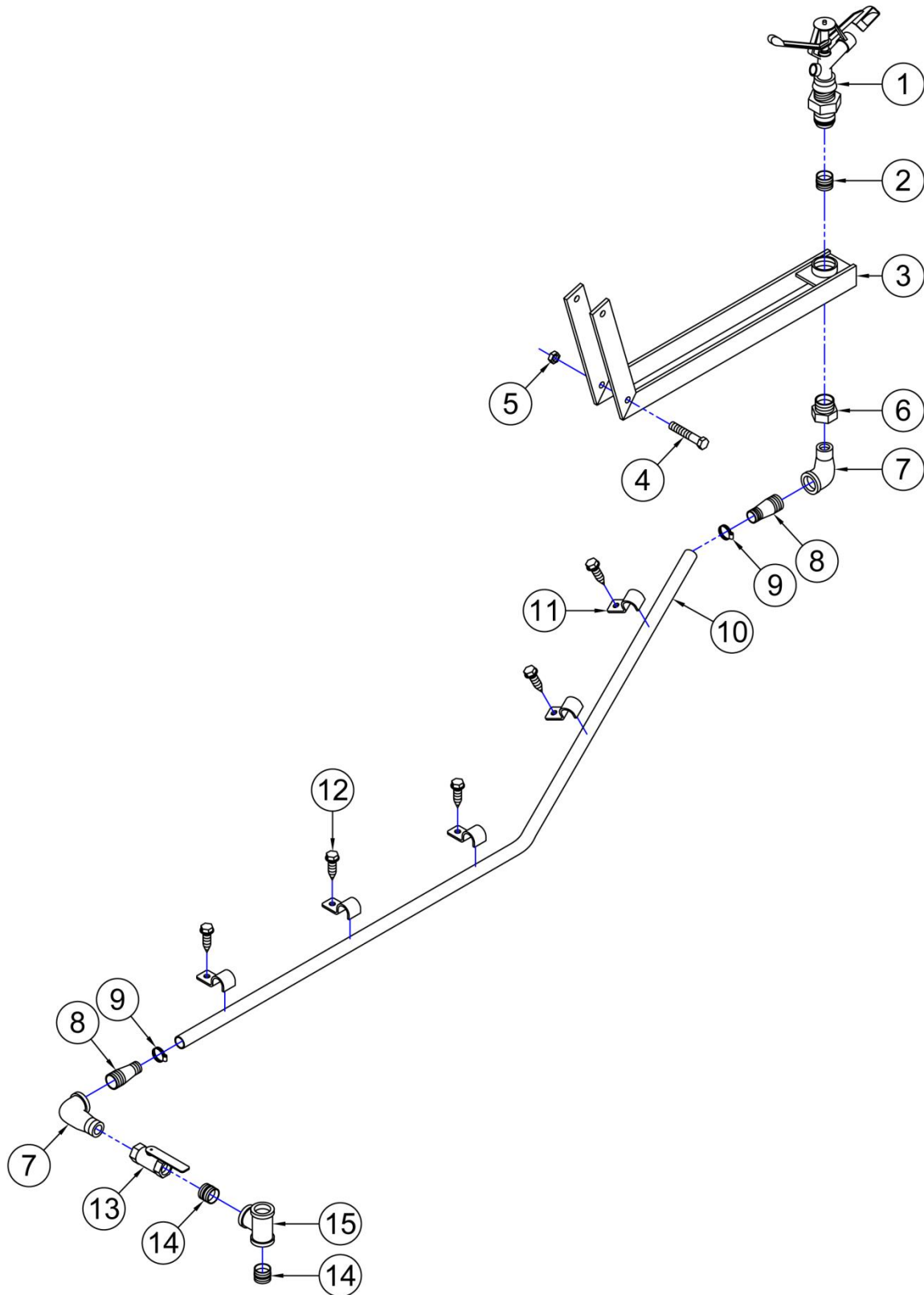
Optional Hydraulic Turntable



Optional Hydraulic Turntable ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	HYDRAULIC TURNTABLE OPTION	TR-TOP-HTT.C	1	◆
1	TURNTABLE WELDMENT	05-612	1	
2	FRONT LOCK COVER 025	05-619	1	
3	TURNTABLE LOCK PIN	05-620	1	
4	TURNTABLE LOCK CABLE	05-638-A	1	
5	CABLE ADJUSTMENT BRACKET	05-753-A	1	
6	TURNTABLE SPACER - PAINTED	06-697	1	
7	IDLER WHEEL - RUB BLOCK	08-653	1	
8	NO. 60 ROLLER CHAIN - 137"	10-CHN-60-1X137	1	
9	CONNECTING LINK - 60-2	10-LNK-60-CONN	2	
10	SPROCKET - 60B10 X 1.00	10-SPT-60B10X100	1	
11	ADAPTER - 06 JICM X 06 NPTM	25-WHD-5205X6X6	2	
12	ADAPTER - 06 JICM X 08 NPTM	25-WHD-5205X6X8	2	
13	ADAPTER - 06 JICF X 08 SAEM	25-WHD-5216X6X8	1	
14	ADAPTER - 06 JICM X 08 SAEM	25-WHD-5315X6X8	3	
15	SPACER - 5/8 ID X 1/2 LG	40-153	1	
16	LOCK SPRING	40-406	1	
17	HYDRAULIC HOSE - 3/8" X 216"	40-417	2	
18	PUSH/PULL CLAMP MODEL 604-SS	40-422	1	
19	HYDRAULIC COUPLER TIP	40-563	2	
20	HYDRAULIC HOSE - 3/8" X 23 1/2"	40-HHZ-0060	1	
21	HYDRAULIC HOSE - 3/8" X 21 1/2"	40-HHZ-0061	1	
22	VALVE - CROSS PORT RELIEF	40-HYD-CRV	1	
23	VALVE - HYDRAULIC NEEDLE	40-HYD-FC	1	
24	HYD. MOTOR - 2 HP	40-HYD-M2.35	1	
25	P-CLAMP - 1 1/2	42-811	3	
26	BOLT - 1/4-20 X 2.00	90-BLT-02520X200	2	
27	BOLT - 5/16-18 X 1.00	90-BLT-03118X100	1	
28	BOLT - 3/8-16 X 1.00	90-BLT-03816X100	4	
29	BOLT FLG - 1/4-20 X 3/4	90-BLT-F02520X075	2	
30	NUT JAM - 1/2-13	90-NUT-JAM050-13	2	
31	NUT LOCK - 1/2-13	90-NUT-LOC050-13	1	
32	SCREW SOCKET - 1/2-13 X 2 1/4	90-SCR-SH05013X225	1	
33	TEK SCREW - 5/16 X 1.00	90-SCR-TEK031X100	3	
34	WASHER FLAT - 1/2	90-WSR-FLT050	3	
35	WASHER LOCK - 3/8	90-WSR-LOC038	4	
36	WASHER SAE - 1/4	90-WSR-SAE025	2	

Optional Sprinkler Kit Assembly ♦

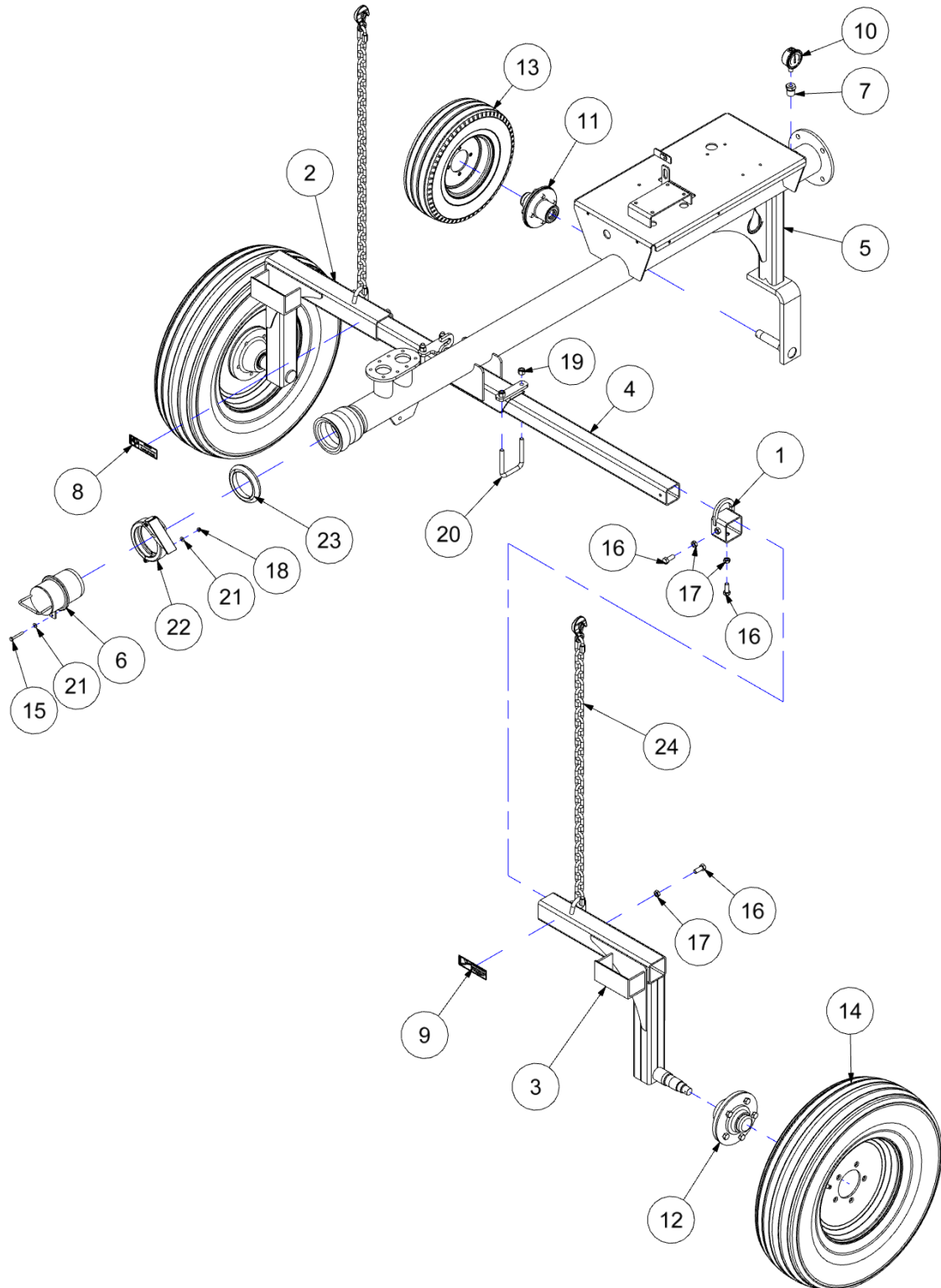




Optional Sprinkler Kit Assembly ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	SPRINKLER MOUNT	06-687-B	1	
2	ADAPTER - 16 BPS-M X 16 NPT-F	15-250-100	1	
3	HOSE BARB - 3/4NPT X 3/4HOSE GAL	40-NPT-BRB075G	2	
4	ELBOW STREET - 3/4 X 90° GALV	40-NPT-ELS075X90G	1	
5	NIPPLE CLOSE - 3/4 NPT GALV	40-NPT-NPLC075G	2	
6	NIPPLE CLOSE - 1.0 NPT GALV	40-NPT-NPLC100G	1	
7	RED. BUSHING - 1 X 3/4 NPT GALV	40-NPT-RB100X075G	1	
8	TEE - 3/4 NPTF GALV	40-NPT-TEE075G	1	
9	BALL VALVE - 3/4 NPTF X NPTF	40-NPT-VLV075BLLFF	1	
10	CLAMP GEAR - HS10 9/16-1-1/16	50-026	2	
11	CLAMP TUBE - 1.00 GALV SINGLE	50-058	5	
13	LOCKNUT - 3/8	90-NUT-LOC038-16	4	
14	TEK SCREW - 1/4 X 1.00	90-SCR-TEK025X100	5	
12	BOLT - 3/8-16 X 3 3/4	90-UBT-SQ05013X400	2	
15	WASHER SAE - 3/8	90-WSR-SAE038	4	
16	SUCTION HOSE- 3/4 X 15' LG.	IR-HOZ-SUC075	1	
17	NOZZLE - 8 mm F43	SP-KOM-040101-80	1	
18	SPRINKLER - KOMET F43	SP-KOM-F43	1	

Optional Broadcast Cart Assembly ◆

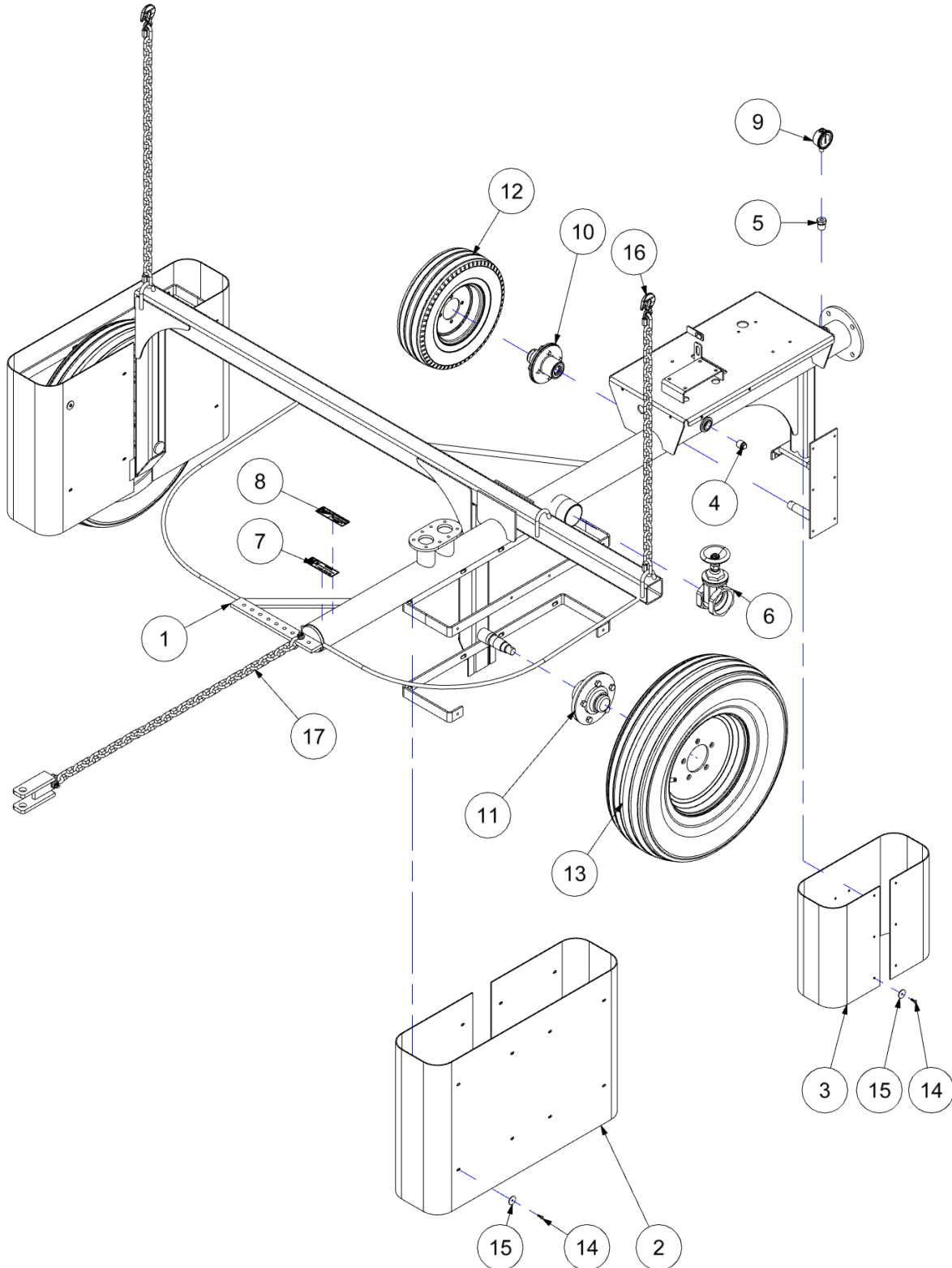




Optional Broadcast Cart Assembly ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	BROADCAST CART ASSEMBLY	TR-CRT-BROADCAST	1	◆
1	PICK UP COLLAR - SHORT GALV.	02-234-G	1	
2	CART LEG - EXTRA LOW L.H.	02-243-L	1	
3	CART LEG - EXTRA LOW R.H.	02-243-R	1	
4	CROSS TUBE - GALVANIZED	04-831-72G	1	
5	BROADCAST CART WELDMENT	14-114	1	
6	COUPLING PLUG WELDMENT	14-115	1	
7	REDUCER - 12 NPTM X 04 NPTF	40-NPT-RB075X025G	1	
8	LABEL - MAX HOSE PULL	42-032	1	
9	LABEL - HIGH PRESS. WATER	42-046-A	1	
10	GAUGE - 0-160 PSI WET	45-017	1	
11	HUB ASS'Y - 4 BOLT	55-002	1	PAGE 82
12	HUB ASS'Y - 5 BOLT	55-018	2	PAGE 84
13	WHEEL ASS'Y - 4 BOLT RIM GALV.	55-036-G	1	
14	WHEEL ASS'Y - 670-15 GALVANIZED	55-041-G	2	
15	BOLT - 1/4-20 X 2.00	90-BLT-02520X200	1	
16	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	6	
17	NUT JAM - 1/2-13	90-NUT-JAM050-13	6	
18	NUT LOCK - 1/4-20	90-NUT-LOC025-20	1	
19	NUT LOCK - 1/2-13	90-NUT-LOC050-13	4	
20	U-BOLT SQ - 1/2-13 X 3.00 X 4.00	90-UBT-SQ05013X400	2	
21	WASHER SAE - 1/4	90-WSR-SAE025	2	
22	CLAMP - 4.00 RINGLOCK	IR-FCL-4	1	
23	GASKET - 4.00 PIERCE	IR-GKT-PIERCE4	1	
24	CART LIFT CHAIN - 25 LINK	TR-CHN-25L	2	

Optional Ginseng Cart Assembly ♦

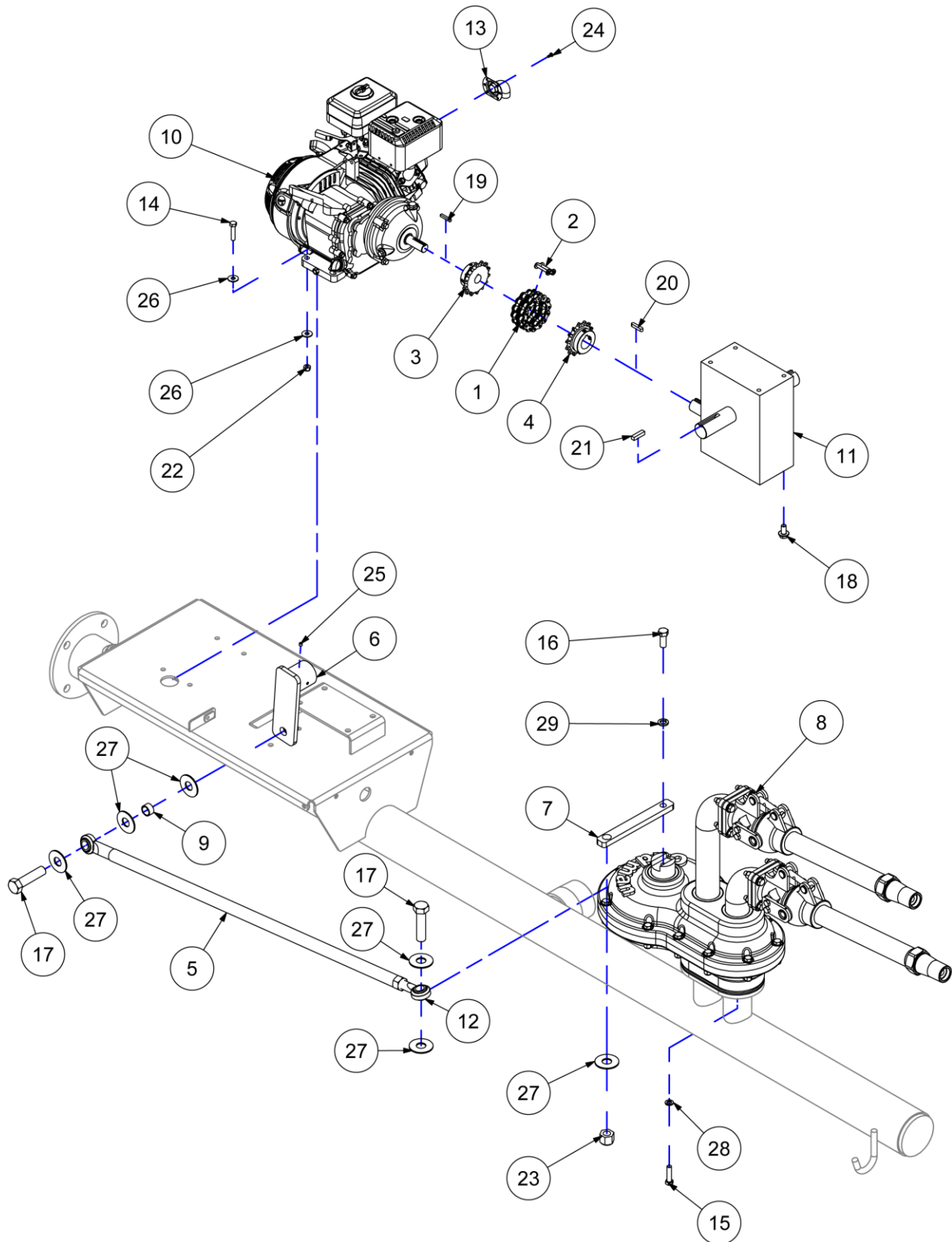




Optional Ginseng Cart Assembly ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	GINSENG CART ASSEMBLY	TR-CRT-GINSENG	1	◆
1	CART BODY WELDMENT - GINSENG	14-101-A	1	
2	WHEEL COVER - REAR	14-235-A	2	
3	WHEEL COVER - FRONT	14-236-A	1	
4	PLUG - 3/4 NPT GALV.	40-NPT-PLG075G	1	
5	REDUCER - 12 NPTM X 04 NPTF	40-NPT-RB075X025G	1	
6	GATE VALVE - 3.00	40-NPT-VLV300GATFF	1	
7	LABEL - MAX HOSE PULL	42-032	1	
8	LABEL - HIGH PRESS. WATER	42-046-A	1	
9	GAUGE - 0-160 PSI WET	45-017	1	
10	HUB ASS'Y - 4 BOLT	55-002	1	PAGE 82
11	HUB ASS'Y - 5 BOLT	55-018	2	PAGE 84
12	WHEEL ASS'Y - 4 BOLT RIM GALV	55-036-G	1	
13	WHEEL ASS'Y - 670-15 GALVANIZED	55-041-G	2	
14	SCREW BUTTON - 1/2-20 X 3/4	90-SCR-BH02520X075	40	
15	WASHER FENDER - 1/4	90-WSR-FEN025	40	
16	CART LIFT CHAIN - 25 LINK	TR-CHN-25L	2	
17	CART TOW CHAIN ASSEMBLY	TR-CRT-TOWCHAIN	1	

Broadcast/Ginseng Cart Drive

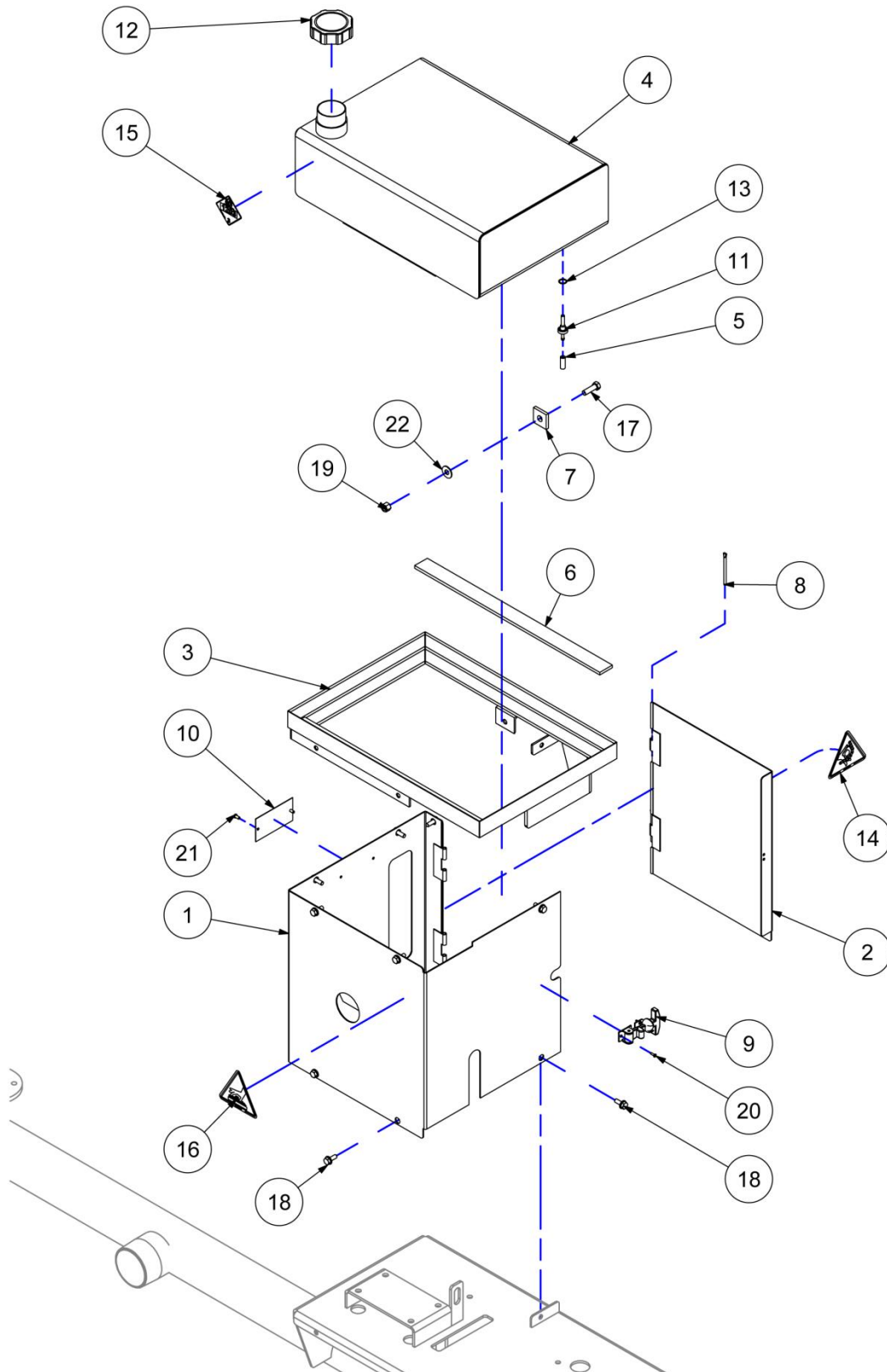




Broadcast/Ginseng Cart Drive

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	ROLLER CHAIN - 50 - 2 RIVETED	10-CHN-50-2RIV	1	
2	CONNECTING LINK - 50 -2	10-LNK-50-2CONN	1	
3	SPROCKET - 50B14 X 3/4" BORE	10-SPT-50B14X075	1	
4	SPROCKET - 50B14 X 1 1/8" BORE	10-SPT-50B14X113	1	
5	DRIVE LINK WELDMENT	14-105	1	
6	GEARBOX ARM WELDMENT	14-108	1	
7	ARM - GUN BLOCK	14-240	1	
8	BROADCAST SPRINKLER ASSEMBLY	20-000	1	PAGE 110
9	SPACER - 3/4 ID X 1/2 LG.	40-110	1	
10	ENGINE - GX120 w/6:1 GEARBOX	40-159-A	1	
11	GEARBOX REDUCER - C80-D50	40-486	1	
12	ROD END - 3/4-16 MALE THREAD	40-488	1	
13	EXHAUST DEFLECTOR - GX-120/160	40-HDA-18340ZE1000	1	
14	BOLT - 5/16-18 X 1 1/2	90-BLT-03118X150	4	
15	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	8	
16	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	1	
17	BOLT - 3/4-10 X 3.00	90-BLT-07510X300	2	
18	BOLT FLG - M10X1.50 X 20mm	90-BLT-FM10150X020	4	
19	KEY - 3/16" SQUARE X 1 1/8	90-KEY-SQ019X113	1	
20	KEY - 1/4 SQ. X 1 1/4 LG	90-KEY-SQ025X125	1	
21	KEY - 5/16 SQ. X 1 3/8	90-KEY-SQ031X125	1	
22	NUT LOCK - 5/16-18	90-NUT-LOC031-18	4	
23	NUT LOCK - 3/4-10	90-NUT-LOC075-10	2	
24	MACH. SCREW PAN - 08-32 X 3/8	90-SCR-PH8X038	2	
25	SET SCREW - 1/4-20 X 1/4 LG	90-SCR-ST02520X025	2	
26	WASHER FLAT - 5/16	90-WSR-FLT031	8	
27	WASHER FLAT - 3/4"	90-WSR-FLT075	6	
28	WASHER LOCK - 3/8	90-WSR-LOC038	8	
29	WASHER LOCK - 1/2	90-WSR-LOC050	1	

Broadcast/Ginseng Shroud Assembly

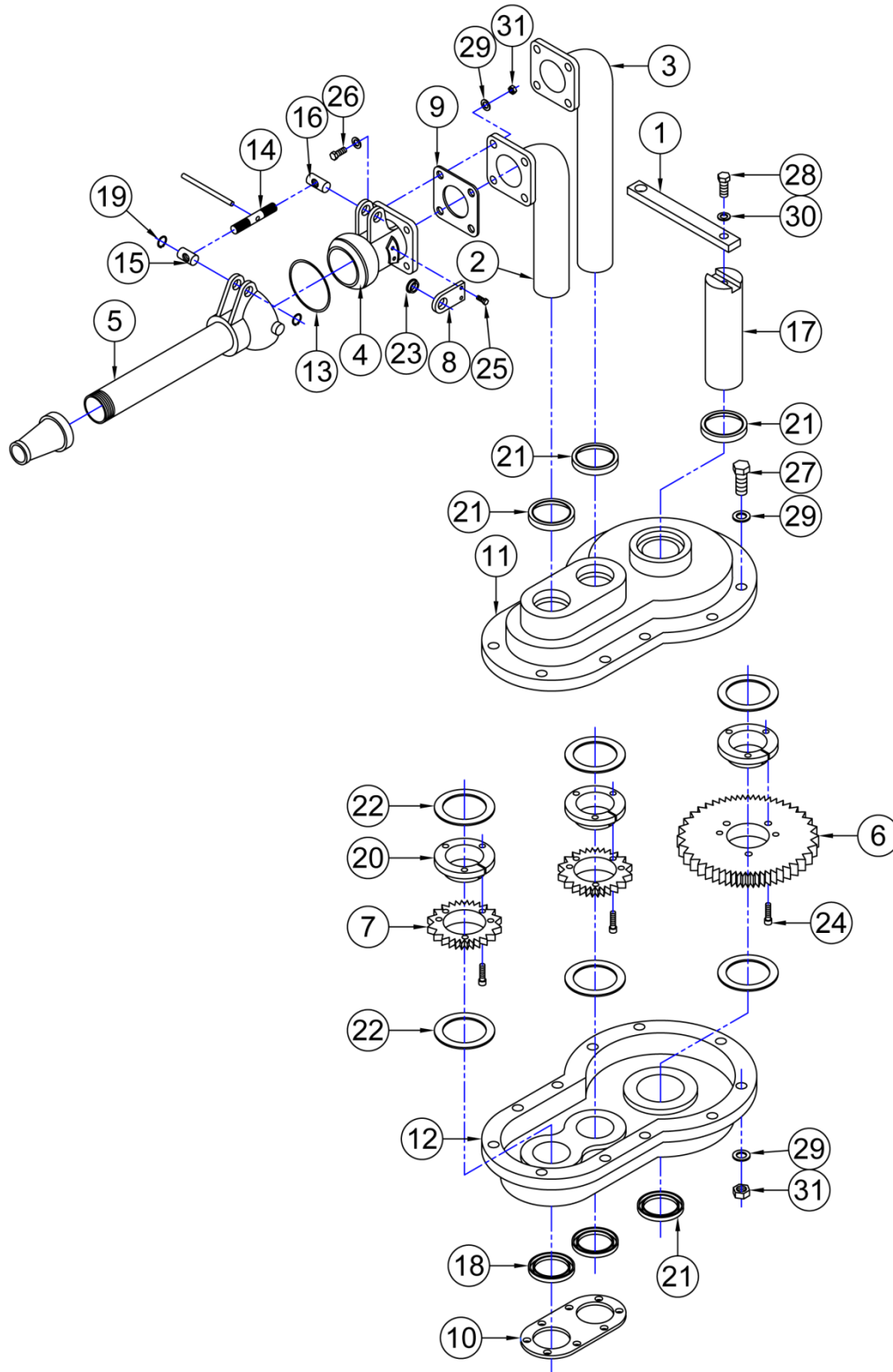




Broadcast/Ginseng Shroud Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	GEARBOX HOUSING WELDMENT	14-102	1	
2	DOOR WELD'T - GEARBOX HOUSING	14-103-A	1	
3	FUEL TANK CRADLE WELDMENT	14-104	1	
4	FUEL TANK - 5 GAL. ALUMINUM	40-017	1	
5	FUEL LINE - 1/4 NEOPRENE	40-066	16	
6	ROUGH TOP BELT - 1 3/8 IN. X 20"	40-093-20	2	
7	VIBRATION ISOLATOR	40-095	1	
8	HINGE PIN - 3/16 X 3.00 BRASS	40-200-C	2	
9	RUBBER LATCH KIT	40-217	1	
10	CADMAN SERIAL NUMBER TAG	40-238-B	1	
11	FUEL STRAINER - SALVAGED	40-HDA-16955ZE1000	1	
12	VENTED GAS CAP	40-HDA-17620Z4H900	1	
13	O RING SALVAGE HONDA GX 120	40-HDA-91353671004	1	
14	LABEL - ENTANGLEMENT HAZARD	42-LBL-127	1	
15	LABEL - GASOLINE	42-LBL-134	1	
16	LABEL - BURN HAZARD	42-LBL-135	1	
17	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	1	
18	BOLT FLG - 5/16-18 X 3/4	90-BLT-F03118X075	12	
19	NUT LOCK - 3/8-16	90-NUT-LOC038-16	1	
20	RIVET - 1/8 X 3/8 LG.	90-RIV-013X038	4	
21	RIVET - 3/16 X 3/8	90-RIV-019X038	2	
22	WASHER FLAT - 3/8	90-WSR-FLT038	1	

Broadcast/Ginseng Gearbox Assembly

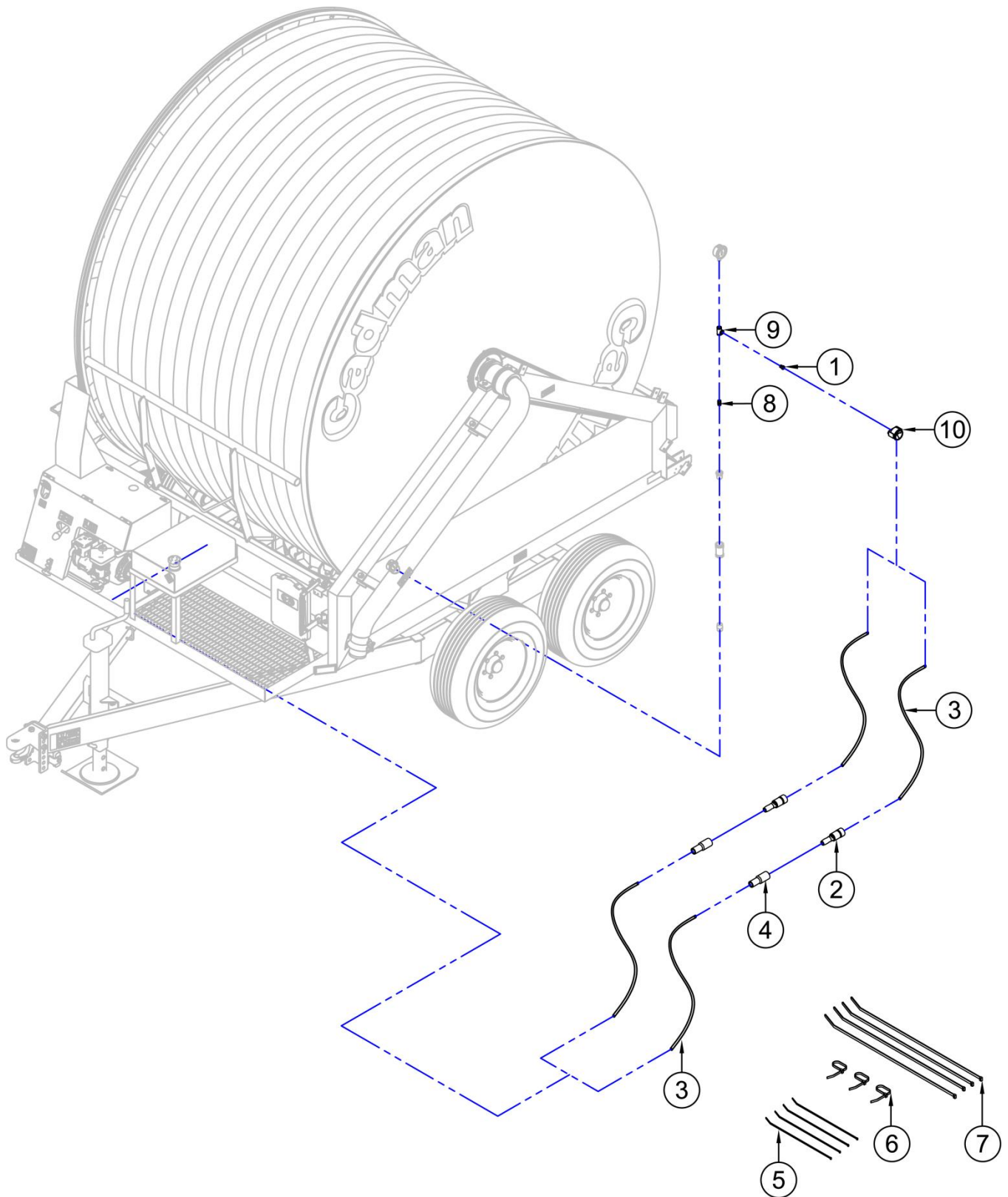




Broadcast/Ginseng Gearbox Assembly

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	SHORT INLET	20-002-A	1	
2	LONG INLET	20-003-A	1	
3	GUN BALL	20-004	2	
4	RANGE TUBE WELDMENT	20-005	2	
5	CROWN GEAR	20-006	1	
6	PINION GEAR	20-007	2	
7	PIVOT ARM	20-008	4	
8	FLANGE GASKET - VITON	20-009-V	2	
9	GUN GASKET - VITON	20-010-V	1	
10	GEAR CASE - TOP	20-011	1	
11	GEAR CASE - BOTTOM	20-012	1	
12	O-RING, 2 3/4" ID X 0.135" - VITON	20-013-V	2	
13	ADJUSTING ROD	20-014	2	
14	PIVOT, RIGHT-HAND THREAD	20-015	2	
15	PIVOT, LEFT-HAND THREAD	20-016	2	
16	SHAFT	20-017	1	
17	INLET SEAL - 2.00	20-018	2	
18	EXTERNAL RETAINING RING, 5/8" SS	20-019	8	
19	ARBOR SHIM, 2 ID X 2 3/4 OD X 0.015"	20-020	6	
20	TAPER BUSHING - 2.00 SDS	40-467	3	
21	SHAFT SEAL - 2.00	40-468	4	
22	BOLT - 5/16-18 X 3/4	90-BLT-03118X075	8	
23	BOLT - 3/8-16 X 1 3/4	90-BLT-03816X175	8	
24	BOLT - 3/8-16 X 2.00	90-BLT-03816X200	11	
25	NUT LOCK - 3/8-16	90-NUT-LOC038-16	19	
26	SCREW SOCKET - 1/4-20 X 1 1/2	90-SCR-SHO2520X150	9	
27	MACH. BUSHING - 2.00 X 14 GA	90-WSR-M51	6	
28	SAE WASHER, 3/8"	90-WSR-SAE038	30	
29	NOZZLE - NELSON 100T 0.50 TAPER	SP-NEL-9309-050	2	
30	ROTATION BUSHING	SP-NEL-9993	4	

Optional Murphy Gauge Assembly ♦

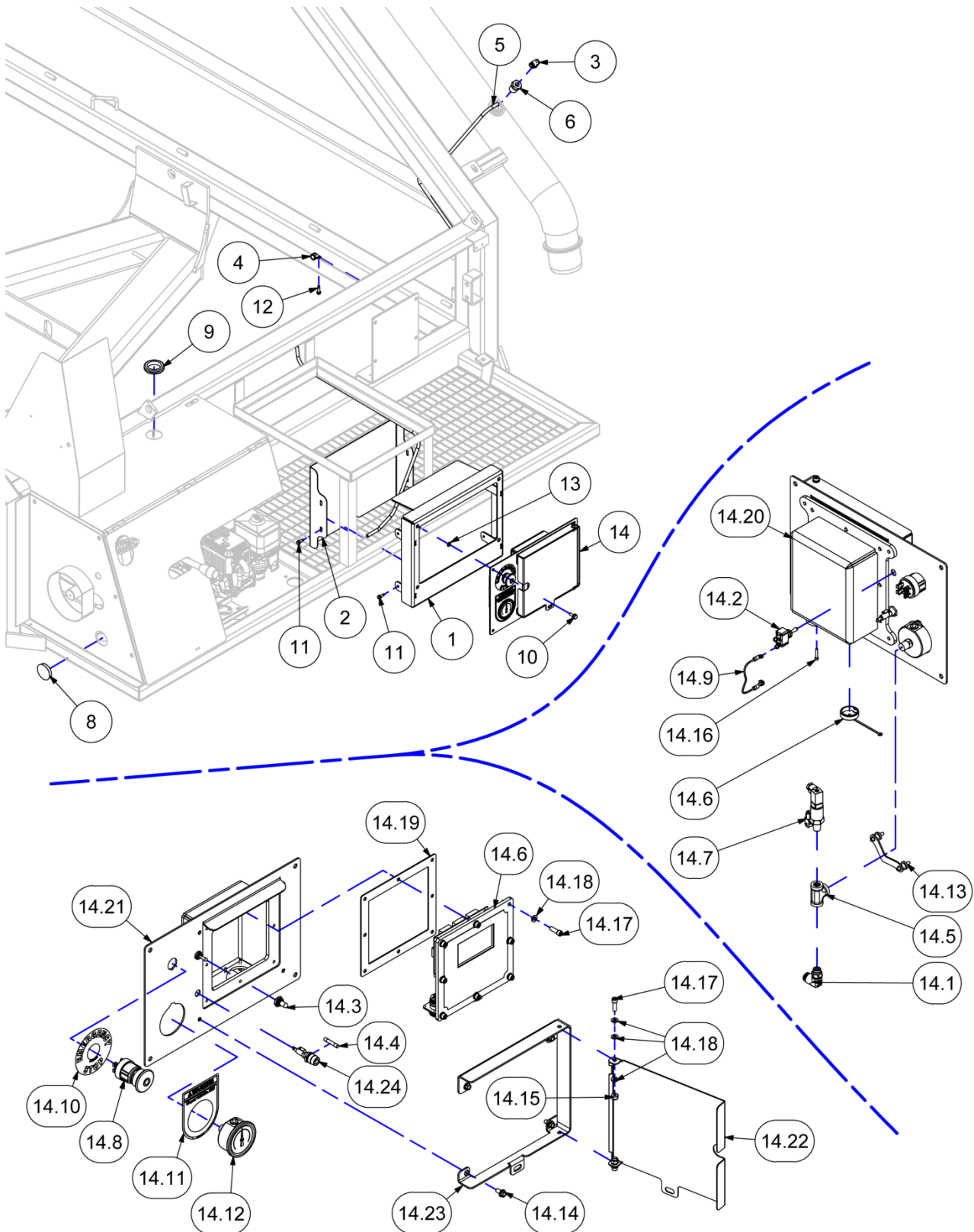




Optional Murphy Gauge Assembly ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	MURPHY PRESSURE GAUGE KIT	TR-KIT-20P7-150_4000		◆
1	RED. BUSHING - 4 NPTM X 2 NPTM	25-WHD-3220X4X2	1	
2	MALE BULLET CONNECTOR, BLUE	40-070	2	
3	CABLE - 16/2 LOW TENSION X 10' LG.	40-147-FT	1	
4	FEMALE BULLET CONNECTOR, BLUE	40-247	1	
5	BLACK CABLE TIE - 4" LG.	40-391	6	
6	BLACK 50 LB CABLE TIE - 7" LG.	40-424	2	
7	BLACK CABLE TIE - 14" LG.	40-425	2	
8	NIPPLE CLOSE - 1/4 NPT GALV.	40-NPT-NPLC025G	1	
9	TEE - 1/4 NPT GALV	40-NPT-TEE025G	1	
10	MURPHY 20-P7 0-150 PSI GAUGE	IR-MPY-20-P7_150	1	

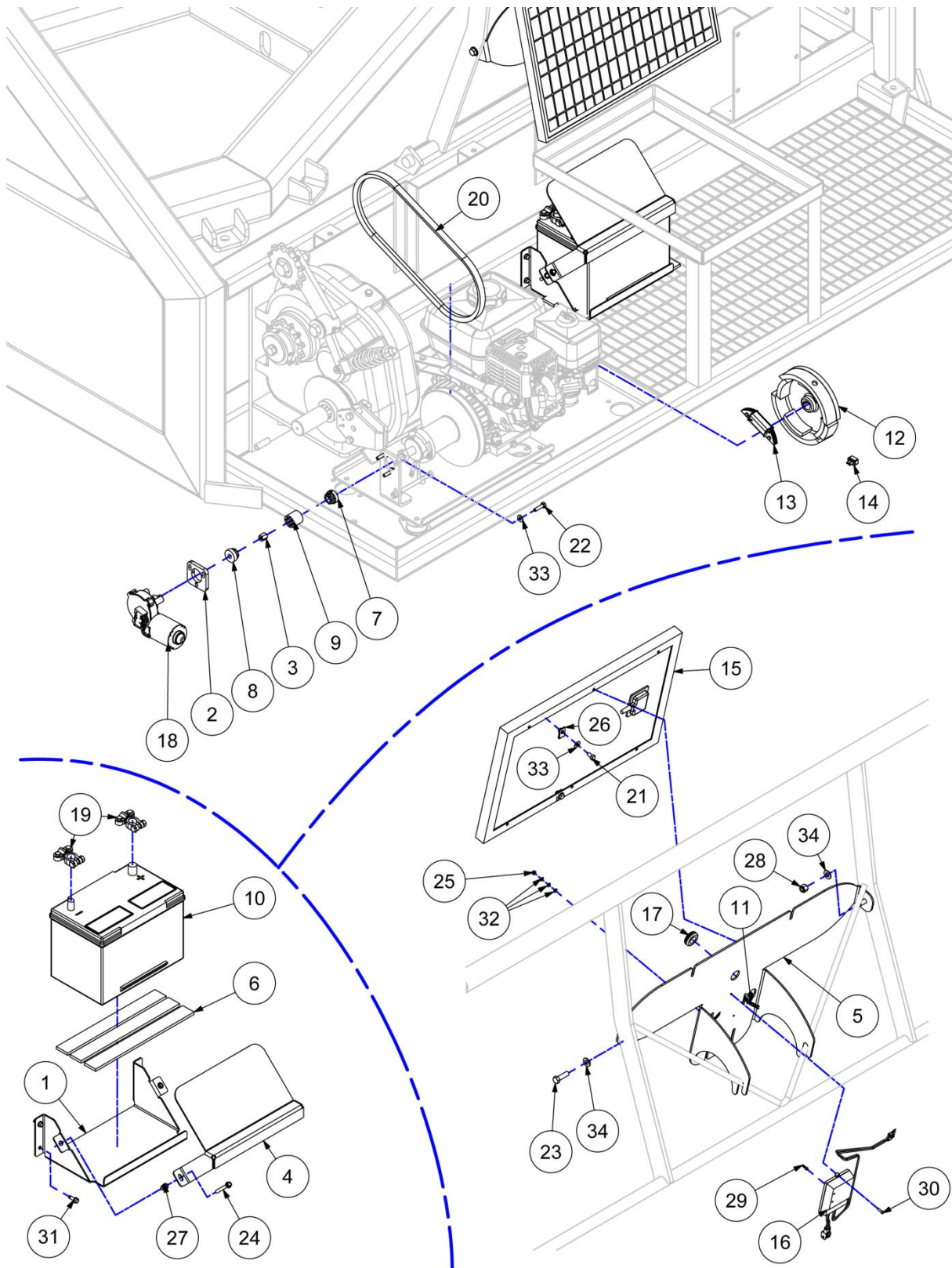
Optional i-Water™ Control (1 of 3) ◆



Optional i-Water™ Control (1 of 3) ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	i-WATER™ ASSEMBLY - 4000 SERIES	TR-OPT-IWATER4000	1	◆
1	MOUNT PANEL - I-WATER™	06-610-000-C	1	
2	SHIELD - I-WATER REAR	06-642-000	1	
3	ELBOW - 06 TUBE X 04 NPTM X 90°	25-HYD-87110-06-04	1	
4	P-CLAMP - 5/8	40-416	6	
5	HOSE - 3/8 BLACK POLYETHYLENE	40-HHZ-0167	1	
6	REDUCER - 12 NPTM X 04 NPTF	40-NPT-RB075X025G	1	
7	HARNESS - I-WATER CONTROL	42-274-A	1	NS
8	PANEL PLUG - 2.00 BLACK	42-283	1	
9	GROMMET - 1 1/2ID X 2 3/8OD X3/8	42-589	1	
10	BOLT FLG - 5/16-18 X 3/4	90-BLT-F03118X075	4	
11	SCREW TEK - 1/4 X 3/4	90-SCR-TEK025X075	8	
12	TEK SCREW - 1/4 X 1.00	90-SCR-TEK025X100	6	
13	WASHER FLAT - 5/16" NYLON	90-WSR-FLT031NYLON	4	
14	iWATER™ ASSEMBLY	TR-ASY-IWATER-B	1	◆
14.1	ELBOW - 06 TUBE X 04 NPTM X 90°	25-HYD-87110-06-04	1	
14.2	SWITCH - 15AMP 110V	40-260	1	
14.3	BOOT - SWITCH SEAL	40-261	1	
14.4	FUSE - 15 AMP - AGC-15	40-426	1	
14.5	TEE - 1/4 NPT GALVANIZED	40-NPT-TEE025G	1	
14.6	IWATER CONTROLLER	42-257-A	1	
14.7	PRESSURE SENSOR ASSEMBLY	42-265-ASY	1	
14.8	SWITCH - EMERGENCY STOP	42-268	1	
14.9	HARNESS - SWITCH JUMPER	42-ELC-309	1	
14.10	LABEL - EMERGENCY STOP	42-LBL-002	1	
14.11	LABEL - OPERATING PRESSURE	42-LBL-003	1	
14.12	GAUGE - 0-160 PSI WET	45-059	1	
14.13	GAUGE CLAMP ASSEMBLY	45-060	1	
14.14	BOLT FLG - 1/4-20 X 1/2	90-BLT-F02520X050	4	
14.15	NUT LOCK - 1/4-20	90-NUT-LOC025-20	2	
14.16	SCREW SOCKET CAP - #6-32 X 3/4	90-SCR-SH00632X075	8	
14.17	SCREW SOCKET CAP - 1/4-20 X 3/4	90-SCR-SH02520X075	10	
14.18	WASHER NYLON - 1/4	90-WSR-PL025	14	
14.19	GASKET - iWATER FACE PLATE	C3-381-A	1	
14.20	BOX - MACHINED iWATER	C3-382-C	1	
14.21	FACE PLATE - CONTROL PANEL	C3-680-B	1	
14.22	COVER - CONTROL PANEL	C3-681-E	1	
14.23	SHROUD - CONTROL PANEL	C3-815-A	1	
14.24	FUSE HOLDER	IR-MPY-FH	1	

Optional i-Water™ Control (2 of 3) ◆

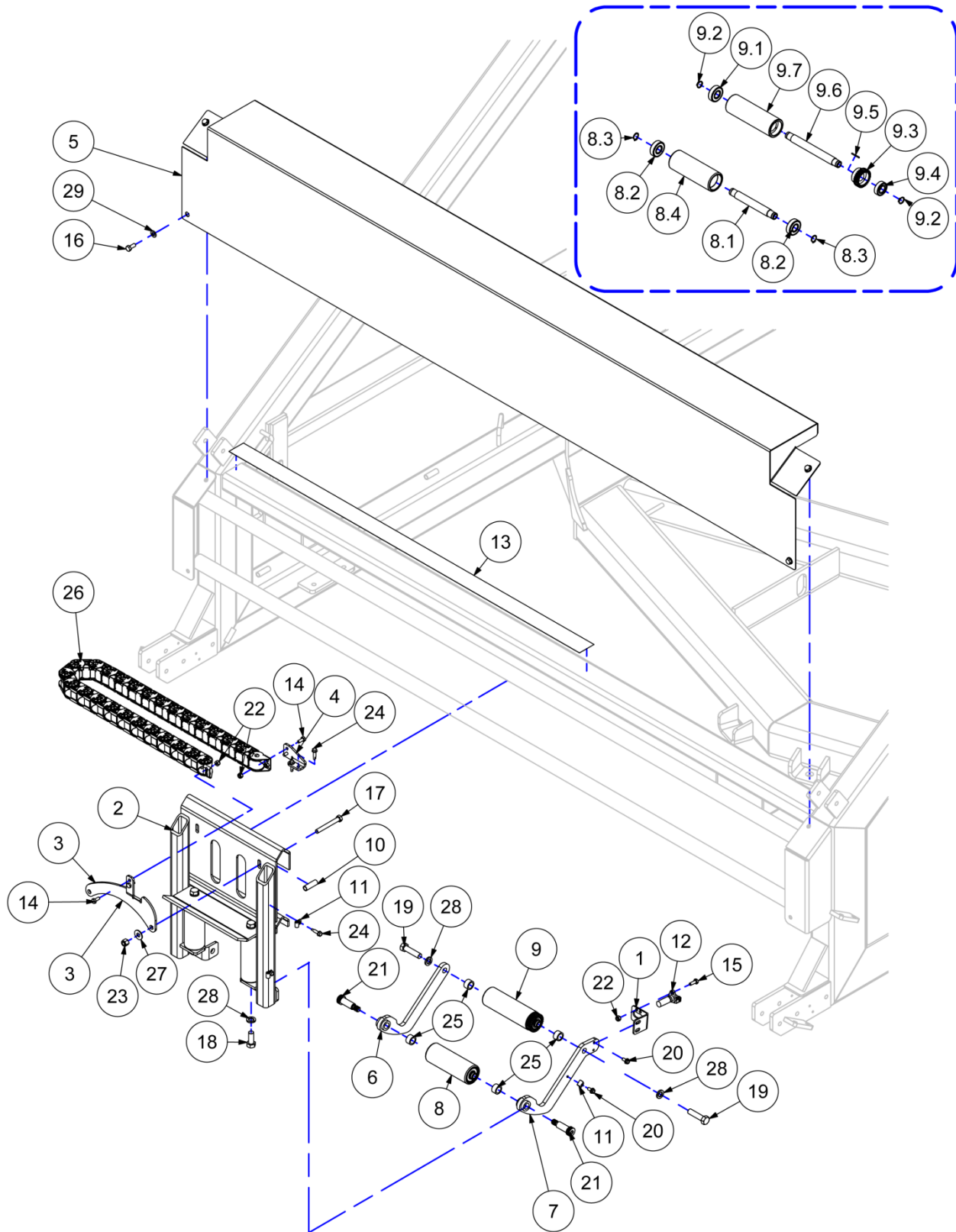




Optional i-Water™ Control (2 of 3) ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	i-WATER™ ASSEMBLY - 4000 SERIES	TR-OPT-IWATER4000	1	◆
1	BATTERY BOX - KUBOTA OC60	05-662-000	1	
2	SHIM - 1/4 WIPER MOTOR	05-668-031	1	
3	NUT COUPLING - M08-1.25 X 9/16	05-678-000	1	
4	BATTERY HOLD DOWN	06-633-000	1	
5	MOUNT - SOLAR PANEL	06-638-000	1	
6	ROUGH TOP BELT - 1 3/8 IN. X 12"	40-094	3	
7	COUPLING HALF - 1/2 IN. P.B.	40-165-C	1	
8	COUPLING - TAPERED BORE	40-165-D	1	
9	1.06 IN LG. COUPLING ELEMENT	40-165-F	1	
10	BATTERY - 12V 700CCA	40-327	1	
11	CABLE TIE - 4 IN. BLACK	40-391	4	
12	FLYWHEEL	40-HDA-31100ZE1811	1	
13	CHARGE COIL	40-HDA-31630ZE1003	1	
14	RECTIFIER	40-HDA-31700124008	1	
15	SOLAR PANEL - 20 WATT	42-261	1	
16	SOLAR CHARGER - I-WATER™	42-399-IWATER	1	
17	GROMMET - 1" X 1 5/16" X 7/16"	42-406	1	
18	WIPER MOTOR - I-WATER™	42-ELC-285	1	
19	BATTERY CLAMP - 1/0-4/0 CABLE	42-ELC-287	2	
20	V-BELT - BX-37	43-037	1	
21	BOLT - 1/4-20 X 1/2	90-BLT-02520X050	4	
22	BOLT - 1/4-28 X 1.00	90-BLT-02528X100	3	
23	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	2	
24	BOLT FLG - 1/4-20 X 2.00	90-BLT-F02520X200	2	
25	NUT ACORN - 06-32	90-NUT-ACL006-32	3	
26	NUT CLIP - 1/4-20	90-NUT-CLIP025-20	4	
27	THREADED INSERT - 1/4-20 SHORT	90-NUT-HTR02520S	2	
28	NUT LOCK - 3/8-16	90-NUT-LOC038-16	2	
29	SCREW SOCKET CAP - 06-32 X 7/16	90-SCR-SH00632X043	2	
30	SCREW SOCKET CAP - 06-32 X 1/2	90-SCR-SH00632X050	1	
31	SCREW TEK - 1/4 X 3/4	90-SCR-TEK025X075	4	
32	WASHER SAE - 06	90-WSR-SAE006	6	
33	WASHER SAE - 1/4	90-WSR-SAE025	7	
34	WASHER SAE - 3/8	90-WSR-SAE038	4	

Optional i-Water™ Control (3 of 3) ◆

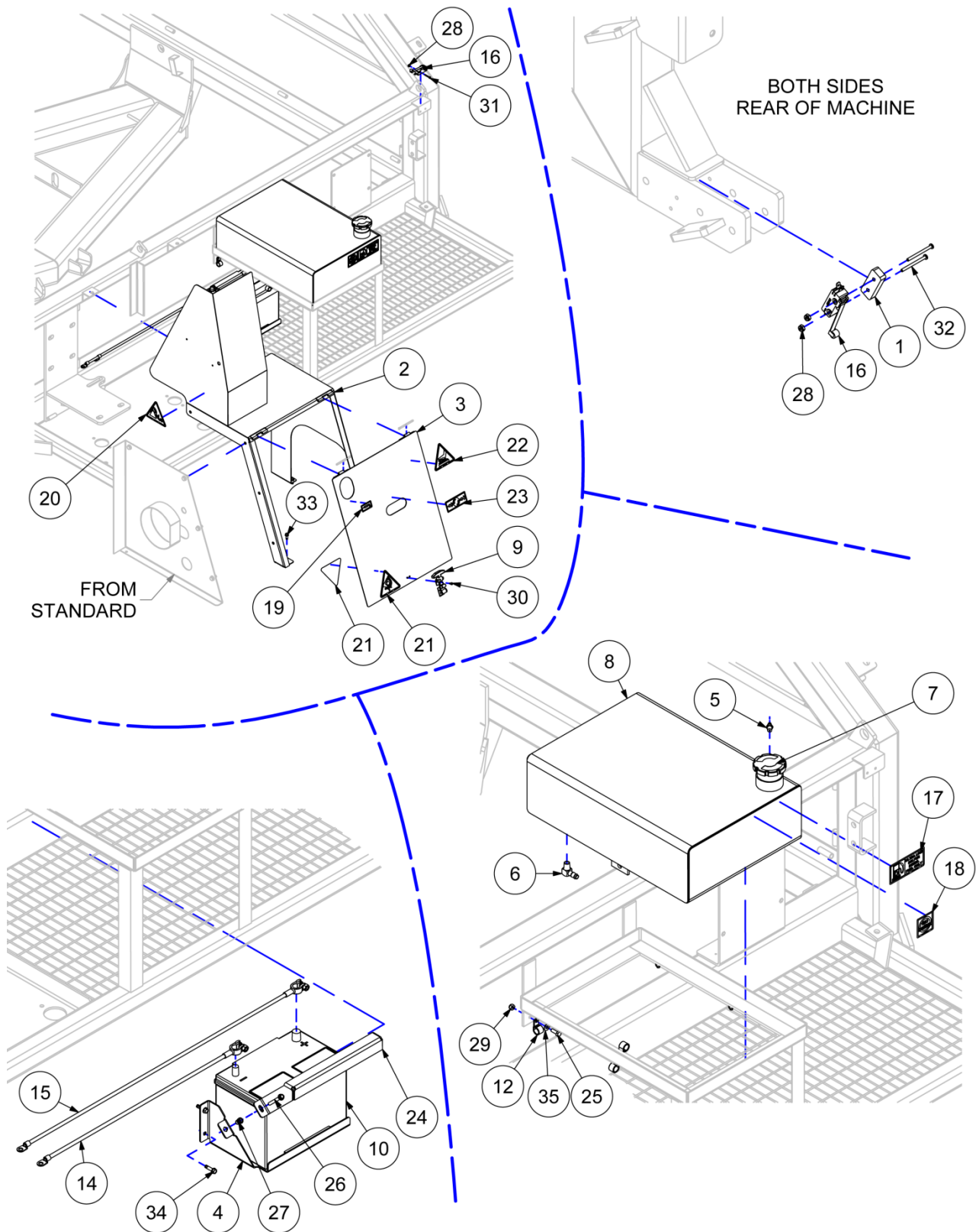




Optional i-Water™ Control (3 of 3) ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	i-WATER™ ASSEMBLY - 4000 SERIES	TR-OPT-IWATER4000	1	◆
1	MOUNT - SENSOR	05-664-000	1	
2	HOSE GUIDE WELDMENT	06-622-C	1	
3	TRACK MOUNT	06-ACC-004-A	1	
4	MOUNT -- CABLE TRACK	06-ACC-005	1	
5	INDEXER SHIELD - IWATER OPTION	06-ACC-006-A	1	
6	SWING ARM - I-WATER ROLLER	06-ACC-007	1	
7	ARM - I-WATER SENSOR/ROLLER	06-ACC-008-A	1	
8	ROLLER ASSEMBLY - 6 IN. GUIDE	15-019	3	◆
8.1	ROLLER SHAFT - 6"	15-019-F	1	
8.2	BEARING - 6203	15-018-C	2	
8.3	SNAP RING	15-018-D	2	
8.4	6 IN. ROLLER BODY	15-019-G	1	
9	ROLLER ASSEMBLY - I-WATER	15-265-000	1	◆
9.1	BEARING - 6203	15-018-C	1	
9.2	SNAP RING	15-018-D	2	
9.3	TONE WHEEL	15-265-002	1	
9.4	BEARING - 17MM X 35MM X 10MM	42-BRG-6003-2RS	1	
9.5	ROLL PIN - 3/32 X 1 LG	90-PIN-RL009X100	1	
9.6	ROLLER SHAFT - I-WATER	15-265-003	1	
9.7	ROLLER - I-WATER PLATED	15-265-001	1	
10	WIRE LOOM	40-108	2	
11	P-CLAMP - 3/16	40-763	3	
12	SPEED/DIRECTION SENSOR	42-264	1	
13	UHMW TAPE - 2"	43-014	48	
14	BOLT - 1/4-20 X 5/8	90-BLT-02520X063	4	
15	BOLT - 1/4-20 X 3/4	90-BLT-02520X075	1	
16	BOLT - 5/16-18 X 3/4	90-BLT-03118X075	4	
17	BOLT - 3/8-16 X 3.00	90-BLT-03816X300	2	
18	BOLT - 1/2-13 X 1 1/4	90-BLT-05013X125	4	
19	BOLT - 1/2-13 X 2.00	90-BLT-05013X200	2	
20	BOLT FLG - 1/4-20 X 1/2	90-BLT-F02520X050	3	
21	BOLT SHOULDER - 1/2-13 X 1 1/2	90-BLT-SH05013X150	2	
22	NUT LOCK - 1/4-20	90-NUT-LOC025-20	5	
23	NUT LOCK - 3/8-16	90-NUT-LOC038-16	2	
24	TEK SCREW - 1/4 X 1.00	90-SCR-TEK025X100	4	
25	SPACER - 0.51 ID X 0.75 OD X 1/2	90-SPR-063X088X050	4	
26	CABLE/HOSE CARRIER - K100-54	90-TRK-KS100-54	1	
27	WASHER FLAT - 3/8	90-WSR-FLT038	2	
28	WASHER LOCK - 1/2	90-WSR-LOC050	6	
29	WASHER SAE - 5/16	90-WSR-SAE031	4	

Optional Diesel Option Common ◆

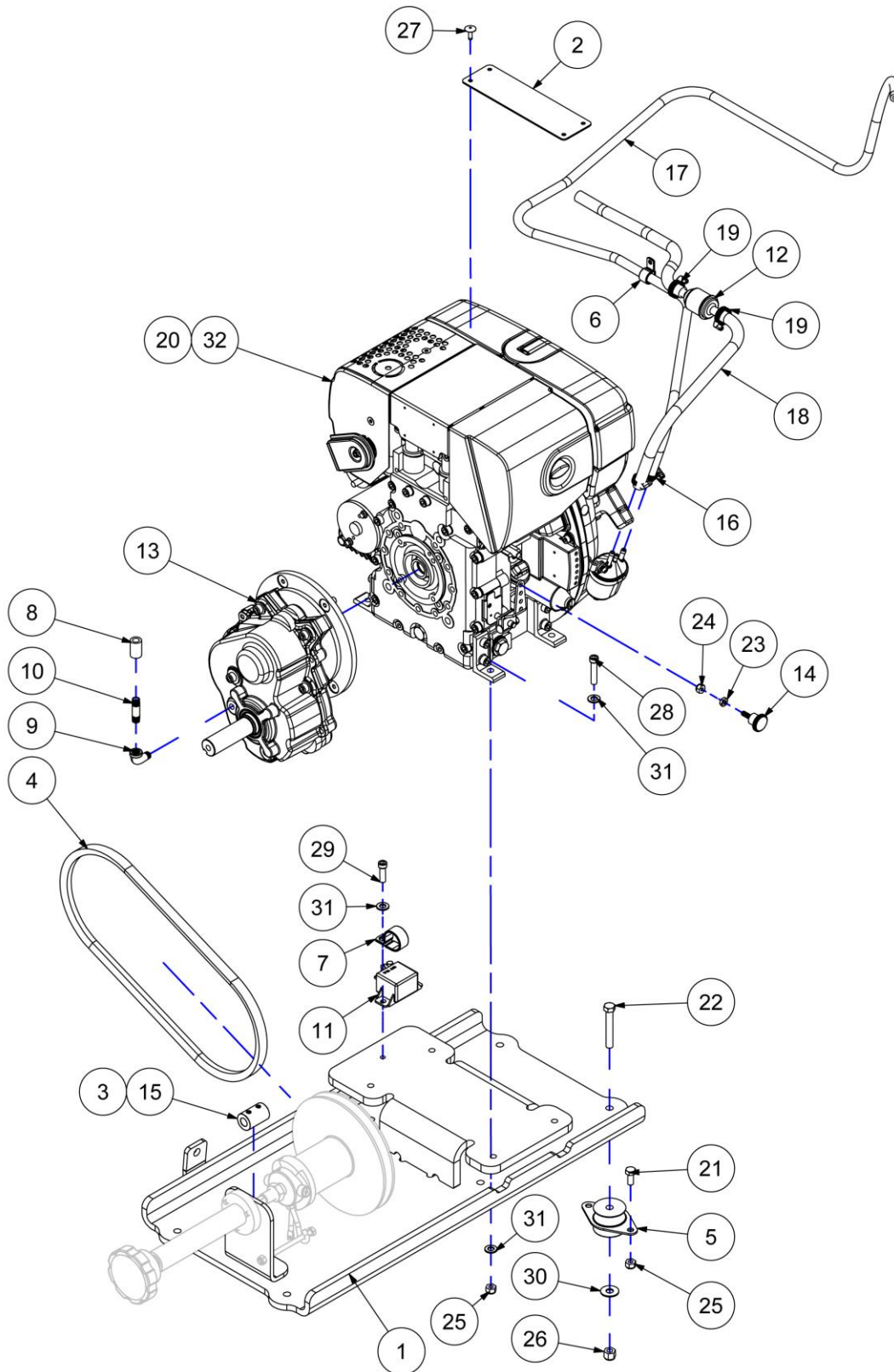




Optional Diesel Drive Common ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	OPTION - HATZ DIESEL DRIVE	TR-OPT-DIEDRV40-HATZ	◆	PAGE 122
◆	OPTION - KUBOTA DIESEL DRIVE	TR-OPT-DIEDRV40	◆	PAGE 124
1	SWITCH SPACER BLOCK	04-628	2	
2	DRIVE COVER - KUBOTA OC60	05-660-000-C	1	
3	DRIVE COVER DOOR WELDMENT	05-661-000-B	1	
4	BATTERY BOX - KUBOTA OC60	05-662-000	1	
5	ADAPTER - 1/8 NPTM x 1/4 HOSE	25-WHD-125-4A	1	
6	ELBOW - 1/4 NPTM X 3/8 HOSE x 90	25-WHD-139-6B	1	
7	VENTED GAS CAP	40-017-A	1	
8	FUEL TANK - DIESEL REWORK	40-017DIESEL-A	1	
9	RUBBER LATCH KIT	40-217	1	
10	BATTERY - 12V 700CCA	40-327	1	
11	CABLE TIE - 4 IN. BLACK	40-391	5	
12	P-CLAMP - 5/8	40-416	7	
13	CABLE TIE - 7 IN. BLACK	40-424	13	
14	CABLE ASSY - 24" 4GA TOP POST	42-ELC-136	1	
15	CABLE ASSY - 34" 4GA TOP POST	42-ELC-137	1	
16	SHUT OFF SWITCH - 25AMP	42-ELC-145	3	
17	LABEL - ULTRA LOW SULFUR	42-LBL-027	1	
18	LABEL - NO BIO DIESEL	42-LBL-104	1	
19	LABEL - GREASE POINT	42-LBL-115	1	
20	LABEL - ROTATING DRUM	42-LBL-122	1	
21	LABEL - ENTANGLEMENT HAZARD	42-LBL-127	2	
22	LABEL - BURN HAZARD	42-LBL-135	1	
23	LABEL - DRIVE DISCONNECT	42-LBL-143	1	
24	BATTERY HOLD DOWN	60-458	1	
25	BOLT - 1/4-20 X 3/4	90-BLT-02520X075	3	
26	BOLT FLG - 1/4-20 X 2.00	90-BLT-F02520X200	2	
27	THREADED INSERT - 1/4-20 SHORT	90-NUT-HTR02520S	2	
28	NUT LOCK - 06-32	90-NUT-LOC006-32	6	
29	NUT LOCK - 1/4-20	90-NUT-LOC025-20	3	
30	RIVET - 3/16 X 3/8	90-RIV-019X038	4	
31	MACH. SCREW PAN - 06-32 X 1.00	90-SCR-RM06-32X100	2	
32	MACH. SCREW PAN - 06-32 X 1 3/4	90-SCR-RM0632X175	4	
33	SCREW TEK - 1/4 X 3/4	90-SCR-TEK025X075	4	
34	SCREW TEK - 1/4 X 1.00	90-SCR-TEK025X100	4	
35	WASHER SAE - 1/4	90-WSR-SAE025	3	

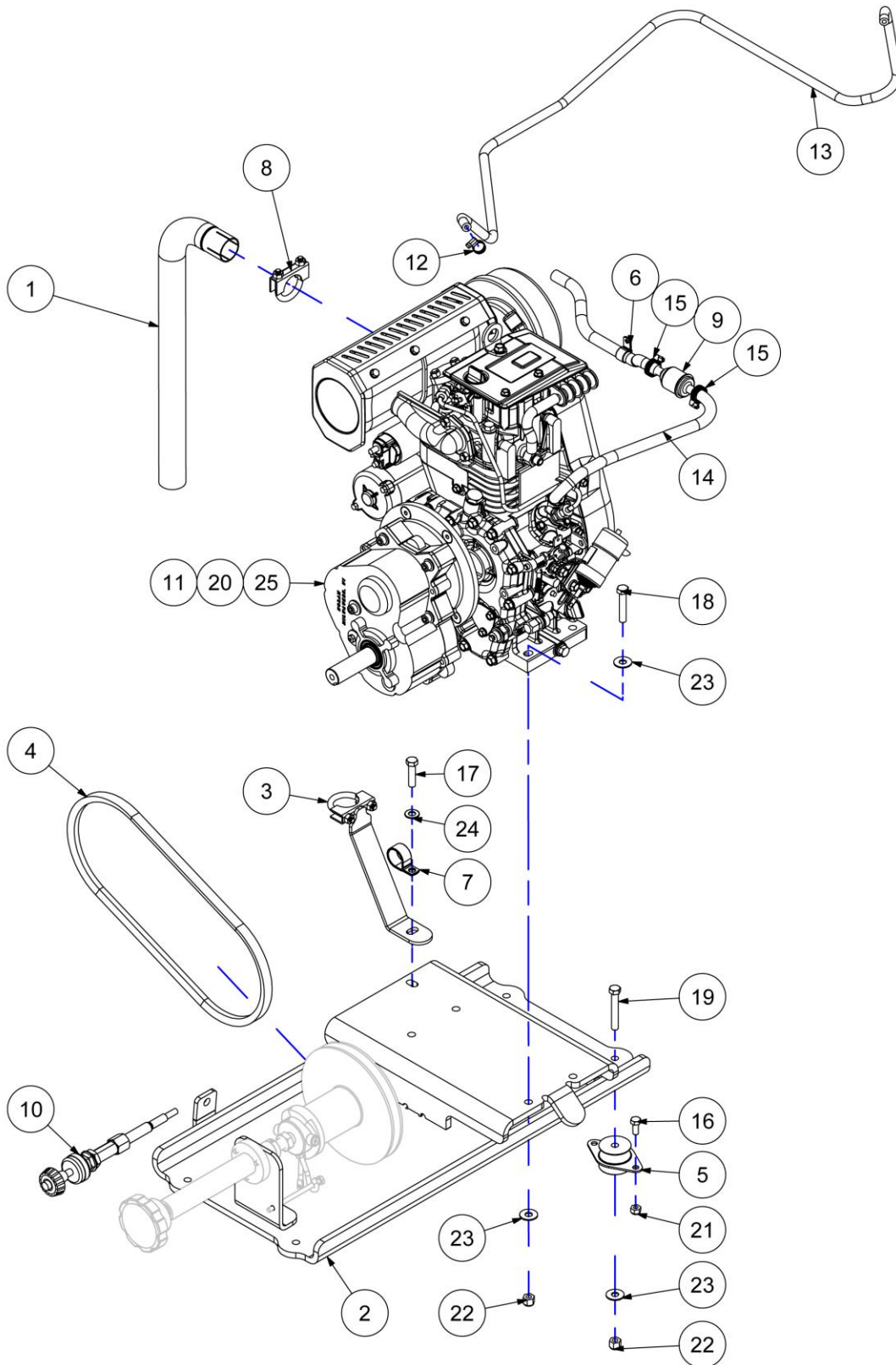
Optional Hatz Diesel Drive ◆



Optional Hatz Diesel Drive ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	OPTION - HATZ DIESEL DRIVE	TR-OPT-DIEDRV40-HATZ	◆	
1	ENGINE PLATE WELDMENT - HATZ	06-629-000-B	1	
2	GUARD - FUEL TANK	06-639-000	1	
3	EXTENSION SHAFT	15-075-A	1	
4	V-BELT - BX-38	40-172	1	
5	ENGINE MOUNT	40-285	2	
6	P-CLAMP - 5/8	40-416	7	
7	P-CLAMP - 1.00	40-904	1	
8	COUPLER - 1/8 NPT GALV	40-NPT-CPL013G	1	
9	ELBOW STREET - 90° GALV	40-NPT-ELB013X90G	1	
10	NIPPLE BLACK - 1/8 NPT X 1 1/2LG	40-NPT-NPL013X150G	1	
11	RELAY - 12 VOLT	42-091	1	
12	FUEL FILTER - 3/8"	42-729	1	
13	GEARBOX REDUCER - NORAM 2:1	42-841	1	
14	KNOB - 1/4-20 PLASTIC KNURL	42-847	1	
15	COUPLER - 1/2 X 1 1/2 X 1 ALUM	42-934	1	
16	CLAMP GEAR - 5/16-5/8 (MH4)	50-025	2	
17	FUEL LINE- 1/4 NEOPRENE	50-037	7	
18	FUEL LINE - 3/8 NEOPRENE	50-039	2	
19	GEAR CLAMP - MH-06	50-068	3	
20	MOTOR OIL - 15W40	85-LUB-OIL/15W40	1	
21	BOLT - 5/16-18 X 3/4	90-BLT-03118X075	4	
22	BOLT - 3/8-16 X 2 1/2	90-BLT-03816X250	6	
23	JAM NUT - 1/4-20	90-NUT-JAM025-20	1	
24	NUT LOCK - 1/4-20	90-NUT-LOC025-20	4	
25	NUT LOCK - 5/16-18	90-NUT-LOC031-18	8	
26	NUT LOCK - 3/8-16	90-NUT-LOC038-16	3	
27	RIVET - 3/16 X 7/16 BLACK	90-RIV-019X045BLK	4	
28	SCREW SOCKET - 5/16-18 X 1 1/2	90-SCR-SH03118X150	4	
29	SCREW SOCKET - 5/16-24 X 1.00	90-SCR-SH03124X100	1	
30	WASHER FLAT - 3/8	90-WSR-FLT038	3	
31	WASHER SAE - 5/16	90-WSR-SAE031	9	
32	DIESEL ENGINE - HATZ 1B20	HA-ENG-1B20	1	

Optional Kubota Diesel Drive ◆

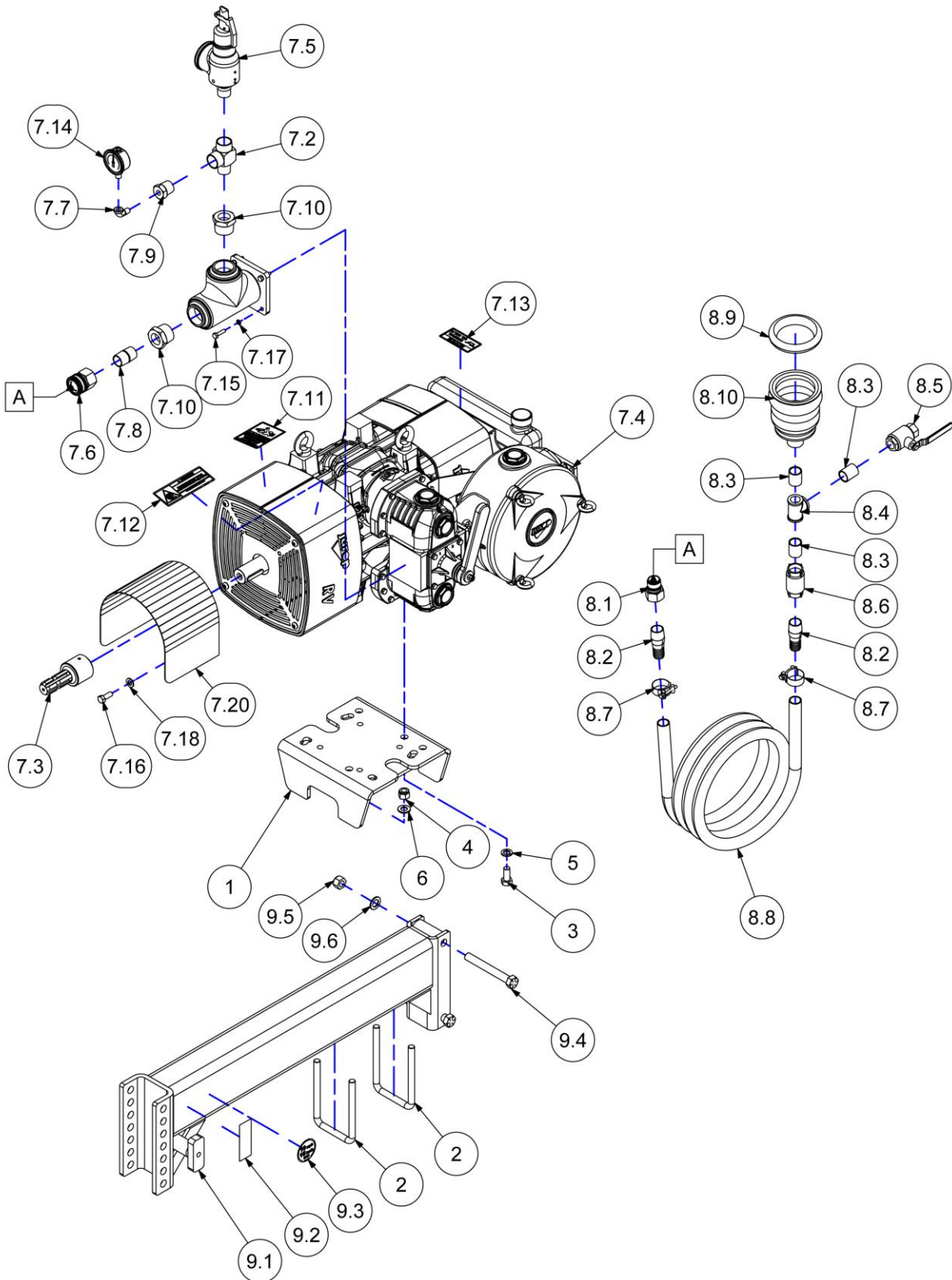




Optional Kubota Diesel Drive ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	OPTION - KUBOTA DIESEL DRIVE	TR-OPT-DIEDRV40	◆	
1	STACK TUBE - KUBOTA	06-300-000	1	
2	ENGINE PLATE - KUBOTA	06-625-000	1	
3	EXHAUST SUPPORT - KUBOTA OC60	06-628-000	1	
4	BX-38 V-BELT	40-172	1	
5	ENGINE MOUNT	40-285	2	
6	P-CLAMP - 5/8	40-416	1	
7	P-CLAMP - 1.00	40-904	1	
8	MUFFLER CLAMP - 1 7/16"	42-717	1	
9	FUEL FILTER - 3/8"	42-729	1	
10	CONTROL CABLE - PUSH/PULL 5'	42-736	1	
11	WIRING HARNESS - KUBOTA OC60	42-ELC-144-A	1	
12	CLAMP GEAR - 5/16-5/8 (MH4)	50-025	1	
13	FUEL LINE - 1/4 NEOPRENE	50-037	6	
14	FUEL LINE - 3/8 NEOPRENE	50-039	1	
15	GEAR CLAMP - MH-06	50-068	3	
16	BOLT - 5/16-18 X 3/4	90-BLT-03118X075	4	
17	BOLT - 3/8-16 X 1 1/2	90-BLT-03816X150	1	
18	BOLT - 3/8-16 X 2.00	90-BLT-03816X200	4	
19	BOLT - 3/8-16 X 2 1/2	90-BLT-03816X250	2	
20	KEY - 1/4 SQ. X 2 LG	90-KEY-SQ025X200	1	
21	NUT LOCK - 5/16-18	90-NUT-LOC031-18	4	
22	NUT LOCK - 3/8-16	90-NUT-LOC038-16	7	
23	WASHER FLAT - 3/8	90-WSR-FLT038	11	
24	WASHER SAE - 3/8	90-WSR-SAE038	1	
25	DIESEL - KUBOTA OC60 w/GB	KU-ENG-OC60-4D1QX2-1	1	

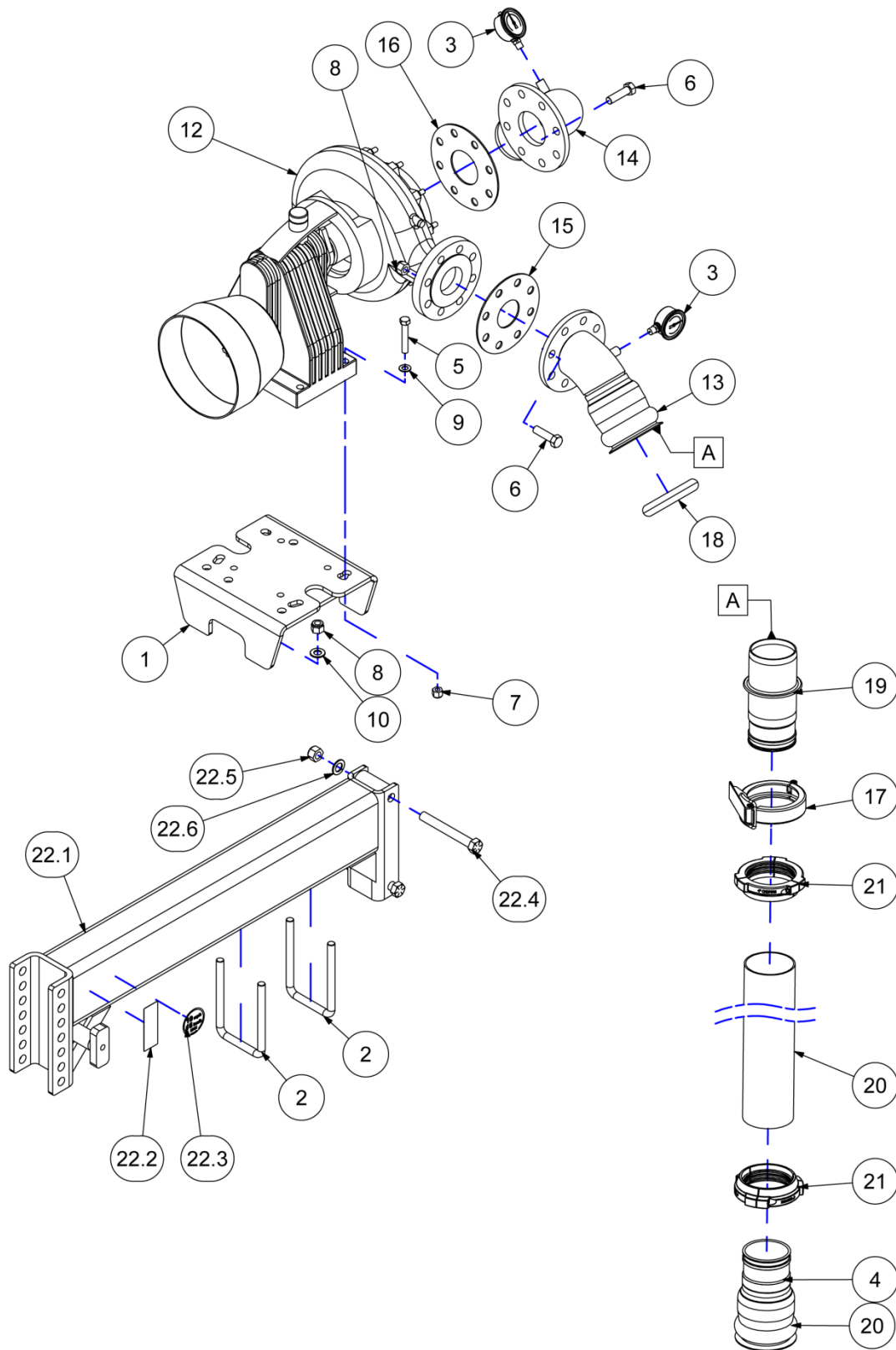
Optional Tongue Mounted Compressor ◆



Optional Tongue Mounted Compressor ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	TONGUE MT. - COMPRESSOR	TM-CMP-ABC540		◆
1	PUMP/COMP. MOUNT WELDMENT	06-695-A	1	
2	U-BOLT SQ. - 5/8-11 X 3 X 4 1/4	17-772	2	
3	BOLT - M16-2.00 X 35MM	90-BLT-M16200X035	4	
4	NUT LOCK - 5/8-11	90-NUT-LOC063-11	4	
5	WASHER LOCK - M16	90-WSR-LOCM16	4	
6	WASHER SAE - 5/8	90-WSR-SAE063	4	
7	COMPRESSOR ASSY - RVC360	PU-CMP-7500-019	1	◆
7.1	COMPRESSOR DISCHARGE WELD'T	05-220-000-A	1	
7.2	TEE - 16 NPTM X NPTF X NPTF	25-WHD-5602X16X16X16	1	
7.3	1 3/8-6 MALE SPLINE-1 F SHAFT	40-689-M40	1	
7.4	COMPRESSOR	40-AIR-7503-019	1	
7.5	VALVE - 35 PSI PRESSURE RELIEF	40-NPT-6010FEM01-KM0035	1	
7.6	AIR COUPLING - 1 IN X 1 NPT-F	40-NPT-AIRCPL-F	1	
7.7	ELBOW STREET - 1/2-NPT 90°	40-NPT-ELS025X90G	1	
7.8	NIPPLE CLOSE - 1 NPT GALV.	40-NPT-NPLC100G	1	
7.9	RED. BUSHING - 1 X 1/4 NPT GALV.	40-NPT-RB100X025G	1	
7.10	REDUCER - 24NPTM X 16NPT GALV	40-NPT-RB150X100G	2	
7.11	LABEL - ROTATING DRIVE VERT/SM	42-LBL-067	1	
7.12	LABEL - PRESSURE RELIEF	42-LBL-087	1	
7.13	LABEL - MINERAL OIL ONLY!	42-LBL-088	1	
7.14	GAUGE - 0-60 PSI WET	45-023	1	
7.15	BOLT - M8-1.25 X 30mm	90-BLT-M08125X030	4	
7.16	BOLT - M12-1.75 X 30MM	90-BLT-M12175X030	4	
7.17	WASHER LOCK - M08	90-WSR-LOCM08	4	
7.18	WASHER SAE - M12	90-WSR-SAEM12	4	
7.19	BONDIOLI 5 540 RPM PTO SHAFT	BP-PTO-513861386	1	NS
7.20	PTO GUARD WELDMENT	PU-100-000	1	
8	AIR HOSE ASSY - 4RL X 1IN	PU-HOZ-100X4	1	◆
8.1	AIR COUPLING - 1 IN X 1 NPT MALE	40-NPT-AIRCPL-M	1	
8.2	HOSE BARB - 1 IN X 1 IN NPT GALV	40-NPT-BRB100G	2	
8.3	NIPPLE - 1.00 NPT CLOSE GALV	40-NPT-NPLC100G	3	
8.4	TEE - 1.00 NPT	40-NPT-TEE100G	1	
8.5	BALL VALVE - 1" FEMALE X FEMALE	40-NPT-VLV100BLLFF	1	
8.6	CHECK VALVE - 1 IN. IN-LINE	40-NPT-VLV100CHKFF	1	
8.7	CLAMP MAXI - 1.00 (36-39)	50-033	2	
8.8	HOSE - 1 IN. AIR	50-049	15	
8.9	GASKET - 4.00 PIERCE	IR-GKT-PIERCE4	1	
8.10	BLOW OUT ADAPTER - 4" RL X 1NPT	TR-BLA-RL4X100	1	
9	TONGUE EXTENSION - 4000 SERIES	TR-KIT-TE4000	1	◆
9.1	TONGUE EXTENSION WELDMENT	16-111	1	
9.2	DECAL - AMBER REFLECTIVE	40-598	2	
9.3	LABEL - MAX TOW SPEED	42-LBL-119	1	
9.4	BOLT GR.8 - 3/4-10 X 6.00	89-BLT-07510X600	2	
9.5	NUT LOCK GR.8 - 3/4-10	89-NUT-LOC075-10	2	
9.6	WASHER SAE - 3/4 GRADE L9	89-WSR-SAE075	2	

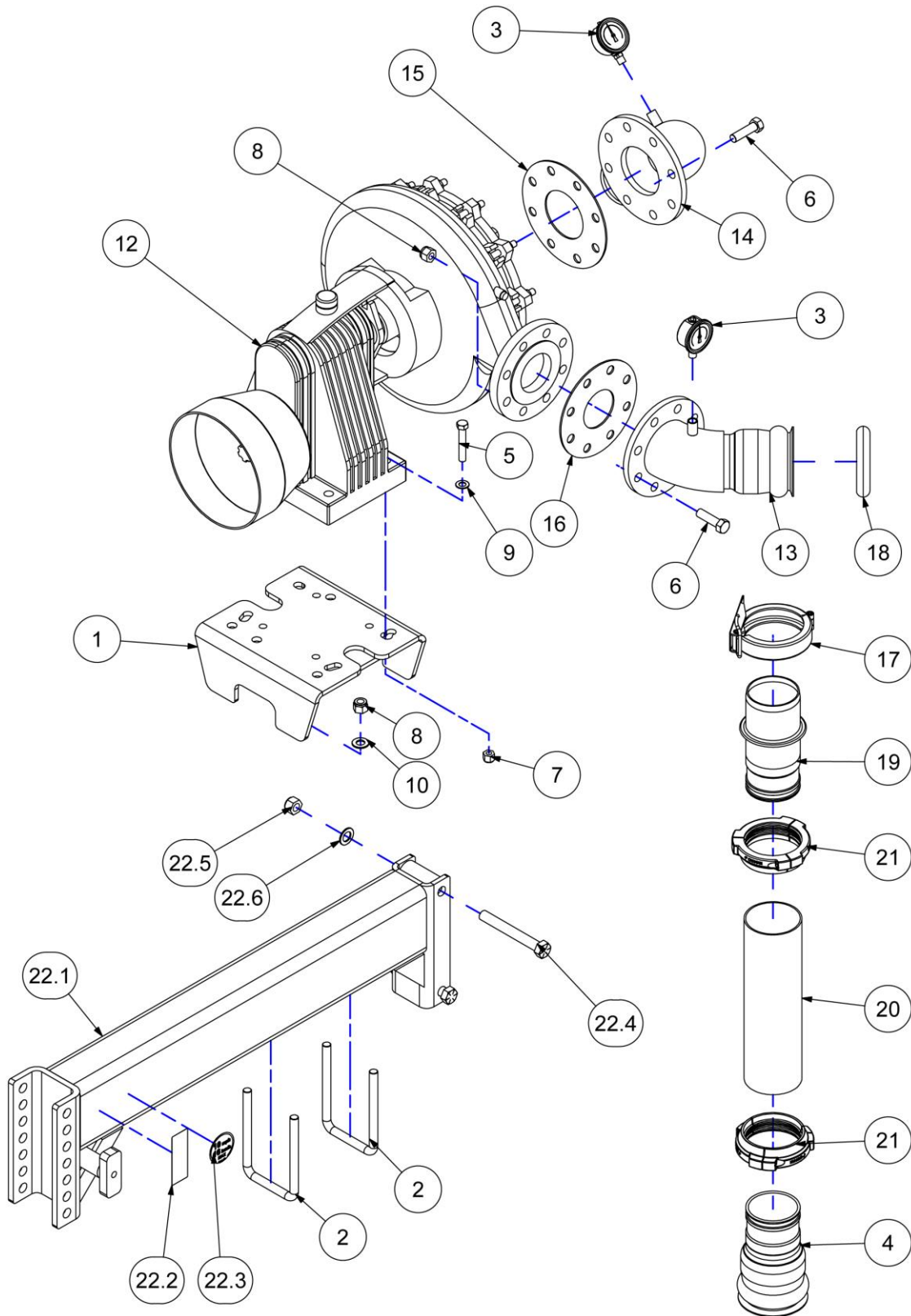
Optional Tongue Pump Caprari D3 ♦



Optional Tongue Pump Caprari D3 ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	TONGUE MNT PUMP - CAPRARI D3	TM-PMP-ABC.D365B677		◆
1	PUMP/COMP. MOUNT WELDMENT	06-695-A	1	
2	U-BOLT SQ. - 5/8-11 X 3 X 4 1/4	17-772	2	
3	GAUGE - 0-160 PSI WET	45-017	2	
4	HOSE END - 4.00	45-030-B	1	
5	BOLT - 1/2-13 X 3.00	90-BLT-05013X300	4	
6	BOLT - 5/8-11 X 2 1/4	90-BLT-06311X225	16	
7	NUT LOCK - 1/2-13	90-NUT-LOC050-13	4	
8	NUT LOCK - 5/8-11	90-NUT-LOC063-11	20	
9	WASHER SAE - 1/2	90-WSR-SAE050	4	
10	WASHER SAE - 5/8	90-WSR-SAE063	4	
11	PTO SHAFT FOR 6010 PTO OPTION	BP-PTO-513861386	1	
12	CPRRI D3/65-B 1:6.77 BASIC-N/L	CA-PMP-D365B628	1	
13	OUTLET ELBOW - 45°	CA-PRT-1205	1	
14	INLET ELBOW - 90°	CA-PRT-1206	1	
15	GASKET - 65MM FLANGE	CA-PRT-FLG65	1	
16	FLANGE GASKET - 80mm	CA-PRT-FLG80	1	
17	CLAMP - 4.00 RINGLOCK	IR-FCL-4	1	
18	GASKET - 4.00 PIERCE	IR-GKT-PIERCE4	1	
19	HOSE END - 4 HOSE X 4 PIERCE	IR-HE4-TUE4PIERCE	1	
20	SUPPLY HOSE - 4" CADMAN PREM	IR-HOZ-400CPSL	40	
21	HOSE CLAMP - 4.00 SINGLE BARB	IR-MIS-20063	2	
22	TONGUE EXTENSION - 4000 SERIES	TR-KIT-TE4000	1	◆
22.1	TONGUE EXTENSION WELDMENT	16-111	1	
22.2	DECAL - AMBER REFLECTIVE	40-598	2	
22.3	LABEL - MAX TOW SPEED	42-LBL-119	1	
22.4	BOLT GR.8 - 3/4-10 X 6.00	89-BLT-07510X600	2	
22.5	NUT LOCK GR.8 - 3/4-10	89-NUT-LOC075-10	2	
22.6	WASHER SAE - 3/4 GRADE L9	89-WSR-SAE075	2	

Optional Tongue Pump Caprari D0480 ◆

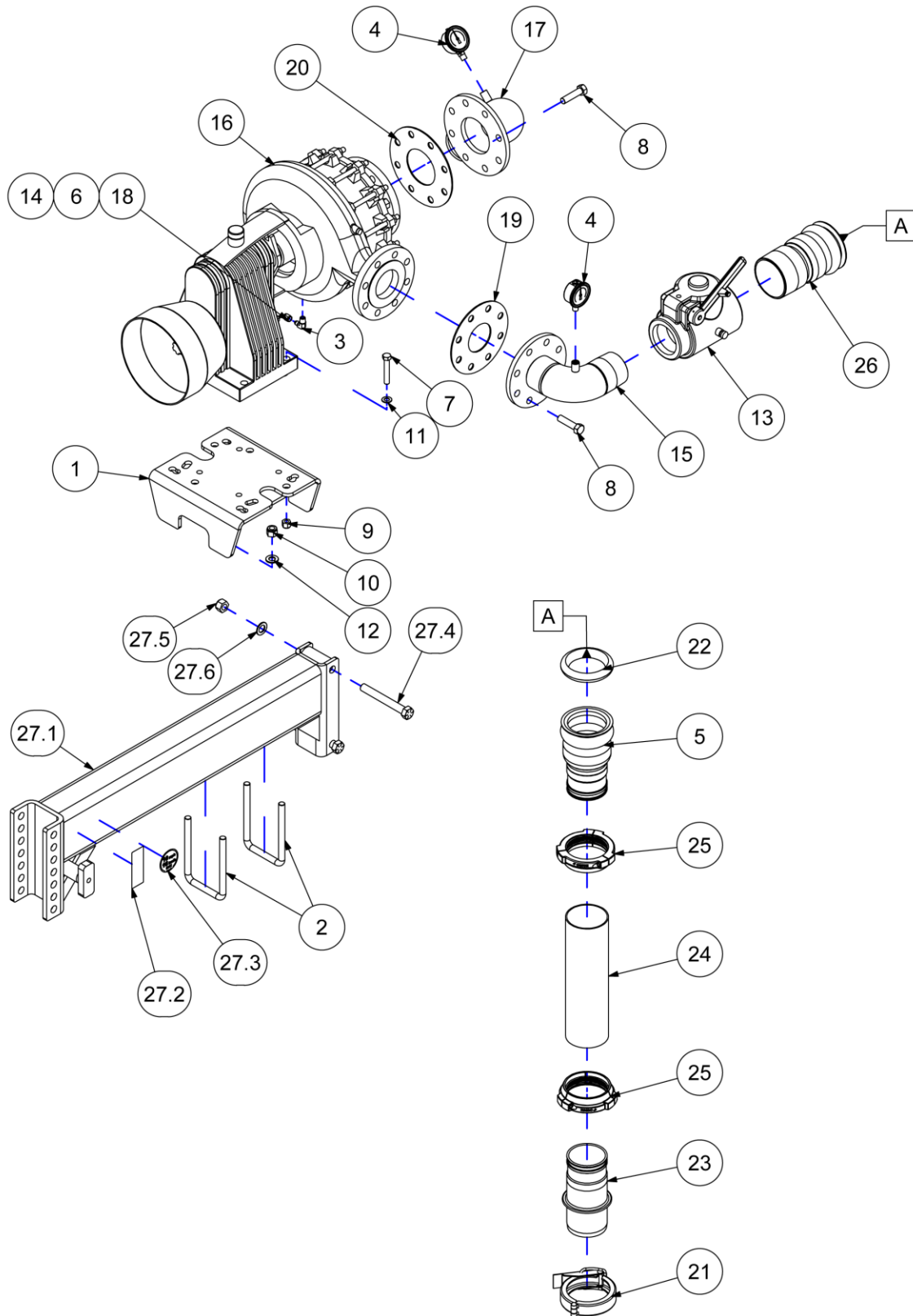




Optional Tongue Pump Caprari D0480 ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	TONGUE MNT PUMP - CAP. D0480	TM-PMP-ABC.D0480C383	◆	
1	PUMP/COMP. MOUNT WELDMENT	06-695-A	1	
2	U-BOLT SQ. - 5/8-11 X 3 X 4 1/4	17-772	2	
3	GAUGE - 0-160 PSI WET	45-017	2	
4	HOSE END - 4.00	45-030-B	1	
5	BOLT - 1/2-13 X 3.00	90-BLT-05013X300	4	
6	BOLT - 5/8-11 X 2 1/4	90-BLT-06311X225	16	
7	NUT LOCK - 1/2-13	90-NUT-LOC050-13	4	
8	NUT LOCK - 5/8-11	90-NUT-LOC063-11	20	
9	WASHER SAE - 1/2	90-WSR-SAE050	4	
10	WASHER SAE - 5/8	90-WSR-SAE063	4	
11	PTO SHAFT FOR 6010 PTO OPTION	BP-PTO-6138211386	1	
12	CAPRARI D 0480 C 3:83 PUMP	CA-PMP-D0480C383	1	
13	OUTLET ELBOW - 45°	CA-PRT-1201	1	
14	INLET ELBOW - 90°	CA-PRT-1202	1	
15	GASKET - 100mm FLANGE	CA-PRT-FLG100	1	
16	FLANGE GASKET - 80mm	CA-PRT-FLG80	1	
17	CLAMP - 4 IN. RINGLOCK	IR-FCL-4	1	
18	GASKET - 4.00 PIERCE	IR-GKT-PIERCE4	1	
19	HOSE END - 4 HOSE X 4 PIERCE	IR-HE4-TUE4PIERCE	1	
20	SUPPLY HOSE - 4.00 CADMAN PREM	IR-HOZ-400CPSL	40	
21	HOSE CLAMP - 4.00 SINGLE BARB	IR-MIS-20063	2	
22	TONGUE EXTENSION - 4000 SERIES	TR-KIT-TE4000	1	◆
22.1	TONGUE EXTENSION WELDMENT	16-111	1	
22.2	DECAL - AMBER REFLECTIVE	40-598	2	
22.3	LABEL - MAX TOW SPEED	42-LBL-119	1	
22.4	BOLT GR.8 - 3/4-10 X 6.00	89-BLT-07510X600	2	
22.5	NUT LOCK GR.8 - 3/4-10	89-NUT-LOC075-10	2	
22.6	WASHER SAE - 3/4 GRADE L9	89-WSR-SAE075	2	

Optional Tongue Pump Caprari DMR80 ◆

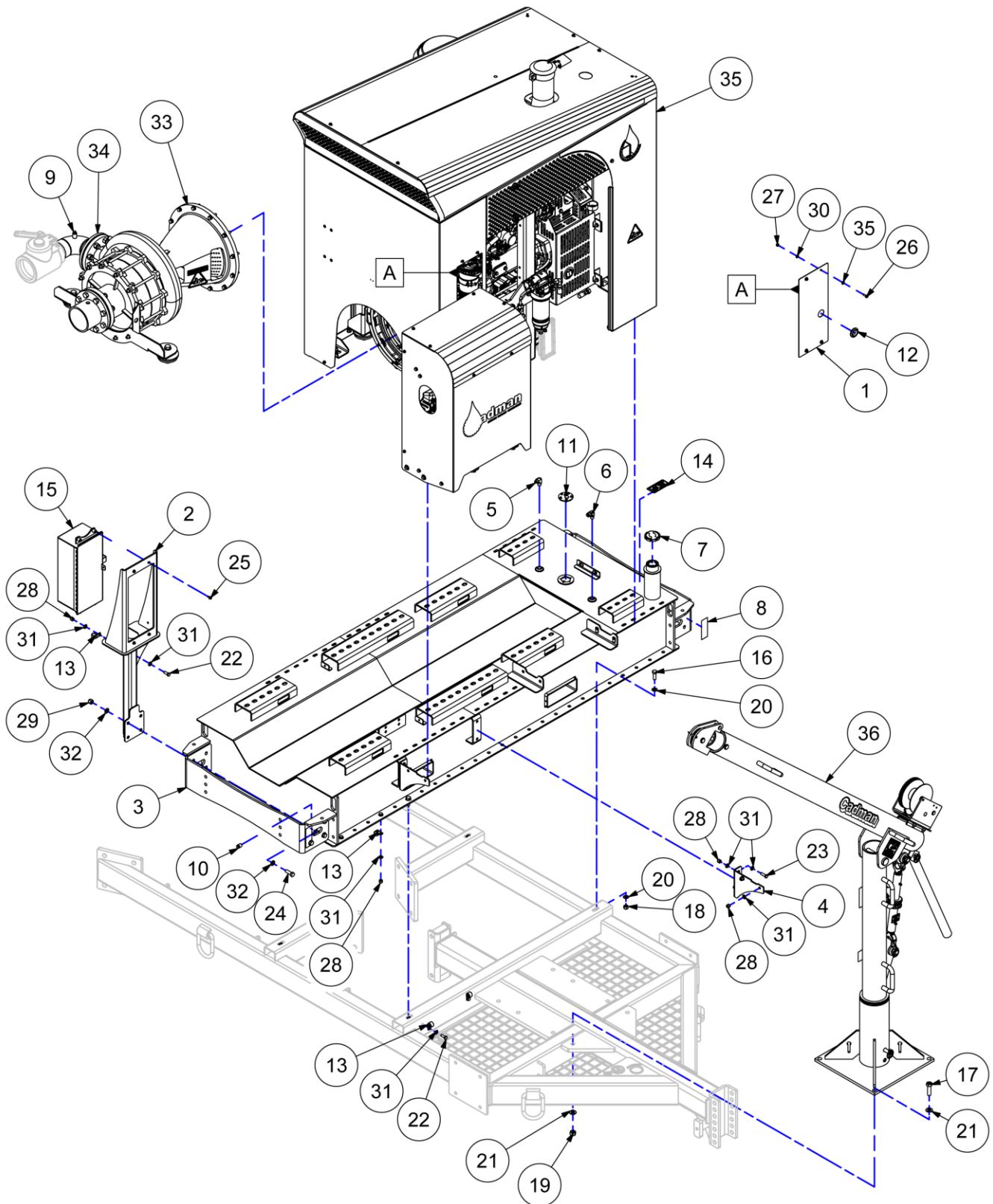




Optional Tongue Pump Caprari DMR80 ◆

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◆	TONGUE MNT PUMP - CAP. D0480	TM-PMP-ABC.DMR8032C569	◆	
1	PUMP/COMP. MOUNT WELDMENT	06-695-A	1	
2	U-BOLT SQ. - 5/8-11 X 3 X 4 1/4	17-772	2	
3	ELBOW - 04 JICM X 04 NPTM X 90	25-WHD-5405X4X4	1	
4	GAUGE - 0-200PSI LIQUID FILLED	45-018	2	
5	HOSE END - 4.00	45-030-B	1	
6	GEAR OIL - EP-150	85-LUB-OIL/EP150	3	
7	BOLT - 1/2-13 X 3.00	90-BLT-05013X300	4	
8	BOLT - 5/8-11 X 2 1/2	90-BLT-06311X250	16	
9	NUT LOCK - 1/2-13	90-NUT-LOC050-13	4	
10	NUT LOCK - 5/8-11	90-NUT-LOC063-11	20	
11	WASHER SAE - 1/2	90-WSR-SAE050	4	
12	WASHER SAE - 5/8	90-WSR-SAE063	4	
13	VALVE CHECK - 3" X 4" (PRIMING)	BE-ASY-B05923	1	
14	PTO SHAFT FOR 6010 PTO OPTION	BP-PTO-6138211386	1	
15	CAPRARI 3IN NPT 90DEG	CA-DSG-390	1	
16	PUMP CAP - MEC-DMR 80 3/2C 5.69	CA-PMP-DMR8032C569	1	
17	INLET ELBOW - 90°	CA-PRT-1202	1	
18	COOLING COIL HOSE ASSEMBLY	CA-PRT-COOLHOSE	1	
19	FLANGE GASKET - 80mm	CA-PRT-FLG80	1	
20	GASKET - 100mm FLANGE	CA-PRT-FLG100	1	
21	CLAMP - 4.00 RINGLOCK	IR-FCL-4	1	
22	GASKET - 4.00 PIERCE	IR-GKT-PIERCE4	1	
23	HOSE END - 4 HOSE X 4 PIERCE	IR-HE4-TUE4PIERCE	1	
24	HOSE SUPPLY - 4.00 CADMAN PREM	IR-HOZ-400CPSL	40	
25	HOSE CLAMP - 4.00 SINGLE BARB	IR-MIS-20063	2	
26	ADAPTER - 4.0 NPTM X 4.0 PIERCE	IR-TC4-4PIERCE	1	
27	TONGUE EXTENSION - 4000 SERIES	TR-KIT-TE4000	1	
27.1	TONGUE EXTENSION WELDMENT	16-111	1	
27.2	DECAL - AMBER REFLECTIVE	40-598	2	
27.3	LABEL - MAX TOW SPEED	42-LBL-119	1	
27.4	BOLT GR.8 - 3/4-10 X 6.00	89-BLT-07510X600	2	
27.5	NUT LOCK GR.8 - 3/4-10	89-NUT-LOC075-10	2	
27.6	WASHER SAE GR.8 - 3/4	89-WSR-SAE075	2	

Optional Engine/Pump Set (1 of 2) ♦



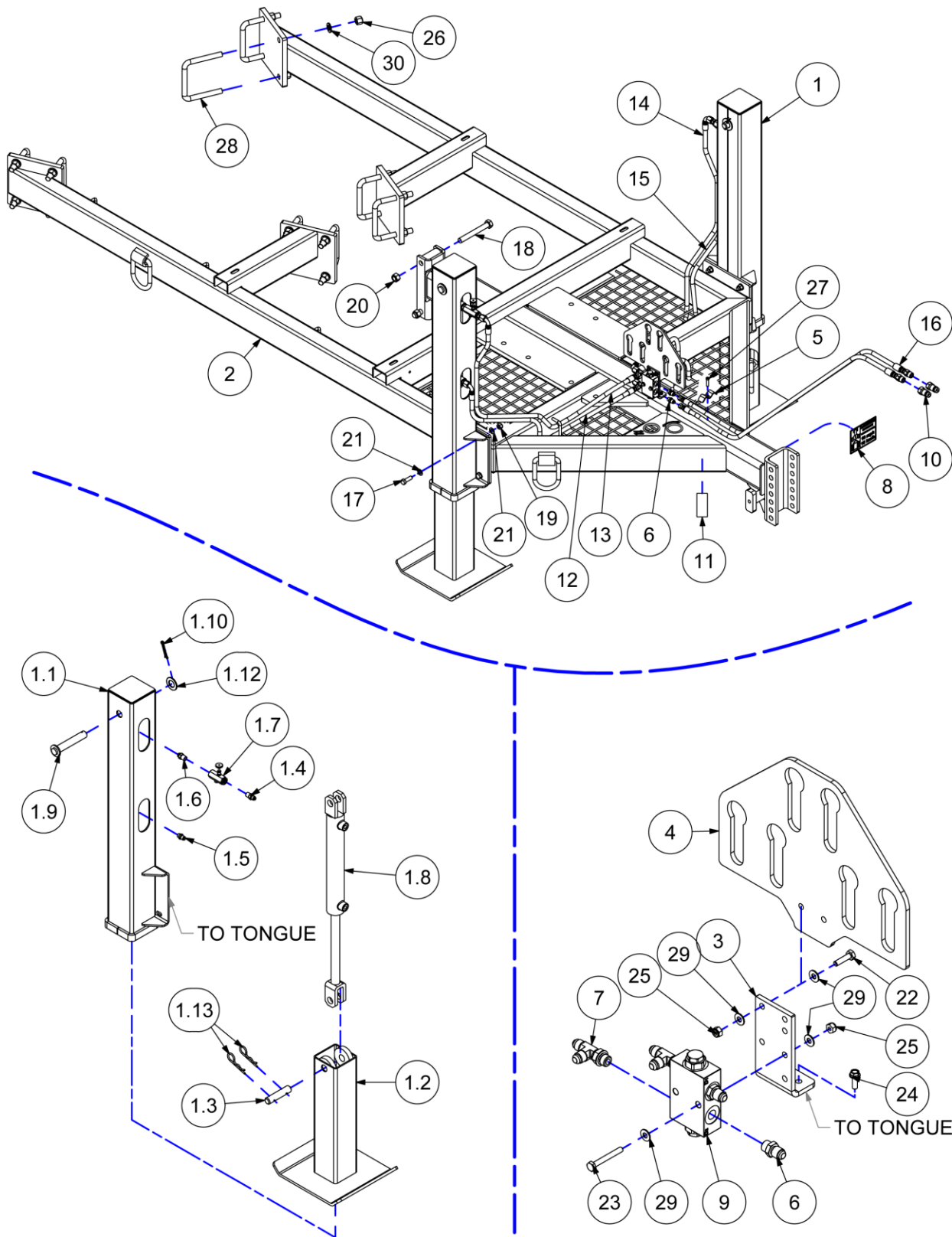


Optional Engine/Pump Set (1 of 2)

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◇	PUMP SET JD85 CA MG8043A	TM-PMP-CJD85-MG8043A		◇
1	GAUGE PANEL BLANK W/ HOLE	09-001-031	1	
2	REAR JD ENG CONTROL MNT	09-001-035	1	
3	BELLY TANK - 100 GAL BLK MATTE	09-TNK-100-MBK	1	
4	DEF TANK MNT REAR LOWER 4045	09-TNK-115	2	
5	ELBOW - 06 JICM X 06 NPTM X 90 D	25-WHD-2501X6X6	1	
6	ELBOW - 8 M-JIC x 6 M-NPT x 90 D	25-WHD-2501X8X6	1	
7	VENTED GAS CAP	40-017-A	1	
8	DECAL - AMBER REFLECTIVE	40-598	2	
9	PLUG - 1/4-NPT	40-NPT-PLG025G	1	
10	PLUG - 3/8-NPT BLACK	40-NPT-PLG038	2	
11	SENDER - FUEL GAUGE	42-409	1	
12	GROMMET 1.25 ID X 1.5 OD X 1/8	42-594	1	
13	P-CLAMP - 13/16	42-812	5	
14	LABEL - ULTRA LOW SULFUR	42-LBL-027	1	
15	GAUGE PANEL - TIER 3	60-999-B	1	CALL
16	BOLT GR.8 - 1/2-13 X 1 1/2	89-BLT-05013X150	4	
17	BOLT GR.8 - 5/8-11 X 2 1/4	89-BLT-06311X225	4	
18	NUT LOCK GR.8 - 1/2-13	89-NUT-LOC050-13	4	
19	NUT LOCK GR.8 - 5/8-11	89-NUT-LOC063-11	4	
20	WASHER SAE GR.8 - 1/2	89-WSR-SAE050	8	
21	WASHER SAE GR.8 - 5/8	89-WSR-SAE063	8	
22	BOLT - 3/8-16 X 1.00	90-BLT-03816X100	5	
23	BOLT - 3/8-16 X 1 1/4	90-BLT-03816X125	4	
24	BOLT - 1/2-13 X 1 1/2	90-BLT-05013X150	4	
25	BOLT FLG - 1/4-20 X 1/2	90-BLT-F02520X050	4	
26	BOLT FLG - 1/4-20 X 3/4	90-BLT-F02520X075	4	
27	NUT LOCK - 1/4-20	90-NUT-LOC025-20	4	
28	NUT LOCK - 3/8-16	90-NUT-LOC038-16	11	
29	NUT LOCK - 1/2-13	90-NUT-LOC050-13	4	
30	WASHER SAE - 1/4	90-WSR-SAE025	4	
31	WASHER SAE - 3/8	90-WSR-SAE038	20	
32	WASHER SAE - 1/2	90-WSR-SAE050	8	
33	CAPRARI MG8043A SAE 3 BTA	CA-BTA-MG8043A	1	CALL
34	CAPRARI 3IN NPT 90DEG	CA-DSG-390	1	
35	JOHN DEERE 84HP T4 MK SPEC	JD-BTA-4045H4-84PP-MK	1	CALL
36	DAVIT CRANE - 10'	PT-OPT-B10	1	CALL

CALL - For further information call Cadman Power Equipment or your local representative.

Optional Engine/Pump Set (2 of 2) ♦





Optional Engine/Pump Set (2 of 2)

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
◇	PUMP SET JD85 CA MG8043A	TM-PMP-CJD85-MG8043A		◇
1	HYDRAULIC LIFT ASSEMBLY	06-606-100	2	◆
1.1	TUBE - HYDRAULIC LIFT	06-603-010	1	
1.2	FOOT - HYDRAULIC LIFT	06-604-000	1	
1.3	PIN - 1.00DIA X 4 1/2 LG	06-605-000	1	
1.4	ADAPTER - 06 JICM X 06 NPTM	25-WHD-5205X6X6	1	
1.5	ADAPTER - 06 JICM X 06 SAEM	25-WHD-5315X6	1	
1.6	ADAPTER - 06 SAEM X 06 NPTM	25-WHD-6401X6X6	1	
1.7	VALVE NEEDLE - 3/8 NPT INLINE	40-HYD-060	1	
1.8	CYLINDER - 2.00 X 12.00 CLEVIS	40-HYD-CYL041	1	
1.9	PIN - 1.00DIA X 5.19 USEABLE	90-PIN-CL100X520	1	
1.10	COTTER PIN - 1/4 X 2.00	90-PIN-CT025X200	1	
1.11	HAIR PIN - 3/16 X 3 3/4 LG.	90-PIN-HP019X375	2	
1.12	WASHER SAE - 1.00	90-WSR-SAE100	1	
2	ENG TONGUE MNT - TRAV.	09-TRV-120	1	
3	BRACKET - VALVE MOUNT	09-TRV-300	1	
4	HYDRAULIC HOSE HOLDER	09-TRV-303	1	
5	HOSE CLAMP ("BUTTERFLY")	16-632	1	
6	ADAPTER - 06 JICM X 06 SAEM	25-WHD-5315X6	2	
7	RUN TEE - 06 JIC X 06 SAE X 06 J	25-WHD-5716X6	2	
8	LABEL - MAX TOW SPEED	40-291-A	1	
9	PILOT OPERATED CHECK VALVE	40-399-A	1	
10	HYDRAULIC COUPLER TIP	40-563	2	
11	DECAL - AMBER REFLECTIVE	40-598	2	
12	HYD HOSE - 3/8 X 42.00 CUT	40-HHZ-0539	1	
13	HYD HOSE - 3/8 X 54.00 CUT	40-HHZ-0540	1	
14	HYD HOSE - 3/8 X 72.00 CUT	40-HHZ-0541	1	
15	HYD HOSE - 3/8 X 54.00 CUT	40-HHZ-0542	1	
16	HYD HOSE - 3/8 X 57.00 CUT	40-HHZ-0543	2	
17	BOLT GR.8 - 1/2-13 X 1 1/2	89-BLT-05013X150	8	
18	BOLT GR.8 - 3/4-10 X 6.00	89-BLT-07510X600	2	
19	NUT LOCK GR.8 - 1/2-13	89-NUT-LOC050-13	8	
20	NUT LOCK GR.8 - 3/4-10	89-NUT-LOC075-10	2	
21	WASHER SAE GR.8 - 1/2	89-WSR-SAE050	16	
22	BOLT - 1/4-20 X 1.00	90-BLT-02520X100	2	
23	BOLT - 1/4-20 X 2.00	90-BLT-02520X200	2	
24	BOLT FLG - 1/4-20 X 3/4	90-BLT-F02520X075	2	
25	NUT LOCK - 1/4-20	90-NUT-LOC025-20	4	
26	NUT LOCK - 3/4-10	90-NUT-LOC075-10	16	
27	SCREW CAP - 5/16-18 X 1 1/4	90-SCR-SH03118X125	1	
28	U-BOLT SQ. - 0.75 UNC 6 x 5.75	90-UBT-SQ07510X600X575	8	
29	WASHER SAE - 1/4	90-WSR-SAE025	8	
30	WASHER SAE - 3/4	90-WSR-SAE075	16	

Optional Sprinklers ♦



1



2



3



4









5



6



Optional Sprinklers

ITEM	DESCRIPTION	PART NUMBER	QTY	NOTES
1	SPRINKLER - NELSON SR150	SP-NEL-SR150	1	
2	SPRINKLER - NELSON SR200	SP-NEL-SR200	1	
3	SPRINKLER - KOMET TWIN 160	SP-KOM-T160	1	
4	SPRINKLER - KOMET TWIN 160 VARI	SP-KOM-T160A	1	
5	SPRINKLER - KOMET TWIN 202	SP-KOM-T202	1	
6	SPRINKLER - KOMET TWIN 202 VARI	SP-KOM-T202A	1	

Required Maintenance

To make sure your 4000 series traveller performs as intended it is important to follow the maintenance schedule in this manual.



Maintenance must be done only when the traveller is shut down and is in a non-loaded condition. This means that all mechanical and hydraulic tension has been released from the traveller.

Performing maintenance on the traveller during operation may result in serious injury and/or death to operators

Greases and Lubricants

See the following table for the greases and lubricants used for your traveller.

ITEM	SPECIFICATION
Gasoline Engine oil	10W-30 for general use. Refer to Honda engine manual for details if you need a different oil to match your operating conditions.
Diesel Engine oil	See diesel drive manual.
Grease	NGLI Grade 2 grease
Transmission oil	80W-90 gear oil
Indexer gearbox oil	80W-90 gear oil

Table 4 - Grease and Lubricants

Each Use



MAINTENANCE ITEM	PROCEDURE
Visually inspect equipment	Walk around the traveller and check for loose, missing, and/or damaged items. Replace missing and/or damaged items. Tighten loose items.
Inspect all pins	Check pins for wear and/or damage. Replace worn and/or damaged pins.
Inspect all lubrication points	Check all grease points. Use grease sprinkler to lubricate grease points as needed. Use a brush to apply grease to the indexer rails and drive button. Do not exceed times set in Grease Points Upkeep. See page 147.
Inspect tire pressure	<p>Check sidewall tire for operating pressure and use tire pressure gauge to see if inflation is correct.</p> <p>Do not lower the tire pressure below the tire's recommended level. Do not overinflate tires.</p> <p> Failure to use recommended tire pressure may result in the tire exploding, or separating from the wheel rim. This may result in serious injury and/or death. This will also damage the traveller</p>
Inspect all wheel nuts (See Star Pattern for Tightening Wheel Nuts, Page 146)	<p>Check and see if wheel nuts are tight. If they need to be tightened then tighten them with a torque wrench to:</p> <p style="text-align: center;">110 ft•lbs [149 N•m]</p> <p>Do not operate the traveller if the wheel nuts are loose.</p> <p> Using the traveller if the wheel nuts are not correctly torqued may result in wheel separation. This may result in serious injury and/or death, and will damage the traveller</p>
Verify fluid levels and filter condition	Inspect Honda engine air filter. Verify fluid levels for Honda engine. Refill fluids and/or replace filter as needed. Refer to Honda engine manual for details.
Verify indexer chain tension	Remove the guard, and then adjust indexer chain so that it contains no visible slack. Replace the guard when finished.
Verify man drive chain alignment and tension	Inspect alignment and tension of main drive chain. Adjust if needed.

Table 5 - Each Use

After First 25 hours (New Machines Only)

MAINTENANCE ITEM	PROCEDURE
Change engine oil	Change the oil in the engine. Refer to Honda engine manual or diesel drive manual for details.
Change transmission oil	Empty transmission of all old oil. Refill transmission using new oil.

Table 6 - After First 25 Hours

Every 100 Hours



MAINTENANCE ITEM	PROCEDURE
Inspect tire pressure	<p>Check sidewall tire for operating pressure and use tire pressure gauge to see if inflation is correct.</p> <p>Do not lower the tire pressure below the tire's recommended level. Do not overinflate tires.</p> <p> Failure to use recommended tire pressure may result in the tire exploding, or separating from the wheel rim. This may result in serious injury and/or death. This will also damage the traveller.</p>
Change engine oil	Change the oil in the engine. Refer to Honda engine manual or diesel drive manual for details.
Check transmission oil level	Verify that transmission contains enough oil to operate safely.
Check indexer gearbox oil level	Verify that indexer gearbox contains enough oil to operate safely.
Lubricate the listed major components	<p>Turntable ring ~ Indexer rails ~ Indexer idler block Drive chain idler arm pivot ~ Drive pulley lead screw All chains on traveller. See page 147.</p> <p>Reinstall any guards that may have been removed in order to grease the above components. Do not operate the traveller with missing or damaged guards.</p> <p> Operating the traveller with missing and/or damaged guards may lead to operators, spectators, and/or objects to come into contact with moving parts. This will cause serious injury and/or death to operators and/or spectators. This will also damage the traveller</p>

Table 7 - Every 100 Hours

Every 250 Hours

MAINTENANCE ITEM	PROCEDURE
Inspect sprinkler cart wheel bearings	Disassemble, clean, inspect, and repack sprinkler cart wheel bearings with new grease. Replace any worn, broken, or defective parts as needed.

Table 8 - Every 250 Hours

Before Storage

When the traveller is placed in storage for more than one day, the hose must be completely emptied.


MAINTENANCE ITEM	PROCEDURE
Drain the hose	<p>Pull the hose out in a level area leaving at least 1 full coil on the drum. Remove the drain plug from the gun cart, then reel the hose in with either the Honda engine on the traveller or a tractor PTO shaft. Adjust the hose while it is reeling in so that the coils are tightly packed.</p> <p>Do not leave the traveller unattended during this procedure.</p> <p> Leaving the traveller unattended may result in the hose wrapping on the drum incorrectly. This will lead to damage to the indexing system, hose, and/or the traveller.</p>
Clean the variable speed pulley	Remove the moving face of the variable speed pulley. Remove all containments from the bronze bushing and shaft. Lubricate the shaft and bushing using light oil.
Inspect traveller wheel bearings	Disassemble, clean, inspect, and repack wheel bearings with new grease. Replace any worn, broken, or defective parts as needed.
Lubricate all chains	Use a brush to apply grease to all chains. See page 147.
Prepare Honda engine for storage	Refer to Honda engine manual for storage preparation procedure.

Table 9 - Before Storage



Failing to clean out the traveller before long term storage will result in the traveller becoming clogged. A clogged hose will result in a build of gasses during long term storage. This may cause serious injury and/or death to operators and/or spectators. This may also damage the traveller.

After Long Term Storage

Complete the following procedure prior to start-up of your traveller after long term storage.


MAINTENANCE ITEM	PROCEDURE
Review operator's manual	Review this manual to verify how to operate the traveller safely. This will reduce the chance of user injury and equipment damage.
Inspect tires	Verify that tires are in good condition with no cracks, uneven wear, or other problems. Check sidewall of tire for operating pressure and use tire pressure gauge to see if inflation is correct. Do not lower the tire pressure below the tire's recommended level. Do not overinflate tires.  Failure to use recommended tire pressure may result in the tire exploding, or separating from the wheel rim. This may result in serious injury and/or death. This will also damage the traveller.
Change indexer gearbox and transmission oil	Empty indexer gearbox and transmission of all old oil. Refill indexer gearbox and transmission using new oil.
Inspect gas tank	Verify that gas tank and fuel lines are in good condition with no leaks. Fill gas tank with new fuel.

Table 10 - After Long Term Storage



Failing to review the operator's manual and/or inspecting the unit after long term storage may result in incorrect traveller operation and/or not performing maintenance on items that may require repair. This may result in serious injury and/or death to operators and/or spectators. This may also damage the traveller.

Star Pattern for Tightening Wheel Bolts

Follow the numbered pattern below when tightening your 3 Point Hitch Injector's wheel nuts to their required torque values. After you are finished tightening all nuts to their required values, repeat the numbered pattern to check that all nuts are correctly torqued.

A 6 bolt pattern is shown here. For other bolt patterns, do the same procedure.

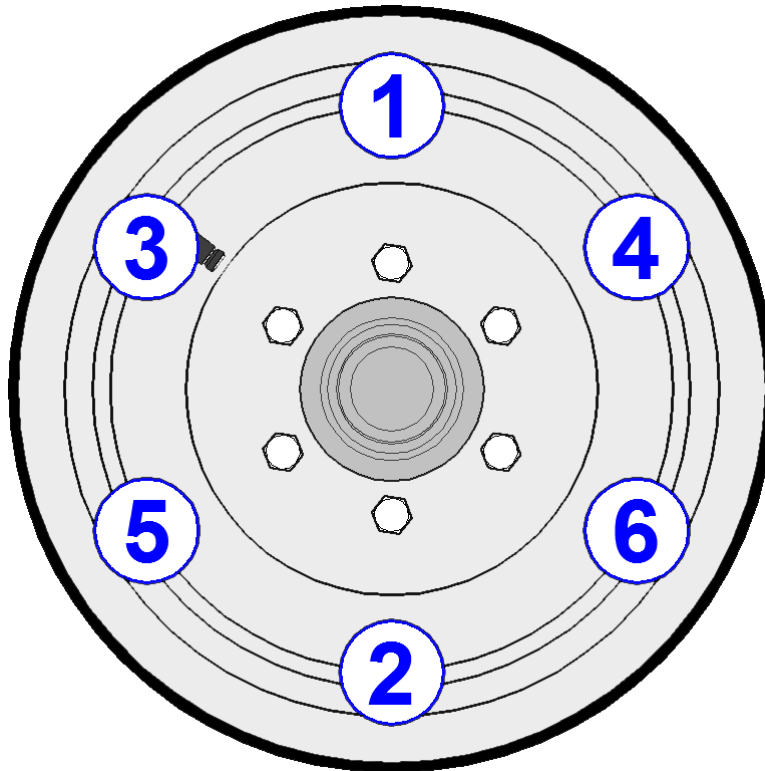


Figure 46 - Tighten Wheel Fasteners

img-00224



Failing to use a star pattern will result in some or all of the wheel bolts being torqued incorrectly. This may result in wheel separation, and will cause serious injury and/or death to operators and/or spectators. This will also damage the traveller.

Grease Point Locations

If you need to remove a guard to grease any part of the traveller you must replace it immediately after greasing. Do not operate the traveller with missing or damaged guards.

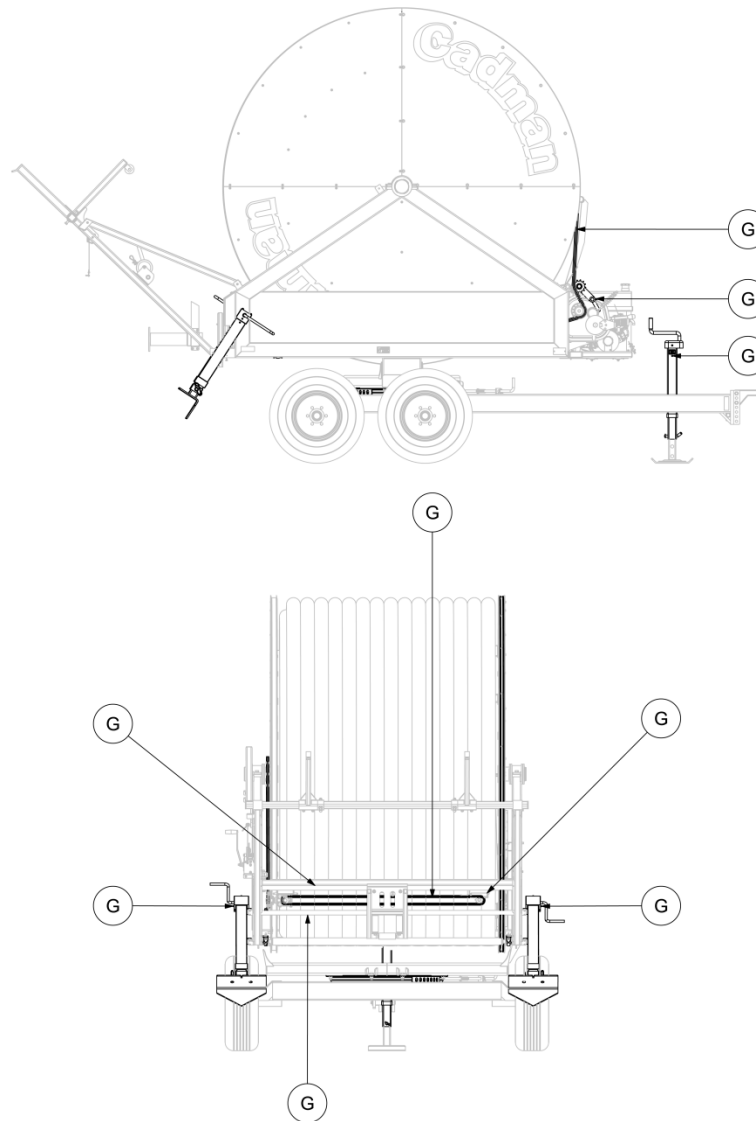


Figure 47 - Traveller Grease Point

img-01381



Operating the traveller with missing and/or damaged guards may lead to operators, spectators, and/or objects to come into contact with moving parts. This will cause serious injury and/or death to operators and/or spectators. This will also damage the traveller.

Indexing System Adjustment

Only adjust the traveller's indexing when the base layer is visible. In addition, the hose connection to the drum must be at the six o'clock position with no gaps between the hoses before adjusting the traveller's indexing.

Step 1

Remove the indexer shield from the traveller.

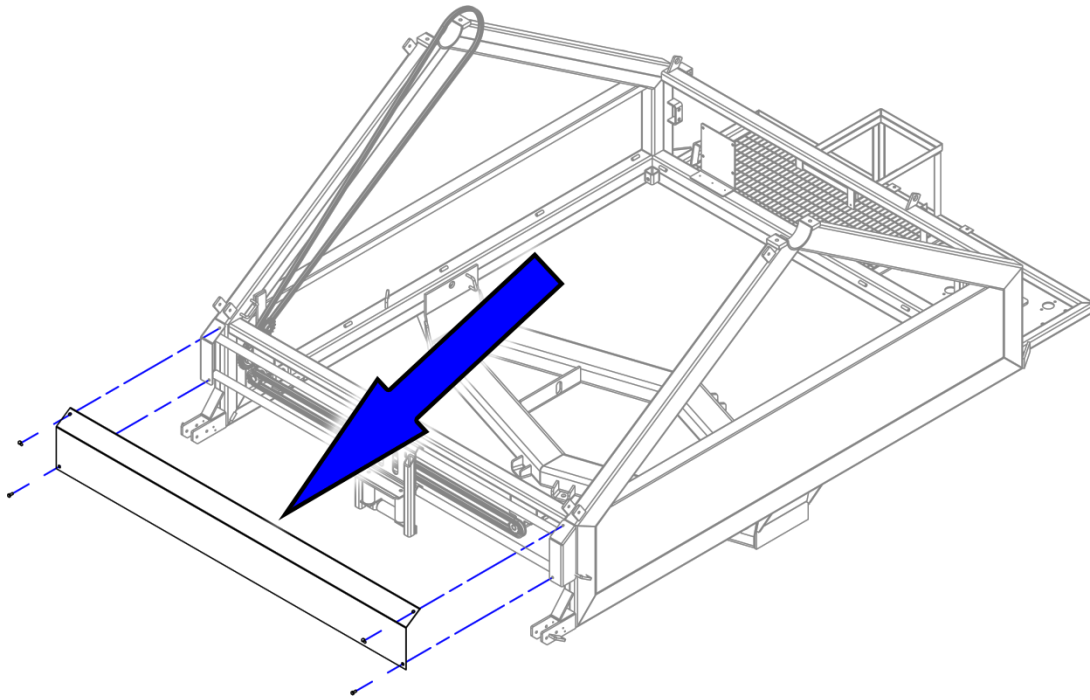


Figure 48 - Remove Shields

img-01383

Step 2

Loosen the #50 chain and idler sprocket. Then remove the #50 chain from the gearbox sprocket.

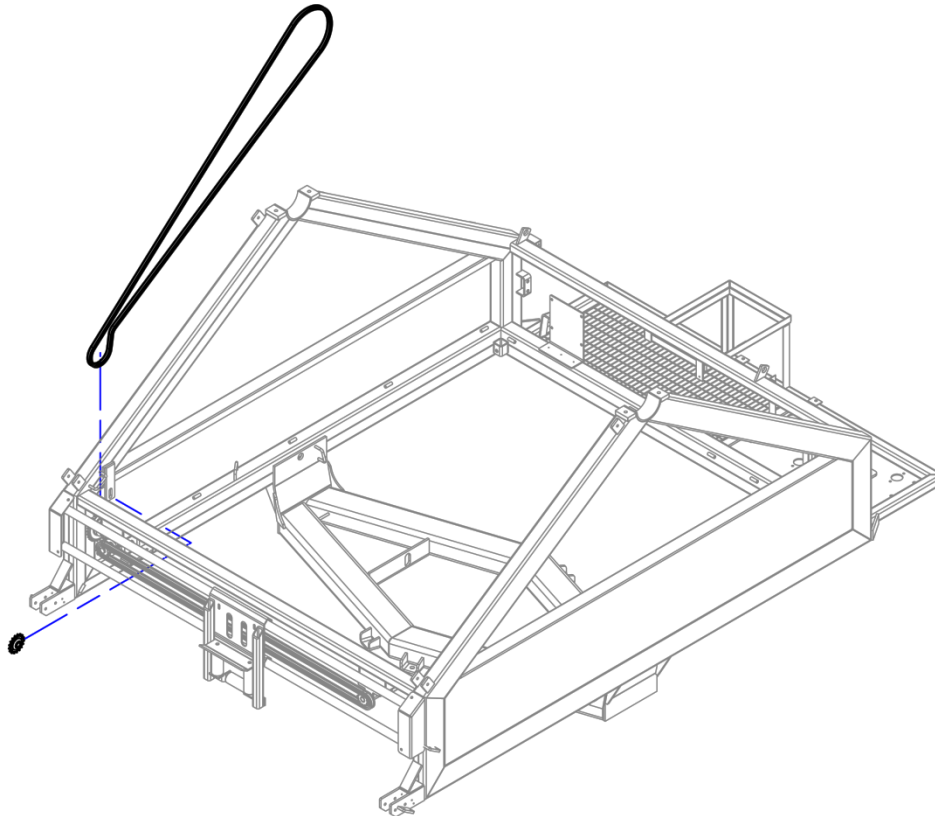


Figure 49 - Loosen Chain

img-01384

Step 3

Manually adjust the hose guide position by rotating the sprocket on the indexer gearbox. The hose guide must be in a position that will allow the hose to wrap onto the drum in a straight line.

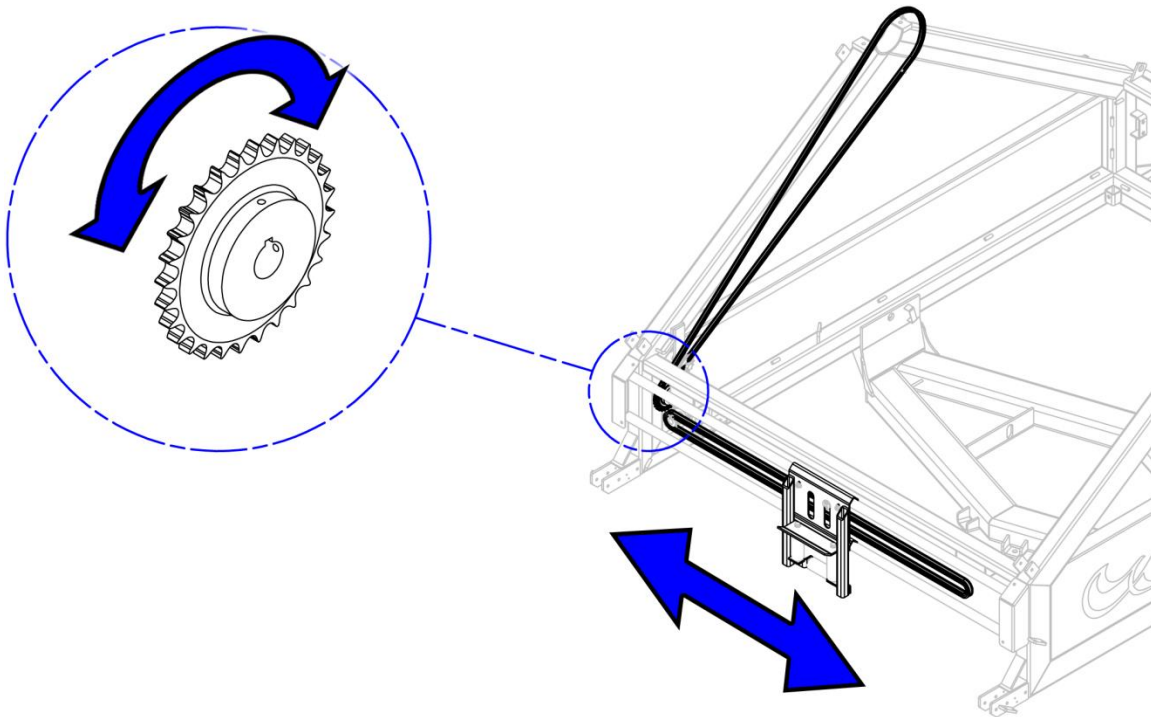


Figure 50 - Adjust Indexer

img-01385

Step 4

Reinstall the #50 chain onto the indexer gearbox sprocket. Then reinstall the idler sprocket. Remove all the slack from the #50 chain by pushing with a 15/16 inch wrench on the inside nut of the idler sprocket during reassembly before tightening the idler sprocket back onto the traveller.

Step 5

Reinstall the indexer and idler shields.



Operating the traveller with missing and/or damaged guards may lead to operators, spectators, and/or objects to come into contact with moving parts. This will cause serious injury and/or death to operators and/or spectators. This will also damage the traveller.

Sprinkler Performance Data

Your 4000 series traveller will come equipped with one of several sprinkler guns. Use the data from the chart that matches which sprinkler gun your traveller is equipped with when determining your retrieval rates. See page 14 for a retrieval rate selection example.

Disclaimer: Performance data has been obtained under ideal test conditions and may be adversely affected by wind, poor hydraulic entrance conditions or other factors.



The following charts are to be used as a guide only. Always verify the application amount with rain gauges to confirm that your application is correct.



NELSON - SR 150



NELSON - SR 200



KOMET - TWIN 160 ULTRA

FIXED



KOMET - TWIN 202 ULTRA



VARIABLE



Figure 51 - Available Sprinkler Options

img-01420

Nelson SR150 Big Gun[®] (24° Trajectory, Taper Nozzle)

NOZZLE	Ø 0.7		Ø 0.8		Ø 0.9		Ø 1		Ø 1.1		Ø 1.2		Ø 1.3		Ø 1.4	
	PSI	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM
50	100	250	130	270	165	290	205	310	255	330	300	346	350	360	408	374
60	110	266	143	286	182	306	225	326	275	346	330	366	385	380	446	396
70	120	280	155	300	197	320	245	340	295	360	355	380	415	396	483	412
80	128	290	165	310	210	336	260	356	315	376	380	396	445	410	516	428
90	135	300	175	320	223	346	275	366	335	390	405	410	475	426	547	442
100	143	310	185	330	235	356	290	376	355	400	425	420	500	440	577	458
110	150	320	195	340	247	366	305	386	370	410	445	430	525	450	605	472
120	157	330	204	350	258	376	320	396	385	420	465	440	545	460	632	482

Table 11 - Nelson - SR150 Big Gun[®]

Nelson SR150 Big Gun[®] (24° Trajectory, Ring Nozzle)

NOZZLE	Ø 0.86		Ø 0.97		Ø 1.08		Ø 1.18		Ø 1.26		Ø 1.34		Ø 1.41	
	PSI	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM
50	100	246	130	266	165	286	205	300	255	320	300	336	350	350
60	110	260	143	280	182	300	225	316	275	336	330	350	385	366
70	120	270	155	290	197	310	245	330	295	350	355	366	415	380
80	128	280	165	300	210	320	260	340	315	360	380	380	445	396
90	135	290	175	310	223	330	275	350	335	370	405	390	475	406
100	143	300	185	320	235	340	290	360	355	380	425	400	500	416
110	150	310	195	330	247	350	305	370	370	390	445	410	525	426
120	157	326	204	336	258	360	320	380	385	400	465	420	545	436

Table 12 - Nelson - SR150 Big Gun[®]

Nelson SR200 Big Gun[®] (27° Trajectory, Taper Nozzle)

NOZZLE	Ø 1.05		Ø 1.1		Ø 1.2		Ø 1.3		Ø 1.4		Ø 1.5		Ø 1.6		Ø 1.75		Ø 1.9	
	PSI	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM
60	250	346	285	356	330	376	385	390	445	410	515	430	585	446	695	470	825	496
70	270	360	310	380	355	396	415	410	480	430	555	450	630	466	755	496	890	516
80	290	376	330	396	380	410	445	430	515	450	590	470	675	486	805	516	950	536
90	310	390	350	410	405	426	475	446	545	466	625	486	715	506	855	536	1005	556
100	325	400	370	420	425	440	500	460	575	480	660	500	755	520	900	550	1060	576
110	340	410	390	430	445	450	525	470	605	496	695	516	790	536	945	566	1110	590
120	355	420	405	440	465	460	545	480	630	506	725	530	825	550	985	680	1160	606
130	370	426	425	446	485	466	565	486	655	516	755	540	860	560	1025	590	1210	620

Table 13 - Nelson - SR200 Big Gun[®]

Nelson SR200 Big Gun[®] (27° Trajectory, Ring Nozzle)

NOZZLE	Ø 1.29		Ø 1.46		Ø 1.56		Ø 1.66		Ø 1.74		Ø 1.83		Ø 1.93	
	PSI	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM
50	230	326	300	356	350	370	410	390	470	406	535	420	640	436
60	250	340	330	370	385	390	445	410	515	426	585	440	695	456
70	270	356	355	386	415	406	480	426	555	440	630	456	755	476
80	290	370	380	400	445	420	515	440	590	456	675	470	805	490
90	310	380	405	416	475	436	545	456	625	470	715	486	855	506
100	325	390	425	426	500	446	575	466	660	480	755	500	900	520
110	340	400	445	436	525	456	605	476	695	490	790	510	945	536
120	355	410	465	446	545	466	630	486	725	500	825	520	985	546
130	370	416	485	450	565	470	655	490	755	506	860	526	1025	550

Table 14 - Nelson - SR200 Big Gun[®]



KOMET - Twin 160 Ultra (24° Trajectory, Taper Nozzle)

NOZZLE PSI	Ø 0.71		Ø 0.75		Ø 0.79		Ø 0.83		Ø 0.87		Ø 0.91		Ø 0.94		Ø 0.98	
	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.
40	92	227	101	233	113	240	124	242	137	244	150	246	163	248	176	251
50	102	256	113	265	127	273	138	277	153	282	168	286	182	290	197	295
60	112	275	124	284	139	293	152	299	167	305	184	310	199	316	216	323
70	121	285	134	294	150	303	164	310	181	317	199	324	215	330	233	339
80	130	294	143	303	160	312	175	319	193	327	212	334	230	341	249	351
90	137	303	152	312	170	321	186	329	205	337	225	345	244	353	264	362
100	145	311	160	321	179	330	196	338	216	347	237	355	257	364	278	373
110	152	319	168	329	188	338	205	348	226	356	249	365	270	374	292	384
120	159	326	175	336	196	346	215	355	237	365	260	374	281	384	305	393
130	165	334	182	344	204	354	223	364	246	373	271	383	293	393	317	401

Table 15 - KOMET - Twin 160 Ultra

NOZZLE PSI	Ø 1.02		Ø 1.06		Ø 1.10		Ø 1.14		Ø 1.18		Ø 1.22		Ø 1.26		Ø 1.30	
	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.
40	192	254	206	257	222	259	238	261	255	264	273	266	292	268	307	269
50	215	301	230	306	248	311	266	315	285	318	305	322	326	325	343	328
60	235	330	252	337	272	344	292	349	312	355	334	360	357	366	376	371
70	254	347	273	355	294	363	315	3370	337	377	361	384	386	391	406	397
80	272	360	291	369	314	378	337	385	360	393	386	401	412	409	434	416
90	288	372	309	381	333	391	357	399	382	407	410	415	437	423	461	431
100	304	383	326	392	351	402	377	410	403	418	432	426	461	434	486	444
110	319	393	342	402	368	412	395	420	423	428	453	436	484	445	509	456
120	333	402	357	411	384	420	413	429	441	437	473	445	505	453	532	465
130	347	410	371	419	400	428	429	436	460	445	492	453	526	461	554	472

Table 16 - KOMET - Twin 160 Ultra (continued)

NOZZLE PSI	Ø 1.34		Ø 1.38		Ø 1.42		Ø 1.46		Ø 1.50		Ø 1.54		Ø 1.57	
	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.
40	317	271	347	272	366	274	387	275	409	277	430	279	450	280
50	366	332	388	335	409	338	433	342	458	245	481	348	503	350
60	400	376	425	381	449	386	474	291	501	297	527	399	551	403
70	433	404	459	411	484	417	513	424	541	431	569	433	595	438
80	462	424	491	431	518	439	548	446	579	454	608	457	636	464
90	490	440	521	448	549	546	581	465	614	473	645	477	675	484
100	517	453	549	462	579	472	612	481	647	490	680	495	711	502
110	542	465	576	475	607	485	642	295	679	505	713	511	746	519
120	566	475	602	485	634	495	671	505	709	516	745	527	779	533
130	589	482	626	492	660	503	698	513	738	523	775	531	811	540

Table 17 - KOMET - Twin 160 Ultra (continued)

KOMET - Twin 202 Ultra (24° Trajectory)

NOZZLE PSI	Ø 0.87		Ø 0.91		Ø 0.94		Ø 0.98		Ø 1.02		Ø 1.06		Ø 1.10		Ø 1.14	
	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.
40	137	247	150	250	163	252	176	255	192	257	206	260	222	263	238	265
50	152	285	168	290	182	294	197	299	215	304	230	310	248	315	266	319
60	167	307	184	313	199	319	216	326	235	333	252	340	272	347	292	352
70	181	319	199	325	215	332	233	340	254	349	273	357	294	365	315	372
80	193	328	212	336	230	343	249	352	272	361	291	370	314	380	337	387
90	205	338	225	347	244	355	264	364	288	374	309	383	333	393	357	401
100	216	349	237	357	257	366	278	375	304	385	326	394	351	404	377	412
110	226	359	249	368	270	377	292	386	319	396	342	405	368	415	395	423
120	237	369	260	379	281	388	305	397	333	407	357	416	384	425	413	434
130	246	377	271	387	293	397	317	406	347	415	371	424	400	433	429	441

Table 18 - KOMET - Twin 202 Ultra

NOZZLE PSI	Ø 1.18		Ø 1.22		Ø 1.26		Ø 1.30		Ø 1.34		Ø 1.38		Ø 1.42		Ø 1.46	
	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.
40	225	267	273	269	292	271	307	273	327	274	347	276	365	278	387	279
50	285	322	305	326	326	330	343	333	366	336	388	340	409	343	433	346
60	312	358	334	363	257	369	376	374	400	379	425	384	449	389	474	395
70	337	379	361	386	386	393	406	400	433	406	459	413	484	420	512	426
80	360	395	386	403	412	411	434	418	462	426	491	433	518	441	548	449
90	382	409	410	417	437	425	461	433	490	442	521	450	549	459	581	467
100	403	420	432	428	461	437	486	447	517	456	549	465	579	474	612	484
110	423	431	453	440	484	448	509	459	542	469	576	478	607	489	642	499
120	441	442	473	450	505	459	532	470	566	480	602	490	634	501	671	511
130	460	449	492	457	526	466	554	477	589	487	626	497	660	508	698	518

Table 19 - KOMET - Twin 202 Ultra (continued)

NOZZLE PSI	Ø 1.50		Ø 1.54		Ø 1.57		Ø 1.61		Ø 1.65		Ø 1.69		Ø 1.73		Ø 1.77	
	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.	GPM	DIA.
40	409	281	430	282	450	283	479	284	496	285	525	286	548	288	573	290
50	458	349	481	351	503	354	536	356	555	358	586	360	613	363	640	362
60	501	400	527	403	551	407	587	411	608	415	642	418	671	422	701	424
70	541	433	569	437	595	443	634	448	656	453	694	458	725	464	758	469
80	579	456	608	462	636	468	678	475	702	481	742	487	775	493	810	499
90	614	475	645	482	675	489	719	496	744	503	787	510	822	517	859	523
100	647	493	680	500	711	508	757	516	784	523	829	531	867	538	905	546
110	679	509	713	516	746	524	794	533	823	541	870	549	909	557	950	565
120	709	522	745	529	779	538	830	547	859	555	909	564	950	572	992	581
130	738	529	775	537	811	546	864	555	894	563	946	572	988	581	1032	590

Table 20 - KOMET - Twin 202 Ultra (continued)



Watering Time required for One Acre (in minutes)

GPM	PRECIPITATION RATE (ACRE INCHES)								
	0.20"	0.30"	0.40"	0.50"	0.75"	1.00"	1.25"	1.50"	2.00"
150	36	54	72	91	136	181	226	272	----
175	31	47	62	78	116	155	194	233	----
200	27	41	54	68	102	136	170	204	272
225	24	36	48	60	91	121	151	181	241
250	22	33	43	54	81	109	136	163	217
275	20	30	39	49	74	99	123	148	197
300	18	27	36	45	68	91	113	136	181
350	16	23	31	39	58	78	97	116	155
400	----	20	27	34	51	68	85	102	136
450	----	18	24	30	45	60	75	91	121
500	----	16	22	27	41	54	68	81	109
550	----	15	20	25	37	49	62	74	99
600	----	----	18	23	34	45	57	68	91
650	----	----	17	21	31	42	52	63	84

Table 21 - Watering Time

Retrieval Rate (in.)

MIN. / ACRE	LANE SPACING (FEET)								
	200	225	250	275	300	325	350	375	400
10	----	----	----	----	----	----	----	139	131
15	----	----	139	126	116	107	100	93	87
20	131	116	104	95	87	80	75	70	65
25	105	93	84	76	70	64	60	56	52
30	87	77	70	63	58	54	50	46	44
35	75	66	60	54	50	46	43	40	37
40	65	58	52	47	44	40	38	35	33
45	58	52	46	42	39	36	33	31	29
50	52	46	42	38	35	32	30	28	26
55	48	42	38	35	32	29	27	25	24
60	44	39	35	32	29	27	25	23	22
65	40	36	32	29	27	25	23	21	20
70	37	33	30	27	25	23	21	20	19
75	35	31	28	25	23	21	20	19	17
80	33	29	26	24	22	20	19	17	16
85	31	27	25	22	21	19	18	16	15
90	29	26	23	21	19	18	17	16	15
95	28	24	22	20	18	17	16	15	14
100	26	23	21	19	17	16	15	14	13

Table 22 - Retrieval Rate

4000 Series Dimensions and Weight

The dimensions and weights shown on the following page are only approximate.

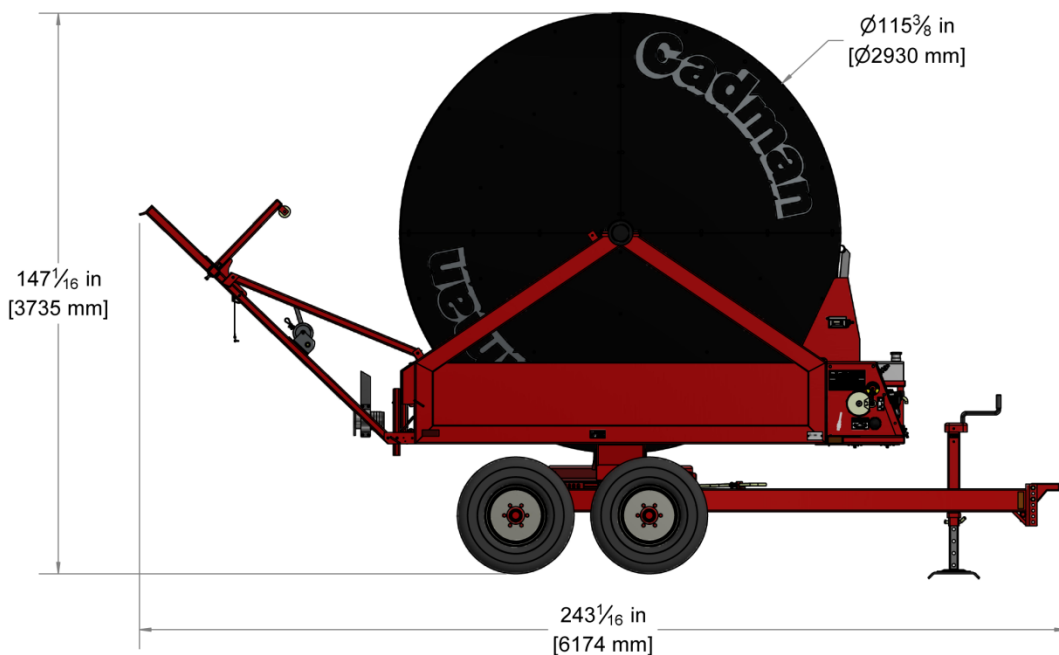
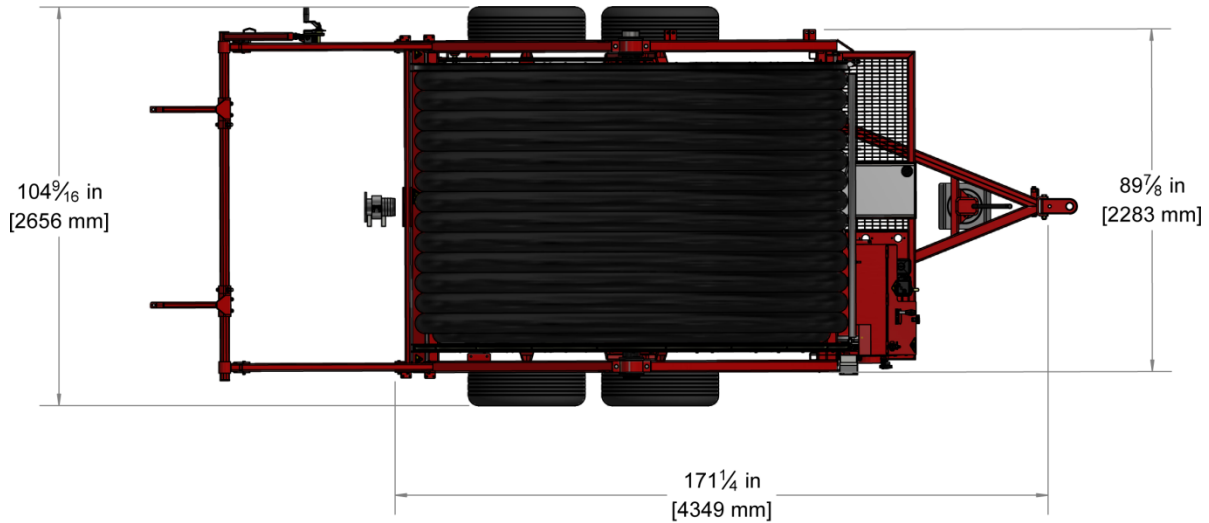


Figure 52 - Overall Dimensions 4000 Series

img-01419

The weight for an empty Cadman 4000 series traveller is 9,500 lbs (4310 kg)

Useful Information

LENGTH

1 FOOT	= 12	Inches	1 METER	= 39.37	Inches
	= 0.3048	Meter		= 3.2808	Feet
1 ROD	= 198	Inches	1 MILE	= 5280	Feet
	= 16.5	Feet		= 1760	Yards
	= 5.5	Yards		= 320	Rods
	= 5.029	Meters		= 1609	Meters

AREA

1 SQUARE FOOT	= 144	Square Inches
	= 0.0929	Square Meters
1 SQUARE YARD	= 1296	Square Inches
	= 0.8361	Square Meters
1 SQUARE METER	= 1550	Square Inches
	= 10.764	Square Feet
1 ACRE	= 43560	Square Feet
	= 4047	Square Meters
	= 0.4047	Hectare
1 HECTARE	= 107639	Square Feet
	= 10000	Square Meters
	= 2.47105	Acres
1 SQUARE MILE	= 640	Acres
	= 259	Hectares

VOLUME

1 GALLON (US)	= 0.8327	Imperial Gallons
	= 231	Cubic Inches
	= 0.1337	Cubic Feet
	= 8.345	Pounds
1 CUBIC FOOT	= 1728	Cubic Inches
	= 7.48	Gallons (US)
	= 62.4	Pounds
	= 28.32	Liters
1 ACRE INCH	= 27154	Gallons (US)
	= 254	Cubic Meters / Hectare
AREA OF A CIRCLE	= Diameter x Diameter x 0.7854	
CYLINDER VOLUME (US GAL.)	= Diameter (ft) x Diameter (ft) x Length (ft) x 5.8752	