



1330 76th Ave SW • Cedar Rapids, IA • 52404-7052
Ph: 319/363-8281 • Fax: 319/286-3351
www.NewLeader.com

Dear Customer:

On behalf of Highway Equipment Company, now doing business as New Leader Manufacturing, we want to thank you for your purchase of your New Leader® equipment.

You are now eligible for our **FREE EXTENDED WARRANTY PROGRAM** provided your dealer completes and returns the DELIVERY & EXTENDED WARRANTY FORM to New Leader Manufacturing within 30 days of delivery.

When your dealer submits the DELIVERY & EXTENDED WARRANTY FORM online, not only will you receive our BASIC (6) six-month genuine parts only warranty; you will also receive, at no charge, an additional (18) eighteen months for a total of (24) twenty-four months of warranty for parts.

As an added bonus for getting the DELIVERY & EXTENDED WARRANTY FORM to New Leader Manufacturing within 30 days of delivery, we will also extend labor coverage at our standard dealer labor reimbursement rate for a period of (24) twenty-four months. Contact your dealer to register and complete the DELIVERY & EXTENDED WARRANTY FORM online at <http://legacy-newleader.highwayequipment.com>.

Thank you for your purchase.

FREE Extended Warranty Program

- 30 days to turn in DELIVERY & EXTENDED WARRANTY FORM
- 24 months on genuine parts
- 24 months labor

This pre-delivery checklist is provided to identify the items checked and, if necessary, adjusted by the dealer prior to delivery of this machine.

CHECK THE FOLLOWING AND ADJUST IF NECESSARY:

Before starting engine/Before starting machine operation

- | | |
|---|--|
| ☐ Battery condition and connection | ☐ Center divider in frame |
| ☐ Electrical connections | ☐ Safety shields in place |
| ☐ Hydraulic oil level and line connections | ☐ All fasteners secure |
| ☐ Gear case oil level (right and/or left) | ☐ Chain tension and sprocket alignments |
| ☐ Lubricate all grease fittings | ☐ Center spinner frame assembly |
| ☐ Frame mounts adjusted properly | ☐ Tighten set screw in divider adjuster |

Start chassis/Start run to operation temperature

- | | |
|---|---|
| ☐ All gauges operating correctly | ☐ Hydraulic fittings tight no leaks |
| ☐ Engine RPM (operating speed) | ☐ Flow control valve operation |
| ☐ Check operation of all alarms | ☐ Calibrate processor |
| ☐ Check operation of monitor and display | ☐ Test-drive, verify calibration |
| ☐ Hydraulic system functions | ☐ Test manual operation of conveyor & spinners |
| ☐ Pump flow @ OERPM is ____ GPM | ☐ Check belt alignment and chain tension |

Stop operation/Turn off engine, engage parking brake

- | | |
|---|--|
| ☐ Visual check for leaks | ☐ All oil levels full |
|---|--|

Inspection performed by: Dealer Signature _____ Date _____

Reviewed the following with the owner:

- | | | | |
|--|---|----------------------------------|-----------------------------------|
| ☐ Operations manual | ☐ Safety precautions | ☐ Storage | ☐ Warranty |
|--|---|----------------------------------|-----------------------------------|

Customer Signature _____ Date _____

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1330 76TH Ave SW
Cedar Rapids, IA 52404-7052
Phone: (800) 363-1771
www.NewLeader.com

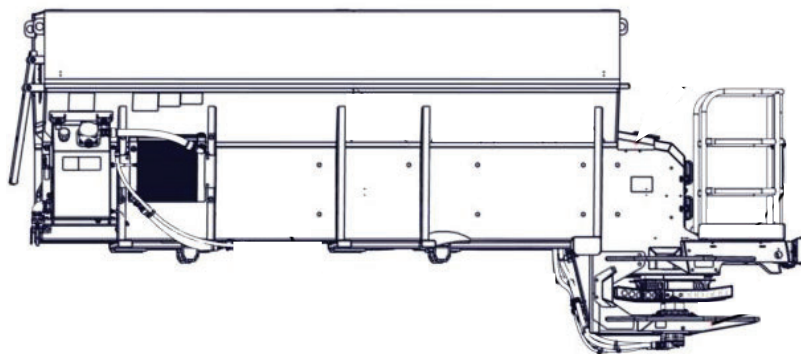
NL710 RBR

Parts Manual

Unit Serial No. _____

Manual Number: 325025-A

Effective 04/2025



Serious injury or death can result from the failure to read, understand, and follow instructions provided in the spreader operator's manual. Before using this equipment, read, understand and follow all instructions in the spreader operator's manual as well as the chassis operator's manual supplied by your chassis manufacturer.

NEW LEADER LIMITED WARRANTY

BASIC WARRANTY

HIGHWAY EQUIPMENT COMPANY d/b/a NEW LEADER MANUFACTURING ("Highway") has manufactured or is distributing the Product/Genuine Parts to which this warranty is attached, and warrants to its original reseller including Dealers, Distributors and Original Equipment Manufacturers (hereafter called Dealer) that the Product/Genuine Parts will, under normal conditions of use and service, be free from material defects due to faulty manufacturing for a period of six (6) months from the date of delivery to the original user. For any Product/Genuine Part that does not conform to the aforesaid warranty within six (6) months from the date of delivery to the original user, your Dealer will, at its option, repair or replace parts. Labor costs for this basic warranty coverage will be paid by Highway to the Dealer at their standard shop rate, based on the amount of time Highway establishes to be the time reasonably necessary to make required repairs. If the Product/Genuine Part is defective in materials or workmanship, you must promptly notify your Dealer; and complete the warranty registration by utilizing the internet at <http://dealer.highwayequipment.com> for such Product before the expiration of the warranty period (Genuine Parts do not require a warranty registration but may require proof of purchase). If your Dealer determines that the defect is due to Highway's material or workmanship, your Dealer will, with Highway's consent, repair such defect during normal working hours, at their location, or such other location as the Dealer may designate. The installation of any part that did not originate from Highway will void this Basic Warranty in its entirety. In the event of repair or replacement, the warranty period shall not be extended beyond the original warranty period. In the case of a demonstration or rental machine (Demo), the warranty will begin at the date of delivery to the original user. If the Demo is sold within the first 120 days of the demo or rental period, the warranty will re-start to the date it is delivered to the end user. If the Demo is sold after the 120th day, the warranty will remain at the date of original delivery to the original user.

NEW LEADER EXTENDED WARRANTY

In lieu of the basic warranty described above, if the warranty registration (or warranty information as provided above) is received at Highway within thirty (30) days after the date of delivery to the original user, Highway will warrant that the Product will, under normal conditions of use and service, be free from material defects due to faulty manufacturing for a period of twenty-four (24) months from the date of delivery to the original user. For any Product that does not conform to the aforesaid warranty within twenty-four (24) months from the date of delivery, your Dealer will, at its option, send you a new part, or give you full credit for the part, provided the replacement part is purchased through your Dealer. Labor costs for this extended warranty coverage will be paid by Highway to the Dealer at their standard shop rate, based on the amount of time Highway establishes to be the time reasonably necessary to make required repairs. If the Product is defective in materials or workmanship, you must promptly notify your Dealer before the expiration of the warranty period. If your Dealer determines that the defect is due to Highway's material or workmanship, your Dealer will, with Highway's consent, repair such defect during normal working hours, at their location, or such other location as your Dealer may designate. In the event of repair or replacement, the warranty period shall not be extended beyond the original warranty period. In the case of a Demo, the warranty will begin at the date of delivery to the original user provided the machine is registered with Highway within 30 days. If the Demo is sold within the first 120 days of the demo or rental period and the machine is registered with Highway within 30 days of the sale, the extended warranty will re-start to the date it is delivered to the end user. If the Demo is sold after the 120th day and is registered with Highway within 30 days of the sale, the extended warranty will remain at the date of original delivery to the original user.

Genuine Parts are covered by the Basic Warranty and are not eligible for the Extended Warranty.

If you fail to complete the warranty registration (or warranty information as provided above) to Highway within thirty (30) days after the date of delivery, the extended warranty shall not apply, and your sole remedy for any defects in the Product shall be under the basic warranty described above. This includes all demo or rental machines.

The above warranties do not cover:

- (1) Product that is damaged by abuse, neglect, accident, or modification;
- (2) fluids, towing, telephone, travel and cleaning cost;
- (3) loss of use of vehicle, inconvenience, commercial loss, or consequential damages;
- (4) any combustion engine; or
- (5) the Product itself if parts are installed on the Product that did not originate from Highway.
- (6) Labor for Genuine Parts

The above warranties do not apply under the following conditions:

- (1) when Product has been improperly used or installed, or modified, or fitted with sideboards, or fails because of defects or inefficiency of components not furnished with the Product;
- (2) **when Product is used for purposes for which it was not originally designed or intended;**
- (3) when Product is used under abnormal operating conditions; or
- (4) when the dealer or user fails to follow Highway instructions regarding the Product, including the instruction to install only Highway supplied parts onto the Product.

HIGHWAY WILL BEAR NO OTHER EXPENSE, INCLUDING BUT NOT LIMITED TO LABOR AND MATERIAL COSTS (OTHER THAN THOSE SPECIFIED HEREIN) OF ANY KIND, AND YOUR EXCLUSIVE REMEDY, IN LIEU OF ALL INCIDENTAL, SPECIAL, CONSEQUENTIAL OR ANY OTHER DAMAGES, INCLUDING, BUT NOT LIMITED TO, DAMAGES FOR NEGLIGENCE, IS LIMITED TO REPAIR OR REPLACEMENT AS HERETOFORE DESCRIBED. THE FOREGOING WARRANTIES ARE IN LIEU OF ALL OTHER REPRESENTATIONS OR WARRANTIES, EXPRESS OR IMPLIED OF ANY KIND REGARDING ANY PRODUCT, INCLUDING BUT NOT LIMITED TO THE IMPLIED WARRANTIES OF MERCHANTABILITY AND FITNESS FOR A PARTICULAR PURPOSE OR USE. IN NO CASE SHALL HIGHWAY BE LIABLE FOR ANY SPECIAL, INCIDENTAL OR CONSEQUENTIAL DAMAGES BASED UPON BREACH OF WARRANTY, BREACH OF CONTRACT, NEGLIGENCE, STRICT TORT, OR ANY OTHER LEGAL THEORY.

Unless modified in writing, signed by both parties, this Limited Warranty is understood to be the complete and exclusive agreement between the parties, superseding all prior agreements, oral or written, and all other communications between the parties relating to the subject matter of this Limited Warranty. No representative or agent of Highway, nor any third party has authority to change or modify this warranty in any respect, nor to assume any other obligation or liability on behalf of Highway. Any action for breach of warranty must be commenced within six (6) months following the expiration of the Limited Warranty.

These warranties are extended only to the original Dealer and are not transferable. In the event of a warranty claim, you should promptly notify your Dealer and provide the following:

1. Model and serial number of the Product;
2. Date of delivery to the original user;
3. Part number of the defective part;
4. Description of the difficulty encountered;
5. Date of repair.

Highway will work with your Dealer regarding instructions for repair, replacement, or refund, if the warranty claim can be validated.

Effective with Product delivered to original user on or after August 25, 2014.

Table of Contents

Warranty	2	14' Conveyor Group	32
Table of Contents	3	Main	32
Ordering Parts: Instructions.....	4	Conveyor Cartridges	34
Body.....	5	Conveyor Gear Cases	38
Sight Window	5	Gear Case Assy - LH.....	39
Mounting Pads	5	Gear Case Assy - RH	39
Front Ladder	6	Gear Case Service Parts.....	40
Platform.....	7	Spinners	41
Platform Assembly	8	Spinner Assembly	41
Screens.....	9	Spinner Motor	45
Lights	10	Electrical	46
Sign – Slow-Moving Vehicle (SMV) & Speed		Harnesses and Sensors.....	46
Identification Symbol (SIS).....	11	Decals	58
Deflectors	11	Safety	58
Waterfalls	12	Decor Group	51
Chutes.....	13	Calibration.....	52
Hydraulics - 14'	14	Spread Pattern Test Kit	52
Main Hydraulics	14	Calibration Chutes	53
Spinner Hydraulics.....	18		
Spinner Control Valve Assembly	19		
Conveyor Hydraulics.....	20		
Conveyor Control Valve Assembly	22		
Case Drain Group	23		
Case Drain Mounting Assembly	26		
Tank Group	27		
Tank Assembly	28		
Return Filter.....	29		
Tank Decal Group.....	29		
Cooler Assembly.....	30		

NOTE: The information contained within this manual was current at the time it was published. Some information is subject to change to ensure the best performance of the unit. New Leader Manufacturing reserves the right to make changes in materials or design of the product and its manual at any time without notice.

Check with your Authorized Dealer or call our New Leader Manufacturing (NLM) Product Sales and Support Department at 1-888-363-8006 for the latest version of the manual.



® Order from an AUTHORIZED DEALER in your area.

Ordering Parts: Instructions

When ordering, please always provide the following:

1. The pertinent model and serial number
2. Part name(s), part number(s) and the quantity required
3. The shipping address
4. The preferred carrier, if applicable

Unless claims for shortages or errors are made immediately upon receipt of goods they will not be considered. Any part returns should be directed through the dealer from which they were purchased.

When broken goods are received, a full description of the damage should be made by the carrier agent on the freight bill. If this description is insisted upon, full damage can be collected from the transportation company.

No responsibility is assumed for delay or damage to merchandise while in transit. Our responsibility ceases upon delivery of shipment to the transportation company from whom a receipt is received showing that shipment was in good condition when delivered to them, therefore, claims (if any) should be filed with the transportation company and not with New Leader Manufacturing.

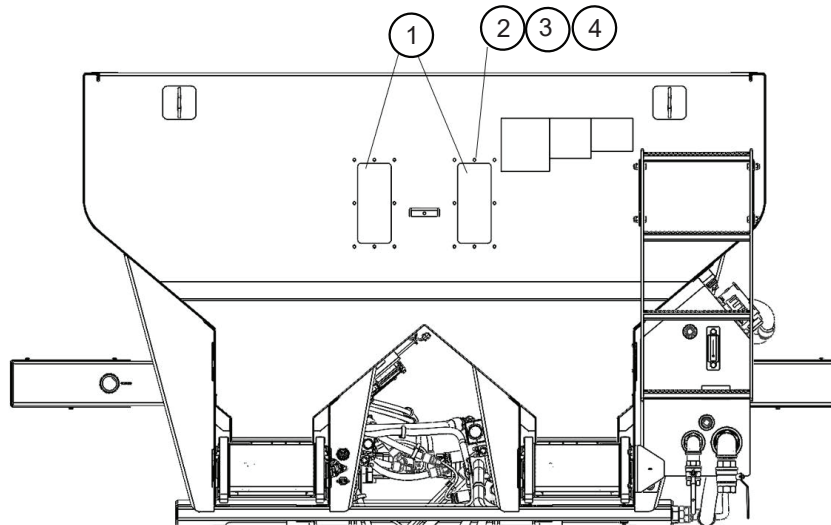
If your claims are not being handled (by the transportation company) to your satisfaction, please call our Product Sales & Support Department at New Leader Manufacturing at (800) 363-1771 for assistance.

In the parts list the following symbols and abbreviations stand for:

- * - Not Shown
- AR – As Required
- CS – Carbon Steel
- SS – Stainless Steel
- NS – Not Serviced

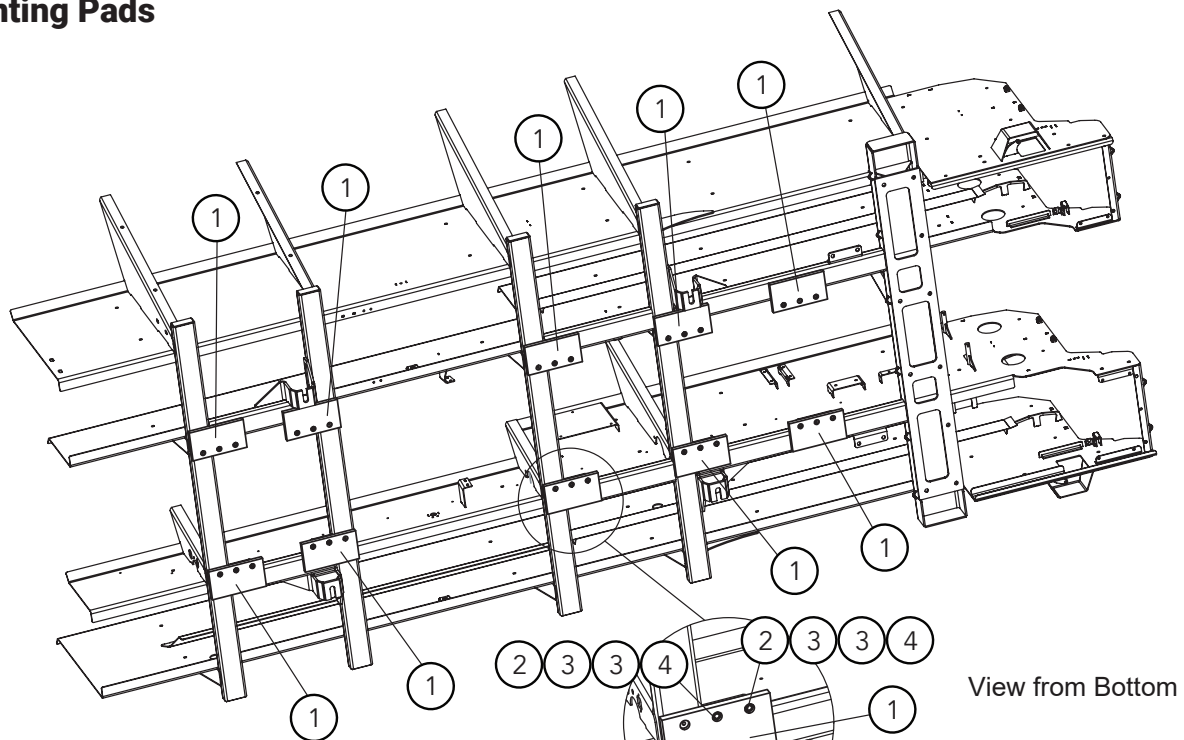
The parts listed under the different steel types (CS, 409 SS and 304 SS) are for that type of unit and do not necessarily mean the part is made of that type of steel.

Body Sight Window



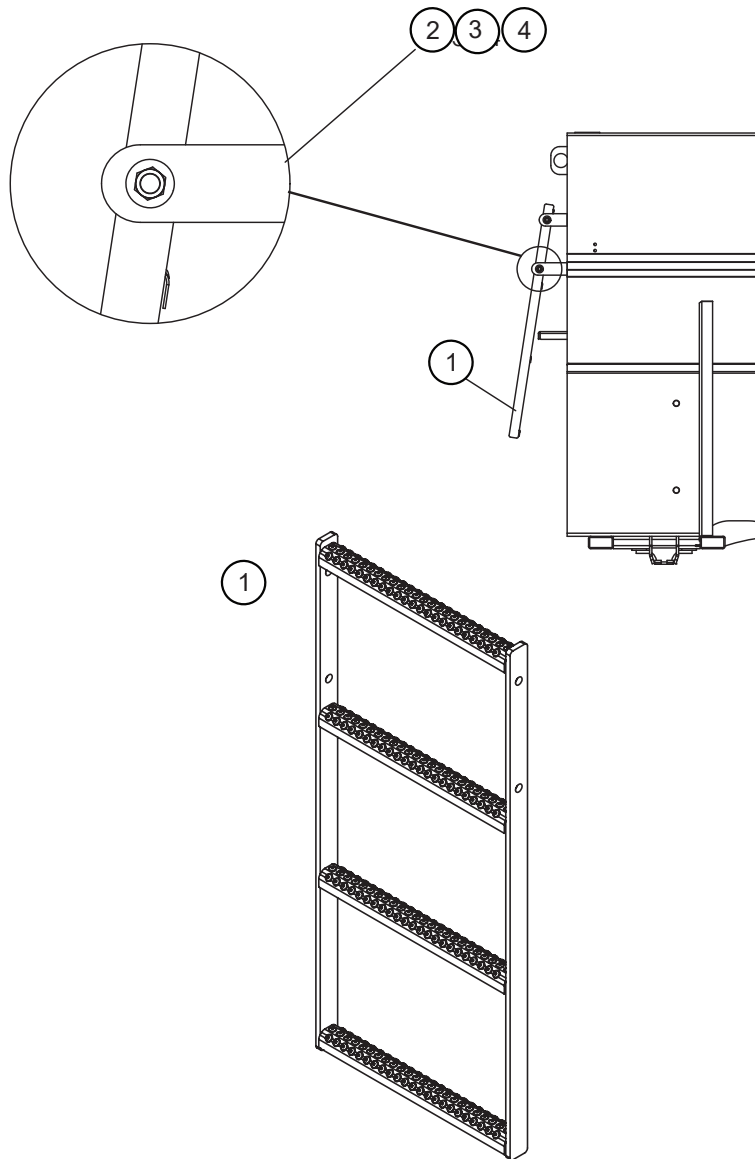
Key	NLM	Description	Qty	Key	NLM	Description	Qty
1	302686	Window - Sight 5X12 Plexiglas	2	3	36423	Washer - .25 SS Flat	16
2	36395	Capscrew - .25-20NC X 1 SS	16	4	42034	Nut - .25-20NC SS Lock	16

Mounting Pads



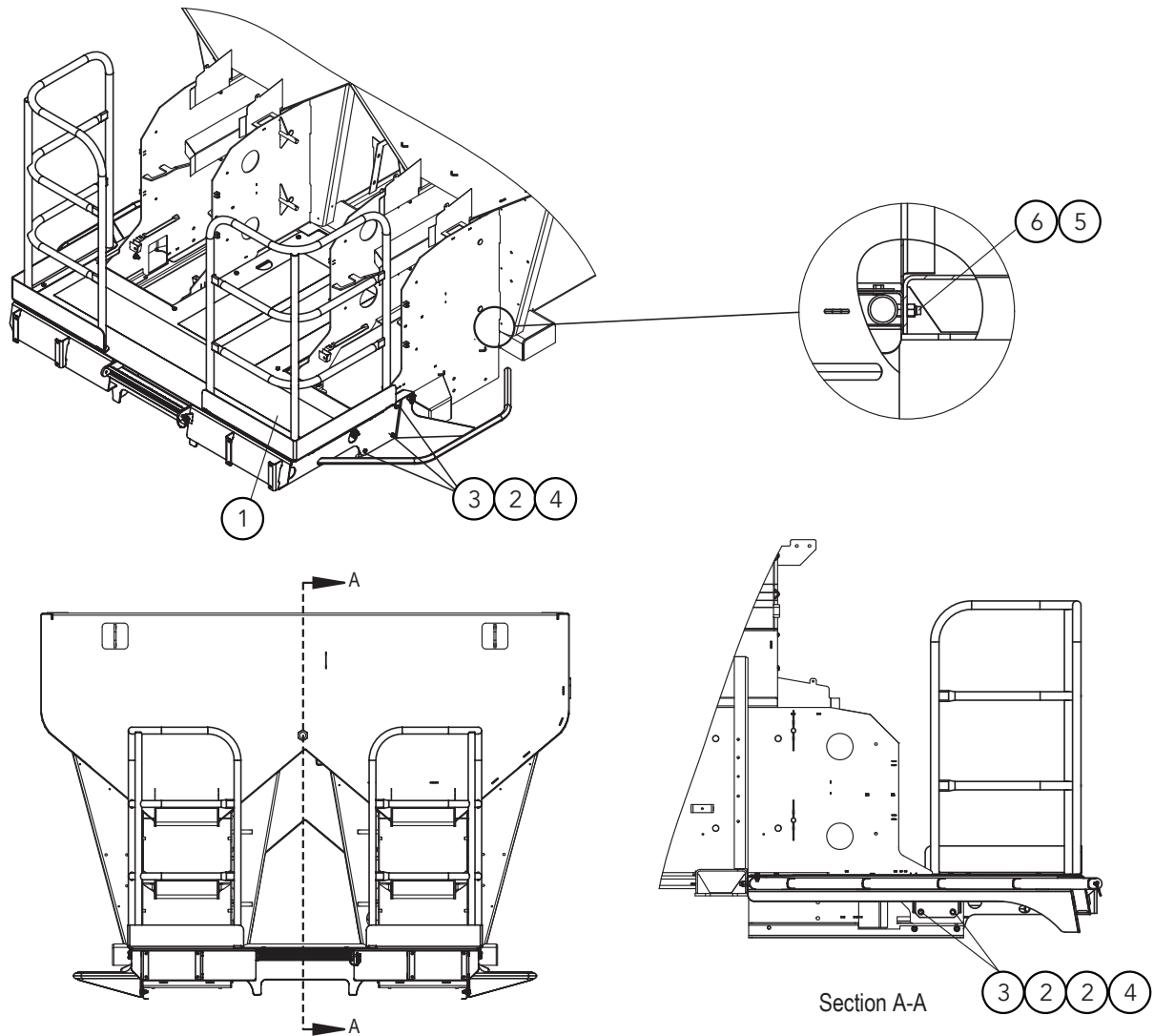
Key	NLM	Description	Qty	Key	NLM	Description	Qty
1	323590	Pad - Mount .75 x 5.5 x 10 Poly	10	3	36423	Washer - .25 SS Flat	40
2	40750	Capscrew - .25-20NC x 1.25 SS	20	4	42034	Nut - .25-20 NC SS Lock	20

Front Ladder



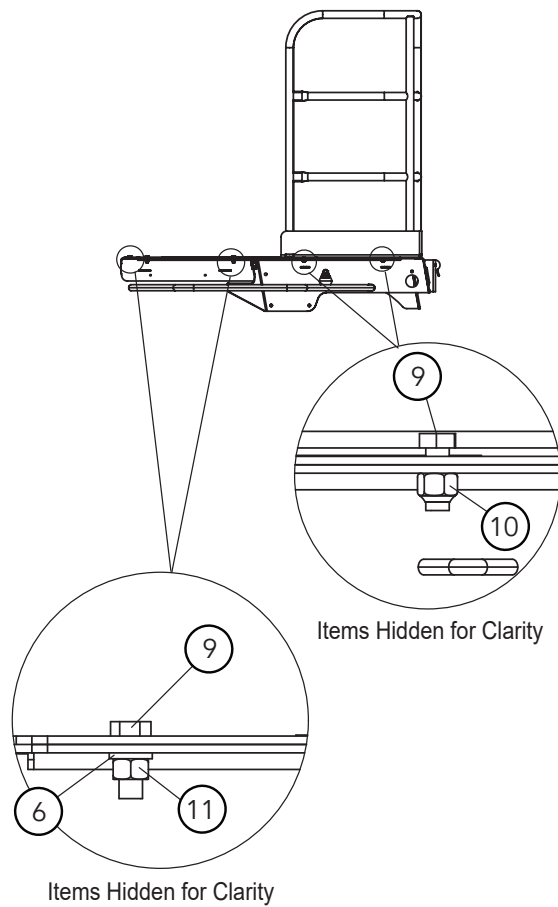
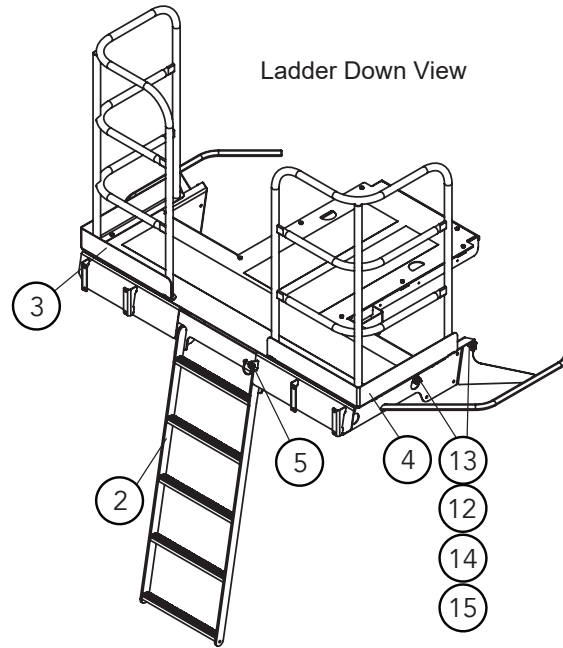
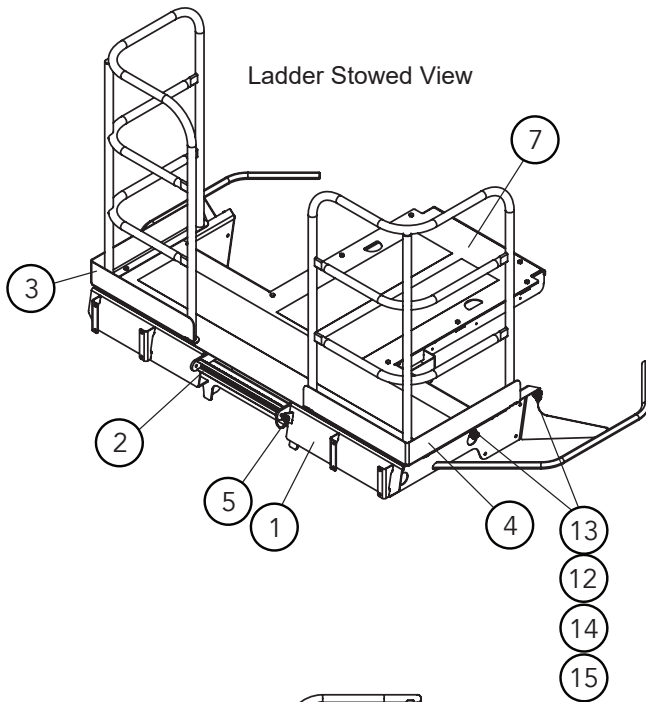
Key	NLM	Description	Qty	Key	NLM	Description	Qty
1	321803	Ladder - Wldmt 304	1	3	36426	Washer - .5 SS Flat	8
2	36539	Capscrew - .5-13 NC X 1.5 SS	4	4	39016	Nut - .5-13NC SS Lock	4

Platform



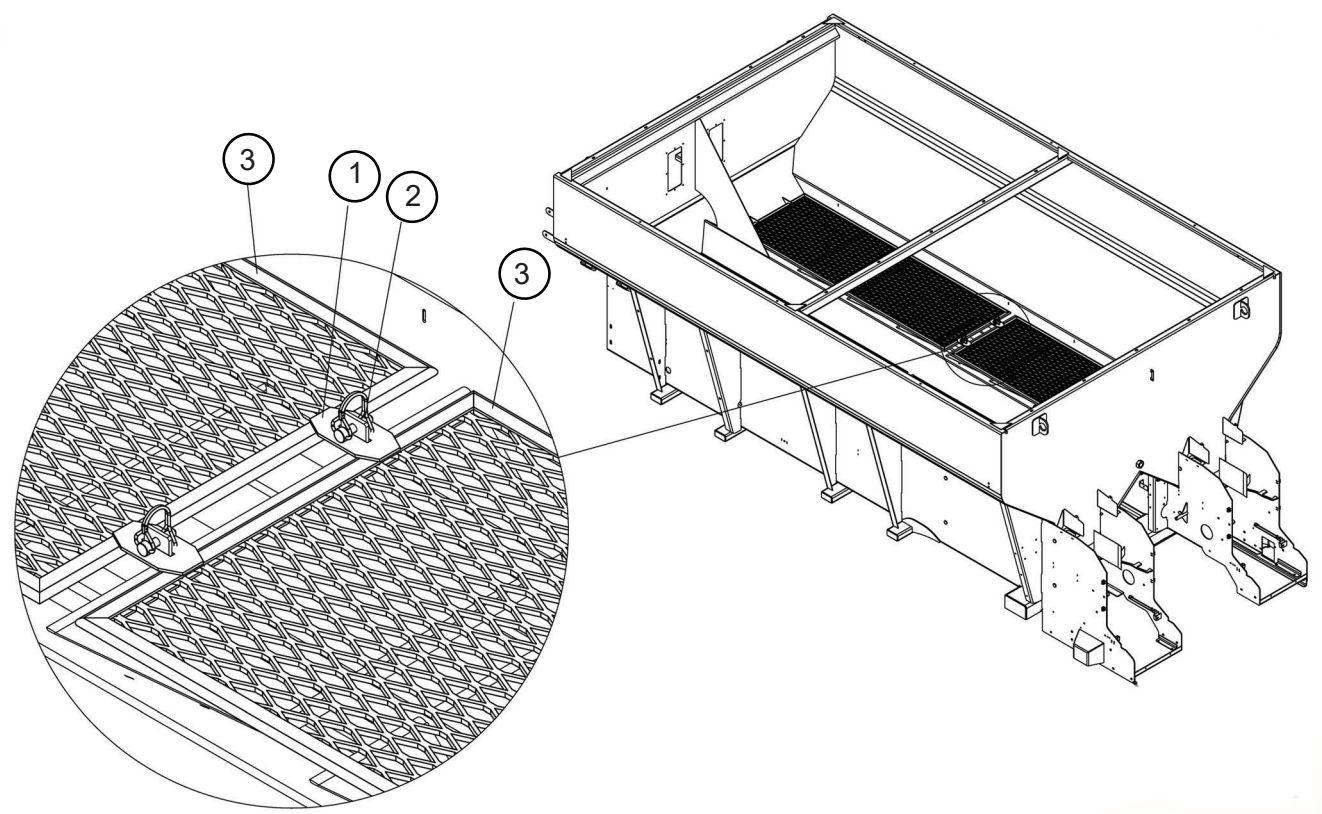
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	322759	Platform - Assy 304 (See next page.)	1	5	39016	Nut - Lock .5-13NC SS	2
2	36425	Washer - .375 SS Flat	14	6	36402	Capscrew - .5-13NC X 1.25 SS	2
3	36399	Capscrew - .375-16NC X 1.25 SS	10				
4	72054	Nut - Lock .375-16NC SS	10				

Platform Assembly



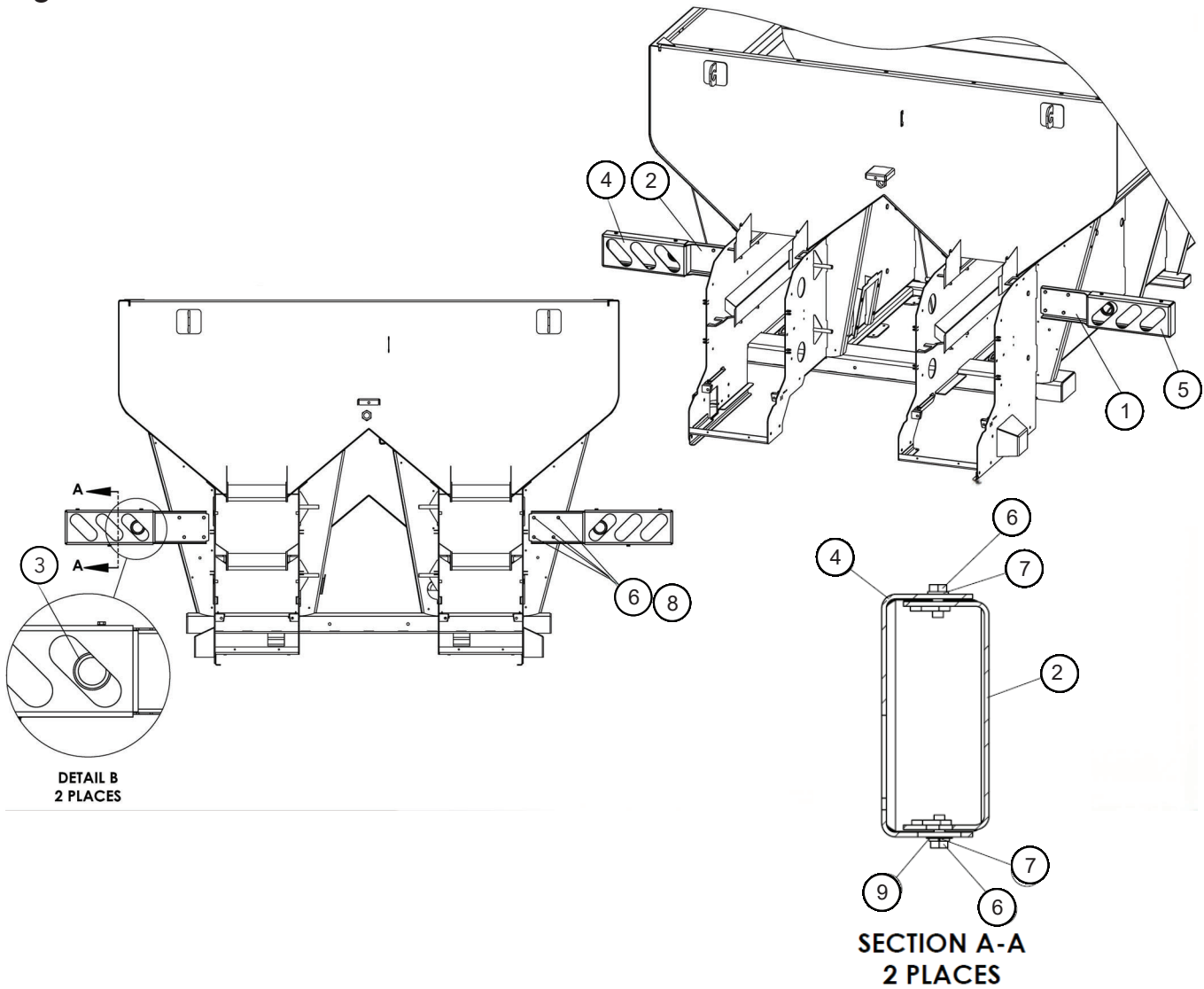
Key	Part No.	Description	Qty
	322759	Platform - Assy 304	1
1	322767	Platform - Wldmt 304	1
2	321467	Ladder - Wldmt 18 304	1
3	322760	Railing - Wldmt LH 304	1
4	322764	Railing - Wldmt RH 304	1
5	311732	Pin - Lock .375 X 1.375 SS	1
6	36420	Nut - .375-16NC SS Lock	6
7	322788	Panel - Top 304	1
8	*21699	*Skid Fabric - 8" X (per foot) *Not Shown*	10
9	36398	Capscrew - .375-16NC X 1 SS	16
10	72054	Nut - Lock .375-16NC SS	10
11	36414	Nut - Hex .375-16NC SS	6
12	312964	Clip - Harness Mounting	4
13	300458	Capscrew - .313-18NC X .875 SS	4
14	36424	Washer - Flat .313 SS	4
15	42221	Nut - Lock .313-18NC SS	4

Screens



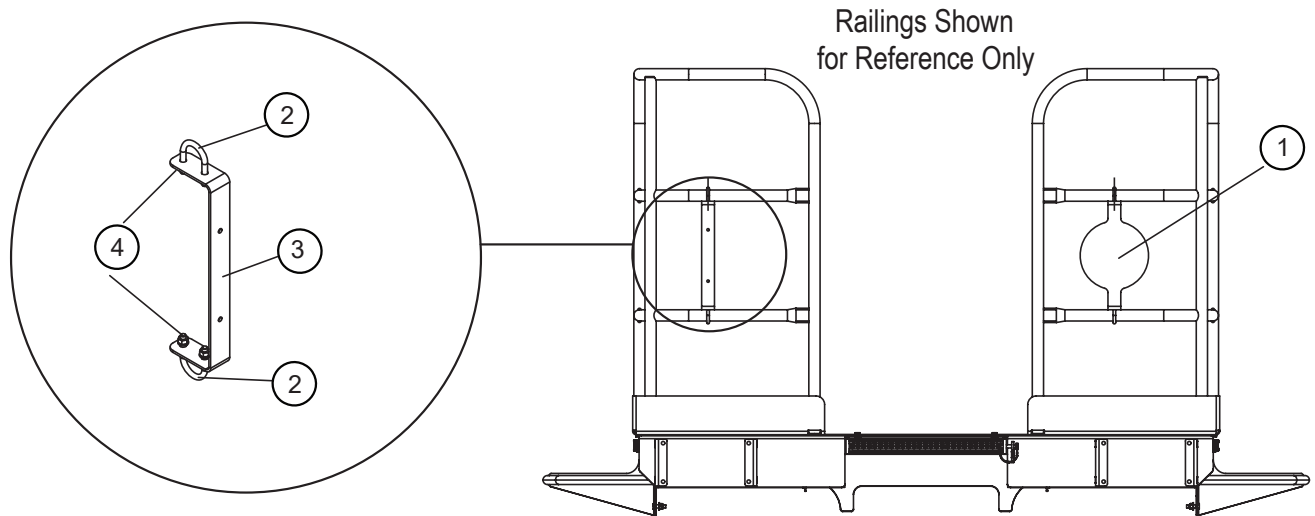
Key	Part No.	Description	Qty
1	324662	Clamp - 304	4
2	322464	Pin - Lock .375 X 1.125 SS	4
3	324810	Screen - Front 14' 304	4

Lights



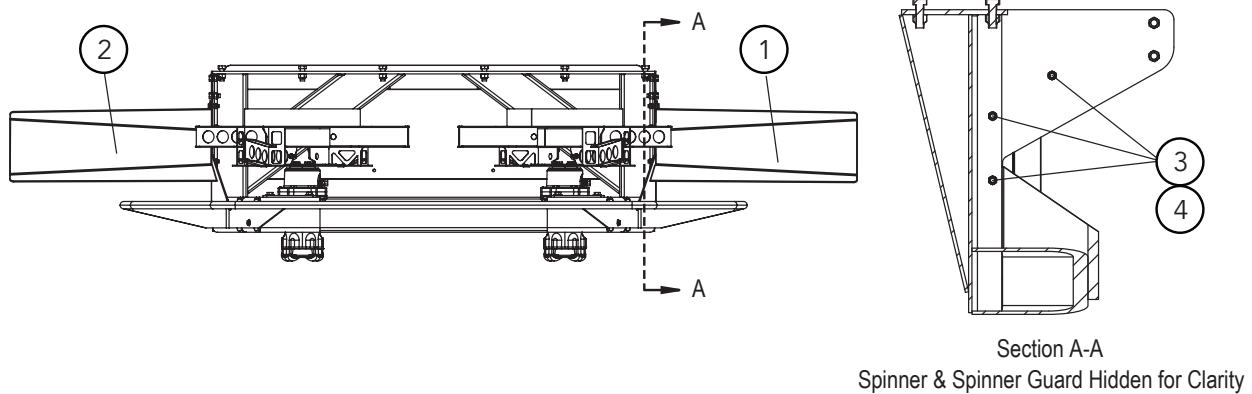
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	325131	Light - Assy 3 Place Oval	1	6	56858	Capscrew - .313-18NC X .75 SS	14
1	325132	Bracket - Wldmt Light RH Back Panel 304	1	7	36419	Washer - .313 SS Lock	6
2	325134	Bracket - Wldmt Light LH Back Panel 304	1	8	42221	Nut - .313-18NC SS Lock	8
3	21653	Grommet - Rubber 3" ID	2	9	36424	Washer - Flat .313 SS	2
4	322922	Panel - 3 Oval Front LH 304	1				
5	322923	Panel - 3 Oval Front RH 304	1				

Sign – Slow-Moving Vehicle (SMV) & Speed Identification Symbol (SIS)



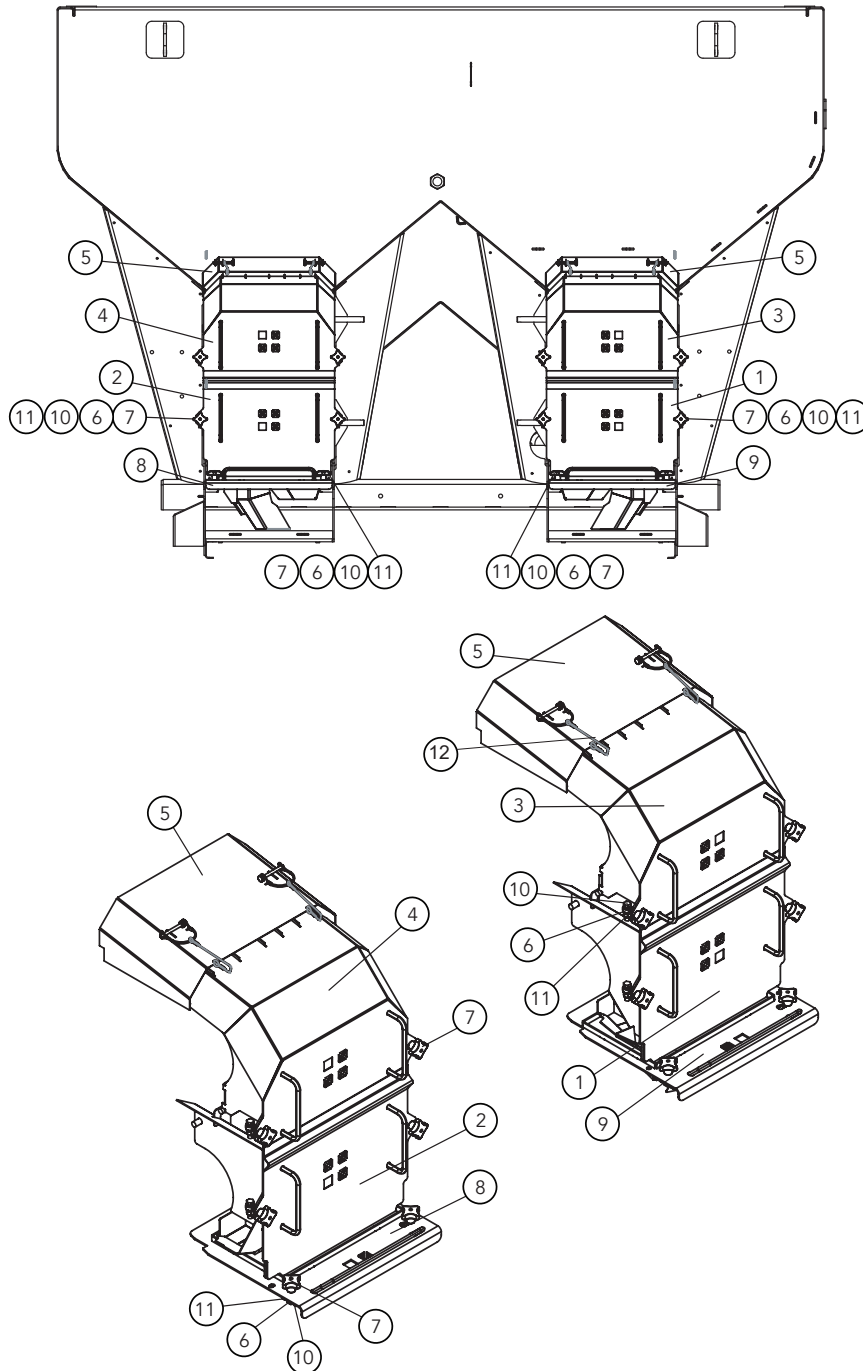
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	321936	Mount - SIS Railing 304	1	3	321946	Mount - SMV Railing 304	1
2	321937	Bolt - .31-18 X 1.375ID 304	4	4	36419	Washer - .313 SS Lock	8

Deflectors



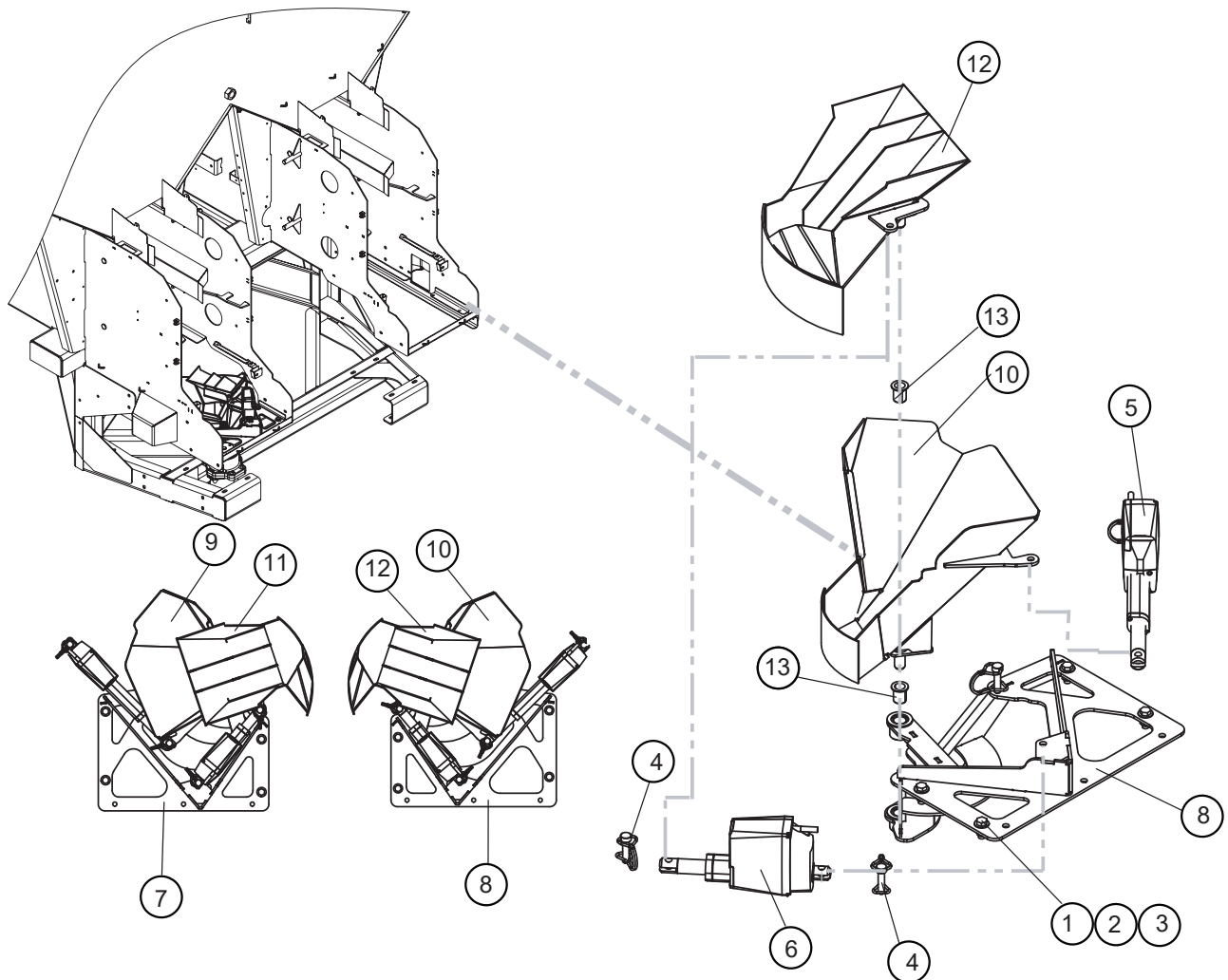
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	321441	Deflector - Wldmt RH 304	1	3	36399	Capscrew - .375-16NC X 1.25 SS	6
2	321437	Deflector - Wldmt LH 304	1	4	72054	Nut - .375-16NC SS Lock	6

Waterfalls

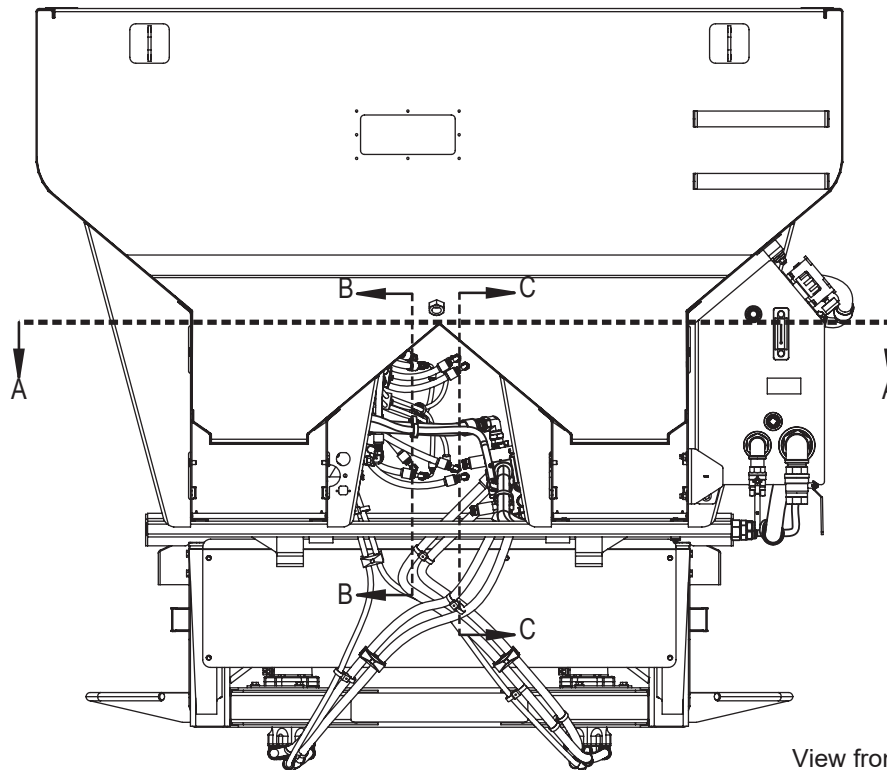


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	321561	Waterfall - Wldmt Bottom RH	1	7	321740	Knob - Tie Down 304	12
2	321563	Waterfall - Wldmt Bottom LH	1	8	321778	Chute - Wldmt Upper LH 304	1
3	321560	Waterfall - Wldmt Top RH 304	1	9	321779	Chute - Wldmt Upper RH 304	1
4	321562	Waterfall - Wldmt Top LH 304	1	10	34858	Capscrew - .375-16NC X 1.5 SS	12
5	321727	Cover - Assy Conv Waterfall	2	11	72054	Nut - .375-16NC SS Lock	12
6	321739	Eye Bolt - Tie Down 304	12	12	313790	Pin - Lock .25 x 2.50 SS	4

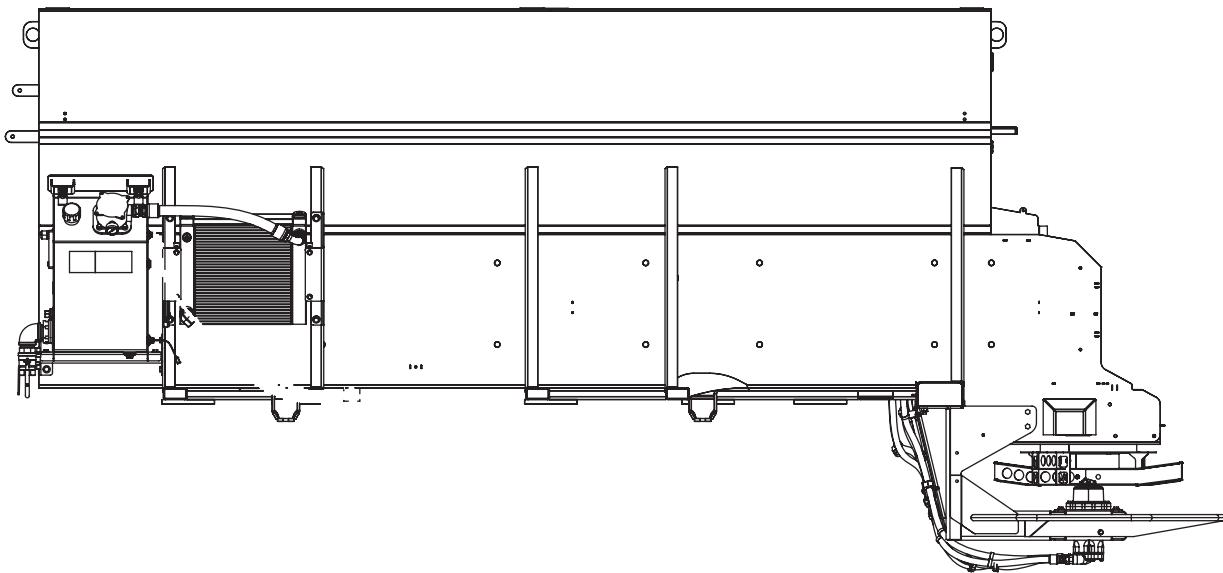
Chutes



Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	36398	Capscrew - .375-16NC X 1 SS	8	7	322287	Chute - Wldmt Mount Lower LH	1
2	36425	Washer - .375 SS Flat	8	8	322286	Chute - Wldmt Mount Lower RH	1
3	72054	Nut - .375-16NC SS Lock	8	9	322447	Chute - Wldmt Inner LH 304	1
4	322464	Pin - Lock .375 X 1.125 SS	8	10	322446	Chute - Wldmt Inner RH 304	1
5	320881	Actuator - 150mm (with harness)	2	11	321667	Chute - Wldmt Outer LH 304	1
6	320882	Actuator - 75mm (with harness)	2	12	321676	Chute - Wldmt Outer RH 304	1
				13	321733	Bearing - Flange .625 X 1.0	4

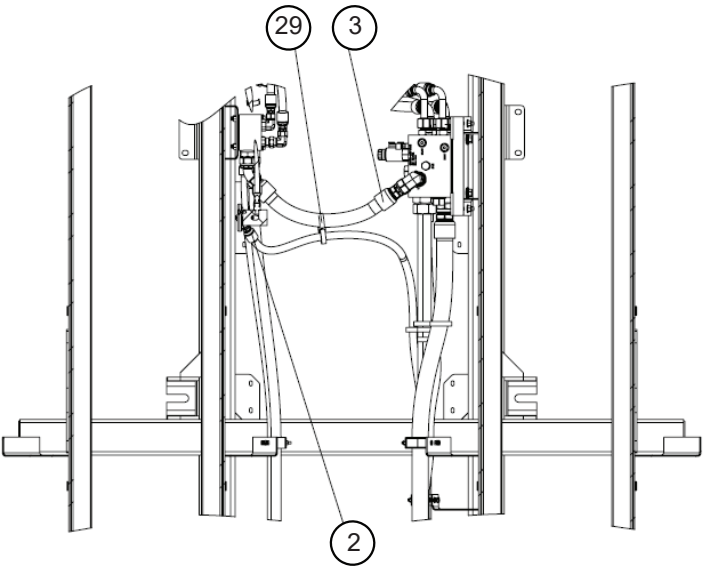
Hydraulics - 14'
Main Hydraulics


View from Front

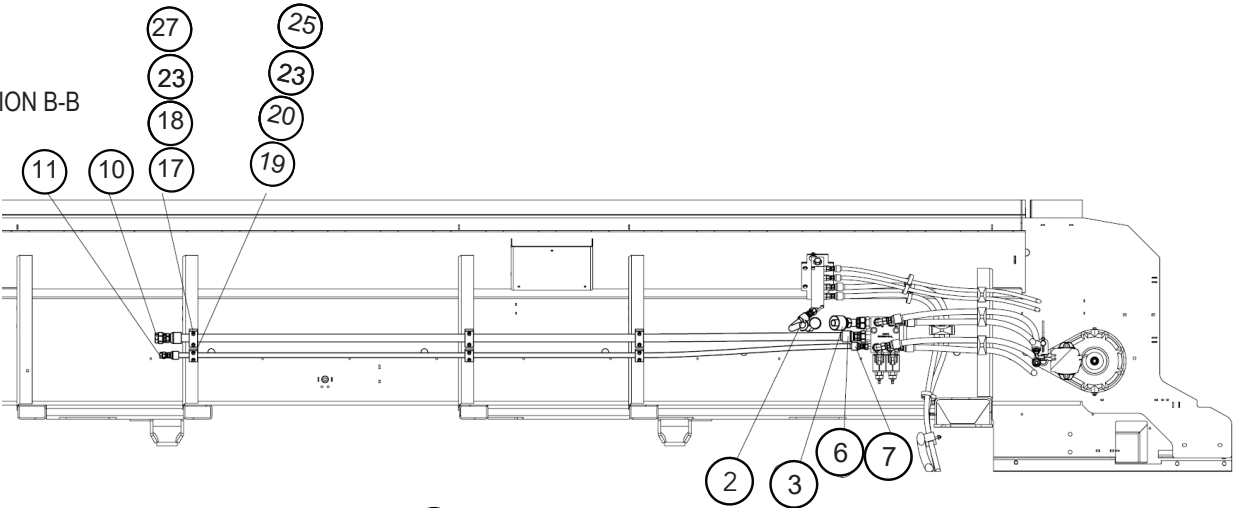


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
A-A	--	See Section A-A on next page.	--	C-C	--	See Section C-C on next page.	--
B-B	--	See Section B-B on next page.	--				

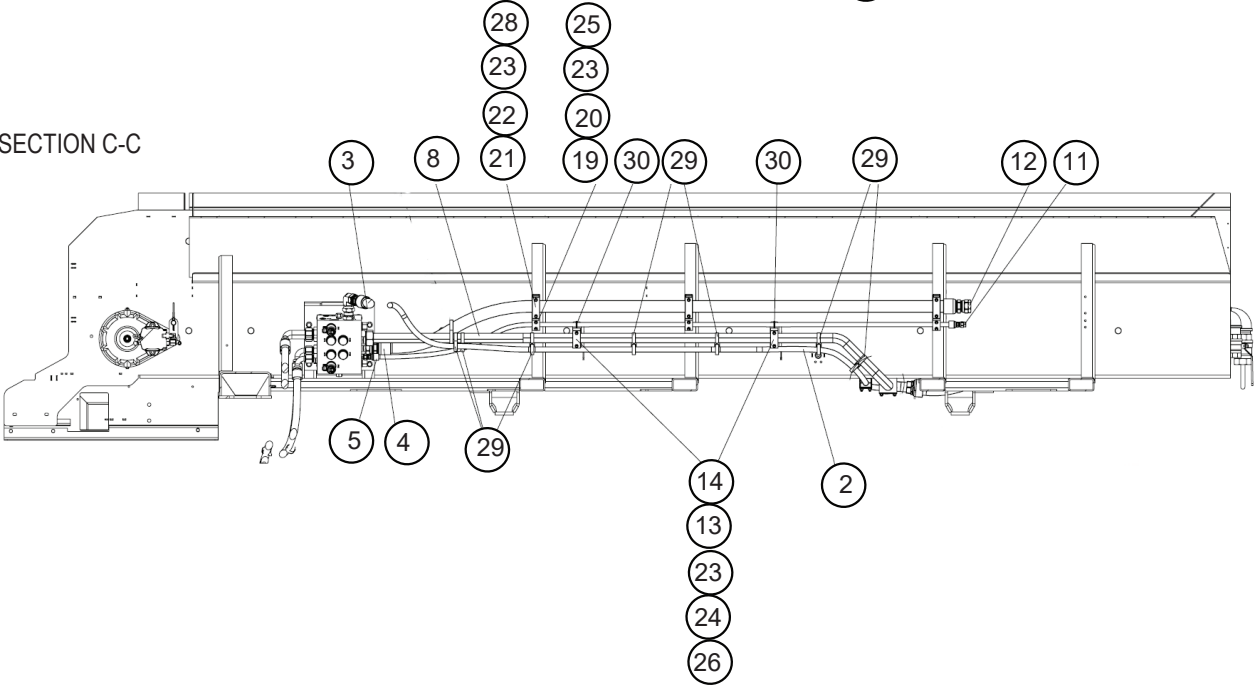
SECTION A-A



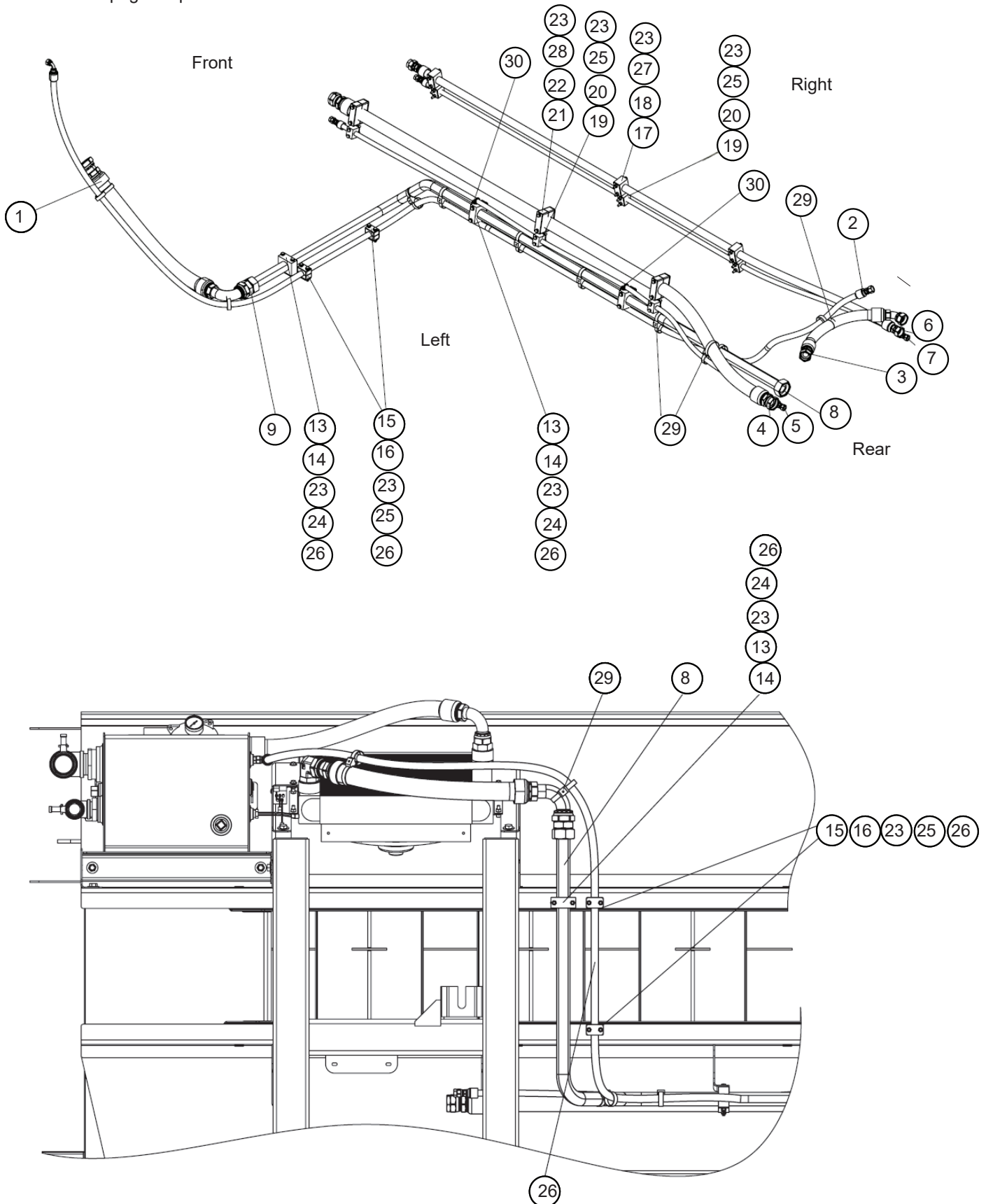
SECTION B-B



SECTION C-C

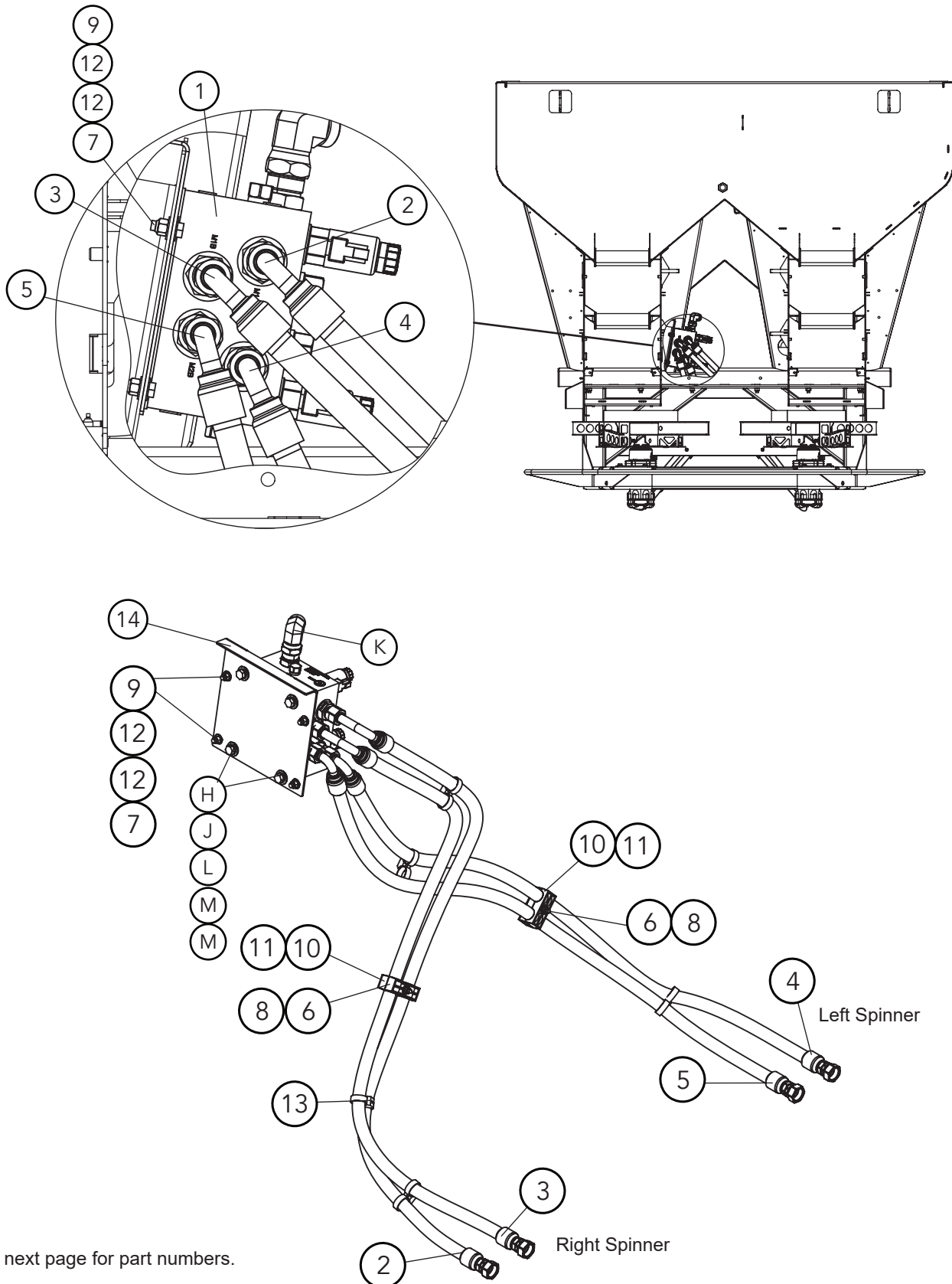


See next page for parts list.



Key	Part No.	Description	Qty
1	321808	Hose - Assy 1.5 X 30.5 100R2	1
2	321810	Hose - Assy .50 X 178 100R19	1
3	322810	Hose - Assy 1.0 X 22.1 100R12	1
4	324350	Hose - Assy 1.25 X 95.5	1
5	324351	Hose - Assy .38 X 95	1
6	324988	Hose - Assy .75 X 100	1
7	324989	Hose - Assy .75 X 100	1
8	322811	Tube - Assy 1.50OD X .049 X 81.50	1
9	321811	Fitting- 24-24 520101	1
10	318823	Fitting- 12 520109	1
11	318824	Fitting- 6 520109	2
12	324117	Fitting- 20 520109	1
13	315765	Clamp Pair - 1.50 " Tube	3
14	96925	Plate - Top 1.25 Tube	3
15	312678	Clamp Pair - .87" Tube	2
16	86556	Plate - Cover Hyd Tube Clamp	2
17	324343	Clamp - Tube 1.1 "	3
18	324344	Plate - Top SS	3
19	324345	Clamp - Tube 1.1 "	6
20	324372	Plate - Top SS	6
21	308165	Clamp Pair- 1.75" Tube	3
22	308164	Plate - Cover Clamp 1.75OD Tube	3
23	42034	Nut - Lock .25-20NC SS	34
24	36396	Capscrew - .25-20NC X 3 SS	6
25	34865	Capscrew - .25-20NC X 2.25 SS	16
26	36423	Washer - Flat .25 SS	10
27	34501	Capscrew - .25-20NC X 2.5 SS	6
28	56396	Capscrew - .25-20NC X 3.25 SS	6
29	312665	Tie - Dual Clamp	11
30	311806	Tie - Wire Fir Tree	2

Spinner Hydraulics

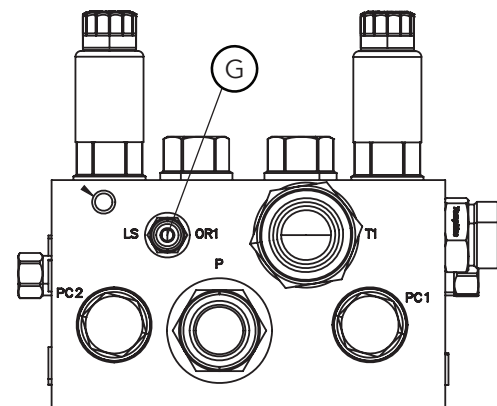
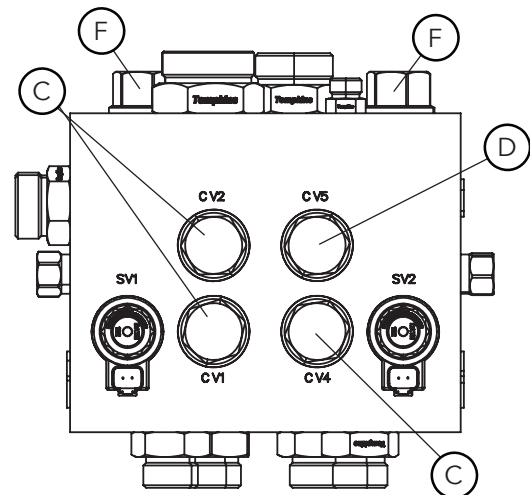
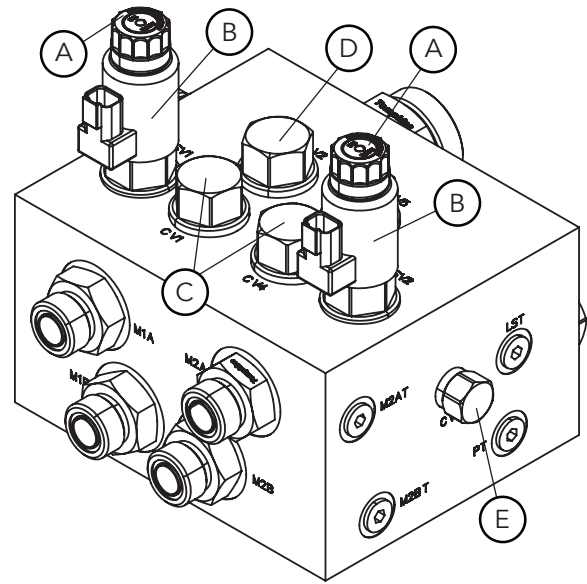


See next page for part numbers.

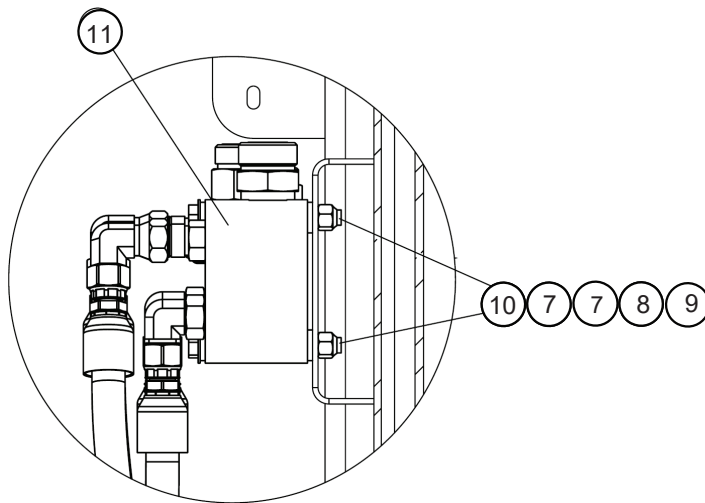
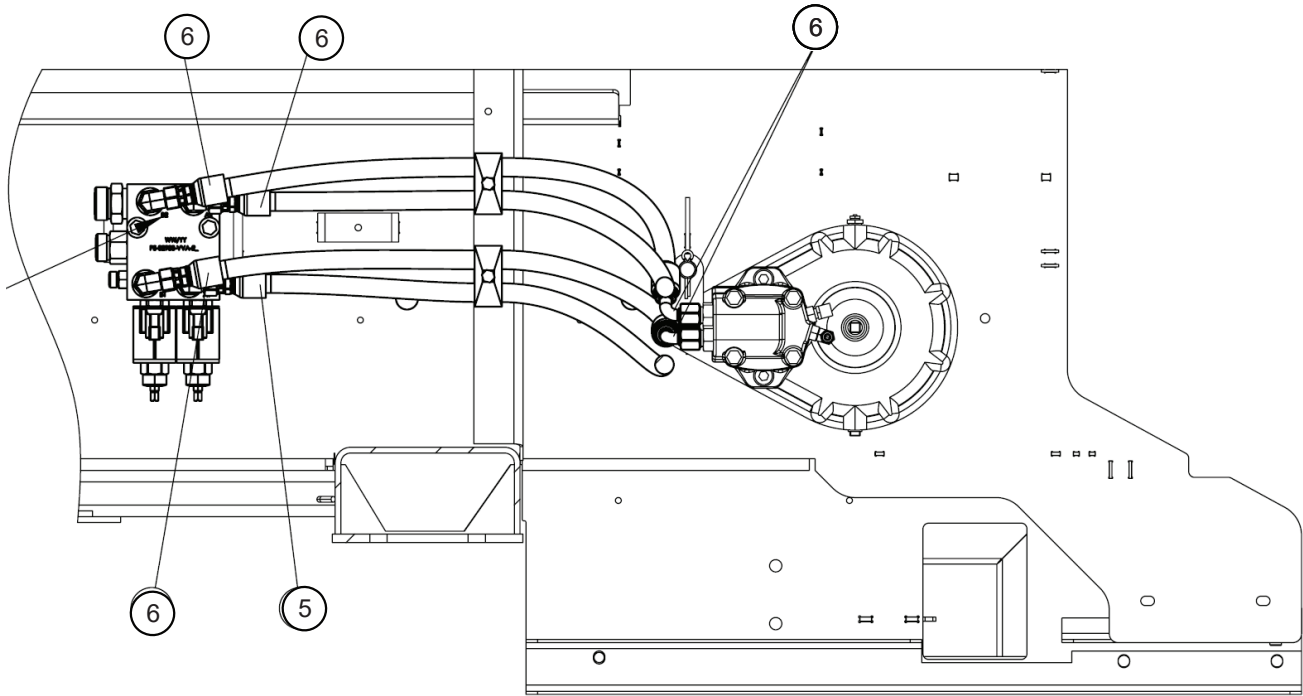
1 Spinner Control Valve Assembly

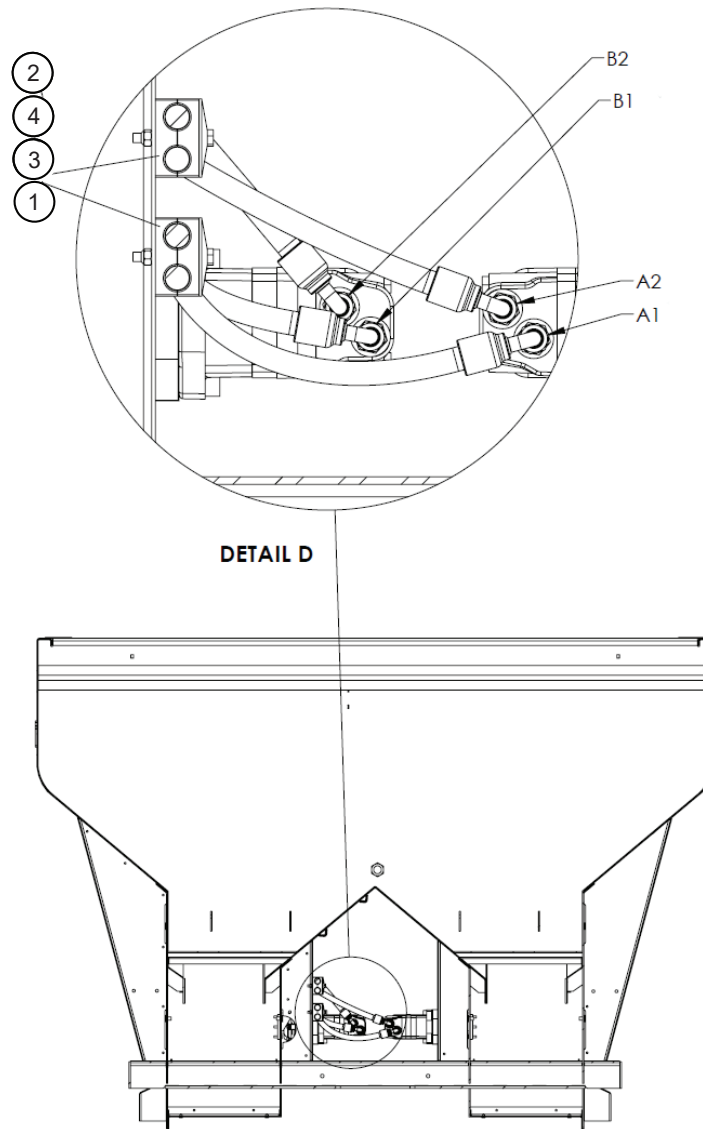
Key	Part No.	Description	Qty
1	323556	Valve - Assy Spinner Control	1
A	322372	Valve - Flow Control 60gpm	2
*A.i	*322406	*Seal Kit for 322372	AR
B	317382	Coil - 12vdc Deutsch	2
C	322368	Valve - Check 50psi	2
D	322369	Valve - Check 100 Psi	2
E	322370	Valve - Check 4 Psi	2
F	322371	Valve - Normally Open Modulating	2
G	323573	Plug	1
2	321696	Hose - Assy .75 X 65 100R12	1
3	321697	Hose - Assy .75 X 62 100R12	1
4	321698	Hose - Assy .75 X 63 100R12	1
5	321699	Hose - Assy .75 X 64.5 100R12	1
6	71830	Capscrew - .313-18NC X 2.5 SS	2
7	36398	Capscrew - .375-16NC X 1 SS	4
8	42221	Nut - .313-18NC SS Lock	2
9	72054	Nut - .375-16NC SS Lock	4
10	315721	Clamp - Tubing Twin 1.10	2
11	305267	Plate - Cover Hose Clamp 304	2
12	36425	Washer - .375 SS Flat	8
13	310648	Tie - Dual Clamp	5
14	322934	Plate - Mount Valve 304	1
H	89521	Capscrew - .5-13NC X 1 Gr8 (Apply Loctite To Capscrews)	4
J	36422	Washer - .5 SS Lock	4
K	313461	Fitting - 16-16 520221	1
L	36426	Washer - .5 SS Flat	4
M	321715	Washer - .638ID X .875OD X 1.25 x .105THK Poly Step	8

* Not Shown



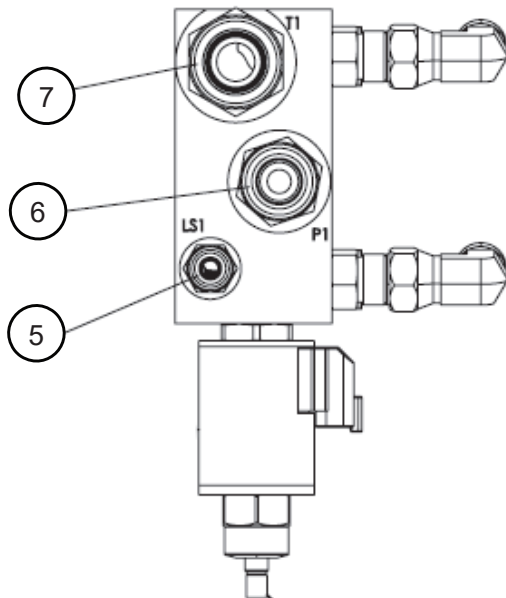
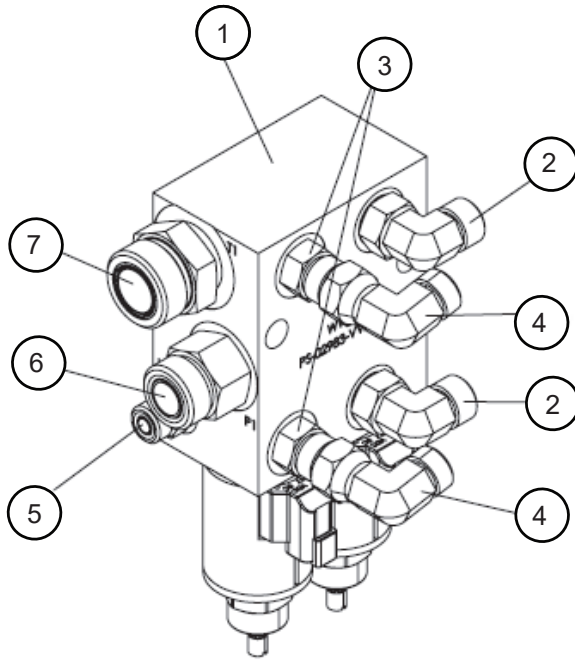
Conveyor Hydraulics





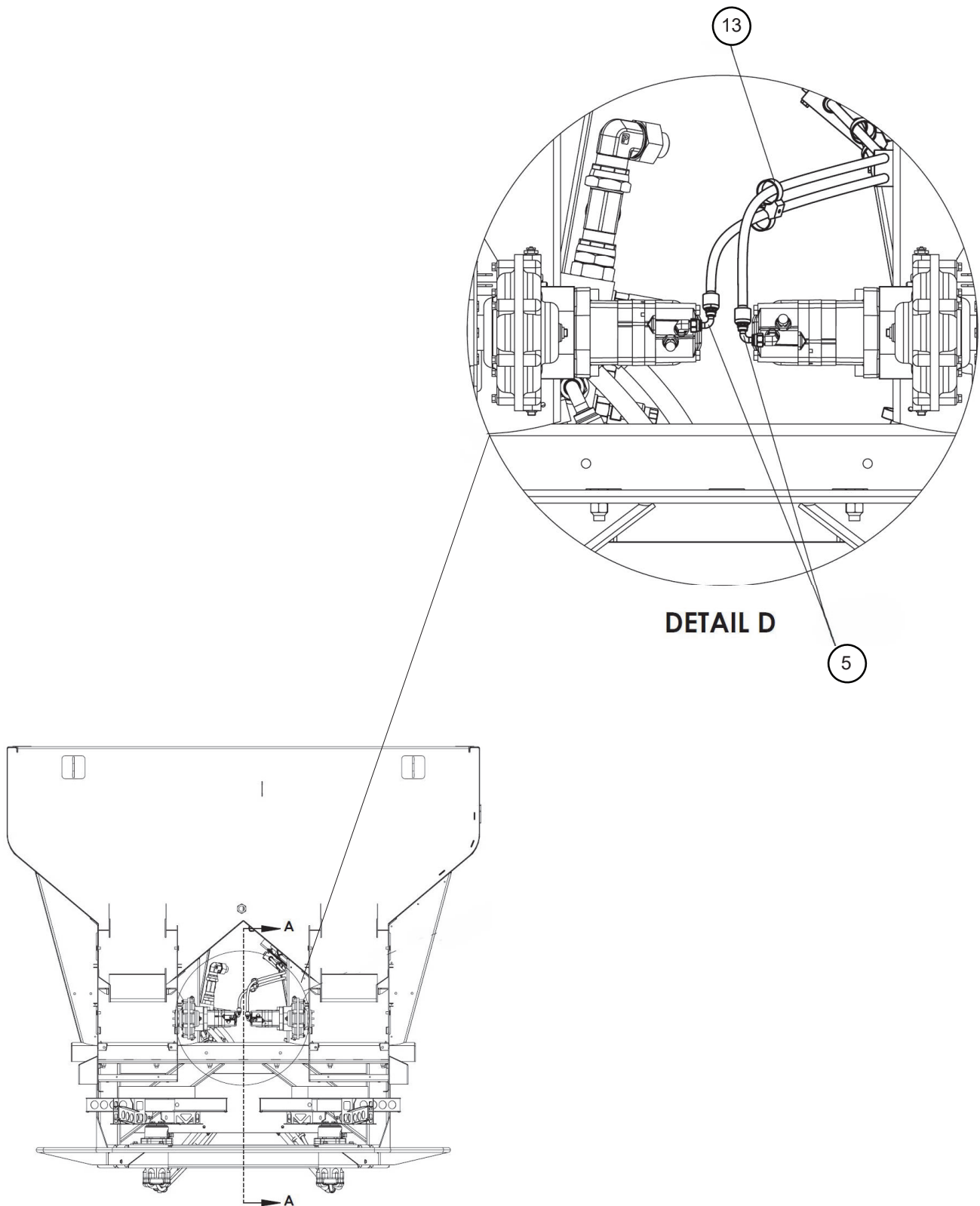
Key	Part No.	Description	Qty
1	310649	Clamp - Tubing Twin .84"	2
2	42221	Nut- Lock .313-18NC SS	2
3	310688	Plate- Cover Hose Clamp	2
4	71830	Capscrew -.313-18NC X 2.5 SS	2
5	324016	Hose - Assy .5 x 29.5 100R19	1
6	322899	Hose - Assy .5 x 27.5 100R19	3
7	302099	Washer - Step .38ID X .53OD X .13	4
8	36425	Washer - Flat .375	2
9	72054	Nut - Lock .375-16NC SS	2
10	96879	Capscrew - .375-16NC X 3.5 SS	2
11	323973	Valve - Assy Conveyor Control	1
A1-B2		Labels on Hydraulic Valve Ports	4

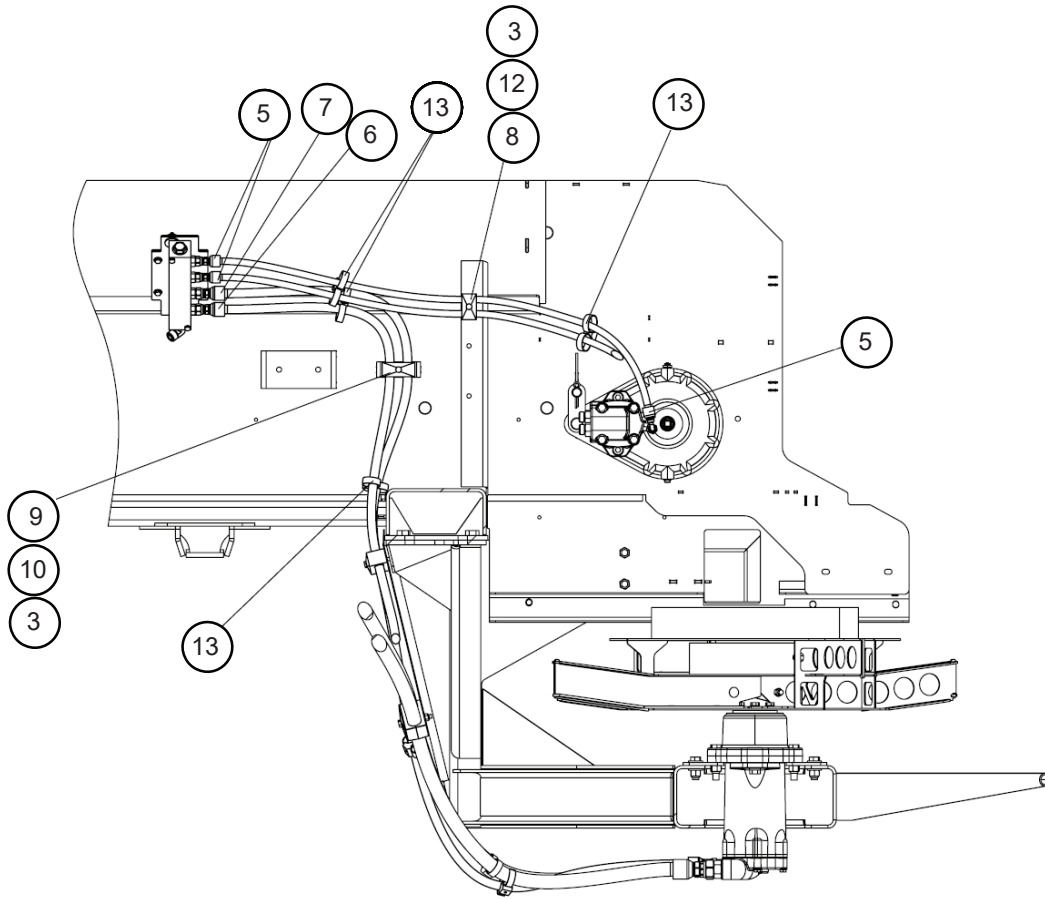
Conveyor Control Valve Assembly



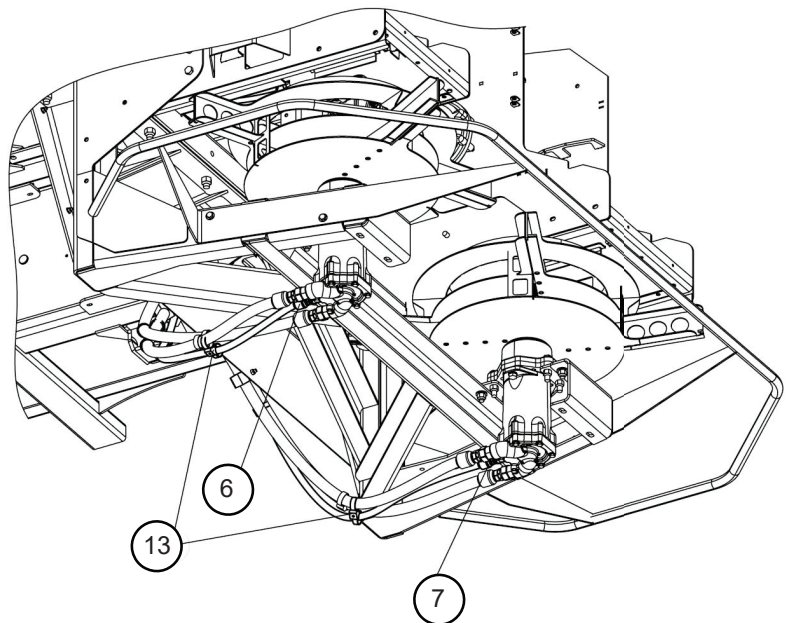
Key	Part No.	Description	Qty
	323973	Conveyor Control Valve	
1	323841	Valve - Assy Conveyor Control includes items 8-10	1
2	313451	Fitting - 8-8 520220	2
3	313454	Fitting - 8-8 520120	2
4	304306	Fitting - 8-8 520221	2
5	313455	Fitting - 6-6 520120	1
6	315940	Fitting - 12-8 520120	1
7	315673	Fitting - 16-12 520120	1
8	320885	Valve - Flow Control 8 GPM W/ Coil	2
9	315866	Coil - 12VDC Deutsch DT02-2P	1
10	324575	Seal - Kit for PV70 Valve	1

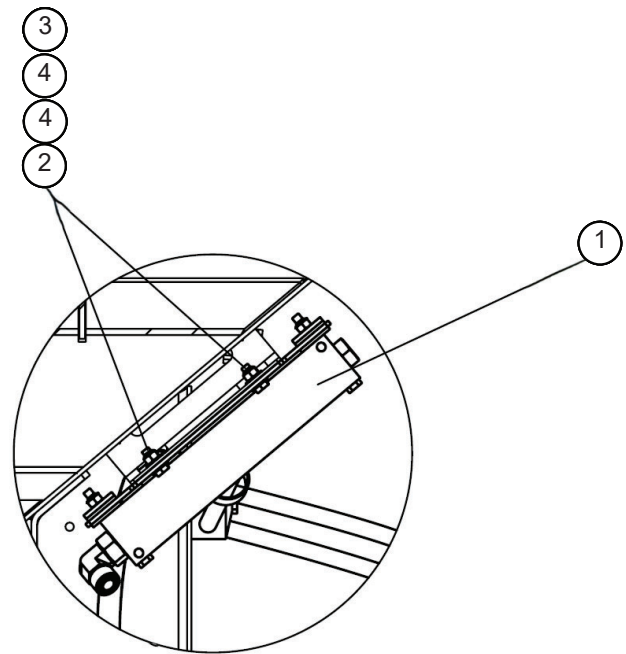
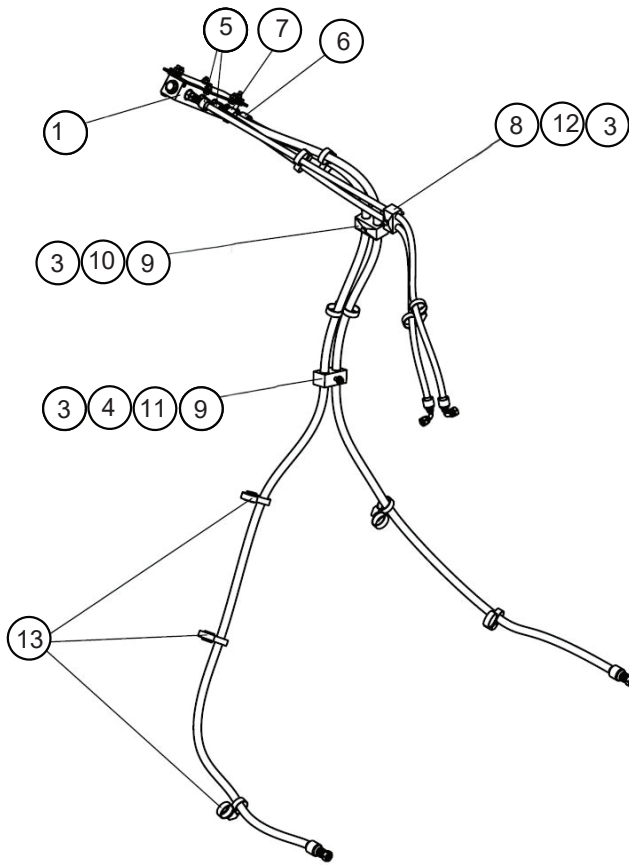
Case Drain Group





SECTION A-A

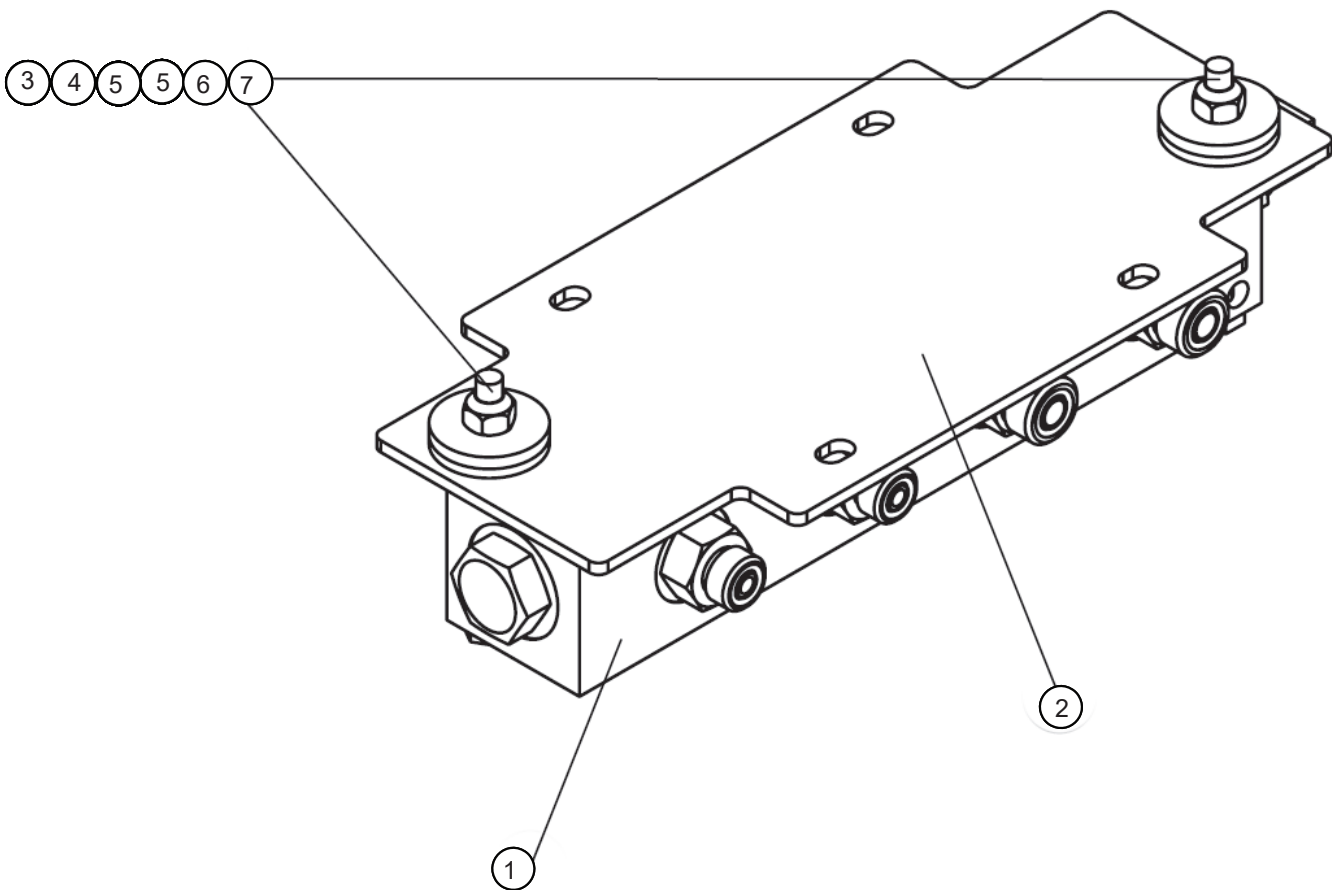




Key	Part No.	Description	Qty
-	323704	Case Drain Mounting Assembly	
1	323705	Valve - Assy Mounting Case Drain	1
2	36393	Capscrew - .25-20NC X .75 SS	4
3	42034	Nut - Lock .25-20NC SS	7
4	36423	Washer - Flat .25 SS	9
5	322895	Hose - Assy .25 X 46 100R19	2

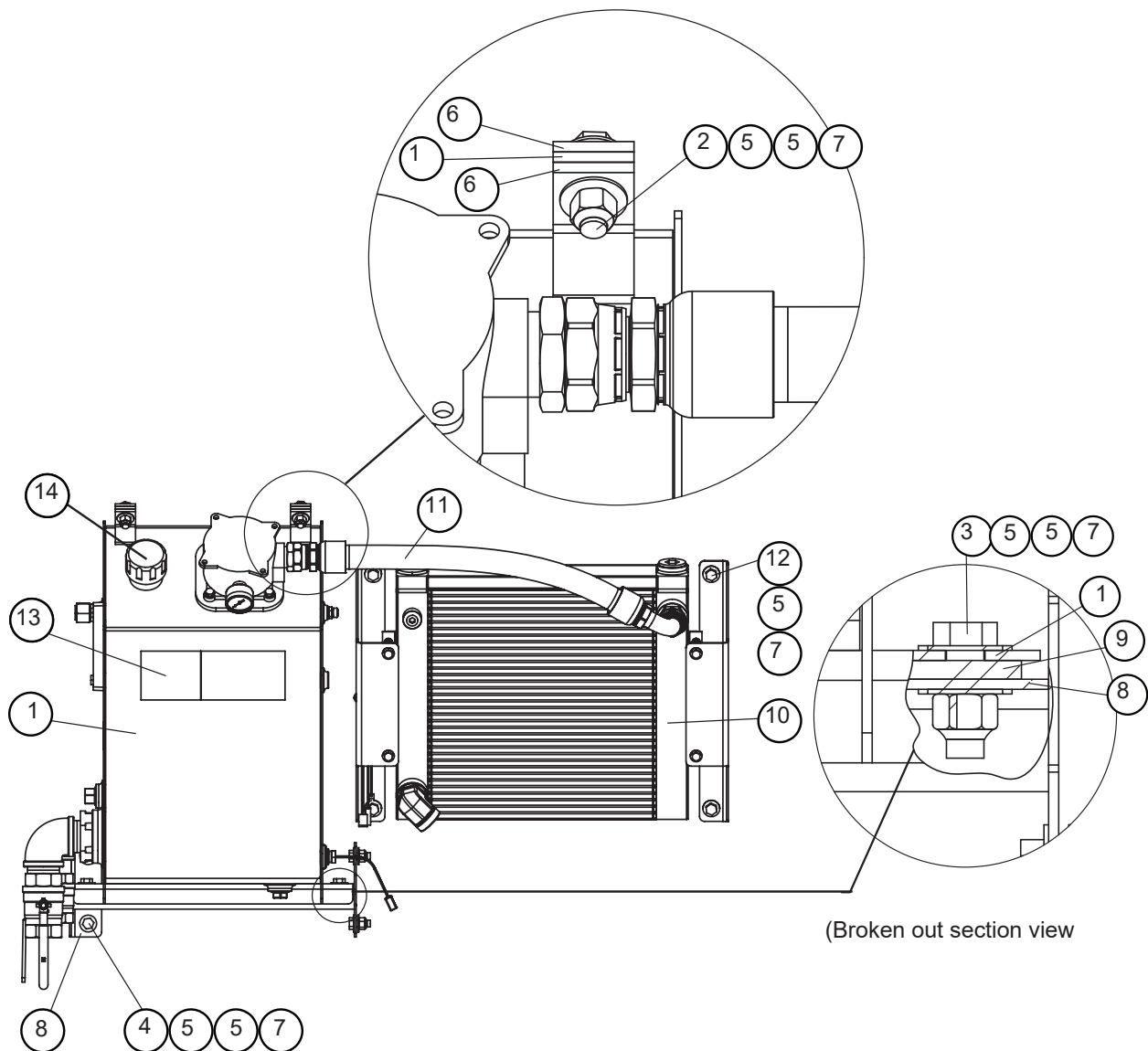
Key	Part No.	Description	Qty
6	321722	Hose - Assy .38 X 89 100R19	1
7	321723	Hose - Assy .38 X 82 100R19	1
8	300031	Clamp - Tubing Twin.5"	1
9	75036	Clamp - Tubing Twin .75"	2
10	34865	Capscrew - .25-20NC X 2.25 SS	1
11	34501	Capscrew - .25-20NC X 2.5 SS	1
12	308112	Capscrew - .25-20NC X 2 SS	1
13	310648	Tie - Dual Clamp	9

Case Drain Mounting Assembly



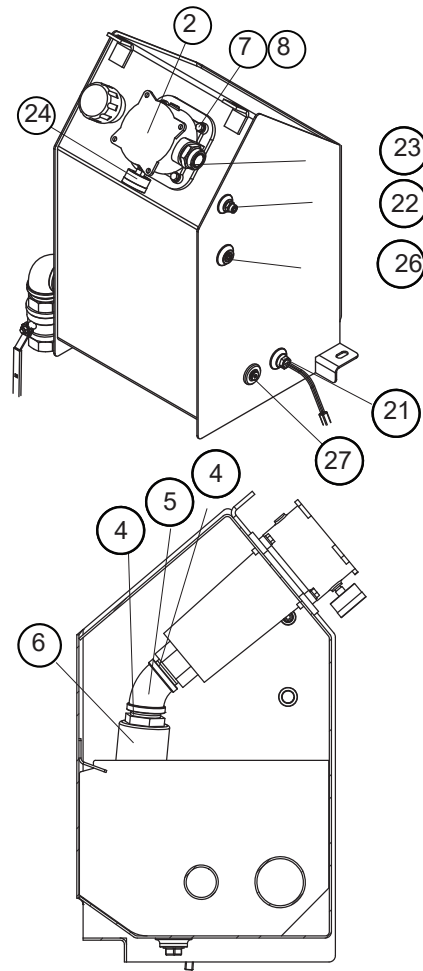
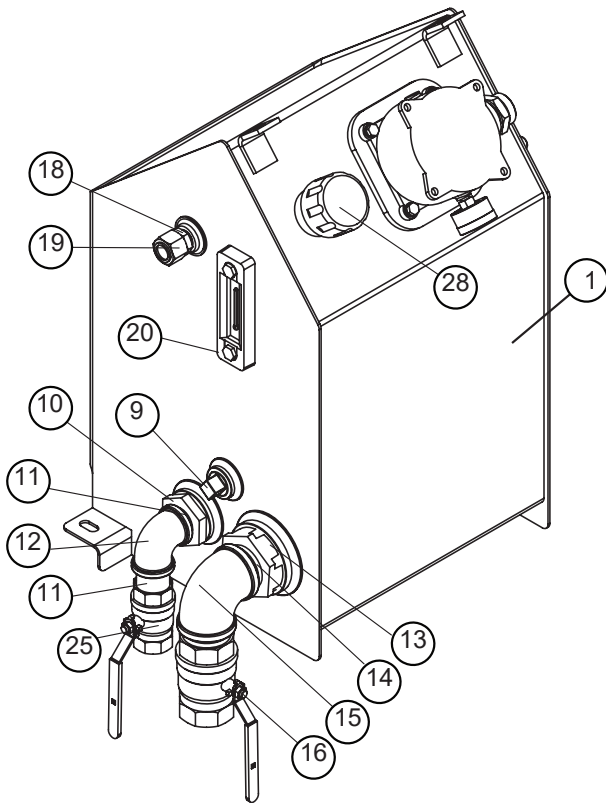
Key	Part No.	Description	Qty
	323705	Case Drain Mounting Assy	--
1	323706	Valve - Assy Case Drain	1
2	323707	Bracket - Valve Mount	1
3	34866	Capscrew - .25-20NC X 2.75 SS	2
4	42034	Nut - Lock .25-20NC SS	2
5	321715	Washer - Step .638 ID X .875 OD	4
6	321716	Washer - .313 ID X 1.125 OD X 10	2
7	321717	Spacer - 304	2

Tank Group



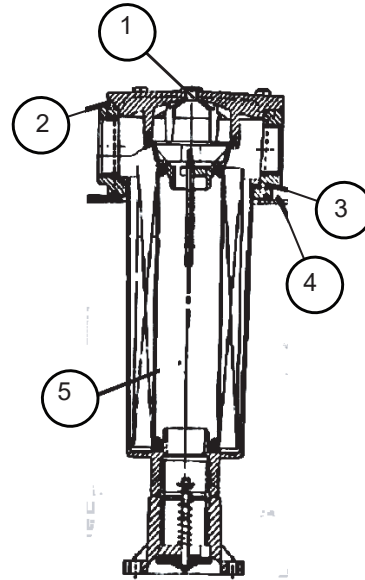
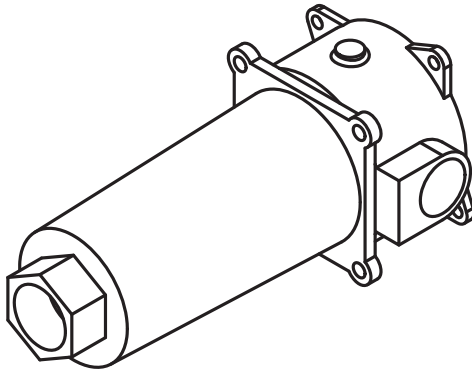
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
Tank Group - 304				8	321578	Mount - Wldmt 304	1
1	321569	Tank - Assy 304 (See next page.)	1	9	39158	Belt - Flex Mount	2
2	71832	Capscrew - .5-13NC X 1.75 SS	2	10	321575	Cooler - Assy	1
3	36539	Capscrew - .5-13NC X 1.5 SS	2	11	321577	Hose - Assy 1.25 X 29 100R4	1
4	36402	Capscrew - .5-13NC X 1.25 SS	4	12	36401	Capscrew - .5-13NC X 1 SS	4
5	36426	Washer - .5 SS Flat	20	13	323000	Decal - Group Hyd Tank (See page 29.)	1
6	39159	Belt - Spacer	4	14	320410	Filler - Cap Breather	1
7	39016	Nut - .5-13NC SS Lock	12				

Tank Assembly



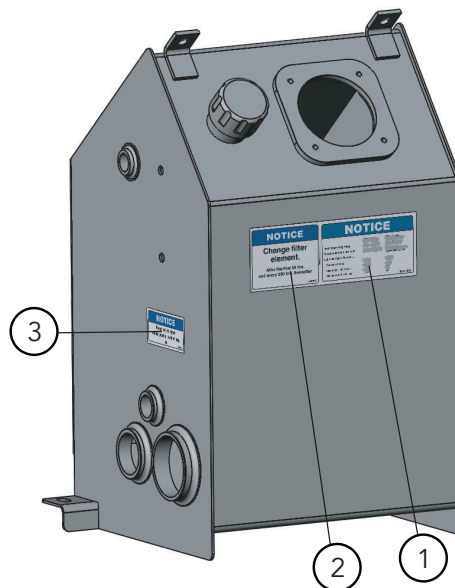
Key Part No.	Description	Qty	Key Part No.	Description	Qty
1	321570 Tank - Wldmt 304	1	15	23703 Adapter - Elbow 90° 2 NPT	1
2	88838 Filter - Return In Tank 120gpm (See next page.)	1	16	305060 Valve - Ball 2" NPT	1
3	-- Not used.	--	17	305061 Plug - Magnetic 1" NPT	1
4	22322 Nipple - CLOSE 1.5"NPT STD	2	18	313404 Fitting - 12-12 Non Standard	1
5	22243 Elbow - Pipe 45 1.5NPT	1	19	312673 Fitting - 12 520112	1
6	305057 Diffuser - Tank	1	20	38575 Gauge - Sight & Temperature	1
7	36399 Capscrew - .375-16NC X 1.25 SS (Apply Loctite)	4	21	305074 Switch - Temp. 115° (Apply Loctite)	1
8	36420 Washer - .375 SS Lock	4	22	313405 Fitting - 6-6 Non Standard	1
9	6034 Plug - Pipe 1" NPT	1	23	313403 Fitting - 20-20 Non Standard	1
10	305062 Strainer - 1.25" NPT	1	24	43534 Indicator - Service	1
11	6028 Nipple - Close 1.25 NPT	2	25	305059 Valve - Ball 1.25" NPT	1
12	6011 Elbow 90° 1.25 NPT	1	26	320364 Plug - .5 NPT SS (Apply Loctite)	1
13	305063 Strainer - 2" NPT	1	27	323359 Plug - Low Pressure M14 X 1.5 SS	1
14	22324 Nipple - Pipe 2 X 2	2	28	320410 Filler - Cap Breather	1

Return Filter



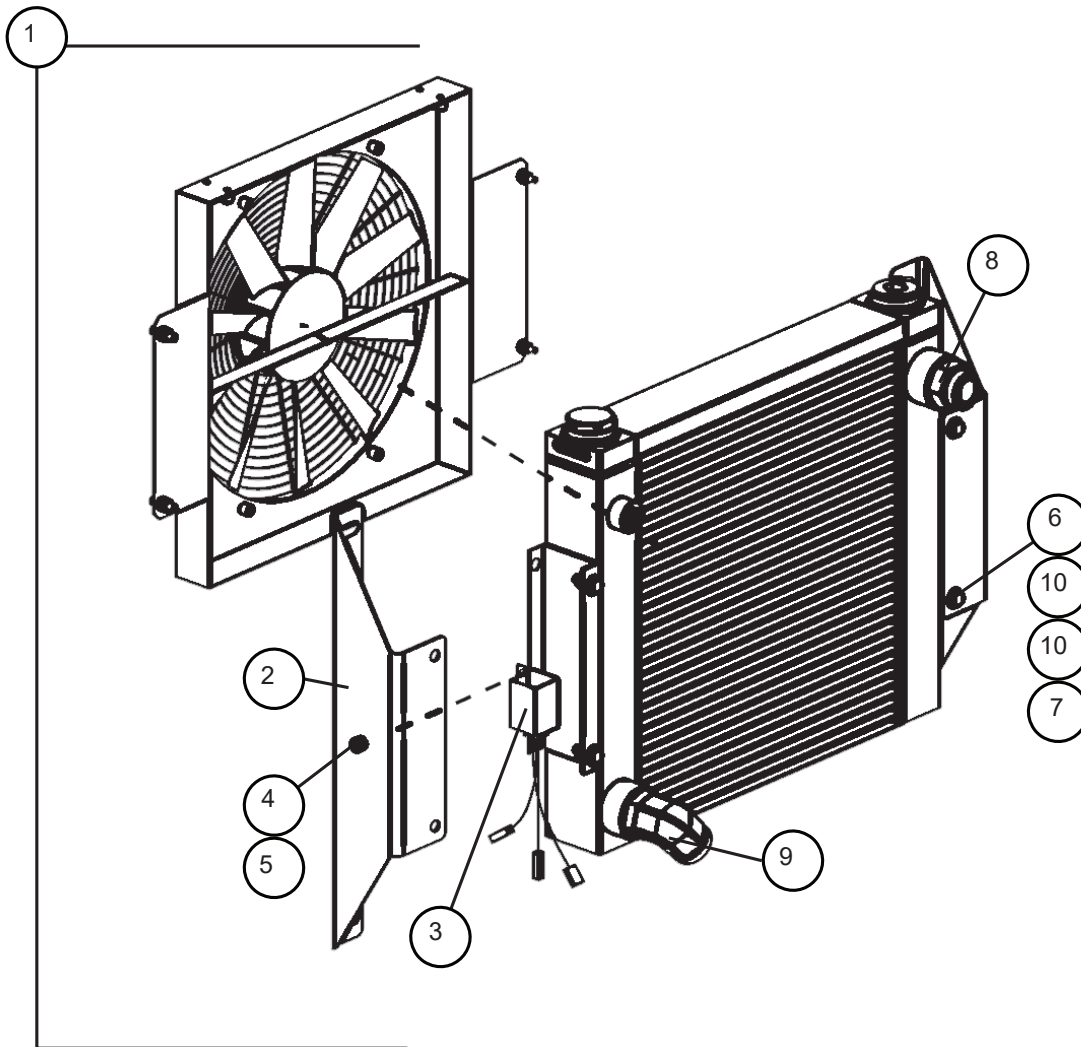
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	88838	Filter - Return In Tank	1	4	306789	Tetraseal - Filter Assy	1
1	323363	Cap - Filter	1	5	305066	Filter Element.	
2	306772	O-Ring Cover Filter	1				
3	306773	O-Ring Housing Filter	1				

Tank Decal Group

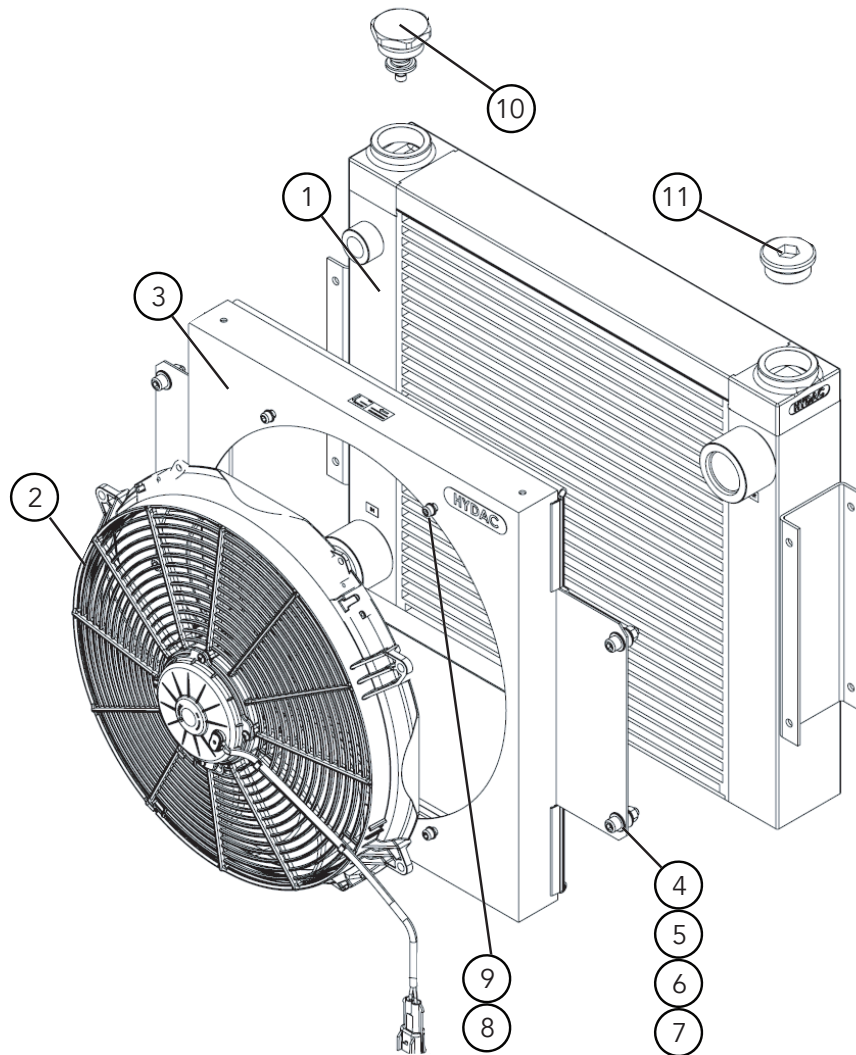


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	323000	Decal - Group Hyd Tank	1	2	39378	Decal - Change Filter Element	1
1	304264	Decal - Notice Cooler	1	3	8664	Decal - Important Keep Valve Open	1

Cooler Assembly

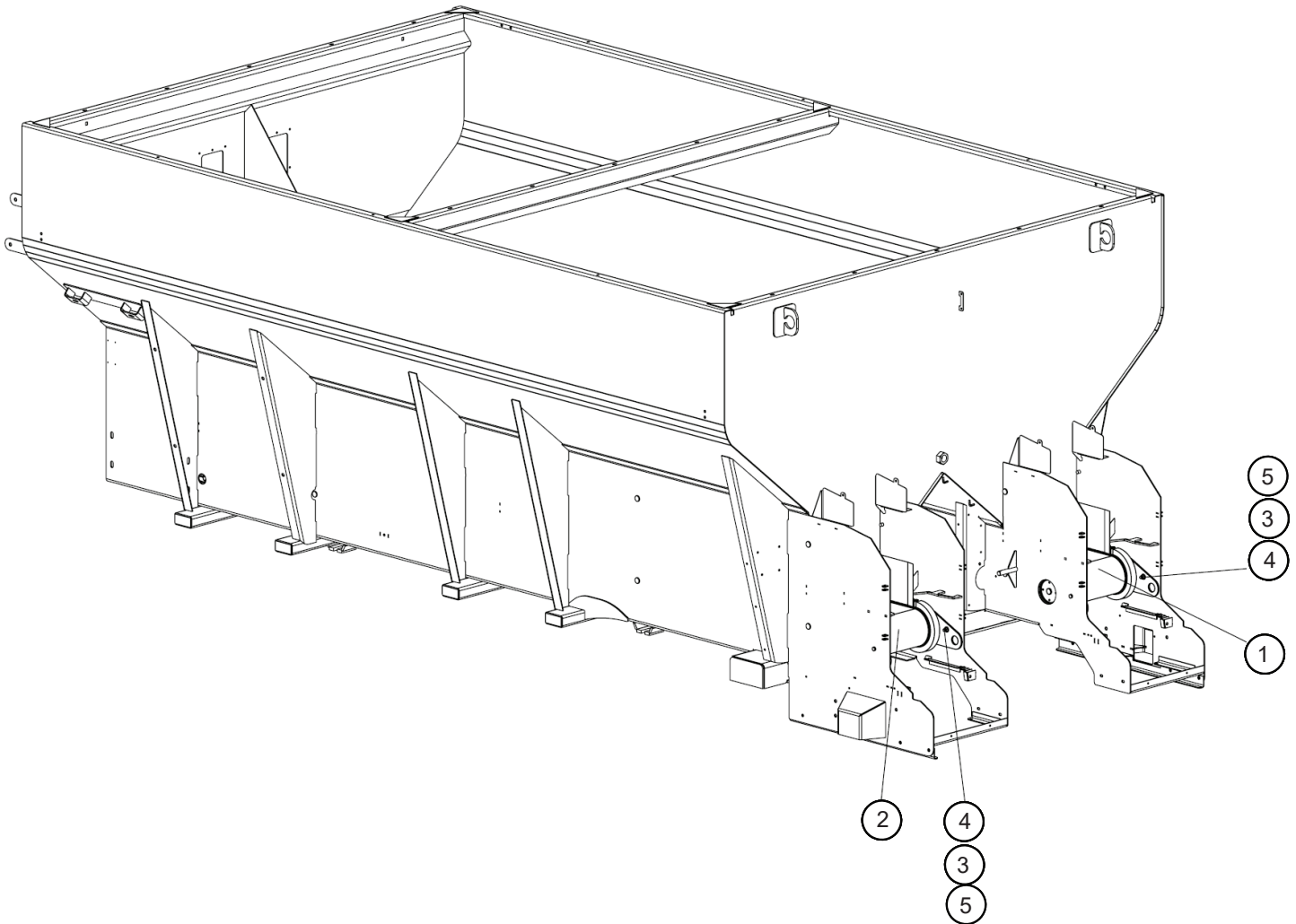


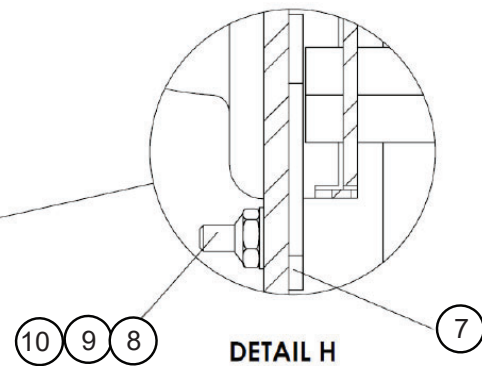
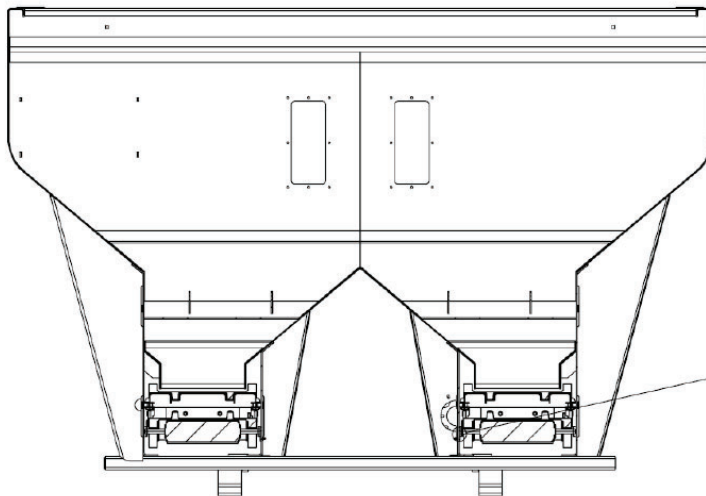
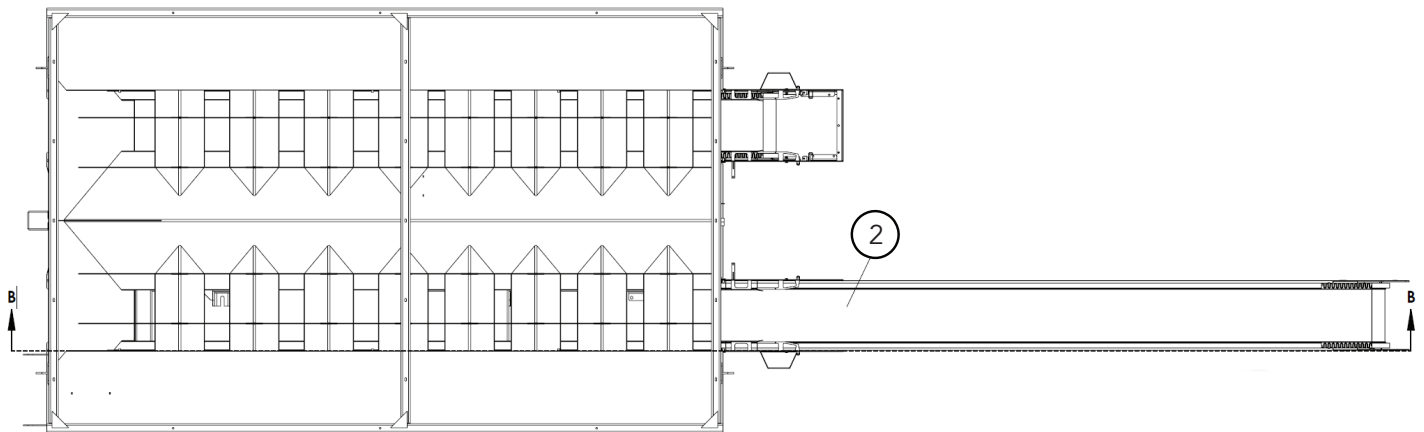
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	305767	Cooler - Assy Hydac Eld 4.5 (See next page.)	1	7	36398	Capscrew - .375-16NC X 1 SS	4
2	321576	Bracket - 304	2	8	316329	Fitting - 20-20 520120	1
3	312271	Relay - 12vdc 40A	1	9	321809	Fitting - 24-20 520220	1
4	56258	Screw - Truss Head .25-20NC X .5 SS	1	10	36425	Washer - Flat .375 SS	8
5	36413	Nut - .313-18NC SS Hex	1				
6	72054	Nut - .375-16NC SS Lock	4				



Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	305767	Cooler - Assy Hydac Eld 4.5	1	6	20677	Nut - .313-18NC Zn Lock	AR
1	305767-AA	Core (does not include Items 10 & 11)	--	7	20692	Washer - .313 Zn Flat	AR
2	305767-AB	Fan	--	8	319928	Washer - M6 Lock	AR
3	305767-AC	Housing	--	9	319929	Screw - Sockethead M6-1 X 20	AR
4	319927	Screw - Sockethead .313-18NC X 2	AR	10	323290	Valve - Bypass Assy lbp-2	AR
5	20711	Washer - .313 Zn Lock	AR	11	323291	Fitting - 20 3408-Hhp-20	AR

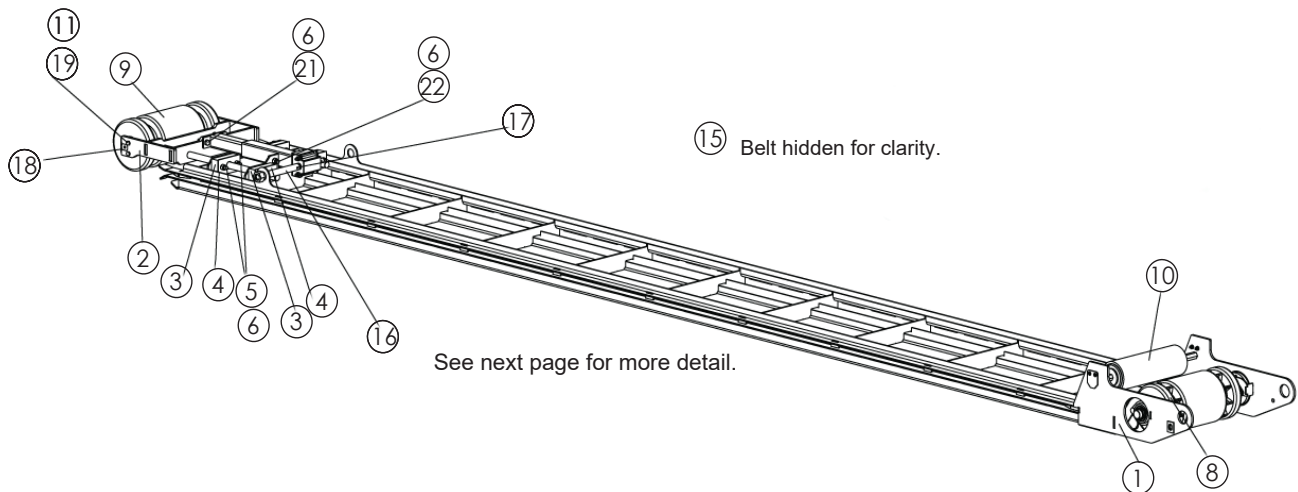
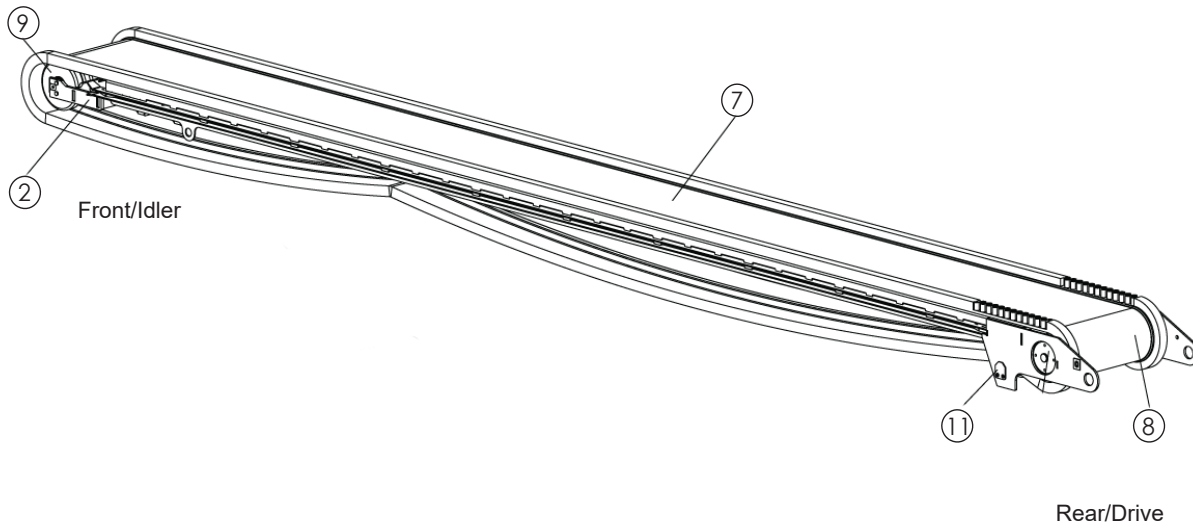
**14' Conveyor Group
Main**

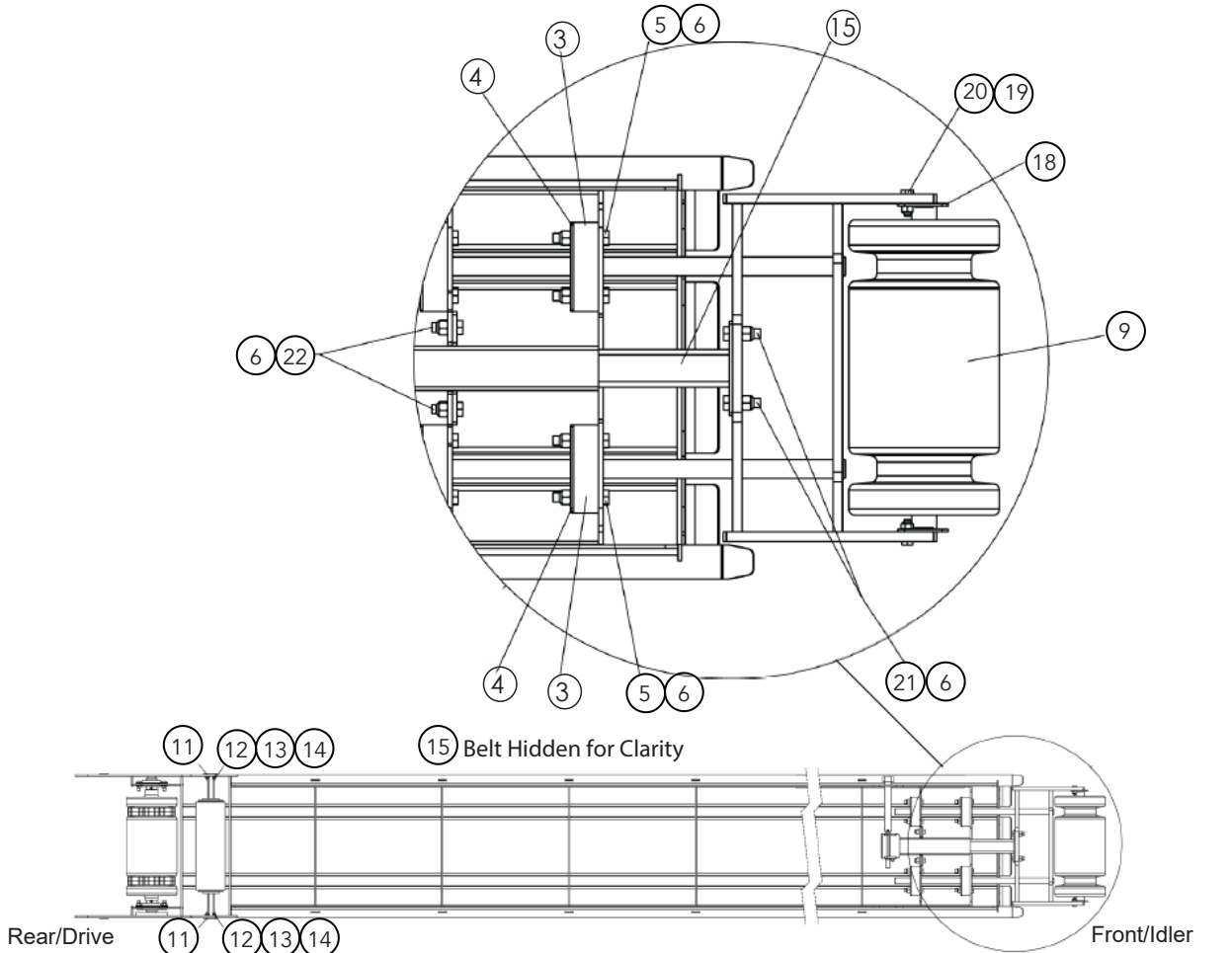



SECTION G-G

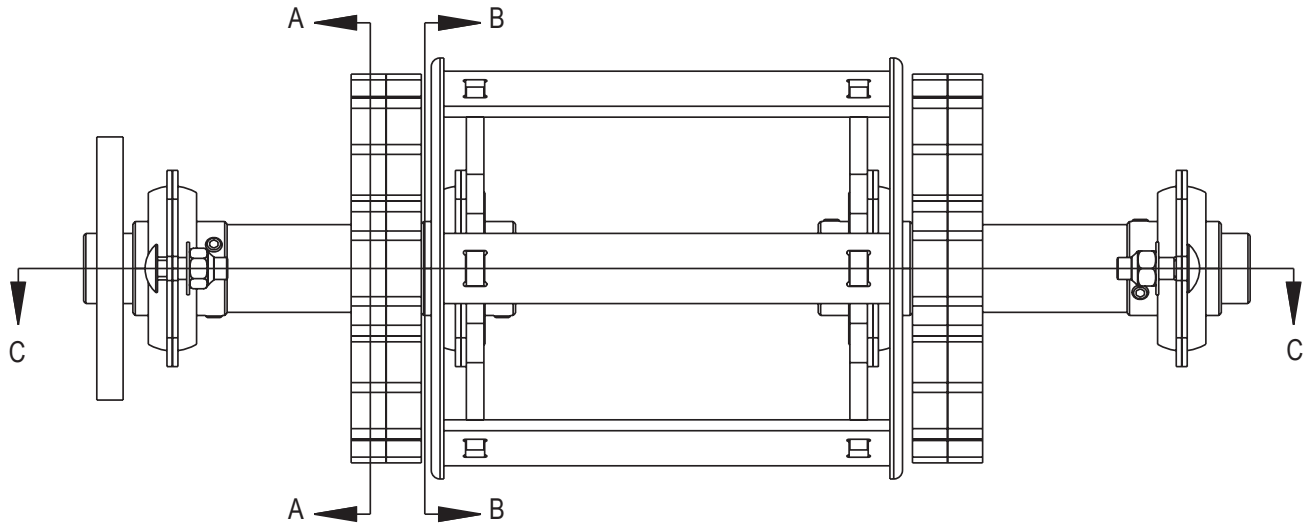
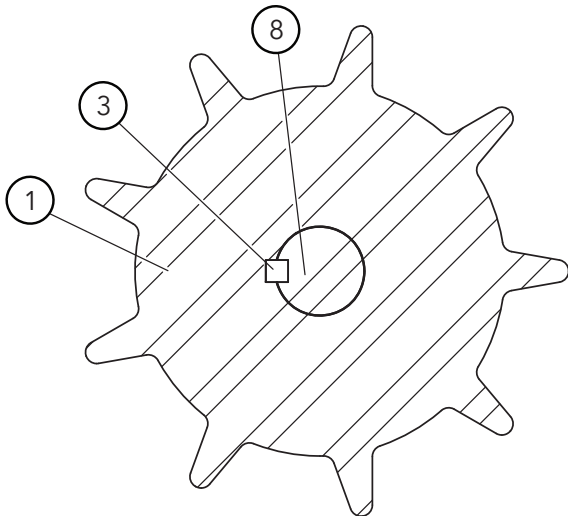
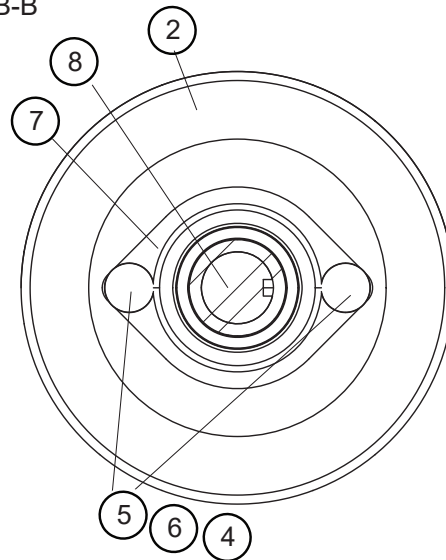
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	324934	Conveyor - Group 14"		6	322463	Pulley - Snubber	2
1	322846	Cartridge - Assy RH Conv 14'	1	7	323265	Tab - Cover 304	2
2	322848	Cartridge - Assy LH Conv 14'	1	8	323271	Bolt - Flat Head SS	4
3	36425	Washer - .375 SS Flat	4	9	171052	Washer - #10 SS	4
4	36399	Capscrew - .375-16NC X 1.25 SS	4	10	171052	Nut - Lock #10-24NC SS	4
5	72054	Nut - .375-16NC SS Lock	4				

Conveyor Cartridges



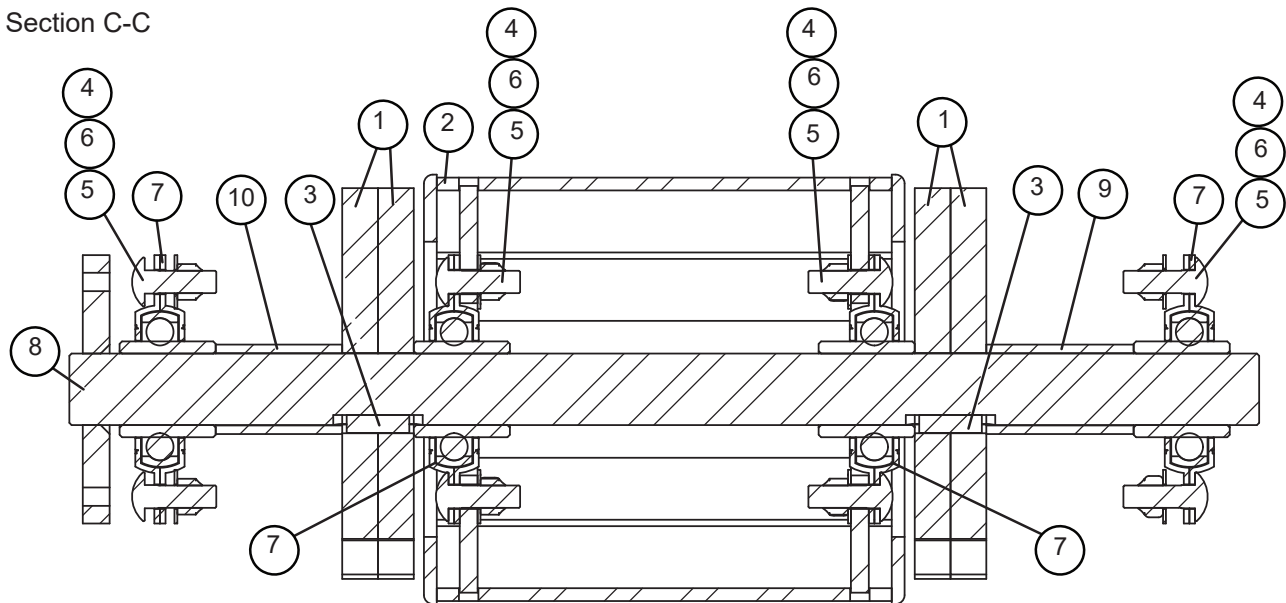


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	325016	Complete Conv Cartridge - RH 14'					
	325015	Complete Conv Cartridge - LH 14'	1	12	323271	Capscrew - .375-16NC X 2 SS	4
1	324980	Cartridge - Wldmt Conv 12' 304	1	13	171052	Nut - .375-16NC SS Lock	4
2	324990	Cartridge -Wldmt Takeup 304	1	14	56355	Washer - .75 SS Flat	2
3	324943	Block - Guide UHMW	4	15	325004	Belt - Conv 12' # 6 5.63	1
4	325006	Cover - Idler Bushing	4	16	325008	Shaft - Assy Drive (See next page.)	1
5	34859	Capscrew - .375-16NC X 2.0 SS	8	17	56313	Pulley - Assy Tail (See page 37.)	1
6	72054	Nut - Lock .375-16NC SS	12	18	325005	Pulley - Snubber	1
7	321253	Belt - Conv 12' # 6 5.63	1	19	36394	Tab - Cover 304	2
8	324996	Pin - Clevis .5 X 1 SS	2	20	42034	Flat Head - 10-24 .75 SS	4
9	324995	Pin - Cotter .125 X 1 SS	2	21	36399	Washer - #10 SS Flat	4
10	322463	Nut - Castle .75-10UNC 304	1	22	36398	Nut - #10-24NC Zn Lock	4
11	323265	Pin - Roll .156 X 1 SS	1				

Drive Shaft

Section A-A

Section B-B


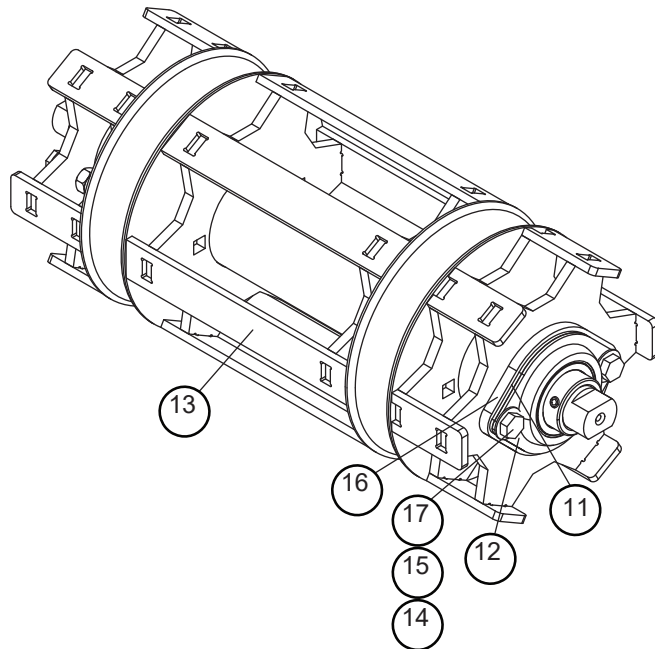
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	322832	Shaft - Assy Drive	1	6	36424	Washer - .313 SS Flat	8
1	321205	Sprocket - 304	4	7	321732	Bearing - 304	4
2	322828	Roller - Wldmt 304	1	8	322833	Shaft - Wldmt Drive 304	1
3	321724	Key - Sq .25 X .875	2	9	322837	Spacer - Tube 304	1
4	42221	Nut - .313-18NC SS Lock	8	10	322838	Spacer - Tube 304	1
5	42639	Bolt - .313-18NC X 1 SS	8				

Section C-C

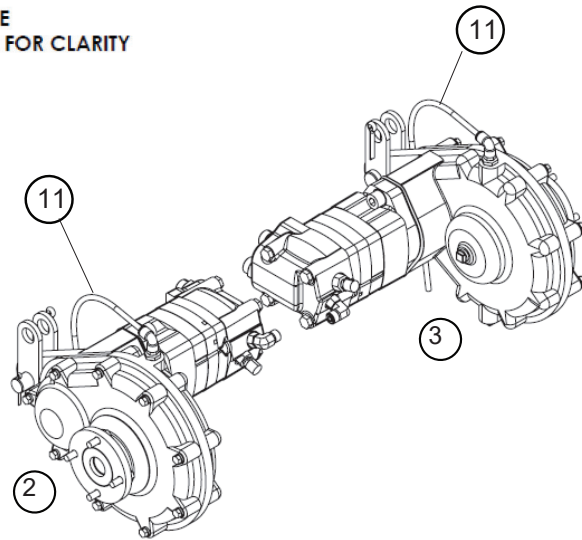
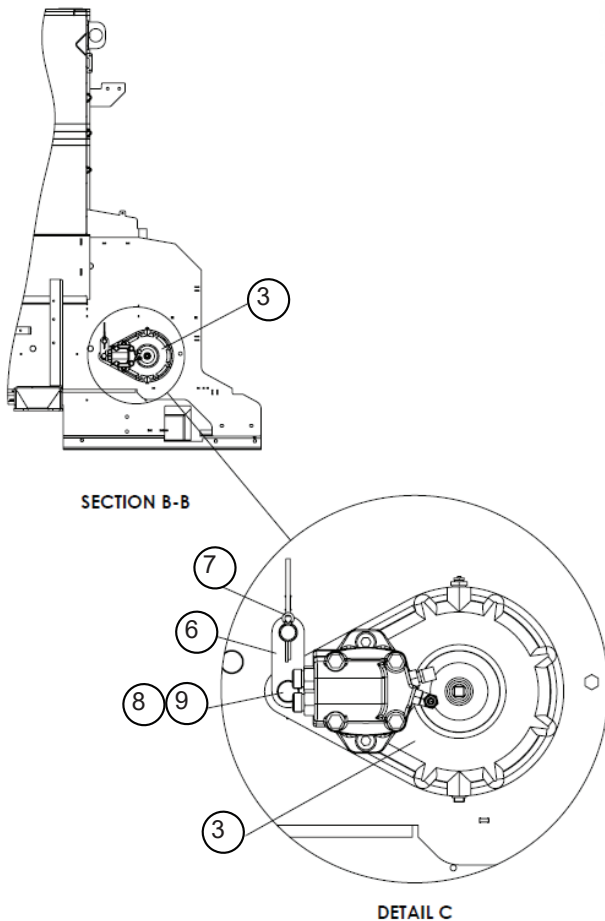
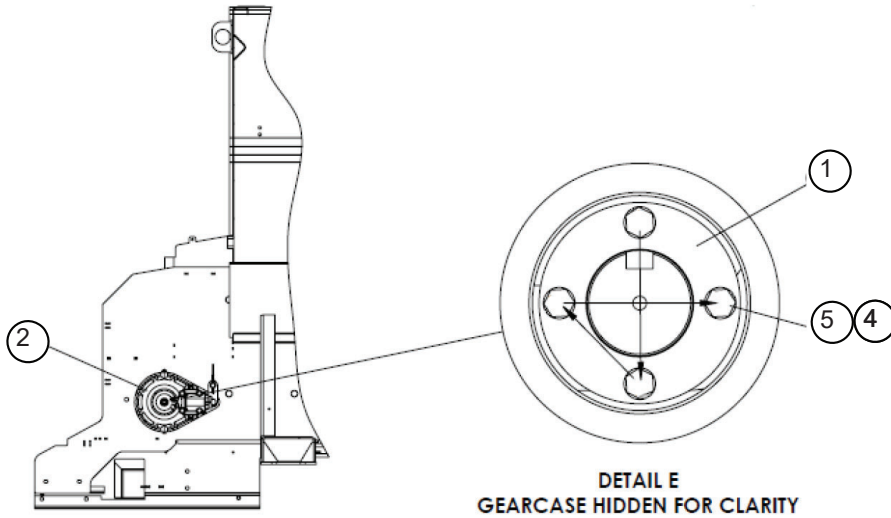


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	322832	Shaft - Assy Drive	1	6	36424	Washer - .313 SS Flat	8
1	321205	Sprocket - 304	4	7	321732	Bearing - 304	4
2	322828	Roller - Wldmt 304	1	8	322833	Shaft - Wldmt Drive 304	1
3	321724	Key - Sq .25 X .875	2	9	322837	Spacer - Tube 304	1
4	42221	Nut - .313-18NC SS Lock	8	10	322838	Spacer - Tube 304	1
5	42639	Bolt - .313-18NC X 1 SS	8				

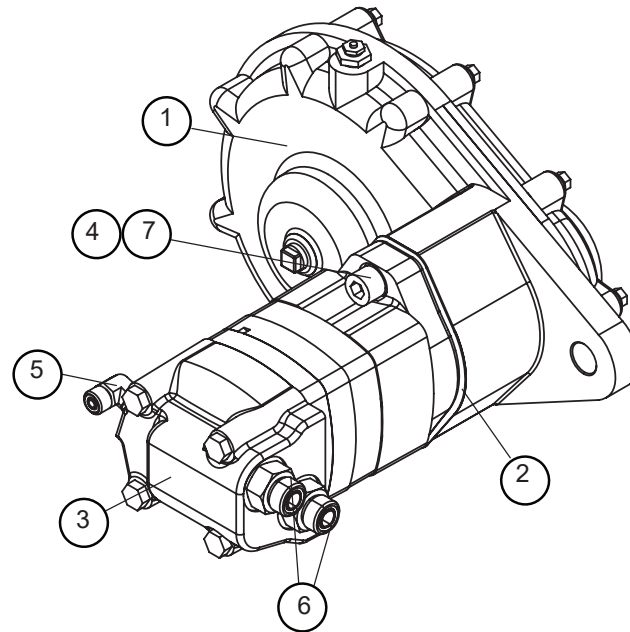
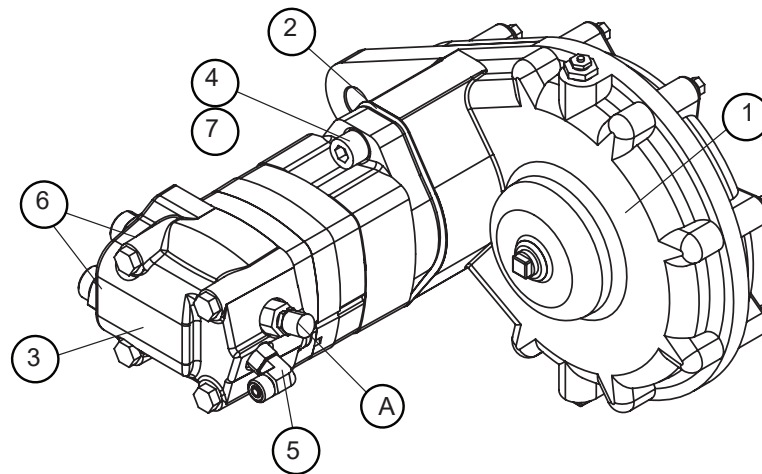
Tail Pulley



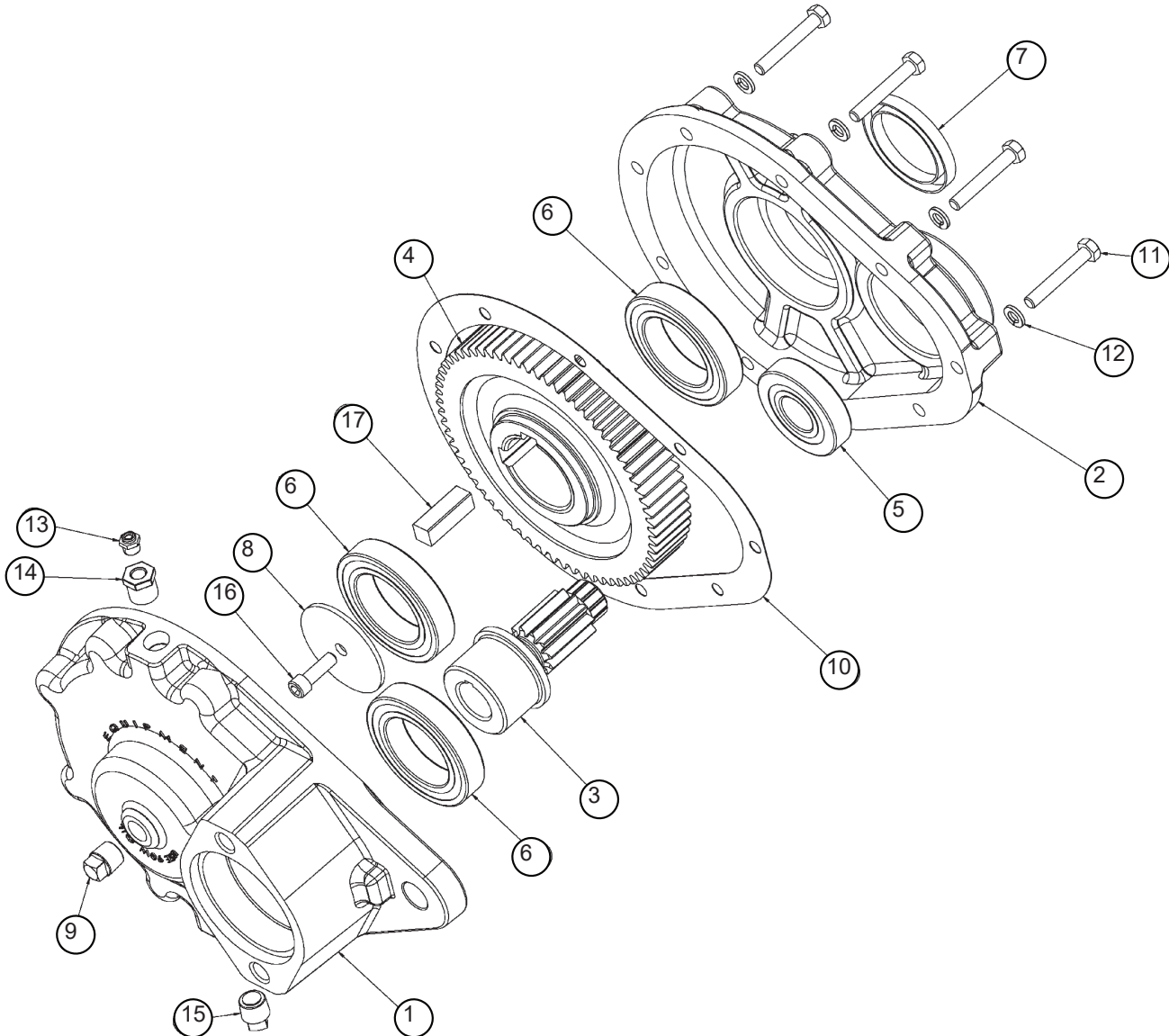
Key	Part No.	Description	Qty
	322452	Pulley - Assy Tail	1
11	322458	Shaft - Idler Pulley 304	1
12	321732	Bearing - 304	2
13	322453	Roller - Wldmt Tail	1
14	42221	Nut - .313-18NC SS Lock	4
15	36424	Washer - .313 SS Flat	4
16	322999	Spacer - Bearing 304	2
17	36397	Capscrew - .313-18NC X 1.25 SS	4



Key	Part No.	Description	Qty
1	322883	Shaft - Wldmt Adapter 304	4
2	322886	Gearcase - Assy 6:1 4.9CID LH (See next page.)	2
3	322887	Gearcase - Assy 6:1 4.9CID RH (See next page.)	2
4	36419	Washer - .313 SS Lock	16
5	34580	Capscrew - .313-18NC X 1 SS	16
6	322890	Link - 304	8
7	316109	Pin - Cotter .25 X 1.5 SS	4
8	322892	Pin - Cotter .125 X 1.5 SS	4
9	322891	Pin - Clevis .75 X 1.75 SS	4
10	301315	Loctite - 243	-
11	306890	Breather Tube- Assy Gearcase	2

Gear Case Assy - LH**Gear Case Assy - RH**

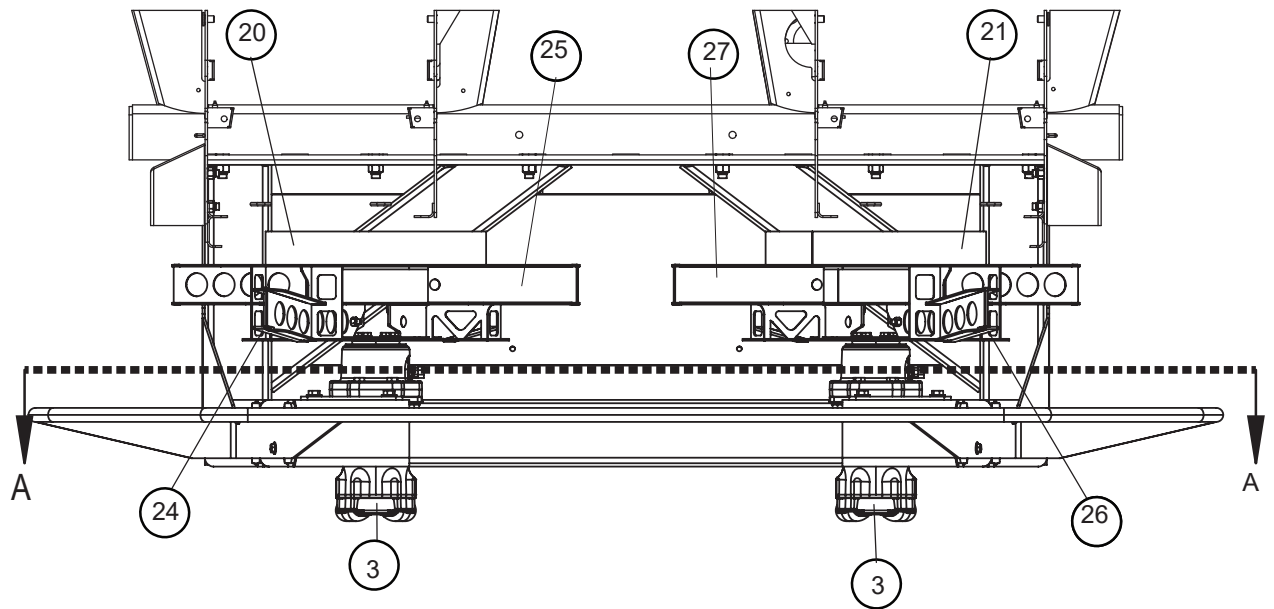
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	322886	Gearcase - Assy 6:1 4.9CID LH		4	30227	Washer - Lock Socket HD .5"	2
	322887	Gearcase - Assy 6:1 4.9CID RH		5	312654	Fitting - 4-4 520220	1
1	36671	Gear Case - 6:1 (See next page for service parts.)	1	6	304309	Fitting - 8-10 520120	2
2	74524	Gasket - SAE 101-2 B	1	7	305098	Screw - Sockethead .5-13NC X 1.75	2
3	320877	Motor - Hyd 4.9CID	1				
A	89709-AA	Sensor	1				
B	77938	*Seal Kit *Not Shown*	1				

Gear Case Service Parts


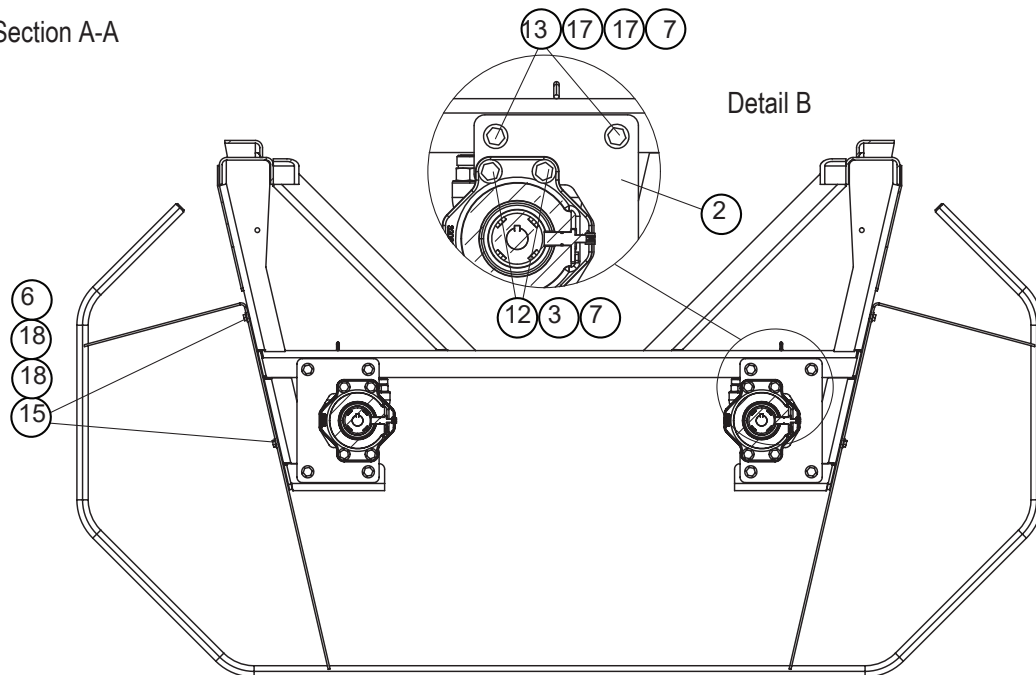
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	36671	Gear Case Service Assy	1	10	304563	Gasket - Housing Single Pinion	1
1	304559	Housing - Outboard Sngl Pinion	1	11	20040	Capscrew - .313-18NC X 2 Gr5	9
2	304560	Housing - Inboard Sngl Pinion	1	12	20711	Washer - .313 Zn Lock	9
3	304561	Gear - Pinion 11t	1	13	2564	Tube - Breather	1
4	304562	Gear - Driven 67t	1	14	27465	Bushing - 3/8 X 1/8	1
5	37007	Bearing - Ball	1	15	21490	Plug - Magnetic Sq Head .38NPT	1
6	37008	Bearing - Ball	3	16	38980	Screw - Allen Hd .31-18NC X 1	1
7	37006	Seal - Oil	1	17	37010	Key - SQ .5 X 1.5	1
8	38979	Washer - Retainer	1				
9	6031	Plug - 3/1 X 1/8 NPT	1				

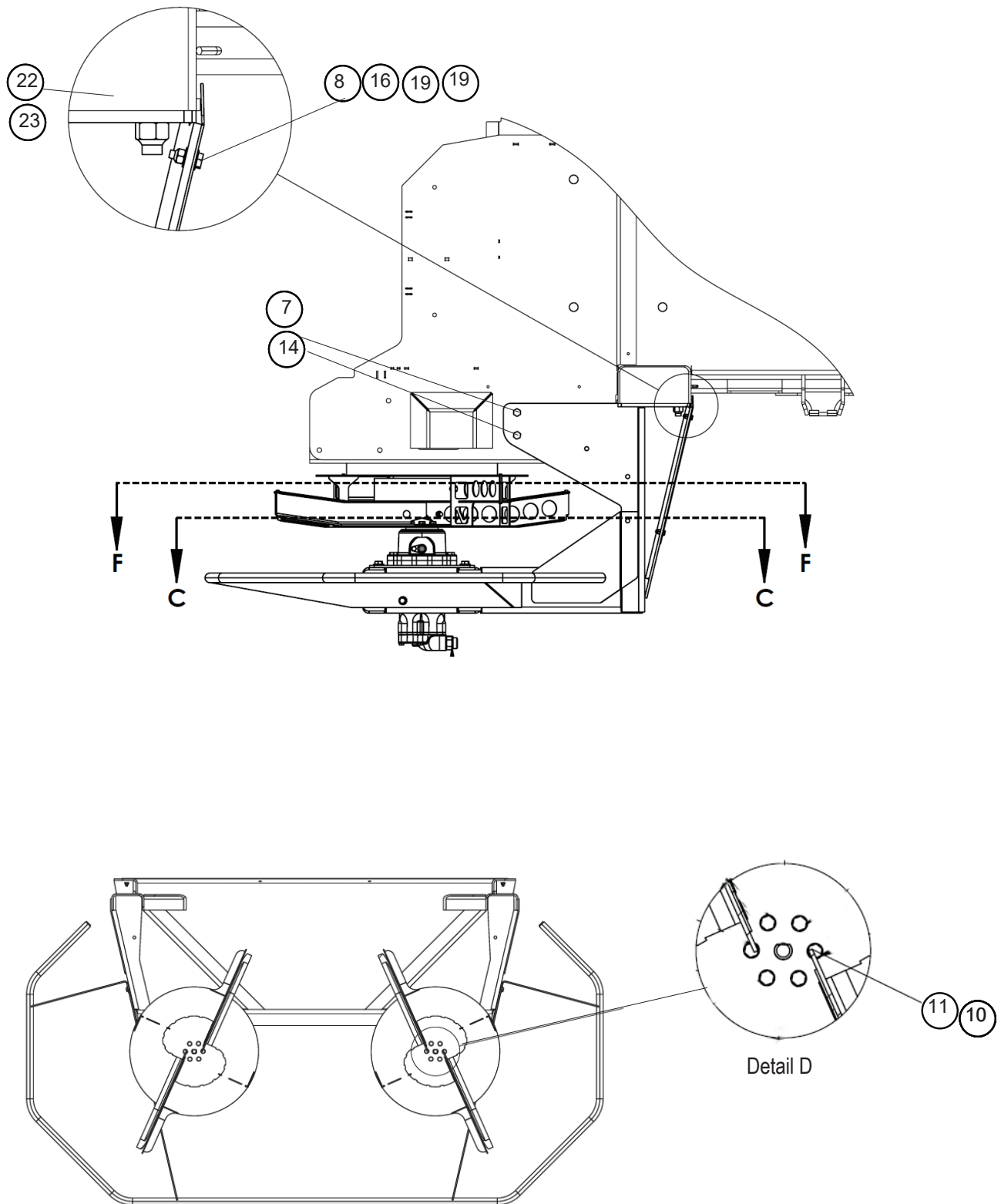
Spinners

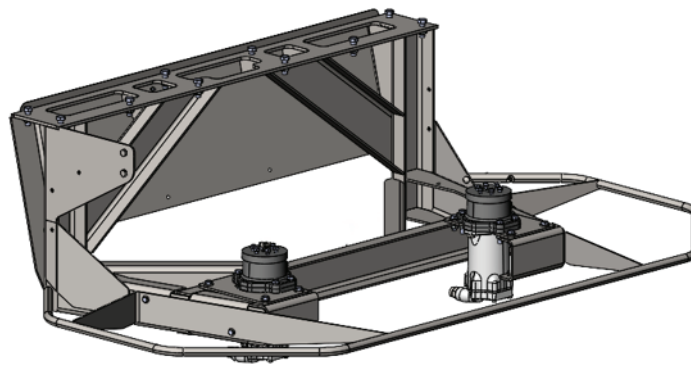
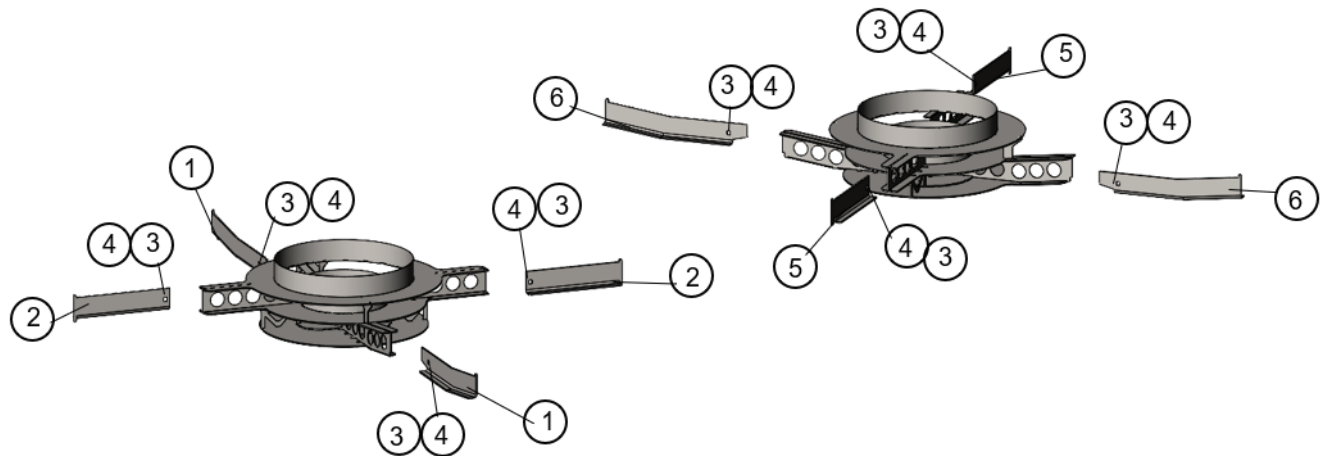
Spinner Assembly



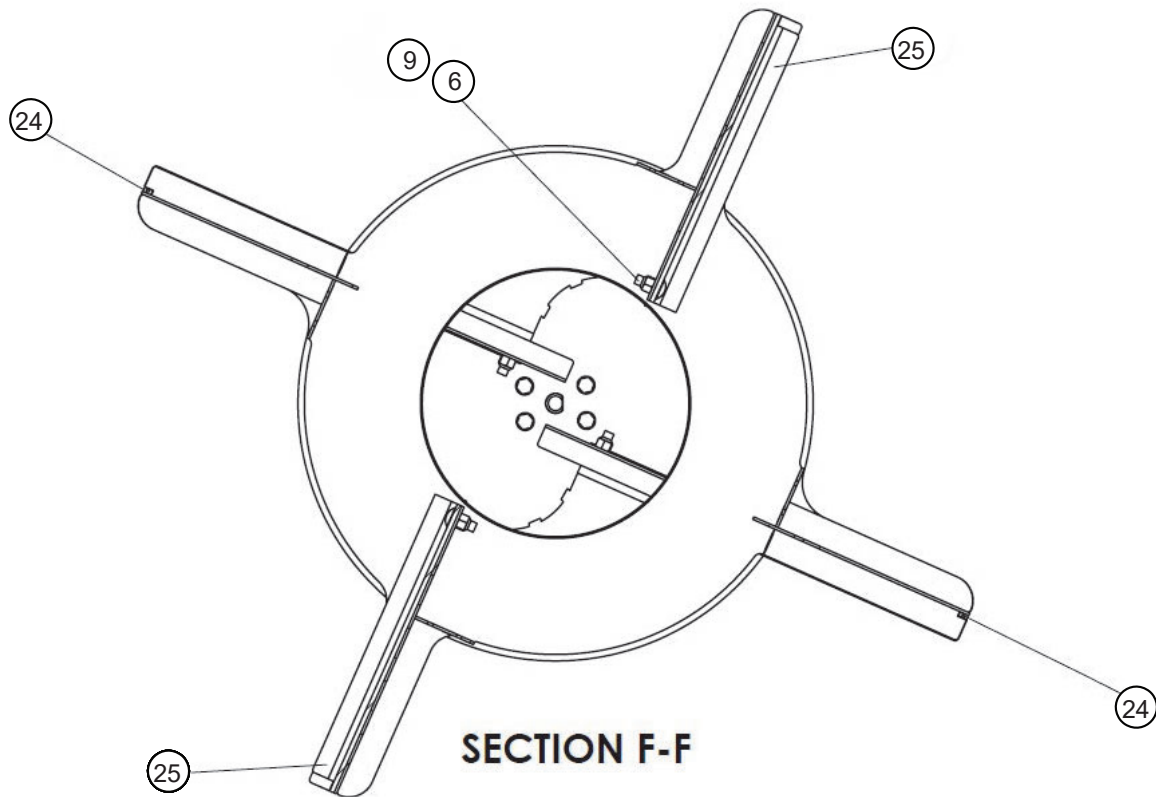
Section A-A





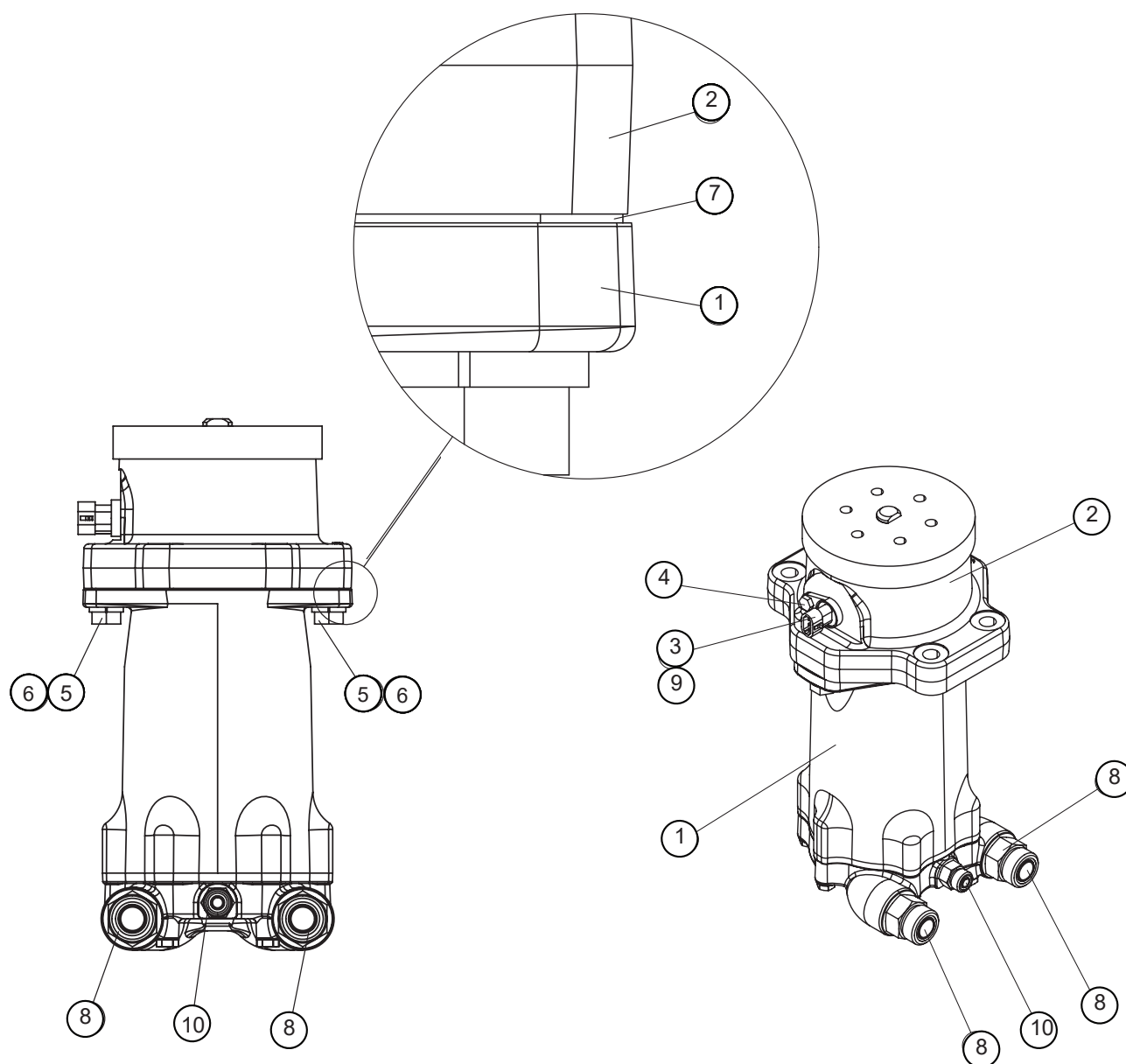


1	324166	Overlay - BTM LH	2
2	324167	Overlay - Top LH	2
3	36408	Bolt - Carriage .375 - 16NC X 1 SS	8
4	72054	Nut - Lock .375-16NC SS	8
5	324166	Overlay - BTM RH	2
6	324168	Overlay - Top RH	2



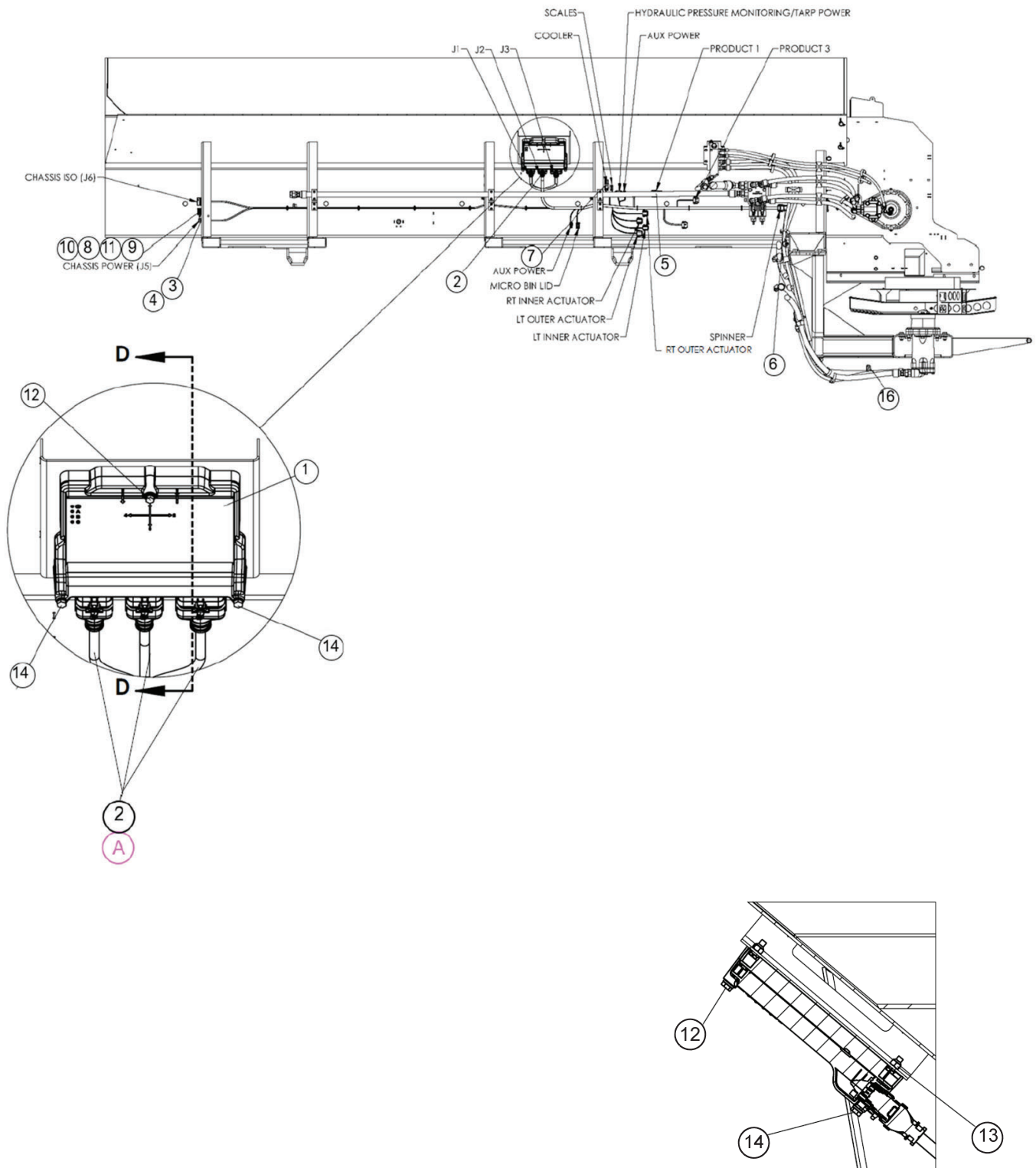
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	322465	Frame - Wldmt Spinner 304	1	15	36399	Capscrew - .375-16NC X 1.25 SS	4
2	322483	Mount - Spinner 304	2	16	36394	Capscrew - .25-20NC X .875 SS	6
3	321528	Motor - Assy Spinner (See next page.)	2	17	322259	Washer - Flat .5 Hd SS	16
4	321443	Plate - Backstop Panel 304	1	18	36425	Washer - .375 SS Flat	8
5	321530	Guard - Wldmt Spinner Lower	1	19	36423	Washer - .25 SS Flat	12
6	72054	Nut - .375-16NC SS Lock	12	20	322490	Disk - Wldmt LH 304	1
7	39016	Nut - .5-13NC SS Lock	20	21	322531	Disk - Wldmt RH 304	1
8	42034	Nut - .25-20NC SS Lock	6	22	58800	Capscrew - .625-11NC X 1.75 SS	10
9	36408	Bolt - .375-16NC X 1 SS	8	23	41762	Nut - Lock .625-11NC SS	10
10	36420	Washer - .375 SS Lock	12	24	324165	Overlay - BTM LH 304	2
11	36293	Capscrew - .375-16NC X .75 SS	12	25	324167	Overlay - TOP LH 304	2
12	42454	Capscrew - .5-13NC X 2.5 SS	8	26	324166	Overlay - BTM RH 304	2
13	36539	Capscrew - .5-13NC X 1.5 SS	8	27	324168	Overlay - TOP RH 304	2
14	36402	Capscrew - .5-13NC X 1.25 SS	4				

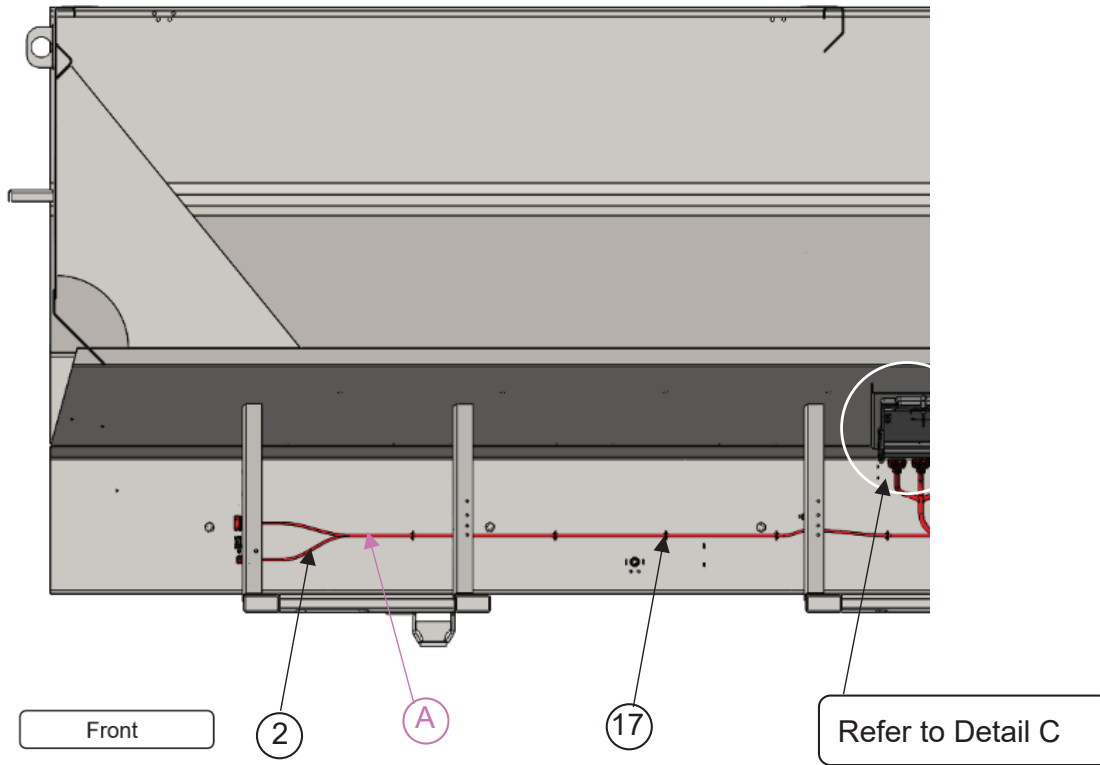
Spinner Motor

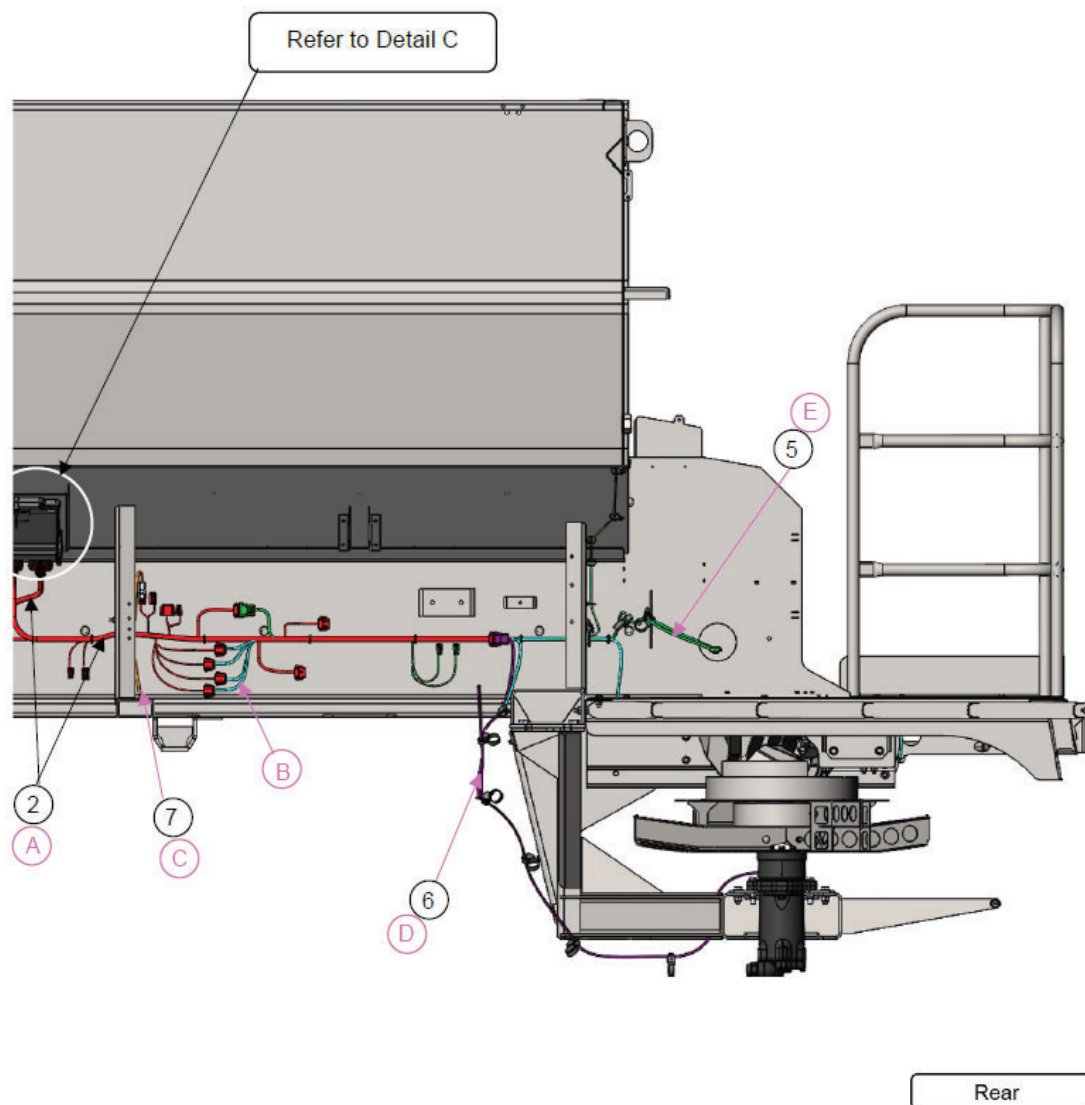


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	321528	Motor - Assy Spinner		5	36402	Capscrew - .5-13NC X 1.25 SS	2
1	320879	Motor - Hyd 5CID	1	6	36422	Washer - .5 SS Lock	2
A	*320894	*Motor Seal Kit *Not shown*	1	7	300493	Gasket - Paper SAE B 2 Bolt	1
2	324176	Over Hung Load Adaptor - Assy	1	8	313450	Fitting - 12-12 520120	2
3	316587	Sensor - Gear Tooth	1	9	29875	O-Ring - 016	1
4	308227	Capscrew - .25-20NC X .625 SS	1	10	313455	Fitting - 6-6 520120	1

Electrical Harnesses and Sensors



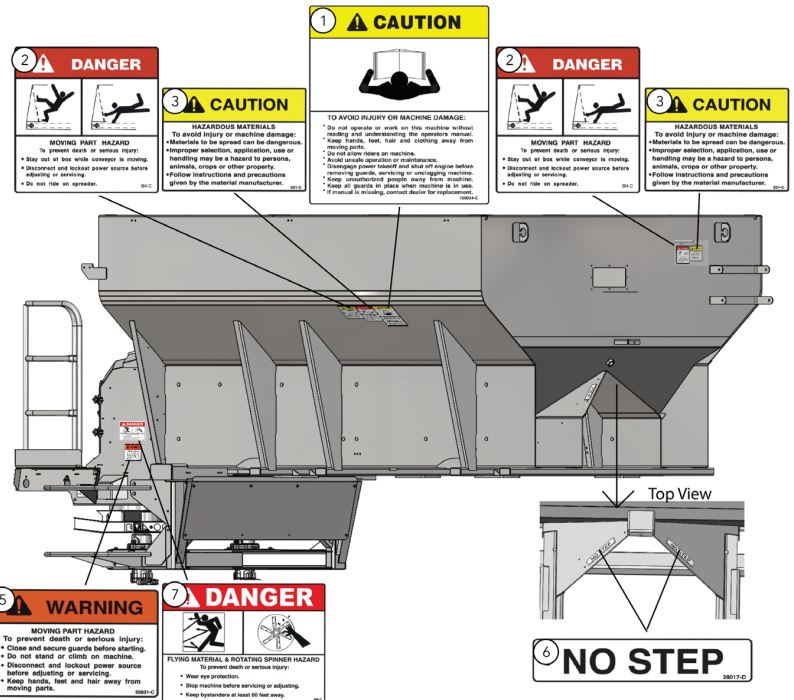
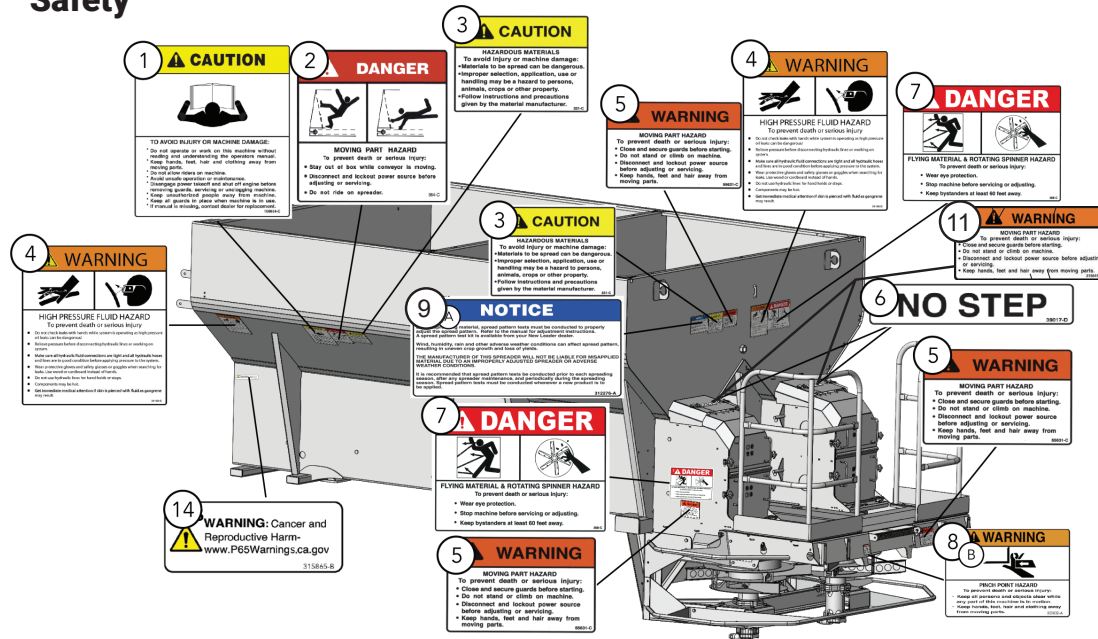




Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	322921	Controller - Raven RCM	1	11	42221	Nut - Lock .313-18NC SS	4
2	322915	Harness - Main	1	12	34501	Capscrew - .25-20NC x 2.5 SS	1
3	44483	Screw - Panhead PHLP #10-24NC x .75 SS	2	13	42034	Nut - Lock .25-20NC SS	3
4	56355	Nut - Lock #10-24NC SS	2	14	36396	Capscrew - .25-20NC X 3 SS	2
5	322916	Harness - Bin 1 Control 12'-14'	1	15	*99674	*Tie - Wire *Not Shown*	20
	322919	Harness - Spinner	1	16	310648	Tie - Dual Clamp	12
7	322920	Harness - Cooler Extension	1	17	311806	Tie - Wire Fir Tree	30
8	312964	Clip - Harness Mounting	4				
9	34580	Capscrew - .313-18NC x 1 SS	4				
10	36424	Washer - Flat .313 SS	4				

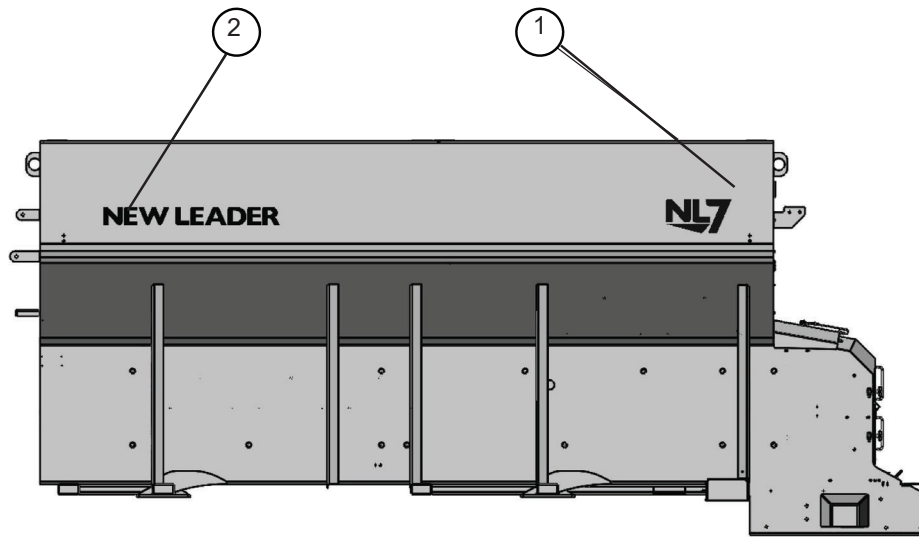
Key	Part No.	Description	Color
A	322915	Harness - Main	Red
B	320881	Actuator - 150mm (with harness)	Teal
	320882	Actuator - 75mm (with harness)	Teal
C	322920	Harness - Cooler Extension	Orange
D	322919	Harness - Spinner	Purple
E	322916	Harness - Bin 1 Control 12'-14'	Green

Decals Safety

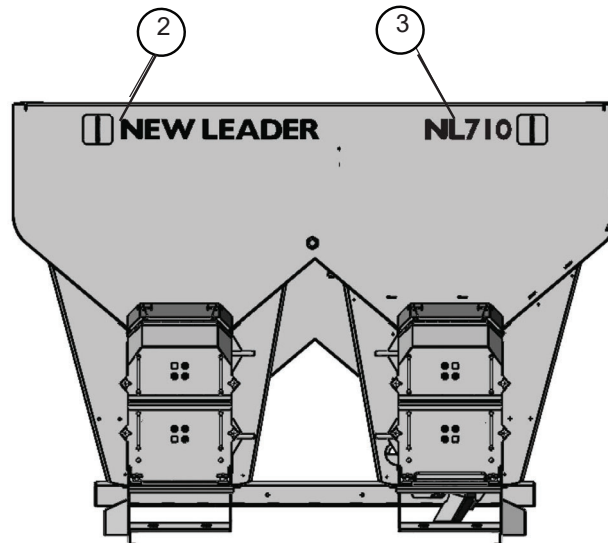


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	150034	Decal - Caution Oper & Maint	AR	7	368	Decal - Danger Flying Material	AR
2	364	Decal - Danger Moving Part	AR	8	323632	Decal - Warning Moving Part	AR
3	321	Decal - Caution Hazard Matl	AR	9	312276	Decal - Notice Spread Pattern	AR
4	39138	Decal - Warning High Pressure	AR	10	308191	Decal - Guard is Missing	AR
5	55631	Decal - Warning Moving Part	AR	11	315641	Decal - Moving Part Hazard	AR
6	39017	Decal - No Step	AR				

Decor Group



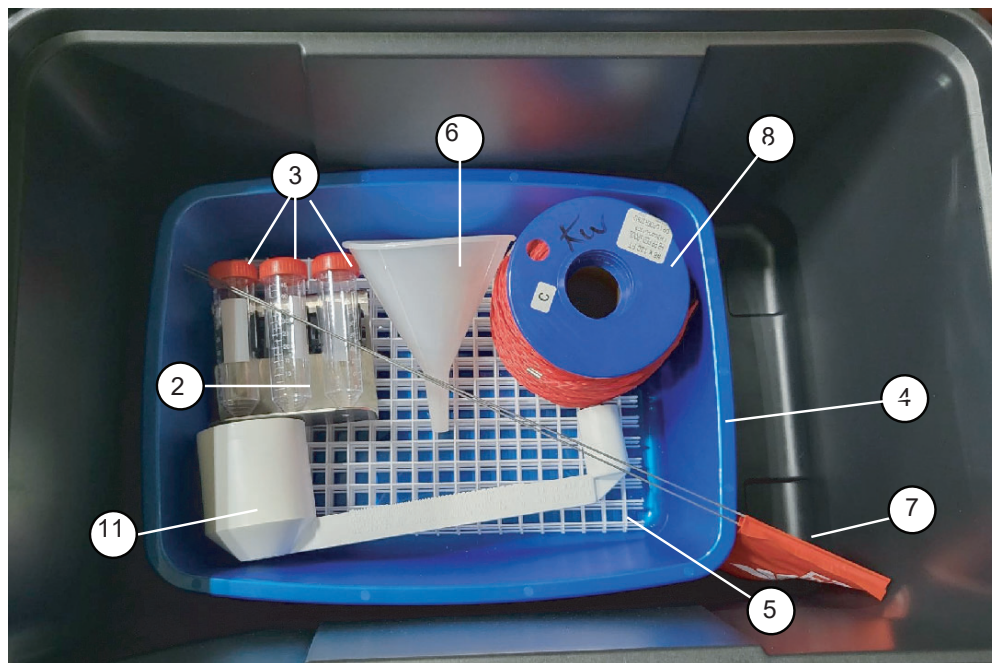
MIRRORED ON OTHER SIDE



Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	322278	Decal - Group Decor	1	2	322277	Decal - New Leader Black	3
1	322083	Decal - NL7 Black	2	3	322084	Decal - NL720 Black	1

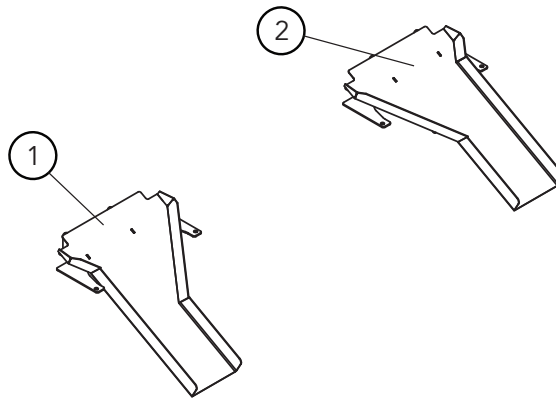
Calibration

Spread Pattern Test Kit



Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	323516	Test - Kit Spread Pattern	1	6	87332	Funnel	1
1	323517	Box - Plastic Storage	1	7	70897	Flag	2
2	323518	Assy - Test Tube Rack	1	8	323519	Rope - 120' Marked Red	1
3	300507	Test Tube	3	9	*87210	*Stake - Tent *Not Shown*	2
4	313963	Tray - Collection Blue	3	10	--	Not used	--
5	87200	Divider - 8.38 x 12.44	3	11	58897	Scale - Density	1
				12	323523	Decal - New Leader White/Red	2

Calibration Chutes



Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	323366	Chute - Kit Calibration	1	2	321830	Chute - Wldmt CFR RH 304	1
1	321831	Chute - Wldmt CFR LH 304	1				