



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

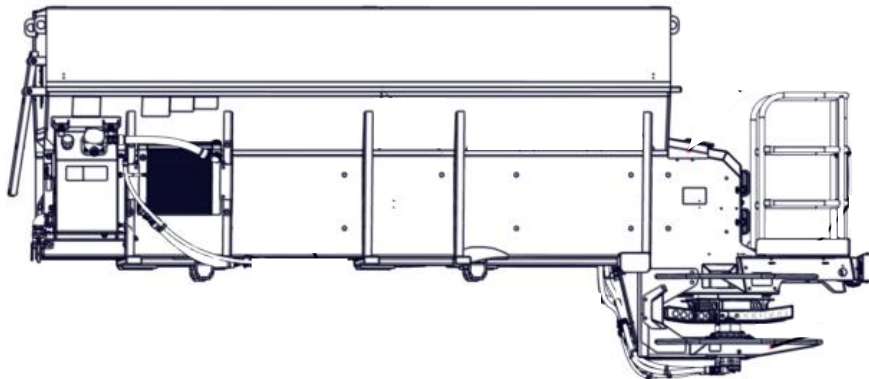
# NL720 RBR

## Parts Manual

Unit Serial No. \_\_\_\_\_

Manual Number: 322913-B

Effective 05/2024



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 120<sup>th</sup> 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 120<sup>th</sup> 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

<b>Warranty</b> .....	<b>2</b>	<b>14' Conveyor Group</b> .....	<b>32</b>
<b>Table of Contents</b> .....	<b>3</b>	Main .....	32
<b>Ordering Parts: Instructions</b> .....	<b>4</b>	Conveyor Cartridges .....	34
<b>Body</b> .....	<b>5</b>	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	<b>Spinners</b> .....	<b>41</b>
Platform Assembly.....	8	Spinner Assembly .....	41
Screens.....	9	Spinner Motor .....	44
Lights .....	10	<b>Electrical</b> .....	<b>45</b>
Sign – Slow-Moving Vehicle (SMV) & Speed Identification Symbol (SIS).....	11	Harnesses and Sensors.....	45
Deflectors .....	11	<b>Decals</b> .....	<b>47</b>
Waterfalls .....	12	Safety.....	47
Chutes.....	13	Decor Group .....	48
<b>Hydraulics - 14'</b> .....	<b>14</b>	<b>Calibration</b> .....	<b>49</b>
Main Hydraulics .....	14	Spread Pattern Test Kit .....	49
Spinner Hydraulics.....	18	Calibration Chutes .....	50
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.

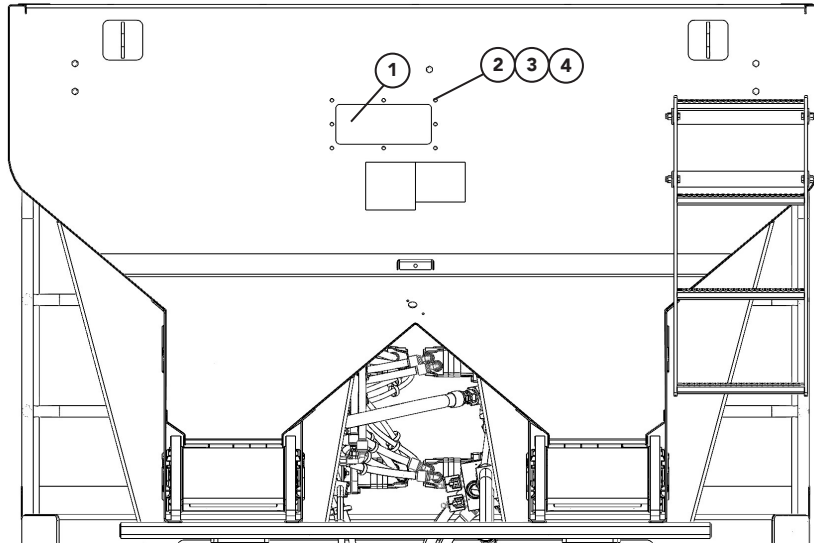
If your claims are not being handled (by the transportation company) to your satisfaction, please call our Product Sales & Support Department at New Leader Manufacturing at (800) 363-1771 for assistance.

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

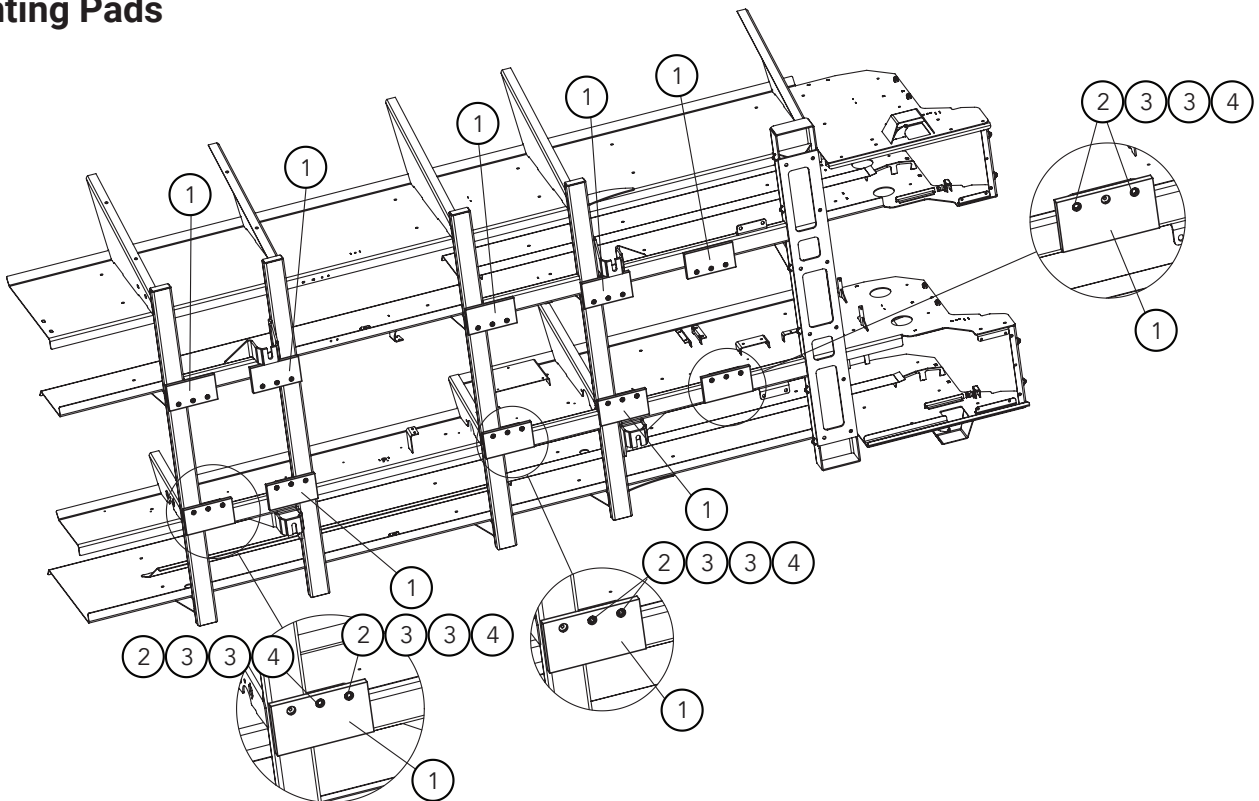
The parts listed under the different steel types (CS, 409 SS and 304 SS) are for that type of unit and do not necessarily mean the part is made of that type of steel.

Body  
Sight Window



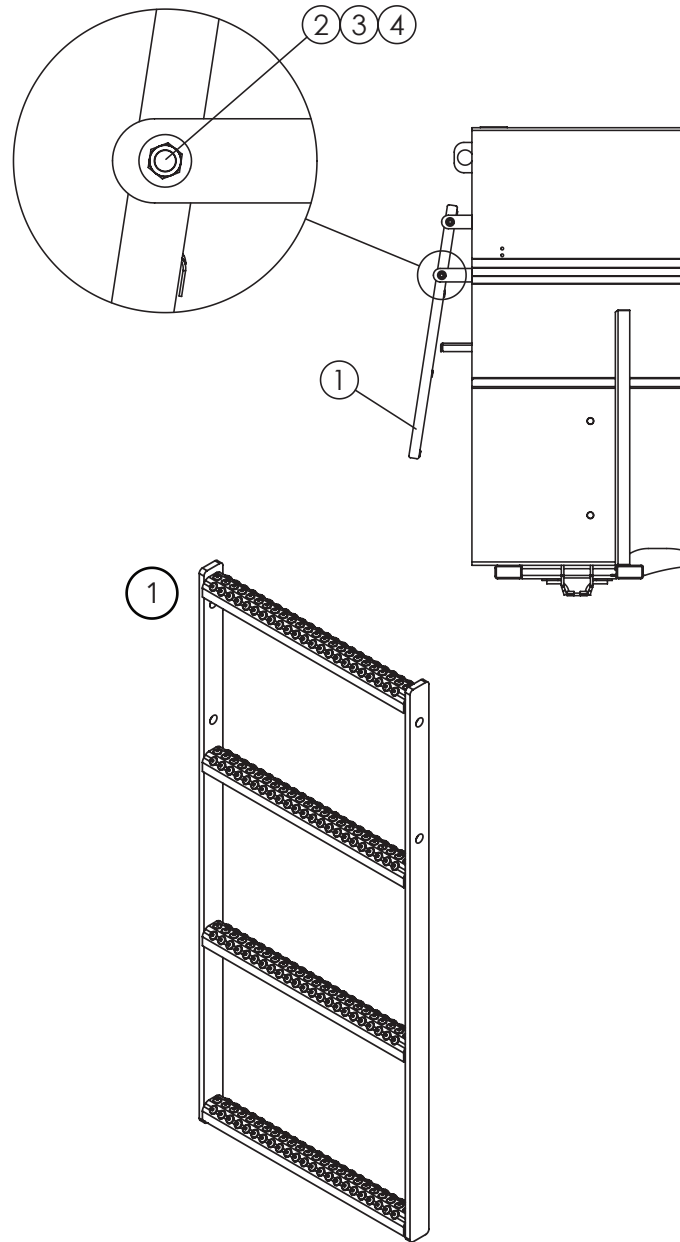
Key	NLM	Description	Qty	Key	NLM	Description	Qty
1	302686	Window - Sight 5X12 Plexiglas	1	3	36423	Washer - .25 SS Flat	8
2	36395	Capscrew - .25-20NC X 1 SS	8	4	42034	Nut - .25-20NC SS Lock	8

Mounting Pads



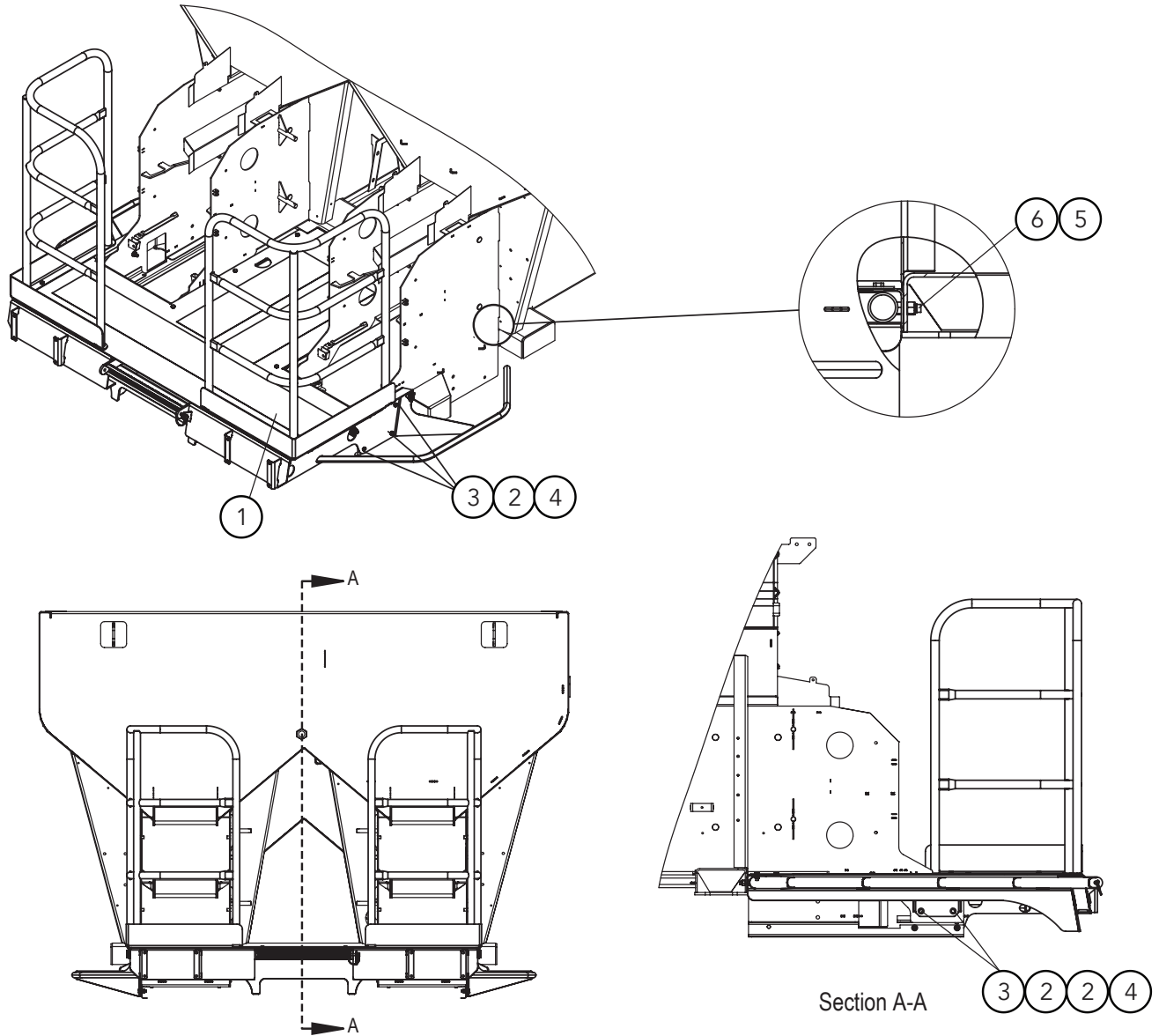
Key	NLM	Description	Qty	Key	NLM	Description	Qty
1	323590	Pad - Mount .75 x 5.5 x 10 Poly	10	3	36423	Washer - .25 SS Flat	40
2	40750	Capscrew - .25-20NC x 1.25 SS	20	4	42034	Nut - .25-20 NC SS Lock	20

**Front Ladder**



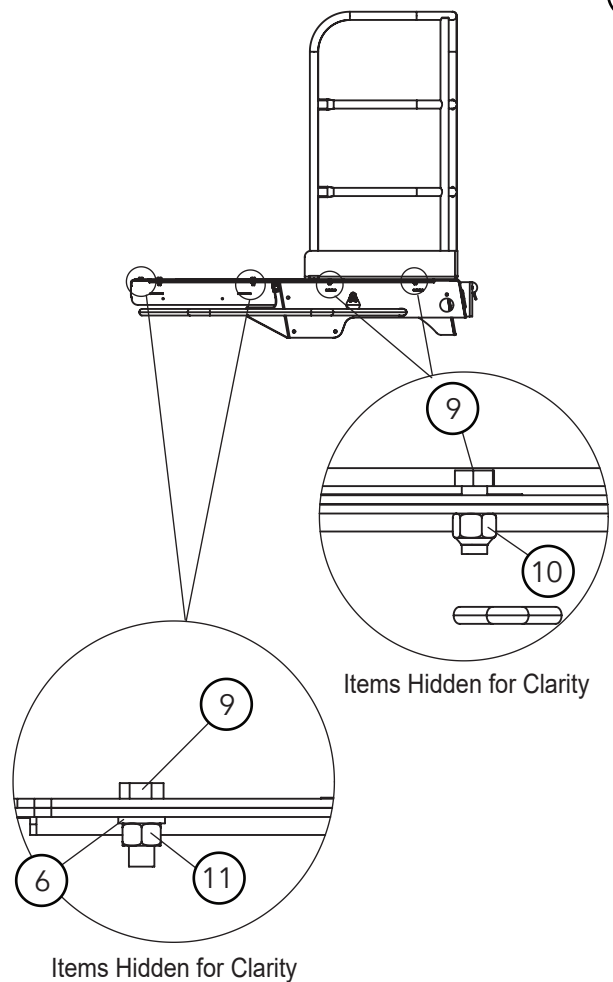
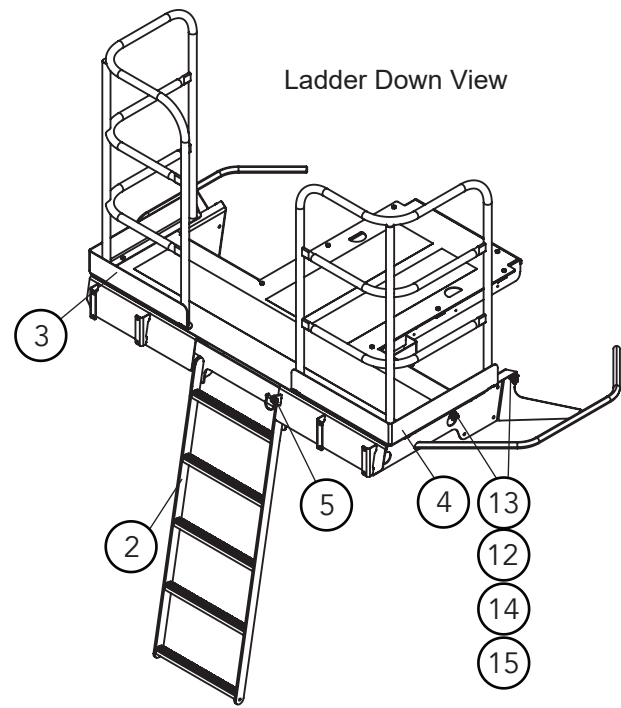
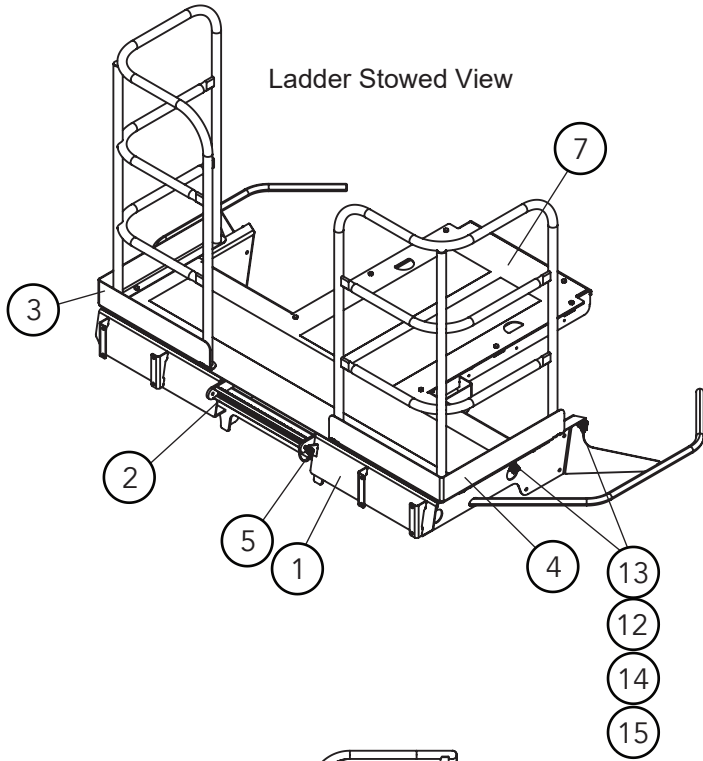
Key	NLM	Description	Qty	Key	NLM	Description	Qty
1	321803	Ladder - Wldmt 304	1	3	36426	Washer - .5 SS Flat	8
2	36539	Capscrew - .5-13 NC X 1.5 SS	4	4	39016	Nut - .5-13NC SS Lock	4

# 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				

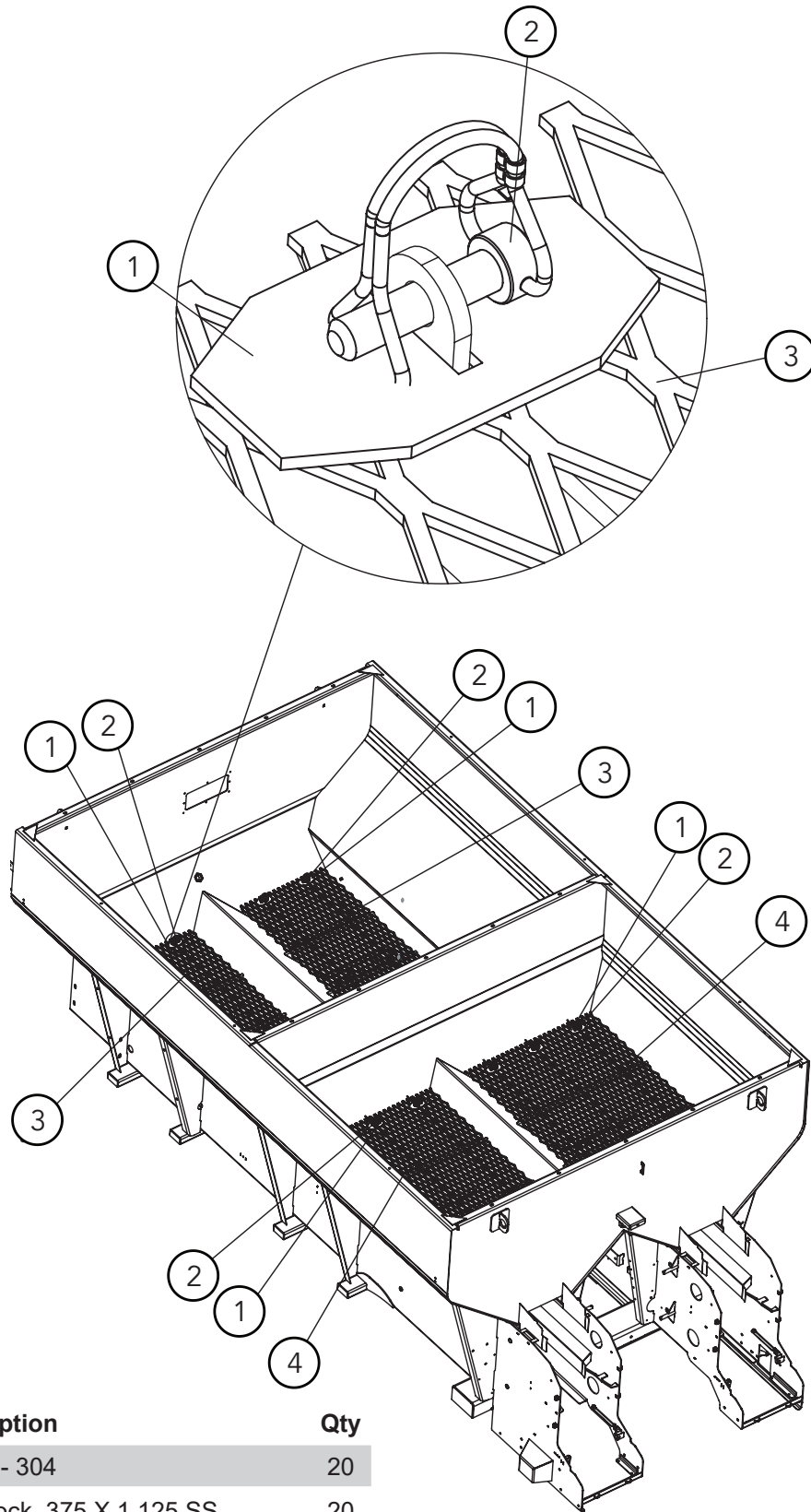
**Platform Assembly**



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

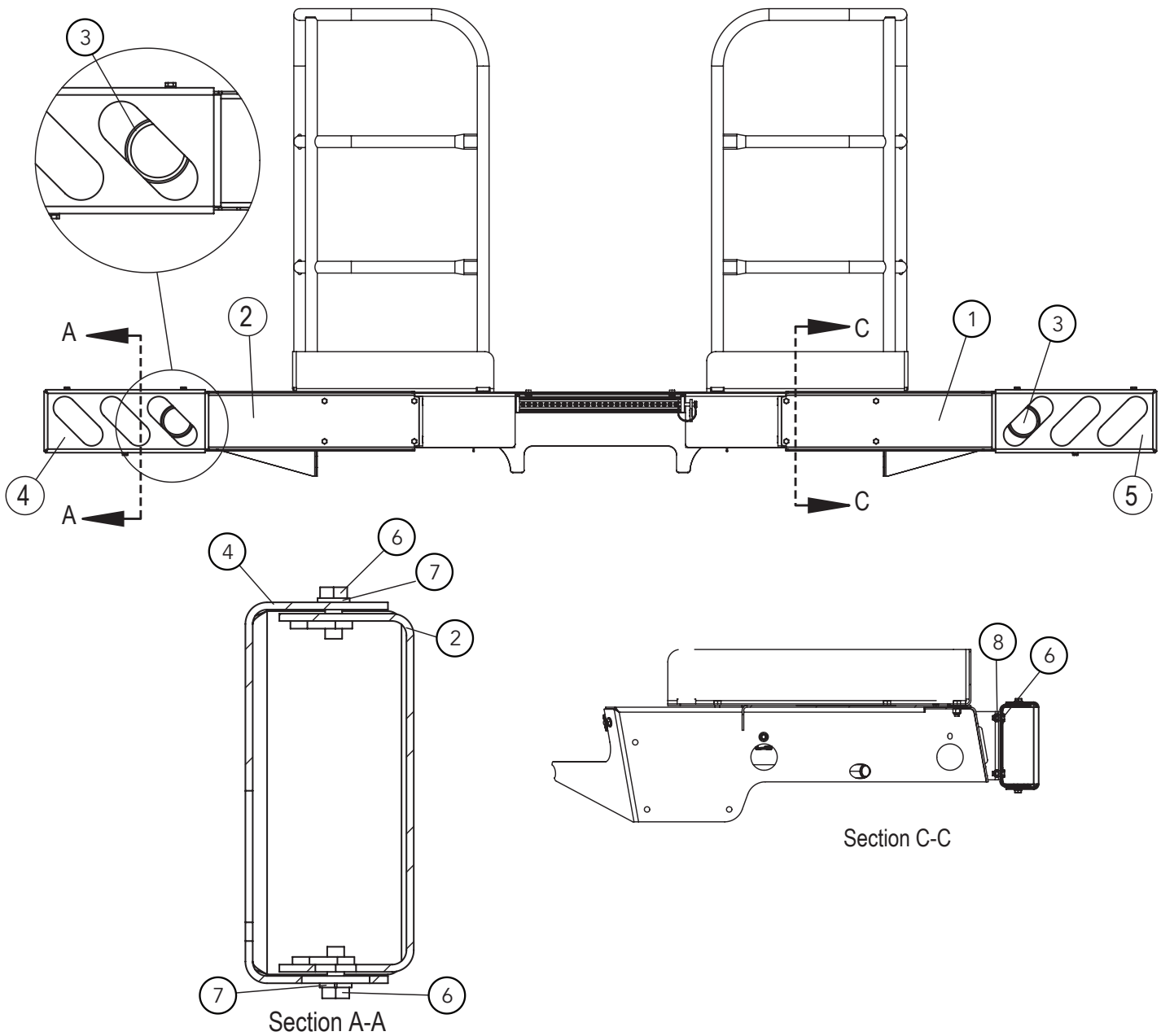


Screens



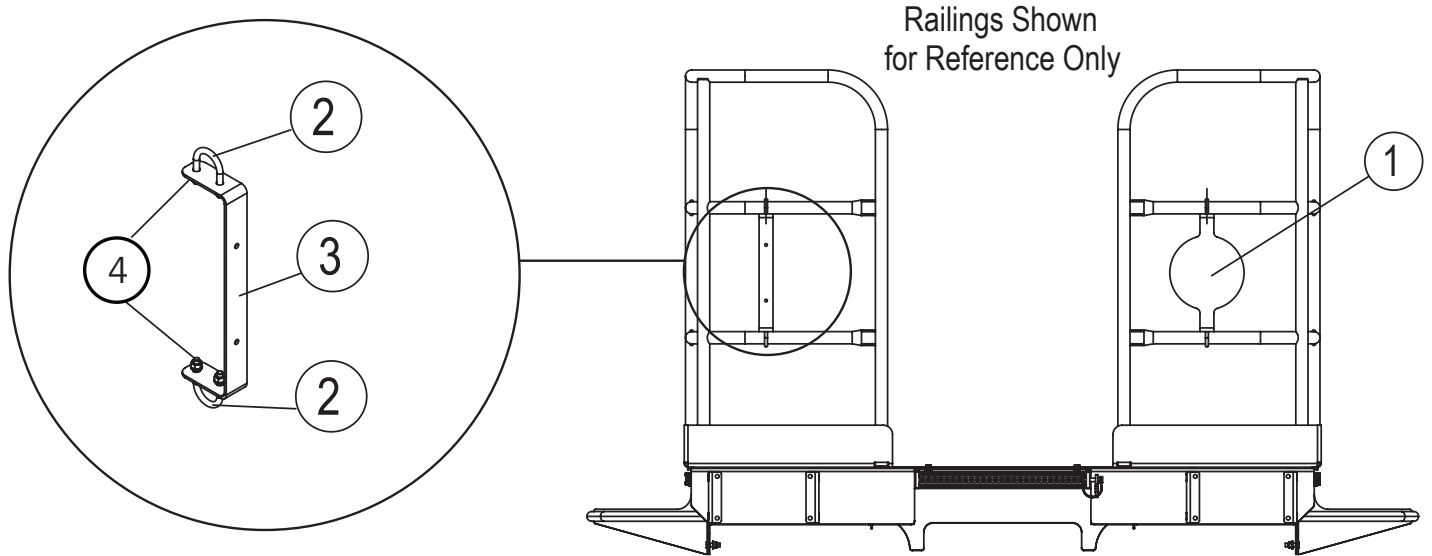
Key	Part No.	Description	Qty
1	322747	Clamp - 304	20
2	322464	Pin - Lock .375 X 1.125 SS	20
3	322753	Screen - Front 14' 304	2
4	322754	Screen - Rear 14' 304	2

**Lights**



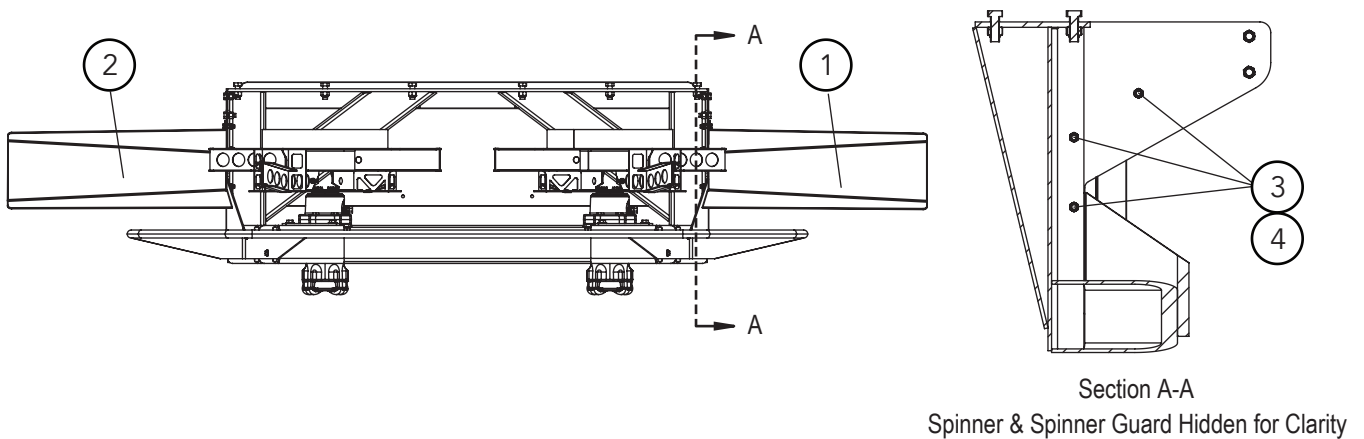
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	322872	Light - Assy 3 Place Oval	1	6	56858	Capscrew - .313-18NC X .75 SS	14
1	322906	Bracket - Wldmt Light RH Back Panel 304	1	7	36419	Washer - .313 SS Lock	6
2	322905	Bracket - Wldmt Light LH Back Panel 304	1	8	42221	Nut - .313-18NC SS Lock	8
3	307583	Grommet - Rubber 3" ID	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)



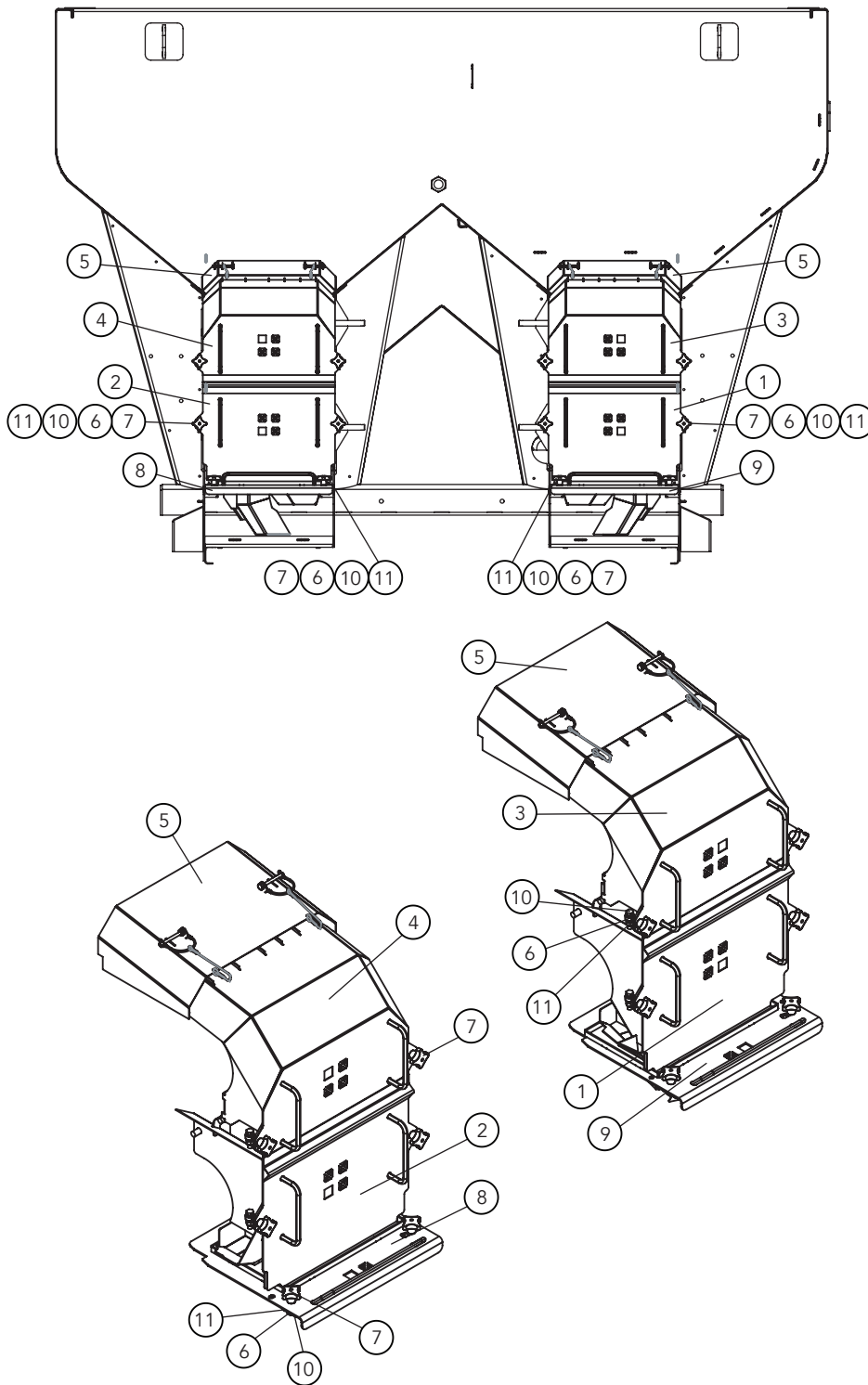
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	321936	Mount - SIS Railing 304	1	3	321946	Mount - SMV Railing 304	1
2	321937	Bolt - .31-18 X 1.375ID 304	4	4	36419	Washer - .313 SS Lock	8

## Deflectors



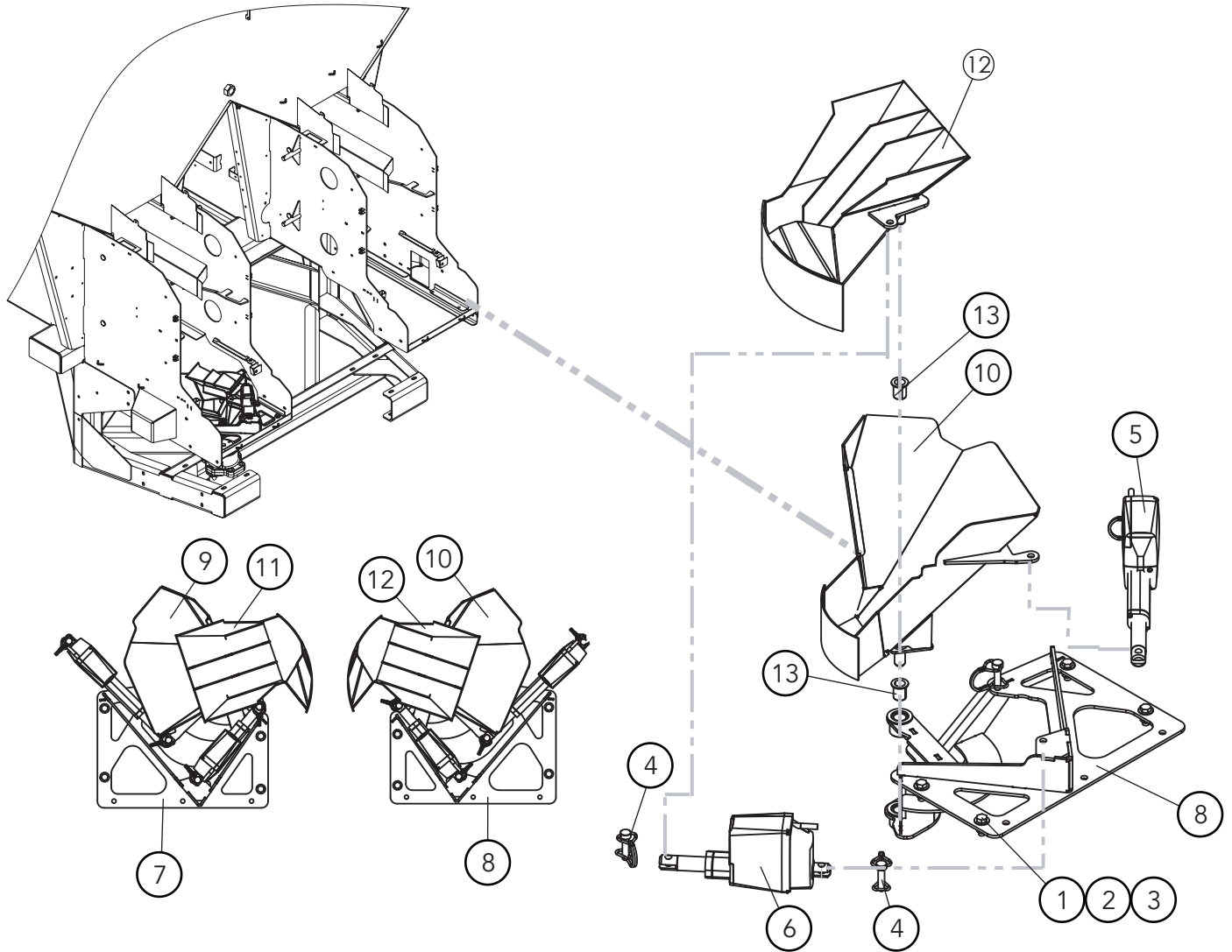
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	321441	Deflector - Wldmt RH 304	1	3	36399	Capscrew - .375-16NC X 1.25 SS	6
2	321437	Deflector - Wldmt LH 304	1	4	72054	Nut - .375-16NC SS Lock	6

**Waterfalls**



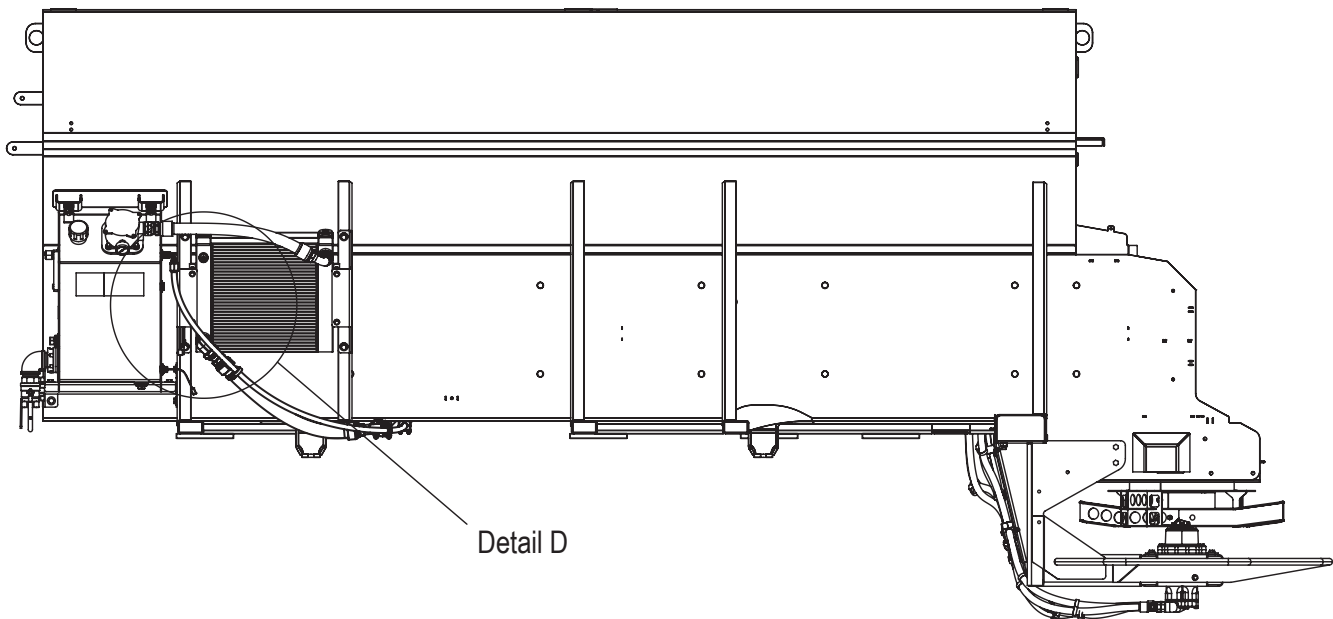
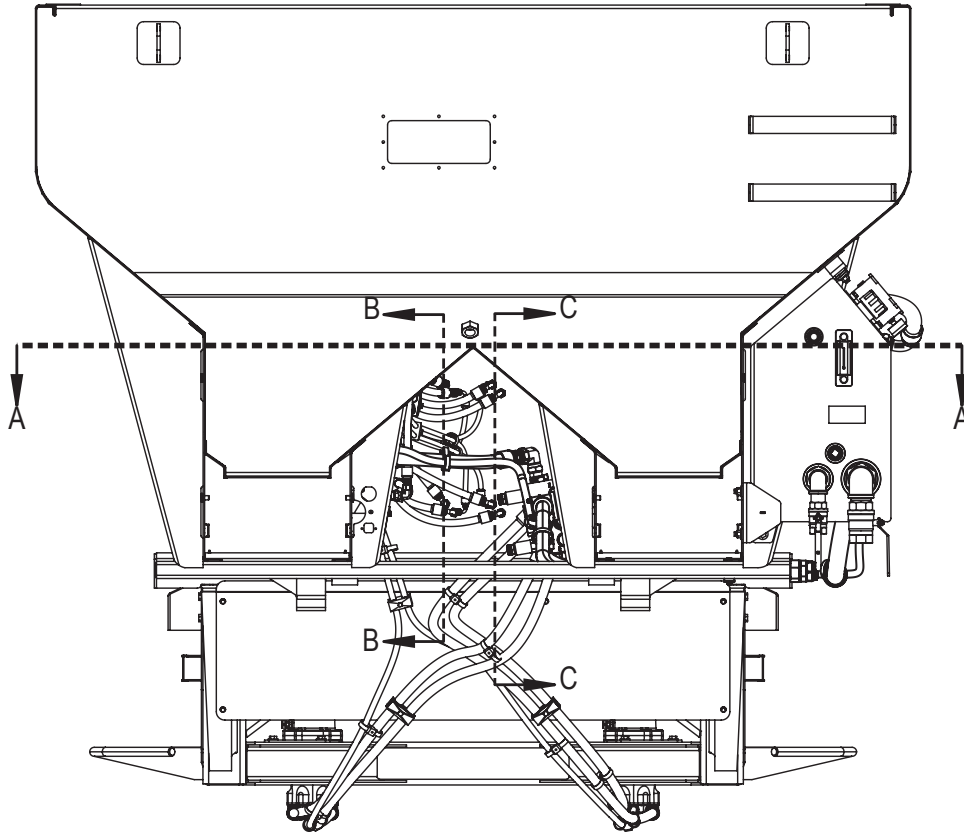
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	321561	Waterfall - Wldmt Bottom RH	1	7	321740	Knob - Tie Down 304	12
2	321563	Waterfall - Wldmt Bottom LH	1	8	321778	Chute - Wldmt Upper LH 304	1
3	321560	Waterfall - Wldmt Top RH 304	1	9	321779	Chute - Wldmt Upper RH 304	1
4	321562	Waterfall - 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				

# Chutes



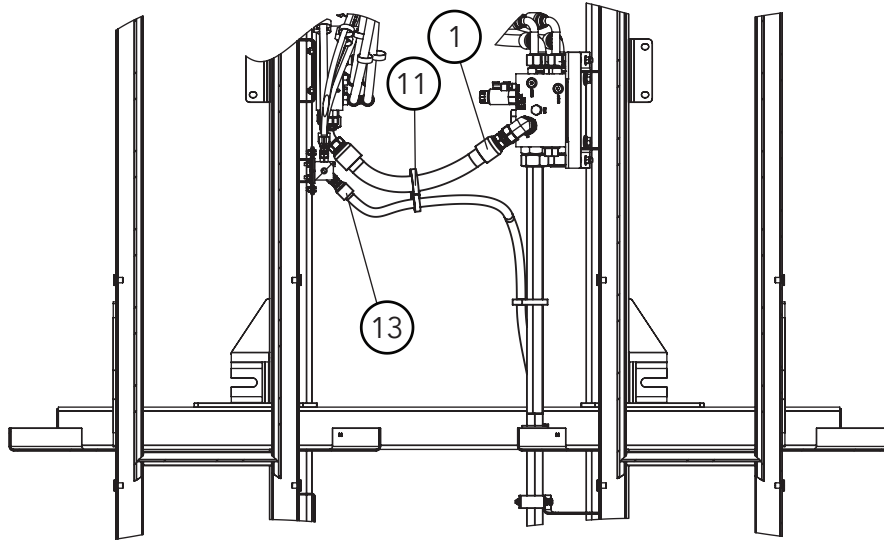
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	36398	Capscrew - .375-16NC X 1 SS	8	7	322287	Chute - Wldmt Mount Lower LH	1
2	36425	Washer - .375 SS Flat	8	8	322286	Chute - Wldmt Mount Lower RH	1
3	72054	Nut - .375-16NC SS Lock	8	9	322447	Chute - Wldmt Inner LH 304	1
4	322464	Pin - Lock .375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

Hydraulics - 14'  
Main Hydraulics

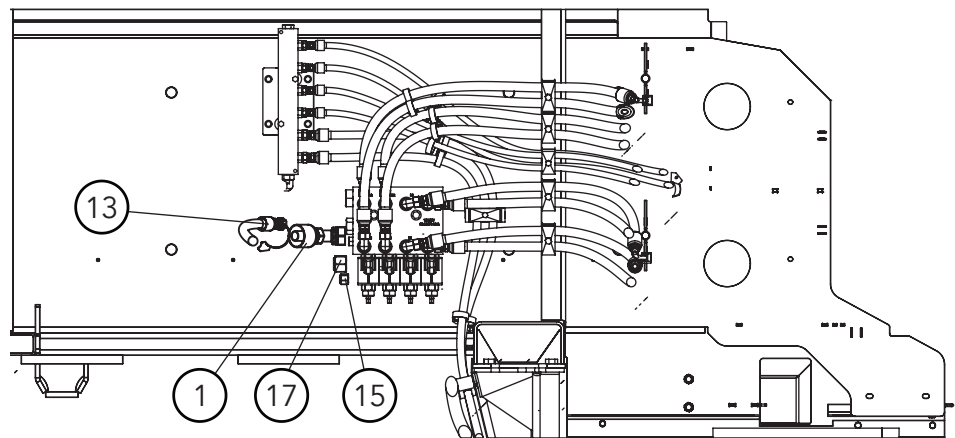


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
A-A	--	See Section A-A on next page.	--	C-C	--	See Section C-C on next page.	--
B-B	--	See Section B-B on next page.	--	D	--	See Detail D on "Detail D" on page 17.	--

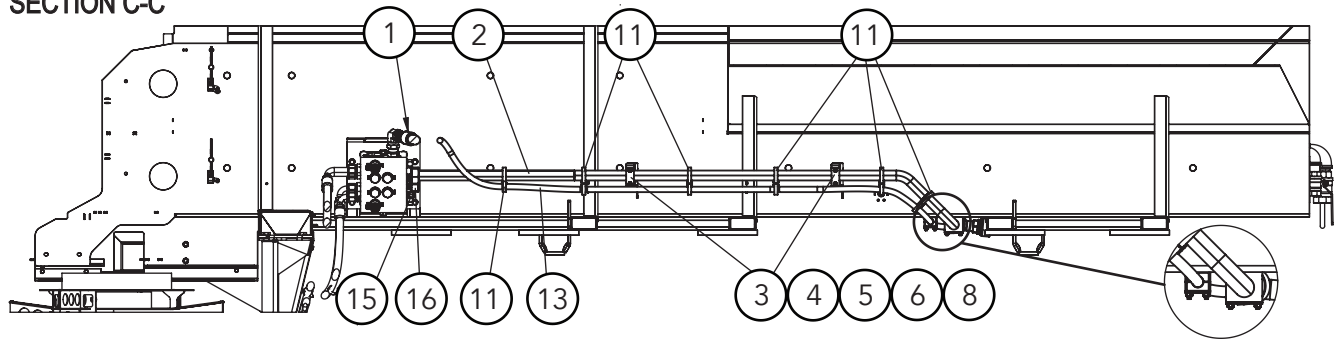
SECTION A-A



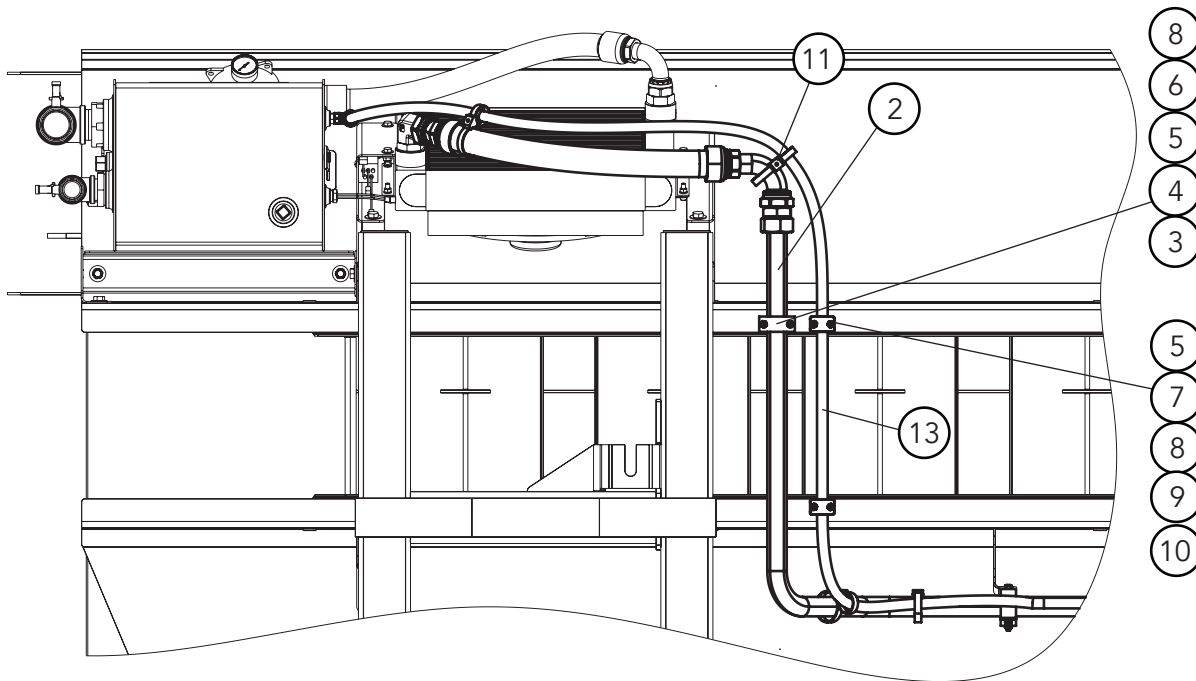
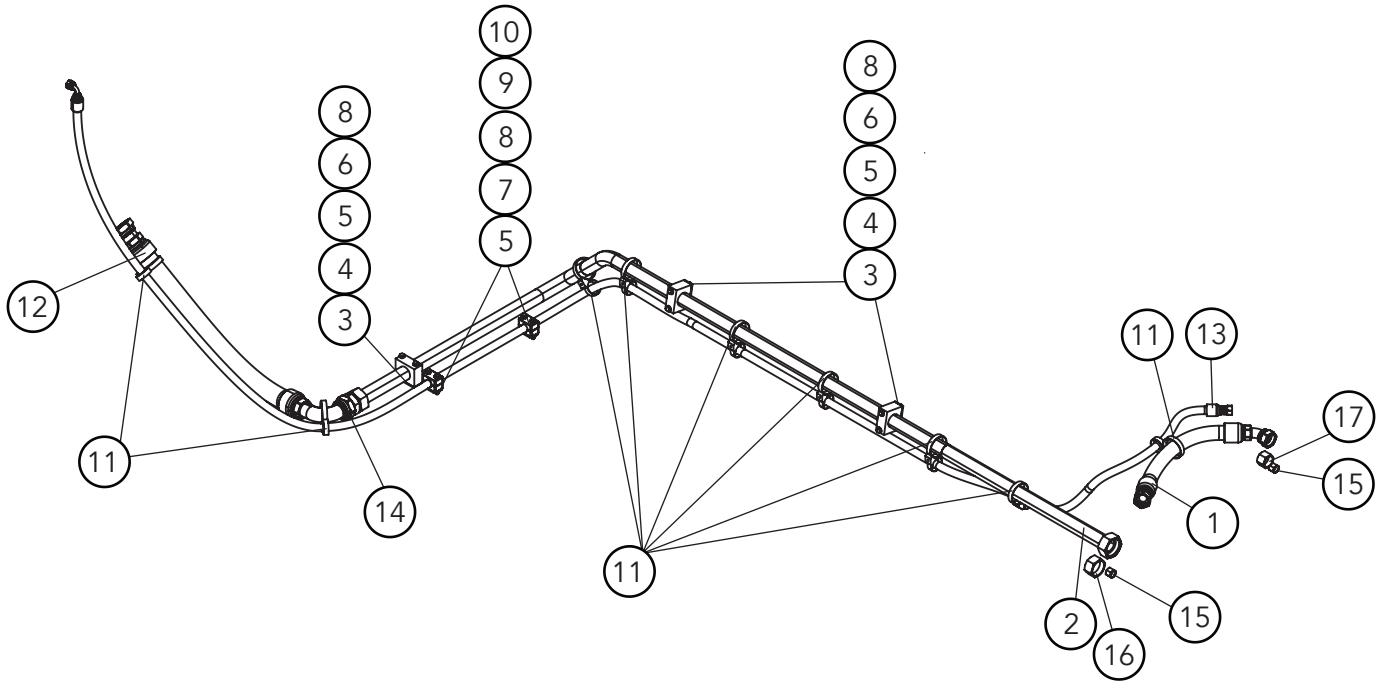
SECTION B-B



SECTION C-C



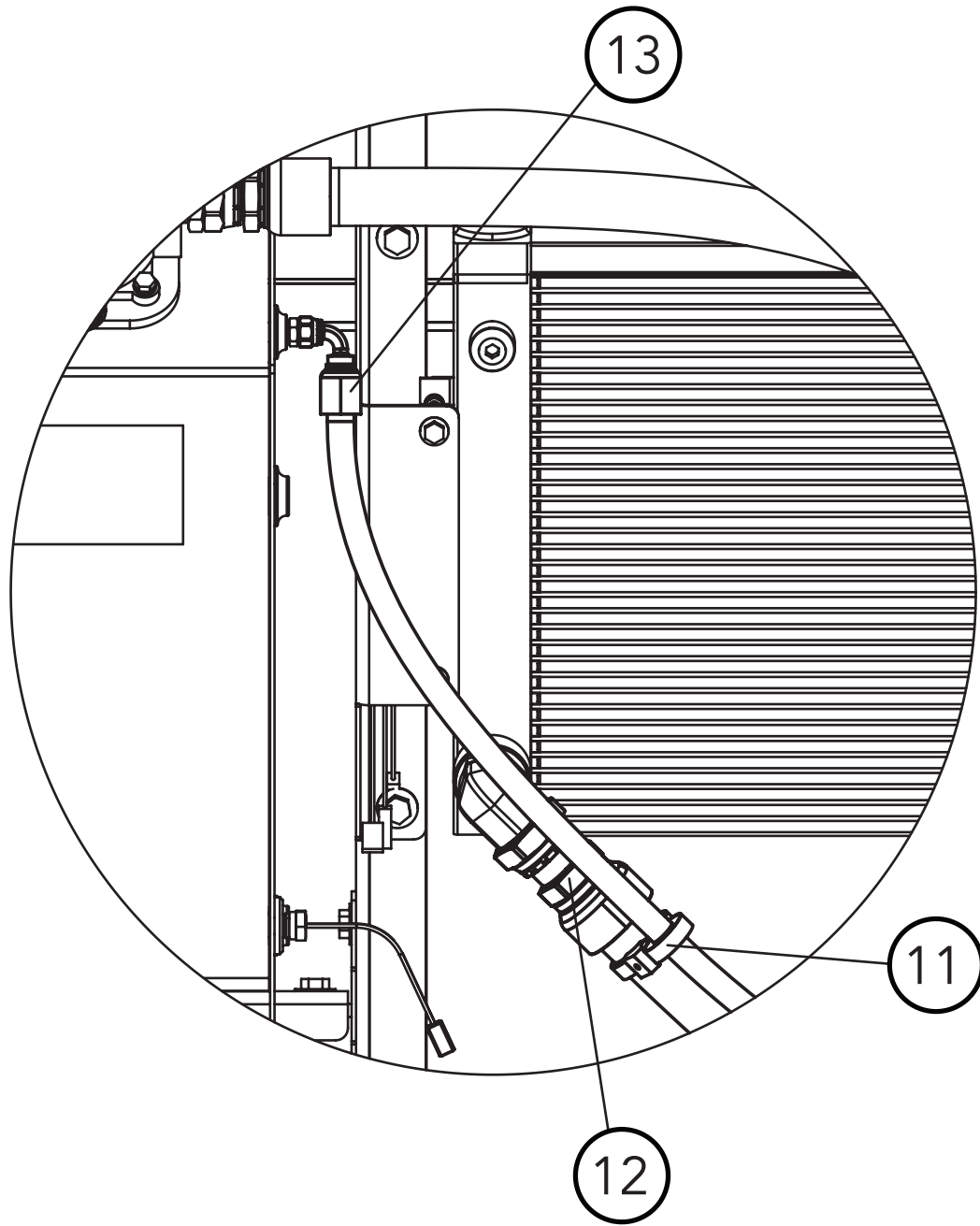
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	322810	Hose - Assy 1.0 X 22.1 100R12	1	9	--	See next page.	--
2	322811	Tube - Assy 1.50OD X .049 X	1	10	--	See next page.	--
3	96925	Plate - Top 1.5 Tube	3	11	312665	Tie - Dual Clamp	9
4	315765	Clamp - Pair 1.5 Tube	3	12	--	See next page.	--
5	42034	Nut - .25-20NC SS Lock	10	13	321810	Hose - Assy .5 X 178 100R19	1
6	36396	Capscrew - .25-20NC X 3 SS	6	14	--	See next page.	--
7	--	See next page.	--	15	314506	Fitting - 6	2
8	36423	WASHER - .25 SS FLAT	10	16	314490	Fitting - 20	1
				17	312673	Fitting - 12	1



Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	322810	Hose - Assy 1.0 X 22.1 100R12	1	9	312678	Clamp Pair - .87" Tube	2
2	322811	Tube - Assy 1.50OD X .049 X	1	10	86556	Plate - Cover Hyd Tube Clamp	2
3	96925	Plate - Top 1.5 Tube	3	11	312665	Tie - Dual Clamp	9
4	315765	Clamp - Pair 1.5 Tube	3	12	321808	Hose - Assy 1.5 X 30.5 100R2	1
5	42034	Nut - .25-20NC SS Lock	10	13	321810	Hose - Assy .5 X 178 100R19	1
6	36396	Capscrew - .25-20NC X 3 SS	6	14	321811	Fitting - 24-24 520101	1
7	34865	Capscrew - .25-20NC X 2.25 SS	4	15	314506	Fitting - 6	2
8	36423	Washer - .25 SS Flat	10	16	314490	Fitting - 20	1
				17	312673	Fitting - 12	1

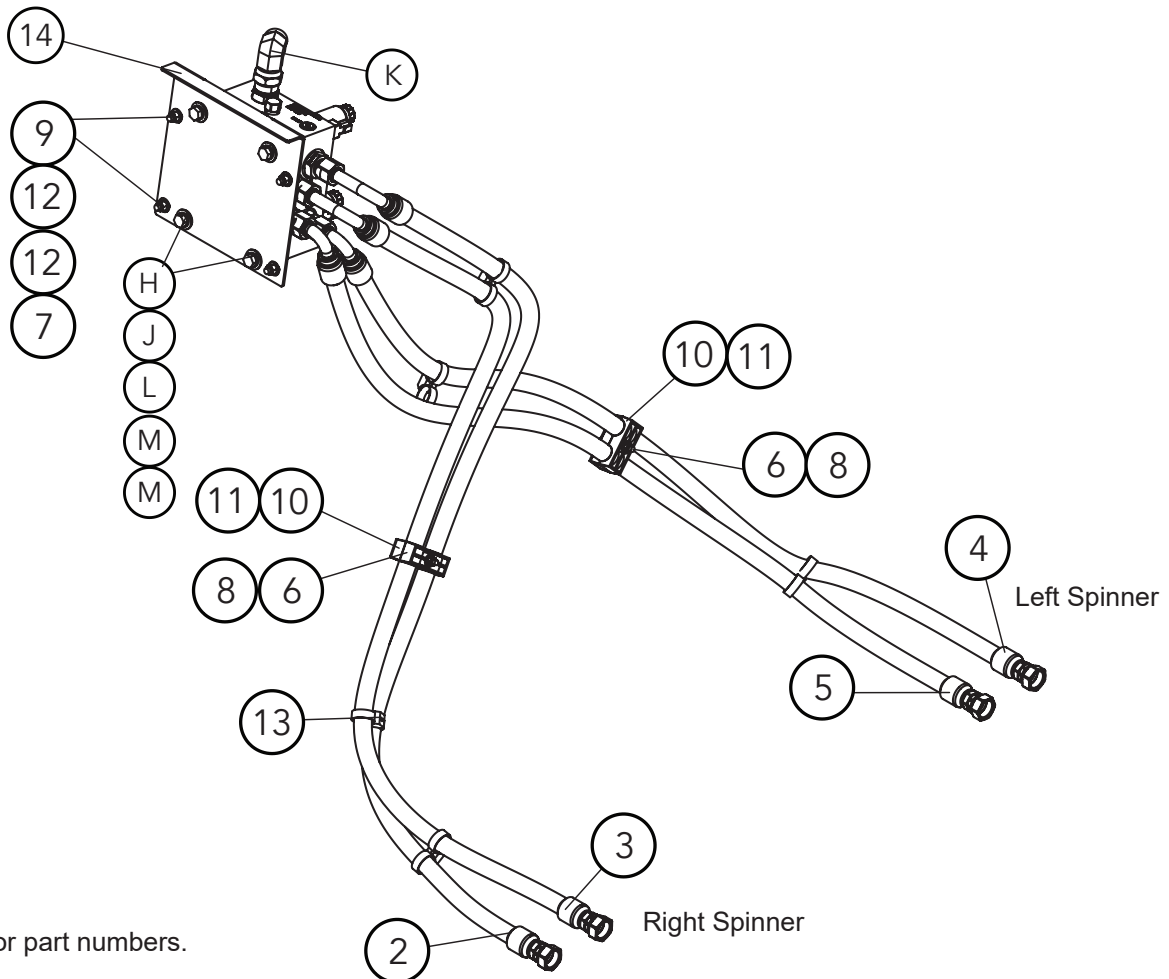
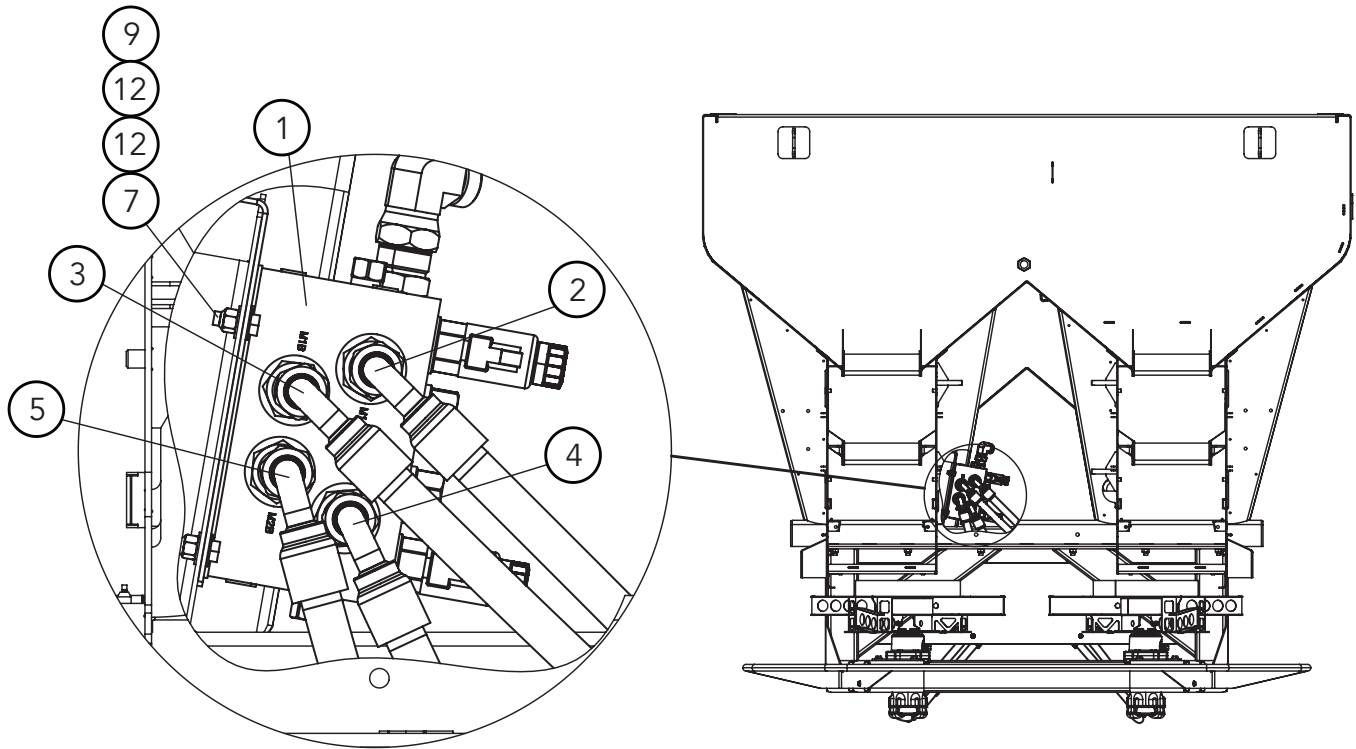


Detail D



Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
11	312665	Tie - Dual Clamp	9	13	321810	Hose - Assy .5 X 178 100R19	1
12	321808	Hose - Assy 1.5 X 30.5 100R2	1				

# Spinner Hydraulics

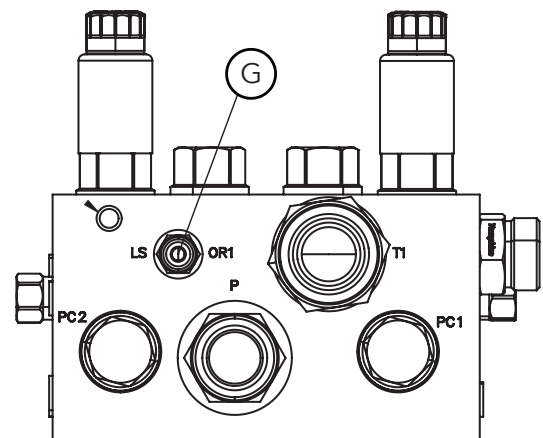
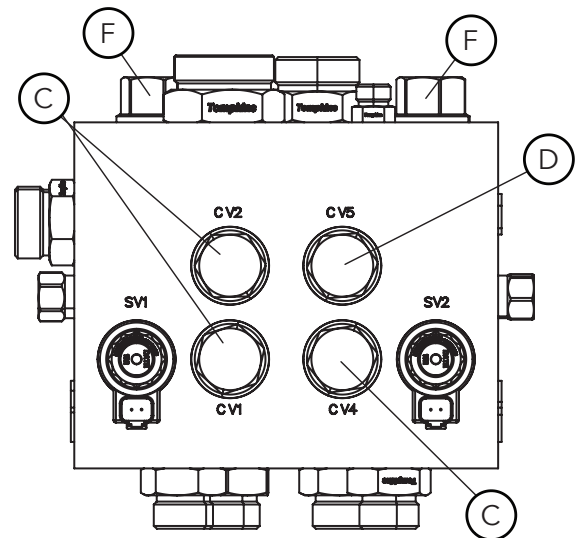
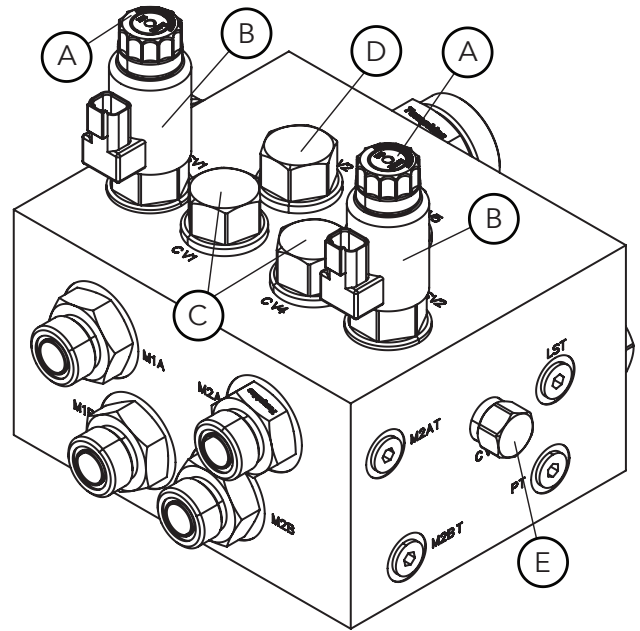


See next page for part numbers.

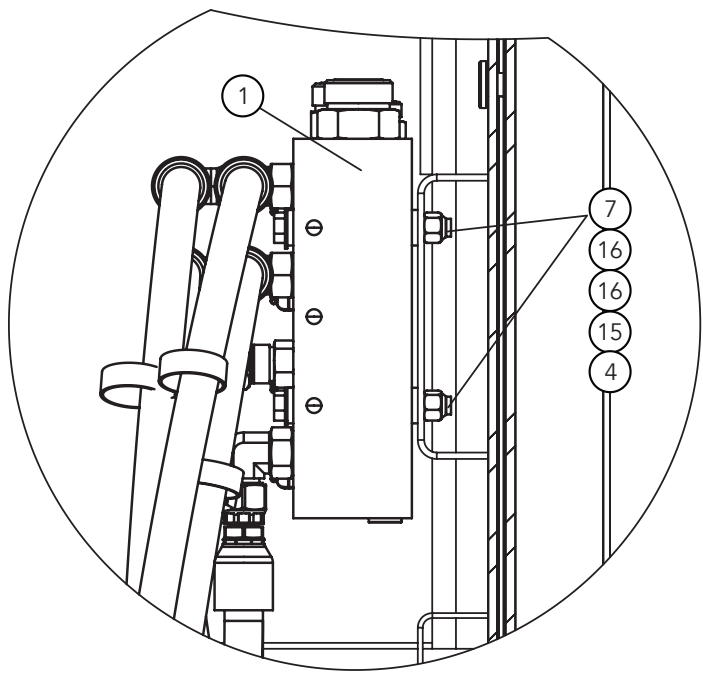
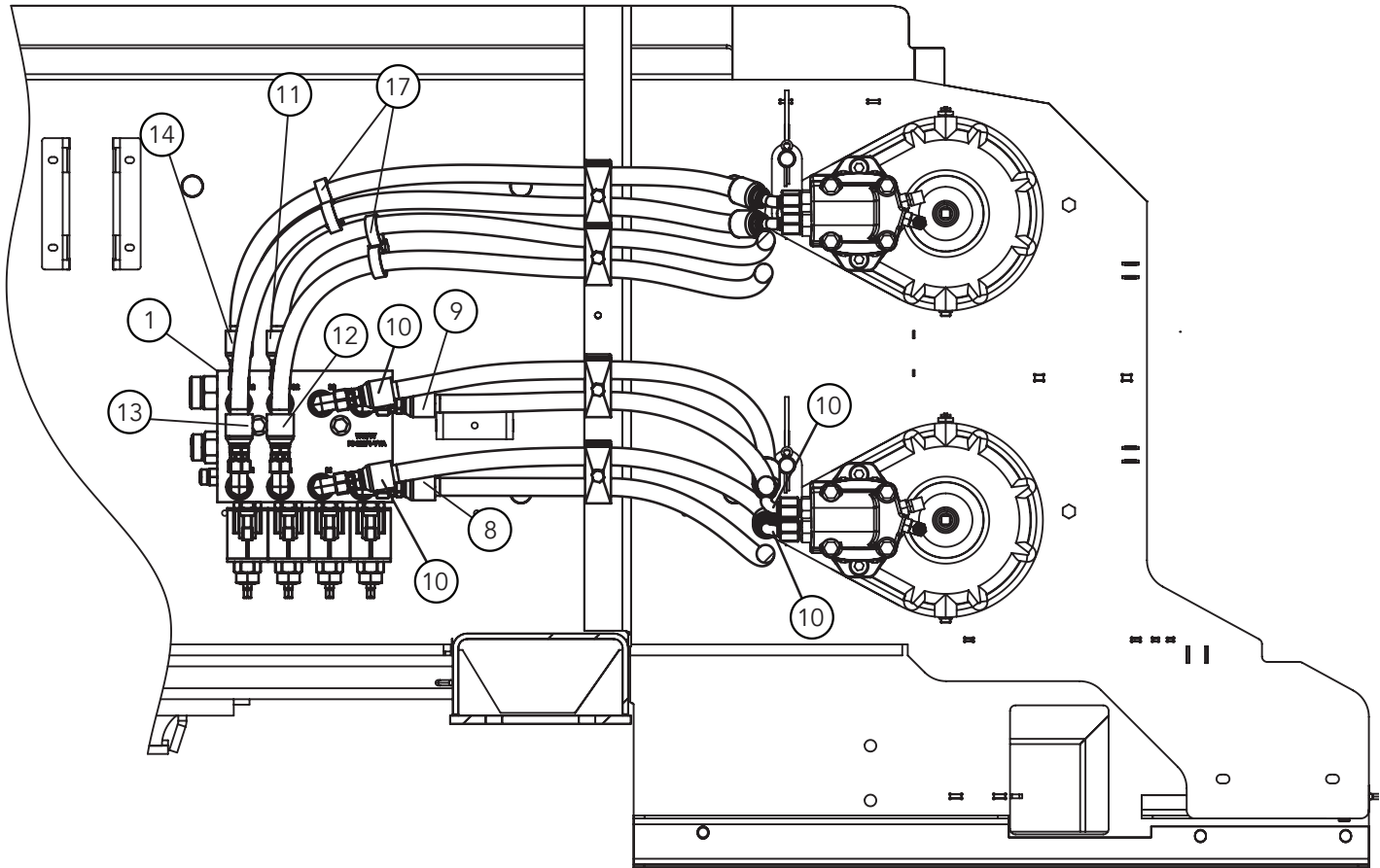
1 Spinner Control Valve Assembly

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

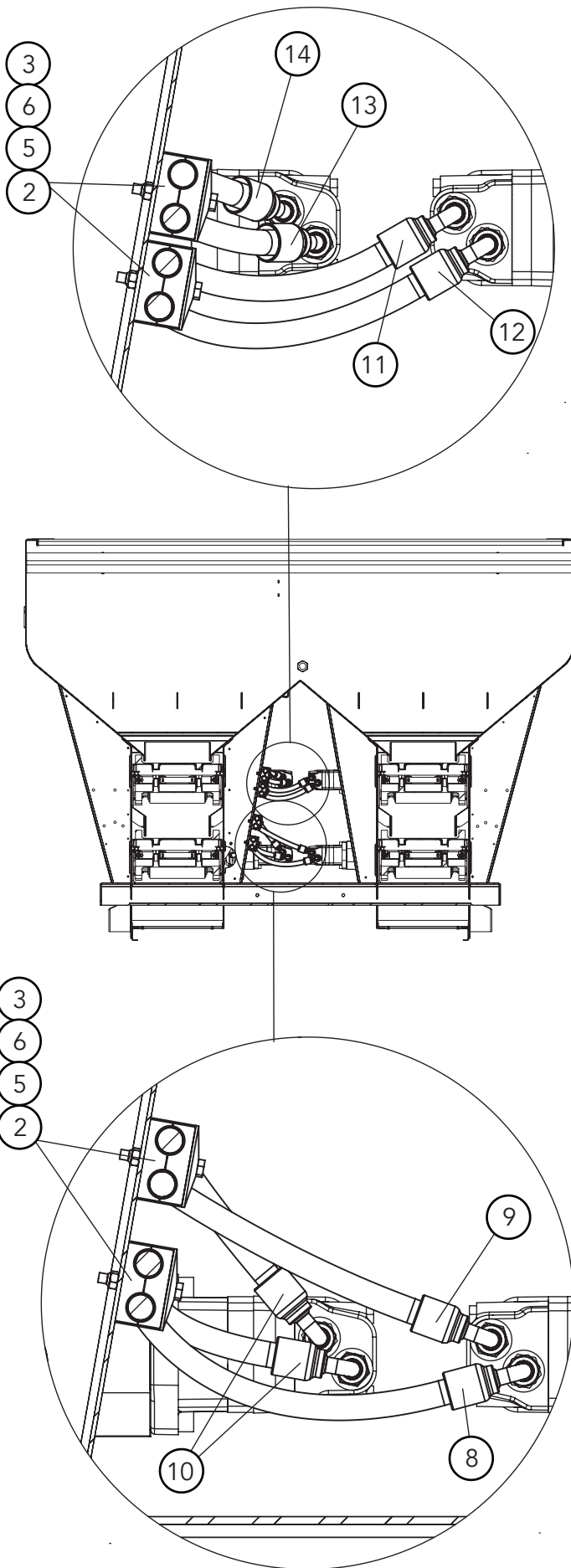
\* Not Shown



**Conveyor Hydraulics**

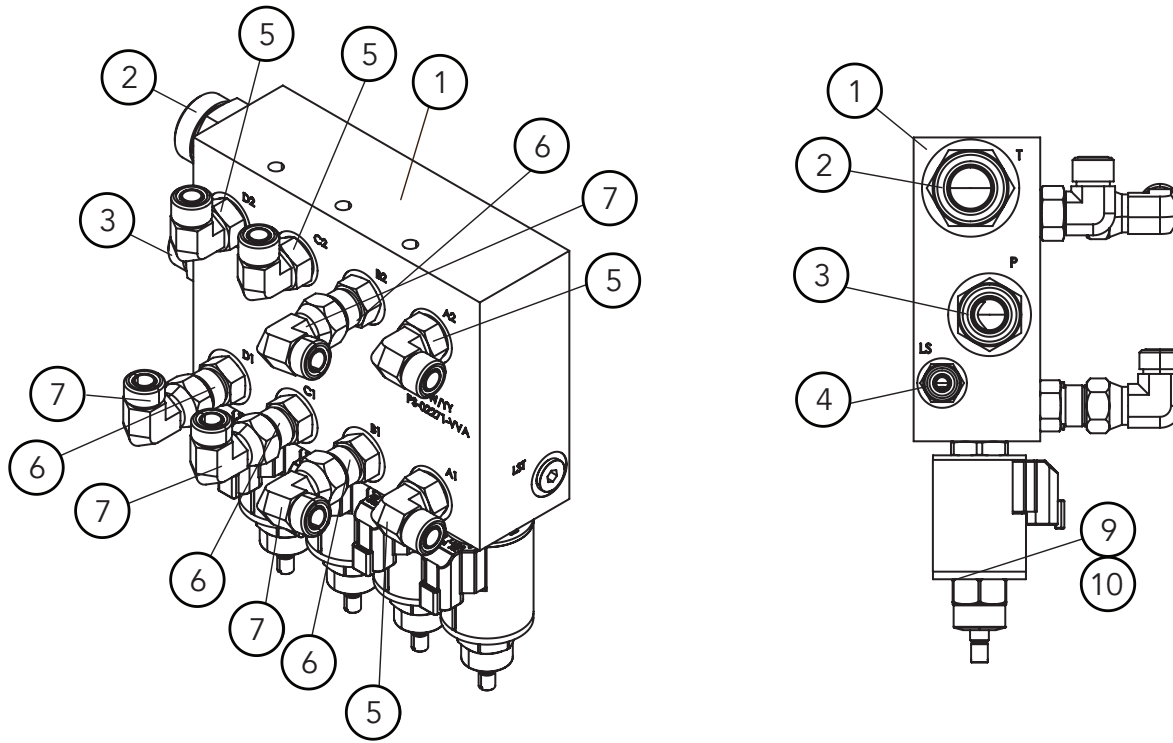


Key	Part No.	Description	Qty
1	--	Conveyor Control Valve (See page 19.)	1
2	--	See next page.	--
3	--	See next page.	--
4	72054	Nut - .375-16NC SS Lock	2
5	--	See next page.	--
6	--	See next page.	--
7	96879	Capscrew - .375-16NC X 3.5 SS	2
8	--	See next page.	--
9	321703	Hose - Assy .5 X 26 100R19	1
10	322900	Hose - Assy .5 X 25.5 100R19	2
11	321707	Hose - Assy .5 X 34 100R19	1
12	321706	Hose - Assy .5 X 37 100R2	1
13	322902	Hose - Assy .5 X 35.5 100R19	1
14	322903	Hose - Assy .5 X 33 100R19	1
15	302099	Washer - .38ID X .53OD X .13th K	4
16	36425	Washer - .375 SS Flat	2
17	310648	Tie - Dual Clamp	2



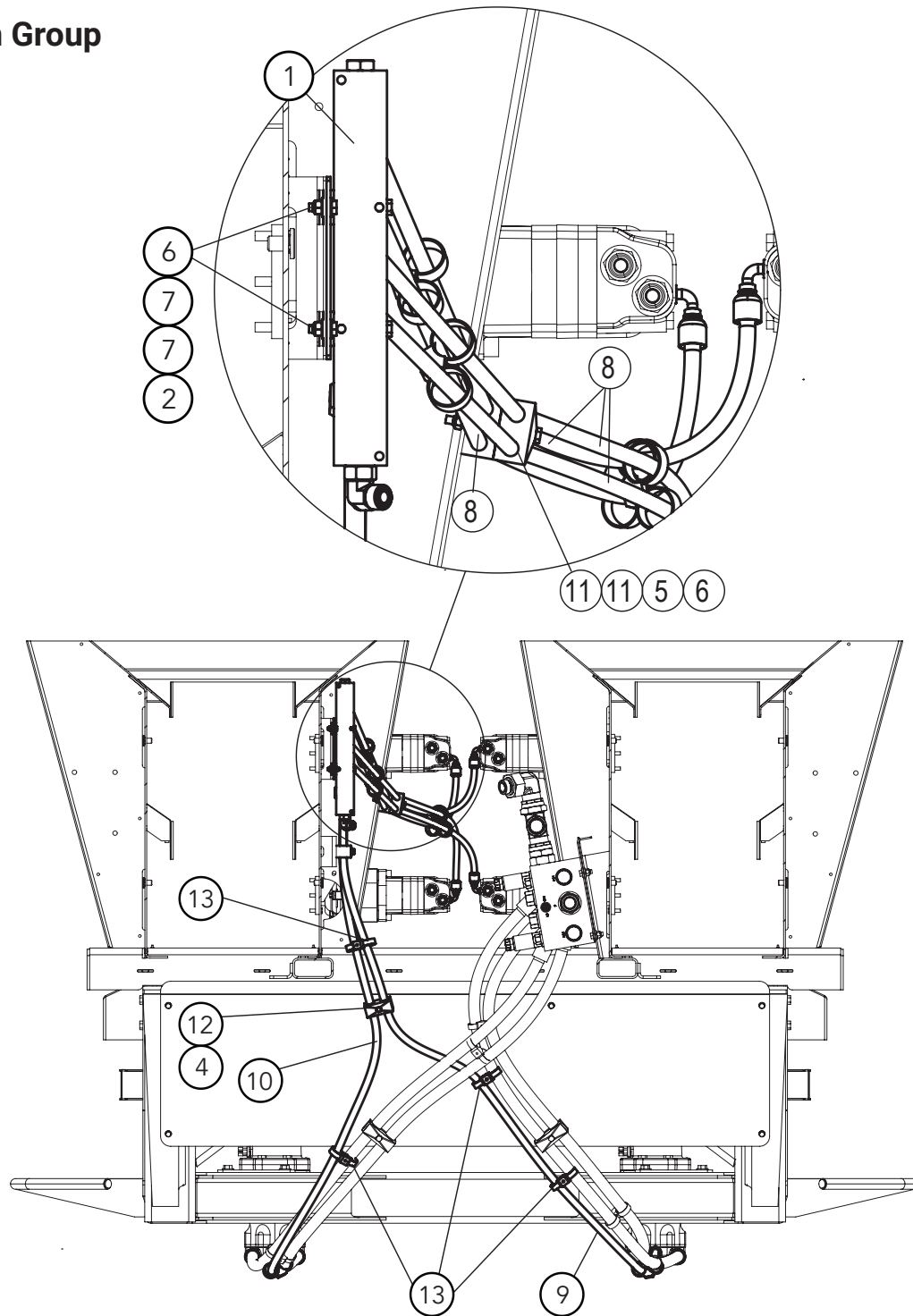
Key	Part No.	Description	Qty
1	--	Conveyor Control Valve (See next page.)	1
2	310649	Clamp - Tubing Twin .84"	4
3	42221	Nut - Lock .313-18NC SS	4
4	--	See previous page.	--
5	310688	Plate - Cover Hose Clamp 304	4
6	71830	Capscrew - .313-18NC X 2.5 SS	4
7	--	See previous page.	--
8	322899	Hose - Assy .5 X 27.5 100R19	1
9	321703	Hose - Assy .5 X 26 100R19	1
10	322900	Hose - Assy .5 X 25.5 100R19	2
11	321707	Hose - Assy .5 X 34 100R2	1
12	321706	Hose - Assy .5 X 37 100R19	1
13	322902	Hose - Assy .5 X 35.5 100R19	1
14	322903	Hose - Assy .5 X 33 100R19	1
15	--	See previous page.	--
16	--	See previous page.	--
17	--	See previous page.	--

**Conveyor Control Valve Assembly**

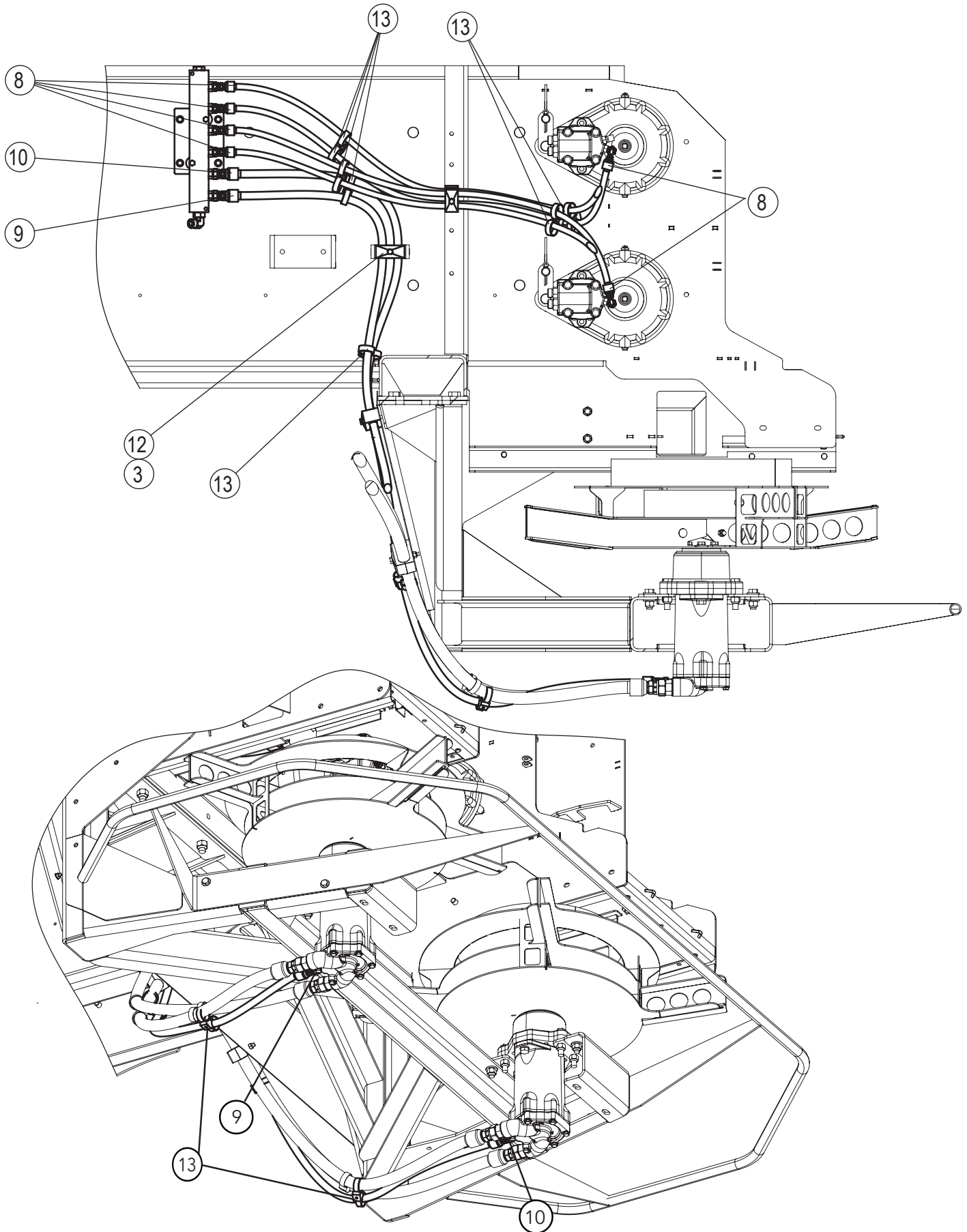


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
--		Conveyor Control Valve		6	313454	Fitting - 8-8 520120	4
1	320878	Valve - Assy Conveyor Control	1	7	304306	Fitting - 8-8 520221	4
2	312655	Fitting - 16-16 520120	1	8	*29832	*Fitting - 4 090109a *Not Shown*	1
3	313450	Fitting - 12-12 520120	1	9	320885	Valve - Flow Control 8gpm w/Coil	4
4	313455	Fitting - 6-6 520120	1	10	315866	Coil - 12VDC Deutsch Dt04-2p	1
5	313451	Fitting - 8-8 520220	4				

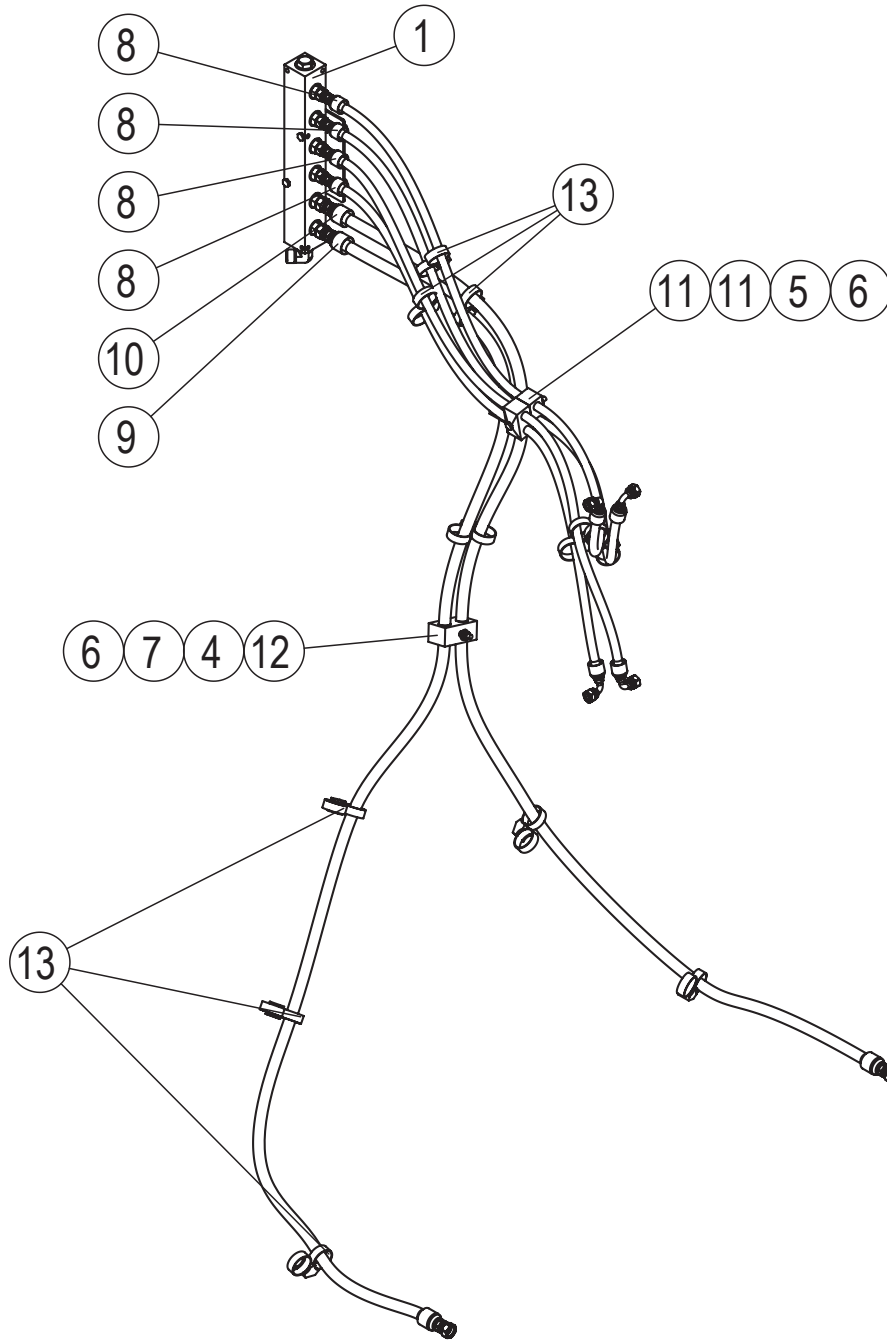
### Case Drain Group



Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	--	Case Drain Mounting Assembly (See page 23.)	1	7	36423	Washer - .25 SS Flat	9
2	36393	Capscrew - .25-20NC X .75 SS	4	8	322895	Hose - Assy .25 X 46 100R19	4
3	--	See next page.	1	9	321722	Hose - Assy .38 X 89 100R1	1
4	34501	Capscrew - .25-20NC X 2.5 SS	1	10	321723	Hose - Assy .38 X 86.5 100R19	1
5	36396	Capscrew - .25-20NC X 3 SS	1	11	300031	Clamp - Tubing .5 Twin	2
6	42034	Nut - .25-20NC SS Lock	7	12	75036	Clamp - Tubing Twin .75	2
				13	310648	Tie - Dual Clamp	11

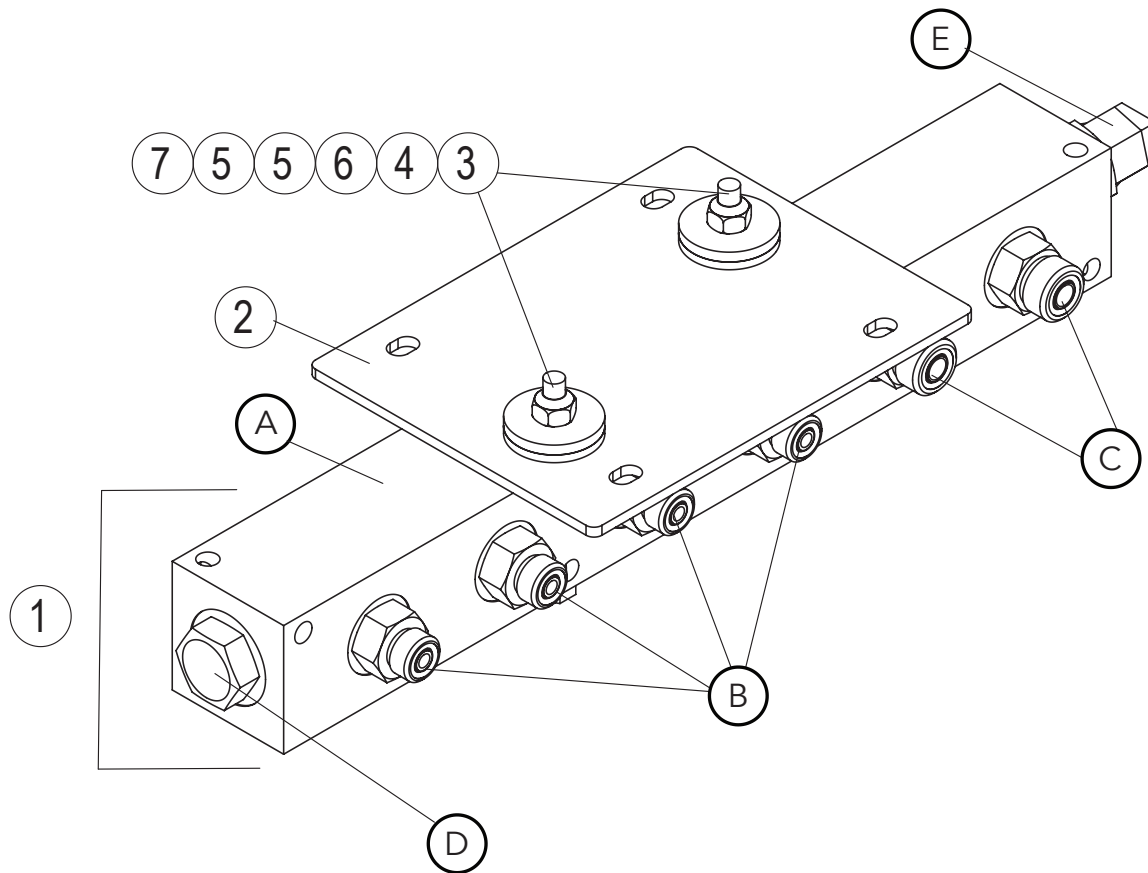






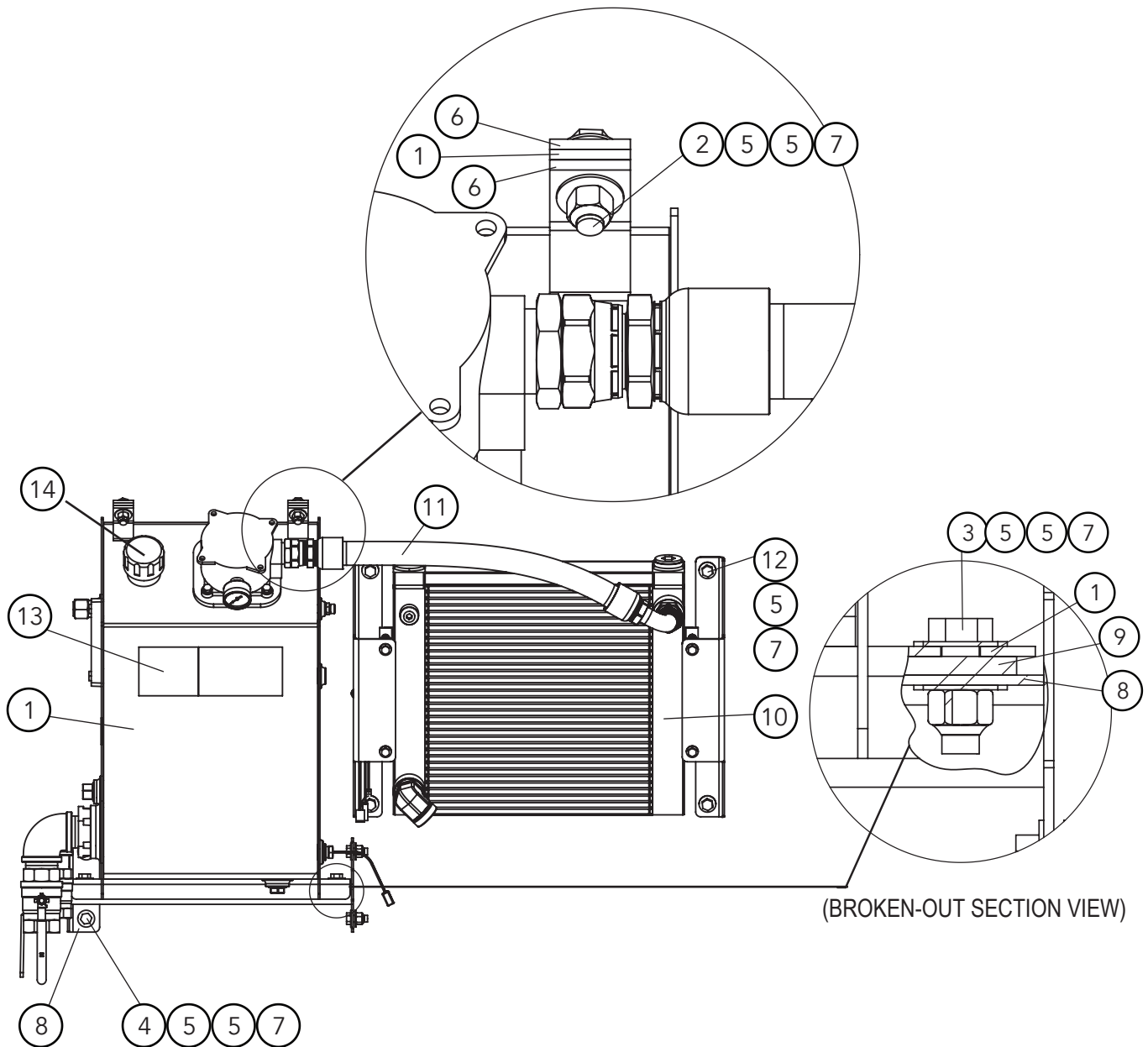
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	--	Case Drain Mounting Assembly (See next page.)	1	7	36423	Washer - .25 SS Flat	9
2	36393	Capscrew - .25-20NC X .75 SS	4	8	322895	Hose - Assy .25 X 46 100R19	4
3	34865	Capscrew - .25-20NC X 2.25 SS	1	9	321722	Hose - Assy .38 X 89 100R1	1
4	34501	Capscrew - .25-20NC X 2.5 SS	1	10	321723	Hose - Assy .38 X 86.5 100R19	1
5	36396	Capscrew - .25-20NC X 3 SS	1	11	300031	Clamp - Tubing .5 Twin	2
6	42034	Nut - .25-20NC SS Lock	7	12	75036	Clamp - Tubing Twin .75	2
				13	310648	Tie - Dual Clamp	11

**Case Drain Mounting Assembly**



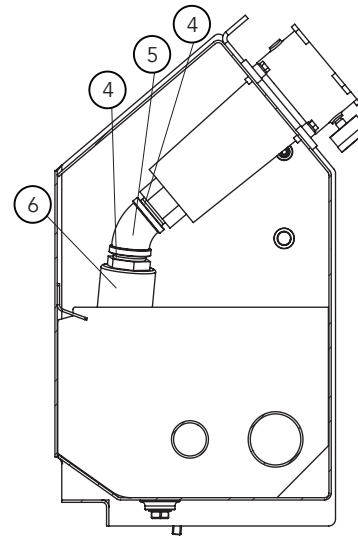
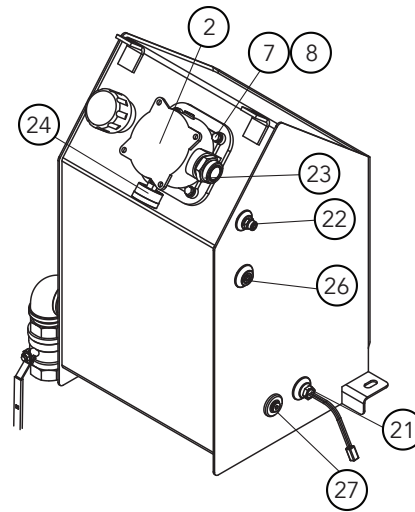
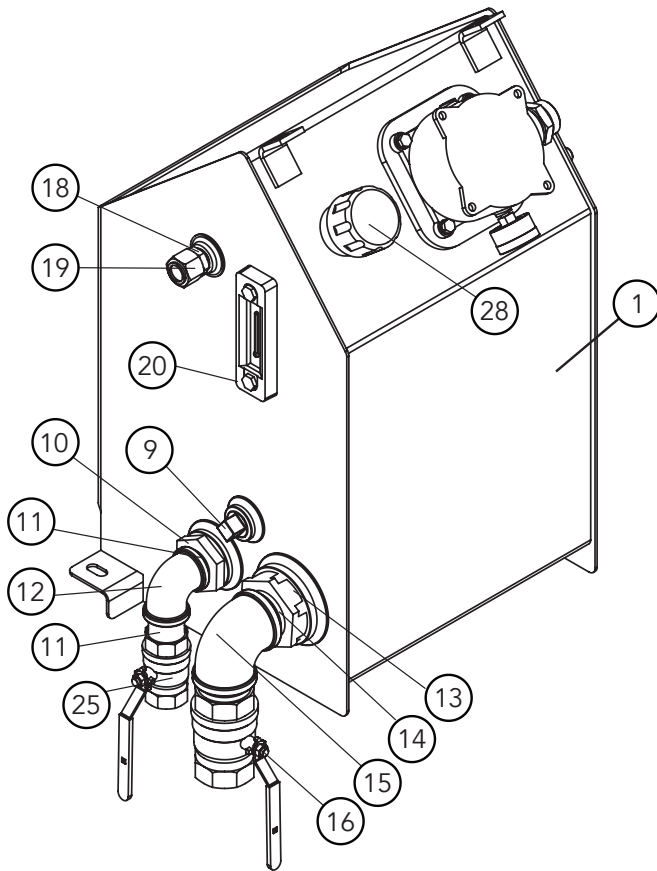
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
--	--	Case Drain Mounting Assy	--	E	313451	Fitting - 8-8 520220	1
1	321713	Valve - Assy Case Drain	1	2	321712	Bracket - Valve Mount	1
A	321714	Valve - Distribution	1	3	34866	Capscrew - .25-20NC X 2.75 SS	2
B	313447	Fitting - 4-6 520120	4	4	42034	Nut - .25-20NC SS Lock	2
C	313455	Fitting - 6-6 520120	2	5	321715	Washer - Step .638ID X .875OD	4
D	29804	Fitting - 8 090109a	1	6	321716	Washer - .313ID X 1.125OD X 10GA 304	2
				7	321717	Spacer - 304	2

# Tank Group



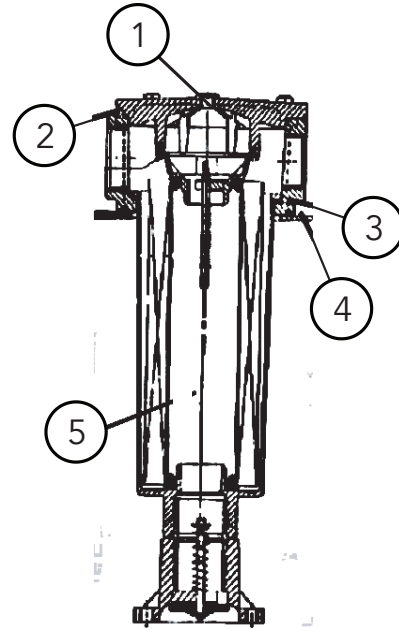
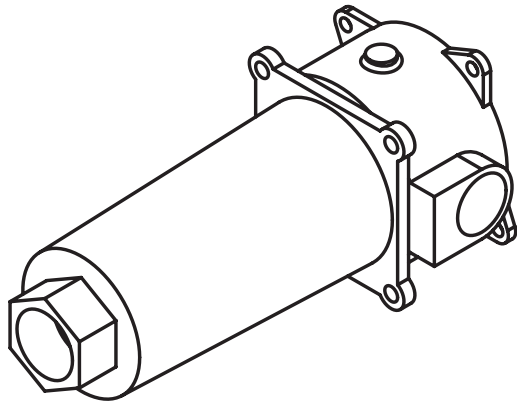
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
		Tank Group - 304		8	321578	Mount - Wldmt 304	1
1	321569	Tank - Assy 304 (See next page.)	1	9	39158	Belt - Flex Mount	2
2	71832	Capscrew - .5-13NC X 1.75 SS	2	10	321575	Cooler - Assy	1
3	36539	Capscrew - .5-13NC X 1.5 SS	2	11	321577	Hose - Assy 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



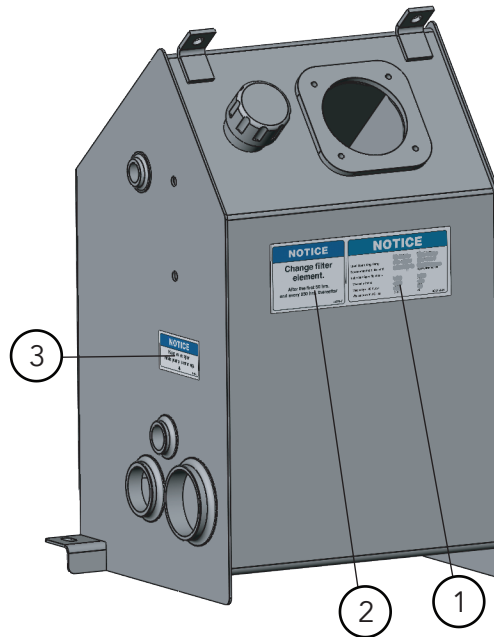
Key Part No.	Description	Qty	Key Part No.	Description	Qty
1	321570 Tank - Wldmt 304	1	15	23703 Adapter - Elbow 90° 2 NPT	1
2	88838 Filter - Return In Tank 120gpm (See next page.)	1	16	305060 Valve - Ball 2" NPT	1
3	-- Not used.	--	17	305061 Plug - Magnetic 1" NPT	1
4	22322 Nipple - CLOSE 1.5"NPT STD	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



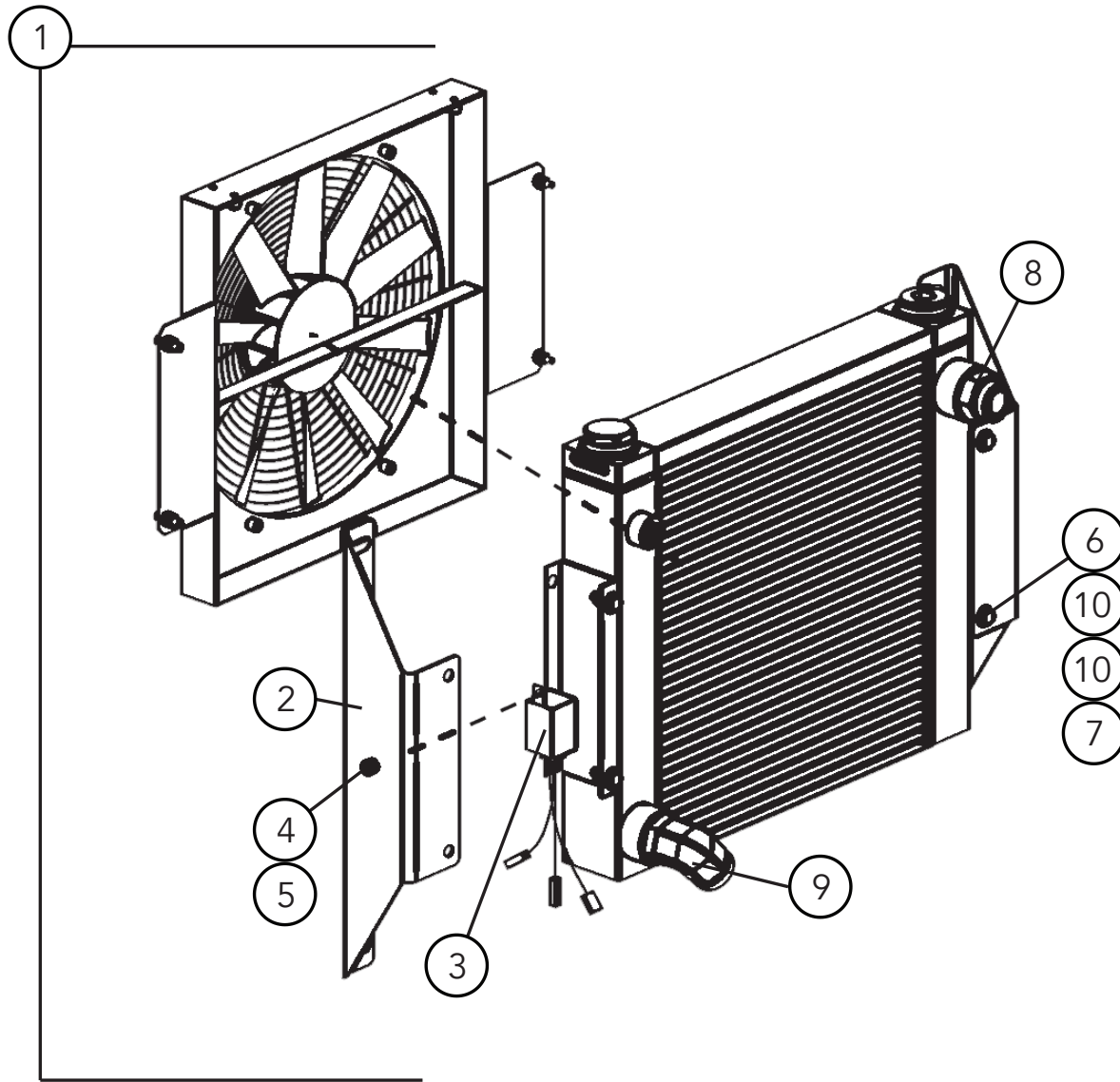
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	88838	Filter - Return In Tank	1	4	306789	Tetraseal - Filter Assy	1
1	323363	Cap - Filter	1	5	305066	Filter Element.	
2	306772	O-Ring Cover Filter	1				
3	306773	O-Ring Housing Filter	1				

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

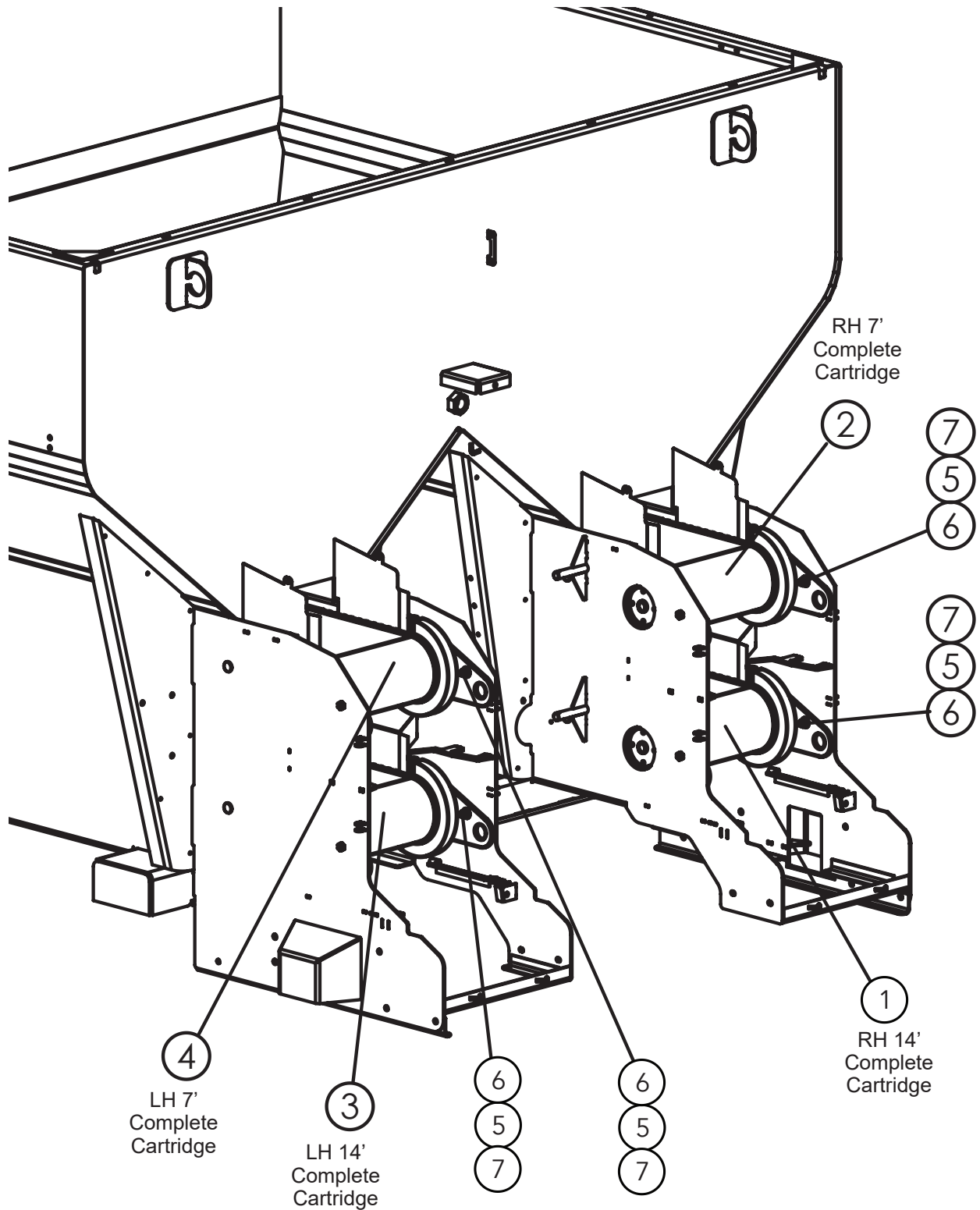
**Cooler Assembly**



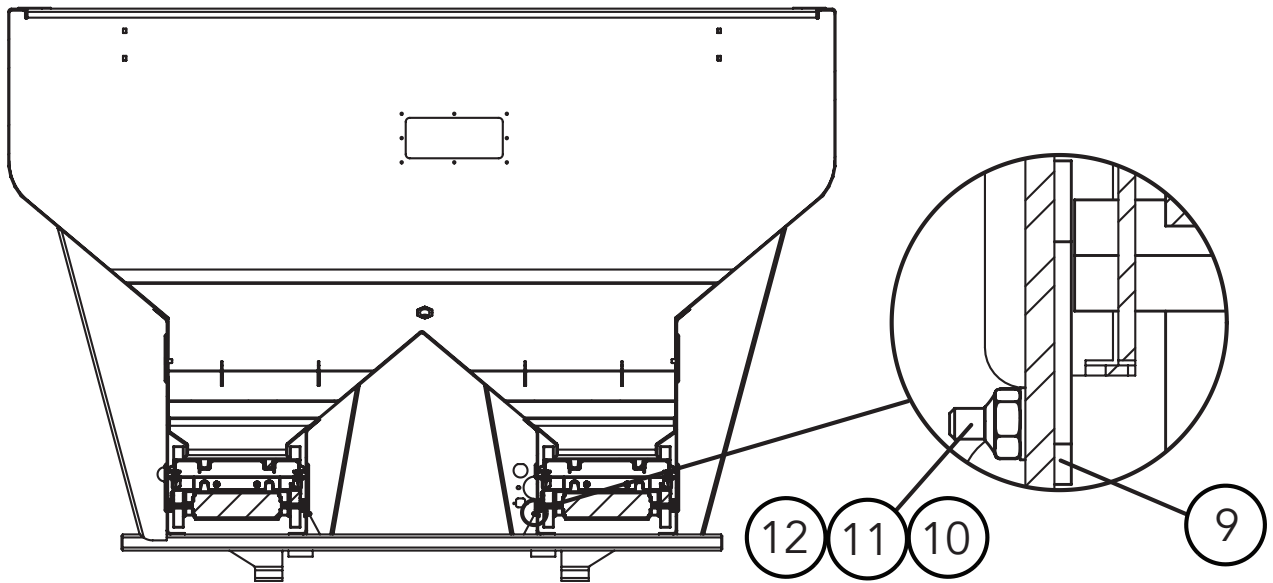
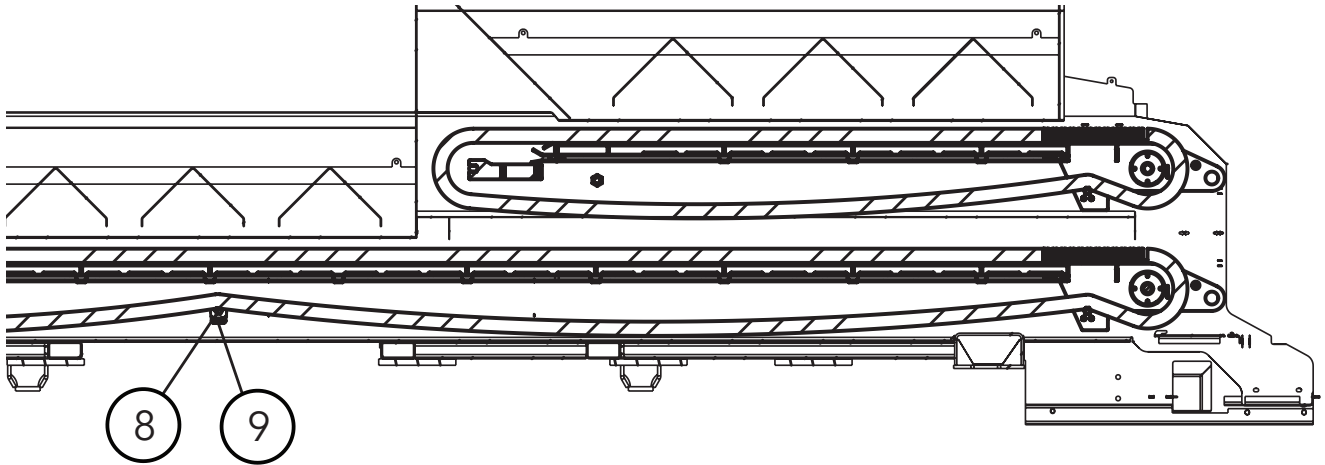
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	305767	Cooler - Assy Hydac Eld 4.5 (See next page.)	1	7	36398	Capscrew - .375-16NC X 1 SS	4
2	321576	Bracket - 304	2	8	316329	Fitting - 20-20 520120	1
3	312271	Relay - 12vdc 40A	1	9	321809	Fitting - 24-20 520220	1
4	56258	Screw - Truss Head .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**

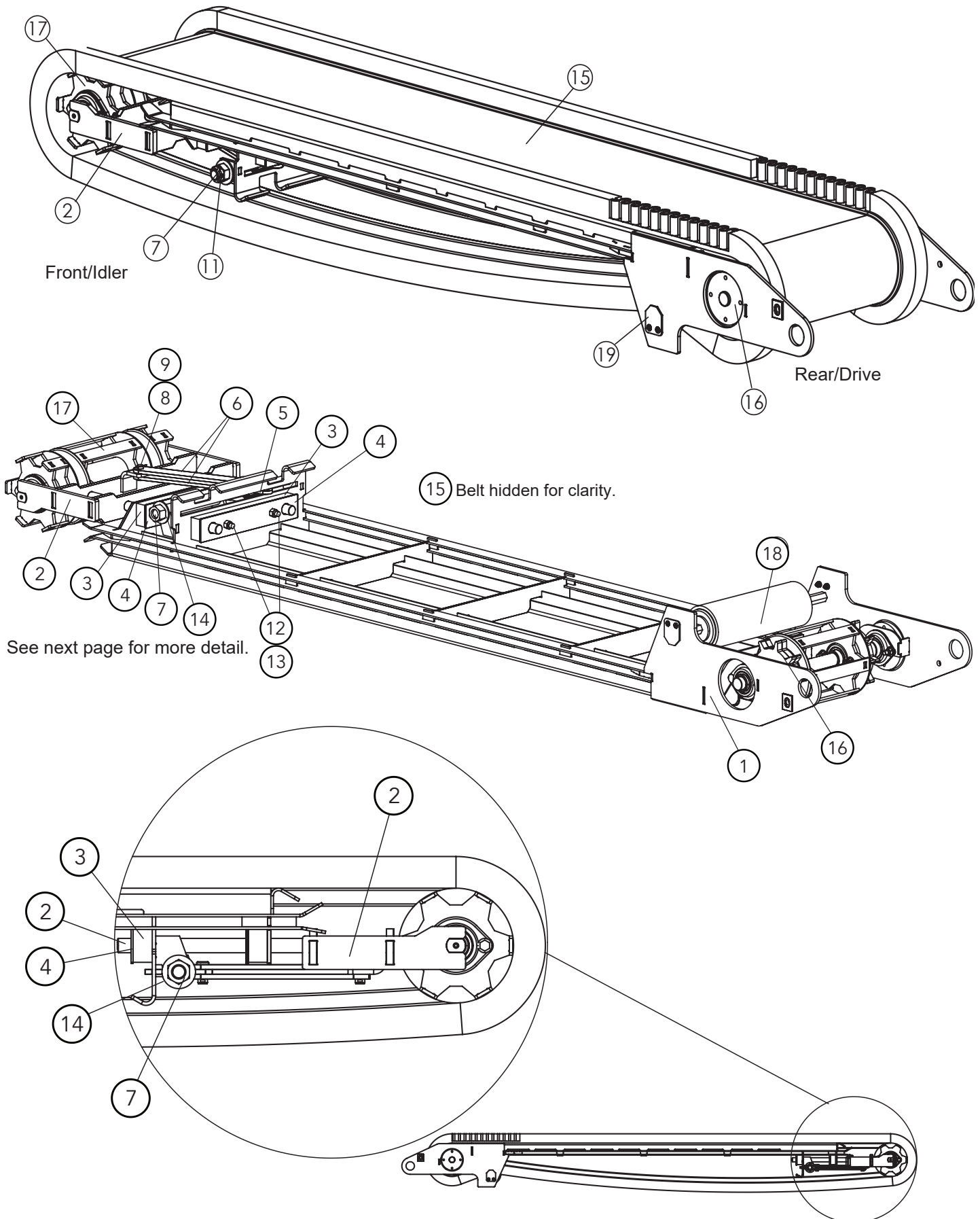


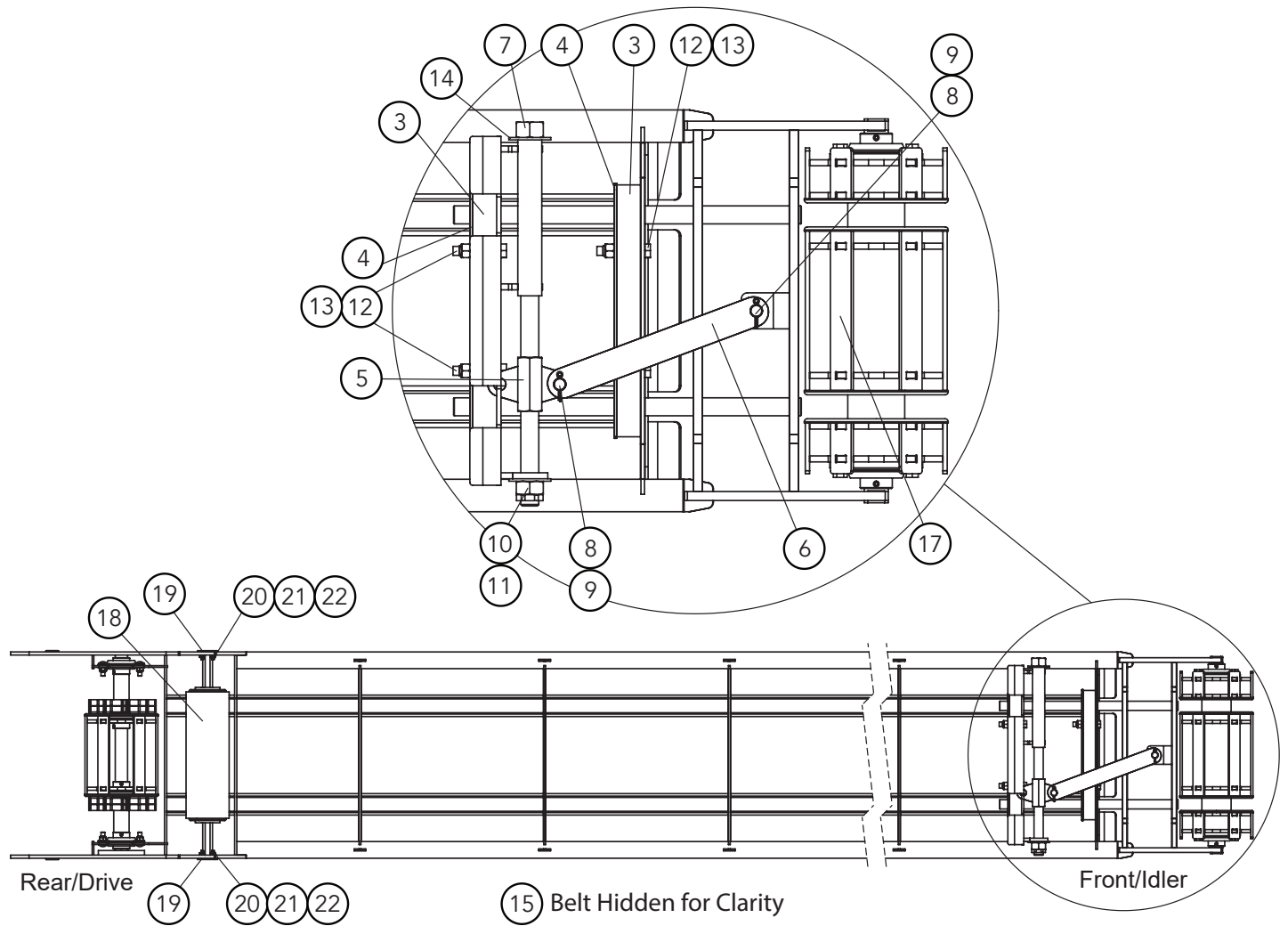




Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	322846	Complete Cartridge - Assy RH Conv 14' (See next page.)	1	7	72054	Nut - .375-16NC SS Lock	8
2	322847	Complete Cartridge - Assy RH Conv 7'(See next page.)	1	8	322463	Pulley - Snubber	2
3	322848	Complete Cartridge - Assy LH Conv 14' (See next page.)	1	9	323265	Tab - Cover 304	2
4	322849	Complete Cartridge - Assy LH Conv 7' (See next page.)	1	10	323271	Bolt - Flat Head SS	4
5	36425	Washer - .375 SS Flat	8	11	171052	Washer - #10 SS	4
6	36399	Capscrew - .375-16NC X 1.25 SS	8	12	20675	Nut - Lock #10-24NC	4

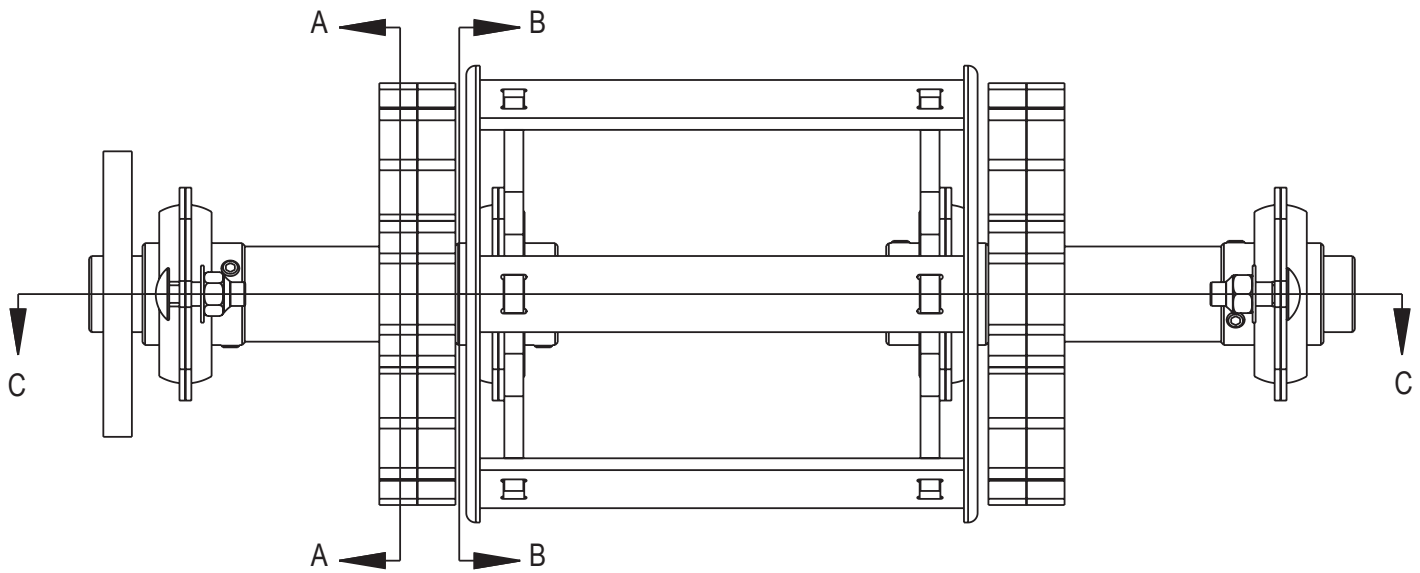
# Conveyor Cartridges



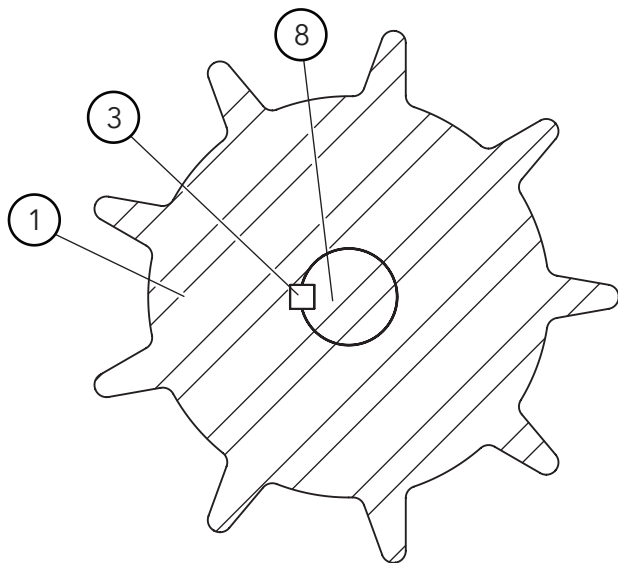


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	322846	Complete Conv Cartridge - RH 14'	1	12	34859	Capscrew - .375-16NC X 2 SS	4
	322847	Complete Conv Cartridge - RH 7'		13	72054	Nut - .375-16NC SS Lock	4
	322848	Complete Conv Cartridge - LH 14'		14	56408	Washer - .75 SS Flat	2
	322849	Complete Conv Cartridge - LH 7'		15	321253	Belt - Conv 14' (Lower)	1
1	322852	Cartridge - Wldmt Conv 14' (Lower)	1	15	321254	Belt - Conv 7' (Upper)	1
	322853	Cartridge - Wldmt Conv 7' (Upper)		16	322832	Shaft - Assy Drive (See next page.)	1
2	321650	Cartridge - Wldmt Takeup 304	1	17	322452	Pulley - Assy Tail (See page 37.)	1
3	321662	Block - Guide UHMW	2	18	322463	Pulley - Snubber	1
4	321646	Guide - 304	2	19	323265	Tab - Cover 304	2
5	321651	Nut - Wldmt Coupling SS	1	20	323271	Flat Head - 10-24 .75 SS	4
6	321645	Plate - Link 304	2	21	171052	Washer - #10 SS Flat	4
7	321664	Shaft - Wldmt Threaded	1	22	20675	Nut - #10-24NC Zn Lock	4
8	21026	Pin - Clevis .5 X 1 Zn	2				
9	20817	Pin - Cotter .125 X 1 Zn	2				
10	321663	Nut - Castle	1				
11	20916	Pin - Roll .1563 X 1	1				

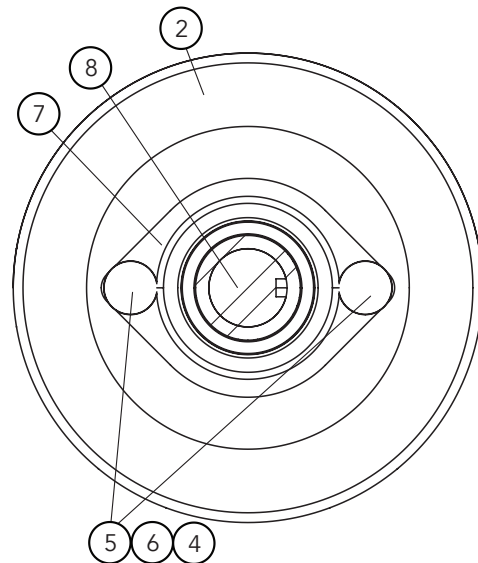
**Drive Shaft**



Section A-A

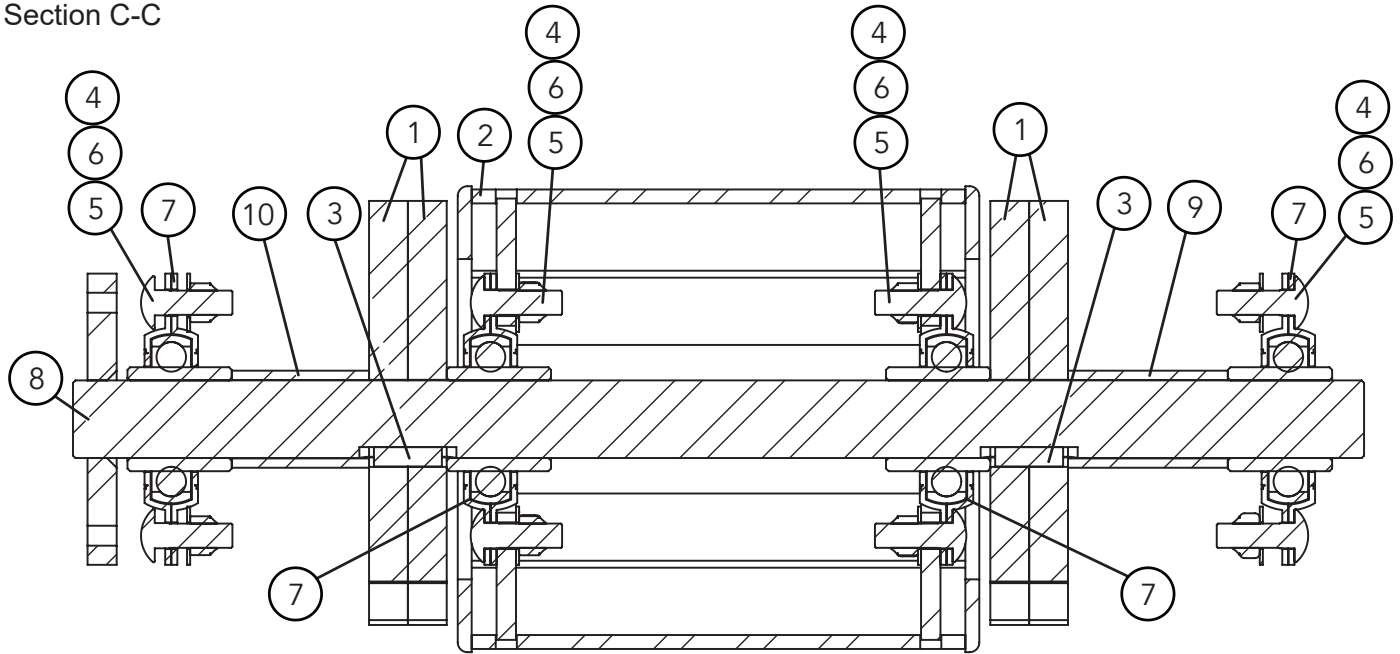


Section B-B



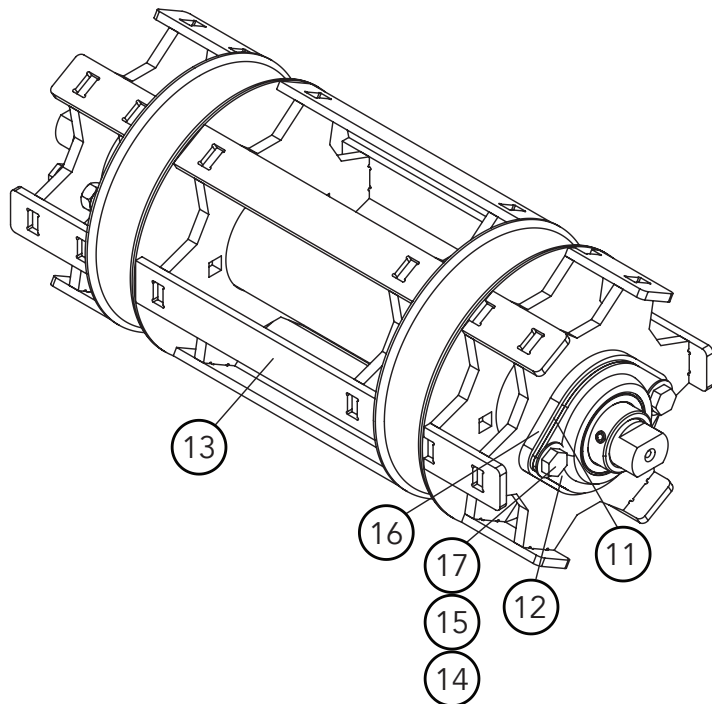
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	322832	Shaft - Assy Drive	1	6	36424	Washer - .313 SS Flat	8
1	321205	Sprocket - 304	4	7	321732	Bearing - 304	4
2	322828	Roller - Wldmt 304	1	8	322833	Shaft - Wldmt Drive 304	1
3	321724	Key - Sq .25 X .875	2	9	322837	Spacer - Tube 304	1
4	42221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

Section C-C



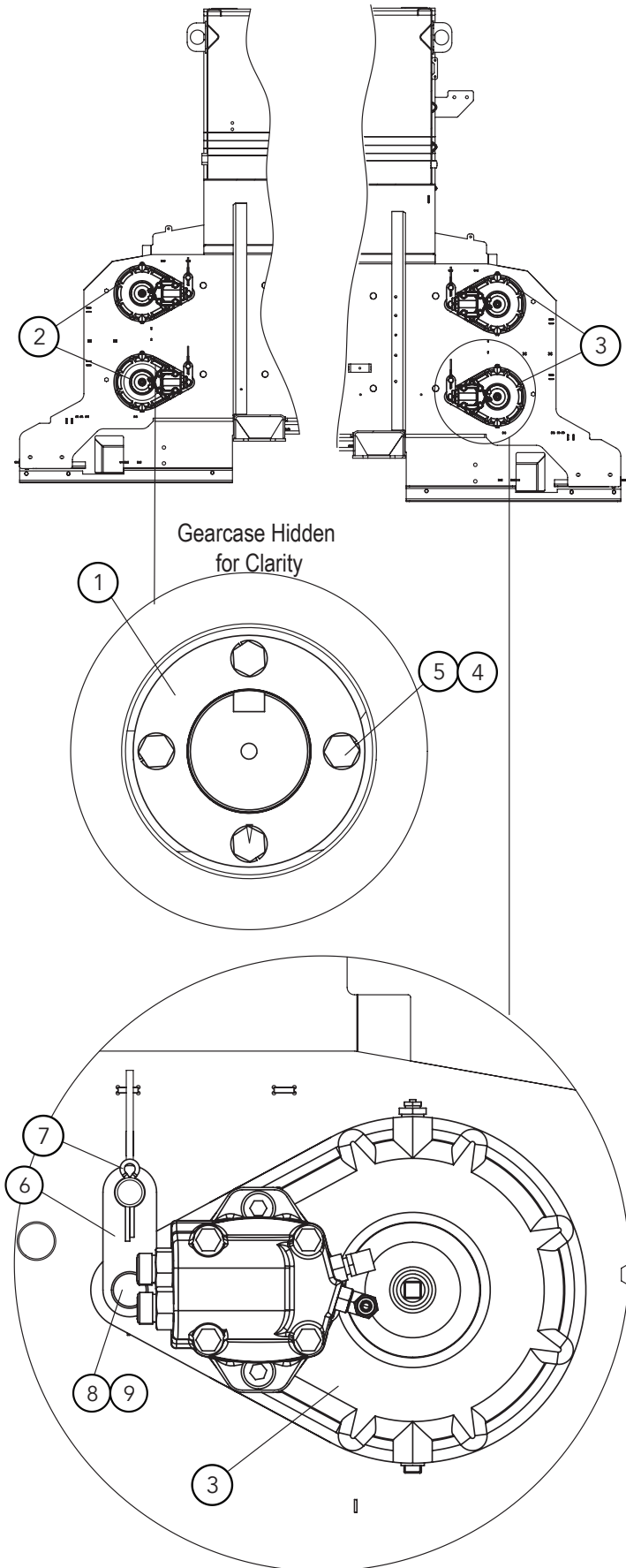
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	322832	Shaft - Assy Drive	1	6	36424	Washer - .313 SS Flat	8
1	321205	Sprocket - 304	4	7	321732	Bearing - 304	4
2	322828	Roller - Wldmt 304	1	8	322833	Shaft - Wldmt Drive 304	1
3	321724	Key - Sq .25 X .875	2	9	322837	Spacer - Tube 304	1
4	42221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

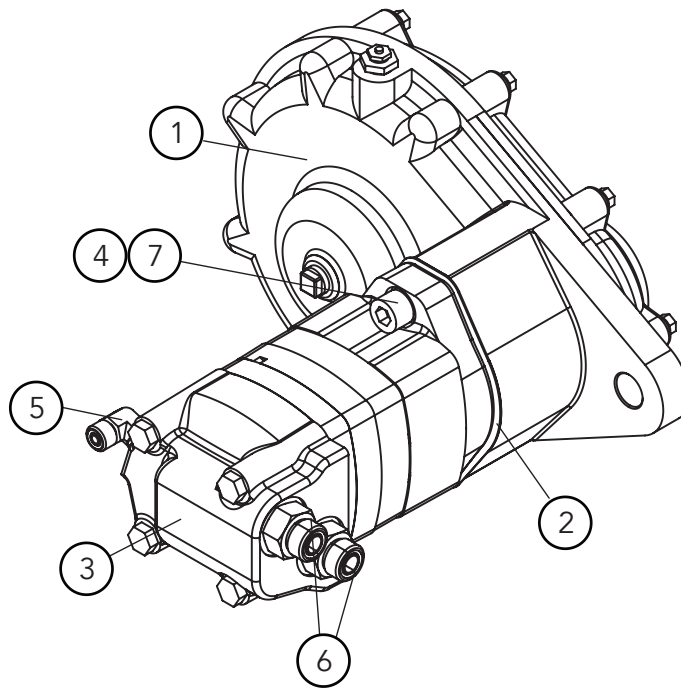
**Conveyor Gear Cases**



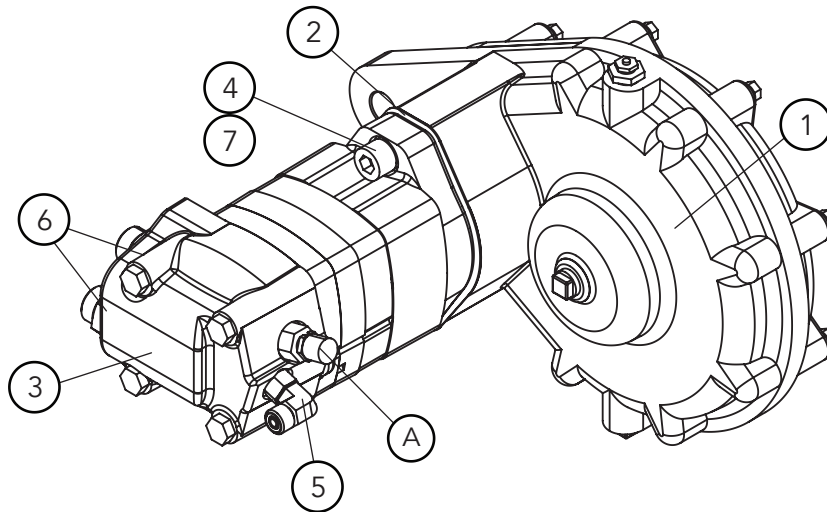
Gearcase Hidden for Clarity

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

**Gear Case Assy - LH**

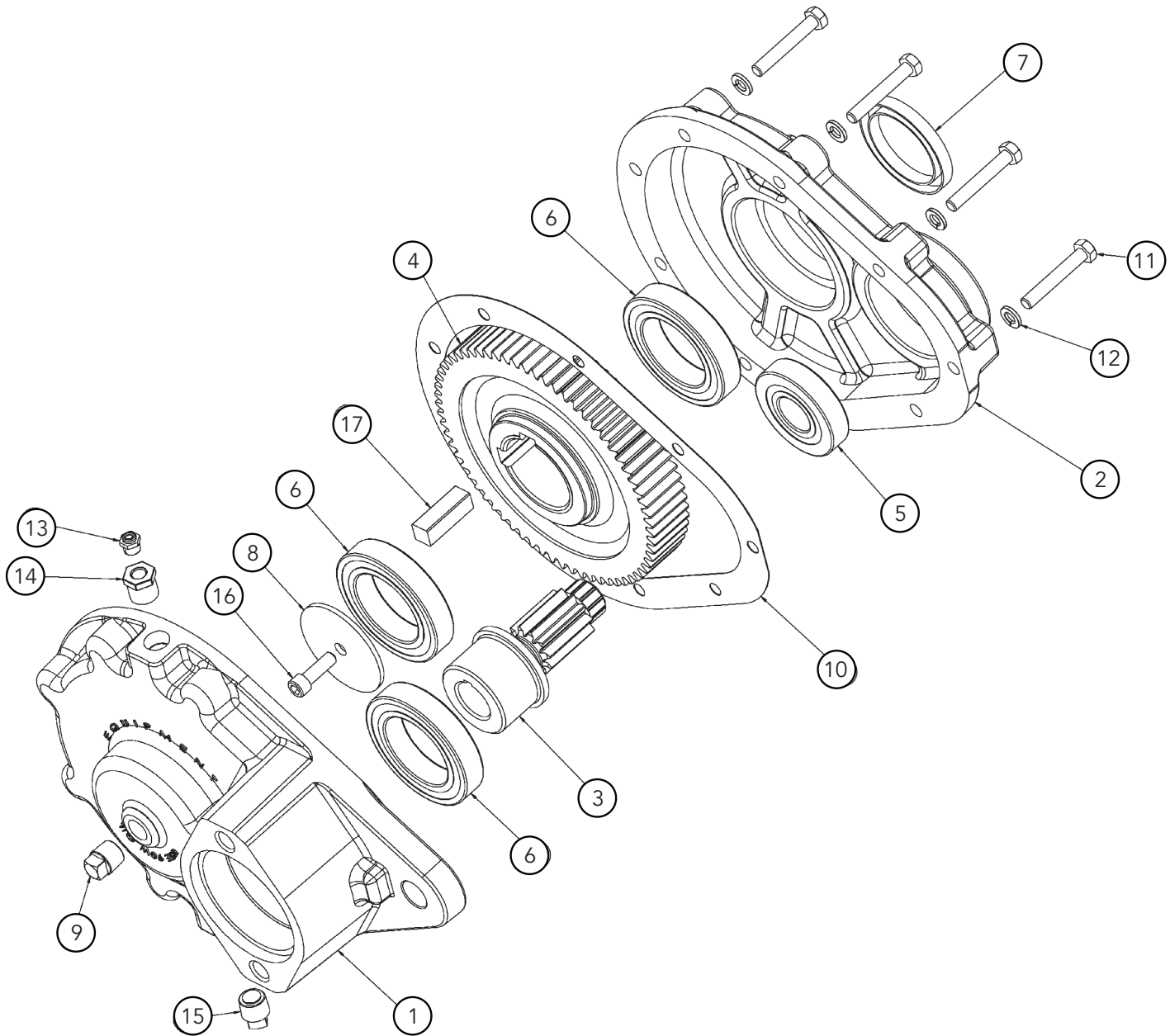


**Gear Case Assy - RH**



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**

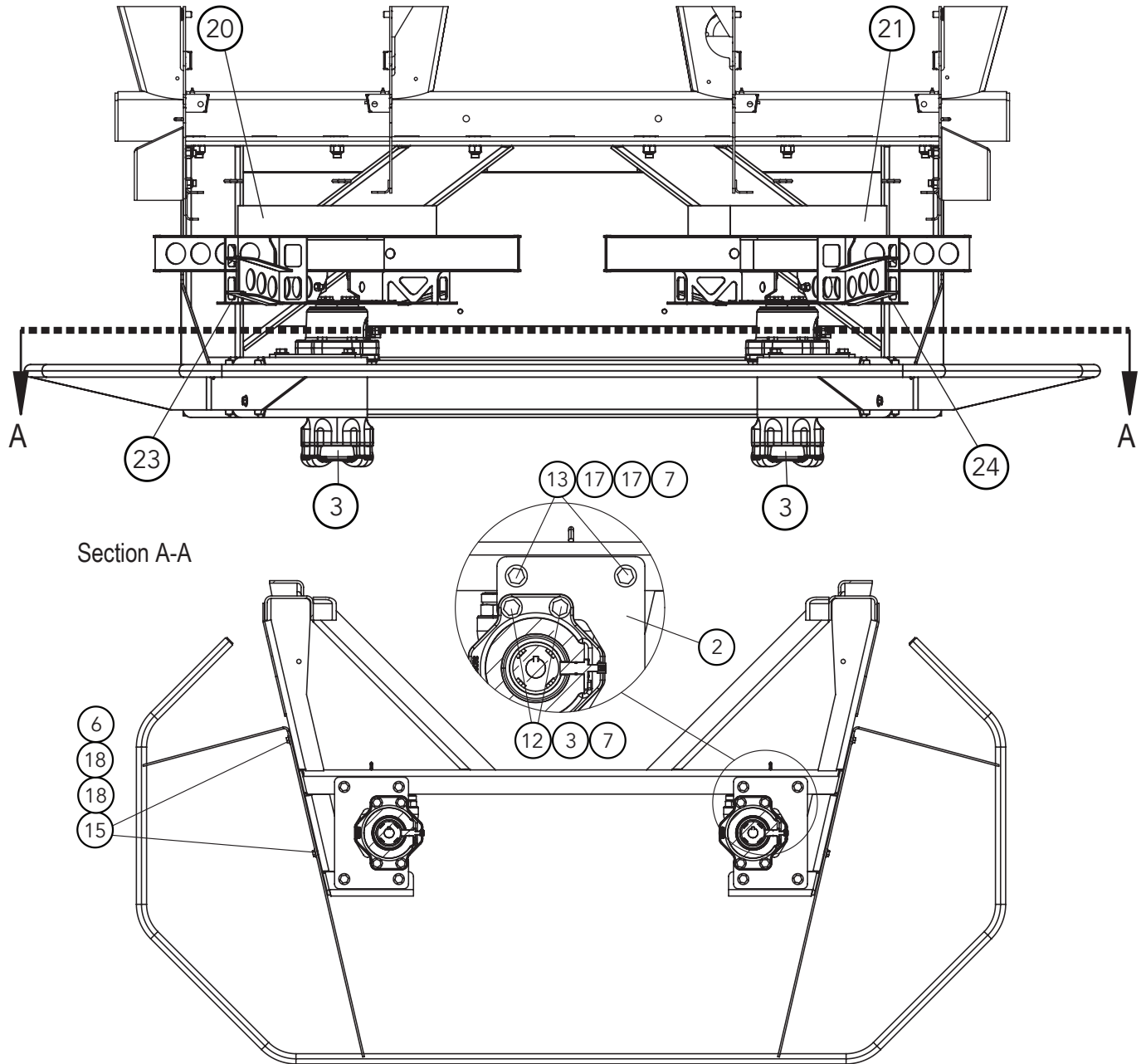


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	36671	Gear Case Service Assy	1	10	304563	Gasket - Housing Single Pinion	1
1	304559	Housing - Outboard Sngl Pinion	1	11	20040	Capscrew - .313-18NC X 2 Gr5	9
2	304560	Housing - Inboard Sngl Pinion	1	12	20711	Washer - .313 Zn Lock	9
3	304561	Gear - 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				



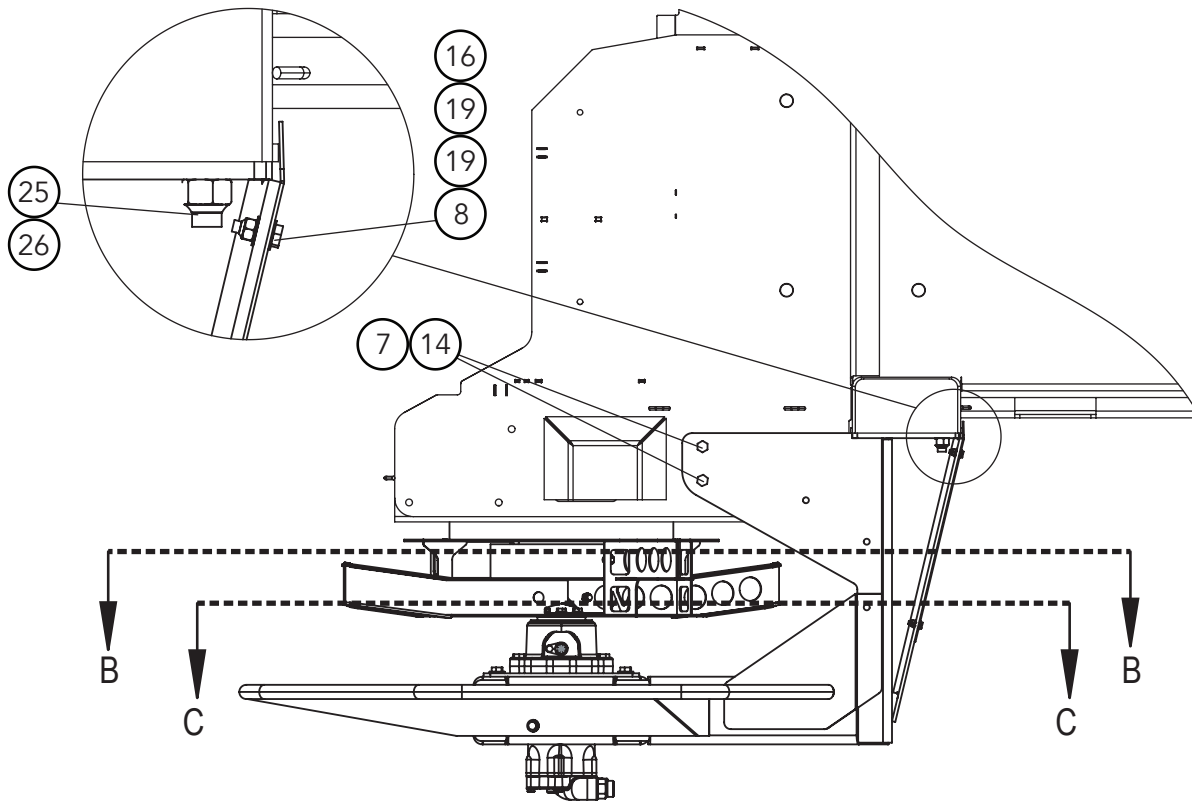
Spinners

Spinner Assembly

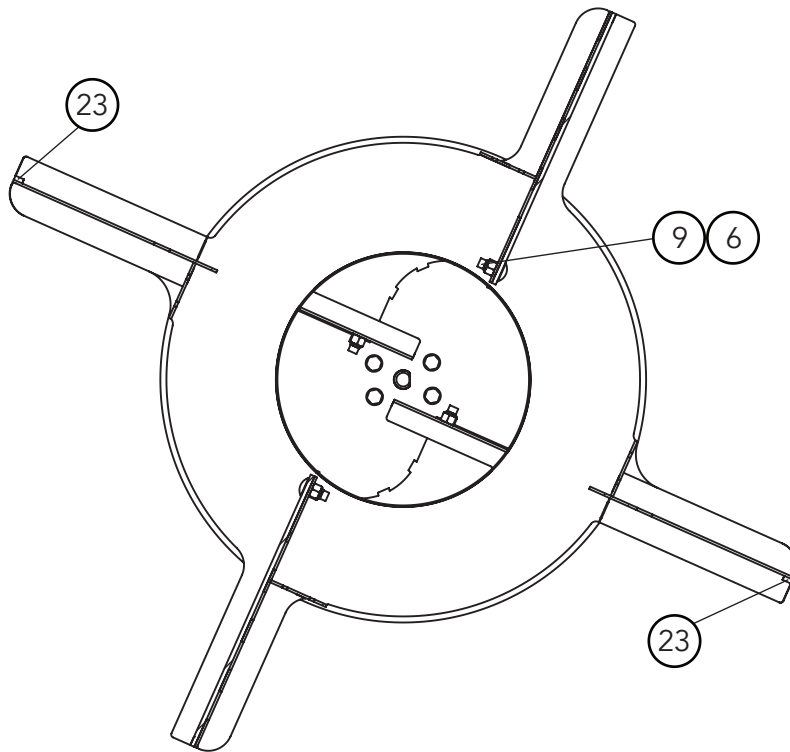


Section A-A

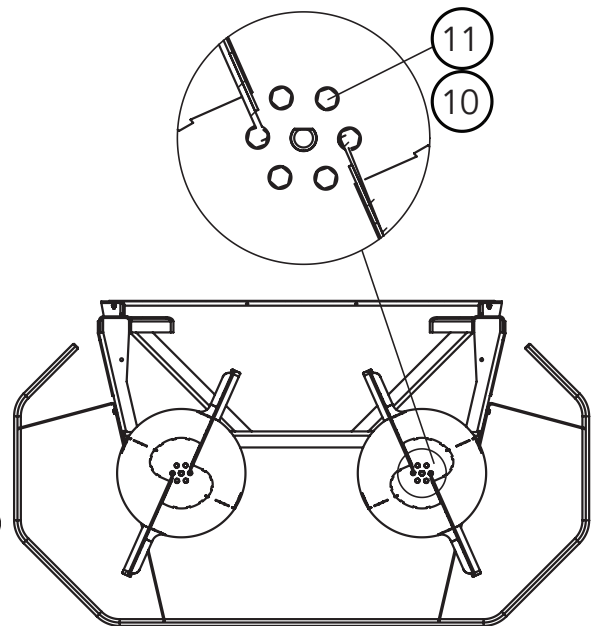
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
2	322483	Mount - Spinner 304	2	15	36399	Capscrew - .375-16NC X 1.25 SS	4
3	321528	Motor - Assy Spinner RH	2	17	322259	Washer - Flat .5 Hd SS	16
6	72054	Nut - .375-16NC SS Lock	12	18	36425	Washer - .375 SS Flat	8
7	39016	Nut - .5-13NC SS Lock	20	20	322490	Disk - Wldmt LH 304	1
12	42454	Capscrew - .5-13NC X 2.5 SS	8	21	322531	Disk - Wldmt RH 304	1
13	36539	Capscrew - .5-13NC X 1.5 SS	8	23	322502	Blade - Wldmt LH 304	2
				24	322532	Blade - Wldmt RH 304	2

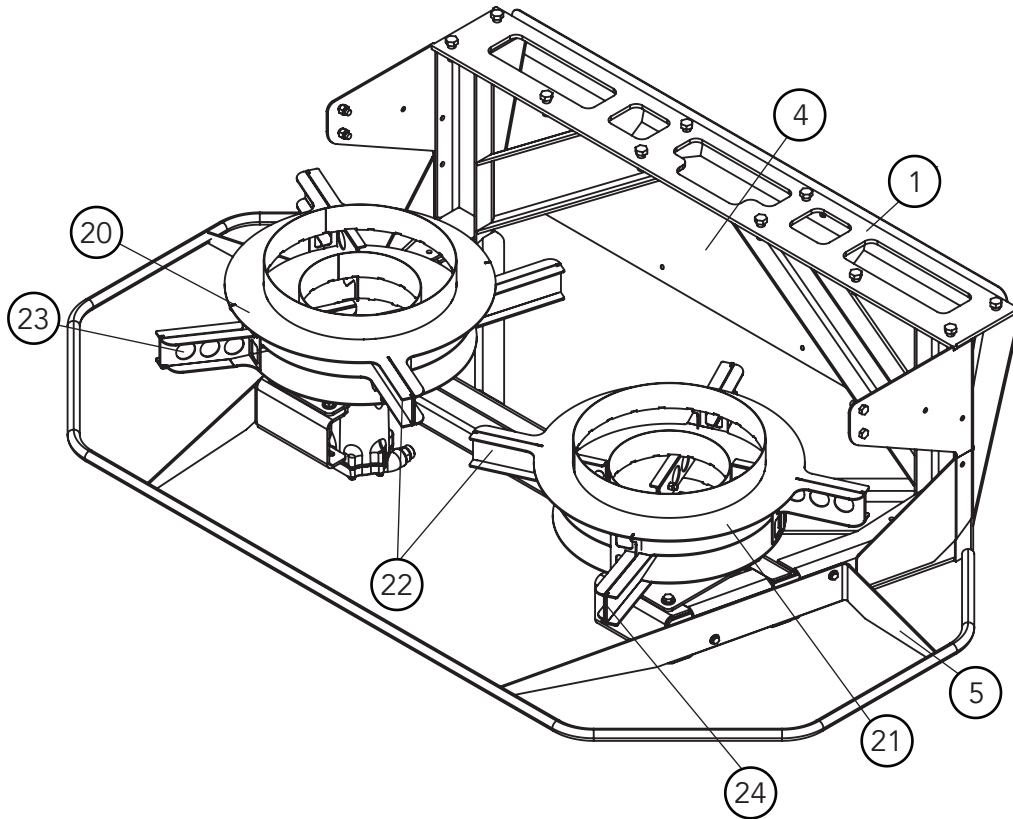


Section B-B



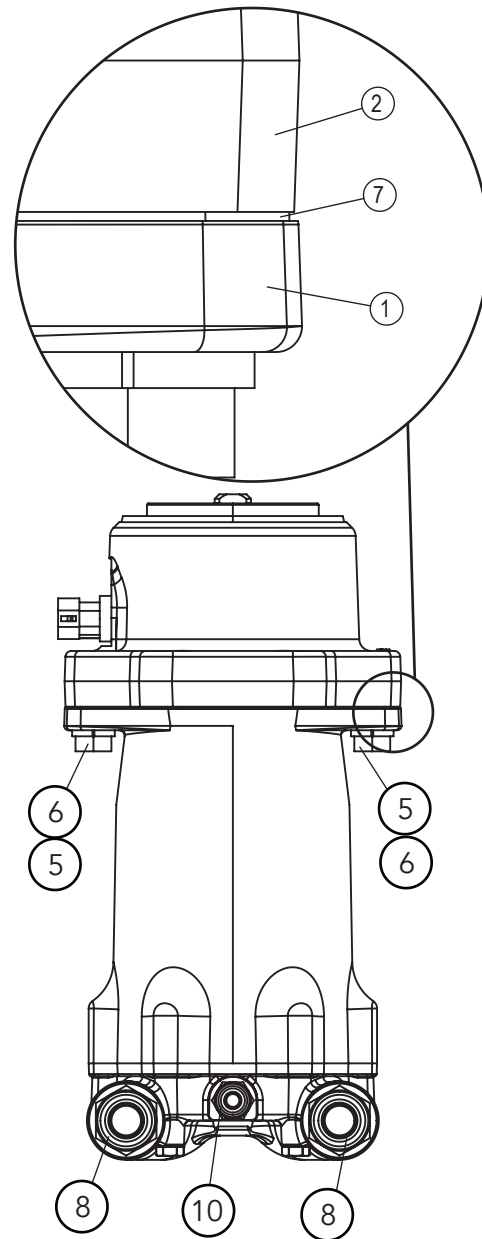
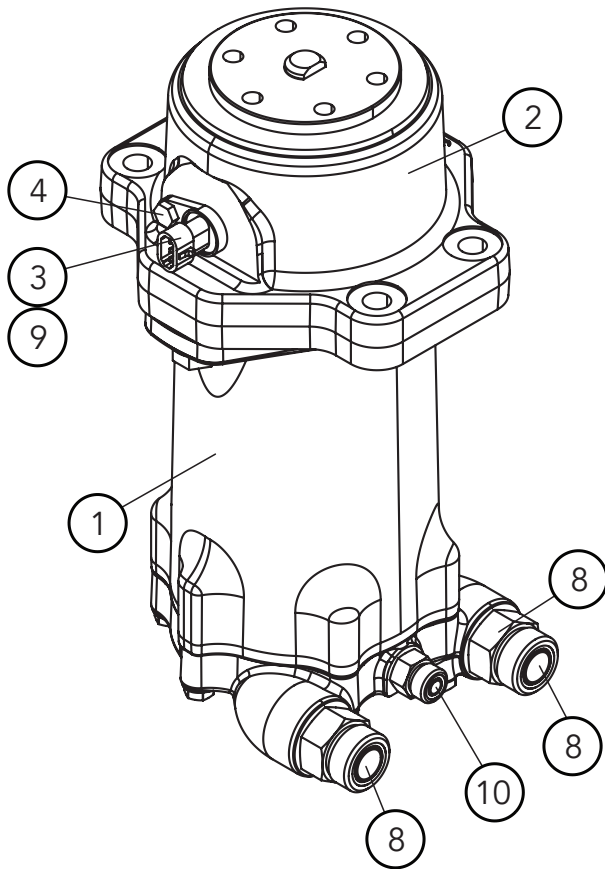
Section C-C



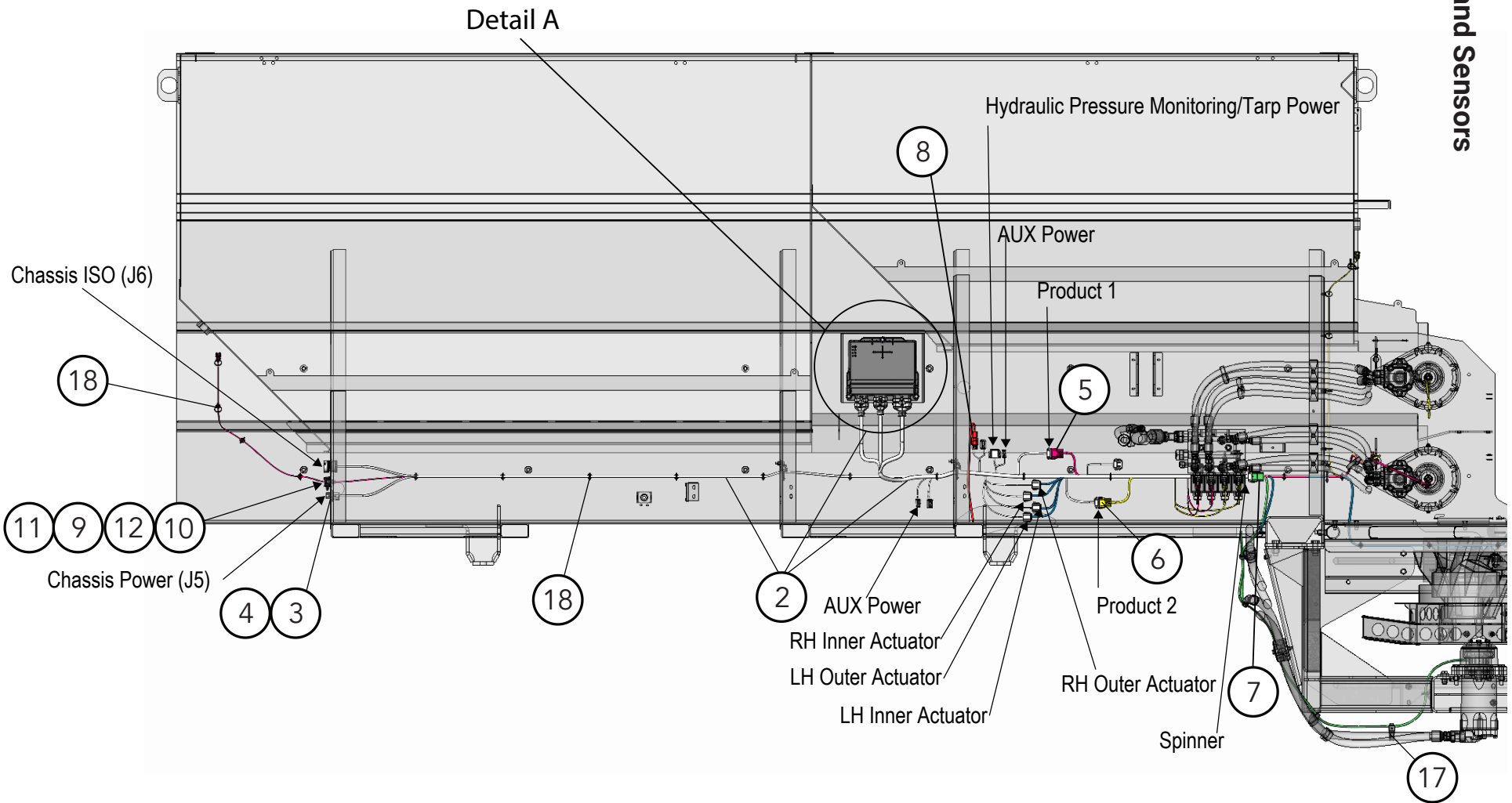


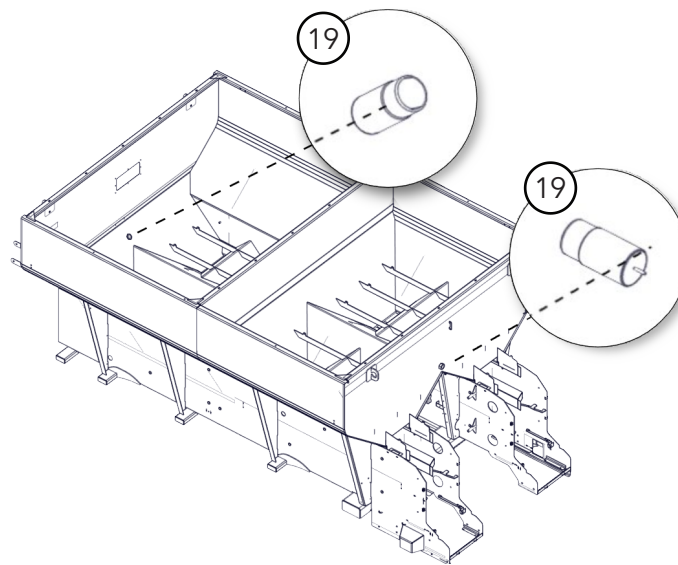
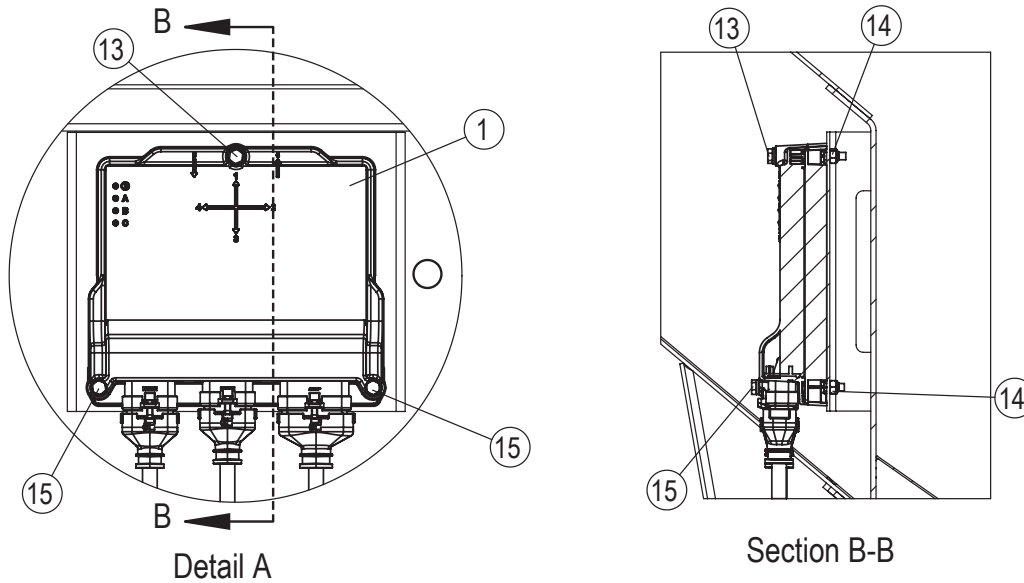
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	322465	Frame - Wldmt Spinner 304	1	15	36399	Capscrew - .375-16NC X 1.25 SS	4
2	322483	Mount - Spinner 304	2	16	36394	Capscrew - .25-20NC X .875 SS	6
3	321528	Motor - Assy Spinner (See next page.)	2	17	322259	Washer - Flat .5 Hd SS	16
4	321443	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	322505	Panel - Fin 304	4
9	36408	Bolt - .375-16NC X 1 SS	8	23	322502	Blade - Wldmt LH 304	2
10	36420	Washer - .375 SS Lock	12	24	322532	Blade - Wldmt RH 304	2
11	36293	Capscrew - .375-16NC X .75 SS	12	25	58800	Capscrew - .625-11NC X 1.75 SS	10
12	42454	Capscrew - .5-13NC X 2.5 SS	8	26	41762	Nut - .625-11NC SS Lock	10
13	36539	Capscrew - .5-13NC X 1.5 SS	8				
14	36402	Capscrew - .5-13NC X 1.25 SS	4				

**Spinner Motor**



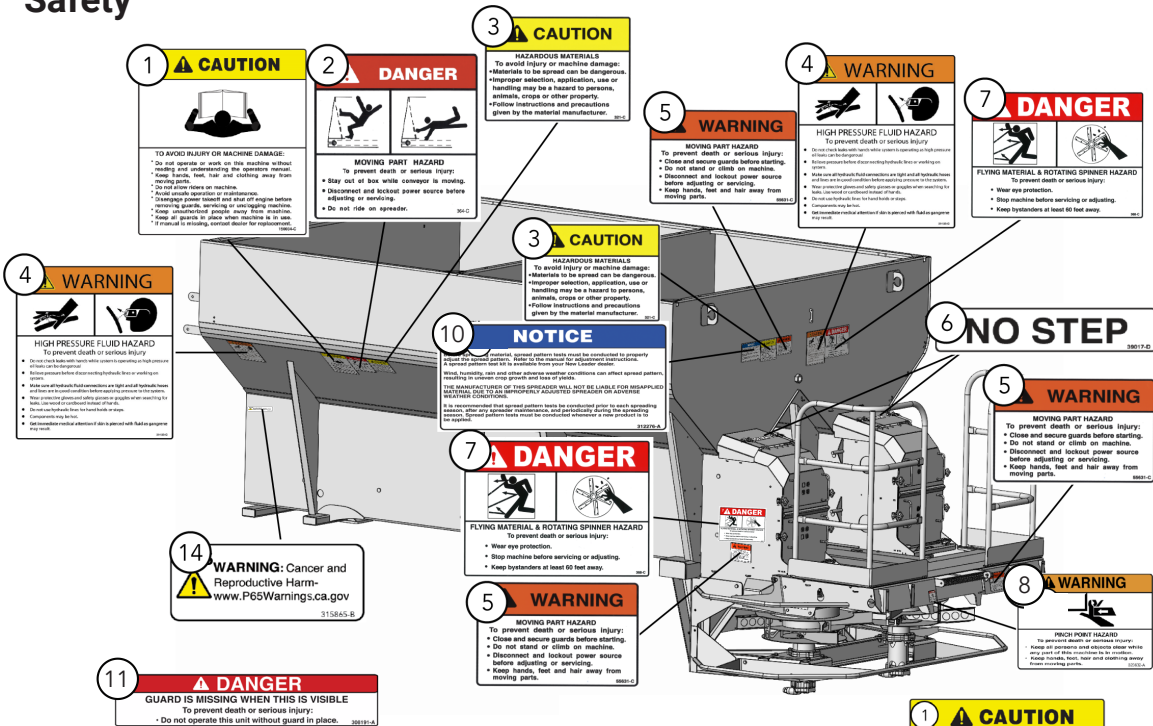
Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	321528	Motor - Assy Spinner		5	36402	Capscrew - .5-13NC X 1.25 SS	2
1	320879	Motor - Hyd 5CID	1	6	36422	Washer - .5 SS Lock	2
A	*320894	*Motor Seal Kit *Not shown*	1	7	300493	Gasket - Paper SAE B 2 Bolt	1
2	320822	Over Hung Load Adaptor - Assy	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



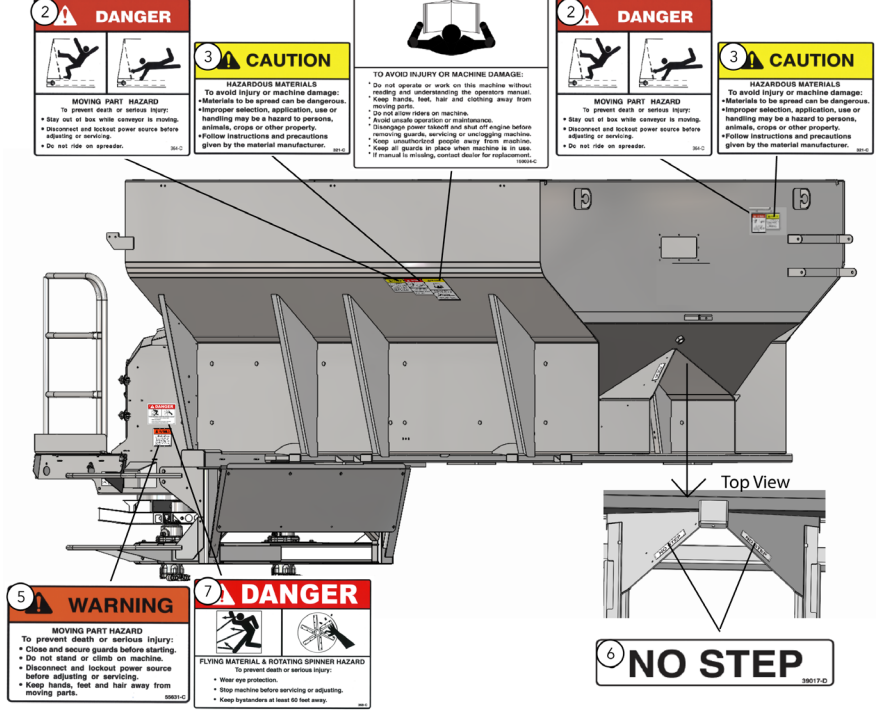


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
1	322921	Controller - Raven RCM	1	11	36424	Washer - Flat .313 SS	4
2	322915	Harness - Main	1	12	42221	Nut - Lock .313-18NC SS	4
3	44483	Screw - Panhead PHLP #10-24NC x .75 SS	2	13	34501	Capscrew - .25-20NC x 2.5 SS	1
4	56355	Nut - Lock #10-24NC SS	2	14	42034	Nut - Lock .25-20NC SS	3
5	322916	Harness - Bin 1 Control 12'-14'	1	15	36396	Capscrew - .25-20NC X 3 SS	2
6	322917	Harness - Bin 2 Control 12'-14'	1	16	*99674	*Tie - Wire *Not Shown*	20
7	322919	Harness - Spinner	1	17	310648	Tie - Dual Clamp	12
8	322920	Harness - Cooler Extension	1	18	311806	Tie - Wire Fir Tree	30
9	312964	Clip - Harness Mounting	4	19	322417	Sensor - Bin Level Capacitive	2
10	34580	Capscrew - .313-18NC x 1 SS	4				

# Decals Safety



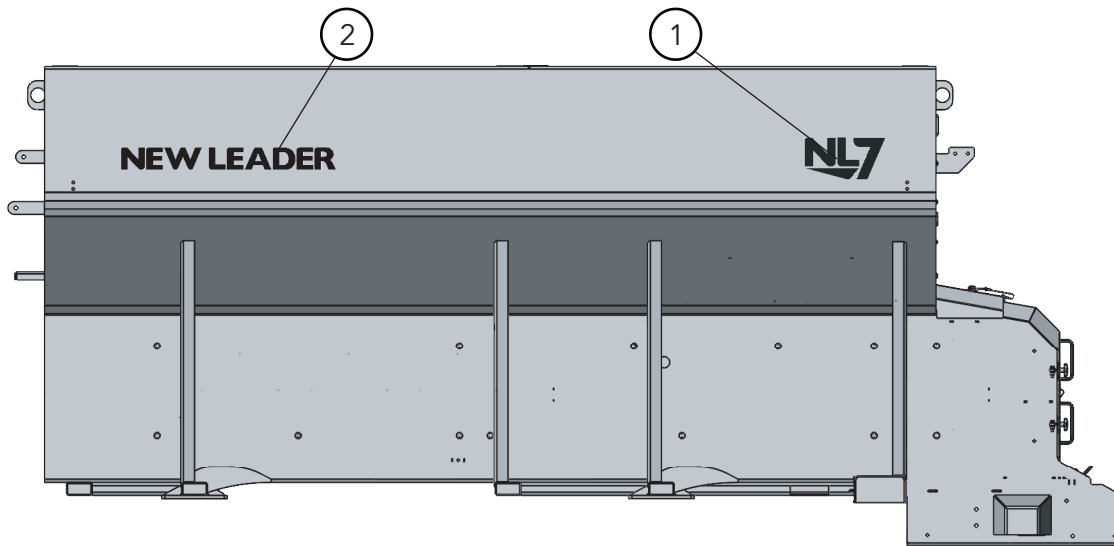
Rear Endgate with Waterfall Covers Removed



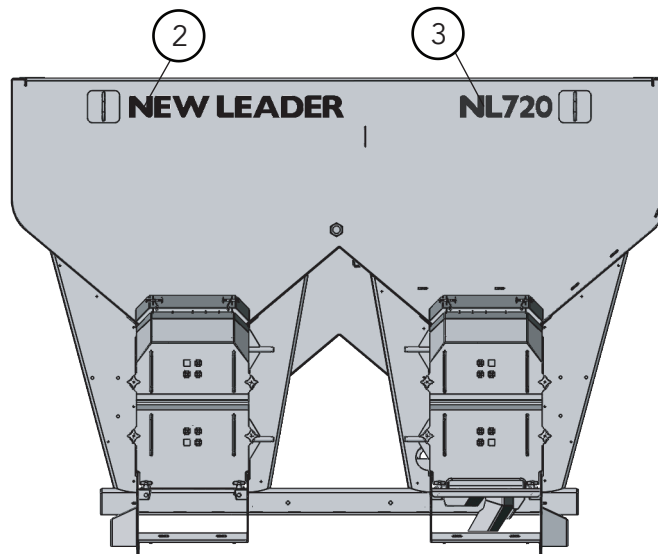
Key	Part No.	Description	Qty
1	150034	Decal - Caution Oper & Maint	AR
2	364	Decal - Danger Moving Part	AR
3	321	Decal - Caution Hazard Mat	AR
4	39138	Decal - Warning High Pressure	AR
5	55631	Decal - Warning Moving Part	AR
6	39017	Decal - No Step	AR

Key	Part No.	Description	Qty
7	368	Decal - Danger Flying Material	AR
8	323632	Decal - Warning Moving Part	AR
10	312276	Decal - Notice Spread Pattern	AR
11	308191	Decal - Guard is Missing	AR
--	Tank Decals	See page 29 for decals affixed to the hydraulic tank.	--

**Decor Group**



Mirrored on Other Side

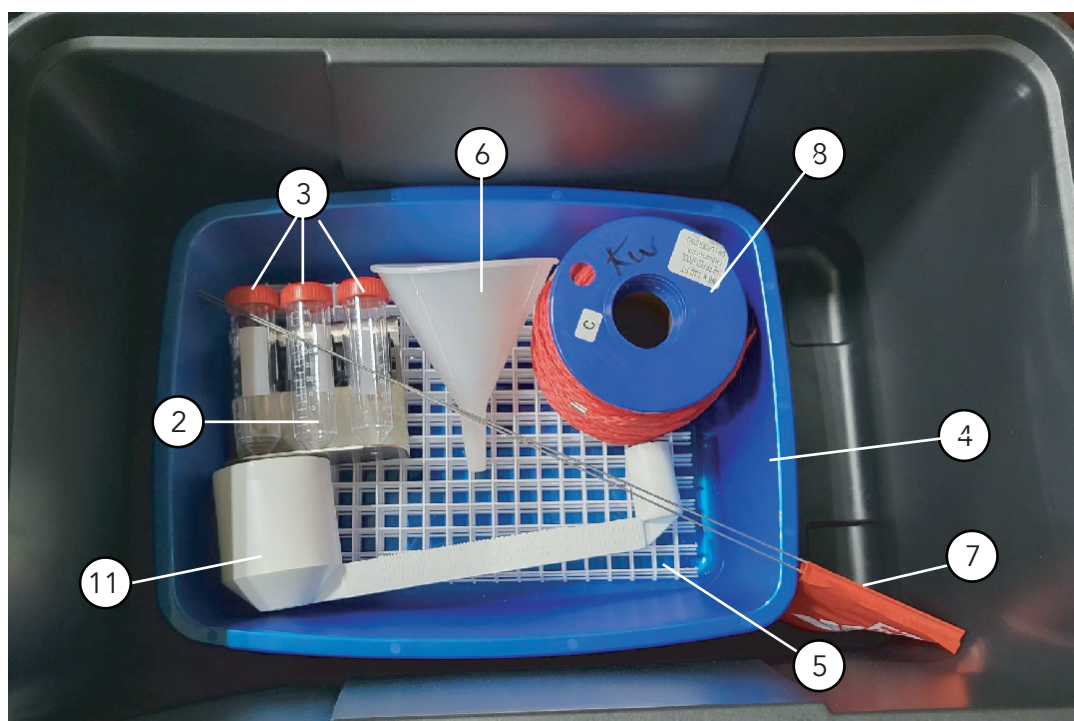


Key	Part No.	Description	Qty	Key	Part No.	Description	Qty
	322278	Decal - Group Decor	1	2	322277	Decal - New Leader Black	3
1	322083	Decal - NL7 Black	2	3	322084	Decal - NL720 Black	1



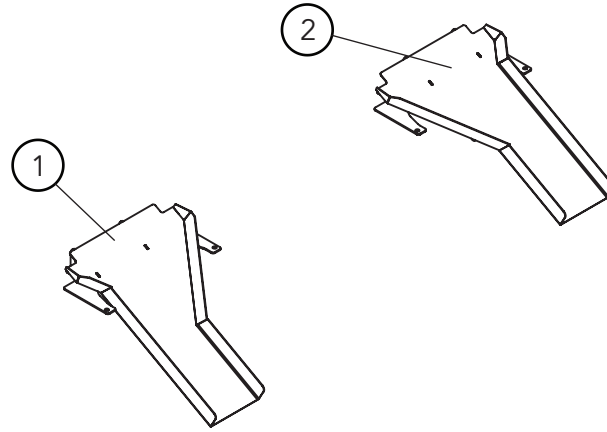
Calibration

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				