



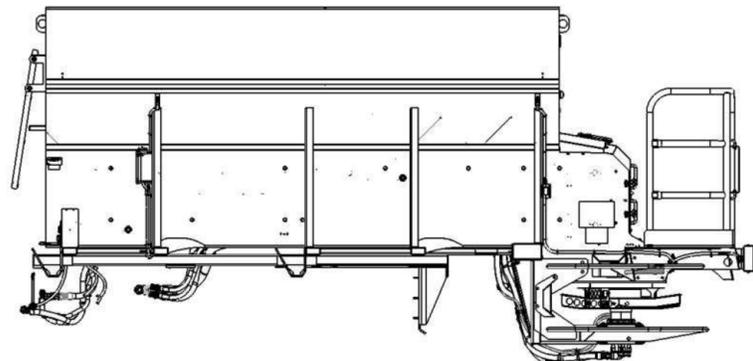
1330 76TH Ave SW  
Cedar Rapids, IA 52404-7052  
Phone: (800) 363-1771  
www.NewLeader.com

# NL720 CNH Trident 5550 Dry High Flow Parts Manual

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

Manual Number: 323540

Effective: 01/2025



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 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

Table of Contents .....	3
Order from an AUTHORIZED DEALER in your area .....	4
Ordering Parts: Instructions.....	4
Body.....	5
Sight Window.....	5
Mounting Pads .....	5
Platform .....	6
Platform Assembly .....	7
Screens.....	8
Sign Slow-Moving Vehicle (SMV) & Speed Identification Symbol (SIS).....	9
Deflectors.....	9
SMV —Group .....	10
Waterfalls .....	12
Chutes .....	14
Hydraulics .....	16
Group Spinners .....	16
Valve .....	20
Assy Mounting Spinner .....	20
Spinner Control Valve Assembly .....	21
Conveyor Hydraulics .....	22
Conveyor Control Valve Assembly.....	24
Case Drain Group.....	25
Case Drain Mounting Assembly.....	28
Cartridge - Assy Conv 12' .....	29
Drive Shaft .....	33
Tail Pulley.....	34
Conveyor Gear Cases .....	35
Gear Case Assy - LH .....	36
Gear Case Assy - RH.....	36
Gear Case Service Parts .....	37
Spinners .....	38
Spinner Motor .....	42
Electrical .....	43
Harnesses and Sensors .....	43
Light- Group.....	47
PDC/ISO- Group .....	51
Safety Decals .....	52
Decor Group .....	54
Calibration .....	55
Spread Pattern Test Kit .....	55
Calibration Chutes .....	56
Calibration Test Kit.....	56

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 to the 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.

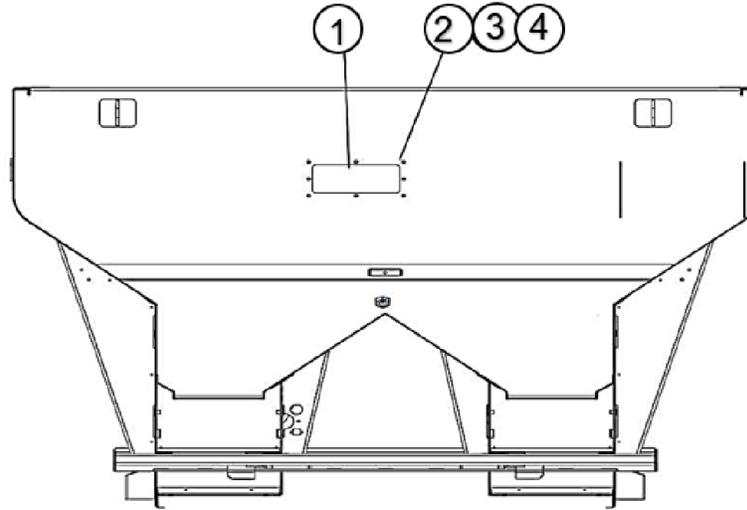
In the parts list the following symbols and abbreviations stand for:

- \* - 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.

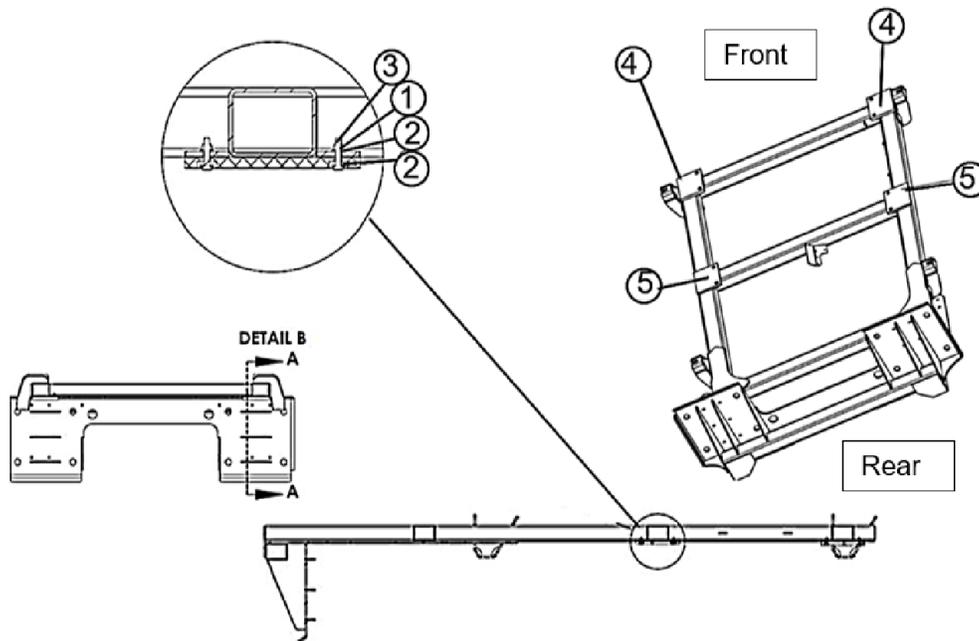
# Body

## Sight Window



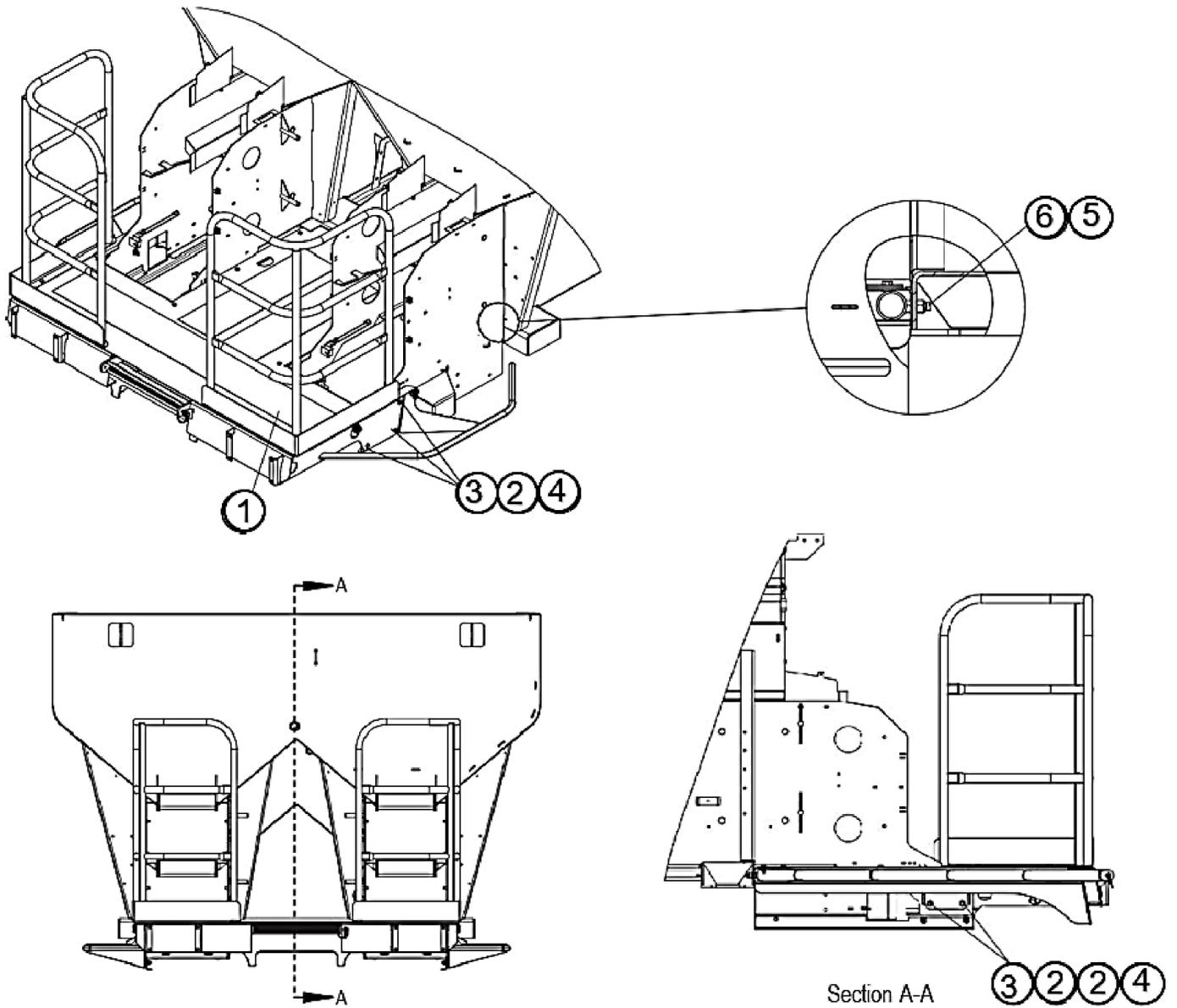
Key	Part No.	Description	Qty
1	302686	WINDOW - SIGHT 5X12 PLEXIGLAS	1
2	36395	CAPSCREW - .25-20NC X 1 SS	8
3	36423	WASHER - .25 SS FLAT	8
4	42034	NUT - .25-20NC SS LOCK	8

## Mounting Pads



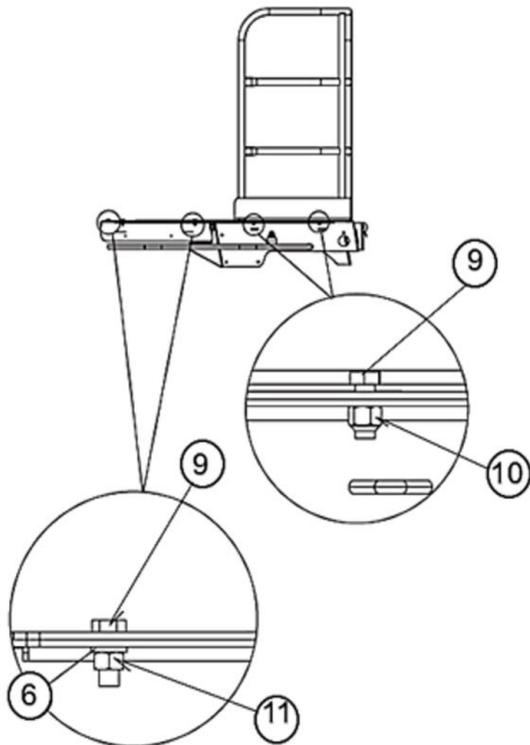
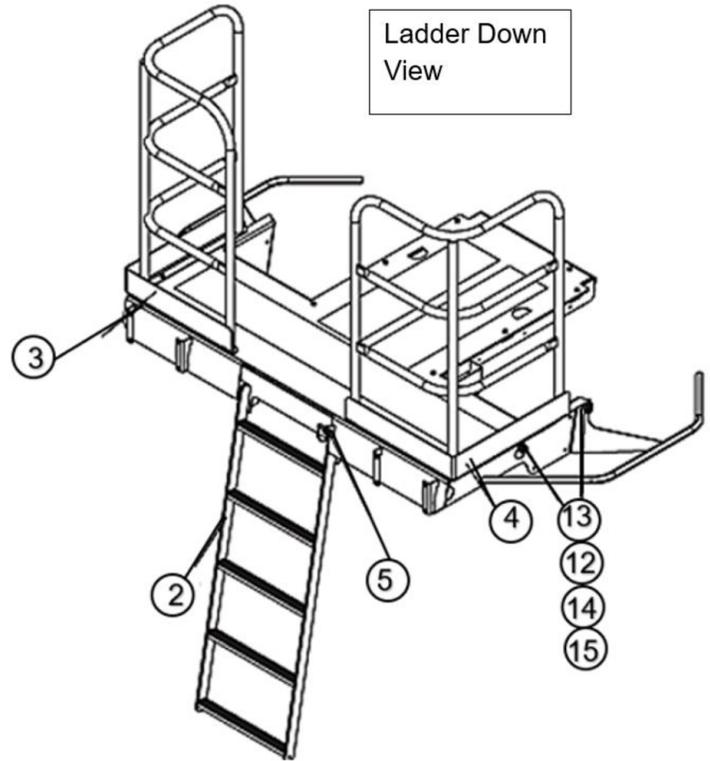
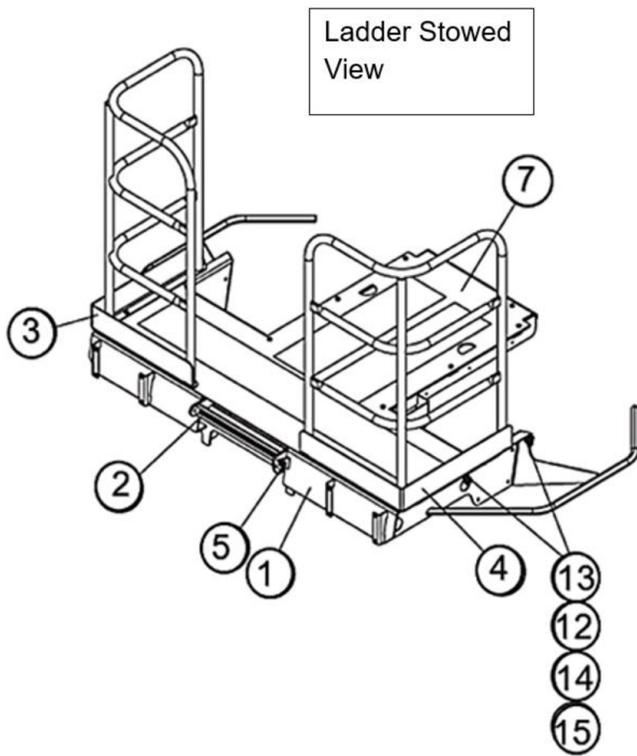
Key	Part No.	Description	Qty
1	42034	NUT - LOCK .25-20NC SS	8
2	36423	WASHER - FLAT .25 SS	16
3	40750	CAPSCREW - .25-20NC X 1.25 SS	8
4	313706	PAD - .688 X 6 X 8 POLY	2
5	313644	PAD - .498 X 6 X 8 POLY	2

Platform



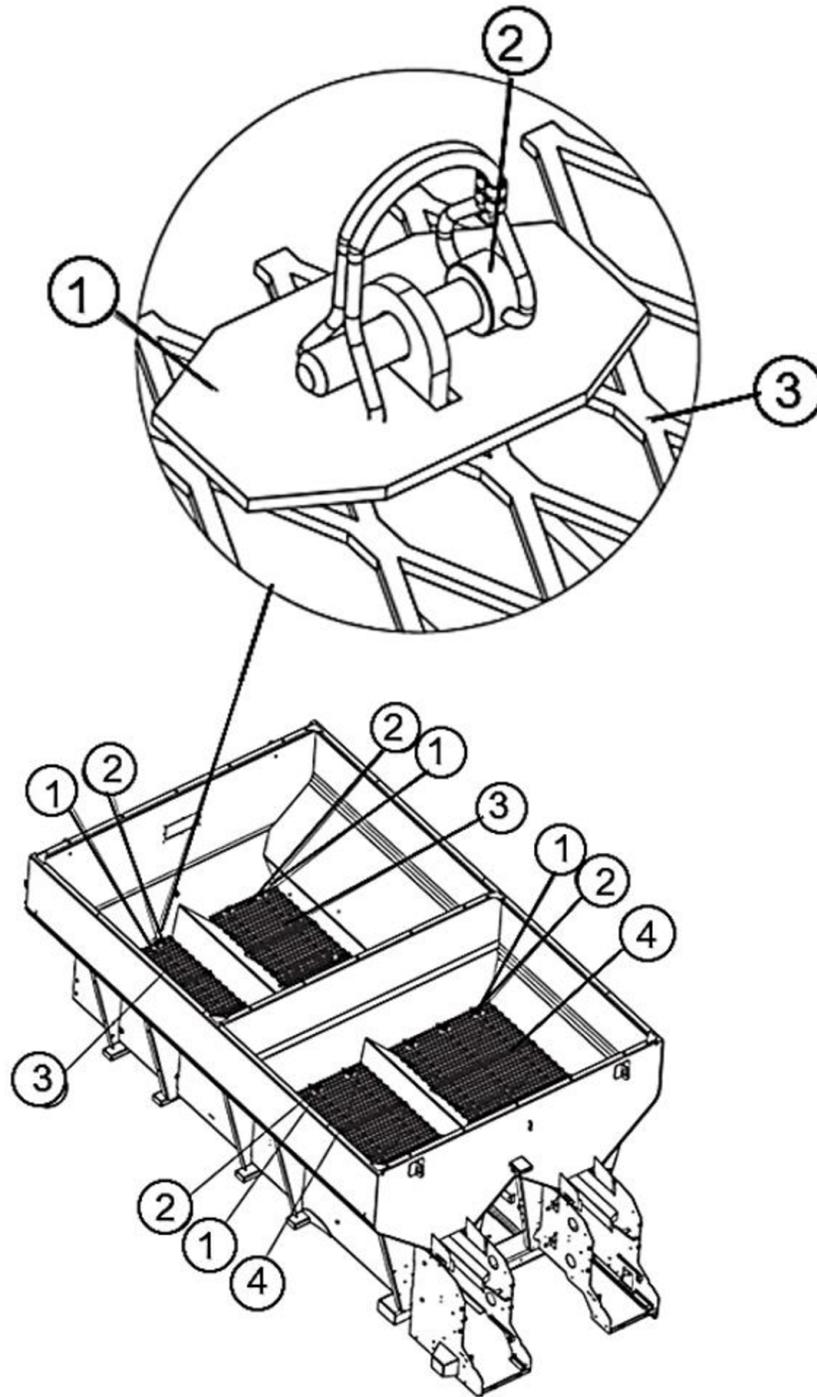
Key	Part No.	Description	Qty
1	322759	PLATFORM - ASSY 304 (SEE NEXT PAGE.)	1
2	36425	WASHER - .375 SS FLAT	14
3	36399	CAPSCREW - .375-16NC X 1.25 SS	10
4	72054	NUT - LOCK .375-16NC SS	10
5	39016	NUT - LOCK .5-13NC SS	2
6	36402	CAPSCREW - .5-13NC X 1.25 SS	2

# Platform Assembly



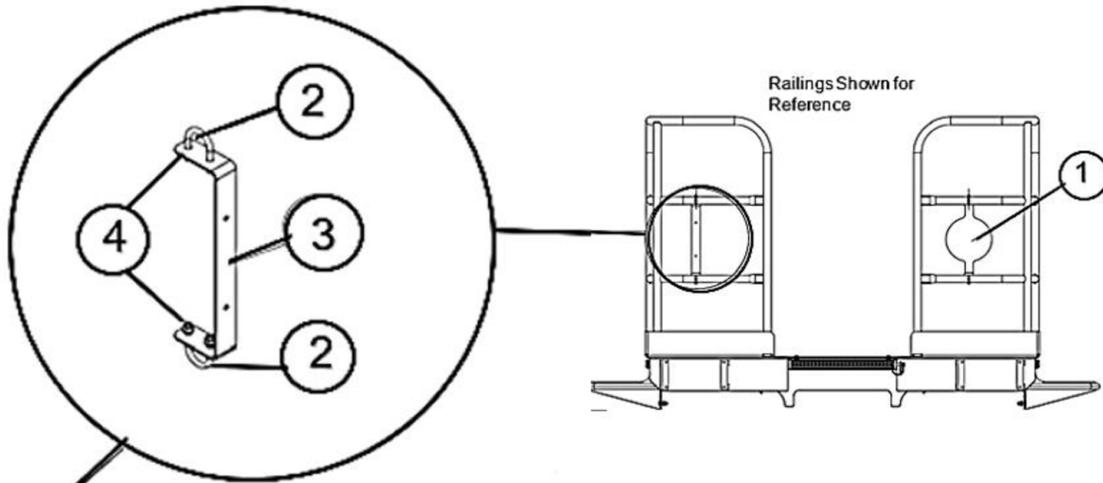
Key	Part No.	Description	Qty
	322759	PLATFORM - ASSY 304	1
1	322767	PLATFORM - WLDMT 304	1
2	321467	LADDER - WLDMT 18 304	1
3	322760	RAILING - WLDMT LH 304	1
4	322764	RAILING - WLDMT RH 304	1
5	311732	PIN - LOCK .375 X 1.375 SS	1
6	36420	NUT - .375-16NC SS LOCK	6
7	322788	PANEL - TOP 304	1
8	*21699	*SKID 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

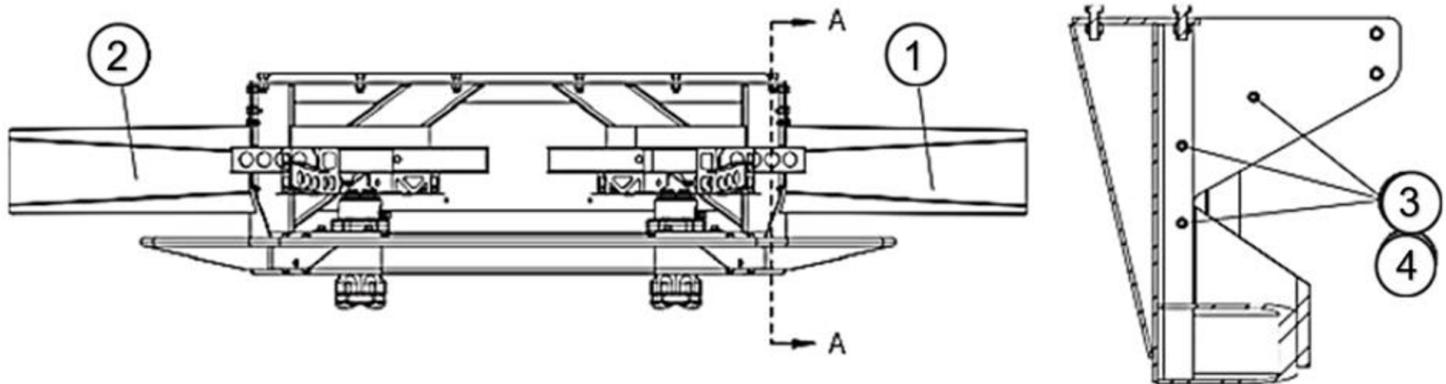
Sign – Slow- Moving Vehicle (SMV) & Speed Identification Symbol (SIS)



NOTE: Mounting bracket is the same

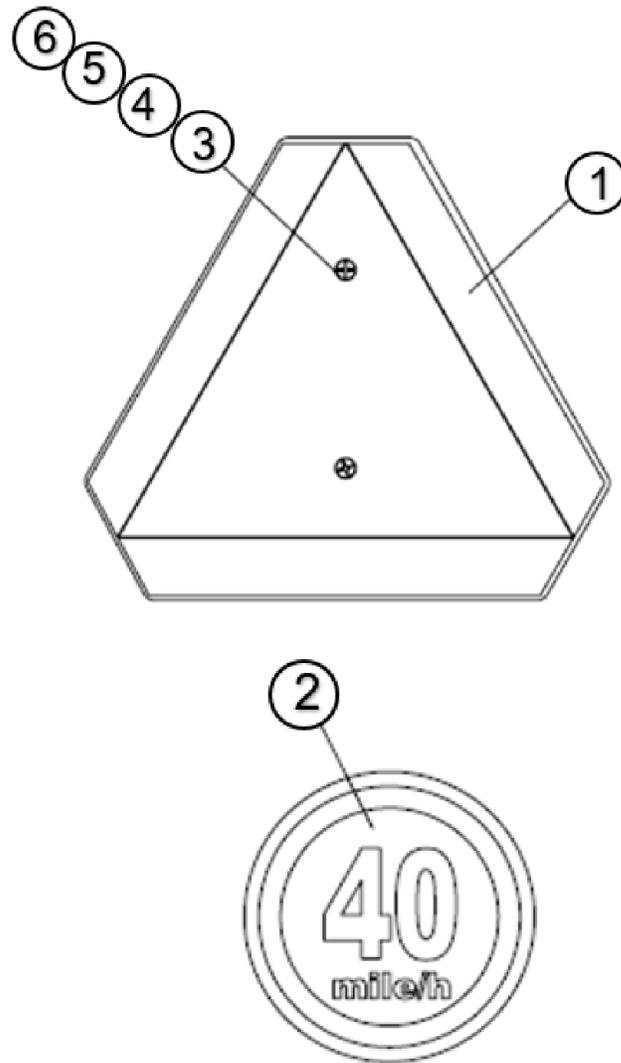
Key	Part No.	Description	Qty
1	321936	MOUNT - SIS RAILING 304	1
2	321937	BOLT - .31-18 X 1.375ID 304	4
3	321946	MOUNT - SMV RAILING 304	1
4	36419	WASHER - .313 SS LOCK	8

Deflectors



Key	Part No.	Description	Qty
1	321441	DEFLECTOR - WLDMT RH 304	1
2	321437	DEFLECTOR - WLDMT LH 304	1
3	36399	CAPSCREW - .375-16NC X 1.25 SS	6
4	72054	NUT - .375-16NC SS LOCK	6

SMV - Group

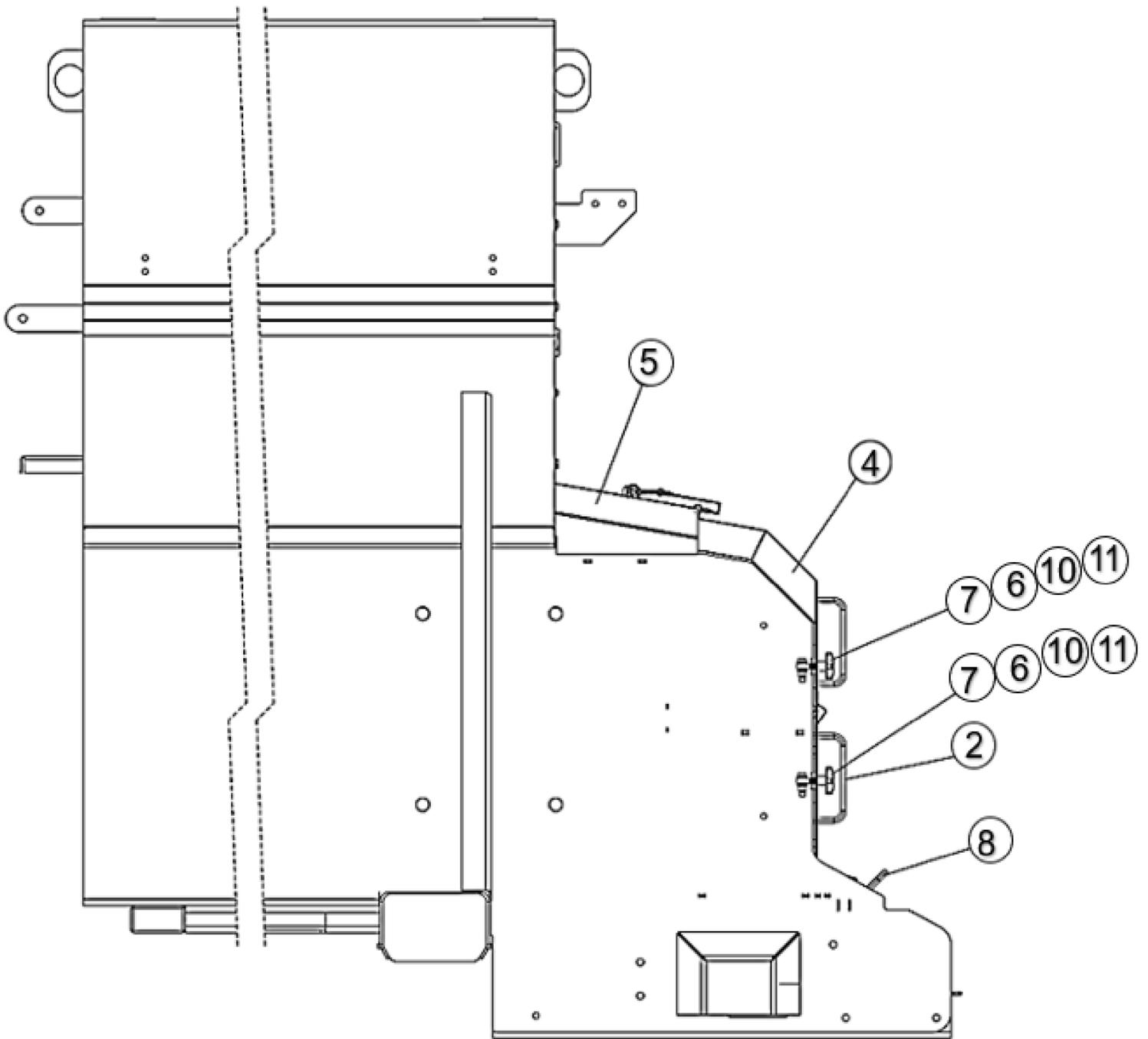


Key	Part No.	Description	Qty
1	321561	WATERFALL - WLDMT BOTTOM RH	1
2	321563	WATERFALL - WLDMT BOTTOM LH	1
3	321560	WATERFALL - WLDMT TOP RH 304	1
4	321562	WATERFALL - WLDMT TOP LH 304	1
5	321727	COVER - ASSY CONV WATERFALL	2
6	321739	EYE BOLT - TIE DOWN 304	12
7	321740	KNOB - TIE DOWN 304	12
8	321778	CHUTE - WLDMT UPPER LH 304	1
9	321779	CHUTE - WLDMT UPPER RH 304	1
10	34858	CAPSCREW - .375-16NC X 1.5 SS	12
11	72054	NUT - .375-16NC SS LOCK	12

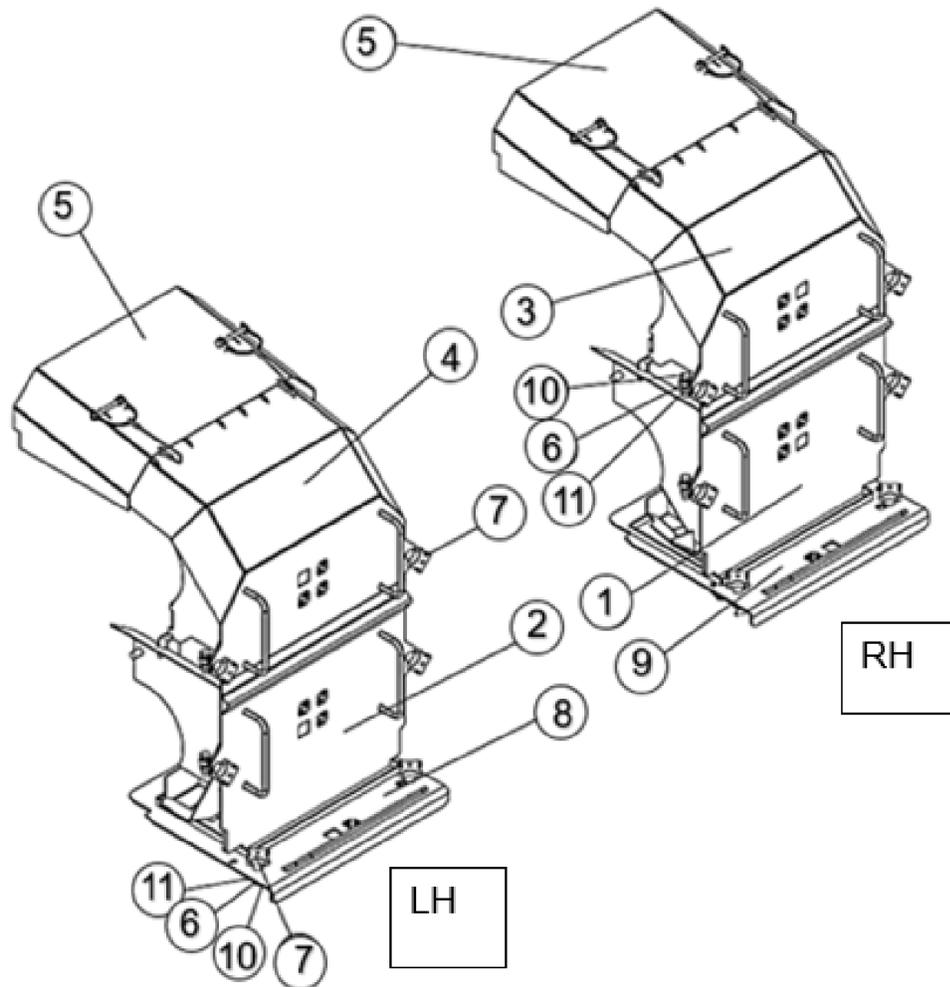
This page is intentionally left blank

# Waterfalls

See next page for parts list.



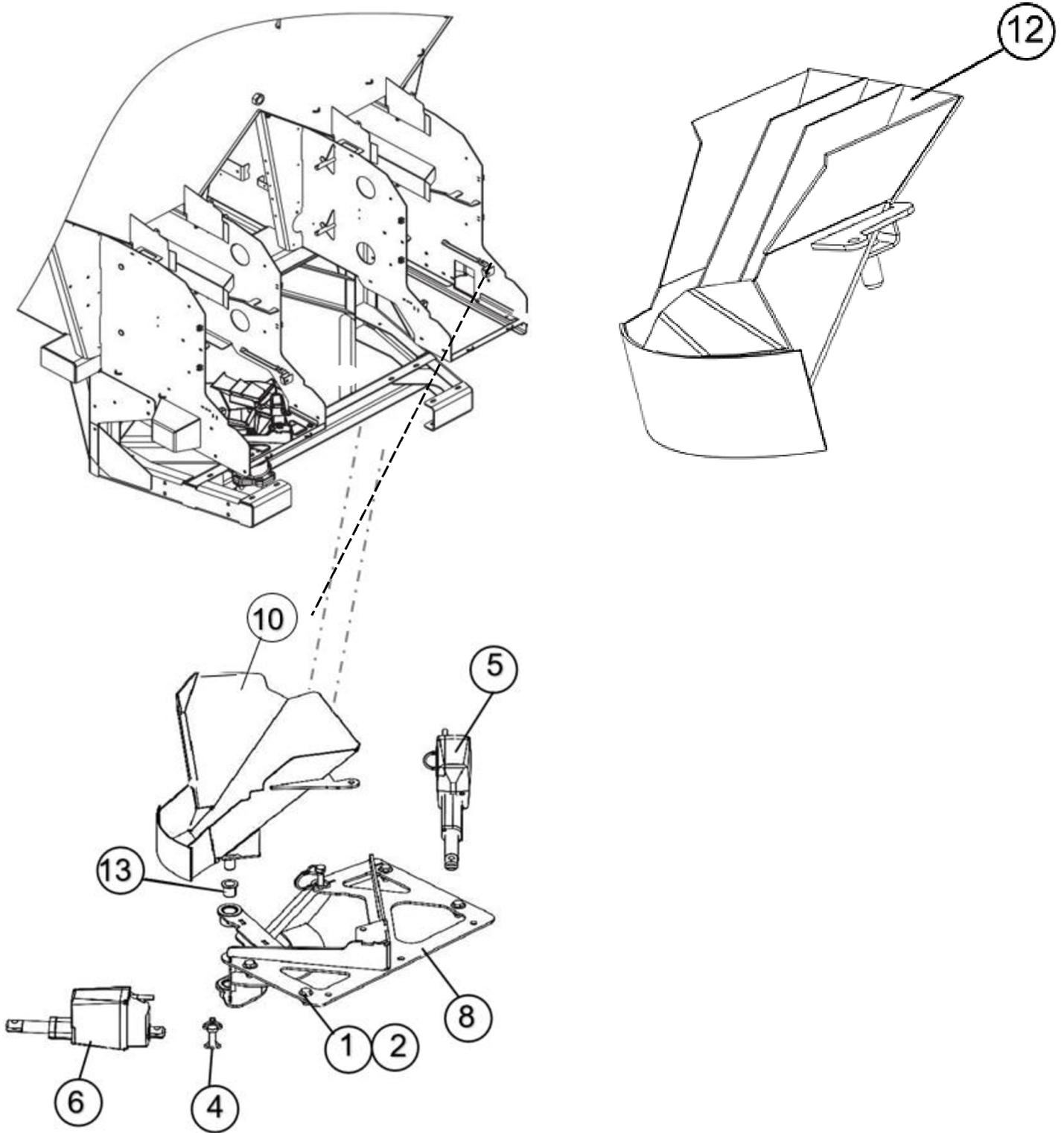
Waterfalls cont.



Key	Part No.	Description	Qty
1	321561	WATERFALL - WLDMT BOTTOM RH	1
2	321563	WATERFALL - WLDMT BOTTOM LH	1
3	321560	WATERFALL - WLDMT TOP RH 304	1
4	321562	WATERFALL - WLDMT TOP LH 304	1
5	321727	COVER - ASSY CONV WATERFALL	2
6	321739	EYE BOLT - TIE DOWN 304	12
7	321740	KNOB - TIE DOWN 304	12
8	321778	CHUTE - WLDMT UPPER LH 304	1
9	321779	CHUTE - WLDMT UPPER RH 304	1
10	34858	CAPSCREW - .375-16NC X 1.5 SS	12
11	72054	NUT - .375-16NC SS LOCK	12

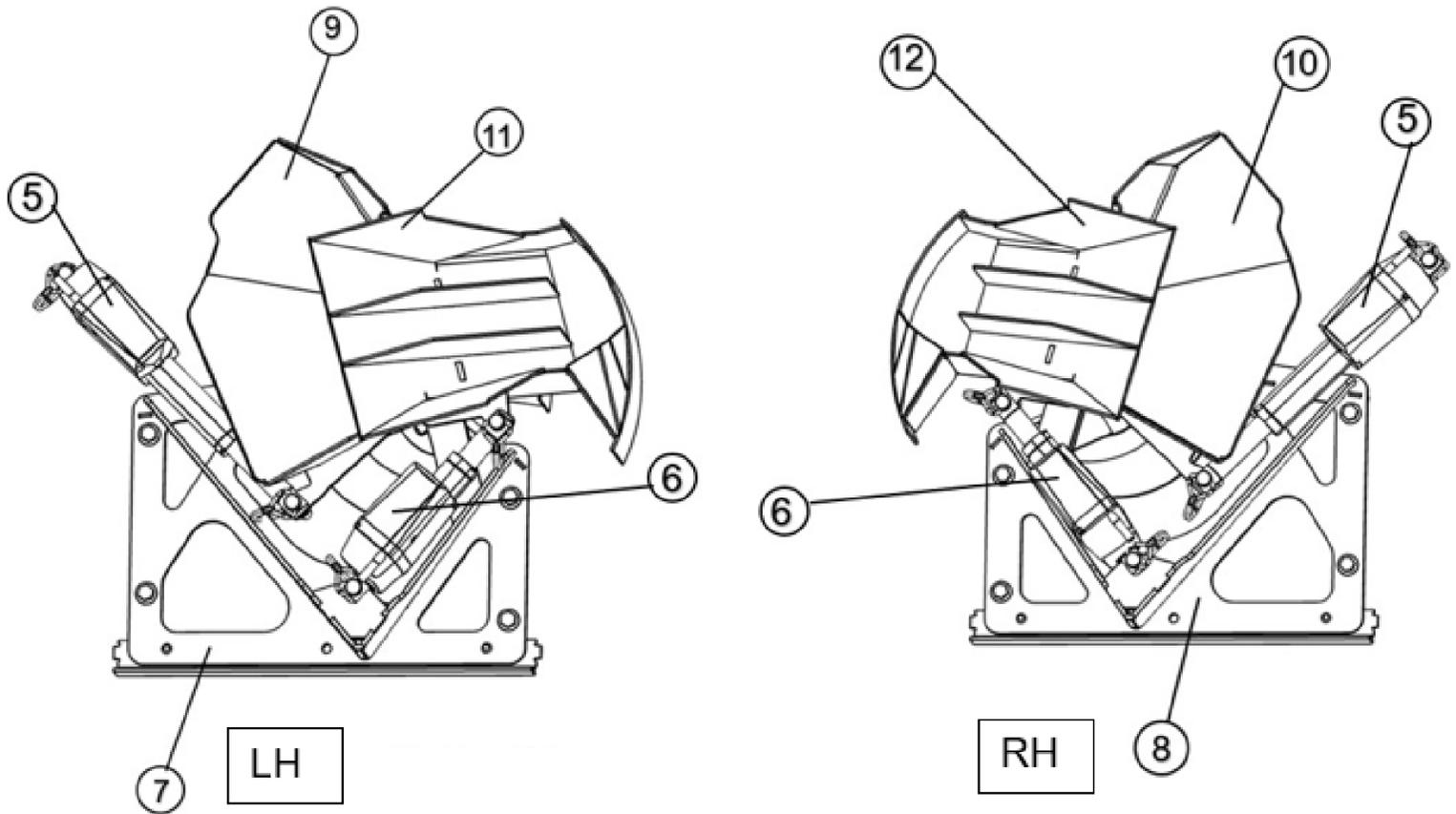
# Chutes

See next page for parts list.



Exploded view of chute

Chutes cont.

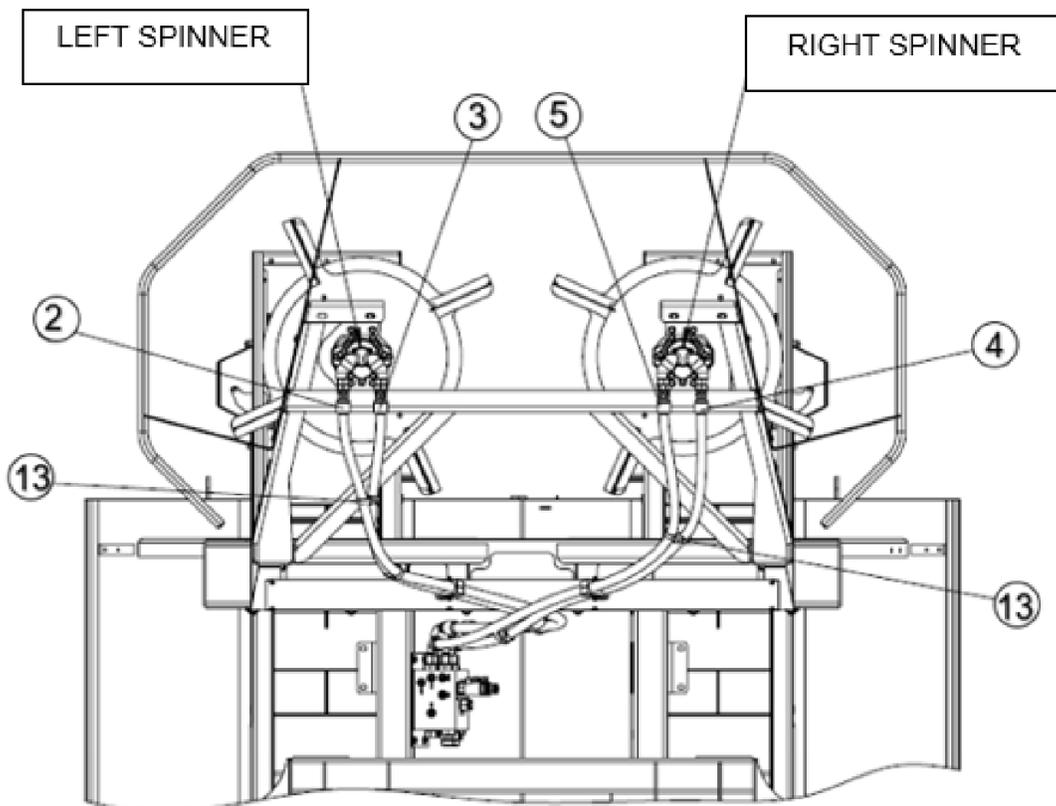
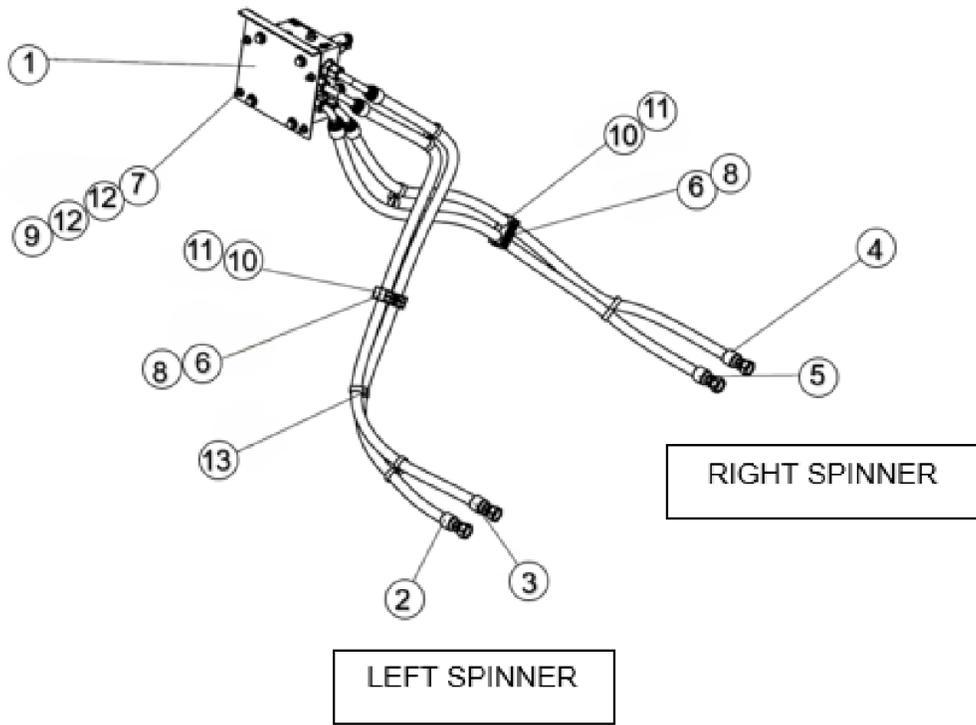


Key	Part No.	Description	Qty
1	36398	CAPSCREW - .375-16NC X 1 SS	8
2	36425	WASHER - .375 SS FLAT	8
3	72054	NUT - .375-16NC SS LOCK	8
4	322464	PIN - LOCK .375 X 1.125 SS	8
5	320881	ACTUATOR - 150MM	2
6	320882	ACTUATOR - 75MM	2
7	322287	CHUTE - WLDMT MOUNT LOWER LH	1
8	322286	CHUTE - WLDMT MOUNT LOWER RH	1
9	322447	CHUTE - WLDMT INNER LH 304	1
10	322446	CHUTE - WLDMT INNER RH 304	1
11	321667	CHUTE - WLDMT OUTER LH 304	1
12	321676	CHUTE - WLDMT OUTER RH 304	1
13	321733	BEARING - FLANGE .625 X 1.0	4

# Hydraulics

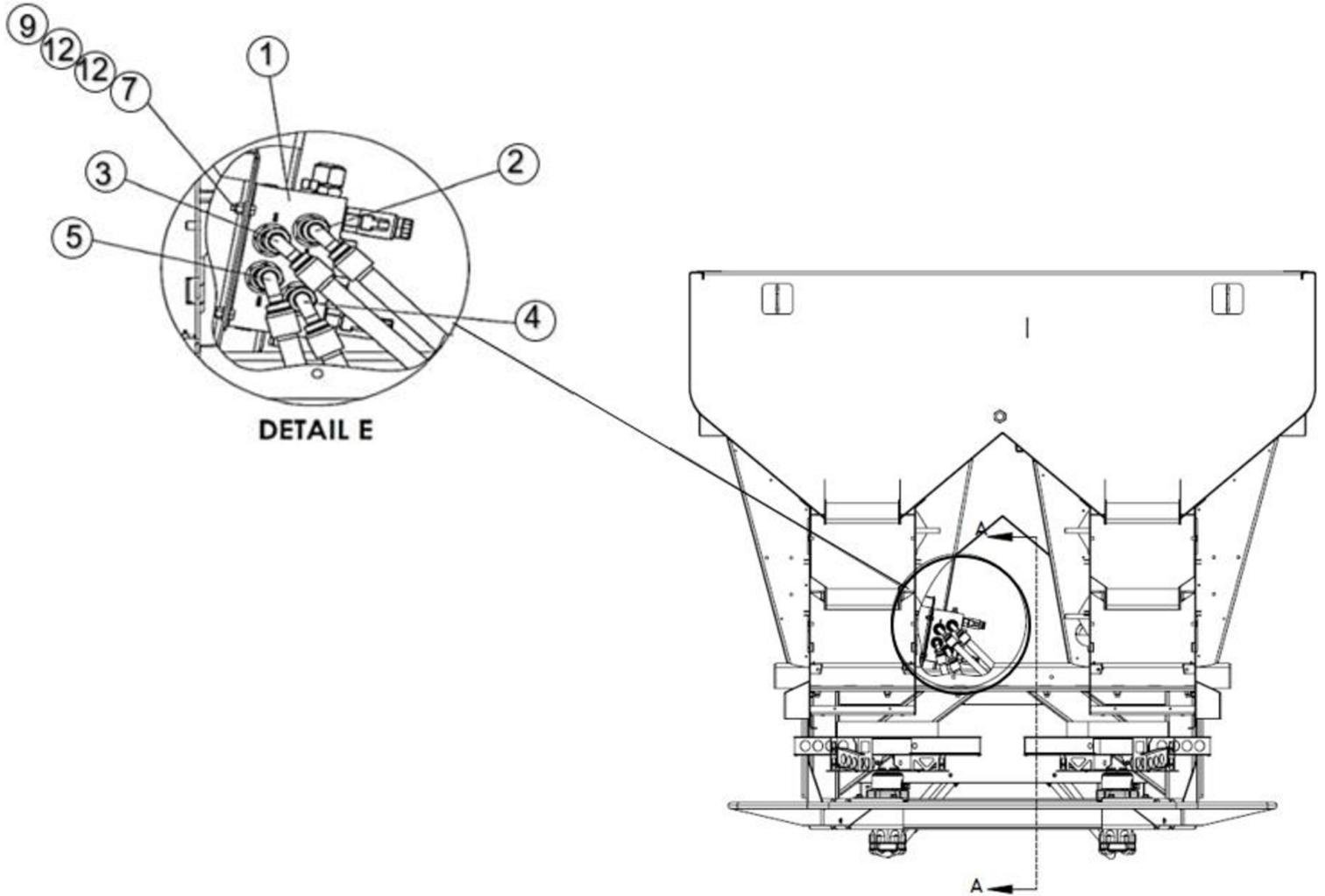
## Group Spinners

See next page for part list.

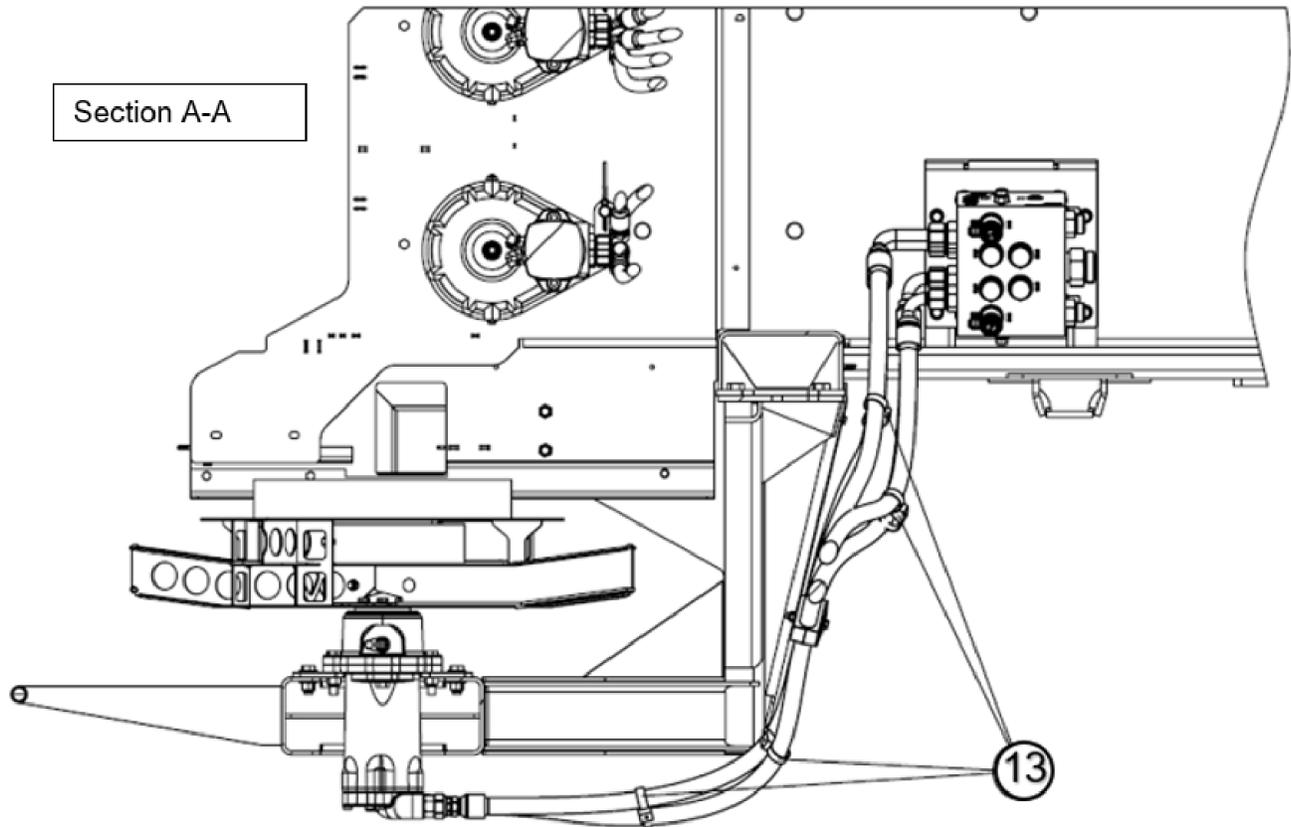


### Hydraulics cont.

See next page for parts list.

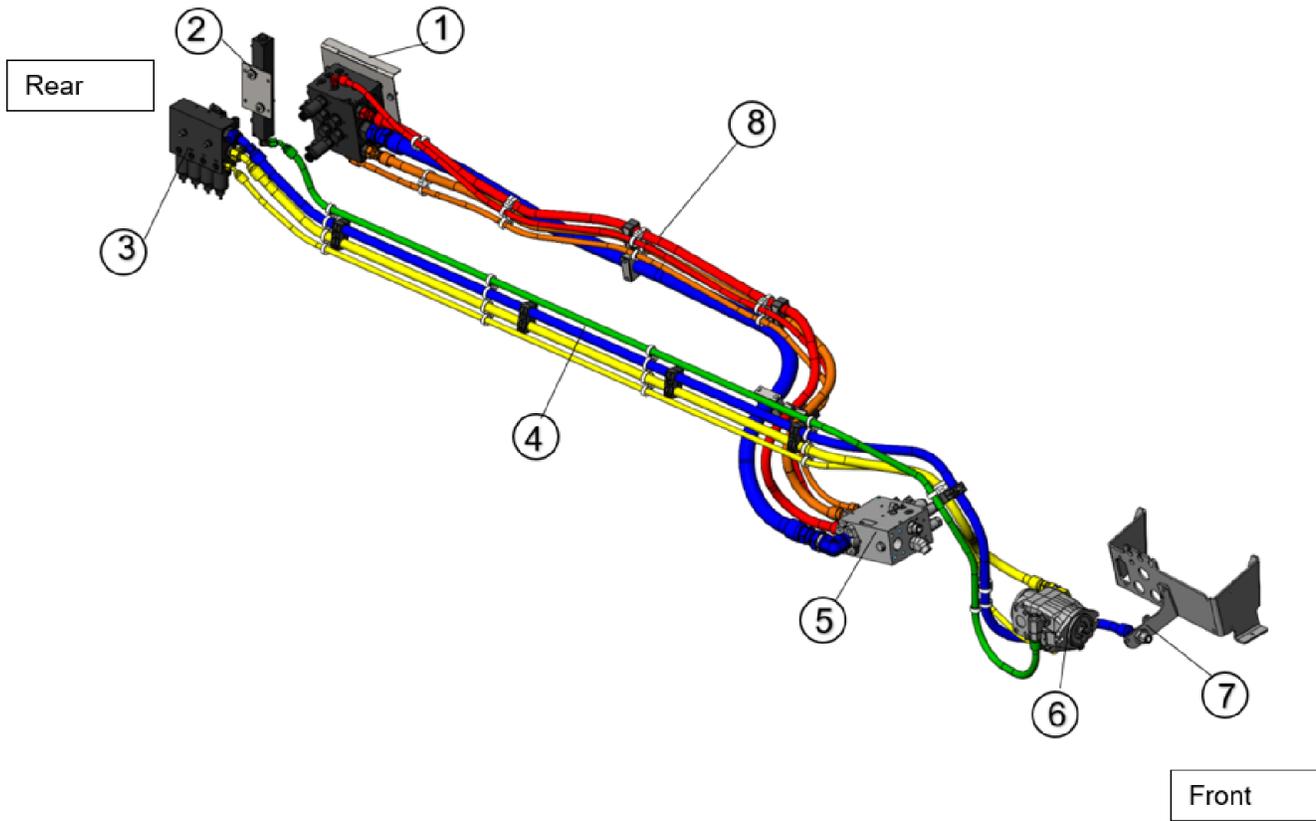


Hydraulics cont.



Key	Part No.	Description	Qty
1	323645	SPINNER VALVE MOUNTING ASSY (SEE NEXT PAGE.)	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

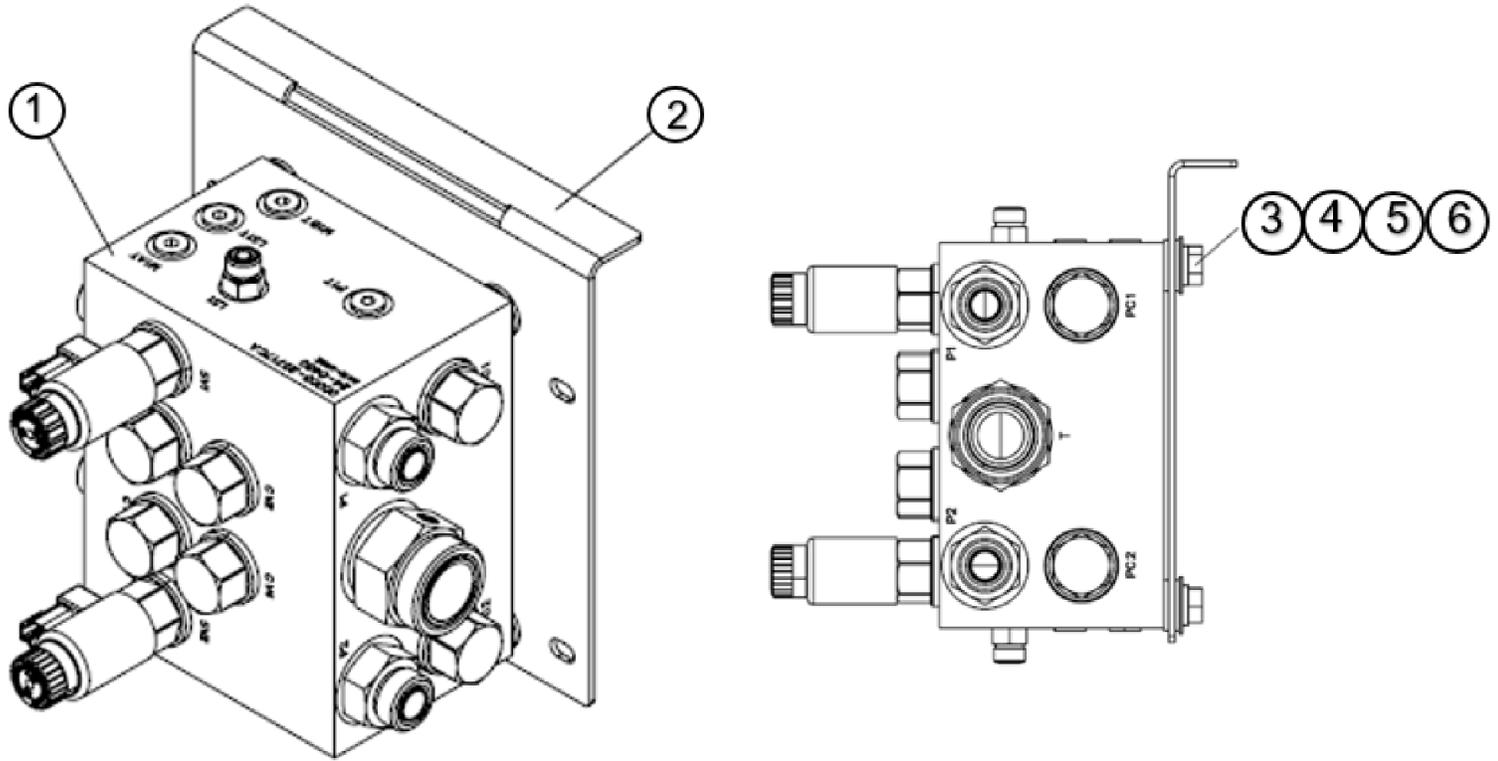
Hydraulics cont.



Key	Description	Refer to page #
1	SPINNER CONTROL VALVE (SPREADER)	20
2	CASE DRAIN	23-26
3	CONVEYOR CONTROL VALVE (SPREADER)	29
4	CONVEYOR CONTROL VALVE HOSES (SPREADER)	22
5	SPINNER VALVE (CHASSIS)	20
6	HYDRAULIC PUMP (CHASSIS)	16-18
7	BULKHEAD (CHASSIS)	16-18
8	SPINNER CONTROL VALVE HOSES (SPREADER)	20

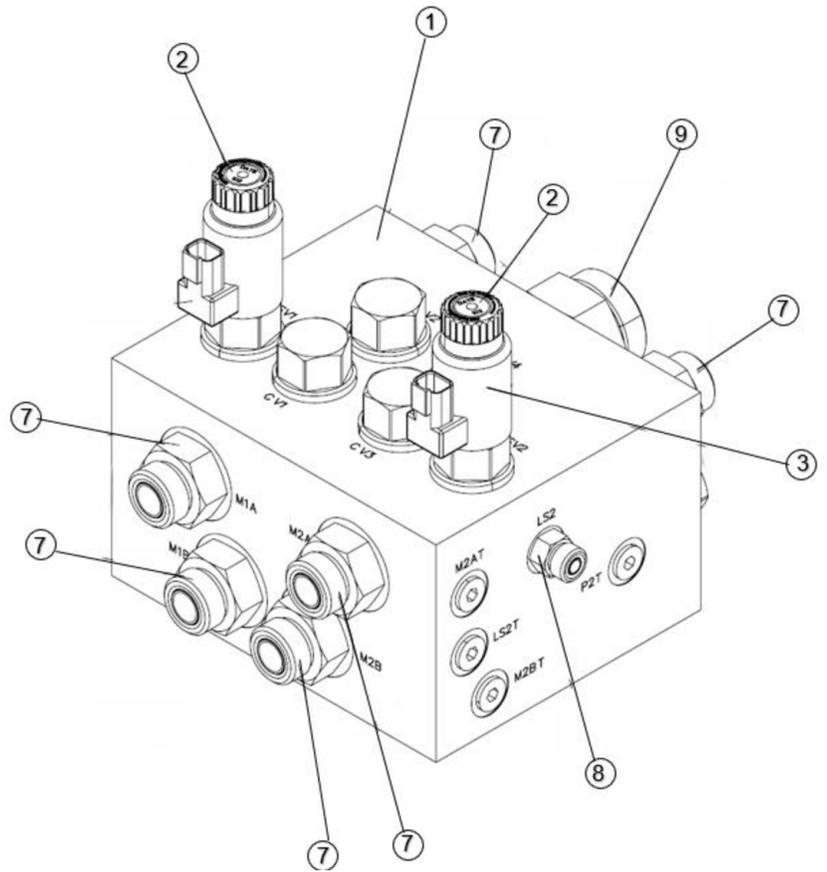
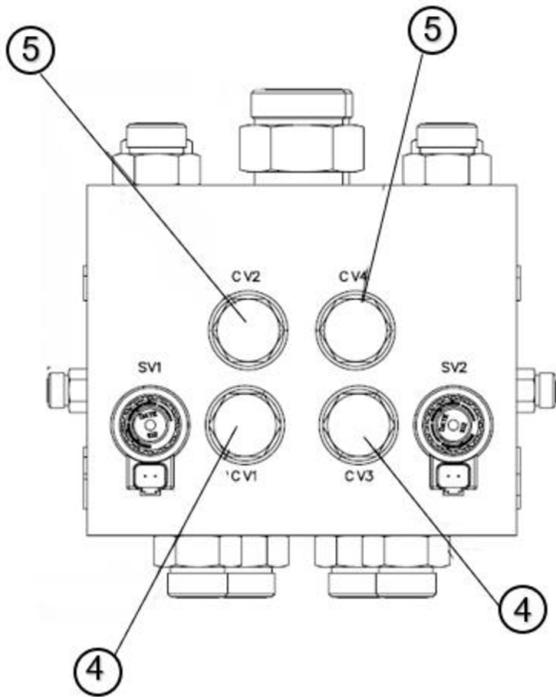
# Valve

## Assy Mounting Spinner



Key	Part No.	Description	Qty
1	323644	VALVE- ASSY SPINNER CONTROL	1
2	322934	PLATE - MOUNT VALVE 304	1
3	89521	CAPSCREW -.5-13NC X 1 GR8	4
4	36422	WASHER -LOCK .5 SS	4
5	36426	WASHER -FLAT .5 SS	4
6	321715	WASHER - STEP .638 ID X .875 OD	8
7	301315	LOCTITE - 243	-

# Spinner Control Valve Assembly

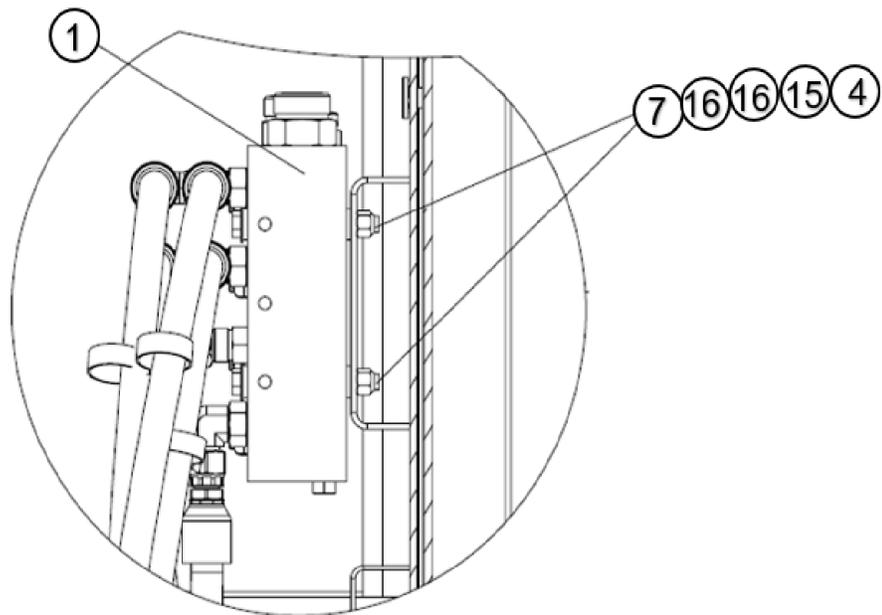
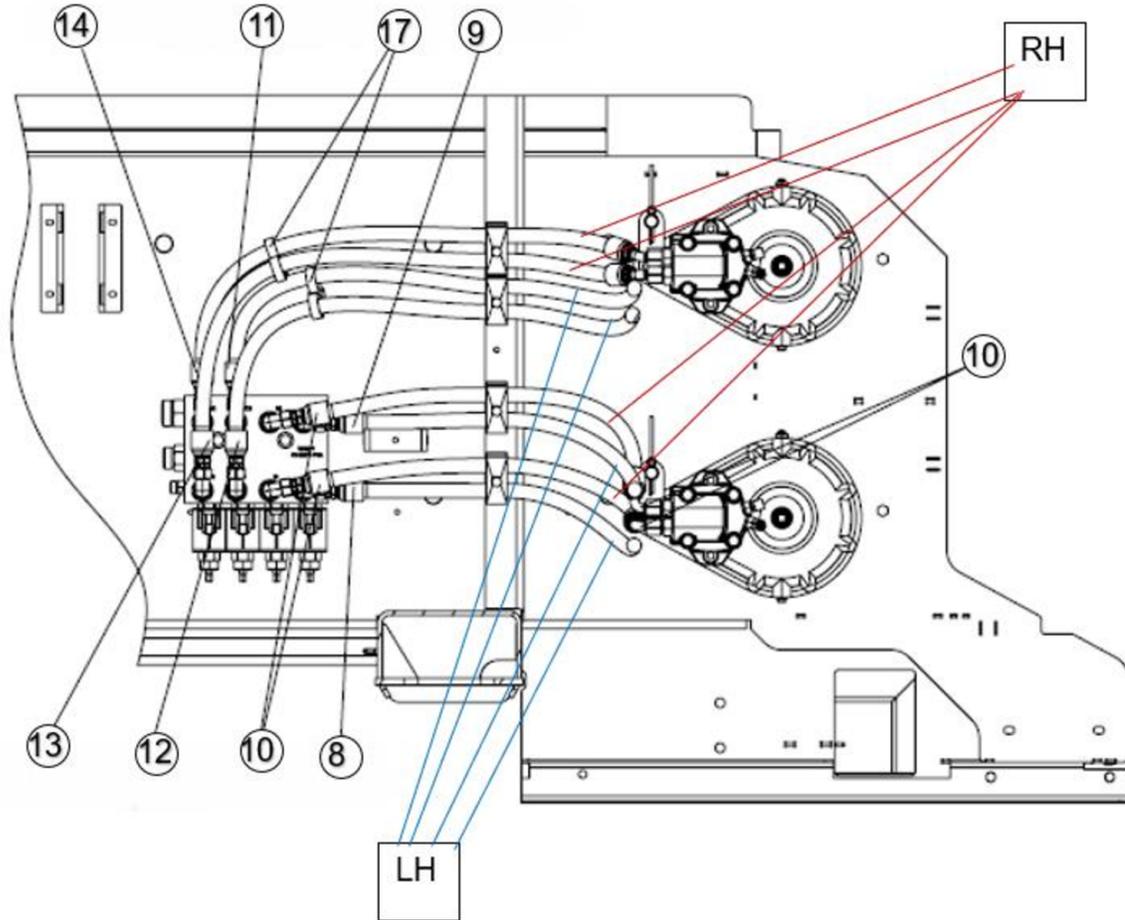


Key	Part No.	Description	Qty
1	323644	VALVE - ASSY SPINNER CONTROL (INCLUDES ITEMS 2-8)	1
2	322372	VALVE - FLOW CONTROL 60GPM	2
3	317382	COIL - 12 VDC DEUTSCH	3
4	322368	VALVE - CHECK 50PSI	4
5	322369	VALVE - CHECK 100PSI	5
6	322371	VALVE - CHECK	6
7	313184	FITTING - 12-16 520120	6
8	313455	FITTING - 6-6 520120	2
	*322406	* SEAL KIT NOT PICTURED	-
	*324574	* COIL NUT NOT PICTURED	-

\* - Not Shown  
 NOTE: Seal kit and Coil nut are service parts for the 322372 valve.

# Conveyor Hydraulics

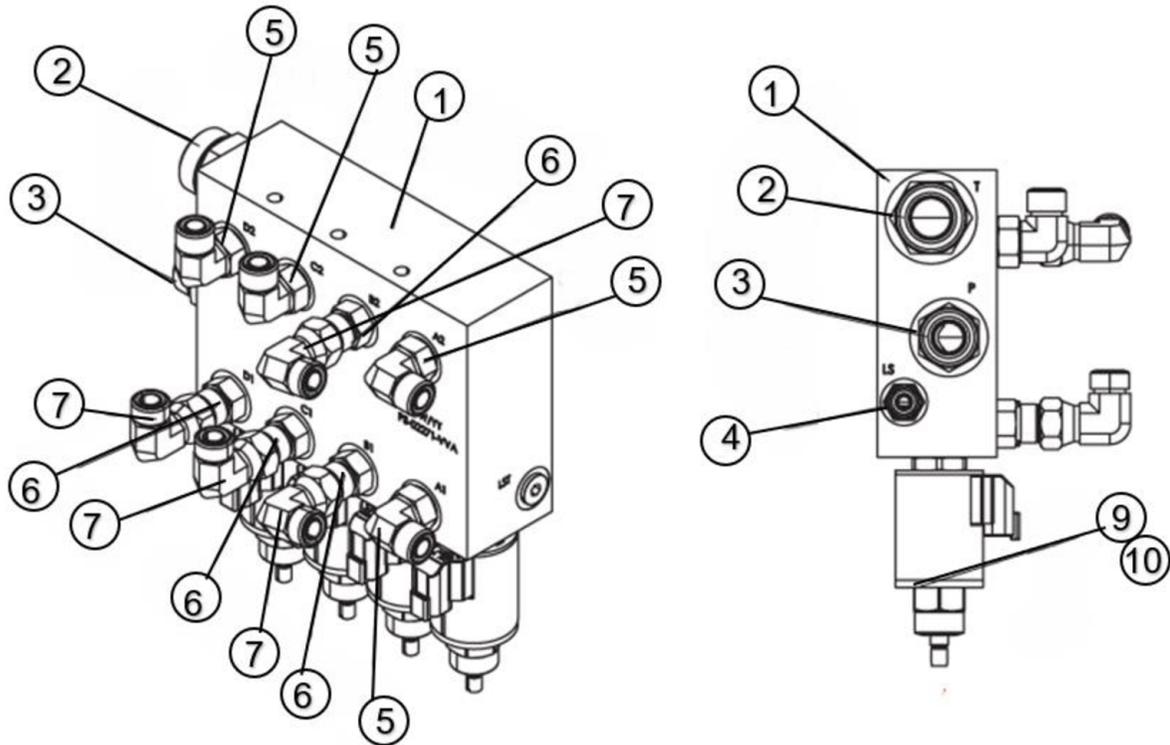
See next page for part numbers.



## Conveyor Hydraulics cont.

Key	Part No.	Description	Qty
1	322898	VALVE - ASSY CONVEYOR CONTROL	1
2	310649	CLAMP - TUBING TWIN .84"	4
3	42221	NUT - LOCK .313-18NC SS	4
4	72054	NUT - LOCK .375-16NC SS	2
5	310688	PLATE - COVER HOSE CLAMP 304	4
6	71830	CAPSCREW - .313-18NC X 2.5 SS	4
7	96879	CAPSCREW - .375-16NC X 3.5 SS	2
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 100R19	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	302099	WASHER - STEP .38ID X .53OD X .13THK	4
16	36425	WASHER - FLAT .375 SS	2
17	310648	TIE - DUAL CLAMP	2

# Conveyor Control Valve Assembly

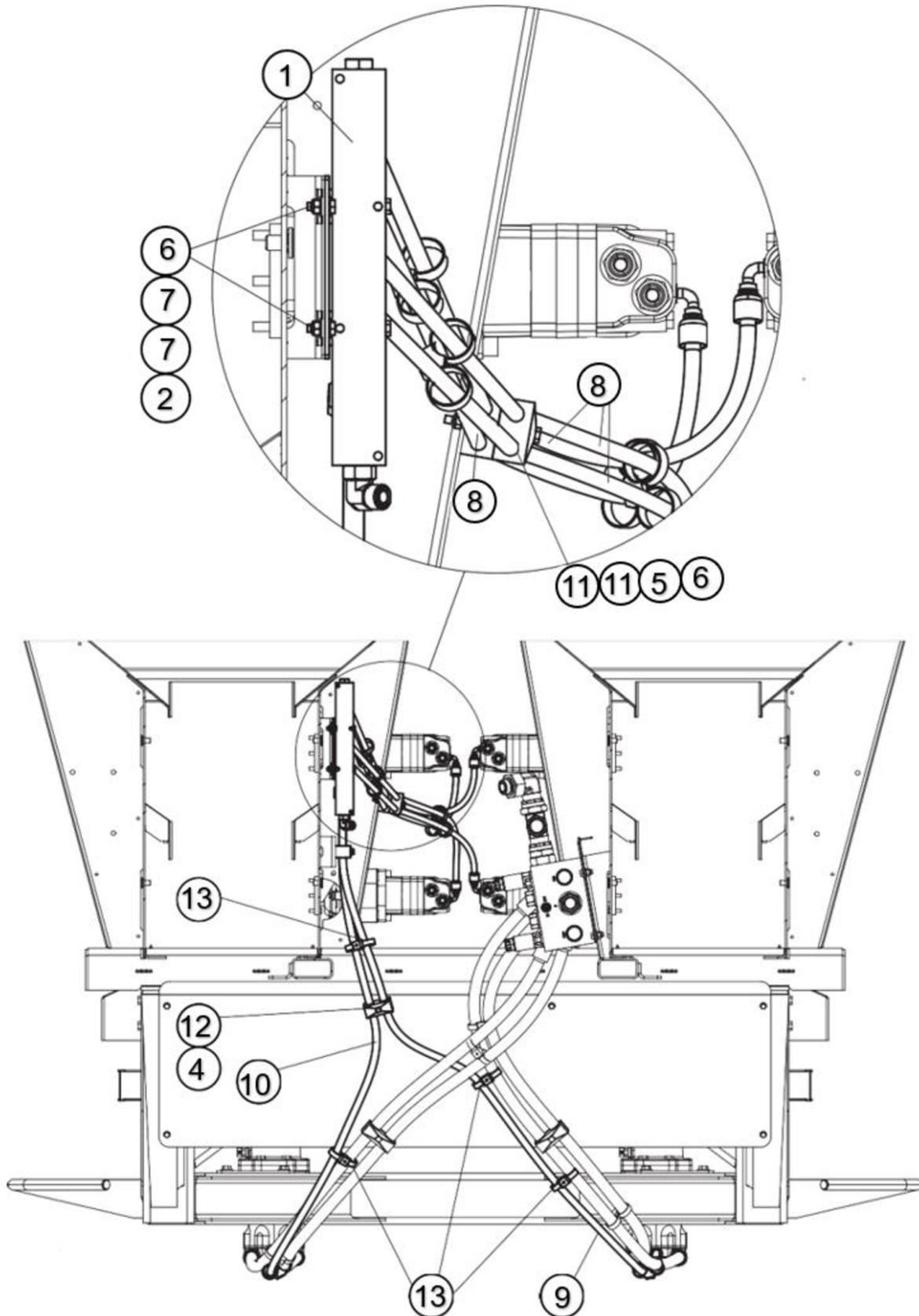


Key	Part No.	Description	Qty
1	322898	VALVE - ASSY CONVEYOR CONTROL	1
2	312655	FITTING - 16-16 520120	1
3	313450	FITTING - 12-12 520120	1
4	313455	FITTING - 6-6 520120	1
5	313451	FITTING - 8-8 520220	4
6	313454	FITTING - 8-8 520120	4
7	304306	FITTING - 8-8 520221	4
9	320885	VALVE - FLOW CONTROL 8GPM W/COIL	4
10	315866	COIL - 12VDC DEUTSCH DT04-2P	1
	*324575	* SEAL KIT NOT SHOWN	-

\* - Not Shown

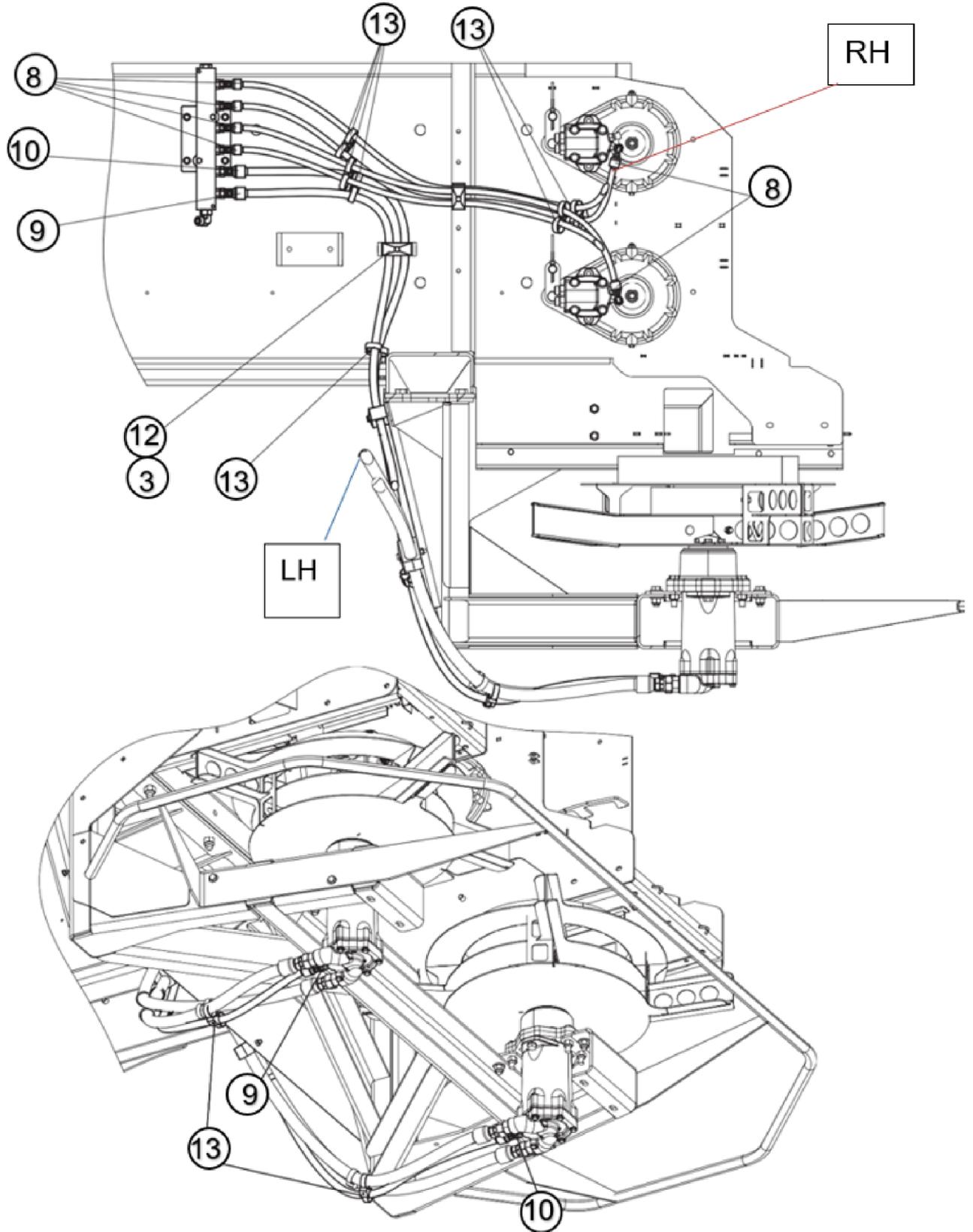
**Note:** Seal kit is a service part for the 320878 valve.

# Case Drain Group

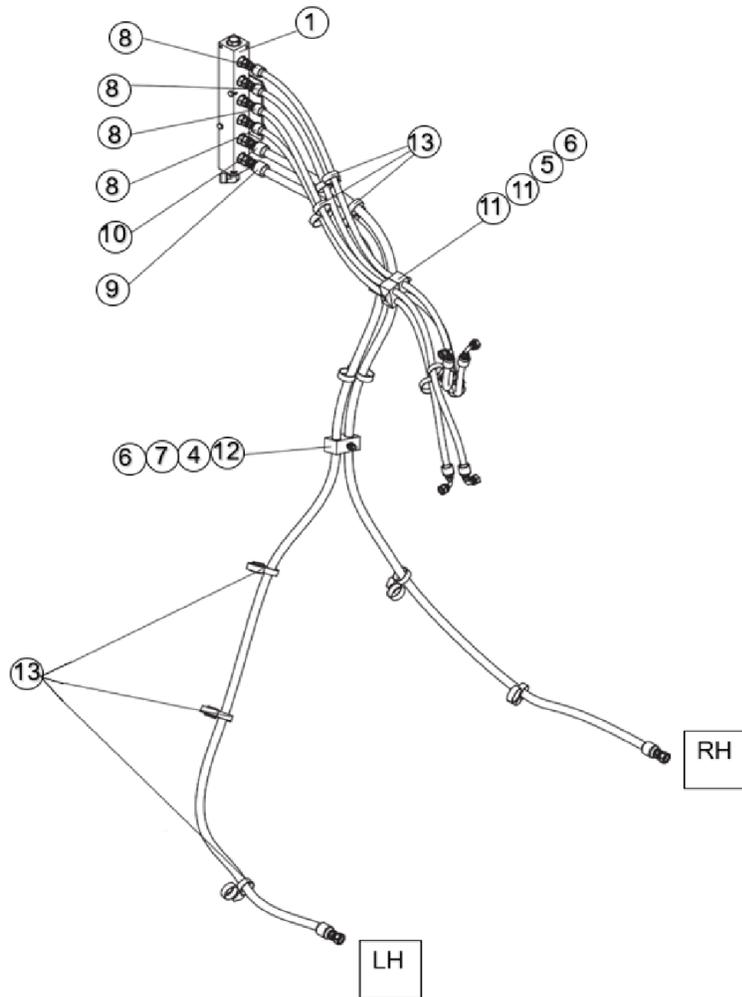


### Case Drain Group Cont.

See next page for parts list.

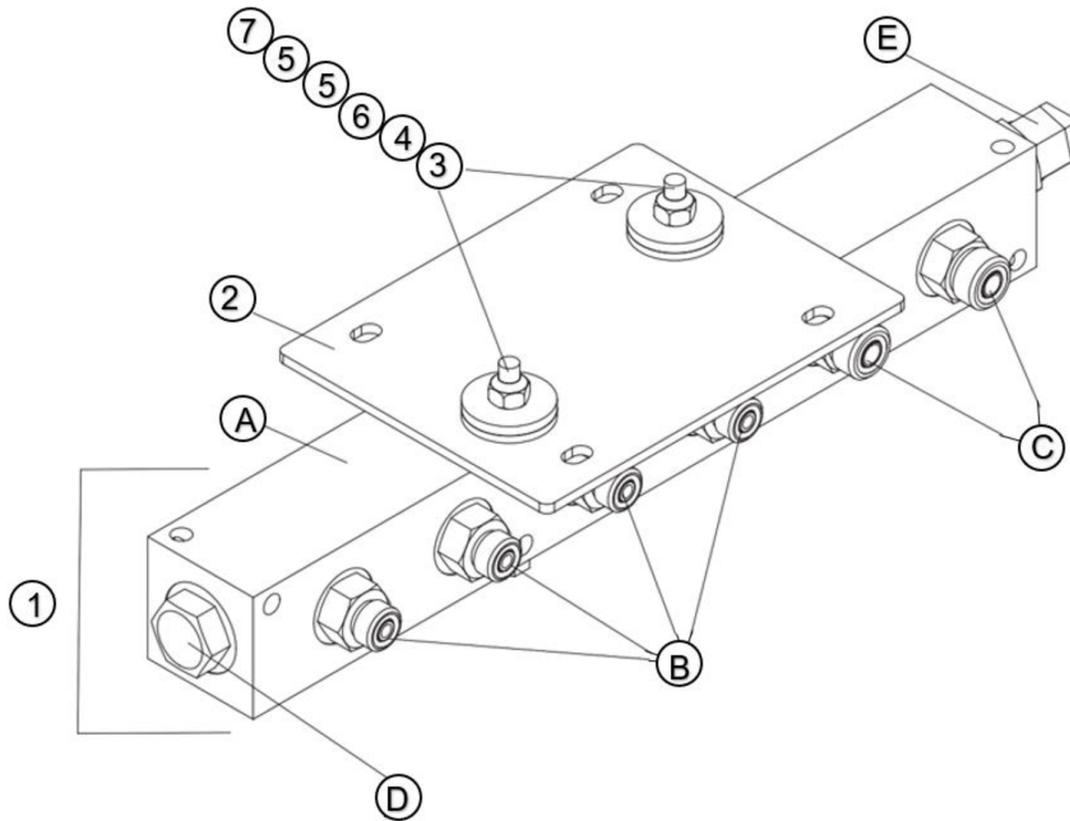


Case Drain Group Cont.



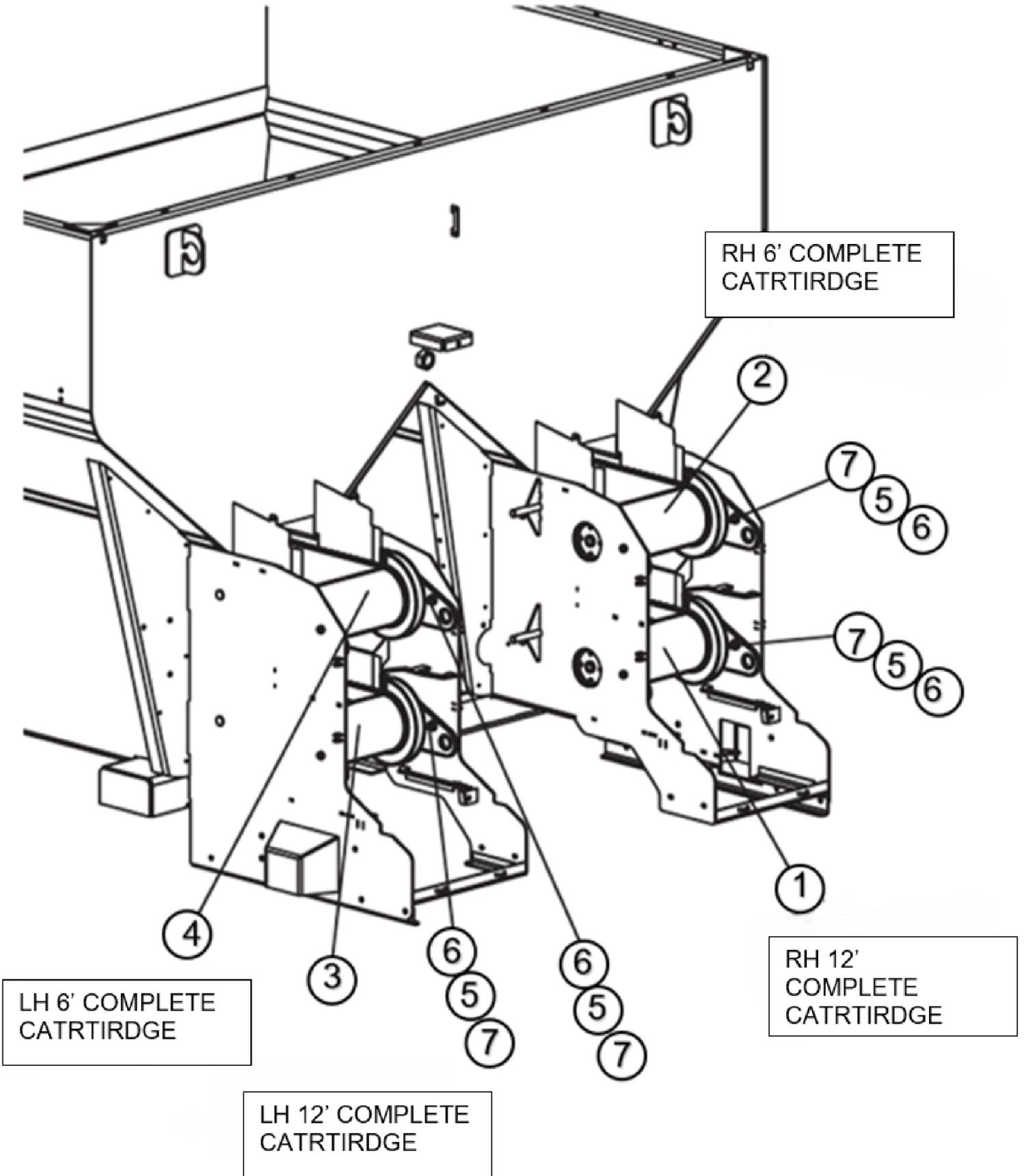
Key	Part No.	Description	Qty
1	-	CASE DRAIN MOUNTING ASSEMBLY	1
2	36393	CAPSCREW - .25-20NC X .75 SS	4
3	-	SEE NEXT PAGE.	1
4	34501	CAPSCREW - .25-20NC X 2.5 SS	1
5	36396	CAPSCREW - .25-20NC X 3 SS	1
6	42034	NUT - .25-20NC SS LOCK	7
7	36423	WASHER - .25 SS FLAT	9
8	322895	HOSE - ASSY .25 X 46 100R19	4
9	321722	HOSE - ASSY .38 X 89 100R1	1
10	321723	HOSE - ASSY .38 X 86.5 100R19	1
11	300031	CLAMP - TUBING .5 TWIN	2
12	75036	CLAMP - TUBING TWIN .75	2
13	310648	TIE - DUAL CLAMP	11

# Case Drain Mounting Assembly

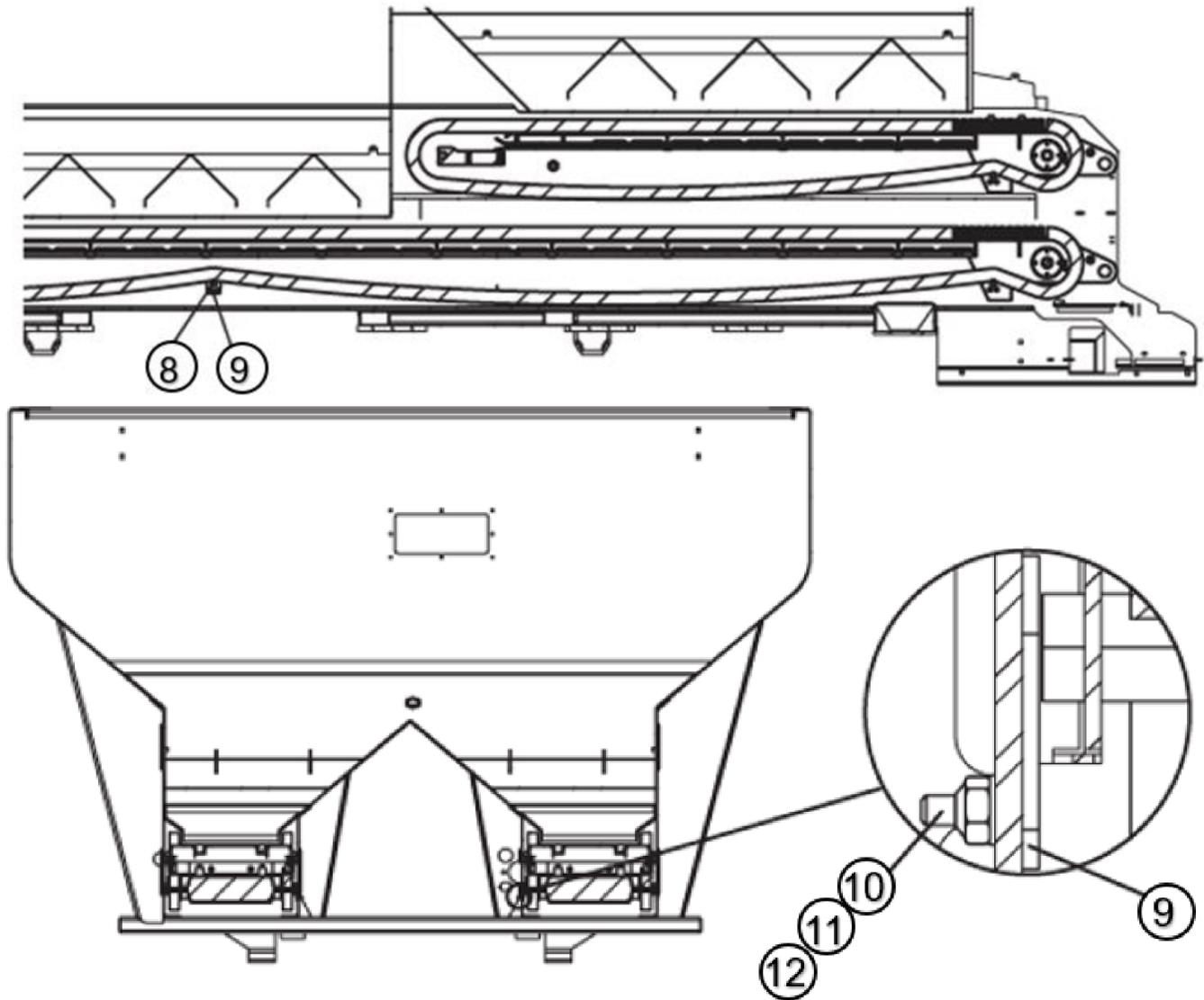


Key	Part No.	Description	Qty
	-	CASE DRAIN MOUNTING ASSY	-
1	321713	VALVE - ASSY CASE DRAIN	1
A	321714	VALVE - DISTRIBUTION	1
B	313447	FITTING - 4-6 520120	4
C	313455	FITTING - 6-6 520120	2
D	29804	FITTING - 8 090109A	1
E	313451	FITTING - 8-8 520220	1
2	321712	BRACKET - VALVE MOUNT	1
3	34866	CAPSCREW - .25-20NC X 2.75 SS	2
4	42034	NUT - .25-20NC SS LOCK	2
5	321715	WASHER - STEP .638ID X .875OD	4
6	321716	WASHER - .313ID X 1.125OD X 10GA 304	2
7	321717	SPACER - 304	2

# Cartridge – Assy Conv 12'



Cartridge -Assy Conv 12' cont.

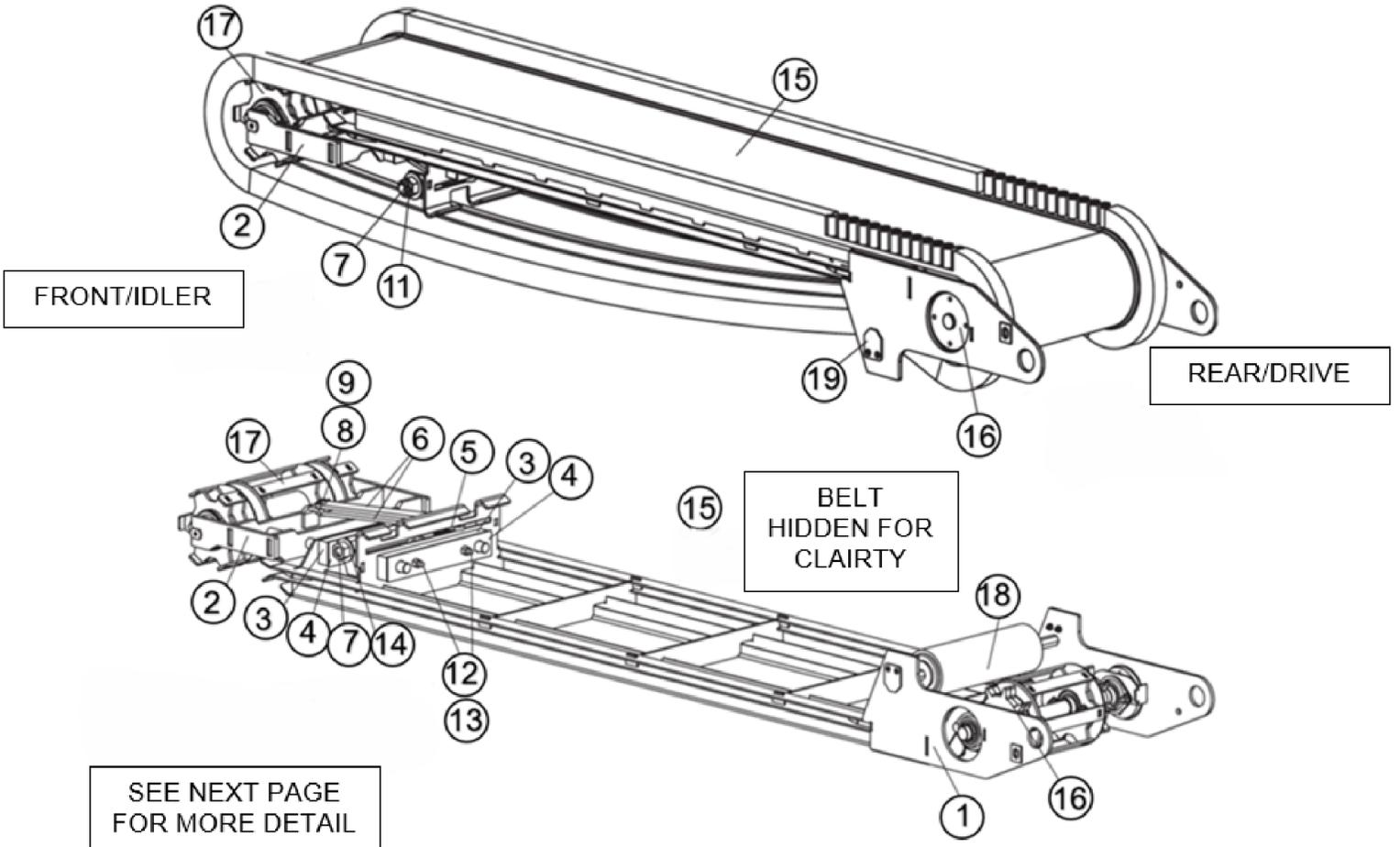


Key	Part No.	Description	Qty
1	322842	CARTRIDGE - ASSY RH CONV 12'	1
2	322843	CARTRIDGE - ASSY RH CONV 6'	1
3	322844	CARTRIDGE - ASSY LH CONV 12'	1
4	322845	CARTRIDGE - ASSY LH CONV 6'	1
5	36425	WASHER - FLAT .375 SS	8
6	36399	CAPSCREW - .375-16NC X 1.25 SS	8
7	72054	NUT - LOCK .375-16NC SS	8
8	322463	PULLEY - SNUBBER	2
9	323265	TAB - COVER 304	2
10	323271	FLAT HEAD - 10-24 .75 SS	4
11	171052	WASHER - FLAT #10 SS	4
12	56355	NUT - LOCK #10-24NC SS	4

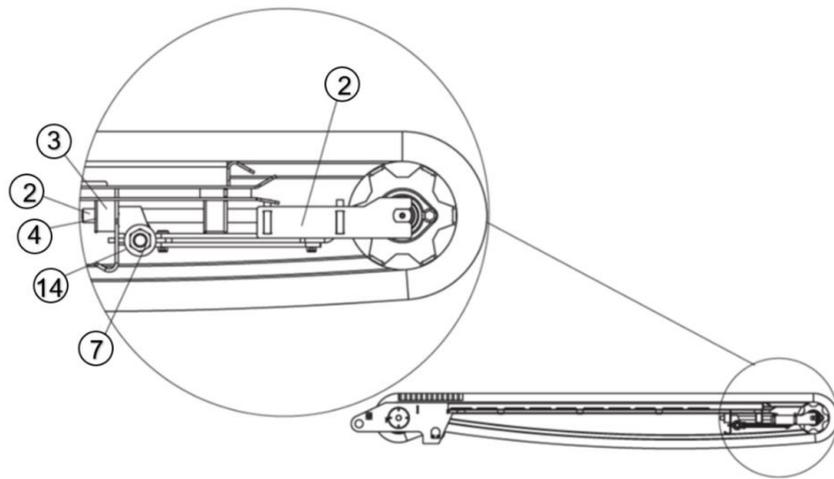
# Cartridge -Assy

Conv 12' cont.

See next page for parts list.



Cartridge -Assy  
Conv 12' cont.



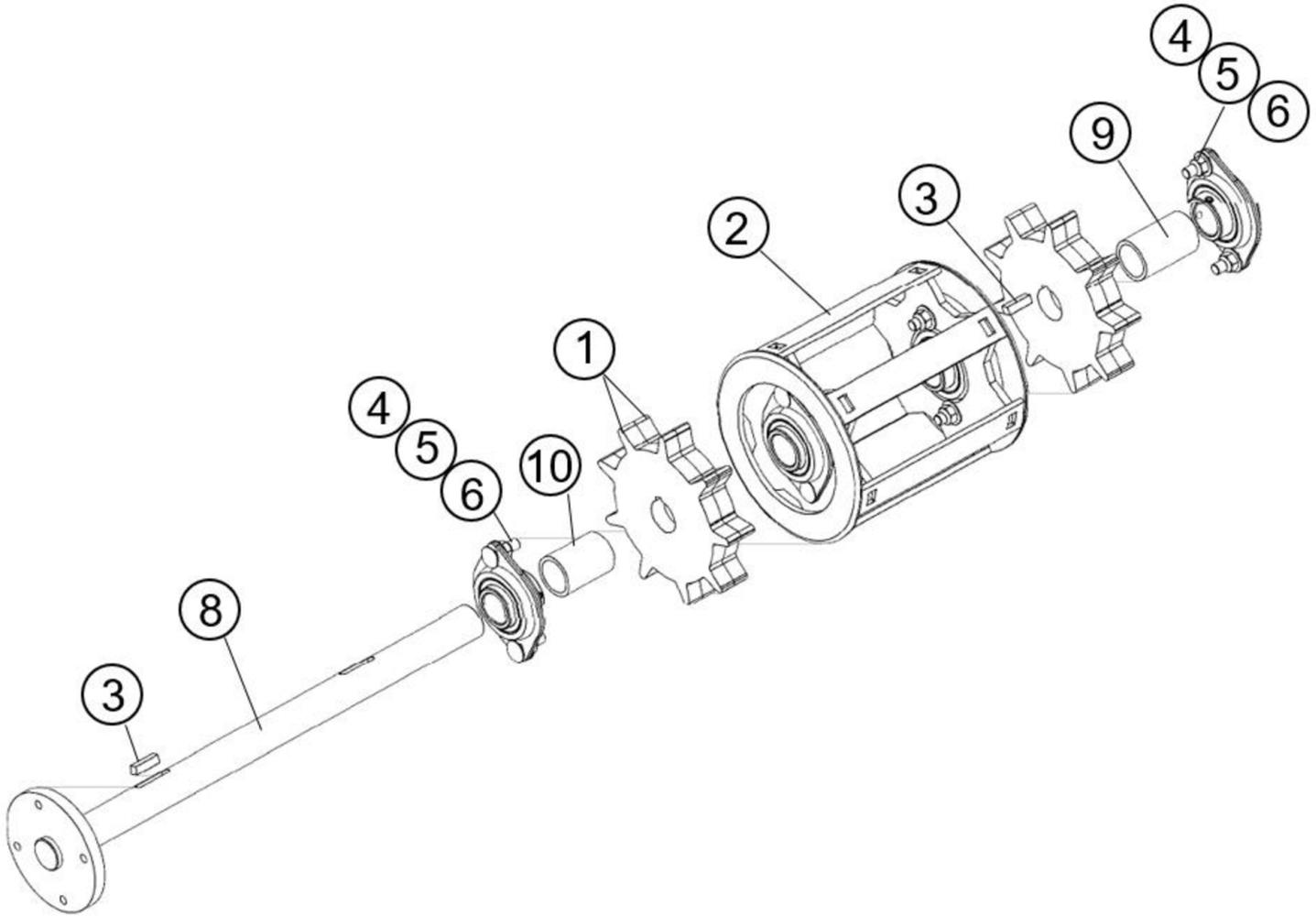
Item	Part No.	Description	Qty
1	322850	CARTRIDGE - WLDMT CONV 12' 304	1
2	321650	CARTRIDGE - WLDMT TAKEUP 304	1
3	321662	BLOCK - GUIDE UHMW	2
4	321646	GUIDE - 304	2
5	321651	NUT - WLDMT COUPLING SS	1
6	321645	PLATE - LINK 304	2
7	321664	SHAFT - WLDMT THREADED	1
8	88398	PIN - CLEVIS .5 X 1 SS	2
9	36427	PIN - COTTER .125 X 1 SS	2
10	321663	NUT - CASTLE .75-10UNC 304	1
11	324330	PIN - ROLL .156 X 1 SS	1
12	34859	CAPSCREW - .375-16NC X 2.0 SS	4
13	72054	NUT - LOCK .375-16NC SS	4
14	56408	WASHER - FLAT .75 304	2
15	321251	BELT - CONV 12' #6 5.63"	1
16	322832	SHAFT - ASSY DRIVE	1
17	322452	PULLEY - ASSY TAIL	1
18	322463	PULLEY - SNUBBER	1
19	323265	TAB - COVER 304	2
20	323271	FLAT HEAD - 10-24 .75 SS	4
21	171052	WASHER - FLAT #10 SS	4
22	56355	NUT - LOCK #10-24NC SS	4
23	*324590	CARTRIDGE -PULLER KIT *NOT SHOWN*	-

\* - Not Shown

**Note:** Available as a service kit to assist in replacement of a cartridge assembly.

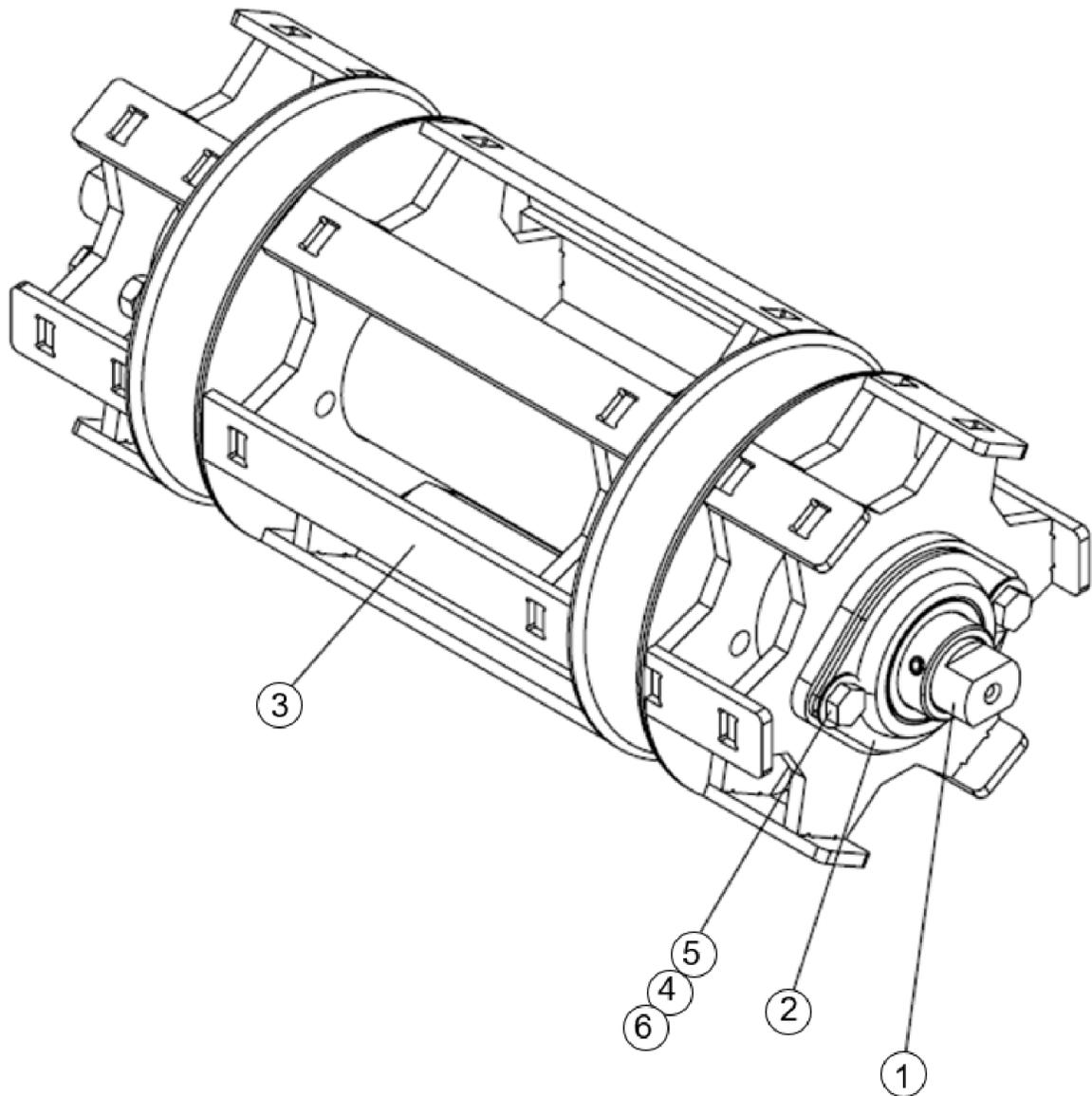
# Drive Shaft

See next page for parts list.



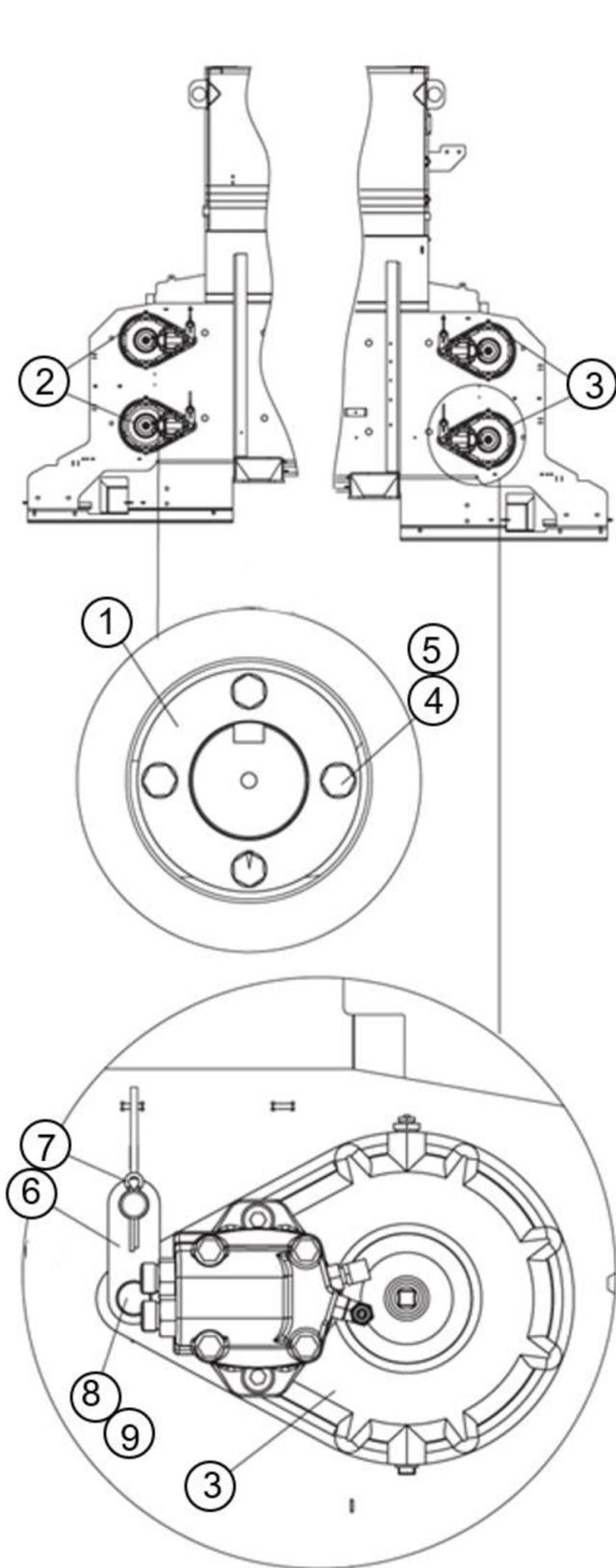
Key	Part No.	Description	Qty
	322832	SHAFT - ASSY DRIVE (Includes items 1-10)	1
1	321205	SPROCKET - 304	4
2	322828	ROLLER - WLDMT 304	1
3	321724	KEY - SQ .25 X .875	2
4	42221	NUT - .313-18NC SS LOCK	8
5	42639	BOLT - .313-18NC X 1 SS	8
6	36424	WASHER - .313 SS FLAT	8
7	321732	BEARING - 304	4
8	322833	SHAFT - WLDMT DRIVE 304	1
9	322837	SPACER - TUBE 304	1
10	322838	SPACER - TUBE 304	1

## Tail Pulley

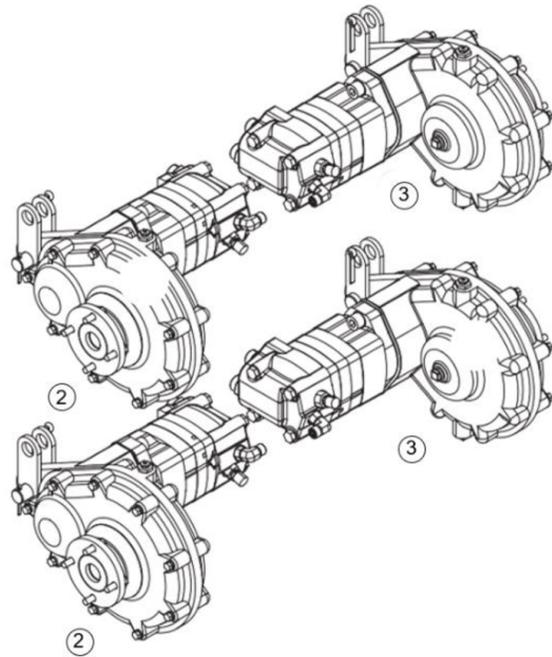


Key	Part No.	Description	Qty
1	322458	SHAFT - IDLER PULLEY 304	1
2	321732	BEARING - 304	2
3	322453	ROLLER - WLDMT TAIL	1
4	42221	NUT - LOCK .313-18NC SS	4
5	36397	CAPSCREW - .313-18NC X 1.25 SS	4
6	36424	WASHER - FLAT .313 SS	4

# Conveyor Gear Cases



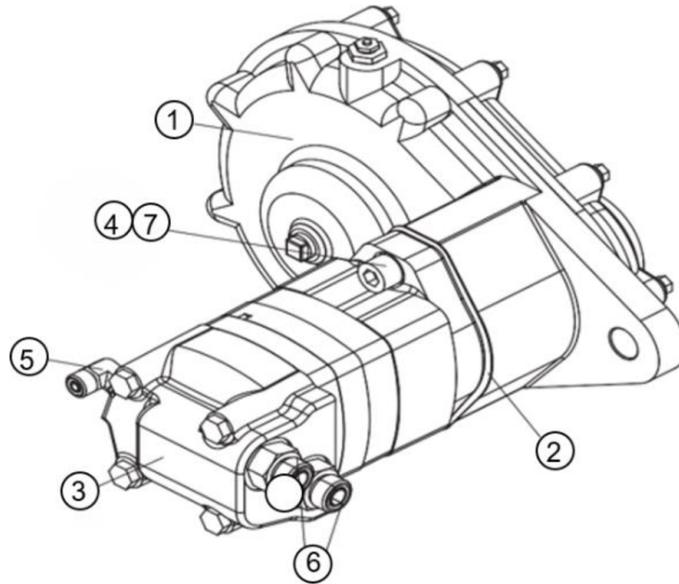
LH



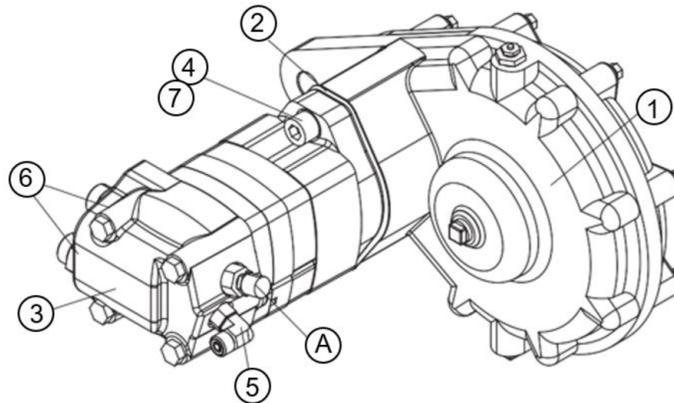
RH

Key	Part No.	Description	Qty
1	322883	SHAFT - WLDMT ADAPTER 304	4
2	322886	GEARCASE - ASSY 6:1 4.9 CID LH (SEE NEXT PAGE.)	2
3	322887	GEARCASE - ASSY 6:1 4.9 CID 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

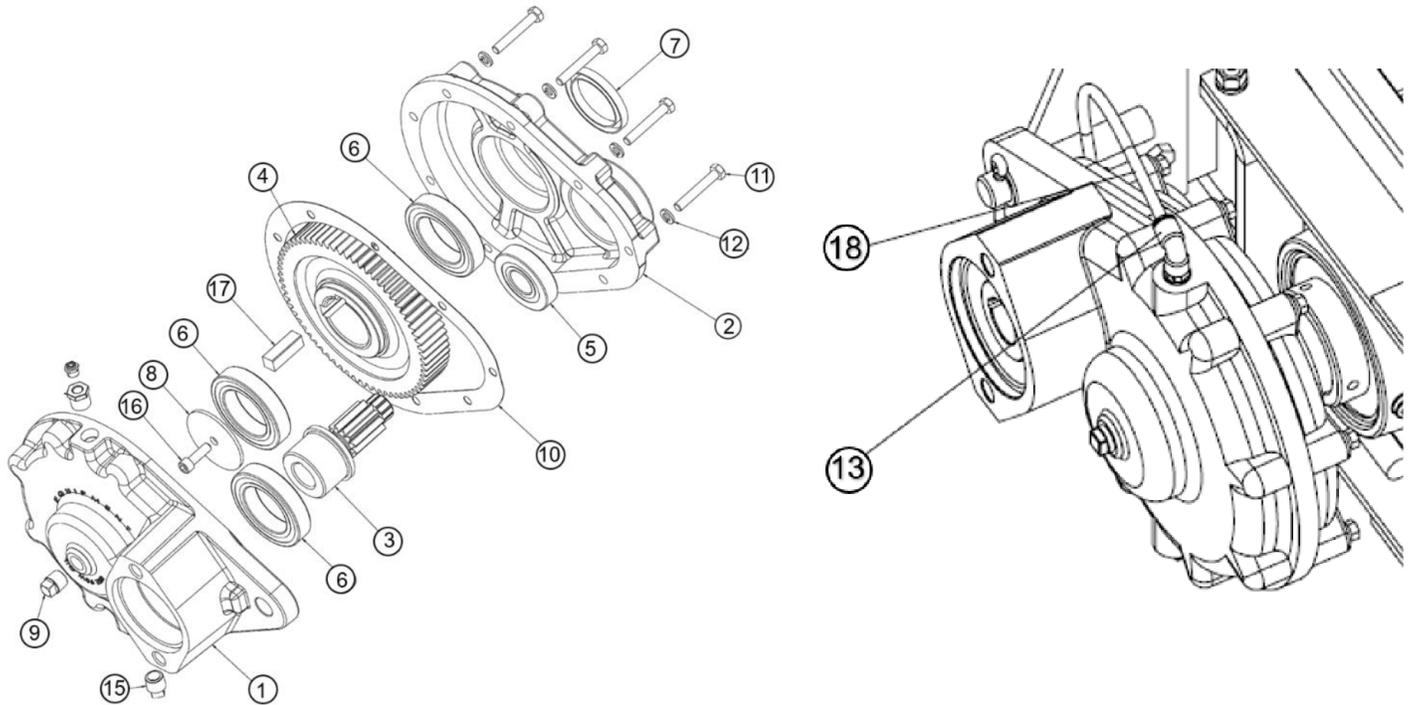


### Gear Case Assy - RH



Key	Part No.	Description	Qty
	322886	GEARCASE - ASSY 6:1 4.9CID LH	-
	322887	GEARCASE - ASSY 6:1 4.9CID RH	-
1	36671	GEAR CASE - 6:1 (SEE NEXT PAGE FOR SERVICE PARTS.)	1
2	74524	GASKET - SAE 101-2 B	1
3	320877	MOTOR - HYD 4.9CID	1
A	89709-AA	*SENSOR *NOT SHOWN*	1
B	*77938	*SEAL KIT *NOT SHOWN*	1
4	30227	WASHER - LOCK SET HD 5"	2
5	312654	FITTING - 4-4 520220	1
6	304309	FITTING - 8-10 520120	2
7	305098	SCREW - SOCKETHEAD .5-13NC X 1.75	2

## Gear Case Service Parts

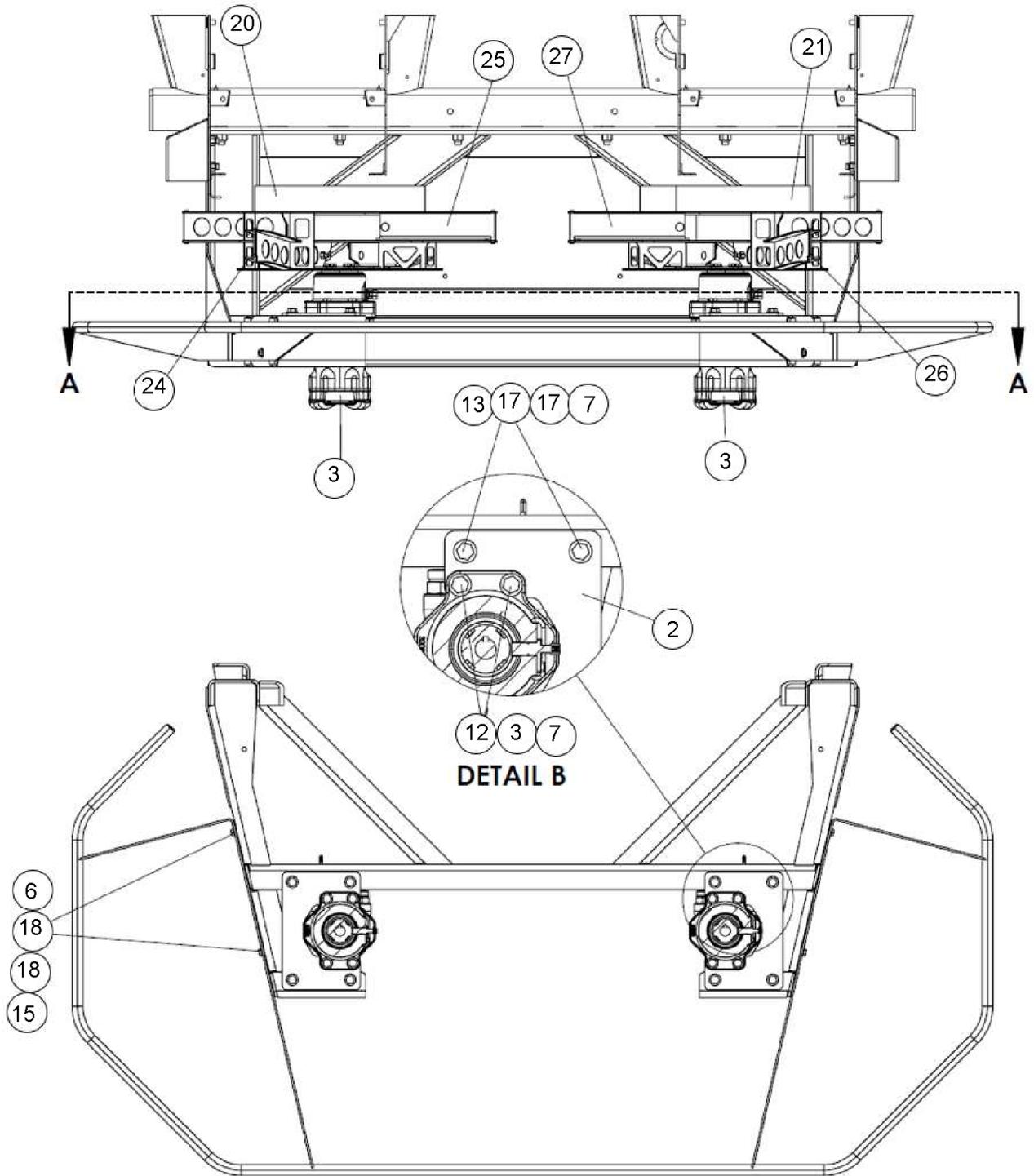


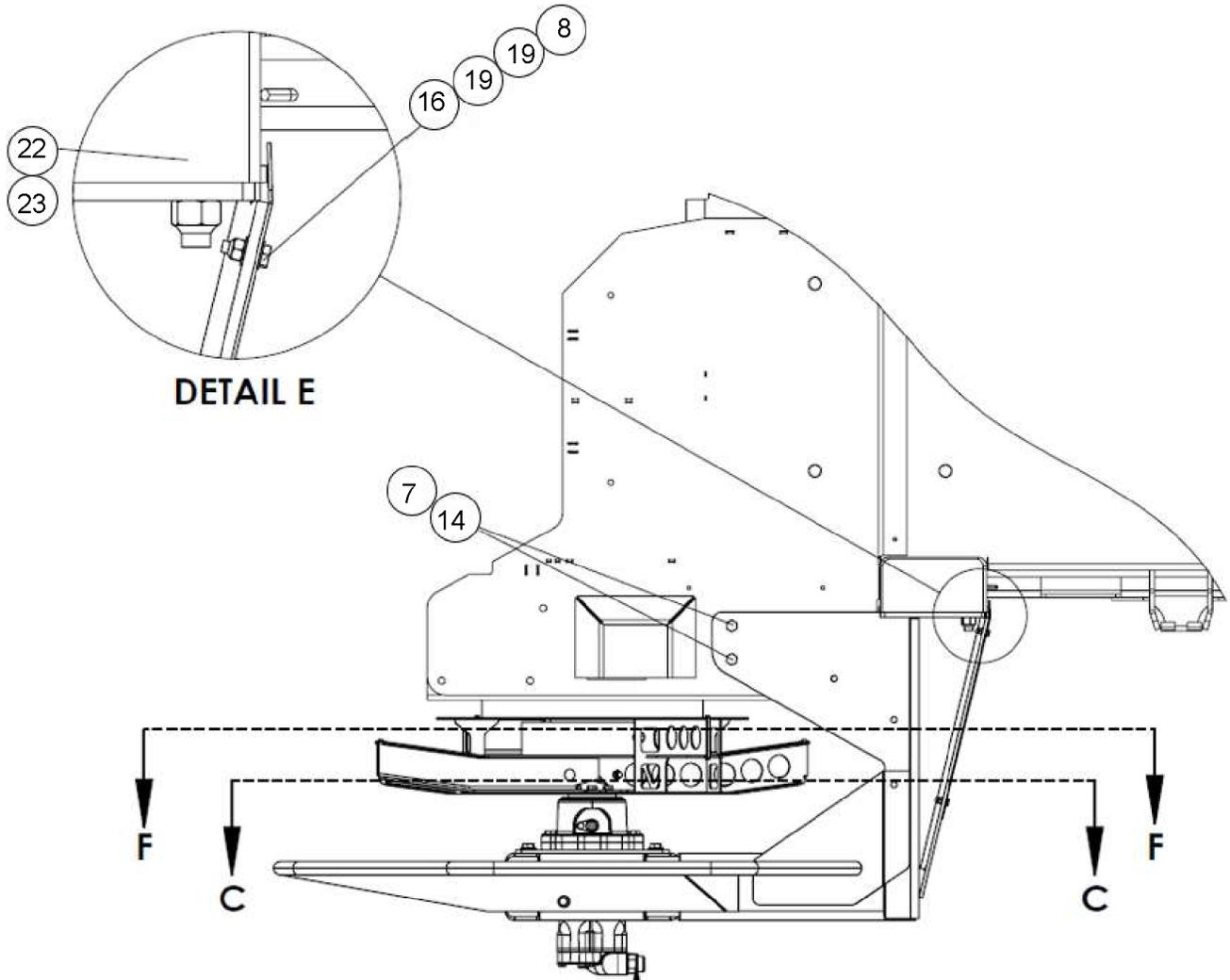
Key	Part No.	Description	Qty
	36671	GEAR CASE SERVICE ASSY	1
1	304559	HOUSING - OUTBOARD SNGL PINION	1
2	304560	HOUSING - INBOARD SNGL PINION	1
3	304561	GEAR - PINION 11T	1
4	304562	GEAR - DRIVEN 67T	1
5	37007	BEARING - BALL	1
6	37008	BEARING - BALL	3
7	37006	SEAL - OIL	1
8	38979	WASHER - RETAINER	1
9	6031	PLUG - 3/1 X 1/8 NPT	1
10	304563	GASKET - HOUSING SINGLE PINION	1
11	20040	CAPSCREW - .313-18NC X 2 GR5	9
12	20711	WASHER - .313 ZN LOCK	9
13	306891	FITTING - 4-2 630202K	1
14	* 311174	* V RING SEAL - ASSY GEARCASE	1
15	21490	PLUG - MAGNETIC SQ HEAD .38NPT	1
16	38980	SCREW - ALLEN HD .31-18NC X 1	1
17	37010	KEY - SQ .5 X 1.5	1
18	9005-0-7761	TUBING - .25 OD AIR BRAKE BLACK (FEET)	1.5

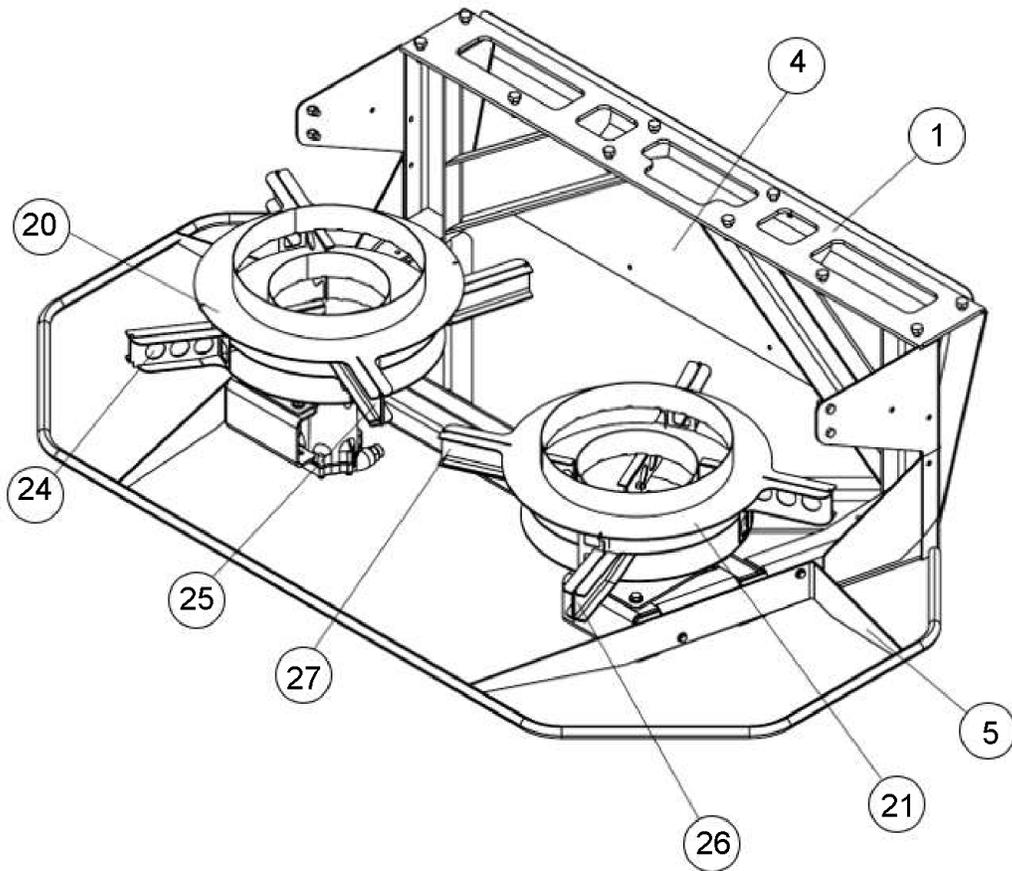
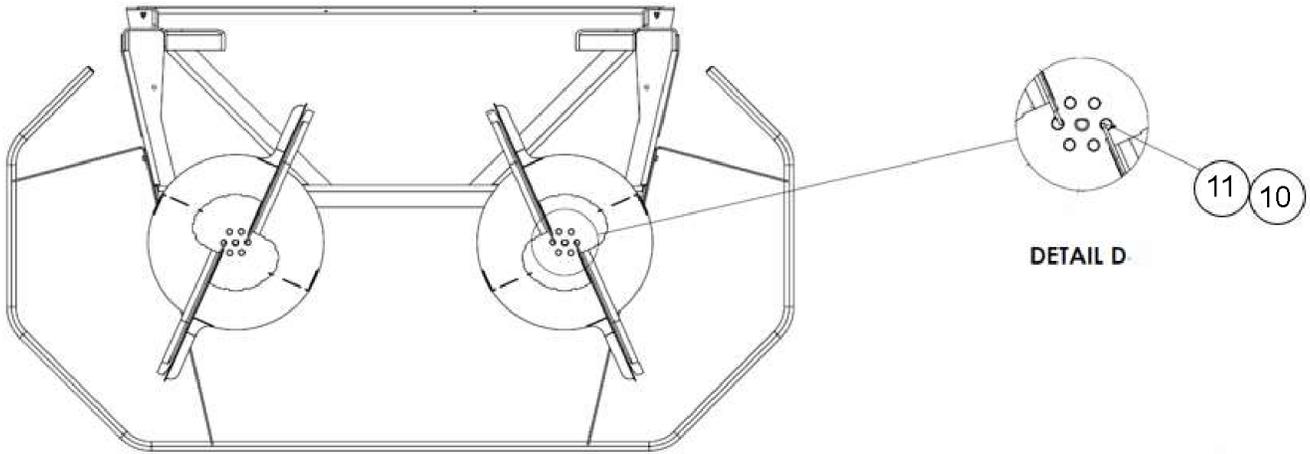
\* - Not Shown

Spinners

Spinner Assembly



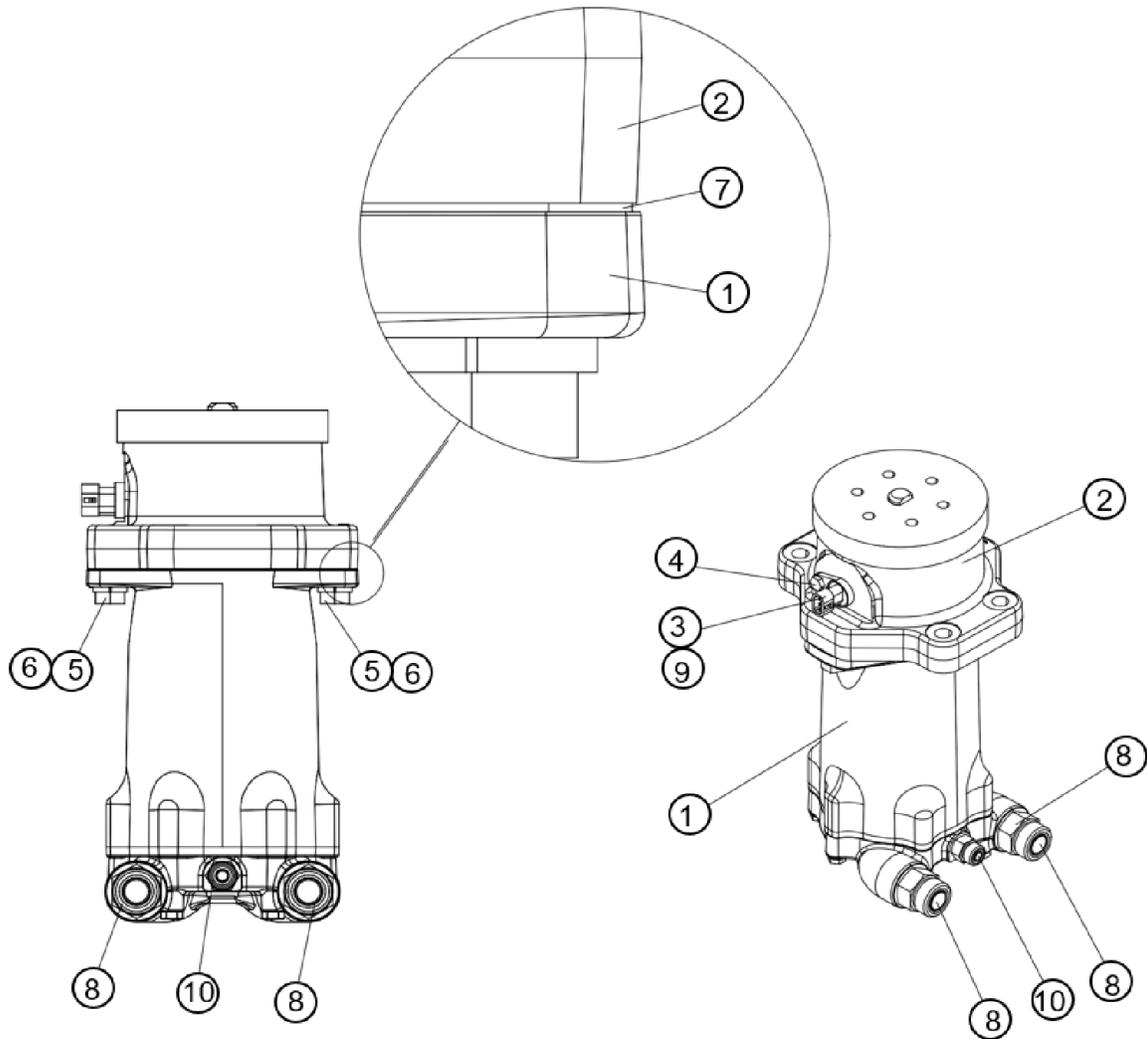




Key	Part No.	Description	Qty
	322484	SPINNER - ASSY	1
1	322465	FRAME - WLDMT SPINNER	2
2	322483	MOUNT - SPINNER MOTOR	2
3	321528	MOTOR - ASSY SPINNER	1
4	321443	PLATE - BACKSTOP PANEL	1
5	321530	GUARD - WLDMT SPINNER LOWER	1
6	72054	NUT - LOCK .375-16NC SS	12
7	39016	NUT - LOCK .5-13NC SS	20
8	42034	NUT - LOCK .25-20NC SS	6
9	36408	BOLT - CARRIAGE .375-16NC X 1 SS	8
10	36420	WASHER - LOCK .375 SS	12
11	36293	CAPSCREW - .375-16NC X .75 SS	12
12	42454	CAPSCREW - .5-13NC X 2.5 SS	8
13	36539	CAPSCREW - .5-13NC X 1.5 SS	8
14	36402	CAPSCREW - .5-13NC X 1.25 SS	4
15	36399	CAPSCREW - .375-16NC X 1.25 SS	4
16	36394	CAPSCREW - .25-20NC X .875 SS	6
17	322259	WASHER - FLAT .5 HD SS	16
18	36425	WASHER - FLAT .375 SS	8
19	36423	WASHER - FLAT .25 SS	12
20	322490	DISK - WLDMT LH 304	1
21	322531	DISK - WLDMT RH 304	1
22	58800	CAPSCREW - .625-11NC X 1.75 SS	10
23	41762	NUT - LOCK .625-11NC SS	10
24	324165	OVERLAY - BTM LH 304	2
25	324167	OVERLAY - TOP LH 304	2
26	324166	OVERLAY - BTM RH 304	2
27	324168	OVERLAY - TOP RH 304	2

# Spinners

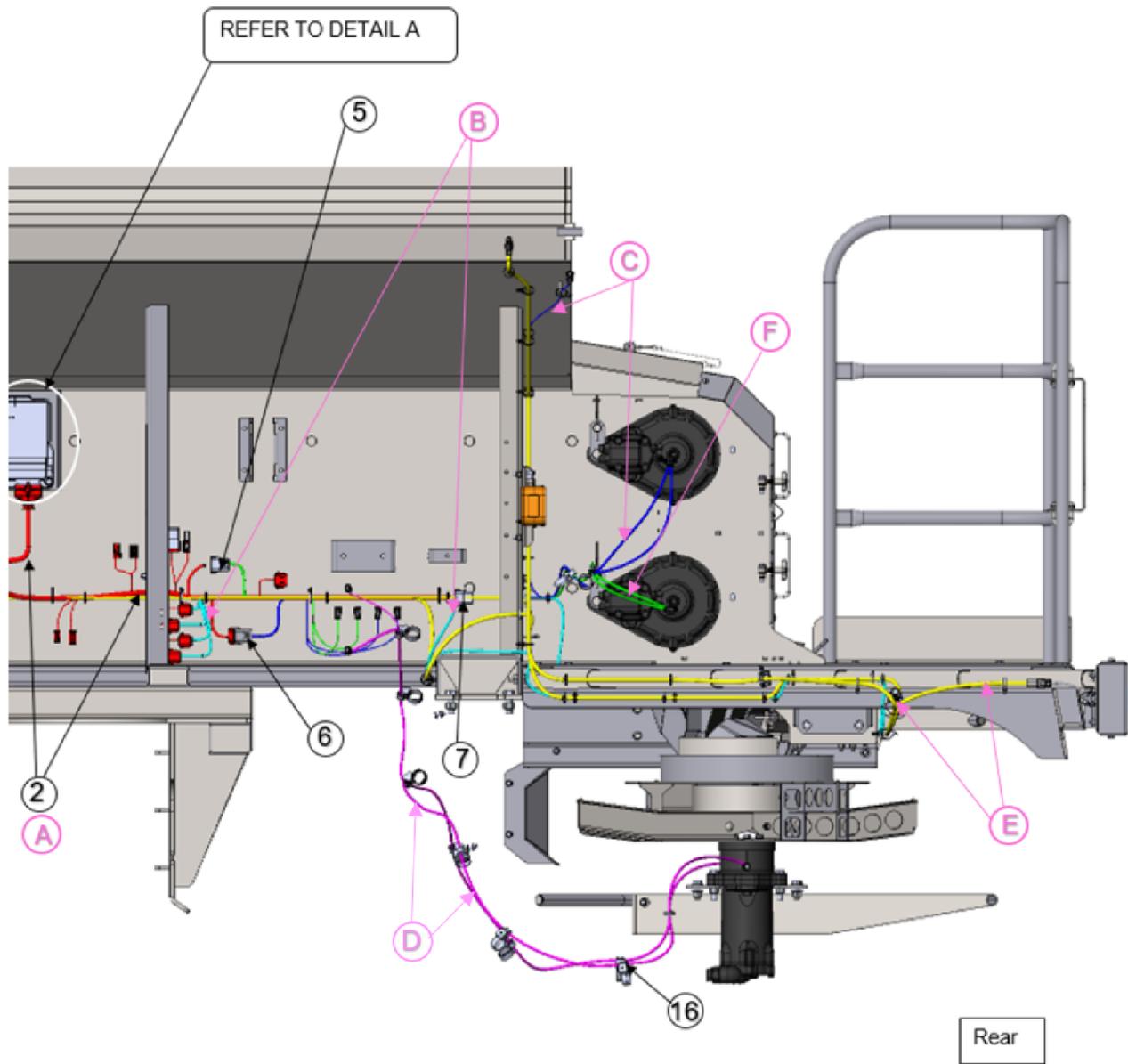
## Spinner Motor



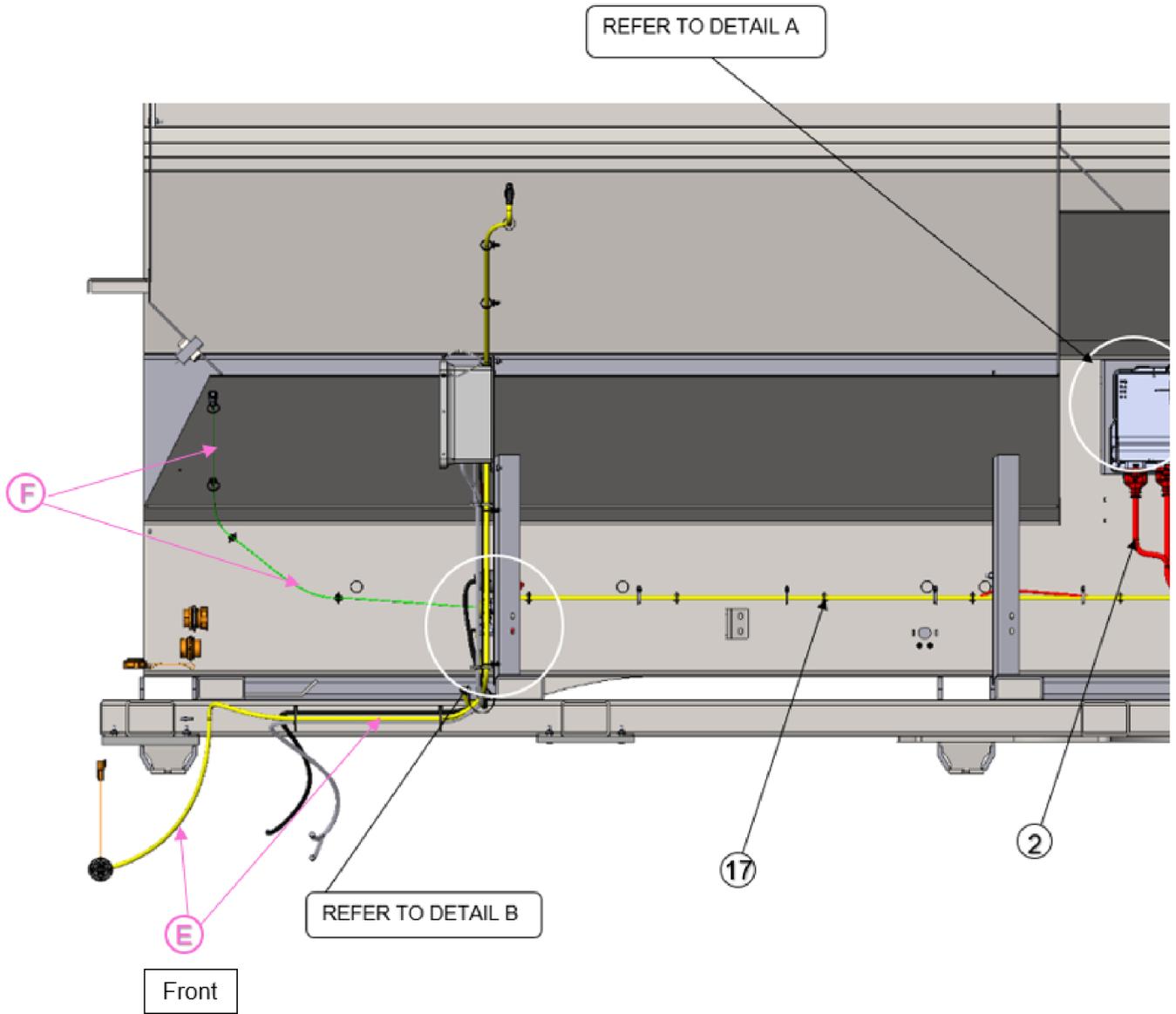
Key	Part No.	Description	Qty
	321528	MOTOR - ASSY SPINNER (Includes 1-10)	
1	320879	MOTOR - HYD 5CID	1
A	*320894	*MOTOR SEAL KIT *NOT SHOWN*	1
2	324176	OVER HUNG LOAD ADAPTOR - ASSY	1
3	316587	SENSOR - GEAR TOOTH	1
4	308227	CAPSCREW - .25-20NC X .625 SS	1
5	36402	CAPSCREW - .5-13NC X 1.25 SS	2
6	36422	WASHER - .5 SS LOCK	2
7	300493	GASKET - PAPER SAE B 2 BOLT	1
8	313450	FITTING - 12-12 520120	2
9	29875	O-RING - 016	1
10	313455	FITTING - 6-6 520120	1

# Electrical

## Harnesses and Sensors

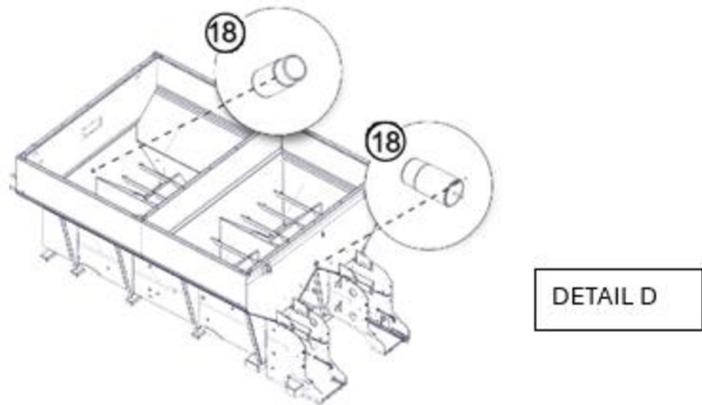
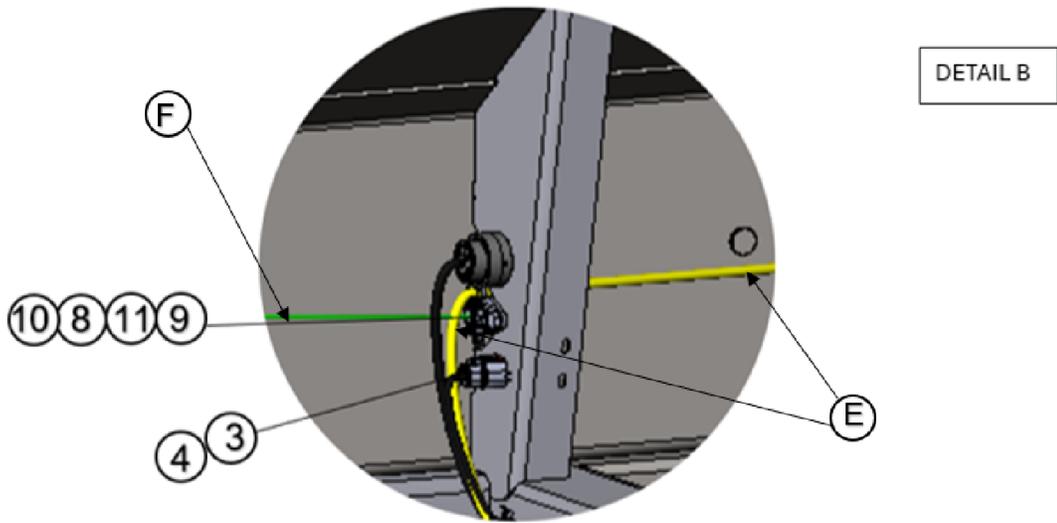
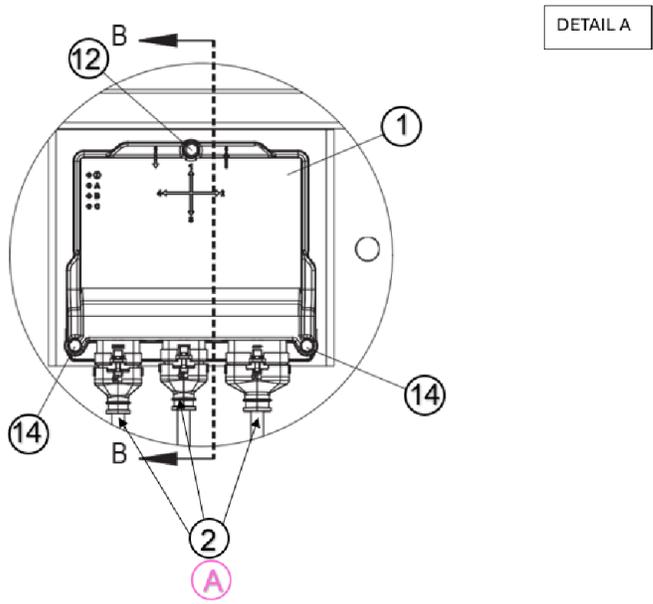


# Harnesses and Sensors Cont.



# Harnesses and Sensors Cont.

See next page for part's and harness list.



## Harnesses and Sensors Cont.

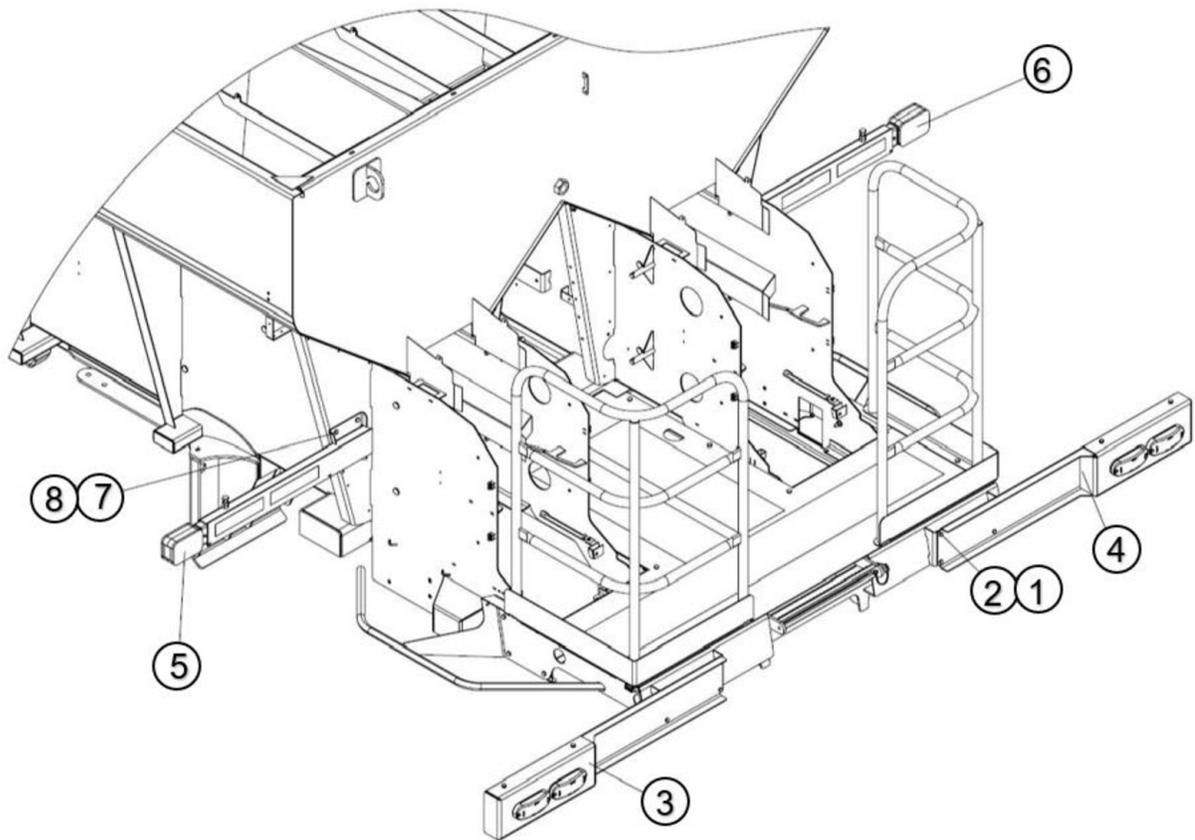
Part's list →

Key	Part No.	Description	Qty
1	322921	CONTROLLER - RAVEN RCM	1
2	322915	HARNESS - MAIN	1
3	44483	SCREW - PANHEAD PHLP #10-24NC X .75 SS	2
4	56355	NUT - LOCK #10-24NC SS	2
5	322916	HARNESS - BIN 1 CONTROL 12'-14'	1
6	322917	HARNESS - BIN 2 CONTROL 12'-14'	1
7	322919	HARNESS - SPINNER	1
8	312964	CLIP - HARNESS MOUNTING	4
9	34580	CAPSCREW - .313-18NC X 1 SS	4
10	36424	WASHER - FLAT .313 SS	4
11	42221	NUT - LOCK .313-18NC SS	4
12	34501	CAPSCREW - .25-20NC X 2.5 SS	1
13	42034	NUT - LOCK .25-20NC SS	3
14	36396	CAPSCREW - .25-20NC X 3 SS	2
15	*99674	*TIE - WIRE	20
16	310648	TIE - DUAL CLAMP	12
17	311806	TIE - WIRE FIR TREE	30
18	322417	SENSOR - BIN LEVEL CAPACITIVE	2

Harness list →

Key	Description	Colors	Part Number
A	MAIN HARNESS	RED →	322915
B	CHUTE ACTUATORS	TEAL →	322915
C	BIN 2 CONVEYORS	BLUE →	322917
D	SPINNERS	PURPLE →	322919
E	LIGHTING	YELLOW →	SEE PAGE 43-46 FOR PART NUMBERS
F	BIN 1 CONVEYORS	GREEN →	322916

# Light-Group

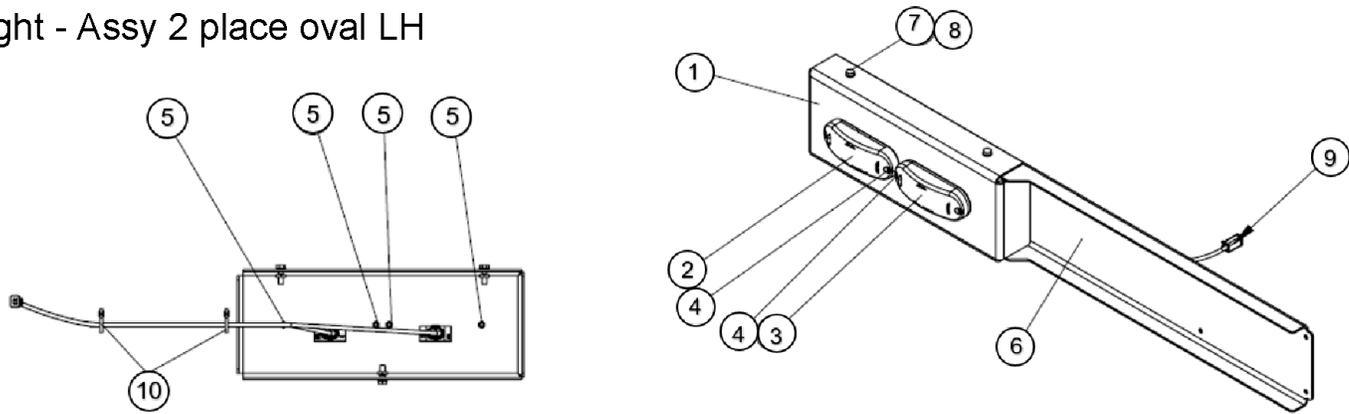


Key	Part No.	Description	Qty
1	42221	NUT – LOCK .313 -18NC SS	8
2	56858	CAPSCREW- .313-18NC X .75 SS	8
3	323477	LIGHT ASSY 2 PLACE OVAL LH **	1
4	323478	LIGHT ASSY 2 PLACE OVAL RH **	1
5	322223	BRACKET ASSY WARN LIGHT LH 304 **	1
6	322224	BRACKET ASSY WARN LIGHT RH 304 **	1
7	36398	CAPSCREW - .375-16NC X 1 SS	6
8	72054	NUT - LOCK .375-16NC SS	6

Note: \*\* - See next page for additional part number and list breakdown

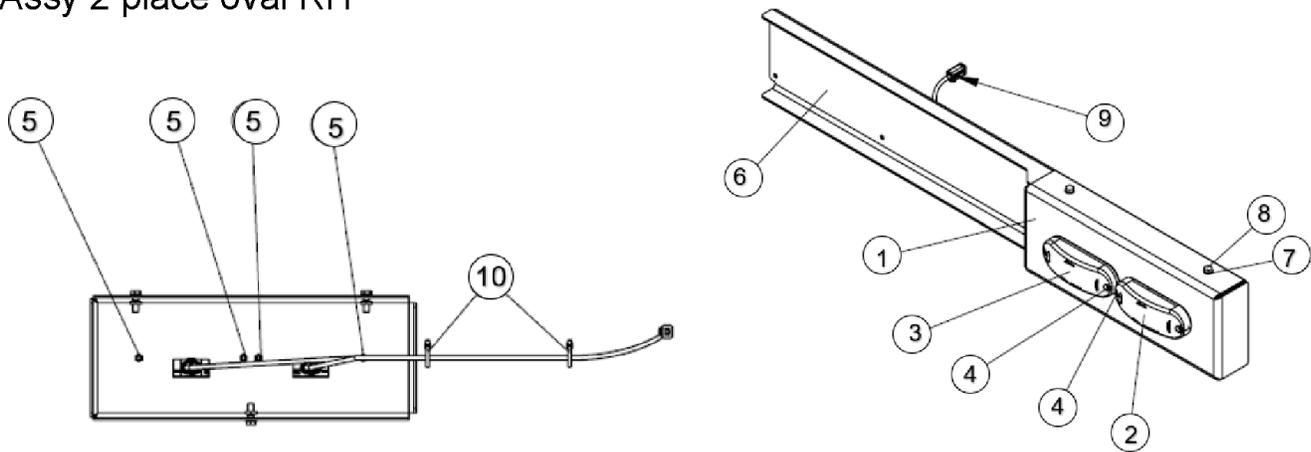
Light – Group Continued

Light - Assy 2 place oval LH



Key	Part No.	Description	Qty
1	323479	PANEL - 2 OVAL 304 LH	1
2	313931	LIGHT - STOP TURN TAIL	1
3	313932	LIGHT - TURN	1
4	314026	SCREW - PANHEAD #10-24NC X 1.25	4
5	42221	NUT - LOCK .313-18NC SS	5
6	323481	BRACKET - WLDMT LIGHT LH BACK PANEL 304	1
7	34580	CAPSCREW - .313-18NC X 1 SS	4
8	36419	WASHER - LOCK .313 SS	3
9	323513	HARNES - TAIL LIGHT	1
10	99674	TIE - WIRE	3
11	312964	CLIP - HARNES MOUNTING	1

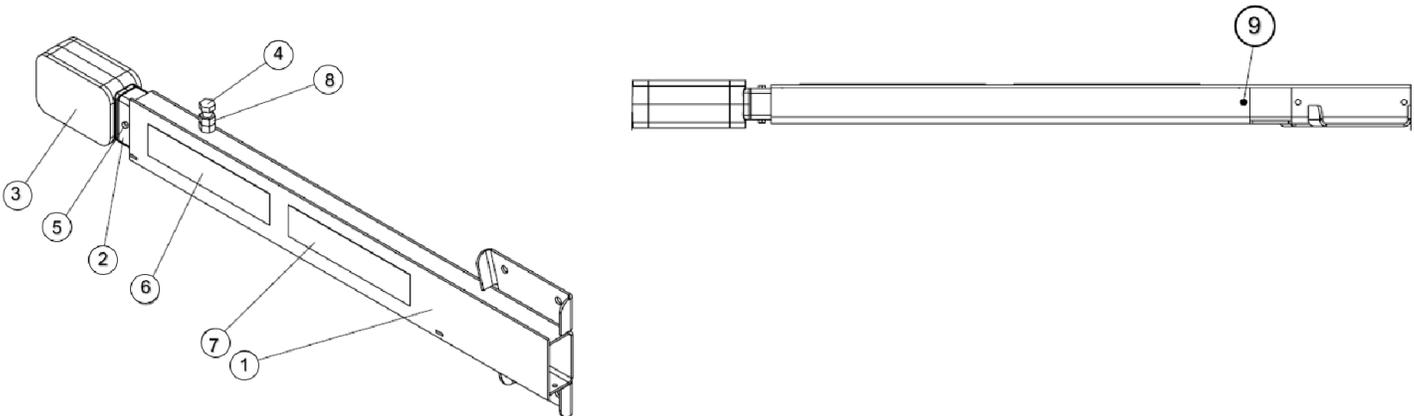
Light - Assy 2 place oval RH



Key	Part No.	Description	Qty
1	323480	PANEL - 2 OVAL 304 RH	1
2	313931	LIGHT - STOP TURN TAIL	1
3	313932	LIGHT - TURN	1
4	314026	SCREW - PANHEAD #10-24NC X 1.25 SS	4
5	42221	NUT - LOCK .313-18NC SS	5
6	323482	BRACKET - WLDMT LIGHT RH BACK PANEL 304	1
7	36419	CAPSCREW - .313-18NC X 1 SS	3
8	34580	CAPSCREW - .313-18NC X 1 SS	4
9	323513	HARNES - TAIL LIGHT	1
10	99674	TIE - WIRE	3
11	312964	CLIP - HARNES MOUNTING	1

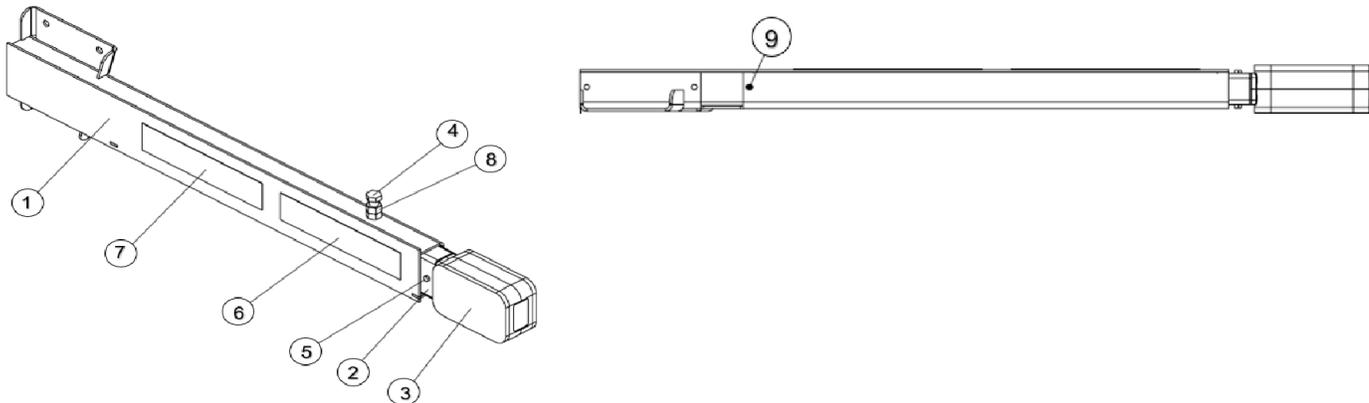
### Light - Group Continued

#### Light - Bracket assy warn light LH



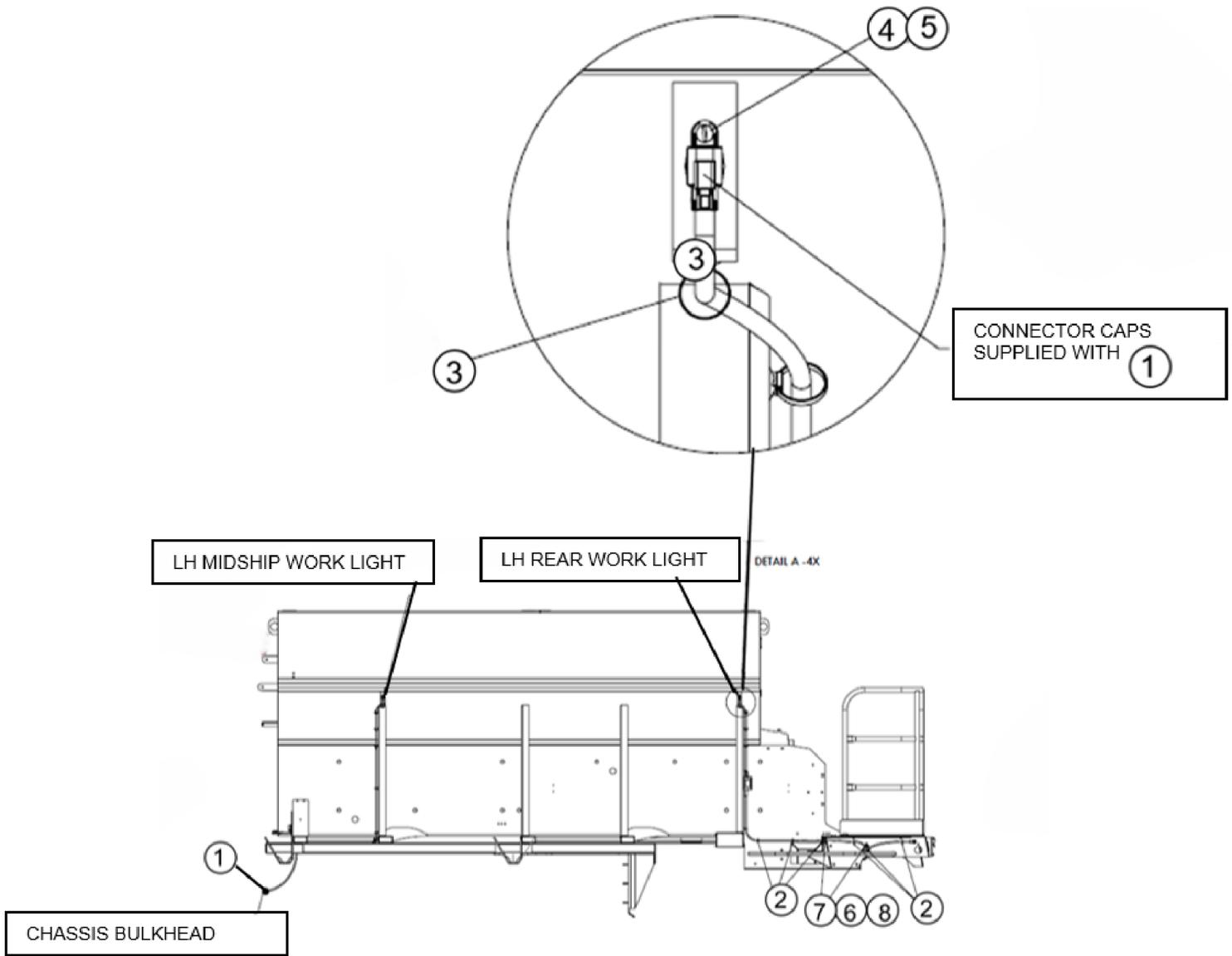
Key	Part No.	Description	Qty
1	322221	BRACKET - WLDMT WARN LIGHT LH 304	1
2	313925	TUBE - TAIL LIGHT 304	1
3	313933	LIGHT - MARKER	1
4	36539	CAPSCREW - .5-13NC X 1.5 SS	1
5	313934	CAPSCREW - M5 X 12 SS	2
6	323803	TAPE - RED REFLECTIVE 2 X 9 STRIP	1
7	306430	TAPE - ORANGE FLOURESCENT 2" X 9" STRIP	1
8	36416	NUT - HEX .5-13NC SS	1
9	311806	TIE - WIRE FIR TREE	1

#### Light - Bracket assy warn light RH



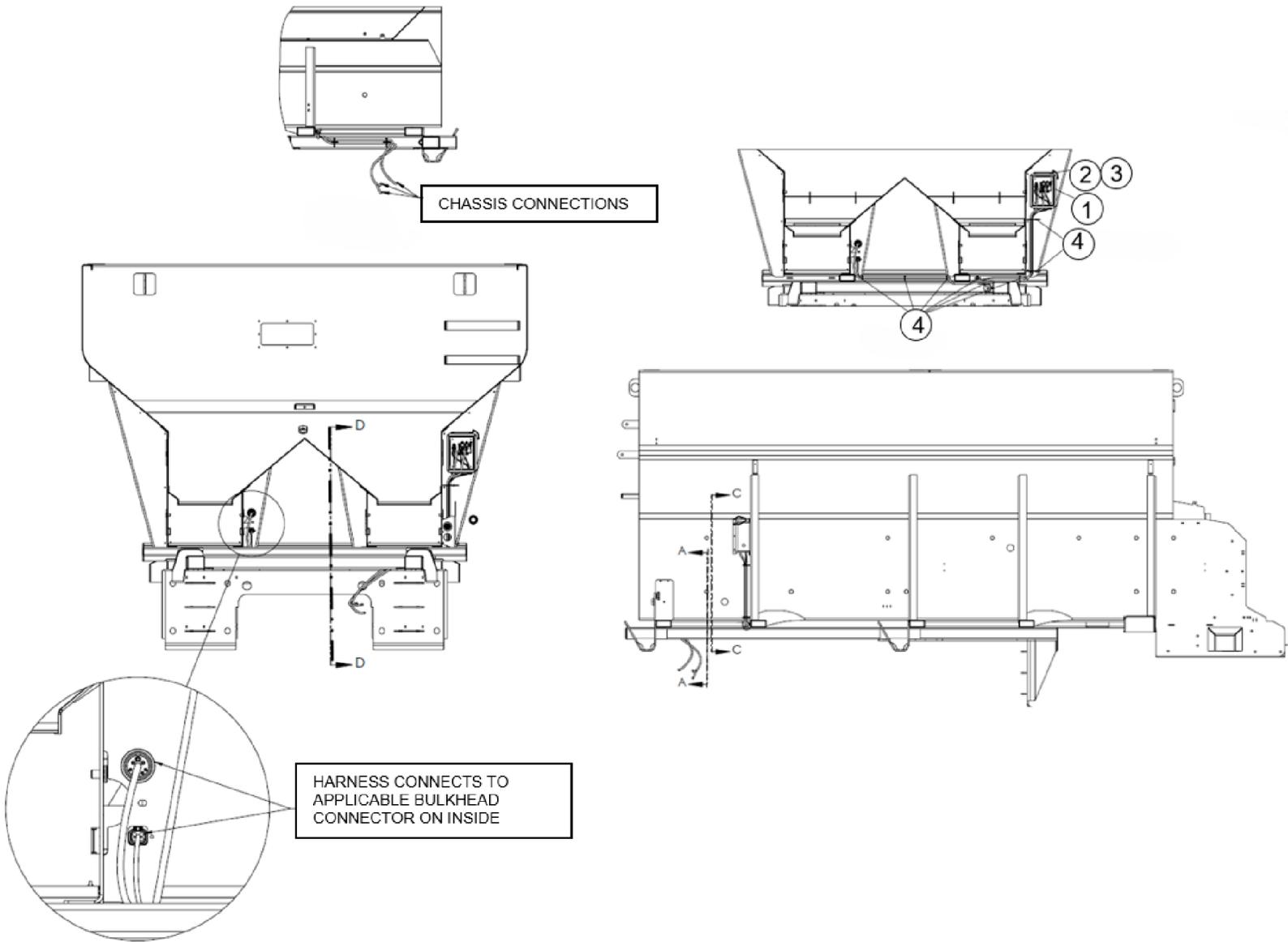
Key	Part No.	Description	Qty
1	323479	BRACKET - WLDMT WARN LIGHT RH 304	1
2	313931	TUBE - TAIL LIGHT 304	1
3	313932	LIGHT - MARKER	1
4	314026	CAPSCREW - .5-13NC X 1.5 SS	1
5	42221	CAPSCREW - M5 X 12 SS	2
6	323481	TAPE - RED REFLECTIVE 2 X 9 STRIP	1
7	34580	TAPE - ORANGE FLOURESCENT 2" X 9" STRIP	1
8	36419	NUT - HEX .5-13NC SS	1
9	323513	TIE - WIRE FIR TREE	1

Light – Group Continued



Key	Part No.	Description	Qty
1	323506	HARNES - LIGHTING	1
2	99674	TIE - WIRE	51
3	311806	TIE - WIRE FIR TREE	29
4	44452	SCREW - ROUND HEAD #10-24NC X .5 SS	4
5	56355	NUT - LOCK #10- 24NC SS	4
6	312964	CLIP - HARNES MOUNTING	4
7	34580	CAPSCREW - .313- 18NC X 1 SS	4
8	42221	NUT - LOCK .313- 18NC SS	4

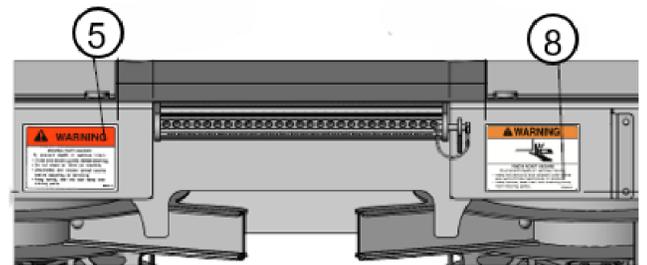
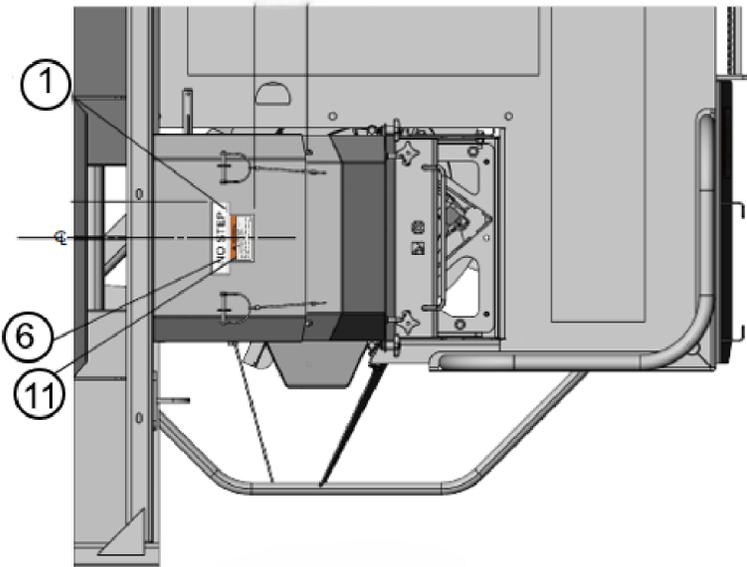
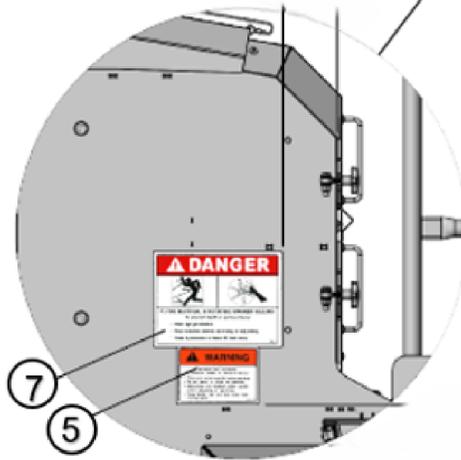
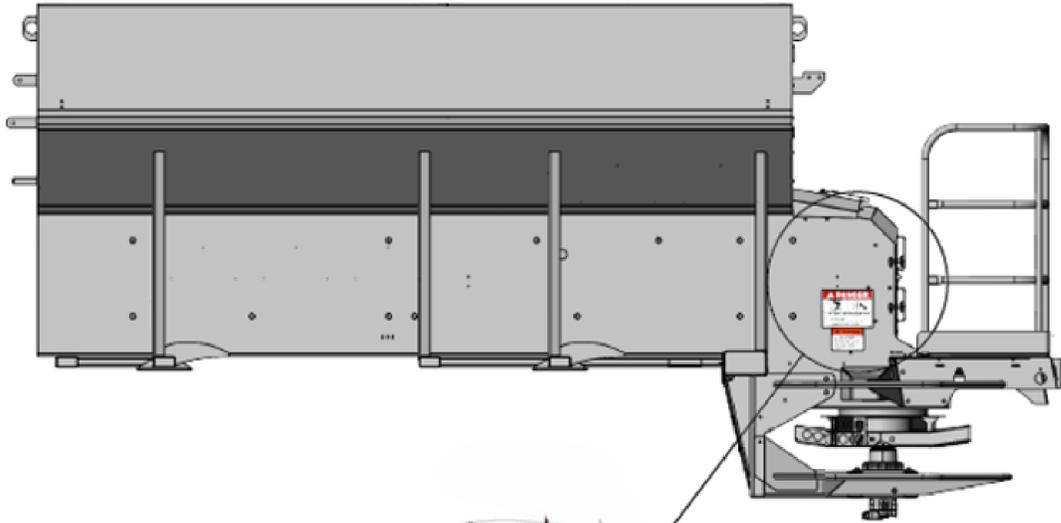
# PDC/ISO- Group



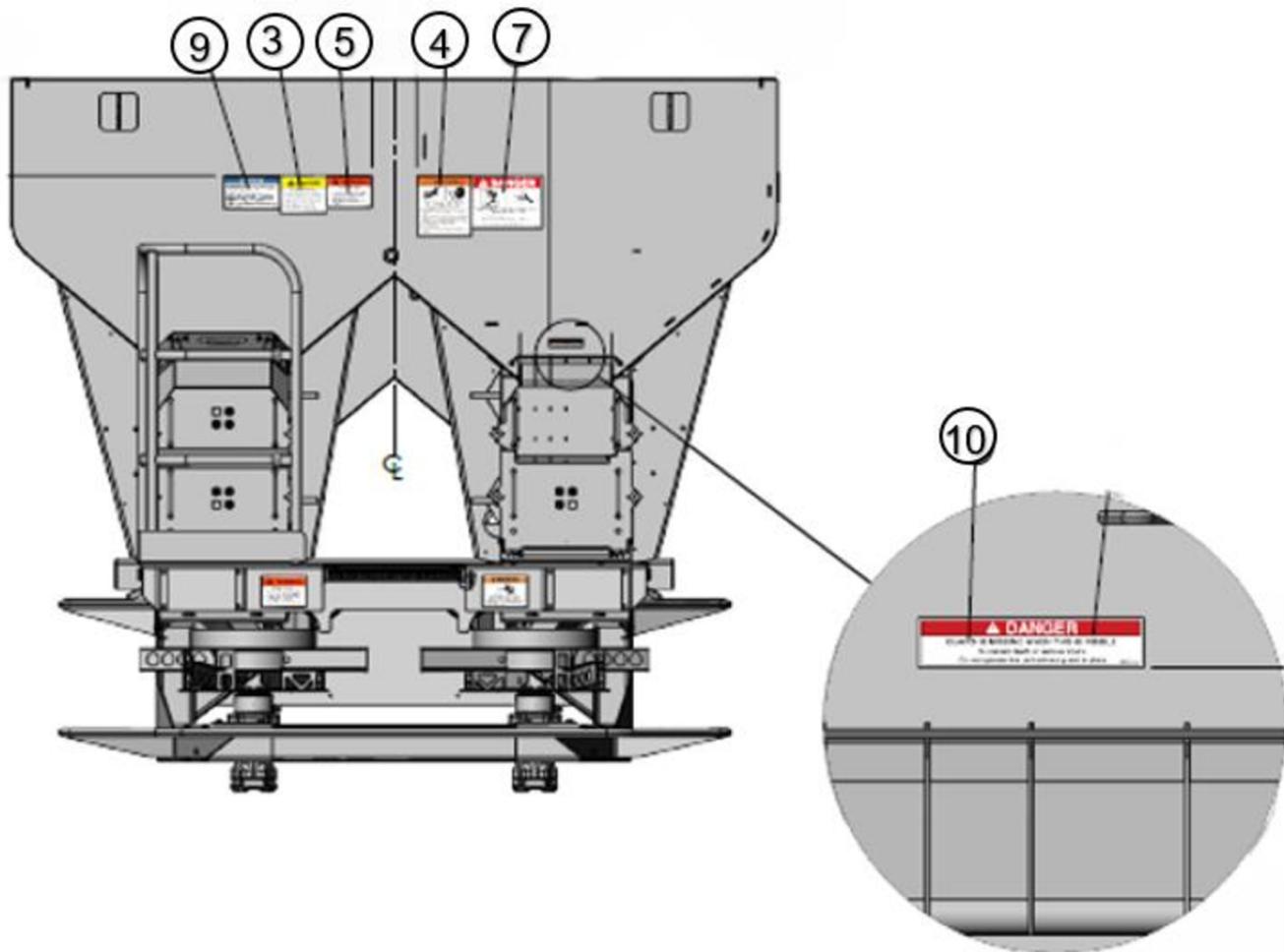
Key	Part No.	Description	Qty
1	323499	HARNESS - PDC/ISO	1
2	36394	CAPSCREW - .25-20NC X .875 SS	4
3	42034	NUT - LOCK .25-20NC SS	4
4	99674	TIE - WIRE	9

# Safety Decals

See next page for part's and harness list.

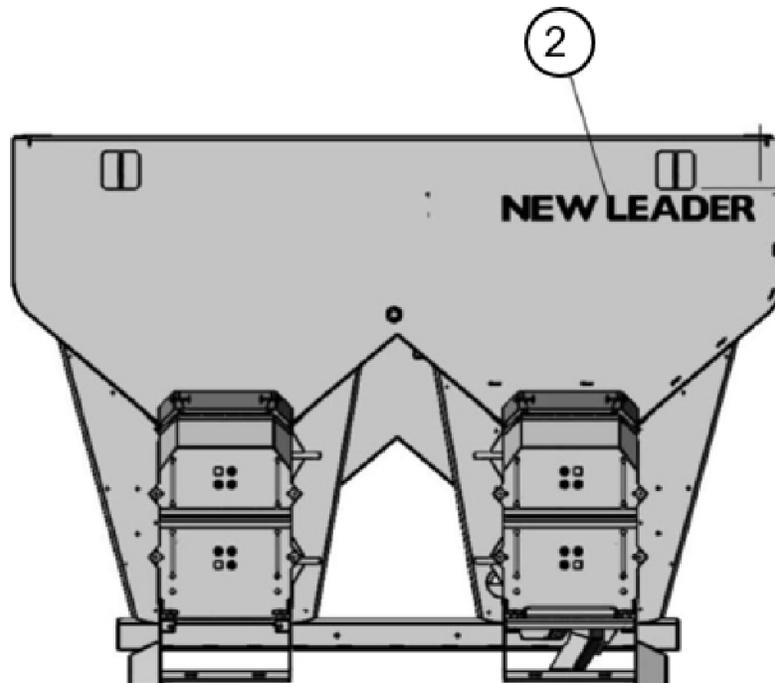


Safety Decals cont.



Item	Part No.	Description	Qty
1	150034	DECAL - CAUTION OPERATION & MAINT.	1
2	364	DECAL - DANGER MOVING PART	1
3	321	DECAL - CAUTION HAZARDOUS MATERIAL	2
4	39138	DECAL - WARNING HIGH PRESSURE FLUID	1
5	55631	DECAL - WARNING MOVING PART HAZARD	4
6	39017	DECAL - NO STEP	4
7	368	DECAL - FLYING MATERIAL	3
8	323632	DECAL - WARNING MOVING PART HAZARD	1
9	312276	DECAL - NOTICE SPREAD PATTERN	1
10	308191	DECAL - GUARD IS MISSING	2
11	315641	DECAL - MOVING PART HAZARD	2

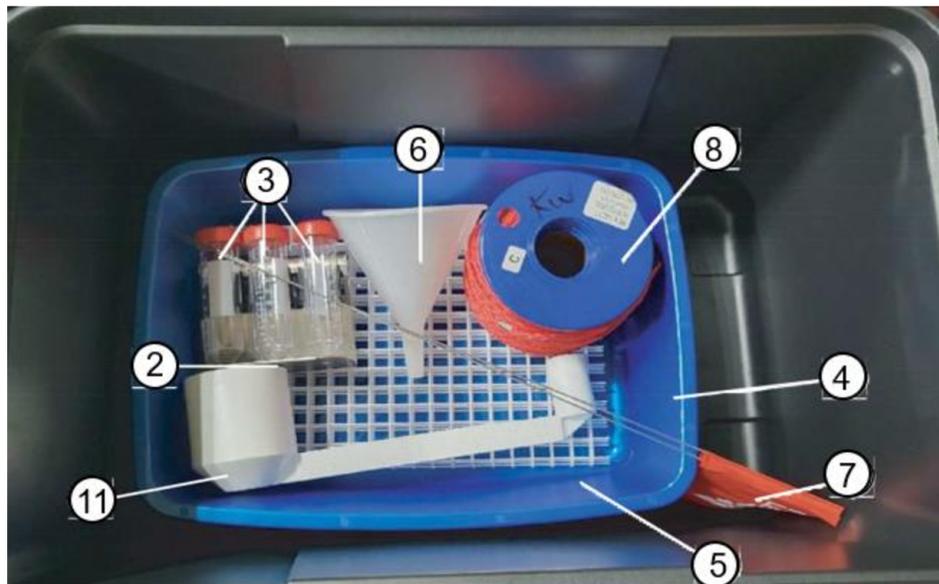
# Decor Group



Key	Part No.	Description	Qty
1	322083	DECAL - NL7 BLACK	2
2	322277	DECAL - NEW LEADER BLACK	1

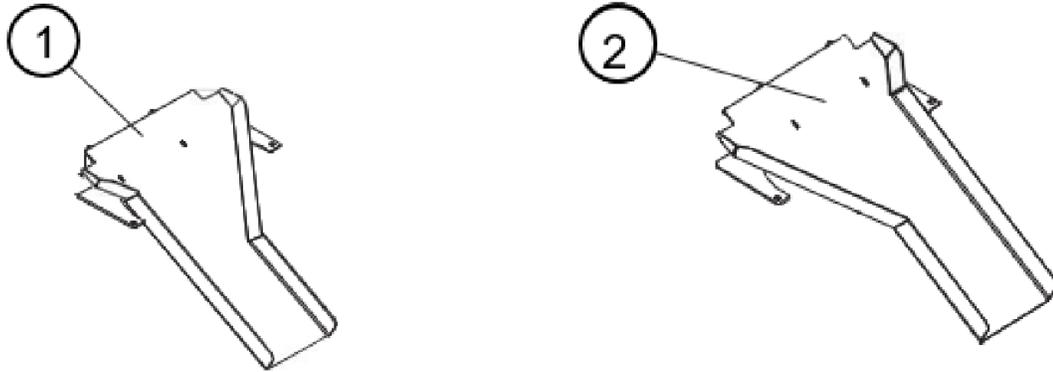
# Calibration

## Spread Pattern Test Kit



Key	Part No.	Description	Qty
1	323517	BOX - PLASTIC STORAGE	1
2	323518	ASSY - TEST TUBE RACK	1
3	300507	TEST TUBE	3
4	313963	TRAY - COLLECTION BLUE	3
5	87200	DIVIDER - 8.38 X 12.44	3
6	87332	FUNNEL	1
7	70897	FLAG	2
8	323519	ROPE - 120' MARKED RED	1
9	*87210	*STAKE - TENT *NOT SHOWN*	2
10	-	NOT USED	-
11	58897	SCALE - DENSITY	1
12	323523	DECAL - NEW LEADER WHITE/RED	2

## Calibration Chutes



Key	Part No.	Description	Qty
	323366	CHUTE - KIT CALIBRATION	1
1	321831	CHUTE - WLDMT CFR LH 304	1
2	321830	CHUTE - WLDMT CFR RH 304	1

## Calibration Test Kit



Figure 2

308908

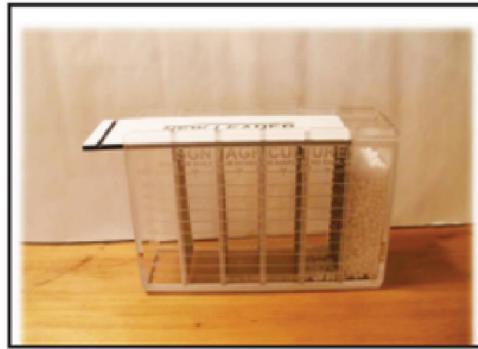


Figure 4

308909

Part No.	Description
308907	SGN CALIBRATION – KIT TEST
308908 (Included with 308907)	TESTER- HARDNESS
308909 (Included with 308907)	SCALE - SGN