

# Red Devil

*Possessed to be the BEST!*

## Snow Blowers

### OWNER'S MANUAL

*RED DEVIL SNOWBLOWER*

6' Skid Steer Mount **RED2S306**

Serial Number \_\_\_\_\_

Date of Purchase \_\_\_\_\_

**LANKOTA GROUP, INC.**

**RED DEVIL**

270 West Park Ave

Huron, SD 57350

866 – 526 – 5682



## RED DEVIL SNOW BLOWER CHUTE INSTALLATION For Hydraulic Chute Rotation

Figure 1

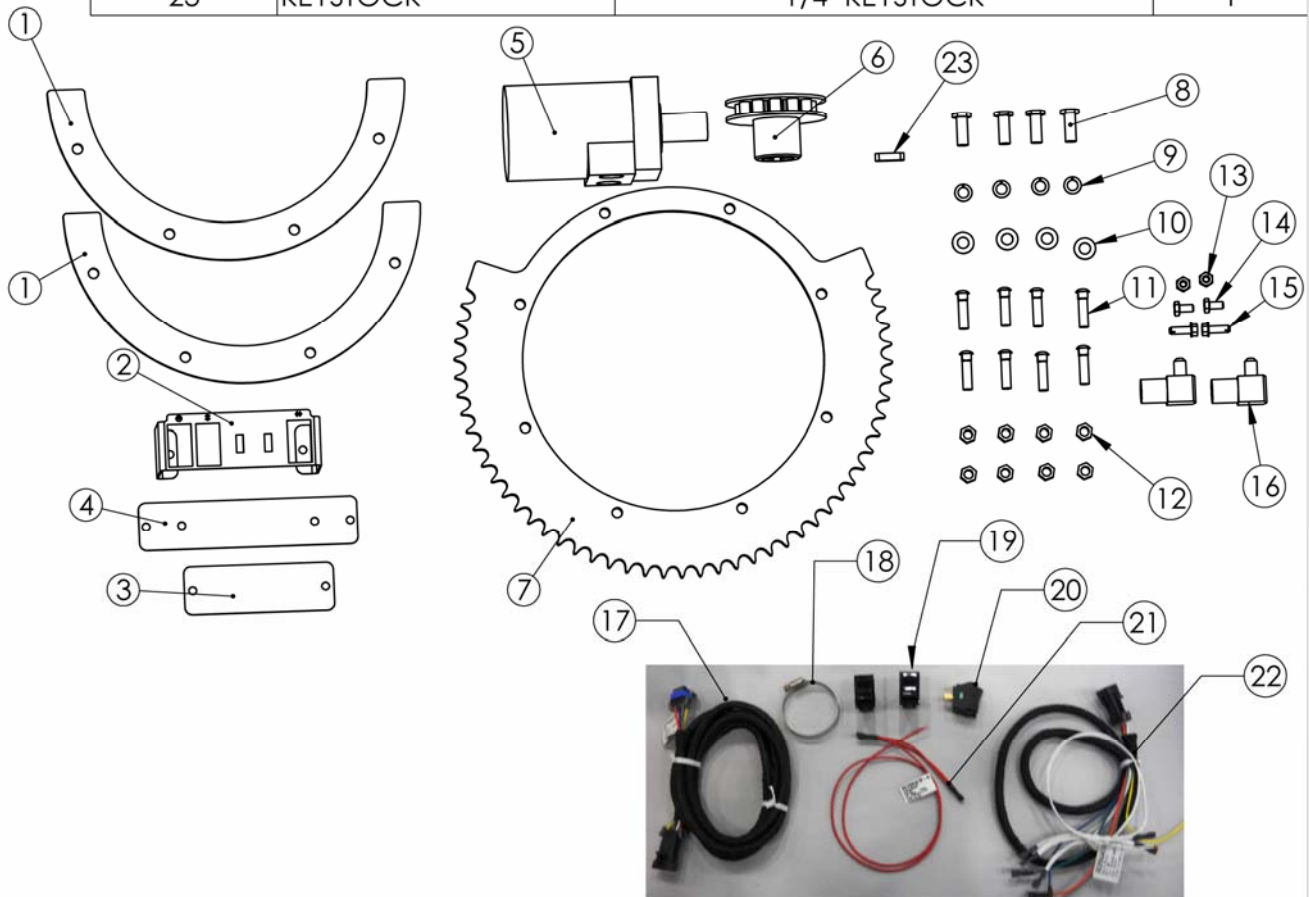


The Red Devil Snow Blower will arrive in a crate, as shown in Figure 1. In the accompanying box there will be (See **RED56CGK3P**):

- (1) Chute Rotation Motor (**RED10110**)
- (1) Chute Rotation Gear (**RED51039**)
- (3) Switch Mounting Plates (**REDSW-0001, REDSW-0002, & REDSW-0003**)
- (1) Partial Chute Gear Ring (**RED56SH-0007**)
- (2) Half-Moon Chute Gear Clamps (**RED56SH-0006**)
- (1) Manual Chute Rotation Bracket (**RED56MSH**)
- (1) Bag of Hardware
- (1) Electrical wiring kit

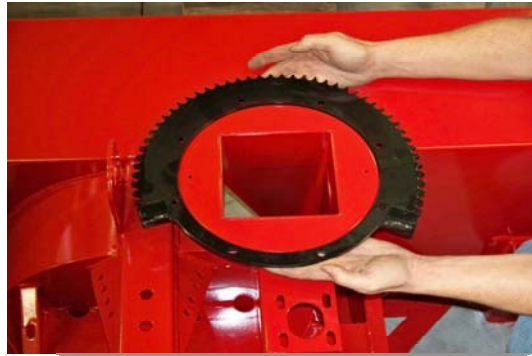
# RED56SSECK KIT

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RED56SH-0006	RED DEVIL 5' & 6' CHUTE HALF MOON	2
2	REDSW-0001	SKID STEER SWITCH MOUNT PLATE	1
3	REDSW-0002	SKID STEER SWITCH MOUNT PLATE	1
4	REDSW-0003	SKID STEER SWITCH MOUNT PLATE	1
5	RED10110	HYDRAULIC CHUTE ROTATION MOTOR	1
6	RED51039	RED DEVIL 8' & 9' CHUTE GEAR ASSEMBLY (WELDING)	1
7	RED56SH-0007	RED DEVIL 5' & 6' CHUTE GEAR	1
8	LAN18A00	3/8"-16 X 1" HEX HEAD BOLT GR.5	4
9	REDWL53	3/8" LOCK WASHER	4
10	LAN18000	3/8" FLAT WASHER	4
11	LAN4A16A16	5/16"-18 X 1-1/4" CARRIAGE BOLT	8
12	REDKRJ8	5/16"-18 TOP LOCK NUT	8
13	REDAN1	1/4" - 20 LOCK NUT	2
14	REDB102	1/4"-20 X 1/2" HEX NUT	2
15	LAN93314A	1/4" X 1" SELF TAPPING BOLT	2
16	FHMOTORKIT	HYDRAULIC ROTATION MOTOR FITTING	2
17	RED56WIR-2	WIRING EXTENSION	1
18	HOSECLAMP	3 INCH HOSE CLAMP	1
19	SWITCH	MOMENTARY SWITCH	2
20	SWITCH	POWER SWITCH	1
21	RED56WIR-4	POWER WIRE	1
22	RED56WIR-3	WIRING HARNESS	1
23	KEYSTOCK	1/4" KEYSTOCK	1



## Chute installation

Figure 2



- 1) Slide the partial chute gear ring (**RED56SH-0007**) over the top of the impeller housing chimney of (**RED6H**). (As shown in Figure 2)
- 2) Place the (2) half moon chute gear clamps (**RED56SH-0006**) underneath the partial chute gear ring (**RED56SH-0007**) and align the bolt holes.
- 3) Set the chute (**RED56SH**) on top of the blower output chimney and align bolt holes of all three components. (As shown in Figure 3)
- 4) Use (8) bolts (**LAN4A16A16**) and (8) lock nuts (**REDKRJ8**) to attach chute gear, half moon clamps, and chute together to complete assembly. (As shown in Figure 4)
- 5) Grease the flange with the zerk installed on the bottom side of chimney flange of (**RED6H**). Rotate chute (**RED56SH**) as you grease to evenly distribute.
- 6) Tighten or loosen nuts after greasing to maintain a firm grip that will rotate easily.
- 7) Attach hoses labeled Chute to the Deflector. One on the bottom fitting and one on the top fitting.

Figure 3



Figure 4



## Orbital motor installation

- 1) Place the orbital motor (**RED10110**) underneath orbital motor mount on (**RED6H**). (As shown in Figure 5)
- 2) Place keystick provided in hardware bag onto the shaft of the orbital motor. Line up the keyways of the orbital motor and the chute rotation gear (**RED51039**) and slide chute rotation gear down onto motor shaft. (As shown in Figure 6)
- 3) Line up the chute rotation gear and the partial chute gear ring (**RED56H-0007**) so that the gears will mesh and one lip of the chute rotation gear is above the partial chute gear ring and one lip is below. (As shown in Figure 7)
- 4) Use bolts (**LAN18A00**) and washers (**REDWL53**) to attach orbital motor to housing.
- 5) Tighten set screw in Chute Rotation Gear to secure Chute Rotation gear to the motor
- 6) Slide motor and gear assembly forward to make a tight fit with the chute gear and tighten bolts attaching the motor to the housing. (As shown in Figure 7)
- 7) Attach hydraulic hoses labeled Motor to Orbital Motor using Teflon tape and fittings provided.

Figure 5



Figure 6



Figure 7



## Skid Steer wiring installation

- 1) Insert two (2) Momentary switches (**REDRS1093**) and one (1) On/Off switch into upper cab panel. (As shown in Figure 8 & 9)
- 2) Attach one post of the Red wire (**RED56WIR-4**) to the post in the middle of the On/Off switch and attach the Orange wire of harness (**RED56WIR-3**) to the end post. (As shown in Figure 10) This will be the on/off switch for the auger and impeller of your snow blower
- 3) Attach the second post of Red wire (**RED56WIR-4**) to the middle post on one side of a momentary switch. (Both momentary switches are the exact same) Then attach the Blue wire and the Gray wire of harness (**RED56WIR-3**) to the momentary switch. One on either side of the Red Wire. Finally attach three (3) of the White Wires of harness to the same momentary switch. (As shown in Figure 11) This will be your chute rotation motor switch.
- 4) Attach the final end post of Red Wire (**RED56WIR-4**) to the middle post on one side of the second momentary switch. (**REDRS1093**) Then attach the Green wire and Yellow wire of harness (**RED56WIR-3**) to the momentary switch. One on each side of the Red Wire. Finally attach the last three (3) posts of the White wire in harness (**RED56WIR-3**) to the momentary switch. (As shown in Figure 12 on next page) This will be your deflector control switch.
- 5) Connect the free end of the Red wire (**RED56WIR-4**) to the Power wire on the skid loader and the free end of the White wire of harness (**RED56WIR-3**) to a ground wire on the skid loader. (As shown in Figure 13 on next page)

Figure 8



Figure 9



Figure 10



Figure 11

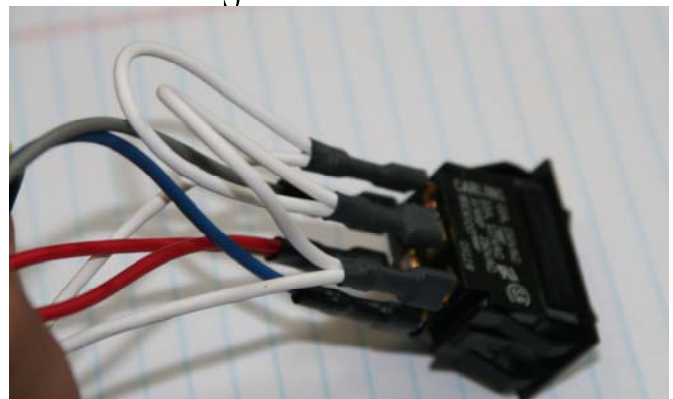
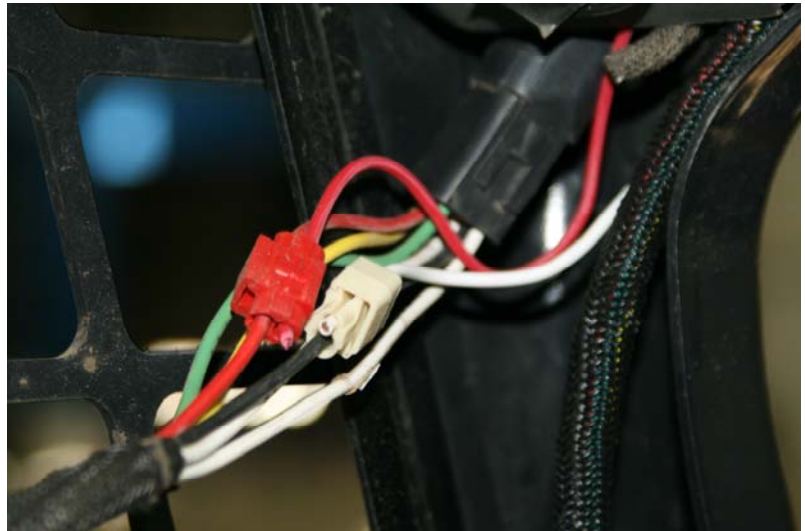


Figure 12



Figure 13



Also provided in box with wiring components are three plates used as an alternative to mounting the switches in the upper cab panel. These plates can be permanently mounted in a location of your choice in your skid loader or mounted to the cage of the window by squeezing the cage between the two backing plates (**REDSW-0002 & REDSW-0003**) and mounting the switches in the switch mount plate. (**REDSW-0001**)

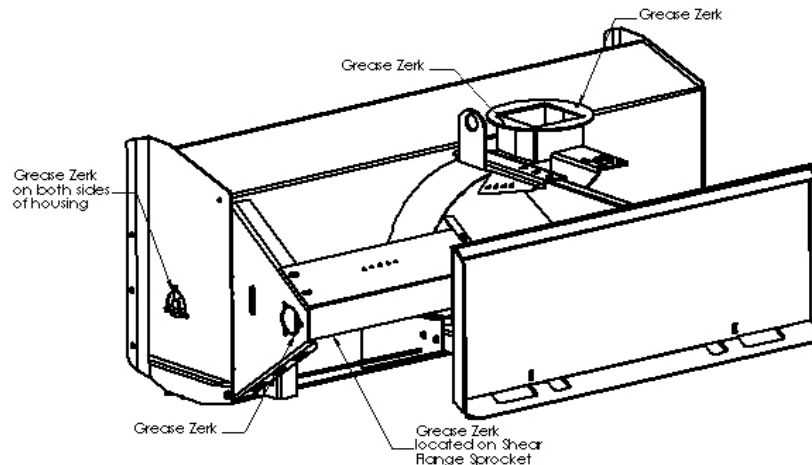
**RED DEVIL SERIAL NUMBER** (All Blowers)- Stainless Steel Tag located on the bracket that holds the Chute Rotation Motor. **THE SERIAL NUMBER IS NEEDED FOR ALL WARRANTY ISSUES.**



# PRELIMINARY CHECK

MAKE SURE PTO IS DISENGAGED, ENGINE IS SHUT OFF AND KEYS ARE REMOVED

- ✓ Visually check the shipping pallet and packaging for any shipping damage.
- ✓ Unpack the snow blower from the shipping pallet.
- ✓ Grease all of the grease zerks on your snow blower. (See below drawing)
  - One on each end of the auger outer bearing holder.
  - One on the cross drive outer bearing holder.
  - One on the shear flange sprocket.
  - Two on chute rotation.



- ✓ Check the chain tension. Adjust idler sprocket (**RED-033-5017**) if needed.
- ✓ Check the gear box (**RED10027**) oil level by removing the fill plug and checking for 9 ounces of oil.
- ✓ Make sure the chute rotation mechanism (**RED56SH**) & (**RED10110**) is working freely.
- ✓ Make sure the deflector mechanism (**RED56SH**) is working freely.
- ✓ Be sure the impeller (**RED56IMP**) and auger (**RED6AUG**) are free of foreign objects and remove foreign object if needed.
- ✓ Make sure all decals and safety signs are clean and readable.
- ✓ Make sure all safety shields are in place and in good condition.
- ✓ Make sure driveline shield spins freely.
- ✓ Make sure all nuts, bolts, and pins are tightened and secure in place.
- ✓ Make sure the drive line is the proper length for your setup (tractor models).
- ✓ Make sure the hydraulics are in good working condition by testing each function and checking for leaks.
- ✓ Check skid shoe wear and adjustment.
- ✓ Check cutting edge wear.

# OPERATING THE SNOW BLOWER

- Make sure the impeller and auger are free of any loose objects.
- Check to see that all the shields and guards are in place and in good condition.
- Lubricate the snow blower before and after every use.
- After starting the tractor engine, engage the PTO.
- Ease the tractor slowly into the snow.
- The sound of the tractor will let you judge when the snow blower is taking too much snow or has reserve capacity.
- When backing into deep snow you may have to take more than one cut, starting at the top of the drift. Remember to disengage the PTO when raising the snow blower.
- Stop the tractor's motion in order to assure that all snow has passed through the snow blower.
- Shallow snow can normally be cleared in one pass, depending on the density of the snow and the size of the tractor.

DO NOT BULLDOZE – THE BLOWER WAS NOT DESIGNED FOR BULLDOZING

DESIGNED FOR 540 RPM ONLY

- The most effective method of dispensing snow is to blow the snow as high as possible downwind, if room permits.
- The chute deflector will allow you to adjust the height that the snow is thrown.
- Reducing the tractor's RPM will reduce the distance the snow is thrown and the force of the discharge will be less.
- Your snow blower has Manual deflector control.
- You can change the direction of the snow being thrown by using the hydraulic chute rotation controls or by removing the pin, rotating the chute, and replacing the pin in the desired location. Always be aware of where you are throwing the snow.
- DO NOT throw the snow toward buildings, livestock, the tractor or any other object that may be damaged.
- DO NOT change the chute direction or adjust the deflector while snow is being discharged. This may cause damage to both the chute and deflector.
- DO NOT use hydraulic controls until you check to see that the chute moves freely. Damage to chute and controls may occur.

# OPERATION SAFETY

- Disengage Hydraulics, stop engine, and remove the engine key whenever you leave the equipment seat.
- Disengage Hydraulics, stop engine, and remove the engine key after striking a foreign object. Thoroughly inspect the blower before restarting unit.
- Disengage Hydraulics, stop engine, and remove the key before attempting to service your snow blower or unplugging the impeller and chute.
- Do not rotate the chute so that discharge material will be directed toward people, your tractor, or any other object that could be damaged.
- Rotating components can catch feet, hands, and loose clothing. Stand clear of all moving parts.
- Do not climb or step on or over the snow blower for any reason.
- Never operate the snow blower in bad light or poor visibility.
- Disengage the Hydraulics while raising, lowering, and transporting the snow blower.
- Make sure to read and understand every safety sign on your machine.
- Stay clear of the blower at all times while Hydraulic pressure is engaged.
- Do not bulldoze, let the machine throw the snow, do not push the snow.
- Be aware of your surroundings and know the area you are removing the snow from.
- Do not allow anyone to ride on the snow blower at any time.
- Keep all shields in place and safety equipment intact.

### **Red Devil Statement of Limited Warranty**

Red Devil warrants its new products to be free from defects in material and workmanship for a period of (1) year following the date of purchase by the retail purchaser.

Red Devil warrants genuine Red Devil replacement parts and components to be free from defects in material and workmanship for a period of ninety (90) days following the date of purchase or the remainder of the original equipment warranty period, whichever is longer. Red Devil's obligation under these warranties shall be limited to repairing or replacing, free of charge to the original purchaser, any part that, in Red Devil's judgment, shows evidence of such defect.

### **Limitations to Warranty**

This warranty does not cover:

- 1) Warranty claims directly resulting from improper installation of the product.
- 2) Any product damaged by accident, abuse, misuse, or negligence after shipment from Red Devil.
- 3) Any unauthorized product alteration or modification.
- 4) Any unauthorized repairs made with parts other than genuine Red Devil parts.
- 5) Any repairs performed by anyone other than Red Devil or an authorized Red Devil dealer unless specifically authorized by Red Devil.
- 6) Snow Blower Fan Shafts.
- 7) Snow Blowers being used on a rental basis.

### **Warranty Procedure**

**Warranty registration form must be filled out and returned to Red Devil to validate all future warranty claims.**

- 1) Troubleshooting should be done between end user/dealer and Red Devil through our technical assistance @ 866-526-5682.
- 2) Labor reimbursement will occur only when pre-arranged through Red Devil's technical assistance. Lankota will reimburse labor based on it's current shop rate completed within a reasonable time using Red Devil's judgment.
- 3) There is no mileage reimbursement.
- 4) Diagnostic time will not be reimbursed except in pre-arranged circumstances.
- 5) Warranty claims should be on typical dealer service work order with a number and name to be attached for any future correspondence.
- 6) All warranty work must be performed and claims submitted within thirty (30) days of the occurrence of the claim and within the warranty period.
- 7) All parts removed during warranty repair should be held for a period of thirty (30) days after the warranty claim has been submitted to Red Devil.
- 8) Red Devil reserves the right to either inspect the product at the original retail purchaser's location or require it to be returned to Red Devil for inspection.

### **Limitation of Liability**

Red Devil makes no express warranties other than those, which are specifically described herein. And description of the goods sold hereunder, including any reference to buyer's specifications and any descriptions in circulars and other written material published by Red Devil is for the sole purpose of identifying such goods and shall not create an express warranty that the goods shall conform to such description.

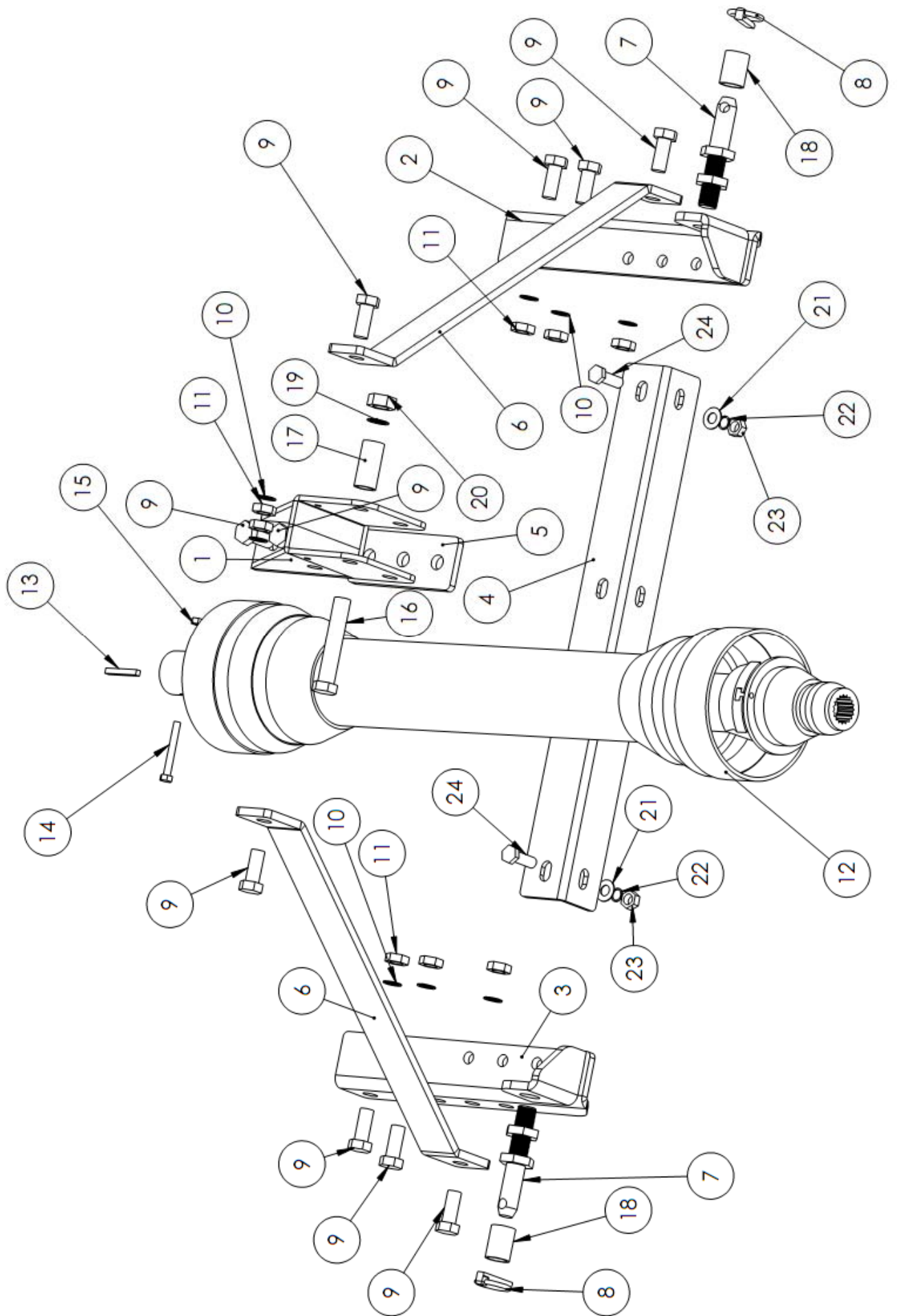
THIS WARRANTY IS EXPRESSLY IN LEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. There are no warranties of merchantability or fitness of a particular purpose. This warranty states Red Devil's entire and exclusive liability and buyer's exclusive remedy or any claim for damages in connection with the sale of furnishing of Red Devil products, their design, suitability for use, installations or operation, or for any claimed defects herein. RED DEVIL WILL IN NO EVENT BE LIABLE FOR ANY INCIDENTAL OR CONSEQUENTIAL DAMAGES WHATSOEVER, NOT FOR ANY SUM IN EXCESS OF THE PRICE RECEIVED FOR THE GOODS FOR WHICH LIABILITY IS CLAIMED.

No representative of Red Devil nor any dealer associated with Red Devil has the authority to change the items of this warranty in any manner whatsoever, and no assistance to purchase by Red Devil in the repair of operation of any Red Devil product shall constitute a waiver of the conditions of this warranty, nor shall such assistance extend or revive it.

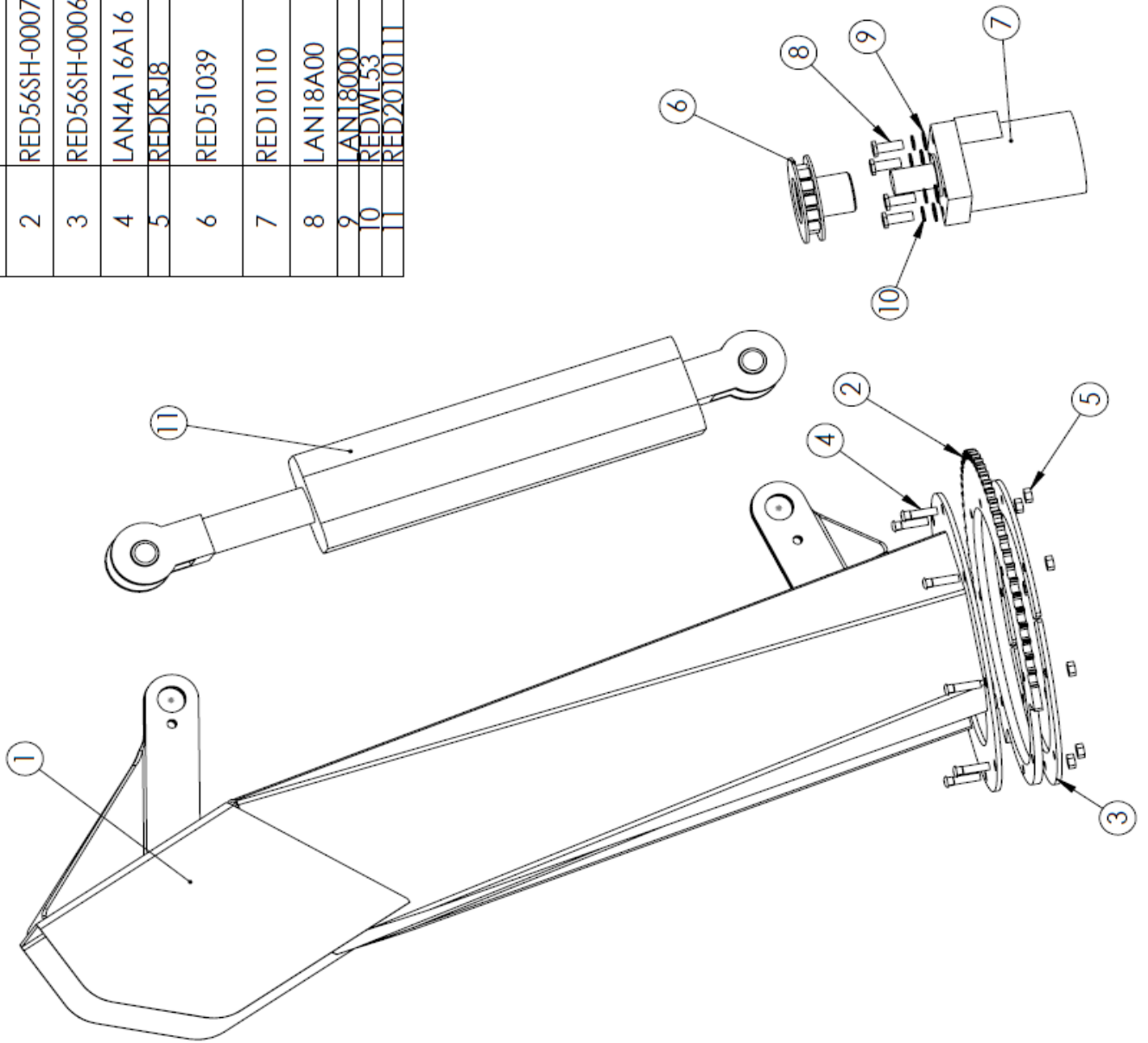
Lankota reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligation to owners of units previously sold.

ITEM #	PART #	DESCRIPTION	QTY.
1	RED44779	RED DEVIL 5' & 6' 3 POINT UPPER MOUNT ASSEMBLY	1
2	RED44769-L	RED DEVIL 5' & 6' LOWER 3 POINT MOUNT ASSEMBLY LEFT	1
3	RED44769-R	RED DEVIL 5' & 6' 3 POINT LOWER MOUNT ASSEMBLY RIGHT	1
4	RED-563P-0003	RED DEVIL 5' & 6' 3 POINT LOWER MOUNT BRACE	1
5	RED-563P-0002	RED DEVIL 5' & 6' 3 POINT MOUNT SPACER	1
6	RED-563P-0001	RED DEVIL 5' & 6' 3 POINT MOUNT CONNECTOR	2
7	RED21233	LIFT ARM PIN	2
8	RED21940	7/16" x 2" Clinch Pin	2
9	REDB706	5/8"-11 X 1-1/2" HEX HEAD BOLT	10
10	REDWL57	5/8" LOCK WASHER	10
11	REDNBF7	5/8" HEX NUT	10
12	RED232-24092	5', 6' DRIVELINE	1
13	RED1SXT	1/4" X 2" KEYSTOCK	1
14	REDB210	5/16"-18 X 2-1/2" HEX HEAD BOLT	1
15	REDKRJ8	5/16"-18 TOP LOCK NUT	1
16	REDB816	3/4"-10 X 4" HEX HEAD BOLT	1
17	RED21190	UPPER 3 PT BUSHING	1
18	RED21194	LOWER 3 PT BUSHING	2
19	REDWL58	3/4" LOCK WASHER	1

20	REDNBF8	3/4"-10 TOP LOCK NUT	1
21	REDWU55	1/2" FLAT WASHER	2
22	REDWL55	1/2" LOCK WASHER	2
23	REDNBF5	1/2"-13 HEX NUT	2
24	LAN14M7259	1/2"-13 X 1-1/2" HEX HEAD BOLT GR. 5	2



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RED56SH	RED DEVIL 5' & 6' CHUTE ASSEMBLY	1
2	RED56SH-0007	RED DEVIL 5' & 6' CHUTE GEAR	1
3	RED56SH-0006	RED DEVIL 5' & 6' CHUTE HALF MOON	2
4	LAN4A16A16	5/16"-18 X 1-1/4" CARRIAGE BOLT	8
5	REDKRJ8	5/16"-18 TOP LOCK NUT	8
6	RED51039	RED DEVIL 8' & 9' CHUTE GEAR ASSEMBLY (WELDING)	1
7	RED10110	HYDRAULIC CHUTE ROTATION MOTOR	1
8	LAN18A00	3/8"-16 X 1" HEX HEAD BOLT GR.5	4
9	LAN18000	3/8" FLAT WASHER	4
10	REDWL53	3/8" LOCK WASHER	4
11	RED2010111	2X8 DEFLECTOR CYLINDER	1



ITEM #	PART #	DESCRIPTION	QTY.
1	RED6H	RED DEVIL 6' HOUSING COMPLETE ASSEMBLY	1
2	RED56IMP	RED DEVIL 5' & 6' IMPELLER ASSEMBLY	1
3	RED6H-0001D	RED DEVIL 6' CUTTING EDGE	1
4	RED6AUG	6' FT AUGER	1
5	RED706K	5/8"-11 X 1-1/2" CARRAIGE BOLT	8
6	REDKRJF	5/8"-11 TOP LOCK NUT	8
7	RED60550	1/4"-28 GREASE ZERK	2
8	RED0F23	3/8" - 1-1/4" FENDER WASHER	1
9	RED1SXT	1/4" X 2" KEYSTOCK	2
10	REDB306	3/8"-16 X 1-1/2" HEX HEAD BOLT	1
11	REDWL53	3/8" LOCK WASHER	21
12	RED51677	1-1/8" BEARING ASSEMBLY W/ HARDWARE	3
13	RED89H-SKIDS	5' & 6' SKID SHOE ASSEMBLY	2
14	REDW742	SKID SHOE PIN	2
15	REDB304	3/8"-16 X 1" HEX HEAD BOLT GR.5	19
16	RED0DTT	3/8"-16 TOP LOCK NUT	7
17	RED56H-0034	RED DEVIL 5' & 6' BLOWER CHAIN GUARD	1
18	LAN22000	1/2" FLAT WASHER	8
19	RED1F30	1/2"-13 TOP LOCK NUT	1
20	REDB514	1/2"-13 X 3-1/2" HEX HEAD BOLT GR. 5	1

21	RED-033-5017	17 TOOTH IDLER SPROCKET	1
22	REDA105	1/4"-20 X 1-1/2" HEX HEAD BOLT GR. 5	1
23	REDE37E	1/4"-20 TOP LOCK NUT	1
24	RED36525	AUGER GEAR	1
25	RED50RC	# 50 CHAIN W/ 90 PITCHES	1
26	RED50CL	# 50 CHAIN CONNECTOR LINK	1
27	RED40336	5', 6' SHEAR FLANGE SPROCKET WELDMENT	1
28	RED40355	5', 6' SHEAR FLANGE SHAFT WELDMENT	1
29	RED10027	5' & 6' GEAR BOX	1
30	RED44339	5', 6' PTO SHIELD WELDMENT	1
31	REDWL52	5/16" LOCK WASHER	2
32	REDNBF2	5/16"-18 TOP LOCK NUT	2
33	REDB204	5/16"-18 X 1" HEX HEAD BOLT GR 5	2
34	RED36536	5', 6' Shear Flange Coupler	1
35	REDB308	3/8"-16 X 2" HEX HEAD BOLT	2
36	REDNBF3	3/8" HEX NUT	6
37	RED-44703-5	RED DEVIL 5' & 6' BLOWER SHIELD	1
38	LAN18000	3/8" FLAT WASHER	4

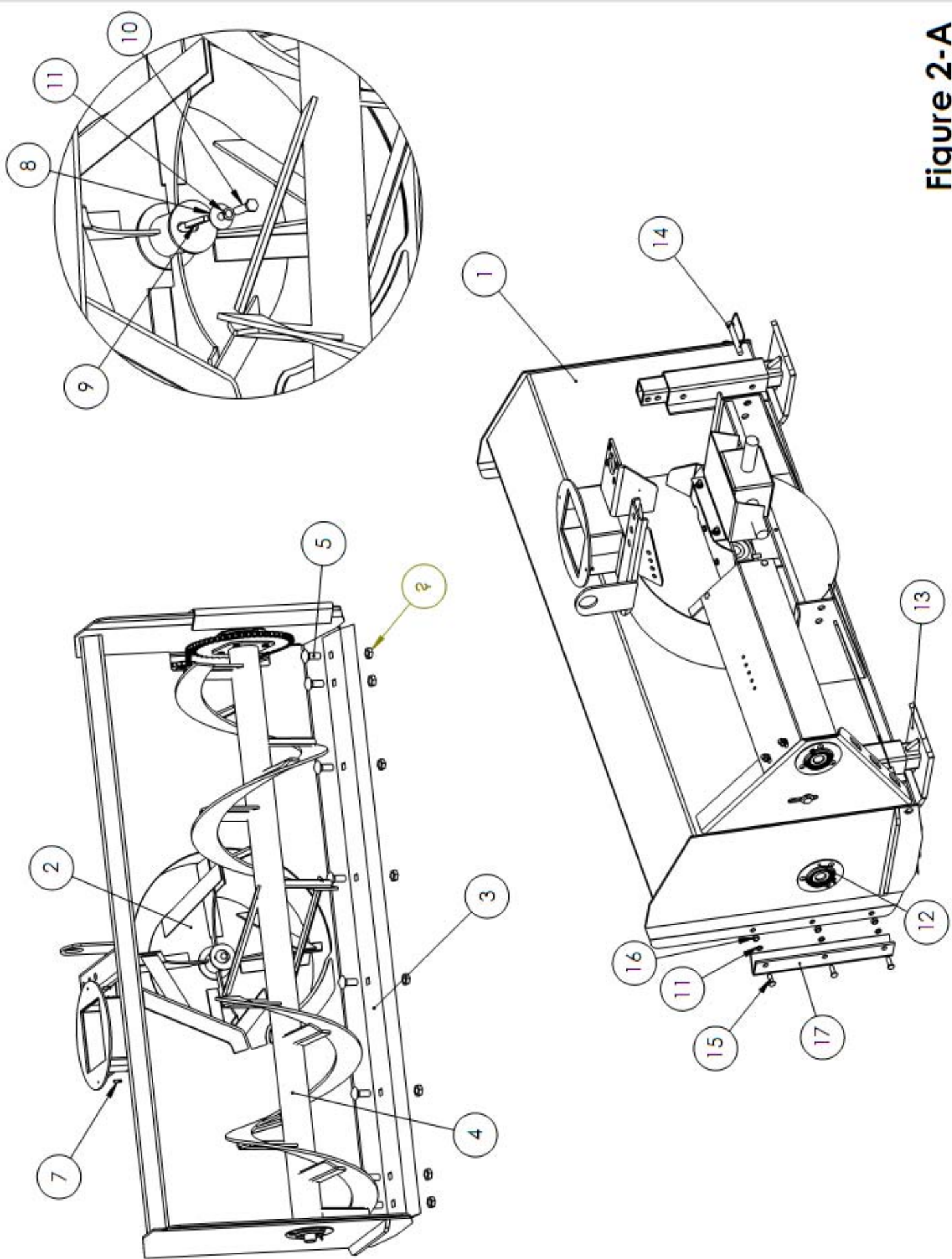


Figure 2-A

# 50 CHAIN - 25  
# 50 CONNECTOR LINK - 26

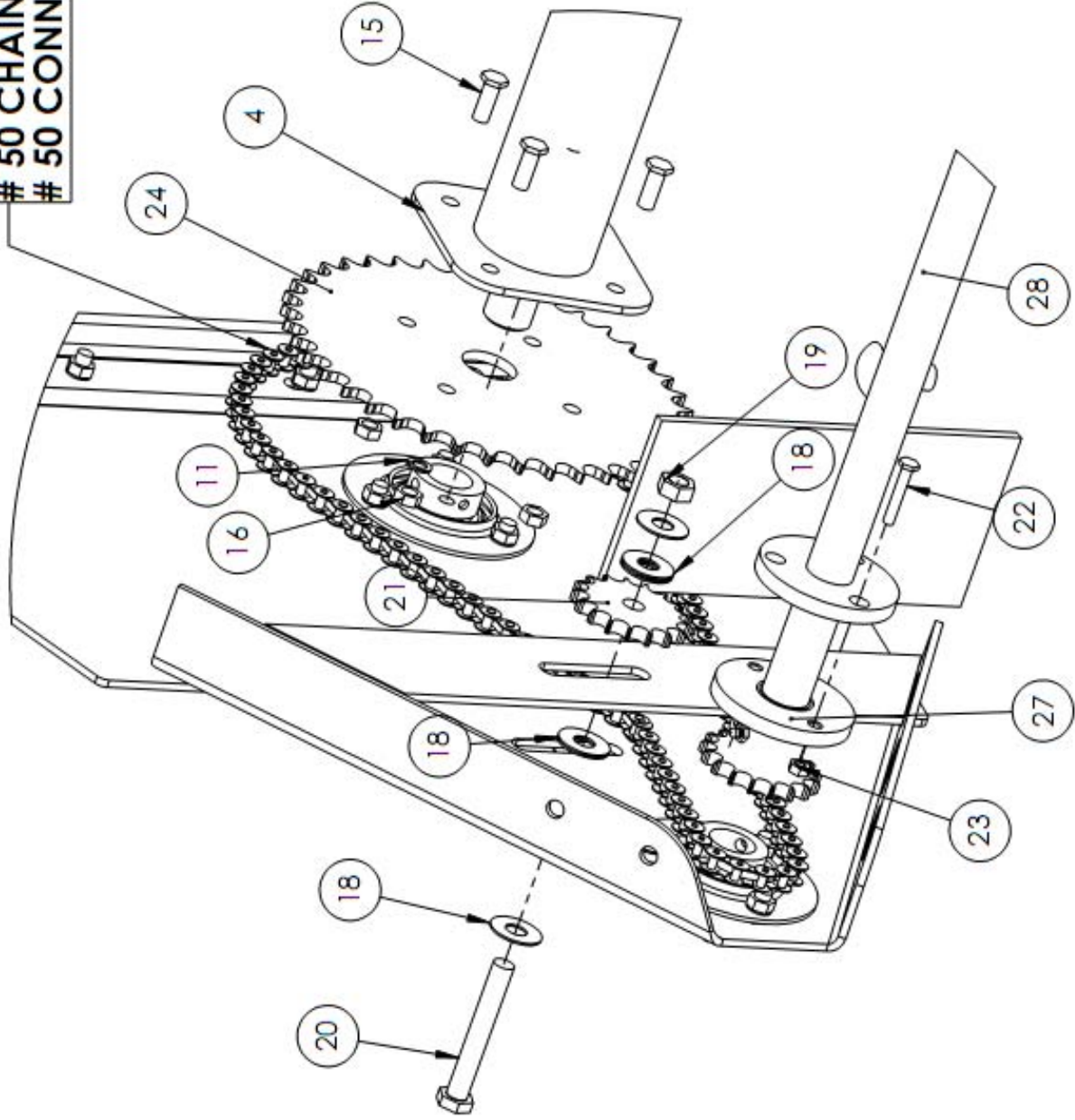
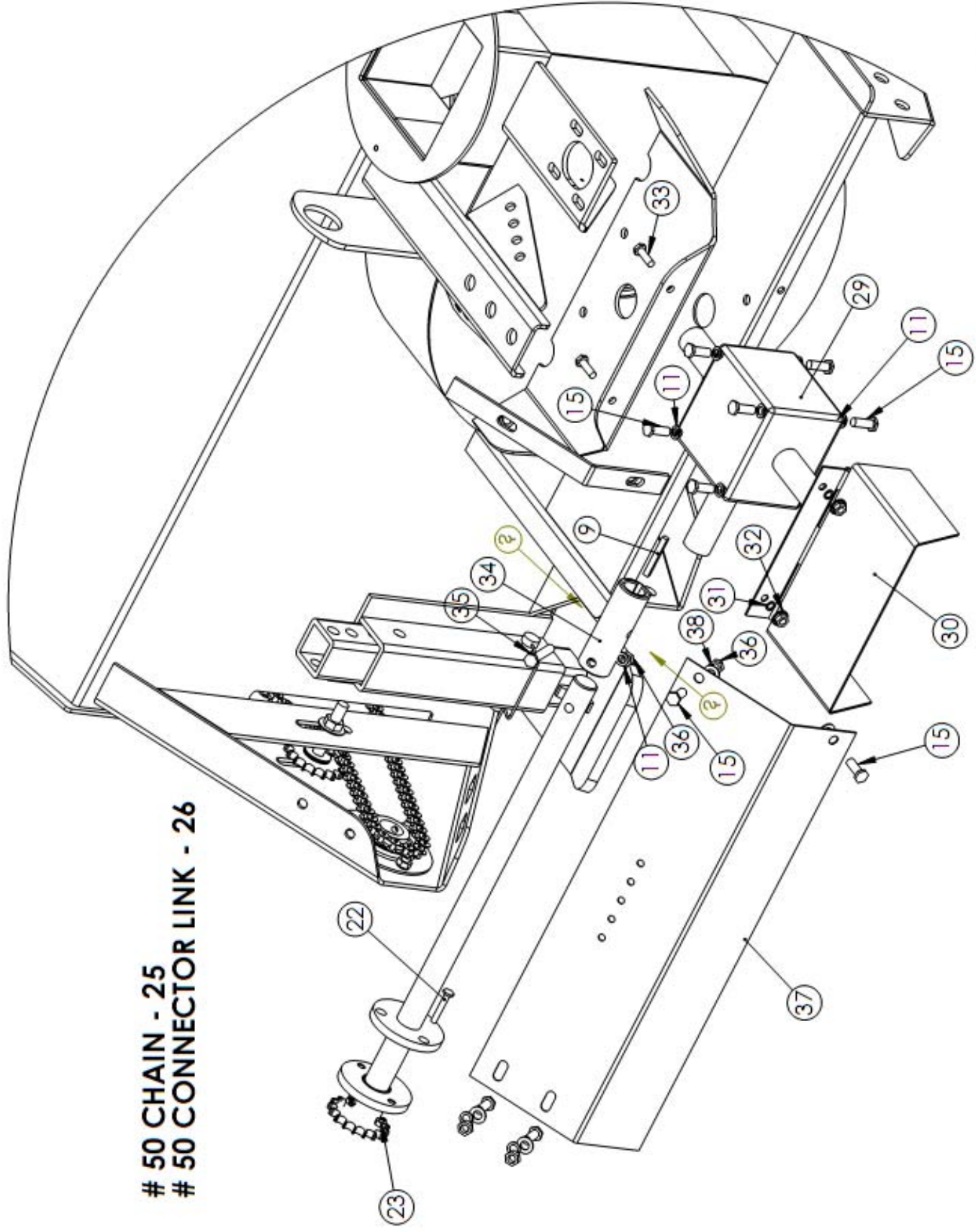


Figure 2-B



# 50 CHAIN - 25  
# 50 CONNECTOR LINK - 26

Figure 2-C

ITEM #	PART #	DESCRIPTION	QTY.
1	RED-39200	RED DEVIL 5' & 6' SKID STEER MOUNT PLATE	1
2	RED-563P-0003	RED DEVIL 5' & 6' 3 POINT LOWER MOUNT BRACE	1
3	LAN14M7259	1/2"-13 X 1-1/2" HEX HEAD BOLT GR. 5	6
4	RED1F30	1/2"-13 TOP LOCK NUT	6
5	REDWU55	1/2" FLAT WASHER	10
6	RED-11004	RD SS Hyd Motor Mnting Plate	1
7	REDB706	5/8"-11 X 1-1/2" HEX HEAD BOLT	7
8	REDKRJF	5/8"-11 TOP LOCK NUT	7
9	RED032309-SPW-001	RD SS Hydraulic Motor Kit	1
10	RED032-1600	1" ID 12 TOOTH HALF COUPLER	1
11	RED032-2000	1 1/4" ID 12 TOOTH HALF COUPLER	1
12	RED030-1260	# 60 CHAIN W/ 11 PITCHES AND CONNECTOR LINK	1
13	RED1SXT	1/4" X 2" KEYSTOCK	2

**HYDRAULIC KIT - 9**

