# RED23304 Owner's Manual

4 foot, 3-Point Mounted Snow Blower



270 West Park Avenue
Huron, SD 57350
866-526-5682

Serial Number:	Date of Purchase:	

### Red Devil Snow Blower

### See Figure 1.

1. The Red Devil Snow Blower will arrive on a pallet as shown in Figure 1. In the accompanying box you will find the following:

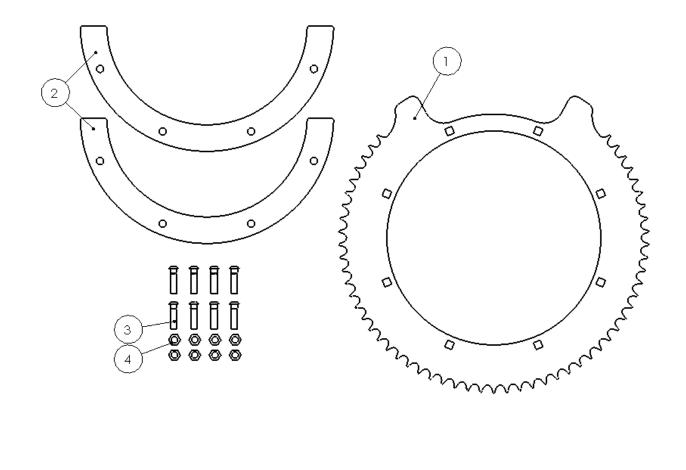
<u>Part Numbers</u>	Description	Quantity
RED56SH-0007	Chute Gear Ring	1
RED56SH-0006	Half-Moon Chute Gear Clamps	2
Bag of Hardware		1



Figure 1

### RED56CGK3P KIT

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RED56SH-0007	RED DEVIL 5' & 6' CHUTE GEAR	1
2	RED56SH-0006	RED DEVIL 5' & 6' CHUTE GEAR CLAMP	2
3	LAN4A16A16	5/16"-18 x 1.0" CARRIAGE HEAD SCREW	8
4	REDKRJ8	5/16"-18 TOP LOCK NUT	8



## **Chute Installation**

- 1. Slide the chute gear ring (RED56SH-0007) over the top of the impeller housing chimney as shown in figure 2. The teeth should engage with the sprocket as shown in figure 3.
- 2. Place the two half moon chute gear clamps (RED56SH-0006) underneath the chute gear ring.
- 3. Set the chute on top of the impeller housing chimney and align bolt holes of all three components as shown in figure 4.
- 4. Use (8) bolts (LAN4A16A16) and (8) lock nuts (REDKRJ8) to attach chute gear, half moon clamps, and chute together to complete assembly.
- 5. Grease the flange with the zerk installed on the bottom side of chimney flange. Rotate chute as you grease to ensure even grease distribution.
- 6. Tighten or loosen nuts after greasing to maintain a firm grip that will rotate easily.
- 7. 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 5.

Figure 2







Figure 3



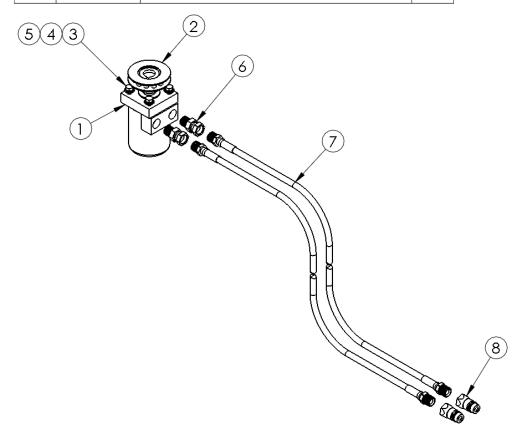
Figure 5

# Chute Rotation Option - Hydraulic (RED56HYD0040)

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RED10110	RED DEVIL CHUTE ROTATION MOTOR	1
2	RED51039	RED DEVIL CHUTE ROTATION SPROCKET	1
3	LAN18A00	HHCS375-16 X 1, GR. 5	4
4	REDWL53	LOCK WASHER375	4
5	LANFWS53	SAE FLAT WASHER375	4
6	RED1404-8-8	1/2" Pipe Thread Swivel Reducer - 1/32" Orifice	2
7	RED-HH-70	70" x 1/4" Hyd Hose	2
8	LAN8010-4	1/2" Female Pioneer Tip - Pipe Thread	2

Use the diagram for installation assistance

- 1. Attach the orbital motor (RED10110) to the back of the snow blower housing with the shaft of the orbital motor pointed up.
- 2. Attach the fittings and hoses to the motor.





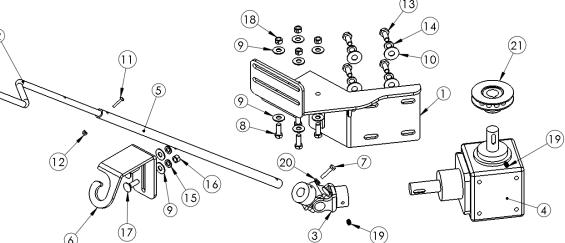
## Chute Rotation Option - Manual (RED56MSH0040)

Use the diagram for installation assistance

- 1. Attach the gearbox mount (RED56MSH-0018) to the back of the snow blower so that it will hold the gearbox to the right side of the blower (when looking from the tractor side).
- 2. Attach the gearbox (RED910400640) to the mount with the shorter shaft pointing upward and the longer shaft pointed toward the tractor.
- 3. Attach the handle to the U-Joint and adjust it to the length that best suits your application.
- 4. Adjust the hook (RED56MSH-0034) so the handle sits in an ideal location for your tractor this will act as a holder for your handle during operation.

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RED56MSH-0018	MANUAL CRANK GEARBOX MOUNT	1
2	RED56MSH-0017	MANUAL CHUTE ROTATION HANDLE	1
3	LAN4P34	4P U-JOINT 3/4" BORE X 1" BORE	1
4	RED910400640	MANUAL CHUTE ROTATION GEARBOX	1
5	RED56MSH-0032	MANUAL CHUTE ROTATION HANDLE EXTENSION	1
6	RED56MSH-0034	MANUAL ROTATION HANDLE HOOK	1
7	REDA105	HHCS25-20 X 1.25, GR. 2	1
8	LAN18A00	HHCS375-16 X 1, GR. 5	4
9	LAN18000	FLAT WASHER375	10
10	LANFW U54	FLAT WASHER438	4
11	LANFQXWH	10-32 X 1" 18-8 PHS W/ SEMS LW	1
12	LANFE2UH	10-32 18-8 Stainless Flex Lock Nut	1
13	LANFF525	HHCS - M10-1.5 X 25, GR. 8.8	4
14	LANFWL54	LOCK WASHER438	4
15	REDWL53	LOCK WASHER375	2
16	REDNAF3	HEX NUT375-16, GR. 5	2
17	RED305K	CARRBLT375-16 X 1.25	2
18	LANFH5CJJ	CENTER LOCK NUT375-16, GR. 5	4
19	LANF04JV	5/16-18 X 1/2" SS SET SCREW - KNURL GRIP	2
20	REDWL52	LOCK WASHER312	1
21	RED51039	RED DEVIL CHUTE ROTATION SPROCKET	1



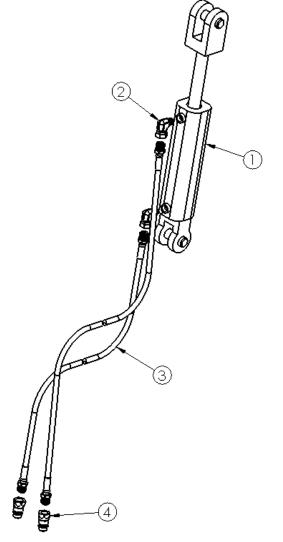


# Chute Deflector Option - Hydraulic (REDHYD0030)

Use the diagram for assembly assistance

Attach the hydraulic cylinder (RED2010111) to the snow blower chute (RED56SH). Then attach the hydraulic hoses and fittings to the cylinder.

	ITEM NO.	PART NUMBER	DESCRIPTION
	1	RED2010111	2X8 DEFLECTOR CYLINDER
	2	RED1501-6-8	3/8" M x 1/2" F 90° Pipe Fitting
	3	RED-HH-90	90" x 1/4" Hyd Hose
ĺ	4	LA N8010-4	1/2" Female Pioneer Tip - Pipe Thread

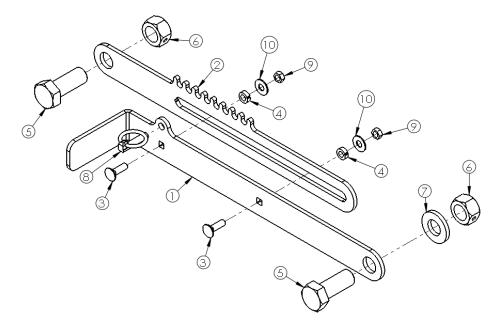


# Chute Deflector Option - Manual (REDMSH0030)

Use the diagram for assembly assistance

Attach the manual chute deflector assembly (REDMSH0030) to the snow blower chute (RED56SH).

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RED56MSH-0025	MANUAL CHUTE DEFLECTOR HANDLE	1
2	RED56MSH-0026	MANUAL CHUTE DEFLECTOR SLIDER	1
3	RED305K	CARRBLT375-16 X 1.25	2
4	RED56MSH-0027	MANUAL CHUTE DEFLECTOR BUSHING	2
5	LANFB010	HHCS - 1-8 X 2.5, GR. 5	2
6	LANFHHN1N	CENTER LOCK NUT - 1-8, GR. 5	2
7	RED56MSH-0031	MANUAL CHUTE DEFLECTOR SPACER	1
8	RED21940	7/16" x 2" LINCH PIN	1
9	REDODΠ	TOP LOCK NUT375-16, GR. 5	2
10	LAN18000	FLAT WASHER375	2





## Red Devil Serial Number

- 1. A stainless steel serial number tag is located on the bracket that holds the Chute Rotation Motor.
- 2. This serial number is required for product registration and is needed for all warranty issues. (As shown in Figure 7)



Figure 7

### **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)

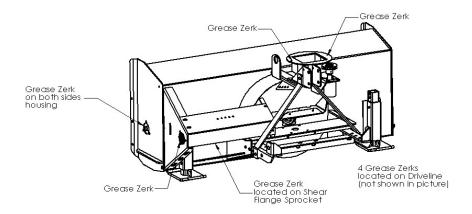
One on each end of the auger outer bearing holder.

One on the cross drive outer bearing holder.

One on the shear flange sprocket.

Two on chute rotation.

Four on the driveline



Check the chain tension. Adjust idler sprocket if needed.

Check the gear box oil level by removing the fill plug and checking for 9 ounces of oil.

Make sure the chute rotation mechanism is working freely.

Make sure the deflector mechanism is working freely.

Make sure the impeller and auger are free of foreign objects.

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 the drive line is the proper length for your 3-Point setup.

Make sure all nuts, bolts, and pins are tightened and secure in place.

Make sure the hydraulics are in good working condition by testing each function and checking for leaks.

### Use Synthetic 80/90 Gear Oil In Gear Box

### **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 engine, engage the PTO.

Ease the blower slowly into the snow.

When clearing 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 blower's backward 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 available horsepower.

#### 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 PTO RPM will reduce the distance the snow is thrown.

You can change the direction of the snow being thrown by using the hydraulic chute rotation controls. Always be aware of where you are throwing the snow.

Your snow blower has Manual deflector control.

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 insure that the chute moves freely. Damage to chute and controls may occur.

### **OPERATION SAFETY**

- Disengage PTO, stop engine, and remove the engine key whenever you leave the equipment seat.
- Disengage PTO, stop engine, and remove the engine key after striking a foreign object. Thoroughly inspect the blower before restarting unit.
- Disengage PTO, stop engine, and remove the engine 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 PTO 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 the PTO is engaged.

- Do not bulldoze. Let the machine throw 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.

### **1 DRIVELINE INSTALLATION INSTRUCTIONS**

# FOLLOW INSTRUCTIONS CAREFULLY TO DETERMINE THE PROPER FIT OF THE DRIVELINE

- 1. Hook up snow blower to lower arms of the 3-point.
- 2. Measure the distance from the end of the PTO shaft to the end of the gear box shaft
- 3. Lay driveline on flat surface and measure the distance from one yoke to the other in the most retracted position. If the driveline length is greater than length of shaft, move the mountings to correct the length, shorten driveline or use a CAT II quick hitch.
- 4. If distance from shaft to shaft is greater than 9" more than the overall length of driveline, it may be too short. Most drivelines require a minimum of 5" overlap. Once the driveline is installed, slowly lift the snow blower thru the complete arc of 3-point mount. Make sure driveline does not bottom out anywhere throughout the arc. Make sure the shields do not separate.

# **Driveline Safety and Maintenance**

- Keep driveline shield in place do not remove. Never operate your snow blower when driveline shields are damaged or missing. These shields have been installed for your safety. Personal injury or even death can result from entanglement in rotating components.
- Do not operate your snow blower with a driveline that is too long or with a dented shield. This will not allow the shaft to telescope freely. Operating under these conditions can cause damage to the snow blower, gear box, driveline knuckles, or your tractor.
- Keep the driveline well greased or oiled. (Oil should be used in severe cold)
- Make sure the third arm on the tractor three point will have the snow blower sitting level and resting on the skid shoes. This will keep the knuckles on the driveline running as straight as possible.
- Raising and lowering the snow blower while the PTO is engaged can cause severe damage to the driveline and the tractor.
- This driveline is designed to operate at 540 rpm only.
- Operating the driveline at an excessive angle will shorten the life of the driveline.
- Personal injury or even death can result from entanglement with drivelines. Stay clear of driveline at all times while PTO is engaged.
- If your driveline is making a chattering noise you may be running at too steep of an angle. You may need to move the mounting out to lessen the angle.
- Drivelines must always have at least 5" of overlap. Grease before operating your snow blower.

# Red Devil Statement of Limited Warranty

Red Devil warranties its new products to be free from defects in material and workmanship for a period of one (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. Any 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.

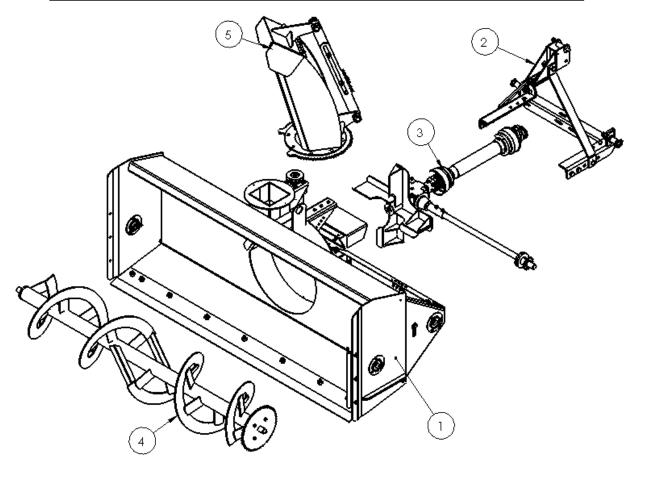
THIS WARRANTY IS EXPRESSLY IN LEU OF ALL OTHER WARRANTIES EXPRESSED OR IMPLIED. There are no warranties of merchantability or fitness of a particular purpose. This warranty states Red Devil's entire and exclusive liability and buyer's exclusive remedy or any claim for damages in connection with the sale 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.

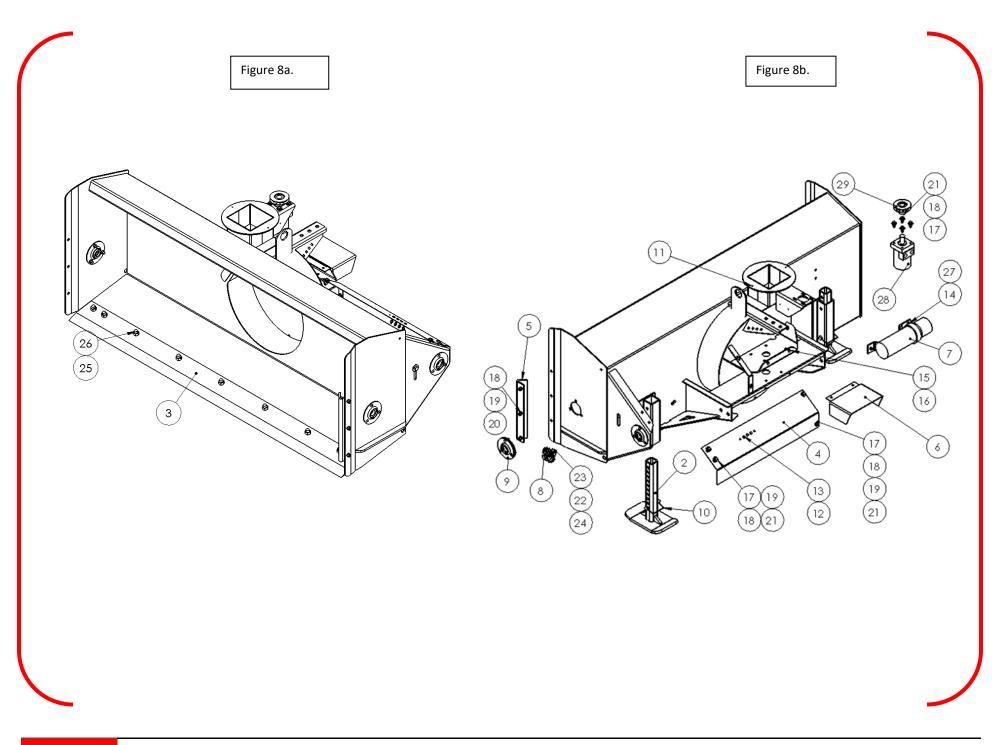
Lankota reserves the right to make improvements in design or changes in specifications at any time, without incurring any obligation to owners of units previously sold.

## Parts Book

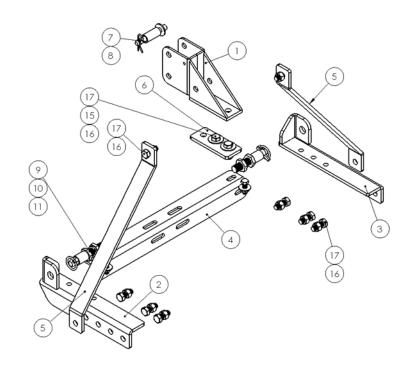
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RED4H	RED DEVIL 4' HOUSING ASSEMBLY	1
2	RED563P	RED DEVIL 5" & 6"3-POINT ASSEMBLY	1
3	RED56-3PT-Powertrain	RED DEVIL 4' POWERTAIN FOR 3-POINT UNITS	1
4	RED4AUG	RED DEVIL 4' AUGER ASSEMBLY	1
5	RED56SH	RED DEVIL 5' & 6' CHUTE ASSEMBLY	1



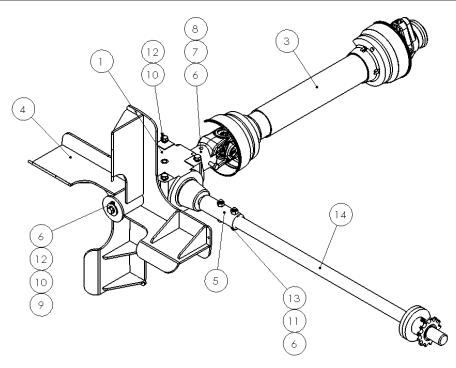
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RED4H-0000	RED DEVIL 4" HOUSING COMPLETE ASSEMBLY	1
2	RED89H-SKIDS	RED DEVIL SKID SHOE WELDMENT	2
3	RED4H-0001D	RED DEVIL 4' BLOWER CUTTING EDGE	1
4	RED-44703-4	RED DEVIL 4' BLOWER SHIELD	1
5	RED56H-0034	RED DEVIL 5' & 6' BLOWER CHAIN GUARD	1
6	RED44339	RED DEVIL 5' & 6' BLOWER PTO SHIELD	1
7	RED01-315C	manual holder canister	1
8	RED033-5017	#50 ANSI 17 Tooth Idler Sprocket	1
9	RED51677	1-1/8" BEARING ASSEMBLY	3
10	REDW742	SKID SHOE PIN	2
11	RED3234	ZERK FITTING 1/4"-28	2
12	REDE37E	1/4"-20 TOP LOCK NUT	3
13	REDB105	1/4"-20 x 1.25" HEX HEAD CAP SCREW	3
14	LANFXG26	CARRBLT312-18 X .75	3
15	REDB204	5/16-18 x 1.00" HEX HEAD CAP SCREW	2
16	REDKRJ8	5/16"-18 TOP LOCK NUT	2
17	LAN18000	3/8" FLAT WASHER	8
18	REDWL53	3/8" LOCK WASHER	11
19	REDNAF3	3/8" HEX NUT	7
20	LAN18A	3/8"-16 x 1" Carriage Bolt	3
21	LA N18 A00	3/8"-16 x 1.00" HEX HEAD CAP SCREW	8
22	LAN22000	1/2" FLAT WASHER	14
23	RED1F30	1/2"-13 TOP LOCK NUT	1
24	REDB512	1/2"-13 x 3.00" Hex Head Cap Screw	1
25	REDKRJF	5/8"-11 TOP LOCK NUT	8
26	RED706K	CARRBLT625-11 X 1.5	8
27	REDKRJ8	TOP LOCK NUT312-18, GR. 5	3
28	RED10110	RED DEVIL CHUTE ROTATION MOTOR	1
29	RED51039	RED DEVIL CHUTE ROTATION SPROCKET	1



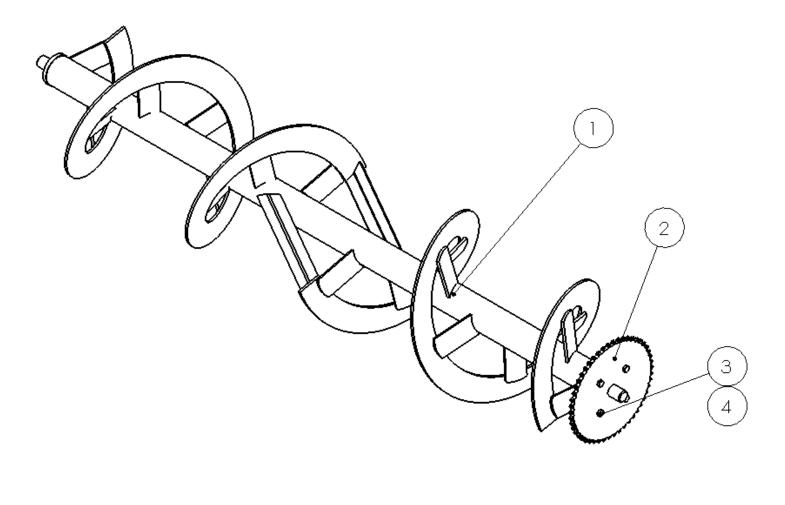
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RED44779	RED DEVIL 5' & 6' 3-POINT UPPER MOUNT	1
2	RED44769-L	RED DEVIL 5' & 6' 3-POINT LOWER LEFT MOUNT	1
3	RED44769-R	RED DEVIL 5' & 6' 3-POINT LOWER RIGHT MOUNT	1
4	RED-563P-0003	RED DEVIL 5' & 6' 3-POINT LOWER BRACE	1
5	RED-563P-0001	RED DEVIL 5' & 6' 3-POINT Z-BAR	2
6	RED-563P-0002	red devil 5' & 6' 3-point mount spacer	1
7	RED21250	TOP LINK PIN - CATEGORY 0	1
8	RED21180	TOP LINK BUSHING - CATEGORY 2	1
9	RED21233	LIFT ARM PIN - CATEGORY 1	2
10	RED21180	LIFT ARM BUSHING - CATEGORY 2	2
11	RED21940	7/16" x 2" LINCH PIN	2
12	LAN22000	1/2" FLAT WASHER	2
13	RED1F30	1/2"-13 TOP LOCK NUT	2
14	LAN22A32	1/2"-13 x 1.50 HEX HEAD CAP SCREW	2
15	LAN26000	5/8" FLAT WASHER	2
16	REDKRJF	5/8"-11 TOP LOCK NUT	10
17	REDB706	5/8"-11 x 1.50" HEX HEAD CAP SCREW	10



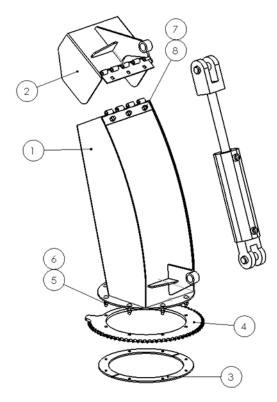
ITEM NO.	PART NUMBER	DESCRIPTION	6 FT/QTY.
1	RED 10027	RED DEVIL 5' & 6' GEAR BOX	1
2	RED 232-24092	DRIVELINE FOR 5' & 6' BLOWERS	1
3	RED 232-24092	DRIVELINE FOR 5' & 6' BLOWERS	1
4	RED56IMP	RED DEVIL 5' & 6' IMPELLER WELDMENT	]
5	RED36536	RED DEVIL 5' & 6' SHEAR FLANGE COUPLER	1
6	RED 10BH	MACHINE KEY 1/4" X 2.00"	3
7	REDKRJ8	5/16"-18 TOP LOCK NUT	1
8	REDB212	5/16"-18 x 3.00 HEX HEAD CAP SCREW	]
9	RED0F23	3/8" FENDER WASHER	]
10	REDWL53	3/8" LOCK WASHER	9
11	RED0DTT	3/8"-16 TOP LOCK NUT	2
12	LAN18A00	3/8"-16 x 1.00" HEX HEAD CAP SCREW	9
13	REDB308	3/8"-16 x 2.00" HEX HEAD CAP SCREW	2
14	RED4SE	RED DEVIL SHEAR FLANGE ASSY - 4 FT	1
NA	RED 50RC	ANSI 50 ROLLER CHAIN - 90 LINK	1
NA	RED 50 O L	OFFSET LINK FOR ANSI 50 ROLLER CHAIN	1
NA	RED50CL	CONNECTING LINK FOR ANSI 50 ROLLER CHAIN	1



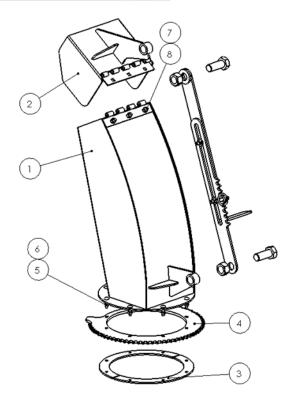
ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RED4AUG-0000	RED DEVIL 4' AUGER WELDMENT	1
2	RED36525	50T 50# CHAIN SPROCKET	1
3	REDB306	3/8"-16 x 1.50" HEX HEAD CAP SCREW	4
4	REDODTT	3/8"-16 TOP LOCK NUT	4



ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	RED56SH-000C	RED DEVIL 5' & 6' CHUTE WELDMENT	1
2	RED56SH-000D	RED DEVIL 5' & 6' DEFLECTOR WELDMENT	1
3	RED56SH-0006	RED DEVIL 5' & 6' CHUTE GEAR CLAMP	2
4	RED56SH-0007	RED DEVIL 5' & 6' CHUTE GEAR	1
5	REDKRJ8	5/16"-18 TOP LOCK NUT	8
6	LAN4A16A16	5/16"-18 x 1.25" CARRIAGE SCREW	8
7	REDODTT	3/8"-16 TOP LOCK NUT	3
8	LAN18A	3/8"-16 x 1" Carriage Bolt	3



Shown with optional HYDRAULIC chute deflector (RED56HYD0030)



Shown with optional MANUAL chute deflector (RED56MSH0030)

