

# PARTS CATALOG



**SERF - 525** 

#### **ATTACHMENTS**

28" ROTARY MOWER	MFRS. NO. 599
LEAF MULCHER	MFRS. NO. 459
FRONT WEIGHT KIT	MFRS. NO. 466
REAR WEIGHT KIT	MFRS. NO. 300
REAR WHEEL WEIGHT	MFRS. NO. 449
42" SNOWPLOW & DOZER	MFRS. NO. 299
40" GRADER BLADE	MFRS. NO. 298
LEFT LEVER KIT	MFRS. NO. 594

## SIMPLICITY MANUFACTURING COMPANY, INC.

## WARRANTY

The company warrants Simplicity Products to be free from defects in material and workmanship except the company makes no warranty express or implied with respect to tires, engines and engine accessories which generally are warranted by their respective manufacturers. Any part covered by this warranty which is proven defective within one year, under normal use, from date of purchase, will be replaced free of charge, f. o. b. Port Washington, Wisconsin, provided such part is returned to factory transportation charges prepaid and is found to be defective upon examination at the factory. The company is not obligated under this warranty to bear cost of labor or delivery charges in replacement of defective parts. This warranty does not apply to any Simplicity Products altered outside of Simplicity's factory. Such replacement of defective parts shall be the exclusive remedy and in no event shall Simplicity be liable for consequential damages, EXCEPT AS SPECIFICALLY PROVIDED HEREIN, THERE ARE NO WARRANTIES WHICH EX-TEND BEYOND THE DESCRIPTION ON ANY SIMPLICITY PRODUCT.

Should warranty service be necessary, the information below should be presented to the authorized SIMPLICITY Dealer.

\_\_\_\_\_

Customer's Name

Address

Mfg. No.\_\_\_\_\_\_Serial No.\_\_\_\_\_

Date Purchased\_\_\_\_

Purchased From

Address

Engine Model No.\_\_\_\_\_Type No.\_\_\_\_\_

To obtain replacement parts from dealer, advise quantity, part number and description.



## PACKING

This tractor is delivered complete in one carton. The carton contains:

- 1 Tractor Assembly
- 1 -Steering Wheel
- 1 Seat Cover Assembly
- 1 Hardware Pack

Should shortages of any of the above items occur, advise by stating packer's number listed on green packing slip, serial number of tractor, part number & description of items missing.

#### ASSEMBLY

This tractor is shipped completely assembled except for the steering wheel and seat cover assembly. Position the wheel on the steering post as shown in Figure 1 and secure with the 5/16'' screw and lock nut provided. Attach the seat cover to the seat pan assembly.

## ENGINE LUBRICATION

1. ENGINE LUBRICATION - Refer to the engine manufacturer's instruction manual for information concerning location of the crankcase filler plug, and the oil capacity of the crankcase.

NOTE: It is important that you pay attention to "Service Designation" stamped on the top of each can of oil you intend using in your tractor engine. Use oil labeled MS (Motor Severe), but do not use ML or MM labels as they do not contain sufficient additives for proper protection. Labels DL and DM may be used also; however, do not use a DS label oil as it is too severe in detergent quality for this application. Be sure to use a premium grade oil and change at least every 24 hours of operation.

2. ENGINE AIR CLEANER - Refer to the engine manufacturer's instruction manual for information concerning the type and quantity of oil to be used in the air cleaner. Inspect the air cleaner element frequently to insure cleanliness, and under dusty or dirty operating conditions, check and clean daily if necessary.

3. ENGINE COOLING - The engine used on your tractor is an air-cooled engine and requires that the fins on the head and cylinder be kept free of heavy layers of dirt and foreign material. If the air flow is obstructed by grass, etc., piled up on the recoil starter screen, or dirt is allowed to nullify the purpose of the cooling fins on the cylinder head and cylinder, proper cooling cannot take place, and the life of the engine will be shortened.



## TRACTOR LUBRICATION

Grease fittings are located on both front spindle housing, on the front wheels and at the pivot point under tractor frame. In normal use, these fittings (5 in all) should get two or three shots of a good grade of automotive type multi-purpose grease, every 15 to 20 hours of operation. Be sure to wipe the fittings clean before you apply the grease gun, or dirt and grit will be carried into the bearings with the application of grease.

The tractor transmission is lubricated with SAE 90 oil and is filed up to the level of the threads in the filler-plug hole, Check the transmission for oil before operating the tractor initially, and occasionally check the filler and drain plugs for tightness. Unless the transmission is disassembled or the oil seals leak, the transmission lubricant need not be replenished or replaced. Allow the tractor to sit still for a period of time before checking transmission oil level. This will allow the oil dispersed in transmission to drain down to its normal position.

Occasionally lubricate the pivots for the clutch lever and pivots for the PTO and the front axle steering links and gears. Use a regular medium weight oil for this purpose.



Figure 2

## **BRAKE and CLUTCH ADJUSTMENT**

Operation of clutch and brake is regulated by clutch & brake pedal shown in Figure 2.

Depress the pedal and the clutch idler pulley is released and the brake is applied at the same time. Release the pedal and the clutch idler is engaged and the brake is released. The adjustment is regulated by positioning the set collars on the clutch and brake rods so that a clearance exists between the set collar and the rod guides when the clutch and brake pedal is released, as shown in Figure 4.

### PARKING BRAKE

To operate the parking brake, hold the brake pedal depressed and slide the parking brake lever all the way to the rear and turn the lever in a clockwise direction until it is tight. See Figure 5. To release the parking brake, turn the parking brake lever in a counter-clockwise direction until the brake pedal is released.

## STARTING ENGINE

The proper procedure for starting the engine is as follows:

- 1. Sit upon the tractor seat.
- 2. Depress the clutch pedal Figure 2 with the right foot.
- 3. Move the throttle lever Figure 1 to the CHOKE position.

4. Grasp the handle of the recoil starter Figure 2 with the right hand and pull sharply toward you. If engine starts on first pull, slowly move the throttle lever to the FAST position as the engine warms up. Should the engine fail to start on the first or second pull move the throttle lever to the FAST position to avoid flooding the engine with fuel. When re-starting a warm engine, it should not be necessary to use the choke.



Figure 3

## FORWARD or REVERSE TRAVEL

Travel direction of the tractor is regulated by the position of the transmission shift lever, Figure 3. Merely depress the clutch pedal, Figure 2 with the right foot, and with the heel of your hand, move the shift lever into the desired 1st, 2nd, 3rd or reverse position. Slowly release the clutch lever and move off, regulating speed of travel by the position of the throttle lever.

## **STOPPING ENGINE**

When stopping engine or parking tractor, keep the transmission in gear and depress the clutch pedal to a point where the brake is applied and place throttle in the STOP position. Hold the clutch pedal all the way in until the engine stops, then release.



#### Figure 4

## UNDERSIDE INSPECTION

The underside of the tractor is readily accessible in the following manner:

1. Drain all fuel from the fuel tank by removing the fuel line from the carburetor and draining into a suitable container.

2. Remove the air cleaner from the carburetor.

3. Place the transmission in "LO" gear to prevent the rear wheels from turning, and raise up the front end of the tractor until the tractor stands in a vertical position, resting the back edge of the seat level with the ground. With the tractor in this position, inspection of belts and linkages may be carried out with ease. While it is possible for one man to raise the tractor to this position, it obviously will be easier if two men perform this together.



Figure 5

## HOOD REMOVAL

To remove the tractor hood, use the following procedure:

- 1. Loosen the four screws at the sides of hood.
- 2. Push the recoil starter handle inside of the hood opening.

3. Remove the hood by lifting up and forward, to clear the steering wheel. To replace the hood, reverse the order of above steps.



#### RECOMMENDED TIRE PRESSURES

FRONT 9 Lbs. PSI REAR 10 Lbs. PSI

NOTE: The tractor is shipped with all tires inflated to 25 PSI. It is very important to reduce these pressures to the above recommendations before putting the tractor into operation.

# POWER TAKE OFF GROUP



Ref. Let.	Part No.	Description
A B C D E F G H J K L M N P	163063 154177 705005 719001 720002 717003 101096 154177 705059 719002 720002 717003 163096 722016	Pulley Clevis Assembly Spacer Hex. Cap Screw, 3/8"-16 x 1" Plain Washer, 3/8" Lock Washer, 3/8" Full Hex. Nut, 3/8"-16 Pulley Spacer Hex. Cap Screw, 3/8"-16 x 4-1/4" Plain Washer, 5/16" Lock Washer, 3/8" Full Hex. Nut, 3/8"-16 P.T.O. Rod Clutch Cotter Pin, 3/32" x 3/4"

Ref. Let.	Part No.	Description
Q	163100	Rod Guide Assembly
R	717511	Full Lock Hex. Nut, 5/16"-18
S	163103	Spring
T	8191022	Set Collar
U	713001	Set Screw, 1/4"-20 x 3/8"
V	158186	Handle
W	163061	Handle Lever
X	719001	Plain Washer, 3/8"
Y	717510	Full Lock Hex. Nut, 3/8"-16
Z	163080	Belt Stop
AA	162093	P.T.O. Decal
AB	159112	Knob
AC	162115	Belt Stop
AD	163112	Bracket



# STEERING & FRONT WHEEL GROUP

# STEERING & FRONT WHEEL GROUP PARTS LIST

Ref. Let.	Part No.	Description
Let. A B C D E F G H J K L M N P Q R S T U V W X Y Z AA B AC AD AE AG AH AJ AK AL AM	No. 163113 170107 705019 717511 157077 157241 170105 157286 158012 159026 157286 163023 154177 162053 719001 720002 717003 154301 720004 717008 170091 717016 121349 705005 719001 717016 121349 705005 719001 717510 163033 108181 163037 725504 713006 163030 157286 163106 101022 8021010	Steering Wheel Assembly Decal Hex. Cap Screw, 5/16"-18 x 1-1/4" Full Lock Hex. Nut, 5/16"-18 Steering Bushing Snap Ring Steering Shaft Assembly Retainer Ring Drag Link Assembly Spacer Special Screw Plain Washer, 3/8" Lock Washer, 3/8" Lock Washer, 3/8" Full Hex. Nut, 3/8"-16 Ball Joint Lock Washer, 1/2" Full Hex. Nut, 1/2"-20 Tie Rod Jam Hex. Nut, 1/2"-20 Spacer Hex. Cap Screw, 3/8"-16 x 1" lg. Plain Washer, 3/8" Full Lock Hex. Nut, 3/8"-16 L.H. Spindle Assembly Washer Steering Lever Assembly Key Set Screw, 5/16"-18 x 1/2" R.H. Spindle Assembly Retainer Ring Wheel & Tire Assembly Washer Ste Collar
AL	163106 101022	Wheel & Tire Assembly Washer
AK AL AM AN AP AR	163106 101022 8021010 713503 <b>163114</b> 163107	Wheel & Tire Assembly Washer Set Collar Set Screw, 5/16"-18 x 5/16" Front Hub Cap (For Service Only) Wheel
AS AT AU AV AW	163111 163100 163108 163109 154264	Bearing, Relief (For Service) Wheel Bearing (For Service) Tire Tube Snap Ring



# ENGINE, PULLEY, BRAKE & CLUTCH GROUP

# ENGINE, PULLEY, BRAKE & CLUTCH GROUP PARTS LIST

<b>.</b> .		· · · · · · · · · · · · · · · · · · ·
Ref.	Part	
Let.	No.	Description
A	163077	Engine Dullars (Leure)
B	163010	Engine Pulley (Large)
C	713503	Engine Pulley (Small) Set Screw, 5/16"-18 x 1/2"
D	154096	
E	163011	Key "V" Belt
F	163065	Belt Stop, 3/16'' x 3/4'' x 5-7/8''
G	105005	
н	162021	Idler Pulley Pulley Bracket Assembly
J	722009	Cotter Pin
ĸ	705016	Hex. Cap Screw, 3/8''-16 x 1-1/4''
L	719002	Plain Washer, 5/16"
M	720002	Lock Washer, 3/8"
N	717003	Full Hex. Nut, 3/8"-16
P	165068	Return Spring
Q	170063	Clutch Rod
R	722009	Cotter Pin, 1/8'' x 3/4''
S	156303	Rod Guide Assembly
T	717511	Full Lock Hex. Nut, 5/16''-18
U	8191022	Set Collar
v	713001	Set Screw, 1/4"-20 x 3/8"
W	162092	Brake Rod, 5/16'' Dia. x 30-3/4''
Х	156304	Rod Guide Assembly
Y	717513	Full Lock Hex. Nut, 1/4"-20
Z	157087	Parking Brake Collar
AA	157088	Parking Brake Lock
AB	121037	Spring
AC	715031	Hex. Cap Screw, 1/4''-20 x 1/2''
AD	720003	Lock Washer, 1/4"
AE	717005	Full Hex. Nut, 1/4"-20
AF	156134	Brake Band Assembly
AG	156135	Brake Band
AH	156136	Brake Lining
AJ	724502	Tubular Brass Rivet
AK AL	705009	Hex. Cap Screw, 3/8"-16 x 1-1/2"
	157041	Spring
AN	720002	Lock Washer, 3/8"
AN	170208 118240	Clutch Shaft Assembly
AP	162029	Snap Ring L.H. Foot Rest
AQ	162054	Foot Rest Cover
AS	705004	Hex. Cap Screw, 3/8"-16 x 3/4"
AT	705004	Hex. Cap Screw, $3/8$ '-16 x $3/4$ '' Hex. Capscrew, $3/8$ ''-16 x 1'' lg.
AU	717003	Full Hex. Nut, $3/8$ "-16
AV	719001	Plain Washer, 3/8"
AX	715067	Taptite Screw, $1/4$ "-20 x $3/8$ "
AY	162098	Pedal Pad
BB		Engine
BC	715079	Special Screw, 3/8''-16 x 1-1/4'' lg.
BD	705018	Hex. Cap Screw, 5/16LL-18 x 1-1/2" lg.
BE	718033	Nut, Whiz-Lock, 5/16"-18
BF	163075	Muffler Deflector
BG	718038	Tinnerman Nut
BH	714020	Self-Tapping Screw $\# 14 \ge 5/8$ " lg.
BJ	717001	Full Hex Nut, 5/16 - 18
BK	720001	Lock Washer, 5/16
BL	157127	Spring



# FRAME, HOOD, DASH & SEAT GROUP

# FRAME, HOOD, DASH & SEAT GROUP

Ref.	Part	
Let.	No.	Description
A	163001	Grille
B	718041	Retainer Nut
C D	705012 720001	Hex. Cap Screw, 5/16"-18 x 5/8" Lock Washer, 5/16"
E	717001	Full Hex. Nut, 5/16"
F	106582	Felt Pad
G	170093	Grille Support
н	718041	Retainer Nut
J K	163040	Hood
L	715037 720001	Thumb Screw Lock Washer 5/16''
м	170081	Dash Assembly
N	715067	Taptite Screw, 1/4''-20 x 3/8''
Р	106582	Felt Pad
Q	162105	Seat Support
R S	163006 153037	Wheel Assembly, L.H. Tire
T	153038	Tube
U	158433	Plug Button
V	719008	Washer
W	727001	Grease Fitting
X Y	165066 159177	Seat Panel Seat Pan Tape
Z	162094	Seat Pad
AĀ	703005	Carriage Bolt, 5/16''-18 x 3/4''
AB	720001	Lock Washer, 5/16"
AC	717001	Full Hex. Nut, 5/16"-18
AD AE	163116 154289	Frame Assembly Bushing
	104207	Daimid
AG	165040	L.H. Side Plate
AH	705004	Hex. Capscrew, 3/8"-16 x 3/4"
AJ	720002	Lock Washer, 3/8"
AK AL	705040 720006	Hex. Capscrew, 7/16"-14 x 3/4" Lock Washer, 7/16"
ALL	165038	R.H. Side Plate
AN	705010	Hex. Capscrew, 3/8"-16 x 1-3/4"
AP	720002	Lock Washer, 3/8"
AQ	717003	Hex. Nut, 3/8''-16
AR AS	105050 154065	Washer Set Collar
AS	713006	Set Screw, 5/16"-18 x 1/2"
AU	163097	Choke Control
AV	714016	Self Tap Screw, 1/4"-20 x 1/2"
AW	170098	Throttle Decal
AX AZ	162072 156211	Clutch Decal Rear Hub Cap (For Service Only)
BA	163098	Number Decal
BB	163073	Rear Emblem
BC	170296	Grille Decal
BD BE	163069 163005	Hood Stripe Wheel & Tire Assembly, L.H.
BF	158436	Plug Button
BG	163003	Wheel & Tire Assembly R.H.
BH	118053	Pin
BJ	722009	Cotter Pin
BK BL	156191 705004	Draw Bar Bracket Hex. Cap Screw, 3/8"-16 x 3/4"
BM	720002	Lock Washer, 3/8"
BN	156192	Clip Drawbar
BP	705005	Hex. Cap Screw, 3/8"-16 x 1"
BQ	720002	Lock Washer, 3/8''
BR BS	717003 705019	Full Hex. Nut, 3/8"-16
BT	705019	Hex. Capscrew, 5/16''-18 x 1-1/4'' Hex. Cap Screw, 5/16''-18 x 3/4'' lq.
BU	718041	Retainer Nut
BV	163004	Wheel Assembly, R.H.
BW	165073	Speed Clip
BX	727013	Grease Fitting

# TRANSMISSION



# **TRANSMISSION**

Description	Snap Ring Avlo & Buching Accombly P H	Bushing	Thrust Cup	L.H. Axle Assembly	Differential Plate Assembly	Drive Gear	Washer	Bushing	Differential Pinion Spindle	Differential Pinion	Differential Spacer	Hex. Cap Screw, 3/8"-16 x 2 1/2"	Full Lock Hex. Nut, 3/8''-16	Lock Washer, 3/8"	Gear Case Cover (Sub Assy. Encludes	C, D, BE, & BV)	Bushing	Oil Seal	Case Gasket	Hex. Cap Screw, 5/16"-18 x 1 1/4"	Lock Washer, 5/16"	Shift Lever Assembly	Knob Ball	Hex. Cap Screw, 1/4"-20 x 3/4"	Full Lock Hex. Nut, 1/4''-20	Transmission Pulley	Key	Brake Drum	Key	Set Screw, 5/16"-18 x 1/2"	Spring	Roll Pin Assembly	Expansion Plug	"O" Ring	Gear and Shaft Assembly	
Part No.	163017	158363	158358	163028	163054	163013	163088	158365	121083	158579	121084	715043	717510	720002	163095		163021	163012	156103	705019	720001	165063	8021050	705030	717513	156119	725504	165067	725505	713501	162085	156308	163074	165006	165013	
Ref. Let.	AN	AQ	AR	AS	AT	AU	AV	AW	AX	AY	AZ	BA	BB	ည္ထ	BD		BE	BF	ဗ္ဗ	BH	BJ	BK	BL	BM	BN	BP	ğ	BR	BS	BT	BU	ΒV	BW	BX	ВΥ	
	_										·															_			<b></b>				66 LUIGEN			
Description	Gear Case (Sub Assy. Encludes A, B,	C, D, E, F, & DV) Roll Pin, 3/8" Dia. x 1"	Bushing	Plug	Half Ball Bushing	Shift Rod Assembly	Pipe Plug, 3/8"	Pipe Plug	Shift Shaft, Reverse & 1st	Retainer Ring	Hi-Lo Shift Shaft	Full Hex. Nut, 7/16"-14	Reverse Shift Fork	I & II Shift Fork	Shift Lock Ball	Spring	Reverse Pinion Shaft	Reverse Pinion	Roller Bearing	Pulley Shaft	Oil Seal	Washer	Retainer Ring	Key	Hi & Lo Pinion Assembly	Washer	Shaft & Gear Assembly	Brake Shaft	<b>Chuster Gear</b> Assembly	Dowel Pin	Gasket	Plate Support As and v	Oil Seal	Hex. Cap Screw, 3/8"-16 x 7/8"	Washer	Washer
Part No. Description	163094 Gear Case (Sub Assy. Encludes A, B,	723007 Roll Pin, $3/8''$ Dia. x 1"		163050 Plug	101042 Half Ball Bushing	156031 Shift Rod Assembly		726252 Pipe Plug	165004 Shift Shaft, Reverse & 1st	8061048 Retainer Ring	156078 Hi-Lo Shift Shaft	717022 Full Hex. Nut, 7/16"-14	156079 Reverse Shift Fork	156080 I & II Shift Fork	154262 Shift Lock Ball	154323 Spring	165005 Reverse Pinion Shaft	165007 Reverse Pinion	156082 Roller Bearing	165008 Pulley Shaft	156084 Oil Seal	156085 Washer	8061048 Retainer Ring	156086 Key	156087 Hi & Lo Pinion Assembly	156089 Washer	165009 Shaft & Gear Assembly	165010 Brake Shaft	165011 Chuster Gear Assembly	156292 Dowel Pin	163009 Casket	163056 Plate Support As end v				163015 Washer

# LIFT LEVER KIT

MFRS. NO. 594



Ref. Let.	Part No.	Description
A	162069	R.H. Bearing Bar
B	162070	L.H. Bearing Bar
C	162068	Lift Lever Quadrant
D	705005	Hex. Cap Screw, 3/8"-16 x 1"
EF	720002 717003	Lock Washer, 3/8" Hex. Nut, Full, 3/8"-16
G	705004	Hex. Cap Screw, 3/8''-16 x 3/4''
H	162066	Lift Lever Assembly
J	723011	Roll Pin 3/16" dia. x 1"
K	154224	Lift Lever Latch
L	723007	Roll Pin 3/8" dia. x 1"
M	170094	Lift Lever Latch Rod
N	170015	Push Nut
Р	154226	Spacer
Q	152006	Spring
R	154227	Thumb Button
S	156209	Handle Grip
T	153058	Pin

Ref Let.	Part No.	Description
U V W X Z AA AB AC AD AE AF AG AH AJ AK AL	8161045 108385 705031 717510 108375 705004 720002 717003 108199 705005 717510 107031 705005 7179001 720002 153058 8161045	Spring Clip Mower Lift Lever Hex. Cap Screw, 3/8"-16 x 7/8" Hex. Nut, Full Lock, 3/8"-16 Lift Bar Hex Cap Screw, 3/8"-16 x 3/4" Lock Washer, 3/8" Hex Nut, Full, 3/8"-16 Mower Lift Link Hex Cap Screw, 3/8"-16 x 1" Hex Nut, Full Lock, 3/8"-16 Chain Hex Cap Screw, 3/8"-16 x 1" Plain Washer, 3/8" Lock Washer, 3/8" Pin Spring Clip

# ELECTRIC STARTER

Ref. Let.	Part No.	Description	UNDER NORMAL USE THE TRACTOR
			SHOULD BE RECHARGED ONCE A
А	122218	Key Switch	MONTH.
В	122203	Key & Ring Assembly	
С	170047	Harness Assembly	
D	721505	Lock Washer	RECHARGE FOR A PERIOD OF
Е	122234	Special Hex Nut	24 HOURS.
F	721003	Lock Washer No. 10 Ext. Type	
G	717007	Hex Nut Full No. 10-32	
Н	122221	Charger Assembly	
J	122225	Mounting Clip	
к	710002	Machine Screw No. $10-32 \times 1/2$ "	
L	122226	Battery	
М	122143	Battery Insulation	
N	122227	Battery Hold-Down	
Р	705070	Bolt, 1/4" x 7"	
Q	720003	Lock Washer, 1/4"	
R	717005	Hex Nut Full, 1/4''-20	R B-R
·····			
		ALL DECEMBER OF	
		D S C	
	1		
		B	
		A	SERVICE THRU
		νι	BRIGGS & STRATTON
		E	GF
			-

DECALS



170099 Plate Serial No. 121195 Plate Patent No. 154380 Funnel 154381 Oil Filler Tube Number Decal Hood Stripe 163098 163069 P.T.O. Decal 162093 170296

## **28" ROTARY MOWER**

MFRS. NO. 599



#### PACKING

The 28" Rotary Mower is delivered complete except for the addition of deflector in one carton or packed with the SERF. The carton contains:

- 1 Mower Assembly
- 1 Deflector
- 1 Bag of Hardware

Should any shortages of the above items occur, advise by stating the packers number listed on the green packing slip. State part number and description of items missing.

#### ASSEMBLY

Attach deflector over discharge opening using (3) carriage bolts, (3) plain washers, (3) lockwashers and (3) nuts supplied in bag of hardware. Check exploded view for proper arrangement.

#### ATTACHMENT

Attach mower hitch assembly to the tractor front axle using spring clips and pins provided.

#### LUBRICATION

The No. 442 Rotary Mower has ball bearings in the spindle housing and pulleys which are lifetime prelubricated and sealed, therefore, do not require further attention. Lubricate all pivot points and linkage with SAE-10 oil frequently.



#### BELTS

The drive belt is a super combine type constructed to our own specifications to insure proper mower operation and long life. When replacement is needed, do not substitute standard fractional horsepower belts. Use only Simplicity 108514 mower drive belt.

#### OPERATION

Release the transport hook or lift lever and place the mower on the ground. To operate the mower, move the power take-off lever to the "engage" position, making sure that the tractor engine is operating at a sufficient speed to take care of the additional load. Then as the mowing operation is started, regulate the mower speed as needed by means of the tractor throttle control lever.

To transport the mower over gravel drives, etc. disengage the power take-off, then raise the mower and support by means of the transport hook or lift lever.

#### P.T.O. ROD GUIDE ADJUSTMENT



Engage the P.T.O. handle on the left side of the tractor and check the spacing between the set collar and the rod guide assembly. Adjust the collar as necessary to give approximately 1/4" spacing at this point. See illustration.

#### ADJUSTMENT

1. Position the mower under the tractor and attach the mower hitch arms to the rear holes of the tractor front hitch, using pins and spring clips. Figure 1. Mower should be on flat surface for adjustments.

2. Loosen the left hand front bracket "A" and the right hand rear bracket "B" (See Figure 1).

3. Remove the two shoulder bolts that hold adjusting arms (See Figure 1). Be sure all roller bracket linkage is free to slide in slotted holes.

4. Establish points 1 and 2 (See Figure 1). Rotate blades to point 1 and 2. Raise the mower using the height adjusting handle (See Figure 1) so that the blade tip at point 1 is 1/8" higher than point 2. When measuring this dimension, always rotate the blade so that all measurements are made using the same blade tip (i.e., after measuring the front tip, rotate the blade so that the rear measurement is made using the same blade tip).

5. Place a  $1\frac{1}{2}$ " block under each arbor spindle to insure that the mower maintains a level position. Be sure all roller bracket linkage is free to slide in slotted holes (that the rollers are not holding the mower up). Tighten the front bracket at "A" first, then tighten the rear bracket at "B".

6. Remove the  $1\!\!\!\!/ \!\!\!/ _2$  blocks. Repeat Step No. 4, then proceed to Step No. 7.

7. Replace the shoulder bolts. If the holes do not line up (without pressure) screw the eye bolt (See Figure 1) into or out of the adjusting arms as necessary.

8. After the initial running period, belt stretch may require repositioning of the idler pulleys. Remove the fastener holding the belt cover in place and remove the cover. Loosen the attaching hardware and move the pulleys to increase the tension on the belt. (Move both pulleys). Tighten previously loosened hardware and replace belt cover and fasteners. Belt guards should be positioned as shown in Figure 1. Belt guards must not touch the belt when PTO handle is in the "engaged" position.



## LEAF MULCHER

#### MFRS. NO. 459

The leaf mulcher for the 28" Rotary Mower consists of baffles which must be attached to the inside of mower housing as illustrated in Figure 2.

1. The front baffles (A) and (B) are positioned on the inside front of the housing and are secured by four carriage bolts, lockwashers and hex nuts. Lockwashers and hex nuts are positioned on the outside of the mower housing.

2. The side baffle (C) which closes off the grass exhaust port is fastened into place with the hardware provided. Lockwashers and hex nuts are positioned on the outside of the mower housing.

3. The two rear baffles (D) and (E) are fastened in place with carriage bolts, lockwashers and hex nuts as shown in Figure 2.

4. Rotate the mower blades to check for proper clearance between the blades and the baffle flanges.





Ref. Let.	Part No.	Description
A	108539	Center Front Mulcher Baffle
B	703011	Carriage Bolt, 5/16"-18 x 1/2"
C	720001	Lock Washer, 5/16"
D	717001	Nut, Hex, Full, 5/16"-18
E	108541	Front Right Hand Mulcher Baffle
F	108540	Center Rear Mulcher Baffle
G	108542	Left Hand Mulcher Baffle

# **MOWER LIFT & HITCH**



Ref. Let.	Part No.	Description	Ref. Let.	Part No.	Description
A	108552	Mower Hitch Assembly	AB	705031	Capscrew, Hex, 3/8"-16 x 7/8" lg.
в	157286	Retaining Ring	AC	116001	Washer
C	156306	Pin	AD	108431	Roller Assembly
D	8161045	Spring Clip	AE	108419	Bushing (Two per roller)
Е	705005	Capscrew, Hex, 3/8"-16 x 1" lg.	AF	8261055	Washer
F	121349	Spacer	AG	722011	Cotter Pin
G	8161045	Spring Clip	AH	108526	Adj. Screw Assembly
н	720002	Lock Washer, 3/8''	AJ	108510	Screw Adj. Bracket
J	717003	Nut, Hex, Full, 3/8''-16	AK	108512	Pivot
к	108520	Left Hand Adj. Arm	AL	722001	Cotter Pin
L	108521	Right Hand Adj. Arm	AM	717013	Nut, Hex, Jam, 3/8''-16
M	717016	Nut, Hex, Jam, 1/2''-20	AN	702004	Carriage Bolt, 3/8"-16 x 1 1/4"
N	157215	Eye Bolt	AP	702003	Carriage Bolt, 3/8"-16 x 3/4"
P	108412	Shoulder Bolt	ΔQ	717510	Hex Nut, Full Lock, 3/8"-16 lg.
0	153058	End Cap	AR	108519	Front Bracket, R.H.
R	108513	Pivot Bracket	AS	108518	Front Bracket, L.H.
S	703004	Carriage Bolt, 3/8"-16 x 3/4" lg.	AT	108509	Spacer Bar
Т	715005	Capscrew, Hex, 3/8''-16 x 1'' lg.	AU	108551	Mower Lift
U	108511	Spacer	AV	705016	Hex Capscrew, 3/8"-16 x 1 1/4"
V	108161	Rear Lever	AW	719001	Plain Washer, 3/8"
w	108517	Right Hand Roller Bracket	AX	721701	Washer, Double Coil Spring, 3/8"
X	108516	Left Hand Roller Bracket	AY	159134	Plain Washer
Y	108256	Roller Bar Assembly	AZ	717510	Hex Nut Full Lock, 3/8"-16
Z	108528	Roller Bar & Shaft Assembly	BA	719001	Plain Washer, 3/8"
AA	719002	Washer, Plain, 5/16''			,,

# **MOWER HOUSING, DRIVE & BLADES**

Ref. Let.	Part No.	Description
А	108679	Arbor Tube Assembly
В	108134	Backing Ring
С	108250	Arbor Assembly
D	108181	Washer
Е	108202	Radial Single Row Bearing
F	108257	Washer
G	108472	Washer
H	108201	Spacer
J.	108139	Flinger
К	108142	Pulley
L	725006	Woodruff Key, // 61, 3/16" x 5/8" lg.
Μ	713504	Set Screw, Socket Head, 5/16"-18 x 3/8" lg.
N	717517	Lock Nut, Hex Jam, 3/4''-16
Р	108298	Knife Blade
Q	715024	Capscrew, Hex, 3/8"-16 x 5/8" lg.
Ř	720002	Lock Washer, 3/8''
S	158614	Mower Housing
Т	705004	Screw Hex. Cap, 3/8''-16 x 3/4'' lg.
U	106771	Stud
v	170163	Belt Guide
W	720002	Lock Washer, 3/8''
х	717003	Nut, Hex, Full, 3/8"-16
Y	717510	Nut, Hex, Full, Lock, 3/8"-16
Z	705010	Capscrew, Hex, 3/8"-16 x 1-3/4" lg.
AA	106717	Belt Guide
AB	719002	Washer, Plain, 5/16"
AC	106716	Idler Pulley
AD	154177	Spacer
AE	719001	Washer, Plain, 3/8"
AF	108514	"V" Drive Belt
AG	108372	Stud
AH	170203	Housing Cover
AJ	108531	Baffle
AK	715067	Screw, Self Tapping, Hex. Hd., 1/4''-20 x 3/8'' lg.
AL	108504	Deflector
AM	703004	Carriage Bolt, 3/8''-16 x 3/4'' lg.
AN	8161199	Washer, Special
AP	720002	Lock Washer, 3/8''
AQ	717003	Nut, Hex, Full
AR	703005	Carriage Bolt, 5/16''-18 x 3/4'' lg.
AT	719002	Washer, Plain, 5/16''
AU	720001	Lock Washer, 5/16"
AV	717001	Nut, Hex, Ful 5/16″
AW	103031	Decal, Safety
AX	108507	Film, Safety
AY	155061	Decal, Simpicity
*	103100	Plate Serial No.
*	121195	Plate, Patent No.
AZ	108822	Arbor Assembly with Bearings
		and Hardware
*	108828	Decal-Safety Stds.

\* Not Illustrated

## CAUTION

MOWER SHALL NOT BE USED WITHOUT EITHER VACUUM COLLECTOR ADAPTER OR THE THE DEFLECTOR ADAPTER IN PLACE.

## **IMPORTANT**

USE ONLY SIMPLICITY REPLACMENT BELTS AND BLADES



## 42" SNOW PLOW & DOZER

#### Mfgrs. No. 299



#### PACKING

The 42" snow plow and dozer comes packed complete in one bundle.

#### ASSEMBLY

Refer to Figure 1. Attach the push bar (1) to the blade (2), using a king pin (3) and install a cotter pin through the king pin. Install the pivot pin (4) through the blade assembly bracket and the push bar.

#### ATTACHMENT

To attach the 42" snow plow and dozer to the tractor, first attach the mounting bracket to the underside of the tractor as shown in Figure 2. Install the pins at the rear mounting holes first, and secure with spring clips. If required, the arms may be loosened and repositioned to align the mounting holes in the arms and on the tractor.

Connect the push bar (1) to the mounting bracket (8), using the long pin (6) and the spring clips (7).

Connect the lift rod (9) to the lift lever of the tractor as shown, using a spring clip. Attach the clevis end of the lift rod to the upright arm on the push bar assembly, using a pin and spring clip.

The shoe assemblies (5) are mounted to the blade using 3/8" carriage bolts, lockwashers, and nuts.

#### **OPERATION**

Alternate holes are provided to permit adjustment of the shoe assemblies for raising or lowering the blade when cleaning gravel drives or walks. When cleaning concrete, it is desirable to allow the blade to scrape the surface.

The angle of the blade is adjustable to permit plowing to the left or right by moving the pivot pin to the desired hole in the blade mounting bracket.

When using this equipment, it is recommended that chains be installed on the wheels. Loose mounting of the chains will make them self-cleaning.

## 42" SNOW PLOW & DOZER



Reference Letter	Part No.	Description
А	107047	Blade Assembly, 42''
B	107045	Wear Plate
Č	702003	Carriage Bolt, 3/8"-16 x 3/4"
D	720002	Lock Washer, 3/8"
Ē	717003	Hex Nut, Full, 3/8''-16
F	107024	Shoe Assembly
G	702002	Carriage Bolt, 3/8''-16 x 1''
Н	720002	Lock Washer, 3/8"
J	717003	Hex Nut, Full, 3/8''-16
K	107072	Support Arm Assembly
L	705016	Hex Capscrew, 3/8"-16 x 14"
М	720002	Lock Washer, 3/8"
N	717003	Hex Nut, Full, 3/8"-16
P	107074	Push Frame
Q	118053	Pin
R	8161045	Spring Clip
S	107089	Pivot Rod
Т	8161045	Spring Clip
U	107075	Push Bar Assembly
V	8181033	Pivot Pin
W	8181008	King Pin
X	8161045	Spring Clip
Y	106812	Lift Rod
Z	157631	Adjusting Yoke
AA	154305	Yoke Pin
AB	717008	Hex Nut, Full, 1/2''-20 NF
AC	8161045	Spring Clip

# **40" GRADER BLADE** Mfgr's. No. 298 LIFT LEVER () LIFT ARM 3/8" HEX CAPSCREW C) LIFT CHAIN HITCH ASSEMBLY DRAW BAR ASSEMBLY SPRING CLIP PIN $\left( \right)$ The 40" Grader Blade is attached to the tractor as shown in the above illustration by following the sequence of steps outlined below. 1. Position the grader blade under the tractor so that the draw bar assembly may be connected to the front hitch brackets of the tractor. Secure in place with 2 pins and spring clips.

2. Attach the lift lever to the lift arm of the tractor as shown. Fasten securely with a 3/8" hex head capscrew and lock nut.

3. Attach the lift chain and links to the lift lever with a pin and spring clip so that the blade can be lifted high enough to clear the ground when transporting from one location to another.

4. When desired, the blade may be angled to the left or right by removing the pin and spring clip from the center hole in the hitch assembly. Lock the blade in desired position by replacing the pin and spring clip when the alternate holes in the hitch assembly line up with the hole in the draw bar.

## **40" GRADER BLADE**



