

OPERATING INSTRUCTIONS AND PARTS LIST

Ariens



TRACTOR

5 H. P.
6 H. P.
7 H. P.

AFTER SERIAL NUMBERS

MODEL 10965 - SERIAL NO. - 000001
MODEL 10970 - SERIAL NO. - 000001
MODEL 10962 - SERIAL NO. - 000001
MODEL 10954 - SERIAL NO. - 000001
MODEL 10969 - SERIAL NO. - 000001



⚠ SAFETY MESSAGE ⚠

The product for which you have requested information or replacement parts is not a current product. The replacement models incorporate product designs, safety features, safety instructions or warnings which represent the latest "State Of The Art" developments. For your safety and those around you please contact your nearest Ariens/Gravely Dealer for a demonstration of the current product safety provisions and features.

WARRANTY

Ariens Company hereby warrants to the original retail purchaser all new products of its own manufacture to be free from defects in material and workmanship.

Engine, parts or accessories not manufactured by Ariens Company, even though incorporated into its products, are not covered by this warranty.

The warranty period shall be one year from date of original purchase, except when the product is used for rental purposes, in which case the warranty period shall be for 45 days from date of original purchase.

Any transportation charges incurred on any product claimed defective, which shall include the time and expense of the distributor or dealer for pickup and/or return of the unit, shall be borne by the purchaser.

This warranty shall not apply to any failure resulting from misuse, neglect or accident. Ariens Company shall not be responsible for damage in transit or handling by any common or contract carrier. Under no circumstances, within or without the warranty period, will the company be liable for damages for loss of use, or damages resulting from delay, or any consequential damages.

The company reserves the right to incorporate any changes in design into its products without obligation to make such changes on units previously manufactured.

ASSEMBLY

1. GENERAL

All hardware and parts required for assembly are included in the skin pack in the carton.

2. HANDLE BARS

a. Place the holes in the flat section of the lower handle bars over the studs projecting from the frame on each side of the engine.

b. Place a lockwasher and nut on each stud but do not tighten.

c. Place the upper handle bar in place between the curved portions of the lower handle bars (figure 1).

d. Place the bolts in the top hole of the lower handle bar and the matching hole in the upper handle bar. Fasten with locknut.

e. Hook the bent portion of the nameplate panel over the lower handle bar and slide it up until the holes in the panel line up with the lower holes in the lower handle bar. Fasten in place with bolts, washers and locknuts. Place the curved washers on the outside of the panel.

f. Tighten the nuts holding the lower handle bar to the frame.

3. SHIFT CONTROL

Position the shift control (figure 1) on the inside of the handle bars on the right hand side so that the holes in the control line up with the holes in the handle bar. Fasten the control to the handle bar with two hex head capscrews and lockwashers (figure 1).

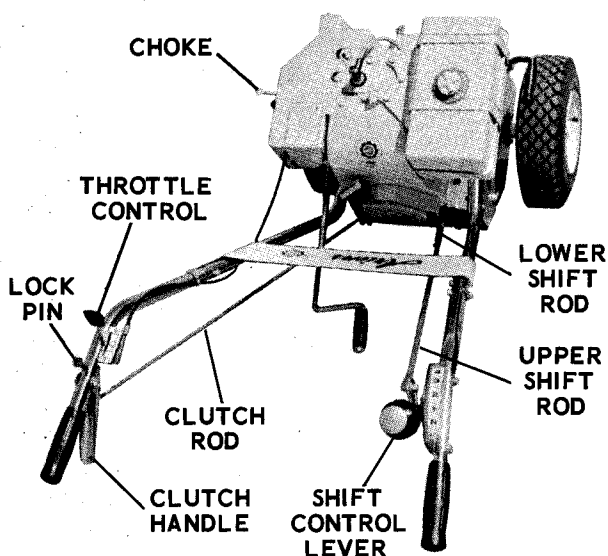


Figure 1

4. SHIFT ROD

a. Pull up as far as possible on the lower shift rod which projects from the rear of the engine mounting frame (figure 1). Screw the threaded portion of the upper shift rod over the lower shift rod.

b. Depress the button on the top of the shift lever and move the lever to the REVERSE position.

c. Thread the upper rod on the lower rod until the opposite end of the rod drops easily into the hole in the shift control. Place a washer over that portion of the rod which projects through the shift control and insert a cotter pin to hold the rod in place.

d. Tighten the locking nut on the lower shift rod.

5. TRACTOR CLUTCH ROD

a. Using a rubber band or piece of string, tie the clutch operating handle up against the handle bar.

b. Slide the straight end of the clutch rod through the ball joint mounted on the clutch arm (figure 1) and place the bent end of the rod through the hole in the clutch operating handle (figure 1) and fasten with ratchet plate.

c. Tighten the clamping screw in the ball joint.

d. Remove the ties holding the clutch operating handle to the handle bar and remove the wedge from under the clutch arm.

e. Pull up on the clutch operating handle and lock the handle in place with the locking pin. Depress the button on top of the shift lever and move the lever to the neutral position. If the shift lever does not move freely to the neutral position, loosen the clamping screw in the ball joint, slide the wedge in a little farther, and retighten the clamping screw and remove the wedge.

6. THROTTLE CONTROL LEVER

a. Using the two self-tapping screws provided, fasten the throttle control lever (figure 1) to the inside of the left hand handle bar.

b. Run the control cable down the inside of the handle bar and fasten in place with the spring clip.

7. TIRES

For shipping purposes, the tires on the tractor have been inflated to greater than normal pressure. Before using the machine, deflate the tires to approximately 12 lbs. to provide greater traction. Be sure to balance the air pressure in both tires so the machine will travel in a straight line.

LUBRICATION

1. ENGINE

See manufacturer's instruction book for engine lubrication instructions.

NOTE

Use MS classification 5W-20 for operation below 40° F. Use MS classification SAE-30 oil for operation above 40° F.

2. TRACTOR DRIVE

a. At the start of each season grease the gears, hex and fork shaft, jaw coupling, and chains.

b. Two or three drops of light oil should be placed on the shift lever release rod.

OPERATING INSTRUCTIONS

1. ENGINE

Complete instructions for the operation, lubrication, and proper care of the engine will be found on the instruction plate attached to the engine fan housing and in the manufacturer's instruction book packed with the engine. Do not attempt to start the engine before following the manufacturer's recommendations for servicing the engine.

2. TRACTOR CLUTCH

a. The clutch operating handle mounted on the left handle bar serves to disengage the clutch so that the shift control lever may be moved to any one of the four forward speeds or reverse position.

b. When the clutch operating handle is squeezed together, the shift control lever may be moved to the desired position. Releasing the handle will cause the machine to move in the direction and at the speed selected.

c. A locking device is provided on the clutch operating handle to hold the handle in the non-operating position. The lock is released by a light squeeze on the handle.

3. SHIFT CONTROL LEVER

a. The shift control lever mounted on the right handle bar governs the speed and direction of the tractor.

b. To move the shift control lever to a selected position, squeeze the tractor clutch operating handle together, depress the button on the center of the shift control lever knob and move the lever.

4. ENGINE CLUTCH

a. The engine clutch is controlled by a lever mounted on the right hand side of the unit (figure 2) just forward of the engine.

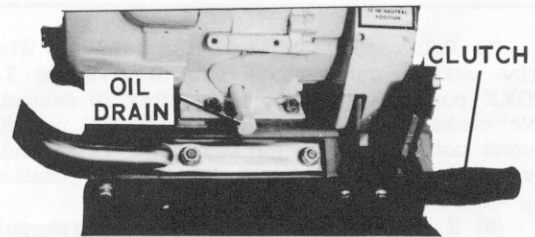


Figure 2

b. When the clutch control lever is pulled up, the idler pulley bears against the drive belt causing the engine to drive the tractor transmission and attachment drive.

c. When the clutch control lever is pushed down, the idler pulley moves away from the drive belt, loosening the belt and operation of the transmission and attachment stops.

5. THROTTLE CONTROL

The throttle control lever controls the speed of the engine and therefore, in conjunction with the shift control lever, the speed of the machine. Moving the lever toward FAST increases engine speed and moving it toward SLOW decreases speed. Moving the lever to the STOP position will stop the engine. ALWAYS MOVE THE THROTTLE LEVER TO "PARK" AFTER ENGINE HAS STOPPED.

6. CHOKE

A manual choke is provided which is operated by a lever projecting from the carburetor cover on the

left hand side of the engine. The lever can be placed in any one of four detent positions. Moving the lever toward the rear of the machine places it in the FULL CHOKE position. As it is moved forward, it will pass through the 3/4 CHOKE and 1/2 CHOKE positions to the NO CHOKE position fully forward.

7. ENGINE STARTING INSTRUCTIONS

a. Manual Starting.

- (1) Fill engine fuel tank with "regular" grade gasoline.
- (2) Place engine clutch lever in down position and shift control lever in NEUTRAL.
- (3) Place choke lever in FULL CHOKE position.
- (4) At temperatures below 10° F., depress primer button and pull recoil starter slowly past compression one time. Release primer button.

CAUTION

Do not use primer when temperature is above 10° F.

(5) Pull recoil starter handle quickly. When engine starts, move choke control lever to 3/4 CHOKE position (first notch). After 20 seconds, move choke control lever to 1/2 CHOKE position (second notch). After an additional 15 seconds, move choke control lever to NO CHOKE position.

(6) If engine does not start on first pull, move choke lever to 1/2 CHOKE position before pulling recoil starter a second time.

(7) If engine does not start by the fifth pull,

move choke lever to NO CHOKE position and pull starter twice. Repeat starting procedure. DO NOT REPRIME ENGINE BEFORE TRYING AT LEAST FIVE PULLS ON STARTER.

b. Electric Starting.

(1) Plug the polarized cord from a 110 volt AC receptacle to the starter motor.

(2) Follow steps (1), (2), and (3) in MANUAL STARTING, paragraph a.

(3) Operate the switch on the starter motor.

(4) With the starter operating the engine, move the choke control lever to the FULL CHOKE position. As soon as the engine starts, release the switch and move the choke control lever to the 3/4 CHOKE position. After the engine has warmed up, move the choke to the NO CHOKE position and remove the cord.

CAUTION

Do not depress the primer button when starting the engine with the electric starter.

8. DIFFERENTIAL LOCK

The differential lock is located on the left wheel hub. See figure 3. With the knob turned to the IN position, the differential is locked and power is applied equally to both wheels for snow removal. To use the differential, pull back on the knob and turn to the OUT position. This unlocks the differential for easy turning with the mower or vacuum attachments.

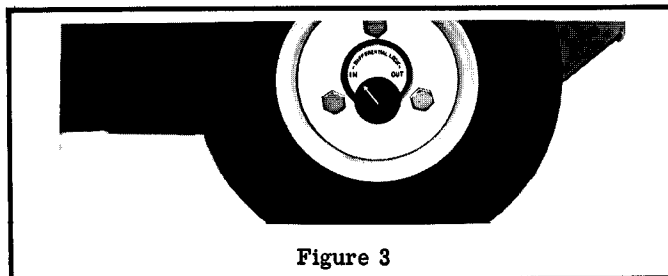


Figure 3

SERVICE

1. GENERAL

Ariens dealers will provide any service which may be required to keep the tractor operating at peak efficiency. The tractor is equipped with the finest quality engine obtainable. However, should servicing be required, it can be obtained from an Ariens dealer or authorized engine manufacturer's service station. Consult an Ariens dealer for details.

2. ENGINE

Refer to the engine instruction book and nameplate on the engine for maintenance instructions. If repairs or service are needed for engine, see an Ariens dealer or nearest authorized engine service station.

ACCESSORIES

1. DIFFERENTIAL KIT (10983)

A differential kit is available for the Model 10965 tractor. This kit provides easy maneuverability on corners and is required for proper operation of the mower and lawn vacuum. Figure 4 and parts list for differential kit illustrated below.

2. MAINTENANCE KIT (A10951)

A maintenance kit containing gear case oil, grease gun, four shear bolts and nuts and a set of tire chains is available for the 6 H.P. models 10969 and 10970 and for the 5 H.P. model 10965.

3. MAINTENANCE KIT (A10950)

A maintenance kit containing gear case oil, grease gun, four shear bolts and nuts and a set of tire chains is available for the 7 H.P. models 10954 and 10962.

4. ELECTRIC STARTER (10996)

a. A 110 volt AC operated electric starter kit is available for the model 10965, 10970, 10962, 10957, and 10969 Sno-Thros. The kit consists of a 110 volt DC starter which mounts permanently on the engine.

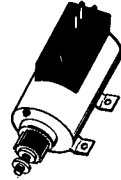


Figure 5

b. In operation, the polarized cord is plugged into a 110 volt AC receptacle and connected to the starter motor. Pressing the switch then operates the starter. When the engine has started, the cord is disconnected from the starter and the Sno-Thro operated in the usual manner.

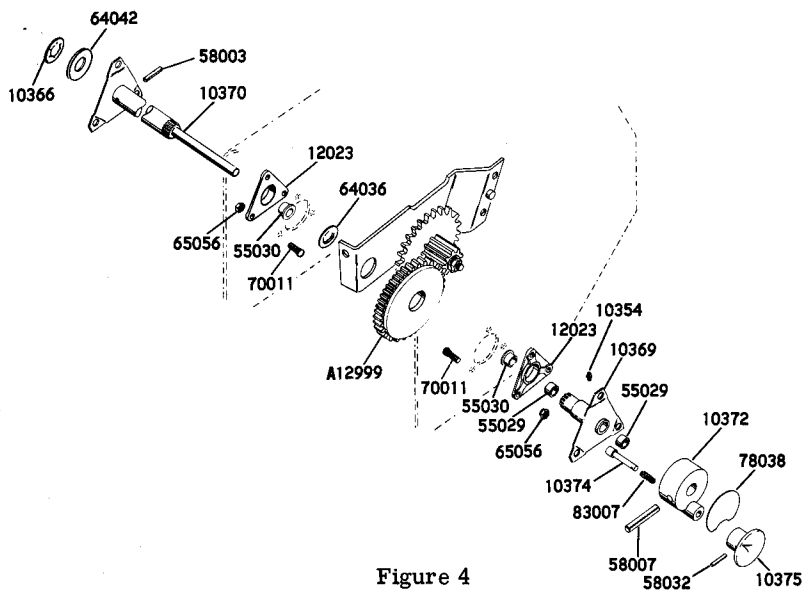
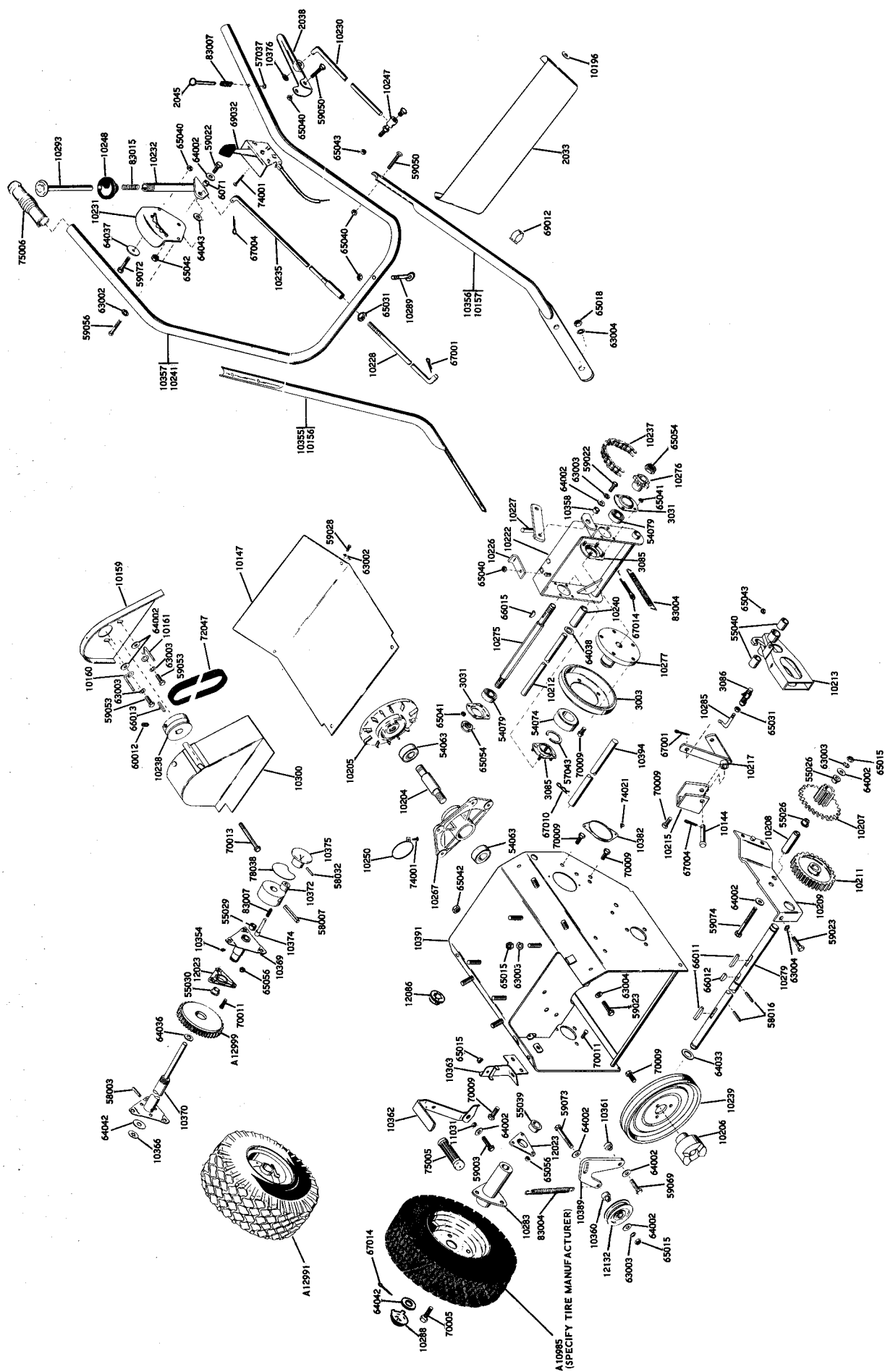


Figure 4

PARTS IN KIT

Part No.	Description	No. Req'd.	Part No.	Description	No. Req'd.
10354	Zerk Fitting	1	58003	Roll Pin 3/16 x 1-1/4	1
10366	Push Nut	1	58007	Roll Pin 1/4 x 1-1/4	1
10369	L. H. Axle	1	58032	Roll Pin 3/32 x 1	1
10370	R. H. Axle Shaft	1	64036	Washer 1.380 O.D. x .880 I.D. x .062	1
10372	Lockout Hub	1	64042	Washer 2" O.D. x 3/4" I.D. x 1/8"	1
10374	Pin	1	65056	Whizlock Nut 1/4-20	6
10375	Knob	1	70011	Ribbed Neck Bolt 1/4-20	6
12023	Bearing Support	2	78038	Differential Lock Decal (Not Illustrated)	1
12999	Differential Assembly	1	83007	Spring	1
55029	Bushing (In 12008)	2			
55030	Bushing (In 12023)	2			

Part No.	Description	Part No.	Description	No. Req'd.				Part No.	Description	No. Req'd.				
10965	10970	10982	10989	10994	10995	10997	10998	10999	10999	10999	10999	10999	10999	
2033	Handle Bar Panel	10370	R. H. Axle Shaft	1	1	1	1	1	64042	Washer - .751/.757 I.D. x 2 O.D. x 1/8	2	1	1	1
2038	Clutch Handle	10372	Lockout Hub	1	1	1	1	1	64043	Washer - SAE 3/8 - 13/32 I.D. x 13/16 O.D. x 1/16 Plated	1	1	1	1
2045	Clutch Lock Pin	10373	Carburetor Cover	1	1	1	1	1	65015	Nut - 5/16-18 Hex, Plated	7	7	7	7
3003	Friction Wheel	10374	Pin	1	1	1	1	1	65018	Nut - 3/8-16 Hex, Plated	4	4	4	4
3031	Bearing Flange	10375	Knob	2	2	2	2	2	65031	Nut - 5/16-24 Hex, Plated	2	2	2	2
3085	Bearing Flange	10376	Ratchet Plate	2	2	2	2	2	65040	Locknut - 1/4-20 Hex, Plated	8	8	8	8
3086	Ball Joint	10382	Cover	1	1	1	1	1	65041	Locknut - #10-24 Plated	8	8	8	8
6071	Spacer Bushing	10389	Idle Arm	1	1	1	1	1	65042	Locknut - 5/16-18 Hex, Plated	2	2	2	2
10144	Clevis Pin	10391	Tractor Frame	1	1	1	1	1	65043	Locknut - 5/16-24 Hex, Plated	2	2	2	2
10147	Bottom Cover	10394	Fork Shaft	1	1	1	1	1	65054	Locknut - 1/2-20 Hex, Centerlock	2	2	2	2
10156	R. H. Lower Handle Bar	11031	Spacer	1	1	1	1	1	65056	Flange Whizlock Nut - 1/4-20 Plated	6	6	6	6
10157	L. H. Lower Handle Bar	12023	Bearing Support	1	1	1	1	1	66011	Key	2	2	2	2
10159	Inner Belt Guard	12086	Cap	1	1	1	1	1	66012	Key - Woodruff #91	1	1	1	1
10160	R. H. Belt Finger	12132	Idle	1	1	1	1	1	66013	Key - SAE 1035	1	1	1	1
10161	L. H. Belt Finger			1	1	1	1	1	66015	Key - Woodruff #5	1	1	1	1
10196	Handle Bar Washer			1	1	1	1	1	67001	Cotter Pin - 3/32 x 3/4 Plated	2	2	2	2
10204	Spindle		Differential Assembly	2	2	2	2	2	67004	Cotter Pin - 1/8 x 1 Plated	2	2	2	2
10205	Drive Plate	12999	Ball Bearing	1	1	1	1	1	67010	Hair Pin Cotter	1	1	1	1
10206	Jaw Coupling	54063	Thrust Bearing	1	1	1	1	1	67014	Cotter Pin - 1/8 x 1-1/4 Plated	3	3	3	3
10207	Pinion and Sprocket	54074	Ball Bearing	1	1	1	1	1	69012	Cable Clamp	1	1	1	1
10208	Pinion Stub Shaft	55026	Bushing	2	2	2	2	2	69032	Throttle Control	1	1	1	1
10209	Support Bracket	55029	Bushing	2	2	2	2	2	70005	Wheel Bolt - 1/2-20	6	6	6	6
10211	Spur Gear	55030	Bushing	2	2	2	2	2	70009	Flange Whizlock Screw - 5/16-18 x 1/2 Plated	14	14	14	14
10212	Bracket Pin	55039	Flange Bushing	2	2	2	2	2	70011	Ribbed Neck Bolt - 1/4-20 x 5/8 Plated	6	6	6	6
10213	Sliding Fork	55040	Bushing	1	1	1	1	1	70013	Belt Cover Bolt	1	1	1	1
10215	Lever Bracket	57037	Retaining Ring	1	1	1	1	1	72047	Belt	1	1	1	1
10217	Transfer Lever	57043	Snap Ring	1	1	1	1	1	74001	Self-Tapping Screw - #10-12 x 1/2 Pan Head	3	3	3	3
10222	Disc Bracket	58003	Roll Pin - 3/16 x 1-1/4	1	1	1	1	1	74021	Tapite - #10-24 x 1/4	4	4	4	4
10226	Neutral Catch	58007	Roll Pin - 1/4 x 1-1/4	1	1	1	1	1	75005	Grip	1	1	1	1
10227	Throwout Lever	58016	Roll Pin - 3/16 x 1	1	1	1	1	1	75006	Grip	2	2	2	2
10228	Lower Shift Rod	58032	Roll Pin - 3/32 x 1	1	1	1	1	1	78010	Helicon Patent Label (Not Illus.)	1	1	1	1
10230	Clutch Rod	59003	Cap Screw - 5/16-18 UNC x 1	1	1	1	1	1	78011	Clutch Label (Not Illustrated)	1	1	1	1
10231	Shift Quadrant	59022	Cap Screw - 5/16-18 UNC x 3/4	1	1	1	1	1	78013	Carburetor Cover Decal (Not Illus.)	1	1	1	1
10232	Shift Handle	59023	Cap Screw - 3/8-16 UNC x 3/4	2	2	2	2	2	78016	Sno Shift Label (Not Illustrated)	1	1	1	1
10235	Shift Rod	59028	H.H., Zinc Plated	4	4	4	4	4	78034	Engine Decal - 5 H.P. (Not Illus.)	1	1	1	1
10237	Chain	59050	H.H., Plated	2	2	2	2	2	78035	Engine Decal - 6 H.P. (Not Illus.)	1	1	1	1
10238	Engine Sheave	59053	H.H., Plated	2	2	2	2	2	78037	Engine Decal - 7 H.P. (Not Illus.)	1	1	1	1
10239	Driven Sheave	59056	H.H., Zinc Plated	5	5	5	5	5	78038	Differential Lock Decal (Not Illus.)	2	2	2	2
10240	Spacer	59069	Cap Screw - 1/4-20 UNC x 1-1/2	2	2	2	2	2	83004	Spring	1	1	1	1
10241	Upper Handle Bar	59072	Cap Screw - 1/4-20 UNC x 1-1/4	1	1	1	1	1	83007	Spring	1	1	1	1
10247	Ball Joint	59073	Cap Screw - 5/16-18 UNC x 1-1/4	1	1	1	1	1	83015	Spring	1	1	1	1
10248	Shift Ball	59074	H.H., Plated	1	1	1	1	1	TIRE AND WHEEL ASSEMBLIES					
10250	Cover		H.H., H.T.	1	1	1	1	1	Tire and Wheel Assembly consisting of: Req'd. per Wheel					
10257	Bearing Housing		Cap Screw - 5/16-18 UNC x 1-3/4	1	1	1	1	1	71046 Tire (Carlisle)					
10275	Hex Shaft		Cap Screw - 5/16-18 UNC x 2-3/4	1	1	1	1	1	OR					
10276	Sprocket		H.H., Zinc Plated	1	1	1	1	1	71049 Tire (Goodyear)					
10277	Friction Disc Hub		Cap Screw - 5/16-18 UNC x 2-3/4	2	2	2	2	2	71050 Tube					
10279	Axle Shaft		H.H., Zinc Plated	4	4	4	4	4	71052 Rim					
10279	Axle Shaft		H.H., H.T.	13	13	13	13	13	Tire and Wheel Assembly consisting of: Req'd. per Wheel					
10283	Wheel Hub		Cap Screw - 5/16-18 UNC x 1-3/4	1	1	1	1	1	71066 Tire					
10285	Connecting Link		Cap Screw - 5/16-18 UNC x 2-3/4	1	1	1	1	1	71050 Tube					
10288	Hub Cap		H.H., Zinc Plated	1	1	1	1	1	71052 Rim					
10289	Rod Hanger		H.H., Plated	1	1	1	1	1	Tire and Wheel Assembly consisting of: Req'd. per Wheel					
10293	Shift Release Handle		Setscrew - 5/16-18 x 3/8 Nylock	1	1	1	1	1	71066 Tire					
10300	Outer Belt Guard		Lockwasher - 1/4 SAE Std., Plated	2	2	2	2	2	71050 Tube					
10354	Zerk Fitting		Lockwasher - 5/16 SAE Std., Plated	4	4	4	4	4	71052 Rim					
10355	R. H. Lower Handle Bar		Lockwasher - 3/8 SAE Std., Plated	9	9	9	9	9	Tire and Wheel Assembly consisting of: Req'd. per Wheel					
10356	L. H. Lower Handle Bar		Washer - 5/16 Wrought Plated	8	8	8	8	8	71066 Tire					
10357	Upper Handle Bar		Washer - .755 I.D. x 1.375 O.D. x .125 Plated	13	13	13	13	13	71050 Tube					
10358	Spacer Bushing		Washer - .880 I.D. x 1.380 O.D. x .062	1	1	1	1	1	71052 Rim					
10360	Bearing Spacer		Washer - 9/32 I.D. x 1-1/4 O.D. x 1/16 Plated	1	1	1	1	1	Tire and Wheel Assembly consisting of: Req'd. per Wheel					
10361	Shoulder Spacer		Shim Washer - .505 I.D. x .880 O.D. x 24 Ga., Plated	1	1	1	1	1	71066 Tire					
10362	Clutch Lever			1	1	1	1	1	71050 Tube					
10363	Clutch Bracket			1	1	1	1	1	71052 Rim					
10365	Carburetor Cover			1	1	1	1	1	Tire and Wheel Assembly consisting of: Req'd. per Wheel					
10366	Push Nut			1	1	1	1	1	71066 Tire					
10369	L. H. Axle			1	1	1	1	1	71050 Tube					

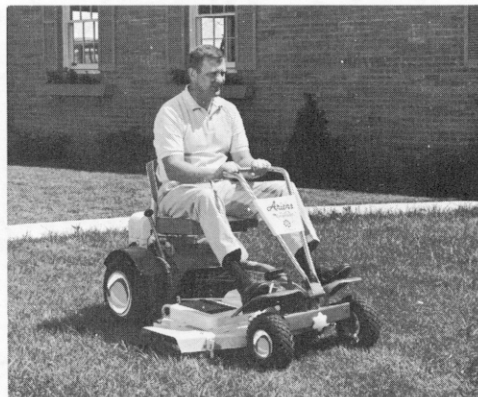


Ariens

OUTDOOR POWER EQUIPMENT



ARIENS JET series rotary tillers. Choice of 3 h.p., or 4 or 5 h.p. with tine reverse drive.



ARIENS EMPEROR riding mowers with Flex-N-Float rotary mower. Choice of 6 h.p. or 7 h.p. models.



ARIENS ROCKET VI 6 h.p. rotary tiller. Cast iron Tecumseh engine. 2 forward speeds, 2 reverse.



ARIENS SNO-THRO. 2-stage, self-propelled 4, 5, 6 or 7 h.p. models with 240 degree revolving Sno-Chute.



ARIENS FAIRWAY riding mower with 26-inch rotary mower. Choice of standard or deluxe models.



ARIENS LAWN VACUUM. Self-propelled 6 h.p. unit with 30" nose cone, 9 cu. ft. refuse bag.

ARIENS COMPANY

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