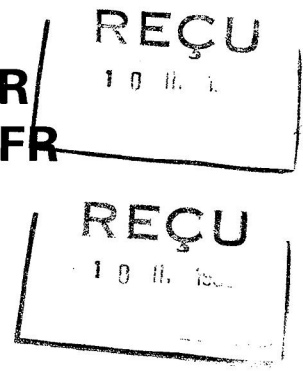


# OWNER'S MANUAL

11 H.P. LAWN TRACTOR  
MODEL NUMBER LT110FR



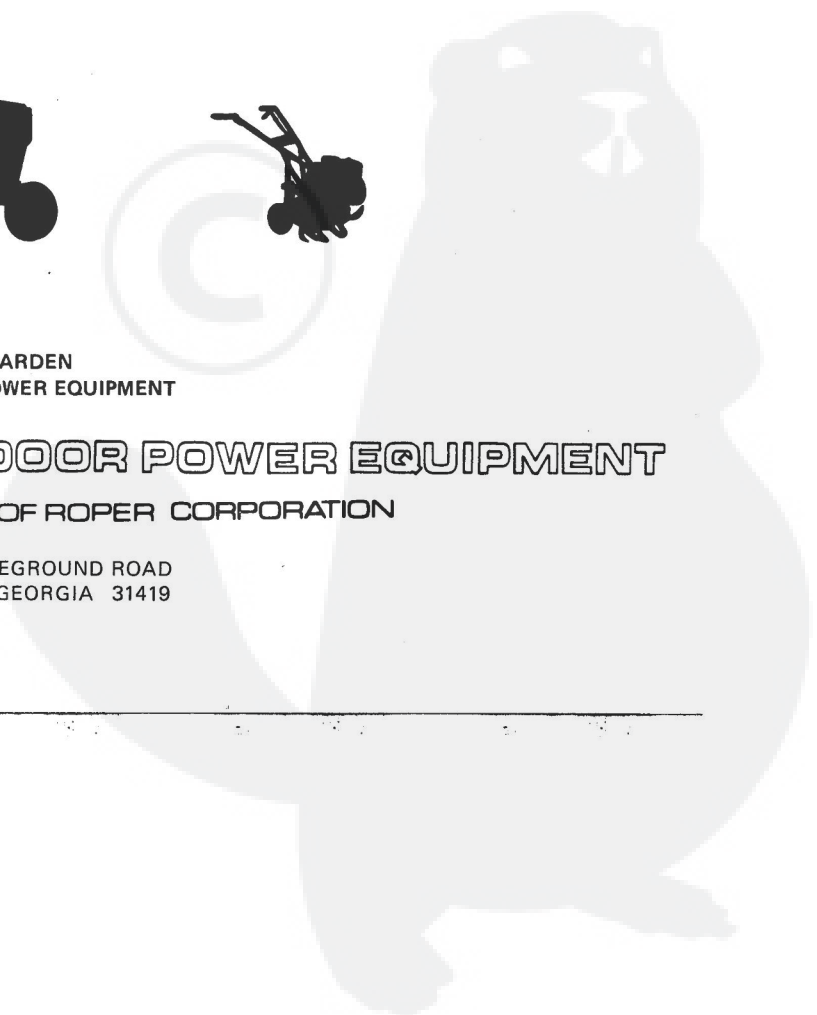
LAWN AND GARDEN  
OUTDOOR POWER EQUIPMENT



**OUTDOOR POWER EQUIPMENT**

DIVISION OF ROPER CORPORATION

12052 MIDDLEGROUND ROAD  
SAVANNAH, GEORGIA 31419



LT

1. Slide Belt under Extension Spring (Fig. 42).
2. Place Belt on rear side of both Mandrels.
3. Spring Idler Belt Guide down and place Belt around rear side of Idler Pulley.
4. Roll Belt over Engine Pulley.

### TO REMOVE MOWER

1. Remove mower Belt per instructions under "To Remove Mower Belt", through step 3.
2. Turn Depth Adjustment Knob to lowest position. Use Lift Lever to lower mower to its lowest position.
3. Remove Retainer Spring from Clutch Rod; pull Clutch Rod out of Clutch Bracket.
4. Pull Retainer Springs out of Rear Suspension Trunnions. Remove Rear Suspension Trunnions from Lift Brackets (Fig. 43).
5. Pull Retainer Spring out of Rear Hinge Pin. Remove Rear Hinge Pin.
6. Pull Retainer Spring out of Front Hinge Pin. Remove Front Hinge Pin (Fig. 43).
7. Use Lift Lever to raise Suspension Arms. Slide mower out from under tractor.

NOTE: IF AN ATTACHMENT OTHER THAN THE MOWER DECK IS TO BE MOUNTED ON THE TRACTOR, THE L.H. AND R.H. SUSPENSION ARMS (FIG. 43) SHOULD BE REMOVED FROM TRACTOR.

### STORAGE

When mower is to be stored for a period of time, clean it thoroughly, remove all dirt, grease, leaves, etc. Give blades and underside of housing a good coat of grease or rust preventative. Store in a clean dry area.

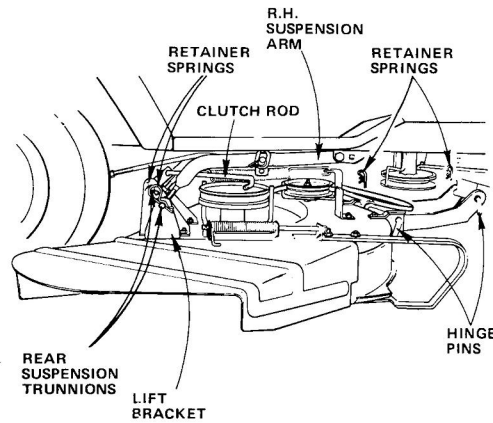
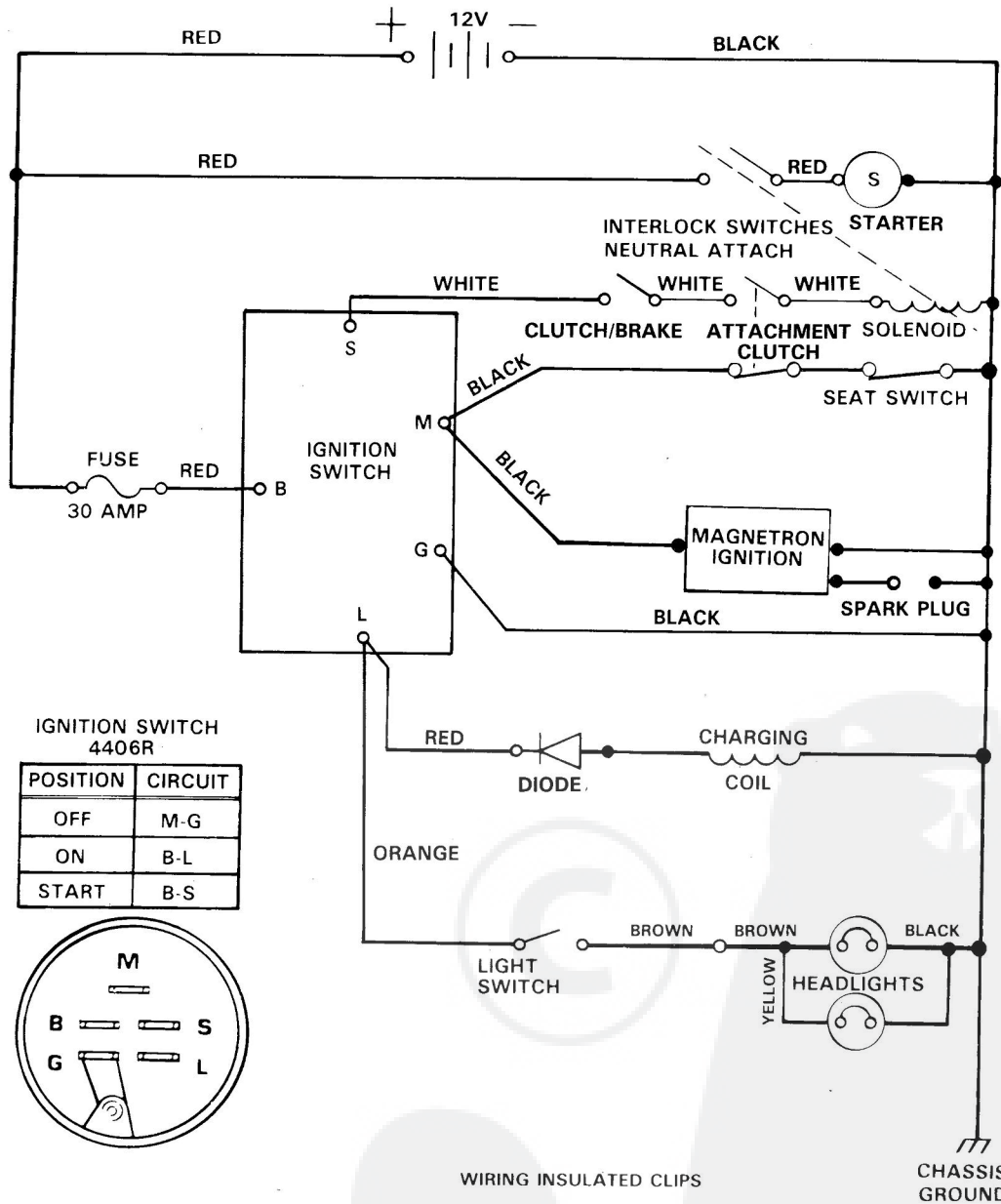


FIGURE 43

Roper Corporation reserves the right to make any changes in design or improvements without imposing any obligation to install the same upon its items heretofore manufactured.

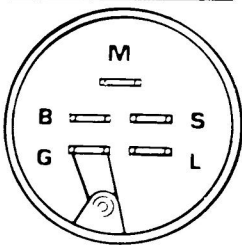
ROPER LAWN TRACTOR--MODEL NUMBER LT110FR

SCHEMATIC



IGNITION SWITCH  
4406R

POSITION	CIRCUIT
OFF	M-G
ON	B-L
START	B-S

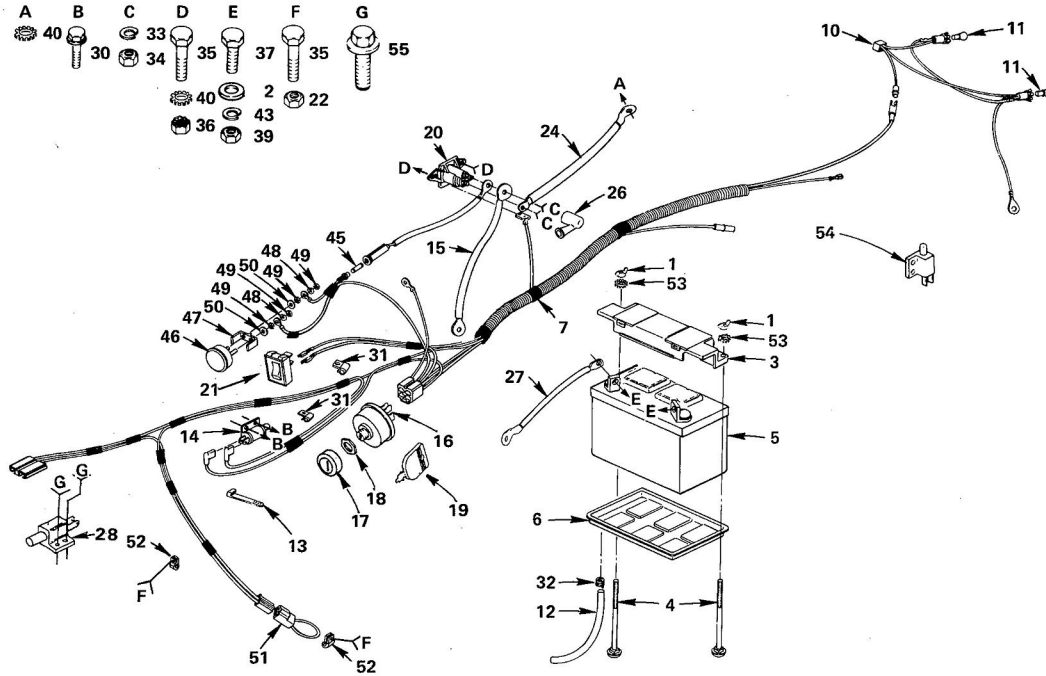


WIRING INSULATED CLIPS

NOTE: IF WIRING INSULATED CLIPS WERE REMOVED FOR SERVICING OF UNIT, THEY SHOULD BE REPLACED TO PROPERLY SECURE YOUR WIRING.

**ROPER LAWN TRACTOR--MODEL NUMBER LT110FR**

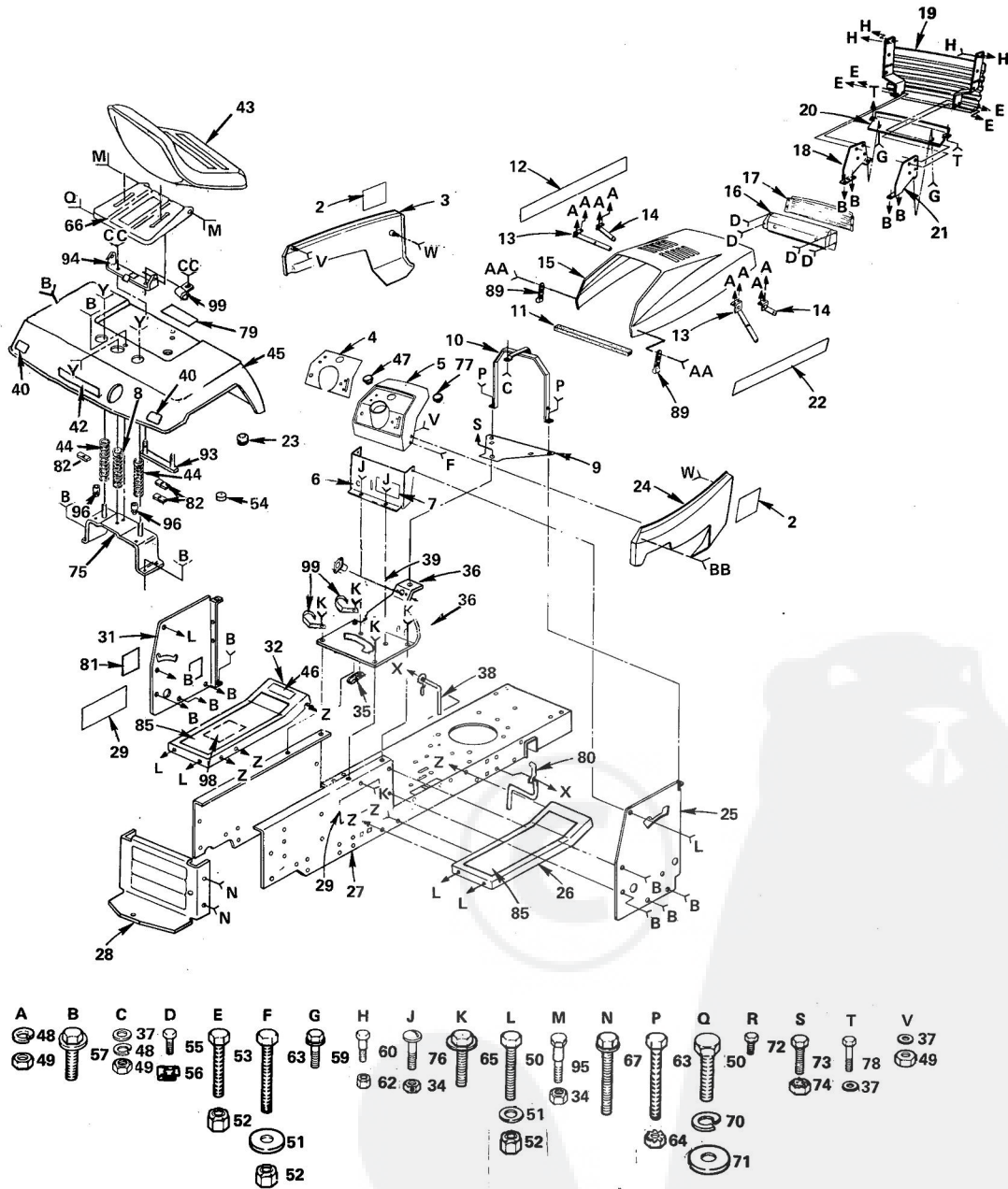
**ELECTRICAL**



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	73490400	*Wing Nut 1/4 - 20	29	73951000	Nut - Keps No. 10 - 32
2	19091016	Washer 9/32 x 5/8 x 16 Ga.	30	17541208	Screw - Hex Washer Hd, Thd. Rolling Type TT No. 12 - 24 x 1/2
3	105371X	Guard - Terminal	31	2751R	Clip - Fuel Line
4	72240460	Battery Bolt (Bolt - Carriage, Rd. Hd, Sq. Neck 1/4 - 20 x 7 - 1/2)	32	109596X	Clamp - Hose
5	104922X	Battery	33	10090400	Lockwasher 1/4
6	105372X	Battery Tray	34	73350400	*Nut - Hex Jam 1/4 - 20
7	109439X	Harness - Ignition	35	74780408	*Bolt - Hex 1/4 - 20 x 1/2 Gr. 5
10	7661J	Harness - Light Socket	36	73510400	Nut - Keps, Hex 1/4 - 20
11	7662J	Bulb - Light	37	74760412	*Bolt - Hex 1/4 - 20 x 3/4
12	100541K	Tube - Battery Tray	39	73220400	*Nut - Hex 1/4 - 20
13	7192J	Cable Tie	40	11050400	Washer - Lock 1/4 Ext. Tooth
14	7755R	Switch - Interlock	43	10040400	*Lockwasher 1/4
15	2957J	Cable - Battery (Battery to Solenoid)	45	6374R	Fuse - 30 Amp.
16	4406R	Ignition Switch	46	9433R	Ammeter
17	109787X	Bezel - Ignition	47	6009J	Bracket - Ammeter
18	109788X	Nut - Ignition	48	6952J	Lockwasher No. 10
19	109434X	Key, Molded	49	6953J	Nut No. 10
20	109081X	Solenoid	50	6951J	Washer 7/32 x 1/2 x 18 Ga.
21	105381X	Switch - Light	51	102501X	Loop - Wire
22	73680400	Nut - Hex 1/4 - 20	52	235R	Clip - Insulated
23	7320R	Nut - Hex	53	11030400	Lockwasher - Int./Ext. 1/4
24	5907J	Cable - Battery (Solenoid to Starter)	54	104445X	Switch - Interlock
25	19151116	Washer 15/32 x 11/16 x 16 Ga.	55	71031008	Screw - Hex Washer Hd. No. 10 - 32 x 1/2
26	719J	Terminal Cover (For Solenoid)	...	101539X	Sheet - Instruction, Tractor 15° Slope
27	2955J	Cable - Battery (Battery to Ground)	...	110023X	Owners Manual
28	109869X	Switch - Seat	- 23 -		*STANDARD HARDWARE--PURCHASE LOCALLY

ROPER LAWN TRACTOR--MODEL NUMBER LT110FR

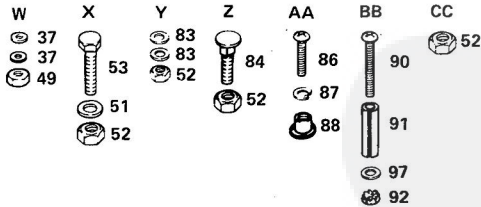
ENCLOSURES



**ROPER LAWN TRACTOR--MODEL NUMBER LT110FR**

**ENCLOSURES**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	10040400	Washer - Lock 1/4	55	17211010	Screw - Hex Washer Hd. Tapping 10 - 16 x 5/8
2	108563X	Decal - Side Panel	56	104755X	"J" Fastener
3	108442X367	Panel - Side, L.H.	57	17490612	Screw - Hex Washer Hd. Thd. Rolling 3/8 - 16 x 3/4 Type TT
4	105414X	Decal - Dash	59	17490512	Screw - Hex Washer Hd. Thd. Rolling 5/16 - 18 x 3/4 Type TT
5	108679X	Dashboard	60	7605J	Bolt - Shoulder 1/4 - 20
6	104783X	Dash Assembly - Lower	62	73680400	Nut - Crownlock 1/4 - 20
7	108456X	Decal - Instruction	63	74760620	*Bolt - Hex 3/8 - 16 x 1 - 1/4
8	109867X	Spring - Compression	64	73510600	Nut - Keps 3/8 - 16
9	106965X	Plate - Support, Battery	65	17490608	Screw - Hex Washer Hd. Thd. Forming 3/8 - 16 x 1/2 Type TT
10	104786X	Support Assembly - Dash	66	109866X	Pan - Seat
11	105037X	Foam - Strip	67	17490612	Screw - Hex Washer Hd. Thd. Rolling 3/8 - 16 x 3/4 Type TT
12	104643X	Decal - Hood, L.H.	69	74780816	*Bolt - Hex 1/2 - 13 x 1 Gr. 5
13	106784X	Strap Assembly - Hinge, Rear	70	10040600	*Washer - Lock 3/8
14	104618X	Strap Assembly - Hinge, Front	71	19131212	Washer 13/32 x 3/4 x 12 Ga.
15	108370X367	Hood	72	17431008	Screw - Hex Head Self Tapping No. 10 - 16 x 1/2 Type B
16	104613X	Bezel Assembly	73	74780512	*Bolt - Hex 5/16 - 18 x 3/4 Gr. 5
17	106395X	Lens	74	73510500	Nut - Keps 5/16 - 18
18	104632X	Support - Grill, L.H.	75	105509X	Bracket Assembly - Fender
19	104801X	Grill Assembly	76	74180512	Screw - Mach. Cross Thd. 5/16 - 18 x 3/4
20	104634X367	Strap - Grill	77	5479J	Plug - Dash
21	104633X	Support - Grill, R.H.	78	17490412	Screw - Hex Washer Hd. 1/4 - 20 x 3/4
22	104644X	Decal - Hood, R.H.	79	106974X	Decal - Opei - Caution
23	109641X	Grommet	80	106300X	Guide - Belt, Lower, Engine, Pulley, R.H.
24	108443X358	Panel - Side, R.H.	81	105505X	Cover - Access
25	106976X	Panel - Dash, R.H.	82	105514X	Clamp - Spring
26	105464X367	Footrest - R.H.	83	19132012	Washer 13/32 x 1 - 1/4 x 12 Ga.
27	109512X	Chassis	84	72140606	*Bolt - Carriage 3/8 - 16 x 3/4
28	102481X	Drawbar	85	109864X	Pad - Footrest
29	104808X	Decal - Frame	86	74191008	Screw - Cross Recess Pan Hd, Machine 10 - 24 x 1/2
31	106966X	Panel - Dash, L.H.	87	10071000	*Washer - Lock No. 10
32	105465X367	Footrest - L.H.	88	2029J	Nut - Weld
34	73680500	Locknut - Gripco 5/16 - 18	89	100225L	Latch - Hood
36	108263X	Saddle	90	74981020	Screw - Machine Cross Recess 10 - 24 x 1 - 1/4
37	19091216	Washer 9/32 x 3/4 x 16 Ga.	91	7206J	Spacer - Split 10 x 3/4
38	106301X	Guide - Belt, Lower, Engine, Pulley, L.H.	92	73731000	Nut - Keps 10 - 24
39	1554J	Bushing - Steering	93	105511X	Strap Assembly - Fender
40	106202X	Reflector - Taillight	94	109871X	Bracket - Pivot, Seat
42	104810X	Decal - Fender, Roper	95	105529X	Bolt - Shoulder 5/16 - 18
43	110056X	Seat	96	105531X	Nut - Push
44	105512X	Spring - Compression	97	19070818	Washer 7/32 x 1/2 x 18 Ga.
45	109640X367	Fender	98	109199X	Decal - V-Belt Drive
46	4900J	Decal - Clutch/Brake	99	2751R	Schematic, Tractor
47	8022J	Plug - Dash			Clip - Fuel Line
48	10090400	*Washer - Lock 1/4			
49	73220400	*Nut - Hex 1/4 - 20			
50	74760612	*Bolt - Hex 3/8 - 16 x 3/4			
51	19131312	Washer 13/32 x 13/16 x 12 Ga.			
52	73680600	Nut - Crownlock 3/8 - 16			
53	74760616	*Bolt - Hex 3/8 - 16 x 1			
54	109412X	Cap, Spring			

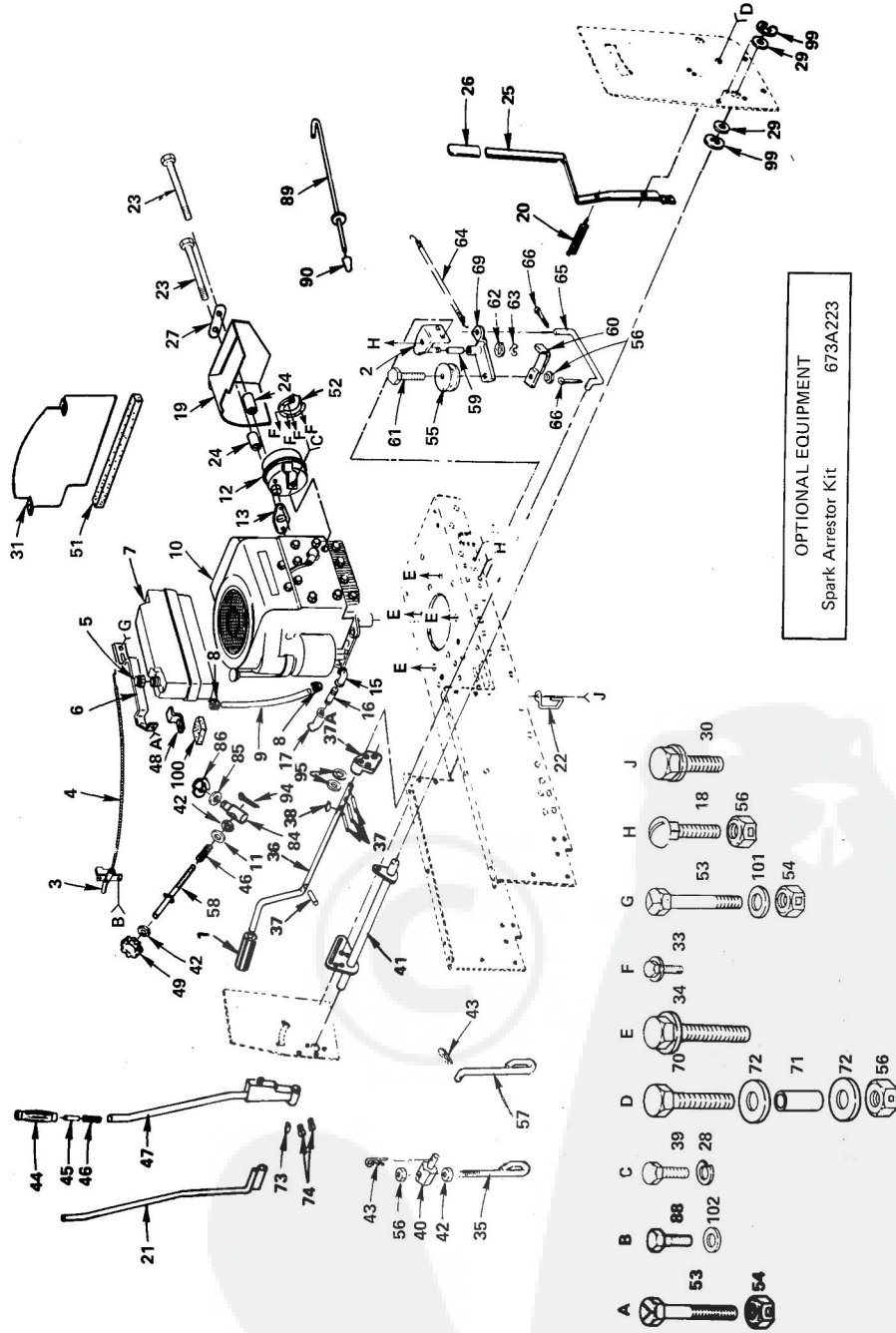


\*STANDARD HARDWARE--PURCHASE LOCALLY

# REPAIR PARTS

ROPER LAWN TRACTOR--MODEL NUMBER LT110FR

POWER & MECHANICAL CONTROLS GROUP



## REPAIR PARTS

### POWER & MECHANICAL CONTROLS GROUP

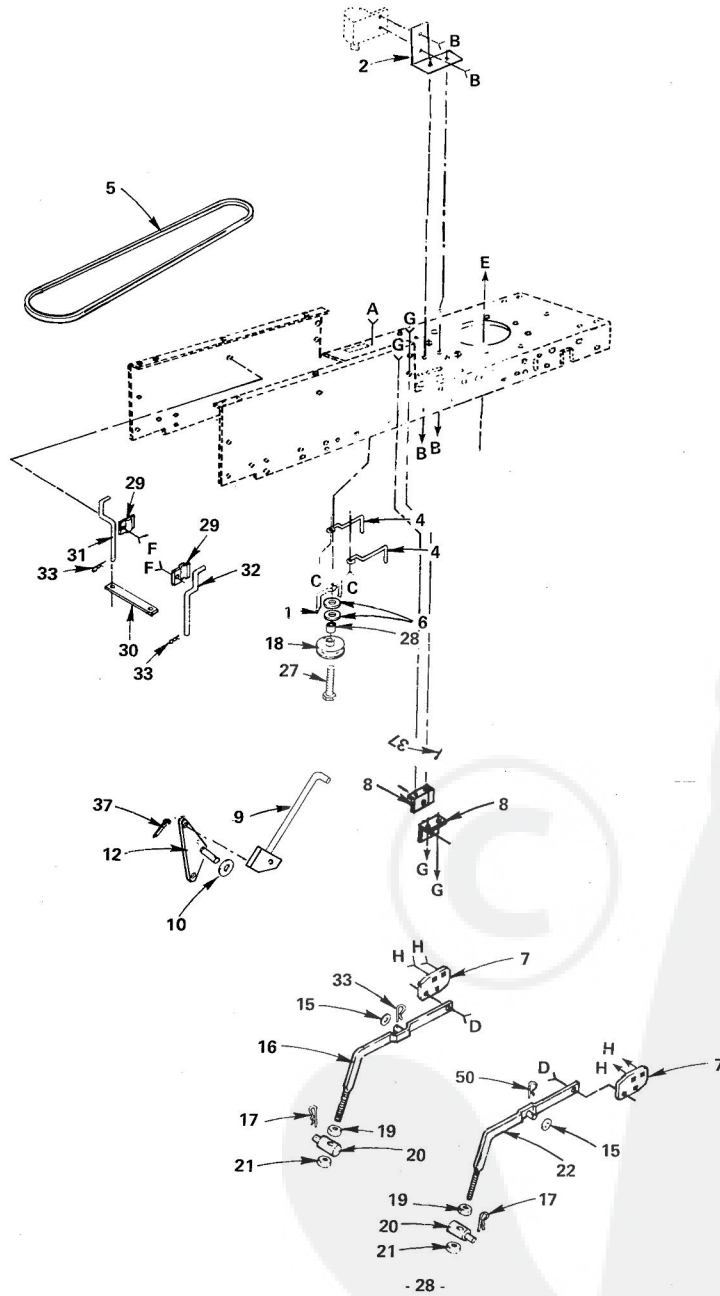
#### ROPER LAWN TRACTOR--MODEL NUMBER LT110FR

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	8883R	Pedal Cover	44	109413X	Grip - Handle
2	105724X	Bracket Assembly - Clutch	45	105723X	Plunger - Lever, Hand
3	61159	Knob - Throttle Control	46	2876H	Spring
4	101336K	Control - Throttle (Inc. Key No. 3)	47	104597X	Lever Assembly, Hand Kit (Inc. Key No.'s. 45, 46 and 2 each 74)
5	8504J	Fuel Cap	48	104799X	Brace - Tank
6	104800X	Support - Tank, Fuel	49	100734K	Handle - Adjust, Lift
7	3615J	Tank - Fuel	51	104915X	Strip - Foam 14.5"
8	6999R	Hose Clamp	52	101326L	Deflector - Muffler
9	7833R	Fuel Line	53	74780512	* Bolt - Hex 5/16 - 18 x 3/4 Gr. 5
10	253707	Engine Briggs & Stratton, Type No. 0154.02	54	73680500	Locknut 5/16 - 18 Gr. B
11	19131016	Washer 13/32 x 5/8 x 16 Ga.	55	106298X	Pulley - Idler
12	101273M	Muffler	56	73680600	Locknut 3/8 - 16
13	1407J	Gasket - Exhaust	57	110029X	Link - Lift
14	1150400	Washer - Lock Internal Tooth 1/4	58	100735K	Rod - Adjust, Lift
15	13240300	90° Street Elbow 3/8 NPT	59	105706X	Bearing
16	13280328	Std. Pipe Nipple 3/8 - 18 NPT x 3 - 1/2	60	108498X	Retainer - Belt
17	13200300	90° Elbow 3/8 NPT	61	74760624	* Bolt - Hex 3/8 - 16 x 1 - 1/2
18	72140606	Bolt - Rd. Hd. Sq. Neck 3/8 - 16 x 3/4	62	207J	Washer - Hardened
19	104910X	Baffle Assembly - Muffler	63	12000039	Ring - Klip
20	102727X	Spring - Extension	64	105709X	Spring - Return, Clutch
21	104598X	Rod Assembly - Lever	65	105710X	Link - Clutch
22	104777X	Retainer - Belt, Chassis, L.H.	66	76020412	Pin - Cotter 1/8 x 3/4
23	74780572	Bolt - Hex 5/16 - 18 x 4 - 1/2	69	105705X	Bellcrank Assembly (Inc. Key No. 59)
24	101496X	Spacer - Split	70	74760624	* Bolt - Hex 3/8 - 16 x 1 - 1/2
25	106983X	Handle - Clutch Attachment	71	108056X	Bushing - Handle, Clutch
26	4617J	Grip - Handle	72	19121612	Washer 3/8 x 1 x 12 Ga.
27	104909X	Clip - Muffler	73	8330H	Woodruff Key 1/4 x 1
28	10040400	* Lockwasher 1/4	74	23180606	Set Screw - Hex Socket Forged Headless 3/8 - 16 x 3/8
29	19292016	Washer 29/32 x 1 - 1/4 x 16 Ga.	84	101272K	T-union - Stop, Depth
30	17490612	Screw - Hex Washer Hd., Rolling 3/8 - 16 x 3/4	85	19151216	Washer 15/32 x 3/4 x 16 Ga.
31	109623X	Baffle - Vertical	86	12000037	Klip Ring
32	19131312	Washer 13/32 x 13/16 x 12 Ga.	88	17720408	Screw Hex Washer Head Thread Cutting 1/4 - 20 x 1/2
33	17210806	Screw - Hex Washer Hd., Thread	89	105844X	Rod - Brake, Park
34	17490620	Screw - Hex Washer Hd., Thread	90	71673	Plunger Cap
35	105855X	Rolling 3/8 - 16 x 1 - 1/4 Type TT	94	76020308	Cotter Pin 3/32 x 1/2
36	109037X	Link - Lift, Adjustable	95	19252018	Washer 25/32 x 1 - 1/4 x 16 Ga.
37	1572H	Shaft - Pedal, Foot	99	12000029	Klip Ring
37A	106918X	Roll Pin 3/16 x 1	100	6431J	Pad - Spacer
38	2228M	Arm - Brake	101	19111416	Washer 11/32 x 7/8 x 16 Ga.
39	74780408	* Bolt - Hex 1/4 - 20 x 1/2 Gr. 5	102	19091016	Washer 9/32 x 5/8 x 16 Ga.
40	106204X	Woodruff Key			* STANDARD HARDWARE--PURCHASE LOCALLY
41	109991X	* Bolt - Hex 1/4 - 20 x 1/2 Gr. 5			
42	732280600	T-union, Lift			
43	4939M	Shaft Assembly - Lift Retainer Spring			



ROPER LAWN TRACTOR--MODEL NUMBER LT110FR

DRIVE GROUP



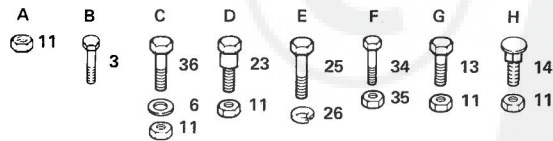
**REPAIR PARTS**

**ROPER LAWN TRACTOR--MODEL NUMBER LT110FR**

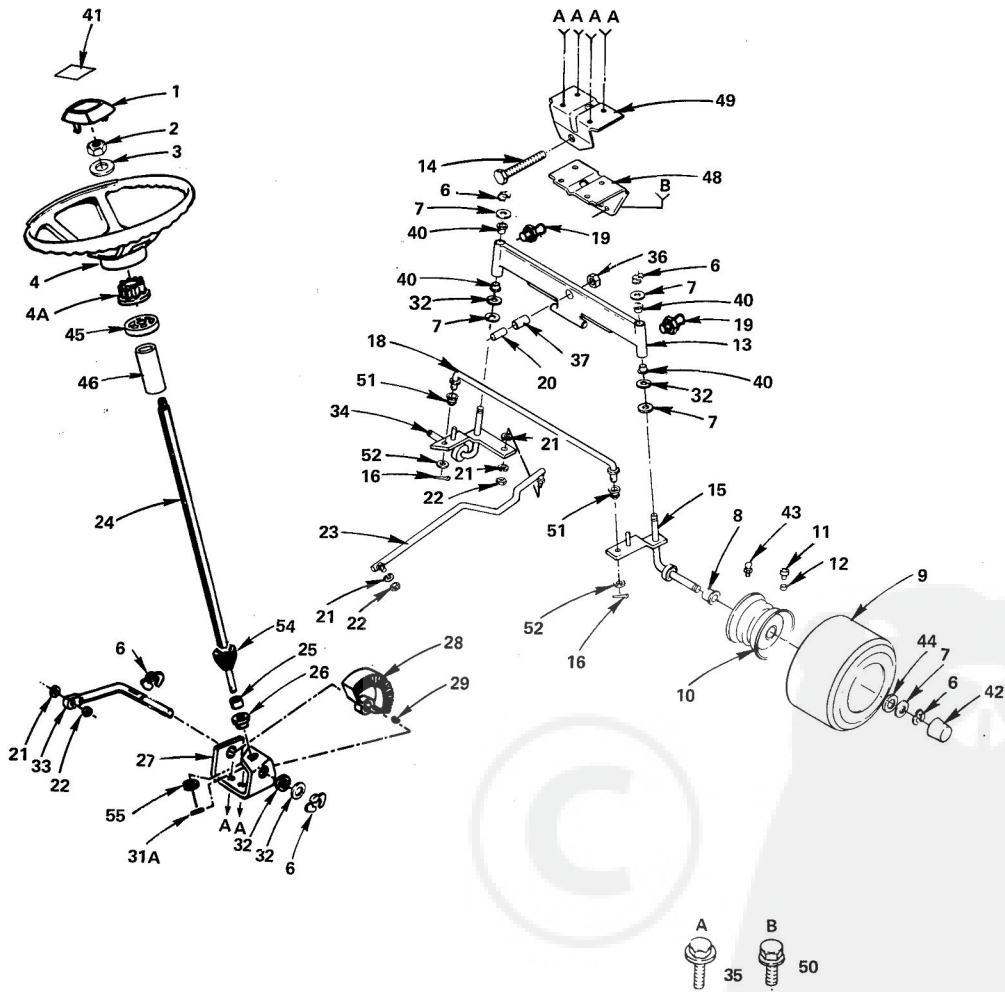
**DRIVE GROUP**

KEY NO.	PART NO.	DESCRIPTION
1	109070X	Keeper - Belt
2	108236X	Bracket - Switch
3	17021008	Screw - Tap, Hex Hd, 10 - 24 x 1/2
4	105730X	Keeper - Belt, Engine
5	105732X	V-Belt, Drive
6	19131312	Washer 13/32 x 13/16 x 12 Ga.
7	105864X	Bracket - Suspension
8	106444X	Bracket - Bellcrank
9	108451X	Rod Assembly - Clutch Primary
10	19131410	Washer
11	73680600	Nut - Crownlock 3/8 - 16
12	109728X	Bellcrank Assembly
13	74760612	*Bolt - Hex 3/8 - 16 x 3/4
14	72140606	Bolt - Rd, Hd, Sq, Neck 3/8 - 16 x 3/4
15	19171416	Washer 17/32 x 7/8 x 16 Ga.
16	105863X	Arm Assembly - Suspension - L.H.
17	9135F	Retainer - Spring
18	4859J	Idler - Flat
19	73220800	*Nut - Hex 1/2 - 13
20	106308X	Trunnion - Lift Lower
21	73680800	Nut - Crownlock 1/2 - 13
22	105862X	Arm Assembly - Suspension - R.H.
23	105848X	Bolt - Shoulder 3/8 - 16
24	105731X	Pulley - Engine
25	74770720	Bolt - Hex 7/16 - 20 x 1 - 1/4
26	10040700	*Washer - Lock 7/16
27	74760644	*Bolt - Hex 3/8 - 16 x 2 - 3/4
28	4470J	Spacer
29	106190X	Clamp
30	109370X	Strap - Locator
31	109368X	Keeper, Belt, L.H.
32	109369X	Keeper, Belt, R.H.
33	4921H	Spring - Retainer
34	74760512	*Bolt, Hex 5/16 - 18 x 3/4
35	73680500	Nut, Lock 5/16 - 18
36	74760616	*Bolt - Hex 3/8 - 16 x 1
37	76020412	Pin - Cotter 1/8 x 3/4

\*STANDARD HARDWARE--PURCHASE LOCALLY



**ROPER LAWN TRACTOR--MODEL NUMBER LT110FR**  
**STEERING, FRONT AXLE AND WHEELS**



**ROPER LAWN TRACTOR--MODEL NUMBER LT110FR**

**STEERING, FRONT AXLE AND WHEELS**

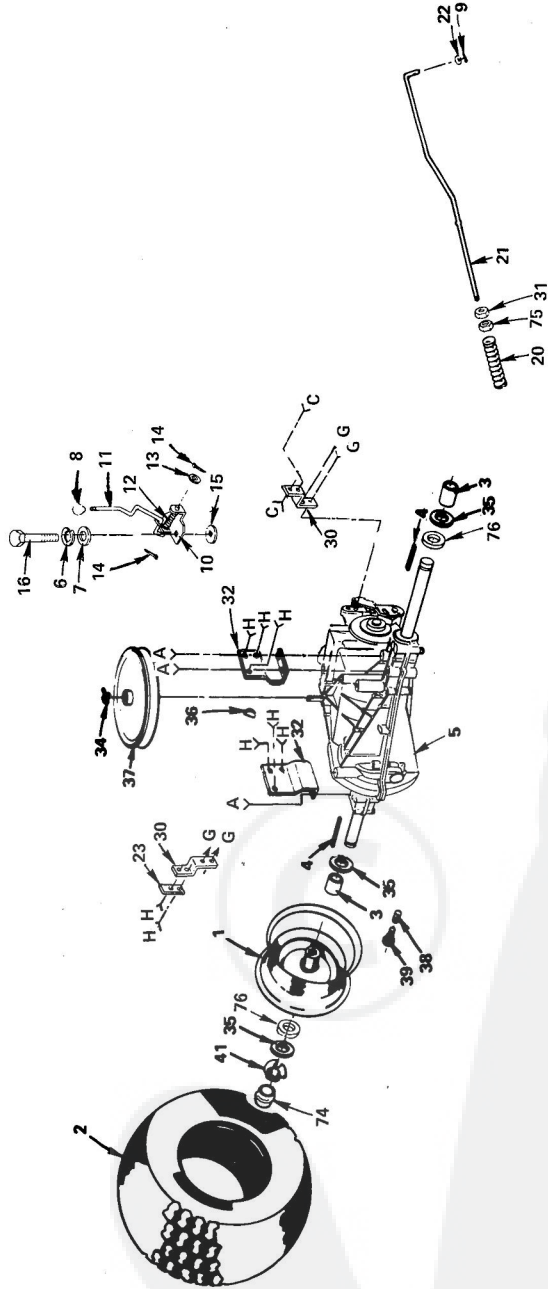
KEY NO.	PART NO.	DESCRIPTION
1	100710L	Insert - Steering Wheel
2	73360800	*Nut - Hex Jam 1/2 - 20
3	100712K	Washer 17/32 x 2 - 1/4 x .160
4	100713N	Steering Wheel 13"
4A	100711L	Adapter - Wheel, Steering
5	109816X	Nyliner - Snap-In
6	12000029	Klipring
7	19252016	Washer 25/32 x 1 - 1/4 x 16 Ga.
8	9040H	Bearings - Wheel, Front
9	106222X	Tire - 15 x 6.00 - 6 (Tubeless)
---	59904	Tube - Tire (not furnished with Tractor)
10	106732X	Rim Assembly - 6" Front (Inc, 2 each Key No. 8)
11	65139	Stem - Valve
12	59192	Cap - Valve
13	108075X	Axle Assembly - Front
14	74761060	Bolt - Hex 5/8 - 11 x 3 - 3/4
15	105654X	Spindle Assembly - R.H.
16	76020412	Pin - Cotter 1/8 x 3/4
18	105715X	Tie Rod
19	6855M	Fitting - Grease
20	105726X	Bearing
21	10040600	*Lockwasher 3/8
22	73610600	*Nut - Hex 3/8 - 24
23	105727X	Drag Link
24	109556X	Shaft Assembly - Steering
25	74580	Spacer
26	1554J	Bushing - Steering Rod
27	109432X	Bracket Assembly - Steering
28	108684X	Gear - Sector
29	106126X	Woodruff Key 3/16 x 3/4
30	19212016	Washer 21/32 x 1 - 1/4 x 16 Ga.
31A	2882J	Drive Pin 3/16 x 1
32	6266H	Hardened Washer (1 - 3 as required)
33	108683X	Rod - Steering
34	105656X	Spindle Assembly - L.H.
35	17490612	Screw - Hex Washer Hd, Thread Forming Type TT 3/8 - 16 x 3/4
36	73901000	Nut - Lock Flange, 5/8 - 11
37	105725X	Spacer
40	3366R	Bearing
41	104590X	Decal - Steering Wheel
42	104757X	Cap - Hub, Front
43	278H	Grease Fitting
44	19252616	Washer 25/32 x 1 - 5/8 x 16 Ga.
45	106943X	Spacer - Shaft, Steering
46	106944X	Tube - Shaft, Steering
48	105664X	Support - Saddle, Front
49	105663X	Support - Saddle, Rear
50	17490508	Screw - Hex Washer Thd, Rolling 5/16 - 18 x 1/2
51	102792X	Bushing
52	19131416	Washer 13/32 x 7/8 x 16 Ga.
54	108685X	Gear - Pinion
55	101930X	Washer - Hardened

\*STANDARD HARDWARE--PURCHASE LOCALLY

# REPAIR PARTS

ROPER LAWN TRACTOR--MODEL NUMBER LT110FR

TRANSAXLE AND REAR WHEEL



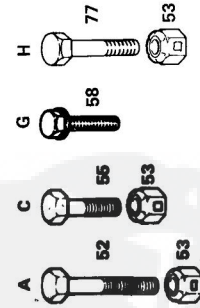
## REPAIR PARTS

### TRANSAXLE AND REAR WHEEL

#### ROPER LAWN TRACTOR--MODEL NUMBER LT110FR

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	106108X	Rim Assembly - 8" Rear	30	105842X	Strap - Torque
2	106268X	Tire - 18 x 9.50 - 8 (Tubeless)	31	73350600	Nut - Hex Jam 3/8 - 16
3	7152J	Tube - Tire (not furnished with Tractor)	32	109167X	Bracket - Transaxle
4	109502X	Spacer - Split	34	12000028	Ring - Klip
5	2703J	Key - Square 3/16 x 2	35	19252016	Washer 25/32 x 1 - 1/4 x 16 Ga. (2 to 4 as required)
6	110066X	Transaxle Foote, 4 Speed, Model No. 150-4 (see pages 36 and 37 for parts breakdown)	36	2228M	Woodruff Key 3/16 x 3/4
7	10040400	*Washer - Lock 1/4	37	105703X	Pulley - Input
8	19091210	Washer 9/32 x 3/4 x 10 Ga.	38	59192	Cap - Valve
9	106933X	Knob - Control	39	65139	Stem - Valve
10	76020412	Cotter Pin 1/8 x 3/4	41	12000001	E-Ring
11	106919X	Plate - Rod, Shift	52	74760644	*Bolt - Hex 3/8 - 16 x 2 - 3/4
12	105689X	Rod - Shifter	53	73680600	Nut - Crownlock 3/8 - 16
13	105700X	Spring - Torsion	55	74760612	*Bolt - Hex 3/8 - 16 x 3/4
14	19151216	Washer 15/32 x 3/4 x 16 Ga.	58	17490512	Screw Hex Washer Hd, Thd. Form, Type TT 5/16 - 18 UNC x 3/4
15	76020416	*Pin, Cotter 1/8 x 1	74	104757X	Cap - Hub, Rear
16	105701X	Washer - Shift Plate	75	73930600	Nut - Centerlock 3/8 - 16
17	71040412	Bolt - Hex 1/4 - 28 x 3/4 Gr. 8	76	19252616	Washer 25/32 x 1 - 5/8 x 16 Ga.
18	106888X	Spring - Rod, Brake	77	74760616	*Bolt - Hex 3/8 - 16 x 1
19	105752X	Rod - Brake			
20	19131316	*Washer 13/32 x 13/16 x 16 Ga.			
21	106157X	Plate - Strap, Torque			
22					
23					

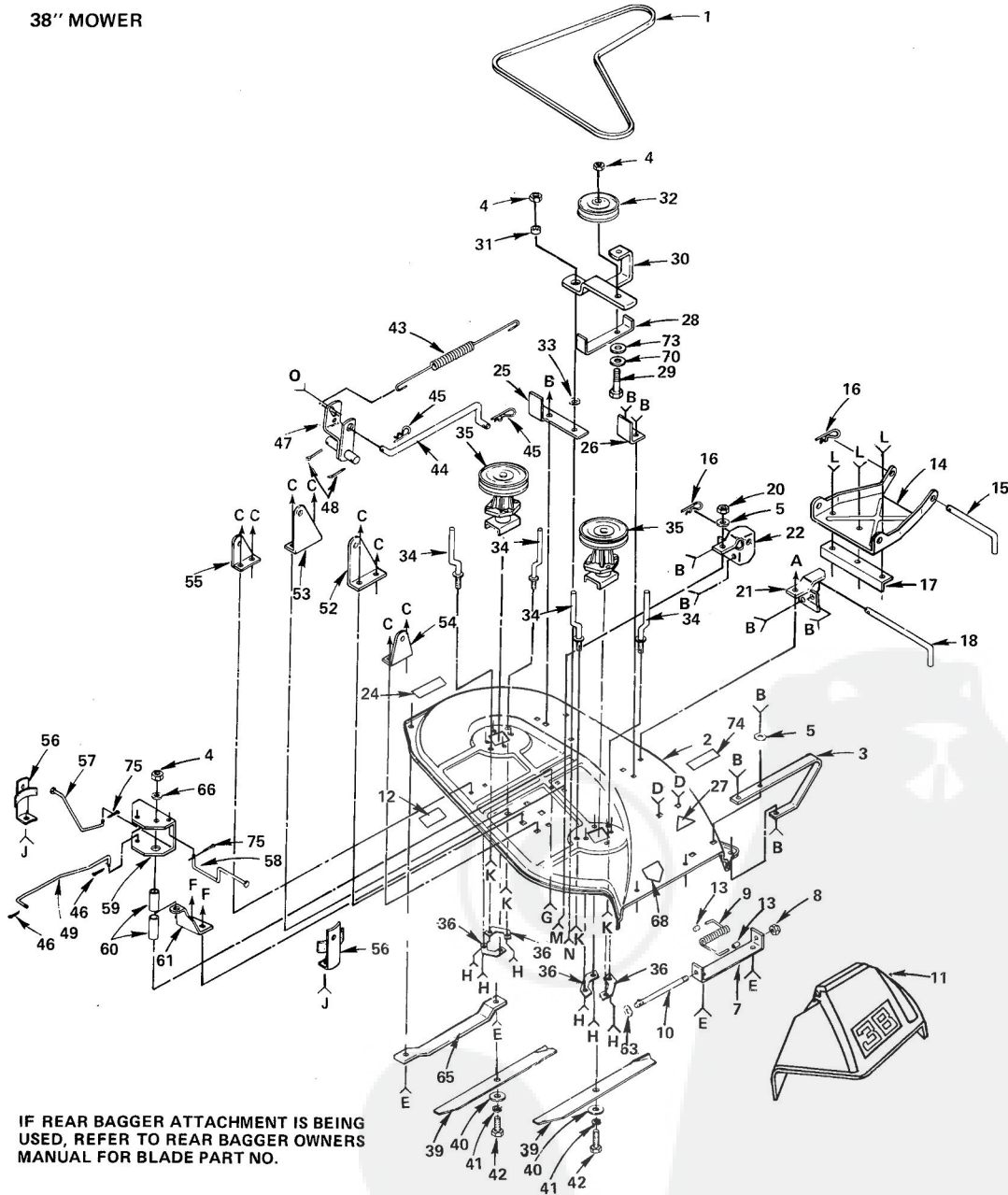
\*STANDARD HARDWARE--PURCHASE LOCALLY



REPAIR PARTS

ROPER LAWN TRACTOR--MODEL NUMBER LT110FR

38" MOWER

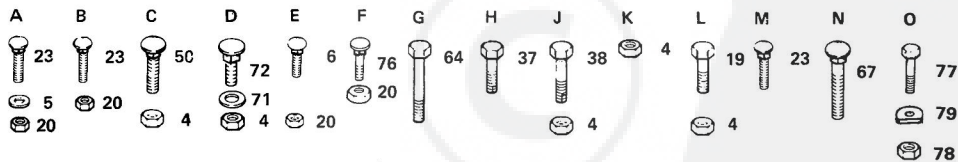


**ROPER LAWN TRACTOR--MODEL NUMBER LT110FR**

**38" MOWER**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	106085X	V-Belt	39	106634X	Blade, 36"
2	105689X	Housing	40	19132012	Washer 13/32 x 1 - 1/4 x 12 Ga.
3	8417J	Runner, R.H.	41	10030600	*Washer, Lock, 3/8
4	73680600	Nut, Lock, 3/8 - 16	42	74610624	*Bolt, Hex 3/8 - 24 x 1 - 1/2 Gr. 5
5	19111216	Washer, 11/32 x 3/4 x 16 Ga.	43	108250X	Spring, Ext.
6	72140505	Bolt, Carr., 5/16 - 18 x 5/8	44	108235X	Rod - Clutch, Mower
7	105896X	Bracket, Deflector	45	4921H	Spring - Retainer
8	5846R	Nut	46	76020312	*Pin - Cotter, 3/32 x 3/4
9	106734X	Spring, Deflector	47	109892X	Rock Shaft Assembly
10	106735X	Rod - Hinge	48	76020616	Pin, Cotter, 3/16 x 1
11	106736X	Deflector - Shield	49	108247X	Rod, Brake, Primary
12	105814X	Decal	50	72140606	*Bolt, Carriage 3/8 - 16 x 3/4
13	105304X	Cap	52	108243X	Bracket, Pivot, R.H.
14	105662X	Link, Parallel	53	108241X	Bracket, Pivot, L.H.
15	105744X	Pin - Hinge, Front	54	105857X	Bracket, Susp., Rear, R.H.
16	3146R	Spring - Retainer	55	108673X	Bracket, Susp., Rear, L.H.
17	105872X	Stop, Link	56	106578X	Brake Assembly
18	105743X	Pin - Hinge, Rear	57	106463X	Rod, Brake, Secondary L.H.
19	74760612	*Bolt, 3/8 - 16 x 3/4	58	108249X	Rod, Brake, Secondary, R.H.
20	73680500	Nut, Lock 5/16 - 18	59	106456X	Bracket, Brake, Pivot
21	105659X	Bracket, Lift, R.H.	60	100672K	Spacer, Brake
22	105660X	Bracket, Lift, L.H.	61	100673L	Bracket, Support
23	72140506	*Bolt, Carriage 5/16 - 18 x 3/4	63	19111016	Washer, 11/32 x 5/8 x 16 Ga.
24	3713J	Instruction - Caution Decal	64	74760684	Bolt, 3/8 - 16 x 5 - 1/4
25	106295X	Support, Arm	65	7631J	Runner, L.H.
26	105850X	Stop, Deck, Front	66	19131614	Washer 13/32 x 1 x 14 Ga.
27	106975X	Decal - Safety Standard	67	72140610	Bolt, Carr. 3/8 - 16 x 1 - 1/4
28	106461X	Guide, Belt	68	78850	Decal - Warning
29	74760632	*Bolt 3/8 - 16 x 2	70	19131316	*Washer 13/32 x 13/16 x 16 Ga.
30	108832X	Arm, Idler Assembly	71	19141610	Washer 7/16 x 1 x 10 Ga.
31	106902X	Spacer	72	72110606	Bolt, Carriage 3/8 - 16 x 3/4
32	102403X	Pulley, Idler	73	19132012	Washer 13/32 x 1 - 1/4 x 12 Ga.
33	106513X	Washer, Wear, 1/16	74	106679X	Decal - Warning
34	102669X	Keeper, Belt	75	76020308	Pin, Cotter 3/32 x 1/2
35	105891X	Mandrel Assembly	76	72110506	Bolt, Carriage 5/16 - 18 x 3/4
36	100668L	Plate, Support, Mandrel	77	74760412	Screw
37	17490612	Screw, Hex Washer Hd. 3/8 - 16 x 3/4	78	73680400	Nut
38	17490620	Screw, Hex Washer Hd. 3/8 - 16 x 1 - 1/4	79	109893X	Washer, Special

\*STANDARD HARDWARE--PURCHASE LOCALLY

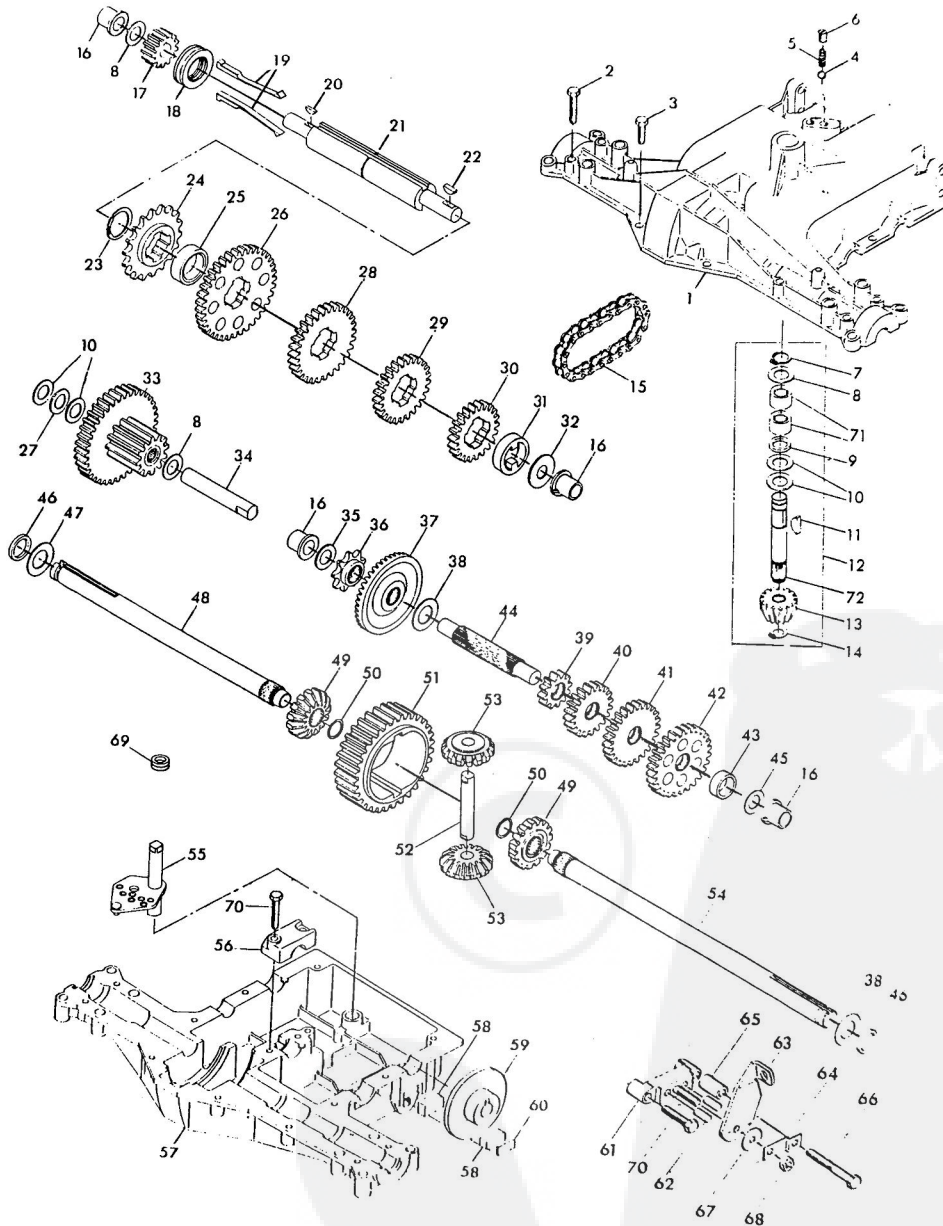




**ROPER LAWN TRACTOR--MODEL NUMBER LT110FR  
TRANSAXLE FOOTE--MODEL NUMBER 4150-41**

**TRANSAXLE**

ALL REPAIRS MUST BE PERFORMED BY AN AUTHORIZED FOOTE DEALER. REFER TO BACK COVER.



**SUPPLEMENT SHEET  
FOR  
11 H.P. LAWN TRACTOR  
MODEL NUMBER LT110FR**

DISREGARD PAGE 37 IN YOUR OWNERS MANUAL AND USE THIS SHEET INSTEAD. ALWAYS USE THIS SHEET WHEN ORDERING REPAIR PARTS FOR YOUR LAWN TRACTOR TRANSAXLE. KEEP THIS SHEET IN YOUR OWNERS MANUAL FOR FUTURE REFERENCE.

**REPAIR PARTS**

**ROPER LAWN TRACTOR--MODEL NUMBER LT110FR  
TRANSAXLE FOOTE--MODEL NUMBER 4150-41**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	3655-B	Housing, Upper	38	3749	Washer, Plain, .758 x 1.12 x .010
2	1360	Screw, Tapping, 1/4 - 20 x 1.31 Lg.	38	3652	Washer, Plain, .758 x 1.12 x .015
3	3396	Screw, Tapping, 1/4 - 20 x .875 Lg.	38	3693	Washer, Plain, .758 x 1.12 x .020
4	1151	Ball, Detent	38	3653	Washer, Plain, .758 x 1.12 x .025
5	3626	Spring, Detent	38	3408	Washer, Plain, .758 x 1.25 x .020
6	3623	Screw, Set	38	3732	Washer, Plain, .758 x 1.25 x .025
7	1099	Ring, Retaining	38	3184	Washer, Plain, .758 x 1.25 x .031
8	1441	Washer, Plain, .632 x 1.00 x .020	38	3733	Washer, Plain, .758 x 1.25 x .035
8	1423	Washer, Plain, .632 x 1.00 x .026	38	3198	Washer, Plain, .758 x 1.25 x .040
8	1082	Washer, Plain, .632 x 1.00 x .031	38	3734	Washer, Plain, .758 x 1.25 x .045
8	1424	Washer, Plain, .632 x 1.00 x .036	38	3735	Washer, Plain, .758 x 1.25 x .050
8	1068	Washer, Plain, .632 x 1.00 x .041	38	3736	Washer, Plain, .758 x 1.25 x .055
8	1425	Washer, Plain, .632 x 1.00 x .046	38	3180	Washer, Plain, .758 x 1.25 x .062
8	1358	Washer, Plain, .632 x 1.00 x .050	39	3646	Gear, Spur, 12T
8	1145	Washer, Plain, .632 x 1.00 x .060	40	3637	Gear, Spur, 20T
8	1319	Washer, Plain, .632 x 1.00 x .082	41	3719	Gear, Spur, 25T
9	3312	O-Ring	42	3683	Gear, Spur, 31T
10	1425	Washer, Plain, .632 x 1.00 x .046	43	3714	Spacer
11	1374	Key, Woodruff, No. 9	44	3657	Shaft, Drive
12	4134	Assembly, Kit, Input Shaft (Inc. Key No's 7,8,9,11,13,14,72 & 2 each Key No's 10 & 71)	45	1145	Washer, Plain, .640 x 1.00 x .060
13	3590	Pinion, Bevel, 14T	46	3191	Seal, Felt
14	3624	Ring, Retaining	47	3184	Washer, Plain, .758 x 1.25 x .031
15	3625	Chain, 24 Pitches	48	3846	Axle, L.H.
16	1542	Bearing, Flange	49	3780	Gear, Miter, 15T
17	3773	Gear, Spur, 14T	50	3656	Ring, Retaining
18	3631	Collar, Clutch	51	3839	Gear, Spur, 32T
19	3676	Key, Clutch	52	3840	Shaft, Cross
20	1369	Key, Woodruff, No. 3	53	3781	Gear, Miter, 15T
21	3663	Shaft, Intermediate	54	3845	Axle, R.H.
22	1375	Key, Woodruff, No. 61	55	4192	Ass'y., Shifter
23	3627	Ring, Retaining	56	3775	Cap., Support
24	3640	Sprocket, 18T.	57	3654-B	Housing, Lower
25	3841	Spacer	58	3757	Puck, Friction
26	3786	Gear, Spur, 37T	59	3276	Disc, Brake
27	3422	Spacer, .630 x 1.00 x .169	60	3758	Spacer
28	3784	Gear, Spur, 30T	61	4282	Assembly, Jaw, Brake
29	3783	Gear, Spur, 25T	62	3754	Pin, Dowel
30	3741	Gear, Spur, 19T	63	3768	Lever, Actuating
31	3715	Spacer	64	3842	Bracket, Anti-Rotation
32	3628	Washer, Plain, .640 x 1.37 x .061	65	3752	Spacer, .323 x .563 x 1.00 Lg.
33	4286	Assembly, Gear, Comb, 12T & 35T	66	3771	Screw, Tapping, 5/16 - 18 x 2.50 Lg.
34	3658	Shaft, Idler	67	3760	Washer, Plain, .321 x 1.00 x .055
35	1959	Washer, Plain, .631 x 1.00 x .010	68	3847	Nut, Lock, 5/16 - 24
36	3654	Sprocket, 9T.	69	3789	V-Ring
37	3853	Gear, Bevel, 42T	70	3724	Screw, Tapping 5/16 - 18 x 1.44 Lg.

\*USE IN VARIOUS COMBINATIONS TO MAINTAIN PROPER CLEARANCES

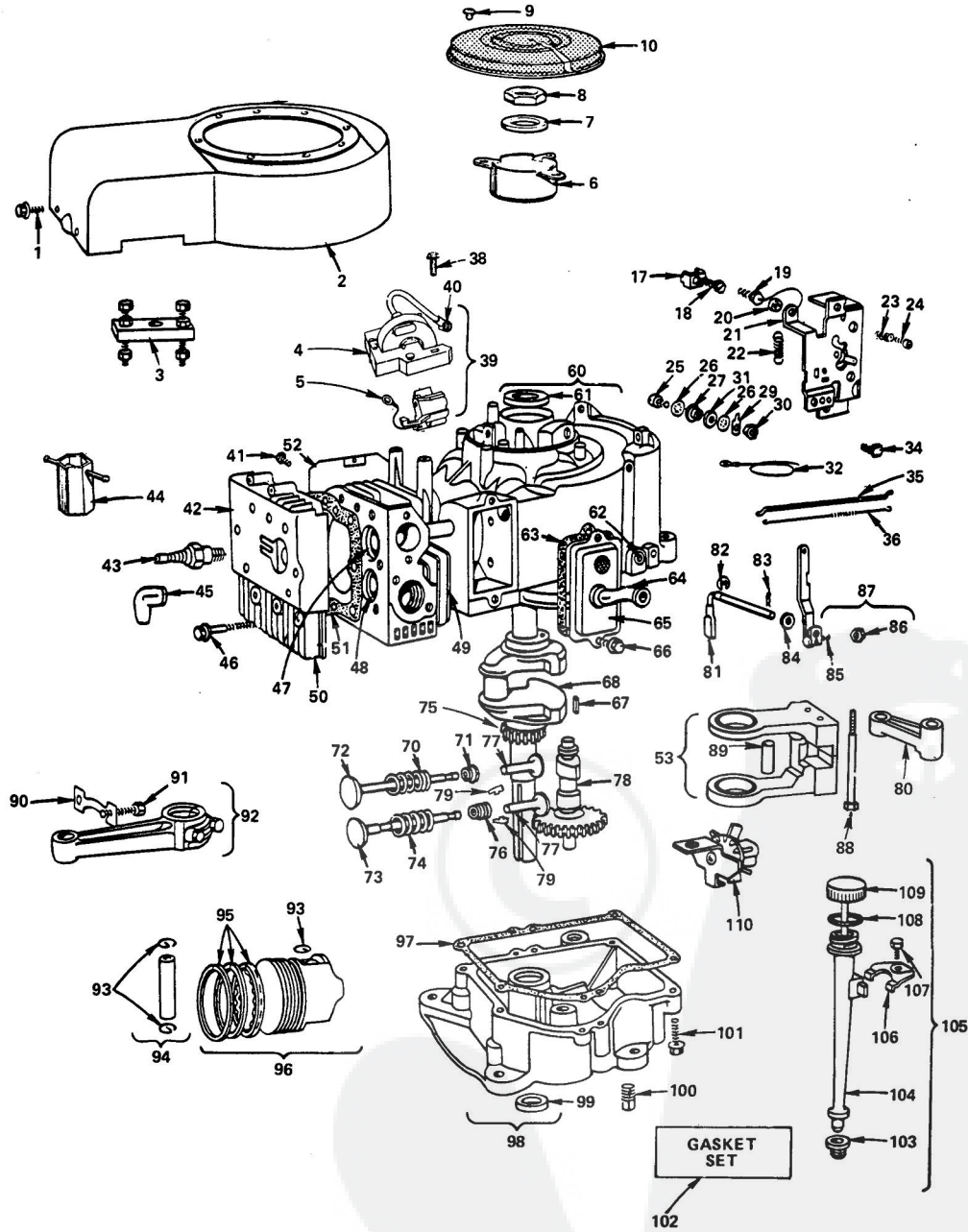
+ NOT SOLD SEPARATELY--ORDER KEY NO. 12

SAVE THIS SHEET FOR FUTURE REFERENCE.

SUPPLEMENT SHEET FOR OWNERS MANUAL 110023X

110142X-11.26.86  
Printed in U.S.A.

**ROPER LAWN TRACTOR--MODEL NUMBER LT110FR**  
**ENGINE BRIGGS & STRATTON--MODEL NUMBER 253707, TYPE NUMBER 0154-02**  
**CYLINDER BLOCK GROUP**



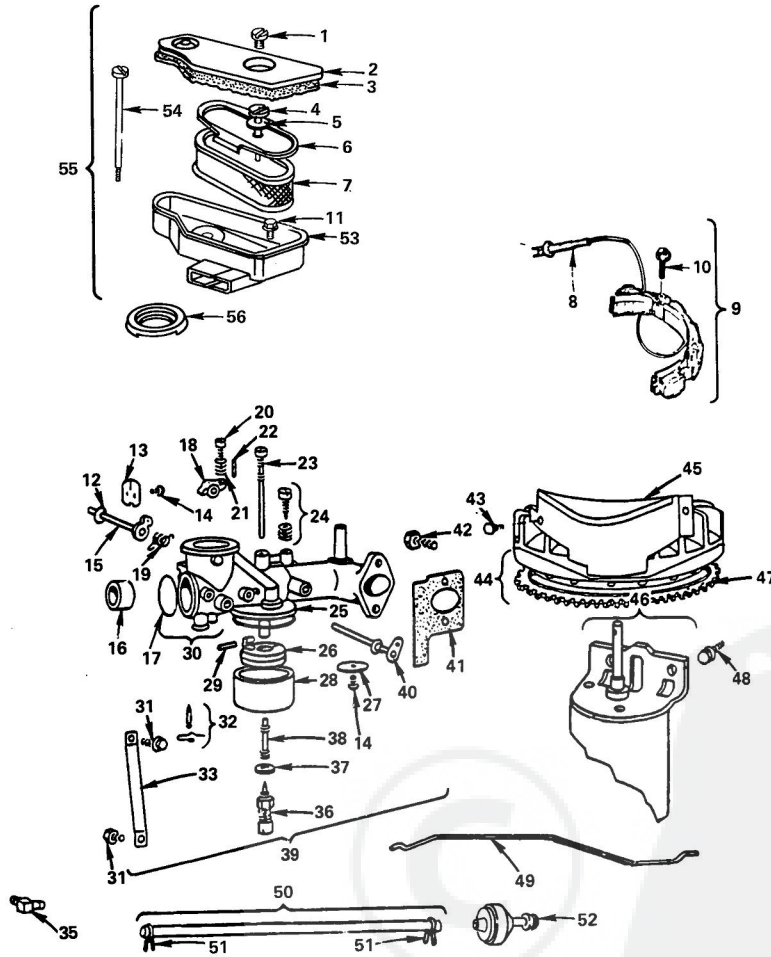
**ROPER LAWN TRACTOR--MODEL NUMBER LT110FR  
ENGINE BRIGGS & STRATTON--MODEL NUMBER 235707, TYPE NUMBER 0154-02  
CYLINDER BLOCK GROUP**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	93158	Screw - Blower Hsg. Mtg. Sem	71	221596	Retainer - Intake Valve
2	391556	Housing - Blower	72	261462	Valve - Intake
3	19203	Puller - Flywheel	73	261185	Valve - Exhaust
4	395326	Armature Assembly (Less Trigger Coil)	74	26828	Spring - Exhaust Valve
5	394970	Trigger Coil	75	261196	Gear - Timing
6	222561	Cup - Screen Mtg.	76	292260	Rotocoil - Exhaust Valve
7	220865	Washer - Spring	77	261183	Tappet - Valve
8	92284	Nut - Hex	78	212296	Gear - Cam
9	93805	Screw - Sem	79	93630	Retainer - Exhaust Valve Rotocoil (2)
10	222562	Screen - Flush Rotating	80	212359	Link - Counterweight
17	221535	Clamp - Casing	81	231058	Crank - Governor
18	93496	Screw - Sem	82	93307	Retainer - E-Ring
19	93572	Screw - Control Brkt. Mtg.	83	93306	Cotter - Hairpin
20	231039	Spacer - Control Brkt. Mtg.	84	222450	Washer - Governor Crank
21	396199	Plate - Gov. Contol	85	92613	Bolt - Governor Lever
22	261306	Spring - Governor	86	231082	Nut - Hex 10 - 24
23	26157	Spring - Throttle Adjustment	87	391733	Lever Assy. - Governor (Inc. Key No's. 85 & 86)
24	90200	Screw - Fill. Hd.	88	93875	Screw - Counterweight
25	91920	Screw - Terminal (Fill. Hd.)	89	298909	Pin - Counterweight
26	92791	Washer - Lock - Shakeproof	90	222299	Lock - Conn. Rod Screw
27	66554	Collar - Insulating	91	92909	Screw - Conn. Rod
29	93722	Terminal - Spade	92	391775	Rod Assy. - Conn. (Inc. Key No's. 90 & 91)
30	90576	Nut - Hex 8 - 32	93	260924	Lock - Piston Pin
31	66068	Washer - Insulating	94	299691	Pin Assy. - Piston - Std. (Inc. Key No. 93)
32	299500	Wire - Ground	94	391286	Pin Assy. - Piston .005" O.S.
34	93572	Screw	95	394665	Ring Set - Piston - Std.
35	261609	Link - Governor	95	391781	Ring Set - Piston .010" O.S.
36	260584	Spring - Governor Link	95	391782	Ring Set - Piston .020" O.S.
38	93381	Screw - Armature Mtg. Sem	95	391783	Ring Set - Piston .030" O.S.
39	395492	Armature Group	96	394661	Piston Assy. - Std. (Inc. Key No's. 93 & 95)
40	221798	Terminal - Ignition Cable	96	394662	Piston Assy. - .010" O.S.
41	93163	Screw - Cylinder Shield Mtg. Sem	96	394663	Piston Assy. - .020" O.S.
42	222725	Cover - Cylinder Head	96	394664	Piston Assy. - .030" O.S.
43	293918	Plug - Spark	97	270808	* Gasket - Crankcase Cover 1/64" thick
44	89838	Plug - Spark - Wrench	97	270915	* Gasket Crankcase Cover .005" thick
45	66538	Elbow - Spark Plug	97	270916	* Gasket Crankcase Cover .009" thick
46	93723	Screw - Cylinder Head	98	391784	Sump - Oil (Inc. Key No's. 97 & 99)
47	261463	+Seat - Intake Valve	99	291675	Seal - Oil
48	210940	+Seat - Exhaust Valve	100	91084	Plug - Oil Drain
49	291961	+Guide - Exhaust Valve	101	93585	Screw - Sump Mtg. Sem
50	212300	Head - Cylinder	102	393411	Gasket Set
51	271075	* Gasket - Cylinder Head	103	68838	Seal - Filler Tube
52	222744	Shield - Cylinder	104	280134	Tube - Oil Filler
53	391373	Counterweight Assembly (Inc. Key No. 89)	105	392067	Fill Group - Oil (Inc. Key No's. 103, 104, 106, 107, 108 & 109)
60	395705	Cylinder Assy. (Inc. Key No. 61)	106	222502	Clamp - Oil Filler Tube
61	391086	Seal - Oil	107	93804	Screw - Clamp Mtg.
62	231055	Bushing - Gov. Crank	108	270920	Seal - Oil Filler Cap
63	27803	* Gasket - Valve Cover	109	391841	Cap & Dipstick - Oil Filler
64	280100	Tube - Breather	110	391764	Oil Slinger, Gov. Gear & Bracket Assy.
65	391406	Breather Assembly			
66	93394	Screw - Sem			
67	222698	Key - Flywheel			
68	392299	Crankshaft			
70	65906	Spring - Intake Valve			

+Special Tools Required to Install  
\* Included in Gasket Set - Part No. 393411

ROPER LAWN TRACTOR--MODEL NUMBER LT110FR  
ENGINE BRIGGS & STRATTON--MODEL NUMBER 253707, TYPE NUMBER 0154-02

CARBURETOR



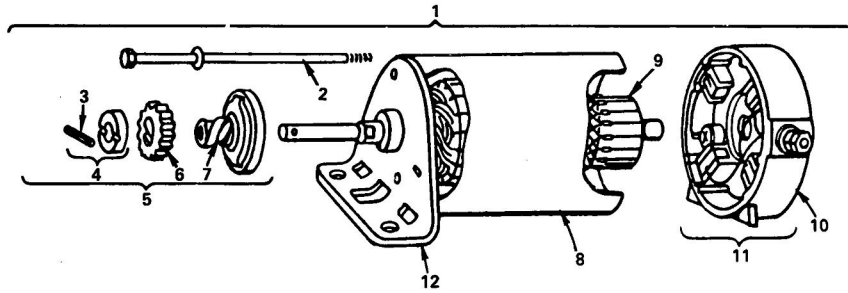
**ROPER LAWN TRACTOR--MODEL NUMBER LT110FR  
ENGINE BRIGGS & STRATON--MODEL NUMBER 253707, TYPE NUMBER 0154-02  
CARBURETOR**

KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	93913	Screw - Air Cleaner	29	230896	+Pin - Float Hinge
2	396966	Cover Group - Air Cleaner	30	396574	Body Assembly Carburetor (Inc. Key No. 17)
3	271591	Gasket - Air Cleaner Cover			Screw
4	93910	Screw - Air Cleaner	31	93572	+Valve - Fuel Inlet
5	270978	Washer - Air Cleaner	32	299096	Bracket - Carburetor
6	222898	Plate - Air Cleaner Cartridge	33	222311	Connector - Fuel Pipe
7	393725	Cartridge - Air Cleaner	35	67218	+Valve - Needle
8	393814	Diode & Connector	36	396568	+Washer - Float Bowl
9	391529	Stator - Alternator (Inc. Key No's. 8 & 10)	37	222014	+Screw - Nozzle
10	93621	Screw - Sem	38	231323	Carburetor Assy. (Inc. Key No's. 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29, 30, 31, 32, 33, 36, 37 & 38)
11	94018	Screw - Sem	39	396501	Shaft & Lever - Throttle
12	270382	Washer - Choke Shaft	40	391512	*Gasket - Carburetor Mounting
13	222010	Valve - Choke	41	270872	Screw - Carburetor Mounting
14	93499	Screw - Throttle & Choke Valve Mtg. Sem	42	93357	Screw - Sem
15	390684	Shaft & Lever - Choke	43	93984	Flywheel & Ring Gear Assy. - Magneto (Inc. Key No. 47)
16	211960	Venturi - Carburetor	44	391988	Cover & Shield - Starter
17	221997	+Plug - Welch			Motor - Starting
18	211712	Stop - Throttle	45	395405	Gear - Ring (Inc. Mounting parts)
19	261116	Spring - Choke Return	46	394805	Screw - Sem
20	91920	Screw - Machine, Fill. Hd. 8 - 32 x 5/8	47	392134	Link - Choke
21	26157	Spring - Throttle Adjustment	48	93535	Line - Fuel (cut to desired length) (Inc. Key No. 51)
22	93043	Pin - Throttle Stop	49	261610	Clamp - Fuel Pipe
23	299740	+Nozzle - Carburetor	50	299146	Filter - Fuel
24	292681	+Valve Assembly - Carburetor Idle	51	93053	Body - Air Cleaner
25	270511	+Gasket - Float Bowl	52	298090	Screw - Air Cleaner
26	299707	Float - Carburetor	53	393726	Cleaner - Air (Inc. Key No's. 1, 2, 3, 4, 5, 6, 7, 11, 53 & 54)
27	222858	Valve - Throttle	54	93911	Gasket - Air Cleaner
28	221995	Bowl - Float	55	393749	Carburetor Overhaul Kit
			56	270853	
			---	394698	

+Included in Carburetor Overhaul Kit - Part No. 394698  
\*Included in Gasket Set - Part No. 393411

**ROPER LAWN TRACTOR--MODEL LT110FR  
ENGINE BRIGGS & STRATTON--MODEL NUMBER 253707, TYPE NUMBER 0154-02**

**STARTER - MOTOR**



KEY NO.	PART NO.	DESCRIPTION	KEY NO.	PART NO.	DESCRIPTION
1	394805	Motor - Starting (Inc. Key No's. 2, 3, 4, 5, 6, 7, 8, 9, 10, 11 & 12)	7	391135	Clutch Assembly
2	94003	Thru Bolt Assembly	8	393825	Housing Assembly
3	93754	Roll Pin	9	392747	Armature Assembly
4	391462	Retainer & Pin (Inc. Key No. 3)	10	395538	Brush Assembly
5	391461	Drive Assembly (Inc. Key No's 3, 4, 6 & 7)	11	395537	End Cap Assy. Commutator (Inc. Key No. 10)
6	280104	Gear	12	394856	End Cap Assy. Drive

### CONGRATULATIONS . . .

on your purchase of a Roper Lawn Tractor. It has been designed, engineered and manufactured to give you dependability and performance. Should you experience any problem you cannot easily remedy, please contact your nearest authorized Roper dealer. He has competent, well-trained technicians and the proper tools and parts to service or repair this unit.

Please read and retain this manual. Following the "Rules For Safe Operation", "Assembly", "Operation" and "Maintenance" instructions will help you achieve a long, safe, service life for your Lawn Tractor.

### LIMITED WARRANTY

Roper Corporation warrants to the original consumer purchaser that this product as manufactured is free from defects in materials and workmanship. For a period of two (2) years from date of purchase by the original consumer purchaser, we will repair or replace, at our option, without charge for parts or labor incurred in replacing parts, any part which we find to be defective due to materials or workmanship. This warranty is subject to the following limitations and exclusions:

1. Engine Warranty: All engines on Roper® products have a separate Warranty extended by the individual Engine Manufacturer; said Warranty must be referred to in the event of a service requirement (see pages 44 and 45).
2. Transaxle/Transmission Warranty: Some Roper® products have a Transaxle/Transmission supplied by other manufacturers. Such Transaxle/Transmissions are warranted by that manufacturer and said Warranty must be referred to in the event of a service requirement (see back cover).
3. Battery Warranty: On products equipped with a battery, Roper® will replace, without charge to you, any battery which we find to be defective in manufacture during the first year of ownership. Battery must be maintained in accordance with instructions in the product literature.
4. The warranty period for any products used for rental or commercial purposes is limited to 90 days from the date of original purchase.
5. This warranty applies only to products which have been properly assembled, adjusted and operated in accordance with instructions found in product literature for your product. This warranty does not apply to any product which has been subject to alterations, misuse, abuse, improper assembly, installation, or delivery damages.
6. Exclusions: Excluded from this warranty are belts, blades, blade adapters, normal wear, normal adjustments, and normal maintenance.
7. In the event you have a claim under this warranty, you must return the product to an authorized Roper Outdoor Power Equipment service dealer.

Should you have any unanswered questions concerning this warranty, please contact:

Roper Outdoor Power Equipment  
Service Department  
12052 Middleground Road  
Savannah, Georgia 31419

giving the model number, serial number and date of purchase of your product and the name and address of the authorized Roper dealer from whom it was purchased.

THIS WARRANTY DOES NOT APPLY TO INCIDENTAL OR CONSEQUENTIAL DAMAGES AND IMPLIED WARRANTIES ARE LIMITED TO THE SAME TIME PERIODS STATED HEREIN FOR ROPER'S EXPRESSED WARRANTIES. Some states do not allow the limitation of consequential damages or limitation of how long an implied warranty may last, so the above limitations or exclusions may not apply to you. This warranty gives you specific legal rights and you may have other rights which vary from state to state.

This is a Limited Warranty within the meaning of that term as defined in the Magnuson-Moss Act of 1975.

840712

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