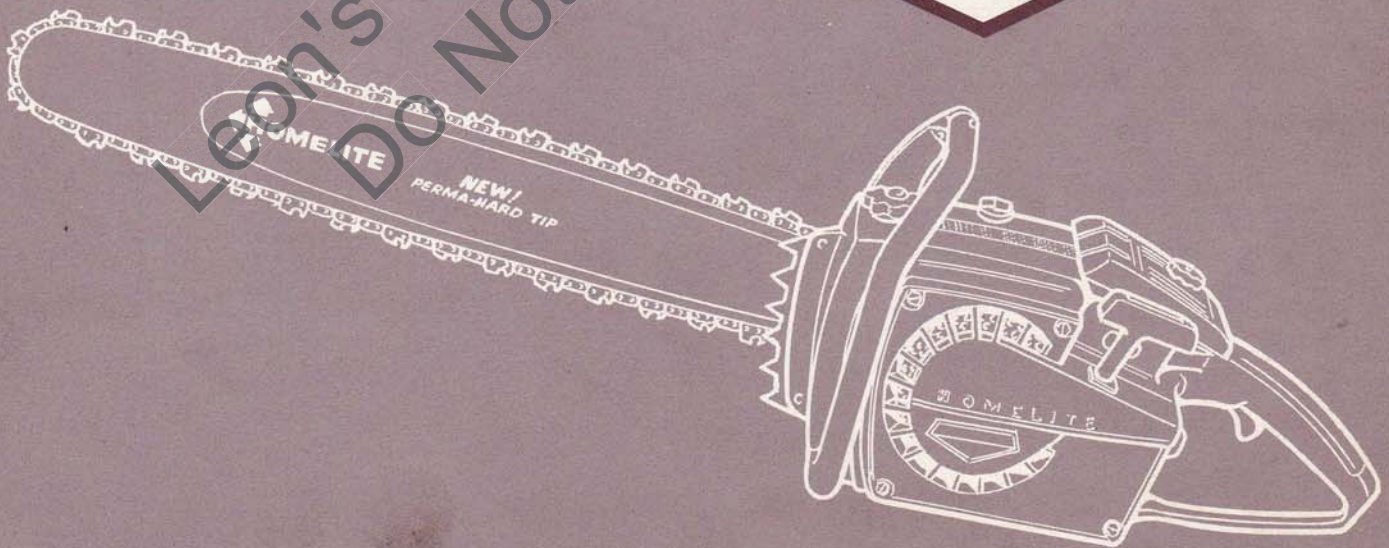


HOMELITE

CHAIN SAW

SOLID STATE IGNITION

XL-850



PARTS LIST

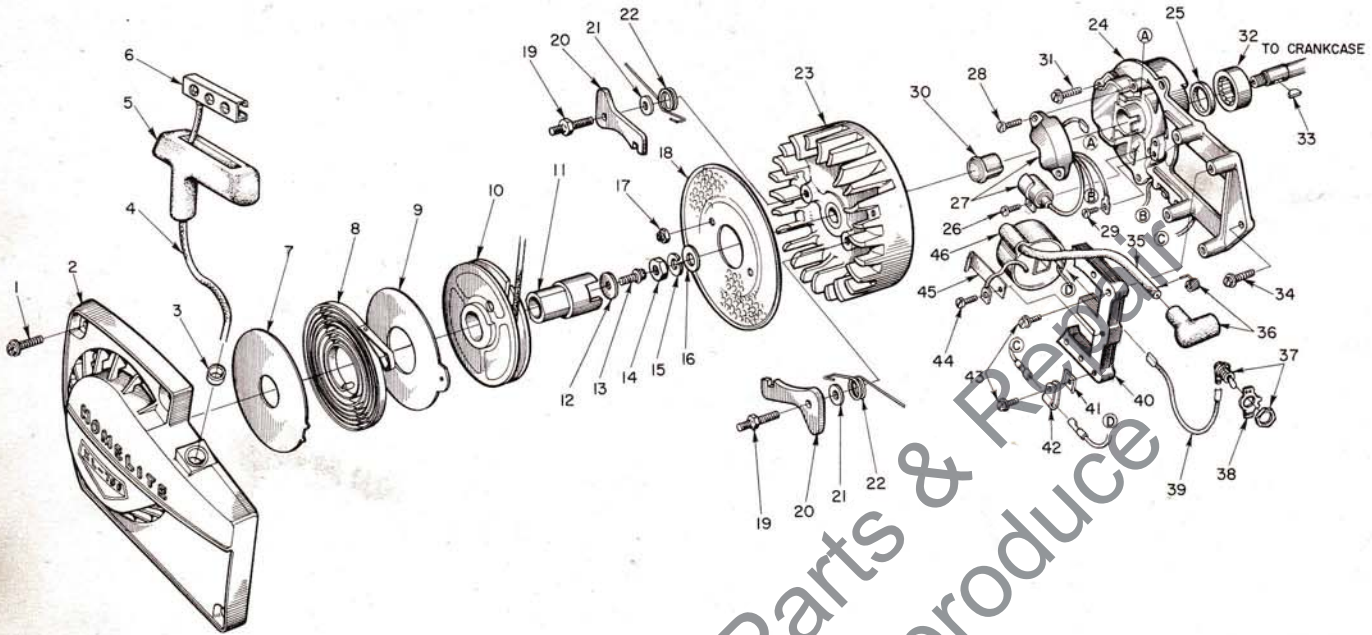


FIGURE 1

No.	Description	Part No.	Qty.	No.	Description	Part No.	Qty.
1	SCREW - hex, 12-24 x 5/8	80676	4	26	SCREW - condenser clamp	64022	1
2	HOUSING - fan	A-63330-1	1	27	SWITCH & CONDENSER	64000	1
3	Includes: BUSHING - rope	59313	1	28	SCREW - pan, 8-32 x 1/2	80560	2
4	ROPE - starter	58806	1	29	SCREW - pan, (switch grounding)	76421	1
5	GRIP - rope	58915	1	30	CAP - dust	64002	1
6	INSERT	58847	1	31	SCREW - hex, 12-24 x 5/8	80807	3
7	SHIELD - spring (inner)	63566	1	32	BEARING - roller	63195	1
8	SPRING - rewind	63268	1	33	KEY	75078	1
9	SHIELD - spring (outer)	63565-A	1	34	SCREW - hex, 12-24 x 9/16	80899	1
10	PULLEY - starter	58759-1	1	35	LEAD - high tension	63632	1
11	CUP - starter	58760	1	36	TERMINAL - high tension lead	A-33055	1
12	WASHER - retaining	58763	1	37	SWITCH - w/nut	A-57650-3	1
13	SCREW - hex	80648	1	38	PLATE - "ON-OFF"	72085-A	1
14	NUT - hex, 5/8-24	81124	1	39	LEAD - ground	A-59031	1
15	WASHER - lock, 3/8	83102	1	40	CORE - coil	63630	1
16	WASHER - flat, 3/8	84010-1	1	41	D-WASHER	64059	1
17	NUT - lock, 10-32	81109-2	2	42	CLAMP - nylon	64058	1
18	SCREEN - air	64137	1	43	SCREW - core	64021	4
19	STUD - pawl	58757-B	2	44	SCREW - coil grounding	58872	1
20	PAWL - starter (finger)	58756	2	45	CLIP - coil retaining	63726	1
21	WASHER	58851	2	46	COIL	63998	1
22	SPRING - pawl	58758	2				
23	ROTOR	64001	1				
24	PLATE - back	A-64023	1				
25	Includes: SEAL	58688-A	1				

HOMELITE XL-850 CHAIN SAWS

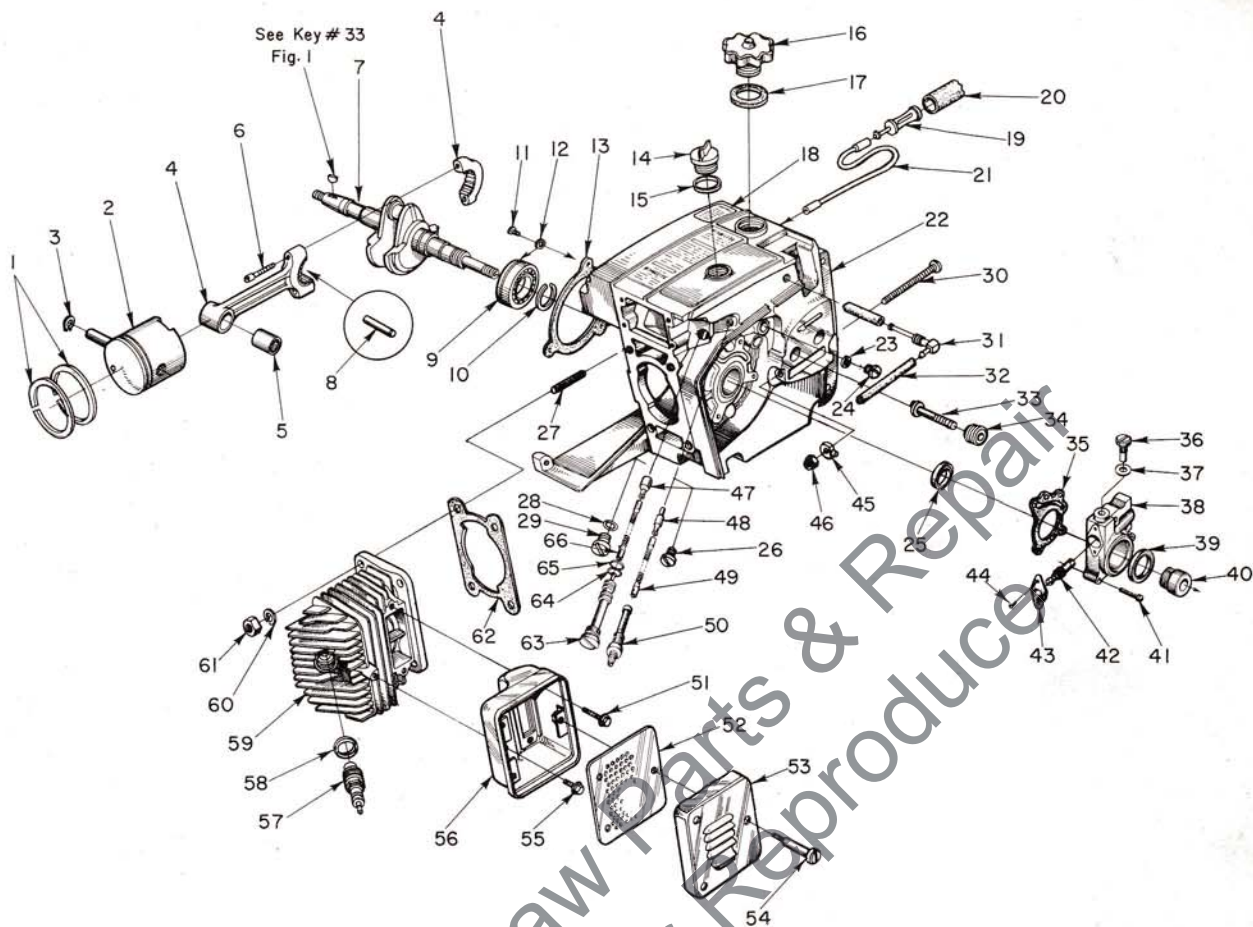


FIGURE 2

No.	Description	Part No.	Qty.	No.	Description	Part No.	Qty.
1	RING - piston (2-1/16" bore)	55537	2	33	STUD - guide bar	59764-A	2
2	PISTON & PIN - 2-1/16" bore	A-63781	1	34	INSERT - threaded	59896	2
3	Includes: RING - retaining	55095	1	35	GASKET - oil pump	63471	1
4	ROD - connecting	A-63309	1	36	SCREW - cam	59737	1
5	Includes: BEARING - needle	59361	1	37	GASKET	59736	1
6	SCREW - socket cap, 8-32 x 9/16	80805	2	38	HOUSING - automatic oiler	A-63461-A	1
7	CRANKSHAFT	59625-2	1	39	SEAL - felt	59926	1
8	BEARING - needle (set 28)	A-63307	1	40	GEAR - worm	59675	1
9	BEARING - ball	58190-S	1	41	SCREW - hex, 6-32 x 13/16	80962	3
10	RING - retaining	58319-A	1	42	PLUNGER - gear	63760	1
11	SCREW - bearing retaining	59704	2	43	BEARING - flanged	59719	1
12	WASHER - lock	59705	2	44	SCREW - pan, 4-40 x 1/4	80919	2
13	GASKET - sealing	63319	1	45	PIN - guide bar adjusting	58783	1
14	CAP - oil (vented)	A-63717	1	46	NUT - lock, 1/4-20	81108	1
15	Includes: GASKET	56607	1	47	FILTER - oil	A-58828	1
	(not shown) VALVE - vent	63718	1	48	FILTER - oil	A-59009	1
	(not shown) COLLAR - retaining	63719	1	49	SLEEVE	59000	1
16	CAP - fuel	A-64140	1	50	CONNECTOR - oil filter	64018	1
17	Includes: GASKET	58957	1	51	SCREW - hex, 12-24 x 5/8	80978	2
18	DECAL - caution	64144	1	52	BAFFLE - muffler	63521-A	1
19	FILTER ASSEMBLY	A-59251	1	53	CAP - muffler	63520-1	1
20	Includes: FILTER	59253	1	54	SCREW - shoulder	63855	3
21	LINE - flexible	55805	1	55	SCREW - hex, 12-24 x 3/8	80837	1
22	CRANKCASE & TANKS	A-63682-A	1	56	BODY - muffler	A-63535-1A	1
23	Includes: GASKET	58338	1	57	SPARK PLUG	63547-S	1
24	CAP	58339	1	58	Includes: GASKET	25038	1
25	SEAL	58688-A	1	59	CYLINDER - 2-1/16" bore	63012-1	1
26	PLUG - pipe	28097	1	60	NUT - hex, 1/4 x 28	81065-2	4
27	STUD	55871	4	61	WASHER - lock, 1/4	83009	4
28	WASHER	58138	1	62	GASKET - cylinder	63778	1
29	CAP	63115	1	63	TUBE - oil line	63452	1
30	SCREW - guide bar adjusting	63367	1	64	"O" RING	58406	1
31	FITTING - elbow	63297-A	1	65	GASKET - oil line tube	63751	1
32	LINE - fuel	63335-A	1	66	LINE - oil pick-up	63605	1

ACCESSORY

A-63540-A SPARK ARRESTOR

ALWAYS FURNISH MODEL AND SERIAL NUMBER WHEN ORDERING PARTS.

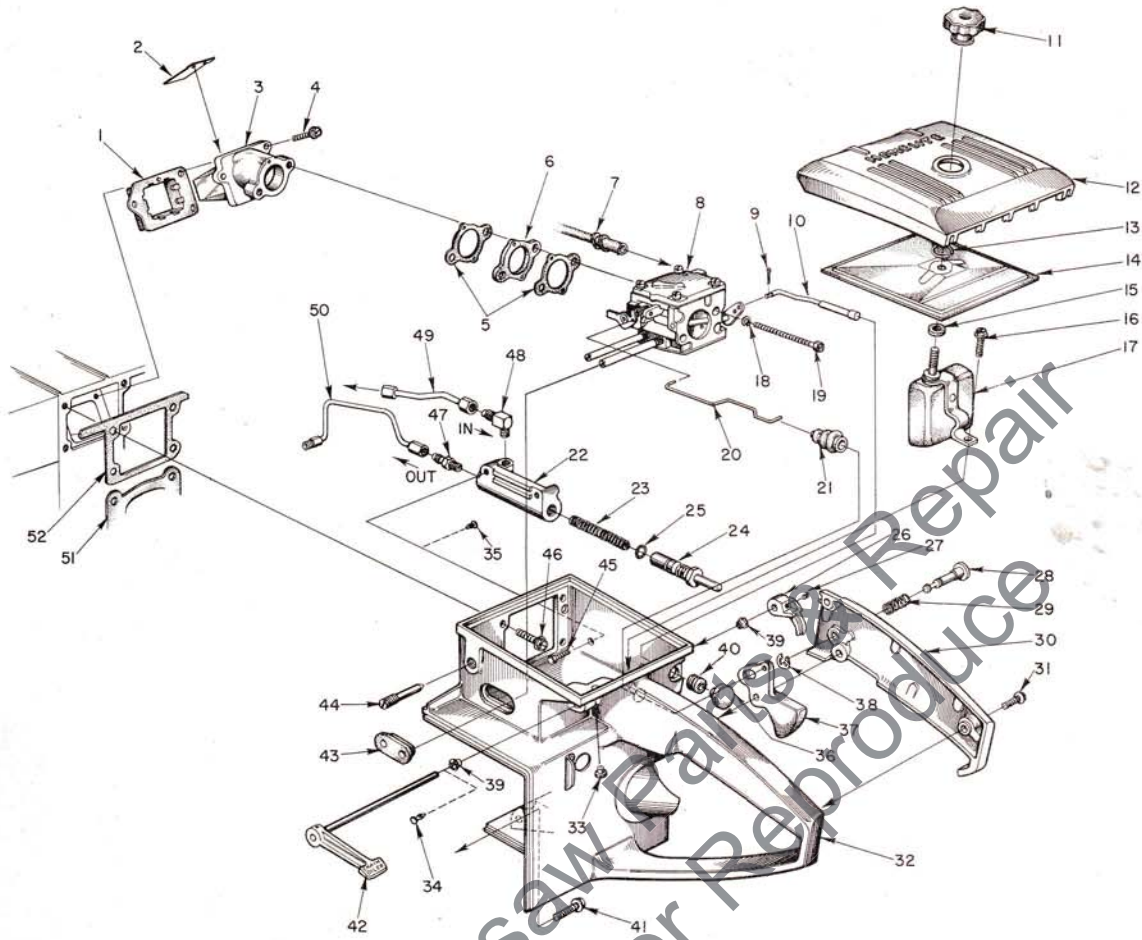


FIGURE 3

No.	Description	Part No.	Qty.	No.	Description	Part No.	Qty.
1	RETAINER - reed valve	63370	1	27	SCREW - socket, set, 6-32 x 1/4	80989	1
2	VALVE - reed	63166	4	28	PIN - throttle lock	58924	1
3	SEAT - reed valve	A-63907	1	29	SPRING - lock	58405	1
4	SCREW - pan, 8-32 x 1/2	63709	3	30	COVER - throttle handle	A-63325-1	1
5	GASKET - carburetor	63254	2		Includes: BUSHING - pin	59064	1
6	SPACER - carburetor	63256	1	31	SCREW - pan, 8-32 x 1/2	80560	2
7	LINE - fuel	63335-A	1	32	HANDLE - throttle	A-63683	1
8	CARBURETOR	A-63448	1	33	Includes: BUMPER - rubber	56298	1
9	PIN - cotter	86324	1	34	PLUG	63848	2
10	ROD - choke	A-63337	1	35	PLUG	63847	2
11	NUT - cover mounting	A-63582-A	1	36	BUTTON	57289-1	1
12	COVER - air filter	63634-1	1	37	THROTTLE - trigger	58859	1
13	RING - retainer	58319-A	1	38	RING - retaining	58409	1
14	FILTER ELEMENT - air	63341	1	39	BUSHING - throttle handle	63400	2
15	GASKET - mounting nut	58392-1	1	40	GROMMET	58362	1
16	SCREW - hex, 12-24 x 1/2	80821	1	41	SCREW - hex, 12-24 x 7/8	80891	1
17	DEFLECTOR - air, w/bracket	A-63593	1	42	LEVER - oiler w/shaft	A-63327	1
18	WASHER - lock, #10	83046	2	43	GROMMET	59058	1
19	SCREW - hex, 10-32 x 2	80965	2	44	SCREW - idle adjustment	63369	1
20	ROD - throttle	63266	1	45	SCREW - sl. hex, 8-32 x 1/2	80983	2
21	BOOT - throttle rod	58348	1	46	SCREW - hex, 12-24 x 5/8	80676	4
22	BODY - oil pump	63343-2	1	47	VALVE - check	A-59456-A	1
23	SPRING - plunger	59293	1	48	VALVE - check	A-63432	1
24	PLUNGER - oil pump	A-57834-14	1	49	LINE - oil	A-63298	1
	Includes: "O" RING - shaft	59074	1	50	LINE - oil	A-63299	1
25	"O" RING - plunger	74388	1	51	GASKET - cylinder	63778	1
26	LEVER - oiler	63280-2A	1	52	GASKET - throttle handle	63779	1

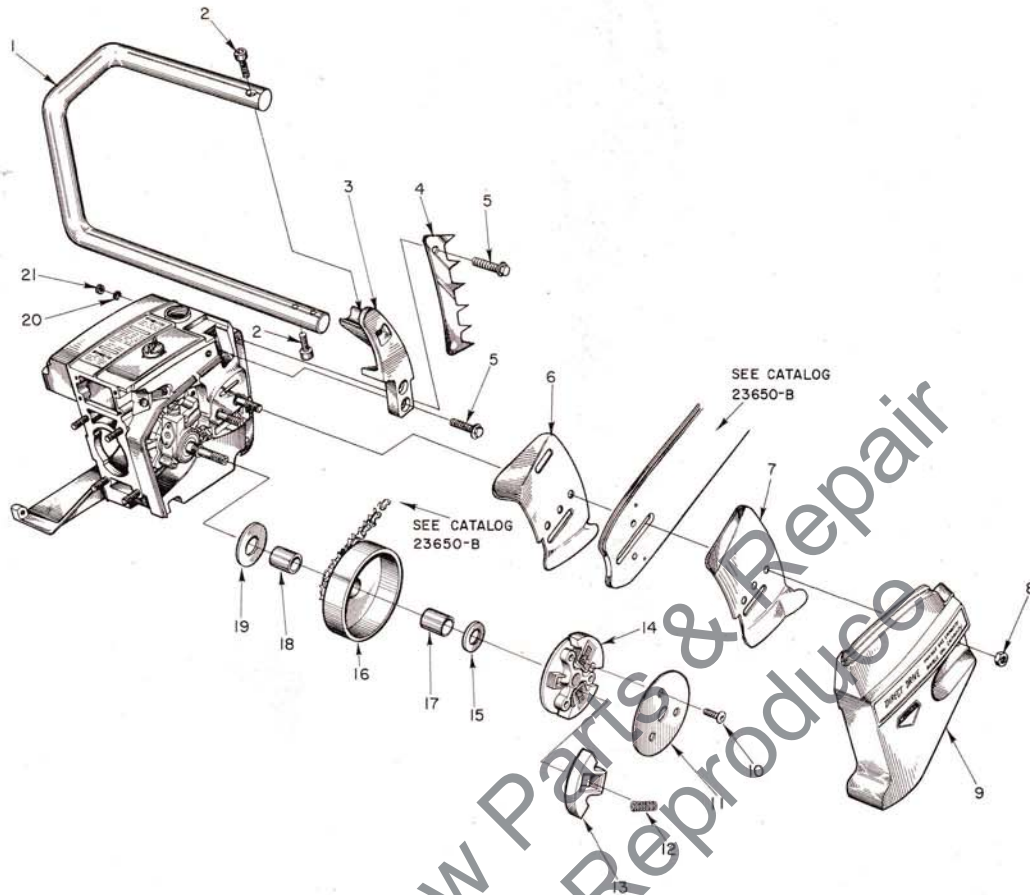


FIGURE 4

No.	Description	Part No.	Qty.	No.	Description	Part No.	Qty.
1	HANDLE BAR - flush cut	A-63485-2	1	14	PLATE - clutch	63053-2	1
	HANDLE BAR - wrap-around ①	A-63659	1	15	WASHER - thrust (outer)	63462	1
2	SCREW - socket, 1/4-20 x 1	80428	3	16	SPROCKET & DRUM		
3	BRACKET - handle bar (flush cut)	63011-3	1		Standard - 8 tooth, 3/8" pitch	A-63813	1
	BRACKET - handle bar (wrap-around)	① 63011-5	1		Optional - 8 tooth, .404 pitch	A-63465	1
4	BUMPER - spiked (optional)	63549	1	17	Includes: BEARING - needle	77442	1
5	SCREW - hex, 12-24 x 3/4	80867	as req'd.	18	RACE - inner	63588	1
6	PLATE - guide bar (inner)	58781	1		Optional (not shown)		
7	PLATE - guide bar (outer)	58782	1		SPROCKET & DRUM		
8	NUT - 5/16-18	61196	2		- 7 tooth, .404 pitch	A-64063	1
9	COVER - drivecase	63009-2	1		- 7 tooth, 3/8" pitch	A-64060	1
10	SCREW - button, 1/4-20 x 1/2	80985	3		BEARING - needle	64124	1
11	COVER - clutch	63051-1	1		RACE - inner	64129	1
12	SPRING - clutch	63977	3	19	WASHER - thrust (inner)	63463	1
13	SHOE - clutch	63957	3	20	WASHER - lock, #12	83056	2
				21	NUT - 12-24	81068	2

① Wrap around Handle Bar and special Bracket also requires #63660 Brace (not shown) mounted on drivecase cover. Attach Brace to Handle Bar with one #80867 screw.

SPECIAL TOOLS available on order

Part No.	Description
A-23937-A	COMBINATION WRENCH
22828	PLIERS - piston snap ring
23528	WRENCH - socket screw (conn. rod)
23955	PLUG - bearing installation (conn. rod)
A-23965	JACKSCREW
23136-1	BODY - jackscrew
22820-4	COLLAR - bearing
23846-1	ANVIL - crankshaft installation
23971	SLEEVE - seal protecting (crankcase)
23972	SLEEVE - seal installation (crankcase)
23957	PLUG - seal installation (crankcase)
23987	SHIM - magneto air gap
24006-1	PLATE - shaft aligning
23968	ANVIL - roller bearing (back plate)

Part No.	Description
A-23934	WRENCH - spanner (clutch)
A-23841	WRENCH - insert (guide bar stud)
A-23960	PULLER - rotor
23819	PLUG - needle bearing (sprocket)
23420	PLUG - bearing installation (sprocket)
23956	PLUG - bearing and seal installation (back plate)
A-23962	REMOVER - bearing (back plate)
23846-2	ANVIL - bearing disassembling (back plate)
A-23951	PLUG - piston pin removal
	PAINT
23343	SPRAY CAN - green
23560	SPRAY CAN - white

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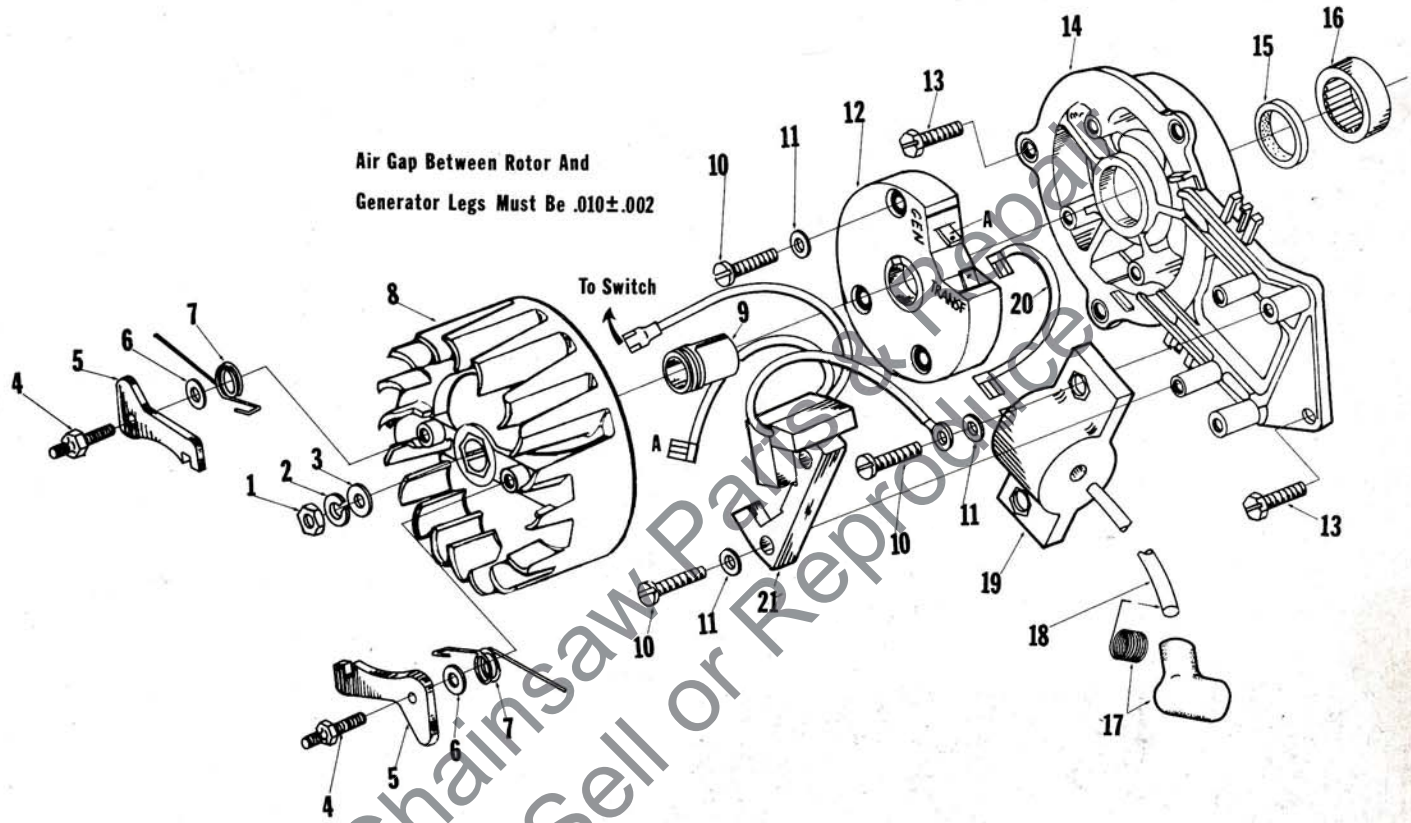
A **textron** DIVISION

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HOMELITE®

CAPACITOR DISCHARGE MAGNETO XL-850, XL-875, *XL-904



No.	Description	Part No.	Qty.	No.	Description	Part No.	Qty.
1	NUT-hex, 3/8-24	81124	1	11	WASHER-lock, #8	83106	7
2	WASHER-flat, 3/8	84010-1	1	12	MODULE-ignition	67162	1
3	WASHER-lock, 3/8	83102	1	13	SCREW-hex, 1/4-20x5/8-See Note 1	80048-1	4
4	STUD-shoulder	58757-B	2	*14	PLATE-back - See Note 1	A-67604	1
5	PAWL-starter	58756	2	15	Includes: SEAL	58688-A	1
6	WASHER	58851	2	16	BEARING-roller	63195	1
7	SPRING-starter pawl	58758	2	17	TERMINAL-spark plug	A-33055	1
8	ROTOR-magneto	67165	1	18	LEAD-high tension	67166	1
9	CAP-dust	64002	1	19	COIL-transformer	67164	1
10	SCREW-pan, 8-32 x 3/4	82178	7	20	LEAD-transformer	67167	1
				21	COIL-core and generator	67163	1

*Denotes new part

Note 1 - Units below serial 3043434 must use Back Plate #A-67198, Backplate Retaining Screws (3) #65321 and (1) Hex Screw (12-24x11/16) #80751
A-67202 Complete Magneto ("CD" type) is available for these units.

Tools

24302 PLUG-seal installation
24306 SHIM-plastic (air gap-black)
24304 BIT-#2 pozidriv

*ABOVE SERIAL #3043434

TEST INSTRUCTIONS

HOMELITE®

CAPACITOR DISCHARGE MAGNETO

EQUIPMENT REQUIRED - VOLT OHMMETER

INITIAL TEST

Turn the ignition switch to the "ON" position, disconnect the high tension lead terminal from the spark plug and insert a screw into the spring connector. Hold the rubber insulating boot to position the screw head 3/8" from any unpainted, grounded part of the engine, and observe the spark while pulling the starter rope. If there is no spark, proceed to the following tests.

CAUTION: Discharge the capacitor by switching the ignition switch to the "OFF" position or touching the switch lead to ground if disconnected from the switch.

HIGH VOLTAGE TRANSFORMER COIL TEST

1. Select R X 1000 scale on meter.
2. Place either lead of meter to high voltage lead wire; the other lead of meter to ground.
3. A reading of 2400 to 2900 ohms should be read.
4. Select R X 1 scale on meter.
5. Place either lead to transformer terminal, other lead to ground, Reading of .2 ohms to .25 ohms should be read.
6. If no results are obtained in either step 4 or 5, transformer is defective - Replace.

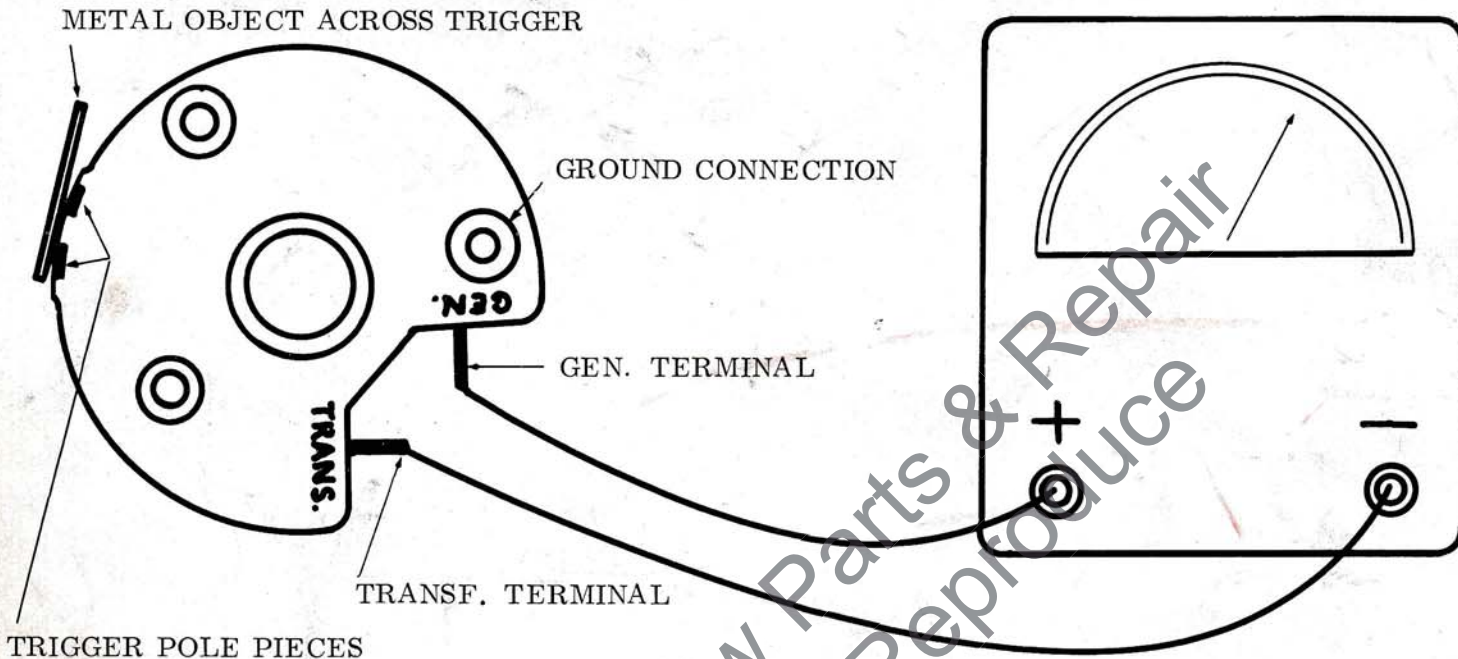
GENERATOR COIL TEST - (Ignition switch "ON", or lead disconnected.)

(NOTE: The generator coil is the square coil mounted on the outside of the rotor.)

1. Remove rotor - Remove lead that goes to terminal marked GEN.
2. Select R X 1 scale of meter.
3. Place black (-) lead of meter to ground, red (+) lead of meter to the wire removed in Step 1.
4. Meter should show continuity.
5. Reverse meter leads: NO continuity should be observed. If a reading is noticed, replace Generator Coil.
6. Reinstall rotor but do not connect wire back to terminal marked Generator. Move wire externally from rotor so that wire will not interfere when rotor is revolved.
7. Remove Spark Plug.
8. Select lowest DC scale on meter, place red (+) lead of meter to wire that is removed from terminal marked Gen. Place black (-) lead to ground.

9. Spin rotor at least 500 RPM. (A firm pull on starter rope is sufficient.)
10. A reading of approximately 4 volts minimum should be read.
11. If no results are obtained in Step 10 - replace Generator.

IGNITION MODULE TEST DIAGRAM



IGNITION MODULE TEST - (Ignition switch "ON", or lead disconnected.)

Select R X 1000 scale of ohmmeter. Place red (+) lead of meter to terminal marked Gen. Place black (-) lead of ohmmeter to ground. An instant deflection of needle should be noticed; if not, reverse meter leads and note again the deflection of needle; when no deflection of needle is observed - module is faulty: Replace Module -

If needle movement is observed - proceed as follows:

1. Select R X 1 scale.
2. Place black (-) lead to terminal marked Trans. - red (+) lead to terminal marked Gen.
3. With leads held on terminal, strike trigger poles with screwdriver blade. (Trigger poles are the two metal pieces that are exposed.)
4. A deflection on meter needle should be noticed, and remain deflected until leads are removed.
5. If results of Step 1 to 4 are obtained, module is probably functioning properly.
6. Since the module cannot be completely checked with a Volt-Ohmmeter, if all other ignition components and wiring check out, replace the module.

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