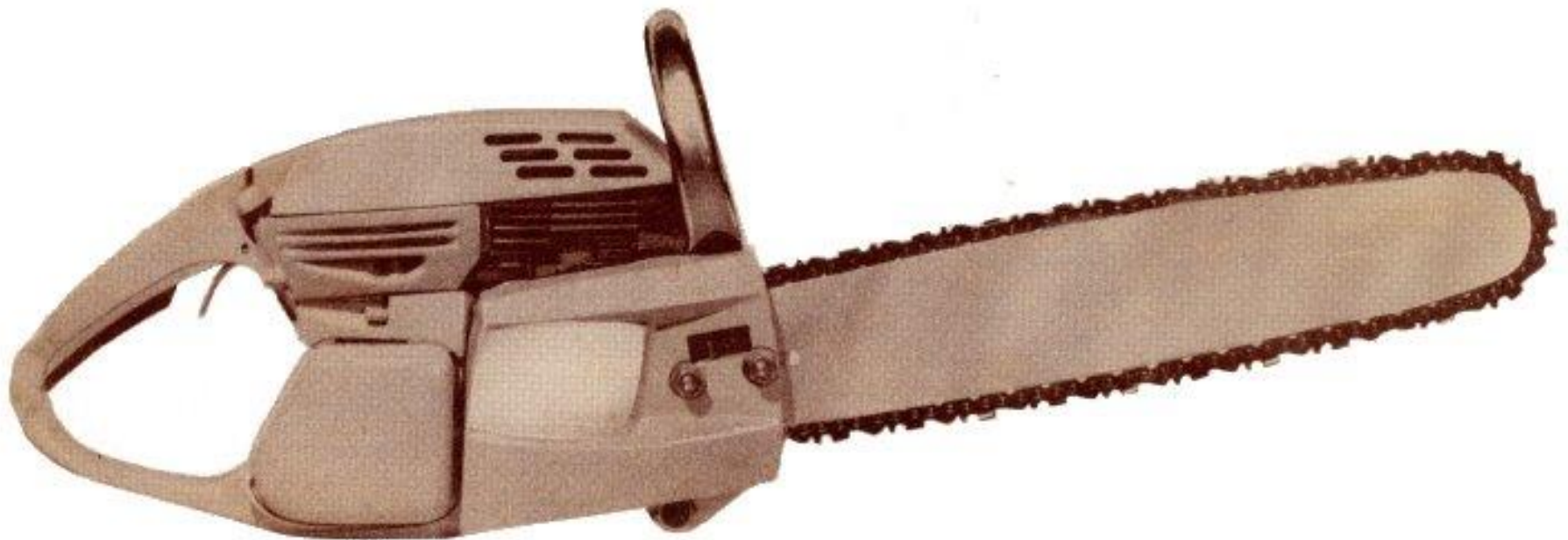


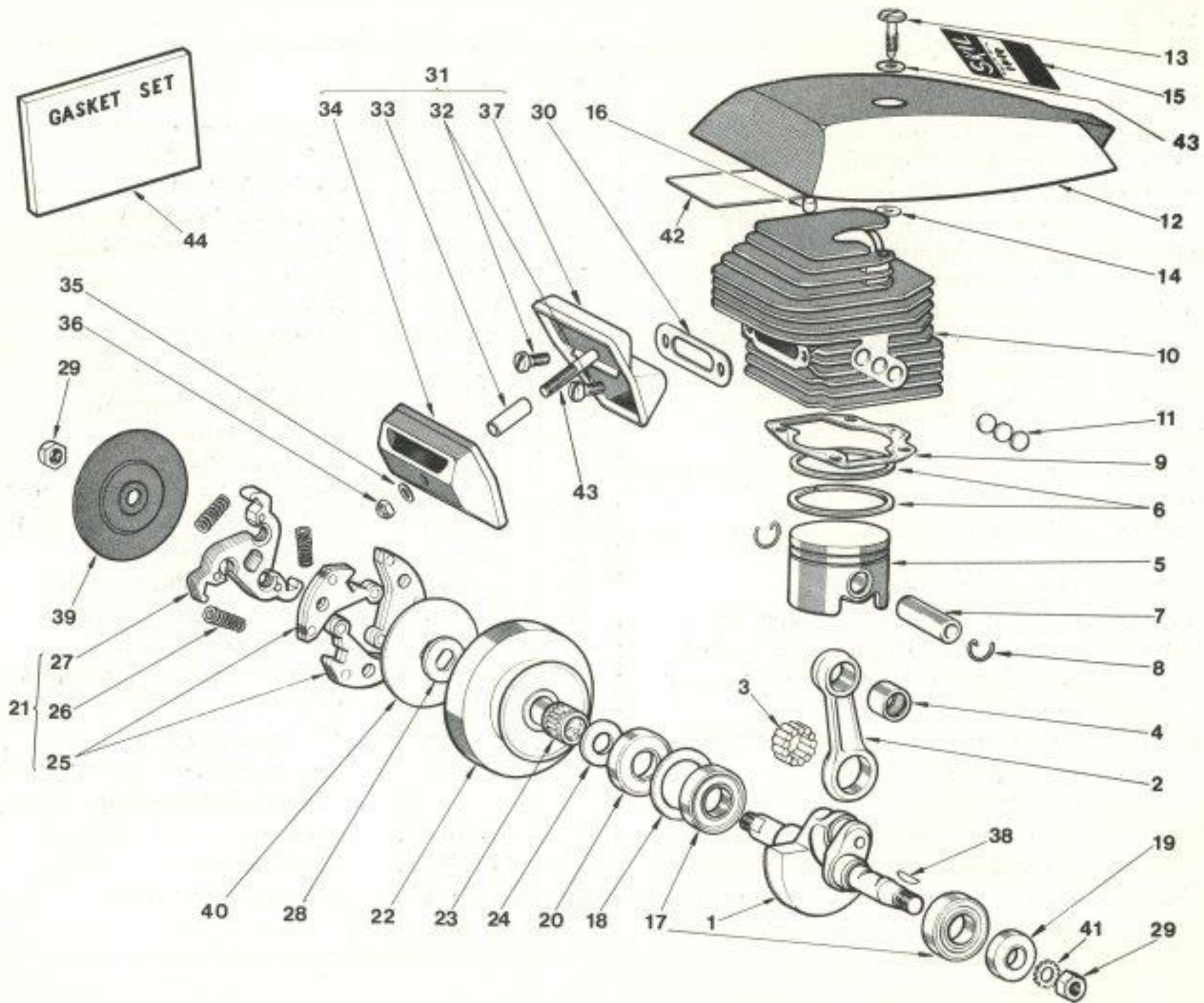
SKIL[®]
POWER TOOLS
OPERATOR'S MANUAL

MODELS
1644
1645



SKIL CORPORATION 5033 ELSTON AVENUE CHICAGO, ILLINOIS 60630 MADE IN CANADA
SKIL CORPORATION (CANADA) LTD. 1190 CALEDONIA ROAD, TORONTO 19, ONTARIO.

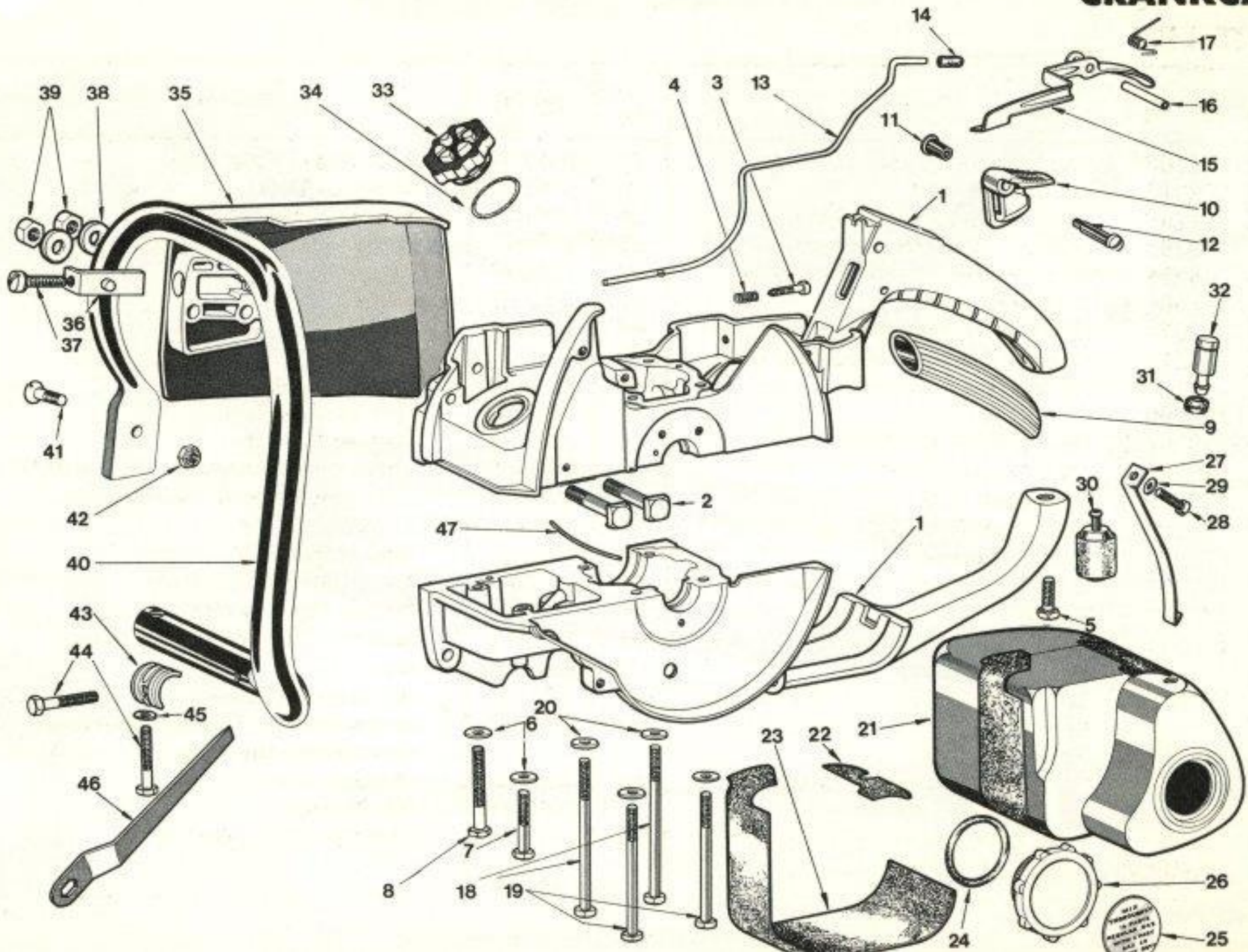
POWER HEAD



PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	179025	Crankshaft	22	178653	Clutch Drum Assy. (comp. w/bearing)
2	178606	Connect'g Rod Assy. (comp w/bearing)	23	178348	Sprocket Bearing
3	178040	Rollers (Big End) (13 used)	24	276379	Inside Thrust Washer
4	270353	Wrist Pin Bearing	25	178654	†Clutch Shoe Assembly (3 used)
5	178045	Piston	26	270363	†Clutch Spring (3 used)
6	178050	Piston Ring (2 used)	27	178643	†Clutch Driver Assembly
7	178017	Wrist Pin	28	276378	Outside Thrust Washer
8	178047	Retaining Clips (2 used)	29	850466	Nut (2 used)
9	178058	Cylinder Block Gasket	30	178140	Muffler Gasket
10	178612	Cylinder Block Assy. (includes *)	31	178631	Muffler Assembly (includes **)
11	178061	*Core Plugs	32	735814	**Screw-Muffler to Cylinder Blk. (2 used)
12	178640	Outer Shroud Assembly (includes			
13	177301	††Shroud Screw ††)	33	178141	**Spacer Tube
14	178309	††Washer	34	178136	**Muffler Cover
15	226303	Decal Model 1644	35	275069	**Flat Washer
	226304	Decal Model 1645	36	850464	**Muffler Cover Nut
16	178302	Insulator Pad	37	178617	**Muffler Body
17	178030	Main Bearing (2 used)	38	856303	Flywheel Key
18	178166	Retaining Ring	39	178364	Clutch Side Plate Outer
19	178032	Crankshaft Seal (Flywheel Side)	40	178362	Clutch Side Plate Inner
20	178033	Crankshaft Seal (Drive Side)	41	854116	Shake Proof Washer
21	178647	Clutch Assembly (includes †)	42	178307	††Instruction Decal
			43	270026	††Washer
			44	178710	Gasket Set

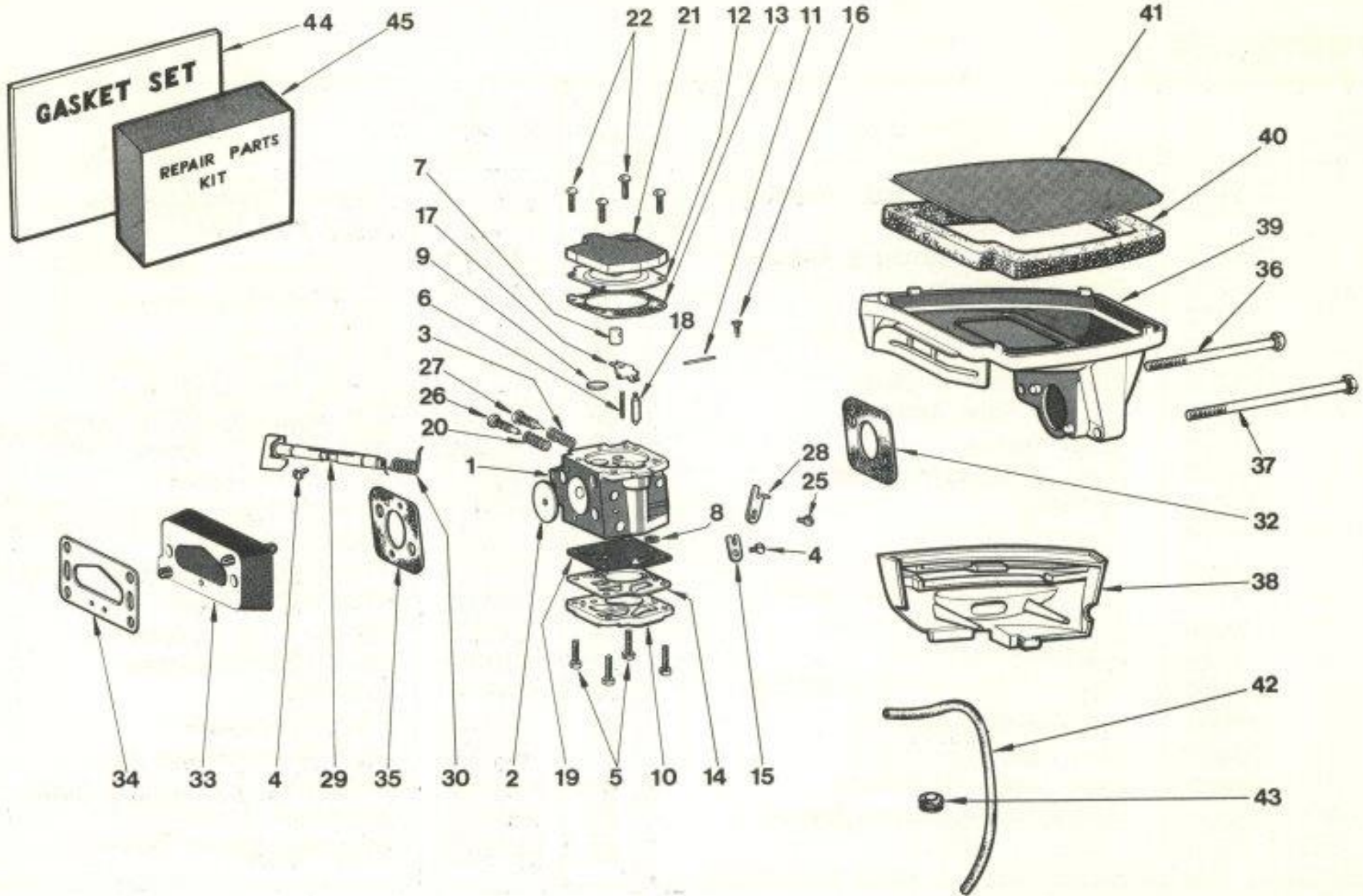
CRANKCASE



PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	226703	Crankcase Assembly (Includes*)	24	270186	Fuel Cap O Ring
2	178013	Bar Bolt (2 used)	25	178201	Fuel Cap Decal
3	731208	Screw — Idle Speed Adjusting	26	270675	Fuel Cap Assembly
4	178368	Spring — Adjusting Screw	27	179387	Strap — Tank Retaining
5	706214	*Screw — Rear Handle Mounting	28	721010	Screw
6	275069	*Washer (2 used)	29	275069	Washer
7	702014	Screw — Oil Tank Mounting Short	30	177635	Fuel Pickup Assembly
8	703214	Screw — Oil Tank Mounting Long	31	177229	Grommet — Tank Vent
9	178169	Handle Grip	32	177634	Tank Vent Assembly
10	178290	Oiler Lever	33	275638	Oil Cap Assembly
11	178294	Oiler Lever Pivot Bush	34	271258	Oil Cap O Ring
12	178291	Oiler Lever Screw	35	178648	Chain Cover Assembly (includes***)
13	179295	Oiler Push Rod	36	178649	***Adjuster Assembly (includes †)
14	178288	Oiler Push Rod End Cap	37	737814	***†Adjuster Screw
15	178230	Throttle Trigger	38	178359	Washer Bar Bolt (2 used)
16	175231	Roll Pin — Throttle Trigger Pivot	39	850065	Nut — Bar Bolt (2 used)
17	178220	Spring — Throttle Trigger Return	40	178655	Handle Bar Assembly
18	705614	Bolt Long — Crk/Case to Cylinder Block (2 used)	41	741264	Screw — Handle/Bar Pad Mount
19	704814	Bolt Short — Crk/Case to Cylinder Block (2 used)	42	850364	Nut
20	275069	Washer (4 used)	43	271326	No Squash Washer
21	179766	Fuel Tank Assembly (Comp. W/Grommets) (includes **)	44	702414	Screw (2 used) Handle/Crk/Case — Handle/Fan Housing
22	178225	**Fuel Tank Mounting Damper(Small)	45	275069	Washer
23	178224	**Fuel Tank Mounting Damper(Large)	46	177521	Bar Wrench
			47	179062	Seal Crk/Case Joint

CARBURETOR



PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	178095	Carburetor Complete	25	725403	Screw & Lockwasher 3-48 x 1/4 Pan Hd.
2	183129	Throttle Shutter	26	178121	Idle Adjustment Screw
3	275143	Main Adjusting Screw Spring	27	178122	Main Adjustment Screw
4	715304	Screw & Lockwasher (2)	28	178124	Throttle Lever
5	735606	Screw & Lockwasher (4 used)	29	178693	Throttle Shaft Assembly
6	183136	Tension Spring	30	178142	Throttle Return Spring
7	178123	Check Valve Nozzle	32	177079	Gasket (Carburetor to Aircleaner)
8	178102	Screen	33	178096	Insulator Block
9	178053	Welch Plug 11/32" Dia.	34	178097	Gasket
10	183157	Pump Cover	35	177098	Carburetor Gasket (Insulator to Carb.)
11	183150	Fulcrum Pin	36	707410	Screw (Long)
12	178153	Diaphragm (Metering)	37	705810	Screw (Short)
13	178110	Metering Diaphragm Gasket	38	178343	Grill
14	178111	Fuel Pump Gasket	39	178750	Air Cleaner Body
15	178125	Throttle Shaft Clip	40	178172	Foam Gasket
16	178149	Screw 4-40 x 5/16" Oval Hd.	41	178174	Air Cleaner Element
17	178155	Inlet Control Lever	42	178206	Fuel Pick Up Hose
18	178151	Inlet Needle	43	177229	Grommet
19	178154	Fuel Pump Diaphragm	44	178778	Carburetor Gasket Set
20	178120	Idle Adjusting Screw Spring	45	178777	Carburetor Repair Parts Kit
21	178134	Diaphragm Cover			
22	715604	Screw & Lockwasher 4-40 x 3/8" Rd. Hd. (4 used)			

ADJUSTMENTS

CARBURETOR

Note: Before making any carburetor adjustments, clean the air filter and filter chamber.

Adjust the carburetor in the following sequence:

1. Screw in main jet (H) lightly, then open 1 to 1¼ turns.
2. Screw in idle jet (L) lightly, then open ¾" to 1 turn.
3. Unscrew idle speed screw until it just clears throttle lever stop then screw in 1¾ to 2½ turns.

Further fine adjustments to high and low speed jets may be required to obtain maximum power and cutting speed, these should be made under load

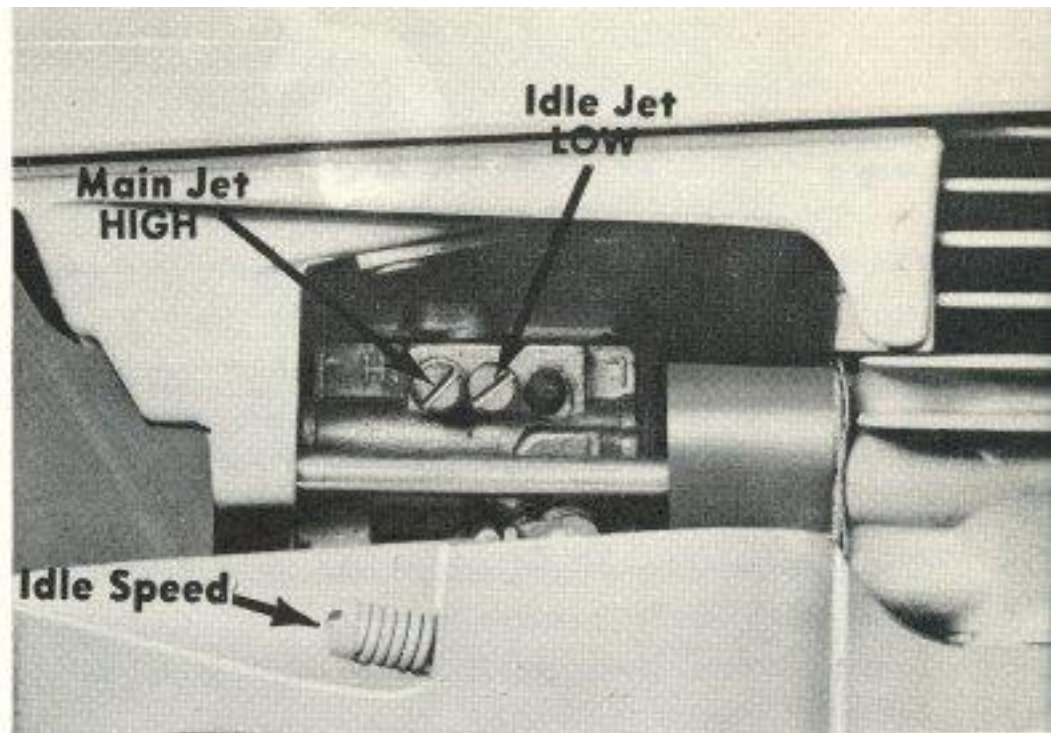
FUEL MIX

Fuel mix 16 gas to 1 oil 8 oz. per U.S. gal.
(10 oz. per Imp. gal.).

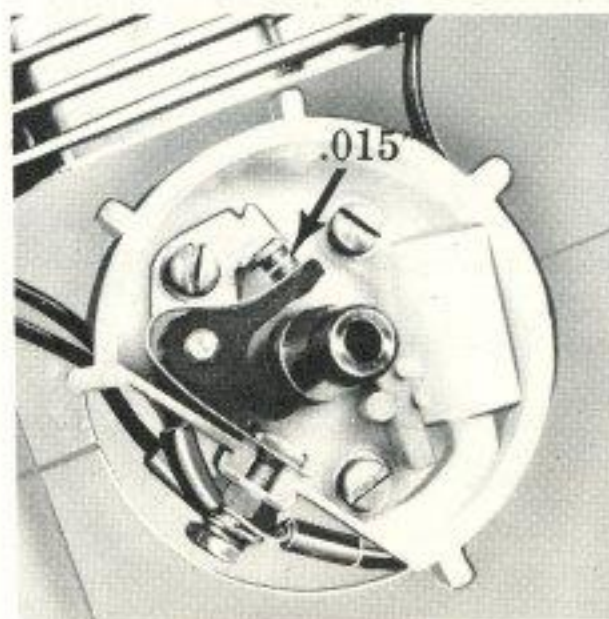
IGNITION

Spark plug gap .025".

Ignition breaker point gap .015".



Carburetor Adjustment

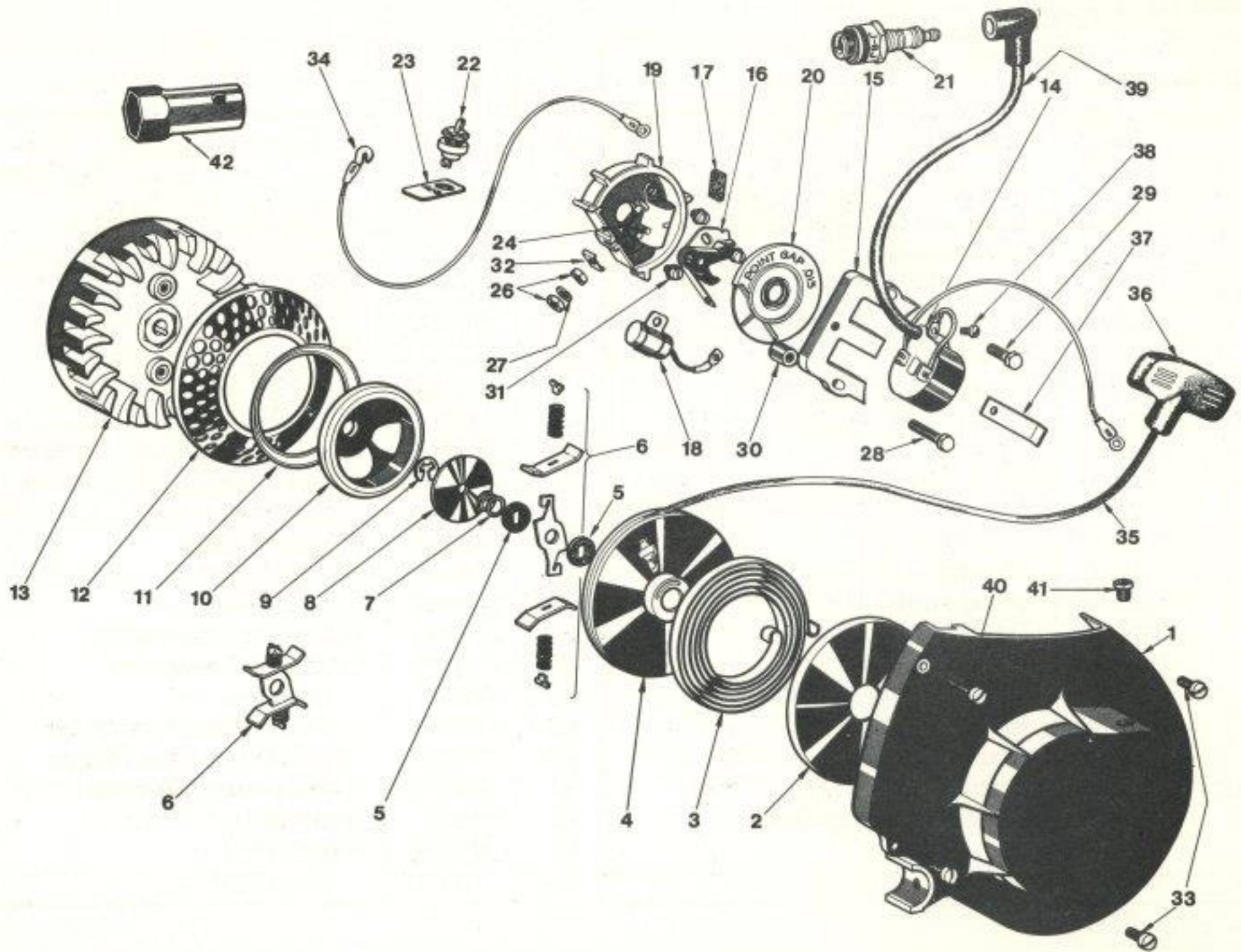


Breaker Point Adjustment



Spark Plug Gap

MAGNETO & STARTER



PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
	178674	Fan Housing & Starter Assembly including Starter	20	178451	Breaker Housing Cover
1	178675	Fan & Starter Housing Assembly	21	270523	Spark Plug J.6J.
2	178287	Spring Retainer	22	270238	Switch
3	178317	Spring	23	183269	Switch Plate
4	178297	Rotor	24	178163	Screw
5	178100	Fibre Washer (2 used)	26	850008	Nut (2 used)
6	178676	Friction Shoe Assembly	27	854208	Spring Lock Washer
7	178319	Brake Spring	28	707210	Coil Mounting Screw—Long
8	178323	Brake Retaining Washer	29	706410	Coil Mounting Screw—Short
9	178324	"E" Clip	30	178144	Coil Screw Spacer
10	178126	Starter Cup	31	735508	Fixed Contact Clamp Screw (3 used)
11	178128	Starter Snow Shield	32	178453	Channel Washer
12	178127	Starter Screen	33	726010	Fan Housing Mounting Screw (3 used)
13	178658	Flywheel	34	178087	Stop Switch Lead
14	178145	Coil	35	178600	Starter Cord Assembly
15	178146	Core	36	178639	Tee Handle Assembly
16	178663	Breaker Assembly	37	178147	Coil Clip
17	178452	Cam Wiper Felt	38	178148	Coil Clip Screw
18	178664	Condenser	39	178666	High Tension Lead Assy.
19	179450	Contact Breaker Housing	40	726810	Fan Housing Mounting Screw
			41	178327	Bushing
			42	270522	Plug Wrench

PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
1	178743	Primer Body Assembly (Includes)	21	270284	Valve Spring
2	725610	Screw — Primer Body	22	179264	†Screen — Oil Pick Up
3	183007	*Inlet Valve		179729	Manual Oiler and Tank Cover Kit(includes †)
4	183263	*Inlet Connector			Also includes 178288 End Cap Push Rod
5	183195	*Primer Button			Ref. 14 — Page 17
6	183197	*Primer Piston	23	179629	†Manual Oiler and Tank Cover Assy.(includes**)
7	183155	*O Ring — Primer/Oiler Piston	24	179246	†Gasket
8	178198	*Spring — Primer Piston Return	25	179627	**Ball Valve Assembly
9	183385	*Valve Plate Washer	26	270234	**Spring—Manual Oiler Ball Return
10	183256	*Valve Disc Assembly	27	177196	**Washer Fibre
11	183217	*Spring	28	179199	**Screw—Manual Oiler Spring Retaining
12	177188	*O Ring End Cap	29	781260	**Screw—Lube Assist Adjusting (includes††)
13	183199	*End Cap	30	850260	††Nut — Adjusting Screw
14	178205	Hose — Primer Pick Up	31	177198	Spring — Oiler Piston Return
15	177229	Grommet	32	179197	Piston — Oiler
16	183635	Primer Pickup Assembly	33	179298	†Bush — Oiler Push Rod
17	178613	Piston Assembly — Lube Assist	34	185296	†Felt — Push Rod
18	178285	Sleeve Lube Assist	35	179083	†Washer — Felt Retaining
19	270187	O Ring	36	179217	Spring — Push Rod Return
20	178262	Ball Valve Lube Asssit (Neoprene)	37	271267	**Ball — Steel
			38	726410	Screw Oil Cover Mounting
			39	726010	Screw Oil Cover Mounting (2 used)

COLD WEATHER OPERATION

Good maintenance of your saw is doubly important during cold weather. One of the main problems encountered during cold weather operation is water in the fuel mix. Add a deicing agent or methyl hydrate to your fuel mix (1 fuel mix cap full per gallon of mix).

Completely empty and clean the fuel tank at least once every week. Clean snow off the fuel mix can and from around the tank filler hole before filling tank.

Use S.A.E. 10 or 20 motor oil. Dilute oil up to 50% in extremely cold weather.

WARNING

Do not dilute chain oil beyond 50%, otherwise the lubricating qualities will be destroyed.

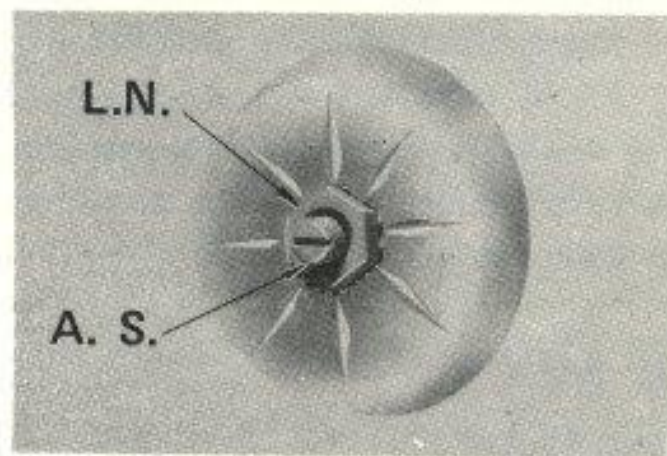
It is extremely important that the bar and chain be adequately lubricated when cutting in cold weather—use your manual oiler often.

Keep the oiling system clean and in good working order.

ADJUSTMENTS

LUBE ASSIST AND MANUAL OILER

The lube assist provides a continuous flow of oil to the bar and chain and supplements the amount normally applied by the regular use of the manual oiler. The lube assist has been factory set for average operating conditions but may be adjusted to suit local conditions as follows:



1. Loosen locknut on adjusting screw. L.N.
2. Back screw off for more oil. A.S.
3. Turn screw in for less oil. A.S.
4. Retighten locknut. L.N.