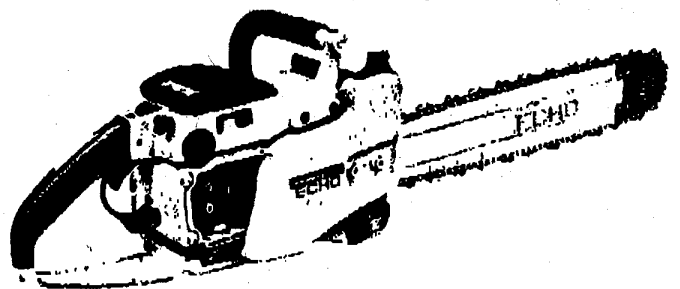


ECHO



OPERATOR'S MANUAL

ECHO CHAIN SAW CS-400EVL

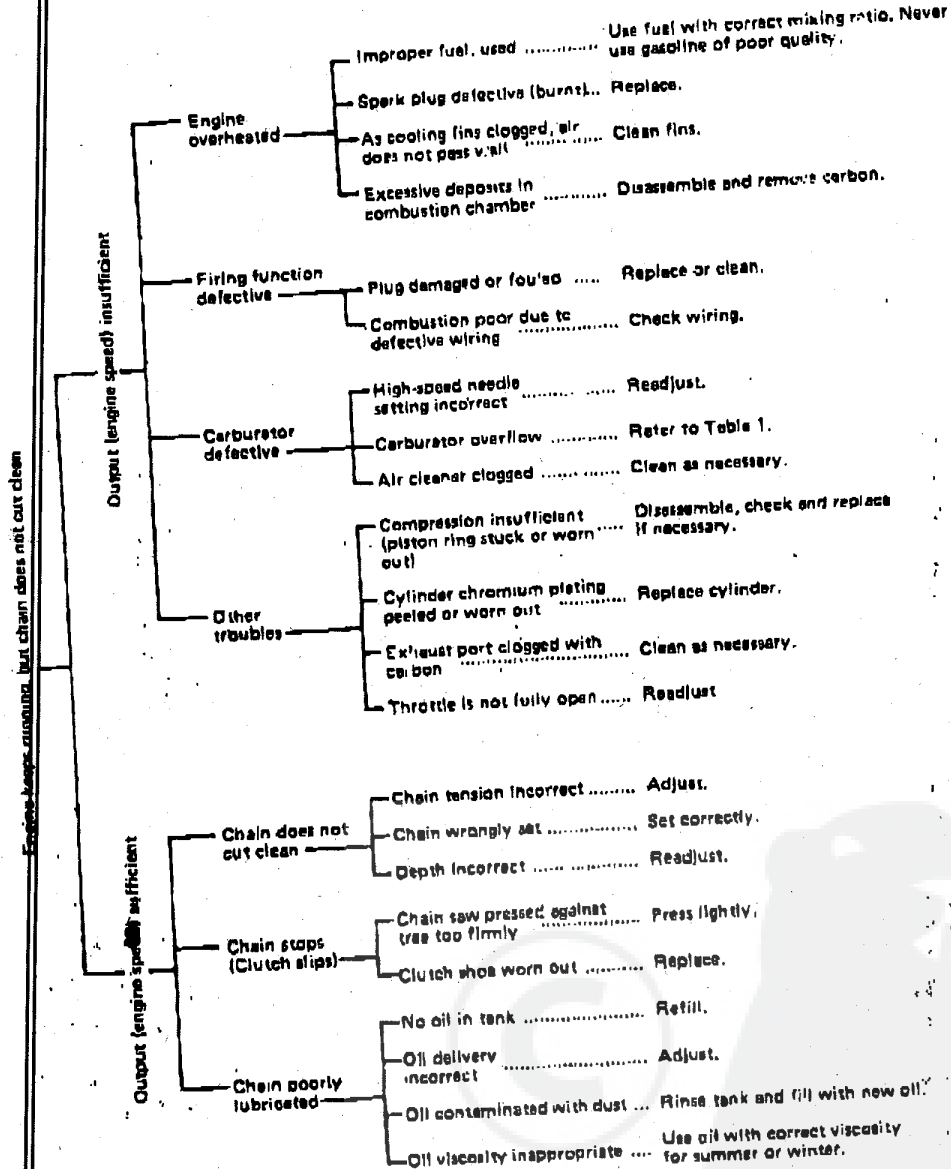
CAUTION

Read Rules for safe Operation
and Instructions Carefully

5

898 572-1453 2

Table 2



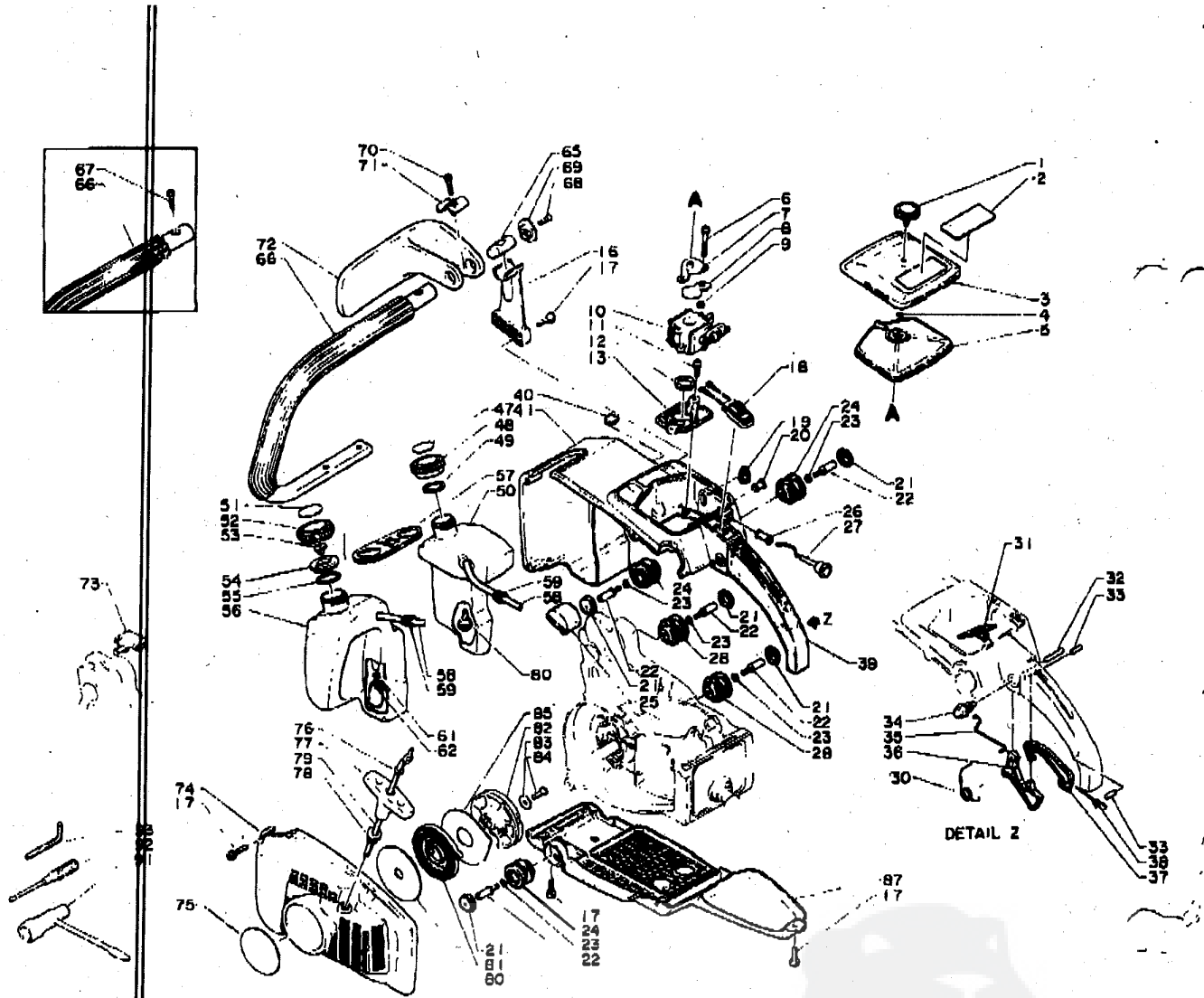
STORAGE AFTER USE

- Inspect and adjust every part of the chain saw.
- Completely clean every part, and repair, if necessary.
- Apply thin coating of oil on metal parts to prevent rust.
- Remove chain and guide bar, apply them sufficient oil coating and wrap them up in plastic sheet.
- Drain fuel tank, pull starter slowly a few times to drain fuel from carburetor.
- Pour a little amount of clean motor oil into spark plug hole, pull starter and crank the engine until the TOP DEAD CENTER.
- Store in a dry area, free from dust.

Key No.	Part Number	Q'ty	Description	Key No.	Part Number	Q'ty	Description
1-1	101 860-1453 0	1	Fan cover, inner	72	175 105-1453 0	1	Clutch case Disc.
2	800 242-0401 8	6	Screw 4x18	73	100 113-0483 0	1	Needle bearing
4	158 801-1453 0	1	C.D. Ignition module	74	175 016-0343 0	1	Washer, clutch
5	158 835-1523 0	1	Ground plate	75	100 128-0343 0	1	Nut
6	177 207-0383 2	2	Spacer	76	900 242-0501 6	2	Screw 5x18
7	177 204-1453 0	2	Spring, ratchet	77	433 011-1483 0	2	Stud, guide bar
8	177 208-1453 0	2	Ratchet	81	800 220-0501 0	1	Screw 5x10
9	177 217-1453 0	2	Screw	82	437 059-1113 3	1	Lock washer
13	158 801-1453 0	1	Flywheel	83	437 000-0343 0	1	Auto. oiler ass'y
14	900 811-0000 8	1	Lock washer 8	84	437 020-0283 0	3	O-ring
15	900 800-0000 8	1	Nut 8	85	437 019-0283 0	1	Coil spring
16	800 102-0502 8	1	H.S.H. bolt	86	433 028-1103 0	1	Clip
17	158 828-1823 0	2	Ignition coil 158-628-1823-30	87	433 018-1103 1	1	Screw, adjustment
18	158 820-1523 0	1	Lead	88	433 014-0383 2	1	Tensloner
19	158 117-1453 0	1	Spacer	89	433 100-1463 1	1	Chain brake ass'y.
20	132 115-1233 0	1	Oil seal	90	800 242-0401 2	3	Screw 4x12
21	100 014-1733 0	2	Spacer	91	433 113-1233 0	1	Pin
22	100 012-1123 0	1	Grammet	92	433 312-1233 0	1	Cover
23	100 000-1453 3	1	Crankcase set	93	433 105-1483 1	1	Handle
24	100 000-1453 3	1	Knock pin	94	433 149-1483 0	1	Reset rubber
25	100 015-0383 0	2	Pipe, impulse	95	433 313-1233 0	1	Dust seal
26	130 110-1453 0	1	Ball bearing 8202	96	433 117-1233 0	1	Connector
27	800 010-0620 2	2	Crankshaft ass'y	97	433 115-1233 0	1	Spacer
28	100 00-1593 0	1	Circlip 36	98	433 119-1233 0	1	Stopper
29	900 002-0003 5	1	Gasket, crankcase	99	433 114-1233 0	1	Spring
30	100 042-1453 0	1	Oil seal	100	433 134-1233 0	1	Bolt
31	100 013-0283 0	1	Woodruff key	101	433 123-1483 0	1	Brake band
32	100 012-1233 0	1	Needle bearing	102	433 142-1233 0	1	Adjuster, brake band
33	100 010-1593 0	1	Piston Disc.	103	433 144-1433 0	1	Retainer, brake band
34	100 013-0573 1	1	Piston pin	104	433 310-1483 0	1	Cover, brake band
35	100 015-0012 0	2	Circlip, piston pin	105	433 013-1453 2	1	Side plate
36	100 011-1053 0	2	Piston ring	106	433 012-1453 3	1	Side plate
37	101 010-1453 0	1	Gasket, cylinder base	107	433 010-1453 1	1	Cover, guide bar
38	101 011-1493 0	1	Cylinder	108	433 025-1453 0	2	Protector
39	900 242-0501 0	2	Screw 5x10	109	433 019-0393 3	2	Flange nut
40	130 508-1463 0	1	Adapter, intake	110	880 118-1833 0	1	Decal, ECHO
41	130 010-1233 0	1	Gasket	111	433 010-1453 2	1	Cover, guide bar
42	101 514-1453 0	1	Cylinder cover	112	430 511-1653 0	1	Guide bar
43	900 802-0000 4	2	Washer 4	113	431 711-1453 0	1	Saw chain, 20AP-86E
44	900 805-0000 4	2	Spring washer 4	114	433 030-1483 0	2	Knock
45	900 220-0401 2	2	Screw 4x12	115	800 241-0300 8	1	Screw 3x8
46	158 010-1233 0	1	Spark plug	Option			
47	158 011-0343 2	1	Coil spring, plug cap	33	900 105-0501 2	2	H.S.H. bolt 5x12
48	158 012-0343 3	1	Cap, spark plug	34	880 210-0343 0	1	Spike
49	900 162-0502 0	5	H.S.H. bolt 5x20	35	900 800-0000 6	2	Nut 5
50	145 810-1053 0	1	Gasket, muffler	3	900 242-0401 2	2	Screw 4x12
51	145 810-1453 0	1	Muffler	59	145 808-1453 0	1	Adapter
52	800 182-0504 0	2	H.S.H. bolt 5x40	60	900 108-0501 2	2	H.S.H. bolt 5x12
53	100 270-1453 0	1	Insulator	61	145 882-1483 0	1	Screen
54	900 162-0503 0	8	H.S.H. bolt 5x30	64	145 883-1453 0	1	Screen holder
55	433 000-1283 0	1	Chain catcher	3	900 242-0401 2	2	Screw 4x12
56	800 800-0000 5	1	Washer 5	59	145 808-1453 0	1	Adapter
57	900 220-0502 5	1	Screw 5x25	60	900 108-0501 2	2	H.S.H. bolt 5x12
58	175 310-1453 0	1	Plate	63	145 882-1483 0	1	Screen
59	175 000-1453 2	1	Clutch ass'y	64	145 887-1453 0	1	Muffler lid
60	175 019-1883 0	3	Side plate				
61	175 018-1453 1	1	Boss /				
62	175 018-1983 0	1	Spring				
63	175 002-1983 0	1 set	Shoe				
64	800 287-0400 8	8	Screw				

Remarks: Option
 24: Includes 25
 ; Consists of 3 and 92 thru 105
 900 162-0502 6 (1)
 68: Includes 67 and 69
 83: Includes 84 and 85

There are two types of cover, guide bar.
 Confirm which type of cover, guide bar your saw

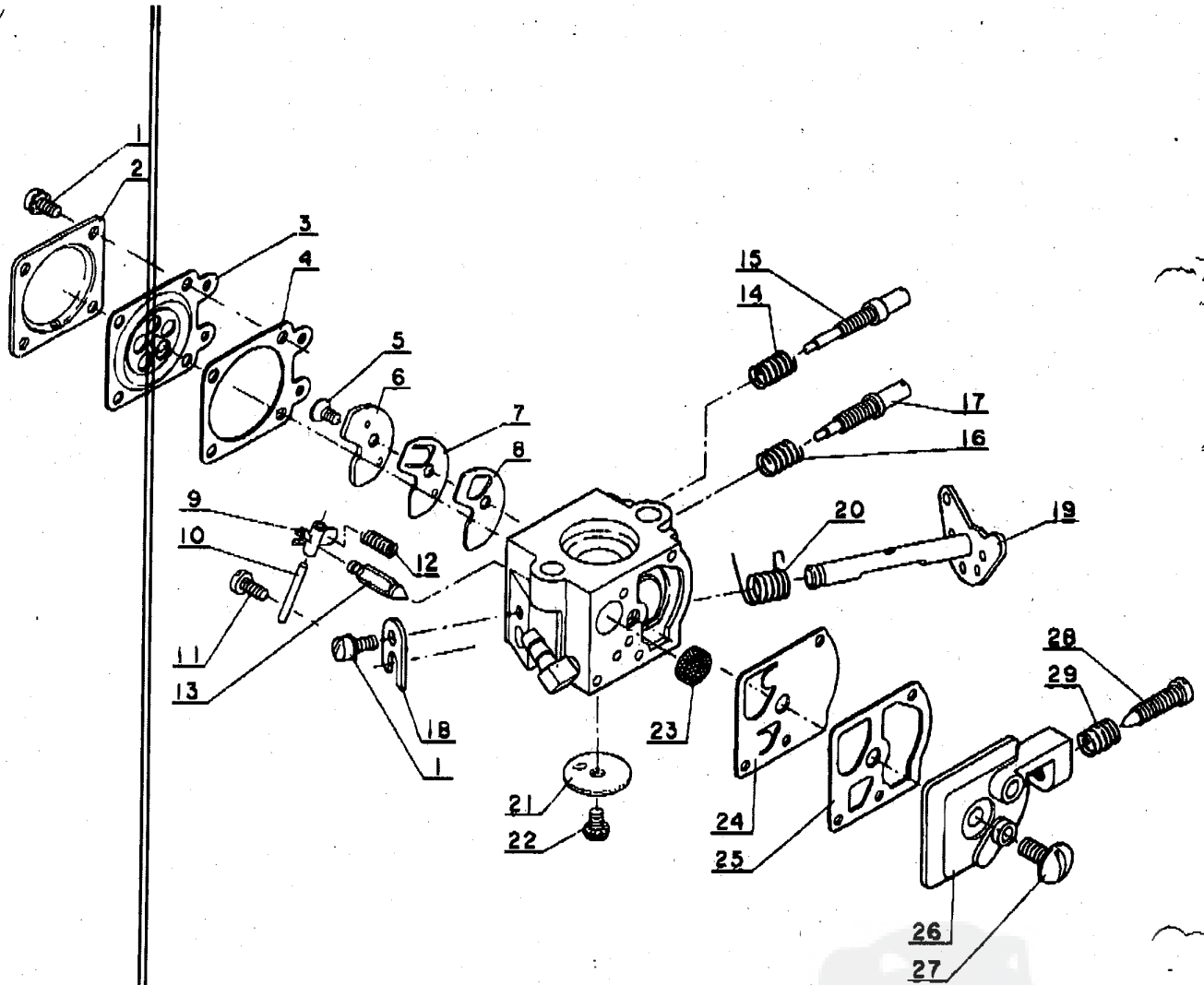


Key No.	Part Number	Q'ty	Description	Key No.	Part Number	Q'ty	Description
2-1	130 406-1433 0	1	Thumb bolt	23	800 605-0000 5	6	Spring washer 6
2	830 151-1453 0	1	Decal, model	24	100 810-1253 0	3	Cushion
3	130 313-1453 0	1	Cover, air cleaner	25	351 138-1433 2	1	Cover, cushion
4	900 720-0000 3	1	O-ring 3	26	178 810-1463 0	1	Grommet
5	130 310-1453 0	1	Air filter <i>DISC.</i>	27	178 510-1453 0	1	Choke rod
6	900 242-0504 0	2	Screw 5x40	28	100 817-1453 0	2	Cushion
7	130 420-1453 0	1	Bracket, air cleaner	30	178 043-1613 0	1	Spring, return
8	178 515-0393 0	1	Choke shutter	31	178 210-1453 0	1	Grommet
9	178 516-0093 0	2	Spacer	32	800 340-5002 5	1	Spring pln 6x25
10	128 000-1463 0	1	Carburetor ass'y WA 88	33	900 340-4001 3	2	Spring pln 4x13
11	900 242-0401 2	2	Screw 4x12	34	178 302-1233 0	1	Throttle latch
12	130 511-1233 0	1	Holder, intake adaptor	35	178 011-1463 0	1	Throttle rod
13	130 013-1453 0	1	Adaptor, carburetor	36	178 010-1463 0	1	Throttle trigger
16	35 814-1453 0	1	Supporter	37	178 090-1233 0	1	Throttle control lockout
17	900 152-0502 0	7	H.S.H.bolt 5x20	38	178 081-1053 1	1	Spring
18	188 400-1523 0	1	Switch	39	351 111-1233 0	1	Grip, rear handle
19	128 010-0393 0	1	Grommet	40	351 137-1233 0	1	Stopper, cushion
20	128 023 1453 0	1	Grommet	41	351 110-1463 0	1	Rear handle
21	100 918-1433 0	6	Plug	47	438 002-1963 0	1	Cap ass'y, oil tank
22	100 915-1433 2	5	Screw	48	890 153-1143 0	1	Decal, chain oil
				48	436 000-1233 0	1	Cap, oil tank
				48	436 012-1233 0	1	Gasket, oil tank cap

Key No.	Part Number	Q'ty	Description	Key No.	Part Number	Q'ty	Description
2-50	436 010-1453 0	1	Oil tank	71	351 034-1453 0	1	Stopper
**	131 600-1233 2	1	Cap ass'y, fuel tank	72	351 028-1083 0	1	Hand guard, front
51	-899 154-1513 0	1	Decal, fuel mix	73	100 812-1233 1	1	Cover
52	-13 017-1233 0	1	Cap, fuel tank	75	890 012-1113 2	1	Decal, ECHO
53	-13 314-0033 0	1	Valve, check	***	177 200-1453 1	1	Starter ass'y
54	-13 018-1233 1	1	Holder, check valve	74	-101 507-1453 0	1	Fan cover
55	-800 720-0002 2	1	O-ring 22	76	-177 229-1493 0	1	Spacer
56	131 010-1453 0	1	Fuel tank	77	-177 228-1233 0	1	Starter handle
57	131 038-1233 1	1	Connector	78	-177 227-0023 0	1	Rope guide
58	133 010-1453 0	2	Pipe, oil & fuel	79	-177 226-0393 0	1	Starter rope
59	132 115-1223 0	2	Grommet	80	-177 221-0393 0	1	Side plate
60	436 208-1473 0	1	Strainer, chain oil	-81	-177 220-0393 0	1	Rewind spring
61	900 603-0000 5	1	Washer 5	-82	-177 218-1453 1	1	Recoil drum
62	131 208-0083 0	1	Strainer, fuel	83	-177 214-0283 0	1	Washer
66	35 206-1453 0	1	Front handle	84	-900 241-0501 0	1	Screw 5x10
65	-35 817-1053 1	1	Insert, front handle	85	-177 242-0393 0	1	Side plate
67	900 182-0802 5	1	H.S.H.bolt 5x25	87	351 123-1453 0	1	Supporter
68	900 208-0502 0	1	Screw 5x20	81	895 410-0393 0	1	Wrench w/s. driver
69	381 833-1013 0	1	Retainer	82	895 812-0393 0	1	Screw driver
70	900 182-0803 0	1	H.S.H.bolt 5x30	83	895 810-0013 0	1	L-wrench, 6mm.

Remarks:

- * : Consists of 47 thru 49
- ** : Consists of 51 thru 56
- 66 ; Includes 65
- 67 ; Included Chain brake ass'y
- *** : Consists of 74 and 76 thru 85



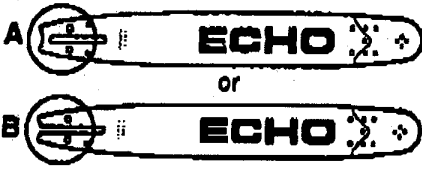

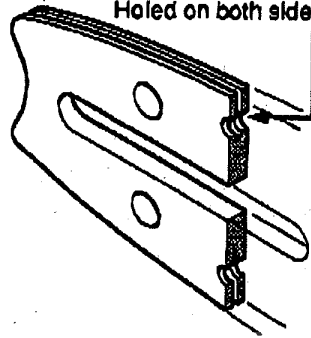
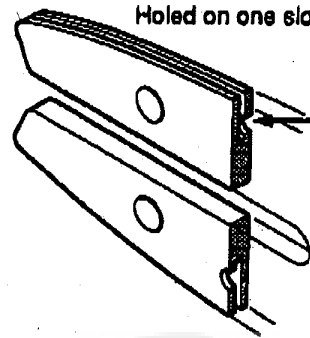
Key No.	Part Number	Q'ty	Description	Key No.	Part Number	Q'ty	Description
3 -	123 000-1483 0	1	Carburetor ass'y (WA-86)	3-15	123 120-1453 0	1	Needle, high speed
1	123 144-0393 0	6	Screw	16	123 121-0393 0	1	Spring, idle needle
2	123 142-0393 0	1	Cover, metering diaphragm	17	123 118-0623 0	6	Needle, idle
3	123 141-0393 0	1	Diaphragm, metering	18	123 127-0393 0	1	Clip, throttle shaft
4	123 140-0393 0	1	Gasket, m./diaphragm	19	123 117-1463 0	1	Shaft, throttle
5	123 167-0623 0	1	Screw, circuit plate	20	123 113-0393 0	1	Spring, throttle return
6	123 166-0393 0	1	Plate, circuit	21	123 116-0393 0	1	Valve, throttle
7	123 165-0393 0	1	Check valve, c/p	22	123 114-0393 0	1	Screw, throttle valve
8	123 164-0393 0	1	Gasket, circuit plate	23	123 126-0393 0	1	Screen, inlet
9	123 123-0393 0	1	Lever, metering	24	123 112-0393 0	1	Diaphragm, fuel pump
10	123 138-0393 0	1	Pin, metering lever	25	123 126-0393 0	1	Gasket, fuel pump
11	123 139-0393 0	1	Screw, metering lever pin	26	123 124-1463 0	1	Cover, fuel pump
12	123 122-0653 0	1	Spring, metering lever	27	123 110-0393 0	1	Screw, pump cover
13	123 137-0393 0	1	Valve, inlet needle	28	123 134-0853 0	1	Screw, idle adjustment
14	123 119-0393 0	1	Spring, H.S. needle	29	123 133-1113 0	1	Spring, idle screw

Remarks
 *Consists of 1 thru 29

TECHNICAL INFORMATION

SUBJECT: Guide bar
for CS-400EVL, CS-440EVL, CS-4000, CS-4010,
CS-4500, CS-4510, CS-4600, CS-4601, CS-4610,
and CS-4611.

Number: 92-469
Issued: March 23, 1992

Guide bar			Former	Current
			 <p>A</p> <p>ECHO</p> <p>or</p> <p>B</p> <p>ECHO</p>	 <p>B</p> <p>Changed logo.</p> <p>ECHO</p>
			<p>Detailed A</p> <p>Holed on both sides.</p> 	<p>Detailed B</p> <p>Holed on one side.</p> 
Length (cm)	Type		Part Number	Part Number
	Gauge (in)	Pitch (in)		
33	33RV58-325E	.059 .325	430513-30130	430513-30131
35	35RV60-325E	.050 .325	430510-16530	430510-14631
38	38RV58-325E	.058 .325	430521-30130	430521-30131
40	40RV60-325E	.050 .325	430511-16530	430511-16531
46	46RV50-325E	.050 .325	430517-16530	430517-16531
45	45RV58-325E	.058 .325	430517-30130	430517-80131
50	50RV60-325E	.050 .325	430512-16530	430512-14631
50	50RV58-325E	.058 .325	430512-30130	430512-30131
Applicable models			CS-400EVL, CS-440EVL, CS-4000, CS-4010, CS-4500, CS-4510, CS-4600, CS-4601, CS-4610, and CS-4611.	

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