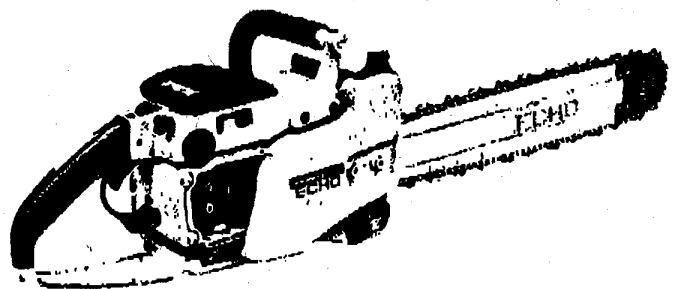


ECHO



OPERATOR'S MANUAL

ECHO CHAIN SAW CS-400EVL

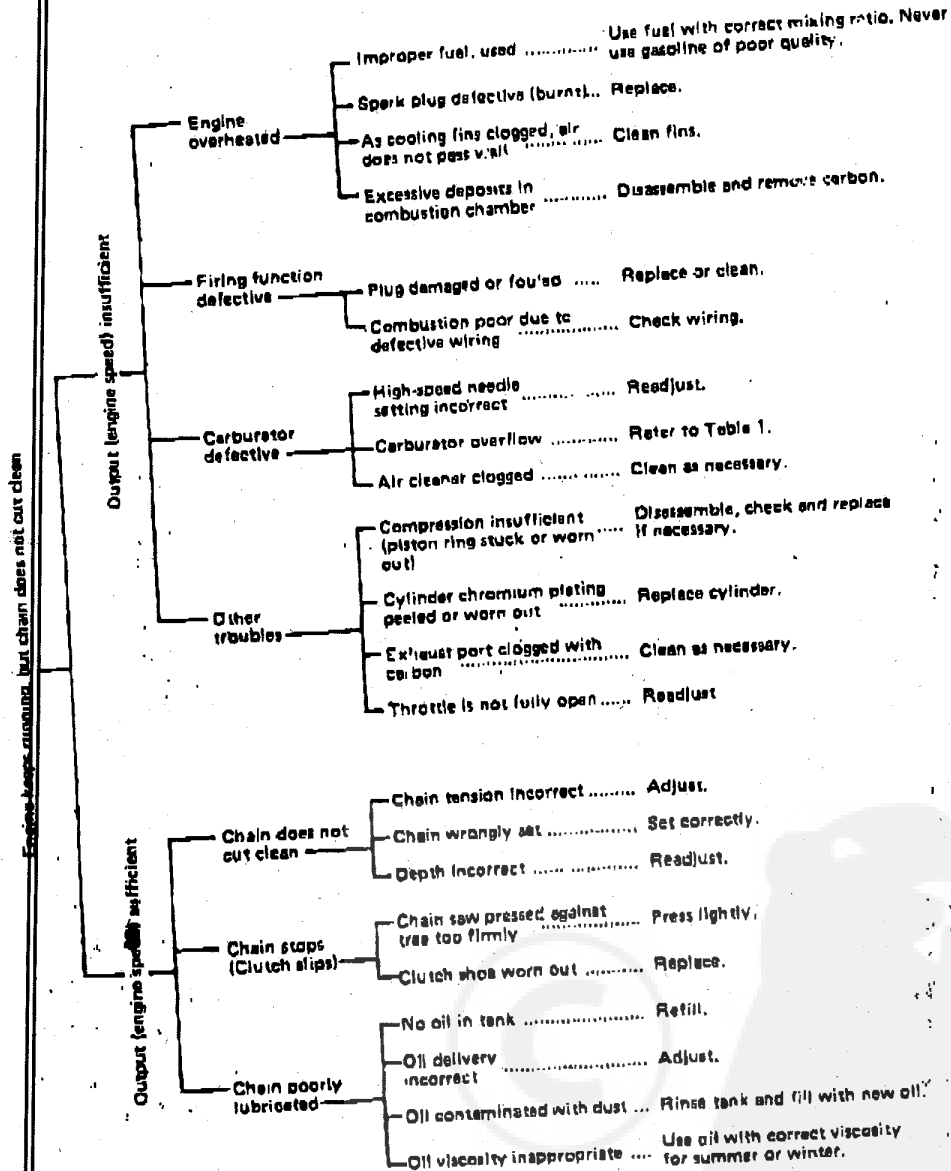
CAUTION

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	156 801-1453 0	1	C.D. Ignition module	74	175 016-0343 0	1	Washer, clutch
5	156 835-1523 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	156 801-1453 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	156 828-1823 0	2	Ignition coil 156-628-1823-30	87	433 018-1103 1	1	Screw, adjustment
18	156 820-1523 0	1	Lead	88	433 014-0383 2	1	Tensloner
19	156 117-1453 0	1	Spacer	89	433 100-1463 1	1	Chain brake ass'y.
20	132 115-1233 0	1	Grammet	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	Oil seal	92	433 312-1233 0	1	Cover
23	100 000-1453 3	1	Crankcase set	93	433 105-1483 1	1	Handle
24	100 015-0383 0	2	Knock pin	94	433 149-1483 0	1	Reset rubber
25	130 110-1453 0	1	Pipe, impulse	95	433 313-1233 0	1	Dust seal
26	800 010-0620 2	2	Ball bearing 6202	96	433 117-1233 0	1	Connector
27	100 00-1593 0	1	Crankshaft ass'y	97	433 115-1233 0	1	Spacer
28	900 002-0003 5	1	Circlip 36	98	433 119-1233 0	1	Stopper
29	100 042-1453 0	1	Gasket, crankcase	99	433 114-1233 0	1	Spring
30	100 013-0283 0	1	Oil seal	100	433 134-1233 0	1	Bolt
31	100 142-1233 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	156 010-1233 0	1	SPark plug	Option			
47	156 011-0343 2	1	Coil spring, plug cap	33	900 105-0501 2	2	H.S.H. bolt 5x12
48	156 012-0343 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	175 019-1983 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				

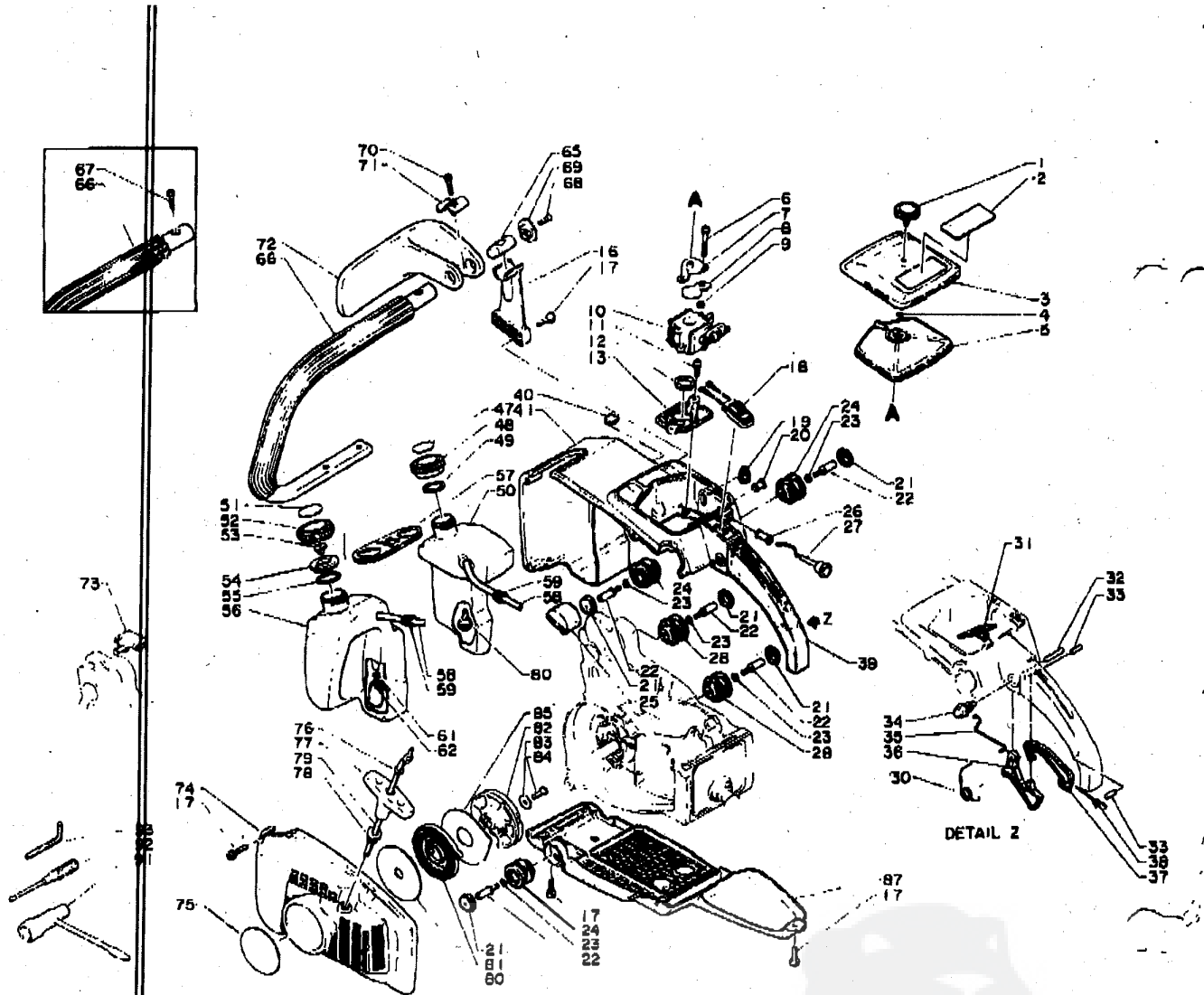
Remarks:

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

Option

433 100-1483 1

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

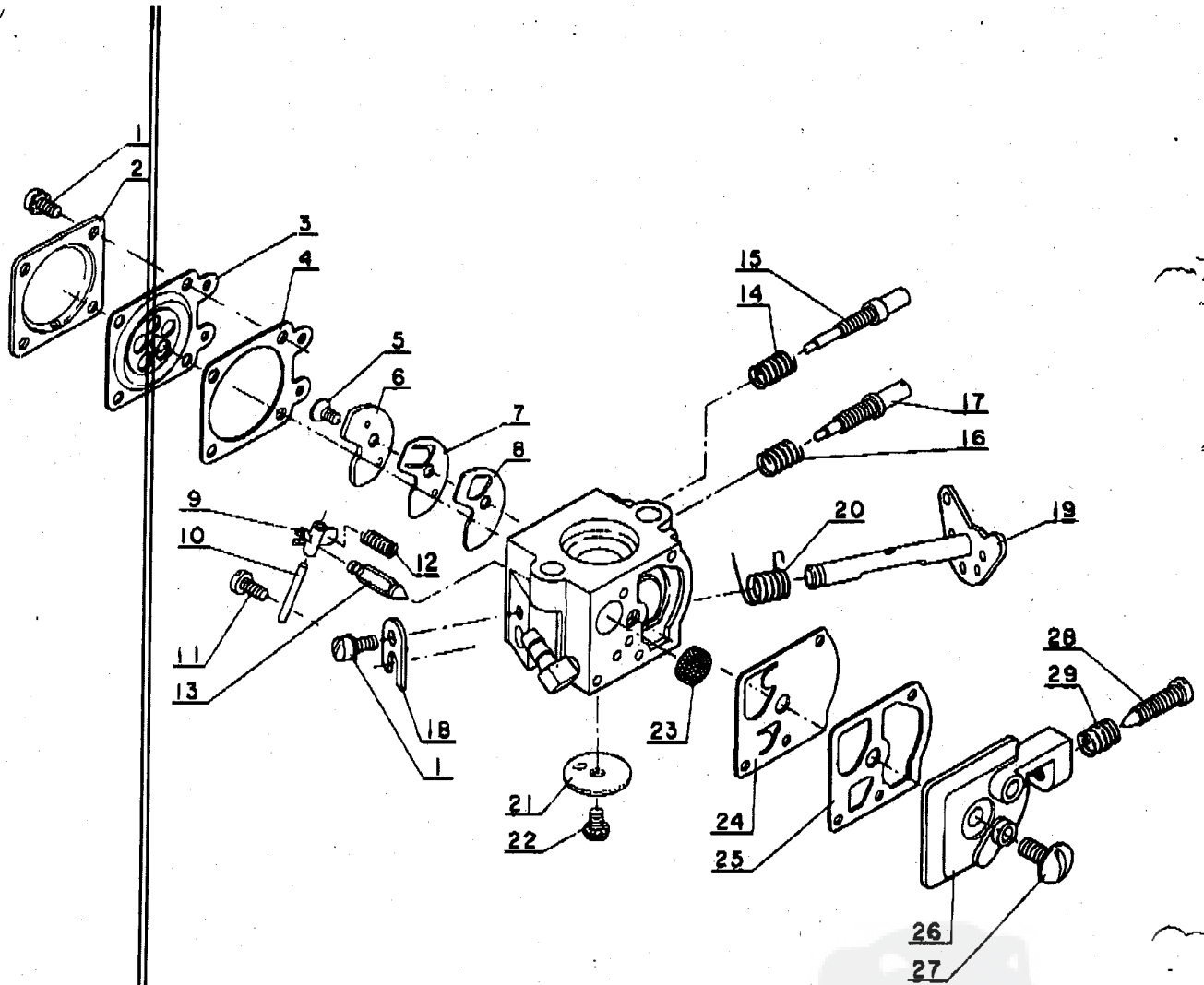


Key No.	Part Number	Q'ty	Description	Key No.	Part Number	Q'ty	Description
2-1	130 406-1433 0	1	Thumb bolt	23	800 605-0000 5	6	Spring washer 6
2	830 151-1453 0	1	Decal, model	24	100 810-1253 0	3	Cushion
3	130 313-1453 0	1	Cover, air cleaner	25	351 138-1433 2	1	Cover, cushion
4	900 720-0000 3	1	O-ring 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	178 515-0093 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	351 110-1453 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	436 205-1473 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	131 205-0083 0	1	Strainer, fuel	83	-177 214-0283 0	1	Washer
66	35 205-1453 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	900 162-0802 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	900 162-0803 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



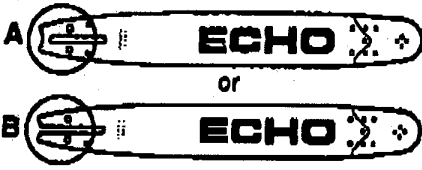

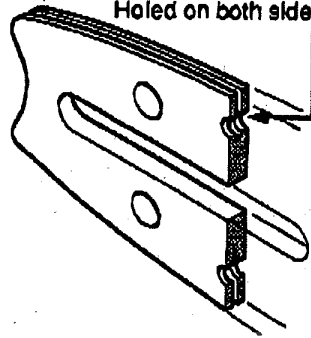
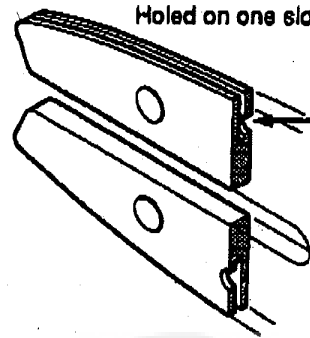
Key No.	Part Number	Q'ty	Description	Key No.	Part Number	Q'ty	Description
3 -	123 000-1483 0	1	Carburetor ass'y (WA-86)	3-15	123 120-1453 0	1	Needle, high speed
1	123 144-0393 0	6	Screw	16	123 121-0393 0	1	Spring, idle needle
2	123 142-0393 0	1	Cover, metering diaphragm	17	123 118-0623 0	6	Needle, idle
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
48	48RV50-325E	.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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