

PARTS MANUAL



Mikasa **SERIES**
MODEL MVH408DZ
REVERSIBLE PLATE COMPACTOR
(HATZ 1B50T-9-166 DIESEL ENGINE)

Revision #12 (04/01/21)

THIS MANUAL MUST ACCOMPANY THE EQUIPMENT AT ALL TIMES.

SUGGESTED SPARE PARTS

MVH408DZ PLATE COMPACTOR WITH 1B50 DIESEL ENGINE

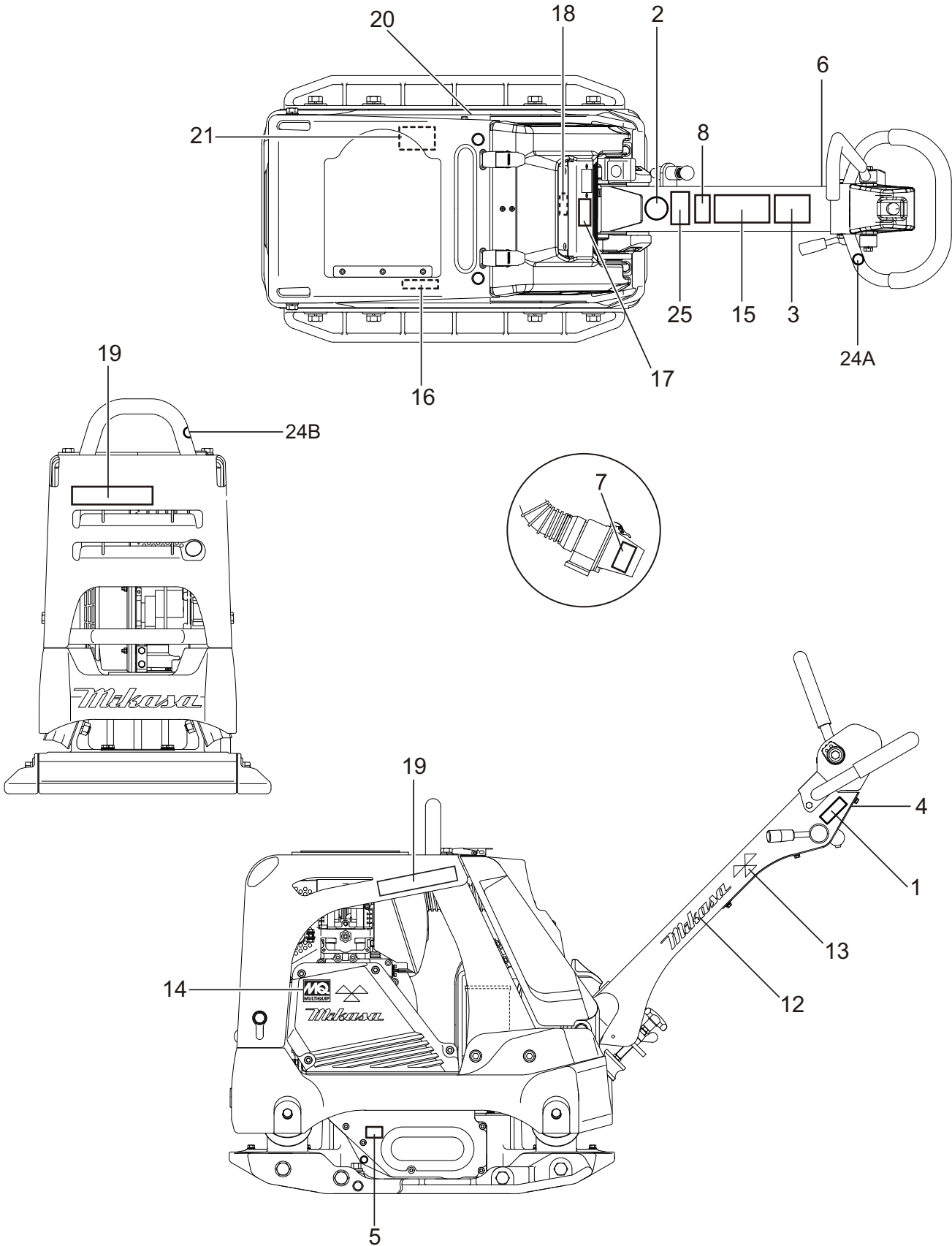
1 to 3 units

Qty.	P/N	Description
4.....	939010260.....	SHOCK ABSORBER
4.....	939010010.....	SHOCK ABSORBER
2.....	070200463.....	V-BELT HDPF-5460
1.....	50384401.....	IGNITION SWITCH W/ KEYS
3.....	50404900.....	KEY, IGNITION SWITCH
3.....	01542703.....	OIL SUCTION FILTER ASSY.
3.....	01635210.....	FUEL FILTER
1.....	01919702.....	FUEL FILTER
3.....	50484100.....	ELEMENT, AIR FILTER
1.....	01535302.....	CAP, FUEL TANK
1.....	956100070.....	THROTTLE WIRE

NOTICE

Part numbers on this Suggested Spare Parts list may supersede/replace the part numbers shown in the following parts lists.

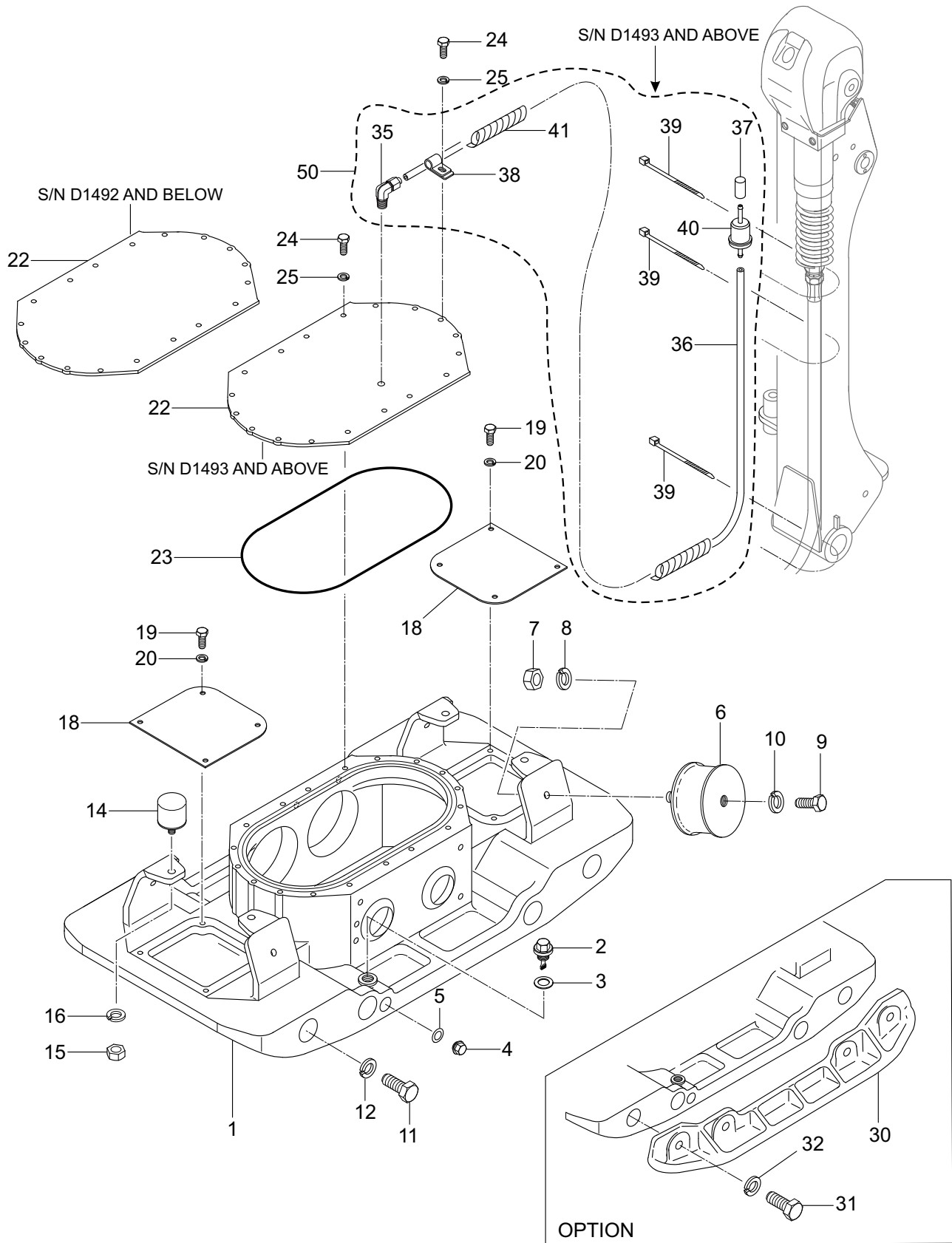
NAMEPLATE AND DECALS ASSY.



NAMEPLATE AND DECALS ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	920204580	DECAL, FULL THROTTLE	1	
2	920203330	EAR PROTECTION LABEL	1	
3	920211060	DECAL, CAUTION LEVER	1	
4	920211090	DECAL, SHELL TELLUS OIL 32	1	
5	920201950	DECAL, OIL SAE 10W-30	1	
6	920106760	DECAL, STOP-RUN-START	1	
7	920214200	DECAL, CAUTION CYCLONE	1	
8	920214100	DECAL ,E/G FIRE WARNING	1	
12	920217130	DECAL, MIKASA MARK (W) 200L	2	
13	920217110	DECAL, MIKASA MARK 35X70	2	
14	920201580	DECAL, MQ MARK 71X55	1	
15	920218390	DECAL, CAUTION	1	
16	920217690	DECAL, V-BELT HDPF-5460	1	
17	920218150	DECAL, E/G RPM 2400	1	
18	920217880	DECAL, MODEL, MVH-408	1	
19	920217770	DECAL, MODEL (R)	2	
20	920217780	DECAL, MODEL (L)	1	
21		PLATE, SERIAL NO.....	1	CONTACT MQ PARTS DEPT.
24A	920900090	DECAL, SET, DO NOT LIFT	1	
24B	920900090	DECAL, SET, LIFTING POSITION	1	
25	920222240	DECAL, PROPOSITION 65	1	

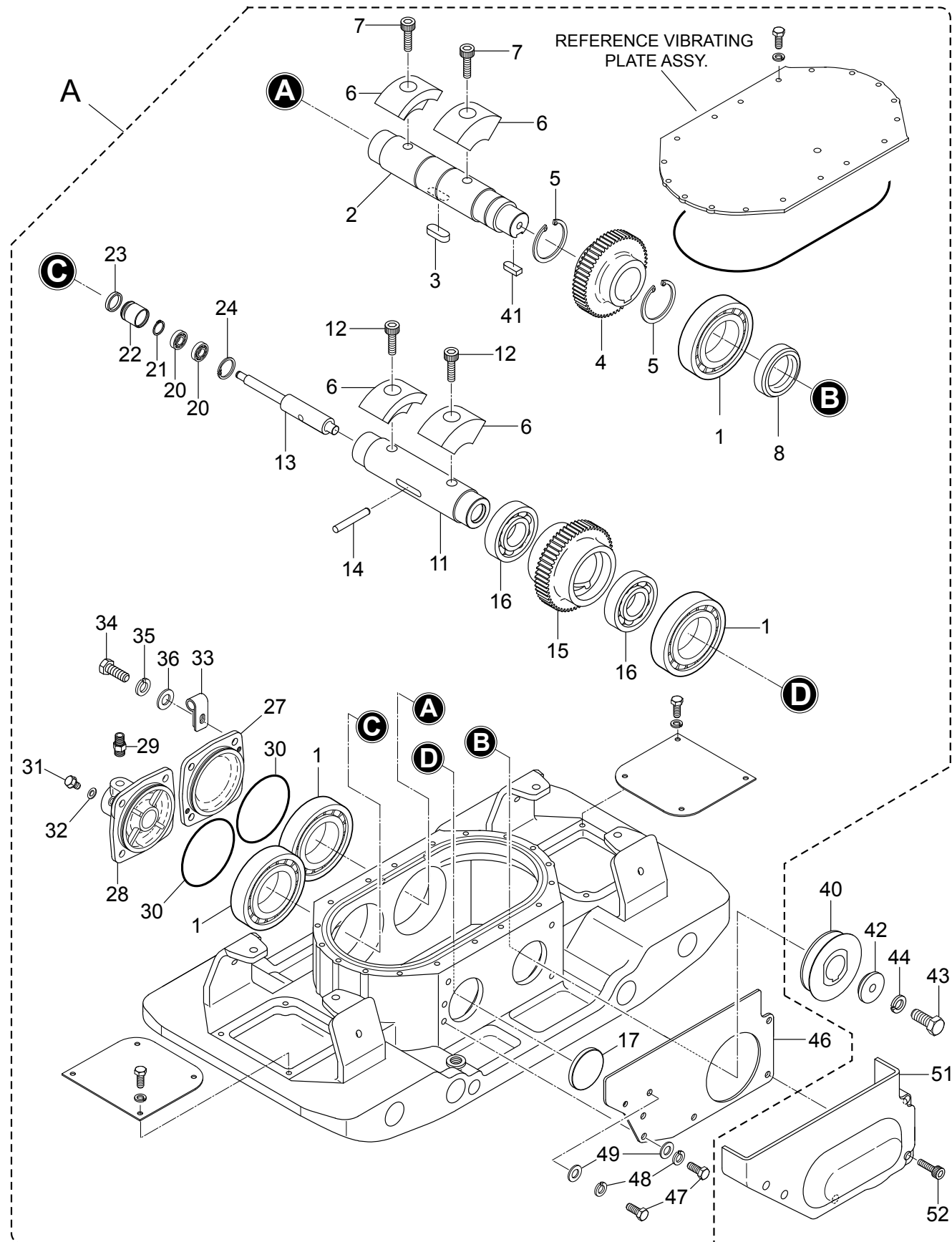
VIBRATING PLATE ASSY.



VIBRATING PLATE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	468121201	VIBRATING PLATE	1	
2	465460670	OIL GAUGE	1	
3	953402930	COPPER PACKING	1	
4	953400270	PLUG	1	
5	953405260	PACKING	1	
6	939010260	SHOCK ABSORBER	4	
7	020316130	NUT M16	4	
8	030216400	WASHER, LOCK M16	4	
9	001221635	BOLT 16X35	4	
10	030216400	WASHER, LOCK M16	4	
11	001221830	BOLT 18X30	8	
12	58407	WASHER, LOCK M18	8.....	REPLACES P/N 030218460
14	939010010	SHOCK ABSORBER	4	
15	020310080	NUT M10	4	
16	030210250	WASHER, LOCK M10	4	
18	468352110	COVER, VIBRATING PLATE	2	
19	014208020	BOLT 8X20.....	8.....	REPLACES P/N 001220820
20	030208200	WASHER, LOCK M8	8	
22	467351790	COVER, VIBRATOR	1.....	S/N D1492 AND BELOW
22	467355940	COVER, VIBRATOR BREATHER.....	1.....	S/N D1493 AND ABOVE
23	050103250	O-RING	1	
24	014208020	BOLT 8X20.....	18.....	REPLACES P/N 001220820
25	030208200	WASHER, LOCK M8	18	
30	467219050	EXTENSION PLATE	2	
31	012218050	BOLT 18X50.....	8.....	REPLACES P/N 001221850
32	58407	WASHER, LOCK M18	8.....	REPLACES P/N 030218460
35#	954410070	90° ELBOW	1.....	S/N D1493 AND ABOVE
36#	959029209	TUBE, NYLON	1.....	S/N D1493 AND ABOVE
37#	467471710	ELEMENT, BREATHER	1.....	S/N D1493 AND ABOVE
38#	959408920	CLIP M8	1.....	S/N D1493 AND ABOVE
39#	507010110	CLAMP.....	3.....	S/N D1493 AND ABOVE
40#	16910GB2005	FUEL FILTER, IN-LINE	1.....	S/N D1493 AND ABOVE
41#	959021818	SPIRAL TUBE	1.....	S/N D1493 AND ABOVE
50	467910040	AIR BREATHER TUBE	1.....	INCLUDES ITEMS W/#

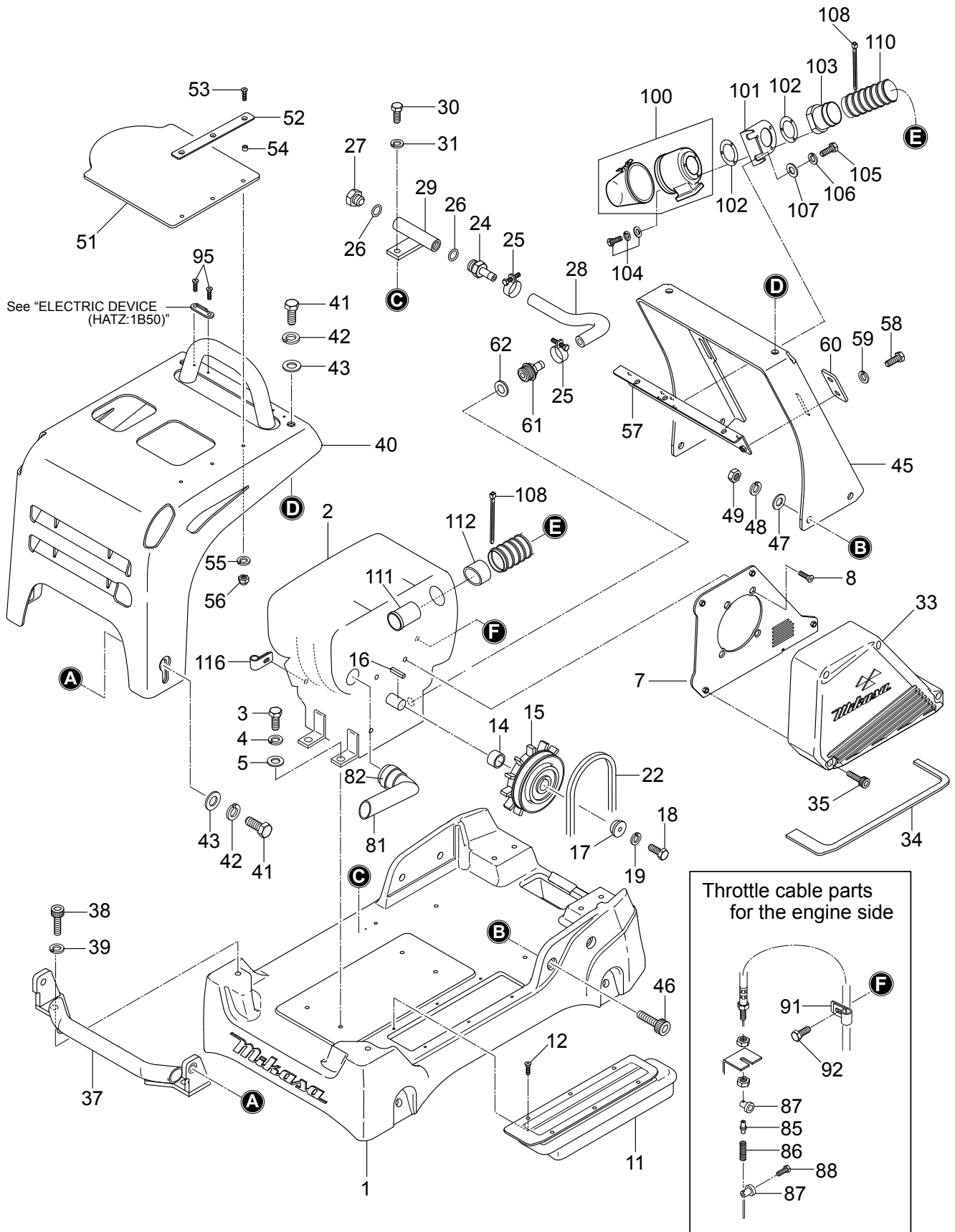
VIBRATOR ASSY.



VIBRATOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
A	468910040	VIBRATING PLATE ASSY. (OLD)	1.....	S/N D1492 AND BELOW INCLUDES ITEMS W/#
A	468910041	VIBRATING PLATE ASSY. (NEW)	1.....	S/N D1493 AND ABOVE INCLUDES ITEMS W/%
1#%	047920120	ROLLER BEARING	4	
2#	456331060	ROTARY SHAFT, DRIVE	1.....	S/N D1492 AND BELOW
2%	467355910	ROTARY SHAFT, DRIVE	1.....	S/N D1493 AND ABOVE
3#%	951405370	KEY 15X10X39	1	
4#%	456327150	GEAR, DRIVE	1	
5#%	080200550	STOP RING	2	
6#%	468352210	ECCENTRIC ROTATOR	4	
7#%	009120301	SOCKET HEAD BOLT 16X40	2	
8#	060105030	OIL SEAL.....	1.....	S/N D1492 AND BELOW
8%	060405040	OIL SEAL.....	1.....	S/N D1493 AND ABOVE
11#%	456337670	ROTARY SHAFT, DRIVEN	1	
12#%	009120302	SOCKET HEAD BOLT 16X30	2	
13#%	456337380	PISTON ROD	1	
14#%	456010010	KNOCK PIN 10X70	1	
15#%	467351910	GEAR (DRIVEN)	1	
16#%	040006911	BEARING	2	
17#%	953010030	SEAL CAP	1	
20#%	042506000	BEARING 6000ZZSG	2	
21#%	0080000010	STOP RING	1.....	REPLACES P/N 080200100
22#%	455435051	PISTON	1	
23#%	455010070	PACKING	1	
24#%	080100260	STOP RING	1	
27#%	467352540	BEARING COVER	1	
28#%	467219070	CYLINDER (R)	1	
29#%	954010020	CONNECTOR PT, PF1/4	1	
30#%	050101050	O-RING	2	
31#%	001720812	FLANGE BOLT 8X12	1	
32#%	953404600	COPPER PACKING	1	
33#%	959408880	CLIP 15 (M10)	1	
34#%	0105091025	BOLT 10X25.....	8.....	REPLACES P/N 001221025
35#%	030210250	WASHER, LOCK M10	8	
36#%	031110160	WASHER, FLAT M10	8	
40	465345090	PULLEY	1	
41#%	951404970	KEY 12X8X30	1	
42	456437920	WASHER, PULLEY	1	
43	012212035	BOLT 12X35.....	1.....	REPLACES P/N 001221235
44	030212300	WASHER, LOCK M12	1	
46#%	467351920	GUIDE, BELT COVER	1	
47#%	014208020	BOLT 8X20.....	2.....	REPLACES P/N 001220820
48#%	030208200	WASHER, LOCK M8	2	
49#%	401450080	WASHER, FLAT M8	2.....	REPLACES P/N 031108160
51	468218960	BELT COVER, LOWER	1	
52	001520856	SOCKET HEAD BOLT 8X80	5	

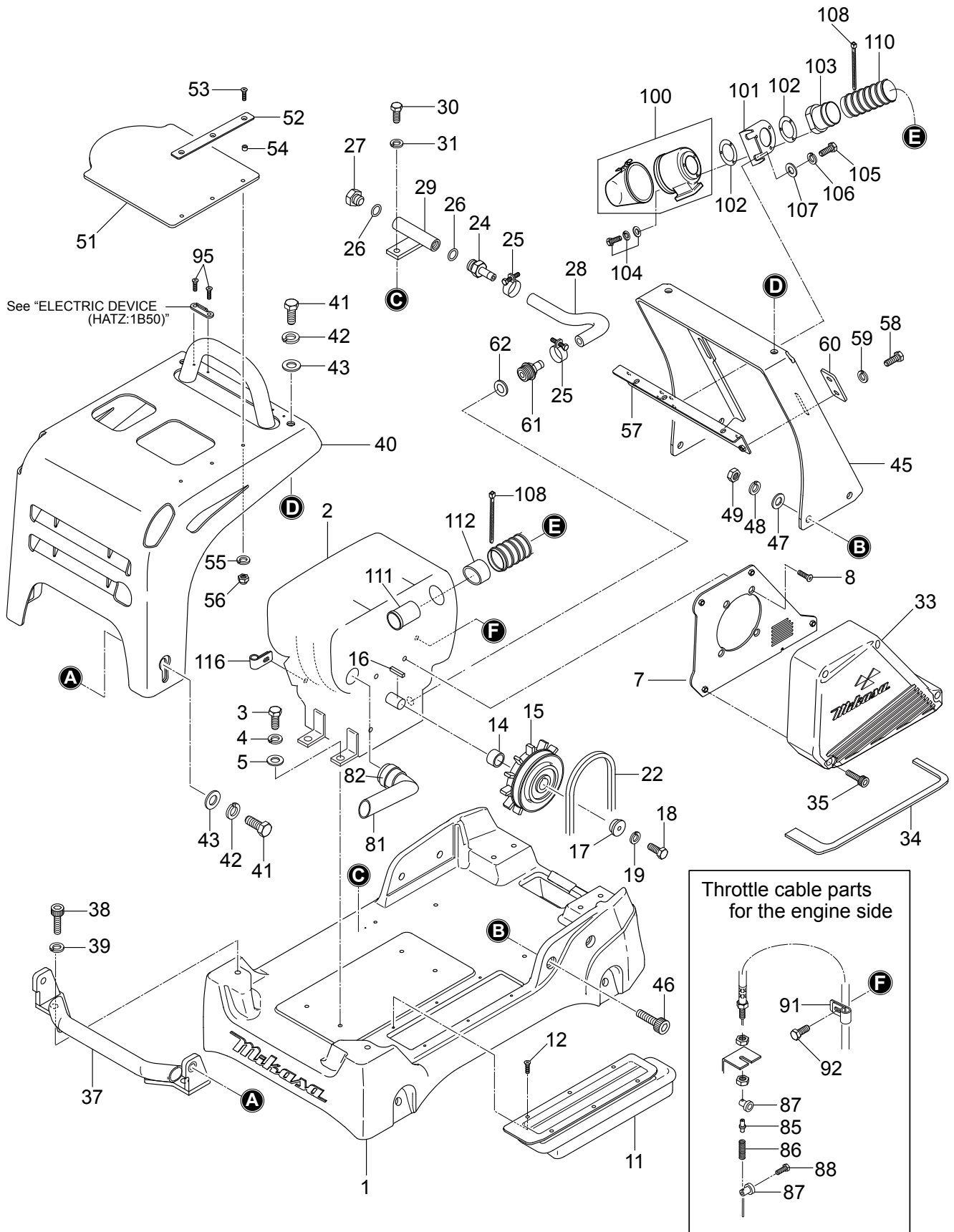
BASE AND ENGINE ASSY.



BASE AND ENGINE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	468121250	BASE	1	
2	918401100	ENGINE ASSY. 1B50T-9-166 HATZ	1	
3	012010030	BOLT 10X30	4	REPLACES P/N 001221030
4	030210250	WASHER, LOCK M10	4	
5	031110160	WASHER, FLAT M10	4	
7	468352230	BELT COVER, IN	1	
8	009120416	SUNK HEAD BOLT 10X25	4	
11	468352120	DUST COVER	1	
12	092006010	FLAT HEAD SCREW 6X10	6	
14	952408830	SPACER 25X31.8X18	1	
15	468352380	CLUTCH ASSY.	1	
16	951400110	KEY 7X7X35	1	
17	952408840	SPECIAL WASHER	1	
18	012010030	BOLT 10X30.....	1	REPLACES P/N 001221030
19	030210250	WASHER, LOCK M10	1	
22	070200463	V-BELT HDPF-5460	1	
24	954407310	UNION, DRAIN	1	
25	0091720000	HOSE CLAMP	2	
26	0211140020	GASKET	2	
27	0401140030	PLUG	1	
28	465459390	DRAIN HOSE	1	
29	464457380	DRAIN JOINT	1	
30	014208020	BOLT 8X20	1	REPLACES P/N 001220820
31	030208200	WASHER, LOCK M8	1	
33	468218930	BELT COVER (OUT)	1	
34	468352130	DUST SPONGE (OUT)	1	
35	001521056	SOCKET HEAD BOLT 10X80	4	
37	468352140	FRONT BUMPER	1	
38	001521435	SOCKET HEAD BOLT 14X35	2	
39	030214350	WASHER, LOCK M14	2	
40	468121210	FRONT COVER	1	
41	001221445	BOLT 14X45	4	
42	030214350	WASHER, LOCK M14	4	
43	031114260	WASHER, FLAT M14	4	
45	468218941	CENTER COVER	1	
46	001521435	SOCKET HEAD BOLT 14X35	4	
47	031114260	WASHER, FLAT M14	4	
48	030214350	WASHER, LOCK M14	4	
49	020314110	NUT M14	4	
51	468466890	RUBBER COVER UPPER	1	
52	467466760	STOPPER, COVER	1	
53	009120424	SOCKET HEAD BOLT 6X25	3	
54	617465130	COLLAR 6.2X7.8X4.5	3	
55	030206150	WASHER, LOCK M6	3	

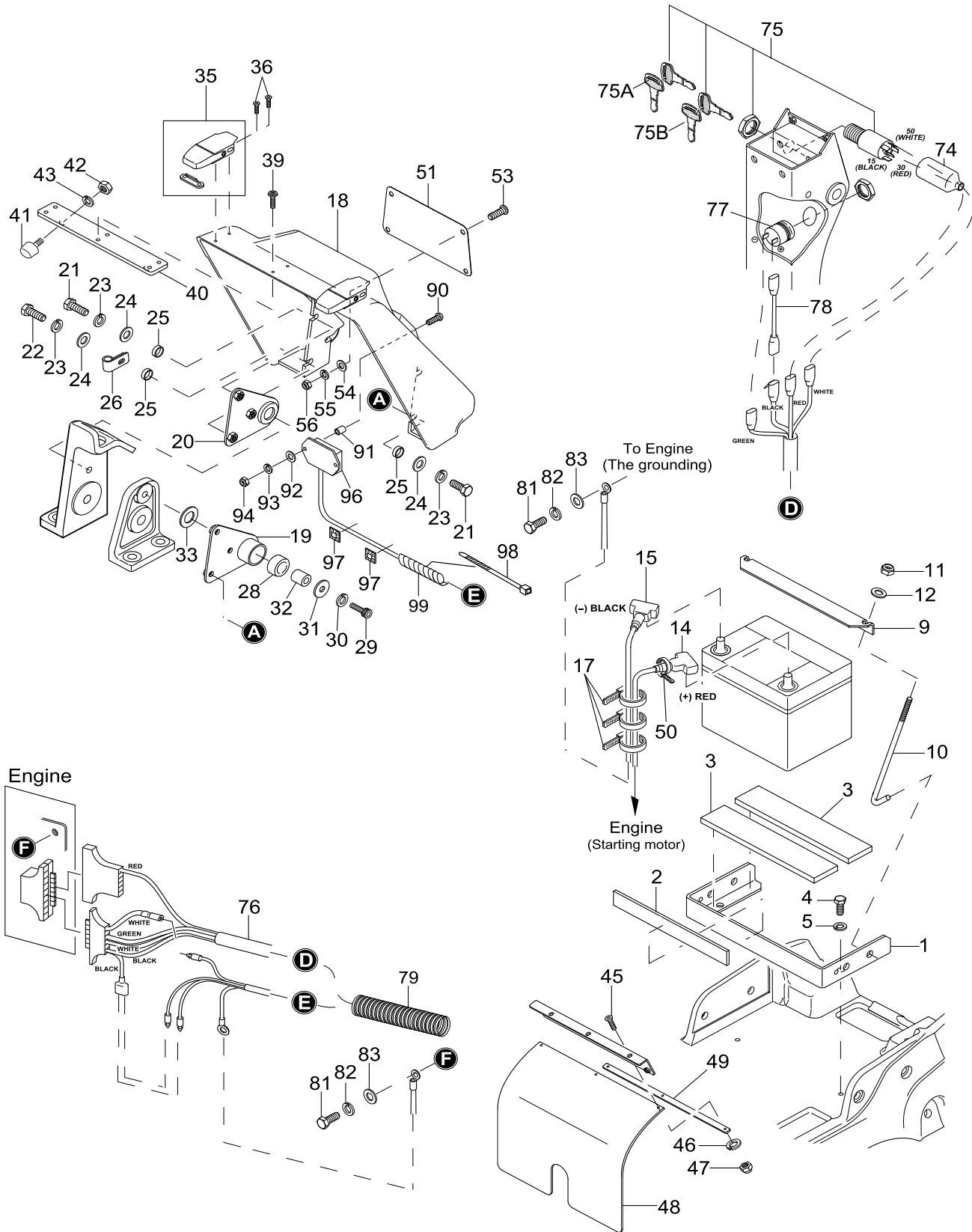
BASE AND ENGINE ASSY. (CONT'D.)



BASE AND ENGINE ASSY. (CONT'D.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
56	022710607	NYLON NUT M6	3	
57	467352720	CLEANER STAY	1	
58	011208025	BOLT 8X25.....	4	REPLACES P/N 001220825
59	030208200	WASHER, LOCK M8	4	
60	467467580	PLATE, CLEANER STAY	2	
61	465459670	OIL DRAIN	1	
62	DH50001600	JOINT A22X27	1	
81	468352160	EXHAUST PIPE	1	
82	DH03740900	PIPE CLIP	1	
85	DH05165000	GUIDE BUSH	1	
86	DH50484600	PRESSURE SPRING	1	
87	DH50483100	CABLE CLAMP	2	
88	DH50025000	HEX SCREW M 4X10/1B40	1	
91	2067550101	CLAMP COMPLETE	1	
92	011006010	BOLT 6X10	1	REPLACES P/N 001220610
95	009120420	SOCKET HEAD BOLT 5X10	4	
100	466218080	CLEANER, CYCLONE	1	
101	468352180	CYCLONE STAY	1	
102	466462850	GASKET, AIR INTAKE	2	
103	467466840	JOINT, CLEANER	1	
104	009110057	SOCKET HEAD BOLT, 5X18	3	
105	014208020	BOLT 8X20.....	2	REPLACES P/N 001220820
106	030208200	WASHER, LOCK M8	2	
107	0401450080	WASHER, FLAT M8	2	REPLACES P/N 031108160
108	506010060	CLAMP	2	
110	467351900	DUCT HOSE 50X390	1	
111	467466850	INTAKE PIPE	1	
112	467466860	GROMMET, CLEANER	1	
116	2267510103	CLAMP	2	

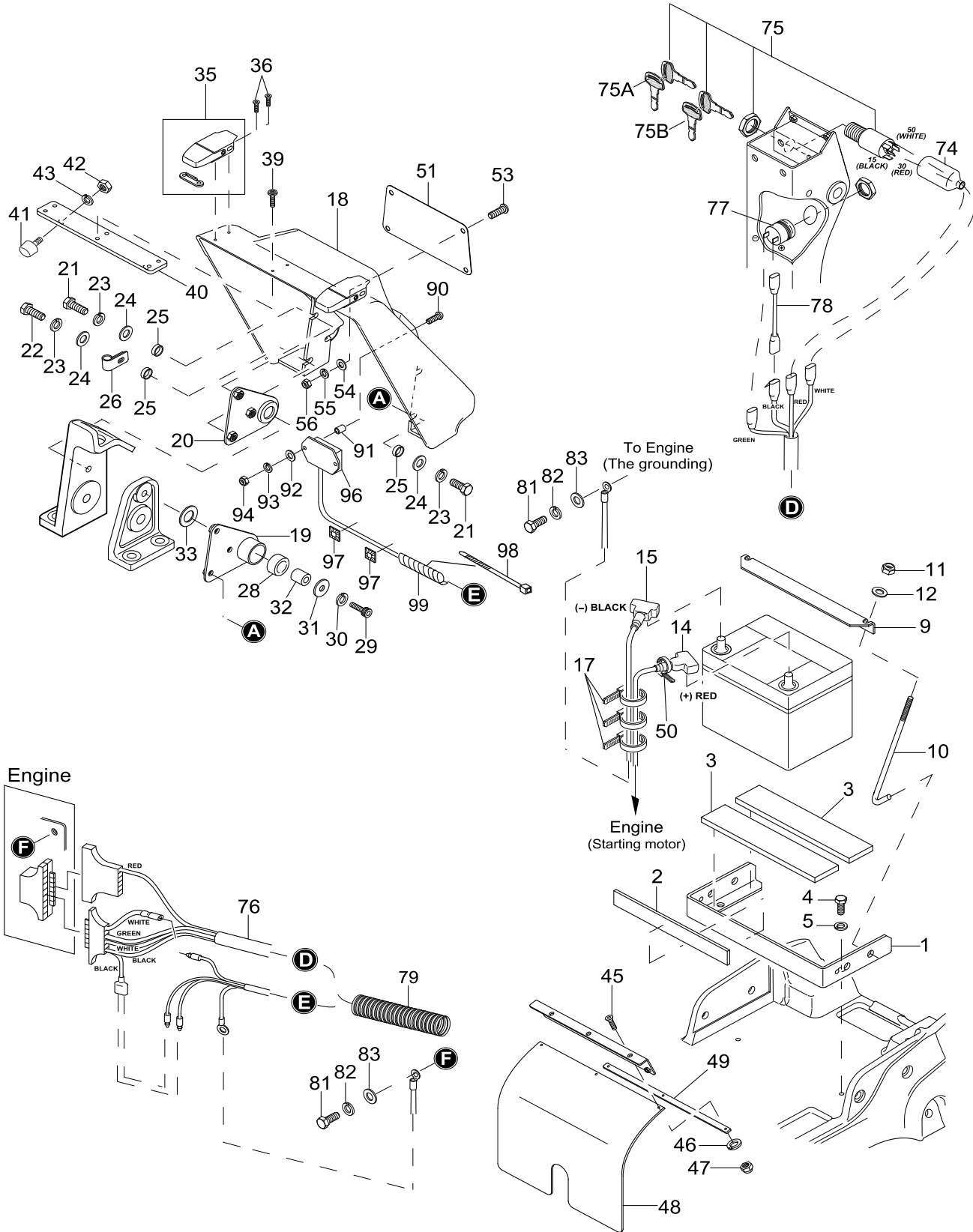
ELECTRIC DEVICE ASSY.



ELECTRIC DEVICE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	467218920	BATTERY HOLDER	1	
2	456447590	RUBBER PLATE	1	
3	456447600	RUBBER PLATE	2	
4	012210020	BOLT 10X20.....	2.....	REPLACES P/N 001221020
5	030210250	WASHER, LOCK M10	2	
9	464343740	HOLDER, BATTERY	1	
10	469467170	BOLT, BATTERY	2	
11	022710809	NYLON NUT M8	2	
12	0401450080	WASHER, FLAT M8	2.....	REPLACES P/N 031108160
14	955301030	BATTERY CABLE (+)	1	
15	955301040	BATTERY CABLE (-)	1	
17	506010070	CLAMP	5	
18	468121270	REAR COVER	1	
19	467352020	BRACKET, REAR COVER (L)	1	
20	467352030	BRACKET REAR COVER (R)	1	
21	014208020	BOLT 8X20.....	5.....	REPLACES P/N 001220820
22	011208025	BOLT 8X25.....	1.....	REPLACES P/N 001220825
23	030208200	WASHER, LOCK M8	6	
24	0401450080	WASHER, FLAT M8	6.....	REPLACES P/N 031108160
25	952408780	COLLAR	6	
26	959408920	CLIP 8 (M8)	1	
27	959408920	CLIP 8 (M8)	1	
28	416459340	RUBBER, VAS HANDLE	2	
29	014210040	SOCKET HEAD BOLT 10X40.....	2.....	REPLACES P/N 001521040
30	030210250	WASHER, LOCK M10	2	
31	952408740	WASHER	2	
32	952408790	COLLAR	2	
33	467467250	RUBBER WASHER	2	
35	467467090	CATCH CLIP	2.....	INCLUDES ITEM W/@
36	009120421	SOCKET HEAD BOLT 5X15	4	
37@	467467080	HOLDER, CATCH CLIP	2	
39	009110073	SOCKET HEAD SCREW 5X15	2	
40	468352220	BRACKET, STOPPER	1	
41	939010360	STOPPER RUBBER	2	
42	020108060	NUT M8	2.....	REPLACES P/N 020308060
43	030208200	WASHER, LOCK M8	2	
45	009120422	SOCKET HEAD BOLT 5X20	3	
46	030205130	WASHER, LOCK M5	3	
47	022710506	NYLON NUT M5	3	
48	467466930	RUBBER PLATE, BATTERY	1	
49	468467110	STOPPER, RUBBER PLATE	1	
50	454010020	CLAMP	9	

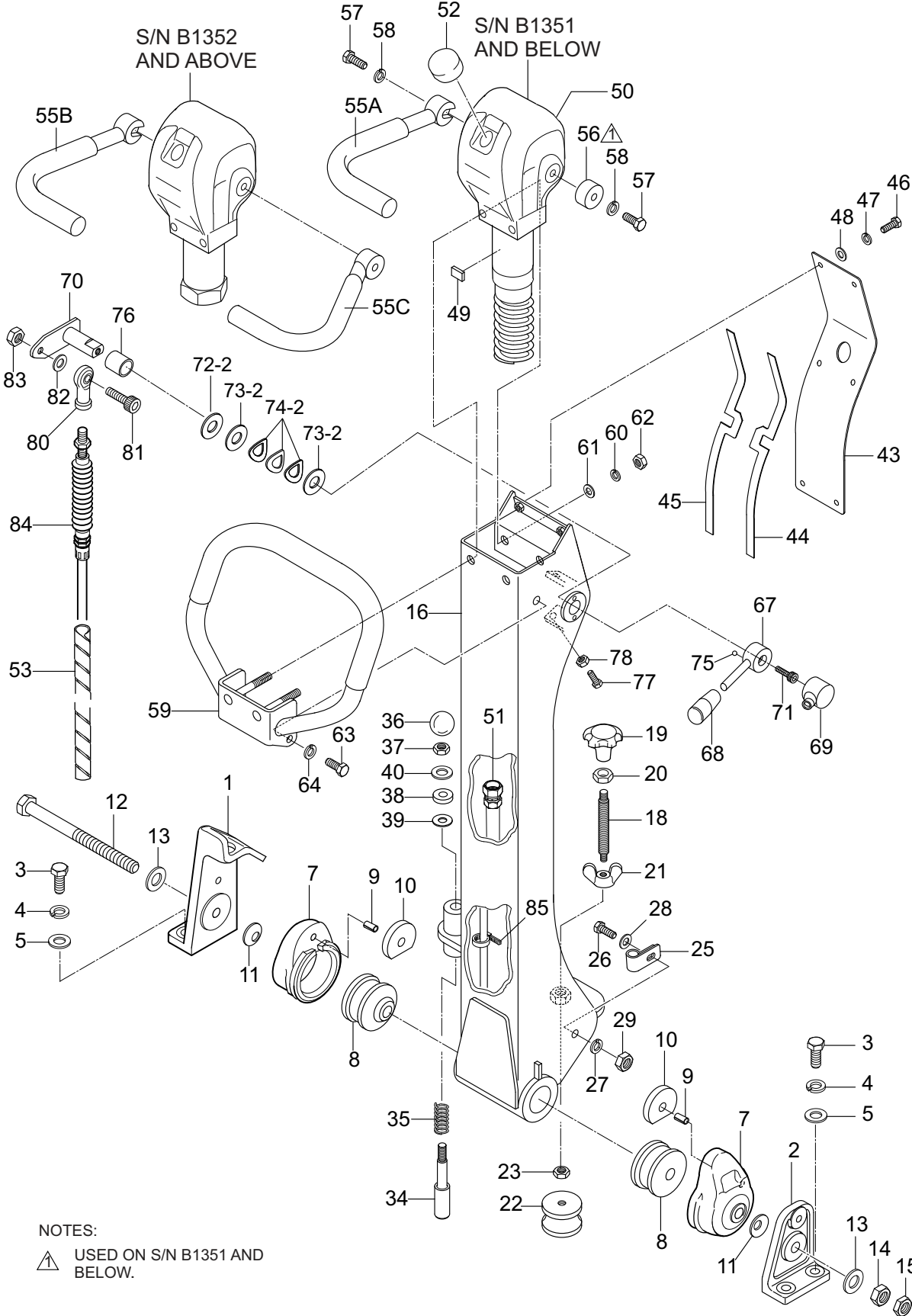
ELECTRIC DEVICE ASSY. (CONT'D.)



ELECTRIC DEVICE ASSY. (CONT'D.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
51	467352050	PANEL, REAR COVER	1	
53	009110062	SOCKET HEAD SCREW 6X20	4	
54	952404470	WASHER, LOCK M6	4.....	REPLACES P/N 031106100
55	030206150	WASHER, FLAT M6	4	
56	022710607	NYLON NUT M6	4	
74	470468770	PROTECTIVE COVER, IGNITION SWITCH	1.....	S/N E1803 AND ABOVE
75	50599500	IGNITION SWITCH ASSY. W/ KEY (OLD).....	1.....	INCLUDES ITEM W/# S/N Z1050 AND BELOW
75	50384401	IGNITION SWITCH ASSY. W/ KEY	1.....	INCLUDES ITEM W/\$ S/N Z1051 AND ABOVE
75A#	50600800	KEY, IGNITION (OLD)	1.....	S/N Z1050 AND BELOW
75B\$	50404900	KEY, IGNITION (NEW)	1.....	S/N Z1051 AND ABOVE
76	467352070	WIRE HARNESS	1	
77	50465100	BUZZER	1	
78	465459680	RELAY CABLE/BUZZER	1	
79	959026022	CORRUGATE TUBE	1	
81	001220612	BOLT 6X12	1	
82	030206150	WASHER, LOCK M6	1	
83	952404470	WASHER, FLAT M6	1.....	REPLACES P/N 031106100
90	009110072	PAN HEAD SCREW 5X35	2	
91	952407930	COLLAR	2	
92	58151	WASHER, FLAT M5	2.....	REPLACES P/N 031105080
93	030205130	WASHER, LOCK M5	2	
94	022710506	NYLON NUT M5	2	
96	955301020	TACH. AND HOUR METER	1	
97	955407970	WIRING FIXED BASE	2	
98	454010020	CLAMP TC-100	2	
99	959021813	SPIRAL TUBE	1	

CONTROL ASSY.

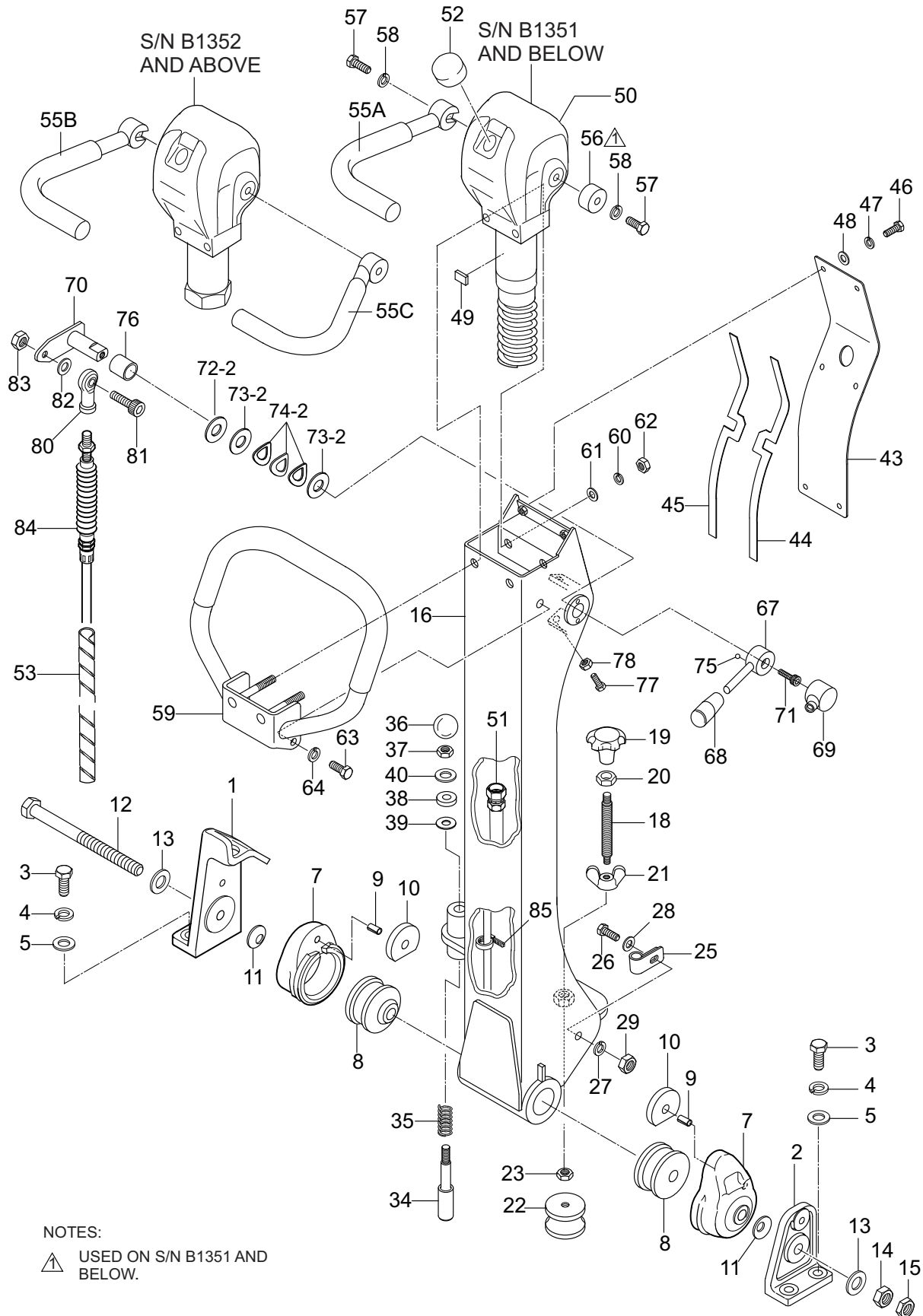


NOTES:
 ▲ USED ON S/N B1351 AND BELOW.

CONTROL ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	467351950	HANDLE BRACKET (R)	1	
2	467351960	HANDLE BRACKET (L)	1	
3	012212035	BOLT 12X35.....	4	REPLACES P/N 001221235
4	030212300	WASHER, LOCK M12	4	
5	031112230	WASHER, FLAT M12	4	
7	456336400	RUBBER COUPLING	2	
8	456449940	SHOCK ABSORBER	2	
9	025306016	SPRING PIN 6X16	2	REPLACES P/N 025406016
10	456449930	RUBBER PLATE	2	
11	032124400	CONICAL SPRING WASHER M24	2	
12	001221681	BOLT 16X250	1	
13	0401450160	WASHER, FLAT M16	2	REPLACES P/N 031116260
14	020316130	NUT M16	1	
15	020416100	NUT M16	1	
16	467121170	COLUMN, HANDLE BAR	1	
18	455434950	SPINDLE	1	
19	455010030	KNOB	1	
20	020412070	NUT M12	1	
21	022411635	WING NUT M16	1	
22	939010060	SHOCK ABSORBER	1	
23	020310080	NUT M10.....	1	REPLACES P/N 020410060
25	959408930	CLIP 15	1	
26	011206020	BOLT 6X20.....	1	REPLACES P/N 001220620
27	030206150	WASHER, LOCK M6	1	
28	952404470	WASHER, FLAT M6	1	REPLACES P/N 031106100
29	020106050	NUT M6	1	REPLACES P/N 020306050
34	501402870	HANDLE STOPPER	1	
35	501402880	SPRING/HANDLE	1	
36	959403460	BALL GRIP	1	
37	020310080	NUT M10	1	REPLACES P/N 020410060
38	456449980	RUBBER PACKING	1	
39	953405260	PACKING 1/4	1	
40	031110160	WASHER, FLAT M10	1	
43	467351970	HANDLE COVER	1	
44	467467340	PACKING (L), HANDLE	1	
45	467467350	PACKING (R), HANDLE	1	
46	0105050616	BOLT 6X15.....	6	REPLACES P/N 001220615
47	030206150	WASHER, LOCK M6	6	
48	952404470	WASHER, FLAT M6	6	REPLACES P/N 031106100
49	464457930	RUBBER PIECE	1	
50	468219160	HYDRAULIC PUMP	1	

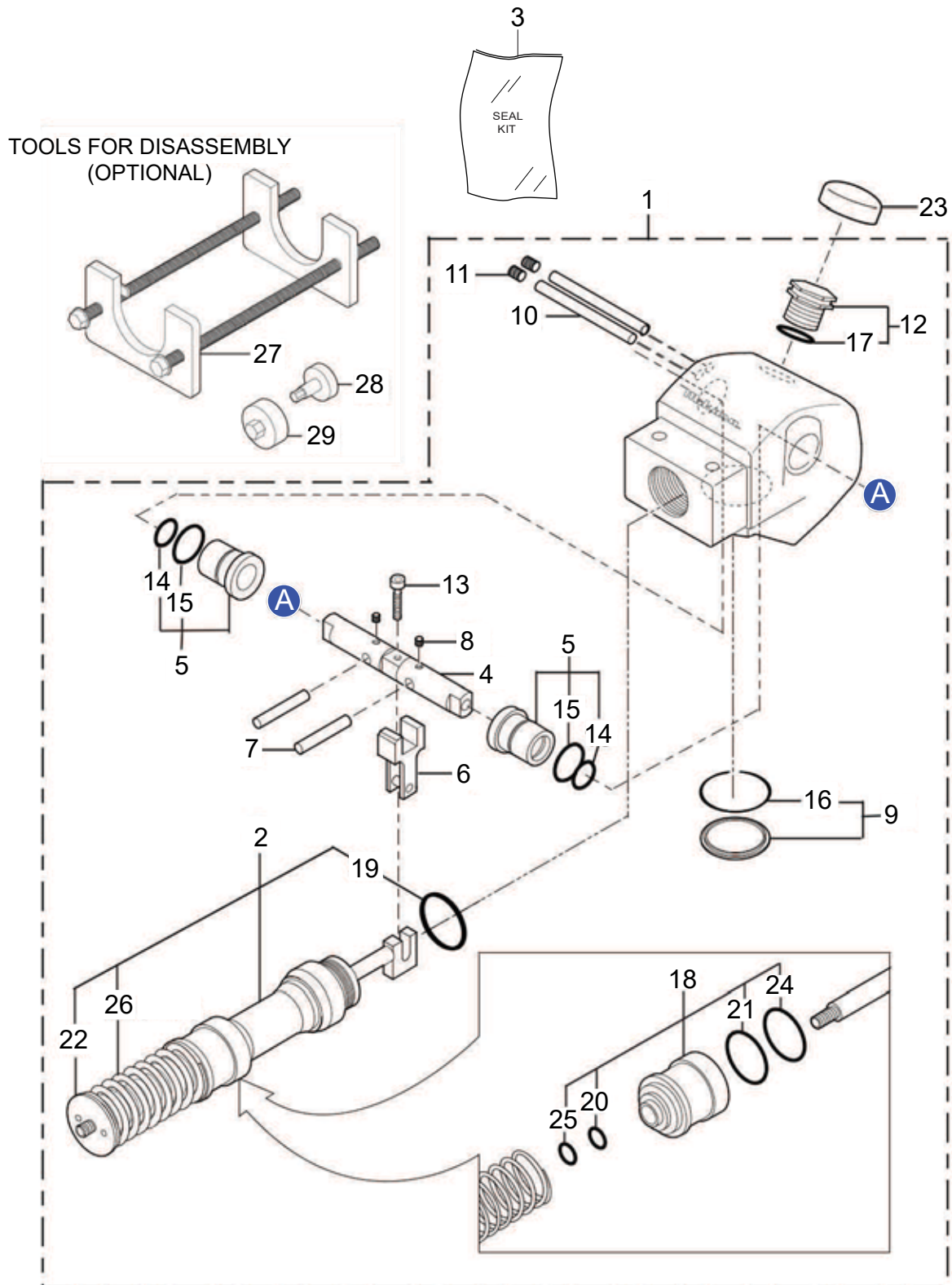
CONTROL ASSY. (CONT'D.)



CONTROL ASSY. (CONT'D.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
51	954003110	OIL HOSE	1	
52	458451630	BREATHER CAP	1	
53	959021813	SPIRAL TUBE	1	
55A	464216630	TRAVEL LEVER, RIGHT	1	S/N 1351 AND BELOW
55B	464216820	TRAVEL LEVER, RIGHT	1	S/N 1352 AND ABOVE
55C	464216830	TRAVEL LEVER, LEFT	1	S/N 1352 AND ABOVE
56	464457400	HANDLE BOSS	1	S/N 1351 AND BELOW
57	012010030	BOLT 10X30.....	2	REPLACES 001221030
58	030210250	WASHER, LOCK M10	2	
59	467218900	HANDLE W/ RUBBER GRIP	1	
60	030210250	WASHER, LOCK M10	2	
61	031110160	WASHER, FLAT M10	2	
62	020310080	NUT M10	2	
63	0105091025	BOLT 10X25.....	2	REPLACES P/N 001221025
64	030210250	WASHER, LOCK M10	2	
67	467467380	THROTTLE LEVER	1	
68	959403840	BAR GRIP	1	
69	464457420	COVER, THROTTLE LEVER	1	
70	468467070	ARM, THROTTLE	1	
71	014208020	SOCKET HEAD BOLT 8X20.....	1	REPLACES P/N 001520820
72	0401450160	WASHER, FLAT M16	1	REPLACES P/N 031116260
73	458450660	WASHER	2	
74	033910080	CONICAL WASHER, LOCK	3	
75	464457440	STEEL BALL	1	
76	464010010	DRY BUSHING	1	
77	011606025	BOLT 6X25.....	2	REPLACES P/N 001220625
78	020106050	NUT M6	2	REPLACES P/N 020306050
80	464010020	ROD END M5	1	
81	001520520	SOCKET HEAD BOLT 5X20	1	
82	58151	WASHER, FLAT M5	1	REPLACES P/N 031105080
83	020305040	NUT M5	1	
84	956100069	THROTTLE WIRE	1	
85	454010020	CLAMP	1	

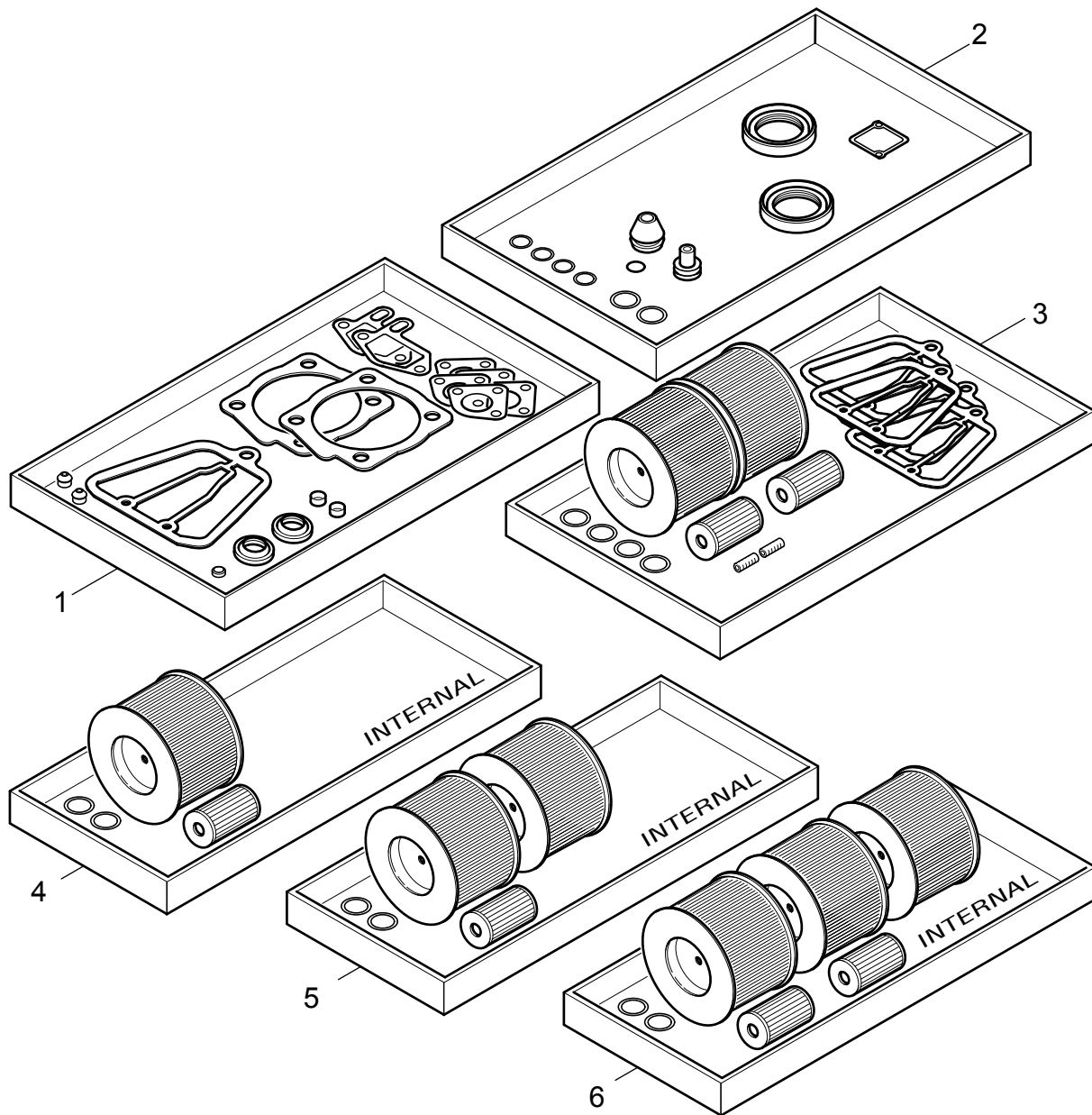
HYDRAULIC HAND PUMP ASSY.



HYDRAULIC HAND PUMP ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	468219160	HAND PUMP	1.....	INCLUDES ITEMS W/#
2#	468910020	ACCUMULATOR.....	1.....	INCLUDES ITEMS W/\$ NOT SOLD SEPARATELY
3	464910080	SEAL KIT	1.....	INCLUDES ITEMS W/%
4#	464010040	CONTROL SHAFT	1	
5#	467010020	BUSH.....	2.....	INCLUDES ITEMS W/@
6#	464010060	CAM	1	
7#	464010070	STOPPER	2	
8#	099205005	SCREW, SOCKET HEAD	2	
9#	464010080	PLUG	1.....	INCLUDES ITEMS W/*
10#	464010090	PIN, STOPPER	2	
11#	464010100	PLUG	2	
12#	458010080	BREATHER.....	1.....	INCLUDES ITEMS W/^
13#	001520620	BOLT, SOCKET HEAD.....	1.....	REPLACES P/N 001520620
14@%#	050200200	O-RING, P-20	2	
15@%#	050210220	O-RING, P-22	2.....	REPLACES P/N 050200220
16*%#	050300380	O-RING, S-38	1	
17^%#	050200180	O-RING, P-18	1	
18\$#	464010111	CASE, ACCUMULATOR	1.....	INCLUDES ITEMS W/&
19\$%#	050300400	O-RING, S-40	1	
20\$&%#	050200150	O-RING, P-15	1	
21\$&%#	050100400	O-RING, G-40	1	
22\$#	468010010	PLUG, SPRING	1	
23#	458451630	CAP, BREATHER	1	
24\$&%#	069904010	SEAL, SER-40	1	
25\$&%#	069901010	SEAL, SER-15	1	
26\$#	468910030	SPRING, ACCUMULATOR	1	
27	984010060	SPRING COMPRESSION, TOOL	1	
28	984010040	TOOL A, DISASSEMBLING	1	
29	984010050	TOOL B, DISASSEMBLING	1	

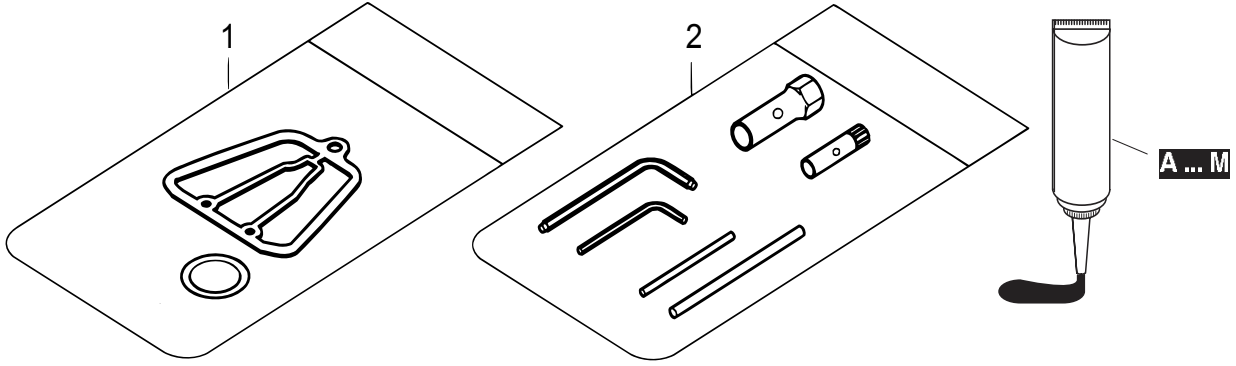
HATZ 1B50 ENGINE — SPARE PARTS KIT ASSY.



HATZ 1B50 ENGINE — SPARE PARTS KIT ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	01940002	GASKET SET, CYLINDER HEAD	1	
2	01679303	GASKET SET, CRANKCASE	1	
3	01679400	MAINTENANCE KIT	1	
4	02265600	FILTER KIT/INT. LIGHT	1	
5	02268200	FILTER KIT/INT. MED.	1	
6	02269300	FILTER KIT/INT. HEAVY	1	

HATZ 1B50 ENGINE — ACCESSORIES ASSY.



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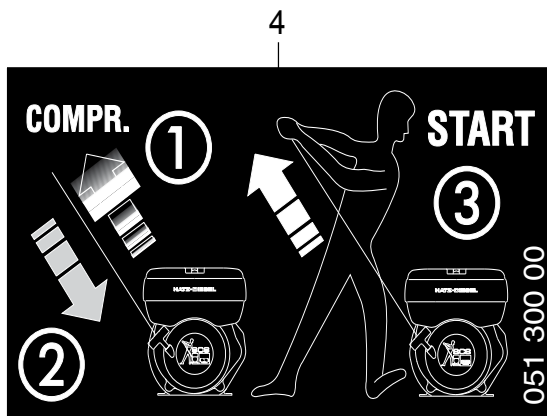
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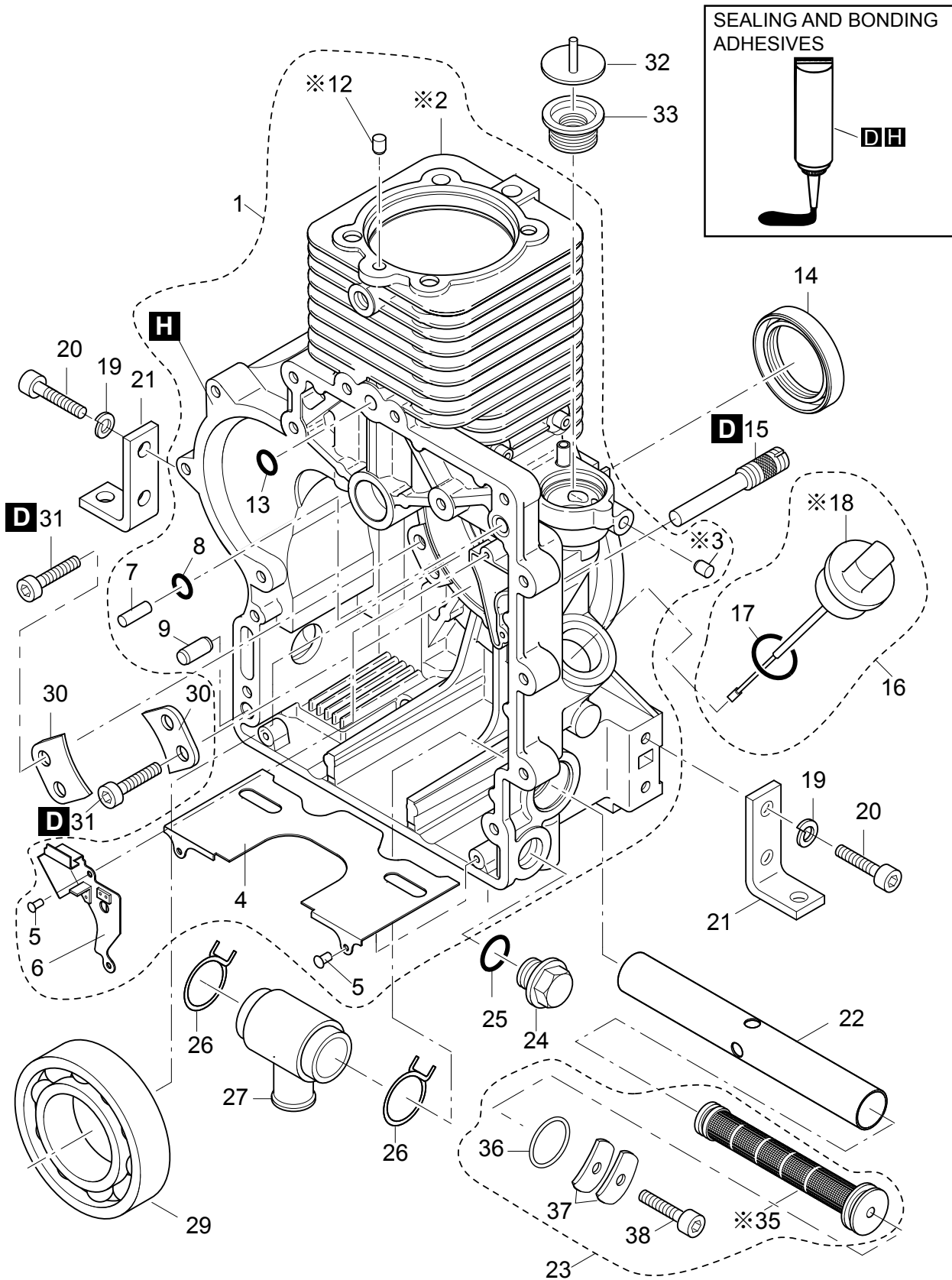


- A LOCTITE ACTIVATOR N
- B LOCTITE 574
- C LOCTITE 601
- D LOCTITE 221
- E LOCTITE 648
- F TECHNICAL ADHESIVE 8058
- FA TECHNICAL CLEANER
- G LOCTITE 407
- H TEROSON TEROSTAT 63
- J HIGH TEMP. PASTE
- K HIGH TEMP FETT 400G
- L SILICON SEALER
- M GRINDING PASTE 80 ML

HATZ 1B50 ENGINE — ACCESSORIES ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
A	50223001	LOCTITE ACTIVATOR N	1	
B	50223101	LOCTITE 574	1	
C	50223200	LOCTITE 601	1	
D	50223300	LOCTITE 221	1	
E	50223400	LOCTITE 648	1	
F	50223800	TECHNICAL ADHESIVE 8058	1	
FA	50223900	TECHNICAL CLEANER	1	
G	50256501	LOCTITE IS 407	1	
H	70018944	TEROSON TEROSTAT 63	1	
J	50283004	HIGH TEMPERATURE PASTE	1	
K	50342601	HIGH TEMPERATURE FETT 400G	1	
L	50256600	SILICON SEALER	1	
M	50485100	GRINDING PASTE 80ML	1	
1	01329701	ACCESSORIES KIT	1	
2	01330901	TOOLS	1	
3	05110406	STICKER LABEL	1	
4	05130002	STICKER LABEL "START"	1	

HATZ 1B50 ENGINE — CRANKCASE ASSY.

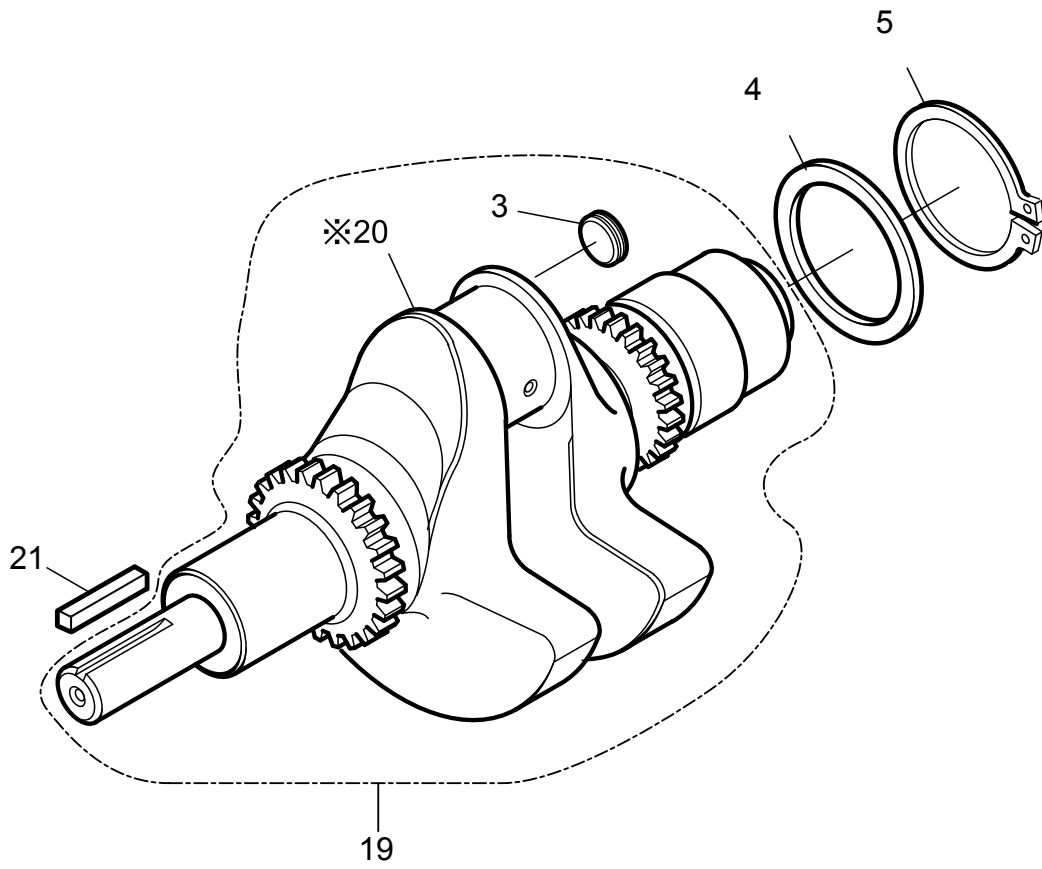


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — CRANKCASE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
D	50223300	LOCTITE 221	1	
H	70018944	TEROSON TEROSTAT 63	1	
1	01946500	CRANKCASE ASSY.....	1.....	INCLUDES ITEMS W/\$
2\$		CRANKCASE.....	1.....	NOT SOLD SEPARATELY
3\$		PLUG		NOT SOLD SEPARATELY
4\$	04141600	COVER SHEET	1	
5\$	40002600	BLIND RIVET	1	
6\$	01336410	COVER SHEET, SIDE	4	
7\$	50502801	CYLINDER PIN 8 M6X24	1	
8\$	50440300	O-RING 8X1.5	1	
9\$	50249102	Z-CYLINDER PIN 8 M6X20	1	
12\$		PLUG	2.....	NOT SOLD SEPARATELY
13\$	40022300	O-RING 8X2	1	
14	50479000	OIL SEAL 45X60X8	1	
15	04198800	GRUB SCREW CARB	1	
16	01342800	DIPSTICK ASSY.	1.....	INCLUDES ITEMS W/@
17@	04125000	SEALING RING, DIPSTICK	1	
18@		DIPSTICK	1.....	NOT SOLD SEPARATELY
19	50208500	WASHER, LOCK	8	
20	04219500	ALLEN SCREW M8X40	8	
21	04144701	ENGINE BRACKET	4	
22	04141500	TUBE, OIL FILTER	1	
23	01542703	OIL SUCTION FILTER ASSY.....	1.....	INCLUDES ITEMS W/#
24	50373100	DRAIN PLUG, MAGNETIC M22	1	
25	50001600	GASKET	1	
26	05036900	HOSE CLIP	2	
27	04163000	T-PIECE	1	
29	50478900	GROOVE BALL BEARING 6310	1	
30	04133800	PLATE	3	
31	50564200	ALLEN SCREW M6X18	6	
32	01555800	COVER	1	
33	03568701	OIL SUPPLEMENT PLUG	1	
35#		OIL SUCTION FILTER.....	1.....	NOT SOLD SEPARATELY
36#	50475901	O-RING 20X4	1	
37#	05148200	PLATE SPRING	2	
38#	50170700	ALLEN SCREW M6X16	1	

HATZ 1B50 ENGINE — CRANKSHAFT ASSY.

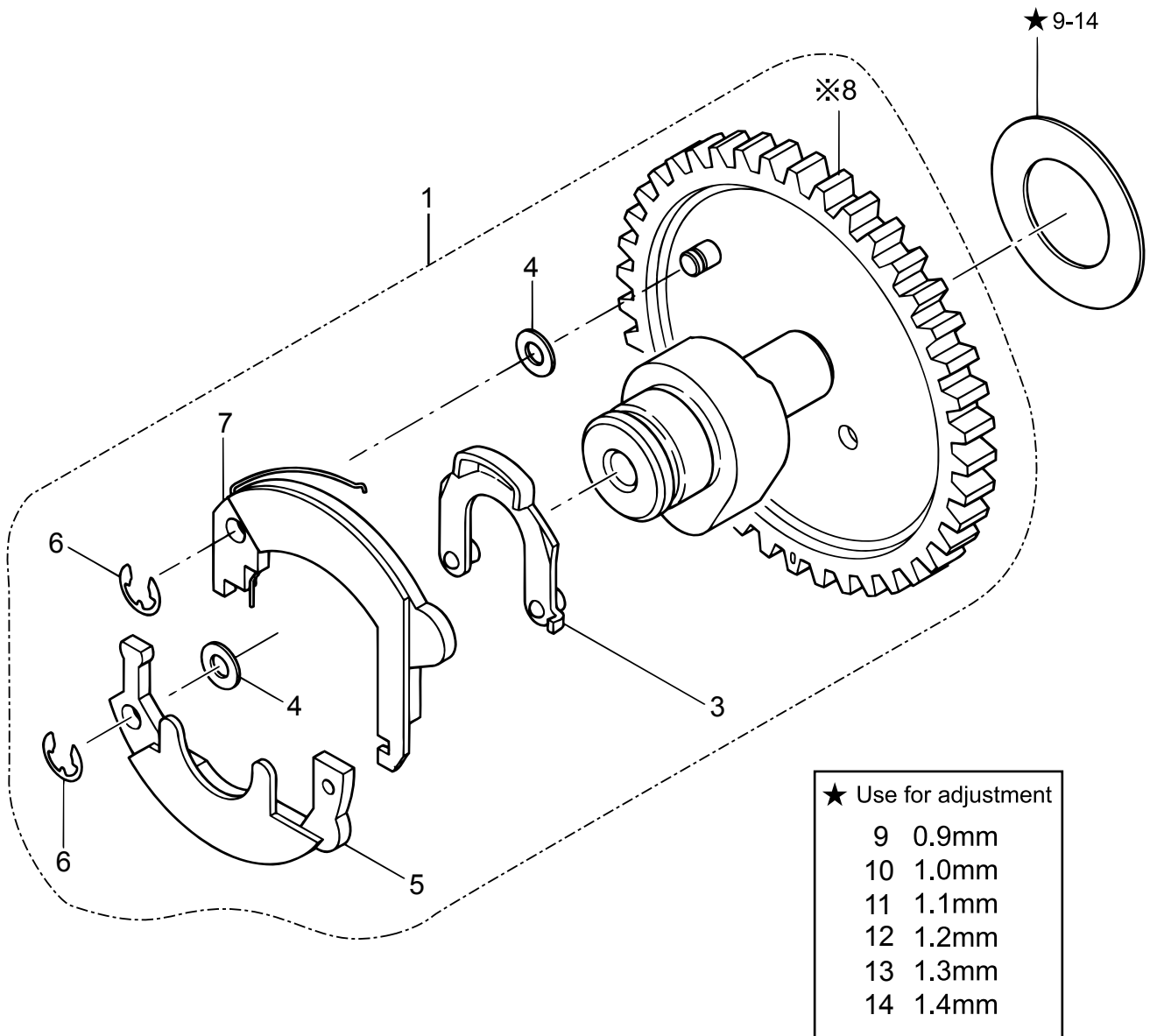


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — CRANKSHAFT ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
3\$	50529700	COVER	1	
4	50481400	SUPPORTING DISC 50X62X3.0	1	
5	50021800	CIRCLIP 50X2	1	
19	01896210	CRANKSHAFT ASSY.	1.....	INCLUDES ITEMS W/\$
20\$		CRANKSHAFT.....	1.....	NOT SOLD SEPARATELY
21	05306100	KEY 7X7X35	1	

HATZ 1B50 ENGINE — CAMSHAFT ASSY.

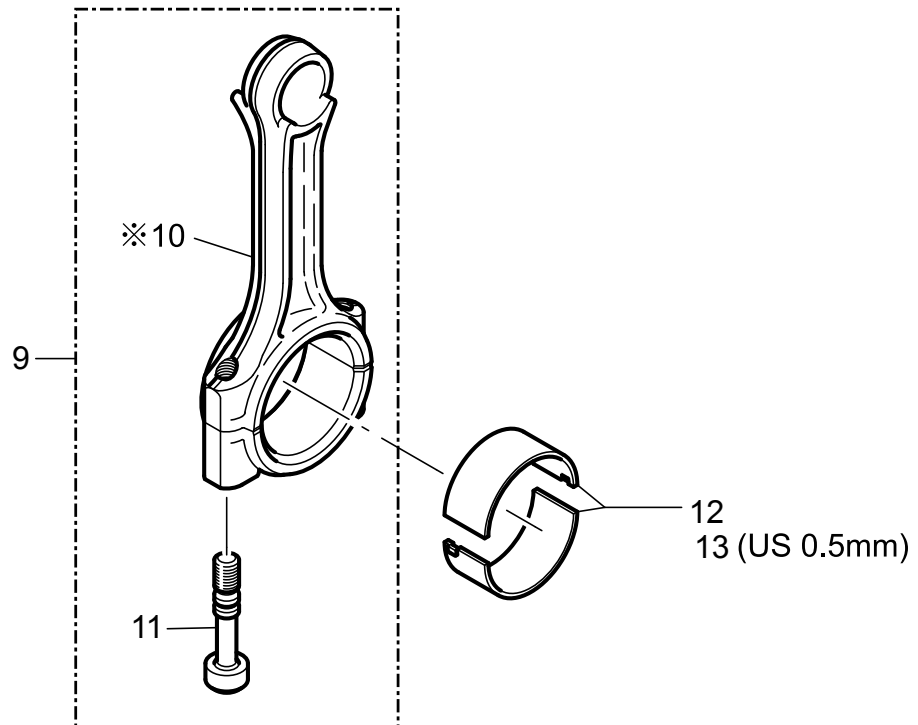
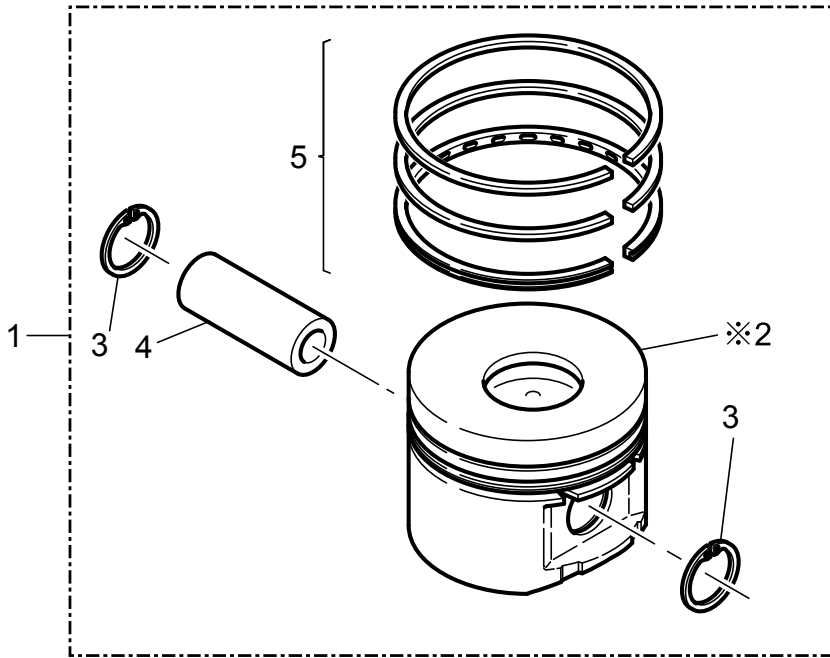


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — CAMSHAFT ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	01345010	CAMSHAFT ASSY.	1.....	INCLUDES ITEMS W\$
3\$	01326401	CAMLEVER	1	
4\$	50123200	SHIM 5X10X0.5	1	
5\$	01326600	FLYWEIGHT	1	
6\$	50255300	WASHER, LOCK	1	
7\$	01326501	FLYWEIGHT HAND-START	1	
9	04121700	SHIM 23X38X0.9	1.....	SELECT 0-1
10	04112100	SHIM 23X38X1.0	1.....	SELECT 0-1
11	04112200	SHIM 23X38X1.1	1.....	SELECT 0-1
12	04112300	SHIM 23X38X1.2	1.....	SELECT 0-1
13	04125100	SHIM 23X38X1.3	1.....	SELECT 0-1
14	04125200	SHIM 23X38X1.4	1.....	SELECT 0-1

HATZ 1B50 ENGINE — PISTON, CONROD, CYLINDER ASSY.

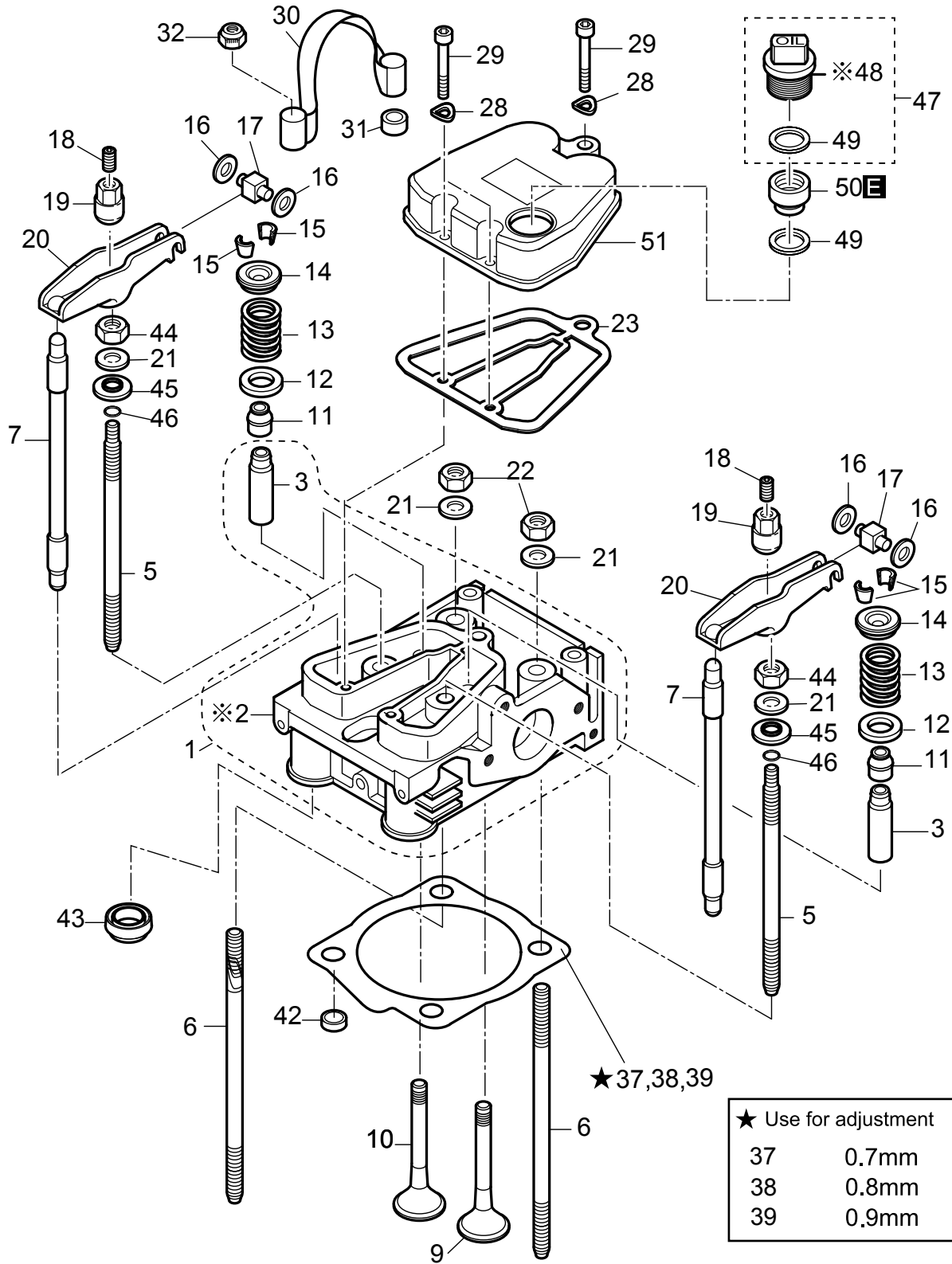


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — PISTON, CONROD, CYLINDER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	01384320	PISTON ASSY. 93MM	1.....	INCLUDES ITEMS W/\$
2\$		PISTON.....	1.....	NOT SOLD SEPARATELY
3\$	50482300	CIRCLIP 22X1	2	
4\$	50566400	GUDGEON PIN 22X13X60	1	
5\$	01384410	PISTON RING SET 93MM	1	
9	01343500	CONNECTING ROD ASSY.....	1.....	INCLUDES ITEMS W/%
10%		CONNECTING ROD.....		NOT SOLD SEPARATELY
11%	04100500	SCREW, CONNECTING ROD	2	
12	01679800	BIG END BEARING	1	
13	01692700	BIG END BEARING US -0.5	1	

HATZ 1B50 ENGINE — CYLINDER HEAD ASSY.

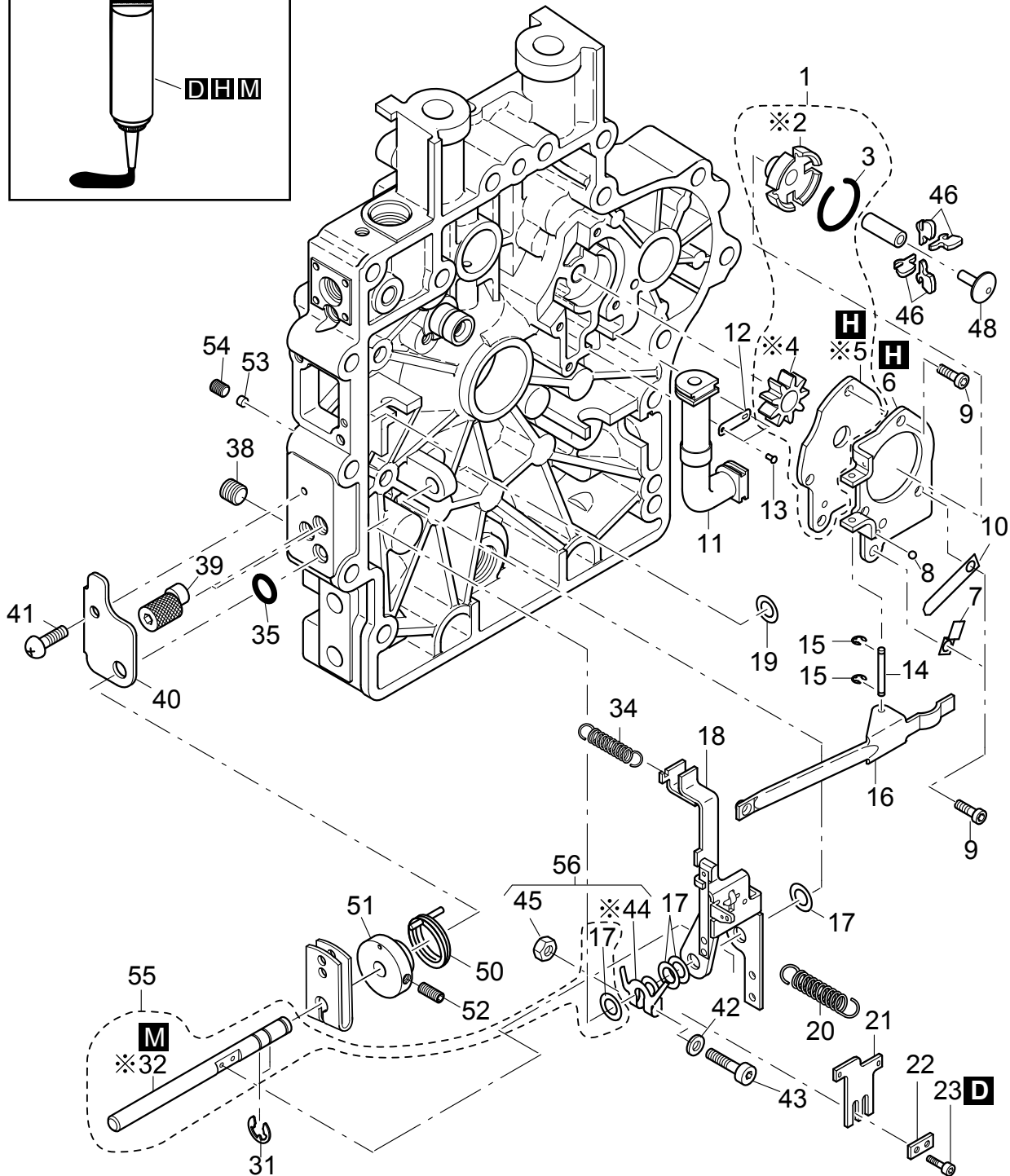
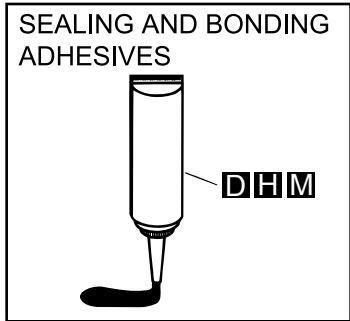


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — CYLINDER HEAD ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
E	50223400	LOCTITE 648	1	
1	01850902	CYLINDER HEAD ASSY.....	1	INCLUDES ITEMS W/\$
2\$		CYLINDER HEAD.....	1	NOT SOLD SEPARATELY
3\$	05209700	VALVE GUIDE	2	
5	04253010	STUD CYLINDER HEAD	2	
6	04253110	STUD CYLINDER HEAD	2	
7	01374000	PUSHROD	2	
9	05145100	VALVE, INLET	1	
10	05145200	VALVE EXHAUST	1	
11	50631000	VALVE STEM SEAL CAP	2	
12	04147100	WASHER	2	
13	04146900	VALVE SPRING	2	
14	04147000	SPRING PLATE/RETAINER	2	
15	02252500	COLLET (COTTER)	2	
16	50445100	SUPPORT DISC 6X12X1.2	1	
17	05091101	SLIDER	2	
18	50513100	GRUB SCREW M8X10	2	
19	05054700	NUT, ROCKER ARM	2	
20	05146701	ROCKER ARM	2	
21	05099300	WASHER 10.1X24X3	4	
22	50396600	HEXAGON NUT M10	2	
23	05156401	GASKET, CYLINDER HEAD	1	
28	50081200	WASHER, LOCK A6	3	
29	50374900	ALLEN SCREW M6X35	3	
30	04117701	LIFTING STRAP	1	
31	04126100	PROTECTION HOSE	2	
32	40028600	HEXAGON NUT M10	2	
37	04235230	GASKET, CYLINDER HEAD 0.7	1	
38	04235330	GASKET, CYLINDER HEAD 0.8	1	
39	04235430	GASKET, CYLINDER HEAD 0.9	1	
42	04174500	CENTER BUSHING	2	
43	04106501	SEALING RING, TIMING COVER	2	
44	50396600	HEXAGON NUT M10	2	
45	04243700	DISC 8.1X12X2.0	2	
46	50563900	O-RING 10X2.5	2	
47	01936500	CAP SCREW, CYL. HD. COVER	1	INCLUDES ITEMS W/%
48%		CAP SCREW	1	NOT SOLD SEPARATELY
49%	05278401	SEALING RING 26X35X4	2	
50	05321100	CONNECTING PIECE	1	
51	05256800	COVER CYLINDER HEAD/F. CAP	1	

HATZ 1B50 ENGINE — OIL PUMP, GOVERNOR ASSY.

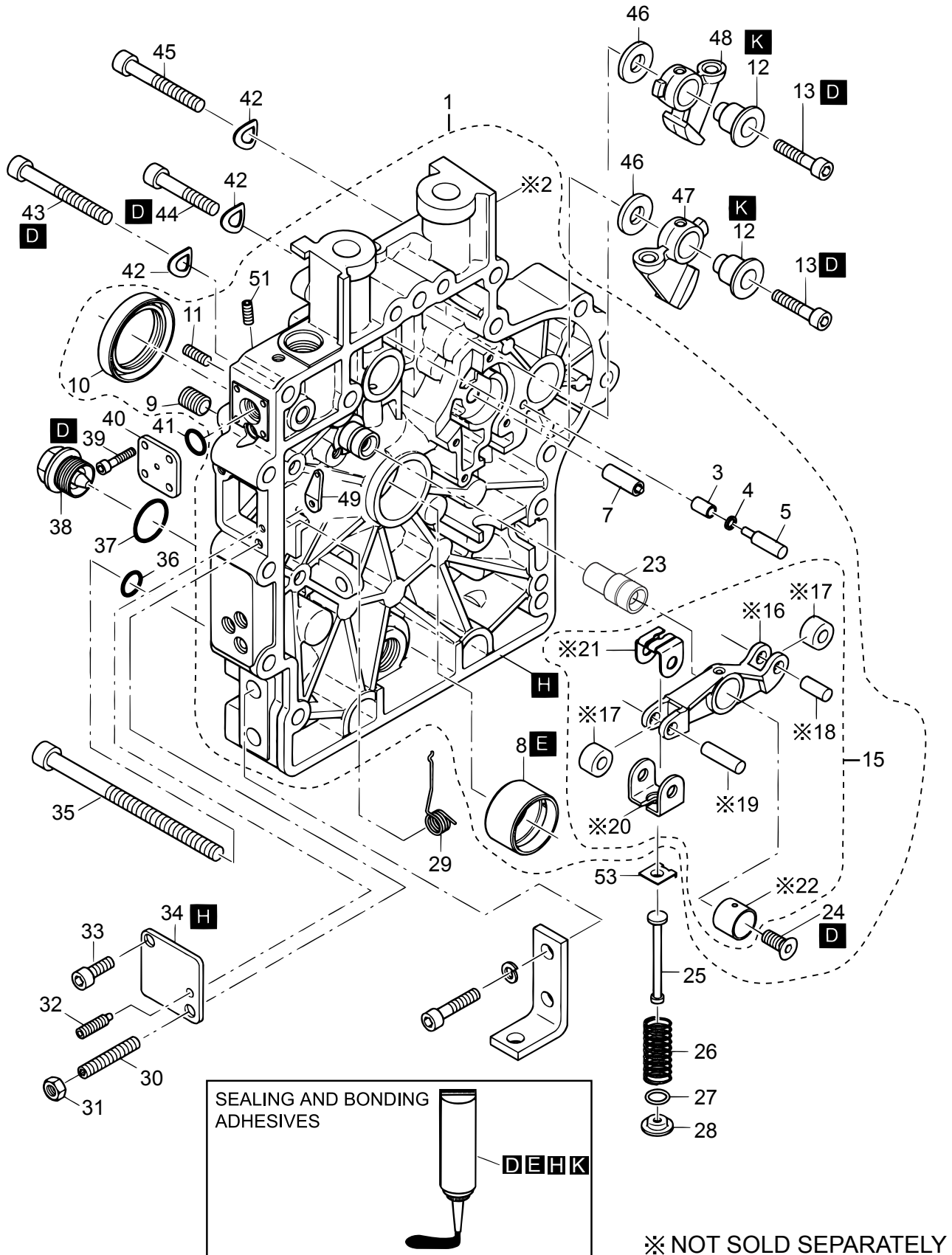


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — OIL PUMP, GOVERNOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
D	50223300	LOCTITE 221	1	
H	70018944	TEROSON TEROSTAT 63	1	
M	50485100	GRINDING PASTE 80ML	1	
1	01344510	OIL PUMP ASSY.	1	INCLUDES ITEMS W/\$
2\$		HOUSING, OIL PUMP	1	NOT SOLD SEPARATELY
3\$	04210910	CIRCLIP	1	
4\$		GEAR, OIL PUMP.....	1	NOT SOLD SEPARATELY
5\$		SPACER, OIL PUMP	1	NOT SOLD SEPARATELY
6	05078110	COVER, OIL PUMP	1	
7	05097100	RETAINING STRAP	1	
8	50447900	BALL 3.5MM	1	
9	50429400	ALLEN SCREW M5X12	4	
10	05097300	FLAT SPRING 0.4	1	
11	01346000	TUBE, OIL SUCTION	1	
12	04153400	FISHPLATE	1	
13	40002600	BLIND RIVET 3.2 K44311	2	
14	05078600	SHAFT	1	
15	50434800	CIRCLIP 1.9	2	
16	04208300	LEVER	1	
17%	50422400	SHIM 8X14X1	2	
18	01530404	GOVERNOR LEVER	1	
19	50125800	DISC 8X14X0.5	1	
20	04290100	GOVERNOR SPRING	1	SELECT 0-1
21	05130800	STOP	1	
22	05079800	INTERMEDIATE PLATE	1	SELECT 1-5
23	50465300	ALLEN SCREW M3X8	2	
31	50092700	CIRCLIP 7	4	
32%		SHAFT	1	NOT SOLD SEPARATELY
34	50563400	TENSION SPRING	1	SELECT 0-1
34A	04000200	TENSION SPRING	1	SELECT 0-1
35	40022401	O-RING 8X2 GRAY	1	
38	50475700	GRUB SCREW M10X10	1	
39	05178810	ECCENTRIC SCREW	2	
40	05178400	PLATE	1	
41	50492300	FILLISTER HEAD SCREW M5X12	1	
42	50216300	WASHER 5.3	1	
43	50492200	ALLEN SCREW M5X25	1	
44#		STOP	1	NOT SOLD SEPARATELY
45#	50094300	HEXAGON NUT M5	1	
46	05079611	CENTRIFUGAL WEIGHT	1	SELECT 0-4
48	05078502	GOVERNOR SLEEVE	1	
50	05154010	SPRING	1	SELECT 0-1
51	05179000	BUSH	1	SELECT 0-1
52	50400600	GRUB SCREW M5X10	1	SELECT 0-1
53	05307300	PLUG 4.5X3	1	
54	50574600	THREADED PIN M6X10	1	
55	01981000	SHAFT W/ SHIMS	1	INCLUDES ITEM W/%
56	02340300	STOP W/ NUT	1	INCLUDES ITEM W/#

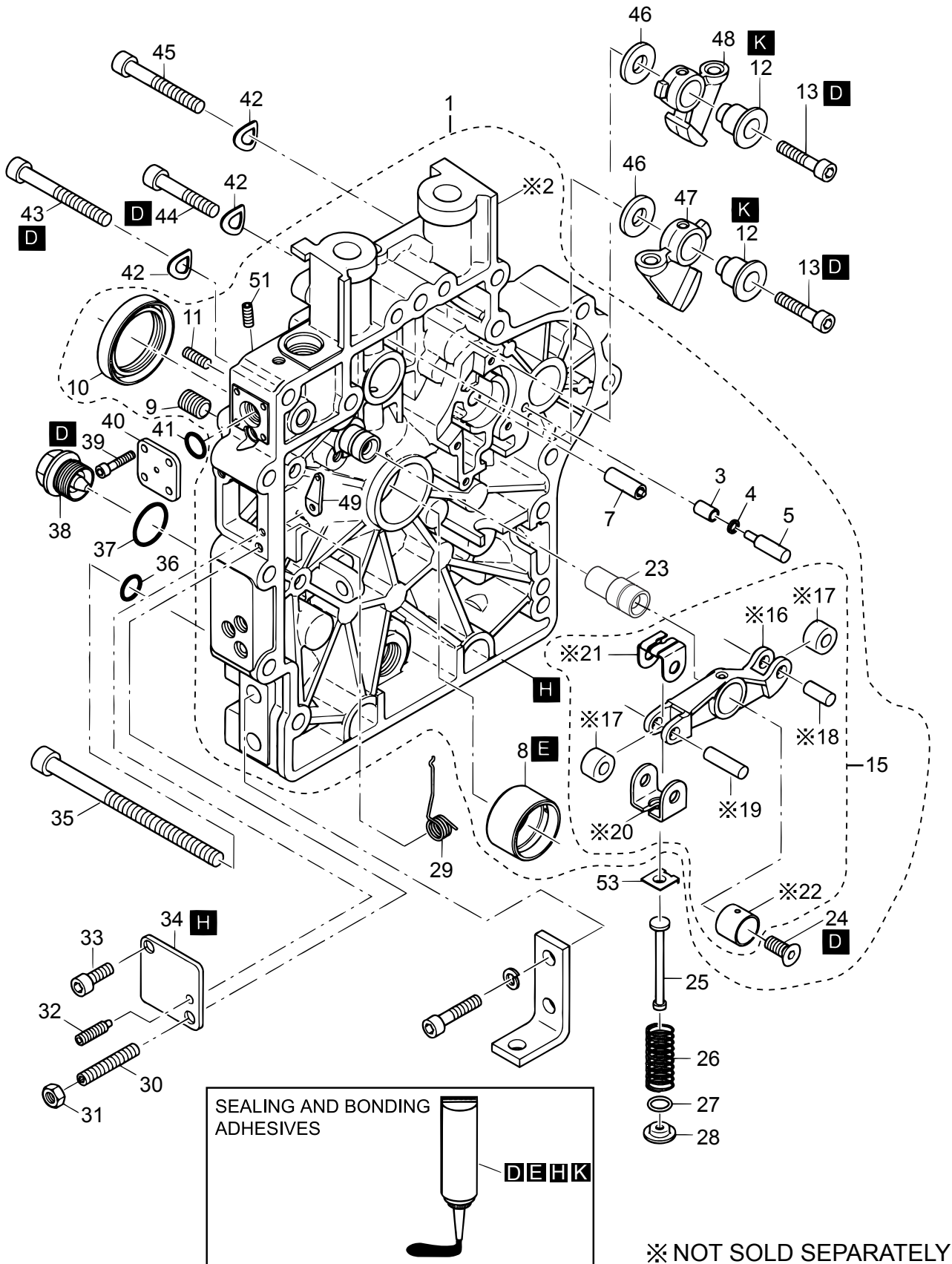
HATZ 1B50 ENGINE — TIMING COVER ASSY.



HATZ 1B50 ENGINE — TIMING COVER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
D	50223300	LOCTITE 221	1	
E	50223400	LOCTITE 648	1	
H	70018944	TEROSON TEROSTAT 63	1	
K	50342601	HIGH TEMPERATURE FETT 400G	1	
1	02262600	TIMING COVER ASSY.	1	INCLUDES ITEMS W/\$
2\$		TIMING COVER.....	1	NOT SOLD SEPARATELY
3\$	04185800	CLOSING PLUG	1	
4\$	50464100	O-RING 2X1	1	
5\$	04185700	CLOSING PLUG 4X15	1	
7\$	01344600	BOLT, GOVERNOR HOUSING	1	
8\$	04148801	MAIN BEARING, STANDARD	1	
8	04220801	MAIN BEARING, US -0.5	1	
9\$	50530600	GRUB SCREW M8X10	4	
10\$	50479500	OIL SEAL 35X47X7	1	
11\$	50400600	GRUB SCREW M5X10	2	
12	03794201	CAM FOLLOW SPINDLE	2	
13	50457900	ALLEN SCREW M6X25	2	
15\$	01346720	ROCKER LEVER ASSY.....	1	INCLUDES ITEMS W/%
16%		ROCKER LEVER.....	1	NOT SOLD SEPARATELY
17%		BUSHING.....	2	NOT SOLD SEPARATELY
18%		BOLT, ROCKER LEVER	1	NOT SOLD SEPARATELY
19%		BOLT, ROCKER LEVER	1	NOT SOLD SEPARATELY
20%		CLAMP, LOWER	1	NOT SOLD SEPARATELY
21%		CLAMP, UPPER.....	1	NOT SOLD SEPARATELY
22%		BUSHING.....	1	NOT SOLD SEPARATELY
23\$	04096830	CAM FOLLOW SPINDLE	1	
24\$	50561800	COUNTERSUNK SCREW M6X40	1	
25	04094700	DRAW ROD	1	
26	04095700	PRESSURE SPRING	1	
27	04133900	DISC 10.7X19X0.5	1	
28	04094802	CUP	1	
29	05095210	SPRING, GOVERNOR	1	
30	50499300	GRUB SCREW M6X35	1	
31	020106050	HEXAGON NUT M6.....	1	REPLACES P/N 50144400
32	50499400	GRUB SCREW M4X25	1	
33	50384200	ALLEN SCREW M6X12	1	
34	04095210	COVER	1	
35	50463000	ALLEN SCREW M8X130	2	
36	50162900	JOINT A8X14	2	
37	50001600	GASKET	1	
38	50373100	DRAIN PLUG MAGNT. M22	1	
39	50397100	ALLEN SCREW M4X10	4	
40	01351700	COVER	1	

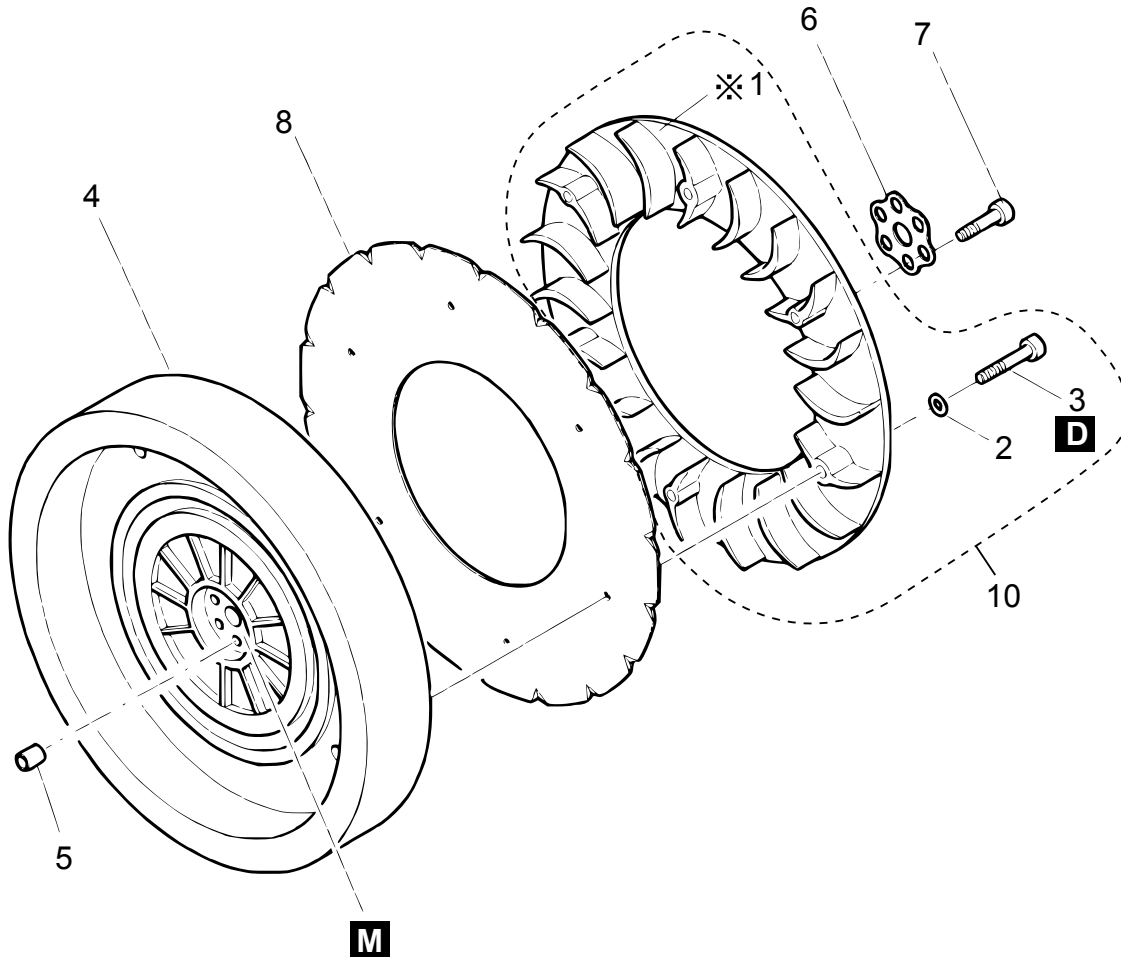
HATZ 1B50 ENGINE — TIMING COVER ASSY. (CONT'D.)



HATZ 1B50 ENGINE — TIMING COVER ASSY. (CONT'D.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
41	50329000	O-RING 9.5X2.5	1	
42	50095100	WASHER, LOCK A8	15	
43	50288800	ALLEN SCREW M8X55	11	
44	50177500	ALLEN SCREW M8X40	2	
45	50392900	ALLEN SCREW M8X50	2	
46	03794100	WASHER	2	
47	04146600	CAM FOLLOWER	1	
48	04146000	CAM FOLLOWER	1	
49	05127100	LEVER	1	
51	50262400	THREADED PIN M6X10	1	
53	04189500	CUP	1	

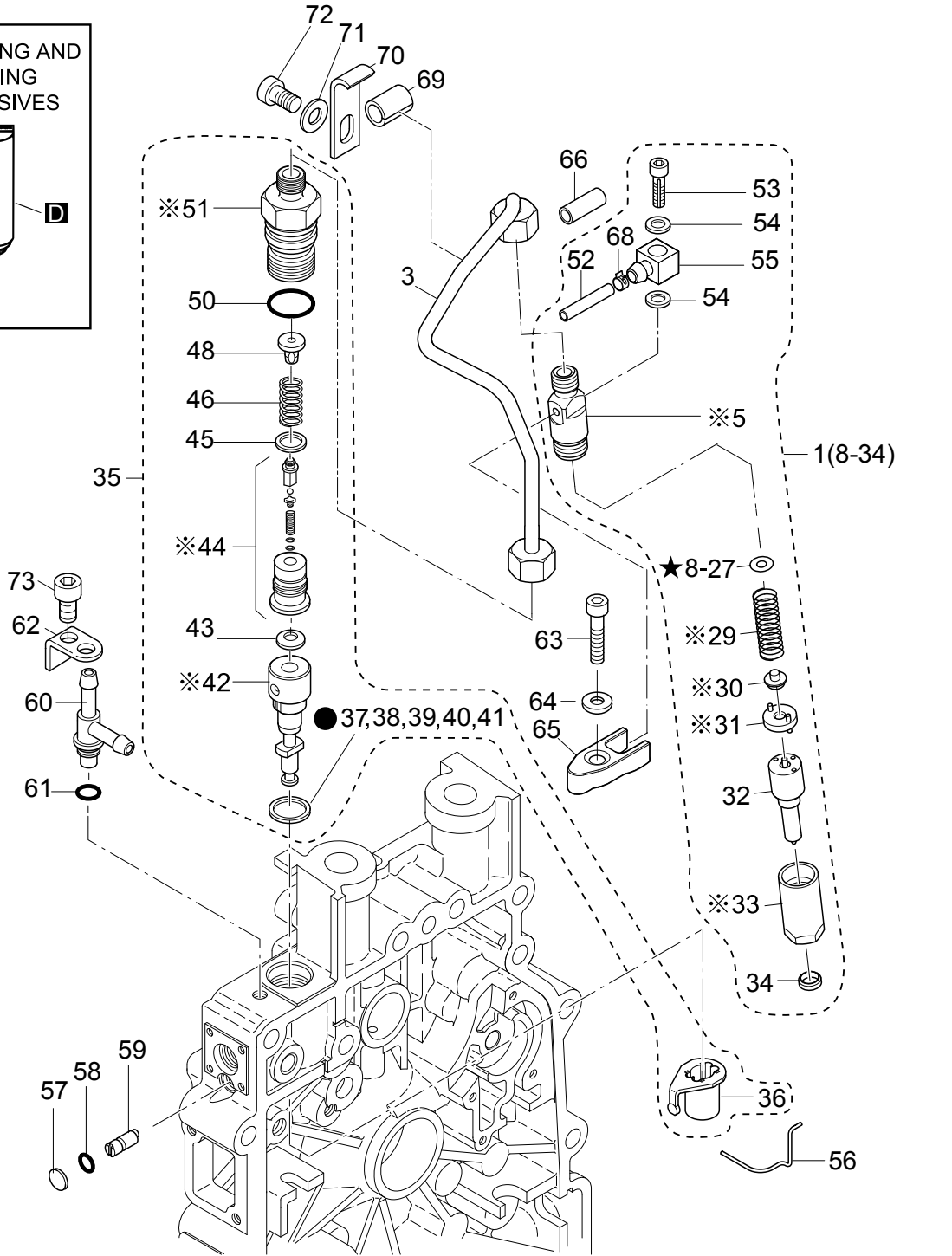
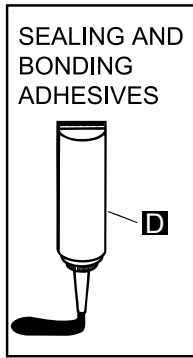
HATZ 1B50 ENGINE — BLOWER, FLYWHEEL ASSY.



HATZ 1B50 ENGINE — BLOWER, FLYWHEEL ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
D	50223300	LOCTITE 221	1	
M	50485100	GRINDING PASTE 80ML	1	
1\$		BLOWER RING	1.....	NOT SOLD SEPARATELY
2\$	50003400	WASHER, LOCK A4	6	
3\$	50327300	ALLEN SCREW M4X20	6	
4	04234700	FLYWHEEL	1	
5	04288200	BUSH	1	
6	04155101	PLATE	1	
7	50502501	ALLEN SCREW M8X35	6	
8	01390800	PLATE	1	
10	01934300	BLOWER RING W/ WASHER AND SCREW.....	1	INCLUDES ITEMS W/\$

HATZ 1B50 ENGINE — INJECTION EQUIPMENT ASSY.



※ NOT SOLD SEPARATELY

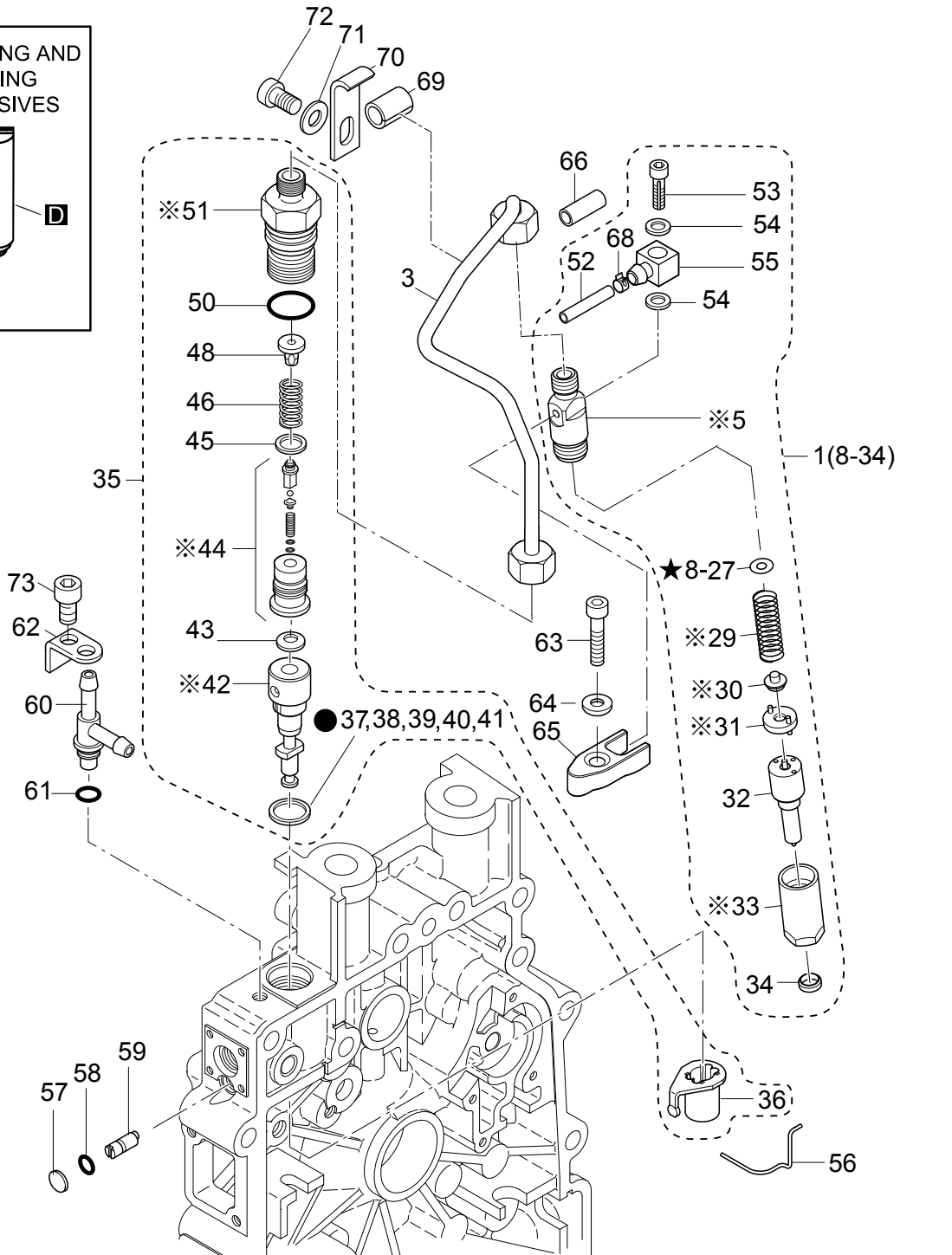
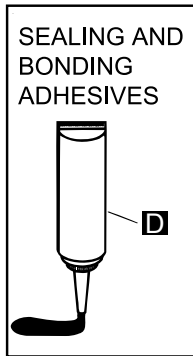
● Use for adjustment	
37	0.2mm
38	0.3mm
39	0.4mm
40	0.5mm
41	0.6mm

★ Use for adjustment							
8	1.00mm	13	1.24mm	18	1.50mm	23	1.74mm
9	1.04mm	14	1.30mm	19	1.54mm	24	1.80mm
10	1.10mm	15	1.34mm	20	1.60mm	25	1.84mm
11	1.14mm	16	1.40mm	21	1.64mm	26	1.90mm
12	1.20mm	17	1.44mm	22	1.70mm	27	1.94mm

HATZ 1B50 ENGINE — INJECTION EQUIPMENT ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
D	50223300	LOCTITE 221	1	
1	01399510	INJECTOR ASSY.	1	INCLUDES ITEMS W/\$
3	02022901	FUEL PRESSURE PIPE	1	
5\$		HOUSING, INJECTOR	1	NOT SOLD SEPARATELY
8\$	50436400	SHIM 1.0	1	SELECT 0-1
9	50436500	SHIM 1.04	1	SELECT 0-1
10	50436600	SHIM 1.10	1	SELECT 0-1
11	50436700	SHIM 1.14	1	SELECT 0-1
12	50436800	SHIM 1.20	1	SELECT 0-1
13	50436900	SHIM 1.24	1	SELECT 0-1
14	50437000	SHIM 1.30	1	SELECT 0-1
15	50437100	SHIM 1.34	1	SELECT 0-1
16	50437200	SHIM 1.40	1	SELECT 0-1
17	50437300	SHIM 1.44	1	SELECT 0-1
18	50437400	SHIM 1.50	1	SELECT 0-1
19	50437500	SHIM 1.54	1	SELECT 0-1
20	50437600	SHIM 1.60	1	SELECT 0-1
21	50437700	SHIM 1.64	1	SELECT 0-1
22	50437800	SHIM 1.70	1	SELECT 0-1
23	50437900	SHIM 1.74	1	SELECT 0-1
24	50438000	SHIM 1.80	1	SELECT 0-1
25	50438100	SHIM 1.84	1	SELECT 0-1
26	50438200	SHIM 1.90	1	SELECT 0-1
27	50438300	SHIM 1.94	1	SELECT 0-1
29\$		SPRING, INJECTOR	1	NOT SOLD SEPARATELY
30\$		GUIDE, INJECTOR SPRING	1	NOT SOLD SEPARATELY
31\$		HOLDER, GUIDE	1	NOT SOLD SEPARATELY
32\$	50577410	NOZZLE	1	
33\$		BODY, INJECTOR	1	NOT SOLD SEPARATELY
34\$	05070500	JOINT WASHER INJECTOR	1	
35	01680820	INJECTION PUMP ASSY.	1	INCLUDES ITEMS W/%
36%	01330801	CONTROL SLEEVE	1	
37%	04096300	SHIM 14X18X0.2	1	SELECT 0-1
38	04096400	SHIM 14X18X0.3	1	SELECT 0-1
39	04096500	SHIM 14X18X0.4	1	SELECT 0-1
40	04096600	SHIM 14X18X0.5	1	SELECT 0-1
41	04096700	SHIM 14X18X0.6	1	SELECT 0-1
42%		VALVE, INJECTION PUMP	1	NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — INJECTION EQUIPMENT ASSY. (CONT'D.)



※ NOT SOLD SEPARATELY

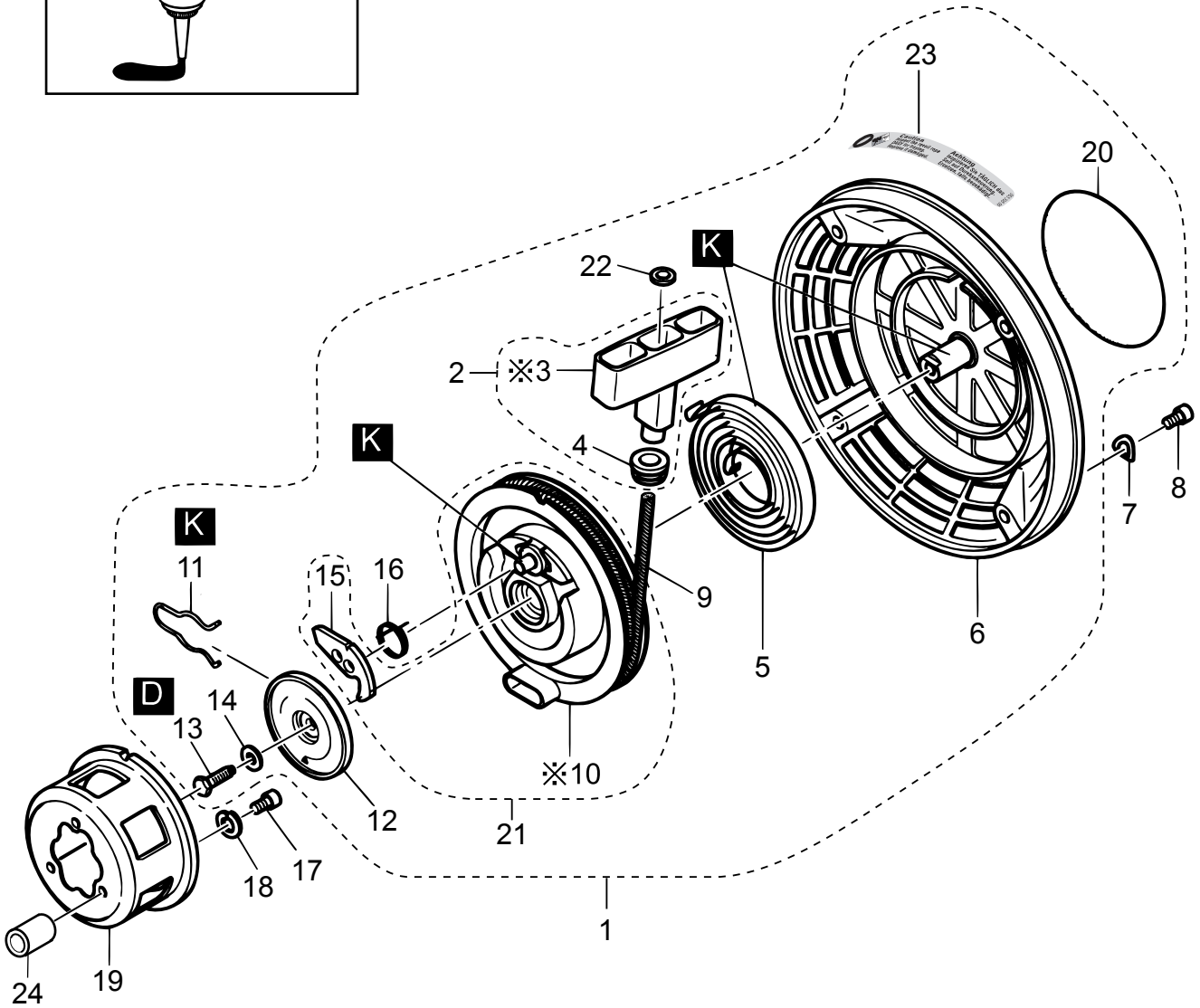
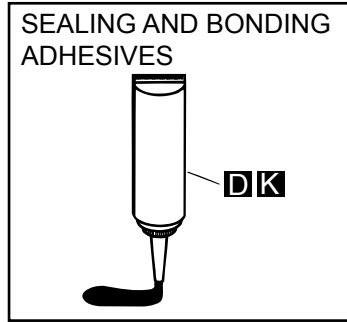
● Use for adjustment	
37	0.2mm
38	0.3mm
39	0.4mm
40	0.5mm
41	0.6mm

★ Use for adjustment					
8	1.00mm	13	1.24mm	18	1.50mm
9	1.04mm	14	1.30mm	19	1.54mm
10	1.10mm	15	1.34mm	20	1.60mm
11	1.14mm	16	1.40mm	21	1.64mm
12	1.20mm	17	1.44mm	22	1.70mm
				23	1.74mm
				24	1.80mm
				25	1.84mm
				26	1.90mm
				27	1.94mm

HATZ 1B50 ENGINE — INJECTION EQUIPMENT ASSY. (CONT'D.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
43%	04165200	SEALING WASHER	1	
44%		VALVE COMPONENTS	1	NOT SOLD SEPARATELY
45%	50476900	JOINT WASHER	1	
50%	50489200	O-RING 17X2	1	
51%		HOUSING, INJECTION PUMP.....	1	NOT SOLD SEPARATELY
52\$	04282000	HOSE 2.5X245	1	
53\$	04281900	ALLEN SCREW M4X14	1	
54\$	50110800	JOINT A 4X8	2	
55\$	05129000	CONNECTING NIPPLE	1	
56	04161800	HOLDING SPRING	1	
57	50476000	DISC	1	
58	50330100	O-RING 4X1.2	1	
59	04097710	ECCENTRIC PIN	1	
60	01756800	NIPPLE	1	
61	50154300	O-RING 7.5X10.5X1.5	1	
62	05390700	SUPPORT	1	
63	50323900	ALLEN SCREW M6X30	1	
64	50596500	BALL DISC	1	
65	04281801	FORK, INJECTOR	1	
66	05267901	INSULATION HOSE 185MM	1	
68\$	50577900	CLAMP	1	
69	04282700	PROTECTION HOSE	1	
70	04282600	SUPPORT	1	
71	50144500	WASHER, FLAT 6.4	1	
72	50528100	ALLEN SCREW M6X16	1	
73	50547000	ALLEN SCREW M5X25	1	

HATZ 1B50 ENGINE — RECOIL STARTER ASSY.

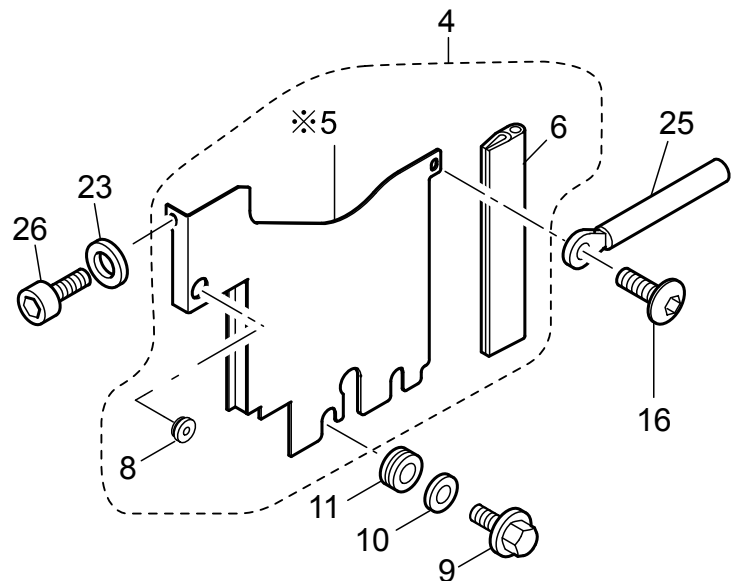
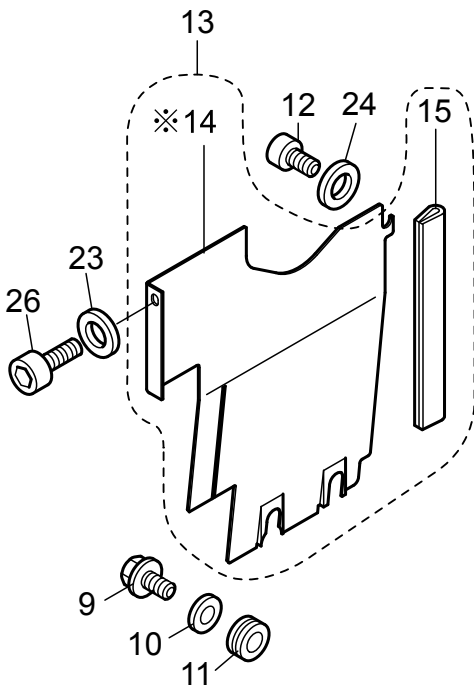
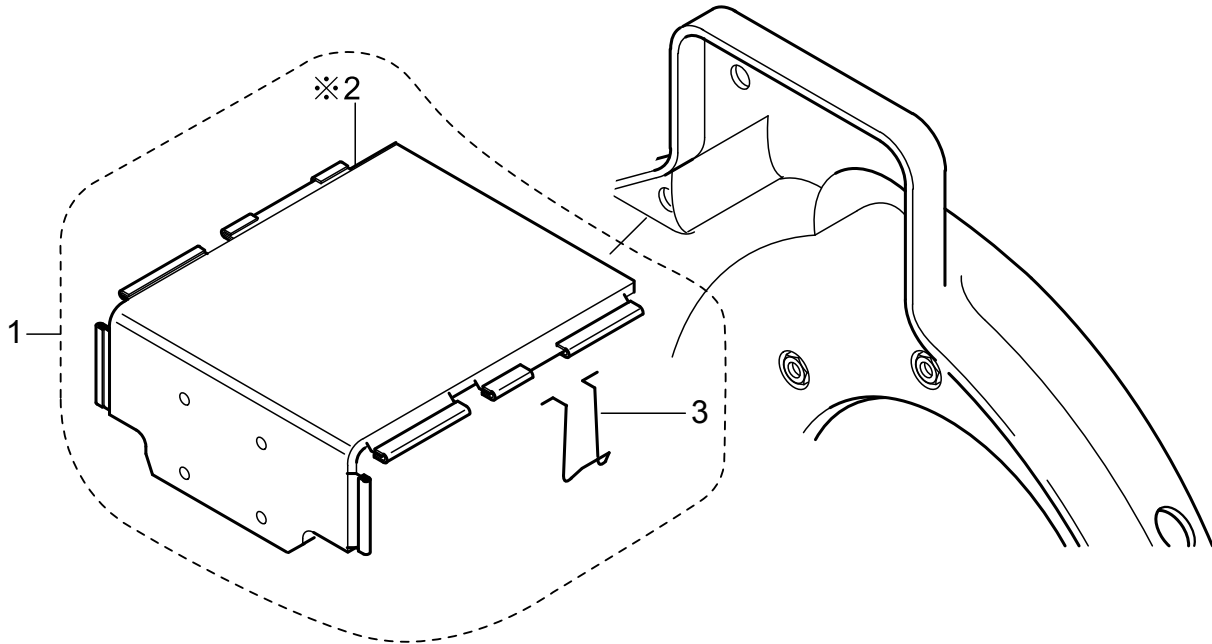


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — RECOIL STARTER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
D	50223300	LOCTITE 221	1	
K	50342601	HIGH TEMP. FETT 400G	1	
1	02319100	RECOIL-STARTER ASSY.....	1	INCLUDES ITEMS W/\$
2\$	01497800	STARTER KNOB ASSY.	1	INCLUDES ITEMS W/%
3\$%		KNOB, STARTER.....	1	NOT SOLD SEPARATELY
4\$%	03665200	RUBBER SLEEVE	1	
5\$	05045202	SPIRAL SPRING	1	
6\$	02308100	CASE RECOIL-STARTER	1	
7	50081200	WASHER, LOCK A6	4	
8	50062700	ALLEN SCREW M6X10	4	
9\$	01929000	ROPE, RECOIL	1	
10\$@		REEL.....	1	NOT SOLD SEPARATELY
11\$	05044901	BRAKE SPRING	1	
12\$	05045001	BRAKE DISC	1	
13\$	50146300	HEXAGON SCREW M6X18	1	
14\$	50390701	CON. WASHER, LOCK 6	1	
15 \$@	05044800	RATCHET, RECOIL STARTER	1	
16\$	05061300	RETURN SPRING	1	
17	50062700	ALLEN SCREW M6X10	3	
18	50170900	WASHER, LOCK 6	3	
19	04155000	STARTER PULLEY	1	
20\$	05109103	STICKER LABEL	1	
21\$	01548800	REEL WITH RATCHET, RECOIL	1	INCLUDES ITEMS W/@
22\$	50514600	WASHER 5.3	1	
23\$	05333801	STICKER	1	
24	05188600	SPACER BUSH 7X12X7	3	

HATZ 1B50 ENGINE — AIR DUCTING A ASSY.



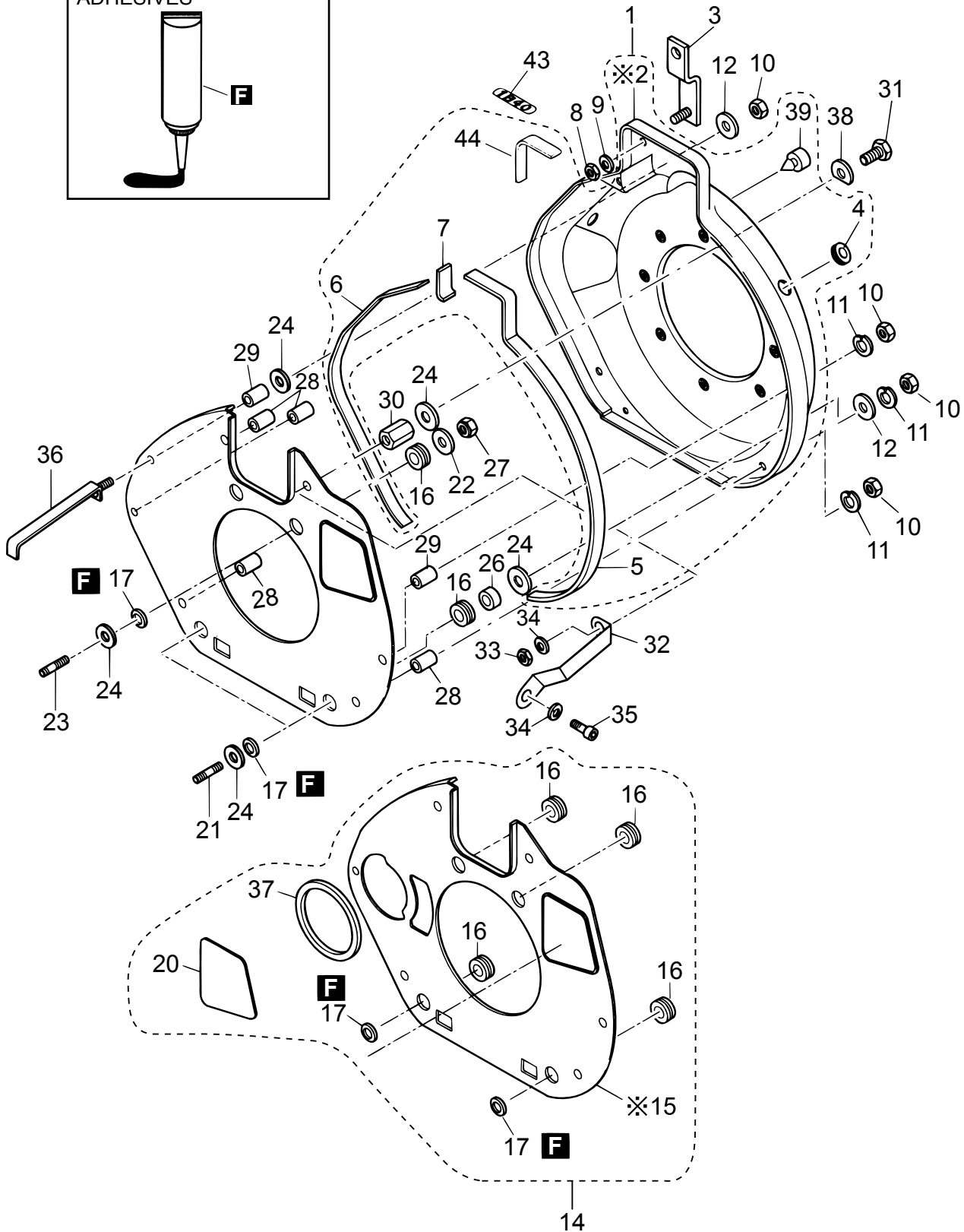
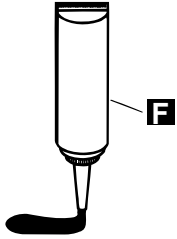
※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — AIR DUCTING A ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	01911801	HOOD ASSY.	1.....	INCLUDES ITEMS W/\$
2\$		HOOD	1.....	NOT SOLD SEPARATELY
3\$	05152100	SPRING CLIP	1	
4	01345410	COOLING AIR DUCTING	1.....	INCLUDES ITEMS W/%
5%		DUCT	1.....	NOT SOLD SEPARATELY
6%	04144210	SEALING STRIP 93MM	1	
8%	50334800	RUBBER SLEEVE	1	
9	50445401	FILLISTER HEAD SCREW M4X10	4	
10	50441600	WASHER 4.3	4	
11	50163801	RUBBER SLEEVE	4	
12	50528100	ALLEN SCREW M6X16	1	
13	01345310	COOLING AIR DUCTING 2	1.....	INCLUDES ITEMS W/@
14@		DUCT 2.....	1.....	NOT SOLD SEPARATELY
15@	04144210	SEALING STRIP 93MM	1	
16	50495000	CHEESE-HEX HEAD SCREW M6X12	1	
22	03577200	SEALING STRIP	1	
23	50144500	WASHER, FLAT 6.4	2	
24	04060600	WASHER 6.4X16X1.5	1	
25	05001200	CLIP	1	
26	50474200	ALLEN SCREW M6X16	2	

HATZ 1B50 ENGINE — AIR DUCTING B ASSY.

SEALING AND BONDING
ADHESIVES

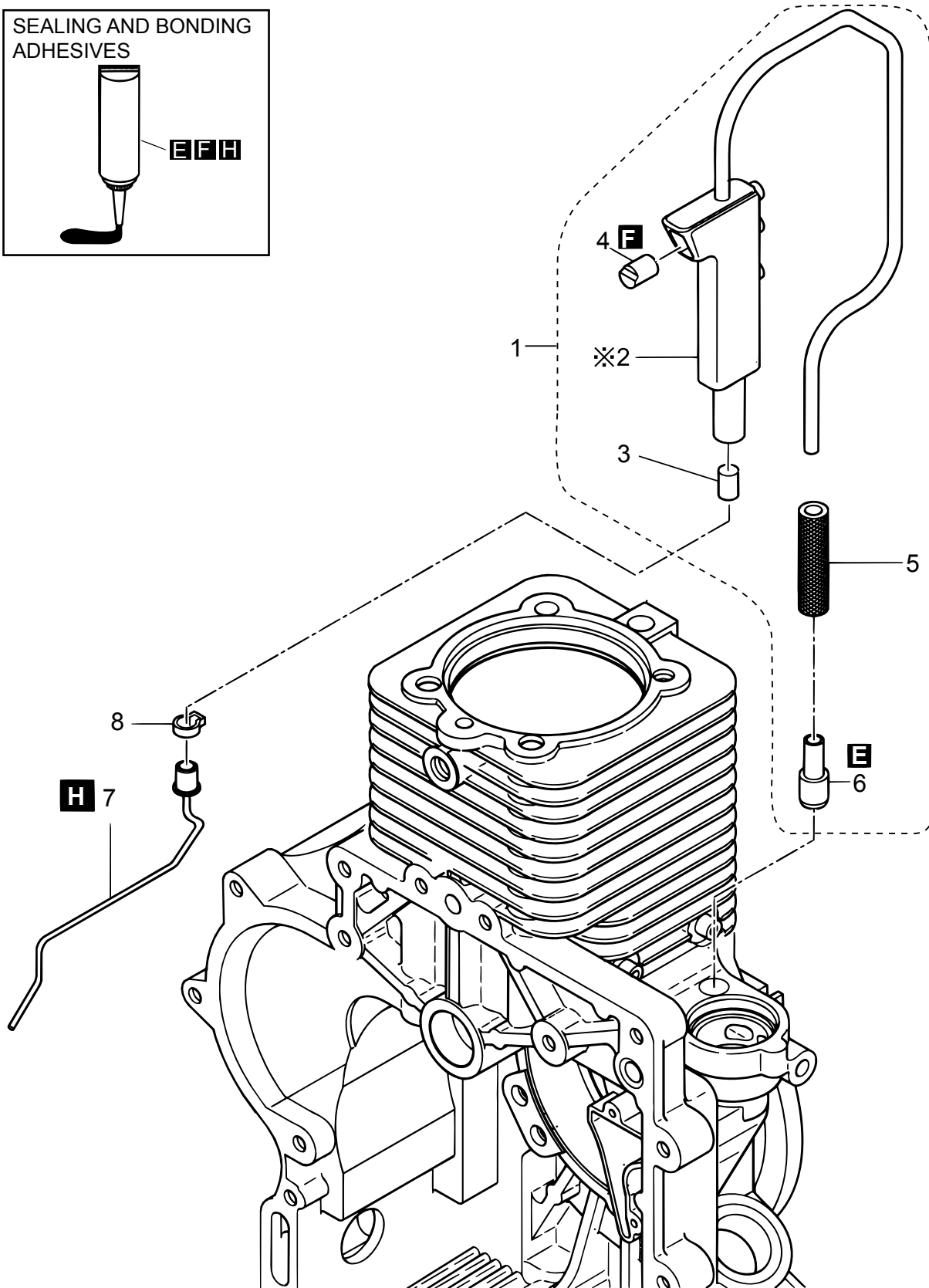
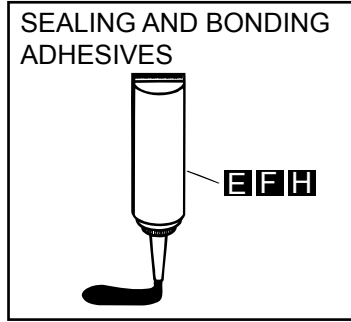


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — AIR DUCTING B ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
F	50223800	TECHNICAL ADHESIVE 8058	1	
1	01831301	BLOWER DUCTING ASSY.	1	INCLUDES ITEMS W/\$
2\$		HOUSING, BLOWER DUCT.....	1	NOT SOLD SEPARATELY
3\$	01331300	SUPPORT	2	
4\$	50453300	RUBBER SLEEVE	1	
5\$	05401600	SEALING STRIP 715MM	1	
6\$	05401500	SEALING STRIP 555MM	1	
7\$	05401400	SEALING STRIP 57MM	1	
8	020106050	HEXAGON NUT M6	2	REPLACES P/N 50144400
9	50170900	WASHER, LOCK 6	2	
10	020106050	HEXAGON NUT M6	7	REPLACES P/N 50144400
11	50170900	WASHER, LOCK 6	8	
12	50120000	DISC A 6.4	3	
14	01347600	PROTECTION SHIELD.....	1	INCLUDES ITEMS W/%
15%		SHIELD, PROTECTION.....	1	NOT SOLD SEPARATELY
16%	01378300	SPACER BUSHING	4	
17%	03575500	RUBBER SEAL RING	4	
20%	04215200	CLOSING COVER	1	
21	50458100	STUD M6X45	2	
22	50114300	DISC 6.4	2	
23	50464401	STUD M6FOX35	2	
24	04042000	WASHER 6.5X22.5X1	7	
26	05188600	SPACER BUSH 7X12X7	2	
27	50328300	HEXAGON NUT VM6	2	
28	04139000	SPACER TUBE 6.5X12X18	4	
29	04098400	SPACER TUBE 7X12X16.3	2	
30	05184000	HEXAGON NUT M6X17	1	
31	50026400	HEXAGON SCREW M6X35	1	
32	01669400	SUPPORT	1	
33	020106050	HEXAGON NUT M6	1	REPLACES P/N 50144400
34	50170900	WASHER, LOCK 6	2	
35	50170700	ALLEN SCREW M6X16	1	
36	01683300	SUPPORT	1	
37%	04099500	SEALING RING	1	
38	05140900	WASHER	1	
39\$	50392610	RUBBER BUSHING	1	SELECT 0-4
43	05314300	STICKER	1	
44\$	05401300	PROTECTION 58MM	1	

HATZ 1B50 ENGINE — CRANKCASE BREATHING SYSTEM ASSY.



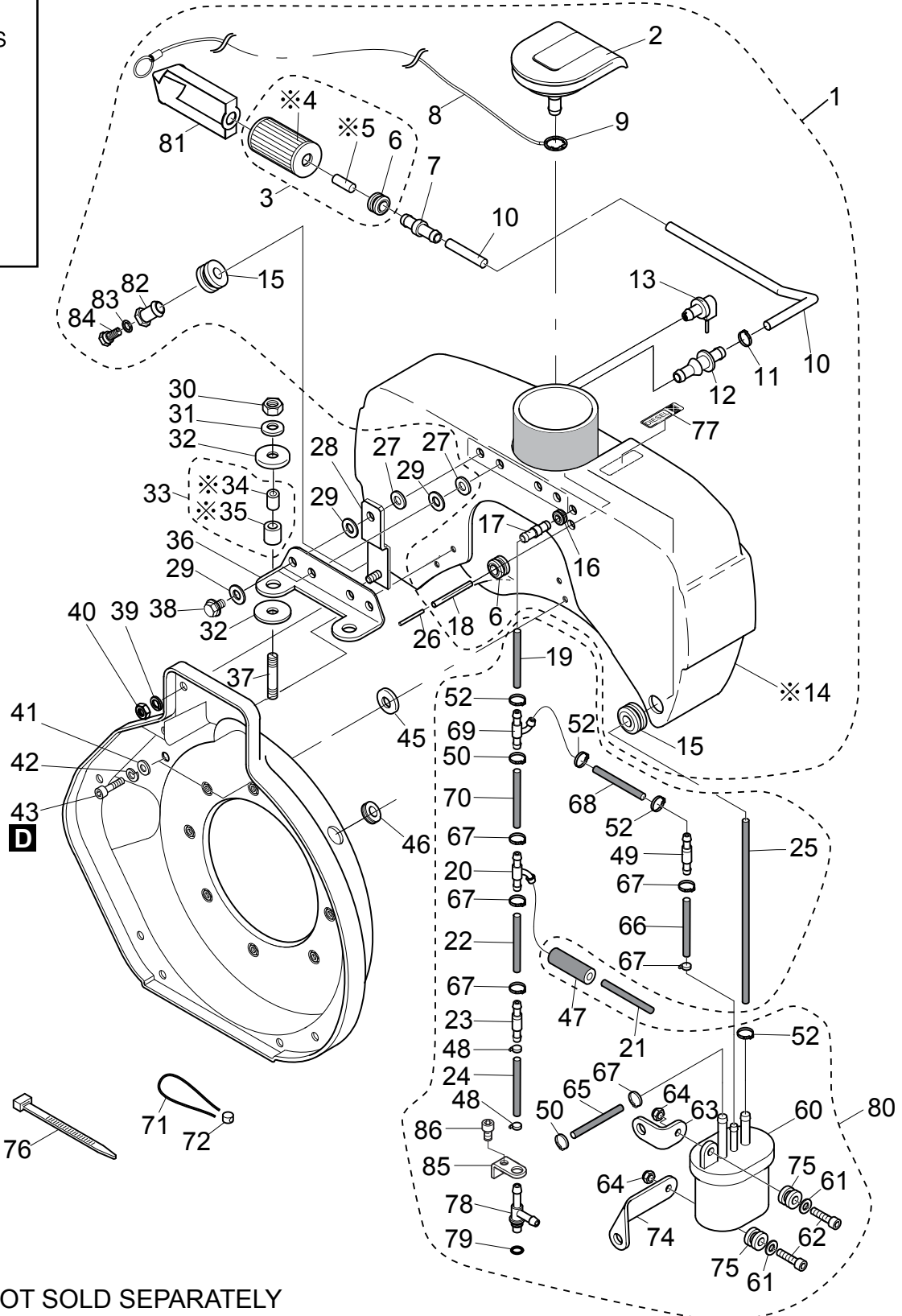
※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — CRANKCASE BREATHING SYSTEM ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
E	50223400	LOCTITE 648	1	
G	50256501	LOCTITE IS 407	1	
H	70018944	TEROSON TEROSTAT 63	1	
1	01885800	CRANKCASE BREATHER ASSY.	1	INCLUDES ITEMS W/%
2%		HOUSING, CRANKCASE BREATHER.....	1	NOT SOLD SEPARATELY
3%	05102900	FILTER BREATHING SYSTEM	1	
4%	05098100	PLUG	1	
5%	05197200	FUEL PIPE LW 7X35	1	
6%	05196000	NIPPLE	1	
7	01626900	SUCTION PIPE	1	
8	50456800	CLAMP	1	

HATZ 1B50 ENGINE — FUEL ASSY.

SEALING AND
BONDING
ADHESIVES



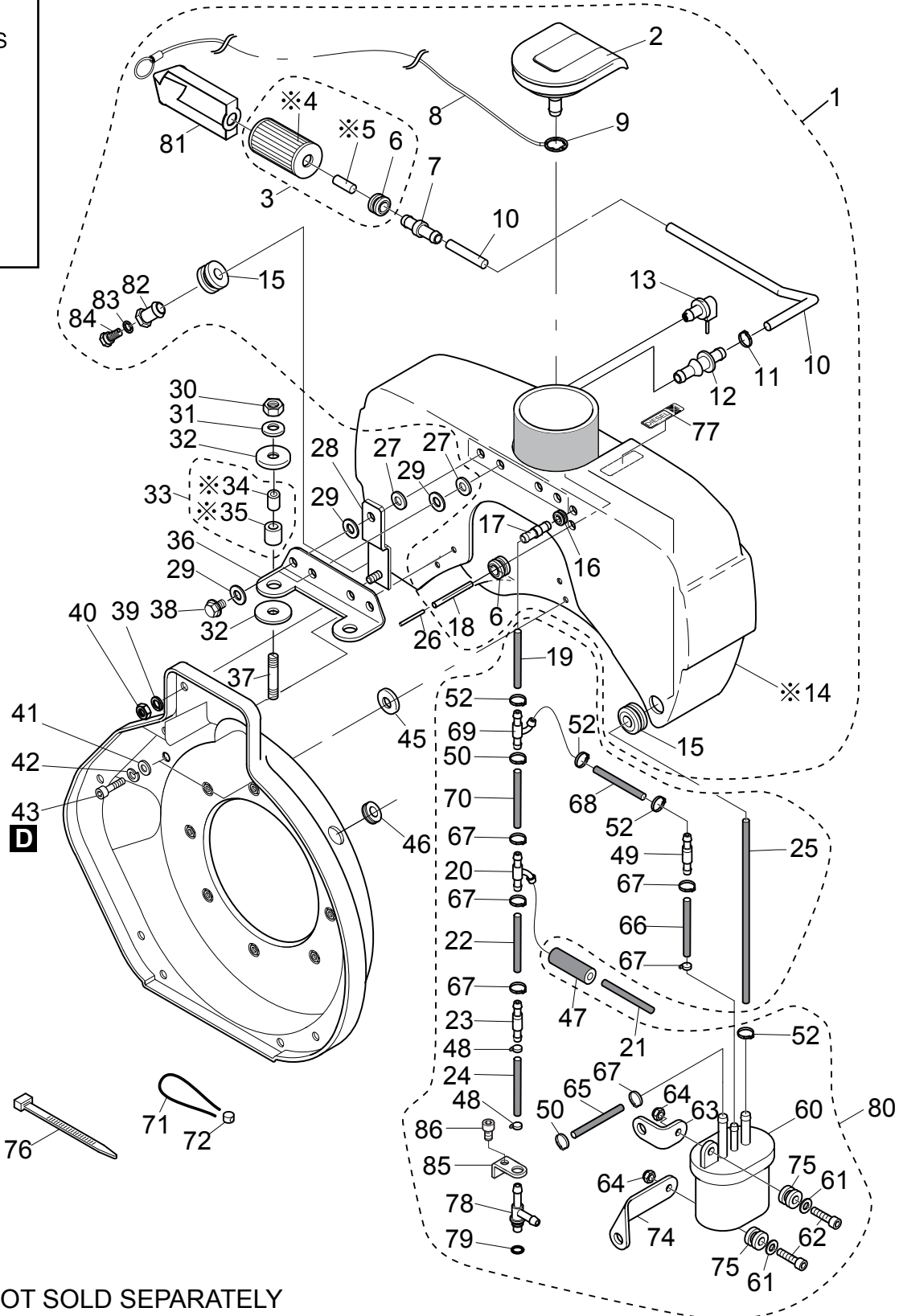
※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — FUEL ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
D	50223300	LOCTITE 221	1	
1	02221000	FUEL TANK ASSY., 5L	1	INCLUDES ITEMS W/\$
2\$	01535302	CAP, FUEL TANK	1	
3\$	01635210	FUEL FILTER ASSY.....	1	INCLUDES ITEMS W/%
4\$%		FUEL FILTER.....	1	NOT SOLD SEPARATELY
5\$%		BUSHING.....	1	NOT SOLD SEPARATELY
6\$%	50440901	RUBBER SLEEVE	2	
7\$	05189001	CONNECTING NIPPLE	1	
8\$	01628900	ROPE	1	
9\$	50500800	CIRCLIP 8	1	
10\$	05311100	FUEL HOSE 3.5X340	1	
11\$	50399801	CLAMP 11.3	1	
12\$	05084010	CONNECTING NIPPLE	1	
13\$	01534900	FUEL VENTING VALVE	1	
15\$	50440800	RUBBER SLEEVE	2	
16\$	05130400	RUBBER SLEEVE	1	
17\$	05184400	CONNECTING NIPPLE	1	
18\$	05189700	BREATHER HOSE	1	
19#	05289300	FUEL HOSE 5.0X50	1	
20#	05175602	HOSE NIPPLE T	1	
21	04282000	HOSE 2.5X245	1	
22#	03664210	HOSE 5X130	1	
23#	01534601	FUEL VENTING VALVE	1	
24#	05366400	FUEL PIPE 6X40	1	
25#	05347600	FUEL HOSE 3.5X215	1	
26	05141800	TUBE 2X0.3X25	1	
27	50120000	DISC A 6.4	4	
28	01331300	SUPPORT	2	
29	05110010	DISC 7.1X17.9X2	10	
30	020108060	HEXAGON NUT M8	2	REPLACES P/N 40028400
31	50148100	WASHER, FLAT 8.4	2	
32	05109810	DISC 8.20X22X2	4	
33	01655800	INSULATING TUBE ASSY.	2	INCLUDES ITEMS W/@
34@		TUBE	1	NOT SOLD SEPARATELY
35@		INSULATION.....	1	NOT SOLD SEPARATELY
36	05170110	SUPPORT	1	
37	50231900	STUD M8X25	2	
38	01557000	HEXAGON SCREW M6X16	4	
39	50170900	WASHER, LOCK 6	2	
40	50144000	HEXAGON SCREW M8X40	2	
41	50120000	DISC A 6.4	4	
42	50170900	WASHER, LOCK 6	4	
43	50149100	ALLEN SCREW M6X12	4	

HATZ 1B50 ENGINE — FUEL ASSY. (CONT'D.)

SEALING AND
BONDING
ADHESIVES

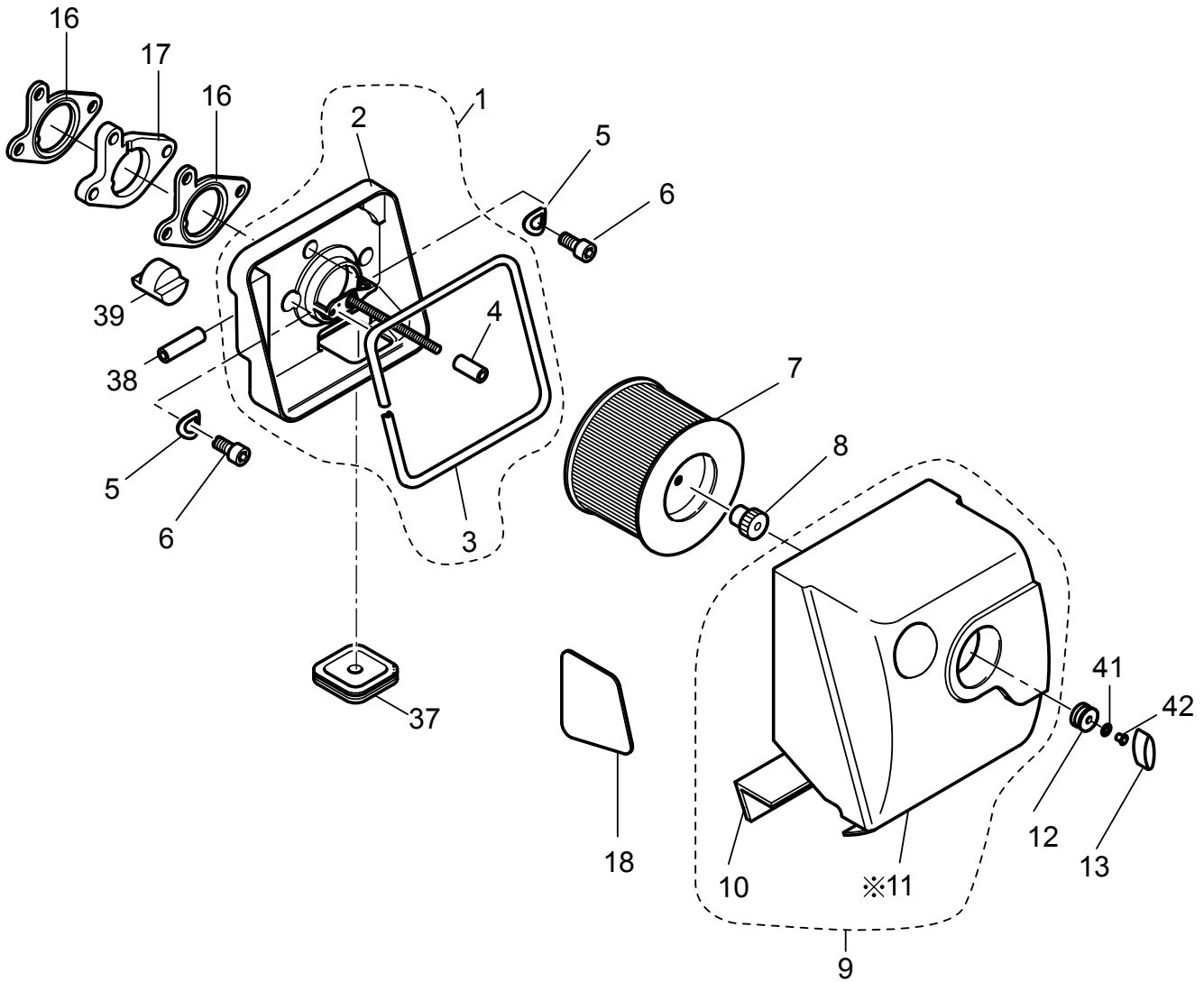


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — FUEL ASSY. (CONT'D.)

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
45	04042000	WASHER 6.5X22.5X1	2	
46	50453300	RUBBER SLEEVE	1	
47	05213010	INSULATING HOSE 25MM	1	
48#	50570900	CLAMP 12.8	2	
49#	00805502	VENT VALVE	1	
50#	50590000	CLAMP 12.0	1	
52#	50399801	CLAMP 11.3	4	
60#	01919702	FUEL FILTER, EXTERNAL MTG.	1	
61#	50441600	WASHER 4.3	2	
62#	50446900	ALLEN SCREW M4X16	2	
63#	05279500	SUPPORT	1	
64#	50501600	HEXAGON NUT M4	2	
65#	03663610	FUEL HOSE 5X330	1	
66#	03663610	FUEL HOSE 5X330	1	
67#	50570900	CLAMP 12.8	5	
68#	05289300	FUEL HOSE 5.0X50	1	
69#	05122701	HOSE NIPPLE T	1	
70#	03663710	FUEL HOSE 5.0X50	1	
71#	40021500	SEAL WIRE 0.5-0.3	1	
72#	40021400	LEAD SEAL 8MM	1	
74#	05285400	SUPPORT	1	
75#	50556600	RUBBER SLEEVE	2	
76	50358400	STRAP	2	
77\$	05235602	STICKER DIESEL	1	
78#	01756800	NIPPLE	1	
79#	50154300	O-RING 7.5X10.5X1.5	1	
80	02299400	FUEL PIPE ASSY. (INCLUDES FILTER)	1.....	INCLUDES ITEMS W/#
81\$	05253400	SUPPORT FUEL FILTER	1	
82\$	05188200	CONNECTING NIPPLE	1	
83\$	50313100	JOINT A6X10	1	
84\$	03613600	VENT SCREW M6	1	
85#	05390700	SUPPORT	1	
86#	50547000	ALLEN SCREW M5X25	1	

HATZ 1B50 ENGINE — AIR FILTER ASSY.

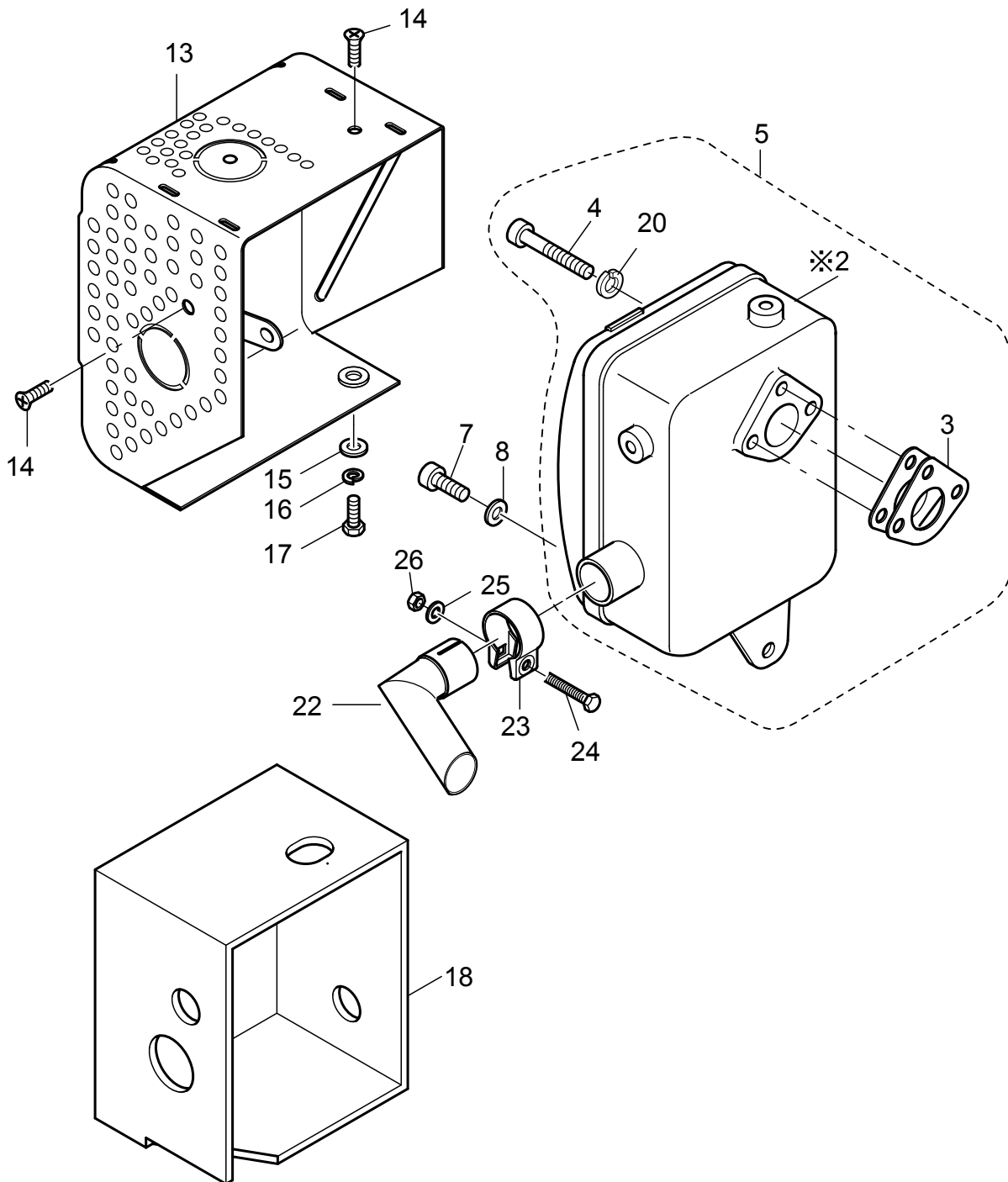


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — AIR FILTER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	01637410	AIR FILTER HOUSING ASSY.	1.....	INCLUDES ITEMS W/\$
2\$		HOUSING, AIR FILTER	1.....	NOT SOLD SEPARATELY
3\$	05167700	SEALING STRIP 665MM	1	
4\$	05166200	RUBBER SHELL 32MM	1	
5	50095100	WASHER, LOCK A8	3	
6	50171500	ALLEN SCREW M8X25	3	
7\$	50484100	AIR FILTER ELEMENT	1	
8	50454300	KNURLED NUT M6	1	
9	01822001	COVER, AIR FILTER ASSY.	1.....	INCLUDES ITEMS W/%
10%	05158000	SEALING STRIP	1	
11%		COVER, AIR FILTER	1.....	NOT SOLD SEPARATELY
12	50435800	RUBBER SLEEVE	1	
13	50452200	WING NUT M6	1	
16	05149900	GASKET AIR FILTER	2	
17	05149801	INSULATING FLANGE	1	
18	04215200	CLOSING COVER	1	
37	04215300	CLOSING COVER	1	
38	05309300	BREATHER TUBE	1	
39	05098100	PLUG	1	
41	50591500	SHIM 9X15X1.0	1	
42	50591600	TUBE RIVET A8X0.5X12	1	

HATZ 1B50 ENGINE — EXHAUST SILENCER ASSY.



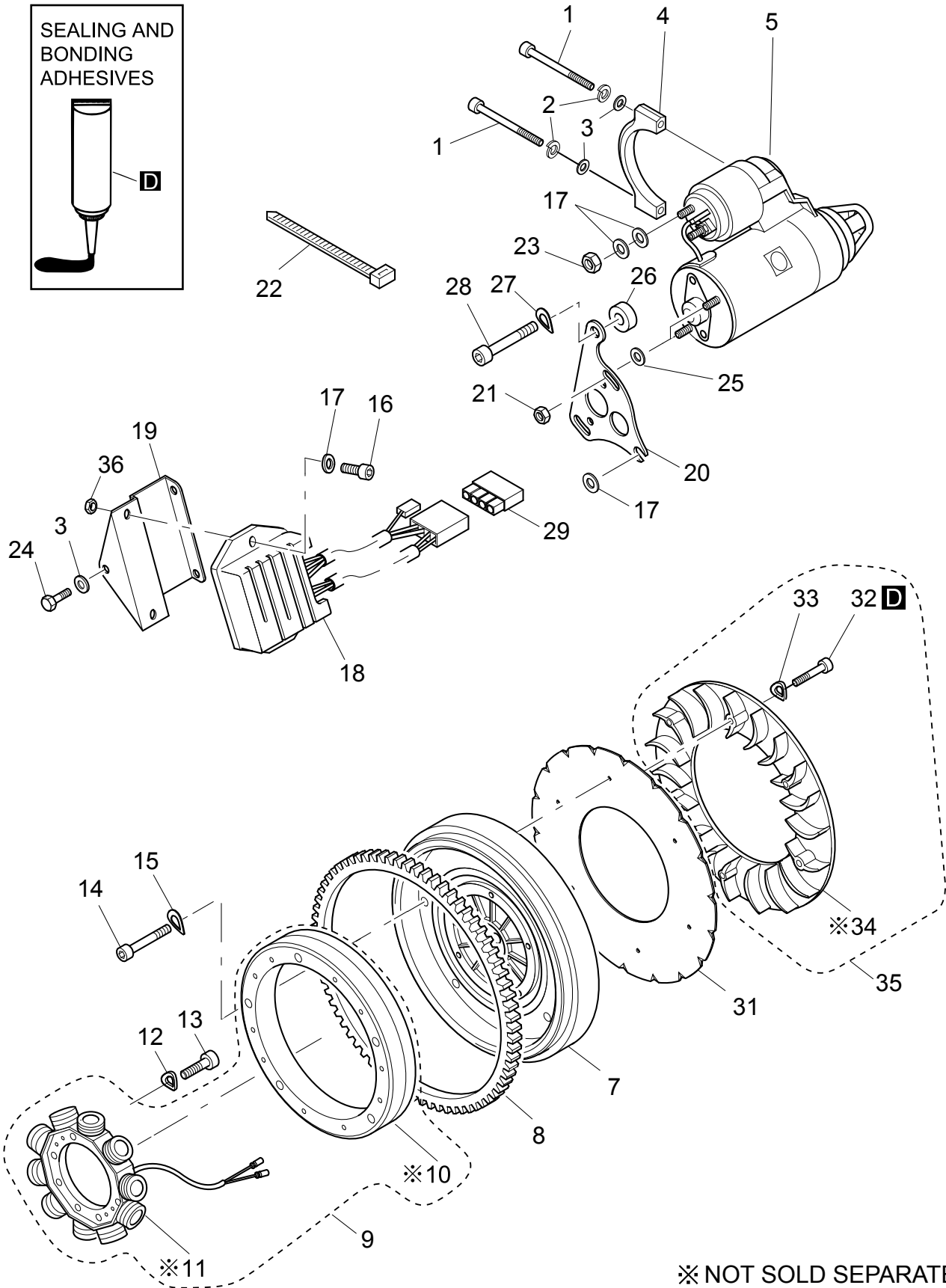
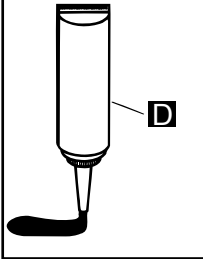
※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — EXHAUST SILENCER ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
2\$	01872502	EXHAUST SILENCER	1	
3\$	01732701	GASKET MUFFLER	1	
4\$	50403900	ALLEN SCREW M8X25	3	
5	01701601	EXHAUST SILENCER ASSY.	1	INCLUDES ITEMS W/\$
7	50474200	ALLEN SCREW M6X16	1	
8	50114300	DISC 6.4	1	
13	01629001	PROTECTION GUARD EXHAUST	1	
14	50422501	COUNTERSUNK SCREW M6X12	2	
15	50114300	DISC 6.4	1	
16	50170900	WASHER, LOCK 6	1	
17	50177100	HEXAGON SCREW M6X16	1	
18	01883502	INSULATION, EXHAUST SILENCER	1	
20\$	50208500	WASHER, LOCK 8	3	
22	468352160	EXHAUST PIPE	1	
23	03740900	PIPE CLIP	1	
24	50380000	HEXAGON SCREW M8X50	1	
25	50148100	WASHER, FLAT 8.4	1	
26	020108060	HEXAGON NUT M8	1	REPLACES P/N 40028400

HATZ 1B50 ENGINE — STARTER, ALTERNATOR ASSY.

SEALING AND BONDING ADHESIVES

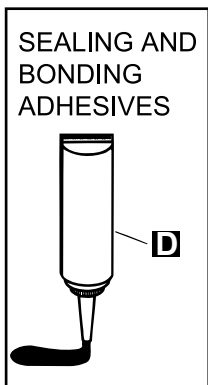
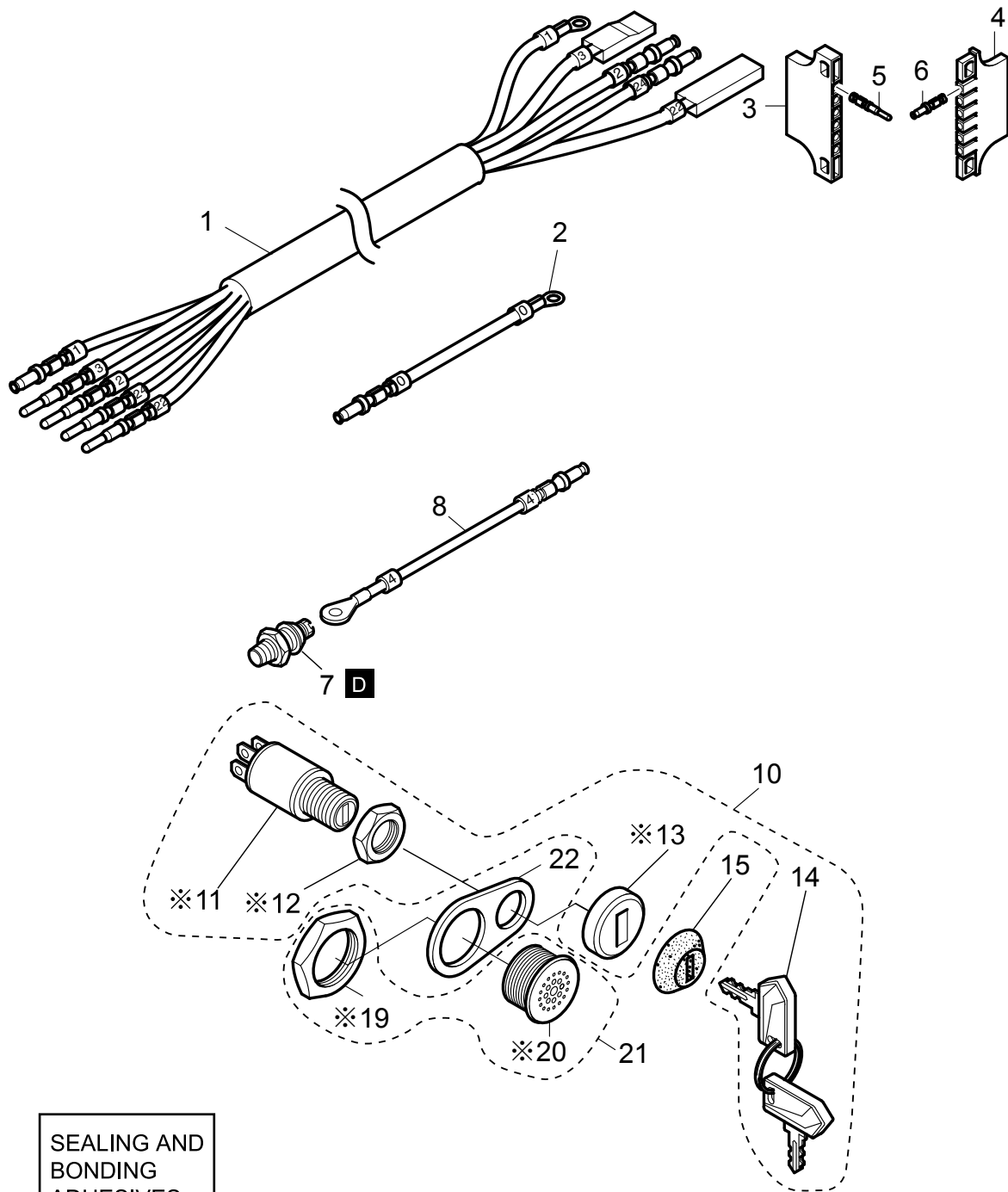


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — STARTER, ALTERNATOR ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
	50223300	LOCTITE 221	1	
1	50402300	ALLEN SCREW M6X70	2	
2	50170900	WASHER, LOCK 6	4	
3	50144500	WASHER, FLAT 6.4	3	
4	04099100	RETAINING BRACKET	1	
5	50483500	ELECTRIC STARTER 12V 1.0 KW	1	
7	04234700	FLYWHEEL	1	
8	04151100	GEAR RING	1	
9	01926100	ALTERNATOR 12V 200W	1	INCLUDES ITEMS W/\$
10\$		INDUCTOR RING, ALTERNATOR.....	1	NOT SOLD SEPARATELY
11\$		STATER.....	1	NOT SOLD SEPARATELY
12	50081900	WASHER, LOCK A5	4	
13	50547000	ALLEN SCREW M5X25	4	
14	50236600	ALLEN SCREW M6X25	5	
15	50081200	WASHER, LOCK A6	5	
16	50183000	ALLEN SCREW M8X35	2	
17	50148100	WASHER, FLAT 8.4	6	
18	02270800	TENSION REGULATOR 12V	1	
19	01663000	SUPPORT	1	
20	05182912	SUPPORT	1	
21	50602400	HEXAGON NUT M6	2	
22	50439500	STRAP 2.6X200	3	
23	50344700	HEXAGON NUT M8	1	
24	50025400	HEXAGON SCREW M6X10	1	
25	50120000	DISC A 6.4	2	
26	03714100	SPACER BUSHING	1	
27	50095100	WASHER, LOCK A8	1	
28	50392900	ALLEN SCREW M8X50	1	
29	50402100	PLUG SLEEVE HOUSING	1	
31	01390800	PLATE	1	
32%	50327300	ALLEN SCREW M4X20	6	
33%	50003400	WASHER, LOCK A4	6	
34%		BLOWER RING	1	NOT SOLD SEPARATELY
35	01934300	BLOWER RING W/ WASHER AND SCREW.....	1	INCLUDES ITEMS W/%
36	50514100	HEXAGON NUT M8	2	

HATZ 1B50 ENGINE — ELECTRIC EQUIPMENT, WIRINGS ASSY.

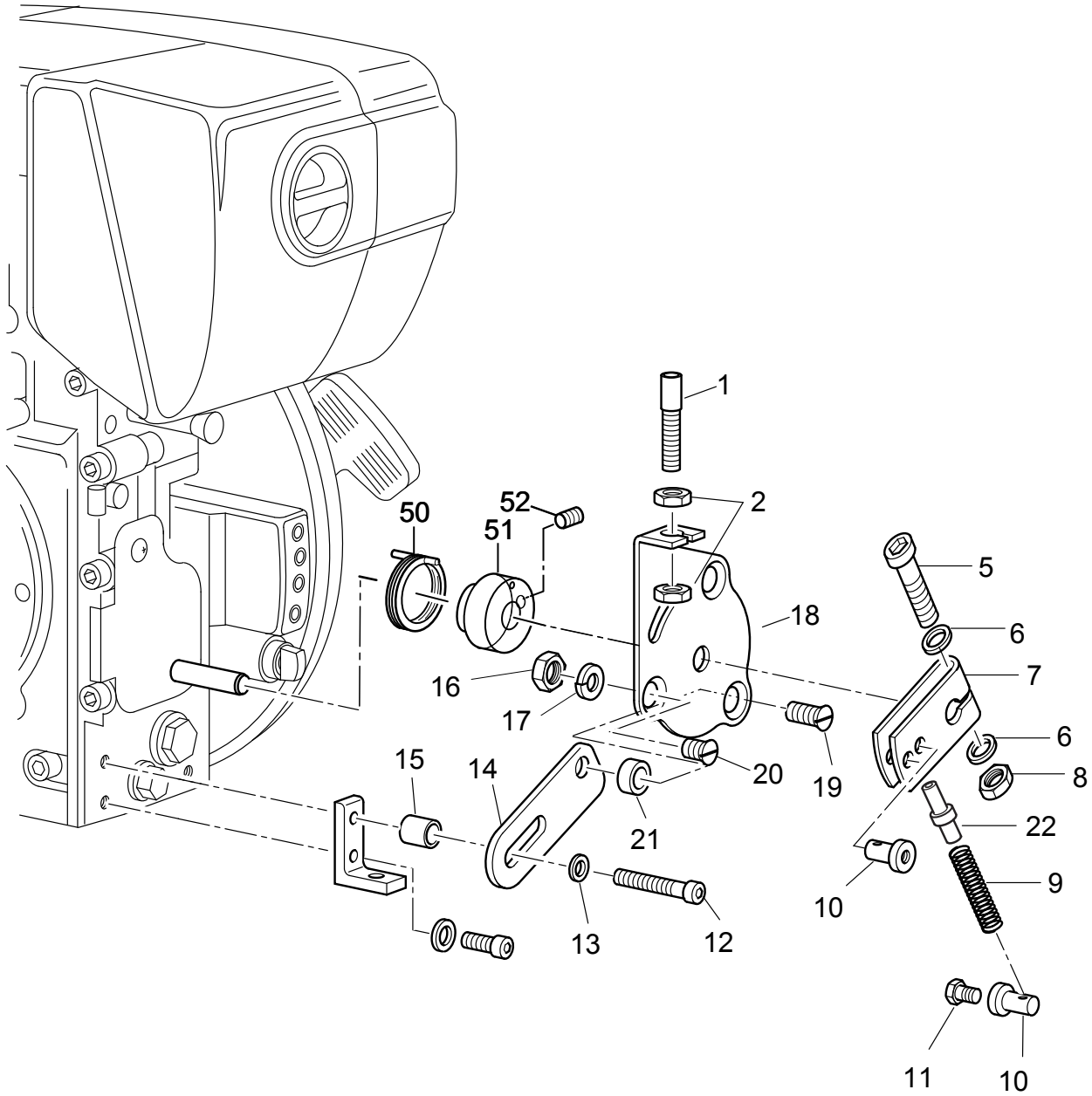


※ NOT SOLD SEPARATELY

HATZ 1B50 ENGINE — ELECTRIC EQUIPMENT, WIRINGS ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	01667001	WIRING HARNESS	1	
2	01548300	ELECTRIC WIRE 220MM	1	
3	50373600	PIN TERMINAL HOUSING 6-WAY	1	
4	50373700	PLUG SLEEVE HOUSING	1	
5	50374100	PIN, TERMINAL 0.5-1	5	
6	50373900	SLEEVE 1.5-2.5	6	
7	50469101	OIL PRESSURE SWITCH	1	
8	01548000	ELECTRIC WIRE	1	
10	50384401	SWITCH, KEY ASSY.	1	INCLUDES ITEMS W/\$
11\$		SWITCH, IGNITION.....	1	NOT SOLD SEPARATELY
12\$		NUT, RETAINING.....	1	NOT SOLD SEPARATELY
13\$		COVER, SWITCH.....	1	NOT SOLD SEPARATELY
14\$	50404900	IGNITION SWITCH KEY	2	
15	05126402	PROTECTION CAP	1	
19%		NUT, RETAINER	1	NOT SOLD SEPARATELY
20%		BUZZER.....	1	NOT SOLD SEPARATELY
21	50465100	BUZZER 12/24V W/ NUT.....	1	INCLUDES ITEMS W/%
22	05131801	FASTENING PLATE	1	

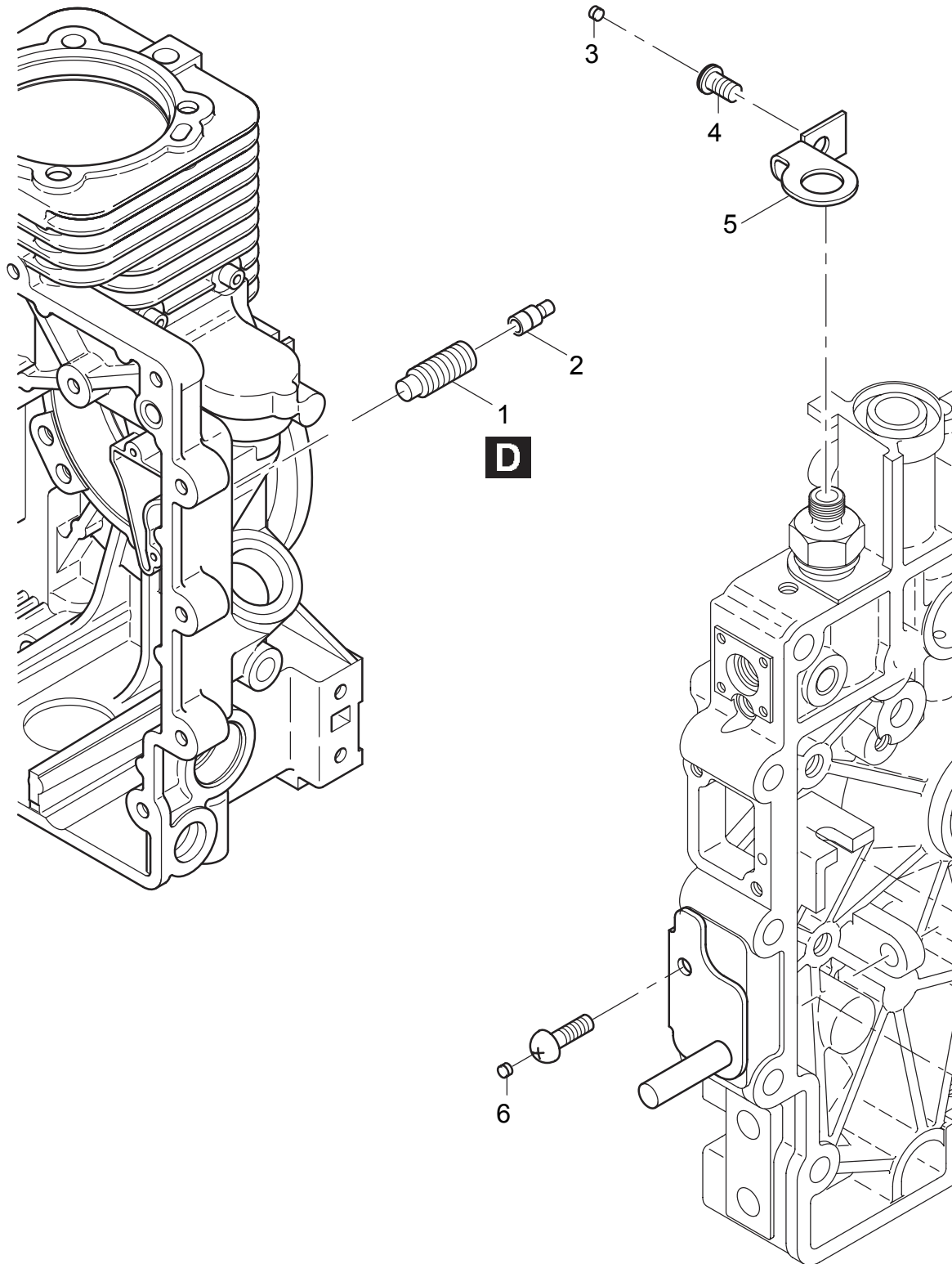
HATZ 1B50 ENGINE — SPEED CONTROL BOWDENCABLE ASSY.



HATZ 1B50 ENGINE — SPEED CONTROL BOWDENCABLE ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
1	05141200	ADJUSTING SCREW	1	
2	020406040	NUT M6, H=4.2	2	
5	50511900	ALLEN SCREW M5X30	1	
6	50216300	WASHER 5.3	2	
7	05117700	LEVER	1	
8	50094300	HEXAGON NUT M5	1	
9	50483200	PRESSURE SPRING	1	
10	50483100	CABLE CLAMPING 2.2MM	2	
11	50025000	HEXAGON SCREW M4X10	1	
12	50342400	ALLEN SCREW M8X50	1	
13	50148100	WASHER, FLAT 8.4	1	
14	05189600	PLATE, SPEED CONTROL	1	
15	03599600	SPACER BUSHING	1	
16	50328300	HEXAGON NUT VM6	1	
17	50208500	WASHER, LOCK 8	1	
18	05117610	CONSOLE	1	
19	50423900	COUNTERSUNK SCREW M6X20	1	
20	50380800	COUNTERSUNK SCREW M6X10	1	
21	03292900	SPACER TUBE	1	
22	05165000	GUIDE BUSHING	1	
50	05154010	SPRING	1	
51	05179000	BUSHING	1	
52	50400600	GRUB SCREW M5X10	1	

HATZ 1B50 ENGINE — SPEC. EQUIPMENT EPA ASSY.



HATZ 1B50 ENGINE — SPEC. EQUIPMENT EPA ASSY.

<u>NO.</u>	<u>PART NO.</u>	<u>PART NAME</u>	<u>QTY.</u>	<u>REMARKS</u>
D	50223300	LOCTITE 221	1	
1	04198800	GRUB SCREW CARB	1	
2	04150500	CLOSING PLUG 6 CARB	1	
3	04170600	PLUG 4.15	1	
4	50495000	CHEESE-HEX SCREW M6X12	1	
5	04185301	GUARD	1	
6	05201500	CLOSING PLUG	1	