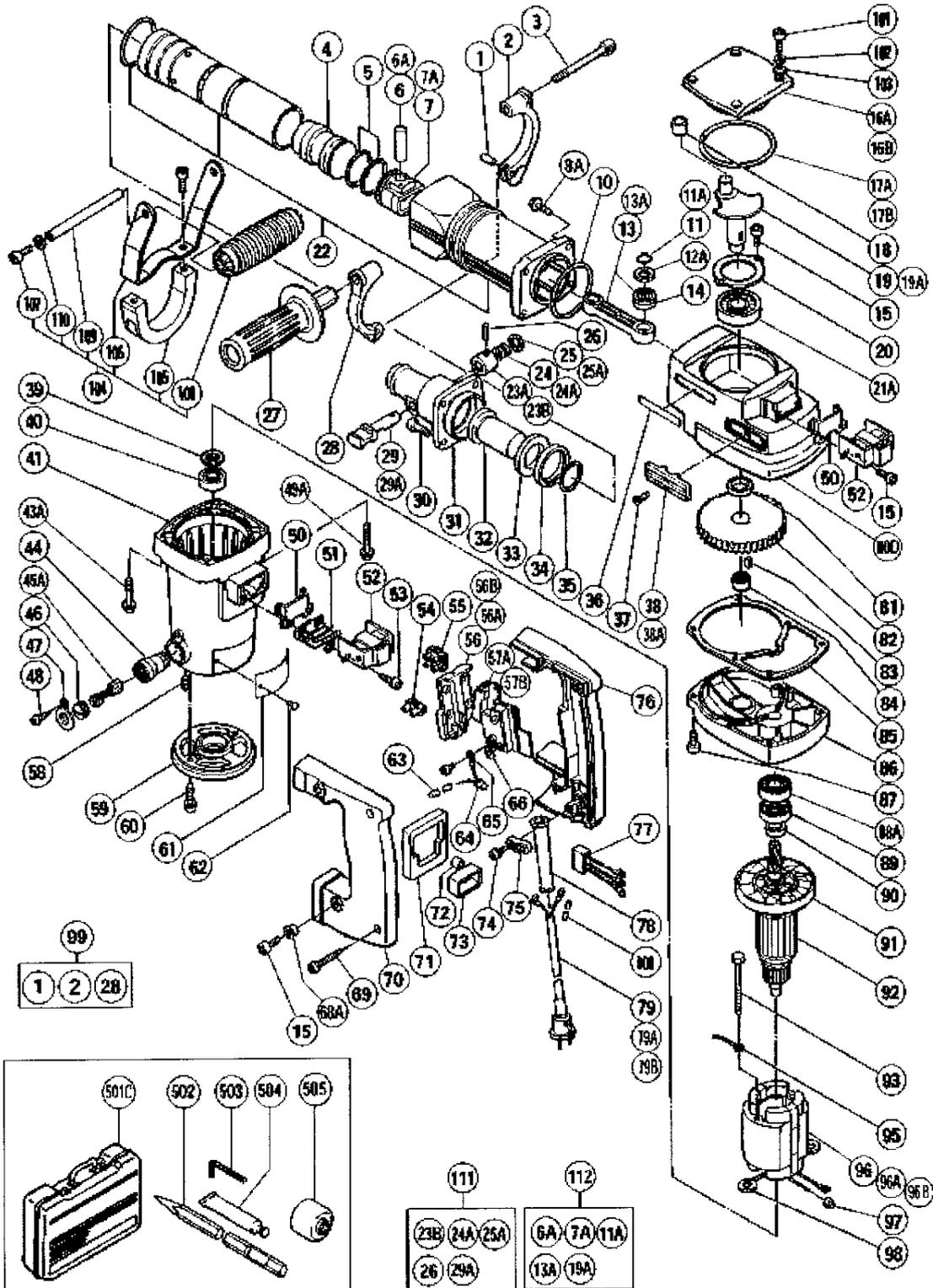


ELECTRIC TOOL PARTS LIST

■ HAMMER
Model H 55SA

2002-6-1
(E5-2)



PARTS

H55SA

ITEM No.	CODE No.	DESCRIPTION	No. USED	REMARKS
* 1	949-747	ROLL PIN D6X25 (10 PCS.)	1	(SINCE 1.2001 FOR GBR,SAF,FRA,SUI)
* 2	985-475	HANDLE HOLDER (A)	1	(SINCE 1.2001 FOR GBR,SAF,FRA,SUI)
* 3	985-465	HANDLE BOLT	1	(SINCE 1.2001 FOR GBR,SAF,FRA,SUI)
4	985-455	STRIKER	1	
5	985-454	O-RING (A) (FPM810)	2	
6	985-451	PISTON PIN	1	TILL 7.2000
6A	301-509	PISTON PIN	1	SINCE 8.2000
7	985-452	PISTON	1	TILL 7.2000
7A	317-084	PISTON	1	SINCE 8.2000
8A	990-083	HEX. SOCKET HD. BOLT (W/FLANGE) M8X35	4	
10	956-996	O-RING (1AS-60)	1	
11	939-542	RETAINING RING FOR D12 SHAFT (10 PCS.)	1	TILL 7.2000
11A	939-543	RETAINING RING FOR D14 SHAFT (10 PCS.)	1	SINCE 8.2000
12A	985-453	CRANK WASHER	1	TILL 7.2000
13	985-450	CONNECTING ROD ASS'Y	1	INCLUD.14 TILL 7.2000
13A	317-082	CONNECTING ROD	1	SINCE 8.2000
14	985-470	NEEDLE BEARING (B) (RNA4901V1)	1	TILL 7.2000
15	949-665	HEX. SOCKET HD. BOLT M5X14 (10 PCS.)	8	
16A	985-449	CRANK COVER	1	TILL 3.1984
16B	986-957	CRANK COVER	1	SINCE 4.1984
17A	985-448	O-RING (B) (S-80)	1	TILL 3.1984
17B	877-316	O-RING (S-90)	1	SINCE 4.1984
18	985-467	INNER RACE	1	TILL 7.2000
19	985-444	CRANK SHAFT	1	TILL 7.2000
19A	319-502	CRANK SHAFT	1	SINCE 8.2000
20	985-443	BEARING COVER	1	
21A	620-4DD	BALL BEARING 6204DDCMPS2L	1	
22	986-941	CYLINDER CASE	1	
23A	985-466	SPRING CASE	1	TILL 3.1995
23B	993-241	SPRING CASE	1	SINCE 4.1995
24	981-937	STOPPER SPRING	1	TILL 3.1995
24A	302-096	STOPPER SPRING	1	SINCE 4.1995
25	985-463	STOPPER WASHER	1	TILL 3.1995
25A	993-243	STOPPER SLEEVE	1	SINCE 4.1995
26	943-364	NEEDLE ROLLER D4X20	1	
* 27	985-477	SIDE HANDLE	1	(SINCE 1.2001 FOR GBR,SAF,FRA,SUI)
* 28	985-476	HANDLE HOLDER (B)	1	(SINCE 1.2001 FOR GBR,SAF,FRA,SUI)
29	985-462	STOP LEVER	1	TILL 3.1995
29A	302-095	STOP LEVER	1	SINCE 4.1995

*ALTERNATIVE PARTS

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PARTS

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ITEM No.	CODE No.	DESCRIPTION	No. USED	REMARKS
30	985-479	SEAL LOCK HEX. SOCKET HD. BOLT M8X25	4	
31	986-945	FRONT COVER	1	
32	986-944	SECOND HAMMER	1	
33	986-943	DAMPER WASHER	1	
34	986-942	DAMPER	1	
35	986-946	O-RING (C) (FPM810)	1	
36	957-561	HITACHI LABEL	1	
37	949-323	FLAT HD. SCREW M4X12 (10 PCS.)	2	TILL 7.1987
38	980-735	WIND GUIDE	2	TILL 7.1987
38A	991-713	WIND GUIDE (B)	2	SINCE 8.1987
39	985-436	DUST WASHER	1	
40	620-0VV	BALL BEARING 6200VVCMP2L	1	
41	985-435	HOUSING ASS'Y	1	INCLUD.44,58
43A	994-084	HEX. SOCKET HD. BOLT (W/FLANGE) M6X40	2	
44	983-362	BRUSH HOLDER	2	
45A	999-071	CARBON BRUSH (AUTO STOP TYPE) (1 PAIR)	2	
46	961-781	BRUSH CAP	2	
47	981-959	CAP COVER	2	
48	958-715	TAPPING SCREW D4X10	2	
49A	994-085	HEX. SOCKET HD. BOLT (W/FLANGE) M6X60	2	
50	980-750	GUIDE PLATE	2	
51	985-469	INTERNAL WIRE HOLDER	1	
52	980-727	HANDLE RUBBER	2	
53	985-605	TAPPING SCREW (W/WASHER) D5X25	2	
* 54	938-307	PILLAR TERMINAL	1	FOR GBR,ITA,FRG,FRA,HOL,DEN,AUT,SUI,USA, CAN,FIN,SWE,SAF,AUS
* 55	958-308Z	PILLAR TERMINAL (A)	1	FOR FIN
* 56	981-869	SUPPORT	1	TILL 3.1987
* 56	981-986Z	SUPPORT (A)	1	TILL 3.1998 FOR AUS
* 56B	990-082	SUPPORT (E)	1	SINCE 4.1997,SINCE 4.1998 FOR AUS
* 57A	981-533Z	SWITCH (2P PILLAR TYPE) W/O LOCK	1	TILL 3.1998 FOR AUS
* 57A	995-398	SWITCH (A) (1P SCREW TYPE) W/LOCK	1	FOR FRG
* 57B	992-891	SWITCH (A) (1P SCREW TYPE) W/O LOCK	1	SINCE 4.1998 FOR AUS
58	982-169	HEX. SOCKET SET SCREW M5X12	2	
59	985-437	TAIL COVER	1	
60	985-480	TAPPING SCREW (W/WASHER) D5X20	2	
61		NAME PLATE	1	
62	949-510	RIVET D2.5X4.8 (10 PCS.)	2	
63		VINYL TUBE (I.D.7XT0.5X50)	2	

*ALTERNATIVE PARTS

PARTS

H55SA

ITEM No.	CODE No.	DESCRIPTION	No. USED	REMARKS
* 64	959-141	CONNECTOR 50092 (10 PCS.)	2	FOR NZL,GBR,ITA,FRG,FRA,HOL,SAF,DEN,AUT,
* 64				SUI,SWE,AUS
* 65	983-276Z	INTERNAL WIRE	1	FOR NZL,GBR,ITA,FRG,FRA,HOL,SAF,DEN,AUT,
* 65				SUI,FIN,SWE,AUS
66	949-423	WASHER M4 (10 PCS.)	1	
68A	991-711	DISTANCE PIECE (B)	4	
69	956-636	TAPPING SCREW (W/WASHER) D4X25	2	
70	983-273	HANDLE (B)	1	
71	980-751	HANDLE PACKING	1	
* 72		VINYL TUBE (I.D.9XTO.5X25)	1	TILL 4.1987
* 73	985-474	WIRE SUPPORT	1	FOR USA
74	984-750	TAPPING SCREW (W/FLANGE) D4X16	2	
* 75	960-266	CORD CLIP	1	
* 75	981-987Z	CORD CLIP	1	FOR SUI
76	983-272	HANDLE (A)	1	
* 77	994-273	NOISE SUPPRESSOR	1	
* 78	958-049	CORD ARMOR D8.2	1	
* 78	940-778	CORD ARMOR D10.7	1	
* 79	500-390Z	CORD	1	(CORD ARMOR D10.7) FOR ITA,FRG,FRA,HOL,
* 79				DEN,AUT,FIN,SWE,SAF
* 79	500-391Z	CORD	1	(CORD ARMOR D10.7) FOR SUI
* 79	500-407Z	CORD	1	(CORD ARMOR D10.7) FOR USA,CAN
* 79	500-408Z	CORD	1	(CORD ARMOR D10.7) FOR AUS,NZL
* 79A	500-460Z	CORD	1	(CORD ARMOR D10.1) FOR GBR(110V)
* 79B	500-446Z	CORD	1	(CORD ARMOR D10.7) FOR GBR(230V)
80D	986-968	CRANK CASE ASS'Y	1	INCLUD.16B,17B,38A,101-103
81	985-445	DISTANCE RING (B)	1	
82	985-446	FIRST GEAR	1	
83	932-815	WOODRUFF KEY 3X13	1	
84	985-442	NEEDLE BEARING (A) (BK1512)	1	
85	985-447	SEAL PACKING	1	TILL 11.1986
86	985-440	GEAR COVER	1	
87	949-660	HEX. SOCKET HD. BOLT M6X20 (10 PCS.)	4	
88A	620-2VV	BALL BEARING 6202VVCMP2L	1	
89	985-439	OIL SEAL (FPM 807)	1	
90	985-438	SLEEVE	1	
91	985-482	FAN	1	
* 92	985-472U	ARMATURE ASS'Y 115V	1	INCLUD.39,40,88A,90,91
* 92	985-472E	ARMATURE ASS'Y 220V-230V	1	INCLUD.91

*ALTERNATIVE PARTS

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PARTS

H55SA

ITEM No.	CODE No.	DESCRIPTION	No. USED	REMARKS
* 92	985-472F	ARMATURE ASS'Y 240V	1	INCLUD.91
93	961-400	HEX. HD. TAPPING SCREW D5X70	2	
* 95	986-277	INTERNAL WIRE	1	FOR ITA,FRG,FRA,HOL,AUT,FIN,AUS
* 95	971-776	INTERNAL WIRE	1	FOR NZL,GBR,DEN,SUI,SWE
* 95	971-825	INTERNAL WIRE	1	FOR SAF
* 96	985-471C	STATOR ASS'Y 110V-115V	1	INCLUD.98
* 96	985-471E	STATOR ASS'Y 220V-230V	1	INCLUD.98
* 96	985-471J	STATOR 110V	1	INCLUD.98 FOR GBR
* 96A	985-471G	STATOR ASS'Y 220V-230V	1	INCLUD.98 FOR ITA,SWE,AUT,SAF,NZL
* 96A	985-471H	STATOR ASS'Y 240V	1	INCLUD.98 TILL 3.1998 FOR AUS
* 96B	985-471F	STATOR ASS'Y 230V-240V	1	INCLUD.98 FOR GBR,FRG,FRA,HOL,DEN,ESP,
*				FIN,SUI,SINCE 4.1998 FOR AUS
* 97	959-140	CONNECTOR 50091 (10 PCS.)	1	FOR NZL,GBR,ITA,FRG,FRA,HOL,SAF,DEN,AUT,
*				SUI,SWE,AUS
98	937-623	BRUSH TERMINAL	2	
* 99	985-464	HANDLE HOLDER ASS'Y	1	INCLUD.1,2,28 (SINCE 1.2001 FOR GBR,SAF
*				FRA,SUI)
100		VINYL TUBE (I.D.7XT0.5X80)	2	
101	990-079	SEAL LOCK HEX. SOCKET HD. BOLT M5X16	4	
102	949-454	SPRING WASHER M5 (10 PCS.)	4	
103	949-424	WASHER M5 (10 PCS.)	4	
* 104	986-959	HOLDER ASS'Y	1	INCLUD.105-110 SINCE 1.1986-TILL 12.2000
*				FOR GBR,SAF,FRA,SUI
* 105	986-960	HOLDER (A)	1	SINCE 1.1986-TILL 12.2000 FOR GBR,SAF,
*				FRA,SUI
* 106	986-961	HOLDER (B)	1	SINCE 1.1986-TILL 12.2000 FOR GBR,SAF,
*				FRA,SUI
* 107	949-656	HEX. SOCKET HD. BOLT M8X20 (10 PCS.)	4	SINCE 1.1986-TILL 12.2000 FOR GBR,SAF,
*				FRA,SUI
* 108	944-951	GRIP	1	SINCE 1.1986-TILL 12.2000 FOR GBR,SAF,
*				FRA,SUI
* 109	986-962	SHAFT	1	SINCE 1.1986-TILL 12.2000 FOR GBR,SAF,
*				FRA,SUI
* 110	986-963	WASHER (C)	2	SINCE 1.1986-TILL 12.2000 FOR GBR,SAF,
*				FRA,SUI
111	310-891	STOP LEVER ASS'Y	1	INCLUD.23B,24A,25A,26,29A
112	319-842	CRANK SHAFT SETY	1	INCLUD.6A,7A,11A,13A,19A

*:ALTERNATIVE PARTS

STANDARD ACCESSORIES

H55SA

ITEM No.	CODE No.	DESCRIPTION	No. USED	REMARKS
501C	319-783	CASE (PLASTIC)	1	
502	986-947	BULL POINT 300MM	1	
503	872-422	HEX. BAR WRENCH 6MM	1	
504	981-840	GREASE (A) FOR HAMMER.HAMMER DRILL (30G)	1	
505	985-468	DUST COVER	2	



MODEL H 55SA

1. NOTE ON DISASSEMBLY AND REASSEMBLY

The numbers mentioned in the description indicate the parts list number.

1-1. Disassembly

- Retainer

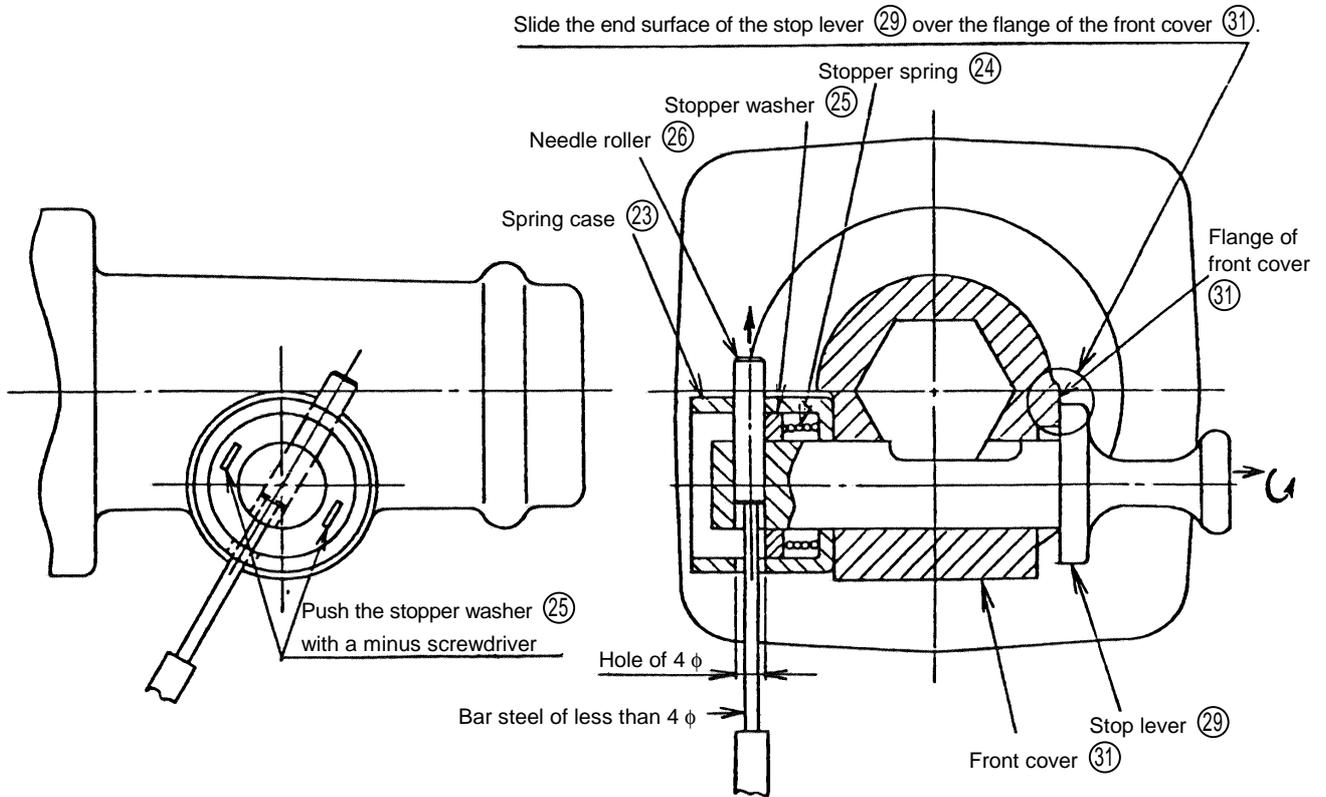


Fig. 7

The disassembly order is shown in the above drawing.

Pull the stop lever (29) in the direction of the arrow, rotate it a little and slide the end surface of the stop lever over the flange end surface of the front cover (31).

Rotate the spring case so that the hole of the spring case (23) is adjusted to the position of the needle roller (26) out and remove the needle roller. Then, the stop lever, stopper washer (25) and stopper spring can be taken off.

- O-rings of piston and striker

Remove four M8 hexagonal socket head bolts (8) of the cylinder case assembly (22). Then, the cylinder case assembly comes off from the crank case (80).

The piston (7) remains in the crank case, and you may remove the connecting rod (13) from the crank shaft (19). The striker (4) will come off if the cylinder case assembly is tapped with a plastic hammer. If the striker will not come off, push the removed piston with the connecting rod into the cylinder and pull it out suddenly. Then the striker will pop out together with the piston.

- Disassembling the first gear

Remove six M5 hexagonal socket head bolts (15) of the crank cover (16) and bearing cover (20). Support the upper end of the crank case (80). Push the end surface of the crank shaft (19) with a press to release it.

- Disassembling the handles

Remove four M5 hexagonal socket head bolts (15).

Then, the handles (A) (76) and (B) (70) come off from the main unit.

1-2. Assembly

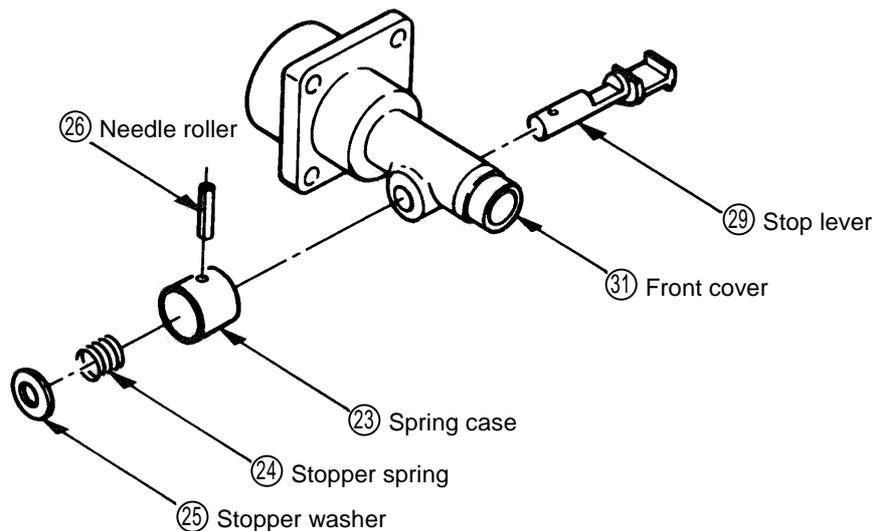
Do the disassembly procedure in the reverse order.

Pay attention to the following points.

- Lubricant application

Apply the special lubricant (electric impact drill lubricant) to the needle bearing (B) (14) of the connecting rod assembly (13), needle bearing (A) (84) supporting the crank shaft (19) O-rings (A) (5) attached to the piston (7) and striker (4), pinions of the first gear (82) and armature (92).

- Assembling the retainer



Apply Mollub alloy K#777-1 lubricant to the sliding part of the stop lever (29) before assembling.

As shown in Fig. 7, mount the stop lever end surface on the flange of the front cover (31) and push the stopper washer (25) with the minus screwdriver to contract the stopper spring (24). Adjust the holes of the stop lever and spring case (23), and insert the needle roller (26).

- Oil seal

Take care not to damage the O-ring (B) (17) of the crank cover (16), oil seal (89) of the gear cover (86), O-ring (10) of the crank case assembly, and O-rings (A) (5) of the piston (7) and striker (4).

1-3. Notes on using adhesives

- Apply Screw Locking Agent TB1401 to all M5 and M6 hexagonal socket head bolts (15), (43), (49), (87) and the cylinder case assembly mounting M8 hexagonal socket head bolt (8) before tightening them.
- Apply CEMEDINE 1500 to the front cover mounting M8 hexagonal socket head bolt (30) before tightening it.

Note: Loosened bolts may result in damage of the machine.

Always apply screw locking agent to the bolts. Before applying screw clean the oil and fat with gasoline, etc.

1-4. Tightening torque of screws and bolts

- (1) M4 tapping screw: 15 - 25 kg-cm (13.0 - 21.7 lbs-in)
- (2) M5 tapping screw: 30 ± 5 kg-cm (26.0 ± 4.3 lbs-in)
- (3) M5 hexagonal socket head bolt: 80_{-0}^{+20} kg-cm ($69.4_{-0}^{+17.3}$ lbs-in)
- (4) M6 hexagonal socket head bolt: 100_{-0}^{+20} kg-cm ($86.7_{-0}^{+17.3}$ lbs-in)
(Housing fixing bolts M6 x 45, M6 x 60: 50_{-0}^{+20} kg-cm ($43.4_{-0}^{+17.3}$ lbs-in))
- (5) M8 hexagonal socket head bolt: 200_{-0}^{+20} kg-cm ($173.4_{-0}^{+17.3}$ lbs-in)
(Front cover fixing bolts M8 x 25: 400 ± 10 kg-cm (346.9 ± 8.7 lbs-in))

1-5. Insulation test

After disassembly and repair, the insulation resistance should be measured and the dielectric strength (resistance voltage) should be tested.

Insulation resistance: Should be more than 7 M Ω

Dielectric strength: Should be normal after applying 4000 V for 1 minute.

1-6. No-load current

The no-load current should be as below, specified after 30 minutes no-load operation.

3 A or less at 220 V, 50/60 Hz