

F90

FAA28051
FAA28251
FAA28451

N90

FAA28151
FAA28351
FAA28551

REPAIR MANUAL

Nikon | NIKON CORPORATION
Tokyo, Japan

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Exploded Drawings & Parts List

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[1] Exploded Drawings

BODY DIECASTING, SHUTTER UNIT, DB-DX CONTACT BASE PLATE UNIT -----	F 1
POWER SWITCH FPC, FILM ADVANCE BASE PLATE UNIT -----	F 2
REWIND BASE PLATE, CAMERA BACK OPEN/CLOSE KEY, FILM DETECTION SW --	F 3
SEQUENCE BASE PLATE UNIT -----	F 4
FRONT BODY, AF BASE PLATE UNIT -----	F 5
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PRISM -----	F 8
MAIN FPC, AF SENSOR -----	F 9
EXTERNAL PARTS, INTERNAL LCD -----	F 1 0
TOP COVER -----	F 1 1
TOP COVER, TOP COVER FPC, EXTERNAL LCD -----	F 1 2
BOTTOM COVER, BATTERY HOLDER -----	F 1 3
CAMERA BACK -----	F 1 4

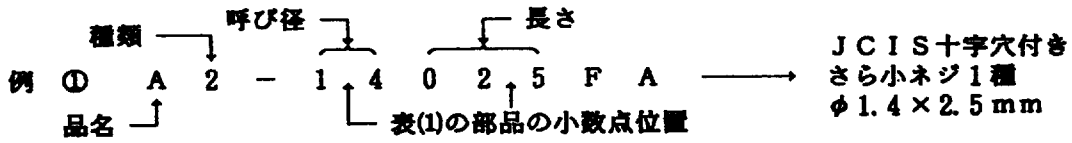
[2] Parts List

PARTS LIST -----	P 1
ASSEMBLY LIST -----	P 2 5

記号説明 MARKS IN THE PARTS LIST

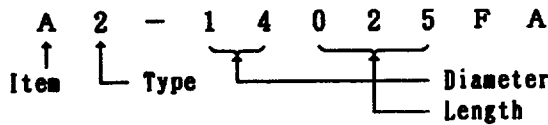
(1) 機械標準品

下の表に示す機械標準品の部品番号は品名、種類、呼び径、長さを示しています。



(1) Standard mechanical parts
Reference Number in the Parts List

A. Screw · Pin



B. Nut · Washer · Snap ring

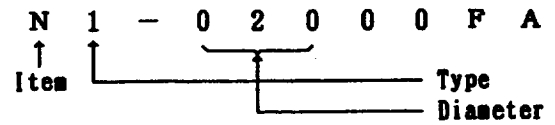


表 1

品名 Item	種類 Type	品名 Item	種類 Type				
J C I S 十字穴付き小ねじ 1 種 Cross-point screw 1	A	なべ Pan	1	すりわり付き止めねじ Splitted set screw			
		さら Countersunk	2				
		丸さら Oval	3				
J C I S 十字穴付き小ねじ 3 種 Cross-point screw 3	B	なべ Pan	1	六角穴付き止めねじ Hexagon socket head set screw			
		さら Countersunk	2				
		丸さら Oval	3				
十字穴付き小ねじ Cross-point screw	C	なべ Pan	1	六角穴付きボルト Hexagon socket head bolt			
		さら Countersunk	2				
		丸さら Oval	3	平行ピン Straight pin			
		トラス Trus	4				
十字穴付きタップタイ タイトねじ B 型 Cross-point tapped screw B	F	なべ Pan	1	スプリングピン Spring cotter			
		さら Countersunk	2				
十字穴付きタップタイ タイトねじ B 型 1 種 Cross-point tapped screw B1	G	なべ Pan	1	表 2			
		さら Countersunk	2				
		丸さら Oval	3				
十字穴付きタップタイ タイトねじ B 型 3 種 Cross-point tapped screw B3	H	なべ Pan	1	六角ナット Hexagon nut			
		さら Countersunk	2				
		丸さら Oval	3				
				平座金 Washer	R	1 種 Type 1	1
						1 種 Type 3	3
				ばね座金 Spring washer		小形丸	1
						みがき丸	2
				E 型止め環 B-snap ring	S	E 型 Type E	1
						G 型 Type G	2
						GS 型 Type GS	3

(2) 販売区分欄 The term of sale column

記号 Mark	説明	Explanation
○	Can be Supplied individually	単独部品として販売するもの
△	Not supplied individually but only as subassembly.	部組品でなければ販売しないもの
○△	Supplied either as part or subassembly	単独部品でも部組品でも販売するもの
×	Not considered as repair part	修理部品と考えないもの
※	Should be sent to the factory if the repair needed.	単体では交換できないので、組む場合に工場での加工が必要なもの
☐	Delivered as a product from the sales department (i. e., not supplied as repair part)	商品として販売店で販売しているもの (修理部品扱いはしない)

(3) 備考欄 The remarks column

P-601M	Part number used in common	共通部品番号
(Blue ×125mm)	Lead wire (color × length)	コードの色と長さ
53P-2013 (PM-780028)	Technical information ref. number (number in parenthesis; English edition)	製品技術資料No ()内は英文
(2.1×3.8 ×0.07)	Washer (internal diameter × external diameter×thickness)	ワッシャー (内径×外径×厚さ)
(Black)	Black-finished parts	黒部品
(d=0.2)	Diameter of wire	線型=0.2
(t= 1)	Thickness	厚さ=1
Rev.	Revision	訂正
Add.	Addition	追加
Dis.	Discontinuation	廃止
OLD	Parts of the intial design	旧部品
◆	Limited part	R P 限定出庫部品
RP-9001	Repair part information No.	R P 情報No.
R1... D1... W1... C1... Q1... P1...	Abbreviation for electronic part	電気部品記号
TA-0003	Number (TA-****) are order numbers of adhesive tape. (For the order of adhesive tape, the number 1K***-*** is not use).	接着テープ要求部番 (1K***-*** では部品要求できません。)
W-0056BB	Number (W-0056BB) are order numbers of Lead wire. (For the order of Lead wire, the number 1K***-*** is not use).	リードワイヤ要求部番 (1S***-*** では部品要求できません。)

* VERSATILB PART

* 既出部品

Apart maked with this pentagonal symblo is used commonly in the arcitecture of other products. That is called "VERSATILE PART". Note that every part, bearing new part number of eleven places, will turn into a VERSATILB PART when it is used in the design of future product.

テープ類TA設定部品一覧表

TAPES AND FILMS WITH PREFIX ALPHABETS TA Dec. 17, 1991

部品 No. Part No.	名称 Name of part	色 Color	厚さ Thickness (t=mm)	幅 Widths (mm)	長さ Length (m)	要求単位 Q'ty for a unit for ordering
TA-0001	ポリエステルフィルム Tape	透明 Transparent	0.025	10	30	1巻 1 roll
TA-0002	ポリエステルフィルム Tape	透明 Transparent	0.025	20	30	1巻 1 roll
TA-0003	両面接着テープ Both sided adhesive tape	白 White	0.16	10	2	1巻 1 roll
TA-0004	両面接着テープ Both sided adhesive tape	黒 Black	0.14	12	50	1巻 1 roll
TA-0005	ポリエステルフィルム Tape	黄 Yellow	0.06	19	66	1巻 1 roll
TA-0006S	アセテートクロス (シート) Tape (200x120/sheet)	黒 Black	0.23	6	200 (mm)	1set (20pcs)
TA-0007	銅箔導電性 Tape, copper foil	銅箔 Copper foil	0.11	4	6	1巻 1 roll
TA-0008	ポリエステルフィルム Tape	透明 Transparent	0.055	30	30	1巻 1 roll
TA-0009	カプトンフィルム Tape	琥珀 Amber	0.07	6	30	1巻 1 roll
TA-0010	両面接着テープ Both sided adhesive tape	乳白色 Opal	0.16	15	36	1巻 1 roll
TA-0011	ポリエステルフィルム Tape	黒 Black	0.06	10	30	1巻 1 roll
TA-0012	ポリエステルフィルム Tape	透明 Transparent	0.025	6	30	1巻 1 roll
TA-0013	アセテートクロス (シート) Tape (200x120/sheet)	黒 Black	0.23	20	200 (mm)	1set (20pcs)

リードワイヤー—覽表

LEAD WIRE LIST

DEC. 17. 1991

部品 No Part No.	色 Color	外形 Diameter (outer tube)	導体サイズ Pcs./ Diameter (lead wire)	部品 No Part No.	色 Color	外形 Diameter (outer tube)	導体サイズ Pcs./ Diameter (lead wire)
W-0045BN	Brown	0.45mm	7×0.05mm	W-0108BK	Black	1.08mm	7×0.16mm
W-0045RE	Red	-ditto-	-ditto-	W-0108BN	Brown	-ditto-	-ditto-
W-0045OR	Orange	-ditto-	-ditto-	W-0108RE	Red	-ditto-	-ditto-
W-0045GN	Green	-ditto-	-ditto-	W-0108OR	Orange	-ditto-	-ditto-
W-0045BE	Blue	-ditto-	-ditto-	W-0108YE	Yellow	-ditto-	-ditto-
W-0045PU	Purple	-ditto-	-ditto-	W-0108GN	Green	-ditto-	-ditto-
				W-0108BE	Blue	-ditto-	-ditto-
W-0056BK	Black	0.56mm	7×0.08mm	W-0108PU	Purple	-ditto-	-ditto-
W-0056BN	Brown	-ditto-	-ditto-	W-0108GY	Gray	-ditto-	-ditto-
W-0056RE	Red	-ditto-	-ditto-	W-0108WH	White	-ditto-	-ditto-
W-0056OR	Orange	-ditto-	-ditto-				
W-0056YE	Yellow	-ditto-	-ditto-	W-0120BK	Black	1.2 mm	7×0.18mm
W-0056GN	Green	-ditto-	-ditto-	W-0120BN	Brown	-ditto-	-ditto-
W-0056BE	Blue	-ditto-	-ditto-	W-0120RE	Red	-ditto-	-ditto-
W-0056PU	Purple	-ditto-	-ditto-	W-0120OR	Orange	-ditto-	-ditto-
W-0056GY	Gray	-ditto-	-ditto-	W-0120YE	Yellow	-ditto-	-ditto-
W-0056WH	White	-ditto-	-ditto-	W-0120GN	Green	-ditto-	-ditto-
W-0056PK	Pink	-ditto-	-ditto-	W-0120BE	Blue	-ditto-	-ditto-
				W-0120PU	Purple	-ditto-	-ditto-
				W-0120GY	Gray	-ditto-	-ditto-
				W-0120WH	White	-ditto-	-ditto-
W-0080BK	Black	0.80mm	7×0.12mm				
W-0080BN	Brown	-ditto-	-ditto-	W-0150BK	Black	1.5 mm	40×0.08mm
W-0080RE	Red	-ditto-	-ditto-	W-0150BN	Brown	-ditto-	-ditto-
W-0080OR	Orange	-ditto-	-ditto-	W-0150RE	Red	-ditto-	-ditto-
W-0080YE	Yellow	-ditto-	-ditto-	W-0150OR	Orange	-ditto-	-ditto-
W-0080GN	Green	-ditto-	-ditto-	W-0150YE	Yellow	-ditto-	-ditto-
W-0080BE	Blue	-ditto-	-ditto-	W-0150GN	Green	-ditto-	-ditto-
W-0080PU	Purple	-ditto-	-ditto-	W-0150BE	Blue	-ditto-	-ditto-
W-0080GY	Gray	-ditto-	-ditto-	W-0150PU	Purple	-ditto-	-ditto-
W-0080WH	White	-ditto-	-ditto-	W-0150GY	Gray	-ditto-	-ditto-
W-0080LB	Light blue	-ditto-	-ditto-	W-0150WH	White	-ditto-	-ditto-
1 roll = 20m							

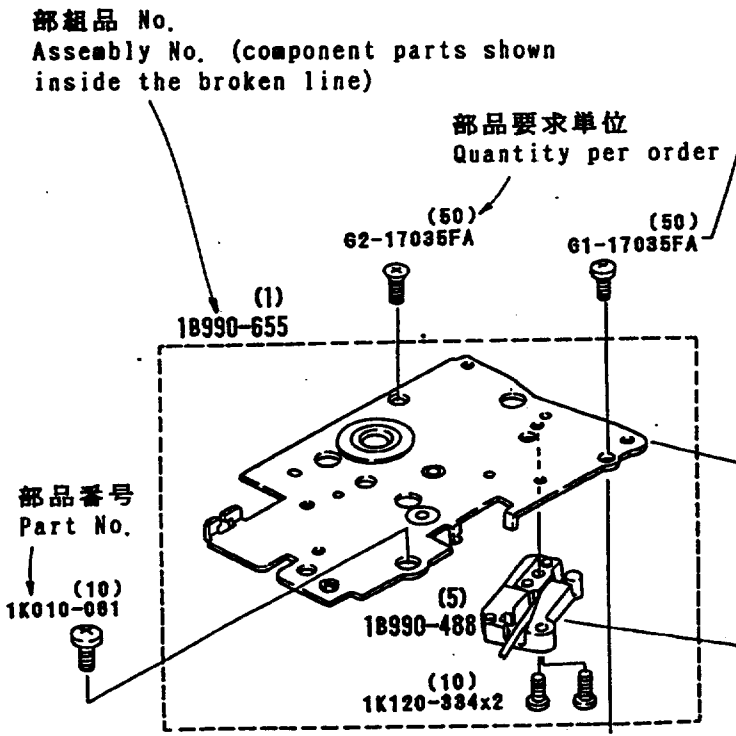
収縮チューブ一覧表

Thermal construction tube list


Dec. 17, 1991

部品 No. Part No.	名称 Name of part	直径 Diameter (φ)	長さ Length (m)	備考 Remarks
TU-0001	収縮チューブ Thermal construction tube	1.0 mm	1	RP-8925
TU-0002	収縮チューブ Thermal construction tube	2.0 mm	1	RP-8925
TU-0003	収縮チューブ Thermal construction tube	3.0 mm	1	RP-8925
TU-0004	収縮チューブ Thermal construction tube	4.0 mm	1	RP-8925

展開図の見方 How to use explosion drawings



項目 Part Classification	販売区分 Term of Supply	記号 Mark
破線外で部番の入っているもの Part with Part No., shown outside the broken line	単部品で要求できるもの Available as individual part	○
破線外で部番のないもの Part without Part No., shown outside the broken line	修理部品と考えないもの Not available as repair part	×
破線内で部番のないもの Part without Part No., shown inside the broken line.	部組品でなければ要求できないもの Available only as assembly.	△
破線内で部番の入っているもの Part with Part No., shown inside the broken line	単部品でも部組品でも要求できるもの Available as assembly or individually	○△

作成承認印	配布許可印
	

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PARTS LIST (REVISED-1)

修理部品表 (改訂-1)

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A

B

FAA28051-R.3312.B

F90 シャッター部 F90 Shutter

旧シャッター組品に新シャッター幕1B999-709、
1B999-675を取付ける時には*の部品を使用すること
製技 94F-1033
F801,F90-940089

When mounting the new curtains (1B994-709 and
1B999-675) on the old shutter assembly, use the parts
marked with "*".
No.94F-1033
F801,F90-940089

1

2

3

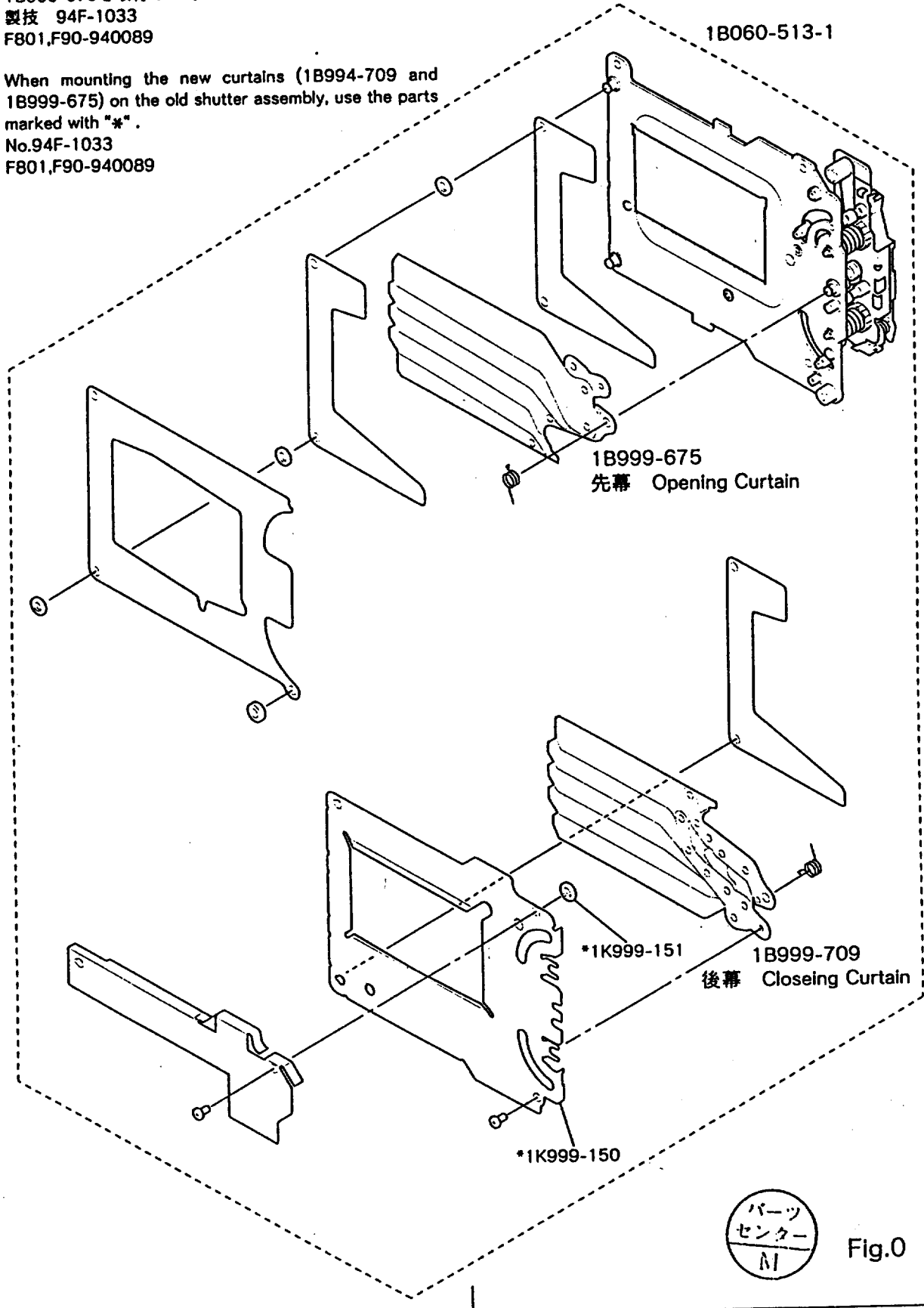
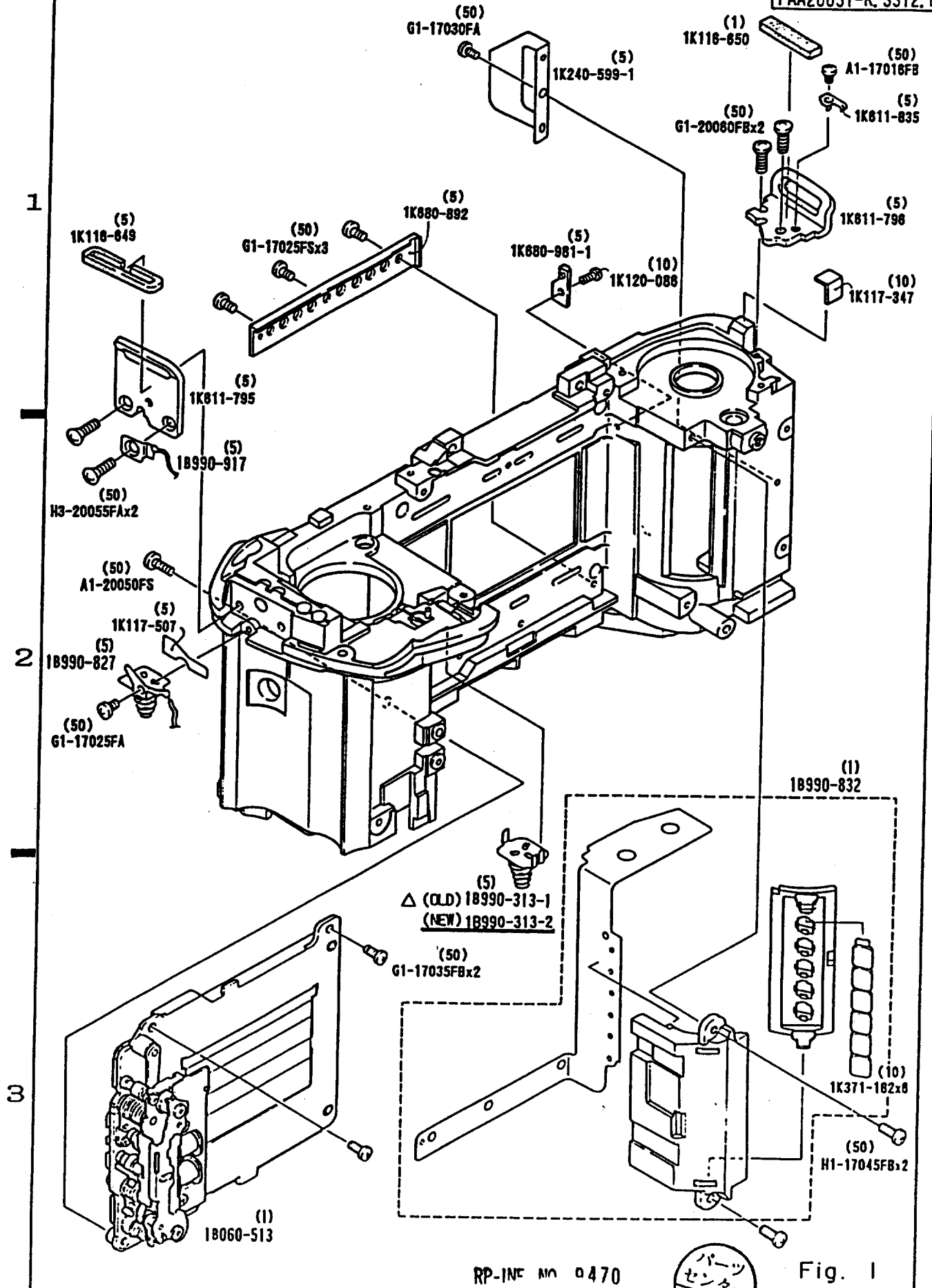


Fig.0

A

B

FAA28051-R. 3312. B



1

2

3

(5)
 △ (OLD) 1B990-313-1
 (NEW) 1B990-313-2

RP-INE No 0470



Fig. 1

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NOV. 28. 1994

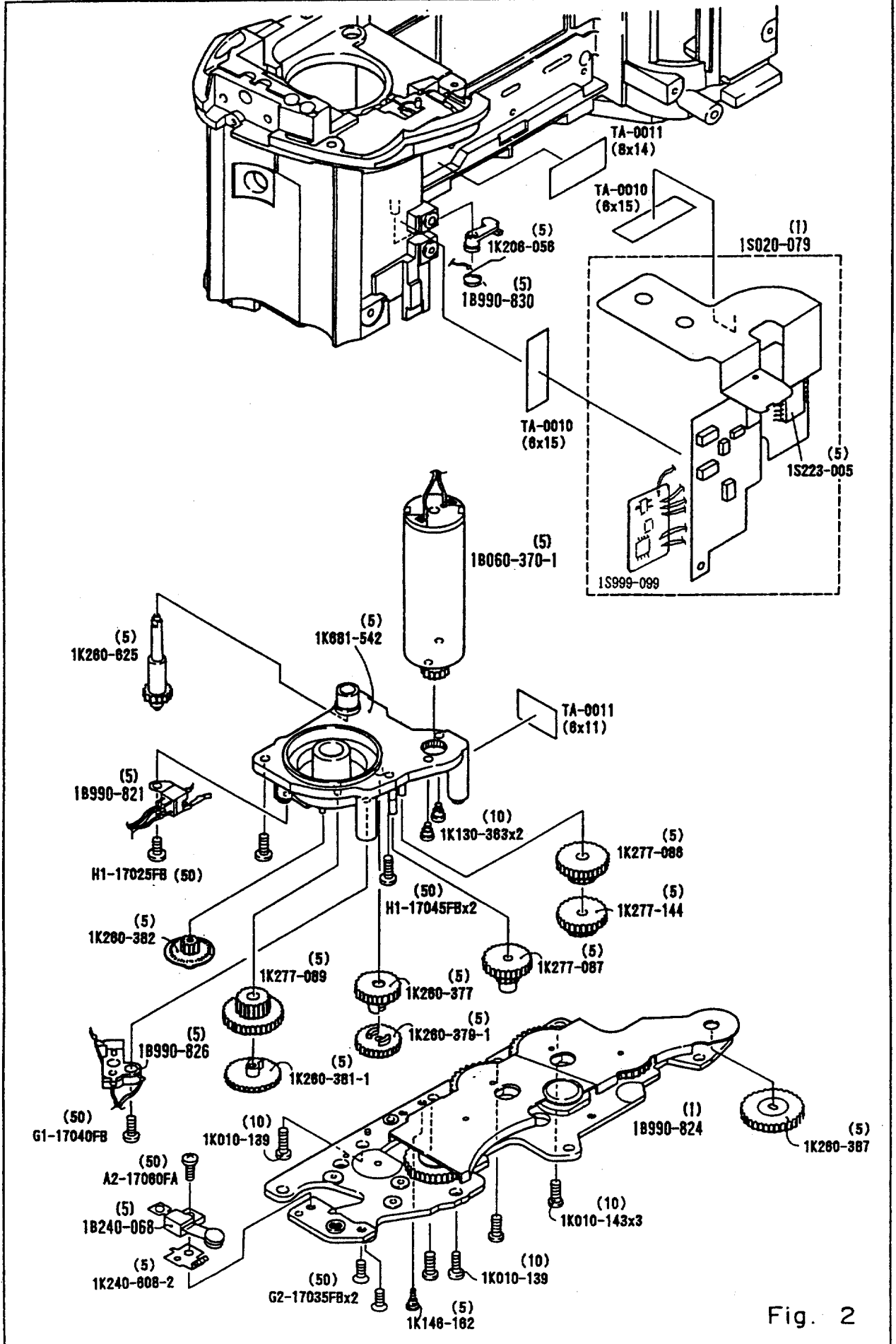


Fig. 2

REWIND BASE PLATE, CAMERA BACK OPEN/CLOSE KEY, FILM DETECTION SW

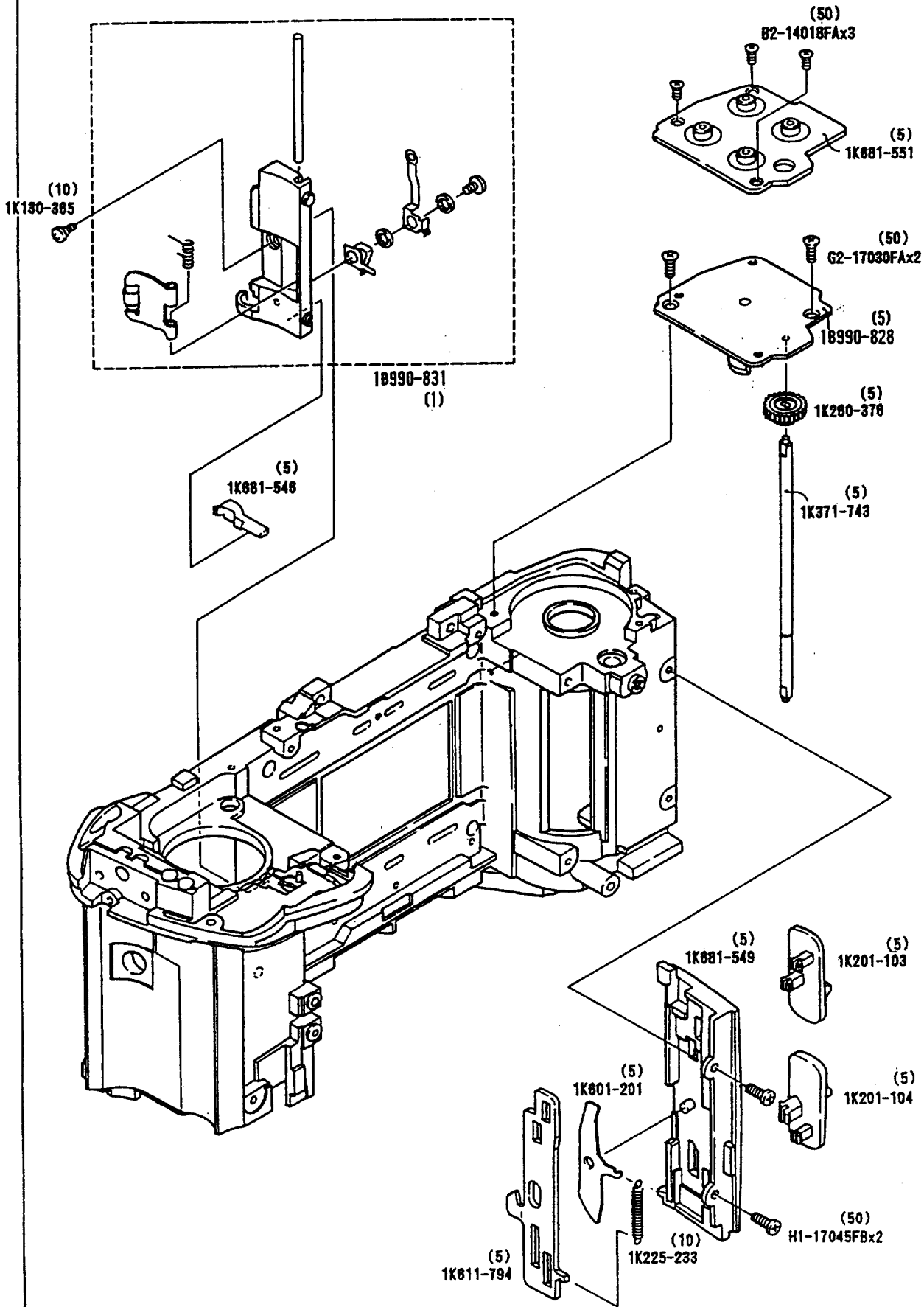


Fig. 3

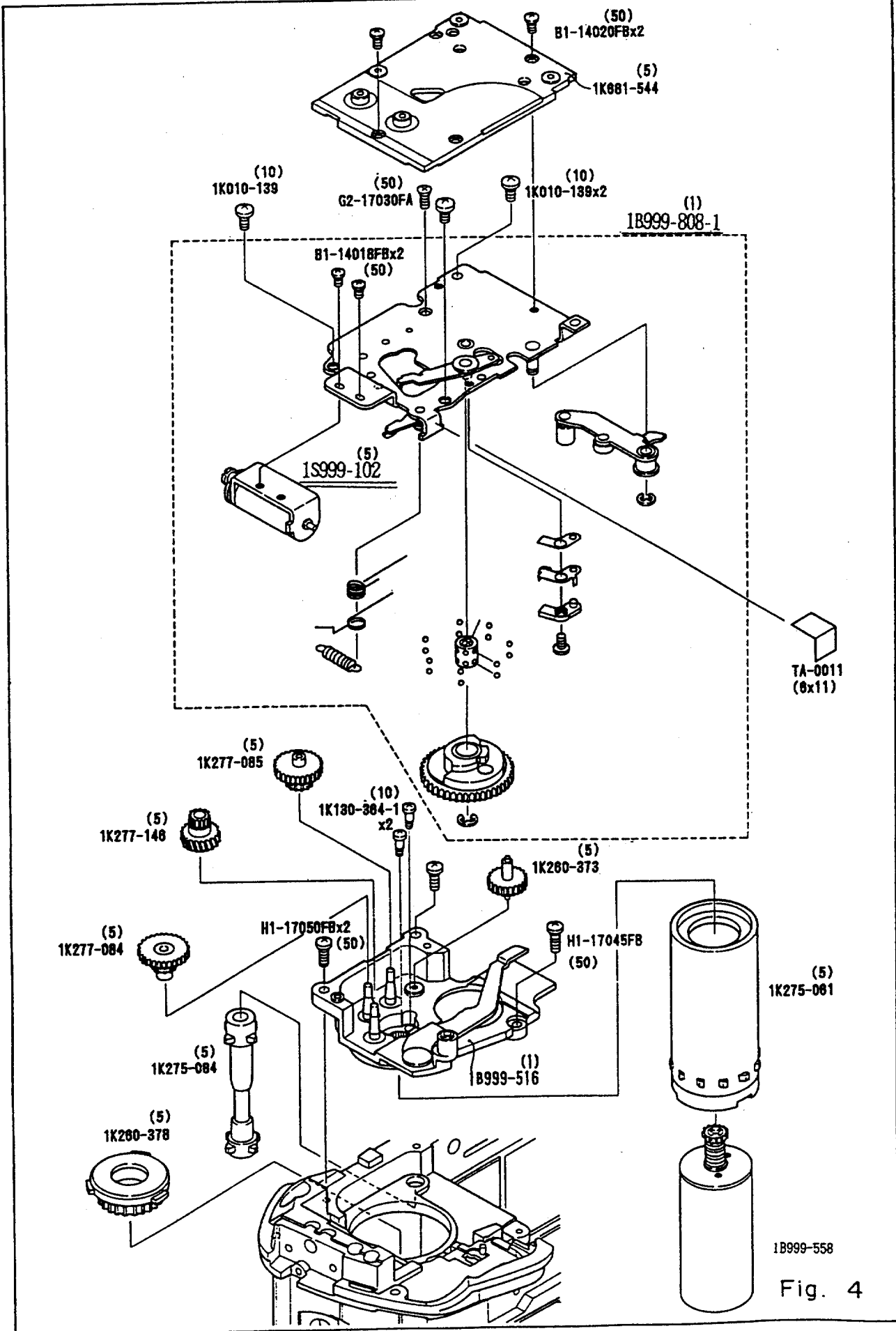


Fig. 4

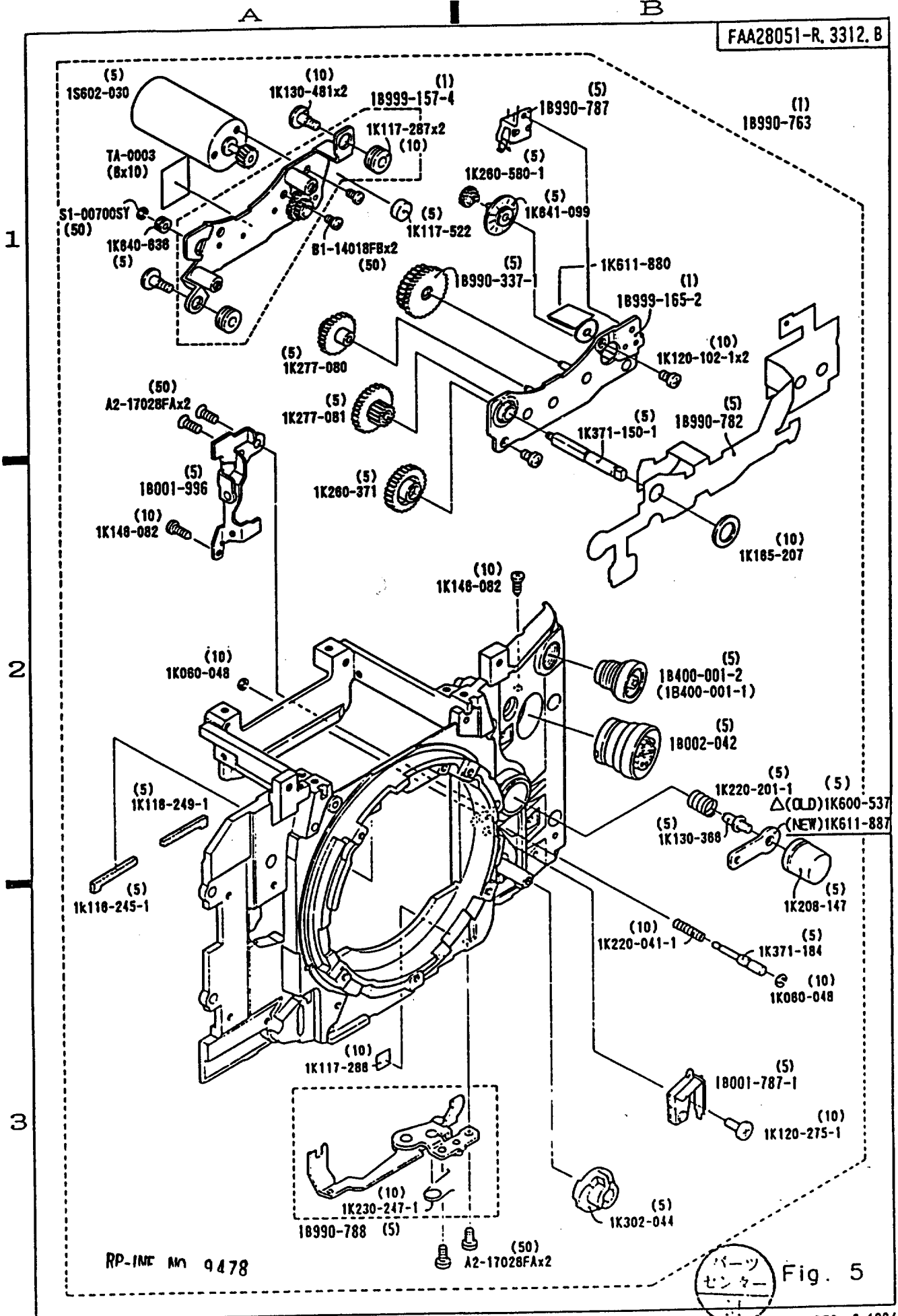


Fig. 5

A

B

(1)
18990-763

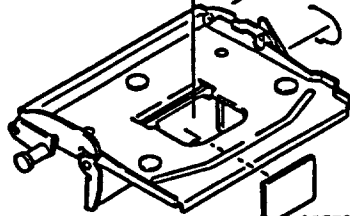
(5)
1G571-008

(10)
1K230-254

(1)
18999-531

1K050-144
1K050-022
1K050-112 (10)

1



(10)
1K130-249

(50)
B1-17030FA

(50)
B1-17030FA

(10)
1K118-878

(10)
1K225-178

(5)
1K117-489

2

(10)
1K225-238

1K011-123-2 (5)

(1)
18990-777

(10)
1K225-175

(10)
1K118-878

(5)
1K117-635

(10)
1K230-258

(50)
B1-17030FA

1K118-885 (5)

(5)
18060-511

(5)
18990-314-1

(10)
1K080-047-1

(50)
B1-17018FB

(1)
18001-784

(50)
B1-17018FBx2

(5)
1K080-548-1

(10)
1K080-047-1x2

(50)
B1-17018FB

(10)
1K120-275-1

(5)
18990-315-1

(5)
18314-160

(10)
1K230-257-2

(10)
1K080-047-1

(5)
1K280-397-1

(5)
18990-329-1

(5) S1-01200SX
△(OLD)18990-779

(5)(NEW)18990-779-1

(50)
A1-17018FB

(10)
1K115-880-1

(50)
B1-14018FB

3

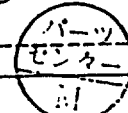
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18990-789

(5)
18610-035-2

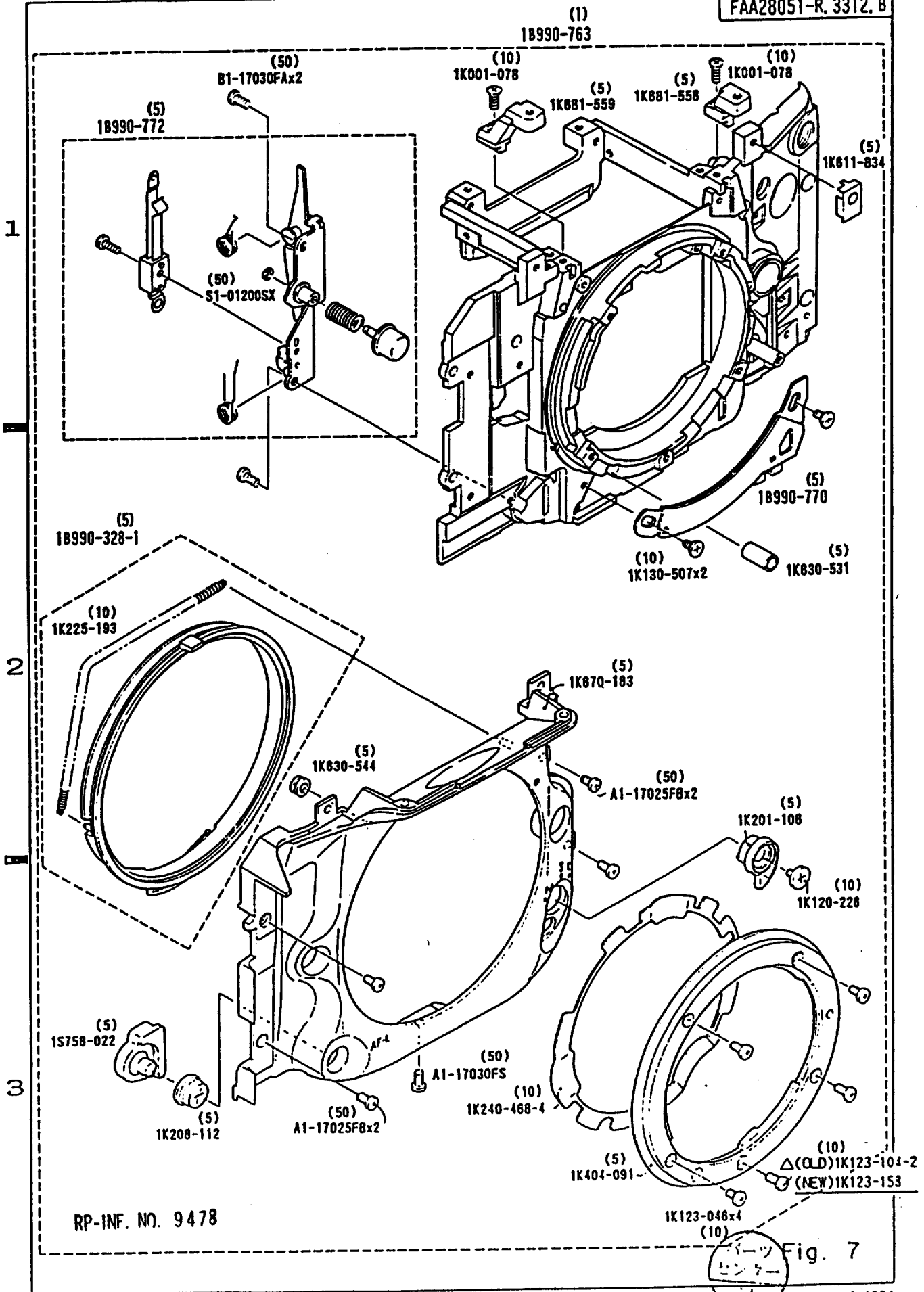
(10)
1K120-374x2

RP-INF. NO. 9472

Fig. 6



A I B



RP-INF. NO. 9478

Fig. 7

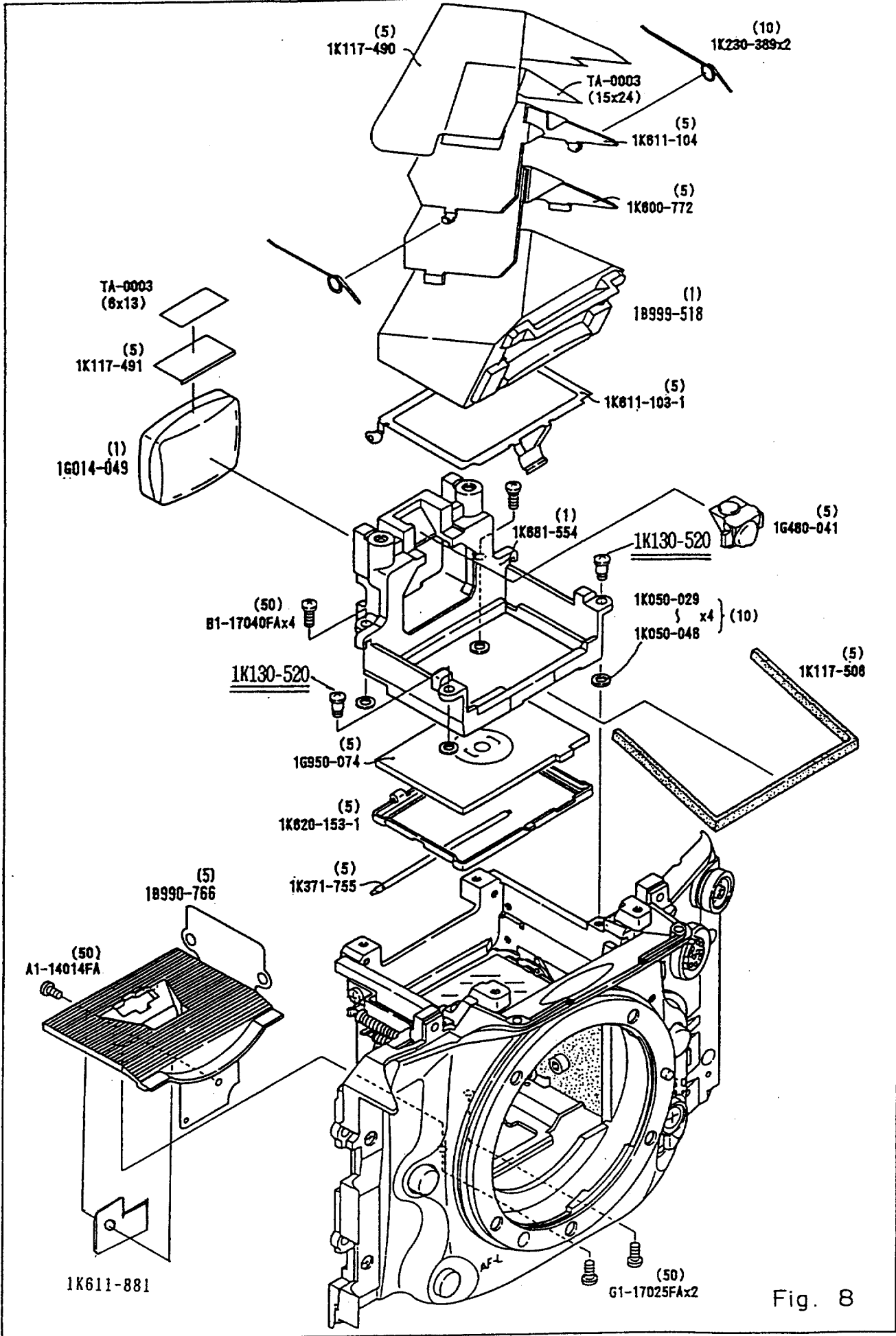
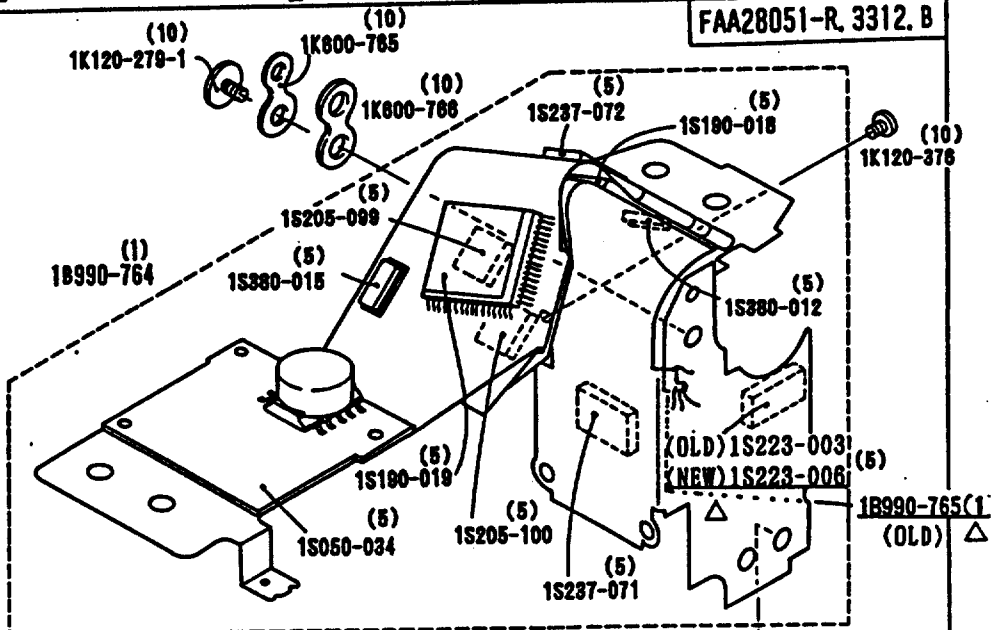
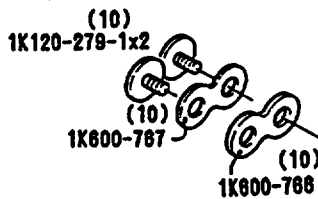
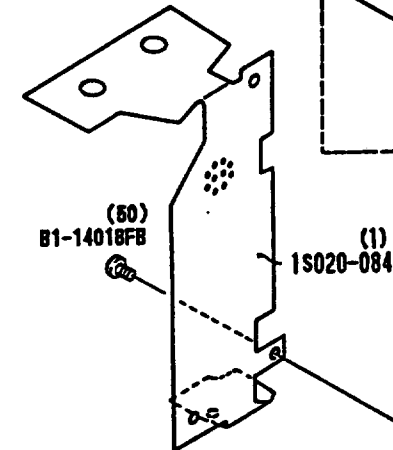


Fig. 8

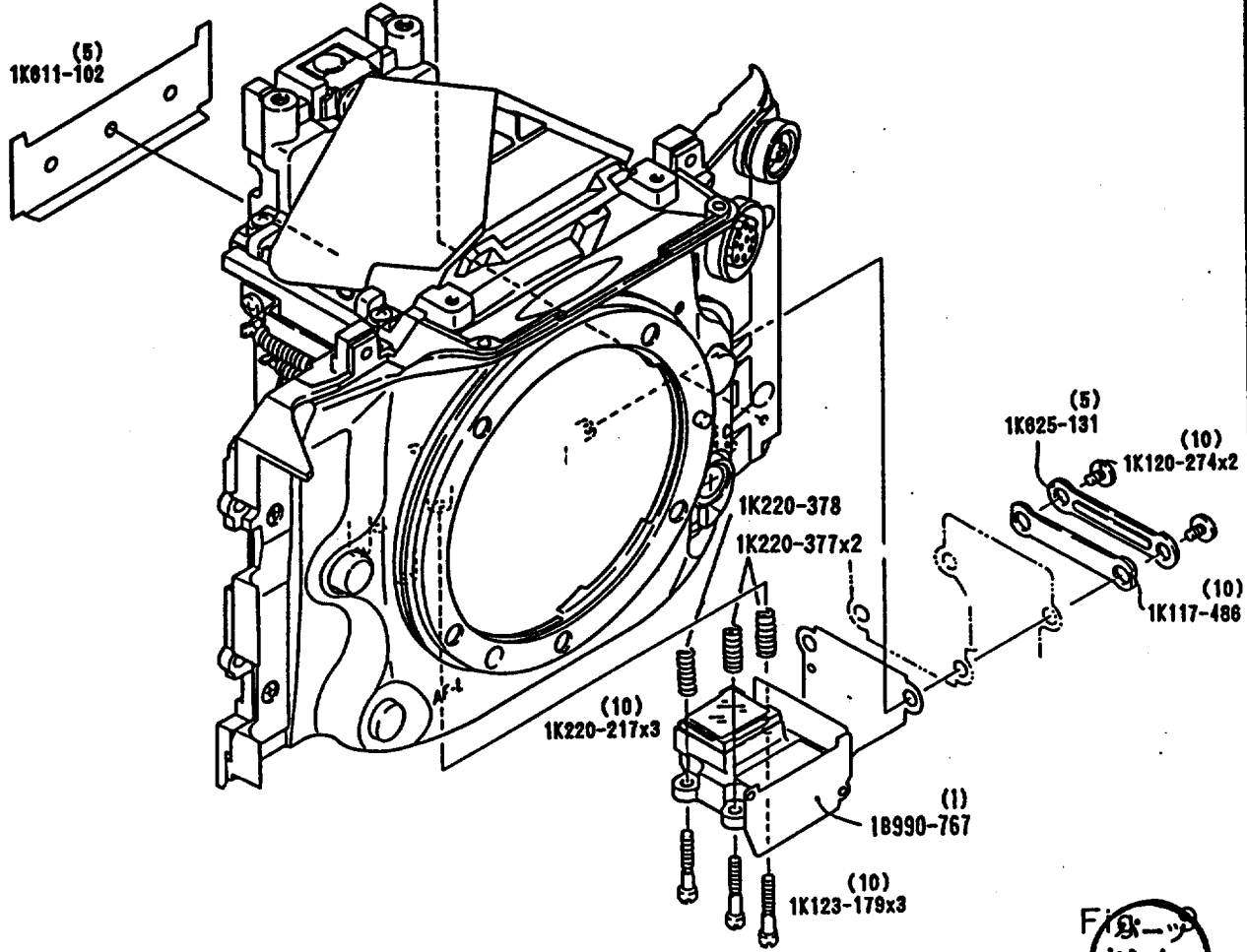
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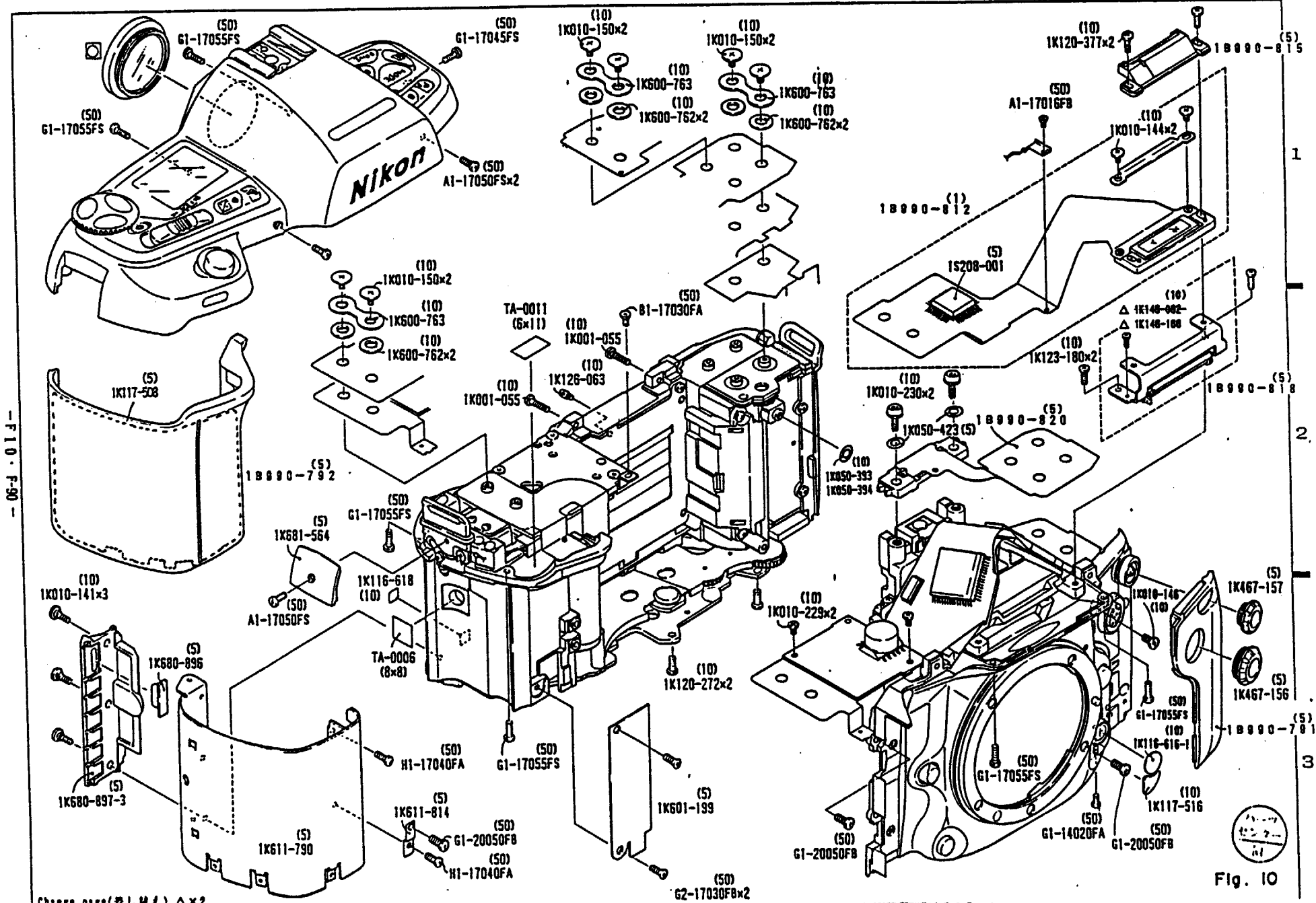


2



3





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Fig. 10

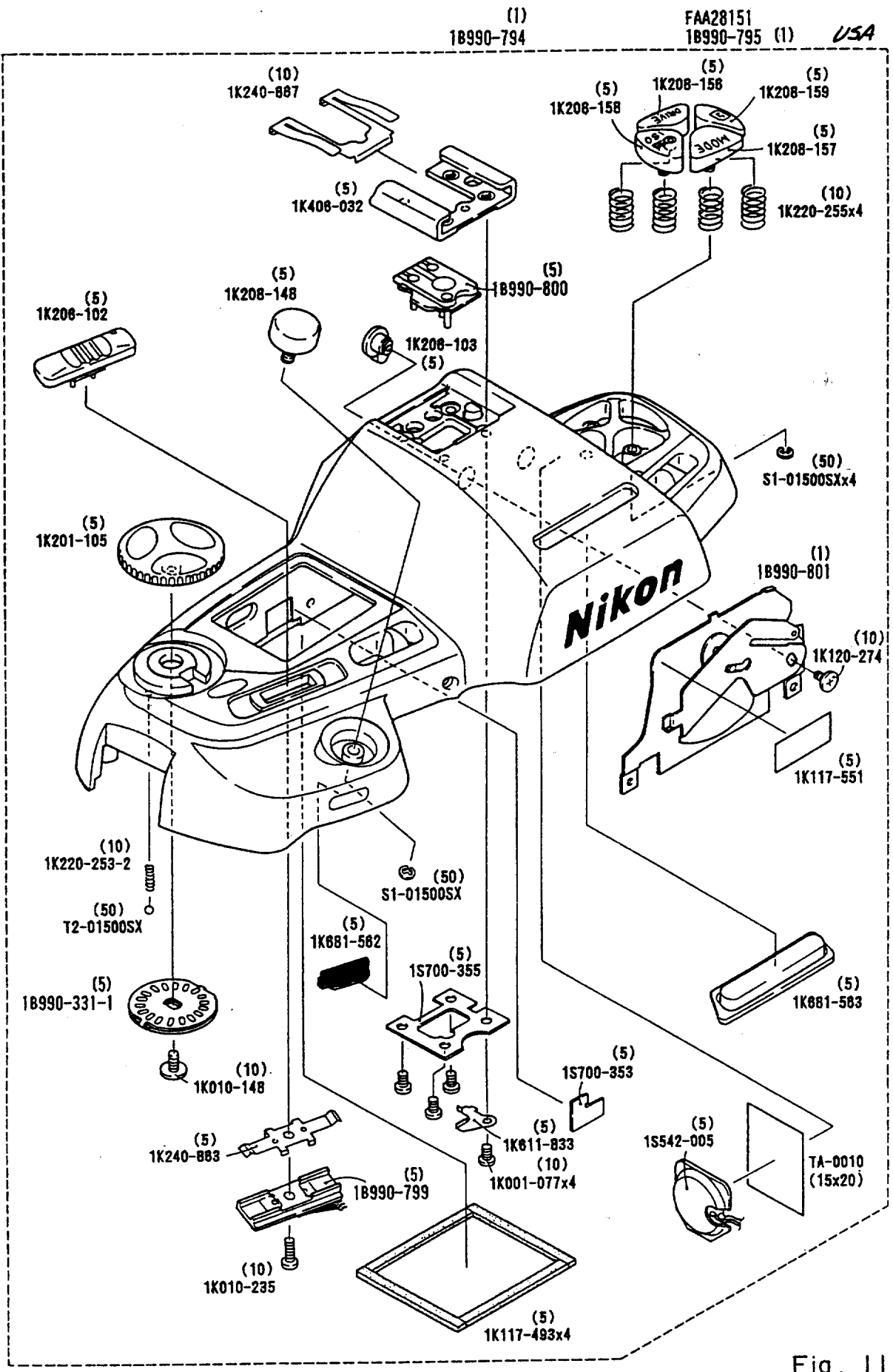


Fig. 11

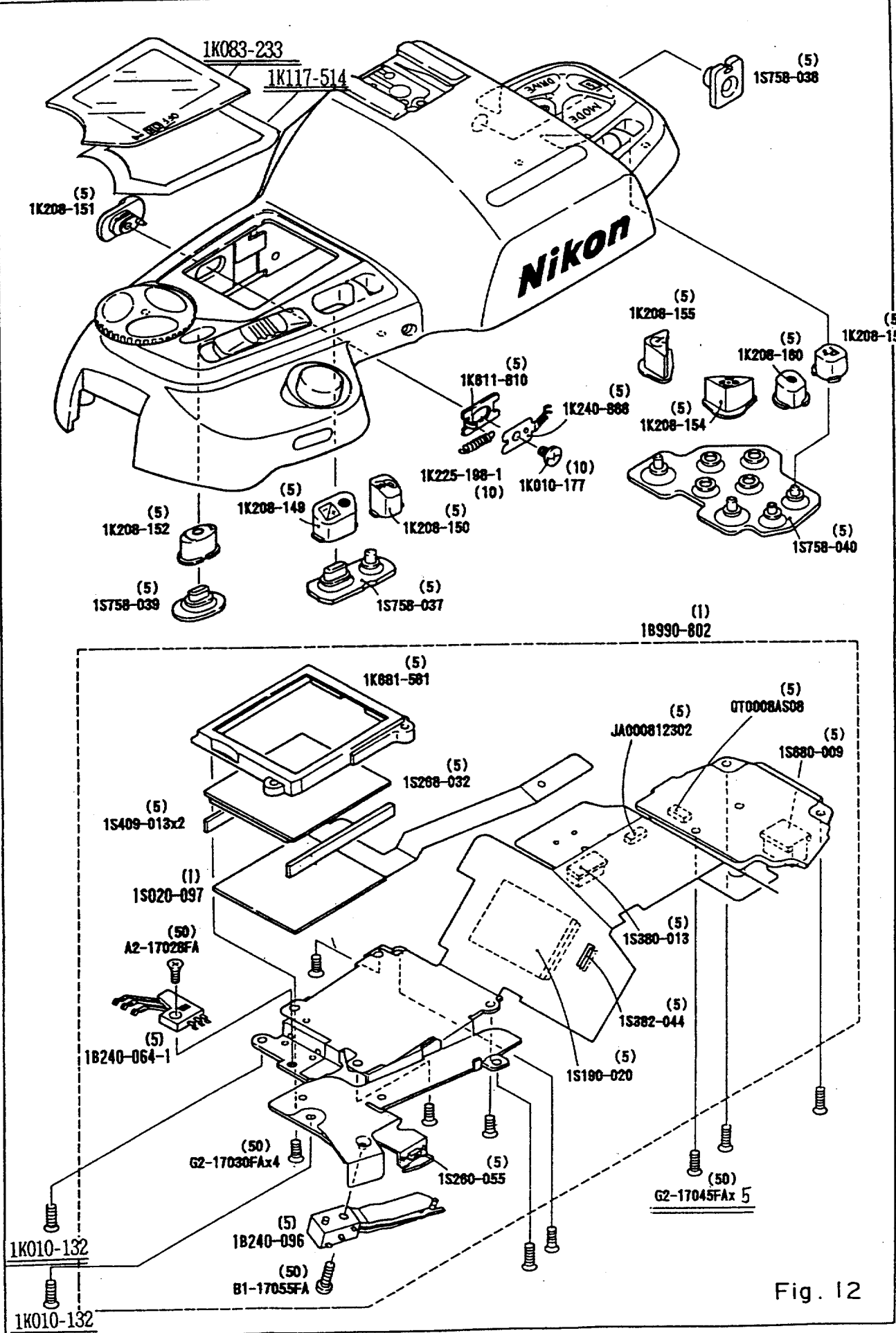
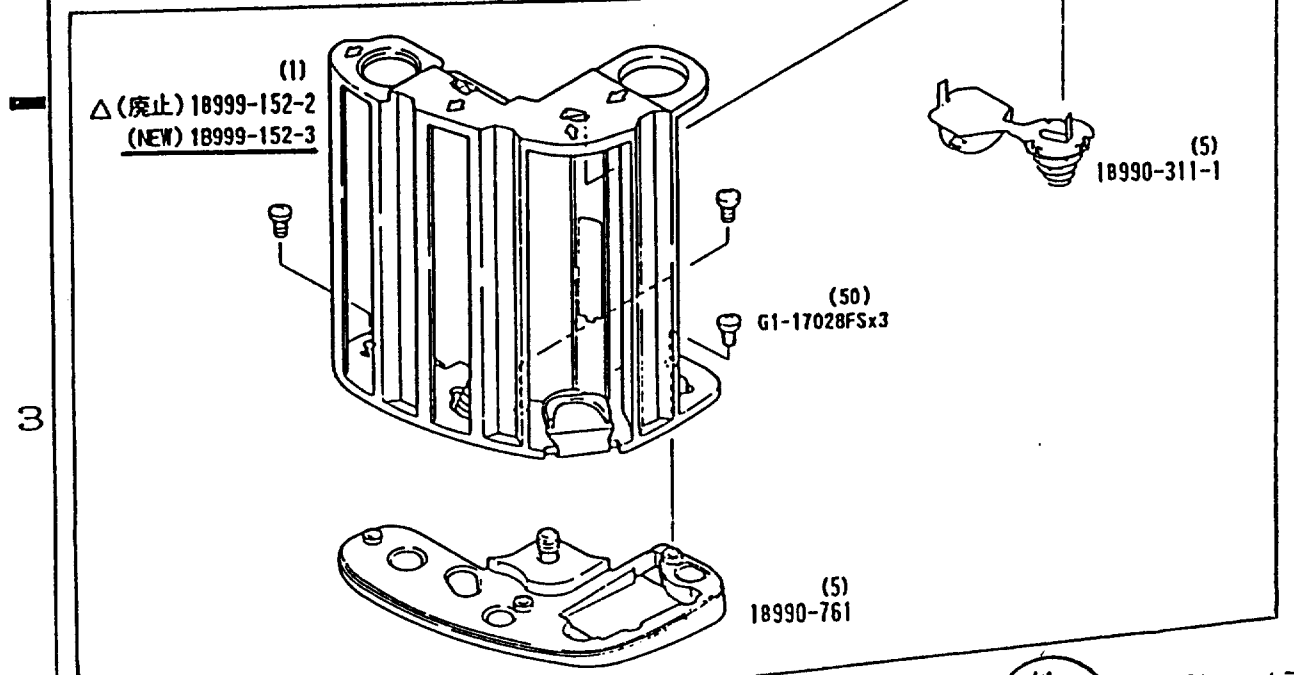
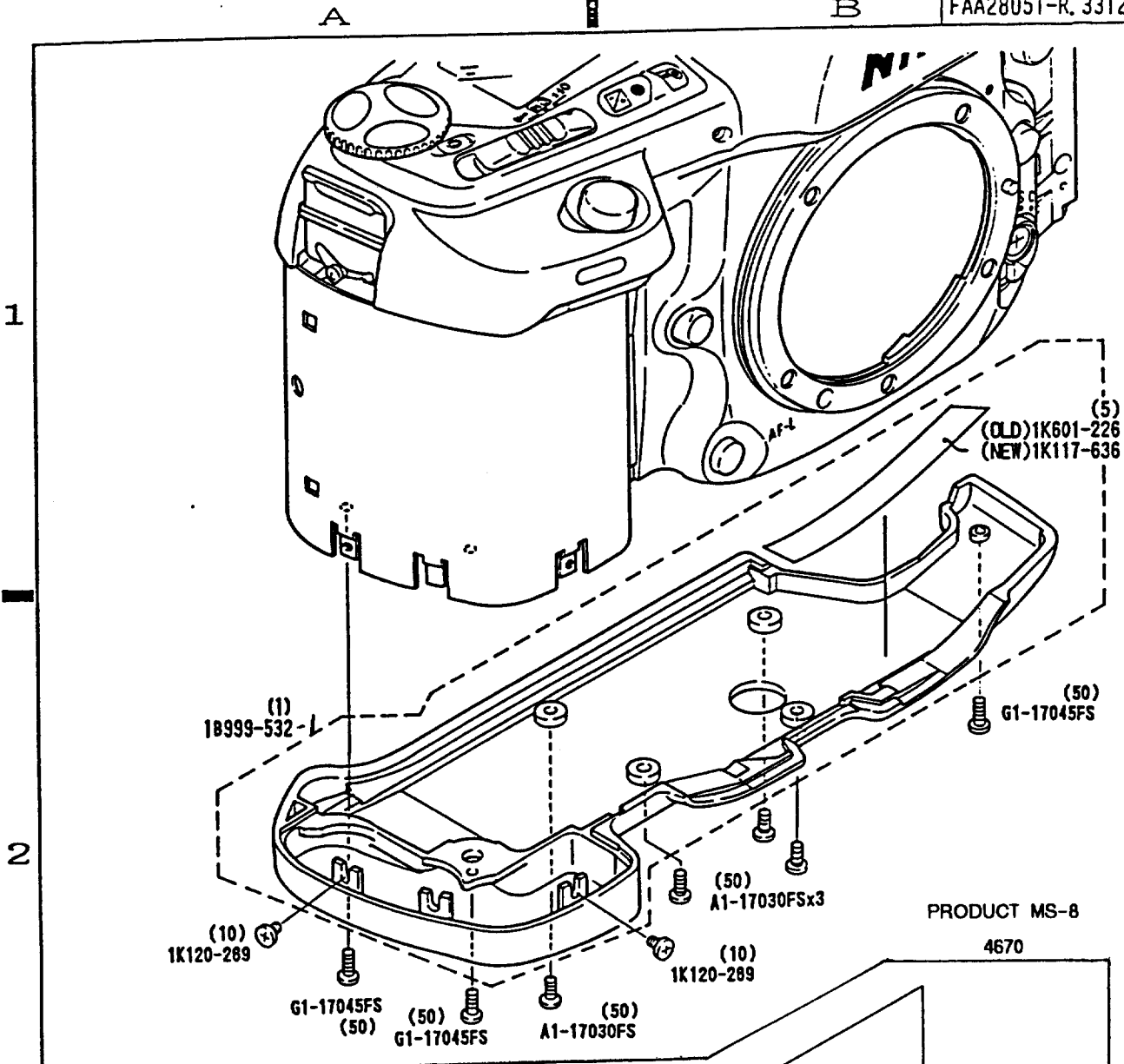


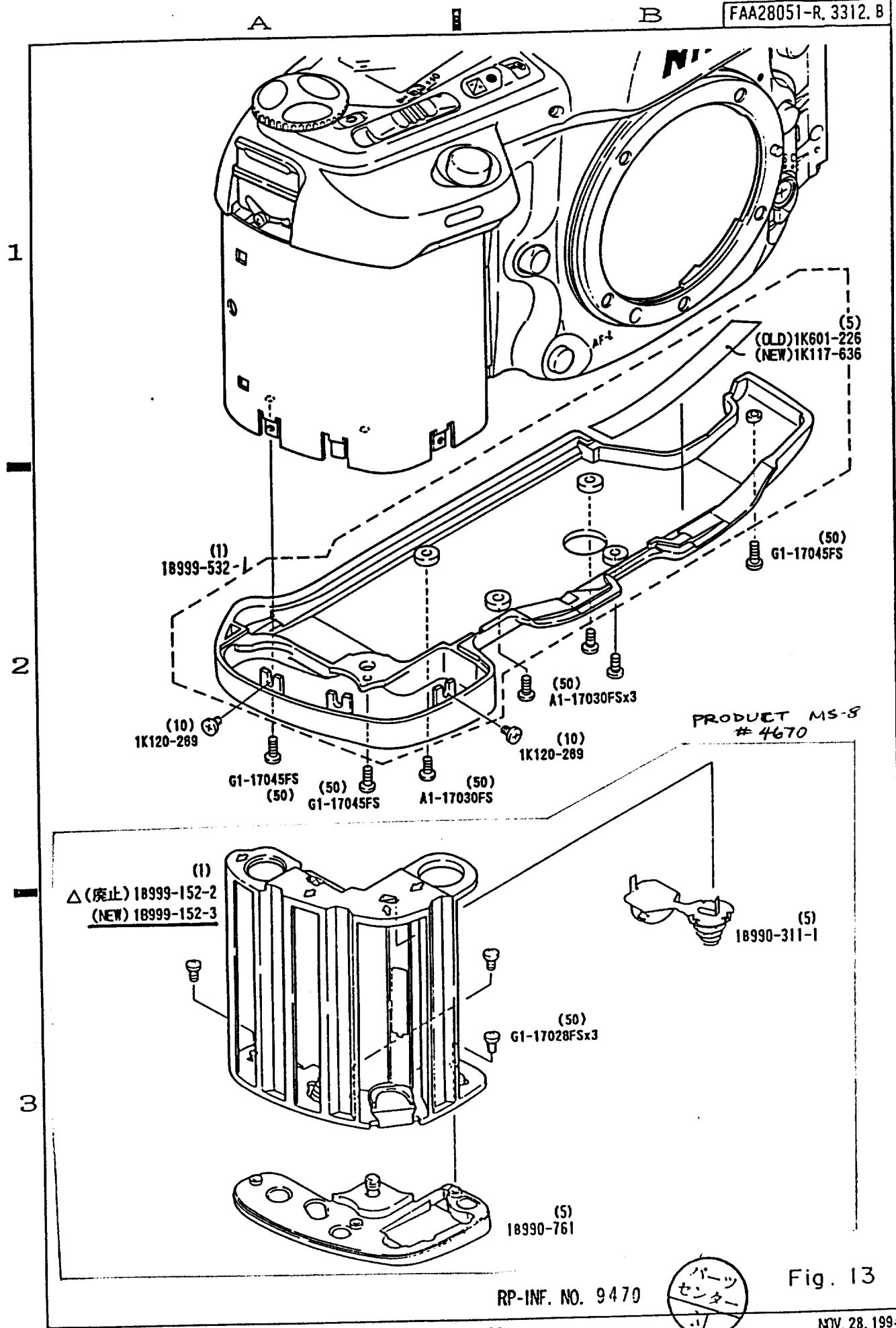
Fig. 12



RP-INF. NO. 9470



Fig. 13



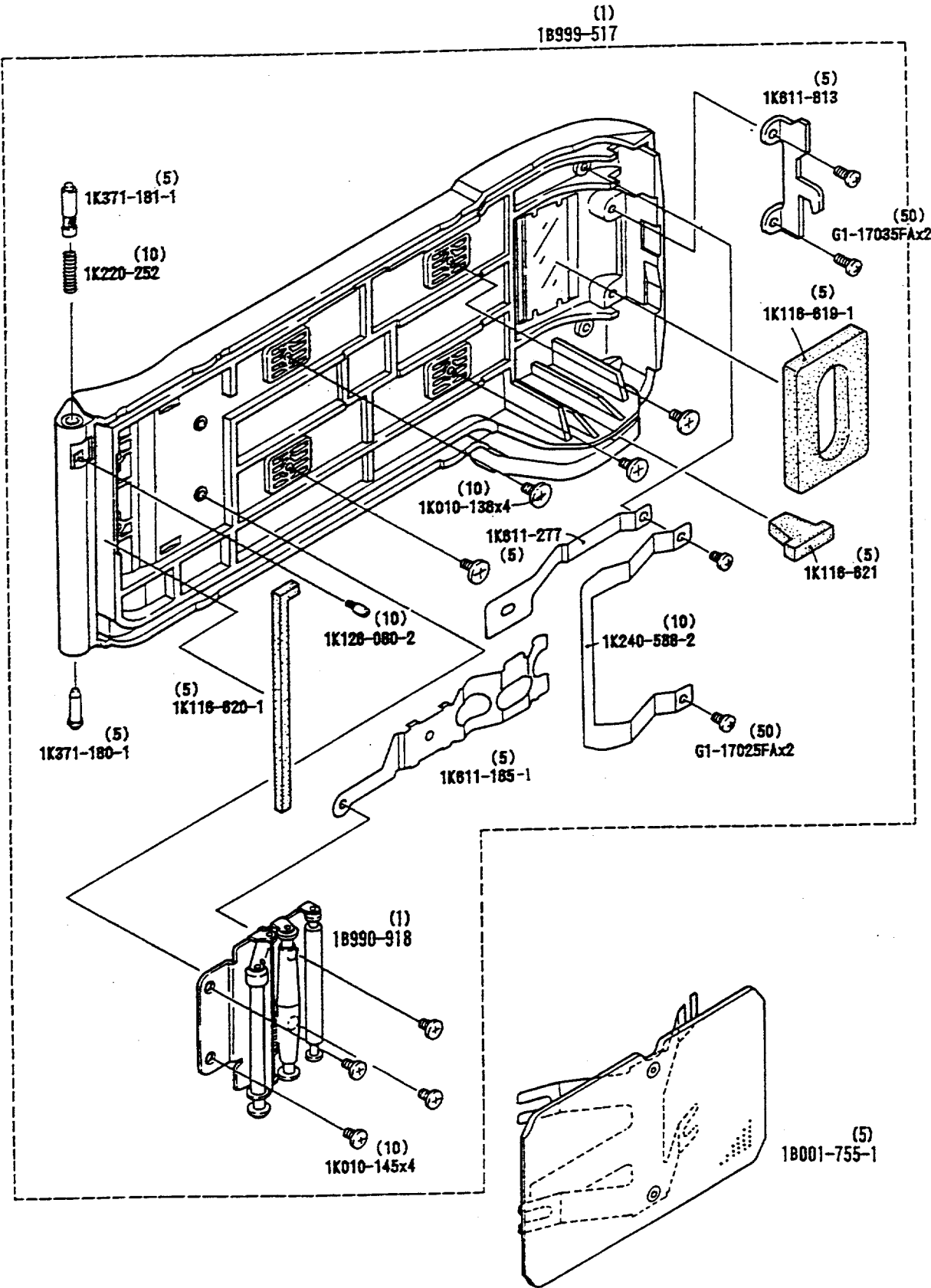


Fig. 14

部品表 Parts List

FAA28051-R. 3312. B

部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Satabil- ity	備考 Remarks	要求単位 Order Unit Q'ty
*1K001-055 (B1-17070FB)	724	Screw (M1.7)	2		10	○	F-801S	10
1K001-077	577	Screw (M1.7)	4	1B990-794	11	○△		10
1K001-078	850	Screw (M1.7)	2	1B990-763	7	○△		10
1K010-132		Screw	2		12	○	F-601 RP-9355 製技92F-2065 参照	10
*1K010-138	624	Screw (B1.7)	4	1B999-517	14	○△	F-801S	10
*1K010-139	841	Screw (B1.7)	5		2.4	○	F-801S	10
*1K010-141	844	Screw (B1.7)	3		10	○	F-801S	10
*1K010-143	846	Screw (B2)	3		2	○	F-801S	10
*1K010-144	847	Screw (B1.7)	2	1B990-812	10	○△	F-801S	10
*1K010-145	848	Screw (B1.7)	4	1B999-517	14	○△	F-801S	10
*1K010-146	849	Screw (M2)	1		7	○	F-801S	10
*1K010-148	517	Screw (B1.7)	1	1B990-794	11	○△	F-801S	10
*1K010-150	284	Screw	6		10	○	F-801S	10
*1K010-177	556	Screw (B1.7)	1		12	○	F-601	10
1K010-229	773	Screw (PS1.4)	2		10	○		10
1K010-230	775	Screw (B1.7)	2		10	○		10

部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
1K010-235	739	Screw (PSI. 7)	1	1B990-794	11	○△		10
*1K050-022	801	Washer(T=0.2)	1	1B990-763	6	○△	F-801S	10
*1K050-029	811	Washer(T=0.05)	0-4		8	○	F-801S	10
*1K050-030	811	Washer(T=0.06)	0-4		8	○	F-801S	10
*1K050-031	811	Washer(T=0.07)	0-4		8	○	F-801S	10
*1K050-032	811	Washer(T=0.08)	0-4		8	○	F-801S	10
*1K050-033	811	Washer(T=0.09)	0-4		8	○	F-801S	10
*1K050-034	811	Washer(T=0.1)	0-4		8	○	F-801S	10
*1K050-035	811	Washer(T=0.11)	0-4		8	○	F-801S	10
*1K050-036	811	Washer(T=0.12)	0-4		8	○	F-801S	10
*1K050-037	811	Washer(T=0.2)	0-4		8	○	F-801S	10
*1K050-038	811	Washer(T=0.3)	0-4		8	○	F-801S	10
*1K050-039	811	Washer(T=0.4)	0-4		8	○	F-801S	10
*1K050-040-1 (1K050-040)	811	Washer(T=0.5)	0-4		8	○	F-801S	10
*1K050-041	811	Washer(T=0.6)	0-4		8	○	F-801S	10
*1K050-042-1 (1K050-042)	811	Washer(T=0.7)	0-4		8	○	F-801S	10

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
*1K050-043-1 (1K050-043)	811	Washer(T=0.8)	0-4		8	○	F-801S	10
*1K050-044	811	Washer(T=0.9)	0-4		8	○	F-801S	10
*1K050-045-1 (1K050-045)	811	Washer(T=1.0)	0-4		8	○	F-801S	10
*1K050-046-1 (1K050-046)	811	Washer(T=1.1)	0-4		8	○	F-801S	10
*1K050-047-1 (1K050-047)	811	Washer(T=1.2)	0-4		8	○	F-801S	10
*1K050-048	811	Washer(T=0.03)	0-4		8	○	F-801S	10
*1K050-112	801	Washer(T=0.3)	0-1	1B990-763	6	○△	F-801S	10
*1K050-144	801	Washer(T=0.1)	0-1	1B990-763	6	○△	F-801S	10
1K050-393	835	前板取付け基準穴用ワッシャー (T=0.1) Washer	0		10	○		10
1K050-394	836	前板取付け基準穴用ワッシャー (T=0.2) Washer	0		10	○		10
△ 1K050-423	776	Washer	2		10	○	EP-9434	5
*1K060-047-1 (1K060-047)	824	E-ring	6	1B990-763 1B990-818	6	○△	F-801S	10
*1K060-048	825	E-ring	4	1B060-510 1B990-763 1B990-808	5	○△	F-801S	10
1K083-233	566	LCD窓 LCD window	1		12	○	EP-9355	5
*1K115-660-1	668	アセテートテープ 6×13 Cloth tape	1	1B990-763	6	○△	F-801S	10
1K116-124	675	両面テープ 15×24 Double-sided adhesive tape	1		8	×	TA-0003	1 roll

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部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Q'ty
*IK116-245-1	416	ミラー受けモルトA Mirror holder SPONGE A	1	1B990-763	5	○△	F-801S	5
*IK116-249-1	417	ミラー受けモルトB Mirror holder sponge B	1	1B990-763	5	○△	F-801S	5
*IK116-616-1 (IK116-616)	953	AFモードSWノブカバー Cover, focus mode SW knob	1		10	○	F-801S	10
*IK116-618	170	フィルム位置マーク Film leader index mark	1		10	○	F-801S	10
*IK116-619	607	裏蓋窓モルト Sponge, camera back window	1	1B999-517	14	○△	F-801S	5
*IK116-620-1 (IK116-620)	628	裏蓋軸部遮光モルト Light-tight sponge, camera back shaft	1	1B999-517	14	○△	F-801S	5
*IK116-621	629	裏蓋底部遮光モルト Light-tight sponge, camera back bottom	1	1B999-517	14	○△	F-801S	5
IK116-632-1	680	両面テープ 15×20 Double-sided adhesive tape	1	1B990-794	11	×	TA-0010	1 roll
*IK116-649-1	593	上カバー防滴シール Drip-proof seal, top cover	1		1	○	F-801S	5
*IK116-650	236	耳環B防滴シール Drip-proof seal, eyelet B	1		1	○	F-801S RP-9331 『要求単位 変更の件』	1
IK116-651	241	電池室遮光テープ 8×8 Light-tight tape, battery chamber	1		10	×	TA-0006	1 roll
*IK116-665	346	植毛紙 Flocked sheet	1	1B990-763	6	○△	F-801S	5
*IK116-678	328	振動防止モルト Vibration-proof sponge	2	1B990-763	6	○△	F-801S	10
IK116-684	697	ポリエステルテープ 8×14 Tape	1		2	×	TA-0011	1 roll
IK116-855-1	646	コード整理用テープ 6×11 Tape	3		2.4 10	×	TA-0011	1 roll
IK117-174	653	両面テープ 6×15 Double-sided adhesive tape	2		2	×	TA-0010	1 roll

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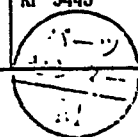
FAA28051-R. 3312. B

部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
*IK117-287	937	防音ゴム Rubber	2	1B990-763 1B999-157-4	5	○△	F-801S	10
*IK117-288	939	押さえゴム Rubber	1	1B990-763	5	○△	F-801S	10
IK117-347	645	植毛紙 Flocked sheet	1		1	○	F-801S RP-9355 「製品に使用 されない」	10
IK117-486	292	APセンサー圧接ゴム Press-contact rubber. AF	1		9	○		10
IK117-489	418	L基板植毛紙 Flocked sheet. base plate L	1	1B990-763	6	○△		5
IK117-490	429	ペンタ押さえ絶縁シート Insulation sheet. pentaprism	1		8	○		5
IK117-491	433	接眼遮光板 Light-tight plate	1		8	○		5
IK117-493	630	外部LCDゴミ防止用モルト Dust protect sponge	4	1B990-794	11	○△		5
IK117-506	415	F内LCDゴミ対策用モルト Dust protect sponge	1		8	○		5
IK117-507	644	巻上げ側吊環部絶縁用テープ (静電気対策用) Insulation tape	1	1B990-794	1	○△		5
△ *IK117-508	671	グリップテープ Grip tape	1	1B990-792	10	○△	RP-9472	5
IK117-513	677	両面テープ 8×10 Double-sided adhesive tape	2	1B990-763 1B990-791	5	×	TA-0003	1 roll
IK117-514	690	両面テープ.LCD window Double-sided adhesive tape.LCD window	1		12	○	RP-9355	5
IK117-516	954	AFモードSW銘板 Focus mode plate	1		10	○		5
IK117-522	927	AFファットインタラプタ押さえゴム Photo interrupter retainer	1	1B990-763	5	○△		5
IK117-550	658	両面テープ 6×13 Double-sided adhesive tape	1		8	×	TA-0003	1 roll
IK117-551	662	ポリエステルテープ 7×15 Tape	1	1B990-794	11	×	TA-0011	1 roll
IK117-635	419	植毛フィルム Flocked sheet	1		1	○	RP-9443	5

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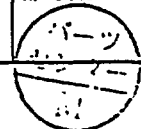
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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Q'ty
*IK117-287	937	防音ゴム Rubber	2	1B990-763 1B999-157-4	5	○△	F-801S	10
*IK117-288	939	押さえゴム Rubber	1	1B990-763	5	○△	F-801S	10
IK117-347	645	植毛紙 Flocked sheet	1		1	○	F-801S RP-9355 「製品に使用されていない」	10
IK117-486	292	APセンサー圧接ゴム Press-contact rubber. AP	1		9	○		10
IK117-489	418	L基板植毛紙 Flocked sheet. base plate L	1	1B990-763	6	○△		5
IK117-490	429	ペンタ押さえ絶縁シート Insulation sheet. pentaprism	1		8	○		5
IK117-491	433	接眼遮光板 Light-tight plate	1		8	○		5
IK117-493	630	外部LCDゴミ防止用モルト Dust protect sponge	4	1B990-794	11	○△		5
IK117-506	415	F内LCDゴミ対策用モルト Dust protect sponge	1		8	○		5
IK117-507	644	巻上げ側吊環部絶縁用テープ (静電気対策用) Insulation tape	1	1B990-794	1	○△		5
△ *IK117-508	671	グリップテープ Grip tape	1	1B990-792	10	○△	RP-9472	5
IK117-513	677	両面テープ 8×10 Double-sided adhesive tape	2	1B990-763 1B990-791	5	×	TA-0003	1 roll
IK117-514	690	両面テープ.LCD window Double-sided adhesive tape.LCD window	1		12	○	RP-9355	5
IK117-516	954	AFモードSW銘板 Focus mode plate	1		10	○		5
IK117-522	927	AFファトインタラプタ押さえゴム Photo interrupter retainer	1	1B990-763	5	○△		5
IK117-550	658	両面テープ 6×13 Double-sided adhesive tape	1		8	×	TA-0003	1 roll
IK117-551	662	ポリエステルテープ 7×15 Tape	1	1B990-794	11	×	TA-0011	1 roll
IK117-635	419	植毛フィルム Flocked sheet	1		1	○	RP-9443	5

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
*IK120-086	790	Screw (M1.4)	1		1	○	F-801S	10
*IK120-102-1	926	Screw (M1.7)	2	1B990-763	5	○△	F-801S	10
*IK120-226	951	Screw (M1.7)	1	1B990-763	7	○△	F-801S	10
*IK120-269	781	Screw (M1.4)	2		13	○	F-801S	10
*IK120-272	787	Screw (M2)	2		10	○	F-801S	10
*IK120-274	294	Screw (M1.4)	3	1B990-794	10	○△	F-801S	10
*IK120-275-1 (IK120-275)	507	Screw (M1.7)	2	1B990-763	5.6	○△	F-801S	10
*IK120-279-1 (IK120-279)	289	Screw (M1.7)	3		9	○	F-801S	10
*IK120-374	717	Screw (M1.4)	2	1B990-763	6	○	RS	10
IK120-376	786	Screw	1		9	○		10
IK120-377	791	Screw (M1.7)	2		10	○		10
△ *IK123-104-2 (IK123-104-1)	475	Screw (M2)	1	1B990-763	7	○△	RP-9478 F-801S	10
*IK123-157 (IK123-046)	473	Screw (M2)	4	1B990-763	7	○△	F-801S	10
△ *IK123-158	475	Screw (M2)	1	1B990-763	7	○△	RP-9478 F-801S	10
IK123-179	405	Screw (M1.4)	3		9	○		10
IK123-180	723	Screw (M1.7)	2		10	○		10
*IK126-063	178	Screw (M1.4)	1		10	○	F-801S	10

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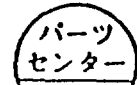
部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Q'ty
*IK126-080-1 (IK126-080)	636	Screw	1	1B990-517	14	○△	F-801S	10
*IK130-249	789	Screw (M1.7)	1	1B990-763	6	○△	F-801S	10
*IK130-363	782	Screw (M1.4)	2		2	○	F-801S	10
*IK130-364	783	Screw (M1.4)	2		4	○	F-801S	10
*IK130-365	784	Screw (M1.4)	1		3	○	F-801S	10
*IK130-366	444	レンズ着脱軸 Lens release shaft	1	1B990-763	5	○△	F-801S	5
*IK130-481	918	Screw (M1.7)	2	1B990-763	5	○△	F-801S	10
IK130-507	488	Screw (M1.7)	2	1B990-763	7	○△		10
IK130-520	722	Screw	2		8	○	RP-9283 「製技92F- 2059」参照	10
△ *IK146-082	771	Screw (M1.4)	2	1B990-763	5	○△	F-801S RP-9533	10
IK146-162	90	裏蓋SWピン Pin. camera back SW	1		2	○		5
△ IK146-166	768	Screw	1	1B990-818	10	○△	RP-9533	10
*IK165-207	938	Washer (Rubber)	1	1B990-763	5	○△	F-801S	10
IK201-103	225	裏蓋開閉ノブA Camera back open/close knob A	1		3	○		5
IK201-104	226	裏蓋開閉ノブB Camera back open/close knob B	1		3	○		5
IK201-105	515	電子ダイヤル Electrical dial	1	1B990-794	11	○△		5
IK201-106	950	AFモードSWノブ Knob. focus mode SW	1	1B990-763	7	○△		5

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Q'ty
*1K206-056	91	裏蓋SWレバー Lever. camera back SW	1		2	○	F-801S	5
1K206-102	541	電源SWレバー Power SW lever	1	1B990-794	11	○△		5
1K206-103	594	アイピースレバー Knob. eyepiece shutter	1	1B990-794	11	○△		5
*1K208-112	491	A Fロック鈕 AF lock button	1	1B990-763	7	○△	F-801S	5
1K208-147	441	レンズ着脱鈕 Lens release button	1	1B990-763	5	○△		5
1K208-148	531	レリーズ鈕 Shutter release button	1	1B990-794	11	○△		5
1K208-149	546	露出補正鈕 Exposure compensation button	1		12	○		5
1K208-150	547	R鈕 Film rewind button	1		12	○		5
1K208-151	552	A Eロック鈕 AE lock button	1		12	○		5
1K208-152	564	測距モード鈕 Focus area button	1		12	○		5
1K208-153	580	P s鈕 Ps button	1		12	○		5
1K208-154	583	マルチ鈕 Metering system button	1		12	○		5
1K208-155	584	セルフ鈕 Self-timer button	1		12	○		5
1K208-156	585	ドライブ鈕 Drive button	1	1B990-794	11	○△		5
1K208-157	586	モード鈕 Mode selector button	1	1B990-794	11	○△		5
1K208-158	587	R / I S O鈕 Film speed/film rewind button	1	1B990-794	11	○△		5

部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
1K208-159	588	フラッシュ切替え釘 Flash sync mode button	1	1B990-794	11	○△		5
1K208-160	590	リセット釘 Reset button	1		12	○		5
*1K220-041-1 (1K220-041)	446	レンズ着脱釘バネ Spring, lens release button	1	1B990-763	5	○△	F-801S	10
*1K220-201-1	445	レンズ着脱軸バネ Spring, lens release shaft	1	1B990-763	5	○△	F-801S	5
*1K220-217	406	AFセンサー調整バネ Adjustment spring, AF sensor	8		9	○	F-801S RP-9355 『製技92F- 1034』参照	10
*1K220-252	637	裏蓋軸着脱バネ Spring, camera back shaft release	1	1B999-517	14	○△	F-801S	10
*1K220-253-2 (1K220-253)	519	電子ダイヤルクリックバネ Spring, electrical dial click	1	1B990-794	11	○△	F-801S	10
*1K220-255	589	釘バネ Spring	4	1B990-794	11	○△	F-801S	10
1K220-377	407	AFセンサー調整バネ Adjustment spring, AF sensor	2		9	○	RP-9355 『製技92F- 1034』参照	5
1K220-378	408	AFセンサー調整バネ Adjustment spring, AF sensor	1		9	○	RP-9355 『製技92F- 1034』参照	5
*1K225-175	306	ミラーアップ縦レバー戻しバネ Spring, mirror-up lever reset	1	1B990-763	6	○△	F-801S	10
*1K225-176	310	絞りレバー駆動バネ Spring, aperture lever actuating	1	1B990-763	6	○△	F-801S	10
*1K225-193	484	F-F0バネ F-Fo spring	1	1B990-328-1 1B990-763	7	○△	F-801S	10
*1K225-198-1 (1K225-198)	555	AEロックバネ AE lock spring	1		12	○	F-601	10
1K225-233	222	裏蓋開閉キーバネ Spring, camera back open/close key	1		3	○		10
1K225-236	313	絞り戻しバネ Aperture reset spring	1	1B990-763	6	○△		10

部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
*1K230-247-1 (1K230-247)	932	A F横レバーバネ Spring. AF lever	1	1B990-763 1B990-788	5	○△	F-801S	10
*1K230-254	410	主ミラーダウンバネ Mirror-down spring	1	1B990-763	6	○△	F-801S	10
*1K230-256	305	ミラーアップバネ Mirror-up spring	1	1B990-763	6	○△	F-801S	10
*1K230-257-1 (1K230-257)	324	シャッターリリースレバーバネ Spring. shutter release	1	1B990-763	6	○△	F-801S	10
*1K230-258-2 (1K230-258-1)	341	絞りカウンタ円盤バネ Spring. aperture counter disc	1	1B990-763	6	○△	F-801S	10
1K230-389	427	ペンタ押さえバネ Retainer spring. pentaprism	2		8	○		10
*1K233-052	397	サブミラーバネ Sub-mirror spring	1	1B100-639 1B990-763	6	○△	F-801S	5
*1K240-468-4 (1K240-468-2)	472	バヨネットバネ Bayonet spring	1	1B990-763	7	○△	F-801S	10
*1K240-588-2 (1K240-588)	631	バトロローネ規制バネ Film cartridge stopper spring	1	1B999-517	14	○△	F-801S	10
*1K240-599-1 (1K240-599)	217	バトロローネ押さえバネ Spring. film cartridge retainer	1		1	○	F-801S	5
*1K240-608-2 (1K240-608)	96	電池SW接片 Battery switch contact	1		2	○	F-801S	5
1K240-863	542	クリック板(電源SW板A) Click spring	1	1B990-794	11	○△		5
1K240-866	557	A EロックSW接片 AE lock SW contact	1		12	○		5
1K240-867	573	シューバネ Shue spring	1	1B990-794	11	○△		10
*1K260-371	910	A Fカップリングギア AF coupling gear	1	1B990-763	5	○△	F-801S	5
*1K260-373	109	減速ギアR Reducing gear R	1		4	○	F-801S	5

部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
*1K260-376	165	巻き戻し連結ギアL Rewind coupling gear L	1		3	○	F-801S	5
*1K260-377	50	フィルム給送モーター減速ギアF Reducing gear F. film advance motor	1		2	○	F-801S	5
*1K260-378	52	フィルム給送モーター減速ギアH Reducing gear H. film advance motor	1		4	○	F-801S	5
*1K260-379-1 (1K260-379)	53	フィルム給送モーター減速ギアW Reducing gear W. film advance motor	1		2	○	F-801S	5
*1K260-381-1	58	基準ギア Reference gear	1		2	○	F-801S	5
*1K260-382	59	カウンタギア Counter gear	1		2	○	F-801S	5
*1K260-387	85	巻き戻し連結ギアK Rewind coupling gear K	1		2	○	F-801S	5
*1K260-397-1 (1K260-397)	339	絞りカウンタ円盤 Aperture counter disk	1	1B990-763	6	○△	F-801S	5
*1K260-580-1 (1K260-580)	921	AFギア AF gear	1	1B990-763	5	○△	F-801S	5
1K260-625	57	スプロケットギア Sprocket gear	1		2	○		5
*1K275-061	55	スプール Spool	1		4	○	F-801S	5
1K275-084	56	スプロケット Sprocket	1		4	○		5
*1K277-080	908	AFギア4 AF gear 4	1	1B990-763	5	○△	F-801S	5
*1K277-081	909	AFギア5 AF gear 5	1	1B990-763	5	○△	F-801S	5
*1K277-084	107	減速ギアP Reducing gear P	1		4	○	F-801S	5
*1K277-085	108	減速ギアQ Reducing gear Q	1		4	○	F-801S	5

部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
*1K277-086	47	フィルム給送モーター減速ギアA Reducing gear A. film advance motor	1		2	○	F-801S	5
*1K277-087	48	フィルム給送モーター減速ギアB Reducing gear B. film advance motor	1		2	○	F-801S	5
*1K277-089	51	フィルム給送モーター減速ギアG Reducing gear G. film advance motor	1		2	○	F-801S	5
1K277-144	49	フィルム給送モーター減速ギアC Reducing gear C. film advance motor	1		2	○		5
1K277-146	106	減速ギアO Reducing gear O	1		4	○		5
*1K302-044	952	AFモードSWカム AF mode SW cam	1	1B990-763	5	○△	F-801S	5
*1K371-150-1 (1K371-150)	911	AFカップリング軸 AF coupling shaft	1	1B990-763	5	○△	F-801S	5
*1K371-180-1 (1K371-180)	634	裏蓋軸A Camera back shaft A	1	1B999-517	14	○△	F-801S	5
*1K371-181-1 (1K371-181)	635	裏蓋軸B Camera back shaft B	1	1B999-517	14	○△	F-801S	5
*1K371-182	216	DX接点 DX contact	6	1B990-832	1	○△	F-801S	10
*1K371-184	443	レンズ着脱ピン Lens release pin	1	1B990-763	5	○△	F-801S	5
1K371-743	166	巻き戻し連結軸 Rewind coupling shaft	1		3	○		5
1K371-755	423	スクリーン枠支持軸 Shaft. screen frame support	1		8	○		5
*1K404-091-1 (1K404-091)	471	バヨネット Bayonet	1	1B990-763	7	○△	F-801S	5
1K406-032	571	シュー Shue	1	1B990-794	11	○△		5
1K467-156	468	リモートコネクタキャップ Remote connecter cap	1		10	○		5

部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
IK467-157	470	シンクロキャップ Sync cap	1		10	○		5
△ *IK600-537	442	レンズ着脱板	1	1B990-763	5	○△	RP-9457 F-801S	5
IK611-887		Lens release plate						
*IK600-762	282	圧接ゴム Press-contact rubber	6		10	○	F-801S	10
*IK600-763	283	圧接押さえ板 Press-contact retainer plate	3		10	○	F-801S	10
*IK600-765	286	AF接点FPC圧接板 FPC press-contact plate	1		9	○	F-801S	10
*IK600-766	287	AF接点FPC圧接ゴム FPC press-contact rubber	2		9	○	F-801S	10
*IK600-767	288	AF基板FPC圧接板 FPC press-contact plate	1		9	○	F-801S	10
*IK600-772	428	ペンタ押さえシート Pentaprism retainer sheet	1		8	○	F-801S	5
IK601-199	175	実装カバー板 Cover plate	1		10	○		5
IK601-201	224	裏蓋開閉キーロックレバー Lever. camera back open/close key lock	1		3	○		5
IK601-226	684	銅箔シート	1		13	○△	RP-93F9 製技92F-2060参照の 事	5
IK117-636		Tpae. copper foil						
*IK611-102	413	チタン板 Titanium plate	1		9	○	F-801S	5
*IK611-103-1 (IK611-103)	425	視野枠 Viewfield frame	1		8	○	F-801S	5
*IK611-104	426	ペンタ押さえ板 Pentaprism retainer plate	1		8	○	F-801S	5
*IK611-123-1 (IK611-123)	345	アオリ防止板 Flop preventative plate	1	1B990-763	6	○△	F-801S	5
*IK611-165	622	板バネ	1	1B999-517	14	○△	F-801S RP-9283 製技 92F- 2055J 参照	5
*IK611-165-1		Plate						

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Q'ty
*1K611-277	633	板バネ Plate	1	1B999-517	14	○△	F-801S	5
1K611-790	36	グリップ Grip	1		10	○		5
1K611-794	221	裏蓋開閉キー板 Camera back open/close key plate	1		3	○		5
1K611-795	231	吊環 (グリップ側) Neckstrap ring (Grip side)	1		1	○		5
1K611-796	232	吊環 (巻き戻し側) Neckstrap ring (Film rewind side)	1		1	○		5
1K611-810	554	AE ロックスライダー板 Plate, AE lock slider	1		12	○		5
1K611-813	609	裏蓋爪 Camera back latch	1	1B999-517	14	○△		5
1K611-814	663	グリップ導電板 Grip conductive plate	1		10	○		5
1K611-833	639	静電気対策用ラグ板A Lug plate A	1	1B990-794	11	○△		5
1K611-834	640	静電気対策用ラグ板B Lug plate B	1	1B990-763	7	○△	RP-9335 『製技92F-2070参照』	5
1K611-835	641	静電気対策用ラグ板C Lug plate C	1		1	○		5
1K611-880	2901M	曲げ板 Bent plate	1		8	○	RP-93F9	5
1K611-881	638	TTL-FPC 押さえ板 TTL-FPC retaining plate	1			○	RP-9355 『製技92F-1033参照』	5
*1K620-153-1 (1K620-153)	422	スクリーン枠 Screen frame	1		8	○	F-801S	5
1K625-131	293	AFセンサー圧接基板 Press-contact base plate	1		9	○		5
*1K630-531	956	AFカップリングチューブ AF coupling tube	1	1B990-763	7	○△	F-801S	5

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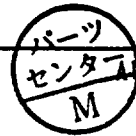
部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
*IK630-544	485	F-F0バネローラー F-Fo spring roller	1	1B990-763	7	○△	F-801S	5
*IK630-548-1 (IK630-548)	309	絞りローラー Aperture roller	1	1B990-763	6	○△	F-801S	5
*IK640-636	913	A Fカップリングカラー AF coupling coller	1	1B990-763	5	○△	F-801S	5
*IK641-099	923	A Fカウンター円板 AF counter disk	1	1B990-763	5	○△	F-801S	5
IK670-163	22	エプロン Apron	1	1B990-763	7	○△		5
*IK680-892	190	DB接点カバー Data back contact cover	1		1	○	F-801S	5
*IK680-896	39	裏蓋受けゴム Camera back cushion rubber	1		10	○	F-801S	5
*IK680-897-3 (IK680-897-2)	40	裏蓋ヒンジカバー Camera back hinge cover	1		10	○	F-801S	5
*IK680-981-1	177	バトローネ受け Film cartridge set mold	1		1	○	F-801S	5
IK681-542	41	フィルム給送モーター基板 Film advance motor base plate	1		2	○		5
IK681-544	119	上地圧接基板 Press-contact base plate	1		4	○		5
IK681-546	186	F検知環 Film detecting ring	1		3	○		5
IK681-549	220	裏蓋開閉キーモールド座 Camera back open/close key mold base	1		3	○		5
IK681-551	281	圧接基板 Press-contact base plate	1		3	○		5
IK681-554	421	プリズムボックス Prism box	1		8	○		1
IK681-558	454	表示系ブロック保持脚A Display block supporter A	1	1B990-763	7	○△		5

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
1K681-559	455	表示系ブロック保持脚B Display block supporter B	1	1B990-763	7	○△		5
1K681-561	561	外部LCDハウジング LCD housing	1	1B990-802	12	○△		5
1K681-562	567	セルフ窓 Self-timer window	1	1B990-794	11	○△		5
1K681-563	568	採光窓 Lighting window	1	1B990-794	11	○△		5
1K681-564	569	吊り環カバー Neckstrap cover	1		10	○		5
△ 1K999-150		カバー板 Cover plate	1			○	RP-9444	5
△ 1K999-151		ワッシャー Washer	1			○	RP-9444	5

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
* QT0008AS08	1084	トライアック Triac	2	1S020-084 1B990-802	12	○△	F-801S	5
JA000812302	1055	IC IC (S-81230AG-RB-T1)	1	1B990-802	12	○△		5
1S050-034	1021	DC-DCコンバータ DC-DC converter	1	1B990-764	9	○△		5
1S190-018	1041	CPU. IC	1	1B990-764	9	○△	RP-9397 「製技93F-1016参照」	5
1S190-022-5		CPU IC (μPD78P238GC-389)						
1S190-019	1042	CPU. IC	1	1B990-764	9	○△	RP-9397 「製技93F-1016参照」	5
1S190-023-5		CPU IC (μPD78P214GC-AB8)						
1S190-020	1043	CPU. IC CPU IC (μPD75308GF)	1	1B990-802	12	○△		5
1S205-099	1050	EEPROM EEPROM (μPD6254GS-BA1-T1)	1	1B990-764	9	○△		5
1S205-100	1051	EEPROM EEPROM (M6M80041AFP)	1	1B990-764	9	○△		5
* 1S208-001	1049	IC IC (μPD7225GB-387)	1	1B990-812	10	○△	RS	5
△ 1S223-003	1052	(μPD16804GS-T1)	1	1B990-764	9	○△	RP-9434 製技資料93F-2033 予-以情報94-20 参照方	5
1S223-006		(μPD16805GS)						
1S223-005	1053	IC IC (μPD16805GS-T1)	1	1S020-079	2	○△		5
1S237-071	1046	IC IC (M52326FP)	1	1B990-764	9	○△		5
1S237-072	1047	IC IC (M52327FP)	1	1B990-764	9	○△		5
* 1S260-055	1035	セルフLED Self LED	1	1B990-802	12	○△	TW-ZOOM 105	5
1S268-032	560	外部LCD External LCD	1	1B990-802	12	○△		5

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Jun. 21. 1994

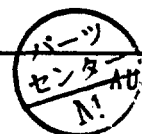
部品表 Parts List

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabili- ty	備考 Remarks	要求単位 Order Unit Q'ty
1S380-012	1028	発振子 Oscillator (12MHz)	1	1B990-764	9	○△		5
1S380-013	1030	発振子 Oscillator (4.194MHz)	1	1B990-802	12	○△		5
1S380-015	1029	発振子 Oscillator (8MHz)	1	1B990-764	9	○△		5
1S382-044	1031	発振子 Oscillator (32KHz)	1	1B990-802	12	○△		5
1S409-013	563	エラスティックコネクター Elastic connector	2	1B990-802	12	○△		5
*1S542-005	1033	圧電ブザー Buzzer	1	1B990-794	11	○△	F-801S	5
1S602-030	903	A Fモーター AF motor	1	1B990-763	5	○△		5
*1S622-002-1 (1S622-002)	139	ソレノイド Solenoid	1	1B990-808	4	○△	F-801S RP-9355 「製技92F- 2068参照」	5
1S680-009	1038	トランス Trans	1	1B990-802	12	○△		5
1S700-353	558	A Eロック基板 AE lock base plate	1	1B990-794	11	○△		5
1S700-355	576	裏打ち板 Backing plate	1	1B990-794	11	○△		5
*1S758-022	492	A FロックSWゴム AF lock SW rubber	1	1B990-763	7	○△	F-801S	5
1S758-037	545	露出補正/RラバーSW Exposure compensation rubber SW	1		12	○		5
1S758-038	553	イルミラバーSW Illumination rubber SW	1		12	○		5
1S758-039	565	測距モード知ラバーSW Focus area button SW	1		12	○		5
1S758-040	582	巻き戻し側設定知ラバーSW Rewind-side setting button rubber SW	1		12	○		5
1S999-100		ソレノイド	1	1B990-808	4	○△	RP-9355 「製技92F- 2068参照」	1
△ 1S999-102		Solenoid	1	1B990-808-1	4	○△	RP-9443	1

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Q'ty
1S811-569	1197	Lead wire L=30 (brown)	1	1B990-787		×	W-0056BN	1 roll
1S811-570	1198	Lead wire L=25 (blue)	1	1B990-787		×	W-0056BE	1 roll
1S811-571	1199	Lead wire L=30 (orange)	1	1B990-787		×	W-0056OR	1 roll
1S811-572	1200	Lead wire L=30 (black)	1	1B990-787		×	W-0056BK	1 roll
1S811-573	1201	Lead wire L=45 (red)	1			×	W-0080RE	1 roll
1S811-659	1202	Lead wire L=80 (blue)	1	1B990-917		×	W-0056BE	1 roll
1S811-660	1203	Lead wire L=40 (black)	1	1B990-827		×	W-0056BK	1 roll

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部品番号 Part No.	補助番号 Ckt No.	名 称 Name	1台分 個 数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備 考 Remarks	要求単位 Order Unit Q'ty
IG480-041	G11	測光用集光レンズ Metering lens	1		8	○		5
IG550-036	G2	サブミラー Sub-mirror	1	1B100-639 1B990-763	6	○△		5
IG571-006	G1	主ミラー Main mirror	1	1B100-639 1B990-763	6	○△		5
IG950-074	G3	スクリーン Screen	1		8	○		5

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部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
A1-14014FA	701	Screw	1		8	○		50
A1-17016FB	714	Screw	2	1B990-763	1.6	○△		50
A1-17025FB	706	Screw	4	1B990-763	7	○△		50
A1-17030FS	702	Screw	5	1B990-763	7.13	○△		50
A1-17050FS	709	Screw	3		10	○		50
A1-20050FS	712	Screw	1		1	○		50
A2-17028FA	726	Screw	5	1B990-763 1B990-802	5.12	○△		50
A2-17060FA	727	Screw	1		2	○		50
B1-14018FB	716	Screw	6	1B990-763 1B990-808	4.5 6.9	○△		50
B1-14020FA	718	Screw	1		10	○		50
B1-14020FB	715	Screw	2		4	○	RP-9378 『製技93F- 2011参照』	50
B1-14014FA								
B1-17016FB	719	Screw	4	1B990-763	6	○△		50
B1-17030FA	720	Screw	6	1B990-763	6.10	○△		50
B1-17040FA	722	Screw	2		8	○	RP-9283 『製技92F- 2059参照』	50
B1-17055FA	721	Screw	1	1B990-802	12	○△		50

部品表 Parts List

FAA28051-R. 3312. B

部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Qty
B2-14018FA	728	Screw	3		3	○		50
G1-14020FA	732	Screw	1		10	○		50
G1-17025FA	733	Screw	5	1B999-517	1.8 14	○△		50
G1-17025FS	734	Screw	3		1	○		50
G1-17028FS	736	Screw	3		13	○		50
G1-17030FA	735	Screw	1		1	○		50
G1-17035FA	737	Screw	2	1B999-517	14	○△		50
G1-17035FB	738	Screw	1		1	○		50
G1-17040FB	741	Screw	1		2	○		50
G1-17045FS	744	Screw	4		10. 13	○		50
G1-17055FS	743	Screw	6		10	○		50
G1-20050FB	745	Screw	3		10	○		50
G1-20060FB	746	Screw	2		1	○		50
G2-17030FA	761	Screw	7	1B990-802	3.4 12	○△		50
G2-17030FB	762	Screw	2		10	○		50

部品表 Parts List

FAA28051-R. 3312. B

部品番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	部組品番号 Assembly	参照 図番 Fig. No.	販売区分 Class. of Salabil- ity	備考 Remarks	要求単位 Order Unit Q'ty
G2-17035FB	765	Screw	2		2	○		50
G2-17045FA	763	Screw	5		12	○	RP-9355 『製技92F- 2065参照』	50
H1-17025FB	750	Screw	1		2	○		50
H1-17040FA	751	Screw	2		10	○		50
H1-17045FB	752	Screw	7		1. 2 3. 4	○		50
H1-17050FB	753	Screw	2		4	○		50
H3-20055FA	766	Screw	2		1	○		50
S1-00700SY	821	E-ring	1	1B990-763	5	○△		50
S1-01200SX	822	E-ring	2	1B990-763 1B990-772	6.7	○△		50
S1-01500SX	823	E-ring	5	1B990-794	11	○△		50
T2-01500SX	832	Ball	1	1B990-794	11	○△		50

部組品表 Assembly List

FAA28051-R. 3312. B

部組番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	大部組品番号 Main assembly No.	参照 図番 Fig. No.	備考 Remarks	要求単位 Order Unit Q'ty
*1B001-755-1	B603	圧板 Pressure plate	1		14	F-801S	5
*1B001-784	B2301	I基板 Base plate I	1	1B990-763	6	F-801S	1
*1B001-787-1 (1B001-787)	B940	AFモードSW Focus mode SW	1	1B990-763	5	F-801S	5
*1B001-996	B936	AF縦レバー基板 AF lever	1	1B990-763	5	F-801S	5
1B002-042	B467	リモートコネクター Remote connector	1	1B990-763	5		5
*1B060-370-1	B32	フィルム給送モーター Film advance motor unit	1		2	F-801S	5
1B060-511	B380	絞りMg基板 Aperture Mg base plate unit	1	1B990-763	6		5
△ 1B060-513 1B060-513-1	B31	シャッター組品 Shutter unit	1		1	RP-9444	1
*1B240-064-1 (1B240-064)	B522	電子ダイヤル接片座 Electrical dial contact unit	1	1B990-802	12	F-801S	5
*1B240-068	B95	電池室SW組 Switch contact. battery house	1		2	F-801S	5
1B240-096	B533	リリースSW接片 Release SW contact unit	1	1B990-802	12		5
*1B314-160	B321	シャッターリリースレバー Shutter release lever	1	1B990-763	6	F-801S	5
*1B400-001-2 (1B400-001-1)	469	シンクローターミナル Sync terminal	1	1B990-763	5	F4	5
*1B610-035-2 (1B610-035-1)	B474	AF接点 AF contact unit	1	1B990-763	6	F-801S	5
*1B990-311-1 (1B990-311)	B258	電池端子板C Battery terminal plate C	1		13	F-801S	5

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部品組品表 Assembly List

FAA28051-R. 3312. B

部組番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	大部組品番号 Main assembly No.	参照 図番 Fig. No.	備考 Remarks	要求単位 Order Unit Qty
* 18990-313-1 (18990-313) 18990-313-2	B263	電池接点B Battery contact B	1		1	F-801S RP-9470 94F1020	5
* 18990-314-1 (18990-314)	B331	絞り増速ギア Aperture accelerating gear	1	18990-763	6	F-801S	5
* 18990-315-1 (18990-315)	B335	絞りラチェット Aperture latchet	1	18990-763	6	F-801S	5
* 18990-328-1 (18990-328)	B482	F-Fo連動環 F-Fo coupling ring	1	18990-763	7	F-801S	5
* 18990-329-1 (18990-329)	B503	AF-M切替SW Focus mode SW unit	1	18990-763	6	F-801S	5
* 18990-331-1 (18990-331)	B514	電子ダイヤルパターン基板 Electrical dial pattern plate	1	18990-794	13	F-801S	5
* 18990-337-1 (18990-337)	B906	フリクションギア Friction gear	1	18990-763	5	F-801S	5
18990-761	B252	電池ホルダー蓋 Battery holder cover unit	1		13		5
18990-763	B26	前板 Front plate	1		5.6 7		1
18990-764	B2001	メインFPC Main F.P.C unit	1		9		1
△ 18990-765	B1014	B1014 基板 B1014 Base plate	1		9	RP-9283 RP-9434 「製技資料 93F-2033. 補足説明94-20」	1
18990-766	B420	ミラーBOX底板 Mirror box bottom plate	1		8		5
18990-767	B2401	AFセンサー組 AF sensor unit	1		9		1
18990-770	B486	F-Fo抵抗基板 F-Fo resistance base plate	1	18990-763	7		5
18990-772	B2350	絞り込み基板 Manual aperture base plate	1	18990-763	7		5
18990-777	B400	L基板 Base plate L	1	18990-763	6		1

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RP-9470



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部組品表 Assembly List

FAA28051-R. 3312. B

部組番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	大部組品番号 Main assembly No.	参照 図番 Fig. No.	備考 Remarks	要求単位 Order Unit Q'ty
△ 1B990-779	B342	絞りフォトインタラプタ	1	1B990-763	6	RP-9472	5
1B990-779-1		Aperture control P.I retainer					
1B990-782	B1004	AF基板FPC AF base plate FPC unit	1	1B990-763	5		5
1B990-787	B924	AFフォトインタラプタ AF photo interrupter	1	1B990-763	5		5
1B990-788	B930	AF横レバー基板 AF transverse lever plate	1	1B990-763	5		5
1B990-789	B1003	AF接点FPC AF contact F.P.C unit	1	1B990-763	6		5
1B990-791	B38	巻き戻し側ゴム Rubber (Rewind side)	1		10		5
1B990-792	B37	グリップゴム Grip rubber	1		10		5
1B990-794	B023	上カバー Top cover	1		11		1
1B990-795	B023	上カバー (N90) Top cover (N90)	1		11	FAA28151	1
1B990-788	B566	LCD窓 LCD window	1		12	RP-9355	5
1B990-799	B543	電源SW Power SW	1	1B990-794	11		5
1B990-800	B572	シュー座 Shue base unit	1	1B990-794	11		5
1B990-801	B591	アイピースシャッター Eyepiece shutter unit	1	1B990-764	11		1
1B990-802	B3007	上カバーFPC部組 FPC unit for top cover	1		12		1
1B990-808	B2110	上地板	1		4	RP-9355	1
1B990-808-1		Upper base plate					
1B990-812	B2452	表示系ブロック部組 Display block	1		10		1

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部品組品表 Assembly List

FAA28051-R. 3312. B

部組番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Qty Per Unit	大部組品番号 Main assembly No.	参照 図番 Fig. No.	備考 Remarks	部手単の Order Unit Qty
1B990-815	B453	ライトガイド Light guide	1		10		5
1B990-818	B457	表示ミラー基板 Display mirror base plate	1		10		5
1B990-820	B435	受光素子ホルダー Sensor holder unit	1		10		5
1B990-821	B66	フォトインタラプタ基板 P.I base plate	1		2		5
1B990-824	B70	底基板ギア組 Bottom base plate	1		2		1
1B990-826	B60	基準SW Reference SW	1		2		5
1B990-827	B262	電池接点A Battery contact A	1		1		5
1B990-828	B160	巻き戻し基板 Rewind base plate	1		3		5
1B990-830	B92	裏蓋SW Camera back SW	1		2		5
1B990-831	B180	フィルムガイドローラー Film guide roller	1		3		1
1B990-832	B212	DX接点基板 DX contact plate	1		1		1
1B990-917	B642	静電気アース板 Earth plate	1		1		5
1B990-918	B612	ロッド軸基板 Rod shaft plate	1	1B999-517	14		1
* 1B999-152-2 (1B999-152) 1B999-152-3	B8251	電池ホルダーハウス Battery holder house	1		13	F-801S RP-9470 94F1020	1
* 1B999-157-4 (1B999-157-3)	B901	AF駆動基板 AF base plate	1	1B990-763	5	F-801S	1
* 1B999-165-2 (1B999-165-1)	B8902	AF駆動ギア基板 AF driving gear plate	1	1B990-763	5	F-801S	1

部品組品表 Assembly List

FAA28051-R. 3312. B

部組番号 Part No.	補助番号 Ckt No.	名称 Name	1台分 個数 Q'ty Per Unit	大部組品番号 Main assembly No.	参照 図番 Fig. No.	備考 Remarks	要求単位 Order Unit Q'ty
1B999-516	BB100	シーケンスギア基板下地板 Film advance mechanism unit	1		4		1
1B999-517	BB601	裏蓋 Camera back	1		14		1
1B999-518	BB421	ペンタプリズム部 Pentaprism unit	1		8		1
1B999-531	B2391	主ミラー Main mirror holder	1	1B990-763	6		1
1B999-532-1	B24	底カバー Bottom cover	1		13	NO入り	1
1B999-558	B33	シーケンス制御モーター Sequence control motor unit	1		4		5
△ 1B999-675		シャッター先幕組 Opening curtain	1			RP-9444	5
△ 1B999-709		シャッター後幕組 Closing curtain	1			RP-9444	5
1G014-049	LB5	接眼レンズ Eyepiece lens	1		8		1
1S020-079	B1005	パワーFPC Power SW FPC unit	1		2		1
1S020-084	B1011	R/T FPC R/T FPC	1		9		1
1S020-097	B1036	EL部組 EL unit	1		12		1
1S999-099	B1015	シーケンスエラー14基板 Sequence error 14 base plate	1		2	RP-9283 製技92F-20 59参照J	1
1S999-102		ソレノイド Solenoid	1	1B990-808-1	4	RP-9355	1

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ASSEMBLING

1. Rear body

Small parts of rear body	A 1
DX contact unit	A 2
Film detection SW	A 2
Shutter unit	A 3
Power SW FPC	A 3
Camera back SW	A 4
Film advance motor base plate group	A 4
Battery holder release SW	A 5
Mount bottom base plate on film advance motor base plate group	A 5
Film advance base plate unit	A 6
Soldering bridges, Arrange wire	A 6
Film advance lever unit	A 7
Sequence gear base plate	A 7
Mount film advance lever unit on sequence gear base plate	A 8
Arrange wires of solenoid	A 9
Press-contact plate	A 9
Film advance PI	A 9
Soldering wires on power SW FPC	A 10
Rewind fork unit, Camera back lock releases	A 11

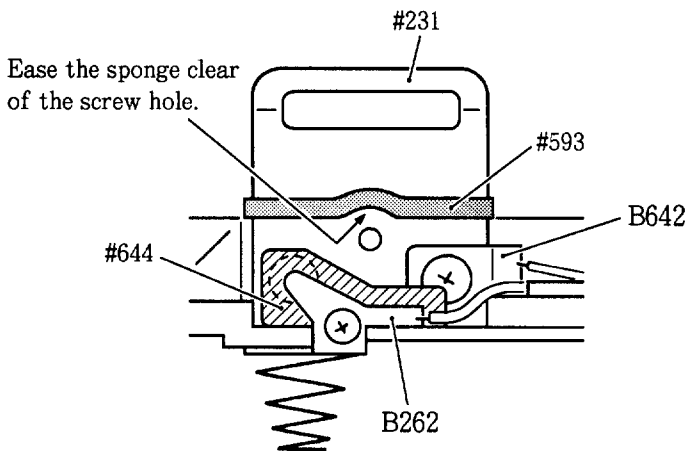
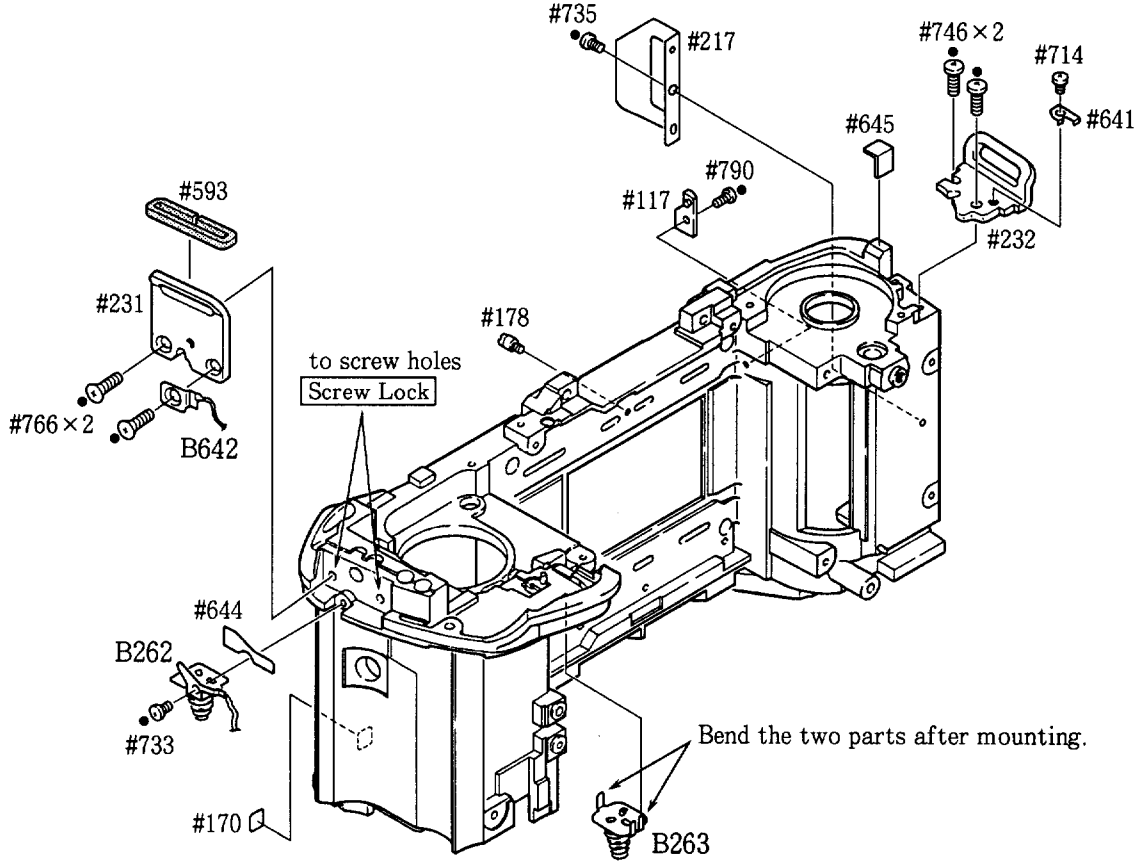
2. Front plate

Small parts of front plate	A 12
AF driving unit	A 13
AF contact FPC	A 14
F—Fo base plate	A 14
Apron, Lens mount	A 15
Height adjustment of AF coupling shaft #911	A 15
Checking of AF driving unit operation	A 16
Mirror box	A 16
1. Pasting main mirror and sub mirror	A 17
2. I base plate to which grease should be applied and those to which springs should be hooked ..	A 17
3. Mounting position of aperture ratchet gear B335	A 18
4. Mounting position of shutter release lever B321	A 18
5. Assemble I base plate, L base plate and mirror unit	A 18
6. Attach aperture PI B342	A 19
7. Adjustment of aperture Mg latch lever position	A 19
8. Mount mirror box	A 19

ASSEMBLING

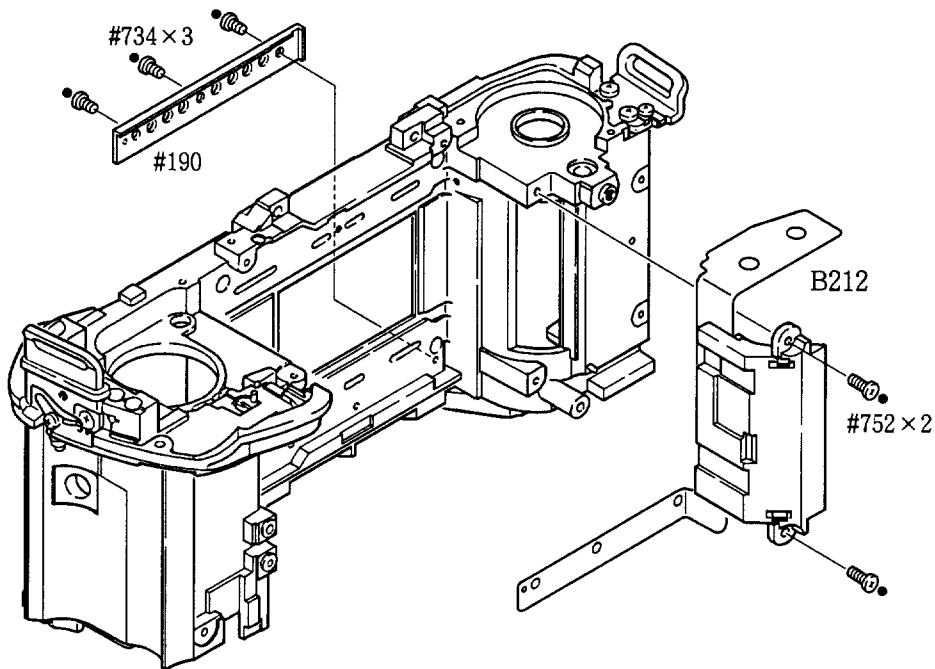
1. REAR BODY

SMALL PARTS OF REAR BODY

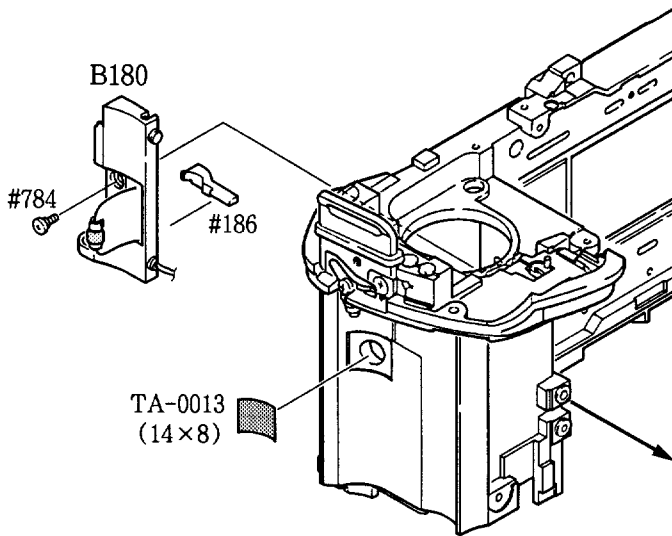


● Refer to the positions shown in the figure on the left when attaching sponge #593 and insulating sheet #644.

DX CONTACT UNIT

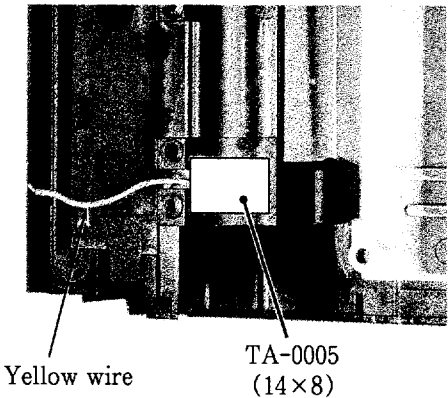


FILM DETECTION SW



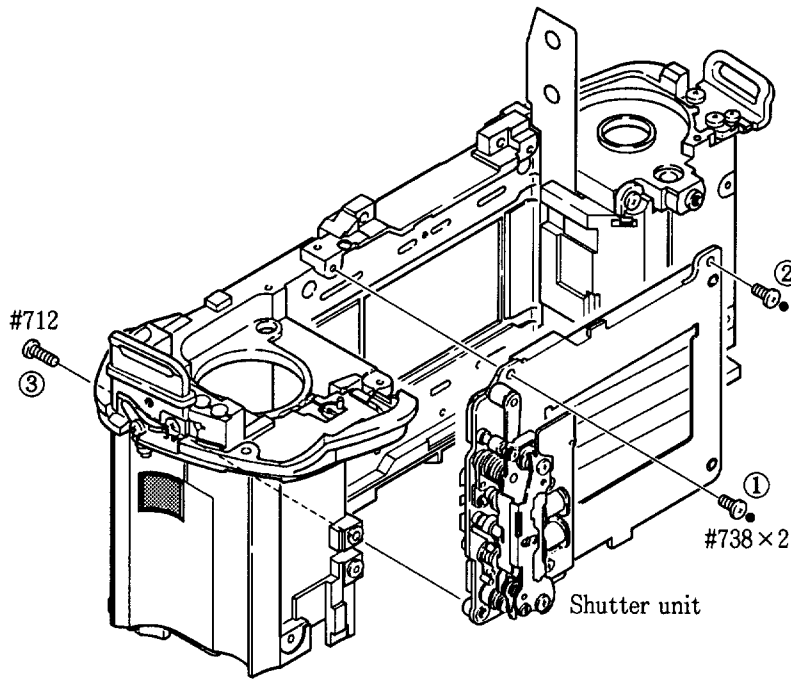
Inspection: Connect the yellow wire from the film detection SW and the film guide screw #178 to the tester. Make sure that the film detection SW will turn OFF when part #186 is depressed approximately 0.5mm.

Pull the yellow wire forward from the film detection SW, passing it through the hole in the body.



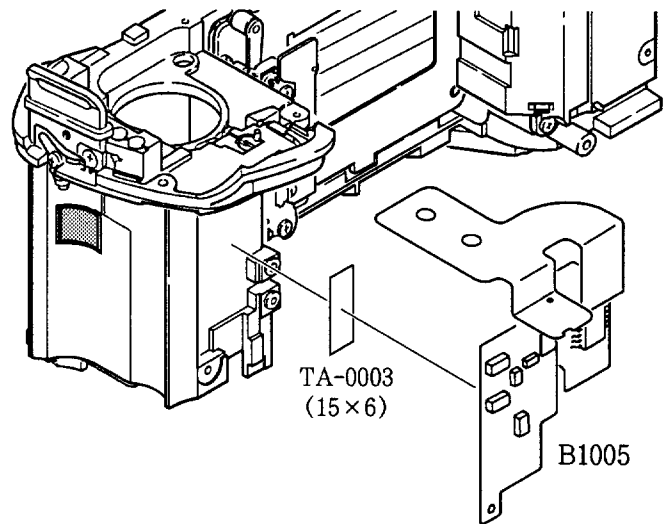
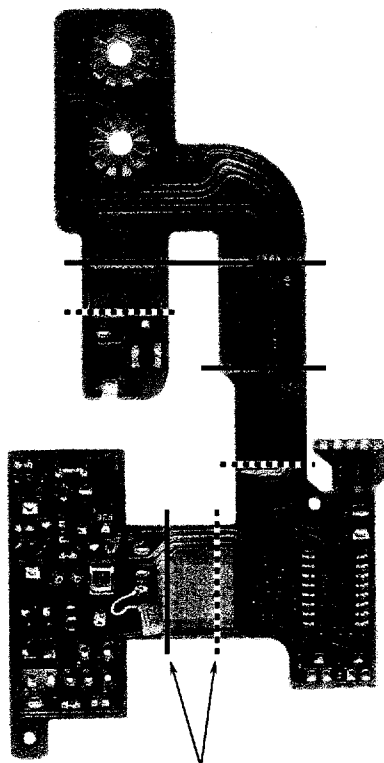
● Arrange wire of film detection SW as shown in the picture.

SHUTTER UNIT



- Fasten screws #712 and #738×2 in the order from ① to ③.

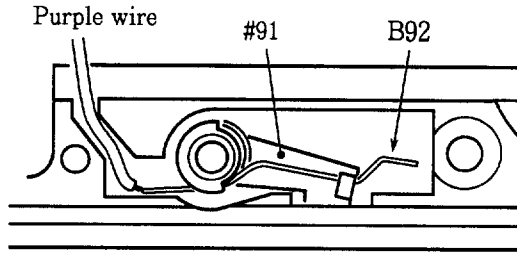
POWER SW FPC



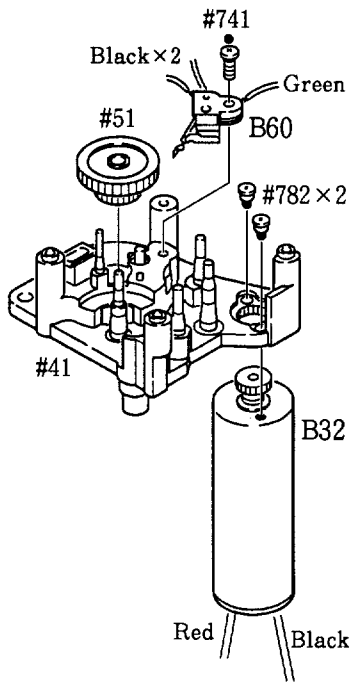
- : Fold outside
- : Fold inside

Bend the two parts using a rod with a diameter of 4mm.

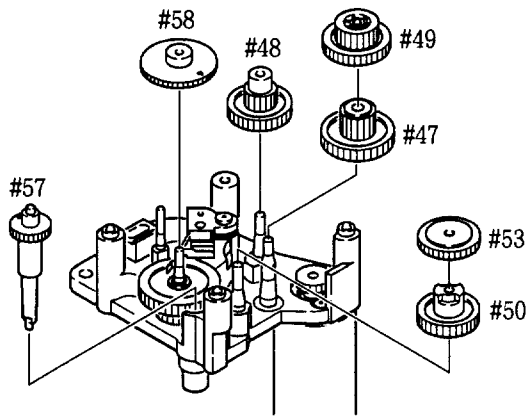
CAMERA BACK SW



FILM ADVANCE MOTOR BASE PLATE GROUP



- Apply grease LEN317A to the five gear shafts of #41.
- Apply grease LEN317A to the gear #51.



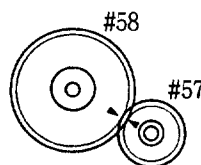
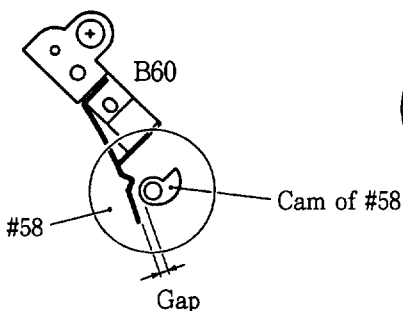
- Apply grease LEN317A to each gear.

● Mounting order of the gears

- #47
- ↓
- #48 and #50
- ↓
- #49
- ↓
- #58 (Mount the gear at the position as shown in Fig. 1.)
- ↓
- #57 (Mount the gear at the position as shown in Fig. 2.)
- ↓
- #53

Fig. 1

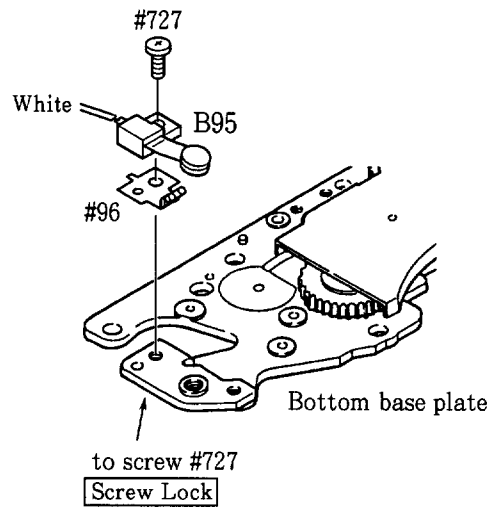
Fig. 2



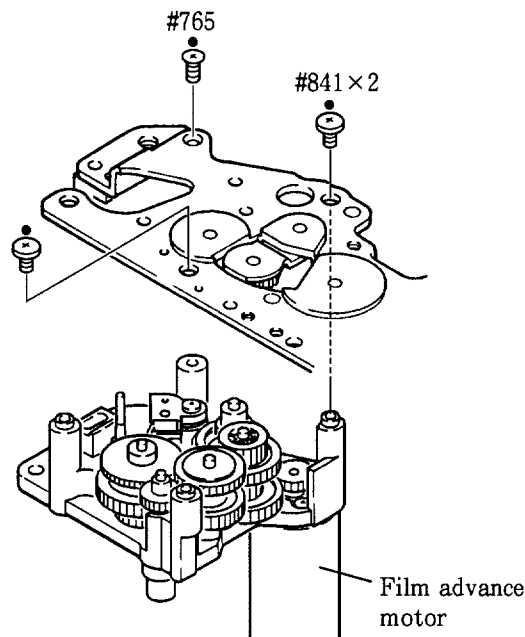
Note:

- ① Make sure that there is a gap between the cam and the contact of the B60 when cam of #58 is at the position as shown in Fig. 1.
- ② The marks (▲) on gears #57 and #58 should be aligned. (Refer to Fig. 2.)

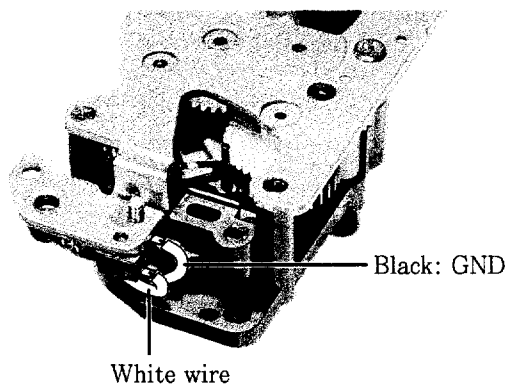
BATTERY HOLDER RELEASE SW



MOUNT BOTTOM BASE PLATE ON FILM ADVANCE MOTOR BASE PLATE GROUP

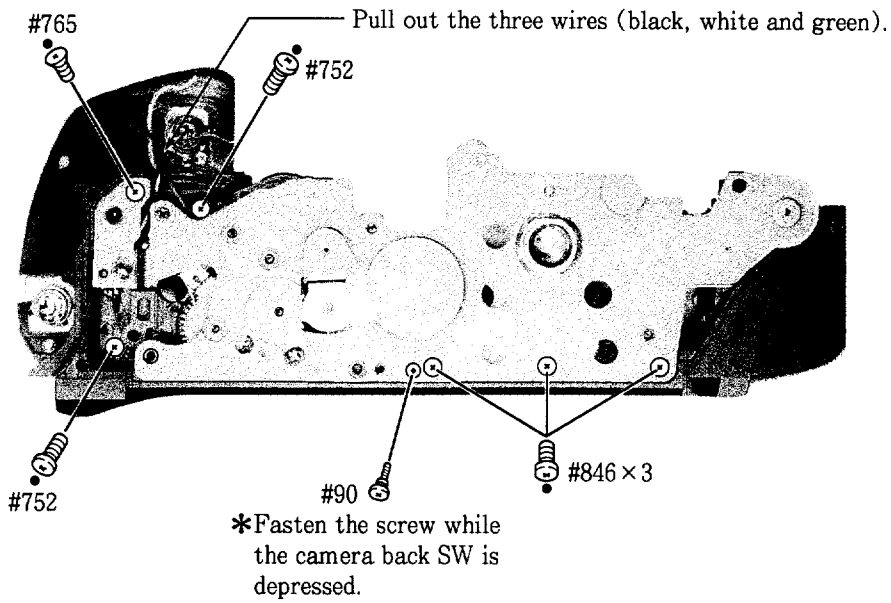


Inspection: Supply 3 to 5 volts to the film advance motor and check the operation of the gears and see if the motor generates any sound. Also check rotation in normal and reverse directions.



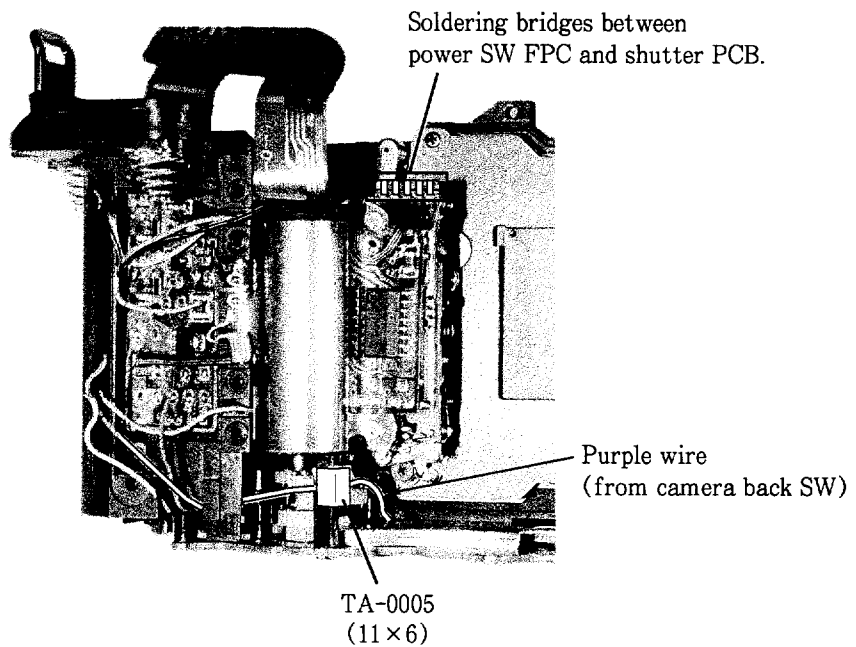
- Solder the short black wire (from the ref. SW) to the battery holder release SW.

FILM ADVANCE BASE PLATE UNIT

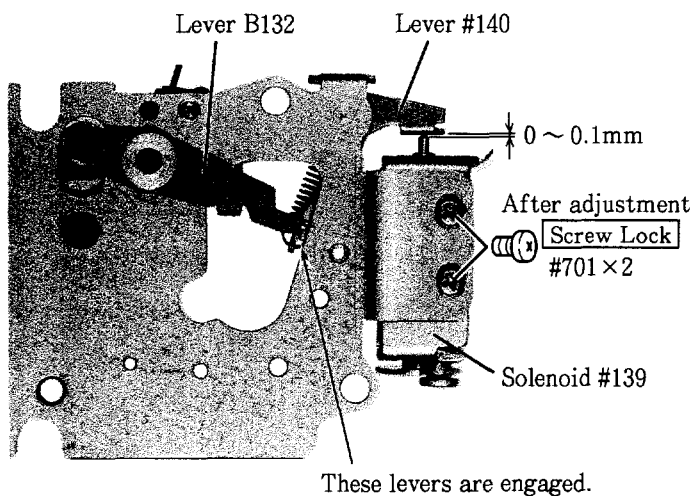


Note: Do not pinch the purple wire running from the camera back SW. Pull out the purple wire to the lens mount side.

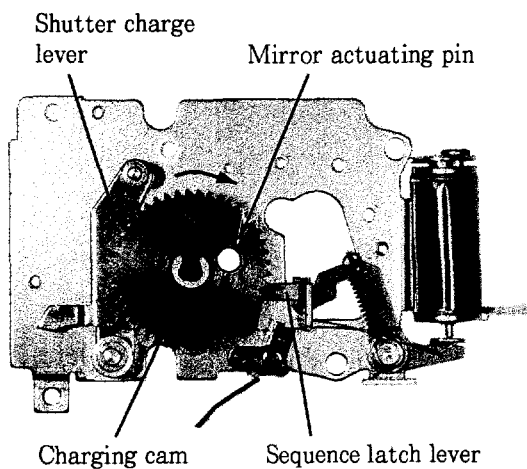
SOLDERING BRIDGES, ARRANGE WIRE



FILM ADVANCE LEVER UNIT



- Mounting position of the solenoid #139
 - ① Mount solenoid #139 on the film advance lever unit with screws #701 x 2.
 - ② Adjust the position of the solenoid so that the gap between the solenoid and lever #140 is 0 to 0.1mm, when levers B132 and #140 are engaged as shown in the picture.
 - ③ After adjustment, disengage levers B132 and #140. Reengage them to check the gap between the solenoid and lever #140.
 - ④ Secure screws #701 x 2 with Screw Lock.

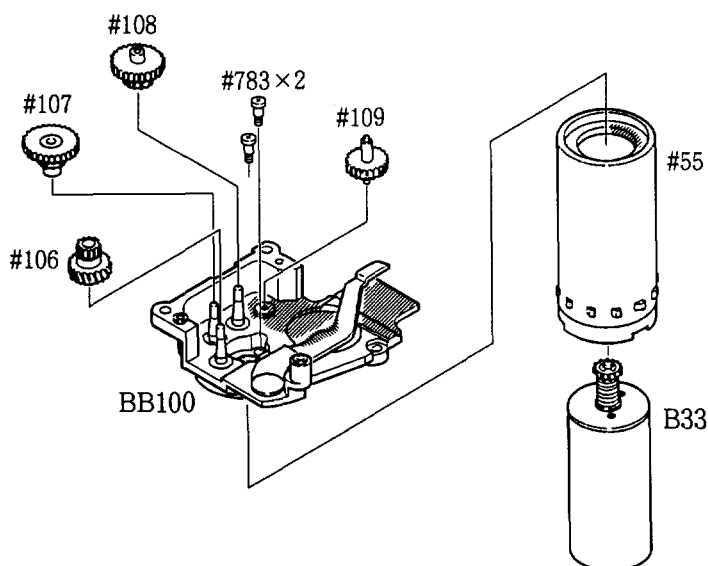


- Sequence starting position

Rotate the charging cam so that the sequence latch lever drops into the cam groove and the shutter charge lever drops into the concave portion of the cam.

*The above position is the film advance lever unit set position when mounting on the sequence gear base plate and when aligning of the rear body and front plate together.

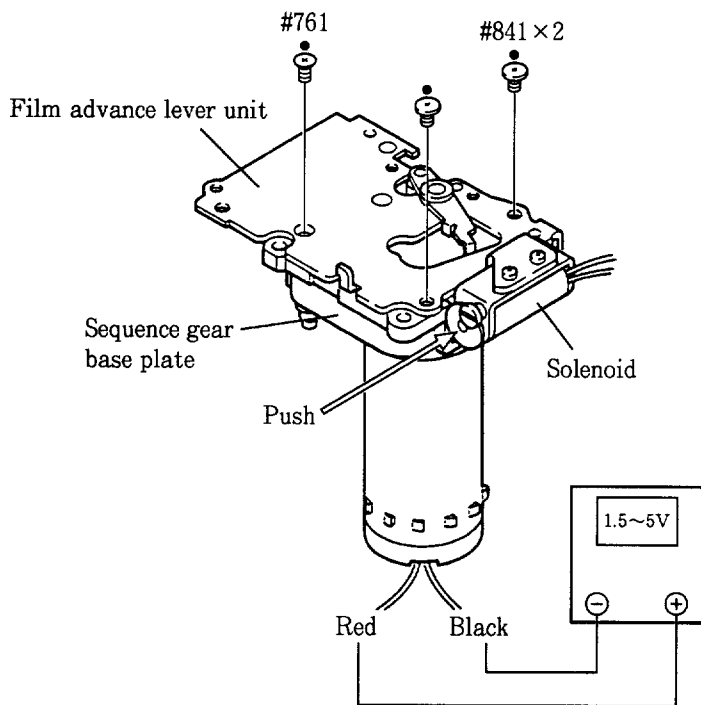
SEQUENCE GEAR BASE PLATE



- Where grease G7100 should be applied.
 - ① Shaded part of BB100
 - ② Three gear shafts of BB100
 - ③ Gear threads and the shaft of #109.
- Where grease LEN317A should be applied.

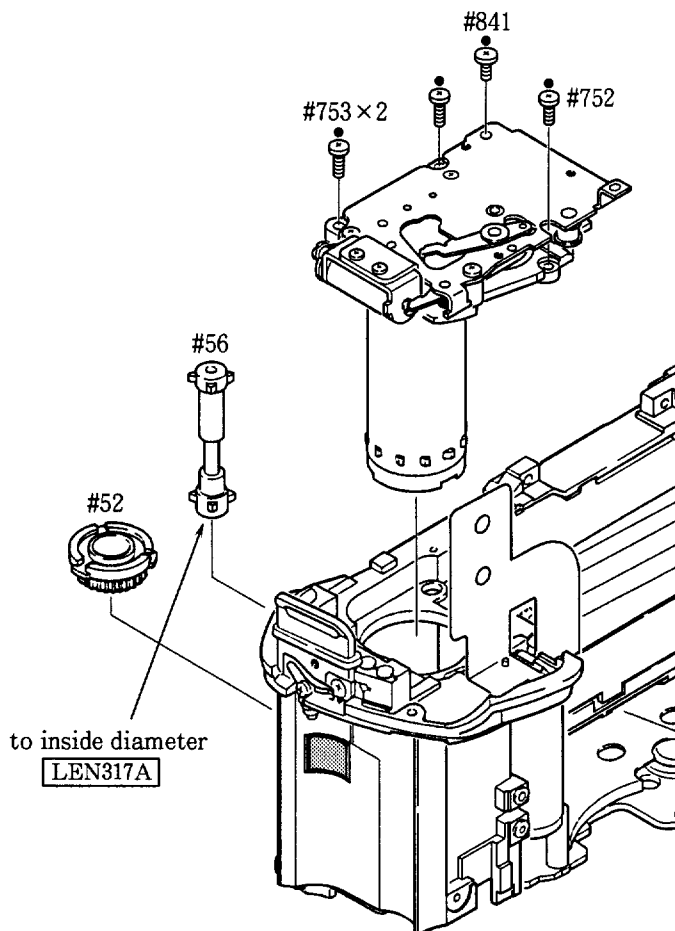
Shaded parts of #55 (about one fourth of the surroundings.)

MOUNT FILM ADVANCE LEVER UNIT ON SEQUENCE GEAR BASE PLATE

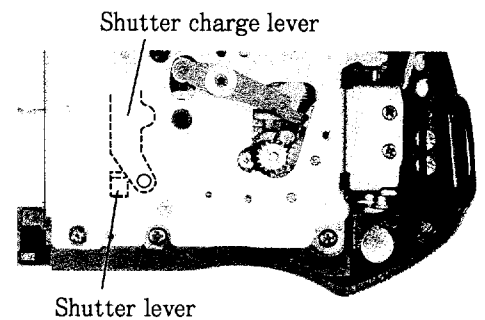


- Set the sequence film advance lever unit to the sequence start position.
- Attach the sequence film advance lever unit to the sequence gear base plate with screws #761 and #841 x 2.

Inspection: Connect the sequence motor and the regulated DC power supply as shown in the figure. Supply 1.5 to 5 volts to the sequence motor and check the operation of the gears and the cam, while push the solenoid disk. After inspection, set the sequence film advance lever unit to the sequence start position again.

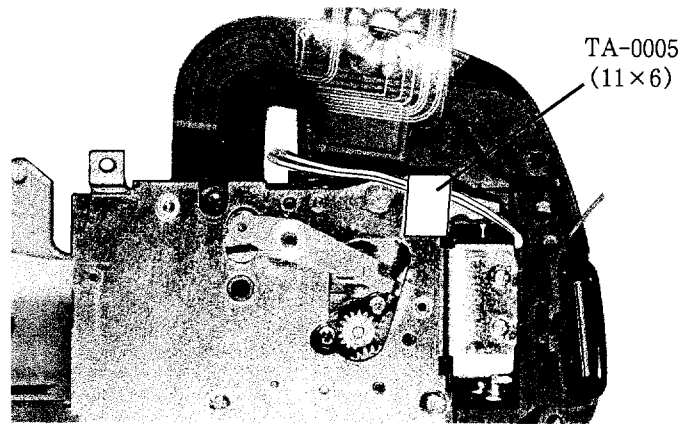


- Mounting on the rear body
 - ① Mount sprocket #56 and gear #52 on the rear body.
 - ② Mount the sequence base plate on the rear body while keeping the spool chamber film roller to one side. Pass the two sequence motor wires through the bottom base plate side.
- *Rotate the spool for easier mounting.
- Note:** The position of the shutter lever and the shutter charge lever should be as shown in the following figure.

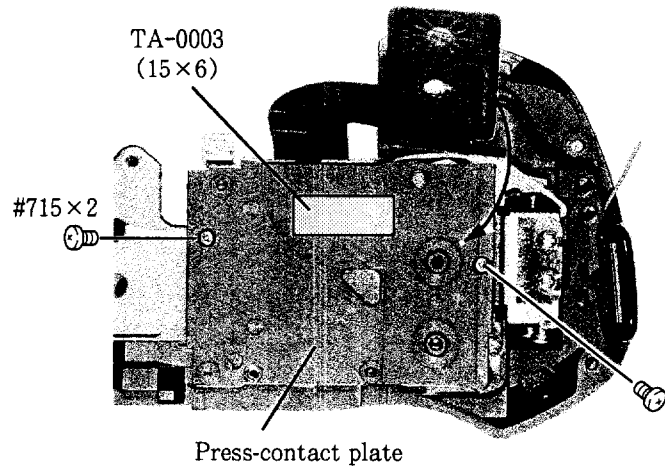


- Inspection:**
- ① The lower sprocket gear should rotate when the sprocket is rotated.
 - ② The sprocket should rotate smoothly.

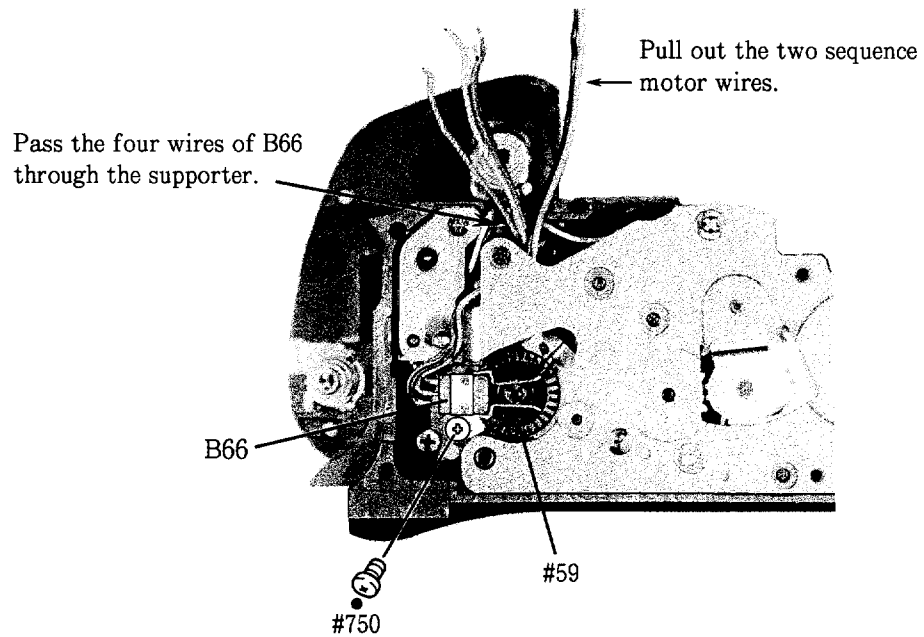
ARRANGE WIRES OF SOLENOID



PRESS-CONTACT PLATE

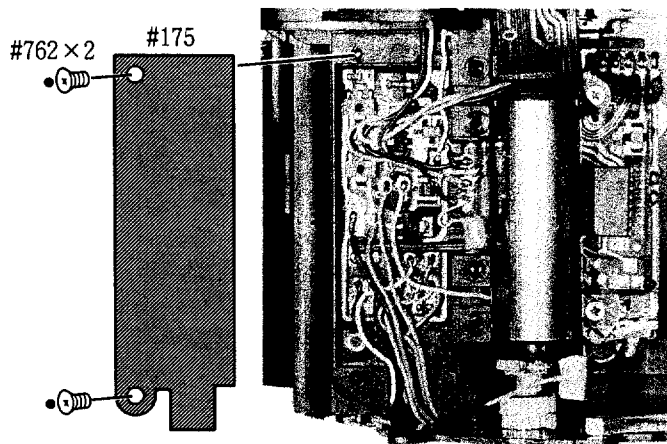
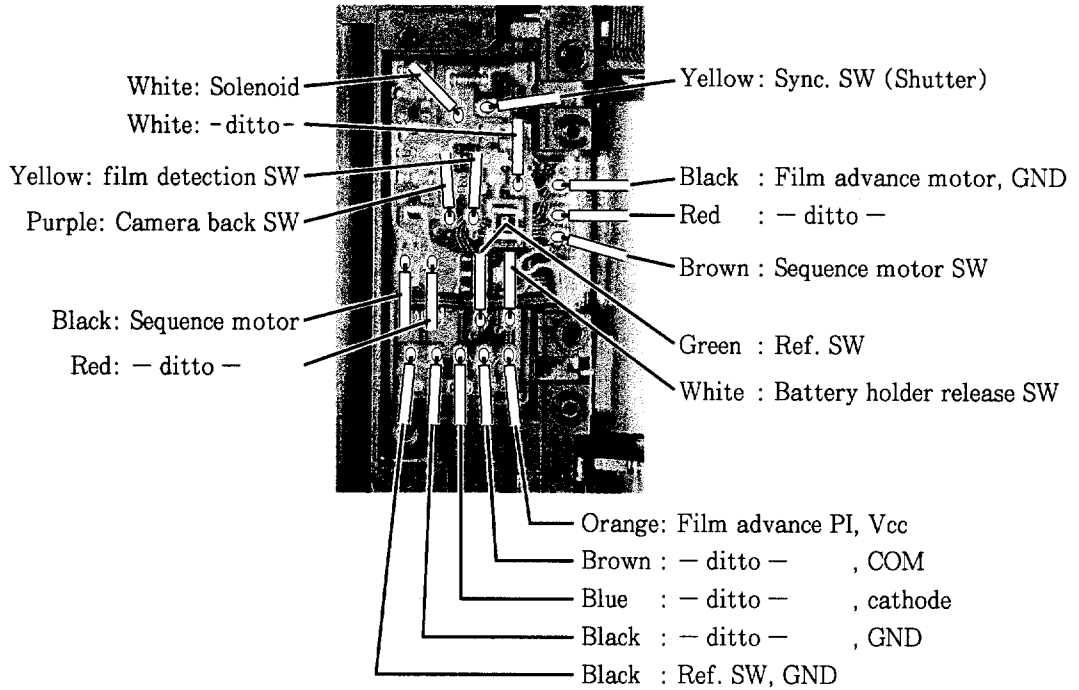
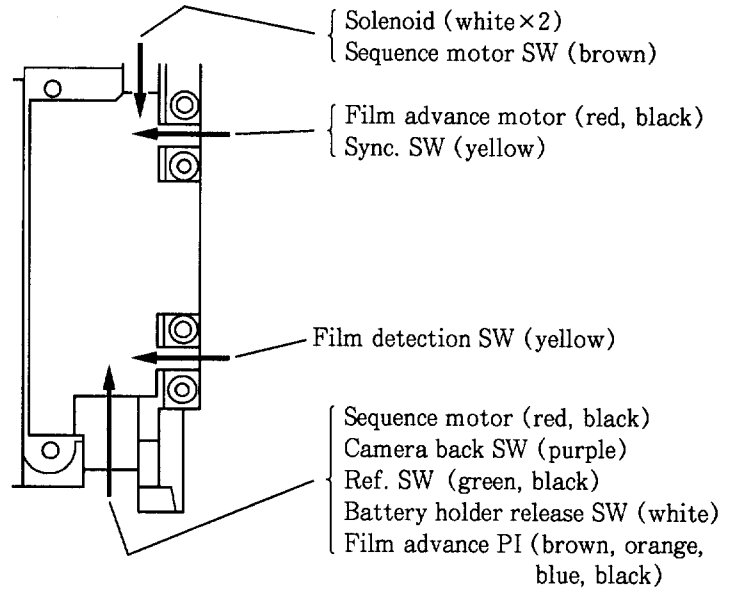


FILM ADVANCE PI



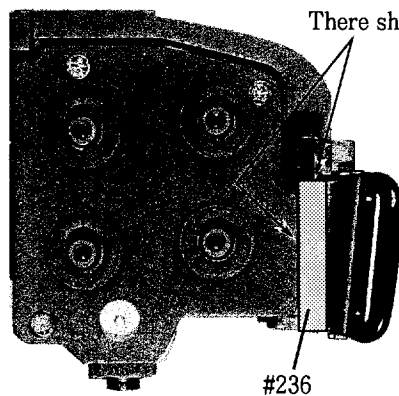
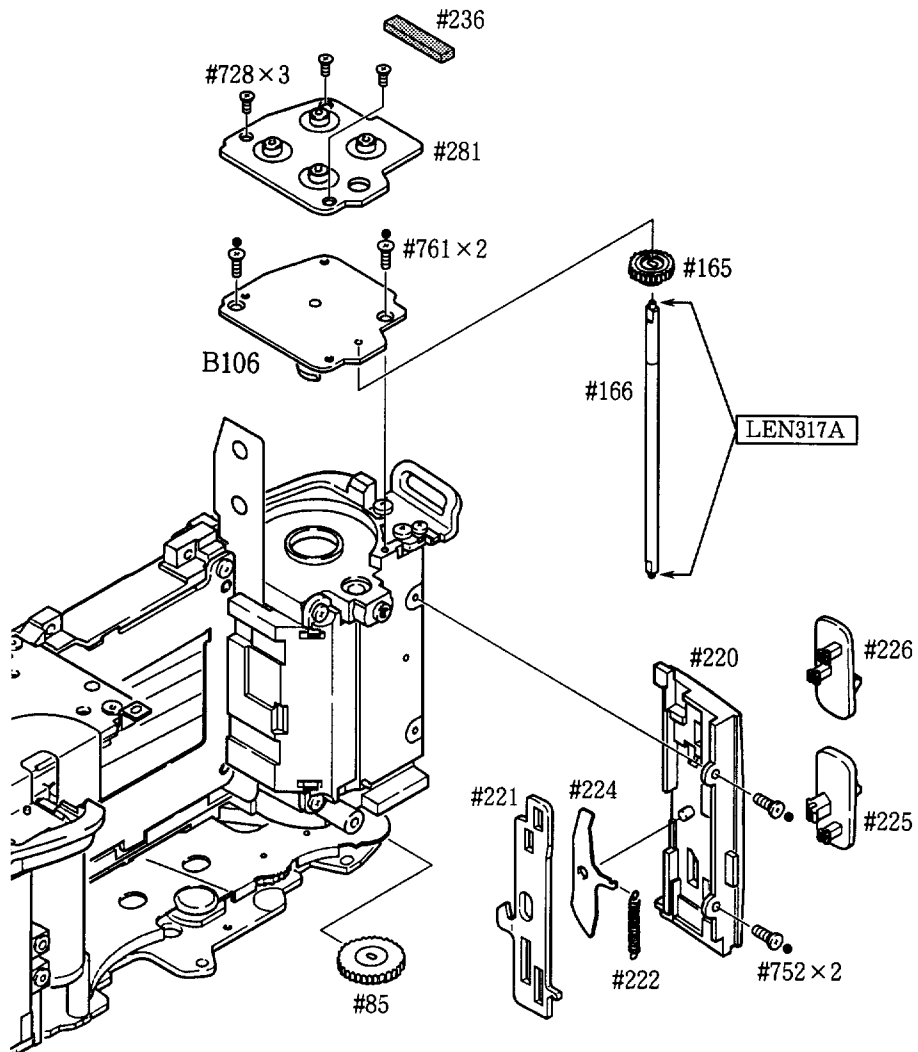
SOLDERING WIRES ON POWER SW FPC

● Pulled out position of each wire



● After arranging each wire, attach the cover #175 with screws #762 x 2.

REWIND FORK UNIT, CAMERA BACK LOCK RELEASES

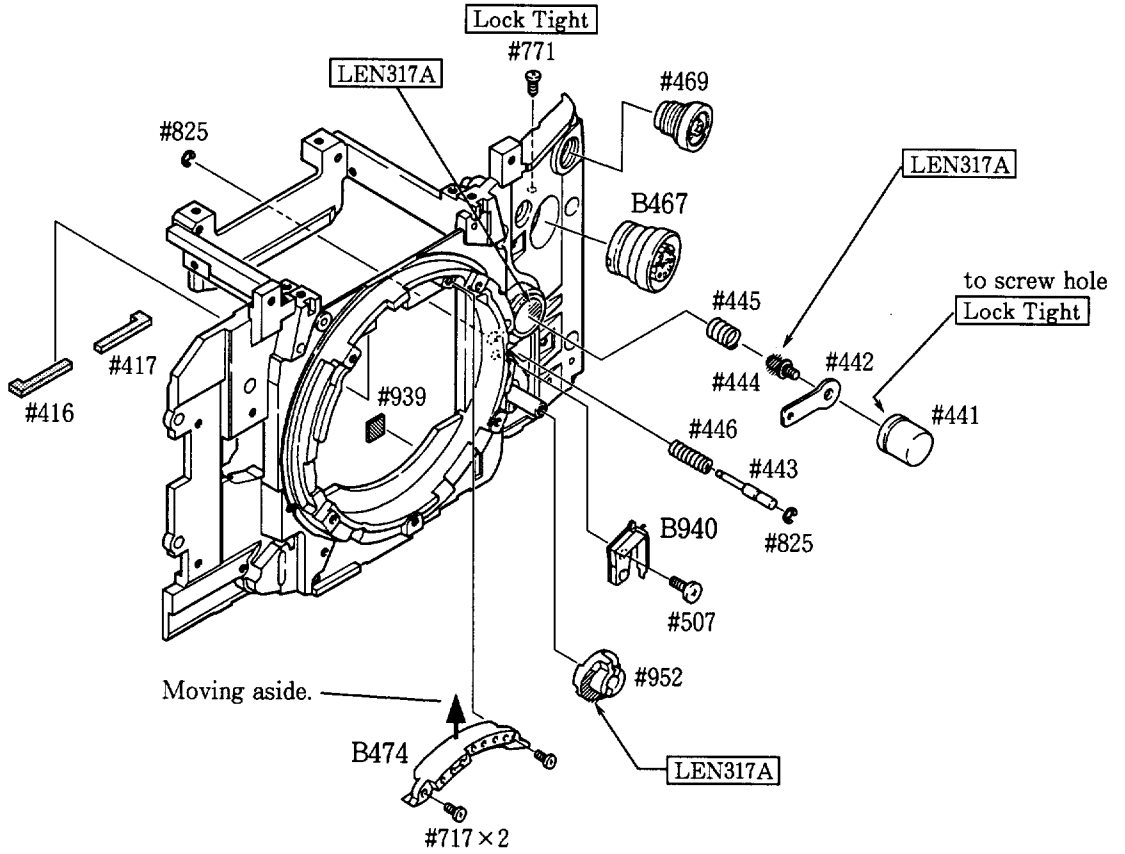


There should be no gap here.

- Attach drip-proof sponge #236 to the position shown in the picture.

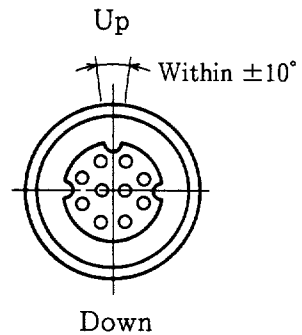
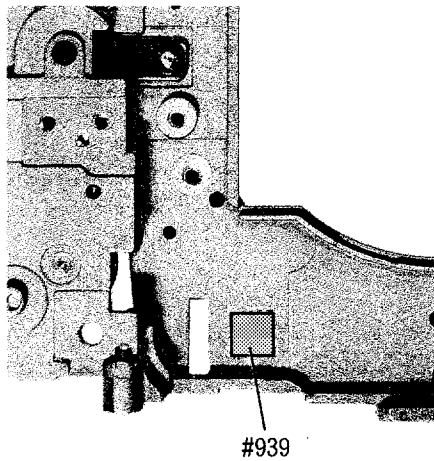
2. FRONT PLATE

SMALL PARTS OF FRONT PLATE

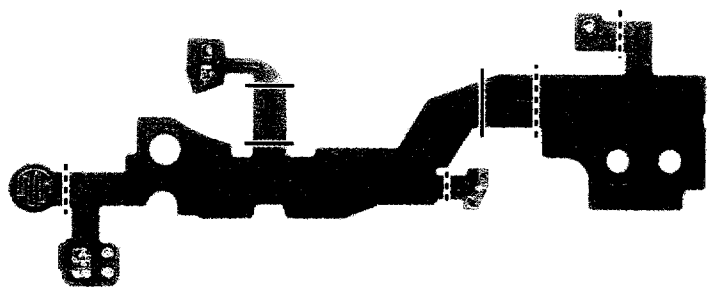


● Attaching position of rubber plate #939

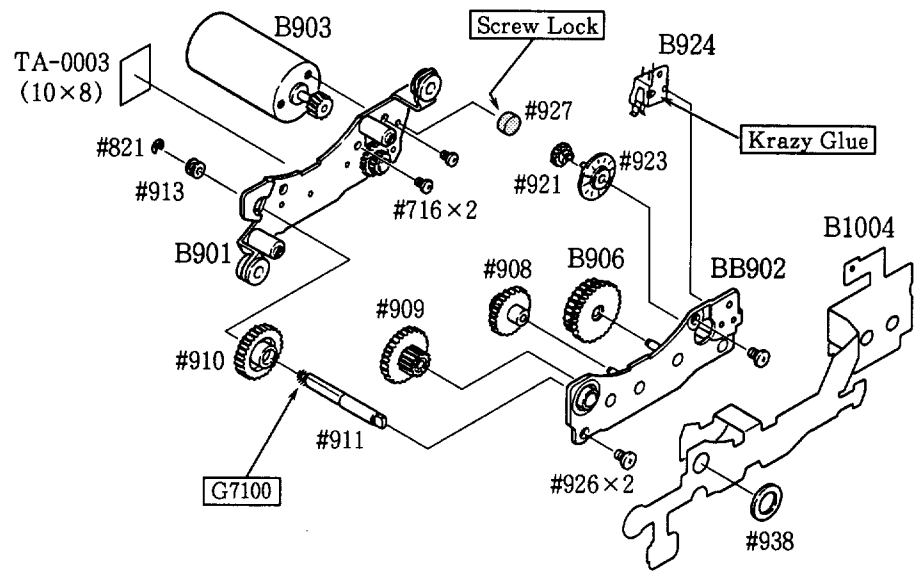
● Mounting position of remoto connector B467



AF DRIVING UNIT

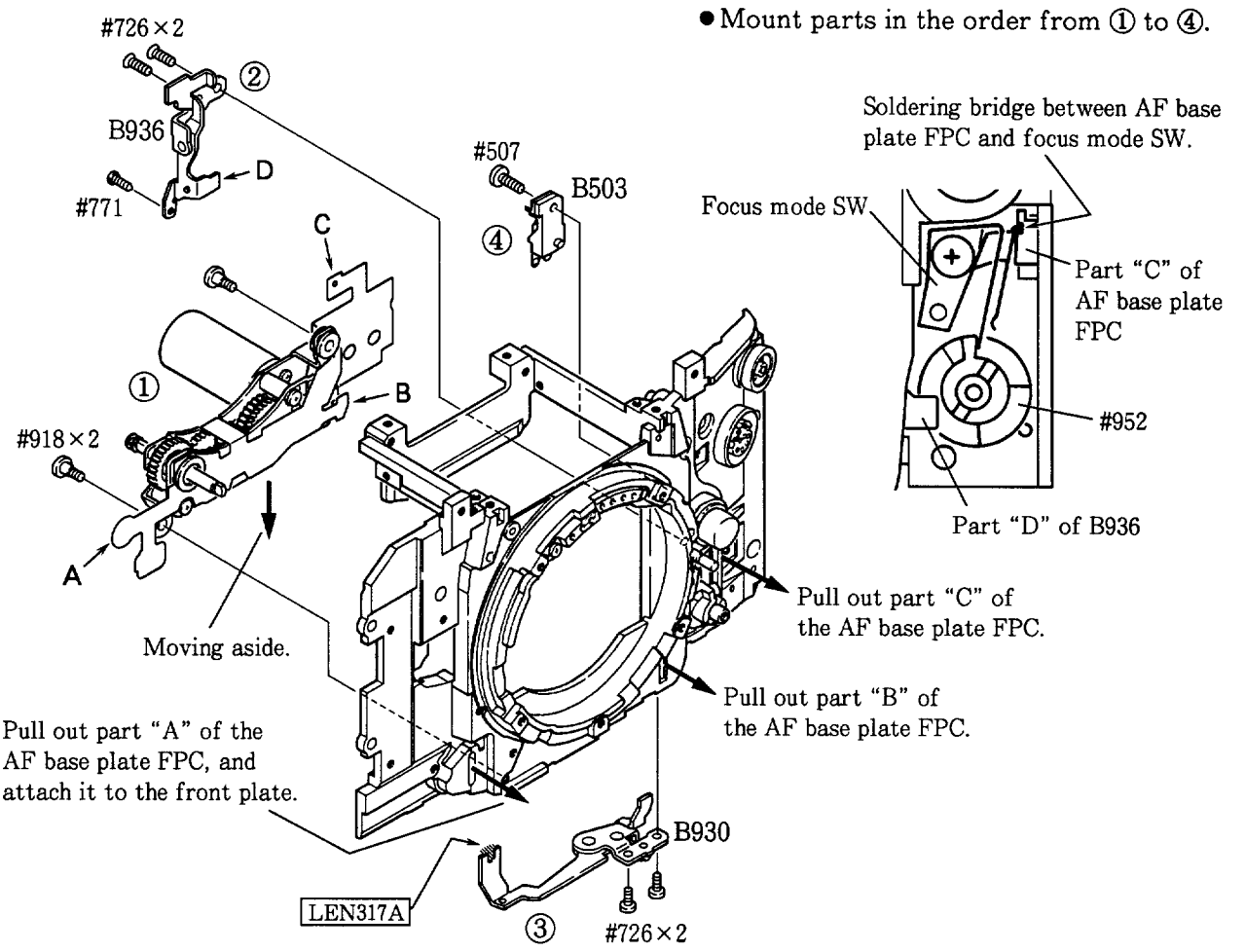


—— : Fold outside
 - - - - : Fold inside

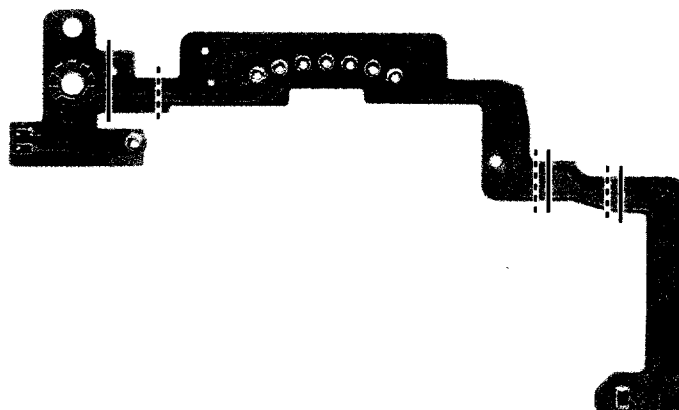


- Apply grease L2113 to each gear shaft of BB902.
- Apply grease G7100 to each gear.

● Mount parts in the order from ① to ④.



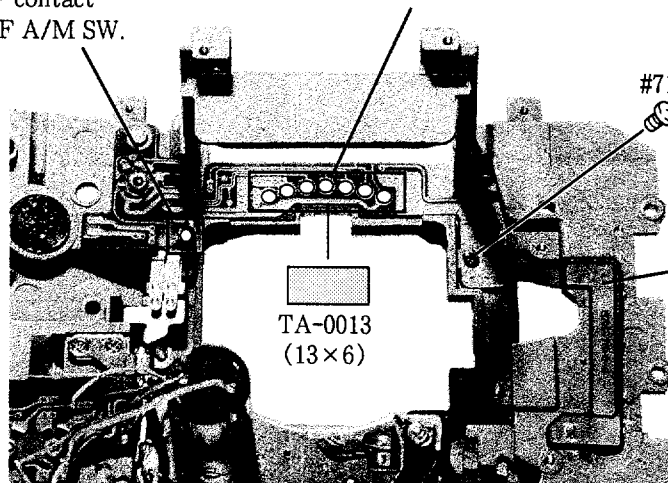
AF CONTACT FPC



—— : Fold outside
 - - - - : Fold inside

Soldering bridge
 between AF contact
 FPC and AF A/M SW.

Soldering bridges between
 AF contact FPC and AF contact unit.

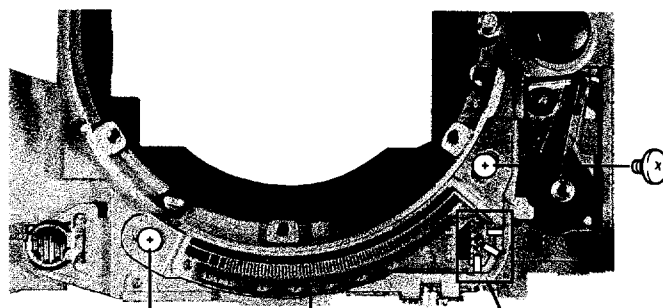


#718

AF contact FPC

TA-0013
 (13x6)

F-Fo BASE PLATE

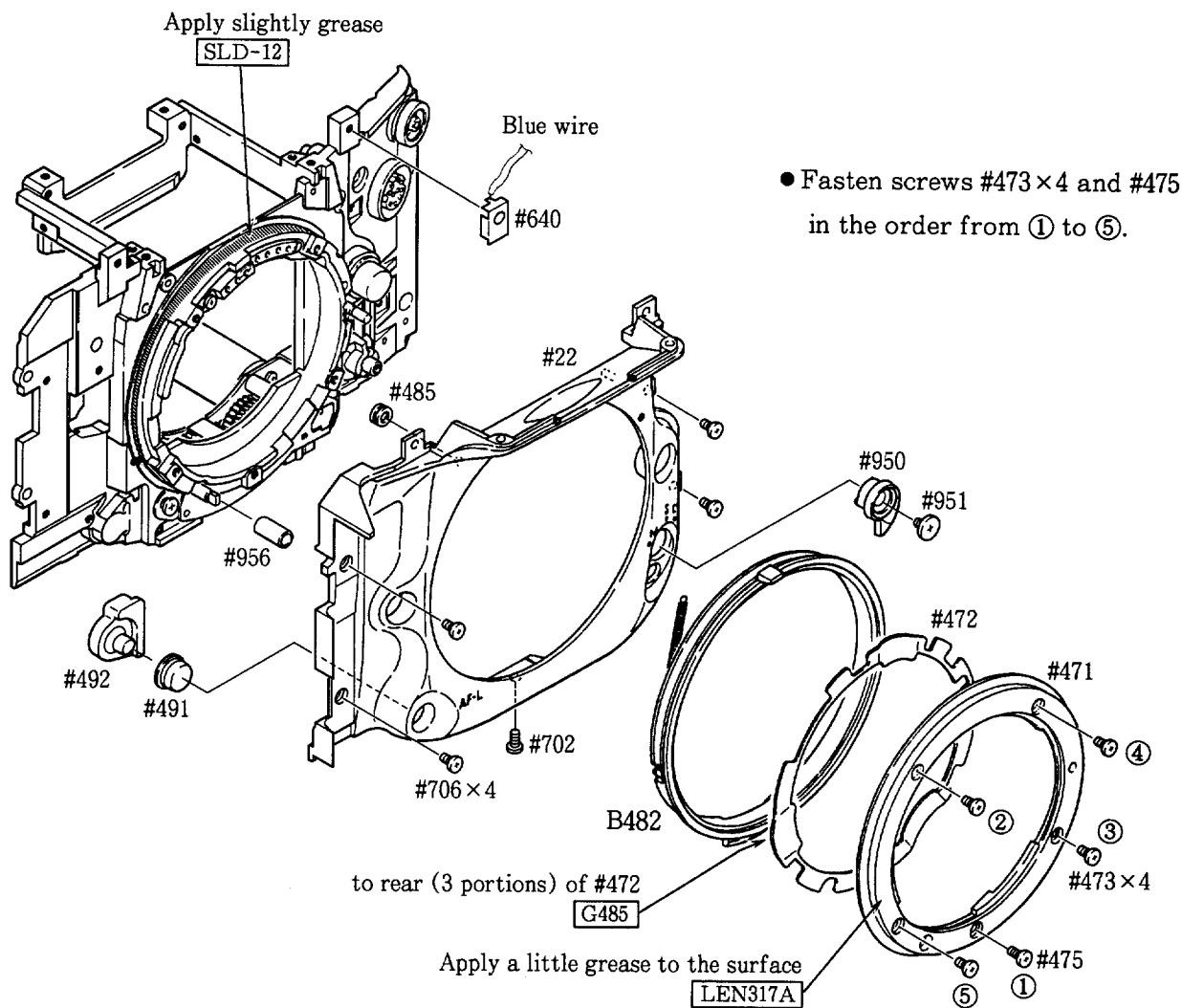


#488 x 2

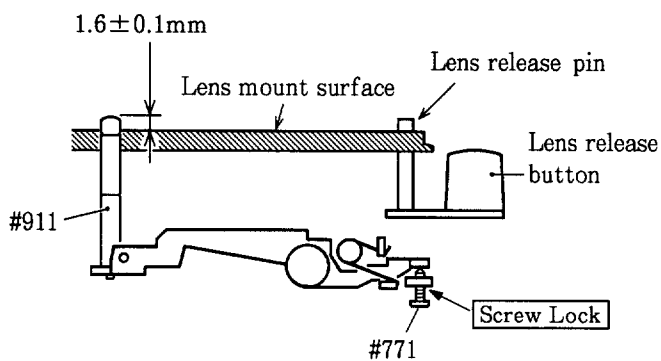
F-Fo base plate

Soldering bridges between F-Fo base
 plate and AF base plate FPC.

APRON, LENS MOUNT



HEIGHT ADJUSTMENT OF AF COUPLING SHAFT #911



- ① Set the focus mode selector to "S" or "C". Measure the height of the AF coupling shaft #911 after pressing the lens release button several times.
- ② Adjust the height of the AF coupling shaft using screw #771.
- ③ The AF coupling shaft should not protrude over the lens mount surface, when the height of lens release pin is adjusted to 0.4mm.
- ④ After adjusting, secure screw #771 with Screw Lock.

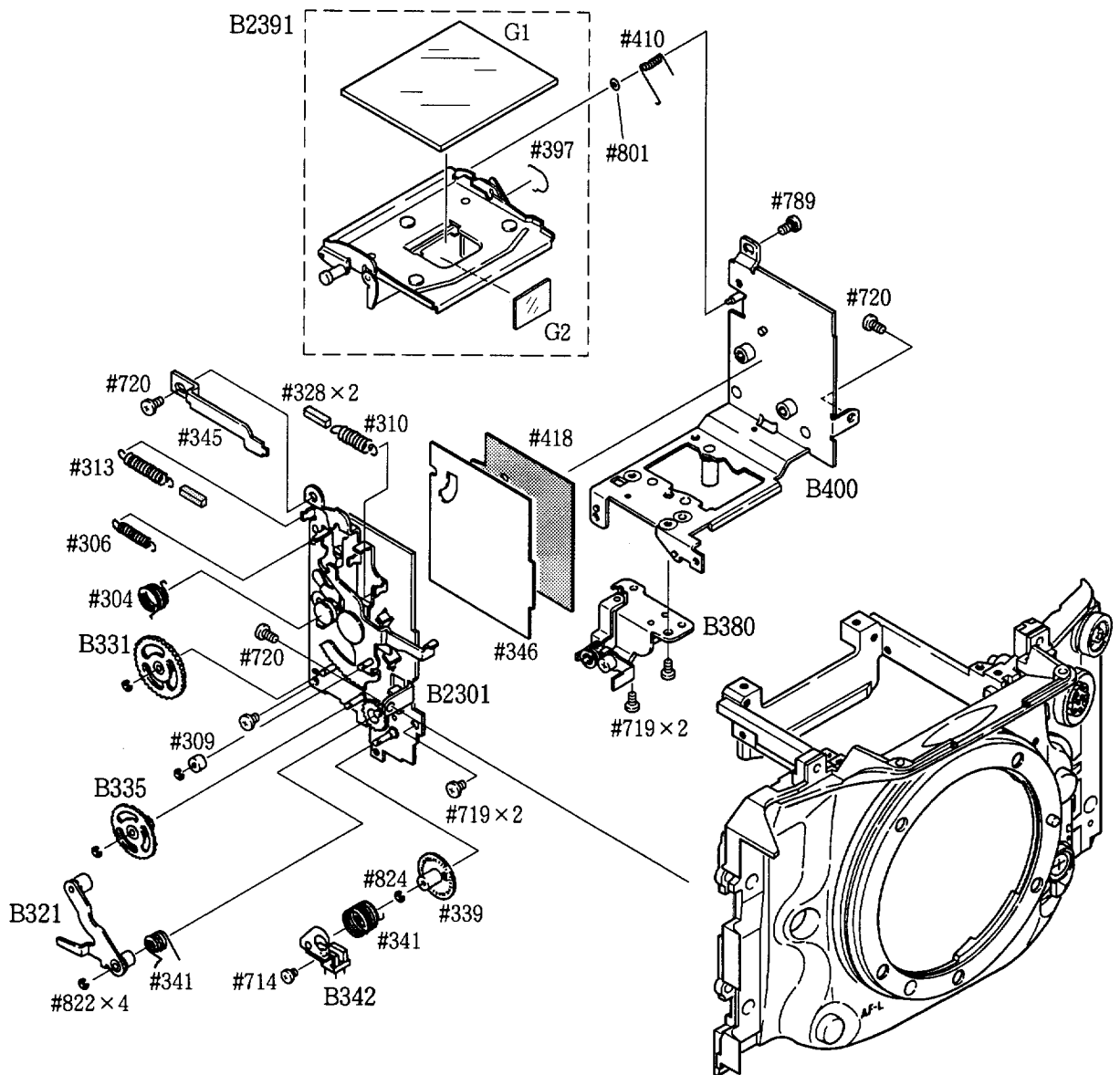
CHECKING OF AF DRIVING UNIT OPERATION

- Supply 1.5 to 5 volts to the AF motor to check its operation to check if any strange sounds are generated.

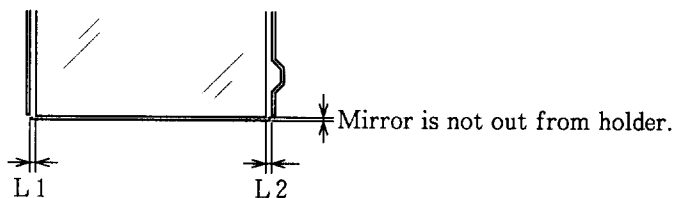
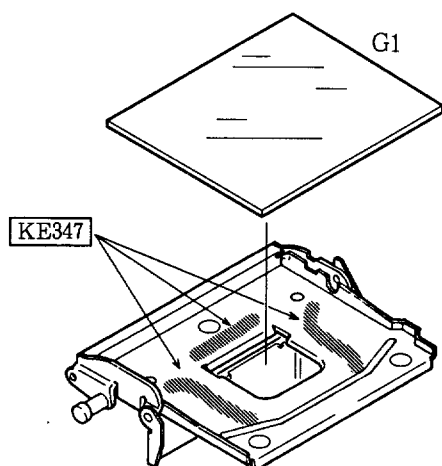
Check to see if the AF motor rotates in the normal direction or in reverse.

MIRROR BOX

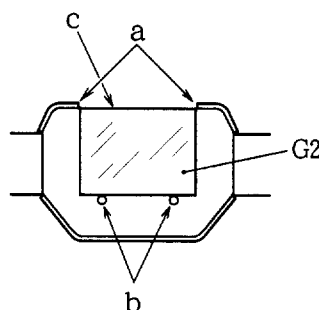
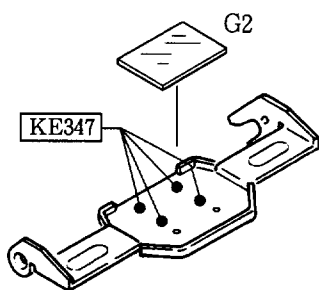
- More details for assembling, refer to from next page.



1. Pasting main mirror and sub mirror

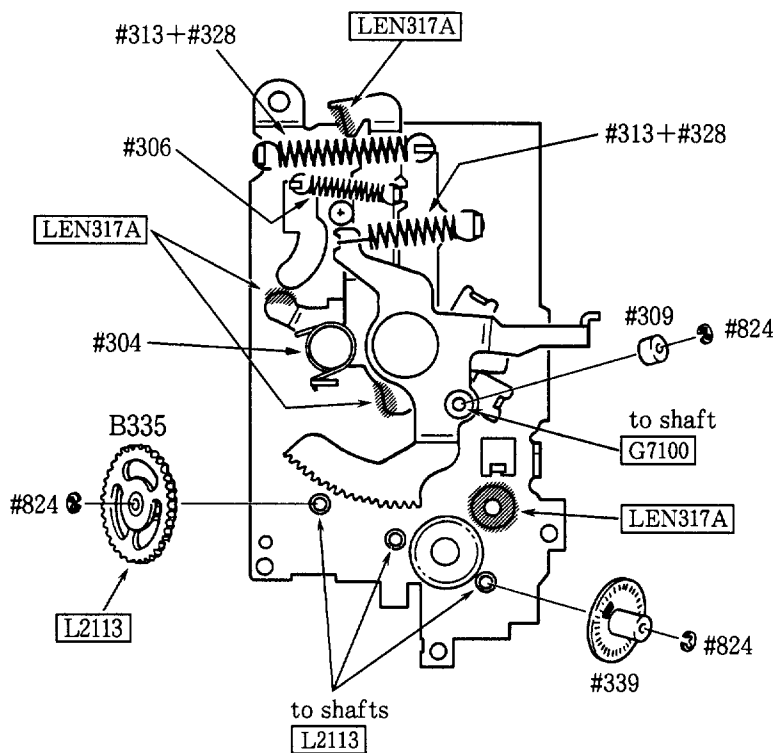


Gap of mirror and holder, L1 and L2 are equal.

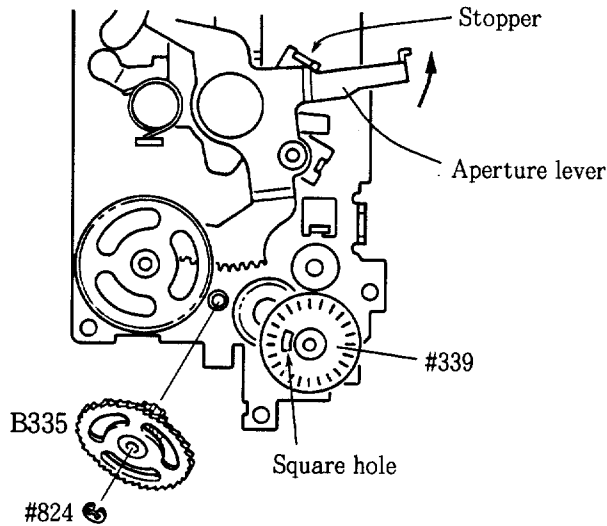


- ① Paste the sub mirror G2 by aligning the projecting part "b" with the notch "a".
- ② Spread black mat paint on side "c" of the sub mirror G2.

2. I base plate to which grease should be applied and those to which springs should be hooked

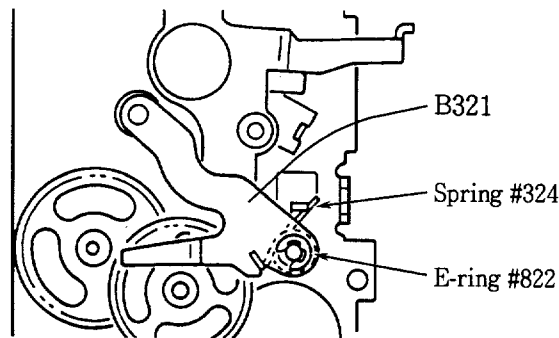


3. Mounting position of aperture ratchet gear B335

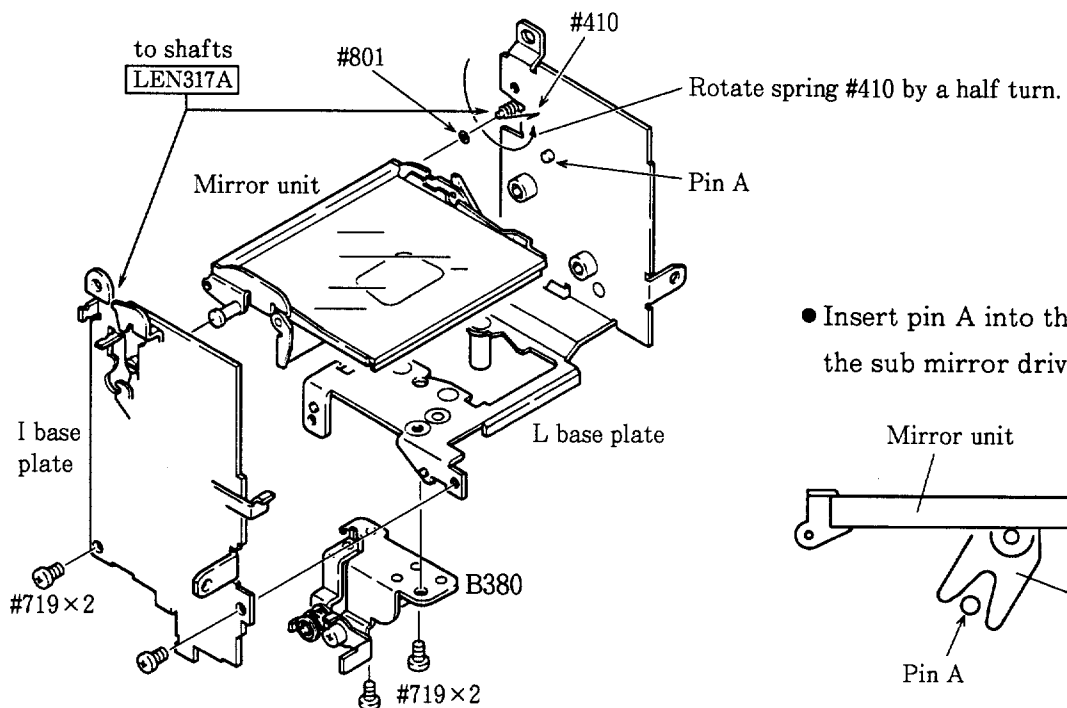


- ① Move the aperture lever in the direction of the arrow and keep the lever in contact with the stopper.
- ② Align the square hole of #339 to the position as shown in the figure (the base of the hole turns to the 8 to 9 o'clock direction).
- ③ In this state, mount the B335 unit.

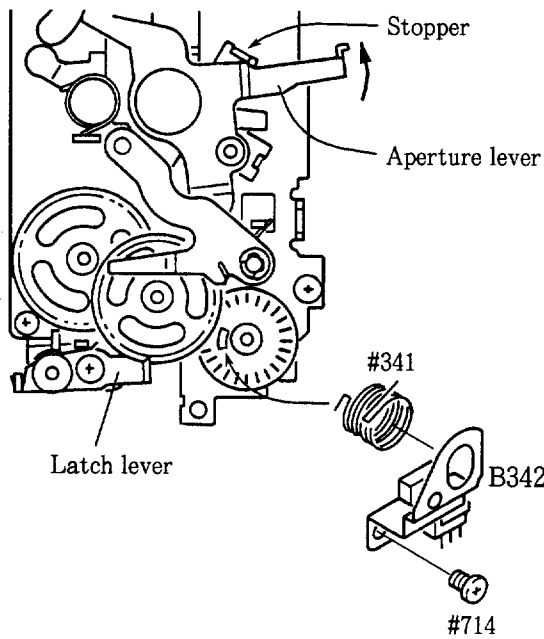
4. Mounting position of shutter release lever B321



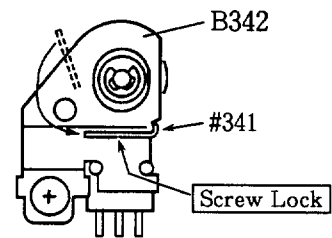
5. Assemble I base plate, L base plate and mirror unit



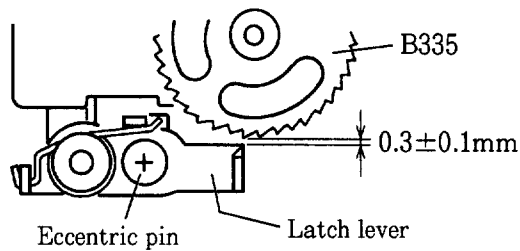
6. Attach aperture PI B342



- ① Move the aperture lever in the direction of the arrow and keep the lever in contact with the stopper. Secure the aperture lever with the latch lever.
- ② Mount spring #341 by inserting the shorter of the hooks into the square hole.
- ③ Attach aperture PI B342 with screw #714.
- ④ Hook the longer of the hooks to B342 as shown in the figure below. Secure the spring #341 with Screw Lock.

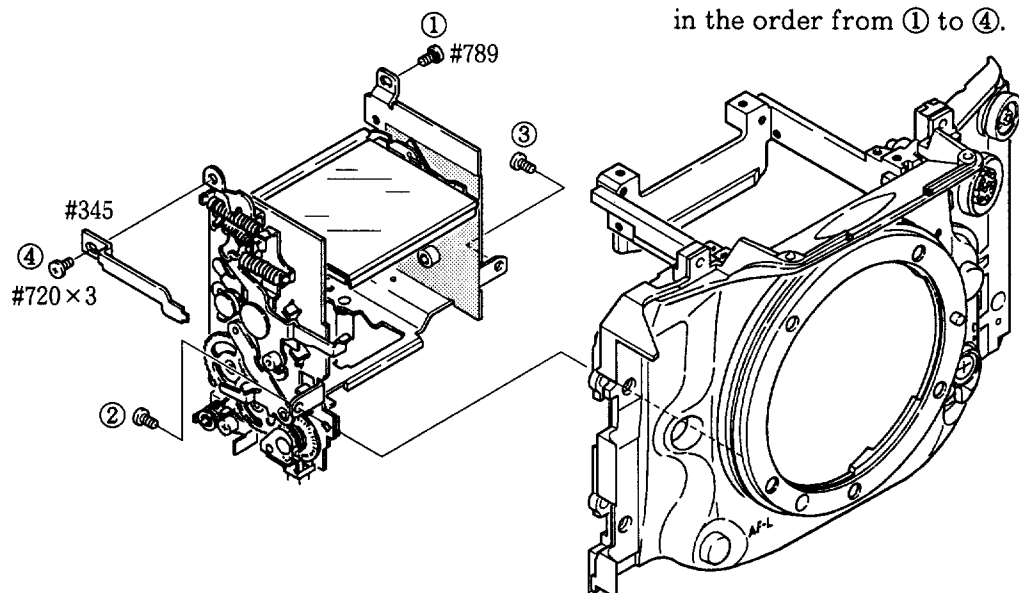


7. Adjustment of aperture Mg latch lever position



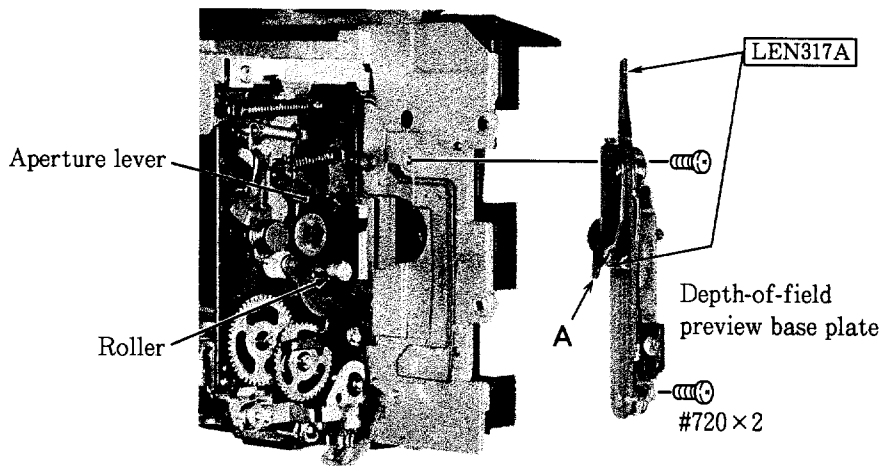
- Rotate the eccentric pin to adjust the gap between the aperture latch gear B335 and the latch lever to 0.3 ± 0.1 mm. After adjustment, secure the eccentric pin with Crazy Glue.

8. Mount mirror box

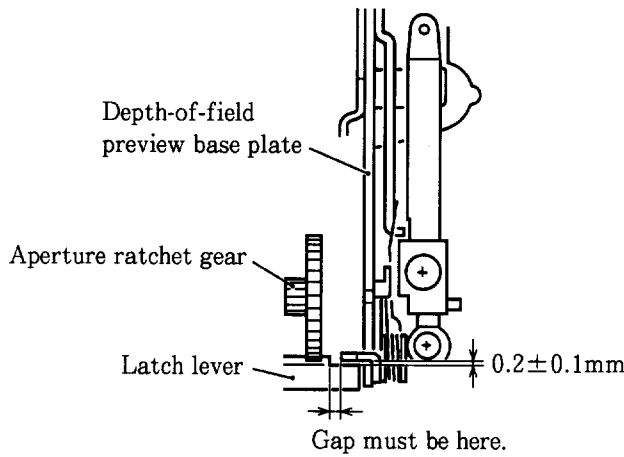


- Fasten screws #720×3 and #789 in the order from ① to ④.

DEPTH-OF-FIELD PREVIEW BASE PLATE

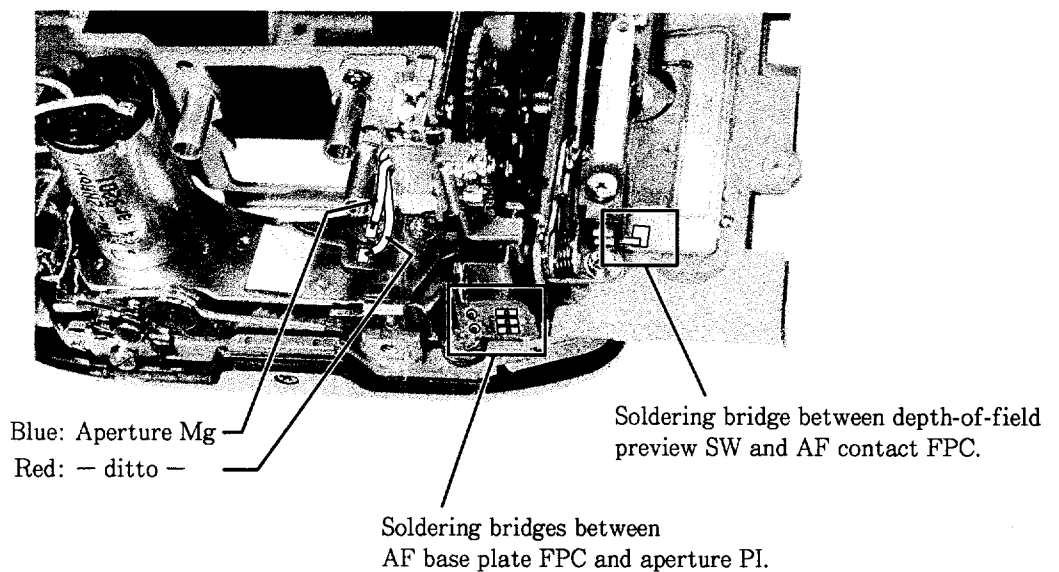


- Mount the Depth-of-field preview base plate so that part "A" sits much deeper than the roller of the aperture lever. Hold down the aperture lever for easier mounting.

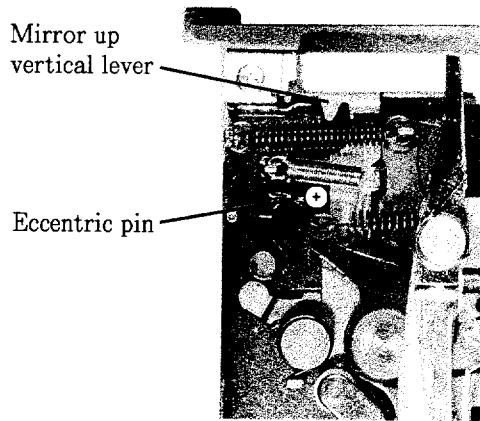


- Adjust the latch lever so that the Depth-of-field preview base plate comes to the position as shown in the figure on the left when the latch lever is engaged with the aperture latch gear.

SOLDERING ON THE BOTTOM OF THE MIRROR BOX



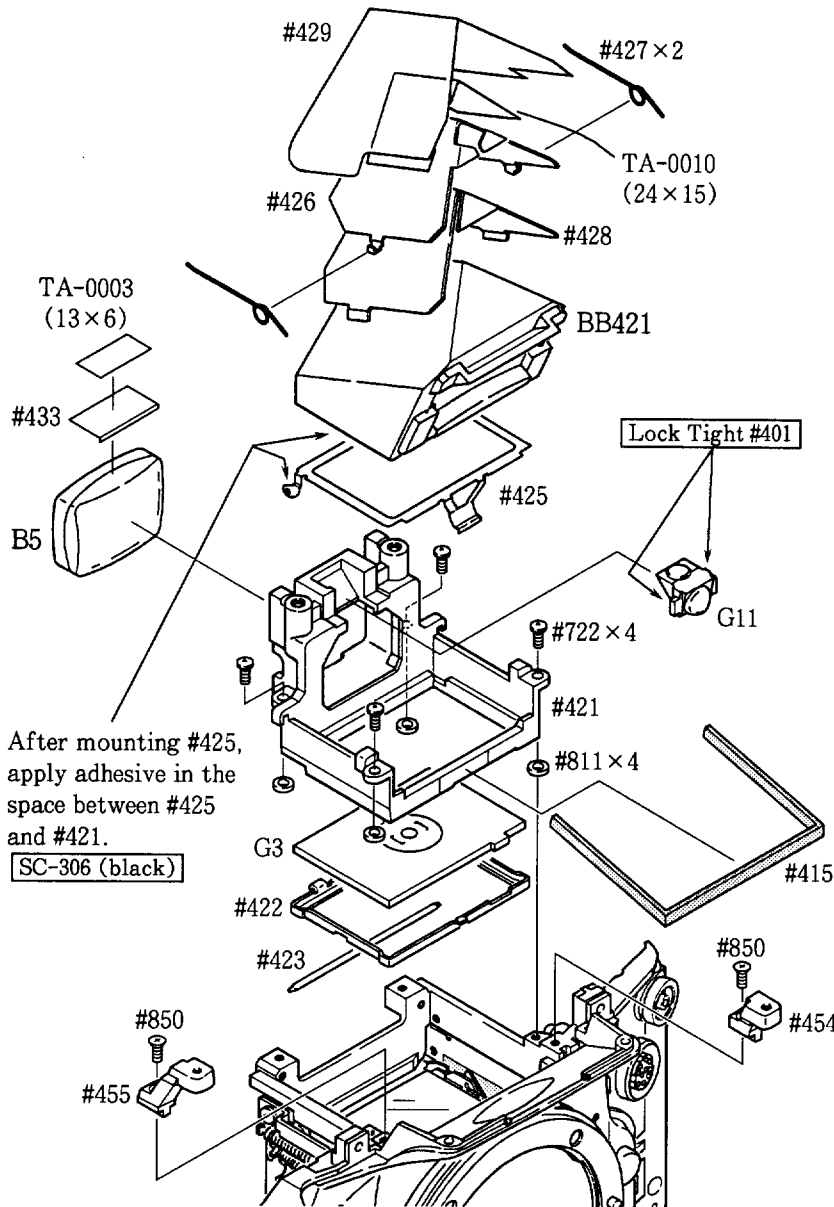
ADJUSTMENT OF APERTURE LEVER POSITION



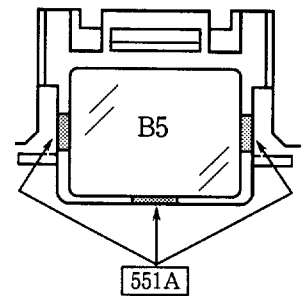
- Measure the height of the aperture lever using tool J18004. If the value is out of the standard value, rotate the eccentric pin to adjust it. After adjustment, move the mirror up vertical lever several times to check the height of the aperture lever.

Standard value: $3.4^{+0.1}$ mm

PENTAPRISM, SCREEN BOX

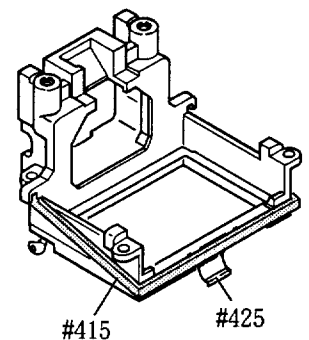


- Pasting eyepiece lens B5

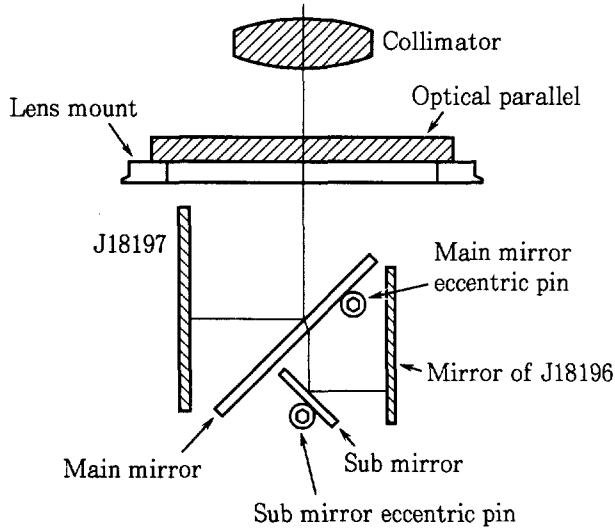


Caution: Do not spread adhesive on the lens surface of eyepiece lens B5 and condenser lens G11.

- Attaching position of sponge #415



ANGLE ADJUSTMENT OF MAIN MIRROR AND SUB MIRROR TO 45°



***Use tools**

1. Angle adjustment of main mirror

- ① Collimator (J19002)
- ② Mirror angle inspection mirror (J18197)
- ③ Optical parallel
- ④ Hexagonal wrench

2. Angle adjustment of sub mirror

- ① Collimator (J19002)
- ② Sub mirror angle adjustment tool (J18196)
- ③ Hexagonal wrench

● Angle adjustment of main mirror to 45°

Note: Check to confirm the accuracy of the main mirror before and after adjustment by moving it up and down several times.

(1) Checking the discrepancy (right/left)

- ① If the amount of the discrepancy is out of the standard value, unfasten screws #720×3 and #789 (securing the mirror box) and move the top of the mirror box back and forth to adjust.

*Check also the discrepancy (right/left) of the sub mirror.

- ② If the amount of the discrepancy (up/down and right/left) is over 10', it is possible that the lens mount spring #472 has been pinched.

(2) Checking the discrepancy (up/down)

If the amount of the discrepancy is out of the standard value, rotate the main mirror eccentric pin to adjust.

● Angle adjustment of sub mirror to 45°

Note: Check to confirm the accuracy of the main mirror before and after adjustment by moving it up and down several times.

(1) Checking the discrepancy (up/down)

If the amount of the discrepancy is out of the standard value, rotate the sub mirror eccentric pin to adjust.

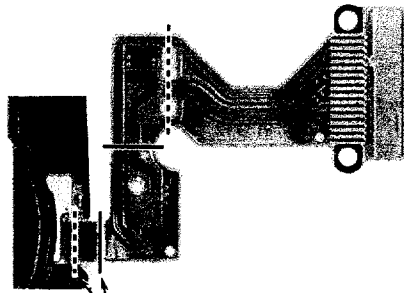
Standard:

	Main mirror	Sub mirror
Discrepancy (right/left)	Within ±20'	Within ±30'
Discrepancy (up/down)	Within ± 5'	Within ±10'
Distortion	Within ± 8'	Within ± 8'

ADJUSTMENT OF INFINITY (∞)

- Adjust the prism box washers #811×4 so that subject at infinity (∞) comes in focus within the range of 0±0.05mm when using a reference lens J18010.

MIRROR BOX BOTTOM PLATE

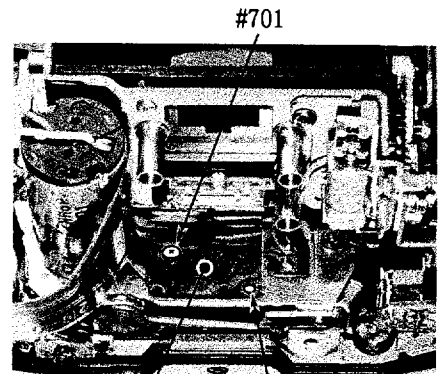
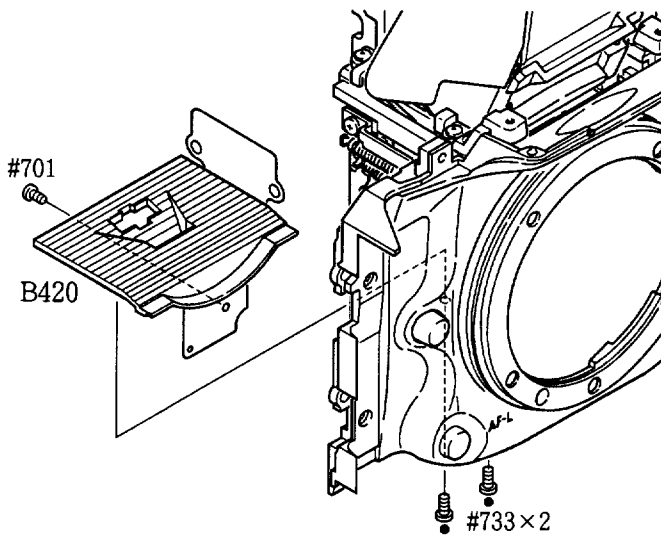


Bend these two parts 120°.

—— : Fold outside

- - - - : Fold inside

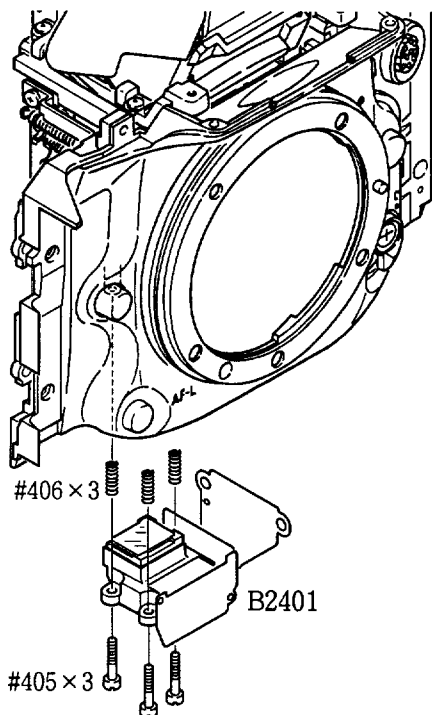
- Mount B420 while keeping the main mirror up. Pull out the TTL FPC through the hole in the mirror box.



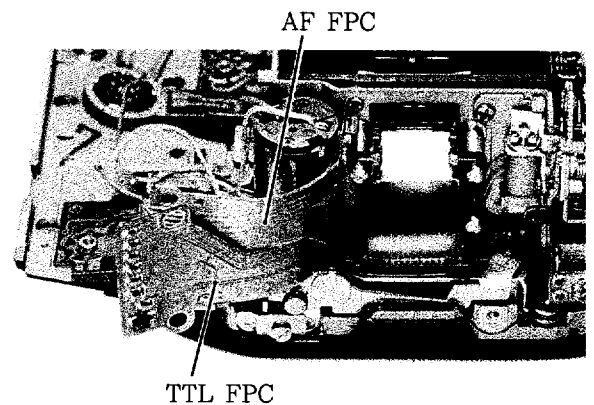
Align the protruding part with the hole.

Attach this FPC to the AF driving unit with double coated adhesive tape.

AF FPC (AP3)

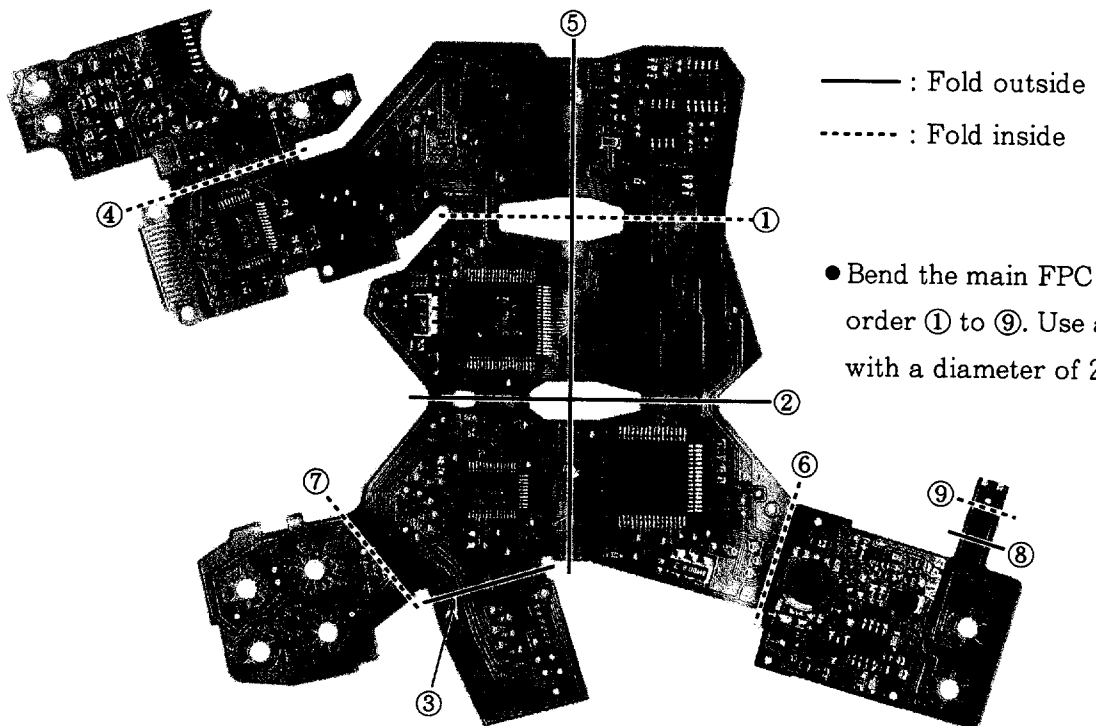


- Fasten screws #405 x 3 fully and then unfasten them two turns.
- As shown in the picture below, cross AF FPC with TTL FPC.

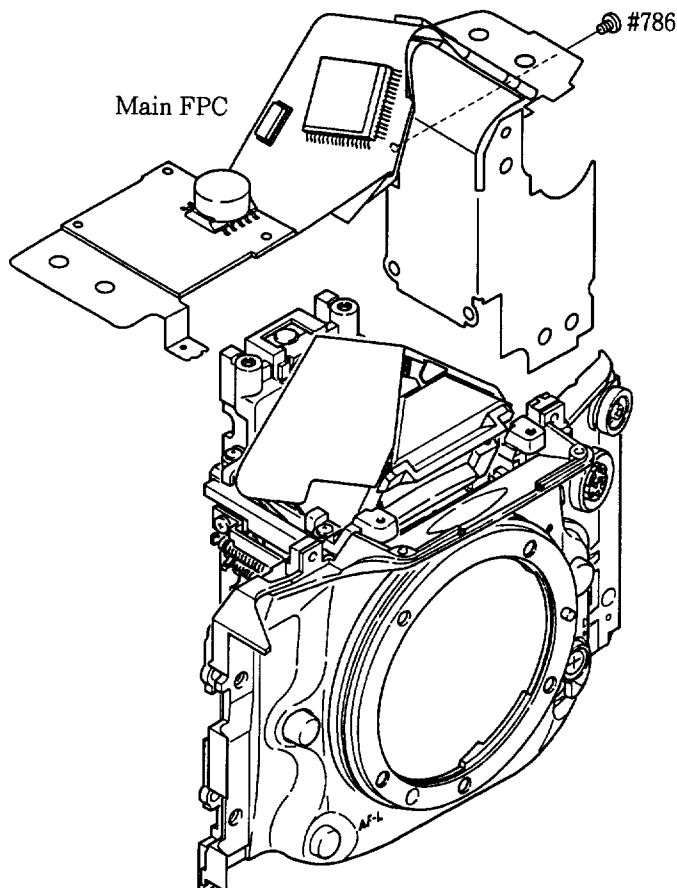


MAIN FPC

1. Bend the main FPC

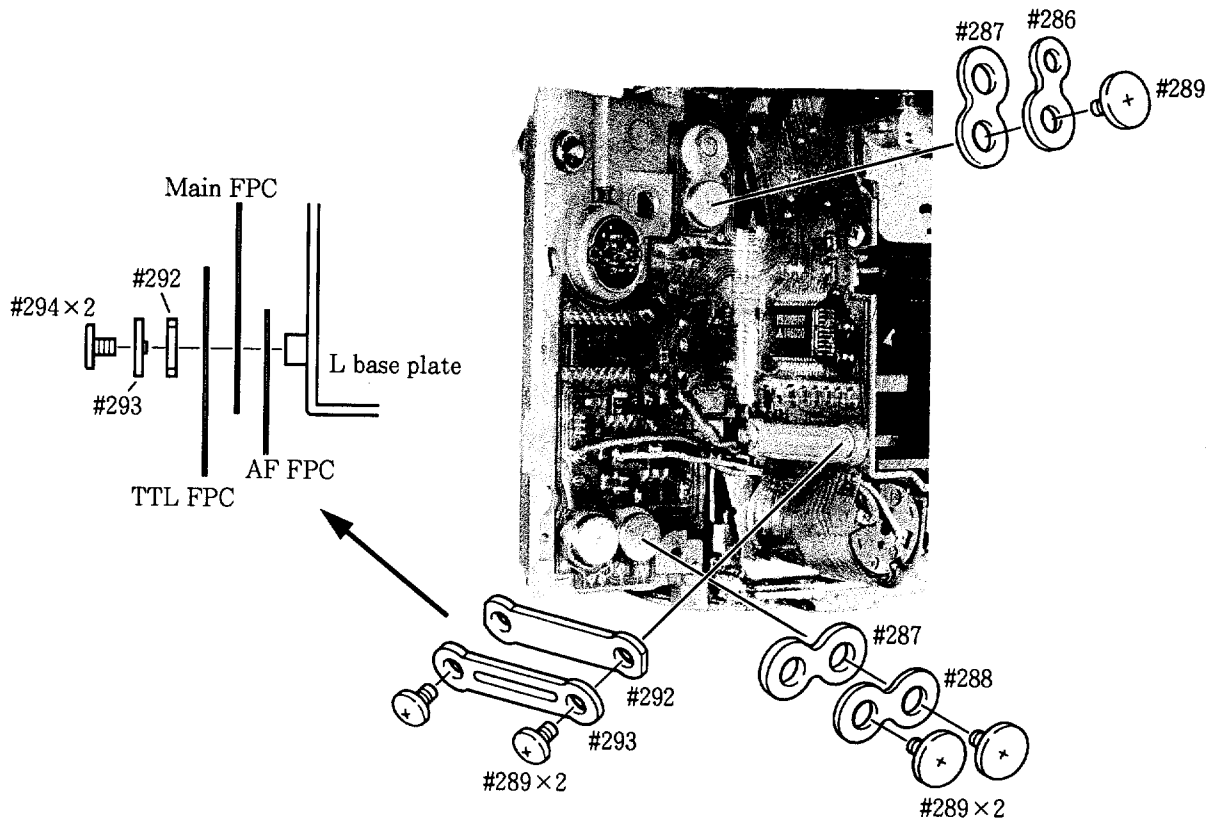


2. Attach the main FPC



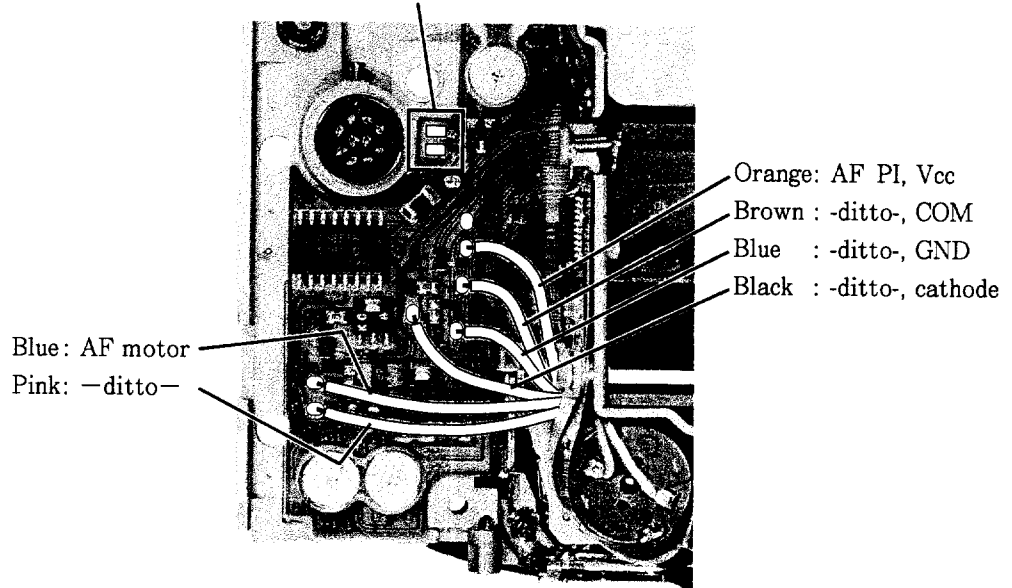
- Mount the prees-contact part of the AF FPC on the L base plate, before mounting the main FPC on the front plate.

3. Press-contact

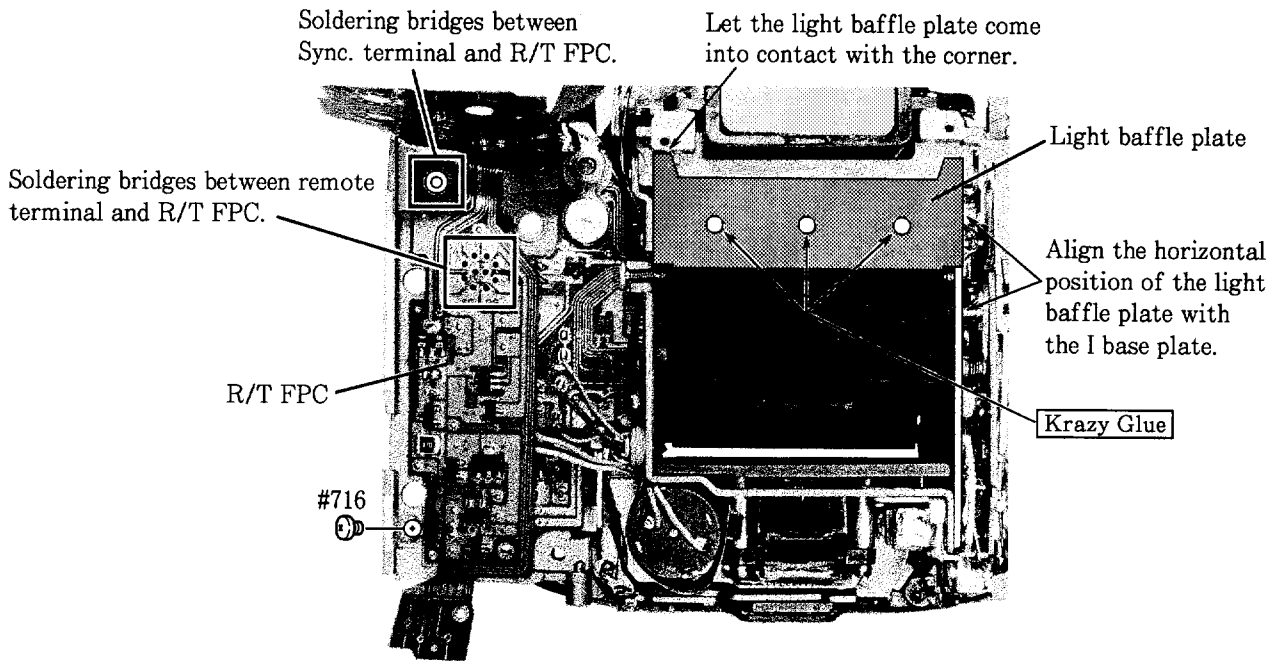


4. Soldering wires, soldering bridges

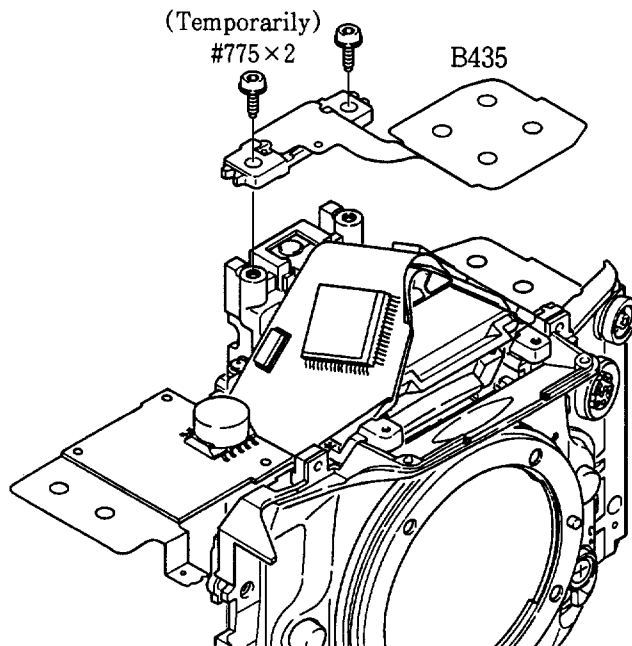
Soldering bridges between main FPC and AF contact FPC.



R/T FPC, LIGHT BAFFLE PLATE



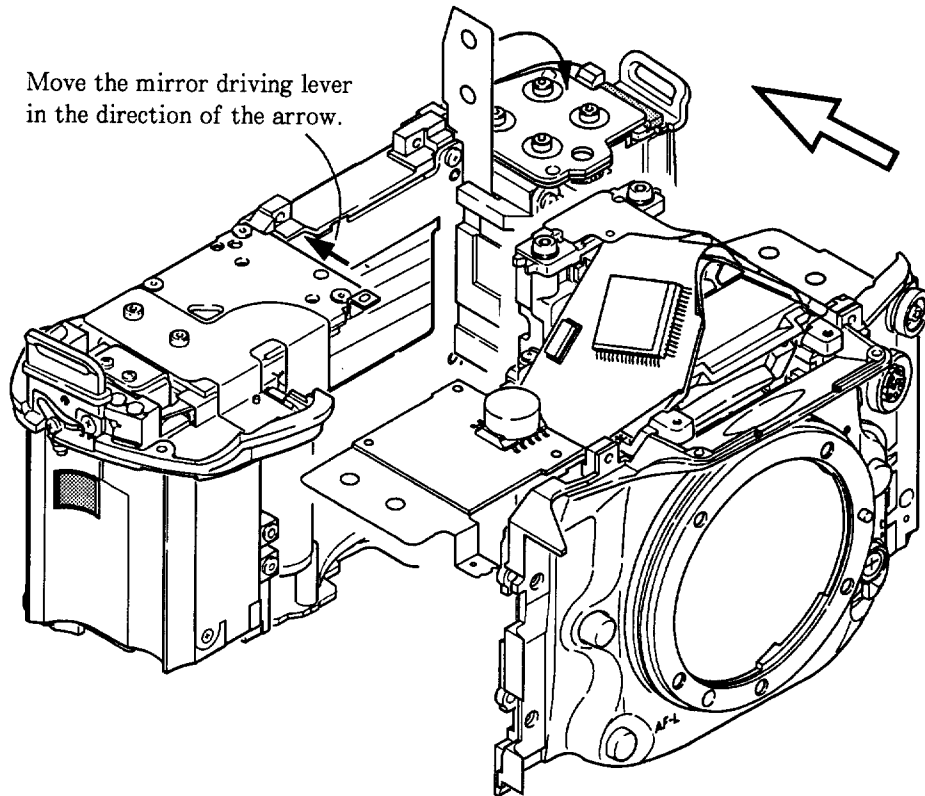
AE FPC (SPD)



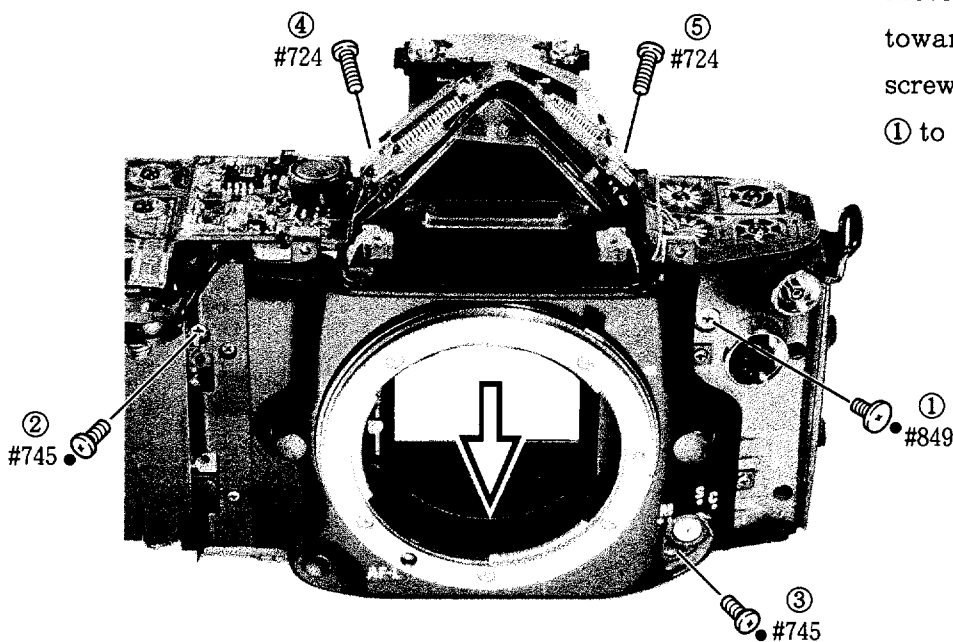
3. FRONT PLATE & REAR BODY

MOUNT FRONT PLATE ON REAR BODY

Move the mirror driving lever
in the direction of the arrow.

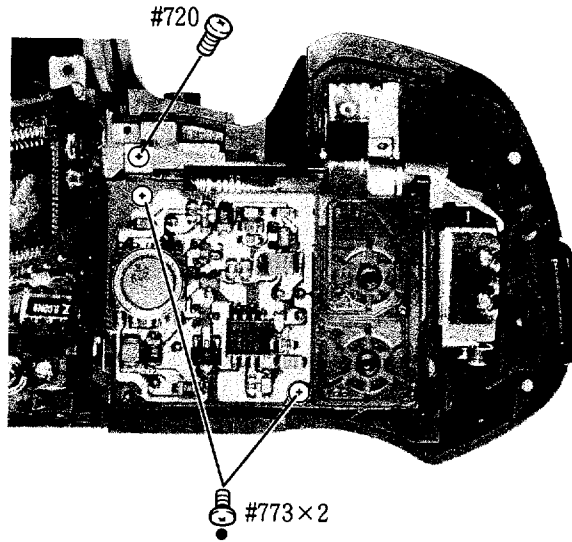


1. Attach screws

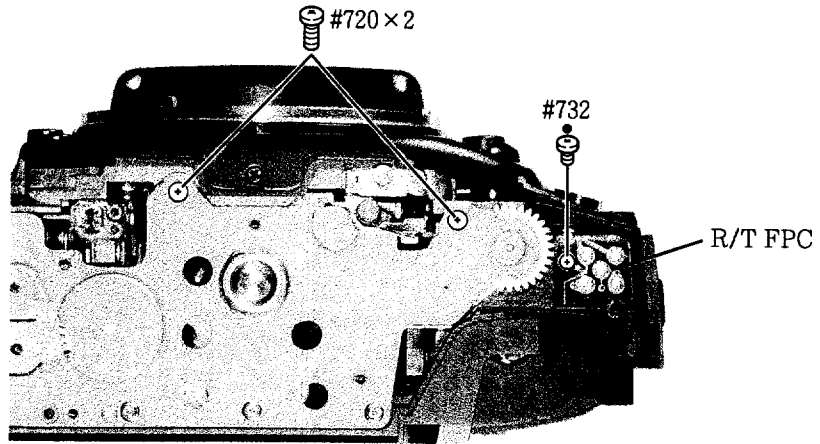


- Move the front plate toward lower and fasten screws in the order from ① to ⑤.

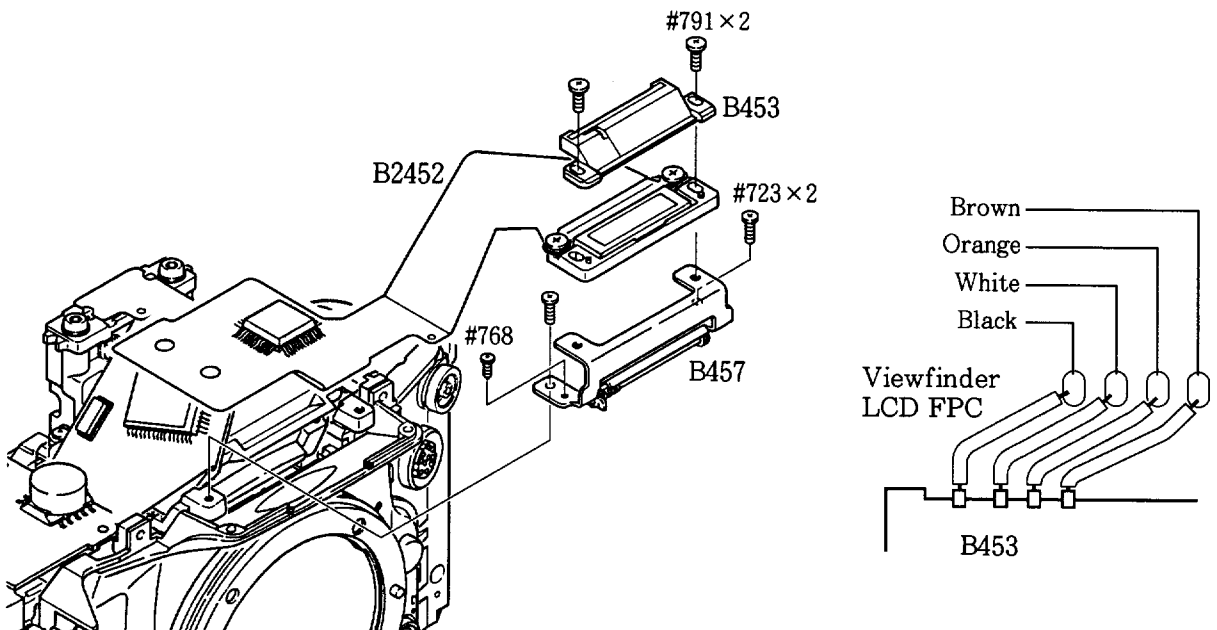
2. Attach screws on the upper side of the hand grip



3. Attach screws on the bottom side

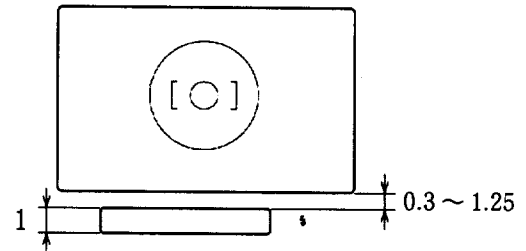
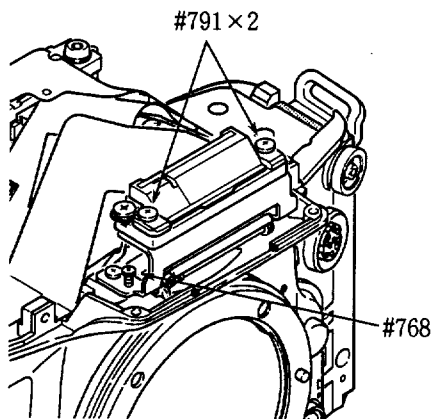


VIEWFINDER LCD FPC

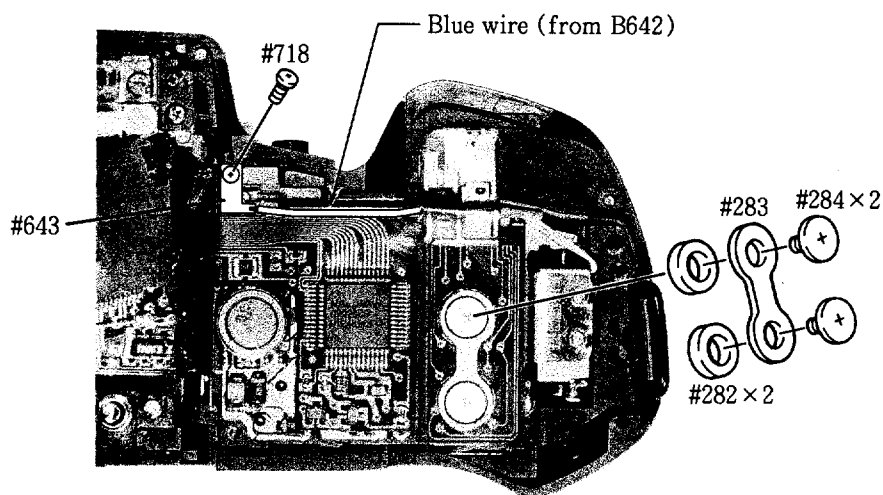


ADJUSTMENT OF VIEWFINDER LCD POSITION

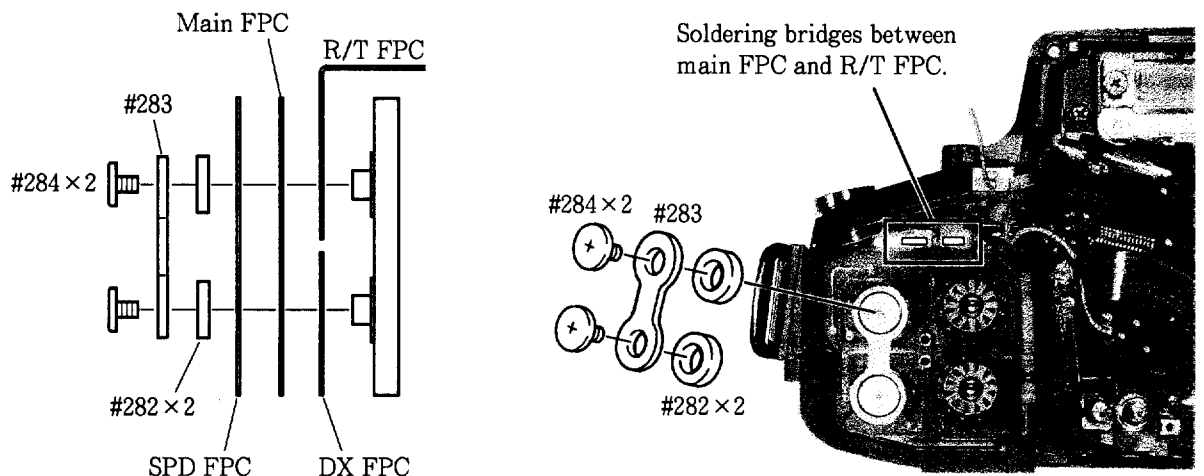
- ① Unfasten screws #791×2 and move the viewfinder LCD to adjust its inclination.
- ② When the height of the viewfinder LCD is defined as 1, rotate screw #768, adjusting so that the distance between the screen and the viewfinder LCD is 0.5 to 1.25. After adjustment, secure the screw #768 with Screw Lock.



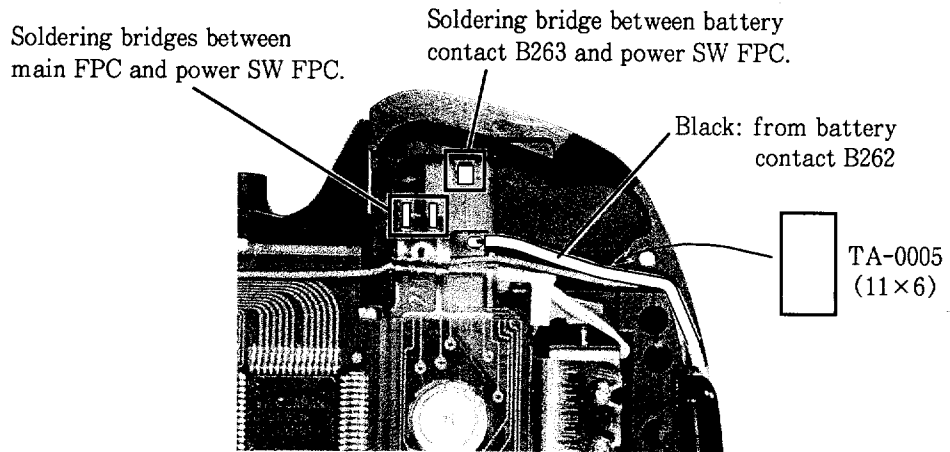
PRESS-CONTACT ON THE UPPER SIDE OF THE HAND GRIP



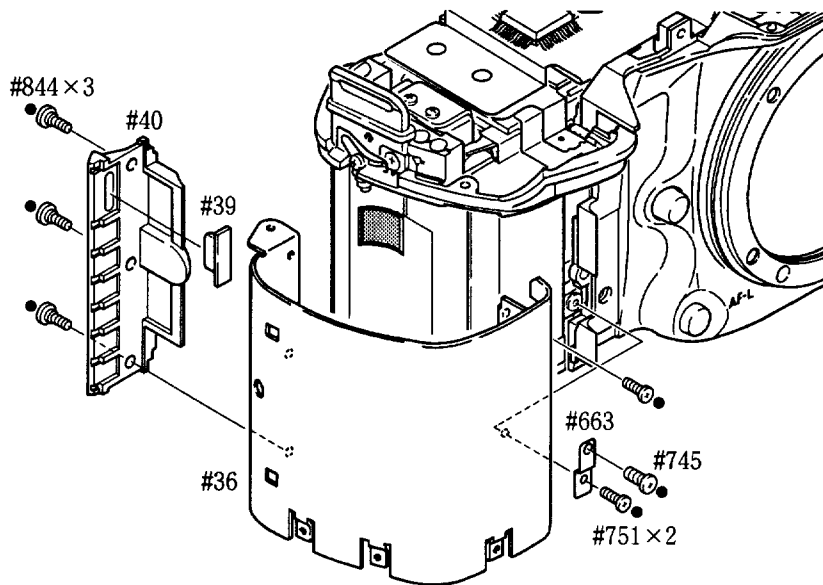
PRESS-CONTACT & SOLDERING BRIDGES ON THE UPPER SIDE OF THE FILM CARTRIDGE CHAMBER



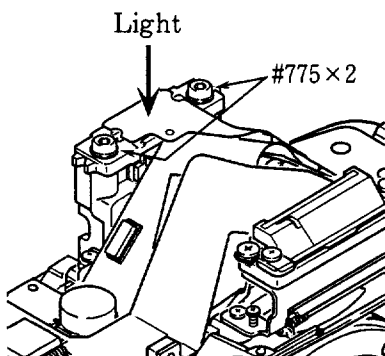
SOLDERIND BRIDGES & WIRES ON THE UPPER SIDE OF THE HAND GRIP



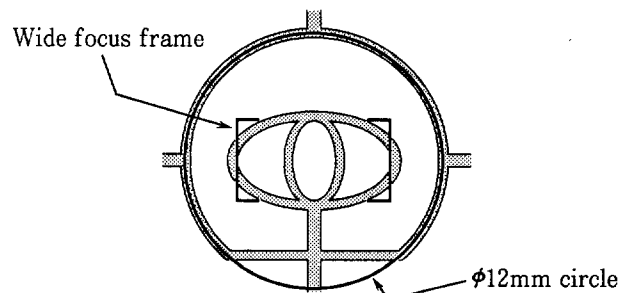
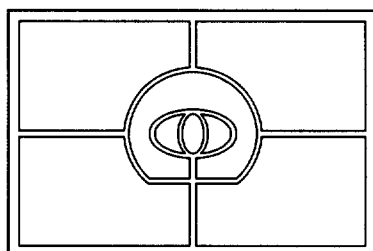
HAND GRIP BASE PLATE



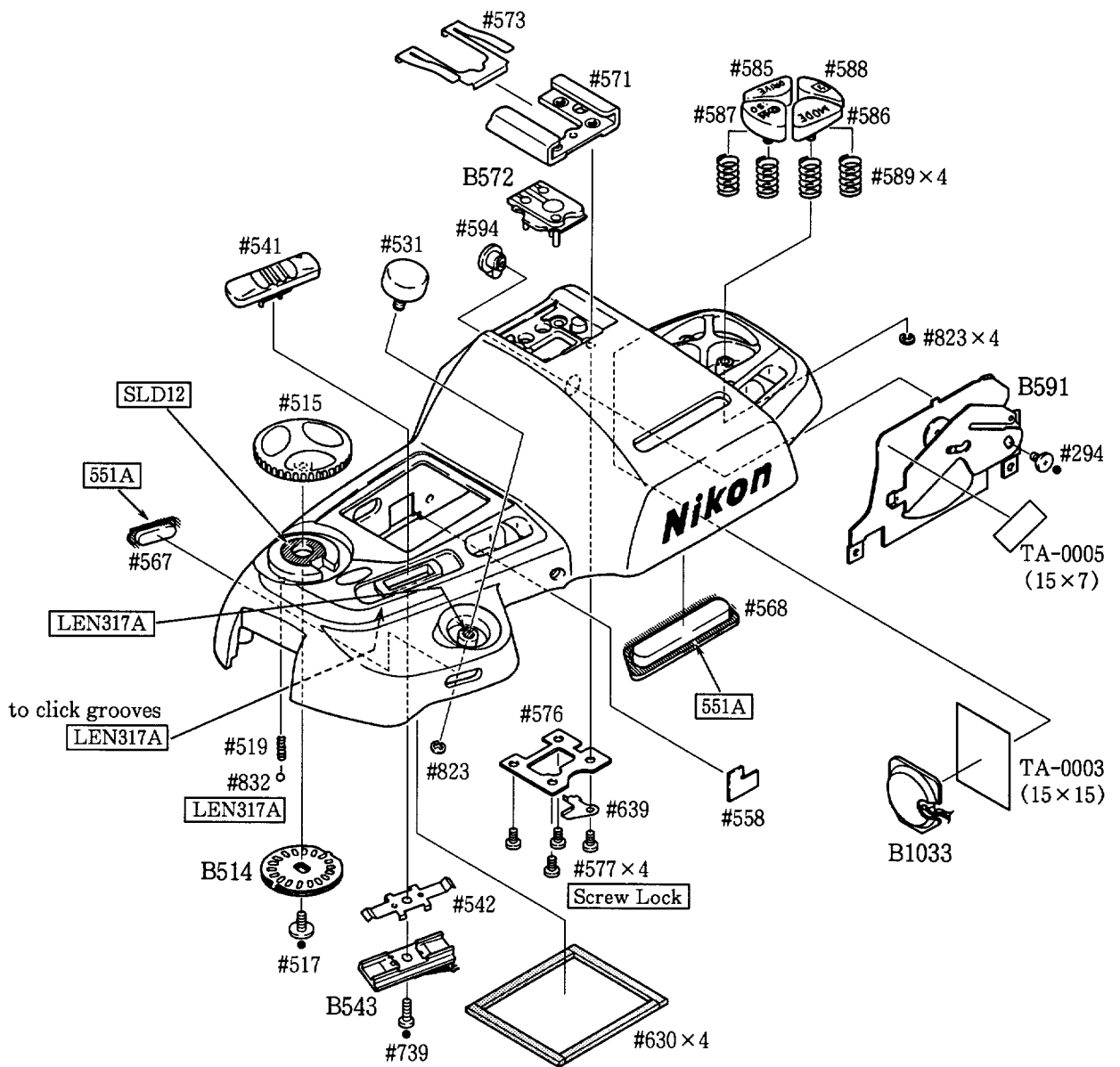
ADJUSTMENT OF AE SPD POSITION



- ① Unfasten screws #775×2.
- ② Irradiate a strong light on the AE SPD so that the AE SPD patterns are reflected on the main mirror.
(Refer to the figure below on the left.)
- ③ As shown the figure below, align the center of the AE SPD with both the wide focus frame and the $\phi 12\text{mm}$ circle. The AE SPD should be parallel to the main mirror.



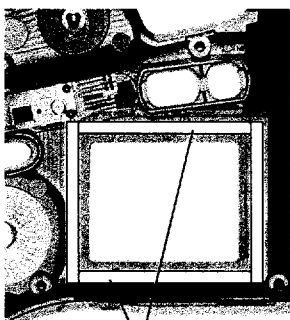
SMALL PARTS OF TOP COVER



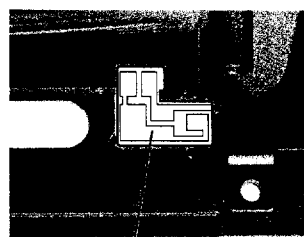
① Attaching positions of sponge #630 x 4

② Attaching position of AE lock printed circuit board #558

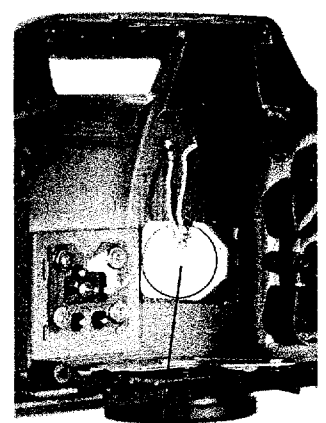
③ Attaching position of buzzer B1033



Stretch these two sponge when attaching them.

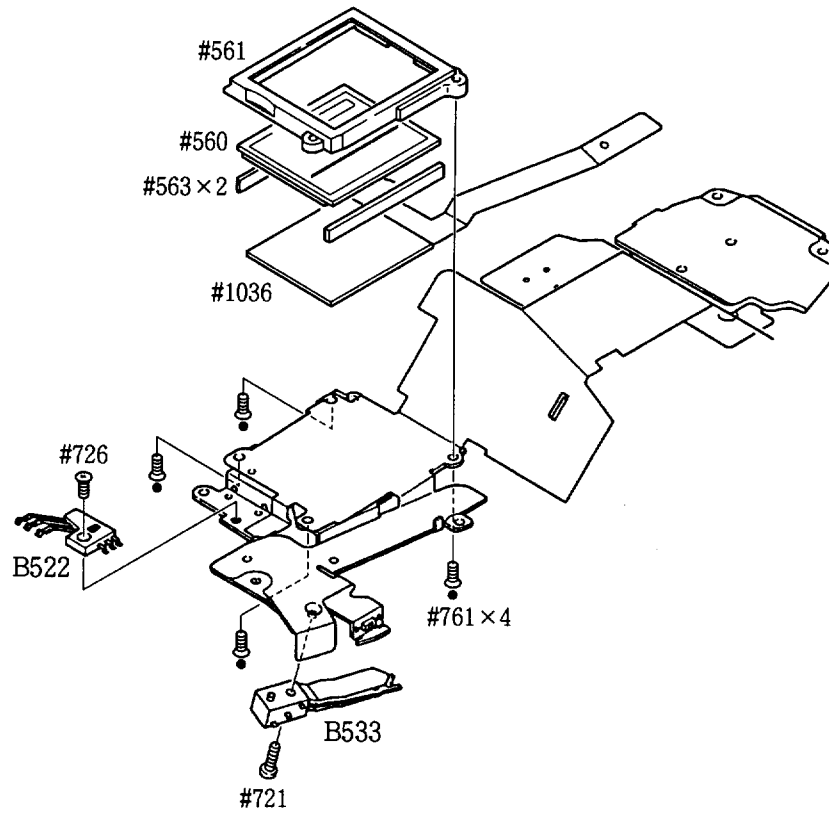


#558



B1033

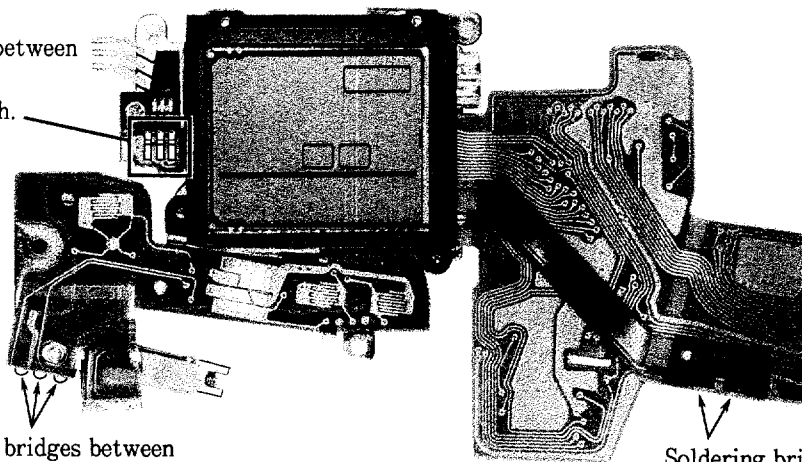
TOP COVER FPC, LCD PANEL



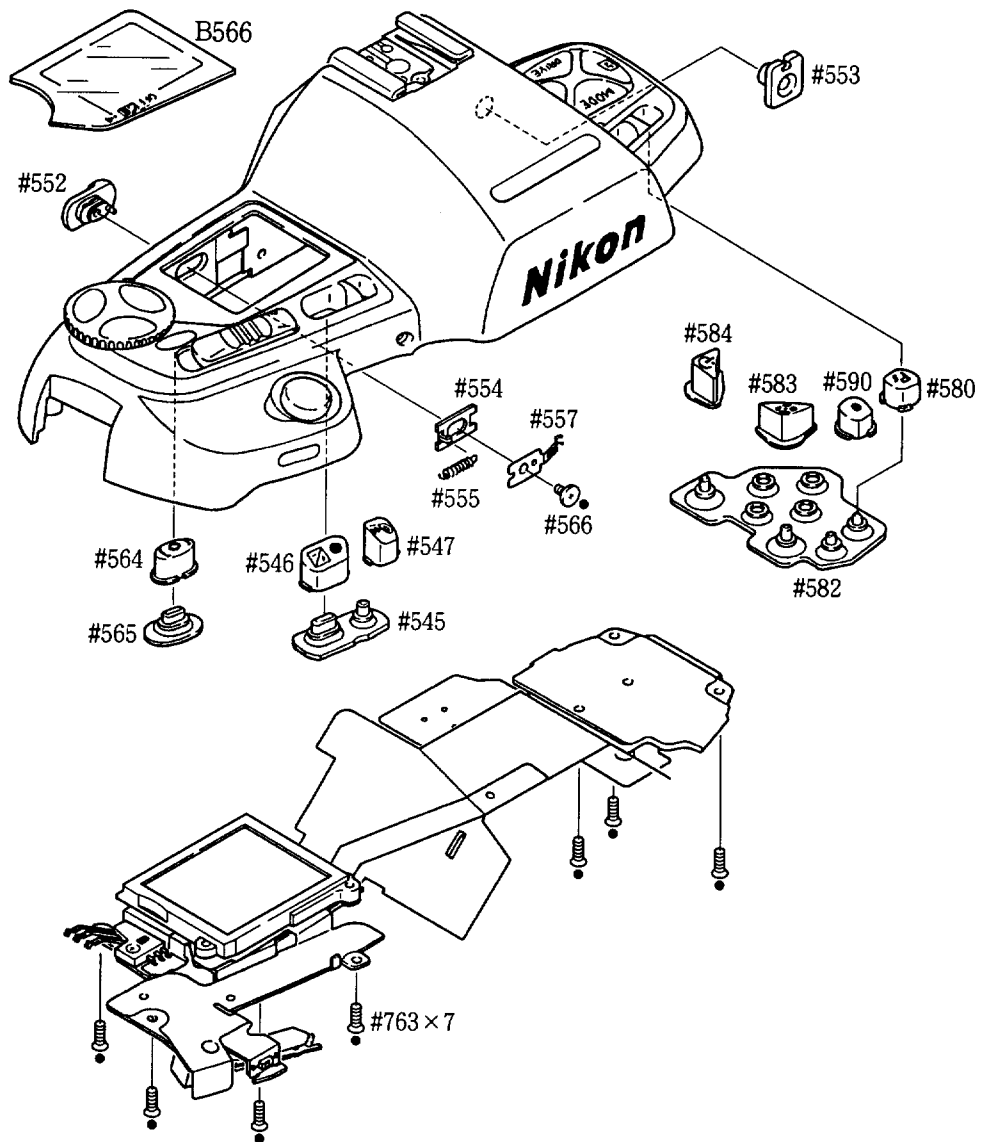
Soldering bridges between top cover FPC and command dial brush.

Soldering bridges between top cover FPC and release SW.

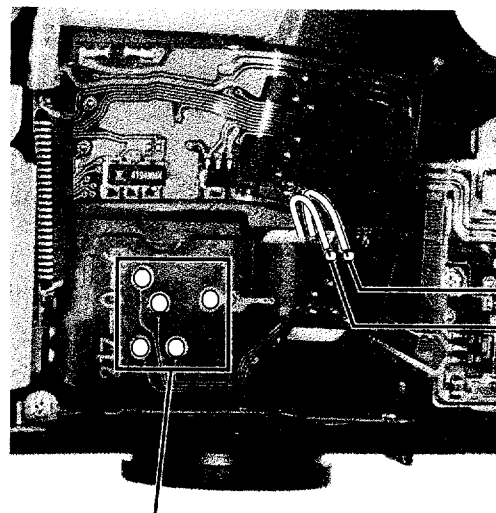
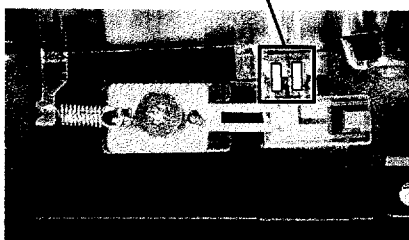
Soldering bridges between top cover FPC and EL #1036 from the rear side.



MOUNT THE TOP COVER FPC



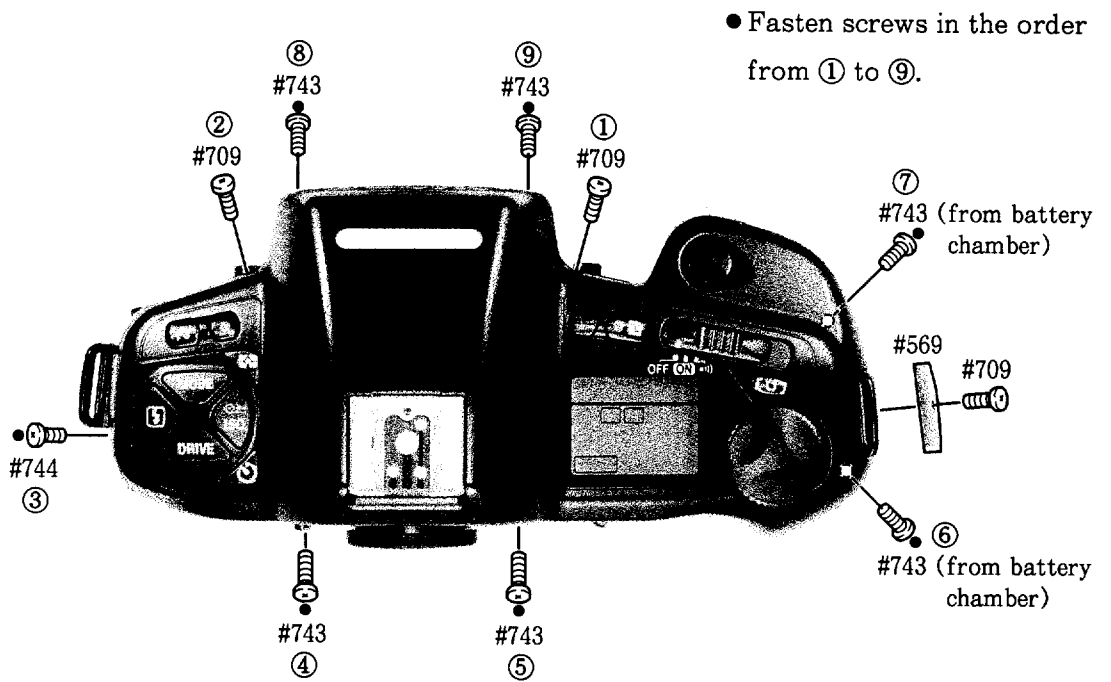
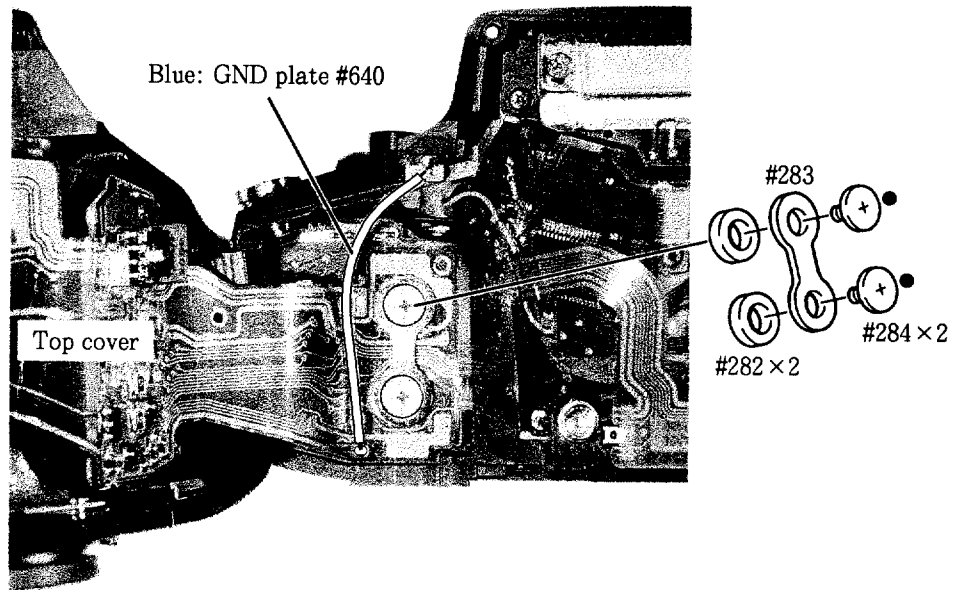
Soldering bridges between top cover FPC and AE lock printed circuit board.



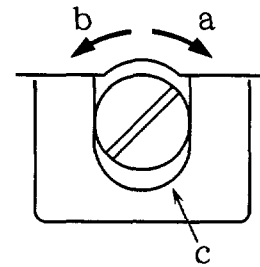
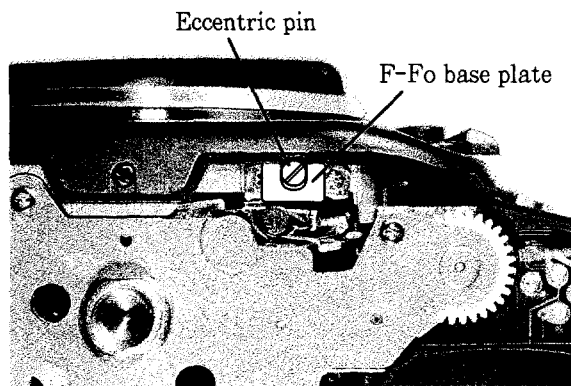
Yellow: Buzzer
Yellow: - ditto -

Soldering bridges between top cover FPC and accessory shoe B572.

MOUNT THE TOP COVER



ADJUSTMENT OF F-Fo BASE PLATE POSITION



1. Rotate the eccentric pin in the direction of "a" to move the pin head to the right.

Note: Do not rotate the eccentric pin too much otherwise the F-Fo base plate might bend due to the "c" part of the F-Fo base plate coming into contact with the eccentric pin.

2. Slowly mount the F-Fo tool lens J18202 on the camera body, so that the upper and lower gaps between the lens release pin and the groove are the same.
3. Attach the battery holder (with batteries) to the body. Screw in the battery holder lock screw until the battery holder release SW turns OFF.

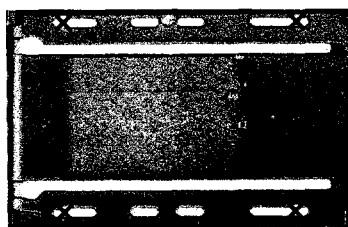
Note: Do not fasten the battery holder lock screw completely, for the bottom cover has not been mounted yet.

4. Turn ON the main SW of the body to set the exposure mode selector to "A" or "M".
5. Lightly press the shutter release button, and slowly rotate the eccentric pin in the direction of "b". Stop the rotation at the moment when the aperture value on the LCD has changed from F1.8 to F2.

Note:

- ① Rotate the eccentric pin in the direction of "b".
- ② If the pin has been rotated too much, set the pin to "1." and rotate the pin in the direction of "b" again.

INSPECTION & ADJUSTMENT OF BODY BACK

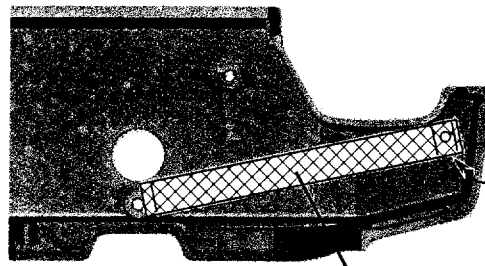


- Measure the distance between the lens mount surface and the outer film guide rail.
Mark x: Measured positions
Standard value: $46.67 \pm 0.02\text{mm}$
Degree of parallel: within 0.02mm
- If it is out of the standard value, unfasten screws #787 x 2, securing the bottom base plate and the front plate, and move the front plate back and forth.
Or adjust the distance by inserting the washers under the lens mount.

INSPECTION & ADJUSTMENT OF AE, AF, TTL, BATTERY CHECK VOLTAGE

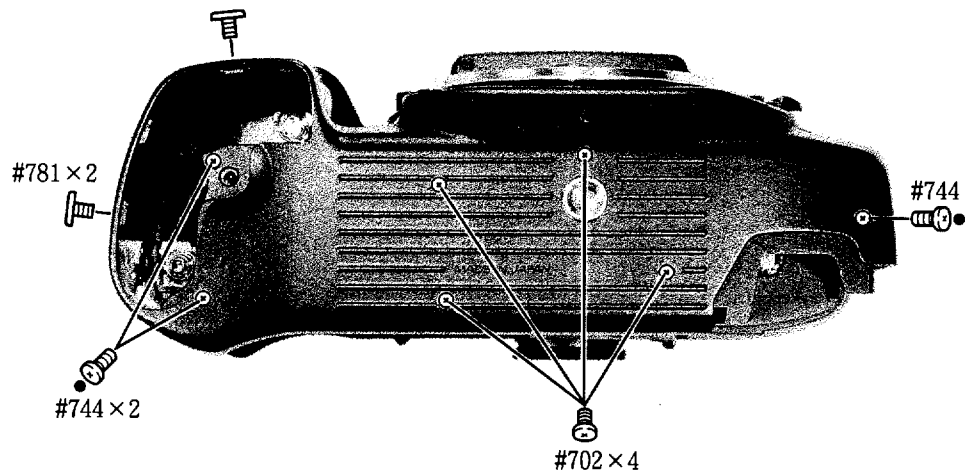
- Make each inspection and adjustment as indicated on the computer display.

BOTTOM COVER



Copper foil tape
(58 × 6)

Do not lift this tape up or it might short-circuit with the R/T FPC land.



#781 × 2



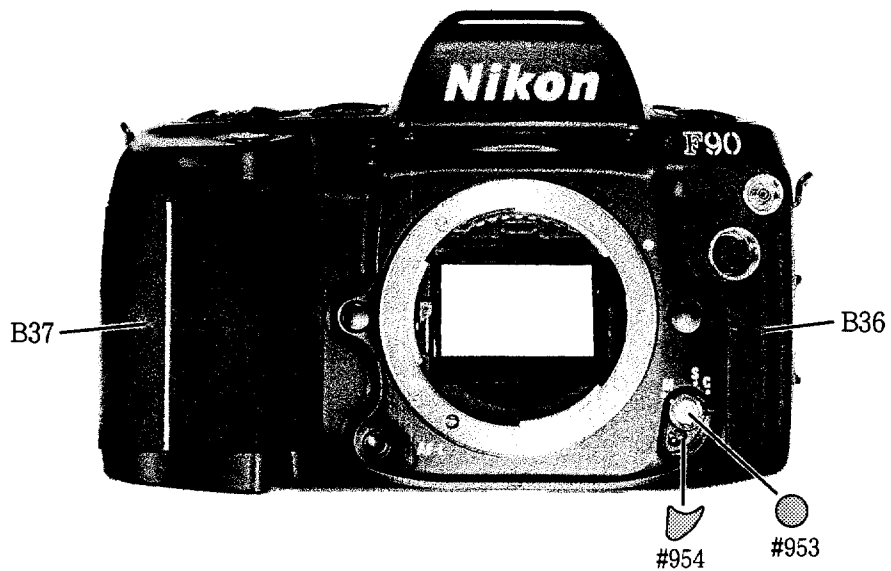
#744 × 2

#702 × 4

#744



HAND GRIP RUBBERS



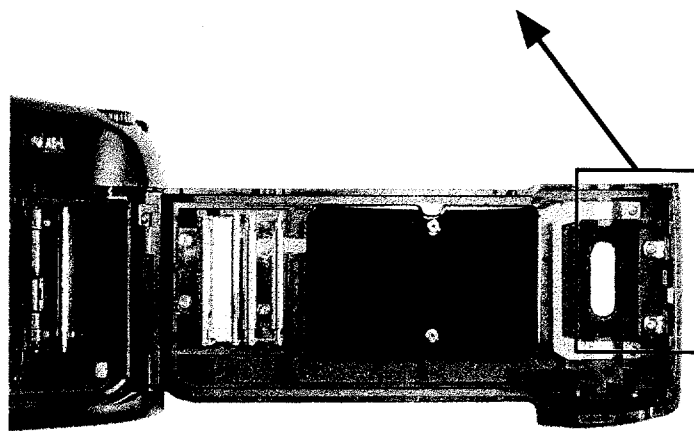
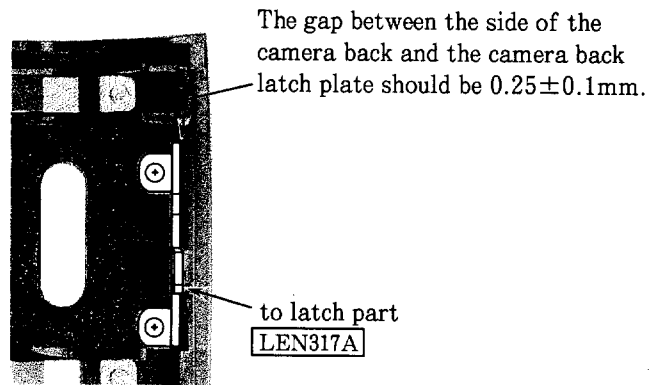
B37

B36

#954

#953

CAMERA BACK



CHECK & CLEAN

- Refer to the standard value of inspection and checking & adjustment programs.

F90 (N90) specifications**Contents**

1.	Exposure metering	M1
2.	Exposure mode	M1
3.	AE lock	M10
4.	Film speed setting	M10
5.	Sequence control	M10
6.	Film advance	M11
7.	End of roll	M11
8.	Film rewind	M11
9.	Film advance speed	M12
10.	Frame counter	M12
11.	Shutter	M12
12.	Illumination	M13
13.	Power source	M13
14.	Battery power voltage check	M13
15.	Electric current	M13
16.	Tripod socket screw	M13
17.	Remote terminal	M14
18.	Data back terminal	M14
19.	Ambient temperature	M14
20.	Driving timing chart	M15

F90/N90 specifications

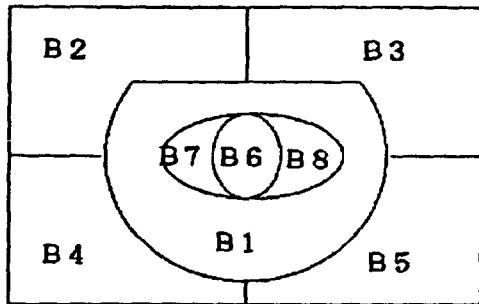
Note: The following information is not included in the instruction manual and product brochure.

1. Metering system

Metering range:

From EV-1 to EV21 (with f/1.4 lens at ISO 100)

EV-3 to EV21 (in Spot Metering mode)



- 1) Multiple pattern metering
Metering is carried out using B1 to B8 segments
- 2) Center-Weighted Metering
Metering is carried out using B1, B6, B7 and B8 segments.
Concentration ratio: Approx. 75% (equivalent to $\varnothing 12$ mm circle.)
- 3) Spot Metering
Metering is carried out using B6 segment.
Concentration ratio: Approx. 50% or more (equivalent to $\varnothing 3$ mm circle.)

Fig. 1 8-segment silicon photo diode

2. Exposure mode

(The following are program charts using a 50mm f/1.4 lens at ISO 100 film speed unless otherwise noted.)

- 1) Multiple Programmed Auto Exposure Mode (P mode)
 - 1-1) Program chart (no dedicated Speedlight mounted).
 - a) Program charts vary depending on the lens focal length (16mm to 1600mm) due to camera shake preventive measures.
 - b) Here we take a 50mm f/1.4 lens as an example to draw a program chart and to explain the chart. (Refer to Fig. 1.) In the program chart, we draw a line between two points: f/1.4, at 30s and f/32 at 1/8000 as a reference line. In low light levels, the shutter-priority (at maximum aperture) auto exposure mode (b) is activated from the point (a) of shutter speed at 1/focal length with an aperture of f/2.8. In even lower light levels, the aperture-priority auto exposure mode (c) is activated. With much higher shutter speeds than point (a) mentioned above, the program chart shows that the shutter speed changes by two stops (d) per one f/stop. In very bright light levels, the program chart corresponds to reference line (e). The aperture-priority auto exposure mode (at minimum aperture) is activated when the aperture is set at its smallest setting. But shutter-priority auto exposure mode is activated with a lens whose shutter speed setting reaches its limit before the aperture can be set to its minimum value. In the low light level program chart using a lens with a maximum aperture of f/2.8 or slower, the aperture-priority (at maximum aperture) auto exposure mode (f) is activated from the point of shutter speed at 1/focal and maximum aperture.
 - c) If the [Hi]/ [Lo] extreme metering range indicators appear while changing a combination of shutter speed/aperture, that combination of shutter speed/aperture is invalid and the values are reset.

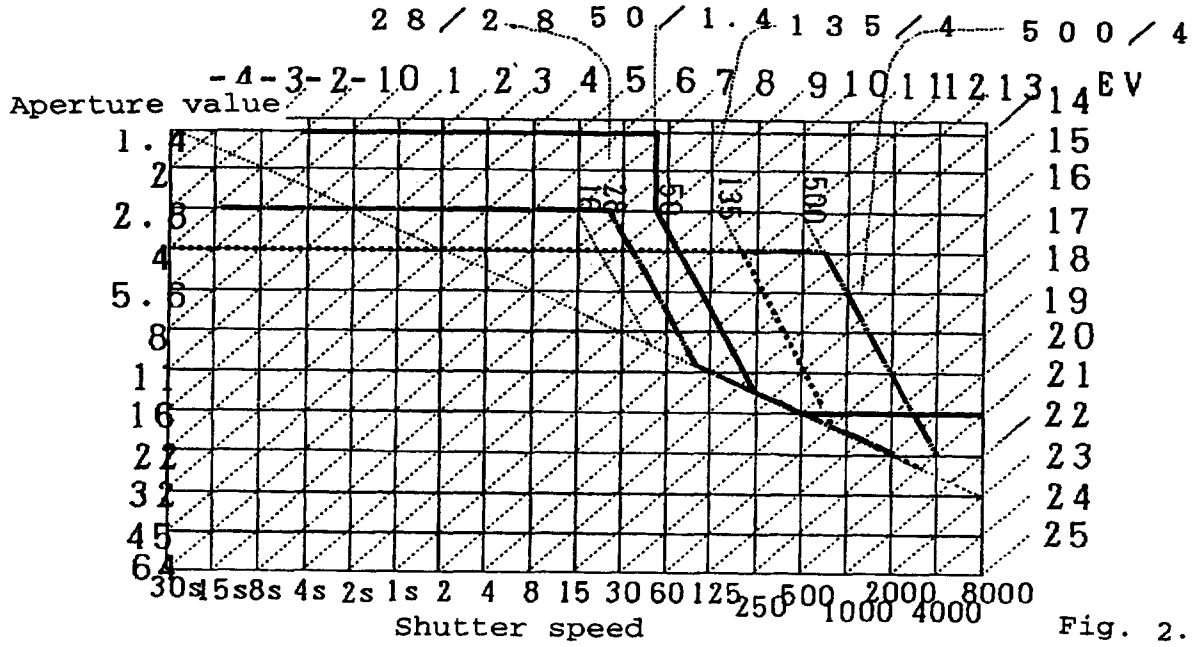


Fig. 2.

- 1-2) Program chart with a dedicated speedlight mounted.
- The chart includes aperture-priority auto mode (f/4 at ISO 100) and shutter-priority auto mode (1/250 sec.). Aperture value at ISO 100 can be calculated from the following equation. (Maximum aperture value is f/2.8.)

$$AVMIN = (SV + 3) / 2$$
 (provided that $AVMIN \geq 3$)

$$4 = (5 + 3) / 2$$
 (at ISO 100)
 - Shutter speed range for slow sync is possible up to the limited metering point.
 - Change of combination of shutter speed/aperture is invalid.

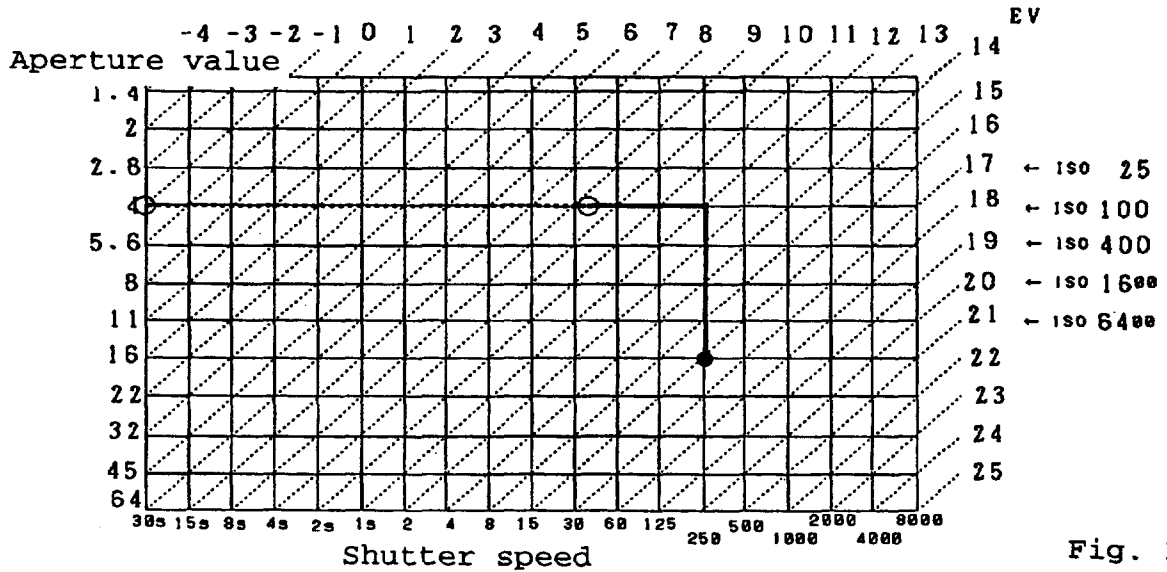
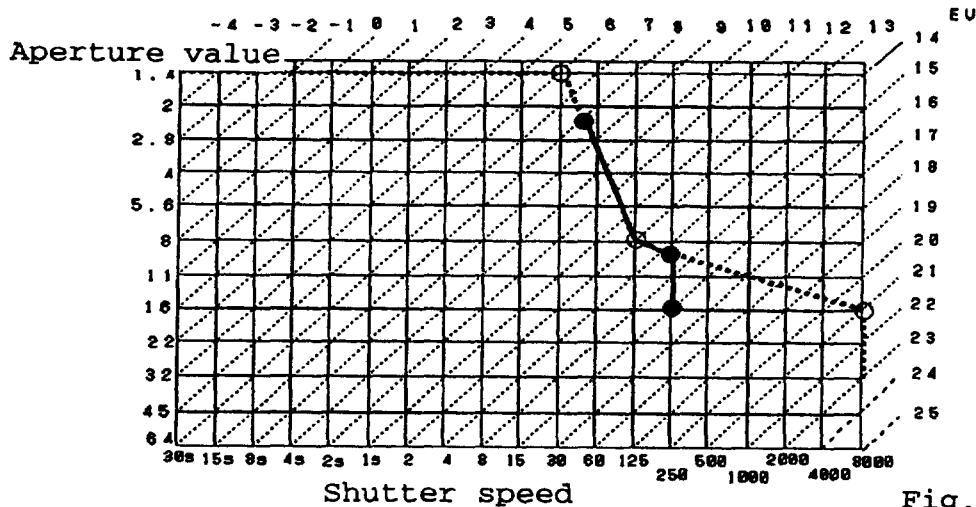


Fig. 3

- 2) Custom program (CP) mode
 2-1) Program chart with no dedicated speedlight mounted.
 Any three points (a, b, and c) on the program chart can be set using an electronic organizer and a Nikon data link IC card. The available shutter speed range is from 1 sec. to 1/8000 sec., and aperture range is from f/1.4 to f/32. When point "a" is set at any point, set point "b" at the same or higher shutter speed or larger f-number than point "a". In the same way, set point "c" at the same or higher shutter speed or larger f-number than point "b". The controllable limited value is locked to that value when the lens aperture and shutter speed values exceed their limited values.



Custom program chart

Fig. 4

- 2-2) Program chart with a dedicated speedlight mounted
 When using a dedicated speedlight, TVMAX (1/250) and TVMIN are limited (1/focal length), the camera is controlled within the range as shown by solid lines in Fig. 4. In slow sync and rear-curtain sync settings, the camera can be controlled up to the minimum value determined by the minimum metering value.

- 3) Image program auto (Ps) mode
 - a) There are seven different types of program charts in Ps mode. In any chart, the camera is controlled at the limited values when aperture value and shutter speed values reach the limited values.
 - b) In Ps mode, the change of combination of shutter speed/aperture is invalid.
 - c) When the dedicated speedlight's power is ON, TVMAX (1/250) and TVMIN are limited (1/focal length), the camera is controlled within the range as shown by each solid line. But in the landscape, silhouette, and hyperfocal program modes, the camera can be controlled up to the minimum value determined by the minimum metering value.

3-1) Portrait program (Po) mode with red-eye reduction (rE) mode
 The camera can be controlled within the range as shown by dotted lines in Fig. 5 according to the focal length (at tele end) and f-number at open aperture of the lens mounted.

- a) f/2 program
 when the focal length (at tele end) $\geq 80\text{mm}$ and f-number at open aperture $< f/2.8$
- b) f/2.8 program
 - (1) when the focal length (at tele end) $< 80\text{mm}$ and f-number at open aperture $< f/2.8$
 - (2) when the focal length (at tele end) $\geq 80\text{mm}$ and f-number at open aperture = $f/2.8$
- c) f/4 program
 when the focal length (at tele end) $> 80\text{mm}$
- d) f/5.6 program
 when the focal length (at tele end) $> 80\text{mm}$

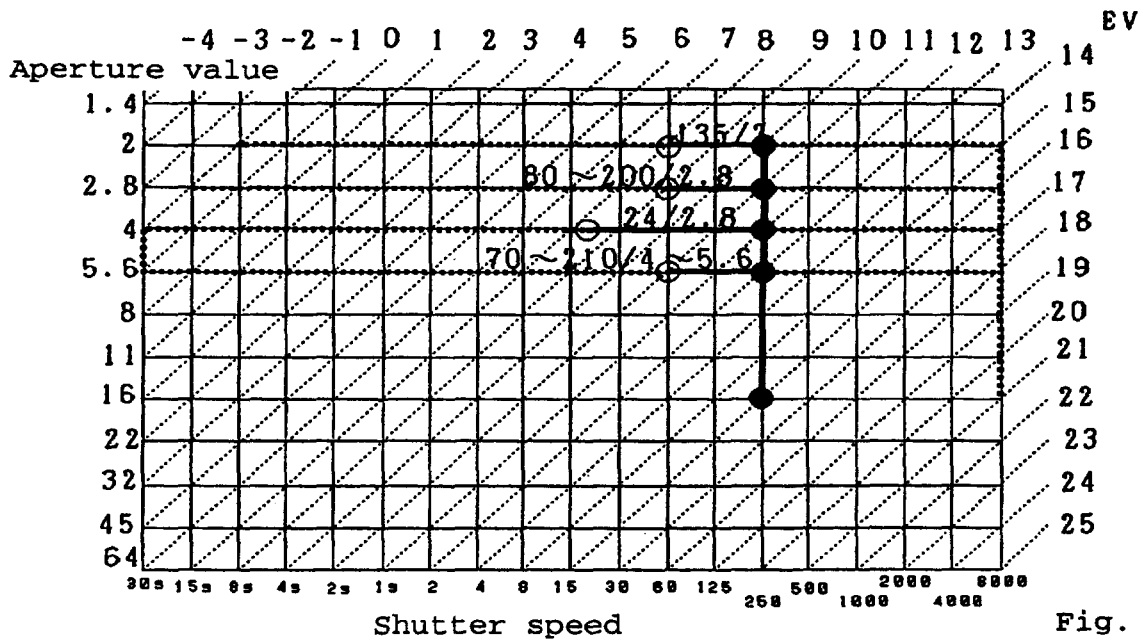


Fig. 5

3-2) Hyperfocal program (HF) mode

The camera can be controlled within the range as shown by dotted lines in Fig. 6 according to the focal length (at wide end) of the lens mounted.

- a) f/5.6-f/11 program when the focal length (at wide end) $\geq 66\text{mm}$
- b) f/8-f/16 program when the focal length (at wide end) $< 66\text{mm}$.

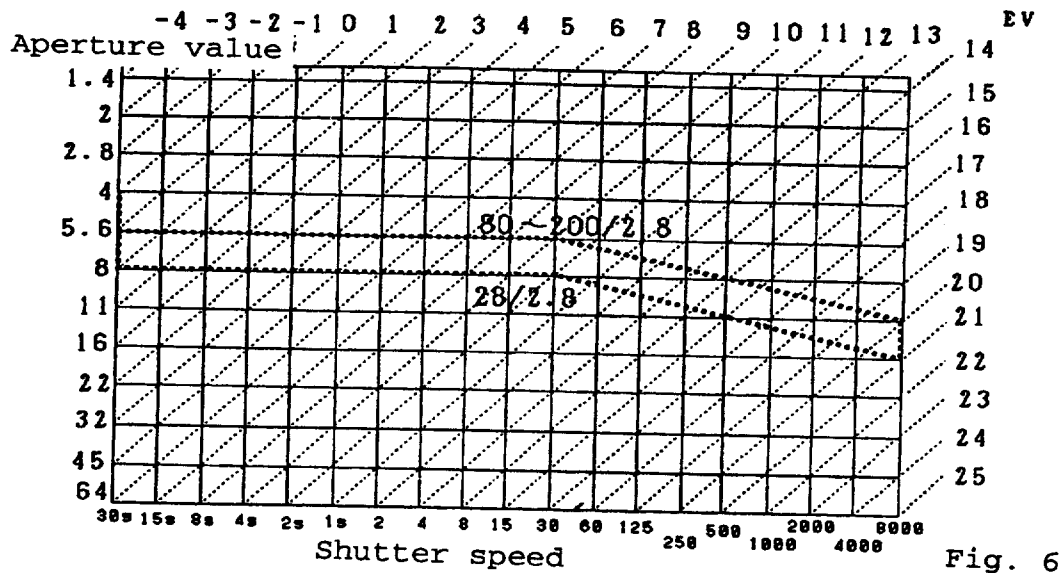


Fig. 6

When the dedicated speedlight's power is ON, the camera is controlled within the range as shown by the solid lines in Fig. 7 according to the maximum shutter speed (1/250) and minimum metering value, disregarding the focal length of the lens mounted.

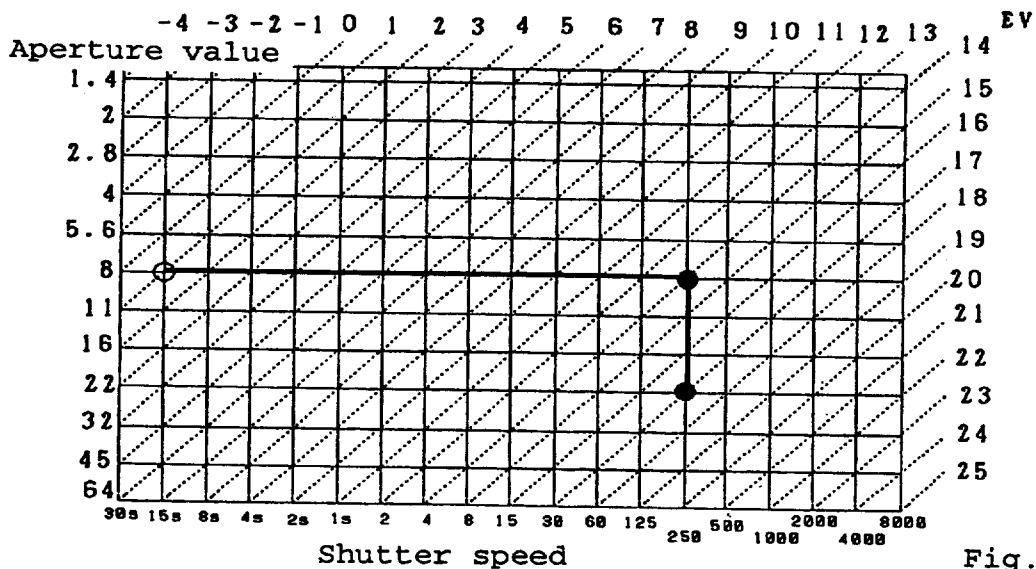


Fig. 7

3-4) Silhouette program (SL) mode

The camera can be controlled within the range as shown by the dotted lines in Fig. 8 according to the focal length (at tele end) of the lens mounted.

- a) f/5.6-f/8 program when the focal length (at tele end) $\geq 80\text{mm}$
- b) f/8-f/11 program when the focal length (at tele end) $< 80\text{mm}$.

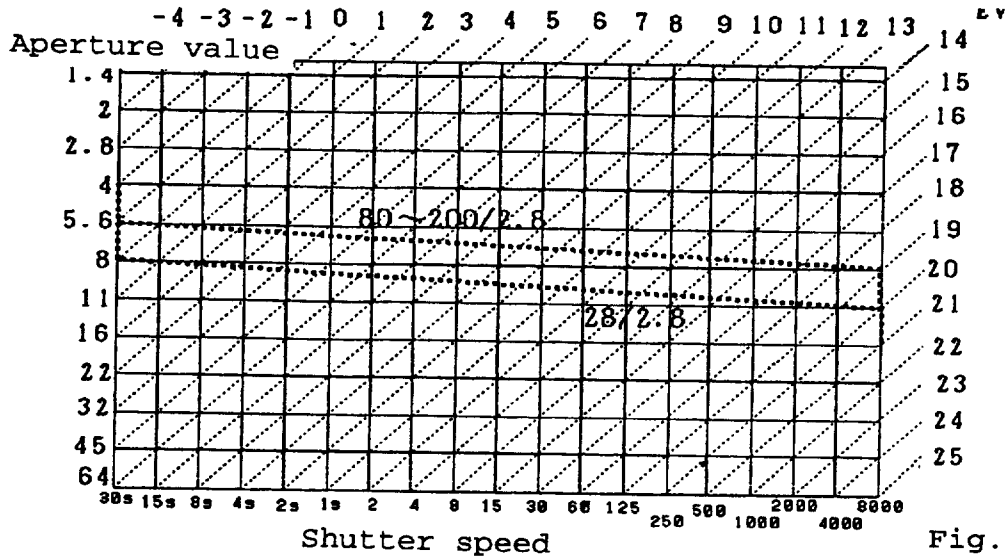


Fig. 8

When the dedicated speedlight's power is ON, the camera is controlled within the range as shown in the solid lines in Fig. 9 according to the maximum shutter speed (1/250) and minimum metering value, disregarding the focal length of the lens mounted.

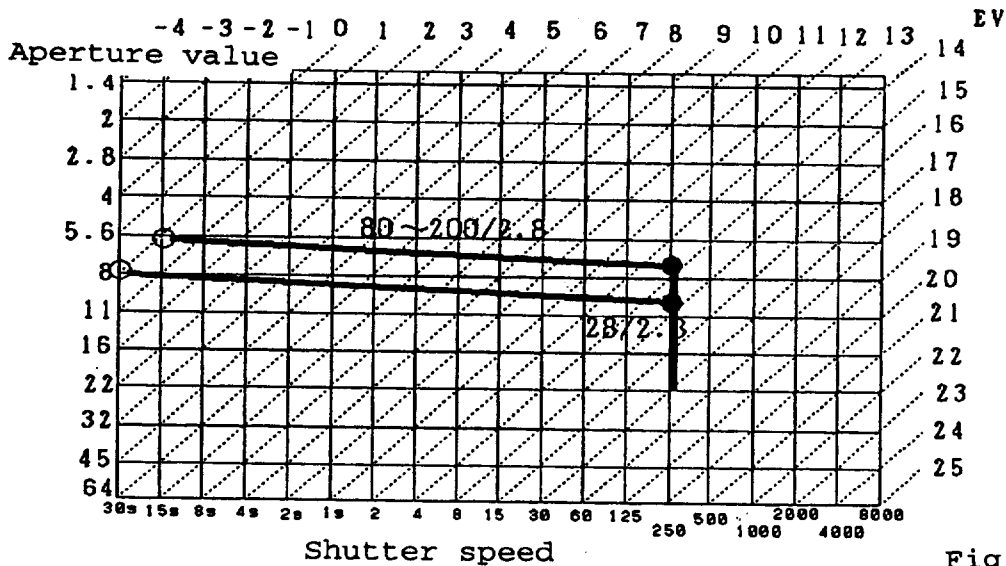


Fig. 9

3-5) Landscape program (LA) mode

The camera can be controlled within the range as shown by the dotted lines in Fig. 10 according to the focal length (at tele end) of the lens mounted.

a) f/5.6-f/11 program

when the focal length (at tele end) $\geq 80\text{mm}$

b) f/8-f/16 program

when the focal length (at tele end) $< 80\text{mm}$.

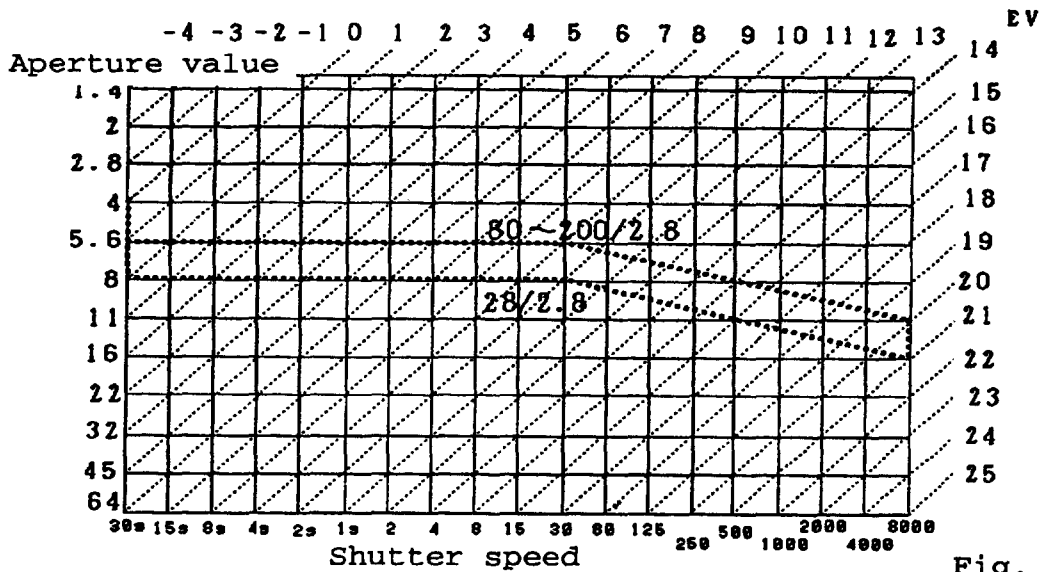


Fig. 10

When the dedicated speedlight's power is ON, the camera is controlled within the range as shown by the solid lines in Fig. 11 according to the maximum shutter speed (1/250) and minimum metering value, disregarding the focal length of the lens mounted.

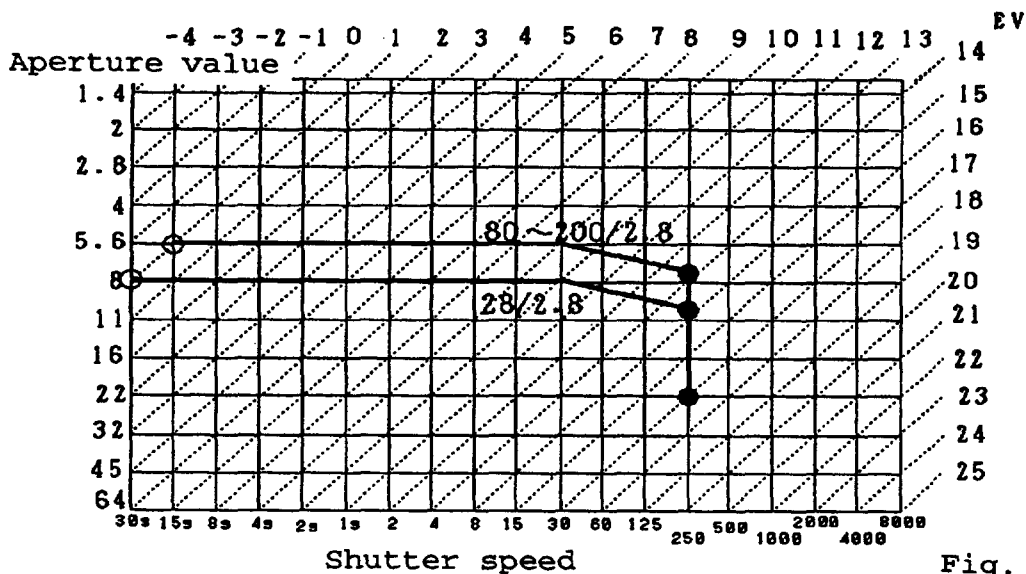


Fig. 11

3-6) Sport Program (SP) mode

The camera can be controlled within the range as shown by the dotted lines in Fig. 12 according to the focal length (at tele end) and f-number at open aperture of the lens mounted.

a) High speed f/2 program

when the focal length (at tele end) >300 mm and f-number at open aperture <f/2.8

b) High-speed f/2.8 program

when the focal length (at tele end) >300 mm and f-number at open aperture =f/2.8

c) High-speed f/4 program

when the focal length (at tele end) >300 mm and f-number at open aperture >f/2.8

d) Medium-speed f/2 program

when the focal length (at tele end) ≤300 mm and f-number at open aperture <f/2.8

e) Medium-speed f/2.8 program

when the focal length (at tele end) ≤300 mm and f-number at open aperture =f/2.8

e) Medium-speed f/4 program

when the focal length (at tele end) ≤300 mm and f-number at open aperture >f/2.8

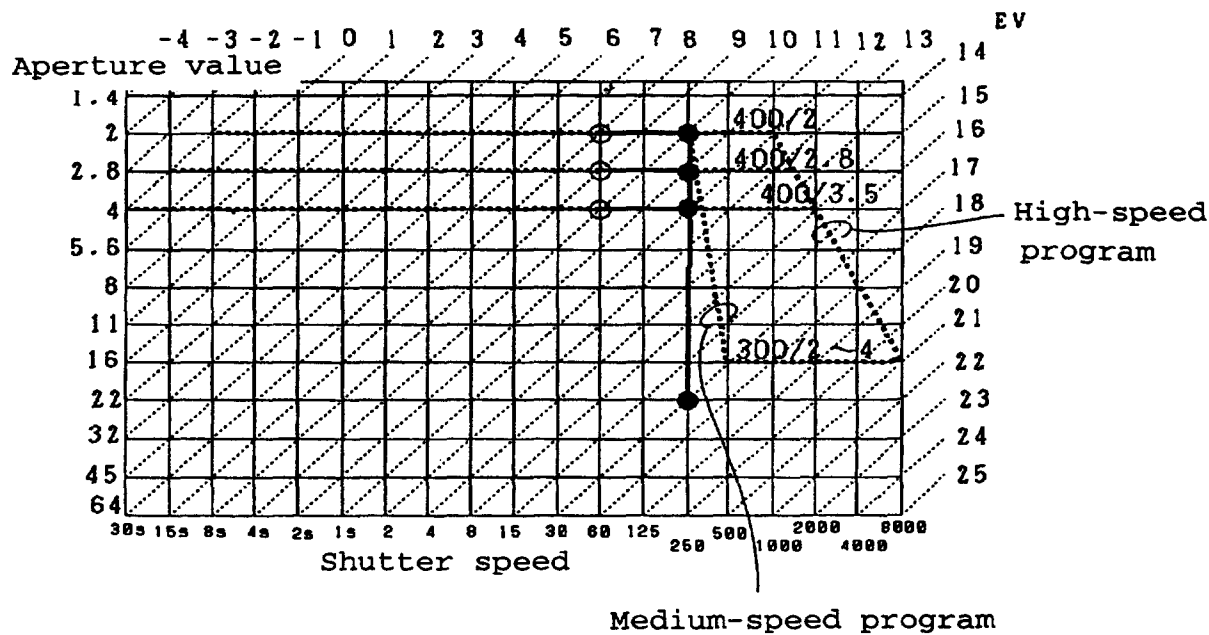


Fig. 12

3-7) Close-up program (CU) mode

The camera can be controlled within the range as shown by the dotted lines in Fig. 13 according to the focal length (at wide end) and f-number at open aperture of the lens mounted.

a) f/4 program

when the focal length (at wide end) ≥ 50 mm and f-number at open aperture $\leq f/2.8$

b) f/5.6 program

when the focal length (at wide end) > 50 mm or f-number at open aperture $> f/2.8$

When the dedicated speedlight's power is OFF, the camera is controlled within the range as shown by the dotted lines in Fig. 13.

a) f/8 program

when the focal length (at wide end) > 50 mm and f-number at open aperture $\leq f/2.8$

b) f/11 program

when the focal length (at wide end) > 50 mm or f-number at open aperture $> f/2.8$

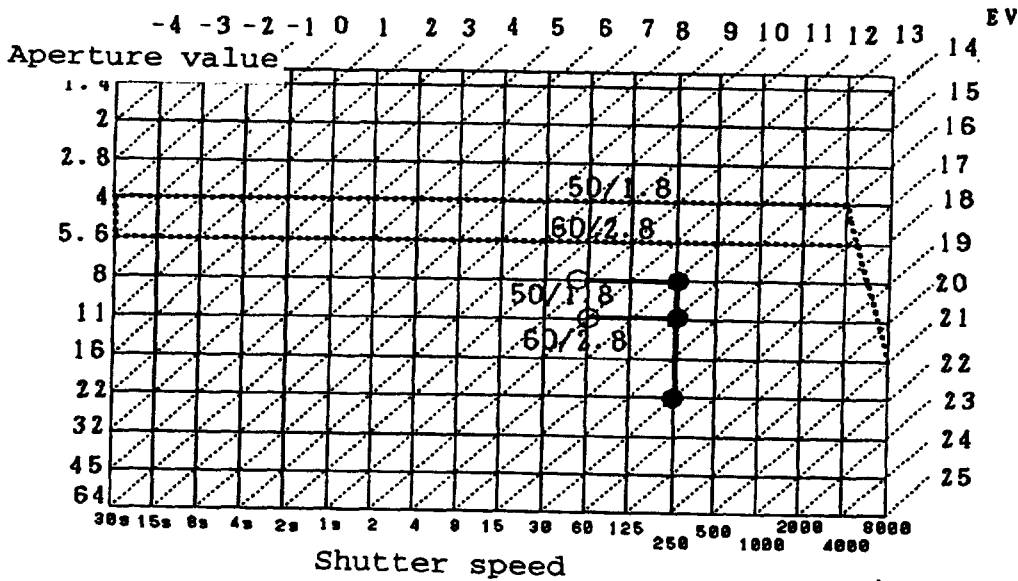


Fig. 13

- 4) Aperture-priority auto exposure (A) mode
Controllable shutter speed range is from 30 sec. to 1/8000 sec. at 1/8 EV step. Selected shutter speed is displayed in the LCD panel in 1 EV step increments. If the selected shutter speed is out of the controllable range, the shutter speed is set to 30 sec. with "Lo" indicator or 1/8000 sec. with "Hi" indicator.
- 5) Shutter-priority auto exposure (S) mode
Controllable aperture value range is from the f-number at open aperture to the maximum f-number of the lens mounted at 1/8 EV step. Selected aperture value is displayed in the LCD panel in 1 EV step increments. If the selected aperture value is out of the available range, the aperture value is set to the f-number at open aperture with "Lo" indicator or the maximum f-number sec. with "Hi" indicator.

3. AE lock

- 1) Exposure value to be memorized is BV value in either P, CP, Ps, A, or A mode. (BV memory system). Therefore, when the aperture ring is turned in A mode while the auto exposure mode is locked, the shutter speed changes.
- 2) The camera power will not turn OFF while the auto exposure mode is locked. Normally the power will turn OFF in 8 seconds after releasing the AE lock. But if the battery power is exhausted, the power will turn OFF immediately after releasing the AE lock.
- 3) Exposure metering mode can be selected while the auto exposure mode is locked.
- 4) No exposure warning (beeper sound) is available while the auto exposure mode is locked.

4. Film speed setting

When non-DX-coded film is loaded in DX mode, the exposure meter operates and the ISO number is tentatively set to 100.

5. Sequence control

The sequence gear turns approx. 85° to move the mirror up and control the aperture while releasing the shutter, moving the aperture lever down until the mirror is completely up.

At this point the sequence latch lever drops in the sequence cam groove to turn ON the sequence motor stop switch and the sequence motor stops.

Then, the solenoid is activated to lift the sequence latch lever from the sequence cam groove, making it possible for the sequence motor to turn again after shooting. (The sequence motor stop switch turns OFF.)

After shooting (after running the rear-curtain), the sequence gear turns by approx. 275° to cock the shutter, move the mirror down, and reset the aperture lever.

At this point, the sequence latch lever drops in the sequence cam groove to turn ON the sequence motor stop switch and the sequence motor stops.

Then, the solenoid is activated to reset the sequence latch lever for the next shutter release sequence.

6. Film advance

- 1) Automatic film loading operation stops when the reference switch turns OFF four times (equivalent to four frames).
- 2) The reference switch is always kept turned ON. This switch is designed to turn OFF once when the film is advanced by approx. 19mm (1/2 frame).
- 3) When a pulse from the film advance photo-interrupter is monitored after the reference switch is turned OFF, the film advance stop timing control starts.
- 4) The film advance photo-interrupter outputs 114 pulses while advancing one frame.
- 5) In either the single-frame (S), continuous low-speed (CL), or continuous high-speed (CH) shooting mode, the sequence motor and the film advance motor turn simultaneously to advance film to charge the shutter and mirror after shooting. But if it takes much longer to move the mirror and advance film than specified due to insufficient battery power or low temperature, the sequence motor automatically turns after the shutter curtain has traveled fully, and then the film advance motor turns. (We call this operation square mode.)
Normal operation automatically resumes when the battery power has recovered.

7. End of roll

If the film advance operation cannot be completed within the specified period of time, the film advance motor stops and a warning indicator accompanied by a beeper sound appears in the viewfinder and LCD panel.

Then when the shutter release button is pressed, only the film advance motor turns and the above mentioned operation is repeated.

But when the frame counter shows a number over 37, the film advance motor does not work. When the frame counter shows a number below 37, the warning indicator disappears when the film is advanced properly. Normal shooting becomes possible from the next frame on.

8. Film rewind

- 1) When the film rewind operation is activated even though no film is loaded, the film rewind motor turns for 2 seconds.
- 2) If the film advance motor stops due to insufficient battery power when starting film rewind, the shutter release operation is locked. In this case, try to activate the film rewind operation once again. When the film is completely rewound, the shutter release lock is released.

DISASSEMBLING

1. Separating the front plate and the rear body

Hand grip rubbers	D 1
Bottom cover	D 1
Top cover	D 2
Hand grip base plate	D 2
Separating the front plate and the rear body	
1. Remove soldering bridges & wires on the upper side of hand grip	D 3
2. Remove press-contact & soldering bridges on the upper side of the film cartridge chamber ...	D 3
3. Remove press-contact & screw	D 3
4. Remove screws on the upper side of the hand grip	D 4
5. Remove screws on the bottom side	D 4
6. Remove the front plate	D 5

2. Rear body

Remove wires on power SW FPC	D 6
Press-contact plate	D 6
Sequence base plate	D 7
Rewind fork unit, Camera back lock releases	D 7
Film advance base plate unit	D 8
Camera back SW	D 8
Power SW FPC	D 9
Shutter unit	D 9
Film detection SW	D 9
DX contact unit	D 10
Small parts of rear body	D 10

3. Front plate

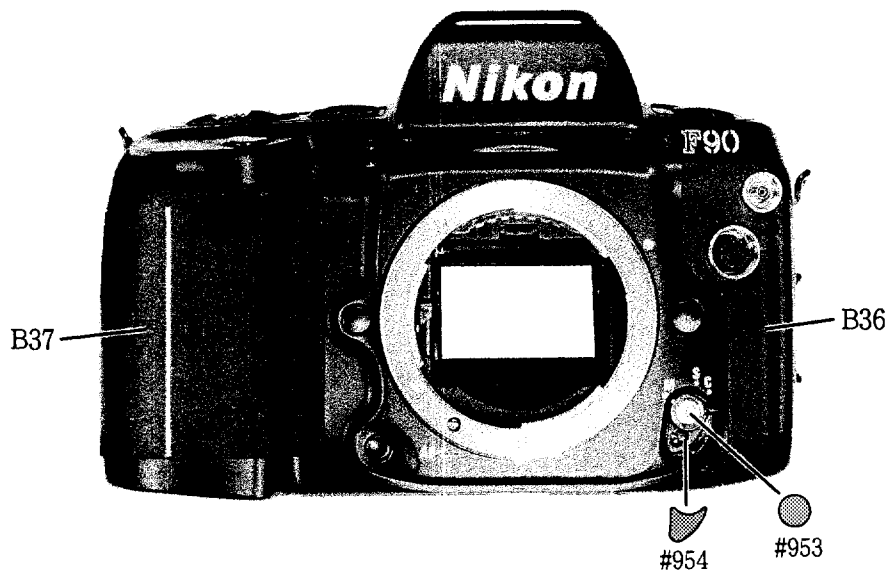
Viewfinder LCD, AE FPC (SPD)	D 11
R/T FPC, Light baffle plate	D 11
Main FPC	D 12
AF FPC (AP3), Mirror box bottom plate	D 13
Prism box	D 13
Unsolder on the bottom of the mirror box	D 14
Depth-of-field preview base plate	D 14
Mirror box	D 14
Apron, Lens mount	D 15
F-Fo base plate	D 15
AF contact FPC	D 16
AF driving unit	D 16
Small parts of front plate	D 17

DISASSEMBLING

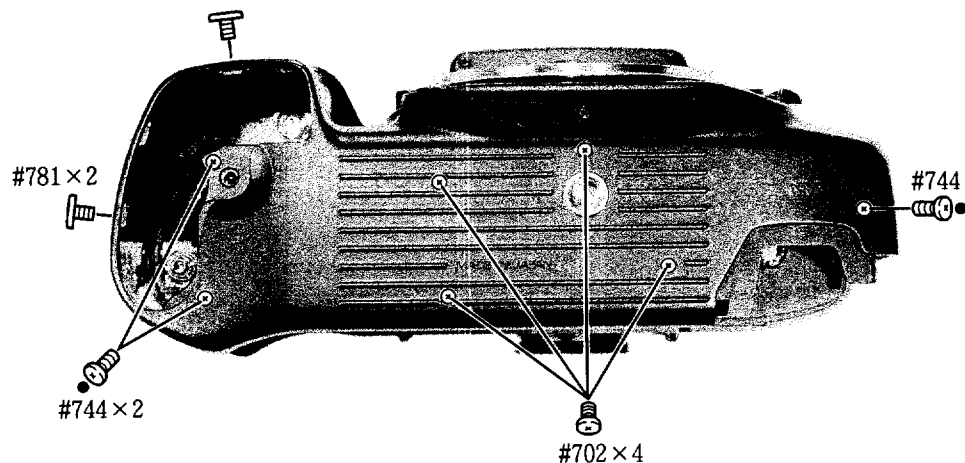
- Note:**
- ① Remove the battery holder and the camera back before disassembling.
 - ② When you disassemble the camera body further than described in the disassembling section, refer to the exploded drawings and assembling section, since some parts are disassembled as a unit part.
 - ③ When disassembling, pay attention to the arrangement and mounting positions and types of screw to be removed.
 - ④ Be sure you are grounded when holding FPC because static electricity exerts serious adverse effects on ICs.
 - ⑤ The “●” mark on the screws indicates they tap-tight screws.

1. Separating the front plate and the rear body

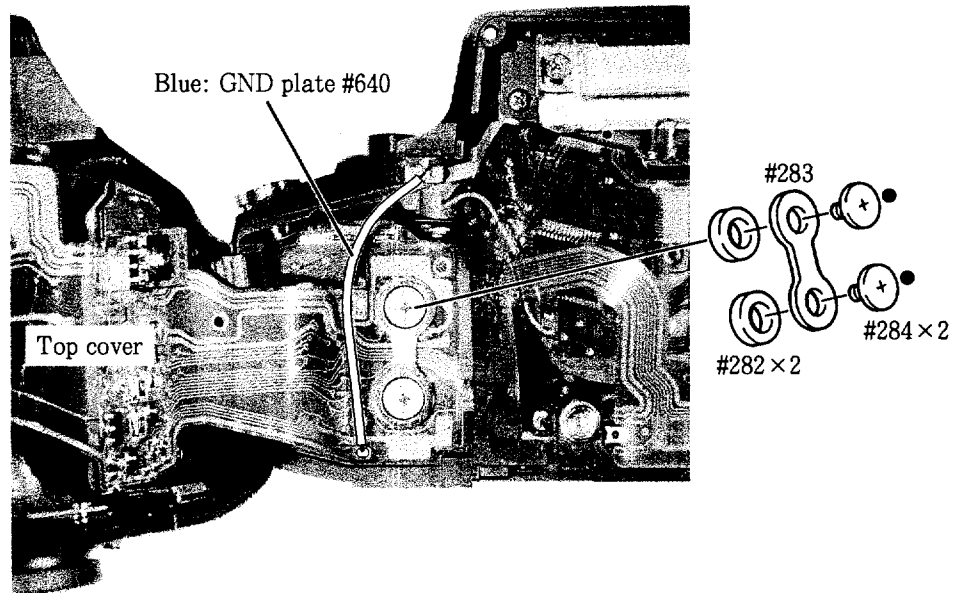
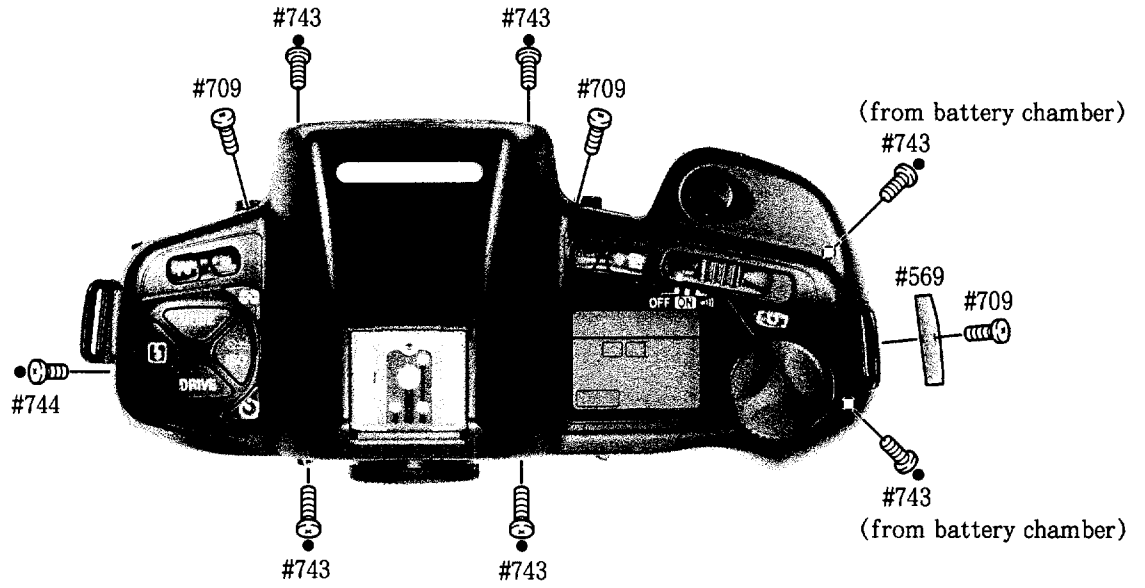
HAND GRIP RUBBERS



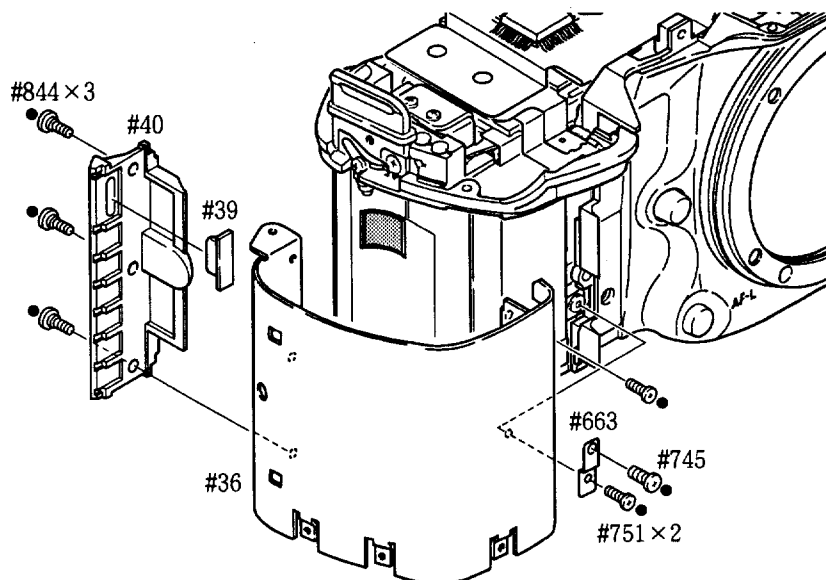
BOTTOM COVER



TOP COVER

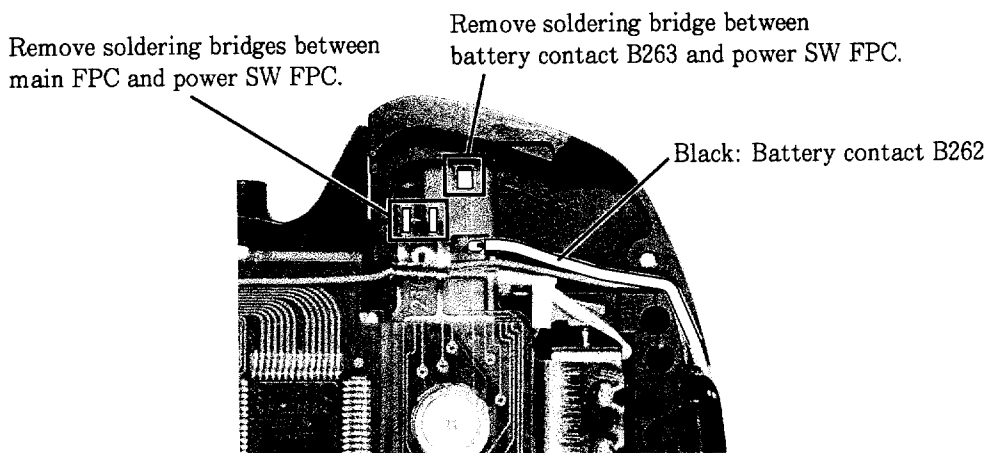


HAND GRIP BASE PLATE

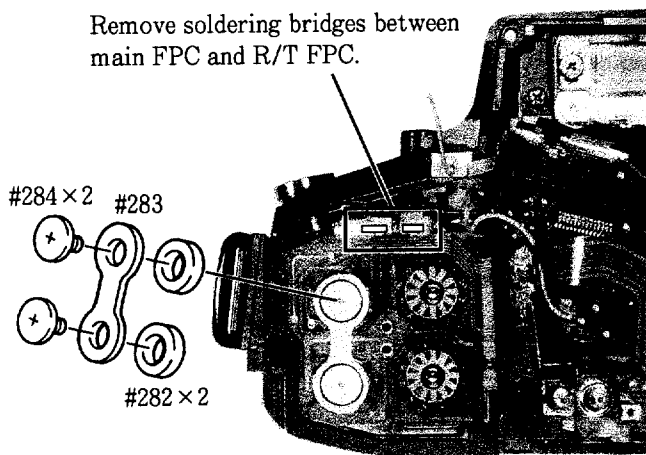


SEPARATING THE FRONT PLATE AND THE REAR BODY

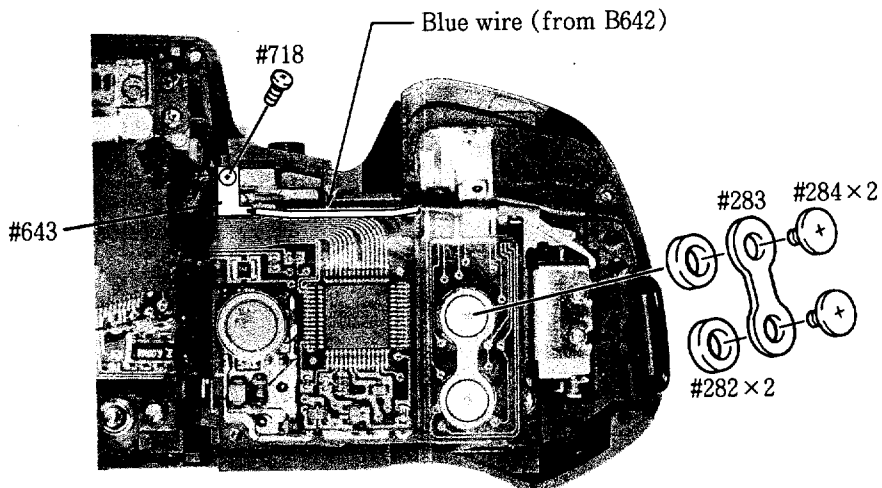
1. Remove soldering bridges & wire on the upper side of hand grip



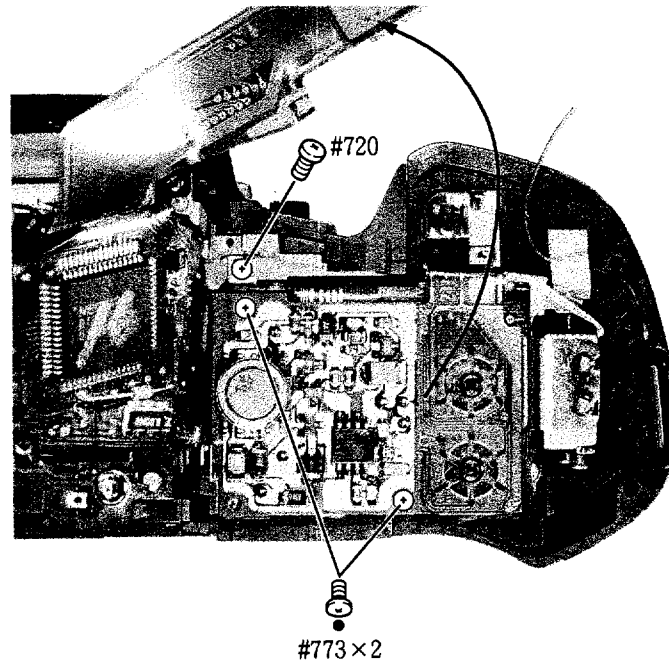
2. Remove press-contact & soldering bridges on the upper side of the film cartridge chamber



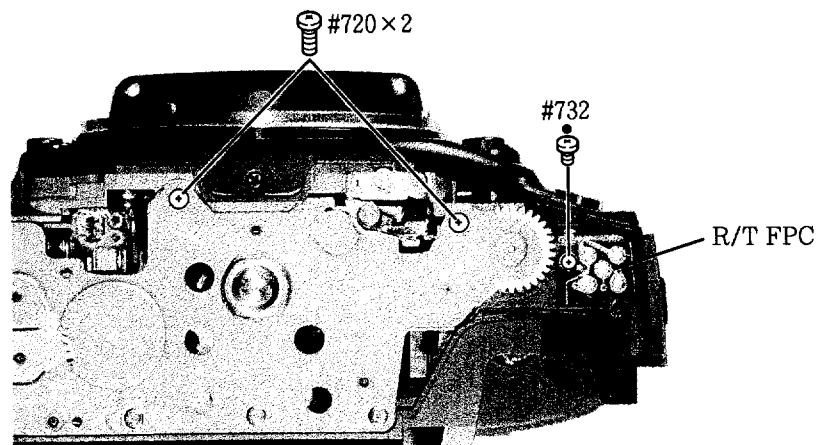
3. Remove press-contact & screw



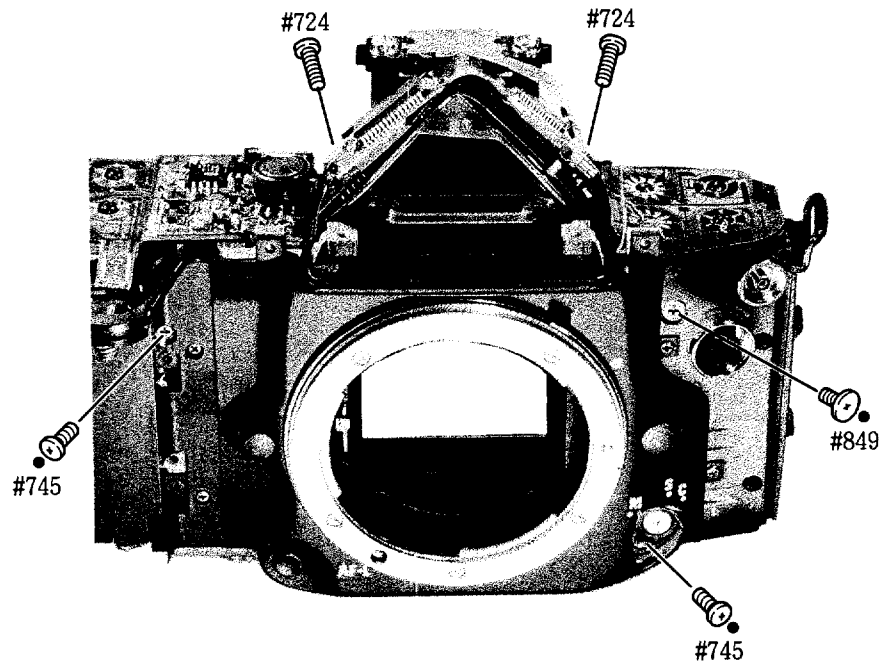
4. Remove screws on the upper side of the hand grip



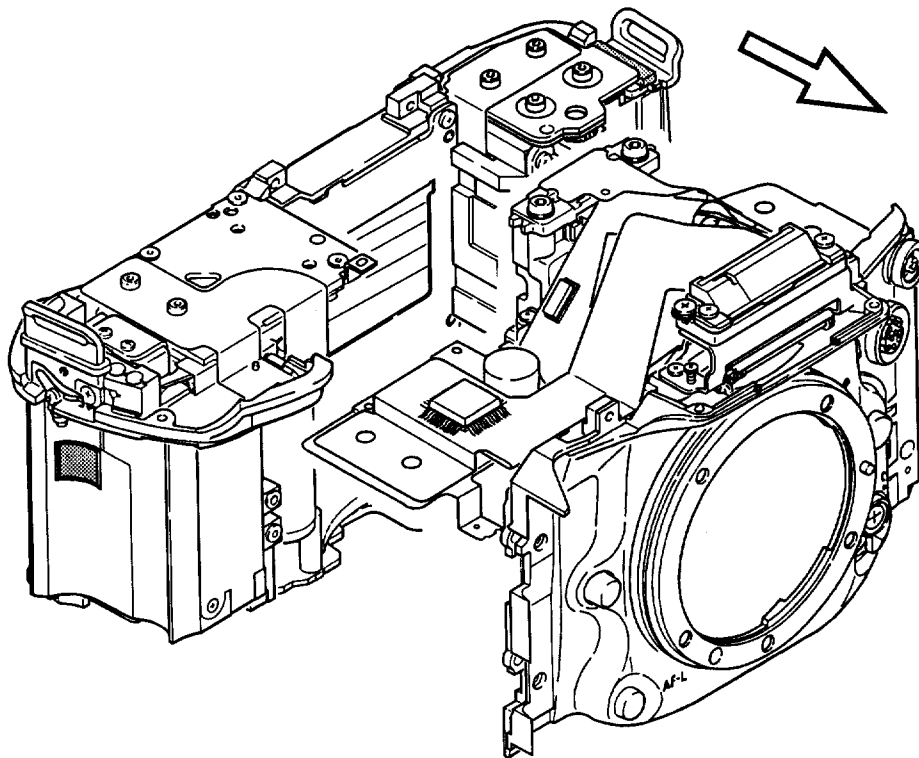
5. Remove screws on the bottom side



6. Remove the front plate

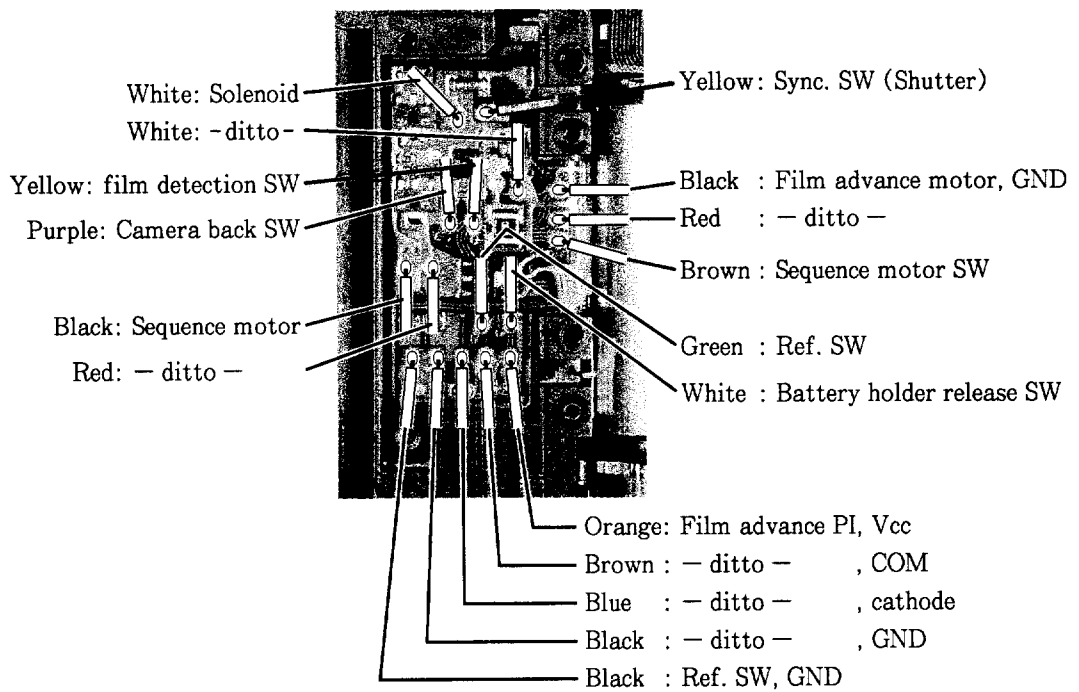
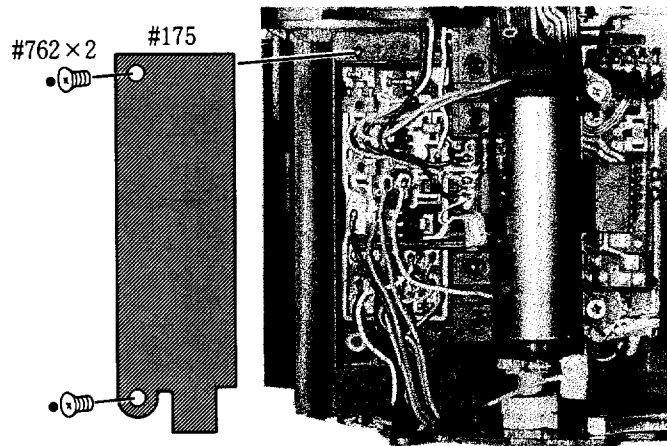


- Press-contact parts of each FPC have to be removed from the press-contact plate.

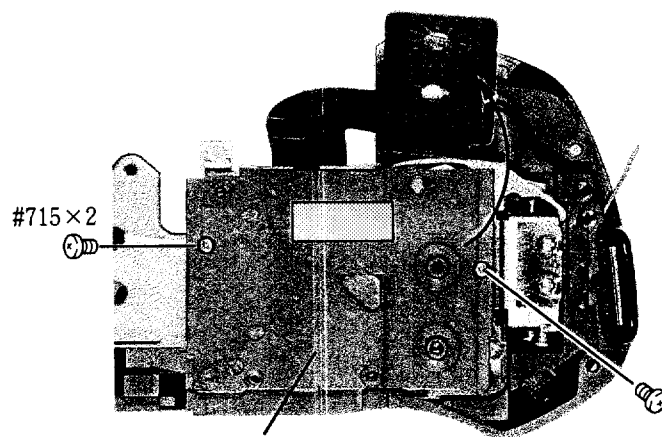


2. REAR BODY

REMOVE WIRES ON POWER SW FPC

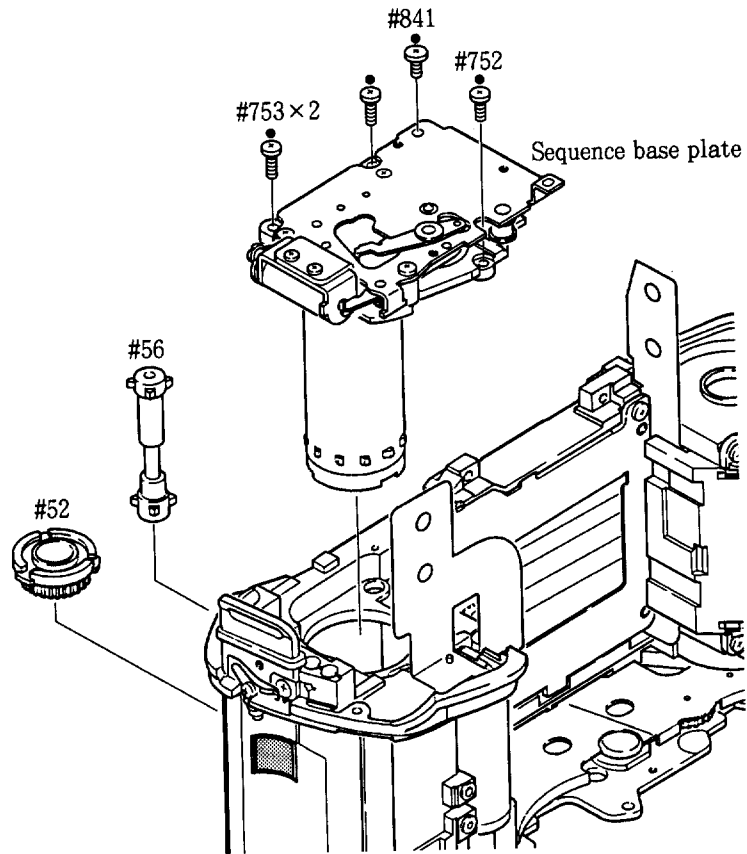


PRESS-CONTACT PLATE

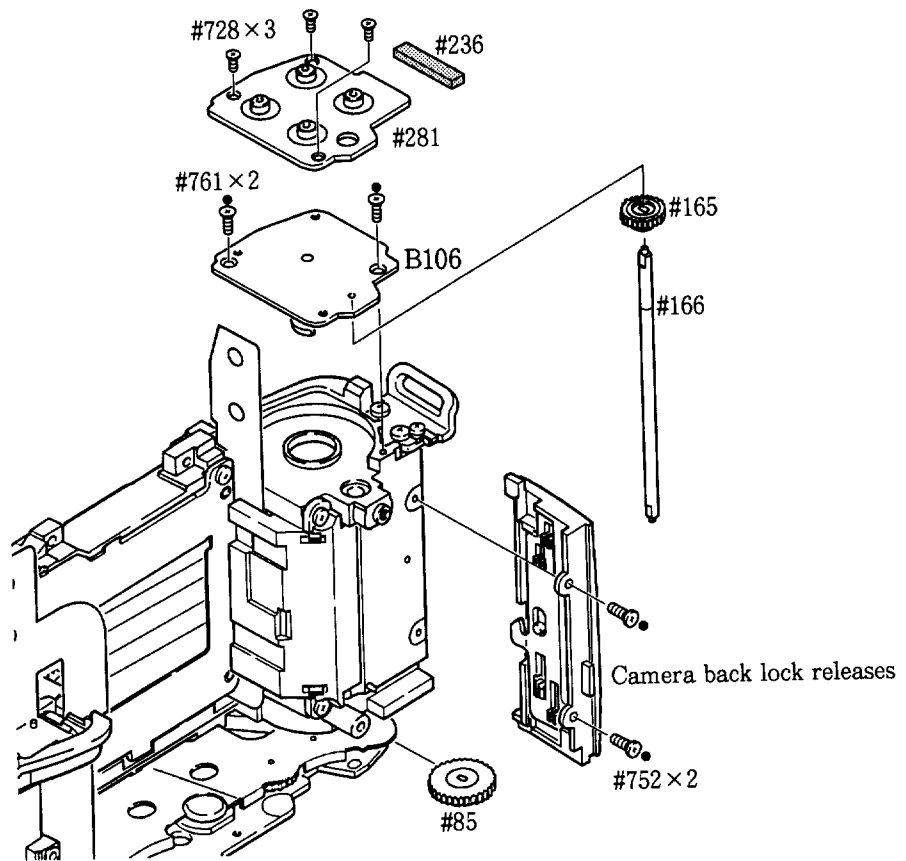


Press-contact plate

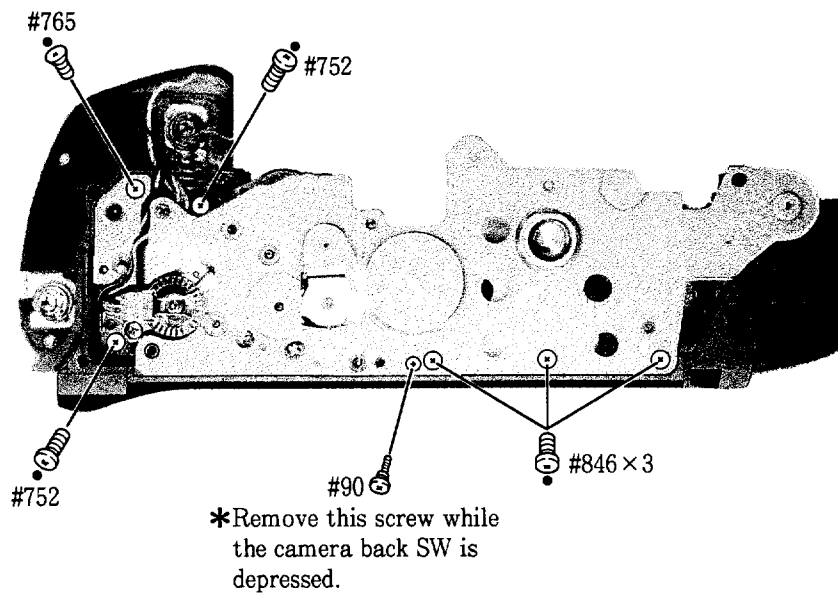
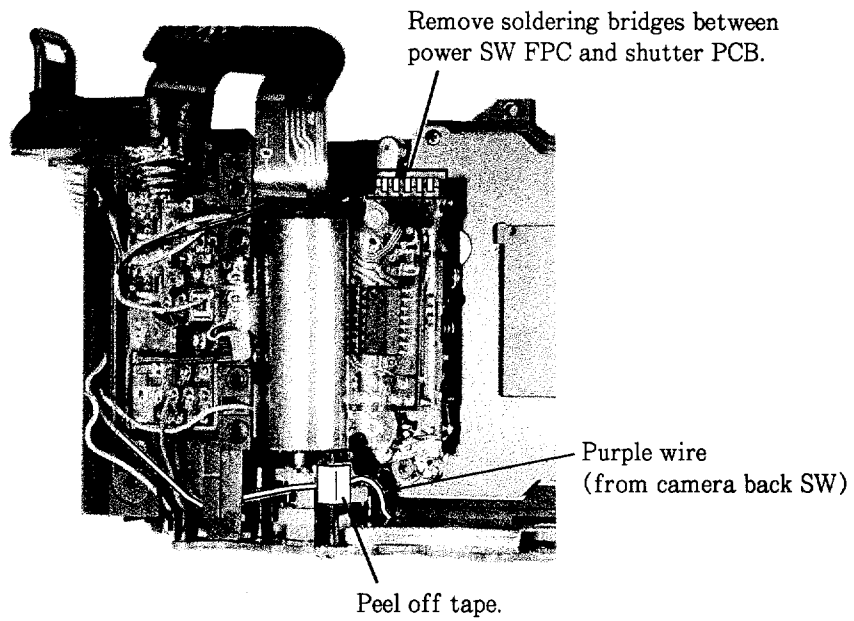
SEQUENCE BASE PLATE



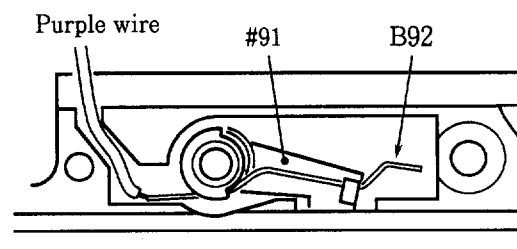
REWIND FORK UNIT, CAMERA BACK LOCK RELEASES



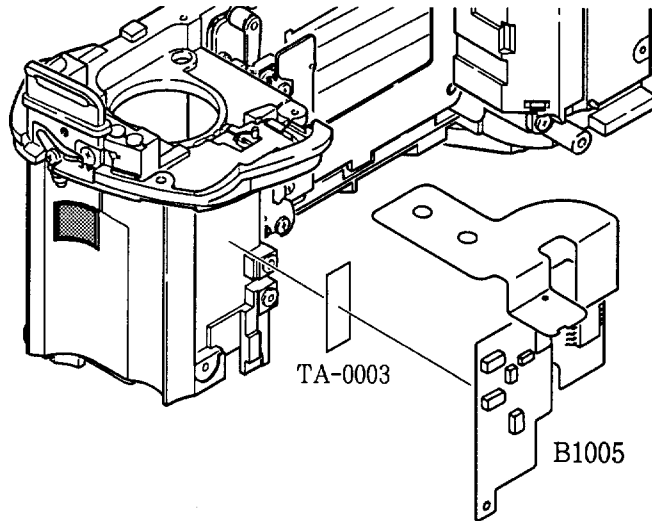
FILM ADVANCE BASE PLATE UNIT



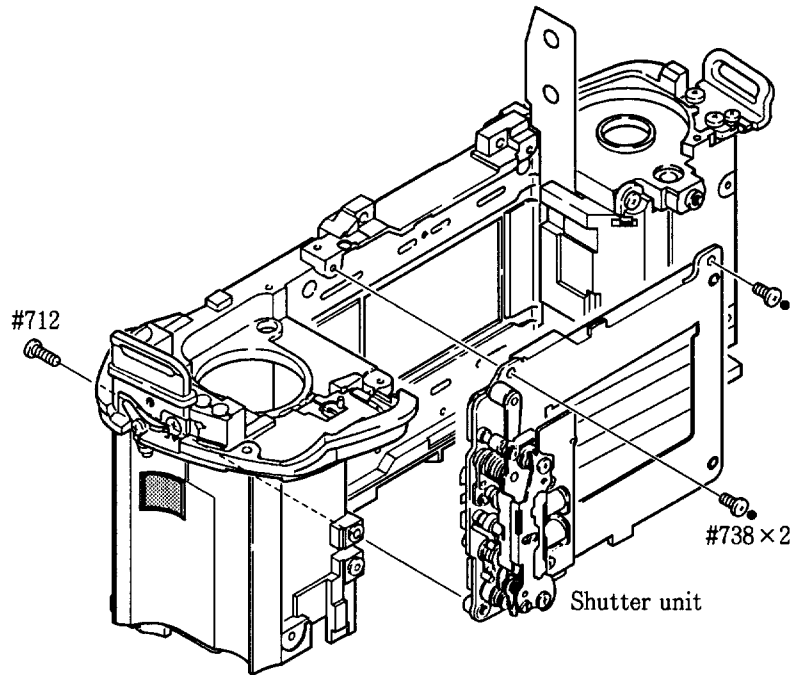
CAMERA BACK SW



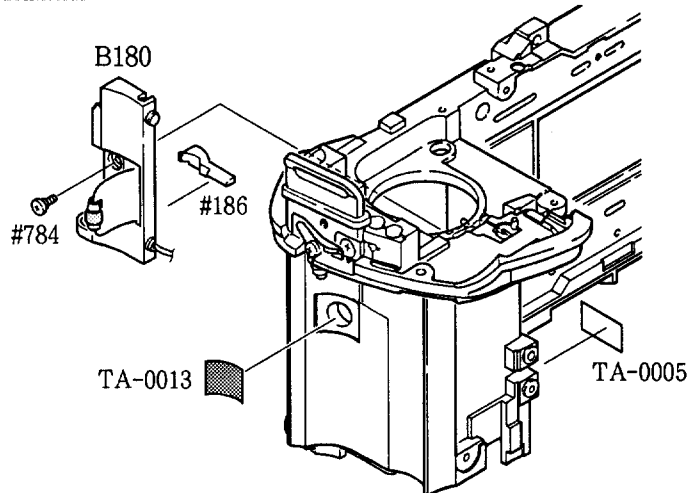
POWER SW FPC



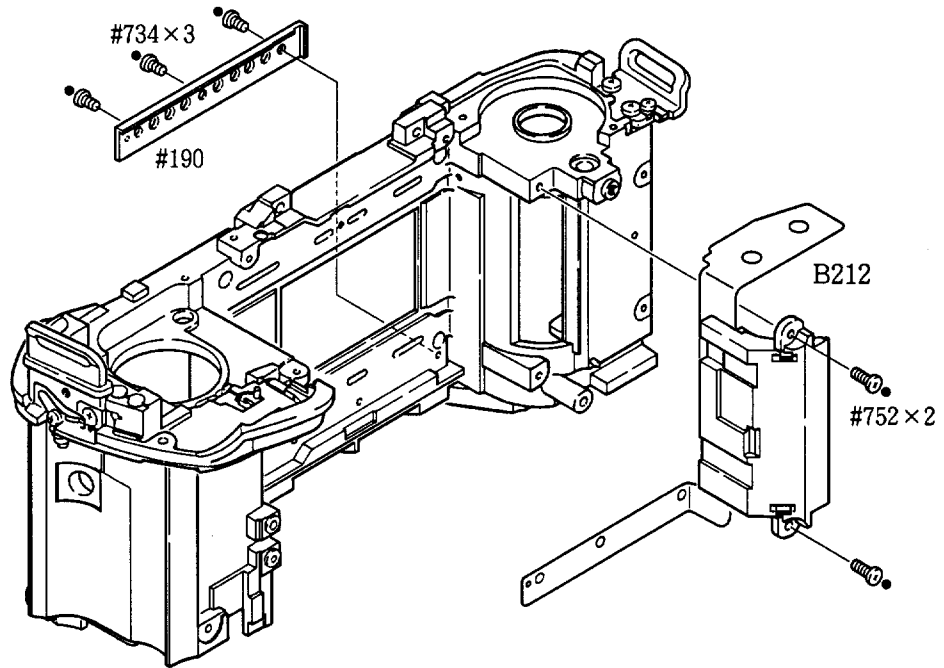
SHUTTER UNIT



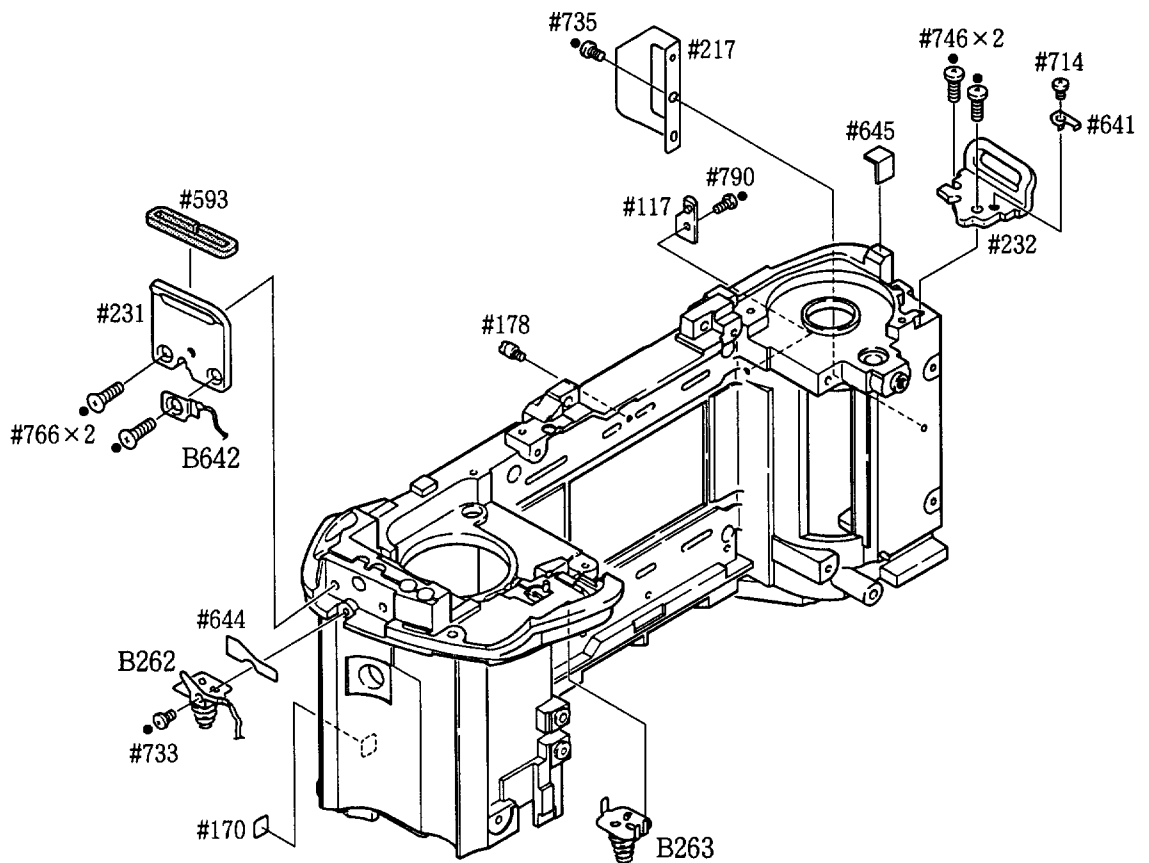
FILM DETECTION SW



DX CONTACT UNIT



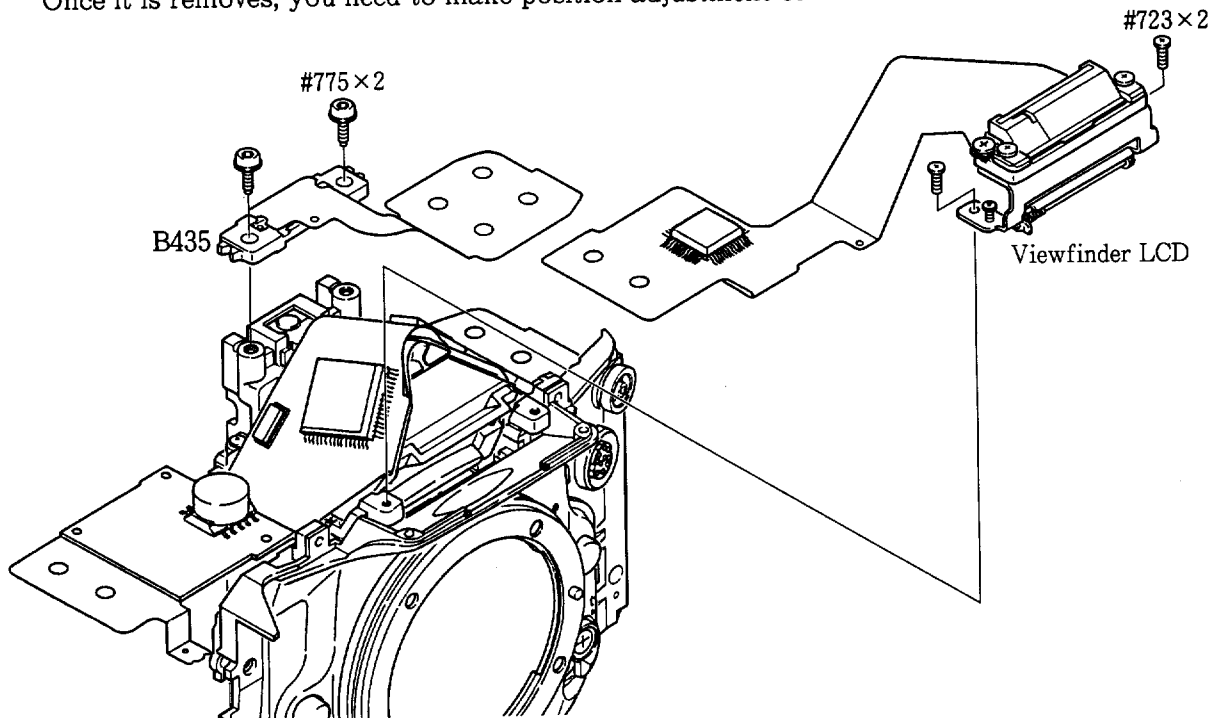
SMALL PARTS OF REAR BODY



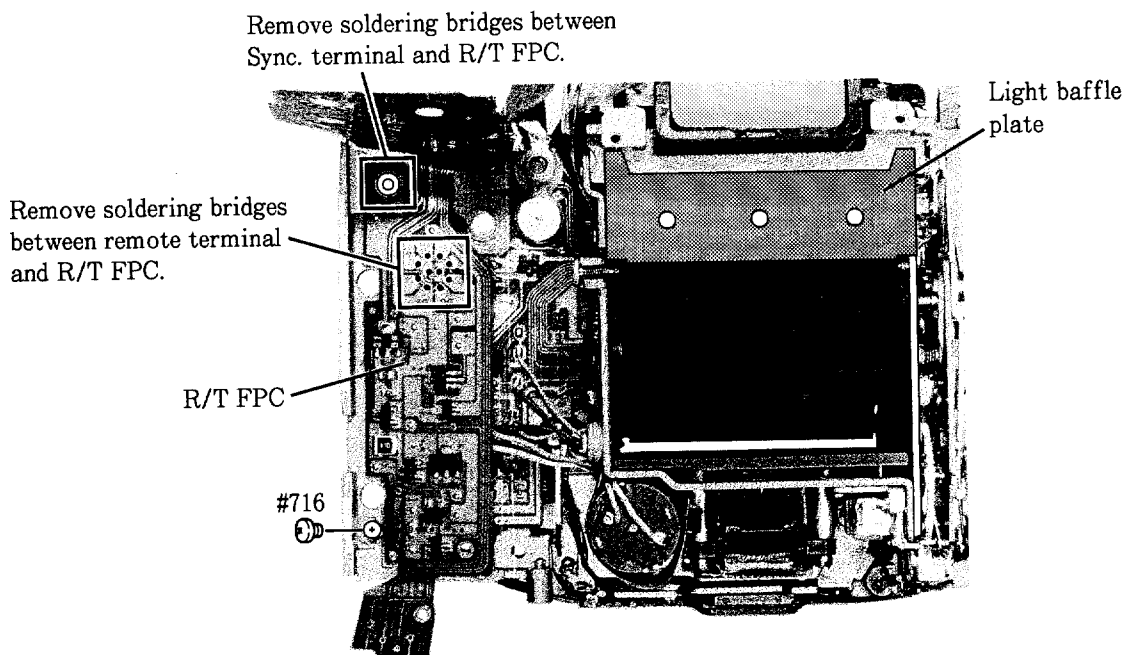
3. FRONT PLATE

VIEWFINDER LCD, AE FPC (SPD)

*Do not remove the AE FPC B435 unless it is absolutely necessary.
Once it is removed, you need to make position adjustment of AE SPD.



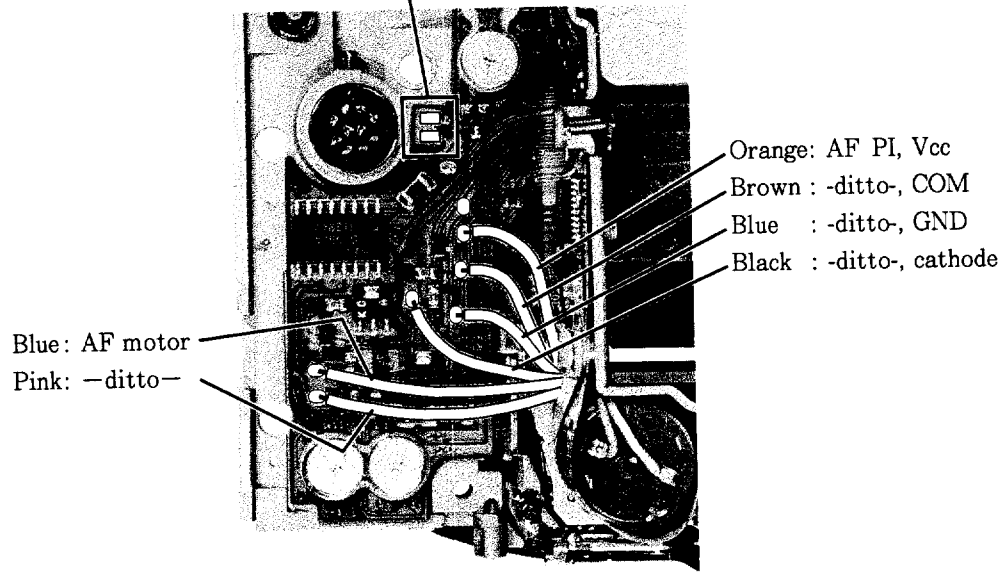
R/T FPC, LIGHT BAFFLE PLATE



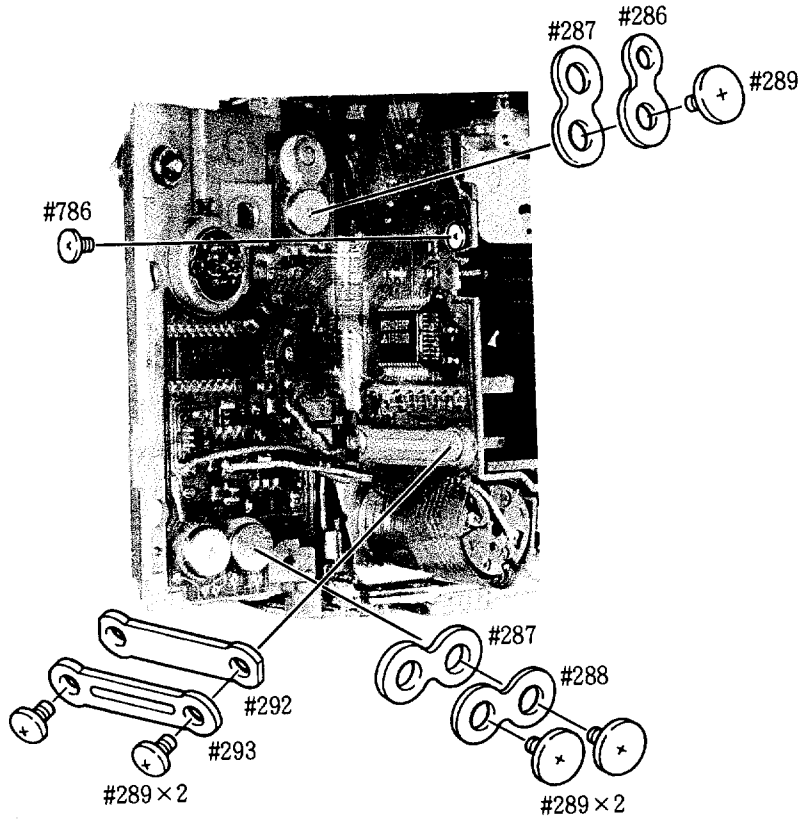
MAIN FPC

1. Remove wires & soldering bridges

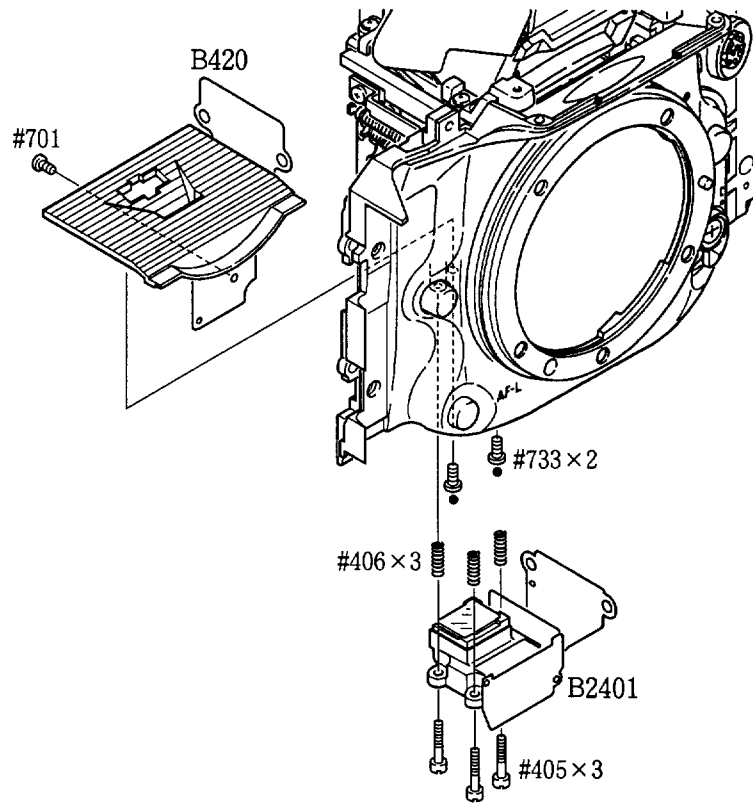
Remove soldering bridges between main FPC and AF contact FPC.



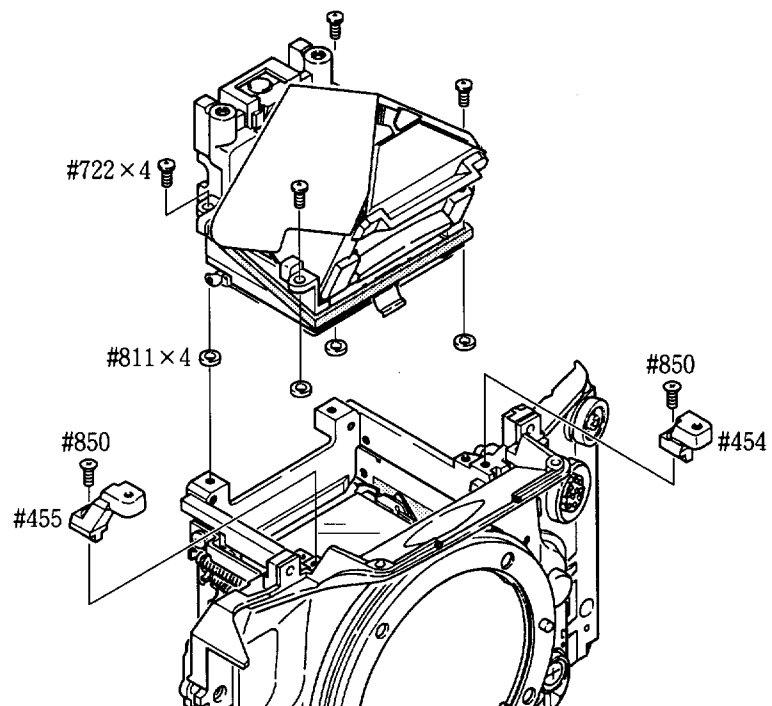
2. Remove press-contact & screw



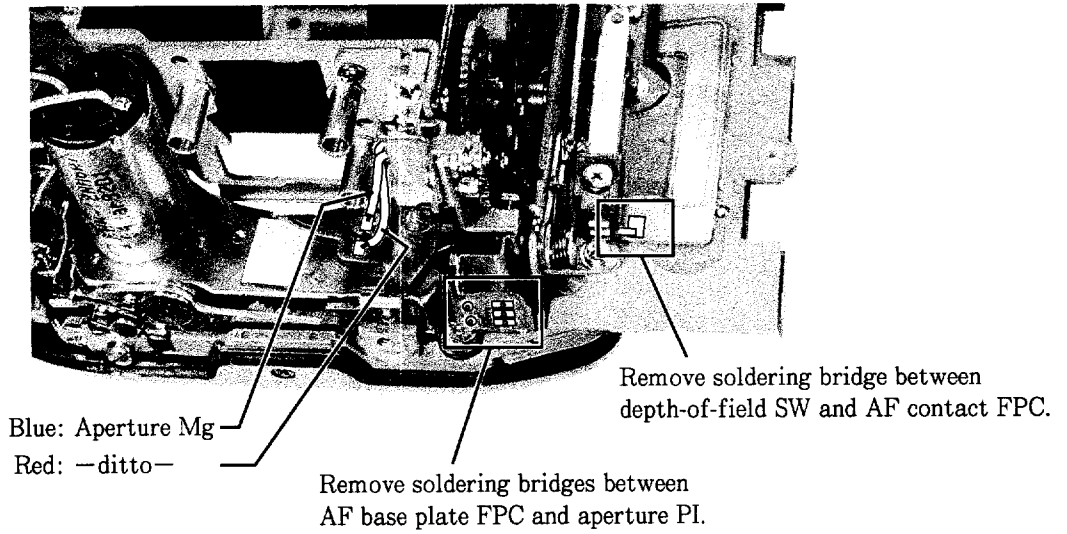
AF FPC (AP3), MIRROR BOX BOTTOM PLATE



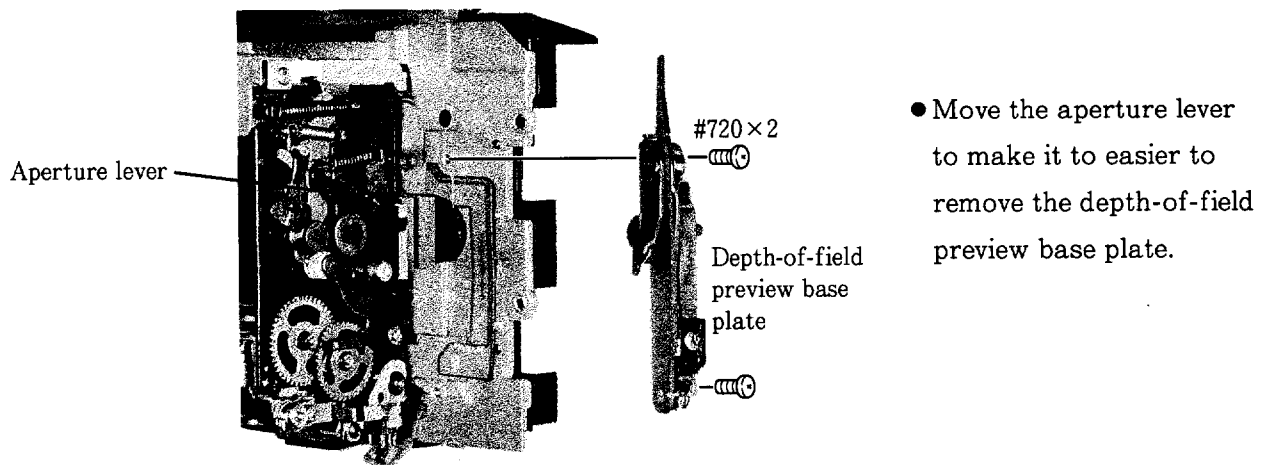
PRISM BOX



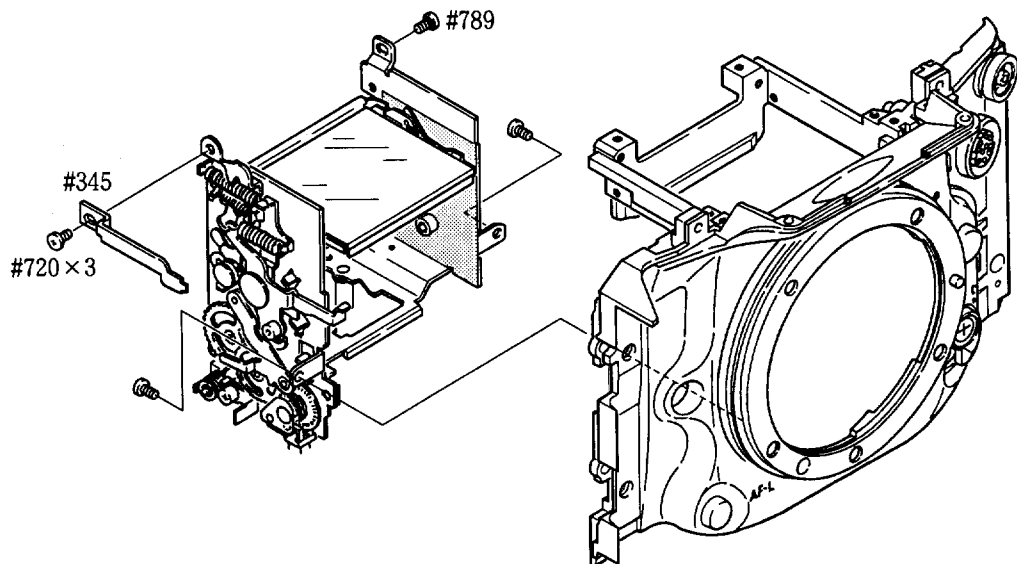
UNSOLDER ON THE BOTTOM OF THE MIRROR BOX



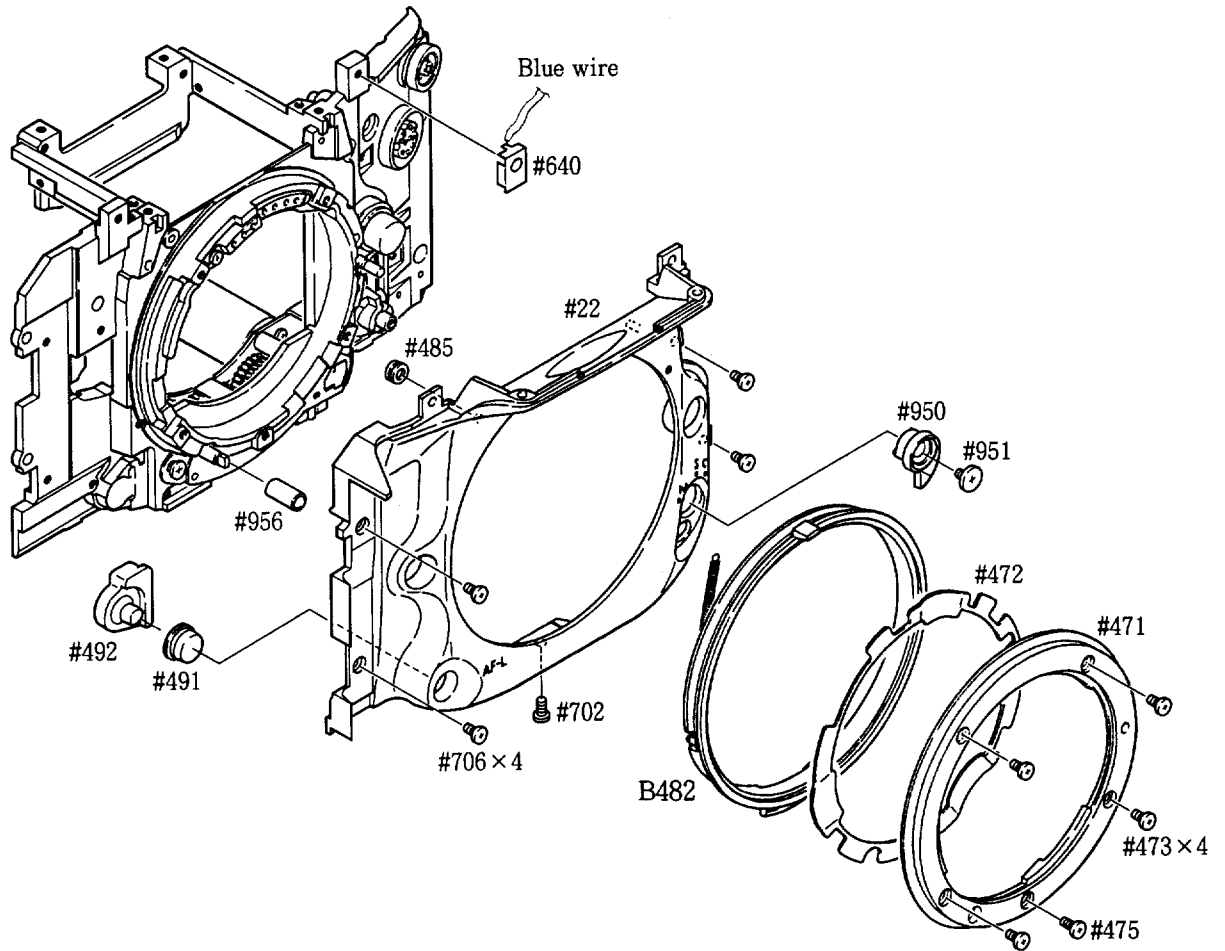
DEPTH-OF-FIELD PREVIEW BASE PLATE



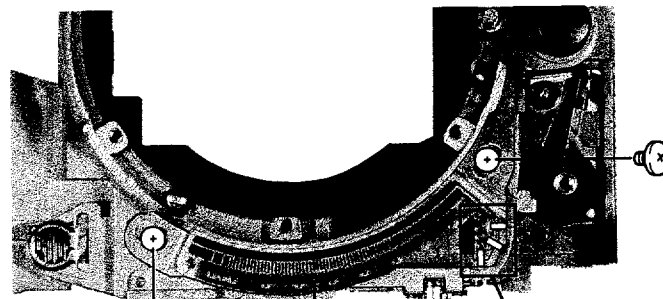
MIRROR BOX



APRON, LENS MOUNT



F-Fo BASE PLATE



#488 x 2

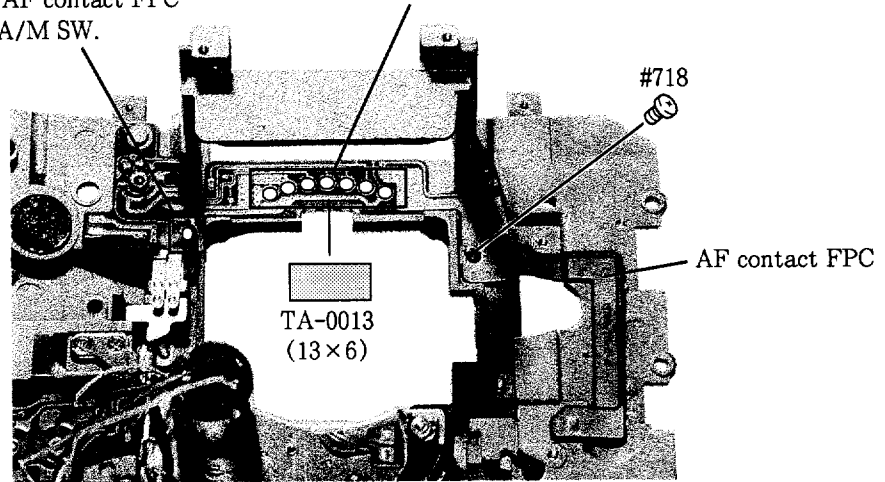
F-Fo base plate

Remove soldering bridges between F-Fo base plate and AF base plate FPC.

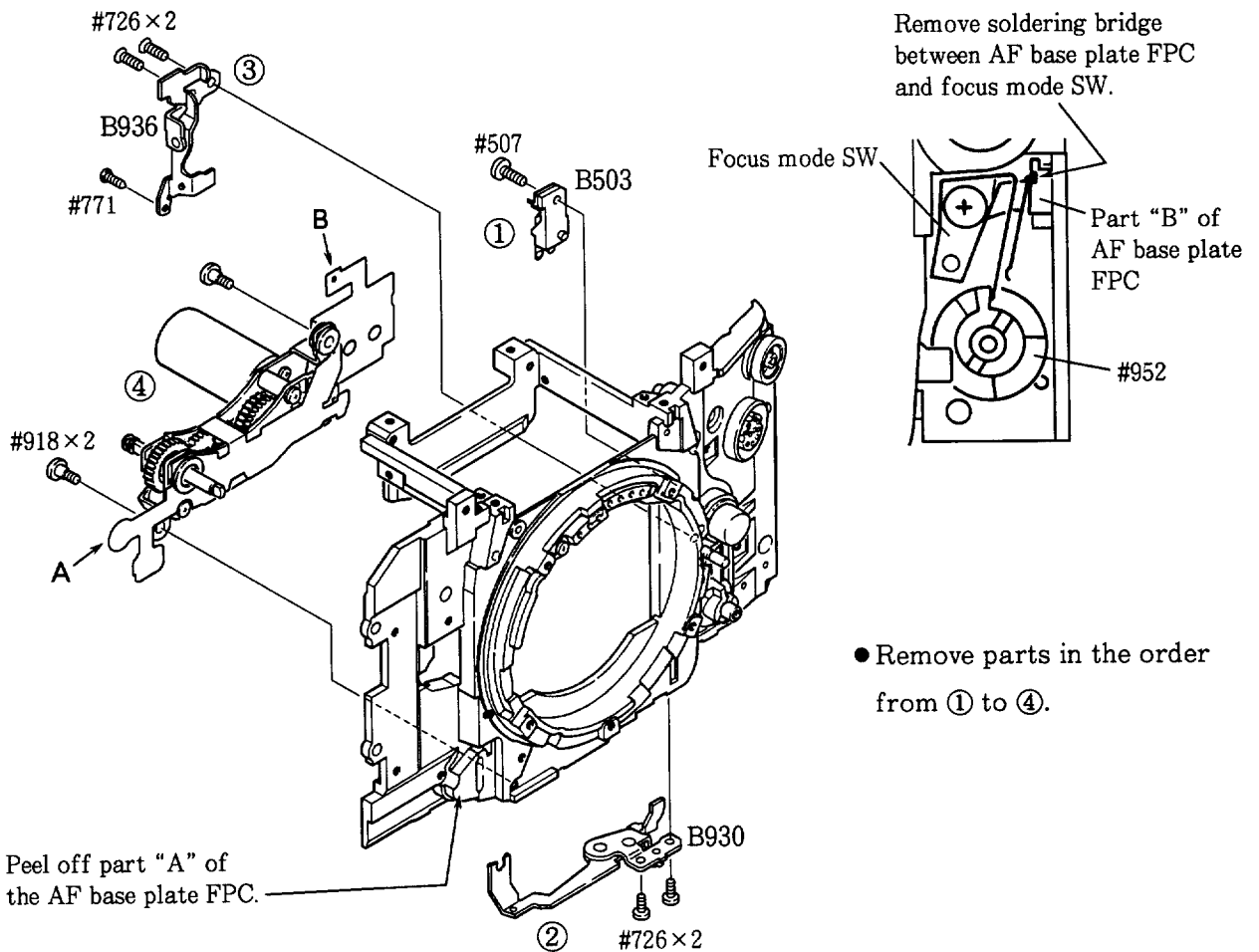
AF CONTACT FPC

Remove soldering bridge between AF contact FPC and AF A/M SW.

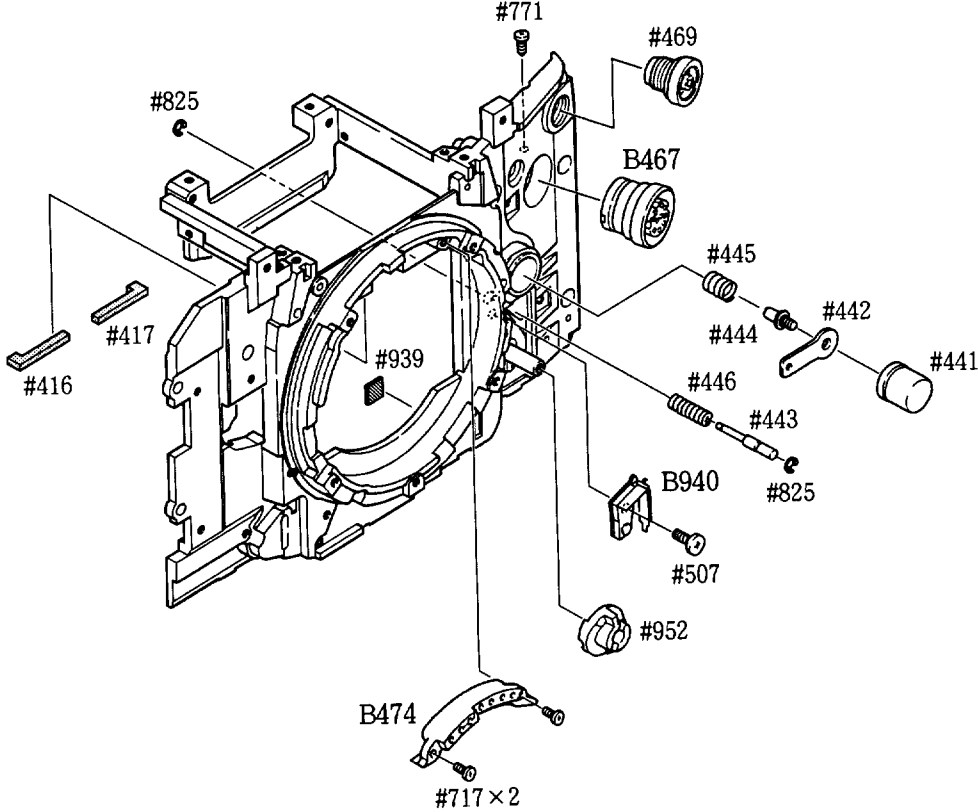
Remove soldering bridges between AF contact FPC and AF contact unit.



AF DRIVING UNIT



SMALL PARTS OF FRONT PLATE



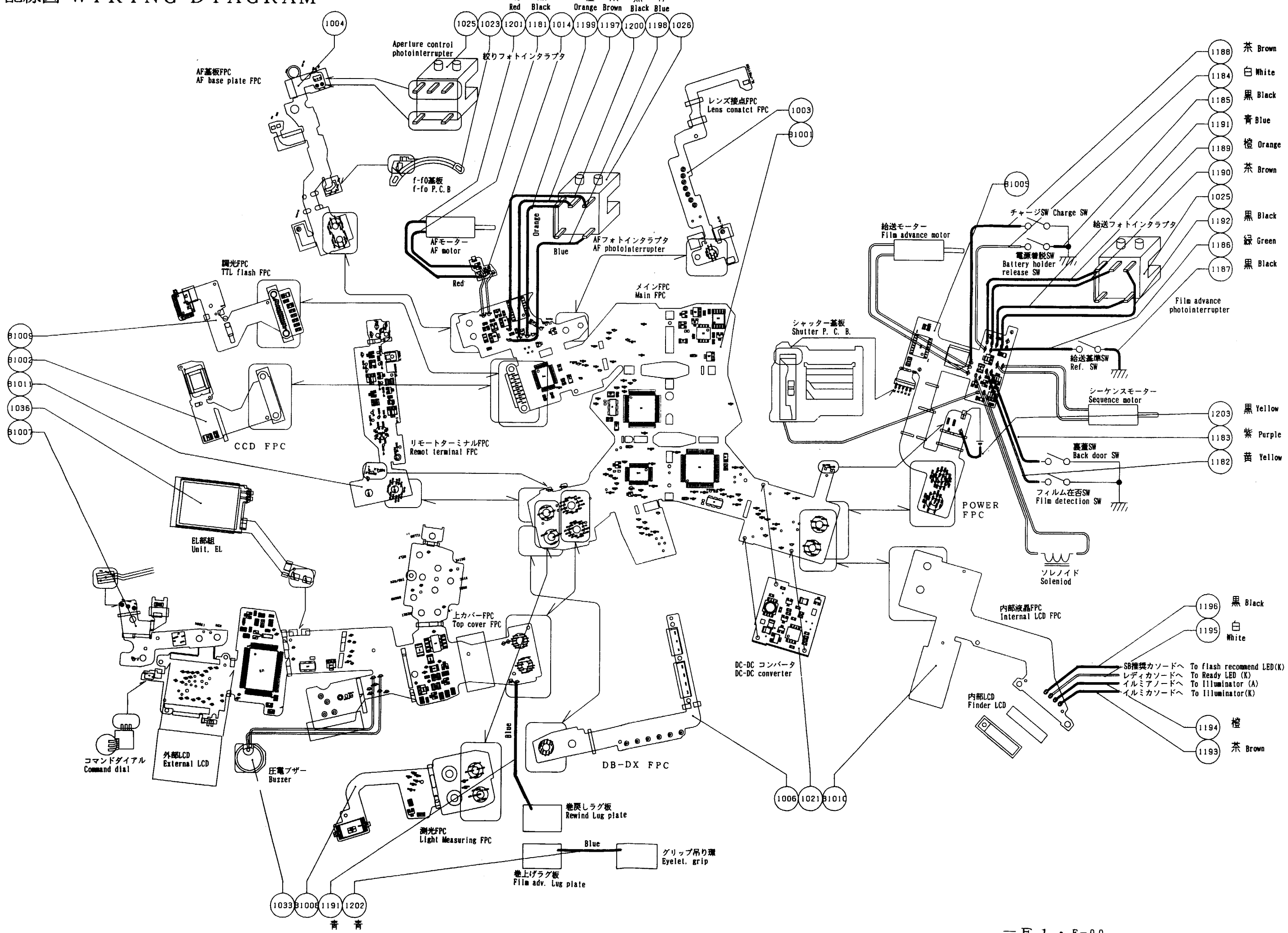
電 気 編

実体配線図	-----	E 1
回路図	-----	E 2
メインFPC	-----	E 3
上カバーFPC	-----	E 6
パワーFPC	-----	E 9
CCD FPC	-----	E 11
DB-DX FPC	-----	E 13
リモートターミナルFPC	-----	E 14
AF基板FPC	-----	E 16
測光FPC	-----	E 17
リリース接点FPC	-----	E 18
内部液晶FPC	-----	E 19
ICピン端子表	-----	E 20
チェックランド表	-----	E

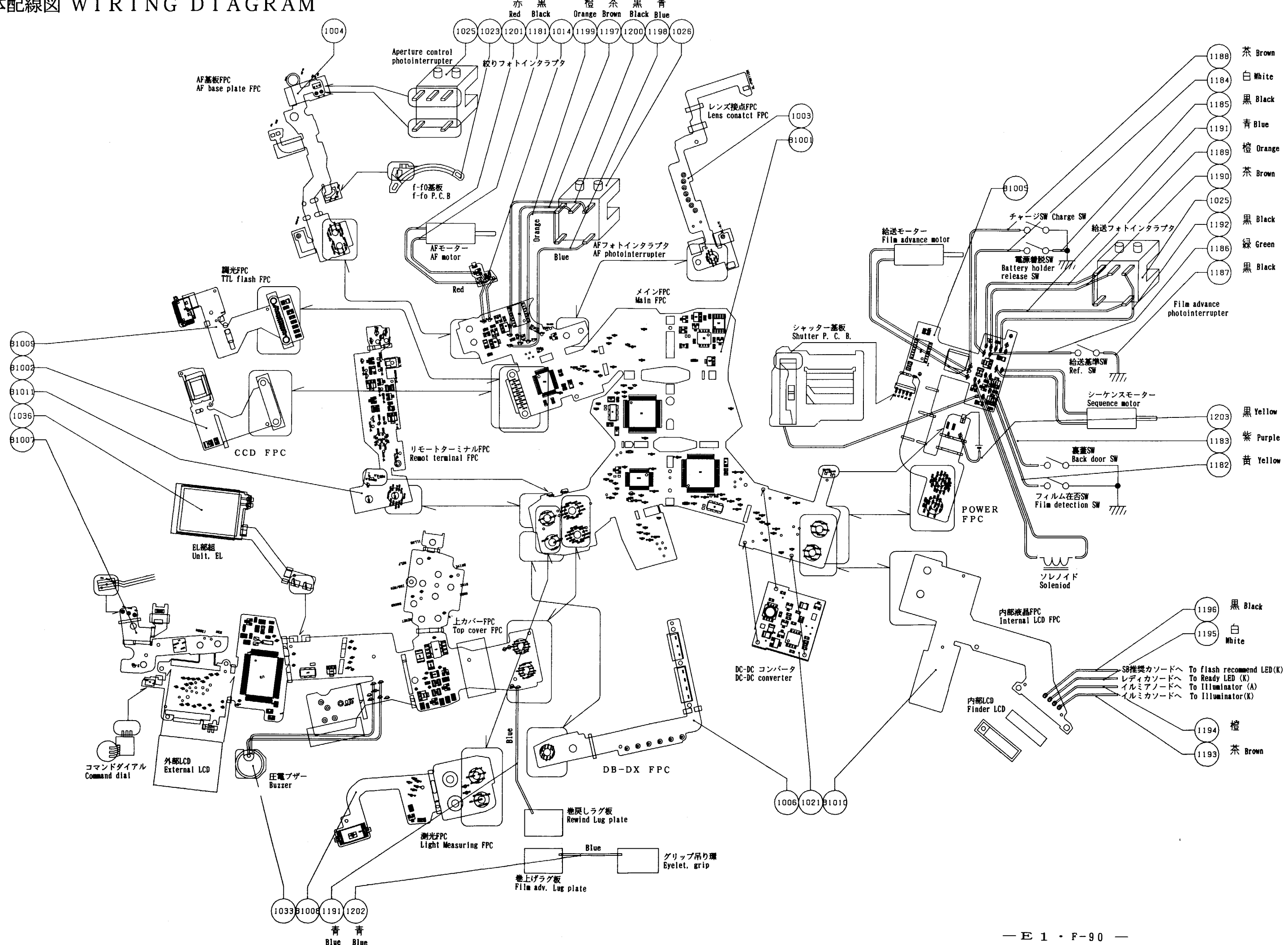
E l e c t r i c C i r c u i t

WIRING DIAGRAM	-----	E 1
CIRCUIT DIAGRAM	-----	E 2
MAIN FPC	-----	E 3
TOP COVER FPC	-----	E 6
POWER FPC	-----	E 9
CCD FPC	-----	E 11
DB-DX FPC	-----	E 13
REMOTE TERMINAL FPC	-----	E 14
AF BASE PLATE FPC	-----	E 16
LIGHT MEASURING FPC	-----	E 17
LENS CONTACT FPC	-----	E 18
INTERNAL LCD FPC	-----	E 19
REFERENCE TABLE, IC TERMINALS	-----	E 20
REFERENCE TABLE, CHECKING LAND LIST	-----	E

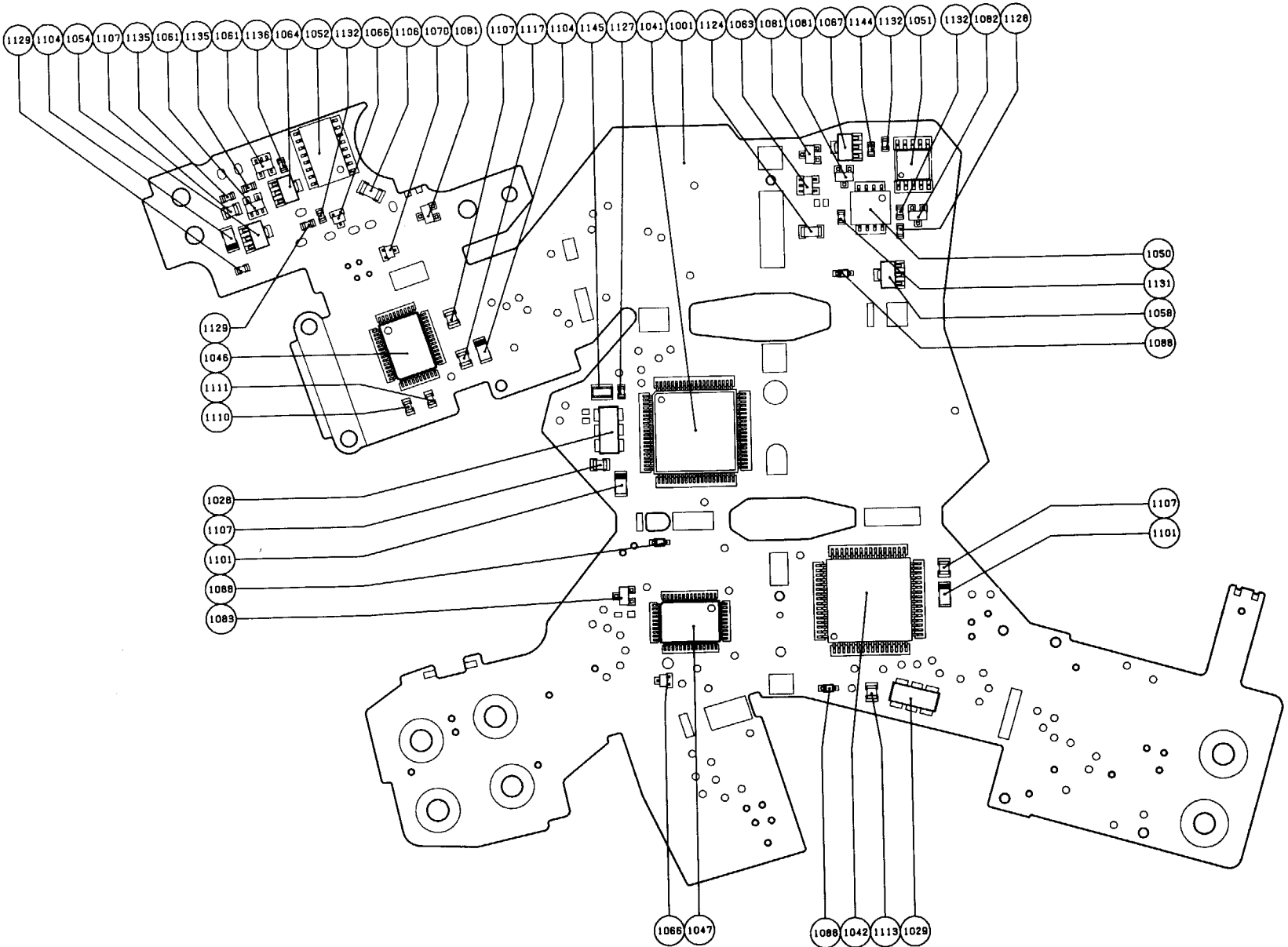
美体配線図 WIRING DIAGRAM



美体配線図 WIRING DIAGRAM



メインFPC
MAIN FPC

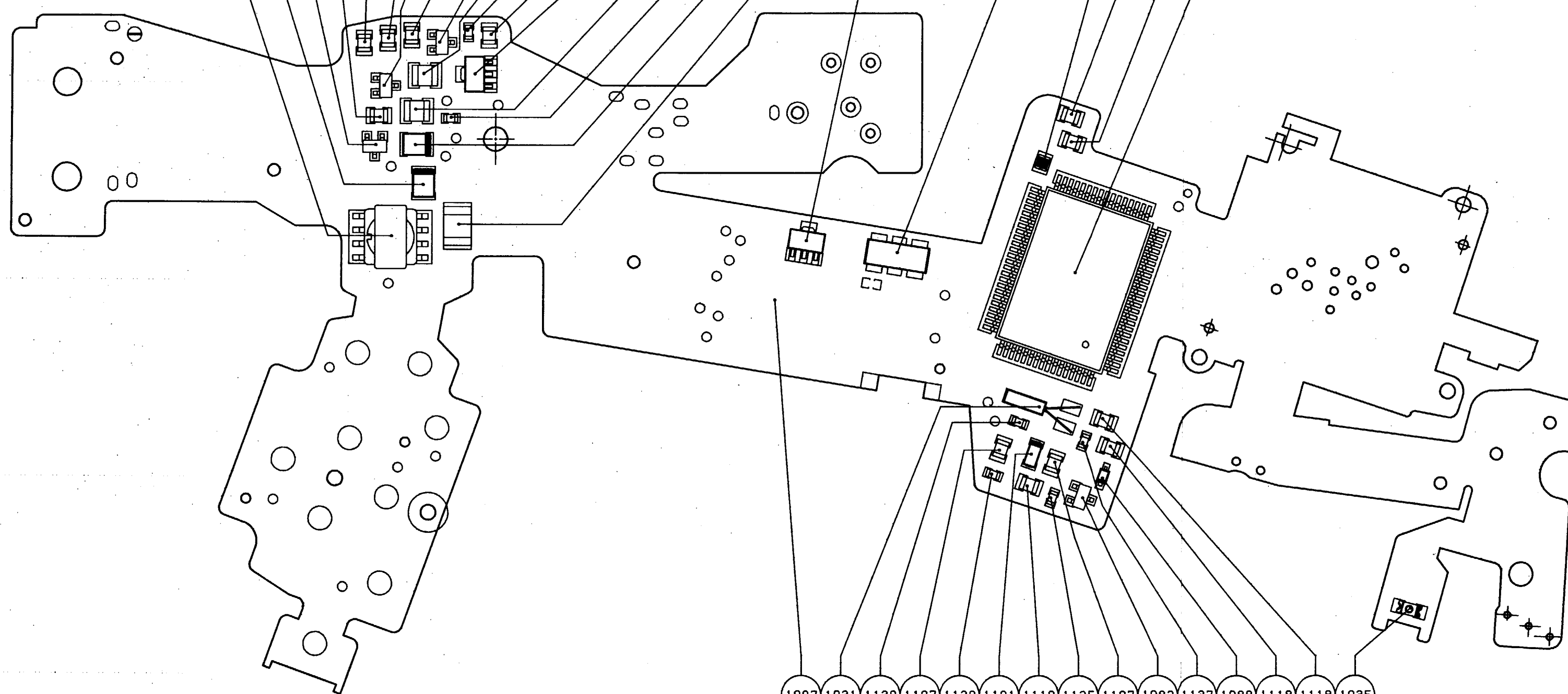


L701 C712 Q703 C714 C706 C707 Q701 C708 D701 R712 R701 C709 D703 R713 R714 C713 C715 U26
10u 25B624 0.015U 220P 220P DTA1132K 220P MC2838 47 560 0.15uBCR08AS 150 6.8K 6.8u6800P IC

X701 R715 C705 C704 U3
4.194MHZ 100K 1000P1000P IC

1038 1162 1071 1105 1117 1117 1065 1117 1081 1121 1128 1107 1084 1125 1134 1161 1120 1055

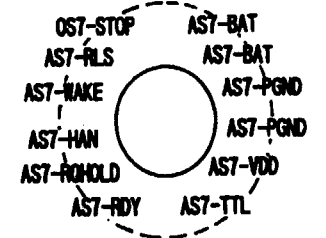
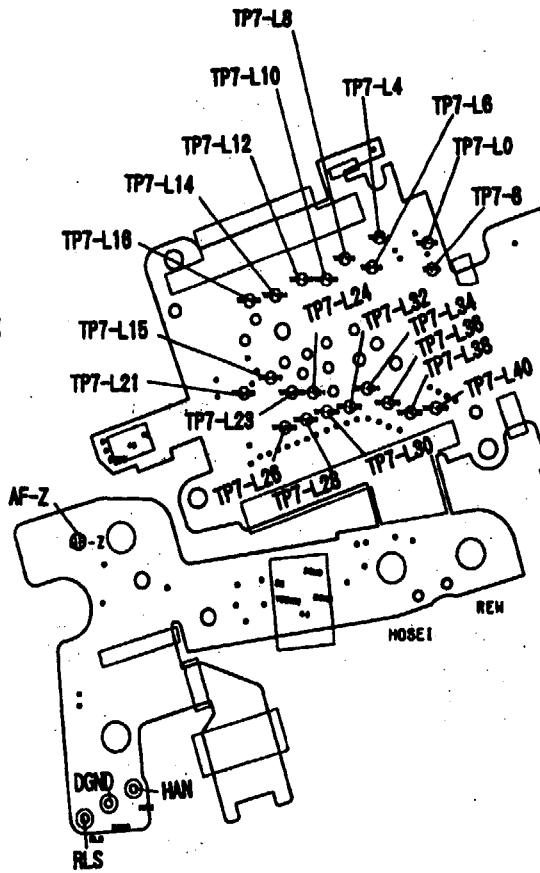
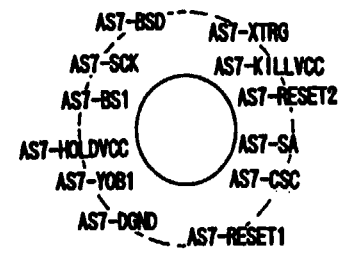
1030 1146 1113 1113 1043



1007 1031 1130 1107 1132 1101 1112 1135 1107 1083 1137 1088 1118 1118 1035

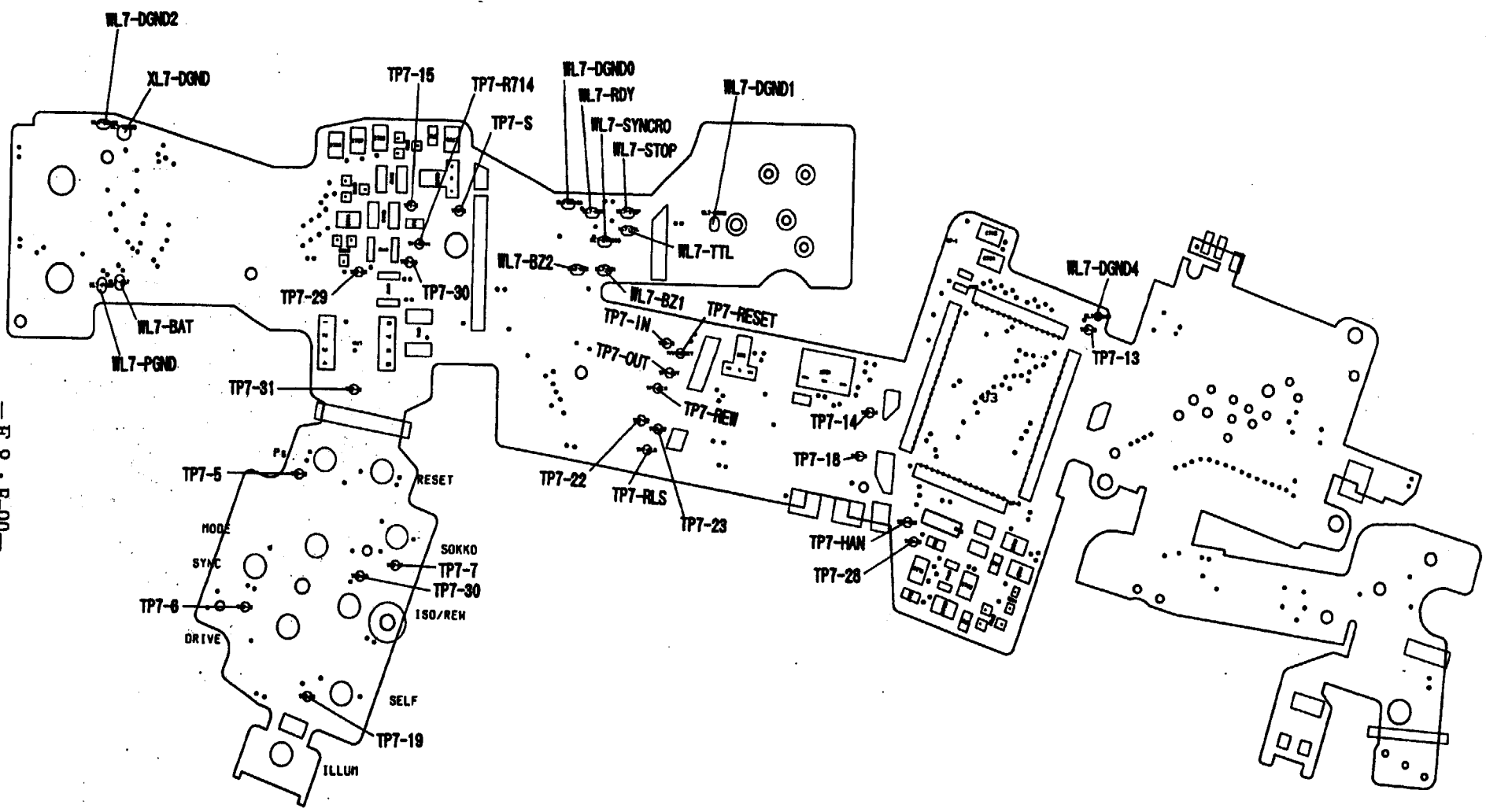
FPC X702 R705 C716 R703 C701 C703 R702 C702 D702 R704 D704 C711 C710 LED
32KHz 1K 0.15u 10K 4.7u 2200P 47K 0.15u MA704MK B30K MA110 22P 22P

-E 7 · P-90-



FAA 28051-R. 3312. A

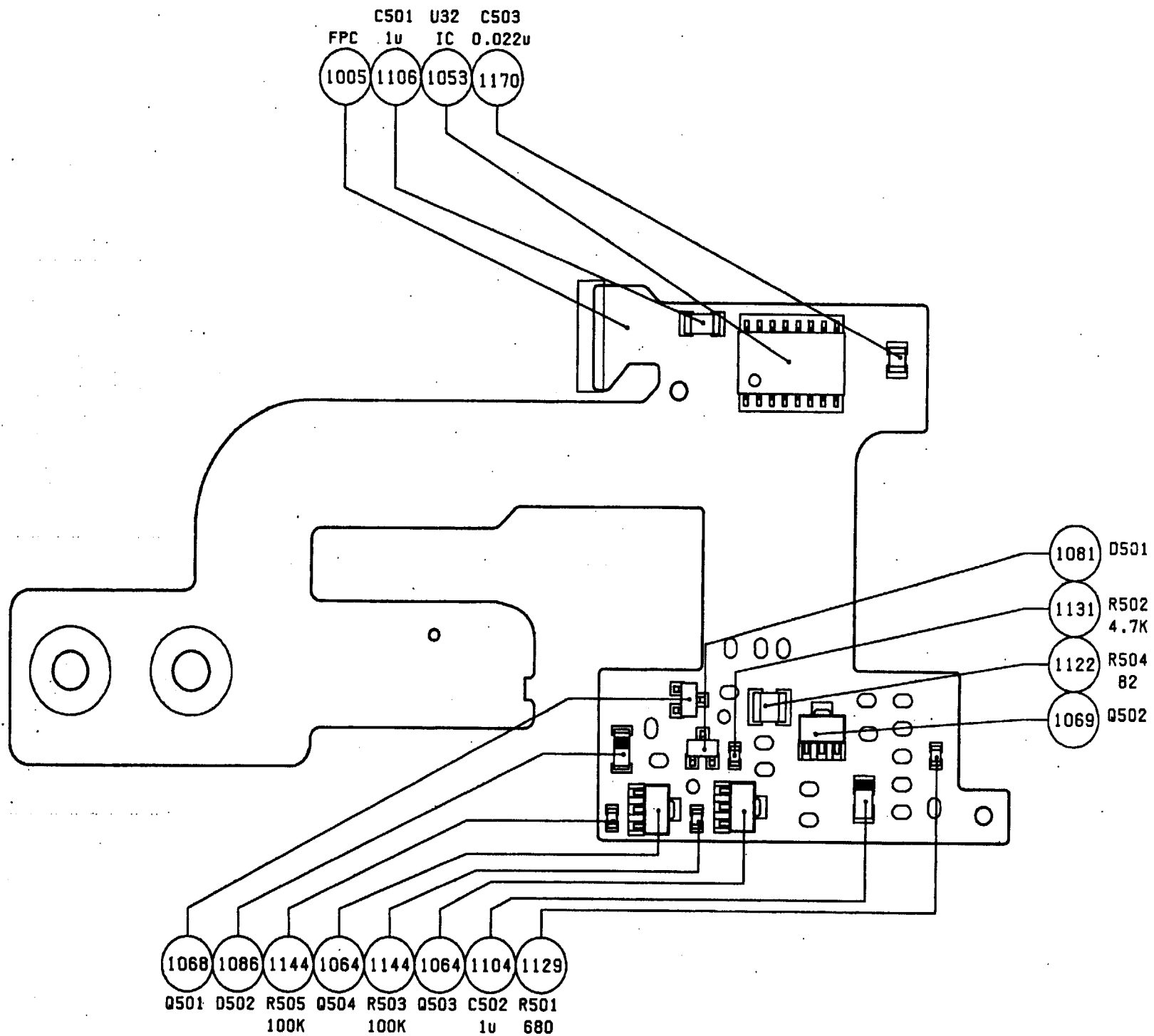
-E 8 · P-90-



FAA28051-R. 3312. A

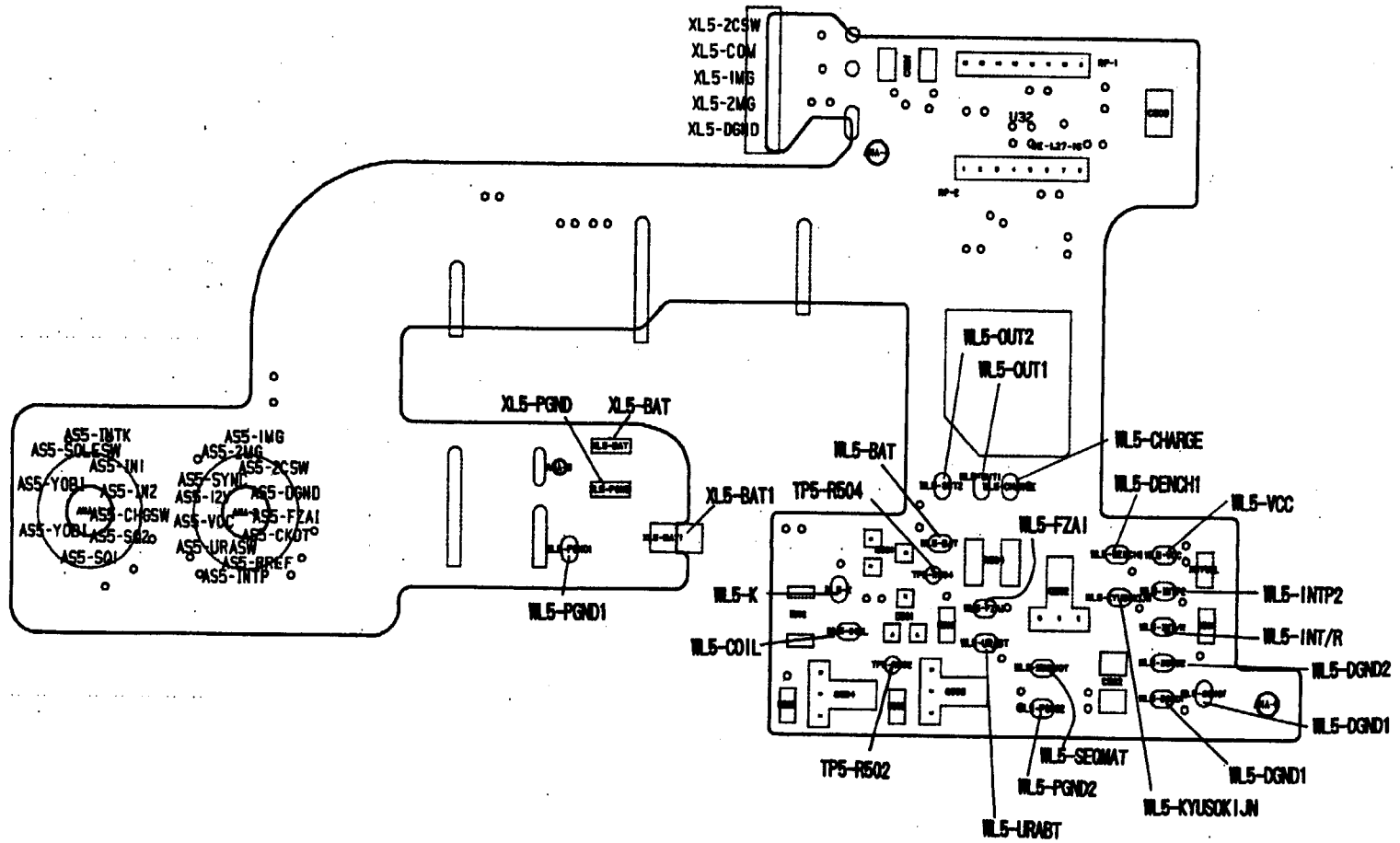
パワー-FPC
POWER FPC

FAA28051-R. 3312. A



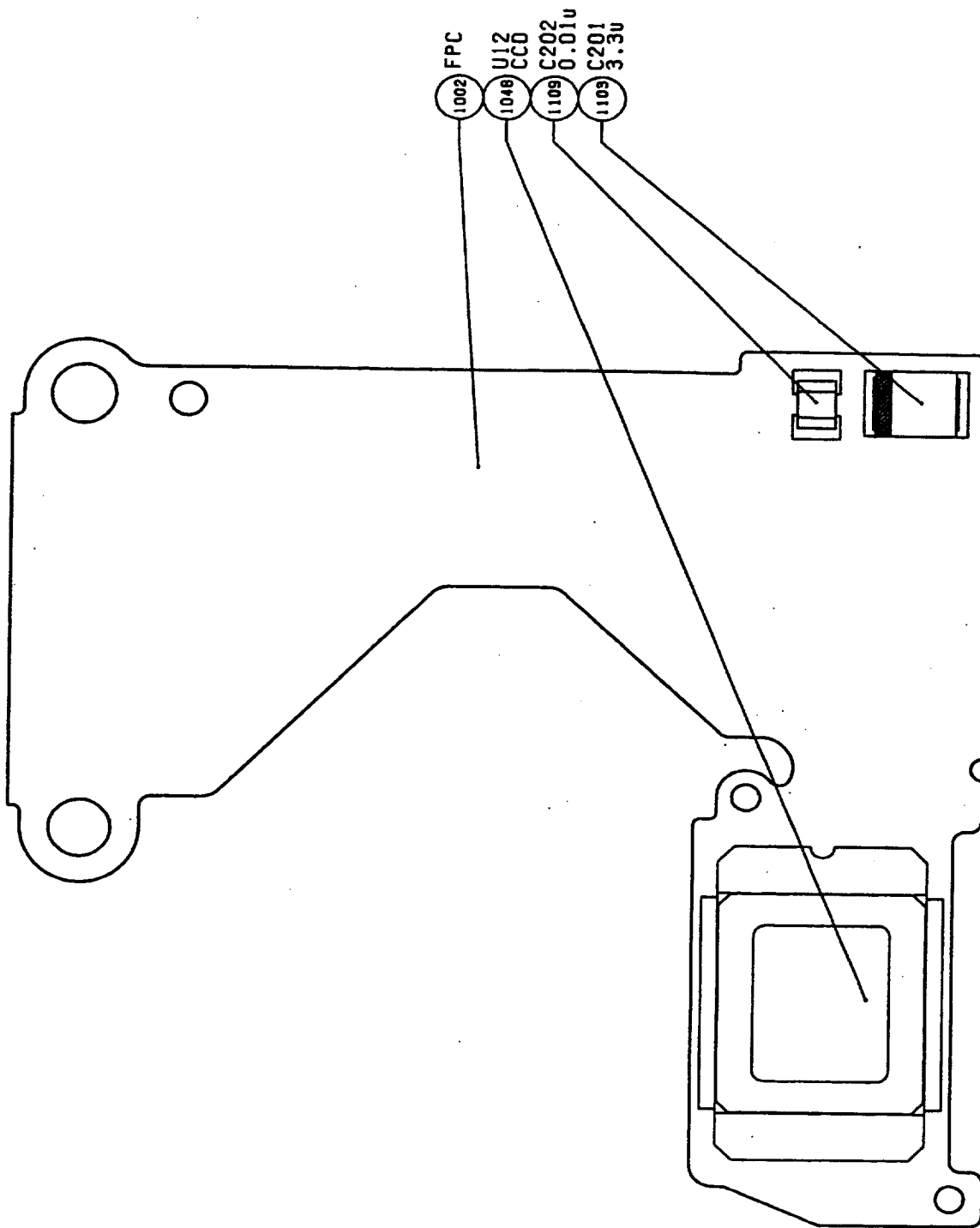
-E 9 · P-90-

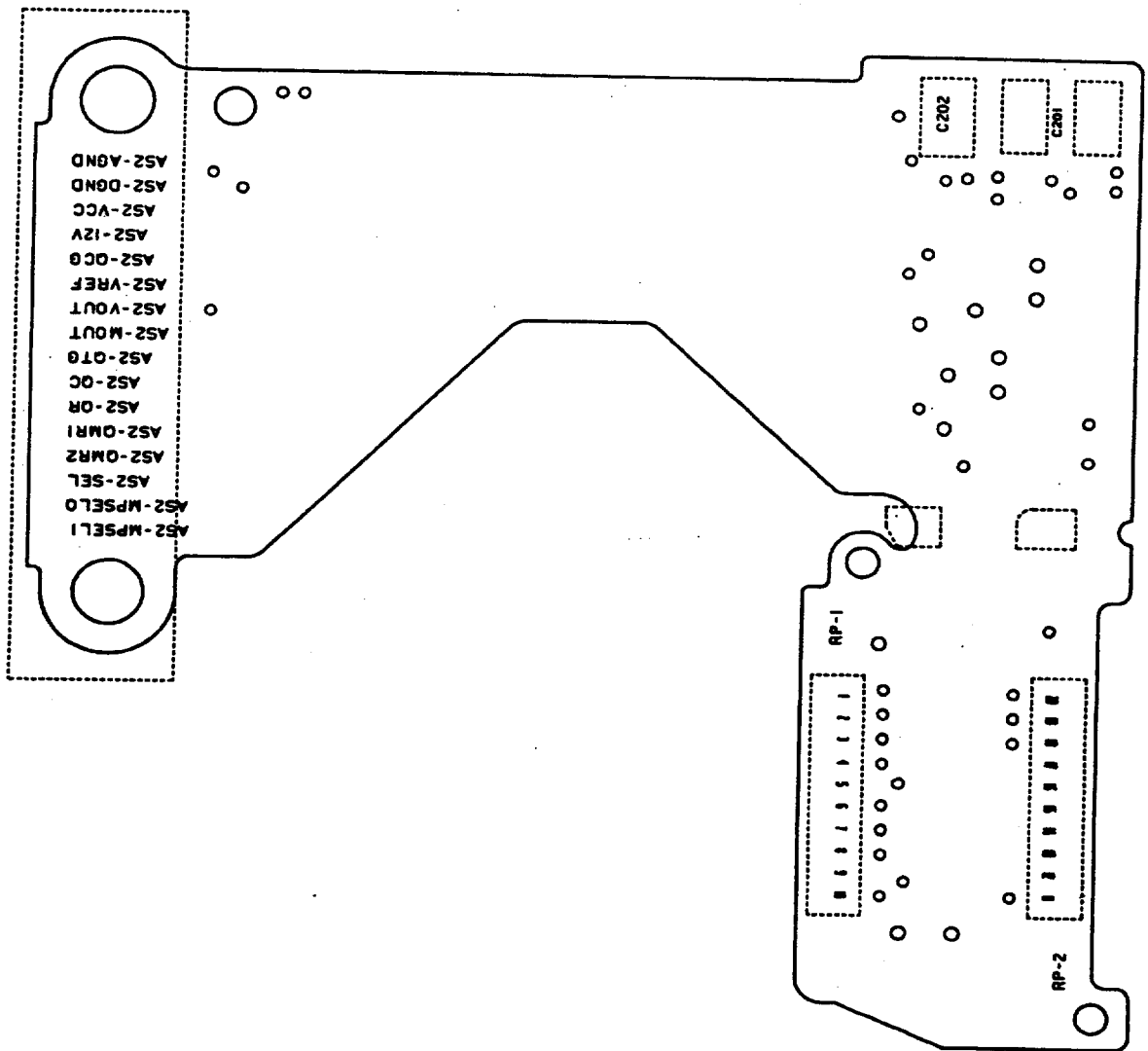
-E10·P-90-



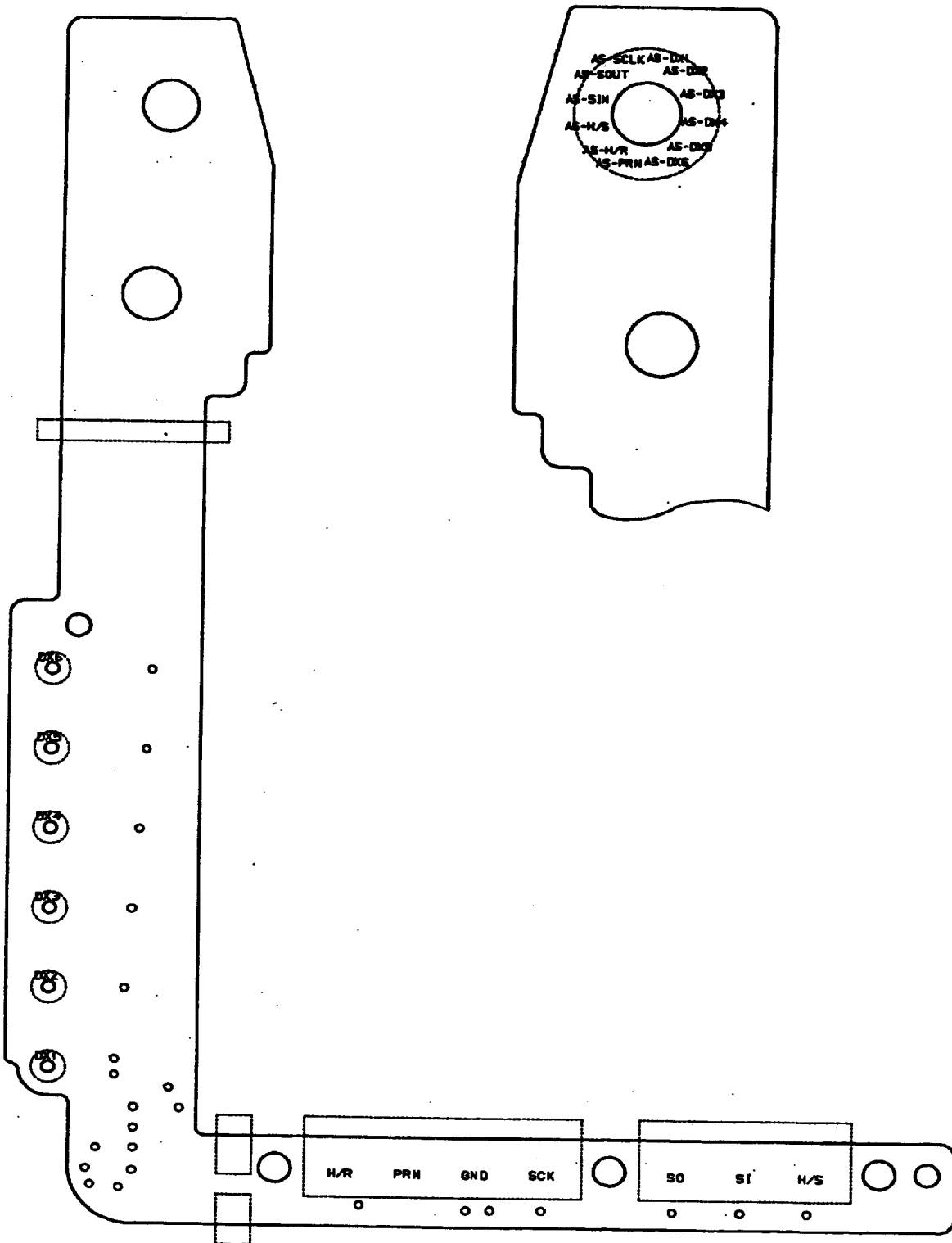
FAA28051-R. 3312. A

CCD FPC



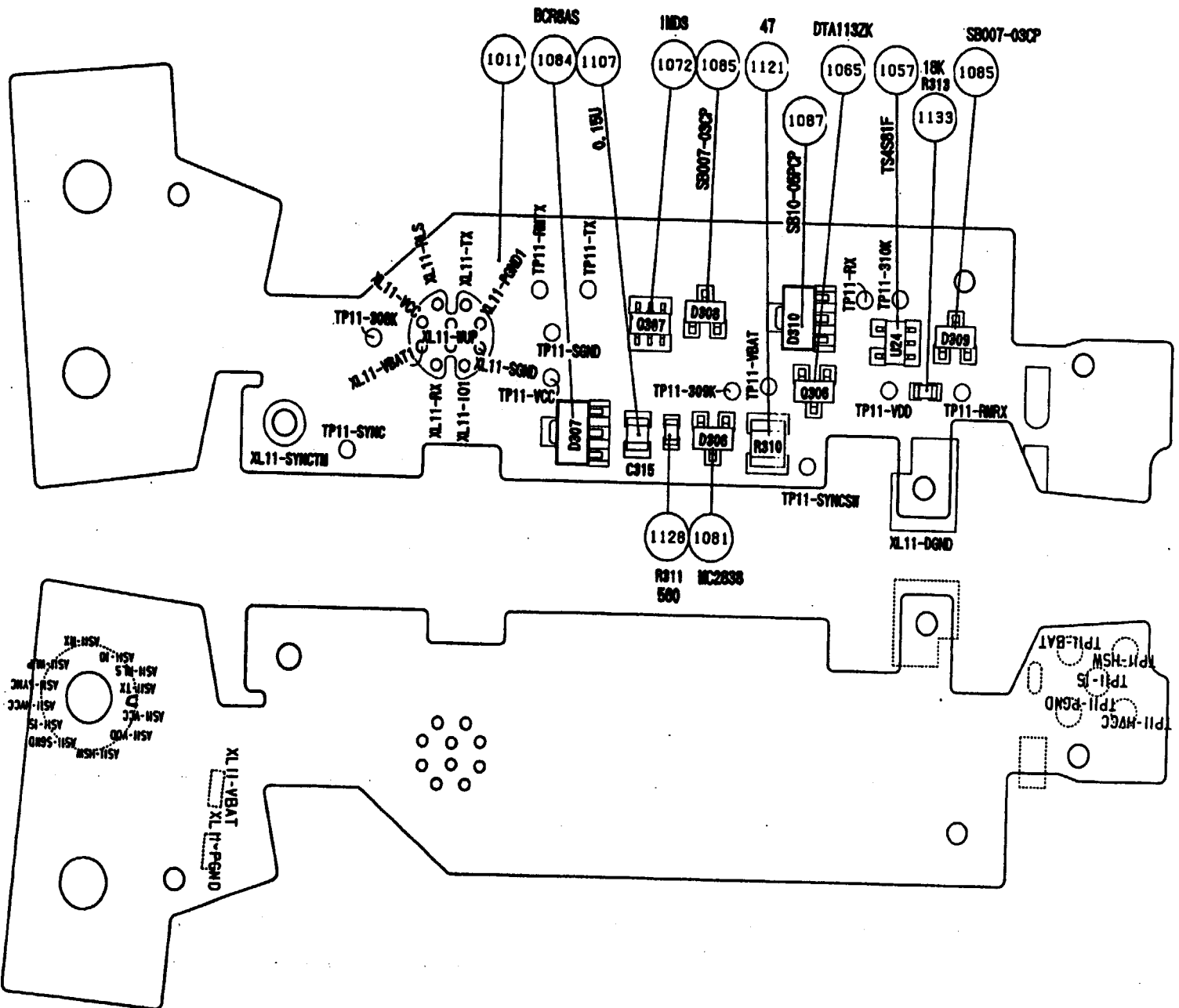


DB-DX FPC



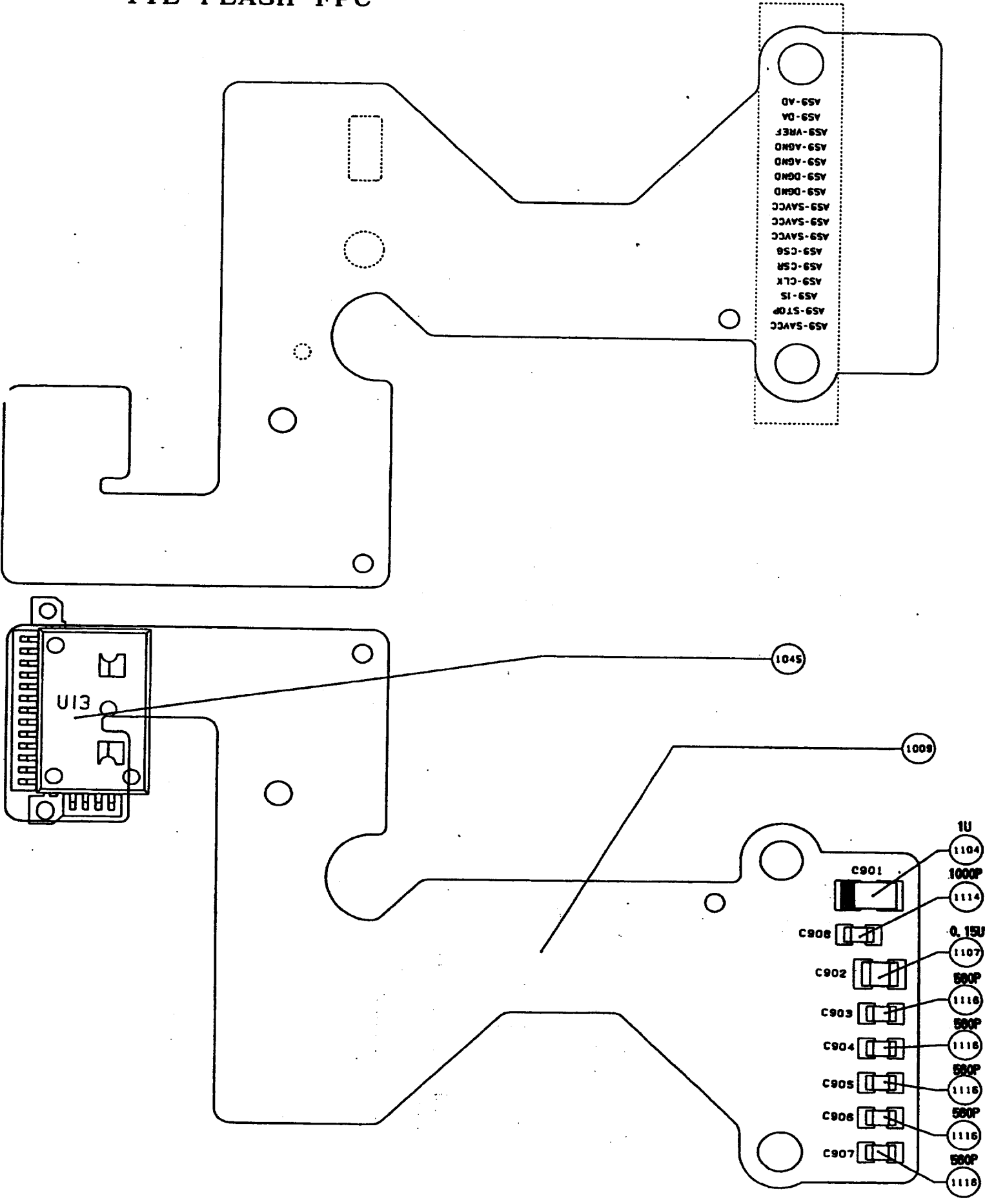
リモートターミナルFPC
REMOTE TERMINAL FPC

FAA28051-R. 3312.A



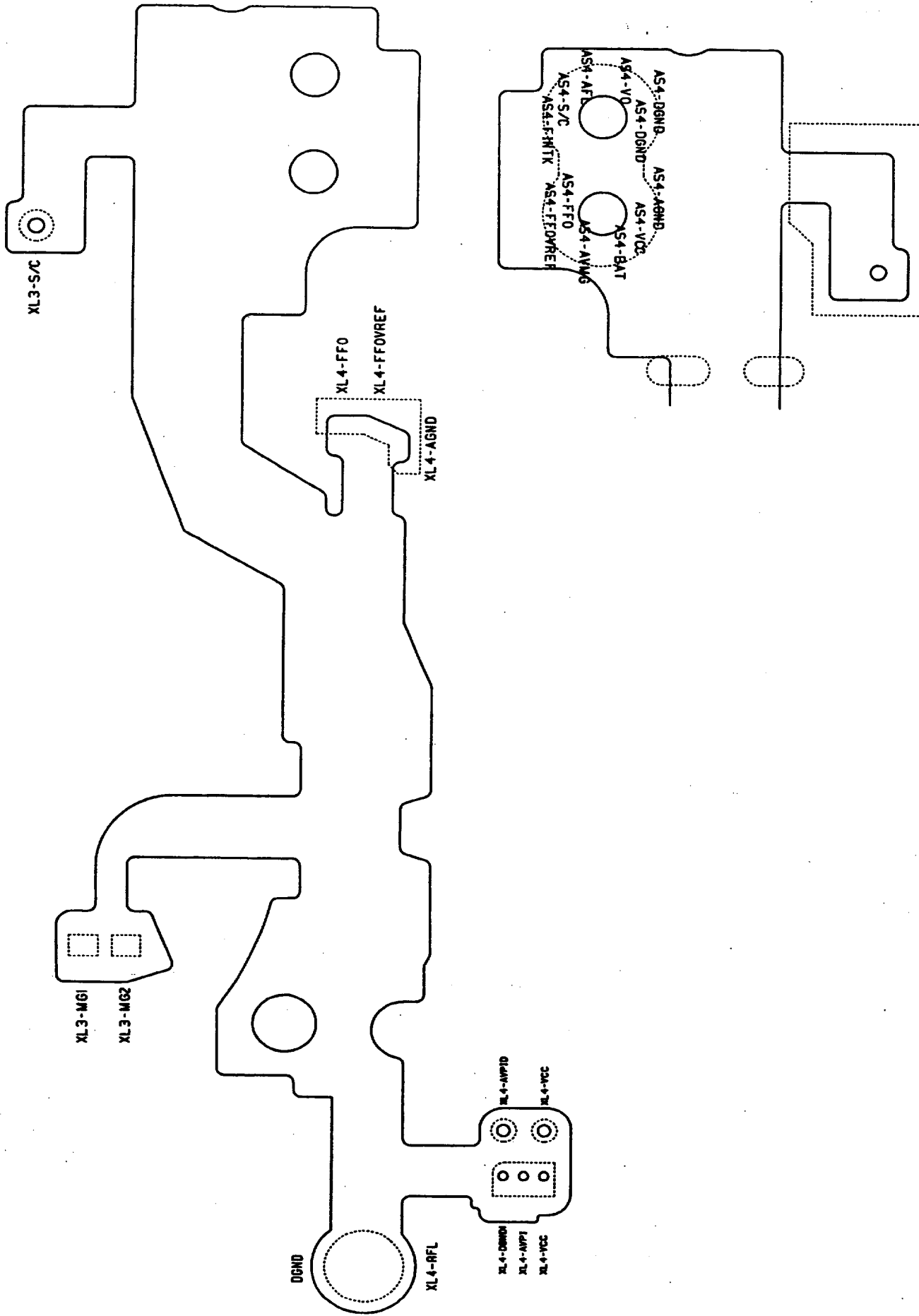
-E14·P-90-

調光FPC
TTL FLASH FPC

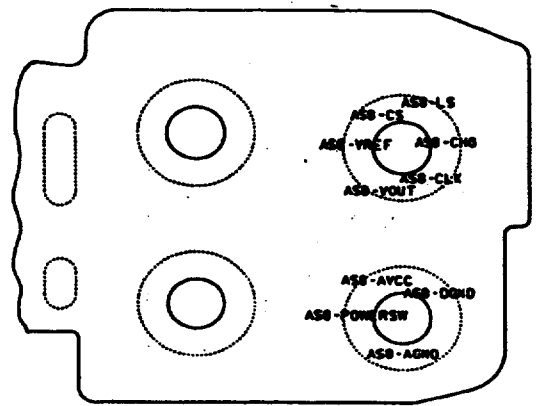
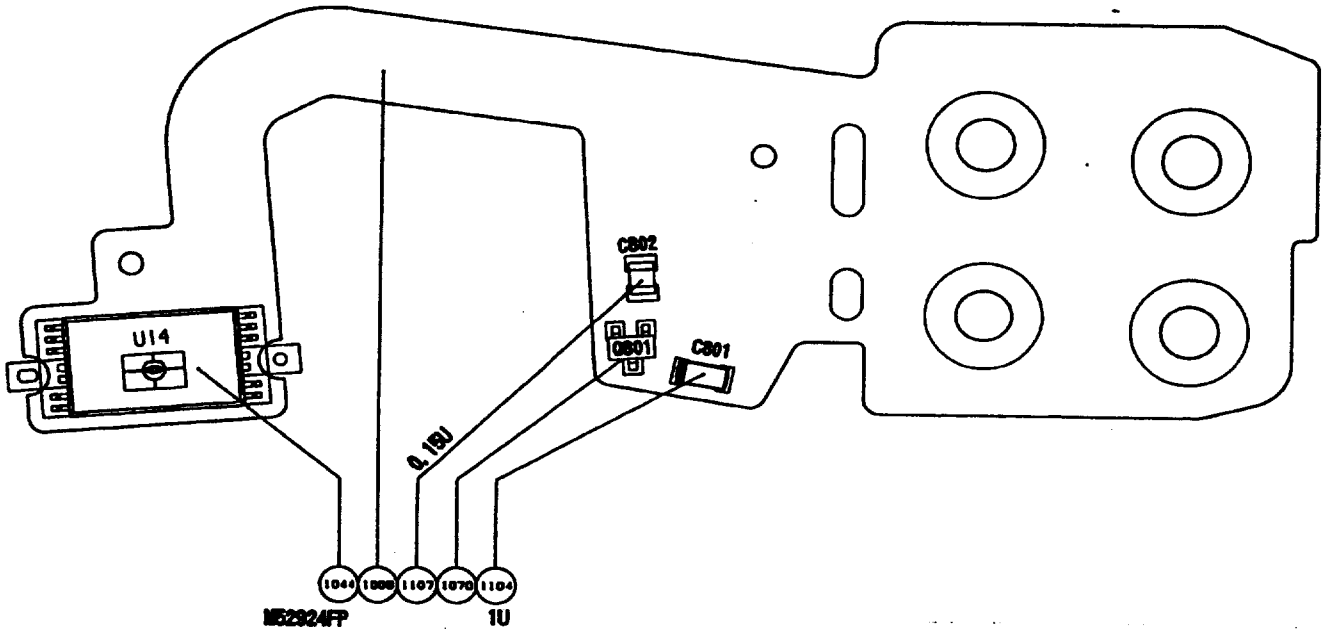
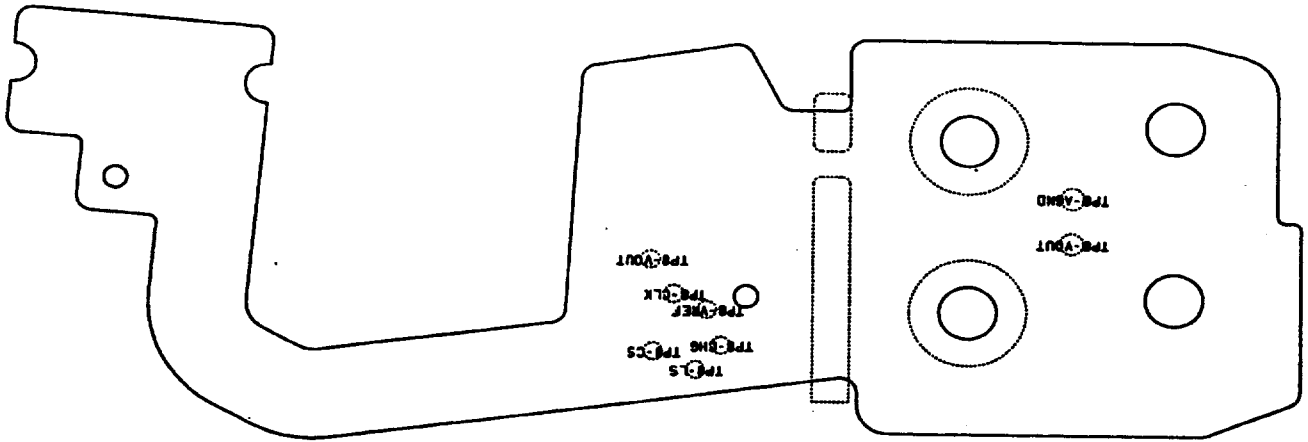


AF 基板 FPC
AF BASE PLATE FPC

FAA28051-R. 3312. A

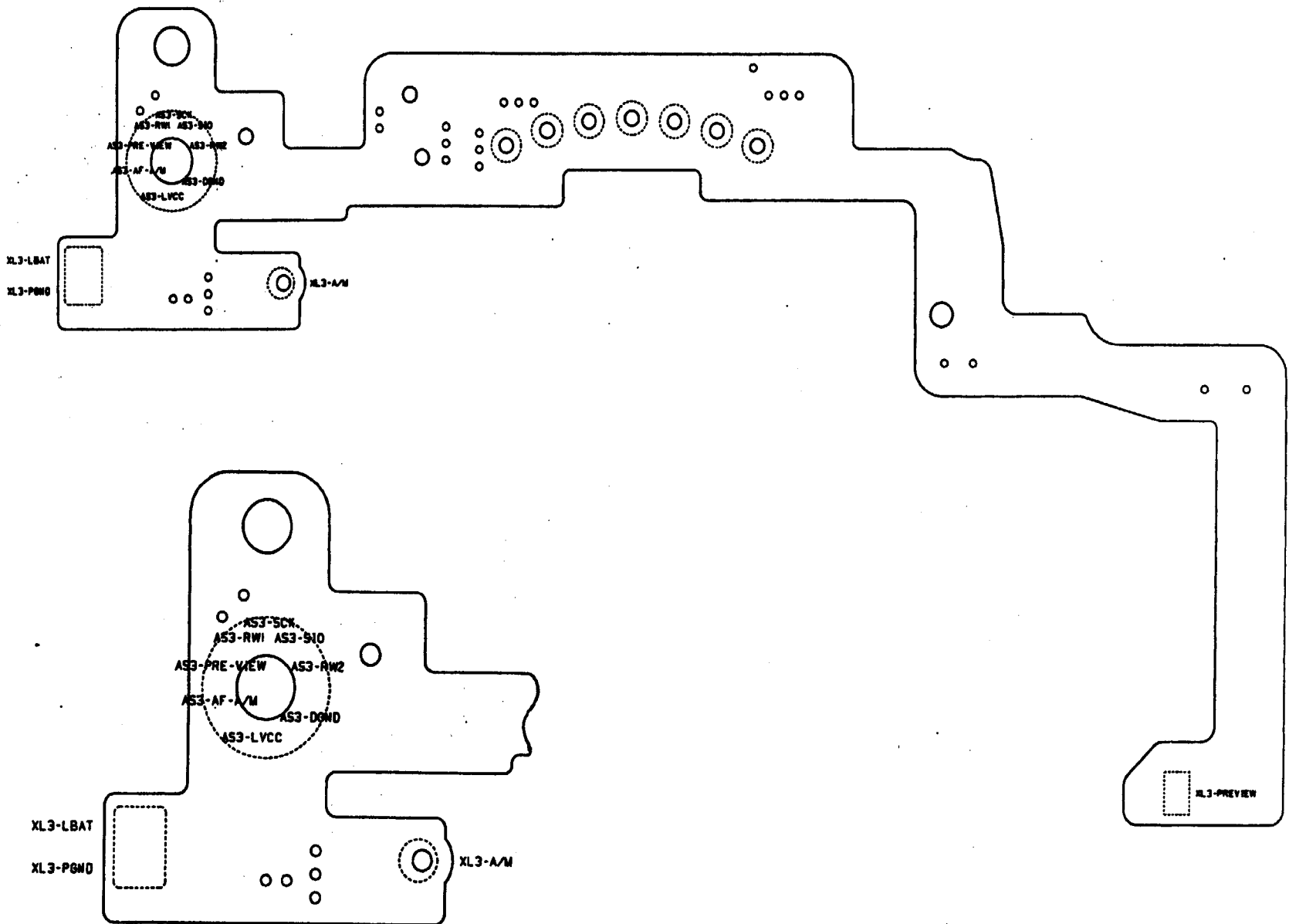


測光 F P C
LIGHT MEASURING FPC



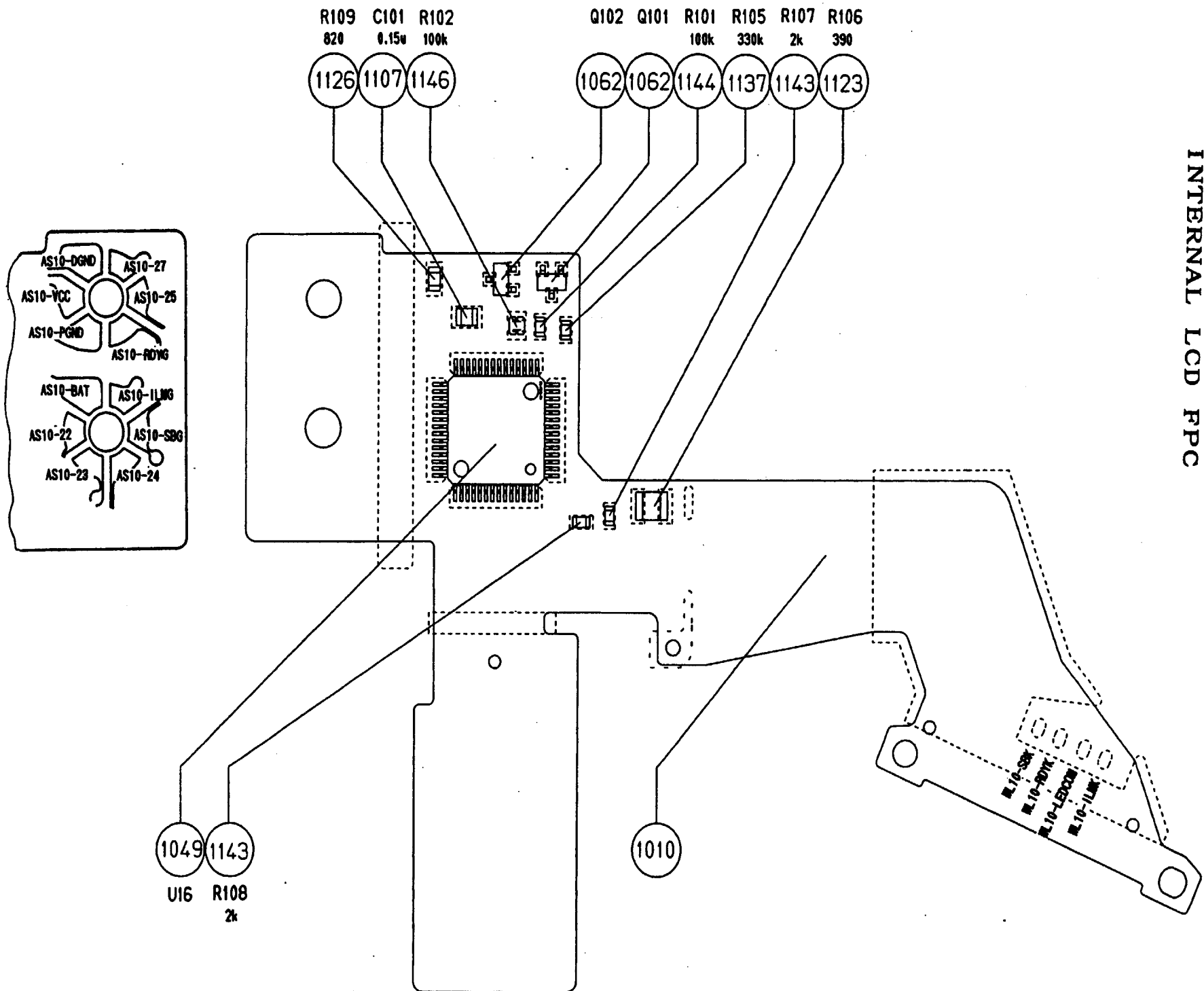
レンズ接点 F P C
LENS CONTACT FPC

FAA28051-R. 3312. A

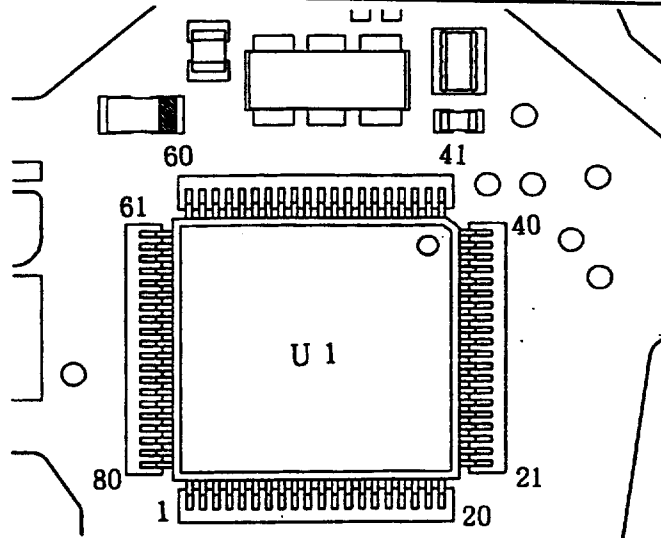


内部液晶 FPC
INTERNAL LCD FPC

FAA28051-R. 3312. A

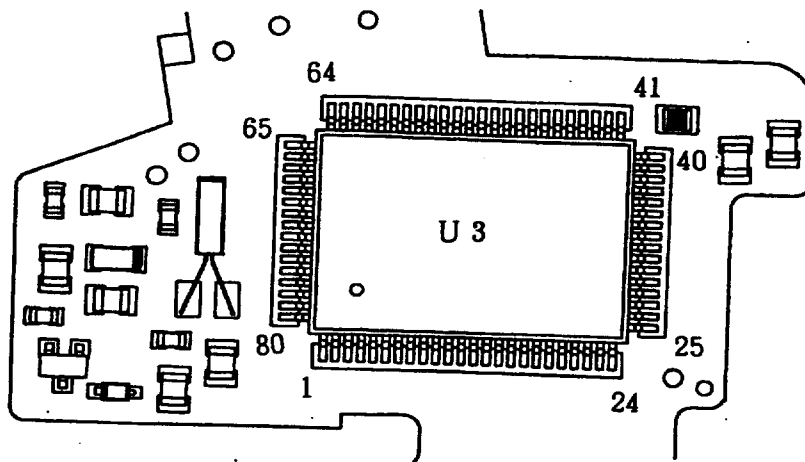


μPD78P238GC-3B9 (A-MCU)



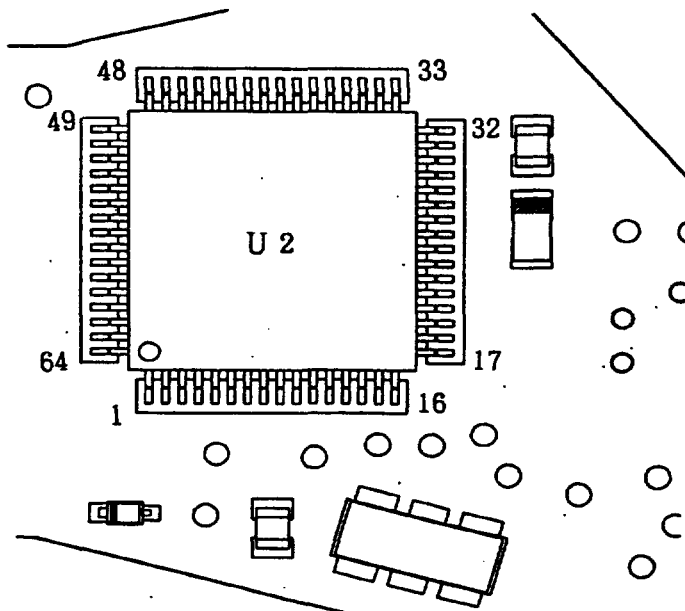
Terminals		Terminals	
1	P32 Serial Clock	41	P42 Focus Lock Switch
2	P33 Serial Outt	42	P41 Release Switch
3	P34 DX 2	43	P40 Pre-release Switch
4	P35 DX 3	44	ASTB 3MHz Output(CCD STB)
5	P36 DX 6	45	Vss GND
6	P37 B-MCU Hand Shake Signal	46	MODE GND
7	RESET	47	P10 AF Motor Drive Signal 1
8	Vdd Vcc	48	P11 AF Motor Drive Signal 2
9	X2 Oscilator Terminal 2	49	P12 AF PhgotoInterrupter Control
10	X1 Oscilator Terminal 1	50	P13 Flash Ready Drive Signal
11	Vss GND	51	P14 Vcc Control for AMP Circuit
12	P00 CCD Sensitivity Select	52	P15 Vcc Control for TTL Circuit
13	P01 CCD Monitor Select 0	53	P16 Flash Stop Signal
14	P02 CCD Monitor Select 1	54	P17 CCD Carrier Mode
15	P03 CCD Storage Control	55	Vdd Vcc
16	P04 Amplifire Gain Change 0	56	P70 N. C.
17	P05 Amplifire Gain Change 1	57	P71 AMP Rerference Voltage
18	P06 E ² PROM Chip Select Signal	58	P72 AMP Mertering Output
19	P07 Release Inhibit Signal	59	P73 TTL Rerference Voltage
20	P67 Clock for TTL Control	60	P74 TTL Mertering Output
21	P66 CSR Signal for TTL Control	61	P75 f - f φ
22	P65 CSG Signal for TTL Control	62	P76 Voltage for BaterryCheck
23	P64 N. C.	63	P77 CCD Signal
24	P63 Clock for AMP Select	64	A Vdd AVcc
25	P62 Charge Signal for AMP	65	A Vref1 Rerference Volt. for A/D
26	P61 LS Signal for AMP	66	AVss AGND
27	P60 CS Signal for AMP	67	A NO0 D/A Output for AF
28	P57 Flash Recomendate Signal	68	A NO1 D/A Output for TTL
29	P56 R I O U T (M52927)	69	A Vref2 Rerference Volt. for D/A
30	P55 PowerControl for F Terminal	70	AS Vref3 AGND
31	P54 N. C.	71	P20 Vcc
32	P53 L H/S	72	P21 Mirror Switch Signal
33	P52 TC H/S	73	P22 Rerlease Signal
34	P51 Clock by Software	74	P23 AF PhotoInterrupterf Output
35	P50 I/O by Software	75	P24 Lens Communication Input
36	P47 Preview Switch	76	P25 F 3 4 (M52926 33p)
37	P46 Integration StartSignal	77	P26 H AGC/CCD
38	P45 DB Pre-release Detection	78	P27 Sertial In
39	P44 AFC Signal Detection	79	P30 DX 5
40	P43 AFM Signal Detection	80	P31 DX 4

μPD75308GF (C-MCU)



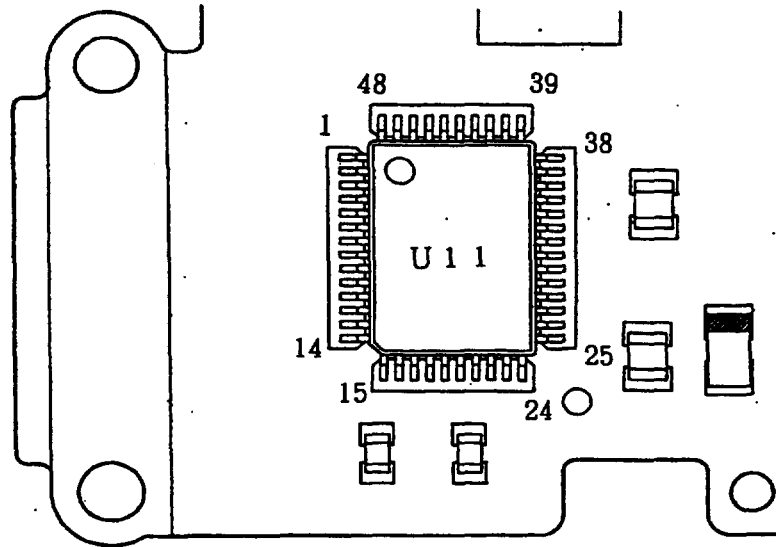
NO	Terminals	NO	Terminals
1	S12 External LCD Segment 1 2	41	P03 Serial Out
2	S13 External LCD Segment 1 3	42	P10 Command Dial ϕ
3	S14 External LCD Segment 1 4	43	P11 Command Dial 1
4	S15 External LCD Segment 1 5	44	P12 Mein Switch
5	S16 External LCD Segment 1 6	45	P13 N. C.
6	S17 External LCD Segment 1 7	46	P20 Buzzer Drive Output
7	S18 External LCD Segment 1 8	47	P21 Pullup for Command Dial
8	S19 External LCD Segment 1 9	48	P22 HOLD - Vcc
9	S20 External LCD Segment 2 0	49	P23 KILL - Vcc
10	S21 External LCD Segment 2 1	50	P30 Focus Lock Switch
11	S22 EXternal LCD Segment 2 2	51	P31 3V Regulator Input
12	S23 External LCD Segment 2 3	52	P32 Buzzer Switch
13	S24 External LCD Segment 2 4	53	P33 Reset2 Output
14	S25 External LCD Segment 2 5	54	Vdd Vcc
15	S26 External LCD Segment 2 6	55	XT1 OscillatorT1 (32.768KHz)
16	S27 External LCD Segment 2 7	56	XT2 OscillatorT2 (32.768KHz)
17	S28 External LCD Segment 2 8	57	NC
18	S29 External LCD Segment 2 9	58	X1 Oscillator1 (4.19MHz)
19	S30 EXternal LCD Segment 3 0	59	X2 Oscillator2 (4.19MHz)
20	S31 External LCD Segment 3 1	60	P60 "MODE" "PS" Switch
21	COM0 External LCD Common ϕ	61	P61 "DRIVE" Switch
22	COM1 External LCD Common 1	62	P62 "AMP" "SELF" Switch
23	COM2 External LCD Common 2	63	P63 "COMPENSATION" "AF-Z" Switch
24	COM3 N. C.	64	P70 Illuminator Switch
25	BIAS N. C.	65	P71 "ISO" Switch
26	VLC0 3V Regulateter Output	66	P72 Pre-release Switch
27	VLC1 N. C.	67	P73 Power ON Signal
28	VLC2 N. C.	68	RESET Mein Switch
29	P40 Switch Common ϕ	69	S0 External LCD Segment 0
30	P41 Switch Common 1	70	S1 External LCD Segment 1
31	P42 LED Drive for Selftimer	71	S2 External LCD Segment 2
32	P43 EL Drive Terminal	72	S3 External LCD Segment 3
33	Vss D G N D	73	S4 EXternal LCD Segment 4
34	P50 Resetr Switch	74	S5 EXternal LCD Segment 5
35	P51 SA Terminal	75	S6 EXternal LCD Segment 6
36	P52 Release Input	76	S7 EXternal LCD Segment 7
37	P53 Rewind Switch	77	S8 EXternal LCD Segment 8
38	P00 Chip Select for B-MCU	78	S9 EXternal LCD Segment 9
39	P01 Serial Clock	79	S10 External LCD Segment 1 0
40	P02 Serial In	80	S11 External LCD Segment 1 1

μPD78P214GC-AB8 (B-MCU)



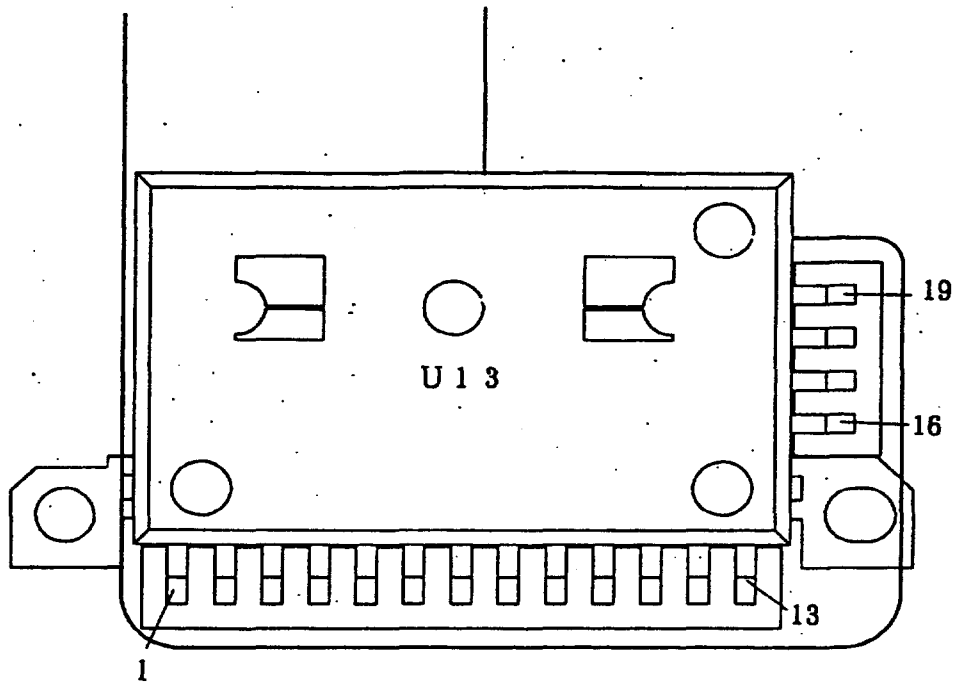
NO	Terminals	NO	Terminals
1	P64 ClosingCurtain Switch	33	P25 R 2 (52927) - O U T
2	P63 OpeningCurtain Magnet Drive	34	P26 B U S Y (μPD7225)
3	P62 ClosingCurtain Magnet Drive	35	P27 S e r i a l I n
4	P61 E ² PROM(U22) Chip Select	36	P30 R e m o t e T e r m i n a l (R x D)
5	P60 E ² PROM(U21) Chip Select	37	P31 R e m o t e T e r m i n a l (T x D)
6	R E S E T	38	P32 S e r i a l C l o c k
7	X2 O s c i l a t e r 2 (8 M H z)	39	P33 S e r i a l O u t
8	X1 O s c i l a t e r 1 (8 M H z)	40	E A V c c
9	V s s D G N D	41	V d d V c c
10	P57 S y n c. S w i t c h	42	A V s s D G N D
11	P56 C-MCU Chip Select	43	A V r e f D G N D
12	P55 R e l e a s e S i g n a l (A-MCU)	44	P75 R e l e a s e S w i t c h
13	P54 H S (M52927)	45	P74 R D Y O U T (M52927)
14	P53 N O T R E S E T (C-MCU)	46	P73 R 1 O U T (M52927)
15	P52 R e l e a s e I n h i b i t S i g n a l	47	P72 N. C.
16	P51 S e r i a l I / O b y S o f t w a r e	48	P71 N. C.
17	P50 S e r i a l C l o c k b y S o f t w a r e	49	P70 D G N D
18	P47 M i r r o r S i g n a l (A-MCU)	50	P34 F i l m M o t o r D r i v e S i g n a l 1
19	P46 F i l m P h o t o I n t e r r u p t e r D r i v e	51	P35 F i l m M o t o r D r i v e S i g n a l 2
20	P45 I l l u m i n a t o r D r i v e	52	P36 F i l m R e f e r e n c e S w i t c h
21	P44 S o l e n o i d D r i v e	53	P37 C h a r g e S w i t c h
22	P43 S e a q e n c e M o t o r B r e a k S i g n a l	54	P00 D 0 (M52927)
23	P42 S e a q e n c e M o t o r D r i v e S i g n a l	55	P01 D 5 (M52927)
24	V s s D G N D	56	P02 D 4 (M52927)
25	P41 A p t. P h o t o I n t e r r u p t e r D r i v e	57	P03 D 3 (M52927)
26	P40 A p t. M a g n e t D r i v e	58	P04 D 2 (M52927)
27	(A S T B) N. C.	59	P05 D 1 (M52927)
28	P20 V c c	60	P06 S T B (M52927)
29	P21 C S R S i g n a l f o r T T L	61	P07 N. C.
30	P22 A-MCU Chip Select	62	P67 V c c - H O L D
31	P23 F i l m P h o t o I n t e r r u p t e r O u t p u t	63	P66 C a m e r a B a c k S w i t c h
32	P24 A p t. P h o t o I n t e r r u p t e r O u t p u t	64	P65 F i l m D e t e c t i o n S w i t c h

M52926FP (CCD I/F)



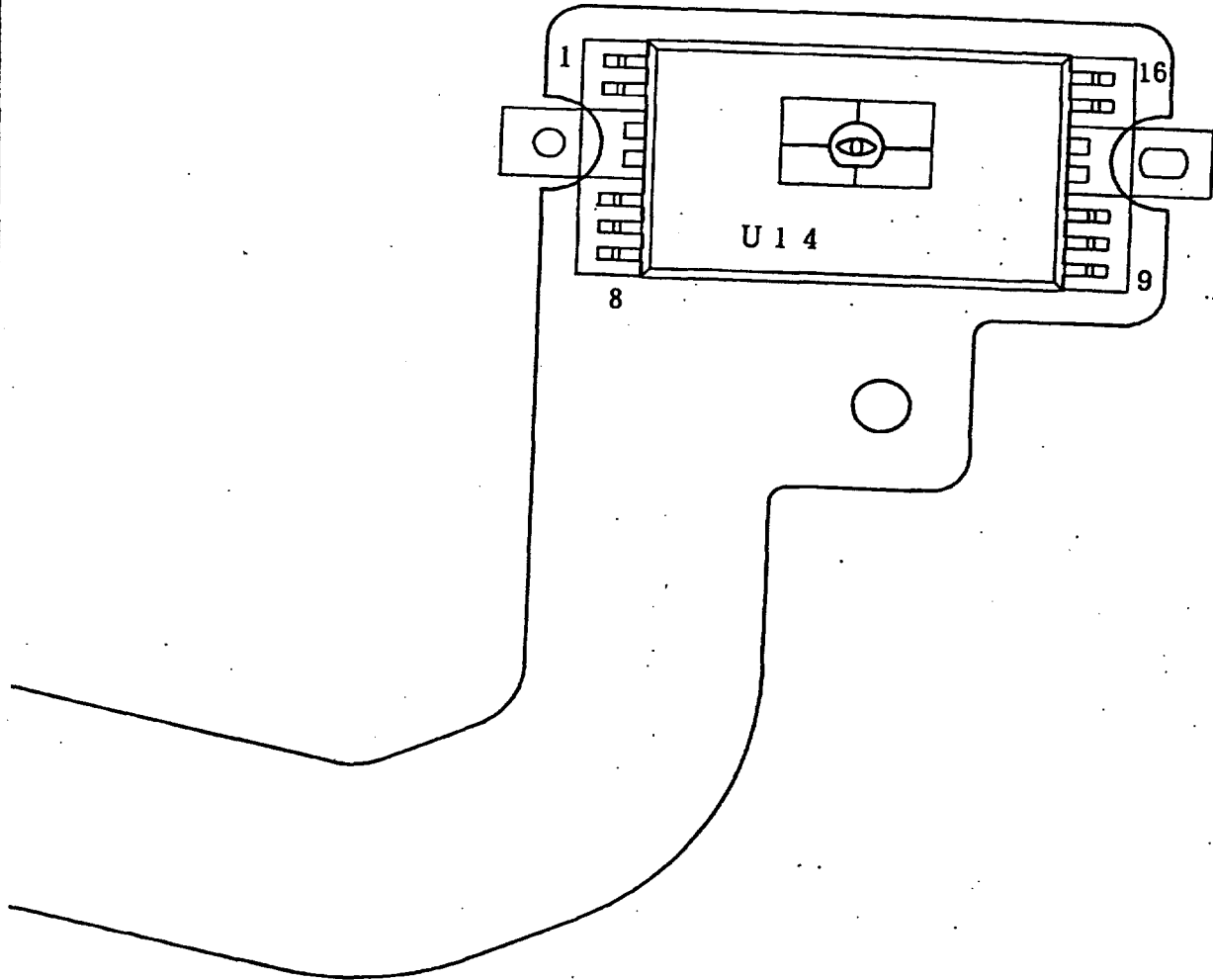
NO	Terminals	NO	Terminals
1	XIN GND	25	T3 N. C.
2	COUT N. C.	26	T2 N. C.
3	QMR2 CCD Clock Outout	27	VOUT2 CCD Signal
4	MON CCD AGC Output	28	AGND AGND
5	QMR1 CCD Clock Output	29	HL Gain Change Signal
6	QR CCD Clock Output	30	N. C.
7	N. C.	31	N. C.
8	N. C.	32	SBL Gain Change Signal
9	QTG CCD Clock Output	33	F34 Offset Detection Signal
10	QC CCD Clock Output	34	T1 N. C.
11	QCG CCD Clock Output	35	TRM Carrier Speed Control
12	SYC CCD A/D Signal	36	T4 N. C.
13	DGND1 DGND	37	T5 N. C.
14	VMON1 CCD AGC Output	38	T6 N. C.
15	MONIN CCD AGC Input	39	DVcc DVcc
16	SHC Sample Hold Signal	40	N. C.
17	VMON2 Monitor for "MONIN"	41	3MHz Clock In (3MHz)
18	Vcc12 +12V	42	GATE Clock Select
19	DGND2 DGND	43	N. C.
20	AVCC AVcc	44	DGND3 DGND
21	C2 Clamp Condenser	45	COUTE ExternalClock Source Control
22	C1 CCD Level Shift Signal	46	C/2C Select of 6MHz/3MHz
23	Vref RefernceVoltage for Clamp	47	INT CCD Storage Control
24	CCDIN CCD SensorSignal Input	48	XOUT N. C.

M52925FP (TTL IC)



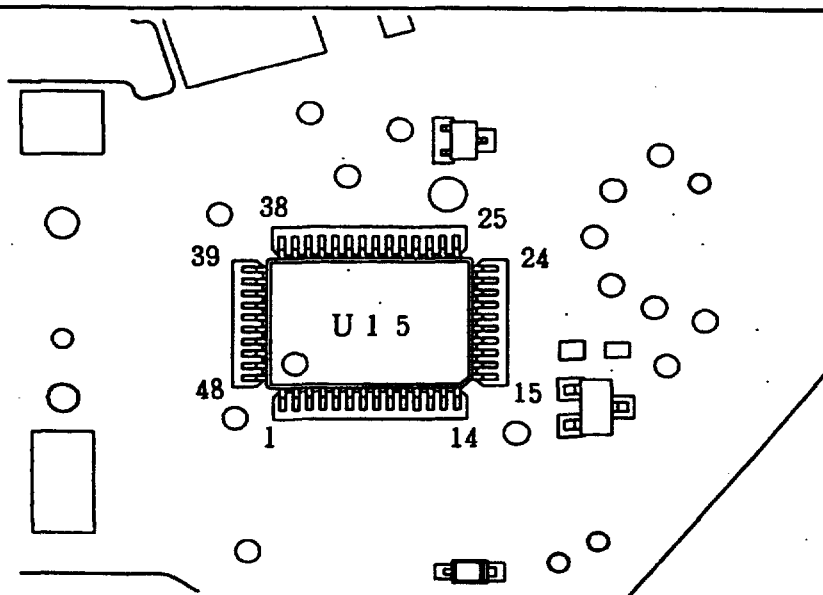
NO	Terminals	NO	Terminals
1	AGND	12	Vcc
2	Vref Reference Voltage for TTL	13	Is Integration Start Signal
3	DA TTL Gain Input	14	Lead for IC Positioning
4	AD Integration Voltage Output	15	Lead for IC Positioning
5	HC5 Is Condenser for Channel 5	16	CLK Clock for Channel Select
6	HC3 Is Condenser for Channel 3	17	CSR Channel Mode Select 1
7	HC1 Is Condenser for Channel 1	18	CSG Channel Mode Select 2
8	HC2 Is Condenser for Channel 2	19	DGND
9	HC4 Is Condenser for Channel 4	20	Lead for IC Positioning
10	SC Is Condenser for TTL	21	Lead for IC Positioning
11	STOP Flash Stop Signal	22	_____

M52924FP (MERTERING IC)



NO	Terminals	NO	Terminals
1	A9OUT N. C.	9	Vcc
2	Vref ReferenseVoltage for AMP	10	LS Level Select for Multi Output
3	N. C.	11	CHG Charge Signal for Mertering
4	N. C.	12	N. C.
5	N. C.	13	N. C.
6	Vout Mertering Output	14	N. C.
7	AGND	15	CS Channel Select Signal
8	DGND	16	CLK Channel Select Clock

M 5 2 9 2 7 F P (Accessory Inter Face)



NO	Terminals	NO	Terminals
1	D5 Latch Code 5	25	DB-HS DB Hand Shake Signal
2	STB Latch Timing Signal	26	VBRESS N. C.
3	BAT V b a t	27	VDD V d d
4	VCC V c c	28	RESOUT Reset Signal for C-MCU
5	IS Integration Start Signal	29	RES-2 Reset Signal for A, B-MCU
6	RDY Ready Terminal	30	RDYLED Ready LED Control Signal
7	TTL TTL Terminal	31	RDYOUT Ready Signal
8	STOP Stop Terminal	32	PRINT DB Print Signal
9	STOPC Stop-Condenser Terminal	33	X-TR2 Control Signal for Triac2
10	DB-HR PRE-release/release Signal	34	X-TR1 Control Signal for Triac1
11	H-DB DB Pre-release Signal	35	SCK B-MCU Serial Clock
12	R-DB DB Release Signal	36	S0 B-MCU Serial Out
13	RM-H Remote Pre-release Signal ϕ	37	HS B-MCU Hand Shake Signal
14	WAKE Power On Signal	38	DC-DC DC-DC Converter Control
15	H2-RM Remote Pre-release Signal ²	39	HOLD-1 DC-DC Conv. Control Terminal
16	H1-RM N. C.	40	KILL DC-DC Conv. Off Signal
17	R2-IN Accessory control Signal ²	41	RES-IN Battery Release Switch
18	R1-IN Accessory Release in-out	42	S1 B-MCU Serial In
19	GND	43	D0 Latch Code 0
20	R2-OUT Accessory Release Signal	44	GND
21	R1-OUT Accessory Control Signal ¹	45	D1 Latch Code 1
22	DB-SCK DB Serial Clock	46	D2 Latch CODE 2
23	DB-S0 DB Serial Out	47	D3 Latch Code 3
24	DB-S1 DB Serial In	48	D4 Latch Code 4

Main FPC Check Land List

Name	Terminals	Contact
TP-A5SEL	CCD I/F Gain Change	A-MCU 17p ~ CCD I/F 32p
TP-AD	TTL IC A/D Output of Integration	A-MCU 60p ~ TTL IC 4p
TP-AGND	AGND	
TP-ANI6	Voltage for Battery Check	A-MCU 62p ~ R4, R5
TP-ASCK	CCD I/F Offset Control	A-MCU 76p ~ CCD I/F 33p
TP-ASTB	3 MHz Output	A-MCU 44p ~ CCD I/F 41P
TP-AVCC	Avcc	
TP-BAT	Vbat	
TP-BCIN	Vbat	
TP-CHGSW	Charge Switch	~ B-MCU 33P
TP-CKDT	Battery Released Switch	~ ACC. (Accsesary) I/F 41p
TP-CLK	TTL IC Channel Select Clock	A-MCU 20p ~ TTL IC 16p
TP-CSG	TTL IC Mode Signal ϕ	A-MCU 22p ~ TTL IC 18p
TP-CSR	TTL IC Mode Signal 1	A-MCU 21p ~ TTL IC 17p
TP-DA	TTL IC Gain for TTL	A-MCU 68p ~ TTL IC 3p
TP-DCDC	DC-DC Converter Control Signal	ACC. I/F 38p ~ DC-DC CTL
TP-DGND	DGND	
TP-DX2	DX 2 (via Resistor)	A-MCU 3p ~ DX2
TP-DX3	DX 3 (via Resistor)	A-MCU 4p ~ DX3
TP-DX4	DX 4 (via Resistor)	A-MCU 80p ~ DX4
TP-DX5	DX 5 (via Resistor)	A-MCU 79p ~ DX5
TP-DX6	DX 6 (via Resistor)	A-MCU 5p ~ DX6
TP-FZAI	Film Detection Switch	~ B-MCU 64p
TP-GIRD	CCD Level Shift Clump Voltage	~ CCD I/F 21p
TP-H/R	DB Pre-release and Release Signal	DB Terminal ~ ACC. I/F 10p
TP-H/S	DB HandShake Signal	DB Terminal ~ ACC. I/F 25p
TP-H2RM	Pre-release Detection Signal	A-MCU 43p ~ ACC. I/F 15p
TP-HL	CCD I/F Gain Control	A-MCU 16p ~ CCD I/F 29p
TP-HOLDVCC	DC-DC Converter Control Signal	C-MCU 48p ~ B-MCU 62p ~ ACC. I/F 39p
TP-HS	Accsesary I/F Hand Shake Signal	B-MCU 13p ~ ACC. I/F 37p
TP-IN1	Film Motor Drive Signal 1	B-MCU 51p ~ U32 6p
TP-IN2	Film Motor Drive Signal 2	B-MCU 50p ~ U32 7p
TP-INT	CCD Storage Control Signal	CCD I/F 47p ~ A-MCU 15p
TP-INTK	Seaqence Photo Interrupter (K)	~ B-MCU 19p
TP-INTP	Seaqence Photo Interrupter Output	~ B-MCU 31p
TP-IO	10pin conecter I/O	~ ACC I/F 17p
TP-IS	Integral Start Signal	TTLIC 13p ~ ACC. I/F 5p
TP-KILLVCC	DC-DC Converter Off signal	ACC. I/F 40p ~ C-MCU 49p
TP-MIRSIG	Mirror Signal	A-MCU 72p ~ B-MCU 18p
TP-MONIN	D/A Output forf AF	A-MCU 67p ~ CCD I/F 15p
TP-PGND	PGND	
TP-PRN	DB Print Terminal	~ ACC. I/F 32p

TP-R1OUT	Accessory I/F Control Signal	B-MCU 46p ~ACC. I/F 21p
TP-R2OUT	Accessory I/F Release Signal	B-MCU 33p ~ACC I/F 20p
TP-RDYOUT	LED of Ready	~ACC. I/F 31p
TP-RESET1	Reset Signal for C-MCU	ACC. I/F 28p ~C-MCU 68p
TP-RESET2	Reset Signal for A-MCU and C-MCU	U27 ~ACC. I/F 29p ~B-MCU 6p ~A-MCU 7p
TP-RLS	10pin Conecter Release Signal	~ACC. I/F 15p
TP-RLSINH	Release Inhibit Signal	A-MCU 19p ~B-MCU 15p
TP-RLSSIG	Release Detection Signal	A-MCU 73p ~B-MCU 12p
TP-RQHOLD	Vcc Hold Signal	B-MCU 14p ~C-MCU 36p
TP-PREF	Reference Switch	~B-MCU 32p
TP-RX	10pin Conecter ReceiveSignal (via Diode)	~B-MCU 16p ~ACC I/F 14p ~C-MCU 67p
TP-SCLK	DB Serial Clock Terminal	~ACC. I/F 22p
TP-SIN	DB Sertuial In Terminal	~ACC. I/F 24p
TP-SOLESW	Solenoid Drive Signal	~ B-MCU 21p
TP-SOUT	DB Serial Out Terminal	~ACC. I/F 23p
TP-SQ1	Seaqence Motor Drive Signal	~ B-MCU 23p
TP-SQ2	Seaqence Motor Break Signal	~B-MCU 22p
TP-STOP	Flash Stop Signal	TTL IC 11p~Hotshue
TP-SYC	H AGC/CCD	A-MCU 77p ~CCD I/F 17p
TP-SYNC5	Sync. Switch	~B-MCU 10p
TP-SYNC11	Gate of Triac for Sync. Terminal	~ACC. I/F 34p
TP-TPHSW	Pre-release Switch	~ACC. I/F 15p
TP-TX	10pin Conecter Transmission Signal	~B-MCU 37p
TP-URASW	Camera Back Switch	~B-MCU 63p
TP-VCC	V c c	
TP-VOUT2	CCD Signal Output	CCD I/F 27p ~A-MCU 63p
TP-VREF	TTL IC Reference Voltage	TTL IC 2p ~A-MCU 59p
TP-WUP	10pin Conecter "WAKE UP" Signal	~ACC. I/F 13p
TP-12V	12V	
TP-1MG	Opening Curtain Magnet	~B-MCU 2p
TP-2MG	Closing Curtain Magnet	~B-MCU 3p
TP-2CSW	Closing Curtaun Switch	~B-MCU 1p
WL-AF1	Power 1 for AF PhotoInterrupter	Q7~AFPINT LED (A)
WL-AF2	Power 2 for AF PhotoInterrupter	Q7~AFPINT (forOP-Amp)
WL-AF3	AF Photo Interrupter Output	~A-MCU 74p
WL-AF4	GND for PhotoInterrupter	~D G N D
WL-AF5	AF PhotoInterrupter LED (K)	~R9
WL-AFM1	AF Motor Drive Signal 1	AF Motor ~U31 11p
WL-AFM2	AF Motor Drive Signal 2	AF Motor ~U31 13p
WL-PGND	PGND for AF Motor	~P G N D

FPC Check Land LIST (#1002~#1011)

名 称	内 容	接 続 先
Power F P C		
TP5-R502	Seaqence Motor Break Signal	Q503(B) ~R502 ~TP-SQ2
TP5-R504	Seaqence Motor Drive Signal	Q502(B) ~Q501~TP-SQ1
WL5-BAT1	Battery Voltage for Solenoid	Solenoid~XL5-BAT
WL5-CHARGE	Charge Switch	~AS5-CHGSW
WL5-COIL	Solenoid	~Q504(D)
WL5-DENCHI1	Battery release Switch	~AS5-CKDT
WL5-DGND1	D G N D	
WL5-DGND2	D G N D	
WL5-FZAI	Film Detection Switch	~AS5-FZAI
WL5-INT/R	Seaqence Photo Interrupter LED	~R501
WL5-INTP2	Seaqence Photo Intertupter Output	~ASX5-INTP
WL5-KYUSKIJN	Reference Switch	~AS5-RREF
WL5-OUT1	Film Motor	~U32 11p
WL5-OUT2	Film Motor	~U32 13p
WL5-PGND1	P G N D	
WL5-PGND2	Seaqence Motor	~PGND
WL5-SEQMOT	Seaqence Motor	~Q503(D)
WL5-URABT	Camera Back Switch	~AS5-URASW
WL5-VCC	Power for Photo Interrupter	~Vcc
WL5-X	Sync. Switch (Shutter)	~AS5-SYNC
Top Cover F P C		
TP7-5	Triac Drive Signal 1	R712~D701(A)
TP7-6	Triac Drive Signal 2	D701(K) ~D703(G)
TP7-8	Command Dial 1	~C-MCU 43p
TP7-13	AE Lock Switch	~WL7-ABL ~C-MCU 50p
TP7-14	Clock (for C-MCU)	X702~C-MCU 55p
TP7-15	"MODE" "Ps" Switch	~C-MCU 60p
TP7-16	"DRIVE" "SYNC" Switch	~C-MCU 61p
TP7-17	"測光" "SELF" Switch	~C-MCU 62p
TP7-18	"補正" "AF-Z" Switch	~C-MCU 63p
TP7-19	Illuminater Switch	~C-MCU 64p
TP7-20	"ISO" Switch	~C-MCU 65p
TP7-22	Set Switch Common 1	~C-MCU 30p
TP7-23	Set Switch Common ϕ	~C-MCU 29p
TP7-25	L C D Common ϕ	C-MCU 23p ~外部LCD 18p21p
TP7-26	L C D Common 1	C-MCU 22p ~外部LCD 19p22p
TP7-27	L C D Common 2	C-MCU 21p~外部LCD 20p23p
TP7-28	Self-Timer L E D (K)	~R705~C-MCU 31p
TP7-29	E L Drive Signal 1	Q703(B) ~R713
TP7-30	E L Drive Signal 2	C713~R714
TP7-31	E L Drive Output	L701 8p ~EL
TP7-D0	Command Dial ϕ	~C-MCU 42p

TP7-HAN	Pre-release Switch	~C-MCU 66p
TP7-IN	3 V Regulator Input	~C-MCU 51p
TP7-L4	Segment 4	C-MCU 2p~外部LCD 4p
TP7-L6	Segment 6	C-MCU 80p ~外部LCD 6p
TP7-L8	Segment 8	C-MCU 78p ~外部LCD 8p
TP7-L10	Segment 10	C-MCU 76p ~外部LCD 10p
TP7-L12	Segment 12	C-MCU 74p ~外部LCD 12p
TP7-L14	Segment 14	C-MCU 72p ~外部LCD 14p
TP7-L16	Segment 16	C-MCU 70pn~外部LCD 16p
TP7-L24	Segment 24	C-MCU 20p ~外部LCD 24p
TP7-L26	Segment 26	C-MCU 18p ~外部LCD 26p
TP7-L28	Segment 28	C-MCU 16p ~外部LCD 28p
TP7-L30	Segment 30	C-MCU 14p ~外部LCD 30p
TP7-L32	Segment 32	C-MCU 12p ~外部LCD 32p
TP7-L34	Segment 34	C-MCU 10p ~外部LCD 34p
TP7-L36	Segment 36	C-MCU 8p~外部LCD 36p
TP7-L38	Segment 38	C-MCU 6p~外部LCD 38p
TP7-L40	Segment 40	C-MCU 4p~外部LCD 40p
TP7-OUT	3 V Regulator Output	~C-MCU 26p
TP7-R714	E L Drive Control Signal	C-MCU 32p ~R714
TP7-RDY	Ready Terminal(Hot Shue)	~AS7-RDY ~ACC. I/F 6p
TP7-RESET	Reset Switch	~C-MCU 34p
TP7-REW	Rewind Switch	~C-MCU 37p
TP7-RLS	Release Switch	~AS7-RLS ~B-MCU 44p
TP7-STOP	Stop Terminal(Hot Shue)	~AS7-STOP~ACC. I/F 9p
TP7-SYNCR0	Sync. Terminal (Hot Shue)	~D703(T1)
TP7-TTL	T T L Terminal (Hot Shue)	~AS7-TTL ~ACC. I/F 7p
WL7-AEL	AE Lock Switch	~TP7-3 ~C-MCU 50p
WL7-BZ1	Buzzer	~DGND
WL7-BZ2	Buzzer	~C-MCU 46p
WL7-DGND1	D G N D	
WL7-DGND2	D G N D	
WL7-DGND3	D G N D	
WL7-DGND4	D G N D	
测光 F P C		
TP8-AGND	A G N D	
TP8-CHG	Charge Signal for AMP (U14 11p)	~AS8-CHG ~A-MCU 25p
TP8-CLK	Clock for Channel Select(U14 16p)	~AS8-CLK ~A-MCU 24p
TP8-CS	CS Signal for AMP(U14 15p)	~AS8-CS~A-MCU 27p
TP8-LS	LS Signal for AMP(U14 11p)	~AS8-LS~A-MCU 26p
TP8-VOUT	Mertering Output(U14 6p)	~AS8-VOUT~A-MCU 58p
TP8-VREF	AMP Referende Voltage(U14 2p)	~AS8-VREF~A-MCU 57p

Internal LCD FPC		
WL10-ILMK	Illuminator LED (K)	~R106
WL10-LEDCOM	Finder LED Common (A)	~AS10-BAT
WL10-RDYK	Ready LED (K)	~R107
WL10-SBK	Flash Recomendate LED (K)	~R108
10pin Connector FPC		
TP11-308K	Remote Terminal V c c	XL11-VCC~D308(K)
TP11-309K	Remote Terminal Receive Signal	XL11-RX ~D308(K)
TP11-310K	Remote Terminal V b a t	XL11-VBAT1~D310(K)
TP11-BAT	Battery Voltage	D310(A) ~XL11-VBAT
TP11-HAN	Check Land for Pre-release Switch	AS11-HAN~半押しスイッチ
TP11-HOLDVCC	Check Land for DC-DC ControlSignal	AS11-HVCC ~ACC. I/F 39p
TP11-IS	Check Land for IS	AS11-IS ~ACC. I/F 5p
TP11-PGND	P G N D	
TP11-RMRX	Remote Terminal Receive Signal	D308(A) ~U24 1p
TP11-RMTX	Remote Terminal Transmit Signal	XL11-TX ~Q307(C)
TP11-RX	Remote Terminal Receive Signal	U24 4p~AS-RX
TP11-SGND	DGND for Accesasry Communication	
TP11-SYNC	Sync. Terminal	~D307(T1)
TP11-SYNCSW	Triac Control Signal	Q306(B) ~AS11-SYNC
TP11-TX	Remote Terminal Transmit Signal	Q307(B) ~AS11-TX
TP11-VBAT	Check Land for Battery Voltage	~TP11-BAT
TP11-VCC	V c c	D308(A) ~Vcc
TP11-VDD	V d d	U24 5p~Vdd

ADDRESS	CONTENTS	MP1	MP2	MP3	MP4	MP5	MP5.1	MP6	REF. ADJUSTMENT DATA
		92/04/15	92/04/23	92/05/27	92/07/17	92/09/24	92/10/15	93/03/05	
0	AF ADJUSTMENT DATA	----	----	----	----	----	----	----	0 ~ 64
245	AF ADJUSTMENT DATA	----	----	----	----	----	----	----	0 ~ 64
256	AE ADJUSTMENT DATA CH1	----	----	----	----	----	----	----	90 ~ 110
257	AE ADJUSTMENT DATA CH2	----	----	----	----	----	----	----	105 ~ 135
258	AE ADJUSTMENT DATA CH3	----	----	----	----	----	----	----	105 ~ 135
259	AE ADJUSTMENT DATA CH4	----	----	----	----	----	----	----	105 ~ 135
260	AE ADJUSTMENT DATA CH5	----	----	----	----	----	----	----	105 ~ 135
261	AE ADJUSTMENT DATA CH6	----	----	----	----	----	----	----	90 ~ 110
262	AE ADJUSTMENT DATA CH7	----	----	----	----	----	----	----	90 ~ 110
263	AE ADJUSTMENT DATA CH8	----	----	----	----	----	----	----	90 ~ 110
264	AE ADJUSTMENT DATA GAMMA	----	----	----	----	----	----	----	110 ~ 130
265	AE ADJUSTMENT DATA OFFSET	----	----	----	----	----	----	----	105 ~ 125
266	TTL ADJUSTMENT DATA NON CH1	----	----	----	----	----	----	----	65 ~ 95
267	TTL ADJUSTMENT DATA NON CH2	----	----	----	----	----	----	----	65 ~ 95
268	TTL ADJUSTMENT DATA NON CH3	----	----	----	----	----	----	----	65 ~ 95
269	TTL ADJUSTMENT DATA NON CH4	----	----	----	----	----	----	----	65 ~ 95
270	TTL ADJUSTMENT DATA NON CH5	----	----	----	----	----	----	----	65 ~ 95
271	TTL ADJUSTMENT DATA NON GAMMA	----	----	----	----	----	----	----	120 ~ 140
272	TTL ADJUSTMENT DATA CH1	----	----	----	----	----	----	----	130 ~ 150
273	TTL ADJUSTMENT DATA CH2	----	----	----	----	----	----	----	130 ~ 150
274	TTL ADJUSTMENT DATA CH3	----	----	----	----	----	----	----	130 ~ 150
275	TTL ADJUSTMENT DATA CH4	----	----	----	----	----	----	----	130 ~ 150
276	TTL ADJUSTMENT DATA CH5	----	----	----	----	----	----	----	130 ~ 150
277	TTL ADJUSTMENT DATA GAMMA	----	----	----	----	----	----	----	130 ~ 150
278	CAMERA CONTROL DATA	10	10	10	10	10	10	10	-----
279	CAMERA CONTROL DATA	124	124	124	124	124	124	124	-----

ADDRESS	CONTENTS	NP1	NP2	NP3	NP4	NP5	NP5.1	NP6	REF. ADJUSTMENT DATA
		92/04/15	92/04/23	92/05/27	92/07/17	92/08/24	92/10/15	93/03/05	
280	B. C ADJUSTMENT DATA	----	----	----	----	----	----	----	142~165
281	B. C ADJUSTMENT DATA	----	----	----	----	----	----	----	133~155
282	AF ADJUSTMENT DATA	----	----	----	----	----	----	----	35~73
283	CAMERA CONTROL DATA	0	0	0	0	0	0	0	-----
284	CAMERA CONTROL DATA	0	0	0	0	0	0	0	-----
285	CAMERA CONTROL DATA	0	0	0	0	0	0	0	-----
286	AF ADJUSTMENT DATA	----	----	----	----	----	----	----	NO REF. DATA
309	AF ADJUSTMENT DATA	----	----	----	----	----	----	----	NO REF. DATA
310	AF ADJUSTMENT DATA	----	----	----	----	----	----	----	NO REF. DATA
317	AF ADJUSTMENT DATA	----	----	----	----	----	----	----	NO REF. DATA
318	AF ADJUSTMENT DATA	----	----	----	----	----	----	----	NO REF. DATA
327	AF ADJUSTMENT DATA	----	----	----	----	----	----	----	NO REF. DATA
328	CAMERA CONTROL DATA	40	40	40	40	40	40	40	-----
329	CAMERA CONTROL DATA	0	0	0	0	0	0	64	-----
330	CAMERA CONTROL DATA	110	110	110	110	110	110	110	-----
331	CAMERA CONTROL DATA	8	8	8	8	8	8	8	-----
332	CAMERA CONTROL DATA	10	10	10	10	10	10	10	-----
333	CAMERA CONTROL DATA	50	50	50	50	50	50	50	-----
334	CAMERA CONTROL DATA	48	48	49	50	50	50	50	-----
335	CAMERA CONTROL DATA	110	110	110	110	110	110	110	-----
336	CHECK SUN DATA	----	----	----	----	----	----	----	NO REF. DATA
After this : product line data									

F90 (N90) [B] -MCU EEPROM DATA

VER. 1993-07-01

ADDRESS	CONTENTS	NP1	NP2	NP2A	NP3	NP4	NP5	NP6	REF. ADJUSTMENT DATA
		92/04/18	92/05/26	92/07/14	92/07/20	92/09/11	92/10/15	93/02/15	
0 H	CAMERA CONTROL DATA	95	95	95	95	95	95	95	-----
0 L	M 1/8000 ADJUSTMENT DATA	-----	-----	-----	-----	-----	-----	-----	NO REF. DATA
1 H	CAMERA CONTROL DATA	124	124	128	128	128	128	128	-----
1 L	CAMERA CONTROL DATA	30	30	30	30	30	30	30	-----
2 H	CAMERA CONTROL DATA	70	70	70	70	70	70	70	-----
2 L	CAMERA CONTROL DATA	80	80	80	80	80	80	80	-----
3 H	CAMERA CONTROL DATA	75	75	75	75	75	75	75	-----
3 L	CAMERA CONTROL DATA	60	60	60	60	60	60	60	-----
4 H	CAMERA CONTROL DATA	255	255	255	255	255	255	255	-----
4 L	CAMERA CONTROL DATA	10	10	10	10	10	10	10	-----
5 H	CAMERA CONTROL DATA	0 / 50	0 / 50	50	50	50	50	50	-----
5 L	CAMERA CONTROL DATA	40	40	40	40	40	40	40	-----
6 H	CAMERA CONTROL DATA	10	10	10	10	10	10	10	-----
6 L	CAMERA CONTROL DATA	10	10	10	10	10	10	10	-----
7 H	CAMERA CONTROL DATA	62	62	62	62	62	62	62	-----
7 L	CAMERA CONTROL DATA	192	192	192	192	192	192	192	-----
8 H	CAMERA CONTROL DATA	100	100	100	100	100	100	100	-----
8 L	ERROR CODE INDICATION CTRL.	0	0	0	0	0	0	0	1: INDICATE
9 H	FILM LEADER CTRL.	208	208	208	208	208	208	208	0: LEAVE FILM LEADER
9 L	FILM LEADER CTRL.	7	7	7	7	7	7	7	0: LEAVE FILM LEADER
10 H	CAMERA CONTROL DATA	0	0	0	0	8	8	8	-----
10 L	CHECK SUN DATA	-----	-----	-----	-----	-----	-----	-----	NO REF. DATA
11 H	CAMERA SETTING DATA	-----	-----	-----	-----	-----	-----	-----	-----
24 H	CURRENT ERROR CODE	0	0	0	0	0	0	0	-----
24 L	NEAREST ERROR CODE	0	0	0	0	0	0	0	-----

AFTER THIS CAMERA SETTING DATA, PHOTO DATA

F90 (N90) [A]-MCU EEPROM DATA

VER. 1993-01-18

ADDRESS	CONTENTS	FIXED VALUE (DATE AS : CPU VERSION)					REF. ADJUSTMENT DATA
		92/04/15	92/04/23	92/05/27	92/07/17		
0	AF ADJUSTMENT DATA	----	----	----	----		0 ~ 64
1	1	1	1	1	1		1
245	AF ADJUSTMENT DATA	----	----	----	----		0 ~ 64
256	AE ADJUSTMENT DATA CH1	----	----	----	----		90 ~ 110
257	AE ADJUSTMENT DATA CH2	----	----	----	----		105 ~ 135
258	AE ADJUSTMENT DATA CH3	----	----	----	----		105 ~ 135
259	AE ADJUSTMENT DATA CH4	----	----	----	----		105 ~ 135
260	AE ADJUSTMENT DATA CH5	----	----	----	----		105 ~ 135
261	AE ADJUSTMENT DATA CH6	----	----	----	----		90 ~ 110
262	AE ADJUSTMENT DATA CH7	----	----	----	----		90 ~ 110
263	AE ADJUSTMENT DATA CH8	----	----	----	----		90 ~ 110
264	AE ADJUSTMENT DATA GAMMA	----	----	----	----		110 ~ 130
265	AE ADJUSTMENT DATA OFFSET	----	----	----	----		105 ~ 125
266	TTL ADJUSTMENT DATA MON CH1	----	----	----	----		65 ~ 95
267	TTL ADJUSTMENT DATA MON CH2	----	----	----	----		65 ~ 95
268	TTL ADJUSTMENT DATA MON CH3	----	----	----	----		65 ~ 95
269	TTL ADJUSTMENT DATA MON CH4	----	----	----	----		65 ~ 95
270	TTL ADJUSTMENT DATA MON CH5	----	----	----	----		65 ~ 95
271	TTL ADJUSTMENT DATA MON GAMMA	----	----	----	----		120 ~ 140
272	TTL ADJUSTMENT DATA CH1	----	----	----	----		130 ~ 150
273	TTL ADJUSTMENT DATA CH2	----	----	----	----		130 ~ 150
274	TTL ADJUSTMENT DATA CH3	----	----	----	----		130 ~ 150
275	TTL ADJUSTMENT DATA CH4	----	----	----	----		130 ~ 150
276	TTL ADJUSTMENT DATA CH5	----	----	----	----		130 ~ 150
277	TTL ADJUSTMENT DATA GAMMA	----	----	----	----		130 ~ 150
278	CAMERA CONTROL DATA	10	10	10	10		-----
279	CAMERA CONTROL DATA	124	124	124	124		-----

ADDRESS	CONTENTS	FIXED VALUE (DATE AS : CPU VERSION)				REF. ADJUSTMENT DATA
		92/04/15	92/04/23	92/05/27	92/07/17	
280	B.C ADJUSTMENT DATA	-----	-----	-----	-----	142~165
281	B.C ADJUSTMENT DATA	-----	-----	-----	-----	133~155
282	AF ADJUSTMENT DATA	-----	-----	-----	-----	35~ 73
283	CAMERA CONTROL DATA	0	0	0	0	-----
284	CAMERA CONTROL DATA	0	0	0	0	-----
285	CAMERA CONTROL DATA	0	0	0	0	-----
286	AF ADJUSTMENT DATA	-----	-----	-----	-----	NO REF. DATA
309	AF ADJUSTMENT DATA	-----	-----	-----	-----	NO REF. DATA
310	AF ADJUSTMENT DATA	-----	-----	-----	-----	NO REF. DATA
317	AF ADJUSTMENT DATA	-----	-----	-----	-----	NO REF. DATA
318	AF ADJUSTMENT DATA	-----	-----	-----	-----	NO REF. DATA
327	AF ADJUSTMENT DATA	-----	-----	-----	-----	NO REF. DATA
328	CAMERA CONTROL DATA	40	40	40	40	-----
329	CAMERA CONTROL DATA	0	0	0	0	-----
330	CAMERA CONTROL DATA	110	110	110	110	-----
331	CAMERA CONTROL DATA	8	8	8	8	-----
332	CAMERA CONTROL DATA	10	10	10	10	-----
333	CAMERA CONTROL DATA	50	50	50	50	-----
334	CAMERA CONTROL DATA	48	48	49	50	-----
335	CAMERA CONTROL DATA	110	110	110	110	-----
336	CHECK SUM DATA	-----	-----	-----	-----	NO REF. DATA
After this : product line data						

F90 (N90) [B] -MCU EEPROM DATA

VER. 1993-01-18

ADDRESS	CONTENTS	FIXED VALUE (DATE AS : CPU VERSION)				REF. ADJUSTMENT DATA
		92/04/16	92/05/26	92/07/14	92/07/20	
0 H	CAMERA CONTROL DATA	95	95	95	95	-----
0 L	M 1/8000 ADJUSTMENT DATA	-----	-----	-----	-----	NO REF. DATA
1 H	CAMERA CONTROL DATA	124	124	128	128	-----
1 L	CAMERA CONTROL DATA	30	30	30	30	-----
2 H	CAMERA CONTROL DATA	70	70	70	70	-----
2 L	CAMERA CONTROL DATA	80	80	80	80	-----
3 H	CAMERA CONTROL DATA	75	75	75	75	-----
3 L	CAMERA CONTROL DATA	60	60	60	60	-----
4 H	CAMERA CONTROL DATA	255	255	255	255	-----
4 L	CAMERA CONTROL DATA	10	10	10	10	-----
5 H	CAMERA CONTROL DATA	50	50	50	50	-----
5 L	CAMERA CONTROL DATA	40	40	40	40	-----
6 H	CAMERA CONTROL DATA	10	10	10	10	-----
6 L	CAMERA CONTROL DATA	10	10	10	10	-----
7 H	CAMERA CONTROL DATA	62	62	62	62	-----
7 L	CAMERA CONTROL DATA	192	192	192	192	-----
8 H	CAMERA CONTROL DATA	100	100	100	100	-----
8 L	ERROR CODE INDICATION CTRL.	0	0	0	0	1: INDICATE
9 H	FILM LEADER CTRL.	208	208	208	208	0: LEAVE FILM LEADER
9 L	FILM LEADER CTRL.	7	7	7	7	0: LEAVE FILM LEADER
10 H	-----	0	0	0	0	-----
10 L	CHECK SUM DATA	-----	-----	-----	-----	NO REF. DATA
11 H	CAMERA SETTING DATA	-----	-----	-----	-----	-----
24 H	CURRENT ERROR CODE	0	0	0	0	-----
24 L	NEAREST ERROR CODE	0	0	0	0	-----

AFTER THIS CAMERA SETTING DATA, PHOTO DATA

SEQUENCE ERROR

- Sequence error code can be monitored by external LCD after rewriting data at address 8L on EEPROM for B-MCU from 0 to 1.
- At address 24H on EEPROM B-MCU current error code is written in, and at address 24L on EEPROM for B-MCU the error code with the nearest error code is written in.

エラーコード	CONTENTS
Err 01	Rear curtain SW had already turned on, before mirror up.
Err 02	Charge SW had already turned on, before mirror up.
Err 03	Rear curtain SW does not turn on, when recovering Err 02.
Err 04	Release operation, after Err 21.
Err 14	Charge SW does not turn on, being mirror up.
Err 21	Sync sw does not turn on, while shutter operation.
Err 22	Rear curtain SW does not turn on, after shutter operation.
Err 23	Rear curtain SW does not turn on, when recovering Err 01.
Err 32	Charge SW does not turn off, when turn on solenoid (1st time).
Err 33	Charge SW does not turn on, being mirror down.
Err 34	Charge SW does not turn off, when turn on solenoid (2nd time).

CHECK SUM ERROR

- Sequence error code can be monitored by external LCD after rewriting data at address 8L on EEPROM for B-MCU from 0 to 1.

ERROR CODE	CONTENTS
Err SA	Check sum error EEPROM for A-MCU.
Err Sb	Check sum error EEPROM for B-MCU.

N i k o n F 9 0 / N 9 0

[1] 檢 查 規 格 ----- R 1
Inspection standards

[2] 工 具 ----- T 1
Tool



[1] I n s p e c t i o n s t a n d a r d s

Item	Judgement standards	Remarks
Shutter accuracy 1). Allowance difference 2). Irregular	(TV) 1 / 8 0 0 0 : ± 0 . 6 5 1 / 4 0 0 0 : ± 0 . 4 0 1 / 2 0 0 0 : ± 0 . 2 5 1 / 1 0 0 0 ~ 3 0 : ± 0 . 2 0 1 / 8 0 0 0 : ± 0 . 5 5 1 / 4 0 0 0 : ± 0 . 3 0 1 / 2 0 0 0 ~ 3 0 : ± 0 . 2 5	Exp. mode : M, S Shutter tester
Exposure accuracy 1). Allowance difference 2). Irregular	(EV) 1 / 6 0 0 0 or more : ± 0 . 9 0 Others : ± 0 . 6 5 1 / 6 0 0 0 or more : ± 0 . 7 0 Others : ± 0 . 3 0	Exp. mode : M, A, P, S, P s Shutter tester
Aperture control 1). Allowance difference 2). Irregular	(AV) LV 1 2 , F 5 . 6 1 / 1 2 5 , I S O 1 0 0 : ± 0 . 5 0 Other combination : ± 0 . 6 0 LV 1 2 , F 5 . 6 1 / 1 2 5 , I S O 1 0 0 : ± 0 . 5 0 Other combination : ± 0 . 5 0	Exp. mode : P, S Shutter tester
AF accuracy	(μm) L 1 , L 9 : 0 ± 9 0 Others : 0 ± 7 5 L x x (ver. Hol.) : 0 ± 5 0 (mrad) Y a w : 0 ± 6 P i t c h : 0 ± 1 5	PC F90(N90) AF tool
General light leakage Light leakage between shutter curtain	Practically no light leakage at 400,000lx min. (ISO 400) Practically no light leakage at 200,000lx min. (ISO 400)	Lens cap Sun light or light leakage tester Color film or Try I 50/1.4 Light leakage tester

Item	Judgement standards	Remarks
<p>Picture size</p> <p>Separation between frames</p> <p>Picture position</p> <p>Vertical difference</p> <p>File scratch</p>	<p style="text-align: right;">(mm)</p> <p>ver. : $24 \begin{smallmatrix} +0.4 \\ -0 \end{smallmatrix}$ Hol. : $36 \begin{smallmatrix} +0.4 \\ -0 \end{smallmatrix}$</p> <p>$2 \pm 1$</p> <p>$A = 0.5 \pm 1$</p> <p>$H1 - H2 \leq 0.4$</p> <p>Scratch should not be seen when you enlarge the file.</p>	<p>The diagram shows a film frame with a width dimension of 2.75 mm. Two vertical height dimensions are indicated: H1 for the upper portion and H2 for the lower portion. A horizontal dimension A is shown for a specific feature on the left side of the frame.</p>
<p>Battery check</p> <p>8 sec hold level</p> <p>0 sec hold level</p> <p>Shutter release lock level</p>	<p>$4.8V \leq V_{BAT} < 5.1V$</p> <p>$4.5V < V_{BAT} < 4.8V$</p> <p>less than 4.5V</p>	<p>Regulated DC power source</p>
<p>Current consumption</p>	<p>Main sw OFF : 50 μA</p> <p>Pre-release sw OFF : 100 μA</p> <p>Pre-release sw ON : 170 mA</p> <p>Illuminator ON : 200 mA</p>	<p>Regulated DC power source</p> <p>5.5V + 0.8 Ω</p>

〔 2 〕 工 具 T O O L

工具番号 Tool No.	名 称 Name of tool	区 分
<p>J 1 8 2 3 4 A B C D</p>	<p>点検調整用ディスク A : NEC用 5" B : " 3.5" C : IBM用 5" D : " 3.5" (1.44M format)</p>	<p>A</p>
<p>J 1 8 2 3 0</p>	<p>YAW、PITCH工具</p>	<p>A</p>
<p>J 1 8 2 3 2</p>	<p>AFチャート (縦、横)</p>	<p>A</p>
<p>J 1 1 2 1 0</p>	<p>AE SPD 位置だしドライバー</p>	<p>B</p>
<p>J 1 8 2 3 4 A B C D</p>	<p>Checking & adjustment disk for F90/N90 A : For 5" (NEC) B : For 3.5" (NEC) C : For 5" (IBM) D : For 3.5" (IBM) (1.44M format)</p>	<p>A</p>
<p>J 1 8 2 3 0</p>	<p>YAW、PITCH Tool</p>	<p>A</p>
<p>J 1 8 2 3 2</p>	<p>AF chart</p>	<p>A</p>
<p>J 1 1 2 1 0</p>	<p>AE SPD positioning screw driver</p>	<p>B</p>