

OLYMPUS
OM 4
REPAIR MANUAL



OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN

<http://olympus.dementia.org/hardware>

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OM 4 REPAIR MANUAL

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NOTE: Some of the information in this manual is specific to either early or later production cameras and may not apply to the model you are working on. Wiring and circuit diagrams are supplied for both early (ROM 1) and later (ROM 4) models.

A. GENERAL OUTLINE

1. Outline of Product






Model name : OLYMPUS OM-SYSTEM OM-4
House code : MDY-2

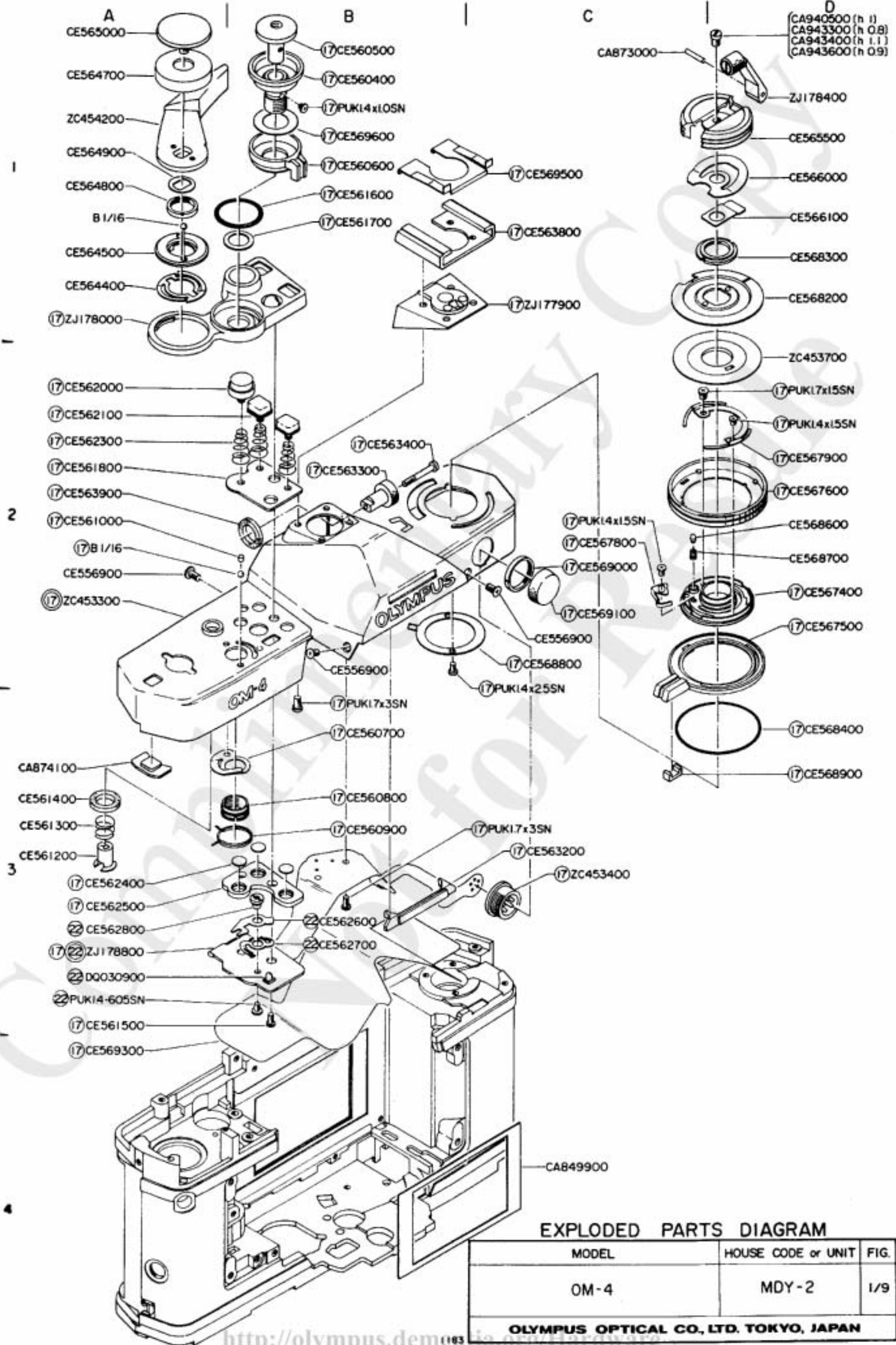
2. Main Specifications

Type : TTL auto-exposure SLR camera
Film format : 24 mm x 36 mm
Lens mount : Olympus OM mount
Shutter : Electronically controlled focal plane shutter with horizontally travelling cloth curtain; 1 to 1/2000 sec., shutter speed; 1/60 sec., mechanical shutter speed.
Synchronization : X contact (synchronization at speed of 1/60 sec. or slower); hot shoe with contacts for T-series flash; 5-pin connector for T-series flash; synchro socket (JIS type)
Light measuring method : Center-weighted average light measurement, switchable to spot measurement; measuring spot at the microprism area of the finder screen; spot metering selective in 3 modes; multi-spot measurement, highlight- and shadow-based methods
Light measuring range: 0EV to 19 EV (ISO/ASA 100, 50 mm at F1.4)
Automatic exposure control by average light measurement : TTL direct "off-the-film" light measuring with aperture-preferred electronic shutter; exposure control range; about 1 min. ~ 1/2000 sec. (approx. -5 EV ~ 19 EV at ISO/ASA 100, 50 mm F1.4, normal temperature and humidity); ± 2 EV exposure compensation
Automatic exposure control by spot measurement : TTL spot metering memory system (AE lock); exposure control range: about 4 min. ~ 1/2000 sec. (approx. 0 EV ~ 19 EV at ISO/ASA 100, 50 mm F1.4, normal temperature and humidity); multiple spot method, highlight method and shadow-based method selectable; ± 2 EV exposure compensation.
Automatic exposure memory control : Exposure value memory system (60 min. limiter)
Automatic exposure value obtained by TTL direct light metering stored in average light measurement mode EE lock value obtained by spot light measurement stored.
Manual exposure control : B, 1 sec. ~ 1/2000 sec., mechanical exposure time 1/60 sec.
X contact synchronized at speeds of 1/60 sec. or slower
Film sensitivity : ISO/ASA 6 ~ 3200
Film advance : Film advancer lever with 130° angle for one long or several short strokes and pre-advance angle 30°; motor drive and winder usable
Film rewind : Rewind crank (motorized rewind with Motor Drive 2 possible)
Viewfinder : Viewfinder with dioptric correction; +1, 0 ~ -3 diopters; with dioptric correcting lock mechanism; interchangeable focusing screens; microprism/split image-matter standardized (1 ~ 13 types)
Finder view-field: 97% of actual picture field
Magnification: 0.84X at infinity with -0.15 diop. and 50 mm lens

- Viewfinder information** : LCD multi-mode display; built-in illuminator (10 sec. limiter)
 Indication limiter 120 sec.
 Suitable shutter speeds 1 ~ 1/2000 sec. indicated by a bar in 1/3 EV steps
 Luminance of photographic body indicated by a dot and calculated value indicated by a bar in spot light measurement mode
 Indication marks: SPOT, HIGHLIGHT and SHADOW
 Mark indication on red LED upon completing flash charging
 Suitable strobe flashing indicated by flickering of red LED in flash mode
 Over and under exposure indicated by OVER and UNDER marks
 Definite point matching and set shutter speed indicated in manual exposure mode
 MEMO mark indicated upon setting and MEMO mark flickers upon completion in exposure memory mode
- Mirror** : Large quick return mirror coated with multi-layer film
- Self-timer** : 12 sec. delay electronic self-timer
- Battery check** : 3-level display with LED and alarm sound; automatic lock with batteries exhausted
- Power source** : Two silver-oxide batteries SR44 or alkaline-manganese batteries LR44
- Camera back** : Removable hinge type with memo holder; interchangeable with Recordata Backs and 250 Film Back
- Dimensions** : 136 (W) x 84 (H) x 50 mm (body only)
- Weight** : 540g (body only)

EXPLANATION OF MARKS

- ① Indicates parts that are supplied both as a single piece and as an assembled unit. In this case, the single part is incorporated in the assembled unit indicated with the mark .
Exception: Parts in the mark () are not supplied in single pieces.
(Parts that are supplied only in single pieces are not indicated with any mark. While parts that are supplied as an assembled unit are prefixed with "Z" or "U".)
-] Several types of parts for the same position are available, from which most suitable one is to be selected.
- * 3 Parts differ according to different models and types. This mark is used to indicate various combinations in a picture.
-  Left-handed screw. The mate screw hole is not marked particularly.
-  Indicates parts that should not be touched directly by bare hand because special surface treatment is applied. Wear fingerstalls or use tweezers.
- ★ Not supplied as a repair part.
-  Used exclusively for black finish models.
- Indicates original parts. New, modified ones are not indicated with this mark. Both original and modified parts are supplied.
- == No more available parts due to design change or out of stock.
-  A correction mark. Parts with this mark are not available.
- < 2 > Modified parts that are unable to show in the technical manual. The figure indicates reference page number.
- 2-A3 This notation is entered in the "Remarks" column of parts list and indicates parts position in the technical manual.
- 2-A3 — Parts position. The technical manual is divided into 16 equal sections. Each section can be identified by using A, B, C and D from left to right and 1, 2, 3 and 4 from top to bottom.
- Indicates page number in which the technical manual appears. However, 1. 1 (page 1 of 1) is not indicated particularly.



EXPLODED PARTS DIAGRAM

MODEL	HOUSE CODE or UNIT	FIG.
OM-4	MDY-2	1/9

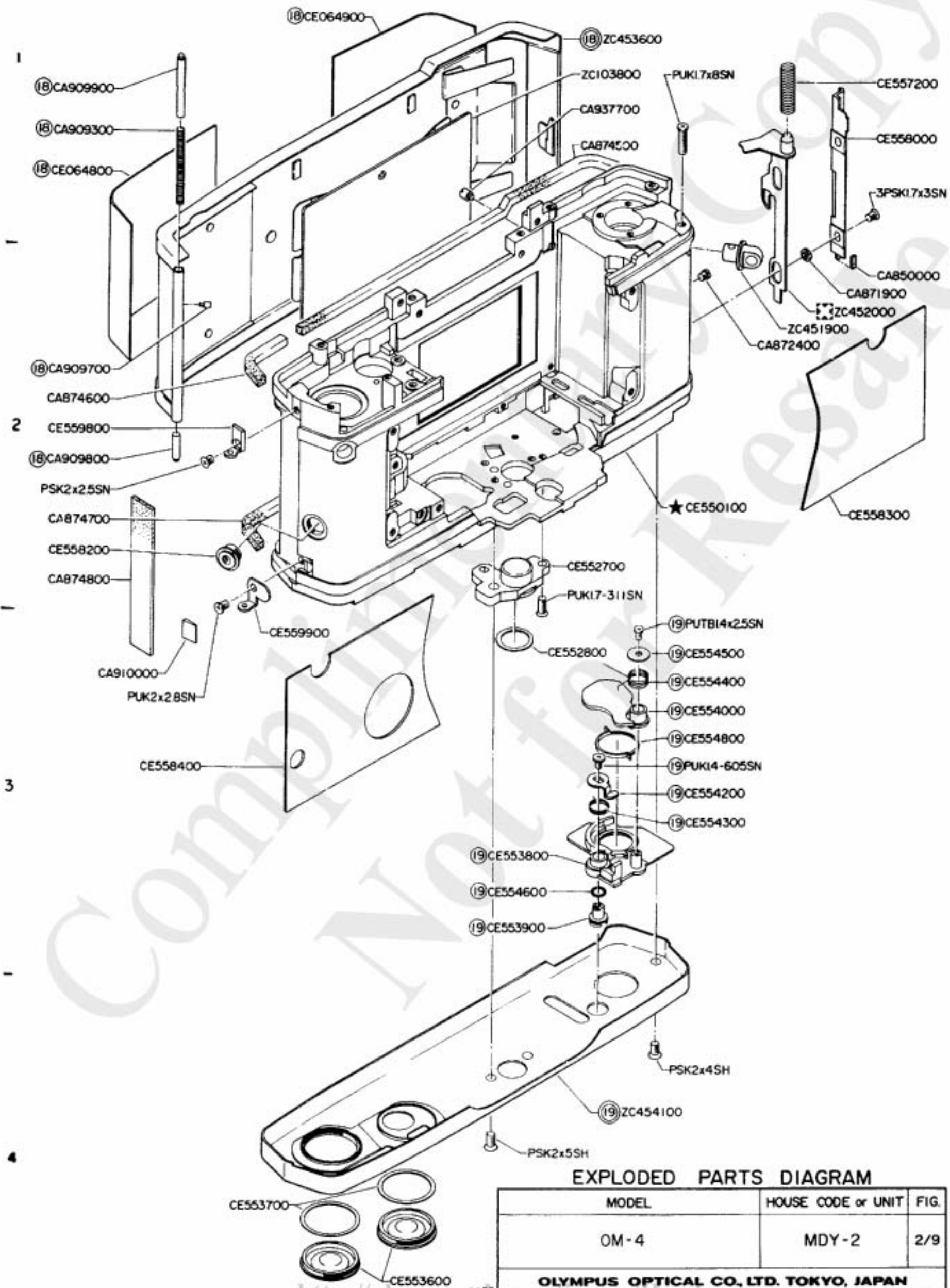
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN

A

B

C

D



EXPLODED PARTS DIAGRAM

MODEL	HOUSE CODE or UNIT	FIG.
OM-4	MDY-2	2/9

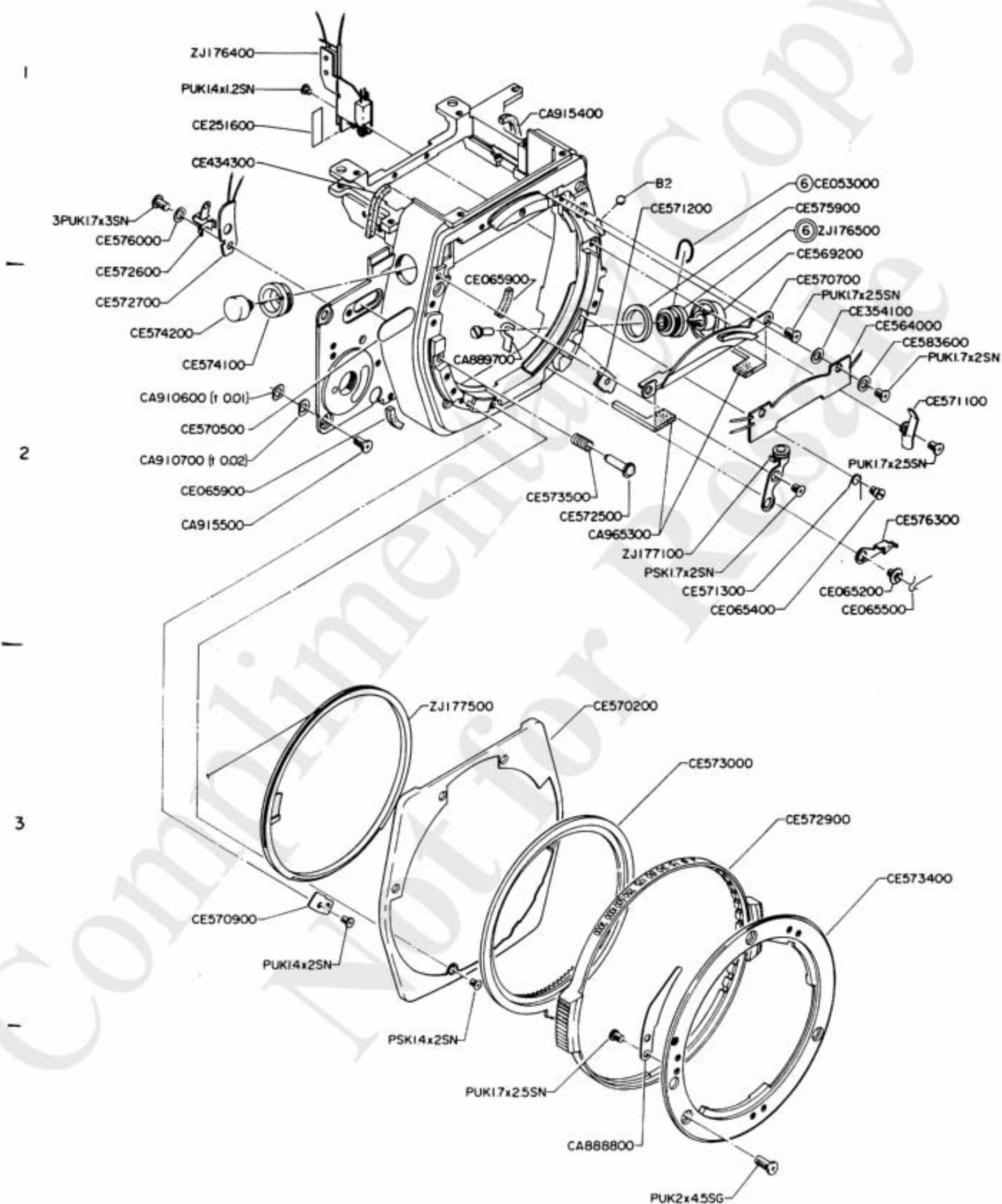
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN

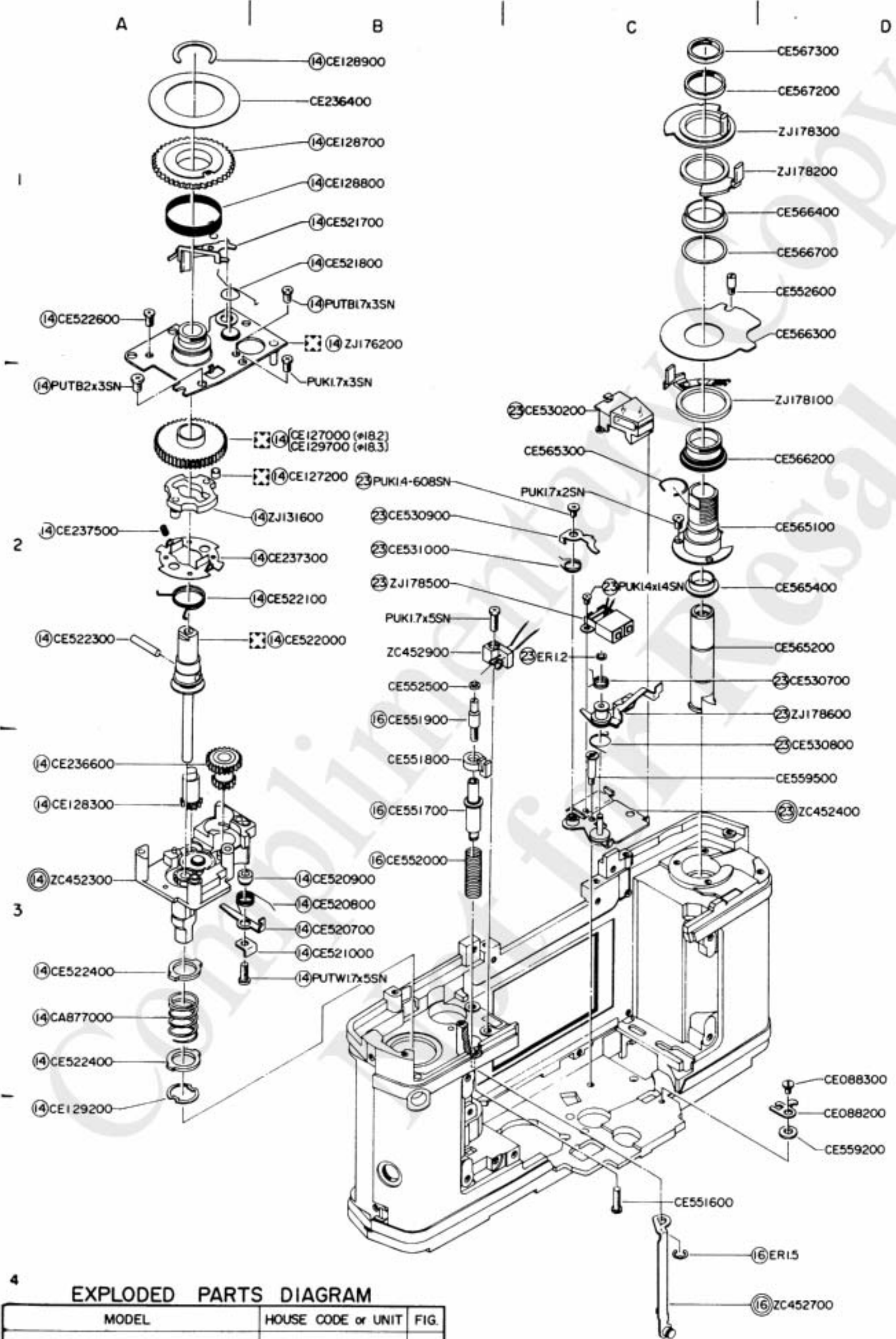
A

B

C

D





EXPLODED PARTS DIAGRAM

MODEL	HOUSE CODE or UNIT	FIG.
OM-4	MDY-2	4/9

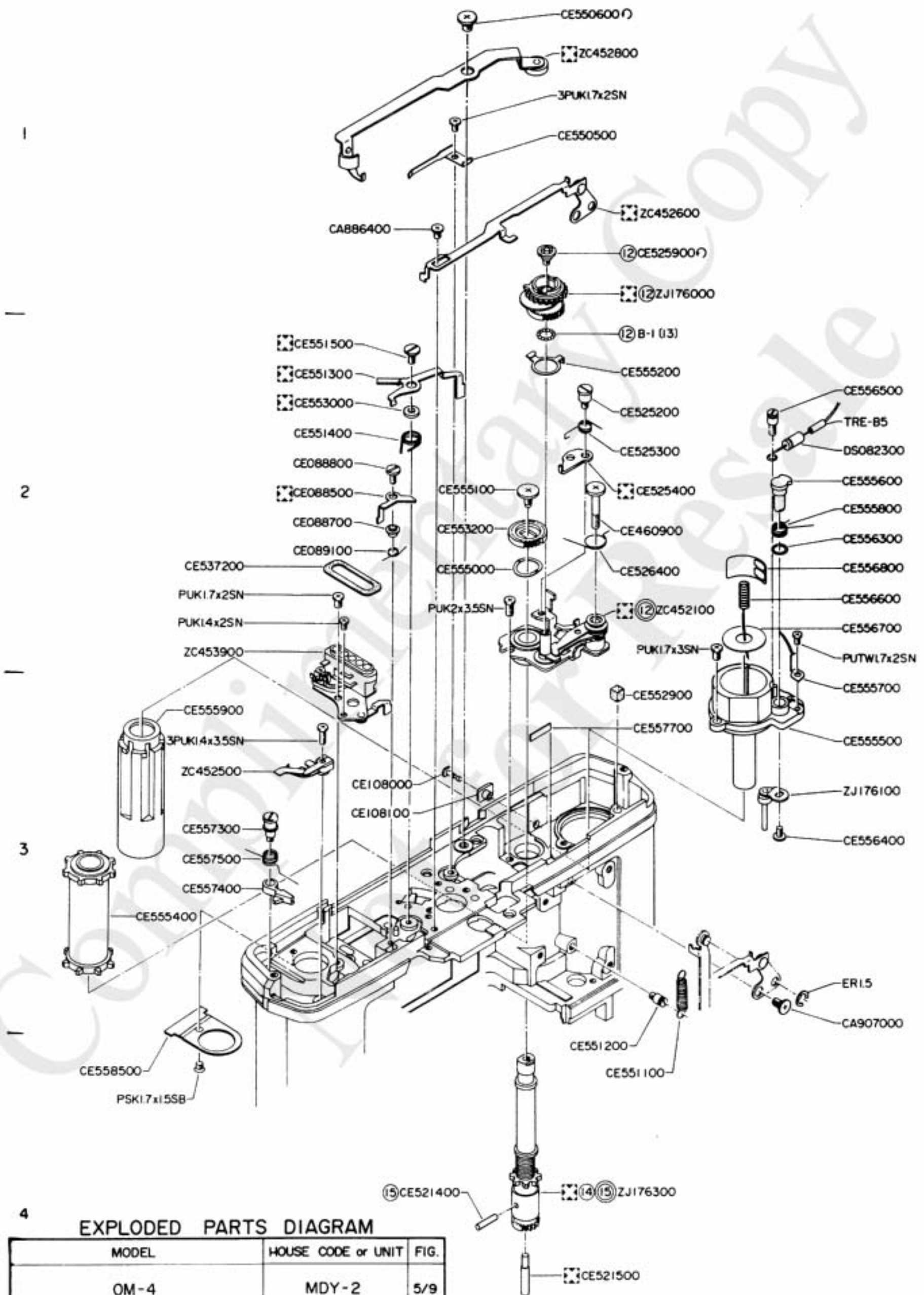
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN

A

B

C

D



2

3

4

EXPLODED PARTS DIAGRAM

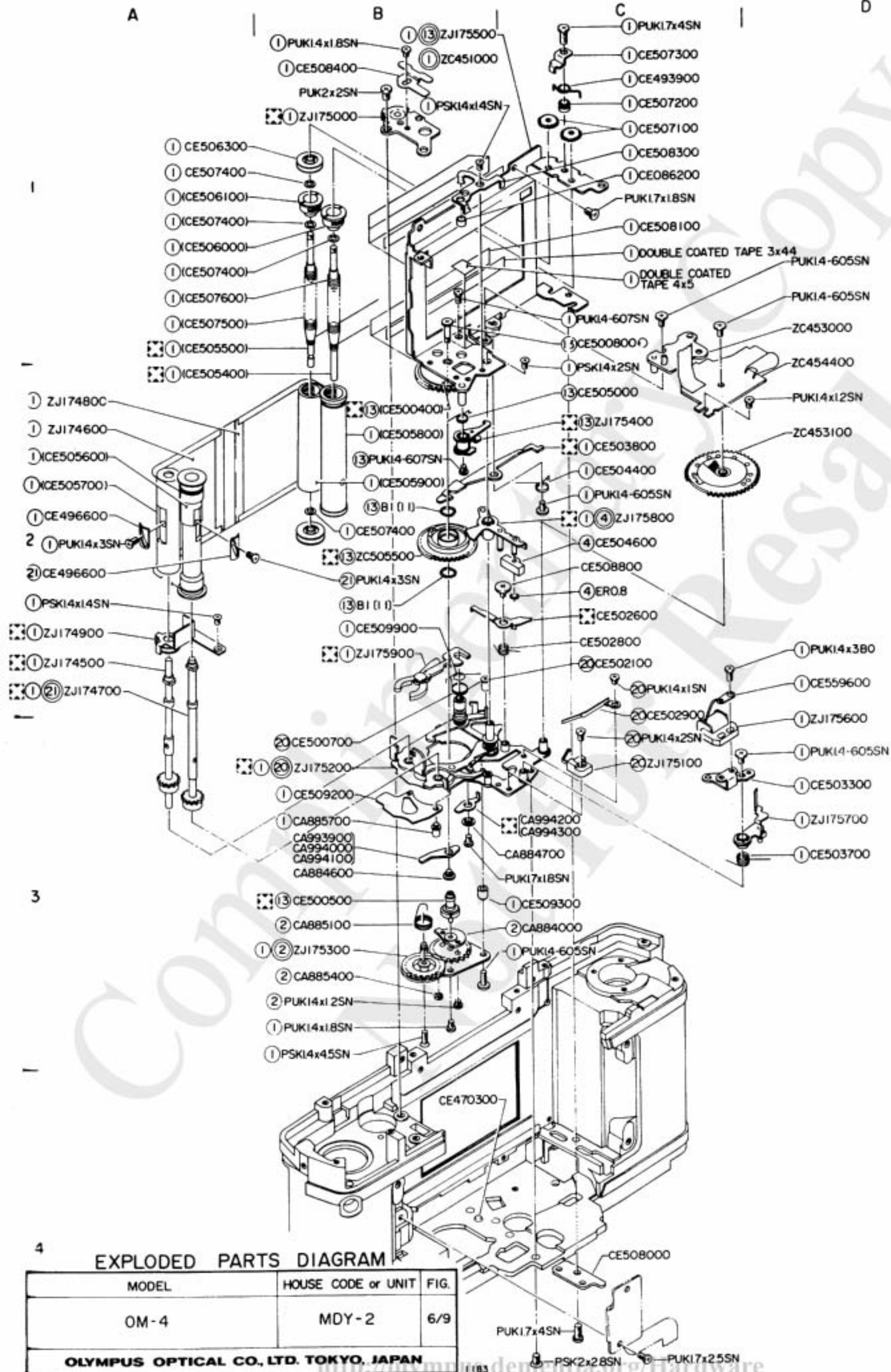
MODEL	HOUSE CODE or UNIT	FIG.
OM-4	MDY-2	5/9
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

A

B

C

D



EXPLODED PARTS DIAGRAM

MODEL	HOUSE CODE or UNIT	FIG.
OM-4	MDY-2	6/9

OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN

A

B

C

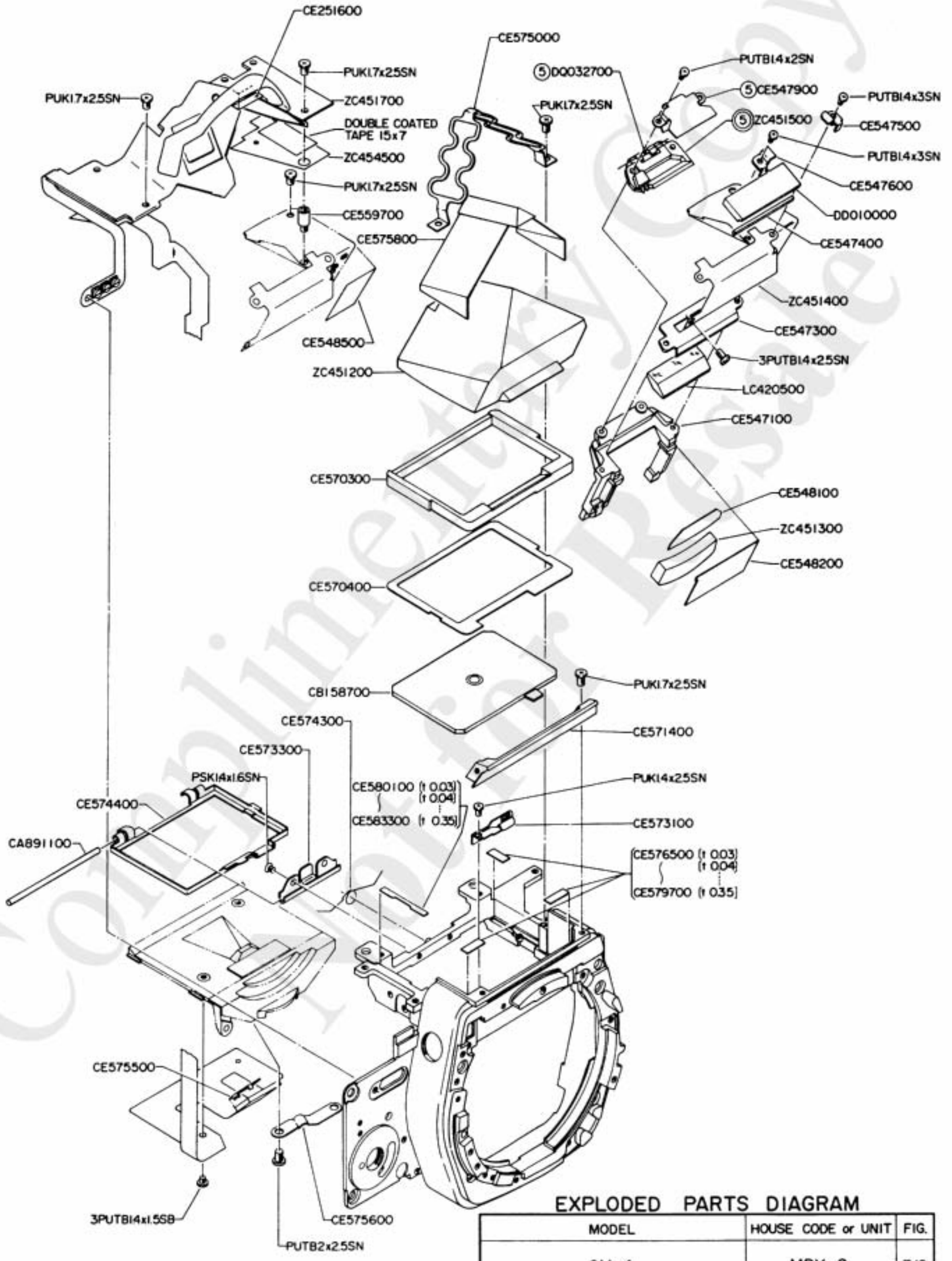
D

1

2

3

4



EXPLODED PARTS DIAGRAM

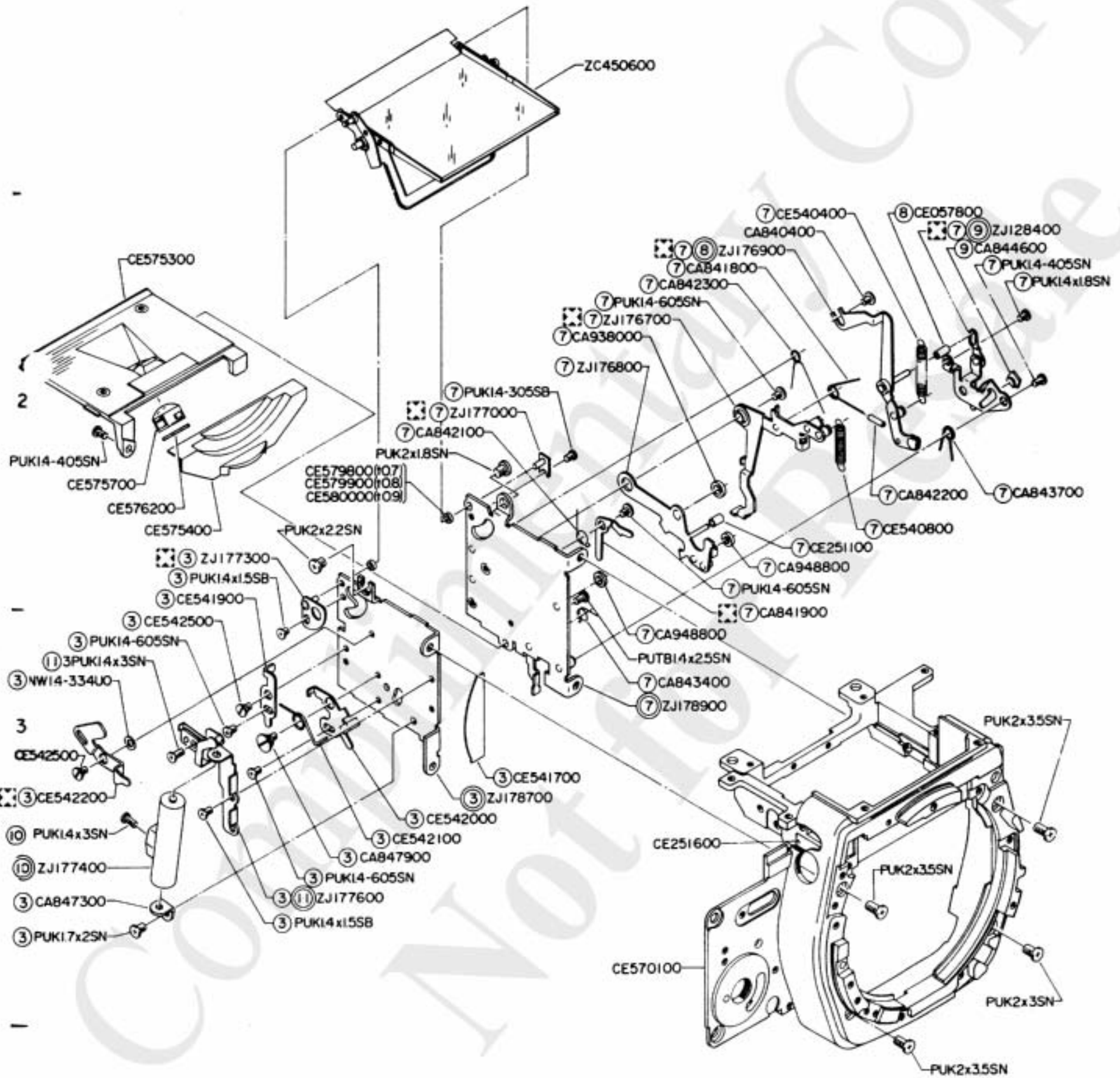
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OM-4	MDY-2	7/9
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		

A

B

C

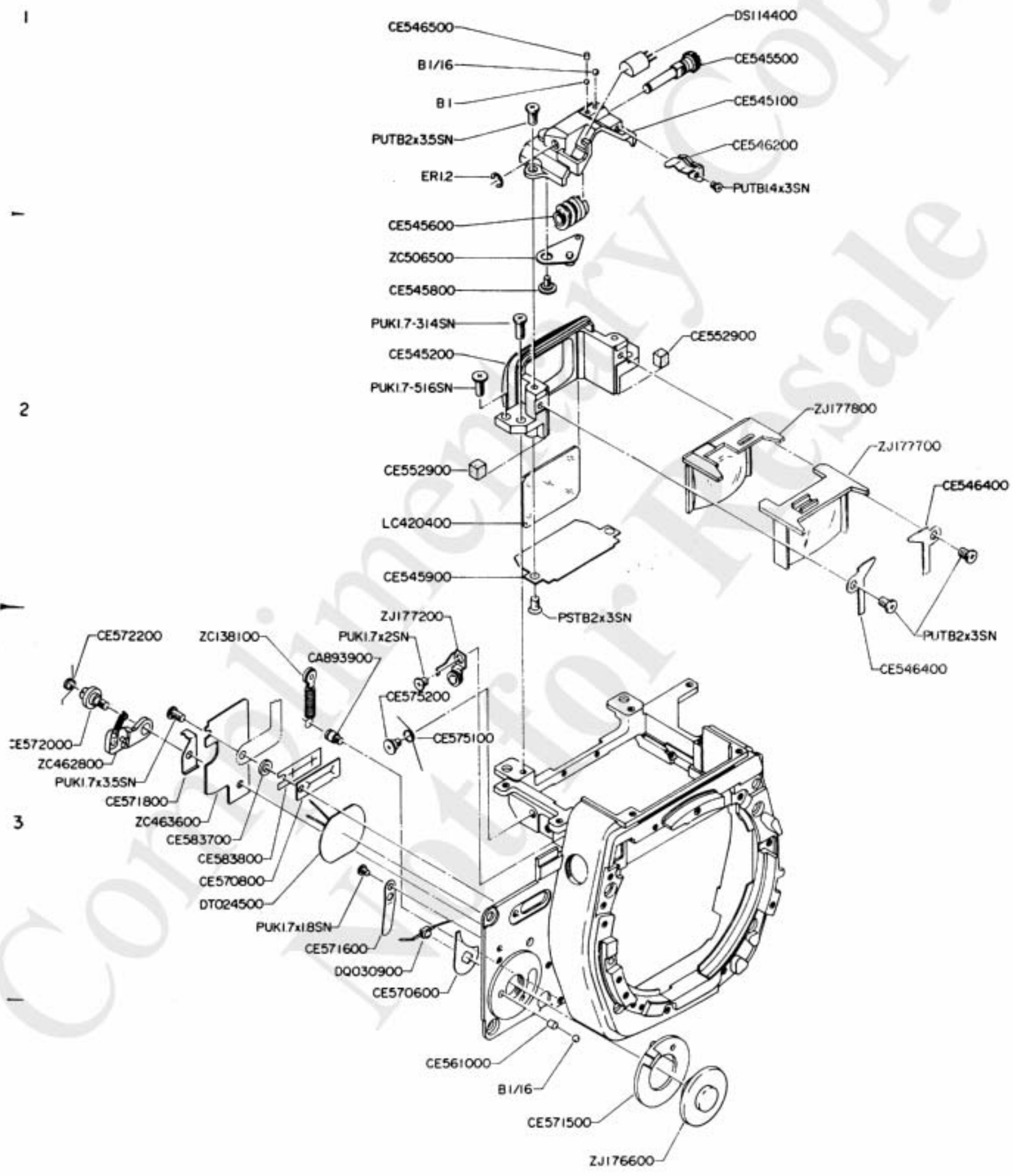
D



4

EXPLODED PARTS DIAGRAM

MODEL	HOUSE CODE or UNIT	FIG.
OM-4	MDY-2	8/9
OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN		



4 EXPLODED PARTS DIAGRAM

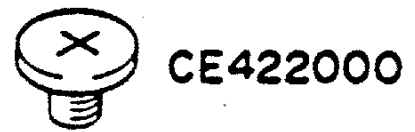
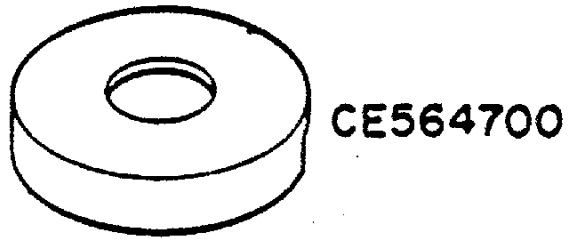
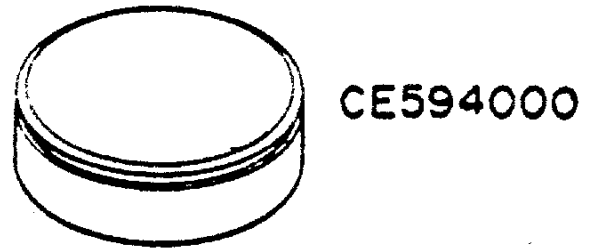
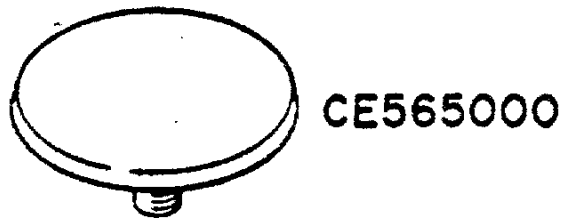
MODEL	HOUSE CODE or UNIT	FIG.
OM-4	MDY-2	9/9

OLYMPUS OPTICAL CO., LTD. TOKYO, JAPAN

OLD

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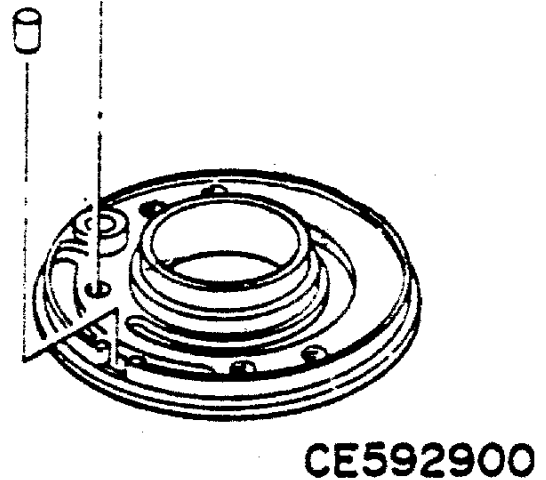
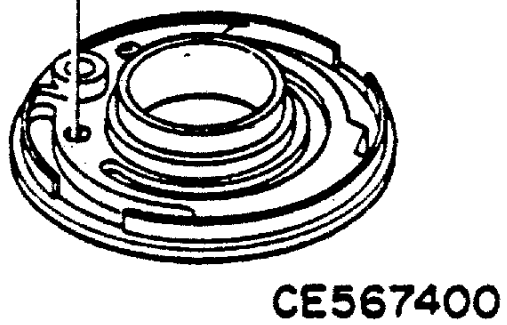
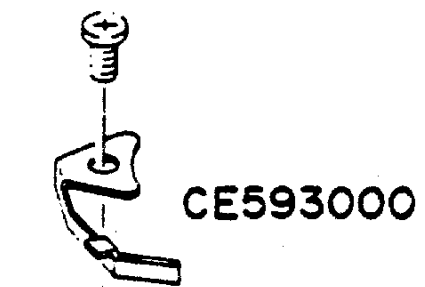
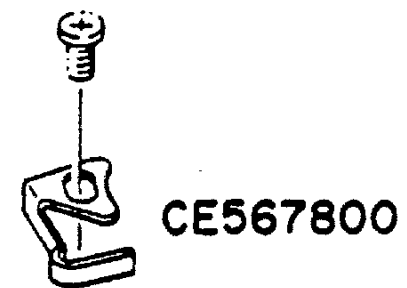
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OLD

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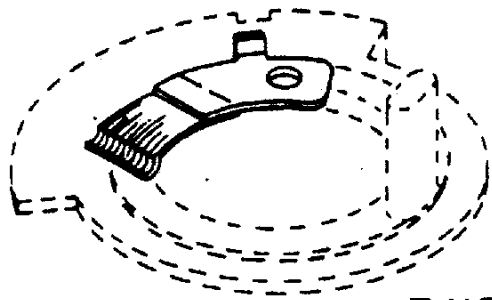
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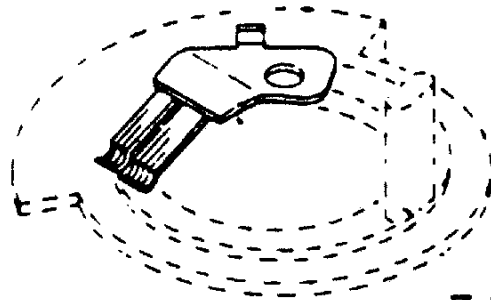
OLD

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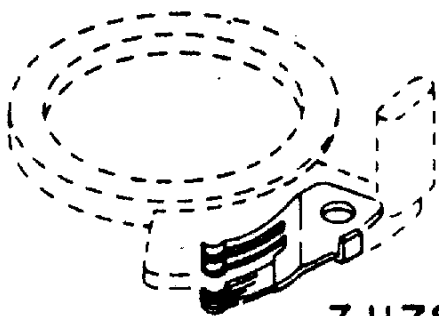
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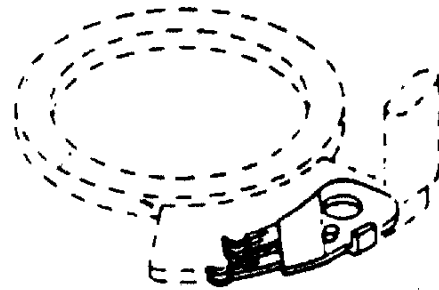
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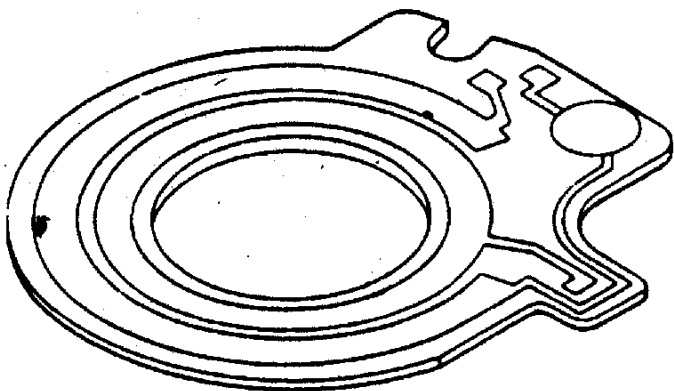
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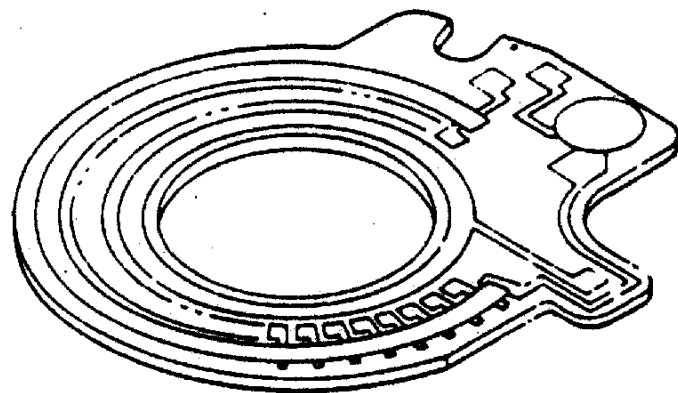
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ZJI78200



CE566300

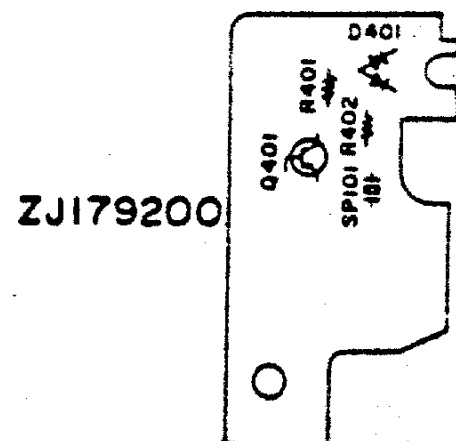
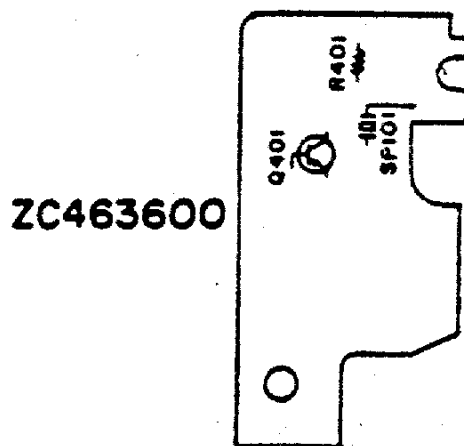
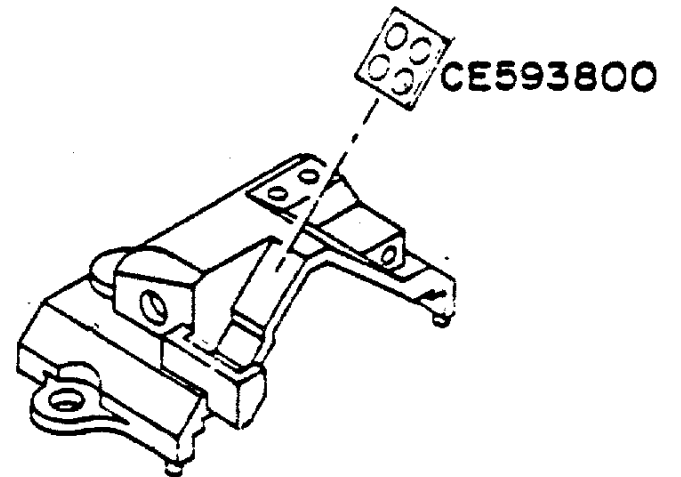
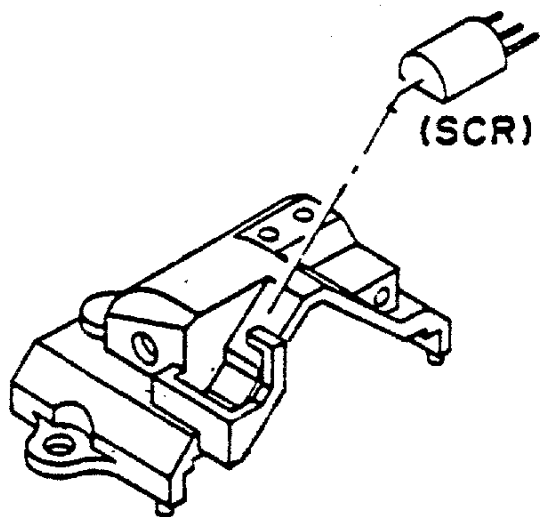
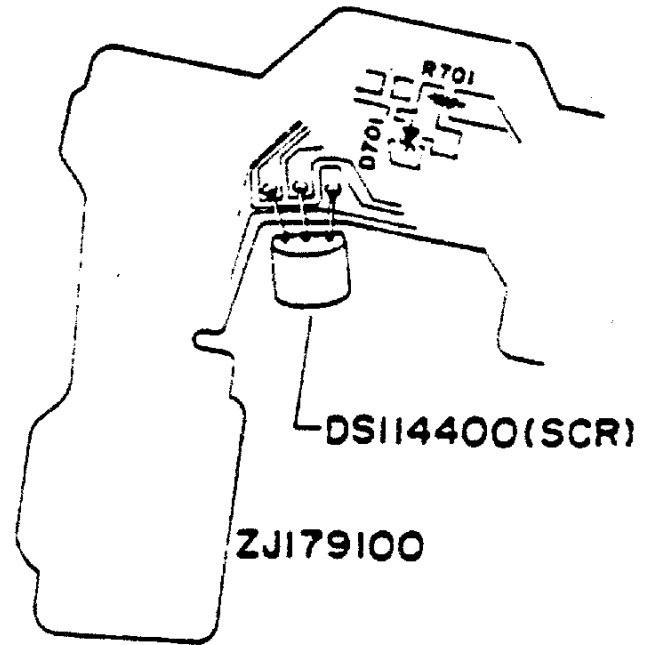
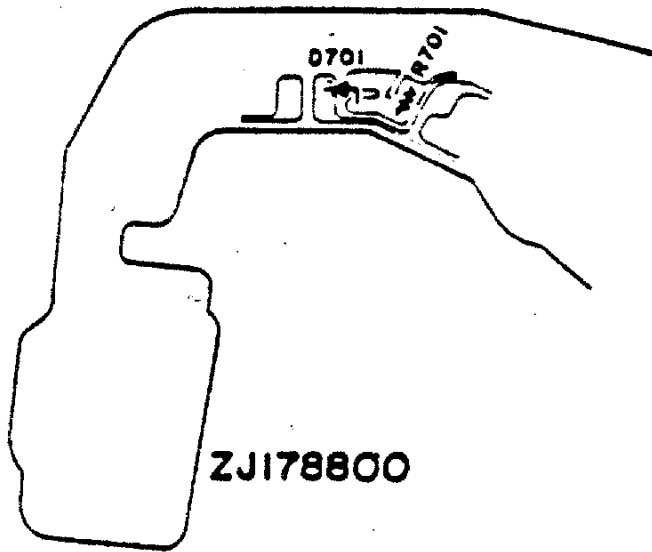
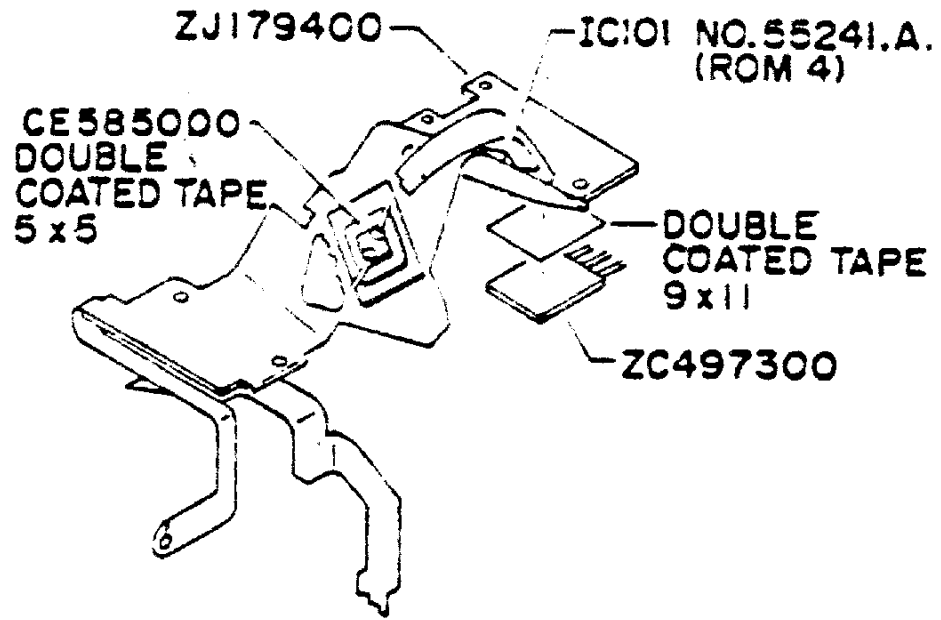
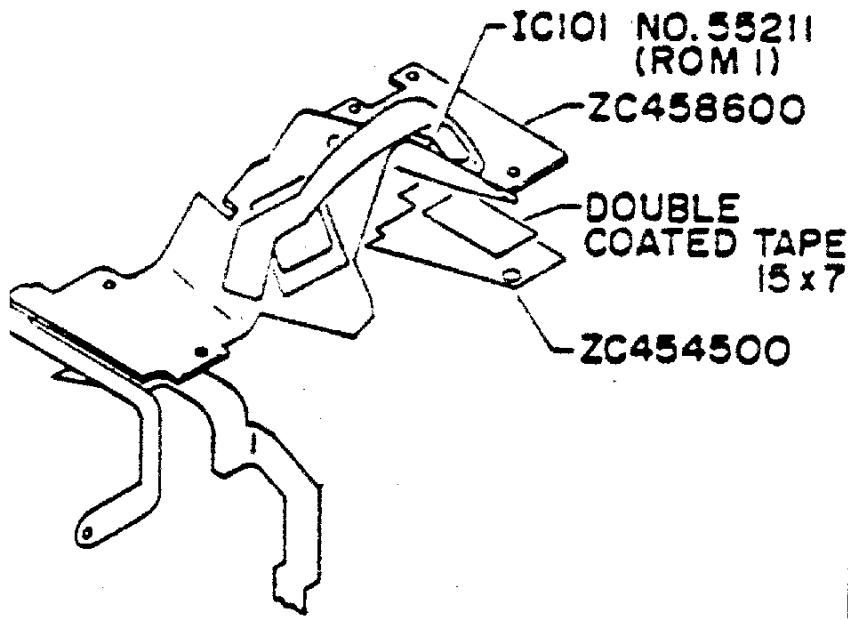


CE594300

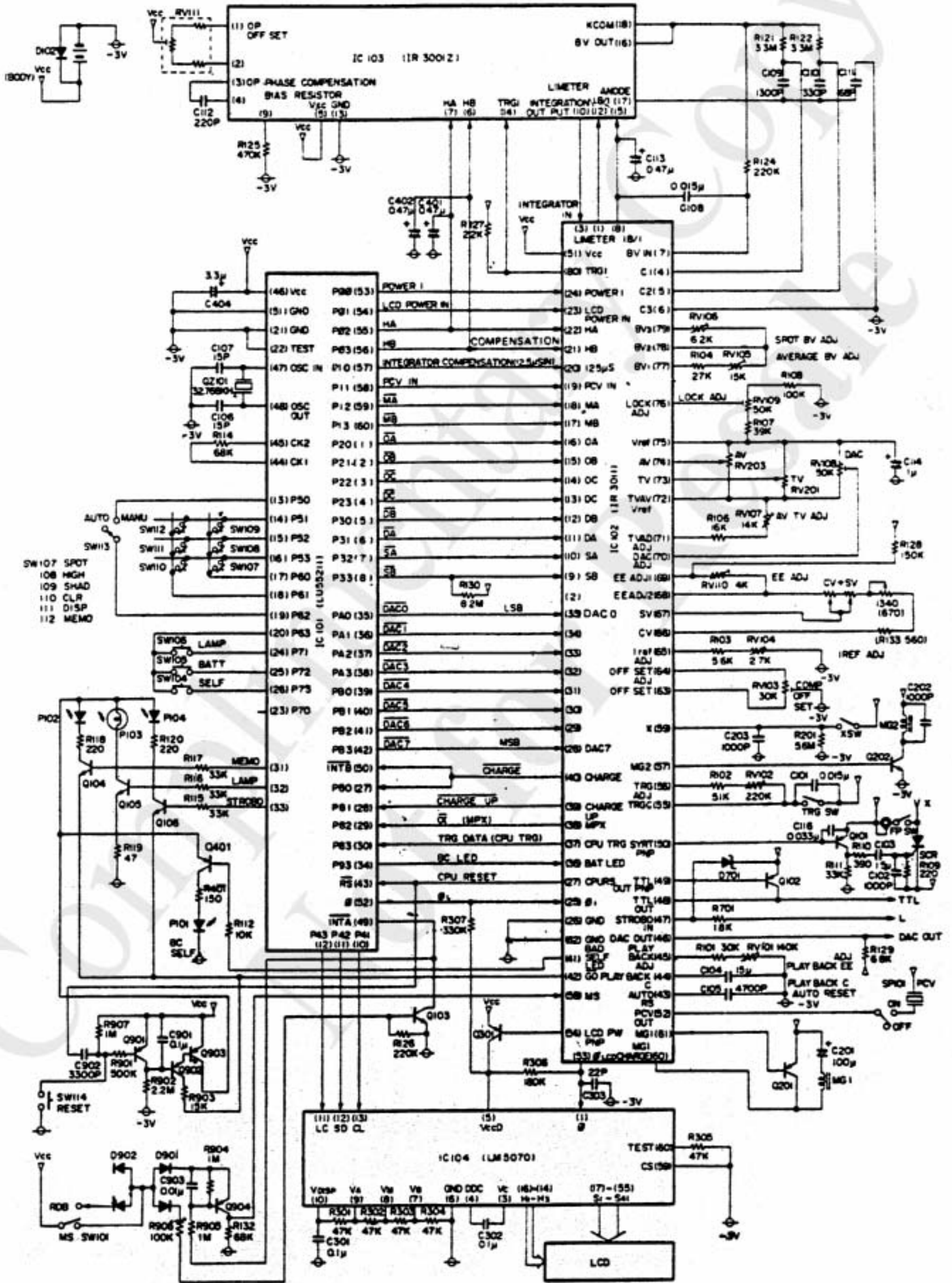
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OLD

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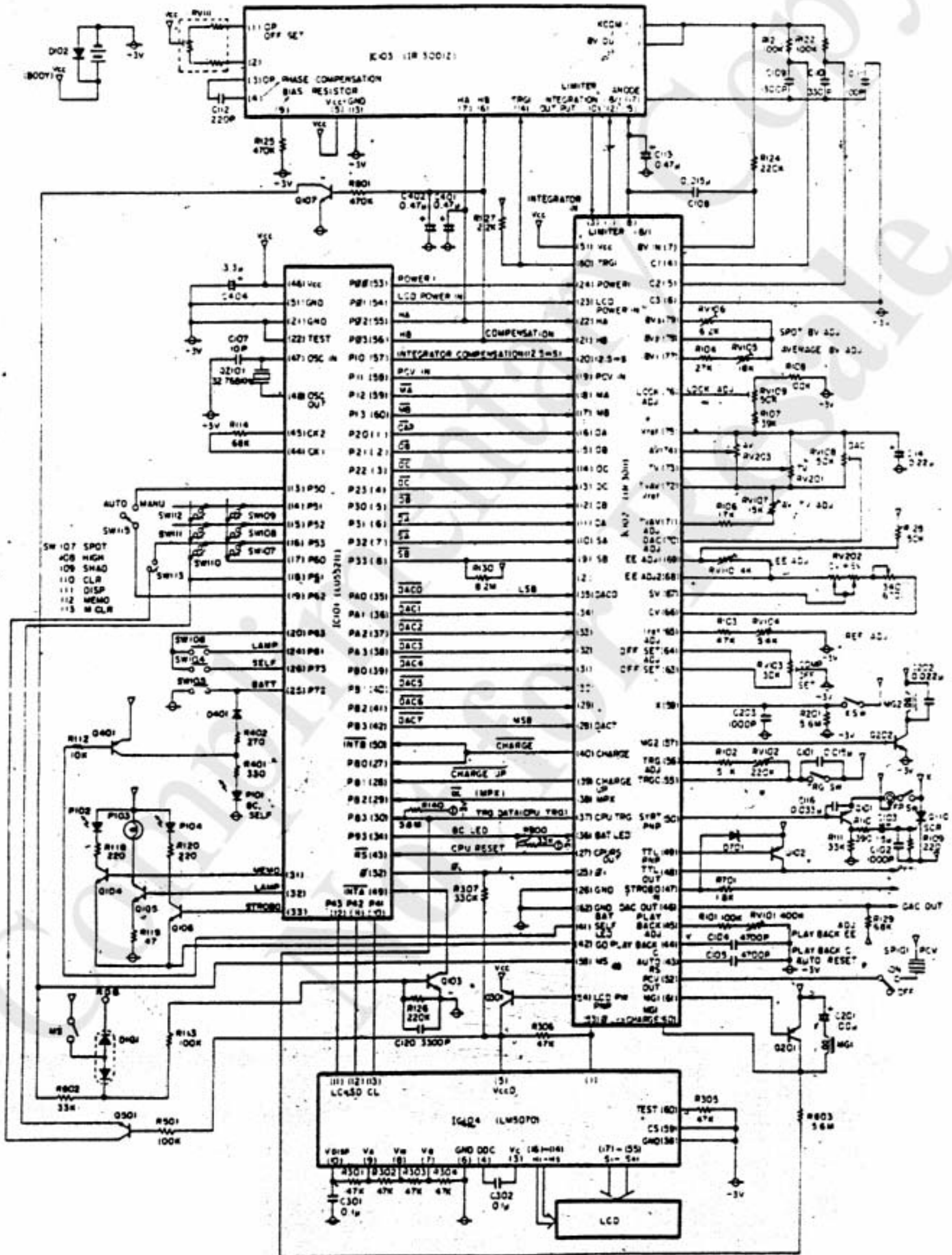


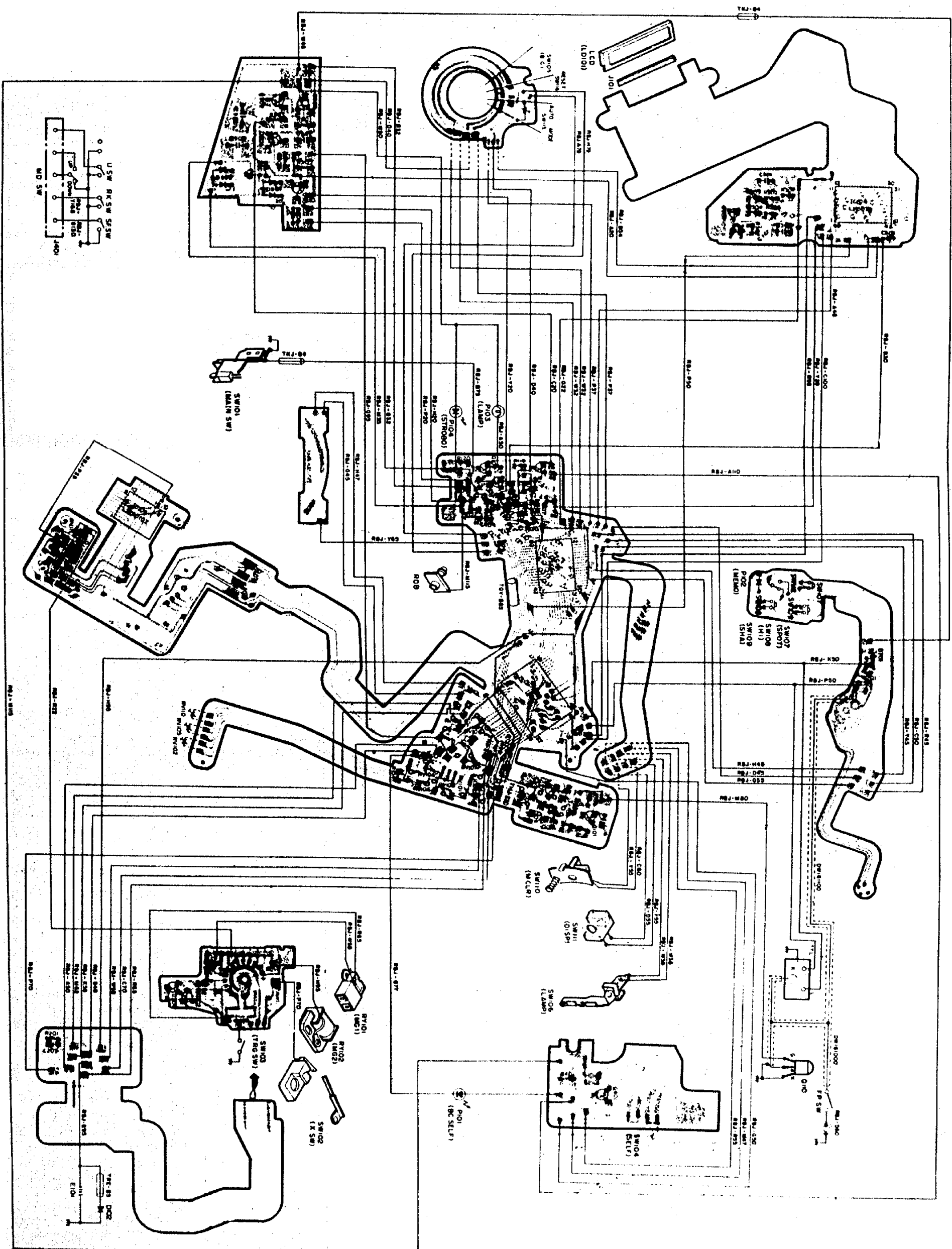
MDY2 CIRCUIT DIAGRAM



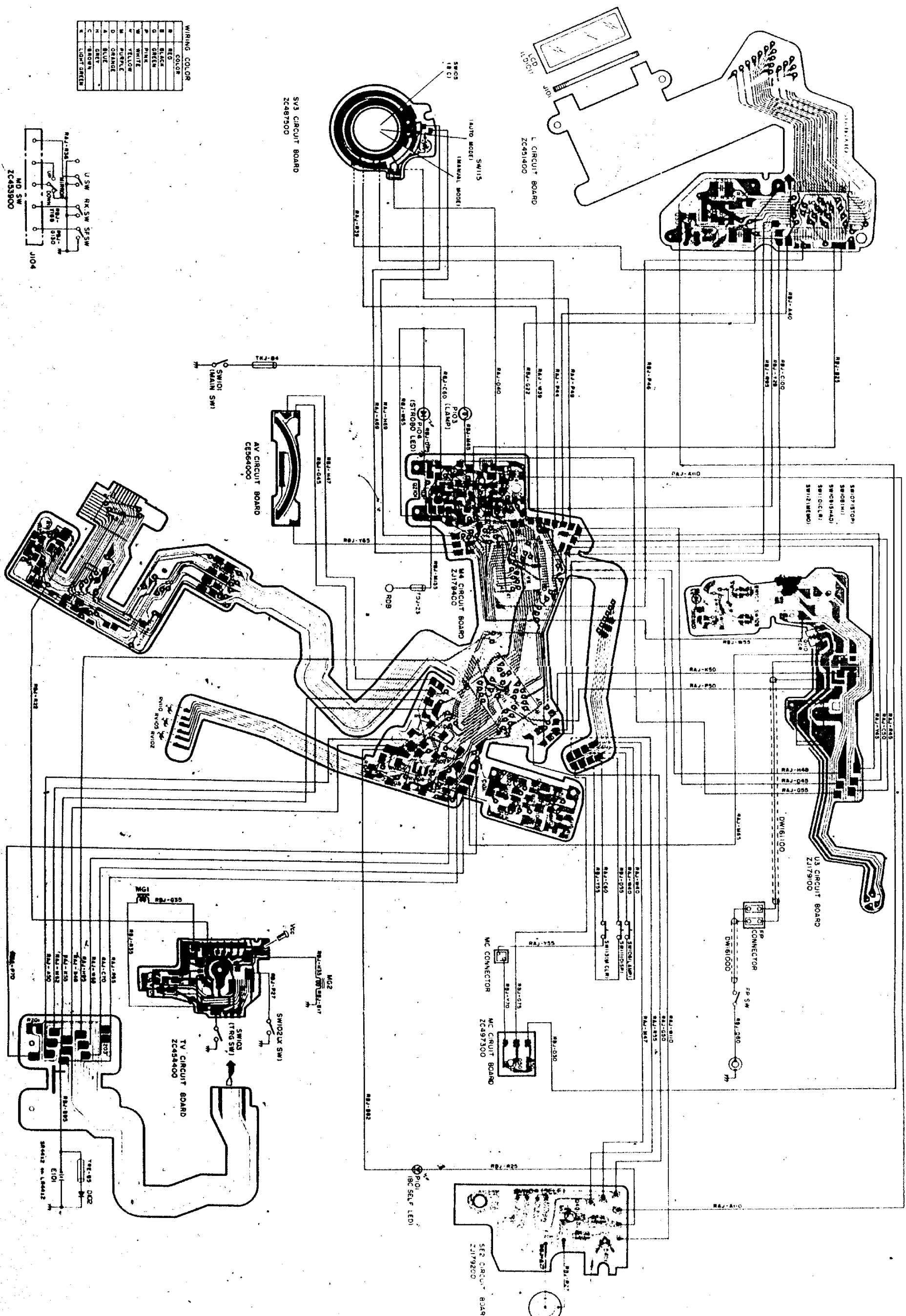
MDY2 CIRCUIT DIAGRAM (ROM4)

NO.A-5





MDY2 (ROM4) WIRING DIAGRAM



WIRING COLOR

A	RED
B	BLACK
C	GREEN
D	WHITE
E	PINK
F	YELLOW
G	PURPLE
H	ORANGE
I	BLUE
J	GRAY
K	BROWN
L	LIGHT GREEN

