PRODUCT No. 23903

## PENTAX $\sqrt{4}$ 石 super SERVICE MANUAL ENGLISH



Disassembling and assembling procedures are almost the same as 23900 and/or 23901. Therefore, the details of disassembling and assembling procedures are abbreviated.

Here is explained about special items for 23903.

Disassembly

1. Bottom cover assy. (A400)

CSS $1.7 \times 3 \times 2$
CSS $1.7 \times 2$ Connector seat (A23)
2. Winding lever assy. (0-C69)

| Cover screw (C139-01) | left handed | $23600 \mathrm{~K}-\mathrm{C} 135-\mathrm{A}$ |
| :--- | :--- | :--- |
| Winding lever nut (C8) | left handed | $23600 \mathrm{~K}-\mathrm{C} 134-\mathrm{A}-2$ |

Winding lever assy, (0-C69)
Winding lever friction spring (C7-01)
3. Rewinding knob assy. (0-D6), ASA ring assy. (D-D11-01)

Rewinding knob assy. (0-D6)
Nut (D15)
*Washer (D21)
ASA ring assy. (0-D11-01)
*Washer (D2l)
To adjust the torque of click of ASA ring.
4. Top cover assy. (A300)

Top cover retainer screw A (A333) x 2
B (A334)
C (A342) x 2
D (A345)
*Top cover assy. (A300)
*Top cover assy. (A300)
Material of Top cover assy. (A300) is a plastic. But the surface is made conductive by surface treatment. So that the electrical conductive does not apply on the back of Top cover assy. (A300).
5. Unsoldering

1) P.C. board pattern (T100)

2) Relay P.C. board assy. (0-A129) Before unsoldering, take out Insulation seal (A152) to prevent melting by soldering iron.

3) f-volume (K101)

4) Hot shoe contact A (N4), Hot shoe contact C (N9)

5) EF switch contact piece (A44)

Before unsoldering, take out ASA volume (R100)
ASA volume retainer screw (A16-01)
CNL-D $1.7 \times 2.5$
ASA volume (R100)

6) Connector base plate assy. (0-A21)

6. Self-timer charge lever assy. (0-A118)

Self-timer screw (A122) 231K-H50
Self-timer charge lever assy. (0-A118)
Self-timer collar (A123)
W30
7. Body covering

Body covering, right (A19)
Body covering, left (A20)
After peel off, re-install Self-timer charge lever assy. (0-A118)
8. Front board and Mirror housing complete assy.

At the charged condition.
CNL-D $1.7 \times 3 \times 2$
P.C. board pattern retainer (II)

W14
Front board retainer screw (A132-01) x 4
9. P.C. board pattern (T100)

T-CNL-E 1.7 x 4
Hot shoe contact piece A (N4)
Insulation collar (N8)
Insulation plate (N13)
T-CNL-E l. 7 x 3
Hot shoe contact piece C (N9)
CNL-D $1.4 \times 3$
LED retainer collar (T212)
*PC board pattern (T100)
LED part in P. C. board pattern (T100) should be taken out straight and carefully to prevent making scratches on Shutter speed scale indication plate (M10).
*P.C. board pattern (T100)
It is recommended that $P . C$. board pattern (T100) is taken out from Mirror housing under the condition separated from Body proper (A1). due to difficulty of LED part taken out and/or installed.

Assembly and Adjustment

1. Cocked indicator assy. (0-C23) Check the spring tenSion.

At the released condition, the spring should have no tension.


If the spring tension is stronger at the charged condition, 2nd curtain speed will be affected. Accordingly, $1 / 2000$ sec will be changed by its spring tension. (l/2000sec should be not changed by its spring tension.)
2. Adjustment of Main SW


Adjust the clearance by eccentric screw in the range shown below to prevent the side of screw touching the body when the shutter rod pushed down or up.


If the clearance is wider than 0.5 mm , the shutter will be stayed open at the 1st exposure when released by Self-timer or Winder.
3. EF- switch contact piece (A44)

The clearance of $\mathbf{A}$ should be within 0.3 mm . Adjust the clearance by bending the part of B .

4. Bulb off adjustment

Install *the temporary top cover and set the shutter dial Bulb.


After released first curtain

return shutter rod slowly
Within the range $\mathbf{A}$, 2nd curtain should be released. Adjust by eccentric screw.

Confirmation

1) Change the shutter dial 125 X . And release the shutter. The shutter speed should be1/125 sec, not $1 / 500$ or $1 / 1000 \mathrm{sec}$.
2) At the charged condition, release only the shutter block, not push the shutter button. The shutter speed should be $1 / 125 \mathrm{sec}$, not $1 / 500$ or l/l000sec.
*The temporary top cover

5. Dumper lever plate assy. (0-B90)

Adjust the actuating torque by turning Nut (B96).


About 1.5 teeth out from the surface of nut (B96).
The level of actuating torque is depends on the greatness of mirror bounce.

Confirmation

1) When drop the mirror seat from up-position, an afterimage of dumper lever plate down and up can be seen after the mirror seat hitted with
 the dumper lever plate.
2) When pushed down the dumper lever plate, and returned slowly, the dumper lever plate should be returned to the original position completely by its own tention. If not, check *Friction washer (B94).
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*Friction washer (B94)
Material: Calfskin
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a. It is prohibited to apply any grease in order to the
material of friction washer (B94) is calfskin.
b. When install, fluffy surface should be faced up.
5. Check of Shutter block ( 0 -EOOO) by using T-adjuster It is prohibited to adjust the curtain speed and the shutter speed in $0-E 000$. If the curtain speed and the shutter speed was out of tolerance, replace Shutter block (0-E0OO) to new one.

The curtain speed and the shutter speed must be checked before install the mirror housing to the body.
*The curtain speed is especially important for 23903 so that l/2000sec. is adopted.
*The auto-manual speeds are already decided on T100. The auto-manual speeds which decided on $T 100$ can not get if the adjustment of timing switch in $0-E 000$ was no good.

6. Time-sequence of SWg and SWm

It is requested that Adapter for checking the time-sequence of SWg and SWm should be made by your own side.


Adjusting procedures and the tolerance are the same as 23900.
7. P.C. board pattern (T100)

1) LED part

LED retainer collar (T212)
CNL-D $1.4 \times 2.5$
Confirm that LED insulation seal (I18) was sealed on the back side of LED supporting plate.
2) LED positioning

Use P.C. board pattern checker (239 PATTERN CHECKER). Adjust LED position by sliding the LED supporting plate.

Each LED should be aligned with its figure in the view-finder.
3) As installing Photo-cell part to Cell frame (N1), insert P.C. board to the connector.
4) Photo-cell part

Hot shoe contact piece C (N9)
T-CNL-E $1.7 \times 3$
Insulation plate (N13)
Insulation collar (N8)
Hot shoe contact piece A (N4)
T-CNL-E $1.7 \times 4$
8. Front board and Mirror housing Shutter block charged condition Mirror housing released condition
*lAThen installed, take care about lead wires.
Front board retainer screw (A132-01) 4pcs.
W14
P. C. board retainer (I1)

CNL-Dl. 7 x 3 x 2
After installed, check the functions of shutter.
9. Mechanical back focus.

$$
45,46 \pm 0.04 \mathrm{~mm}
$$

10. Soldering The location of solder refer to page 1 and 2.

Especially, red and blue lead wire should be positioned
 between Relay P.C. board assy. (0-A129) and Prism seat assy. ( $0-\mathrm{M} 2$ ), as shown left. - to prevent from catching between the top cover and the prism seat.
11. ASA volume (R100)

ASA volume retainer scerw (A16-01)
CNL-D $1.7 \times 2.5$
12. Bottom cover assy. (A400)

Connector seat (A23)
Bottom cover assy. (A400)
CSS 1.7 x 3 x 2
CSS $1.7 \times 2.2$
13. Load the batteries G13 x 2
14. Confirm the function of LED of P.C. board pattern and/or LED positioning
*If P.C. board pattern checker is not ready, adjust LED position at this time.

Confirm the function of LED as follows.

1) After the main switch was ON, LED stays on about 30 sec. .
2) LED indicates as Manual-mode at when the top cover does not install.
3) LED should be changed the indication when connect the points as mentioned below.


15. Install ASA ring assy. (0-D11-01) temporary.

When set ASA ring out of $1 X$, red LED of EE should be flickering.
16. Install the temporary top cover.
17. Adjust the auto shutter-speed and the LED indication.


1) Auto shutter-speed
EV12 Light value correction unit

ASA100 1X
f8 - using f8 set ring KA-00- 1A
2.8 V

Regulated D. C. power
supply
Shutter dial AUTO
*Nominal speed $\quad 15.6 \mathrm{~ms}$
Adjust by VR1. After adjusted, check other EVs. (EV16 1X, EV16 1/2X, EV8)

Standard of shutter speed is the same as 23900.
*Standard of $1 / 2000 \mathrm{sec}$.
$0.49 \pm 0.7 \mathrm{EV} \mathrm{ms}$. (0.30 0.81 ms.$)$
2) LED indication

EV12
ASA 100 1X
f8
2.8 V

Shutter dial AUTO
LED of 60 should be turned on at the above combinations. Adjust by VR2. LED of 60 should not move to next LED when changed ASA from 80 to 125.
After adjusted, check other EVs.
3) Auto manual-speed and the indication Shutter dial M Shutter speed tester (7F-9A-
a. Check the curtain speed at $1 / 1000 \mathrm{sec} .6 .5 \mathrm{~ms}$ or faster at 21 mm distance
b. Check each shutter speed from $1 / 2000$ sec. ~ 4 sec..
c. Each LED should be turned on when changed the shutter speed, and OVER or UNDER LED must be flickering when non-proper exposure was made.
*As a general rule, use Light value correction unit and Shutter speed tester (7F-9A-2) for checking and/or adjusting the shutter speed and the indication. However, Shutter speed tester (7PE-25A3) may use by the circumstances.
4) LED indication and Shutter speed under the full-charged condition of AF2OOS or AF-160

When load 2.4 V between the ground and Hot shoe contact piece $A(N 4)$, LED indication and the shutter speed are as below.

a. LED indication
M - flickering 125X - on
b. Shutter speed $9.6--11.8 \mathrm{~ms}$
5) Battery check

| 2.4 V | LED off or flickering |
| :--- | :--- |
| 2.65 V | LED on |

18. Remove ASA ring and the temporary top cover
19. Clean the view-finder
*Do not use the air-compressed blower to clean the view-finder. It will be caused by taking out Shutter speed indication plate (M10).
20. Top cover assy. (A300)

Check the conductivity of Switch board (A318) before install Top cover assy. (A300).
a. At Shutter dial AUTO

| A - the ground | ON |
| :--- | :--- |
| B - the ground | OFF |
| C - the ground | OFF |

a. At Shutter dial M

A - the ground OFF
B - the ground OFF
C - the ground OFF
When pushed the bottom side button,
B - the ground ON
When pushed the up side button,
$\mathbf{C}$ - the ground ON

If the conductivity of Switch board (A318) was good, install Top cover assy. (A300).
The point of installation is the same as 23900 ME .
Cover frame (A131)
Top cover retainer screw A (A333) 2pcs.
Top cover retainer screw B (A334)
Top cover retainer screw C (A332)
Top cover retainer screw D (A335)
After installed, check the function of LED by changing the shutter dial.
21. ASA ring assy. (0-D11-01), Rewinding knob assy. (0-D6)

ASA ring assy. (0-D11-01)
Washer (D21)
Nut (D15)

After installed, check the function of click of ASA ring assy. (0-D1101). and the LED indication.

At $1 / 4 \mathrm{X}, 1 / 2 \mathrm{X}, 2 \mathrm{X}$ and 4 X except $1 \mathrm{X}, \mathrm{EF}$ red LED must be flickering. If not, check the clearance of ElF switch contact piece (A44) and lead wires and/or adjust ElF index plate (D23) assembled in ASA ring assy. (0-D11-01), as shown below.

within 0.3 mm

A44


Fix D23 as pushing to the arrowed
direction

Rewinding knob assy. (0-D6)
22. Winding lever assy. (0-C69)

Winding lever friction spring (C7-01)
Winding lever assy. (O-C69)
Winding lever nut (C8) left handed 23600K0C134-A-2
Cover screw (C139-01) left handed 23600K-C135-A

Check the function of shutter and winding.
23. Check the shutter button stroke Shutter dial Bulb
a. When pushed the shutter button deeper than 0.2 mm from the original position, LED should be turned ON before release the shutter.

Main switch ON position
b. After released 1st curtain, the shutter button can goes down 0 . 1 - 0.5 mm .

Shutter dial AUTO
a. Charge the self-timer.
b. Release the shutter by self-timer under main switch off. (No LED turned on.)
c. LED should be turned on surely before release the shutter.

If LED is turned on at the same time or after the shutter released, the shutter by actuating with self-timer or winder will be AUTO-TIME at 1st exposure under main switch off. In this case, the clearance of main switch is wider than 0. 5mm. The clearance should be adjusted less than 0 . 5 mm .
24. Check the conductivity of Hot shoe and the full-charged indication Checking procedures are the same as 23901 MV.
25. Focusing
26. Remove Self-timer charge lever assy. (0-A118)
27. Body covering

Body covering, left (A19)
Body covering, right (A20)
28. Self-tirner charge lever assy. (0-A118)

W3 0
Self-timer collar (A123)
Self-timer charge lever assy. (0-A118)
Self-timer screw (A 122)

Special Tools


## Body



```
LED - to indicate shutter speed Switches
A-M - Auto-manual switch (for 23903)
UP-DOWN UP-DOWN switch for manual
speed (for 23903)
*LED goes down when set DOWN position.
*LED goes up when set UP position.
EF -EF switch (for 23903)
*When set ON position, red LED at the top
flickering.
SWT - Timing switch
SWM/SWG - Memory and Magnet switch
```

Power switch

*If use G13 x 2, power switch is ON when set BATT ON.
*If use exterior power- sorce, power switch is ON when set EXT ON.

Adapter


23900 ME


23901 MV 23904 MV1


23903 ME Super

1. Preparation
a. If use two batteries (G13 x 2), load them to battery case.

b. If use exterior power sorce, connect the body and the exterior power sorce with connection cord. And set the voltage $2 . S V$.
2. Check 23900 P.C. board pattern
a. Install the adapter for ME to the connector.
b. Set Power switch OFF and insert P.C. board pattern to the connector of adapter.
c. Set ME-MV switch to ME side
d. Set Timing switch ON.
e. Set Memory switch ON.

Check the LED function
a. Power switch ON. At this time, check LED lights on.
b. Turn VR-dial and check each LED light on or not. If LEDs in slow speed side does not light on even if VR-dial turned fully, cover up the photosenser part step by step.

Check the shutter function
*Shutter speed indicated with LED in P.C. board pattern can be checked by the lighting time of LED of checker body.
a. Set a shutter speed by turning VR-dial. Slower speed is better to check. To get accurate shutter speed, it need to give constant light on the phot-senser part.
b. Set Timing switch OFF.
c. Set Memory switch OFF.

At this time, LED of checker body lights on for the time indicated on $P$. C. board pattern.
d. Repeat the above mentioned process. And check the shutter speed constant or irregular.
*Due to difficulty to confirm the accurate and/or irregular shutter speed, shutter speed checked by LED of checker body is judged a criterion for the time being.
3. Check 23903 P.C. board pattern
a. Install the adapter for ME -super to the connector.
b. Set ME-MV switch to ME side.
c. Insert P. C. board pattern to the connector of adapter.
d. Check the function and indication of auto-mode.

Check the function and indication of auto-mode
a. Set A-M switch to A-side.
b. Checking process is the same as ME mentioned before.

Check the function and indication of manual-mode
a. Set A-M switch to M-side.
b. Set UP-DOWN switch OFF position.
c. Confirm LED movement.
*LED should moves up and/or down to the direction which fixed by UP-DOWN switch.

Check the indication of EF
Red LED at the top should be flickering when set EF switch ON.
4. Check 23901 and 23904 P.C. board pattern
a. Install the adapter for $M V$ to the connector.
b. Set ME-MV switch to MV side.
c. Insert P.C. board pattern to the connector of adapter.
d. Checking process is the same as ME. But the application range of VR is opposite.


PENTAX ]ME Super
Fig. 1

## EXPLODED ILLUSTRATION





## LIST OF SERVICE PARTS

Product No. 23903 PENTAX ME Super

Note: 1: The parts with numbers starting '0-' are assemblies
2: Only available parts are listed below.

| Parts No. | Description | Qty | Interchangeability |
| :---: | :---: | :---: | :---: |
| A2 | Back cover key | 1 | 23900-A2 |
| A3 | Back cover key collar | 2 | 23900-A3 |
| A4 | Back cover key retainer plate | 1 | 23900-A4 |
| A5 | Back cover guide screw | 1 | 23900-A5 |
| 0-A6 | Strap hook assembly <br> (A6, A18) | 2 | 23900-0-A6 |
| A8 | Shutter light seal cover | 1 | 23900-A8 |
| A9 | Cassette receptacle | 1 | 23900-A9 |
| A10 | Back cover shaft receptacle | 1 | 23900-Al0 |
| $0-\mathrm{Al1}$ | $\begin{gathered} \text { Battery case assembly } \\ \text { (A11, A12, A14) } \end{gathered}$ | 1 | 23900-0-A11 |
| A13 | Tripod seat | 1 | 23900-A13 |
| A15 | Back cover key retainer spring | 1 | 23901-A15 |
| A16-01 | ASA volume retainer screw | 1 | 23901-A16-02 |
| A19 | Body covering, left | 1 | 23900-A19 |
| A20 | Body covering, right | 1 | 23900-A20 |
| 0-A21 | $\begin{aligned} & \text { Connector base plate assembly } \\ & \text { (A21, A22, A24 x 3) } \end{aligned}$ | 1 | 23900-0-A21 |
| A23 | Connector seat | 1 | 23900-A23 |
| A25 | Connector retainer screw | 1 | 23900-A25 |
| A26 | Light seal D | 3 | 23900-A26 |
| A2 8 | Light seal F | 2 | 23900-A28 |
| A30 | Light seal | 1 | 23900-A30 |
| A31 | Light seal A | 1 | 23900-A31 |
| A32 | Light seal B | 1 | 23900-A32 |
| A33 | Light seal C | 1 | 23900-A33 |
| A34 | Light seal tape | 1 | 23900-A34 |
| A35 | Light seal | 1 | 23900-A35 |
| A36 | Light seal | 2 | 23900-A35 |
| A37 | Light seal | 2 | 23900-A37 |
| A38 | Light seal J | 1 | 23900-A38 |
| 0-A39 | Exposure-compensation selector seat assy (A39, A40, A41) | 1 |  |
| A42 | Click spring | 1 |  |


| Parts No. | Description | Qty | Interchangeability |
| :---: | :---: | :---: | :---: |
| A4 3 | EF switch contact piece installing seat | 1 |  |
| A44 | EF switch contact piece | 1 |  |
| A4 5 | EF switch contact piece insulation washer | 1 |  |
| A46 | Stopper | 1 |  |
| A100 | Front board assembly <br> (A101, A102, A104, A105, A106 x 6, <br> A107, A108, A109, A110, A117, A121 x 2, <br> A124, A125, A126, A127, A128, A129, <br> A133, A134 x 2, A135, A136, A137, A138, A139 x 3, A151 x 4, K101, K102, K103 x 2, K104, K105 x 2, K106, K107, K108 x 2, K109, CNS $1.7 \times 2 \mathrm{x} 2, \operatorname{CNS} 1.7 \mathrm{x} 2.5 \mathrm{x} 4$, CNS 2 x 2.5 x 2$)$ | 1 |  |
| A104 | Mount ring | 1 | 23900-A104 |
| A105 | Mount spring | 1 | 23900-A105 |
| A106 | Mount retainer screw | 6 | 23900-A106 |
| $0-A 107$ | Mount lock button assembly (A107, A108, A109) | 1 | 23900-0-A107 |
| A110 | Mount lock button spring | 1 | 23900-A110 |
| $0-\mathrm{Al11}$ | Mirror release lever assembly (A111, A112, A113, A114, A115, A116) | 1 | 23900-0-A111 |
| A114 | Coupler lever spring | 1 | 23900-A114 |
| $0-\mathrm{A} 118$ | Self-timer charge lever assembly (A118, A119) | 1 | 23900-0-A118 |
| A120-01 | Charge cam | 1 | 23900-A120-O1 |
| A122 | Self-timer screw | 1 | 23900 -A122 |
| A123 | Self-timer collar | 1 | $23900-\mathrm{Al23}$ |
| $0-\mathrm{A} 126$ | $\begin{gathered} \text { Synchro terminal assembly } \\ \text { (A126, A124, A125) } \end{gathered}$ | 1 | 23900-0-A126 |
| A127 | X contact relay plate | 1 | 23900 -A127 |
| $0-\mathrm{A} 129$ | ```Relay P. C. board (A129, A117, A121 x 2, A138, A139 x 3, A151 x 4)``` | 1 |  |
| A130 | Light seal plate | 1 | 23900-A130 |
| A131 | Cover frame | 1 | 23900-A131 |
| A132-01 | Front board retainer screw | 4 | 23900-A132-01 |
| A133 | Lock pin supporter plate | 1 | $23900-$ A133 |
| A134 | Diaphragm coupler ring retainer | 2 | 23900-A134 |
| A135 | Restitution spring | 1 | 23900-A135 |
| A136 | Light seal | 1 | $23900-\mathrm{A} 136$ |
| A137 | Scratch protection seal | 1 | $23900-\mathrm{A} 137$ |
| A152 | Insulation seal | 1 |  |
| A200-02 | Back cover assembly $\begin{aligned} & (A 20 \text { 1-02, A202, A203, A207, A208 x } 2, \\ & \text { A209 x } 2, \text { A210, A211, A212, A213, } \\ & \text { A214-02, A219-02, A222-01 x 4, } \\ & \text { A230 x 2) } \end{aligned}$ | 1 | 23900-A200-02 |


| Parts No. | Description | Qty | Interchangeability |
| :---: | :---: | :---: | :---: |
| $0-\mathrm{A} 204$ | Pressure plate assembly (A204, A205, A206 x 2) | 1 | 23900-0-A204 |
| A220 | Pressure plate cover | 1 | 23900-A220 |
| A230 | Light seal | 2 | 23900-A230 |
| A300 | ```Top cover assembly (A301, A303, A304, A305, A307, A 11, A312, A313, A314, A315, A316, A317, A318, A319, A320 x 2, A321, A322, A323, A324, A325, A326, A327, A328, A329, A330, A331, A332, A335, A336, A337, A338, A339, A340 x 2, A341, A343, A344, A347 x 4, D20, CSS 1.7 x 4 x 4, T-CNS 1.7 x 3, T-CSS 1.7 x 2.5 x 3, T-CNM 1.7 x 4)``` | 1 |  |
| A303 | Click pin | 1 |  |
| A3 04 | Click pin spring | 1 | $23900-\mathrm{A} 304$ |
| A3 05 | Bearing | 1 |  |
| $0-\mathrm{A} 307$ | $\begin{gathered} \text { Click plate assembly } \\ (\text { A } 307, \text { A311) } \end{gathered}$ | 1 |  |
| A312 | Auto-manual selector plate | 1 |  |
| A313 | Release button, bottom | 1 |  |
| $0-\mathrm{A} 314$ | $\begin{aligned} & \text { Shutter buton assembly } \\ & (\text { A314, A341) } \end{aligned}$ | 1 | 23901-0-A314 |
| A315 | Shutter button core | 1 |  |
| A316 | Shutter dial | 1 |  |
| A317 | Release button | 1 | 23900-A317 |
| A318 | Switchboard | 1 |  |
| A319 | Switch board insulation sheet | 1 |  |
| A320 | Control button | 2 |  |
| A321 | Switch spring | 1 |  |
| A322 | Accessory shoe | 1 |  |
| A323 | Accessory shoe spring | 1 |  |
| $0-\mathrm{A} 324$ | $\begin{gathered} \text { Accessory shoe base assembly } \\ (\text { A324, A325, A344) } \end{gathered}$ | 1 |  |
| A326 | Contact spring A | 1 |  |
| A327 | Contact spring $B$ | 1 |  |
| A328-01 | Collar | 1 | 23900-A328-01 |
| A329 | Retainer screw | 1 | 23900-A329 |
| A330-01 | Insulation washer | 1 | 23900-A330-01 |
| A331 | SW pin | 1 | $23900-\mathrm{A} 331$ |
| A3 32 | Indication plate | 1 | 23900-A332 |
| A333 | Top cover retainer screw A | 2 | 23602-A342-01 |
| A3 34 | Top cover retainer screw B | 2 |  |
| A335 | Shutter indicator plate | 1 |  |


| Parts No. | Description | Qty | Interchangeability |
| :---: | :---: | :---: | :---: |
| A336 | Window A | 1 | 23900-A336 |
| A337 | " B | 1 | 23900-A337 |
| A338 | " C | 1 | 23900-A338 |
| A339 | Insulation tape | 1 | 23900-A339 |
| A340 |  | 2 | $23900-\mathrm{A} 340$ |
| A342 | Top cover retainer screw C | 2 |  |
| A343 | Shutter button retainer washer | 1 | 23901-A343 |
| A345 | Top cover retainer screw D | 1 |  |
| A346 | Nut | 1 |  |
| A347 | Accessory shoe retainer nut | 4 |  |
| A400 | Bottom cover assembly (A401, A402, A408, C209) | 1 | 23900-A400 |
| A403 | Bottom winding cap | 1 | 23900 -A403 |
| A405 | Battery cap | 1 | 23900 -A405 |
| A408 | Scratch protection seal | 1 | 23900-A408 |
| A500 | ```Release plate assembly (A501, A502, A503, A505, A506, A509, A512, A513, A514, CNS 1.4 x 5)``` | 1 |  |
| A504 | Bulb actuator plate | 1 | 23900-A504 |
| A507 | Guide screw | 1 | 23900-A507 |
| A508 | Spring hook B | 1 | 23900-A508 |
| A510 | Release plate restitution spring | 1 | 23900-A510 |
| A511 | Connection spring | 1 | 23900 -A511 |
| 0-A513 | $\begin{aligned} & \text { SW adjusting plate assembly } \\ & \text { (A513, A512) } \end{aligned}$ | 1 |  |
| $0-\mathrm{BO} 00$ | Mirror housing complete assembly <br> (B1, B2, B3, B4, B5, B6, B7, B8, B9, <br> B11, B12, B13, B14, B15, B1G, B17, <br> B18, B19, B20, B21, B22 x 2, B23, <br> B24, B25, B26, B27, B28, B30, B31, <br> B32, B33, B34, B35, B36, B37, B38, <br> B39, B40, B41, B42, B43, B44, B45, <br> B51 x 2, B52 x 3, B53, B54, B55, B57, <br> B60 $x$ 2, $\mathrm{B} 61, \mathrm{~B} 62, \mathrm{~B} 63, \mathrm{~B} 70, \mathrm{~B} 71, \mathrm{~B} 81$, <br> $\mathrm{B} 82, \mathrm{~B} 83, \mathrm{~B} 84, \mathrm{~B} 85, \mathrm{~B} 86 \mathrm{x} 2, \mathrm{~B} 90, \mathrm{~B} 91$, <br> B92, B93, B94, B95, B96, B97, B98, <br> B101, B102, B103, B105, B106, B107, <br> B108, B109, B111, B112, B201, B202, <br> B203, B204, B205 x 4, B206, B207, <br> B208, B210, B211, B215, B216 x 3, <br> B217, B218, I8, I9, I10, I19, I300, <br> L1, M6, M7, CSS 1.7 x 2.2 x 6 , <br> CSS 1.7 x 2.5 x 2, CNS 1.7 x 2, <br> CNS 1.7 x 2.5 x 3, CNM 1.7 x 3, <br> CNL-D 1.4 x 3. 5, CNL-F 1.7 x 2.5, W2, <br> W3, W27, W31, W36, W70, W78, W88, W89, <br> LW10, LW13, LW17 x 3, LW20) | 1 |  |
| B4 | Supporter plate, right | 1 | 23900-B4 |
| B5 | Supporter plate, left | 1 | 23900 -B5 |


| Parts No. | Description | Qty | Interchangeability |
| :---: | :---: | :---: | :---: |
| 0-B7 | $\begin{aligned} & \text { Hook lever B assembly } \\ & (\mathrm{B7}, \mathrm{~B} 6, \mathrm{B9}, \mathrm{~B} 86 \mathrm{x} 2) \end{aligned}$ | 1 |  |
| $0-\mathrm{B} 11$ | Mirror actuator lever assembly (B11, B51, B210) | 1 |  |
| 0-B12 | ```Diaphragm coupler lever assembly (B12, B13, B15, B51, B81, B82, B83, B84, B208, W88)``` | 1 |  |
| $0-\mathrm{B} 16$ | ```Restitution link A assembly (B16, B19, B36)``` | 1 | 23900-0-B16 |
| B17 | Slide shaft nut | 1 | 23900-B17 |
| B18 | Restitution link slide shaft | 1 | 23900-B18 |
| B20 | Restitution link B shaft | 1 | 2390Q-B20 |
| B22 | Spring hook | 2 |  |
| B23 | Release lever shaft | 1 | 23900-B23 |
| B24 | Release lever | 1 | 23900-B24 |
| 0-B25 | Restitution actuator lever hook plate assy. (B25, B26) | 1 | 23900-0-B25 |
| B27 | Restitution actuator lever hook plate shaft | 1 | 23900-B27 |
| B2 8 | Mirror up lever | 1 | 23900-B28 |
| 0-B30 | ```Restitution actuator lever assembly (B30, B31, B33, B44, B211)``` | 1 |  |
| $0-\mathrm{B} 34$ | Shock absorber connection lever assembly. (B34, B35, B39, B57) | 1 |  |
| B38 | Shock absorber lever | 1 | 23900-B38 |
| 0-B40 | $\begin{array}{r} \text { Shock absorber assembly } \\ (\mathrm{B} 40, \mathrm{~B} 41, \mathrm{~B} 42, \mathrm{~B} 45) \end{array}$ | 1 |  |
| B43 | Restitution spring hook screw | 1 | $23900-\mathrm{B4} 3$ |
| B51-00A | Mirror actuator collar a | 2 | 23900-B51-00A |
| -00B | " " " b |  | 23900-851-00B |
| -00C | " " " c |  | 23900-851-00C |
| -00D | " " " d |  | 23900-851-00D |
| $\begin{array}{r} \text { B32 }-00 \mathrm{~A} \\ -00 \mathrm{~B} \\ -00 \mathrm{C} \\ -00 \mathrm{D} \\ -00 \mathrm{E} \end{array}$ | Shock absorber collar a <br> " $"$ $"$ b <br> " " $"$ $c$ <br> $"$ $"$ $"$ $d$ <br> $"$ $"$ $"$ $e$ | 3 |  |
| B54 | Shock absorber lever shaft | 1 | 23900-B54 |
| 0-B55 | ```Mirror seat assembly (B55, B2, B3, B201, B202, B203, B204, B205 x 4, B206, LW10)``` | 1 | 23900-0-B55 |
| B60 | Light seal | 2 | 23900-B50 |
| B61 | Light seal A | 1 | 23900-B61 |
| B62 | Light seal B | 1 | 23900-B62 |
| B63 | Light seal C | 2 | 23900-B63 |
| B71 | Spring washer | 1 | 23900-B71 |


| Parts No. | Description | Qty | Interchangeability |
| :---: | :---: | :---: | :---: |
| 0-B90 | ```Dumper plate assembly (B90, B91)``` | 1 |  |
| B92 | Dumper plate shaft | 1 |  |
| B93 | Connection lever | 1 |  |
| B94 | Friction washer | 1 |  |
| B95 | Connection lever shaft | 1 |  |
| B96 | Nut | 1 |  |
| 0-B98 | ```Mirror seat adjusting plate assembly (B98, B97)``` | 1 |  |
| B101 | Mirror seat restitution spring | 1 | 23900-B101 |
| B102 | Diaphragm actuator lever spring | 1 | 23900-B102 |
| B103 | Diaphragm actuator spring | 1 |  |
| B105 | Hook lever restitution spring | 1 |  |
| B106 | Restitution actuator lever hook plate spring | 1 | 23900-B106 |
| B107-01 | Release lever restitution spring | 1 | 23900-B107-01 |
| B108-01 | Mirror flip-up spring | 1 |  |
| B109 | Mirror restitution spring | 1 |  |
| B111 | Shock absorber lever spring | 1 |  |
| B112 | Connection lever spring | 1 |  |
| B201-01 | Light seal curtain | 1 | 23900-B201-01 |
| B203 | Collar | 1 | 23900-B203 |
| B207 | Washer | 1 | 23900-B207 |
| B215 | Mirror adhesive tape | 1 | 23900-B215 |
| B216 | Focus adjusting screw | 3 | 23900-B216 |
| B217 | Light seal | 1 | 23900-B217 |
| B218 | Dust prevention seal | 1 | 23900-B218 |
| B220 | Light seal | 1 | 23900-B220 |
| 0-C1 | ```Top mech. plate assembly (C1, C13, C20, C27, C28, C29, C31, C32, C33, C37, C43, C44, C46, C60, C63, C64, C66, C142-01, CNL-F l.7 x 2.5, W13, W75)``` | 1 | 23900-0-C1 |
| 0-C2-02 | Winding seat assembly <br> (C2-02, C4-01, C6, C14, C16-01, C17, C18-01, C21, C24, C39, C47, C50-02, C51, C52, C59, C61, C71-01, C76, C78, I200, CNS 1.4 x 2, CNS 1.4 x 4.5, CNM 1.4 x 1.4, W6, W89, LW13 x 2) | 1 |  |
| C5-01 | Winding lever click cam | 1 | 23901-C5-01 |
| C7-01 | Winding lever friction spring | 1 | 23900-C7-01 |
| C8 | Winding lever nut | 1 | 23900-C8 |
| 0-C12 | Winding spring assembly (C12, C137, C138) | 1 | 23900-0-C12 |
| C14 | Switch actuating lever | 1 |  |


| Parts No. | Description | Qty | Interchangeability |
| :---: | :---: | :---: | :---: |
| C15-01 | Counter dial indicator | 1 | 23901-C15-01 |
| C16-01 | Receiving claw | 1 | 23901-C16-01 |
| C17 | Winding lever click spring | 1 | 23900-C17 |
| 0-C18-01 | Transporting claw assembly (C18-01, C47) | 1 | 23900-0-C18-01 |
| C21 | Release lock lever | 1 |  |
| 0-C22-01 | ```Winding shaft assembly (C22-01, C48 x 2, C67 x 2, C68, C140, C141-01, C154, C201)``` | 1 | 23900-0-C22-0101 |
| 0-C23 | $\begin{aligned} & \text { Cocked indicator assembly } \\ & (\mathrm{C} 23, \mathrm{C} 74) \end{aligned}$ | 1 |  |
| C24 | Shutter control lever | 1 |  |
| C25 | Counter retainer plate | 1 | 23900-C25 |
| 0-C26 | Winding stopper assembly <br> (C26, C41-01, C42, C65, C77, LW10) | 1 | 23901-0-C26 |
| C30 | Main gear | 1 | 23900-C30 |
| C31 | 2nd gear | 1 | 23900-C31 |
| C34-01 | Counter dial | 1 | 23901-C34-01 |
| C40 | Sprocket shaft pin | 1 | 23900-C40 |
| C4 9 | Cocked indicator lever shaft | 1 |  |
| C51 | Restriction lever shaft | 1 | 23900-C51 |
| C53 | Winding seat retainer screw | 1 | 23900-C53 |
| C54 | Counter dial indicator retainer screw | 1 | 23901-C54 |
| C57 | Counter dial spring | 1 | 23900-C57 |
| C59 | Release lock lever spring | 1 | 23900-C59 |
|  | Shutter restriction lever spring | 1 | 23900-C61 |
| C63 | Cam lever spring | 1 | 23900-C63 |
| C54 | Silent ratchet spring | 1 | 23900-C64 |
| C65-01 | Transporting claw spring | 1 | 23901-C65-C1 |
| 0-C69 | $\begin{aligned} & \text { Winding lever assembly } \\ & \text { (C69, C70) } \end{aligned}$ | 1 | 23900-0-C69 |
| C71-01 | Release lock lever shaft | 1 |  |
| C72 | Winding shaft retainer | 1 | 23900-C72 |
| C73 | Transporting marker | 1 | 23900-C73 |
| C75 | Cocked indication marker | 1 | 23900-C75 |
| C78 | Counter dial indicator stopper | 1 | 23901-C78 |
| C79 | Winding lever click spring | 1 | 23900-C79 |
| C80 | Winding stopper retainer screw | 1 | 23900-C80 |
| C81 | Strap hook retainer | 1 | 23900-C81 |
| 0-C101 | Bottom mech. plate assembly (C101, C110, C118, C120) | 1 | 23900-0-C101 |
| 0-C102 | Winding guide plate assembly <br> (C102, C103, C104, C112, C113, C114) | 1 | 23900-0-C102 |


| Parts No. | Description | Qty | Interchangeability |
| :---: | :---: | :---: | :---: |
| 0-C105 | $\begin{array}{r} \text { R lever assembly } \\ \text { (C105, C119) } \end{array}$ | 1 | 23900-0-C105 |
| 0-C106 | ```Winding lever ratchet wheel assembly (C106, C121, C122, C128)``` | 1 | 23900-0-C106 |
| C107 | Winding lever ratchet | 1 | 23900-C107 |
| C108 | Winding hook lever | I | 23900-C108 |
| 0-C109 | ```Sprocket shaft assembly (C109, C134, C135, C136)``` | 1 | 23900-0-C109 |
| C111 | Spring hook screw | 1 | 23900-C111 |
| C116 | Sprocket seat | 1 | 23900-C116 |
| C117 | R button | 1 | 23900-C117 |
| C124 | Winding hook coupler spring | 1 | 23900-C124 |
| C125 | Hook lever spring | 1 | 23900-C125 |
| C126 | R lever spring | 1 | 23900-C126 |
| C127 | Mirror charge lever spring | 1 | 23900-C127 |
| 0-C129 | ```Shutter charge lever assembly (C129, C115, C123)``` | 1 | 23900-0-C129 |
| C130 | Winding ratchet collar | 1 | 23900-C130 |
| C131 | Sprocket collar | 1 | 23900-C131 |
| C132 | Sprocket | 1 | 23900-C132 |
| C133 | Sprocket spring | 1 | 23900-C133 |
| C139-01 | Cover screw | 1 | 23900-C139-01 |
| C141-01 | Winding ratchet spring | 1 | 23900-C141-01 |
| C144 | Shutter charge collar | 1 | 23900-C144 |
| C145 | Winding ratchet spring | 1 | 23900-C145 |
| C146 | Seat plate retainer screw | 5 | 23900-C146 |
| 0-C147 | ```Bottom release assembly (C147, C148, C149, C150, C151, C152, C153)``` | 1 | 23900-0-C147 |
| C202-01 | Spool cam | 1 | 23900-C202-01 |
| C203 | Friction ring | 1 | 23900-C203 |
| 0-C204 | ```Spool assembly (C204, C2O5 x 14, C206, C2O8)``` | 1 | 23900-0-C204 |
| C207 | Joint | 1 | 23900-C207 |
| C210 | Spool cam receptacle | 1 | 23900-C210 |
| C211 | Light seal washer | 1 | 23900-C211 |
| 0-D6 | Rewind knob assembly (D6, D1, D2, D3, D4, D5, CNM $1.4 \times 2 \times 2)$ | 1 | 23900-0-D6 |
| D7 | Rewinding shaft | 1 | 23900-D7 |
| D8 | Rewinding shaft spring | 1 | 23900-D8 |
| 0-D10 | Rewinding shaft bearing assembly | 1 | 23900-0-D10 |


| Parts No. | Description | Qty | Interchangeability |
| :---: | :---: | :---: | :---: |
| O-D11-01 | ```ASA dial assembly (D11-01, D12, D13, D14 x 3, D16, D17, D18 x 3, D19, D23, T-CNS 1.4 x 2.5 x 2)``` | 1 |  |
| D15 | Nut | 1 | $23900-$ D15 |
| $\begin{array}{r} \text { D21-00A } \\ -00 \mathrm{~B} \\ -00 \mathrm{C} \end{array}$ | $\begin{array}{ccl} \text { Washer } & a & (t=0.1 \mathrm{~mm}) \\ " & b & (t=0.15 \mathrm{~mm}) \\ " & c & (t=0.2 \mathrm{~mm}) \end{array}$ | 1 | $\begin{aligned} & 23900-\mathrm{D} 21-00 \mathrm{~A} \\ & 23900-\mathrm{D} 21-00 \mathrm{~B} \\ & 23900-\mathrm{D} 21-00 \mathrm{C} \end{aligned}$ |
| 0-E000 | Shutter block | 1 |  |
| 0-1-1000 | Self-timer | 1 | 23900-0-K000 |
| I 1 | P.C. board retainer | 1 | 23901-I 1 |
| I 8 | Winder switch contact | 1 |  |
| I 9 | Insulation plate | 1 |  |
| I 10 | Collar | 2 |  |
| I 19 | Lug plate | 1 | 23901-I 19 |
| I 20 | Insulation seal | 1 |  |
| I 100 | Connector |  |  |
| I 200 | Main switch | 1 |  |
| I 300 | Memory and magnet switch block | 1 | 23900-I 300 |
| K101 | f -volume | 1 | 23900-K101 |
| $0-\mathrm{K} 102$ | ```Diaphragm coupler ring assembly (K102, K103 x 2, K104, K105 x 2, K106, K107, K108 x 2)``` | 1 | 23900-0-K102 |
| K109 | Insulation seat | 1 | 23900-K109 |
| L1 | Mirror | 1 | 23900 -L1 |
| L2 | Fresnel lens | 1 |  |
| L3 | Penta prism | 1 | 23900-L3 |
| 0-L4 | ```Eyepiece assembly (L4, L5)``` | I | 23900-0-L4 |
| M1 | Focusing screw receptacle plate | 1 | 23900-M1 |
| 0-M2 | ```Prism seat assembly (M2, M4, M9 x 2, M10, M14, M16)``` | 1 |  |
| M3 | Focusing plate retainer | 1 | 23900-M3 |
| M4 | Finder mask |  |  |
| M5 | Fresnel lens frame | 1 |  |
| M6 | Supporter plate, right | 1 |  |
| M7 | Supporter plate, left |  |  |
| M8 | Prism protection sheet | 2 | 23900-M8 |
| M10 | Shutter speed scale indication plate | 1 |  |
| M14 | Spacer | 1 | $23900-\mathrm{M} 14$ |
| M16 | Light seal | 1 | 23900-M16 |
| M18 | Fresnel lens retainer plate | 1 | 23900 MI 8 |
| M19 | Dust prevention seal A | 1 | 23900 M19 |


| Parts No. | Description | Qty | Interchangeability |
| :--- | :--- | :--- | :--- |
| M20 | Dust prevention seal B | 1 | $23900-\mathrm{M} 20$ |
| N1 | Cell frame | 1 |  |
| N3 | Light metering lens | 2 | $23900-\mathrm{N} 3$ |
| N4 | Shoe contact piece A | 1 |  |
| N7 | Eyepiece protector | 1 | $23900-\mathrm{N} 7$ |
| N8 | Insulation collar | 1 | $23901-\mathrm{N} 8$ |
| N9 | Shoe contact piece C | 1 |  |
| N13 | Insulation plate | 1 | $23901-\mathrm{N} 13$ |
| R100 | ASA volume assembly | 1 |  |
| T100 | P.C. board assembly | 1 |  |
| T108 | P.C. board retainer | 2 | $23900-\mathrm{T} 108$ |
| T210 | Dust prevention seal | 1 | $23900-\mathrm{T} 210$ |
| T212 | LED retainer collar | 1 |  |

## LIST OF STANDARD PARTS

Product No. 23903 PENTAX ME Super

| Small Screws: |  |  |  |
| :---: | :---: | :---: | :---: |
| Description | Surface Treatment | Position of Use | Qty |
| CSS $1.7 \times 2.2$ | Black nickel | 0-B000, B5 | 2 |
|  |  | 0-B000, M6 | 2 |
|  |  | 0-B000, M7 | 2 |
| CSS $1.7 \times 2.2$ | Nickel | A1, A400 | 1 |
| CSS $1.7 \times 2.5$ | Black nickel | 0-B000, B4 | 2 |
| CSS $1.7 \times 3$ | " " | A1, A4 | 2 |
|  |  | A1, A10 | 2 |
|  |  | A1, 0-A39 | 2 |
|  |  | A1, 0-C1 | 1 |
|  |  | A1, 0-C102 | 1 |
| CSS $1.7 \times 3$ | Nickel | A1, A400 | 2 |
| CSS 1.7 x 4 | Black nickel | A300, A322 | 4 |
| CNS $1.4 \times 1.5$ | " " | A500, Q-A513 | 1 |
|  |  | 0-C2-02, C17 | 1 |
| CNS 1.4 x 2 | " " | 0-C2-02, I200 | 1 |
| CNS 1.4 x 4.5 | " " | 0-C2-02, I200 | 1 |
| CNS $1.7 \times 1.8$ | " " | 0-M2, M6 | 1 |
|  |  | 0-M2, M7 | 1 |
| CNS 1.7 x 2 | " " | A100, K101 | 2 |
| CNS $1.7 \times 2.5$ | " " | A100, 0-A129 | 2 |
|  |  | A100, A133 | 2 |
|  |  | 0-B000, I10 | 2 |
|  |  | O-B000, $0-\mathrm{M} 2$ | 2 |
|  |  | 0-B000, M6 | 1 |
|  |  | C40, 0-C109 | 1 |
| CNS 1.7 x 3 | " " | A1, 0-C102 | 1 |
|  |  | 0-B000, 0-B98 | 1 |
| CNS 1.7 x5 | " " | A1, 0-A6 | 1 |
| CNS $2 \times 2.5$ | " " | A100, A134 | 2 |
| CNM $1.7 \times 2.2$ | " " | A1, 0-A21 | 1 |
|  |  | A1, 0-C147 | 1 |
| CNM $1.7 \times 2.8$ | " " | A1, 0-C147 | 1 |
| CNM $1.7 \times 3$ | " | A1, 0-A11 | 2 |
|  |  | A1, A13 | 2 |
|  |  | 0-B000, B71 | 1 |
| CNM $1.7 \times 3.5$ | " " | A100, $0-\mathrm{HOOO}$ | 2 |
|  |  | 0-C26, C72 | 1 |
| CNL-D 1.4x 2 | " | A1, A45 | 1 |
|  |  | A1, A504 | 1 |
| CNL-D $1.4 \times 3$ | " " | T100, T212 | 1 |
| CNL-D 1.4 x 3.5 | " " | 0-B000, B207 | 1 |
| CNL-D $1.7 \times 2$ | " " | 0-B000, 1100 | 1 |


| Description | Surface Treatment | Position of Use | Qty |
| :---: | :---: | :---: | :---: |
| CNL-D $1.7 \times 2.5$ | Black nickel | Al, $0-\mathrm{C} 2-02$ <br> Al, R100 | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ |
| CNL-D $1.7 \times 3$ | " " | A1, I 1 <br> A1, M6 <br> A1, $0-\mathrm{E} 000$ <br> N1, M6 <br> N1, M7 | $\begin{aligned} & 1 \\ & 1 \\ & 2 \\ & 1 \\ & 1 \end{aligned}$ |
| CNL-D $1.7 \times 3$ | Black zinc | A1, 0-E000 | 1 |
| CNL-F $1.7 \times 2.5$ | Black nickel | $\begin{aligned} & 0-\mathrm{B} 000, \quad \mathrm{~B} 24 \\ & 0-\mathrm{C} 1, \quad \mathrm{C} 31 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ |
| T-CSS 1.7 x 2.5 | " " | 0-A307, A316 | 3 |
| T-CNS $1.7 \times 3$ | " " | $\begin{aligned} & \text { A1, A335 } \\ & \text { N1 } \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ |
| T-CNM $1.7 \times 4$ | " " | A300, A321 | 1 |
| T-CNL-E $1.7 \times 3$ | " " | N1, N9 | 1 |
| T-CNL-E 1.7 x 4 | " " | N1, N8 | 1 |
| Set T $1.7 \times 4$ | " | 0-M2 | 2 |

Washers:

| Description | Material | Thickness | Position of Use | Qty |
| :---: | :---: | :---: | :---: | :---: |
| W2 | Brass | 0.5 mm | 0-B000, B4 | 1 |
| W3 | Delrin | 0.3 | 0-A129 | 1 |
| W3 | Brass | $\begin{aligned} & 0.3 \\ & 0.5 \\ & 0.5 \end{aligned}$ | $\begin{aligned} & \text { A1, } \quad 0-\mathrm{A} 139 \\ & 0-\mathrm{A} 126, \text { A127 } \\ & \text { B38, } 0-\mathrm{B} 40 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| W6 | " | $\begin{array}{lll} 0.03, & 0.05, & 0.1 \\ 0.1, & 0.15 & \\ 0.2 & \end{array}$ | $\begin{aligned} & \text { A100, A134 } \\ & \text { C16-01 } \\ & 0-\mathrm{C} 26 \end{aligned}$ | $\begin{aligned} & 2 \\ & 1 \\ & 1 \end{aligned}$ |
| W8 | " | 0.08, 0.1, 0.15 | A500, A507 | 1 |
| W13 | " | 0.1 | 0-C1 | 1 |
| W14 | " | $\begin{array}{llll} 0.1, & 0.15 & \\ 0.1, & 0.2, & 0.3, & 0.4 \\ 0.1, & 0.2, & 0.3, & 0.4 \\ 0.1 & & & \\ 0.05, & 0.1, & 0.15 \end{array}$ | A1, A100 <br> A1, M6 <br> A1, M7 <br> 0-C106, C144 <br> C108, Cl30 | $\begin{aligned} & 4 \\ & 1 \\ & 1 \\ & 1 \\ & 1 \end{aligned}$ |
| W17 | Steel | $0.15,0.2,0.3$ | 0-C101 | 1 |
| W27 | Brass | 0.3 | 0-B90 | 1 |
| W2 8 | " | 0.3 | 0-C109, C132 | 1 |
| W30 | " | 0.1 | A100, A123 | 1 |
| W31 | " | $\begin{array}{ll} 0.1, & 0.2 \\ 0.05, & 0.07, \end{array} \quad 0.1$ | $\begin{aligned} & 0-\mathrm{B} 25 \\ & 0-\mathrm{C} 18-01 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ |
| W36 | " | 0.2 | B93, B95 | 1 |
| W40 | " | 0.2 | A3, A4 | 2 |
| W70 | " | 0.5 | B38, 0-B40 | 1 |
| W89 | " | $\begin{aligned} & 0.2 \\ & 0.5 \end{aligned}$ | $\begin{aligned} & 0-\mathrm{B} 16 \\ & \mathrm{C} 24 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ |


| Description | Material | Thickness | Position of Use | Qty |
| :---: | :---: | :---: | :---: | :---: |
| W91 | " | 0.05, 0.07, 0.1, | 0.15 C 25 | 1 |
| w96 | " | 0.3 | A321 | 1 |
| Lock Washers: |  |  |  |  |
| Description | Material | Position of use | Qty |  |
| LW10 | Steel | $\begin{aligned} & \mathrm{B} 203 \\ & 0-\mathrm{C} 26 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \end{aligned}$ |  |
| LW13 | " | $\begin{aligned} & \mathrm{B} 27 \\ & \mathrm{C} 16-01 \\ & 0-\mathrm{C} 18-01 \\ & 0-\mathrm{C} 101 \\ & 0-\mathrm{C} 109 \end{aligned}$ | $\begin{aligned} & 1 \\ & 1 \\ & 1 \\ & 2 \\ & 1 \end{aligned}$ |  |
| LW17 | " | 0-B7 | 1 |  |
|  |  | 0-B40 | 1 |  |
|  |  | 0-B90 | 1 |  |
| LW20 | " | 0-B30 | 1 |  |
| Lead wires: |  |  |  |  |
| Lead wire No. | Length | Color | Position of use | Qty |
| 1 | 136 mm | Blue | I100, 0-A129 | 1 |
| 2 | 125 | Brown | I100, 0-A129 | 1 |
| 3 | 40 | Orange | I100, I300 | 1 |
| 4 | 40 | Black | I100, I19 | 1 |
| 5 | 50 | Purple | I100, I300 | 1 |
| 6 | 125 | Green | I100, 0-A129 | 1 |
| 7 | 105 | Purple | I100, A44 | 1 |
| 8 | 125 | Skyblue | I100, 0-A129 | 1 |
| 9 | 120 | Gray | I100, 0-A129 | 1 |
| 10 | 120 | White | I100; 0-A129 | 1 |
| 11 | 125 | Pink | I100, 0-A129 | 1 |
| 12 | 105 | Yellow | I100, K101 | 1 |
| 13 | 40 | Purple | I100, I300 | 1 |
| 14 | 55 | Gray, | N9, 0-E000 | 1 |
| 15 | 2.0 | Brown | 0-A129, 0-E000 | 1 |
| 16 | 13 | Black | 0-E000 | 1 |
| 17 | 40 | Blue | T100, 0-E000 | 1 |
| 18 | 20 | White | 0-A129, 0-E000 | 1 |
| 19 | 20 | Pink | I200, 0-A129 | 1 |
| 20 | 40 | Red | I200, T100 | 1 |
| 21 | 50 | Gray | N4, 0-A126 | 1 |
| 22 | 35 | Pink | N4, T100 | 1 |
| 23 | 40 | Yellow | R100, T100 | 1 |


| Lead wire No. | Length | Color | Position of use | Qty |
| :--- | :--- | :--- | :--- | :--- |
| 24 | 55 | Yellow | R100, K101 | 1 |
| 25 | 110 | Red | T100, 0-A11 | 1 |
| 26 | 50 | Blue | I100, 0-A21 | 1 |
| 27 | 50 | Red | I100, 0-A21 | 1 |
| 28 | 55 | Green | I8, 0-A21 | 1 |

