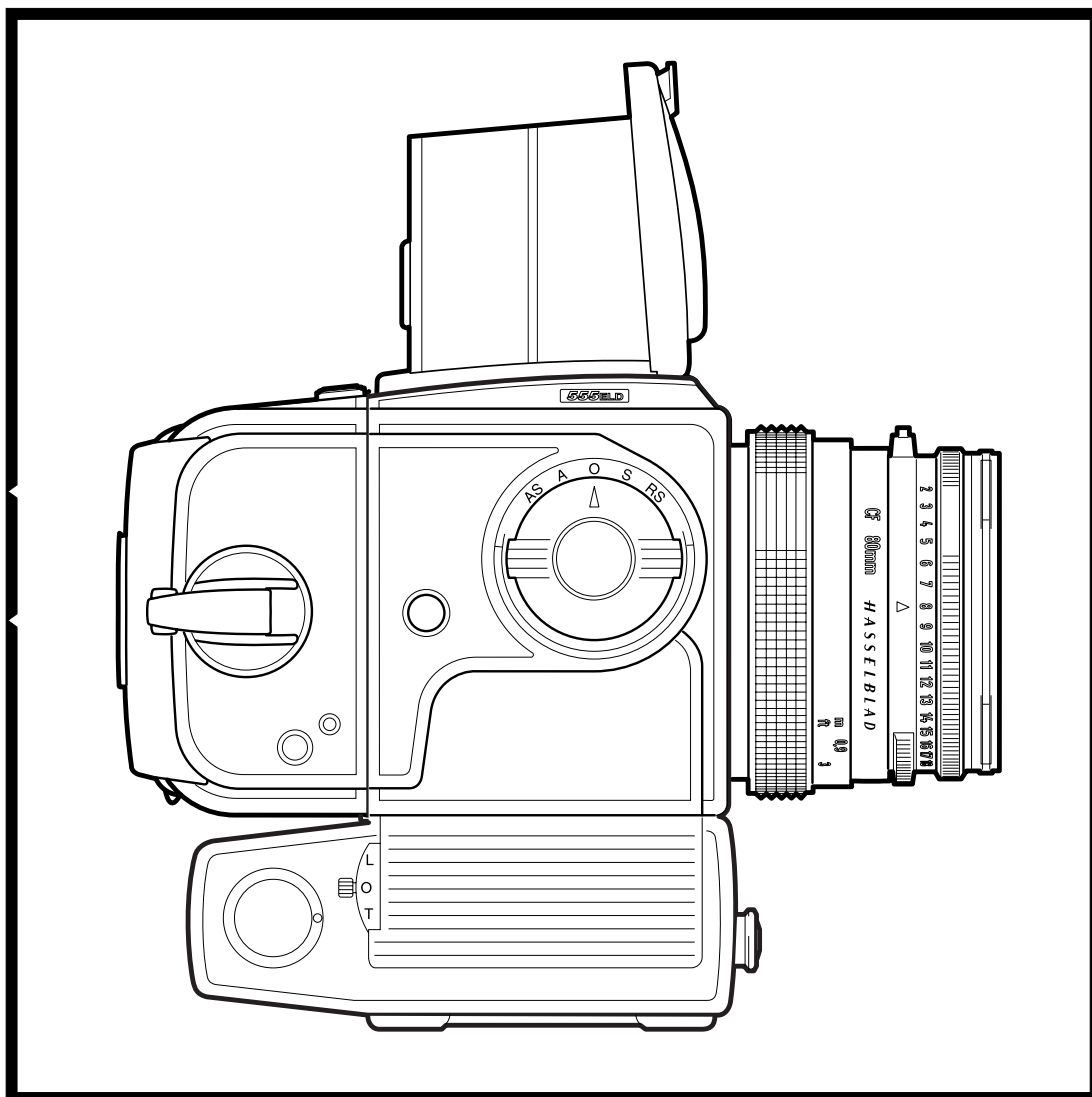


H A S S E L B L A D

Service Manual

555ELD



May 1999

Victor Hasselblad AB

Göteborg Sweden

Copyright © 1999 by Victor Hasselblad AB. All rights reserved. No parts of this material may be reproduced, stored in retrieval system or transmitted, in any form or by any means, electronic, mechanical, photocopy, recording, or otherwise, without the prior written permission of the Company.

Camera body 555ELD**1.**

| |
|-----------------------------------------------------------------------------------|
| 1. General |
| 2. Tools |
| 3. Disassembly |
| 4. Reassembly |
| 5. Adjustment, final assembly and calibration of the flash meter |
| 6. Sub-assembly: Front bayonet plate and auxiliary shutter |
| 7. Exploded view: Shell |
| 8. Exploded view: Motor housing |
| 9. Exploded view: Right hand wall & main components |
| 10. Exploded view: Left hand wall & electronics |
| 11. Exploded view: Rear plate & auxiliary shutter |
| 12. Exploded view: Front bayonet plate, mirror assembly & screen frame |
| 13. Exploded view: Motor & electrical connections |
| 14. Exploded view: Motor drive gear box |
| 15. Exploded view: Shell 553ELX/500ELX |
| 16. Exploded view: Motor housing 553ELX |
| 17. Exploded view: Motor housing 500ELX |
| 18. Exploded view: Right hand wall & main components 553ELX/500ELX |
| 19. Exploded view: Left hand wall & electronics 553ELX/500ELX |
| 20. Exploded view: Rear plate & auxiliary shutter 553ELX/500ELX |
| 21. Exploded view: Front bayonet plate & screen frame 553ELX/500500ELX |
| 22. Exploded view: Motor & electrical connections 553ELX |
| 23. Exploded view: Motor & electrical connections 500ELX |

555ELD - 553ELX - 500ELX

01/93 New screw holding the side cover - 553ELX and 500ELX

17/93 Fitted with wrong spacers - 553ELX

20/93 Redesigned flash metering circuit - 553ELX and 500ELX

23/95 New motor - 553ELX

12/96 Tripod foot adapter/kits

01/97 Rechargeable batteries discontinued - 500ELX

06/97 New tripod foot - 553ELX

03/99 Battery compartment - 553ELX

04/99 Release and S-arm redesigned - 553ELX and 500ELX

05/99 Preliminary spare part catalogue - 555ELD

07/99 New Service Manual - 555ELD

09/99 Mounting plate in motor housing modified - 555ELD

14/99 Battery compartment for AA batteries - 500ELX

01/00 New CD-ROM - Version 1.2

09/00 New CD-ROM - Version 1.3

14/00 Discontinued parts - 500 series cameras

01/01 Modified magazine hook - 555ELD

02/01 Modified motor unit - 555ELD

04/01 New CD-ROM - Version 2.0

Camera body 555ELD

General description

| | |
|------------------------------------|------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------------|
| Camera type: | Medium format single lens reflex camera with a built-in motor, TTL/OTF flash metering and two release systems, one adapted for conventional photography, the other one for digital photography including integrated connections for digital camera backs. |
| Camera body: | One-piece, cast aluminium alloy shell with permanently attached motor housing in lightweight magnesium. Tripod socket threads 1/4" and 3/8", and tripod plate for rapid mounting. |
| Film format and film types: | 6x6 cm and 6x4.5 cm with different film magazines; 120 and 220 rollfilm, 70 mm perforated long rolls and Polaroid film. |
| Film advance: | Automatic motorized film advance with simultaneous shutter winding and mirror return; maximum speed 1.3 frames/s. Remote shutter release via optional cord or IR control. |
| Lenses: | All CF/CFi/CFE/CB lenses from 30 to 500 mm, Teleconverter 1.4XE, Converter 2XE, Converter 2XE, Teleconverter APO 1.4XE and PC-Mutar 1.4X Shift Converter. |
| Shutter: | Lens leaf shutter. Speeds from 1 to 1/500 s and B. Time exposure lever on camera body. |
| Shutter / Mirror modes: | Five different shutter/mirror modes; single exposure with normal mirror function, sequential exposures with normal mirror function, pre-release of mirror for one single exposure, repeated pre-release for single exposures and pre-release for sequential exposures. |
| Flash control: | TTL centre-weighted dedicated system with OTF metering. Measured area Ø40 mm. Film speed range ISO 64 - 4000. Controls a wide variety of flash units using appropriate adapters (SCA-system). |

Camera body 555ELD

General description

Viewfinder and focusing screen: Foldable focusing hood with 5x magnification, interchangeable with 90° or 45° prism viewfinders or magnifying hoods. Bright Acute-Matte D* screen interchangeable for other types. Full viewfinder image with all lenses and accessories.

Adaption to digital backs: Integrated databus connections interface directly to leading digital backs. A unique release system with separate front release port on camera activates the digital back.

Camera operation: Electronic front release. Alternatively, the camera can be released remotely by optional cord or IR control. Selector dial for shutter/mirror release modes. Film speed selector for TTL/OTF flash metering. Battery check for alkaline batteries.

Battery/Capacity: Five standard 1.5 V AA size alkaline batteries (LR-6 or AM-3) or rechargeable NiCd types. Up to 4000 exposures with alkaline batteries, less than 2000 exposures with fully charged NiCd.

Fuse: 5x20 mm 1.5 A medium slow-blow instrument fuse.

Dimensions: Length 120 mm (4.7"), width 100 mm (3.9"), height 150 mm (5.9").

Weight: 1125 g (2 lb 8 oz).

IR Release unit: Unit for infrared remote release of the Hasselblad 555ELD. Attaches to the front release ports of the camera and powered by the camera batteries. Can be set for normal or digital photography. Supplied with the Hasselblad IR Remote control 44113, which in normal conditions provides an operating range of approx. 10 m (33').

Dimensions: Length 26 mm (1.0"), width 86 mm (3.4"), height 36 mm (1.4"), weight approx. 70g (2.5oz).

Camera body 555ELD**Tools**

| Tool No. | Description | Used for |
|--------------------|-------------------------|------------------------------------------------------------------------|
| V-2211 | Pin driver | Fitting the locating pin in the front plate and the front gear bracket |
| V-2229 | Focal length gauge | Adjustment of the focal length, mirror 45°angle and focusing screen |
| V-2236 | Microscope | Focusing screen adjustment |
| V-4151/52 | Focusing tester | Focusing screen adjustment |
| V-4705 | Focusing screen adapter | Focusing screen adjustment |
| V-5423 | Riveting jig | Replacement of aux. shutter flaps |
| 902474 | Test box ELX/CX | Calibration of the TTL flash meter |
| 902658 (V-2075) | Key angle gauge | Adjustment of the front key angle |
| 903202 | Power supply adapter | Running the camera without batteries |
| 970600 | Service Test System | Calibration of the TTL flash meter |

Camera body 555ELD

Disassembly

Motor Housing

Remove the lens, film magazine, viewfinder and focusing screen.

Unlock the battery cover, operate the release button and disconnect the battery cover at the exact moment when the auxiliary shutter is closed and mirror is in the upper position.

Peel back the small palpas cover hiding the screw (821033). Use the short screwdriver V-2245. Remove the inner side cover (22709).

Remove the cover (22928).

Fully wind the camera.

Remove the batteries and battery cover (30737 chrome or 30742 black).

Remove the socket cap (22470) from the side contact. Remove the two screws (820019) from the right hand plastic grip (40202). Peel back the leather on the side cover (chrome 30424 -1, black 30631-1) and remove the screw (823017) underneath. The side cover and the plastic grip can now be removed.

Remove the cover (Chrome 21292, black 22117) from the motor housing.

Unplug the release button (46120) from the release socket
Fig. 1.

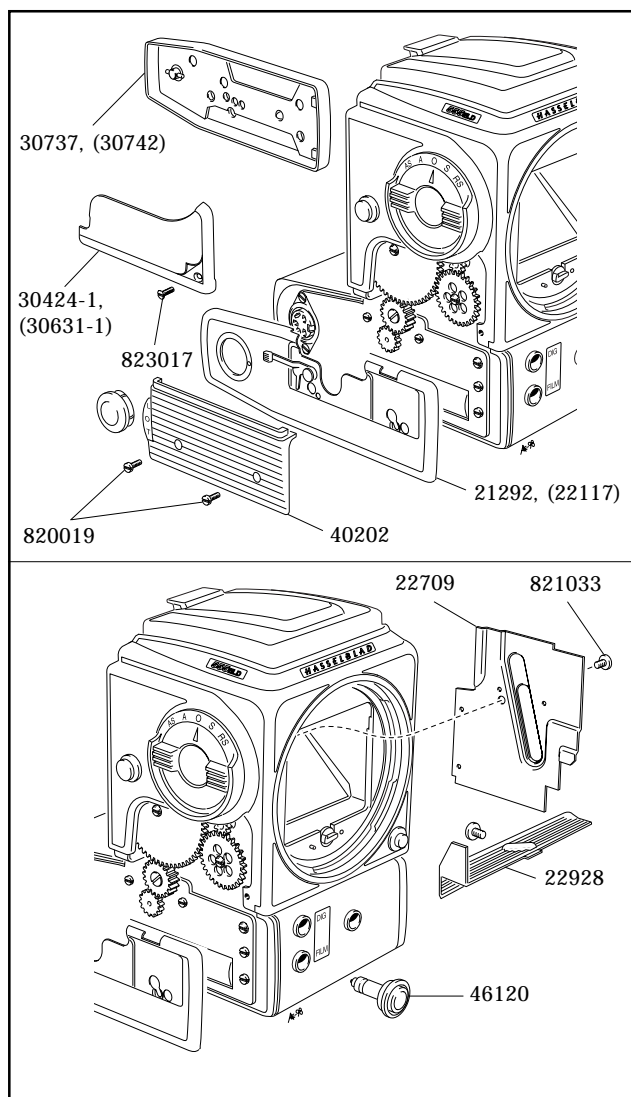


Fig. 1

Remove the four screws, two (820042), two (823017) and loosen the contact flex (22915) from the motor unit and pull it clear of the motor housing. At this point the fuse assembly (815855, 21305, 22342 and 13593) can also be removed. Finally, push out the battery compartment (50178).

Fig. 2.

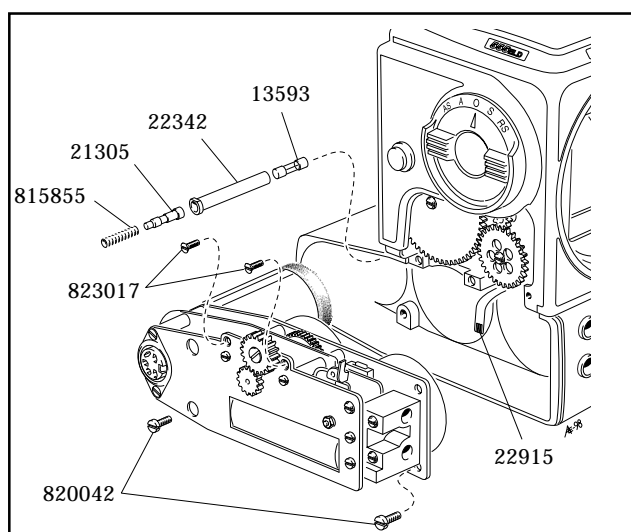


Fig. 2

Camera body 555ELD

Disassembly

Remove the tripod foot (30763) by removing the six screws (829790) and the rubber support (30778) held by double-sided tape. When the tripod foot and the rubber support have been removed, four holes are exposed allowing access to the four screws (823745) holding the motor housing (30801) to the main camera body. Insert a screwdriver through the access holes and remove all four screws. The motor housing can now be removed from the main body of the camera.

Fig. 3.

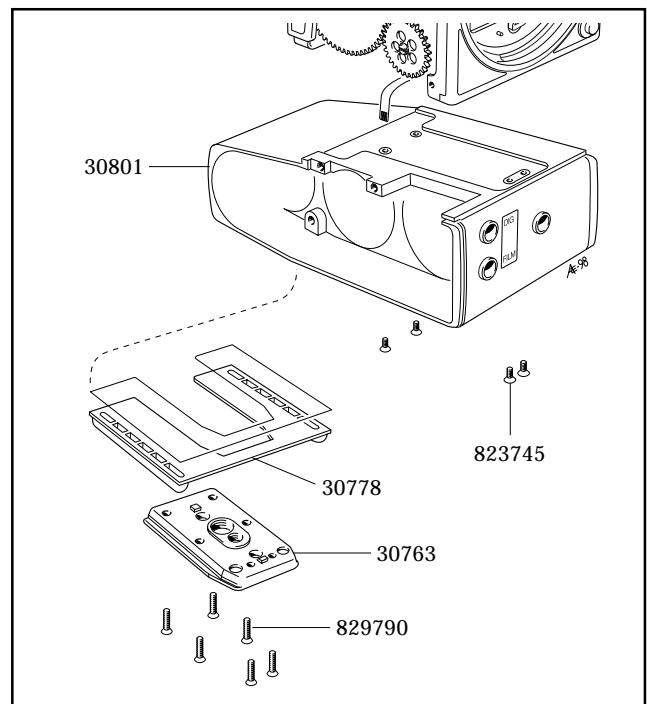


Fig. 3

Motor unit

Remove the two long screws (823049) from the side contact (13604). The contact will now pull clear but will still be connected to the motor (22827) and the wiring. If no further disassembly is to take place, then care should be taken that this wiring is not broken. Unsolder the brown, red, and blue wire from the micro switch (13605). Remove the three screws (824205).

Fig. 4.

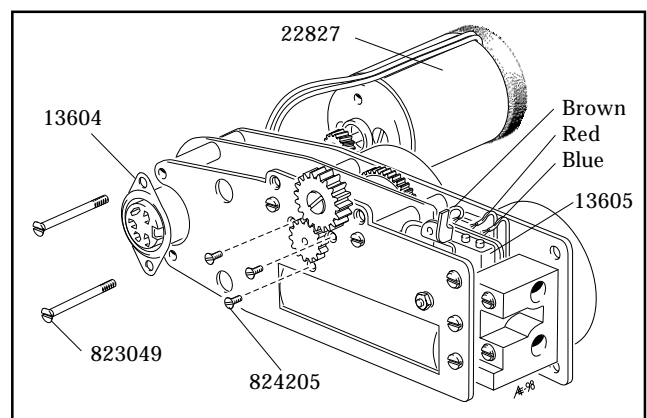


Fig. 4

Remove the screw (821012) and the gear (13566). Remove the two long screws (820048), that pass through the outer mounting plate, then through the connecting terminal and into the inner mounting plate. Remove the two short screws (820041 and 820042) located on both sides of the gear (13566) and the two washers (810613). Gently remove the outer mounting plate (21290).

Fig. 5.

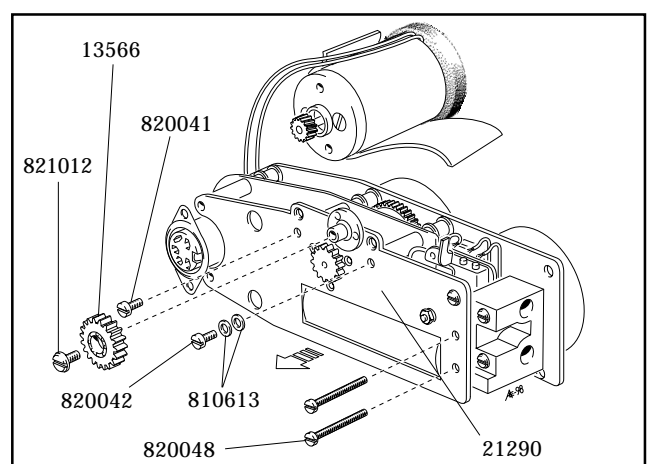


Fig. 5

Camera body 555ELD

Disassembly

To remove the parts from the outer and inner mounting plates proceed as follows (see the exploded views 13 and 14):

Remove the small nut (828001), eccentric (22352) and bearing pin (14100). Remove the screw (821033) and washer (810532) and the micro switch (13605) can be separated from the outer mounting plate. Remove the link (22351), clip (817112) and stop arm (13571). Disconnect the spring (814601), remove clip (817115). Separate the magnet arm (13561) and the clutch arm (14099) from the outer mounting plate. Remove the two bearings (13528).

Remove the three plastic tubes (13606) from the inner mounting plate. Remove the four screws (821033) and disconnect the green, black, blue and red wires from the connecting terminal (30435).
Fig. 6.

Remove the foam pad (22823). Unsolder the blue wire from the sheet metal shield marked "+" of the motor, the white wire right opposite and the capacitor (853549). The motor can now be separated from the remainder of the motor unit.
Fig. 7.

Unloosen the screw (820020) and disconnect the blue wire connected to the inner mounting plate (ground). Lift carefully the PC board (22913) a bit and remove the gears (13565, 13563 and 13564). Unsolder the red wire from the contact spring (22646) and separate the PC board from inner mounting plate. Unsolder the solenoid (30421).

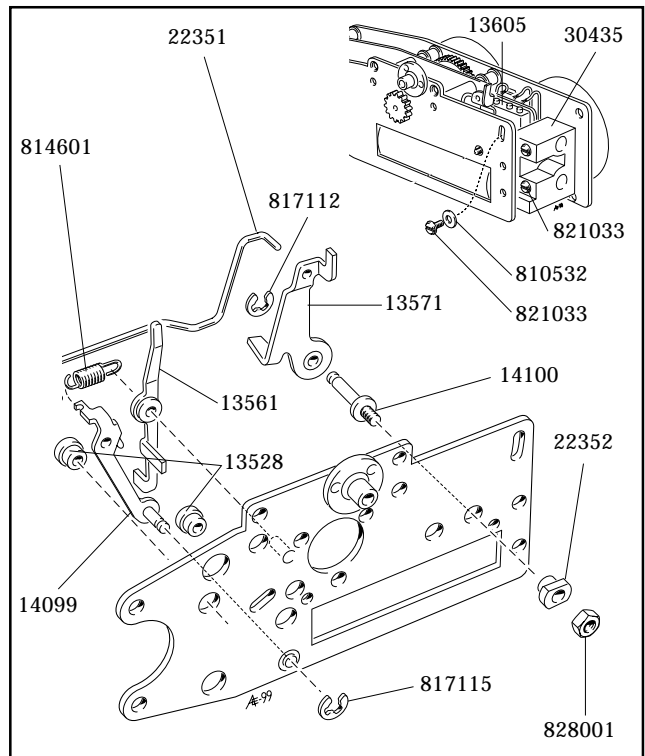


Fig. 6

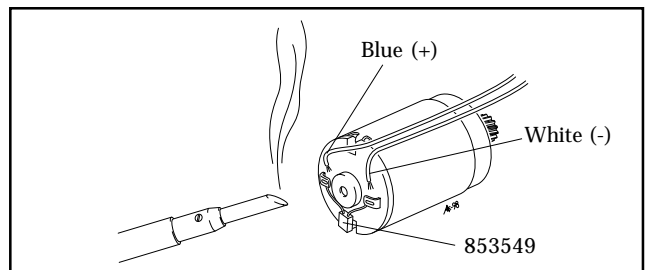


Fig. 7

Camera shell

Remove the circular piece of leather (13374) from the centre of the mode selector and then remove the two screws (823023) beneath it. Withdraw the selector knob (30429), thus exposing a further two screws. Remove these two screws (820014) together with their washers (810613) and (810607), and then withdraw the symbol plate (30682), together with the washer (13541) and spring (816906). Remove the circular piece of leather (13374) on the ISO selector (22495) and remove the set screw beneath it. When withdrawing the selector care must be taken that the spring loaded dog (22533) does not spring free.
Fig. 8.

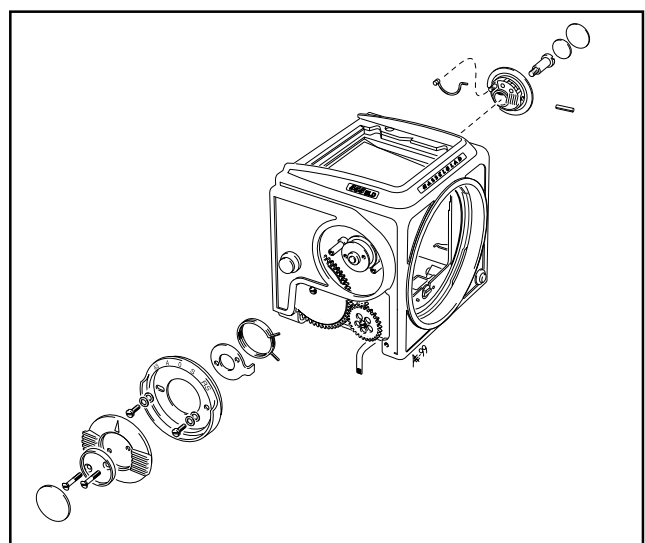


Fig. 8

Camera body 555ELD

Disassembly

Remove the two long screws (823781) located towards the front of the camera shell. Remove the two short screws (823755) located towards the rear of the camera shell.

Remove the cap (22470) from the chassis connector and peel back the leather (22455) covering the two screws (823335). Remove these screws and push the chassis connector into the body of the camera. The shell can now be separated from the body.

Note: Care must be taken so that the flex (22915) will not become damaged during the separation.

To accomplish this separation requires manipulation of the shell and body in order that the gearing, on the right hand wall of the camera shell, does not snag on the camera shell. When the shell and body have been separated the teflon button (103773) can also be removed if required.

Fig. 9.

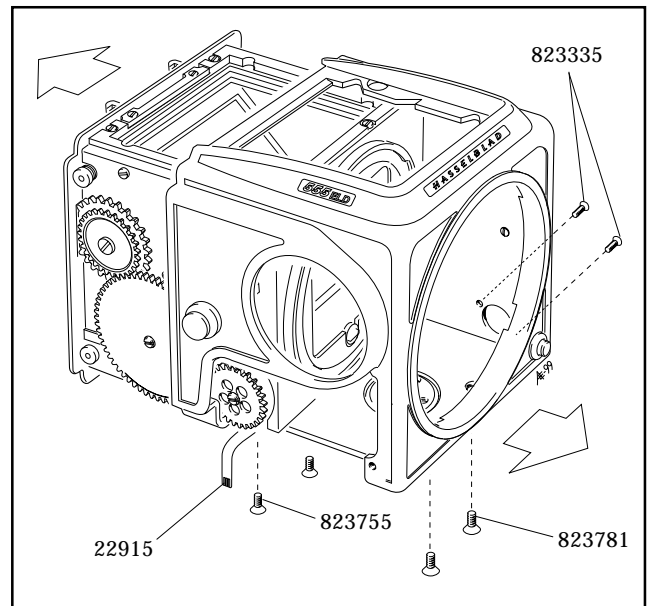


Fig. 9

Circuit board and contact flex

CAUTION! When handling the circuit board a grounded bench mat and a wrist strap must be used to prevent ESD damage.

Remove the screw (820019) and the washer (810407) that secures the micro switch (852589). Loosen carefully the cables (22931) from the chassis. Remove the two screws (820011) from the grounding attachment (22918). Remove the screw (820011) that secures the cable holder (12453). Remove the two screws (820325) that secure the photodiode and the two screws (820015) that secure the PC board. Loosen carefully the contact flex (22915) from the bottom side of the chassis. The circuit board, also secured by double-sided tape, can now carefully be separated from the assembly.

Fig. 10.

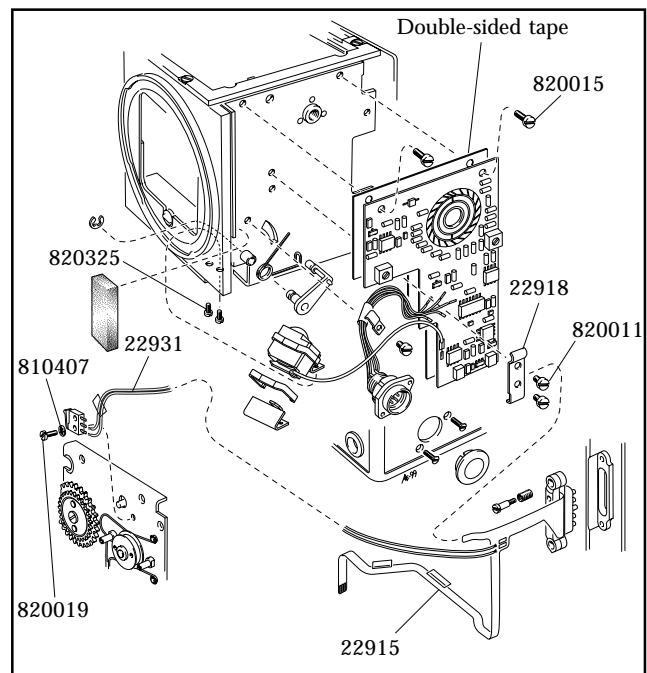


Fig. 10

Camera body 555ELD

Disassembly

Rear plate

Remove the screw (821033) from the centre of the large gear (13557) and lift the gear clear. With the gear removed an additional screw is exposed which must also be removed (820025). Remove the screws (820013 and 820015) securing the rear plate to the left hand wall, the two screws (820015) on the underside and the screws (821017) on the upper side.

Release the camera.

Remove the clip "A" (817115) located in the centre of the actuating part (13551). Tension the camera somewhat by turning the gear (13556) clockwise and pull out the rear plate approximately 10 mm. Remove the clip "B" (817115) that secure the upper actuating arm (13580) and disconnect it from the actuating part. Lift the actuating part clear of its stud. Keeping track of the spacer (13547), the rear plate can now be separated completely from the remainder of the assembly.

Remove the two screws (105412) and the two springs (815511). The contact flex (22915) can now be separated from the rear plate.

Fig. 11.

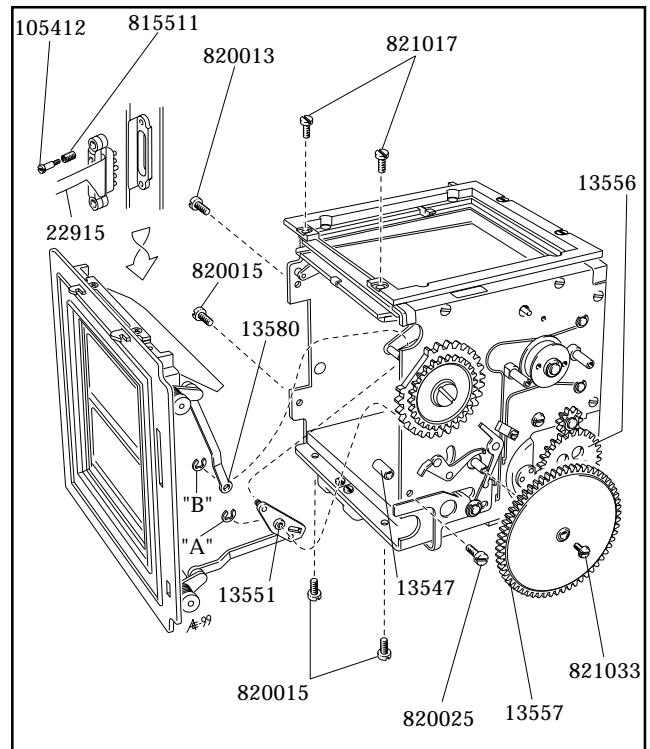


Fig. 11

Focusing screen frame

Remove the two long screws (823028) that secure the frame to the side walls. Remove the screws (821017) that secure the frame to the top of the camera body. The frame (22980) can now be separated from the remainder of the assembly.

Fig. 12.

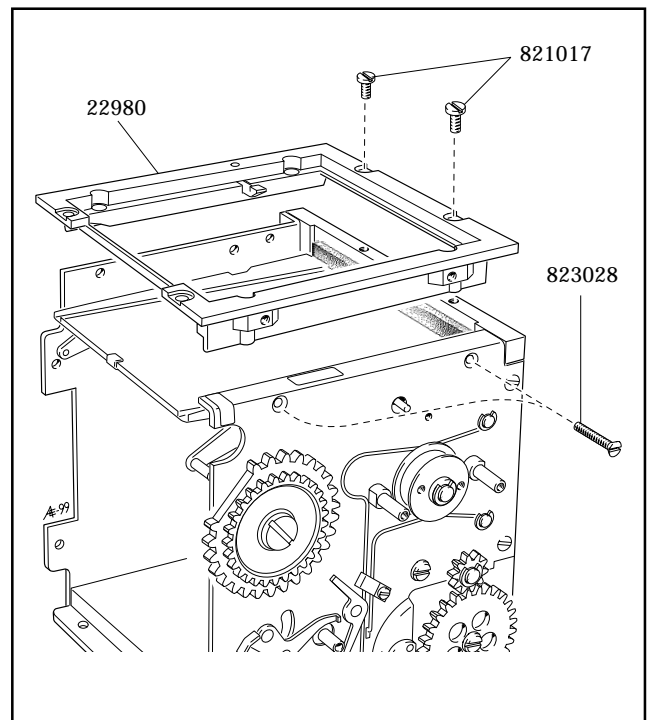


Fig. 12

Camera body 555ELD

Disassembly

Mirror

Disconnect the mirror hinge (30754) from the two pins "A" and release the pin "B" on the mirror frame, from the mirror lever (22460). The complete mirror (30716) can now be separated from the remainder of the assembly.

Fig. 13.

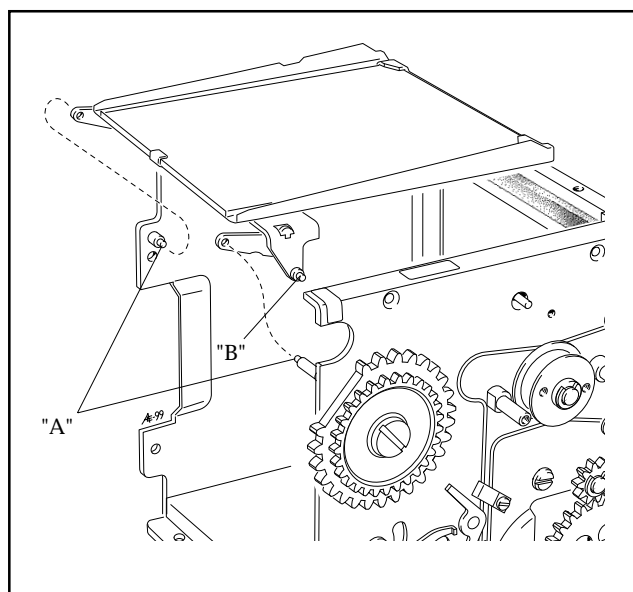


Fig. 13

Front bayonet plate

Remove the two screws (820015) located at the rear of the bayonet plate. Remove the two screws (823655) that secure the bottom of the bayonet plate to the main camera body. Remove the two screws (823015) that secure the bayonet plate to right hand wall of the camera body (i.e. the side upon which the mode selector is mounted).

When separating the bayonet plate from the rest of the camera body a firm grip should be maintained on the gear (13556), thus ensuring that tension on the spring behind it is not quickly relieved.

When the bayonet plate has been separated from the rest of the camera body the gear should be gradually released allowing the tension on the spring to be gradually relieved. Remove gear (13556) and disc (21324) with screw (821033) from bayonet plate.

Fig. 14.

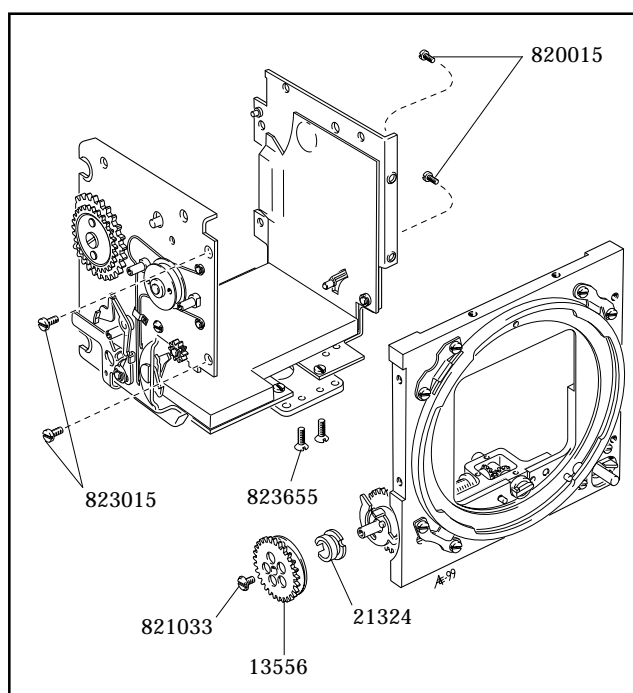


Fig. 14

Camera body 555ELD

Disassembly

Right and left hand wall

Remove (or cut) the foam plastic pad (22513) to get access to the screws (820014). remove the right hand wall.

Fig. 15.

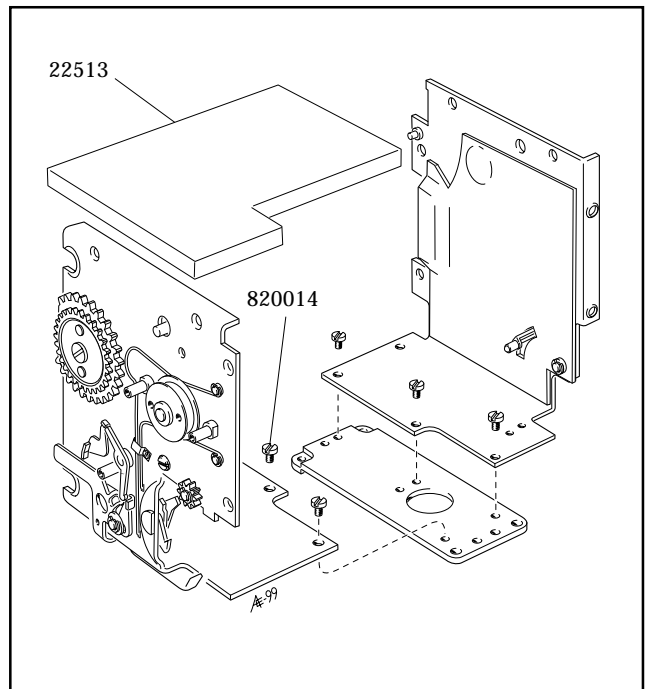


Fig. 15

Mechanism plate

To dismantle the right and left hand wall proceed using the following sequence:

Inner wall right

Remove the spring (814862). Remove the two screws (820013) that secure the support (30701).

Remove the clip "A" (817115) and lift the plate (22714).

Lift the arm (22896).

Remove the spring (814861), clip "B" (817115) and washer (810532). Lift the mirror actuating arm (22458) and the mirror lever (22460). Remove the teflon washer (810761).

Remove the screw "C" (821033) that secures the gear (22476) to the inside wall, then lift the gear clear.

Lift the auxiliary shutter arm (13554) clear.

Disconnect the springs "D", "E" and "F" (814302, 814706 and 814509).

Remove the clip (817123) and two washers (810702/705). Lift the locking arm (21219) clear, together with the washer (810702) underneath. Lift the S-arm (22923) clear together with the washer (810702). Lift the B-arm (21221) clear together with the washer (810703).

Fig.16.

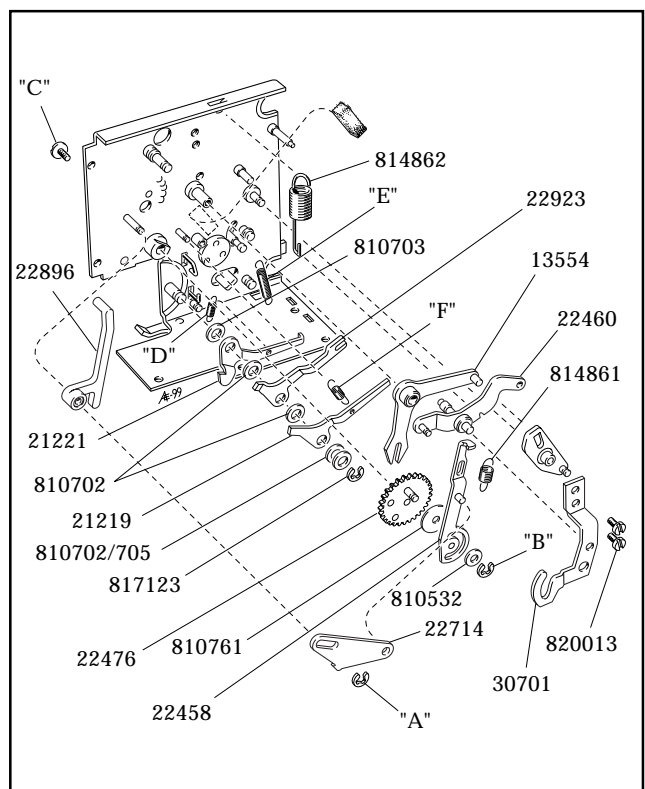


Fig. 16

Camera body 555ELD

Disassembly

Outer wall right

Remove the screw (821012) and lift the gear (13558) clear, together with the washer (810854).

Remove the clip "A" (817119) from the inside wall. The release arm (22922) can now be lifted clear of the outside wall.

Remove the clip (817112) from the inside wall. The release catch (13570) and the torsion spring (816608) underneath can be lifted clear of the outside wall. Remove the draw spring (814309) that connects the release lever (30793) to the stop (22317).

Remove the clip "B" (817115) and washer (810538), then lift the release lever clear. Remove the clip "C" (817119) and lift the gear (13567) clear, together with the dog (13525).

Remove the clip (817123), the washer (810702/705) and the selector (13559). Remove the screw (820011) and cable holder (12453).

Remove the two clips "D" (817115), then remove the S-wire (21223) and the A-wire (21224).
Fig. 17.

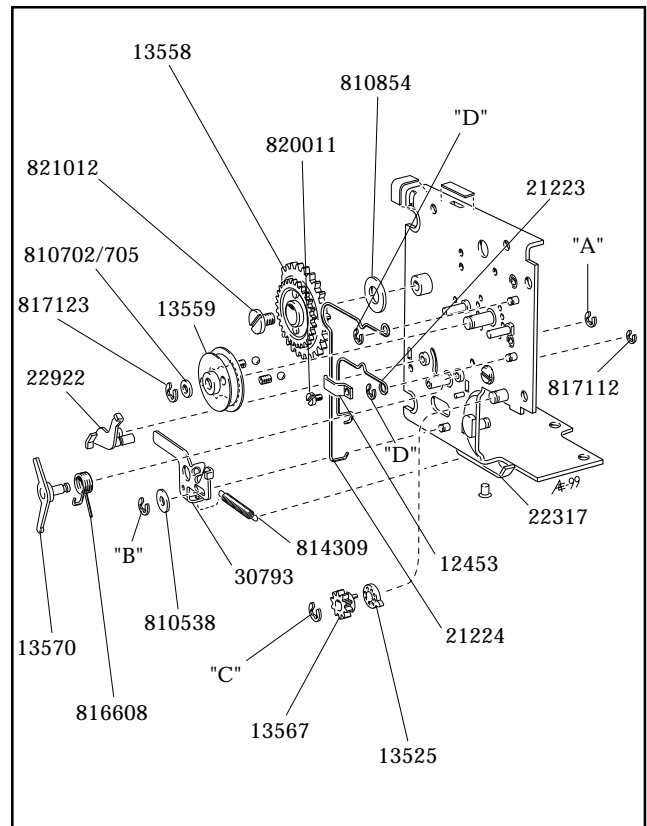


Fig. 17

The dismantling procedure for the Hasselblad 555ELD is now completed.

Camera body 555ELD

Reassembly

Lubricate the camera as detailed in the appropriate lubrication chart. Use the lubricants listed below:

| | |
|---|-----------------------------|
| ● | = Isoflex Topas L32 |
| ○ | = Mollykote - X |
| ■ | = Isoflex PDP-48 |
| □ | = Gleitmo 805-K |
| ▽ | = Loctite, e.g. Loctite 243 |
| ▼ | = Safety lacquer |

Mechanism plate

To reassembly the right and left hand walls proceed using the following sequence:

Outer wall right

Lubricate according to Fig. 18.

Locate the A-wire (21224) and the S-wire (21223) and secure them into place with the two clips "D" (817115).

Fit the cable holder (12453) over the A and S-wires and fit the screw (820011). Fit the selector (13559) and secure it into position with the washer (810702/705) and the clip (817123).

Fit the release lever (30793) and secure it into position with the clip "B" (817115) and washer (810538). Refit the draw spring (814309) securing both ends of the spring.

Fit the torsion spring (816608) and the release catch (13570) and secure them into position using clip (817112). Note: This clip is fitted on the inside wall.

Fit the release arm (22922) and secure it with the clip (817119) which clips on from the inside wall.

Fit the gear (13558) and washer (810854) and then fit the screw (821012).

Fig. 19.

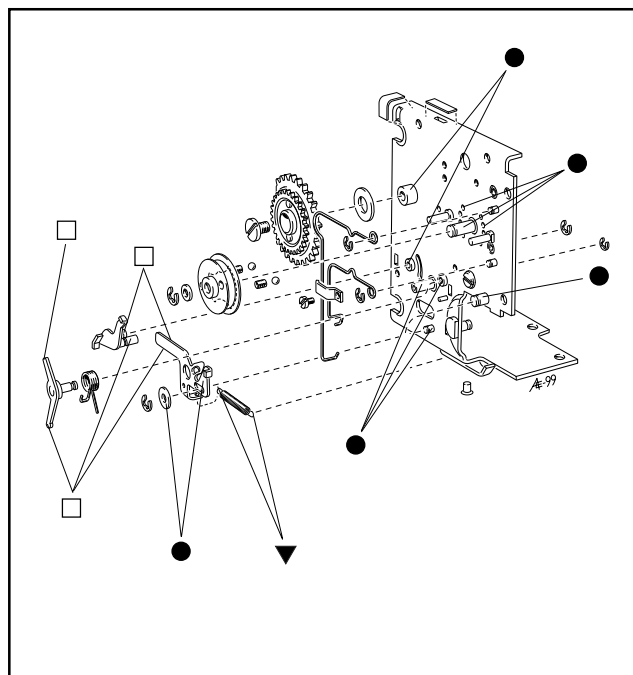


Fig. 18

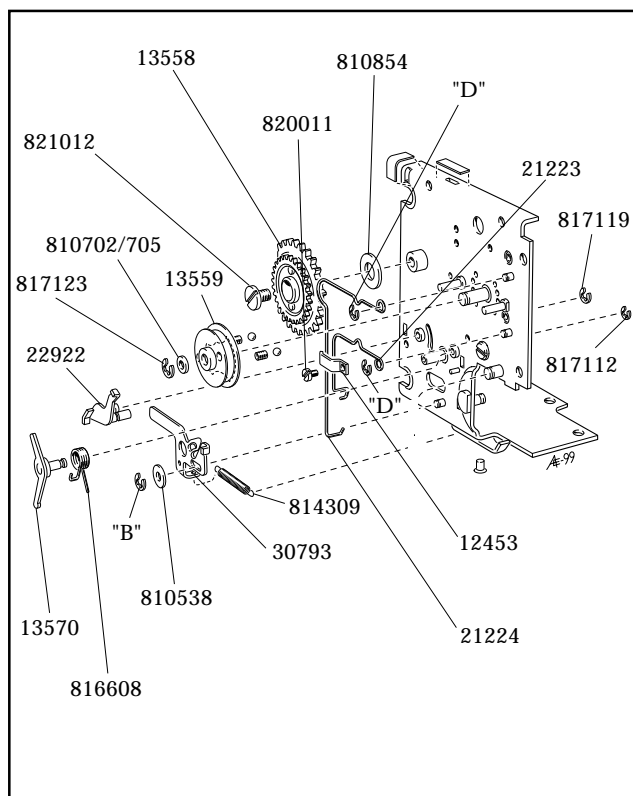


Fig. 19

Camera body 555ELD

Reassembly

Outer wall right

Lubricate according to Fig. 20.

Fit the washer (810703) followed by the B-arm (21221), then fit the washer (810702) followed by the S-arm (22923).

Fit the washer (810702) followed by the locking arm (21219) and the two washers (810702/705) and secure them into place with the clip (817123).

Fit the auxiliary shutter arm (13554).

Fit the gear (22476) and secure it into position with the screw "C" (821031) from the outside wall. Check the function.

Fit the mirror lever (22460).

Fit the teflon washer (810761) on the top of gear (22476).

Fit the mirror actuating arm (22458) followed by the washer (810532) and secure with the clip "B" (817115).

Fit the arm (22896) and the plate (22714). Secure them into position with the clip "A" (817115). Check for easy of operation.

Fit the support (30701) and secure it in position with the two screws (820013).

Fit the spring (814862).
 Fit the spring (814861).
 Fit the spring "F" (814509).
 Fit the spring "E" (814706).
 Fit the spring "D" (814302) Note: Secure the spring with safety lacquer.
 Fig. 21.

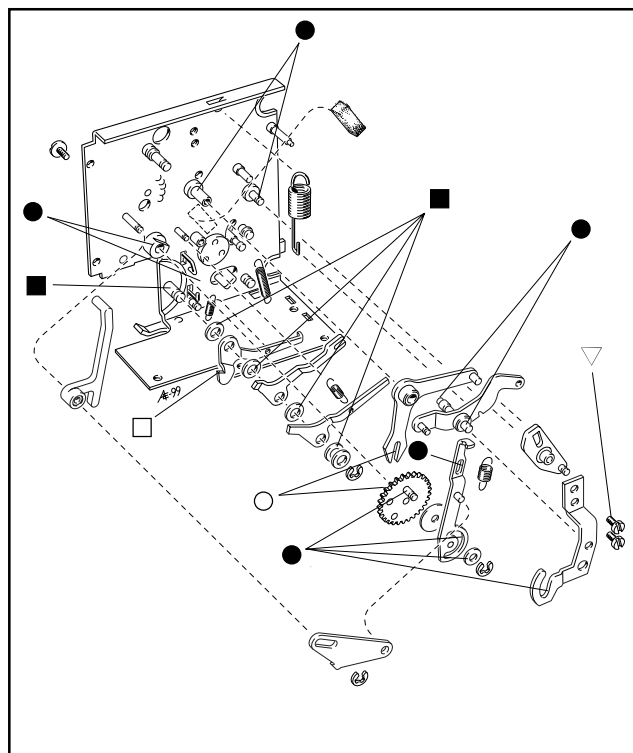


Fig. 20

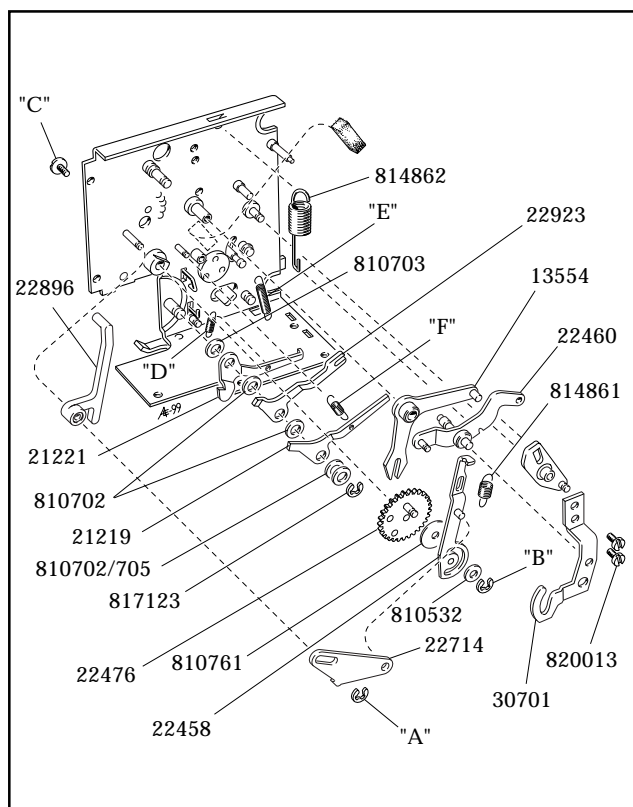


Fig. 21

Camera body 555ELD

Reassembly

Release catch/arm adjustment

Check and if necessary bend the release catch (13570) at the arrow so that it is engaged by approximately 1mm.

Fig. 22.

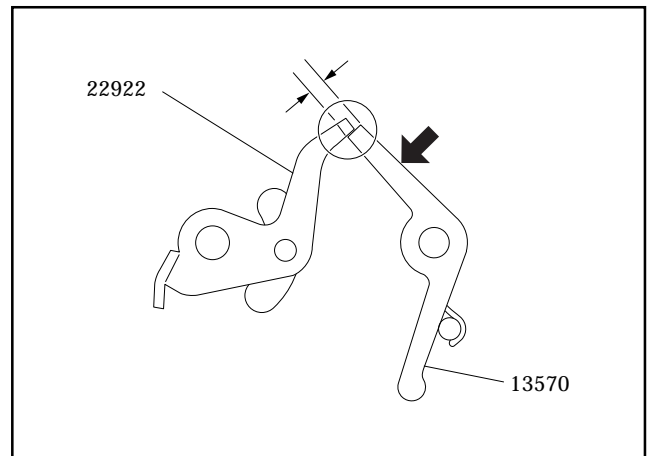


Fig. 22

Refit the gearwheel (13557) temporarily. Rotate the gear anticlockwise and check that the overtravel on the release arm (22922) is approximately 1mm with respect to the release catch (13570).

If adjustment is required, bend the angle on the release arm (22922) see arrow.

Fig. 23.

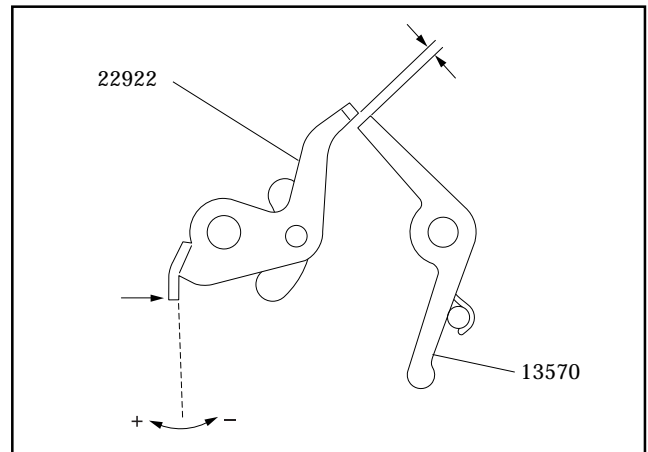


Fig. 23

Locking arm adjustment

Check that the arms move easily without axial play. If there is play on the locking arm (21219) then fit a further washer (810702/705) in addition to the two already fitted. If the arms are sluggish then try a thinner washer.

Fig. 24.

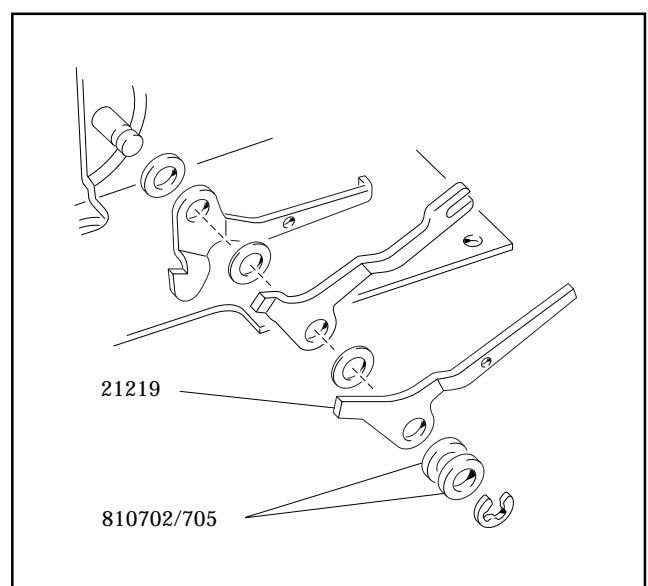


Fig. 24

Camera body 555ELD

Reassembly

Left hand wall

Check the tension of the spring (816864). This should be between 40 and 60 grams.

Adjust by bending the spring (816864) as indicated in Fig. 25.

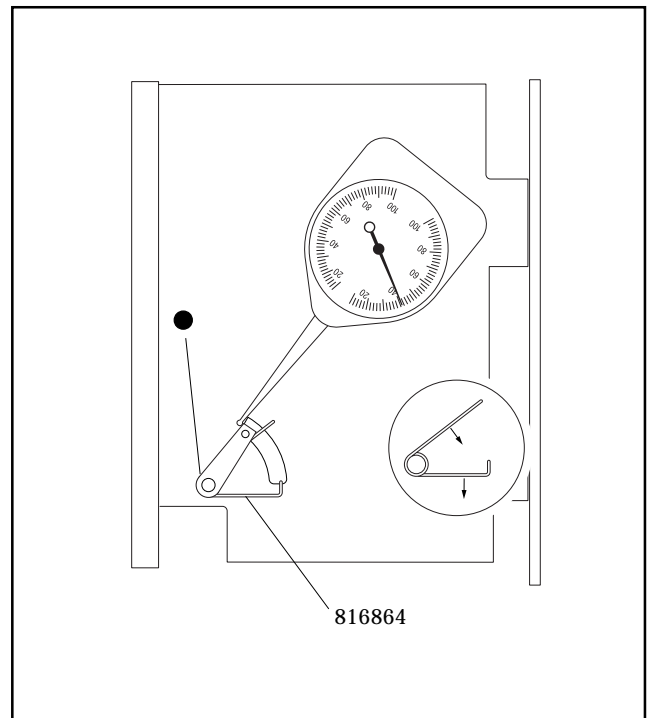


Fig. 25

Fit the left and right hand walls together and secure with the screws (820014). Fit the foam plastic pad (22513).
Fig. 26.

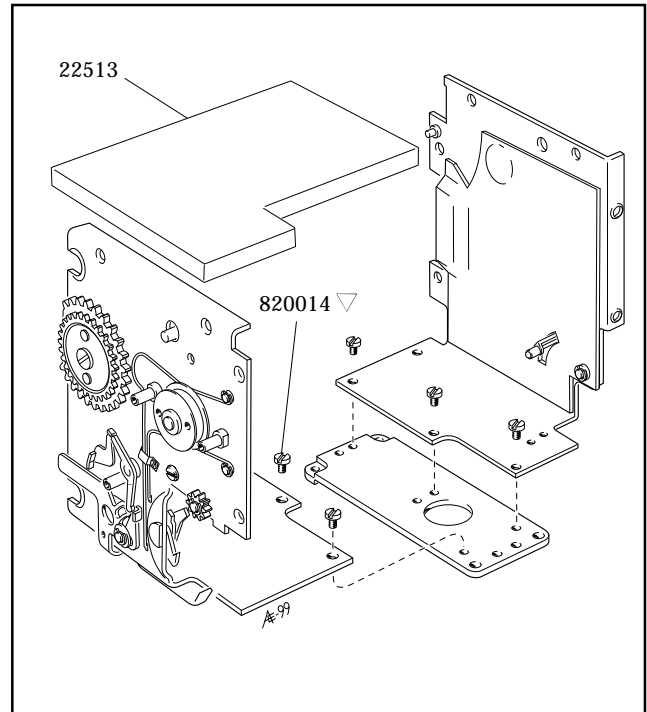


Fig. 26

Camera body 555ELD

Reassembly

Front bayonet plate

Before fitting the bayonet plate (30706-1) make sure the camera is released. This is done by turning gear (22476). Note that the pin "A" should be visible from the outside.

Fig. 27.

Fitting the front bayonet plate to the camera body:

Tension the drive spring by turning the front gear wheel (30413) clockwise 3 turns.

Fit in the lower part of the bayonet plate so that the check "C" on the front gear cam plate is stopped by the spring (22317). Ensure that the two indexes "A" and "B" are aligned opposite each other and that the upper part of the bayonet plate is put into position.

Fig. 27.

Secure the bayonet plate to the right hand wall using two screws (823015). Secure the bayonet plate to the bottom of the main camera body using two screws (823655). Refit the two screws (820015) to the rear of the bayonet plate.

Fig. 28.

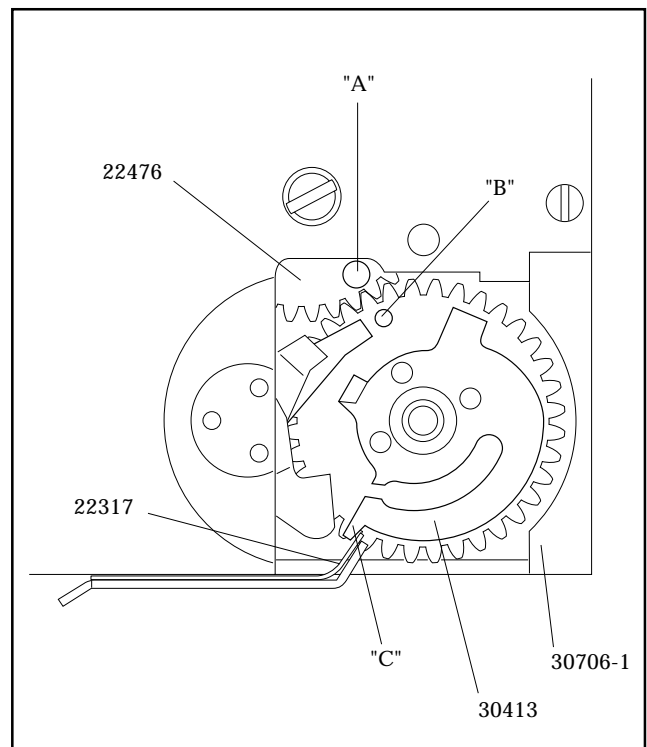


Fig. 27

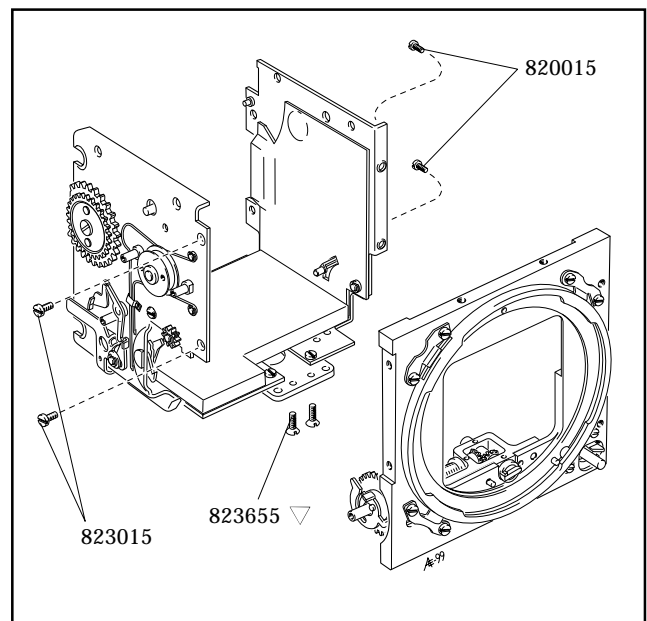


Fig. 28

Camera body 555ELD

Reassembly

The key position of the front gear is checked with the camera cocked. This is carried out as follows:

Fit the blade of a screwdriver in the slot on the front gear wheel (30413). Turn the gear in a clockwise direction until the check "C" has passed the locking arm (21219). In this position it is now possible to cock the release arm (22922) against the release catch (13570). Continue the cocking action until the locking arm (21219) operates and is blocked against the check "D".

Fig. 29.

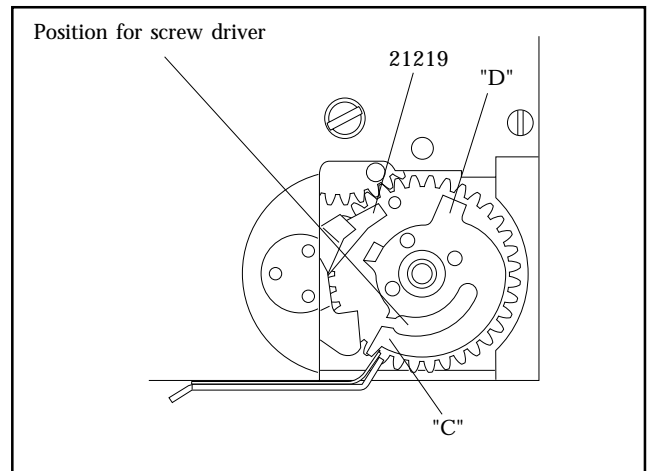


Fig. 29

Mount the key inspection tool 902658 (V-2075) to the camera's front bayonet plate. Ensure the indicator is pointing upwards when the camera is cocked.

Fig. 30.

With the tool 902658 (V-2075) fitted to the front of the camera, the key position should have a minimum of 3° with a load of 1400 gram-centimetres and a maximum of 9° with 300 gram-centimetres. Remove the tool.

Fig. 30.

1. If the measured value is less than 3°, replace the ordinary locking arm (21219-2) by a locking arm which is 0.2 mm longer. This arm is designated (21219-1).
2. If the measured value is more than 9°, replace the ordinary locking arm (21219-2) by a locking arm which is 0.2 mm shorter. This arm is designated (21219-3).
3. If the above-mentioned adjustment is insufficient, a new front gear (30413) must be fitted on the bayonet plate.

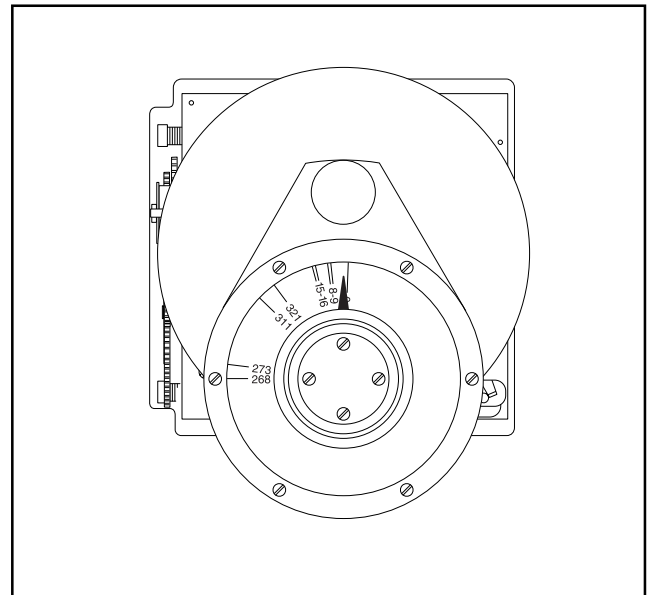


Fig. 30

Camera body 555ELD

Reassembly

Mirror

Lubricate according to Fig. 31.

Make sure the camera is released. Locate the mirror (30716) into position. Connect the mirror hinge (30754) to the two pins "A".

Relocate the pin "B" on the mirror frame to the mirror lever (22460).

Fig. 31.

Test the function of the mirror by fitting the blade of a screwdriver in the slot on the front gear wheel and cock the camera. Release by moving the release catch (13570) to the rear.

Fig. 29

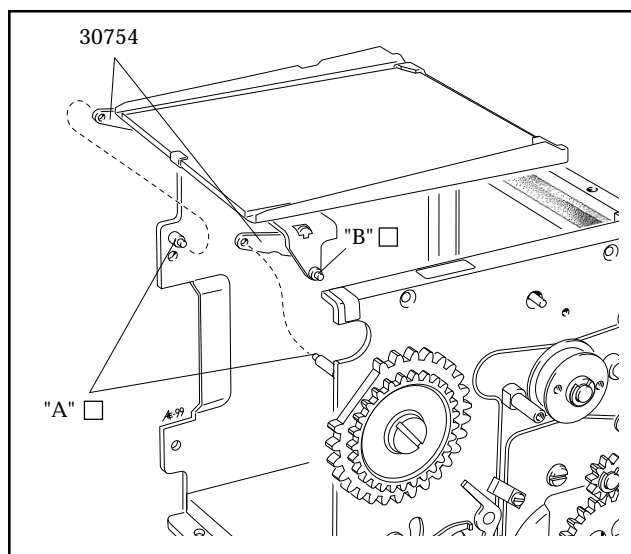


Fig. 31

Focusing screen frame

Refit the focusing screen frame and secure it as follows:

Refit the two long screws (823028) to the right hand side wall and two short screws (821017) to the top of the frame.

Fig. 32.

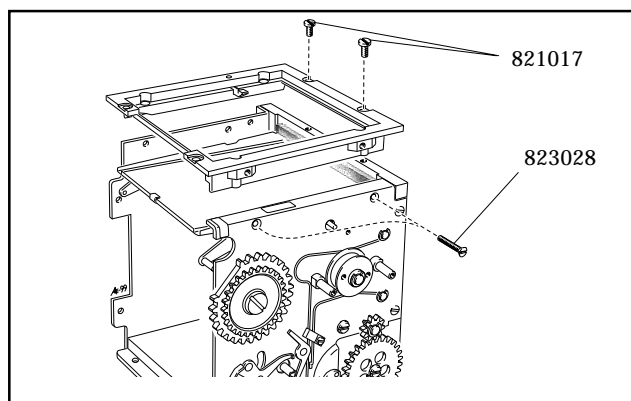


Fig. 32

Rear plate

Fit the springs (815511) to the screws (105412).

Fit the contact flex (22915) to the rear plate and secure it into position with the above mentioned screws.

Lubricate according to Fig. 33.

Release the camera. Fit in the actuating part (13551) and secure it in the position with the clip "C" (817115).

Locate the upper actuating part (13580) around the pin "D" and fasten it to actuating part (13551). Secure it in position with the clip "E" (817115).

Locate the spacer (13547). Note: Turn the front gear (30413) somewhat in a clockwise direction.

Locate the rear plate into position and secure it with seven screws, note the long screw (820025) is fitted on the right hand wall and the short one (820013) at the top of the left hand wall.

Fig. 33.

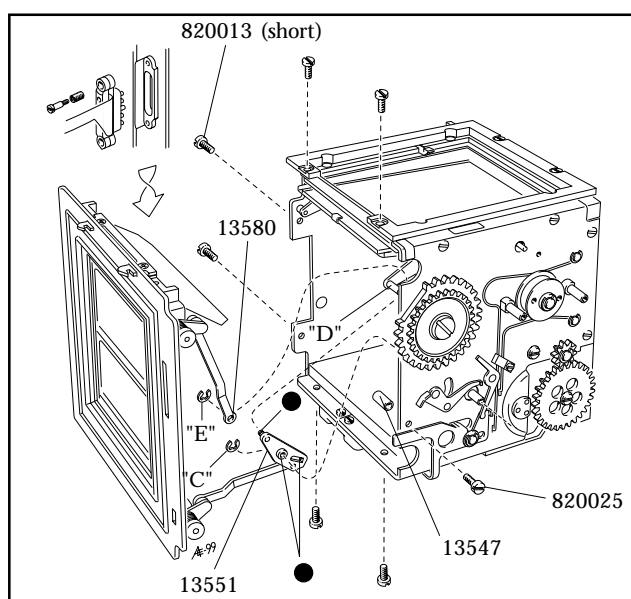


Fig. 33

Camera body 555ELD

Reassembly

Seal between the rear plate and the left side wall using black silicone or similar as shown in Fig. 34 to ensure a tight light seal.

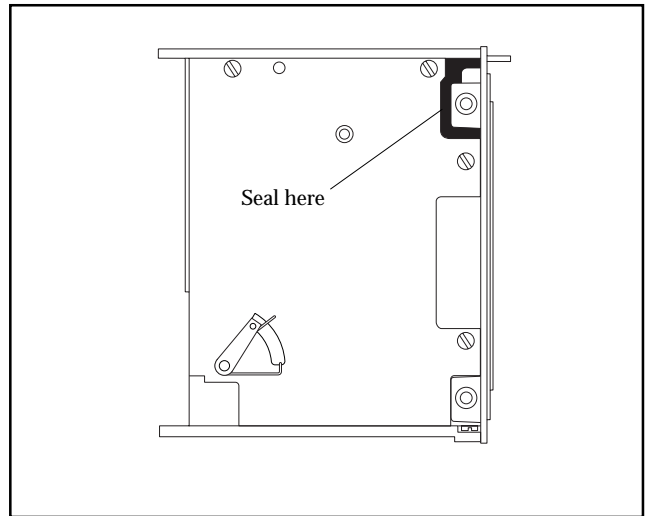


Fig. 34

Preliminary adjustment of the focal length

71.40 ± 0.03 mm

Mount the front plate "A" in the front of the camera body and place the camera with the rear section in control tool V-2229.

Check that the rear section is flat.

If the rear section is warped, the first procedure is to ensure that both the inner walls of the camera are in good contact with the inside of the rear section. This is carried out by knocking carefully on the front plate with a plastic-faced hammer.

If this operation is insufficient, it is possible to adjust the warp at the corners which may be too low.

Loosen the two nearest screws and push the rear section backwards until it is flat. Then tighten the screws.

Place the camera body in control tool V-2229 without tensioning it. Set the ruler with the indicator clock to zero by placing it on surface "B". Fig. 35.

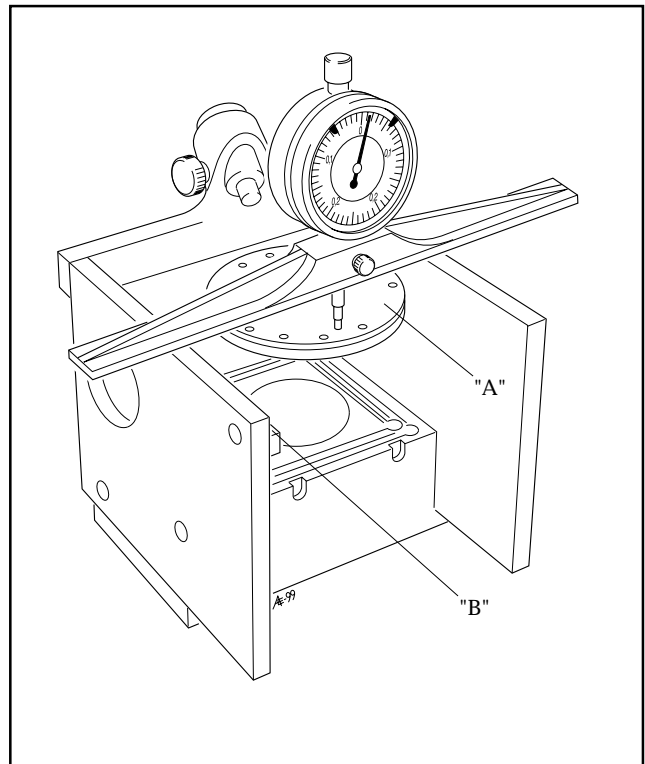


Fig. 35

Camera body 555ELD

Reassembly

Place the ruler with indicator clock onto the gauge and move the indicator around the periphery on the front plate and check that the length is within the tolerance.

If the camera body is too short, on the left-hand side, then the front must be moved forward on this side. This is carried out by knocking on the angle on the left wall which provides the support for the bayonet plate. A solid fibre rod and a suitable hammer are used for this operation.

Re-check as described above.

If the camera is too short on the right hand side, it must be extended. This is carried out by moving the rear section to the rear. Loosen the screw (820025) on the right wall (30748), the screw (820015) on the bottom of the camera and the screw (820017) on top of the camera. Insert the blade of the screwdriver first in one and then in the other of the two rectangular recesses in the rear edge of the right wall close to the rear section and turn carefully. Then tighten the screws and check on control tool V-2229 that the rear section has not become distorted during adjustment. Fig. 36.

Check the length measurement above.

If the total length measurement of the camera body is too long, adjust the bayonet front plate downwards by knocking on the front plate "A" at the points where necessary.

Re-tighten all screws retaining the rear section, the front plate and the frame.

Note! The focal length is checked once more when the camera is fully reassembled.

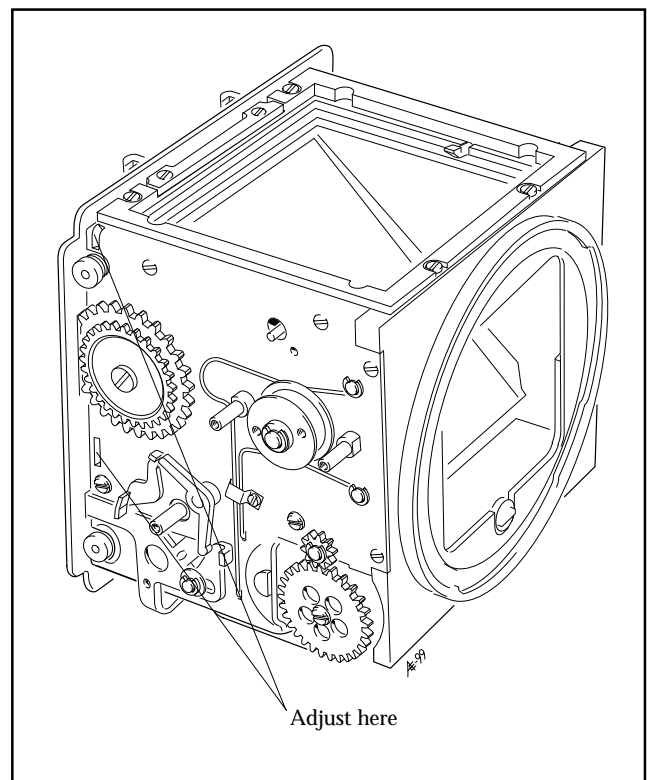


Fig. 36

Camera body 555ELD

Reassembly

Dog (13525), gear (13567) and gear (13556)

Cock the camera as follows:

Fit the blade of a screwdriver in the curved slot on the front gear (30413). Turn the gear in a clockwise direction until the check "C" has passed the locking arm (21219). In this position it is now possible to cock the release arm (22922) against the release catch (13570). Continue the cocking action until the locking arm (21219) operates and stops against the check "D".

Fig. 37.

Lubricate the front gear journal "F". Locate the dog (13525) onto the pin "E" with the bent lug upwards. Place the disk (21324) with the large flange downwards on the front gear journal. The recess in the disk fits against the pin on the front gear cam disk.

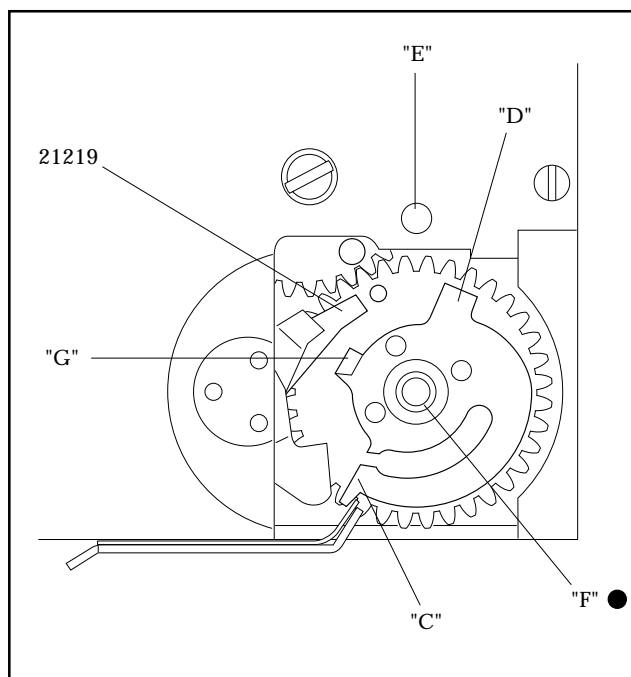


Fig. 37

Check that both catches on the gear (13556) move easily and that the spring-loaded setting hook returns under the influence of its own spring. If the movement of the catches should be doubtful, this can possibly be adjusted by carefully bending the ring which is riveted on.

The gear (13556) is fitted so that the point of the hook which is not spring-loaded comes into contact with the recess in the disk (21324). Turn the gear in a clockwise direction until the spring-loaded setting hook stops against the check "G" as shown in Fig. 37.

The dog (13525) is backed off in an anti-clockwise direction so that the bent lug rests against the periphery of the spring-loaded setting hook in gear (13556).

Fit gear (13567) with the pin pointing downwards from "E".

Fig. 37.

Note that the gear (13556) and the dog (13525) must be retained in the positions previously described. This facilitates adjustment. Ensure that the pin on gear (13567) is placed in the hole on the dog (13525) in a 12 o'clock position.

Fig. 38.

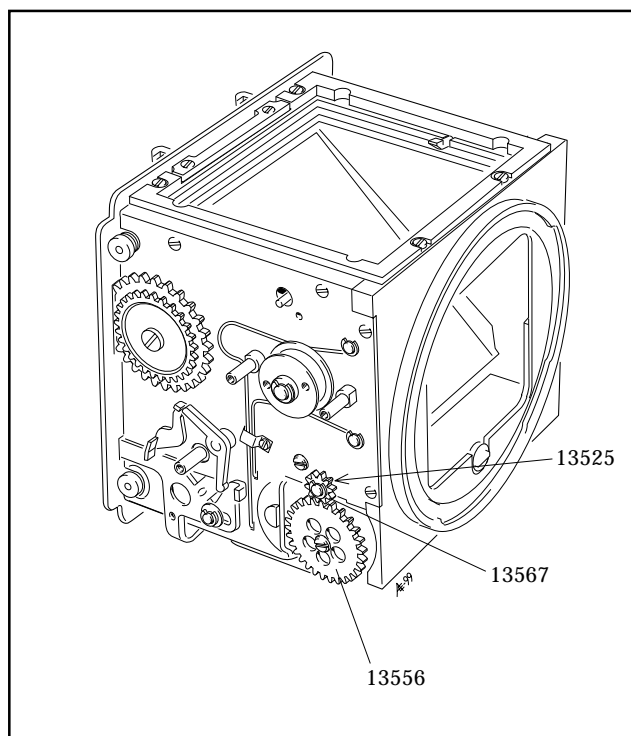


Fig. 38

Camera body 555ELD

Reassembly

When the gear (13556) is turned in a clockwise direction the dog (13525) should release the setting hook from the check "G".

Fig. 39.

Adjustment: Disengagement should occur when the check "D" has passed the locking arm (21219) and moved a further 1 - 2 mm. (this is a safety margin to ensure that the lens is fully cocked).

Fig. 39.

If a further movement is needed, then the relationship between the dog (13525) and the gear (13567) must be altered.

Adjustment: If smaller movement is required, lift the gear (13567) out of engagement with gear (13556). Turn gear (13567) one (1) tooth segment in an anti-clockwise direction. Re-check as specified above.

Adjustment: In the case of excessively large further movement, carry out the same operation in the reverse direction.

Tighten gear (13556) with screw (821033) and secure gear (13567) with clip (817119).

Note that the front gear (30413) must be held when the screw for gear (13556) is tightened. This can be done in a convenient way by inserting the blade of a screwdriver on the underside of the camera between the spring stop (22317) and the fixed gear on the front gear.

Gear (13557)

The initial position for fitting gear (13557) is as follows. The dog (13525) has just operated the spring-loaded setting hook on gear (13556) and further movement has been checked as described previously.

Gear (13556) is backed in an anti-clockwise direction until the spring-loaded setting hook stops against the upper point "G" on the front cam disk.

Fig. 39.

The straight side of gear (13558) is placed parallel with the rear section of the camera. Lubricate and fit the gear wheel (13557) on its pin. The position of both the pins on the underside of the gear is shown in Fig. 40.

Tighten gear (13557) with one screw (821033).

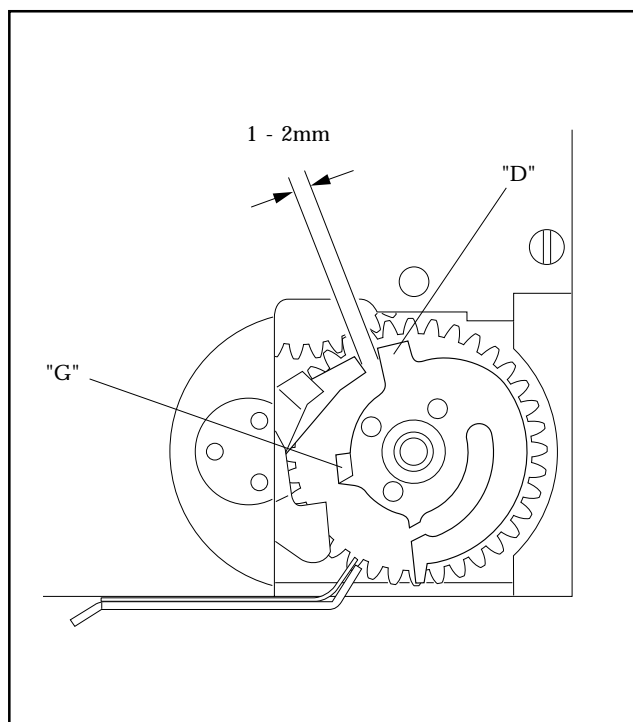


Fig. 39

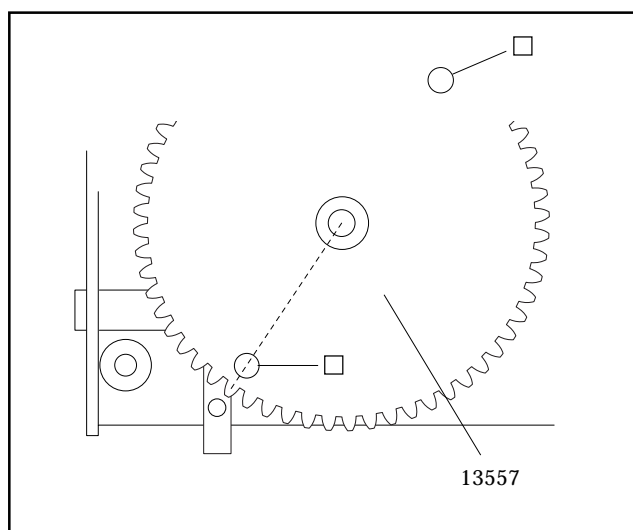


Fig. 40

Camera body 555ELD

Reassembly

Control and Adjustment of Auxiliary Shutter

Operate the release catch so that the camera auxiliary shutter opens.

Check that the auxiliary shutter blinds do not influence on the light path.

Fig. 41.

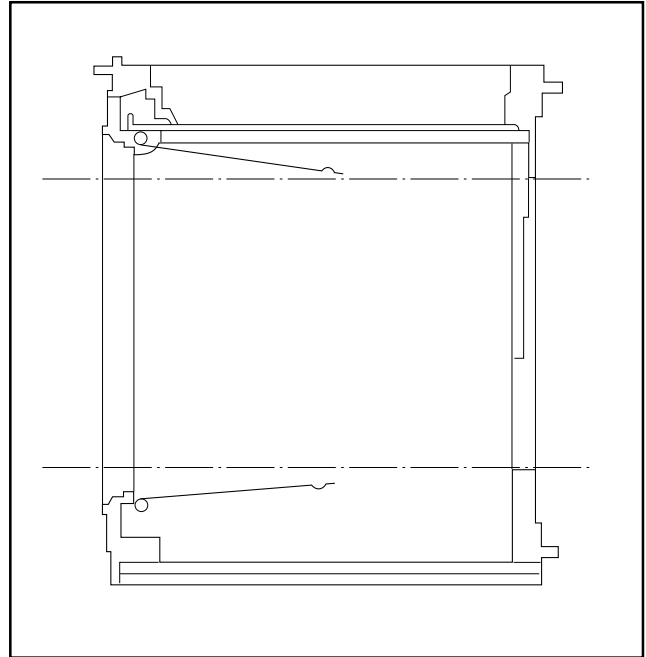


Fig. 41

Alignment of the blinds can be adjusted by holding the shaft with a pair of pliers and carefully bend in the desired direction.

Check that the shutter pivot point is not loose on the shaft. If this is the case a new shutter must be fitted. Check that on closing the top shutter is positioned 4-5 mm in front of the lower shutter blind.

Fig. 42.

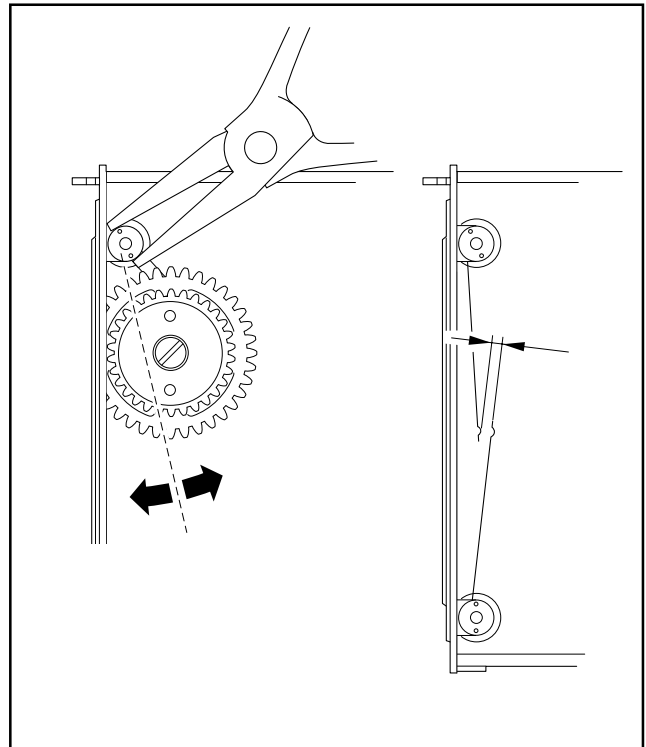


Fig. 42

Camera body 555ELD

Reassembly

Circuit board and contact flex

CAUTION! When handling the circuit board a grounded bench mat and a wrist strap must be used to prevent ESD damage.

Fit the circuit board in position. It is fixed to the wall by insulating double-sided tape (22879), and the two screws (820015).

Put the photo diode in position on the inside of the bottom part of the left hand wall and secure from the outside with two screws (820325).

Fit the cable holder (12453) securing the cables with screw (820011).

Fold the contact flex (22915) forwards and fit the attachment (22918) over the flex "A" and secure it with the two screws (820011). Fit the contact flex "B" at the bottom side of the camera. It is fixed by double-sided tape.

Fig. 43.

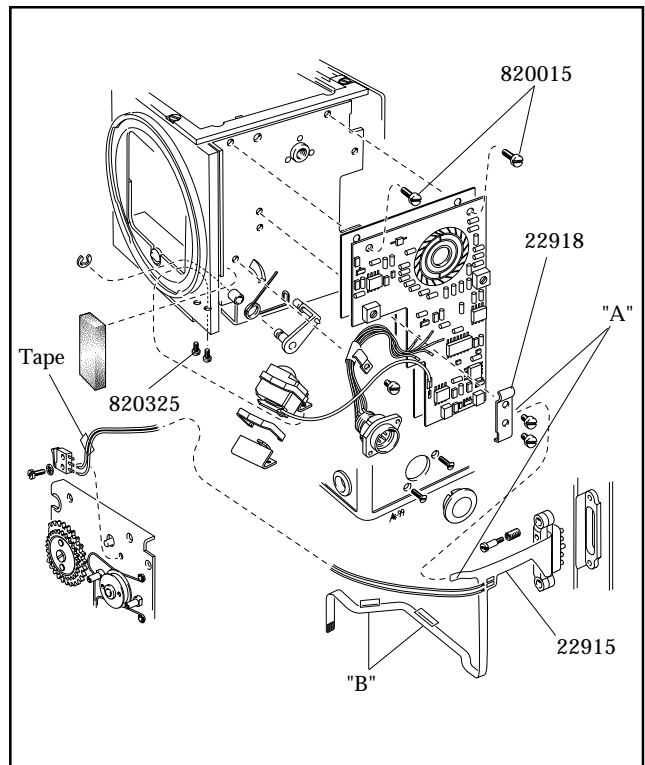


Fig. 43

Fit the cables (22931) into position and secure them with self-adhering paste at four places.

Note: The cables must not be put on the top of each other.

If the micro-switch has been unsoldered, soldering should be accomplished in less than 5 seconds. Keep the soldering tip temperature less than 320°C (608°F). Avoid applying force to the terminals.

Apply some loctite onto the threads of the screw (820019). Fit the micro-switch (852589) and secure with the locking washer (810407) and the screw previously mentioned.

Note: In order to prevent damage to the micro-switch the screw must not be tighten to hard. Secure the flex (22915) with a piece of tape according to Fig. 44.

Adjustment: Release the camera and slowly rotate the gearwheel (13557) back and forth. Check that the micro-switch "clicks" on and off. When the camera is fully released there must be a small free-play (0.2 - 0.3mm) between the actuator of the micro-switch and the arm (22896).

Note: The micro-switch must not be switched on before the auxiliary shutter is fully opened.

Fig. 44.

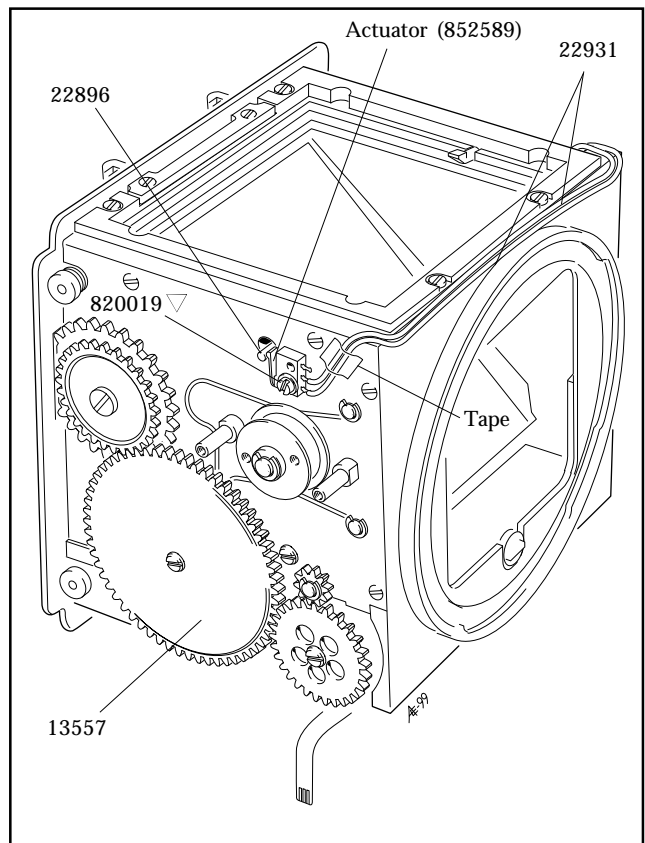


Fig. 44

Camera body 555ELD

Reassembly

Camera shell

Secure all screws (except those which are secured with loctite) with safety lacquer. Lubricate with Isoflex Topas L32 onto the pin for the teflon button (103773) and put that one in position before inserting the camera body into the camera shell.

Insert camera body into the camera shell. This operation requires manipulation to accomplish. Ensure the circuit board and the contact flex are not damaged.

Adjust the lower rear plate/shell alignment and tighten the two rear screws 823755. Fit and tighten the two front screws (823781)

Check the upper edge alignment of rear plate and shell. Adjust if necessary, the two screws (825760) which are accessible behind the leathers mounted on the shell. Secure the two screws with safety lacquer. Fig. 45.

Note! Check that the rear edge of the shell does not protrude over the rear plate at any point.

Adjustment: The V-bend in the S-wire must be as close as possible, but not pressing on the selector. Therefore, the S-wire should be bent by the necessary amount, such that when S is selected on the selector symbol plate (and mechanism is cocked), the shutters open immediately. Fig. 46.

Position the chassis connector and secure it with the two screws (823335) behind the leather.

Ensure that the spring (22587) and the dog (22533) are located correctly. Fit the ISO selector knob and secure it with the screw (822701). Fit the shim (22473) and leather (13374).

Refit the spring (816906) and the washer (13541). Refit the symbol plate (30682) and place the two washers (810613, 810607) in position. Secure with two screws (820014).

Refit the mode selector (30429) and secure with the two screws (823023). Mount the leather (13374). Fig. 47.

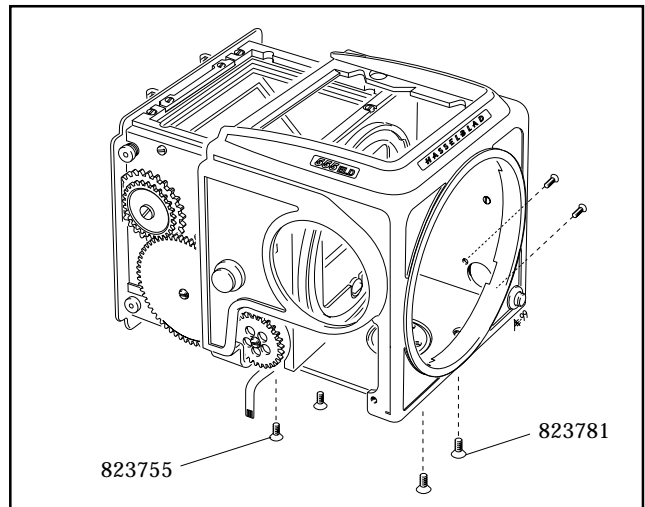


Fig. 45

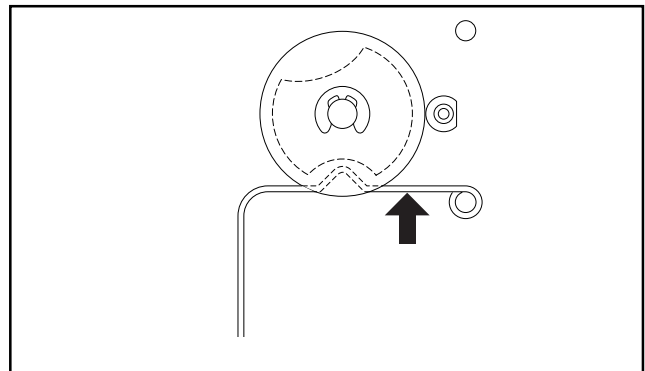


Fig. 46

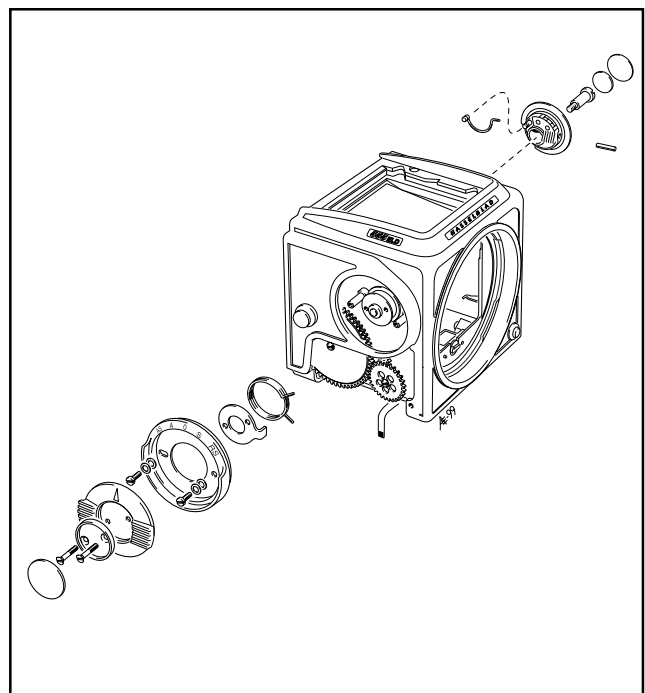


Fig. 47

Camera body 555ELD

Reassembly

Motor Housing

Insert a screwdriver through access holes at the bottom of the housing and secure it to the main camera body with four screws (823745).

Fit the rubber support (30778)

Fit the tripod foot (30763) and secure it with the six screws (829790).

Fig. 48.

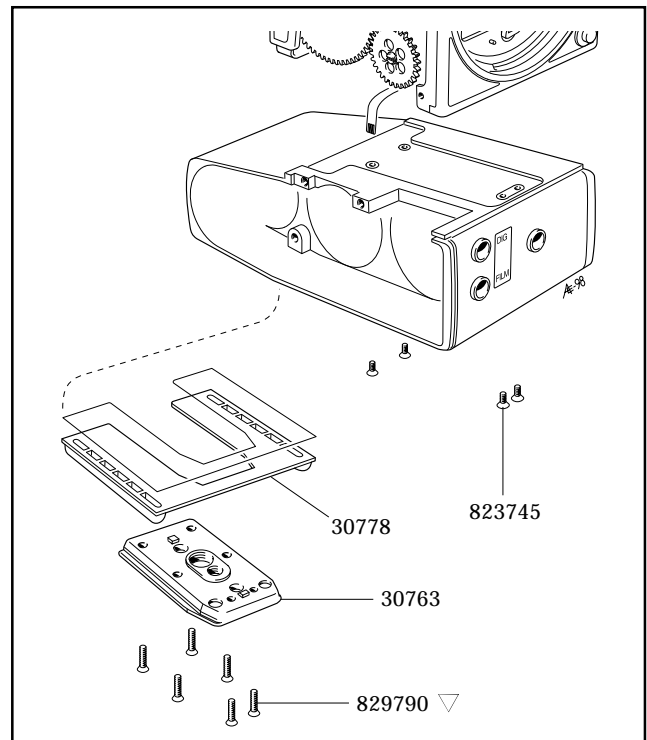


Fig. 48

Motor Unit

If, during the dismantling procedure any or all of the wiring has been unsoldered from its connections, then the wiring must be reconnected in accordance with the diagram shown in Fig. 49.

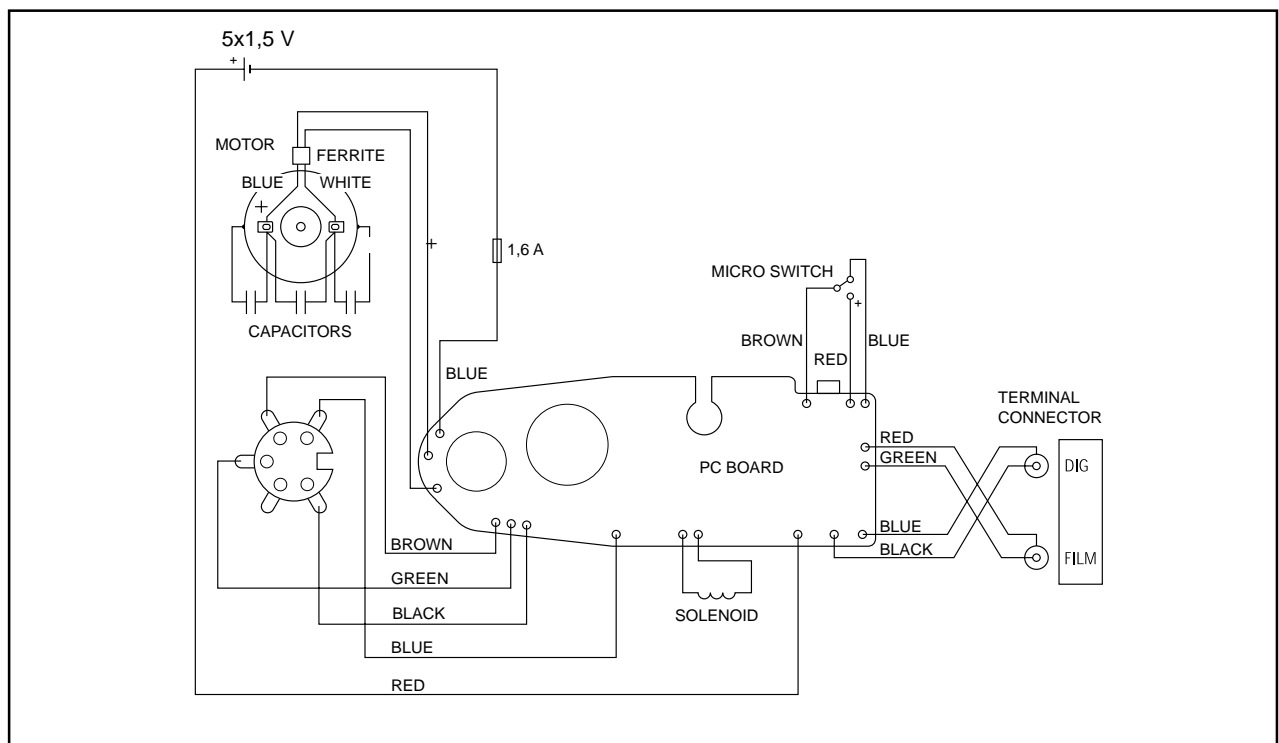


Fig. 49

Camera body 555ELD

Reassembly

Lubricate according to Fig. 50.

When the wiring has been correctly connected, re-assemble the outer mounting plate by using the following sequence:

Secure the stop arm (13571), by refitting the bearing pin (14100), the eccentric (22352), the small nut (828001) and secure by the clip (817112).

Fit the magnet arm (13561), clutch arm (14099), link (22351), spring (814601) and secure with clip (817115).

Fit the micro switch and secure with washer (810532) and screw (821033).

Assemble the gearing (13563 and 13564). Locate the gear (13565) and the complete PC board between the inner and outer mounting plates and fit the assembly together.

Fit the two long screws (820048) through the terminal connector and into the inner mounting plate. Refit the screw (820041) on the left side of the gear (13565) and the screw (820042) together with the two washers (810613) on the right side of the gear.

Fit the two long screws (823049) through the side contact (13604), then through the outer mounting plate, PC board, inner mounting plate and into the motor (22827).

Fit the three screws (824205)

Lubricate and fit the gear (13566). Note that the riveted washer on gear (13566) is to be turned inwards. Then tighten one screw (821012).
Fig. 51.

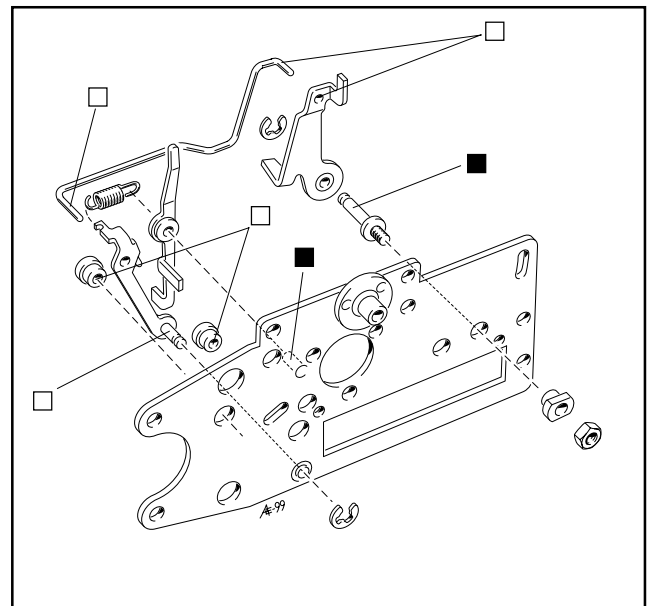


Fig. 50

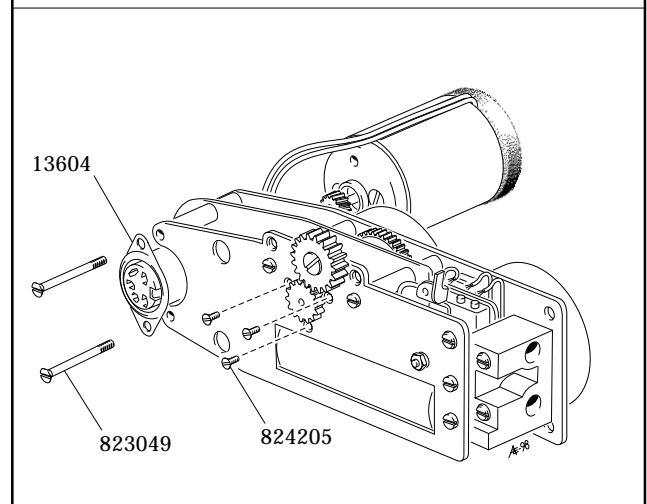
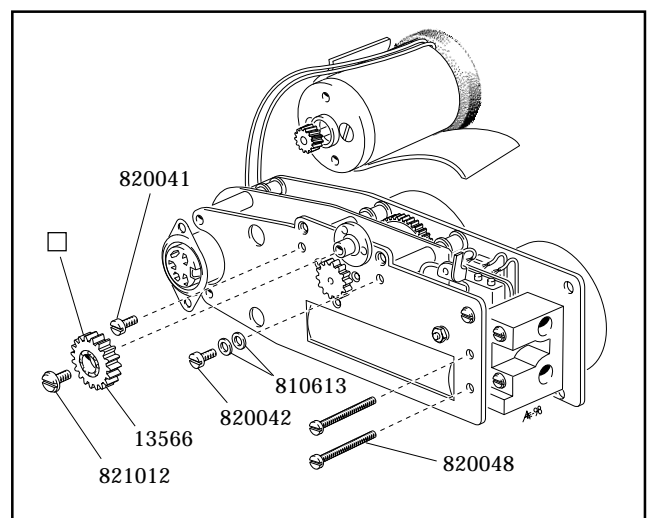


Fig. 51

Camera body 555ELD

Reassembly

Adjusting the Function of the Micro-Switch

The micro-switch (13605) is set so that the current is interrupted when the clutch arm (14099) is 1mm from the top of one of the teeth on clutch gear (13563).

Adjustment: Loosen the screw (821033) which retains the bracket (21312), move the micro-switch upwards if earlier contact breaking is desired and downwards if later contact breaking is desired. Tighten the screw (821033).

Fig. 52.

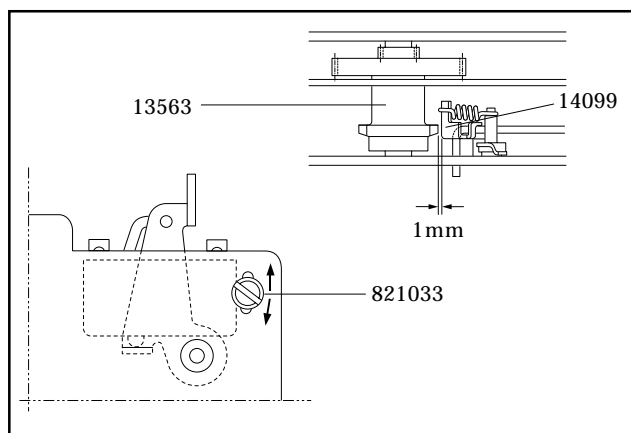


Fig. 52

Release the camera.

Insert the fuse assembly (13593, 22342, 21305, 815855) into the motor housing.

Insert the motor unit halfway, connect the contact flex to the PC board and fit the motor unit completely.

Secure with two screws (823017) and two screws (820042).

Fig. 53.

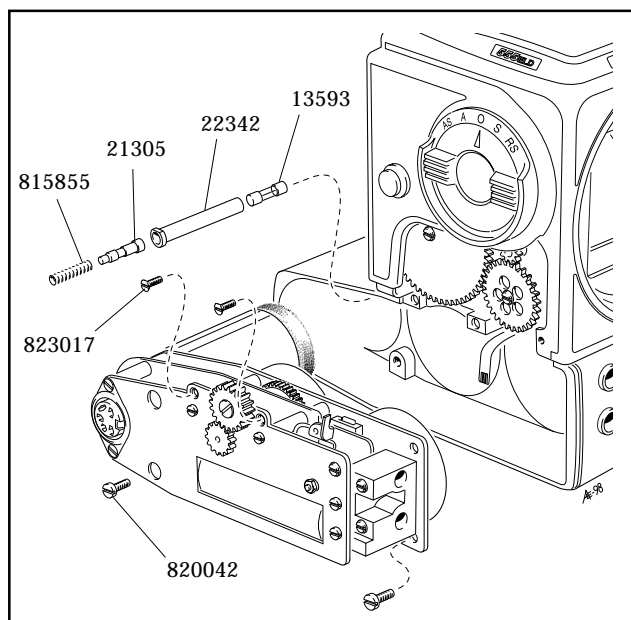


Fig. 53

Check that the release button (46120) can easily be fitted in the front holes in the motor housing.

Adjustment: Loosen slightly both the screws (820048) which hold the connection terminal (30435). Slide the release button in the respective holes and tighten the screws (820048). Check again.

Connect the camera to an electrical supply of 6 volts d.c. using the tool (903202). Note that the camera starts automatically as soon as the connection is made.

Fig. 54.

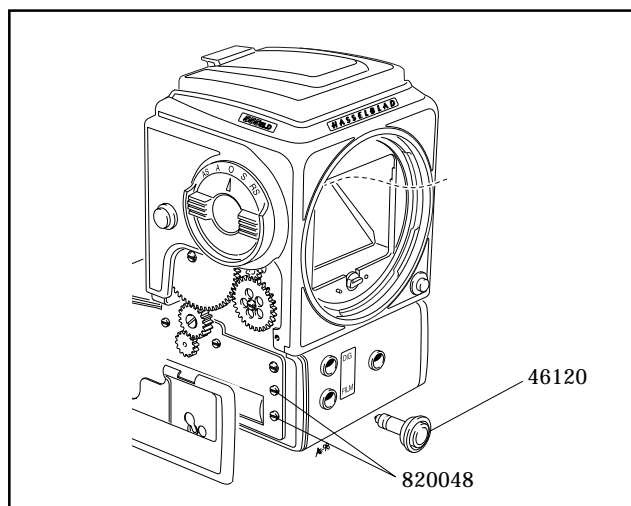


Fig. 54

Camera body 555ELD

Adjustment

Checking and Adjusting the Camera Functions

Operate the camera. If there is no exposure operation, one reason for this can be that the release lever (30793) is not releasing the cocked action between the release arm (22922) and the release catch (13570).

Adjustment: Bend the angle section on the release lever (30793) forwards at the point shown by the arrow "A" in Fig. 55. Check that the exposure action is properly carried out by holding the release lever (30793) at the same time as the release button is kept fully pressed in. Then slowly release the release lever (30793) and when exposure occurs, the excess movement of the release lever (30793) should be approximately 0,1 - 0,2mm.

After adjustment, however, the release lever (30793) must not project more than 0,8 mm outside the rear plate.
Fig. 55.

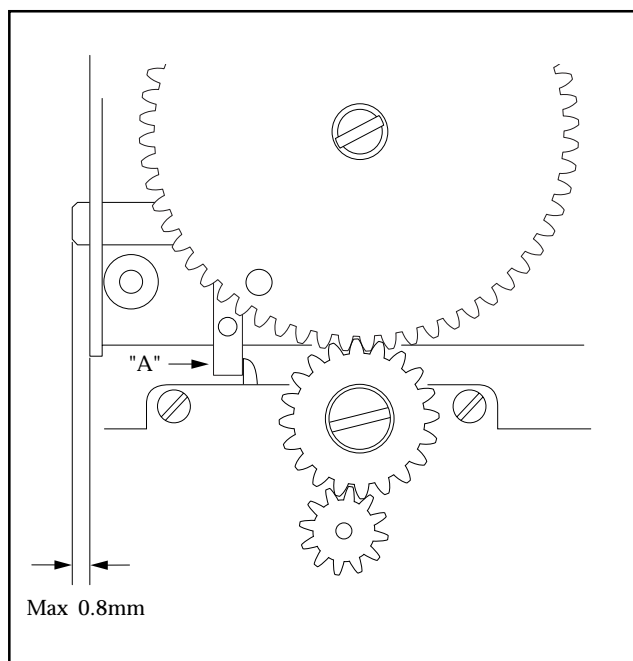


Fig. 55

Operate the camera again and check that the hook on the gear (13556) comes into contact with the stop arm (13571) when cocking is completed.

Adjustment: If the hook passes on the outside or the inside of the stop arm (13571), bend the arm in the desired direction. If the stop arm (13571) is too short or too long, loosen the nut (828001) and adjust the eccentric (22352). Do not forget to tighten the nut again after adjustment. Recheck the action.
Fig. 56.

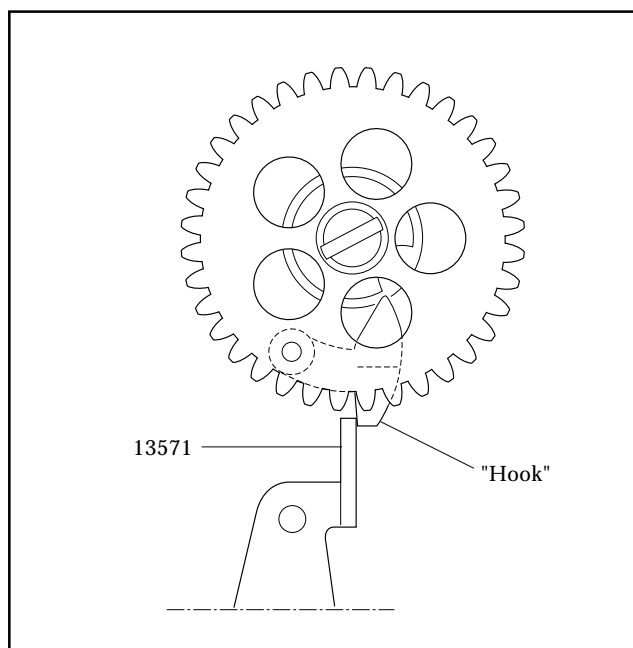


Fig. 56

Camera body 555ELD

Adjustment

Check that the flat side of gear (13558) is parallel with the rear section.

Adjustment: The source of current must be removed before adjustment is carried out.

If the position of gear (13558) is faulty in relation to rear section, this can be adjusted by modifying engagement with gear (13557). Mark up the tooth engagement between gears (13557 and 13556). Temporarily remove the screw (821033) holding the large gear (13557). Lift the gear up as far as possible for clearance. Adjust the flat side of gear (13558) parallel with the rear section. Refit the gear (13557) according to marks. Refit the screw (821033). Connect the electrical supply or the batteries and operate the camera.

If gear (13558) is located incorrectly by half a tooth or less, carry out adjustment by bending the stop arm (13571).

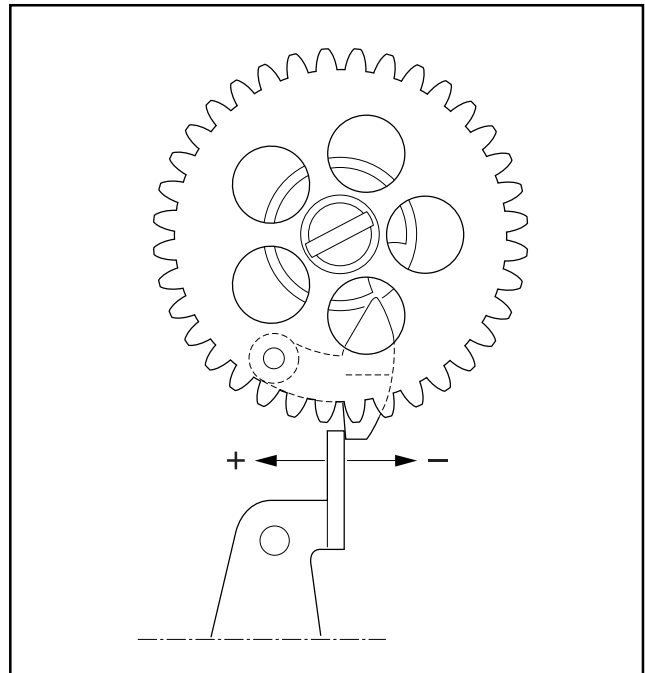


Fig. 57

Bend the stop arm (13571) forwards (-) if gear (13558) projects at the bottom.

Bend the stop arm (13571) backwards (+) if gear (13558) projects at the top.

Fig. 57.

Check that the selector knob (30429) operates for the correct exposure type.

0 - Normal mode

When the release button is pressed the action in the camera is as follows. The mirror swings up and the auxiliary shutter opens. When the button is released the cocking action starts the shutter closes and the mirror returns to viewing position.

S - Single pre-release

When the selector knob is moved to the S position, the mirror swings up and the shutter opens. The selector knob (30429) returns automatically to the 0 position. When the release button is pressed, the front gear carries out the last part of its working movement.

Camera body 555ELD

Adjustment

RS - Repeated pre-release

The same function occurs as in the S position except that the selector knob (30429) remains in the set position and the camera returns automatically to the S position after exposure until the selector knob is returned manually to the 0 position.

A - Automatic

The camera makes a continuous sequence of exposures as long as the release button remains depressed. The sequential exposure rate in this mode is about 1 frame/sec.

AS - Automatic sequential

The camera is pre-released in AS and exposes sequentially as long as the release button is kept depressed. At the end of the sequence the camera remains in a pre-released state. The exposure rate is slightly faster than in A position.

Cover (21292)

Lubricate the T-arm (21283) and check that it operates freely.

Press down the cover assembly (21292) on the motor housing and make sure that both the legs on the spring (816826) are on opposite sides of the magnet arm (13561). Check that the clutch arm (22351) does not drag against the edge of the oblong slot in the cover assembly.

Fig. 58.

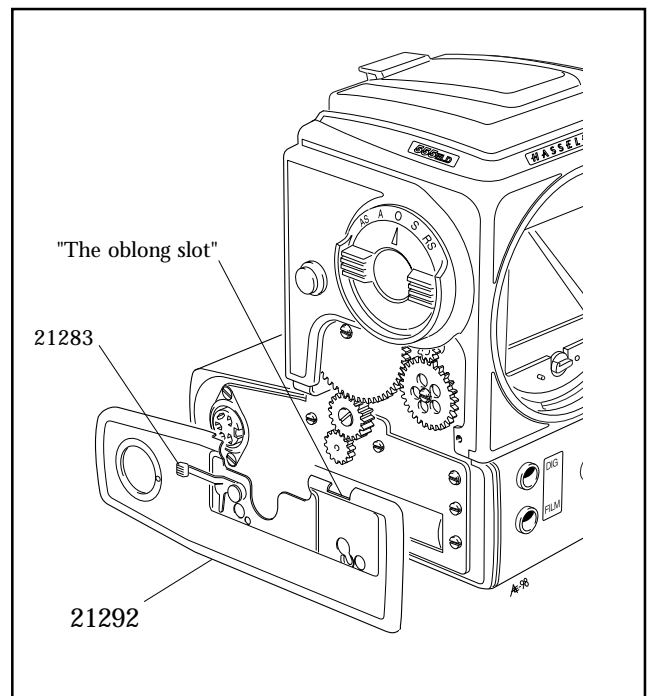


Fig. 58

Adjustment: If necessary, file the oblong slot.

Check that the camera is actuated when the T-arm (21283) is moved inwards and downwards and is in the L position. The clutch arm (14099) should then be blocked by the bent lug on the T-arm.

Adjustment: If the lug passes the end surface of the clutch arm (14099) the lug should be bent downwards but not so far that the T-arm operates sluggishly. If this adjustment does not give the desired result, the clutch arm (14099) must be adjusted. The motor unit is taken out and the double bracket on the clutch arm widened by means of a pair of pliers inserted from below. After this adjustment, check that the clutch arm (14099) runs easily between the outer mounting plate (21290) and the PC board (22913).

Fig. 59.

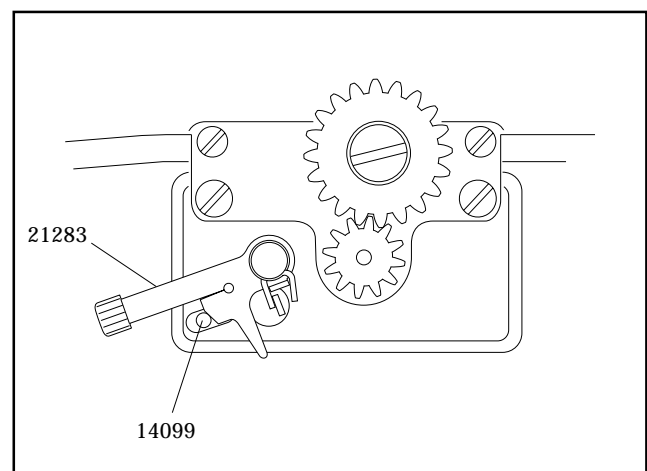


Fig. 59

Camera body 555ELD

Adjustment

Check that the magnet arm (13561) has free movement between the shanks of spring (816826) during exposure.

Adjustment: Bend the front shank of spring (816826) forwards. Check the spring (816826) blocks the magnet arm (13561) when the T-arm (21283) is in the L position.
Fig. 60.

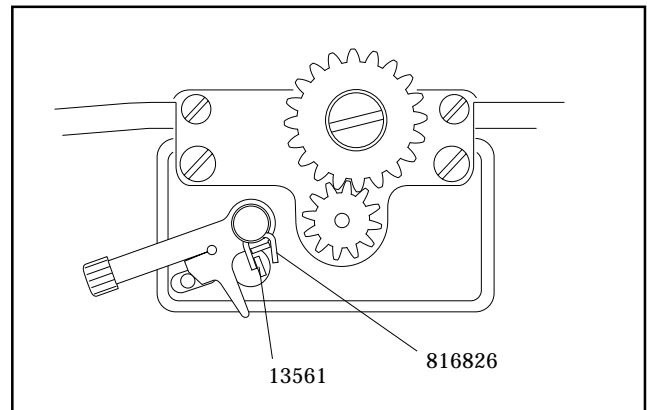


Fig. 60

Refit the side cover (30424-1 chrome or 30631-1 black) and the right hand plastic grip (40202) and secure them with the two screws (820019) and one screw (823017). Recover the screw (823017) with the leather.

Fit the blanking plug (43175) into the side contact.

Fit the batteries and the battery cover (30737 chrome or 30742 black). Do not lock the cover. Push the release button and disconnect the battery cover at the exact moment when the auxiliary shutter is closed and the mirror is in the upper position.
Fig. 61.

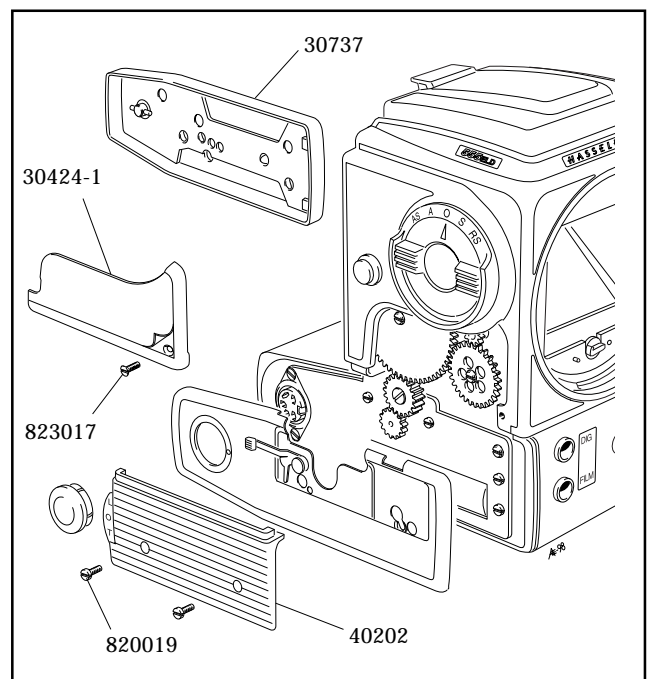


Fig. 61

Refit the cover (22928) and secure it with screw (821031).

Refit the cover (22709) and secure it with screw (821033)

Refit the battery cover and ensure the camera is fully cocked.
Fig. 62.

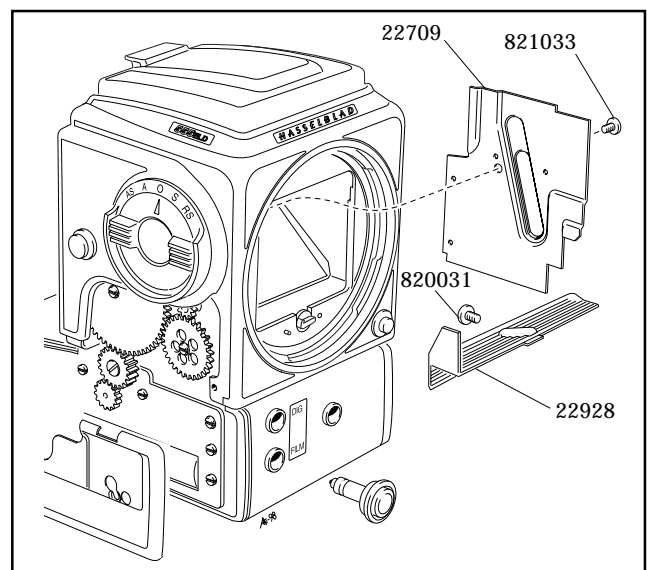


Fig. 62

Camera body 555ELD

Adjustment

Checking the databus connections

Check the integral control connector to ensure automatic and direct communication between camera body and digital back. Proceed using the following sequence:

Short-circuit the two pins "B" and "C". The camera must now release.

Pre-release the camera (the micro-switch 852859 is switched on). Connect a digital multimeter to the two pins "C" and "D". Measure the electric resistance (maximum 5 ohms).

Put the release button (46120) into the release socket marked "DIG".

Short-circuit the two pins "A" and "B". Operate the camera by pressing the release button (46120). The camera must now release.

Fig. 63.

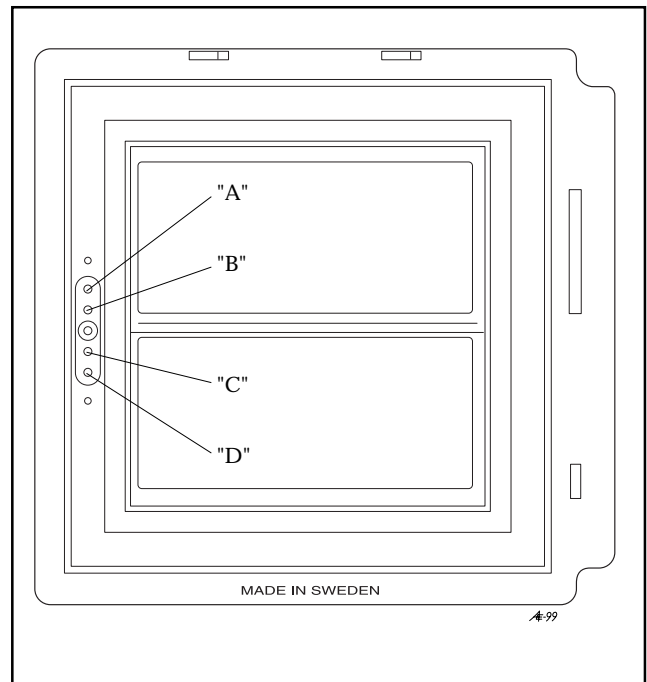


Fig. 63

Final checks

Place the camera in the focusing gauge V-2229. Zero the dial indicator by placing it on surface "B". Mount the front plate "A" into the front bayonet of the camera. Place the ruler with indicator clock onto the gauge and move the indicator around the periphery of the front plate and check that the length is within the tolerance ± 0.03 mm. If too long, the camera can be shortened by carefully striking the plate with a plastic hammer. (Focal length is 71.40 mm).

Fig. 64.

Note! If the camera is too short it must be taken out from the shell again for an adjustment.

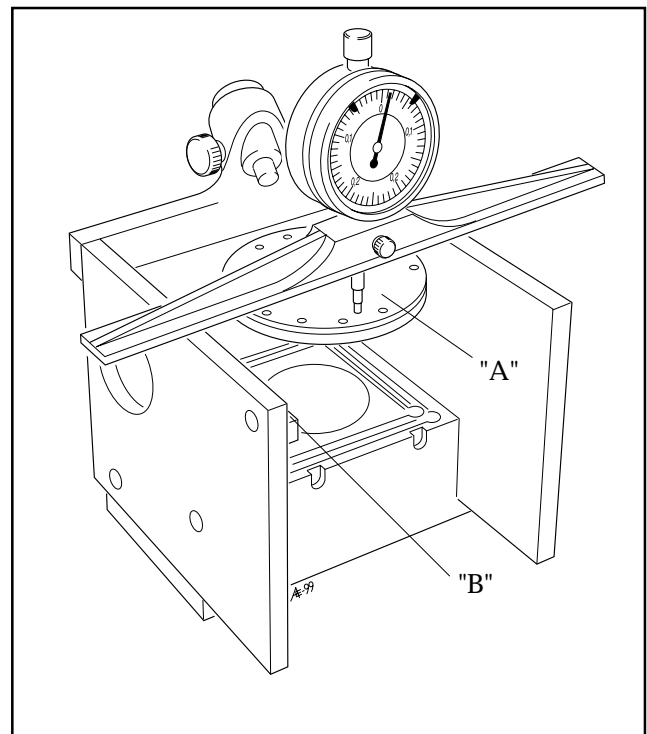


Fig. 64

Camera body 555ELD

Adjustment

Check the mirror 45° angle using the sighting tube which fits in the holder on the gauge. Tighten the locking screw. Shine a light source towards the oval cut-out in the upper part of the tube so that the white ring of the ocular is illuminated. When the mirror is at 45° the pattern in the sighting tube will appear as shown. Check that the inner white circle is symmetrical and does not lie outside the inner black field.

The mirror level is adjusted by the screws located in the two mirror rests (22445 and 22446) behind the front bayonet plate.

Fig. 65.

After adjustment is completed remove the sighting tube.

To adjust the screen position there are four special screws (22478) in the screen frame. Use allen key (1.5mm) for the adjustment. Each rotation of the screw alters the height by 0.35 mm.

First check the flatness of the screen. Use the screen adapter V-4705 and the ruler with the indicator clock. The same measurement should be obtained at all four corners.

Fig. 66.

Then fit tool V-4151 into the camera's front bayonet plate. The tool should be powered by 6 volt DC.

Position the microscope V-2236 on the screen adapter V-4705. Adjust (all four screws) the screen height with the allen key until the red line is central between the two green lines.

Fig. 67.

Remove the camera body from V-2229 and secure the screws (22478) with safety lacquer.

Check the camera functions. Check that the auxiliary shutter is clear of the internal covers. Check that a magazine can be fitted on the camera and that the locking functions work properly. If the lock does not function the magazine hook can be adjusted by filing. Ensure when filing that tests are made often and finally that the magazine fits snugly otherwise it will result in play between the camera body and the magazine.

Mount the screen and the focusing hood. Test run the camera with a loaded magazine and a lens fitted.

Check the flash metering system.

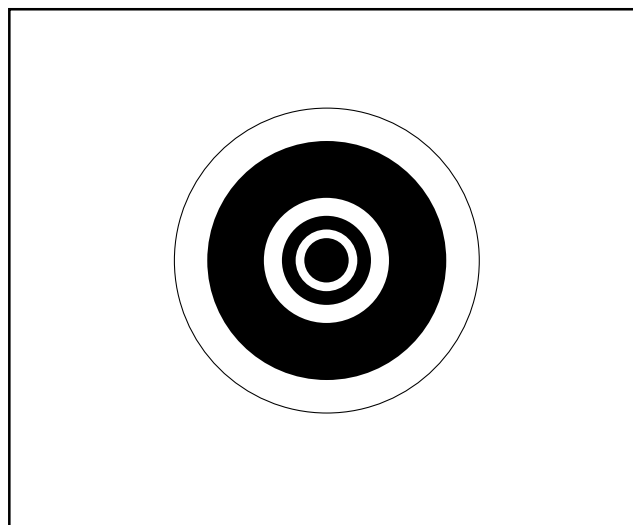


Fig. 65

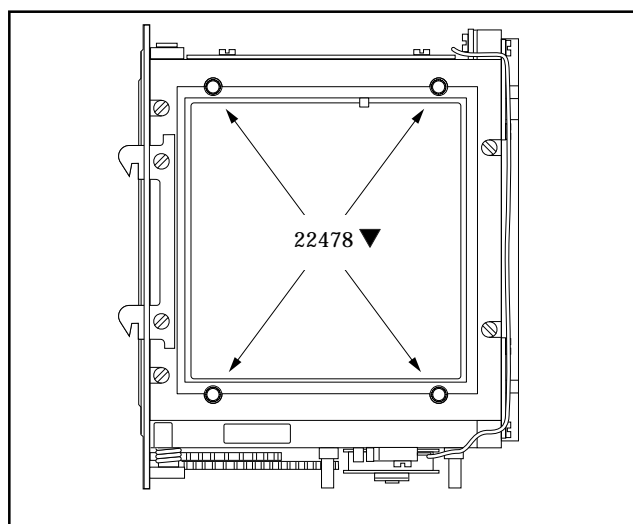


Fig. 66

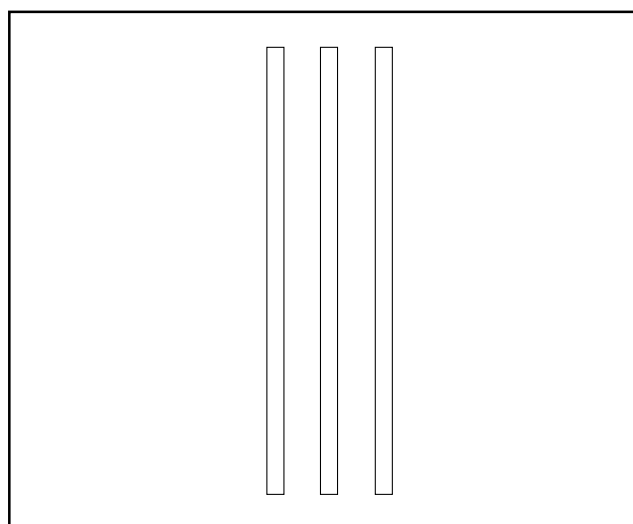


Fig. 67

Calibration and control of the flash metering system TTL

Control/calibration should be carried out each time the camera has been in for repair.
The tolerance for the flash meter is ± 0.3 EV at all settings.

If the Hasselblad Service System 970600 is used, follow the step by step instruction in the STS user manual.

Note! For calibration work use ISO 400/LV12.

If the Test box 902474 is used follow the instruction below.

Calibration requires the following test equipment:

- Planar CF80 mm lens with controlled diaphragm values.
Deviation max. $\pm 10\%$.
- Magazine fitted with Kodak's grey card.
- Stabilized DC power supply adjustable to 7.5 volt ± 0.1 volt.
- Calibrated light box with LV12 and 15.
- Test box 902474.
- Non-conductive trimmer, 2 - 2,5mm.

Set-up for calibration:

| | | |
|-----------------|---------------------------------|-----------------|
| Lens | Shutter Aperture | B or F f 5.6 |
| Camera body | ISO | 400 |
| Magazine | Fitted with grey card | |
| Test box 902474 | Exposure knob Tolerance knob | +1 Trim |
| Power supply | Voltage | 7.5 \pm 0.1v |
| Light box | LV K-factor | 12 1.3 |

Camera body 555ELD

Adjustment

Calibration

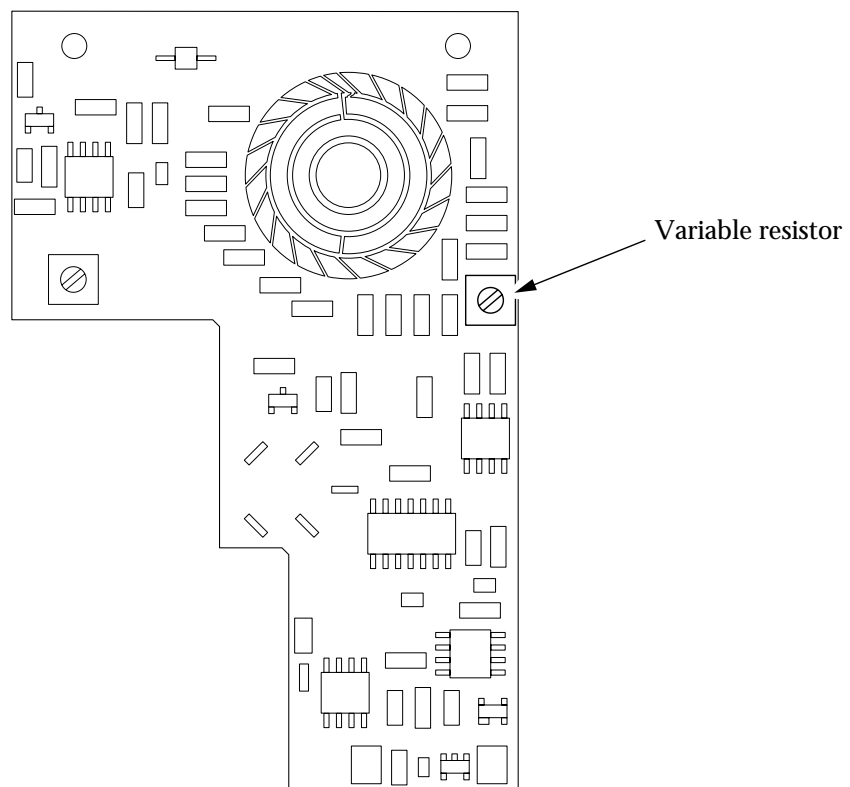
On pressing the MEASURE button one of the three LED's will light. The variable resistor in the camera (access behind the leather beside the ISO dial) should be turned so that the green LED lights when the MEASURE button is pressed again.

If the red LED lights, the resistor is turned anticlockwise and if the yellow LED lights, it is turned clockwise. At least two seconds must be allowed between measurements.

Control

To ensure the ISO dial functions, the measurement should also be made for two other ISO settings (100 and 1600). In each case the green LED should light when the MEASURE button is pressed.

| ISO | Exposure knob | Tolerance knob | LV |
|------|---------------|----------------|----|
| 100 | 0 | 1/2 | 15 |
| 1600 | - 1 | 1/2 | 12 |



Camera body 555ELD

Front bayonet plate

Front plate reassembly

Fit the four bayonet tongues (103439) and secure with eight screws (820425). Behind the front plate glue the two foam plastic strips (13212) and (22899) as well as the reflection protector (22527) into place.

Place the lens catch (103440) in position and fit the cover plate (105107). Secure with screw (823440). Install the spacer (810409) and the spring (816858). Secure the second screw (823440). Check the lens catch lever for ease of operation.

Fit the right and left mirror rest (22445 and 22446) and secure with the screws (823015 and 823017). Fit one adjusting screw (820020) in each mirror rest. Fig. 68.

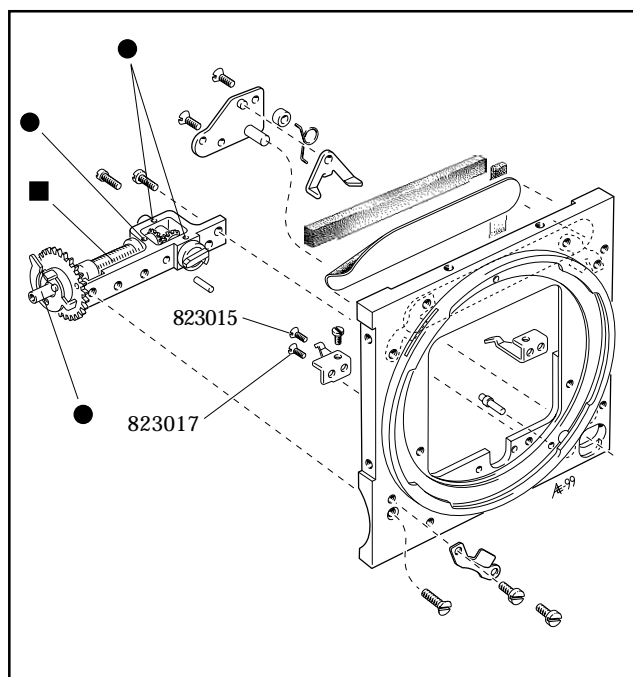


Fig. 68

Front gear (30413)

Check the front gear ease of operation. The long shaft from the drive gear wheel to the bevel gear wheel sometimes has too little play which can give rise to tightness. A light blow with a plastic faced hammer on the cog wheel end of the shaft will generally overcome the problem.

Fit the front gear on the front bayonet plate using one screw (823019) in the front and one (820018) from the rear. Check the freedom of operation. Do not tighten the screws to much.

Centring the front gear key.

Mount the tool 902658 (V-2075) into the lens bayonet plate and connect tool 902918 (V-2219). Turn the key using 902918 to a vertical position. Check that the free play is even in both directions. If there is more resistance at one direction than the other move the front gear to obtain a balance. Carry out the same procedure with the key in a horizontal position. Also check at the 180° points in both vertical and horizontal position. Fig. 69.

When the key is centralised tighten both screws in the front gear and secure with safety lacquer.

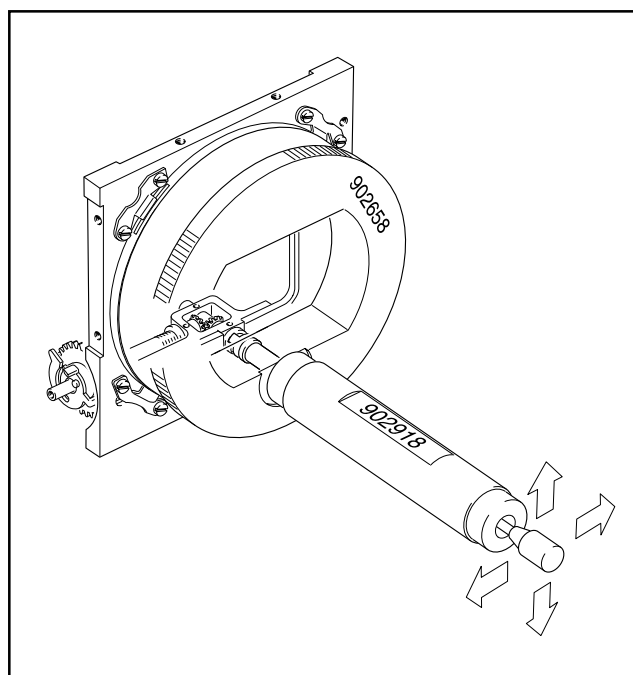


Fig. 69

Camera body 555ELD

Front bayonet plate

The hole for the locating pin (812202) is bored with 1.15 mm drill. Use tool V-2211 for driving in the pin. Drive the pin in until the face of the tool touches the front bayonet plate.
Fig. 70.

When a new front plate is installed the hole must be drilled using tool 902658 (V-2075), which is equipped with two drill bushes.

Remove the swarf and lubricate the bevel gears with grease. Force grease using a syringe into the three small holes. **Note! Do not over lubricate.**
Fig. 68.

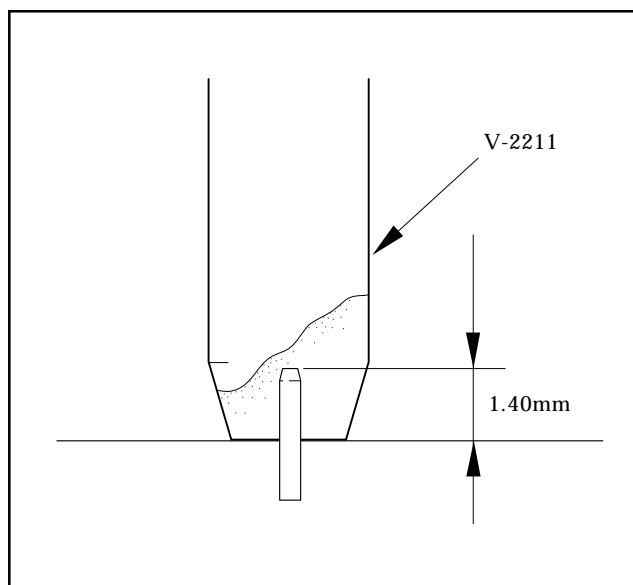


Fig. 70

Camera body 555ELD

Auxiliary shutter

Exchanging the auxiliary shutter

Note! For convenience use the aux. shutter jig V-5423 when removing/mounting the pins (811108).

Remove the pin (811108), spring retainer, spring (816807) and the upper actuating arm (13580).

Remove the safety lacquer and loosen the locking screws (825661). Remove the two hubs (840514).

The upper shutter flap can now be removed. Ensure that all adjustment washers on the shaft are retained. The lower shutter flap is dismantled in a similar manner. The light trap (13125) is held in place by two screws (821203).

Remount the upper shutter flap by aligning it to the bearing holes. Push in both bearing hubs and centralise the shutter flap side movement by using the shim washer (810505).

Tighten up both screws (825661) and secure with safety lacquer.

Fit a washer (810505) on each side of the lower shutter flap shaft and mount in the same way as the upper one.

Check that the shutter flaps move freely and that they are central to the rear plate inner frame. Fig. 71.

Assemble the upper actuating arm, spring and spring retainer. Locate the spring so the three items are together. Fig. 72.

Connect the three items to the shutter shaft and secure it with pin (811108).

The lower shutter is completed in the same manner but note that a weaker spring is used, (816806).

Check that the upper shutter spring pressure is approximately twice as strong as the lower shutter.

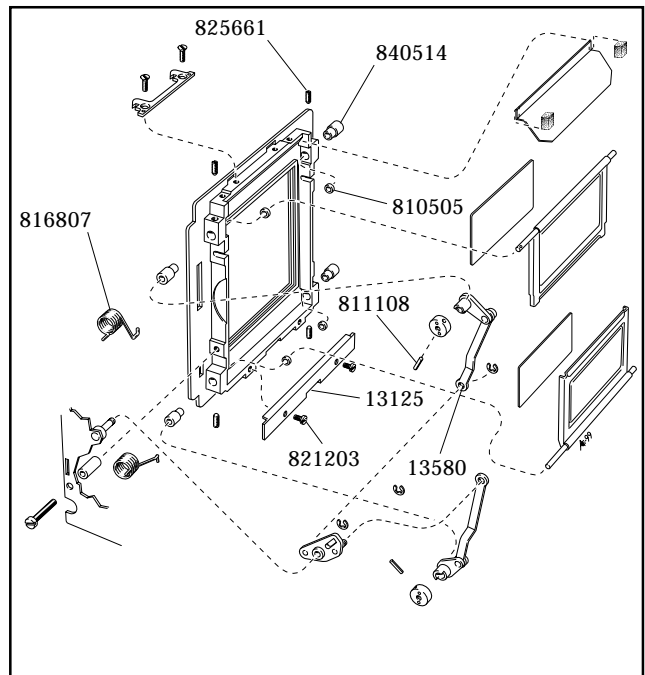


Fig. 71

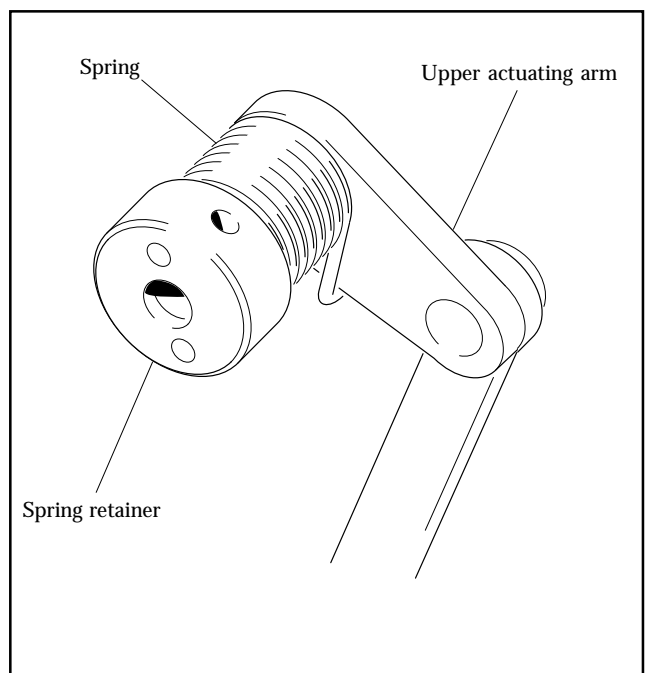
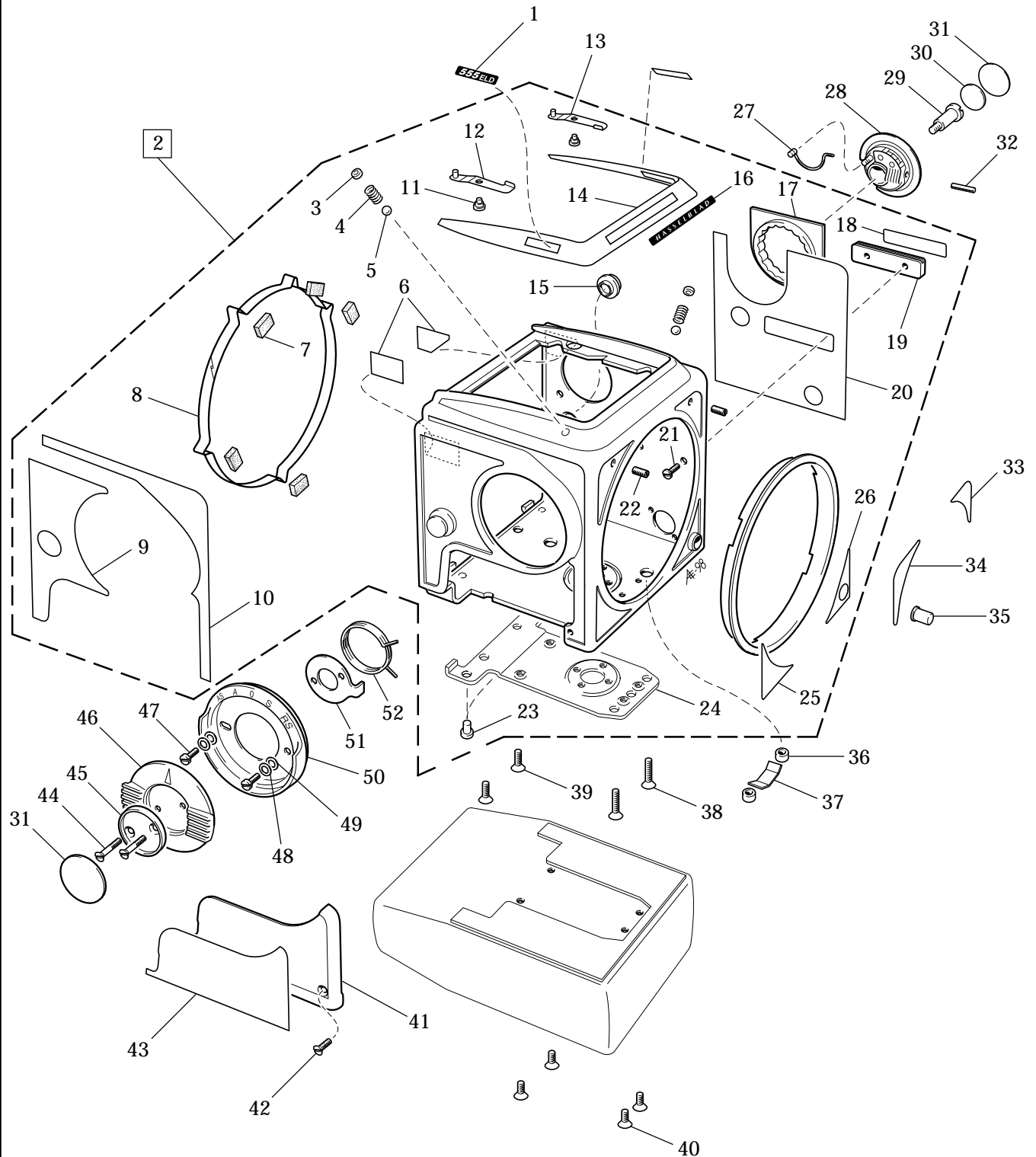


Fig. 72

Camera body 555ELD



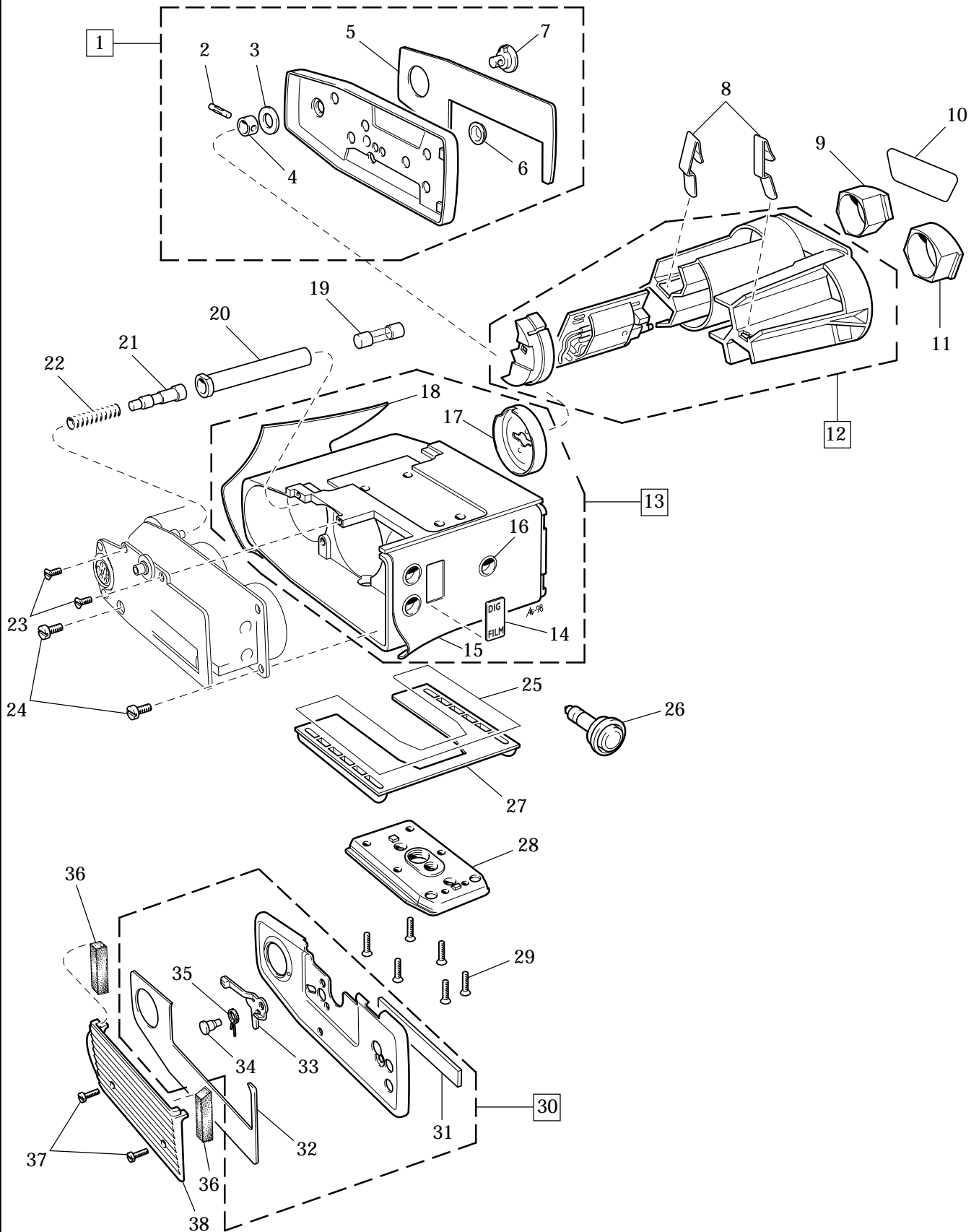
H A S S E L B L A D

Camera body 555ELD

7

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|--------------------------|---------------------------|
| 1 | 2 | 22 894 | Name plate | Part No. 40 365 (black) |
| 2 | 1 | 40 364 | Shell, complete (chrome) | |
| 3 | 2 | 12 978 | Plate | |
| 4 | 2 | 815 604 | Spring | |
| 5 | 2 | 809 120 | Steel ball | |
| 6 | 2 | 22 514 | Reflection protector | |
| 7 | 5 | 13 315 | Foam plastic pad | |
| 8 | 1 | 22 515 | Locking ring | |
| 9 | 1 | 105 509 | Leather | |
| 10 | 1 | 103 596 | Leather | |
| 11 | 2 | 835 001 | Rivet | |
| 12 | 1 | 13 906 | Holder, right | |
| 13 | 1 | 13 907 | Holder, left | |
| 14 | 1 | 105 926 | Leather | |
| 15 | 2 | 13 466 | Strap button | |
| 16 | 1 | 13 190 -1 | Name plate | |
| 17 | 1 | 40 417 | ISO plate | |
| 18 | 1 | 22 607 | Leather | |
| 19 | 1 | 22 472 | Accessory rail | |
| 20 | 1 | 22 455 | Leather | |
| 21 | 2 | 821 661 | Screw | |
| 22 | 2 | 825 760 | Screw | |
| 23 | 2 | 831 502 | Rivet | |
| 24 | 1 | 103 327 | Magazine support | |
| 25 | 1 | 103 594 | Leather | |
| 26 | 1 | 103 510 | Leather | |
| 27 | 1 | 22 587 | Spring | |
| 28 | 1 | 22 495 | ISO Selector | |
| 29 | 1 | 822 701 | Screw | |
| 30 | 1 | 22 473 | Shim | |
| 31 | 2 | 13 374 | Leather | |
| 32 | 1 | 22 533 | Dog | |
| 33 | 1 | 103 508 | Leather | |
| 34 | 1 | 103 507 | Leather | |
| 35 | 1 | 13 139 | Lens release button | |
| 36 | 2 | 810 620 | Spacer | |
| 37 | 1 | 103 424 | Spring | |
| 38 | 2 | 823 781 | Screw | |
| 39 | 2 | 823 755 | Screw | |
| 40 | 4 | 823 745 | Screw | |
| 41 | 1 | 30 424-1 | Cover (chrome) | Part No. 30 631-1 (black) |
| 42 | 1 | 823 017 | Screw | |
| 43 | 1 | 13 608 -1 | Leather | |
| 44 | 2 | 823 023 | Screw | |
| 45 | 1 | 13 596 | Plate | |
| 46 | 1 | 30 429 | Selector knob | |
| 47 | 2 | 820 014 | Screw | |
| 48 | 2 | 810 613 | Washer | |
| 49 | 2 | 810 607 | Washer | |
| 50 | 1 | 30 682 | Symbol plate | |
| 51 | 1 | 13 541 | Washer | |
| 52 | 1 | 816 906 | Spring | |

Camera body 555ELD



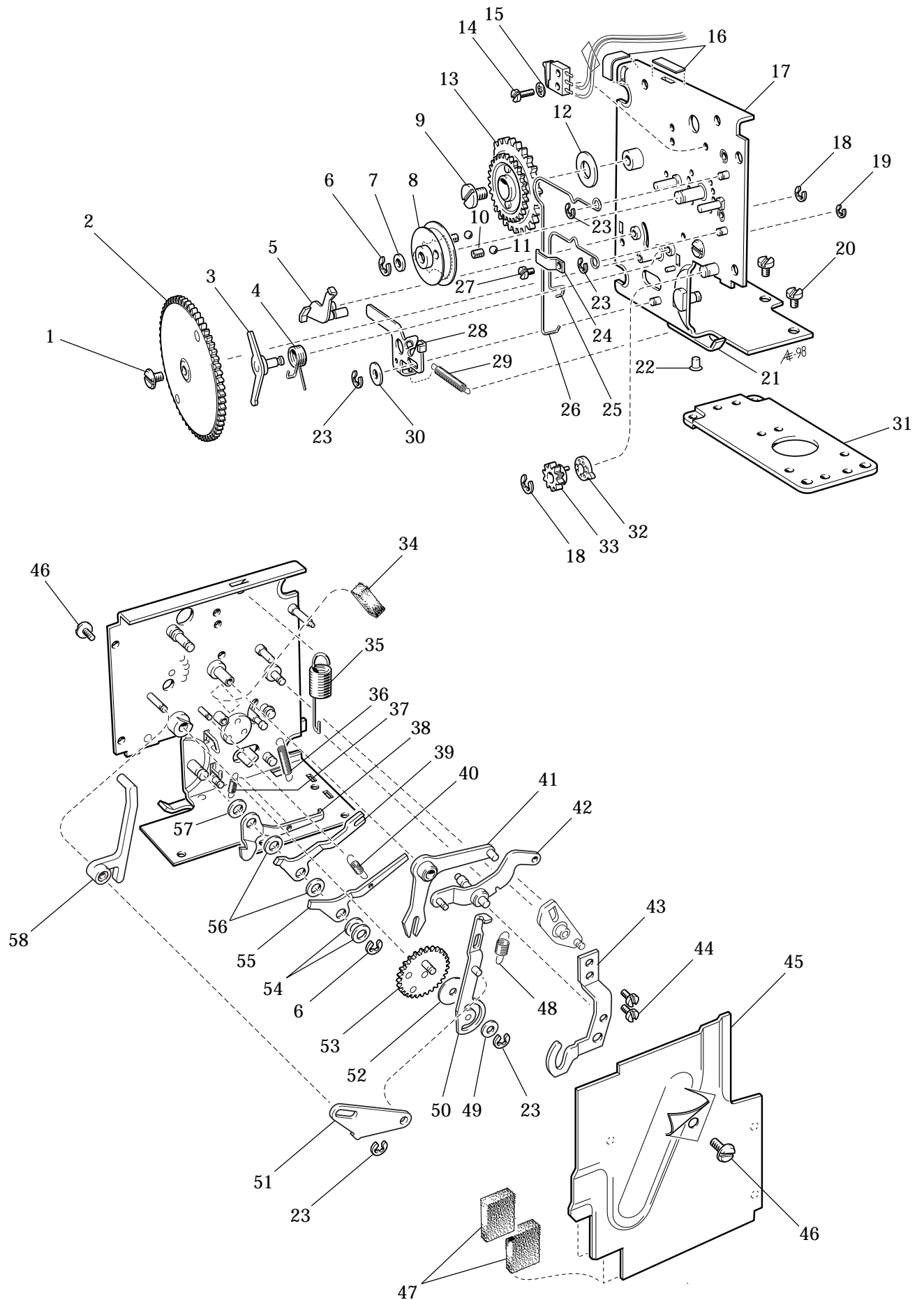
H A S S E L B L A D

Camera body 555ELD

8

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|--------------------------------|-------------------------|
| 1 | 1 | 30 737 | Battery cover, compl. (chrome) | Part No. 30 742 (black) |
| 2 | 1 | 812 505 | Pin | |
| 3 | 1 | 810 864 | Washer | |
| 4 | 1 | 13 550 | Spacer | |
| 5 | 1 | 21 317 | Leather | |
| 6 | 1 | 30 739 | Rubber cap | |
| 7 | 1 | 21 304 | Turn button | |
| 8 | 2 | 30 745 | Contact spring | |
| 9 | 1 | 41 001 | Insert, right | |
| 10 | 1 | 22 682 | Sign + - | |
| 11 | 1 | 41 000 | Insert, left | Complete |
| 12 | 1 | 50 178 | Battery compartment | |
| 13 | 1 | 30 801 | Motor housing | |
| 14 | 1 | 22 898 | Sign Dig/Film | |
| 15 | 1 | 22 912 | Leather | |
| 16 | 3 | 13 529 | Nylon bushing | |
| 17 | 1 | 13 585 | Cap | |
| 18 | 1 | 22 845 | Leather | |
| 19 | 1 | 13 593 | Fuse | |
| 20 | 1 | 22 342 | Insulating tube | |
| 21 | 1 | 21 305 | Fuse holder | Sales code No. 46120 |
| 22 | 1 | 815 855 | Spring | |
| 23 | 2 | 823 017 | Screw | |
| 24 | 2 | 820 042 | Screw | |
| 25 | 1 | 22 846 | Tape | |
| 26 | 1 | - | Release button | |
| 27 | 1 | 30 778 | Rubber support | |
| 28 | 1 | 30 763 | Tripod foot | |
| 29 | 6 | 829 790 | Screw | |
| 30 | 1 | 21 292 | Cover, complete (chrome) | |
| 31 | 1 | 13 545 | Shim | |
| 32 | 1 | 21 317 | Leather | |
| 33 | 1 | 21 283 | T-arm | |
| 34 | 1 | 835 330 | Pin | |
| 35 | 1 | 816 826 | Spring | |
| 36 | 2 | 22 530 | Light seal | |
| 37 | 2 | 820 019 | Screw | |
| 38 | 1 | 40 202 | Plastic grip, right | |

Camera body 555ELD



H A S S E L B L A D

Camera body 555ELD

9

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|-----------------------|---------------------------|
| 1 | 1 | 821 033 | Screw | |
| 2 | 2 | 13 557 | Gear | |
| 3 | 1 | 13 570 | Release catch | |
| 4 | 1 | 816 608 | Spring | |
| 5 | 1 | 22 922 | Release arm | |
| 6 | 2 | 817 123 | Clip | |
| 7 | 1 | 810 702 | Washer | Alternatively 810 703/705 |
| 8 | 1 | 13 559 | Selector | |
| 9 | 1 | 821 012 | Screw | |
| 10 | 2 | 815 604 | Spring | |
| 11 | 2 | 809 020 | Steel ball | |
| 12 | 1 | 810 854 | Washer | |
| 13 | 1 | 13 558 | Gear | |
| 14 | 1 | 820 019 | Screw | |
| 15 | 1 | 810 407 | Washer | |
| 16 | 2 | 22 943 | Light seal "palpas" | |
| 17 | 1 | 30 748 | Inner wall, right | |
| 18 | 2 | 817 119 | Clip | |
| 19 | 1 | 817 112 | Clip | |
| 20 | 3 | 820 014 | Screw | |
| 21 | 1 | 22 317 | Stop | |
| 22 | 2 | 832 315 | Rivet | |
| 23 | 5 | 817 115 | Clip | |
| 24 | 1 | 12 453 | Holder | |
| 25 | 1 | 21 223 | S-wire | |
| 26 | 1 | 21 224 | A-wire | |
| 27 | 1 | 820 011 | Screw | |
| 28 | 1 | 30 793 | Release lever | |
| 29 | 1 | 814 309 | Spring | |
| 30 | 1 | 810 560 | Teflon washer | |
| 31 | 1 | 30 686 | Bottom plate | |
| 32 | 1 | 13 525 | Dog | |
| 33 | 1 | 13 567 | Gear | |
| 34 | 1 | - | Foam plastic pad | |
| 35 | 1 | 814 862 | Spring | |
| 36 | 1 | 814 706 | Spring | |
| 37 | 1 | 814 302 | Spring | |
| 38 | 1 | 21 221 | B-arm | |
| 39 | 1 | 22 923 | S-arm | |
| 40 | 1 | 814 509 | Spring | |
| 41 | 1 | 13 554 | Auxiliary shutter arm | |
| 42 | 1 | 22 460 | Mirror lever | |
| 43 | 1 | 30 701 | Support | |
| 44 | 2 | 820 013 | Screw | |
| 45 | 1 | 22 709 | Inner cover | Complete |
| 46 | 2 | 821 033 | Screw | |
| 47 | 2 | 22 528 | Foam plastic pad | |
| 48 | 1 | 814 861 | Spring | |
| 49 | 1 | 810 532 | Washer | |
| 50 | 1 | 22 458 | Mirror actuating arm | |
| 51 | 1 | 22 714 | Plate | |
| 52 | 1 | 810 761 | Washer | |
| 53 | 1 | 22 476 | Gear | |

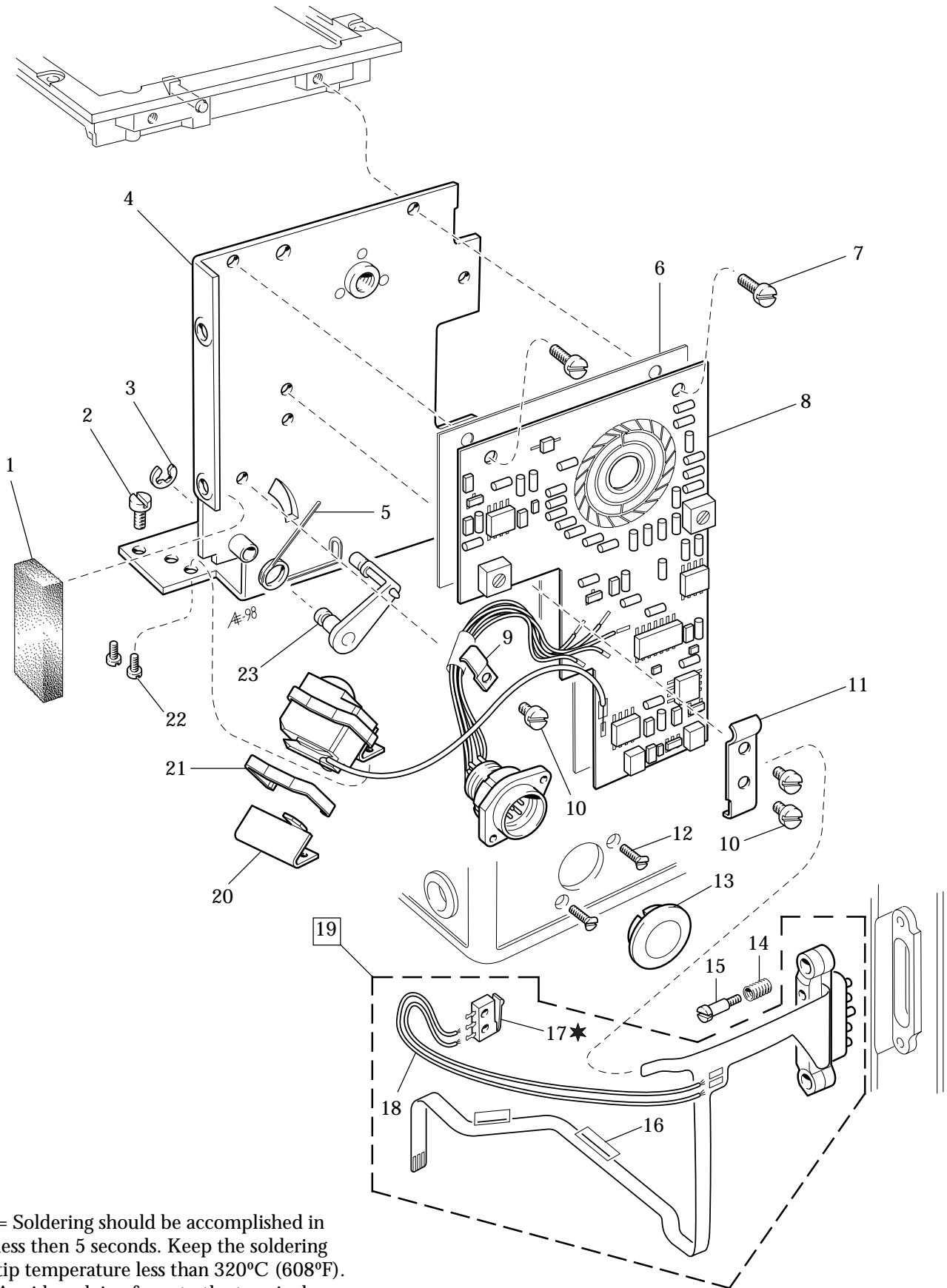
H A S S E L B L A D

Camera body 555ELD

9

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|----------------------|---------------------------------------------------|
| 54 | 2 | 810 705 | Washer (0,20 mm) | Alternatively 810 702/703 (0,05/0,10 mm) |
| 55 | 1 | 21 219-2 | Locking arm (normal) | Alternatively 21 219-1 (long) 21 219-3 (short) |
| 56 | 2 | 810 702 | Washer | |
| 57 | 1 | 810 703 | Washer | |
| 58 | 1 | 22 896 | Arm | |
| | | 40 423 | Inner wall, right | Complete |

Camera body 555ELD



★ = Soldering should be accomplished in less than 5 seconds. Keep the soldering tip temperature less than 320°C (608°F). Avoid applying force to the terminals.

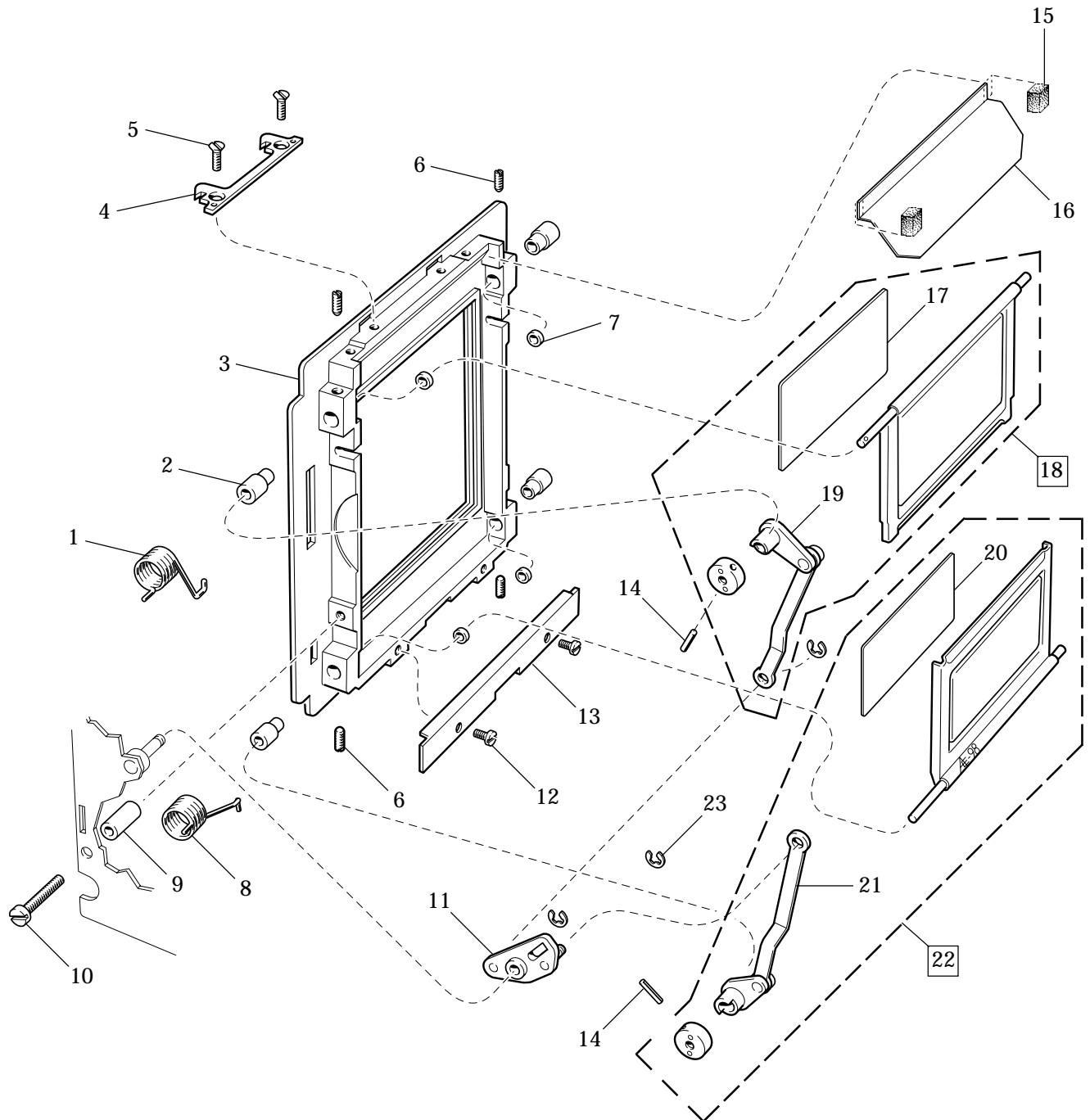
H A S S E L B L A D

Camera body 555ELD

10

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|-----------------------|-----------------|
| 1 | 1 | 22 678 | Foam | |
| 2 | 3 | 820 014 | Screw | |
| 3 | 1 | 817 115 | Clip | |
| 4 | 1 | 22 707 | Inner wall, left | |
| 5 | 1 | 816 864 | Spring | |
| 6 | 1 | 22 879 | Double-sided tape | |
| 7 | 2 | 820 015 | Screw | |
| 8 | 1 | 22 882 | PC-board (incl. tape) | |
| 9 | 1 | 12 453 | Cable holder | |
| 10 | 3 | 820 011 | Screw | |
| 11 | 1 | 22 918 | Attachment | |
| 12 | 2 | 823 335 | Screw | |
| 13 | 1 | 22 470 | Socket cap | |
| 14 | 2 | 815 511 | Spring | |
| 15 | 2 | 105 412 | Screw | |
| 16 | 2 | - | Double-sided tape | Type Scotch VHB |
| 17 | 1 | 852 589 | Micro switch | |
| 18 | 2 | 22 931 | Cable | |
| 19 | 1 | 22 915 | Contact flex | Complete |
| 20 | 1 | 22 576 | Bracket | |
| 21 | 1 | 22 577 | Clip | |
| 22 | 2 | 820 325 | Screw | |
| 23 | 1 | 22 461 | Mirror rest | |

Camera body 555ELD



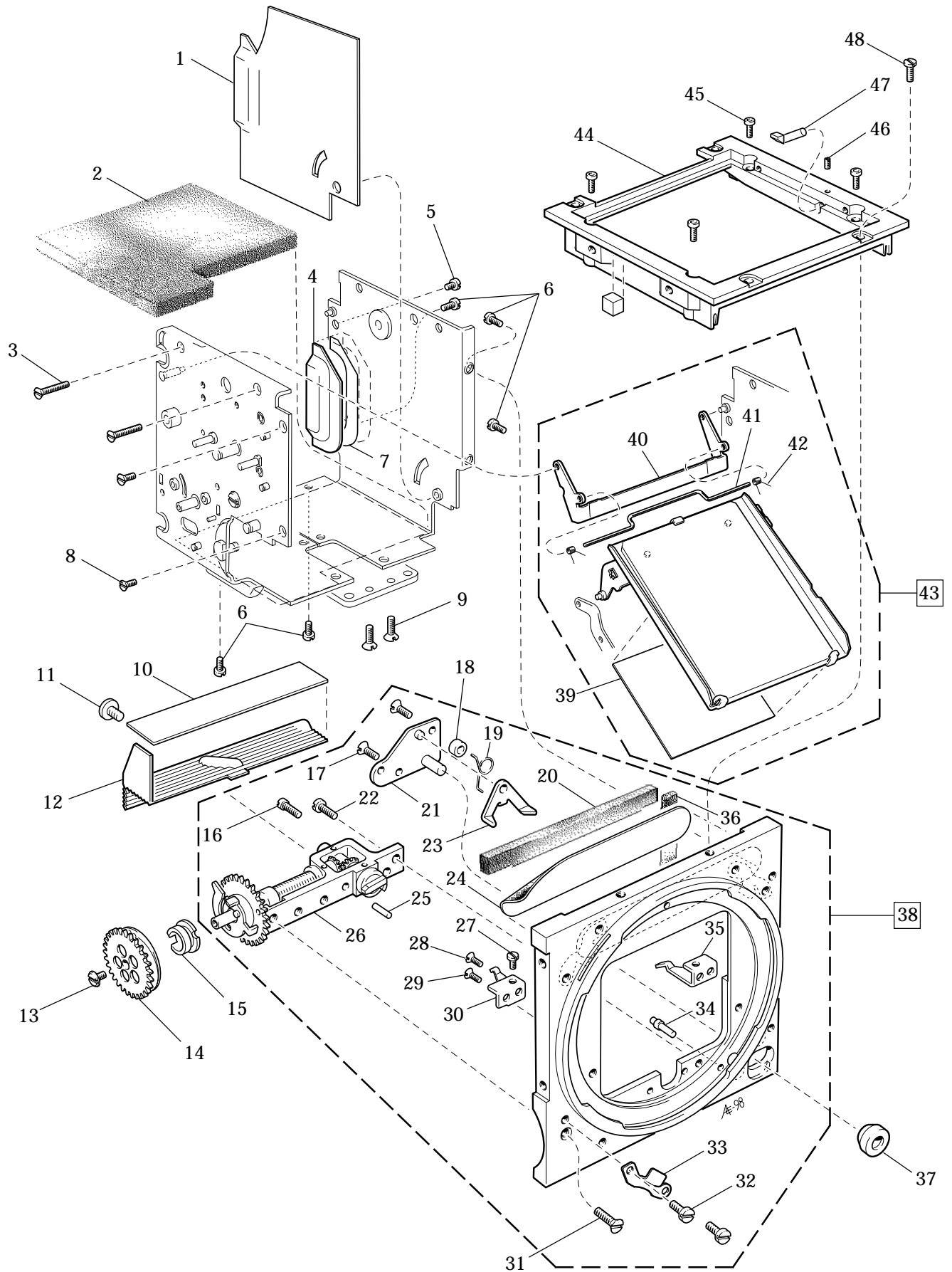
H A S S E L B L A D

Camera body 555ELD

11

| Pos No. | Pcs | Spare Part No. | Description | Remark | |
|---------|-----|----------------|-------------------------|-------------------------|-------------------------|
| 1 | 1 | 816 807 | Spring | Please state serial No. | |
| 2 | 4 | 840 514 | Hub | | |
| 3 | 1 | 40 422 | Rear plate | | |
| 4 | 1 | 22 423 | Magazine hook | | |
| 5 | 2 | 823 640 | Screw | | |
| 6 | 4 | 825 661 | Screw | | |
| 7 | 4 | 810 505 | Washer | | |
| 8 | 1 | 816 806 | Spring | | |
| 9 | 1 | 13 547 | Spacer | | |
| 10 | 1 | 820 025 | Screw | | |
| 11 | 1 | 13 551 | Actuating part | Upper | |
| 12 | 2 | 821 203 | Screw | | |
| 13 | 1 | 13 125 | Light trap | | |
| 14 | 2 | 811 108 | Pin | | |
| 15 | 2 | 13 315 | Foam plastic pad | | |
| 16 | 1 | 22 508 | Light shield | | |
| 17 | 1 | 22 419 | Reflection protector | | |
| 18 | 1 | 90 713 | Top flap, co-drilled | | |
| 19 | 1 | 13 580 | Actuating arm | | |
| 20 | 1 | 22 420 | Reflection protector | | |
| 21 | 1 | 13 552 | Actuating arm | | Lower |
| 22 | 1 | 90 714 | Bottom flap, co-drilled | | |
| 23 | 3 | 817 115 | Clip | | |
| | | 30 791 | Rear plate, complete | | Please state serial No. |

Camera body 555ELD



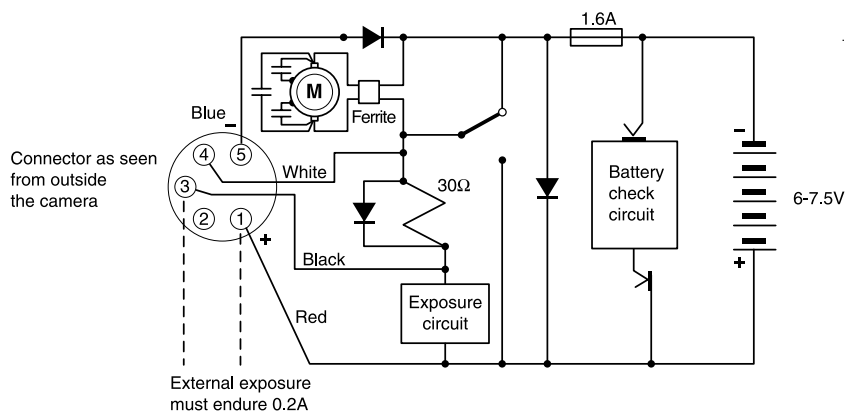
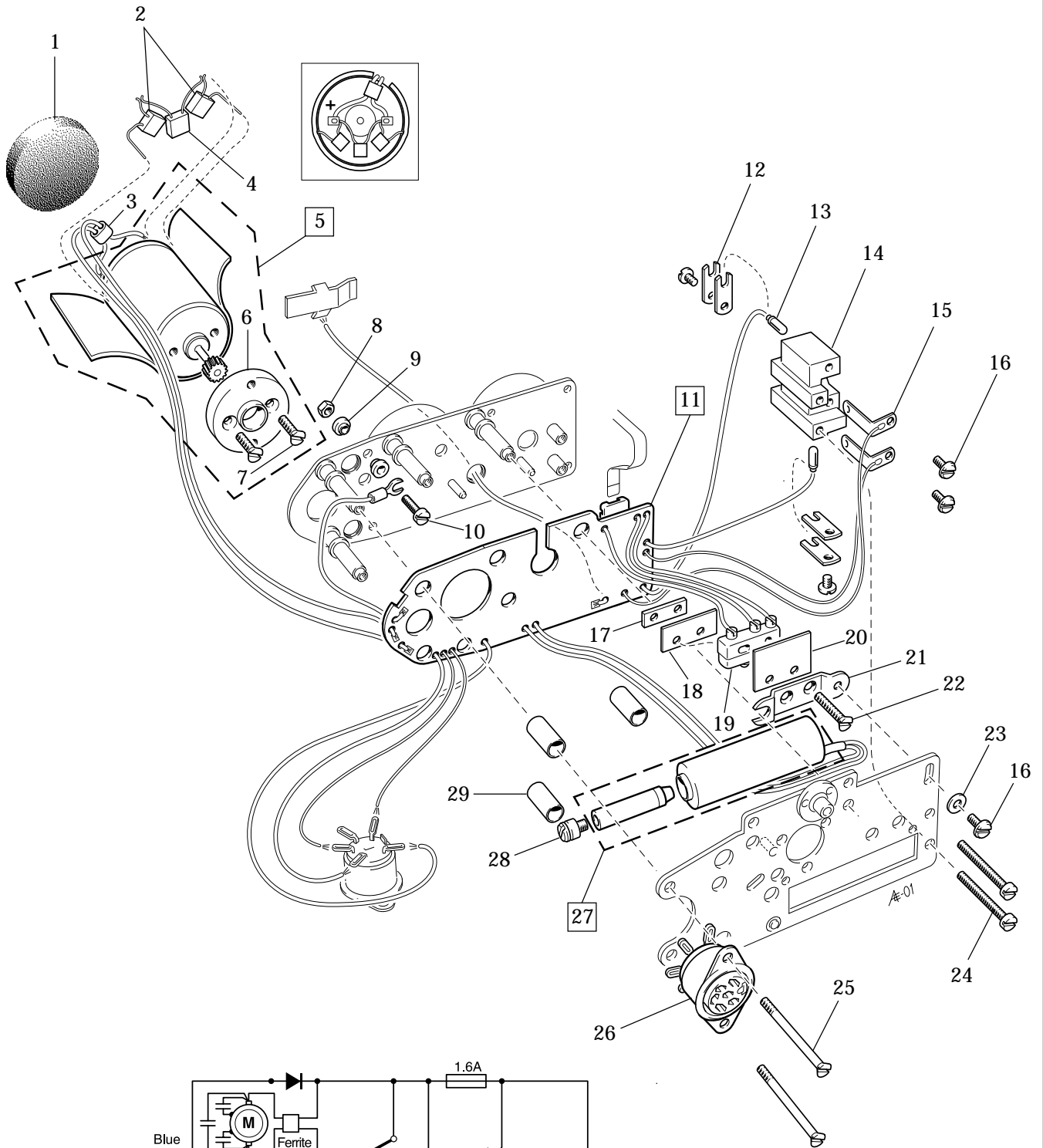
H A S S E L B L A D

Camera body 555ELD

12

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|-----------------------|-----------------------------------|
| 1 | 1 | 22 706 | Reflection protector | |
| 2 | 1 | 22 513 | Foam plastic pad | |
| 3 | 2 | 823 028 | Screw | |
| 4 | 1 | 22 917 | Cover | Incl. tape 22 916 |
| 5 | 1 | 820 013 | Screw | |
| 6 | 5 | 820 015 | Screw | |
| 7 | 1 | 22 916 | Tape | |
| 8 | 2 | 823 015 | Screw | |
| 9 | 2 | 823 655 | Screw | |
| 10 | 1 | 22 902 | Reflection protector | |
| 11 | 1 | 821 031 | Screw | |
| 12 | 1 | 22 928 | Cover | Incl. reflection protector 22 902 |
| 13 | 1 | 821 033 | Screw | |
| 14 | 1 | 13 556 | Gear | |
| 15 | 1 | 21 324 | Disc | |
| 16 | 1 | 821 009 | Screw | |
| 17 | 2 | 823 440 | Screw | |
| 18 | 1 | 810 409 | Spacer | |
| 19 | 1 | 816 858 | Spring | |
| 20 | 1 | 22 899 | Foam plastic strip | |
| 21 | 1 | 105 107 | Cover plate | |
| 22 | 1 | 820 018 | Screw | |
| 23 | 1 | 103 440 | Lens catch | |
| 24 | 1 | 22 527 | Reflection protector | |
| 25 | 1 | 812 202 | Pin | |
| 26 | 1 | 30 413 | Front gear | |
| 27 | 2 | 820 020 | Screw | |
| 28 | 2 | 823 015 | Screw | |
| 29 | 2 | 823 017 | Screw | |
| 30 | 1 | 22 445 | Mirror rest, right | |
| 31 | 1 | 823 019 | Screw | |
| 32 | 8 | 820 425 | Screw | |
| 33 | 4 | 103 439 | Bayonet flange | |
| 34 | 1 | 836 107 | Stop pin | |
| 35 | 1 | 22 446 | Mirror rest, left | |
| 36 | 1 | 13 212 | Foam plastic strip | |
| 37 | 1 | 103 773 | Teflon button | |
| 38 | 1 | 30 706 | Front bayonet plate | Complete |
| 39 | 1 | 22 897 -1 | Reflection protection | |
| 40 | 1 | 30 754 | Mirror hinge | |
| 41 | 1 | 22 482 | Spring | |
| 42 | 2 | 816 761 | Spring | |
| 43 | 1 | 30 716 | Mirror | Complete |
| 44 | 1 | 22 980 | Frame | Incl. magnet |
| 45 | 4 | 22 478 | Screw | |
| 46 | 1 | 825 420 | Screw | |
| 47 | 1 | 22 467 | Light pipe | |
| 48 | 4 | 821 017 | Screw | |

Camera body 555ELD



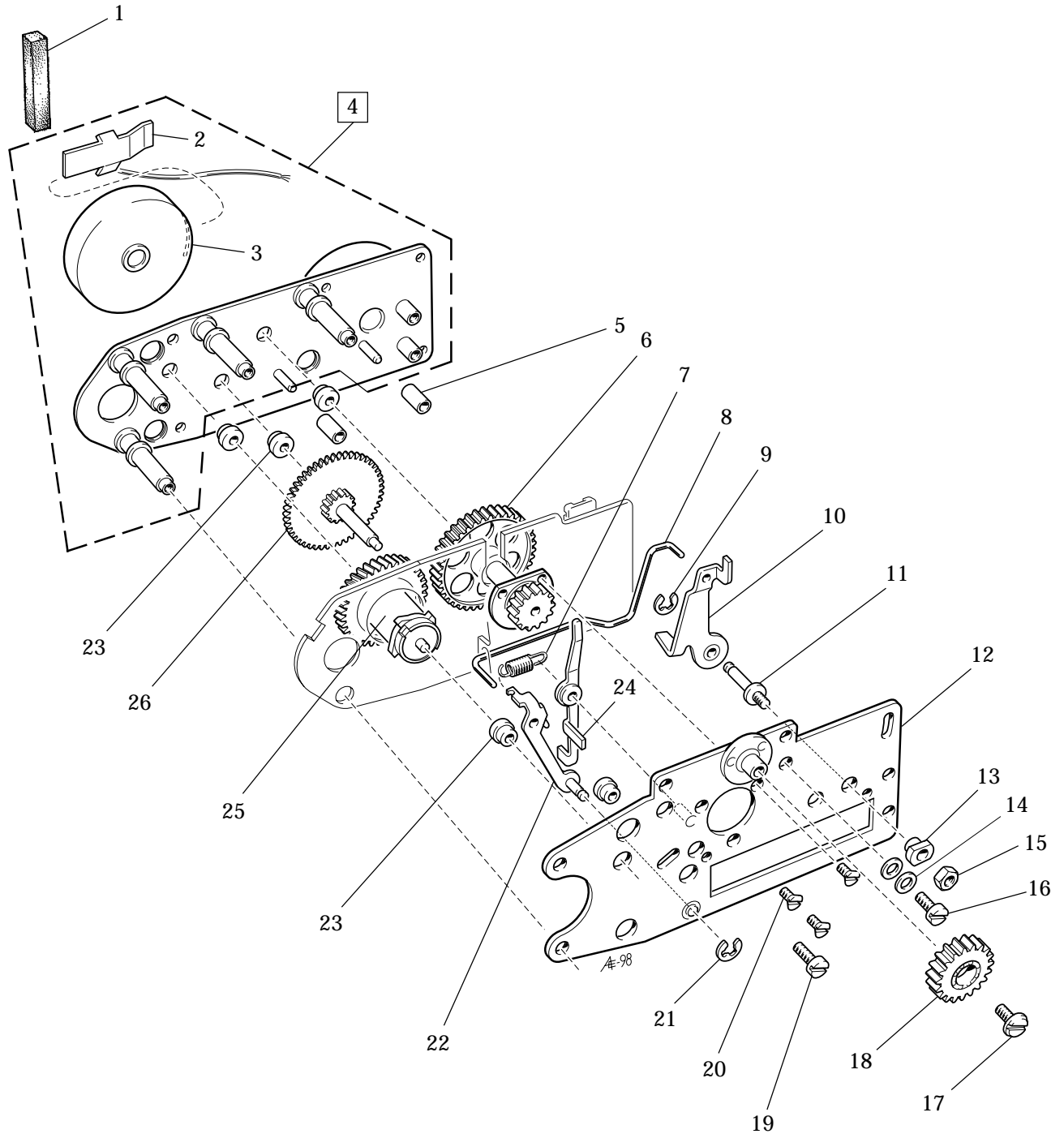
H A S S E L B L A D

Camera body 555ELD

13

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|---------------------|-------------------------------|
| 1 | 1 | 22 823 | Foam pad | |
| 2 | 2 | 853 587 | Capacitor | |
| 3 | 1 | 853 042 | Ferrite | |
| 4 | 1 | 853 549 | Capacitor | |
| 5 | 1 | 22 827 | Motor | |
| 6 | 1 | 22 825 | Spacer | |
| 7 | 2 | 824 703 | Screw | |
| 8 | 1 | 828 001 | Nut | |
| 9 | 1 | 13 538 | Insulating bushing | |
| 10 | 1 | 820 020 | Screw | |
| 11 | 1 | 22 913 | PC board, complete | Incl. cables and side contact |
| 12 | 4 | 13 534 | Plate spring | |
| 13 | 2 | 22 938 | Contact pin | |
| 14 | 1 | 30 435 | Connecting terminal | |
| 15 | 2 | 13 535 | Contact spring | |
| 16 | 5 | 821 033 | Screw | |
| 17 | 1 | 13 592 | Nut | |
| 18 | 1 | 13 590 | Insulating shim | |
| 19 | 1 | 13 605 | Micro switch | |
| 20 | 1 | 22 903 | Insulating shim | |
| 21 | 1 | 21 312 | Bracket | |
| 22 | 2 | 824 614 | Screw | |
| 23 | 1 | 810 532 | Washer | |
| 24 | 2 | 820 048 | Screw | |
| 25 | 2 | 823 049 | Screw | |
| 26 | 1 | 13 604 | Side contact | |
| 27 | 1 | 30 421 | Solenoid | |
| 28 | 1 | 822 062 | Screw | |
| 29 | 3 | 13 606 | Plastic tube | |
| | 1 | 40 424 | Motor unit | Complete |

Camera body 555ELD



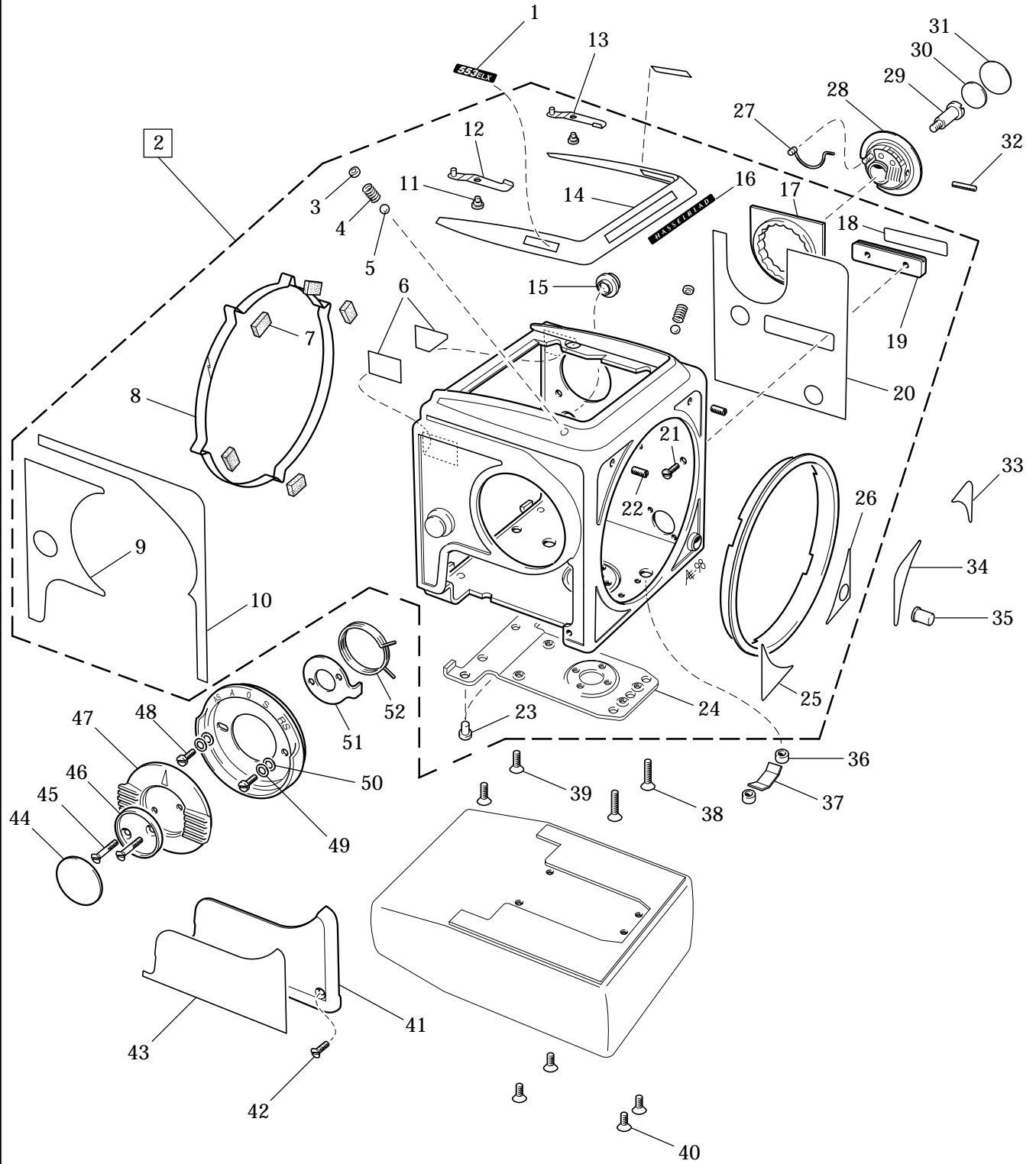
H A S S E L B L A D

Camera body 555ELD

14

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|-----------------------|--------|
| 1 | 1 | 12 942 | Foam plastic strip | |
| 2 | 1 | 22 904 | Contact spring | |
| 3 | 2 | 21 309 | Battery holder | |
| 4 | 1 | 22 978 | Mounting plate, inner | |
| 5 | 2 | 13 607 | Rubber tube | |
| 6 | 1 | 13 565 | Gear | |
| 7 | 1 | 814 601 | Spring | |
| 8 | 1 | 22 351 | Link | |
| 9 | 1 | 817 112 | Clip | |
| 10 | 1 | 13 571 | Stop arm | |
| 11 | 1 | 14 100 | Bearing pin | |
| 12 | 1 | 21 290 | Mounting plate, outer | |
| 13 | 1 | 22 352 | Eccentric | |
| 14 | 2 | 810 613 | Washer | |
| 15 | 1 | 828 001 | Nut | |
| 16 | 1 | 820 042 | Screw | |
| 17 | 1 | 821 012 | Screw | |
| 18 | 1 | 13 566 | Gear | |
| 19 | 1 | 820 041 | Screw | |
| 20 | 3 | 824 205 | Screw | |
| 21 | 1 | 817 115 | Clip | |
| 22 | 1 | 14 099 | Clutch arm | |
| 23 | 5 | 13 528 | Teflon bearing | |
| 24 | 1 | 13 561 | Magnet arm | |
| 25 | 1 | 13 563 | Clutch gear | |
| 26 | 1 | 13 564 | Gear | |

Camera body 553 ELX/500ELX



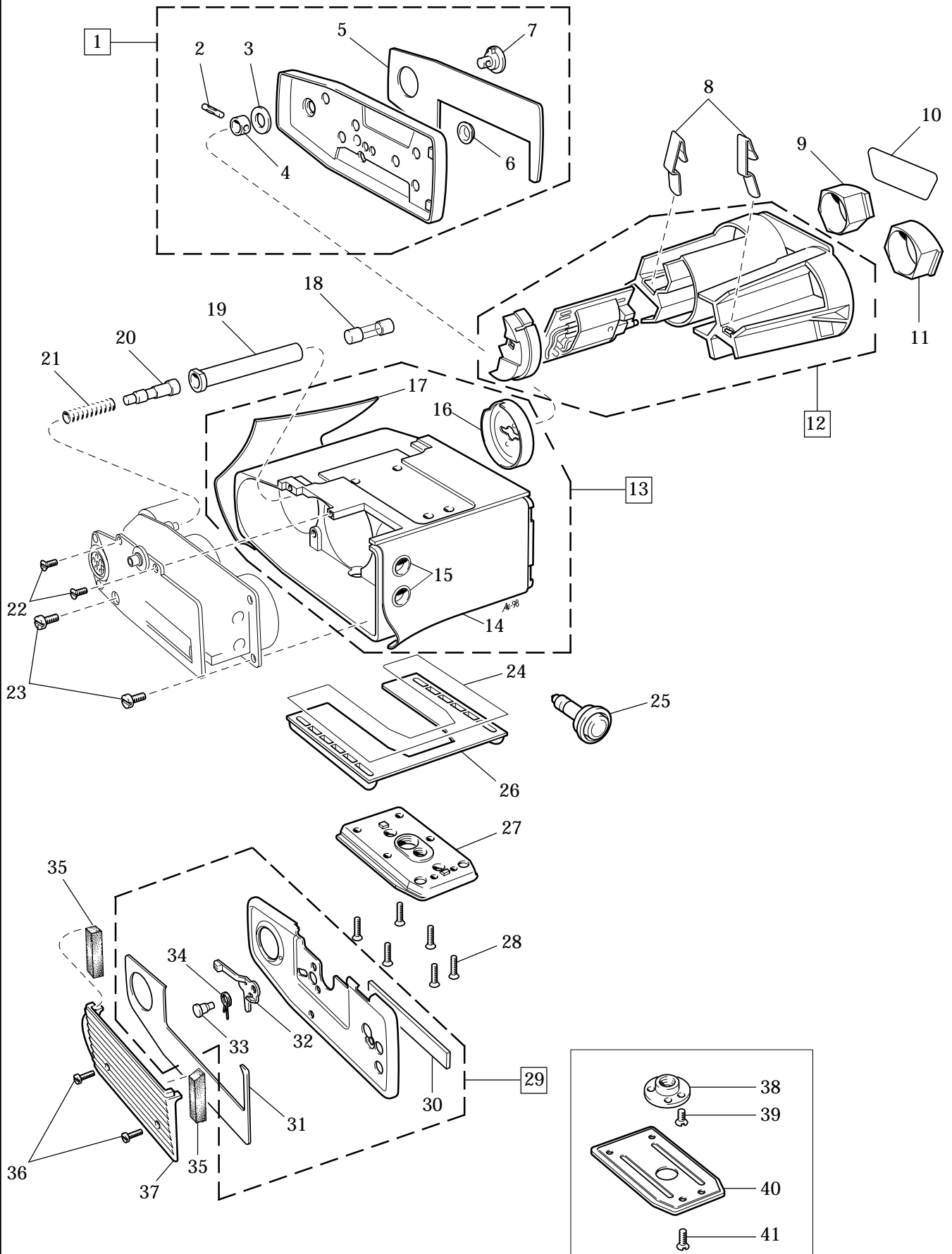
Camera body 553 ELX/500ELX

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|----------------|------------|-----------------------|------------------------|--------------------------------------------|
| 1 | 2 | 22 610 | Name plate | |
| 2 | 1 | 40 364 | Shell 553ELX, complete | Chrome, (Note! P/N 40331 <u>not</u> incl.) |
| | 1 | 40 365 | Shell 553ELX, complete | Black, (Note! P/N 40331 <u>not</u> incl.) |
| | 1 | 40 335 | Shell 500ELX, complete | Chrome |
| | 1 | 40 334 | Shell 500ELX, complete | Black |
| 3 | 2 | 12 978 | Plate | |
| 4 | 2 | 815 604 | Spring | |
| 5 | 2 | 809 120 | Steel ball | |
| 6 | 2 | 22 514 | Reflection protector | |
| 7 | 5 | 13 315 | Foam plastic pad | |
| 8 | 1 | 22 515 | Locking ring | |
| 9 | 1 | 105 509 | Leather | |
| 10 | 1 | 103 596 | Leather | |
| 11 | 2 | 835 001 | Rivet | |
| 12 | 1 | 13 906 | Holder, right | |
| 13 | 1 | 13 907 | Holder, left | |
| 14 | 1 | 105 926 | Leather | 553ELX |
| | 1 | 103 511 | Leather | 500ELX |
| 15 | 2 | 13 466 | Strap button | |
| 16 | 1 | 13 190-1 | Name plate | |
| 17 | 1 | 40 331 | ISO plate | |
| 18 | 1 | 22 607 | Leather | 553ELX |
| | 1 | 22 448 | Name plate | 500ELX |
| 19 | 1 | 22 472 | Accessory rail | |
| 20 | 1 | 22 455 | Leather | |
| 21 | 2 | 821 661 | Screw | |
| 22 | 2 | 825 760 | Screw | |
| 23 | 2 | 831 502 | Rivet | |
| 24 | 1 | 103 327 | Magazine support | |
| 25 | 1 | 103 594 | Leather | |
| 26 | 1 | 103 510 | Leather | |
| 27 | 1 | 22 587 | Spring | |
| 28 | 1 | 22 495 | ISO Selector | |
| 29 | 1 | 822 701 | Screw | |
| 30 | 1 | 22 473 | Shim | |
| 31 | 1 | 13 374 | Leather | |
| 32 | 1 | 22 533 | Dog | |
| 33 | 1 | 103 508 | Leather | |
| 34 | 1 | 103 507 | Leather | |
| 35 | 1 | 13 139 | Lens release button | |
| 36 | 2 | 810 620 | Spacer | |
| 37 | 1 | 103 424 | Spring | |
| 38 | 2 | 823 781 | Screw | |
| 39 | 2 | 823 755 | Screw | |
| 40 | 4 | 823 745-1 | Screw | |
| 41 | 1 | 30 424-1 | Cover | Chrome |
| | 1 | 30 631 | Cover | Black |
| 42 | 1 | 823 017-1 | Screw | |
| 43 | 1 | 13 608 | Leather | |
| 44 | 1 | 13 374 | Leather | |
| 45 | 2 | 823 023 | Screw | |
| 46 | 1 | 13 596 | Plate | |
| 47 | 1 | 30 429 | Selector knob | |

Camera body 553 ELX/500ELX

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|----------------|------------|-----------------------|--------------------|---------------|
| 48 | 2 | 820 014 | Screw | |
| 49 | 2 | 810 613 | Washer | |
| 50 | 2 | 810 607 | Washer | |
| 51 | 1 | 13 541 | Washer | |
| 52 | 1 | 816 906 | Spring | |

Camera body 553ELX



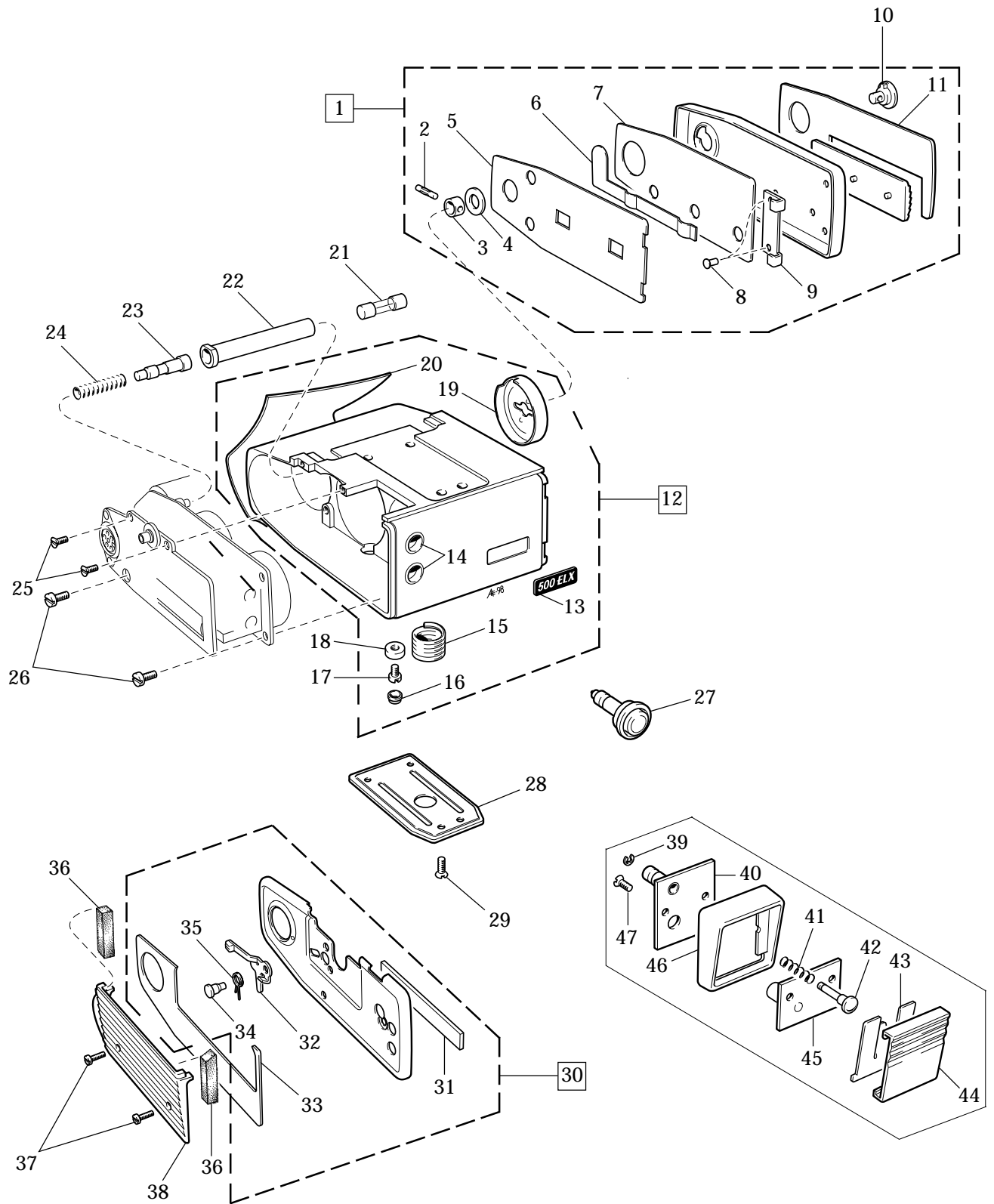
H A S S E L B L A D

Camera body 553ELX

16

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|--------------------------------|-------------------------------------------------|
| 1 | 1 | 30 737 | Battery cover, compl. (chrome) | Part No.30 742 (black) |
| 2 | 1 | 812 505 | Pin | |
| 3 | 1 | 810 864 | Washer | |
| 4 | 1 | 13 550 | Spacer | |
| 5 | 1 | 21 317 | Leather | |
| 6 | 1 | 30 739 | Rubber cap | |
| 7 | 1 | 21 304 | Turn button | |
| 8 | 2 | 30 745 | Contact spring | |
| 9 | 1 | 41 001 | Insert, right | |
| 10 | 1 | 22 682 | Sign + - | |
| 11 | 1 | 41 000 | Insert, left | |
| 12 | 1 | 50 178 | Battery compartment | |
| 13 | 1 | 30 787 | Motor housing, complete | |
| | 1 | 30 740 | Motor housing, complete | Previous type, please see Service Info No. 6/97 |
| 14 | 1 | 22 844 | Leather | |
| 15 | 2 | 13 529 | Nylon bushing | |
| 16 | 1 | 13 585 | Cap | |
| 17 | 1 | 22 845 | Leather | |
| 18 | 1 | 13 593 | Fuse | |
| 19 | 1 | 22 342 | Insulating tube | |
| 20 | 1 | 21 305 | Fuse holder | |
| 21 | 1 | 815 855 | Spring | |
| 22 | 2 | 823 017 | Screw | |
| 23 | 2 | 820 042 | Screw | |
| 24 | 1 | 22 846 | Tape | |
| 25 | | - | Release button | Sales code No. 46120 |
| 26 | 1 | 30 778 | Rubber support | |
| 27 | 1 | 30 763 | Tripod foot | |
| 28 | 6 | 829 790 | Screw | |
| 29 | 1 | 21 292 | Cover, complete (chrome) | Part No. 22 117 (black) |
| 30 | 1 | 13 545 | Shim | |
| 31 | 1 | 21 317 | Leather | |
| 32 | 1 | 21 283 | T-arm | |
| 33 | 1 | 835 330 | Pin | |
| 34 | 1 | 816 826 | Spring | |
| 35 | 2 | 22 530 | Light seal | |
| 36 | 2 | 820 019 | Screw | |
| 37 | 1 | 40 202 | Plastic grip, right | |
| 38 | 1 | 22 584 | Tripod socket standard 1/4" | Previous type tripod foot |
| | | 22 667 | Tripod socket standard 3/8" | " |
| 39 | 4 | 823 770 | Screw | " |
| 40 | 1 | 103 349 | Slide | " |
| 41 | 4 | 823 745 | Screw | " |

Camera body 500ELX



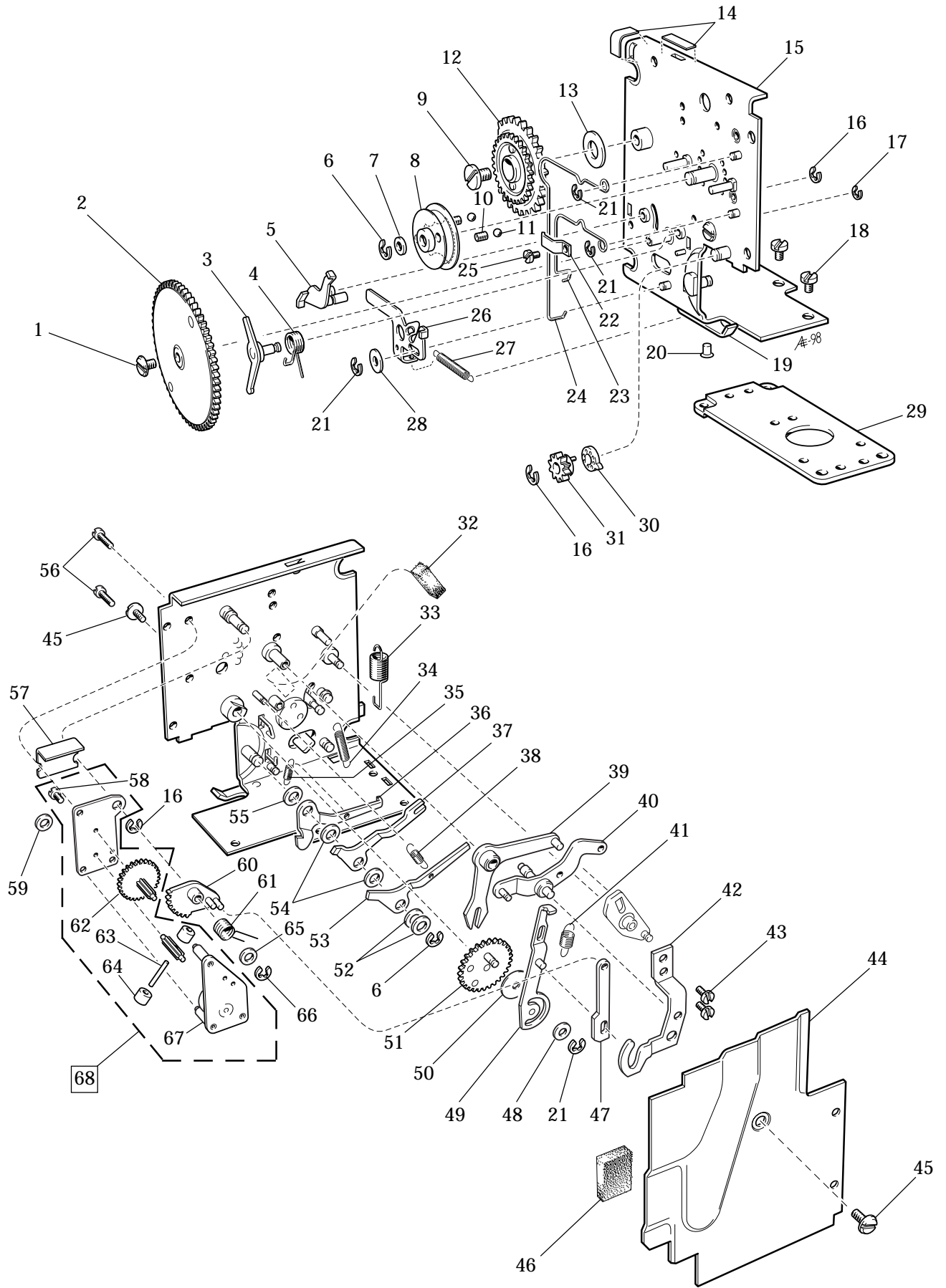
H A S S E L B L A D

Camera body 500ELX

17

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|-------------------------------|-----------------------------|
| 1 | 1 | 22 118 | Battery cover, compl. (black) | Chrome, no longer available |
| 2 | 1 | 812 505 | Pin | |
| 3 | 1 | 13 550 | Spacer | |
| 4 | 1 | 810 864 | washer | |
| 5 | 1 | 21 320 | Plate | |
| 6 | 1 | 21 318 | Contact spring | |
| 7 | 1 | 21 319 | Plate | |
| 8 | 2 | 833 103 | Rivet | |
| 9 | 1 | 21 301 | Catch | |
| 10 | 1 | 21 304 | Turn button | |
| 11 | 1 | 21 317 | Leather | |
| 12 | 1 | 30 685 | Motor housing | Complete |
| 13 | 1 | 22 485 | Name plate | |
| 14 | 2 | 13 529 | Nylon bushing | |
| 15 | 1 | 827 810 | Heli-coil | |
| 16 | 4 | 13 598 | Rubber foot | |
| 17 | 4 | 820 012 | Screw | |
| 18 | 4 | 13 599 | Cap | |
| 19 | 1 | 13 585 | Cap | |
| 20 | 1 | 21 314 | Leather | |
| 21 | 1 | 13 593 | Fuse | |
| 22 | 1 | 22 342 | Insulating tube | |
| 23 | 1 | 21 305 | Fuse holder | |
| 24 | 1 | 815 855 | Spring | |
| 25 | 2 | 823 017 | Screw | |
| 26 | 2 | 820 042 | Screw | |
| 27 | | - | Release button | Sales code No. 46120 |
| 28 | 1 | 103 349 | Slide | |
| 29 | 4 | 823 745 | Screw | |
| 30 | 1 | 21 292 | Cover, complete (chrome) | Part No. 22 117 (black) |
| 31 | 1 | 13 545 | Shim | |
| 32 | 1 | 21 283 | T-arm | |
| 33 | 1 | 21 317 | Leather | |
| 34 | 1 | 835 330 | Pin | |
| 35 | 1 | 816 826 | Spring | |
| 36 | 2 | 22 530 | Light seal | |
| 37 | 2 | 820 019 | Screw | |
| 38 | 1 | 40 202 | Plastic grip, right | |
| 39 | 1 | 817 112 | Clip | |
| 40 | 1 | 402 102 | Rear plate | |
| 41 | 1 | 815 605 | Spring | |
| 42 | 1 | 402 436 | Button | |
| 43 | 1 | 402 345 | Plate spring | |
| 44 | 1 | 402 425 | Plate | |
| 45 | 1 | 402 103 | Mounting plate | |
| 46 | 1 | 402 322 | Frame | |
| 47 | 2 | 823 640 | Screw | |

Camera body 553ELX/500ELX



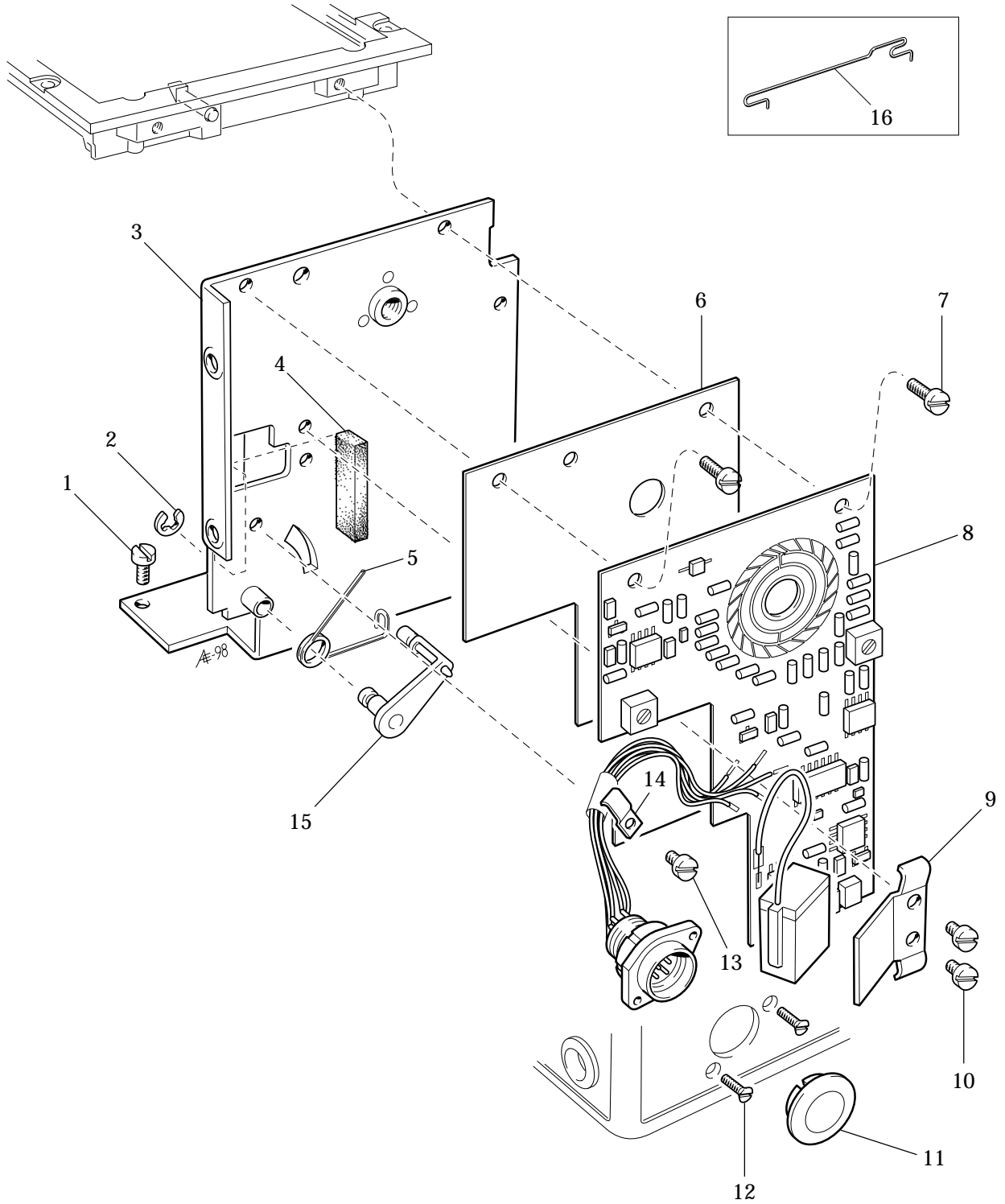
Camera body 553ELX/500ELX

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|----------------|------------|-----------------------|-----------------------|---------------------------------------------|
| 1 | 1 | 821 033 | Screw | |
| 2 | 1 | 13 557 | Gear | |
| 3 | 1 | 13 570 | Release catch | |
| 4 | 1 | 816 608 | Spring | |
| 5 | 1 | 22 922 | Release arm | |
| 6 | 2 | 817 123 | Clip | |
| 7 | 1 | 810 702 | Washer | |
| 8 | 1 | 13 599 | Selector | |
| 9 | 1 | 821 012 | Screw | |
| 10 | 2 | 815 604 | Spring | |
| 11 | 2 | 809 020 | Steel ball | |
| 12 | 1 | 13 558 | Gear | |
| 13 | 1 | 810 854 | Washer | |
| 14 | 2 | 22 943 | Light seal "palpas" | |
| 15 | 1 | 30 704 | Inner wall, right | |
| 16 | 2 | 817 119 | Clip | |
| 17 | 1 | 817 112 | Clip | |
| 18 | 3 | 820 014 | Screw | |
| 19 | 1 | 22 317 | Stop | |
| 20 | 2 | 832 315 | Rivet | |
| 21 | 4 | 817 115 | Clip | |
| 22 | 1 | 12 453 | Holder | |
| 23 | 1 | 21 223 | S-wire | |
| 24 | 1 | 21 224 | A-wire | |
| 25 | 1 | 820 011 | Screw | |
| 26 | 1 | 30 793 | Release lever | |
| 27 | 1 | 814 309 | Spring | |
| 28 | 1 | 810 538 | Washer | |
| 29 | 1 | 30 686 | Bottom plate | |
| 30 | 1 | 13 525 | Dog | |
| 31 | 1 | 13 567 | Gear | |
| 32 | 1 | - | Foam plastic pad | |
| 33 | 1 | 814 862 | Spring | |
| 34 | 1 | 814 706 | Spring | |
| 35 | 1 | 814 302 | Spring | |
| 36 | 1 | 21 221 | B-arm | |
| 37 | 1 | 22 923 | S-arm | |
| 38 | 1 | 814 509 | Spring | |
| 39 | 1 | 13 554 | Auxiliary shutter arm | |
| 40 | 1 | 22 460 | Mirror lever | |
| 41 | 1 | 814 861 | Spring | |
| 42 | 1 | 30 701 | Support | |
| 43 | 2 | 820 013 | Screw | |
| 44 | 1 | 22 529 | Inner cover | |
| 45 | 2 | 821 036 | Screw | |
| 46 | 1 | 22 528 | Foam plastic pad | |
| 47 | 1 | 22 498 | Link | |
| 48 | 1 | 810 532 | Washer | |
| 49 | 1 | 22 458 | Mirror actuating arm | |
| 50 | 1 | 810 761 | Washer | |
| 51 | 1 | 22 476 | Gear | |
| 52 | 2 | 810 705 | Washer (0,20 mm) | Alternatively 810 702/703 (0,05/0,10 mm) |

Camera body 553ELX/500ELX

| Pos No. | Pcs | Spare Part No. | Description | Remark | |
|----------------|------------|-----------------------|--------------------------|---------------------------------------------------|----------|
| 53 | 1 | 21 219-2 | Locking arm (normal) | Alternatively 21 219-1 (long) 21 219-3 (short) | |
| 54 | 2 | 810 702 | Washer | | |
| 55 | 1 | 810 703 | Washer | | |
| 56 | 2 | 820 345 | Screw | | |
| 57 | 1 | 22 519 | Stop | | |
| 58 | 3 | 820 320 | Screw | | |
| 59 | 1 | 810 609 | Washer | | |
| 60 | 1 | 22 496 | Cog sector | | |
| 61 | 1 | 816 760 | Torsion spring | | |
| 62 | 1 | 103 104 | Gear | | |
| 63 | 1 | 812 008 | Pin | | |
| 64 | 2 | 103 461 | Weight | | |
| 65 | 1 | 810 611 | Washer | | |
| 66 | 1 | 817 112 | Clip | | |
| 67 | 1 | 103 133 | Mounting plate | | |
| 68 | 1 | 22 500 | Mirror braking mechanism | | |
| | | 40 333 | Inner wall, right | | Complete |

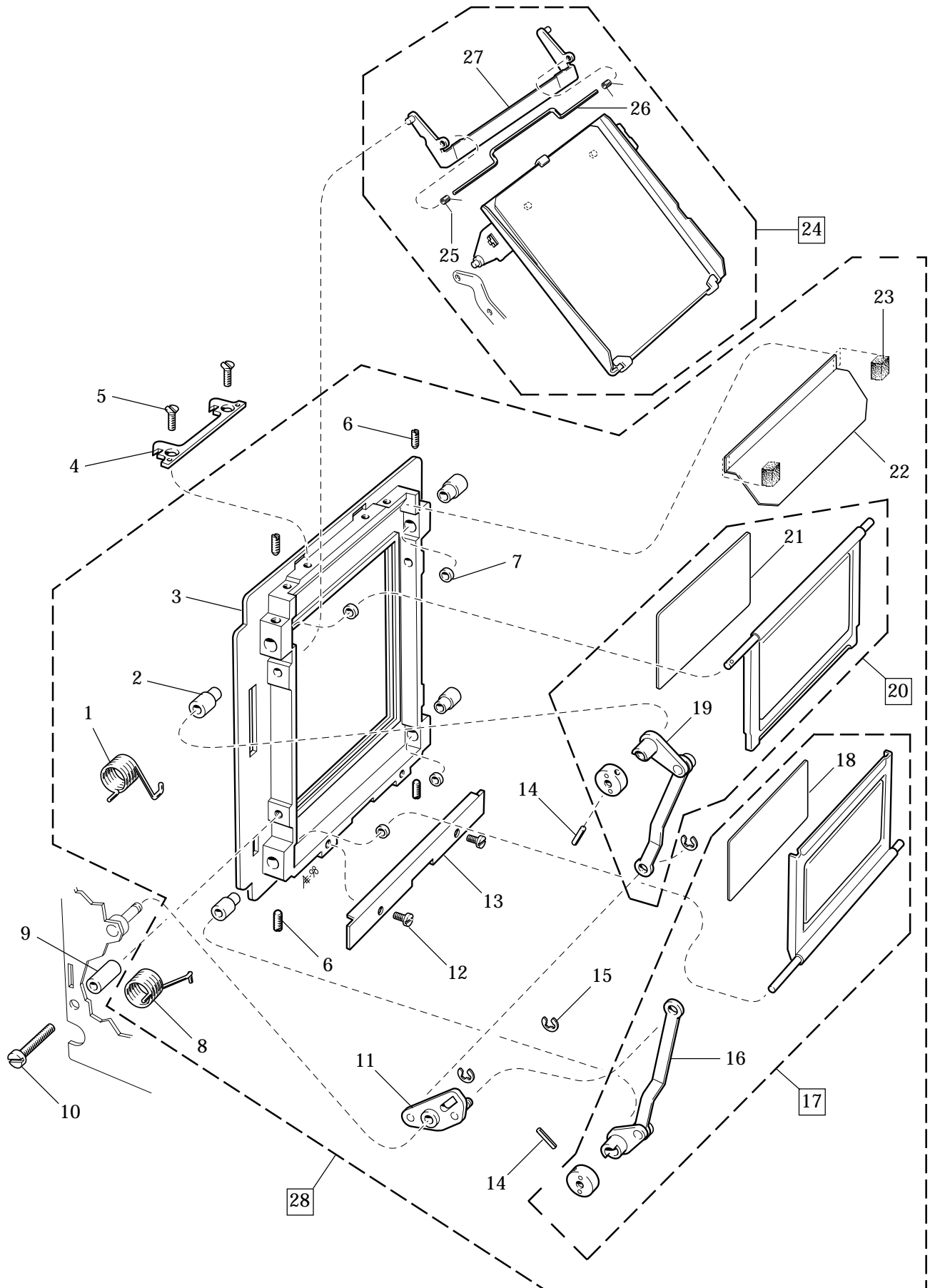
Camera body 553ELX/500ELX



Camera body 553ELX/500ELX

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|------------------|------------------------|
| 1 | 3 | 820 014 | Screw | |
| 2 | 1 | 817 115 | Clip | |
| 3 | 1 | 22 477 | Inner wall, left | |
| 4 | 1 | 22 678 | Foam | |
| 5 | 1 | 816 864 | Spring | |
| 6 | 1 | 22 746 | Insulating plate | |
| 7 | 2 | 820 015 | Screw | |
| 8 | 1 | 22 494 | PC-board | |
| 9 | 1 | 22 453 | Attachment | |
| 10 | 2 | 820 011 | Screw | |
| 11 | 1 | 22 470 | Socket cap | |
| 12 | 2 | 823 335 | Screw | |
| 13 | 1 | 820 011 | Screw | |
| 14 | 1 | 12 453 | Cable holder | |
| 15 | 1 | 22 461 | Mirror rest | |
| 16 | 1 | 22 456 | Spring | Previous type PC-board |

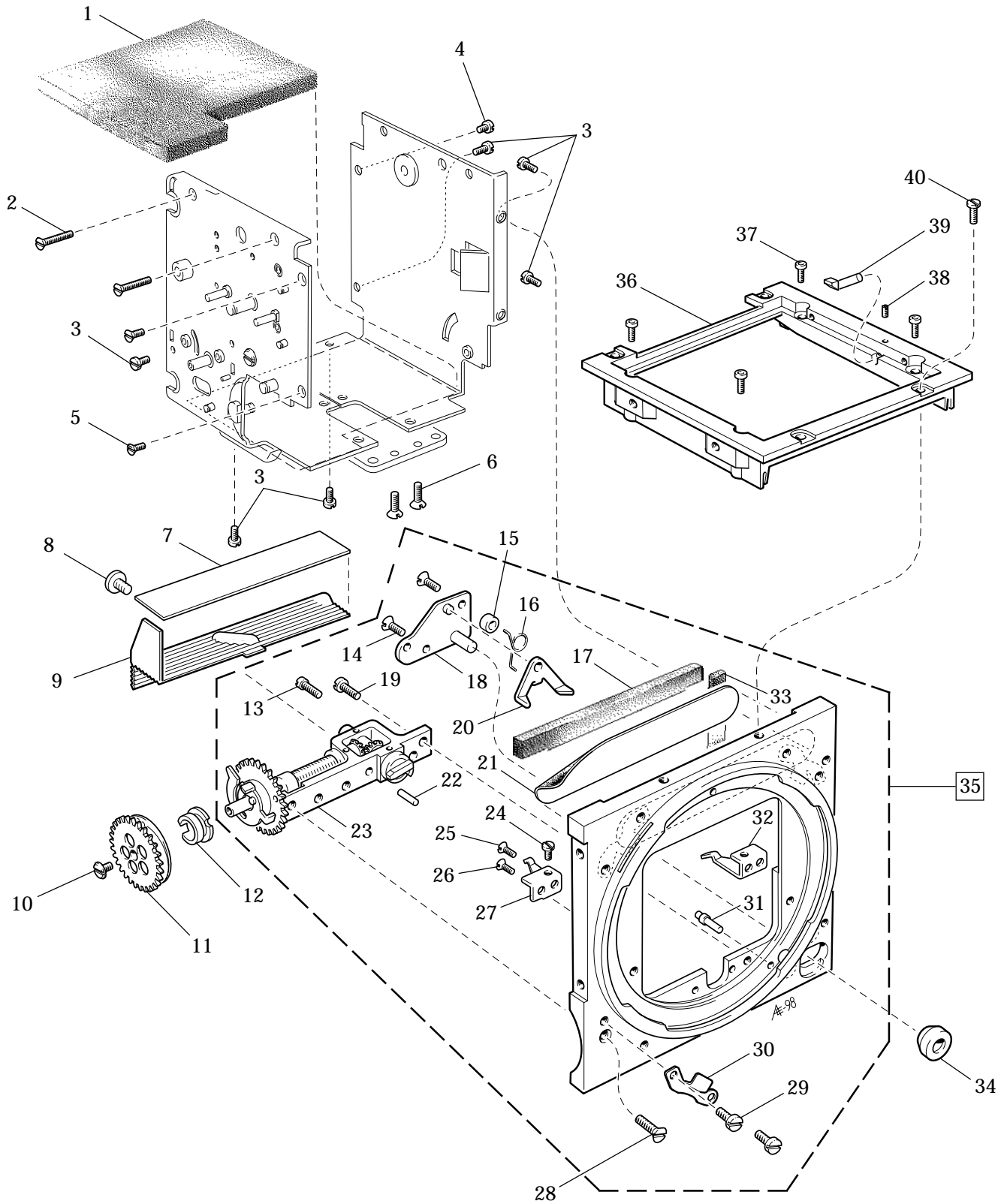
Camera body 553ELX/500ELX



Camera body 553ELX/500ELX

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|----------------|------------|-----------------------|-------------------------|-------------------------|
| 1 | 1 | 816 807 | Spring | Please state serial No. |
| 2 | 4 | 840 514 | Hub | |
| 3 | 1 | 40 367 | Rear plate | |
| 4 | 1 | 22 423 | Magazine hook | |
| 5 | 2 | 823 640 | Screw | |
| 6 | 4 | 825 661 | Screw | |
| 7 | 4 | 810 505 | Washer | |
| 8 | 1 | 816 806 | Spring | |
| 9 | 1 | 13 547 | Spacer | |
| 10 | 1 | 820 025 | Screw | |
| 11 | 1 | 13 551 | Actuating part | |
| 12 | 2 | 821 203 | Screw | |
| 13 | 1 | 13 125 | Light trap | |
| 14 | 2 | 811 108 | Pin | |
| 15 | 3 | 817 115 | Clip | |
| 16 | 1 | 13 552 | Actuating arm | Lower |
| 17 | 1 | 90 714 | Bottom flap, co-drilled | Lower |
| 18 | 1 | 22 420 | Reflection protector | |
| 19 | 1 | 13 580 | Actuating arm | Upper |
| 20 | 1 | 90 713 | Top flap, co-drilled | Upper |
| 21 | 1 | 22 419 | Reflection protector | |
| 22 | 1 | 22 508 | Light seal | Please state serial No. |
| 23 | 2 | 13 315 | Foam plastic pad | |
| 24 | 1 | 30 707 | Mirror, complete | |
| 25 | 2 | 816 761 | Spring | |
| 26 | 1 | 22 482 | Spring | |
| 27 | 1 | 22 459 | Mirror hinge | |
| 28 | 1 | 30 703 | Rear plate, complete | |

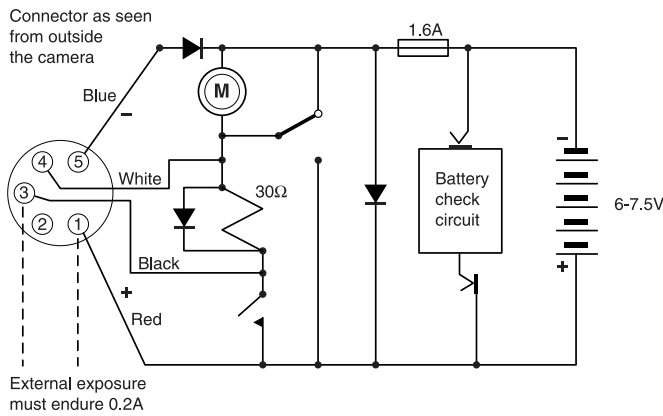
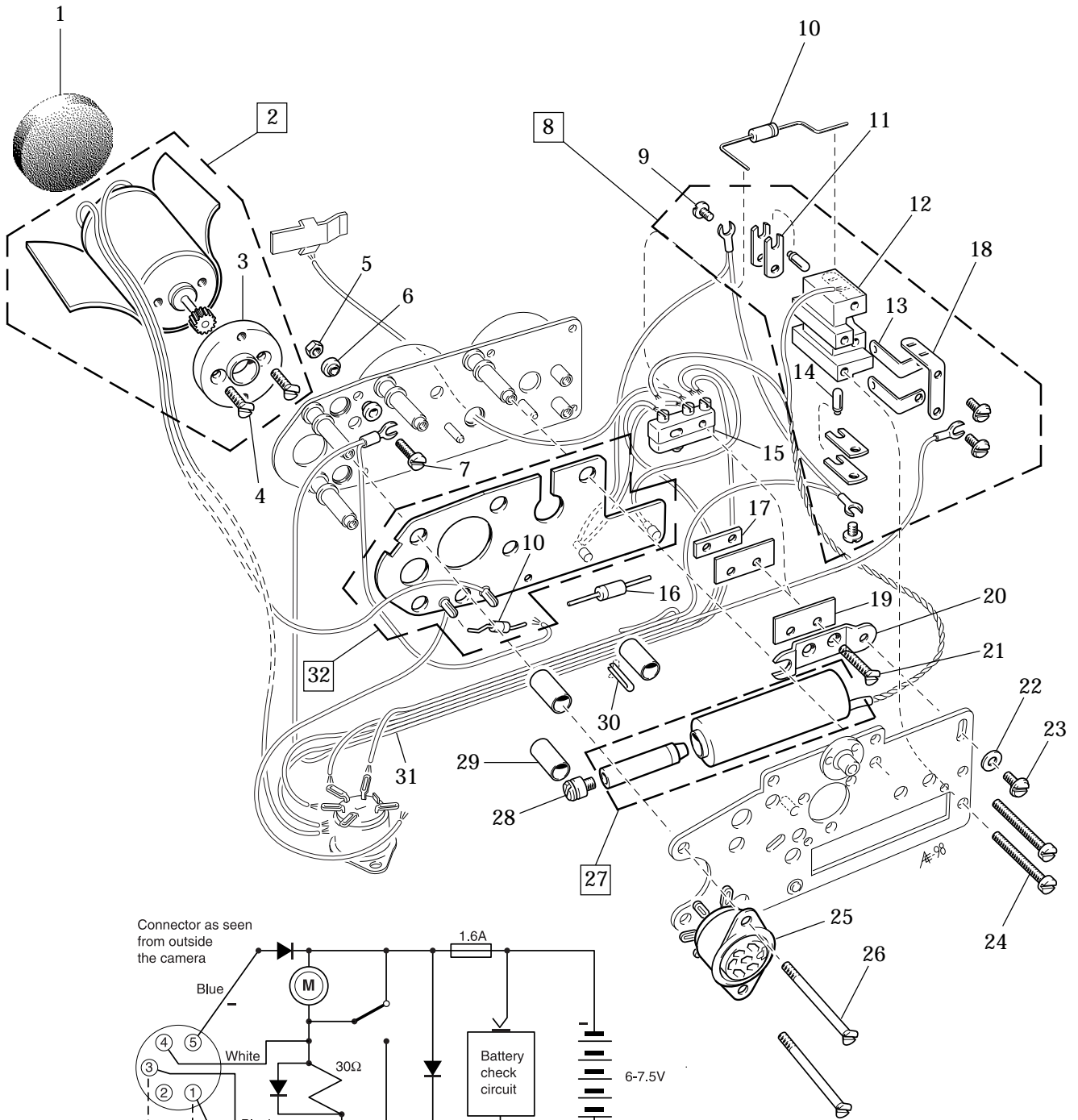
Camera body 553ELX/500ELX



Camera body 553ELX/500ELX

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|----------------|------------|-----------------------|----------------------|-----------------------------------|
| 1 | 1 | 22 513 | Foam plastic pad | |
| 2 | 2 | 823 028 | Screw | |
| 3 | 6 | 820 015 | Screw | |
| 4 | 1 | 820 013 | Screw | |
| 5 | 2 | 823 015 | Screw | |
| 6 | 2 | 823 655 | Screw | |
| 7 | 1 | 22 902 | Reflection protector | |
| 8 | 1 | 820 031 | Screw | |
| 9 | 1 | 22 928 | Cover | Incl. reflection protector 22 902 |
| 10 | 1 | 821 033 | Screw | |
| 11 | 1 | 13 566 | Gear | |
| 12 | 1 | 21 324 | Disc | |
| 13 | 1 | 821 009 | Screw | |
| 14 | 2 | 823 440 | Screw | |
| 15 | 1 | 810 409 | Spacer | |
| 16 | 1 | 816 858 | Spring | |
| 17 | 1 | 22 512 | Foam plastic strip | |
| 18 | 1 | 105 107 | Cover plate | |
| 19 | 1 | 820 018 | Screw | |
| 20 | 1 | 103 440 | Lens catch | |
| 21 | 1 | 22 527 | Reflection protector | |
| 22 | 1 | 812 202 | Pin | |
| 23 | 1 | 30 413 | Front gear | |
| 24 | 2 | 820 020 | Screw | |
| 25 | 2 | 823 015 | Screw | |
| 26 | 2 | 823 017 | Screw | |
| 27 | 1 | 22 445 | Mirror rest, right | |
| 28 | 1 | 823 019 | Screw | |
| 29 | 8 | 820 425 | Screw | |
| 30 | 4 | 103 439 | Bayonet flange | |
| 31 | 1 | 836 107 | Stop pin | |
| 32 | 1 | 22 446 | Mirror rest, left | |
| 33 | 1 | 13 212 | Foam plastic strip | |
| 34 | 1 | 103 773 | Teflon button | |
| 35 | 1 | 30 706-1 | Front bayonet plate | Complete |
| 36 | 1 | 40 324 | Frame | |
| 37 | 4 | 22 478 | Screw | |
| 38 | 1 | 825 420 | Screw | |
| 39 | 1 | 22 467 | Light pipe | |
| 40 | 4 | 821 017 | Screw | |

Camera body 553ELX



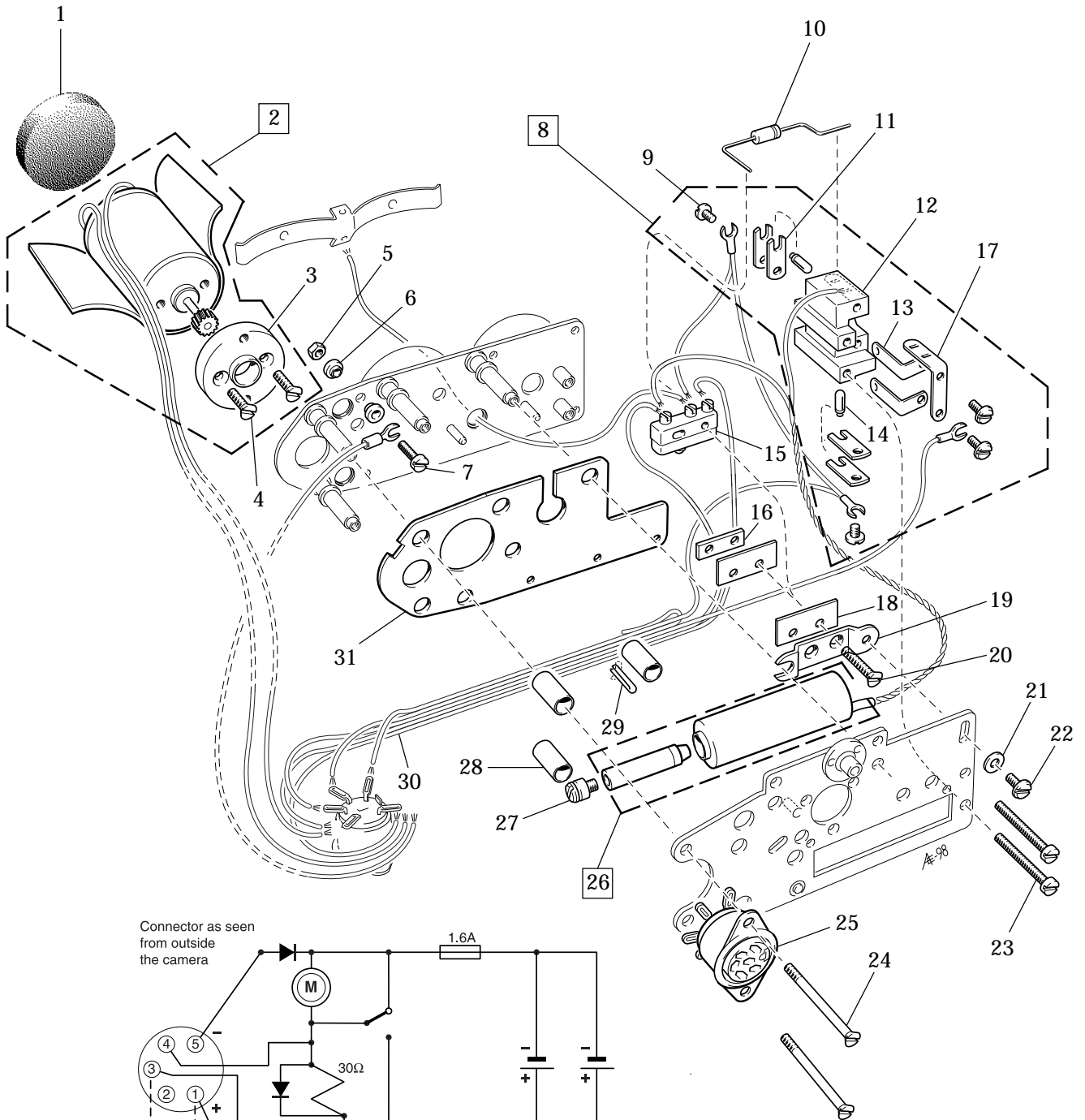
H A S S E L B L A D

Camera body 553ELX

22

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|---------------------|----------|
| 1 | 1 | 22 823 | Foam pad | |
| 2 | 1 | 22 827 | Motor | |
| 3 | 1 | 22 825 | Spacer | |
| 4 | 2 | 824 703 | Screw | |
| 5 | 1 | 828 001 | Nut | |
| 6 | 1 | 13 538 | Insulating bushing | |
| 7 | 1 | 820 020 | Screw | |
| 8 | 1 | 13 572 | Connecting terminal | Complete |
| 9 | 4 | 821 033 | Screw | |
| 10 | 2 | 853 535 | Diode | |
| 11 | 4 | 13 534 | Plate spring | |
| 12 | 1 | 30 435 | Connecting terminal | |
| 13 | 2 | 13 535 | Contact spring | |
| 14 | 2 | 13 533 | Contact pin | |
| 15 | 1 | 13 605 | Micro switch | |
| 16 | 1 | 853 437 | Diode | |
| 17 | 1 | 13 592 | Nut | |
| 18 | 1 | 21 357 | Contact strip | |
| 19 | 2 | 13 590 | Insulating shim | |
| 20 | 1 | 21 312 | Bracket | |
| 21 | 2 | 824 614 | Screw | |
| 22 | 1 | 810 532 | Washer | |
| 23 | 1 | 821 033 | Screw | |
| 24 | 2 | 820 048 | Screw | |
| 25 | 1 | 13 604 | Side contact | |
| 26 | 2 | 823 049 | Screw | |
| 27 | 1 | 30 421 | Solenoid | |
| 28 | 1 | 822 062 | Screw | |
| 29 | 3 | 13 606 | Plastic tube | |
| 30 | 4 | 13 603 | Clip | |
| 31 | 1 | 22 640 | Ribbon cable | Complete |
| 32 | 1 | 22 642 | Insulating plate | |
| | 1 | 40359 | Motor unit | Complete |

Camera body 500ELX



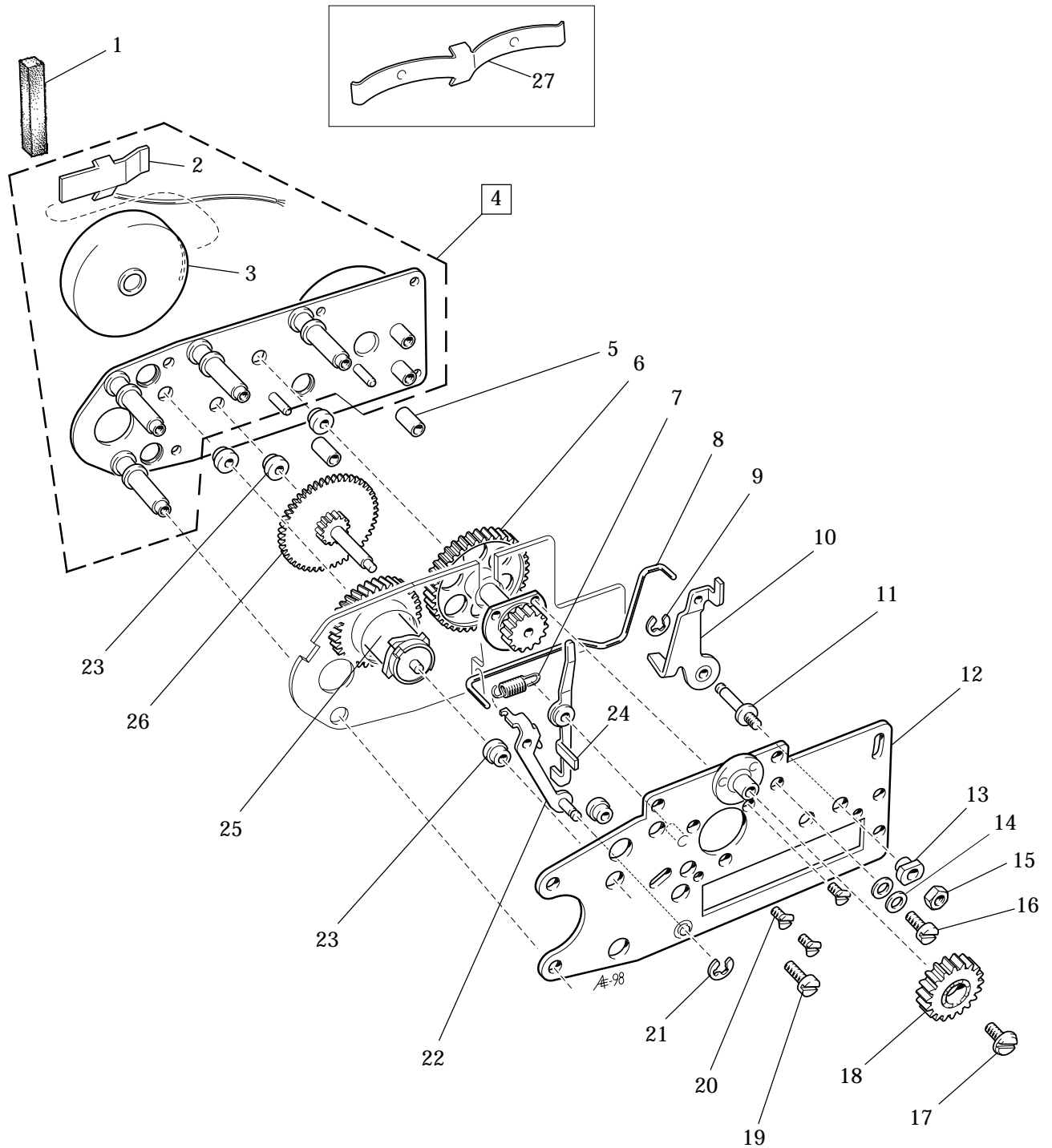
H A S S E L B L A D

Camera body 500ELX

23

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|---------|-----|----------------|---------------------|----------|
| 1 | 1 | 22 823 | Foam pad | |
| 2 | 1 | 22 827 | Motor | |
| 3 | 1 | 22 825 | Spacer | |
| 4 | 2 | 824 703 | Screw | |
| 5 | 1 | 828 001 | Nut | |
| 6 | 1 | 13 538 | Insulating bushing | |
| 7 | 1 | 820 020 | Screw | |
| 8 | 1 | 13 572 | Connecting terminal | Complete |
| 9 | 4 | 821 033 | Screw | |
| 10 | 1 | 853 535 | Diode | |
| 11 | 4 | 13 534 | Plate spring | |
| 12 | 1 | 30 435 | Connecting terminal | |
| 13 | 2 | 13 535 | Contact spring | |
| 14 | 2 | 13 533 | Contact pin | |
| 15 | 1 | 13 605 | Micro switch | |
| 16 | 1 | 13 592 | Nut | |
| 17 | 1 | 21 357 | Contact strip | |
| 18 | 2 | 13 590 | Insulating shim | |
| 19 | 1 | 21 312 | Bracket | |
| 20 | 2 | 824 614 | Screw | |
| 21 | 1 | 810 532 | Washer | |
| 22 | 1 | 821 033 | Screw | |
| 23 | 2 | 820 048 | Screw | |
| 24 | 2 | 823 049 | Screw | |
| 25 | 1 | 13 604 | Side contact | |
| 26 | 1 | 30 421 | Solenoid | |
| 27 | 1 | 822 062 | Screw | |
| 28 | 3 | 13 606 | Plastic tube | |
| 29 | 4 | 13 603 | Clip | |
| 30 | 1 | 22 640 | Ribbon cable | Complete |
| 31 | 1 | 22 642 | Insulating plate | |
| | 1 | 40241 | Motor unit | Complete |

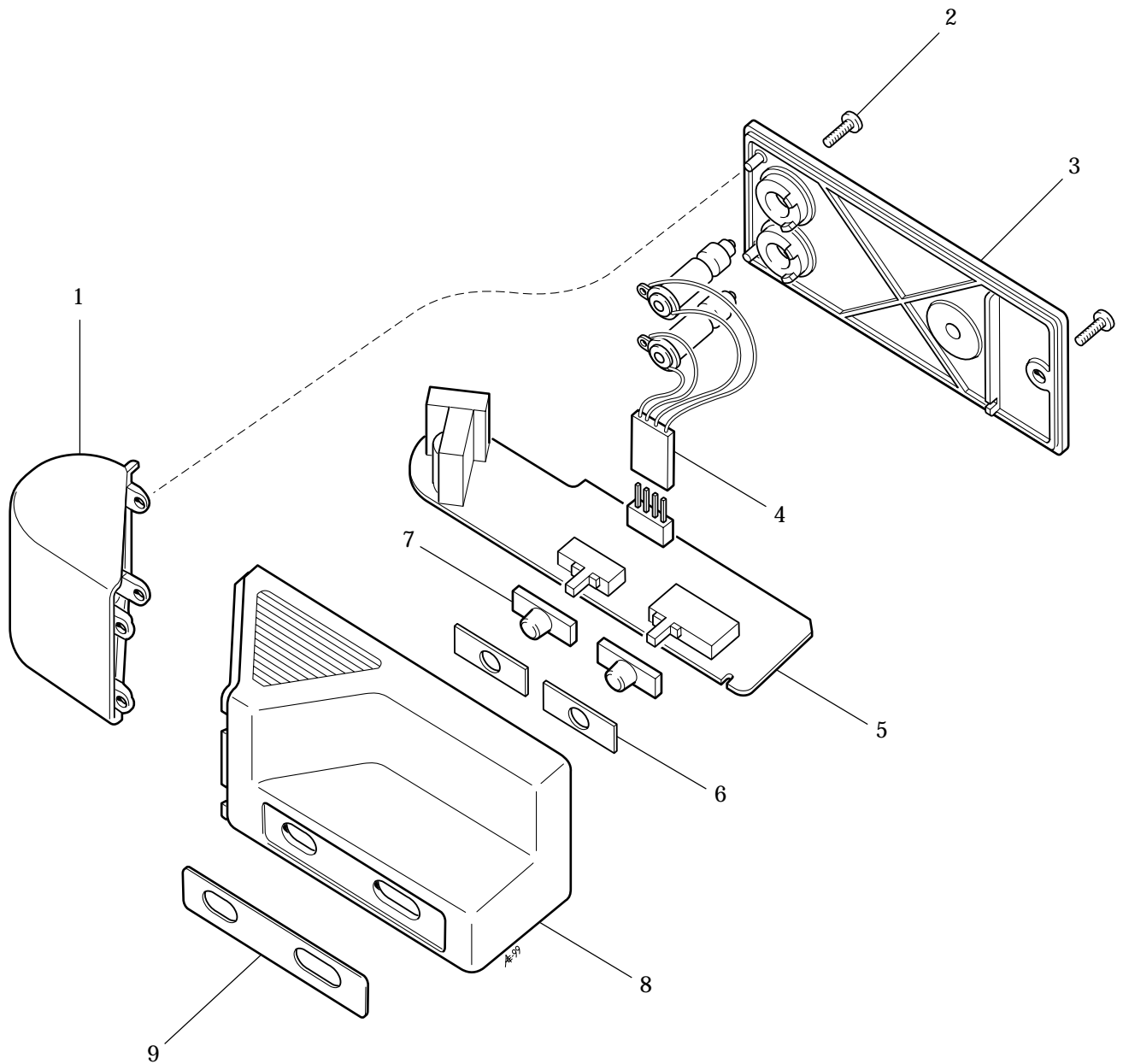
Camera body 553ELX/500ELX



Camera body 553ELX/500ELX

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|----------------|------------|-----------------------|-----------------------|---------------|
| 1 | 1 | 12 942 | Foam plastic strip | |
| 2 | 1 | 22 646 | Contact spring | |
| 3 | 2 | 21 309 | Battery holder | |
| 4 | 1 | 22 645 | Mounting plate, inner | |
| 5 | 2 | 13 607 | Rubber tube | |
| 6 | 1 | 13 565 | Gear | |
| 7 | 1 | 814 601 | Spring | |
| 8 | 1 | 22 351 | Link | |
| 9 | 1 | 817 112 | Clip | |
| 10 | 1 | 13 571 | Stop arm | |
| 11 | 1 | 14 100 | Bearing pin | |
| 12 | 1 | 21 290 | Mounting plate, outer | |
| 13 | 1 | 22 352 | Eccentric | |
| 14 | 2 | 810 613 | Washer | |
| 15 | 1 | 828 001 | Nut | |
| 16 | 1 | 820 042 | Screw | |
| 17 | 1 | 821 012 | Screw | |
| 18 | 1 | 13 566 | Gear | |
| 19 | 1 | 820 041 | Screw | |
| 20 | 3 | 824 205 | Screw | |
| 21 | 1 | 817 115 | Clip | |
| 22 | 1 | 14 099 | Clutch arm | |
| 23 | 5 | 13 528 | Teflon bearing | |
| 24 | 1 | 13 561 | Magnet arm | |
| 25 | 1 | 13 563 | Clutch gear | |
| 26 | 1 | 13 564 | Gear | |
| 27 | 1 | 13 568 | Contact spring | 500ELX |

IR Release unit



IR Release unit

| Pos No. | Pcs | Spare Part No. | Description | Remark |
|----------------|------------|-----------------------|--------------------|---------------|
| 1 | 1 | 40 421 | Cover | |
| 2 | 2 | 826 025 | Screw | |
| 3 | 1 | 50 207 | Cover | |
| 4 | 1 | 22 909 | Contact assembly | |
| 5 | 1 | 22 908 | PC-board | |
| 6 | 2 | 439 403 | Dust guard | |
| 7 | 2 | 439 401 | Button cover | |
| 8 | 1 | 50 206 | Housing | |
| 9 | 1 | 22 905 | Sign | |