
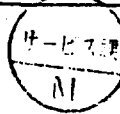


作成承認印	配布許可印
	

Nikon F50	FAA29051
F50D	FAA29251
F50DP	FAA29351
N50	FAA29151

REPAIR MANUAL

Nikon | NIKON CORPORATION
Tokyo, Japan

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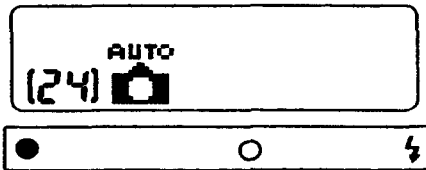
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Operation and display specifications

Simple mode (common to all four programs)



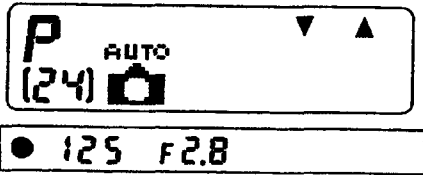
- (1) Set/adjust buttons are invalid. Press the menu button to display the menu.
- (2) In-focus indicator (·), correct exposure indicator (o), and flash ready-light (⚡) indicator appear in the viewfinder.
- (3) No change of shutter speed/aperture combination is available.
- (4) No shutter speed and aperture values are displayed in the LCD panel.
- (5) Basically no shutter speed and aperture values appear in the viewfinder. However, this becomes possible by optional setting. In this case, no exposure indicator (o) appears.
 - Optional settingWith the following operations, shutter speed and aperture values can be displayed in the viewfinder.
 - I. Change the shooting mode to SIMPLE mode.
 - II. Turn the power switch OFF.
 - III. Turn the power switch ON while holding down the menu button.
 - IV. Now it is possible to display shutter speed and aperture values.
 - V. Repeat the above operations to go back to the original mode.

Note:

In the SIMPLE mode, only necessary indicators are displayed in the viewfinder for easy shooting for all users. As a result, no shutter speed and aperture values are displayed. But, we have incorporated an optional function for easy checking at production and service sections. This function is confidential, except for users who really want to display those values in the viewfinder.

Advanced mode

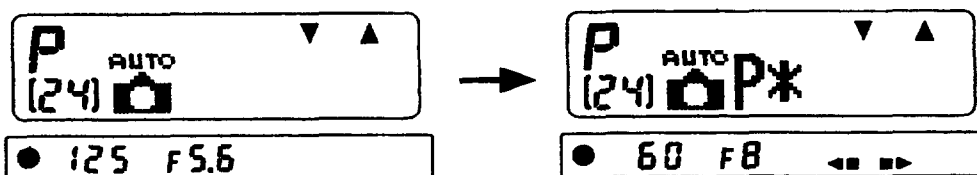
1. General-purpose program mode in programmed auto exposure mode



- (1) It is possible to choose the combination of shutter speed and aperture for a correct exposure with the set/adjust button corresponding to the up (Δ) and down (∇) marks. Other buttons are invalid.
- (2) When using a flash, the up (Δ) and down (∇) marks disappear and the change of a combination of shutter speed/aperture is not possible. (No up (Δ) and down (∇) marks appear.)
- (3) Press the menu button to return to the menu.
- (4) Shutter speed and aperture values are displayed in the viewfinder.
- (5) Shutter speed and aperture values are displayed in the LCD panel.

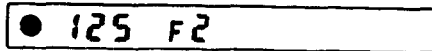
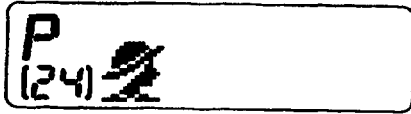
Change of a combination of shutter speed/aperture

- (1) Exposure mode to change the combination of shutter speed/aperture.
 - This is only possible in programmed auto exposure mode in advanced shooting mode with no flash.
 - Change of a combination of shutter speed/aperture is not possible when using flash. Although choosing an optional mode to display both shutter speed and aperture values in simple mode, the change of a combination of shutter speed/aperture is not possible. (No up (Δ) and down (∇) marks appear.)
- (2) Display of the change of a combination of shutter speed/aperture
(Before setting) (After setting)



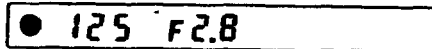
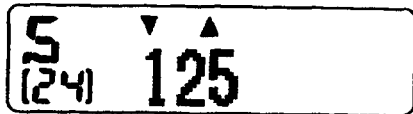
- (3) Setting the change of a combination of shutter speed/aperture
 - Press the down (∇) button to change the aperture value in 1/2 steps to the open aperture side, and press the up (Δ) button to change the aperture value in 1/2 steps to the minimum aperture side.
 - Continue to press the button to advance the value quickly in 1/2 EV steps at 2Hz.

2. Other program modes (common to other seven modes) in programmed auto exposure mode



- (1) Set/adjust buttons are invalid. Press the menu button to display the exposure mode menu.
- (2) Shutter speed and aperture values are displayed in the viewfinder.
- (3) No shutter speed and aperture values are displayed in the LCD panel.

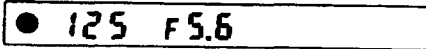
3. Shutter-priority auto exposure mode (S)



- (1) Press the set/adjust button corresponding to the up (Δ) and (∇) down marks to set the shutter speed. No other buttons are invalid.
- (2) Press the menu button to go to the exposure mode menu.
- (3) Shutter speed and aperture values are displayed in the viewfinder.
- (4) Shutter speed values only are displayed in the LCD panel.
- (5) Set the shutter speed values and displays in 1/2 steps.
- (6) To set the shutter speed continue to press the set/adjust button for more than 1 second to advance the value quickly in 1/2 steps at 2Hz.
- (7) Shutter speeds ranging from 1/2000 sec. to 30 sec can be set.
- (8) Setting is possible up to the fastest speed of 1/2000 sec. and down to the slowest speed, of 30 sec. Once either 1/2000 or 30 sec has been reached, you must press the opposite arrow to change the speed setting.

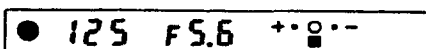
4. Aperture-priority auto exposure mode (A)

- Set and display the aperture values from the camera body side. Accordingly do not turn the lens aperture ring. (Always set the lens aperture ring to the minimum.)



- (1) Press the set/adjust button corresponding to the up () and () down marks to set the shutter speed. No other buttons are valid.
- (2) Press the menu button to go to the exposure mode menu.
- (3) Shutter speed and aperture values are displayed in the viewfinder.
- (4) Shutter speed values only are displayed in the LCD panel.
- (5) Set the shutter speed values and displays in 1/2 steps. But set wide open aperture values by 1/6 step increments.
- (6) To set the shutter speed, continue to press the set/adjust button for more than 1 second to advance the value quickly by 1/2 step at 2Hz.

5. Manual exposure mode



- (1) Set the shutter speed and aperture values with the set/adjust button.
- (2) Press the menu button to go to the exposure mode menu.
- (3) Shutter speed and aperture values are displayed in the viewfinder.
- (4) Shutter speed and aperture values are displayed in the LCD panel.
- (5) Setting of the shutter speed is the same as that of the shutter-priority auto exposure mode except for the Time setting.
- (6) Shutter speed can be set ranging from 1/2000 sec. to 30 sec. and Time setting.
- (7) If shutter speed is set to a value slower than 30 sec., it becomes the Time setting.
- (8) Setting is possible up to the highest of 1/2000 sec. and the slowest of 30 sec. Shifting continuously from 1/2000 sec. to 30 sec. is not possible.
- (9) During shooting in the Time setting, the self-timer LED blinks at 1Hz. The back light in the viewfinder goes out.
- (10) Setting of aperture value is the same as with the aperture-priority auto exposure modes.

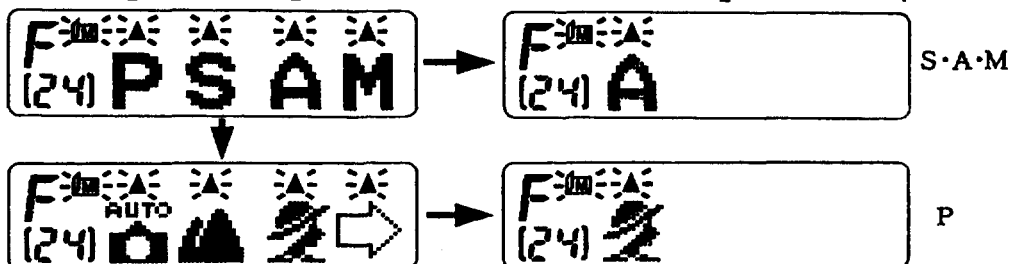
(11) Exposure indicator

Exposure indicator	ΔEV : difference from the correct exposure value
	$\Delta EV \geq +1.5$
	$+1.5 > \Delta EV \geq +0.5$
	$+0.5 > \Delta EV > -0.5$
	$-0.5 \geq \Delta EV > -1.5$
	$-1.5 \geq \Delta EV$

6. Exposure mode memory

(Memory setting mode)

(Memory is set.)



(1) Setting memory

- 1) Select the symbol (M) in the optional-function menu to activate the Memory setting mode.
- 2) Press the set/adjust button to select the desired exposure mode to be memorized. The symbol (M) blinks.
- 3) When the exposure mode is selected, the menu displays the exposure mode to be memorized. Press the button above the corresponding symbol, the exposure mode to be set will be memorized in the camera body. The symbol (M) lights up and returns back to the optional-function menu. (M)
- 4) When the menu button is pressed while exposure modes to be memorized are displayed, the memory setting screen appears. Pressing the menu button while the symbol (M) is blinking returns the LCD panel to the optional-function menu.

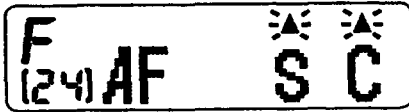
(2) Recalling memory

- 1) In Advanced mode, press the menu button for over 2 seconds, the memorized exposure mode can be recalled in any mode.
- 2) If no memory function is memorized, the LCD panel returns to the general-purpose program mode in programmed auto exposure mode.
- 3) Memory recall function is called "Instant Jump".

(3) Clearing memory

- 1) While memory is set, the symbol (C) appears in place of the symbol (M) in the optional-function menu. Press the button corresponding to the symbol (C). The symbol (M) appears and the memory function is cleared.
- 2) When the memory is cleared, the LCD panel returns back to the optional-function menu.

7. Selecting AF mode



- (1) With the optional-function menu, press the button above AF.
- (2) Press the button corresponding to the symbol (S) or (C) for Single servo AF (AF-S) or Continuous servo AF (AF-C).
- (3) Press the set/adjust button (S or C) to set the AF mode.
- (4) When the menu button is pressed while the AF mode selection menu is displayed, AF mode is set to AF-S mode, and the LCD panel returns to the exposure mode menu.
- (5) No AF mode setting menu is displayed.
- (6) Set the focus switch at the front of the camera body to M for manual focus mode.
- (7) Operation and displays in each AF mode.

	AF-M	AF-S	AF-C
In-focus indicator	O	O	O
Out-of-focus warning	X	O	O
Out of focus shutter release	O	X	X
Focus tracking	X	O	O

- (8) When a non-AF lens is mounted, the AF mode is set to AF-M mode regardless of the focus switch position.
- (9) When a non-AF lens is mounted and AF mode is set to AF-M, AF-S and AF-C modes can be set but they do not function. When AF operation becomes possible, AF-S/AF-C settings become effective.

8. Setting and confirming film speed

- (1) When DX-coded film is loaded:



- 1) With the optional-function menu, press the set/adjust button corresponding to the ISO. The LCD panel shows the ISO film speed of the loaded DX-coded film.
- 2) When the mark (Δ) above the ISO blinks and the button corresponding to the mark is pressed, the LCD panel shows the last selected exposure mode menu.
- 3) When the menu button is pressed while the LCD shows the ISO film speed, the LCD panel shows the exposure mode menu.
- 4) When using DX-coded film, film speed cannot be set.
- 5) Film speed range is from ISO 25 to 5000 by 1/3 Sv step.

(2) When non-DX-coded film is loaded:



- 1) With the optional-function menu, press the set/adjust button corresponding to AF. The ISO setting screen is activated.
- 2) Press the set/adjust button corresponding to the up () or down () mark to adjust the film speed.
- 3) Press the button corresponding to the blinking (Δ) mark, the ISO film speed selected can be set. The LCD panel shows the last selected exposure mode menu.
- 4) When the menu button is pressed while the ISO setting screen is activated, the film speed shown can be set. The LCD panel shows the exposure mode menu.
- 5) Film speed range is from ISO 6 to 6000 in 1/3 Sv steps.
- 6) When DX-coded film is loaded, the ISO film speed can be set automatically. When non-DX-coded film is loaded, the ISO setting screen appears again but the last set ISO value is displayed.
- 7) When non-DX-coded film is loaded, the ISO setting screen automatically appears. Until setting is completed, the shutter button remains locked, and the menu button is deactivated.
- 8) In item 7) above, when "Instant Jump" and "Instant Reset" are performed, the exposure mode menu to be jumped remains displayed while the button is depressed, but the ISO setting screen appears when the finger is removed from the button.

9. Exposure compensation



- (1) With the optional-function menu, press the button corresponding to the (+/-) indication, and the exposure compensation screen appears.
- (2) Set the compensation value by pressing the button corresponding to the up () or down () mark.
- (3) Press the set/adjust buttons corresponding to the blinking (Δ) mark, the compensation value can be set. The LCD panel shows the last selected exposure mode menu.
- (4) When the menu button is pressed while the exposure compensation screen appears, the compensation value returns to ± 0.0 and the LCD panel shows the exposure mode menu.

- (5) Exposure can be compensated from -5 EV to +5 EV in 1/2 steps.
- (6) When exposure is compensated, the (+/-) indication appears in the viewfinder and the LCD panel.
- (7) Compensation value can be reset by returning to a ± 0.0 value or when instant reset has been activated.
- (8) Compensation values can be used in all exposure modes in Advanced mode. (In M mode, compensated exposure value is displayed in the analog indicator.)
- (9) When shooting mode is switched over to Simple mode, the compensated exposure values set are neglected.
- (10) When using flash, exposure compensation is effective for both background (AE exposure) and the main subject (exposure by TTL).

10. Instant reset

- Press the menu button and the self-timer button all together for over 2 seconds to carry out instant reset. The details of the instant reset is described as follows.
 - (1) In Simple mode:
The LCD panel returns to the general-purpose program mode in the programmed auto exposure mode.
 - (2) In Advanced mode:
Except when using non-DX-coded film, settings in the optional-function mode are returned to the basic settings, and the LCD panel returns to the general-purpose program mode in the programmed auto exposure mode.
*The basic settings in the optional-function mode:
No exposure memory is set, AF mode is set to S, exposure compensation is set to ± 0.0 , and a change in a combination of shutter speed/aperture is released.

11. Self-timer operation



- (1) Press the self-timer button then the self-timer indicator appears in the LCD panel.
- (2) Self-timer mode cannot be activated when the self-timer button is pressed while the exposure mode menu or optional-function mode screen appears in the LCD panel.
- (3) Press the shutter release button to start the self-timer operation while the self-timer indicator appears in the LCD panel.
- (4) Press the menu button while the self-timer indicator appears in the LCD panel or the self-timer operation is being started to cancel the self-timer. The LCD panel returns to the last selected exposure mode menu.
- (5) Self-timer duration is approx. 10 seconds during which the self-timer indicator in the LCD panel and the self-timer LED blinks. The self-timer LED blinks at 2Hz for the first 8 seconds and lights for the remaining 2 seconds.

- (6) Exposure mode for the self-timer operation is the last exposure mode immediately before the self-timer button is pressed.
- (7) After the shot, the exposure mode returns to that which preceded the self-timer shot.
- (8) During the self-timer operation, the viewfinder display is activated.
- (9) When the shutter release button is pressed slightly during self-timer operation, AF operation is activated.

12. AE lock

(1) Lock system

- 1) While the AE-L button is depressed, the BV value is locked at the time when the AE-L button is pressed. Remove the finger from the button to release the lock.
- 2) Exposure metering system is the same as if the AE-L button was not pressed.
- 3) The AE-L button is effective in all exposure modes. In M mode, the analog indicator appears based on the BV value.
- 4) When using flash, AE is locked against the bright background.
- 5) As AE is locked at the time when the self-timer is activated, no effect is observed when the AE-L button is pressed.

(2) AE lock specifications

- 1) In the AE lock, only the BV value is locked. Other operations perform normally.
- 2) If exposure mode, shutter speed, aperture, shutter speed/aperture combination, film speed, or exposure compensation are changed, the indications and controls based on the locked BV value are carried out.
- 3) When the wide open aperture value changes due to zooming operation, the indications and controls based on the locked BV value are carried out for the changed aperture value, except in the following cases.
 - when the aperture value is at the minimum or maximum limit.
 - when the program chart varies due to the change of focusing distance or wide open aperture value.
- 4) When the shutter speed is changed to X by using the flash while the AE-L button is pressed, the indications and controls are carried out by calculating the aperture value from the changed shutter speed and BV value.
- 5) When the camera enters in a warning state while AE is locked, the warning operation has priority. But the BV value is kept stored. When the warning is released, the indications and controls are carried out based on the BV value at the time when the AE was locked.
- 6) If self-timer operation is activated while the AE is locked, self-timer operation works based on the locked BV value.
- 7) If the AE-L button is pressed when the power switch is OFF or shutter pre-release timer is OFF, the BV value is locked when the shutter pre-release timer is turned ON.

13. Shutter pre-release timer

- (1) Activating the shutter pre-release timer
 - 1) While the power switch is turned ON, the shutter pre-release timer functions when:
 - The shutter pre-release switch is ON.
 - The menu button is ON.
 - The elf-timer button is ON.
 - The camera back is closed.
 - The camera back is opened.
 - The battery is replaced.
 - (2) Upgrading the shutter pre-release timer
 - 1) The shutter pre-release timer is upgraded when:
 - The shutter pre-release switch is ON.
 - The menu button and set/adjust button are pressed.
 - The built-in flash pops up.
 - 2) The shutter pre-release timer does not turn OFF when:
 - The self-timer is activated.
 - The AE-L button is pressed.

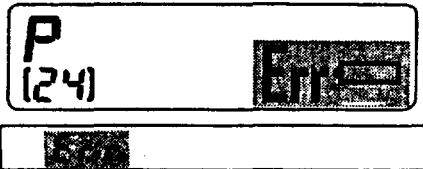
14. Frame counter

- (1) Frame counter indications:
E and 1 to 99.
- (2) The frame counter counts up to 99 and stays there.
- (3) The frame counter counts down to E. When an error occurs during film rewinding, no E sign appears in the LCD panel.
- (4) Frame counter reset
Frame counter is reset to E when:
 - 1) Camera back is opened disregarding whether the power is turned ON or OFF.
 - 2) Camera back is closed disregarding whether the power is turned ON or OFF.
 - 3) Film rewind operation is completed.
- (5) Memory of frame counter
The contents of the frame counter are stored in the memory in the camera body and remain in memory when the battery is replaced.

Warning indication

- Warning indication screen, possible warning indication screen, operation with warning indication, reason for warning, method of releasing warning indication.
- Two warning indications are displayed both in the LCD panel and the viewfinder. One warning indication only is displayed in either the LCD panel or the viewfinder.
- If more than two warning indications are to be displayed, lower numbered warning indications have priority. But warning indications from (1) to (12) cannot be displayed more than two at a time.
- [Shaded portion]: Blinking portion.

(1) Battery is exhausted.



Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication	With warning indication	With warning indication	With warning indication	With warning indication	With warning indication	With warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	X	X	X	X	X

Reason for the warning indication	Battery is exhausted.
Method of releasing the warning indication	Replace the battery.

* This indication appears when the battery voltage drops lower than battery check level 2 stored in the EEPROM.

(2) Film rewind completion



Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication		With warning indication	With warning indication	With warning indication	With warning indication	

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	0	X	X	X	X

Reason for the warning indication	Film rewind is complete.
Method of releasing the warning indication	Open the camera back.

* This indication appears when the film is rewound completely. This indication is kept remained until the camera back is open even when the power is turned OFF or the shutter pre-release timer is turned OFF, when the power is turned ON again.

(3) Film is being rewound.



Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication		With warning indication	With warning indication	With warning indication	With warning indication	

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	0	X	X	X	X

Reason for the warning indication	Film is being rewound.
Method of releasing the warning indication	Automatically released when the film rewind is completed.

* This indication appears during film rewind. The indication is released when the film rewind operation is canceled.

(4) Sequence error



Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication		With warning indication	With warning indication	With warning indication	With warning indication	

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	0	X	X	X	X

Reason for the warning indication	Sequence error occurs.
Method of releasing the warning indication	Turn the power switch OFF and ON.

* This indication appears when the X contact does not turn ON during shutter release sequence operation. This means that some trouble occurs in the most previous shooting. Turn the power switch OFF and ON again to release the warning indication. Error recovery control is carried out if necessary.

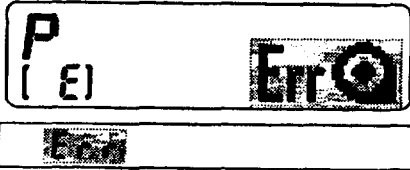
Error recovery control

(1) One frame advances disregarding whether the shutter release switch is ON or OFF in the following cases.

- X contact is ON when the shutter pre-release timer is turned ON.
- The previous shutter releases interruption operation is still memorized.
- Sequence error occurrence (X contact does not turn ON, aperture pulse numbers do not reach the specified numbers) is memorized.

(2) If the previous film rewind interruption operation is memorized when the shutter pre-release timer is turned ON, film rewind operation starts whether or not the mid-roll rewind button is pressed.

(5) Automatic film loading error



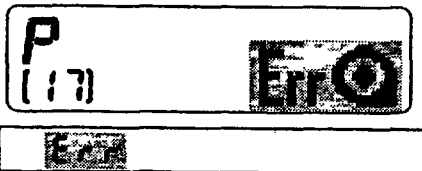
Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication		With warning indication	With warning indication	With warning indication	With warning indication	

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	O	X	X	X	X

Reason for the warning indication	Malfunction in automatic film loading
Method of releasing the warning indication	Open the camera back (Rewind the film before opening the camera back if necessary.)

* This indication appears when more than 3 and less than 32 sprocket pulses are emitted during automatic film loading. This indication remains until the camera back is open even when the power is turned OFF, and ON again.

(6) Film rewind error



Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication		With warning indication	With warning indication	With warning indication	With warning indication	

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	O	X	X	X	X

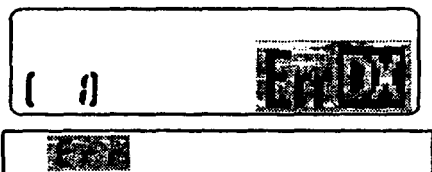
Reason for the warning indication	Film rewind error has occurred.
Method of releasing the warning indication	Replace the battery, or open the camera back.

* Film rewind operation will be completed when the sprocket pulse output interval becomes 2.5 seconds when the sprocket pulse is detected during rewinding film. In this case, if the frame counter shows "1", the operation is completed normally. If the frame counter shows "2" or more, film rewind error occurs. This indication appears when the film rewind operation becomes impossible due to exhausted battery power during film rewind. As this phenomenon is stored in memory, the film rewind operation continues through the error recovery control even when the battery is replaced. When the film rewind operation has been completed normally through the error recovery control, the warning indication is released.

When the camera back is open, the warning indication is released unconditionally.

As a special case, when the battery is removed and installed again during film rewind, the frame counter does not count down to 1, and the warning indication appears even though the film rewind operation is completed. Furthermore in this case, the warning indication cannot be released even if the power switch is turned ON or OFF to activate error recovery control because of the completion of the film rewind operation. Open the camera back to release the warning indication.

(7) Loading non-DX-coded film in Simple mode



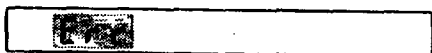
Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication		No warning indication	No warning indication	No warning indication	No warning indication	No warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	O	X	X	X	X

Reason for the warning indication	Non-DX-coded film is loaded in Simple mode.
Method of releasing the warning indication	Replace the film with a DX-coded film. Change the Simple/Advance dial to Advance mode.

* Non-DX-coded film cannot be used in Simple mode. Change the Simple/Advance dial to Advance mode. This warning indication appears when DX codes cannot be read due to poor DX contacts or when the wrong codes are read.

(8) Non-CPU lens is mounted or no lens is mounted. (In other than M mode)



Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication		With warning indication	With warning indication	With warning indication		No warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	X	O	X	X	X

Reason for the warning indication	Communication between the camera and the lens is impossible.
Method of releasing the warning indication	Use in M mode. Use a lens with CPU.

* This warning indication appears when no communication is made between the camera and the lens. Shutter can be released in M mode.

(9) Non-CPU lens is mounted, or no lens is mounted. (In M mode)



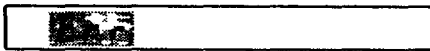
Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
					With warning indication	No warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
O	X	O	O	X	O

Reason for the warning indication	Communication between the camera and the lens is impossible.
Method of releasing the warning indication	Use a lens with CPU.

* This warning indication appears when communication between the camera and the lens is impossible. This indicates that AE does not function, although it works in M mode. Use the lens aperture ring to adjust the aperture.

(10) Minimum aperture reset error



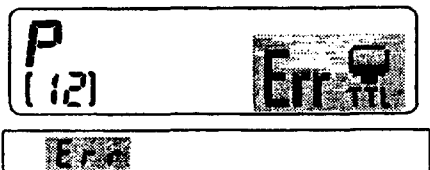
Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication	No warning indication	With warning indication	With warning indication	With warning indication	With warning indication	No warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	O	O	X	X	X

Reason for the warning indication	Lens aperture ring is not set to the minimum aperture.
Method of releasing the warning indication	Set the lens aperture ring to the minimum aperture.

* Make sure to set the lens aperture ring to the minimum aperture since the camera body has no aperture coupling ring. When a non-CPU lens is mounted, no communication between the body and the lens is possible, and no warning indication appears.

(11) External flash is not set to TTL mode.



Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication	No warning indication	With warning indication	With warning indication	No warning indication	No warning indication	No warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	0	0	X	X	X

Reason for the warning indication	Flash is not set to TTL mode when the exposure mode is set to P or S.
Method of releasing the warning indication	Set the exposure mode to A or M mode. Set the flash to TTL mode.

* When the camera's exposure mode is set to P or S mode, an external flash cannot be used unless it is set to TTL mode. This is because the flash's aperture value must be identical with the camera's aperture value when using an external flash. As there is no communication capability between the camera body and the external flash, it is impossible have corresponding aperture values.

In A and M mode, it is possible for the user to read the flash's aperture value and set the camera's aperture accordingly. When the external flash is set to TTL mode and the built-in flash is used, there appears no warning indication because of the TTL flash mode.

(12) Time warning indication in S mode



Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
			With warning indication			No warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	0	0	0	X	X

Reason for the warning indication	Shutter speed is set to Time in S mode.
Method of releasing the warning indication	Change the shutter speed.

* This warning indication appears when the shutter speed is set to Time in M mode and changed to S mode while shutter speed remained set to Time. In S mode, if the shutter speed is determined first, the aperture value cannot be set, and the warning indication appears. Change the shutter speed to release the warning indication.

(13) AF does not work correctly.



Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication	With warning indication	With warning indication	With warning indication	With warning indication	With warning indication	With warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
X	0	0	0	0	0

Reason for the warning indication	Focusing is impossible in AF mode.
Method of releasing the warning indication	Use manual focus mode. Focus on another subject.

* This warning indicator appears when focusing is impossible in AF mode. In manual focus, no warning indicator appears even when no subject is detected. Normally, the shutter is locked when this warning indicator appears. But the shutter is not locked in self-timer mode only. This warning indicator appears in combination with all other warning indicators in AF mode.

(14) No film is loaded.



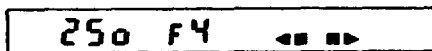
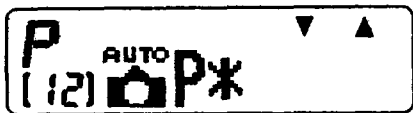
Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication	With warning indication	With warning indication	With warning indication	With warning indication	With warning indication	With warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
0	0	0	0	0	0

Reason for the warning indication	Film is not yet loaded.
Method of releasing the warning indication	Load the film.

* When this warning indicator appears after the film is loaded automatically, the letter "E" appears in the frame counter. Nothing is affected for other displays and functions.

(15) Changing the combination of shutter speed/aperture



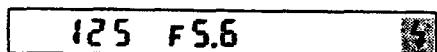
Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
		With warning indication				

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
0	0	0	0	0	X

Reason for the warning indication	The change in shutter speed/aperture is set.
Method of releasing the warning indication	Release this setting.

* In Advance mode, this warning indicator appears when you change the combination of shutter speed/aperture in the General-purpose program mode.

(16) Flash fires at full output



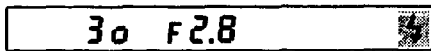
Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication		With warning indication	With warning indication	With warning indication	With warning indication	

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
0	0	0	0	0	0

Reason for the warning indication	Flash fires at full output. The picture is might be underexposed.
Method of releasing the warning indication	Automatically released in 3 to 4 seconds.

* When the flash fires at full output, the flash ready-light indicator () blinks in the viewfinder in 3 to 4 seconds after shutter is released.

(17) Flash fires at full output



Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication	No warning indication	With warning indication	With warning indication	With warning indication	With warning indication	No warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
0	0	0	0	0	0

Reason for the warning indication	Flash use is recommended due to poor light.
Method of releasing the warning indication	Use flash. Target the camera toward a bright subject.

* This warning indication appears when metering value satisfies the condition of the following equation. No warning indication appears in silhouette mode.

$$BVM (\text{mean metering value}) + SV < 10$$

(18) Insufficient battery power warning



Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen

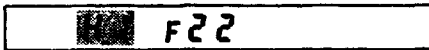
With warning indication	No warning indication	With warning indication	With warning indication	With warning indication	No warning indication	No warning indication
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Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
0	0	0	0	0	0

Reason for the warning indication	Battery power is insufficient.
Method of releasing the warning indication	Replace the battery.

* This warning indication appears when the battery voltage drops below battery check level 1 stored in the EEPROM.. When the voltage has recovered, the warning indication disappears. No warning indication appears in manual exposure and in the option screen.

(19) Possibility overexposure



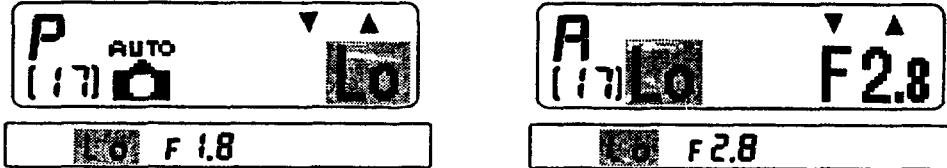
Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication	No warning indication	With warning indication	With warning indication	With warning indication	No warning indication	No warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
0	0	0	0	0	0

Reason for the warning indication	Subject is too bright exceeding the shutter speed/aperture combination range.
Method of releasing the warning indication	Use a slow-speed film. Use a Nikon ND filter. Choose another subject.

* This warning indication appears when the controlled EV value exceeds the upper range of the combination of shutter speed/aperture. In manual exposure mode, the analog indicator appears in the viewfinder with no warning indication. No warning indication appears when the controlled EV value is within the range of the combination of shutter speed/aperture, even though out of the metering range. The controlled EV value is determined as close to the correct exposure value as possible. But the possibility of error becomes greater and correct exposure value is not guaranteed.

(20) Possibility underexposure



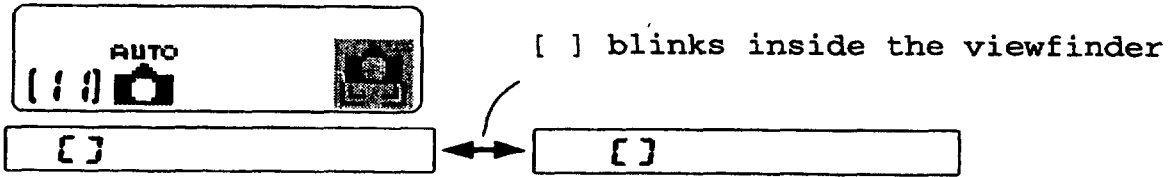
Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication	No warning indication	With warning indication	With warning indication	With warning indication	No warning indication	No warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
0	0	0	0	0	0

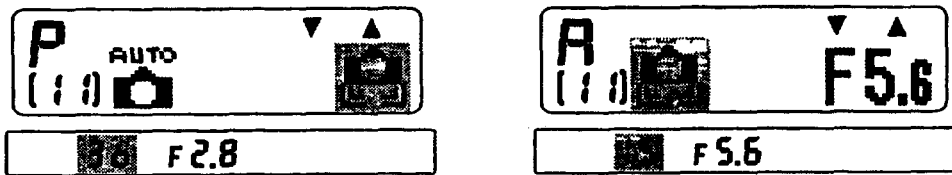
Reason for the warning indication	Subject is too dark exceeding the shutter speed/aperture combination range.
Method of releasing the warning indication	Use flash. Use a high-speed film. Choose another subject.

* This warning indication appears when the controlled EV value exceeds the lowest range of the combination of shutter speed/aperture. In manual exposure mode, the analog indicator appears in the viewfinder with no warning indication. No warning indication appears when the controlled EV value is within the range of the combination of shutter speed/aperture, even though out of the metering range. The controlled EV value is determined as close to the correct exposure value as possible. But the possibility of error becomes greater and correct exposure value is not guaranteed.

- (21) Camera shake
 - Simple mode



- Advanced mode




Simple mode		Advanced mode				
Active screen	Option screen	P	S	A	M	Option screen
With warning indication	No warning indication	With warning indication	No warning indication	With warning indication	No warning indication	No warning indication

Shutter release	AF operation	Setting operation			
		Menu button	Shutter speed	Aperture	Self-timer
0	0	0	0	0	0

Reason for the warning indication	Camera shake may occur.
Method of releasing the warning indication	Use flash. Change the subject.

* This warning indicator appears when the shutter speed satisfies the following conditions. In shutter-priority auto or M exposure mode, no warning indication appears since the shutter speed is set by the user himself. Indications in the viewfinder differ depending on whether Simple mode or Advanced mode are in use.

- (1) Shutter speed is slower than 1/30 sec.
- (2) Shutter speed is between 1/30 sec. and 1/500 sec., and slower than 1/f sec.
- (3) Decision is made not on the controlled value but on the displayed value.

作成承認印	配布許可印
	

Nikon F50

FAA29051

F50D

FAA29251

N50

FAA29151

REPAIR MANUAL

修理 指 針

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Tokyo, Japan

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DISASSEMBLING

1. Separating the front body and the rear body

Hand grip front cover, Battery chamber cover	D 1
Bottom cover, Camera back	D 2
Top cover	
1. Removing screws	D 2
2. Discharging of the main condenser	D 2
3. Removing wires and press-contact	D 3
Front cover, Camera back lock release, Hand grip rear cover	D 3
Remove wires on the DX FPC	D 4
Penta FPC group	
1. Removing wires and soldering bridges	D 4
2. Removing screws	D 4
3. Removing wires and soldering bridges	D 5
4. Disconnecting connectors	D 5
5. Removing penta FPC group	D 5
Removing soldering bridges	D 6
Film rewind fork group	D 6
Tripod base plate B131	D 6
Film advance mechanism group	D 7
Separating front body and rear body	D 7

2. FRONT BODY

Shutter unit B31	D 8
Main PCB	D 8
Aperture control unit B2251	D 9
Mirror box & pentaprism group	D 9
Light baffle plate, Viewfinder LCD FPC	D 9
TTL FPC, AF sensor unit	D10
Pentaprism group	D10
Mirror box group	D11
AF driving group	D11
Lens mount group	D12
Lens contact FPC, Small parts of front body	D12

3. REAR BODY

Each part on the film cartridge chamber side	D13
Each part on the spool chamber side	D14

- Set the output voltage to 5.6V and use a 0.8Ω resistor when using a DC regulated power supply.

Inspection item	Standard	Remarks
Shutter accuracy		Exposure mode: M, S Shutter tester (EF-8000)
(1) Allowance	1/2000 to 1/1500 sec.: ±0.45 SV 1/1000 to 1/180 sec.: ±0.3 SV 1/125 sec.: 0 to +0.3 SV 1/90 to 30 sec.: ±0.3 SV	
(2) Difference	1/2000 to 1/180 sec.: within 0.45 SV 1/125 to 30 sec.: within 0.3 SV	
(3) Shutter curtain	No bounce is detected.	
Exposure accuracy		Exposure mode: P, A, S Shutter tester (EF-8000)
(1) Allowance	1/2000 to 1/125 sec.: ±0.65 EV 1/90 to 30 sec.: ±0.5 EV	
(2) Difference	Within 0.5 EV	
Aperture control accuracy	LV12 (ISO100)、1/60	Exposure mode: S Shutter tester (EF-8000)
(1) Allowance	f/5.6: ±0.5 AV Other aperture: ±0.65 AV	
(2) Difference	Within 0.5 AV	
AF adjustment accuracy		Personal computer and other dedicated tools
(1) Yaw	± 6 mrad	
(2) Pitch	± 6 mrad	
(3) Z	±50 μm	
Height of aperture lever	3.4 ±0.1mm	J18004
Main mirror 45°	Adjustment of infinity: ±0.05mm Horizontal: ±20' Distortion: ±8'	J18010 J19002, J18197, J18196 Optical parallel
Sub mirror 45°	Horizontal: ±20' Distortion: ±8'	Hexagonal key
M. B. F.	Standard: 46.67 ±0.03mm Parallel: Within 0.03mm	J18001 Dial gauge
Battery check voltage		Use a DC regulated power supply with no resistor.
(1) First level	4 . 9 V	
(2) Second level	4 . 7 V	