

2181 Supplementary Information Index

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Division	Camera CS Division
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SERVICE MANUAL

CODE NO. 2181 Series

SUPPLEMENTARY

MODEL DYNAX 7D
MAXXUM 7D
7 DIGITAL

INFORMATION**About Focusing Screen Replacement**

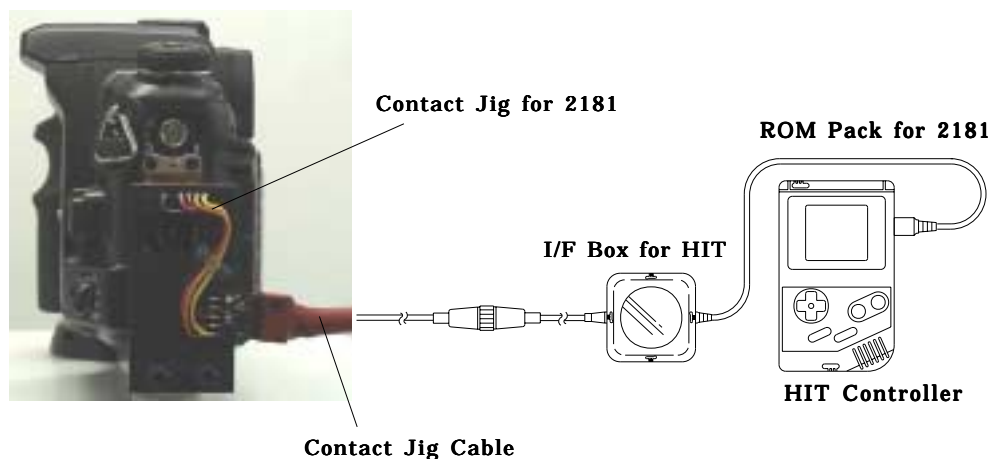
Whenever replacing the focusing screen to a different type between G (STANDARD) and M, data update is essential. Otherwise, exposure data will be incorrect because of change in diffusion characteristics.

Equipment Required

HIT Controller
ROM Pack for 2181
Contact Jig for 2181
I/F Box for HIT
Contact Jig Cable

Procedure

1. Set up the equipment as in Fig. 1.
2. Select ASSIST MODE from the main menu, and press SELECT button.
3. Select MATTE TYPE SET from the assist mode menu, and press SELECT button.
4. Select an appropriate type from the menu using the control pad (Up/Down).
SET STANDARD MATTE ----- Focusing Screen Type-G (STANDARD)
SET M MATTE ----- Focusing Screen Type M
5. Press the shutter-release button partway down (S1 ON) according to the display.
“ COMPLETE ” appears on the screen when the data update is complete.
6. Press SELECT button to return to the assist mode menu.

Fig. 1

This information should be filed in your service manual.

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INFORMATION**Information of the repair method of picture (CCD) inclination****Check**

Setup the equipments so that the camera faces to a subject at accurate level;

1. Use a copy stand or place a mirror on the wall.
2. Use a 50/1.7 lens for inspection.
3. Measure an angle of gradient by Photoshop.

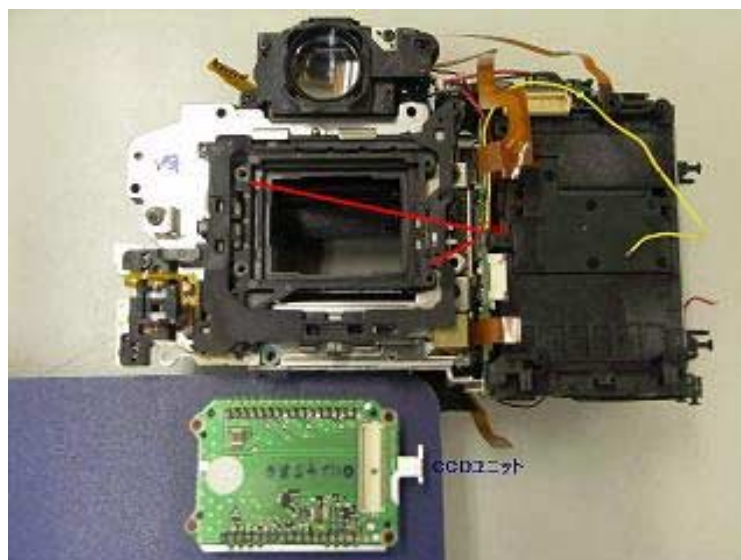
If it is beyond ± 1.0 degree, be sure to implement the Repair method (mentioned later).

If it is between ± 0.5 and ± 1.0 degree, implement the Repair method (mentioned later) upon request of the user.

If it is within ± 0.5 degree, implement the Inspection again to correct measurement error.

Procedure

1. Disassemble the body so that the CCD Assy can be removed.
 2. Cut the two posts (fig. 1); one for positioning and the other for direction standard between the CCD holder (in the Tebure Assy) and the heat sink plate (in the CCD Assy).
 3. Install an insulation sheet on the terminal of the CCD Assy or on the contact surface of the CCD holder. (to prevent short-circuit between the CCD terminal and CCD holder)
 4. Adjust the position of the CCD Assy and then assemble it.
When an image tilts to the right, turn it clockwise.
When an image tilts to the left, turn it counterclockwise.
The tilt can be corrected approx. ± 0.7 degree at the maximum by shifting the double faced tape on the LPF*.
- *Prepare a spare parts of Tebure Assy with the above mentioned step 2 applied separately and shift the position by using it. Donot shift the tape on the user's Tebure Assy to prevent the Tebure Assy from being broken.
5. Assemble the whole unit.
 6. Implement the Inspection.
If the variance is beyond ± 0.5 degree, replace the Tebure Assy. Implement the Inspection again.
 7. Perform adjustment of CCD position and perspective, camera shaking compensation after the completion of repair.

Fig. 1

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How to change the data for production after replacement of Main PCB Assy (2181-0455)**Background:**

Data for production control is set in the service supply Main PCB Assy.

When using this Main PCB Assy as it is after replacement, the camera boots up but does not function at all.

Service:

After replacement of Main PCB Assy, change the data as shown below.

Equipment required:

2181 Mode Change Software for Adjustment <2181-0008-75>*

*Downloadable from CS Information site.

Procedure:

1. Save "ram.bin" of the 2181 Mode Change Software for Adjustment to the root directory of a CompactFlash card.
2. Insert the CompactFlash card into the camera. Slide the Main switch from OFF to ON while pressing the shutter release button all the way down.
When the access lamp turns on and then off, slide the Main switch from ON to OFF. Remove the battery and then insert it again. Slide the Main switch from OFF to ON again.

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INFORMATION

2181 Program flash control adjustment (measure against the underexposure problem)

Symptom

Compared to the built-in flash, the flash control results tend to be underexposure with external flashes.

Measure:

Take measures in order of 1 to 2.

Step 1. Upgrade the firmware version and then conduct "GAIN UP" adjustment.

Step 2. Adjust flash control to decrease the pre-flash (flat flash) level of the external flash.

Step 1. Upgrade the firmware version and then conduct "GAIN UP" adjustment.**Equipments required:**

Firmware Ver.1.10 or later for 2181 <2181-0007-76>

PC (IBM PC/AT Compatible Computer with the 2181 Adjustment Program is installed)

2181 Adjustment Program CD Ver. 1.1 <2181-0001-76> or later

CF card for Adjustment

USB-2 (USB cable)

AC Adapter AC-11

Procedure:

1. Save "km023.app /km023.brd" of the Firmware Ver.1.10 or later for 2181 to the root directory of a CompactFlash card.
2. Insert the CompactFlash card into the camera. Slide the Main switch from OFF to ON.
3. Pressing the Playback button.
4. Select " Yes "by using controller key and push the center of controller according to the firmware rewrite operation guid on the LCD display.
5. Firmware version number is displayed on LCD display. Check the version number.
Ver. 1.10 or later
6. Switch off camera according to the guidance on LCD display.

Confirm method of firmware version

1. The menu is displayed with " Menu button "ON" Display switch button "is pushed.

GAIN UP adjustment procedure-1

1. Enter the adjustment mode. Refer to pg.49 of Repair Guide. "Starting up 2181 adjustment program"
2. Click "GAIN UP" of the adjustment menu. (Fig.1)
3. Select "+0.33" in the "Gain Up" menu and then click "WRITE". (Fig. 2)
4. Click "ADJUSTMENT END" to complete adjustment.
5. Adjust flash control to decrease the pre-flash (flat flash) level of the external flash.

Fig. 1

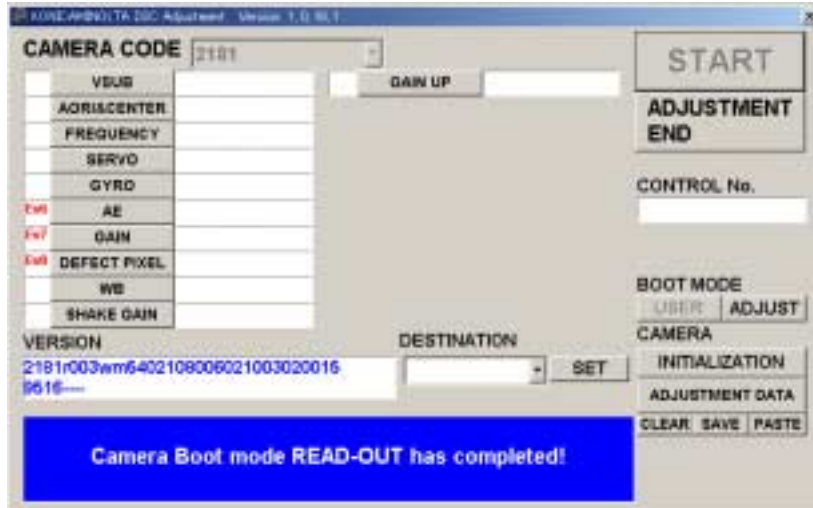
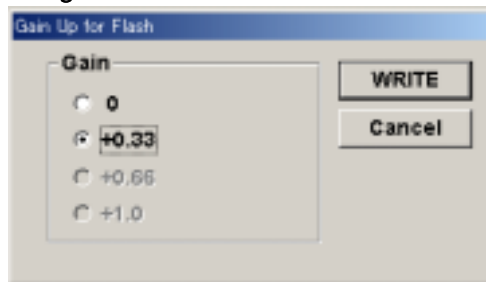


Fig. 2



For re-work of repair with a complaint about wireless flash overexposure from customer, follow the procedure below.

GAIN UP adjustment procedure-2

1. Enter the adjustment mode. Refer to pg.49 of Repair Guide. "Starting up 2181 adjustment program"
2. Click "GAIN UP" of the adjustment menu. (Fig.1)
3. Double click the right button of a mouse at "Gain Up" screen.
4. Select "+0.66" in the "Gain Up" menu and then click "WRITE". (Fig. 2)
5. Click "ADJUSTMENT END" to complete adjustment.
6. Adjust flash control to decrease the pre-flash (flat flash) level of the external flash.

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2. Adjust flash control to decrease the pre-flash (flat flash) level of the external flash.

Be sure to complete the step 1 "Upgrade the firmware version and then conduct "GAIN UP" adjustment."

Adjustment (for 5600HS[D] and 3600HS[D])

1. Flash amount adjustment (Guide number adjustment for the main burst) (only 5600HS [D])
Refer to page 9 of Repair Guide in the #8841 Service manual.
2. Flat flash adjustment (flash amount control of the flat flash, including preflash)
Refer to page 10 of Repair Guide in the #8841 Service manual.

Equipments required:

Reflection paper

Tripod

CompactFlash card

Lens (AF 50/1.7 or AF 50/1.4)

Camera (settings: A mode, f/5.6, ISO100, PWB: flash, P-TTL, Continuous advance mode)

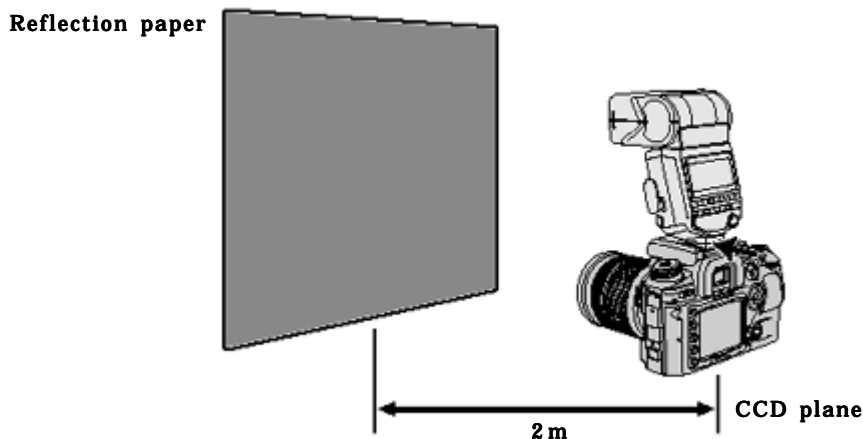
Flash (Remove Rear Panel (8841-1103/ 8842-1006))

Color Calculator 2 (2766-0008-75) (*)

* Adobe Photoshop can be used. Any application software that the RGB value is checked in the histogram can be used.

Condition:

Set the equipments so that the distance between the camera (CCD plane) and the reflection paper is 2m in a darkroom.



Adjustment:

Adjust the flat flash level so that the G-value of the center area will be within 130+/-5.

Procedure:

With the following procedure, histogram is checked in the camera's playback mode, but it is just for a rough check for adjustment, and not the must item. Check if the resulting value satisfies the standard in the following step 4.

1. Take a test image with the built-in flash, and then display the image on the camera's LCD monitor with histogram. Confirm that the peak of the histogram slightly shifts to the right.



Playback image on the camera's LCD.
(built-in flash)

2. With the flash 5600HS [D] or 3600HS [D] attached, take a test image and check the image in the playback mode as well (with histogram).



Playback image on the camera's LCD.
(5600HS[D] or 3600HS[D]
before adjustment)

3. Adjust the flat flash level by turning the VR1 so that the peak of the histogram slightly shifts to the left from the center. (Do not make it the same level as that of built-in flash)

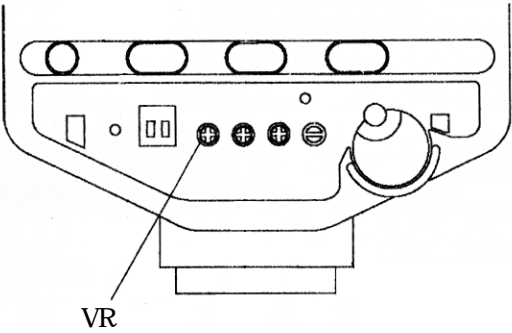


Playback image on the camera's LCD.
(5600HS[D] or 3600HS[D]
after adjustment)

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5600HS (D)

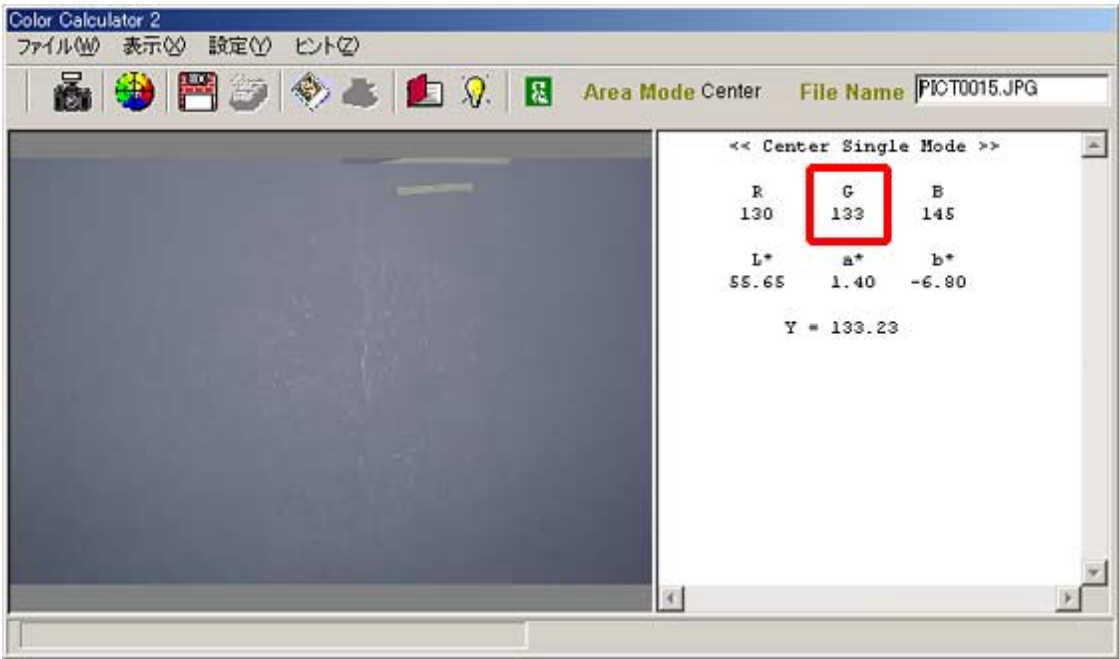


3600HS (D)



VR Turning to clockwise	Flat flash amount decreases. As a result, the main bust amount increases and exposure shifts to be overexposed.
VR Turning to counterclockwise	Flat flash amount increases. As a result, the main bust amount decreases and exposure shifts to be underexposed.

4. Open the adjusted image on the Color Calculator 2 and the measure the Green level of the center single area (center 256-by-256 pixel area). Check that the value Green level is within 130+/-5. (For the settings of the Color Calculator 2, refer to page 5, 6 of Repair Guide in the Service manual..)
If the result is beyond this range, repeat the above steps 2 to 4.



- <When using the Adobe Photoshop>
1. With the rectangular marquee, drag over the center 256-by-256 pixel area of the image.
 2. Select Image > Histogram.
 3. Select Green from the Channel option and check the average value.

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INFORMATION**EZ Shift**

EZ Shift has been added to the EZ check item in 2181 ROM PACK II (7981-5002-87 and after).

For details, please refer to the followig procedure.

****DO NOT** operate the EZ shift function of 2181 ROM PACK (7981-5002-86). It rewrites all the islands.

EZ shift procedure

1. Follow the procedure of "3. EZ check" to step 5. (Repair Guide page 45)
2. After displaying the value for approx. 3 sec., display changes as in Fig. 1.
**** If the displayed value was beyond the standard, follow the procedure below for EZ shift.**
3. Select target island for EZ shift with 4-way key and then press SELECT button.
4. Follow the direction on the display and press the shutter-release button partway down until "COMPLETE" appears. Setting completed.
5. Select "+00" with 4-way key, set the shift amount with up/down keys, and then press SELECT button.
6. Follow the direction on the display and press the shutter-release button partway down until "COMPLETE" appears. EZ shift completed.
7. After completion of EZ shift, press SELECT button to return to the display where the island currently selected is displayed.

Fig. 1

EZ CHECK		
SET POSITION A		
MENU		
SHIFT	3	62
SHIFT	4	-30
SHIFT	6	22

****EZ shift can be done for respective islands.**

Island group	Chart	Mesurement point
3rd, 4th, 6th ISLAND	AF Chart-I for 2163 (Horizontal)	A
5th ISLAND	AF Chart-I for 2163 (Vertical)	E
1st, 7th ISLAND	AF Chart-II for 2163 (Horizontal)	I
2nd, 8th ISLAND	AF Chart-II for 2163 (Horizontal)*	M

When checking the reading at 2nd island group and 8th island group, use AF Chart-II for 2163 upside down.

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**Handling instructions on static electricity of Position detection assy
(Tebure Assy: 2181-0901)****About Position detection assy:**

Position detection assy is sensitive to static electricity. Keep this parts under 50V.

Symptom:

CCD center adjustment (CENTER) cannot be done. Error occurs.

Precautions:

Care should be taken when taking out from the antistatic bag. Electrostatic discharge damage may occur.

Repair person must wear ground strap.

Be sure to ground the workbench and mat.