



# Broadcast Products Technical Bulletin 20-2011-052

DATE: **June 6, 2011**SUBJECT: **REPLACING SWITCHING REGULATOR WITH  
POWER BLOCK ASSEMBLY (A70)**

MODEL: **HDC1400 Series**  
***HDC1400R//UL***  
**HDC1400R/L**  
***HDC1400R/T***  
**HDC1400R/T**  
**HDC1450 Series**  
***HDC1450R//UF***  
**HDC1450R/K**  
**HDC1500 Series**  
***HDC1500R//UL***  
**HDC1500R/L**  
***HDC1500R/T***  
**HDC1500R/T**  
**HDC1550 Series**  
***HDC1550R//UF***  
**HDC1550R/K**  
**HDC1580 Series**  
***HDC1580R/L***  
***HDC1580R/T***  
**HDC1600 Series**  
**HDC3300 Series**  
***HDC3300R/L***  
**HDC3300R/L**  
***HDC3300R/T***  
**HDC3300R/T**

SERIAL NO:

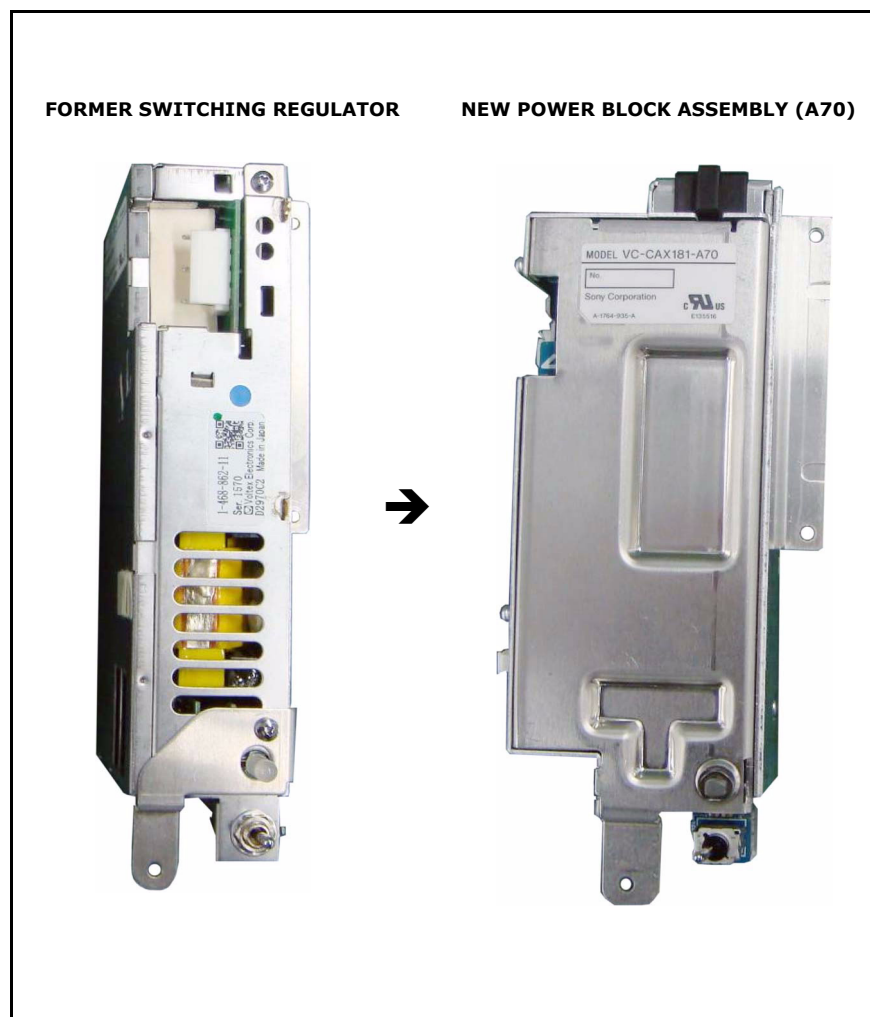
HDC1400 Series	All
<i>HDC1400R//UL</i>	<i>Up to 410,000</i>
HDC1400R/L	Up to 11,000
<i>HDC1400R/T</i>	<i>Up to 51,000</i>
HDC1400R/T	Up to 31,000
HDC1450 Series	All
<i>HDC1450R//UF</i>	<i>Up to 410,000</i>
HDC1450R/K	Up to 11,000

(Part 1 of 2)

*Italicized information in green applies to  
customers outside the United States.*

**DESCRIPTION**

A new AC-DC power supply is available. (See Figure 1.)

**Figure 1**

When replacing the former switching regulator with the new power block assembly (A70), use the new parts listed in Table 1 on page 3.

HDCM10-027

## SERIAL NO: (Continued)

HDC1500 Series	All
<i>HDC1500R//UL</i>	<i>Up to 410,000</i>
HDC1500R/L	Up to 11,000
<i>HDC1500R/T</i>	<i>Up to 51,000</i>
HDC1500R/T	Up to 31,000
HDC1550 Series	All
<i>HDC1550R//UF</i>	<i>Up to 410,000</i>
HDC1550R/K	Up to 11,000
HDC1580 Series	All
<i>HDC1580R/L</i>	<i>Up to 51,000</i>
<i>HDC1580R/T</i>	<i>Up to 51,000</i>
HDC1600 Series	All
HDC3300 Series	All
<i>HDC3300R/L</i>	<i>Up to 41,000</i>
HDC3300R/L	Up to 11,000
<i>HDC3300R/T</i>	<i>Up to 51,000</i>
HDC3300R/T	Up to 31,000

(Part 2 of 2)

*Italicized information in green applies to customers outside the United States.*

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### NOTE:

- To prevent interference with the new power block assembly, the heat sink for the DC-DC converter assembly must be replaced first.  
Replacement of the heat sink depends on the shape of the DC-DC converter. Refer to "REPLACING HEATSINK ON DC-DC CONVERTER" on page 4 of this technical bulletin.
- For details on how to replace the former switching regulator with the new power block assembly, refer to "REPLACING POWER BLOCK ASSEMBLY" on page 5 of this technical bulletin.

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### ORDERING INFORMATION

To order parts online, go to: [www.sony.com/servicesplus](http://www.sony.com/servicesplus). For service or parts ordering assistance, refer to the following document, which lists all contact telephone numbers:

Technical Bulletin 00-1999-000

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**Table 1**

Model	Former Parts		→	New Parts	
	Description	Part No.		Description	Part No.
All	Switching regulator	1-468-862-1x	→	Power block assy (A70)	A-1764-935-A
	Bracket (Dengen)	3-872-593-0x	→	PS attachment kit (A70)*	A-1778-956-A*
	Thermattach tape (AC/DC)	3-872-621-0x			
	Heat trans sheet (Dengen upper)	3-986-640-0x			
	Heat trans sheet (Dengen lower)	3-986-641-0x			
	Heat sink 2 (DD)	3-872-614-0x			
	Heat conduct sheet (DD)	3-872-619-0x			
Non-Triax Cameras: HDC1400 HDC1400R HDC1500 HDC1500R HDC1580 HDC1580R HDC1600 HDC1600R HDC3300	Screw, +B2.6×5 Nylock Qty: 3	3-364-941-0x	→	Screw, +PSW 2.6×8 Qty: 3	7-621-759-65
	Clamp	4-908-882-0x			
Triax Cameras: HDC1450 HDC1450R HDC1550 HDC1550R	Screw, +B2.6×5 Nylock Qty: 2	3-364-941-0x	→	Screw, +PSW 2.6×8 Qty: 2	7-621-759-65
	Clamp, Qty: 2	4-908-882-0x		Sub harness (Triaxin A70)	1-967-495-11
	FL-338 assy	A-1169-464-A			
	Reuse clamp, Qty: 2	3-853-802-0x		Cable clamp (PJ-21B) Qty: 2	4-209-962-01
	FL holder	3-990-333-xx			

\* The PS attachment kit (A70) contains the following parts:

- Thermal sheet (A70-small) (4-185-753-0x)
- Thermal sheet (A70-chassis) (4-185-754-0x)
- Heat sink 2 (DD) (4-184-888-0x)
- Heat conduct sheet (DD) (3-872-619-0x)

**NOTE:** The former parts should all be discarded.

## REPLACING HEATSINK ON DC-DC CONVERTER (See Figure 2.)

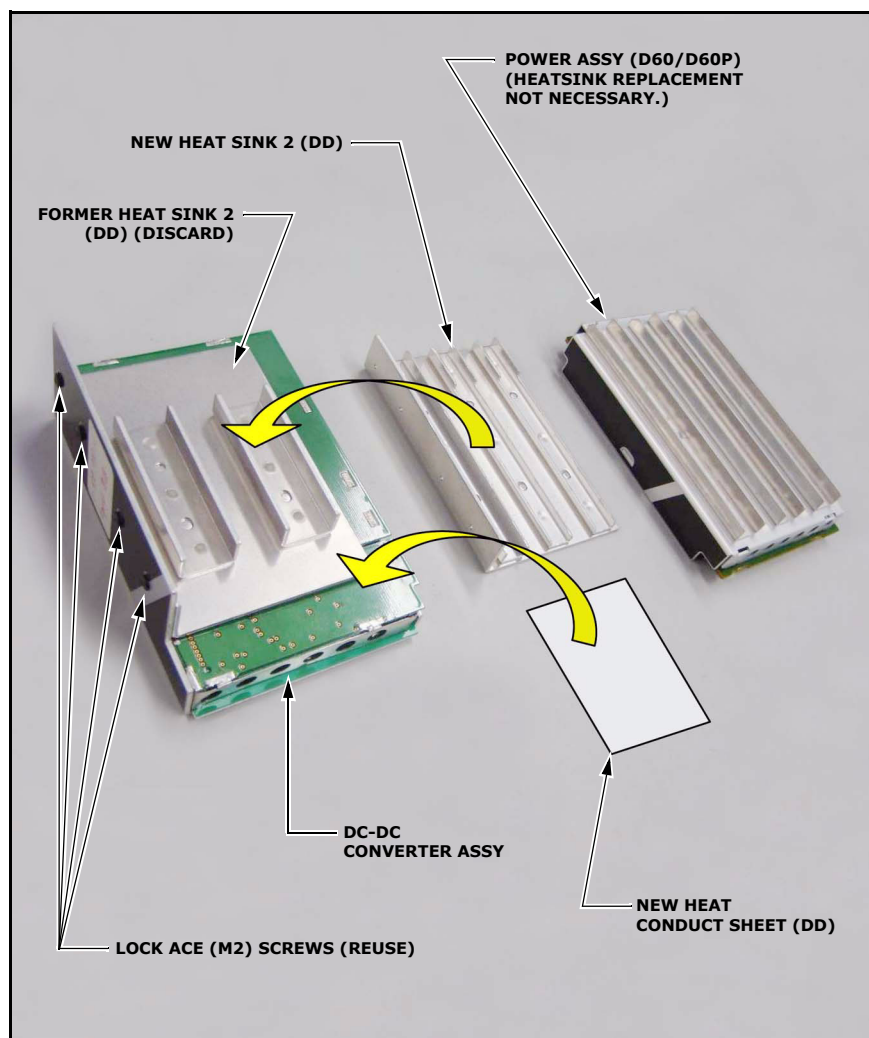
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**NOTE:**

- The applicable DC-DC converter assemblies are:  
A-1128-443-A  
A-1179-730-A  
A-1211-214-A
  - If using power assembly (D60/D60P) (A-1765-460-A/A-1773-365-A), the following procedure is not necessary.
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1. Prepare the PS attachment kit (A70).
2. Remove the former heat sink 2 (DD) from the DC-DC converter, and replace it with the following two new parts included in the PS attachment kit:  
Heat sink 2 (DD)  
Heat conduct sheet (DD)

**NOTE:** Install the new parts by reusing the removed screws.



**Figure 2**

## REPLACING POWER BLOCK ASSEMBLY

1. Remove the former power supply block (switching regulator) and all the following parts from the camera main unit. (See Figure 3.)

### All Units (See Figure 3.)

- Bracket (Dengen)
- Thermattach tape (AC/DC)
- Heat trans sheet (Dengen upper)
- Heat trans sheet (Dengen lower)

### Non-Triax Cameras (Excluding HDC1450/R and HDC1550/R) (See Figure 3.)

- Screws, +B2.6×5 Nylock, Qty: 3
- Clamp

### Triax Cameras (HDC1450/R and HDC1550/R) (See Figure 3 and Figure 4.)

- Screws, +B2.6×5 Nylock, Qty: 2
- Clamp, Qty: 2
- FL-338 assembly (See Figure 4.)
- Reuse clamps, Qty: 2 (See Figure 4.)
- FL holder (See Figure 4.)

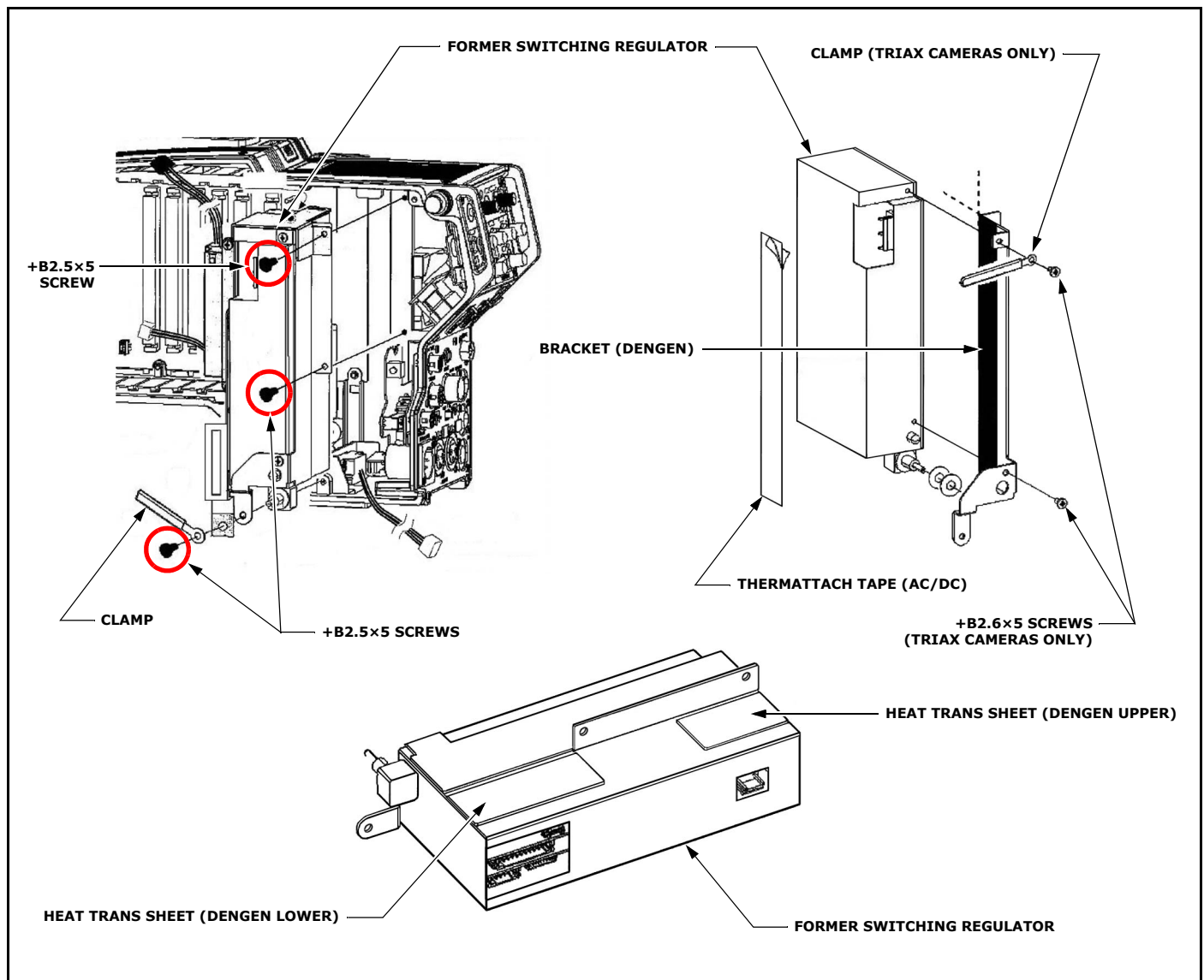
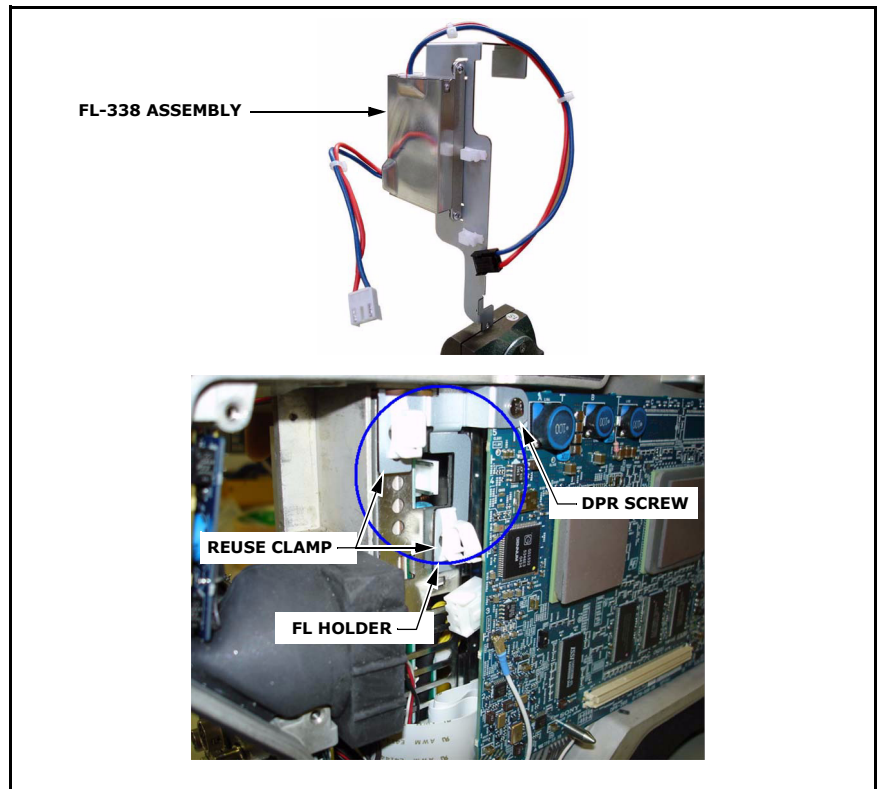


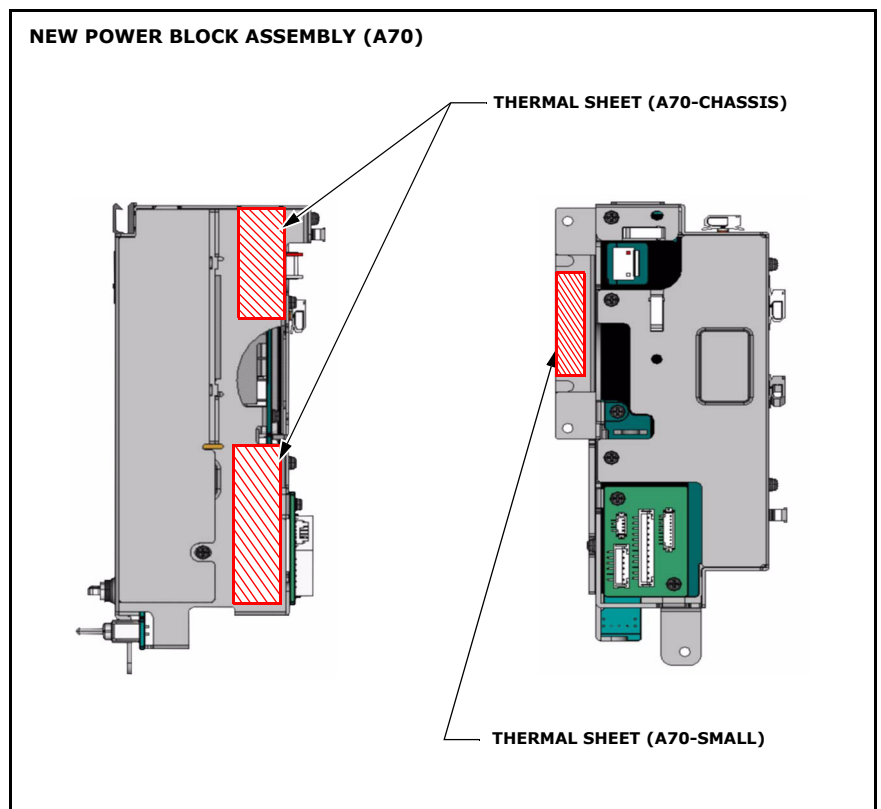
Figure 3



**Figure 4**

2. Attach the new thermal sheets to the new power block assembly (A70). (See Figure 5.)

- Thermal sheet (A70-small)
- Thermal sheet (A70-chassis)



**Figure 5**



### Non-Triax Cameras (Excluding HDC1450/R and HDC1550/R)

For non-Triax cameras, install the power block assembly to the camera using the following new screws:

+PSW 2.6×8, Qty: 3

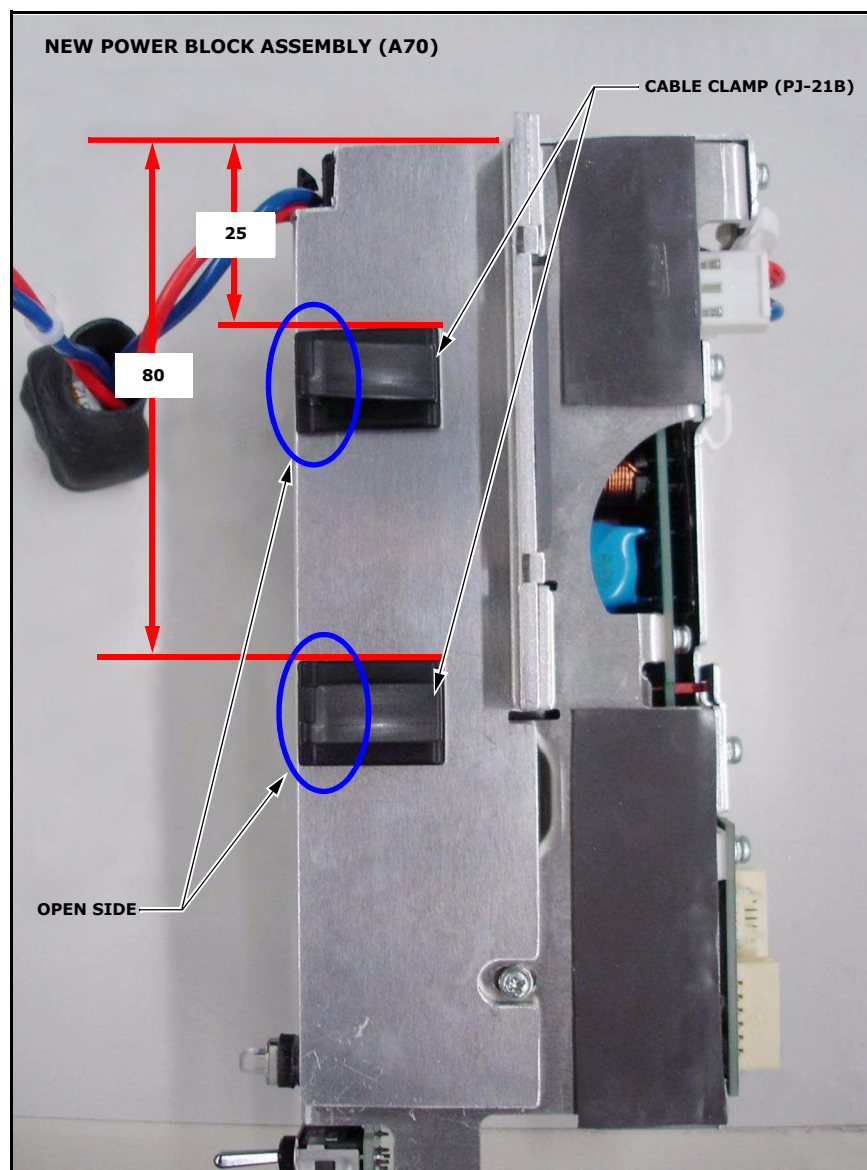
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**NOTE:** For non-Triax cameras the installation is now complete.

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### Triax Cameras (HDC1450/R and HDC1550/R)

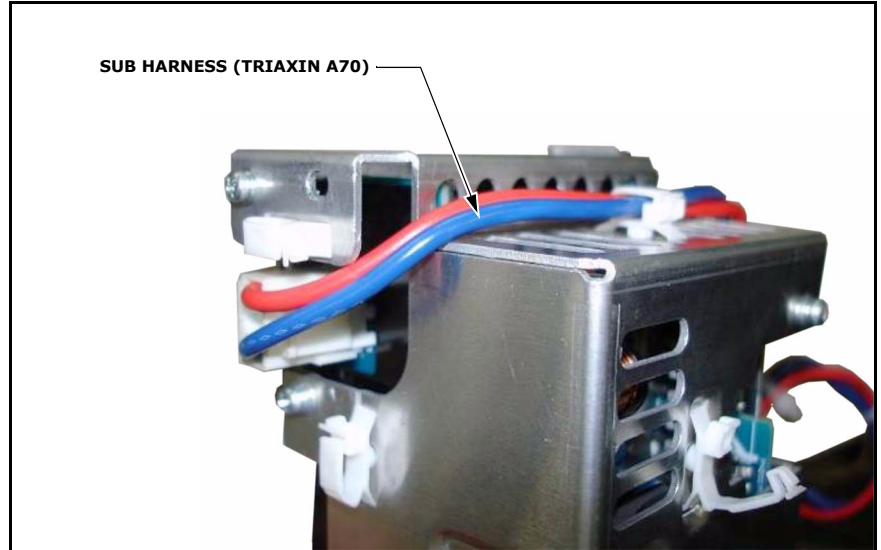
1. For Triax cameras, attach the two new cable clamps (PJ-21B) to the power block assembly as shown in Figure 6.



**Figure 6**

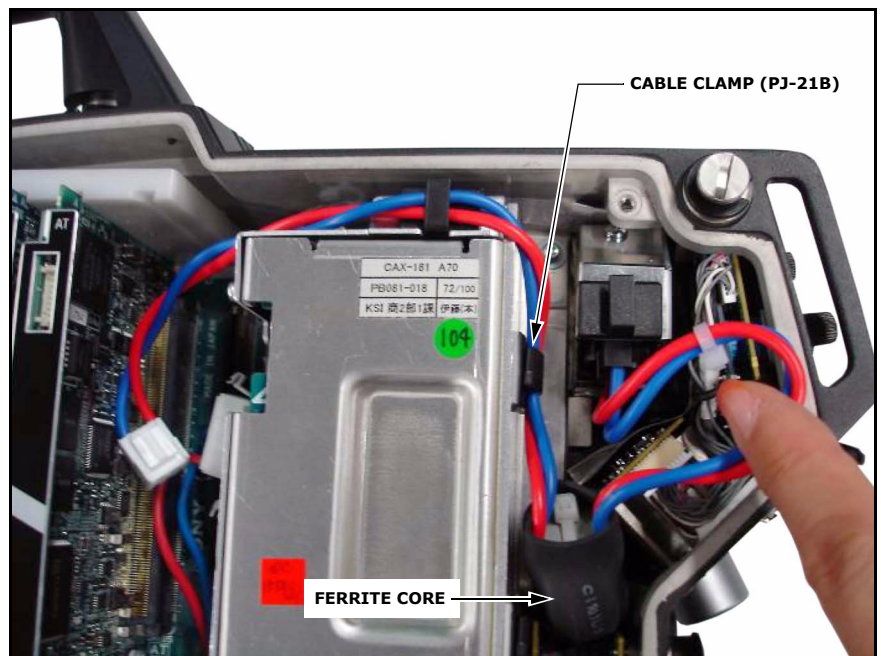
2. Attach the new sub harness (Triaxin A70) to the power block assembly as follows:

Connect the white connector of the sub harness to the white connector of the power block assembly as shown in Figure 7.



**Figure 7**

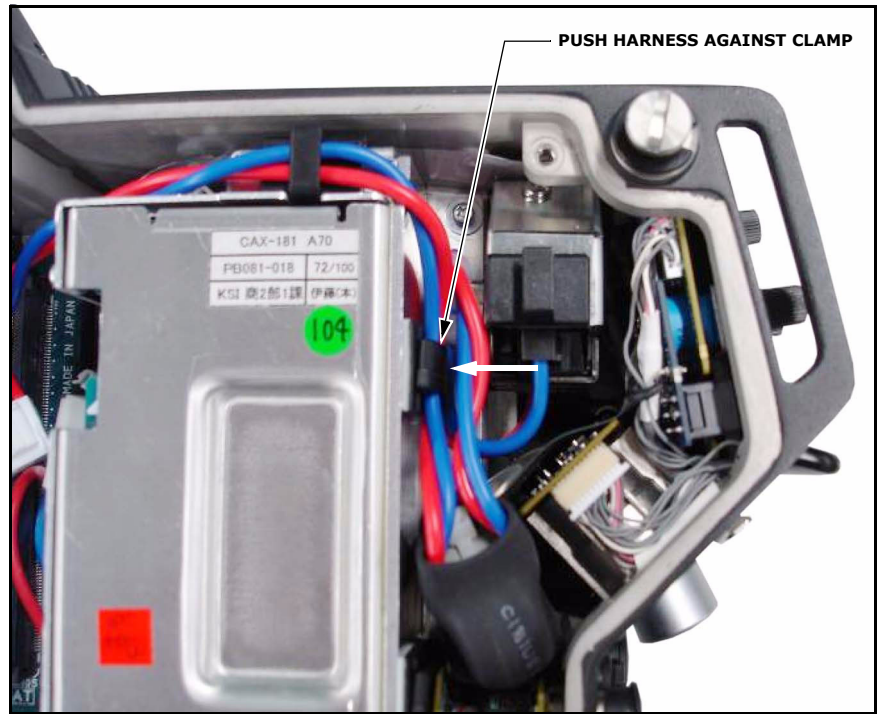
3. Install the power block assembly to the camera as follows:
  - a. Secure the power block assembly to the camera using the two new +PSW2.6×8 screws. Reuse one of the original +PSW2.6×8 screws.
  - b. Connect the BLK connector of the sub harness (Triaxin A70) to the BLK connector of the FL-337 board on the outside panel.
  - c. Insert the ferrite core of the sub harness, and secure the sub harness with the new cable clamp (PJ-21B) as shown in Figure 8.



**Figure 8**



- d. Push the extra length of the harness next to the clamp as shown in Figure 9.



**Figure 9**