



SERVICE BULLETIN

Product : PEGASUS-SERIES	Bulletin No. : 00-C/M-E0013
Model : S/M950P,750P,700IFT,900IFT	Bulletin Date : 13. DEC. 2000
Buyer : All subsidiaries	ECN Date : 13. DEC. 2000
SUBJECT : TROUBLE SHOOTING FOR PEGASUS SERIES	

Background : Please refer to attached trouble shooting guide for pegasus-project
 We'd like to provide a quickly trouble shooting guide according to each of defect symptom for pegasus-series

Cause :

Solution :

Application Date : At once.

(Interchangeability Code : * I.C)

Location No.	OLD (before) Parts		NEW (changed) Parts		* I.C
	SEC Code	Description	SEC Code	Description	

Type	A type	B type	C type	D type	E type	F type
Interchange Type Code (* I.C)	OLD → Early (Parts) (Prod.) NEW → Late (Parts) (Prod.)	OLD → Early (Parts) (Prod.) NEW → Late (Parts) (Prod.)	OLD → Early (Parts) (Prod.) NEW → Late (Parts) (Prod.)	OLD → Early (Parts) (Prod.) NEW → Late (Parts) (Prod.)	Parts Addition (None New)	Parts deletion (Old Del.)

Application Reference () Only Defected sets (0) Whole sets ()

Attachment Schematic Diagram () Component Lay-out () Exploded View ()
 Mechanical Diagram () None () Others (0)

Product Month : - All Serial No. (~ from)

Published by : C.K.Park Checked by : C. K.Park Approved by : Y.K.Y00

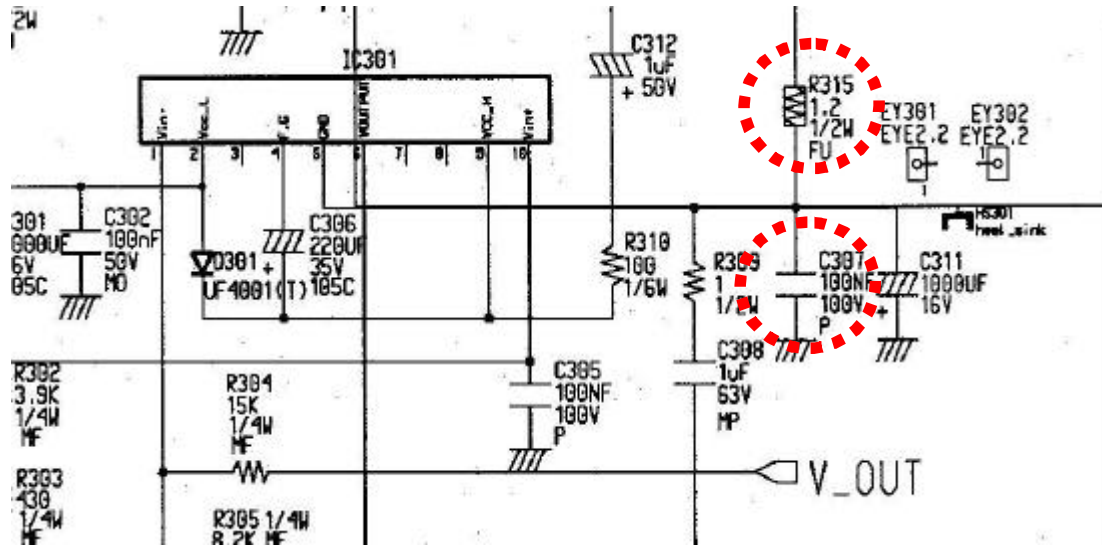
DEFECT SYMPTOM

The lower part on the image doesn't appear.

Circuit Diagram

Model

PG17FST,PG19FST,PG17NF,PG19NF,PG19DF



Procedure

1. Major Defect Parts

Location	Description	Parts Number
C307	Ceramic 104Z, 50V	
R315	1.2, 1/2W	

1. Check the C307, R315 whether a defective parts or not.

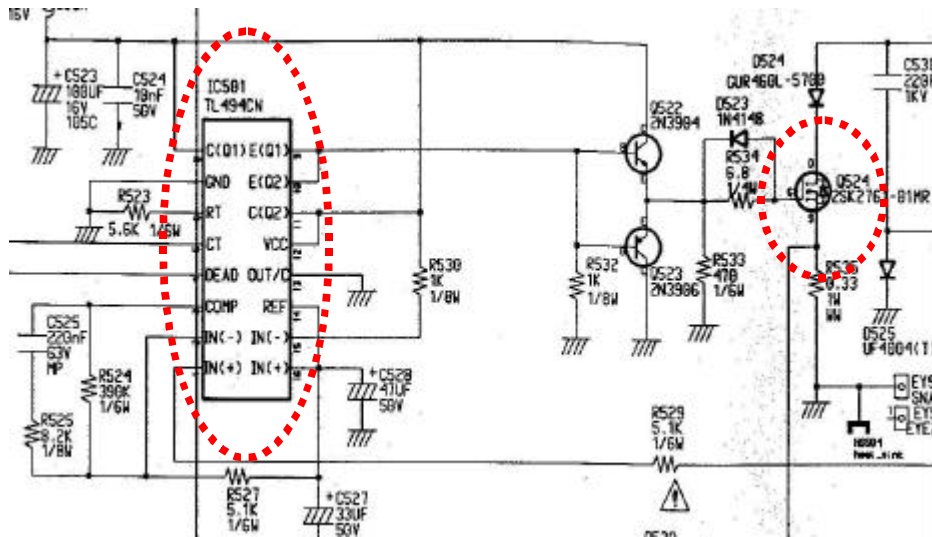
Defect Symtom

No Raster

Circuit Diagram

Model

PG17FST,PG19FST,PG17NF,PG19NF,PG19DF



Procedure

1.Major Defect Parts

Location	Description	Parts Number
Q524	HIGH VOLTAGE-OUTPUT TR	
IC501	TL494 HV REGULIOR	
Q405	2SC5583 H-Out TR	
C263	0.82nF, 50V, MO	
D529	RGP02-12 DIODE	
D526	DIODE GUR460L	
IC261	SAM9222G	
C181	CERAMIC,102, 2KV	

No raster is occurred by various reasons.

1.In case the parts at a secondary circuits is shorted or semi-shortd by damaged parts or soldering short, between lead of parts, the OCP (over current protection) function in IC601 operate to protect a primary and secondary circuit from too much load (current)

As a result of OCP operating, it bring the SMPS circuit to a halt and then cut-off the output DC voltage which supply a secondary circuit with current

and voltage

2. In case the parts or pattern on the route for H/V-sync from PC or others is damaged by electronic over stress or soldering short, poor connection for each of connector.

DPMS Mode is operated owing to cut-off the H-sync or V-sync.

3. When the high voltage circuit operates abnormally, it generates a high voltage higher than normal level.

Above condition increases X-Ray emission on the surface of CDT and causes hazard for a customer

To prevent a customer above matter, High voltage protection circuit exist.

If the H/V protection function operates, the voltage of +30V line goes up and then the 1 pin output of IC501 goes to high level.

The 1 pin of IC 501 connects with 7pin of micom IC201.

The Micom operating act to halt mode in according to 7pin's voltage goes to high level, and so No raster occurs.

4. If the CDT is failed by inner floating substance or neck cracking, DY short, No Raster is occurred by operating OCP function.

CDT also the same as a secondary circuit.

[Check Flow]

1. Check the Q405, Q403 whether a poor condition or not.

Q405 : Horizontal Output TR, Q403 : Horizontal current control TR

2. Check the Q524, D526, D529, D527, D528

Q524 : High Voltage output TR, D526 : Damper Diode

3. Check the IC501

Check using oscilloscope for IC501, 9pin whether a output waveform or not.

If not, check the parts as follow.

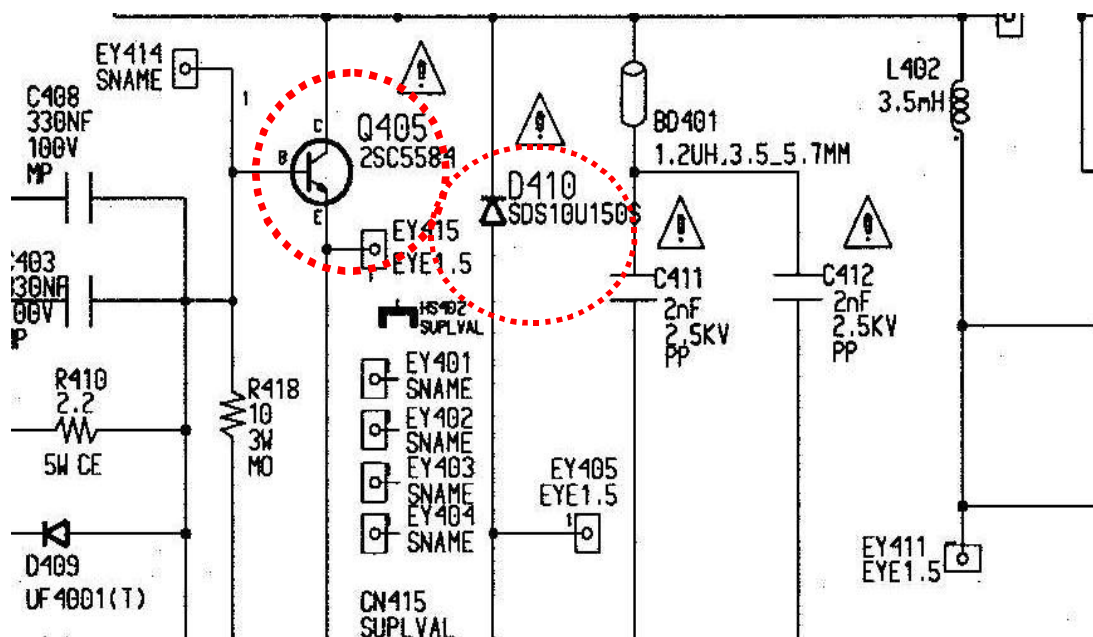
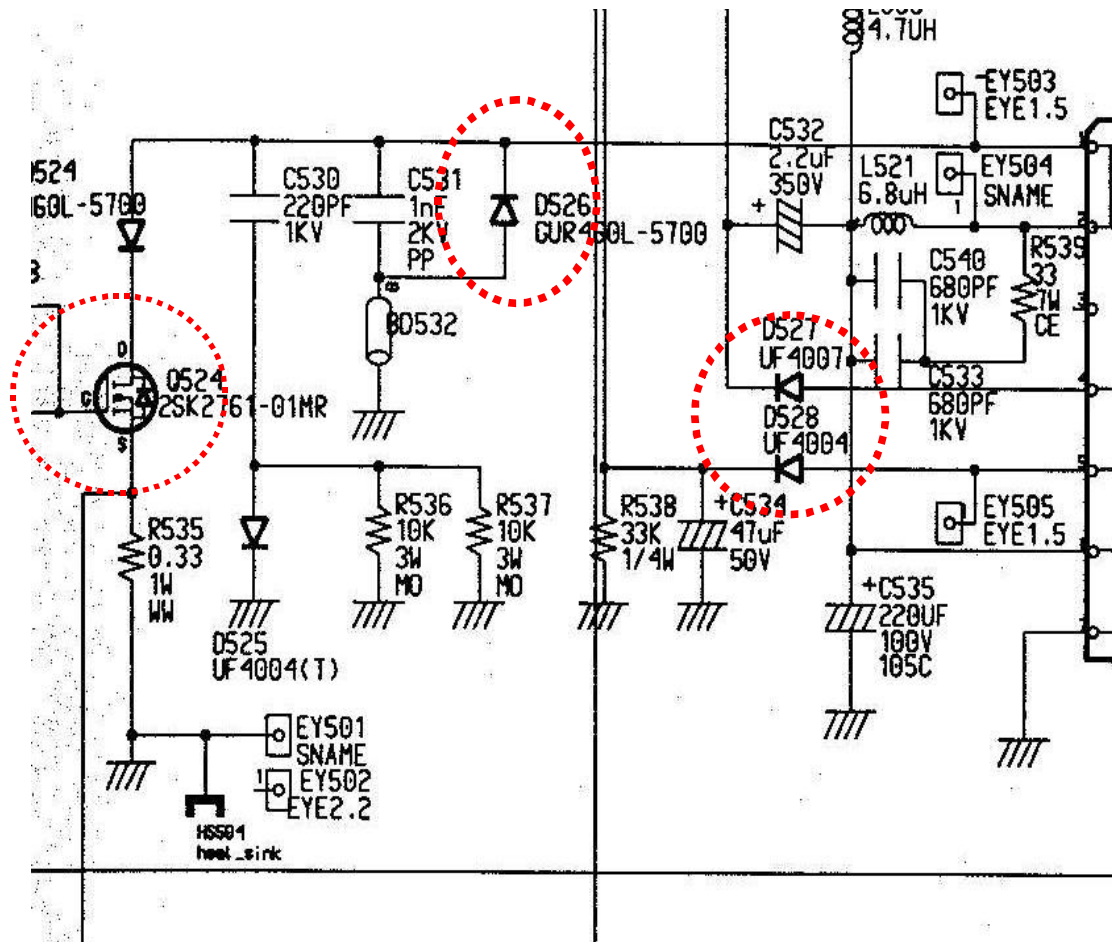
-> C525, Q521, Q522, Q523, R523, C522

If it can't find any defective parts, Replace the FBT

4. Check the C181, Replace the C181 in case you can't check it.

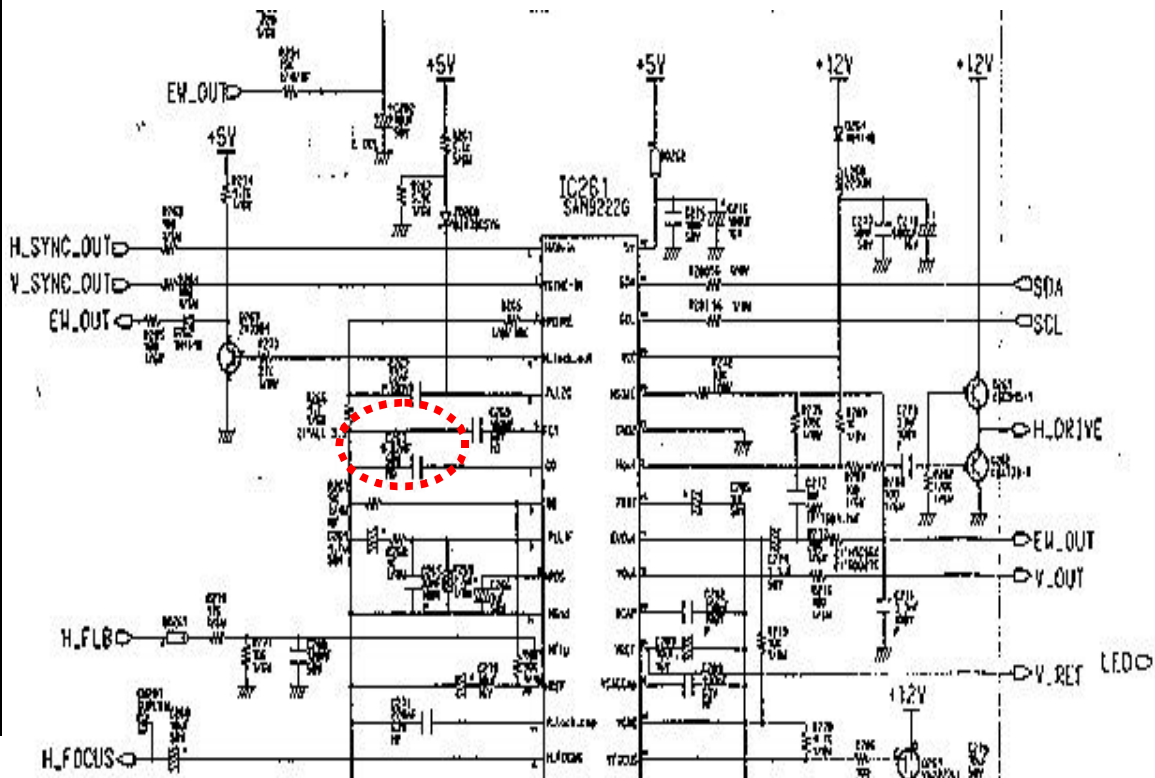
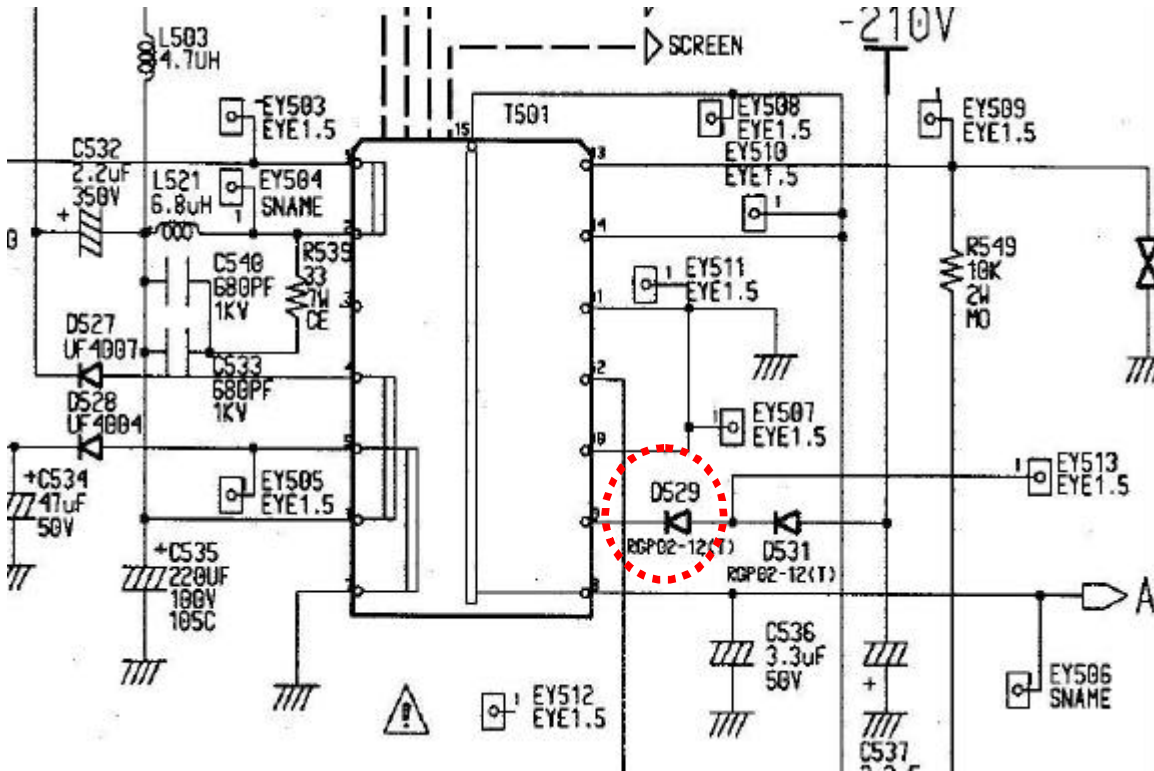
5. Check using DVM R551 whether a poor condition

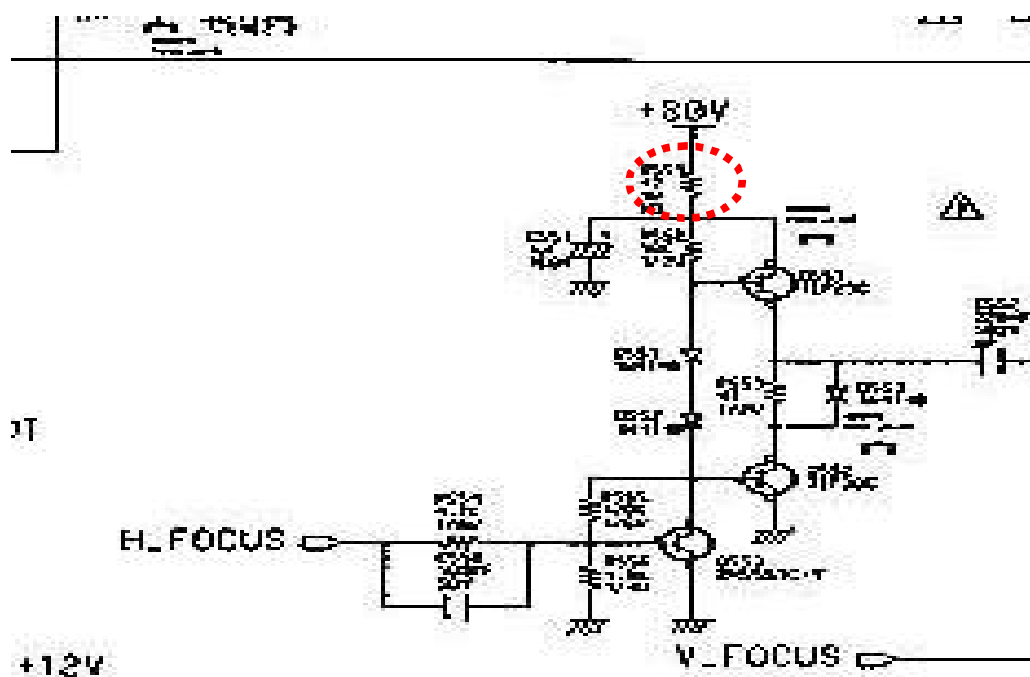
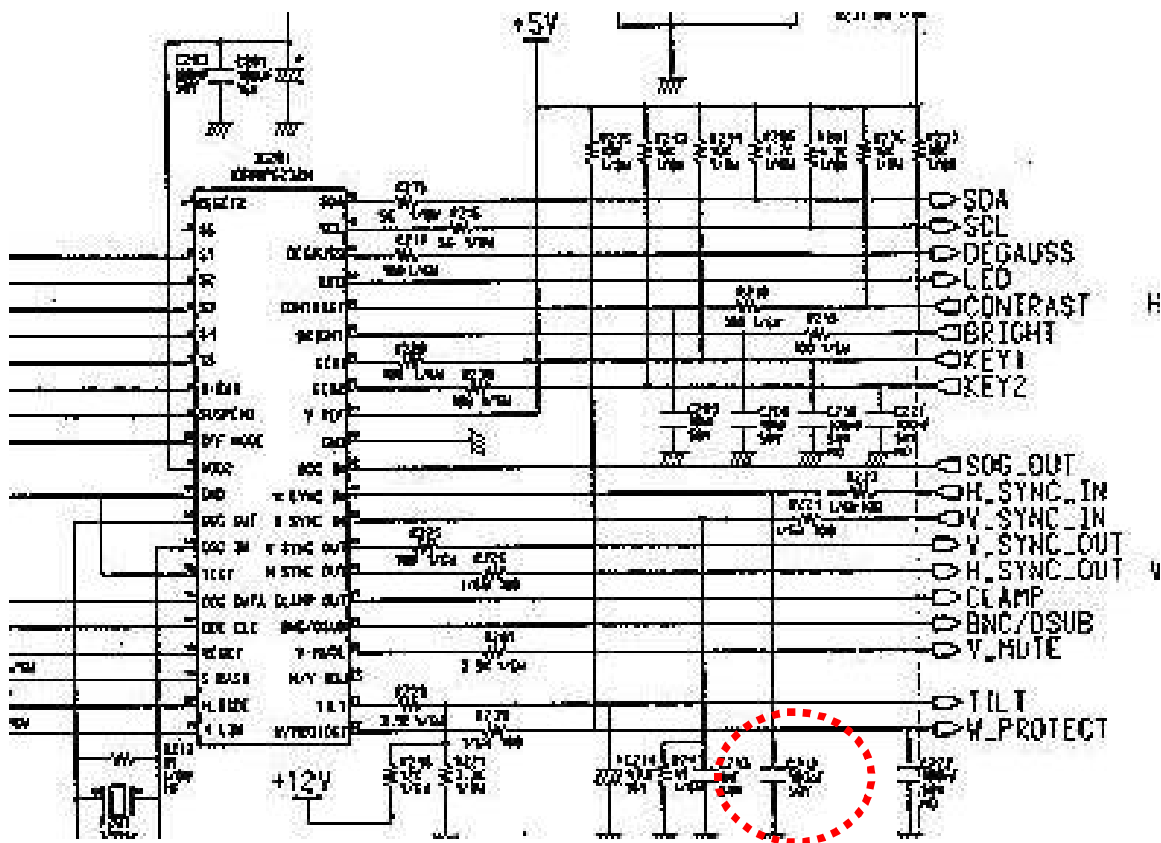
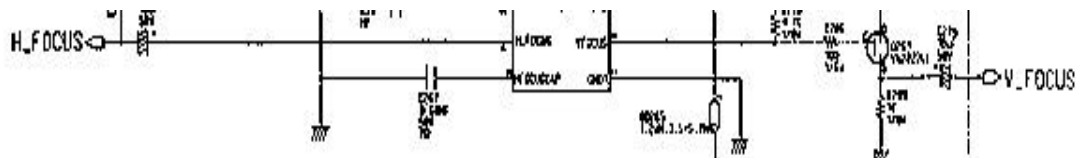
6. Check the C263 connected 7pin of IC261, it may be occurs a image jitter or no raster if the capacitor has a poor characteristic.



UF4001(T)

CN415
SUPLVAL





+12V
T

V_FOCUS

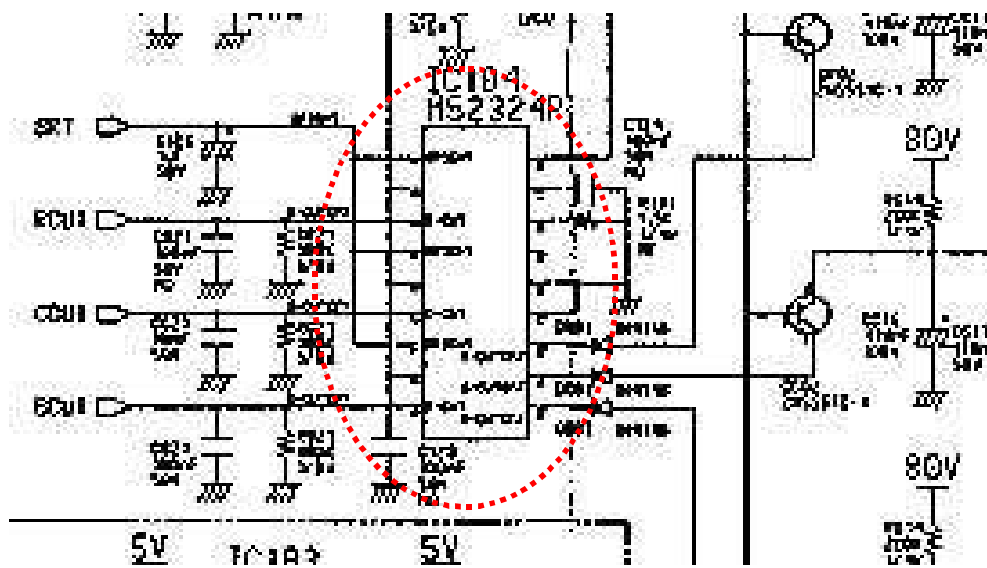
Defect Symptom

Change suddenly a image brightness in case the brightness is changing use the control button

CIRCUIT DIAGRAM

Model

PG17FST,PG19FST,PG17NF,PG19NF,PG19DF



Procedure

1. Major Defect Parts

Location	Description	Parts Number
IC104	KA2506	

1. Check the IC104, KA2506

2. Check a bad soldering whether around on the G2 GT-PIN

3.The wholly re-check the soldering and connector condition on the PBA.

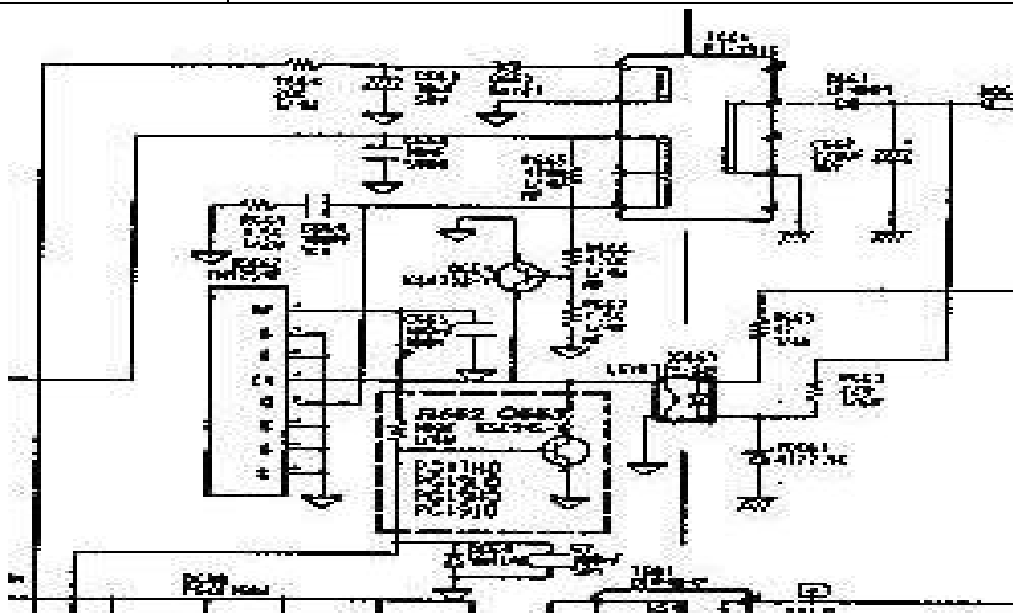
DEFECT SYMPTOM

No Power

CIRCUIT DIAGRAM

MODEL

PG17FST ,PG19FST ,PG17NF ,PG19NF ,PG19DF



PROCESS

1.MAJOR DEFECTIVE PARTS

Location		
R666,R665	Res 470K, 1/4W	
IC662	TNY254P	
D632	Diode 31DF6	
D608	P6KE160A	
IC601	DP308P	

1.Check using DVM R666,R665 whether a short or open condition

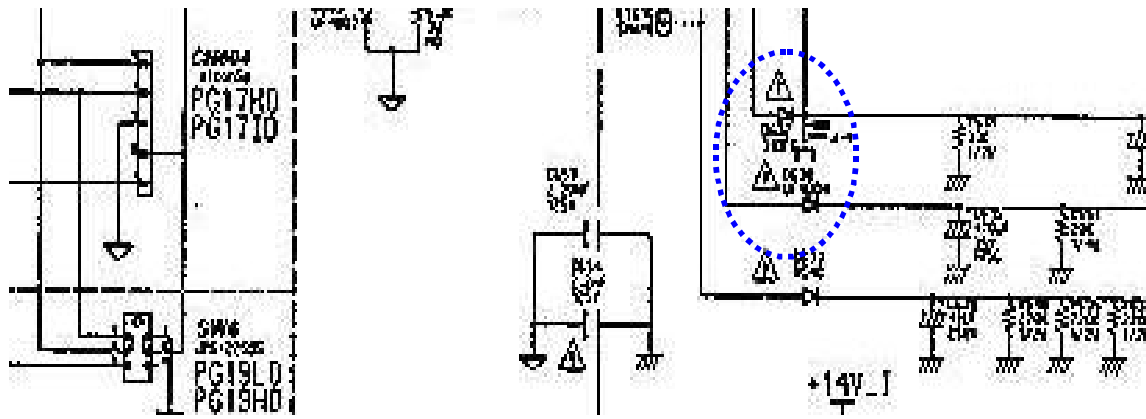
2.Check D632, D608 whether a poor condition.

3. Check using DVM between 1pin and 2pin of IC601 whether a low impedance.

4. Check the secondary rectifier circuits as follow.

-> D632, D636, D637, D634,

5. If it can't find a bad parts above process, replace IC662 or T601.



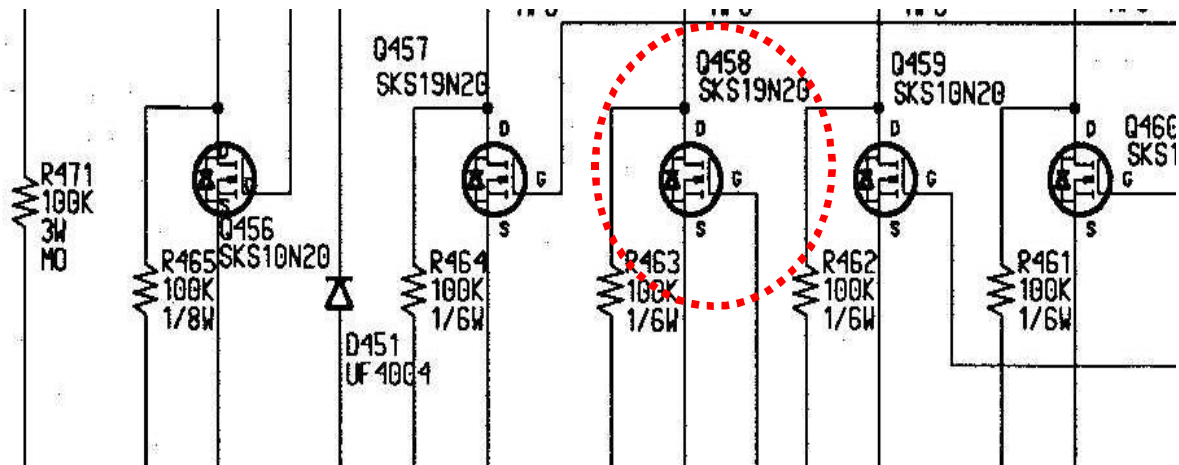
Defect Symptom

Bad a horizontal linearity

Circuit Diagram

Model

PG17FST, PG19FST, PG17NF, PG19NF, PG19DF



Procedure

1. Major Defect Parts

Location	Description	Parts Number
Q458	SKS10N20	

1. Check a parts as follow.

- .Q462, Q456, Q457, Q458, Q459, Q460

- .Q451, 452, 453, 454, 455, 461

If above the parts has a defective condition, the linearity characteristic should be get worse.

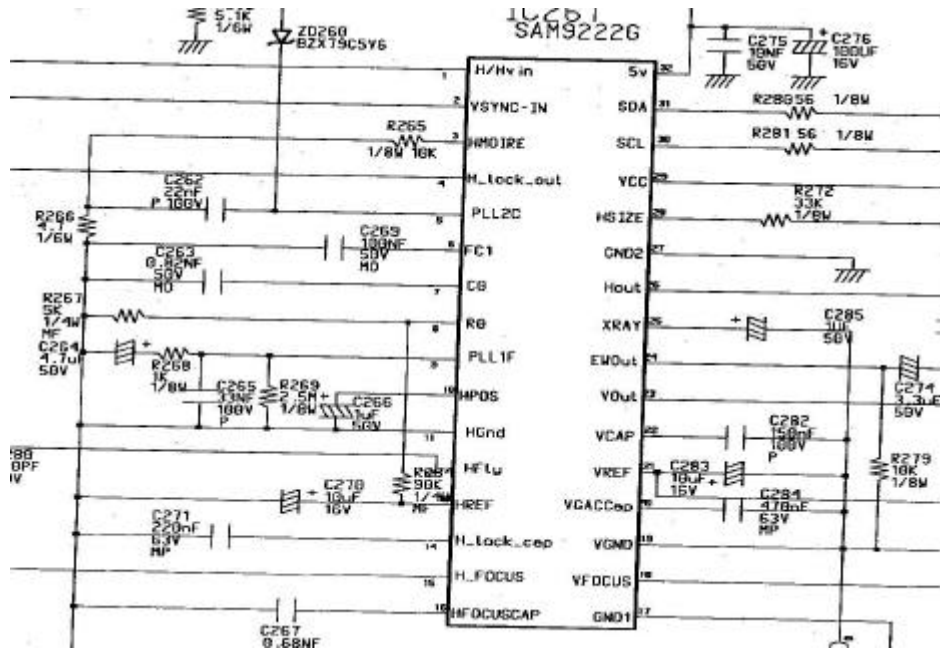
2.Check capacitors around S-correction circuit as follow.

- .C460, 452, 454, 455, 456, 457, 452, 451

In case above capacitors has a poor characteristics, a distortion occur a portion of image

DEFECT SYMPTOM

Image Shaking and get curved.



Procedure

1.Major Defective Parts

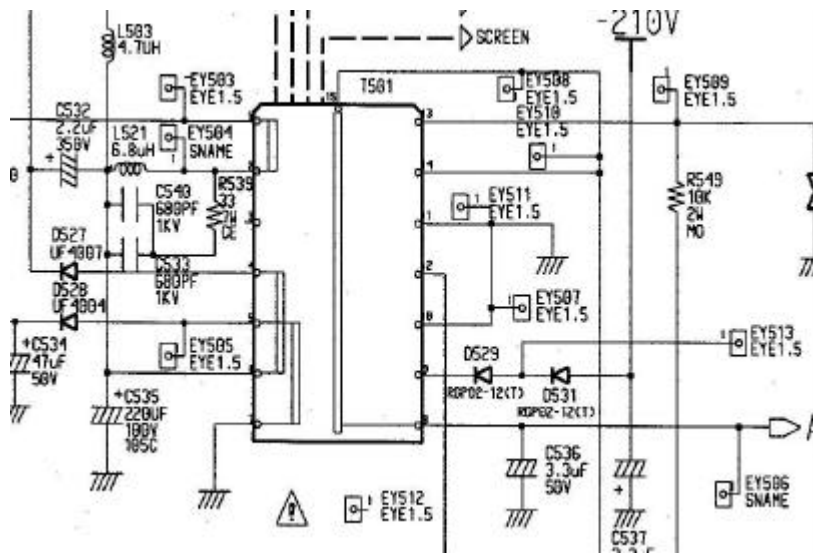
Location	Description	Parts Number
IC261	SAM9222G	

1. Check IC261 and replace it.
2. Check a soldering condition around the IC261

Defect Symptom

Image Shaking

Circuit Diagram



Process

1. Major Parts

Location	Description	Parts Number
T501	FBT	

1. Check Q524, If it has a short or open, Replace it.

Check a soldering condition for Q524

2. Check Q522, Q523, Q521

3. Check a 9pin of IC501 whether a existing output waveform.

4. If not, Check C525, D522, D530

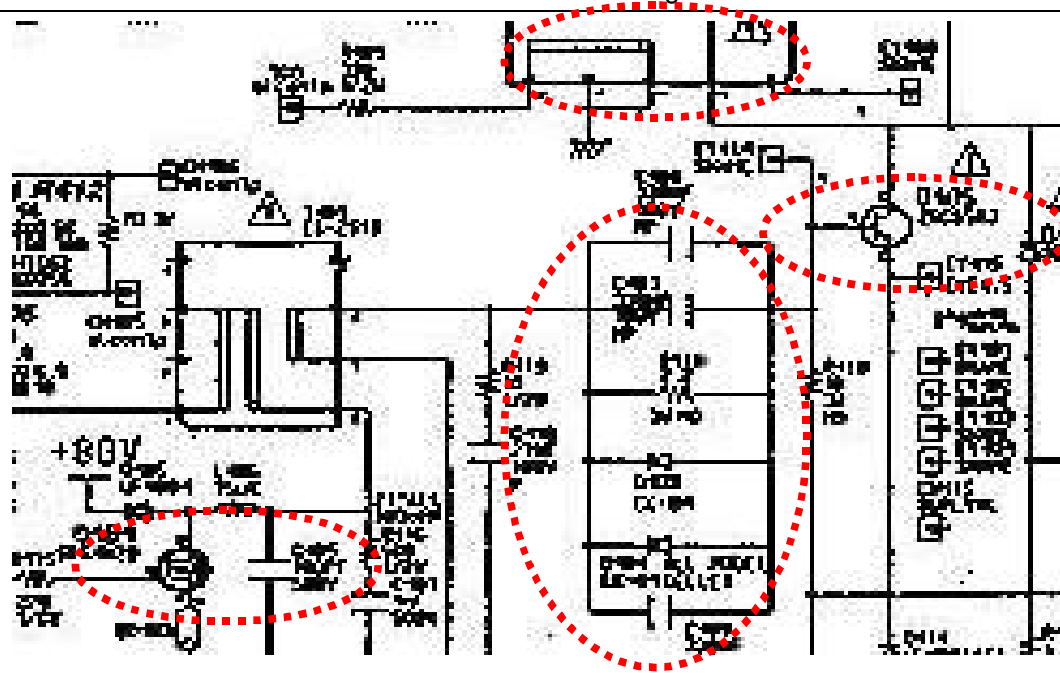
Replace IC501 in case output waveform from the 9pin of IC501 doesn't existing although C525, D522, D530 and soldering condition around IC501 is good.

5. If above all of parts has maintain a good characteristic, Replace the FBT.

Defect Symptom

H-size is abnormally narrow
Q405 is continuously failed

Circuit Diagram



Process

1. Major Parts

Location	Description	Parts Number
T402		
Q405	2SC5583	
Q403	IRF740	
T401		

C408,C403	330nf, 100V, MP	
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1.If the H-size is abnormally narrow, Check Q403,T402 and components around Q403 - R436, D437 and so on.

2.If the Q405 is continuously shorted, Check the C403,408,D409,D404 whether a poor characteristics.

Also, Check the T401, Q404

Regarding the transformer, Replace it at once.