

HITACHI BULLETIN

M1LXU & A3LXU POWER SUPPLY

TECHNICAL NOTES

NOTE: Component values and identifications vary from M1LXU to A3LXU chassis. The attached drawing is a block diagram applicable to both chassis.

A3LXU uses 3 transistors instead of IC902.

The secondary drawing used on the following page is for A3LXU.

REPAIR PROCEDURE:

POWER SUPPLY "DEAD"

Fuse blown - check D902 short
 check IC902 short
 check IC903A short

Fuse O.K.: - check 160V Pin # 3 IC902
 check 12V (60Hz) WAVE at ZD901

POWER SUPPLY STARTS & SHUTS DOWN: Disconnect VCC at H.O.P collector to ensure shut down is not caused by deflection or X-ray.

Check negative voltage at D906

Check at approximately 0 volts IC902 Pin #1

Check negative voltage between -2.8 to -3.5 IC902 Pin #2

Check if IC903 and Q901 are open.

SECONDARY VOLTAGE DROPS WHEN SET IS TURNED ON

Check Pin # 5 IC902 (OFF = negative voltage -2.8V, ON = negative voltage -4V)

Check ZD902-IC903-Q901 ZD905 if short.

A3LXU only:

When set is turned on: 11 Volts at collector Q90A - is on for 3 seconds only, because the horizontal deflection is defective. Use an external Power Supply (15 V approx.) at Q90A to trouble shoot in the horizontal deflection section.

COMPONENT DESCRIPTION:

ZD901 Start up pulse from 60Hz
 D907 Return to feedback Pulse
 D906 Negative Voltage Supply
 D904 Bias (0 Volts) for Pin #1 IC902
 R911 Determines the output voltage of power supply.
 IC903 Variable control element for the power supply.

SAFETY COMPONENT:

a) Q903 (M1LXU) will shut down the power supply if the secondary current or voltage (30V maximum) becomes excessive.

Q90C (A3LXU) will shut down power supply if the secondary voltage (20V maximum) becomes excessive.

b) Should the Power Supply Regulator not work properly) -

ZD902: Ensure output voltage does not exceed 50V

ZD905 & Q901: Ensure output current does not exceed 800MA.

TECHNICAL NOTES:

MODEL 50EX12B (AP32F CHASSIS)

Intermittent or very bad convergence (similar phenomena as if a power convergence IC would be short)

Check IC1105 for IC short. (IC1105 is installed at IC1101 location on PCB). See service manual #0046 for part number and circuit descriptions.

COMPONENT REPLACEMENT

Due to the rise in component prices, we are receiving a lot of calls from technicians complaining of:

- 1) Jail Bars after replacing Fly Back Transformer. Some replacement Fly Back Transformers (not original) will produce this phenomena.
- 2) Black Bar on the left side of picture (blanking) after replacing Horizontal Output Transistor. Some types of Horizontal Output replacements (not the original) will cause this phenomena.

VCR REMOTE INCOMPATIBILITY

VCR model VTM190 can only be operated with the VTM-190 remote control.

IMPORTANT

SOME OF OUR VCR MANUALS CONTAIN MORE THAN ONE MODEL SO IT IS THEREFORE IMPORTANT WHEN ORDERING A PART, TO MAKE SURE THAT THE PART ORDERED IS COMPATIBLE WITH THE MODEL CONCERNED.

EXAMPLE: THE MICROPROCESSOR FOR MODEL VTF-380A IS PART NUMBER CK10722.



TECHNICAL BULLETIN - BULLETIN TECHNIQUE

No. TB0240

REF:

DATE: 12 FEB., 1996

ITEM: PTV

MODEL/ MODÈLE: 50EX12B

DESTINATION: H - T

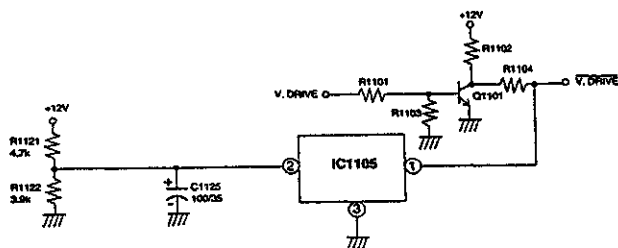
SUBJECT/SUJET: CONVERGENCE PROBLEM CAUSED BY IC1105.

When IC1105 is replaced, the following modification should be performed:

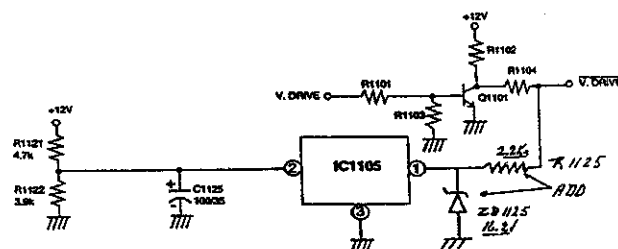
WARNING:

IC1105 is located in IC1101 location on PCB. Also, IC1105 Pin numbering is reversed of PCB diagram.

BEFORE



AFTER



R1125 (2.2KΩ 1/16W) should be installed in series with Pin #1 of IC1105 (Part # 0700045)

ZD1125 (16.2Volts) should be installed parallel with Pin 1 and 3 of IC1105 (Part # 2334243)

TECHNICAL BULLETIN - BULLETIN TECHNIQUE

No. TB0241

REF:

DATE: 26 FEB., 1996

ITEM: CTV

MODEL/ MODÈLE: BELOW

DESTINATION: H - T

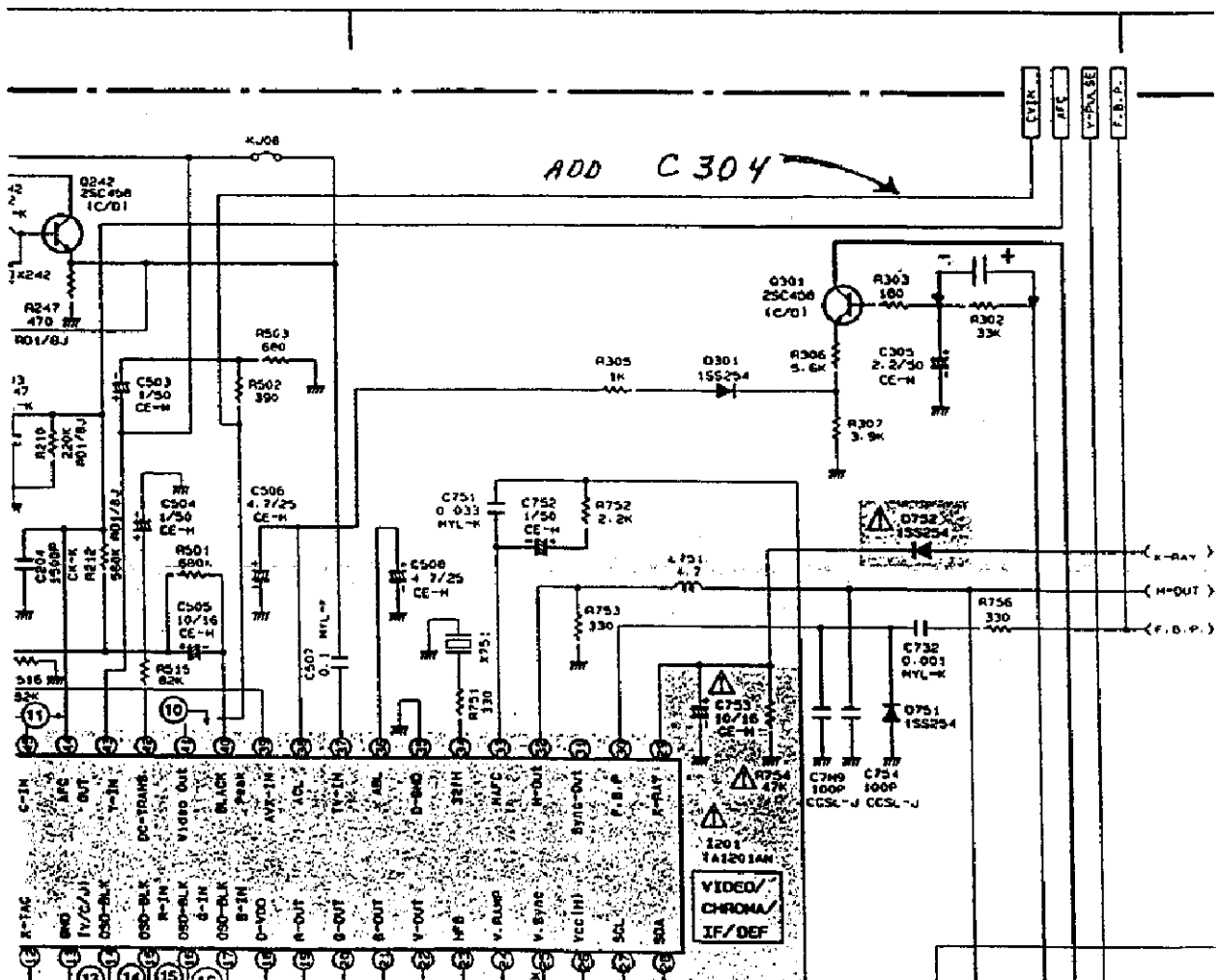
SUBJECT/SUJET: SHUTDOWN PROBLEM - MODEL 27CX5 - 27CX25 CHASSIS M3LXU

IMPORTANT NOTICE

If you have experienced a shutdown problem with either of the above mentioned models, please add capacitor C304 - 0.47 μ F/50V. (Part # 0800001) parallel to R302, and secure with silicone glue.

The physical location on the PCB of R302 is between vertical section and video audio auxiliary jack. See diagram below.

This modification must be performed in the customer's home, and a flat rate of \$40.00 will be paid.



TECHNICAL BULLETIN

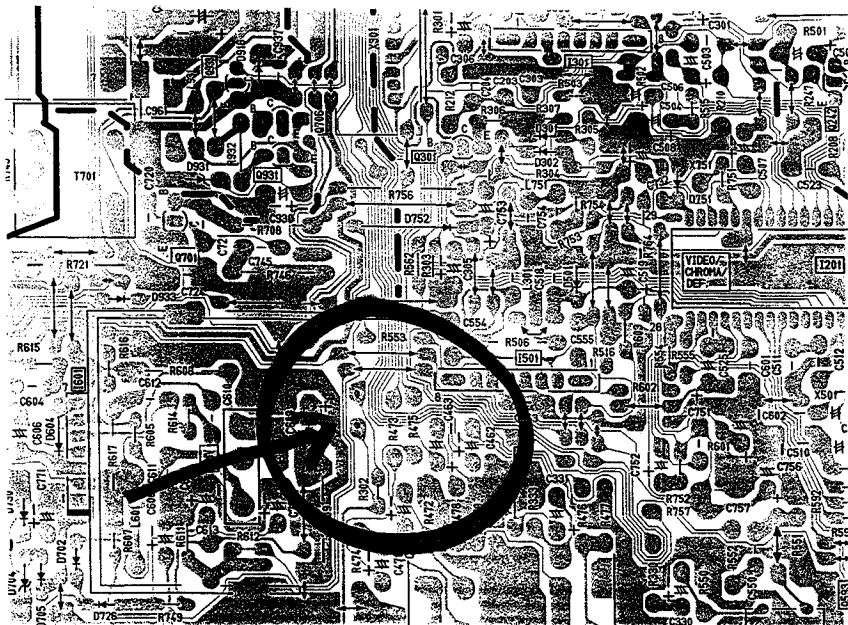
No. TB0241

REF:

DATE: 26 FEB, 1996

SUBJECT/SUJET: MODEL 27CX5 - 27CX25 CHASSIS M3LXU

We recommend using the 2 existing holes to install the C304 and installing the capacitor on the component side (see diagram below).



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& SERVICE DEPARTMENT

**HITACHI**

T E C H N I C A L - B U L L E T I N

NO. TB 0226 *JP* REF : _____ DATE: AUG 4, 1995
ITEM: C.T.V. MODEL/MODELE: A3LXU DESTINATION: H.T.
SUBJECT/SUJET: T.V. DEAD (LOCKUP) / T.V. MORTE (INOOPERANTE)

If the above intermittent phenomena occurs only when the customer changes the channels while the CCD (Close Caption Display) is in operation:-

IC 1001 part number # CP00201 has to be replaced.

Important: All Defective IC's have to be returned with the Warranty Claim.

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PARTS & SERVICE DEPARTMENT

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POINTE CLAIRE, QUEBEC
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HITACHI BULLETIN

HITACHI (HSC) CANADA INC.

TECHNICAL NOTES

FH92XS (20MA1)

1) PROBLEM: INTERMITTENT SHUT-DOWN

Replace C725 for 1 μ F TO 10 μ F/25V.

Add diode (same type) with D710.

2) WARNING: (ANY TYPE OF PROBLEM)

It is important to verify the two following VCC lines & components:

Check 12 Volts (C704)

Check 25 Volts (C705)

M3LXU (27CX5)

PROBLEM: INTERMITTENT SHUT-OFF

Make sure the 560PF under PCB is not touching against X751 Crystal. If necessary, please add silicone glue.

M3LXU (ALL)

1) Poor linearity at top (elongated)

Replace C602 from 2.2 μ F Electrolyte to 2.2 μ F Tantalum (Pin #24 IC201)

2) Picture is delayed (stays blank) when PinP signal in SWAP mode is changed.

Delete Diode DA07 on P/P PWB.

VME35/39

INTERMITTENT CONTROL PANEL

Cold solder PG1950 plug.

HITACHI (HSC) CANADA INC.

TECHNICAL BULLETIN

No. TB0239

REF:

DATE: 12 FEB., 1996

ITEM: CTV

MODEL/ MODÈLE: 27CX5B-27CX6B

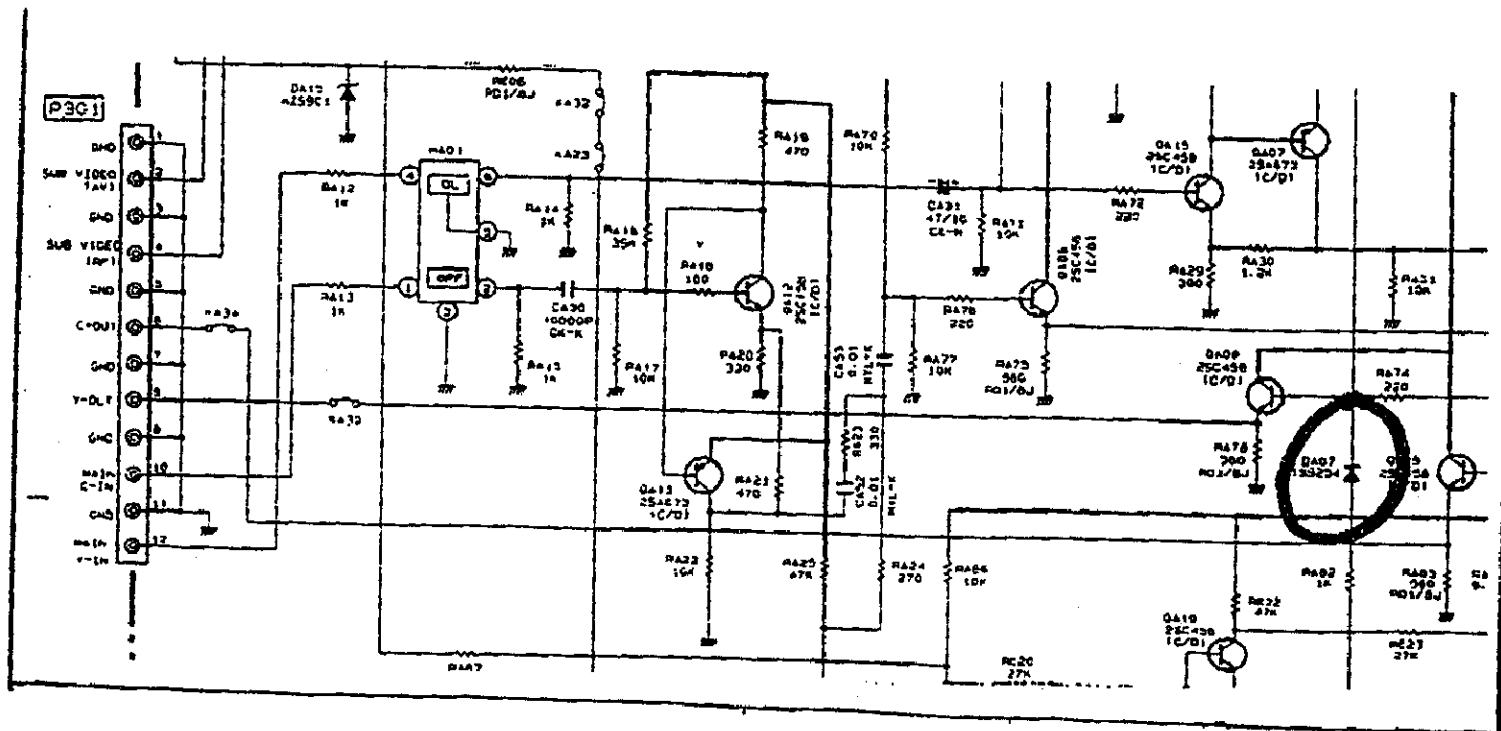
DESTINATION: H - T

SUBJECT/SUJET: BLANK OR DELAYED PICTURE WHEN ON PinP SELECTION.

Picture stays blank or is delayed when the signal of PinP (auxiliary input) is changed and unit is in SWAP mode.

Countermeasure:

Delete diode DA07 from PinP PWB. Schematic diagram below: -



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