

**Display**Date: **December 17, 2001**Model: **PVM-5041Q, *PVM-6041QM***Subject: **MANUAL CORRECTION—SAFETY
RELATED ADJUSTMENTS**Serial No: **ALL***Italicized information in green applies to Europe, Middle East and Africa.***DESCRIPTION**

1. Correct the following service manuals as shown in Figure 1:
 - PVM-5041Q Service Manual
 - PVM-6041QM Service Manual
2. Replace page 18 of the PVM-5041Q Service Manual with the appropriate page attached. (See the model listed in the upper left corner.)
3. Replace page 18 of the PVM-6041Q Service Manual with the appropriate page attached. (See the model listed in the upper left corner.)

NOTE: Changes to page 18 are noted with **[Bold]** text.



40	41	42	44

SECTION 6 DIAGRAMS
6-5 PRINTED WIRING BOARDS AND SCHEMATIC DIAGRAMS

Part replaced (☑)	Adjustment (☒)
IC601, IC651, PH602, C655, R653, R655, R656, R657, RV651	RV651 (B+ MAX)
Q1601, Q1602, Q1603, D1601, D1602, D1603, D1604, D1605, C1601, C1602, R1601, R1602, R1603, R1604, R1605, R1606, R1607, R1608, R1628, R1629, R1630, RV1601, RV1603	RV1603 (B+ MAX IN DC POWER INPUT MODE)
IC502, Q833, Q834, Q835, Q836, D835, D836, C519, C814, C843, C844, C845, C846, C847, C848, RV833, R523, R850, R851, R852, R853, R854, R855, R856, R857, R858, R859, R861, R862, R863, NL801, R860	R833 (HOLD-DOWN)

ADD

45	46	47	48

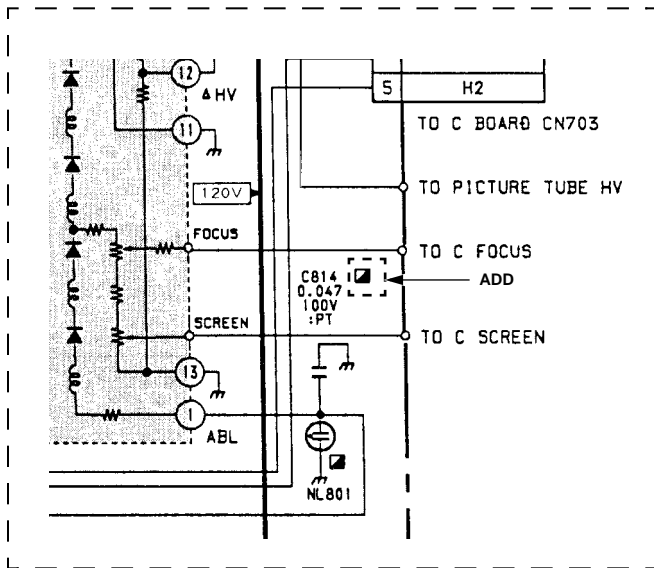


Figure 1

SECTION 4

SAFETY RELATED ADJUSTMENTS

4-1. SAFETY RELATED ADJUSTMENTS

B+ MAX CONFIRMATION (RV651)

The following adjustments should always be performed when replacing the following components (marked with on the schematic diagram).

on G board : (Power supply block)

IC601, IC651, PH602, C655, R653, R655, R656, R657, RV651.

1. For US model, supply 130V $\pm_{-0}^{+0.5}$ V AC with variable auto-transformer.
2. Receive a dot signal.
3.
 - CONTRAST Minimum
 - BRIGHTNESS Minimum
4. Connect a digital multimeter to RY1601 pin-⑦ of D board.
5. Turn RV651 on the G board fully clockwise. Confirm that the voltage of RY1601 pin-⑦ is less than 41.9V DC.
6. If step 5 is not satisfied, readjust the RV651. After adjusting, fasten RV651 in place with epoxy.

B+ MAX IN DC POWER INPUT MODE, CONFIRMATION (RV1603)

The following adjustments should always be performed when replacing the following components (marked with on the schematic diagram).

on D board :

Q1601, Q1602, Q1603, D1601, D1602, D1603, D1604, D1605, C1601, C1602, R1601, R1602, R1603, R1604, R1605, R1606, R1607, R1608, R1628, R1629, R1630, RV1601, RV1603.

1. Supply DC 12V $\pm_{-0.0}^{+0.4}$ V from DC 12V IN connector.
2. Receive a dot signal.
3.
 - CONTRAST Minimum
 - BRIGHTNESS Minimum
4. Connect a digital multimeter to C1605 positive + side of D board.
5. Turn RV1601 on the D board fully clockwise. Confirm that the voltage of C1605 + pin is less than 41.9V DC.
6. If step 5 is not satisfied, readjust the RV1603. After adjusting, fasten RV1603 in place with epoxy.

HOLD-DOWN CIRCUIT CONFIRMATION (RV833) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with on the schematic diagram).

on D board:

IC502, Q833, Q834, Q835, Q836, D835, D836, C519, C843, C844, C845, C846, C847, C848, RV833, R523, R850, R851, R852, R853, R854, R855, R856, R857, R858, R859, R860, R861, R862, R863,

on P board: NL801, T802 (FBT), C814

1. Receive an entire white signal.
2.
 - CONTRAST Maximum
 - BRIGHTNESS Maximum
3. Connect a digital multimeter to the TP85 (CN503 pin-⑥).
4. Confirm the voltage is 14.1 \pm 3.0V DC.
5. Receive a dot signal.
6. Connect an ammeter between D board CN503 pin-⑧ and P board CN801 pin-⑧.
7. Adjust BRIGHTNESS and CONTRAST so that the current is IABL = \pm_{-30}^{+130} μ A.
8. Apply an external DC voltage gradually to TP85. When the voltage becomes $\pm_{-0.1}^{+16.4}$ V DC, confirm the HOLD-DOWN circuit operates immediately and raster disappears.
9. When external DC voltage at TP85 becomes $\pm_{-0.1}^{+15.7}$ V DC, confirm the HOLD-DOWN circuit doesn't operate.
10. Receive an entire white signal.
11. Adjust with BRIGHTNESS and CONTRAST controls so that the current is IABL = \pm_{-30}^{+300} μ A.
12. Apply DC voltage of $\pm_{-0.1}^{+16.1}$ V to TP85. Confirm the HOLD-DOWN circuit operates immediately and raster disappears.
13. With the same set-up as steps 10 and 11, supply $\pm_{-0.1}^{+15.5}$ V DC to TP85. Confirm that the HOLD-DOWN circuit doesn't operate.
14. When above specifications are not satisfied, readjust RV833. After adjusting, fasten RV833 in place with epoxy.

SECTION 4

SAFETY RELATED ADJUSTMENTS

4-1. SAFETY RELATED ADJUSTMENTS

B+ ADJUSTMENT AND B+ MAX CHECK FOR SERVICING
(RV651)

The following adjustments should always be performed when replacing the following components (marked with on the schematic diagram).

on G board : (Power supply block)

IC601, IC651, PH601, C654, R653, R655, R656, R657, RV651.

1. Input the AC power supply voltage $240V_{-0}^{+1}$ V.
2. Input the monoscope signal.
3. Set as follows.
 - CONTRAST 80%
 - BRIGHTNESS 50%
4. Connect the digital multimeter to RY1601 pin-⑦ on the D board.
5. Adjust RV651 on the G board so that the +B voltage becomes 40.0 ± 0.1 V.
6. After adjusting RV651, fix it with an epoxy.
7. Input the AC power supply voltage $240V_{-0}^{+1}$ V.
8. Input the dot signal.
9. Set as follows.
 - CONTRAST Minimum
 - BRIGHTNESS Minimum
10. Check that the B+ voltage is below 41.9V.
If it is above this value, repeat from step 1.

B+ MAX IN DC POWER INPUT MODE, CONFIRMATION
(RV1603)

The following adjustments should always be performed when replacing the following components (marked with on the schematic diagram).

on D board :

Q1601, Q1602, Q1603, D1601, D1602, D1603, D1604, D1605, C1601, C1602, R1601, R1602, R1603, R1604, R1605, R1606, R1607, R1608, R1629, R1628, R1630, RV1601, RV1603.

1. Supply DC $12V_{-0.0}^{+0.4}$ V from DC 12V IN connector.
2. Receive a dot signal.
3.
 - CONTRAST Minimum
 - BRIGHTNESS Minimum
4. Connect a digital multimeter to C1605 positive + side of D board.
5. Turn RV1601 on the D board fully clockwise. Confirm that the voltage of C1605 + pin is less than 41.9V DC.
6. If step 5 is not satisfied, readjust the RV1603. After adjusting, fasten RV1603 in place with epoxy.

HOLD-DOWN CIRCUIT CONFIRMATION (RV833) AND READJUSTMENTS

The following adjustments should always be performed when replacing the following components (marked with on the schematic diagram).

on D board:

IC502, Q833, Q834, Q835, Q836, D835, D836, C519, C843, C844, C845, C846, C847, C848, RV833, R523, R850, R851, R852, R853, R854, R855, R856, R857, R858, R859, R860, R861, R862, R863.

on P board: NL801, T802 (FBT), C814.

1. Receive an entire white signal.
2.
 - CONTRAST Maximum
 - BRIGHTNESS Maximum
3. Connect a digital multimeter to the TP85 (CN503 pin-⑥).
4. Confirm the voltage is 14.1 ± 3.0 V DC.
5. Receive a dot signal.
6. Connect an ammeter between D board CN503 pin-⑧ and P board CN801 pin-⑧.
7. Adjust BRIGHTNESS and CONTRAST so that the current is $IABL = 180 \pm 30 \mu A$.
8. Apply an external DC voltage gradually to TP85. When the voltage becomes $16.4V \pm 0.1$ V DC, confirm the HOLD-DOWN circuit operates immediately and raster disappears.
9. When external DC voltage at TP85 becomes $15.7V \pm 0.1$ V DC, confirm the HOLD-DOWN circuit doesn't operate.
10. Receive an entire white signal.
11. Adjust with BRIGHTNESS and CONTRAST controls so that the current is $IABL = 300 \pm 30 \mu A$.
12. Apply DC voltage of $16.1V \pm 0.1$ V to TP85. Confirm the HOLD-DOWN circuit operates immediately and raster disappears.
13. With the same set-up as steps 10 and 11, supply $15.5V \pm 0.1$ V DC to TP85. Confirm that the HOLD-DOWN circuit doesn't operate.
14. When above specifications are not satisfied, readjust RV833. After adjusting, fasten RV833 in place with epoxy.