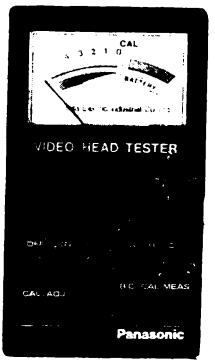
National / Panasonic

NATIONAL-PANASONIC
VIDEO HEAD TESTER VFK-0225
OPERATING INSTRUCTIONS



For correct operation, please read the contents of this Operating Instructions before use.

Matsushita Electric Trading Co., Ltd.

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Operating Instructions of National/Panasonic Video Head Tester VFK-0225

Introduction

This Video Head Tester, VFK-0225, detects and indicates the worn condition of the video head on the meter so that the actual condition of the video head is visually determined by the meter.
Please understand however that this tester should be used merely as a brief standard for confirmation of the wear of the video head, since the confirmation accuracy may not be precise enough due to the tester's own preciseness and various conditions of the video head involved.

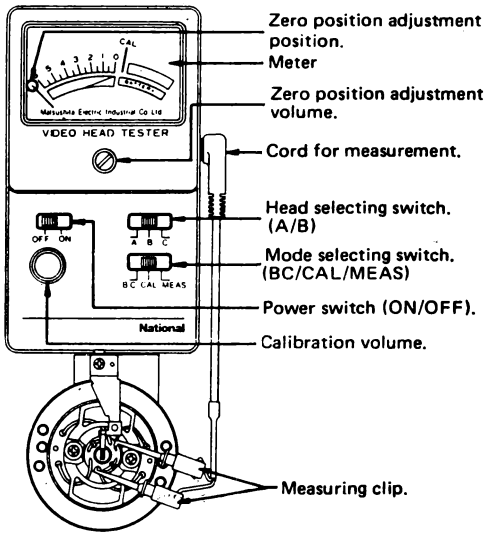
Precautions before use

Before checking any of the worn conditions of the video head with this tester, please make that the following preparations are correctly performed.

(1) **Cleaning of the video head.**
First, thoroughly clean the video head and the parts in contact with the tape transportation. Perform recording and playback, and confirm that the video heads are free from any of the soils or clogging.

(2) **Confirming the conduction of the video head coils and lead wires.**
With any of the conventional testers, check and confirm that the video head coils and lead wires conduct the current properly.
Remarks: Either RX100 or RX1K should be used to determine the resistance range.

Name and function of the parts



Remarks: Remove the solder from the lead wires before performing the measuring operation with this tester.

(1) Adjustment of the video head tester.

1-1. Zero-position adjustment

Confirm that the needle of the video head tester is in the zero-position adjustment position. If it is out of the position, adjust the needle with the zero-position adjustment volume so that it is precisely in the zero position.

1-2. Selecting the video head.

Depending on the video head to be tested, set the head selecting switch either to the Head A or to B.

Remarks: For selection of the Head A or B, refer to the table of the Head Selection Switch and the Value Measurement shown below.

Selection of the Head C is open circuit, then do not set to "C" portion.

1-3. Checking the battery voltage.

First, set the mode select switch to the "B.C" position. Then, turn the power switch ON and check the needle movement. If the needle swings within the battery scale, the battery voltage is correct. If it doesn't, replace it with a new battery.

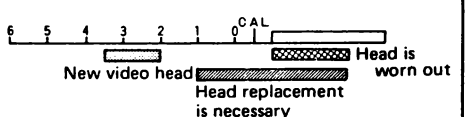
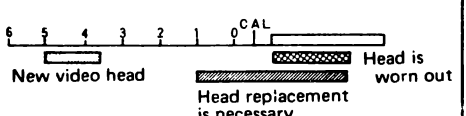
Remarks: Battery is replaceable with a layer-built dry cell (S-006P).

1-4. Adjustment of the calibration.

First, set the mode select switch to the "CAL" position. Then, align the needle position with the "CAL" scale using the calibration volume.

Remarks: When the head select switch is selected to the position of the designated head, perform the calibration adjustment in the position of the head designated.

Table of the Head Selection Switch and the Value Measurement.

Head Selecting Switch	Head Part Numbers	Applicable Models of the VTR	Value to be measured
A	VEH0115	NV-8600 NV-8620EM	
B	VEH0103 VEH0099 VEH0121	NV-8610F, NV-8400 NV-2000 NV-2010B, NV-300, NV-333, NV-340. NV-8610 NV-7000, NV-7200 NV-3000 NV-7500EM, NV-7800	

(2) Measurement Procedure

2-1. As shown in the video head replacement method, remove the lead wires connected to the two video heads and the four solders securing the lead wires. For the exchanging method, refer to our service manual.

Remarks:

If only the checking is performed, there is no need to remove the upper cylinder.

To check the video head status, you may not necessarily remove the lead wires that secure the both sides of the respective video heads, but remove the lead wire from one side only.

2-2. Connect the measuring clip to the [illegible] through the lead wire) which is disengaged from the solder.

2-3. Set the mode select switch to the "MEAS" position. Theh, set the power switch ON. The needle swings to indicate the worn condition.

Remarks:

Since a slight difference may exist in the meter value between the two heads, please check both of the video heads.

Precautions for use.

(1) When the head select switch is in the Head A position, the actual range of the needle swing may vary a little from the other when the Head B is selected.

(2) When either the video head coil or the lead wire is disconnected, the needle does not swing, but stays in the power OFF position.

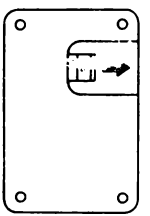
(3) When either the video head coil or the lead wire is short-circuited, the meter does not indicate the correct value, where the needle stays in the extreme right end of the red zone when the head select switch is turned to the head A, while the needle remains in the zero scale when the head B is selected.

(4) Even though the video head is soiled, the needle will swing itself by the effect of the projected amount, independently of the soil deposited.

(5) Should any part of the video head is broken or missing, the needle movement will vary, depending on the degree of the breakage exists.

How to replace the battery.

If the voltage output from the battery terminal has been lowered by continuous discharge, meter needle indicates the short voltage. If so, please replace it with a new battery in the following procedures.



(1) Push the rear lid to the arrow direction for removal and draw out the used battery from the compartment. Then, install a new battery in it.

(2) After the new battery is installed, check to see if the battery voltage is correct. Refer to the preceding Section, 1-3, for checking the battery voltage.

Inhibitive instructions.

In order to preserve the original performance of this tester satisfactorily, please do not attempt to perform the following under all circumstances.

(1) Readjustment of the internal volume and/or coils.

(2) Remodelling. For example, should you change the length of the lead wire at your discretion, the meter will malfunction, indicating wrong values.