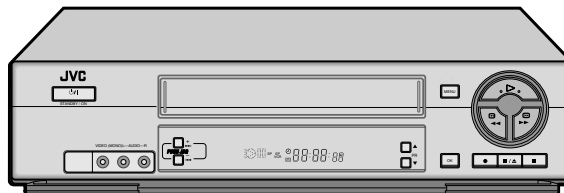


# JVC

## SERVICE MANUAL

### VIDEO CASSETTE RECORDER

## HR-J2010T/J770KR



**Hi-Fi VHS**  
**SQPB**  
**G-CODE**

Regarding service information other than these sections, refer to the HR-VP680U service manual (No. 82777). Also, be sure to note important safety precautions provided in the service manual.

### SPECIFICATIONS *(The specifications shown pertain specifically to the model HR-J2010T)*

#### GENERAL

Power requirement	: AC 110 V~, 60 Hz
Power consumption	
Power on	: 19 W
Power off	: 2.5 W
Temperature	
Operating	: 5°C to 40°C (41°F to 104°F)
Storage	: -20°C to 60°C (-4°F to 140°F)
Operating position	: Horizontal only
Dimensions (W x H x D)	: 400 mm x 94 mm x 278 mm
Weight	: 3.3 kg (7.3 lbs)
Format	: VHS NTSC standard
Maximum recording time	
SP	: 210 min. with ST-210 video cassette
EP	: 630 min. with ST-210 video cassette

#### VIDEO/AUDIO

Signal system	: NTSC-type color signal and EIA monochrome signal, 525 lines/60 fields
Recording/ Playback system	: DA-4 (Double Azimuth) head helical scan system
Signal-to-noise ratio	: 45 dB
Horizontal resolution	: 240 lines
Frequency range	
Normal audio	: 70 Hz to 10,000 Hz
Hi-Fi audio	: 20 Hz to 20,000 Hz
Input/Output	: RCA connectors (IN x 2, OUT x 1)

#### TUNER

Tuning system	: Frequency-synthesized tuner
Channel coverage	
VHF	: Channels 2 – 13
UHF	: Channels 14 – 69
CATV	: 113 Channels
RF output	: Channel 13 75 Ω, unbalanced

#### TIMER

Clock reference	: Quartz
Program capacity	: 1-year programmable timer/ 8 programs
Memory backup time	: Approx. 3 min.

#### ACCESSORIES

Supplied accessories	: RF cable (F-type) Infrared remote control unit "AA" battery x 2
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*Specifications shown are for SP mode unless otherwise specified.  
E. & O.E. Design and specifications subject to change without notice.*

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The following table indicate main different points between models HR-VP680U, HR-J770KR and HR-J2010T.

ITEM	MODEL	HR-VP680U	HR-J770KR	HR-J2010T
POWER VOLTAGE (RATING)		120V,60Hz	110 – 220V(60Hz)	110V(60Hz)
POWER PLUG		UL,CSA	KOREAN	SASO
POWER SAVE		USED	NOT USED	←
FRONT PANEL COLOR		BLACK	CHMP	←
STEREO DECODER		MTS	A2	MTS
RF OUT CH		4CH	←	13CH
SUMMER TIME ADJ.		USED	NOT USED	←
VCR PLUS+		VCR+	G-CODE	←
AUTO CLOCK		USED	NOT USED	←
JUST CLOCK		USED	NOT USED	←
FF/REW TIME		150"	2'30"	←
VIDEO RCA IN		NOT USED	USED	←
AUDIO RCA IN		NOT USED	USED	←

The following table indicate different parts number between models HR-VP680U, HR-J770KR and HR-J2010T.

### PACKING AND ACCESSORY ASSEMBLY <M1>

REF. NO	ITEM	MODEL	HR-VP680U	HR-J770KR	HR-J2010T
301	PACKING CASE		LP30658-007A	LP30658-030A	LP30658-028A
306	REMOTE CONTROLLER		LP20303-014A	LP20878-008A	←
306A	COVER(BATTERY)		LP40225-002A	LP40610-002A	←
△ 310	INST.BOOK(EN)		LPT0342-001A	—	—
△ 310	INST.BOOK(KO)		—	LPT0427-001A	—
△ 310	INST.BOOK(EN.CH)		—	—	LPT0426-001A
316	WARRANTY CARD		—	BT-56009-2M	—
317	REGIST.CARD		BT-51020-2	—	—
318	Q.S.SHEET		LPT0342-002A	—	—

### CABINET AND CHASSIS ASSEMBLY <M2>

REF. NO	ITEM	MODEL	HR-VP680U	HR-J770KR	HR-J2010T
△ 501	FRONT PANEL ASSY		LP10289-006A	LP10289-036B	LP10289-041B
501A	CASSETTE DOOR		LP20868-001A	LP20868-014A	←
501C	DISPLAY WINDOW		LP20869-006A	LP20869-050A	LP20869-059A
△ 502	TOP COVER		LP10013-021C	LP10013-031C	←
503	TAP SCREW		QYTDSF3010M	QYTDSF3010R	←
△ 511	BOTTOM CHASSIS		LP10108-011A	LP10108-002D	←
△ 517	POWER CORD ASSY		QMPD190-170-K	PQ21730N	QMP73J0-170
518	CLEANER ASSY		—	LP40369-001D	←
518A	CLEANER ROLLER		—	PQ46418-1-2	←
518B	CLEANER		—	PQ46419-1-2	←
518C	CLEANER ARM		—	LP30407-001D	←
523	PC SUPPORT		*LP40628-001A	LP40628-001B	←

**Notes :** Mark — is not used.  
 Mark ← is same as left.  
 Mark \* reference model was also changed.

MAIN BOARD ASSEMBLY <03>

REF. NO	ITEM	MODEL	HR-VP680U	HR-J770KR	HR-J2010T
PW1	MAIN BOARD ASSY		LPA10088-05C1	LPA10088-22D1	LPA10088-25J1
IC6501	IC		UPC1854AGT-X	—	UPC1854AGT-X
Q5101	POWER MOS FET		2SK3048-LT	2SK2632-CB14	2SK3048-LT
Q6030	TRANSISTOR		2SB1218A/QR/-X	←	—
Q6551	TRANSISTOR		2SC1740S/QRS/-T	—	2SC1740S/QRS/-T
D3007	SI DIODE		—	1SS355-X	←
D3009	SI DIODE		—	DA204U-X	←
D3013	SI DIODE		—	DA204U-X	←
D5105	SI DIODE		—	1SS133-T2	—
D6551	ZENER DIODE		MTZJ10B-T2	—	MTZJ10B-T2
R2007	MG RESISTOR		—	NRSA02J-393X	←
R2010	MG RESISTOR		—	NRSA02J-123X	←
R2219	MG RESISTOR		—	NRSA02J-393X	←
R2224	MG RESISTOR		—	NRSA02J-123X	←
R2603	MG RESISTOR		—	NRSA02J-101X	←
R3003	MG RESISTOR		—	NRSA02J-102X	←
R3014	MG RESISTOR		—	NRSA02J-102X	←
R3082	MG RESISTOR		NRSA02J-102X	—	—
R3087	MG RESISTOR		—	NRSA02J-102X	—
R3236	MG RESISTOR		—	NRS181J-103X	←
R3240	MG RESISTOR		NRSA02J-103X	—	—
R3241	MG RESISTOR		NRSA02J-103X	—	—
△ R5001	RESISTOR		QRZ9046-475Z	—	—
R5108	MG RESISTOR		NRSA02J-152X	NRSA02J-222X	NRSA02J-152X
R5111	MG RESISTOR		—	NRSA02J-821X	—
R5112	MG RESISTOR		—	NRSA02J-221X	—
R5306	MG RESISTOR		NRSA02J-823X	NRSA02J-563X	NRSA02J-823X
R6030	MG RESISTOR		NRSA02J-332X	←	—
R6032	MG RESISTOR		NRSA02J-123X	—	NRSA02J-123X
R6033	MG RESISTOR		NRSA02J-123X	—	NRSA02J-123X
R6053	MG RESISTOR		NRSA02J-102X	←	—
R6501	MG RESISTOR		NRSA02J-102X	—	NRSA02J-102X
R6502	MG RESISTOR		NRSA02J-334X	—	NRSA02J-334X
R6503	MG RESISTOR		NRSA02J-124X	—	NRSA02J-124X
R6504	MG RESISTOR		NSA02J-302X	—	NSA02J-302X
R6505	MG RESISTOR		NRSA02J-512X	—	NRSA02J-512X
R6506	MG RESISTOR		NRSA02J-333X	—	NRSA02J-333X
R6507	MG RESISTOR		NRSA02J-333X	—	NRSA02J-333X
R6508	MG RESISTOR		NRSA02J-392X	NRSA02J-682X	NRSA02J-392X
R6509	MG RESISTOR		NRSA02J-122X	NRSA02J-682X	NRSA02J-122X
R6510	MG RESISTOR		NRSA02J-392X	NRSA02J-682X	NRSA02J-392X
R6511	MG RESISTOR		NRSA02J-122X	NRSA02J-682X	NRSA02J-122X
R6514	MG RESISTOR		NRSA02J-0R0X	—	NRSA02J-0R0X
R6515	MG RESISTOR		NRSA02J-0R0X	—	NRSA02J-0R0X
R6551	MG RESISTOR		NRSA02J-271X	—	NRSA02J-271X
R6552	MG RESISTOR		NRSA02J-101X	—	NRSA02J-101X
C20	NP E CAPACITOR		QEPF1HM-105Z	QEKJ1HM-105Z	←
C3002	CAPACITOR		—	NCB21EK-104X	←
C3018	TRIM CAPACITOR		—	QAT3725-300Z	←
C3019	CAPACITOR		NDC21HJ-180X	NDC21HJ-100X	←
C3024	E CAPACITOR		—	QEKJ0JM-476Z	←
C3025	CAPACITOR		—	NCB21HK-103X	←
C3028	E CAPACITOR		QETN0JM-108Z	QETL0JM-338	←
C3029	CAPACITOR		—	NCB21HK-103X	←
C3030	E CAPACITOR		—	QEKJ0JM-227Z	←
C3055	E CAPACITOR		—	—	QEKJ0JM-337Z
△ C5004	CAPACITOR		QCZ9094-472	QCZ9071-222	←
C5006	E CAPACITOR		QETM2DM-826	QEZ0374-826	QETM2DM-826
C5106	CAPACITOR		—	QCB11HJ-271Y	—
C5304	M CAPACITOR		QFLC1HJ-823Z	QFLC1HJ-563Z	QFLC1HJ-823Z
C5310	M CAPACITOR		QFLC1HJ-393Z	—	QFLC1HJ-393Z
C6008	CAPACITOR		NDC21HJ-100X	—	NDC21HJ-100X
C6023	MG RESISTOR		NRSA02J-0R0X	—	—
C6031	E CAPACITOR		QEKJ1CM-106Z	—	QEKJ1CM-106Z
C6501	E CAPACITOR		QERF1CM-226Z	—	QERF1CM-226Z
C6502	CAPACITOR		NCB21EK-104X	—	NCB21EK-104X
C6503	E CAPACITOR		QERF1HM-105Z	—	QERF1HM-105Z
C6504	E CAPACITOR		QERF1EM-475Z	—	QERF1EM-475Z
C6505	E CAPACITOR		QEKJ1CM-106Z	—	QEKJ1CM-106Z
C6506	E CAPACITOR		QERF1HM-104Z	—	QERF1HM-104Z

Notes : Mark — is not used.  
 Mark ← is same as left.

REF. NO	ITEM	MODEL	HR-VP680U	HR-J770KR	HR-J2010T
C6507	CAPACITOR		NCB21EK-473X	—	NCB21EK-473X
C6508	E CAPACITOR		QERF1HM-474Z	—	QERF1HM-474Z
C6509	CAPACITOR		NCB21EK-104X	—	NCB21EK-104X
C6510	E CAPACITOR		QERF1HM-105Z	—	QERF1HM-105Z
C6511	E CAPACITOR		QEKJ1HM-105Z	—	QEKJ1HM-105Z
C6512	E CAPACITOR		QEKJ1HM-105Z	—	QEKJ1HM-105Z
C6513	E CAPACITOR		QETN1HM-335Z	—	QETN1HM-335Z
C6514	E CAPACITOR		QETN1HM-106Z	—	QETN1HM-106Z
C6515	E CAPACITOR		QEKJ1HM-105Z	—	QEKJ1HM-105Z
C6516	E CAPACITOR		QEKJ1CM-106Z	—	QEKJ1CM-106Z
C6517	E CAPACITOR		QEKJ1CM-106Z	—	QEKJ1CM-106Z
C6518	E CAPACITOR		QEKJ1HM-105Z	—	QEKJ1HM-105Z
C6519	CAPACITOR		—	NCB21EK-223X	—
C6520	CAPACITOR		—	NCB21EK-223X	—
C7008	CAPACITOR		NCB21HK-223X	NCB21EK-223X	←
C7011	E CAPACITOR		QEKJ0JM-476Z	QEKJ0JM-227Z	←
△ TB1	TERMINAL BOARD		PQ21910-3-5	PQ21910-8-5	PQ21910-10
J1	PIN JACK		—	QNN0285-002	←
J7101	PIN JACK		QNN0287-001	QNN0288-002	←
FW3001	PARA RIBON WIRE		—	QUM022-13A4A4	←
VA5001	VARISTOR		QAF0023-431Z	—	QAF0023-431Z
VA5003	VARISTOR		—	QAF0026-621	—
PC5101	IC(PHOTO COUPLER)		PS2501-1	PS2561L1-1/WL/	←
△ F5001	FUSE		QMF51N2-1R25J1	QMF51E2-2R0	←
TU6001	TUNER		QAU0142-002	QAU0125-001	QAU0177-001
S6050	SLIDE SWITCH		QSW0460-001	←	—

#### DEMOD BOARD ASSEMBLY <14>

REF. NO	ITEM	MODEL	HR-VP680U	HR-J770KR	HR-J2010T
PW1	DEMOD BOARD ASSY		—	PB11091A	—

#### MINI FRONT BOARD ASSEMBLY <28>

REF. NO	ITEM	MODEL	HR-VP680U	HR-J770KR	HR-J2010T
PW6	MINI FRONT BOARD ASSY		LPA10088-01C6	LPA10088-02C6	←

#### R.PAUSE BOARD ASSEMBLY <91>

REF. NO	ITEM	MODEL	HR-VP680U	HR-J770KR	HR-J2010T
PW1	R.PAUSE BOARD ASSY		—	LPA10088-01A2	←
R7156	MG RESISTOR		—	NRSA02J-101X	←
J7104	MINI JACK		—	PU60612	←

Notes : Mark ← is same as left.  
Mark — is not used.



**JVC**

VICTOR COMPANY OF JAPAN, LIMITED  
VIDEO DIVISION

S40894