

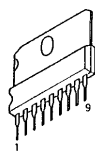
LIST OF ABBREVIATIONS - LISTE DES ABREVIATIONS - ABKÜRZUNGEN  
LISTA DELLE ABBREVIAZIONI - LISTA DE ABREVIACIONES

● ABL	AVERAGE BEAM CURRENT LIMITING	● PHI2_REF	PHI2 REFERENCE SIGNAL
● AQR_ON	DISABLE AQUISITION MODE REGUL.	● PIF	PICTURE IF SIGNAL
	ENABLE PWM PULSE	● PKS	PEAK SENSING
● AV1_8	PIN_8 DETECTOR	● PO	POWER ON
● AV_LINK	AV_LINK DATAS VCR/TV	● PWM	PULSE WIDTH MODULATION
● AV_R_OUT	AUDIO RIGHT-OUT	● RES_MSP	MSP RESET
● AV_L_OUT	AUDIO LEFT-OUT	● RESET	RESET TO MICROPROCESSOR
● AV_R_IN	AUDIO RIGHT-IN	● ROTATION	OUTPUT OF EARTH FIELD CORRECTION STAGE
● AV_L_IN	AUDIO LEFT-IN	● R_OUT	RED SIGNAL TO VIDEO AMPLIFIER
● AV_B	BLUE SIGNAL FROM AV	● R_TXT	RED SIGNAL OUTPUT (TEXT)
● AV_G	GREEN SIGNAL FROM AV	● PIF	PICTURE IF SIGNAL
● AV_R	RED SIGNAL FROM AV	● SIF	SOUND IF SIGNAL
● AV_C_IN	CHROMA-IN	● SSC	SUPER SAND CASTLE
● AV_FB	FAST BLANK SIGNAL FROM AV SCART	● SSC_V_GUARD	SAFETY DATA GENERATED BY THE VERTICAL AMPLIFIER TDA8177F
● AV_Y_IN	VIDEO-IN		
● BEAM_INFO	BEAM CURRENT INFORMATION	● TRAP_INFO	BG/L,L',D/K K' I SWITCH
● BLKCURR	CUT OFF CURRENT	● TUBE_DETET.	SELECTS 16:9 OR 4:3 TUBES
● B_TXT	BLUE SIGNAL OUTPUT (TEXT)	● U_OUT	U TO VIDEO PART
● B_OUT	BLUE SIGNAL TO VIDEO AMPLIFIER	● U_M_IN	U MASTER FROM CHROMA DECODER
● BREATHING	COMPENSATE BREATHING PICTURE SIGNAL	● U_S_IN	U SLAVE FROM CHROMA DECODER
● BSVM	BEAM SCAN VELOCITY MODULATION	● +USYS	SYSTEM VOLTAGE
● CNT1_20V	SAFETY SIGNAL TO INSURE A GOOD CONNECTION BETWEEN SIGNAL BOARD AND POWER BOARD (BV001- BL111)	● +/- UA	SOUND VOLTAGE
		● +UVERT	POSITIVE SUPPLY VERTICAL VOLTAGE
● CNT2_20V	SAFETY SIGNAL TO INSURE A GOOD CONNECTION BETWEEN SIGNAL BOARD AND POWER BOARD (BR003- BP005)	● -UVERT	NEGATIVE SUPPLY VERTICAL VOLTAGE
		● +UVFB	POSITIVE SUPPLY VOLTAGE FOR VERTICAL POWER STAGE
		● +UVIDEO	VIDEO VOLTAGE FOR THE CRT BOARD
● CRT	CATHODE RAY TUBE	● U_S_IN	U SLAVE FROM CHROMA DECODER
● CVBS	VIDEO	● V_M_IN	V MASTER FROM CHROMA DECODER
● CVBS_M_IN	MASTER VIDEO FROM CHROMA DECODER	● V_S_IN	V SLAVE FROM CHROMA DECODER
● CVBS_S_IN	SLAVE VIDEO FROM CHROMA DECODER	● V_DRIVE	VERTICAL DEFLECTION DRIVE SIGNAL
● DEFL_SAFETY	SAFETY INFORMATION FROM DEFLECTION	● V_OUT	V TO VIDEO PART
● DEGAUSS	DEGAUSS SIGNAL	● V_S_IN	V SLAVE FROM CHROMA DECODER
● DPC	DYNAMIC PHASE COMPENSATION SIGNAL	● Y_M_IN	Y MASTER FROM CHROMA DECODER
● EFC	EARTH FIELD CORRECTION	● Y_S_IN	Y SLAVE FROM CHROMA DECODER
● EHT	EXTREMELY HIGH TENSION	● Y_OUT	Y TO VIDEO PART
● E.W_DRIVE	EAST - WEST DRIVE SIGNAL	● 1V8_STBY	1V8 STANDBY
● EW_PROT	SAFETY SIGNAL FROM DIODE MODULATOR	● 3V3	3V3 POWER SUPPLY UP CONVERTER PART OF SIGNAL BOARD
● FB DETEC	FAST BLANKING DETECT	● 3V3_STBY	3V3 STANDBY
● FB_TXT	FAST BLANKING (TEXT)	● 5V_A / 5V_V	5V POWER SUPPLY SIGNAL BOARD
● FW ADJ.	FULL WHITE ADJUSTMENT	● 5V_STBY	5V STANDBY
● G_OUT	GREEN SIGNAL TO VIDEO AMPLIFIER	● 5V_UP	MICROPROCESSOR SUPPLY VOLTAGE
● G_TXT	GREEN SIGNAL OUTPUT (TEXT)	● 10 V	SUPPLIES THE 8V REGULATORS ON SIGNAL BOARD
● H_DRIVE	DRIVE SIGNAL FOR HORIZONTAL DEFLECTION	● 8V_1H	8V SUPPLY FOR 1H VIDEO PROCESSING
● HEATER	HEATER OUTPUT FROM THE DST TO CRT	● 8V_2H	8V SUPPLY FOR 2H VIDEO PROCESSING
● H DEFL. PROT.	HORIZONTAL DEFLECTION PROTECTION	● 8V_5	8V5 POWER SUPPLY FRONT END AND SCART PART OF SIGNAL BOARD
● IIC_CL	I2C CLOCK BUS	● 7V_STBY	7V STANDBY
● IIC_DATA	I2C DATA BUS	● 40V	SUPPLY VOLTAGE TUNER
● INF_POW_FAIL	POWER FAIL INFORMATION	● 20V	SUPPLY VOLTAGE HORIZONTAL DRIVER AND BSVM CRT
● IR	INFRARED RECEIVER		
● LDR	LIGHT DEPENDENT RESISTOR		
● MUTE	MUTES AUDIO AMPLFIERS		

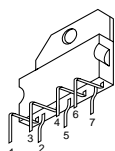
# INTEGRATED CIRCUITS AND TRANSISTORS OUTLINE - CIRCUITS INTEGRES ET TRANSISTORS

## INTEGRIERTE SCHALTUNGEN UND TRANSISTOREN - CIRCUITI INTEGRATI TRANSISTOR

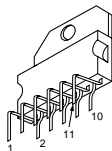
### CIRCUITOS INTEGRADOS Y TRANSISTORES



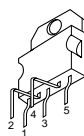
TDA 6111Q



TDA7298  
TDA 8177F



TDA7269



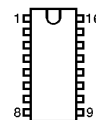
VIPER20



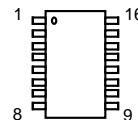
LM193  
LM293  
LM393N  
M24C16MN6



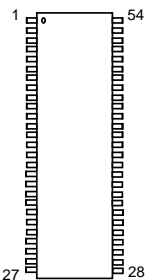
LM358D  
M24C64MN6  
MC4558CD  
TDA4950  
TL431ACD



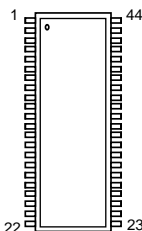
TEA2262



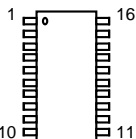
HEF4053BT  
TCE2ACU  
TDA8601  
TDA9181



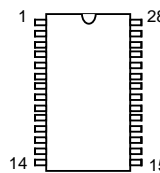
MT48LCM16A2TG



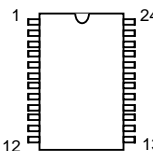
MX29L3211MC-10



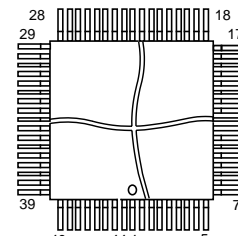
TEA6415CD



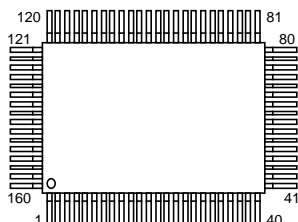
TEA6422D



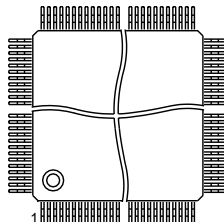
TDA9178



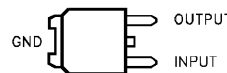
MA53528E



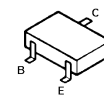
GENCAM CUT1.1



DLP4519G  
MSP4410G  
MSP3411G  
SDA9206  
SDA9410  
TDA9321H  
TDA9330H



LF85CDT  
KF80BDT  
LD1117DT33  
LF18ABDT



BC807-40  
BC846-BC846B  
BC847B-BC856B  
BC857B-BF799  
BC848 A/B/C  
BCR141-BCR141N  
BCR191-BF660  
DTC113ZK



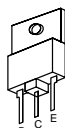
LM431  
1: REFERENCE  
2: ANODE  
3: CATHODE



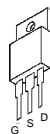
BC327  
BC337  
BC546B  
BC548B  
BC556B  
BC558B



MPS750P  
MPSW01A



ON4977N



STP10NB20FP



L78M05ABV



BF199



BF422



IRF630FPSTH  
13NB60FI  
STP10NB20FP  
SPW17N80C2



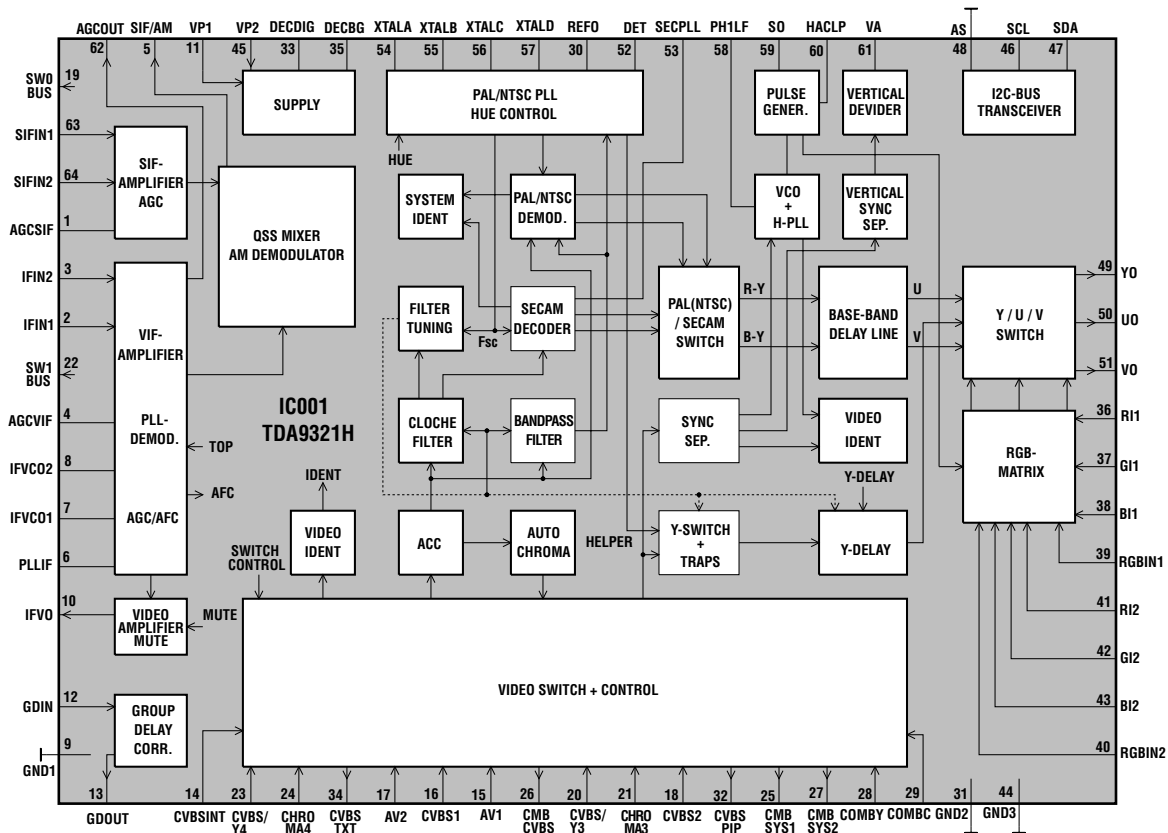
BD139  
BD140



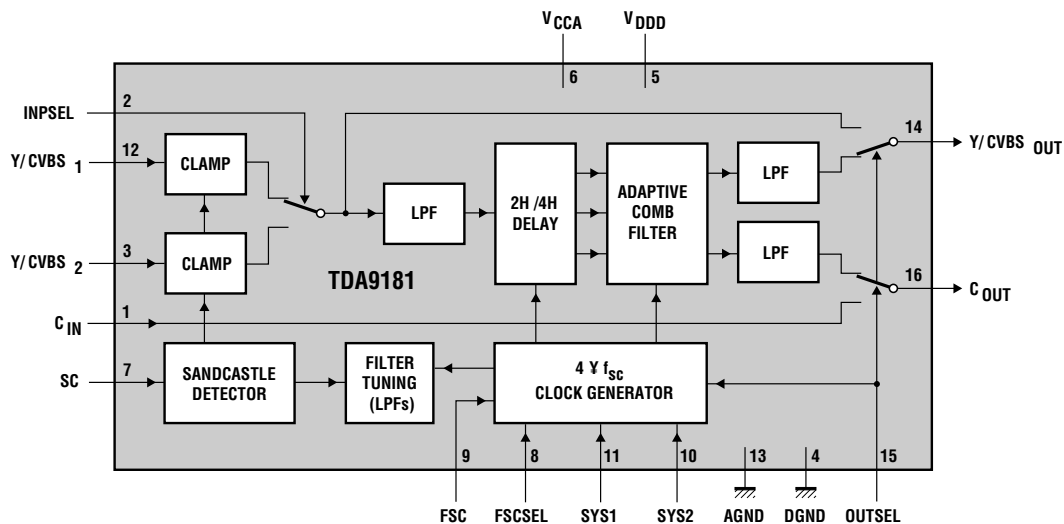
2SC3675

# INTEGRATED CIRCUITS BLOCK DIAGRAMS - SYNOPTIQUES INTERNES DES CIRCUITS INTEGRES - INTEGRIERTE SCHALTUNGEN BLOCKSCHALTBIlder SCHEMA A BLOCCHI DEL CIRCUITI INTEGRATI - VISTA INTERNA DE LOS CIRCUITOS INTEGRADOS

## IC500 - IC700 - TDA9321H



## IC900 - TDA9181





# EACEM-IRIS REPAIR CODING SYSTEM

# SYMPTOM CODE TABLE



1	2	3	4	5	6	7	8
CONSTANTLY	INTERMITTENTLY	AFTER A WHILE	IN A HOT ENVIRONMENT	IN A COLD ENVIRONMENT	WHEN SWITCHING	UNDER VIBRATION	IN A DAMP/WET/ RAINY/SNOWY ENVIRONMENT
IN A DRY ENVIRONMENT	AFTER BEING DROPPED/ TRANSPORT DAMAGE	AFTER LIGHTNING STRIKE	ONLY CERTAIN SOFTWARE/ MODE/ CHANNELS/ FREQUENCY BAND	ONLY ON CERTAIN STANDARDS	ONLY ON ONE CHANNEL	ONLY WITH CERTAIN INPUT(S)	ONLY ON CERTAIN OUTPUT(S)
IN STANDBY/OFF MODE	AT EDIT POINT	WHEN INTERCON- NECTED	LIQUID CONTAMINATION	FOR A SHORT WHILE AFTER SWITCH-ON	UNDER MAKING A COPY	UNDER STRESSED CONDITIONS / HIGH LOAD	AT SWITCH-OFF
GENERAL	COMMUNICATION	PICTURE	COLOUR	AUDIO	MECHANISM	DATA PROCESSING	PRINT/COPY/SCAN
110	NO ACTION	2	LEVEL	3	QUALITY	4	NOISE
111	POWER PROBLEM OR NOT OPERATING	120	CHARGING PROBLEM	130	DISPLAY FUNCTION PROBLEM	140	ABNORMAL NOISE
112	NO POWER	121	NO BATTERY CHARGING	131	FAULTY DISPLAY	141	CRT DISCHARGING NOISE
113	NO POWER WHEN USING AC-ADAPTER	122	INCOMPLETE BATTERY CHARGE	132	FAULTY LAMP/LED OPERATION	142	EHT DISCHARGING NOISE
114	NO POWER WHEN USING DRY BATTERIES	123	CHARGING TIME TOO LONG	133	FAULTY LEVEL METER OPERATION	143	NOISY CABINET/CRACKING TRAYS
115	NO POWER WHEN USING RECHARGEABLE BATTERIES	124	OTHER 'CHARGING' PROBLEM	134	FAULTY ON-SCREEN DISPLAY OPERATION	144	NOISY TRANSFORMER/HUMMING
116	NO POWER FROM SOLAR CELL	125		135	ELECTRONIC TUNING DISPLAY FAULT	145	NOISY COMPONENT(S)
117	NO POWER WHEN USING A CAR BATTERY	126		136	MECHANICAL TUNING DISPLAY FAULT	146	RATTLE
118	SHORT OPERATION TIME/SHORT BATTERY LIFE	127		137	FAULTY TIME CODE DISPLAY	147	CLICKING
119	POWER-OFF FUNCTION NOT WORKING	128		138	FAULTY ALARM/ERROR DISPLAY	148	CLOCK NOISE
120	NO SWITCH-ON FROM STANDBY	129		139	DISPLAY DIM/TOO DARK	149	CRACKING
121	POWERS UP, BUT NO OPERATION	130		140	UNUSUAL OR INCORRECT MESSAGE IN DISPLAY	150	WHISTLING
122	CYCLIC POWER ON/OFF	131		141	NO BACKLIGHT	151	OTHER 'ABNORMAL' NOISE
123	BLOWING EXTERNAL (MAINS) FUSE	132		142	BEEPS, NO DISPLAY	152	
124	SET SWITCHES OFF BY ITSELF	133		143	WARNING LIGHT DOES NOT WORK	153	
125	BACKUP BATTERY PROBLEM	134		144	WARNING LIGHT LIGHTS UP	154	
126	NOT OPERATING	135		145	OTHER 'DISPLAY FUNCTION' PROBLEM	155	
127	NO AUTOMATIC SWITCH ON/OFF	136		146		156	
128	PROTECTION SWITCH/FUSE IN SET TRIGGERS	137		147		157	
129	RECHARGEABLE BATTERY NOT RECOGNIZED	138		148		158	
130	OTHER 'POWER' PROBLEM	139		149		159	
210	NO RECEPTION OR CONNECTION	220	POOR RECEPTION OR CONNECTION	230	TRANSMISSION/CONNECTION PROBLEM	240	NOISY RECEPTION/TRANSMISSION
211	NO AM RECEPTION	221	POOR AM RECEPTION	231	NO TRANSMISSION/CONNECTION	241	LINE NOISE
212	NO FM RECEPTION	222	POOR FM RECEPTION	232	POOR TRANSMISSION/CONNECTION	242	OSCILLATION
213	NO SW RECEPTION	223	POOR SW RECEPTION	233	TRANSMISSION LEVEL TOO HIGH	243	INTERSTATION INTERFERENCE
214	NO VHF RECEPTION	224	NO TRANSMISSION BETWEEN BASE UNIT AND HANDSET	234	NO TRANSMISSION BETWEEN BASE UNIT AND HANDSET	244	OTHER 'NOISY RECEPTION/TRANSMISSION' PROBLEM
215	NO UHF RECEPTION	225	POOR UHF RECEPTION	235	POOR TRANSMISSION BETWEEN BASE UNIT AND HANDSET	245	
216	NO BS RECEPTION	226	POOR BS RECEPTION	236	NO IR TRANSMISSION	246	
217	NO CS RECEPTION	227	POOR CS RECEPTION	237	ONE-SIDED CONNECTION	247	
218	NO HDTV RECEPTION	228	POOR HDTV RECEPTION	238	MODEM HANGS UP IMMEDIATELY ONCE CONNECTED	248	
219	NO GPS/QPS RECEPTION	229	POOR GPS/QPS RECEPTION	239	MODEM DROPS LINE DURING CONNECTION	249	
220	NO RECEPTION OF DIGITAL BROADCASTING	230	POOR RECEPTION OF DIGITAL BROADCASTING	240	OTHER 'TRANSMISSION/CONNECTION' PROBLEM	250	
221	NO IR RECEPTION	231	POOR IR RECEPTION	241		251	
222	NO DIAL TONE	232	OTHER 'POOR RECEPTION' PROBLEM	242		252	
223	NO MODEM/FAX CONNECTION	233		243		253	
224	MODEM NOT ANSWERING/NO CARRIER	234		244		254	
225	NO NETWORK CONNECTION/NETWORK INITIALIZATION FAILS	235		245		255	
226	OTHER 'NO RECEPTION' PROBLEM	236		246		256	
310	NO PICTURE	320	PICTURE LEVEL PROBLEM	330	PICTURE QUALITY PROBLEM	340	PICTURE NOISE
311	NO PICTURE IN E TO E MODE	321	PICTURE TOO DARK	331	POOR PICTURE RESOLUTION	341	SNOWY PICTURE
312	NO PICTURE IN PLAYBACK MODE	322	PICTURE TOO BRIGHT	332	POOR FOCUS	342	DOT NOISE OR DROPOUT ON PICTURE
313	NO PICTURE IN VIEWFINDER	323	CONTRAST TOO LOW	333	RINGING ON PICTURE	343	NOISE BARS ON PICTURE
314	NO PICTURE, ONLY RASTER	324	CONTRAST TOO HIGH	334	EXCESSIVE SMEAR/LAG	344	BLANKING LINES ON PICTURE
315	NO RASTER, BLACK PICTURE	325	SATURATED WHITE OR BLACK LEVEL	335	POOR LINEARITY OR GEOMETRY	345	BEATING ON PICTURE
316	ONLY HORIZONTAL LINE	326	SHADING ON PICTURE	336	PICTURE SIZE INCORRECT	346	GHOSTING ON PICTURE
317	ONLY VERTICAL LINE	327	ONLY PARTIAL PICTURE	337	INCORRECT CENTRING OF PICTURE	347	VCR HEAD SWITCHING NOISE ON PICTURE
318	NO PICTURE IN LCD	328	OTHER 'PICTURE LEVEL' PROBLEM	338	PICTURE SLANTING	348	OVERMODULATION NOISE
319	NO 2nd (OR HIGHER) MONITOR DISPLAY	329		339	V-SIZE INCORRECT	349	MOIRE
320	OTHER 'NO PICTURE' PROBLEM	330		340	H-SIZE INCORRECT	350	MOSAIC NOISE
410	NO COLOUR	420	COLOUR LEVEL PROBLEM	430	POOR COLOUR QUALITY	440	NOISY COLOUR
411	NO COLOUR IN E TO E MODE	421	WEAK COLOUR	431	SOME OR ALL COLOURS MISSING	441	COLOUR NOISE ON A BLACK & WHITE
412	NO COLOUR IN PLAYBACK MODE	422	EXCESSIVE COLOUR	432	PICTURE COLOUR BALANCE	442	COLOUR STREAKING
413	NO COLOUR IN VIEWFINDER	423	OTHER 'COLOUR LEVEL' PROBLEM	433	HUE PROBLEM	443	COLOUR BARS ON PICTURE
414	NO COLOUR IN PART OF PICTURE	424		434	PURITY ERROR	444	OTHER 'COLOUR NOISE' PROBLEM
415	OTHER 'NO COLOUR' PROBLEM	425		435	LANDING ERROR/WHITE UNIFORMITY	445	
510	NO AUDIO	520	AUDIO LEVEL PROBLEM	530	AUDIO QUALITY	540	NOISY AUDIO
511	NO SOUND IN E TO E MODE	521	LOW AUDIO LEVEL	531	POOR FREQUENCY RESPONSE	541	HUM
512	NO PLAYBACK OF OUTGOING MESSAGE(S)	522	EXCESSIVE AUDIO LEVEL	532	DISTORTED AUDIO	542	HISS
513	NO PLAYBACK OF INCOMING MESSAGE(S)	523	BALANCE PROBLEM	533	NO OR POOR TREBLE	543	CROSSTALK
514	NO AUDIO PLAYBACK	524	FADER PROBLEM	534	NO OR POOR BASS	544	STATIC, POP OR CLICK NOISE
515	NO SOUND FROM HANDSET	525	AUDIO LEVEL REMAINING/NO MUTING	535	EARPHONE/HEADPHONE AUDIO POOR	545	BUZZ
516	NO SOUND FROM SPEAKER	526	OTHER 'AUDIO LEVEL' PROBLEM	536	OTHER 'AUDIO QUALITY' PROBLEM	546	SCRATCHING NOISE
517	NO SOUND FROM EARPHONE/HEADPHONE	527		537		547	IGNITION NOISE
518	NO MICROPHONE SOUND	528		538		548	WHISTLING/MULTIPATH NOISE
519	NO SOUND FROM DIGITAL OUTPUT	529		539		549	DATA/DIGITAL NOISE
520	OTHER 'NO AUDIO' PROBLEM	530		540		550	OTHER 'AUDIO NOISE' PROBLEM
610	NO MECHANICAL OPERATION	620	IRREGULAR MECHANICAL OPERATION	630	SPEED PROBLEM	640	MECHANICAL NOISE
611	NO ROTATION OF MOTOR/DISC	621	IRREGULAR ROTATION	631	SPEED TOO FAST	641	ROTATION NOISE/DRUM NOISE
612	NO FORWARD OPERATION	622	IRREGULAR FORWARD MODE	632	SPEED TOO SLOW	642	MOTOR NOISE
613	NO REVERSE OPERATION	623	IRREGULAR REVERSE OPERATION	633	SPEED UNADJUSTABLE	643	WINDOW NOISE
614	NO FAST FORWARD OR REWIND FUNCTION	624	IRREGULAR FAST FORWARD OR REWIND FUNCTION	634	OTHER 'SPEED' PROBLEM	644	SQUEALING
615	NO LOADING	625		635		645	FAN NOISE
616	NO UNLOADING OR EJECTING	626	IRREGULAR LOADING OF MEDIA	636		646	DISC SCRAPING
617	NO AUTO SHUT-OFF OPERATION	627	IRREGULAR UNLOADING OR EJECTING	637		647	NOISY TAPE LOADING
618	TONELARM DOES NOT MOVE	628	IRREGULAR AUTO SHUT-OFF OPERATION	638		648	GEAR NOISE
619	DISC NOT BEING EJECTED	629	IRREGULAR TONELARM MOVEMENT	639		649	CONTROL OR SWITCH NOISY
620	MAGAZINE OR MODULE	630	IRREGULAR EJECTION OF DISC	640		650	GRINDING
621	LOADING/UNLOADING	631	IRREGULAR DIRECTION CHANGE	641		651	RUMBLING
622	CONTROL/SWITCH NOT WORKING	632	FAULTY DISC CHANGE OPERATION	642		652	VIBRATION NOISE
623	OTHER 'NO MECHANICAL OPERATION' PROBLEM	633	OTHER 'IRREGULAR MECHANICAL OPERATION' PROBLEM	643		653	OTHER 'MECHANICAL NOISE' PROBLEM
710	NO DATA PROCESSING OPERATION	720	FAULTY DATA PROCESSING OPERATION	730	DATA DISPLAY PROBLEM	740	KEYBOARD/POINTING DEVICE
711	NO INITIAL SCREEN	721	INCORRECT DATA	731	INCORRECT CHARACTER DISPLAY	741	MOUSE/TRACKBALL/TRACKPAD NOT WORKING
712	SYSTEM DOES NOT RESET	722	SYSTEM RESET WHILE BEING USED	732	MISSING DISPLAY CHARACTERS	742	KEYBOARD LOOKS UP
713	SYSTEM DOES NOT BOOT UP	723	SYSTEM LOOKS OUT/CRASHES/HANGS	733	FAULTY GRAPHIC DISPLAY	743	POINTING DEVICE LOOKS UP
714	NO OPERATION FROM PLUG-IN MODULE/PERIPHERAL	724	FAULTY OPERATION OF PLUG-IN MODULE	734	FAULTY SWITCHING BETWEEN GRAPHIC/ CHARACTER MODE	744	NON-OPERATIVE KEY(S)
715	NO KEYBOARD OPERATION	725	FAULTY KEYBOARD OPERATION	735	FAULTY PROMPT/CURSOR OPERATION	745	POINTING DEVICE NOT TRACKING PROPERLY
716	NO OPERATION FROM OTHER INPUT/OUTPUT DEVICE	726	FAULTY OPERATION OF OTHER INPUT/OUTPUT DEVICE	736	DATA DISPLAY COLOUR INCORRECT	746	POINTING DEVICE JITTERY
717	NO DATA STORAGE OPERATION	727	FAULTY DATA STORAGE OPERATION	737	NO PAGING OR SCROLL MODE	747	LEFT- OR RIGHT-CLICK BUTTON INOPERATIONAL
718	NO DATA COMMUNICATION	728	FAULTY DATA COMMUNICATION	738	OTHER 'DATA DISPLAY' PROBLEM	748	TRACKPAD SURFACE DAMAGED
719	ERROR MESSAGE DISPLAY	729	MEMORY ERROR	739		749	KEYBOARD KEY(S) DAMAGED
720	HDD BOOT FAILURE	730	IRREGULAR TONELARM MOVEMENT	740		750	OTHER KEYBOARD/POINTING DEVICE PROBLEM
721	FDD BOOT FAILURE	731	OTHER 'FAULTY DATA PROCESSING' PROBLEM	741		751	
722	OTHER 'NO DATA PROCESSING' PROBLEM	732		742		752	
810	NO PRINT/COPY/SCAN OPERATION	820	ERRONEOUS PRINT/COPY/SCAN OPERATION	830	POOR PRINT QUALITY	840	NOISY PRINTING
811	NOT PRINTING	821	PRINT IMAGE REVERSED (NEGATIVE/POSITIVE)	831	INCORRECT PRINTING POSITION	841	PRINTING NOISE LINES
812	NO COMMUNICATION WITH PRINTER	822	IRREGULAR PAPER FEED	832	LOW PRINT CONTRAST	842	DIRTY PRINTING
813	PAPER NOT LOADING	823	ERRONEOUS PRINT MODE SWITCHING	833	EXCESSIVE PRINT CONTRAST	843	UNPLEASANT SMELL (OZONE)
814	NO PAPER FEED	824	COPY TOO DARK	834	BLURRED PRINT IMAGE	844	BLACK LINES/STRIPES IN FEED DIRECTION
815	NO IMAGE FIXATION	825	PRINT IMAGE NOT SHARP	835	WHITE LINES/STRIPES IN FEED DIRECTION	845	BLACK LINES/STRIPES ACROSS FEED DIRECTION
816	NO DOCUMENT FEEDING	826	BLACK COPY	836	DOTS MISSING IN PRINT IMAGE	846	WHITE LINES/STRIPES ACROSS FEED DIRECTION
817	SCANNER NOT WORKING	827	WHITE COPY	837	COLOUR STREAKING	847	OTHER 'NOISY PRINTING' PROBLEM
818	OTHER 'NO PRINT/COPY/SCAN OPERATION' PROBLEM	828	POOR COLOUR LEVELS	838	NO COLOUR IN PART OF PICTURE	848	
819		829	IRREGULAR DOCUMENT FEED	839	PRINT IMAGE/COPY INCOMPLETE	849	
820		830	FAULTY CALIBRATION	840	FAULTY CORRECTION FUNCTION	850	
821		831	POOR SCANNING QUALITY	841	OTHER 'PRINT QUALITY' PROBLEM	851	
822		832	OTHER 'PRINT/COPY/SCAN OPERATION' PROBLEM	842		852	
823		833		843		853	
824		834		844		854	
825		835		845		855	
826		836		846		856	
827		837		847		857	
828		838		848		858	
829		839		849		859	
830		840		850		860	
831		841		851		861	
832		842		852		862	
833		843		853		863	
834		844		854		864	
835		845		855		865	
836		846		856		866	
837		847		857		867	
838		848		858		868	
839		849		859		869	
840		850		860		870	
841		851		861		871	
842		852		862		872	
843		853		863		873	
844		854		864		874	
845		855		865		875	
846		856		866		876	
847		857		867		877	
848		858		868		878	
849		859		869		879	
850		860		870		880	
851		861		871		881	
852		862		872		882	
853		863		873		883	
854		864		874		884	
855		865		875		885	
856		866		876		886	
857		867		877		887	
858		868		878		888	
859		869		879		889	
860		870		880		890	
861		871		881		891	
862		872		882		892	
863		873		883		893	
864		874		884		894	
865		875		885		895	
866		876		886		896	
867		877		887		897	
868		878		888		898	
869		879		889		899	
870		880		890		900	
871		881		891		901	
872		882		892		902	
873		883		893		903	
874		884		894		904	
875		885		895		905	
876		886		896		906	
877		887		897		907	
878		888		898		908	
879		889		899		909	
880		890		900		910	
881		891		901		911	
882		892		902		912	
883		893		903		913	
884		894		904		914	
885		895		905		915	
886		896		906		916	
887		897		907		917	
888		898		908		918	
889		899		909		919	
890		900		910		920	
891		901		911		921	
892		902		912		922	
893		903		913		923	
894		904		914		924	
895		905		915		925	
896							

EACEM - SECTION CODES

COMMON	
ANT	ANTENNA SECTION
APR	SIGNAL PROCESSING (ANALOG)
BCH	BATTERY CHARGE
CLK	CLOCK/TIMER SECTION
CPA	COLOUR PROCESSING/ANALOG
CTR	CONTROL PANEL
DPR	SIGNAL PROCESSING (DIGITAL)
ERA	ERASE CIRCUIT
FLX	FLEXIBLE PRINTED CIRCUIT BOARD
HFS	HIGH FREQUENCY SECTION (RF)
IDS	INFORMATION DISPLAY SECTION
IFC	IF-CIRCUIT
ILN	i.LINK (IEEE1394) SECTION
INP	SIGNAL INPUT SECTION
IRD	INFRARED (IrDA) SECTION
MEM	MEMORY CIRCUIT
OUT	SIGNAL OUTPUT SECTION
PRG	PROGRAMMING SECTION
PRT	PROTECTION CIRCUIT
PSU	POWER SUPPLY
PWA	POWER AMP SECTION
REM	REMOTE CONTROL SECTION
RFU	BOOSTER,RF UNIT
SFT	SOFTWARE (TAPE, DISC, ETC.)
SNS	SENSOR UNIT
SVO	SERVO SECTION
SYS	SYSTEM CONTROL SECTION
TUN	TUNING SECTION
TXT	TEXT PROCESSING
SOUND-RELATED	
APA	AUDIO PROCESSING/ANALOG
APD	AUDIO PROCESSING/DIGITAL
CDC	CD CHANGER SECTION
CDS	CD SECTION
MDC	MD CHANGER SECTION
MDS	MINIDISC SECTION
MIC	MICROPHONE SECTION
PUD	PICK-UP DEVICE
SHD	STATIONARY HEAD(S)
SPK	SPEAKER
PICTURE-RELATED	
CAM	CAMERA CIRCUIT
CPD	COLOUR PROCESSING/DIGITAL
CRT	PICTURE TUBE
DFL	DEFLECTION CIRCUIT
DVD	DVD SECTION
FPK	FOCUS PACK
IMG	IMAGE DISPLAY UNIT

PICTURE-RELATED	
LCD	LCD SECTION
LMP	LAMP/FLASH SECTION
VPA	VIDEO PROCESSING/ANALOG
VPD	VIDEO PROCESSING/DIGITAL
VWF	VIEWFINDER
PC-RELATED	
FDD	FLOPPY DISC DRIVE
FMW	FIRMWARE
HDD	HARD DISC DRIVE
ISA	ISA SECTION
JST	JOYSTICK
KBD	KEYBOARD (SEPARATE)
MDM	MODEM SECTION
NIF	NETWORK INTERFACE
PAR	PARALLEL PORT
PCC	PC CARD
PCI	PCI SECTION
SCS	SCSI PORT
SER	SERIAL PORT
USB	USB PORT
MECHANICAL	
ARM	ARM MECHANISM
BZL	BEZEL
CBT	CABINET
CHA	CHASSIS
DDM	DISC DRIVE MECHANISM
EXC	EXTERNAL CONNECTOR
HCM	HEAD CARRIAGE MECHANISM
HOL	CASSETTE HOLDER
INC	INTERNAL CONNECTOR
LDG	LOADING MECHANISM
LMN	LENS MECHANISM
PFM	PAPER FEED MECHANISM
PIN	PINCH ROLLER/LEVER
PRI	PRINT BLOCK
RFM	RIBBON FEED MECHANISM
RHD	ROTARY HEAD(S)
SLD	SLED MECHANISM
SRS	SUPPLY REEL SECTION
STA	STATIC BLOCK
TDM	TAPE DRIVE MECHANISM
THR	THREADING MECHANISM
TNR	TENSION REGULATOR
TPT	TAPE PATH
TRS	TAKE-UP REEL SECTION
WIR	LEAD WIRE
XXX	CABINET/COSMETIC PARTS

DEFECT CODES			
MECHANICAL		ELECTRICAL	
A	WORN OUT (OR GENERAL MECHANICAL DEFECT)	N	DEFECTIVE ELECTRICAL COMPONENT/MODULE
A1	MISOPERATING	O	BURNT, ARCING, MISSING PIXELS
B	DIRTY, CLOGGED	P	ELECTRICALLY MISALIGNED/WRONG SETTING
C	MECHANICALLY MISALIGNED	Q	SHORT CIRCUIT
D	CUT, BROKEN	R	OPEN CIRCUIT
E	DEFORMED	S	LEAKING (ELECTRICAL)
F	SNAPPED	T	BAD CONTACT, CONNECTION
G	SCRATCHED, DENTED, SHARP EDGES	T1	BAD EARTH CONNECTION
H	CRACKED, PEELED, CORRODED, MELTED	U	OPEN PATTERN
I	LOOSE/OFF/STRIPPED	V	CRACKED PRINTED CIRCUIT BOARD
J	SHAKY, UNSTABLE	W	COLD OR NO SOLDERING
K	LEAKING (MECHANICAL)	X	BRIDGED SOLDERING
L	DRY (NO LUBRICANT)	Y	WRONG COMPONENT/MODULE
M	FOREIGN OBJECT	Z	MISSING COMPONENT/MODULE
		1	SOFTWARE PROBLEM
		11	LOSING DATA FROM MEMORY
		12	FAULTY PROGRAM SETTING/INSTALLATION
		13	SOFTWARE DEFECTIVE OR INCOMPLETE
		14	SOFTWARE SETUP PROBLEM
		15	NO IDENTIFICATION / AUTHENTICATION OF PRODUCT OR USER
		2	EXHAUSTED, LOW EMISSION
		3	NO PROBLEM FOUND (SET WITHIN SPEC)
		4	NO PROBLEM FOUND - CUSTOMER MISUNDERSTANDING
		5	NO PROBLEM FOUND - LOCAL CONDITIONS
		51	FAULTY MAINS VOLTAGE
		6	UNABLE TO DIAGNOSE FAULT
		7	INCORRECTLY WIRED/ASSEMBLED
		81	INCORRECT EQUIPMENT CONNECTION
		9	CUSTOMER MISUSE
		93	UNAUTHORISED MODIFICATION

REPAIR CODES	
A	REPLACEMENT
B	MECHANICAL ALIGNMENT
C	ELECTRICAL ALIGNMENT
D	RESOLDERING
D1	REFITTING, PUT BACK IN POSITION (CONNECTOR, TUBE...)
E	CLEANING
F	LUBRICATION
G	REPAIRED ELECTRICAL PARTS
H	REPAIRED MECHANICAL PARTS
I	MODIFICATION REQUESTED BY MANUFACTURER
J	REMOVED
K	ADDED
L	FUNCTIONAL CHECK
M	SPECIFICATION MEASUREMENT
N	MAINTENANCE
O	REFURBISHING, RECONDITIONING
P	PREVENTIVE PARTS REPLACEMENT
Q	PREVENTIVE ACTION WITHOUT PARTS REPLACEMENT
U	EXPLANATION FOR CUSTOMER
V	COST ESTIMATION REFUSED
W	COST ESTIMATION WITH PARTS
X	COST ESTIMATION WITHOUT PARTS
Y	RETURN WITHOUT REPAIR
Z	PRODUCT EXCHANGE
Z1	PRODUCT EXCHANGE (REPAIR TOO EXPENSIVE)
Z2	PRODUCT EXCHANGE (TOO MANY VISITS/REPAIRS)
Z3	PRODUCT EXCHANGE (PARTS NOT AVAILABLE)
Z4	PRODUCT EXCHANGE (IMPOSSIBLE TO REPAIR)
Z5	PRODUCT EXCHANGE (ON REQUEST OF RETAILER)
Z6	PRODUCT EXCHANGE (ON REQUEST OF MANUFACTURER)
1	SOFTWARE CORRECTION/RESET
2	SOFTWARE UPGRADE
3	PRODUCT UPGRADE (ON REQUEST)

EXAMPLE OF USE:

FLAG	SYMPTOM CODE	PART NO.	REF. NO.	SECTION	PCB	DEFECT CODE	REPAIR CODE	QTY
<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>	<div></div>
1	1 4 1 2	1 1 1 1 1 1 1 1 1 1 1 1 1 1 1	R 1 2 3 . . . .	T D M	Y A 2 2 . . .	C 1	Z 1	. . .
.	3 6 4 1	3 4 5 6 7 8 9 X X X X X X X X	1 1 1 . . . . .					

FLAG: INDICATES THE ONE MAJOR SYMPTOM/PART COMBINATION BY '1'