



FAILURE ANALYSIS LISTING OF INITIAL CAUSES

- Applicable to all loudspeaker and compression driver types
- Applicable to the analysis of power handling capacity results

Update: 14/02/2007

DEFECT CODE		LISTING OF INITIAL CAUSES	WARRANTY STATUS	REMARKS
BA	Bad Assembly	Defective product assembly. Factory specifications not fulfilled	IN	
BB	Broken Basket	Broken or warped basket due to shock or mechanical strain	OUT	
BC	Broken Cone	Folded or torn cone due to tear and wear or bad handling	OUT	
BD	Broken Dust-cap	Sagging or perforated Dust-cap	OUT	
BF	Blistered Former	Blistering of the former facing the winding	IN	
BG	Broken Diaphragm	Broken or warped diaphragm due to excessive power or bad handling	OUT	
BK	Buckling Former	Buckling of the voice-coil former (Voice-coil driven out of the air-gap)	OUT	
BL	Broken loudspeaker or compression driver	Complete destruction of the loudspeaker	OUT	No possibility of service
BM	Broken Magnet	Splitt ring magnet. The voice-coil is jammed in the air-gap	IN	
BR	Bad Reconing	Bad reconed unit	OUT	
BS	Bad Diaphragm Replacement	Bad user-replaced diaphragm	OUT	
BT	Broken Terminals	Broken electrical terminals due to shock or bad handling	OUT	
BZ	Buzzing	Unusual noise in sinusoidal excitation (Buzz)	IN	Specify applied voltage and frequency
CB	Cut Braids	Lead-out braid cut by mechanical fatigue breaking	IN	See also 'TB' code
CR	Coil Rubbing	The voice-coil rubs the gap's surface producing extraneous noise	IN	
CS	Cold Solder	Cold solder of the lead-out braids	IN	Voice-coil in open circuit
DC	Direct Current	Carbonisation of one half of the coil	OUT	
DG	Detached Grille	Venting hole grille detached or lost	IN	

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DK	Detached Gasket	Loudspeaker gasket detached	IN	
DR	Detached Double Spider	Glue joint failure between spiders	IN	
DS	Detached Surround	Unsticking or delamination of surround from the cone	IN	
EW	Expired Warranty	Three year warranty expired	OUT	Production year and week is coded on batch number printed on label
FA	Filings in air-gap	Filings in the air-gap	IN	
FR	Bad Frequency Response	Frequency response curve goes outside the accepted QC limits	IN	
IR	Bad Impedance Response	Impedance response curve goes outside the accepted QC limits	IN	
LB	Too Long Braids	Too long braids hit the cone during operation	IN	
LD	Loose Dust-cap	Dust-cap loose from cone	IN	
LP	Loose Phase Plug	Compression driver phase plug loose	IN	
LS	Broken or Lost Screws	Loudspeaker or compression driver assembly screws completely or partially broken or lost	OUT	
MA	Missing Article	Article listed in the delivery note not present in the shipped items	OUT	
ML	Missing Label	Missing loudspeaker or compression driver label	OUT	
MM	Missing Moving Parts	Missing moving parts	OUT	
MS	Melted Solder	Melting of the aluminum winding solders	IN	
OC	Open Circuit	Winding in open-circuit by breaking of output wire at fatigue	IN	
OD	Over Driven	Exceeding of excursion limits: circularly folded cone and/or bottomed voice-coil. Damaged suspension and/or sign of phase plug on diaphragm in compression drivers	OUT	
OH	Over Heated	Overheating of the voice-coil. The coil is carbonized	OUT	
OK	O.K.	No Defect Found	OUT	
OP	Out of Production	Discontinued Product	OUT	
OS	Out of Specifications	Out of Specifications	IN	
OV	Ovalized Voice-coil	Ovalized Voice-coil causes Rub	IN	
RP	Rusty Plate	Metal Parts Oxidation	IN	
SB	Too Short Braids	Too short lead-out braid, cut during operation	IN	
SC	Short-Circuit	Winding in short-circuit by melting with the return wire	IN	
SG	Spider Glueing	Breaking of the spider / voice-coil or spider/ frame gluing joint	IN	
SN	Side Noise	Unusual noise coming from cone suspension in sinusoidal excitation (Buzz)	IN	Specify applied voltage and frequency

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SP	Shifted Plate	Front or rear plate shifted. The voice-coil is jammed in the air-gap	IN	
SS	Softened Spider	Softened spider causes Rub or Buzz	IN	
SW	Slipped Winding	Partial or complete shifting of coil winding	IN	
TB	Tearred Braids	Lead-out braid accidentally snatched	OUT	
TS	Torn Spider	Torn or broken spider	IN	
TU	Torn Surround	Out-of-shape or torn surround	IN	
VG	Voice-coil Glueing	Breaking of the voice-coil to cone or diaphragm gluing joint	IN	
WI	Winding Insulation	Winding in open-circuit by melting with the return wire	IN	