

KES

Console

KES D-C571

(EST.) 1988 - 08 - 19

Contents

1. Purpose
2. Scope of Application
3. Report of Evaluation Results
4. Meaning of Terminology
5. Specifications which are indicated in the
Specification Drawings
6. Evaluation Standard
7. Evaluation Method
8. Engineering Changes



1. Purpose

This standard has the purpose of standardization of the console specification and assuring appropriate quality.

2. Scope of Application

This standard specifies the floor console assembly for the automobile.

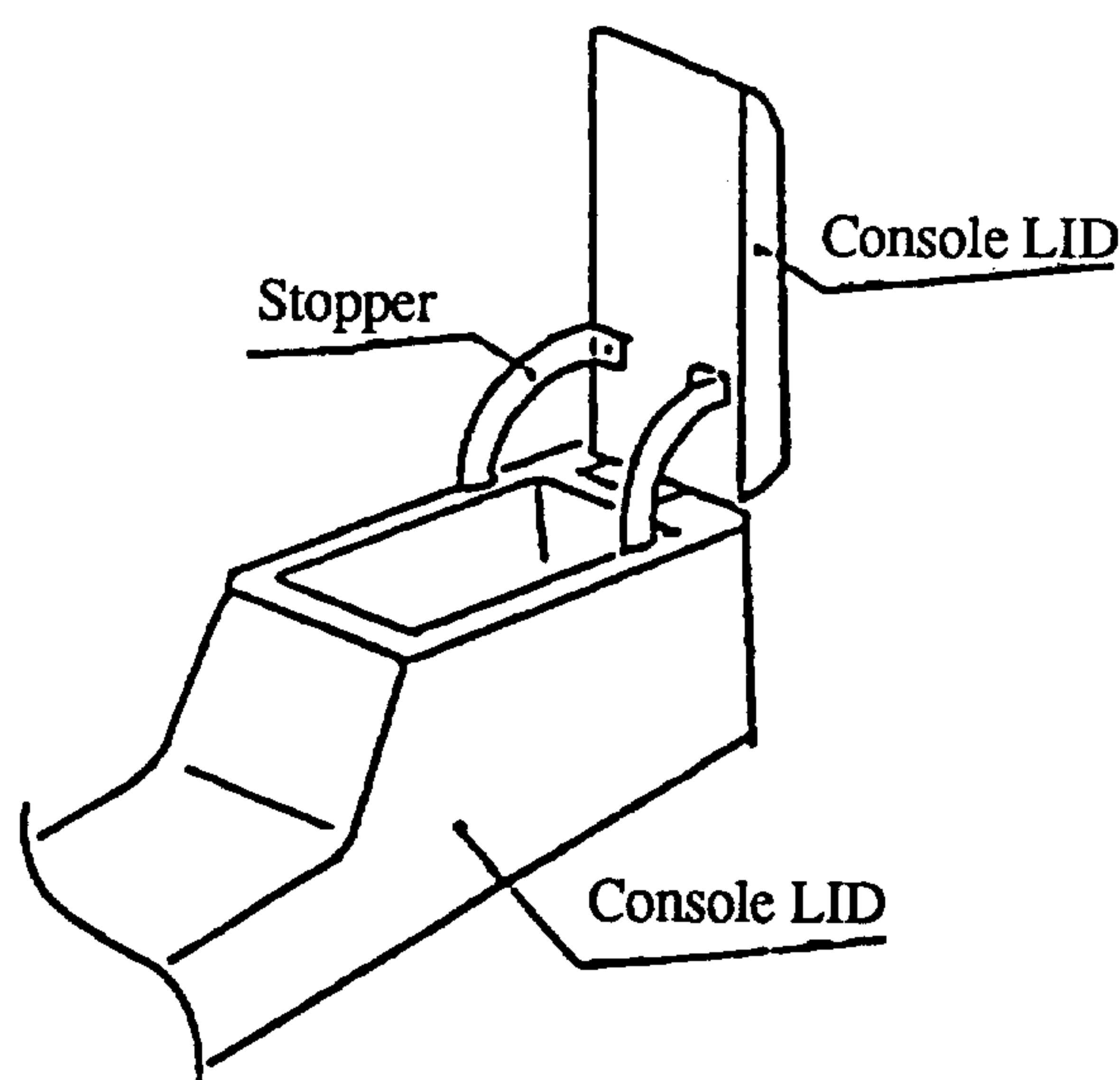
3. Report of Evaluation Results

The evaluation result for quality with each step, from development to manufacture, must be submitted according to the indication included in the supplement.

4. Meaning of Terminology

- (1) Stopper: It is installed between the console lid (hereafter called the lid) and the console body and is usually made of metal.

It has the function to control the opening angle of the lid.



- (2) Abnormal sounds: An unpredictable noise which does not occur in static state, but occurs when external force, for example vibration is applied.
- (3) Lock mechanism: It is the part which has a hook, striker and lever and is able to lock the lid to the console body by these parts.
- (4) Lamp case: It is the part which has the purpose of preventing diffusion of light and the mounting lamp.
- (5) Bulb: Head bulb which has a mounting system in the lamp case.
- (6) Boost panel: It is the part which mounts the shift boot, and is mounted to the console body.
- (7) Console assembly: It is the parts which include the assembled console body, lid, foot lamp, stopper lock mechanism, and shift boots, etc. indicated on specified drawing with the specified indication.

5. Specifications which are indicated in the Specification Drawings

- (1) Color of parts: It is indicated as the part's color, and whether that is the painting color or the application color on the material as well.
- (2) Kinds, range and thickness of EMBO
- (3) Watt, amount for used bulb (Only in the case when the lamp is installed in the console)
- (4) Stroke amount of shift lever (Only in the case when the change boot is assembled)
- (5) Requirement code for KES D-G008
- (6) Required hardness of the pad
- (7) Material quality of sheet for the crash pad [In accordance with KES B-P001 (Vinyl leather for automobiles)].
- (8) Position of the lid

6. Evaluation Standard

The evaluation standard for the console assembly should be according to (Table 2 ~Table 14.

Reference: Characteristic rank should be according to Table 1 in KES Q-A002 (Decision of quality rank and operation points)

Table 1

Characteristic rank	Definitions
A Rank	What approaches risk to human life when a problem occurs, or what has a risk of fire.
AR Rank	What is applies to regulations such as safety, emission, etc.
B Rank	What becomes inability in driving when a problem occurs what loses the original function of the automobile. What deteriorates perceptably concerning brass and good characteristics
C Rank	C rank is the characteristic besides A, AR, and B rank

6.1 Evaluation standard for rigidity of lid should be according to Table 2.

Table 2

Evaluation Items	Evaluation Standard		Quality Rank	Evaluation Methods
Rigidity for operating area	Displacement amount should be less than 20mm		B	7.2.1
Opposite load strength	Opening direction of lid	Stopper should not come off. there should not be an inferior catch lock	B	7.3.1
	Horizontal direction of lid	There should be no breaks at hinge area		7.3.2
Surface rigidity of lid	Strain amount should be less than 3mm		B	7.4.1, 7.4

6.2 Evaluation standard for lock performance should be according to Table 3.

Table 3

Evaluation Items	Evaluation Standard	Quality Rank	Evaluation Methods
Holding force for lock	There should be no opening of lid. There should be no breaks in the lock.	AR	7.5.1
		B	7.5.2
			7.5.3
Play in lock button or lock lever	Each play amount in directions of the frant and rear, and the left and right should be less than 0.5mm	B	7.5.4

6.3 Evaluation standard for operating feeling of lid should be according to Table 4.

Table 4

Evaluation Items	Evaluation Standard	Quality Rank	Evaluation Methods
Operating effort for lock button or lock lever	Operating effort should be more than 0.5 ~ 0.8 kgf {4.9 ~ 7.84N}	B	7.6.1
			7.6.2
Locking force for lid	Operating effort should be more than 0.5 ~ 1.2 kgf {4.9 ~ 11.76N}	B	7.6.3
Play in lid	Play in direction of left and right.  1.0 or less	C	7.6.4

6.4 Evaluation standard for abnormal sounds of console assembly should be according to Table 5.

Table 5

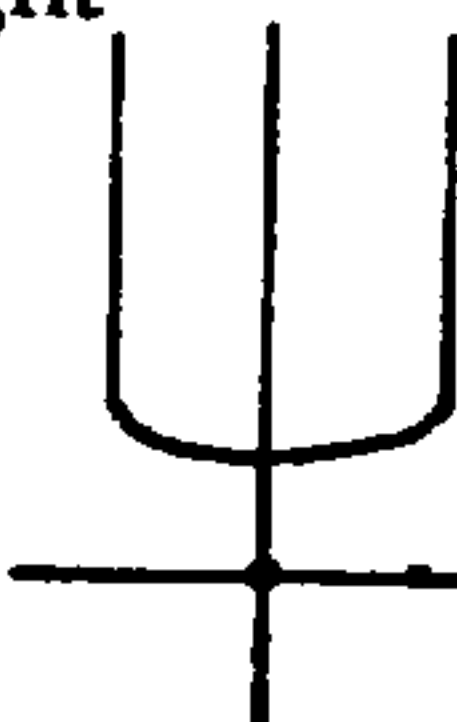
Evaluation Items	Evaluation Standard	Quality Rank	Evaluation Methods
Abnormal sound of console assembly	Abnormal sounds should not be produced.	B	7.7

6.5 Evaluation standard for vibration resistance of console assembly should be according to Table 6.

Table 6

Evaluation Items	Evaluation Standard		Quality Rank	Evaluation Methods
Vibration resistance of console assembly	What should not exist	Breaks at hinge area, looseness of screws, cracks Deformation of lid, poor catching in lock, deformation and misalignment in stopper.	B	7.8
	What should not be seen with eyes	Scratches, peeling of paint, peeling of outer skin, discoloration.		
Holding force after evaluation of vibration resistance	Lid should not be opened.		B	(7.5.2) (7.5.3)
	Lock should not be broken.		AR	(7.5.1)
Abnormal sounds in console assembly after evaluating for vibration resistance	Abnormal sounds should not be produced		B	(7.7)

6.6 Evaluation standard for operating durability of lid and parking brake boots should be according to Table 7.

Evaluation Items	Evaluation Standard		Quality Rank	Evaluation Methods
Operating durability of lid	What should not exist	Breaks at hinge area, looseness of screws, deformation on lid, poor catching in lock, deformation on stopper, misalignment, cracks.	B	7.9.1
	What should not be seen with eyes	Scratches, peeling of paint, peeling of outer surface, discoloration		
Holding force for lock after evaluating for operating durability of lid	Lid should not be opened.		B	(7.5.2)
	Lock should not be broken		AR	(7.5.1)
Operating force of lock button or lock lever after evaluating for operating durability of lid	Operating effort should be 0.5 ~ 0.8 kgf (4.9 ~ 7.84)		B	(7.6.1) (7.6.2)
Locking force of lid after evaluating for operating durability of lid	Operating effort should be 0.5 ~ 1.2 kgf (4.9 ~ 11.76N)		B	(7.6.3)
Play in lid after evaluating for operating durability of lid	Play in directions of left and right 1.0 or less  1.0 or less		C	(7.6.4)
Abnormal sounds in console assembly after evaluating for operating durability of lid	Abnormal sounds should not be produced		B	(7.7)
Operating durability of parking brake boots	What should exist	Breaks, detachments, coming off of Bush, misalignment and breaks on bush panel	B	7.9.2
	What should not be seen with eyes	Peeling of bush, deformation		
	Wear amount at bush opening area should be less than 1mm in overall width			

Evaluation Items	Evaluation Standard	Quality Rank	Evaluation Methods
Abnormal sounds in console assembly after evaluating for operating durability of parking brake bush	Abnormal sounds should not be produced.	B	7.7

6.7 Evaluation standard for removal of grease on steel plate part which is installed in the console should be according to Table 8.

Table 8

Evaluation Items	Evaluation Standard	Quality Rank	Evaluation Methods
Grease removal treatment of steelplate parts	Oil film should not be produced.	B	7.10

6.8 Evaluation standard for heat resistance of lamp case should be according to table 9.

Table 9

Evaluation Items	Evaluation Standard	Quality Rank	Evaluation Methods
Lamp case usual use	There should be no deformation nor ignition of lamp case and neighboring parts	A	7.11.1
usual use	There should not be ignition to lamp case and neighboring parts	A	7.11.2

6.9 Evaluation standard for hardness of pad or lid surface should be according to Table 10.

Table 10

Evaluation Items	Evaluation Standard	Quality Rank	Evaluation Methods
Pad hardness of lid scrach resistance of	Should be satisfied with indicated hardness in specification drawings (JIS spring hardness A type)	B	7.12.1
Lid surface (trans- parent luster surface)	Scratch production should be with in the limits according to standard parts	B	7.12.12

6.10 Evaluation standard for appearance should be according to Table 11.

Table 11

Evaluation Items		Evaluation Standard	Quality Rank	Evaluation Methods
Physical appearance	Burr	Should be within limit in accordance with standard parts	C	Visual check
	Parting edge at the place where contact with hand and foot end			
	Contraction			
	Wave length on surface			
	Weld mark, flash, flow mark			
Painting color		Should be satisfied with painting color indicated on specified drawing. In accordance with color EMBO standard board which is distributed from Kia.	C	Visual check (In accordance with KS A 0065)
Painting		Should be satisfied with a kind of TA2 in KES B-R001		In accordance with KES T-M010
Applying color on material		Should be satisfied with indicated color on specified drawing In accordance with color EMBO standard board which is distributed from Kia.		Visual check (In accordance with KS A 0065)
EMBO		Should be satisfied with kind, range and depth of EMBO indicated on specified drawing.		Visual check (In accordance with KS A 0065)

6.11 Evaluation standard for operating force and operating durability of shift lever boot should be according to Table 12.

Table 12

Evaluation Items		Evaluation Standard		Quality Rank	Evaluation Methods
Operating effort of shift lever boot	Normal temperature	Should be less than 0.3 kgf (2.94N)		B	7.13.1
	Low temperature	Should be less than 1.5 kgf (14.7N)			7.13.2
Operating durability of shift lever boots		What should not exist	Broken, separated or detached boots, broken and deformed boot panel, sinking of boots upper parts	B	7.13.3
		What should not be seen with eyes	Boots hanging down discoloration		
Operating force after evaluating for operating durability of shift lever boots	Normal temperature	Should be less than 0.3 kgf (2.94N)		B	(7.13.1)
	Low temperature	Should be less than 1.5 kgf (14.7N)			(7.13.2)

6.12 Evaluation standard for environmental resistance should be according to Table 13.

Table 13

Evaluation Items		Evaluation Standard		Quality Rank	Evaluation Methods
Environmental Resistance		Should be satisfied with following specification in KES D-G008 (Plastic part on interior and exterior)		B	In accordance with KES D-G008
	Heat resistance for short periods	Indicated on specification drawings			
	Heat resistance for long periods				
	Repeatability for cold -heat resistance				
	Cold resistance				
	Fluid resistance	Cr - I. O			
	Light resistance	Li - O.B			
	Warm up characteristics	In accordance with KES C-H001		AR	In accordance with KES C-H 001
Holding force of lock after evaluating for environmental resistance		Lid should not be opened.		B	7.5.2 (7.5.3)
		Lock should not be broken.		AR	(7.5.1)
Operating effort of lock button or lock lever after evaluating for environmental resistance		Operating effort should not be less than 0.5 ~ 0.8 kgf (4.9 ~ 7.84N)		B	(7.6.1) (7.6.2)
Abnormal sounds of console assembly after evaluating for environmental resistance		Abnormal sounds should not be produced.		B	(7.7)
Operating force of shift lever bush after evaluating for environmental resistance	Normal temperature	Should be less than 0.3 kgf (2.94N)		B	(7.13.1)
	Low temperature	Should be less than 1.5 kgf (14.7N)			(7.13.2)
Operating force of shift lever boots after evaluating for environmental resistance		What should not exist	Broken, sperated, detached bush, breaks and misalign- ment of bush panel	B	(7.13.3)
		What should not be seen with eyes	Hanging down of duct, discoloration		