

KES

The Determination Method
for Specification of
Clutch Cover Ass'y

KES M – I003A

(EST.) 1989 – 10 – 30
(REV.) 1991 – 04 – 30

Contents

1. Scope of Application
2. Purpose
3. Definition of Terminology
4. Design Procedure

Attached Book



1. Scope of Application

This standard shall be applied to the determination method for specification of clutch cover ass'y of diaphragm spring for car.

2. Purpose

This standard shall have the purpose of standardization for specification design of clutch cover ass'y

3. Definition of Terminology

Definition of terminology follows the M-I002(Determination method of clutch volume).

4. Design Procedure

4.1 Determination of clutch transmission volume (T_c)

The purpose is to determine size of applied clutch disc facing and pressure load of clutch cover ass'y.

(1) T_c determination by maximum engine torque (T_e)

Car : T_c/T_e (1)

Entrainment vehicle of gasoline engine : 1.0 ~ 1.5

Entrainment vehicle of diesel engine : 1.2 ~ 1.8

Truck, Bus : T_c/T_e (2)

Entrainment vehicle of gasoline engine : 1.3 ~ 1.7

Entrainment vehicle of diesel engine : 1.5 ~ 2.0

Note : Actual measurement value for vehicles follow asterisk 1.

(2) T_c determination for vehicle volume

In case of the same engine of same kind of vehicle, set up about 4 % T_c increase per 100 kg f increase of vehicle volume.

Note : Refer to KES M-I002 for detailed determination method of clutch volume.

4.2 Lay out setting of clutch cover ass'y

(1) It is desirable to set in accordance with form determination of clutch cover ass'y and engine type.(Table 1)

Table 1

Spring form	Drive method	Cover shape	Fly wheel shape	Abbreviation	Strength & Weakness	Comparison
Diaphragm spring	Strap drive	Turn over	Pot	DSTP	•Light •Small numbers of parts •Good for the things of which maximum engine rotation number is small	Fig. 1-1
			Flat	DSTF		
		Flat	Pot	DSFP	•Heavy •Many number of parts •Good for the things of which maximum engine rotation number is large	Fig. 1-2
			Flat	DSFF		

Note : Comparison of fly wheel shape

Pot shape : It is mainly used for vehicles (Vehicles of F.R or R.R) of rear wheel drive shape which need large inertia force and have small outside diameter.

Flat shape : It is mainly used for vehicles of front wheel drive shape which must have narrow fly wheel width even though have large outside diameter.