



FEDERATION INTERNATIONALE DU SPORT AUTOMOBILE

Homologation N°

N-5415 N

FN-028

1990年6月30日

FICHE COMPLEMENTAIRE D'HOMOLOGATION EN GROUPE «N»
COMPLEMENTARY HOMOLOGATION FORM FOR GROUP «N»

Homologation valable à partir du 01 AOUT 1990 prononcée par FISA
Homologation valid as from _____ decided by _____

En complément de la fiche de Gr. A n° 5415
In addition to the Gr. A from n° _____

IMPORTANT:

La présente fiche comporte toutes informations complémentaires à la fiche d'homologation de base de Gr. A pour la participation du véhicule en groupe «N». En cas d'information contradictoire, seule l'information figurant sur la présente fiche complémentaire est à prendre en considération pour le Groupe «N».

IMPORTANT:

This form includes all the additional information to the basic Group A homologation form for the participation of the vehicle in Group «N». In the case of contradictory information, only the information appearing on the present additional form is to be taken into consideration for Group «N».

1. DEFINITIONS

101. Constructeur MAZDA MOTOR CORPORATION
Manufacturer _____

102. Dénomination(s) commerciale(s) – Modèle et type MAZDA FAMILIA 4WD (BG8)
Commercial name(s) – Type and model _____

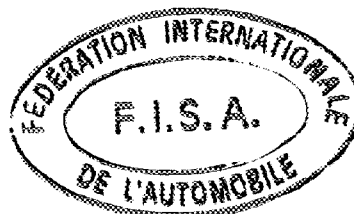
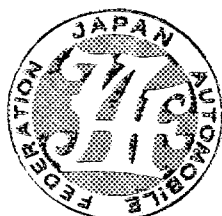
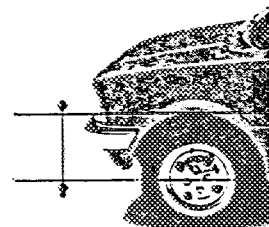
103. Cylindrée totale (1839.6 X 1.7)
Cylinder capacity 3127.3 cm³

2. DIMENSIONS, POIDS / DIMENSIONS, WEIGHTS

201. Poids minimum 1097 kg
Minimum weight _____

205. Hauteur minimum centre moyeu de roue /
ouverture du passage de roue
Minimum height center hub /
wheel arch opening

AV
Front 340 mm
AR
Rear 335 mm



Marque MAZDA Modèle FAMILIA (BG8) N° Homol. N-5415 **N**
 Make _____ Model _____

207. Voie maximum AV 1430 mm AR 1435 mm
 Maximum track Front _____ Rear _____

208. Garde au sol minimum XXXXX mm Endroit de la mesure XXXXX
 Minimum ground clearance _____ Where measured _____

3. MOTEUR / ENGINE

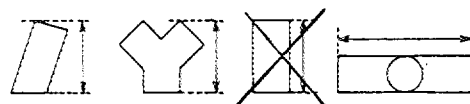
302. Nombre de supports 3
 Number of supports _____

308. Volume minimal total d'une chambre de combustion 63.9 cm³
 Total minimum volume of a combustion chamber _____

309. Volume minimum d'une chambre de combustion dans la culasse 50.8 cm³
 Minimum volume of a combustion chamber in the cylinderhead _____

310. Rapport volumétrique maximum (par rapport à l'unité) 8.2 : 1
 Maximum compression ratio (in relation with the unit) _____

311. Hauteur minimum du bloc-cylindres 221 mm
 Minimum height of the cylinder block _____



313. Chemises b) Matériau XXXXX
 Sleeves Material _____

317. Piston a) Matériau Aluminum alloy
 Piston Material _____

b) Nombre de segments 3 c) Poids minimum 377 g
 Number of rings _____ Minimum weight _____

d) Distance de la médiane de l'axe au sommet du piston 31.2 ± 0.1 mm
 Distance from gudgeon pin center line to highest point of piston crown _____

e) Distance (+/-) entre le sommet du piston au PMH et le plan de joint du bloc-cylindre 0.1 ± 0.15 mm
 Distance (+/-) between the top of the piston at TDC and the gasket plane of the cylinderblock _____

f) Volume de l'évidement du piston 9.5 ± 0.5 cm³
 Piston groove volume _____

319. Vilebrequin i) Diamètre maximum des manetons 45 mm
 Crankshaft Maximum diameter of big end journals _____

320. Volant moteur
 Flywheel
 c) Poids minimum avec couronne de démarreur et embrayage complet XXXXX g
 Minimum weight of the flywheel with starter ring and complete clutch _____

321. Culasse: c) Hauteur minimum 133 mm
 Cylinderhead: Minimum height _____

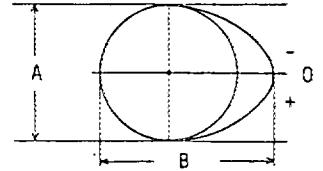
d) Endroit de la mesure From the top of cylinderhead to the bottom of cylinderhead
 Where measured _____



322. Epaisseur du joint de culasse serré 0.8 ± 0.2 mm
 Thickness of the tightened cylinderhead gasket _____ mm

325. Arbre à cames e) Diamètre des paliers 26 +0.03 / -0.05 mm
 Camshaft Diameter of bearings _____ mm

g) Dimensions de la came Admission: A = 36 ± 0.1 mm
 Cam dimensions Inlet: B = 44.1 ± 0.1 mm
 Echappement Exhaust: A = 36 ± 0.1 mm
B = 44.6 ± 0.1 mm



326. Distribution a) Jeu théorique pour la distribution Admission 0 mm Echappement 0 mm
 Timing Theoretical timing clearance Inlet _____ mm Exhaust _____ mm

b) Avance à l'ouverture (avec jeu théorique (326 a))
 Valves open at (with theoretical timing clearance (326 a))
 Admission Inlet 2 ± 1 avant/après PMH ° Echappement Exhaust 59 ± 1 avant/après PMB °
 before/after TDC before/after BDC

c) Retard à la fermeture (avec jeu théorique (326 a))
 Valves closes at (with theoretical timing clearance (326 a))
 Admission Inlet 51 ± 1 avant/après PMB ° Echappement Exhaust 8 ± 1 avant/après PMH °
 before/after BDC before/after TDC

d) Levée de came en mm (arbre démonté) (dessin/drawing art. 325)
 Cam lifts in mm (dismounted camshaft)

Admission / Inlet

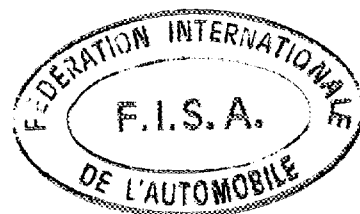
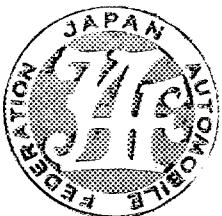
Echappement / Exhaust

$$0 = 8.1 \pm 0.2 \text{ mm}$$

$$0 = 8.6 \pm 0.2 \text{ mm}$$

- 5° = <u>8.0 ± 0.2</u> mm	+ 5° = <u>8.0 ± 0.2</u> mm
- 10° = <u>7.8 ± 0.2</u> mm	+ 10° = <u>7.8 ± 0.2</u> mm
- 15° = <u>7.3 ± 0.2</u> mm	+ 15° = <u>7.3 ± 0.2</u> mm
- 30° = <u>5.1 ± 0.2</u> mm	+ 30° = <u>5.1 ± 0.2</u> mm
- 45° = <u>1.7 ± 0.2</u> mm	+ 45° = <u>1.7 ± 0.2</u> mm
- 60° = <u>0.0 ± 0.2</u> mm	+ 60° = <u>0.1 ± 0.2</u> mm
- 75° = <u>0.0 ± 0.2</u> mm	+ 75° = <u>0.0 ± 0.2</u> mm
- 90° = <u>0.0 ± 0.2</u> mm	+ 90° = <u>0.0 ± 0.2</u> mm
- 105° = <u>0.0 ± 0.2</u> mm	+ 105° = <u>0.0 ± 0.2</u> mm
- 120° = <u>0.0 ± 0.2</u> mm	+ 120° = <u>0.0 ± 0.2</u> mm
- 135° = <u>0.0 ± 0.2</u> mm	+ 135° = <u>0.0 ± 0.2</u> mm
- 150° = <u>0.0 ± 0.2</u> mm	+ 150° = <u>0.0 ± 0.2</u> mm

- 5° = <u>8.5 ± 0.2</u> mm	+ 5° = <u>8.5 ± 0.2</u> mm
- 10° = <u>8.3 ± 0.2</u> mm	+ 10° = <u>8.3 ± 0.2</u> mm
- 15° = <u>7.9 ± 0.2</u> mm	+ 15° = <u>7.9 ± 0.2</u> mm
- 30° = <u>5.6 ± 0.2</u> mm	+ 30° = <u>5.6 ± 0.2</u> mm
- 45° = <u>2.3 ± 0.2</u> mm	+ 45° = <u>2.3 ± 0.2</u> mm
- 60° = <u>0.2 ± 0.2</u> mm	+ 60° = <u>0.1 ± 0.2</u> mm
- 75° = <u>0.0 ± 0.2</u> mm	+ 75° = <u>0.0 ± 0.2</u> mm
- 90° = <u>0.0 ± 0.2</u> mm	+ 90° = <u>0.0 ± 0.2</u> mm
- 105° = <u>0.0 ± 0.2</u> mm	+ 105° = <u>0.0 ± 0.2</u> mm
- 120° = <u>0.0 ± 0.2</u> mm	+ 120° = <u>0.0 ± 0.2</u> mm
- 135° = <u>0.0 ± 0.2</u> mm	+ 135° = <u>0.0 ± 0.2</u> mm
- 150° = <u>0.0 ± 0.2</u> mm	+ 150° = <u>0.0 ± 0.2</u> mm



Marque
Make

MAZDA

Modèle
Model

FAMILIA (BG8)

N° Homol.

N-5415

N

e) Levée de soupape en mm avec jeu théorique de distribution (art. 326 a)
Valve lift in mm with theoretical timing clearance (art. 326 a)

Admission / Inlet

Art. 326 b) = 2 ± 1 avant/après PMH
before/after TDC = 0,0 mm

+ 20°	= 1.1 ± 0.2 mm
+ 40°	= 3.4 ± 0.2 mm
+ 60°	= 5.5 ± 0.2 mm
+ 80°	= 7.0 ± 0.2 mm
+ 100°	= 7.8 ± 0.2 mm
+ 120°	= 7.9 ± 0.2 mm
+ 140°	= 7.4 ± 0.2 mm
+ 160°	= 6.2 ± 0.2 mm
+ 180°	= 4.4 ± 0.2 mm
+ 200°	= 2.1 ± 0.2 mm
+ 220°	= 0.2 ± 0.2 mm
+ 240°	= 0.0 ± 0.2 mm
+ 260°	= 0.0 ± 0.2 mm
+ 280°	= 0.0 ± 0.2 mm
+ 300°	= 0.0 ± 0.2 mm
+ 320°	= 0.0 ± 0.2 mm
+ 340°	= 0.0 ± 0.2 mm
+ 360°	= 0.0 ± 0.2 mm

Echappement / Exhaust

Art. 326 b) = 59 ± 1 avant/après PMB
before/after BDC = 0,0 mm

+ 20°	= 6.9 ± 0.2 mm
+ 40°	= 8.0 ± 0.2 mm
+ 60°	= 8.5 ± 0.2 mm
+ 80°	= 8.2 ± 0.2 mm
+ 100°	= 7.9 ± 0.2 mm
+ 120°	= 5.9 ± 0.2 mm
+ 140°	= 3.9 ± 0.2 mm
+ 160°	= 1.6 ± 0.2 mm
+ 180°	= 0.1 ± 0.2 mm
+ 200°	= 0.0 ± 0.2 mm
+ 220°	= 0.0 ± 0.2 mm
+ 240°	= 0.0 ± 0.2 mm
+ 260°	= 0.0 ± 0.2 mm
+ 280°	= 0.0 ± 0.2 mm
+ 300°	= 0.0 ± 0.2 mm
+ 320°	= 0.0 ± 0.2 mm
+ 340°	= 0.0 ± 0.2 mm
+ 360°	= 0.0 ± 0.2 mm

327. Admission h) Nombre de ressorts par soupape

Inlet Number of springs per valve 1

i) Caractéristiques des ressorts: Sous une charge de 31/65.0 kg, la longueur max. du ressort est de 39.5/24.0 mm
Spring characteristics: Under a load of 31/65.0 kg, the max. length of the spring is 39.5/24.0 mm

Caractéristiques des ressorts: Sous une charge de XXXX kg, la longueur max. du ressort est de XXXX mm
Spring characteristics: Under a load of XXXX kg, the max. length of the spring is XXXX mm

k) Diamètre extérieur des ressorts 26.5 ± 0.2 mm l) Nombre de spires des ressorts 7.7 mm
Exterior diameter of the springs
Number of spring coils

m) Diamètre du fil des ressorts 3.9 ± 0.1 mm n) Longueur libre maximum des ressorts 46.3 mm
Diameter of spring wire
Maximum free length of the springs

328. Echappement

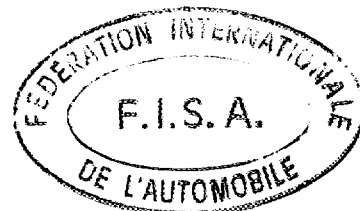
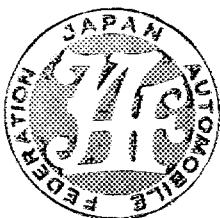
Exhaust

c) Diamètre de(s) sortie(s) du collecteur 48 ± 1.0 mm i) Nombre de ressorts par soupape 1
Diameter of the manifold exit(s)
Number of springs per valve

k) Caractéristiques des ressorts: Sous une charge de 31/65.0 kg, la longueur max. du ressort est de 39.5/24.0 mm
Spring characteristics: Under a load of 31/65.0 kg, the max. length of the spring is 39.5/24.0 mm

l) Diamètre extérieur des ressorts 26.5 ± 0.2 mm m) Nombre de spires des ressorts 7.7
Exterior diameter of the springs
Number of spring coils

n) Diamètre du fil des ressorts 3.9 ± 0.1 mm o) Longueur libre maximum des ressorts 46.3 mm
Diameter of spring wire
Maximum free length of the springs



Marque MAZDA Modèle FAMILIA (BG8) N° Homol. N-5415 **N**
Make _____ Model _____

329. **Système anti-pollution** a) oui/~~non~~
Anti pollution system Yes/~~no~~
b) Description Catalytic converter
Description _____

330. **Système d'allumage** d) Nombre de bobines 1
Ignition system Number of coils _____

331. **Capacité du circuit de refroidissement** 6 L
Cooling system capacity _____

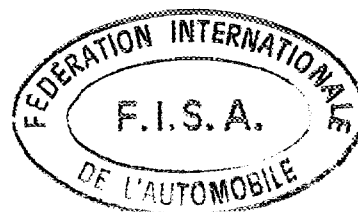
332. **Ventilateur de refroidissement** a) Nombre 1 b) Diamètre de l'hélice 340 mm
Cooling fan Number _____ Diameter of the screw _____ mm
c) Matériau de l'hélice Plastic d) Nombre de pales 5
Material of the screw _____ Number of blades _____
e) Type de connexion Electrical f) Ventilateur débrayable oui/~~non~~
Type of connection _____ Automatic cut in yes/~~no~~

333. **Système de lubrification** c) Capacité totale 4 L
Lubrification system Total capacity _____ L
d) Radiateur(s) d'huile oui/~~non~~ Nombre 1
Oil radiator(s) yes/~~no~~ Number _____
e) Emplacement du/des radiateurs Between cylinderblock and oil filter
Position of the radiator(s) _____

4. CIRCUIT DE CARBURANT / FUEL CIRCUIT

401. **Réservoir** e) Emplacement des orifices Left side of rear fender
Fuel tank Filler holes location _____

402. **Pompe(s) à essence** a) Électrique Mécanique
Fuel pump(s) Electrical Mechanical
b) Nombre 1 c) Marque et type Nippon Denso
Number _____ Make and type _____
d) Emplacement In fuel tank e) Débit maximum 2.3 l/mn
Location _____ Maximum flow _____ l/mn



Marque MAZDA Modèle FAMILIA (BG8) N° Homol. N-5415 N
 Make _____ Model _____

5. EQUIPEMENT ELECTRIQUE / ELECTRICAL EQUIPEMENT

501. Batterie(s) b) Tension 12 V c) Emplacement In engine compartment
 Battery(ies) Tension _____ Location _____

502. Génératrice(s) a) Nombre 1
 Generator(s) Number _____
 b) Type Alternator c) Système d'entraînement Belt
 Type _____ Drive system _____

503. Phares escamotables: a) ~~oui~~/non b) Système de commande XXXXX
 Retractable headlights: yes/no Drive system _____

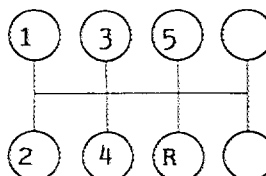
6. TRANSMISSION / DRIVE

602. Embrayage a) Type Dry single plate d) Diamètre du(des) disque(s) 230 ± 2 mm
 Clutch Type _____ Diameter of the plate(s) _____

603. Boîte de vitesse
 Gearbox
 e) rapports ratios

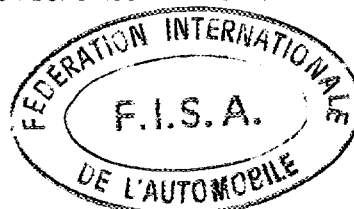
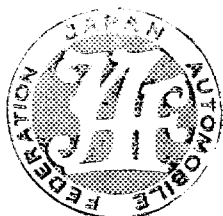
	Manuelle / Manual			Automatique / Automatic		
	rapports ratio	nombre de dents/ number of teeth	synchro.	rapports ratio	nombre de dents/ number of teeth	synchro.
1	3.454	38/11	X			
2	1.833	33/18	X			
3	1.310	38/29	X			
4	0.970	33/34	X			
5	0.717	33/46	X			
AR/R	3.166	38/27 X 27/12				
Constante	XXXXX	XXXXX				
Constant.						

f) Grille de vitesse
 Gear change gate



605. Couple final b) Rapport Front: 4.214
 Final drive Ratio Rear: 3.909

c) Nombre de dents Front: 59/14
 Number of teeth Rear: 43/11



Marque MAZDA
 Make _____

Modèle FAMILIA (BG8)
 Model _____

N° Homol. N-5415 N

7. SUSPENSION / SUSPENSION

702. Ressorts hélicoïdaux
Helical springs

- a) Matériau
Material
- b) Type progressif
Progressive type
- c) Longueur libre minimale
Minimal free length
- d) Nombre de spires
Number of coils
- e) Diamètre du fil
Diameter of the wire
- f) Diamètre extérieur
Exterior diameter

AV / Front	AR / Rear
Steel	Steel
oui/non yes/no	oui/non yes/no
XXXXX _____ mm	XXXXX _____ mm
XXXXX _____ mm	XXXXX _____ mm
XXXXX _____ mm	XXXXX _____ mm
XXXXX _____ mm	XXXXX _____ mm

g) Caractéristiques des ressorts: Sous une charge de XXX kg, la longueur min. du ressort AV est de _____ mm
 Spring characteristics: Under a load of XXX kg, the min. length of the front spring is _____ mm
 Sous une charge de XXX kg, la longueur min. du ressort AR est de _____ mm
 Under a load of XXX kg, the min. length of the rear spring is _____ mm

703. Ressorts à lames
Leaf springs

A = *Lame maîtresse / X = lame auxiliaire*
 2 = 2^e lame / 3 = 3^e lame / 4 = 4^e lame / 5 = 5^e lame

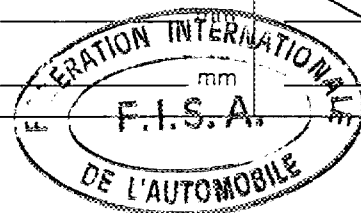
A = *major leaf / X = auxiliary leaf*
 2 = 2nd leaf / 3 = 3rd leaf / 4 = 4th leaf / 5 = 5th leaf

- a) Matériau
Material
- b) Nombre d'étriers
Number of spring hangers
- c) Longueur libre minimum
Minimum free length
- d) Largeur maximum
Maximum width
- e) Epaisseur
Thickness
- f) Courbure verticale maximale
Maximum vertical curve

A	2	3
_____	_____	_____
_____	_____	_____
_____ mm	_____ mm	_____ mm
_____ mm	_____ mm	_____ mm
_____ mm	_____ mm	_____ mm
_____ mm	_____ mm	_____ mm

- a) Matériau
Material
- b) Nombre d'étriers
Number of spring hangers
- c) Longueur libre minimum
Minimum free length
- d) Largeur maximum
Maximum width
- e) Epaisseur
Thickness
- f) Courbure verticale maximale
Maximum vertical curve

4	5	X
_____	_____	_____
_____	_____	_____
_____ mm	_____ mm	_____ mm
_____ mm	_____ mm	_____ mm
_____ mm	_____ mm	_____ mm
_____ mm	_____ mm	_____ mm



Marque MAZDA
 Make _____

Modèle FAMILIA (BG8)
 Model _____

N° Homol. N-5415 N

704. Barre de torsion
Torsion bar

- a) Longueur efficace
 Effective length
 mesurée de:
 measured from:
 à:
 to:
- b) Diamètre efficace
 Effective diameter
 mesuré à:
 measured at:
- c) Matériau
 Material

AV / Front	AR / Rear
_____ mm	_____ mm
_____	_____
_____	_____
_____ mm	_____ mm
_____	_____
_____	_____

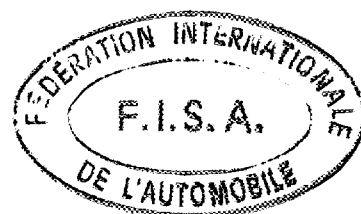
706. Stabilisateur
Stabilizer

- a) Longueur efficace
 Effective length
- b) Diamètre efficace
 Effective diameter
- c) Matériau
 Material

AV / Front	AR / Rear
<u>1062 ± 1%</u> mm	<u>1036 ± 1%</u> mm
<u>22 ± 0.3</u> mm	<u>20 ± 0.3</u> mm
<u>Steel</u>	<u>Steel</u>
_____	_____
<u>XXXXX</u> mm	<u>XXXXX</u> mm
oui /non <u>yes</u> /no	oui /non <u>yes</u> /no
<u>XXXXX</u> mm	<u>XXXXX</u> mm
<u>XXXXX</u> mm	<u>XXXXX</u> mm

707. Amortisseurs
Shock absorbers

- d) Diamètre extérieur
 Exterior diameter
- e) Assiette du ressort réglable
 Adjustable spring trim
- f) Distance assiette-fixation
 Distance trim-monitoring
- g) Diamètre de la tige de piston
 Diameter of the piston rod



Marque MAZDA
 Make _____

Modèle FAMILIA (BG8)
 Model _____

N° Homol. N-5415 N

8. TRAIN ROULANT / RUNNING GEAR

**801. Roues
 Wheels**

- a) Diamètre
 Diameter
- b) Largeur
 Width
- c) Marque et type
 Make and type
- d) Matériau
 Material
- e) Poids unitaire
 Unitary weight
- f) Dépot entre plan de montage
 et extrémité intérieure
 Offset between mounting
 and extreme inner face

AV / Front	AR / Rear	Secours / Spare
<u>14</u> "	<u>14</u> "	<u>14</u> "
<u>356</u> mm	<u>356</u> mm	<u>356</u> mm
<u>5.5</u> "	<u>5.5</u> "	<u>4</u> "
<u>140</u> mm	<u>140</u> mm	<u>102</u> mm
<u>XXXXX</u>	<u>XXXXX</u>	<u>XXXXX</u>
<u>XXXXX</u>	<u>XXXXX</u>	<u>XXXXX</u>
<u>XXXXX</u> kg	<u>XXXXX</u> kg	<u>XXXXX</u> kg
<u>XXXXX</u> mm	<u>XXXXX</u> mm	<u>XXXXX</u> mm

**802. Emplacement de la roue de secours
 Location of the spare wheel**

In trunk room

9. CARROSSERIE / BODYWORK

**901. Intérieur
 Interior**

c) Climatisation ~~oui~~/non
 Air conditioning ~~yes~~/no

- d) Sièges
 Seats
- d1) Type
 Type
- d2) Appui-tête
 Headrest
- d3) Poids
 Weight

AR / Rear	AV / Front
<u>Bench</u>	<u>Separate</u>
oui / non yes / no	oui / non yes / no
<u>13.2 ± 1</u> kg	<u>Driver's: 16.3 Passenger's: 14.5 kg (Tolerance: ± 1kg)</u>

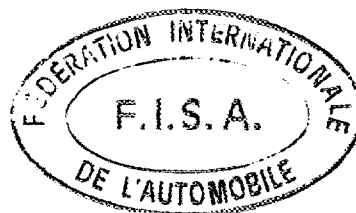
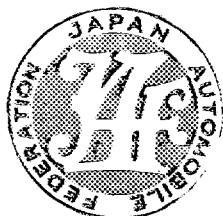
d4) Siège AR rabattable ~~oui~~/~~non~~
 Car rear seat be folded ~~yes~~/~~no~~

e) Plaque arrière ~~oui~~/~~non~~
 Rear ledge ~~yes~~/~~no~~

e1) Matériau Wood chip, Carpet
 Material _____

**902. Extérieur
 Exterior**

n) Essuie-glace AR ~~oui~~/~~non~~
 Rear wiper ~~yes~~/~~no~~



Marque MAZDA
Make

Modèle FAMILIA (BG8)
Model

N° Homol. N-5415 **N**

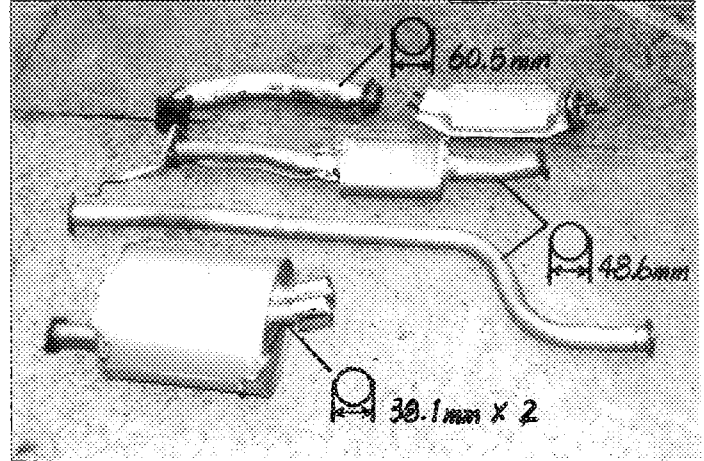
PHOTOS / PHOTOS

Moteur / Engine

AA) Piston de profil
Piston profile



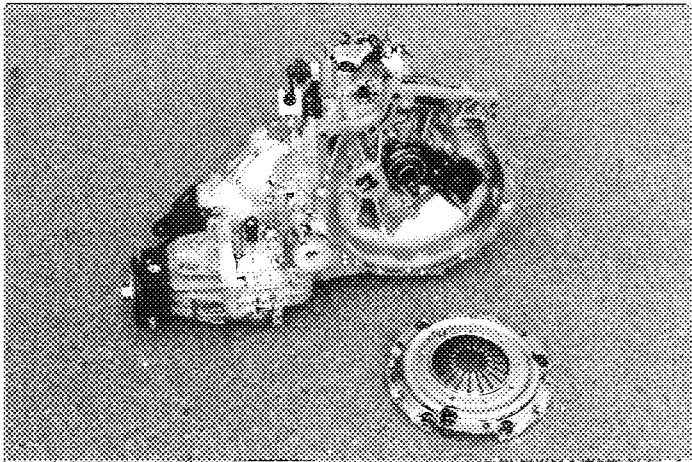
BB) Echappement complet
Complete exhaust system



Tolerance +/- 5%

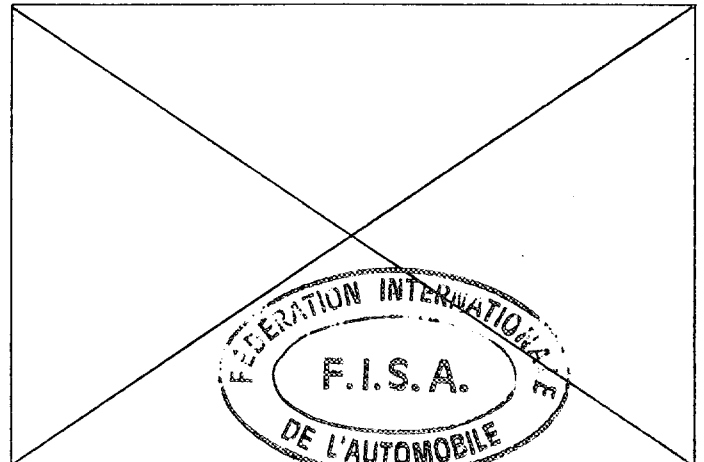
Transmission / Transmission

CC) Embrayage complet
Complete clutch

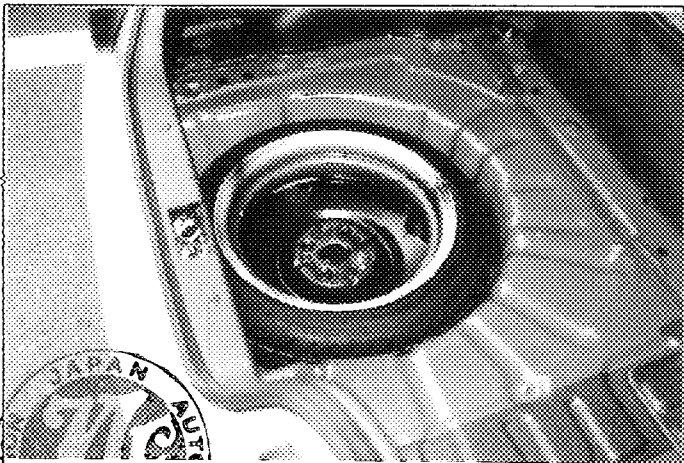


Train roulant / Running gear

DD) Roue nue (vue de 3/4)
Bare wheel (3/4 view)

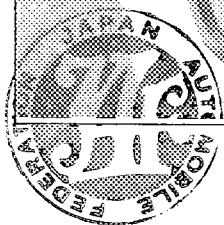
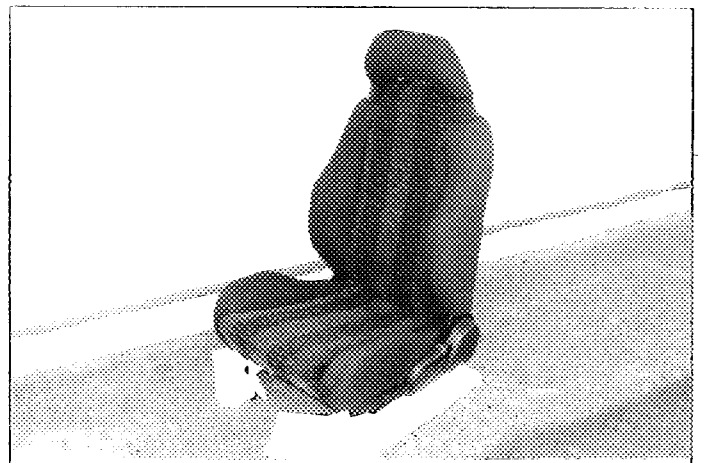


EE) Roue de secours dans son emplacement
Spare wheel in its location



Carrosserie / Bodywork

FF) Siège démonté avec ses accessoires
Dismounted seat with its accessories



Make
会社名 MAZDA

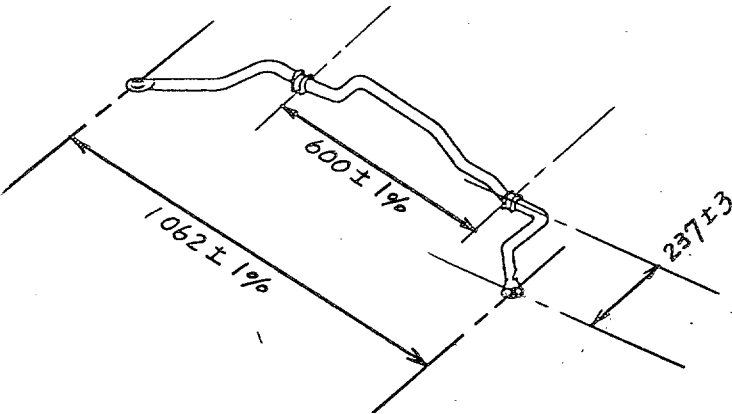
Model
型式 FAMILIA (BG8)

No Homol. **N-5415**

No Ext. _____

JAF公認番号 **FN-028**

Additional Information

Page or ext. ページまたは補足	Art. 項目	Description 記述
	334 F3 F4	Standard pressure: 0.75 +/- 0.05 Bar Measuring pressure system: Pressure corresponding to an axial displacement of the wastegate control rod of 2.0mm
	706	Stabilizer (Drawings) Front  Rear 