



FEDERATION INTERNATIONALE DU SPORT AUTOMOBILE

Homologation N°

N-5397 N

FN-024

1989年7月31日

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

Homologation valable à partir du 01 NOV. 1989 prononcée par FISA
Homologation valid as from _____ decided by _____

En complément de la fiche de Gr. A n° 5397
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 Fuji Heavy Industries Ltd.
Manufacturer _____

102. Dénomination(s) commerciale(s) – Modèle et type SUBARU 4WD (1.2) SEDAN , KA
Commercial name(s) – Type and model _____

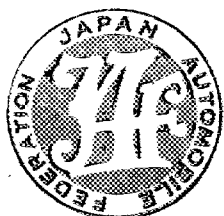
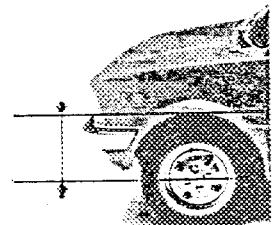
103. Cylindrée totale 1,189.2 cm³
Cylinder capacity _____

2. DIMENSIONS, POIDS / DIMENSIONS, WEIGHTS

201. Poids minimum 740 kg
Minimum weight _____

205. Hauteur minimum centre moyeu de roue /
ouverture du passage de roue 352 mm
Minimum height center hub /
wheel arch opening 341 mm

AV
Front 352 mm
AR
Rear 341 mm



Marque Fuji Modéle KA N° Homol. N-5397 N
 Make _____ Model _____

207. Voie maximum AV AR
 Maximum track Front 1,330 mm Rear 1,290 mm

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

3. MOTEUR / ENGINE

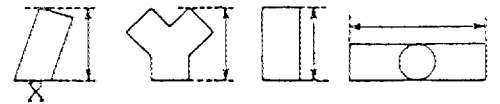
302. Nombre de supports
 Number of supports 3

308. Volume minimal total d'une chambre de combustion
 Total minimum volume of a combustion chamber 46.7 cm³

309. Volume minimum d'une chambre de combustion dans la culasse
 Minimum volume of a combustion chamber in the cylinderhead 37.2 cm³

310. Rapport volumétrique maximum (par rapport à l'unité)
 Maximum compression ratio (in relation with the unit) 9.5 : 1

311. Hauteur minimum du bloc-cylindres
 Minimum height of the cylinder block 200 mm



313. Chemises b) Matériau
 Sleeves Material X X X X

317. Piston a) Matériau
 Piston Material Aluminum alloy

b) Nombre de segments c) Poids minimum
 Number of rings 3 Minimum weight 300 g

d) Distance de la médiane de l'axe au sommet du piston
 Distance from gudgeon pin center line to highest point of piston crown 28.0 ± 0.1 mm

e) Distance (+/-) entre le sommet du piston au PMH et le plan de joint du bloc-cylindre
 Distance (+/-) between the top of the piston at TDC and the gasket plane of the cylinderblock 0 ± 0.15 mm

f) Volume de l'évidement du piston
 Piston groove volume 2.8 ± 0.5 cm³

319. Vilebrequin i) Diamètre maximum des manetons
 Crankshaft Maximum diameter of big end journals 42.0 mm

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

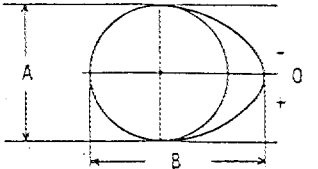
321. Culasse: c) Hauteur minimum
 Cylinderhead: Minimum height 137 mm
 d) Endroit de la mesure
 Where measured From top to bottom of cylinderhead



322. Epaisseur du joint de culasse serré 1.2 ± 0.2 mm
 Thickness of the tightened cylinderhead gasket 1.2 ± 0.2 mm

325. Arbre à cames e) Diamètre des paliers 38.5 , 39.0 , 43.0 , 44.0 , 47.0 mm
 Camshaft Diameter of bearings

g) Dimensions de la came Admission: A = 32.0 mm ±0.1
 Cam dimensions Inlet: B = 36.9 mm ±0.1
 Echappement A = 32.0 mm ±0.1
 Exhaust B = 36.9 mm ±0.1



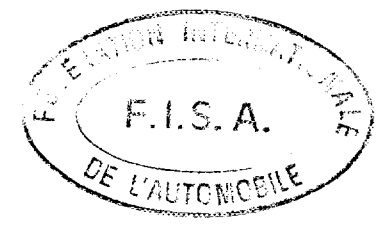
326. Distribution a) Jeu théorique pour la distribution Admission 0.15 mm Echappement 0.25 mm
 Timing Theoretical timing clearance Inlet Exhaust

b) Avance à l'ouverture (avec jeu théorique (326 a))
 Valves open at (with theoretical timing clearance (326 a))
 Admission 19 ° avant/avant PMH Echappement 64 ° avant/avant PMB
 Inlet before/after TDC Exhaust before/after BDC

c) Retard à la fermeture (avec jeu théorique (326 a))
 Valves closes at (with theoretical timing clearance (326 a))
 Admission 57 ° ~~avant~~/après PMB Echappement 24 ° ~~avant~~/après PMB
 Inlet ~~before~~/after BDC Exhaust ~~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 = <u>4.8</u> mm		0 = <u>4.8</u> mm	
- 5° = <u>4.8 ± 0.2</u> mm	+ 5° = <u>4.8 ± 0.2</u> mm	- 5° = <u>4.8 ± 0.2</u> mm	+ 5° = <u>4.8 ± 0.2</u> mm
- 10° = <u>4.6 ± 0.2</u> mm	+ 10° = <u>4.6 ± 0.2</u> mm	- 10° = <u>4.6 ± 0.2</u> mm	+ 10° = <u>4.6 ± 0.2</u> mm
- 15° = <u>4.3 ± 0.2</u> mm	+ 15° = <u>4.3 ± 0.2</u> mm	- 15° = <u>4.3 ± 0.2</u> mm	+ 15° = <u>4.4 ± 0.2</u> mm
- 30° = <u>2.7 ± 0.2</u> mm	+ 30° = <u>2.8 ± 0.2</u> mm	- 30° = <u>2.9 ± 0.2</u> mm	+ 30° = <u>3.0 ± 0.2</u> mm
- 45° = <u>0.7 ± 0.2</u> mm	+ 45° = <u>0.9 ± 0.2</u> mm	- 45° = <u>0.2 ± 0.2</u> mm	+ 45° = <u>1.1 ± 0.2</u> mm
- 60° = <u>0.2 ± 0.2</u> mm	+ 60° = <u>0.2 ± 0.2</u> mm	- 60° = <u>0.1 ± 0.2</u> mm	+ 60° = <u>0.2 ± 0.2</u> mm
- 75° = <u>0.1 ± 0.2</u> mm	+ 75° = <u>0.1 ± 0.2</u> mm	- 75° = <u>0 ± 0.2</u> mm	+ 75° = <u>0.1 ± 0.2</u> mm
- 90° = <u>0 ± 0.2</u> mm	+ 90° = <u>0 ± 0.2</u> mm	- 90° = <u>0 ± 0.2</u> mm	+ 90° = <u>0 ± 0.2</u> mm
- 105° = <u>0 ± 0.2</u> mm	+ 105° = <u>0 ± 0.2</u> mm	- 105° = <u>0 ± 0.2</u> mm	+ 105° = <u>0 ± 0.2</u> mm
- 120° = <u>0 ± 0.2</u> mm	+ 120° = <u>0 ± 0.2</u> mm	- 120° = <u>0 ± 0.2</u> mm	+ 120° = <u>0 ± 0.2</u> mm
- 135° = <u>0 ± 0.2</u> mm	+ 135° = <u>0 ± 0.2</u> mm	- 135° = <u>0 ± 0.2</u> mm	+ 135° = <u>0 ± 0.2</u> mm
- 150° = <u>0 ± 0.2</u> mm	+ 150° = <u>0 ± 0.2</u> mm	- 150° = <u>0 ± 0.2</u> mm	+ 150° = <u>0 ± 0.2</u> mm



Marque
Make

Fuji

Modèle
Model

KA

N° Homol.

N-5397 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) = 19 avant/avant PMH
before/after TDC = 0,0 mm

+ 20°	= <u>0.3±0.2</u> mm
+ 40°	= <u>1.9±0.2</u> mm
+ 60°	= <u>4.3±0.2</u> mm
+ 80°	= <u>6.3±0.2</u> mm
+ 100°	= <u>7.7±0.2</u> mm
+ 120°	= <u>8.4±0.2</u> mm
+ 140°	= <u>8.3±0.2</u> mm
+ 160°	= <u>7.5±0.2</u> mm
+ 180°	= <u>6.6±0.2</u> mm
+ 200°	= <u>3.8±0.2</u> mm
+ 220°	= <u>1.5±0.2</u> mm
+ 240°	= <u>0.2±0.2</u> mm
+ 260°	= <u>0±0.2</u> mm
+ 280°	= <u>0±0.2</u> mm
+ 300°	= <u>0±0.2</u> mm
+ 320°	= <u>0±0.2</u> mm
+ 340°	= <u>0±0.2</u> mm
+ 360°	= <u>0±0.2</u> mm

Echappement / Exhaust

Art. 326 b) = 64 avant/avant PMB
before/after BDC = 0,0 mm

+ 20°	= <u>0.3±0.2</u> mm
+ 40°	= <u>1.7±0.2</u> mm
+ 60°	= <u>3.9±0.2</u> mm
+ 80°	= <u>5.9±0.2</u> mm
+ 100°	= <u>7.4±0.2</u> mm
+ 120°	= <u>8.3±0.2</u> mm
+ 140°	= <u>8.4±0.2</u> mm
+ 160°	= <u>7.9±0.2</u> mm
+ 180°	= <u>6.6±0.2</u> mm
+ 200°	= <u>4.8±0.2</u> mm
+ 220°	= <u>2.5±0.2</u> mm
+ 240°	= <u>0.7±0.2</u> mm
+ 260°	= <u>0±0.2</u> mm
+ 280°	= <u>0±0.2</u> mm
+ 300°	= <u>0±0.2</u> mm
+ 320°	= <u>0±0.2</u> mm
+ 340°	= <u>0±0.2</u> mm
+ 360°	= <u>0±0.2</u> mm

327. Admission h) Nombre de ressorts par soupape

Inlet Number of springs per valve 1

i) Caractéristiques des ressorts: Sous une charge de	kg, la longueur max. du ressort est de	mm
Spring characteristics: Under a load of	<u>55</u> kg, the max. length of the spring is	<u>31.7</u> mm
Caractéristiques des ressorts: Sous une charge de	kg, la longueur max. du ressort est de	mm
Spring characteristics: Under a load of	<u>X X</u> kg, the max. length of the spring is	<u>X X</u> mm
k) Diamètre extérieur des ressorts	i) Nombre de spires des ressorts	
Exterior diameter of the springs <u>27.9±0.2</u> mm	Number of spring coils <u>7.7</u>	
m) Diamètre du fil des ressorts	n) Longueur libre maximum des ressorts	
Diameter of spring wire <u>3.9±0.1</u> mm	Maximum free length of the springs <u>46.5</u> mm	

328. Echappement

Exhaust

c) Diamètre de(s) sortie(s) du collecteur	i) Nombre de ressorts par soupape	
Diameter of the manifold exit(s) <u>85.0 ± 1</u> mm	Number of springs per valve <u>1</u>	
k) Caractéristiques des ressorts: Sous une charge de	kg, la longueur max. du ressort est de	mm
Spring characteristics: Under a load of	<u>55</u> kg, the max. length of the spring is	<u>31.7</u> mm
l) Diamètre extérieur des ressorts	m) Nombre de spires des ressorts	
Exterior diameter of the springs <u>27.9±0.2</u> mm	Number of spring coils <u>7.7</u>	
n) Diamètre du fil des ressorts	o) Longueur libre maximum des ressorts	
Diameter of spring wire <u>3.9±0.1</u> mm	Maximum free length of the springs <u>46.5</u> mm	



Marque Fuji Modèle KA N° Homol. N-5397 N
 Make Fuji Model KA

329. Système anti-pollution a) oui / ~~XXX~~
 Anti pollution system yes / ~~XXX~~
 b) Description 3 Way Catalyst
 Description _____

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

331. Capacité du circuit de refroidissement
 Cooling system capacity 4.6 L

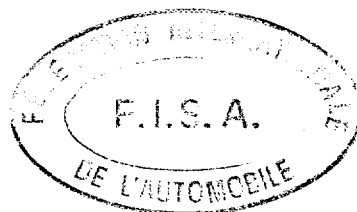
332. Ventilateur de refroidissement a) Nombre b) Diamètre de l'hélice
 Cooling fan Number 1 Diameter of the screw 300 mm
 c) Matériau de l'hélice d) Nombre de pales
 Material of the screw Polypropylene Number of blades 4
 e) Type de connexion f) Ventilateur débrayable oui / ~~XX~~
 Type of connection Electric Automatic cut in yes / ~~XX~~

333. Système de lubrification c) Capacité totale
 Lubrification system Total capacity 3.0 L
 d) Radiateur(s) d'huile ~~XX~~/non Nombre
 Oil radiator(s) ~~XX~~/no Number X X X X
 e) Emplacement du/des radiateurs
 Position of the radiator(s) X X X X

4. CIRCUIT DE CARBURANT / FUEL CIRCUIT

401. Réservoir e) Emplacement des orifices
 Fuel tank Filler holes location Rearward on the left hand side

402. Pompe(s) à essence a) Electrique Mécanique
 Fuel pump(s) Electrical Mecanical
 b) Nombre c) Marque et type Mak : JIDOSHAKIKI
 Number 1 Make and type Type: Electromagnetism
 d) Emplacement e) Débit maximum
 Location Under the rear floor Maximum flow 0.43 l/mn



Marque Fuji Modèle KA N° Homol. N-5397 **N**
 Make Fuji Model KA N° Homol. N-5397 **N**

5. EQUIPEMENT ELECTRIQUE / ELECTRICAL EQUIPEMENT

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

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

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

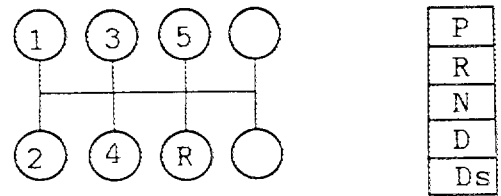
6. TRANSMISSION / DRIVE

602. Embrayage a) Type d) Diamètre du(des) disque(s)
 Clutch Type Dry Diameter of the plate(s) 180±2.0 mm

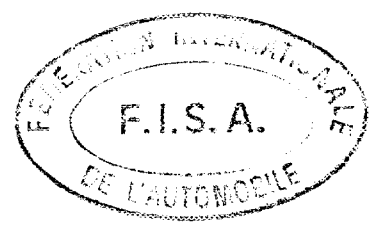
603. Boîte de vitesse
 Gearbox
 e) rapports ratios

	Manuelle / Manual			Automatique / Automatic		
	rappports ratio	nombre de dents/ number of teeth	synchro.	rappports ratio	nombre de dents/ number of teeth	synchro.
1	3.071	43/14	X	2.503		
2	1.695	39/23	X			X
3	1.137	33/29	X	0.497		
4	0.794	27/34	X			
5	0.631	24/38	X			
AR/R	3.461	⁴⁵ / ₃₃ / ₁₃		2.475	$\frac{20}{33} \times \frac{31}{19} \times 2.503$	X
Constante	—	—		1.275	37/29	
Constant.	—	—				

f) Grille de vitesse
 Gear change gate



605. Couple final b) Rapport Front 5.200 c) Nombre de dents Front 78/15
 Final drive Ratio Rear 3.700 Number of teeth Rear 37/10



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
XXXXXXXX	XXXXXXXX
XXXXXXXX	XXXXXXXX
X X X X mm	X X X X mm
X X X X,	X X X X mm
X X X X mm	X X X X mm
X X X X mm	X X X X mm

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

703. Ressorts à lames

Leaf springs

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

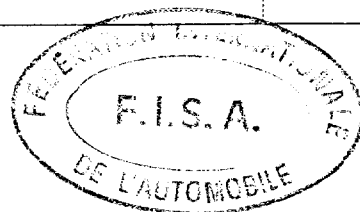
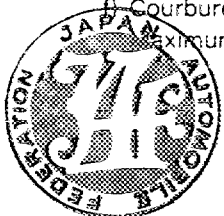
A = *major leaf* / X = *auxiliary leaf*
 2 = *2nd leaf* / 3 = *3rd leaf* / 4 = *4th leaf* / 5 = *5th leaf*

- 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
X X X	X X X	X X X
X X X	X X X	X X X
X X X mm	X X X mm	X X X mm
X X X mm	X X X mm	X X X mm
X X X mm	X X X mm	X X X mm
X X X mm	X X X mm	X X X 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
X X X	X X X	X X X
X X X	X X X	X X X
X X X mm	X X X mm	X X X mm
X X X mm	X X X mm	X X X mm
X X X mm	X X X mm	X X X mm
X X X mm	X X X mm	X X X mm



Marque
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Modèle
 Model KA

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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
<u> X X X </u> mm	<u> X X X </u> mm
<u> X X X </u>	<u> X X X </u>
<u> X X X </u>	<u> X X X </u>
<u> X X X </u> mm	<u> X X X </u> mm
<u> X X X </u>	<u> X X X </u>
<u> X X X </u>	<u> X X X </u>

706. Stabilisateur
Stabilizer

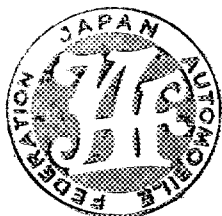
- a) Longueur efficace
 Effective length
- b) Diamètre efficace
 Effective diameter
- c) Matériau
 Material

AV / Front	AR / Rear
<u> 956.9 ± 1% </u> mm	<u> 995.0 ± 1% </u> mm
<u> 22.0 </u> mm	<u> 14.0 </u> mm
<u> Steel </u>	<u> Steel </u>

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

<u> X X X X </u> mm	<u> X X X X </u> mm
XX i/non XX yes/no	XX i/non XX yes/no
<u> X X X X </u> mm	<u> X X X X </u> mm
<u> X X X X </u> mm	<u> X X X X </u> mm



Marque Fuji
 Make _____

Modèle KA
 Model _____

N° Homol. N-5397 **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
13 "	13 "	13 "
330 mm	330 mm	330 mm
5 "	5 "	5 "
127 mm	127 mm	127 mm
KANAISYARIN 5-Bx13	KANAISYARIN 5-Bx13	KANAISYARIN 5-Bx13
Steel	Steel	Steel
6.2 kg	6.2 kg	6.2 kg
119.0 ±2.0 mm	119.0 ±2.0 mm	119.0 ±2.0 mm

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

Behind the rear seat

9. CARROSSERIE / BODYWORK

901. Intérieur c) Climatisation ~~XX~~/non
 Interior Air conditioning ~~XXS~~/no

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

AR / Rear	AV / Front
Bench	Separate
oui/non yes/no	oui/non yes/no
10.8 ±1.0 kg	11.2 ±1.0 kg

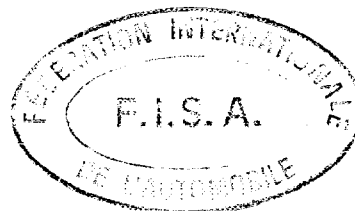
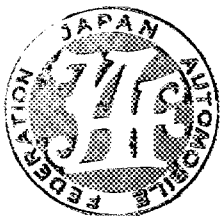
d4) Siège AR rabattable oui/~~XX~~
 Car rear seat be folded yes/~~XX~~

e) Plaque arrière oui/~~XX~~
 Rear ledge yes/~~XX~~

e1) Matériau Plastic
 Material

**902. Extérieur
 Exterior**

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



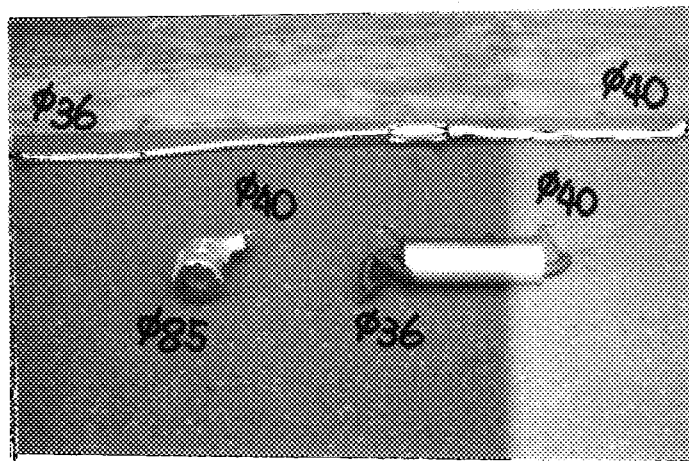
PHOTOS / PHOTOS

Moteur / Engine

AA) Piston de profil
Piston profile

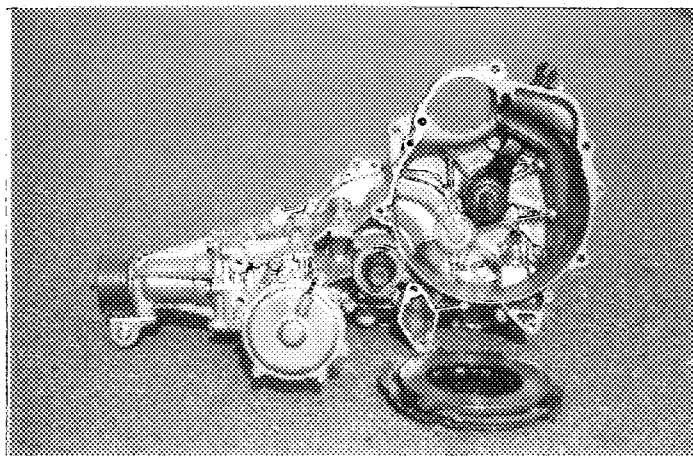


BB) Echappement complet
Complete exhaust system



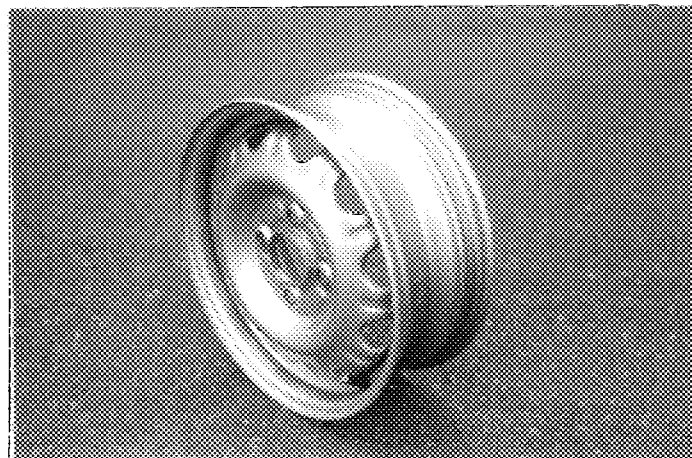
Transmission / Transmission

CC) Embrayage complet
Complete clutch

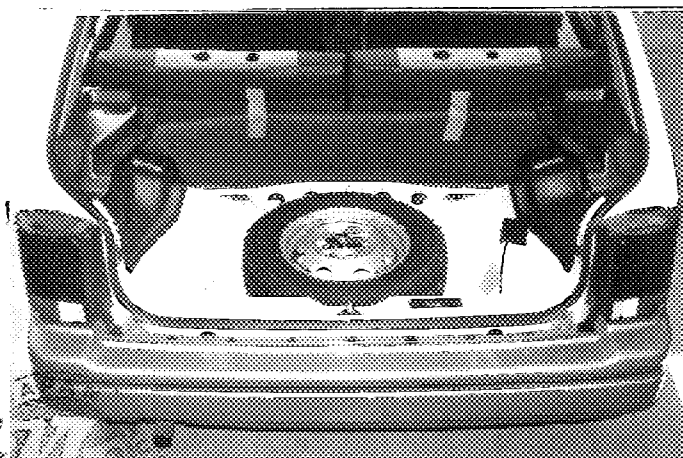


Train roulant / Running gear

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

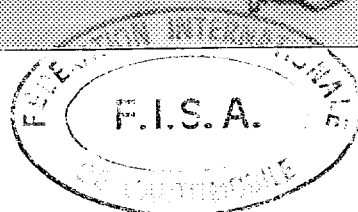
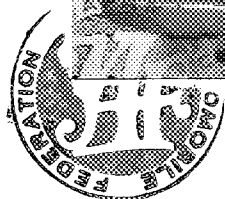
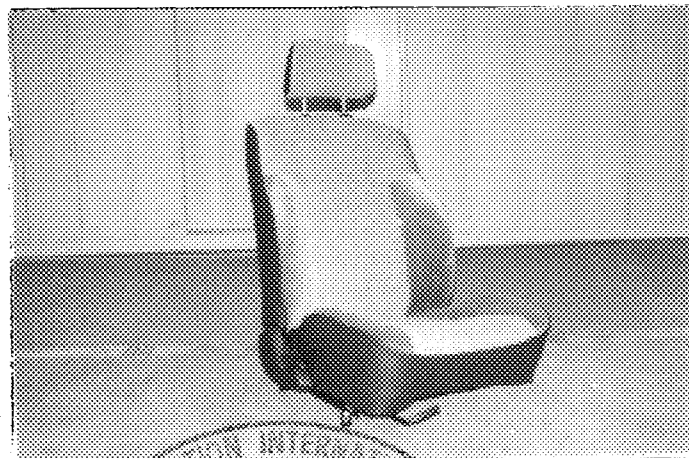


EE) Roue de secours dans son emplacement
Spare wheel in its location



Carrosserie / Bodywork

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

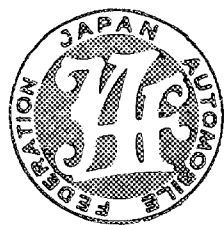
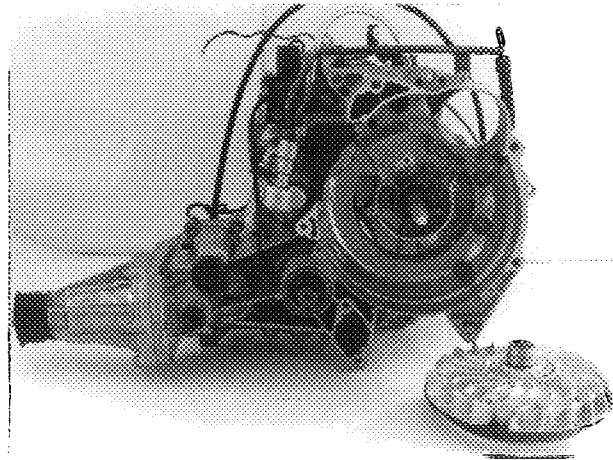


COMPLEMENTARY INFORMATION

- (1) 320 c) Minimum weight of the flywheel with starter ring and complete clutch of Automatic Gear-box (Electro Continuously Variable Transmission) : 12,800 g
- (2) 331 Cooling system capacity of Automatic Gear-box (Electro Continuously Variable Transmission) : 4.9 L
- (3) 602 a) Type of Automatic Gear-box (Electro Continuously Variable Transmission) : Electromagnetic Powder
 d) Diameter of the Plate : X X X X
- (4) 605 Final drive of Automatic Gear-box (Electro Continuously Variable Transmission)

	Front	Rear
Ratio	4.666	3.900
Number of Teeth	70/15	39/10

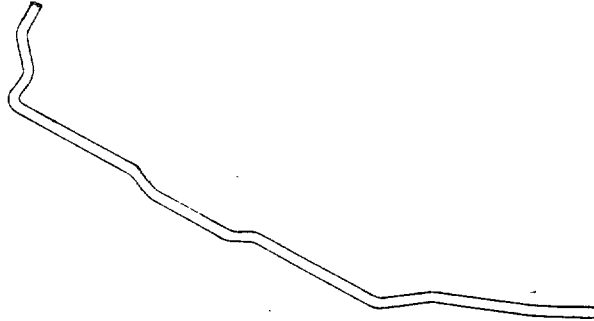
- (5) Photo CC) Complete Clutch of Automatic Gear-box (Electro Continuously Variable Transmission)



COMPLEMENTARY INFORMATION

(6) 706 Drawing of the stabilizer

Front stabilizer



Rear stabilizer

