FEDERATION INTERNATIONALE DU SPORT AUTOMOBILE

Homologation N°
N - 5 4 2 2 N

FN-029

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

Homologation valable à partir du / Homologation valid as from: 01 NOV. 1990
prononcée par / decided by: FISA

En complément de la fiche de Gr. A n° / In addition to the Gr. A from n°: 5422

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 / Manufacturer**: Fuji Heavy Industries Ltd.

102. **Dénomination(s) commerciale(s) — Modèle et type / Commercial name(s) — Type and model**: SUBARU LEGACY SEDAN 2.0 4WD , BC

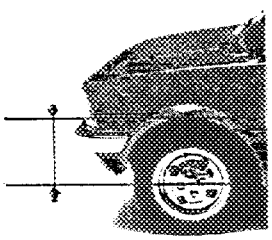
103. **Cylindrée totale / Cylinder capacity**: 1,994 cm³

2. DIMENSIONS, POIDS / DIMENSIONS, WEIGHTS

201. **Poids minimum / Minimum weight**: 1,200 kg

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

AV / Front: 353 mm
AR / Rear: 329 mm



JAPAN AUTOMOBILE FEDERATION JAF

FEDERATION INTERNATIONALE F.I.S.A. LE L'AUTOMOBILE

N = 5422 N

Marque / Make: Fuji — Modèle / Model: BC — N° Homol.:

207. **Voie maximum / Maximum track** — AV / Front: 1,490 mm — AR / Rear: 1,480 mm

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

3. MOTEUR / ENGINE

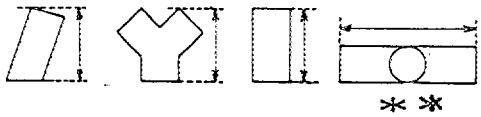
302. **Nombre de supports / Number of supports**: 3

308. **Volume minimal total d'une chambre de combustion / Total minimum volume of a combustion chamber**: 55.57 cm³

309. **Volume minimum d'une chambre de combustion dans la culasse / Minimum volume of a combustion chamber in the cylinderhead**: 53.80 cm³

310. **Rapport volumétrique maximum** (par rapport à l'unité) / **Maximum compression ratio** (in relation with the unit): 9.9 : 1

311. **Hauteur minimum du bloc-cylindres / Minimum height of the cylinder block**: 401.0 mm



* *

313. **Chemises / Sleeves** — b) Matériau / Material: Cast-iron

317. **Piston / Piston** — a) Matériau / Material: Aluminum alloy
- b) Nombre de segments / Number of rings: 3
- c) Poids minimum / Minimum weight: 536 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: 33.5±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: 0.5±0.15 mm
- f) Volume de l'évidemment du piston / Piston groove volume: -3.99±0.5 cm³

319. **Vilebrequin / Crankshaft** — i) Diamètre maximum des manetons / Maximum diameter of big end journals: 52.0 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: / Cylinderhead:** — c) Hauteur minimum / Minimum height: 127.0 mm
- d) Endroit de la mesure / Where measured: From top to bottom of the cylinderhead

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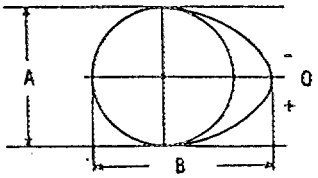
322. Epaisseur du joint de culasse serré
Thickness of the tightened cylinderhead gasket 1.4 ±0.2 mm

325. Arbre à cames e) Diamètre des paliers
Camshaft Diameter of bearings F 32.0 , C 28.0 , R28.0 mm

g) Dimensions de la came
Cam dimensions

Admission / Inlet: A = 34.0±0.1 mm, B = 39.2±0.1 mm
Echappement / Exhaust: A = 34.0±0.1 mm, B = 38.9±0.1 mm



326. Distribution a) Jeu théorique pour la distribution — Admission / Inlet 0.0 mm — Echappement / Exhaust 0.0 mm
Timing Theoretical timing clearance

b) Avance à l'ouverture (avec jeu théorique «326 a»)
Valves open at (with theoretical timing clearance «326 a»)
Admission / Inlet 3 ±1.0 ° avant/before PMH — Echappement / Exhaust 51 ±1.0 ° avant/before BDC

c) Retard à la fermeture (avec jeu théorique «326 a»)
Valves closes at (with theoretical timing clearance «326 a»)
Admission / Inlet 55 ±1.0 ° après/after PMB — Echappement / Exhaust 11 ±1.0 ° après/after TDC

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

Admission / Inlet

0 = 5.2±0.2 mm

– 5°	5.1±0.2 mm	+ 5°	5.1±0.2 mm
– 10°	4.8±0.2 mm	+ 10°	4.8±0.2 mm
– 15°	4.5±0.2 mm	+ 15°	4.4±0.2 mm
– 30°	2.6±0.2 mm	+ 30°	2.3±0.2 mm
– 45°	0.4±0.2 mm	+ 45°	0.3±0.2 mm
– 60°	0±0.2 mm	+ 60°	0.1±0.2 mm
– 75°	0±0.2 mm	+ 75°	0±0.2 mm
– 90°	0±0.2 mm	+ 90°	0±0.2 mm
– 105°	0±0.2 mm	+ 105°	0±0.2 mm
– 120°	0±0.2 mm	+ 120°	0±0.2 mm
– 135°	0±0.2 mm	+ 135°	0±0.2 mm
– 150°	0±0.2 mm	+ 150°	0±0.2 mm

Echappement / Exhaust

0 = 5.4±0.2 mm

– 5°	5.3±0.2 mm	+ 5°	5.3±0.2 mm
– 10°	5.1±0.2 mm	+ 10°	5.1±0.2 mm
– 15°	4.8±0.2 mm	+ 15°	4.7±0.2 mm
– 30°	2.9±0.2 mm	+ 30°	2.6±0.2 mm
– 45°	0.6±0.2 mm	+ 45°	0.3±0.2 mm
– 60°	0±0.2 mm	+ 60°	0.1±0.2 mm
– 75°	0±0.2 mm	+ 75°	0±0.2 mm
– 90°	0±0.2 mm	+ 90°	0±0.2 mm
– 105°	0±0.2 mm	+ 105°	0±0.2 mm
– 120°	0±0.2 mm	+ 120°	0±0.2 mm
– 135°	0±0.2 mm	+ 135°	0±0.2 mm
– 150°	0±0.2 mm	+ 150°	0±0.2 mm

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Marque / Make: Fuji — Modèle / Model: BC — N° Homol.: N - 5422 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) = 3 ° avant/~~après~~ PMH / before/~~after~~ TDC = 0,0 mm

+ 20°	= 0.5±0.2 mm
+ 40°	= 2.5±0.2 mm
+ 60°	= 5.0±0.2 mm
+ 80°	= 6.9±0.2 mm
+ 100°	= 8.1±0.2 mm
+ 120°	= 8.5±0.2 mm
+ 140°	= 8.1±0.2 mm
+ 160°	= 6.8±0.2 mm
+ 180°	= 4.8±0.2 mm
+ 200°	= 2.3±0.2 mm
+ 220°	= 0.5±0.2 mm
+ 240°	= 0.1±0.2 mm
+ 260°	= 0±0.2 mm
+ 280°	= 0±0.2 mm
+ 300°	= 0±0.2 mm
+ 320°	= 0±0.2 mm
+ 340°	= 0±0.2 mm
+ 360°	= 0±0.2 mm

Echappement / Exhaust

Art. 326 b) = 55 ° avant/~~après~~ PMB / before/~~after~~ BDC = 0,0 mm

+ 20°	= 0.5±0.2 mm
+ 40°	= 2.4±0.2 mm
+ 60°	= 5.0±0.2 mm
+ 80°	= 7.1±0.2 mm
+ 100°	= 8.5±0.2 mm
+ 120°	= 9.0±0.2 mm
+ 140°	= 8.7±0.2 mm
+ 160°	= 7.6±0.2 mm
+ 180°	= 5.7±0.2 mm
+ 200°	= 3.2±0.2 mm
+ 220°	= 1.0±0.2 mm
+ 240°	= 0.2±0.2 mm
+ 260°	= 0.1±0.2 mm
+ 280°	= 0±0.2 mm
+ 300°	= 0±0.2 mm
+ 320°	= 0±0.2 mm
+ 340°	= 0±0.2 mm
+ 360°	= 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 8.4 kg, la longueur max. du ressort est de 31.5 mm
(in) Spring characteristics: Under a load of 8.4 kg, the max. length of the spring is 31.5 mm
Caractéristiques des ressorts: Sous une charge de 21.0 kg, la longueur max. du ressort est de 35.0 mm
(out) Spring characteristics: Under a load of 21.0 kg, the max. length of the spring is 35.0 mm

k) Diamètre extérieur des ressorts
Exterior diameter of the springs: 28.5±0.2 mm

l) Nombre de spires des ressorts
Number of spring coils: 7.1

m) Diamètre du fil des ressorts
Diameter of spring wire: 4.3±0.1 mm

n) Longueur libre maximum des ressorts
Maximum free length of the springs: 41.7 mm

328. Echappement
Exhaust

c) Diamètre de(s) sortie(s) du collecteur
Diameter of the manifold exit(s): 45.6±1.0 mm

i) Nombre de ressorts par soupape
Number of springs per valve: 1

k) Caractéristiques des ressorts: Sous une charge de 21.0 kg, la longueur max. du ressort est de 35.0 mm
Spring characteristics: Under a load of 21.0 kg, the max. length of the spring is 35.0 mm

l) Diamètre extérieur des ressorts
Exterior diameter of the springs: 28.5±0.2 mm

m) Nombre de spires des ressorts
Number of spring coils: 7.1

n) Diamètre du fil des ressorts
Diameter of spring wire: 4.3±0.1 mm

o) Longueur libre maximum des ressorts
Maximum free length of the springs: 41.7 mm

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329. Système anti-pollution / Anti pollution system a) oui/Yes XXX
b) Description / Description: 3 Way catalitic converter with O_2 feedback

330. Système d'allumage / Ignition system d) Nombre de bobines / Number of coils: 4

331. Capacité du circuit de refroidissement / Cooling system capacity: 6.1 L

332. Ventilateur de refroidissement / Cooling fan a) Nombre / Number: 1
b) Diamètre de l'hélice / Diameter of the screw: 340 mm
c) Matériau de l'hélice / Material of the screw: Polypropylene
d) Nombre de pales / Number of blades: 5
e) Type de connection / Type of connection: Electrical
f) Ventilateur débrayable / Automatic cut in: oui/yes XXX

333. Système de lubrification / Lubrification system c) Capacité totale / Total capacity: 4.5 L
d) Radiateur(s) d'huile / Oil radiator(s): oui/yes XXX — Nombre / Number: 1
e) Emplacement du/des radiateurs / Position of the radiator(s): Between the cylinder block and the oil filter

4. CIRCUIT DE CARBURANT / FUEL CIRCUIT

401. Réservoir / Fuel tank e) Emplacement des orifices / Filler holes location: Rearward on the righthand

402. Pompe(s) à essence / Fuel pump(s) a) [X] Electrique / Electrical [ ] Mécanique / Mecanical
b) Nombre / Number: 1
c) Marque et type / Make and type: Make:: NIHONDENSO Type : Electrical
d) Emplacement / Location: In the fuel tank
e) Débit maximum / Maximum flow: 2.2 l/mn

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Marque / Make: Fuji — Modèle / Model: BC — N° Homol.: N-5422 N

5. EQUIPEMENT ELECTRIQUE / ELECTRICAL EQUIPEMENT

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

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

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

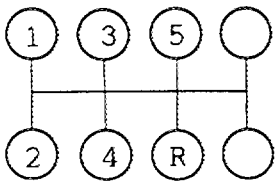
6. TRANSMISSION / DRIVE

602. Embrayage / Clutch a) Type / Type: Dry — d) Diamètre du(des) disque(s) / Diameter of the plate(s): 225 ± 2.0 mm

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	3.545	39/11	X	2.785	$1+\frac{75}{42}$	
2	2.111	38/18	X	1.545	$\frac{75/33+75/42+1}{75/33+1}$	
3	1.448	42/29	X	1.000	—	
4	1.088	37/34	X	0.694	$\frac{75/33}{75/33+1}$	
5	0.871	34/39	X	—	—	
AR/R	3.416	41/12		2.272	75/33	
Constante / Constant.	—	—		1.000	53/53	

f) Grille de vitesse / Gear change gate



P
R
N
D
3
2
1

605. Couple final / Final drive b) Rapport / Ratio: Front : 3.900 / Rear : 3.900 (Manual) — c) Nombre de dents / Number of teeth: Front : 30/9 / Rear : 30/9 (Manual)

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7. SUSPENSION / SUSPENSION

702. Ressorts hélicoïdaux / Helical springs

	AV / Front	AR / Rear
a) Matériau / Material	Steel	Steel
b) Type progressif / Progressive type	XXXXXX	XXXXXX
c) Longueur libre minimale / Minimal free length	XXXX mm	XXXX
d) Nombre de spires / Number of coils	XXXX	XXXX mm
e) Diamètre du fil / Diameter of the wire	XXXX mm	XXXX mm
f) Diamètre extérieur / Exterior diameter	XXXX mm	XXXX mm

g) Caractéristiques des ressorts / Spring characteristics:

Sous une charge de XXX kg, la longueur min. du ressort AV est de XXX mm
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 = 2è lame / 3 = 3è lame / 4 = 4è lame / 5 = 5è lame

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

	A	2	3
a) Matérau / Material	XXX	XXX	XXX
b) Nombre d'étriers / Number of spring hangers	XXX	XXX	XXX
c) Longueur libre minimum / Minimum free length	XXX mm	XXX mm	XXX mm
d) Largeur maximum / Maximum width	XXX mm	XXX mm	XXX mm
e) Epaisseur / Thickness	XXX mm	XXX mm	XXX mm
f) Courbure verticale maximale / Maximum vertical curve	XXX mm	XXX mm	XXX mm

	4	5	X
a) Matériau / Material	XXX	XXX	XXX
b) Nombre d'étriers / Number of spring hangers	XXX	XXX	XXX
c) Longueur libre minimum / Minimum free length	XXX mm	XXX mm	XXX mm
d) Largeur maximum / Maximum width	XXX mm	XXX mm	XXX mm
e) Epaisseur / Thickness	XXX mm	XXX mm	XXX mm
f) Courbure verticale maximale / Maximum vertical curve	XXX mm	XXX mm	XXX mm

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704. Barre de torsion / Torsion bar

	AV / Front	AR / Rear
a) Longueur efficace / Effective length	X X X mm	X X X mm
mesurée de: / measured from:	X X X	X X X
à: / to:	X X X	X X X
b) Diamètre efficace / Effective diameter	X X X mm	X X X mm
mesuré à: / measured at:	X X X	X X X
c) Materiau / Material	X X X	X X X

706. Stabilisateur / Stabilizer

707. Amortisseurs / Shock absorbers

	AV / Front	AR / Rear
a) Longueur efficace / Effective length	1,066.4 ± 1% mm	1,134.0 ± 1% mm
b) Diamètre efficace / Effective diameter	18.0 mm	16.0 mm
c) Matériau / Material	Steel	Steel
d) Diamètre extérieur / Exterior diameter	X X X X mm	X X X X mm
e) Assiette du ressort réglable / Adjustable spring trim	~~oui~~/non ~~yes~~/no	~~oui~~/non ~~yes~~/no
f) Distance assiette-fixation / Distance trim-monitoring	X X X X mm	X X X X mm
g) Diamètre de la tige de piston / Diameter of the piston rod	X X X X mm	X X X X mm

Marque / Make: Fuji | Modèle / Model: BC | N° Homol.: N-5422 N

8. TRAIN ROULANT / RUNNING GEAR

801. Roues / Wheels

	AV / Front	AR / Rear	Secours / Spare
a) Diamètre / Diameter	14 " / 356 mm	14 " / 356 mm	14 " / 356 mm
b) Largeur / Width	5.5 " / 140 mm	5.5 " / 140 mm	5.5 " / 140 mm
c) Marque et type / Make and type	X X X	X X X	X X X
d) Matériau / Material	X X X	X X X	X X X
e) Poids unitaire / Unitary weight	X X X kg	X X X kg	X X X kg
f) Dépot entre plan de montage et extrémité intérieure / Offset between mounting and extreme inner face	X X X mm	X X X mm	X X X mm

802. Emplacement de la roue de secours / Location of the spare wheel: Behind the rear seat

9. CARROSSERIE / BODYWORK

901. Intérieur / Interior

c) Climatisation / Air conditionning: ~~oui~~/non ~~yes~~/no

	AR / Rear	AV / Front
d) Sièges / Seats		
d1) Type	Bench	Separate
d2) Appuie-tête / Headrest	~~oui~~/non ~~yes~~/no	oui/~~non~~ yes/~~no~~
d3) Poids / Weight	10.2 ±1.0 kg	13.5 ±1.0 kg

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

e) Plage arrière / Rear ledge: oui/~~non~~ yes/~~no~~

e1) Matériau / Material: Cloth

902. Extérieur / Exterior

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

Marque / Make: Fuji | Modèle / Model: BC | N° Homol.: N-5422 N

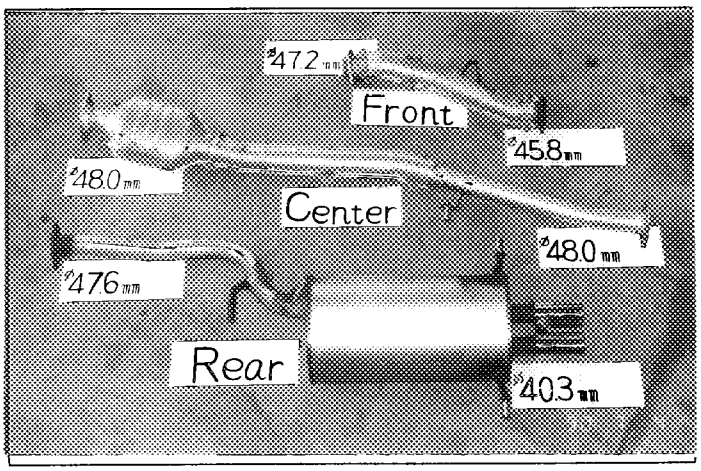
PHOTOS / PHOTOS

Moteur / Engine

AA) Piston de profil
Piston profile

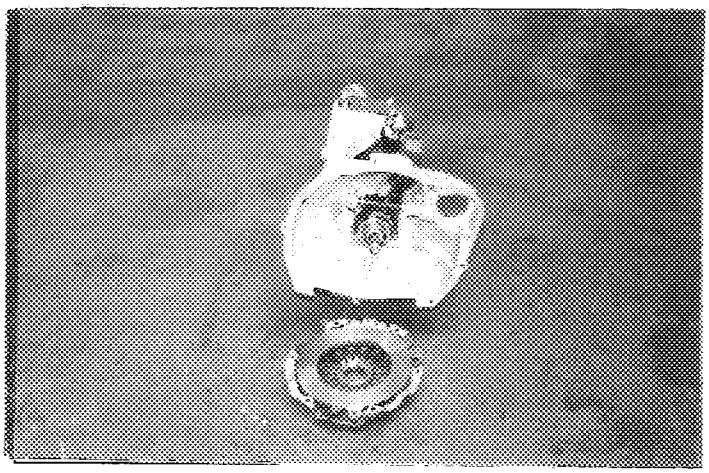
BB) Echappement complet
Complete exhaust system

Tolerance ±5%



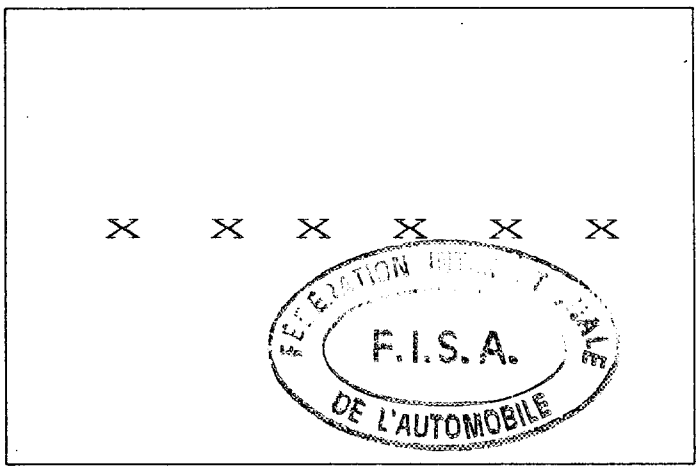
Transmission / Transmission

CC) Embrayage complet
Complete clutch

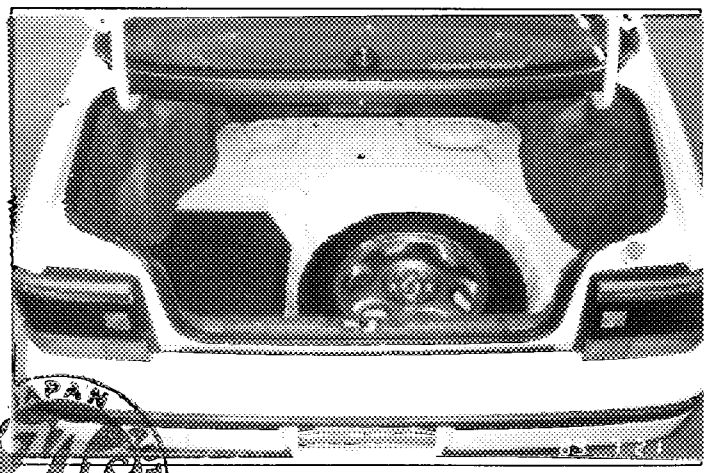


Train roulant / Running gear

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 Fuji | Model 型式 BC | No Homol. N-5422

COMPLEMENTARY INFORMATION

JAF公認番号

(1) 327 Inlet of automatic gear-box

i)	Spring characteristics (out)	: Under a load of 22.1 kg
k)	Exterior diameter of the springs	: 27.9 ±0.2 mm
l)	Number of spring coils	: 7.3
m)	Diameter of spring wire	: 4.0 ±0.1 mm
n)	Maximum free length of the springs	: 43.9 mm

(2) 328 Exhaust of automatic gear-box

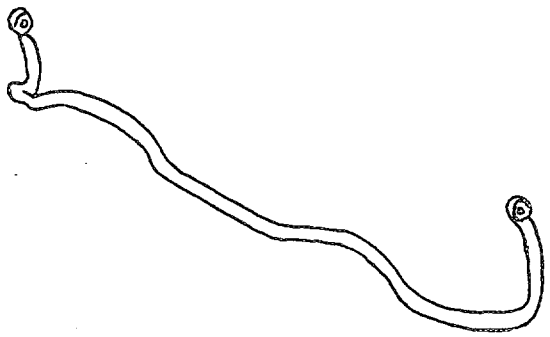
k)	Spring characteristics	: Under aload of 22.1 kg
l)	Exterior diameter of the springs	: 27.9 ±0.2 mm
m)	Number of spring coils	: 7.3
n)	Diameter of spring wire	: 4.0 ±0.1 mm
o)	Maximum free length of the springs	: 43.9 mm

(3) 605 Final drive of automatic gear-box

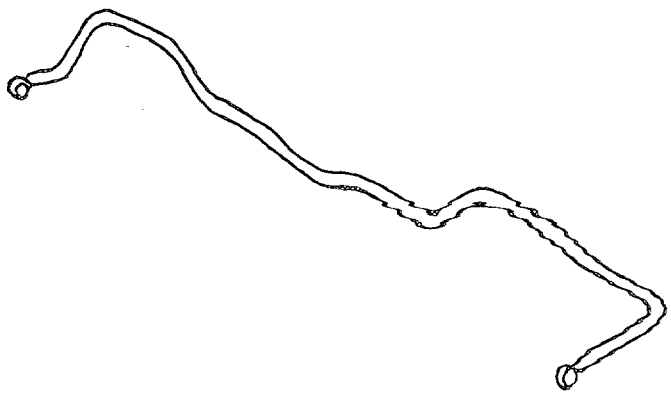
Ratio	: 4.111
Number of teeth	: 37/9

(4) 706 Drawing of the stabilizer

Front stabilizer



Rear stabilizer



Make
会社名 Fuji

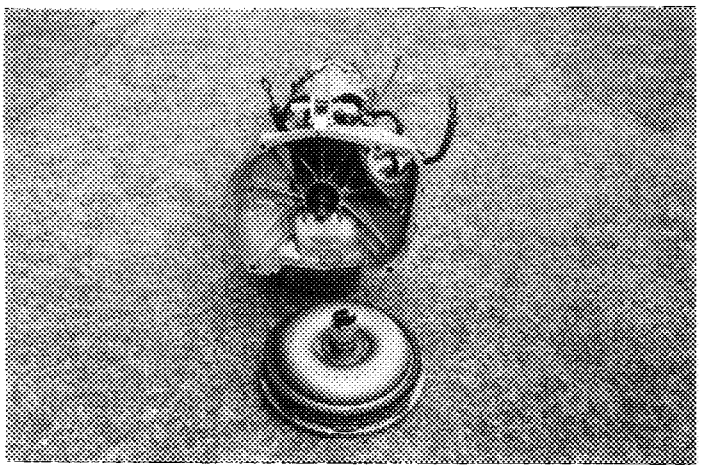
Model
型式 BC

No Homol. N-5422

COMPLEMENTARY INFORMATION

JAF公認番号

(5) Photo CC) Complete clutch of automatic gear-box



FEDERATION INTERNATIONALE DU SPORT AUTOMOBILE
JAPAN AUTOMOBILE FEDERATION
社団法人 日本自動車連盟

FISA Homologation No
N-5422

Extension No
01/01 VO

JAF公認番号 FN-029VO-1/1
発効年月日 1990年 7月31日

FORM OF EXTENSION TO THE OFFICIAL FISA HOMOLOGATION
FISA公認追加書式

☐ ES Sporting evolution of the type / スポーツ進化

☐ ET Normal evolution of the type / 形式の正常進化

☐ VF Supply variant / 供給変型

☒ VO Option variant / オプション変型 Ref. A-5422 (02/02 VO)

☐ ER Erratum / 誤記訂正

Homologation valid as from 公認発行日 01 NOV. 1990 in group FISAグループ N

Manufacturer 製造者 Fuji Heavy Industries Ltd.

Model and type 型式と形式 SUBARU LEGACY SEDAN 2.0 4WD , BC

Page or ext. ページまたは補足	Art. 項目	Description 記述
1	Photo A) Photo B)	Rear-spoiler (wing) Photo A : Rear view with rear-spoiler Photo B : Dismounted rear-spoiler Parts No. : 96053AA010 Material : Urethane
1	Photo A) Photo B)	Rear-under-spoiler Photo C : Rear view with rear-under-spoiler Photo D : Dismounted rear-under-spoiler Parts No. : Rh 57796AA000 Lh 57796AA010 Material : Polypropylene
1	Photo A) Photo B)	Side-spoiler Photo E : Side view with side-spoiler Photo F : Dismounted side-spoiler Parts No. : Rh 96052AA010 Lh 96052AA020 Material : Urethane
		All parts must be fitted together.

FEDERATION INTERNATIONALE F.I.S.A. DE L'AUTOMOBILE

Make 会社名 Fuji | Model 型式 BC | No Homol. N-5422

PHOTOS/写真 | No Ext. 01/01 VD

JAF公認番号 FN-[illegible] VO-[illegible]/1

Photo A) Rear view with rear-spoiler (wing)

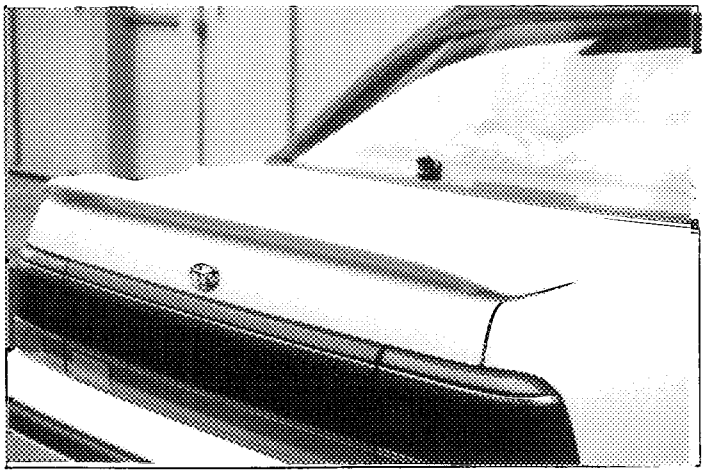


Photo B) Dismounted rear-spoiler

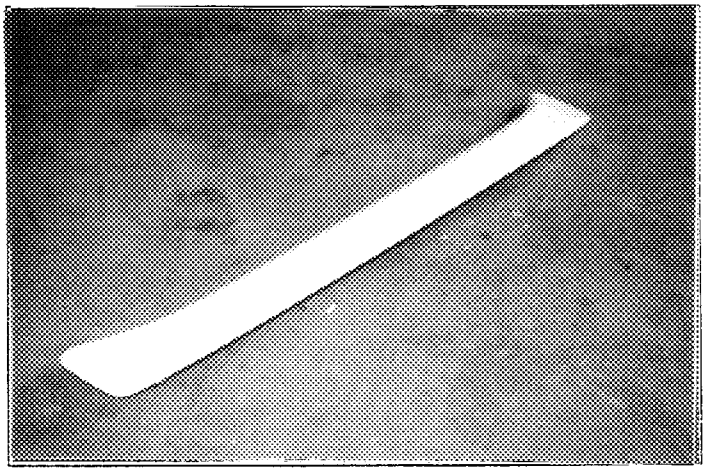


Photo C) Rear view with rear-under-spoiler

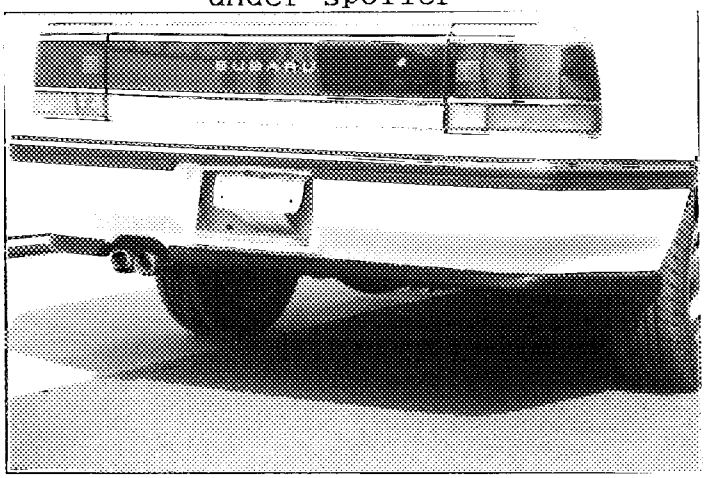


Photo D) Dismounted rear-under-spoiler

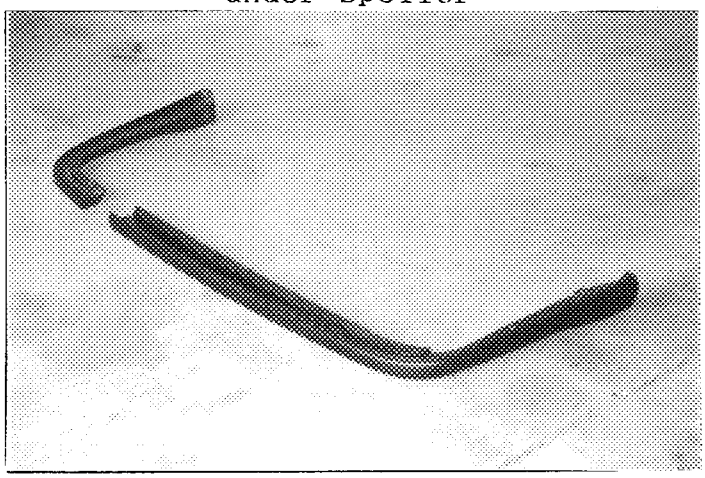


Photo E) Side view with side-spoiler

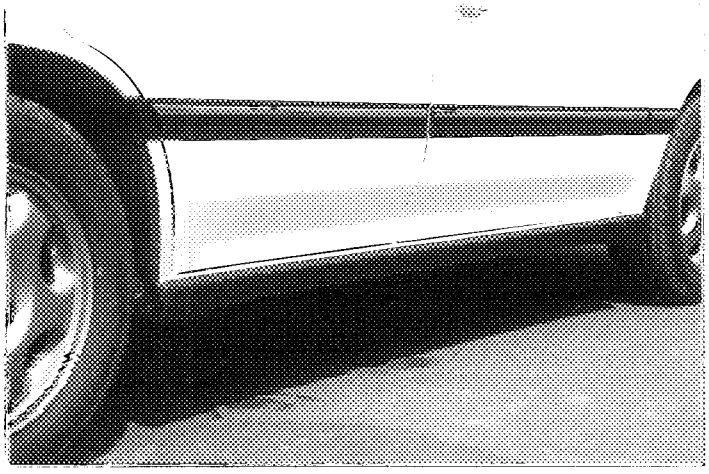
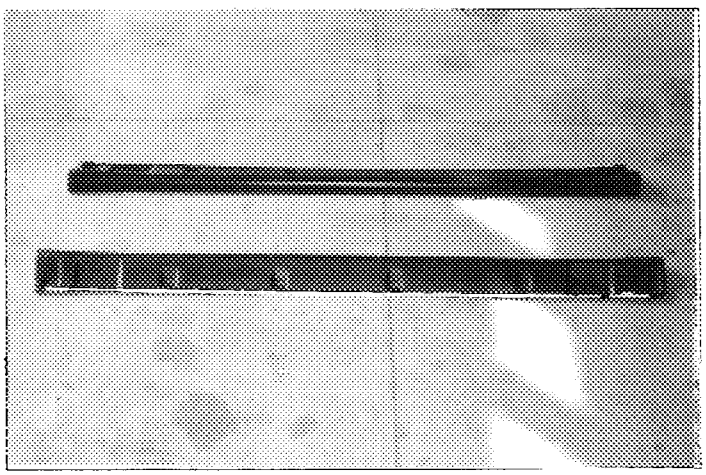


Photo F) Dismounted side-spoiler



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