



FEDERATION INTERNATIONALE DU SPORT AUTOMOBILE

Homologation N°

T-1021

Groupe **Tout-Terrain**
Group

FT-020

1989年 4月30日

FICHE D'HOMOLOGATION CONFORME A L'ANNEXE J DU CODE SPORTIF INTERNATIONAL
HOMOLOGATION FORM IN ACCORDANCE WITH APPENDIX J OF THE INTERNATIONAL SPORTING CODE

Homologation valable à partir du **01 JUIL. 1989** en groupe **Tout-Terrain**
Homologation valid as from _____ in group

Photo A



Photo B



1. DEFINITIONS / DEFINITIONS

101. Constructeur **ISUZU MOTORS LIMITED**
Manufacturer

102. Dénomination(s) commerciale(s) — Modèle et type **BIGHORN (UBS55FW)**
Commercial name(s) — Type and model

103. Cylindrée totale **(2771.5 x 1.7) 4711.6** cm³
Cylinder capacity

104. Mode de construction séparée, matériau du châssis **Steel**
Type of car construction separate, material of chassis
 monocoque
unitary construction

105. Nombre de volumes **2**
Number of volumes

106. Nombre de places **5**
Number of places



2. DIMENSIONS, POIDS / DIMENSIONS, WEIGHT

201. Poids minimum 1660 kg
Minimum weight _____
202. Longueur hors-tout 4470 mm ± 1%
Overall length _____
203. Largeur hors-tout 1650 mm ± 1% Endroit de la mesure
Overall width _____ Where measured At rear axle
204. Largeur de la carrosserie: a) A la hauteur de l'axe AV
Width of bodywork: At front axle 1640 mm ± 1%
b) A la hauteur de l'axe AR
At rear axle 1650 mm ± 1%
206. Empattement: a) Droit 2650 mm ± 1% b) Gauche:
Wheelbase: Right _____ Left: 2650 mm ± 1%
207. Voie maximum AV 1390 mm AR
Maximum track Front _____ Rear 1400 mm
209. Porte-à-faux: a) AV: 750 mm ± 1% b) AR:
Overhang: Front: _____ Rear: 1070 mm ± 1%
210. Distance «G» (volant — paroi de séparation AR) 1540 mm ± 1%
Distance «G» (steering wheel — rear bulkhead) _____

3. MOTEUR / ENGINE: *(En cas de moteur rotatif, voir Article 335 sur fiche complémentaire).*
(In case of rotative engine, see Article 335 on complementary form).

301. Emplacement et position du moteur: Inclination (F/R): 3°30'
Location and position of the engine: Front Longitudinal Vertical Angle: 0°

302. Nombre de supports 3 303. Cycle
Number of supports _____ Cycle 4 (Diesel)



Marque / Make ISUZU Modèle / Model BIGHORN (UBS55FW) N° Homol. T-1021

304. Suralimentation oui/~~non~~ type Turbo charger
 Supercharging yes/~~no~~: type Turbo charger

'En cas de suralimentation, voir également l'Article 334 sur fiche complémentaire)
(In case of supercharging, see also Article 334 on complementary form).

305. Nombre et disposition des cylindres
 Number and layout of the cylinders 4, In-line

308. Mode de refroidissement
 Cooling system Liquid

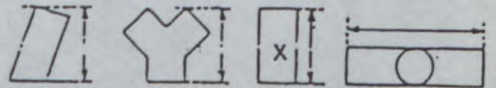
307. Cylindrée: a) Unitaire 693.0 cm³ b) Totale (2771.5 x 1.7) 4711.6 cm³
 Cylinder capacity: a) Unitary b) Total

308. Volume minimal total d'une chambre de combustion
 Total minimum volume of a combustion chamber 42.8 cm³

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

310. Rapport volumétrique maximum (par rapport à l'unité)
 Maximum compression ratio (in relation with the unit) 17.2

311. Hauteur minimum du bloc-cylindres
 Minimum height of the cylinder block 274 mm



312. Matériau du bloc-cylindres
 Cylinder block material Cast-iron

313. Chemises: a) oui/~~non~~ b) Matériau Cast-iron c) Type: Dry
 Sleeves: yes/~~no~~ Material Type:

314. Alésage
 Bore 93.0 mm

16. Course
 Stroke 102.0 mm

317. Piston a) Matériau Aluminum alloy
 Piston Material

b) Nombre de segments 3 c) Poids minimum 1278 g
 Number of rings Minimum weight

d) Distance de la médiane de l'axe au sommet du piston
 Distance from gudgeon pin center line to highest point of piston crown 51.8 ± 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 +0.8 ± 0.15 mm

f) Volume de l'évidement du piston
 Piston groove volume 32.3 ± 0.5 cm³



318. Bielle: a) Matériau Steel b) Type de la tête de bielle Separate
 Connecting rod: Material _____ Big end type _____
 c) Diamètre intérieur de la tête de bielle (sans coussinets): 56.0 mm ± 0.1%
 Interior diameter of the big end (without bearings): _____
 d) Longueur entre axes: 168.0 mm (± 0.1 mm) e) Poids minimum: 1045 g
 Length between the axes: _____ Minimum weight: _____

319. vilebrequin: a) Type de construction Integral
 Crankshaft: Type of manufacture _____
 b) Matériau Steel
 Material _____
 c) coulé / moulé estampé / stamped
 d) Nombre de paliers 5
 Number of bearings _____
 e) Type de paliers Plain
 Type of bearings _____
 f) Diamètre des paliers 74.0 mm ± 0.2%
 Diameter of bearings _____
 g) Matériau des chapeaux des paliers Cast-iron
 Bearing caps material _____
 h) Poids minimum du vilebrequin nu 25800 g
 Minimum weight of the bare crankshaft _____
 i) Diamètre maximum des manetons 66.0 mm
 Maximum diameter of big end journals _____

320. Volant moteur: a) Matériau Cast-iron
 Flywheel: Material _____
 b) Poids minimum avec couronne de démarreur 17200 g
 Minimum weight of the flywheel with starter ring _____

321. Culasse: a) Nombre de culasses 1 b) Matériau Cast-iron
 Cylinderhead: Number of cylinderheads _____ Material _____
 c) Hauteur minimum 92 mm
 Minimum height _____
 d) Endroit de la mesure From top of cylinderhead to bottom of cylinderhead
 Where measured _____

322. Epaisseur du joint de culasse serré 1.5 ± 0.2 mm
 Thickness of the tightened cylinderhead gasket _____

323. Alimentation par carburateur(s): a) Nombre de carburateurs XXXX
 Fuel feed by carburettor(s): Number of carburators _____
 b) Type XXXX c) Marque et modèle XXXX
 Type _____ Make and model _____



Marque
Make

ISUZU

Modèle
Model

BIRHORN (UBS55FW)

N° Homol.

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- d) Nombre de passages de gaz par carburateur
Number of mixture passages per carburettor XXXX
- e) Diamètre maximum de la tubulure de gaz à la sortie du carburateur
Maximum diameter of the flange hole of the carburettor exit port XXXX mm
- f) Diamètre du diffuseur au point d'étranglement maximum
Diameter of the venturi at the narrowest point XXXX mm

324. Alimentation par injection:

Fuel feed by injection:

a) Marque:

DIESEL KIKI

Manufacturer:

b) Modèle du système d'injection:

Model of injection system:

VE Type

c) Mode de dosage du carburant:

Kind of fuel measurement:

mécanique
 mechanical

électronique
 electronical

hydraulique
 hydraulical

c1) Plongeur

Piston pump

oui/yes

yes/oui

c2) Mesure du volume d'air

Measurement of air volume

~~XXX~~/non

~~XXX~~/no

c3) Mesure de la masse d'air

Measurement of air mass

~~XXX~~/non

~~XXX~~/no

c4) Mesure de la vitesse de l'air

Measurement of air speed

~~XXX~~/non

~~XXX~~/no

c5) Mesure de la pression d'air

Measurement of air pressure

~~XXX~~/non

~~XXX~~/no

Quelle est la pression de réglage?

Which pressure is taken for measurement?

XXXX

bars

d) Dimensions effectives du point de mesure au(x) papillon(s) ou au(x) tiroir(s) d'étranglement

Effective dimensions of measure position in the throttle area

XXXX

mm

e) Nombre des sorties effectives de carburant

Number of effective fuel outlets

4

f) Position des soupapes d'injection:

Position of injection valves:

Canal d'admission
 Inlet manifold

Culasse
 Cylinderhead

g) Parties du système d'injection servant au dosage du carburant

Statement of fuel measuring parts of injection system

Injection pump with boost compensator (Mechanical governor built-in Type)

325. Arbre à cames:

Camshaft:

Number

1

b) Emplacement

Location

Side (OHV)

c) Système d'entraînement

Driving system

Belt

d) Nombre de paliers par arbre

Number of bearings for each shaft

3

e) Diamètre des paliers

Diameter of bearings

49.9

mm

f) Système de commande des soupapes

Type of valve operation

Push rod, Rocker arm



327. Admission: a) Matériau du collecteur Aluminum alloy
 Inlet: Material of the manifold _____
 b) Nombre d'éléments du collecteur 1 c) Nombre de soupapes par cylindre 1
 Number of manifold elements _____ Number of valves per cylinder _____
 d) Diamètre maximum des soupapes 40.3 mm e) Diamètre de la tige de soupape 8.0 ⁺⁰ _{-0.2} mm
 Maximum diameter of the valves _____ Diameter of the valve stem _____
 f) Longueur de la soupape 118.0 ± 1.5 mm g) Type des ressorts de soupape Coil
 Length of the valve _____ Type of valve springs _____
 h) Nombre de ressorts par soupape 1
 Number of springs per valve _____

328. Echappement: a) Matériau du collecteur Cast-iron
 Exhaust: Material of the manifold _____
 b) Nombre d'éléments du collecteur 1 c) Diamètre de(s) sortie(s) du collecteur 44 mm
 Number of manifold elements _____ Diameter of the manifold exit(s) _____
 d) Nombre de soupapes par cylindre 1
 Number of valves per cylinder _____
 e) Diamètre maximum des soupapes 35.7 mm f) Diamètre de la tige de soupape 8.0 ⁺⁰ _{-0.2} mm
 Maximum diameter of the valves _____ Diameter of the valve stem _____
 g) Longueur de la soupape 118 mm h) Type des ressorts de soupape Coil
 Length of the valve _____ Type of valve springs _____
 i) Nombre de ressorts par soupape 1
 Number of springs per valve _____

329. Système anti-pollution a) oui/~~non~~
 Anti pollution system yes/~~no~~
 b) Description Recycling of exhaust gas
 Description _____

330. Système d'allumage: a) Type XXXX
 Ignition system: Type _____
 b) Nombre de bougies par cylindre XXXX c) Nombre de distributeurs XXXX
 Number of plugs per cylinder _____ Number of distributors _____
 d) Nombre de bobines XXXX
 Number of coils _____

332. Ventilateur de refroidissement a) Nombre 1 b) Diamètre de l'hélice 410 mm
 Cooling fan Number _____ Diameter of the screw _____
 c) Matériau de l'hélice Plastics d) Nombre de pales 7
 Material of the screw _____ Number of blades _____
 e) Type de connexion Direct f) Ventilateur débrayable oui/~~non~~



Marque Make ISUZU Modèle Model BIGHORN (UBS55FW) N° Homol. T-1021

333. Système de lubrification: a) Type Wet sump b) Nombre de pompes à huile 1
Lubrification system: Type Wet sump Number of oil pumps 1

c) Capacité totale 6.0 L
Total capacity 6.0 L

d) Radiateur(s) d'huile oui/XXX Nombre 1
Oil radiator(s) yes/XXX Number 1

e) Emplacement du/des radiateurs Attached to engine
Position of the radiator(s) Attached to engine

5. EQUIPEMENT ELECTRIQUE / ELECTRICAL EQUIPEMENT

501. Batterie(s): a) Nombre 1
Battery(ies): Number 1

b) Tension 12 V c) Emplacement In engine compartment
Tension 12 V Location In engine compartment

502. Génératrice(s) a) Nombre 1
Generator(s) Number 1

b) Type Alternator c) Système d'entraînement Belt
Type Alternator Drive system Belt

503. Phares escamotables: a) XXX/non b) Système de commande XXXX
Retractable headlights: XXX/no Drive system XXXX

6. TRANSMISSION / DRIVE

601. Roues motrices: avant arrière
Driving wheels: front rear

602. Embrayage a) Type Dry
Clutch Type Dry

b) Système de commande Mechanical
Drive system Mechanical

c) Nombre de disques 1 d) Diamètre du(des) disque(s) 240 mm
Number of plates 1 Diameter of the plate(s) 240 mm

603. Boîte de vitesses: a) Emplacement Attached to engine in engine compartment
Gear-box: Location Attached to engine in engine compartment

b) Marque «manuelle» ISUZU c) Marque «automatique» XXXX
«Manual» make ISUZU «Automatic» make XXXX

d) Emplacement de la commande _____

Floor

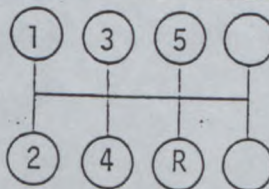
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603. Boîte de vitesse
 Gearbox
 e) rapports ratios

	Manuelle / Manual			Automatique / Automatic		
	rappports ratio	nombre de dents / number of teeth	synchro.	rappports ratio	nombre de dents / number of teeth	synchro.
1	3.77	43/21	X			
2	2.31	39/31	X			
3	1.40	29/38	X			
4	1.00	-	X			
5	0.81	22/50	X			
AR/R	3.87	33/19 x 40/33				
Constante Constant.	1.84	46/25				

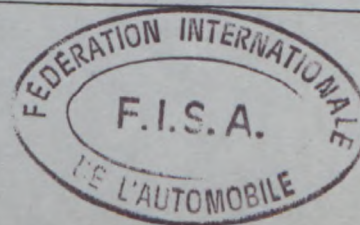
f) Grille de vitesse
 Gear change gate



604. Surmultiplication: a) Type Overdrive: XXXX
 b) Rapport Ratio XXXX c) Nombre de dents Number of teeth XXXX
 d) Utilisable avec les vitesses suivantes Usuable with the following gears XXXX

605. Couple final: Final drive:
 a) Type du couple final Type of final drive
 b) Rapport Ratio
 c) Nombre de dents Teeth number
 d) Type de limitation de différentiel (si prévu) Type of differential limitation (if provided)

AV / Front	AR / Rear
Hypoid & Bevel gear	Hypoid & Bevel gear
4.300	4.300
43/10	43/10
XXXX	Limited Slip



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 Make _____ Model _____

e) Rapport de la boîte de transfert
 Ratio of the transfer box 1 : 2.283

606. Type de l'arbre de transmission
 Type of the transmission shaft Propeller shaft with universal joints

7 SUSPENSION / SUSPENSION

701. Type de suspension: a) AV / Front Independent - Wishbone with torsion bar spring
 Type of suspension: b) AR / rear Rigid axle with leaf spring

702. Ressorts hélicoïdaux: AV: ~~XX~~/non AR: ~~XX~~/non
 Hélicoïdal springs: Front: ~~XX~~ Rear: ~~XX~~/no

a) Matériau
 Material

AV Front	AR / Rear
XXXX	XXXX

703. Ressorts à lames: AV: ~~XXX~~/non AR: oui/~~XXX~~
 Leaf springs: Front: ~~XXX~~/no Rear: yes/~~XX~~

703. Ressorts à lames
 Leaf springs

A = Lame maîtresse / X = lame auxiliaire A = major leaf / X = auxiliary leaf
 2 = 2^e lame / 3 = 3^e lame / 4 = 4^e lame / 5 = 5^e lame 2 = 2nd leaf / 3 = 3rd leaf / 4 = 4th leaf / 5 = 5th leaf

a) Matériau
 Material

A	2	3
Steel	Steel	Steel

a) Matériau
 Material

4	5	X
XXXX	XXXX	Steel



Marque / Make ISUZU

Modele / Model BIGHORN (UBS55FW)

N° Homol. T-1021

704. Barre de torsion: AV: oui/XXX AR: XXX/non
Torsion bar: Front: yes/XX Rear: XXX/no

c) Matériau / Material

AV / Front	AR / Rear
Steel	XXXX

705. Autre type de suspension: Voir photo/dessin en page 22
Other type of suspension: See photo or drawing on page 22 XXXX

706. Stabilisateur : Voir photo/dessin en page 23
Stabilizer : See photo/drawing on page 23

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

AV / Front	AR / Rear
870 mm	XXXX mm
28.6 mm	XXXX mm
Steel	XXXX

707. Amortisseurs: Shock Absorbers:
a) Nombre par roue / Number per wheel
c) Type / Type

Avant / Front	Arrière / Rear
1	1
Telescopic	Telescopic

8. TRAIN ROULANT / RUNNING GEAR

801. Roues / Wheels

a) Diamètre / Diameter
b) Largeur maximale de jante / Maximal rim width

AV / Front	AR / Rear
16"	16"
406 mm	406 mm
6"	6"
152 mm	152 mm

8023 Positionnement de la roue de secours / Location of the spare wheel

On the tail gate



803. Freins: a) Système de freinage Hydraulic
 Brakes: Braking system _____
 b) Nombre de maître-cylindres Tandem b1) Alésage 25.4/25.4 mm
 Number of master cylinders _____ Bore _____
 c) Servo-frein oui/XXX c1) Marque et type JIDOSHA KIKI, Vacuum
 Power assisted brakes yes/XXX Make and type _____
 d) Régulateur de freinage oui/XXX d1) Emplacement Dashboard
 Braking adjuster yes/XXX Location in the engine compartment

	Avant / Front	Arrière / Rear
e) Nombre de cylindres par roue: Number of cylinders per wheel:	<u>1</u>	<u>1</u>
e1) Alésage Bore	<u>60.3</u> mm	<u>41.3</u> mm
f) Freins à tambours: Drum brakes:		
1) Diamètre intérieur Interior diameter	<u>XXXX</u> mm (± 1.5 mm)	<u>XXXX</u> mm (± 1.5 mm)
2) Nombre de mâchoires par roue. Number of shoes per wheel	<u>XXXX</u>	<u>XXXX</u>
3) Surface de freinage Braking surface	<u>XXXX</u> cm ²	<u>XXXX</u> cm ²
4) Largeur des garnitures Width of the shoes	<u>XXXX</u> mm	<u>XXXX</u> mm
g) Freins à disques: Disc brakes:		
g1) Nombres de sabots par roue Number of pads per wheel	<u>2</u>	<u>2</u>
g2) Nombre d'étriers par roue Number of calipers per wheel	<u>1</u>	<u>1</u>
g3) Matériau des étriers Caliper material	<u>Cast-iron</u>	<u>Cast-iron</u>
g4) Epaisseur maximale du disque Maximum disc thickness	<u>22 \pm 1</u> mm	<u>12 \pm 1</u> mm
g5) Diamètre extérieur du disque Exterior diameter of the disc	<u>257 \pm 1.5</u> mm (± 1 mm)	<u>265 \pm 1.5</u> mm (± 1 mm)
g6) Diamètre extérieur de frottement des sabots Exterior diameter of the shoes rubbing surface	<u>255 \pm 1.5</u> mm	<u>262.5 \pm 1.5</u> mm
g7) Diamètre intérieur de frottement des sabots Interior diameter of the shoes rubbing surface	<u>156 \pm 1.5</u> mm	<u>188.5 \pm 1.5</u> mm
g8) Longueur hors-tout des sabots Overall length of the shoes	<u>112 \pm 1.5</u> mm	<u>91.5 \pm 1.5</u> mm
g9) Disques ventilés Ventilated disc	<u>oui/XXX</u> <u>yes/XXX</u>	<u>XXX non</u> <u>XXX no</u>
g10) Surface de freinage par roue Braking surface per wheel	_____ cm	_____ cm

h) Frein de stationnement:
 Parking brake: n1) Système de commande Cable
 Command system _____
 h2) Emplacement de la commande Below instrument panel n3) Effet sur roues AV AR
 Location of the lever _____ On which wheels Front Rear Rear



804. Direction: a) Type Recirculating ball and nut
 Steering: Type _____
 b) Rapport 1 : 15.8 c) Servo-assistance oui/XXX
 Ratio _____ Power assisted yes/XX

9. CARROSSERIE / BODYWORK

901. Intérieur: a) Ventilation oui/XXX b) Chauffage oui/XXX
 Interior: Ventilation yes/XX Heating yes/XX

c) Climatisation oui/XXX
 Air conditioning yes/XX

c1) Sièges
Seats

d1) Type
Type

d2) Appui-tête
Headrest

d3) Poids
Weight

	AR / Rear	AV / Front
Type	<u>Bench</u>	<u>Separate</u>
Headrest	<u>oui/XXX</u> <u>yes/XX</u>	<u>oui/XXX</u> <u>yes/XX</u>
Weight	<u>30.7</u> kg	<u>19.6</u> kg

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

e) Plage arrière XXX/non
 Rear ledge XXX/no

e1) Matériau XXXX
 Material _____

f) Toit ouvrant optionnel XXX/non
 Sun roof optional XXX/no

f1) Type XXXX
 Type _____

f2) Système de commande XXXX
 Command system _____

g) Système d'ouverture des vitres latérales: AV/Front: Power
 Opening system for the side windows: AR/Rear: Power

902. Extérieur: a) Nombre de portes 4
 Exterior: Number of doors _____

b) Hayon AR oui/XXX
 Rear tailgate yes/XX

c) Matériau des portières:
 Door material:

AV/Front: Steel
 AR/Rear: Steel

d) Matériau du capot AV Steel
 Front bonnet material _____

e) Matériau du capot/hayon AR Steel, Safety Glass
 Rear bonnet / tailgate material _____

f) Matériau de la carrosserie Steel
 Bodywork material _____



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Make _____ Model _____

- k) Matériau des vitres latérales avant Safety glass
Front side window material _____
- l) Matériau du pare-choc avant Steel
Material of the front bumper _____
- m) Matériau du pare-choc arrière Steel
Material of the rear bumper _____
- n) Essuie-glace AR oui/~~non~~
Rear wiper yes/~~no~~

INFORMATIONS COMPLEMENTAIRES

COMPLEMENTARY INFORMATION

Art 102 Commercial name(s) — Type and model
TROOPER (JACUBS55F)

Art 321 e) Angle between the axis of the inlet valve
And the outlet valve : 0 degrees

Art 605 b) Ratio : 4.555, 4.777

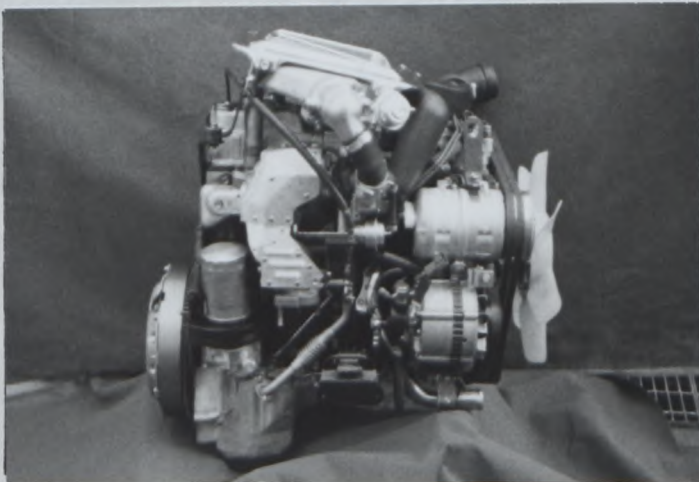
c) Teeth number : 41/9 43/9



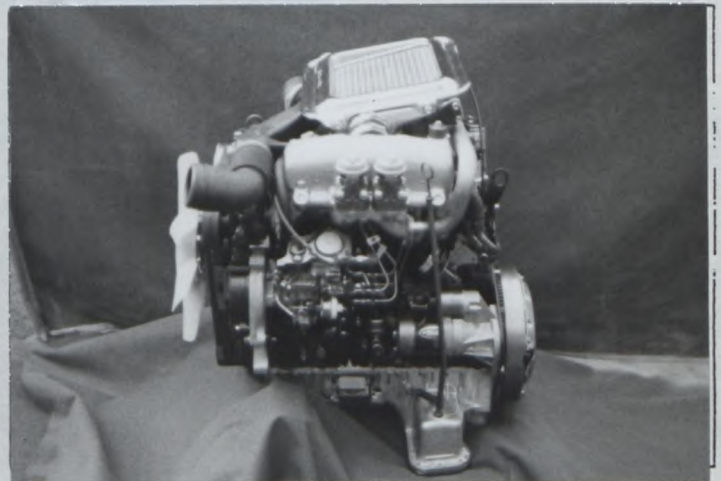
PHOTOS / PHOTOS

Moteur / Engine

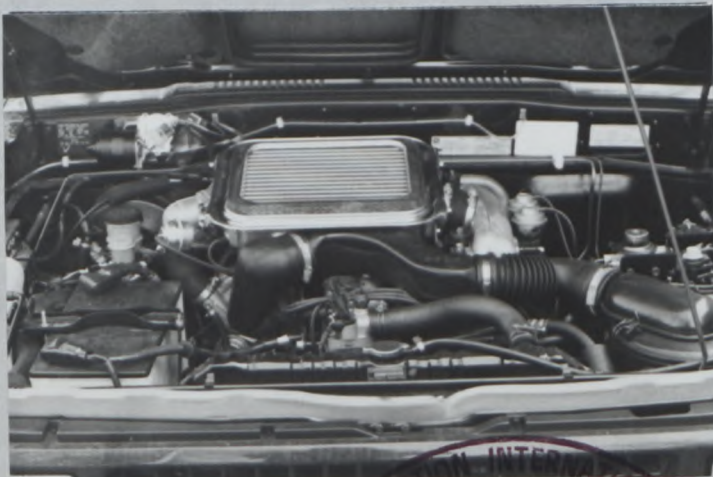
C) Profil droit du moteur déposé
Right hand view of dismantled engine



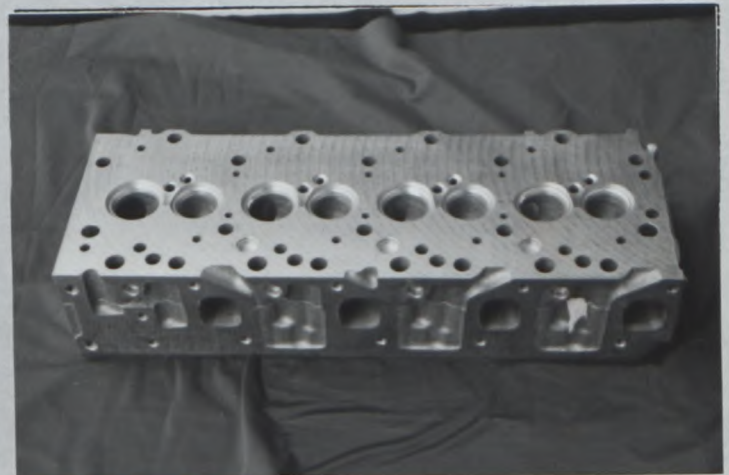
D) Profil gauche du moteur déposé
Left hand view of dismantled engine



E) Moteur dans son compartiment
Engine in its compartment



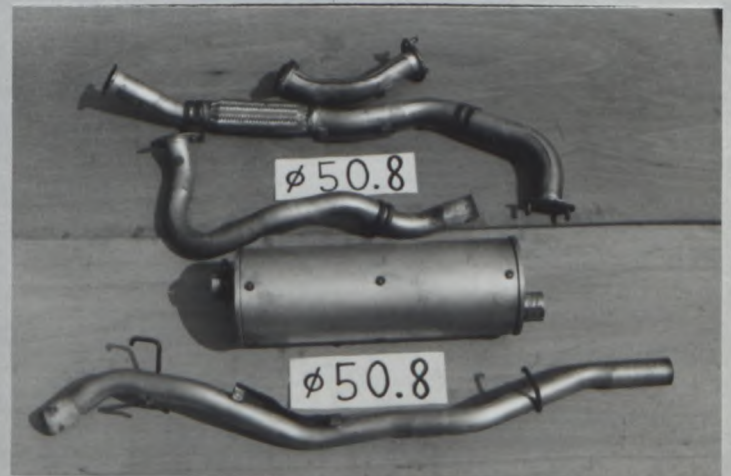
F) Culasse nue
Bare cylinderhead



AA) Piston de profil
Piston profile



BB) Echappement complet
Complete exhaust system :



Marque
Make

ISUZU

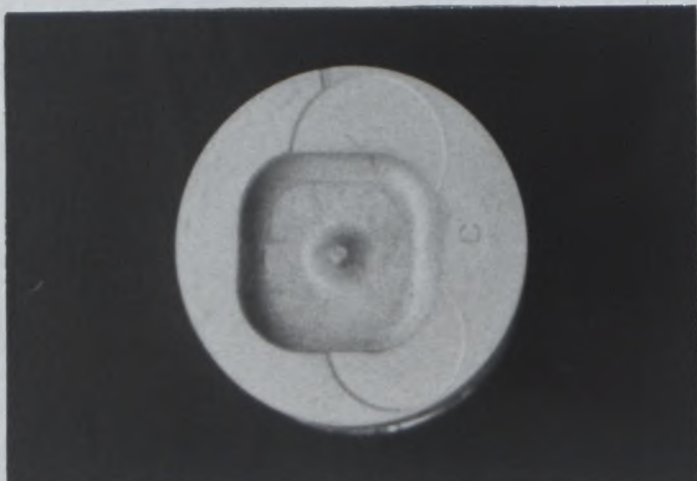
Modèle
Model

BIGHORN (UBS55FW)

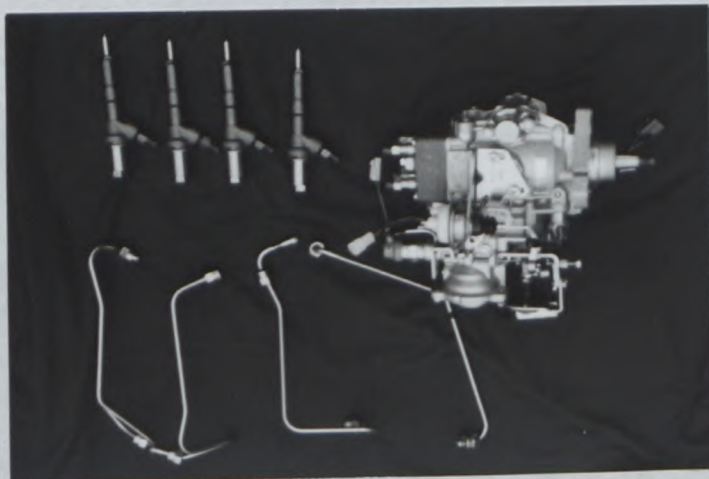
N° Homol.

T-1021

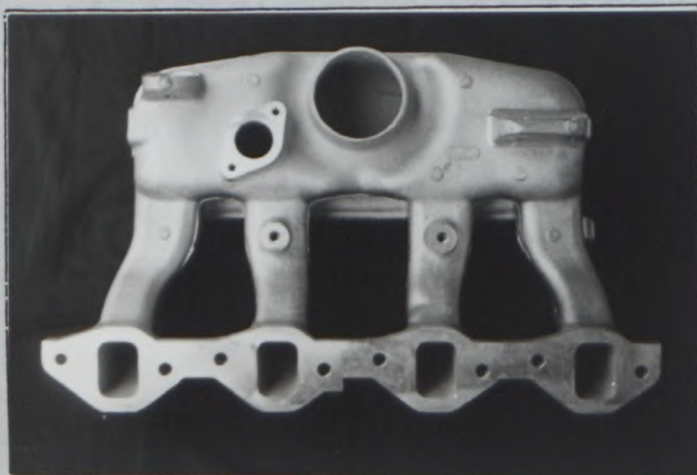
G) Chambre de combustion
Combustion chamber



H) Carburateur(s) ou système d'injection
Carburetor(s) or injection system



I) Collecteur d'admission
Inlet manifold

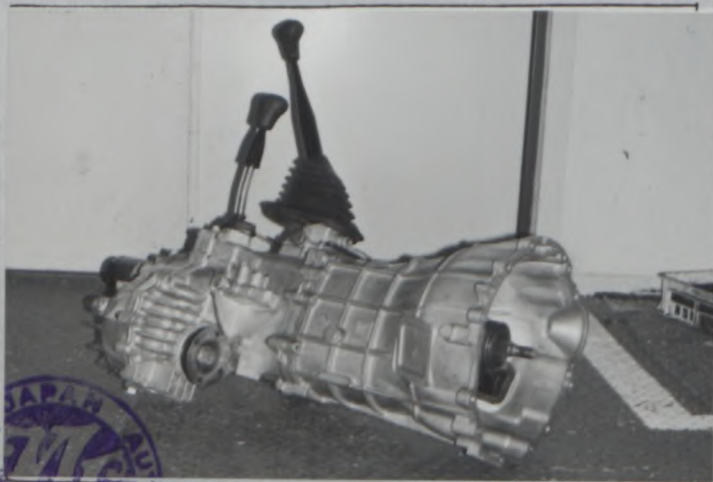


J) Collecteur d'échappement
Exhaust manifold



Transmission / Transmission

S) Carter de boîte de vitesse et cloche d'embrayage
Gearbox casing and clutch bellhousing



CC) Embrayage
clutch



Marque ISUZU
Make

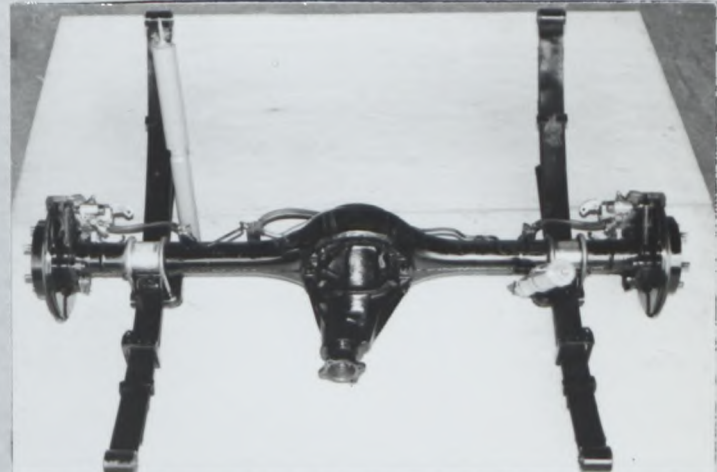
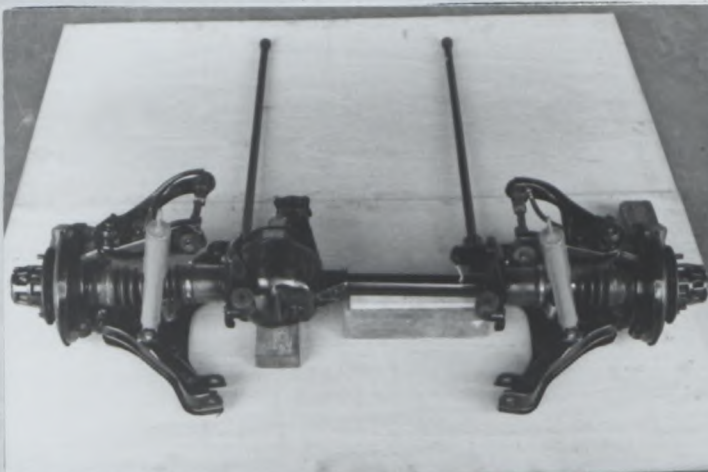
Modèle BIGHORN (UBS55FW)
Model

N° Homol. T-1021

Suspension / Suspension

T) Train avant complet déposé
Complete dismantled front running gear

U) Train arrière complet déposé
Complete dismantled rear running gear



Train roulant / Running gear

V) Freins avant
Front brakes

W) Freins arrière
Rear brakes



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



Marque
Make

ISUZU

Modele
Model

BIGHORN (UBS55FW)

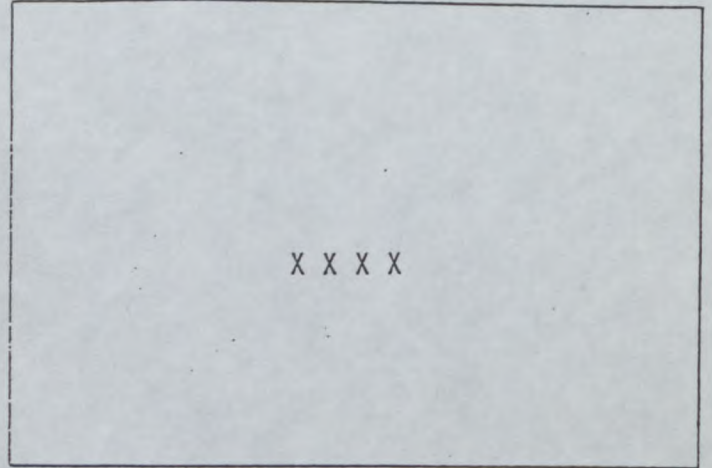
N° Homol.

T-1021

Carrosserie / Bodywork

X) Tableau de bord
Dashboard

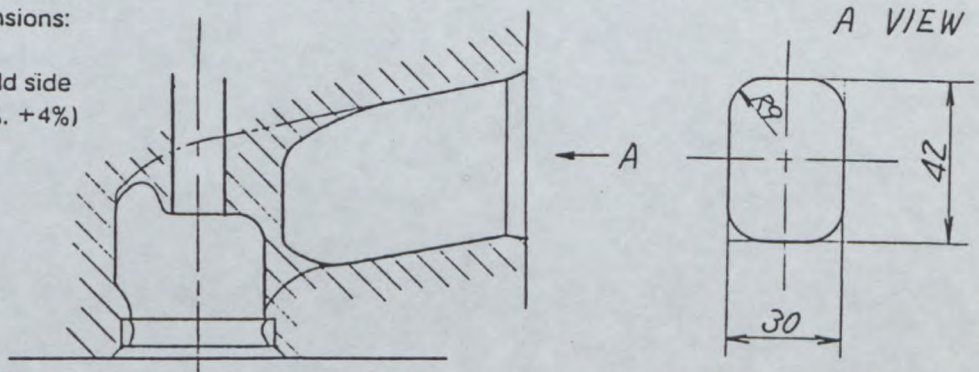
Y) Toit ouvrant
Sunroof



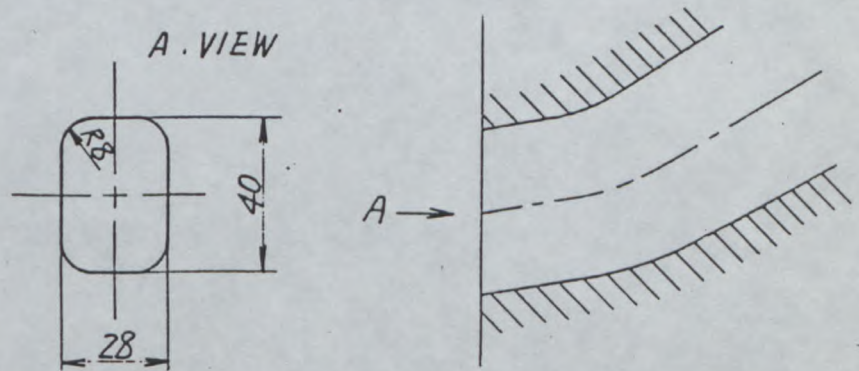
DESSINS / DRAWINGS

Moteur / Engine

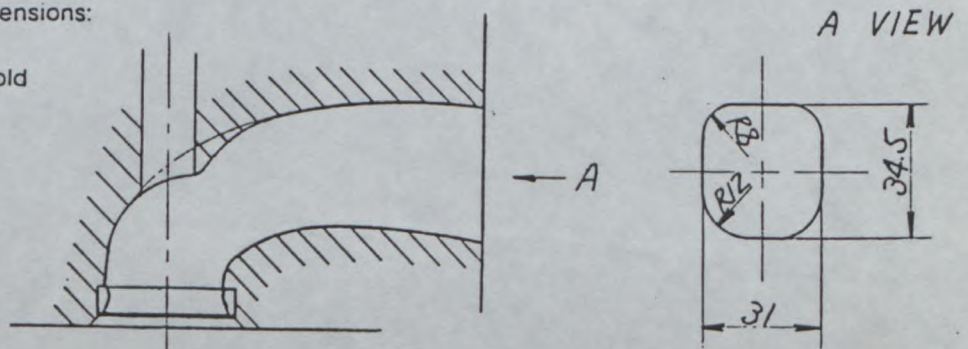
- I Orifices d'admission de la culasse, face collecteur (tolérances sur dimensions: -2%, +4%)
 Cylinderhead inlet ports, manifold side (tolerances on dimensions: -2%, +4%)



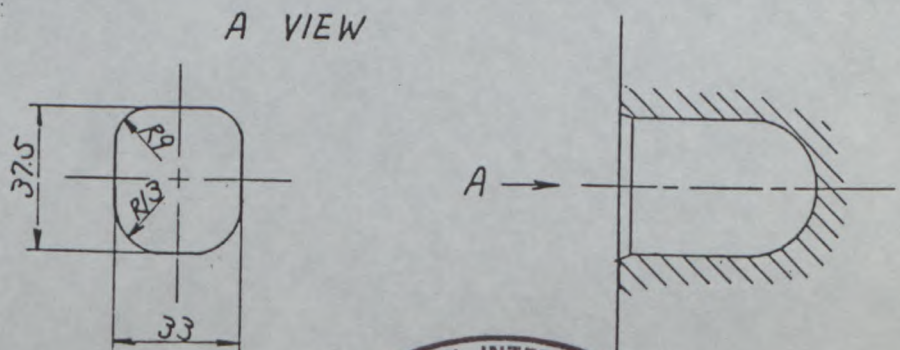
- II Orifices du collecteur d'admission, côté culasse (tolérances sur dimensions: -2%, +4%)
 Inlet manifold ports, cylinderhead side (tolerances on dimensions: -2%, +4%)



- III Orifices d'échappement de la culasse, face collecteur (tolérances sur dimensions: -2%, +4%)
 Cylinderhead exhaust ports, manifold side (tolerances on dimensions: -2%, +4%)



- IV Orifices du collecteur d'échappement, côté culasse (tolérances sur dimensions: -2%, +4%)
 Exhaust manifold ports, cylinderhead side (tolerances on dimensions: -2%, +4%)



Marque ISUZU Modèle BIGHORN (UBS55FW) N° Homol. T-1021
Make _____ Model _____

Suspension / Suspension

Système de suspension, selon l'article 705 ou en remplacement des photos O et P.
Suspension system according to article 705 or replacing photos O and P.

XXXX



Marque / Make ISUZU Modèle / Model BIGHORN (UBS55FW) N° Homol. J-1021

Suspension / Suspension

XVI Stabilisateur / Stabilizer Selon article 706 / According to article 706

Front





FEDERATION INTERNATIONALE DU SPORT AUTOMOBILE

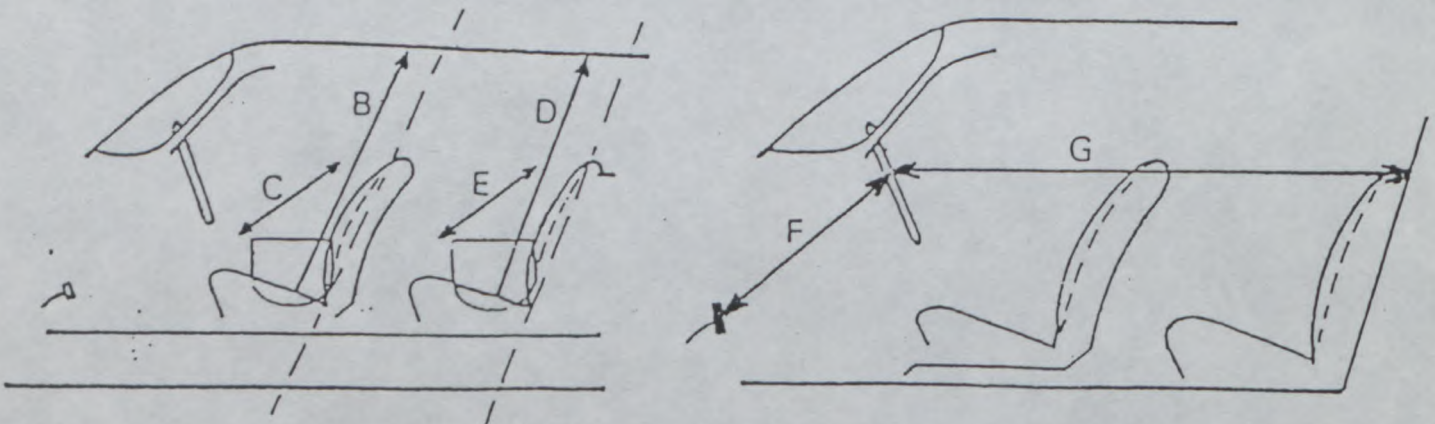
Homologation N°

T-1021

Groupe Tout-Terrain
Group

Marque ISUZU MOTORS LIMITED Modèle BIGHORN (UBS55FW)
Make Model

Dimensions intérieures comme définies par le Règlement d'Homologation
interior dimensions as defined by the Homologation Regulations.



B (Hauteur sur sièges avant) (Height above front seats)	<u>1040</u>	mm
C (Largeur aux sièges avant) (Width at front seats)	<u>1340</u>	mm
D (Hauteur sur sièges arrière) (Height above rear seats)	<u>1000</u>	mm
E (Largeur aux sièges arrière) (Width at rear seats)	<u>1370</u>	mm
F (Volant - Pédale de frein) (Steering wheel - brake pedal)	<u>690</u>	mm
G (Volant - paroi de separation arrière) (Steering wheel - rear bulkhead)	<u>1540</u>	mm
H = F+G =	<u>2230</u>	mm





FEDERATION INTERNATIONALE FISA Homologation No

DU SPORT AUTOMOBILE

T-1021

JAPAN AUTOMOBILE FEDERATION



社団法人 日本自動車連盟

JAF公認番号 FT-020
JAF公認グループ T
JAF発効年月日 1989年 4月30日

Group ~~A/B~~ T
グループ

ADDITIONAL HOMOLOGATION FORM FOR TURBO CHARGED ENGINES

ターボチャージャーエンジンの追加公認書

Vehicle : Manufacturer ISUZU MOTORS LIMITED Model and type BIGHORN (UBS55FW)
車両: 製造者 型式とモデル

Homologation valid as from 01 JUL. 1989 in group T
有効年月日 グループ

Ishikawajima-Harima

334. Turbocharging ターボチャージャー a) Make and type of the turbocharger H.I. Co., Ltd. RHB 52W
ターボチャージャーの製造者と型式

b) Turbine housing: タービンハウジング b1) Number of exhaust gas entries 1
排気ガスのタービン入口穴数

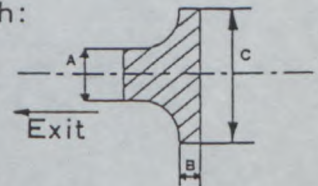
b2) Material Cast-Iron
材質

c) Turbine wheel: タービンホイール c1) Material Special heat resisting alloy
材質

c2) Number of blades 12 c3) Height(s) of blade 9.3^{+0.3}_{-0.2} ~ 13.0^{+0.3}_{-0.2} mm
翼の数 翼の高さ

c4) Indicate the dimensions A, B, C, according the following sketch:
下図に従い、寸法A、B、Cを記載

A = $\phi 44.0 \pm 0.1$ mm
B = $7.0 \begin{smallmatrix} +0.3 \\ -0.15 \end{smallmatrix}$ mm
C = $\phi 52.5 \pm 0.25$ mm



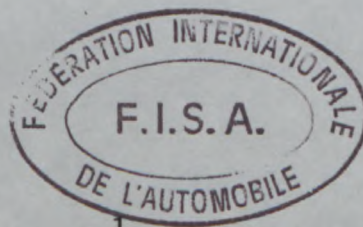
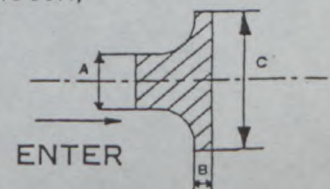
d) Impeller housing: インペラーハウジング d1) Number of air entries (gas) 1
空気取入口穴数

d2) Material Aluminum alloy
材質

e) Impeller wheel: インペラーホイール e2) Number of blades 10 e3) Height(s) of blade 0 ~ 13.4^{+0.15}_{-0.10} mm
翼の数 翼の高さ

e4) Indicate the dimensions A, B, C, according to the following sketch,
下図に従い、寸法A、B、Cを記載

A = $\phi 38.5 \pm 0.1$ mm
B = $4.8 \begin{smallmatrix} +0.15 \\ -0.15 \end{smallmatrix}$ mm
C = $\phi 52.5 \begin{smallmatrix} +0.15 \\ -0.30 \end{smallmatrix}$ mm



f) Pressure regulation: 過給圧の調整

f1) Type of pressure adjustment: by-pass バイパス relief valve リリーフバルブ other case 他方式

f2) Indicate the type of the valve and its control Swing Valve
バルブの形式と制御方法

g) Exhaust system: 排気システム

Internal dimensions of the eventual exhaust pipes between exhaust manifold and turbocharger (sketch)

エキゾーストマニホールドとターボチャージャーの間の排気管の内部寸法(図)
XXXX

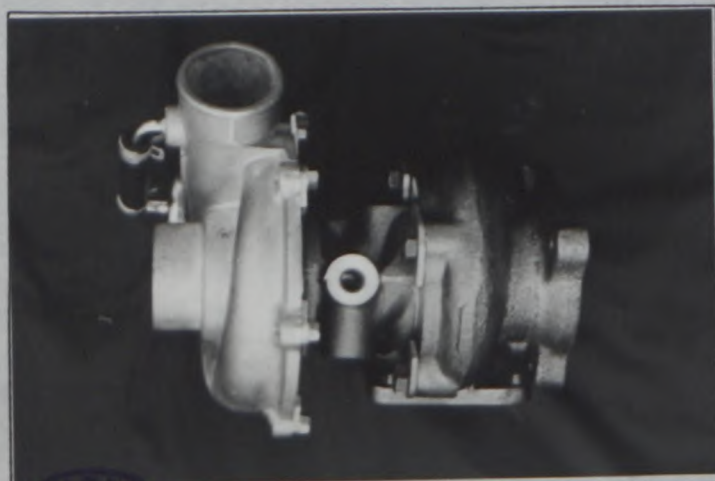
Additional Information

- h1) Intercooler : YES
- h2) Exchanger : NO
- h3) Cooling of turbo by water: YES
- h4) Water injection : NO
- f3) Standard pressure : 0.87 ± 0.1 BAR
- f4) Measuring pressure system: Pressure corresponding to an axial displacement of the wastegate control rod of 2.0 mm.

h) Cooling of intake air : yes/yes
吸気冷却器

PHOTOS 写真

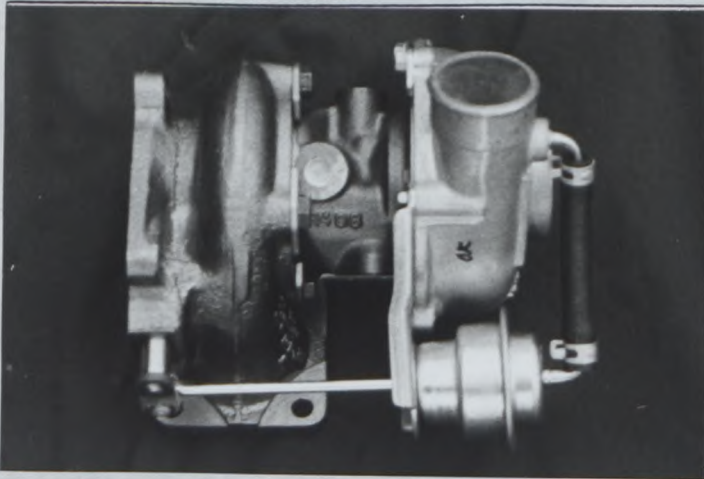
k) Plan view of turbocharger ターボチャージャーの平面



L) Front view of turbocharger ターボチャージャーの正面



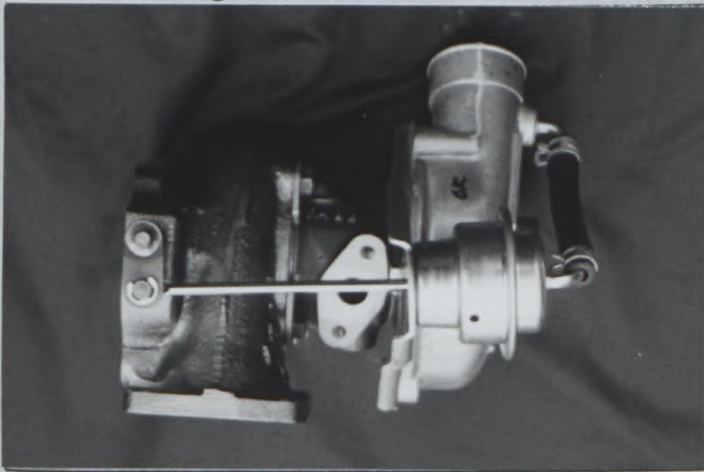
M) Side view of turbocharger
ターボチャージャーの側面



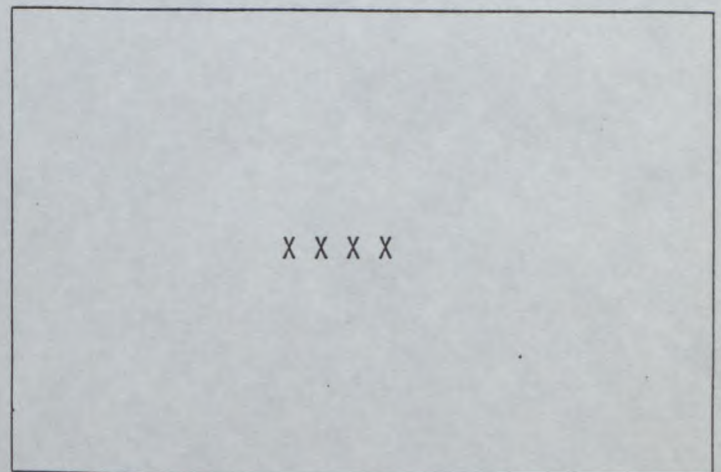
N) Turbine housing of turbocharger
ターボチャージャーのタービンハウジング



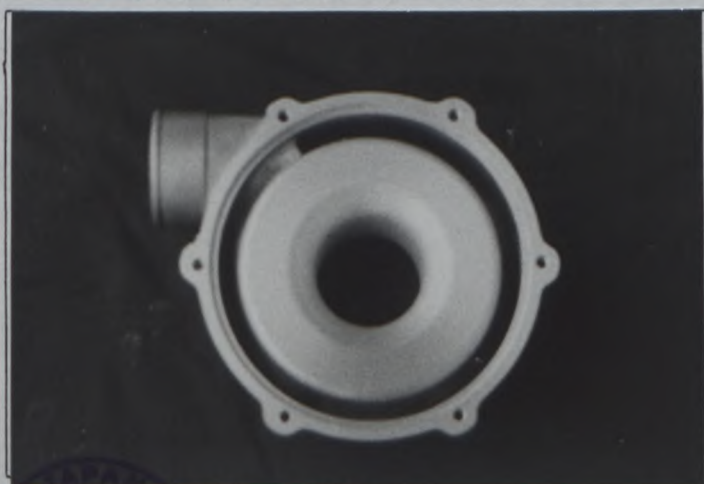
O) Valve and by-pass installation of turbocharger
過給圧調整装置



P) Eventual exhaust pipes between the exhaust manifold and the turbocharger.
エキゾーストマニホールドとターボチャージャーの間の排気管



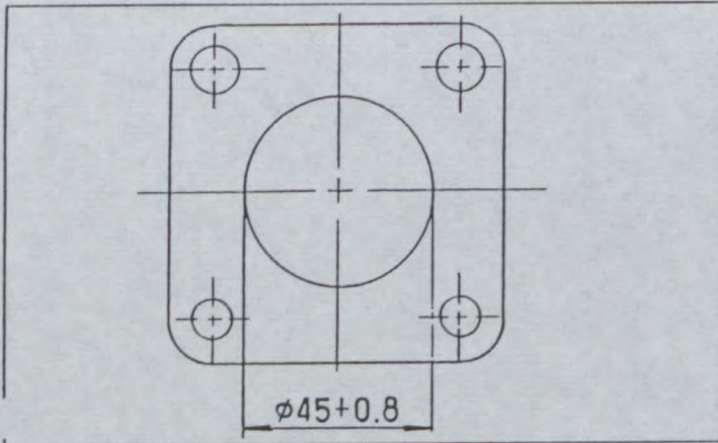
Q) Impeller housing of turbocharger
ターボチャージャーのインペラーハウジング



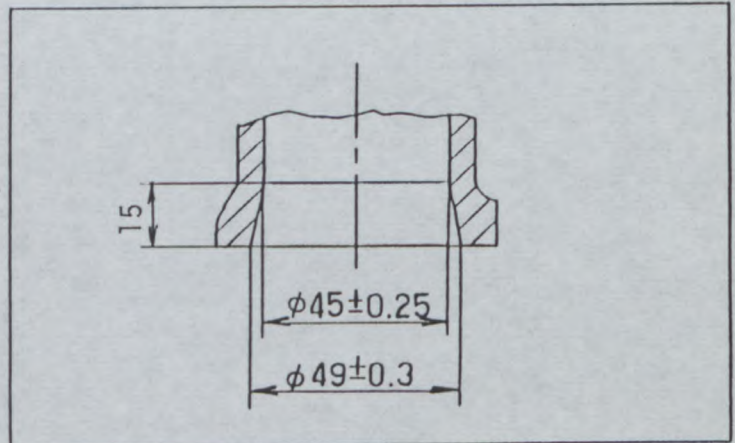
DRAWINGS

図面

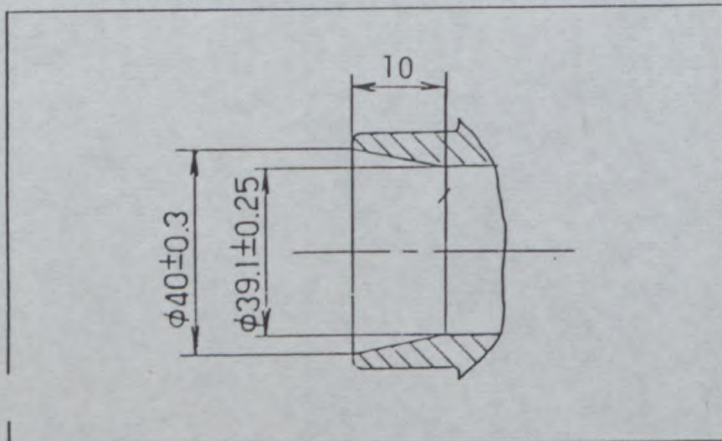
V) Exhaust gas entry in the turbine housing of turbocharger. タービンハウジングの排気ガス入口



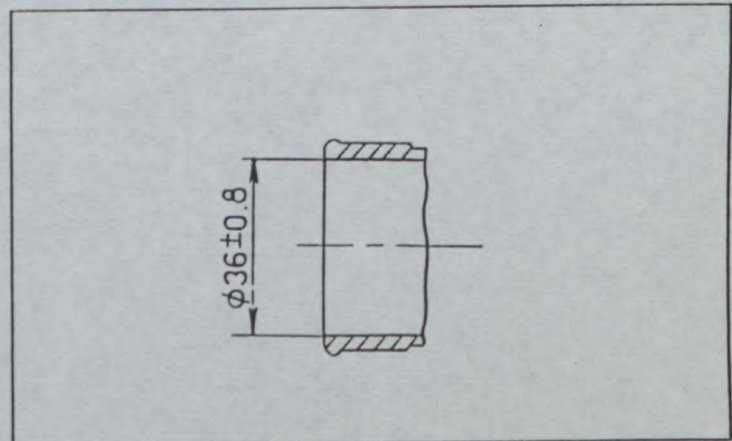
VI) Exhaust gas exit of the turbine housing of turbocharger. タービンハウジングの排気ガス出口



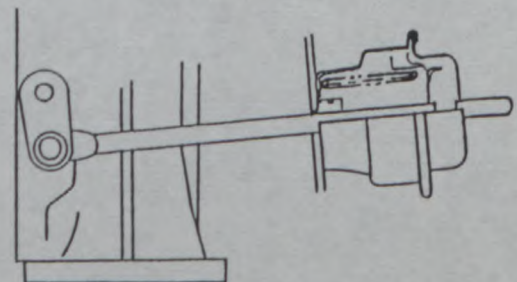
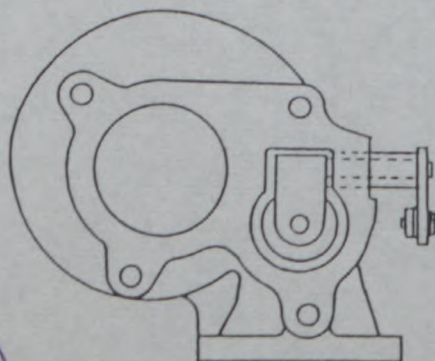
VII) Air (gas) entry in the impeller housing of the turbocharger. インペラーハウジングの空気取入口



VIII) Air (gas) exit of the impeller housing of the turbocharger. インペラーハウジングの空気出口



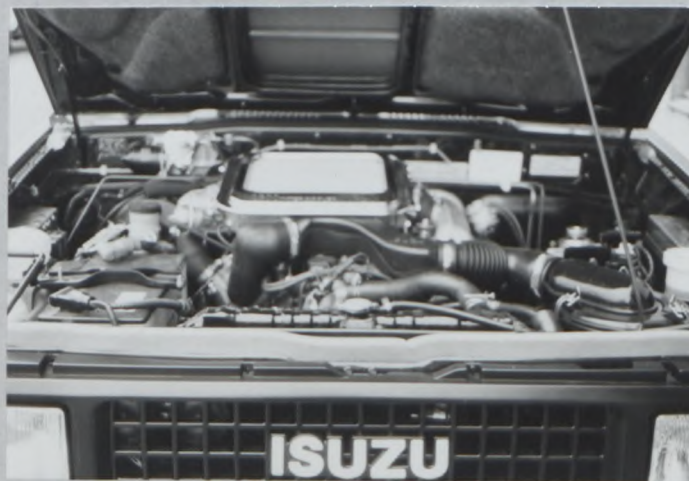
IX) Device regulating the turbocharging pressure. 過給圧調整装置



h1) Intercooler



h2) Vehicle installation of intercooler





FEDERATION INTERNATIONALE DU SPORT AUTOMOBILE



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

Homologation No

T-1021

Extension No

01/01VO

FORM OF EXTENSION TO THE OFFICIAL FISA HOMOLOGATION

F I S A 公認追加書式

J A F 公認番号

FT-020VO-1/1

J A F 発行年月日

1990年 9月30日 VO Option variant / オプション変型

Homologation valid as from

F I S A 発行年月日

01 JAN. 1991

in group

F I S A 公認グループ

T

Manufacturer of the car

車両製造者 **ISUZU MOTORS LIMITED**

Model and type

形式とモデル **UBS (BIGHORN)**~~ROLLBAR~~ / ROLL CAGE~~ロールバー~~ / ロールケージ

Main rollbar

主ロールバー

Longitudinal / diagonal strut

前後 / 斜ストラット

Front rollbar

前ロールバー

Rollbar manufacturer

ロールバー製造者

ISUZU MOTORS LIMITED

Material

材質

STEEL (STKM-13C)**STEEL (STKM-13C) / STEEL (STKM-13C)****STEEL (STKM-13C)**

Exterior diameter

外径

38 mm**38 mm / 38 mm****38 mm**

Wall thickness

肉厚

2.6 mm**2.6 mm / 2.6 mm****2.6 mm**

Elastic limit

弾性限度

41 kg/mm²**41 kg/mm² / 41 kg/mm²****41 kg/mm²**

Tensile strength

引張強度

55 kg/mm²**55 kg/mm² / 55 kg/mm²****55 kg/mm²**

Total weight including fixings

取付金具を含む総重量

46 kg~~Complete rollbar~~ / rollcage outside the car~~完成したロールバー~~ / 車から外したロールケージ

We certify that the present ~~rollbar~~ / rollcage complies with the conditions of the FIA Appendix J, in particular with regard to its attachments, its connections and its stress resistances.

上記~~ロールバー~~/ロールケージは、特に取付け部分、継ぎ手、強度に関し、FIA国際スポーツ法典付則J項の条件に準拠していることを証明いたします。

Signature of the car manufacturer representative.

車両製造代表者の署名

K. Takagi

KIMIO TAKAGI

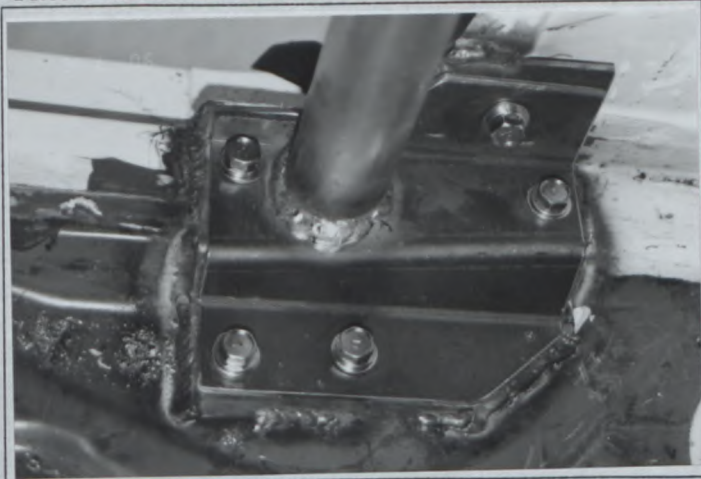
PRODUCT MANAGER



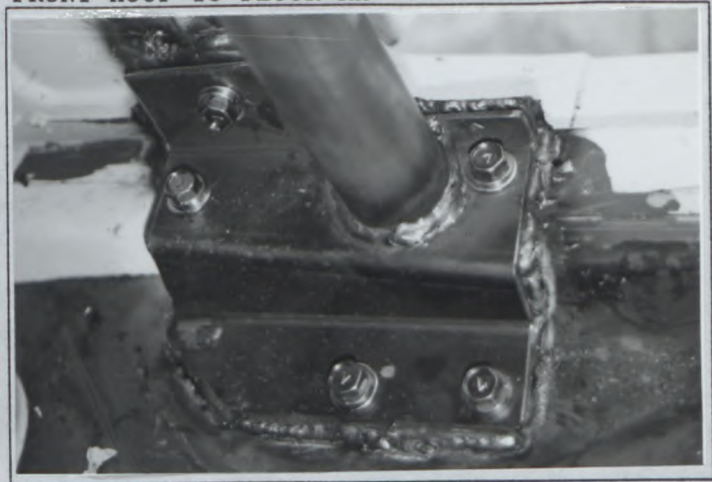
Make 会社名 ISUZU Model 型式 BIGHORN No Homol. T-1021

PHOTOS/写真 JAF公認番号 FT-020 VO- 1/1 No Ext. 01/01 VO

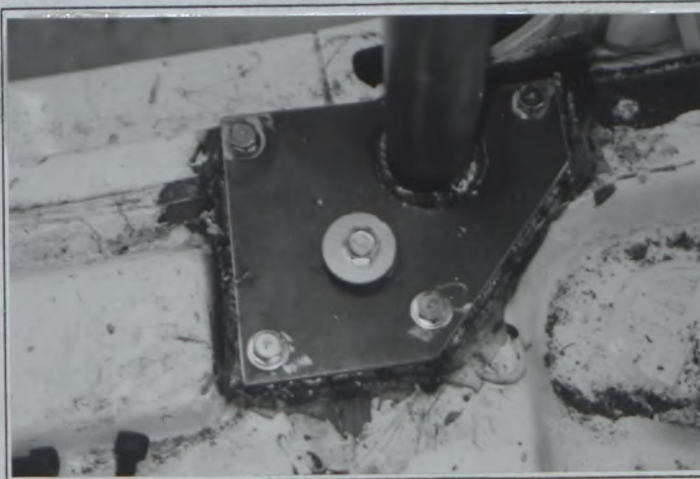
FRONT HOOP TO FLOOR LH



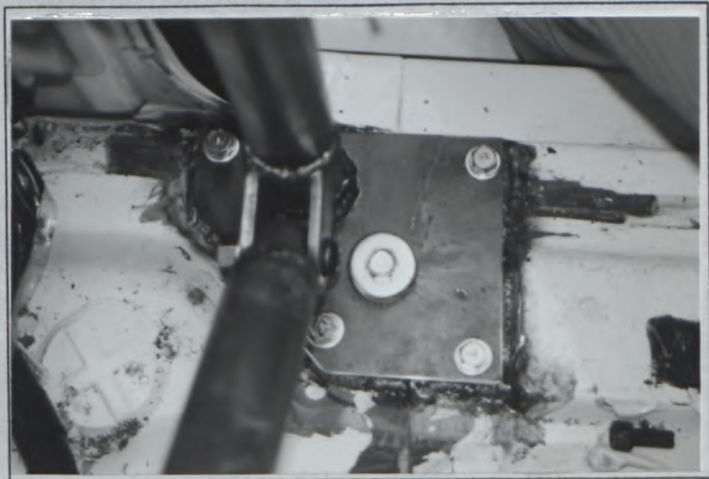
FRONT HOOP TO FLOOR RH



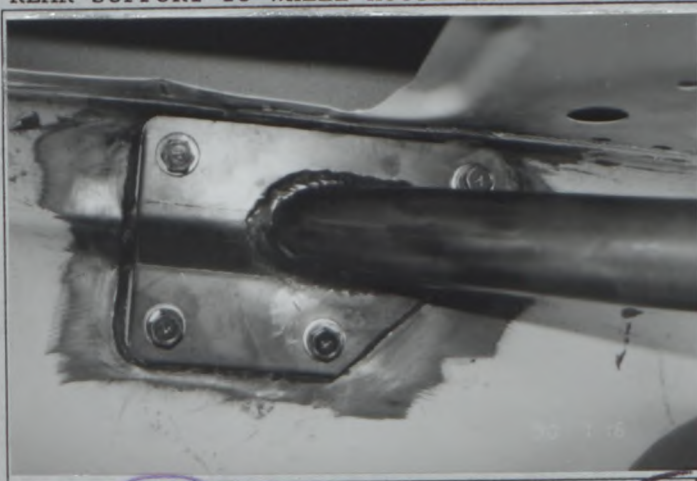
MAIN HOOP TO FLOOR LH



MAIN HOOP TO FLOOR RH



REAR SUPPORT TO WHEEL HOUSE LH



REAR SUPPORT TO WHEEL HOUSE RH





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

FISA Homologation No

T-1021

Extension No

02 / 02 VO

JAF公認番号 FT-020 VO- 2/2

発効年月日 1990年 10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
- ER Erratum / 誤記訂正

Homologation valid as from
公認発行日

01 JAN. 1991

in group

FISAグループ T

Manufacturer
製造者

ISUZU MOTORS LIMITED

Model and type
型式と形式

BIGHORN UBS55FM

Page or ext. ページまたは補足	Art. 項目	Description 記述
		Body variation : Wide fender version Photo A1 , B1 & EE1.
	201	Minimum weight : 1700 Kg
	203	Overall width : 1760 mm ± 1% At rear axle
	204	Width of bodywork a) At front axle : 1750 mm ± 1% b) At rear axle : 1760 mm ± 1%
	207	Maximum track a) Front : 1450 mm b) Rear : 1460 mm
	801	Wheels (Front & Rear) a) Diameter : 15", 381 mm b) Maximum rim width : 7", 178 mm
	605	Final drive b) Ratio : 4.555 c) Teeth number : 41/9



Make
会社名 ISUZU

Model
型式 BIGHORN UBS55FM

No Homol. T-1021

PHOTOS/写真

JAF公認番号 FT-020VO-2/2

No Ext. 02/02VO

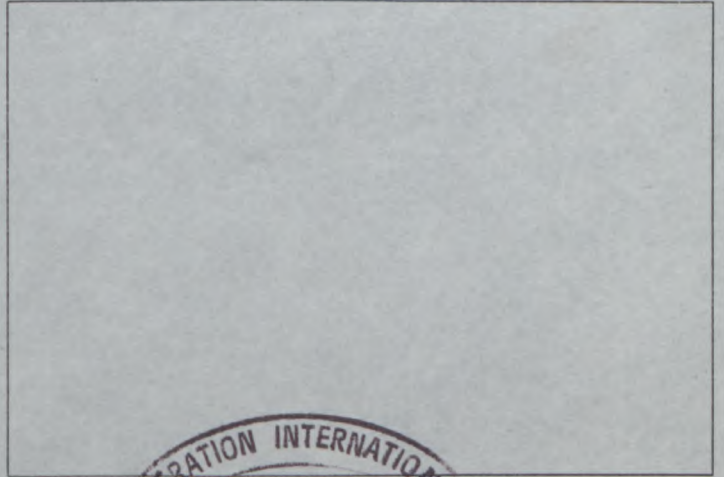
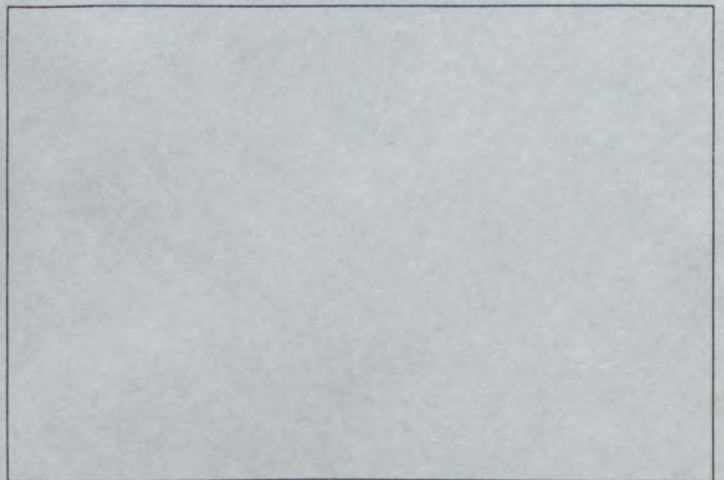
A1



B1



EE1





FEDERATION INTERNATIONALE
DE L'AUTOMOBILE

Homologation No

T-1021

Group
Group T1

Extension No

03 / 01 ER

FICHE D'EXTENSION D'HOMOLOGATION
FORM OF HOMOLOGATION EXTENSION

FT-020ER-3/1
1995年8月31日

- ET Evolution normale du type / Normal evolution of the type
- VF Variante de fourniture / Supply variant
- VO Variante option / Option variant
- ER Erratum / Erratum

Véhicule: Constructeur
Vehicle: Manufacturer

ISUZU MOTORS LIMITED

Modèle et type
Model and type

BIGHORN

Homologation valable à partir du
Homologation valid as from

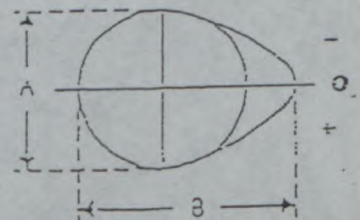
01 OCT. 1995

L'information suivante doit être ajoutée à la fiche de base / à l'extension numérotée :
The following information must be added to the basic form / to the extension numbered:

325. Arbre à cames :
Camshaft :

a) Dimensions de la came
Cam dimensions

Admission Inlet	A =	35.5	+/-0.1 mm
	B =	42.0	+/-0.1 mm
Echappement Exhaust	A =	35.5	+/-0.1 mm
	B =	42.0	+/-0.1 mm



FEDERATION INTERNATIONALE
DE L'AUTOMOBILE

8, place de la Concorde, 75008 Paris

Services Administratifs :

8 bis, rue Boissy d'Anglas, 75008 Paris

Marque
Make

ISUZU

Modèle
Model

BIGHORN (UBS55FW)

T-1021

Extension No

03701 ER

FT-020ER-3/1

320. Distribution
Timing

a) Jeu théorique de distribution
Theoretical clearance for valve timing

admission
intake 0.4 mm

échappement
exhaust 0.4 mm

b) Levée de came en mm (arbre démonté)
Cam lift in mm (disassembled camshaft)

(dessin / drawing Art. 325)

ADMISSION / INTAKE				ÉCHAPPEMENT / EXHAUST			
Angle de rotation en degrés Rotation angle in degrees	Levée en mm (+/-0.2 mm) Lift in mm (+/-0.2 mm)	Angle de rotation en degrés Rotation angle in degrees	Levée en mm (+/-0.2 mm) Lift in mm (+/-0.2 mm)	Angle de rotation en degrés Rotation angle in degrees	Levée en mm (+/-0.2 mm) Lift in mm (+/-0.2 mm)	Angle de rotation en degrés Rotation angle in degrees	Levée en mm (+/-0.2 mm) Lift in mm (+/-0.2 mm)
0	6.5			0	6.5		
-5	6.4	+5	6.4	-5	6.4	+5	6.4
-10	6.3	+10	6.3	-10	6.3	+10	6.3
-15	5.9	+15	5.9	-15	5.9	+15	5.9
-30	4.2	+30	4.2	-30	4.2	+30	4.2
-45	1.7	+45	1.7	-45	1.7	+45	1.7
-60	0.4	+60	0.4	-60	0.4	+60	0.4
-75	0.1	+75	0.1	-75	0.1	+75	0.1
-90	0.0	+90	0.0	-90	0.0	+90	0.0
-105	0.0	+105	0.0	-105	0.0	+105	0.0
-120	0.0	+120	0.0	-120	0.0	+120	0.0
-135	0.0	+135	0.0	-135	0.0	+135	0.0
-150	0.0	+150	0.0	-150	0.0	+150	0.0

Un décalage de l'ensemble des mesures de +/- 2 degrés est accepté.

A shift of +/- 2 degrees of the whole measurement is accepted.

e) Levée maximum des soupapes
Maximum valve lift

Admission / Intake

9.3

+/-0.2 mm

Échappement / Exhaust

9.3

+/-0.2 mm

avec jeu selon Art. 320.a
with clearance according to Art. 320.a



FEDERATION INTERNATIONALE
DE L'AUTOMOBILE

8, place de la Concorde, 75008 Paris

Services Administratifs :

8 bis, rue Boissy d'Anglas, 75008 Paris

FIA - F. 312 - 0000000000



FEDERATION INTERNATIONALE
DU SPORT AUTOMOBILE



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

PRODUCTION CERTIFICATE

生産証明書

Manufacturer 製造者 ISUZU MOTORS LIMITED

Date 年月日 April 11, 1989

Car Model 型式 UBS55FW

Type or commercial designation タイプまたは通称名 BIGHORN

Homologation No. 車両公認No. T-1021

Nature of the extension 追加公認の種類 New Model

Production period 生産時期 from 自 Nov. 1988 to 至 Feb. 1989

	Month/year 月/年	Number 生産数
1	Nov. 1988	1082
2	Dec. 1988	875
3	Jan. 1989	917
4	Feb. 1989	1154
5		
6		
7		
8		
9		
10		
11		
12		
TOTAL		4028
Remarks: 注		

I hereby certify that the production mentioned hereabove concerns cars which are entirely completed, identical and in conformity with the recognition form submitted for the said model.

上記車両型式について提出された公認書に完全に一致し、この車両を確かに生産したことをここに証明いたします。

Signature 署名 *Kimio Takagi*
Kimio Takagi

Position 所属役職 Product Manager
Product Program Planning Office

JAPAN AUTOMOBILE FEDERATION (JAF)





FEDERATION INTERNATIONALE DU SPORT AUTOMOBILE



JAPAN AUTOMOBILE FEDERATION

社団法人 日本自動車連盟

PRODUCTION CERTIFICATE

FT-020 VO- 2/2

生産証明書

1990 + 10月01日

Manufacturer 製造者 ISUZU MOTORS LIMITED

Date 年月日 October 2, 1990

Car Model 型式 UBS55FM

Type or commercial designation タイプまたは通称名 BIGHORN

Homologation No. 車両公認No. T-1021

Nature of the extension 追加公認の種類 VO

02 / 02 VO

Production period 生産時期 from 自 Oct. 1989 to 至 Jul. 1990

	Month/year 月/年	Number 生産数
1	Oct. 1989	123
2	Nov. 1989	144
3	Dec. 1989	161
4	Jan. 1990	97
5	Feb. 1990	106
6	Mar. 1990	128
7	Apr. 1990	132
8	May. 1990	111
9	Jun. 1990	114
10	Jul. 1990	98
11		
12		
TOTAL		1214
Remarks: 注		

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