

Group 3E RECOGNITION DOCUMENT

A) Vehicle seen from 3/4 front

B) Vehicle seen from 3/4 rear



1. GENERAL

101. Manufacturer

HOLDEN

102. Commercial name(s) - Model and type

HSV ASTRA VXR AH

103. Engine capacity

1998 cm³ Corrected engine capacity **1998 x 1.7 = 3397** cm³

104. Type of car construction

a) Type

<input type="checkbox"/> separate chassis	<input checked="" type="checkbox"/> monocoque
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b) Material of chassis / bodyshell

STEEL

106. Number of seats

5

2. DIMENSIONS, WEIGHT

Tare Weight

1333 kg Minimum Racing Weight **1333** kg

202. Overall length

4290 mm ± 1 %

203. Maximum overall width

1753 mm ± 1 % Where measured _____

204. Width of bodywork

a) At front axle **1753** mm ± 1 %

b) At rear axle **1753** mm ± 1 %

206. Wheelbase **2614** mm ± 1 %

207. Maximum track

a) Front **1484** mm

b) Rear **1481** mm

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3. ENGINE

(In case of rotary engine, see Art. 335 on additional form)

301. Location and position of the engine **FRONT - TRANSVERSE**

302. Number of mounts **3**

Engine in its compartment



304. Supercharging

<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
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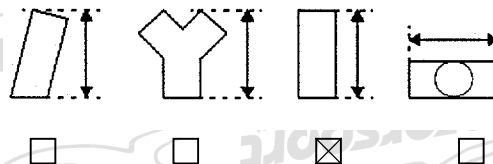
Maximum manifold pressure **1.2 BAR**

Type and number of compressors **TURBOCHARGER - SINGLE**

305. Number and layout of cylinders **4 IN-LINE**

312. Cylinder block material **CAST IRON**

310. Maximum compression ratio **8.8 : 1**



313. Sleeves

a) yes no

b) Material **N/A**

c) wet dry

314. Bore **86** +/- 0.1 mm

316. Stroke **86** +/- 0.1 mm

321. Cylinderhead

a) Number **1**

b) Material **ALUMINIUM**

324. Fuel feed by injection : a) Make **GM**

b) Model **GM**

f) Position of Injectors:

f1) Manifold Cylinderhead

325. Camshaft

a) Number

2

b) Location

DOHC

c) Drive system

BELT

f) Type of valve operation

DIRECT

327. Intake

a) Material of manifold

ALLOY/ COMPOSITE

b) Number of manifold elements

1

c) Number of valves per cylinder **2**



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328. Exhaust

- a) Material of manifold **STEEL**
- b) Number of manifold elements **1**
- d) Number of valves per cylinder **2**
- p) External Diameter of exhaust pipe between manifold and first silencer _____ mm ± 5%

330. Ignition system

- a) Type **DIRECT**
- b) Number of plugs per cylinder **1**
- c) Number of distributors **N/A**
- d) Number of coils **4**

331. Cooling system

Capacity **13 L**

332. Cooling fan

- a) Number **2**
- b) Diameter of the fan **300 mm**
- c) Material of the fan **PLASTIC**
- d) Number of blades **5**
- e) Type of drive **ELECTRIC**
- f) Automatic cut in

<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
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333. Lubrication system

- a) Type **WET**
- b) Number of oil pumps **1**
- c) Total capacity **5 L**
- e) Location of the cooler(s) **N/A**
- f) Type of the cooler(s) **N/A**

4. FUEL CIRCUIT

401. Fuel tank

- b) Location **UNDER FLOOR**
- d) Total capacity **54 L**

402. Fuel pump(s)

- a)

<input checked="" type="checkbox"/>	Electrical	<input type="checkbox"/>	Mechanical
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- b) Number **1**
- d) Location **IN TANK**

Fuel Pressure _____

5. ELECTRICAL EQUIPMENT

502. Alternator

- a) Number **1**
- b) Type **DC MOTOR**
- c) Drive system **BELT**
- d) Nominal power **85 Amp**

503. Retractable headlights

- a)

<input type="checkbox"/>	yes	<input checked="" type="checkbox"/>	no
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- b) Control system **N/A**

6. POWER TRAIN

601. Driven wheels

- front

<input checked="" type="checkbox"/>	yes	<input type="checkbox"/>	no
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- rear

<input type="checkbox"/>	yes	<input checked="" type="checkbox"/>	no
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602. Clutch

- a) Type **MECHANICAL FRICTION**
- b) Control system **HYDRO/MECHANICAL**



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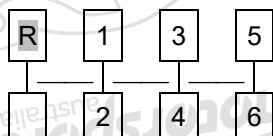
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3. Gearbox

- a) Location **LHS**
- b) Make **GM**
- c) Type and location of control **MANUAL STICK**
- e) Ratios

	Number of teeth	Ratio	Constant Mesh	Synchro
1	—	3.82:1	—	—
2	—	2.16:1	—	—
3	—	1.48:1	—	—
4	—	1.07:1	—	—
5	—	0.88:1	—	—
6	—	0.74:1	—	—
R	—	—	—	—
Constant	—	—	—	—

f) Gear change gate



604. Transfer box / Centre differential

- a) Ratios **N/A**
- c) Control system of transfer box **N/A**
- d) Type of central differential **N/A**

605. Final drive

- a) Type of final drive
- b) Ratio
- f) Oil Cooler
- g) Cooler Type

	Front	Rear
a) Type of final drive	VISCOUS R&P	N/A
b) Ratio	3.94:1	N/A
f) Oil Cooler	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no
g) Cooler Type	N/A	N/A

606. Shafts

- a) Type of longitudinal shafts **N/A**
- b) Material of longitudinal shafts **N/A**
- c) Type of transversal half-shafts **CV**
- d) Material of transversal half-shafts **STEEL**



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7. SUSPENSION

701. General

	Front	Rear
a) Type of suspension	<u>MCPHERSON STRUT</u>	<u>TRAILING ARM</u>
702. Helical springs	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
a) Material	<u>STEEL</u>	<u>STEEL</u>
703. Leaf springs	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
a) Material	<u>N/A</u>	<u>N/A</u>
704. Torsion bars	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
a) Material	<u>N/A</u>	<u>N/A</u>

705. Other type of suspension

See description on additional form

706. Stabiliser

	Front	Rear
b) Effective diameter	_____ mm	<u>N/A</u> mm
c) Material	<u>STEEL</u>	<u>N/A</u>

707. Suspension Dampers

	Front	Rear
a) Number per wheel	<u>1</u>	<u>1</u>
b) Type	<u>GAS / HYDRAULIC</u>	<u>GAS / HYDRAULIC</u>
c) Principle of operation	<u>TELESCOPIC</u>	<u>TELESCOPIC</u>

8. WHEELS

801. Wheels

	Front	Rear
a) Diameter	<u>19"</u>	<u>19"</u>
b) Width	<u>8.0"</u>	<u>8.0"</u>
c) Offset	<u>+0</u> mm	<u>+0</u> mm

803. Brakes



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a) Braking system

DISC

b) Number of master cylinders

1

c) Servo-brakes

yes no

c1) Make and type

GM

	Front	Rear
e) Number of cylinders per wheel	_____	_____
f) Drum brakes		
f1) Internal diameter	<u>N/A</u>	<u>N/A</u>
f2) Number of linings per wheel	<u>N/A</u>	<u>N/A</u>
g) Disc brakes		
g1) Number of pads per wheel	<u>2</u>	<u>2</u>
g2) Number of calipers per wheel	<u>1</u>	<u>1</u>
g3) Caliper material	<u>STEEL</u>	<u>STEEL</u>
g4) Thickness of new disc	<u>28 ± 1 mm</u>	<u>10 ± 1 mm</u>
g5) External diameter of the disc	<u>321 ± 1.5 mm</u>	<u>278 ± 1.5 mm</u>
g9) Ventilated discs	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input checked="" type="checkbox"/> no

h) Parking brake: h1) Control system

MECHANICAL LEVER

h2) Location of lever

CABIN

h3) On which wheels

Front Rear

804. Steering

a) Type

Front		Rear	
<u>RACK & PINION</u>		<u>N/A</u>	
<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
<u>HYDRAULIC</u>		<u>N/A</u>	

b) Servo-assistance

Type of Assistance

9. BODYWORK

901. Interior

a) Ventilation

yes no

c) Air Conditioning

yes no

b) Heating

yes no

f) Optional sun roof

yes no

f1) Type

N/A

f2)

Control system

N/A

g) Opening system for side windows

Front	Rear
<u>ELECTRIC</u>	<u>N/A</u>

X) Dashboard

Y) Sunroof



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N/A

902. Exterior

a) Number of doors **2**

b) Tailgate

<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
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Front	Rear
<u>STEEL</u>	<u>N/A</u>

c) Door material

d) Front bonnet material

STEEL

e) Rear bootlid / tailgate material

STEEL

f) Bodywork material

STEEL

h) Rear window material

GLASS

i) Rear quarter window material **GLASS**

Front	Rear
<u>GLASS</u>	<u>GLASS</u>
<u>PLASTIC</u>	<u>PLASTIC</u>

k) Side window material

l) Material of bumper

n) Exterior Rear wiper

<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
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XIII) NON METALLIC PARTS OF THE BODY



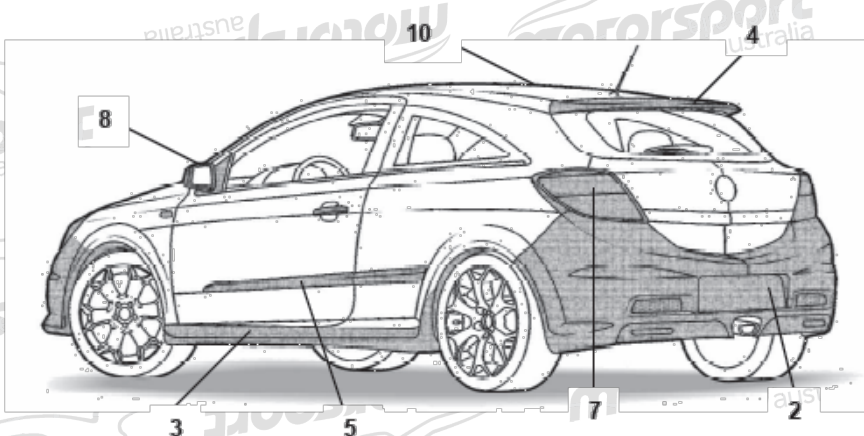
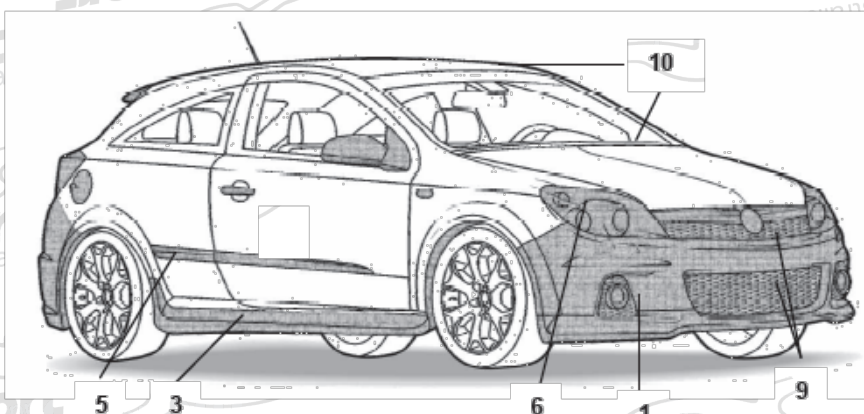
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Number	Part	Material
1	FRONT BUMPER	POLYURETHANE
2	REAR BUMPER	POLYURETHANE
3	SIDE PANEL LEFT + RIGHT	POLYURETHANE
4	ROOF SPOILER	POLYURETHANE
5	SIDE AND DOOR TRIM LEFT + RIGHT	POLYURETHANE
6	HEAD LIGHT	CLEAR POLYETHYLENE
7	REAR LIGHT	CLEAR POLYETHYLENE
8	MIRROR LEFT + RIGHT	POLYURETHANE
9	FRONT GRILLE	POLYURETHANE
10	ROOF TRIM PANEL + SCUTTLE COVER	POLYURETHANE



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COMPLEMENTARY INFORMATION

