

GROUP 3E RECOGNITION FORM

Homologation valid as from **01-01-2019**

A) Vehicle seen from 3/4 front

B) Vehicle seen from 3/4 rear



1. GENERAL

- 101. Manufacturer **FORD**
- 102. Commercial name(s) - Model and type **MUSTANG FN MACH 1**
- 103. Engine capacity **5038** cm³ Corrected engine capacity **629.75 x 8 = 5038** 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

- 201. Minimum Weight **1681** kg
- Tare Weight **1754** kg **RVD CPA Number. 47158-1378259**
- 202. Overall length **4797** mm +/- 1 %
- 203. Maximum overall width **1916** mm +/- 1 % — Where measured **REAR AXLE CENTRELINE**
- 204. Width of bodywork
 - a) At front axle **1597** mm +/- 1 %
 - b) At rear axle **1658** mm +/- 1 %

Make **Ford**

Model Mustang FN Mach 1

205. Minimum height centre hub / Wheel arch opening

a) Front **376**mm b) Rear **357**mm

206. Wheelbase **2720**mm +/- 1%

207. Maximum track

a) Front **1657**mm b) Rear **1698**mm

209. Overhang

a) Front **1132**mm +/- 1% b) Rear **932**mm +/- 1%

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

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

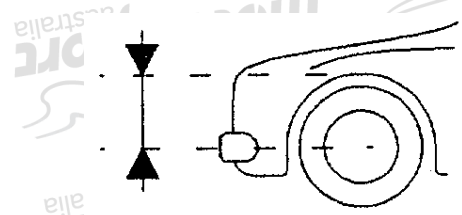
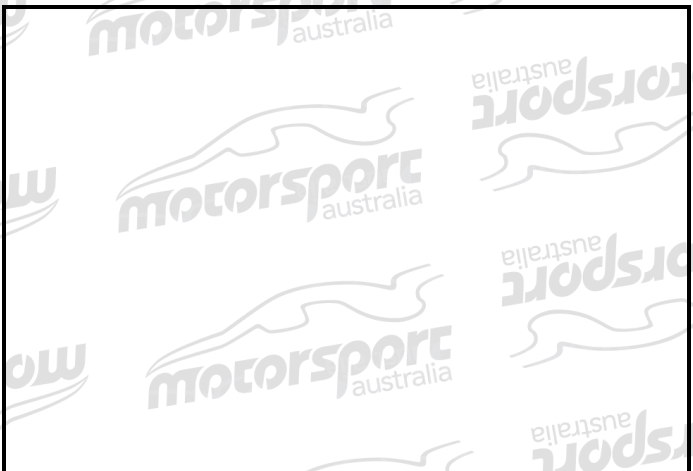
302. Number of mounts **2**

C) Right hand view of dismantled engine

D) Left hand of dismantled engine



E) Engine in its compartment



Make **Ford**

Model Mustang FN Mach 1

304. Supercharging

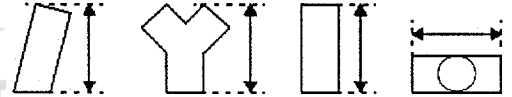
<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
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(In case of supercharging, see Art. 334 on additional form)

Type and number of compressors

Normally Aspirated

305. Number and layout of cylinders

V8

312. Cylinder block material

ALUMINIUM

306. Type of cooling

WATER

307. Cylinder capacity

a) Single cylinder/Chamber **618.61** cm³ b) Total **5038** cm³

308. Total minimum volume of a combustion chamber

686.7 cm³ (Chamber + swept volume ABC)

309. Minimum volume of a combustion chamber in the cylinder head

57 cm³ (Chamber ATC)

310. Maximum compression ratio (in relation with the unit)

12:1:1

311. Minimum height of the cylinder block

227 mm

313. Sleeves

a) yes no b) **CAST IRON** c) wet dry

314. Bore

93MM +/- 0.1 mm315. Maximum bore allowed **93.05** mm

316. Stroke

92.7 +/- 0.1 mm

317. Piston

a) Material **ALLUMINIUM**b) Number of rings **3**c) Minimum weight **360** gd) Distance from gudgeon pin centre line to highest point of piston crown **29.87** +/- 0.1 mme) Distance (+/-) between the top of the piston ATC and the gasket plane of the cylinder block **0** +/- 0.15 mmf) Piston crown relief/dome volume **-2.5** +/- 0.5 cm³ (Show dome as negative)

AA) Piston

318. Connecting rod

a) Material **STEEL** b) Big end type **2 PIECE BEARING**c) Interior diameter of the big end (without shell bearings) **56.88** mm +0.1/- 0 mmd) Length between the axes **150.67** +/- 0.1 mm e) Minimum weight **610** g

E1) Connecting rod seen from 3/4 (with marking)

Make **Ford**

Model Mustang FN Mach 1

319. Crankshaft

a) Type of manufacture **SINGLE** (Single or multi piece)

b) Material

c)

 cast forged

d) Number of bearings

e) Type of bearings

2 PIECE

f)

Diameter of bearings

67.58mm +/- 0.25 mm

g) Bearing caps material

STEEL

h)

Minimum weight of bare crankshaft

2500 g +/- 400.0gi) Diameter of crank pins **50.4** mm +/- 0.25 mm

320. Flywheel

a) Material

STEEL

b) Minimum weight with starter ring

N/A g

321. Cylinderhead

a) Number

2

b) Material

ALLUMINIUM

c) Minimum height

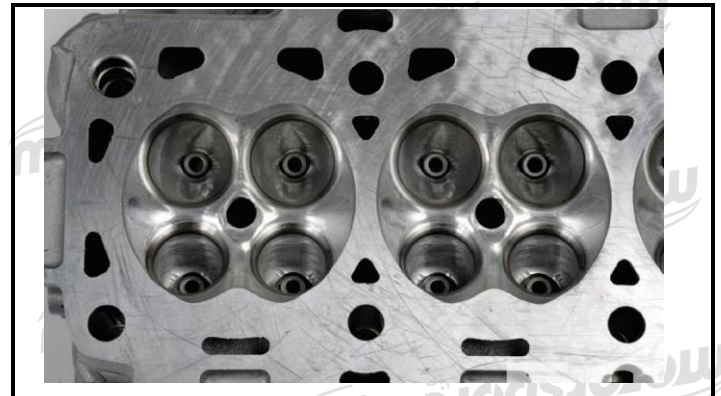
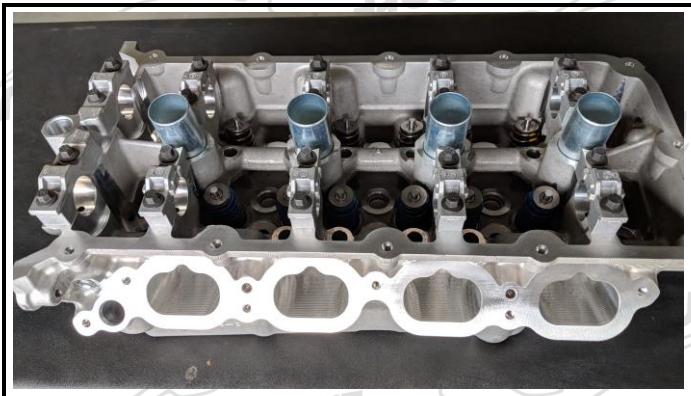
N/A mmd)

Where measured

N/A

F) Bare cylinderhead

G) Combustion chamber



323. Fuel feed by carburettor

a) Number of carburetors **NILL**

b) Type

N/A

c) Make and model

324. Fuel feed by injection :

a) Make

b) Model

c) Type of fuel measurement :

 mechanical electronic hydraulic

d) Dimensions of intake duct at the throttle or slide location

87 +/- 0.25 mm

e) Number of effective fuel outlets

16

f) Position of injectors

f1) Manifold Cylinderhead

g) Sensors of injection system

ENGINE TEMP, MAP ,CAM POSITION (4) CRANK POSITION (1) THROTTLE POSITION DRIVER(2)**AIR TEMP, LAMBDA(2), FUEL PRES., THROTTLE POSITION ENGINE (2), FUEL PRESSURE X 2**

Make **Ford**

Model Mustang FN Mach 1

h) Actuators of injection system

THROTTLE STEPPER, INJECTORS(16)**325. Camshaft**a) Number **4** b)Location **DOHC**

c) Drive system

VCT-CHAINS d)Number of bearings per shaft **NIL**

e) Diameter of bearings

N/A mm f)Type of valve operation **ROCKER****327. Intake**

a) Material of manifold

PLASTIC

b) Number of manifold elements

8

c) Number of valves per cylinder

2

d) Maximum diameter of the valve

37.7 mm

e) Diameter of the valve stem in guide

6 +0/-0.2 mm

f) Valve length

119 +/- 1.5 mm

g) Type of valve springs

COIL

h) Number of springs per valve

1

k) External diameter of the springs

32 +/- 0.2 mm

l) Number of spring coils

10

m) Diameter of spring wire

3.55 +/- 0.1 mm

n) Max.free length of the springs

55.2 mm**328. Exhaust**

a) Material of manifold

STEEL

b) Number of manifold elements

8

c) Internal dimensions of manifold exit

N/A mm

d) Number of valves per cylinder

2

e) Maximum diameter of the valve

32 mm

f) Diameter of the valve stem in guide

6+0/-0.2 mm

g) Valve length

108+/- 1.5 mm

h) Type of valve springs

COIL

i) Number of springs per valve

1

l) External diameter of the springs

32 +/- 0.2 mm

m) Number of spring coils

10

n) Diameter of spring wire

3.55 +/- 0.1 mm

o) Max. free length of the springs

55.2 mm

p) Diameter of exhaust pipe between manifold and first silencer

44MM mm +/- 5%

Make **Ford**

Model **Mustang FN Mach 1**

I) Intake manifold



J) Exhaust manifold



BB) Complete exhaust system removed from vehicle (not including manifold)



330. Ignition system

- a) Type **COIL ON PLUG**
- b) Number of plugs per cylinder **1**
- c) Number of distributors **NIL**
- d) Number of coils **8**

331 Cooling system Capacity **15LT** l

- 332. Cooling fan
 - a) Number **2**
 - b) Diameter of the fan **400** mm
 - c) Material of the fan **PLASTIC**
 - d) Number of blades _____
 - e) Type of drive **DC ENGINE**
 - f) Automatic cut in yes no

333. Lubrication system a) Type **WET SUMP** b) Number of oil pumps **1**

- c) Total capacity **9** L
- d) Oil cooler(s) Yes no Number **2**
- e) Location of the cooler(s) **BEFORE RADIATOR**
- f) Type of the cooler(s) **AIR / WATER - OIL**

Make **Ford**

Model **Mustang FN Mach 1**

4. FUEL CIRCUIT

401. Fuel tank

- a) Number **1**
- b) Location **BOOT**
- d) Total capacity **61 L**
- e) Filler hole locations **LH REAR QUARTER PANEL**

402. Fuel pump(s)

- a) Elelectrical Mechanical
- b) Number **2**
- c) Make and type **FORD**
- d) Location **INTANK (LP) CAMSHAFT DRIVE (HP)**

5. ELECTRICAL EQUIPMENT

502. Generator

- a) Number **1**
- b) Type **DYNAMO**
- c) Drive system **BELT**
- d) Nominal power **180** Amp

503. Retractable headlights

- a) yes no
- b) Control system _____

6. POWER TRAIN

601. Driven wheels

- front yes no
- rear yes no

602. Clutch

- a) Type **TWIN PLATE - FRICTION**

CC) Clutch

S) Gearbox casing and clutch bell housing



b) Control system **HYDRAULIC**

c) Number of plates **TWIN (2)**

d) Diameter of the plate(s) **265**+/- 2 mm

Make **Ford**

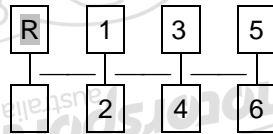
Model **Mustang FN Mach 1**

603. Gearbox

- a) Location **CENTRAL**
- b) Make **TREMEC TR-3160**
- c) Type and location of control **STICK - CABIN**
- e) Ratios

	Number of teeth	Ratio	Constant Mesh	Synchro
1	_____	3.25	_____	YES
2	_____	2.23	_____	YES
3	_____	1.61	_____	YES
4	_____	1.24	_____	YES
5	_____	1	_____	_____
6	_____	.63	_____	YES
R	_____	-2.95	_____	NIL
Constant	_____	1	_____	_____

f) Gear change gate



g) Type of lubrication

h) Oil cooler

yes no

Type **OIL TO AIR**

604. Transfer box / Centre differential

- a) Ratios _____
- b) Number of teeth _____
- c) Control system of transfer box _____
- d) Type of central differential _____
- e) Torque distribution e1) Front _____ % Rear _____ % e2) Number of teeth _____
- f) Type of central differential limitation _____

605. Final drive

- a) Type of final drive
- b) Ratio
- c) Number of teeth
- d) Type of differential limitation
- e) Type of lubrication
- f) Oil cooler
- g) Cooler Type

	Front	Rear
a) Type of final drive	N/A	CWP
b) Ratio	N/A	3.55.1
c) Number of teeth	N/A	_____
d) Type of differential limitation	N/A	RAMP AND PLATE LSD
e) Type of lubrication	N/A	WET
f) Oil cooler	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<input checked="" type="checkbox"/> yes <input type="checkbox"/> no
g) Cooler Type		OIL TO AIR



3-21-011B

Make Ford

Model Mustang FN Mach 1

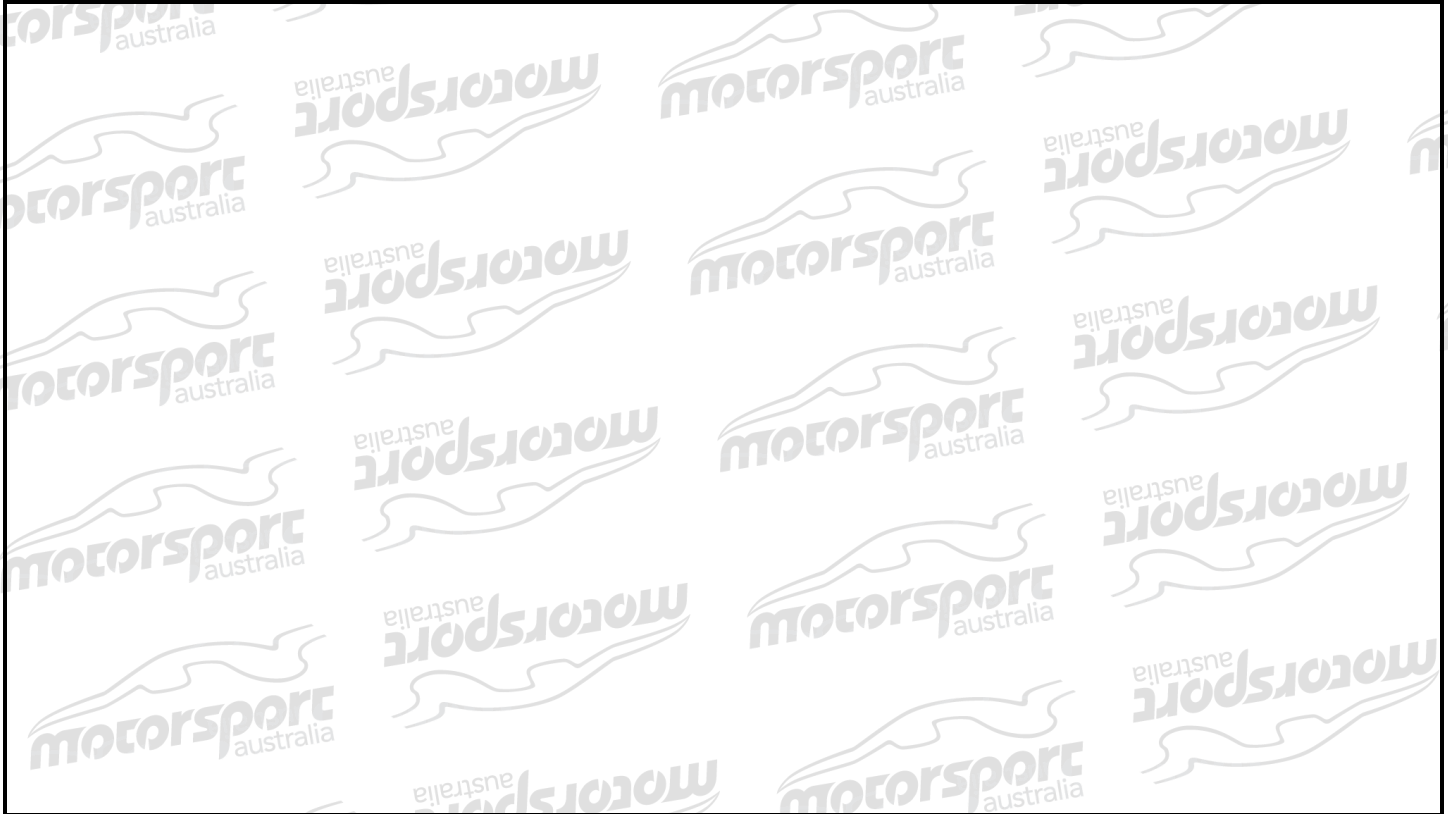
- 606. Shafts a) Type of longitudinal shafts
- b) Material of longitudinal shafts
- c) Type of transversal half-shafts
- d) Material of transversal half-shafts

HOLLOW

STEEL

SOLID

STEEL



Make **Ford**

Model Mustang FN Mach 1

7. SUSPENSION

701. General

a) Type of suspension

	Front		Rear	
	MACPHERSON STRUT		DOUBLE A-ARM	
	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no
	Steel		steel	
	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no	<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no
a) Material of main leaf	_____		_____	
Material of 2nd leaf	_____		_____	
Material of 3rd leaf	_____		_____	
Material of 4th leaf	_____		_____	
Material of 5th leaf	_____		_____	
Material of auxiliary leaf	_____		_____	
704. Torsion bars	<input type="checkbox"/> yes	<input type="checkbox"/> no	<input type="checkbox"/> yes	<input type="checkbox"/> no
a) Material	_____		_____	

705. Other type of suspension

See description on additional form

706. Stabiliser

a) Effective length

b) Effective diameter

c) Material

	Front	Rear
a) Effective length	1600 mm +/- 1%	1500 mm +/- 1%
b) Effective diameter	35 mm	20 mm
c) Material	STEEL	STEEL

XI) Drawing or photo of front stabiliser

XI) Drawing or photo of rear stabiliser



Make **Ford**

Model Mustang FN Mach 1

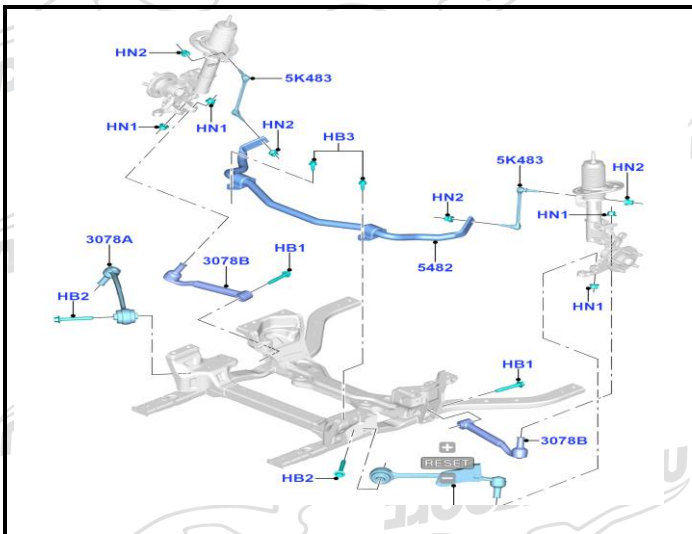
707. Suspension Dampers

- a) Number per wheel
- b) Type
- c) Principle of operation

Front	Rear
1	1
<u>HYDRAULIC - TELESCOPIC</u>	<u>HYDRAULIC - TELESCOPIC</u>
<u>HYDRAULIC</u>	<u>HYDRAULIC</u>

T) Complete dismantled front axle

U) Complete dismantled rear axle



8. WHEELS

801. Wheels

a) Diameter

Front	Rear
19"	19"
or	or
_____ mm	_____ mm

b) Width

Front	Rear
9.5"	10"
or	or
_____ mm	_____ mm

Make **Ford**

Model Mustang FN Mach 1

803. Brakes

- a) Braking system
- b) Number of master cylinders
- c) Servo-brakes
- d) Braking regulator

SERVO HYDRAULIC

1

b1) Bores _____ mm / _____ mm

yes no

c1) Make and type **FORD**

yes no

d1) Location **FRONT BULKHEAD**

D2) Active

yes no

	Front	Rear
e) Number of pistons per caliper	6	2
e1) Bore/s	_____ mm x _____ mm	_____ mm x _____ mm
g) Disc brakes		
g1) Number of pads per wheel	2	2
g2) Number of calipers per wheel	1	1
g3) Caliper material	Aluminium	Aluminium
g4) Thickness of new disc	34 +/- 1 mm	25 +/- 1 mm
g5) External diameter of the disc	380 +/- 1.5 mm	330 +/- 1.5 mm
g6) External diameter of pads' rubbing surface	380 +/- 1.5 mm	330 +/- 1.5 mm
g7) Internal diameter of pads' rubbing surface	256 +/- 1.5 mm	222 +/- 1.5 mm
g8) Overall length of the pads	170 +/- 1.5 mm	132 +/- 1.5 mm
g9) Ventilated discs	<input checked="" type="checkbox"/> yes	<input type="checkbox"/> no

h) Parking brake

h1) Control system

LEVER

h2) Location of lever

CABIN

h3) On which wheels

Front Rear

804. Steering

- a) Type
 - b) Servo-assistance
- Type of Assistance

Front	Rear
RACK AND PINION	NIL
<input checked="" type="checkbox"/> yes <input type="checkbox"/> no	<input type="checkbox"/> yes <input type="checkbox"/> no
ELECTRO MECHANICAL	

9. BODYWORK

901. Interior

- a) Ventilation
- c) Air Conditioning

yes no
 yes no

b) Heating

yes no

f) Optional sun roof

yes no

f1) Type _____

f2) Control system _____

Make **Ford**

Model Mustang FN Mach 1

Front	Rear
<u>ELECTRICAL</u>	<u>FIXED</u>

g) Opening system for side windows

X) Dashboard



Y) Sunroof



902. Exterior

a) Number of doors **2**

b) Tailgate

<input type="checkbox"/> yes	<input checked="" 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 / ALLUMINIUM

h) Rear window material

GLASS

i) Rear quarter window material

POLYCARBONATE

k) Side window material

Front	Rear
<u>GLASS</u>	<u>GLASS</u>
<u>PLASTIC</u>	<u>PLASTIC</u>
<input type="checkbox"/> yes	<input checked="" type="checkbox"/> no

l) Material of bumper

n) Exterior Rear wiper

Make **Ford**

Model Mustang FN Mach 1

Homologation N°

3-21-011B

XIII) NON METALLIC PARTS OF THE BODY

Number	Part	Material
various	Front Bumper bar cover	Plastic
various	Rear bumper bar cover	Plastic
VFR3Z9944210AA	Rear Deck Fin	Plastic composite

Drawing / photo required



Make **Ford**

Model Mustang FN Mach 1

3-21-011B**COMPLEMENTARY INFORMATION**

Fastback CDC Decklid – Factory option VFR3Z9944210AA

**AUTOMATIC TRANSMISSION OPTION****6. POWER TRAIN**

601. Driven wheels front yes no rear yes no

602. Clutch a) Type **NA**

b) Control system **NA**

c) Number of plates **NA** d) Diameter of the plate(s) **NA**

Make **Ford**

Model **Mustang FN Mach 1**

COMPLEMENTARY INFORMATION

603. Gearbox a) Location **CENTRAL** b) Make **FORD**
 c) Type and location of control **STICK - CABIN**
 e) Ratios

	Number of teeth	Ratio	Constant Mesh	Synchro
1		4.6597		
2		2.9851		
3		2.1462		
4		1.7690		
5		1.5201		
6		1.270		
7		1.0		
8		0.8536		
9		0.6892		
10		0.6357		
R		4.8661		
Constant				

f) Gear change gate **AUTO**

g) Type of lubrication

h) Oil cooler

yes no

Type **OIL TO AIR**

605. Final drive

a) Type of final drive

N/A

CWP

b) Ratio

N/A

3.55:1

c) Number of teeth

N/A

d) Type of differential limitation

N/A

RAMP AND PLATE LSD

e) Type of lubrication

N/A

WET

f) Oil cooler

yes no

yes no

g) Cooler Type

OIL TO AIR

Make **Ford**

Model Mustang FN Mach 1

3-21-011B

ERRATA:

Version 3-21-011B

Revised Minimum Racing Weight and Added RVD CPA Number
Added Automatic Transmission option

