



FEDERATION INTERNATIONALE DE L'AUTOMOBILE

PONTIAC - TEMPEST LE MANS GTO

MARQUE ET MODELE

7/64

VALIDITE HOMOLOGATION

180

FICHE NR.

GT / 6500

GROUPE / CLASSE

EXTENSIONS	DEBUT VALIDITE	DESCRIPTION	NOTES

Autres homologations du modèle

Vérifiée le 13/03/96 par [Signature] visée ce jour le _____ par _____

Mr. 180

CERTIFICATE OF MINIMUM PRODUCTION

Name of Manufacturer PONTIAC MOTOR DIVISION



Name of Model Tempest LeMans G. T. O.

Manufacturer's Reference No. of Application 389-64A

We certify that in excess of 1000* cars identical with the basic specification stated in this application were completed on May 7, 1964. Production commenced on September 3, 1963. Cars conforming to this specification may be identified by Chassis Numbers 824P-1001 or 824F-1001 and up. Engine Numbers 1001 and up

Name of Company or Division Pontiac Motor Division

By JF Charles

Title Executive Assistant Chief Engineer

By RW Emrick

Title Director - Public Relations

AUTOMOBILE COMPETITION COMMITTEE
FOR THE UNITED STATES, FIA, INC.
107 EAST 38th STREET
NEW YORK 16, N. Y.

George Blaud

JUN 24 1964

* 16, 593 with 4-barrel carburetor and 6, 402 with 3-2 barrel carburetor.

THE AUTOMOBILE COMPETITION COMMITTEE
FOR THE UNITED STATES, FIA INC.
515 MADISON AVENUE
NEW YORK 22, N. Y.

TEL: ELdorado 5-0900

CABLE: ACCUSFIA NEW YORK

FEDERATION INTERNATIONALE DE L'AUTOMOBILE

Form of Recognition in accordance with Appendix J to the International Sporting Code.

Manufacturers Reference No. for

Application 389 - 64A

F.I.A. Recognition No. 180

Manufacturer Pontiac Motor Division, General Motors Corporation

Model Tempest LeMans G. T. O.

Year of Manufacture 1964

Serial No. of Chassis starts with 824P-1001 or 824F-1001

Engine starts with 1001

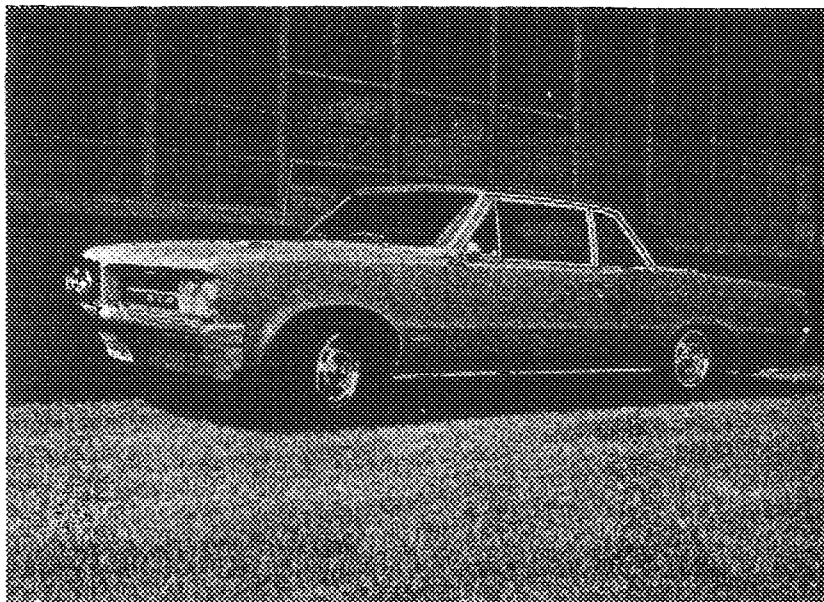
Type of Bodywork 2-Door Coupe

Recognition is valid from 11/7/64

In Category Touring

or Grand Touring X

list 2/11



Stamp of ACCUSFIA, INC.
to be affixed here.

Stamp of F.I.A. to be
affixed here.

Signed *Roger E. Stand*

Sec'y

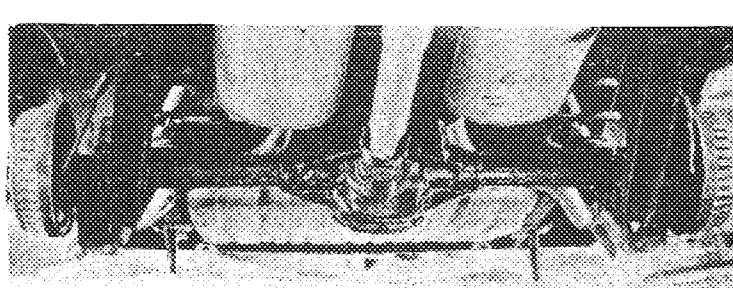
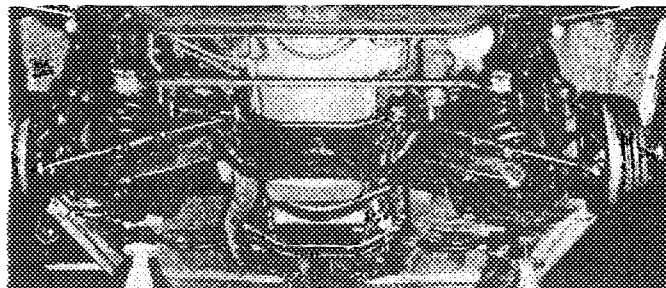
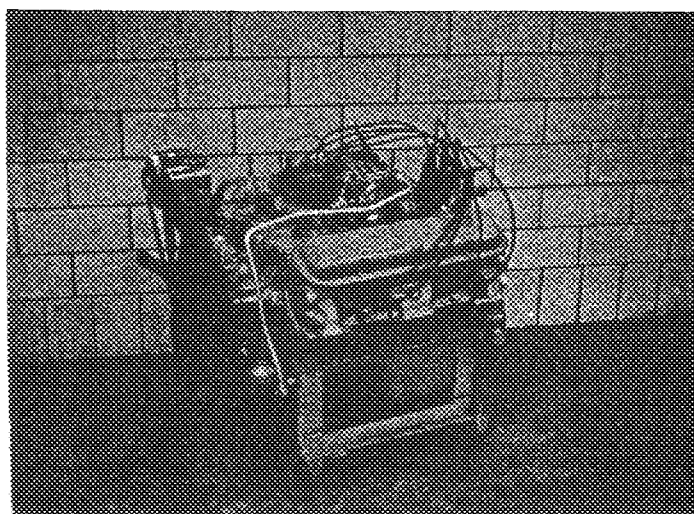
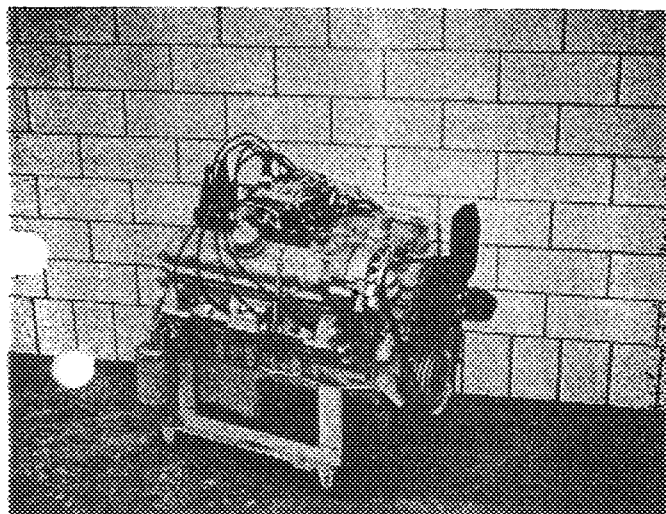
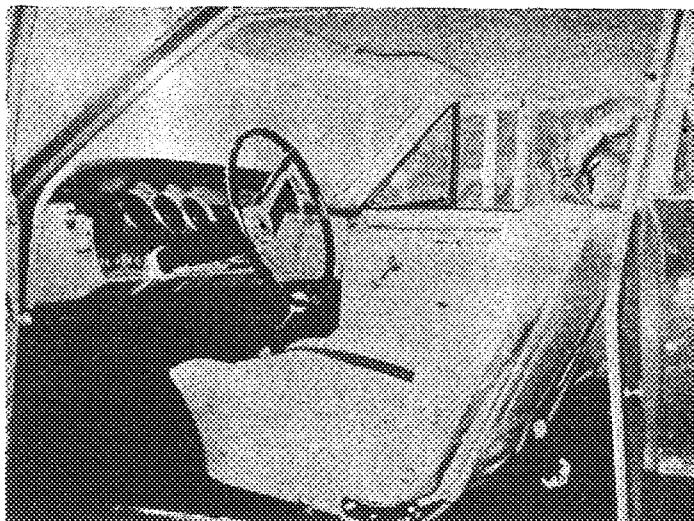
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JUN 24 1964

General description of car: (specifying materials of Bodywork)

Two-door coupe having all steel body, fenders, hood and bumpers.

Photographs to be affixed below:



ENGINE

No. of cylinders 8 in line _____
 in V x _____
 opposed _____
 Cycle 4 Firing order 1-8-4-3-6-5-7-2
 Capacity 6373 c.c. Bore 103.19 ± 0.06 m.m. Stroke 95.25 ± 1.10 m.m.
 Maximum rebore 103.79 Resultant capacity 6447 c.c.

Material of cylinder block cast iron Material of sleeves, if fitted _____ not used _____
 Distance from crankshaft center line to top face of block at center line of cylinders 259.87 ± .13 m.m.

Material of cylinder head cast iron Volume of one combustion chamber 67 c.c.

Compression ratio 10.75:1
 Material of piston aluminum alloy No. of piston rings 3
 Distance from wrist pin center line to highest point of piston crown 43.74 m.m.

Bearings (Crankshaft main bearings: Type Babbitt-steel back Dia. 76.2 m.m.
 (Connecting rod big end: Type Babbitt-steel back Dia. 57.15 m.m.

Weights (Flywheel 17.852 kg.
 (Crankshaft 31.752 kg.
 (Connecting rod 898 kg.
 (Piston with rings 725 kg.
 (Wrist pin 195 kg.

No. of valves per cylinder 2 Method of valve operation push rod
 No. of camshafts 1 Location of camshafts in block
 Type of camshaft drive chain

Diameter of valves: Inlet 48.8 m.m. Exhaust 42.2 m.m.
 Diameter of port at valve seat: Inlet * m.m. Exhaust 40.0 m.m.

Tappet clearance for checking timing: Timing points taken at end of ramps.
 Inlet ----- m.m. Exhaust ----- m.m.

Valves open: Inlet 23° BTC Exhaust 78° BBC
 Valves close: Inlet 70° ABC Exhaust 31° ATC
 Maximum valve lift: Inlet 10.42 m.m. Exhaust 10.4 m.m.

Degrees of crankshaft rotation from zero to -
 Maximum lift: Inlet 136° Exhaust 145°
 3/4 Maximum lift: Inlet 86° Exhaust 116°

Valve springs: Inlet _____ Exhaust _____
 Type Coil _____ Coil _____
 No. per valve 2 _____ 2 _____

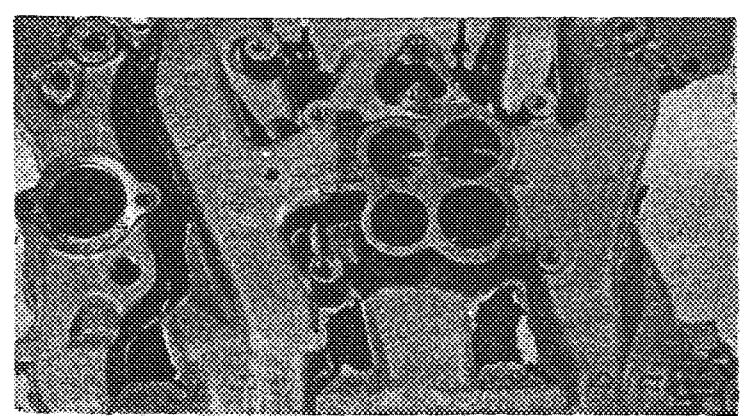
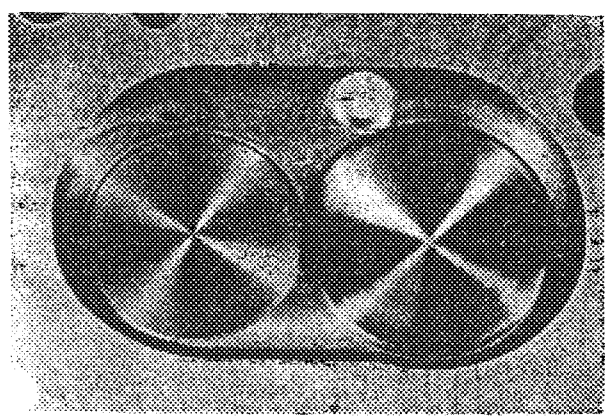
Carburetor: Type Downdraft No. fitted 1
 (up or down draft, horizontal)

Make Carter Model AFB 3647-S
 Flange hole diameter 36.51 Pri. 42.86 m.m. Choke diameter 30.16 Pri. 39.69 sec. m.m.
 Main jet identification No. 120-166 Pri. 120-233 sec.

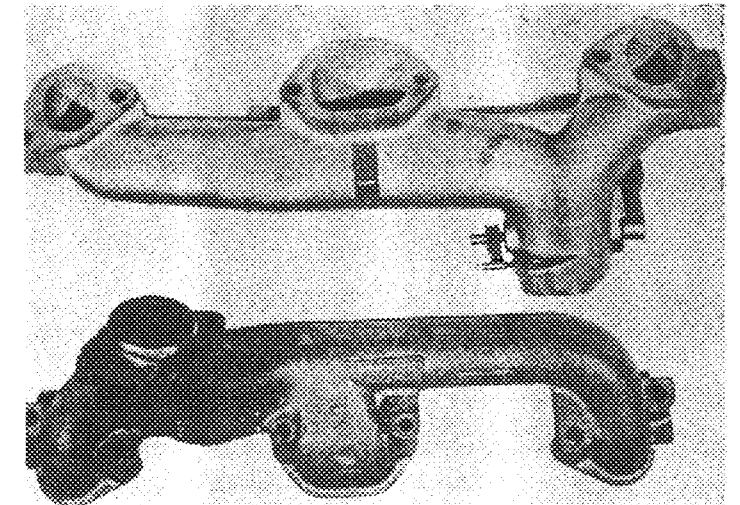
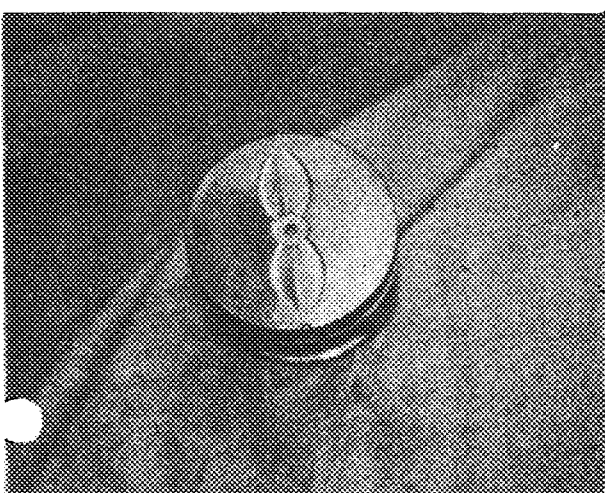
* Conical sections from valve seat into port prevent measurement.

Air filter: Type Polyurethane Foam No. fitted 1

Inlet manifold:
Diameter of flange hole at carburetor 36.53 Pri. 42.88 sec. m.m.
Diameter of flange hole at port 26.93 x 50.29 with 8.64 R corners m.m.



Exhaust manifold: L.H. center ports D shape 30.23 x 46.23 with 4.57 & 17.27 R.
R.H. center port rectangular 65.02 x 46.23 with 17.27 R.
Diameter of flange hole at port and ports oval 34.54 x 46.23 m.m.
Diameter of flange hole at connection to muffler inlet pipe 51.56 m.m.



ENGINE ACCESSORIES

Make of fuel pump AC No. fitted 1
Method of operation cam attached to front of camshaft

Type of ignition system coil and distributor coil or magneto
Make of ignition Delco-Remy Model 1111054
Method of advance and retard centrifugal and vacuum advance

Make of ignition coil Delco-Remy Model 1115187
No. of ignition coils 1 Voltage 12

Make of generator Delco-Remy Model 1100683
Voltage of generator 12 Maximum output 37 amps.

Make of starter motor Delco-Remy Model 1107294

Battery: No. fitted 1 Voltage 12 Capacity 61 amp. hour

TRANSMISSION

Make of clutch Borg & Beck Type Dry Disk
 Diameter of clutch plate 264.2 m. m. No. of plates 1
 Method of operating clutch foot pedal and linkage
 Make of gearbox Chevrolet Type 4-speed synchromesh
 No. of gearbox ratios 4 forward, 1 reverse
 Method of operating gearshift side levers
 Location of gearshift floor
 Is overdrive fitted? no
 Method of controlling overdrive, if fitted _____

Speed	4-Speed SM		3-Speed SM		2-Speed Auto.			
	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth	Ratio	No. of Teeth
1st.	2.20	27-26 36-17	2.58	25-20 29-14	1.76	Torque Converter		
2nd.	1.64	27-26 30-19	1.48	25-20 26-22	1.00			
3rd.	1.28	27-26 27-22	1.00	-				
4th.	1.00	27-26						
5th.		17-16		25-20				
Reverse	2.27	35-17	2.58	29-14	1.76			

Type of final drive Linkage controlled live rear axle
 Type of differential Hypoid axle with locking differential
 Final drive ratio 3.23:1 Alternatives 3.08, 3.36, 3.55, 3.90
 No. of teeth 42-13 40-13, 42-13, 39-11, 39-10
 Overdrive ratio, if fitted None

WHEELS

Type Steel Disk Weight 7.85 kg.
 Method of attachment 5 Bolts
 Rim diameter 355.2 m.m. Rim width 152.4 m.m.
 Tire size: Front 750 x 14 Rear 7.50 x 14

BRAKES

Method of operation Hydraulic
 Is servo assistance fitted? No
 Type of servo, if fitted _____
 No. of hydraulic master cylinders 1 Bore 25.4 m.m.

	Front	Rear
No. of wheel cylinders	<u>2</u>	<u>2</u>
Bore of wheel cylinders	<u>28.58</u> m.m.	<u>23.81</u> m.m.
Inside diameter of brake drums	<u>241.3</u> m.m.	<u>241.3</u> m.m.
No. of shoes per brake	<u>2</u>	<u>2</u>
Outside diameter of brake discs	<u> </u> m.m.	<u> </u> m.m.
No. of pads per brake	<u> </u>	<u> </u>

Dimensions of brake linings per shoe or pad (if all shoes or pads in each brake are not of same dimensions, specify each)

	Front	Rear
Length	<u>249.5</u> m.m.	<u>249.5</u> m.m.
Width	<u>63.5</u> m.m.	<u>50.8</u> m.m.
Total area per brake	<u>31,686.5</u> m.m. ²	<u>25,349.2</u> m.m. ²

SUSPENSION	Front	Rear
Type	<u>Independent</u>	<u>4-link pivoted control arm</u>
Type of spring	<u>coil</u>	<u>coil</u>
Is stabiliser fitted?	<u>yes</u>	<u>no</u>
Type of shock absorber	<u>2-way direct acting</u>	<u>2-way direct acting</u>
No. of shock absorbers	<u>2</u>	<u>2</u>

STEERING

Type of steering gear recirculating ball

Turning circle of car 12.47 m., approx.

No. of turns of steering wheel from lock to lock 5

CAPACITIES AND DIMENSIONS

Fuel tank 81.4 litres Sump 4.73 litres

Radiator 18.9 litres

Overall length of car 515.6 cm. Overall width of car 186.2 cm.

Overall height of car, unladen (with top up, if appropriate) 139.5 cm.**

Distance from floor to top of windshield:

 Highest point 101.0 cm. Lowest point 70.4 cm.

Width of windshield:

 Maximum width 150.0 cm. Minimum width 128.1 cm.

*Interior width of car 171.0 cm.

No. of seats 5

Track: Front 147.2 cm. Rear 147.2 cm.

Wheelbase 292.1 cm. Ground clearance 149 m.m.

Overall weight with water, oil and spare wheel, but without fuel 1565 kgs.

*(To be measured at the immediate rear of the steering wheel, and the width quoted to be maintained in a vertical plane of not less than 25 cms.)

** Measured at curb load except empty fuel tank.

Additional information for cars fitted with two-cycle engines only:

System of cylinder scavenging _____
Type of lubrication _____

Size of inlet port:
Length measured around cylinder wall _____ m.m.
Height _____ m.m. Area _____ m.m.²

Size of exhaust port:
Length measured around cylinder wall _____ m.m.
Height _____ m.m. Area _____ m.m.²

Size of transfer port:
Length measured around cylinder wall _____ m.m.
Height _____ m.m. Area _____ m.m.²

Size of piston port:
Length measured around piston _____ m.m.
Height _____ m.m. Area _____ m.m.²

Method of pre-compression _____
Bore and stroke of pre-compression cylinder, if fitted _____ m.m.

Distance from top of cylinder block to lowest point of inlet port _____ m.m.
Distance from top of cylinder block to highest point of exhaust port _____ m.m.
Distance from top of cylinder block to highest point of transfer port _____ m.m.

Drawing of cylinder ports.

Supercharger, if fitted
Make _____ Model or Type No. _____
Type of drive _____ Ratio of drive _____

Fuel injection, if fitted
Make of pump _____ Model or Type No. _____
Make of injectors _____ Model or Type No. _____

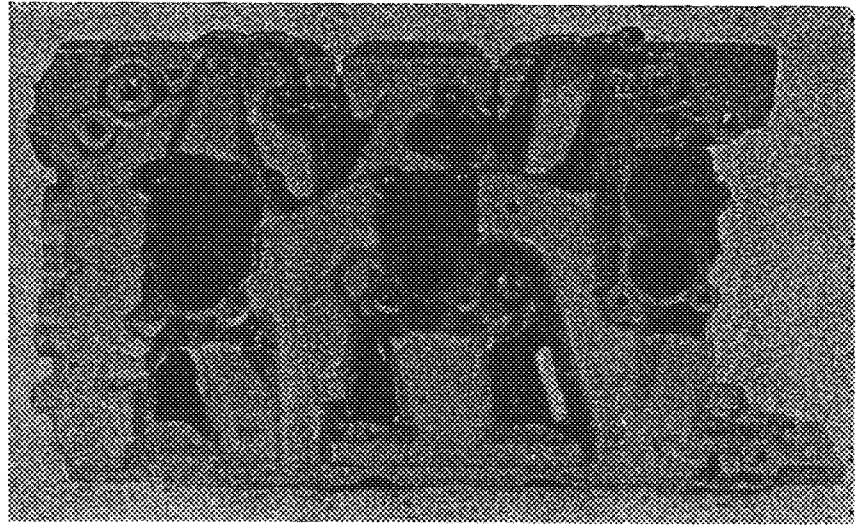
Location of injectors _____

Optional equipment affecting preceding information:-

Intake System Option

Triple 2-Barrel Carburetor	<u>Front & Rear</u>	<u>Center</u>
Make	Rochester	Rochester
Model	7024178 Frt.	7024175 (SMT)
	7024179 Rear	7024173 (AT)
Flange Hole Diameter	42.9 m. m.	36.6 m. m.
Choke Diameter	33.4 m. m.	31.8 m. m.
Main Jet Identification	68	64 (SMT)
		62 (AT)

Intake Manifold (a)



(a) Manifold flanges to match carburetors, ports to match standard cylinder heads.