

5TH CATEGORY - HISTORIC RACING

GROUP S

APPROVED VEHICLE SPECIFICATION

This form details the approved specifications of individual vehicle models in the 5th Category Historic car group. To be issued with an Historic Log Book, cars need to comply with these specifications, the physical appearance shown in the illustrations and the general historic rules as detailed in the current Motorsport Australia Manual.

Make of Car:	De Tomaso	Model:	Pantera, L & GTS (US spec)
Period of Original Manufacture:	June 1971 to 1985		
Motorsport Australia Historic Group:	Sc		
Date of Issue of this Document:	31/12/2024		



Update Log

	- F
8/2020	Replacement Cleveland cylinder block added
30/6/2022	Document layout
31/12/2024	Inclusion of kerb and minimum racing weights

SECTION 1 - CHASSIS

1.1. CHASSIS

Description:	Pressed steel Unibody, two door coupe
Period of Manufacture:	June 1971 to 1985
Manufacturer:	De Tomaso Automobili S.P.A
Chassis Number From:	Refer to Appendix
Chassis Number location:	1971/72 LH door pillar
	1972 onwards, Front compartment
Material:	Steel
Comments	None

1.2. FRONT SUSPENSION

Description:	Independent	Independent with upper and lower wishbones				
Spring Medium:	Coil	Coil				
Damper Type:	Telescopic	Telescopic Adjustable: No				
Anti-sway bar:	Fitted	Fitted		No		
Suspension adjustable:	Yes	Yes Method:				
Comments:	None					

1.3. REAR SUSPENSION

Description:	Independent	Independent with upper and lower wishbones				
Spring Medium:	Coil	Coil				
Damper Type:	Telescopic		Adjustable	No		
Anti-sway bar:	Fitted	Fitted		No		
Suspension adjustable:	Yes	Yes Method:				
Comments:	None					

1.4. STEERING

Type:	Rack and Pinion	Make:	Fiat
Comments	None		

1.5. BRAKES

Front	Rear
Disc, vented	Disc, vented
282 mm x 20 mm	297 mm x 18.5 mm
Cadt iron	Cast iron
Four	One
Hydraulic	Hydraulic
Girling	
Girling	
Tandem	
No	
Yes	
None	
	Disc, vented 282 mm x 20 mm Cadt iron Four Hydraulic Girling Girling Tandem No Yes

SECTION 2 - ENGINE

2.1. ENGINE

Make:	Ford					
Model:	Cleveland	Cleveland				
No. cylinders:	Eight	Configuration:	Vee			
Cylinder Block-material:	Cast iron	Two/Four Stroke:	Four			
Bore - Original:	101.6 mm	Max allowed:	103.1 mm			
Stroke - original:	88.9 mm	Max allowed:	88.9 mm			
Capacity - original:	5766 cc	Max allowed:	5937 cc			
Identifying marks:						
Cooling method:	Liquid					
Comments:	Refer Appendix for	Block substitution				

2.2. CYLINDER HEAD

Make:	Ford Cle	Ford Cleveland				
No. of valves/cylinder:	Two	Inlet:	One	Exhaust:	One	
No. of ports total:	Eight	Inlet:	Four	Exhaust:	Four	
No. of camshafts:	One	Location:	Block	Drive:	Chain	
Valve actuation:	Pushrod	Pushrod and rocker				
Spark plugs/cylinder:	One					
Identifying marks:	N/A					
Comments:	None					

2.3. LUBRICATION

Method:	Wet sump	Oil tank location:	N/A
Dry sump pump type:	N/A	Location:	N/a
Oil cooler standard:	No	Location:	N/A
Comments:	None		

2.4. IGNITION SYSTEM

Type:	Points, Coil and Distributor		
Make:	Autolite		
Comments	None		

2.5. FUEL SYSTEM

Carburettor Make:	Autolite	or	Model:	4 Barrel	
	Holley				
Carburettor Number:	One				
Size:					
Fuel injection Make:	N/A		Type:	N/A	
Supercharged:	No		Type:	N/A	
Comments:	None				

SECTION 3 - TRANSMISSION

3.1. CLUTCH

Make:	Ford
Type:	Diaphragm
Diameter:	280 mm
No. of Plates:	One
Actuation:	Hydraulic
Comments:	None

3.2. TRANSMISSION

Type:	Transaxle
Make:	ZF
Model:	ZF 5DS - 25
Gearbox location:	Behind engine
No. forward speeds:	Five
Gearchange type and location:	Remote floor
Case material:	Alloy
Identifying marks:	N/A
Comments:	None

3.3. FINAL DRIVE

Make:	Transaxle	Model:	ZF 5DS – 25	
Drive:	Rear			
Ratios:	Various			
Differential type:	Limited slip			
Comments:	None			

3.4. TRANSMISSION SHAFTS (EXPOSED)

Number:	Two	
Location:	Transaxle to hubs	
Description:	2 x Hookes type joints with sliding coupler	
Comments:	None	

3.5. WHEELS & TYRES

Wheel type - Original:	Cast	Material - Original:		Alloy
Wheel type - Allowed:	Cast	Material	- Allowed:	Period alloy
Fixture method:	Studs	No. stud	s:	Five
Wheel dia. & rim width	FRONT			REAR
Original:	7" x 15"		8.5" x 15"	
Allowed	7" x 15"	7" x 15" 8.5" x 15"		8.5" x 15"
Tyre Section:				
Original:	180/70 x 15"	215/70 x 15"		L5/70 x 15"
Allowed:	Refer approved tyre list.			
Aspect ratio - minimum:	60% minimum aspect ratio.			
Comments:	none			

_

SECTION 4 GENERAL

4.1. FUEL SYSTEM

Tank Location:	Behind left seat	Capacity:	90 litres
Fuel pump, type:	Mechanical, on engine	Make:	Ford
Comments:	None		_

4.2. ELECTRICAL SYSTEM

Voltage:	Twelve	Alternator fitted:	Alternator
Battery Location:	Front luggage compartment		
Comments:	None		

4.3. BODYWORK

Type:	Closed Sports car	Material:	Steel
No. of seats:	Two	No. doors:	Two
Comments:	See Appendix - Bodywork		

4.4. DIMENSIONS

Track - Front:	1450 mm	Rear:	1460 mm
Wheelbase:	2515 mm	Overall length:	4270 mm
Approved Manufacturer's	1460 kg		
kerb weight:			
Approved minimum racing	1349 kg		
weight:			
Comments:	None		

4.5. SAFETY EQUIPMENT

Refer applicable Group Regulations

Appendix

VIN Numbers

The information below is taken from 1971/74 De Tomaso Pantera Chassis and Body Master Parts Catalogue FP-8085 Dated April 1975.

- Early Vehicles have 11-digit VIN
- Later Vehicles have 17-digit VIN

Page 6 of the document contains the following example:

THPNLS01859

- T − De Tomaso
- H Assembled at Modena, Italy
- PN Pantera
- L 1971 (Calendar Year),
- S July
- 01859 1859th unit built

Unit number 01001 is a prototype all 02000 series were test cars.

Page 9 contains the year codes: L = 1971, M = 1972, N = 1973, P = 1974The month codes for 1974 are:

- C September,
- D November,
- E December.
- H − June,
- J May,
- K –October,
- L January,
- M − July,
- P August,
- S March,
- T − April,
- Y February

Missing from document are the VIN codes for the American GTS cars. All of these cars were specially built for the US market and contained the letters "GT" in the THIRD and FOURTH character positions.

An example of a US GTS VIN is THGTLS01859.

US Delivered GTS cars are not the same as the Euro-spec GTS cars. However, you cannot tell if a Pantera was an "L" or a "GTS" just from the VIN code. Only the factory has the list of how each car was built.

Engine

Cylinder Block

Cleveland Block

ARROW Ford 351 Cleveland Small Block engine block is approved for use, in conjunction with MSD Soft Touch rev Limiter Part no 8728 with a 7500 RPM limit. The limiter will be subject to testing at race meetings, and will be located in an easily accessible position within the engine bay.

Bodywork

All panels are steel except for pop riveted fibre glass flared mudguard extensions on the front and rear wheel openings.

GTS Decals to be applied.

Single pod dash.

Front bonnet air grills.

Front air dam.

Engine compartment must have the grill in place together with the unmodified steel bonnet closing correctly.

Luggage compartment lining shown in photo can be removed.



Engine compartment