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:	30/6/2022		

Update Log

8/2020	Replacement Cleveland cylinder block added
30/6/2022	Document layout

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

1.3. REAR SUSPENSION

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

1.4. STEERING

Type:	Rack and Pinion	**Make:**	Fiat
Comments	None		

1.5. BRAKES

	Front	**Rear**
Type:	Disc, vented	Disc, vented
Dimensions:	282 mm x 20 mm	297 mm x 18.5 mm
Material of drum/disc:	Cadt iron	Cast iron
No. cylinders/pots per wheel:	Four	One
Actuation:	Hydraulic	Hydraulic
Caliper make:	Girling	
Caliper type:		
Material:		
Master cylinder make:	Girling	
Type:	Tandem	
Adjustable bias:	No	
Servo Fitted:	Yes	
Comments:	None	

SECTION 2 - ENGINE

2.1. ENGINE

Make:	Ford		
Model:	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 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 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 Holley	**Model:**	4 Barrel
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. studs:**	Five
Wheel dia. & rim width	**FRONT**		**REAR**
Original:	7” x 15”		8.5” x 15”
Allowed	7” x 15”		8.5” x 15”
Tyre Section:			
Original:	180/70 x 15”		215/70 x 15”
Allowed:	Refer approved tyre list.		
Aspect ratio - minimum:	60% minimum aspect ratio.		
Comments:	none		

-

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
Dry weight:	1220 kg		
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 – 1974
The 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 TH**GT**LS01859.
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