General Competition Rules

1962 Edition

Appendix A
Automobiles

1. SCCA Section

A. Pump Fuel
Is defined as any grade of automotive gasoline available at roadside stations, without additions of any nature except upperlube which must be added directly to the gasoline tank and not through any injection or drip oiler system, and which must not raise the octane rating.

B. Production Category
The Car Classification Committee shall publish early in each year a list of the cars and optional equipment for these cars which shall be eligible for competition in the Production Category in the current calendar year. No changes or additions in classification shall ordinarily be made during the calendar year.

Production sports cars shall normally be only those which are series produced with normal road touring equipment in quantities of at least 150 per model sold. However, the Car Classification Committee reserves the right to exclude any spots cars or optional equipment from the Production Category, even if made in quantities of more than 150, if such cars or optional equipment in the opinion of the Committee are primarily designed as or for racing cars.

Production sports cars must be raced as they are normally delivered to the public b the manufacturer's sales outlets, except for the addition of approved optional equipment and the modifications authorized by these rules.

It is not permitted to utilize any items of optional equipment which affect the mechanical performance or reliability of a car unless they are specifically designated for that car by the maker, available to members through the normal sales and parts outlets of the manufacturer, and are approved by the Car Classification Committee.

In 1962, Production cars shall be divided into classes based upon relative performance as follows:

CLASS A –
- Jaguar XKE
- Ferrari 250 GT (2400 mm wheelbase)
- Corvette 327
- Aston Martin DB4 GT

CLASS B –
- Corvette 283
- BMW 507
- Ferrari 250 GT (2600 mm wheelbase)
- Mercedes 300SL
- Porsche Carrera
- Aston Martin DB2, DB2-4, DB4

CLASS C –

Daimler 250 SP
Morgan + 4 (with Options)
AC Bristol
Porsche Super 90
Jaguar XK120, XK140, XK150, XK150S (3.4 and 3.8)
Alfa Romeo Sprint Zagato
Fraser-Nash
Arnolt Bristol
FIAT-Abarth 1000 doc
Lotus Elite-State III Climax
TVR Climax
Sprinzel Sebring Sprite
Alfa Romeo Sprint Speciale
Lotus Seven Super Classic (Ford 109E)

CLASS D –

A-H 3000
Alfa Romeo Veloce
Alfa Romeo 2000
Porsche 1500, 1600 Super
SIATA 208S
Lancia Aurelia—GT Spyder
Turner-Climax
Jensen
A.C. Ace and Aceca
G.S.M. Delta

CLASS E –

A-H 100-6-2.6
A-H 100-4-2.6
Triumph TR-2, 3, 4
Morgan + 4
MG A Twin-Cam
Fairthorpe Electron
FIAT-Abarth 1000 (push rod)
FIAT-Abarth 700 (doc), 750 (doc)
Elva Courier
TVR MG A (1600 engine)
Lotus Elite – Stage 1
Volvo P1800

CLASS F –

Sunbeam Alpine
Porsche 1500, 1600 Normal
DB HBR-5, 850, 950 (Twin ignition)
Mercedes-Benz 190SL
FIAT 1500 Spyder
FIAT Abarth 850S

Denzel 1300S
Turner 950S
MG A 1500
MG A 1600
MG A 1600 Mk. II
Sabra Sport
Facellia
Renault Alpine 900, 850, 750

CLASS G –

Porsche 1300, 1300S
Alfa Romeo Giulietta
A-H Sprite—(with options and Mk. II head)
A-H Sprite—Mk. II
MG Midget (same specs and options as Sprite)
Lotus Seven America—BMC engine
D.B. HBR-5, 850
MG TF 1500
FIAT-Abarth 750 Mille-Miglia
FIAT-Abarth 850
Berkeley B-95, B-105
Fairthorpe Minor
Morgan 4-4—Series III—(Ford 105E)

CLASS H –

A-H Sprite
FIAT-Abarth 750 GT
Auto Union 1000 SP
FIAT 1200 Spyder
MG TC 1250
MG TD 1250
MG TF 1250
Berkeley 500 cc
Lancia Appia GT
N.S.U. Sport Prinz
Dyna Junior (Dyna Panhard)
Morgan 4-4 (Ford 100E)

The following additional changes and modifications are permitted:

Bodywork:

a. The make and number of lighting and signaling devices, provided they do not violate traffic regulations in the state of registry.
b. The fitting of all accessories and all inside modifications for the purpose of improving the convenience and comfort of the driver and passenger, provided they have no influence whatever on the mechanical performance and do not reduce the weight of the car.
c. Raising hood for ventilation of engine compartment by use of hinge adjustment mechanism as installed by manufacturer. (Hood blocks or other modifications are not allowed). Additional hood straps or

fasteners may be used.

d. The capacity of the fuel tank and that of the radiators when the series production model may be sold according to the manufacturer's catalog and listed by the SCCA with such different fuel tanks and radiators.

e. The top may be removed from open cars or else must be folded and securely fastened.

f. Windshield may be folded or removed provided a suitable aero screen is fitted and provided no cutting is necessary to remove it. However, the entire windshield (i.e. both halves if a divided windshield) including all brackets and mounting fixtures must be removed if this substitution is made. Window glass and projecting hardware which might prove hazardous may be removed from the doors

g. Bumpers may be removed, but if so, all projecting hardware such as brackets and fixtures must also be removed. No substitute bumpers are allowed. Hub caps and fender skirts must e removed. Grills ma not be removed.

Tires:

h. The make and size of tires provided they fit the rims without change or additions and do not interfere with the bodywork under any conditions of steering lock or rebound. Tires must all be of the same size. No racing "slicks" or "baldies" permitted. Spare tires may be removed, unless the supplementary rules for an event specify otherwise. Tubeless tires are not permitted for racing.

Wheels, Chassis and Brakes:

i. Strengthening of wheels provided the original wheels are retained and their dimensions are unchanged.

j. The make and type of shock absorbers, but not their numbers, or their system of operation (i.e. lever or telescopic), or their system and points of attachment, unless specifically listed as an allowed option for a given model by the SCCA.

k. The cooling of brakes by ventilation of backing plates or fitting of air ducts, provided no changes are made in the bodywork above a plane passing through the wheel hubs.

l. The make of brake linings and the fitting of dual master cylinders.

Electrical System:

m. Make of spark plugs and ignition coil on condition that the system of ignition remains the one provided by the manufacturer.

n. Make of battery provided its voltage remains unchanged.

Engine, Gear Box, Rear Axle

o. Jets and chokes but not the make or type of the carburetors approved for the car. Ports may be matched and polished, but may not be enlarged or altered beyond the shape and measurements listed by the SCCA and the manufacturer. Air cleaners may be altered or removed.

p. An additional or substitute fuel pump may be utilized.

q. Cylinders may be rebored to compensate for wear to accommodate a maximum of 0.030 in. oversize pistons if they are available from the manufacturer of the car. Cylinder heads may be trued by removing a maximum of 0.015 in. from the manufacturer's original thickness

tolerance. Compression ratio variations which result from these operations may not exceed the specified compression ration by more then 0.5:1

r. Balancing of all rotating or reciprocating parts.
s. Straight exhaust pipe(s) may be fitted but no changes may be made in the exhaust header(s). However, in cases of cars where there are no exhaust headers as such (i.e.: Porsche, Deutsch-Bonnet, etc.) straight pipes may be installed directly at the exhaust ports.
t. The addition of an oil filters.
u. Addition of a device for locking out reverse gear.
v. The ratios of the gear box and rear axle when listed according to the manufacturer's catalog, and by the SCCA.
w. Installation of a spiral tube or other types of transmission breathers to prevent oil from boiling into the cockpit.
x. Any modifications to the clutch except changing the diameter of the unit originally specified for the model by the manufacturer.

C. Modified Category

SCCA Modified Category automobiles shall be those which conform to current or obsolete regulations for "Sports Cars" defined in Appendix C of the International Sporting Code. The following specific deviations from the current Appendix C shall be permitted and shall apply for SCCA National, Divisional, and Regional events:

1. CLASSES — Automobiles in the Modified Category shall be divided into six classes according to the cylinder volumes of the engine:
   C Over 3000 cc
   D Over 2000 cc and below or equal to 3000 cc
   E — Over 1600 cc and below or equal to 2000 cc
   F — Over 1100 cc and below or equal to 1600 cc
   G — Over 750 cc and below or equal to 1100 cc
   H — Below or equal to 750 cc
2. FUEL — All Modified Category automobiles shall run only on pump fuel.
3. WEIGHT — There shall be no minimum limitations on weight.
4. CHASSIS—GROUND CLEARANCE—LOCK — Provisions of previous editions of APPENDIX C shall apply.
5. COACHWORK—SEATS
   i) Provisions of previous or current editions of APPENDIX C shall apply. Specifically, two seats shall be offered, but need not necessarily e located on either side of the longitudinal axis of the automobile. The inside minimum width shall be 120cm (47.24") measured at the immediate rear of the steering wheel perpendicular to the longitudinal axis of the car.
   ii) The arrangement of the drivers seat shall be such that A B C = 110 cm (43.3") minimum.
   iii) Backs of seats shall have a minimum height of 30 cm (11.8").
   iv) Footspace for the driver and passenger shall each be at least 25 cm (10") in width measured at a point even with the pedals.
   v) All cars shall have at least one rigid door giving direct access to the seats and measuring at least 15.7" x 7.9".

vi) The carrying of tops shall not be required.
vii) A suitable aero screen in front of the driver shall be carried. There shall be no other requirements for windshields.
viii) There are no minimum requirements on the size of the luggage compartment.

6. WHEELS AND TIRES

There shall be no restrictions on the size of wheels or tires, provided they are identical for the front axle(s) and rear axle(s).

A usable spare wheel and tire of the same size as one of those mounted on the car shall be presented for safety inspection, and, unless the Supplementary Regulations for a competition otherwise specify, may be left in the assigned pit.

Under no circumstances shall the passenger's space be used to carry the spare wheel and tire.

D. Formula III

1. Engines—Maximum of 500 cc (30.5 cu in) any type combustion chamber and valve actuating system, unsupercharged. Two-stroke engines may not have more than 1.24 atmospheres induction pressure; or 750 cc (45.7 cu in) "L" head engines or in-line overhead valve liquid-cooled engines, unsupercharged. 5% extra displacement allowed on all engines for rebuilding.
2. Fuel—No oxygen-bearing fuels, such as nitro-methane.
3. Weight—440 pounds minimum dry, empty weight.
4. Formula III cars must race by themselves, or else be grouped with other open-wheeled cars.

E. Formula Libre

In order to be eligible to compete in a Formula Libre event, an automobile shall conform to a current or obsolete FIA formula for a single-seat, open-wheeled, road-racing machine. Examples of such cars are:

Formula I . . . . . Current or obsolete
Formula Intercontinental . . . . . Current or obsolete
Formula II . . . . . Obsolete
Formula III
Formula Jr.

2. FIA SECTION
APPENDIX C
TO THE INTERNATIONAL SPORTING CODE
(1962)
SPECIAL REGULATIONS FOR SPORT CARS

200. Classes

Vehicles of the "Sports" category, being the subject of the present regulations, shall be distributed, in view of the participation in competitions, according to the engine cylinder capacity in one of the 15 following classes:

1. Engine capacity inferior or equal to 400 cc
2. Engine capacity exceeding 400 cc and inferior or equal to 500 cc
3. Engine capacity exceeding 500 cc and inferior or equal to 600 cc

4. Engine capacity exceeding 600 cc and inferior or equal to 700 cc
5. Engine capacity exceeding 700 cc and inferior or equal to 850 cc
6. Engine capacity exceeding 850 cc and inferior or equal to 1000 cc
7. Engine capacity exceeding 1000 cc and inferior or equal to 1150 cc
8. Engine capacity exceeding 1150 cc and inferior or equal to 1300 cc
9. Engine capacity exceeding 1300 cc and inferior or equal to 1600 cc
10. Engine capacity exceeding 1600 cc and inferior or equal to 2000 cc
11. Engine capacity exceeding 2000 cc and inferior or equal to 2500 cc
12. Engine capacity exceeding 2500 cc and inferior or equal to 3000 cc
13. Engine capacity exceeding 3000 cc and inferior or equal to 4000 cc
14. Engine capacity exceeding 4000 cc and inferior or equal to 5000 cc
15. Engine capacity above 5000 cc

201. Weight
When the Supplementary Regulations for a competition impose a minimum weight for care of the Sports category, this weight must consist of the weight of the manufactured vehicle itself with its component parts, and cannot therefore be arrived at by the addition of anything extra in the way of ballast.

In order to facilitate proceedings, the vehicle may be weighed without draining out the lubricating oil, in which case the following will be added to the minimum weight, required by the supplementary regulations:

Classes 1 to 5: 5 kilos
Classes 6 to 10: 10 kilos
Classes 11 to 14: 15 kilos
Classes 15: 20 kilos

202. Chassis—Ground clearance—Lock
All parts of the chassis shall be at lease 12 cm from the ground so that a mass 80 cm wide and 12 cm high may be introduced between the back wheels and through the length of the cars equipped with the wheels and tires which are to he used for the competition.

The turning radius shall he 6m,75 maximum, in other words the car must be able to make a complete turn without backing between two parallel lines 13m,50 apart.

203. Self Starter
A self-starter fitted to the vehicle in proper working order is obligatory. It must be used at the start of the competition, and none of its parts may be removed during the event.

All other means of starting up the engine are prohibited, and penalties in case of non-functioning of the automatic self-starter at the beginning or in the course of the competition shall be laid down in the supplementary regulations.

204. Braking safety
The braking system should ensured in such a way that the brake pedal normally controls the 4 wheels.

In case of a leak at any point of the piping or any failure in the braking transmission the brake pedal should operate on at least two wheels on one same axle.

205. Fuel Tanks
The total capacity of the fuel tanks (principal and auxiliary, if such exist) shall not exceed the following maximums:

Cars of an engine capacity up to 1000 cc: 70L. (18.5 gal.)
Cars of an engine capacity from 1000 cc to 1300 cc: 85L. (22.4 gal.)
Cars of an engine capacity from 1300 cc to 1600 cc: 100L. (26.4 gal.)
Cars of an engine capacity from 1600 cc to 2000 cc: 110L. (29.0 gal.)
Cars of an engine capacity from 2000 cc to 2500 cc: 120L. (31.7 gal.)
Cars of an engine capacity from 2500 cc to 3000 cc: 130L. (34.3 gal.)
Cars of an engine capacity exceeding 3000 cc: 140L. (36.9 gal.)

206. Coachwork—Seats
Coachwork must be completely finished and offer no make-shift element. They must offer at least TWO seats of equal dimensions located on either side of the longitudinal axis of the car, and of the same height, without prejudicing the normal system of adaptation to the size of the driver.

The inside minimum width shall be:
100 cm for cars with engine cylinder capacity inferior or equal to 1000 cc.
110 cm for car; with engine cylinder capacity exceeding 1000 cc.

This dimension shall be measured at the immediate rear of the steering wheel, perpendicular to the longitudinal axis of the car. It must be maintained on a minimum height of 25 cm.

The passengers place shall remain available during the whole of the event. It shall not be either partly or totally covered and shall offer the same conditions of comfort, room and protection as that of the driver's. However the passenger's place may be sheltered by means of a cloth or any similar supple material liable to be quickly removed by hand without using any tools. Under no condition may the seats serve as a holder to a spare wheel or be combined with the fuel tank(s). Tanks shall be placed outside the cabin so as to protect the passengers of the car from any fumes or direct splashing of the fuel.

The transmission organs (shafts and cardan joints) must be under the floor boards or be fitted in tubes or casings. The floor boards, tubes or casings must not be of a temporary nature but mist be properly joined together and firmly fixed to the coachwork and the chassis.

Front seats must fulfill the conditions setout hereafter (Figure 1 and 2).

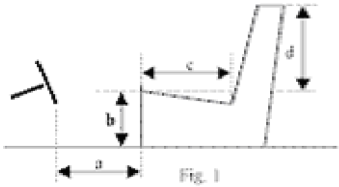

Fig. 1

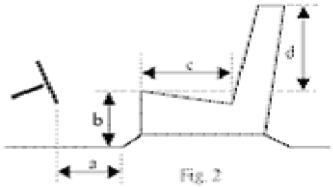

Fig. 2

a is always measured horizontally and parallel to the longitudinal axis of the chassis, between two vertical planes perpendicular to the longitudinal axis and limiting from front to rear the open space on a level where the measurement taken.

For the driver's seat, *a* is measured on the floor level, or at the bottom of any recess if need be, from the perpendicular at the furthest pedal in its position of rest.

For the passenger seat, this measurement is taken at a height of 20 centimeters above the floor, or at the bottom of the recesses, if need be.

In case of movable seats it is forbidden to alter the position of any seat while the cars are being measured.

b is measured vertically from the rear of a to the horizontal plane tangent to the highest part of the cushion as shown on the drawings.

c is measured in the horizontal plane defined above from the upper end of *b*, parallel to *a*, and in the middle of each axis of the chassis and tangent to the foremost point of the back of seats.

Back of seats must have a minimum height of 30 cm. (11.8 in.) measured vertically from rear of *c*.

The arrangement of the body must be such that:
$a + b + c = 1\text{m}.10$ (43.3 in.) at least.

The minimum width for the foot space (for each person must be 25 cm (9.84 in.) measured perpendicularly to the longitudinal axis of the chassis plumb with the pedals.

207. Doors
All vehicles shall he equipped with at least one rigid door on either side, with

a closing device and hinge giving direct access to the seats. They shall, when they are opened, free a space enabling to frontally slide through a rectangle of 50 cm by 30 cm (19.68 in x 11.81 in).

Vehicles with a frontal or a rear door and whose engine cylinder capacity is inferior to 500 cc may have only one door.

There shall always be a means of removing immediately the passengers whatever the position of the car.

208. Windscreen—Windscreen wiper
The windshield is compulsory. If it is broken or looses its transparence on more than three quarters of its width in the course of a race on a closed circuit it must he urgently replaced at the pit under pain of exclusion from the race. It shall be placed symmetrically with regard to the axis of the car and have the following minimum dimensions:

Width, chord measurement:
90 cm (35.43 in.) for cars with cylinder-capacity inferior or equal to 1000 cc.
100 cm (39.37 in.) for cars with cylinder-capacity exceeding 1000 cc.
Height:
15 cm (5.9 in.) measured vertically all along the minimum width.

It shall be efficiently attached to the hood or to the roof of the car, if of closed body type.

If the windscreen is equipped with glass, only glass of safety type shall be permitted.

The windscreen must have at least one automatic wiper, placed in front of the driver, the surface action of the wiper should be sufficient for the driver to be able to see the road distinctly, from his seat.

209. Mudguards
Mudguards of vehicles must not include temporary parts and they must be firmly affixed.

They must he placed exactly above the wheels and they must cover the effectively by surrounding at least a third of the circumference. It will, however, be permitted to make in each mudguard an opening not exceeding a maximum of 200 square centimeters (31 in^2) to enable the driver to check the condition of his tires.

The width of mudguards must be such as to cover the tires completely when the wheels are parallel to the longitudinal axis of the car. In those cars where the mudguards are entirely or partly overhung by the structure of the body, the combination of mudguards and body, or the body alone, must nevertheless fulfill the above-mentioned requirements as to protection.
The rear extremities of the front and rear mudguards must not be higher above the ground than a horizontal line passing through the center of the

wheel hub cap.

Mudguards fitted on the wheels and liable to turn when the wheels are steered are prohibited. They must therefore be solid with the body, there being no gap between them.

210. Hoods (Tops)—No longer required on open sports-racing cars in 1962.

211. Closed cars
Bodies of closed cars, convertible or not, must correspond at least to all the conditions indicated above for open cars.

Bodies of closed cars must he established in such a way that they ensure perfect visibility for the driver. The windows must he fitted with safety glass.

The minimum size of the panes must be such as to include a rectangle measuring:

a. For the front and rear windows. 40 cm wide by 2 cm height (15.75 in. x 9.84 in.)
b. For the back window: 50 cm (19.68 in.) total width, composed of one pane, or several panes inserted into separate frames. Height 10 cm (3.93 in) all along the width, measured vertically.

During races, either by means of open windows or by a special apparatus, a sufficient draught must exist to prevent gases from accumulating inside the car.

Lastly, the height of the roof, measured from the lowest part of the cushions of the rear and front seats shall he at least 85 cm (33.46 in.)

212. Luggage space
A covered space shall be provided, forming an integral part of the body, but outside the space occupied by the front seats It must be able to contain a trunk measuring 65 cm x 40 cm x 20 cm (25.59 in. x 15.75 in. x 7.87 in.) excluding the spare wheel, the tools, or the folded hood.

213. Wheels and tyres
All the wheels of the car shall have the same diameter.

All through the competition, at least one spare wheel, with tyre, identical to one of those mounted on the car must be placed outside the space reserved for occupants of the vehicle, and in such a manner that the normal working of the door is not impeded. Extra spare wheels may, if necessary, be placed in the rear seats of cars for more than two passengers, but in no case may they occupy the space reserved for passengers in the front seat(s).
During competitions, and for safety reasons, spare wheels placed outside the bodies must comprise at least two kinds of systems to fix them, which must be independent one from the other (for instance a hub shaped attachment and straps).

Dimensions of tyres are free.

214. Rear-reflecting mirrors—Silencer—Lighting and Warning apparatus
Vehicles must compulsorily be fitted with:

1. A rear-reflecting mirror with a reflecting surface of at least 50 cm^2 (7.75 $in.^2$)
2. An efficient silencer.

The efficiency of a silencing system is thus defined and verified: the exhaust shall give the impression of a muffled and diminishing sound in which the explosions of each cylinder are not strongly accentuated.

The exhaust pipes shall be arranged so as not to raise any dust.

The sound and luminous signaling devices shall be in working order from beginning to end of the competition.

The lighting devices shall comply with the provisions of the International Convention on Motor Traffic. They shall furthermore be in working order at the start of the competition and remain so during the normal hours of functioning as well as during the hours which are foreseen in the Supplementary Regulations.

The Supplementary Regulations shall lay down what penalties apply in case of tile above accessories being broken, lost, rendered partly or completely useless.

However, damage done to glass by projection of stones shall not be subject to penalization and the replacement of burnt out electric bulbs shall always be authorized.

215. Special provisions
All the integral parts of the body, such as front and rear mudguards, supports and frame of windscreen, hoods, doors, spare-wheel attachments, must be maintained in normal position of use until the end of the event (or if need be, replaced at the first passage at a replenishment pit).

Any competing car shall be in strict compliance with the traffic regulations of either its country of origin, or its country of registration.

Furthermore, the Supplementary Regulations may provide that only those cars are eligible which carry a national registration plate enabling proper identification, to the exclusion of all provisional mobile plates (trial or garage keeper's plate).
All vehicles corresponding to the above characteristics must be admitted in all International Competitions for Sports cars. But this obligation shall not prevent promoters from refusing entry to a competitor, on account of any other reason.

B. APPENDIX J
TO THE INTERNATIONAL SPORTING CODE

GENERAL REGULATIONS
FOR TOURING AND GRAND TOURING CARS

CHAPTER I—GENERAL PROVISIONS

251. Enforcement of the Regulations
The present regulations define all cars built in large or small series and recognized by the FIA in categories "TOURING" or "GRAND TOURING" in compliance with provisions of article 254 below.

They compulsorily apply to all events entered on the International Sporting Calendar (speed events or regularity trials) or on the Calendar of National Events with foreign participation authorized and in which series production cars of the Touring and Grand Touring categories participate.

252. Categories and groups of vehicles
Vehicles referred to in the above article shall be distributed into the following categories and groups:

A. "TOURING" category:
Group 1. Series production Touring Cars
Group 2. Improved Touring Cars

B. "GRAND TOURING" category:
Group 3. Grand Touring Cars

This group takes in also series production Touring Cars with altered bodies as well as Touring Cars belonging to the former group of "Special Touring Cars".

Events open to cars of the Touring and/or Grand Touring categories may also be open to cars of the "Sports" category. In that case cams of this category, which is not defined in the present regulations, shall form the:

C. Group 4. Sports Cars
In which shall be admitted all cars complying with the special regulations of Appendix C to the International Sporting Code, as well as Touring and Grand Touring Cars of a model recognized by the FIA, but which because of changes effected cannot be entered in one of the 3 above mentioned groups (see art. 274 hereafter).

Promoters are free to choose the group(s) they wish to include in the Supplementary Regulations.

Except when otherwise specified by the FIA for a given category of events, the combination of several consecutive groups is authorized.

Since the order of groups as given here-above is considered as forming a logical progression, a car which is eligible for competing in any group not provided in the Supplementary Regulations of an event is automatically eligible for competing in a higher group.

253. Class Scale
Cars shall be distributed into the following 15 classes, according to the engine cylinder capacity:

1. Engine capacity inferior or equal to 400 cc
2. Engine capacity exceeding 400 cc and inferior or equal to 500 cc
3. Engine capacity exceeding 500 cc and inferior or equal to 600 cc
4. Engine capacity exceeding 600 cc and inferior or equal to 700 cc
5. Engine capacity exceeding 700 cc and inferior or equal to 850 cc
6. Engine capacity exceeding 850 cc and inferior or equal to 1000 cc
7. Engine capacity exceeding 1000 cc and inferior or equal to 1150 cc
8. Engine capacity exceeding 1150 cc and inferior or equal to 1300 cc
9. Engine capacity exceeding 1300 cc and inferior or equal to 1600 cc
10. Engine capacity exceeding 1600 cc and inferior or equal to 2000 cc
11. Engine capacity exceeding 2000 cc and inferior or equal to 2500 cc
12. Engine capacity exceeding 2500 cc and inferior or equal to 3000 cc
13. Engine capacity exceeding 3000 cc and inferior or equal to 4000 cc
14. Engine capacity exceeding 4000 cc and inferior or equal to 5000 cc
15. Engine capacity above 5000 cc

The above classification applies to cars with non-supercharged engines.

Cars equipped with a supercharging device provided for the whole series by the manufacturer may be recognized by the FIA but in one of the classes above the one they would belong to according their normal cylinder capacity.

Except when otherwise occasionally specified by the FIA for a given category of events, there is no obligation for the promoters to include all the above classes in the Supplementary Regulations and furthermore, they remain free to combine two or more consecutive classes according to circumstances particular to their events.

254. Recognition of series production models
Before a series production car is accepted in the "TOURING" or "GRAND TOURING" category in a competition, it has to be recognized in that category by the FIA.

Recognition of each Touring or Grand Touring model shall be requested by the National Automobile Club (ACN) of its manufacturing country. Said request shall be accompanied with a certification from the ACN that the minimum production required has been met and within a recognition form (see art. 255) enabling the unmistakable identification of the model concerned.

Recognitions will be granted by the FIA, on recommendations of a Sub-Commission appointed by the CSI called "Sub-Commission for Recognitions". They will he circulated at the earliest opportunity by the FIA Secretariat.

Any change definitely brought to the series production of an existing model shall make the subject of a descriptive note giving specifications as to the

exact nature of the change effected. Said note shall be established by the ACN of the country where the altered vehicle has been manufactured, and submitted by the ACN to the Sub-Commission for Recognitions.

The Sub-Commission will have to determine which of the following case is concerned:

1ST CASE: INTRODUCTION OF A NEW MODEL
The change(s) introduced for good either noticeably improve the performance of the vehicle, or modify its main characteristics.

It shall be then considered as a new model for which construction of the minimum series in the category concerned shall be required, and a new recognition form shall have to be issued.

2ND CASE: NORMAL EVOLUTLON OF THE TYPE
The change(s) introduced for good (construction of previous model abandoned) do not noticeably improve the performance or the main characteristics of the vehicle.

The altered model will remain covered by the original recognition without the manufacturer being required to produce a new minimum series, but the changes must be stated either on a supplementary form appended to the existing one or on a new recognition form.

In particular, such is the case of models on which a change of cylinder-capacity has been carried out, as exceptionally authorized during the years 1960-1963, to enable the readjustment of models to the new limits of classes provided by art. 253 and subject to the following conditions:

a. The production of engines of the previous cylinder-capacity must be definitely discontinued.
b. The cylinder-capacity may be increased till the superior limit of the new class, or reduced under the superior limit of the preceding class.
c. The change may be obtained by modifying either the boring, or the stroke, or by both said means, provided that apart from the pistons, sleeves, connecting rods and crankshaft, all the mechanical parts of the engine unit including their location are not modified.

The model may otherwise not be subject to any modification whatsoever not explicitly permissible according to the present regulations.

3RD CASE: VARIANT
One or several changes are made and noticeably modify either the performance or the main characteristics of the vehicle, but these changes concern only a part of the production of the manufacturer and the construction of the previous model is not discontinued. Said changes will be considered as introducing a "variant" which shall be accepted as well as the original model as soon as the minimum series required for this category of car has been built in twelve months. The variant will imply the drawing up, either of a

new recognition form or of an additional one to be appended to the already existing recognition form.

However, when the changes imply a noticeable reduction of the performances, such as those which are necessary for adapting a car to utility tasks to the detriment of the mechanical efficiency, the variant (s) will be accepted without imposing upon the manufacturer the obligation of previously producing a minimum series, subject to the following conditions:

a. That all the parts liable of being substituted be mentioned on the recognition form concerning said model.
b. That the substitution although it reduces the general efficiency does not improve certain secondary performances which are of special interest in, the competition in which the vehicle has been entered (for instance the fitting of a carburetor of economy type for a fuel consumption event).

The variant(s) may however always be accepted without having to give evidence of a minimum series production, when it concerns (or they concern) a special equipment for climatic or other purposes intended to adapt the car to an arctic or tropical climate or to an unusual type of ground (such as desert or bush) under the express condition that the vehicle is only used in competitions run in the particular circumstances which are referred to hereabove.

255. Recognition Forms
All Touring and Grand Touring cars recognized by the FIA will be described on a form, called Recognition Form, drawn up by the National Automobile Club, on which will he entered the chief specifications enabling the identification of each model.

Shall only he used to this effect by all ACN's the model recognition form, as well as the additional form for "normal evolution of the type" and "variant", drawn up by the FIA.

These forms will be prepared by the ACN of the country in which the car has been built and submitted by said ACN to the Sub-Commission for Recognitions.

It rests within the entrant to secure the recognition form and if need be the additional form concerning his car either from his ACN or if not available at his own ACN, from the ACN of the country in which his vehicle has been built.

Promoters may require entrants to produce the form at scrutineering and/or at the start. They will be entitled to refuse participation of an entrant if the necessary form(s) is (are) not produced.

256. Fuel
Fuel shall be of a commercial type generally distributed at road service stations of the country or countries in which the event is to be run. If in one of the countries, the standards of the best commercial fuel is inferior to the fuel having the largest octane number is one of the three following countries:

France, Great Britain, Italy, a special waiver may be granted to the promoters with the approval of the CSI.

Upper cylinder or two stroke engine lubricants are authorized, on condition there is no increase of the fuel octane number.

CHAPTER II—GROUP 1—SERIES PRODUCTION TOURING CARS

257. Definition—Minimum of construction

Series production Touring cars are motor vehicles intended for the transportation of persons and for which the manufacturer has endeavored to obtain the best performance in normal conditions of use. They must be recognized by the FIA in the "Touring" category.

In order to enjoy such recognition, these cars must be in conformity with a model well defined in a catalogue and obviously intended for normal use, for pleasure or business. They must he offered to customers by the regular sales department of their manufacturer.

They must be of a model in current production or which has not heen definitively abandoned for over 4 years. They must have been manufactured in series at a minimum rate of 1000 units in 12 consecutive months and he identical as far as mechanism and coachwork are concerned.

By identical is meant that the external shape and the component materials of the mechanical parts, the chassis and the body must remain unchanged.

To the exception of the modifications and additions explicitly authorized according to the present regulations, any accessory and/or any mechanical part may only be replaced by the same accessory or the same part used by the manufacturer for the considered model, the only tolerances in size being those officially provided by the factory.

All elements of the vehicle must compulsorily he those of one same recognized model, whether said model is the basic one or one of its variants also recognized (see art. 254) to the exception of elements whereof the addition, the removal or the replacement is explicitly authorized according to the present regulations (considering the group which applies).

However, in case of "normal evolution of the type" (see above art. 254, 2nd case) when a manufacturer has abandoned for good the production of certain spare parts, spare parts of the altered model may be substituted, provided they are perfectly adaptable and do not imply any modification whatsoever of the supports.

258. Coachwork

Series production touring cars shall have a closed body or a "convertible" body.

Coachwork means all the external parts of the vehicle licked by the air streams and located above a plane passing through the wheel hubs.

Convertible coachwork means a body which can be either completely closed, or open, with inter aliis mobile windows in the doors. Is excluded all coachwork fitted with a simple hood offering but a scanty protection against bad weather, even if the hood is equipped with detachable sidescreens.

As a rule the body shall be built by the manufacturer of the frame. However, a series production body manufactured by a coachwork builder approved by the maker of the frame may be admitted. For cars whose body has been made outside of the main factory, there will have to he at least 1000 units assembled within a period of 12 consecutive months and said cars will be subject to a separate recognition.

259. Number and dimensions of seats
Series production Touring cars shall have the number of seats provided by the manufacturer. This number shall be at least TWO when the engine cylinder capacity is inferior or equal to 1000 cc and at least FOUR when the engine capacity is superior to 1000 cc.

Shall be counted as seats only those especially adjusted by the maker of the body for the sake of carrying the passengers, drivers included.

The seats shall have the following minimum dimensions as indicated on the sketch below:

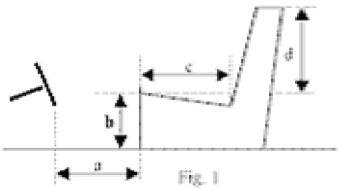

Fig. 1

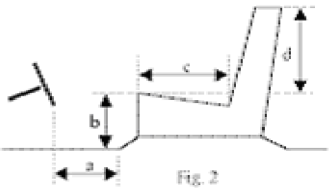

Fig. 2

a is always measured horizontally and parallel to the longitudinal axis of the chassis, between two vertical planes perpendicular to the longitudinal axis and limiting from front to rear the open space on a level with the height where such measurement is taken.
For the driver seat *a* is measured at floor level, or at the bottom of any recess, from the perpendicular of the nearest pedal at rest.

For the passenger seat *a* is measured 20 cm above floor level or the bottom of recesses if need be.

In the case of movable seats the position shall not be altered when measurements are taken.

b is measured vertically from the rear of *a* to the horizontal plane tangent to the highest part of the cushion, as shown on the sketch.

c is measured in the horizontal plane defined above from the upper and of *b*, parallel to *a* and in the center of each seat, as far as the vertical plane perpendicular to the longitudinal axis of the chassis and tangent to the foremost point of the back of the seat.

Back of seats shall have a minimum height of 30 cm, measured vertically from the rear end of *c*.

The coachwork must be planned in order to obtain:
a + *b* + *c* 1,10 m. minimum

The minimum width for foot space (for each person) shall be 25 cm measured perpendicularly to the longitudinal axis of the chassis, at the vertical of the pedals.

Shall not be considered as a four-seater, cars offering inside the coachwork for 2 normal seats and a back space provided for the transportation of dogs or luggage, even if the dimensions of said space enable the temporary accommodation of passengers.

The normal arrangement of the seats may be subject to all kinds of modifications intended to improve the comfort of the occupants of the car (transformations of the seats or their replacement by others) subject to there being no reduction of the number or of the comfort of the seats provided by the manufacturer.

260. Minimum weight
The recognition form shall state the official weight of the considered model. This weight shall be obtained by taking the average of the actual weighing of five closed cars of the same model, selected at random and weighed in the following conditions: with the spare wheel provided by the manufacturer and with a tyre which is the same as those which are mounted on at least two wheels of the vehicle, with full oil tank, and full water tank (if such is the case) but without fuel, tools, luggage or anyone aboard.

When the weight is being checked by the scrutineers on the on the occasion of an event, a tolerance of minus 5% as compared with the weight entered on the recognition form will he granted, whatever the cause of the reduced weight and provided it results from a lightening which is permissible according to the present regulations.

261. Changes and additions authorized
1. LIGHTING DEVICES: make and number are free, provided they comply with the International Convention on Road Traffic.

2. RADIATORS AND FUEL TANKS: any radiator or fuel tank provided by the manufacturer for the model considered and mentioned in the maintenance booklet and on the recognition form may be used.

   The use of radiators having a capacity superior to that of those provided by the manufacturer may be authorized by the ACN in the case of events organized under particular climatic conditions.

   The addition of a radiator screen whether fixed or mobile, regardless of its system of control, is authorized.
3. AIR FILTERS: may be changed or removed.
4. CARBURETORS: the number, type and make must comply within those used by the manufacturer for the model considered. They must always be liable to be directly adapted on the inlet manifold but all the settings and the changes of the venturis, the jets and chokes are authorized.

   All timing operations and modifications of the venturis or the jets and chokes are authorized, even when the tuning is obtained by a substitution of the carburetor body, provided the mounting on the inlet manifold continues to he done without any kind of intermediary device whatsoever.

   The substitution of an automatic control of the starter by a hand control (or vice-versa) is authorized.
5. BATTERY: the tension (voltage) as well as the location provided by the manufacturer may not be changed; but the make, type and capacity (amperage) are free as well as the shape, the dimensions and the attachment system.
6. IGNITION COIL, CONDENSER AND DISTRIBUTOR: are free. on condition the ignition system remains as provided by the manufacturer for the considered model.

   A spare coil and/or a spare condenser may be set up anywhere provided the switching from main to spare cannot be controlled from the inside of the car..

   The replacement of an automatic control of the ignition by a hand control (or vice-versa) is authorized.
7. PLUGS: same number per cylinder as provided by the manufacturer, make and type free.
8. PETROL PUMP: a mechanically controlled pump may be replaced by an electrically controlled one and vice versa.
9. REBORING: is authorized on condition not to exceed the original bore by more than 0.6 mm. Moreover, the resulting increase in capacity must not be such as to make the car pass into the above class.
   The make of pistons is free as well as the basic material, hut they shall be identical (except for the ribs) to those provided by the manufacturer for the model considered and shall have at least the same weight.

   In particular. the shape of the head, the location of the axis, the number and type of rings may not be modified. The type of ring is defined by the

function for which it is intended: top ring, compression ring or oil cutter ring.

When the engine has removable sleeves, the replacement of pistons is authorized in the same conditions as provided hereabove, that of the sleeves is also permitted provided the replacement sleeves are identical to the original ones and in particular the basic material is the same. Moreover engines removable sleeves shall enjoy the same re-boring tolerance as provided for sleeveless engines.

10. MUFFLER: the make and type are free, provided the noise-deadening efficiency is not affected and the exhaust manifold and particularly its outlet port is not modified.
11. TRANSMISSION: any manually or automatically controlled gear box and any axle ratio provided and sup-plied by the manufacturer, mentioned in the maintenance booklet and on the recognition form may be used. The substitution of the clutch pedal by an automatically controlled one, regardless of its system of operation, is authorized.
12. SHOCK ABSORBERS: the make and type are free but neither the number nor the system of operation, nor the system of attachment, may be modified.

    By system of operation is meant: hydraulic or friction shock-absorber, of telescopic or lever type regardless of the mechanical resultants of these different systems, such as for instance whether the device has a double-acting or a single-acting effect, and in case of hydraulic shock-absorbers whether there is or not an additional gas chamber.
13. WHEELS: must be of a type provided by the manufacturer and stated on the recognition form.

    One basic series may comprehend wheels of different types (solid or perforated disk wheels spoke wheels, etc).

    The wheels, including their attachment system maybe reinforced, even if the strengthening entails a modification of said attachment system.

    Wheels may be balanced.
14. TYRES: the make and type are free but they must fit without any modification thereof on the original wheels and/or rims without the need of any intermediary device.
15. BRAKES: any system improving the cooling or increasing the safety of the braking system is authorized, such as for instance the fitting of special air-pipes (provided the body as defined in art. 258 is not altered).

    The fitting of a dual-pump or any type of device providing both a simultaneous action on the four wheels and a divided action on the front and rear wheels is authorized. The make and attachment system of the linings is free.

    All the original supports and all the dimensions of inner friction surfaces shall remain unchanged.

By original supports are meant those on which are fixed the mobile parts (drums or disks) and also the attachment system of the elements bearing the friction parts (brake-shoes or pad-linings).

16. SUPPLEMNTARY ACCESSORIES: all accessories likely to improve the operation of the vehicle. The comfort of its passengers or the safety are authorized, provided they have no influence whatsoever on the mechanical performance of the engine, the transmission, the road holding and the braking (except if explicitly authorized in this same article).
17. COACHWORK ELEMENTS: (windows, quilting, etc) The glass windows of the doors and the rear pan may be replaced by any other rigid and transparent material. The quilting may be changed and all inner coach work accessories may be replaced by other ones or removed.
18. BUMPERS, EMBELLISHERS, STREAM-LINING: The bumpers are compulsory except when the model is of a series normally delivered without bumpers by the manufacturer. The shape is free, but the total weight (including the attachment parts) must be at least equivalent to that of the bumpers and attachment system provided hy the manufacturer for the same model.

    However, for speed races on closed circuits, the supplementary regulations may authorize or prescribe the removal of the bumpers (in ease of events comprising both a regularity course and classification tests on a closed circuit, the bumpers must be fitted on the ear for driving on the open road).

    Embellishers and detachable hub caps liable to interfere with the changing of wheels may be removed beforehand if the entrant so wishes. The gain of weight thus obtained must of course be included in the tolerance of 5% provided by art. 260 hereabove.

    The addition of any protective stream-lining device not provided by the manufacturer for the considered series model is prohibited. However, for events run on particularly difficult ground (snow, sand, rutted tracks) the promoter, in his supplementary regulations, may generally authorize or even require the addition of a stream-lining appliance or any other underneath protective device.

    NB. Any alteration or addition not explicitly authorized hereabove will make the vehicle uneligible in group 1 and will entail its assignment to whichever of the 3 other groups of the present regulations which applies.

    Any change or addition not listed above and which has not been subject to a previous written statement of the entrant will entail a penalty which may go as far as exclusion from the competition without prejudice to higher penalties in case of willful misrepresentation.

CHAPTER III—GROUP 2—IMPROVED TOURING CARS

262. General Specifications

All provisions of Chapter II concerning series Touring cars apply likewise to

group 2 cars with the exception of 3rd paragraph of art. 257 concerning cars whose building has been abandoned since more than 4 years.

263. Changes and additions authorized
In addition to the 18 latitudes granted for cars of Group 1, the following changes and extra equipment are authorized.

19. WHEELS: may be of a different type that the one or those provided by the manufacturer provided the hub remains unchanged as well as the dimensions of the rim and of the track provided and stated by the manufacturer.
20. REBORING: authorized in the same conditions as for cars of the 2st group (art. 261-269) but with a maximum tolerance of 1.2mm (instead of 0.6).
21. STABILIZER: the fitting of a commercial suspension stabilizer or equivalent device is authorized, on condition it does not constitute an additional stay rod.
22. OIL FILTER: an oil filter may be added when the model provided by the manufacturer has none.
23. SPRINGS OF ANY KIND: (valves, clutch, suspension, etc.) — They may be replaced by other ones of unrestricted origin, but without modification of the number provided by the manufacturer and on condition they can be fitted without any alteration of the original supports.
24: FINISHING OFF: any perfecting operations by finishing or machining the original parts but not their replacement except with regard to springs as specified hereabove. In other words provided it is always possible to ascertain unquestionably the origin of the series production part, it may be rectified, balanced, lightened, reduced or modified with regard to the shape through tooling, to the exclusion of any addition of material or any mechanical extension or of any process involving a change of the characteristic molecular structure or of the surface of the metal.

    The increase of the compression ratio through machining the cylinder head or block, or using a thinner gasket or doing without one, is authorized.
25. BRAKING: the braking power may be increased subject to the system of operation provided by the manufacturer (drum brakes or disk brakes) being maintained as well as the original supports (cft hereabove art. 261, par. 15).

    N.B. Any alteration or addition not specifically provided hereabove will make the vehicle unfit for classification in group 2 and will result in its being affected to that of the 2 other groups of the present regulations which applies.

    Any alteration or addition not listed above and which has not been subject to a previous written statement of the entrant will entail a penalty which may go as far as exclusion from the competition without prejudice to higher penalties in case of willful misrepresentation.

CHAPTER IV— GROUP 3—GRAND TOURING CARS

264. Definition

Grand Touring Cars are vehicles built in small series for customers who are hooking for a better performance and/or a maximum comfort and are not particularly concerned about economy.

Such cars shall conform to a model defined in a catalogue and be offered to the customers by the regular sales department of the manufacturer. They must be recognized by the FIA according to the provisions of article 265 below.

Shall on the other hand also be classed in group 3 (Grand Touring Cars) Touring Cars recognized in the Touring category, made of series production mechanical parts and not having been subject to any other changes or additions apart from those authorized according to art. 261 and 263 but equipped with a special coachwork.

By special coachwork is meant:

a. either the original one as defined in art. 258 when it has been subject to any kind of alteration in shape or appearance (other than one due to latitude granted under 261 or 263) or to an alteration of the material used by the manufacturer.
b. or a coachwork without any relation with the original one and made especially either by the manufacturer or an independent builder to answer a private order.

In that case, two possibilities are to be examined:

1. If the frame is of self-bearing type, it shall be maintained and may be strengthened, but not lightened nor cut.
2. If the frame is not of self-bearing type, that is when the car has no frame or only a partial or insufficiently bearing one, the body may be changed as a whole, but shall under its new shape compulsorily use the original attachment points on the series production elements of the suspension, propulsion and steering.

Shall also be classified in the same group 3, Touring Cars equipped with their standard coachwork, but having been subject to changes or additions not authorized by art. 261 and 263 above and whose limits are stated hereafter under art. 274, b.

265. Minimum production—Recognition

In order to enjoy recognition in the "Grand Touring" category, cars will have to be produced at a minimum rate of one hundred identical units as far as mechanical parts and coachwork are concerned in 12 consecutive months.

The word "identical" has the same meaning as defined under art. 257, 4th paragraph. However, one same minimum series of 100 units may have two different carburetor equipments either in number or size.
By "equipment" is meant the carburetor and venturi unit.
Moreover cars will have to conform to specifications of articles 266-270 below.

266. Ground Clearance

All parts of the chassis shall be at least 12 cm from the ground, so that a mass of 80 cm wide and 12 cm high may be introduced between the rear wheels of the car and slipped through the whole length of the car.

This ground clearance may be measured with empty tank and with nobody in the car, which must be equipped with the wheels and tires that are to be used in competition.

267. Lock
The maximum lock shall he 6.75 m. which means that the car must be able to make a complete turn in any direction without the wheels going beyond two parallel lines 13.50 m apart, drawn on the ground.

268. Starting
Grand Touring cars shall have to be equipped with a starting device liable of being operated by the driver when aboard.

269. Fuel tank
Grand Touring cars shall hare one of the fuel tanks provided by the manufacturer and whereof the capacity shall he mentioned on the recognition form.

However, the total capacity of the fuel tanks (main and emergency, if any) shall not exceed the following maximum:

Cars of an engine capacity up to 1000 cc: 70L. (18.5 gal.)
Cars of an engine capacity from 1000 cc to 1300 cc: 85L. (22.4 gal.)
Cars of an engine capacity from 1300 cc to 1600 cc: 100L. (26.4 gal.)
Cars of an engine capacity from 1600 cc to 2000 cc: 110L. (29.0 gal.)
Cars of an engine capacity from 2000 cc to 2500 cc: 120L. (31.7 gal.)
Cars of an engine capacity from 2500 cc to 3000 cc: 130L. (34.3 gal.)
Cars of an engine capacity exceeding 3000 cc: 140L. (36.9 gal.)

270. Coachwork
Grand Touring cars shall be equipped with a coachwork enabling a normal touring use, in particular with regard to comfort, habitability and protection against bad weather.

Coachwork shall be completely finished without any provisional part. It shall offer at least two seats located on either side of the longitudinal axis of the car, and at the same level, without prejudicing the normal system of adapting the sear to the size of the pilot.

The minimum inside width shall be 100 cm for cars within an engine cylinder capacity of 1000 cc or less, and 110 cm for cars of higher capacity. This width, measured perpendicularly to the longitudinal axis of the car must be respected along a minimum height of 25 cm and a minimum depth of 30 cm, measured on the vertical plane tangent to the back of the steering wheel and the back of the seat (i.e. at the normal place where the pilot needs elbow-room).

The passenger's space shall remain available through the whole event. It

shall not be either totally nor partly covered and shall offer the same conditions of comfort, habitability and protection as that of the driver. However, supplementary regulations may provide for the covering of the passenger's seat with canvas or any other similar supple material, which can be quickly removed by hand without the use of any tool. Under no condition whatever may the seat be used for a spare wheel or be combined with the fuel tank (s). The latter shall be located outside the cabin so as to protect its occupants from fumes and from direct fuel splashing.

Transmission equipment (shafts and cardan joints) shall be placed under the floor boards or in tubes or casings. Floor boards, tubes and casings shall be permanent fixtures, properly joined together and firmly fixed to the coachwork or the chassis.
With regard to the location of the seats in relation to the pedals it shall answer the minimum specifications of art. 259 for Touring cars. The height under the roof or hood measured from the lowest point of the upper surface of the driver's seat cushion used in competition shall be 85 cm minimum.

WINDSHIELD—WINDSHIELD-WIPER—PROTECTED HEIGHT - A windshield is compulsory. It shall be placed symmetrically with regard to the axis of the vehicle and be equipped with at least one wiper placed in front of the driver and sweeping a sufficient area to enable him to directly observe the road from his seat.

Moreover, for cars with an open or convertible coachwork, the windshield shall comply within the following requirements:

Minimum width (chord measurements):
90 cm for car with an engine capacity inferior or equal to 1000 cc
100 cm for cars with an engine capacity exceeding 1000 cm
Minimum height:
25 cm, measured vertically and maintained along the whole minimum width

MUDGUARDS—Mudguards shall be of permanent nature and firmly fixed.

They shall be placed exactly above the wheels and provide efficient covering on at least one-third of their circumference.

The width of the mudguards shall be such that no part of the tire may protrude beyond its edge when the wheels are not steered.

In those cars where mudguards are entirely or partly overhung by the body structure, the combination mudguard-body or the body alone shall nevertheless met the above protection requirements.
The back extremities of the front and rear mudguards shall come down at least to the horizontal plane passing through the center of the wheel hub cap.

Mudguards turning with the wheels are prohibited. They must be solid with the body, there being no gap between them.

HOODS—Open or convertible cars shall he equipped with a hood fitting timing exactly and without any intermediary device the windshield the door windows and side panels and the rear of the coachwork.

It shall offer a rear window the minimum dimensions whereof are specified in the present article (see further on).

The hood may never interfere with the opening of the doors.

The hood may be replaced by a removable hard top, but at scrutineering, cars must be shown with one of the devices fitted on.

DOORS— All vehicles shall be fitted with at least one rigid door on each side with closing device and hinges, giving direct access to seats. When open it shall liberate a space allowing for the frontal passage of a 50 x 30 cm rectangle.

Vehicles with a front or rear door may have only one door.

Cars with closed or convertible coachwork shall have doors equipped with mobile security glass or transparent and rigid plastic material, providing ventilation, each window having a minimum width of 40 cm and a minimum height of 25 cm.

REAR WINNDOW— It shall let the light through a minimum width of 50 cm and a minimum height (all along the whole minimum width) of 10 cm.

LUGGAGE TRUNK— A covered space being an integral part of the coachwork but outside of the space occupied by the front seats, large enough to receive a parallel pipe of 65 x 40 x 20 cm minimum, besides the spare wheel, tools or the folded hood, shall be provided.

271. Special Bodies
Open or closed special bodies built in supplement to those required for the recognition of the car according to art. 265 above shall be admitted if they meet the specifications of art. 264 b and 270 above, provided the weight of the vehicle remains at least equal to that of the corresponding recognized car, with the same tolerance of minus 5% (not to be added).

Once there is an existing series of 100 units built within 12 consecutive months, offering the standard body and duly recognized, no minimum of construction is further required for a special body whether mounted by the manufacturer or by the entrant.

272. Minimum weight
The weight of a Grand Touring car shall be entered on the recognition form of the model under consideration. It shall be obtained in the conditions specified under art. 260 with a tolerance of 5% less than the weight entered on the recognition form.

273. Modifications authorized
All additional equipment and modifications authorized for series production Touring cars (group 1) and Improved Touring cars (group 2) are authorized for Grand Touring cars (group 3), in particular all those listed in articles 261 and 263.

Any Grand Touring car with extra equipment or subject to any modification not explicitly authorized may take part in a competition only in group 4, as defined hereafter at art. 275, and subject to said group being provided in the supplementary regulations.

NB. Any alteration or addition not explicitly authorized hereabove will make the vehicle uneligible in group 3 and will entail its assignment to group 4 (see art. 275 hereafter).

Any change or addition not listed above and which has not been subject to a previous written statement of the entrant will entail a penalty which may go as far as exclusion from the competition without prejudice to higher penalties in case of willful misrepresentation.

274. Touring cars assimilated to "Grand Touring"
a. TOURING CARS WITH SPECIAL COACHWORK

Touring cars of a model recognized by the FIA equipped with special coachwork, as defined in art. 270 aabove but in conformity with regard to mechanism with the series production model, except for changes and additions authorized according to art. 261 and 263, shall be assimilated to Grand Touring cars and may participate in events in group 3.

If the above cars are subject to changes and additions exceeding the limits provided under 261 and 263, they will be authorized to enter the events only in group 4 - sports car (see art. 275 below).

b. TOURING CARS WITH STANDARD COACHWORK AND SPECIAL MECHANICAL PARTS (PREVIOUSLY CALLED SPECIAL TOURING CARS)

Shall also be assimilated to Grand Touring cars, Touring cars of an FIA recognized model equipped with their original coachwork but which have been subject to alterations and additions other than those authorized according to art. 261 and 263, and made either by the manufacturer or he competitor, with the intention of increasing the performances and improving the conditions of use of the vehicle.

These alterations or additions may affect the mechanical parts of the engine, of the transmission, of the steering, of the suspension, the number of carburetors, the inlet and exhaust system, the braking system.

The re-boring of the engine whether sleeveless on fitted with sleeves, is authorized up to the limit of the class to which belongs the car accord-

ing to its original cylinder capacity. Furthermore, in consideration of the trend of technical evolution, and the necessity of increasing the safety of cars whose high performances had not been initially foreseen by the manufacturer, the improvement of the braking may be seeked without any obligation of maintaining the original system. Drum brakes may therefore be replaced by disk brakes.

However, the fundamentals and general design of the car, of the engine and other mechanical parts must remain the same as those of the corresponding series production car. The standard coachwork must not he modified; the chassis may be reinforced but not lightened nor cut. The track and wheel-base mast remain unchanged. The suspension and rear axle must remain of same type. All casings and blocks housing the mechanical parts must remain unchanged, except for the following:

1. Cylinder-head
2. Oil sump
3. Braking system
4. Gear box and rear axle box, which may be subject to minor alterations to enable the modification of the gear box ratios or the mounting of an overdrive.

The minimum weight must be that entered on the recognition form of the corresponding series production touring car, but the tolerance granted when the weight is checked will be minus 10% (instead of minus 5%).

The addition of compressors, blowers or any kind of supercharging device not provided for the series production and not entered on the recognition form remains prohibited on cars of this group.

All changes or additions not authorized under art. 261 and 263 shall be the subject of a written statement from the competitor to be appended to the entry form sent to the promoters.

NB. Any omission or wrong information on the above mentioned statement will entail a sanction which may go as far as excluding the car from the competition without prejudice to higher penalties in case of willful misrepresentation.

CHAPTER V-CARS NOT COMPLYING WITH THE ABOVE PROVISIONS

275. Group 4—Sports cars

If the promoters of the events wish to accept the entry of other cars than those which are complying with the hereabove mentioned specifications for groups: 1, 2 and 3, they may contemplate a 4th group which will include:

1. All Touring and Grand Touring cars of a model recognized by the FIA, hut not complying with the specifications recognized for classification in one of the groups from 1 to 3. In that case they must comply with the provisions of art. 266 to 270.

Cars deriving from a model recognized in the Touring category but assimilated to sportcars on account of alterations exceeding the limits consistent with classification in one of the 3 preceding groups are not however when they compete in regularity trials subject to the specifications of art. 266 (minimum ground clearance) nor of art. 268 (maximum lock) –

2. All cars which are not of a recognized model but which comply with the specifications of Appendix C to the International Sporting Code.

276. Cars belonging to none of the above categories or groups—
Promoters are free to allow participation in an event of cars of any type and which do not correspond to any of the above categories or groups, such as for instance: military cars, busses, lorries, experimental cars in conformity neither with Appendix C, nor Appendix J, etc.

They shall however not allow any one of these cars to compete in any one of the 4 groups listed under art. 252.

These regulations have been issued in more than one language. In the event of any controversy the French Version shall be considered valid.

C. FORMULA I

1. Racing cars with an engine cylinder-capacity superior to 1300 cc and inferior or equal to 1500 cc
2. No supercharging device.
3. Commercial fuel as specified by the FI.-I.
4. Minimum weight of car (without ballast: 450 kgs. in working order including lubricant and coolant but without fuel.)
5. Compulsory automatic starter with an electrical or other source of energy liable of being controlled by the pilot at the steering-wheel.
6. Protection against fire: besides that already provided by art. 125 of the International Sporting Code, the car shall be equipped with a general electric circuit breaker either operating automatically or at the disposal of the pilot.
7. Driver's seat liable of being occupied or left without it being necessary to open a door or move a panel.
8. Fastening system for safety belt, the latter optional.
9. Compulsory anti-roll bar complying with the following conditions:
   a. Not overhanging the driver's head.
   b. Exceeding in height the driver's head when sitting at the steering-wheel.
   c. Exceeding in width the driver's shoulders when sitting at the steering-wheel.
10. All the wheels exterior to the body so that the vertical projection be contained within the figure drawn by the vehicle wheels when front wheels are not steered.
11. Compulsory double braking system operated by the same pedal and defined as follows:

The pedal shall normally control the four wheels. In case of a leakage at any point of the brake system pipes or of any kind of failure in the brake transmission system, the pedal shall still control at least the two front wheels.

12. Fuel tanks complying with the following requirements:
    a. The filling port(s) and the cap shall not protrude beyond coachwork material.
    b. The opening shall have sufficient diameter for allowing the air exhaust at the time of quick refueling (in particular those done under pressure) and if necessary the breather-pipe connecting the tank to the atmosphere shall be such as to avoid any liquid leakage during the running.
13. No refueling of lubricant is allowed for the whole duration of the events.

The filling ports of the oil tanks and radiators shall provide as the possibility of affixing seals.

The leads sealing the filling port (s) of the lubricant tank (a) may not be removed at any the during the race.

The lead(s) sealing the filling port(s) of the radiator(s) shall be in place at the start of the race, but may be removed at any pit-stop.

D. INTERCONTINENTAL RACING FORMULA (FORMULA I/C)
Valid from 1st January 1962 to 31st December 1963

Formula for one-seater racing cars of an engine cylinder- capacity front 2,000 cc. to 5,000 cc., equipped either with a free-built engine (Class I, 2,000 to 3,000 cc.) or with an engine taken from a series production touring car of an FIA recognized model (Class II, cylinder-capacity: 3,000 to 4,000 cc., and Class III, cylinder-capacity: 4,000 to 5,000 cc.).

ENGINE
Class I. cylinder-capacity above 2,000 cc. and inferior or equal to 3,000 cc. (122-183 cu. ins.)
Piston engine of entirely free construction.

Class II. cylinder-capacity above 3,000 cc. and inferior or equal to 4,000 cc. (183-244 cu. ins.)
Engine taken from a series production touring car of a model whereof a thousand units have been produced within a twelve-month period, and which has been recognized by the FIA.

These engines shall he fitted with the cylinder head(s) provided and used by the manufacturer and shall undergo no change. When the engine is re-bored a beveling of the inside edge of the combustion chamber for adaptation to the modified cylinder diameter is tolerated.

The cylinder-block shall also be that provided by the manufacturer and shall

undergo no change except within regard to the cylinder-capacity which may he increased or reduced by altering the bore and/or the stroke until the 4,000 cc. limit.

If the engine is of the overhead camshaft type, the intake system (by carburetor or injector) shall be the one used for the original series production car. For carburetor-fed engines, the number and type of carburetors (single or double body etc.) shall be the same as used by the manufacturer for his recognized series production and specified on the recognition form of the model concerned.

All tuning operations and modifications of the venturis or the jets and chokes are authorized, even when the tuning is obtained by a substitution of the carburetor body, provided the mounting on the inlet manifold continues to be done with-out any kind of intermediary device whatsoever.

Make of carburetor and induction pipe: free.

Any feeding system is permissible, as well as any type or number of carburetors, on engines with camshafts in cylinder-block.

Class III. cylinder-capacity above 4,000 cc. and inferior or equal to 5,000 cc. (244-305 cu. ins.)

Engine taken from a series production touring car, a thousand of which have been produced within a twelve month period, and recognized by the FIA. Engines with over-head camshafts may not be used.

Cylinder-block (except for cylinder-capacity), cylinder- head, (except for the beveling of the inside edge), valve control system, feeding system, number and type of carburetors, induction pipe must be in strict conformity with those of the original series production. The cylinder-capacity may he increased or reduced by alteration of the bore and/or stroke until the 5,000 cc limit.

GENERAL SPECIFICATIONS

1. No supercharging device.
2. Minimum weight of the car (without ballast) in working order including lubricant and coolant, but without fuel or driver aboard:
   Class I: 450 kgs. (990 lbs.)
   Class II: 550 kgs. (1210 lbs.)
   Class III: 550 kgs. (1210 lbs.)

   The ballast which is prohibited is that of a removable type. It is therefore permissible to complete the weight of the car through one or several ballasts incorporated to the materials of the car, providing that solid and unitary blocks are used, and that they are fixed by means of a tool and offer the opportunity of being sealed on, should the officers entrusted with scrutineering deem it necessary.
3. Minimum ground clearance: 7 cm. (2.76 ins.). It must always be possible to slip under the car in all directions without hitting any obstacle a mass

or a plank maintained vertically of a minimum height of 7 cm. (2.76 ins.)

4. Compulsory fuel: Commercial pump gasoline complying with the FIA definition.
5. Compulsory automatic starter with an electrical or other source of energy capable of being controlled by the driver at the steering-wheel.
6. Protection against fire besides the fire-wall already provided by art. 125 of the International Sporting Code, the car shall be equipped with an ignition cut off switch either operating automatically or at the disposal of the driver.
7. Driver's seat capable of being occupied or left without it being necessary to open a door or move a panel.
8. Fastening system for safety belt, the latter optional.
9. Compulsory roll-bar complying with the following conditions:
   a. not overhanging the drivers head
   b. exceeding in height by at least 3 cms (1.2 in) the driver's head when sitting at the steering wheel
   c. exceeding in width the driver's shoulders when sitting at the steering wheel.
10. All the wheels exterior to the body so that the vertical projection be contained within the figure drawn by the vehicle wheels when the front wheels not deflected.
11. Compulsory double braking system operated by the same pedal and defined as follows:

    The pedal shall normally control the four wheels. In case of a leakage at any point of the brake system pipes or of any kind of a failure in the brake transmission system, the pedal shall still control at least two wheels of one same axle.
12. Fuel tanks complying with the following requirements:
    a. the filling port(s) and the cap shall not protrude beyond the body material.
    b. the opening shall have a sufficient diameter for allowing the air to exhaust at the time quick refueling (in particular those done under pressure) and if necessary the breather-pipe connecting the tank to the atmosphere shall be such as to avoid any liquid leakage during refueling.
13. No refueling of lubricants is allowed for the whole duration of events.

    The filling ports of the oil tanks and radiators shall provide for the possibility of affixing seals.

    The lead(s) sealing the filling port(s) of the lubricant tank(s) may not be removed at any the during the race.

    The lead(s) sealing the filling port(s) of the radiator(s) shall he in place at the start of the race, but may be removed at any pit-stop.

E. FORMULA JUNIOR

1—Definition

The cars of Formula Junior are single seat cars, whose basic elements are derived from cars homologated by the FIA (minimum 1000 specimens in 12

consecutive months).

2—Measurements

a. Wheelbase, minimum: 200 cm.
b. Track, minimum: 110 cm.
c. Width, maximum—body: 95 cm. (exterior).

Displacement and Weight:

a. Displacement max.: 1100 cm^3
   Weight min.: 400 kg. (880 lb.)*
b. Displacement max.: 1000 cm^3
   Weight min: 360 kg (792 lb.)*

* Ballast may be carried to attain minimum weight requirements but it must be permanently installed in the car.

3—Mechanism

a. The block, including the crankcase, the cylinders and cylinder heads if the latter are removable, must be of those of the motor of a car homologated in the touring category by the FIA.
b. The gear-box must be one of a car homologated in the touring category by the FIA. All freedom is granted as regards to the number and degree of ratios.
c. Formula Junior cars may be fitted with any brakes that are the most efficient.
d. The system and principle of fuel intake (carburetors, injectors, etc.) must be those of the car from which the motor derives.
e. The displacements defined by the regulations can be obtained by modification of the original bore (increase or reduction). Any modification of the stroke is forbidden.
f. The car is required to have an automatic self-starter.

4—Body

The single seat and open body must have a roll bar above the driver, protecting the driver against the danger of being injured in the event the vehicle overturns. Moreover, it must have a protective wall against fire, between the cockpit and motor, provided in the International Sporting Code (Art. 125).

5—Weights

The minimum weights defined in Art. 1 are those of the car ready to run and furnished with all the accessories provided for by the regulation, but with an empty gas tank.

6—Muffler

The supplementary regulations of an event may require the use of an adequate muffler.

7—Prohibitions

The following are forbidden:

a. The use of one or several overhead camshafts.
b. The use of twin-traction differentials.
c. The modifications of the number of crankshaft main bearings.
d. The modification of the position of the camshaft.

8—Motor Fuel

Only pump fuel, as defined in Paragraph 1 of Appendix A may be employed.

Manufacturer: A.C. Class: D
Model: Ace and Aceca

DESCRIPTION:
2-Seater Roadster or Coupe
Aluminum Bodywork
Dry Weight: 1685 lbs

ENGINE:
Type ..... OHV 6 cyl in line
Bore & stroke ..... 2.56″ x 3.94″
Capacity ..... 1991 cc
Comp ratio ..... 8.5:1 or 9.0:1
Head material ..... Cast Iron
Port size ..... Intake: 1.375″, Exhaust 1.25″
Piston material ... Aluminum
Piston weight ..... 10.75 oz
Timing data:
Intake .... Open 12-1/2°BTDC, Close 50°ABDC
Exhaust ...Open 50°BBDC, Close 20°ATDC
Valve lift: ..... 0.375″
Valve head dia:
Intake .... 1.375″
Exhaust ...1.25″
Valve spring ..... Inner 20 lbs, Outer 55 lbs
Carburation ..... Three SU #AUG.700

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.4		2.7
2	1.9	or	1.9
3	1.4		1.3
4	1.0		1.0

Final drive ratios: 3.64, 3.91, 4.1, 4.3

CHASSIS
Wheelbase ..... 90″
Track dimension, front ..... 50″
Track dimension, rear ..... 50″
Shock absorber ..... Armstrong Tubular
Steering ratio ..... 1 7/8 turns
Tire size ..... 16″x5.50″/15″x5.50″

BRAKES LINING AREA
Front: 74.3″ sq
Rear: 71.5″ sq

APPROVED OPTIONAL EQUIPMENT
Second ignition coil
Aluminin fuel atnk
Heavy duty clutch
Larger tank (25 gal)
Second petrol pump
Overdrive
Duplicated fuel line
Oil cooler
Air straighteners on carburetors
Sports Exhaust Manifold
Disc brakes on front wheels (28.2″ sq)
Extra leaf to road springs
9 leaves in front
8 leaves in rear

Manufacturer: A.C. Class: C
Model: Ace-Bristol and Aceca-Bristol

DESCRIPTION:

2-Seater Roadster or Coupe
Aluminum Bodywork
Dry Weight: 1685 lbs

ENGINE:

Type	OHV 6 cyl in line
Bore & stroke	2.59″ x 3.78″
Capacity	1971 cc
Comp ratio	8.5:1 or 9.5:1
Head material	Aluminum
Port size	Intake: 1.250″ ± 0.010″, Exhaust 1.180″ ± 0.010″
Piston material ...	Aluminum
Piston weight	8.5:1 = 11oz, 9.5:1 = 12oz
Timing data (engine hot):	
Intake	Open 32°BTDC, Close 42°ABDC
Exhaust ...	Open 42°BBDC, Close 32°ATDC
Valve lift:	0.343″
Valve head dia:	
Intake	1.540″ ± 0.010″
Exhaust ...	1.31″
Valve spring	101.5 ± 8 lbs @ 1.028″
Carburation	Three Solex 32 PBI 6

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.4		2.7
2	1.9	or	1.9
3	1.4		1.3
4	1.0		1.0

Final drive ratios: 3.64, 3.91, 4.1, 4.3

CHASSIS

Wheelbase	90″
Track dimension, front	50″
Track dimension, rear	50″
Shock absorber	Armstrong Tubular
Steering ratio	1 7/8 turns
Tire size	16″x5.50″/15″x5.50″

BRAKES LINING AREA

Front: 74.3″ sq
Rear: 71.5″ sq

APPROVED OPTIONAL EQUIPMENT

Second ignition coil
Aluminum fuel tank
Second petrol pump
Heady duty clutch
Duplicated fuel line
Oil cooler
Disc brakes on front wheels (28.2″ sq)
Air straighteners on carburetors
Sports exhaust manifold
Overdrive
Larger fuel tank (25 gal)
Extra leaf to road springs
9 leaves in front
8 leaves in rear

Manufacturer: Alfa Romeo Class: G
Model: Guilietta Sprint and Spider

DESCRIPTION:

2-Seater Roadster or Coupe
Dry Weight: 1809 lbs Spider, 1970 lbs Sprint

ENGINE:

Type	DOHC 4 cyl in line
Bore & stroke	74mm x 75mm
Capacity	1290 cc
Comp ratio	9.2:1
Head material	Aluminum Alloy
Port size	Intake: 32mm, Exhaust 29mm
Piston material ...	Aluminum Alloy
Piston weight	
Timing data:	
Intake	Open 25°20′ BTDC, Close 68°ABDC
Exhaust ...	Open 61°20′ BBDC, Close 18°40′ ATDC
Valve lift:	8mm
Valve head dia:	
Intake	37mm
Exhaust ...	34mm
Valve spring	35 kg
Carburation	One Solex 35 APAI-G

TRANSMISSION AND DRIVE TRAIN:

Ratios:	
1	3.258
2	1.985
3	1.352
4	1.0
Final drive ratios:	4.1 (41/10), 4.55 (41/9), 5.12 (41/8)

CHASSIS

Wheelbase	2380mm (Sprint), 2250mm (Spider)
Track dimension, front	1292mm
Track dimension, rear	1270mm
Shock absorber	Telescopic
Steering ratio	15.5:1
Tire size	155 x 15

APPROVED OPTIONAL EQUIPMENT

Limited-slip differential (1365-32775)
Front springs (101-07-21-500-00)
Rear springs (101-07-25-510-00)
Competition fan blades (1315-61003-M)
Distributor (1315-55411)
Flywheel (1315-23705M)
Cylinder head (1315-12712)

Manufacturer: Alfa Romeo Class: D
Model: Guilietta Sprint and Spider Veloce

DESCRIPTION:

2-Seater Roadster or Coupe
Dry Weight: 1809 lbs Spider, 1970 lbs Sprint

ENGINE:

Type		DOHC 4 cyl in line
Bore & stroke		74mm x 75mm
Capacity		1290 cc
Comp ratio		10:1
Head material		Aluminum Alloy
Port size		Intake: 32mm, Exhaust 29mm
Piston material ...		Aluminum Alloy
Piston weight		0.35 kg
Timing data:		
	Intake	Open 34° BTDC, Close 63° ABDC
	Exhaust ...	Open 63° BBDC, Close 30° ATDC
Valve lift:		8.5mm
Valve head dia:		
	Intake	37mm
	Exhaust ...	34mm
Valve spring		35 kg
Carburation		Two Weber 40 DCOE

TRANSMISSION AND DRIVE TRAIN:

Ratios:		
	1	3.258
	2	1.985
	3	1.357
	4	1.0
	5	0.854 (optional)
Final drive ratios:		4.1 (41/10), 4.55 (41/9), 5.12 (41/8)

CHASSIS

Wheelbase	2380mm (Sprint), 2250mm (Spider)
Track dimension, front	1292mm
Track dimension, rear	1270mm
Shock absorber	Telescopic
Steering ratio	15.5:1
Tire size	155 x 15

APPROVED OPTIONAL EQUIPMENT

Limited-slip differential (1365-32775)
5-speed gearbos(10120-13-001-00)
Front springs (10107-21-505-00)
Rear springs (10107-25-510-00)
Competition fan blades (1315-61003M)
Flywheel (1315-23705M)
Cylinder head (1315-12715)

Manufacturer: Alfa Romeo Class: C
Model: Guilietta Sprint Speciale and Sprint Zagato

DESCRIPTION:
2-Seater Coupe
Dry Weight: 1892 lbs Speciale, 1710 lbs Zagato

ENGINE:

Type	DOHC 4 cyl in line
Bore & stroke	74mm x 75mm
Capacity	1290 cc
Comp ratio	10:1
Head material	Aluminum Alloy
Port size	Intake: 32mm, Exhaust 29mm
Piston material ...	Aluminum Alloy
Piston weight	0.35 kg
Timing data:	
Intake	Open 46° BTDC, Close 65° ABDC
Exhaust ...	Open 65° BBDC, Close 34° ATDC
Valve lift:	8.5mm
Valve head dia:	
Intake	37mm
Exhaust ...	34mm
Valve spring	35 kg
Carburation	Two Weber 40 DCOE

TRANSMISSION AND DRIVE TRAIN:

Ratios:	
1	3.258
2	1.985
3	1.357
4	1.0
5	0.854
Final drive ratios:	41/10, 41/9, 41/8

CHASSIS

Wheelbase	89″
Track dimension, front	51″
Track dimension, rear	50″
Shock absorber	Telescopic
Steering ratio	
Brakes	Finned Aluminum Drums
Tire size	155 x 15

APPROVED OPTIONAL EQUIPMENT
Crankshaft (1315-14701)
Connecting Rods (1315-16710)
Cylinder Block (10120-01-010-03)
Cylinder Head (1315-12715)
Flywheel (1315-23705M)
Limited-slip differential (1365-32775)

Manufacturer: Alfa Romeo Class: D
Model: 2000 Spider
DESCRIPTION:
2-Seater Roadster
Dry Weight: 2600 lbs

ENGINE:
Type ..... DOHC 4 cyl in line
Bore & stroke ..... 84.5mm x 88mm
Capacity ..... 1975 cc
Comp ratio .....
Head material ..... Aluminum
Port size .....
Piston material ... Aluminum
Piston weight .....
Timing data:
Intake .... Open 31°48′ BTDC, Close 78°56′ ABDC
Exhaust ...Open 65°36′ BBDC, Close 18°28′ ATDC
Valve lift: .....
Valve head dia:
Intake ....
Exhaust ...
Valve spring .....
Carburation ..... Two Solex 44 PHH

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.958
2	1.985
3	1.352
4	1.0
5	0.854

Final drive ratios: 43/9

CHASSIS
Wheelbase ..... 98.4″
Track dimension, front ..... 55.1″
Track dimension, rear ..... 53.9″
Shock absorber ..... Telescopic
Steering ratio 16.2:1
Tire size ..... 165 x 40

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Arnolt-Bristol Class: C
Model: Bolide
DESCRIPTION:
2 Seater open roadster
Steel and aluminum bodywork
Dry Weight: 2000 lb
ENGINE:
Type ..... OHV 6 cyl in line
Bore & stroke ..... 66mm x 96mm
Capacity ..... 1971 cc
Comp ratio 9.0:1, 9.5:1, 10.0:1
Head material ..... Aluminum Alloy
Port size ..... Intake: 1.25", Exhaust 1.25"
Piston material ... Aluminum Alloy
Piston weight ..... 288.976 grams
Timing data:
Intake .... Open 40° BTDC, Close 80° ABDC
Exhaust ...Open 80° BBDC, Close 40° ATDC
Valve lift: ..... 0.343"
Valve head dia:
Intake .... 1.532"
Exhaust ...1.308"
Valve spring .....
Carburation ..... Three Solex 32 BI
TRANSMISSION AND DRIVE TRAIN:
Ratios:
1 11.4
2 7.12
3 5.04 - Using 3.90:1 rear axle
4 3.90
5
Final drive ratios: 3.545 = 39/11, 3.7:1 = 37/10, 3.9 = 39/10, 4.22 = 38/9
CHASSIS
Wheelbase ..... 96.25"
Track dimension, front ..... 51.86"
Track dimension, rear ..... 54"
Shock absorber ..... Telescopic
Steering ratio 8/25
Brakes .....
Tire size ..... 5.50 x 16
APPROVED OPTIONAL EQUIPMENT
Anti-sway bar for front end
Remote control gear shift
Counter balanced crankshaft
Viscous dampener
Enlarged oil pan
Aluminum-iron brake drums
12" front brake
Knock-off wheels and hubs
Front disc brakes
Micrometer torsion bar adjuster

Manufacturer: Aston Martin Class: B
Model: DB2 (1950-1954) DB2-4 Mk I

DESCRIPTION:

2-4 Seater Coupe
Dry Weight: (not spec'd)

ENGINE:

Type	DOHC 6 cyl in line	
Bore & stroke	78mm x 90mm	
Capacity	2580 cc	
Comp ratio	6.5:1, 8.2:1	
Head material	Cast Iron	
Port size	Intake: 1.5", Exhaust 1.7"	
Piston material ...	Aluminum Alloy	
Piston weight	14.25 oz	
Timing data:		
Intake	Open 18° or 14° BTDC, Close (not spec'd)° ABDC	
Exhaust ...	Open 8° or 10° BBDC, Close (not spec'd)° ATDC	
Valve lift:	0.344"	
Valve head dia:		
Intake	1.515"	
Exhaust ...	1.365"	
Valve spring	Intake: 41.4 lb/in, Exhaust 103.8 lb/in	
Carburation	Two SU H4 Thermo 556	

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	2.92		2.92
2	1.96		1.87
3	1.33	or	1.26
4	1.00		1.00
5			

Final drive ratios:	3.50:1 = 35/10, 3.73:1 = 41/11, 3.77/1 = 49/13, 4.1:1 = 37/9
Wheelbase	(not spec'd)
Track dimension, front	54"
Track dimension, rear	54"
Shock absorber	Telescopic
Steering ratio	14.5:1
Brakes	
Tire size	6.00 x 16

APPROVED OPTIONAL EQUIPMENT

Two SU H6 Thermo 571 carburators
Three Weber 35 DCO or 36 DCF carburetors

Manufacturer: Aston Martin Class: B
Model: DB2-4 Mk I and Mk II

DESCRIPTION:

2-4 Seater Coupe
Dry Weight: 2594 lbs

ENGINE:

Type	DOHC 6 cyl in line
Bore & stroke	83mm x 90mm
Capacity	2922 cc
Comp ratio	8.2:1 or 8.7:1
Head material	Cast Iron
Port size	Intake: 1.5", Exhaust 1.7"
Piston material ...	Aluminum Alloy
Piston weight	14.25 oz
Timing data:	
Intake	Open 10° BTDC, Close (not spec'd)° ABDC
Exhaust ...	Open 10° BBDC, Close (not spec'd)° ATDC
Valve lift:	0.344" or 3.75"
Valve head dia:	
Intake	1.515"
Exhaust ...	1.365"
Valve spring	Intake: 41.4 lb/in, Exhaust 103.8 lb/in
Carburation	Two SU H6 701

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	2.92		2.92
2	1.96		1.87
3	1.33	or	1.26
4	1.00		1.00
5			

Final drive ratios: 3.31:1 = 43/13,3.50:1 = 35/10,3.53:1 = 46/13,3.73:1 = 41/11, 3.77:1 = 49/13,4.09:1 = 45/11,4.10:1 = 37/9,4.27:1 = 47/11

CHASSIS

Wheelbase	(not spec'd)
Track dimension, front	54"
Track dimension, rear	54"
Shock absorber	Telescopic
Steering ratio	14.5:1
Brakes	12 in Drums, Lining area = 174 in sq
Tire size	6.00 x 16

APPROVED OPTIONAL EQUIPMENT

Larger valves (cyl head conversion VB6L/1)
Three Weber 35 DCO carburators

Manufacturer: Aston Martin Class: B
Model: DB2-4 Mk III

DESCRIPTION:

2-4 Seater Coupe or Convertible
Aluminum Bodywork
Dry Weight: 2800 lbs

ENGINE:

Type	DOHC 6 cyl in line
Bore & stroke	83mm x 90mm
Capacity	2922 cc
Comp ratio	8.2:1, 8.7:1, 9.2:1
Head material	Cast Iron
Port size	Intake: 1.5", Exhaust 1.7"
Piston material ...	Aluminum Alloy
Piston weight	14.25 oz
Timing data:	
Intake	Open 10° BTDC, Close (not spec'd)° ABDC
Exhaust ...	Open 10° BBDC, Close (not spec'd)° ATDC
Valve lift:	0.375" or 0.435"
Valve head dia:	
Intake	1.675"
Exhaust ...	1.575"
Valve spring	Intake: 41.4 lb/in, Exhaust 103.8 lb/in
Carburation	Two SU H6 701

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	2.92		2.92
2	1.96		1.87
3	1.33	or	1.26
4	1.0		1.00
5			

Final drive ratios: 3.31:1 = 43/13, 3.54:1 = 46/13, 3.77/1 = 49/13
4.09:1 = 45/11, 4.27:1 = 47/11

CHASSIS

Wheelbase	(not spec'd)
Track dimension, front	54"
Track dimension, rear	54"
Shock absorber	Telescopic
Steering ratio	14.5:1
Brakes	Front Disc, Rear Al-fin (12" x 1-1/4")
Tire size	600 x 16

APPROVED OPTIONAL EQUIPMENT

Oil cooler radiator
Laycock de Normaanville O.D.
Larger fuel tank (33.6 U.S. gal)
Large filler
Three Weber 35DCO Carburators

Manufacturer: Aston Martin Class: B
Model: DB4

DESCRIPTION:
2-4 Seater Coupe
Dry Weight: 2880 lbs

ENGINE:

Type	DOHC 6 cyl in line
Bore & stroke	92mm x 92mm (3.622″ x 3.622″)
Capacity	3670 cc (223.8″)
Comp ratio	8.25:1
Head material	Aluminum Alloy
Port size	Intake: 1.325″, Exhaust 1.65″
Piston material ...	Aluminum Alloy
Piston weight	1.8 lbs
Timing data:	
Intake	Open 28° BTDC, Close 58° ABDC
Exhaust ...	Open 62° BBDC, Close 22° ATDC
Valve lift:	Intake: 0.45″, Exhaust: 0.425″
Valve head dia:	
Intake	1.875″
Exhaust ...	1.710″
Valve spring	Inner: 9.8 lb fitted, Outer: 44.5 lb fitted
Carburation	Two SU/HD8

TRANSMISSION AND DRIVE TRAIN:

Ratios:	
1	2.49
2	1.74
3	1.25
4	1.00
5	
Final drive ratios:	3.31:1 = 43/13, 3.54:1 = 46/13, 3.77/1 = 49/13

CHASSIS

Wheelbase	98″
Track dimension, front	54″
Track dimension, rear	53.5″
Shock absorber	Telescopic
Steering ratio	14:1
Brakes	Brake lining area: 491 in sq
Tire size	6.00 x 16

APPROVED OPTIONAL EQUIPMENT
Power-Loc differential
Oil cooler
Three Weber Dual Horizontal Carburators

Manufacturer: Aston Martin Class: A
Model: DB4 GT
DESCRIPTION:
2-4 Seater Coupe
Aluminum-Magnesium Bodywork
Dry Weight: 2530 lbs

ENGINE:

Type	DOHC 6 cyl in line
Bore & stroke	92mm x 92mm (3.622" x 3.622")
Capacity	3670 cc (223.8")
Comp ratio	9.0:1
Head material	Aluminum Alloy
Port size	Intake: 1.7", Exhaust 1.65"
Piston material ...	Aluminum Alloy
Piston weight	1.68 lbs with rings and pin
Timing data:	
Intake	Open 47-1/2° BTDC, Close 69-1/2° ABDC
Exhaust ...	Open 66° BBDC, Close 41° ATDC
Valve lift:	0.45"
Valve head dia:	
Intake	2.010"
Exhaust ...	1.875"
Valve spring	Inner: 25.5 lb fitted, Outer: 64 lb fitted
Carburation	Three Weber 45 DCOE 4

TRANSMISSION AND DRIVE TRAIN:

Ratios:	
1	2.49
2	1.74
3	1.25
4	1.00
5	
Final drive ratios:	2.93, 3.31, 3.54, 3.77, 4.09

CHASSIS

Wheelbase	(not spec'd)
Track dimension, front	(not spec'd)
Track dimension, rear	(not spec'd)
Shock absorber	Front: Telescopic, Rear: Lever
Steering ratio	14:1
Brakes	Disc (Girling)
Tire size	6.00 x 16

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Austin Healey Class: D
Model: 3000 and 3000 Mk II

DESCRIPTION:
2-4 Seater Roadster
Steel and Aluminum Body
Dry Weight: 2-Seater 2381 lb, 4-Seater 2880 lbs

ENGINE:

Type	OHV 6 cyl in line
Bore & stroke	83.6mm x 88.9mm
Capacity	2912 cc
Comp ratio	9.3:1, 9.6:1
Head material	Cast Iron
Port size	Intake: 1.325", Exhaust 1.65"
Piston material ...	Aluminum Alloy
Piston weight	1 lb 5 oz 11 drams complete
Timing data:	
Intake	Open 5°,16°,5° BTDC, Close 45°,56°,45° ABDC
Exhaust ...	Open 40°,51°,51° BBDC, Close 10°,21°,21° ATDC
Valve lift:	0.314" or 0.356"
Valve head dia:	
Intake	1.75"
Exhaust ...	1.56"
Valve spring	Inner: 26 lb, Outer: 55.7 lb, fitted & closed
Carburation	Two SU/HD6

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	2.93	2.413
2	2.053	1.722
3	1.039	1.195
4	1.00	1.00
5		

Final drive ratios: 3.545:1, 3.909:1, 4.1:1, 4.3:1, 4.8:1

CHASSIS

Wheelbase	91.23"
Track dimension, front	48.75"
Track dimension, rear	50"
Shock absorber	Lever
Steering ratio	15:1
Tire size	5.90 x 15

APPROVED OPTIONAL EQUIPMENT
Camshafts (AEC865 or (690/1223)
Valve Springs (1G 2887)
SU HD8 Carburators (AUC 938)
3 x SU 2" Carburators and manifold
25 gal or 15 gal gas tank
Cold air box (H.8427)
Large Sump (H.8427)
Front springs (1H.4092) or (1H.4055)
Rear sprints (H.8776)
Anti Roll Bar (H.8275)
Oil Cooler (AJA.5291)
Wire Wheels (60 spoke - AHH 8000/8001)
Overdrive
Flare pipes on carburator
Distributor (LT 17001)
Rear disc brake kit (H.8462)
Additioal front dampers-telescopic (H.8792)
Close ratio gear box (H.8794)
Light-weight seats (Q.2609)
Limited slip differential (HAC-25)

Manufacturer: Austin Healey Class: E
Model: 100-6 BN4, BN6

DESCRIPTION:

2-4 Seater Roadster
Dry Weight: 2435 lbs

ENGINE:

Type	OHV 6 cyl in line
Bore & stroke	3.125″ x 3.5″
Capacity	2639 cc
Comp ratio	8.25:1, 9.5:1
Head material	Cast Iron
Port size	Intake: 1.380″, Exhaust 1.193″
Piston material ...	Aluminum Alloy
Piston weight	
Timing data:	
Intake	Open 5° BTDC, Close 45° ABDC
Exhaust ...	Open 40° BBDC, Close 10° ATDC
Valve lift:	0.356″
Valve head dia:	
Intake	1.693″
Exhaust ...	1.420″
Valve spring	Inner: 30 lb fitted, Outer: 60.5 fitted
Carburation	Two SU H4

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.077	3.077	
2	1.913	1.913	
3	1.333	1.333	(OD 1.034)
4	1.00	1.00	(OD 0.778)
5			

Final drive ratios: 3.9:1, 4.1:1, 4.3:1, 4.8:1

CHASSIS

Wheelbase	92″
Track dimension, front	48.75″
Track dimension, rear	50″
Shock absorber	Lever
Steering ratio	14.1:1
Brakes	
Tire size	5.90 x 15, 6.00 x 15

APPROVED OPTIONAL EQUIPMENT

6 port head
Disc brakes (H.8249)
High lift camshaft (H.8339)
Competition clutch (H.8255/6)
25 gal or 15 gal gas tank
Cold air box (H.8427)
Large capacity sump (H.8416)
9.5:1 pistons (H.8417)
Lightweight flywheel (H.8257)
Cold air box (H.8427)
Stiff frong spring (H.8422)
Modified exhaust system (H.8251)
Anti-roll bar (H.8275)
Wire Wheels (60 spoke - AHH 8000/8001)
Oil cooler (AJA-5291)
Limited slip differential (HAC-25)

Manufacturer: Austin Healey Class: E
Model: BN1, BN2
DESCRIPTION:
2-Seater Roadster
Dry Weight: 2176 lbs
ENGINE: Type ..... OHV 4 cyl in line
Bore & stroke ..... 3.4375" x 4.375"
Capacity ..... 2660 cc
Comp ratio 7.5:1
Head material ..... Cast Iron
Port size ..... Intake: 1.5", Exhaust 1.25"
Piston material ... Aluminum Alloy
Piston weight ..... 1 lb 8 oz 14 drms, complete
Timing data:
Intake .... Open 5°BTDC or10°BTDC or 45° BBDC
Close 45°ABDC 50°ABDC 15° ATDC
Exhaust ...Open 40° BBDC,
Close 10° ATDC
Valve lift: ..... 0.39"
Valve head dia:
Intake .... 1.725"/1.730"
Exhaust ...1.415"/1.420"
Valve spring ..... Inner: 22.5 lb fitted, Outer: 6 lb5 fitted
Carburation ..... Two SU H4
TRANSMISSION AND DRIVE TRAIN:
Ratios: BN1 BN2
1 2.25 2.25 3.077
2 1.47 (od 1.034) 1.42 (od 1.103) 1.913
3 1.00 (od 0.756) 1.00 (od 0.778)
4 1.333 (od 1.034) 1.00 (od 0.778)
5
Final drive ratios: 3.667:1,3.909:1, 4.10:1, 4.125:1,4.3:1, 4.8:1
CHASSIS
Wheelbase ..... 90"
Track dimension, front ..... 48.75"
Track dimension, rear ..... 50"
Shock absorber ..... Lever
Steering ratio 12.6:1,14.7:1
Tire size ..... 5.90 x 15
APPROVED OPTIONAL EQUIPMENT
Le mans Kit (P.281)—includes:
HD Valve springs (1B.2814)
HD Valve springs (1B.2813)
1-3/4" Carburetors
Cold air box (7H.1724)
Hi-lift camshaft (1B.2892)
Dist. spec. adv. curve (7H.1727)
HD rear springs (1B.8929)
HD anti-roll bar (7H.1721)
HD front shocks (1B.8935)
HD front springs (H.8422)
25 gal or 15 gal gas tank
Overdrive
Alfin brake drums
Disc brake kit (H.8249)
Competition clutch (H.8255/6)
Wire Wheels (60 spoke - AHH 8000/8001)
Oil cooler (AJA-5291)
Le Mans type hi-comp pistons
Limited slip differential (HAC-25)

Manufacturer: Austin Healey Class: G and H
Model: Sprite (thru 1961)

DESCRIPTION:
2-Seater Roadster
Dry Weight: 1408 lbs

ENGINE:
Type ..... BMC Type A OHV 4 cyl in line
Bore & stroke ..... 63mm x 76mm
Capacity ..... 948 cc
Comp ratio 8.3:1
Head material ..... Cast Iron
Port size ..... Intake: 1.125", Exhaust 1-13/16" x 1.0"
Piston material ... Aluminum
Piston weight .....
Timing data:
Intake .... Open 5°BTDC, Close 45°ABDC
Exhaust ...Open 40° BBDC, Close 10° ATDC
Valve lift: ..... 0.28"
Valve head dia:
Intake .... 1-3/32"
Exhaust ...1.0"
Valve spring ..... 52 lb @ 1.2968", 85 lb @ 1.012"
Carburation ..... Two SU H1

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.628	3.0
2	2.374	1.99
3	1.412	1.35
4	1.0	1.0
5		

Final drive ratios: 3.73:1, 4.22:1, 4.55:1, 5.375

CHASSIS
Wheelbase ..... 80"
Track dimension, front ..... 45-1/4"
Track dimension, rear ..... 44-3/4"
Shock absorber ..... Lever
Steering ratio ..... 2-1/3 turns
Brakes ..... Area 67.5 in sq
Tire size ..... 5.20 x 13

APPROVED OPTIONAL EQUIPMENT (Class G & H - H only allowed this equipment)
Close ratio gear box (Q.2354)
Anti-roll bar (Q.2315)
Large sump (Q.2341)
Front springs (Q.2334)
Rear springs (Q.2335) or (AHA5468)
Fuel tank (Q.2336)
Exhaust mainifold (Q.2345) or (AHA5448)
Electric fuel pump (H.3592)(AUA-56)

APPROVED OPTIONAL EQUIPMENT (Class G only — prohibited in class H)
Competition exhaust system (Q.234/2347)
Crankshaft-Sebring type (Q.262/2629)
Crankshaft (AEA 440)
Alfin brake drums (Q.2491)
8" front brakes (Q.2353)
Disc brakes (Q.2337, Q.2549, Q.2552)
Pistons (2A.946)
Valve springs (2A.950, AEA401)
2 x 1-1/4" SU carburetors (Q.2343)
2 x 1-1/2" SU carburetors (Q.2504/5)
Manifold (Q.2344)
Cylinder head (Q.2302)

Manufacturer: Austin Healey Class: G and H
Model: Sprite (thru 1961)
APPROVED OPTIONAL EQUIPMENT CONT.(Class G only — prohibited in class H)
Oil cooler (Q.2342)
Cold air box (Q.2350)
Polished connecting rods (Q.2346)
Flywheel (Q.2348) or (AEA 408)
Clutch (Q.2349) or (AEJ 31)
Distributor (2A.951)
Light weight seats (Q.2609)
Wire wheels (Q.2424/31)
Large inlet valves (Q.2494)
Large exhaust valves (Q.2495)
Exhaust valves (AEA 400)
Camshaft (2A.948) In open 16°BTDC, close 56°ABDC; lift 0.31″
Ex open 51°BBDC, close 21°ATDC; clearance 0.015″
Camshaft (Q.2629) In open 20°BTDC, close 80°ABDC; lift 0.38″
Ex open 50°BBDC, close 50°ATDC; clearance 0.015″
Cylinder head Mk II
Double valve springs (Q.2628)
Limited slip differential (HAC23)
Blanking sleeve (11G176)
Valve spring collars (AEA 402-432)

Manufacturer: Austin Healey Class: G
Model: Sprite Mk II

DESCRIPTION:

2-Seater Roadster
Dry Weight: 1280 lbs

ENGINE:

Type	BMC Type A OHV 4 cyl in line
Bore & stroke	63mm x 76mm
Capacity	948 cc
Comp ratio	9:1
Head material	Cast Iron
Port size	Intake: 26mm, Exhaust 25mm
Piston material ...	Aluminum
Piston weight	
Timing data:	
Intake	Open 5°BTDC, Close 45°ABDC
Exhaust ...	Open 51° BBDC, Close 21° ATDC
Valve lift:	7.97mm
Valve head dia:	
Intake	29.36mm
Exhaust ...	25.4mm
Valve spring	52 lb @ 1.2968", 85 lb @ 1.012"
Carburation	Two SU H2

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.2
2	1.916
3	1.357
4	1.0
5	

Final drive ratios: 3.73:1, 3.909:1, 4.22:1, 4.55:1, 4.875:1, 5.375:1

CHASSIS

Wheelbase	80"
Track dimension, front	45-1/4"
Track dimension, rear	44-3/4"
Shock absorber	Lever
Steering ratio	2-1/3 turns
Brakes	
Tire size	5.20 x 13

APPROVED OPTIONAL EQUIPMENT

Close ratio gear box (Q.2354)
Anti-roll bar (Q.2315)
Large sump (Q.2341)
Front springs (Q.2334)
Rear springs (Q.2335) or (AHA5468)
Fuel tank (Q.2336)
Exhaust mainifold (Q.2345) or (AHA5448)
Electric fuel pump (H.3592)(AUA-56)
Competition exhaust system (Q.234/2347)
Crankshaft-Sebring type (Q.262/2629)
Crankshaft (AEA 440)
Alfin brake drums (Q.2491)
8" front brakes (Q.2353)
Disc brakes (Q.2337, Q.2549, Q.2552)
Pistons (2A.946)
Valve springs (2A.950, AEA401)
2 x 1-1/4" SU carburetors (Q.2343)
2 x 1-1/2" SU carburetors (Q.2504/5)
Manifold (Q.2344)
Cylinder head (Q.2302)
Oil cooler (Q.2342)

Manufacturer: Austin Healey Class: G
Model: Sprite Mk II
APPROVED OPTIONAL EQUIPMENT CONT.

Cold air box (Q.2350)
Polished connecting rods (Q.2346)
Flywheel (Q.2348) or (AEA 408)
Clutch (Q.2349) or (AEJ 31)
Distributor (2A.951)
Light weight seats (Q.2609)
Wire wheels (Q.2424/31)
Large inlet valves (Q.2494)
Large exhaust valves (Q.2495)
Exhaust valves (AEA 400)
Camshaft (2A.948) In open 16°BTDC, close 56°ABDC; lift 0.31"
Ex open 51°BBDC, close 21°ATDC; clearance 0.015"
Camshaft (Q.2629) In open 20°BTDC, close 80°ABDC; lift 0.38"
Ex open 50°BBDC, close 50°ATDC; clearance 0.015"
Cylinder head Mk II
Double valve springs (Q.2628)
Limited slip differential (HAC23)
Blanking sleeve (11G176)
Valve spring collars (AEA 402-432)

Manufacturer: Auto Union Class: H
Model: 1000 SP
DESCRIPTION:
2-Seater Coupe
Dry Weight: 20900 lbs

ENGINE:	Type	2-stroke 3 cyl in line
	Bore & stroke	74mm x 76mm
	Capacity	980 cc
	Comp ratio	8:1
	Head material	Aluminum
	Port size	
	Piston material ...	Aluminum
	Piston weight	
	Timing data:	
	Intake	
	Exhaust ...	
	Valve lift:	
	Valve head dia:	
	Intake	
	Exhaust ...	
	Valve spring	
	Carburation	Zenith 32 NDX

TRANSMISSION AND DRIVE TRAIN:

Ratios:		
	1	16.71
	2	9.71
	3	5.73
	4	4.0
	5	

Final drive ratios: 4.375:1 = 35/8

CHASSIS

Wheelbase	92″
Track dimension, front	50″
Track dimension, rear	53″
Shock absorber	
Steering ratio	
Brakes	110.2 in sq
Tire size	155 x 15

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Berkeley Class: E
Model: Sports 492 cc

DESCRIPTION:
2-Seater Roadster
Fiberglass Body
Dry Weight: 867 lbs

ENGINE:

Type	3 cyl 2 stroke
Bore & stroke	58mm x 62mm
Capacity	492 cc
Comp ratio	7.4:1 up to 9.87:1
Head material	Aluminum Alloy
Port size	Intake: 1-1/8"x11/16", Exhaust 1-5/16"
Piston material ...	Aluminum Alloy
Piston weight	5 oz
Timing data: 2 Stroke	
Carburation	3 x Amal 376/9

TRANSMISSION AND DRIVE TRAIN:

Ratios: Sprocket tooth	17(std)	15	16	18
1	15.1	17.4	16.3	14.5
2	9.12	10.3	9.7	8.6
3	6.33	7.15	6.7	5.96
4	4.61	5.22	4.9	4.35
5				

Final drive ratios: 2.23:1

CHASSIS

Wheelbase	70"
Track dimension, front	44"
Track dimension, rear	44"
Shock absorber	Girling or Armstrong
Steering ratio	2-1/4 turns
Brakes	
Tire size	5.20 x 12

APPROVED OPTIONAL EQUIPMENT
Electric fuel pump
Swill pot attachment for carburators
Rear mounted fuel tank
Super sports pistons
Additional hood air outlets

Manufacturer: Berkeley Class: G
Model: B.95

DESCRIPTION:

2-Seater Fiberglass Roadster
Dry Weight: 924 lbs

ENGINE:

Type	2 cyl 4 stroke
Bore & stroke	70mm x 90mm
Capacity	692 cc
Comp ratio	7.25:1
Head material	Aluminum Alloy
Port size	Intake: 34.9mm, Exhaust 31.8mm
Piston material ...	Aluminum Alloy
Piston weight	255.15 grams w/rings
Timing data:	
Intake	Open 30° BTDC, Close 60° ABDC
Exhaust ...	Open 75° BBDC, Close 35° ATDC
Valve lift:	0.3125″
Valve head dia:	
Intake	39.7mm
Exhaust ...	34.9mm
Head thickness	1-11/64″ Combusition chamber depth in cyl head
Valve spring	
Carburation	One Amal 375/41

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	13.7	14.41	15.14	13.0	13.0
2	8.62	9.06	9.52	7.79	8.20
3	5.59	6.25	6.57	5.38	5.66
4	4.31	4.53	4.76	4.30	4.59
5					

Final drive ratios: 2.23:1, 2.35:1, 2.47:1

CHASSIS

Wheelbase	70″
Track dimension, front	42.25″
Track dimension, rear	42″
Shock absorber	Combined spring-damper
Steering ratio	10.9:1
Brakes	65 in sq
Tire size	5.20 x 12

APPROVED OPTIONAL EQUIPMENT

Twin SU float chambers
Additional air outlets
7-1/2, 9, 11 gal fuel tanks

Manufacturer: Berkeley Class: G
Model: B.105

DESCRIPTION:
2-Seater Fiberglass Roadster
Dry Weight: 924 lbs

ENGINE:
Type ..... 2 cyl 4 stroke
Bore & stroke ..... 70mm x 90mm
Capacity ..... 692 cc
Comp ratio 8:1
Head material ..... Aluminum Alloy
Port size ..... Intake: 34.9mm, Exhaust 31.8mm
Piston material ... Aluminum Alloy
Piston weight ..... 255.15 grams w/rings
Timing data:
Intake .... Open 24° BTDC, Close 73° ABDC
Exhaust ...Open 83° BBDC, Close 35° ATDC
Valve lift: .....
Valve head dia:
Intake 39.7mm
Exhaust ...34.9mm
Head thickness .... 1-11/64" Combusition chamber depth in cyl head
Valve spring .....
Carburation ..... One Amal 10/TT/9

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	13.7	14.41	15.14	13.0	13.0
2	8.62	9.06	9.52	7.79	8.20
3	5.59	6.25	6.57	5.38	5.66
4	4.31	4.53	4.76	4.30	4.59
5					

Final drive ratios: 2.23:1, 2.35:1, 2.47:1

CHASSIS
Wheelbase ..... 70"
Track dimension, front ..... 42.25"
Track dimension, rear ..... 42"
Shock absorber ..... Combined spring-damper
Steering ratio 10.9:1
Brakes ..... 65 in sq
Tire size ..... 5.20 x 12

APPROVED OPTIONAL EQUIPMENT
Twin SU float chambers
Additional air outlets
7-1/2, 9, 11 gal fuel tanks

Manufacturer: BMW Class: C
Model: 507
DESCRIPTION:
2-Seater Roadster or Coupe
Dry Weight: 2816 lbs

ENGINE:

Type	V8
Bore & stroke	82mm x 75mm
Capacity	3146 cc
Comp ratio	8:1
Head material	Aluminum
Port size	Intake: 30.5mm dia, Exhaust: 32.0mm dia
Piston material ...	Aluminum
Piston weight	0.560 Kg
Timing data:	
Intake	Open 38° BTDC, Close 73° ABDC
Exhaust ...	Open 73° BBDC, Close 38° ATDC
Valve lift:	8mm
Valve head dia:	
Intake	42mm
Exhaust ...	38mm
Valve spring	67.2Kg
Carburation	Zenith NDIX 32

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.39
2	2.07
3	1.36
4	1.00
5	

Final drive ratios: 3.4 = 41/12, 3.7 = 37/10, 3.9 = 39/10

CHASSIS

Wheelbase	2480mm
Track dimension, front	1445mm
Track dimension, rear	1425mm
Shock absorber	1425mm
Steering ratio	16.3:1
Brakes	
Tire size	6.00 x 16

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Chevrolet Class: B
Model: Corvette 1953-1954
DESCRIPTION:
Dry Weight: not specified
ENGINE:
Type ..... 6 cyl in line
Bore & stroke ..... 3-9/16" x 3-15/16"
Capacity ..... 3860 cc
Comp ratio 8:1
Head material ..... Cast Iron
Port size ..... Intake 1.44", Exhaust 1.28"
Piston material ... Aluminum w/steel struts
Piston weight ..... 18.88 oz
Timing data:
Intake .... Open 19°30' BTDC, Close 224°30 ATDC
Exhaust ...Open 239 BTDC, Close 5° ATDC
Valve lift: ..... 0.3987" (std) or 0.394" (opt) at zero lash
Valve head dia:
Intake .... 1.88"
Exhaust ...1.505"
Valve spring ..... Outer 72 lbs @ 1.858"; 160 lbs @ 1.462"
Inner 31 lbs @ 1.788"; 61 lbs @ 1.392"
Carburation ..... Three Carter #3706989
TRANSMISSION AND DRIVE TRAIN:
Ratios:
1 Powerglide
2 "
3 "
4 "
5 "
Final drive ratios: 3.55 = 11/39
CHASSIS
Wheelbase ..... 101.85"
Track dimension, front ..... 56.7"
Track dimension, rear ..... 58.8"
Shock absorber ..... Delco
Steering ratio 21:1
Brakes .....
Tire size ..... 6.70 x 15
APPROVED OPTIONAL EQUIPMENT

Manufacturer: Chevrolet Class: B
Model: Corvette #2934 1955-1956

DESCRIPTION:
2-Seater Convertible
Fiberglass body
Dry Weight: 2829 lbs

ENGINE:
Type ..... 90° V-8 (OHV)
Bore & stroke ..... 3.75" x 3.00"
Capacity ..... 4343 cc
Comp ratio 9.25:1, 8:1
Head material ..... Cast Iron
Port size ..... Intake 1.61",Exhaust 1.35"
Piston material ... Aluminum Alloy w/steel strut
Piston weight ..... 18.41 oz
Timing data:
Intake .... Open 21°30'/35° BTDC, Close 242°30/252° ABDC
Exhaust ...Open 242°30'/256° BBDC, Close 23°30/31° ATDC
Valve lift: .....
Valve head dia:
Intake .... 1.725"
Exhaust ...1.505"
Valve spring ..... Outer 79 lbs @ 1.696":169 lbs @1.306"
Inner 10 lb
Carburation ..... One or Two Carter WCFB 4 bbl

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	2.94	2.21	Powerglide
2	1.68	1.32	
3	1.00	1.00	
4			
5			

Final drive ratios: 3.27,3.55,3.70, 4.11

CHASSIS
Wheelbase ..... 101.85"
Track dimension, front ..... 57"
Track dimension, rear ..... 59"
Shock absorber ..... Telescopic
Steering ratio 21:1
Brakes .....
Tire size ..... 6.70 x 15

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Chevrolet Class: B
Model: Corvette 1957-1961

DESCRIPTION:
2-Seater Convertible
Fiberglass body
Dry Weight: 2905 lbs

ENGINE:
Type ..... 90° V-8 (OHV)
Bore & stroke ..... 3.875″ x 3.00″
Capacity ..... 283 cu in (4638 cc)
Comp ratio 9.5, 10.5, 11:1
Head material ..... Cast Iron
Port size ..... Intake 1.61″ (1.82″-11:1 head only),Exhaust 1.35″
Piston material ... Aluminum Alloy
Piston weight ..... 21.12 oz
Timing data:
Intake .... Open 12°30′/35° BTDC, Close 57°30/72° ABDC
Exhaust ...Open 54°30′/76° BBDC, Close 15°30/31° ATDC
Valve lift: ..... 0.3987″ (std) or 0.394″ (opt) at zero lash
Valve head dia:
Intake .... 1.725″
Exhaust ...1.505″
Valve spring ..... Outer 79 lbs @ 1.696″:169 lbs @1.306″
Inner Damper 10 lb
Carburation ..... One or Two Carter WCFB 4 bbl or Rochester FI

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	2.21	2.20	2.47	Powerglide
2	1.32	1.66	1.53	
3	1.0	1.31	1.00	
4		1.0		
5				

Final drive ratios: 3.36, 4.11, 4.56 (3 speed)
4.11, 4.56 (4 speed limited slip)
3.55 (Power glide)

CHASSIS
Wheelbase ..... 101.85″
Track dimension, front ..... 57″
Track dimension, rear ..... 59″
Shock absorber ..... Telescopic
Steering ratio ..... 21:1 or 16.3:1
Brakes ..... 157.2″sq(std), 120″sq(opt), 129″sq(opt)
Tire size ..... 6.70 x 15

APPROVED OPTIONAL EQUIPMENT
Heavy duty radiator
Cross flow radiator
11.1 compression heads w/large valves (1.945″)
24 gal fuel tank
Steel disc wheels 15″ x 5.5″
Dual 4-barrel carburator w/standard camshaft
Dual 4-barrel carburator w/special camshaft (9.5:1 compression ratio)
Fuel Injection equipement with standard camshaft
Fuel injection equipment with special camshaft
Heads-special spark plug cooling provisions, special valves
Domed pistons (10.5 and 11.0:1)
Special crankshaft balancer
High tension wiring harness
Outside air intakes
8000 RPM tachometer
Heavy duty brake and suspension equipment (FI only)
Heavy duty front and rear springs

Manufacturer: Chevrolet Class: B
Model: Corvette 1957-1961
APPROVED OPTIONAL EQUIPMENT CONT.

Heavy duty front and rear shock absorbers
Heavy duty stbilizer bar
Fast steering adapter
Finned CI brake drums of larger width w/ vented flange plates, airscoops & ducts
Sintered iron brake linings (RPO 686, 687)
Four speed transmission
Powerglide automatic transmission
Positiraction rear axle with vents and bafffles in rear axle (not avail w/PG)

Manufacturer: Chevrolet Class: A
Model: Corvette 1962

DESCRIPTION:

2-Seater Convertible
Fiberglass body
Dry Weight: 3065 lbs

ENGINE:

Type	90° V-8 (OHV)
Bore & stroke	4.0″ x 3.25″
Capacity	327 cu in
Comp ratio	10.25-11.25:1
Head material	High Chrome Iron
Port size	
Piston material ...	Aluminum Alloy
Piston weight	25.75 oz (w/strut)
Timing data:	
Intake	Open 32°/35° BTDC, Close 87°/72° ABDC
Exhaust ...	Open 74°/76° BBDC, Close 45°/31° ATDC
Valve lift:	0.3987″/0.3998″
Valve head dia:	
Intake	1-23/32″ or 1-15/32
Exhaust ...	1-1/2″
Valve spring	Outer 65-80 lbs @ 1-45/64″:155-170 lbs @ 1-5/16″ Inner Damper 5-10 lb
Carburation	One or Two 4bbl Carter or Rochester Fuel Injection

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	2.47	2.20	2.54
2	1.53	1.66	1.92
3	1.0	1.31	1.51
4		1.0	1.0
5			

Final drive ratios: 3.08,3.55,3.56,3.70,4.11,4.56,4.88,5.14,5.42

CHASSIS

Wheelbase	102″
Track dimension, front	57″
Track dimension, rear	59″
Shock absorber	Telescopic
Steering ratio	21:1 or 16.3:1
Brakes	
Tire size	6.70 x 15

APPROVED OPTIONAL EQUIPMENT

All optional equipment approved to date for 1957-1961 Corvette (see 1957-1961 Corvette PCS). In addition, the following options for the 327 cu in model only:

HD suspension springs:
Front (3748140)
Rear (3748143)
Stabilizer unit front aux (3823052)
Brake Unit HD (Special) (3823053)
Tank unit (3823051)

Manufacturer: Deutsch-Bonnet Class: F and G
Model: DB HBR5 850 1955-1959

DESCRIPTION:

Fiberglass Coupe
Dry Weight: 600Kg

ENGINE:

Type	2 cyl opposed
Bore & stroke	85mm x 75mm
Capacity	850 cc
Comp Ratio	7.2:1, 7.8:1, 8:1, 8.5:1
Head material	Aluminum
Port size	Intake: 37mm, Exhaust: 41mm
Piston material ...	Aluminum
Piston weight	445 grams
Timing data:	
Intake	Open 28° BTDC, Close 58° ABDC
Exhaust ...	Open 58° BBDC, Close 28° ATDC
Valve lift:	9.6mm
Valve head dia:	
Intake	43.5mm
Exhaust ...	41.5mm
Valve spring	40Kg (100 lbs)
Carburation	One or Two Zenith NDIX 32, 36, 38

TRANSMISSION AND DRIVE TRAIN:

Ratios:				
1	20/23x9/21	22/20x9/21	20/23x9/21	22/20x9/21
2	20/23x20/26	22/20x20/26	20/23x20/26	22/20x20/26
3	20/23x1	22/20x1	20/23x1	22/20x1
4	20/23x24/16	20/23x26/17	22/20x22/20	20/23x25/18
5	20/23x9/21	22/20x20/26	22/20x1	22/20x23/20

Final drive ratios: 11/24x9/24 = 5.82, 11/24x11/31 = 6.15

CHASSIS

Wheelbase	85″
Track dimension, front	49″
Track dimension, rear	49″
Shock absorber	Telescopic
Steering ratio	11:1
Brakes	
Tire size	145x380 or 145x400

APPROVED OPTIONAL EQUIPMENT

Dual ignition cylinder heads (F-Class only)
Competition brake drums with 45mm linings for front wheels
Reinforced 145x400 Rims
Camshaft #111-15, 25-11, 25-12, 25-54
11/23 or 12/23 ring and pinion
Large fuel tank
Large filler cap (4″)
Extra capacity sump

Manufacturer: D-B-Panhard Class: F and G
Model: HBR5-850 1960-61-62

DESCRIPTION:

Fiberglass Coupe and Cabriolet
Dry Weight: 600Kg (Coupe) & 630Kg (Cabriolet)

ENGINE:

Type	Panhard "Tiger" 2 cyl opposed
Bore & stroke	85mm x 75mm
Capacity	850 cc
Comp Ratio	8:1, 8.5:1
Head material	Aluminum
Port size	Intake: 45mm, Exhaust: 45m
Piston material ...	Aluminum
Piston weight	445 grams
Timing data:	
Intake	Open 33° BTDC, Close 65° ABDC
Exhaust ...	Open 65° BBDC, Close 33° ATDC
Valve lift:	8.5mm
Valve head dia:	
Intake	43.5mm
Exhaust ...	41.5mm
Valve spring	40Kg (100 lbs)
Carburation	One or Two Zenith NDIX 38

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	20/23x10/26	20/23x10/26	20/23x10/26	22/20x10/26
2	20/23x20/26	20/23x20/26	20/23x20/26	22/20x20/26
3	20/23x1	20/23x1	20/23x1	22/20x1
4	20/23x24/16	20/23x24/16	20/23x24/16	22/10x24/16
5				

Final drive ratios: 11/24x9/24 = 5.82, 11/24x11/31 = 6.15

CHASSIS

Wheelbase	85"
Track dimension, front	49"
Track dimension, rear	49"
Shock absorber	Telescopic
Steering ratio	11:1
Brakes	
Tire size	145x380

APPROVED OPTIONAL EQUIPMENT

Dual ignition cylinder heads (F-Class only)
Competition brake drums with 45mm linings for front wheels
Reinforced 145x400 Rims
Camshaft #111-15, 25-11, 25-12, 25-54
11/23 or 12/23 ring and pinion
Large fuel tank
Large filler cap (4")
Extra capacity sump

Manufacturer: Daimler Class: C
Model: SP 250

DESCRIPTION:

Fiberglass Convertible Coupe
Dry Weight: 2090 lbs

ENGINE:

Type	V8
Bore & stroke	3″ x 2.75″
Capacity	2548 cc
Comp Ratio	8.2:1
Head material	Aluminum
Port size	Intake: 1.125″, Exhaust: 1.375″
Piston material ...	Aluminum
Piston weight	8 oz, 5-1/2 drms
Timing data:	
Intake	Open 13° BTDC, Close 65° ABDC
Exhaust ...	Open 55° BBDC, Close 23° ATDC
Valve lift:	0.295″
Valve head dia:	
Intake	1.5″
Exhaust ...	1.4375″
Valve spring	58 lbs (valve closed)
Carburation	Two SU HD6

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	2.933
2	1.742
3	1.232
4	1.0
5	

Final drive ratios: 3.58, 4.01

CHASSIS

Wheelbase	92″
Track dimension, front	50″
Track dimension, rear	48″
Shock absorber	Telescopic
Steering ratio	14:1
Brakes	Disc
Tire size	5.90x15, 5.50x15

APPROVED OPTIONAL EQUIPMENT

Wire wheels with knock-off hubs (#136201)
Overdrive
Anti roll bar (SP.4141)

Manufacturer: Denzel Class: F
Model: 1300 Super
DESCRIPTION:
2-Seater Aluminum Roadster
Dry Weight: 1320 lbs

ENGINE:
Type ..... 4 cyl opposed, air-cooled, ohv
Bore & stroke ..... 3.07" x 2.63" (78mm x 67mm)
Capacity ..... 1289 cc (78.1 cu in)
Comp ratio 8.5:1
Head material ..... Aluminum
Port size ..... Intake 1.25"; Exhaust 1.10"
Piston material ... Aluminum
Piston weight ..... 13 oz
Timing data:
Intake .... Open 15° BTDC, Close 55° ABDC
Exhaust ...Open 55° BBDC, Close 15° ATDC
Valve lift: 9.32mm
Valve head dia:
Intake .... 1.41"
Exhaust ...1.25"
Valve spring .....
Carburation ..... Two Solex 40 PH-4

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.6	2.83
2	1.88	1.81
3	1.23	1.25
4	0.815	0.875
5		

Final drive ratios: 4.375 = 35/8

CHASSIS
Wheelbase ..... 82"
Track dimension, front ..... 52"
Track dimension, rear ..... 52"
Shock absorber .....
Steering ratio 14.15
Brakes .....
Tire size ..... 5.60 X 15

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Elva Class: E
Model: Courier (1959)
DESCRIPTION:
2-Seater Fiberglass Roadster
Dry Weight: 1350 lbs

ENGINE:
Type ..... 4 cyl ohv in line (MGA)
Bore & stroke ..... 2.87" x 3.5" (73mm x 89mm)
Capacity ..... 1489 cc
Comp ratio 8.3:1
Head material ..... Cast Iron
Port size ..... Intake 1-3/8"; Exhaust 1-1/16" x 1-3/16"
Piston material ... Aluminum Alloy
Piston weight ..... 10 oz 8 drms
Timing data:
Intake .... Open 16° BTDC, Close 58° ABDC
Exhaust ...Open 51° BBDC, Close 21° ATDC
Valve lift: ..... 0.357"
Valve head dia:
Intake .... 1.5"
Exhaust ...1.281"
Valve spring ..... Outer 60-1/2 lbs, Inner 30 lbs (fitted)
Carburation ..... Two Solex 1-1/2"

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.64
2	2.214
3	1.374
4	1.0
5	

Final drive ratios: 43/10, 41/9

CHASSIS
Wheelbase ..... 90"
Track dimension, front ..... 50"
Track dimension, rear ..... 50"
Shock absorber ..... Armstrong spring-damper units
Steering ratio ..... 2-1/2 turns
Brakes .....
Tire size ..... 5.20 X 14

APPROVED OPTIONAL EQUIPMENT
MG camshaft (1H.603)
Exhaust valves (1H.1025)
Oil cooler kit (AJA.5291)
Competition clutch assembly (AHH.5457)
9.0:1 pistons (1H.1178)
10.0:1 pistons (1H.1108)
1-3/4" bore SU carburators and manifold
Heavy valve springs (1H.1111/1112)
Distributor (1H.1036)
Connecting rods (AEH.22/23)
Double fuel pump (AUA.73)

Manufacturer: Elva Class: E
Model: Courier (1960-1962)

DESCRIPTION:

2-Seater Fiberglass Roadster
Dry Weight: 1428 lbs

ENGINE:

Type	4 cyl ohv in line (MGA 1600)
Bore & stroke	75.4mm x 88.9mm
Capacity	1588 cc
Comp ratio	8.3:1
Head material	Cast Iron
Port size	Intake 1-3/8"; Exhaust 1-1/16" x 1-13/16"
Piston material ...	Aluminum Alloy
Piston weight	11 oz
Timing data:	
Intake	Open 16° BTDC, Close 58° ABDC
Exhaust ...	Open 51° BBDC, Close 21° ATDC
Valve lift:	0.290" (std); 0.35" (opt)
Valve head dia:	
Intake	1.5"
Exhaust ...	1.281"
Valve spring	Outer 62.5 lbs, Inner 30 lbs (fitted)
Carburation	Two SU 1-1/2"

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.64	2.45
2	2.214	1.62
3	1.374	1.268
4	1.0	1.0
5		

Final drive ratios: 3.7, 4.2, 4.55

CHASSIS

Wheelbase	90"
Track dimension, front	50"
Track dimension, rear	50"
Shock absorber	Telescopic
Steering ratio	2-1/2 turns
Brakes	Drums - front 9 x 1-1/2; rear 8 x 1-1/2
Tire size	5.20 X 14

APPROVED OPTIONAL EQUIPMENT

MG camshaft (1H.603)
Exhaust valves (1H.1025)
Oil cooler kit (ARH.113)
Heavy valve springs (1H.1111/1112)
Inlet manifold (AEH.200)
Two 1-3/4" bore SU carburators
9.25:1 pistons (12H.175)
Connecting rods (AEH.642-644)
Competition clutch assembly (AHH.5457)
Double fuel pump (AUA.73)
Distributor (1H.1036)
Disc brakes on front wheels (9-1/2")
Drum brakes on rear wheels (9 x 1-1/2")
Wide-rim wheels (5 in)

Manufacturer: Facel-Vega Class: F
Model: Facellia
DESCRIPTION:
2-Seater Steel Coupe and Convertible
Dry Weight:

ENGINE:
Type ..... 4 cyl dohc in line
Bore & stroke ..... 3.22″ x 3.07″
Capacity ..... 1647 cc
Comp ratio 9.4:1
Head material ..... Aluminum
Port size .....
Piston material ... Aluminum Alloy
Piston weight .....
Timing data:
Intake .... Open 21-23° BTDC, Close 64-66° ABDC
Exhaust ...Open 71-73° BBDC, Close 14-16° ATDC
Valve lift: .....
Valve head dia:
Intake 44mm
Exhaust ...38.5mm
Valve spring ..... Outer 24Kg, Inner 22Kg
Carburation ..... One Solex AP A1

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.45
2	1.96
3	1.28
4	1.0
5	

Final drive ratios: 4.10, 4.56

CHASSIS
Wheelbase ..... 96.5″
Track dimension, front ..... 51.3″
Track dimension, rear ..... 51.3″
Shock absorber ..... Telescopic
Steering ratio .....
Brakes .....
Tire size ..... 5.90 X 14

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Fairthorpe Class: E
Model: Electron Mk II

DESCRIPTION:
2-Seater Fiberglass Roadster
Dry Weight: 1150 lb (1962 Model - 950 lbs)

ENGINE:
Type ..... 4 cyl ohc in line (Coventry Climax FWA)
Bore & stroke ..... 72.4mm x 66.6mm (1960-61 model bore = 3.0″)
Capacity ..... 1098 cc (1960-61 model displacement = 1220 cc)
Comp ratio 9.8:1
Head material ..... Aluminum Alloy
Port size ..... Intake 1.1″, Exhaust 1.0″
Piston material ... Aluminum Alloy
Piston weight ..... 12 oz 10 drms complete
Timing data:
Intake .... Open 12°/20° BTDC, Close 56°/64° ABDC
Exhaust ...Open 56°/64° BBDC, Close 12°/20° ATDC
Valve lift: ..... 0.300″ or 0.350″
Valve head dia:
Intake .... 1.350″
Exhaust ...1.200″
Valve spring ..... Outer 67 lb @ 0.910″, Inner 25 lb @ 0.686″
Carburation ..... Two SU H4

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	16.1	13.85	13.45
2	9.55	8.2	7.8
3	6.28	5.43	5.03
4	4.55	4.1	3.7
5			

Final drive ratios: 3.7, 4.1, 4.55

CHASSIS
Wheelbase ..... 82″
Track dimension, front ..... 48″
Track dimension, rear ..... 45-1/2″ (48″ for 1962 model)
Shock absorber ..... Telescopic
Steering ratio ..... 1-2/3 turns (2-1/4 turns for 1962 model)
Brakes ..... Disc brakes std equipment for 1962 model
Tire size ..... 5.90x14, 15x155mm (5.60x13 for ’62 model)

APPROVED OPTIONAL EQUIPMENT
Disc brakes on front wheels

Manufacturer: Fairthorpe Class: G
Model: Electron Minor

DESCRIPTION:
2-Seater Fiberglass Roadster
Dry Weight: 920 lbs (1962 model - 965 lbs)

ENGINE:
Type ..... 4 cyl ohv in line (Standard 10 Gold Star) *
Bore & stroke ..... 63 mm x 76 mm
Capacity ..... 948 cc
Comp ratio 8.25/9.0/9.5/10.2:1
Head material ..... Cast Iron
Port size ..... Intake 1.25", Exhaust 0.94"x0.88"
Piston material ... Aluminum Alloy
Piston weight ..... 0.617 lb
Timing data:
Intake .... Open 15°BTDC, Close 55°ABDC
Exhaust ...Open 55°BBDC, Close 15°ATDC
or
Intake .... Open 10°BTDC, Close 50°ABDC
Exhaust ...Open 50°BBDC, Close 10°ATDC
Valve lift: ..... 0.280" or 0.305"
Valve head dia:
Intake .... 1.181"
Exhaust ... 1.056"
Valve spring ..... 25.25 lb @ 1.375
Carburation ..... One Solex 28Z1C/2

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.75	4.27
2	2.1	2.46
3	1.38	1.45
4	1.0	1.0
5		

Final drive ratios: 41/9 = 4.55

CHASSIS
Wheelbase ..... 81" (82" for 1962 Model)
Track dimension, front ..... 49"
Track dimension, rear ..... 48-1/2"
Shock absorber ..... Telescopic
Steering ratio ..... 1-2/3 turns
Brakes .....
Tire size ..... 5.60 x 13, 5.90 x 13

APPROVED OPTIONAL EQUIPMENT
Two SU #H.1 carburators and manifold
Two SU #H.2 carburators and manifold

* Specification change for 1962 Model:
Dry weight - 965 lbs
Engine - Triumph Herald
Wheelbase - 82"

Manufacturer: Ferrari Class: A
Model: 250 GT (SWB) Berlinetta Coupe-California Spider

DESCRIPTION:

2-Seater Aluminum Bodywork
Dry Weight: 2050 lbs (approx)

ENGINE:

Type	V-12
Bore & stroke	73mm x 58.8mm
Capacity	2953.211 cc
Comp ratio	9.5:1 or 9.8:1
Head material	Silumin
Port size	Intake 27mm, Exhaust 27mm
Piston material ...	Silumin
Piston weight	224 grams

Timing data:

Intake	Open 26° BTDC, Close 69° ABDC
Exhaust ...	Open 73° BBDC, Close 19° ATDC
	-or-
Intake	Open 46° BTDC, Close 75° ABDC
Exhaust ...	Open 70° BBDC, Close 40° ATDC

Valve lift:	10mm or 9mm

Valve head dia:

Intake	34mm or 32mm
Exhaust ...	29mm 27mm

Valve spring	35.6Kg
Carburation	Three Weber DCL

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	2.536
2	1.7
3	1.256
4	1
5	

Final drive ratios: 32/9, 32/8, 32/7, 33/9, 34/9, 34/8

CHASSIS

Wheelbase	2400mm
Track dimension, front	1354mm
Track dimension, rear	1349mm
Shock absorber	Telescopic
Steering ratio	17:1
Brakes	Disc - 247 cm sq
Tire size	6.00 x 16, 175 x 400

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Ferrari Class: B
Model: 250 GT Coupe (Farina or Boano) and Cabriolet (Farina)
DESCRIPTION:
2-Seater Steel Bodywork
Dry Weight: 2712 lbs (Coupe) or 2650 lbs (Cabriolet)
2315 lbs (Berlinetta and Clifornia, approx)

ENGINE:

Type	V-12
Bore & stroke	73mm x 58.8mm
Capacity	2953.211 cc
Comp ratio	9.2:1 or 9.5:1
Head material	Silumin
Port size	Intake 27mm, Exhaust 27mm
Piston material ...	Silumin
Piston weight	224 grams

Timing data:

Intake	Open 26° BTDC, Close 69° ABDC
Exhaust ...	Open 73° BBDC, Close 19° ATDC
	-or-
Intake	Open 46° BTDC, Close 75° ABDC
Exhaust ...	Open 70° BBDC, Close 40° ATDC

Valve lift:	10mm

Valve head dia:

Intake	34mm
Exhaust ...	29mm

Valve spring	35.6Kg
Carburation	Three Weber DCL

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	2.536
2	1.7
3	1.256
4	1
5	

Final drive ratios: 32/9, 32/8, 32/7, 33/9, 34/9, 34/8

CHASSIS

Wheelbase	2600mm
Track dimension, front	1354mm
Track dimension, rear	1349mm
Shock absorber	Telescopic
Steering ratio	18:1
Brakes	Disc brakes-247 cm^2, drum brakes-1241 cm2
Tire size	6.00 x 16 or 6.25/6.50 x 16

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Fiat Class: H
Model: 1200 Spider
DESCRIPTION:
2-Seater Steel (Unibody) construction
Dry Weight: 2030 lbs

ENGINE:
Type ..... 4 cyl ohv in line
Bore & stroke ..... 2-22/32″ x 2-61/64″
Capacity ..... 1221 cc
Comp ratio 8.25:1
Head material ..... Aluminum
Port size .....
Piston material ... Aluminum
Piston weight .....
Timing data:
Intake .... Open 16° BTDC, Close 56° ABDC
Exhaust ...Open 56° BBDC, Close 16° ATDC
Valve lift: .....
Valve head dia:
Intake ....
Exhaust ...
Valve spring .....
Carburation ..... One Weber 36 DCD3

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.86	3.38
2	2.38	2.09
3	1.57	1.38
4	1.0	1.0
5		

Final drive ratios: 43/10

CHASSIS
Wheelbase ..... 92-7/64″
Track dimension, front ..... 48.5″
Track dimension, rear ..... 47-53/64″
Shock absorber ..... Telescopic
Steering ratio 16.4:1
Brakes .....
Tire size ..... 5.20 x 14

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Fiat Class: F
Model: 1500 Spider
DESCRIPTION:
2-Seater Steel (Unibody) construction
Dry Weight: 2183 lbs

ENGINE:
Type ..... 4 cyl dohc in line
Bore & stroke ..... 3-5/64″ x 3-5/64″
Capacity ..... 1491 cc
Comp ratio 8.6:1
Head material ..... Aluminum
Port size .....
Piston material ... Aluminum
Piston weight .....
Timing data:
Intake .... Open 20° BTDC, Close 72° ABDC
Exhaust ...Open 69° BBDC, Close 19° ATDC
Valve lift: .....
Valve head dia:
Intake ....
Exhaust ...
Valve spring .....
Carburation ..... One Weber 28-36 DCLD3

TRANSMISSION AND DRIVE TRAIN:
Ratios:
1 3.086
2 1.977
3 1.38
4 1.0
5
Final drive ratios: 43/10

CHASSIS
Wheelbase ..... 92.1″
Track dimension, front ..... 48.7″
Track dimension, rear ..... 47.8″
Shock absorber ..... Telescopic
Steering ratio 16.4:1
Brakes .....
Tire size ..... 155 x 15

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Fiat-Abarth Class: E
Model: 700 Twin Cam

DESCRIPTION:

2-Seater Aluminum Record Monza Coupe, Zagato Coupe or Allemeo Roadster
Dry Weight: 550Kg (1210 lbs)

ENGINE:

Type	4 cyl dohc in line
Bore & stroke	61mm x 59.5mm
Capacity	695.6 cc
Comp ratio	10.3:1
Head material	Aluminum
Port size	Intake 26.5mm, Exhaust 26.5mm
Piston material ...	Aluminum Alloy
Piston weight	182 grams
Timing data:	
Intake	Open 52° BTDC, Close 70° ABDC
Exhaust ...	Open 60° BBDC, Close 28° ATDC
Valve lift:	Intake 8.5mm, Exhaust 7.6mm
Valve head dia:	
Intake	33mm
Exhaust ...	29mm
Valve spring	39.5Kg
Carburation	Two Weber 36 DCL4 or Weber 40 DCM2

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	44/13				
2	37/18	35/20	33/18		
3	35/20	32/24	30/35	29/28	
4	32/24	30/25	29/26	28/27	26/28
5	29/26	28/27	26/30	25/30	28/28

Final drive ratios: 39/9, 39/8, 40/8, 41/9, 41/8, 43/8

CHASSIS

Wheelbase	
Track dimension, front	
Track dimension, rear	
Shock absorber	Telescopic
Steering ratio	13:1
Brakes	Drums, Area = 595.5 cm sq
Tire size	135 x 13, 135 x 12

APPROVED OPTIONAL EQUIPMENT

Single or dual pad disk brakes on front or all wheels
Racing windshield (plastic)
60-70 litre gasoline tank
Aluminum oil sump
Ferget or Borani 12" or 13" heavy duty steel wheels
Amadori or Almag. 12" or 13" wheels
Aux. water radiator
Oil cooler
Stiffer rear springs
Front end reinforcement kit
Securstop master cylinder
Alfin brakes (dual, tripple, or quad shoes)

Manufacturer: Fiat-Abarth Class: H
Model: 750 GT

DESCRIPTION:

2-Seater Aluminum Coupe and Roadster
Dry Weight: 1200 lbs

ENGINE:

Type	4 cyl ohv in line
Bore & stroke	61mm x 64mm
Capacity	747 cc
Comp ratio	9.8:1
Head material	Aluminum
Port size	Intake 24mm, Exhaust 22mm
Piston material ...	Aluminum
Piston weight	175 grams
Timing data:	
Intake	Open 30° BTDC, Close 70° ABDC
Exhaust ...	Open 70° BBDC, Close 30° ATDC
Valve lift:	9mm
Valve head dia:	
Intake	24mm
Exhaust ...	22mm
Valve spring	43Kg or 34Kg
Carburation	One Weber 32 IMPE

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	44/13	44/13
2	37/18	37/18
3	32/24	30/25
4	26/29	26/30
5		

Final drive ratios: 39/9, 43/8, 41/9

CHASSIS

Wheelbase	2000mm
Track dimension, front	1150mm
Track dimension, rear	1160mm
Shock absorber	Telescopic
Steering ratio	28.6ft min turning diameter
Brakes	
Tire size	5.20 x 12

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Fiat-Abarth Class: G
Model: 750 Mille Miglia

DESCRIPTION:

2-Seater Aluminum Coupe and Roadster
Dry Weight: 545Kg (1200 lbs)

ENGINE:

Type	4 cyl ohv in line
Bore & stroke	61mm x 64mm
Capacity	747 cc
Comp ratio	9.8:1
Head material	Aluminum
Port size	Intake 27.5 x 59.35mm, Exhaust 28mm
Piston material ...	Aluminum
Piston weight	185 grams
Timing data:	
Intake	Open 30° BTDC, Close 70° ABDC
Exhaust ...	Open 70° BBDC, Close 30° ATDC
Valve lift:	9mm
Valve head dia:	
Intake	26mm
Exhaust ...	24mm
Valve spring	50Kg
Carburation	One Weber 32 IMPE

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	44/13				
2	37/18	35/20	33/18		
3	35/20	32/24	30/35	29/28	
4	32/24	30/25	29/26	28/27	26/28
5	29/26	28/27	26/30	25/30	28/28

Final drive ratios: 39/9, 39/8, 40/8, 41/9, 41/8, 43/8

CHASSIS

Wheelbase	78.75″
Track dimension, front	45.3″
Track dimension, rear	45.67″
Shock absorber	Telescopic
Steering ratio	28.6ft min turning diameter
Brakes	Drum type
Tire size	135 x 12, 135 x 13

APPROVED OPTIONAL EQUIPMENT

Single or dual pad disk brakes on front or all wheels
Racing windshield (plastic)
60-70 litre gasoline tank
Aluminum oil sump
Ferget or Borani 12″ or 13″ heavy duty steel wheels
Amadori or Almag. 12″ or 13″ wheels
Aux. water radiator
Oil cooler
Stiffer rear springs
Front end reinforcement kit
Securstop master cylinder
Alfin brakes (dual, tripple, or quad shoes)

Manufacturer: Fiat-Abarth Class: E
Model: 750 (dual cam)

DESCRIPTION:

2-Seater Aluminum Coupe
Dry Weight: 565Kg (1244 lbs)

ENGINE:

Type	4 cyl dohc in line	
Bore & stroke	61mm x 64mm	
Capacity	748 cc	
Comp ratio	9.7:1,10.5:1	
Head material	Aluminum	
Port size	Intake 26.5mm, Exhaust 28mm	
Piston material ...	Aluminum	
Piston weight	185 grams	
Timing data:		
Intake	Open 52° BTDC, Close 68° ABDC	
Exhaust ...	Open 73° BBDC, Close 25° ATDC	
Valve lift:	9mm	
Valve head dia:		
Intake	33mm	
Exhaust ...	29mm	
Valve spring	50Kg	
Carburation	Two Weber DCL4	

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	44/13				
2	37/18	35/20	33/18		
3	35/20	32/24	30/35	29/28	
4	32/24	30/25	29/26	28/27	26/28
5	29/26	28/27	26/30	25/30	28/28

Final drive ratios: 39/9, 39/8, 40/8, 41/9, 41/8, 43/8

CHASSIS

Wheelbase	78.75"
Track dimension, front	45.3"
Track dimension, rear	45.67"
Shock absorber	Telescopic
Steering ratio	28.6ft min turning diameter
Brakes	Drum type
Tire size	135 x 12, 135 x 13

APPROVED OPTIONAL EQUIPMENT

Single or dual pad disk brakes on front or all wheels
Racing windshield (plastic)
60-70 litre gasoline tank
Aluminum oil sump
Ferget or Borani 12" or 13" heavy duty steel wheels
Amadori or Almag. 12" or 13" wheels
Aux. water radiator
Oil cooler
Stiffer rear springs
Front end reinforcement kit
Securstop master cylinder
Alfin brakes (dual, tripple, or quad shoes)

Manufacturer: Fiat-Abarth Class: F
Model: 850/S Record Monza

DESCRIPTION:
2-Seater Aluminum Coupe and Spyder
Dry Weight: 600Kg (1320 lbs)

ENGINE:
Type ..... 4 cyl ohv in line
Bore & stroke ..... 62.5mm x 69mm
Capacity ..... 847 cc
Comp ratio 9.1:1,9.5:1
Head material ..... Aluminum
Port size ..... Intake 27.5 x 59.35mm, Exhaust 28mm
Piston material ... Aluminum
Piston weight ..... 171 grams
Timing data:
Intake .... Open 30° BTDC, Close 70° ABDC
Exhaust ...Open 70° BBDC, Close 30° ATDC
Valve lift: 9mm
Valve head dia:
Intake 26mm
Exhaust ...24mm
Valve spring 50Kg
Carburation ..... One Solex 32 PBIC

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	44/13				
2	37/18	35/20	33/18		
3	35/20	32/24	30/35	29/28	
4	32/24	30/25	29/26	28/27	26/28
5	29/26	28/27	26/30	25/30	28/28

Final drive ratios: 39/9, 39/8, 40/8, 41/9, 41/8, 43/8

CHASSIS
Wheelbase ..... 78.75″
Track dimension, front ..... 45.3″
Track dimension, rear ..... 45.67″
Shock absorber ..... Telescopic
Steering ratio ..... 28.6ft min turning diameter
Brakes ..... Drum type (595.5 cm sq)
Tire size ..... 5.20 x 12

APPROVED OPTIONAL EQUIPMENT
One Weber 32 IMPE Carburetor
One Zenith Stromberg NDIX33 Carburator
Single or dual pad disk brakes on front or all wheels
Racing windshield (plastic)
60-70 litre gasoline tank
Aluminum oil sump
Ferget or Borani 12″ or 13″ heavy duty steel wheels
Amadori or Almag. 12″ or 13″ wheels
Aux. water radiator
Oil cooler
Stiffer rear springs
Front end reinforcement kit
Securstop master cylinder
Alfin brakes (dual, tripple, or quad shoes)

Manufacturer: Fiat-Abarth Class: C
Model: 1000 Twin Cam

DESCRIPTION:

2-Seater Aluminum Record Monza Coupe
Dry Weight: 570Kg (1254 lbs)

ENGINE:

Type	4 cyl dohc in line
Bore & stroke	65mm x 74mm
Capacity	982 cc
Comp ratio	10.2:1, 10.8:1
Head material	Aluminum
Port size	Intake 26.5mm, Exhaust 26.5mm
Piston material ...	Aluminum Alloy
Piston weight	215 grams
Timing data:	
Intake	Open 54° BTDC, Close 72° ABDC
Exhaust ...	Open 64° BBDC, Close 33° ATDC
Valve lift:	Intake: 8.5mm; Exhaust 8.3mm
Valve head dia:	
Intake	33mm
Exhaust ...	29mm
Valve spring	Inner/Outer - 39.5Kg
Carburation	Two Weber 40 DCM2 or Weber 36 DCL4

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	44/13				
2	37/18	35/20	33/18		
3	35/20	32/24	30/35	29/28	
4	32/24	30/25	29/26	28/27	26/28
5	29/26	28/27	26/30	25/30	28/28

Final drive ratios: 39/9, 39/8, 40/8, 41/9, 41/8, 43/8

CHASSIS

Wheelbase	
Track dimension, front	
Track dimension, rear	
Shock absorber	Telescopic
Steering ratio	13:1
Brakes	Front-Disc; Rear-Drum or disc
Tire size	135 x 13

APPROVED OPTIONAL EQUIPMENT

Single or dual pad disk brakes on front or all wheels
Racing windshield (plastic)
60-70 litre gasoline tank
Aluminum oil sump
Ferget or Borani 12" or 13" heavy duty steel wheels
Amadori or Almag. 12" or 13" wheels
Aux. water radiator
Oil cooler
Stiffer rear springs
Front end reinforcement kit
Securstop master cylinder
Alfin brakes (dual, tripple, or quad shoes)

Manufacturer: Frazer-Nash Class: C
Model: Two Litre
DESCRIPTION:
2-Seater, Various body styles: "Sebring, "Targa Floria", Roadsters, and "Lemans Coupe" (fixed head)
Dry Weight:

ENGINE:
Type ..... 6 cyl ohv in line
Bore & stroke ..... 66mm x 96mm
Capacity ..... 1971 cc
Comp ratio 7.5:1, 9.0:1, 10:1
Head material ..... Aluminum Alloy
Port size ..... Intake 1.250"; Exhaust 1.250"
Piston material ... Aluminum Alloy
Piston weight ..... 288.976 grams
Timing data:
Intake .... Open 40° BTDC, Close 80° ABDC
Exhaust ...Open 80° BBDC, Close 40° ATDC
Valve lift: .....
Valve head dia:
Intake .... 1.532"
Exhaust ...1.308"
Valve spring .....
Carburation ..... Three Solex 32B1

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	2.918	1.827
2	1.825	1.408
3	1.292	1.189
4	1.0	1.0
5		

Final drive ratios: 3.5, 3.6, 3.9, 4.1

CHASSIS
Wheelbase ..... 96"
Track dimension, front ..... 48"
Track dimension, rear ..... 50"
Shock absorber ..... Telescopic
Steering ratio ..... 2 turns
Brakes ..... Drum type (188 in sq lining area)
Tire size ..... 5.50 x 16

APPROVED OPTIONAL EQUIPMENT
Knock-on wire wheels
25 gal fuel tank
Adjustable friction-telescopic shock absorbers
Alfin brake drums (11 x 2-1/4) with air scoops

Manufacturer: Jensen Class: D
Model: 541R

DESCRIPTION:

2-4 Seater Fiberglass Coupe
Dry Weight: 3018 lbs (Approx)

ENGINE:

Type		6 cyl ohv in line
Bore & stroke		3.437″ x 4.375″
Capacity		3993 cc (243.4 cu in)
Comp ratio		7.4:1
Head material		Cast Iron
Port size		Intake: 1.920″; Exhaust 1.40″ x 1.80″ (siamesed)
Piston material ...		Aluminum alloy
Piston weight		
Timing data:		
	Intake	Open 5° BTDC, Close 45° ABDC
	Exhaust ...	Open 40° BBDC, Close 10° ATDC
Valve lift:		0.392
Valve head dia:		
	Intake	1.73″
	Exhaust ...	1.42″
Valve spring		138 lb/in
Carburation		Three SU H-4

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	11.98
2	7.02
3	4.84
4	3.54
5	2.75 (OD)

Final drive ratios: 3.54

CHASSIS

Wheelbase	105″
Track dimension, front	52″
Track dimension, rear	52″
Shock absorber	Front-Lever, Rear-Telescopic
Steering ratio	14.3:1
Brakes	Dunlop disc
Tire size	6.40 x 15

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Lancia Class: H
Model: Appia GT

DESCRIPTION:
2-Seater Zagato Coupe
Dry Weight: 1850 lbs

ENGINE:
Type V-4
Bore & stroke ..... 68mm x 75mm
Capacity ..... 1090 cc
Comp ratio 8:1
Head material ..... Aluminum
Port size ..... Intake: 25mm, Exhaust 25mm
Piston material ... Aluminum
Piston weight 0.255Kg
Timing data:
Intake .... Open 15° BTDC, Close 52° ABDC
Exhaust ...Open 52° BBDC, Close 15° ATDC
Valve lift: 8.25mm
Valve head dia:
Intake 31mm
Exhaust ...27mm
Valve spring 18.3Kg
Carburation ..... One Weber 36 DCLD3

TRANSMISSION AND DRIVE TRAIN:
Ratios:
1 4.098
2 2.382
3 1.562
4 1.0
5
Final drive ratios: 45/11

CHASSIS
Wheelbase 2510mm
Track dimension, front 1178mm
Track dimension, rear 1182mm
Shock absorber ..... Lancia
Steering ratio 51/4
Brakes .....
Tire size ..... 155 x 15

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Lancia Class: D
Model: Aurelia GT, Spyder
DESCRIPTION:
Dry Weight: lbs
ENGINE: Type V-6
Bore & stroke ..... 78mm x 85.5mm
Capacity ..... 2451 cc
Comp ratio 8.4:1
Head material ..... Aluminum
Port size ..... Intake: 29mm, Exhaust 28mm
Piston material ... Aluminum
Piston weight .....
Timing data:
Intake .... Open 22° BTDC, Close 82° ABDC
Exhaust ...Open 55° BBDC, Close 23° ATDC
Valve lift: 7.435mm
Valve head dia:
Intake 40mm
Exhaust ...35mm
Valve spring 27.5Kg
Carburation ..... Weber 40 DCL5
TRANSMISSION AND DRIVE TRAIN:
Ratios:
1 3.093
2 2.054
3 1.415
4 1.0
5
Final drive ratios: 48/13
CHASSIS
Wheelbase ..... 2450mm (Spyder) 2650mm (GT)
Track dimension, front 1280mm
Track dimension, rear 1300mm
Shock absorber ..... Telescopic
Steering ratio 49/4
Brakes .....
Tire size ..... 165 x 400
APPROVED OPTIONAL EQUIPMENT

Manufacturer: Lotus Class: E
Model: Elite

DESCRIPTION:
2-Seater Fiberglass Coupe
Dry Weight: 1512 lbs

ENGINE:

Type	4 cyl ohc in line
Bore & stroke	3.0" x 2.625"
Capacity	1220 cc
Comp ratio	10.0:1
Head material	Aluminum
Port size	Intake 1.125", Exhaust 1.125"
Piston material ...	Aluminum
Piston weight	12.5 oz
Timing data:	
Intake	Open 12° BTDC, Close 56° ABDC
Exhaust ...	Open 56° BBDC, Close 12° ATDC
Valve lift:	0.360" (intake), 0.310" (exhaust)
Valve head dia:	
Intake	1.35"
Exhaust ...	1.25"
Valve spring	225 lb/in
Carburation	One or Two SU H4

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	2.45	3.67
2	1.62	2.20
3	1.262	1.32
4	1.0	1.0
5		

Final drive ratios: 3.7, 4.22, 4.55, 4.875, 5.375

CHASSIS

Wheelbase	
Track dimension, front	
Track dimension, rear	
Shock absorber	Telescopic
Steering ratio	3:1
Brakes	Girling disc
Tire size	4.50 x 15 / 4.80 x 15 / 5.00 x 15

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Lotus Class: C
Model: Elite (Stage III)

DESCRIPTION:
2-Seater Fiberglass Coupe
Dry Weight: 1512 lbs

ENGINE:
Type ..... 4 cyl ohc in line
Bore & stroke ..... 3.0" x 2.625"
Capacity ..... 1220 cc
Comp ratio 11:1
Head material ..... Aluminum
Port size ..... Intake 1.15", Exhaust 1.15"
Piston material ... Aluminum
Piston weight ..... 15 oz
Timing data:
Intake .... Open 30° BTDC, Close 60° ABDC
Exhaust ...Open 60° BBDC, Close 30° ATDC
Valve lift: ..... 0.360"
Valve head dia:
Intake .... 1.35"
Exhaust ...1.2"
Valve spring ..... 230 lb/in
Carburation ..... Two SU HS-4

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	2.53	2.45	3.67
2	1.71	1.62	2.20
3	1.23	1.262	1.32
4	1.0	1.0	1.0
5			

Final drive ratios: 3.7, 4.22, 4.55, 4.875, 5.375

CHASSIS
Wheelbase .....
Track dimension, front .....
Track dimension, rear .....
Shock absorber ..... Telescopic
Steering ratio 3:1
Brakes ..... Girling disc
Tire size ..... 4.50 x 15 / 4.80 x 15 / 5.00 x 15

APPROVED OPTIONAL EQUIPMENT
5-Bearing camshaft
Long range fuel tank

Manufacturer: Lotus Class: G
Model: Mark 7 America

DESCRIPTION:
Open - 2-Seater
Dry Weight: 900 lbs

ENGINE:
Type ..... BMC Type A (Sprite) OHV 4 cyl inline
Bore & stroke ..... 63mm x 76mm
Capacity ..... 948 cc
Comp ratio 8.3:1
Head material ..... Cast Iron
Port size ..... Intake: 1.125", Exhaust 1-13/16" x 1.0"
Piston material ... Aluminum
Piston weight .....
Timing data:
Intake .... Open 5°BTDC, Close 45°ABDC
Exhaust ...Open 40° BBDC, Close 10° ATDC
Valve lift: ..... 0.28"
Valve head dia:
Intake .... 1-3/32"
Exhaust ...1.0"
Valve spring ..... 52 lb @ 1.2968", 85 lb @ 1.012"
Carburation ..... Two SU H1

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.627	3.0
2	2.374	1.99
3	1.412	1.35
4	1.0	1.0
5		

Final drive ratios: 4.11, 4.55, 4.875

CHASSIS
Wheelbase .....
Track dimension, front .....
Track dimension, rear .....
Shock absorber ..... Telescopic
Steering ratio 3:1
Brakes .....
Tire size ..... 5.60 x 13, 5.90 x 13

APPROVED OPTIONAL EQUIPMENT
Long range fuel tank (8 gal)
Large Sump (Q.2341)
Valve springs (2A.950)
Distributor (2A.951)

Manufacturer: Lotus Class: C
Model: 7 Super Classic
DESCRIPTION:
Open - 2-Seater
Dry Weight: 900 lbs

ENGINE:

Type	Cosworth Ford 109E
Bore & stroke	3.187″ x 2.562″
Capacity	87.8 cu in
Comp ratio	9.5:1
Head material	Cast Iron
Port size	Intake 1.0″, Exhaust 1.0″
Piston material ...	Aluminum
Piston weight	

Timing data:

Intake	Open 50° BTDC, Close 86° ABDC
Exhaust ...	Open 86° BBDC, Close 50° ATDC

Valve lift:	0.390″

Valve head dia:

Intake	1.3″
Exhaust ...	1.2″

Valve spring	220 lb/in
Carburation	Two Weber 40 DCOE-2

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	4.118	3.0	3.627
2	2.396	1.99	2.374
3	1.412	1.35	1.412
4	1.0	1.0	1.0
5			

Final drive ratios: 4.1, 4.5, 4.875

CHASSIS

Wheelbase	
Track dimension, front	
Track dimension, rear	
Shock absorber	Telescopic
Steering ratio	3:1
Brakes	
Tire size	5.60 x 13, 5.90 x 13

APPROVED OPTIONAL EQUIPMENT
Long range fuel tank
HD Valve springs (250 lbs)

Manufacturer: Mercedes-Benz Class: F
Model: 190 SL

DESCRIPTION:
2-Seater Convertible
Dry Weight: 2332 lbs

ENGINE:
Type ..... 4 cyl ohc
Bore & stroke ..... 3.34″ x 3.29″
Capacity ..... 1897 cc
Comp ratio 8.5:1
Head material ..... Light Metal
Port size ..... Intake 1.957″ sq; Exhaust 1.407″ sq
Piston material ... Light Metal
Piston weight ..... 1.41 lbs
Timing data:
Intake .... Open 44° BTDC, Close 87° ABDC
Exhaust ...Open 81° BBDC, Close 42° ATDC
Valve lift: ..... 0.374″ (intake), 0.315 (exhaust)
Valve head dia:
Intake .... 1.74″
Exhaust ...1.46″
Valve spring .....
Carburation ..... Two Solex 44PHH

TRANSMISSION AND DRIVE TRAIN:
Ratios:
1 3.52
2 2.32
3 1.52
4 1.0
5
Final drive ratios: 3.9 = 39/10

CHASSIS
Wheelbase ..... 94-1/2″
Track dimension, front ..... 56-5/16″
Track dimension, rear ..... 57-7/8″
Shock absorber ..... Telescopic
Steering ratio 18.5
Brakes .....
Tire size ..... 6.40 x 13

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Mercedes-Benz Class: B
Model: 300 SL Coupe

DESCRIPTION:
2-Seater Roadster
Dry Weight: 2930 lbs

ENGINE:
Type ..... 6 cyl ohc in line
Bore & stroke ..... 3.35" x 3.47"
Capacity ..... 2996 cc
Comp ratio 8.55:1
Head material ..... Light Metal
Port size ..... Intake 2.356" sq; Exhaust 1.557" sq
Piston material ... Light Metal
Piston weight ..... 1.52 lbs
Timing data:
Intake .... Open 54° BTDC, Close 92° ABDC
Exhaust ...Open 74° BBDC, Close 36° ATDC
Valve lift: ..... 0.37" (intake), 0.33" (exhaust)
Valve head dia:
Intake .... 1.93"
Exhaust ...1.65"
Valve spring .....
Carburation ..... Fuel Injection (Bosch #PES6K170/320R3)

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.34
2	1.97
3	1.39
4	1.0
5	

Final drive ratios: 3.64 (40/11)

CHASSIS
Wheelbase ..... 94.48"
Track dimension, front ..... 54.5"
Track dimension, rear ..... 56.5"
Shock absorber .....
Steering ratio 13.8:1, 11.8:1
Brakes .....
Tire size ..... 6.50 x 15

APPROVED OPTIONAL EQUIPMENT
Alternate axle ratios: 3.25(39/12), 3.42(41/12), 3.89(35/9), 4.11(38/9)

Manufacturer: Mercedes-Benz Class: B
Model: 300 SL Roadster

DESCRIPTION:
2-Seater Roadster
Dry Weight: 2750 lbs

ENGINE:
Type ..... 6 cyl ohc in line
Bore & stroke ..... 3.35" x 3.47"
Capacity ..... 2996 cc
Comp ratio 8.55:1, 9.5:1
Head material ..... Light Metal
Port size ..... Intake 2.356" sq; Exhaust 1.557" sq
Piston material ... Light Metal
Piston weight ..... 1.52 lbs
Timing data:
Intake .... Open 54° BTDC, Close 92° ABDC
Exhaust ...Open 74° BBDC, Close 36° ATDC
Valve lift: ..... 0.37" (intake), 0.33" (exhaust)
Valve head dia:
Intake .... 1.93"
Exhaust ...1.65"
Valve spring .....
Carburation ..... Fuel Injection (Bosch #PES6K170/320R3)

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.34
2	1.97
3	1.39
4	1.0
5	

Final drive ratios: 3.89 (35/9)

CHASSIS
Wheelbase ..... 94.48"
Track dimension, front ..... 55"
Track dimension, rear ..... 57"
Shock absorber ..... Telescopic
Steering ratio 16.7
Brakes .....
Tire size ..... 6.70 x 15, 6.50 x 15

APPROVED OPTIONAL EQUIPMENT
Alternate axle ratios: 3.25(39/12), 3.42(41/12), 3.64(40/11), 4.11(38/9)

Manufacturer: MG Class: H
Model: TC, TD, Mk II

DESCRIPTION:

2-Seater Roadster
Dry Weight:

ENGINE:

Type	4 cyl ohv in line
Bore & stroke	66.5mm x 90mm
Capacity	1250 cc
Comp ratio	7.25:1
Head material	Cast Iron
Port size	Intake and Exhaust: 30 x 30mm
Piston material ...	Aluminum
Piston weight	9-1/2 oz
Timing data:	
Intake	Open 11° BTDC, Close 57° ABDC
Exhaust ...	Open 52° BBDC, Close 24° ATDC
Valve lift:	8mm
Valve head dia:	
Intake	33mm
Exhaust ...	31mm
Valve spring	93 lb shut, 123 lb open
Carburation	Two SU 1-1/4"

TRANSMISSION AND DRIVE TRAIN:

Ratios:	TC	TD, Mk II
1	3.38	3.5
2	1.95	2.07
3	1.35	1.385
4	1.0	1.0
5		

Final drive ratios: 4.875(39/8), 5.125(41/8)
TC Only: 5.428(38/7); TD, MkII Only: 4.55(41/9)

CHASSIS

Wheelbase	94"
Track dimension, front	45" (TC); 47-3/8" (TD)
Track dimension, rear	45" (TC); 50" (TD)
Shock absorber	Lever
Steering ratio	11:1 (TC); 13.75:1 (TD)
Brakes	
Tire size	4.50 x 15, 5.50 x 15

APPROVED OPTIONAL EQUIPMENT

9.3:1 Compression ratio
36mm Inlet valves
34mm Exhaust valves
150 lbs (open) valves
AEG #122 camshaft
1-1/2" SU carburators
Duel fuel pumps
Dual fuel lines
6 qt sump
15" wire wheels (5.50x15) (TC)(TD,MkII equipped with disc wheels only)
Andrex shock absorbers (MkII)

Manufacturer: MG Class: H
Model: TF 1250

DESCRIPTION:
2-Seater Roadster
Dry Weight:

ENGINE:
Type ..... 4 cyl ohv in line
Bore & stroke ..... 66.5mm x 90mm
Capacity ..... 1250 cc
Comp ratio 8.1:1
Head material ..... Cast Iron
Port size ..... Intake and Exhaust: 32 x 320mm
Piston material ... Aluminum
Piston weight ..... 9-1/2 oz
Timing data:
Intake .... Open 5° BTDC, Close 45° ABDC
Exhaust ...Open 45° BBDC, Close 5° ATDC
Valve lift: 8.3mm
Valve head dia:
Intake 36mm
Exhaust ...34mm
Valve spring ..... 114 lb shut, 150 lb open
Carburation ..... Two SU 1-1/2"

TRANSMISSION AND DRIVE TRAIN:
Ratios:
1 3.5
2 2.07
3 1.385
4 1.0
5
Final drive ratios: 4.55(41/9), 4.875(39/8), 5.125(41/8)

CHASSIS
Wheelbase ..... 94"
Track dimension, front ..... 47-3/8"
Track dimension, rear ..... 50"
Shock absorber ..... Girling or Armstrong piston
Steering ratio 13.15:1
Brakes .....
Tire size ..... 5.50 x 15

APPROVED OPTIONAL EQUIPMENT
9.3:1 Compression ratio
AEG #122 camshaft
1-1/2" SU carburators
Duel fuel pumps
Dual fuel lines
6 qt sump
Wire wheels

Manufacturer: MG Class: G
Model: TF 1500

DESCRIPTION:

2-Seater Roadster
Dry Weight:

ENGINE:

Type	4 cyl ohv in line
Bore & stroke	72mm x 90mm
Capacity	1466 cc
Comp ratio	8.3:1
Head material	Cast Iron
Port size	Intake and Exhaust: 32 x 32mm
Piston material ...	Aluminum
Piston weight	
Timing data:	
Intake	Open 5° BTDC, Close 45° ABDC
Exhaust ...	Open 45° BBDC, Close 5° ATDC
Valve lift:	8.3mm
Valve head dia:	
Intake	36mm
Exhaust ...	34mm
Valve spring	114 lb shut, 150 lb open
Carburation	Two SU 1-1/2"

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.5
2	2.07
3	1.385
4	1.0
5	

Final drive ratios: 4.55(41/9), 4.875(39/8), 5.125(41/8)

CHASSIS

Wheelbase	94"
Track dimension, front	47-3/8"
Track dimension, rear	50"
Shock absorber	Girling or Armstrong piston
Steering ratio	13.75:1
Brakes	
Tire size	5.50 x 15

APPROVED OPTIONAL EQUIPMENT

9.3:1 Compression ratio
Wire wheels
Duel fuel pumps
Dual fuel lines
6 qt sump
Competition clutch (AHH.5457)

Manufacturer: MG Class: G
Model: Midget
DESCRIPTION:
2-Seater Roadster
Dry Weight: 1280 lbs

ENGINE:

Type	BMC Type A OHV 4 cyl in line
Bore & stroke	63mm x 76mm
Capacity	948 cc
Comp ratio	9:1
Head material	Cast Iron
Port size	Intake: 26mm, Exhaust 25mm
Piston material ...	Aluminum
Piston weight	
Timing data:	
Intake	Open 5°BTDC, Close 45°ABDC
Exhaust ...	Open 51° BBDC, Close 21° ATDC
Valve lift:	7.97mm
Valve head dia:	
Intake	29.36mm
Exhaust ...	25.4mm
Valve spring	52 lb @ 1.2968", 85 lb @ 1.012"
Carburation	Two SU H2

TRANSMISSION AND DRIVE TRAIN:

Ratios:	
1	3.2
2	1.916
3	1.357
4	1.0
5	
Final drive ratios:	3.73:1, 3.909, 4.22:1, 4.55:1, 4.875, 5.375

CHASSIS

Wheelbase	80"
Track dimension, front	45-1/4"
Track dimension, rear	44-1/4"
Shock absorber	Lever
Steering ratio	2-1/3 turns
Brakes	
Tire size	5.20 x 13

APPROVED OPTIONAL EQUIPMENT
Close ratio gear box (Q.2354)
Anti-roll bar (Q.2315)
Large sump (Q.2341)
Front springs (Q.2334)
Rear springs (Q.2335) or (AHA5468)
Fuel tank (Q.2336)
Exhaust mainifold (Q.2345) or (AHA5448)
Electric fuel pump (H.3592)(AUA-56)
Competition exhaust system (Q.234/2347)
Crankshaft-Sebring type (Q.262/2629)
Crankshaft (AEA 440)
Alfin brake drums (Q.2491)
8" front brakes (Q.2353)
Disc brakes (Q.2337, Q.2549, Q.2552)
Pistons (2A.946)
Valve springs (2A.950, AEA401)
2 x 1-1/4" SU carburetors (Q.2343)
2 x 1-1/2" SU carburetors (Q.2504/5)
Manifold (Q.2344)
Cylinder head (Q.2302)
Oil cooler (Q.2342)

Manufacturer: MG Class: G
Model: Midget

APPROVED OPTIONAL EQUIPMENT CONT.

Cold air box (Q.2350)
Polished connecting rods (Q.2346)
Flywheel (Q.2348) or (AEA 408)
Clutch (Q.2349) or (AEJ 31)
Distributor (2A.951)
Light weight seats (Q.2609)
Wire wheels (Q.2424/31)
Large inlet valves (Q.2494)
Large exhaust valves (Q.2495)
Exhaust valves (AEA 400)
Camshaft (2A.948) In open 16°BTDC, close 56°ABDC; lift 0.31″
Ex open 51°BBDC, close 21°ATDC; clearance 0.015″
Camshaft (Q.2629) In open 20°BTDC, close 80°ABDC; lift 0.38″
Ex open 50°BBDC, close 50°ATDC; clearance 0.015″
Cylinder head Mk II
Double valve springs (Q.2628)
Limited slip differential (HAC23)
Blanking sleeve (11G176)
Valve spring collars (AEA 402-432)

Manufacturer: MG Class: F
Model: MGA (1500)

DESCRIPTION:

2-Seater Coupe and Roadster
Dry Weight: 2013 lbs

ENGINE:

Type	4 cyl ohv in line
Bore & stroke	73mm x 89mm
Capacity	1489 cc
Comp ratio	8.3:1
Head material	Cast Iron
Port size	Intake 1-3/8"; Exhaust 1-1/16" x 1-3/16"
Piston material ...	Aluminum
Piston weight	10 oz 8 drms
Timing data:	
Intake	Open 16° BTDC, Close 56° ABDC
Exhaust ...	Open 51° BBDC, Close 21° ATDC
Valve lift:	0.357"
Valve head dia:	
Intake	1.5"
Exhaust ...	1.281"
Valve spring	Outer 60-1/2 lbs, Inner 30 lbs (fitted)
Carburation	Two Solex 1-1/2"

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.64	2.45
2	2.214	1.62
3	1.374	1.268
4	1.0	1.0
5		

Final drive ratios: 3.9, 4.1, 4.3, 4.55, 4.8

CHASSIS

Wheelbase	94"
Track dimension, front	47-1/2"
Track dimension, rear	48-3/4"
Shock absorber	Armstrong Piston
Steering ratio	13.5:1
Brakes	10" Drums
Tire size	5.60 x 15

APPROVED OPTIONAL EQUIPMENT

MG camshaft (1H.603)
Exhaust valves (1H.1025)
Oil cooler kit (AJA.5291)
9.0:1 pistons (1H.1178)
Wire wheels (AHH.8000/8001)
Competition clutch assembly (AHH.5457)
10.0:1 pistons (1H.1108)
1-3/4" bore SU carburators and manifold
Heavy valve springs (1H.1111/1112)
Distributor (1H.1036)
20 gal fuel tank (AHH.5496)
Connecting rods (AEH.22/23)
Double fuel pump (AUA.73)
Limited slip differential (HAC.24)

Manufacturer: MG Class: F
Model: MGA (1600)

DESCRIPTION:

2-Seater Coupe and Roadster
Dry Weight: 2013 lbs

ENGINE:

Type	4 cyl ohv in line
Bore & stroke	75.39mm x 88.9mm
Capacity	1588 cc
Comp ratio	8.3:1
Head material	Cast Iron
Port size	Intake 1-1/8" dia; Exhaust 1-3/16" x 1-3/16"
Piston material ...	Aluminum
Piston weight	10 oz 8 drms
Timing data:	
Intake	Open 5° BTDC, Close 45° ABDC
Exhaust ...	Open 40° BBDC, Close 10° ATDC
Valve lift:	0.35"
Valve head dia:	
Intake	1.5"
Exhaust ...	1.281"
Valve spring	Outer 60.5 lbs, Inner 30 lbs (fitted)
Carburation	Two SU H4

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.637	2.45
2	2.215	1.62
3	1.373	1.268
4	1.0	1.0
5		

Final drive ratios: 3.9, 4.1, 4.3, 4.55, 4.8

CHASSIS

Wheelbase	94"
Track dimension, front	47.5"
Track dimension, rear	48.75"
Shock absorber	Lever Arm
Steering ratio	13.9:1
Brakes	Front: Disc (Pad area = 21.6" sq)
	Rear: Drum (Lining area = 65.48" sq)
Tire size	5.60 x 15

APPROVED OPTIONAL EQUIPMENT

MG camshaft (1H.603)
Exhaust valves (1H.1025)
Oil cooler kit (ARH.113)
Heavy valve springs (1H.1111/1112)
Wire wheels (AHH.8000/8001)
20 gal fuel tank (AHH.5496)
17 gal fuel tank
Disc brakes on rear wheels
Double fuel pump
15 gal fuel tank (AHH.5863)
Anti-roll bar
Inlet manifold (AEH.200)
1-3/4" Carburators (AVC.780)
9.25:1 pistons (12H.173)
Connecting rods (AEH.642 or 644)
Competition clutch assembly (AHH.5457)
Limited slip differential (HAC.24)

Manufacturer: MG Class: F
Model: MGA 1600 Mk II

DESCRIPTION:

2-Seater Coupe and Roadster
Dry Weight: 2015 lbs

ENGINE:

Type	4 cyl ohv in line
Bore & stroke	76.2mm x 88.9mm
Capacity	1622 cc
Comp ratio	8.9:1
Head material	Cast Iron
Port size	Intake 1-1/8" dia; Exhaust 1-13/16"
Piston material ...	Aluminum
Piston weight	

Timing data:

Intake	Open 16° BTDC, Close 52° ABDC
Exhaust ...	Open 52° BBDC, Close 21° ATDC
	-or-
Intake	Open 24° BTDC, Close 64° ABDC
Exhaust ...	Open 59° BBDC, Close 29° ATDC

Valve lift:	0.35"

Valve head dia:

Intake	1.562" or 1.567"
Exhaust ...	1.343" or 1.348"

Valve spring	Outer 58-60 lbs, Inner 30-32 lbs
Carburation	Two SU H4

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.637	2.45
2	2.214	1.62
3	1.374	1.268
4	1.0	1.0
5		

Final drive ratios: 3.9, 4.1, 4.3, 4.55, 4.875

CHASSIS

Wheelbase	94"
Track dimension, front	47.5" (disc), 47.875" (wire)
Track dimension, rear	48.75" (disc), 48.75" (wire)
Shock absorber	Lever Arm
Steering ratio	13.5:1
Brakes	Front: Disc, Rear: Drum
Tire size	5.60 x 15

APPROVED OPTIONAL EQUIPMENT

Blanking sleeve (Thermo-bypass) II G 176
1-3/4" (H6) Carburators (AVC.780)
Inlet Manifold (AEH.200)
Heavy valve springs (1H.1111/1112)
Oil cooler kit (8G.2282)
Competition clutch assembly (AHH.5457)
Close ratio gears
HD Anti-roll bar(AHH.5940)
HD Wire wheels, 60 spoke/steel rim (AHH.8001)
Fuel tank - 25 gal (AHH.5590)
Fuel tank - 18 gal (AHH.5863)
Limited slip differential (HAC.24)
Twin branch exhaust system (AH.6123)
Competition flywheel (AEH.442)
Wide overlap racing camshaft (AEH.714)

Manufacturer: MG Class: E
Model: MGA Twin Cam

DESCRIPTION:
2-Seater Coupe and Roadster
Dry Weight: 2105 lbs

ENGINE:
Type ..... 4 cyl dohc in line
Bore & stroke ..... 75.47mm x 89mm
Capacity ..... 1588 cc
Comp ratio 9.9:1
Head material ..... Aluminum Alloy
Port size .....
Piston material ... Aluminum Alloy
Piston weight .....
Timing data:
Intake .... Open 20° BTDC, Close 50° ABDC
Exhaust ...Open 50° BBDC, Close 20° ATDC
Valve lift: ..... 0.375″
Valve head dia:
Intake .... 1.59″
Exhaust ...1.44″
Valve spring .....
Carburation ..... Two SU H6

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.64	2.45
2	2.214	1.62
3	1.374	1.268
4	1.0	1.0
5		

Final drive ratios: 3.9, 4.1, 4.3, 4.5, 4.8

CHASSIS
Wheelbase ..... 94″
Track dimension, front ..... 47.5″
Track dimension, rear ..... 48.75″
Shock absorber ..... Lever
Steering ratio .....
Brakes .....
Tire size ..... 5.90 x 15

APPROVED OPTIONAL EQUIPMENT
Oil cooler (AJA.5291)
Connecting Rod (AEH.22/23)
Double fuel pump (AUA.73)
17 gal fuel tank
15 gal fuel tank
20 gal fuel tank (AHH.5496)
Limited slip differential (HAC.24)

Manufacturer: Morgan Class: H
Model: 4/4 Series II
DESCRIPTION:
2-Seater Roadster
Dry Weight: 1465 lbs
ENGINE: Type ..... 4 cyl side valve (Ford 100E)
Bore & stroke ..... 63.5mm x 92.5mm
Capacity ..... 1172 cc
Comp ratio 7:1
Head material ..... Cast Iron
Port size .....
Piston material ...
Piston weight .....
Timing data:
Intake .... Open 10° BTDC, Close 50° ABDC
Exhaust ...Open 44° BBDC, Close 10° ATDC
Valve lift: ..... 0.2893", 0.2904"
Valve head dia:
Intake .... 1.16"
Exhaust ...1.06"
Valve spring .....
Carburation ..... One Solex 21mm choke (Down draught)
TRANSMISSION AND DRIVE TRAIN:
Ratios:
1 3.93
2 2.205
3 1.0
4
5
Final drive ratios: 4.4
CHASSIS
Wheelbase ..... 96"
Track dimension, front ..... 47"
Track dimension, rear ..... 47"
Shock absorber .....
Steering ratio 2-1/4
Brakes .....
Tire size ..... 5.00 x 16, 5.20 x 15 (wire wheels)
APPROVED OPTIONAL EQUIPMENT
Aluminum cylinder head (8:1)
Dual 1-1/4" carburetors (SU)
Wire wheels (15")

Manufacturer: Morgan Class: G
Model: 4/4 Series III
DESCRIPTION:
2-Seater Roadster
Dry Weight: 1450 lbs
ENGINE: Type ..... 4 cyl ohv in line (Ford 105E)
Bore & stroke ..... 80.96mm x 48.41mm
Capacity ..... 996 cc
Comp ratio 8.9:1
Head material ..... Cast Iron
Port size ..... Intake-1.283", Exhaust-1.088"
Piston material ... Aluminum
Piston weight ..... 0.876 lbs (with rings)
Timing data:
Intake .... Open 10° BTDC, Close 50° ABDC
Exhaust ...Open 44° BBDC, Close 10° ATDC
Valve lift: ..... 0.2893", 0.2904"
Valve head dia:
Intake .... 1.370"
Exhaust ...1.192"
Valve spring .....
Carburation ..... One or two Solex DD
TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	18.1
2	10.54
3	6.21
4	4.4
5	

Final drive ratios: 4.4
CHASSIS
Wheelbase .....
Track dimension, front .....
Track dimension, rear .....
Shock absorber .....
Steering ratio 2-1/4
Brakes ..... Girling hydraulic 9 in drums
Tire size ..... 5.20 x 15, 5.60 x 15
APPROVED OPTIONAL EQUIPMENT
Disc brakes on front wheels

Manufacturer: Morgan Class: E
Model: Plus 4 (1954-1957)

DESCRIPTION:

2-Seater Steel-bodied Roadster
Dry Weight: 1900 lbs

ENGINE:

Type	4 cyl ohv in line (TR2-TR3)
Bore & stroke	83mm x 92mm
Capacity	1991 cc
Comp ratio	8.5:1, 9.2:1
Head material	Cast Iron
Port size	Intake-1.5", Exhaust-1.25"x1.06"
Piston material ...	Aluminum Alloy
Piston weight	22 oz complete
Timing data:	
Intake	Open 15° BTDC, Close 55° ABDC
Exhaust ...	Open 55° BBDC, Close 15° ATDC
Valve lift:	0.376", 0.425"
Valve head dia:	
Intake	1-9/16"
Exhaust ...	1-5/16"
Valve spring	166 lbs open
Carburation	Two SU H4

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	12.85	13.5
2	7.38	8.0
3	5.24	5.4
4	3.73	4.1
5		

Final drive ratios: 3.73(41/11), 4.1(41/10)

CHASSIS

Wheelbase	96"
Track dimension, front	47"
Track dimension, rear	47"
Shock absorber	
Steering ratio	1-3/4 turns
Brakes	
Tire size	5.00/5.25x16, 5.50x16, 5.60x15(wire wheels)

APPROVED OPTIONAL EQUIPMENT

15" Dunlop wire wheels
11" Disc brakes on front wheels
Electric fuel pump (in addition to mechanical pump)
Oversize liners (122166)
Oversize pistons (122208)
Cylinder head gasket (2054481)

Manufacturer: Morgan Class: C and E
Model: Plus 4 (1957-1961)
DESCRIPTION:
2-Seater Steel-bodied Roadster
Dry Weight:

ENGINE:
Type ..... 4 cyl ohv in line (TR3)
Bore & stroke ..... 83mm x 92mm (86mm x 92mm)
Capacity ..... 1991 cc (2196 cc)
Comp ratio 8.5:1, 9.2:1
Head material ..... Cast Iron
Port size ..... Intake-1.5", Exhaust-1.25"x1.06"
Piston material ... Aluminum Alloy
Piston weight ..... 22 oz complete
Timing data:
Intake .... Open 15° BTDC, Close 55° ABDC
Exhaust ...Open 55° BBDC, Close 15° ATDC
-or-
Intake .... Open 43° BTDC, Close 76° ABDC
Exhaust ...Open 76° BBDC, Close 43° ATDC
Valve lift: ..... 0.376" or 10.16mm
Valve head dia:
Intake .... 1-9/16"
Exhaust ...1-5/16"
Valve spring ..... 166 lbs open
Carburation ..... Two SU H6

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	12.85	13.5
2	7.38	8.0
3	5.24	5.4
4	3.73	4.1
5		

Final drive ratios: 3.73, 4.1

CHASSIS
Wheelbase ..... 96"
Track dimension, front ..... 47"
Track dimension, rear ..... 47"
Shock absorber .....
Steering ratio ..... 1-3/4 turns
Brakes .....
Tire size ..... 5.00/5.25x16, 5.50x16, 5.60x15(wire wheels), 5.00x15

APPROVED OPTIONAL EQUIPMENT (Allowed in both Class C and E)
15" Dunlop wire wheels
11" Disc brakes on front wheels
Electric fuel pump (in addition to mechanical pump)
Oversize liners (122166)
Oversize pistons (122208)
Cylinder head gasket (2054481)
Bore becomes 86mm

APPROVED OPTIONAL EQUIPMENT (Only permitted in Class C, prohibited in class E)
4 Branch exhaust system
Special inlet manifold
Aluminum sump
Oil cooler
High-lift camshaft
Competition push rods
Competition valve springs
Aluminum bodywork (Dry weight becomes 1764 lbs)
2 Weber 42 DCOE or 45 DCOE Carburators

Manufacturer: NSU Class: H
Model: Sports Prinz
DESCRIPTION:
Bertone Coupe (Steel)
Dry Weight: 1065 lbs

ENGINE:
Type ..... 2 cyl (ohc)
Bore & stroke ..... 75mm x 66mm (76mm x 66mm)
Capacity 583cc (598cc)
Comp ratio 7.6:1, 8.1:1
Head material ..... Aluminum Alloy
Port size ..... Intake 28.5mm,Exhaust 28mm
Piston material ... Aluminum Alloy
Piston weight ..... 416 grams, 341 grams
Timing data:
Intake .... Open 50° BTDC, Close 70° ABDC
Exhaust ...Open 70° BBDC, Close 50° ATDC
-or-
(Intake .... Open 48° BTDC, Close 72° ABDC)
(Exhaust ...Open 78° BBDC, Close 42° ATDC)
Valve lift: 7.5mm (10.5mm)
Valve head dia:
Intake 35mm
Exhaust ...32mm
Valve spring ..... Outer 35Kg (38.6Kg), Inner 15.5Kg (16.3Kg)
Carburation ..... One Bing 7/28/20 (Solex 34 PCI)

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	4.14
2	2.21
3	1.41
4	1.0
5	

Final drive ratios: 2.31

CHASSIS
Wheelbase ..... 78.25″
Track dimension, front ..... 47.25″
Track dimension, rear ..... 47.25″
Shock absorber ..... Telescopic
Steering ratio 16.85:1 (16.15:1)
Brakes ..... Drums - total lining area - 404 cm sq
Tire size ..... 4.40 x 12 (4.80 x 12)

APPROVED OPTIONAL EQUIPMENT

1962 Model - All specifications same as above, except as noted in parenthesis

Manufacturer: Panhard Class: H
Model: Dyna Junior

DESCRIPTION:

2-Seater Convertible
Dry Weight: 1400 lbs

ENGINE:

Type	2 cyl ohv opposed, air-cooled
Bore & stroke	85mm x 75mm
Capacity	850 cc
Comp ratio	7.8:1
Power output	40 bhp @ 5000 RPM
Torque	47 ft/lb @ 4000 RMP
Carburation	Two dual throat DD Solex

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	16.33
2	10.35
3	6.33
4	4.55
5	

Final drive ratios: 4.55

CHASSIS

Wheelbase	83.8″
Track dimension, front	48″
Track dimension, rear	
Shock absorber	
Steering ratio	
Brakes	Lockheed Hydraulic
Tire size	145x400, 4.50x16, 5.20x15

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Porsche Class: G
Model: 356/1300
DESCRIPTION:
Steel Coupe and Cabriolet
Dry Weight:

ENGINE:
Type ..... 4 cyl opposed
Bore & stroke ..... 3.15" x 2.52"
Capacity ..... 1286 cc
Comp ratio 6.5:1, 7.5:1
Head material ..... Aluminum Alloy
Port size ..... Intake 35mm, Exhaust 28mm (at inner valve seat)
Piston material ... Aluminum Alloy
Piston weight ..... 12.5 oz
Timing data:
Intake .... Open 2°30' BTDC, Close 37°30' ABDC
Exhaust ...Open 37°30' BBDC, Close 2°30' ATDC
Valve lift: ..... Intake 0.35", Exhaust 0.32"
Valve head dia:
Intake .... 1.5"
Exhaust ...1.2"
Valve spring ..... Outer 83 lb @ 1.25", Inner 33 lb @ 1.20" (+/-10%)
Carburation ..... Two Solex 32PBI

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	11.35	11.34	13.33
2	17.30	16.31	18.29
3	23.26	22.27	24.25
4	27.22	25.24	26.23
5			

Final drive ratios: 4.375(35/8), 4.428(31/7), 4.857(34/7), 5.167(31/6)

CHASSIS
Wheelbase ..... 82.7"
Track dimension, front ..... 50.8"
Track dimension, rear ..... 49.2"
Shock absorber ..... Fichtel and Sachs, Boge
Steering ratio 14.15:1
Brakes .....
Tire size ..... 5.00 x 16

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Porsche Class: G
Model: 356/1300S (Super)
DESCRIPTION:
Steel Coupe and Cabriolet
Dry Weight:

ENGINE:

Type	4 cyl opposed
Bore & stroke	2.94" x 2.92"
Capacity	1290cc
Comp ratio	8.2:1, 9.2:1
Head material	Aluminum Alloy
Port size	Intake 35mm, Exhaust 28mm (at inner valve seat)
Piston material ...	Aluminum Alloy
Piston weight	12.5 oz
Timing data:	
Intake	Open 19° BTDC, Close 54° ABDC
Exhaust ...	Open 54° BBDC, Close 19° ATDC
Valve lift:	Intake 0.40", Exhaust 0.36"
Valve head dia:	
Intake	1.5"
Exhaust ...	1.2"
Valve spring	Outer 83 lb @ 1.25", Inner 33 lb @ 1.20" (+/-10%)
Carburation	Two Solex 32PBI or 40PBIC

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	11.35	11.34	13.33
2	17.30	16.31	18.29
3	23.26	22.27	24.25
4	26.23	27.22	25.24
5			

Final drive ratios: 4.375(35/8), 4.428(31/7), 4.857(34/7), 5.167(31/6)

CHASSIS

Wheelbase	82.7"
Track dimension, front	50.8"
Track dimension, rear	49.2"
Shock absorber	Telescopic
Steering ratio	14.15:1
Brakes	
Tire size	5.00 x 16

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Porsche Class: G
Model: 356A/1300-1300S
DESCRIPTION:
Steel Coupe and Cabriolet
Dry Weight:

ENGINE:
Type ..... 4 cyl opposed
Bore & stroke ..... 2.94" x 2.92"
Capacity 1290cc
Comp ratio 6.5:1, 7.5:1, 8.2:1, 9.2:1
Head material ..... Aluminum Alloy
Port size ..... Intake 35mm, Exhaust 28mm (at inner valve seat)
Piston material ... Aluminum Alloy
Piston weight ..... 12.5 oz
Timing data:
Intake .... Open 15° BTDC, Close 50° ABDC
Exhaust ...Open 50° BBDC, Close 15° ATDC
-or-
Intake .... Open 5° BTDC, Close 43° ABDC
Exhaust ...Open 43° BBDC, Close 5° ATDC
Valve lift: ..... Intake 0.337", Exhaust 0.319"
or Intake 0.40", Exhaust 0.36"
Valve head dia:
Intake .... 1.5"
Exhaust ...1.2"
Valve spring ..... Outer 83 lb @ 1.25", Inner 33 lb @ 1.20" (+/-10%)
Carburation ..... Two Solex 32PBI, 32PBIC, or 40PBIC

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	11.35	11.34	13.33
2	17.30	16.31	18.29
3	23.26	22.27	24.25
4	27.22	25.24	26.23
5			

Final drive ratios: 4.375(35/8), 4.428(31/7), 4.857(34/7), 5.167(31/6)

CHASSIS
Wheelbase ..... 82.7"
Track dimension, front ..... 51.4"
Track dimension, rear ..... 50.1"
Shock absorber ..... Boge, Koni, Fichtel and Sachs
Steering ratio 16:1
Brakes .....
Tire size ..... 5.60 x 15, 5.90 x 15

APPROVED OPTIONAL EQUIPMENT
Compensating spring (rear axle)
Limited slip differential
80 litre fuel tank
Bucket sports seats
Center-lock wheels

Manufacturer: Porsche Class: F
Model: 356/1500 (Normal)
DESCRIPTION:
Steel Coupe, Cabriolet and Roadster
Dry Weight:

ENGINE:
Type ..... 4 cyl opposed
Bore & stroke ..... 3.15" x 2.91"
Capacity ..... 1488 cc
Comp ratio 7:1, 8:1
Head material ..... Aluminum Alloy
Port size ..... Intake 35mm, Exhaust 28mm
Piston material ... Aluminum Alloy
Piston weight ..... 12.5 oz
Timing data:
Intake .... Open 2°30' BTDC, Close 37°30' ABDC
Exhaust ...Open 37°30' BBDC, Close 2°30' ATDC
Valve lift: ..... 0.32"
Valve head dia:
Intake .... 1.5"
Exhaust ...1.2"
Valve spring ..... Outer 83 lb @ 1.25", Inner 33 lb @ 1.20" (+/-10%)
Carburation ..... Two Solex 32PBI or 40PBIC

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	11.35	11.34	13.33
2	17.30	16.31	18.29
3	23.26	22.27	24.25
4	27.22	25.24	26.23
5			

Final drive ratios: 4.375(35/8), 4.428(31/7), 4.857(34/7), 5.167(31/6)

CHASSIS
Wheelbase ..... 82.7"
Track dimension, front ..... 50.8"
Track dimension, rear ..... 49.2"
Shock absorber ..... Fichtel and Sachs, Boge
Steering ratio 14.15:1
Brakes .....
Tire size ..... 5.00 x 16

APPROVED OPTIONAL EQUIPMENT

Manufacturer: Porsche Class: D
Model: 356/1500S (Super)
DESCRIPTION:
Steel Coupe, Cabriolet and Roadster
Dry Weight:
ENGINE: Type ..... 4 cyl opposed
Bore & stroke ..... 3.15" x 2.91"
Capacity ..... 1488 cc
Comp ratio 8.2:1, 8.7:1
Head material ..... Aluminum Alloy
Port size ..... Intake 35mm, Exhaust 28mm
Piston material ... Aluminum Alloy
Piston weight ..... 12.5 oz
Timing data:
Intake .... Open 19° BTDC, Close 54° ABDC
Exhaust ...Open 54° BBDC, Close 19° ATDC
Valve lift: .....
Valve head dia:
Intake .... 1.5"
Exhaust ...1.2"
Valve spring ..... Outer 83 lb @ 1.25", Inner 33 lb @ 1.20" (+/-10%)
Carburation ..... Two Solex 40PBIC
TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	11.35	11.34	13.33
2	17.30	16.31	18.29
3	23.26	22.27	24.25
4	27.22	25.24	26.23
5			

Final drive ratios: 4.375(35/8), 4.428(31/7), 4.857(34/7), 5.167(31/6)
CHASSIS
Wheelbase ..... 82.7"
Track dimension, front ..... 50.8"
Track dimension, rear ..... 49.2"
Shock absorber ..... Fichtel and Sachs, Boge
Steering ratio 14.15:1
Brakes .....
Tire size ..... 5.00 x 16
APPROVED OPTIONAL EQUIPMENT

Manufacturer: Porsche Class: B
Model: 356A/1500GS, 1500GT "Carrerra"

DESCRIPTION:

Steel Coupe and Roadster
(Some have aluminum doors and deck lids)

ENGINE:

Type	4 cyl opposed - 4 ohc
Bore & stroke	3.35" x 2.59"
Capacity	1498 cc
Comp ratio	9:1, 10:1
Head material	Aluminum Alloy
Port size	Intake 45mm (1.772"), Exhaust 38mm (1.495")
Piston material ...	Aluminum Alloy
Piston weight	17.07 oz (with rings)
Timing data:	(Intake cam lobe: 0.505")
Intake	Open 38° BTDC, Close 78° ABDC
Exhaust ...	Open 78° BBDC, Close 38° ATDC
Valve lift:	
Valve head dia:	
Intake	1.89"
Exhaust ...	1.615"
Valve spring	Outer 84 lb @ 1.062" (37Kg @ 27.0mm), +/-10%
	Inner 58 lb @ 1.000" (26Kg @ 25.4mm), +/-10%
Carburation	Two Solex 40PJJ

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	11.34	13.33	11.35
2	17.30	16.31	18.29
3	22.27	24.25	23.26
4	25.24	26.23	27.22
5			

Final drive ratios: 4.428(31/7), 4.857(34/7), 5.167(31/6)

CHASSIS

Wheelbase	82.7"
Track dimension, front	51.4"
Track dimension, rear	50.1"
Shock absorber	Telescopic
Steering ratio	16:1
Brakes	
Tire size	5.90 x 15

APPROVED OPTIONAL EQUIPMENT

Carburator velocity stacks
Two Solex 40PJJ-4 Carburators
6V or 12V electrical system
Compensating spring (rear axle)
Two Weber 40 DCM, DCM1, DCM2 Carburators
Ventilated brake backing plates
80 Litre fuel tank
Induction venturi
Bucket sports seats
Center-lock wheels
Stabilizer-16mm
Sodium-cooled intake valves
Limited-slip differential
Light-weight wheels

Note: Flywheel weight -
14.0 lbs
(7.71 lb in Roller-crank engines)
(17.0 lb in Plain bearing engines)

Manufacturer: Porsche Class: F
Model: 356A-356B/1600 (Normal)

DESCRIPTION:

Steel Coupe, Cabriolet, Roadster and Hard Top
Dry Weight:

ENGINE:

Type	4 cyl ohv opposed
Bore & stroke	3.25" x 2.91"
Capacity	1582 cc
Comp ratio	7.5-8.0:1
Head material	Aluminum Alloy
Port size	Intake 35mm, Exhaust 28mm
Piston material ...	Aluminum Alloy
Piston weight	12.34 oz (with rings)
Timing data:	
Intake	Open 5° BTDC, Close 43° ABDC
Exhaust ...	Open 43° BBDC, Close 5° ATDC
Valve lift:	Intake: 0.334", Exhaust 0.323"
Valve head dia:	
Intake	1.5"
Exhaust ...	1.22"
Valve spring	Outer 83.7 lb @ 1.247" (38.2Kg @ 31.7mm)
	Inner 34.2 lb @ 1.185" (15.5Kg @ 30.2mm)
Carburation	Two Zenith 32NDIX or Pallas/Zenith NFIX

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	11:34	12:33			
2	17:30	16:31	15:32	18:29	
3	23:26	22:27	20:27	18:29	
4	27:22	25:24	24:25	23:26	20:27
5					

Final drive ratios: 4.428(31/7), 4.857(34/7), 5.167(31/6)

CHASSIS

Wheelbase	82.7"
Track dimension, front	51.4"
Track dimension, rear	50.1"
Shock absorber	Telescopic
Steering ratio	16:1
Brakes	Drum type, total lining area = 121.4 in sq
Tire size	5.90 x 15, 5.60 x 15

APPROVED OPTIONAL EQUIPMENT

Limited-slip differential
80 Litre fuel tank
Induction venturi
Center-lock wheels
Bucket sports seats
Compensating spring (rear axle)
Light-weight wheels
HD Sway bar (16mm)
Large front brakes (60mm wth ventilated backing plates)
Magnetic oil filter with centrifugel valve
Valve cover with ball check
Large oil pump
Centrifugal oil pickup

Notes: No Super pistons allowed in 1600 Normal
No Super-90 pistons allowerd in 1600 Super

Connecting Rod weights: 1600 Normal = 14.98 oz
1600 Super = 15.16 oz
1600 Super-90 = 16.57 oz

Flywheel weights: 1600 Normal, Super, and Super-90 = 17.79 lbs

Manufacturer: Porsche Class: D
Model: 356A-356B/1600S (Super)

DESCRIPTION:

Steel Coupe, Cabriolet, Roadster and Hard Top
Dry Weight:

ENGINE:

Type	4 cyl ohv opposed	
Bore & stroke	3.25" x 2.91"	
Capacity	1582 cc	
Comp ratio	8.5-9.0:1	
Head material	Aluminum Alloy	
Port size	Intake 35mm, Exhaust 28mm	
Piston material ...	Aluminum Alloy	
Piston weight	12.52 oz	
Timing data:		
Intake	Open 15° BTDC, Close 50° ABDC	
Exhaust ...	Open 50° BBDC, Close 15° ATDC	
	-or-	
Intake	Open 19° BTDC, Close 54° ABDC	(Roller Crank)
Exhaust ...	Open 54° BBDC, Close 19° ATDC	(engines only)
Valve lift:	Intake: 0.378", Exhaust 0.364"	
Valve head dia:		
Intake	1.5"	
Exhaust ...	1.22"	
Valve spring	Outer 83.7 lb @ 1.247" (38.2Kg @ 31.7mm)	
	Inner 34.2 lb @ 1.185" (15.5Kg @ 30.2mm)	
Carburation	Two Pallas/Zenith NFIX	

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	11:34	12:33			
2	17:30	16:31	15:32	18:29	
3	23:26	22:27	20:27	18:29	
4	27:22	25:24	24:25	23:26	20:27
5					

Final drive ratios: 4.428(31/7), 4.857(34/7), 5.167(31/6)

CHASSIS

Wheelbase	82.7"
Track dimension, front	51.4"
Track dimension, rear	50.1"
Shock absorber	Telescopic
Steering ratio	16:1
Brakes	Drum type, total lining area = 121.4 in sq
Tire size	5.90 x 15, 5.60 x 15

APPROVED OPTIONAL EQUIPMENT

Limited-slip differential
Induction venturi
Bucket sports seats
Compensating spring (rear axle)
Light-weight wheels
HD Sway bar (16mm)
Large front brakes (60mm wth ventilated backing plates)
Magnetic oil filter with centrifugel valve
Valve cover with ball check
Large oil pump
Centrifugal oil pickup
80 Litre fuel tank
Center-lock wheels

Notes: No Super pistons allowed in 1600 Normal
No Super-90 pistons allowerd in 1600 Super

Connecting Rod weights: 1600 Normal = 14.98 oz
1600 Super = 15.16 oz
1600 Super-90 = 16.57 oz

Flywheel weights: 1600 Normal, Super, and Super-90 = 17.79 lbs

Manufacturer: Porsche Class: B
Model: 356A-356B/1600GS & 1600GT

DESCRIPTION:

2-Seater Steel Coupe and Roadster
(Some have aluminum doors and deck lids)

ENGINE:

Type	4 cyl opposed (4 ohc)
Bore & stroke	3.45" x 2.6"
Capacity	1588 cc
Comp ratio	9.8:1
Head material	Aluminum Alloy
Port size	Intake 1.773", Exhaust 1.495"
Piston material ...	Aluminum Alloy
Piston weight	1.035 lbs
Timing data:	
Intake	Open 40° BTDC, Close 80° ABDC
Exhaust ...	Open 80° BBDC, Close 40° ATDC
Valve lift:	Intake: 0.505", Exhaust 0.394"
Valve head dia:	
Intake	1.89"
Exhaust ...	1.615"
Valve spring	Outer 84 lb @ 1.062" (37Kg @ 27.0mm), +/-10%
	Inner 58 lb @ 1.000" (26Kg @ 25.4mm), +/-10%
Carburation	Two Solex 44 PII-4

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	11:34	12:33					
2	17:30	16:31	15:32	18:29			
3	22:27	20:27	18:29	23:26			
4	25:24	23:26	27:22	27:23	23:26	20:27	24:25
5							

Final drive ratios: 6:31, 7:31, 7:34

CHASSIS

Wheelbase	82.7"
Track dimension, front	51.4"
Track dimension, rear	50.1"
Shock absorber	Telescopic
Steering ratio	16:1
Brakes	Drum type, total lining area = 149 in sq
Tire size	5.90 x 15, 165 x 15

APPROVED OPTIONAL EQUIPMENT

Carburator velocity stacks
Two Solex 40PJJ-4 Carburators
6V or 12V electrical system
Compensating spring (rear axle)
Two Weber 40 DCM, DCM1, DCM2 Carburators
Ventilated brake backing plates
80 Litre fuel tank
Induction venturi
Bucket sports seats
Center-lock wheels
Stabilizer-16mm
Sodium-cooled intake valves
Limited-slip differential
Light-weight wheels

Note: Flywheel weight -
14.0 lbs, 7.71 lb - Roller-crank engines)
17.0 lb - Plain bearing engines

Manufacturer: Porsche Class: C
Model: 356B/1600 Super 90
DESCRIPTION:
Steel Coupe, Cabriolet, Roadster and Hard Top
Dry Weight:

ENGINE:

Type	4 cyl ohv opposed
Bore & stroke	3.25" x 2.91"
Capacity	1582 cc
Comp ratio	9.0-9.5:1
Head material	Aluminum Alloy
Port size	Intake 1.458", Exhaust 1.11" @ inner valve seat
Piston material ...	Aluminum Alloy
Piston weight	13.08 oz

Timing data:

Intake	Open 15° BTDC, Close 50° ABDC	
Exhaust ...	Open 50° BBDC, Close 15° ATDC	
	-or-	
Intake	Open 19° BTDC, Close 54° ABDC	(Roller Crank)
Exhaust ...	Open 54° BBDC, Close 19° ATDC	(engines only)

Valve lift:	Intake: 0.378", Exhaust 0.364"

Valve head dia:

Intake	1.575"
Exhaust ...	1.22"

Valve spring	Outer 83.7 lb @ 1.247" (38.2Kg @ 31.7mm)
	Inner 34.2 lb @ 1.185" (15.5Kg @ 30.2mm)
Carburation	Two Solex 40 PII-4

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	11:34	12:33			
2	17:30	16:31	15:32	18:29	
3	23:26	22:27	20:27	18:29	
4	27:22	25:24	24:25	23:26	20:27
5					

Final drive ratios: 4.428(31/7), 4.857(34/7), 5.167(31/6)

CHASSIS

Wheelbase	82.7"
Track dimension, front	50.8"
Track dimension, rear	49.2"
Shock absorber	Telescopic
Steering ratio	16:1
Brakes	Drum type, total lining area = 121.4 in sq
Tire size	5.90 x 15, 165 x 15

APPROVED OPTIONAL EQUIPMENT

Limited-slip differential	80 Litre fuel tank
Induction venturi	Center-lock wheels
Bucket sports seats	Compensating spring (rear axle)

Light-weight wheels
HD Sway bar (16mm)
Large front brakes (60mm wth ventilated backing plates)
Magnetic oil filter with centrifugel valve
Valve cover with ball check
Large oil pump
Centrifugal oil pickup

Notes: No Super pistons allowed in 1600 Normal
No Super-90 pistons allowerd in 1600 Super

Connecting Rod weights: 1600 Normal = 14.98 oz
1600 Super = 15.16 oz
1600 Super-90 = 16.57 oz

Flywheel weights: 1600 Normal, Super, and Super-90 = 17.79 lbs

Manufacturer: Renault-Alpine Class: F
Model: A.106 (747 cc)
DESCRIPTION:
Fiberglass Coupe, Cabriolet, and "Berlinette Tour De France"
Dry Weight: 530Kg (1166 lbs)
ENGINE: Type ..... 4 cyl ohv in line
Bore & stroke ..... 54.5mm x 80mm
Capacity ..... 747 cc
Combustion Volume..27 cc
Head material ..... Aluminum Alloy
Port size ..... Intake 37mm, Exhaust 37mm
Piston material ... Aluminum
Piston weight ..... 0.295Kg, compete
Timing data:
Intake .... Open 20° BTDC, Close 60° ABDC
Exhaust ...Open 60° BBDC, Close 20° ATDC
Valve lift: .....
Valve head dia:
Intake .... 34 mm
Exhaust ...30 mm
Valve spring .....
Carburation ..... One or Two Weber 36DCL
TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	37/10				
2	41/17	40/15	40/18		
3	37/22	40/20	33/28		
4	32/25	35/23	33/28		
5	31/30	35/28	30/31	31/28	33/29

Final drive ratios: 29/7, 33/9, 33/7, 33/6, 35/9, 35/8
CHASSIS
Wheelbase 2100mm
Track dimension, front 1225mm
Track dimension, rear 1220mm
Shock absorber ..... Telescopic
Steering ratio .....
Brakes ..... 1 or 2 leading shoe drum type - 228x35mm
Tire size ..... 135-145 x 380, 135-155 x 380, 135-145 x 400
APPROVED OPTIONAL EQUIPMENT

Manufacturer: Renault-Alpine Class: F
Model: A.108 (845 cc)
DESCRIPTION:
Fiberglass Coupe, Cabriolet, and "Berlinette Tour De France"
Dry Weight: 530Kg (1166 lbs)
ENGINE: Type ..... 4 cyl ohv in line
Bore & stroke ..... 58mm x 80mm
Capacity ..... 845 cc
Combustion Volume..27 cc
Head material ..... Aluminum Alloy
Port size ..... Intake 37mm, Exhaust 37mm
Piston material ... Aluminum
Piston weight ..... 0.295Kg, compete
Timing data:
Intake .... Open 20° BTDC, Close 60° ABDC
Exhaust ...Open 60° BBDC, Close 20° ATDC
Valve lift: .....
Valve head dia:
Intake .... 34 mm
Exhaust ...30 mm
Valve spring .....
Carburation ..... One or Two Weber 36DCC
TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	37/10				
2	41/17	40/15	40/18		
3	37/22	40/20	33/28		
4	32/25	35/23	33/28		
5	31/30	35/28	30/31	31/28	33/29

Final drive ratios: 29/7, 33/9, 33/7, 33/6, 35/9, 35/8
CHASSIS
Wheelbase 2100mm
Track dimension, front 1225mm
Track dimension, rear 1220mm
Shock absorber ..... Telescopic
Steering ratio .....
Brakes ..... 1 or 2 leading shoe drum type - 228x35mm
Tire size ..... 135-145 x 380, 135-155 x 380, 135-145 x 400
APPROVED OPTIONAL EQUIPMENT

Manufacturer: Renault-Alpine Class: F
Model: A.108-1000
DESCRIPTION:
Fiberglass Coupe, Cabriolet, and "Berlinette Tour De France"
Dry Weight: 530Kg (1166 lbs)
ENGINE: Type ..... 4 cyl ohv in line
Bore & stroke ..... 63mm x 80mm
Capacity ..... 998 cc
Combustion Volume..30 cc
Head material ..... Aluminum Alloy
Port size ..... Intake 37mm, Exhaust 37mm
Piston material ... Aluminum
Piston weight .....
Timing data:
Intake .... Open 20° BTDC, Close 60° ABDC
Exhaust ...Open 60° BBDC, Close 20° ATDC
Valve lift: .....
Valve head dia:
Intake .... 34 mm
Exhaust ...30 mm
Valve spring .....
Carburation ..... One or Two Weber 36DCL
TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	37/10				
2	41/17	40/15	40/18		
3	37/22	40/20	33/28		
4	32/25	35/23	33/28		
5	31/30	35/28	30/31	31/28	33/29

Final drive ratios: 29/7, 33/9, 33/7, 33/6, 35/9, 35/8
CHASSIS
Wheelbase 2100mm
Track dimension, front 1225mm
Track dimension, rear 1220mm
Shock absorber ..... Telescopic
Steering ratio .....
Brakes ..... 1 or 2 leading shoe drum type - 228x35mm
Tire size ..... 135-145 x 380, 135-155 x 380, 135-145 x 400
APPROVED OPTIONAL EQUIPMENT

Manufacturer: Sunbeam Class: F
Model: Alpine Series I and II

DESCRIPTION:

2-Seater Roadster (Steel)
Dry Weight: 2082 lbs

ENGINE:

Type	4 cyl ohv in line
Bore & stroke	3.11" x 3.0" (3.21" x 3.0" Series II)
Capacity	1494 cc (1592 cc Series II)
Comp ratio	9.2:1 (9.1:1 Series II)
Head material	Aluminum Alloy
Port size	Intake 1.31", Exhaust 1.06"
Piston material ...	Aluminum Alloy
Piston weight	1.1 lbs

Timing data:

Intake	Open 14° BTDC, Close 52° ABDC
Exhaust ...	Open 56° BBDC, Close 10° ATDC
	-or-
Intake	Open 25° BTDC, Close 59° ABDC
Exhaust ...	Open 63° BBDC, Close 21° ATDC

Valve lift:	Intake 0.366", Exhaust 0.364"

Valve head dia:

Intake	1.436"/1.432"
Exhaust ...	1.176"/1.172"

Valve spring	Outer 56 lbs, Inner 25 lbs fitted
Carburation	Two Zenith 36 WIP2

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.35	2.97
2	2.14	1.90
3	1.39	1.24
4	1.0	1.0
5		

Final drive ratios: 3.89, 4.22, 4.55, 4.778, 5.22

CHASSIS

Wheelbase	86"
Track dimension, front	51"
Track dimension, rear	48.65"
Shock absorber	Lever arm (rear), Telescopic (front)
Steering ratio	14.5:1
Brakes	Disc (front) - Lining area = 20.6" sq, Drum (rear) - Lining area = 60" sq
Tire size	5.60 x 13, 5.90 x 13

APPROVED OPTIONAL EQUIPMENT

Overdrive
Knock-off wire whees
Camshaft (#1208620)
Flywheel (#1208623)
Cylinder head (#1208624) or (S.233193)
Front springs (#X66941) or (S.233185)
Front anti-roll bar (#X66774) or (S.2331xx)
25 gal fuel tank

Manufacturer: Sabra Class: F
Model:
DESCRIPTION:
2-Seater Convertible
Dry Weight: 1765 lbs

ENGINE:

Type	4 cyl ohv in line (Ford Consul)
Bore & stroke	82.6mm x 79.5mm
Capacity	1703 cc
Comp ratio	8.8-9.5:1
Head material	Cast Iron
Port size	Inlet 1.5", Exhaust 1.01"
Piston material ...	Aluminum
Piston weight	4.18 - 4.22
Timing data:	
Intake	Open 17° BTDC, Close 51° ABDC
Exhaust ...	Open 49° BBDC, Close 19° ATDC
Valve lift:	0.349"
Valve head dia:	
Intake	1.625"
Exhaust ...	1.187"
Valve spring	106 lb @ 1.24"
Carburation	Zenith Single DD

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	2.53
2	1.71
3	1.23
4	1.0
5	

Final drive ratios: 3.55, 3.9, 4.4

CHASSIS

Wheelbase	90"
Track dimension, front	48"
Track dimension, rear	48"
Shock absorber	Telescopic
Steering ratio	2-1/2 turns
Brakes	Disc front, drum rear
Tire size	155 x 15

APPROVED OPTIONAL EQUIPMENT
Two SU 1-1/2" carburetors
High-lift camshaft (200902)
Light flywheel (200779)
Wire wheels (200779)
15 gal fuel tank

Manufacturer: SIATA Class: D
Model: 208 S
DESCRIPTION:
Coupe and Spyder
Dry Weight:
ENGINE: Type ..... V8 ohv
Bore & stroke ..... 72mm x 61.3mm
Capacity ..... 1996 cc
Comp ratio 8.5:1
Head material ..... Aluminum Alloy
Port size .....
Piston material ... Aluminum Alloy
Piston weight .....
Timing data:
Intake .... Open 12° BTDC, Close 31° ABDC
Exhaust ...Open 39° BBDC, Close 10° ATDC
Valve lift: 8.5mm
Valve head dia:
Intake 33mm
Exhaust ...31mm
Valve spring .....
Carburation ..... Two Weber 36 DCF3
TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	2.69
2	1.77
3	1.26
4	1.0
5	

Final drive ratios: 4.10(41/10), 4.45(40/9)
CHASSIS
Wheelbase 2400mm
Track dimension, front 1290mm
Track dimension, rear 1230mm
Shock absorber ..... Telescopic RIV
Steering ratio 16.4:1
Brakes .....
Tire size ..... 165 x 400, 5.90 x 15
APPROVED OPTIONAL EQUIPMENT

Manufacturer: Sprinzel Class: C
Model: Sebring Sprite

DESCRIPTION:

2-Seater Aluminum Fiberglass Coupe
Dry Weight: 570Kg (1254 lbs)

ENGINE:

Type	BMC Type A (Modified)
Bore & stroke	2.538" x 3.0"
Capacity	995 cc
Comp ratio	9.5-11:1
Head material	Cast Iron
Port size	Intake 38.1mm, 34.925mm
Piston material ...	Aluminum
Piston weight	

Timing data:

Intake	Open 16° BTDC, Close 56° ABDC
Exhaust ...	Open 51° BBDC, Close 21° ATDC
	-or-
Intake	Open 35° BTDC, Close 70° ABDC
Exhaust ...	Open 70° BBDC, Close 35° ATDC

Valve lift:	7.9mm, 0.400"
Valve head dia:	
Intake	1-1/4"
Exhaust ...	1-3/16"
Valve spring	140 lbs
Carburation	Two SU 1-1/2" (H4)

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.627	3.198
2	2.374	1.911
3	1.412	1.357
4	1.0	1.0
5		

Final drive ratios: 3.9, 4.22, 4.55, 4.875

CHASSIS

Wheelbase	80"
Track dimension, front	45-1/4"
Track dimension, rear	44-3/4"
Shock absorber	Lever
Steering ratio	2-1/3
Brakes	Front disc, rear drums
Tire size	5.25-5.50 x 13

APPROVED OPTIONAL EQUIPMENT

Solid-skirt pistons
3-branch exhaust system
Special camshaft bearings
Competition clutch
Competition crankshaft
Competition cylinder head

Manufacturer: Triumph Class: E
Model: TR-2, TR-3, TR-3A
DESCRIPTION:
2-Seater Steel Roadster
Dry Weight: 2000 lbs

ENGINE:

Type	4 cyl ohv in line
Bore & stroke	3.268″ x 3.622″
Capacity	1991 cc
Comp ratio	8.5:1, 9.2:1
Head material	Cast Iron
Port size	Intake 1.5″ dia, Exhaust 1.25″ x 1.06″
Piston material ...	Alloy
Piston weight	1.434 lbs (with pin)
Timing data:	
Intake	Open 15° BTDC, Close 55° ABDC
Exhaust ...	Open 55° BBDC, Close 15° ATDC
Valve lift:	0.376″
Valve head dia:	
Intake	1.564″
Exhaust ...	1.304″
Valve spring	Inner & Outer: 166 lbs at open position
Carburation	Two SU H4 or SU H6

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.38		
2	2.00	2.64 (od)	(sic-2.64 should have been 1.64)
3	1.325	1.09 (od)	
4	1.00	0.82 (od)	
5			

Final drive ratios: 3.7(37/10), 4.1(41/10)

CHASSIS

Wheelbase	88″
Track dimension, front	45″
Track dimension, rear	45-1/2″
Shock absorber	
Steering ratio	12:1
Brakes	
Tire size	5.50 x 15, 155 x 15, 5.90 x 15

APPROVED OPTIONAL EQUIPMENT
Overdrive
Undershield
Aluminum Sump
Competition front spring
Anti-roll bar (Triumph part #508397)
Oversize pistons and liners: (Bore becomes 86mm)
Pistons: (#122208)
Liners: (#122166)
Cyl head casket: (#205481)
Wire wheels-60 spoke

Manufacturer: Triumph Class: E
Model: TR-4

DESCRIPTION:
2-Seater Steel Roadster
Dry Weight: 2072 lbs

ENGINE:
Type ..... 4 cyl ohv in line
Bore & stroke ..... 86mm x 92mm
Capacity ..... 2138 cc
Comp ratio 9.0
Head material ..... Cast Iron
Port size ..... Intake 1-5/8" dia, Exhaust 1-3/8" x 1-3/16"
Piston material ... Alloy
Piston weight ..... 1.44 lbs (with pin)
Timing data:
Intake .... Open 15° BTDC, Close 55° ABDC
Exhaust ...Open 55° BBDC, Close 15° ATDC
-or-
Intake .... Open 31° BTDC, Close 67° ABDC
Exhaust ...Open 70° BBDC, Close 28° ATDC
Valve lift: ..... 0.376" or 0.411"
Valve head dia:
Intake .... 1.56"
Exhaust ...1.30"
Valve spring ..... Outer: 125lbs, Inner 69.5lbs, Aux Inner (Ex) 21.4lbs
Carburation ..... Two SU H6

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.139
2	2.01
3	1.325
4	1.00
5	

Final drive ratios: 3.7(37/10), 4.1(41/10), 4.3, 4.625

CHASSIS
Wheelbase ..... 88"
Track dimension, front ..... 49" (disc), 50" (wire)
Track dimension, rear ..... 48" (disc), 49" (wire)
Shock absorber ..... Front-telescopic, Rear-lever
Steering ratio 12:1
Brakes .....
Tire size ..... 5.50 x 15, 155 x 15, 5.90 x 15

APPROVED OPTIONAL EQUIPMENT
Competition valve springs (02065-TR4)
Overdrive (211020)
Wire wheels (60 spoke) (506169)
Aluminum sump (502126)
Competition front springs (201899)
Anti-roll bar (02052-TR4)
Undersize pistons and liners (1991 cc)
HD competition clutch (02051-TR4)
Oil radiator (02053-TR4)
Rear shock absorber kit (telescopic) (02054-TR4)
Limited slip differential (02055-TR4)
Competition push rods (02069-TR4)
Rear suspension torque rods (02056-TR4)
Competition exhaust system (02070-TR4)
HD Comp. valves
Cast alloy wheels (02057-TR4)
HD Steel comp. wheels (02058-TR4)

Manufacturer: Turner Class: D
Model: Climax
DESCRIPTION:
Open 2-Seater, Fiberglass body
Dry Weight: 1204 lbs
ENGINE: Type ..... 4 cyl ohc in line
Bore & stroke ..... 2.85" x 2.625"
Capacity ..... 1097 cc
Comp ratio 9.8:1
Head material ..... Aluminum Alloy
Port size ..... Intake 1-1/8", Exhaust 1-1/8"
Piston material ... Aluminum Alloy
Piston weight .....
Timing data:
Intake .... Open 12° BTDC, Close 56° ABDC
Exhaust ...Open 56° BBDC, Close 12° ATDC
Valve lift: ..... 0.310"
Valve head dia:
Intake .... 1.350"
Exhaust ...1.20"
Valve spring ..... Outer 67 lb or 110.7lb, Inner 25lb or 45.3lb
Carburation ..... Two SU H4
TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	2.25
2	1.67
3	1.23
4	1.0
5	

Final drive ratios: 4.2, 4.3, 4.55, 4.875, 5.125
CHASSIS
Wheelbase .....
Track dimension, front .....
Track dimension, rear .....
Shock absorber ..... Lever (front), telescopic (rear)
Steering ratio ..... 2-1/3 turns
Brakes .....
Tire size ..... 5.20 x 15, 5.60 x 13
APPROVED OPTIONAL EQUIPMENT
Oil radiator
Sports camshaft with following timing:
Intake .... Open 30° BTDC, Close 60° ABDC
Exhaust ...Open 60° BBDC, Close 30° ATDC
Lift..... 0.360"
Z.F. limited slip differential
Borg Warner limited slip differential
Anti-roll bars
Wire wheels with knock-off hubs

Manufacturer: Turner Class: F
Model: 950 Sports

DESCRIPTION:

Open 2-Seater, Fiberglass body
Dry Weight: 1176 lbs

ENGINE:

Type	BMC 'A' 4 cyl ohc in line
Bore & stroke	63mm x 76mm
Capacity	948 cc
Comp ratio	8.3:1
Head material	Cast Iron
Port size	Intake 0.985", Exhaust 0.905"
Piston material ...	Aluminum Alloy
Piston weight	5 oz
Timing data:	
Intake	Open 5° BTDC, Close 45° ABDC
Exhaust ...	Open 40° BBDC, Close 10° ATDC
Valve lift:	0.265"
Valve head dia:	
Intake	1.075"
Exhaust ...	1.0"
Valve spring	Standard A-35
Carburation	Two SU H1

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.628	2.25
2	2.374	1.67
3	1.412	1.23
4	1.0	1.0
5		

Final drive ratios: 3.75, 4.2, 4.3, 4.55, 4.875, 5.125, 5.375

CHASSIS

Wheelbase	80.5"
Track dimension, front	45.5"
Track dimension, rear	44.75"
Shock absorber	Lever (front), telescopic (rear)
Steering ratio	2-1/3 turns
Brakes	Drums, 7 x 1.25"
Tire size	5.20 x 15, 5.20 x 13

APPROVED OPTIONAL EQUIPMENT

9.3 Compression pistons (flat top)
Sports camshaft with timing as follows:

Intake	Open 50° BTDC, Close 70° ABDC
Exhaust ...	Open 78° BBDC, Close 42° ATDC

Alexander alloy head
9" disc brakes on front
8 x 1.5" drum brakes on rear
SU H2 Carburators
SU H4 Carburators
Oil radiator
Wire wheels with knock-off hubs
Anti-roll bars
Heavy duty valve springs
Z.F. Limited slip differential

Manufacturer: TVR Class: C
Model: Grantura (Climax)
DESCRIPTION:
2-Seater Coupe-Fiberglass
Dry Weight:

ENGINE:

Type	4 cyl ohc in line
Bore & stroke	3.0" x 2.625"
Capacity	1216 cc
Comp ratio	10.0:1
Head material	Aluminum
Port size	Intake 1.125"; Exhaust 1.125"
Piston material ...	Aluminum
Piston weight	12.5 oz
Timing data:	
Intake	Open 12° BTDC, Close 56° ABDC
Exhaust ...	Open 56° BBDC, Close 12° ATDC
Valve lift:	Intake 0.360", Exhaust 0.310"
Valve head dia:	
Intake	1.35"
Exhaust ...	1.25"
Valve spring	225 lb/in
Carburation	Two SU

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.637
2	2.215
3	1.373
4	1.0
5	

Final drive ratios: 4.3, 4.55, 4.875

CHASSIS

Wheelbase	84"
Track dimension, front	52"
Track dimension, rear	52"
Shock absorber	Telescopic
Steering ratio	2 turns
Brakes	Front: Disc, Rear: Drum (11 x 1-3/4")
Tire size	5.60 x 15

APPROVED OPTIONAL EQUIPMENT
None

Manufacturer: TVR Class: E
Model: Grantura (MGA 1600)
DESCRIPTION:
2-Seater Coupe-Fiberglass
Curb Weight: 14 cwt

ENGINE:

Type	MGA 1600 4 cyl ohv in line
Bore & stroke	75.39mm x 88.9mm
Capacity	1588 cc
Comp ratio	8.3:1
Head material	Cast Iron
Port size	Intake 1-1/8" dia; Exhaust 1-3/16" x 1-3/16"
Piston material ...	Aluminum
Piston weight	10 oz 8 drms
Timing data:	
Intake	Open 5° BTDC, Close 45° ABDC
Exhaust ...	Open 40° BBDC, Close 10° ATDC
Valve lift:	0.35"
Valve head dia:	
Intake	1.5"
Exhaust ...	1.281"
Valve spring	Outer 60.5 lbs, Inner 30 lbs (fitted)
Carburation	Two SU H4

TRANSMISSION AND DRIVE TRAIN:
Ratios:

1	3.637
2	2.215
3	1.373
4	1.0
5	

Final drive ratios: 4.3, 4.55, 4.875

CHASSIS

Wheelbase	84"
Track dimension, front	52"
Track dimension, rear	52"
Shock absorber	Telescopic
Steering ratio	2 turns
Brakes	Front: Disc, Rear: Drum (11 x 1-3/4")
Tire size	5.60 x 15

APPROVED OPTIONAL EQUIPMENT
None

Manufacturer: Volvo Class: E
Model: P1800

DESCRIPTION:

2-Seater Coupe (Steel)
Dry Weight: 2480 lbs

ENGINE:

Type	4 cyl ohv in line
Bore & stroke	3.313″ x 3.15″
Capacity	1780 cc
Comp ratio	9.5-10.5:1
Head material	Cast Iron
Port size	Intake 1.49″, Exhaust 1.41″
Piston material ...	Aluminum
Piston weight	15-18 oz
Timing data:	
Intake	Open 24° BTDC, Close 64° ABDC
Exhaust ...	Open 62° BBDC, Close 26° ATDC
Valve lift:	0.350″ or 0.400″
Valve head dia:	
Intake	1.575″
Exhaust ...	1.502″
Valve spring	145-150 lbs @ 1.20″
Carburation	Two SU HS6

TRANSMISSION AND DRIVE TRAIN:

Ratios:

1	3.13
2	1.99
3	1.36
4	1.00
5	

Final drive ratios: 4.1, 4.56, 4.88

CHASSIS

Wheelbase	96.5″
Track dimension, front	52″
Track dimension, rear	52″
Shock absorber	Telescopic
Steering ratio	15.5:1
Brakes	Front disc, rear drum
Tire size	165 x 380

APPROVED OPTIONAL EQUIPMENT

Overdrive (Ratio 0.756)
HD Stabilizer bar