12/24



F.I.A. Recognition No. 1187

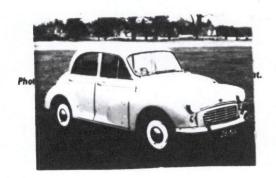
## ROYAL AUTOMOBILE

PALL MALL, LONDON, S.W.I.

# Federation Internationale de l'Automobile.

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

| Manufacturer                  | LCircle Luicas LILITED |                          |
|-------------------------------|------------------------|--------------------------|
| Model                         | MORALS 6 1000          | Year of Manufacture 1962 |
|                               | Chassis No. 85 -       |                          |
|                               | Engine 10 ma-0-11      |                          |
| Type of Coac<br>Recognition i | s valid from 9/5/63    | In category Touring      |



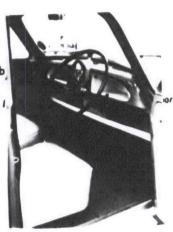
## General description of car:

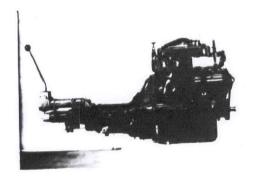
Specify here material/s of chassis/body construction

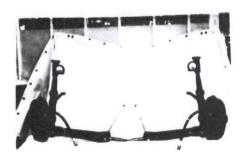
balcon or convertible body of steel unitary construction powered by a cylinder that entire mypoid a floating rear axie through 4 speed synchromesis gearbox. Front suspension consider tars. Kear suspension - semi alliquic hear apriles.

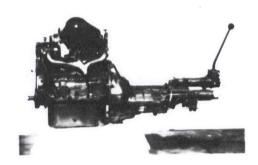


ohs to be affixed b











No. of cylinders....

in line \_\_\_\_YES

| opposed   |  |
|---|--|
|   | ng order 1,3,4,2.                          |
| Capacity 1098 c.c. Bore 64.58   | m.m. Stroke 83.72 m.m.                     |
| Maximum rebore + 0.020" R   | Resultant capacity 1116 c.c.               |
| Material of cylinder block Cast Iron M  |  |
|   |  |
| face of block at centre line of cylinders 210.  | 31 / 218.5/ m.m.                           |
| Material of cylinder head Cast Iron Volume  | e of one combustion chamber                |
| Compression ratio 8.5:1   |  |
| Material of piston Aluminium Alloy  | No. of piston rings 4                      |
| Distance from gudgeon pin centre line to highest po   | pint of piston crown 30.33 m.m.            |
| Crankshaft main hearings. Type Co   | pper Lead Dia 44.46 m.m.                   |
| Bearings Connecting rod big end: Type Co  | pper Lead Dia 41.28 m.m.                   |
| Flywheel 9.5  |  |
| Crankshaft 10.0   |  |
| Weights Connecting rod 0.68   | kg.  |
| Piston with rings 0. 183  | kg.  |
| Gudgeon pin 0.057   |  |
| No. of valves per cylinder 2  | Method of valve operation Push rod & Rocke |
| No. of camshafts 1 L  | ocation of camshafts Crankcase             |
| Type of camshaft drive Chain  |  |
| Diameter of valves: Inlet 29.4  | m.m. Exhaust 25.4 m.m.                     |
| Diameter of port  |  |
| at valve seat: Inlet 21.7   | m.m. Exhaust 23.1 m.m.                     |
| Tappet clearance for checking timing: Inlet 0.30  | m.m. Exhaust 0.30 m.m.                     |
| Valves open: inlet 5° BTDC  | Exhaust 51° BBDC                           |
| Valves open:  Valves close: Inlet 45° ABDC  |  |
| Maximum valve lift: Inlet 7.9   |  |
| Degrees of crankshaft rotation from zero to—  |  |
| Maximum lift: Inlet 110° ATDC   | Exhaust 105° BTDC                          |
| Maximum lift: Inlet 62 ATDC   | 0  |
| - Maximum IIII. IIIIC   | Exhaust Jo Div                             |
| Valve springs: Inlet  | Exhaust                                    |
| -   | Exhaust                                    |
| Valve springs: Inlet Type Coil  | Exhaust<br>Coil                            |
| Valve springs: Inlet  | Exhaust  Coil  No. fitted 1                |
| Valve springs:  Type Coil  No. per valve 1  Carburettor: Type Semi Down Draught                                 | Exhaust  Goil  1  No. fitted 1             |
| Valve springs:  Type Coil  No. per valve 1  Carburettor: Type Semi Down Draught  (up or down draft, horizontal) | Exhaust  Coil  No. fitted 1                |

| Air filter: Type Combined air/clea                    | ner silenceMo. fitte | ed 1 |
|---|----------------------|------|
| Inlet manifold: Diameter of flange hole at carburetto | 31.75                | m.m. |
| Diameter of flange hole at port                       | 26.95                | m.m. |





Exhaust manifold:

Diameter of flange hole at port End Ports - 26.95 x 22.2 Centre 26.95 x 25.4

Diameter of flange hole at connection to silencer inlet pipe 28.55 m.m.



Photograph of exhaust manifold to be affixed here.

See Above

### **ENGINE ACCESSORIES**

| Make of fuel pump S.U.                   | No. fitted 1             |
|--|--------------------------|
| Method of operation Electrical           |                          |
| Type of ignition system Coil             | coil or magneto          |
| Make of ignition Lucas                   | Model 25D4               |
| Method of advance and retard Centrifugal |                          |
| Make of ignition coil Lucas              | Model LA12               |
| No. of ignition coils 1                  | Voltage 12               |
| Make of dynamo Lucas                     | Model C40                |
| Voltage of dynamo 12                     | Maximum output 19 amps.  |
| Make of starter motor Lucas              |                          |
| Battery: No. fitted 1 Voltage            | 12 Capacity 43 amp. hour |
| Oil Cooler (if fitted) type              |                          |

Manufacturers Reference No. of Application.

#### TRANSMISSION

Make of clutch... Borg & Beck Type 7 AGG 74" Diameter of clutch plate... No. of plates... Method of operating clutch Hydraulic Make of gearbox.... B.M.C. Type Synchromesh 2nd 3rd top No. of gearbox ratios..... 4 forward 1 reverse Method of operating gearshift Remote control Location of gearshift.... Central on floor Is overdrive fitted? No Method of controlling overdrive, if fitted.

|    | GEARBOX | ( RATIOS                    |        |                 | ALTERNAT | IVE RATIOS      |       |                 |
|----|---------|-----------------------------|--------|-----------------|----------|-----------------|-------|-----------------|
|    | Ratio   | No. of<br>Teeth             | Ratio  | No. of<br>Teeth | Ratio    | No. of<br>Teeth | Ratio | No. of<br>Teeth |
| 1. | 3.627:1 | 28 32<br>19 13              | 3.2:1  | 26 32<br>20 13  |          |                 |       |                 |
| 2. | 2.172:1 | 28 28<br>19 <sup>2</sup> 19 | 1.916: | 26 28           |          | ×               |       |                 |
| 3. | 1.412:1 | 28 23<br>19 24              | 1.357: |                 |          |                 |       |                 |
| 4. | 1.0:1   |                             | 1.0:1  |                 |          |                 |       |                 |
| 5. |         |                             |        |                 |          |                 |       |                 |

| Type of final drive          | Hypoid be   | vel - three  | e quarte | r floating |   |
|------------------------------|-------------|--------------|----------|------------|---|
| Type of differential         | Bevel       |              |          |            | *************************************** |
| Final drive ratio 4, 22      | : 1         | Alternatives | 4. 55    | 4.875      |   |
| No. of teeth9/38             |             |              |          | 8/39       |   |
| Overdrive ratio, if fitted   | Not fitted  | 1            |          |            |   |
| WHEELS                       |             |              |          |            |   |
| Type Ventilated              |             | -            | 14.      | 74         | kg.                                     |
| Method of attachment4        | studs a nut | ts           |          |            |   |
| Rim diameter 355.6           | śm.         | m. Rim wid   | th       | .2         | m.m.m.                                  |
| Tyre size: Front 520         | x 14        | Rear         | 520 :    |            |   |
| BRAKES                       |             |              |          |            |   |
| Method of operation          | Hydraulic   |              |          |            |   |
| Is servo assistance fitted?  | No          |              | •        |            | *************************************** |
| Type of servo, if fitted     |             |              |          |            |   |
| No. of hydraulic master cyli |             |              | 20.64    |            | m m                                     |

|  | Front  | Rear  |
|--|--|---|
| No. of wheel cylinders   | 4  | 2   |
| Bore of wheel cylinders  | Terms and  | 19.05 m.m.  |
| Inside diameter of brake drums   |  |   |
| No. of shoes per brake   |  | 2   |
| Outside diameter of brake discs  |  | m.m.m.  |
| No. of pads per brake  |  |   |
| Dimensions of brake linings per dimensions, specify each)  | shoe or pad (if all shoes or pads in ea  | ach brake are not of same                                   |
|  | Front  | Rear  |
| Length   | 195 m.m.   | 165.9 m.m.  |
|  | m.m.   | m.m.  |
| Width  | 37.3 m.m.  | 30.95 m.m.  |
| Total area per brake   | 14520 • m.m.²  | 10300. m.m. <sup>2</sup>                                    |
| SUSPENSION   | Front  | Rear  |
| Туре   | Independent  | Semi elliptic   |
|  |  | Leaf  |
| Type of spring   | TOT STOIL DAT  |   |
| Type of spring Is stabiliser fitted?   | No.  |   |
|  |  | No  |
| Is stabiliser fitted?  | No<br>Hydraulic Lever Type   | No  |
| Is stabiliser fitted?  Type of shock absorber  | No<br>Hydraulic Lever Type   | No<br>Hydraulic Lever Ty                                    |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  STEERING  | No Hydraulic Lever Type 2  | No<br>Hydraulic Lever Ty<br>2                               |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  TEERING  Type of steering gear Ra   | No Hydraulic Lever Type 2 ck & Pinion  | No<br>Hydraulic Lever Ty<br>2                               |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  STEERING  Type of steering gear  Turning circle of car.   | No Hydraulic Lever Type 2 ck & Pinion 10.06  | No Hydraulic Lever Ty 2  m., approx.                        |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  STEERING  Type of steering gear  Turning circle of car.   | No Hydraulic Lever Type  2 ck & Pinion 10.06 from lock to lock $2\frac{1}{2}$  | No Hydraulic Lever Ty 2  m., approx.                        |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  TEERING  Type of steering gear  Turning circle of car  No. of turns of steering wheel  CAPACITIES AND DIMENSION   | No Hydraulic Lever Type  2  ck & Pinion  10.06  from lock to lock 2½   | No Hydraulic Lever Ty 2  m., approx.                        |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  STEERING  Type of steering gear  Turning circle of car  No. of turns of steering wheel  CAPACITIES AND DIMENSION  Fuel tank  29.5   | No Hydraulic Lever Type  2  ck & Pinion  10.06  from lock to lock 2½  IS  litres Sump 3.4  | No Hydraulic Lever Ty 2  m., approx.                        |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  STEERING  Type of steering gear  Turning circle of car  No. of turns of steering wheel  CAPACITIES AND DIMENSION  Fuel tank  29.5  Radiator  5.55   | No Hydraulic Lever Type  2  ck & Pinion  10.06 from lock to lock 2½  IS  litres Sump 3.44  Litres  | No Hydraulic Lever Ty 2  m., approx.                        |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  STEERING  Type of steering gear  Turning circle of car  No. of turns of steering wheel  CAPACITIES AND DIMENSION  Fuel tank  29.5  Radiator  5.55  Overall length of car  376   | No Hydraulic Lever Type  2  ck & Pinion  10.06  from lock to lock 2½  IS  litres Sump 3.4  Litres  cm. Overall width of car.   | No Hydraulic Lever Ty 2  m., approx.  litres  155  cm.      |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  STEERING  Type of steering gear Ra  Turning circle of car.  No. of turns of steering wheel  CAPACITIES AND DIMENSION  Fuel tank 29.5  Radiator 5.55  Overall length of car, unladen (w  | No  Hydraulic Lever Type  2  ck & Pinion  10.06  from lock to lock 22  IS  litres Sump 3.4  Litres  cm. Overall width of car.  with hood up, if appropriate) 152   | No Hydraulic Lever Ty 2  m., approx.  litres  155  cm.      |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  STEERING  Type of steering gear  Turning circle of car  No. of turns of steering wheel  CAPACITIES AND DIMENSION  Fuel tank  29.5  Radiator  5.55  Overall length of car, unladen (wheel)  Distance from floor to top of wing the control of the car of the car.  | No Hydraulic Lever Type  2  ck & Pinion  10.06  from lock to lock 22  Is  litres Sump 3.4  litres  cm. Overall width of car.  with hood up, if appropriate) 152  indscreen:  | No Hydraulic Lever Ty 2  m., approx.  litres  155  cm.      |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  TEERING  Type of steering gear Ra  Turning circle of car  No. of turns of steering wheel  CAPACITIES AND DIMENSION  Fuel tank 29.5  Radiator 5.55  Overall length of car 376  Overall height of car, unladen (which is to be point)  Highest point 133  | No Hydraulic Lever Type  2  ck & Pinion  10.06  from lock to lock 22  Is  litres Sump 3.4  litres  cm. Overall width of car.  with hood up, if appropriate) 152  indscreen:  | No Hydraulic Lever Ty 2  m., approx.  litres  155  cm.      |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  TEERING  Type of steering gear  Turning circle of car  No. of turns of steering wheel  CAPACITIES AND DIMENSION  Fuel tank  29.5  Radiator  5.55  Overall length of car, unladen (wheels)  Distance from floor to top of wind Highest point.  133  Width of windscreen:   | No Hydraulic Lever Type  2  ck & Pinion  10.06  from lock to lock 2½  IS  litres Sump 3.4  litres  cm. Overall width of car.  with hood up, if appropriate) 152  indscreen:  cm. Lowest point 106                            | No Hydraulic Lever Ty 2  m., approx.  litres  155 cm.  cm.  |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  TEERING  Type of steering gear  Turning circle of car  No. of turns of steering wheel  CAPACITIES AND DIMENSION  Fuel tank  29.5  Radiator  5.55  Overall length of car 376  Overall height of car, unladen (which is to be described in the composition of the compositi | No Hydraulic Lever Type  2  ck & Pinion  10.06 from lock to lock 22  IS  litres Sump 3.4  litres  cm. Overall width of car.  with hood up, if appropriate) 152  ndscreen:  cm. Lowest point 106  cm. Minimum width 10        | No Hydraulic Lever Ty 2  m., approx.  litres  155 cm.  cm.  |
| Is stabiliser fitted?  Type of shock absorbers  No. of shock absorbers  STEERING  Type of steering gear  Turning circle of car  No. of turns of steering wheel  CAPACITIES AND DIMENSION  Fuel tank  29.5  Radiator  5.55  Overall length of car, unladen (wheel)  Distance from floor to top of with Highest point  Highest point  Maximum width  104  *Interior width of car  122  | No  Hydraulic Lever Type  2  ck & Pinion  10.06  from lock to lock 2½  IS  litres Sump 3.4  litres  cm. Overall width of car.  with hood up, if appropriate) 152  ndscreen:  cm. Lowest point 106  cm. Minimum width 10  cm. | No Hydraulic Lever Ty 2  m., approx.  litres  155 cm.  cm.  |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  STEERING  Type of steering gear Ra  Turning circle of car  No. of turns of steering wheel  CAPACITIES AND DIMENSION  Fuel tank 29.5  Radiator 5.55  Overall length of car 376  Overall height of car, unladen (which is to be point)  Highest point 133  Width of windscreen:  Maximum width 104  *Interior width of car 122  No. of seats 4  | No Hydraulic Lever Type  2  ck & Pinion  10.06  from lock to lock 22  IS  litres Sump 3.4  litres  cm. Overall width of car.  with hood up, if appropriate) 152  ndscreen:  cm. Lowest point 106  cm. Minimum width 10  cm.  | No Hydraulic Lever Ty  2  m., approx.  litres  155 cm.  cm. |
| Is stabiliser fitted?  Type of shock absorber  No. of shock absorbers  STEERING  Type of steering gear Ra  Turning circle of car  No. of turns of steering wheel  CAPACITIES AND DIMENSION  Fuel tank 29.5  Radiator 5.55  Overall length of car 376  Overall height of car, unladen (v. Distance from floor to top of win Highest point 133  Width of windscreen:  Maximum width 104  *Interior width of car 122  No. of seats 4  Track: Front 128.6  | No Hydraulic Lever Type  2  ck & Pinion  10.06  from lock to lock 22  IS  litres Sump 3.4  litres  cm. Overall width of car.  with hood up, if appropriate) 152  ndscreen:  cm. Lowest point 106  cm. Minimum width 10  cm.  | No  |

| ype of lubricationze of inlet port:  Length measured around cylinder wall  Heightze of exhaust port:  Length measured around cylinder wall | m.m.         | Area                  | m.n         |
|--|--------------|-----------------------|-------------|
| Length measured around cylinder wall Heightze of exhaust port:   | m.m.         | Area                  |             |
| Heightze of exhaust port:  | m.m.         | Area                  |             |
| ze of exhaust port:  | I            |                       | <b>m.</b> m |
|  |              |                       |             |
| Length measured around cylinder wall   |              |                       |             |
|  | m.m.         |                       | m.n         |
| Height   |              | Area                  | m.m         |
| ze of transfer port:   |              |                       |             |
| Length measured around cylinder wal  | l            |                       | m.n         |
| Height   | m.m.         | Area                  | m.m         |
| ze of piston port:   |              |                       |             |
| Length measured around piston  |              |                       | m.r         |
| Height   | m.m.         | Area.                 | m.m.m       |
| ethod of pre-compression   |              |                       |             |
| ore and stroke of pre-compression cylin  | nder, if fi  | tted                  | m.r         |
| istance from top of cylinder block to lo   | west poi     | nt of inlet port      | m.r         |
| istance from top of cylinder block to h  | ighest po    | oint of exhaust port  | m.r         |
| istance from top of cylinder block to h  | ighest po    | oint of transfer port | m           |
| Drawing  | of cyline    | der ports.            |             |
| Drawing  | s or cylinic | isi ports.            |             |
|  |              |                       |             |
|  |              |                       |             |
|  |              |                       |             |
|  |              |                       |             |
|  |              |                       |             |
|  |              |                       |             |
|  |              |                       |             |
|  |              |                       |             |
| charger, if fitted   |              |                       |             |
| 1ake   | N            | lodel or Type No      |             |
| ype of drive   |              | Ratio of drive        |             |
| njection, if fitted  |              |                       |             |
| lake of pump   |              | Model or Tune No      |             |
| Take of injectors  |              |                       |             |

Location of injectors.

Optional equipment affecting preceeding information:—