

COX GTM



The G. T. M. is the result of fourteen months design and development, to produce a high performance two seater G. T. car at low cost for the home constructor. Following contemporary sports racing car design, the G. T. M., has double wishbone suspension front and rear with the engine placed ahead of the rear axle. For ease of construction and because of the availability of mechanical and electrical parts the G. T. M. is based on two B.M.C. Mini or Mini-Cooper front sub-frames. (Not Hydrolastic). Because of the availability of B.M.C. parts (both new and used) Cox & Co., supply only the G. T. M. chassis/body unit, and the special or modified parts required.

CATEGORY

The G. T. M. complies with the International vehicle regulations Group 6 Appendix J.



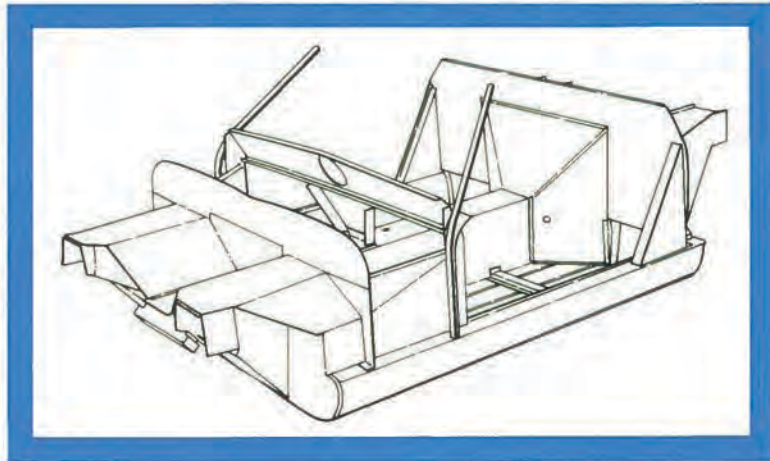
COX & CO., BUXTON ROAD, HAZEL GROVE, CHESHIRE. Telephone No. Stepping Hill 4455

BODY. The body is fibreglass and is made up of two 1½ ounce laminates, with three layers around the edges. Weight 108 lbs. Alternatively a light weight racing body is offered, made up of one 1½ ounce laminate with two layers around the windscreen. Weight 54 lbs.

CHASSIS. The chassis is of semi-monocoque construction, made up from 20"22 gauge sheet steel, electrically spot welded and brazed. The chassis is constructed in the form of a back-bone with a 10 inch deep box joining two forks supplemented by two 5 inch sills, producing an immensely strong unit with a high strength/weight ratio.

ENGINE TRANSMISSION REAR SUSPENSION. The engine transmission and rear suspension is the complete Mini, Mini-Cooper front end unit, bolted into the rear of the G. T. M. chassis. The steering arms are then located to the sub-frame with adjustable rods and Rose joints.

FRONT SUSPENSION. The front suspension is normal B.M.C. Mini front suspension i.e. double wishbone. Cox & Co. supply as a special part shortened drive shafts which are used to retain the bearings in the front hubs.

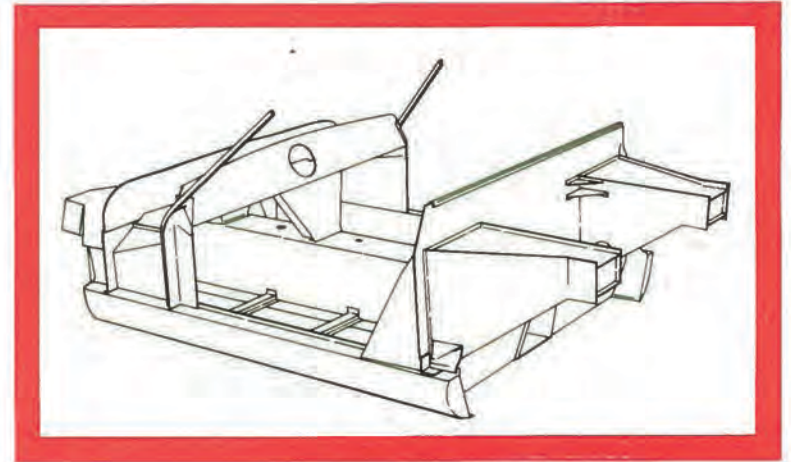


BRAKES. Normal B.M.C. layout is used, but the best set-up is discs front, drums rear. In our tests we have found this to be the best balanced system. With discs all round we have found over braking at the rear and difficulty in incorporating hand brake mechanism.

PETROL TANK. The petrol tank is normal Mini and is mounted under the front bonnet. A larger petrol tank can be used without impairing the handling of the car.

STEERING. Steering is normal Mini rack and pinion steering with a lengthened steering column.

COOLING SYSTEM. The normal Mini Radiator is used mounted on its side in front, behind the air intake and connected to a header tank mounted above the engine.



BODY CHASSIS UNIT

The body chassis unit is supplied as follows :—

Body bolted and bonded to chassis.

Doors fitted with hinges and locks.

Mini front sub-frame fitted to front of chassis.

Bonnet hinged with latches in place.

Laminated glass screen fitted.

Perspex back window fitted.

Perspex side windows supplied.

Body chassis finished in cellulose primer.

PRICE
£330

Complete with header tank and hoses and rear steering arm locating rods.

Full building instructions with drawings.

To build a Cox G. T. M., the constructor requires G. T. M. body chassis unit, some or all of the special or modified parts plus all the mechanical and electrical parts of a Mini or Mini-Cooper, except the rear sub-frame and the suspension, and an extra set of front wishbones and front hubs as these parts have been used at the rear.

DIMENSIONS

Wheel-base	7 feet
Track (front and rear) normal rims 47½ inches wide rims 48½ inches	
Overall length	10 feet 8 inches
Overall width	56 inches
Overall height	43 inches
Ground clearance	5 inches
Interior height (floor to roof)	37 inches
Interior length (front to rear bulk heads)	57 inches
Interior width overall	49 inches
Width from sill to centre tunnel at seat height	20½ inches
Seat to steering wheel (13 inch)	9 inches
Distance from rear bulk head to dash panel	37 inches
Length of steering column and pedal position to choice	
Fuel Tank Capacity (Mini)	5½ gallons
Oil Capacity	8½ pints
Water Capacity	9 pints

WEIGHT

A standard car with a standard body complete in road trim weighs approximately 10½ hundredweights.

A much lighter car can be built for racing with the immediate saving of ½ hundredweight on the light-weight body shell.

MODIFICATIONS ARE NECESSARY TO THE FOLLOWING MAIN COMPONENTS:

Instructions and drawings of these modifications are enclosed with the body chassis unit. However, if the constructor has not the facilities to carry them out, Cox & Co. have an exchange scheme for these items. Price list available.

REAR BRAKES. Drum Brakes are used at the rear. The hole in the back plate is enlarged to fit the dimension of the BMC front hubs which are now used at the rear. The handbrake lever arms are lengthened and the two Mini quadrants are used to lead the handbrake cables to the handbrake lever.

FRONT HUB SHAFTS. These are ordinary front drive shafts cut off close to the oil seal to act as a short stub to retain the front wheel bearings.

ENGINE STEADY BAR This is lengthened and turned to fit forward. An extra steady bar is fitted between the sump and the rear sub-frame.

FRONT SUSPENSION RUBBERS AND CONES. Front Suspension Cones require to be reduced in length by ¾ in. The Front Suspension Rubbers are changed in shape from oval to cone shaped to provide the right spring rate.

CLUTCH AND BRAKE PEDALS. The Clutch and Brake Pedals should be cut, and welded, 2 in. shorter.

STEERING COLUMN. The Steering Column is lengthened approximately 6 in.

GEAR CHANGE LINKAGE (COOPER). The Cooper remote casing is cut in two leaving half the selector shaft on the gear box, the gear lever portion is mounted in the tunnel and is joined to the selection rod by a tube passing underneath the sump.

SPECIAL PARTS

Clutch and Brake Pipes.
Speedometer Cable.
Gear Change Linkage
(848 c.c.).
Interior Trim
Seats.
13 in. Steering Wheel.

H.P. TERMS.

H.P. Terms are available to Board of Trade regulations i.e. Deposit 40% repayment period 24 months.