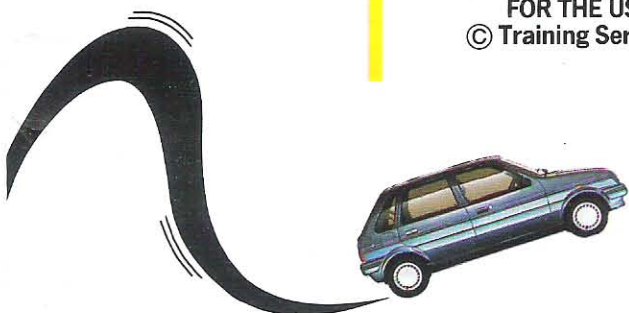


PRODUCT INSIGHT



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METRO

Metro is all set to give a big push to your sales effort this year. For summer '87 this consistent top seller features a number of improvements designed to further strengthen its position in the small car sector. In addition, a strong national advertising campaign is bringing home Metro's agility, economy and cheeky style to a broader range of customers.

NEW FOR SUMMER '87

● The quiet Metro

Continually developed to keep pace with rising standards, Metro is now quieter than ever before. A new sound insulation package employing the latest technology has substantially improved cruising comfort and refinement on all models. On the 1.3 City X, L, Mayfair and Vanden Plas, both quietness and fuel economy have benefited from higher gear ratios. For the Metro owner, the benefit is a real large-car luxury feel, at small car prices.

● New 1.3 City Automatic

Metro was among the very few small cars to offer the benefit of automatic transmission. The four-speed automatic gearbox was enthusiastically received and is well-proven. Now the ease of automatic driving is available at a price which is hard to beat, with the launch of the new 1.3 City Automatic.

● New style, more luxury

Building on the success of the show-stopping all-white MGs, all MG 1300 and Turbo models now have the all-body colour treatment, in a choice of the five most popular colours – Targa Red, Black, Silver Leaf, Moonraker Blue and White Diamond. Among other key feature developments, Metro Mayfair now has an electronic tune stereo radio/stereo cassette player, whilst the Vanden Plas has an Auto-reverse cassette player.

EASY TO LEARN

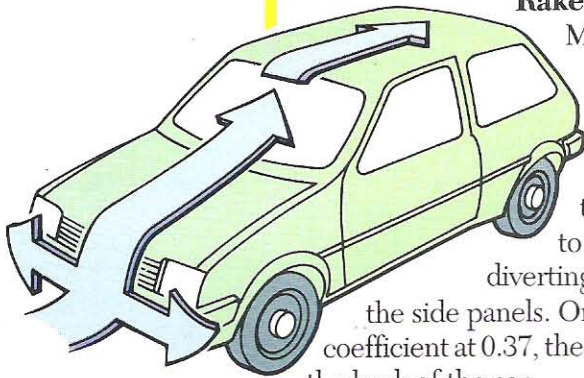
Like the other books in the Product Insight series, this book has questions and tests to help you pick up the facts quickly and easily. Take the Final Test, and you'll be able to see straightaway how your product knowledge measures up. If you want to measure up to the big sales potential Metro offers you, you'll settle only for the top marks.

Metro range	1.0		1.3	
	3-dr	5-dr	3-dr	5-dr
City	●	●		
City Automatic			●	
City X	●			●
L	●	●	●	●
1.3 Automatic			●	
Mayfair	●			●
MG 1300			●	
MG Turbo			●	
Vanden Plas				●

AERODYNAMICS

It's not easy achieving a low drag coefficient with a small car – which makes Metro's slippery shape all the more special. The benefits show in its cruising quietness, in a higher top speed and of course in that outstanding economy.

Raked front end

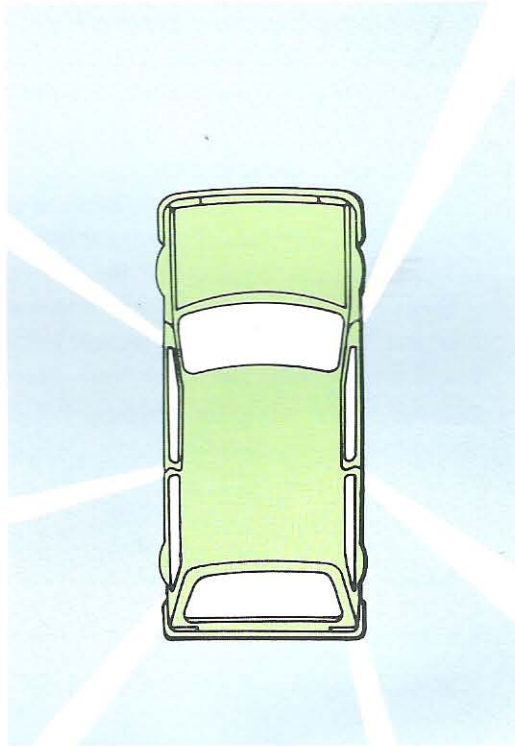


Metro's steeply raked front end offers as little resistance as possible to air flow. Sloping from grille to bonnet, and from bonnet to low-angled windscreen, the front end deflects air flow smoothly over the top of the car. The front spoiler helps to reduce turbulence beneath the car, diverting air flow over the bonnet or round the side panels. On MG models, which have the best drag coefficient at 0.37, the tailgate spoiler flips the air flow away from the back of the car.

Excellent all-round visibility

A large, deep-waisted glass area contributes to Metro's excellent all-round visibility, whilst that small nose makes it easy to edge up to road junctions.

"With slim door pillars, large deep windows, and a well-positioned door mirror, the Metro is exceptionally easy to see out of. The low fascia and steeply raked nose enable you to see the road right up close to the car." MOTOR



QUIETNESS

"The car cruises quietly and economy is good." CAR

Thanks to careful engineering development, Metro was a quiet little mover even before the latest sound insulation package. Now it's among the best. One of the major technological achievements which has produced the Quiet Metro has done so through the use of new materials.

Cotton and jute: the quieter answer

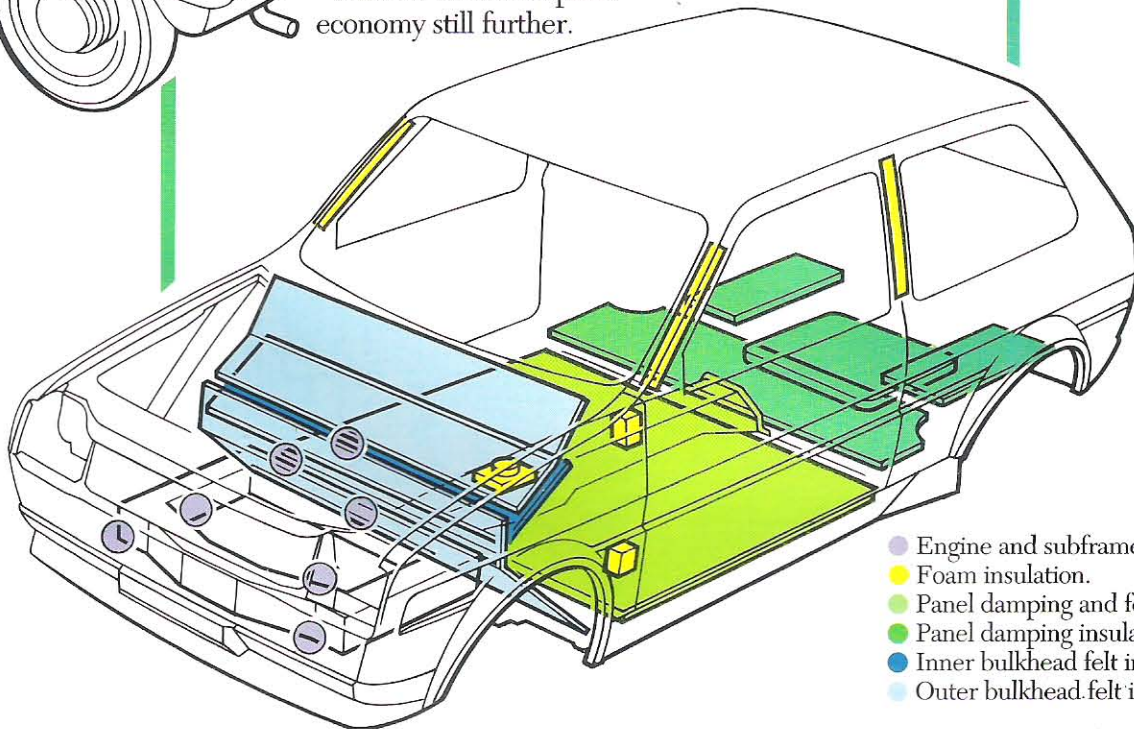
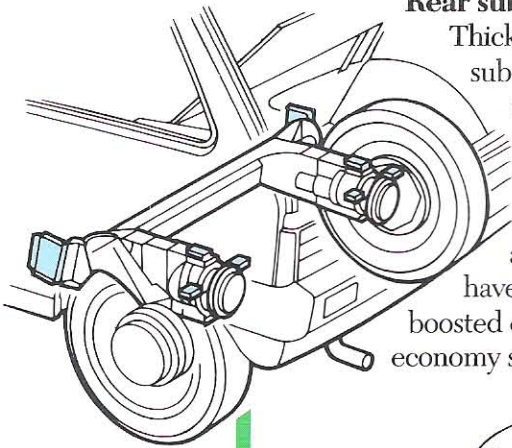
Cotton and jute felt – both natural fibres – deaden a wider range of noise and vibration than synthetics such as foam. The problem was that they were difficult to mould to the body contours of the car interior. Now they can be; lavishly applied around panels most subject to drive-line noise and vibration, and with a heavy layer underneath the carpet and in contact with the body panels, these materials have cocooned the Metro into a very quiet little cruiser indeed.

Rear sub-frame isolation

Thicker rubber has been used to isolate the rear sub-frame, reducing vibrations transmitted to the passenger compartment, but without any penalty to the compliant ride.

Higher gear ratios

On the 1.3 Metro City X, L, Mayfair and Vanden Plas models, higher gear ratios have enhanced cruising quietness – and also boosted constant-speed economy still further.



- Engine and subframe mountings.
- Foam insulation.
- Panel damping and felt insulation.
- Panel damping insulation.
- Inner bulkhead felt insulation.
- Outer bulkhead felt insulation.

Two of the major benefits of Metro's good aerodynamics are better cruising quietness and good fuel economy. What is the third benefit?

SUSPENSION

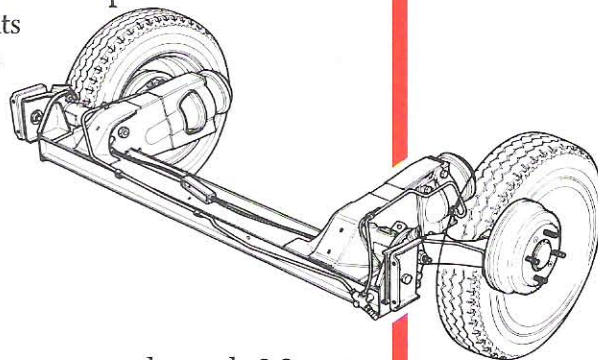
"The Hydragas springs smooth pocked surfaces better than almost any rival metal-sprung car. The 'coup de grace' is that nothing has been sacrificed in the handling department. Steering is light and sharp. I find I'm not winding on lock so much as thinking about it. No need for white knuckles or a firm grip here; a palming caress is all that's needed. Turn-in is crisp and flat." CAR

Hydragas units form the basis of Metro's suspension design. The front units (like the rear) perform the function of both springs and dampers. A front anti-roll bar provides additional cornering stiffness.

Benefits at the back

At the rear, the Hydragas units are horizontally mounted in the subframe. The beauty of this arrangement is that the units intrude less into the loadspace area, giving Metro its small wheelarches, and wide, flat loadspace floor.

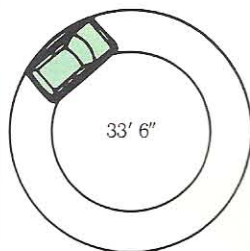
The MG Turbo matches its eyebrow-raising performance with increased spring rates in both front and rear Hydragas units; plus front telescopic dampers, a modified front anti-roll bar, and the addition of a rear anti-roll bar.



Steering

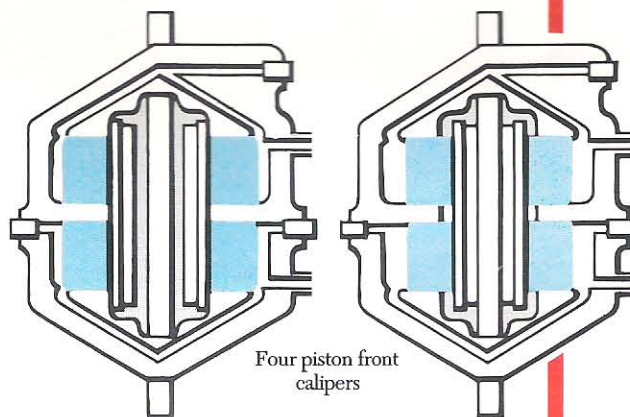
Metro's light but responsive steering, needing only 3.3 turns to lock to lock to negotiate a 33ft 6in turning circle, gives just the right feel for town or open road driving.

Turning circle



Brakes

Metro's highly engineered four-piston front calipers are backed up by the efficiency of ventilated front disc brakes, and also servo assistance, on all models.



Four piston front calipers

WHEELS AND TYRES

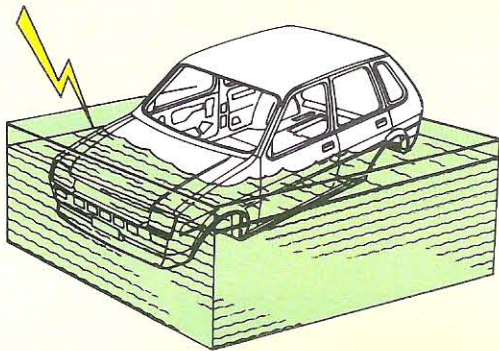
Metro City, City X, L, Mayfair, Vanden Plas, MG 1300
160/65 TD tyres
315mm TD wheels

MG Metro Turbo
165/60 tyres on 13in.alloy wheels

Metro is now quieter than ever because of the ability to mould two natural fibres which deaden a wider range of noise and vibration. Jute is one of those materials. What is the other?

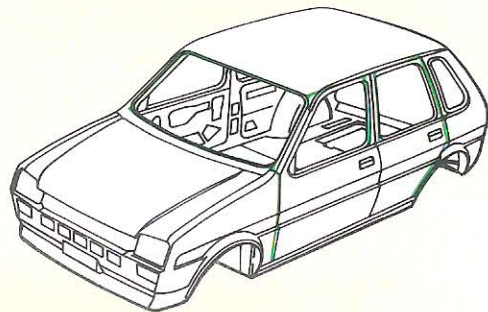
CORROSION PROTECTION

Years of rain, mud and salt won't make Metro catch a cold. During production, built-in temperature controls and special conveyors keep vulnerable panels perfectly dry and clean. Throughout the production process, a series of special treatments gives Metro a waterproof coat that is proof against the very worst that time and the weather can inflict – and guaranteed for six years by the promise of Supershield.



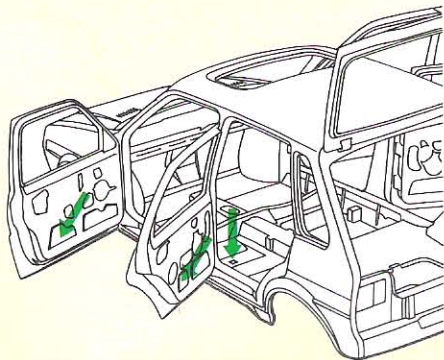
Cathodic electro-prime

A rust-inhibiting primer is applied over the entire bodyshell by immersing it in a paint bath. Opposite charges are passed through the paint and car body to attract the paint particles to the metal, and give a totally even coverage.



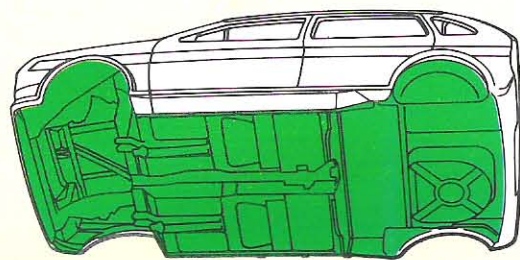
Seam sealing

To ensure that the body seams are completely water tight, plastic based sealants are applied before welding. The completed weld is then sealed again.



Wax-injection

Wax injection of box sections and door panels sprays a water proof coating right into the heart of Metro's car body.



Underbody coating

A tough, PVC based coating plus a heavy duty wax is applied over the whole of Metro's underbody resists damage from stones thrown up from the road.

1. How do Metro's rear suspension units provide additional loadspace width?
2. What is Metro's turning circle?

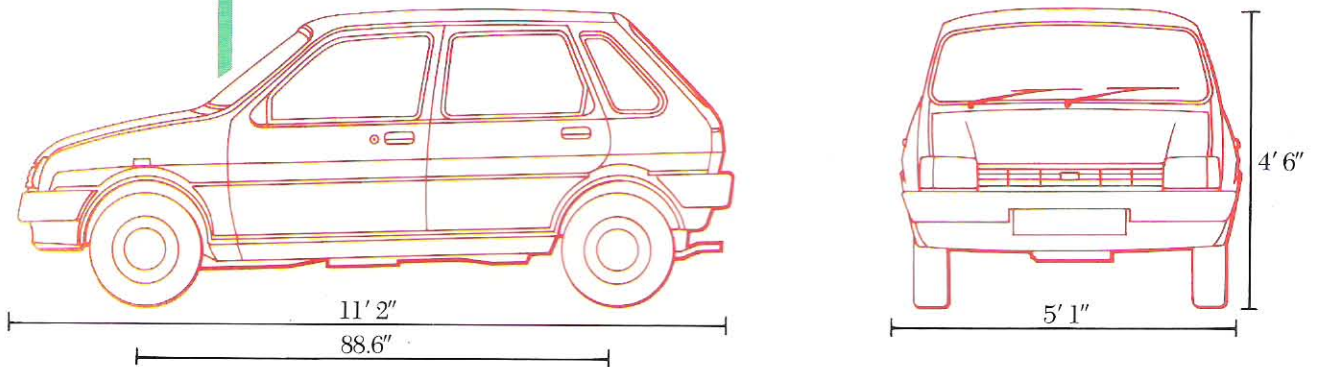
1. The units are horizontal and intrude less into the loadspace.
2. b) 33ft 6in

DIMENSIONS

"You don't fully appreciate its length until you squeeze it into the parking space that has been shunned by all the others." AUTOCAR

EXTERIOR

Metro is still in a class of its own as far as exterior dimensions are concerned. With an 11ft 2in length, it saves valuable space in the garage, and whisks easily in and out of the tightest parking spaces. Within the 5ft 1in width, the car body has noticeably less 'tumble-home' than most, the straight sides maximising shoulder room.

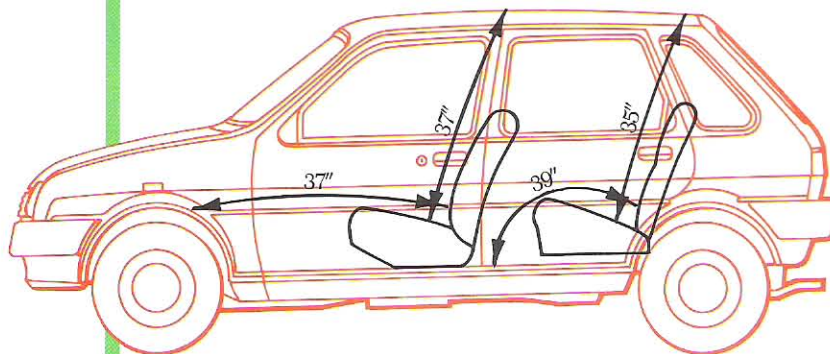


Exterior Dimensions	METRO	Fiesta	Uno	Nova	Peugeot 205	Polo
Length	11' 2"	12' 0"	12' 0"	11' 11"	12' 2"	12' 0"
Width	5' 1"	5' 2"	5' 1"	5' 1"	5' 2"	5' 2"
Height	4' 6"	4' 5"	4' 8"	4' 6"	4' 6"	4' 5"
Wheelbase	88.6"	90.4"	93.0"	92.2"	95.3"	91.9"

A glance at the figures shows how Metro's plumper rivals have been putting on the inches. Even the compact looking Nova is actually 9 inches longer. Polo, Uno and Fiesta add 10 inches; and the Peugeot 205 is a foot longer. The Uno takes the prize for being the tallest, towering a good three inches over Fiesta and Polo. With such a bunch of well-developed superminis, you might reasonably expect some very noticeable differences inside as well.

In addition to new sound insulation, what other development has improved both quietness and fuel economy on the 1.3 Metro City X, L, Mayfair and Vanden Plas models?

INTERIOR SPACE



"Getting the most from the least has always been the forte of Austin Rover designers." CAR

Interior Dimensions	METRO	Fiesta	Uno	Nova	Peugeot 205	Polo
Max. front legroom	37"	39"	40"	39"	40"	40"
Min. rear legroom	39"	38"	39"	39"	36"	34"
Total legroom	76"	77"	79"	78"	76"	74"
Shoulder width – F	50"	50"	52"	50"	52"	48"
– R	50"	50"	52"	50"	52"	48"
Headroom – F	37"	37"	38"	39"	37"	39"
– R	35"	35"	39"	36"	34"	36"

(Interior dimension figures taken from Autocar)

Despite their size however, none of Metro's rivals can make comparable gains in interior space. The Peugeot is the largest major rival, but has the same 76 inch overall legroom as Metro. The Polo actually has two inches LESS (with punishing results for rear seat passengers).

With 37 inches in front, a generous 39 inches in the back, within a body more compact than any rival, Metro's space/size formula is unbeatable.

Metro is 5ft 1in wide. How long is it?
a) 11ft 1in; b) 11ft 2in; c) 11ft 3in.

° Along with other major motor manufacturers, Austin Rover has now adopted the more accurate VDA system of measuring boot and loadspace capacities. This system involves the use of standard-sized 'bricks' of one litre capacity fitted inside the boot.

BOOTSPACE 8.1 CU FT

Boot	METRO	Fiesta	Uno	Nova	Peugeot 205	Polo
Capacity	8.1 cu ft	7.6 cu ft	8.75 cu ft	7.9 cu ft	7.6 cu ft	8.5 cu ft
Sill height	25"	23"	25"	24.5"	24"	25"
Height with parcel shelf in position	18"	13"	21"	18"	16"	18"
Length with seat up	24"	25"	25"	25"	26"	23"

Metro's big 8.1 cu ft boot still deals out a sharp lesson to the competition. Neither Fiesta nor Nova can get within striking distance, whilst the Peugeot 205 puts its 12ft 2in length to no very good purpose.



The Metro's 25 inch sill height compares well with the Uno and the estate-style Polo. And with the parcel shelf in position (fitted as standard from City X), the 18 inch load height is substantially better than that of Fiesta and the 205.

LOADSPACE 33.7 CU FT

	METRO	Fiesta	Uno	Nova	Peugeot 205	Polo
Capacity seat down	33.7 cu ft	31.8 cu ft	34.0 cu ft	29.8 cu ft	36.0 cu ft	34.6 cu ft
Max. width	56"	50"	48"	39"	48"	51"
Min. width between wheelarches	40"	36"	36"	37"	43"	36"
Length with seat down	44"	42"	45"	47"	52"	44"
Height	38"	29"	39"	35"	33"	34"

"Incredible cargo capacity." MOTOR

Metro's generous 33.7 cu ft loadspace swallows up more luggage than either Fiesta or Nova. The loadspace height too is excellent – far better than Fiesta, and beating almost every other rival too. Metro's horizontally arranged rear suspension units give an impressive 40 inches of flat floor between the wheelarches, whilst the overall loadspace width of 56 inches is unequalled by any rival.



Metro is 11ft 2in long. How wide is it?
a) 5ft 1in; b) 5ft 2in; c) 5ft 3in.

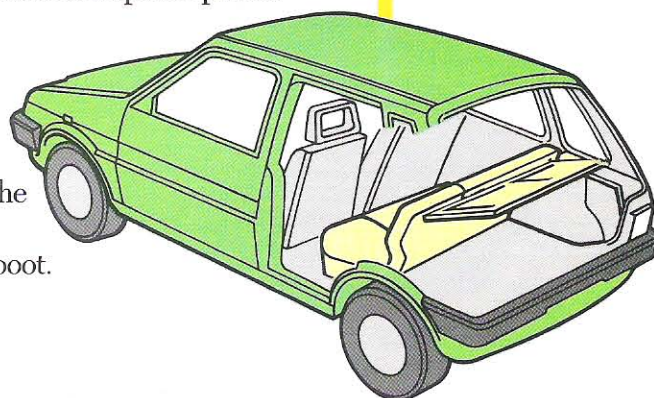
VERSATILITY

Metro's famous 60/40 split rear seat – fitted from L models – set the standard for the class right from the start, and has been endlessly imitated since.

For the family or the businessman, as a holiday hold-all or capacious workhorse, Metro is never stumped for an answer to an awkward problem. The following sequence shows the best way to demonstrate Metro's six versatile loadspace options.

1. REAR SEAT UP, PARCEL SHELF IN POSITION

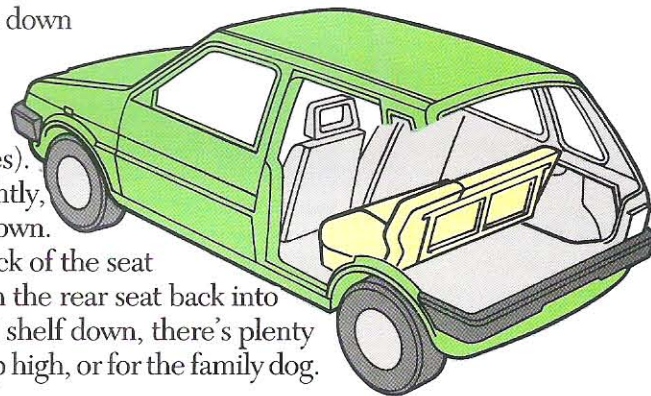
Five can ride in comfort; luggage is securely hidden away beneath the rear parcel shelf. Lift the tailgate, and the parcel shelf hinges upwards to reveal the big 8.1 cu ft boot.



2. REAR SEAT UP, PARCEL SHELF FOLDED DOWN

You don't have to remove the parcel shelf to increase the rear loadspace. It folds down in four easy moves:

- Unclip the parcel shelf straps.
- Release the rear seat catches (located under the parcel shelf edges).
- Push the seat squab forward slightly, and allow the parcel shelf to drop down.
- Secure the parcel shelf to the back of the seat by turning the central clip, and latch the rear seat back into an upright position. With the parcel shelf down, there's plenty of room for suitcases to be stacked up high, or for the family dog.

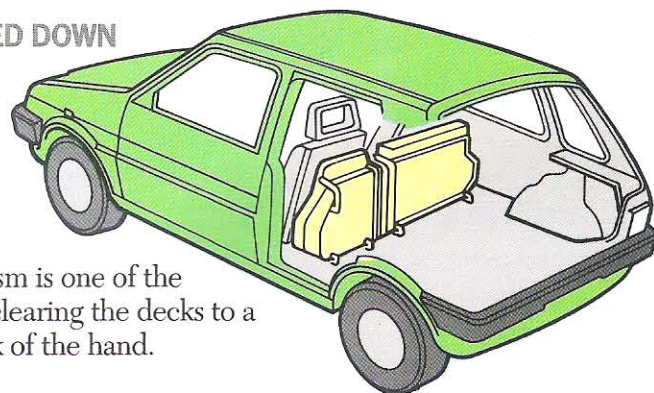


3. COMPLETE REAR SEAT FOLDED DOWN

Metro's impressive loadspace is revealed in 3 quick moves:

- Release the rear seat catches.
- Fold the seat squab down onto the cushion.
- Flip the whole seat forwards.

The jack-knife folding mechanism is one of the simplest and most effective ever – clearing the decks to a completely flat floor with just a flick of the hand.



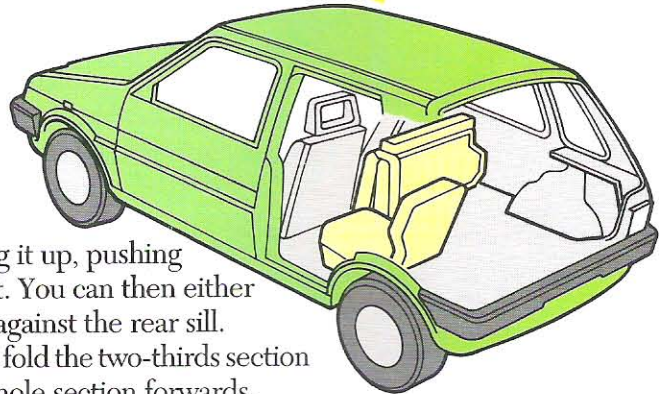
Metro has an 8.1 cu ft boot. How big is its loadspace?
a) 30.8 cu ft; b) 33.7 cu ft; c) 34.8 cu ft.

4. TWO THIRDS OF REAR SEAT FOLDED DOWN

To demonstrate this you'll need to remove the parcel shelf first:

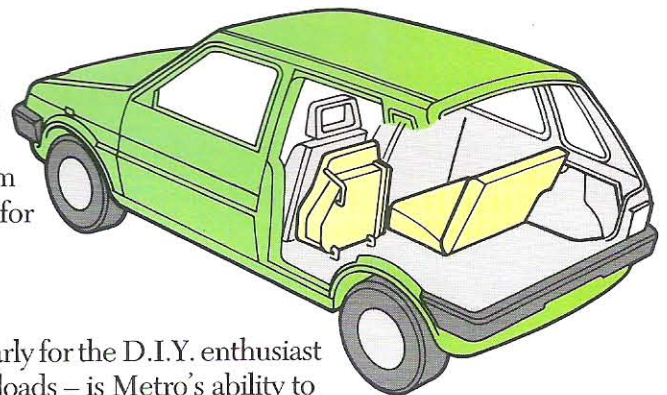
- Pull the rear seat back to a horizontal position.
- Undo the parcel shelf's central clip and lift the shelf, pulling the seat squab backwards until it clicks into place.
- Remove the parcel shelf by lifting it up, pushing it to the right and then unhooking it. You can then either stow it flat on the floor or vertically against the rear sill.
- Release the right hand seat catch, fold the two-thirds section flat onto the cushion, and flip the whole section forwards.

Make sure that you demonstrate that there is still plenty of room for an adult to sit on the remaining portion of the seat.



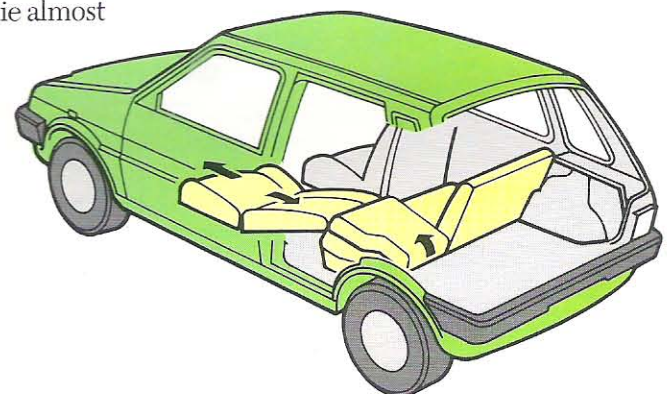
5. ONE THIRD OF REAR SEAT FOLDED DOWN

Repeat the process with the left hand seat catch, and Metro opens up another angle on versatility: room for two in the back, and a big space for the holiday luggage or carrycot.



6. METRO FOR D.I.Y.

Another good feature – particularly for the D.I.Y. enthusiast who needs to carry all sorts of long loads – is Metro's ability to stretch the load length. With the one third seat squab folded down and the front passenger seat fully reclined, planks, carpet rolls or lengths of piping can lie almost the full length of the car.



QUESTIONS

INTERIM TEST

1. Complete the following table showing the Metro range structure:

2. What are the three major benefits of Metro's good aerodynamics?
3. What is the major benefit of the moulded jute and cotton felt used in Metro's new sound insulation?
4. What are the two major benefits of the higher gear ratios on Metro 1.3 City X, L, Mayfair and Vanden Plas?
5. What is Metro's turning circle?
6. What is the major benefit of Metro's rear suspension design?
7. a) How long is Metro?
b) How wide is Metro?
8. What is Metro's bootspace?
a) 7.8 cu ft
b) 8.1 cu ft
c) 8.8 cu ft
9. What is Metro's loadspace?
10. Complete the following list of Metro's six different loadspace configurations:
a) Rear seat up, parcel shelf in position.
b) Rear seat up, parcel shelf removed.
c) Rear seat down.

	1.0		1.3	
	3-dr	5-dr	3-dr	5-dr
City	●			
City Automatic			●	
City X				
L				
1.3 Automatic			●	
Mayfair				
MG 1300			●	
MG Turbo			●	
Vanden Plas				●

ANSWERS

INTERIM TEST

1. Complete the following table showing the Metro range structure:

	1.0		1.3	
	3-dr	5-dr	3-dr	5-dr
City	●	●		
City Automatic			●	
City X	●			●
L	●	●	●	●
1.3 Automatic			●	
Mayfair	●			●
MG 1300			●	
MG Turbo			●	
Vanden Plas				●

2. What are the three major benefits of Metro's good aerodynamics?

- a) Low wind noise
- b) Higher top speed
- c) Better economy

3. What is the major benefit of the moulded jute and cotton felt used in Metro's new sound insulation?

It deadens a wider range of noise and vibration than other materials.

4. What are the two major benefits of the higher gear ratios on Metro 1.3 City X, L, Mayfair and Vanden Plas?

- a) Greater refinement
- b) Better economy

5. What is Metro's turning circle?
33ft 6in

6. What is the major benefit of Metro's rear suspension design?

The horizontal units allow greater loadspace width.

7. a) How long is Metro? b) How wide is Metro?
11ft 2in 5ft 1in

8. What is Metro's bootspace?
b) 8.1 cu ft

9. What is Metro's loadspace?
33.7 cu ft

10. Complete the following list of Metro's six different loadspace configurations:

- d) Two thirds of rear seat down.
- e) One third of rear seat down.
- f) One third rear seat down, front passenger seat reclined.

ENGINES

	c.c.	PS (DIN)/ rpm	Torque (lb ft)/ rpm	Comp ratio :1	Final drive	Mph/1000 rpm in top	Rpm at 70 mph in top
1.0 City, City X, L, Mayfair	998	47/ 5500	54/ 3250	10.3	3.647	16.3	4294
1.3 City X, L and Mayfair	1275	63/ 5300	72/ 3200	9.75	3.21	18.5	3783
1.3 City Auto, 1.3, VP Auto	1275	63/ 5300	72/ 3200	9.75	3.17	18.7	3743
1.3 Vanden Plas	1275	72/ 6000	73/ 4000	10.5	3.21	18.5	3783
MG 1300	1275	73/ 6000	73/ 4000	10.5	3.44	17.3	4046
MG Turbo	1275	94/ 6130	85/ 2650	9.4	3.21	18.7	3743

The A-Plus Engine

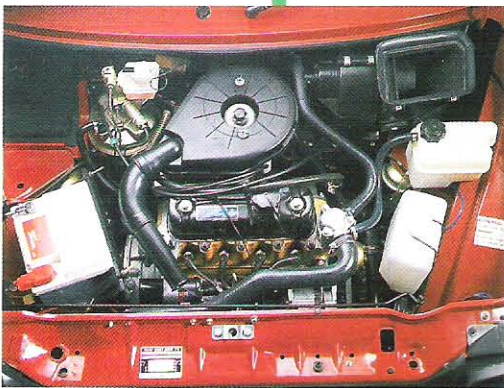
The A-Plus engine powers the Metro range in four different forms. All the 1.0 Metro models take the same 998cc economy engine, whilst the 1275cc economy engine is fitted to the 1.3 City X, L and Mayfair, and the Automatics. The Vanden Plas has the same highly-engineered 1.3 performance engine as the MG1300, and the sophisticated 94PS turbo-charged unit powers the fastest car in the Metro line-up.

The revised gearing and higher final drive ratios have been applied to Metro 1.3 City X, L, Mayfair and Vanden Plas manual models. With the engine turning over at lower rpm in top gear, cruising economy has been substantially improved, as you'll see in the following pages.

In the performance and economy comparisons, the competitors selected are Metro's major rivals – namely, the Fiesta, Nova and Peugeot 205.

THE 1.0 A-PLUS ENGINE

	c.c.	PS (DIN)/rpm	Torque (lb ft)/rpm	Comp ratio :1	Final drive	Mph/1000 rpm in top	Rpm at 70 mph in top
Metro 1.0 City, City X, L and Mayfair	998	47/5500	54/3250	10.3	3.647	16.3	4294



The same economy engine is used on all Metro 1.0 models. Combining a high compression ratio with a good torque output at relatively low rpm, it's a frugal and willing power unit.

The Metro 1.0 models share a number of underbonnet features with the rest of the range, all of which help to produce good performance as well as economy, by contribution to overall engine efficiency.

- The fine tolerances to which A-Plus is built mean that a low viscosity (10W/40W) oil can be used, reducing energy loss through friction, and improving economy.
- The integral inlet/exhaust manifold allows exhaust heat to be used to help vapourize the mixture at low engine temperatures.
- The ATC forms part of the air filter. This is a valve operated by a temperature sensitive bi-metallic strip. While the engine is warming up, the valve remains closed and air warmed by the exhaust manifold is ducted into the intake, speeding warm up time and assisting fuel/air vapourisation for good economy. As the engine warms up, the valve opens gradually to allow in cooler underbonnet air.
- An electric fan, thermostatically controlled, cuts in only when required. In addition to speeding engine warm up, the fan also reduces engine power loss, saving up to 5bhp over a mechanical fan.
- Metro's carburettor is the temperature compensating type, finely adjusting the fuel/air mixture as engine temperature rises to reduce fuel wastage during warm-up.
- The carburettor also incorporates a part-load weakener which gives a finer control over the mixture at intermediate throttle positions, improving cruising economy.

PERFORMANCE

Model	Doors	Derivative	Gears	0-60 mph (secs)	Top speed (mph)	Source
Metro 1.0	3	City/City X	4	17.9	87	AR Eng.
Metro 1.0	3	L/Mayfair	4	18.3	87	AR Eng.
Metro 1.0	5	City	4	18.6	87	AR Eng.
Metro 1.0	5	L	4	19.0	87	AR Eng.
Fiesta 950	3	Popular/ Popular Plus	4	17.8	85	Ford
Fiesta 1.1	3	Popular Plus/ L/Ghia	4	14.5	88	Ford
Nova 1.0	3	Standard/ Merit	4	18.5	84	Motor
Nova 1.0	5	Standard	4	19.5	87	WhatCar?
Peugeot 205	3	1.0 XE/XL	4	18.8	83	WhatCar?
Peugeot 205	3	1.1 XL	4	17.1	85	Motor
Peugeot 205	3	1.1 XR	5	13.1	92	WhatCar?

- Producing performance which is fully competitive with comparably powered rivals, Metro 1.0 City and City X have the edge from 0-60 over Nova and the 1.0 Peugeot 205.
- An indication of its relaxed 70 mph cruising ability, Metro 1.0's top speed of 87 mph betters Fiesta 1.0, the 3-door Nova and the Peugeot XE and XL.

ECONOMY

Model	Derivative	Gears	Urban	Constant 56 mph	Constant 75 mph	Computed Average
Metro 1.0	City/City X/ L/Mayfair	4	45.7	59.7	40.2	51.0
Fiesta 950	Popular/ Popular Plus	4	40.9	52.3	39.8	45.8
Fiesta 1.1	Popular Plus/ L/Ghia	4	44.8	57.6	40.9	49.8
Nova 1.0	Standard/Merit	4	37.7	57.6	42.8	46.2
Peugeot 205 1.0	XE/XL	4	41.5	55.4	38.7	47.1
Peugeot 205 1.1	XL/XR	4/5	48.7	65.7	48.7	56.0

- Among the very thriftiest cars in the class, Metro 1.0 models stretch the fuel further than four out of five of these rivals, with an outstanding 59.7 mpg at constant 56 mph.
- Their composite average too is almost unbeaten, at 51 mpg.

N.B. Fuel Economy Figures

- All the urban, Constant 56 mph and Constant 75 mph figures used in this book are taken from the Official Fuel Consumption Booklet.
- The Computed Average is calculated using the above figures and is provided as a guide for comparison purposes only.
- All the figures are only an indication of the likely fuel economy that could be achieved.

Which Metro models have benefited from revised gearing and higher final drive ratios?

THE 1.3 A-PLUS ECONOMY ENGINE

	c.c.	PS (DIN)/rpm	Torque (lb ft)/rpm	Comp ratio :1	Final drive	Mph/1000 rpm in top	Rpm at 70 mph in top
Metro 1.3 City X, L, Mayfair	1275	63/5300	72/3200	9.75	3.21	18.5	3783
1.3 City Auto, 1.3 Auto and VP Auto	1275	63/5300	72/3200	9.75	3.17	18.7	3743



The economy version of the 1.3 A-Plus engine powers Metro 1.3 City X, L and Mayfair, and also the automatic models.

Quieter cruising, still better economy

The revised gearing applied to the manual cars has raised the final drive ratio from the previous 3.44 to 3.21 (the lower the figure, the higher the final drive). In practice, this means that at 70 mph, the 1.3 engine is now turning over at only 3783 rpm – more than 250 rpm less than before. In addition to the enhanced cruising quietness and comfort, this has given a big boost to Metro's economy advantages.

Breakerless ignition

In addition to the features shared with the 1.0 A-Plus engine, all the 1.3 Metro models also have the benefit of breakerless ignition. This gives advantages over conventional contact breakers in three main areas:

1. Economy benefits because of the greater precision of the ignition control, which allows a leaner mixture.
2. Reliability improves because the engine remains in an accurate state of tune for longer, with no timing variations caused by burnt or worn out points.
3. Metro's 12 month/12,000 mile low maintenance service schedule becomes still more trouble-free; with no contact breakers to replace, the ignition system is completely maintenance-free apart from engine timing checks.

PERFORMANCE

Model	Doors	Derivative	Gears	0-60 mph (secs)	Top speed (mph)	Source
Metro 1.3	3	L	4	12.9	97	AR Eng.
Metro 1.3	5	City XL/ Mayfair	4	13.4	97	AR Eng.
Fiesta 1.4	3	L/Ghia	5	10.8	102	Ford
Nova 1.2	3	L	4	14.2	94	Autocar
Nova 1.2	5	Merit/L	4	16.5	94	WhatCar?
Peugeot 205 (1.1)	5	GL	5	17.0	88	WhatCar?
Peugeot 205 (1.4)	5	GR	5	12.5	96	WhatCar?
Metro 1.3	3	City Auto/Auto	4	15.5	92	AR Eng.
Metro 1.3	5	Vanden Plas Auto	4	16.0	92	AR Eng.
Peugeot 205	5	1.6 Auto	4	13.6	97	Motor
Renault 5	3	1.4 Auto	3	16.6	91	Motor

● Nippy as ever, the Metro 1.3L 3-door and 5-door have no trouble seeing off both the Nova models and the Peugeot 205 1.1

● Metro's top speed of 97 mph is again better than Vauxhall and Peugeot.

● Perky performers and relaxed town-cruisers, Metro 1.3 Automatics lead the Renault 5 from 0-60.

ECONOMY

Model	Derivative	Gears	Urban	Constant 56 mph	Constant 75 mph	Computed Average
Metro 1.3	City XL/ Mayfair	4	40.3	57.0	41.5	47.4
Fiesta 1.4	L/Ghia	5	32.5	52.3	41.5	41.2
Nova 1.2	Merit/L	4	35.7	57.6	43.6	45.1
Peugeot 205 (1.1)	GL	5	48.7	65.7	48.7	55.9
Peugeot 205 (1.4)	GR	5	42.2	61.4	44.1	50.2
Metro 1.3	City Auto/1.3 Auto/VP Auto	4	35.3	47.1	35.0	40.3
Peugeot 205	1.6 Auto	4	33.2	50.4	37.7	40.6
Renault 5	1.4 Auto	3	37.7	52.3	37.7	43.8

● The higher final drive ratio has improved Metro 1.3's constant 75 mph economy by a full 2 mpg, whilst the constant 56 mph economy is up from 55.1 mpg to a really excellent 57 mpg.

● The result – a lead over Fiesta of more than 6 mpg on the composite average, and more than 2 mpg over Nova.

● Economical as well as refined, Metro 1.3 Automatics deliver an average of over 40 mpg.

Which Metro models share the same 1.3 performance engine?

1.3 PERFORMANCE ENGINES

	c.c.	PS (DIN)/rpm	Torque (lb ft)/rpm	Comp ratio :1	Final drive	Mph/1000 rpm in top	Rpm at 70 mph in top
1.3 Vanden Plas	1275	72/6000	73/4000	10.5	3.21	18.5	3783
MG 1300	1275	73/6000	73/4000	10.5	3.44	17.3	4046
MG Turbo	1275	94/6130	85/2650	9.4	3.21	18.7	3743



Like the manual models powered by the 1.3 economy engine, the Vanden Plas benefits from a higher final drive ratio and is more refined and frugal than ever. The 1275cc performance engine powering the Metro Vanden Plas and MG 1300 is a real thoroughbred, with extensive engineering developments:

Feature

- Larger inlet valves
Large diameter inlet tracts
Re-profiled camshaft
- 10.5:1 compression ratio economy.
- Aluminium alloy inlet manifold; water-heated and separate from exhaust manifold.
- MG: large diameter tailpipe (On the Vanden Plas, a special exhaust system keeps the engine's eager note to a discreet level appropriate to the Vanden Plas image.)
- Thermac unit; allows cold air inlet system at full throttle.
- Oil cooler; uses cooling system for heat exchange.

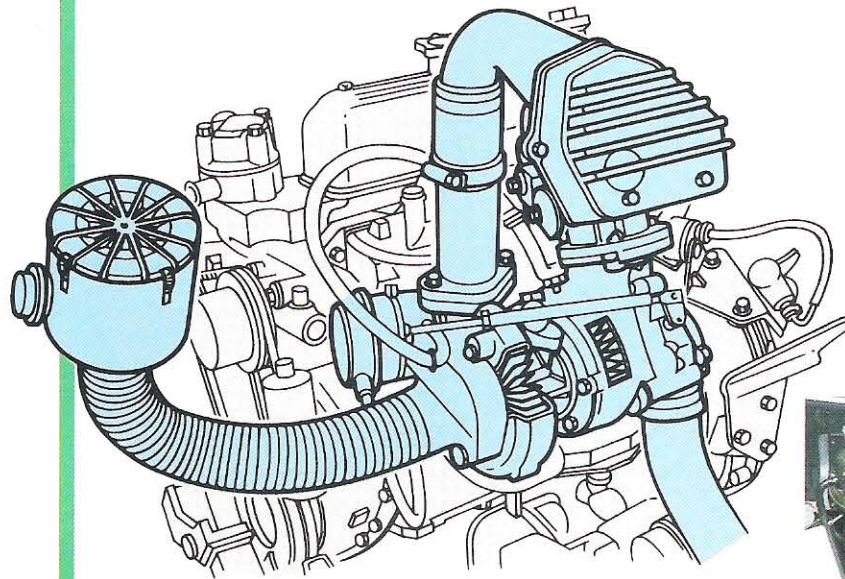
Benefit

- Allows a greater volume of mixture into the combustion chamber.
- More efficient combustion.
- Temperature stability over wide range of operating conditions.
- Reduced back pressure.
- Denser inlet charge gives better performance.
- Maintains optimum operating temperature.

Metro 1.3 City X, L and Mayfair are now still more economical with their higher final drive ratio. What is their constant 56 mph economy?
 a) 55 mpg; b) 57 mpg; c) 58 mpg.

MG METRO TURBO

Turbo charging unleashed hitherto undreamed of power and performance from the endless vitality of the A-Plus engine.



"The progression of power is much smoother, and less stepped than usual for a turbo . . . The ideal boost characteristic is felt in the way in which the engine keeps on delivering more power just when one expects the delivery to slow down when one nears the rev limit." AUTOCAR



A turbo charger is a simple pump which pushes more air into the engine and compresses it into a dense charge for each of the cylinders.

It makes use of exhaust gas energy to drive a turbine wheel. This in turn drives an impellor which compresses the engine air intake.

A highly sophisticated electronic wastegate system ensures that the Turbo delivers boost pressure smoothly.

Engine features

- Copper/brass radiator, increased oil pump and additional oil cooler.
- Electric re-circulating fuel pump with fuel pressure regulator and filter.
- Improved valve cooling, double valve springs and sodium cooled exhaust valves.
- Nitrided crankshaft with increased bearing surface area. Solid skirt pistons.

Benefits

- Efficient cooling.
- Fuelling efficiency.
- Efficiency and durability.
- Durability.

At constant 56 mph, Metro 1.0 models deliver nearly 60 mpg. What is their exact figure?

PERFORMANCE

Model	Doors	Derivative	Gears	0-60 mph (secs)	Top speed (mph)	Source
Metro 1.3	5	Vanden Plas	4	11.9	101	AR Eng.
Fiesta 1.4	3	Ghia	5	10.8	102	Ford
Nova 1.3	5	GL	5	11.8	97	Autocar
Metro 1.3	3	MG 1300	4	10.9	103	AR Eng.
Metro 1.3	3	MG Turbo	4	9.9	112	AR Eng.
Fiesta 1.4	3	S	5	10.8	102	Ford
Fiesta 1.6	3	XR2	5	9.3	109	Ford
Nova 1.3	3	SR	5	11.7	101	Autocar
Peugeot 205 (1.4)	3	XS	5	11.3	106	WhatCar?
Peugeot 205 (1.6)	3	GTI	5	8.6	116	Autocar

● Elegant but decidedly brisk too, Metro Vanden Plas reaches 60 mph in 11.9 seconds and has a top speed of over 100 mph.

● The MG 1300 dismisses the Nova and Peugeot XS with its 10.9 second 0-60 time, and is neck and neck with the Fiesta 1.4S.

● Turbo power takes Metro's quickest performer to 60 mph in just 9.9 seconds, and racing on to a 112 mph top speed. It's interesting to note, by the way, that both Motor and Autocar achieved a 9.4 second 0-60 time in the Turbo – virtually the same as the XR2. Autocar's figure for the XR2 tallies with Ford's.

ECONOMY

Model	Derivative	Gears	Urban	Constant 56 mph	Constant 75 mph	Computed Average
Metro 1.3	Vanden Plas	4	35.1	56.8	41.1	44.2
Fiesta 1.4	Ghia	5	32.5	52.3	41.5	41.2
Nova 1.3	GL	5	32.8	60.1	44.8	44.0
Metro 1.3	MG 1300	4	35.1	55.5	41.9	43.9
Metro 1.3	MG Turbo	4	34.3	53.5	37.9	42.3
Fiesta 1.4	S	5	32.5	52.3	41.5	41.2
Fiesta 1.6	XR2	5	33.2	50.4	38.7	40.7
Nova 1.3	SR	5	32.1	57.6	42.8	42.6
Peugeot 205 (1.4)	XS	5	30.7	54.3	40.4	40.5
Peugeot 205 (1.6)	GTI	5	30.7	47.9	37.7	38.3

● The new gear ratios have brought really dramatic improvements to the already very good economy of the Vanden Plas. Constant 56 mph economy is up by no less than 3.8 mpg – giving a lead of over 4 mpg over Fiesta.

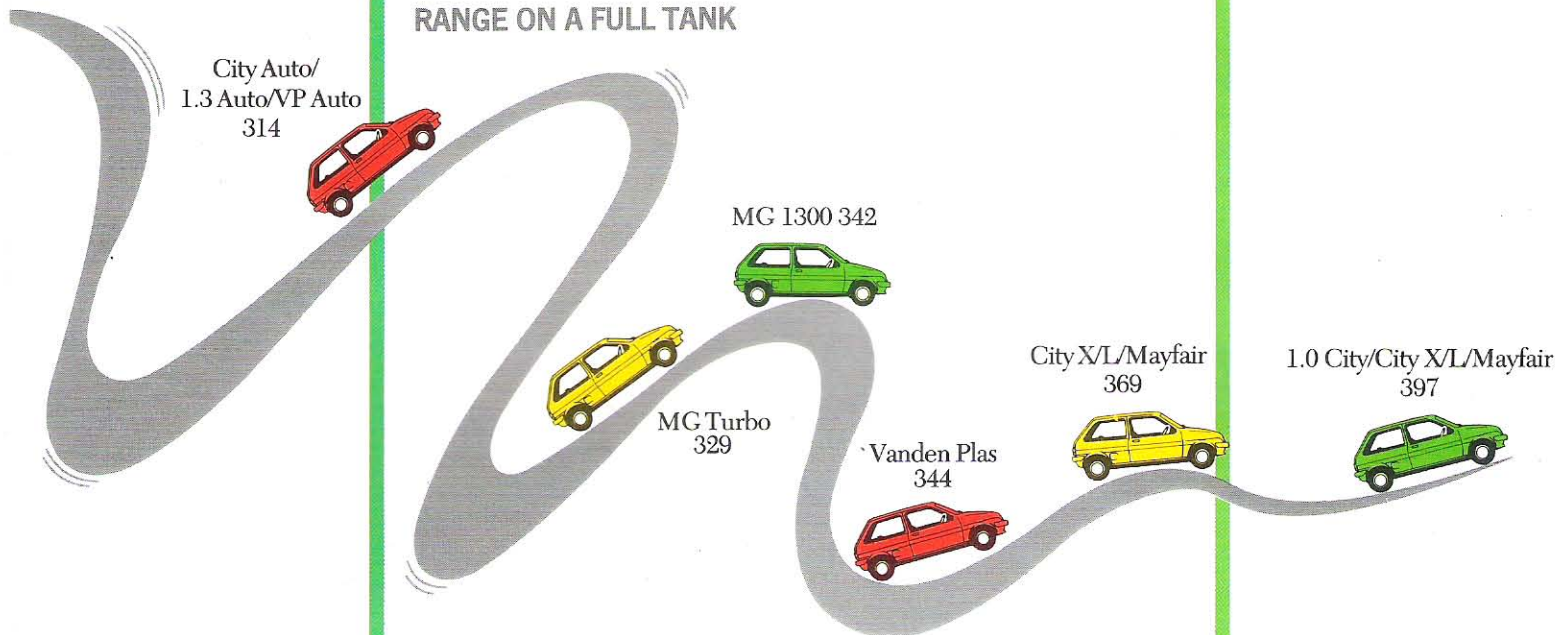
● Both the MGs are amazingly frugal for such hot hatchbacks. The MG 1300 beats both the Fiestas and Peugeots on every count, and the Turbo too turns in a better average than these rivals can achieve.

What is the 0-60 time of the MG Turbo?
a) 10.9 seconds; b) 10.0 seconds; c) 9.9 seconds

TOURING RANGE

Model	Derivative	Computed Av. (mpg)	Range (miles)
Metro 1.0	City/City X/L/Mayfair	51.0	397
Metro 1.3	City X/L/Mayfair	47.4	369
Metro 1.3	Vanden Plas	44.2	344
Metro 1.3	MG 1300	43.9	342
Metro 1.3	MG Turbo	42.3	329
Metro 1.3	City Auto/1.3 Auto/VP Auto	40.3	314

RANGE ON A FULL TANK



Miles further for pounds less; with a practical 7.8 gallon fuel tank, Metro 1.0 models go a lengthy 397 miles between top ups, and the 1.3 City X, L and Mayfair nearly as far. Even the MGs have a range of well over 300 miles.

1. What is the constant 56 mph fuel economy of the Metro 1.0 models?
2. What is the constant 56 mph economy of the Metro 1.3 City X, L and Mayfair?
3. What is the 0-60 time of the MG Metro Turbo?

1. 59.7 mpg
2. 57 mpg
3. 9.9 seconds



FEATURES

To help you to learn more easily, you will only be tested on Metro's **major differential features** – the ones which are most important to your customers. These have been highlighted in the following pages. However, the more you learn about every Metro feature and benefit, the better prepared you will be to sell with confidence and success.

