

Supplementary Owner's Handbook

(for use with the main Owner's Handbook)

M3



Dear BMW driver,

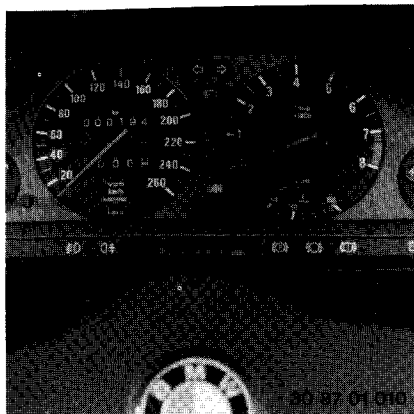
The pleasure of driving one of the most high-quality technological achievements of the modern automobile industry is now to be yours. We are confident that you will exercise all the necessary care.

This supplementary Owner's Handbook tells you everything you need to know specifically about the M 3 model.

It will certainly not be long before you discover for yourself what goes to make up the fascination of driving a car like this: the ultimate in performance combined convincingly with suitability for day-to-day use.

We wish you many a safe, enjoyable journey.

BMW Motorsport GmbH



Revolution counter

Never allow the needle to enter the red warning zone on the dial.

Very erratic running in this zone is a sign that the combustion process is being deliberately interrupted to protect the engine against overspeeding.

The maximum permissible continuous engine speed is 6900/min.

Comply with the following **running-in instructions**:

Up to 2000 km
(approx. 1300 miles):
Max. engine speed 5500/min
Max. road speed 160 km/h
(100 mile/h)

Avoid using the full-throttle position of the accelerator pedal.

Up to 5000 km
(approx. 3000 miles):
Max. continuous road speed
200 km/h (125 mile/h)

Use the car's top speed only for brief periods.

Oil temperature gauge

The usual operating temperature is between 80 and 120°C (176 and 248°F). If the car is driven hard, the oil temperature should not exceed 130°C (266°F).

Check-Control

Attention: The static and dynamic engine oil level will not be checked. Therefore, check the engine oil level regularly, e.g. when refuelling.

Performance

		BMW M 3	BMW M 3
		235 (146)	230 (143)
		Cat.*	
Top speed	km/h (mile/h)		
Acceleration	km/h (mile/h)	s	s
from	0 - 50 (0 - 31)	2.4	2.4
	0 - 80 (0 - 50)	4.9	5.0
	0 - 100 (0 - 80)	6.7	6.9
	0 - 120 (0 - 75)	9.6	9.9
	0 - 140 (0 - 87)	12.7	13.2
	0 - 160 (0 - 99)	17.0	17.8
80 - 120 km/h (50 - 75 mile/h) in 4th gear		7.1	7.5
Standing-start kilometre		27.2	27.6

* Cat. = equipped with catalytic converter

Fuel grades required

Super (Premium, 4-Star) fuel for spark-ignition engines, unleaded, to DIN 51607 standard or equivalent; minimum octane number 98 (Research Method).

Cars equipped with catalytic converter

Super (Premium, 4-Star) fuel for spark-ignition engines, unleaded, to DIN 51607 standard or equivalent; minimum octane number 95 (Research Method).

For conversion to run on unleaded Regular (2-Star) fuel, octane number 91 (Research Method), please consult your BMW Service Station.

If you have no choice but to refuel with petrol having a lower octane number, you should continue to drive with restraint.

Engine data, fuel consumption

	BMW M3		BMW M3 Cat.*
Displacement – effective	cm ³	2302	
Number of cylinders		4	
Max. output acc. to DIN 70020	kW	147	143
	bhp	200	195
at engine speed	l/min	6750	6750
Max. torque	Nm	240	230
	lb.ft	177	170
at engine speed	l/min	4750	4750
Compression ratio	ϵ	10.5	
Stroke/bore	mm	84/93.4	
Mixture preparation	Digital Motor Electronics		
Fuel consumption (acc. to DIN 70030/1 ECE)			
at 90 km/h (56 mile/h)	l/100 km	5.8	6.2
	(Imp/US mile/gal)	48.7/40.1	45.6/37.9
at 120 km/h (75 mile/h)	l/100 km	7.5	7.8
	(Imp/US mile/gal)	37.7/31.4	36.2/30.2
urban driving cycle	l/100 km	11.6	12.4
	(Imp/US mile/gal)	24.3/20.3	22.8/19.0

Dimensions and weights

Length	4345 mm	(171.1 in)
Width	1680 mm	(66.1 in)
Height (unladen)	1365 mm	(53.7 in)
Wheelbase	2562 mm	(100.9 in)
Front overhang	793 mm	(31.2 in)
Rear overhang	990 mm	(39.0 in)
Track, front (at axle load limit)	1412 mm	(56.0 in)
Track, rear (at axle load limit)	1433 mm	(56.4 in)
Min. turning circle (wheels)	10.3 m	(33 ft 10 in)

Min. turning circle (overall)	11,1 m	(36 ft 5 in)
Unladen weight (ready for road, tank full, without optional extras)	1200 kg	(2646 lb)
Gross weight limit	1600 kg	(3527 lb)
Front axle load limit	790 kg	(1742 lb)
Rear axle load limit	865 kg	(1907 lb)
Trailer load limit	(towing not permitted)	
Roof load limit	75 kg	(165 lb)

Neither individual axle load limits nor the gross weight limit are to be exceeded.

Engine oil grades

Only brand-name HD oil for four-stroke spark ignition engines to

API-SF/CC or
API-SF/CD

specifications is to be used in the engine.

Special grades of oil (free-running etc.) are **not** approved.

The oil viscosity must always be SAE 15 W-40 / 15 W-50.

Either the upper or the lower temperature limits for this viscosity grade may be exceeded for short periods.

Engine oil content

with/without oil filter renewal:

5.0/4.7 l

(8.8/8.3 Imp. pints, 5.3/5.0 US quarts)

Additional quantity to be added after a repair in which the engine oil cooler was drained:

0.55 l

(0.97 Imp. pint, 0.58 US quart)

Valve clearances:

Inlet and exhaust valves:

0.28 – 0.33 mm (0.011 – 0.013 in),

measured with engine stopped and cold (max. 35°C (95°F) coolant temperature).

Note: No checking or adjustment of valve clearances during Running-in Check.

Additional service work during Running-in Check and Inspection I:

Check synchronisation of the individual throttle butterflies and adjust if necessary.

Alternator 90 Amp, 1260 Watt

Starter motor 1.4 kW

Battery 12 Volt, 66 Amp/h
(in luggage compartment on right)

Spark plugs

Bosch X 5 DTC
Electrode gap 0.8 ± 0.1 mm

Warning: high-performance ignition system

Touching any live components when the engine is running could result in a fatal accident.

V-belts

Alternator and coolant pump
9.5 x 875 mm LA

Power steering hydraulic pump
9.5 x 810 mm LA

Air conditioning compressor
12.5 x 810 mm LA

Gearbox (manual) oil content: 1.25 l
(2.2 Imp. pints, 1.32 US quarts)

Use only Mobil SHC 630 oil in the gearbox.

Wheel alignment data

Front wheels

Toe-in 2 mm (0.079 in)

equivalent to 16.8'

Camber (negative) -0.71°

Caster 9.14°

Kingpin inclination 14.25°

Toe-out on turns
at 20° inner wheel lock 1.2°

Maximum wheel lock

inner wheel 38°

outer wheel 33°

Rear wheels

Toe-in 3.4 mm (0.134 in)
equivalent to 28'

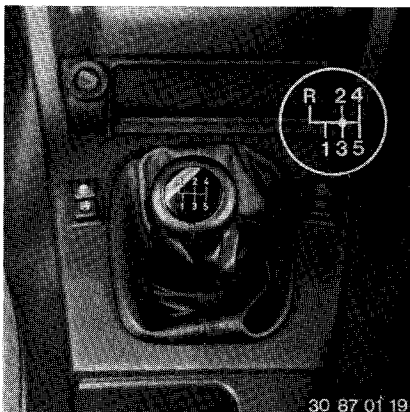
Camber (negative) -1.9°

All values measured with car in normal-load position (tank full, 2 x 68 kg (150 lb) on front seats, 14 kg (31 lb) in luggage compartment).

Final drive ratio: 3.25:1

ZF multi-plate limited-slip differential locking action: approx. 25 %.

Luggage capacity: 420 litres (14.8 ft³) acc. to VDA test method.



GEARBOX

Sports gearbox with Borg-Warner synchromesh on all gears.

The gear selector rest position is between the 2nd and 3rd gear. When switching from the individual gears into "neutral", the gear selector swings automatically into its rest position.

Ratios

1st	3.72:1
2nd	2.40:1
3rd	1.77:1
4th	1.26:1
5th	1.0 :1
Reverse	4.23:1

For your safety — check tyre pressures regularly

Gauge pressures in bar (lb/in²) with tyres cold.

Note: Pressure in the tyre rises as it becomes hot (e.g. after a fast main-road journey) by approx. 0.3 bar (3 – 4 lb/in²). The rate of pressure change is 0.1 bar (1.4 lb/in²) for every 10°C of temperature change.

Tubeless radial-ply tyres	Load on car	Tyre pressures	
		Front	Rear
205/55 VR 15 225/45 VR 16	Max. 4 persons	2.2 (31)	2.4 (34)
	Heavier load	2.5 (35)	3.0 (42.5)
205/55 R 15 M + S	Max. 4 persons	2.2 (31)	2.4 (34)
	Heavier load	2.5 (35)	3.0 (42.5)

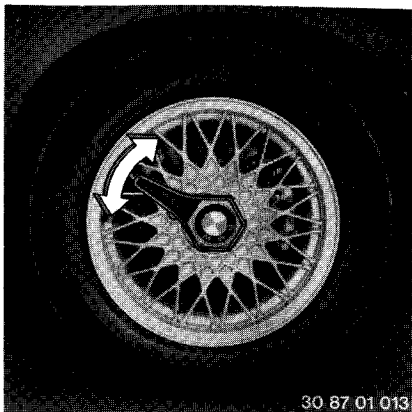
The following BMW road wheels and tyre sizes are approved:

Tubeless radial-ply tyres	Light alloy wheels	Rim dish depth mm (in)
205/55 VR 15	7 J x 15 H2	30 mm (1.18 in)
205/55 R 15 M + S	7 J x 15 H2	30 mm (1.18 in)
225/45 VR 16	7½ J x 16 H2	27 mm (1.06 in)

Winter tyres

Fit only 205/55 R 15 M + S on 7 J x 15 H 2 light alloy wheels.

Fine-link BMW snow chains can be fitted to driven wheels with size 205/55 R 15 tyres only.

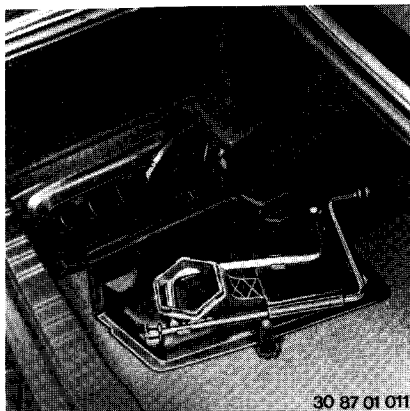


Wheel changing

Apply the handbrake and select either Reverse or 1st gear.

Unscrew the hub cover (shaped like a large hexagon nut) by turning it to the left (bayonet catch).

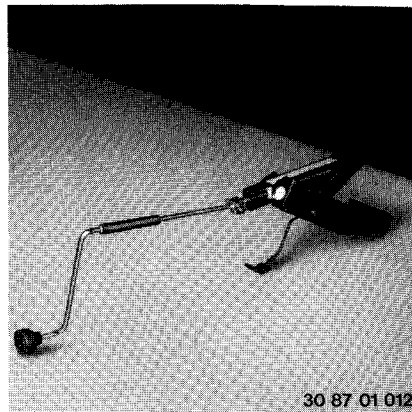
Unscrew the wheel studs and change the wheel.



Jack and wheel stud wrench

These items are housed in the luggage compartment, on the left. When replacing the jack after use, avoid noise by lowering it fully and securing it in the original position with the nut.

The crank handle for the jack is under the jack cover.



Place the jack in position at one of the four jacking points so that the entire area of the jack base is in contact with the road surface.

Bayerische Motoren Werke AG Munich

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