

Japanese MR2 turbo information: Repair Manuals

Version differences

As far as can be established, there are no Toyota repair manuals or supplements or wiring diagrams available for any Japanese MR2 turbo in the English language. Please read the section on [differences and similarities](#) between 3S-GTE engine versions and SW20 body versions to help you to judge the suitability of the manuals listed here for your car.

Engine Repair Manuals

As far as can be established, the USA never got the later 'revision 3' engine, but revision 1 and 2 owners have a choice between American Toyota repair manuals for the American MR2 turbo, and UK (AKA European) repair manuals for the 3S-GTE as fitted in the officially imported Celica GT4.

Toyota part numbers for the UK/European manuals are as follows:

- **RM164E** - 3S-GE, 3S-GTE, 5S-FE engine repair manual (as mounted in ST182, ST184, ST185 UK celicas), Nov 89. Price: 15 pound 10 pence (May 2000).
- **RM165E** - 3S-FE, 3S-GE engine repair manual supplement (as mounted in SW20 UK MR2s), Dec 89. Supplements RM164E. Price/Availability: not currently known. Covers MR2 specific engine issues such as the MR2's cooling system, the MR2's fuel tank and (very briefly) MR2 engine removal. Also covers differences between the 3S-FE and the 5S-FE.
- **RM266E** - 3S-GTE engine repair manual supplement (as mounted in ST185 celica GT4), Aug 91. Supplements RM164E. Price: 10 pound 60 pence (May 2000). Covers revision 2 engine changes, I assume.
- **RM396E** - 3S-GE engine repair manual (as mounted in ST202 UK celicas *and* SW20 UK MR2s (non turbo)), Oct 93. Price 45 pound 41 pence (Dec 2000).
- **RM398E** - 3S-GTE engine repair manual supplement (as mounted in ST205 UK celicas), Feb 94. Supplements RM396E. Price 15 pound 14 pence (Dec 2000).

So if its not obvious:

- for revision 1 you'll want RM164E, and for total completeness, RM165E.
- for revision 2 you'll want RM164E and for total completeness, RM165E and RM266E.
- for revision 3 you'll want RM396E and RM398E.
- for revision 4 & 5 you'll probably find RM396E and RM398E to be appropriate. I haven't heard of any engine differences between revision 3 and the later revisions.

I own all of the above manuals/supplements, so there is no doubt regarding part numbers or existence. The manuals are big thick books about an inch thick. The supplements are more like the thickness of a thick magazine.

If a UK toyota dealer can not be persuaded to order a repair manual even when you give them the part number, its perhaps best to take your business to a more helpful dealer.

Various versions of the american turbo engine and body repair manuals may be available on the Internet, try: <http://mr2manual.teq.org/> (should that page not be working try the web archive of that page at

http://web.archive.org/web/*/mr2manual.teq.org).

Body Repair Manuals

You've a choice between manuals for the UK non-turbo MR2 or the U.S. MR2 turbo. The latter are available by mail order from companies in the U.S. Don't forget american cars are LHD, and motoring in the US is just a bit different to the UK and probably Japan - different practices and regulations and type of use.

The exception is the gearbox. As far as I can guess the only English language documentation for the MR2 turbo gearbox will be for the american turbo. The UK non turbo MR2 gearbox may be similar to some extent but they are not identical though.

Toyota part numbers for the manuals for the **U.K.** cars are as follows:

- **RM182E** - MR2 chassis & body repair manual SW20 series (for Europe & Australia), Dec 89. Price: 30 pound 90 pence (Apr 2001). Note, as a bonus, to my slight surprise this manual does cover transmission, clutch and electrical wiring diagrams, even though separate publications are listed for some of these and the situation may be different for the US repair manuals. Of course non of these things are identical on the turbo car, but in the absence of anything else it gives you a rough idea.
- **RM282E** - MR2 chassis & body supplement SW20 series, Dec 91. Supplements RM182E. Price: 13 pound 97 pence (Nov 2001). Covers bigger brakes & wheels, power steering, revised geometry & suspension, airbag, updated electrics & wiring diagrams, etc.
- **RM379E** - MR2 chassis & body supplement SW20 series, Nov 93. Supplements RM182E and RM282E. Price: 24 pound 15 pence (Aug 2001). Covers suspension, power steering, airbag, updated electrics & wiring diagrams, new front & rear bumpers/spoilers/lights (diagrams only), R134a air conditioning, etc. Note that the revised bigger brakes are covered only in RM282E and not in this supplement, making this book seem a bit expensive.
- **BRM025E** - MR2 repair manual for collision damage SW20 series, Dec 89. Price: 15 pound 60 pence (Apr 2001). Contains some really useful information for proper crash damage and panel replacement repairs etc. For example the location, type and quantity of welds needed, body dimensions, etc.

So if its not obvious:

- for revision 1 you should get RM182E.
- for revision 2 you should get RM182E and RM282E
- for revision 3 you should get RM182E, RM282E and, if cost is not an issue, RM379E.
- for revision 4 & 5 I'm not sure what the situation is.

I don't think you need part numbers to order american repair manuals from american Toyota dealers, they don't seem to have an attitude problem about manuals over there.

Electrical Wiring Diagrams

The only accurate wiring diagram will be in Japanese. The american wiring diagram is good enough to be very helpful though in a lot of cases. For example in the past I've found the [american engine ECU wiring diagram](#) to be very useful even if its not 100% accurate for my Japanese rev 3 turbo.

You may be able to find some pin-out information of ECUs by taking the cover off and reading the screen print on the PCB. Follow this [link](#) for the pin-out information screen printed on the PCB of my engine ECU.

Scans of Japanese MR2 turbo wiring diagrams used to be found at: <http://gtfour.orcon.net.nz/diagrams.htm>
Try searching on altavista or google perhaps.

For body electrics, diagrams for the UK cars are probably as good as anything else in English. The pull out diagrams in the back of the UK body repair manuals and supplements are good enough for most things. In addition Toyota have also created separate books covering the electrics in UK cars. Part numbers of the ones in my possession are as follows:

- **EWD082Y** - MR2 electrical wiring diagram SW20 series (for Europe & General), Dec 89.
Price/Availability: not currently known. More like a complete atlas to the metropolis of wiring in the car than just a wiring diagram. Has the same pull out wiring diagrams in the back that the body repair manuals do, but the main pages include diagrams covering the same stuff in *colour* (at least in the printing I have). Includes locations of electrical parts on the car, and also routing of wiring on the car and the location of 'splice points' (e.g. where a wire is connected to two others buried within the wiring harness). Unlike mechanical manuals, includes some wording in French and Spanish, as well as English, but not German.
- **EWD149F** - MR2 electrical wiring diagram supplement SW20 series (for Europe & Australia), Dec 91. Supplements EWD082Y and EWD106F (EWD supplement Oct 90 that I haven't got).
Price/Availability: not currently known. Just a supplement to EWD082Y for the later cars, by the look of it. Black and White. Includes some wording in French, Spanish and German as well as English.

Electronic documentation

There is a certain amount of unlawfully copied information circulating including:

- RM179U, the US 1991 MR2 chassis/engine repair manual, in PDF format.
- The Toyota Electronic Parts Catalogue (EPC), both European and Japanese versions. Most the Euro disk sets are dated 1995 and the Japanese 1997, but lately there are people advertising post 2000 ones. Microsoft windows is required to use the information.
- Mitchell 'On-demand' (tm) computerized repair information system. US based automotive data company's information system covers most US market cars including, if you have the right disks, the MR2 turbo. Doesn't seem to mention any turboed Celicas though. Generally much inferior to the Toyota manuals, but I guess OK if you wish to seek a second opinion. Seems to include Toyota's Technical Service Bulletins (TSBs) as well as some Toyota diagrams used with permission from Toyota USA. Microsoft windows required.

<http://www.mr2turbo.info/>

