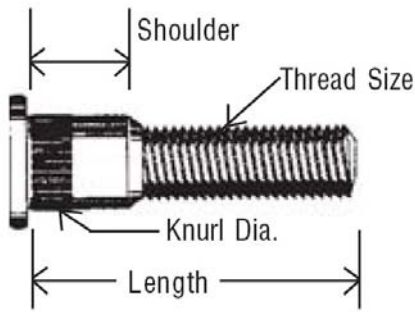


Toyota MR2 - Wheel Stud Guide



SERRATED BOLTS

The FAQ is only to be used as a guide. Always use the best quality stud you can buy. Today the best quality stud is made by ARP. Another manufacturer, Dorman, supply studs to your local auto parts stores and to online shops like Rock Auto. Please be aware that the "import market" and e-Bay are being swamped with inferior studs made overseas. These cheap studs can break un-expectantly creating a very dangerous situation.

Studs should be inspected on a regular basis. They should be closely inspected at any high speed event, like a track day, autoX or drag race. Physically remove the wheel and inspect the stud. Galled, corroded or stripped studs should be removed and replaced.

Always press the new stud in straight. Use a press or a wheel stud installer (i.e. Kastar 938 Wheel Stud Installer Kit – around USA \$50.00). Using wheel nuts to "pull" the stud into place can over-stress the stud and weaken it. Do not over torque the stud when installing wheels. Follow manufacturer's instructions on proper torque technique.

| Toyota MR2 1984-1998 Toyota MR2 Spyder 1999-2006 | Front | Rear |
|---|----------|----------|
| Type | Serrated | Serrated |
| Thread | M12-1.5 | M12-1.5 |
| Knurl Diameter | 14.20mm | 14.20mm |
| Length | 40mm | 40mm |
| Shoulder Length | 8mm | 8mm |

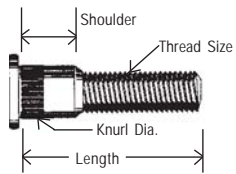
All Toyota MR2's use the same studs. Only the lug nut was changed to match the wheel.

| Year | Quantity | Pattern |
|-------------|----------|---------|
| 1984 – 1989 | 4 | 100mm |
| 1990 – 1998 | 5 | 114.3mm |
| 1999 – 2006 | 4 | 100mm |

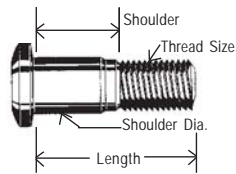
The following pages were taken from the 2006 Dorman parts catalog. They list all studs in the M12-1.5 category. The Knurl diameter can always be enlarged with a drill. Be advised that the hole in the hub cannot be made smaller. 14.20mm knurl is about as small as you can get. In an emergency the holes can be welded shut, re-drilled and re-heat treated.

When a stud has stripped the hub, you can use a larger diameter knurl to fix the assembly. Do not go too large as for example, there is not enough metal on the MK1 MR2 hub to support anything larger than a 1mm overbore. From the edge of the hole to the edge of the hub circle is only 3.50mm.

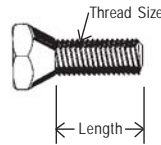
The follow pages are included as references only. Please visit www.dormanproducts.com for the latest product info and pricing.



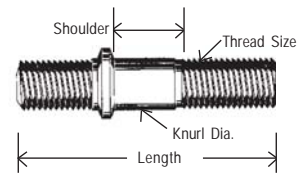
SERRATED BOLTS



SHOULDER BOLTS



WHEEL BOLT



DOUBLE ENDED STUDS

M12-1.5



610-415

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 11.99mm | 50.5mm | 13.5mm |



610-269

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.22mm | 36mm | 9mm |



610-362

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.30mm | 34mm | 9mm |



610-408

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.34mm | 48mm | 13.5mm |



610-360

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.37mm | 42mm | 11mm |



610-307

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.50mm | 39.5mm | 11.5mm |



610-324

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.70mm | 34.5mm | 9mm |



610-254

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.73mm | 41.5mm | 8mm |



610-486

NEW!

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.73mm | 51mm | 9.4mm |



610-468

NEW!

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.80mm | 43.8mm | 14.7mm |



610-323

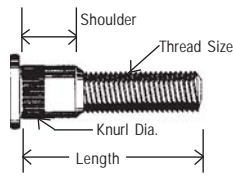
| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.80mm | 54mm | 8mm |



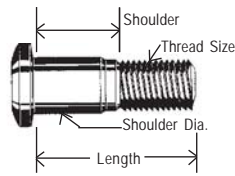
610-295

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.90mm | 37.5mm | 13mm |

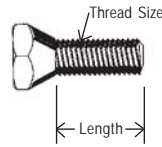
All photos approximate actual size.



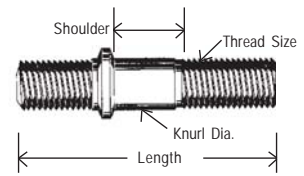
SERRATED BOLTS



SHOULDER BOLTS



WHEEL BOLT



DOUBLE ENDED STUDS

M12-1.5 (continued)



610-410

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.90mm | 46mm | 23mm |



610-409

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.90mm | 56mm | 29mm |



610-294

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 12.95mm | 36mm | 8mm |



610-270

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.03mm | 36.5mm | 10.5mm |



610-309

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.06mm | 42.5mm | 18mm |



610-340

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.08mm | 42mm | 12.5mm |



610-341

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.08mm | 52mm | 25.5mm |



610-413

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.16mm | 43mm | 11mm |



610-440 *NEW!*

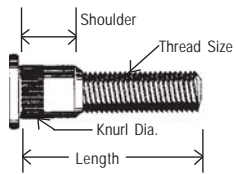
| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.2mm | 36.5mm | 12.7mm |



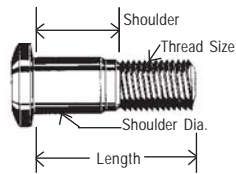
610-484 *NEW!*

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.25mm | 51.6mm | 15.8mm |

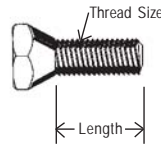
All photos approximate actual size.



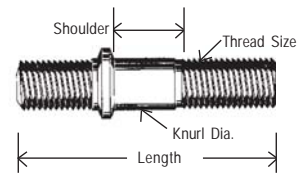
SERRATED BOLTS



SHOULDER BOLTS



WHEEL BOLT



DOUBLE ENDED STUDS

M12-1.5 (continued)



610-470

NEW!

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.31mm | 51.5mm | 15.5mm |



610-365

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.41mm | 51.5mm | 13.5mm |



610-306

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.46mm | 48mm | 14mm |



610-374

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.50mm | 47mm | 10mm |



610-417

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.51mm | 41mm | 13mm |



610-373

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.55mm | 43.5mm | 15.5mm |



610-443

NEW!

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.56mm | 50.8mm | 13.5mm |



610-344

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.59mm | 46mm | 11mm |



610-342

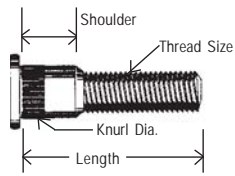
| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.59mm | 46.5mm | 14mm |



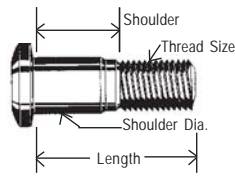
610-376

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.82mm | 49mm | 14mm |

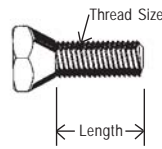
All photos approximate actual size.



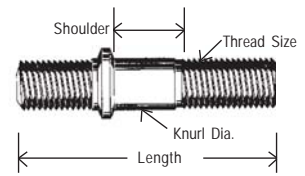
SERRATED BOLTS



SHOULDER BOLTS



WHEEL BOLT



DOUBLE ENDED STUDS

M12-1.5 (continued)



610-482 *NEW!*

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.89mm | 48.7mm | 13.9mm |



610-427

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 13.95mm | 55.3mm | 13.7mm |



610-452 *NEW!*

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.00mm | 43.8mm | 17.2mm |



610-253

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.10mm | 38.5mm | 11.5mm |



610-245

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.15mm | 38.5mm | 9mm |



610-312

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.17mm | 44.5mm | 12.5mm |



610-266

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.20mm | 40mm | 8mm |



610-462 *NEW!*

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.20mm | 44.1mm | 17mm |



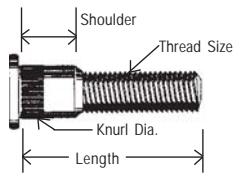
610-463 *NEW!*

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.20mm | 55mm | 26.6mm |

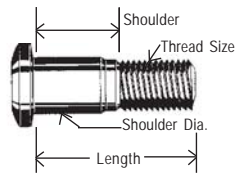


610-244

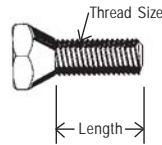
| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.22mm | 37mm | 8mm |



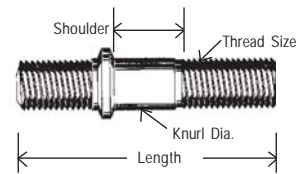
SERRATED BOLTS



SHOULDER BOLTS



WHEEL BOLT



DOUBLE ENDED STUDS

M12-1.5 (continued)



610-238

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.22mm | 37.5mm | 11mm |



610-276

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.30mm | 35.5mm | 6.5mm |



610-275

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.30mm | 41.5mm | 6.5mm |



610-477

NEW!

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.30mm | 43mm | 12mm |



610-265

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.32mm | 44.5mm | 10mm |



610-264

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.33mm | 52.5mm | 25mm |



610-460

NEW!

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.34mm | 46mm | 15mm |



610-262

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.35mm | 37.5mm | 7mm |



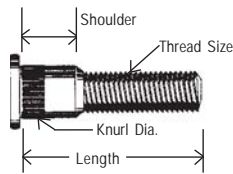
610-261

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.35mm | 42.5mm | 8mm |

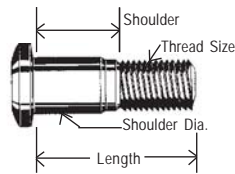


610-414

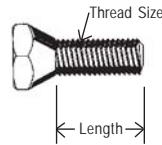
| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.38mm | 45mm | 10.5mm |



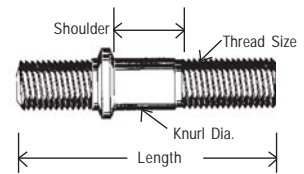
SERRATED BOLTS



SHOULDER BOLTS



WHEEL BOLT



DOUBLE ENDED STUDS

M12-1.5 (continued)



610-291

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.40mm | 39mm | 12.5mm |



610-407

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.40mm | 47mm | 20.5mm |



610-302

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.45mm | 42mm | 11.5mm |



610-445 **NEW!**

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.48mm | 49.2mm | 7mm |



610-387

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.55mm | 49mm | 11.5mm |

All photos approximate actual size.



610-476 **NEW!**

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.60mm | 44.5mm | 13.4mm |



610-473 **NEW!**

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.73mm | 45.5mm | 18.5mm |



610-474 **NEW!**

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.77mm | 43.8mm | 13.3mm |



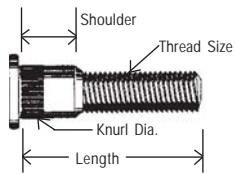
610-239

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.83mm | 40mm | 7mm |

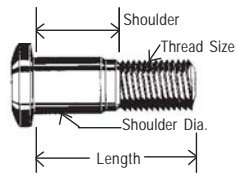


610-416

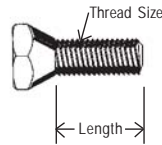
| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.86mm | 52.2mm | 14.5mm |



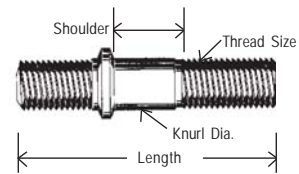
SERRATED BOLTS



SHOULDER BOLTS



WHEEL BOLT



DOUBLE ENDED STUDS

M12-1.5 (continued)



610-321

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.91mm | 38.5mm | 16mm |



610-370

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 15.80mm | 44mm | 16.5mm |



610-285

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.94mm | 41mm | 13.5mm |



610-384

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 15.87mm | 44.5mm | 13mm |



610-369

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 14.99mm | 46mm | 19mm |



610-457

NEW!

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 16.10mm | 41.3mm | 13mm |



610-388

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 15.42mm | 51mm | 15.5mm |



610-372

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 16.18mm | 44mm | 17mm |



610-343

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 15.55mm | 46.5mm | 17.5mm |



610-438

NEW!

| Thread | Knurl Dia. | Length | Shoulder |
|---------|------------|--------|----------|
| M12-1.5 | 16.24mm | 44.5mm | 12.7mm |