288GTO

engine kit (scale 1/4)

static engine model kit, non functional.
For display purpose only

1 parts manual

version 2 - (01.2022)
Important Info:
Preparation of 3d printed resin parts

The 3d printed parts are made of resin and handle different than other known casted resin parts. These printed parts are brittle compared to casted resin parts. Therefore, be **VERY** careful when enlarging holes or trim areas to fit. Parts tend to break very easy. This is especially for the small parts with thin walls. More information in the following workflow steps. Due to the making process of the printing process there is some trimming, cleaning, puttying and sanding process required.

1- coarse trimming
Most printed parts come with a stabilization structure that support the part during the printing process. First step is to remove this structure carefully with a motor tool. Do not break of the structure as you can damage the part itself. Use a new (diamond coated) cutting blade and **do not** use force to cut the structure.

2- smooth sanding of support marks
Once the support structure has been roughly removed you need to sand the remaining pins with sandpaper. I recommend to work with grid 400 and 600. In some areas it could happen, that pins will leave small dimples. Here it is advisable to putty the dimples and sand smooth after they are dry.

3- additional preparation
Large Parts could show some bending where a flat surface is required (e.g. cylinder-head to engine block or oil-pan to block). These surfaces should be sanded flat using a sandpaper layed on a flat surface (e.g. table) and moving the part back and force until all is straight. Due to the making process of the parts there could be some visible printlines on some parts (called layer lines). Very fine lines will disappear once the parts get painted especially when using filler spray as a base coat. On some areas it could be necessary to sand the lines smooth or (where hard to reach) use a cutter knife and scrap the lines smooth. A thin layer of primer to the parts will show if more cleaning or sanding is required.

Most mounting holes on the printed parts are preprinted in the correct size. In some cases it might be necessary to enlarge the holes to the correct required size to fit the corresponding bolts. Be very careful when redrilling these holes and use very little force. **Only use the next larger drill size, step by step** (e.g.: if the hole size is 1,6mm and you want 2,0mm go step by step- 1,7mm, 1,8mm, ...). Do not use drills that are several sizes larger than the actual hole as the resin will probably break. Remember the printed resin is more brittle than a casted resin. It is recommended to use a handdrill and not a motordriven drilling tool. Do a dry fit with all surrounding parts and bolts first before final painting.

Fine layer lines or scratches will be eliminated using automotive filler spray. When no malfunctions are visible, part is ready to get final color. Otherwise repeat cleaning process.

Use sandpaper (400grid) to smooth visible printlines. Spray thin primer coat to better see possible print lines and imperfections. Repeat sanding if required.

Enlarge holes to needed size (step by step - use hand drill. Do not use much force!!!)
### Parts List

Resin - 3d printed parts - *(shown size not to scale)*

<table>
<thead>
<tr>
<th>Part</th>
<th>No. parts</th>
<th>Building step</th>
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</thead>
<tbody>
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Parts List
Resin - 3d printed parts - R shown size not to scale

R43
No. parts: 1
Building step: 8

R44
No. parts: 1
Building step: 8

R45
No. parts: 1
Building step: 8

R46
No. parts: 1
Building step: 10

R47
No. parts: 1
Building step: 10

R48
No. parts: 1
Building step: 10

R49
No. parts: 1
Building step: 10

R50
No. parts: 1
Building step: 6

R51
No. parts: 1
Building step: 6

R52
No. parts: 1
Building step: 6

R53
No. parts: 1
Building step: 6

R54
No. parts: 1
Building step: 6

R55
No. parts: 1
Building step: 6

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Building step: 6

R57
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Building step: 7

R58
No. parts: 1
Building step: 7

R59
No. parts: 1
Building step: 7

R60
No. parts: 1
Building step: 12

R61
No. parts: 4
Building step: 12

R62
No. parts: 2
Building step: 11

R63
No. parts: 1
Building step: 11

R64
No. parts: 2
Building step: 11

R65
No. parts: 1
Building step: 11

R66
No. parts: 1
Building step: 11

R67
No. parts: 1
Building step: 4

R68
No. parts: 12
Building step: 4 / 5

R69
No. parts: 8
Building step: 4 / 5

R70
No. parts: 4
Building step: 4 / 5

R71
No. parts: 2
Building step: 4 / 5

R72
No. parts: 2
Building step: 4 / 5

R73
No. parts: 1
Building step: 4

R74
No. parts: 2
Building step: 4 / 5

R75
No. parts: 1
Building step: 4

R76
No. parts: 2
Building step: 4 / 5

R77
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Building step: 4 / 5

R78
No. parts: 2
Building step: 4 / 5

R79
No. parts: 2
Building step: 4

R80
No. parts: 2
Building step: 4 / 5

R81
No. parts: 2
Building step: 4 / 5

R82
No. parts: 2
Building step: 4 / 5

R83
No. parts: 1
Building step: 5

R84
No. parts: 1
Building step: 5

scale 1/4
## Parts List

#### Resin - 3D printed parts

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*shown size not to scale*
### Parts List

**machined parts**

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Parts List

Hardware Parts

- **H1**
  - No. parts: 4
  - Brass rivet M1,6 x 12

- **H2**
  - No. parts: 23
  - Steel bolt M1,6 x 8

- **H3**
  - No. parts: 16
  - Steel bolt M2,0 x 12

- **H4**
  - No. parts: 24
  - Steel bolt M2,0 x 6

- **H5**
  - No. parts: 1
  - Steel bolt M2,0 x 8

- **H6**
  - No. parts: 8
  - Steel bolt M2,0 x 10

- **H7**
  - No. parts: 8
  - Steel pin M2,0 x 15

- **H8**
  - No. parts: 1
  - Steel bolt M2,5 x 10

- **H9**
  - No. parts: 5
  - Steel bolt M3,0 x 10

- **H10**
  - No. parts: 1
  - Steel bolt M4,0 x 15

- **H11**
  - No. parts: 48
  - Steel nut M1,6

- **H12**
  - No. parts: 122
  - Steel nut M2,0

- **H13**
  - No. parts: 8
  - Steel nut M2,5

- **H14**
  - No. parts: 7
  - Steel nut M3,0

- **H15**
  - No. parts: 28
  - Cap nut M2,0

- **H16**
  - No. parts: 6
  - Brass bolt M1,6 x 6

- **H17**
  - No. parts: 3
  - Brass bolt M2,5 x 8

- **H18**
  - No. parts: 12
  - Brass bolt M2,5 x 12

- **H19**
  - No. parts: 4
  - Brass bolt M1,0 x 5

- **H20**
  - No. parts: 2
  - Steel bolt 1,6 x 12

- **H21**
  - No. parts: 2
  - Steel bolt M4,0 x 15

- **H22**
  - No. parts: 13
  - Steel bolt M1,6 x 6

- **H23**
  - No. parts: 30
  - Steel washer 1,3mm

- **H24**
  - No. parts: 20
  - Steel washer 1,7mm

- **H25**
  - No. parts: 178
  - Steel washer 2,2mm

- **H26**
  - No. parts: 24
  - Steel washer 2,7mm

- **H27**
  - No. parts: 5
  - Steel washer 3,2mm

- **H28**
  - No. parts: 2
  - Brass pin M1,0 x 10

- **H29**
  - No. parts: 4
  - Steel nut M2,5 (thin)

- **H30**
  - No. parts: 85
  - Steel pin M2,0 x 16

- **H31**
  - No. parts: 77
  - Steel pin M2,0 x 20

- **H32**
  - No. parts: 3
  - Steel pin M2,0 x 16

- **H33**
  - No. parts: 4
  - Alu rivet 1 x 4mm

- **H34**
  - No. parts: 2
  - Alu rivet 1 x 2mm

- **H35**
  - No. parts: 4
  - Steel screw M1,6 x 6

- **H36**
  - No. parts: 12
  - Niro screw M1,2 x 6

- **H37**
  - No. parts: 2
  - Steel allen M2,0 x 5

- **H38**
  - No. parts: 1
  - Steel allen M2,5 x 6

- **H39**
  - No. parts: 3
  - Steel allen M3,0 x 6

- **H40**
  - No. parts: 1
  - Steel allen M1,2 x 6

- **H41**
  - No. parts: 3
  - Steel allen M3,0 x 12

- **H42**
  - No. parts: 2
  - Steel allen M2,0 x 10

- **H43**
  - No. parts: 6
  - Steel rod M2,5

- **H44**
  - No. parts: 1
  - Steel rod M3,0

- **H45**
  - No. parts: 8
  - Niro allen M1,4 x 5

- **H46**
  - No. parts: 6
  - Steel allen M2,0 x 20

- **H47**
  - No. parts: 1
  - Steel allen M4,0 x 16

- **H48**
  - No. parts: 4
  - Brass rod M2,0

- **H49**
  - No. parts: 4
  - Steel nut M4

- **H50**
  - No. parts: 8
  - Steel washer M4,3 x 9

- **H51**
  - No. parts: 4
  - Steel allen M2,5 x 12

- **H52**
  - No. parts: 1
  - Brass rod M1,6

- **H53**
  - No. parts: 4
  - Alu rivet - M2,0 x 10

- **H54**
  - No. parts: 1
  - Steel washer - 4,3 x 12

**shown size not to scale**
Parts List
etched parts -  E (shown size not to scale)

sheets:
A - 0,8mm brass
B - 0,3mm nickel silver
C - 0,4mm brass
D - 0,3mm brass
E - 0,4mm nickel silver
F - 0,4mm nickel silver
G - 0,5mm nickel silver

shown sheet layouts not to scale!!

e.g. sheet B is XXL (200x300mm)

part designation in manual:
E (for etch parts) followed by the sheet letter and number on sheet.
eg: E-F3
(etched part no.3 on sheet F)

- parts not used
# Parts List

**miscellaneous parts**

### Z1 (red wire 1,8mm)
- No. parts: 2,0m
- Building step: 4 / 5

### Z2 (shrink-tube yellow)
- No. parts: 0,1m
- Building step: 4 / 5

### Z3 (alu wire 2,0mm)
- No. parts: 0,2m
- Building step: 1 / 2

### Z4 (silver wire 0,6mm)
- No. parts: 0,5m
- Building step: 1 / 2 / 7

### Z5 (steel tube 1,2mm)
- No. parts: 3
- Building step: 1 / 2 / 9

### Z6 (steel tube 1,6mm)
- No. parts: 5
- Building step: 1 / 2

### Z7 (black wire 0,8mm)
- No. parts: 0,9m
- Building step: 3

### Z8 (alu tube 3,0mm)
- No. parts: 1
- Building step: 3

### Z9 (schrink tube 6mm)
- No. parts: 0,3m
- Building step: 3

### Z10 (shrink tube 3,2mm)
- No. parts: 1,2m
- Building step: 7

### Z11 (shrink tube 1,6mm)
- No. parts: 0,5m
- Building step: 7

### Z12 (color wire 0,6mm)
- No. parts: 7x 0,15m
- Building step: 7

### Z13 (black wire 1,0mm)
- No. parts: 1,2m
- Building step: 3

### Z14 (soft solder 1,2mm)
- No. parts: 0,4m
- Building step: 3

### Z15 (soft solder 1,0mm)
- No. parts: 0,1m
- Building step: 3

### Z16 (soft solder 0,8mm)
- No. parts: 1,5m
- Building step: 13

### Z17 (white wire 1,1mm)
- No. parts: 0,4m
- Building step: 3

### Z18 (wire black 2,0mm)
- No. parts: 0,15m
- Building step: 3

### Z19 (brass square tube)
- No. parts: 2
- Building step: 12

### Z20 (brass square tube)
- No. parts: 2
- Building step: 12

### Z21 (alu tube 2,0mm)
- No. parts: 2
- Building step: 7

### Z22 (shrink tube 10mm)
- No. parts: 1
- Building step: 13

### Z23 (shrink tube 20mm)
- No. parts: 1
- Building step: 1 / 2

### Z24 (shrink tube 30mm)
- No. parts: 1
- Building step: 3

### Z25 (metal ring plate)
- No. parts: 1
- Building step: 3

---

### Decals

**shown size not to scale**

1. Hose markings (cut to size)
2. Drive belt decals
3. Oil filter
4. Ignition wire labels
5. Distributor cap labels
6. Climate compressor
7. Engine stand
8. Alternator
9. Hose markings (cut to size)
10. Markings / QC (optional)
11. Hose markings (cut to size)
12. Cylinder head gasket markings
13. Hose clamp protection (optional)
14. Ign. plug labels

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**Note:**
Waterslide decals. Decals are NOT pre cut. All decals need to be cut to size with a sharp cutter blade or scissor prior soaking in water.

Trim as close as possible to the printed image. After that they can be treated as normal water slide decals. Use one by one. Do not soak multiple decals at once. It is recommended to clear coat the decals / part after they are applied and dried (flat or gloss according usage) for better durability and to minimize the visibility of the carrier film.
Parts List

paper gaskets

- P

P1 (2x)
P2 (4x)
P3 (4x)
P4

P14 (8x) P15 P16

P17 (8x) P18 (2x) P11 (2x)

P10

P13

P7 (2x) P8L P8R P9 (2x)
Use the dimensions instead of the drawing. Drawing might be off due to printer error.

Use as reference to solder engine stand base.