To maintain the validity of the warranty, the bicycle must be fully assembled by an authorized Argon 18 dealer. High-end components, particularly carbon parts, require extra care during assembly. These components must be installed using a torque wrench to ensure each bolt is at the specified torque setting to prevent damage.
I. TOOLS NEEDED & SPARE PARTS KIT

- Hydraulic Hose Cutter
- Allen Key Set
- Flush Cut Plier
- Carbon Paste & Grease
- Utility Picks
- Clean Rag
- Derailler Hanger
- Alignment Gauge
- Cables And Housing Cutter
- Thread Locker Medium Strength
- Isopropyl Alcohol
- Torque Wrench
- Cassette Lockring Tool
- 8mm Wrench
- Bleed Kit
- Torx Key Set
- Mineral Oil
- Headset Press
- Seat Post Clamp
- Rear Derailleur Hanger

SPARE PARTS KIT

IMPORTANT:
Spare Parts Kit: Essential parts to always have on hand
IN CASE OF EMERGENCY...THIS MIGHT SAVE YOUR RIDE!
2. TROUBLESHOOTING / TIPS & SPECIFICATIONS

**Brakes**
Front brake - 140/160mm disc rotors
Rear brake - 140/160mm disc rotors
Rear mount thickness: 20mm.

**Tire Clearance**
700c
Maximum clearance: 700x42c. Tires must be no wider than 43mm for both front and rear wheels. With fenders, tires must be no wider than 38mm.

650b
Maximum clearance: 650bx47. Tires must be no wider than 47mm for both front and rear wheels. With fenders, tires must be no wider than 42mm.

**Seat Post**
Ø 27.2mm

**Bottom Bracket**
BB86 (Press-fit)

**Headset**
A18 3D IST2
Bottom Bearing: MR127 - 1 1/2", 36° x 45° Stainless Steel
Top Bearing: MR127 - 1 1/2", 36° x 45° Stainless Steel
*Some systems may require a 1 1/2", 45° x 45° top bearing
For more information, please refer to: Argon 18 - Internal routing compatibility

**Chainring**
The Grey Matter can run a 50-34 chainring maximum. It has been optimized for a gravel crankset.
A chainring of 48T maximum can be installed in 1x configuration.

**Seat Post Collar**
Ø 31.8mm

**Front Derailleur**
The Grey Matter can be used with a 31.8mm clamp front derailleur, or with a front derailleur clamp band adapter.

**Accessories**
The Grey Matter is designed to take fenders, a rear rack up to 27kg and front rack up to 18kg.

Please contact customer service at info@argon18.com for any further inquiries.
3. FRAMESET INSPECTION

Before assembling your new Grey Matter, please verify that you have all the following:

1. Frameset parts checklist (see p.6-7)
2. Inspect the frame for cosmetic defects (scratches, bumps, cracks, paint defects, etc.)
3. For reference, record serial number on p.2
4. All the necessary bolts (refer to frameset parts, p.6-7)
5. For optimal shifting performance, use a derailleur alignment gauge to make sure that the derailleur hanger is straight.

Some of the following parts are already assembled on the frame. When assembling the bike, you will need to adjust these parts according to their torque specifications and fastener conditions when necessary.

### Frameset Inspection

<table>
<thead>
<tr>
<th>No.</th>
<th>A18 SKU#</th>
<th>Function</th>
<th>Description</th>
<th>Screw Type</th>
<th>Torque</th>
<th>Detail</th>
<th>Qty</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>81052</td>
<td>Front Thru Axle</td>
<td>M12 x 1.5 x 119mm Axle</td>
<td>Thru Axle</td>
<td>12 Nm</td>
<td>Grease</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>81053</td>
<td>Rear Thru Axle</td>
<td>M12 x 1.5 x 161mm Axle</td>
<td>Thru Axle</td>
<td>12 Nm</td>
<td>Grease</td>
<td>1</td>
</tr>
<tr>
<td>3</td>
<td>100279*</td>
<td>Rear Derailleur Hanger Screw</td>
<td>M4 x 14mm Screw</td>
<td>Taper Head</td>
<td>2 Nm</td>
<td>Loctite</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>100280*</td>
<td>BB Cable Guide Screw</td>
<td>M5 x 16mm Screw</td>
<td>Flat Head</td>
<td>Hand Tighten</td>
<td>Loctite</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>80801*</td>
<td>Seatpost Collar Screw</td>
<td>M5 x 22mm Screw</td>
<td>Socket Head</td>
<td>4 Nm</td>
<td>Grease</td>
<td>1</td>
</tr>
<tr>
<td>6</td>
<td>81249</td>
<td>Water Bottle Screw</td>
<td>M5 x 14mm Screw</td>
<td>Button Head</td>
<td>3 Nm</td>
<td>Grease</td>
<td>10</td>
</tr>
<tr>
<td>7</td>
<td>100283*</td>
<td>Cable Cover Screw</td>
<td>M4 x 8mm Screw</td>
<td>Flat Head</td>
<td>Hand Tighten</td>
<td>Loctite</td>
<td>2</td>
</tr>
</tbody>
</table>

* Included with

For troubleshooting and FAQ, please visit:

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**IMPORTANT:**
Indicates special precautions and important steps that must be taken to avoid damage and/or injury.

- **Torque Value**
- **Allen key size**
- **Apply carbon paste** on the indicated surfaces.
- **Apply threadlocker** on the indicated surfaces.
- **Apply grease** on the indicated surfaces.
4. FRAMESET SKUS AND DESCRIPTIONS

*Except for the frame itself, which is not sold separately as a spare part, all parts can be ordered by referring to their respective SKU number.*
### Frameset SKUs and Descriptions

<table>
<thead>
<tr>
<th>NO.</th>
<th>NAME</th>
<th>AI8 SKU#</th>
<th>QTY</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>Grey Matter Frame</td>
<td>-</td>
<td>1</td>
</tr>
<tr>
<td>2</td>
<td>Grey Matter Fork 54 mm (XXS-S)</td>
<td>FK.GM.XXS-S.356A</td>
<td>1</td>
</tr>
<tr>
<td></td>
<td>Grey Matter Fork 49 mm (M-XL)</td>
<td>FK.GM.M-XL.356A</td>
<td></td>
</tr>
<tr>
<td>3</td>
<td>Grey Matter Dropout Assembly</td>
<td>100279</td>
<td>1</td>
</tr>
<tr>
<td>4</td>
<td>Grey Matter BB Cable Guide Assembly</td>
<td>100280</td>
<td>1</td>
</tr>
<tr>
<td>5</td>
<td>Button Head Cap Screw For Water Bottle</td>
<td>81249</td>
<td>10</td>
</tr>
<tr>
<td>6</td>
<td>Grey Matter Cover For Mech</td>
<td>100281</td>
<td>2</td>
</tr>
<tr>
<td>7</td>
<td>Grey Matter Cable Cover</td>
<td>100282</td>
<td>2</td>
</tr>
<tr>
<td>8</td>
<td>Flat Head Cap Screw M4x8</td>
<td>100283</td>
<td>2</td>
</tr>
<tr>
<td>9</td>
<td>GW Front Thru Axle 12mm</td>
<td>81052</td>
<td>1</td>
</tr>
<tr>
<td>10</td>
<td>GW Rear Thru Axle 12mm</td>
<td>81053</td>
<td>1</td>
</tr>
<tr>
<td>11</td>
<td>Removable Lever For GW Thru Axle 12mm</td>
<td>81054</td>
<td>3</td>
</tr>
<tr>
<td>12</td>
<td>Plastic Plug For Water bottle Eyelet</td>
<td>80264</td>
<td>16</td>
</tr>
<tr>
<td>13</td>
<td>Foam Liner For Hydraulic Hose</td>
<td>80811</td>
<td>2</td>
</tr>
<tr>
<td>14</td>
<td>3D Headset Sleeve IST2</td>
<td>100156</td>
<td>1</td>
</tr>
<tr>
<td>15</td>
<td>3D Headset Column 25mm IST2</td>
<td>100361</td>
<td>1</td>
</tr>
<tr>
<td>16</td>
<td>Seatpost Collar</td>
<td>80801</td>
<td>1</td>
</tr>
</tbody>
</table>

#### Optional parts that can be ordered separately

- External Battery SP1 + Holder 38446 1
- 3D Headset Column 15mm IST2 100362 1
5 SEATPOST INSTALLATION

1. Apply grease on the thread of the M5 x 22mm socket head screw.
2. Assemble the seat post collar (80801) as shown.
3. Adjust the seatpost at the desired height. Make sure to follow the seatpost min and max insertion limits. (p. 9)
4. Tighten the M5 x 22mm socket head screw on the seatpost clamp to 4Nm.

**IMPORTANT:**
Refer to p.9 for seatpost MIN and MAX insertion limits.
6. **SEATPOST MIN. & MAX. INSERTION**

Depending on the size of the frame, the desired height and the chosen seatpost, the seatpost might need to be cut.

<table>
<thead>
<tr>
<th>SIZE</th>
<th>Max. Insertion</th>
<th>Min. Insertion</th>
</tr>
</thead>
<tbody>
<tr>
<td>XX-SMALL</td>
<td>180</td>
<td>80</td>
</tr>
<tr>
<td>X-SMALL</td>
<td>210</td>
<td>80</td>
</tr>
<tr>
<td>SMALL</td>
<td>245</td>
<td>80</td>
</tr>
<tr>
<td>MEDIUM</td>
<td>215</td>
<td>80</td>
</tr>
<tr>
<td>LARGE</td>
<td>250</td>
<td>80</td>
</tr>
<tr>
<td>X-LARGE</td>
<td>285</td>
<td>80</td>
</tr>
</tbody>
</table>
7. DERAILLEUR HANGER ASSEMBLY

Assembling the rear derailleur hanger:

1. Assemble the rear derailleur hanger (100279) on the frame.
2. Apply a drop of blue Threadlocker (n. 242) on the M4x14mm screw threads and tighten to 2Nm.
3. Use a rear derailleur hanger alignment gauge to align the rear derailleur hanger. (If necessary)

Using a front derailleur:

1. The Grey Matter seattube is 31.8mm in diameter. A front derailleur can be used with a band clamp adapter, or a clamp band front derailleur.

For assistance, visit Park Tool’s website at:
https://www.parktool.com/blog/repair-help/rear-derailleur-hanger-alignment
8. 3D HEADSET INSTALLATION

Assembling the 3D headset (0mm)

1. If the 0mm configuration is chosen, the bearing goes directly in the headtube.

Assembling the 3D headset (+15 / +25mm)

1. Apply grease to the inside of the headtube.
2. Insert the plastic sleeve (100156) into the headtube.
3. Apply grease on the plastic sleeve (100156).
4. Position the 3D column (100361 or 100362) perfectly straight on the headtube opening.
5. Slowly press the cups into the frame using a headset press + adaptor until it sits flush with the frame.
10. BRAKE ROUTING

1. Guide the rear brake housing into the downtube starting at the bottom bracket until it exits at the headtube.

2. If desired, slide a foam liners (80811) onto the brake housing until it reaches the bottom bracket shell.

3. Attach the brake hose to the guide on the non-drive side chainstay with cable ties.
II. FRONT BRAKE ROUTING

1. Guide the hydraulic housing through the hole in the fork leg until it exits from the bottom hole on the steerer.
12. MECHANICAL GROUPSET ROUTING

1. Guide the rear gear housing into the downtube starting at the bottom bracket until it exits at the headtube.
2. Guide the front gear housing into the downtube starting at the bottom bracket until it exits at the headtube.
3. If desired, slide a foam liners (80811) onto the gear housing until it reaches the bottom bracket shell.
4. Attach the rear gear housing to the guide on the drive side chainstay with cable ties.
5. Respect the order of the housing shown (image on right), to avoid crossing the housing while installing the bottom bracket cable guide.
12.1 MECHANICAL GROUPSET ROUTING

1. If using SRAM or an older Shimano front derailleur, use the frame cable stop configuration.

2. Install a housing end cap on the gear housing prior to the cable stop.

3. If using a newer Shimano front derailleur, you can bypass the frame cable stop and use the one on the front derailleur.
13. ETAP GROUPSET ROUTING

1. Install both derailleur, no routing required.
The Grey Matter is compatible with Di2 groupset, however, it is not optimized for them:

1. Guide both derailleur cables through the hole at the bottom of the seattube until they exit at the top of the seattube.
2. Connect both cables in the battery.
### 14.1 DI2 8100-9200 GROUPSET ROUTING

1. Wrap the battery holder (81233) around the Di2 battery.
2. Connect the battery to the system.
3. Insert the battery into the seatpost shaft until it sits at the bottom of the shaft.
4. Install the cover for mechanical (100281) through the cable.
5. Apply Loctite to the threads of the M3 x 8mm screw and hand tighten the screw.
6. Attach the rear derailleur cable to the guide on the drive side chainstay with cable ties.
The Grey Matter is compatible with Di2 groupset, however, it is not optimized for them:

1. Connect all wires to the JC-41 junction box and slide the box into the downtube from the headtube.

2. Using as fishing cable*, guide battery, rear derailleur and front derailleur cables to exit through the hole under the bottom bracket.

TIPS: Use a gear cable and a metal cable end to fix and pull the Di2 wires through the frame.
15.1 DI2 GROUPSET ROUTING

1. Install the cover for mechanical (100281) on the seatube hole.
2. Apply Loctite to the threads of the M3 x 8mm screw and hand tighten the screw.
3. Insert the battery cable through the cover for mechanical until it exits from the seatube.
4. Wrap the battery holder around the Di2 battery and connect the battery to the system.
5. Insert the battery into the seatpost until it sits at the bottom of the shaft.
6. Attach the rear derailleur cable to the guide on the drive side chainstay with cable ties.
7. Respect the order of the housing shown (image above), to avoid crossing the housing while installing the bottom bracket cable guide.
The Grey Matter is compatible with a dropper post, except for Di2 configurations:

1. If you are not using a dropper post, install the cable cover (100282) on the seattube bottom hole and on the downtube hole. Apply Loctite to the threads of each M3 x 8mm screw and hand tighten each screw.

2. If using a dropper post, guide the dropper post housing into the downtube starting at the bottom bracket until it exits from the hole on the downtube. Respect the position shown in image at right.

3. Install the cover for mechanical (100281) on the downtube hole and seattube hole.

4. Apply loctite to the threads of each M3 x 8mm screw and hand tighten each screw.

5. Guide the dropper post housing through the cable cover for mechanical on the seattube until it exits at the top of the seattube.

6. Follow the dropper post installation procedure.
17. BOTTOM BRACKET CABLE GUIDE INSTALLATION

1. After installing all the cables, install the bottom bracket cable guide.
2. Ensure each cable is placed in the order shown in the image below for the chosen configuration.
3. Apply Loctite to the threads of the M5 x 16mm screw and hand tighten the screw.

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**Speed Wires**  
**Brake Housing**  
**Dropper Post Housing**

![Speed Wires](#)  
![Brake Housing](#)  
![Dropper Post Housing](#)
1. Apply grease onto all surfaces where the bearing sits (frame & fork)
2. Insert the fork steerer and front brake housing through the bottom bearing. (MR127)
3. Slide the fork steerer into the frame headtube.
4. Insert the top bearing (MR127) onto the steerer and into the frame.
5. Pass the wires and/or housing through the top bearing.

**IMPORTANT:**
For more information on the cockpit installation and compatibility, please refer to: Argon 18 - Internal routing compatibility
19. BOTTLE CAGE POSITION

Here are some possible options of how to fit the waterbottle(s) onto the frame’s water-bottle-cage mounts, depending on the frame size.

IMPORTANT:
If using a road groupset, interference between the chain and the lower bottle may occur.
20. REAR RACK AND FENDER INSTALLATION

1. When securing the fender and/or the rear rack on the dropout, make sure that the screw doesn’t interfere with the chain. The maximum insertion of the screw is 15mm to avoid protrusion and possible chain interference. Make sure there is at least 10mm of screw insertion to support the load.

2. On the seatstay and seatstay bridge, the thread length is 10mm. Ensure 10mm or less of thread insertion.

3. On the chainstay bridge, the thread length is 15mm. Ensure 15mm or less of thread insertion.

* If a fender is used with a rear rack: if possible, screw the fender onto the rear rack. If not possible, position the rear rack between the frame and the fender on the screw.

* All screws must be torqued to a maximum of 3Nm. Apply grease to the threads.
21. FRONT RACK AND FENDER INSTALLATION

- The thread length on the upper screw is 9mm. Ensure 9mm or less of thread insertion.
- The thread insertion on the interior hole for fenders is 15mm. Ensure 15mm or less of visible threads once the fender is screwed on.
- The thread insertion on the exterior hole for the rack is 20mm. Ensure 20mm or less of visible threads once the rack is screwed on.
- All screws must be torqued to a maximum of 3Nm. Apply grease to the threads.