

VERMEIREN

Maintenance manual
Tricycles
LAGOON





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1 Maintenance

Lifetime of the tricycle is influenced by its use, storage, regular maintenance, servicing and cleaning.

The batteries for the electric tricycle are maintenance-free.

The drive unit is maintenance-free and must only be serviced at an authorized service center. Never attempt to open, remove it from the frame or perform any maintenance by yourself.

1.1 Regular Maintenance

The maintenance activities to ensure a good condition for your Vermeiren tricycle are described below:

- Before every ride
 - Check the tyres and make them clean. If necessary change the tire.
 - Check the tyre pressure, if necessary pump it up (only for air tyres).
 - Check screw fastenings, levers, adjusting buttons are secured.
 - Check the brakes and adjusted if necessary.
 - Check the chain condition and adjusted if necessary.
 - Check the tricycle (cleanliness, cracks, damage on structural parts) and make it clean. If necessary change the coating.
 - Check the condition of the fork.
 - Check the tricycle front and rear lightning (if available).
- Every 8 weeks: inspection and possibly lubricating or adjusting from
 - Chain (inspection + lubricating)
 - Wheel axles, crank shaft (inspection + lubricating)
 - Gears (inspection + lubricating)
 - Brake levers (inspection)
 - Other adjusting systems
- Every year or for every new user
 - General review
 - Disinfection
 - Frontwheels, possibly clean bearings

Additional maintenance activities for the "electric tricycles".

- Before every ride
 - Check the condition of the battery. Press the On/Off button to switch on the battery. When no LED lits the battery may be damaged.
 - Switch on the electronic system. The operator control indicates the level of the batteries. If the battery charge is not sufficient for the intended route, switch off the operator control and charge the batteries.
 - Check the battery is locked in the battery housing.
 - Condition of the electric cables (kinks free, no signs of abrasive wear).
- Every 8 weeks: inspection and possibly lubricating or adjusting from
 - Dirt on the battery/battery housing (carefully remove any dirt as it can corrode the plugs).
- Every 6 months
 - That the charger is working

For your convenience, on the back of this manual is a maintenance plan.

Repairing and assembling of spare parts for your tricycle may only be performed by the specialist dealer.

Only authorized Vermeiren spare parts may be installed.

1.2 Shipping and storage

The shipping and storage of the tricycle shall be according following instructions:

- Store in a dry place (between +5 °C and +41 °C).
- The relative humidity of the air should be between 30% and 70%.
- Provide sufficient covering or packaging to protect the tricycle from rust and foreign bodies. (e.g. salt water, sea air, sand, dust).
- Store all removed parts together in one place (or mark them if necessary) to avoid mixing up with other products when re-assembling.
- Components must be stored without being subjected to strains (Do not put too heavy parts on the tricycle, not clamping between something, ...).

Additional activities for the "electric tricycles".

- Check internal cables for squashing and the prevention of kinks.
- Disconnect the power plug of the battery charger.

If batteries are not used, they can completely drain. So if you no longer use your electric tricycle, you could leave it connected to the battery charger. Charging is automatically controlled by the battery charger. It is recommended to remove the battery from the electric tricycle and store it in an enclosed location until being used again. If you remove and store the batteries, kindly note the following:

- Make sure that no objects can make contact with both poles during the time of storage (danger of short circuits!).
- Batteries should only be stored in dry, well-ventilated spaces at a temperature between -20°C and +40°C. Preferred storage temperature: **+20°C**.
- Protect the batteries against deep discharging (see the chapter on battery charging).
- Do not store the battery in direct sunlight.

If you have further questions, consult your specialist dealer who will gladly help you in regard to storage and servicing of your batteries.

1.3 Care

⚠ CAUTION: Make sure the tricycle is secured and cannot fall over accidentally while you are cleaning it.

The cleaning of your tricycle is possible with household products.

The cleaning of the tricycle shall be according:

- Clean the tricycle with a cloth moistened with warm water. Be aware that you do not soak the tricycle.
- Use a mild commercial detergent for removing stubborn dirt.
- Stains can be removed by using a sponge or a soft brush.
- Do not use strong cleaning liquids like solvents, nor use hard brushes, sharp-edged objects.
- Never clean with steam and/or pressure washers.

Afterwards rinse off the bike, so that no soap remains. The most important step is: drying. Take a dry cloth to remove the moisture (quickly damages are avoided). When a tricycle or one of its components remain moist they can rust and the bike will drive less.



1.3.1 Saddle

Check the saddle and see that it is not made out a material that absorbed water.

- Clean the saddle with a cloth moistened with warm water. Be aware that you do not soak the saddle.

1.3.2 Plastic parts

Clean plastic parts of your tricycle with commercial plastic cleaners. Please comply with special product information. Only use a soft brush or soft sponge.

1.3.3 Coating

The high quality of the surface layer guarantees optimal protection against corrosion. If the outer coat is damaged by scratching or in some other way, get your specialist dealer to repair the affected surface.

When cleaning, only use warm water and normal household detergents and soft brushes and cloths. Ensure that no wetness gets into the tubes.

Initially the chrome parts only require rubbing with a dry cloth. Stubborn dirt can best be removed by using a suitable commercial chrome polish.

1.3.4 Degreasing and lubricating chain

Choose a good clean cloth. Choose a cloth that has a decent textural surface. Some materials are too slippery and will not be able to scrub away the dirt from the chain, so choose a cloth that has some texture.

Take the clean section of the cloth in your hand and have the clean section on your palm.

Place your hand and the cloth around the bottom section of the chain. Pedal backwards with your free hand while applying pressure on the chain. Depending on how dirty your chain is, you may need to repeat this process more than once (take sometimes a new clean section of the cloth). Brand-new clean is not necessary, just getting the majority of the stuff off the chain before lubricating.

After cleaning, lubricate your tricycle. Slightly squeeze the lube on the bottom section of the chain with one hand and pedal backwards with the other. Be sure that the lube is getting on each roller of the chain as the chain is moving. Afterwards use a clean, dry section of the cloth to lightly wipe the access lube off the chain.

1.3.5 Electronic parts (only for the electric tricycle)

- ⚠ **WARNING: Check the plug connectors for corrosion or damage before every ride, since it could affect the efficiency of the electronics.**
- ⚠ **WARNING: Remove the batteries before performing any maintenance, to avoid involuntary conduction of currents.**

Keep water away from the electronic parts.

Wipe the operator control with a cloth moistened by a few drops of a commercial domestic cleaner. Do not use any abrasives or sharp-edged polishing equipment like a metal scrubber or brush, since these can scratch the surface of the operator control.

1.4 Inspection

In principle we recommend one inspection every year, and a minimum of one before usage is resumed. All of the following checks must be performed and documented by authorized persons:

- Check the frame parts and the hinged tubes for plastic deformation, cracks and impaired functioning.

- Visually check for damage to the paintwork (danger of corrosion).
- Check the operation of the wheels (free running, level rolling, axle play, tyres, profile, condition of the rims, air pressure in the case of air tyres, floating axles, etc.).
- Check the function of the brakes.
- Check the solidity and seating of all screws.
- Verify the amount of grease on the metal joints of movable parts (chain, ...).
- The condition and security of the guides and axles of the wheels.
- Visually check all plastic parts for cracks and brittle spots.
- Check the functioning of the saddle, handlebar (locking, load, deformation, wear and tear caused by loads, adjustment levers).
- Check the functioning of all adjusting mechanisms, levers and adjusting screws.
- Functional testing of the cables (kinks), levers and adjusters.
- Completeness of the delivery condition, instruction manual available?

Additional activities for the "electric tricycles".

- Check the cabling (especially for: crushing, abrasion, cuts, visible insulation of the inner conductor, visible metallic veins, kinks, lumpiness, color changes of the outer sleeve, brittle spots).
- Electric cables to be securely placed to avoid shearing, crushing and other mechanical stresses and strains.
- Check the condition of the batteries, battery housing, operator control.

The service must only be signed off in the maintenance plan if a minimum of all the above-mentioned aspects have been checked.

1.5 Troubleshooting

The following list will assist you with the troubleshooting of your electric tricycle.

Problem	Cause of problem
The electric tricycle refuses to go once started. No indication of charge level	<ul style="list-style-type: none"> • Electric tricycle is not switched on. • Battery not connected (batteries not making contact), wrong connected. • Batteries defective (totally discharged). • Defective operator control. • Cables defective.
The assistance of the electric tricycle does not work. Charge level insufficient.	<ul style="list-style-type: none"> • Battery capacity too low. • Level assistance = 0, Assistance is switched off.
Battery error	<ul style="list-style-type: none"> • Check batteries and cabling, if necessary charge. • If necessary, replace batteries.
Batteries cannot be charged.	<ul style="list-style-type: none"> • Batteries not fitted correctly. • Loading socket defective. • Wrong charger. • Loading device defective.

1.6 Disinfection

- ⚠ WARNING: Dangerous Products - The use of disinfectants is restricted to authorized personnel.**
- ⚠ WARNING: Dangerous Products, change on irritate your skin - You should wear suitable protective clothing because the disinfectants could irritate your skin. For this purpose you should also take note of the product information of the solutions concerned.**

All parts of the tricycle can be treated by scrubbing with a disinfectant.

All steps taken to disinfect rehabilitation equipment, their components or other accessory parts are to be recorded in a disinfection report containing a minimum of the following information (with product documentation appended):

Date of the disinfection	Reason	Specification	Substance and concentration	Signature
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Table 1: Example of a disinfection book

Abbreviations used in column 2 (reason):

V = Suspected infection IF = Infection case W = Repetition I = Inspection

For a blank sheet of a disinfection book see § 6.

The recommended disinfectants for scrubbing (based on the list provided by the Robert Koch Institute, RKI) are standing in the table below. The current state of the disinfectants included in the RKI list can be obtained from the Robert Koch Institute (RKI) (homepage: www.rki.de).

Active substance	Product name	Laundry disinfection		Surface disinfection (scrubbing-wiping disinfection)		Disinfection of excretions 1 part sputum or stools + 2 parts diluted solution or 1 part urine + 1 part diluted solution						Area of effectiveness	Manufacturer or Supplier
		Diluted solution	Time to take effect	Diluted solution	Time to take effect	Sputum		Stools		Urine			
						%	Hr.	%	Hr.	%	Hr.		
Phenol or phenol derivative	Amocid	1	12	5	6	5	4	5	6	5	2	A	Lysoform
	Gevisol	0,5	12	5	4	5	4	5	6	5	2	A	Schülke & Mayr
	Helipur			6	4	6	4	6	6	6	2	A	B. Braun
	m-cresylic soap solution (DAB 6)	1	12	5	4							A	
	Phenol	1	12	3	2							A	
Chlorine, organic or inorganic substances with active chlorine	Chloramin-T DAB 9	1,5	12	2,5	2	5	4					A ¹ B	
	Clorina	1,5	12	2,5	2	5	4					A ¹ B	Lysoform
	Trichlorol	2	12	3	2	6	4					A ¹ B	Lysoform
Per combinations	Apesin AP100 ²			4	4							AB	Tana PROFESSIONAL
	Dismozon pur ²			4	1							AB	Bode Chemie
	Perform ²			3	4							AB	Schülke & Mayr
	Wofesteril ²			2	4							AB	Kesla Pharma

Active substance	Product name	Laundry disinfection		Surface disinfection (scrubbing-wiping disinfection)		Disinfection of excretions 1 part sputum or stools + 2 parts diluted solution or 1 part urine + 1 part diluted solution						Area of effectiveness	Manufacturer or Supplier	
		Diluted solution	Time to take effect	Diluted solution	Time to take effect	Sputum		Stools		Urine				
						%	Hr.	%	Hr.	%	Hr.			%
Formaldehyde and/or other aldehydes or derivatives	Aldasan 2000			4	4								AB	Lysoform
	Antifect FD 10			3	4								AB	Schülke & Mayr
	Antiseptica surface disinfection 7			3	6								AB	Antiseptica
	Apesin AP30			5	4								A	Tana PROFESSIONAL
	Bacillocid special			6	4								AB	Bode Chemie
	Buraton 10F			3	4								AB	Schülke & Mayr
	Desomed A 2000			3	6								AB	Desomed
	Hospital disinfectant cleaner			8	6								AB	Dreiturm
	Desomed Perfekt			7	4								AB*	Desomed
	Formaldehyde-solution (DAB 10), (formaline)	1,5	12	3	4								AB	
	Incidin Perfekt	1	12	3	4								AB	Ecolab
	Incidin Plus			8	6								A	Ecolab
	Kohrsolin	2	12	3	4								AB	Bode Chemie
	Lysoform	4	12	5	6								AB	Lysoform
	Lysoformin	3	12	5	6								AB	Lysoform
	Lysoformin 2000			4	6								AB	Lysoform
	Melsept	2	12	4	6								AB	B. Braun
	Melsitt	4	12	10	4								AB	B. Braun
	Minutil	2	12	6	4								AB	Ecolab
	Multidor			3	6								AB	Ecolab
Nüscosept			5	4								AB	Dr. Nüsken Chemie	
Optisept			7	4								AB*	Dr. Schumacher	
Pursept-FD			7	4								AB*	Merz	
Ultrasol F	3	12	5	4								AB	Fresenius Kabi	
Amphoteric surfactants (amphotensiden)	Tensodur 103	2	12										A	MFH Marienfelde
Lye	Lime-milk ³							20	6				A ³ B	

1 Not effective against myco-bacteria when service disinfecting, especially in the presence of blood.
 2 Not suitable for disinfecting blood-contaminated or porous surfaces (e.g. raw wood).
 3 Useless for tuberculosis; preparation of Lime-milk: 1 part dissolved lime (calcium hydroxide) + 3 parts water.
 * Checked for effectiveness on viruses in accordance with checking methods of the RKI (Federal Health Reporting 38 (1995) 242).
 A: Suitable for killing vegetative bacterial germs including myco-bacteria as well as fungi, including fungal spores.
 B: Suitable for deactivating viruses.

Table 2: Disinfectants

Kindly consult your specialist dealer if you have queries on matters related to disinfection; he will gladly assist you.

2 Guarantee

Excerpt from the "General Business Conditions":

(...)

5. The terms of the guarantee may differ from country to country. Consult your specialist dealer for the guarantee period for warranty claims.

(...)

The guarantee excludes damage arising from structural changes to our products, insufficient maintenance, defective or improper handling or storage or the use of non-original parts. Likewise, the guarantee excludes parts or working parts subject to natural wear and tear.

(...)

3 Disposal



When disposing of the tricycle or the batteries observe local regulations or contact your local disposal centre or return the product to your specialist dealer who, after submitting it to a hygienic procedure, will be able to send it back to the manufacturer who will dispose of and recycle it correctly, separating it into its component materials.

The manufacturer is responsible for taking back and recycling the electric tricycle and shall meet the requirements of European Directive 2002/96/EC on Waste Electrical and Electronic Equipment.

Packaging materials can be taken to disposal or recycling centers or to your specialist dealer.

4 Declaration of conformity

The manufacturer or his authorized representative :

N.V. VERMEIREN N.V

Address :

Vermeirenplein 1/15
2920 Kalmthout
Belgium

declares under his sole responsibility that the CE marked devices :

Productgroup: Tricycles
Productgroup (GMDN): Disability cycle, tricycle, foot-propelled (GMDN 31142)
FAMHP (FAGG) registration
number: BE/CA01/11/2-02965-15-CLI
Brand: Vermeiren
Type: 2102, 2103, 2115, 2117, 2119, 2202, 2215, 2217, 2219

have been classified as class I, according to annex IX MDD 93/42/EEC, rule 1,

and is manufactured in full conformity with the European instructions below - including the latest modifications - and with the national law, that organizes this directions :

Medical devices directive MDD 93/42/EEC: 2007

and is in conformity with the relevant European harmonized standards:

EN 12182: 2012

The manufacturer or his authorized representative :

N.V. VERMEIREN N.V

Address :

Vermeirenplein 1/15
2920 Kalmthout
Belgium

declares under his sole responsibility that the CE marked devices :

Productgroup: Tricycles
Productgroup (GMDN): Disability cycle, tricycle, foot-propelled (GMDN 31142)
FAMHP (FAGG) registration
number: BE/CA01/11/2-02965-15-CLI
Brand: Vermeiren
Type: 2219E

have been classified as class I, according to annex IX MDD 93/42/EEC, rule 12,

and is manufactured in full conformity with the European instructions below - including the latest modifications - and with the national law, that organizes this directions :

Medical devices directive MDD 93/42/EEC: 2007

and is in conformity with the relevant European harmonized standards:

EN 12182: 2012



5 Maintenance plan

Date	Maintenance	Remarks	Paraph
1/1/2015	Greasing and general servicing	non	

6 Disinfection book

Date of the disinfection	Reason	Specification	Substance and concentration	Signature

Abbreviations used in column 2 (reason):

V = Suspected infection IF = Infection case W = Repetition I = Inspection



SERVICE

The tricycle was serviced:

Dealer's stamp:
Date:

Dealer's stamp:
Date:

Dealer's stamp:
Date:

Dealer's stamp:
Date:

Dealer's stamp:
Date:

Dealer's stamp:
Date:

Dealer's stamp:
Date:

Dealer's stamp:
Date:

Dealer's stamp:
Date:

Dealer's stamp:
Date:

- For service checklists an additional technical information, please see our specialist dealers nearest to you. More information on our website at: www.vermeiren.com.



Notes

A series of horizontal dotted lines for writing notes.



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Fax: +48(0)71 387 05 74
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e-mail: info@vermeiren.pl

Spain / Portugal

Vermeiren Iberica, S.L.

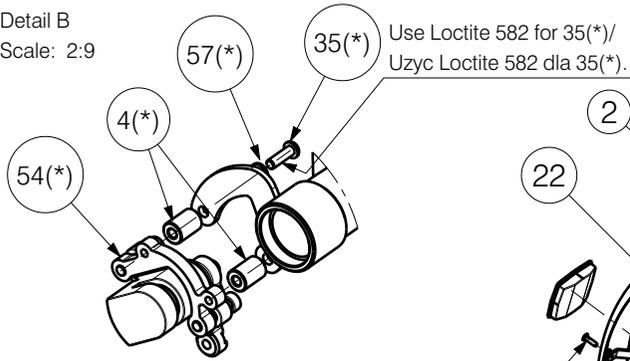
Carratera de Cartellà, Km 0,5
Sant Gregori Parc Industrial Edifici A
17150 Sant Gregori (Girona)
Tel: +34 972 42 84 33
Fax: +34 972 40 50 54
website: www.vermeiren.es
e-mail: info@vermeiren.es

Czech Republic

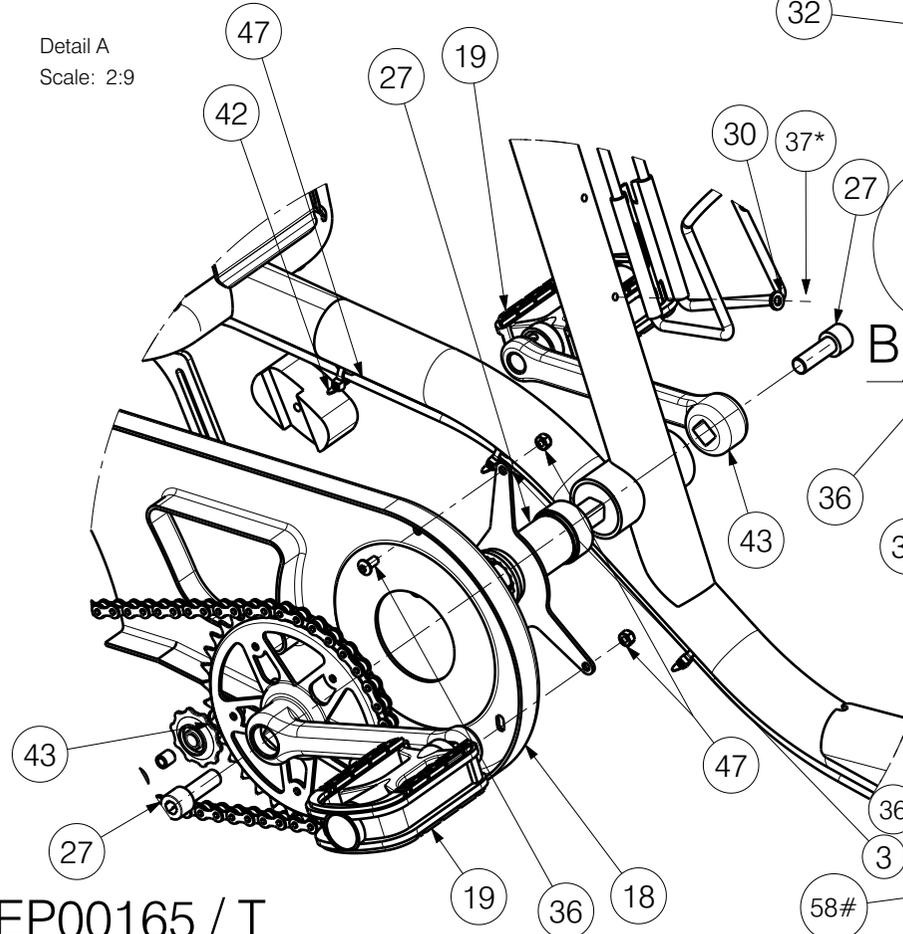
Vermeiren ČR S.R.O.

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Tel: +420 596 133 923
Fax: +420 596 133 277
website: www.vermeiren.cz
e-mail: info@vermeiren.cz

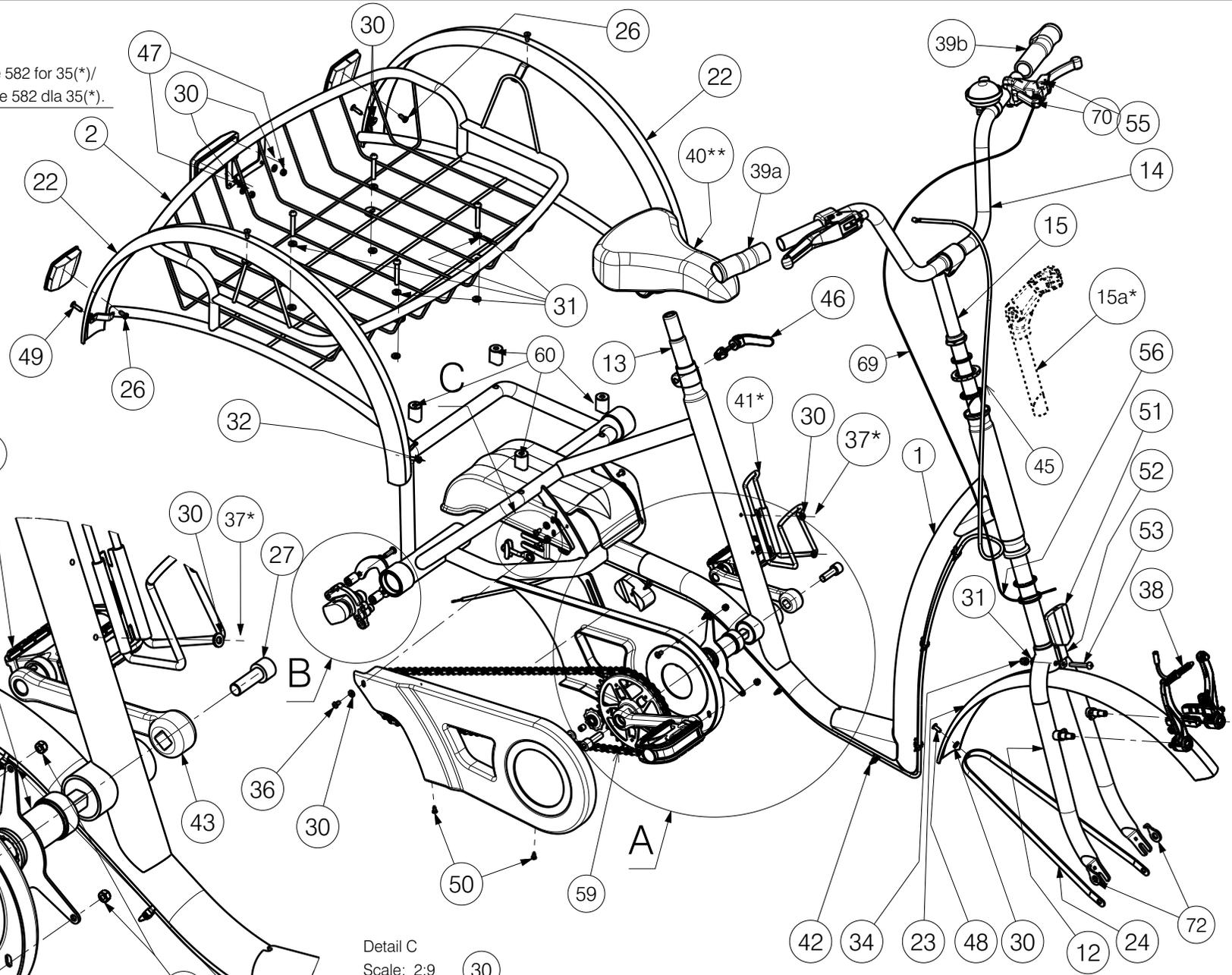
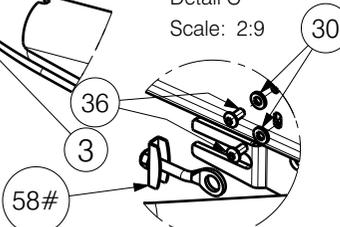
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Scale: 2:9



Detail A
Scale: 2:9



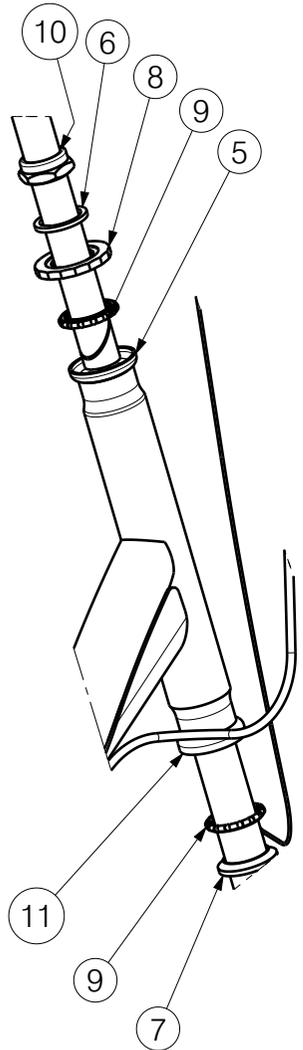
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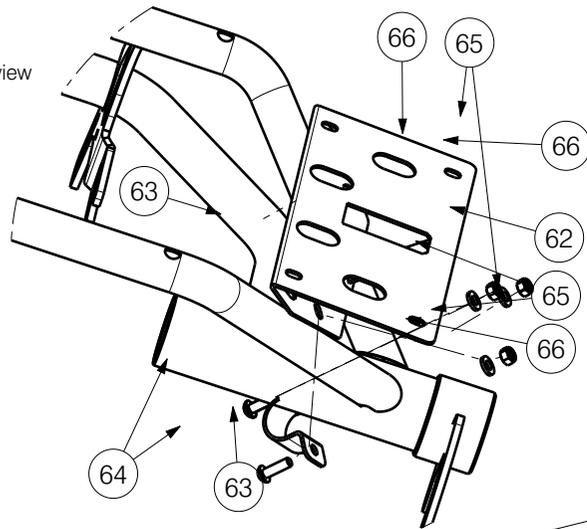
EP00165 / T

MAIN FRAME 2219				Plan No.
				1/4 EP00165/ T
Scale: 1:9	Drafted	Verified	Confirmed	
Date	19/05/2014	17/06/2023	17/06/2023	
Initials	AZ	WM	AZ	

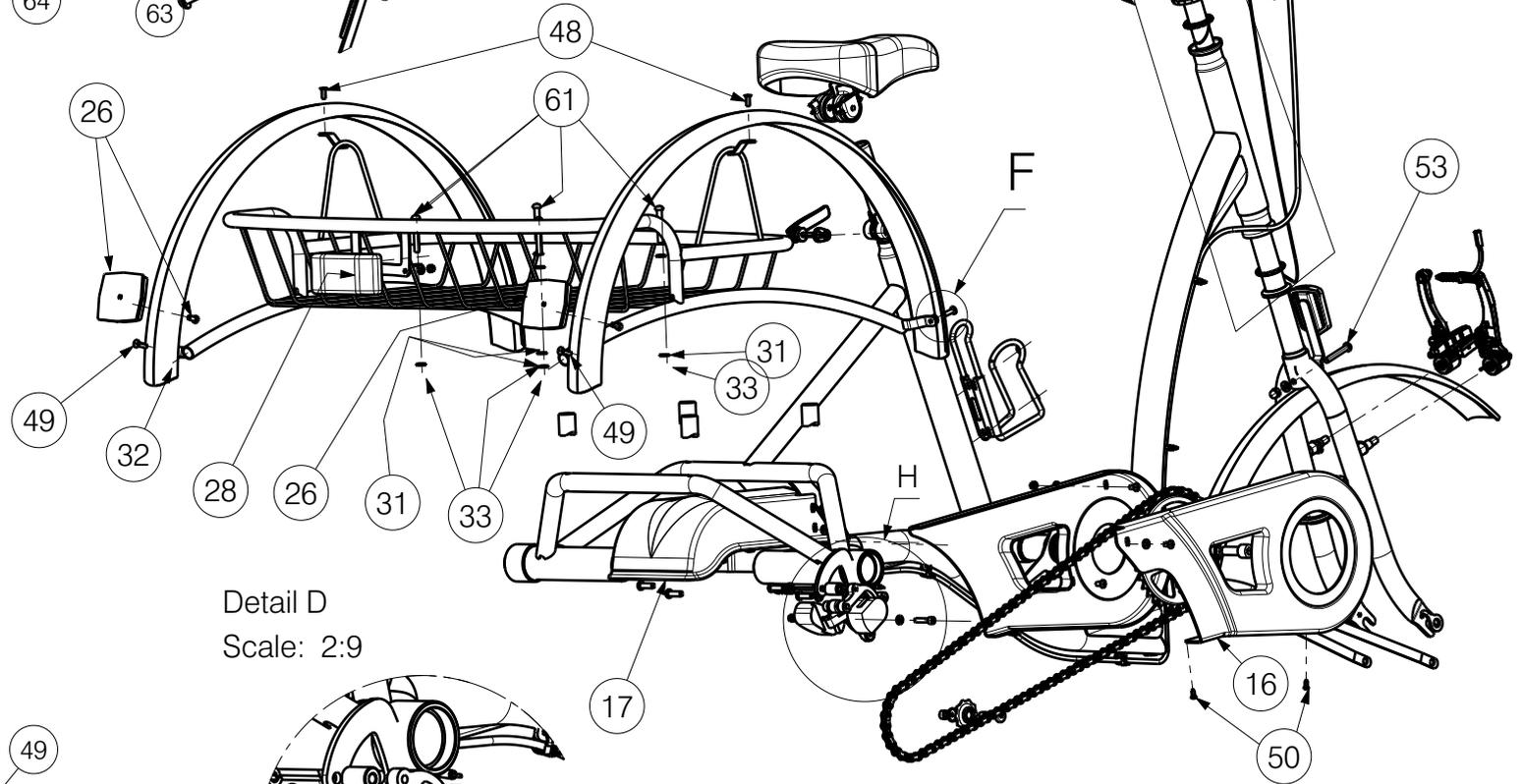
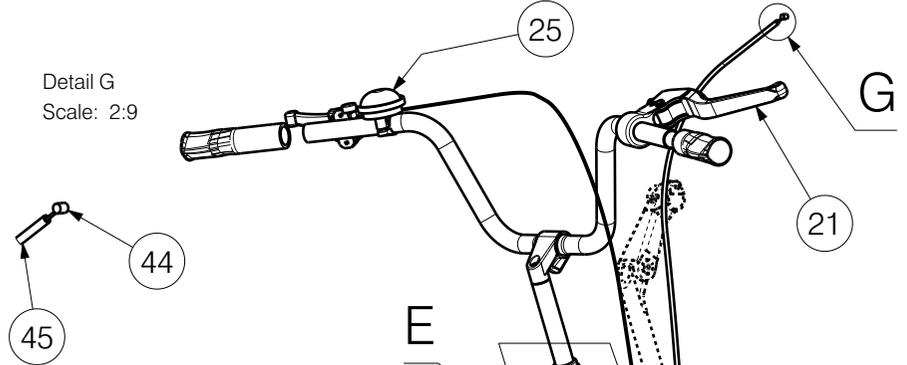
Detail E
Scale: 2:9



Isometric view
Scale: 1:4

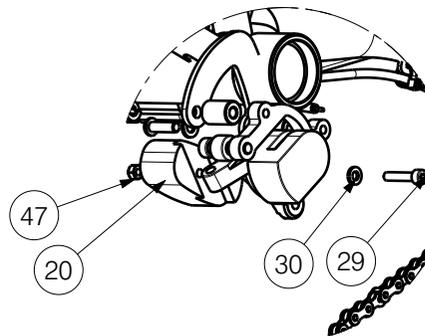
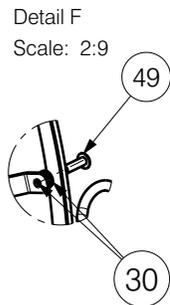


Detail G
Scale: 2:9



Detail D
Scale: 2:9

Detail F
Scale: 2:9



EP00165 / T

MAIN FRAME 2219				Plan No.
				2/4 EP00165/ T
Scale: 1:9	Drafted	Verified	Confirmed	
Date	19/05/2014	17/06/2023	17/06/2023	
Initials	AZ	WM	AZ	

Material				Material				Material (Electric version)																																							
No.	Plan	Article	Quantity	No.	Plan	Article	Quantity	No.	Plan	Article	Quantity																																				
1	YP04174DP	28494...	1	36	M5x10	1007063	8	* 62	YP05043	2898454	1																																				
2	YP04704	28724...	1	37*	M5x6	1997822	2	* 63	YP05045	2898554	2																																				
3	YP04801	2889104	1	38	XP01281	2992201	1	* 64	M5x16	1006112	4																																				
4(*)	XP03125	GP00285	2	39a	XP01394	2992260	1	* 65	M5/DIN985	1001679	4																																				
5	X000905	1001384	1	39b	XP01393	2992261	1	* 66	D10xD5.3x1	1001550	4																																				
6	X000901	1001388	1	40**	XP01279	2992204	1	* 67***	7 Pin Motor	1915033	1																																				
7	X000906	1001382	1		XP01280	2992205	1	* 68***	7 Pin Cable	1915034	1																																				
8	X000907	1001387	1	41*	---	2992292	1	69	---	2993049	****																																				
9	X000993	1001386	2	42	---	W620150	7	70	---	1900008	1																																				
10	X004610	1998556	1	43	XP01328	2992938	1	71***	---	U000331	1																																				
11	X004614	1904939	1	43a* (***)	P00041476 (F5)	2656504	1	72	YP09446	2649700	2																																				
12	XP01104	28669...	1	43a* (***)	P00041477 (F5)	2656604	1	Set E000597 1001020 <table border="1"> <thead> <tr> <th colspan="4">Material</th> </tr> <tr> <th>No.</th> <th>Plan</th> <th>Article</th> <th>Quantity</th> </tr> </thead> <tbody> <tr> <td>5</td> <td>X000905</td> <td>1001388</td> <td>1</td> </tr> <tr> <td>6</td> <td>X000901</td> <td>1001384</td> <td>1</td> </tr> <tr> <td>7</td> <td>X000906</td> <td>1001382</td> <td>1</td> </tr> <tr> <td>8</td> <td>X000907</td> <td>1001386</td> <td>2</td> </tr> <tr> <td>9</td> <td>X000993</td> <td>1001387</td> <td>1</td> </tr> <tr> <td>10</td> <td>X004610</td> <td>1998556</td> <td>1</td> </tr> <tr> <td>11</td> <td>X004614</td> <td>1904939</td> <td>1</td> </tr> </tbody> </table>				Material				No.	Plan	Article	Quantity	5	X000905	1001388	1	6	X000901	1001384	1	7	X000906	1001382	1	8	X000907	1001386	2	9	X000993	1001387	1	10	X004610	1998556	1	11	X004614	1904939	1
Material																																															
No.	Plan	Article	Quantity																																												
5	X000905	1001388	1																																												
6	X000901	1001384	1																																												
7	X000906	1001382	1																																												
8	X000907	1001386	2																																												
9	X000993	1001387	1																																												
10	X004610	1998556	1																																												
11	X004614	1904939	1																																												
13	XP01465	2707100	1	44	---	1000899	1																																								
14	XP01168	2992651	1	45	---	2998322	1																																								
15	XP01190	2992217	1	46	---	1992400	1																																								
15a*	XP01191	2992218	1	47	M5/DIN985	1001679	6																																								
16	XP01205	2992664	1	48	4.8x12	1001585	3																																								
17	XP01204	2992663	1	49	4.8x17	1001586	4																																								
18	XP01206	2992665	1	50	3.9x9,5/DIN 798	1001530	2																																								
19	XP01243	2992258	1	51	---	1001000	1																																								
20	XP01461	2993148	1	52	---	F006075	1																																								
21	XP01264	2992254	1	53	M6x40	1006111	1																																								
22	---	H5516...	2	54(*)	XP01178	2992381	1																																								
23	---	H5517...	1	55	XP01426	2993114	1																																								
24	---	H5523...	1	56	---	1004094	****																																								
25	---	1000989	1	57(*)	M6/DIN127B	1004414	2																																								
26	---	1000999	2	58#	XP01326	2992937	2																																								
27	---	1001021	1	59	---	2993196	1																																								
28	---	1001083	1	60	XP01336	2992972	4																																								
29	M5x35	2990115	1	61	M6x60	1992915	4																																								
30	D5.3/DIN125	1001550	19	<div style="display: flex; justify-content: space-between;"> <div>EP00165 / T</div> <div style="text-align: center;"> <table border="1"> <tr> <td colspan="4">MAIN FRAME 2219</td> <td>Plan No.</td> </tr> <tr> <td colspan="4"></td> <td>3/4 EP00165/ T</td> </tr> <tr> <td>Scale: 1:9</td> <td>Drafted</td> <td>Verified</td> <td>Confirmed</td> <td rowspan="3">  </td> </tr> <tr> <td>Date</td> <td>19/05/2014</td> <td>17/06/2023</td> <td>17/06/2023</td> </tr> <tr> <td>Initials</td> <td>AZ</td> <td>WM</td> <td>AZ</td> </tr> </table> </div> </div>								MAIN FRAME 2219				Plan No.					3/4 EP00165/ T	Scale: 1:9	Drafted	Verified	Confirmed		Date	19/05/2014	17/06/2023	17/06/2023	Initials	AZ	WM	AZ													
MAIN FRAME 2219												Plan No.																																			
												3/4 EP00165/ T																																			
Scale: 1:9	Drafted	Verified	Confirmed																																												
Date	19/05/2014	17/06/2023	17/06/2023																																												
Initials	AZ	WM	AZ																																												
31	D6.4/DIN125	1001564	9																																												
32	D16	1001598	4																																												
33	M6/DIN985	1001680	4																																												
34	M6/DIN986	1008492	1																																												
35(*)	M6x20	1006999	2																																												

Model /Model		1,2 - Frame (Rama)	22,23 - Mudguards (Blotniki)	24 - Mudguards Holder (Uchwyt blotnika)	12 - Forks (Widelki)	40 - Saddle (Siodla)	14 - Handlebar (Kierownica)	Set Stickers (Zestaw Naklejek)	13 - Saddle support (Wspornik siodla)	15 - Handlebar support (Wspornik kierownicy)
2219	Lagoon (Bordeaux)	2849473 2872404	H551606 H551706	H552306	2866906	**2992204 or/lub **2992205 / *1918999(E18)	2992651 or/lub *2992660 or/lub *2992654 or/lub *EP00188	2992941 1 pcs/1 szt.	2992151 or/lub *2992274 / *1919000(E18)	2992217 or/lub *2992218
	Lagoon (Grey)	2849483 2872404	H551608 H551708	H552308	2866908	**2992204 or/lub **2992205 / *1918999(E18)	2992651 or/lub *2992660 or/lub *2992654 or/lub *EP00188	2992942 1 pcs/1 szt.	2992151 or/lub *2992274 / *1919000(E18)	2992217 or/lub *2992218
	Vintage (Brown-Retro)	2849438 2872438	H551636 H551736	H552336	2866936	1907963 / *1918999(E18)	2992660 or/lub *2992651 or/lub *2992654 or/lub *EP00188	2992304 1 pcs/1 szt.	2992151 or/lub *2992274 / *1919000(E18)	2992217 or/lub *2992218

Model /Model		19 - Pedals (Pedaly rowerowe)	25 - Bell (Dzwonek)	39 - Hand grip (chwyty kier.) ***	Lighting system (Oswietlenie) ***	Mirror (Lusterko) ***	Basket (Kosz) ***	Speedometer (Licznik) ***	Pushing handle (Raczka) ***
2219	Lagoon (Bordeaux)	2992258 or/lub *1000895 or/lub *2992280	1000989	2992262 1 set/1 kpl.	*2992289 1 pcs/1szt.	*2992256 1 pcs/1szt.	*1009221 (E19L) 1 pcs / 1szt.t	*1003029 1 pcs/1szt.	*EP00175
	Lagoon (Grey)	2992258 or/lub *1000895 or/lub *2992280	1000989	2992262 1 set/1 kpl.	*2992289 1 pcs/1szt.	*2992256 1 pcs/1szt.	*1009221 (E19L) 1 pcs / 1szt.t	*1003029 1 pcs/1szt.	*EP00175
	Vintage (Brown-Retro)	1001013 or/lub *1000895 or/lub *2992280	***2992265	2992358 or/lub 2992359 1pcs/1szt.	*2992289 1 pcs/1szt.	*2992256 1 pcs/1szt.	1907962 1 pcs/1 szt.	*1003029 1 pcs/1szt.	*EP00175

* Option
** Chosen by the customer
*** Not depicted
(*) Free-Fix-Wheel | standart
Torpedo-Nexus 3-7 | option
Use only with Torpedo, Nexus 3-7
| *E18 set: 1919009 = 1918999+1919000

****	ADJUSTABLE HANDLE- BAR PIN (REGULOWANA SZTYCA)	SHORT HANDLE-BAR PIN (KROTKA SZTYCA)
S1	2993049: 630mm, 1004094: 830mm	2993049: 630mm, 1004094: 830mm
S2	2993049: 530mm, 1004094: 730mm	2993049: 530mm, 1004094: 730mm

EP00165 / T

MAIN FRAME 2219				Plan No.
			4/4	EP00165/ T
Scale: 1:9	Drafted	Verified	Confirmed	
Date	19/05/2014	17/06/2023	17/06/2023	
Initials	AZ	WM	AZ	



no.	description	art.no.
	WIEL ALU 24" ACHTER RECHTS DRIVE 2219NEW	2994425
1	WI BUITENBAND 24X1 3/8"ZWART REFL 37-540	1902734
2	WI BINNENBAND 24X 1 3/8" (37-540) //	1902733



EF00105/A

2994425

WIEL ALU 24" ACHTER RECHTS DRIVE 2219NEW			Plan No.
			EF00105/A
	Drafted	Verified	Confirmed
Date	25/08/2020	25/08/2020	25/08/2020
Init.	LG	SD	SD



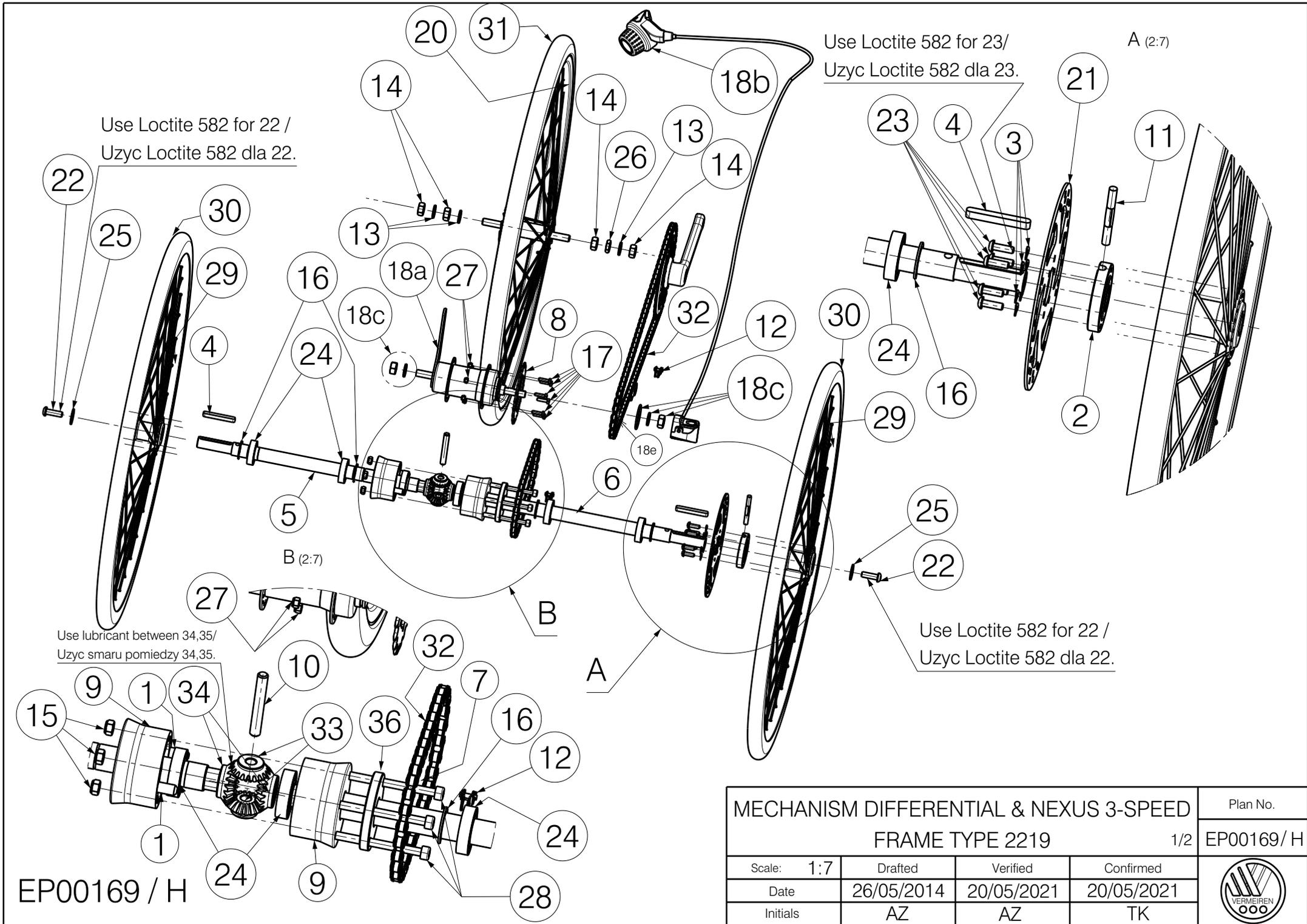
no.	description	art.no.
	WIEL ALU 24" ACHTER LINKS 2219 NEW	2994426
1	WI BUITENBAND 24X1 3/8"ZWART REFL 37-540	1902734
2	WI BINNENBAND 24X 1 3/8" (37-540) //	1902733



EF00104/A

2994426

WIEL ALU 24" ACHTER LINKS 2219 NEW				Plan No.
				EF00104/A
	Drafted	Verified	Confirmed	
Date	25/08/2020	25/08/2020	25/08/2020	
Init.	LG	SD	SD	



MECHANISM DIFFERENTIAL & NEXUS 3-SPEED				Plan No.
FRAME TYPE 2219				EP00169/ H
Scale: 1:7	Drafted	Verified	Confirmed	1/2
Date	26/05/2014	20/05/2021	20/05/2021	
Initials	AZ	AZ	TK	



Material			
No.	Plan	Article	Quantity
1	YP04707	2886600	2
2	XP02365	GP17200	1
3	X002282	1992854	6
4	6x6x50 DIN6885A	GP19000	2
5	XP02371	GP17600	1
6	XP02370	GP17500	1
7	XP01176	2992208	1
8	XP01177	2992207	1
9	XP01189	2886004	2
10	XP01202	2992224	1
11	XP03236	2631200	1
12	XP01283	2992321	2
13	D10,5 DIN 125	1001558	3
14	M10 DIN 934	1001672	4
15	M6 DIN 985	1001680	4
16	D15 DIN 6799	1003049	4
17	M4x16	2990185	6
18	XP03143	2996710	1
19	-----	-----	-
20	XP01296	2992350	1
21	D160mm	2992382	1
22	M8x25	1990501	2
23	M5x16	1006112	6
24	---	1994568	6
25	D8,4 DIN 9021	1996574	2
26	M10 DIN 439B	1903216	1
27	M4 DIN 985	1001678	6
28	M6x90 DIN 912	1911103 (01,02,03)	4
	M6x110 DIN 912	1911104 (06)	4
	M6x100 DIN 912	1998869 (07)	4
29	Wheel 24" Drive	2994425	2
30	Lagoon	1902734	3
	Vintage	1907965	3
31**	---	1902733	3

Material			
No.	Plan	Article	Quantity
32	Chain	2993196	1,66 [m]
33	XP01195	2992221	2
34	XP01197	2992222	2
35	---	G040600	1
36	XP01259	2992306 (01)	1
	XP01671	2993508 (02)	1
	XP01672	2993509 (03)	1
	XP01673	2993510 (06)	1
	XP01674	2993511 (07)	1

Nexus 3 subparts - 2996710 (2992142***)			
No.	Plan	Article	Description
18a	YP04756	FP02286	nexus 3 hub with extra drilled holes
18b	---	2996706	shifting lever
18c	---	2996707	components for hub
18d**	---	2996708	clamp 5/8"
18e	---	2996709	gear 18T (2,3mm)

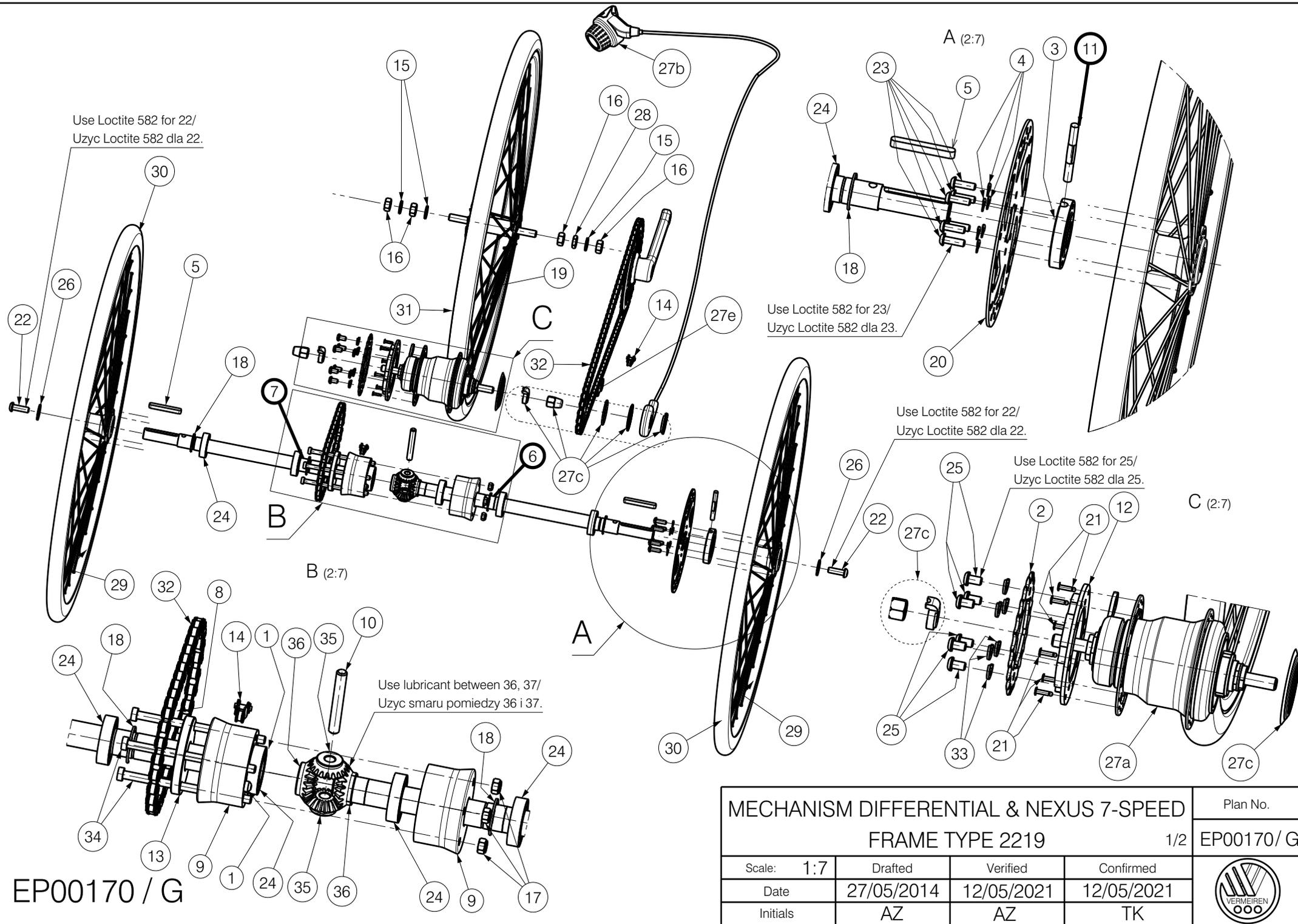
*** - non-modified set, non-usable for clients

** - not depicted

EP00169 / H

MECHANISM DIFFERENTIAL & NEXUS 3-SPEED				Plan No.
FRAME TYPE 2219				EP00169/ H
Scale: 1:7	Drafted	Verified	Confirmed	
Date	26/05/2014	20/05/2021	20/05/2021	
Initials	AZ	AZ	TK	





Use Loctite 582 for 22/
Uzyc Loctite 582 dla 22.

Use Loctite 582 for 23/
Uzyc Loctite 582 dla 23.

Use Loctite 582 for 22/
Uzyc Loctite 582 dla 22.

Use Loctite 582 for 25/
Uzyc Loctite 582 dla 25.

Use lubricant between 36, 37/
Uzyc smaru pomiedzy 36 i 37.

EP00170 / G

MECHANISM DIFFERENTIAL & NEXUS 7-SPEED				Plan No.
FRAME TYPE 2219				EP00170 / G
Scale: 1:7	Drafted	Verified	Confirmed	1/2
Date	27/05/2014	12/05/2021	12/05/2021	
Initials	AZ	AZ	TK	



Material			
No.	Plan	Article	Quantity
1	YP04707	2886600	2
2	YP04804	2992272	1
3	XP02365	GP17200	1
4	X002282	1992854	6
5	6x6x50 DIN6885A	GP19000	2
6	XP02371	GP17600	1
7	XP02370	GP17500	1
8	XP01176	2992208	1
9	XP01189	2886004	2
10	XP01202	2992224	1
11	XP03236	2631200	1
12	XP01257	2853400	1
13	XP01259	2992306 (01)	1
	XP01671	2993508 (02)	1
	XP01672	2993509 (03)	1
	XP01673	2993510 (06)	1
	XP01674	2993511 (07)	1
14	XP01283	2992321	1
15	D10,5 DIN 125	1001558	3
16	M10 DIN 934	1001672	4
17	M6 DIN 985	1001680	4
18	D15 DIN 6799	1003049	4
19	XP01296	2992350	1
20	D160mm	2992382	1
21	D3x10 ISO 15979	2992305	6
22	M8x25	1990501	2
23	M5x16	1006112	6
24	---	1994568	6
25	M6x10	1900641	6
26	D8,4 DIN 9021	1996574	2
27	XP01274 (Nexus 7)	2992270	1
28	M10DIN 439B	1903216	1
29	Wheel 24" Drive	2994425	2

Material			
No.	Plan	Article	Quantity
30	Lagoon	1902734	3
	Vintage	1907965	3
31**	---	1902733	3
32	Chain	2993196	1,66 [m]
33	M6 DIN 127 B	1004414	6
34	M6x90 DIN 912	1911103 (01,02,03)	4
	M6x110 DIN 912	1911104 (06)	4
	M6x100 DIN 912	1998869 (07)	4
35	XP01195	2992221	2
36	XP01197	2992222	2

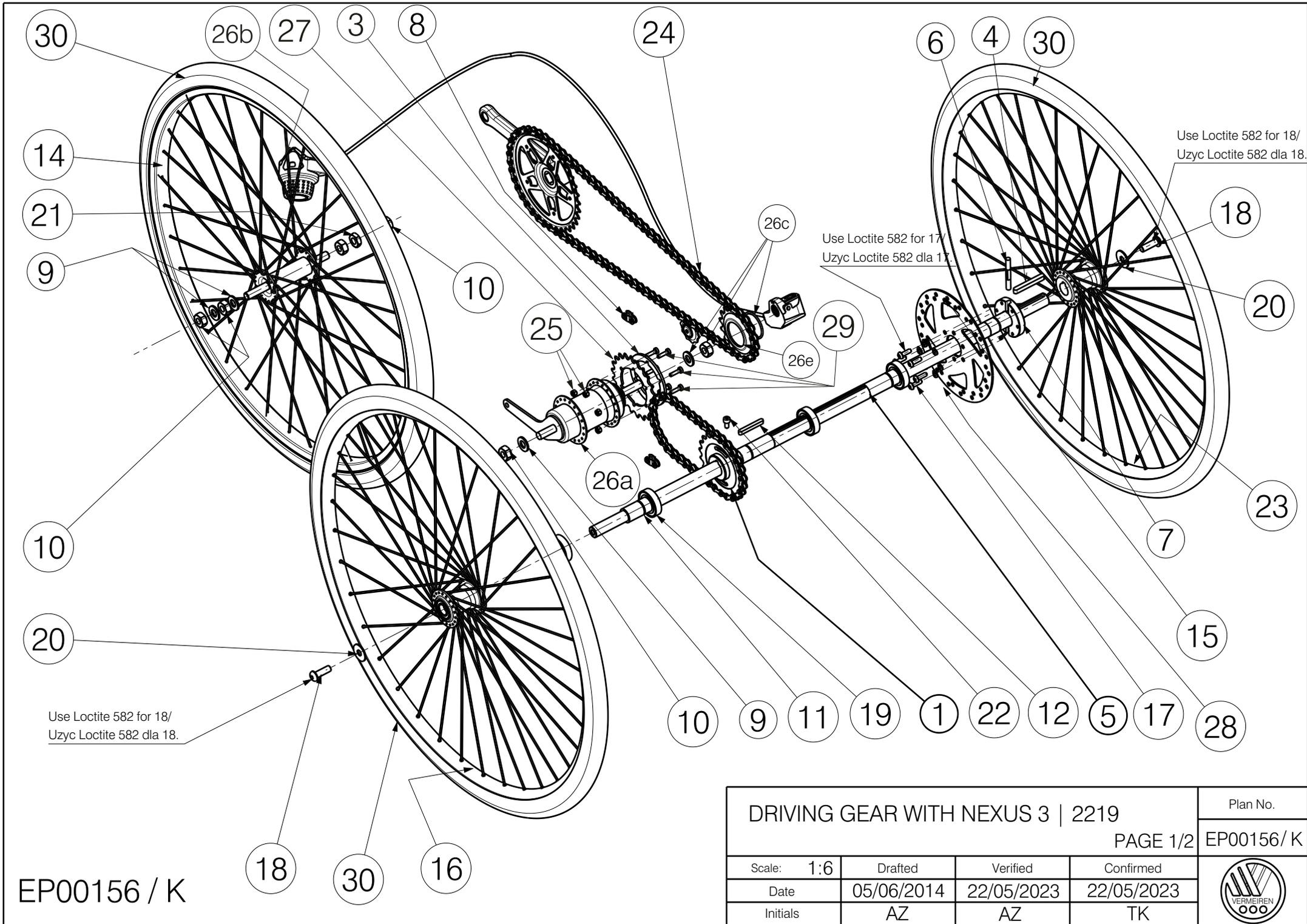
Nexus 7 subparts - 2992270			
No.	Plan	Article	Description
27a	---	2996711	nexus 7 hub with extra drilled holes
27b	---	2996712	shifting lever
27c	---	2996713	components for hub
27d**	---	2996708	clamp 5/8"
27e	---	2996709	gear 18T (2,3mm)

** - not depicted

EP00170 / G

MECHANISM DIFFERENTIAL & NEXUS 7-SPEED				Plan No.
FRAME TYPE 2219			1/2	EP00170 / G
Scale: 1:7	Drafted	Verified	Confirmed	
Date	27/05/2014	12/05/2021	12/05/2021	
Initials	AZ	AZ	TK	





Use Loctite 582 for 18/
Uzyc Loctite 582 dla 18.

Use Loctite 582 for 17/
Uzyc Loctite 582 dla 17.

Use Loctite 582 for 18/
Uzyc Loctite 582 dla 18.

EP00156 / K

DRIVING GEAR WITH NEXUS 3 2219				Plan No.
PAGE 1/2				EP00156/ K
Scale: 1:6	Drafted	Verified	Confirmed	
Date	05/06/2014	22/05/2023	22/05/2023	
Initials	AZ	AZ	TK	

Material			
No.	Plan	Article	Quantity
1	YP03014 (Fix Wheel)	2822000	1
2	-----	-----	-
3	YP04706	2886500	1
4	6x6x50 DIN6885A	GP19000	1
5	XP02362	GP17100	1
6	XP03236	2631200	1
7	XP02365	GP17200	1
8	XP01283	2992321	2
9	M10 DIN 125-1A	1001558	5
10	M10 DIN 934	1001672	6
11	D20 DIN471	1995259	4
12	5x5x40 DIN 6885A	1940800	1
13**	---	1902733	3
14	XP01296	2992350	1
15	D160mm	2992382	1
16	Wheel 24" Left	2994426	1
17	M5x16	1006112	6
18	M8x25	1990501	2
19	---	1994568	4
20	M8 DIN 9021	1996574	2
21	M10 DIN 439B	1903216	1
22	M5x10 DIN 912/8.8	1001488	1
23	Wheel 24" Right	2994425	1
24	Chain	2993196	1,66 [m]
25	M4 DIN 985	1001678	6
26	XP03143	2996710	1
27	XP01177	2992207	1
28	X002282	1992854	6
29	M4x16	2990185	6
30*	Lagoon	1902734	3
	Vintage	1907965	3

Nexus 3 subparts - 2996710 (2992142***)			
No.	Plan	Article	Description
26a	YP04756	FP02286	nexus 3 hub with extra drilled holes
26b	---	2996706	shifting lever
26c	---	2996707	components for hub
26d**	---	2996708	clamp 5/8"
26e	---	2996709	gear 18T (2,3mm)

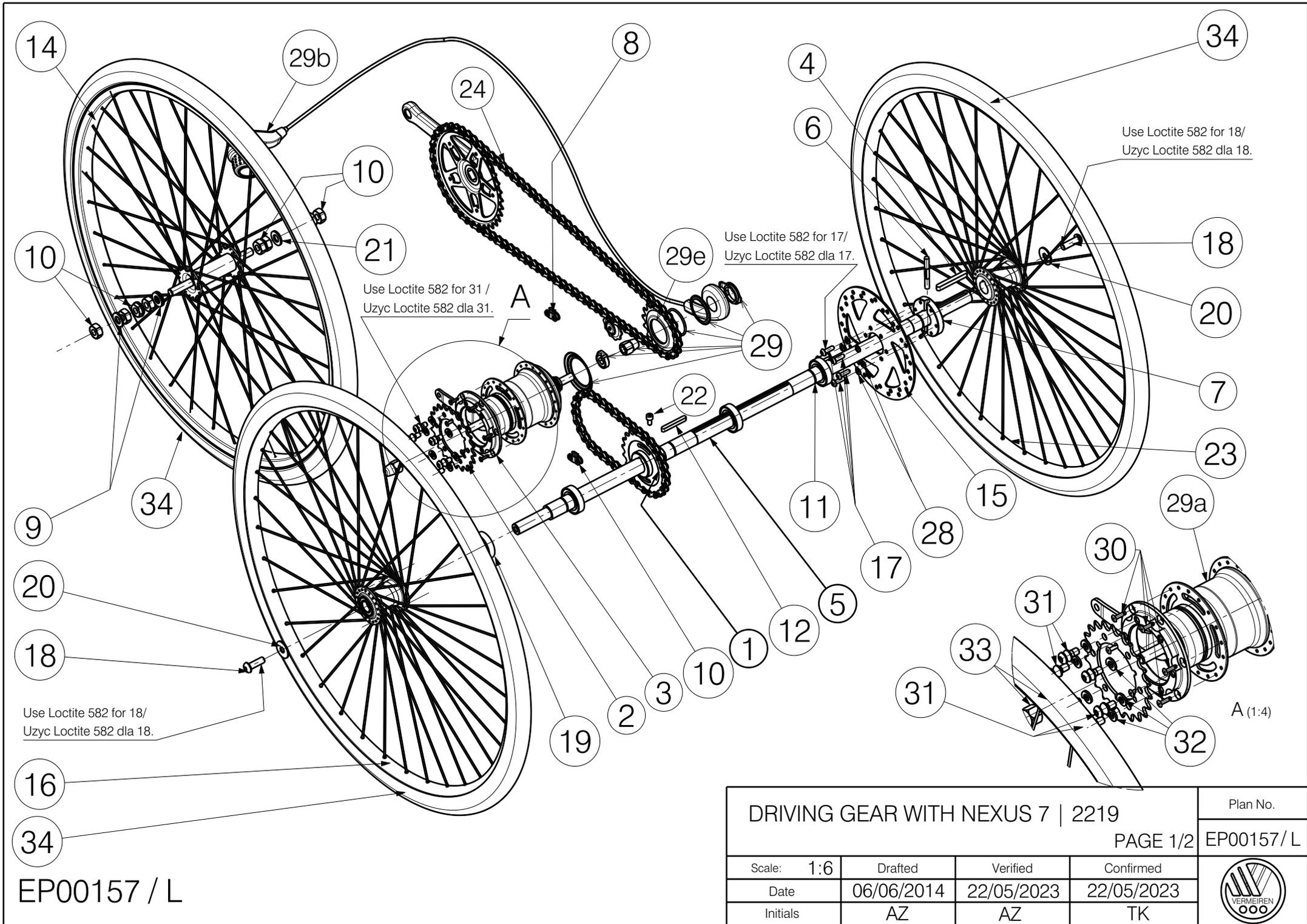
* - option/opcja

** - not depicted

*** - non-modified set, non-usable for clients

EP00156/K

DRIVING GEAR WITH NEXUS 3 2219				Plan No.
PAGE 2/2				EP00156/ K
Scale: 1:6	Drafted	Verified	Confirmed	
Date	05/06/2014	22/05/2023	22/05/2023	
Initials	AZ	AZ	TK	



DRIVING GEAR WITH NEXUS 7 2219				Plan No.
PAGE 1/2				EP00157 / L
Scale: 1:6	Drafted	Verified	Confirmed	
Date	06/06/2014	22/05/2023	22/05/2023	
Initials	AZ	AZ	TK	

EP00157 / L

Material			
No.	Plan	Article	Quantity
1	YP03014 (Fix Wheel)	2822000	1
2	YP04804	2992272	1
3	YP04950	2893404	1
4	6x6x50 DIN6885A	GP19000	1
5	XP02362	GP17100	1
6	XP03236	2631200	1
7	XP02365	GP17200	1
8	XP01283	2992321	2
9	M10 DIN 125-1A	1001558	5
10	M10 DIN 934	1001672	6
11	D20 DIN471	1995259	4
12	5x5x40 DIN 6885A	1940800	1
13**	---	1902733	3
14	XP01296	2992350	1
15	D160mm	2992382	1
16	Wheel 24" Left	2994426	1
17	M5x16	1006112	6
18	M8x25	1990501	2
19	---	1994568	4
20	M8 DIN 9021	1996574	2
21	M10 DIN 439B	1903216	1
22	M5x10 DIN 912/8.8	1001488	1
23	Wheel 24" Right	2994425	1
24	Chain	2993196	1,66 [m]
25	M4 DIN 985	1001678	6
26	---	---	---
27	XP01177	2992207	1
28	M4x16	2990185	6
29	XP01274	2992270	1
30	D3x10 ISO 15979	2992305	6
31	M6x10	1900641	6
32	DIN 127B	1004414	6
33	---	---	-
34*	Lagon	1902734	3
	Vintage	1907965	3

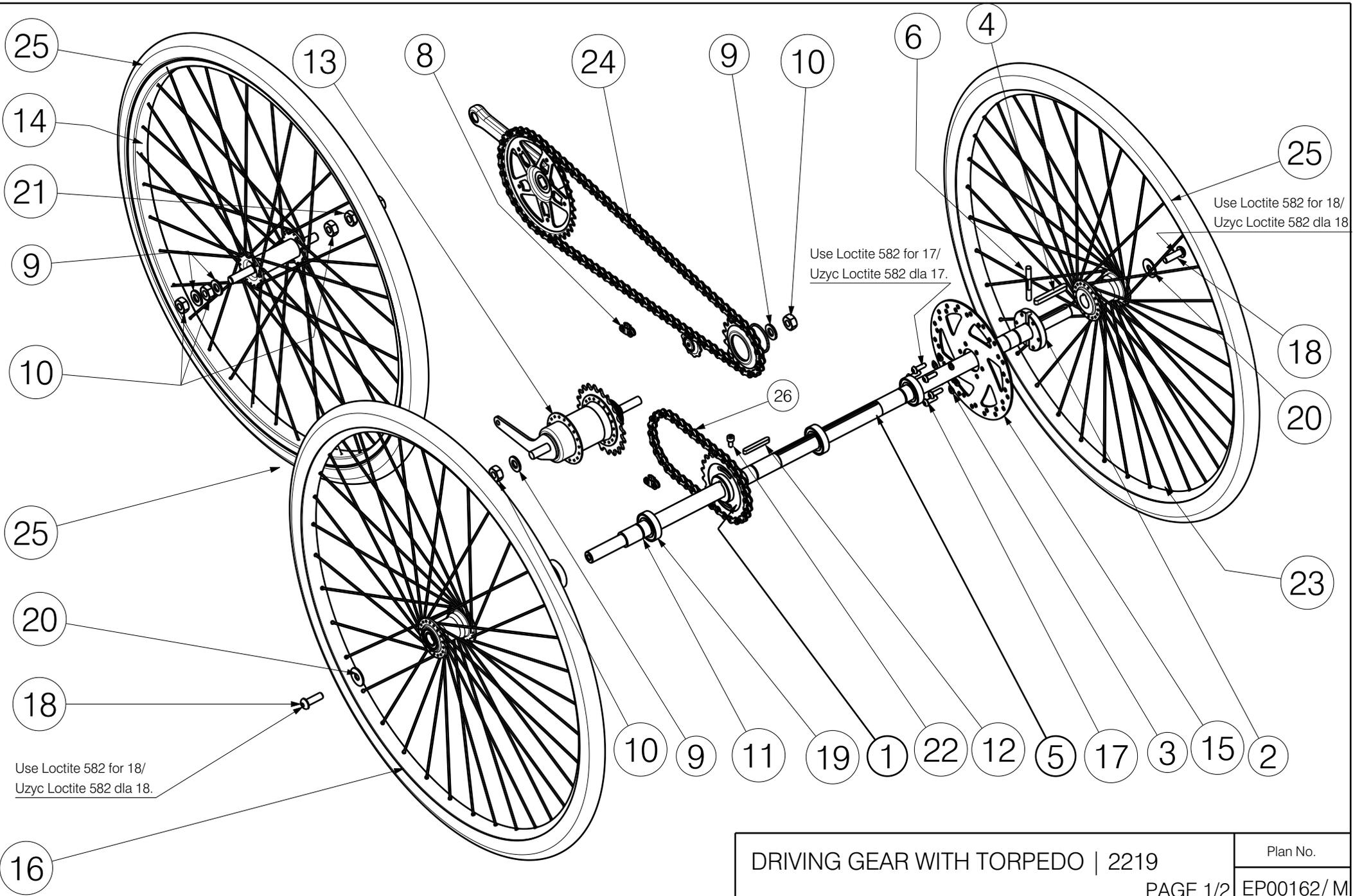
EP00157/L

Nexus 7 subparts - 2992270			
No.	Plan	Article	Description
29a	---	2996711	nexus 7 hub with extra drilled holes
29b	---	2996712	shifting lever
29c	---	2996713	components for hub
29d**	---	2996708	clamp 5/8"
29e	---	2996709	gear 18T (2,3mm)

* - option/opcja

** - not depicted

DRIVING GEAR WITH NEXUS 7 2219				Plan No.
PAGE 2/2				EP00157/ L
Scale: 1:6	Drafted	Verified	Confirmed	
Date	06/06/2014	22/05/2023	22/05/2023	
Initials	AZ	AZ	TK	



EP00162 / M

DRIVING GEAR WITH TORPEDO 2219				Plan No.
PAGE 1/2				EP00162 / M
Scale: 1:6	Drafted	Verified	Confirmed	
Date	12/05/2014	22/05/2023	22/05/2023	
Initials	BS	AZ	TK	

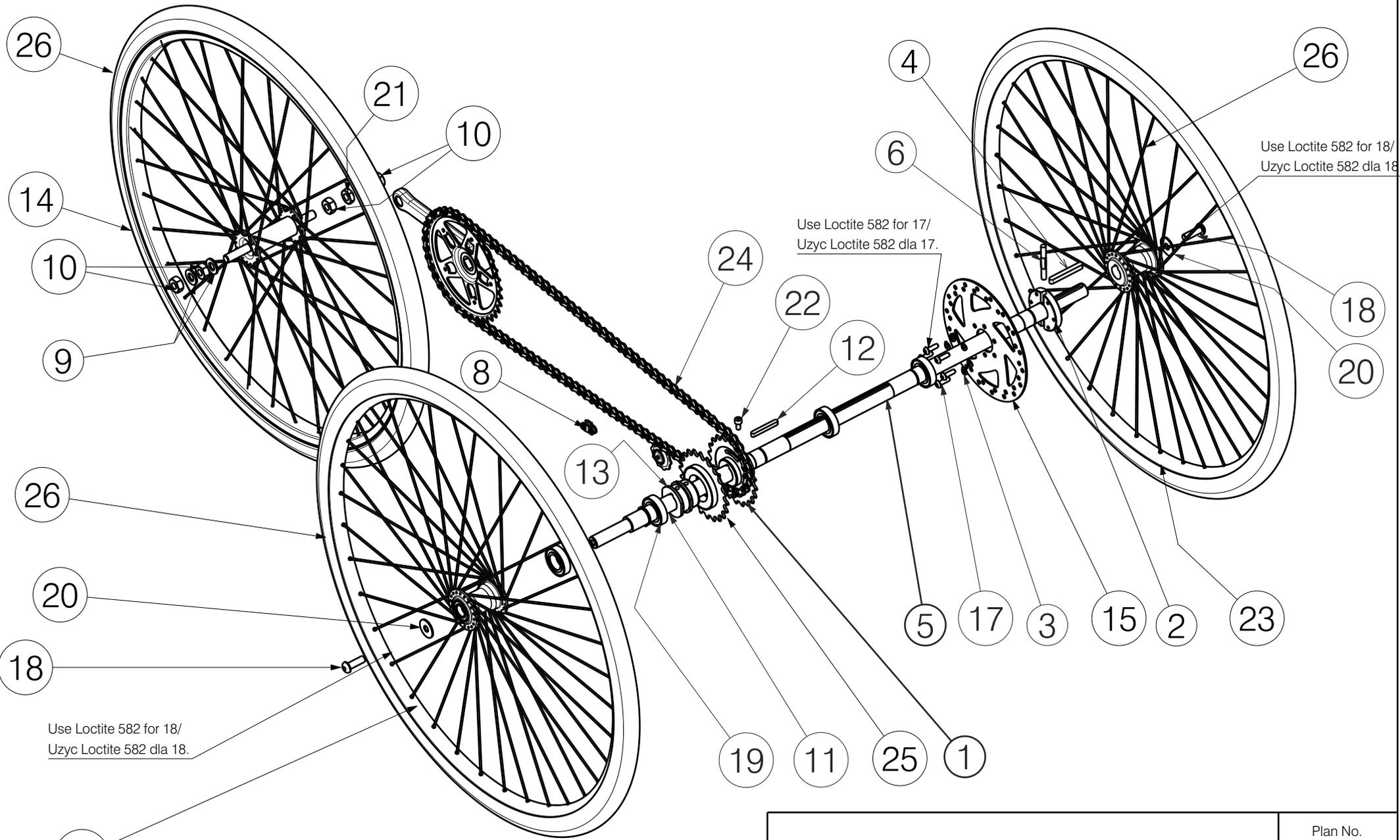
Material			
No.	Plan	Article	Quantity
1	YP03014 (Fix Wheel)	2822000	1
2	XP02365	GP17200	1
3	X002282	1992854	6
4	6x6x50 DIN6885A	GP19000	1
5	XP02362	GP17100	1
6	XP03236	2631200	1
7**	---	1902733	3
8	XP01283	2992321	2
9	M10 DIN 125-1A	1001558	5
10	M10 DIN 934	1001672	6
11	D20 DIN471	1995259	4
12	5x5x40 DIN 6885A	1940800	1
13	Torpedo with gear 22T	B000015	1
14	XP01296	2992350	1
15	D160mm	2992382	1
16	Wheel 24" Left	2994426	1
17	M5x16	1006112	6
18	M8x25	1990501	2
19	---	1994568	4
20	M8 DIN 9021	1996574	2
21	M10 DIN 439B	1903216	1
22	M5x10 DIN 912/8.8	1001488	1
23	Wheel 24" Right	2994425	1
24	Chain	2993196	1,66 [m]
25*	Lgoon	1902734	3
	Vintage	1907965	3
26	Chain	2993196	0,49 [m]

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* - option/opcja

** - not depicted

DRIVING GEAR WITH TORPEDO 2219				Plan No.
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Scale: 1:6	Drafted	Verified	Confirmed	
Date	12/05/2014	22/05/2023	22/05/2023	
Initials	BS	AZ	TK	



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FIX AND FREE WHEEL 2219				Plan No.
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Initials	AS	AZ	TK	

Material			
No.	Plan	Article	Quantity
1	YP03014 (Fix Wheel)	2822000	1
2	XP02365	GP17200	1
3	X002282	1992854	6
4	6x6x50 DIN6885A	GP19000	1
5	XP02362	GP17100	1
6	XP03236	2631200	1
7	---	1902733	3
8	XP01283	2992321	2
9	M10 DIN 125-1A	1001558	5
10	M10 DIN 934	1001672	4
11	D20 DIN471	1995259	4
12	5x5x40 DIN 6885A	1940800	1
13	XP01137 (Free Wheel - 23T)	GP05700	1
	XP03161 (Free Wheel - 22T)	GP25200	1
14	XP01296	2992350	1
15	D160mm	2992382	1
16	Wheel 24" Left	2994426	1
17	M5x16	1006112	6
18	M8x25	1990501	2
19	---	1994568	4
20	M8 DIN 9021	1996574	2
21	M10 DIN 439B	1903216	1
22	M5x10 DIN 912/8.8	1001488	1
23	Wheel 24" Right	2994425	1
24	Chain	2993196	1,66 [m]
25	(Free Wheel - 23T)	1008502	1
	XP03160 (Free Wheel - 22T)	2996728	1
26*	Lagoon	1902734	3
	Vintage	1907965	3

* - option/opcja

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Date	26/05/2014	22/05/2023	22/05/2023	
Initials	AS	AZ	TK	