

Tillotson T4 Series

Global Race Regulations 2020



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Section A: Chassis

1. Tillotson T4-C1 chassis: Part#: T-CHS-FRA1
 - 1.1 No upgrades or after-market components are permitted
 - 1.2 No modifications or structural change to chassis is allowed
 - 1.3 All components must comply with T4-C1 (Ref: Appendix 1)

2. Rear Axle: Part#: T-AXL-50A1030M
 - 2.1 Original supplied and Laser marked axle is mandatory
 - 2.2 Dimensions $\varnothing 50 \times 2 \times 1030 \text{MM}$
 - 2.3 No shortening of shortening of the axle is allowed
 - 2.4 Axle ride height can be adjusted between the three pre-set positions of Standard / High / Low. No additional machining can be made to change the position of axle.

3. Rear Axle Bearings: Part#: T-BRG-5080
 - 3.1 Dimensions $\varnothing 50 \times 80 \text{MM}$ with pins for $\varnothing 50 \text{mm}$ axle

4. Rear Axle Bearing Carrier: Part#: T-SUP-BB80
 - 4.1 Dimensions $\varnothing 80 \text{MM}$ for $\varnothing 50 \text{mm}$ axle
 - 4.2 INOX ANODIZED- TILLOTSON only permitted
 - 4.3 All mounting bolts must be installed in bearing carrier
 - 4.4 Bearing carrier mounting position can be adjusted between three pre-set positions to achieve Axle running position of Low/Standard/High. No additional machining can be made to change the mounting position of bearing carriers.

5. Sprocket Carrier: Part#: T-SUP-SPT50
 - 5.1 SPROCKET SUPPORT FOR $\varnothing 50 \text{MM}$ AXLE with screws
 - 5.2 INOX ANODIZED- TILLOTSON
 - 5.3 The Sprocket size is free for mounting onto the carrier

6. Rear Axle Hubs: Part#: T-HUB-RR5095
 - 6.1 Dimensions $\varnothing 50 \times L95 \text{MM}$
 - 6.2 TILLOTSON REAR HUB INOX ANODIZED with screw

7. Brake System: Part#: T-BRK-SYS50
 - 7.1 Only brake system components are permitted as per T4-C1 (Ref: Appendix 1)
 - 7.2 INOX ANODIZED with Tillotson Laser Marking
 - 7.3 $\varnothing 50 \text{MM}$ Brake disc Carrier: Part#: T-BRK-DISCSUP
 - 7.4 BLACK LINE REAR BRAKE DISC: Part#: T-BRK-DISC
 - 7.5 TILLOTSON BRAKE PUMP $\varnothing 19 \text{MM}$ ANOD. INOX: Part#: T-BRK-PUMP
 - 7.6 R1 REAR BRAKE PAD BLUE: Part#: T-BRK-PADB

8. Steering System and Components:

- 8.1 Only standard supplied material is permitted as per T4-C1 (Ref: Appendix 1)
- 8.2 TILLOTSON LEFT SPINDLE MOD. R Ø25MM 10° CHROMED: Part#: T-SPD-LFT25
- 8.3 TILLOTSON RIGHT SPINDLE MOD. R Ø25MM 10° CHROMED: Part#: T-SPD-RGH25
- 8.4 Front Ride Height can be adjusted only by changing the configuration of the spacers provided. There are three optional positions Low/Standard/High
- 8.5 STEERING COLUMN SUPPORT 2 HOLES: Part#: T-STR-COLSUP1
- 8.6 TIE ROD L270MM INOX ANODIZED TILLOTSON: Part#: T-TIE-ROD270
- 8.7 Tie rods can be installed in any of the available mounting positions on both steering columns and left / right spindles.
- 8.8 UPPER HEAD ECCENTRIC 2MM Ø10MM: Part#: T-SPD-UECC
- 8.9 LOWER HEAD ECCENTRIC 2MM Ø10MM: Part#: T-SPD-LECC
- 8.10 Only Caster / Camber Pills provided as standard are permitted for use. Any configuration within these perimeters is allowed.
- 8.11 TILLOTSON DIESIS KART STEERING WHEEL: Part#: T-STR-WHL1
- 8.12 TILLOTSON STEERING WHEEL SLANTING HUB INOX ANOD: Part#: T-STR-HUB1
- 8.13 Only standard steering wheel and steering boss can be used. The steering boss has two optional mounting position of High/Low. No alternative mounting positions are permitted.
- 8.14 Data Acquisition / Lap timer / RPM counter permitted to be installed.

9. Seats & Support

- 9.1 Only Tillotson Silver Line Racing Seats are permitted for use.
- 9.2 Seat Part#: T-SE-RS1 / T-SE-RS2 / T-SE-RS3 / T-SE-RS4 / T-SE-RS5
- 9.3 Seat Supports can be installed on the left side (Maximum of 2). Part#: T-SE-SUP280 / T-SE-SUP300 / T-SE-SUP320 / T-SE-SUP340 / T-SE-SUP360 / T-SE-SUP400

10. Rims

- 10.1 Only Tillotson Aluminium Laser Marked Rims are permitted for use
- 10.2 TILLOTSON VENTED ALUMINIUM FRONT RIM L130MM: Part#: T-RIM-FRT130
- 10.3 TILLOTSON VENTED ALUMINIUM REAR RIM L180MM: Part#: T-RIM-RR180
- 10.4 TILLOTSON VENTED ALUMINIUM REAR RIM L210MM: Part#: T-RIM-RR210

11. Bodywork: KG-506

- 11.1 Only KG506 bodywork is mandatory for use
- 11.2 FRONT SPOILER MOD.506 BLACK WITH DEFLECTORS: Part#: T-SPO-FRO1
- 11.3 SIDE BODYWORK MOD.506 BLACK: Part#: T-POD-S506
- 11.4 NASSAU PANEL MOD.506 BLACK: Part#: T-NAS-PAN1
- 11.5 REAR SPOILER MOD.CLOB BLACK: Part#: T-SPOILER-RR1
- 11.6 CIK 2015 Front Spoiler Mounted Blocks are mandatory: Part#: T-SPO-PLATE

12. Fuel Tank: Part#: T-TNK-8L

- 12.1 Only the standard supplied FUEL TANK 8.5L is permitted
- 12.2 Tank baffle is allowed in order to run low fuel to prevent fuel surge

13. Permitted Optional Extras

- 13.1 TILLOTSON FOOTREST PLATE CHROMED: Part#: T-PLT-FR01
- 13.2 CHASSIS PROTECTION KIT: Part#: T-FRA-PR01

Section B: Engine

14. Tillotson 225RS Engine: Part#: TPP225RS

- 14.1 The engine must remain as original from the factory
- 14.2 No after-market parts are permitted unless stated in 225RS Engine (Ref: Appendix 2)
No machining / manipulating of surfaces is allowed
- 14.3 Engine and all component must comply with fiche document as shown (Ref: Appendix 2)

Section C: Carburettor

15. Tillotson HW46A Carburettor: Part#: HW46A

- 15.1 The carburettor must remain as original from the factory
- 15.2 No after-market parts permitted unless stated in HW46A Carburettor (Ref: Appendix 3)
- 15.3 No machining or manipulating of the surface finish is permitted
- 15.4 Only Tillotson inlet tension springs can be used ranging from 26g, 31g, 37g, 42g, 46g and 48g.
- 15.5 Carburettor and all component must comply with fiche document as shown (Ref: Appendix 3)

Section D: Tyres

16. Maxxis Sport T4 Tyre:

- 16.1 Only Tillotson tyres with T4 Logo are permitted for use.
- 16.2 Slick Tyre: Part#: T-MAX-DRY1
- 16.3 Wet Tyre: Part#: T-MAX-WET1

Section E: Oil

17. Tillotson Racing Xeramic Oil: Part#: T-OIL-XER

- 17.1 Tillotson Racing Xeramic Oil is the only oil permitted for use in the 225RS engine
- 17.2 Minimum of 450ml of Oil must be present in each engine. Recommended volume of oil to be filled is 500ml
- 17.3 No oil additives or foreign substances are permitted to use along with the oil
- 17.4 Failure of the DYE test will result in exclusion

Section F: General Rules

18. Weight

- 18.1 Minimum Total Weight (Kart and Driver combined): 155Kg

- 18.2 All weight needs to be secured with minimum of two bolts including suitable counter sunk / disc washers of minimum Ø20MM.

19. Numbers

- 19.1 Number Plates: Yellow with Black Numbers

20. Sticker Kits:

- 20.1 Tillotson supplied sticker livery is mandatory for use.
20.2 Race numbers and sponsors logos can be installed in locations set out in as per diagram in Appendix on Pg5.
20.3 T4 packages come complete with standard Tillotson livery. Additional official Tillotson styled livery are available as optional extras
20.4 It is not permitted to race without Tillotson livery installed on bodywork.

Section G: Engine Claim Rules

21. Any Driver / Entrant of the T4 category has the right to purchase another competitor's engine by activating the Engine Claim Rule:

- 21.1 The cost to claim a competitor's engine will be € 1000.00 + VAT. The money will be payable to TILLOTSON.
21.2 A cash deposit of € 300.00 must be submitted with the claim. The person making the claim has until 12:00 the following Friday to pay the remaining € 700.00.
21.3 If the balance is not paid by the time set out in 21.2 then the engine will be returned to the original owner. The deposit will be used for shipping.
21.4 The claim submission must be made before the final race starts
21.5 The related engine can only be obtained after the last race on day of the claim submission
21.6 All documentation must be correctly filled out with race officials along with the exact deposit while activating the claim rule
21.7 After the race the related engine does not leave Park Ferme. The competitor who the engine claim has been made against will be informed and requested to remove the engine.
21.8 The claim Engine ID number must match the engine ID number on driver's scrutiny card
21.9 The complete engine (Engine / carb / clutch / exhaust) will be removed from the kart, boxed and sealed by scrutineer / importer / race organisers. The engine will be sent direct to the Tillotson factory
21.10 Tillotson have the right to disassemble the engine and perform any required tests / technical checks on the material.
21.11 The driver who had his engine claimed will receive a new boxed TPP225RS from Tillotson.
21.12 The engine which was part of the claim submission will be sent direct
21.13 Any driver / entrant can only active the claim rule once per calendar year (Jan 01- Dec 31)
21.14 Engine claim rule will be listed in supplementary regulations for the event

Refusal to adhere to any of the rules set out will be investigated by the race officials and may result in disqualification from the race results.

APPEDIX

1: Chassis Parts List

1.1 TILLOTSON T4-C1

T-CHS-FRA1	TILLOTSON T4C1 FRAME
T-SPO-FRO1	FRONT SPOILER MOD.506 BLACKWITH DEFLECTORS (003-BF-45)
T-SPO-PLATE	2015 CIK-FIA FRONT SPOILER PLATE (2 pieces)
T-SPO-FHS1	HIGH FRONT SPOILER SUPPORT CHROMED
T-SPO-FLS1	LOW FRONT SPOILER SUPPORT CHROMED DRILLED
T-BMR-FCL1	FRONT BUMPER CLIP (2 pieces)
T-SPO-FFAS1	FRONT SPOILER FASTENING
T-NAS-PAN1	NASSAU PANEL MOD.506 BLACK
T-NAS-LSPAN1	LOW NASSAU PANEL SUPPORT CHROMED
T-NAS-HSPAN1	MOD. 506 HIGH NASSAU PANEL SUPPORT KIT CHROMED (R+L)
T-PED-ACC1	ACCELERATOR PEDAL CHROMED
T-PED-BRK1	BRAKE PEDAL CHROMED
T-STR-WHL1	TILLOTSON DIESIS KART STEERING WHEEL
T-STR-HUB1	STEERING WHEEL SLANTING HUB KF INOX ANODIZED- TILLOTSON
T-STR-LOC1	STEERING LOCKING COLUMN BUSH TITAN GOLD ANODIZED (10 pieces)
T-STR-COLSUP1	STEERING COLUMN SUPPORT 2HOLES
T-STR-COL490	R MOD.STEERING COLUMNS L490MM CHROMED
T-TIE-ROD270	TIE ROD L270MM INOX ANODIZED- TILLOTSON
T-BRK-SFT350	BRAKE SAFETY CABLE L350MM
T-BRK-TIE410	BRAKE PUMP TIE ROD M6X410MM CHROMED
T-BRK-SYS50	TILLOTSON REAR BRAKE SYSTEM INOX ANODIZED(with 50mm brake disc support)
T-RIM-FRT130	TILLOTSON VENTED ALUMINIUM FRONT RIM L130MM (VALVE - BEADLOCK SC.)
T-RIM-RR210	TILLOTSON VENTED REAR RIM L210MM BLACK LINE
T-HUB-RR5095	TILLOTSON REAR HUB Ø50XL95MM INOX ANODIZED with screw
T-HUB-FRT2595	TILLOTSON FRONT HUB Ø25XL95MM INOX ANODIZED with bearings
T-SPD-LFT25	LEFT SPINDLE Ø25MM - TILLOTSON
T-SPD-RGH25	RIGHT SPINDLE Ø25MM - TILLOTSON
T-SPD-SP10	Ø25 SPINDLE SPACER H10MM ALUMINIUM
T-SPD-SP5	Ø25 SPINDLE SPACER H5MM ALUMINIUM
T-HUB-LW1430	HUB LOCKING WASHER Ø14xØ30xH9MM GALVANIZED WHITE (10 pieces)
T-POD-S506	SIDE BODYWORK MOD.506 BLACK (003-BS-54)
T-POD-SUPLFT506	LEFT 506 / DUO EVO BODYWORK SUPPORT CHROMED DRILLED
T-POD-SUPRGH506	RIGHT 506 / DUO EVO BODYWORK SUPPORT CHROMED DRILLED
T-SPOILER-RR1	REAR SPOILER MOD.CLOB BLACK
T-REC-TNK1	RECOVERY TANK
T-AXL-KEYS2P	AXLE KEY 2 PIVOT
T-AXL-50A1030M	TILLOTSON AXLE Ø50X2X1030MM
T-SUP-BB80	BEARING BUSH SUPPORT Ø80MM for Ø40-50mm axle INOX ANODIZED- TILLOTSON
T-BRG-5080	BEARING Ø50X80MM with pins for Ø50mm axle
T-SUP-SPT50	SPROCKET SUPPORT FOR Ø50MM AXLE with screws INOX ANODIZED- TILLOTSON
T-CHN-SCR1	CHAIN STRETCHER SCREW WITH NUT AND NYLON CAP
T-SE-SUP300	SEAT SUPPORT L300MM CHROMED
T-SE-SUP320	SEAT SUPPORT L320MM CHROMED
T-RRSPO-SUP1	REAR SPOILER SUPPORT KIT
T-RRSPO-SCR30	REAR SPOILER MOUNTING SCREWS KIT (Ø30MM) (RIGHT + LEFT)

T-RFP-001	RACING EVO FLOOR PLATE
T-TNK-8L	FUEL TANK 8.5L
T-SE-WL	RACING SEAT (NO LOGO)
T-SPR-PROT	SPROCKET PROTECTION KIT
T-CHN-GUARD	CHAINGUARD T4-C1
T-STK-KIT506	TILLOTSON STICKERS KIT 506 + TANK
T-CHN-SUP	CHAINGUARD SUPPORT KIT with screws

1.2 REAR BRAKE SYSTEM

T-BRK-SYS50	TILLOTSON REAR BRAKE SYSTEM ANOD.INOX
T-BRK-PIPE	REAR BRAKE PIPE BLACK LINE
T-BRK-PUMP	TILLOTSON BRAKE PUMP Ø19MM ANOD. INOX
T-BRK-CAL	TILLOTSON REAR BRAKE CALIPER ANOD.INOX with pads and screws
T-BRK-CALSUP	TILLOTSON REAR BRAKE CALIPER SUPPORT ANOD. INOX
T-BRK-DISCMS	BLACK LINE BRAKE DISC MOUNTING SCREWS (6 pieces for each components)
T-BRK-DISC	BLACK LINE REAR BRAKE DISC
T-BRK-DISCSUP	TILLOTSON REAR DISC SUPPORT Ø50MM ANOD.INOX
T-BRK-PADB	R1 REAR BRAKE PAD BLUE
T-SCR-BRM10	SCREW BREATHER M10
T-SCR-OLM10	SCREW OIL PIPE CONNECTION M10
T-WAS-COP1014	COPPER WASHER Ø10x14MM
T-BRK-CALPIST	RBS-V2 BRAKE CALIPER PISTON Ø28MM
T-BRK-SCGASK	SQUARE SECTION GASKET Ø28X34MM
T-BRK-ORING	O-RING Ø28MM
T-BRK-CALCAP	BRAKE CALIPER CAP Ø28MM
T-BRK-SAFPIN	R1 BRAKE PAD SAFETY PIN
T-BRK-CLIP3.2	SEEGER Ø3,2MM

1.3 REAR BRAKE PUMP

T-BRK-PUMP	BRAKE PUMP Ø19MMANOD.INOX
T-WAS-C1014	COPPER WASHER Ø10x14MM
T-SCR-OPCM10	SCREW OIL PIPE CONNECTION M10
T-BRK-TOCM10	THREADED OIL CAP M10
T-BRK-IPGAS	BRAKE PUMP INNER GASKET
T-BRK-IPGASSUP	BRAKE PUMP INNER GASKET SUPPORT
T-BRK-PUMCAP	TILLOTSON BRAKE PUMP CAP ANOD.INOX
T-SCR-CHM0412	SCREW CYLINDRICAL HEAD M4x12MM
T-BRK-PUMSPR	BRAKE PUMP SPRING Ø19MM
T-BRK-PUMPIS	BRAKE PUMP PISTON Ø19MM
T-BRK-OS19	OIL SEAL RUBBER Ø19MM
T-BRK-PUMLEV	BRAKE PUMP LEVER
T-BRK-PDCAP	BRAKE PUMP OUTSIDE DUSTY CAP
T-BRK-PIN0520	PIN Ø5x20MM
T-BRK-FPINM0606	FLAT PIN M6x6MM
T-SCR-RHM0508	SCREW ROUND HEAD M5x8MM
T-SPA-081805	SPACER Ø8.5xØ18xH5MM

1.4 SAFETY CABLES – ACCESSORIES

T-BRK-TIE410	BRAKE TIE ROD M6X410MM CHROMED
T-BRK-SFT350	BRAKE SAFETY CABLE L350MM

1.5 AXLES & KEYWAYS

T-AXL-50A1030M	TILLOTSON AXLE Ø50x2x1030MM
T-AXL-KEYS2P	AXLE KEY 2 PIVOT (20 pieces)

1.6 BEARING SUPPORT & BEARINGS

T-AXL-GRUBS	PIN M8x8MM
T-BRG-5080	BEARING Ø50X80MM with pins for Ø50mm axle
T-SUP-BB80	TILLOTSON BEARING BUSH SUPPORT Ø80MM Ø40-50mm axle ANOD.INOX

1.7 HUBS & ASSOCERIES

T-HUB-RR5095	TILLOTSON REAR HUB Ø50XL95MMANOD.INOX
T-HUB-FRT2595	TILLOTSON FRONT HUB Ø25XL95MM ANOD.INOX
T-HUB-BEAR254209	BEARING Ø25XØ42XH9MM
T-HUB-BS252933	BEARINGS SPACER Ø25xØ29xH33MM
T-HUB-PRCR	PLASTIC RIM CENTERING RING

1.8 SPROCKET SUPPORTS & ACCESSORIES

T-SUP-SPT50	SPROCKET SUPPORT FOR Ø50MM AXLE TILLOTSON
T-CHN-GUARD	T4-C1 chain guard
T-SPR-PROT	SPROCKET PROTECTION KIT

1.9 WHEEL RIMS AND ACCESSORIES

T-RIM-FRT130	TILLOTSON VENTED ALUMINIUM LASER MARKED FRONT RIM L130MM
T-RIM-RR210	TILLOTSON VENTED ALUMINIUM LASER MARKED REAR RIM L210MM
T-RIM-RR180	TILLOTSON VENTED ALUMINIUM LASER MARKED REAR RIM L210MM

1.10 STEERING WHEEL & HUB

T-STR-WHL1	TILLOTSON DIESEL KART STEERING WHEEL
T-STR-HUB1	TILLOTSON STEERING WHEEL SLANTING HUB KF INOX ANOD.

1.11 SPINDLES

T-SPD-LFT25	TILLOTSON LEFT SPINDLE MOD. R Ø25MM 10° CHROMED
T-SPD-RGH25	TILLOTSON RIGHT SPINDLE MOD. R Ø25MM 10° CHROMED

1.12 STEERING COLUMNS AND ACCESSORIES

T-STR-COL490	R MOD.STEERING COLUMNS L490MM CHROMED
T-STR-LOC1	STEERING LOCKING COLUMN BUSH (10 pieces) TITAN GOLD ANODIZED
T-STR-COLSUP1	STEERING COLUMN SUPPORT 2 HOLES
T-TIE-ROD270	TIE ROD L270MM TITAN BLACK ANODIZED TILLOTSON

1.13 SPINDLES Ø25MM & ACCESSORIES

T-SCR-CS0840	SCREW COUNTERSUNK HEAD M8x40MM
T-SCR-CS0822G	WASHER COUNTERSUNK Ø8x22MM TITAN GOLD ANODIZED
T-SPD-KPM10	KINGPIN M10x86MM
T-SPD-UB10	UPPER BUSH Ø10MM WHITE GALVANIZED
T-STR-SPSPA3.8	Ø25MM SPINDLE SPACER H3.8MM WHITE GALVANIZED
T-SPD-IB102608	SPINDLE INTERNAL BEARING Ø10xØ26xH8MM
T-SPD-BSPA101622	BEARINGS SPACER Ø10.5xØ16xH22MM
T-SPD-LBUS10	LOWER BUSH Ø10MM WHITE GALVANIZED
T-SPD-SP10	Ø25 SPINDLE SPACER H10MM WHITE GALVANIZED
T-SPD-SP5	Ø25 SPINDLE SPACER H5MM WHITE GALVANIZED
T-HUB-LW1430	HUB LOCKING WASHER Ø14xØ30xH9MM
T-SPD-UECC	UPPER HEAD ECCENTRIC 2MM Ø10MM WHITE GALVANIZED
T-SPD-LECC	LOWER HEAD ECCENTRIC 2MM Ø10MM WHITE GALVANIZED

1.14 PEDALS & ACCESSORIES

T-PED-BRK1	BRAKE PEDAL - CHROMED
T-PED-ACC1	ACCELERATOR PEDAL - CHROMED
T-PED-SSRING	PEDAL SAFETY SNAP RING Ø3.5MM (50 pieces)
T-PED-CAP	PEDAL CAP (50 pieces)
T-PED-SPR	PEDAL SPRING (10 pieces)
T-PLT-FR01	TILLOTSON FOOTREST PLATE CHROMED

1.15 FLOOR PLATES

T-RFP-001	RACING EVO FLOOR PLATE
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1.16 SEAT SUPPORT

T-SE-RSXS	RACING SEAT SIZE XS FLAT (without logo)
T-SE-RS1	RACING SEAT SIZE 1 FLAT (without logo)
T-SE-RS1P	RACING SEAT SIZE 1+ FLAT (without logo)
T-SE-RS2	RACING SEAT SIZE 2 FLAT (without logo)
T-SE-RS3	RACING SEAT SIZE 3 FLAT (without logo)
T-SE-RS4	RACING SEAT SIZE 4 FLAT (without logo)
T-SE-RS5	RACING SEAT SIZE 5 FLAT (without logo)
T-SE-SUP280	SEAT SUPPORT L280MM CHROMED
T-SE-SUP300	SEAT SUPPORT L300MM CHROMED

T-SE-SUP320	SEAT SUPPORT L320MM CHROMED
T-SE-SUP-340	SEAT SUPPORT L340MM CHROMED
T-SE-SUP360	SEAT SUPPORT L360MM CHROMED
T-SE-SUP400	SEAT SUPPORT L400MM CHROMED

1.17 KG506 BODYWORK & ACCESSORIES

T-SPO-FRO1	FRONT SPOILER MOD.506 BLACKWITH DEFLECTORS (003-BF-45)
T-BMR-FCLI1	FRONT BUMPER CLIP (2 pieces)
T-SPO-FFAS1	FRONT SPOILER FASTENING
T-SPO-FLS1	LOW FRONT SPOILER SUPPORT CHROMED
T-SPO-FHS1	HIGH FRONT SPOILER SUPPORT CHROMED
T-SPO-PLATE	2015 CIK-FIA FRONT SPOILER PLATE (2 pieces)
T-NAS-PAN1	NASSAU PANEL MOD.506 BLACK
T-NAS-HSPAN1	MOD. 506 HIGH NASSAU PANEL SUPPORT KIT CHROMED (R+L)
T-NAS-LSPAN1	LOW NASSAU PANEL SUPPORT CHROMED
T-POD-S506	SIDE BODYWORK MOD.506 BLACK (003-BS-54)
T-SPO-DEFKIT	506 FRONT SPOILER DEFLECTOR KIT
T-POD-SUPLFT506	506 / DUO EVO LEFT BODYWORK SUPPORT CHROMED - DRILLED
T-POD-SUPRGH506	506 / DUO EVO RIGHT BODYWORK SUPPORT CHROMED- DRILLED
T-POD-BUSH	SIDE BUMPER BUSH (10 pieces)
T-SPOILER-RR1	REAR SPOILER MOD.CLOB BLACK
T-RRSPO-SUP1	REAR SPOILER SUPPORT KIT
T-RRSPO-SCR30	REAR SPOILER MOUNTING SCREWS KIT (Ø30MM) (RIGHT + LEFT)

1.18 ENGINE MOUNT

T-ENG-MNT1	TILLOTSON ALUMINIUM ENGINE MOUNT with screws
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1.19 FUEL TANK

T-TNK-8L	FUEL TANK 8.5L
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2: Engine Parts List

2.1 TILLOTSON 225RS

TPP225RS	225RS ENGINE COMPLETE
TPP225RS-SB1	225RS LONG BLOCK ENGINE (LESS FLYWHEEL, IGNITION AND ANCILLARIES)
138220002	CRANKCASE ASSEMBLY-S
138190002	BEARING, CRANKCASE-S
138220028	TOP MOUNTING PLATE-S
138220026	HEXAGON SOCKET HEAD CAP SCREW M6*20-S
138220025	SPACER-S
138190004	WASHER, DRAIN PLUG-S
138190005	BOLT, DRAIN PLUG-S
138190003	OIL SEAL-S
138220053	STICKER LABEL, TOP MOUNTING PLATE-S

2.2 CRANKSHAFT / CONNECTING ROD / PISTON

138210107	CRANKSHAFT ASSEMBLY-S
138220031	CONNECTING ROD ASSEMBLY-S
138220017	HALF-SLEEVE BEARING-S
138220016	BOLT, CONNECTING ROD-S
138220004	PISTON-S
138220006	PISTON PIN-S
138220008	CIRCLIP, PISTON PIN-S
138220005	RING SET, PISTON-S

2.3 CRANKCASE COVER / CHAINGUARD

138190017	GASKET, CRANKCASE-S
138190016	DOWEL PIN BUSHING, CRANKCASE-S
138190002	BEARING, CRANKCASE-S
138190018	CRANKCASE COVER-S
138190020	DIPSTICK ASSEMBLY-S
138190019	OIL PLUG ASSEMBLY-S
138190003	OIL SEAL-S
138190015	FLANGE BOLT M8*30-S
138220032	CHAIN GUARD-S
138190060	FLANGE BOLT 5/16*20-S
138220011	CLUTCH, 21T-S

2.4 CYLINDER HEAD

138190037	FLANGE BOLT M6*12-S
138190088	VALVE COVER-S
138190096	TUBE, BREATHER-S
138190038	GASKET, VALVE COVER-S
138190021	FLANGE BOLT M8*60-S
138220013	SPARK PLUG, NGK BPR6ES-S

138210100	CYLINDER HEAD ASSEMBLY-S
138190056	STUD, EXHAUST MANIFOLD-S
138220033	STUD, INTAKE MANIFOLD-S
138220030	CYLINDER HEAD GASKET-S
138190022	PIN, DOWEL, CYLINDER HEAD-S
138220014	FLANGE BOLT M6*16-S
138210125	AIR LEADING COVER-S

2.5 VALVE TRAIN / CAMSHAFT ASSEMBLY

138190035	VALVE LOCKING NUT-S
138190034	VALVE ADJUSTING NUT-S
138190033	ROCKER ARM-S
138190030	ROCKER ARM SUPPORT-S
138190031	PLATE, PUSH ROD GUIDE-S
138190032	PUSH ROD-S
138190013	TAPPET, VALVE-S
138220012	CAMSHAFT ASSEMBLY-S
138210101	VALVE, INTAKE-S
138210102	VALVE, EXHAUST-S
138210112	VALVE SEAL-S
138220029	VALVE SPRING (26LBS)-S
138210103	RETAINER, VALVE SPRING-S
138210104	VALVE COLLET-S

2.6 CARBURETTOR / AIR FILTER

138190050	GASKET, INTAKE MANIFOLD-S
138220034	INTAKE MANIFOLD ASSEMBLY-S
138220020	STYLE 1 HEXAGON NUT,M6-S
138220035	GASKET, CARBURETOR-S
138220039	CARBURETOR,HW-46A-S
138190106	AIR FILTER-S
138190055	FUEL IINE CLIP-S
138190092	FUEL LINE-S
138190093	FUEL LINE PROTECTIVE SLEEVE-S

2.7 STARTER / RECOIL / FLYWHEEL / IGNITION

138220024	FLYWHEEL ADAPTOR-S
138220022	HEXAGON SOCKET HEAD CAP SCREW M6*12-S
138220007	PVL IGNITION COIL, 6500rpm.-S
138220019	IGNITION COIL STOP WIRE-S
138220023	HEXAGON SOCKET HEAD CAP SCREW 3/16 *20-S
138220018	FLYWHEEL ASSEMBLY-S
138220040	STARTER PULLEY CUP(47mm)-S
138190042	NUT, M14-S
138220015	STARTER ASSY, PULL(black)-S

138190047	KILL SWITCH-S
138190037	FLANGE BOLT M6*12-S

2.8 EXHAUTS

138190058	GASKET, EXHAUST-S
138220038	SILENCER-S
138220021	SPRING WASHER GB 93-87 8-S
138190057	EXHAUST NUT-S
138220027	SPACER, SILENCER BRACKET-S
138220014	FLANGE BOLT M6*16-S
138220054	EXHAUST WRAP(0.4m)-S
138220055	HOSE CLAMP(21-38)-S

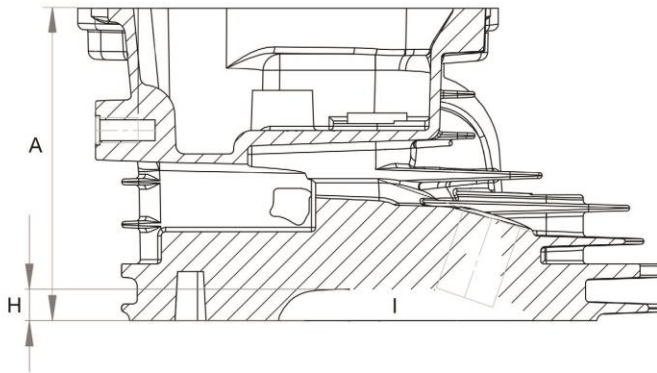
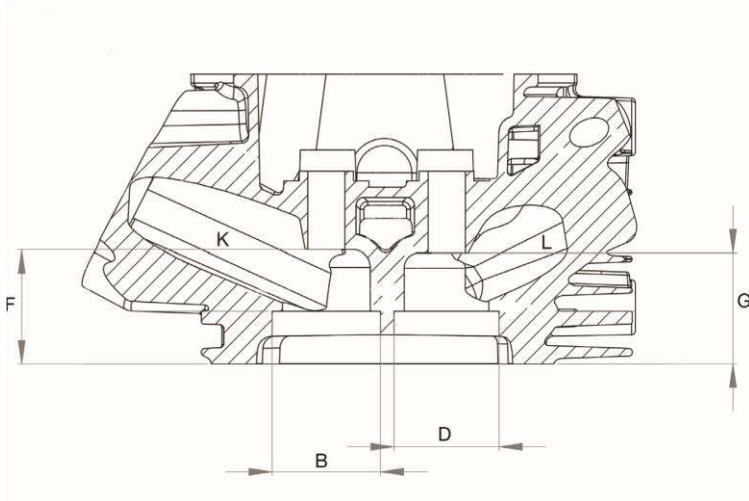
3: Engine Fiche



RACE SPEC 4-Stroke-225cc



Feature	Specification
Engine Type	2 Valve 4-Stroke
Fuel Type	Unleaded Petrol
Cylinder	Single/35° Heavy Reinforced Aluminium Block w/Cast Iron Sleeve
Cylinder Volume	225cc
Bore	72mm/2.834 in
Theoretical Bore	72.1mm/2.838 in
Stroke	56mm/2.204 in
Cooling System	Air
Carburettor	Tillotson HW-225 20mm Venturi
Cylinder Head	Aluminium Alloy 2-Valve Over Head Valve
Combustion Chamber Shape	26cc Factory Designed
Compression Ratio	9:1
PVL Ignition	4 Poles Digital Built in Limiter 6500RPMS (Coil Gap 0.9mm)
Flywheel	Digital Ignition Billet Aluminium 31° Advance Timing
Connecting Rod	Billet Aluminium w/Bearing Inserts
Rod Length	88mm/3.4646 in
Camshaft	.265 Max Lift Race Cam with Built in Compression Release



A. Overall Height	74.05mm Min
B. Intake Seat ID	24.75mm +.1mm
C. Intake Seat Angle	60-45-30
D. Exhaust Seat ID	22.6 +.1mm
E. Exhaust Seat Angle	60-45-30
F. Bowl Depth Intake	29.2 ±.1mm
G. Bowl Depth Exhaust	28.3±.1mm
H. Combustion Chamber Depth	7.5mm ±.1mm
I. Combustion Chamber Vol	20.9cc
J. Valve Head Height from Gasket Surface	6.5mm±.1mm
K. Intake Port Volume	31cc Max
L. Exhaust Port Volume	24.3cc Max



Cylinder Head Gasket

Material	Composite
Thickness	1.26mm± 1
Fire Ring	Steel



Rocker Arm

Material	Steel
Ratio	1:1 max
Length	55mm min
Tip Shape	Retangular



Guide Plate

Material	Steel
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Valve Lifter/Tappet

Material	Mild Steel
Overall Length	34.7mm
Stem Diameter	8mm
Head Diameter	23.6mm
Weight	20.5g min



Valve Spring

Material	Steel
Relaxed Height	30.5mm
Install Height	20.7mm min
Wire Diameter	2.2mm
Overall O.D.	10.8mm
Spring Pressure	115.N



Valve Spring Retainer & Lock

Material	Steel
Overall Height	8mm min
Overall O.D	20.7mm
Retainer Weight	6.5g min
Lock Weight	2.3g min



Push Rod

Material	Steel
Overall Length	134mm min
Ball End Diameter	5mm min
Rod Diameter	4mm min
Weight	11g min



Intake Valve

Material	Alloy Steel
Overall Length	64mm min
Stem Diameter	5mm min
Head Diameter	27mm max
Valve Margin	3mm ±.1mm
Valve Angle	45°
Weight	21g min
Valve Marking	IN Z81 YF



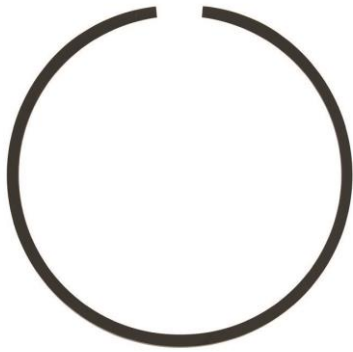
Sparkplug

Model	BPR6ES
Brand	NGK



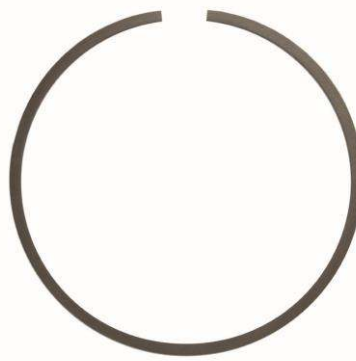
Exhaust Valve

Material	Alloy Steel
Overall Length	64mm min
Stem Diameter	5mm min
Head Diameter	25mm max
Valve Margin	2.3mm ±.1mm
Valve Angle	45°
Weight	20g min
Valve Marking	EX Z81 YF



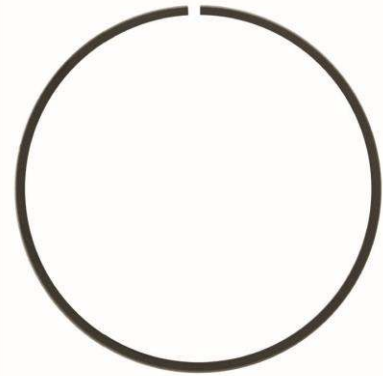
Piston Top Ring

Material	Steel
Thickness	1mm±.02



Piston Second Ring

Material	Steel
Thickness	1mm±.02



Piston Oil Scraper Ring

Material	Steel
Thickness	.40mm±.02



Piston

Material	Aluminum
Diameter	72mm
Compression Height	19.5mm
Wrist Pin Diameter	13mm± .01
Top Ring Landing	2.5mm
Second Ring Landing	2mm
Oil Ring Landing	1.5mm
Piston Top	Flat
Weight w/o Rings	132 ± .5g



Piston Oil Compression Ring

Material	Steel
Thickness	1.72mm±.02 i800 p0-;/



Connecting Rod

Material	Billet Aluminium 7075-
Rod Length	88mm/3.4646 ± .02mm
Width	23.75 ± .1mm
Weight	102 ± 5g



Connecting Rod Bearing Insert

Material	Babbitt
Thickness	1.5mm -.1 for wear
Width	19.1mm
Weight	21.5g min



Piston Wrist Pin

Material	Steel
Overall Length	40.3mm ±.02mm
Outside Diameter	13mm ±.02mm
Inside Diameter	9mm±.02
Weight	21.7g min



Crankcase Side Cover

Material	Cast Aluminum
Bearing OD	52mm
Bearing ID	25mm
Dowel Material	steel



Crankcase Side Cover Gasket

Material	Paper
Thickness	0.5mm
Color	Black



Crankcase Bearing

Material	Steel
Ball Material	Steel
Retainer Material	Steel
Bearing OD	52mm
Bearing ID	25mm



Crankshaft

Material	Forged Steel
Crank Pin Diameter	88mm/3.4646 -.15mm/-.059mm for wear
PTO Shaft Diameter	19.05mm
Weight	1824g ±5g



Crankcase Seal

Material	Fluoropolymer - Red
Outside Dia	41.25
Inside Dia	23.6mm

Camshaft Specs



Compression Release	Stock/unmodified
Base Circle	.865" ±.05"
Intake Duration	235.5 @.050
Exhaust Duration	234.5 @.050
Intake Cam Lift	.264
Max Intake Valve Lift	.265
Exhaust Cam Lift	.265
Max Exhaust Valve Lift	.265
Intake Centerline	107
Exhaust Centerline	111.5



Ignition Coil

RPM Limit	6500
Brand	PVL
Type	Digital



Flywheel

Material	Billet Aluminum
Diameter	165mm
Weight	1.45kg
Timing	31°

Clutch

Brand	Max Torque
Type	Drum



Exhaust Header/Muffler

Model	
Brand	RL

Fastener Torque Specs		
Description	Wrench/ Socket Size	Torque
Blower Housing	8mm	10N.m
Carburetor to Manifold	10mm	10N.m
Connecting Rod	1/4" 12 Point	13N.m
Cylinder Head Bolts	12mm	30N.m
Exhaust Brace Screw	13mm	28N.m
Exhaust Stud	8mm	10N.m
Flywheel Fan	21mm	40N.m
Intake to Cylinder Head	5mm	10N.m
Oil Drain Plug	10mm	22N.m
Rocker Arm Stud	12mm	24N.m
Rocker Arm Set Screw	10mm	10N.m
Sparkplug	21mm	24N.m
Side Cover	10mm	28N.m
Valve Cover	8mm	7N.m