

M3W Alternative Parts List

Revised 14 July 2020

Engine & Transmission

- **Air Filters:**
 - S&S Muscle air filter: Fitting Kit 170-0200, Chrome 170-0119, Black 170-0214 A1
 - Element: S&S 106-4722, S&S Super E/G pleated cotton type.
 - K&N filter E-3226 will fit at a pinch, just a little tight around support spindles
 - S&S Stealth element, S&S 170-0126. Alt PU PN 1011-2765

- **Bevel Box:**
 - Pinion bearings: HM88542-HM88510, HM89449-HM89410.
 - Bevel Box pinion change info: Pinion seal National Oil Seal 224205 Federal Mogul. Pinion shaft nut is LH thread. Pinion bearing pre-load is 18-20 lbs in torque. Assemble with silicone gasket on splines for oil sealing.
 - Pinion seal spec. 55x42x8mm R23 Viton double lip rotary shaft oil seal with gaiter spring. This is confirmed as one size but possibly 2 sizes are used.
 - Bevel gearbox numbers: New U120005 - £1854.22 +VAT. Recon U120058 - £410.00 +VAT (2015)
 - Oil:
 - Redline Heavy Shockproof 75W/140 (75W/250)
 - Standard oil: Morris Lodexol XFS 80W/140 fully synthetic limited slip gear oil
 - Alternative oil: Millars EP 140
 - Bevel Gearbox rebuild: TM Bwitted April 2015. and P964 Nov 2017 for info.

- **Cam Belt:**
 - S&S 106-0571, Gates 37-0014.
 - Cam belt Spec: 127 teeth, 30mm wide.

- **Clutch:**
 - Release bearing/cylinder: Volvo 8675052. (C30,C70 (2006-) S40,V50 (2004-) Jaguar 456R7A564AA, Land Rover LR022452 (Freelander 2)
 - Clutch Master Cylinder 15.8mm dia: LBACBL021AP Morgan p/n U120071
 - Alt. clutch master cylinder, not exact or confirmed bit similar. SAAB 9000 43850 or 8957292. Requires actuation rod transferring over.
 - Shorter Clutch Master Cylinder: AP CP2623. 5/8" bore. 3.15" long from flange face to the end as opposed to the 6" of the original.
 - Centa & Clutch fit: TM JVS Nov 2015.
 - HD Compensator Jurid coupling. BMW 26117518443
 - Clutch is made by TTV Racing Components. They will not help with anything. CG Motorsport in Leeds UK www.clutch-specialists.co.uk will help.
 - Clutch new thickness is 7.3mm
 - Centa to crank nut thread size 5/8UNF

- **Drive belt:**
 - 186214M38 265A (printed on belt)
 - S&S (Gates) p/n: 106-0353
 - Drive belt spec: 1.5" wide, 133 teeth, 14mm pitch

- **Exhaust:**
 - Stud nuts: 5/16" UNF.
 - Exhaust gaskets: 503015 (Matts Machine shop) don't fit.
 - G-56 Spitfire stage 1 kit: PPL-102916
 - Exhaust studs: 5/16" UNF/UNC. 1 3/4" long
 - "Jet" Nuts 5/16-24 Kaynar MS21042. (LAS Aero)
 - Rubber bobbins (later type) Renault Traffic, Master, Espace RTN4 255-336

M3W Alternative Parts List

Revised 14 July 2020

- **Fuel system:**
 - Fuel Filter:
 - Mahle KL167 (Range Rover, BMW X5)
 - Mann WK513/3
 - Rover p/n WFL000020, WFL000021
 - Injector Nozzle. The part # is 0 280 156 198, Bosch, type B
 - S&S info = fuel injector, 55-5005, 31.3 lbs/hr at 58 psi, style b.
 - Fuel pump module retaining ring: BMW p/n 6762417
 - Fuel Pump: Module: WFX101020 (93-98 Discovery V8 EFI)
 - Lambda Sensor: 0258986615 LS615 (Bosch 4 wire)
 - Alt. fuel pump:
 - Walbro GSS342 (Glencoe Ltd) (preferred alternative)
 - Convoluted pump hose heat-shrink 210mm: PFH0825 (for GSS342)
 - Pump wire loom 22-615 (for GSS342)
 - Pump rubber foot 22-63 (for GSS342)
 - Pump inlet filter 22-140 (for GSS342)
 - Pump module lock ring BMX X5 p/n 16116762417
 - Alternative fuel Pump: Walbro 340B.
 - Delphi FE0113 is standard replacement pump(?)
 - Fuel tank sender (280mm) VDO 224011000280G (Europa Spares)
 - Fuel hose Ethanol proof spec: 7.3mm ID, 13.5mm OD. J30 R9 73379 type 3E
 - Fuel hose p/n 2240.0600 from Cohline.
 - Fuel hose protective sleeve: Heatshield Products Kit 204008 (5/8")
 - Fuel hose clips: Stainless steel round edge 11-13mm
 - Stepper Motor- Idle Air Control: S&S 55-5085 or HD 27628-01A
 - Fuel tank roll over valve alternative. Newton TRL88.
 - Charcoal vapour canister : Ford p/n 1374029
- **Ignition:**
 - Spark Plugs:
 - Standard, Champion RA8HC
 - NGK Iridium: DCPR7EIX
 - NGK Iridium: DCPR6EIX recommended for use with 569 cams.
 - Plug Leads: Magnecor p/n 2547. Spec = KV85. 55cm long. 90-degree end coil pack, 45 degree plug, 12mm plug.
 - Ignition Coil .H D p/n 31655-99 or S&S 55-1576
 - Engine start and ignition relay: Durite 0-728-14 (Better) or Ripca 2690 (OEM)
- **Oil System:**
 - Engine oil:
 - Motul 7100 4T 20W-50 V-Twin fully synthetic
 - Spectro 20W/50 fully synthetic V-twin.
 - Oil Filters:
 - S&S Oil Filter p/n 31-4103 (Black)
 - S&S Oil Filter p/n 31-4104 (Chrome)
 - K&N Oil Filter p/n KN-171B (Black)
 - K&N Oil Filter: p/n KN-171C (Chrome finish)
 - Engine sump plug thread 1/2"- 20tpi.
 - Engine sump plug O ring seal. 11.1mm ID 1.6 mm cross section.
 - Oil tank drain valve M12 1.75mm thread. p/n F-107N QVGN (www.quickvalve.co.uk) Use 10mm drain hose.
 - Oil pressure and Temp gauge:

M3W Alternative Parts List

Revised 14 July 2020

- Merlin Motor sport. Gauge and kit SPA-DG201B, Extension bolt $\frac{3}{4}$ UNF M-EB-3/4UNF, Billet sandwich plate M-TGASP200X
- SPA Oil Press/temp gauge info: TM KBMOG, Dec 2014.
www.merlinmotorsport.co.uk
- <http://www.cvoharley.com/smf/index.php?topic=14309.0> relates to air cleaner venting and blow by oil contamination.
- Rear Crank oil seal: SKF 19745 (caution. i/d 2" and Centa o/d 50mm??)
- Rear Crank oil seal, use SKF Speedi Sleeve p/n 99196 on Centa seal area to increase diameter (50mm) closer to 2" and give undamaged seal face (pos. chuck machine marks, remove any damage before fitment of sleeve)

- **Transmission and Starter:**
 - Gearbox sump plug (MX5) M18 – 1.5 12 square head (taper fit)
 - Starter Motor: Mazda MX-5 Series 3. p/n LF9H-18-400. M000T37471.
 - Gearbox rear rubber mount. Ford Cortina Mk1 (Type 9 g/box) requires slight modification to fit. p/n EM-429, GB2E400,113E6068.
 - Gear lever lower bush : 039817462A
 - Gear lever spare parts: (all Mazda numbers)
SI324 nylon cup, gear lever, all Mk1
SP1160 gasket, cover plate
SP1161 wavy washer, gearbox
SP1911 nylon bush gear lever
SP2182 gear shift lower bush 5Spd Mk1
SP2389 Wavy Washer, Gear lever 5-speed Mk2

Wheels, Suspension & Brakes

- **Bearings:**
 - Front wheel bearings:
 - Inner Timken LM67048, LM67010
 - Outer Timken LM11949, LM11910.
 - Seal: 1.75"x2.5"x0.375" (44.45x63.5x9.53mm) single lip.
 - Rear wheel bearings:
 - SKF Explorer 6205-2RSH.
 - Rear swing arm bearings: Timken 33205 25x55x22mm taper roller.
 - Rear swing arm seal: 30x60x7mm

- **Brakes:**
 - Clutch and Brake Fluid: DOT4 spec.
 - Brake bleed nipples Front - M10 x 1.0 Rear - M7 x 1.0
 - Brake parts Info: Caparo AP Braking. www.caparobraking.com
 - Caparo was AP Lockheed. Now does not seem to sell to public, no Cross ref numbers available. Try Liberty Group. 920E
 - Brake master cylinder tandem 17.8mm dia. LBBEAH003AP
 - Front:
 - Front brake Disc + Bell: LB1TPA002AP
 - Front Brake Pads: HF204. APP 0099-200G E344 2117
 - 16mm thick pads. Ferodo FRP1079 (DS3000) EBC Yellow stuff DP2044/3, EBC Green Stuff DP4044/3R, ALCON.PNF0084X322.4, BREMBO 07.5064.8, BREMBO 07.5064.82, BREMBO 07.5064.84, BREMBO 07.5064.49, PAGID 1705, PFC 7735.XX.16
 - Front Brake Caliper LH: APA0099-CD018A
 - Front Brake Caliper RH: APA0099-CD017A

M3W Alternative Parts List

Revised 14 July 2020

- Front brake caliper Banjo Bolt M10x1.0mm (Russell p/n R40506)
- It may be possible to fit Mitsubishi Lancer Evo 5/6 brake pads, work required to modify back plate.
- Speed Bleed Nipple (ABV) qty 4 M10x1mm thread size.
- Rear:
 - Rear Brake Drum (9"x1.75"): LBNLCDL105AP
 - Rear Brake wheel cylinder: LB1LCG033AP. Alt. Motaquip VWC362
 - Rear brake cyl. Repair kit. Autofren Saina D3167 or Ford OE-1571453 or Ford OE-70VB2128BB. (13/16" or 20.6mm dia)
 - Rear Brake shoe set: HF206, Ferodo FSB385, Mintex MLR42.
 - Rear Brake OEM Liberty 920E U220016 (with adjuster fitted)
 - Rear Brake adjuster kit: HK107 or BBA120.
 - Rear Brake spring kit: HF207 or Delphi BSF030
 - Info: Rear brake slave cyl and shoes: Ford Transit Mk2 single rear wheel 1976-86. Leyland Sherpa LDV 200 (9" rear drums) 1985-89. Grease inside gaiters to prevent corrosion. Pagid 134590648, Unipart GWC1715, Delphi LW15028.
 - Speed Bleed Nipple (ABV) qty 1 M7x1mm thread size
- **Front tyres:**
 - Coker Excelsior Comp. 400H19 (Longstone Tyres)
 - Blockley 400H19 (MWS)
 - std.: Avon 400X19 65H
 - Tubes: BLTU400/19 Brass valve(TR-11), BLTU400/19-TR6 metal, BLTU400/19 rubber valve (TR-13) (MWS)
 - Michelin Commander II 110/90 B19 62H Motorcycle tyres, good grip, fast wear rate. Requires speedo recalibration. (See MTWC website for info)
 - Pirelli Night Dragon 110/90 M/C 62H TL. Similar to Michelin Commander II.
 - Schrader aircraft valve cap. MS20813-1
 - Alternative sealed valve caps on ebay.
- **Front wheels:**
 - Black: WW5771 BLACK (MG TA 2 1/2" x 19") (MWS)
 - Silver: WW5771S
 - Chrome: WW5771C/2
- **Rear mudguard:**
 - Fabricate from Indispension MG008
- **Rear tyre:**
 - Kumho KH27 Ecowing ESO1 175/65-15
 - Nokian Weatherproof for snow/ wet, Avon ZT5
 - Dunlop SP Sport Blue Response
 - Yokohama Blue Earth 2
 - Michelin Cross Climate
 - Pirelli All Season
 - Avon CR6ZZ 175/70 R15 (for comp use)
 - Bridgestone Weather Control A005
 - OKO tyre sealant: 170749717059 (1.25 L) Puncture preventative sealant
 - Puncture Safe and Auto Seal are similar to OKO
- **Suspension and Steering:**
 - Rear wheel axle nut locking R clip 3mm x 72mm
 - Rear axle spanner sizes: 36mm & 24mm.

M3W Alternative Parts List

Revised 14 July 2020

- Rear axle adjuster spanner size: 17mm
- Rear axle split pin size: 4mm x 40mm
- Rear swing arm bearings : Timken 33205 25x52x22 taper roller
- Rear swing arm bearing seal 30x60,7mm
- Rear swing arm C spanner size: 50mm
- Rear swing arm dust excluder cap: 48mm dia, 44mm inside 18mm deep.
- Top and Bottom front upright ball joints: Mini Metro Mk1 up to 1984.
p/n GSJ268 (several specs for this item check 14mm at top of taper) or QH
p/n QJS1059S or Moog RO-BJ-3409 or First Line FBJ5150. Requires
1 13/16" deep socket. Loctite 243. Tq load to 105 lbs/ft. Taper nut Tq 56 lbs/ft.
- Gaiters for front upright ball joints: Boot 2 from balljointboots.co.uk spec.
30x12.5 x 27mm high. (Morgan p/n SP160001)
- Track rod ends comfort kit: Fluro GIXSW14x1.5 Rod End Bearing 14mm
Bore. M14x1.5 Thread Female Right Hand.
- Complete track rod. FEBI BILSTIEN 22767 Ford Fiesta Mk5 (2000-2012)
277mm long - cut down to 260mm.
- ATR Shock absorbers. ATR MOG 001 Front, ATR MOG 002 Rear.
 - Available from: <http://www.dampertech.co.uk/>
- Spax front adjustable shock absorber: SP160002. From Morgan only.
- Empire / Krazy Horse Front suspension wishbone rose joints: Aurora XM6T
7/16"unf RH Thread x 3/8" bore PTFE lined with zinc passivisation. Autosport
Bearings and Components, Shepperton, Middlesex, TW7 8BA (£25 ea) or
Demon Tweaks.
- Ohlin Shocks. TM JVS Nov 2015.
- Ohlin shocks info: TM 10/10/16.
- Gunson Trakrite Wheel Alignment Gauge: G4008
- Gunson Magnetic Camber Castor Gauge: 77066
- Steering wheel quick release: Lifeline 3 or 4 lug. April 2017 on cars Traven
unit fitted, this is only available from Morgan. Caution, spline alignment issues
with Traven item, see warning in MTWC info.

Electrics

- **Battery:**
 - Standard Battery: Banner Starting Bull 530 30
 - Standard Battery Spec: 30A, 300A cold crank, L187mm, W128mm, H165mm.
Bolt through terminals.
 - Battery Alt: Duracel DURAGM 30LA-US (30A 400CCA)
 - Odyssey Gel battery : PC680
 - Magneti Marelli 53034 (32a 540 CCA) Lithium Ion.
 - Exide AGM12-31 (4990) sealed bike battery (30A, 430CCA).
 - Varta Blue Dynamic (540126033) (054) Lead Acid. Taller (50mm), needs
retaining studs extending.
 - JMT YTX30-FP. Lithium Ion
 - Westco WCP30 Platinum Motorcycle battery. AGM .May require base plastic
trim to fit tray.
 - Xtreme AGM. CYLA30LXTA. (12V, 385CCA)
 - Arteck 600a jump starter pack.
 - YUASA UR1. 30a/h 270A
- **Charging system:**
 - Standard Cycle Electrics regulator/rectifier: CE 601
 - Harley Davidson Alternate Regulator: 74540-01 38amp 3 Phase. (fits 01-06
HD Softail)
 - HD type after market rectifier Chrome: PEU-21120803
 - HD type after market rectifier Black: PEU-21120808

M3W Alternative Parts List

Revised 14 July 2020

- Rectifier Plug (4 Pin): Farnell Ltd. Amphenol parts: ATP04-4P (Rcpt), ATP06-4S (plg), AT62-12-0166 (Skt), AT60-12-0166 (pin).
- Long life rectifier bobbins: <https://caterhamparts.co.uk/mounts-gaskets/1075-exhaust-mounting-bobbin.html>
- Battery remote disconnect: <https://www.batterybrain.co.uk/>
- Genny stator test: <http://roadstercycle.com/Stator%20Testing%20Example.htm>
- **Lamps:**
 - Replacement 7" headlights with DRL: PowerfulUK (ebay) Morgan ARV6 type or LR Defender. (£45) p/n HL873
 - H4 Halogen Headlight bulb: Philips Extreme Vision +130.
 - H4 LED headlight bulb: H4 Philips LUXEON ZES
 - 55mm red Stop tail LED unit: Part Number: **LED55ST**
 - 55mm amber indicator LED units: Part Number: **LED55IND** from car parts builder solutions.
 - Chrome bullet LED indicator: 2040-0835 (deadbeatcustoms.com)
 - Black bullet LED indicator : 2040-0845.
 - Indicator Module, Morgan p/n E340098. Electromech p/n EA0021i4
 - Additional LED rear light, roll hoop mounted: Axiom Zap 2
 - LED full conversion, chrome or black finish HL-051 (PowerfulUK)
 - Headlight shells, 7"; Black. AS700B or chrome AS700SF (SVC)
 - Wire loom connectors - Econoseal.

Body

- Fairbourne screen made from Lexan Marguard Polycarbonate. Windscreens: www.fairbournecarriages.com
- Exhaust mounts: Hexagon Male M8x16. HEX1384-60 or : <https://www.clampcouk.co.uk/exhaust-repair/exhaust-mountings/exhaust-mounting-bobbins/ecsm33-rnt3-255-333-m8-thread-renault-universal-exhaust-mounting-bobbin.html> or Caterham parts : 30X052B
- Rear Indicator Chrome (Rutter) 2EL201L, 3EL201R
- Replacement side, rear view mirrors: <https://www.ebay.co.uk/itm/PAIR-OF-LUCAS-STYLE-CHROME-ROUND-EXTERIOR-WING-DOOR-MIRROR-CLASSIC-CAR-LH-RH/321698142306>
- G-56 bonnet sprung Dzus fasteners: <https://www.garage56.co.uk/product/morgan-bonnet-fastener-ejector-spring-kit/>
- Stick on Union Jack badges: <http://shop.morgansportscarclub.com/acatalog/Union-Flag-Enamelled-Badges.-Stick-on.-32.html#SID=10>
- Lower body edge to chassis pop rivets: 5mm dia. (3/16") 16.5mm long aft, 9.3mm long forward. Stainless steel. HD puller required.
- Boot liner tray knurled thumb screws (qty9) M5 x 16mm.
- Front mudguard bolts Stainless steel M8 x 16mm, shake proof washers serrated type. Keys on Ebay.

Interior

- Extra (cigar) power socket 20A 28mm flap: 60101 (Europa)
- Dynamat soundproofing.
- Silent Coat soundproofing 2mm and 4mm deadening vibration mat. www.deadening.co.uk
- Manufactured Glove box from 2mm Plasticard.
- Sat Nav mount ball: RAM 1" tough-ball, M6-1 fitting. RAM-RAP-B-379U-M616 (Maya 20000 Ltd) or www.telferizer.com
- Immobiliser: Sterling Excel, Made by Scorpion Automotive. www.scorpionauto.com Thatcham Cat 2.

M3W Alternative Parts List

Revised 14 July 2020

- Immobiliser link plug, removes immobiliser from circuit. Morgan p/n E340044
- Immobiliser link plug make from: AMP Multilock 070 12 way male plug (simtekuk.co.uk)
- Melvyn Rutter engine turned dash panels: 3AC51L, 3AC51R.
- B-G steering wheel spacers (3 bolt): Demon Tweaks
- Steering Wheel quick release: www.lifeline-fire.co.uk
 - Changes to design and part numbers build 01/06/16 and 03/04/17.
 - 3 bolt standard and 4 bolt for Brooklands wheels.
- Glove box leather Bag: <https://dowcopowersports.com/willie-max-take-along-windshield-bag-large-58011-00/>

Miscellaneous

- Loctite 243, use this to secure just about everything on the M3W.
- Fast Idle at standstill: Motor Kit Idle Control S&S 55-5085 or HD 27628-01A
- Protune: voltage oscillation range of the lambda probes is 0.5 V to 1.1 V approximately for good sensor
- Autosol Blueing Remover Stainless Steel Exhaust Cleaner Colour Restorer 150ml.
- Turn Signal Module. Morgan p/n E340064. Can cause engine to run on as well as several indicator and light faults.

Parts Sources

- S&S Parts: Matts Machine Shop
- Davida Goggles/Glasses: 74 WRS. From Greycar (£36)
- Daisy C5 Military Tactical Goggles motor cycle riding glasses (£20)
- Morgan M3W jacket = Spada Dyno (less M3W badge).
- http://www.magnecor.co.uk/product_information.asp
- <https://www.carbuildersolutions.com/uk/CatalogueRequest>
- https://www.sscycle.com/docs/default-source/instruction-sheets/510-0048_sidewinderspringsxwedge_20130311.pdf?sfvrsn=4
- <http://atr-performancedampers.co.uk/> <http://www.dampertech.co.uk/>
- <http://brakeparts.co.uk>
- <http://www.opieoils.co.uk>
- <https://www.powerfuluk.com>
- <https://www.s-v-c.co.uk>
- <https://www.mtwc.co.uk/the-5-speeder/>
- www.europaspares.com
- <https://vtwin.parts/vvctech/ss-cycle-s-s-x-wedge-catalog-2019.pdf>
- <https://www.lasaero.com/products/>
- <http://www.abtproducts.com/chassis-manufactured-in-the-uk/>
- www.deadening.co.uk for Silent Coat sound proofing.
- Info@ttvracing.com Clutch manufacturers. No help to public.
- www.secondcitycustoms.co.uk S&S parts supply.
- www.roosemotorsport.co.uk High performance silicone hose.
- www.clutch-specialists.co.uk Clutch refurbishments and parts.
- www.tayna.co.uk Battery supply
- www.simtekuk.co.uk Automotive electrical connectors.

Services

- B&C Express Potterhanworth. 01522 791369, LN4 2DX. Talked to Chas about chain drive conversion.
- <https://www.gov.uk/government/publications/mot-inspection-manual-for-class-3-4-5-and-7-vehicles>
- Urban Cooling Kit instructions PDF: <https://drive.google.com/file/d/0B597Pkl-M0WqWEk2Tk5UeFk5Mms/view?usp=drivesdk>
- Crash Helmets; Caberg Riviera V2+
- Electrical loom plugs: www.uk.farnell.com
- S&S Engine service manual: 106-0735
- Supermax sprocket conversion: vyvyanross@yahoo.com www.supermax.net
- V 5.2 MMC M3W parts manual: https://www.4shared.com/get/H-5MmbB8ei/M3W_Parts_Book_V52.html
- <http://www.morganpark.de/individuelle-umbauten/>
- <https://www.redlineoil.com/80w250-gl-5-gear-oil-2>
- Matts Machine shop: <http://www.mattsmachineshop.co.uk>
- Coloured tyre sidewalls (Gulf M3W) www.mrwhitewalls.com