

Suggested Tools & Supplies for the Merlin Build

Outside of just a few special tools the majority of these tools may already be in your garage or workshop.

TOOLS & SUPPLIES	NOTES
WIRE CUTTER/STRIPPER	
CRIMPER	For solderless fittings. Some prefer the AMP or professional grade tool.
SOLDERLESS FITTINGS	Mostly for wiring your panel
PLASTIC TUBE-PITOT	Clear plastic tube 1/8 ID from box store
TIE WRAPS BIG	
TIE WRAPS SMALL	
CLECOS 3/32	Suggest 20
CLECOS 1/8	Suggest 40
CLECOS 5/32	Suggest 10
CLECO PLIERS	Clecos and Cleco pliers from ACS or ATS https://www.aircraft-tool.com/ https://www.aircraftspruce.com/
METRIC SOCKET SET	
IMPERIAL SOCKET SET	
METRIC ALLEN WRENCHES	
IMPERIAL ALLEN WRENCHES	
COMPRESSOR & LINE	Can be pretty small unit from Harbor Freight if only used by one person and mostly only for pulling rivets.
PNEUMATIC POP RIVET GUN	Cheap ones work fine https://www.harborfreight.com/14-in-air-hydraulic-riveter-61482.html
1 X HAND RIVET GUN	HP-2 from ACS is good https://www.aircraftspruce.com/pages/to/rivet_poprivet/heavydutyriv1.php
RIVET SQUEEZER	From ACS or ATS https://www.aircraftspruce.com/catalog/topages/integralSqueezer.php?clickkey=30700
RIV NUT TOOL M3	You may not need this but handy to have and good skill to learn. Merlin has most rivet nuts installed already.

BATTERY DRILL	You can choose but be sure to have 2 batteries.
DRILL BIT SET	
EXTRA 1/8, 3/32, 5/32 BITS	Most often used is 1/8. Buy a few extra.
3/4 OPEN END RATCHED	These are handy wrenches https://www.amazon.com/Ratcheting-Wrench-Set-Ratchet-Wrenches/dp/B01MT6PDN0/ref=sr_1_1_sspa?ie=UTF8&qid=1521395774&sr=8-1-spons&keywords=open+end+ratcheting+wrench+set&psc=1
GREASE	
LOCTITE 592	
SCREWDRIVER SET	
TEFLON TAPE	
THREADLOCKER-LOCTITE 290	
MOBIL 1 0-40 SYNTHETIC (6)	If using the HKS. If 582 use per Rotax. I use: https://www.amazon.com/Quaker-State-2-Cycle-Engine-AUTOMOTIVE/dp/B072YTSQHD/ref=sr_1_fkmr1_1_a_it?ie=UTF8&qid=1521395907&sr=8-1-fkmr1&keywords=quaker+state+2+stroke+oil
RAZOR KNIFE	
FILE SET	½ round is my favorite
HOT AIR GUN	For shrink wrap tube
SAFETY WIRE	.025 is fine
NEEDLE NOSE VICE GRIP	
DEBURR TOOL	https://www.aircraftspruce.com/catalog/topages/shavivtools90061.php

Other supplies to have around include:

- Paper towels and shop rags
- Acetone
- Scotchbrite red
- Assorted size snap bushings <https://www.aircraftspruce.com/search/search.php?s=snap+bushing>
- Assorted size AN3 and AN4 bolts/washers/nyloc nuts
- Small oil can and brake oil https://www.amazon.com/ToolUSA-500-Oil-Dispenser-Can/dp/B0018QP1VQ/ref=sr_1_18?ie=UTF8&qid=1521396325&sr=8-18&keywords=oil+can
- Spark Plug gapping tool https://www.amazon.com/Hand-Tools-4450A-Spark-Gauge/dp/B002YKMCDW/ref=sr_1_3?s=automotive&ie=UTF8&qid=1521396423&sr=1-3&keywords=spark+plug+gapper

Other items you may want if placing an ACS order include:

- Metal dataplate
- EXPERIMENTAL sticker
- Circuit breakers, toggle switches, fuses
- Snap Vents (2) then you will need a 3-1/4 hole saw
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