

Caution:

Please Read Before Using This Guide

1. This document is NOT the FAA-approved Applicable Models List. Matters of certification eligibility can be found at www.skytecair.com/eligibility.htm
2. This document is simply intended as a **guide** for fitting most aircraft by type. However, due to variances between aircraft due to manufacturing changes, modifications, cumulative years of maintenance and/or conversion, **it is nearly impossible to definitively recommend the correct starter for any particular aircraft based on make/model alone.** So please only use this document *AS A GUIDE ONLY*. When in doubt, call the Sky-Tec factory for confirmation. **Installation of the wrong starter will void the factory warranty.** Sky-Tec will not warrant starter wear or damage on starters (or engines) where a starter is installed incorrectly (including wrong ring gear teeth or wrong voltage, etc.) or is used in an inappropriate application.
3. There may still be a starter to fit an aircraft whose entry shows “no starter available”. Many older aircraft have been converted and upgraded. Confirm the engine make/model before determining a Sky-Tec is or is not applicable.
4. Please note the use of ring gear tooth count (on Lycoming engines) and aircraft voltage in the model numbers of all Sky-Tec starters. If your aircraft ring gear teeth and/or voltage do not match the numbers in the model recommended for your aircraft, DO NOT ORDER THE STARTER without first contacting Sky-Tec or adjusting your model number accordingly.
5. Recommendations are suggested for aircraft with factory standard equipment. Factory or after-market installed options such as air conditioning may affect the applicability of the primary recommendation. Piper singles with air conditioning must utilize the NL-series starters.
6. Please do not assume ring gear tooth count (on Lycoming engines). Through the years, mechanics have been known to replace ring gears with whatever model they had laying around their shops at the time the work was performed. Therefore it is imperative that the installer CONFIRM RING GEAR TOOTH COUNTS ON ALL LYCOMING INSTALLATIONS.
7. IF YOU ARE UNSURE WHETHER THE STARTER YOU RECEIVE IS CORRECT, PLEASE DO NOT MOUNT IT. Call the factory first. Mounting the starter will preclude you from returning the starter to Sky-Tec as new/unused. Mounting the starter places ‘bite marks’ around the mounting holes and will have to be treated as *used* starters (no new exchange will be permitted).
8. Never use a PM or LS (permanent magnet) starter on a helicopter. Sky-Tec ONLY recommends HT or HTInLine starters (NL models) for use on helicopters.
9. And finally, this list is only as comprehensive as we could attempt to make it. We realize there are omissions and variances. We’ve done our best to include the majority of general aviation aircraft models. If you cannot find what you are looking for (or what you are looking for is not where you’d expect it), we encourage you to speak with the factory to find the best starter for your particular application.
10. Aircraft with sandcast TCM 520 engines (alternator in rear) are notoriously difficult to crank smoothly. TCM utilized a 32:1 starter Adapter on sandcast motors that no known starter is especially good at cranking. Sky-Tec makes no claims that our ST3 starter will crank sandcast TCM520 engines any better than anyone else’s starter.

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

WARRANTY

Sky-Tec Partners, Ltd. ("Sky-Tec") warrants its starters to be free from defects in materials and workmanship for a period of two years from the date of purchase. Sky-Tec will repair or replace any starter it determines to have failed under the terms of this warranty if and only if the customer's original starter is sent to Sky-Tec for evaluation.

Alternatively, Sky-Tec may offer a warranty exchange program to any customer requiring expedited replacement. The customer will be responsible for purchasing a replacement starter directly from Sky-Tec and returning their original starter directly to Sky-Tec for evaluation. If the starter is found to have failed under the terms of this warranty, appropriate credit will be given to the customer for the value of the starter plus domestic UPS Ground shipping charges. Customers will be responsible for any additional expedited shipping charges. Alternatively, a customer may receive core credit regardless of warrantability of the returned starter.

Sky-Tec makes no warranty as to suitability of its products for the intended application.

To be considered eligible for warranty credit, **DO NOT PURCHASE A REPLACEMENT STARTER FROM A DEALER.** Sky-Tec will not offer warranty credit for replacement starters purchased through a dealer. All warranty claims must be handled directly with the manufacturer, Sky-Tec Partners, Ltd.

If you suspect a starter to be defective, consult the [Aircraft Troubleshooting Guide](#) supplied. Before returning a starter to Sky-Tec for service, you must first **obtain a return authorization electronically online.**

Starters returned to the factory via UPS with a valid Return Authorization number will usually be repaired or replaced the same day as received. Other carriers and/or circumstances may increase turn around to 1-2 days.

Warranty Details

Sky-Tec warrants its starters to be free from defects in materials and workmanship for a period of two years from the date of purchase.

Sky-Tec Warranty is *voided* if:

- A starter that is used in the wrong application*.
- Customer attempts to service the starter in the field by removing or replacing any components not specifically instructed and/or supplied by Sky-Tec.
- The starter is determined to have failed by application of voltage in excess of amount specified on starter name plate (physical evidence: armature will be splayed and/or exploded due to the forces of over-rotation and the associated centripetal force WITHOUT discoloration of commutator bars or warping of brush insulator).
- The starter is determined to have failed by application of voltage in excess of cranking times specified on [starter tag](#) (shipped with all starters) which reads: "Crank for no more than 10 seconds then allow 20 seconds cool-down. Repeat up to 6 times. Then let starter cool for 30 min." (physical evidence: copper armature bars are discolored to white/purple hues, brush wires are discolored similarly, brush insulator is warped or scorched, smell of burnt metal evident, and/or melted insulation in motor area). This condition is often caused by the aircraft's starter contactor (solenoid) sticking "closed" beyond the pilot's intended period of cranking.
- The starter is determined to have failed by a counter-rotational force caused by the engine's ignition system failing to retard all sparks at or past piston TDC during the cranking period aka "**kickback**" (physical evidence: bent or broken mount, broken or displaced magnets, broken or chipped brush assemblies, broken drive components and/or excessively worn or damaged drive gear teeth)**.
- The starter has any foreign substance located internally including motor oil, cleaning agents or foreign particles not found in the starter's normal composition (physical evidence: presence of substance within starter causing solenoids or motor brush assemblies to wear prematurely and/or function improperly).
- A starter returned to Sky-Tec under warranty-exchange is determined to perform to specifications (i.e. the starter is good). Warranty applies to starters with defects, not good starters. Core credit may be given to the customer should the core be determined to be rebuildable at Sky-Tec's sole discretion.
- The starter is damaged by impact, shock, excessive shaking or other physical abuse (physical evidence: dents to starter components, loose or stripped connection terminals, and bent components not caused by defects in components, design or workmanship).

Additional Warranty Notes

* Ring gear/starter mismatches are the sole responsibility of the installing mechanic and/or aircraft owner. A starter that has been mounted to an engine can no longer be returned for credit as a new starter and will be considered to be a used starter by the factory. **CHECK FOR ALL FIT/CLEARANCE ISSUES BEFORE INSTALLING THE STARTER.** Once mounted, some starters may be converted to the proper model by Sky-Tec's Repair Station at the starter owner's sole expense (time/materials cost). **Obtain a Return Authorization** before returning any starter to Sky-Tec for conversion.

** Sky-Tec will waive the kickback exclusion above for up to two years from date of installation of the starter **only** for those aircraft with a valid logbook entry showing they were operating [E-MAG Ignition's Electronic Ignition solution](#) during the time of starter failure due to kickback.

Sky-Tec cannot and never will warrant damage to non-starter components or any non-starter-related expense(s) including labor, inconvenience, transportation or loss of business due to any starter failure.

Additional Notes for Sky-Tec High-Torque Inline (NL Model) Starters Only:

The NL starter is designed to respond to kickback and other destructive engine cranking anomalies by shearing a shear pin on the starter's internal lay shaft. Sky-Tec will not warrant any damage to non-starter components (ring gear, etc.) should the shear pin fail to shear. However, should the pin fail to shear causing the starter nose housing to crack, Sky-Tec will warrant the replacement of the nose/mount housing(s) for a period of up to two years from date of purchase under the standard warranty terms above (return to factory for repair/replacement).

The NL starter is designed to fit nearly every Lycoming aircraft application by simulating the location of various mounting points found on the old, heavy OEM starters. As such, NL starters feature four machined aluminum bosses cast into the starter mount. These bosses are not required for proper function of the NL starter but serve only to support accessories on/around the starter. If a specific aircraft installation requires the alteration or removal of one or all four of these bosses, customers may remove the bosses without loss of any warranty privileges. Acceptable means of removal include cutting and/or grinding without incurring any damage to other starter components or features. However, starter damage or starter failure due to the **improper** or **inappropriate** removal of these bosses will **not** be covered under the factory warranty.

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

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Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

Starter Model Cross Reference by OEM Manufacturer

PLEASE READ THIS CAUTION BEFORE USING THE TABLE BELOW!

THE PRIMARY SOURCE OF FIT DATA IS THE AIRCRAFT FIT GUIDE THAT BEGINS ON THE NEXT PAGE. USE THIS CROSS REFERENCE TABLE ONLY IF NO OTHER AIRFRAME DATA IS AVAILABLE OR TO REPLACE LISTED MANUFACTURER'S STARTER WITH A SKY-TEC. AS WITH ALL STARTER MODEL RECOMMENDATIONS IN THIS GUIDE, PLEASE FAMILIARIZE YOURSELF WITH NUMBERED ITEMS ON PAGE 2 OF THIS FIT GUIDE. THESE RECOMMENDATIONS ARE ONLY A GUIDE. THE INSTALLING MECHANIC HAS ULTIMATE RESPONSIBILITY FOR ENSURING THAT THE STARTER IS FULLY COMPATIBLE WITH THE AIRFRAME AND ENGINE BEFORE INSTALLING THE STARTER.

Lycoming Engines

| Manufacturer | Mfr PN | Lycoming PN | Volts | Pitch | Weight | Installed On | Replace With | Weight |
|--|--------------|-------------|-------|-------|-------------------------|-------------------------|--------------|--------|
| Prestolite, Electrosystems, or Kelly Aerospace | 31A21210 | 31A21210 | 12V. | 10/12 | 11.4 | 320, 360, 540, 235, 540 | 122-NL | 9.4 |
| | ERB-8011 | N/A | 24V. | 12/14 | 9.5 | 235,290,320,340,360,540 | 149-NL/ec | 9.4 |
| | ERB-8012 | N/A | 24V. | 10/12 | 9.5 | 320, 340, 360, 540 | 122-NL/ec | 9.4 |
| | ERZ-8011 | N/A | 12V. | 12/14 | 9.5 | 235,290,320,340,360,540 | 149-NL | 9.4 |
| | ERZ-8012 | N/A | 12V. | 10/12 | 9.5 | 320, 340, 360, 540 | 122-NL | 9.4 |
| | MHB-4001 | 76212 | 24V. | 12/14 | 18.0 | 320, 340, 360, 540 | 149-NL/ec* | 9.4 |
| | MHB-4002 | 75700 | 24V. | 12/14 | 18.0 | TIO-541-E | 149-24HT/ec* | 8.4 |
| | MHB-4003 | 76214 | 24V. | 12/14 | 18.0 | 360 | 149-NL/ec* | 9.4 |
| | MHB-4005 | 78791 | 24V. | 12/14 | 18.0 | TIGO-541 | 149-24HT/ec* | 8.4 |
| | MHB-4007 | LW-11936 | 24V. | 12/14 | 18.0 | 540 | 149-NL/ec* | 9.4 |
| | MHB-4008 | LW-12023 | 24V. | 12/14 | 18.0 | TVO-435, VO-435 | 149-24HT/ec* | 8.4 |
| | MHB-4009 | LW-12159 | 24V. | 12/14 | 18.0 | LTIO-540 | 149-NLR/ec* | 9.4 |
| | MHB-4010 | LW-14208 | 24V. | 12/14 | 18.0 | 320, 340, 360, 540 | 149-NL/ec* | 9.4 |
| | MHB-4011 | LW-14212 | 24V. | 12/14 | 18.0 | TIO-541-E | 149-24HT/ec* | 8.4 |
| | MHB-4012 | LW-14210 | 24V. | 12/14 | 18.0 | 360 | 149-NL/ec* | 9.4 |
| | MHB-4013 | LW-14213 | 24V. | 12/14 | 18.0 | 540 | 149-NL/ec* | 9.4 |
| | MHB-4014 | LW-14214 | 24V. | 12/14 | 18.0 | LTIO-540 | 149-NLR/ec* | 9.4 |
| | MHB-4015 | LW-15483 | 24V. | 10/12 | 18.0 | 235 | 122-NL/ec* | 9.4 |
| | MHB-4016 | LW-15572 | 24V. | 12/14 | 18.0 | 320, 340, 360, 540 | 149-NL/ec* | 9.4 |
| | MHB-4016A | 31B22462 | 24V. | 10/12 | 18.0 | 720 | 122-NL/ec* | 9.4 |
| | MHB-4016A | 31B22462 | 24V. | 10/12 | 18.0 | 720 | 122-NL/ec* | 9.4 |
| | MHB-4017 | LW-15576 | 24V. | 12/14 | 18.0 | TIO-541-E | 149-24HT/ec* | 8.4 |
| | MHB-4018 | LW-15577 | 24V. | 12/14 | 18.0 | 540 | 149-NL/ec* | 9.4 |
| | MHB-4019 | LW-15574 | 24V. | 12/14 | 18.0 | 360 | 149-NL/ec* | 9.4 |
| | MHB-4020 | LW-18990 | 24V. | 12/14 | 18.0 | 360 | 149-NL/ec* | 9.4 |
| | MHB-6014 | 31B22477 | 24V. | 12/14 | 8.0 | 540 | 149-NL/ec* | 9.4 |
| | MHB-6016 | 31B22474 | 24V. | 12/14 | 8.0 | 720 | 149-NL/ec* | 9.4 |
| | MHB-6018 | 31B22476 | 24V. | 12/14 | 8.0 | 235 | 149-NL/ec* | 9.4 |
| | MHB-EO-26102 | LW-14447 | 24V. | 12/14 | 18.0 | 360 | 149-NL/ec* | 9.4 |
| | MHJ-4004 | 77879 | 24V. | 10/12 | 18.0 | 720 | 122-NL/ec* | 9.4 |
| | MHJ-4005 | LW-12787 | 24V. | 10/12 | 18.0 | 720 | 122-NL/ec* | 9.4 |
| | MMU-4001 | LW-16207 | 24V. | 10/12 | 18.0 | 235 | 122-NL/ec* | 9.4 |
| | MMU-6001 | 31B22475 | 24V. | 10/12 | 8.0 | 320, 340, 360, 540 | 122-NL/ec* | 9.4 |
| | MZ-4204 | 76210 | 12V. | 10/12 | 18.0 | 235, 290, 320 | 122-NL | 9.4 |
| | MZ-4205 | 76213 | 12V. | 12/14 | 18.0 | 360 | 149-NL | 9.4 |
| | MZ-4206 | 76211 | 12V. | 12/14 | 18.0 | 235,290,320,340,360,540 | 149-NL | 9.4 |
| | MZ-4207 | 75699 | 12V. | 12/14 | 18.0 | TIO-541-A | 149-24HT/ec* | 8.4 |
| | MZ-4216 | LW-10556 | 12V. | 12/14 | 18.0 | LIO-320,LO-360,LIO-360 | 149-NLR | 9.4 |
| | MZ-4217 | LW-14209 | 12V. | 12/14 | 18.0 | 360 | 149-NL | 9.4 |
| | MZ-4218 | LW-14207 | 12V. | 12/14 | 18.0 | 235,290,320,340,360,540 | 149-NL | 9.4 |
| | MZ-4219 | LW-14211 | 12V. | 12/14 | 18.0 | TIO-541-A | 149-24HT/ec* | 8.4 |
| | MZ-4220 | LW-14215 | 12V. | 12/14 | 18.0 | LIO-320,LO-360,LIO-360 | 149-NLR | 9.4 |
| | MZ-4221 | LW-15573 | 12V. | 12/14 | 18.0 | 360 | 149-NL | 9.4 |
| | MZ-4222 | LW-15571 | 12V. | 12/14 | 18.0 | 235,290,320,340,360,540 | 149-NL | 9.4 |
| | MZ-4223 | LW-15575 | 12V. | 12/14 | 18.0 | TIO-541-A | 149-24HT/ec* | 8.4 |
| | MZ-4224 | LW-16460 | 12V. | 12/14 | 18.0 | 320 | 149-NL | 9.4 |
| | MZ-4225 | LW-18047 | 12V. | 12/14 | 18.0 | 360 | 149-NL | 9.4 |
| MZ-4226 | LW-18989 | 12V. | 12/14 | 18.0 | 360 | 149-NL | 9.4 | |
| MZ-6204 | 31A22473 | 12V. | 10/12 | 8.0 | 235, 290, 320 | 149-NL | 9.4 | |
| MZ-6220 | 31A22472 | 12V. | 12/14 | 8.0 | LIO-320,LO-360,LIO-360 | 149-NLR | 9.4 | |
| MZ-6222 | 31A22470 | 12V. | 12/14 | 8.0 | 235,290,320,340,360,540 | 149-NL | 9.4 | |
| MZ-6224 | 31A22471 | 12V. | 12/14 | 8.0 | 320 | 149-NL | 9.4 | |
| SRB-9021 | N/A | 24V. | 12/14 | 7.6 | 235,290,320,340,360,540 | 149-24LS | 8.0 | |
| SRB-9022 | N/A | 24V. | 10/12 | 7.6 | 320, 340, 360, 540 | 122-NL/ec | 9.4 | |
| SRB-9031 | N/A | 24V. | 12/14 | 7.6 | 235,290,320,340,360,540 | 149-24PM | 8.0 | |
| SRB-9032 | N/A | 24V. | 10/12 | 7.6 | 320, 340, 360, 540 | 122-NL/ec | 9.4 | |
| SRZ-9021 | N/A | 12V. | 12/14 | 7.6 | 235,290,320,340,360,540 | 149-12LS | 8.0 | |
| SRZ-9022 | N/A | 12V. | 10/12 | 7.6 | 235, 290, 320 | 122-NL | 9.4 | |
| SRZ-9031 | N/A | 12V. | 12/14 | 7.6 | 235,290,320,340,360,540 | 149-12PM | 8.0 | |
| SRZ-9032 | N/A | 12V. | 10/12 | 7.6 | 235, 290, 320 | 122-NL | 9.4 | |

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Lycoming Engines (cont.)

| Manufacturer | Mfr PN | Lycoming PN | Volts | Pitch | Weight | Installed On | Replace With | Weight |
|--------------|----------|-------------|-------|-------|--------|---------------|--------------|--------|
| Delco-Remy | 1109669 | 69953 | 24V. | 10/12 | 18.0 | 235, 290, 320 | 122-NL/ec* | 9.4 |
| | 1113471 | 72279 | 12V. | 10/12 | 18.0 | 720 | 122-NL | 9.4 |
| Lycoming | 31A21198 | 31A21198 | 12V. | 12/14 | 11.4 | 235, 320 | 149-NL | 9.4 |
| | 31B21064 | 31B21064 | 12V. | 12/14 | 11.4 | 360, 540 | 149-NL | 9.4 |
| | 31B21211 | 31B21211 | 12V. | 10/12 | 11.4 | 235, 320 | 122-NL | 9.4 |
| | PM1201 | 31A22206 | 12V. | 12/14 | 11.5 | 320, 360, 540 | 149-NL | 9.4 |
| Lamar | PM1203 | 31A22361 | 12V. | 10/12 | 11.5 | 235, 320 | 122-NL | 9.4 |
| | PM2401 | 31B22207 | 24V. | 12/14 | 11.5 | 320, 360, 540 | 149-NL/ec* | 9.4 |
| | PM2403 | 31B22362 | 24V. | 10/12 | 11.5 | 235,320 | 122-NL/ec* | 9.4 |
| | PM2404 | 31B22553 | 24V. | 12/14 | 11.5 | LTIO-540 | 149-NL/ec* | 9.4 |
| | PM1204 | 31A22552 | 12V. | 12/14 | 11.5 | 320, 360, 540 | 149-NL | 9.4 |

Teledyne Continental Engines

| Manufacturer | Mfr PN | Volts | If Installed On: | Then Replace With | Weight |
|-------------------------|---------|-------------------------|-------------------------|-------------------|--------|
| Delco-Remy | 1109471 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 1109681 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 1109684 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 1108249 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 646275 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| 1108234 | 24V. | O300-D through O-470 | C24ST3 | 6.5 | |
| | | IO-520 through TSIO-550 | C24ST5 | 9.4 | |
| Teledyne Continental | 537241 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 535856 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 539910 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 626960 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 627842 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 628482 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 629176 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 637847 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 634592 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 646236 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 646238 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | 655565 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C24ST5 | 9.4 |
| | 627841 | 24V. | O300-D through O-470 | C24ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C24ST5 | 9.4 |
| | 634433 | 24V. | O300-D through O-470 | C24ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C24ST5 | 9.4 |
| | 655566 | 24V. | O300-D through O-470 | C24ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C24ST5 | 9.4 |
| 656181 | 24V. | O300-D through O-470 | C24ST3 | 6.5 | |
| | | IO-520 through TSIO-550 | C24ST5 | 9.4 | |
| Lamar | XT-1207 | 12V. | O300-D through O-470 | C12ST3 | 6.5 |
| | | | IO-520 through TSIO-550 | C12ST5 | 9.4 |
| | CT-2407 | 24V. | O300-D through O-470 | C24ST3 | 6.5 |
| IO-520 through TSIO-550 | | | C24ST5 | 9.4 | |

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Recommended Starter by Aircraft Manufacturer

Aero Commander

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------------|--------------------|---------------------|-------|------------------------|------|--------------------------|------|
| 500 | LYC O-540-A2B | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | 149-24HT/ec* | |
| 560 | LYC GO-480 | | | No fit | | | |
| 100 DARTER | LYCOMING O-320-A2B | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| 100 LARK | LYCOMING O-360-A2F | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| 500A | CONT IC-470-M | TCM Starter Adapter | 24 | C24ST3 | | | |
| 700 (Fuji Commander) | LYC TIO-540 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | 149-24HT/ec* | |

Aeronca

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|------------------|-----------------|------------|-------|------------------------|------|--------------------------------------|------|
| 11AC CHIEF | CONT A65-8 | | | | | No fit unless upgraded to -12 Engine | |
| 11BC CHIEF | CONT C-85 | | | | | No fit unless upgraded to -12 Engine | |
| 11CC SUPER CHIEF | CONT C85-8F | | | | | No fit unless upgraded to -12 Engine | |
| 15AC SEDAN | CONT O-300 | Pull-Start | 12 | KCST2 | 15 | | |
| 65TC | CONT A65-7 | | | | | No fit unless upgraded to -12 Engine | |
| 7AC CHAMP | CONT A65-8 | | | | | No fit unless upgraded to -12 Engine | |
| 7AC CHAMPION | CONTINENTAL | | | | | No fit unless upgraded to -12 Engine | |
| 7AC CHAMPION | CONTINENTAL | | | | | No fit unless upgraded to -12 Engine | |
| 7ACA | FRANKLIN 2A-120 | No fit | | | | | |
| 7BCM CHAMP | CONT C-85 | | | | | No fit unless upgraded to -12 Engine | |
| 7CCM CHAMP | CONT C90-12 | Pull-Start | 12 | KCST2 | 15 | | |
| 7DC CHAMP | CONT C85-8 | | | | | No fit unless upgraded to -12 Engine | |
| 7EC CHAMP | CONT C-90-12F | Pull-Start | 12 | KCST2 | 15 | | |
| C-2 | CONT? | | | | | No fit unless upgraded to -12 Engine | |
| K SCOUT | CONT? | | | | | No fit unless upgraded to -12 Engine | |

Aerostar Aircraft

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|---------------------|-----------------|---------------------|-------|------------------------|------|--------------------------|------|
| 601P | LYC IO-540-S1A5 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | 149-24PM | |
| 700P - Left Engine | LYC TIO-540 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | 149-24PM | |
| 700P - Right Engine | LYC LTIO540 | 149-Tooth Ring Gear | 24 | 149-NLR/ec* | | | |

American Champion

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------------|---------------|---------------------|-------|------------------------|------|--------------------------|------|
| ADVENTURE 7GCAA | LYC O-320-B2B | 122-Tooth Ring Gear | 12 | 122-LS | 1 | 122-NL | |
| AER FC-90 TRI-TRAVLR | CONT C-90 | Pull-Start | 12 | KCST2 | 15 | | |
| AERONCA 7EC TRAVELER | CONT C-90 | Pull-Start | 12 | KCST2 | 15 | | |
| AURORA 7ECA | LYC O-235-K2C | 122-Tooth Ring Gear | 12 | 122-12LS | 1 | 122-NL | |
| CITABRIA 7GCAA | LYC O-320-B2B | 149-Tooth Ring Gear | 12 | 149-12LS | 1 | 149-NL | |
| CITABRIA 7KCAB | LYC IO-320- | 149-Tooth Ring Gear | 12 | 149-12LS | 1 | 149-NL | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

| | | | | | | |
|----------------|---------------|---------------------|----|----------|---|----------|
| EXPLORER 7GCBC | LYC IO-320- | 149-Tooth Ring Gear | 12 | 149-12LS | 1 | 149-NL |
| SCOUT 8GCBC | LYC O-360-C2E | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS |

American General

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|---------------|---------------------|-------|------------------------|------|--------------------------|------|
| AG5B TIGER | LYC O-360-A4K | 149-Tooth Ring Gear | 24 | 149-NL | | 149-24LS | 5 |

Aviat Aircraft

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|-------------------|---------------------|-------|------------------------|------|--------------------------|------|
| EAGLE II | LYC AEIO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| PITTS S-1-11B | LYC IO-540 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| PITTS S-1S | LYC AEIO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| PITTS S-2C | LYC AEIO-540 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PITTS S-2C | LYC AEIO-540 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| A-1 HUSKY | LYC O-360-C1G | 149-Tooth Ring Gear | 12 | 149-12PM | 1 | 149-NL | |
| A-1B HUSKY | LYC O-360-A1P | 149-Tooth Ring Gear | 12 | 149-12PM | 1 | 149-NL | |
| PITTS S-1 | LYC AEIO-360-A1E | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-12LS | |
| PITTS S-2 | LYC AEIO-540-D4A5 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |

Beechcraft

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------------|-----------------|---------------------|-------|------------------------|------|--------------------------|---------|
| 23 MUSKETEER | LYC O-320-D2B | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12PM | |
| 23A MUSKETEER | LYC O-360-A4K | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12PM | |
| 33 DEBONAIR | CONT IO-470-J | TCM Starter Adapter | 12 | C12ST3 | | | |
| 33 F.E. | CONT IO-470-K | TCM Starter Adapter | 12 | C12ST3 | | | |
| 33-A&B 33 DEBONAIR | CONT IO-470-K | TCM Starter Adapter | 12 | C12ST3 | | | |
| 33-C33 DEBONAIR | CONT IO-520-B | TCM Starter Adapter | 12 | C12ST5 | | | |
| 33-C33A DEBONAIR | CONT IO-520-B | TCM Starter Adapter | 12 | C12ST5 | | | |
| 33-E33A BONANZA | CONT IO-520-B | TCM Starter Adapter | 12 | C12ST5 | | | |
| 33-F & E 33C | CONT IO-520-B | TCM Starter Adapter | 12 | C12ST5 | | | |
| 33-F33 A BONANZA | CONT IO-520-B | TCM Starter Adapter | 12 | C12ST5 | | | |
| 33-G33 | CONT IO-470-N | TCM Starter Adapter | 12 | C12ST3 | | | |
| 35 BONANZA | CONT E-185 | | V | No Fit | | | |
| 35-135 BONANZA | CONT E-185-1 | | V | No Fit | | | |
| 35-A35 BONANZA | CONT E-185-1 | | V | No Fit | | | |
| 35-B35 BONANZA | CONT E-185-8 | | V | No Fit | | | |
| 35-C35/D35 BONANZA | CONT E-185-11 | | V | No Fit | | | |
| 35-E,F,&G 35 BONANZA | CONT E-225-8 | | V | No Fit | | | |
| 35-H35 BONANZA | CONT O-470-G | TCM Starter Adapter | 12 | C12ST3 | | | |
| 35-J35 BONANZA | CONT IO-470-C | TCM Starter Adapter | 12 | C12ST3 | | | |
| 35-K & M 35 BONANZA | CONT IO-470-C | TCM Starter Adapter | 12 | C12ST3 | | | |
| 35-N & P 35 BONANZA | CONT IO-470-N | TCM Starter Adapter | 12 | C12ST3 | | | |
| 35-S35 BONANZA | CONT IO-520-B | TCM Starter Adapter | 12 | C12ST5 | | | |
| 35-V35 BONANZA | CONT IO-520-B | TCM Starter Adapter | V | C(V)ST5 | | | |
| 35-V35A & B TC | CONT TSIO-520-D | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 35-V35A BONANZA | CONT IO-520-B | TCM Starter Adapter | V | C(V)ST5 | | | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------------------|------------------|---------------------|-------|------------------------|-------------------------------|--------------------------|---------|
| 35-V35B BONANZA | CONT IO-520-BA | TCM Starter Adapter | V | C(V)ST5 | | | |
| 35-V35TC BONANZA | CONT TSIO-520-D | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 36 A36 BONANZA | CONT IO-520-B | TCM Starter Adapter | V | C(V)ST5 | | | |
| 36 A36TC BONANZA | CONT TSIO-520-UB | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 36 B36TC BONANZA | CONT TSIO-520-UB | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 50 B50 TWIN BONANZA | LYC GO-435-C2 | | | No Fit | | | |
| 50 C50 TWIN BONANZA | LYC GO-480-F1A6 | | | No Fit | | | |
| 50 D50 A,B,C,E | LYC GO-480-G2F6 | | | No Fit | | | |
| 50 E50 F&G SUPERCHAR | LYC GSO-480-A1A6 | | | No Fit | | | |
| 50 H & J 50 | LYC GSO-480-A1A6 | | | No Fit | | | |
| 50 TWIN BONANZA | LYC GO-435-C2 | | | No Fit | | | |
| 55 A55 BARON | CONT IO-470-L | TCM Starter Adapter | V | C(V)ST3 | | | |
| 55 B55 BARON | CONT IO-470-L | TCM Starter Adapter | V | C(V)ST3 | | | |
| 55 BARON | CONT IO-470-L | TCM Starter Adapter | V | C(V)ST3 | | | |
| 55 C & D 55 BARON | CONT IO-520-CB | TCM Starter Adapter | V | C(V)ST5 | | | |
| 55 E55 BARON | CONT IO-520-CB | TCM Starter Adapter | V | C(V)ST5 | | | |
| 56TC TURBO BARON | LYC TIO-541-E1B4 | 149-Tooth Ring Gear | 24 | NO FIT | alternator boss on wrong side | | |
| 58 BARON | CONT IO-520-C | TCM Starter Adapter | V | C(V)ST5 | | | |
| 58P BARON | CONT TSIO-520-L | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 58P BARON | CONT TSIO-520-WB | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 58TC BARON | CONT TSIO-520-L | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 58TC BARON | CONT TSIO-520-WB | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 60 A60 DUKE | LYC TIO-541-E1A4 | 149-Tooth Ring Gear | 24 | 149-24HT/ec* | | | 16 |
| 60 B60 DUKE | LYC TIO-541-E1C4 | 149-Tooth Ring Gear | 24 | 149-24HT/ec* | | | 16 |
| 60 DUKE | LYC TIO-541-E1A4 | 149-Tooth Ring Gear | 24 | 149-24HT/ec* | | | 16 |
| 76 DUCHESS CR Right Engine | LYC LO-360 (R) | 149-Tooth Ring Gear | V | 149-NLR | | | |
| 76 DUCHESS Left Engine | LYC O-360 | 149-Tooth Ring Gear | V | 149-NL | | 149-v(V)LS | |
| 76 DUCHESS Matched Engines | LYC O-360 | 149-Tooth Ring Gear | V | 149-NL | | | |
| 77 SKIPPER | LYC O-235-L2C | 122-Tooth Ring Gear | 12 | 122-12LS | | 122-NL | |
| 95 B95 TRAVEL AIR | LYC O-360-A1A | 122-Tooth Ring Gear | V | 122-NL | | 122-??PM | |
| 95 B95A,D95A | LYC IO-360-B1B | 122-Tooth Ring Gear | V | 122-NL | | 122-??PM | |
| 95 E95 TRAVEL AIR | LYC IO-360-B1B | 122-Tooth Ring Gear | V | 122-NL | | 122-??PM | |
| A23 C 23 | LYC O-360-A4K | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| A23-19/19A SPORT | LYC O-320-E2C | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12PM | |
| A23-24 SUPER III | LYC IO-360-A2B | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| A23A II | CONT IO-346-A | TCM Starter Adapter | 12 | C12ST3 | | | |
| A24R SIERRA 200 | LYC IO-360-A1B | 149-Tooth Ring Gear | V | 149-NL | | 149-(V)LS | |
| A56TC TURBO BARON | LYC TIO-541-E1B4 | 149-Tooth Ring Gear | 24 | 149-24HT/ec* | | 149-24HT | |
| B19 SPORT | LYC O-320-E2C | ?-tooth Ring Gear | 12 | ?-NL | | ?-12PM | |
| B24R SIERRA 200 | LYC IO-360-A1B6 | 149-Tooth Ring Gear | V | 149-NL | | 149-(V)LS | |
| BARON 58 | CONT IO-550-C | TCM Starter Adapter | V | C(V)ST5 | | | |
| BONANZA A36 | CONT IO-550-B | TCM Starter Adapter | V | C(V)ST5 | | | |
| C23 SUNDOWNER | LYC O-360-A4G | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12PM | |
| C24R SIERRA 200 | LYC IO-360-A1B6 | 149-Tooth Ring Gear | V | 149-NL | | 149-(V)LS | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|---------------------|-------------------|---------------------|-------|------------------------|------|--------------------------|---------|
| MENTOR T-34 | CONT IO-520 | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| MENTOR T-34 | CONT O-470 | TCM Starter Adapter | V | C(V)ST3 | | | |
| QUEEN AIR '65 | LYC IGSO-480-A1E6 | | | No Fit | | | |
| QUEEN AIR '70 | LYC IGO-480-A1E6 | | | No Fit | | | |
| QUEEN AIR '80 | LYC IGSO-540-A1A | | | No Fit | | | |
| QUEEN AIR '88 | LYC IGSO-540-A1D | | | No Fit | | | |
| QUEEN AIR A65 | LYC IGSO-480-A1E6 | | | No Fit | | | |
| QUEEN AIR A80 | LYC IGSO-540-A1A | | | No Fit | | | |
| QUEEN AIR B80 | LYC IGSO-540-A1A | | | No Fit | | | |
| QUEEN AIR B80 TO'72 | LYC IGSO-540-A1A | | | No Fit | | | |

Bell

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|-----------------|------------|-------|------------------------|------|--------------------------|------|
| 214B | LYC T-550-8D | | | No Fit | | | |
| 214B-1 | LYC T-550-8D | | | No Fit | | | |
| 47G2 | LYC VO-435-A1B | | | No Fit | | | |
| 47G2A | LYC VO-435-A1E | | | No Fit | | | |
| 47G2A1 | LYC VO-435-A1E | | | No Fit | | | |
| 47G3B1 | LYC TVO-435-G1A | | | No Fit | | | |
| 47G3B2 | LYC TVO-435-G1A | | | No Fit | | | |
| 47G3B2A | LYC TVO-435-G1A | | | No Fit | | | |
| 47G4 , 4A | LYC VO-540-B1B3 | | | No Fit | | | |
| 47G5 , 5A | LYC VO-435-B1A | | | No Fit | | | |
| 47J2 | LYC VO-540-B1B | | | No Fit | | | |
| 47J2A | LYC VO-540-B1B3 | | | No Fit | | | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

Bellanca

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|-----------------------|-------------------|---------------------|-------|------------------------|------|--------------------------|---------|
| 14-12-F3 CRUISAIR | FRANK 6AC264F3 | | 12 | F12ST1 | | | |
| 14-13 CRUISEMASTER | FRANK 6A4-150-B3 | | 12 | F12ST1 | | | |
| 14-19 CRUISEMASTER | LYC O-435-A | | | No Fit | | | |
| 14-19-2 CRUISEMASTER | CONT O-470-K | TCM Starter Adapter | 12 | C12ST3 | | | |
| 14-19-3,A 260A,B,C. | CONT IO-470-F | TCM Starter Adapter | 12 | C12ST3 | | | |
| 17-30 VIKING | CONT IO-520-K1A | TCM Starter Adapter | 12 | C12ST5 | | | 9 (p.2) |
| 17-30A/B SUPR VIKING | CONT IO-520-K1A | TCM Starter Adapter | 12 | C12ST5 | | | 9 (p.2) |
| 17-31A | LYC IO-540-K1E5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| 17-31ATC | LYC IO-540-K1E5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| 17-31TC | LYC IO-540-K1E5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| 7ACA CHAMP | FRANKLIN 2A-120-B | | | No Fit | | | |
| 7ECA | LYC O-235-C1 | 122-Tooth Ring Gear | 12 | 122-12LS | | 122-NL | |
| 7GCAA | LYC O-320-A2D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| 7GCBC | LYC O-320-A2D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| 7KCAB | LYC A/IO-320-E2B | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| 8GCBC F/P SCOUT | LYC O-360-C2E | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| 8KCAB 150 DECATHALON | LYC IO-320-E2B | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| 8KCAB 180 DECATHALON | LYC AEIO-360-H1A | 149-Tooth Ring Gear | 12 | 149-12PM | | 149-12LS ¹ | |
| SUPR DECATHALON 8KCAB | LYC AEIO-360-H1B | 149-Tooth Ring Gear | 12 | 149-12PM | | 149-12LS ¹ | |
| T250 ARIES | LYC IO-540-C4B5 | 149-Tooth Ring Gear | V | 149-NL | | | |

Brittain-Norman

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|--------------------|---------------------|---------------------|-------|------------------------|------|--------------------------|------|
| ISLANDER (BN2B-20) | (2) LYC IO-540-K1B5 | 149-Tooth Ring Gear | 24 | 149-NL/ec | | | |
| ISLANDER (BN2B-26) | (2) LYC O-540-E4C5 | 149-Tooth Ring Gear | 24 | 149-NL/ec | | | |
| TRI ISLANDER | (3) LYC O-540-E4C5 | 149-Tooth Ring Gear | 24 | 149-NL/ec | | | |

Cessna

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|--|-------------------------|---------------------|-------|------------------------|------|--------------------------|------|
| 120 ('46-'49) | CONT C85-12 | Pull-Start | 12 | KCST2 | 15 | | |
| 140 ('46-'51) | CONT C85-12 | Pull-Start | 12 | KCST2 | 15 | | |
| 150 ('59-'67) | CONT O-200-A | Pull-Start | 12 | KCST2 | 15 | | |
| 150 ('69-'77) | CONT O-200-A | Key-Start | 12 | C12ST2 | | | |
| 152 ('78-'85) | LYC O-235 | 122-Tooth Ring Gear | 24 | 122-NL/ec* | | 122-24PM | |
| 170 ('48-'56) | CONT C-145 | Pull-Start | 12 | KCST2 | 15 | | |
| 172 ('55-'59) | CONT O-300-A or O-300-B | Pull-Start | 12 | KCST2 | 15 | | |
| 172A ('60) thru 172B ('61) | CONT O-300-C | Pull-Start | 12 | KCST2 | 15 | | 8 |
| 172C ('62) thru 172H ('67) | CONT O-300-D | TCM Starter Adapter | 12 | C12ST3 | | | 8 |
| 172D Powermatic '63 | CONT GO-300 | TCM Starter Adapter | 12 | C12ST3 | | | |
| 172I ('68) | LYC O-320 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| 172J – Never introduced – Became the 177 (a little trivia for you) | | | | | | | |
| 172K ('69-'70) | LYC O-320 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | 5 |
| 172L ('71-'72) | LYC O-320 | 149-Tooth Ring Gear | V | 149-NL | | | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------------|------------------------|-----------------------|-------|------------------------|---|---------------------------------|---------|
| 172M ('73-'76) | LYC O-320 | 149-Tooth Ring Gear | V | 149-NL | | | |
| 172N ('77-'80) | LYC O-320 | 149-Tooth Ring Gear | V | 149-NL | | | |
| R172K XP ('77-'81) | CONT IO-360 | TCM Starter Adapter | V | C(V)ST3 | Both 12V and 24V R172K's were manufactured. Confirm voltage. Order appropriate starter. | | |
| 172P ('81-'86) | LYC O-320 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | | |
| 172Q ('83-'85) | LYC O-360 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | | |
| 172RG ('80-'85) | LYC O-360 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | | |
| 172R ('95-current) | LYC IO-360 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | 1, 14 | 149-24LS or 149-24PM | 4 |
| 172S ('98-current) | LYC IO-360 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | 1, 14 | 149-24LS or 149-24PM | 4 |
| 175 ('58-'62) | CONT GO-300-A | Pull-Start-CR Starter | 12 | KCST2/SR | 15 | | |
| 177 ('68-'78) | LYC O-320 or LYC O-360 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12PM (except 177 & 177A) | 5, 6 |
| 177RG ('72-'78) | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| 180 ('53-'69) | CONT O-470 | TCM Starter Adapter | 12 | C12ST3 | | | |
| 180 ('70-'81) | CONT O-470 | TCM Starter Adapter | V | C12ST3 if 12V | | C24ST3 if 24V | |
| 182 ('56-'69) | CONT O-470 | TCM Starter Adapter | 12 | C12ST3 | | | |
| 182N ('70-'86) | CONT O-470 | TCM Starter Adapter | V | C12ST3 if 12V | | C24ST3 if 24V | |
| T182 ('81-'85) | LYC O-540 | 149-Tooth Ring Gear | V | 149-NL if 12V | | 149-NL/ec if 24V | |
| R182 RG ('78-'86) | LYC O-540 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | | |
| 182S ('96-2000) | LYC IO-540 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | 1, 14 | 149-24LS or 149-24PM | 4 |
| 182T (2001-current) | LYC IO-540 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | 1, 14 | 149-24LS or 149-24PM | 4 |
| T182T (2001-current) | LYC IO-540 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | 1, 14 | 149-24LS or 149-24PM | 4 |
| 185 ('61-'66) | CONT IO-470 | TCM Starter Adapter | 12 | C12ST3 | | | |
| 185E '66 | CONT IO-520 | TCM Starter Adapter | 12 | C12ST5 | | | 9 (p.2) |
| A185 ('67-'85) | CONT IO-520 | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 185F '84 | CONT IO-520 | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 188 ('66-'79) | CONT 470 & CONT 520 | TCM Starter Adapter | V | C(V)ST3 | | | 9 (p.2) |
| 190 '47-'53 | CONT W-670-23 | No Fit | | | | | |
| 205 ('63-'64) | CONT IO-470 | TCM Starter Adapter | 12 | C12ST3 | | | |
| 206 ('64-'77) | CONT IO-520 | TCM Starter Adapter | 12 | C12ST5 | | | 9 (p.2) |
| 206H (see T206H) | LYC 540 | 149-Tooth Ring Gear | 24 | 149-24PM | 1 | | |
| P206 ('65-'70) | CONT IO-520 | TCM Starter Adapter | V | C12ST5 if 12V | | C24ST3 if 24V | 9 (p.2) |
| 207 ('69-'84) | CONT IO-520 | TCM Starter Adapter | V | C12ST5 if 12V | | C24ST3 if 24V | 9 (p.2) |
| 210 ('60-'86) | CONT IO-470 | TCM Starter Adapter | V | C12ST3 if 12V | | C24ST3 if 24V | |
| P210 ('78-'86) | CONT TSIO-520 | TCM Starter Adapter | 24 | C24ST5 | | | 9 (p.2) |
| 303 CRUSADER | CONT LTSIO-520-AE | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 310 ('55-'75) | CONT O-470 & 520 | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 320 | CONT TSIO-470 | TCM Starter Adapter | V | C(V)ST5 | | | |
| 335 '80 | CONT TSIO-520-EB | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 336 SKYMASTER SL | CONT IO-360 | TCM Starter Adapter | V | C(V)ST5 | | | |
| 337 ('66-'71+) | CONT IO-360 | TCM Starter Adapter | V | C(V)ST5 | | | |
| 340 | CONT TSIO-520-NB | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 400 | CONT TSIO-550-C | TCM Starter Adapter | 24 | C24ST5 | | C12ST5 if 12V | |
| 401A,B | CONT TSIO-520-E | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 402 ('69-'71) | CONT TSIO-520 | TCM Starter Adapter | V | C(V)ST5 | | | 9 (p.2) |
| 404 TITAN | CONT GTSIO-520 | TCM Starter Adapter | 24 | C24ST5 | | | 9 (p.2) |
| 411A '67&'68 | CONT GTSIO-520 | TCM Starter Adapter | 24 | C24ST5 | | | 9 (p.2) |
| 414 ('77-'85) | CONT TSIO-520 | TCM Starter Adapter | 24 | C24ST5 | | | 9 (p.2) |
| 421 ('67-'81) | CONT GTSIO-520 | TCM Starter Adapter | 24 | C24ST5 | | | 9 (p.2) |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|--------------------|------------------|---------------------|-------|------------------------|------|--------------------------|---------|
| T206 | LYC O-540-series | 149-Tooth Ring Gear | 24 | 149-24PM | 1 | | |
| T207 ('69-'84) | CONT TSIO-520 | TCM Starter Adapter | V | C(V)ST5 | | C(V)ST3 | 9 (p.2) |
| T210 ('66-'86) | CONT TSIO-520 | TCM Starter Adapter | V | C(V)ST5 | | C(V)ST3 | 9 (p.2) |
| T310 ('69-'75) | CONT TSIO-520 | TCM Starter Adapter | V | C(V)ST5 | | C(V)ST3 | 9 (p.2) |
| T337B ('67-'69+) | CONT TSIO-360 | TCM Starter Adapter | V | C(V)ST3 | | | |
| TP206 ('66-'70) | CONT IO-520 | TCM Starter Adapter | V | C(V)ST5 | | C(V)ST3 | 9 (p.2) |
| TR182 RG ('79-'86) | LYC O-540 | 149-Tooth Ring Gear | V | 149-NL/ec* | | | |
| TU206A ('66-'86) | CONT TSIO-520 | TCM Starter Adapter | V | C(V)ST5 | | C(V)ST3 | 9 (p.2) |
| U206 ('65-'86) | CONT IO-520 | TCM Starter Adapter | V | C(V)ST5 | | C(V)ST3 | 9 (p.2) |

Champion Aircraft

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|---------------------|----------------|---------------------|-------|------------------------|------|--------------------------|------|
| 7EC | CONT C-90-12F | Pull-Start | 12 | KCST2 | 15 | | |
| 7EC/FC TRAVELER | CONT C-90-12F | Pull-Start | 12 | KCST2 | 15 | | |
| 7ECA CITABRIA (100) | CONT O-200 | Pull-Start | 12 | KCST2 | 15 | | |
| 7ECA CITABRIA (115) | LYC O-235-C1 | 122-Tooth Ring Gear | 12 | 122-12LS | | 122-NL | |
| 7GCAA | LYC O-320-A2D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| 7GCB | LYC O-320-A2B | 122-Tooth Ring Gear | 13 | 122-12LS | | 122-NL | |
| 7GCBC | LYC O-320-A2D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| 7KCAB CITABRIA | LYC IO-320-E2A | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| FC 115 TRI-TRAVELER | LYC O-235-C1 | 122-Tooth Ring Gear | 12 | 122-12LS | | 122-NL | |
| LANCER | CONTINENTAL | Pull-Start | 12 | KCST2 | 15 | | |

Cirrus Design

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|---------------|---------------------|-------|------------------------|------|--------------------------|------|
| SR 20 | CONT IO-360 | TCM Starter Adapter | 24 | C24ST5 | | C24ST3 | |
| SRV-G2 | CONT IO-360 | TCM Starter Adapter | 24 | C24ST5 | | C24ST3 | |
| SR 22 | CONT IO-550 | TCM Starter Adapter | 24 | C24ST5 | | C24ST3 | |
| VK30 | CONT TSIO-550 | TCM Starter Adapter | 24 | C24ST5 | | C24ST3 | |

Commander Aircraft

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|-------------------|-----------------|---------------------|-------|------------------------|------|--------------------------|---------|
| 112 | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| 114 | LYC IO-540 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| 500 | LYC O-540 | 149-Tooth Ring Gear | 24 | 149-24HT | | 149-NL | |
| 520 | LYC GO-435 | | | No Fit | | | |
| 560 | LYC GO-480 | | | No Fit | | | |
| 685 | CONT GTSIO-520- | TCM Starter Adapter | 24 | C24ST5 | | | 9 (p.2) |
| 112TC-A ALPINE | LYC TO-360 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| 114A GRAN TURISMO | LYC IO-540 | 149-Tooth Ring Gear | V | 149-NL | | 149-(V)LS | |
| 114TC | LYC TIO-540 | 149-Tooth Ring Gear | V | 149-NL | | 149-(V)LS | |
| 500A | CONT IO-470 | TCM Starter Adapter | 24 | C24ST5 | | | |
| 500B | LYC IO-540 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | 149-24HT | |
| 500S SHRIKE | LYC IO-540 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | 149-24HT | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|------------------|-----------------|---------------------|-------|------------------------|------|--------------------------|------|
| 500U | LYC IO-540 | 149-Tooth Ring Gear | 24 | 149-NL/cc* | | 149-24HT | |
| 560A | LYC GO-480 | 149-Tooth Ring Gear | | No Fit | | | |
| 560A HC | LYC GO-480 | 149-Tooth Ring Gear | | No Fit | | | |
| 560E | LYC GO-480 | 149-Tooth Ring Gear | | No Fit | | | |
| 560F | LYC IGO-540 | 149-Tooth Ring Gear | | No Fit | | | |
| 680 FL COURSER | LYC IGSO-540 | 149-Tooth Ring Gear | | No Fit | | | |
| 680 FL GRAND | LYC IGSO-540 | 149-Tooth Ring Gear | | No Fit | | | |
| 680 SUPER | LYC GSO-480 | 149-Tooth Ring Gear | | No Fit | | | |
| 680E | LYC GSO-480 | 149-Tooth Ring Gear | | No Fit | | | |
| 680F | LYC IGSO-540 | 149-Tooth Ring Gear | | No Fit | | | |
| 680FLP | LYC IGSO-540 | 149-Tooth Ring Gear | | No Fit | | | |
| 720 ALTI-CRUISER | LYC GSO-480 | 149-Tooth Ring Gear | | No Fit | | | |
| 114B | LYC IO-540-T4B5 | 149-Tooth Ring Gear | V | 149-NL | | 149-v(V)LS | |

Culver

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|-------------------|-------------------|------------|-------|--------------------------------------|------|--------------------------|------|
| LAR 90 CADET/LARK | FRANKLIN 4AC199E3 | | | No Fit | | | |
| LCA CADET | CONT A75-8 | | | No fit unless upgraded to -12 Engine | | | |
| V 2 | CONT C85-12J | Pull-Start | 12 | KCST2 | 15 | | |

Diamond Aircraft

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|----------------|---------------------|-------|------------------------|------|--------------------------|------|
| DA20-C1 | CONT IO-240-B | | 12 | C12ST2/S | | | |
| DA40-180 | LYC IO-360-MIA | 149-Tooth Ring Gear | 24 | 149-24LS | 1 | | |

Enstrom

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|-------------|---------------------|-------|------------------------|------|--------------------------|------|
| 280 | LYC HIO-360 | 149-Tooth Ring Gear | V | 149-(V)HT | | 149-NL | |
| F28 | LYC HIO-360 | 149-Tooth Ring Gear | V | 149-(V)HT | | 149-NL | |

Ercoupe

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|-------------------|---------------|------------|-------|------------------------|------|--------------------------|------|
| 415 | CONT C-75 | | | No Fit | | | |
| 415C | CONT A-65-8 | | | No Fit | | | |
| 415 C-D | CONT C-85-12 | Pull-Start | | KCST2 | 15 | | |
| 415D | CONT C-75-12F | Pull-Start | | KCST2 | 15 | | |
| 415G | CONT C-85-12F | Pull-start | | KCST2 | 15 | | |
| ALON A-2 | CONT C-90-16F | Pull-start | | KCST2 | 15 | | |
| F-1 FORNEY | CONT C-90-12F | Pull-start | | KCST2 | 15 | | |
| MOONEY M-10 CADET | CONT C-90 | Pull-start | | KCST2 | 15 | | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

Extra

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|---------------------|---------------|---------------------|-------|------------------------|------|--------------------------|------|
| 200 | LYC AEIO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | 1 | 149-NL | |
| 300 | LYC AEIO-540 | 149-Tooth Ring Gear | 12 | 149-12LS | 1 | 149-NL | |
| 80 CANUCK | CONT C-85-12F | Pull-start | | KCST2 | 15 | | |
| AIRSHARK I (AMPHIB) | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| B (B85C) | CONT C-85-12F | Pull-start | | KCST2 | 15 | | |

Grob

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|---------------|---------------------|-------|------------------------|------|--------------------------|------|
| 115 BAVARIAN | LYC O-320-D2A | 149-Tooth Ring Gear | 24 | 149-24PM | 1 | 149-NL | |

Grumman American

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|---------------|---------------------|-------|------------------------|------|--------------------------|------|
| AA1 YANKEE | LYC O-235-C2C | 122-Tooth Ring Gear | 12 | 122-12LS | | 122-NL | |
| AA1A | LYC O-235-C2C | 122-Tooth Ring Gear | 12 | 122-12LS | | 122-NL | |
| AA1B | LYC O-235-C2C | 122-Tooth Ring Gear | 12 | 122-12LS | | 122-NL | |
| AA1C LYNX | LYC O-235-L2C | 122-Tooth Ring Gear | 12 | 122-12LS | | 122-NL | |
| AA1C T-CAT | LYC O-235-L2C | 122-Tooth Ring Gear | 12 | 122-12LS | | 122-NL | |
| AA5 TRAVELER | LYC O-320-E2G | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| AA5A CHEETAH | LYC O-320-E2G | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| AA5B TIGER | LYC O-360-A4K | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| TR2 AA1B | LYC O-235-C2C | 122-Tooth Ring Gear | 12 | 122-12LS | | 122-NL | |

Hiller

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|------------------|---------------------|-------|------------------------|------|--------------------------|------|
| UH12E & E4 | LYC VO-540-C2A | 149-Tooth Ring Gear | V | 149-(V)HT | | 149-NL | |
| UH12L4 | LYC TIVO-540-A2A | 149-Tooth Ring Gear | V | 149-(V)HT | | 149-NL | |

Johnson

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|-------------|------------|-------|------------------------|------|--------------------------|------|
| ROCKET 185 | LYC O-435-A | | | No Fit | | | |

Lake

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------------|-----------------|---------------------|-------|------------------------|------|--------------------------|------|
| C-1 AMPHIBIAN | LYC O-320-A2A | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| CIV AMPHIBIAN | LYC O-360-A1A | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| LA-4 | LYC O-360-A1A | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| LA-4 200 BUCCANEER | LYC IO-360-A1B | 149-Tooth Ring Gear | V | 149-(V)LS | | 149-NL | |
| LA-4 200EP BUCCANEER | LYC IO-360-A1B | 149-Tooth Ring Gear | V | 149-(V)LS | | 149-NL | |
| LA-4 250 RENEGADE | LYC IO-540-C4B5 | 149-Tooth Ring Gear | V | 149-(V)LS | | 149-NL | |
| LA-4 TURBO LAKE | LYC IO-360-A1B6 | 149-Tooth Ring Gear | V | 149-(V)LS | | 149-NL | |
| LA-4-180 | LYC O-360-A1A | 149-Tooth Ring Gear | V | 149-(V)LS | | 149-NL | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

Luscombe Aircraft Co.

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|-------------------|-------------------------|---------------------|-------|------------------------|------|--------------------------|------|
| 8, 8A, 8C, 8D | CONT A-50, A-65-8, A-75 | | | No Fit | | | |
| 8E | CONT C-85-12 | Pull-Start | | KCST2 | 15 | | |
| 8F | CONT C-90-12F | Pull-Start | | KCST2 | 15 | | |
| 11A SEDAN '48-'50 | CONT C-165 | Pull-Start | | KCST2/SR | 15 | | |
| SPARTAN 185 11-E | CONT IO-360-ES | TCM Starter Adapter | V | C(V)ST3 | | | |

Maule

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------------|------------------|---------------------|-------|------------------------|------|--------------------------|------|
| M4 JETESON '62-'67 | CONT O-300-A | Pull-start | 12 | KCST2 | 15 | | |
| M4-180 ASTRO ROCKET | FRANK 6A-335-B1 | Franklin | 12 | F12ST1 | | | |
| M4-210 ROCKET | CONT IO-360-A | TCM Starter Adapter | 12 | C12ST3 | | | |
| M4-220 STRATA ROCKET | FRANK 6A-350-C1 | Franklin | 12 | F12ST1 | | | |
| M5-180C | CONT O-360-C1F | TCM Starter Adapter | 12 | C12ST3 | | | |
| M5-210 LUNAR ROCKET | CONT IO-360-D | TCM Starter Adapter | 12 | C12ST3 | | | |
| M5-210TC | LYC TO-360-C1A6D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| M5-220C | FRANK 6A350C1 | Franklin | 12 | F12ST1 | | | |
| M5-235C | LYC O-540-J1A5D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| M6-235 SUPER ROCKET | LYC IO-540-J1A5D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| M7-235/MT7-235 | LYC IO-540-J1A5D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| M7-260C ORION | LYC IO-540-V4A5 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| MX7-160 | LYC O-320-B20 | ?-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| MX7-180 | LYC O-360-C1F | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| MX7-235 | LYC O-540-J1A5D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| MX7-260 | LYC IO-540-V4A5 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| MXT7-180 | LYC O-360-C1F | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |

Meyers

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|-----------------|---------------------|-------|------------------------|------|--------------------------|---------|
| 200A | CONT IO-470-D | TCM Starter Adapter | 12 | C12ST3 | | C12ST5 | |
| 200B | CONT IO-470-D | TCM Starter Adapter | 12 | C12ST3 | | C12ST5 | |
| 200D | CONT IO-520-A | TCM Starter Adapter | 12 | C12ST5 | | C12ST3 | 9 (p.2) |
| MICCO SP20 | LYC IO-360-CIE6 | 149-Tooth Ring Gear | V | 149-NL | | | |

Mooney

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|------------------|---------------------|-------|------------------------|------|--------------------------|------|
| 201 M20J | LYC IO-360-A3B6D | 149-Tooth Ring Gear | V | 149-NL | | 149-v(V)LSM | 5 |
| A2A CADET | CONT C-90-16F | Pull-Start | 12 | KCST2 | 15 | | |
| M10 CADET | CONT C-90-16F | Pull-Start | 12 | KCST2 | 15 | | |
| M18 MITE | LYC O-145-B2 | No Fit | | | | | |
| M20 '55-'57 | LYC O-320 | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12LS | |
| M20A | LYC O-360-A1A | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12LS | |
| M20B MARK 21 | LYC O-360-A1A | ?-Tooth Ring Gear | 12 | ?-NL | | 149-12LS | |
| M20C MARK 21 | LYC O-360-A1D | 149-Tooth Ring Gear | 12 | 149-12LS | 5 | 149-NL | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

| | | | | | | | |
|-------------------|-------------------|---------------------|----|----------|---|----------|---|
| M20C RANGER | LYC O-360-A1D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| M20D | LYC O-360-A1D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| M20E CHAPARRAL | LYC IO-360-A1A | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| M20E SUPER 21 | LYC IO-360-A1A | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| M20F EXECUTIVE 21 | LYC IO-360-A1A | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | 5 |
| M20G STATESMAN | LYC O-360-A1D | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| M20J MSE | LYC IO-360-A3B6D | 149-Tooth Ring Gear | V | 149-NL | | | |
| M20K 231 | CONT TSIO-360-GBA | TCM Starter Adapter | V | CvST3 | | C12ST5 | |
| M20K 252 TSE | CONT TSIO-360-MB1 | TCM Starter Adapter | V | CvST3 | | C12ST5 | |
| M20M TLS BRAVO | LYC TIO-540-AF1A | 149-Tooth Ring Gear | 24 | 149-24LS | 1 | | |
| M20R OVATION | CONT IO-550-G5B | TCM Starter Adapter | 24 | C24ST3 | | C24ST5 | |
| M20S EAGLE | CONT IO-550-G | TCM Starter Adapter | 24 | C24ST3 | | C24ST5 | |

Morrissey Aircraft Co.

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|-----------|---------------------|-------|------------------------|------|--------------------------|------|
| MORRISEY 2000 | LYC O-235 | 122-Tooth Ring Gear | 12 | 122-12LS | | | |

Navion

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|-------------------|---------------|---------------------|-------|------------------------|------|--------------------------|------|
| 205A | CONT E-185-9 | | | No Fit | | | |
| B | LYC GO-435-C2 | | | No Fit | | | |
| G/G-1 | CONT IO-470-H | TCM Starter Adapter | 12 | C12ST3 | | | |
| H RANGEMASTER | CONT IO-520-B | TCM Starter Adapter | 12 | C12ST5 | | | |
| NAVION D | CONT O-470 | TCM Starter Adapter | 12 | C12ST3 | | | |
| NAVION/NAVION A/B | CONT E-185-3 | | | No Fit | | | |

Partenavia

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|-------------------|---------------------|-------|------------------------|------|--------------------------|------|
| P68B | LYC IO-360-A1B6 | 149-Tooth Ring Gear | 24 | 149-NL/ec | | | |
| P68C | LYC IO-360-A1B6 | 149-Tooth Ring Gear | 24 | 149-NL/ec | | | |
| P68C OBSERVER | LYC IO-360-A1B6 | 149-Tooth Ring Gear | 24 | 149-NL/ec | | | |
| P68C TC | LYC TIO-360-C1A6D | 149-Tooth Ring Gear | 24 | 149-NL/ec | | | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

Piper

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|---------------------|-----------------|---------------------|-------|------------------------|------|--------------------------|------|
| J3 CUB | CONT A-65-8 | | | No Fit | | | |
| J4-A CUB COUPE | CONT A-65 | | | No Fit | | | |
| J4-CUB | CONT A-50-1 | | | No Fit | | | |
| J4-E | CONT A-75 | | | No Fit | | | |
| J4-F | LYC O-145 | Pull-Start | | C12ST2/SR | | | |
| J5A-75 | CONT A75-8 | | | No Fit | | | |
| PA11 | CONT C-90 | Pull-Start | 12 | KCST2 | 15 | | |
| PA11 CUB SPECIAL | CONT A-65 | | | No Fit | | | |
| PA12 CRUISER | LYC O-235 | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA12 SUPER CRUISER | LYC O-235-C | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA14 CRUISER | LYC O-235-C1 | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA15 VAGABOND | LYC O-145-B2 | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA16 CLIPPER | LYC O-235-C1 | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA17 VAGABOND | CONT A-65-8 | | | No Fit | | | |
| PA18-108 | LYC O-235-C1 | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA18-125 SUPER CUB | LYC O-290-D | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA18-135 SUPER CUB | LYC O-290-D2 | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA18-150 SUPER CUB | LYC O-320-A2A | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA18-90 SUPER CUB | CONT C-90-F | Pull-Start | 12 | KCST2 | 15 | | |
| PA20-125 PACER | LYC O-290-D | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA20-135 PACER | LYC O-290-D2 | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA22 TRI-PACER | LYC O-290-D | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA22-108 COLT | LYC O-235-C1B | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA22-125 | LYC O-290-D | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA22-135 TRI-PACER | LYC O-290-D2 | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA22-150 TRI-PACER | LYC O-320-A1A | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA22-160 TRI-PACER | LYC O-320-B2A | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 2 |
| PA23-150 APACHE | LYC O-320 | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | |
| PA23-160G&H APACHE | LYC O-320-B3B | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | |
| PA23-235 APACHE | LYC O-540 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA23-23B AZTEC | LYC O-540-A1B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA23C AZTEC | LYC IO-540-C4B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA23C&D TURBO AZTEC | LYC IO-540-J4A5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA23D&E AZTEC | LYC IO-540-C4B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA23E TURBO AZTEC | LYC TIO-540-C1A | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA23F AZTEC | LYC IO-540 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA23F TURBO AZTEC | LYC TIO-540-C1A | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA24 260 T COMANCHE | LYC IO-540-N1A5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA24-180 COMANCHE | LYC O-360-A1A | ?-Tooth Ring Gear | 12 | ?-NL | | | |
| PA24-250 COMANCHE | LYC O-540-A1A5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA24-260B COMANCHE | LYC O-540-D | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA24-260C COMANCHE | LYC IO-540-N | 149-Tooth Ring Gear | 12 | 149-NL | | | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|---------------------------------|-------------------|---------------------|-------|------------------------|------|--------------------------|------|
| PA24-260TC COMMANCHE | LYC IO-540-N1A5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA24-400 COMANCHE | LYC IO-720-A1A | 122-Tooth Ring Gear | 12 | 122-NL | | | |
| PA25 235 C,D. PAWNEE | LYC O-540-B2B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA25 260C,D PAWNEE | LYC O-540-G1A5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA25-150 PAWNEE | LYC O-320-A2A | 122-Tooth Ring Gear | 12 | 122-NL | | | |
| PA28-140 CHEROKEE | LYC O-320-E2A | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 4 |
| PA28-140 CRUISER | LYC O-320-E2D | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 4 |
| PA28-140B,C,D,E. | LYC O-320-E2A | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 4 |
| PA28-150 CHEROKEE | LYC O-320-A2B | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 4 |
| PA28-150C CHEROKEE | LYC O-320-A2B | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12PM | 4 |
| PA28-151 WARRIOR | LYC O-320-D3D | ?-Tooth Ring Gear | 12 | ?-NL | | ?-12LS | |
| PA28-160 CHEROKEE | LYC O-320-B2B | ?-Tooth Ring Gear | 12 | ?-NL | | 122-12PM | 4 |
| PA28-160C CHEROKEE | LYC O-320-B2B | ?-Tooth Ring Gear | 12 | ?-NL | | 122-12PM | 4 |
| PA28-161 WARRIOR II | LYC O-320-D3D | ?-Tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| PA28-180 ARCHER | LYC O-360-A4M | ?-Tooth Ring Gear | 12 | ?-NL | | ?-LS | 3 |
| PA28-180 D,E,F,G | LYC O-360-A3A | ?-Tooth Ring Gear | 12 | ?-NL | | ?-LS | 3 |
| PA28-180 R&RB ARROW | LYC IO-360-BE | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| PA28-181 ARCHER II | LYC O-360-A4M | 149-Tooth Ring Gear | V | 149-(V)LS | | 149-NL | |
| PA28-200R ARROW II | CONT TSIO-360-F | TCM Starter Adapter | V | C(V)ST3 | | | |
| PA28-200R&RB ARROW | LYC IO-360-C1C | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| PA28-201T T DAKOTA | CONT TSIO-360-FB | TCM Starter Adapter | V | C(V)ST3 | | | |
| PA28-235 CHARGER | LYC O-540-B4B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA28-235 PATHFINDER | LYC O-540-B4B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA28-235B CHEROKEE | LYC O-540-B4B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA28-235 C,D,E,F. | LYC O-540-B4B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA28-236 DAKOTA | LYC O-540-J3A5D | 149-Tooth Ring Gear | V | 149-NL | | | |
| PA28B&C-180 CHEROKEE | LYC O-360-A3A | 149-Tooth Ring Gear | V | 149-(V)LS | | 149-NL | |
| PA28R ARROW III,IV | LYC IO-360-C1C6 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| PA28R-201T T ARROW 3 | CONT TSIO-360-F | TCM Starter Adapter | 12 | C12ST3 | | | |
| PA28RT-201 ARROW IV | LYC IO-360-C1C6 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| PA28RT-201T ARROW3/4 | CONT TSIO-360-FB | TCM Starter Adapter | 12 | C12ST3 | | | |
| PA30B TURBO T COMMAN | LYC IO-320-C1A | ?-Tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| PA30B TWIN COMMANCHE | LYC IO-320-B1A | ?-Tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| PA30C TURBO TWIN COMM | LYC IO-320-C1A | ?-Tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| PA30C TWIN. COMMANCHE | LYC IO-320-B1A | ?-Tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| PA31-300 NAVAJO | LYC IO-540-M1A5 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | | |
| PA31-310 B&C NAVAJO | LYC TIO-540-A2C | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | | |
| PA31-310 NAVAJO TURB | LYC TIO-540-A1A | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | | |
| PA31-325 NAVAJO (Left Engine) | LYC TIO-540-F2BD | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | | |
| PA31-325 NAVAJO (Right Engine) | LYC LTIO-540-F2BD | 149-Tooth Ring Gear | 24 | 149-NLR/ec* | 10 | | |
| PA31-350 CHIEFTAN (Left Engine) | LYC TIO-540-J2BD | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|-------------------------------------|---------------------|---------------------|-------|------------------------|------|--------------------------|------|
| PA31-350 CHIEFTAN (Right Engine) | LYC LTIO-540-J2BD | 149-Tooth Ring Gear | 24 | 149-NLR/ec* | 10 | | |
| PA31P-350 MOJAVE (Left Engine) | LYC TIO-540 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | | |
| PA31P-350 MOJAVE (Right Engine) | LYC L/TIO-540 | 149-Tooth Ring Gear | 24 | 149-NLR/ec* | 10 | | |
| PA32-260 '74-'78 Cherokee 6 | LYC O-540-E4B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA32-260C,D,E Cherokee 6 | LYC O-540-E4B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA32-300 '73&'74 6 (Lance) | LYC IO-540-K1G5D | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA32-300B,C,D,E. 6 (Lance) | LYC IO-540-K1G50 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA32-301 SARATOGA | LYC IO-540-K1G5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA32-301T SARATOGA | LYC TIO-540-S1AD | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA32R TURBO LANCE | LYC IO-540-S1AD | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA32R&RT LANCE II | LYC IO-540-K1G5D | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA32R-300 LANCE | LYC IO-540-K1G5D | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA32R-301 SARATOGA SP | LYC IO-540-K1G5D | 149-Tooth Ring Gear | V | 149-NL | | | |
| PA32R-301T SARATOGA | LYC TIO-540-S1AD | 149-Tooth Ring Gear | V | 149-NL | | | |
| PA34 200 SENECA I (Left Engine) | LYC IO-360-C1E6 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA34 200 SENECA I (Right Engine) | LYC L/IO-360-C1E6 | 149-Tooth Ring Gear | 12 | 149-NLR | | | |
| PA34-200T SENECA II | CONT LT/TSIO-360-E | TCM Starter Adapter | 12 | C12ST3 | | | |
| PA34-220T SENECA III | CONT LT/TSIO-360-KB | TCM Starter Adapter | 12 | C12ST3 | | | |
| PA36-300 BRAVE | LYC IO-540-K1G5 | 149-Tooth Ring Gear | V | 149-NL | | | |
| PA36-375 BRAVE | LYC IO-720-D1CD | ?-Tooth Ring Gear | V | ?-NL | | | |
| PA38 TOMAHAWK | LYC O-235-L2C | 122-Tooth Ring Gear | 12 | 122-12LS | | 122-NL | |
| PA39C/R TWN COMANCHE (Left Engine) | LYC IO-320 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| PA39C/R TWN COMANCHE (Right Engine) | LYC LIO-320 | 149-Tooth Ring Gear | 12 | 149-NLR | | | |
| PA44-180 SEMINOLE (Left Engine) | LYC TO-360 | 149-Tooth Ring Gear | V | 149-NL | | 149-(V)LS | |
| PA44-180 SEMINOLE (Right Engine) | LYC LTO-360 | 149-Tooth Ring Gear | V | 149-NLR | | | |
| PA46 MALIBU MIRAGE | LYC TIO-540-AE2A | 149-Tooth Ring Gear | 24 | 149-NL/ec* | 13 | | |
| PA46-310P MALIBU | CONT TSIO-520-BE | TCM Starter Adapter | 24 | C24ST5 | | C24ST3 | |
| PA60-60X AEROSTAR | LYC IO-540 -series | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | | |
| PA60-700P AEROSTAR (Left Engine) | LYC TIO-540 | 149-Tooth Ring Gear | 24 | 149-NL/ec* | | 149-24HT | |
| PA60-700P AEROSTAR (Right Engine) | LYC LTIO-540 | 149-Tooth Ring Gear | 24 | 149-NLR/ec* | | | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

Robinson

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|------------|---------------------|-------|------------------------|-------|--------------------------|------|
| R22-All | LYC O-360 | 149-Tooth Ring Gear | 12 | 149-12HT/H | 1, 12 | 149-NL | 11 |
| R44-Raven I | LYC O-540 | 149-Tooth Ring Gear | 12 | 149-12HT/H | 1, 12 | 149-NL | 11 |
| R44-Raven II | LYC IO-540 | 149-Tooth Ring Gear | 24 | 149-24HT/H | 1, 12 | | |

Rockwell

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|---------------|---------------------|-------|------------------------|------|--------------------------|------|
| 100 DARTER | LYC O-320-A2B | ?-Tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| 100-180 LARK | LYC O-360-A2F | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| 112 COMMANDER | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| 114 COMMANDER | LYC IO-540 | 149-Tooth Ring Gear | V | 149-(V)LS | | 149-NL | |

Schweizer

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|-----------------|---------------------|-------|------------------------|------|--------------------------|------|
| 200 (269A) | LYC HIO-360-B1A | 149-Tooth Ring Gear | 24 | 149-24HT | | | |
| 300 (269B) | LYC HIO-360-A1A | 149-Tooth Ring Gear | 24 | 149-24HT | | | |
| 300C (F269C) | LYC HIO-360-D1A | 149-Tooth Ring Gear | 24 | 149-24HT | | | |

Siai Marchetti

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|----------------|---------------------|-------|------------------------|------|--------------------------|------|
| SF260D | LYC O-540-E4A5 | 149-Tooth Ring Gear | 24 | 149-24HT | | 149-NL | |

Socata

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------------|--------------------|---------------------|-------|------------------------|------|--------------------------|------|
| RALLYE 100ST/100T | CONT O-200-A | Pull-Start | 12 | KCST2 | 15 | | |
| RALLYE 150 ST | LYC O-320-E2A | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12LS | |
| RALLYE 180 GT | LYC O-360-A3A | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| RALLYE 235 GT/E | LYC O-540-B4B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| TB9 TAMPICO 12V | LYC O-320-D2A | 149-Tooth Ring Gear | 12 | 149-NL | | | 17 |
| TB10 TOBAGO 12V | LYC O-360-A1AD | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | 17 |
| TB200 TOBAGO XL 12V | LYC IO-360-A1B6 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | 17 |
| TB20 TRINIDAD 12V | LYC IO-540-C4D5D | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | 17 |
| TB 21TC TRINIDAD 12V | LYC TIO-540-AB1AD | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | 17 |
| TB 10 TOBAGO 24V | LYC O-360-A1AD | 149-Tooth Ring Gear | 24 | 149-NL/ec | | 149-24LS | 17 |
| TB 200 TOBAGO XL 24V | LYC IO-360-A1B6 | 149-Tooth Ring Gear | 24 | 149-NL/ec | | 149-24LS | 17 |
| TB 20 TRINIDAD 24V | LYC IO-540-C4D5D | 149-Tooth Ring Gear | 24 | 149-NL/ec | | 149-24LS | 17 |
| TB 21TC TRINIDAD 24V | LYC TIO-540-AB1AD | 149-Tooth Ring Gear | 24 | 149-NL/ec | | 149-24LS | 17 |
| TB30 EPSILON | LYC AEIO-540-L1B5D | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| TB360 TANGARA | (2) LYC O-360-A1G6 | 149-Tooth Ring Gear | 12 | 149-NL | | | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

Stinson

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|--------------------|-------------------|-------------------|-------|------------------------|------|--------------------------|------|
| 105 | CONT A-80-6 | | | No Fit | | | |
| 108 | FRANK 6A4-150-B31 | Franklin | 12 | F12ST1 | | | |
| 108-1 '46 & '47 | FRANK 6A4-150-B23 | Franklin | 12 | F12ST1 | | | |
| 108-2/2 VOYAGER&SW | FRANK 6A4-165-B3 | Franklin | 12 | F12ST1 | | | |
| 10A | FRANK 4AC199E2 | Franklin | 12 | F12ST1 | | | |
| 76/L5 SENTINEL | LYCOMING | ?-Tooth Ring Gear | V | ?-(V)LS | | | |
| SR10 RELIANT | LYCOMING | | | No Fit | | | |

Taylorcraft

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|-------------------|---------------|---------------------|-------|------------------------|------|--------------------------|------|
| BC-12 | CONT A-65 | | | No Fit | | | |
| BC-12D | CONT A-65-8A | | | No Fit | | | |
| BL65 | LYC O-145-B2 | Pull-Start | | KCST2 | 15 | | |
| F15 | CONTINENTAL | | | | | | |
| F19 | CONT C-85 | Pull-Start | | KCST2 | 15 | | |
| F19 SPORTSMAN 100 | CONT O-200A | Pull-Start | | KCST2 | 15 | | |
| F21 | LYC O-235-L2C | 122-Tooth Ring Gear | 12 | 122-12LS | | | |
| F21B | LYC O-235-L2C | 122-Tooth Ring Gear | 12 | 122-12LS | | | |

Varga

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------|----------------|---------------------|-------|------------------------|------|--------------------------|------|
| 2180 | LYC O-360-A4AD | 149-Tooth Ring Gear | 12 | 149-12LS | | | |
| 2150A KACHINA | LYC O-320-A2C | ?-Tooth Ring Gear | 12 | ?-12LS | | | |

Zenair

| Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|-------------------|---------------|---------------------|-------|------------------------|------|--------------------------|------|
| STOL CH 801 | LYC O-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | | |
| TRI ZENITH CH 300 | LYC O-320 | ?-Tooth Ring Gear | 12 | ?-12LS | | | |
| ZENITH CH 200/250 | LYC O-320 | ?-Tooth Ring Gear | 12 | ?-12LS | | | |
| ZENITH CH 2000 | LYC O-235-N2C | ?-Tooth Ring Gear | 12 | ?-12LS | | | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

Experimental & Rare Aircraft

| Aircraft Model | Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|----------------------|-----------------------|-------------------|---------------------|-------|------------------------|------|--------------------------|---------|
| ACE AIRCRAFT | JUNIOR ACE E | CONT C-85-12 | Pull-Start | 12 | KCST2 | 15 | | |
| ACES HIGH LT A/C | ACRO SPORT II | LYCOMING O-320 | ?-Tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| ACRO SPORT INC | ACRO SPORT I | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| ACRO SPORT INC | JUNIOR ACE | CONT C-85-12 | Pull-Start | 12 | KCST2 | 15 | | |
| ADVENTURE AIR | ADVENTURER 2+2 | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| AERO DESIGN | OUTBACK | CONT IO-240-B | Key Start | 12 | C12ST2/S | | | |
| AERO DESIGN | OUTBACK | CONT O-200 | Pull-Start | 12 | KCST2 | 15 | | |
| AERO DESIGN | OUTBACK | LYC O-235-L2C | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12LS | |
| AERO DESIGN | VOYAGER | CONT IO-240-B | Key Start | 12 | C12ST2/S | | | |
| AERO DESIGN | VOYAGER | CONT O-200 | Pull-Start | 12 | KCST2 | 15 | | |
| AERO DESIGN | VOYAGER | LYC O-235-L2C | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12LS | |
| AEROCAD INC | AERO CANARD | LYC LIO-360 | 149-Tooth Ring Gear | 12 | 149-NLR | RT | | |
| AEROCAD INC | AERO CANARD SB | LYC O-360 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| AEROCOMP INC | CA 6 | FRANKLIN | | 12 | F12ST1 | | | |
| AEROCOMP INC | CA 6 TW | FRANKLIN | | 12 | F12ST1 | | | |
| AEROCOMP INC | COMP MONSTER | LYC O-360 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| AIRCRAFT DESIGNS | SPORTSTER GYRO | LYC O-320 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| AIRCRAFT PARTS | A9A SPARROW | LYC O-540-B2B5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| AIRCRAFT PARTS | A9B QUAIL | LYC IO-540-K1A5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| AIRCRAFT PARTS | A9B QUAIL 290HP | LYC IO-540-B1C5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| AIRCRAFT SPRUCE | BABY LAKES | CONT C-85-12 | Pull-Start | 12 | KCST2 | 15 | | |
| AIRCRAFT SPRUCE | BUDDY LAKES | C-85-12 or higher | Pull-Start | 12 | KCST2 | 15 | | |
| AIRCRAFT SPRUCE | ONE DESIGN | LYC AEIO-320 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| AIRCRAFT SPRUCE | RIHN DR-109 | LYC AEIO-540-D4A5 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| AIRCRAFT SPRUCE | SUPER LAKES | LYC O-235 | 122-Tooth Ring Gear | 12 | 122-NL | | | |
| AIRCRAFT SPRUCE | W-10 TAILWIND | CONT O-300 | Pull-Start | 12 | KCST2 | 15 | | |
| AIRCRAFT TECHNOLOGIE | ACRO 1 | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| AIRCRAFT TECHNOLOGIE | ATLANTIS | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| AKROTECH AVIA INC | GILES G-200 | LYCOMING | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| AKROTECH AVIA INC | GILES G-202 | LYC 360 | 149-Tooth Ring Gear | 12 | 149-NL | | 149-12LS | |
| ANGEL | 44 | (2) LYC IO-540 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| ASSOCIATED AIR | LIBERTY 181 | CONT O-470 | TCM Starter Adapter | 12 | C12ST3 | | | |
| AVIABELLANCA | SKY ROCKET III | CONT GTSIO-520 | TCM Starter Adapter | 24 | C24ST3 | | | 9 (p.2) |
| AVID AIRCRAFT | MAGNUM | LYC O-320 | 122-Tooth Ring Gear | 12 | 122-NL | | 122-12LS | |
| BARNETT ROTORCRAFT | BARNETT J4B | CONT O-200 | Pull-Start | 12 | KCST2 | 15 | | |
| BARNETT ROTORCRAFT | BARNETT J4B2 | CONT O-200 | Pull-Start | 12 | KCST2 | 15 | | |
| BARR AIRCRAFT | SIX | LYC TIO-540 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| BD-4 AIRCRAFT | BD-4/BD-6 | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| BROKAW AVIATION INC | BROKAW BULLETT BU133C | LYC TIO-541 | 149-Tooth Ring Gear | V | 149-NL | | | |
| BUCKER PRADO SL | JUNGMEISTER | LYC O-360 | 149-Tooth Ring Gear | V | 149-??LS | | 149-NL | |
| CANADIAN HOME ROTORS | BABY BELLE | LYCOMING | 149-Tooth Ring Gear | 12 | 149-12HT | | 149-NL | |
| COMMONWEALTH | SKYRANGER | CONT C-85-12 | Pull-Start | 12 | KCST2 | 15 | | |

Please refer to [Caution](#) section (page 2) before recommending/ordering any starter

| Aircraft Model | Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|--------------------------|-------------------|------------------|---------------------|-------|--------------------------------------|------|--------------------------|---------|
| CONSOLIDATED VULTEE L-13 | CONVAIR | FRANKLIN | Franklin Engine | V | F(V)ST1 | | | |
| CURTISS-WRIGHT | C1 ROBIN | CONT W-670-K | | | No Fit | | | |
| D2 INC | DAVIS 5-A | CONT A-65 | | | No fit unless upgraded to -12 Engine | | | |
| DURAND ASSOCIATES | DURAND MARK V | LYC O-320 | ?-tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| DYKE AIRCRAFT | DYKE DELTA | LYC O-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| DYN' AERO SA | CR.100 | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| EAGLE | DW-1 | LYC IO-540-M1B5B | 149-Tooth Ring Gear | V | 149-(V)LS | | 149-NL | |
| EDI | WHEELER EXPRESS | CONT IO-360 | TCM Starter Adapter | 12 | C12ST3 | | | |
| EXPRESS A/C CO LLC | EXPRESS | LYC IO-540 | 149-Tooth Ring Gear | V | 149-NL | | | |
| EXPRESS A/C CO LLC | EXPRESS SERIES 90 | LYC IO-540 | 149-Tooth Ring Gear | V | 149-NL | | | |
| GLASSIC COMP | SQ2000 ES | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| GLASSIC | SQ2000 XP | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| GREAT AIRPLANES | SPORT TRAINER | LYC O-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| GREAT LAKES | BIPLANE 2T-1A | LYCOMING | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| KELLY | KELLY D | LYC O-235 | ?-tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| MARQUART | MA-5 CHARGER | LYC O-290 | ?-tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| MAURICE BOYER | SUPER CHIPMUNK | CONT IO-360 | TCM Starter Adapter | V | C(V)ST3 | | | |
| MURPHY AIRCRAFT | REBEL | LYC O-235 | 122-Tooth Ring Gear | 12 | 122-12LS | | | |
| MURPHY AIRCRAFT | REBEL | LYC O-320 | 122-Tooth Ring Gear | 12 | 122-12LS | | | |
| MURPHY AIRCRAFT | REBEL ELITE | LYC O-235 | 122-Tooth Ring Gear | 12 | 122-12LS | | | |
| MURPHY AIRCRAFT | REBEL ELITE | LYC O-320 | 122-Tooth Ring Gear | 12 | 122-12LS | | | |
| MURPHY AIRCRAFT | REBEL ELITE | LYC O-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | | |
| MURPHY AIRCRAFT | SUPER REBEL | LYC O-540 | 149-Tooth Ring Gear | 12 | 149-12LS | | | |
| MURPHY AIRCRAFT | SUPER REBEL 2500 | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | | |
| MURPHY AIRCRAFT | SUPER REBEL 2500 | LYC O-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | | |
| OSPREY AIRCRAFT | GP 4 | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| OSPREY AIRCRAFT | OSPREY II | LYC O-320 | ?-Tooth Ring Gear | 12 | ?-12LS | | 149-NL | |
| LANCAIR INT'L | LANCAIR 235 | LYC O-235 | ?-Tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| LANCAIR INT'L | LANCAIR 320 | LYC IO-320 | ?-Tooth Ring Gear | 12 | ?-12LS | | ?-NL | |
| LANCAIR INT'L | LANCAIR MK II | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| LANCAIR INT'L | LANCAIR ES | LYC IO-360-ES | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| LANCAIR INT'L | LANCAIR IV | CONT TSIO-550-E | TCM Starter Adapter | V | C(V)ST5 | | C(V)ST3 | 9 (p.2) |
| LANCAIR INT'L | LANCAIR IV-P | CONT TSIO-550-E | TCM Starter Adapter | V | C(V)ST5 | | C(V)ST3 | 9 (p.2) |
| LANCAIR INT'L | LANCAIR S ES | CONT IO-550-G | TCM Starter Adapter | V | C(V)ST5 | | C(V)ST3 | |
| LANCAIR INT'L | LEGACY 2000 | LYC IO-550-N | TCM Starter Adapter | V | C(V)ST5 | | C(V)ST3 | |
| RANS INC | S-16 SHEKARI | CONT IO-240 | | 12 | C12ST2/S | | | |
| REARWIN | 185 SKYRANGER | CONT C-85-12 | Pull-Start | 12 | KCST2 | 15 | | |
| RILEY | 340 ROCKET | LYC TIO-540-R2AD | 149-Tooth Ring Gear | V | 149-NL | | | |
| RILEY | 414 ROCKET | LYC IO-720-B1BD | ?-Tooth Ring Gear | V | ?-NL | | | |
| RILEY | SUPER 310 | (2) CONT TC | TCM Starter Adapter | V | C(V)ST3 | | | |
| RILEY | SUPER 340 | (2) CONT TC | TCM Starter Adapter | V | C(V)ST3 | | | |
| SEQUOIA AIRCRAFT | F8L FALCO | LYCOMING | 149-Tooth Ring Gear | 24 | 149-NL | | | |
| SORRELL AIRCRAFT | SNS-7 HIPERBIPE | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| SORRELL AIRCRAFT | SPENCER AMPHIB | CONT IO-520 | TCM Starter Adapter | 12 | C12ST5 | | | 9 (p.2) |
| SPORT AVIATION | THORP T (S) 18 | LYC O-320 | ?-Tooth Ring Gear | 12 | ?-12LS | | | |

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| Aircraft Model | Aircraft Model | Engine | Start Type | Volts | Primary Recommendation | Note | Secondary Recommendation | Note |
|-------------------|-------------------------|--------------|---------------------|-------|------------------------|------|--------------------------|------|
| STEEN AERO LAB | KNIGHT TWISTER | LYCOMING | ?-Tooth Ring Gear | 12 | ?-12LS | | | |
| STEEN AERO LAB | PITTS S1 | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | | |
| STEEN AERO LAB | SKYBOLT | LYC IO-540 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| STODDARD-HAMILTON | GLASTAR | LYC O-320 | ?-Tooth Ring Gear | 12 | ?-12LS | | | |
| STODDARD-HAMILTON | GLASTAR | LYC O-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| STODDARD-HAMILTON | GLASAIR III TURBO | LYC TIO-540 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| STODDARD-HAMILTON | GLASAIR II-S FT | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| STODDARD-HAMILTON | GLASAIR SUPR II-S RG | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| STOLP | STARDUSTER TOO | LYC O-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| STOLP | ACRODUSTER TOO SA750 | LYC IO-360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | |
| TEMCO | TE-18 BUCKEROO | FRANKLIN | Franklin | 12 | No Fit | | | |
| VAN'S AIRCRAFT | RV-3 | LYC 320 | ?-Tooth Ring Gear | 12 | ?-12LS | | | |
| VAN'S AIRCRAFT | RV-4 | LYC 320 | ?-Tooth Ring Gear | 12 | ?-12LS | | 149-NL | 7 |
| VAN'S AIRCRAFT | RV-6 | LYC 360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | 7 |
| VAN'S AIRCRAFT | RV-7 | LYC 360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | 7 |
| VAN'S AIRCRAFT | RV-8 | LYC 360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | 7 |
| VAN'S AIRCRAFT | RV-9 | LYC 360 | 149-Tooth Ring Gear | 12 | 149-12LS | | 149-NL | 7 |
| VAN'S AIRCRAFT | RV-10 | LYC 540 | 149-Tooth Ring Gear | 12 | 149-NL | | | |
| VELOCITY | VELOCITY | LYC 360, 540 | 149-Tooth Ring Gear | V | 149-(V)LS | | 149-NL | |
| WAG-AERO | SPORT TRAINER | CONT C-85-12 | Pull-Start | 12 | KCST2 | 15 | | |
| WAG-AERO | SPORTSMAN 2+2 | LYC O-290-D2 | 122-Tooth Ring Gear | 12 | 122-12LS | | | |
| WAG-AERO | WAG-A-BOND TRAVELER | LYC O-235 | 122-Tooth Ring Gear | 12 | 122-12LS | | | |

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Notes

1. Sky-Tec Starter is the original equipment starter
2. Modification of oil cooler bracket may be required
3. If oil cooler is in front of engine, choose PM model
4. BCE-6 (battery cable extension) may be required
5. Baffle modification required
6. Cowl bumper bracket modification required
7. If using RV-7 “Snorkel” induction, may have to use **149-12LS** (was used by Van’s to form the snorkel)
8. Airframe manufacturer mounted the aircraft starter contactor (“firewall” solenoid) directly to the OEM Starter – you will need to straighten mounting tabs and relocate to suitable place on the firewall
9. Aircraft with sandcast TCM 520 engines (alternator in rear) are notoriously difficult to crank smoothly. TCM utilized a 32:1 starter Adapter on sandcast motors that no known starter is especially good at cranking. Sky-Tec makes no claims that our ST3 starter will crank sandcast TCM520 engines any better than anyone else’s starter. The ST5 series starter may do a better job if sufficient power is available to the starter.
10. Installing the Sky-Tec **149-NLR** starter on some LIO-540 and LTIO-540 engines on PA-31 aircraft may require the use of an installation spacer, Sky-Tec PN 25099. See http://www.skytecair.com/images/PA31_NLR_Install.jpg for details.
11. Some Robinson Helicopters originally configured with Prestolite starters utilized a firewall-mounted starter contactor relay. The **149-NL** starter can be installed on those ships that still have the firewall-mounted starter contactor relay. Robinson Helicopters originally configured with B&C starters or Sky-Tec HT starters cannot utilize the **149-NL** starter as the aircraft has no installed/certified firewall-mounted starter contactor relay and the NL starter S-terminal is not accessible for this function. However, 149-NL/ec starters (due for availability late 2007) may be used as their S-terminal is accessible for dual function as the starter contactor relay. Confused yet? Call Sky-Tec now.
12. Robinson Helicopters originally configured with B&C starters utilized a proprietary starter-alternator strap that is used only on these aircraft (Robinson PN ?). When replacing the B&C starter with any Sky-Tec starter, you must also order and replace the starter-alternator strap with the standard length starter-alternator strap either Lycoming 74323 (steel) or Robinson PN ?
13. One customer has called the factory to claim the NL will not fit on his Mirage. Dozens (if not hundreds) of other Mirage owners have used the NL starter for years with no installation issues.
14. Cessna OEM production replaced the Lamar series starters with Sky-Tec starting in 2006. Via SB07-80-01, Cessna recommends purchasing MK172-80-01 or MK182-80-01, which includes all parts required to do a first class upgrade to the Sky-Tec **149-NL** starter. Order the starter separately.
15. The **KCST2** is an STC eligible kit requiring modification to the engine & airframe for installation.
16. NO FIT on aircraft with electronic tach sensors mounted to the nose of OE Electrosystems Starter.
17. Socata changed from 14 to 28 volt electrical systems determined by serial number (applicable to all models): Serial Numbers 823 to 849 plus s/n 888 are 24Volt. All serial numbers 947 and higher are also 24Volt.

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