We work to
KEEP YOUR
WORLD
MOVING.
Citation Mustang
Textron Aviation
Jessica Busse
One recent change in customer service is that Chris Hearne has moved back to engineering and Robert Khoury has accepted the role of Vice President of Product Support. Robert’s responsibilities now include the entire range of Jet and Turboprop aircraft, Field Service, and the 1Call team.

Robert has been at Textron Aviation since 1995 and has held roles within Engineering and Quality, supporting sustaining, and new product development on multiple aircraft. We welcome Robert to his new position.
Jessica Busse leads 525 series Jet product support team. Jessica comes from production in Independence bringing an in-depth knowledge of the product lines. Recently, her responsibilities have been refined to the 525 series jets. The Mustang, Citation Legacy series, Beechjet, and Premier have been assigned to Bryan Rodman.
Bryan Rodman has been with Cessna for 22 years working in Production & Flight Delivery as a VSL on Caravan, CJ, Encore, XL, Sovereign, CX and Latitude. Served as a front line leader in 3 new model start ups on XL, Sovereign and Latitude and implemented 5 block point aircraft. He has completed Textron Six Sigma training as a certified Black Belt in 2007. Recently he participated on the Business Leader Team as an Operations Process Leader to assist in bringing the Longitude to production.
Walt, James and Bill are here to answer your technical questions or direct you to the right department if you are not sure who to contact. If no one is available, please leave a message so you will be next in line for a response. We can typically get back to you in five to fifteen minutes.
Rollin Rising and Phil Pankratz provide technical support for your Pratt & Whitney powerplant. They can be contacted either by phone or by email; TeamPowerplants@txtav.com
We encourage operators to download the Textron Aviation Service Directory App which is on the Apple App store and the Android Google Play store. This app will provide you with the current support contacts, service centers and Flight Assurance when you are traveling to an unfamiliar location. To access the online contact directory from the internet using a laptop or smart phone, enter www.txtavsupport.mobi into the browser.
Communication

• Email
  • Model/Serial Number in Subject Line
  • Part Number(s)
  • Two Photos
    • (1) Further Away for Location
    • (1) Closeup for Details
  • Detailed Description of Squawk
  • History of Prior Troubleshooting
• Webinar & Conference Presentations
  • Available at www.txtavsupport.com

As technical information often depends on the aircraft serial number, you can help speed up the process by always providing the serial number in the subject line of the email. Photos are always appreciated and it helps to have one further away for location and one up close for detail.

If you have Citation 510 as one of the models on your Customer Access website, look for a registration notice that will be emailed out one month prior to the. You can reduce the number of emails by removing models that you are not interested in the CUSTOMIZE MODELS section.
In revision 14 of the airframe maintenance manual you will notice three items have been added to chapter 5, Unscheduled Inspection list.

These items are; Exposure to High Winds, what to do when there is a fluid spill in the cabin or tailcone, and instructions to operate the air conditioner in cold months to keep everything lubricated.
AMM Rev 14 – Discretionary Maintenance Mustang 510

• Issue
  • Microbiological contamination may develop over time

• Status
  • Added tasks to Chapter 5-19-00 for tracking
  • Every 3 months; Test or Treat
    • Use Biocidal preventative treatment every 3 months
      • (Sohio Biobor JF or Kathon FP 1.5*)
      • Microbiological Contamination Inspection every 12 months
    • Not using biocidal preventative treatment
      • Microbiological Contamination Inspection every 3 months
      • (Hum-bug Detector Kit or Fuelstat FHR8-2)

*Update: Do not use Kathon FP 1.5 pending investigation results

Revision 14 also brings with it a schedule for the Microbiological Contamination Inspection. This is listed in the Discretionary Maintenance section of chapter 5. The inspection interval is determined upon the use of using Biocidal Preventative Treatment. Do the inspection every 12 months if you use the treatment and every 3 months if you do not. Bottom line is to do something every 3 months, Test or Treat.

Do not use Kathon FP 1.5 pending investigation results. Pratt & Whitney does not have data to verify it is ok.

Mustang Capacity 400 gallons; 1 oz Sohio Biobor JF treats 80 gallons = 5 oz. 16 oz bottle is $24 (2019) = 3 treatments.

Hum-Bug Detector Kit $26.
Wash schedules were added as Tasks to help prevent corrosion on your aircraft. The Tasks make it easy to keep track when the next wash is due.

Every 15 days you will want to wash the wheel wells and flap coves, 45 days for the underside and 90 days for the entire aircraft.

The best procedure for washing the airplane is the full water-based washing procedure (wet wash). Because of environmental regulations at some locations, a full water-based washing is not permitted. The operator must make the decision which washing procedures, tools, equipment, and materials to use based on local regulations and most effective results.
AMM Rev 14 – Doc 33 Replaced by Doc 37
Mustang 510

- Document 33 Skin Joint Special Detailed Inspection
  - Initial interval 2,250 hrs. 72 months, repeat 900 hrs. 36 months
- Deleted and replaced by Document 37
  - Removed calendar requirement
  - Initial and repeat interval 7,200 hrs.

You may also notice that Document 33 was deleted and Document 37 took its place. The initial inspection interval of the Skin Joints moved from 2250 hours to 7200 hours and the calendar interval has been removed. Be certain to update your maintenance tracking program accordingly.
Both MIL-G-81322A (Mobil 28 / Aeroshell 22) and MIL-PRF-23827 Type 1 (Soap Based Aeroshell 33) greases for the nose wheel bearings have been removed and only Mobil Aviation Grease SHC 100 remains as the grease to use. This aligns with the current nose wheel manual from UTC Aerospace Systems which was revised in March 2018. The part number of the manual is 32-46-55 and is available from our publications department. Remove all with solvent PD680, then let dry, re-grease with new.
For those of you with the Concorde battery may have noticed that document 24 was deleted and replaced by document 38. This is what maintenance engineering is starting to do when there is a change with the maintenance interval so there is no mistake with which interval to use. The initial interval was extended from 6 to 12 months to align with the Concorde maintenance manual. The follow-on testing remains unchanged. The hourly interval is remaining the same.
Textron Aviation engineering has approved the RG390E/30 sealed Platinum Series battery as a direct replacement for the factory installed lead acid batteries.

Refer to the Parts Substitution List on the customer access website for the replacement part number until the IPC is updated next March. This list is update at the end of each month.
Air Conditioner Compressor Fan Blade
Mustang 510

• Issue
  • Air conditioner motor fan may crack due to fatigue, motor could overheat

• Status
  • Optional SL510-21-05 announces improvement
    • 1134608-1 changed from 0.030” formed aluminum to milled aluminum

The air conditioner original fan blade was made from formed aluminum which could exhibit
damage over time and if left to continue operating, the blades could become detached
from the hub.

The new replacement fan blade and hub are a one piece aluminum milled design. A spacer
is added behind the fan to positively set the position of the fan.

An Optional service letter informs the operators of this change. There is no warranty,
however, the part can be paid for from the customers ProParts account.
Fan Blade Initial Replacement
Mustang 510

- Issue
  - New fan blade needs spacer installed for initial installation
- Status
  - Kit PN K1134608-3 for first time of the fan blade
    - Spacer provided with kit

The new fan blade will need a spacer installed for proper fitment during the initial installation. Order K1134608-3 kit for first time replacement. The replacement instructions will be in the next revision of the Enviro Systems component manual part number 21-00-09 revision 13 which is available from the publication department.

New compressor assemblies will have the new fan and spacer installed. Exchange motors will not come equipped with the fan blade so retain yours when sending your compressor back.
AMM Rev 14 – Compressor Motor Brushes Mustang 510

• Issue
  - Brush replacement interval in the Enviro Manual 21-00-09

• Status
  - 800 hour brush replacement added to 5-11-00 COMPONENT TIME LIMITS
  - Can track via part number
    - 9912660-14, 1133610-4 1133610-2 – Compressor Module
    - 1251171-6 – Motor Brushes (set)
    - 1134146-6 – Motor Assy

The air conditioner brush replacement interval was 500 hours up until May 2019 when the Enviro manual extended the interval up to 800 hours. If your air conditioner motor had more than 500 prior to that point, it is very likely the brushes were changed at that time.

The replacement interval can be started when the compressor module, motor or brushes were replaced.
From customer feedback we were able to identify that the new -12 pressure controller would latch and display the Amber PRESS CNTRL message when selecting STBY in manual mode. This condition will remain present until the unit is reset by cycling power. During the failure condition, the controller becomes inoperative and automatic pressure control is lost. However, the mechanical limiters and dump features still function.

This service letter provides criteria to identify a suspect controllers

When controllers have been reworked a letter “A” will be placed after the serial number. If the controller serial number is listed on the service letter and does not contain the letter A, then it has the potential for this issue. Suspect controllers will be returned to Enviro Systems for upgrading.

The issue is not considered safety critical as it does not affect the mechanical limiters and the dump feature is still available. Because of this, controllers will have until November 2020 to be removed and updated to correct the issue if the condition does not present itself.
We have recently added Model Communiques as a method of communication. A Communiqué is a Service Information Document containing general information of interest to owners/operators and technicians related to a specific product model series. Communiqués may contain information on product improvements, product issues, part upgrades or other general information. Communiqués have been used by Beechcraft and Hawker Customer Support for many years with great customer feedback. A Communiqué is distributed just like our other service documents through email for customers who have registered for that service. The Communiqués are also posted on the 1VIEW Service Information page similar to other service documents.
Service Letter SL510-80-02 provided information on the Mustang 9912676-1EX starter generator pro-rate replacement program. As a good will gesture for operators that have already upgraded to the 9912676-1 Mod D from a Mod -, Mod B, or a Mod C, at a Textron Aviation owned service center, a labor credit will be available regardless of ProParts enrollment. Contact your Customer Service Representative who was involved with the replacement to request the credit for labor. A pro-rate credit or labor credit is not applicable if you are replacing a Mod D starter with another Mod D unit.

The model communiqué also addresses how to identify the starter mod level. The mod level is reflected in the letter at the end of the serial number. If there is no letter, then it is an early original unit.
SL510-80-02 Starter Generator
Mustang 510

• Issue
  • Some Mod B & C starter generators may not make TBO

• Status
  • Mod D generators have electrically insulated ceramic bearings
  • Pro-Rate campaign to replace units with more than 600 hrs.
    • Pay $3,107* USD for 9912676-1EX, credit $2.07 per unused hour
    • Example; TBO is 1500 hrs. Replaced at 750 hrs.
      • Pay $3,107* and credit of $1,553.50 deposited into open account after filing warranty

* Aug 2019 Pricing

Textron Aviation has released a new Mod D starter generator. The Mod D generators have ceramic bearings that are electrically insulated for improved service life. With the newly certified starter generator modification, Textron Aviation has launched a campaign to encourage operators to proactively remove the Mustang Mod B and C generators that have accumulated more than 600 hours and credit the customer’s account for the unused hours to the 1500 TBO. For example, if the units have 750 hours, the account will be credited for 750 unused hours, or 1/2 the price paid for the unit. This typically works out to approximately $2.07 per hour
Thanks to your feedback we were able to identify and confirm several issues. Service Bulletin 34-18 addresses several issues that have been reported by operators. The Display Blink, TAWS N/A, Loss of flight plans, Loss of Flight Path Tracking line and more.

This is only applicable to airplanes that have previously installed ADS-B with service bulletin 34-17 revision 2 or earlier. Revision 3 of SB 34-17 incorporates all these changes and is for new ADS-B installations. This SB 34-18 is not applicable to those who have installed ADS-B per 34-17 Rev 3.

This software is available at no cost to you when installed at a Textron Aviation Service Center. Labor charges will apply when installed by a third party. The cost of the software card can be submitted with a warranty claim from whomever purchased it.
Checklist Revision 7A
Mustang 510

• Issue
  • Rev 7A issued January 2019

• Status
  • Incorporates temp changes for Normal & Emergency checklists
  • AFM will not be revised
  • No procedural changes outside of temporary changes

The checklists were updated earlier this year allowing the operator to remove the yellow temporary change papers. The Aircraft Flight Manual was not updated as there were no procedural changes.
Configuration Codes
Mustang 510

- Issue
  - Checklist rev 7A issued

- Status
  - Calculate Configuration
  - Most Mustangs are;
    - AA – All airplanes
    - AC – Lead acid battery
    - AF – Serial numbers 510-0041+
    - AJ – C/W Software version 16
    - AP – Mandatory FADEC update
    - AR – ADS-B installed
    - AT – ADS-B installed

The emergency checklist has been customized for the individual airplanes configuration. Use the Configuration Code chart to determine which pages to insert.

The configuration codes appear at the bottom of each page of the Pilot's Checklist and indicate page effectivity by serial number. Pages marked AA apply to all airplanes of this model. This list contains only the configurations which have been incorporated into the checklist. Refer to the Configuration Code pages for more information.

The checklists are sent to all owners on record and follows aircraft wherever it goes. Contact Tech Pubs to change the aircraft ownership information.
Landing Gear Lighting
Mustang 510

- **Issue**
  - Landing gear lighting difficult to see during the day unless rheostat is in Day
- **Status**
  - Turn rheostat to Day
  - PCB 7018923-12 can be replaced by 7018923-14
    - The –14 PCB includes a lighting level increase for the landing gear panel to match brightness of surrounding panels

Pilots have mentioned that the landing gear down and locked green lights can be difficult to see during the day when the rheostat is not in the Day position. An update to the Printed Circuit Board addresses this concern as it increases the lighting level to match the brightness of the surrounding panels. The part number changes from a -12 to a -14. The PCB’s will be replaced by attrition.
Cold Cabin / Cockpit Troubleshooting
Mustang 510

• Issue
  • Cabin or cockpit may get cold

• Status
  • Troubleshooting guide on website
  • Identify cause of cold air
  • 31% reduction in actuator sales
  • Corresponding SB510-25-04
    • For aircraft that cool off during long flights
    • Adds additional insulation
    • $1,981* USD + labor

* Aug 2019 Pricing

Shortly after the last customer conference, the Mustang Cold Cockpit-Cabin Troubleshooting Guide was added to the Customer Access website. This guide allows the pilot to systematically check the operation of each component of the heating system to determine what may not be working properly. There are fields to fill out so the data can be interpreted by the maintenance facility or Team Mustang. Since this has gone out there has been a 31 percent reduction in Thermal Actuator sales and complaints of a cold aircraft have decreased significantly. For aircraft that have a properly functioning heating system but tend to cool off on extended flights, there is a corresponding service bulletin to install additional insulation on the bleed air lines, cabin door and cockpit sidewalls. 2019 pricing brings it in just under $2,000 USD plus labor.
G1000 Knob Replacement
Mustang 510

• Issue
  • Garmin display knobs may become worn or lost

• Status
  • Knob kit K00-00350-00 ($225*) assortment of knobs:
    • (2) Volume
    • (4) Inner
    • (5) Outer
    • (1) Heading
    • (1) Cursor
    • (1) Joystick

* Aug 2019 Pricing

Replacement knobs are available from our parts distribution center. This kit is in stock and contains the commonly used knobs on the Garmin Display Units. There are fourteen knobs total with the kit which includes the volume, inner, outer, heading, cursor and joystick.
Replacement Unlock SD Cards
Mustang 510

• Issue
  • SD cards may become corrupt or lost over time

• Status
  • Replacement P/N …SP = Special Pricing $300-$400*
    • 010-00330-55SP – Synthetic Vision
    • 010-00330-50SP – ChartView
    • 010-00330-51SP – TAWS
    • 010-00905-08SP – ADS-B Out
    • 010-00435-E1SP – XM Cockpit

• Required information
  • Owner contact information, serial, registration
  • Letter stating why replacements are needed
  • Proof of installation; MTR entries or Equipment List.

* Aug 2019 Pricing

The SD unlock cards may become lost or unusable over time. Replacement cards can be ordered by placing an SP at the end of the part number. The SP stands for special pricing. Additional information will need to be provided such as the owner, aircraft serial number, proof that the aircraft had the card installed and most importantly, a letter stating why a replacement is needed. Garmin will not provide a replacement card without this information.
ICAO Codes
Mustang 510

• Issue
  • New ICAO codes are needed after upgrading to ADS-B

• Status
  • ICAO codes are available from Team Mustang
    • Only upon request
    • Provide software level
    • Emailed as a PDF

Documentation is available from Team Mustang to assist flight crews in determining the ICAO codes for their aircraft as they change after installing ADS-B. Contact Team Mustang with the aircraft software level and a PDF of the codes will be emailed to you. This document will not be available on the Customer Access website.
Avionic Expert System Videos
Mustang 510

• Issue
  • Videos are in 32-bit Shockwave Player (.swf)
  • 64-bit computers cannot play .swf
• Status
  • Windows 7 Internet Explorer default is 32-bit
  • To play .swf, open with or drag video file onto the browser

The Shockwave Avionic Expert System Videos that are on the Customer Access website can still be viewed by computers that have 64-bit operating systems. This can be accomplished by opening the video with Internet Explorer or dragging the video into Internet Explorer after downloading it.

Citation Expert Systems provide troubleshooting information that is designed to assist in arriving at the correct diagnosis and help reduce troubleshooting time. In addition, Images, Description, and Component information is available. We encourage technicians to familiarize themselves with this program which is available free of charge on our Customer Access website.
Exhaust Nozzle Waviness
Mustang 510

- Issue
  - Waviness on exhaust nozzle 7055100-15
- Status
  - Contact Propulsion Engineering for airworthiness

Operators have noticed a waviness in the exhaust nozzle. This has typically been occurring in the five o'clock position a few inches aft of the attachment point. At this time there have been no reports of cracking and propulsion engineering is determining if dimensional allowances are necessary or not.
**Standby Instruments**

**Mustang 510**

- **Issue**
  - Standby Attitude, Altimeter and Airspeed indicators may need to be replaced

- **Status**
  - Replace with the Mid-Continent MD-302 via STC SA01969SE
    - P/N 6420302-7 $9,397*
  - Replaces
    - 261440-1143EX Air Speed $5,393*
    - 162350-1161EX Altimeter $9,800*
    - 4200-21EX Attitude $9,246*
    - CBS24EX Battery $4,316*
  - Contact Aftermarket Sales for a quote

* Aug 2019 Pricing

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The MD302 Standby Attitude Module — SAM® — is the industry's newest generation of 2-inch standby instruments. SAM provides attitude, altitude, airspeed, slip, vertical trend, and heading information to the pilot during normal operation or in the case of primary instrument failure. SAM delivers an easy-to-fit, compact design ensuring a perfect fit within the Mustang panel. The unique two-screen display features high-definition graphics and extra-wide viewing angles. Entirely self-contained, SAM weighs just 1.6 pounds and fits in less panel space than a standard set of 2-inch mechanical attitude, altitude and airspeed indicators.

This also eliminates the need to have the CBS24 Standby Battery

Contact your aftermarket sales representative for a quote.

[https://www.youtube.com/watch?time_continue=37&v=yjWyyx27kRg](https://www.youtube.com/watch?time_continue=37&v=yjWyyx27kRg)
Battery Charger / Minder
All Models

- Issue
  - Requests for battery tender / minder

- Status
  - P/N ACTIVATOR 282 listed in AMM 10-00-00
  - Available from TAPD
  - Concorde lists BatteryMINDER®
    - Model 244CEC1-AA-S5 - 24V, 4 Amp

If your battery sits idle for an extended period of time, consider utilizing an appropriate battery charger. A constant trickle causes some gassing, heat, and loss of the electrolyte so contact your battery manufacturer for recommendations. The Concorde website lists the BatteryMINDER for their sealed lead acid RG model batteries.

Activator 282 by Lamar Technologies is listed in the Mustang maintenance manual. The Activator 282 keeps the battery in peak condition by fully charging, shutting off, and then continuously recycling as the battery self-discharges and requires recharge. It can be ordered from Textron Aviation Parts & Distribution.

The AFM states that the battery should be removed from the aircraft for charging.
Trickle Charger for NiCad
All Models

- Christie Battery Trickle Charger
  - The “GO” (green LED), “NO GO” (red LED) operation allows for quick visual reference of battery health
  - Elcon type connector
  - Available via a Christie Authorized Distributor

The Christie Trickle Charger (CTC)-500 is specifically designed to trickle charge vented Nickel Cadmium and Sealed Lead Acid aircraft batteries. In Constant Current Mode the charger can be configured to the Nickel Cadmium battery manufacturer’s recommended trickle charge rates or switched over to Constant Potential Mode for a Lead Acid battery. A regulated current and undervoltage set-point allows full battery capacity to be maintained while the battery is on the shelf. The CTC-500 has a European line voltage selector switch, which allows the charger to plug into 115VAC or 230VAC input power. This trickle charger is capable of handling the entire range of both Marathon’s Standard Super Power and new Micro Maintenance battery products. The CTC-500 is available through a Christie Authorized Distributor.
Heated Drain Tube
Mustang 510

- Issue
  - Drain tube may overheat during extended ground procedures
- Status
  - Pull air conditioner circuit breaker HZ063 during maintenance
  - Part of **Safe Ground Maintenance Procedure**
  - PCR for Standard Practices Manual 20-00-00 to have 510 added

As a reminder, The evaporator overboard drain heaters are energized directly from the airplane’s direct current (DC) bus. If you do not disengage the electrical power during the maintenance, failure of the drain heaters can occur. This can cause discoloration to the skin of the airplane. Refer to chapter 20 of the airframe maintenance manual, “Safe Ground Maintenance Procedure”. This procedure should be accomplished before performing any maintenance.

A Publication Change Request has been submitted to add this procedure to the Standard Practices Manual.
Some operators have noticed a dent on the nose gear hydraulic line. This can occur when the nose trunnion is disconnected, moves forward and rests on the line. This is easily detectable by feel as it is on the aft side of the line. If the line is dented, it is recommended to replace the line with a new one. The technician can adhere foam to the line when the trunnion is disconnected as a preventative measure.
Some operators have reported excessive leakage from the green sidewall vent dot on their main Michelin tires. 3% per day is the maximum allowed which works out to 2.6 pounds every 24 hours. From your feedback and tires sent in for examination, Michelin was able to make some improvements to their manufacturing process. Tires manufactured in June 2019 have the changes incorporated.

Some leaking from the green dot is normal and expected but should not exceed this limit. Thank you to those on CJP who provided feedback.
Low Tire Pressure
Mustang 510

• Issue
  • Tire pressure below 25% of inflation pressure;
    Loaded 62 psi main & 90 psi nose

• Status
  • Overloaded Wheel inspection required
  • Goodrich Component MM 32-46-55
  • For safety of the wheel assembly

<table>
<thead>
<tr>
<th>POSITION</th>
<th>VENDOR</th>
<th>PART NUMBER</th>
<th>UNLOADED PRESSURE</th>
<th>LOADED PRESSURE</th>
</tr>
</thead>
<tbody>
<tr>
<td>Nose Tire</td>
<td>Michelin</td>
<td>079-606-0</td>
<td>120 ± 5 PSIG</td>
<td>125 ± 5 PSIG</td>
</tr>
<tr>
<td></td>
<td>Dunlop</td>
<td>DR17028T</td>
<td>120 ± 5 PSIG</td>
<td>125 ± 5 PSIG</td>
</tr>
<tr>
<td>Main Tire</td>
<td>Michelin</td>
<td>021-523-0</td>
<td>85 ± 5 PSIG</td>
<td>90 ± 5 PSIG</td>
</tr>
<tr>
<td></td>
<td>Dunlop</td>
<td>DR25520T</td>
<td>85 ± 5 PSIG</td>
<td>90 ± 5 PSIG</td>
</tr>
</tbody>
</table>

A Overloaded Wheel inspection would be required when the tire pressure is 25% or less of the OEM inflation pressure per the component maintenance manual part number 32-46-55. As the minimum inflation loaded pressures for the Mustang are 83 psi for the main and 120 psi for the nose, they would need to be inspected at 62 and 90 psi respectively. This is for the safety of the wheel assembly.
Main Wheel Non-Destructive Testing
Mustang 510

• Issue
  • Main wheel requires periodic NDT inspections

• Status
  • UTC manual, formerly Goodrich, provides intervals
  • Adjust maintenance tracking program accordingly
    • Tire replacement at < 100 landings = ½ tire change
    • Bead Seat NDT
      • 2 yrs. / Tire changes 5, 10, 15, 20, 23, 26, 29, then at each
        tire change
    • Wheel Halves NDT
      • 14 yrs. / Tire changes 30, 35, 40, 45, 50, then each 3rd one

The main wheel component manual by UTC provides the intervals for when the wheel half
needs to have non-destructive testing performed. The intervals for the bead seat and
wheel halves differ so take note of that when setting up your maintenance tracking
program. If the tire is replaced within 100 landings, it counts as one-half of a tire change.
This can make tracking challenging but not impossible.
Shimmy Damper
Mustang 510

• Issue
  • Reports of nose wheel shimmy on landing

• Status
  • Check the following
    • Nose wheel balance
    • Nose gear torque links, zero play is optimal
    • Grease lower thrust bearing (temporary fix)
    • Service with Fluorocarbon Gel 880
  • Rental nose gear assembly available
    • P/N 7042010-6RENT
  • Document 32 (6) year interval
    • Complete disassembly & inspection

As the Mustang fleet ages, reports of a nose wheel shimmy when decelerating through 40 knots are becoming more prevalent. It is vital that there is no wear on the torque link bushings as any lateral play will exacerbate any shimmy. Although the bonded assembly is serviced during the Document 32 inspection every 1,800 hours / 6 years, it may be advisable to service it if it has been a few years as the Fluorocarbon Gel 880 may be contaminated. The nose gear assembly is available to rent while your gear is being repaired, order part number 7042010-6RENT.

2019 rental pricing is $5,366 USD with a $25,000 Deposit
Jack Pads  
Mustang 510

- Issue
  - Tires may need replacement at a remote location
- Status
  - R-2008 – Nose Jack Pad $155*
  - R-1798 – Wing Jack Pad $109* ea.
    - (2) needed, one for each wing

* Aug 2019 Pricing

If you find yourself in a remote location with a flat tire, a jack pad may be the thing to get you going again. All shops have jacks but not all of them have the nose and wing jack pads for the Mustang. 2019 pricing for the Nose jack pad is $155 and the wing pad is $109. Two of the wing pads are required to jack the aircraft.
Operators are asking if the windshield retainer could be polished instead of painted. Unlike other Citations, the retaining frame is part of the windshield assembly as it comes from GKN or PPG. The engineering specification requires the frame to resistant to corrosion and that is accomplished with the paint. Sustaining engineering team is reviewing the situation and we may have an update in the next Mustang Webinar. has approved the paint removal and polishing the retainer. Over continued practice of buffing, the windshield retainer must not exceed 15% material loss to maintain structural integrity.
PPG & GKN Windshields Installed Mustang 510

- Issue
  - PPG & GKN windshield have different loft contours

- Status
  - Aircraft may have one PPG & one GKN installed
  - Inspections are identical
  - Maintenance differences

During the production of the Mustang, windshield suppliers changed from GKN to PPG and the GKN was no longer available for field replacement. Historically, after a windshield failure, having one PPG windshield and one GKN windshield was not supported. Engineering reviewed the situation taking into account the difference in loft contours, inspection intervals and maintenance requirements and the combination was found to be acceptable. Notes will be added to the maintenance manual as the rain repellency treatments are different.

The easiest way to tell which windshield is installed is to check for sticker in the lower aft section. The PPG has a sticker with the part number and serial numbers whereas the GKN has not sticker at all.
Windshield Deice Inspection Aid
Mustang 510

• Issue
  • Windshield heating issues are hard to replicate on the ground

• Status
  • Thermal imaging assists with identifying windshield heating issues
  • Visual inspection of wiring and ohm testing still required
  • Camera apps and modules available

The maintenance manual provides instructions to check resistance in the wiring to determine serviceability. Although the maintenance manual is the final authority, one inspection aid technicians have discovered is the use of thermal imaging devices that connect to a smart phone. These can be obtained for about $200 - $400 USD and help identify cooler areas of the windshield as shown in the photograph. It is those areas where you will want to look for breaks or shorts in the internal wiring.
Proper windshield maintenance is important. There is a 12 month Electrically Heated Windshield Detailed Inspection that checks the droplet track pattern to ensure that water sheds properly when flying through precipitation. The application of Surfex 100 to the GKN windshield will restore the rain repellency properties. Maintenance providers will want to review the training video that is on YouTube.
Deice Boot Cleaning and Care
All Models

• ShineMaster Prep – Annually
  • Removes, grease, residual ShineMaster™
• ShineMaster
  • Cosmetic coating for a high luster shine
• Icex II – Icing season
  • Ice adhesion inhibitor enhances performance
• Aerospace Cleaner
  • Removes dirt, grime and bugs
• Aerospace Protectant
  • UV protection
• Winterization Procedure
  • AMM 30-10-00 – Silicone Isopropyl mist
• Link for product sheet

It is always a good idea to make sure you deice boots are in top shape. This begins with checking for pin holes so water does not get sucked in followed by a thorough cleaning. You will also want to apply a cosmetic treatment so they are smooth and shiny. If ice is expected, a treatment of Icex every 50 flight hours will help shed the ice.

Goodrich lists the approved products for proper aircraft cleaning and care (boots, windows, safe cleaning products)

AgeMaster cannot be used as the petroleum distillates will damage the Estane boots.

Ceramic Paint Coatings
All Models

• Issue
  • Ceramic coatings such as Element 119 are being advertised for aircraft

• Status
  • Element 119 has not been evaluated by Textron Aviation
    • No plans at this time
  • Permagard 5000 – AV308 approved by Textron Aviation & offered by service network

Operators have been asking about the new “Ceramic” coatings for their aircraft. One that is specifically being marketed for aircraft is Renegade by Element 119. Textron Aviation has not tested any of the new Ceramic coatings and at this time there are no plans to do so. One of the concerns is how the coatings with this nano-technology may impact hold over times as the deicing fluid may slide off too soon prior to takeoff.

A product that has been tested by our engineering department is Permagard 5000 – AV308. This is being offered at most of our service centers by the detailing Appearance Group. Professionally trained technicians use a six step process to apply Permagard onto the painted surfaces of the aircraft. The product bonds and cures over the surface of the paint, leaving a transparent, low friction, high gloss barrier between the paint and the environment.
FLAPS FAIL Message
Mustang 510

- Issue
  - FLAPS FAIL message may appear
- Status
  - May be a proximity switch, PCB or rigging
  - Troubleshooting information available
    - Mustang Flap Troubleshooting YouTube video
    - Central Diagnostics & Maintenance System (CDMS)
    - Expert System on www.txtavsupport.com

Operators have reported a FLAPS FAIL message with a corresponding STALL WARN FAIL. The Stall Warn Fail appears because the AOA system does not know what position the flaps are in and fails by default. This is normal.

When the flaps fail, there are several resources available to identify where the problem is. First thing for the technician to do is to watch the Mustang Flap Troubleshooting video that is on YouTube. This not only provides troubleshooting but more importantly provides an overview of the flap system. The video covers how to get into and read the Central Diagnostics and Maintenance System, CDMS, and view what the Proximity Switches are reading. The flaps will stop working if a proximity switch is not reporting correctly as it does not know where the flaps are, same as with the AOA sensor.

The Expert System also provides vital information with troubleshooting flow charts, description of the system and photos of the components with their location. Be certain to inform your maintenance provider of these resources should you experience a FLAPS FAIL message.
Precooler
Mustang 510

- Issue
  - DUCT O’HEAT message may occur at high power settings

- Status
  - Precooler may have a leak
  - Leaks diminish cooling capacity
  - Inspect precooler for
    - Split fins
    - Dark soot residue
  - Remove and pressurize

If the DUCT O’HEAT message occurs on climb out and then extinguishes when the power is pulled back, there may be a leak in the precooler. As the hot bleed departs through a split in the fins, it prevents cooler air from flowing through and increases the temperature of the air entering the bleed air tubes. Perform a visual inspection of the front side of the precooler checking for splits fins and dark stains. If everything looks good, remove the precooler and submerge it in a bucket of water pressurizing it with shop air.
Nose Baggage Door Latch Rigging
Mustang 510

- Issue
  - NOSE DOOR message during flight
- Status
  - If latches are closed;
    - 1) Bend the switch mount out a bit so a distinct click is heard when the latch is closed
    - 2) Turn the T latch receptacle 1/2 turn IN to increase tension on the latch

NOSE DOOR L or R message may occur in flight. This could be from a latch switch that is not fully engaged. A technician may need to bend the switch mount out a bit so a distinct click is heard when the latch is closed. They can also turn the T latch receptacle 1/2 turn IN to increase tension on the latch.
When there is a repetitive repair that is applicable to a wide range of aircraft serial numbers, the structures team may develop a Standard Repair and make it available as needed. Currently there are three standard repairs for the Mustang; Radome, Trailing edge closeout rib and one for corrosion on the main cabin door frame. Standard repairs are provided free of charge along with an 8100-9 if needed. Eventually the repairs will be incorporated into the Structural Repair Manual. A link to the full list of Standard Repairs for the Textron Aviation models is on the Structural Damage Request form.
Leaks form from time to time within the aircraft systems: oxygen, nitrogen, hydraulic, air conditioner, or fuel. Textron Aviation Service Centers are newly equipped with a leak detection tool that quickly diagnoses the susceptible area(s). Call us to get the leak resolved and get you flying!
Periodically operators will ask about replacement keys, either from purchasing a new aircraft or that their number of keys are dwindling. In either case replacement keys may be ordered from Textron Aviation. The part number is FASTKEY and you will need your key code. The code should be in the airframe logbook but if you cannot find it, contact Team Mustang and we can help you find the original key code.

You also have the option to ship a key to us for duplication.
TAPD Parts Kits
Mustang 510

- TAPD has parts kits setup
- Search CPD510 on https://ww2.txtav.com/Parts

When performing routine maintenance, there may be a kit that is already set up with all the parts you need to do the job. To find out if there is a kit available, log into the Textron Aviation Parts & Distribution website and enter C P D and then the citation model number. For the Mustang it would be CPD510. There is typically a part number associated with the kit to make sure you order the right one. There is a list of the available kits for the Mustang on the right side of the screen.
Vendor Documents
All Models

• Issue
  - Access to vendor manuals

• Status
  - Most vendor documents at Technical Manual Distribution Center (TMDC) for $94* USD
  - Emailed as PDF
  - Do not advertise availability

* Aug 2019 Pricing

Several vendor manuals for the Mustang are available from our Technical Publications department such as those for the wheel, brake and air conditioning. 2019 pricing is at $94 USD and will be emailed to you as a PDF the same day. As these manuals are not published by Textron Aviation, we do not list them on our website.

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Aircraft Maintenance Tracking
All Models

• Textron Aviation Expanded Maintenance Tracking Partnerships
  • Recommended Providers - CAMP, Flightdocs, TRAXXALL & SierraTrax
  • Customer Benefits - Q3 2019
    • Flexibility to select the recommended provider that best fits your needs
    • Different levels of service, tools, products and price points
    • 1 Year free subscription for new & pre-owned Textron Aviation deliveries
    • View of summarized aircraft maintenance data available on the Textron Aviation Customer Portal

• Textron Aviation continues to invest in ways that improve quality, reliability and drive product development which in turn allows us to serve our customers better. One of our most recent investments was in the expansion of our Aircraft Maintenance Tracking partnerships.
• We expanded our recommended provider list to give our customers flexibility in choosing the aircraft maintenance tracking provider that best fits their individual needs.
• Textron Aviation Maintenance Tracking recommended partners are providing a 1-year free subscription for all new and pre-owned TXTAV aircraft purchased.
• By using a recommended provider we are able to quickly summarize your aircraft’s maintenance data in the customer portal giving you a quick snapshot of upcoming or maintenance due.
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The portal will give you access to dive into the details of that maintenance due by clicking your maintenance tracking provider logo located in the “Powered by” section of the page.

- Overdue Maintenance – Overdue maintenance items where the due date has passed
- Upcoming Maintenance – Upcoming (short term) maintenance items where the next due item is within 30 Days
- Lets go flying – Upcoming (long term) maintenance items where the next due item is beyond 30 Days
With every maintenance event, there are logistics to work out — contacting the right people, ordering parts, juggling paperwork and getting to and from your service center. We believe your time as an aircraft owner is better spent on other things, such as running your business. Why not let Textron Aviation take care of the details? Our ProMaintenance program lifts the burden off your shoulders so you can enjoy some peace of mind during your downtime. No planning. No traveling. No worrying. We own maintenance from start to finish.

The ProMaintenance program features a director of maintenance who closely manages the entire service process. That includes planning repairs or modifications, complying with airworthiness directives and service bulletins, tracking expenses and more. You are also provided with a professional pilot who delivers your aircraft to a Textron Aviation Service Center. When maintenance is complete, the pilot returns your aircraft to its home base. ProMaintenance pilot services may be billed at an additional rate.

Everything is done with your approval and your schedule.
Every year Professional Pilot magazine sends out surveys to their subscribers. This survey is vital as it is an unbiased representation of how we are doing and where we can improve. We encourage everyone to take advantage of the this offer so your collective voice is heard.