PURPOSE

As we strive to address the needs of our customers, Textron Aviation Defense (TA Defense) has prepared this catalog offering aircraft modification kits for customization and/or improvements. Additional kits are currently in work and will be added to the catalog over the coming months.

TA Defense can also provide OEM expertise to assist with the installation of these kits either at our Modification Center located in Wichita, KS, or by providing field teams for installation at customer locations.

STANDARD GENERAL TERMS

TA Defense standard terms and conditions are applicable to all items offered in this catalog. Where possible and applicable, TA Defense will accommodate specific contractual requests and agreements.
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AOA Indexer Disconnect
133-3009

**DESCRIPTION**
To replace an AOA indexer, the glareshield assembly must be replaced by maintenance personnel. This kit provides parts and information to add a quick disconnect to forward/aft indexers on in-service Model 3000 Aircraft.

**BENEFIT**
After installation of kit, maintenance personnel can replace the failed AOA indexer instead of the glareshield assembly, thereby decreasing the user’s part replacement costs (AOA indexer verses glareshield assembly).

**EFFECTIVITY**
T-6A
Oil Pressure Annunciator – Amber
133-3016

DESCRIPTION
Line-replaceable units are being returned to the manufacturer based on reported illumination of warning lights when oil pressure is within operating limits at certain operating conditions. This kit provides parts and information to install a signal conditioner unit on Frame 5 to improve operation of oil pressure annunciator on in-service Model 3000 Aircraft.

BENEFIT
After installation of kit, operators have reported a decrease in replacing oil pressure-related line-replaceable units due to the illumination of cockpit warning lights. Previously, these units were often returned from the manufacturer having a no fault found (NFF) status.

EFFECTIVITY
T-6A
ME-406 ELT System Installation
133-3018

DESCRIPTION
Emergency locator transmitters operating at 121.5/243 MHz were no longer produced after September 2006, and distress signals at this frequency stopped being processed by satellites in March 2009. This kit provides parts and information to install an ME-406 ELT system operating at 121.50/406.03 MHz on in-service Model 3000 Aircraft.

BENEFIT
After installation of kit, aircrew emergency distress signals can be detected by satellite and relayed to search and rescue authorities.

EFFECTIVITY
T-6A
Auto Ignition Relay Kit
133-3034

DESCRIPTION
The removal and replacement of the current relay (part number KM-USAL) is labor intensive. This kit provides parts and information to install a new solid state relay on in-service Model 3000 Aircraft.

BENEFIT
After installation of kit, the redesigned mounting bracket allows easier removal and installation by maintenance personnel. In addition, the new solid state relay has a significantly increased MTBF.

EFFECTIVITY
T-6 All Models
**DESCRIPTION**
This kit provides parts and information to install a 400A starter-generator and related components on in-service Model 3000 Aircraft.

**BENEFIT**
After installation of kit, operators will experience increased engine start reliability using only aircraft battery power in high-density altitudes or high-ambient temperatures.

**EFFECTIVITY**
T-6C
**Camera Mount Installation Kit**

**133-5911**

**DESCRIPTION**
Installation of camera mounts permit aircraft operators to install lightweight video cameras such as GoPro™ HERO3 and/or Garmin™ VIRB Elite. This kit provides parts and information to install the camera mounts on in-service Model 3000 aircraft.

**BENEFIT**
After installation of kit, operators have the ability to safely record flying missions. The cameras can capture still photos or record video in high definition (HD) through a wide-angle lens with minimum operator intervention. These images can serve as a useful tool during pilot training and/or mission debriefings.

**EFFECTIVITY**
All T-6 Models
Pylon Installation

133-2000

DESCRIPTION
This kit provides parts and information to install ALKAN-type 6185, NATO standard 14-inch, electromechanical mast pylons at six hardpoints (three per side) on the bottom of the wing on in-service Model 3000 aircraft.

BENEFIT
After installation of kit, operators will have the ability to carry external stores with 14-inch NATO-standard lug configuration, thereby increasing the types of training/flight missions that can be performed.

EFFECTIVITY
T-6C (with hardpoints)
Door Latching, Hydraulic Service Door
133-4010

**DESCRIPTION**
This kit provides parts and information to modify the hydraulic service door upper latch on in-service Model 3000 aircraft.

**BENEFIT**
After installation of kit, latching operation on hydraulic service door is enhanced.

**EFFECTIVITY**
All T-6 Models
Three-mode Interseat Sequencing System Valve Incorporation
133-4024

**DESCRIPTION**
This kit provides parts and information to install components related to the interseat sequencer (ISS) on in-service Model 3000 aircraft. At either SOLO, BOTH or CMD FWD locations, the ISS selector can be locked into position by releasing handle into detent (hole). Spring pressure will keep the handle locked in the position selected by the operator.

**BENEFIT**
After installation of kit, operators are able to conduct orientation flights with increased safety for the forward pilot-in-command during backseat VIP and orientation flights for senior military officials, dignitaries, and VIPs in the event of a backseat initiated ejection.

**EFFECTIVITY**
T-6A
Smoke Kit Installation
133-4031

DESCRIPTION
The 133-4031 kit operates in conjunction with 133-4033. 133-4031 provides parts and information to install smoke system-related components on in-service Model 3000 aircraft. 133-4033 provides the accessories power panel and the annunciator bracket for the smoke kit operation.

BENEFIT
After installation of kit, operators have the ability to use smoke during airshows and demonstration exercises.

EFFECTIVITY
All T-6 Models
**DESCRIPTION**

The 133-4034 kit operates in conjunction with 133-4033. 133-4034 provides parts and information to install weapons system-related components on in-service Model 3000 aircraft. 133-4033 provides the accessories power panel and the annunciator bracket for the weapons kit operation.

**BENEFIT**

After installation of kit, operators have the weapons system capability for training and exercise purposes.

**EFFECTIVITY**

T-6C (with hardpoints)
Condenser Blower Removal/Replacement
133-5008

**DESCRIPTION**
The current condenser blower motor (ES79127-2) has experienced a lower than expected mean time between failure (MTBF) rate and has developed into a high-maintenance driver. This kit provides parts and information to install a new brushless condenser blower motor on in-service Model 3,000 aircraft.

**BENEFIT**
The new brushless condenser blower motor is more reliable with a significantly higher MTBF rate. After installation of kit, operators have reported a decreased replacement rate of condenser blower motors and increased performance of the air-conditioning system.

**EFFECTIVITY**
T-6A
Nose Wheel Centering
133-5010

DESCRIPTION
This kit provides parts and information to install nose wheel centering related components on in-service Model 3000 aircraft.

BENEFIT
This change keeps the nose gear centered when the airplane is in flight with gear extended. Without the kit, when gear is left extended in flight for a prolonged period of time, the nose wheel can caster from prop wash or side slip operations. If this amount of caster is large, the nose gear could contact structure prior to the retraction centering function when gear is raised.

EFFECTIVITY
T-6A
ASV Regulator Upgrade, OBOGS
133-5015

DESCRIPTION
This kit provides parts and information to install an improved oxygen regulator and its related components on in-service Model 3000 aircraft.

BENEFIT
Two safety features have been incorporated into a redesigned oxygen regulator (3260050-0403). These safety feature additions include an anti-suffocation valve and a redesigned regulator overpressure relief valve. After installation of kit, the pilot will experience less effort to breathe during conditions with the OBOGS not operating or when the onboard emergency oxygen system is activated.

EFFECTIVITY
T-6A
**Rudder Trim Upgrade**

**133-5018**

**DESCRIPTION**
The rudder trim system is upgraded with improved corrosion-resistant components that have lubrication provisions.

**BENEFIT**
After installation of kit, operators will experience the following:
- Strengthened rudder trim pushrod (changed to 0.50-inch diameter x 0.35 wall 4130 steel tube).
- Improved pushrod maintainability (rod ends with grease zerks and turnbuckle-style rudder trim tab actuator pushrod for faster adjustments and removals).

**EFFECTIVITY**
T-6A
Elevator Trim Upgrade
133-5019

DESCRIPTION
This kit provides parts to install an upgraded elevator actuator (133-380027-9) with a higher trim rate on in-service Model 3000 aircraft.

BENEFIT
After installation of kit, operators will experience a faster elevator trim rate (2.2x, nominal 8.0 seconds from stop-to-stop).

EFFECTIVITY
T-6A
**DESCRIPTION**

Various line-replaceable units within the onboard oxygen generating system (OBOGS) have attributed to the high number of OBOGS reported failures. These failures continue to increase the number of aborted missions and no fault found (NFF) rate when these failed units are returned from the manufacturer.

**BENEFIT**

This kit provides parts and information to install a new hermetically sealed low-pressure switch, redesigned heat exchanger with improved drainage, and additional plumbing drain ports on in-service Model 3000 aircraft, thereby reducing OBOGS-related failures, NFF rates for OBOGS related units, and overall OBOGS maintenance-related costs.

**EFFECTIVITY**

T-6A/C
Quick Engine Change
133-9005

DESCRIPTION
This kit provides the parts under a single kit to perform an initial engine buildup or a quick engine change.

BENEFIT
This kit provides all parts required for initial engine buildup or quick engine change. This kit allows maintenance personnel to avoid ordering, requesting, and pulling individual parts.

EFFECTIVITY
All T-6 Models
External Fuel Tank Installation
133-2000-0003

DESCRIPTION
This kit is used to install external fuel tanks on in-service aircraft configured to accept ALKAN-type 6185, NATO standard 14-inch, electromechanical mast pylons.

BENEFIT
After installation of kit, operators will have the ability to carry additional fuel in order to conduct longer missions and/or training exercises. Each tank has a maximum design fuel capacity of 67.2 gallons, of which 63.7 gallons are usable.

EFFECTIVITY
T-6C (with hardpoints)
Oil Filler Cap/Dipstick
133-9004

**DESCRIPTION**
The T-6A has experienced in-flight engine shutdowns largely attributed to the lack of adequate lubrication for the flight maneuvers being executed at the engine’s current serviced oil level.

**BENEFIT**
This kit provides parts and information to install a new oil dipstick (with a MAX HOT range) and related decals on in-service Model 3000 aircraft. Adding a MAX HOT fill range with an increased 0.5-quart oil capacity will decrease the potential for engine incidents resulting from reduced lubrication. The new dipstick also allows oil to be serviced in a range – not just to the MAX HOT line – thus decreasing overall maintenance man-hour requirements.

**EFFECTIVITY**
T-6A
Oil Cooler Hose Clamp
133-4042

DESCRIPTION
Operators have reported chafing of oil cooler hoses. This kit provides parts and material to enhance installation and prevent chafing of oil cooler hoses on in-service Model 3000 aircraft.

BENEFIT
After installation of kit, the potential for chafing of oil cooler hoses drastically decreases, and operators have a standardized orientation of oil cooler clamps and related hoses. This kit eases the maintenance requirements to maintain positive clearance between hoses and structure.

EFFECTIVITY
All T-6 Models
Fire Extinguisher Installation
133-5002

**DESCRIPTION**
This kit provides parts and information to install a fire extinguisher in the forward and aft cockpit on in-service Model 3000 aircraft.

**BENEFIT**
Operators have quick access to fire extinguishers in case of cockpit fire-related emergencies.

**EFFECTIVITY**
All T-6 Models
**DESCRIPTION**
This kit provides parts and information to install gaskets at the antenna-skin mating surface. Operators are experiencing Level 2 corrosion on aircraft operating in caustic environments. Kit includes gaskets for all antennas, such as NAV, VHF/UHF, ADF, TAS, ELT, etc., installed on the aircraft.

**BENEFIT**
After installation of kit, the operator may experience as much as 40 percent increased time on aircraft due to reduced downtime caused by corrosion.

**EFFECTIVITY**
All T-6 Models
Please contact us for pricing (to include technical publication updates, if desired) and lead times which will be provided to meet customer specific requirements. We would also like to discuss additional kits to address your unique and special needs.

TA Defense has a designated Modification Center, where aircraft repairs and modifications are performed. This facility is specifically designated for installation of new kits and components, testing, service work or repairs.

For more information, please contact TA Defense via the contact information provided above.
DISCLAIMER
This document is intended to provide information for T-6 Kits offered by Textron Aviation Defense and third party suppliers. Whereas Textron Aviation Defense makes every effort to ensure that the data contained in this catalog is accurate, it is not intended to be a formal declaration of performance or equipment specification. Textron Aviation Defense makes no warranty or guarantee that any particular modification will meet the needs of the customer. The customer shall rely on its own judgment and expertise in determining whether a particular modification is appropriate for the aircraft and the mission. Although each of the individual items offered in the catalog may have its own airworthiness approval, the installation of multiple modifications could result in a requirement for additional evaluation to ensure airworthiness of the modified aircraft. Textron Aviation Defense reserves the right to modify, supersede, cancel or declare obsolete any item, configuration or specification within this catalog without prior notice.

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