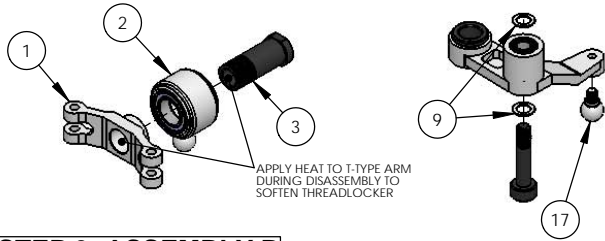


# TREX500 SERIES PERFORMANCE TAIL CONTROL UPGRADE

## AT500-PTC (AL 6061-T6)

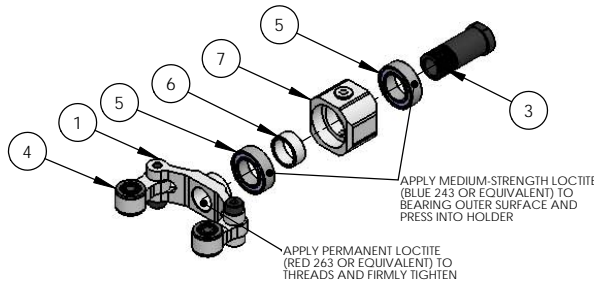
### STEP 1

DISASSEMBLE STOCK ALIGN METAL TAIL PITCH ASSEMBLIES



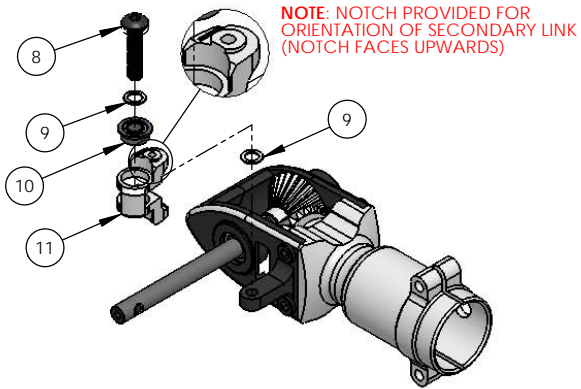
### STEP 2: ASSEMBLY A

ASSEMBLE PERFORMANCE TAIL PITCH ASSEMBLY



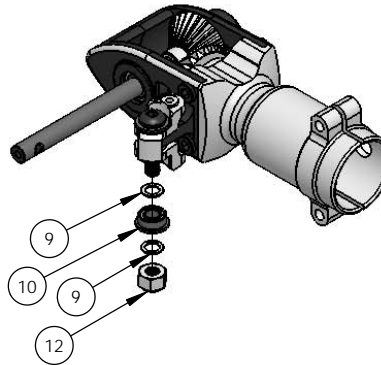
### STEP 3: ASSEMBLY B

ASSEMBLE SECONDARY LINK MECHANICS



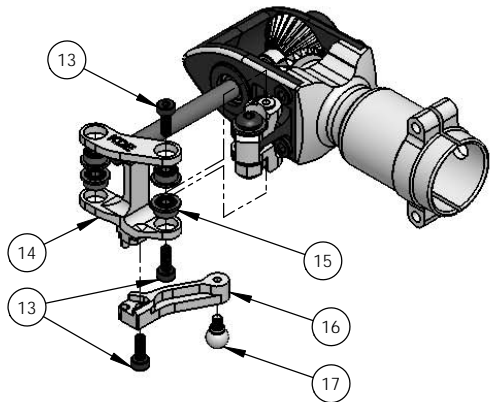
### STEP 4: ASSEMBLY B

ASSEMBLE SECONDARY LINK MECHANICS



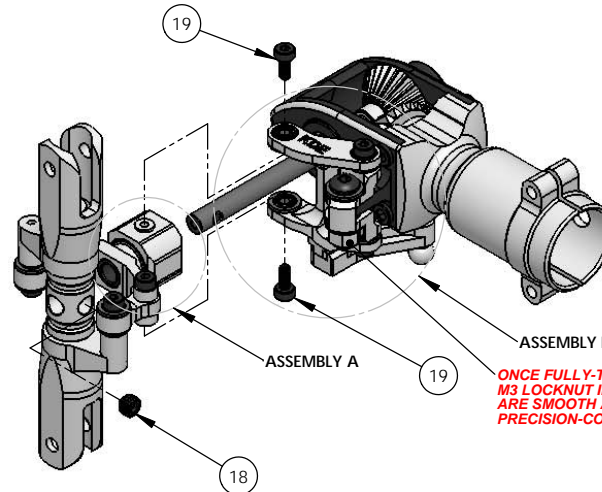
### STEP 5: ASSEMBLY B

ASSEMBLE PRIMARY LINK MECHANICS



### STEP 6

ASSEMBLE INTO TREX 500 SERIES TAIL SYSTEM



ONCE FULLY-TIGHTENED, PRESSURE TO THE SYSTEM CAN BE ADJUSTED WITH THE M3 LOCKNUT INSTALLED IN STEP 4. TIGHTEN OR LOOSEN UNTIL THE MECHANICS ARE SMOOTH AND SLOP-FREE TO YOUR PREFERENCE AND ENJOY THE NEW PRECISION-CONTROL TAIL SYSTEM.

ITEM NO.	DESCRIPTION	QTY.
1	ALIGN TREX 500 SERIES T-TYPE ARM (INCLUDED IN ORIGINAL KIT)	1
2	ALIGN TREX 500 SERIES BEARING HOLDER ASSEMBLY (INCLUDED IN ORIGINAL KIT)	1
3	ALIGN TREX 500 SERIES SLIDE SHAFT (INCLUDED IN ORIGINAL KIT)	1
4	KDE DIRECT TREX 500 SERIES PERFORMANCE TAIL UPGRADE V2 (SOLD SEPARATELY, AT500-PTU-V2)	2
5	MR106ZZ RADIAL BALL BEARING	2
6	KDE DIRECT TREX 500 SERIES PERFORMANCE TAIL CONTROL BEARING COLLAR	1
7	KDE DIRECT TREX 500 SERIES PERFORMANCE TAIL CONTROL BEARING HOLDER	1
8	M3 x 0.5 x 14MM BUTTON HEAD SOCKET HEAD CAP SCREW	1
9	M3 x 0.30MM (0.125" x 0.012") ROUND SHIM WASHER	4
10	MF63ZZ FLANGED RADIAL BALL BEARING	2
11	KDE DIRECT TREX 500 SERIES PERFORMANCE TAIL CONTROL SECONDARY LINK	1
12	M3 x 0.5 NYLON INSERT HEX LOCKNUT ALLOY STEEL	1
13	M2 x 0.4 x 6MM SOCKET HEAD CAP SCREW	3
14	KDE DIRECT TREX 500 SERIES PERFORMANCE TAIL CONTROL PRIMARY LINK	1
15	MF52ZZ FLANGED RADIAL BALL BEARING	4
16	KDE DIRECT TREX 500 SERIES PERFORMANCE TAIL CONTROL ARM LEVER	1
17	ALIGN TREX 500 SERIES LINKAGE BALL A (M2 x 3.5MM) (INCLUDED IN ORIGINAL KIT)	1
18	M4 x 0.7 x 3MM SOCKET HEAD SET SCREW CUP POINT (INCLUDED IN ORIGINAL KIT)	1
19	M2 x 0.4 x 5MM SOCKET HEAD CAP SCREW	2

**NOTE:** THE TREX 500 PERFORMANCE TAIL CONTROL UPGRADE PROVIDES THE ULTIMATE, SLOP-FREE CONTROL SYSTEM AVAILABLE ON THE MARKET TO PROVIDE PRECISE TAIL CONTROL AND AUTHORITY. DUE TO THE PRECISION CNC-MACHINING OF EACH COMPONENT, CORRECT INSTALLATION IS KEY FOR PROPER, BIND-FREE OPERATION. PLEASE PAY ATTENTION TO THE INSTRUCTIONS AND TAKE YOUR TIME WHEN INSTALLING THE ASSEMBLY. **MAKE SURE TO APPLY MEDIUM-STRENGTH LOCTITE (BLUE 243 OR EQUIVALENT) TO ALL SCREWS AND OUTER SURFACE OF RADIAL BALL BEARINGS DURING ASSEMBLY. IN ADDITION, LEAVE ALL SCREWS LOOSELY INSTALLED UNTIL STEP 6.**

**STEP 1:** DISASSEMBLE THE STOCK ALIGN METAL TAIL PITCH ASSEMBLIES TO REMOVE THE STOCK BEARING HOLDER AND CONTROL ARM. USING A HEAT-GUN, FLAME, OR ALTERNATE HEAT-SOURCE, APPLY HEAT TO THE THREADS HOLDING THE SLIDE SHAFT TO THE T-TYPE ARM. ONCE THE LOCTITE HAS SOFTENED AND RELEASED, UNSCREW THE SLIDE SHAFT FROM THE T-TYPE ARM AND SET ASIDE.

**STEP 2:** ASSEMBLE THE PERFORMANCE TAIL PITCH ASSEMBLY AS SHOWN IN THE DIAGRAM. APPLY MEDIUM-STRENGTH LOCTITE (BLUE 243 OR EQUIVALENT) TO THE OUTER SURFACE OF THE MR106ZZ RADIAL BALL BEARINGS AND PERMANENT LOCTITE (RED 263 OR EQUIVALENT) TO THE THREADS OF THE SLIDE SHAFT DURING INSTALLATION. TIGHTEN THE SLIDE SHAFT FIRMLY TO ACCURATELY SEAT THE RADIAL BALL BEARINGS INTO THE HOLDER AND PROVIDE A SLOP-FREE HOLD.

**STEP 3:** ASSEMBLE THE PERFORMANCE TAIL CONTROL SECONDARY LINK AS SHOWN IN THE DIAGRAM, WITH THE M3 SHIM WASHER INSTALLED BETWEEN THE MOUNTING ARM AND THE MF63ZZ FLANGED RADIAL BALL BEARING.

**STEP 4:** INSTALL THE SECOND M3 SHIM WASHER BETWEEN THE MOUNTING ARM AND THE LOWER MF63ZZ FLANGED RADIAL BALL BEARING, AND HAND-PRESSURE TIGHTEN THE M3 LOCKNUT TO LOCK DOWN THE ASSEMBLY (USE A 5.5MM WRENCH FOR EASIEST INSTALLATION).

**STEP 5:** ASSEMBLE THE PERFORMANCE TAIL CONTROL PRIMARY LINK AS SHOWN IN THE DIAGRAM. INSTALL THE M2 SOCKET HEAD CAP SCREWS AS SHOWN (LEAVE M2 SCREWS LOOSELY INSTALLED).

**STEP 6:** INSTALL BOTH ASSEMBLIES AND CHECK FOR SMOOTH OPERATION OF ALL COMPONENTS. PROCEED TO TIGHTEN ALL SCREWS (DO NOT OVERTIGHTEN TO PREVENT STRIPPING M2 THREADS) TO COMPLETE INSTALLATION AND ENJOY THE NEW SLOP-FREE AND PRECISION-CONTROL TAIL SYSTEM.



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