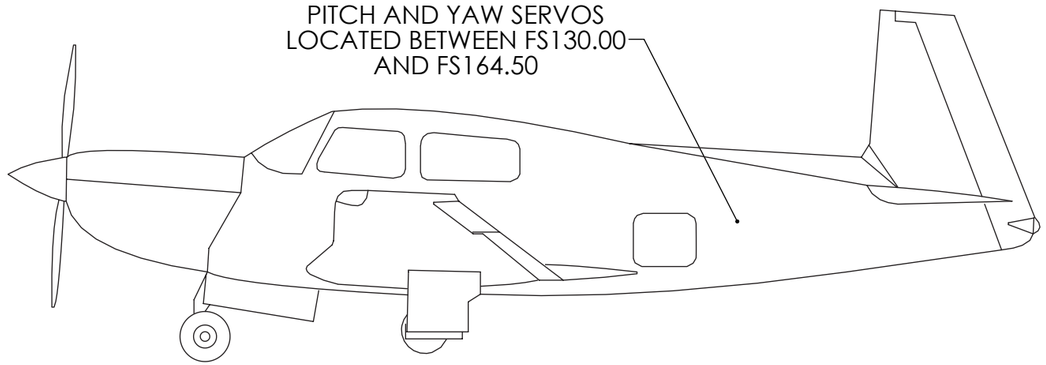

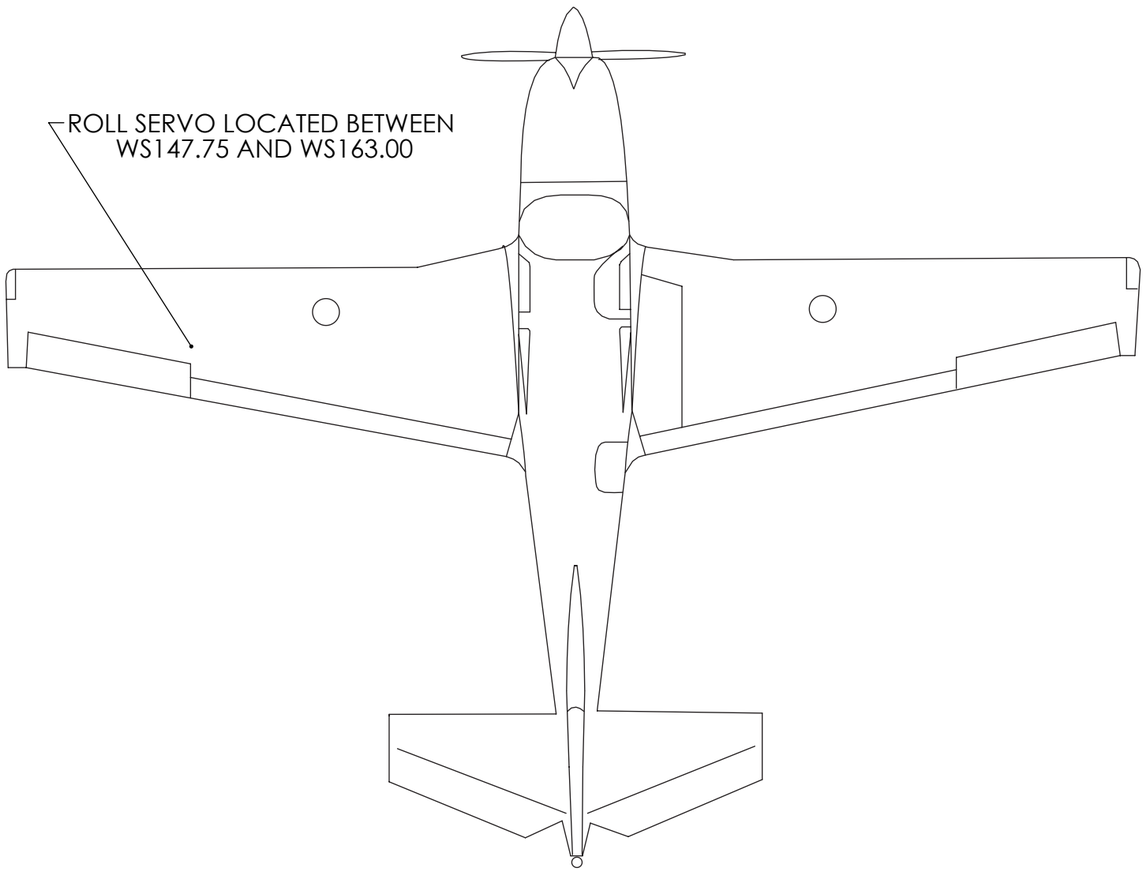

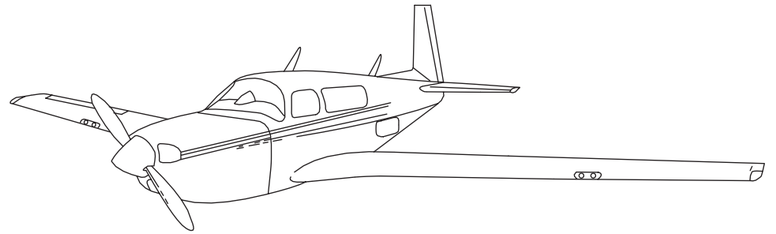

Introduction

This manual provides instructions for installing SkyView Autopilot servos and bracketry in the following Mooney aircraft:

- M20J (S/N 24-0001 through 24-3431)
- M20K (S/N 25-0001 through 25-2035)

Information about wiring autopilot servos to the SkyView Network is provided in the *SkyView System Installation Manual*; procedures to calibrate autopilot servos and Instructions for Continued Airworthiness (ICA) are provided in the *SkyView General Maintenance Manual* document at dynoncertified.com/docs.

This document is released, archived, and controlled according to the Dynon's document control process. To revise this document, a letter is submitted to the FAA with the revision. The FAA then accepts and approves any revision to the Airworthiness Limitations section. After FAA acceptance/approval, Dynon posts the revised document for customer use at dynoncertified.com/docs, and STC owners and installers are notified of the new revision via an official Dynon Marketing email release.

Dynon does not provide a printed version of this document. However, Dynon grants permission to third parties to print this document, as necessary. It is important to use the most recent version when installing SkyView autopilot components. The most recent PDF version is available for download at dynoncertified.com/docs.

This manual is intended for FAA-certified Airframe and Powerplant Technicians. It assumes technicians have the typical aircraft knowledge and training required to perform the procedures in this manual.

All mechanical drawings included in this manual are for reference purposes only. They should not be scaled or copied and used as templates or patterns.

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AUTOPILOT SERVO INSTALLATION MANUAL

Mooney M20J and M20K

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DOC. NO. 104368-000

REV B

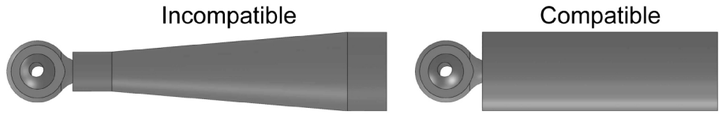
DATE: 11/21/2024

Document Revision History

REV	DATE	CHANGE DESCRIPTION
A	04/04/2024	Initial Release
B	11/21/2024	Revised information about autopilot installation eligibility on Sheet 2.

Note Regarding Rudder Pushrod Ends

Some M20Js have rudder pushrods with tapered ends. Dynon's pushrod clamps are only compatible with pushrods with flat ends; therefore, M20Js with tapered-ended rudder pushrods are ineligible for autopilot installation. It is important to visually inspect the rudder pushrods in M20Js to determine compatibility prior to purchase.



Airworthiness Limitations

For any Airworthiness Limitations associated with installing SkyView autopilot servos, see the *SkyView General Maintenance Manual* document at dynoncertified.com/docs. It is the principal ICA document for the SkyView system.

Basic Control and Operation

Operating instructions and control descriptions are found in the *SkyView Airplane Flight Manual Supplement* document at dynoncertified.com/docs. Operating limitations for the SkyView Autopilot are also found in the *SkyView Airplane Flight Manual Supplement* document.

Product Delivery and Registration

Upon delivery, visually inspect all SkyView Autopilot components, brackets, fasteners, cable harnesses, and accessories for damage and loss that may have occurred during shipping (see Materials on Sheet 10). If loss or damage has occurred, contact Dynon Technical Support.

Register SkyView Autopilot components at dynoncertified.com/register. Product registration verifies ownership, expedites warranty claims, and allows Dynon to send notification when product Service Bulletins and Technical Advisories are published. This site also allows owners and installers to register to receive news and product announcements from Dynon.

Installation Compliance

If the airplane receiving the installation has been modified, it may be difficult to use the information in this manual to completely substantiate the installation in compliance with STC SA02594SE. **Therefore, it is the installer's responsibility to make the final determination of applicability for each individual airplane**.
Prior to completing the installation, and before returning the airplane to service, the installer must complete and submit a completed Form FAA 337 - Major Repair & Alteration (Airframe, Powerplant, Propeller, or Appliance) to the appropriate FAA Aircraft Registration Branch. The form must include the following:

- Description of the autopilot servo installation.
- Description of how the autopilot servos interface with existing equipment and systems.
- Appropriately approved or acceptable data that demonstrates compliance.

Refer to AC 43.9-1G - Instructions for Completion of FAA Form 337 for additional information.

Important Installation Information

Always install avionics equipment in accordance with the instructions in this manual and the guidance and approved engineering methods outlined the following FAA documents:

- AC 23.1311-1C - Installation of Electronic Display in Part 23 Airplanes
- AC 43.13-1B - Acceptable Methods, Techniques, and Practices - Aircraft Inspection
- AC 43.13-2B - Acceptable Methods, Techniques, and Practices - Aircraft Alterations

The instructions in this manual assume the aircraft areas affected by the autopilot servo installation are unmodified from the factory-delivered configuration.

The technician who will authorize the airplane's return to service should agree with the installation plan (i.e., methods, component locations, wiring harness routing, etc.) before installation activities begin. This will help avoid potential rework should any part of the installation be found non-compliant. The technician performing the installation should record where the autpilot components are installed in the airplane. This information should then be entered into airplane's permanent record. Dynon provides a document template to record this information. Download the *SkyView Equipment Installation Record* document at dynoncertified.com/docs.

Ensure the following before and during installation activities:

- Make sure all flight control bellcranks are lubricated in accordance with manufacturer's instructions.
- Remove any previously installed autopilot equipment, including rivets and other hardware, that may interfere with the new servo installation.
- Remove any non-essential insulation or interior materials that may interfere with the servo installation.
- Always disconnect aircraft battery before starting installation activities.
- Always deburr drilled holes.
- Unless otherwise specified, torque all fasteners per specifications in AC 43.13-1B, Table 7-1. Include specified friction drag value when torquing screws.

The following non-typical tools are needed to complete the installation:

- Drill fixture for MS21047L08 nutplates,
- Calibrated tensiometer.

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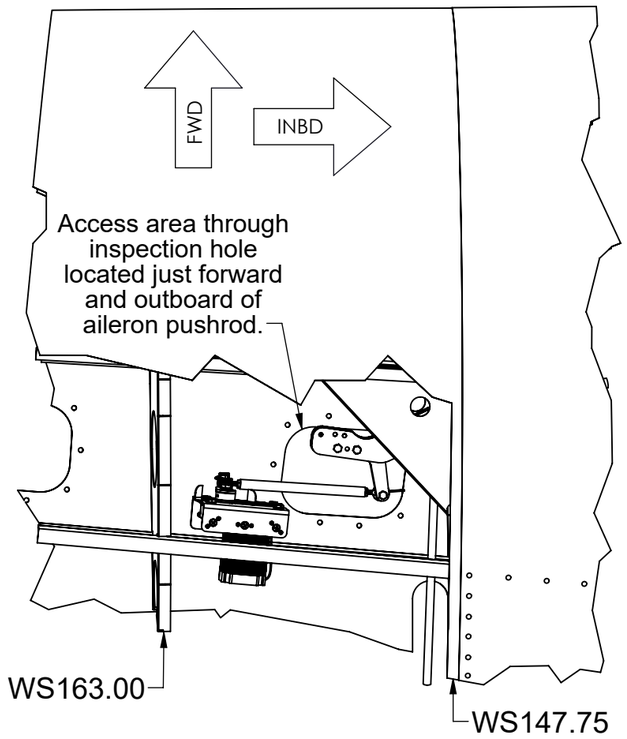
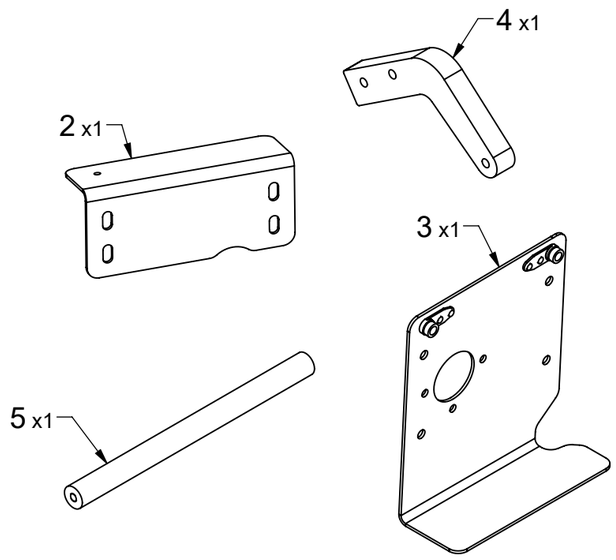
AUTOPILOT SERVO INSTALLATION MANUAL

Mooney M20J and M20K

Roll Servo Installation



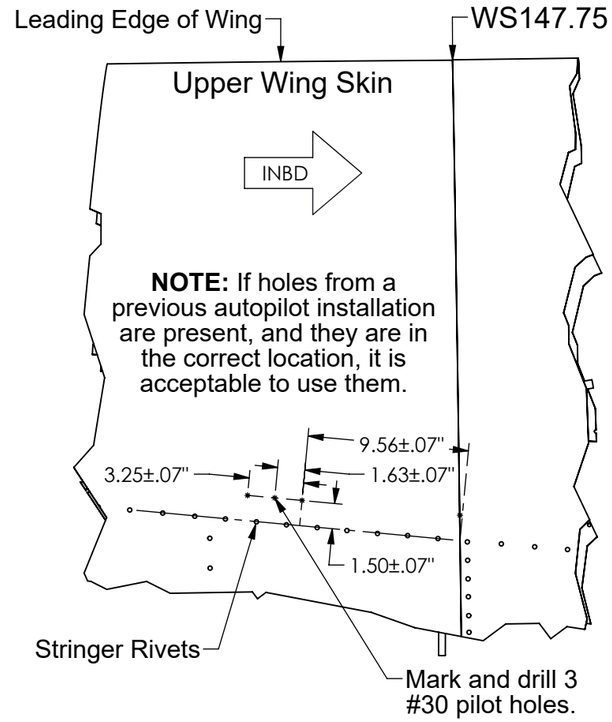
Roll Servo Complete Installation

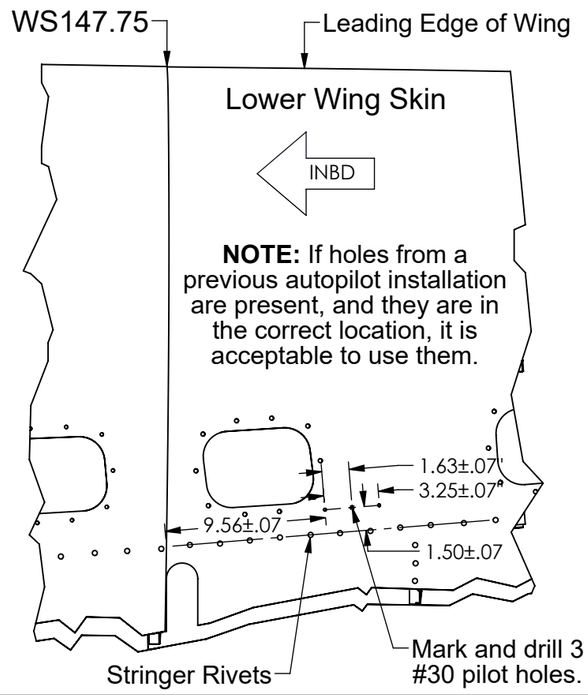


Roll Servo Bracketry

STEP 1: Secure ailerons in center of travel.

STEP 2: Measure, mark, and drill pilot holes in upper and lower wing skins.





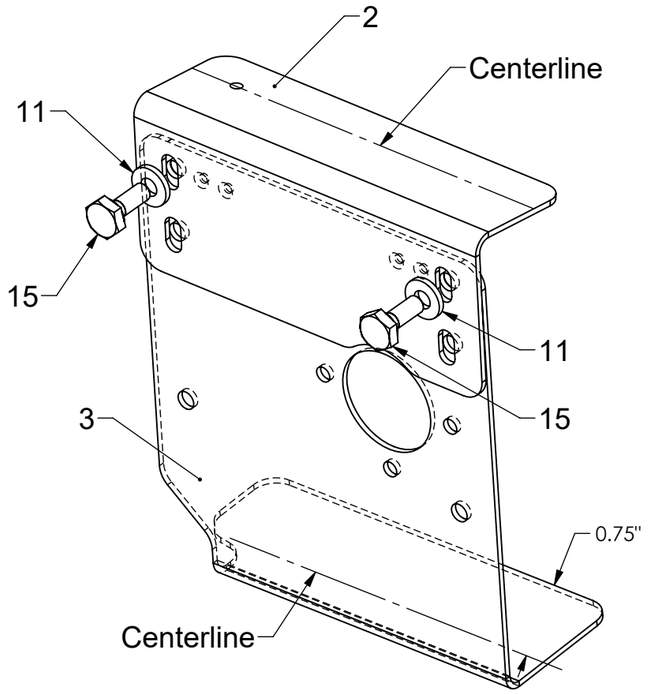
STEP 3: Prepare brackets for installation:

A. Assemble brackets. Do not fully tighten hardware at this time.

   TIP: Place additional hardware through lower slots and holes to ensure holes do not get blocked by upper bracket during fitment of bracket assembly in wing.

B. Mark a centerline on the top of upper roll bracket using pre-drilled pilot hole as reference.

C. Mark a centerline on the bottom of lower roll bracket 0.75" from outside edge.



ITEM #	DESCRIPTION
2	ROLL SERVO UPPER BRACKET
3	ROLL SERVO LOWER BRACKET
4	ROLL SERVO BELLCRANK ARM
5	ROLL SERVO PUSHROD
11	FLAT WASHER #10 (AN960-10)
15	HEX BOLT #10-32 (AN3-4A)

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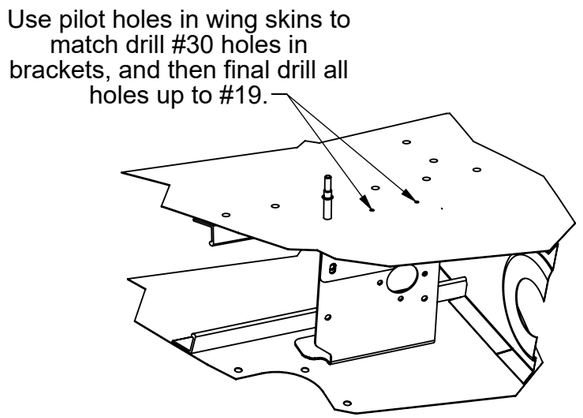
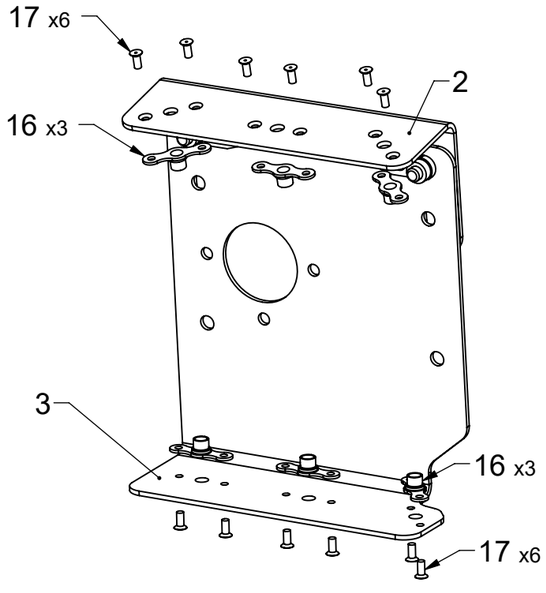
STEP 4: Position bracket assembly in wing:

A. Insert bracket assembly in wing and slide upper bracket as needed so bracket assembly contacts upper and lower wing skins.
B. Tighten upper bracket hardware, and then mark position of upper bracket on lower bracket.
C. Temporarily fasten bracket using pre-drilled hole in upper bracket and align centerlines on brackets with pilot holes in wing skins.
D. Clamp bottom bracket to wing skin.
E. Use pilot holes in wing skins to match drill #30 holes in upper and lower brackets.
F. Using temporary fasteners as needed, final drill all holes up to #19.



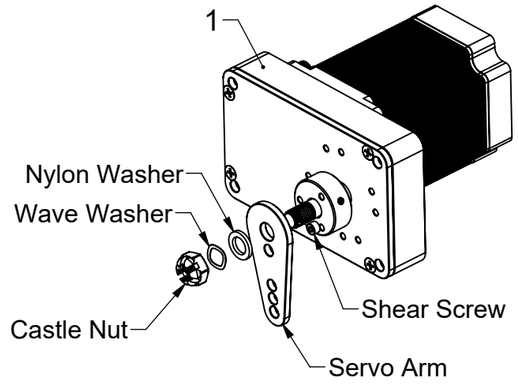
STEP 5: Attach nutplates to upper and lower brackets:

A. Remove bracket assembly from aircraft.
B. Use a #8 nutplate drill fixture to attach nutplates to brackets.

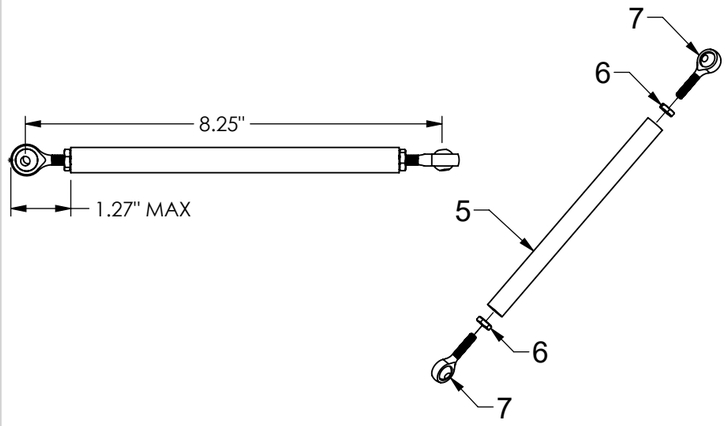


STEP 5: Temporarily remove servo arm from roll servo.

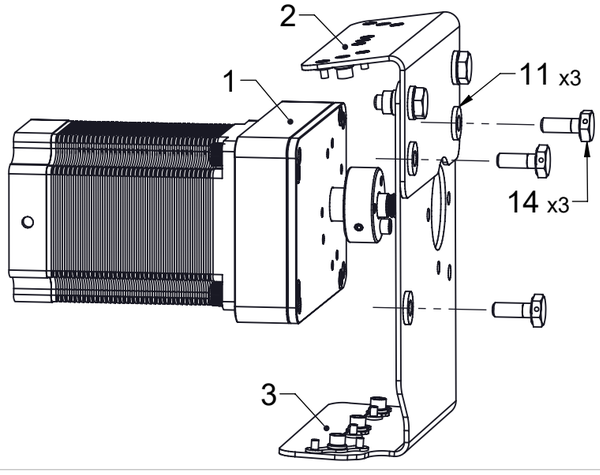
IMPORTANT: *DO NOT remove shear screw from servo disc!*



STEP 6: Assemble roll servo pushrod and set to length.

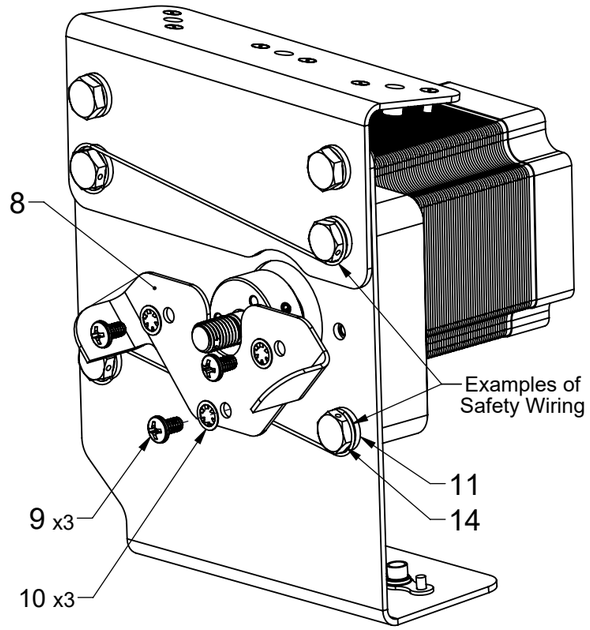


STEP 7: Attach roll servo to bracket assembly.



STEP 8: Complete servo/bracket assembly:

A. Attach servo arm limiter to roll servo.
B. Install fourth servo bolt.
C. Use 0.032" wire to safety wire servo bolts.



ITEM #	DESCRIPTION
1	ROLL SERVO
2	ROLL SERVO UPPER BRACKET
3	ROLL SERVO LOWER BRACKET
5	ROLL SERVO PUSHROD
6	JAM NUT #10-32
7	BEARING ROD END #10-32, RH, MALE
8	SERVO ARM LIMITER
9	PHIL PAN HEAD SCREW #6-32, 1/4"L, NYLOCK
10	INT STAR LOCK WASHER #06 (MS535333-37P)
11	FLAT WASHER #10 (AN960-10)
14	HEX BOLT #10-32, 17/32"L, 1/8"G, DRILL HEAD (AN3H-4A)
16	NUTPLATE #8-32 (MS21047L08)
17	RIVET 3/16"L, 3/32"D (MS20426AD3-3)

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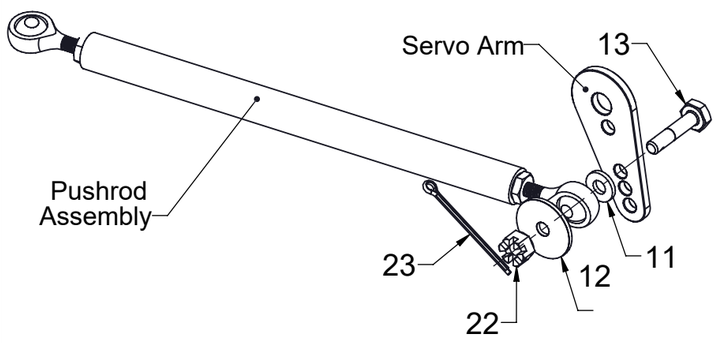
STEP 9: Attach roll servo pushrod assembly to servo arm.

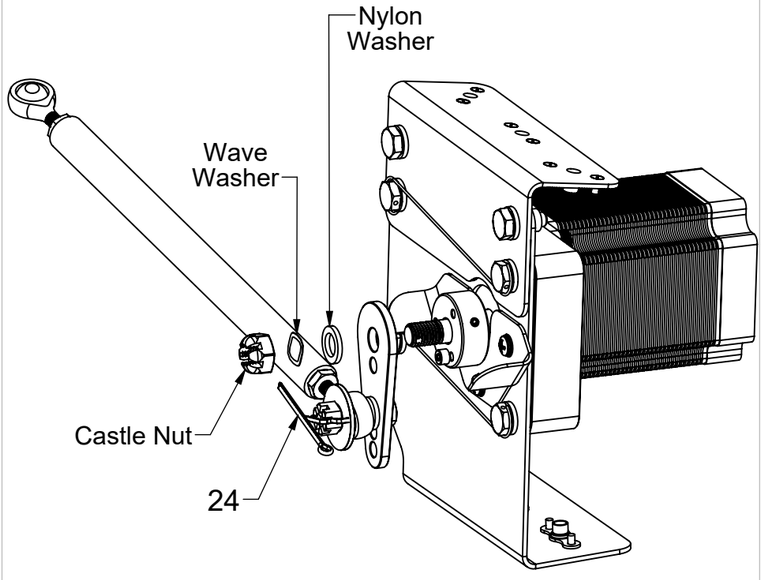
IMPORTANT: *It is critical to an airworthy installation to insert the hex bolt through innermost hole in the servo arm and in the direction shown.*



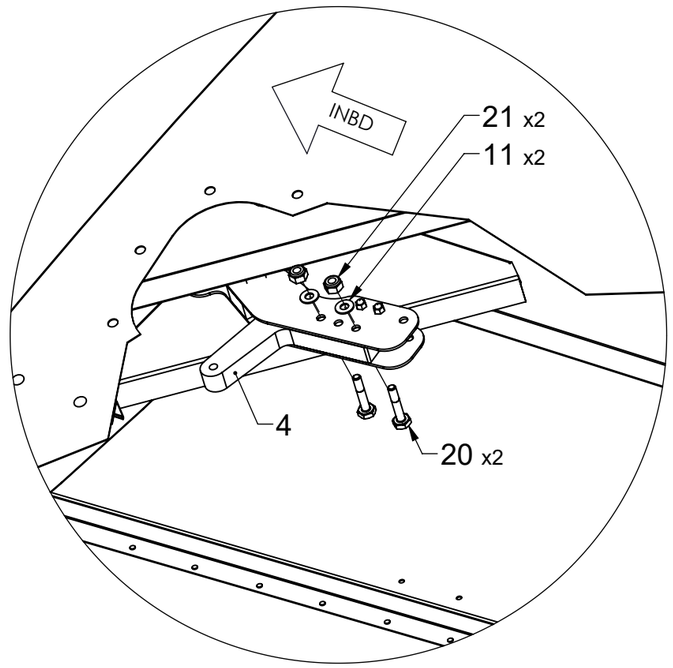
STEP 10: Attach servo arm, with servo pushrod assembly, to roll servo.

IMPORTANT: *Position servo arm so it is fully seated on servo disc. The servo arm has a hole that fits over the shear screw head.*

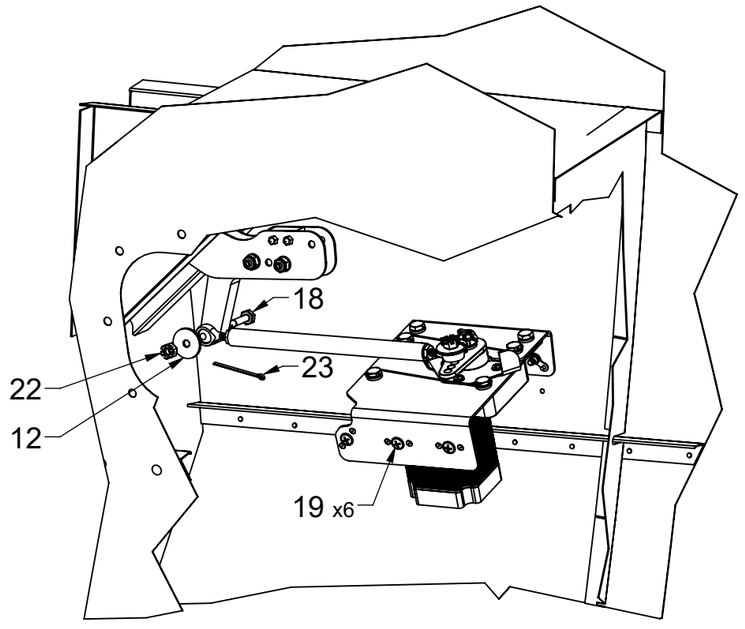
IMPORTANT: *Tighten servo castle nut to 1-4 in-lbs. DO NOT over tighten! Over tightening may prevent capstan from rotating freely in event of shear screw failure.*



STEP 11: Attach roll servo bellcrank arm to aircraft bellcrank.



STEP 12: Attach pushrod assembly to bellcrank arm and secure entire roll servo assembly to wing skins.



Check Roll Servo Installation

1. Release ailerons.
2. Move aileron control through full range of motion per manufacturer's maintenance instructions, and verify the following:
   - Aileron control is smooth throughout (i.e., no grinding, rubbing, or roughness).
   - Roll servo pushrod and bellcrank do not contact any other controls, structures, wiring, insulation, or interior materials during entire travel.
   - At extents of travel in both directions, servo arm never rotates more than 60 degrees in either direction from neutral.
   - Aileron control travel is limited by manufacturer's control stop not the servo arm limiter.
3. Cycle the control several times, return it to neutral, and verify the servo arm points downward in roughly the 6 o'clock position.

ITEM #	DESCRIPTION
4	ROLL SERVO BELLCRANK ARM
11	FLAT WASHER #10 (AN960-10)
12	FLAT WASHER 3/16", LARGE AREA (AN970-3)
13	HEX BOLT #10-32, 29/32"L, 1/2"G, DRILL SHANK (AN3-7)
18	HEX BOLT #10-32, 1-9/32"L, 7/8"G, DRILL SHANK (AN3-11)
19	PHIL WASH HEAD SCREW #8-32, 7/16"L (AN525-832R7)
20	HEX BOLT #10-32, 1-1/32"L, 5/8"G (AN3-10A)
21	LOCK NUT #10-32 (AN365-1032A)
22	CASTLE NUT #10-32 (AN310-3)
23	COTTER PIN 1/16" X 1/2" (MS24665-151)
24	COTTER PIN 5/64" X 3/4" (MS24665-210)

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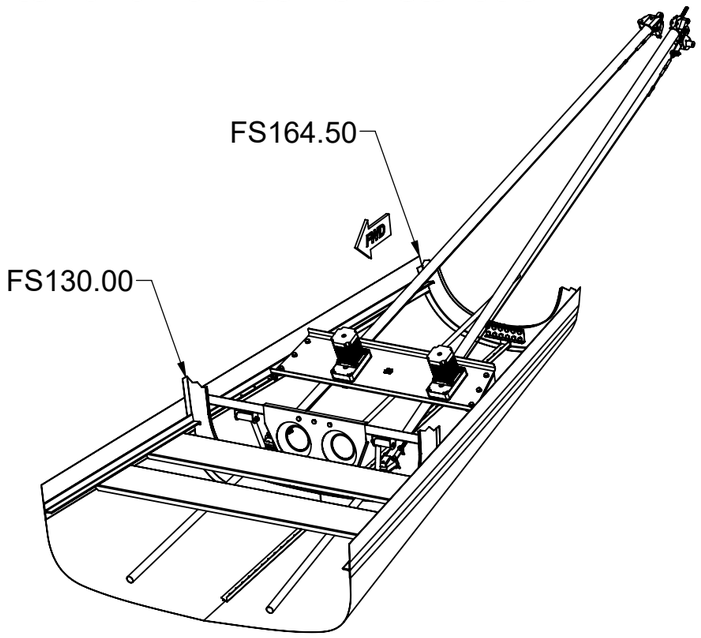
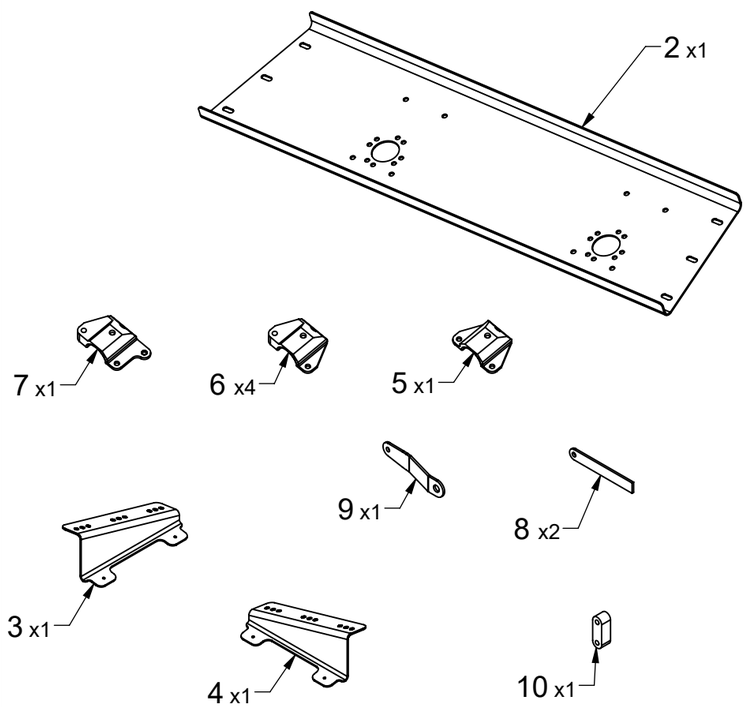
Pitch and Yaw Servo Installation



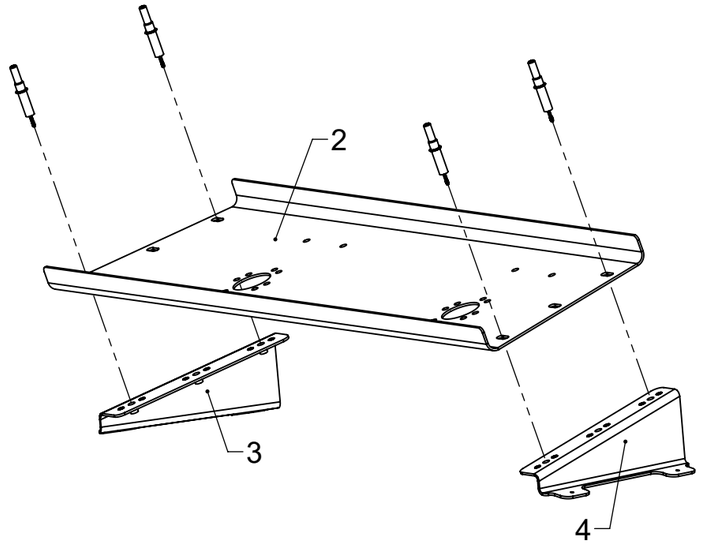
Pitch and Yaw Servo Complete Installation



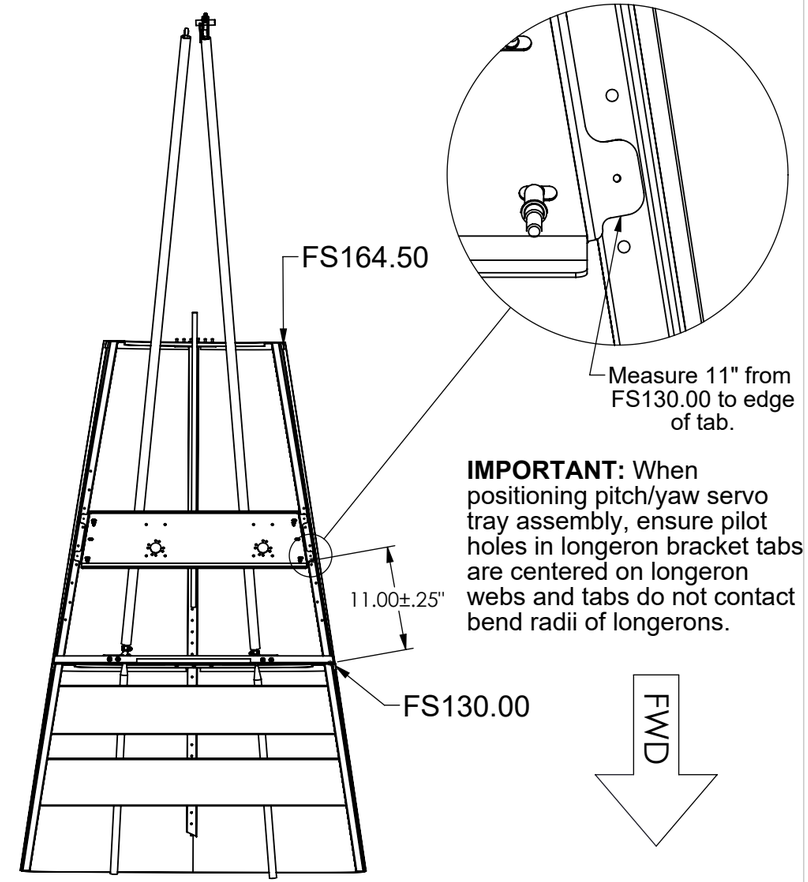
Pitch and Yaw Servo Bracketry

STEP 1: Secure elevator and rudder in center of travel.

STEP 2: Temporarily fasten left and right longeron brackets to pitch/yaw servo tray.



STEP 3: Position pitch/yaw servo tray assembly as shown below.



IMPORTANT: When positioning pitch/yaw servo tray assembly, ensure pilot holes in longeron bracket tabs are centered on longeron webs and tabs do not contact bend radii of longerons.

ITEM #	DESCRIPTION
2	PITCH/YAW SERVO BRACKET TRAY
3	PITCH/YAW SERVO LONGERON BRACKET, RH
4	PITCH/YAW SERVO LONGERON BRACKET, LH
5	PITCH SERVO PUSHROD CLAMP, THIN
6	PITCH/YAW SERVO PUSHROD CLAMP
7	PITCH/YAW SERVO PUSHROD CLAMP, TAB
8	PITCH/YAW SERVO BRIDLE CABLE EXTENDER
9	YAW SERVO CLEARANCE BRACKET
10	YAW SERVO BELLCRANK SPACER

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STEP 4: Attach left and right longeron brackets to longerons.

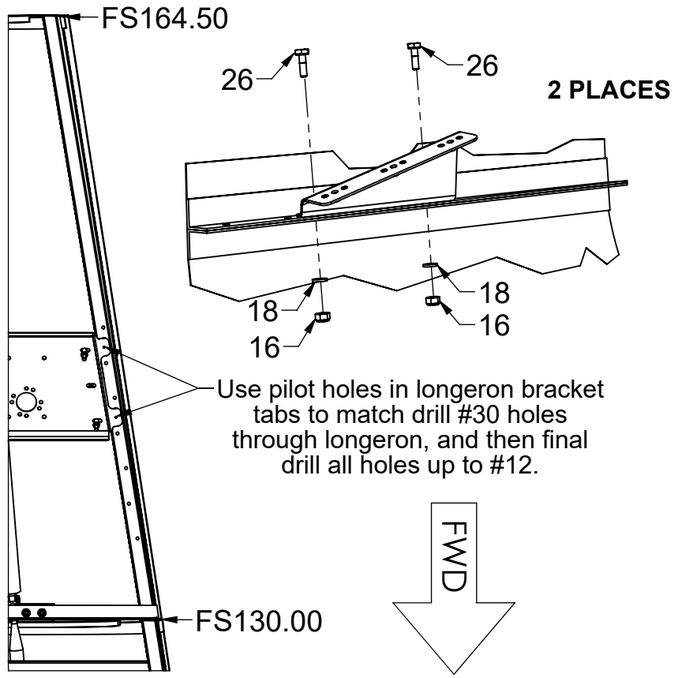
A. On both sides of fuselage, clamp pitch/yaw servo tray assembly to longerons at marks made in Step 3.

   IMPORTANT: When positioning pitch/yaw servo tray assembly, ensure pilot holes in longeron bracket tabs are centered on longeron webs and tabs do not contact bend radii of longerons.

B. Use pilot holes in longeron bracket tabs to match drill #30 holes through longerons.

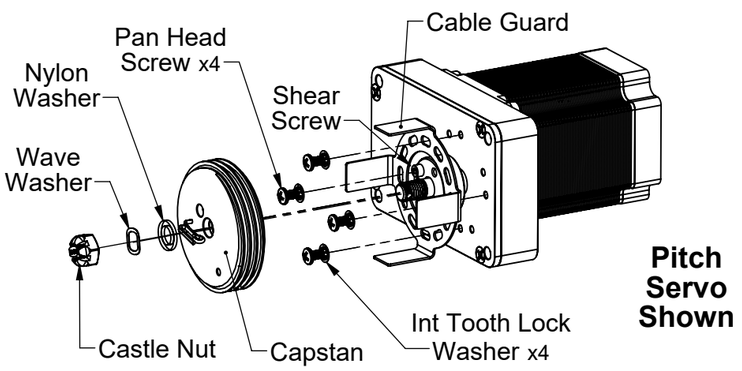
C. Final drill all holes up to #12.

D. Secure longeron brackets to longerons.

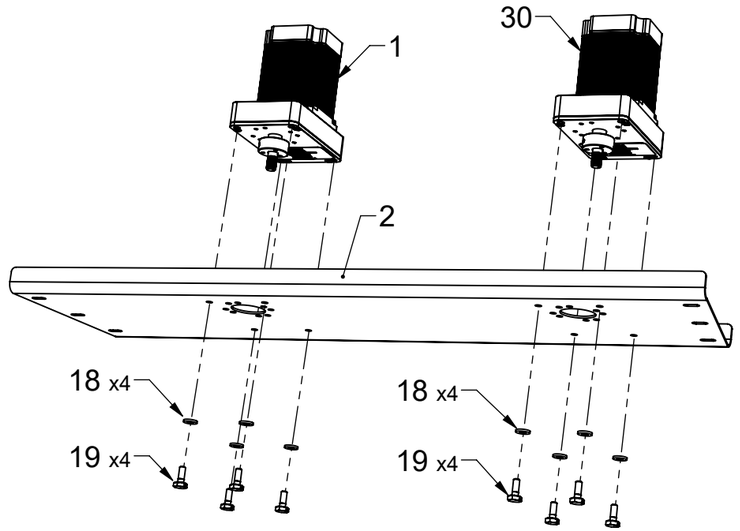


STEP 5: Temporarily remove capstans and cable guards from pitch and yaw servos. Keep hardware for re-installation.

IMPORTANT: *DO NOT remove shear screws from servo discs!*

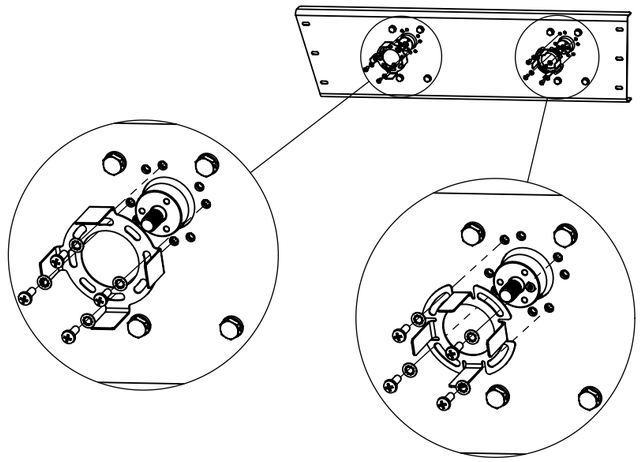


STEP 6: Attach pitch and yaw servos to pitch/yaw servo tray bracket.

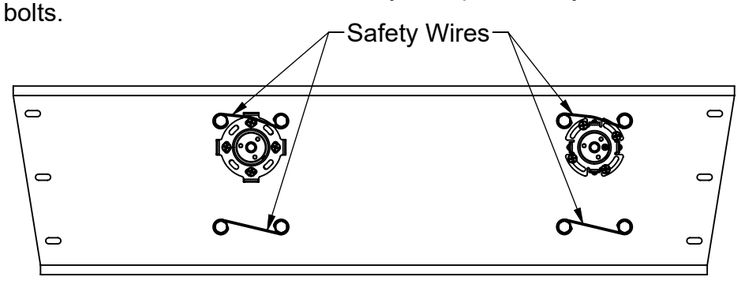


STEP 7: Re-attach cable guards to pitch and yaw servos.

NOTE: Cable guard and attachment hardware are included in servo sales assemblies.



STEP 8: Use 0.032" wire to safety wire pitch and yaw servo bolts.

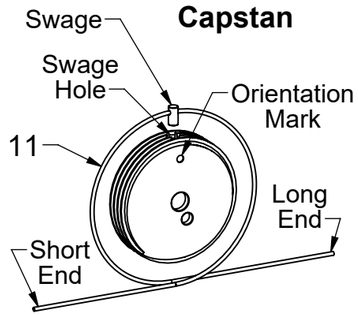


STEP 9: Wrap bridle cables around pitch and yaw servo capstans.

IMPORTANT: Ensure ends of bridle cables exit capstans as detailed below.

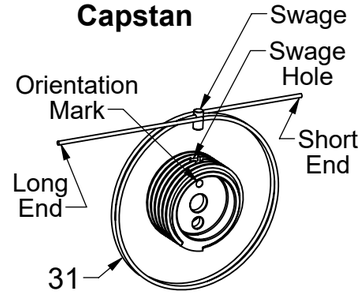
NOTE: Securing (e.g., taping) bridle cables to capstan grooves prevents them from unraveling when handling.

Pitch Servo Capstan



Wrap pitch servo bridle cable 1/2-time around capstan in each direction.

Yaw Servo Capstan



Wrap yaw servo bridle cable 1-time around capstan in each direction.

ITEM #	DESCRIPTION
1	PITCH SERVO
2	PITCH/YAW SERVO BRACKET TRAY
11	BRIDLE CABLE
16	LOCK NUT #10-32 (AN365-1032A)
18	FLAT WASHER #10 (AN960-10)
19	HEX BOLT #10-32, 17/32", 1/8"G, DRILL HEAD (AN3H-4A)
26	HEX BOLT #10-32, 21/32"L, 1/4"G (AN3-5A)
30	YAW SERVO
31	BRIDLE CABLE

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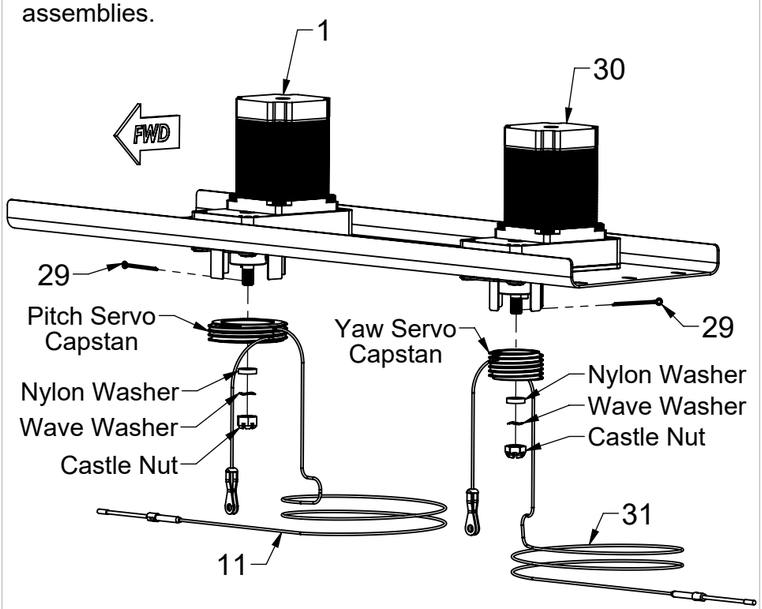
STEP 10: Re-attach pitch and yaw servo capstans with bridle cables.

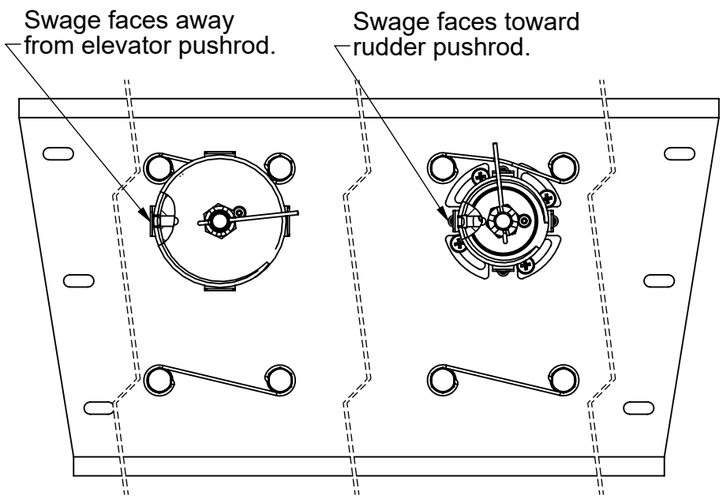
IMPORTANT: *Position servo capstans so orientation marks face away from servo and are fully seated on servo discs. The capstans have holes that fit over the shear screw heads.*

IMPORTANT: *Position pitch servo capstan so swage hole will face away from elevator pushrod; position yaw servo capstan so swage hole will face toward rudder pushrod.*

IMPORTANT: *Tighten servo castle nuts to 1-4 in-lbs. DO NOT over tighten! Over tightening may prevent capstan from rotating freely in event of shear screw failure.*

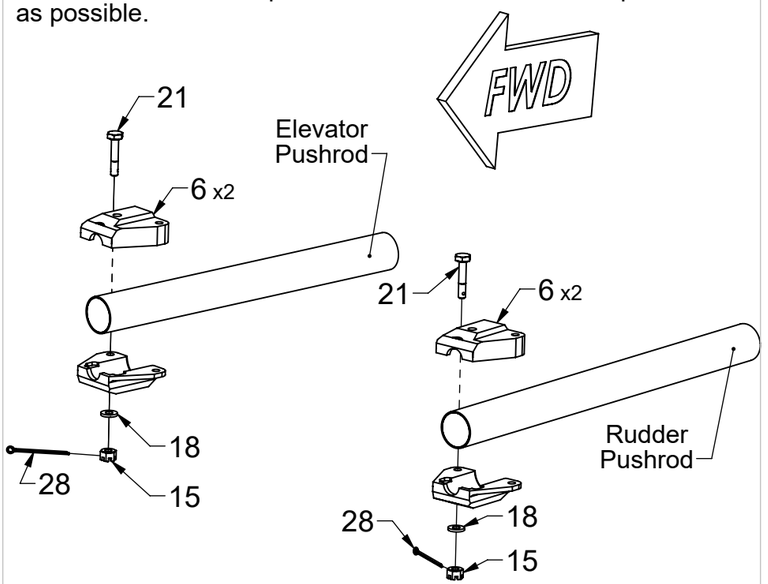
NOTE: Servo attachment hardware is included in servo sales assemblies.





STEP 11: Attach forward pushrod clamps to elevator and rudder pushrods.

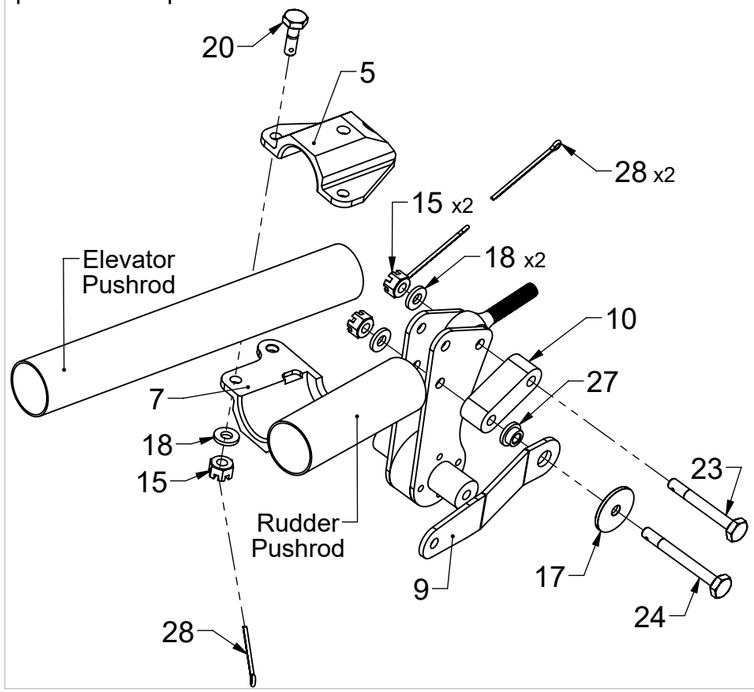
IMPORTANT: Ensure pushrods are inserted into clamps as far as possible.



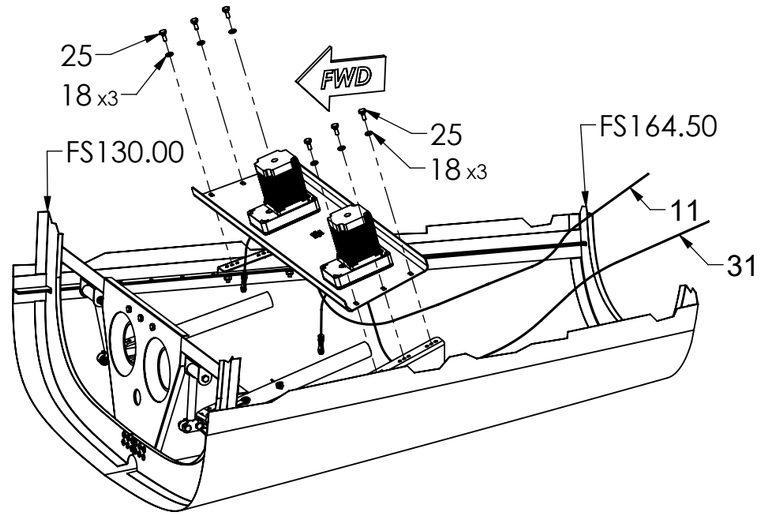
STEP 12: Attach aft pushrod clamps to elevator pushrod; attach yaw clearance bracket to rudder bellcrank.

IMPORTANT: Ensure pushrod is inserted into clamps as far as possible.

IMPORTANT: For M20Ks, attach elevator down spring to elevator pushrod clamp's tab.



STEP 13: Attach pitch/yaw servo tray, with servos and bridle cables, to left and right longeron brackets.



ITEM #	DESCRIPTION
1	PITCH SERVO
5	PITCH SERVO PUSHROD CLAMP, THIN
6	PITCH/YAW SERVO PUSHROD CLAMP
7	PITCH/YAW SERVO PUSHROD CLAMP, TAB
9	YAW SERVO CLEARANCE BRACKET
10	YAW SERVO BELLCRANK SPACER
11	BRIDLE CABLE
15	CASTLE NUT #10-32 (AN310-3)
17	FLAT WASHER 3/16", LARGE AREA (AN970-3)
18	FLAT WASHER #10 (AN960-10)
20	HEX BOLT #10-32, 21/32"L, 1/4"G, DRILL SHANK (AN3-5)
21	HEX BOLT #10-32, 1-1/32"L, 5/8"G, DRILL SHANK (AN3-10)
23	HEX BOLT #10-32, 1-17/32"L, 1-1/8"G, DRILL SHANK (AN3-14)
24	HEX BOLT #10-32, 1-25/32"L, 1-3/8"G, DRILL SHANK (AN3-16)
25	HEX BOLT #10-32, 17/32"L, 1/8"G (AN3-4A)
27	COPPER BUSHING 3/16"ID
28	COTTER PIN 1/16" X 1/2" (MS24665-151)
29	COTTER PIN 5/65" X 3/4" (MS24665-210)
30	YAW SERVO
31	BRIDLE CABLE

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STEP 14: Connect pitch servo bridle cable assembly to elevator pushrod:

A. Assemble bridle cable, turnbuckle, and turnbuckle pin eye.
B. At aft end of pushrod, attach bridle cable assembly to pushrod clamp.
C. At forward end of pushrod, attach extender bracket to pushrod clamp.
D. While pulling bridle cable taught, mark hole location on extender bracket.
E. Drill #10 hole through extender bracket, and then trim bracket as needed.
F. Attach bridle cable assembly to extender bracket.
G. Make sure bridle cable does not contact cable guard.

   IMPORTANT: *The bridle cable will prematurely wear if it contacts the cable guard throughout its travel.*

H. If cable guard interferes with bridle cable, adjust cable guard position as needed.

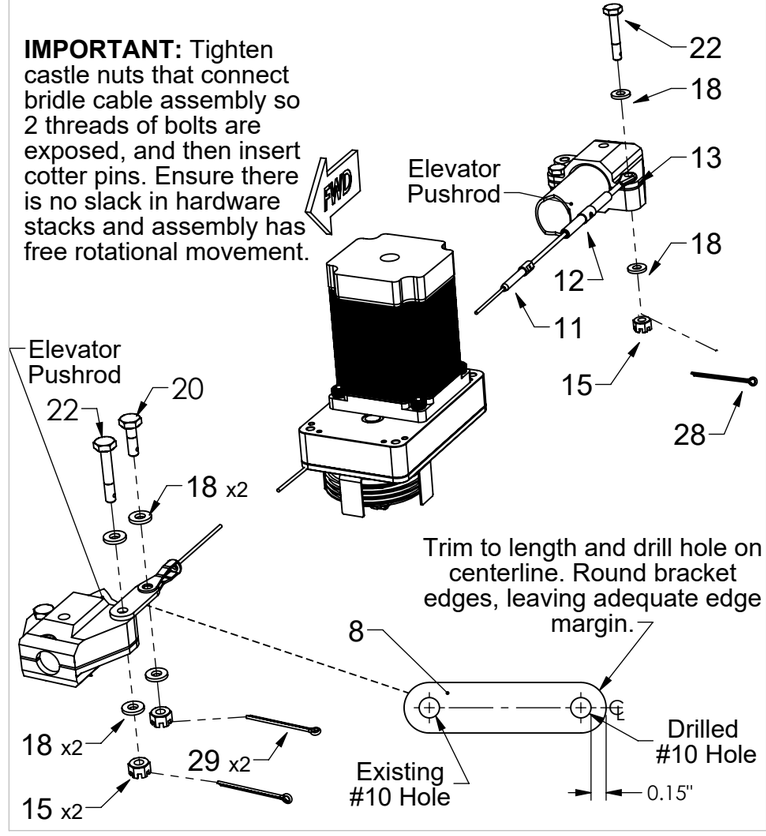
   NOTE: See the *SkyView General Maintenance Manual* document for cable guard adjustment instructions.

I. Use turnbuckle to tension bridle cable to 15-20 lbs. While tensioning, make sure capstan's swage engagement hole continues to face *away from* elevator pushrod.

   IMPORTANT: *Ensure no more than 3 threads on bridle cable end and pin eye end extend from turnbuckle.*

J. Safety wire turnbuckle with provided clips.

IMPORTANT: Tighten castle nuts that connect bridle cable assembly so 2 threads of bolts are exposed, and then insert cotter pins. Ensure there is no slack in hardware stacks and assembly has free rotational movement.



STEP 15: Connect yaw servo bridle cable assembly to rudder pushrod:

A. Assemble bridle cable, turnbuckle, and turnbuckle fork end.
B. At aft end of pushrod, attach bridle cable assembly to clearance bracket.
C. At forward end of pushrod, attach extender bracket to pushrod clamp.
D. While pulling bridle cable taught, mark hole location on extender bracket.
E. Drill #10 hole through extender bracket, and then trim bracket as needed.
F. Attach bridle cable assembly to extender bracket.
G. Make sure bridle cable does not contact cable guard.

   IMPORTANT: *The bridle cable will prematurely wear if it contacts the cable guard throughout its travel.*

H. If cable guard interferes with bridle cable, adjust cable guard position as needed.

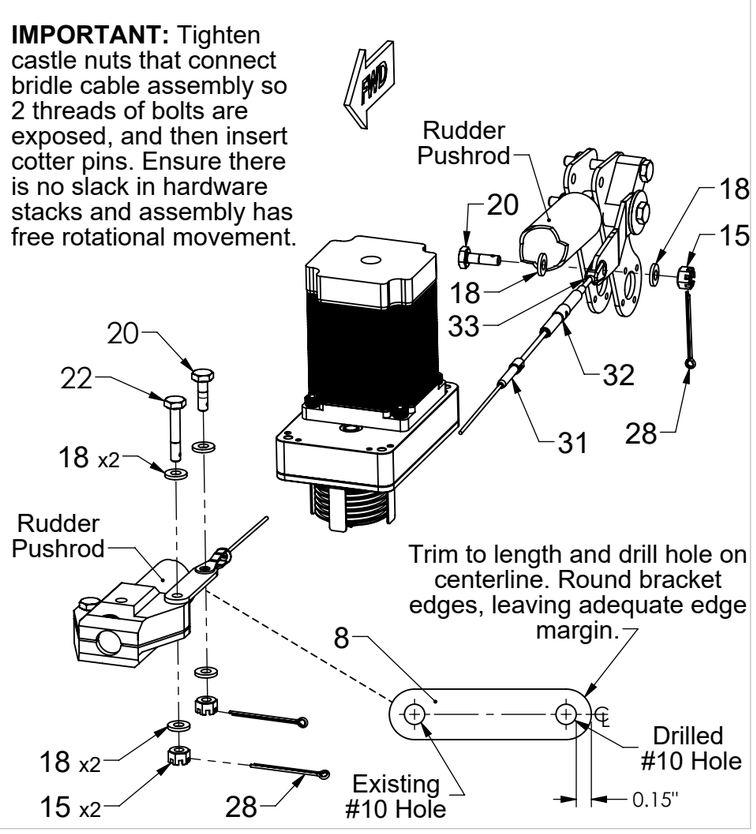
   NOTE: See the *SkyView General Maintenance Manual* document for cable guard adjustment instructions.

I. Use turnbuckle to tension bridle cable to 15-20 lbs. While tensioning, make sure capstan's swage engagement hole continues to face *toward* rudder pushrod.

   IMPORTANT: *Ensure no more than 3 threads on bridle cable end and fork end extend from turnbuckle.*

J. Safety wire turnbuckle with provided clips.

IMPORTANT: Tighten castle nuts that connect bridle cable assembly so 2 threads of bolts are exposed, and then insert cotter pins. Ensure there is no slack in hardware stacks and assembly has free rotational movement.



Check Pitch/Yaw Servo Installation

1. Release elevator and rudder and/or yoke and pedals.
2. Move elevator and rudder controls through full range of motion per manufacturer's maintenance instructions, and verify the following:
   - Elevator and rudder controls are smooth throughout (i.e., no grinding, rubbing, or roughness).
   - Pitch and yaw servo bridle cables and connecting ends do not contact any other controls, structures, wiring, insulation, or interior materials during entire travel.
   - At extents of travel in both directions, there's a minimum of 30 degrees of bridle cable engagement with capstan from swage engagement hole to where bridle cable departs from capstan.
   - Elevator and rudder control travel is limited by manufacturer's control stops.
3. Cycle elevator and rudder controls several times, return them to neutral, and verify the following:
   - Pitch servo swage engagement hole faces away from elevator pushrod.
   - Yaw servo swage engagement hole faces toward rudder pushrod.
   - Pitch and yaw servo bridle cable tensions have not changed.

ITEM #	DESCRIPTION
8	PITCH/YAW SERVO BRIDLE CABLE EXTENDER
11	BRIDLE CABLE
12	TURNBUCKLE BARREL #6-40
13	TURNBUCKLE PIN EYE #6-40, RH
15	CASTLE NUT #10-32 (AN310-3)
18	FLAT WASHER #10 (AN960-10)
20	HEX BOLT #10-32, 21/32"L, 1/4"G, DRILL SHANK (AN3-5)
21	HEX BOLT #10-32, 1-1/32"L, 5/8"G, DRILL SHANK (AN3-10)
22	HEX BOLT #10-32, 1-5/32"L, 3/4"G, DRILL SHANK (AN3-11)
28	COTTER PIN 1/16" X 1/2" (MS24665-151)
31	BRIDLE CABLE
32	TURNBUCKLE BARREL #6-40
33	TURNBUCKLE FORK END ##6-40, RH

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ITEM #	DYNON PART #	DESCRIPTION	QTY
		ROLL SERVO KIT (Includes the Following)	1
1	504897-000	SV42 ROLL SERVO ASSY: MOONEY M20	1
	504438-000	**ROLL SERVO BRACKET KIT**	1
2	504311-001	ROLL SERVO UPPER BRACKET	1
3	504310-001	ROLL SERVO LOWER BRACKET	1
4	104325-000	ROLL SERVO BELLCRANK ARM	1
	104904-000	**ROLL SERVO PUSHROD KIT**	1
5	104317-000	ROLL SERVO PUSHROD, 0.5" OD	1
6	100975-000	JAM NUT #10-32	2
7	104568-000	BEARING ROD END #10-32RH, MALE	2
	504903-000	**ROLL SERVO LIMITING BRACKET KIT**	1
8	104875-000	SERVO ARM LIMITING BRACKET	1
9	100494-000	PHIL PAN HEAD SCREW #6-32, 1/4"L, NYLOCK	3
10	100979-000	INT STAR LOCK WASHER #06	3
	104777-000	**ROLL SERVO HARDWARE KIT**	1
11	100978-003	FLAT WASHER #10	9
12	100977-000	FLAT WASHER 3/16", LARGE	2
13	101844-004	HEX BOLT #10-32, 29/32"L, 1/2"G, DRILL SHANK	1
14	100981-001	HEX BOLT #10-32, 17/32"L, 1/8"G, DRILL HEAD	4
15	103666-001	HEX BOLT #10-32, 17/32"L, 1/8G	2
16	103990-008	NUTPLATE #8-32, SELF-LOCK, LOW-PRO	6
17	103665-001	RIVET, MS20426AD3-3.5	12
18	101844-007	HEX BOLT #10-32, 1-9/32"L, 7/8"G, DRILL SHANK	1
19	101880-004	PHIL WASH HEAD #8-32", 7/16"L	6
20	103666-005	HEX BOLT #10-32, 1-1/32"L, 5/8"G	2
21	100976-001	LOCK NUT #10	2
22	100899-001	CASTLE NUT #10-32	2
23	100904-002	COTTER PIN 1/16" X 1/2"	2
24	100904-001	COTTER PIN 5/64" X 3/4"	1

ITEM #	DYNON PART #	DESCRIPTION	QTY
		PITCH SERVO KIT (Includes the Following)	1
1	503406-000	SV42C PITCH SERVO ASSY: MOONEY M20	1
	504437-000	**PITCH/YAW SERVO BRACKET KIT**	1
2	504309-002	PITCH/YAW SERVO BRACKET TRAY	1
3	504307-002	PITCH/YAW SERVO LONGERON BRACKET, RH	1
4	504307-003	PITCH/YAW SERVO LONGERON BRACKET, LH	1
5	104844-003	PITCH SERVO PUSHROD CLAMP, THIN	1
6	104844-000	PITCH/YAW SERVO PUSHROD CLAMP	4
7	104844-001	PITCH SERVO PUSHROD CLAMP, TAB	1
8	504552-000	PITCH/YAW SERVO BRIDLE CABLE EXTENDER	2
9	504553-000	YAW SERVO CLEARANCE BRACKET	1
10	504499-000	YAW SERVO BELLCRANK SPACER	1
	504573-000	**BRIDLE CABLE KIT**	1
11	504508-000	BRIDLE CABLE	1
12	104563-000	TURNBUCKLE BARREL #6-40	1
13	104564-000	TURNBUCKLE PIN EYE #6-40, RH	1
	104656-000	TURNBUCKLE FORK END #6-40, RH (NOT USED)	1
14	104556-000	TURNBUCKLE SAFETY CLIP	2
	104776-000	**PITCH/YAW SERVO HARDWARE KIT**	1
15	100899-001	CASTLE NUT #10-32	11
16	100976-011	LOCK NUT #10-32	4
17	100977-000	FLAT WASHER 3/16", LARGE	1
18	100978-003	FLAT WASHER #10	35
19	100981-001	HEX BOLT #10-32, 17/32"L, 1/8"G, DRILL HEAD	8
20	101844-002	HEX BOLT #10-32, 21/32"L, 1/4"G, DRILL SHANK	4
21	101844-005	HEX BOLT #10-32, 1-1/32"L, 5/8"G, DRILL SHANK	2
22	101844-006	HEX BOLT #10-32, 1-5/32"L, 3/4"G, DRILL SHANK	3
23	101844-009	HEX BOLT #10-32, 1-17/32"L, 1-1/8"G, DRILL SHANK	1
24	101844-011	HEX BOLT #10-32, 1-25/32"L, 1-3/8"G, DRILL SHANK	1
25	103666-001	HEX BOLT #10-32, 17/32"L, 1/8"G	6
26	103666-002	HEX BOLT #10-32, 21/32"L, 1/4"G	4
27	104747-000	COPPER BUSHING 3/16"ID	1
28	100904-002	COTTER PIN 1/16" X 1/2"	11
29	100904-001	COTTER PIN 5/64" X 3/4"	2
	504573-000	***YAW SERVO KIT (Includes the Following)***	1
30	503933-000	SV42C YAW SERVO ASSY: MOONEY M20	1
	504573-000	**BRIDLE CABLE KIT**	1
31	504508-000	BRIDLE CABLE	1
32	104563-000	TURNBUCKLE BARREL #6-40	1
	104564-000	TURNBUCKLE PIN EYE #6-40, RH (NOT USED)	1
33	104565-000	TURNBUCKLE FORK END #6-40, RH	1
34	104556-000	TURNBUCKLE SAFETY CLIP	2

Electrical Connection

After physically installing all autopilot servos, connect them to the SkyView Network. See the *Autopilot Servos* section of the *SkyView System Installation Manual* document at dynoncertified.com/docs.

Servo Calibration

After physically installing and electrically connecting all autopilot servos, calibrated them in the SkyView System. See the *Autopilot Servo Calibration* section of the *SkyView General Maintenance Manual* document at dynoncertified.com/docs.

Electric Trim Control

Existing pitch trim motors certified for the airplane can be controlled through the SkyView Autopilot system. Such trim motors must operate on 10–30 Volts with a maximum current draw of 5 Amps. This includes trim motors with or without a clutch.

Instructions for connecting to a trim motor, configuring SkyView for trim control, and testing the feature are found in the *SkyView System Installation Manual* document at dynoncertified.com/docs.

Servo Troubleshooting, Service, and Maintenance

Instructions for Continued Airworthiness (ICA) for autopilot servos, including troubleshooting, service, and maintenance procedures, are provided in the *SkyView General Maintenance Manual* document at dynoncertified.com/docs.

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