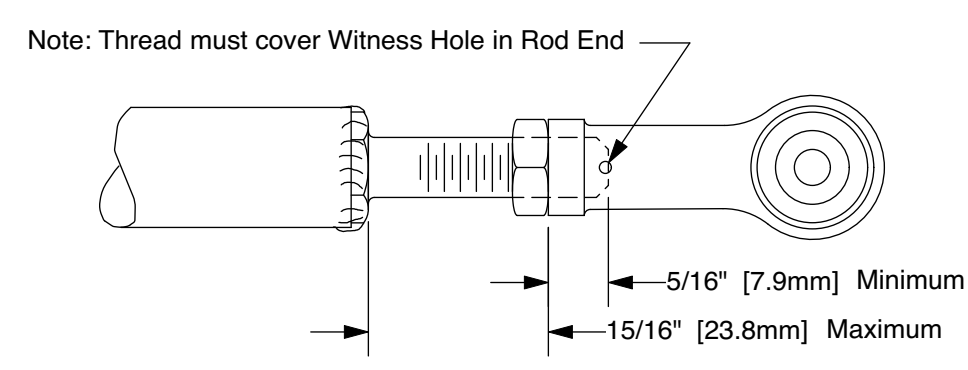
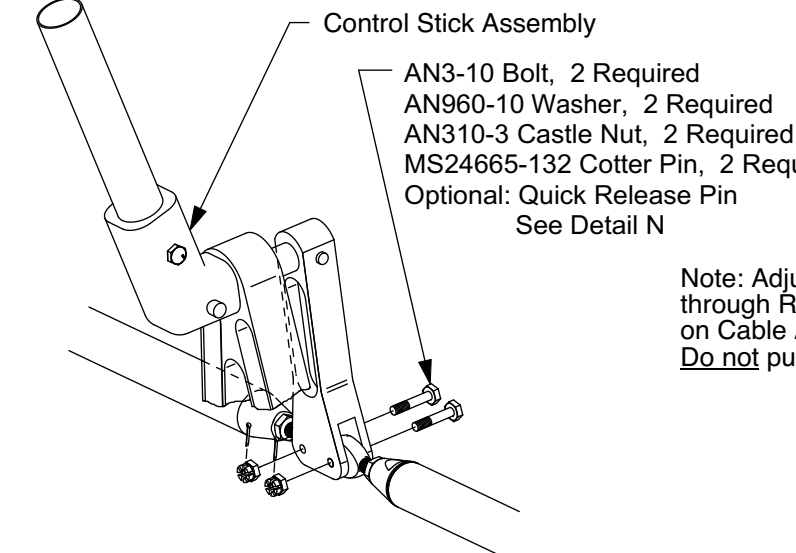


**-03 Rudder Return Spring**  
Make from SNX-C01-03  
Scale: Full  
Bend ends per full size pattern

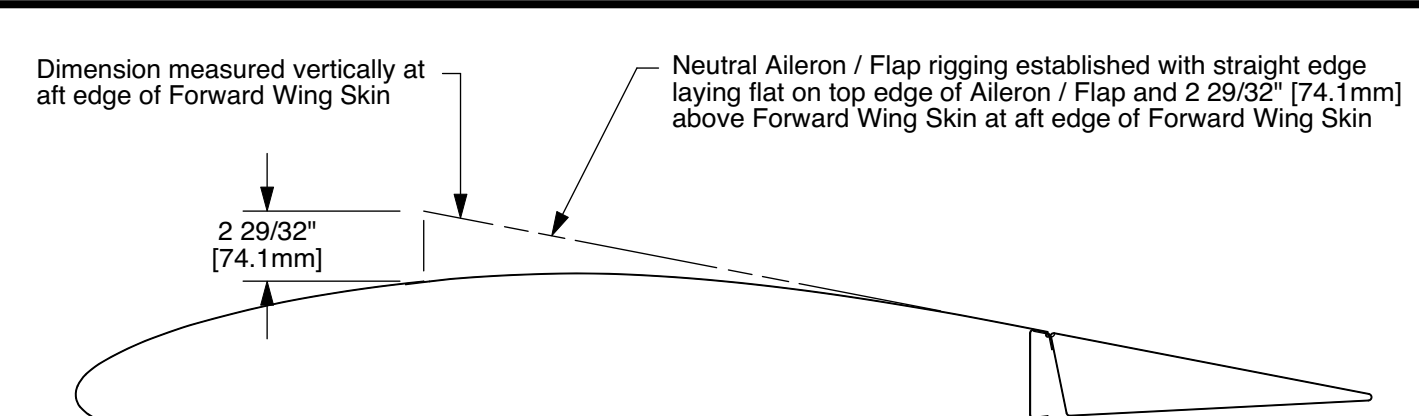


**Detail K**  
Minimum Thread Engagement for Rod End



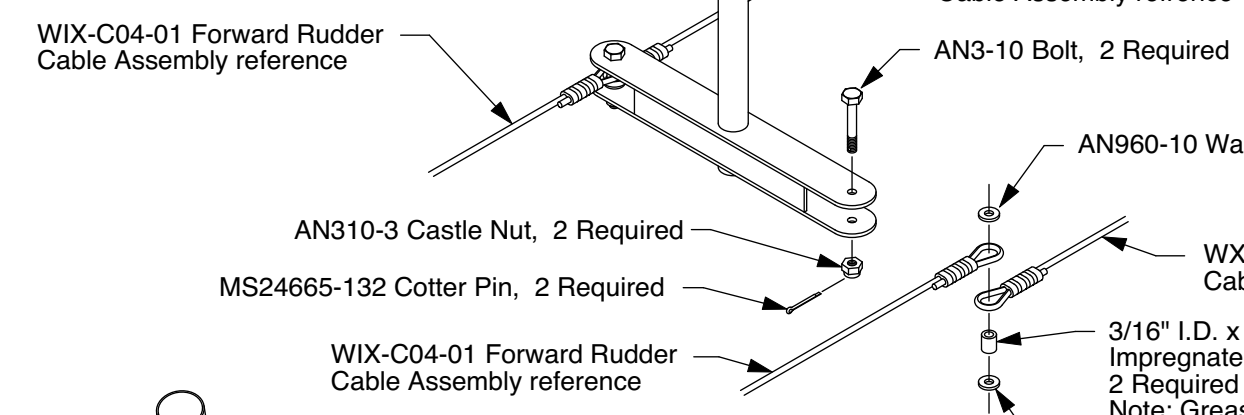
**Detail L**  
Detail of Aileron Pushrod Installation at Control Stick  
Scale: 1/4

**Detail F**  
Detail of Rudder Cable Attach Typical Left and Right Sides  
Scale: 1/4

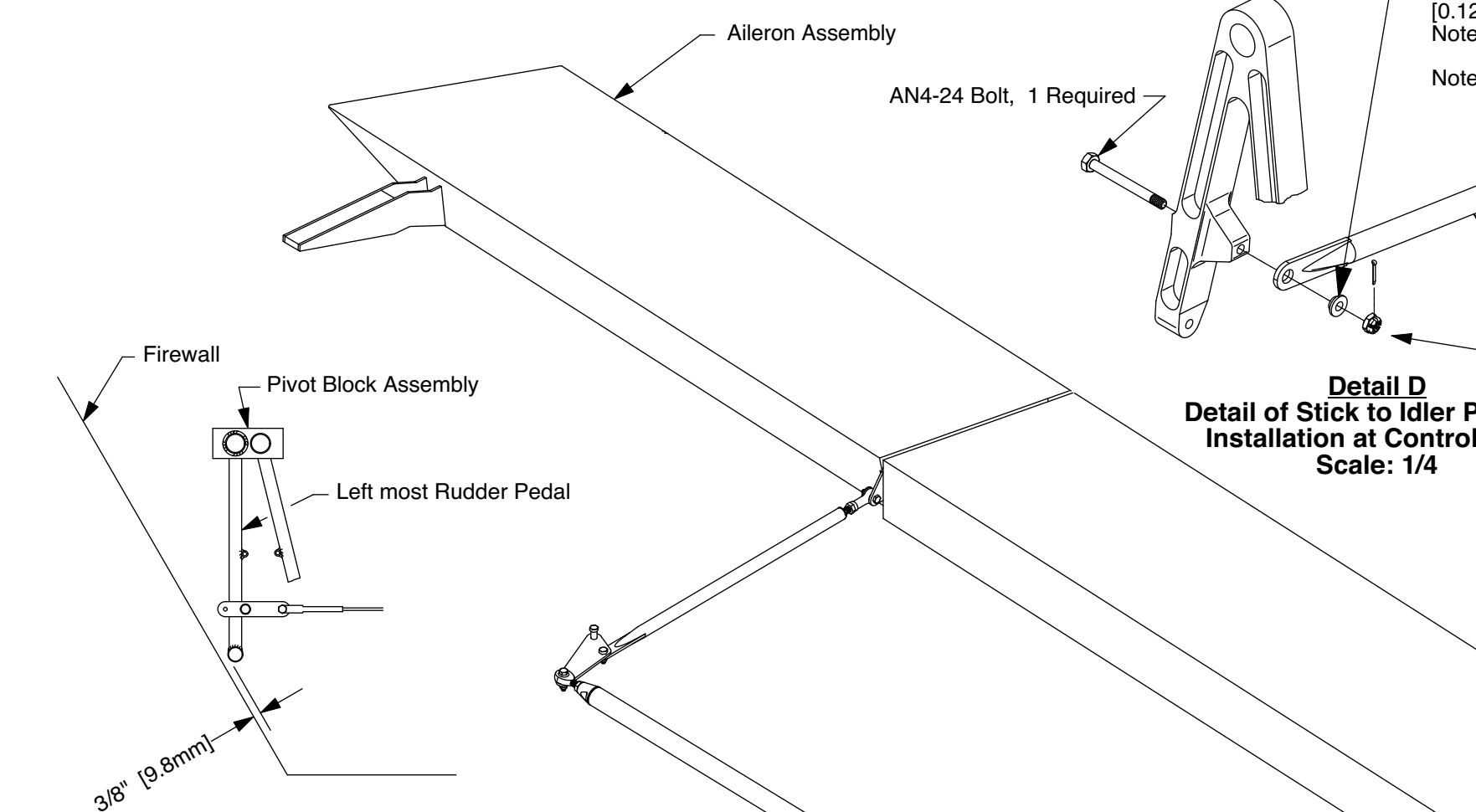


**Detail J**  
Neutral Flap & Aileron Rigging

**Detail L**  
Detail of Aileron Pushrod Installation at Control Stick  
Scale: 1/4

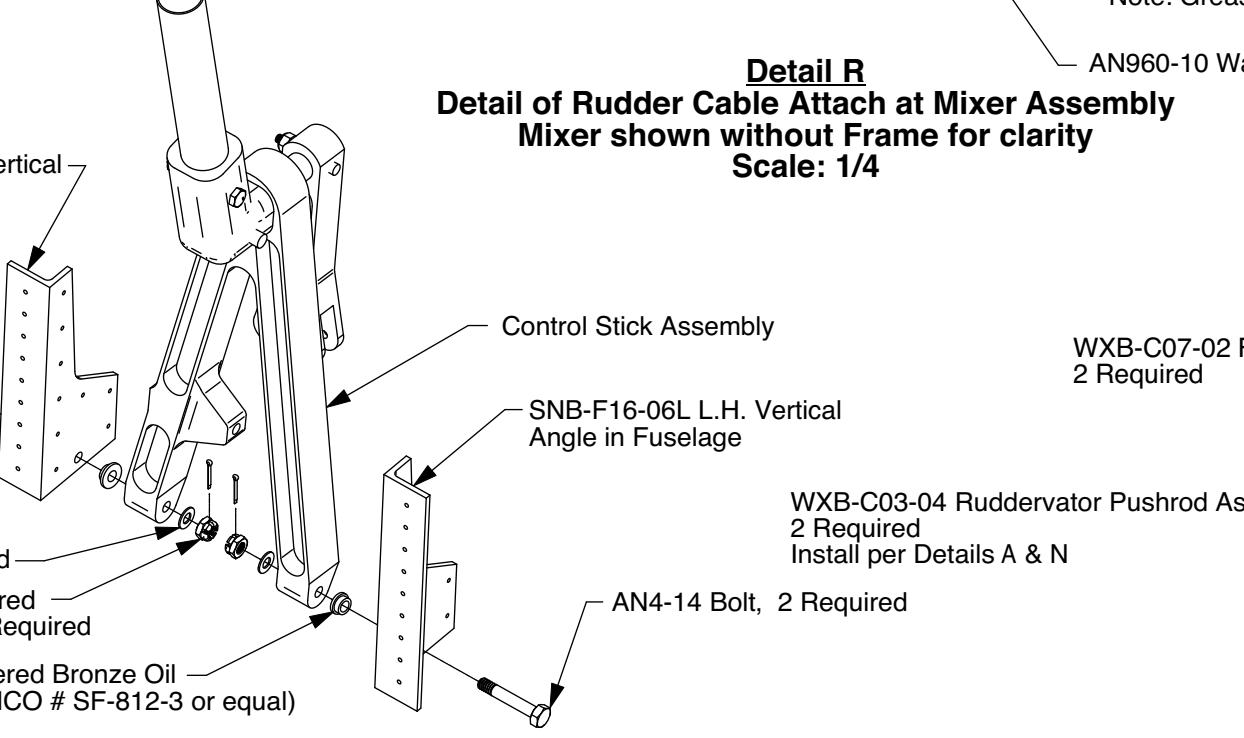


**Detail R**  
Detail of Rudder Cable Attach at Mixer Assembly  
Mixer shown without frame for clarity  
Scale: 1/4

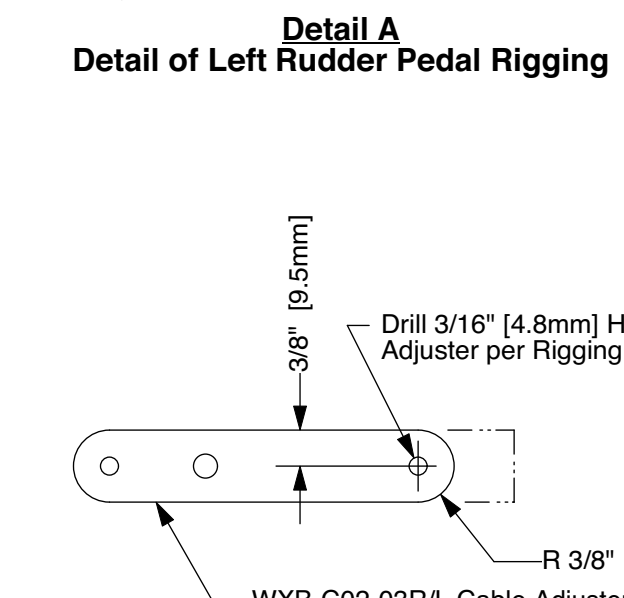


**Detail A**  
Detail of Left Rudder Pedal Rigging

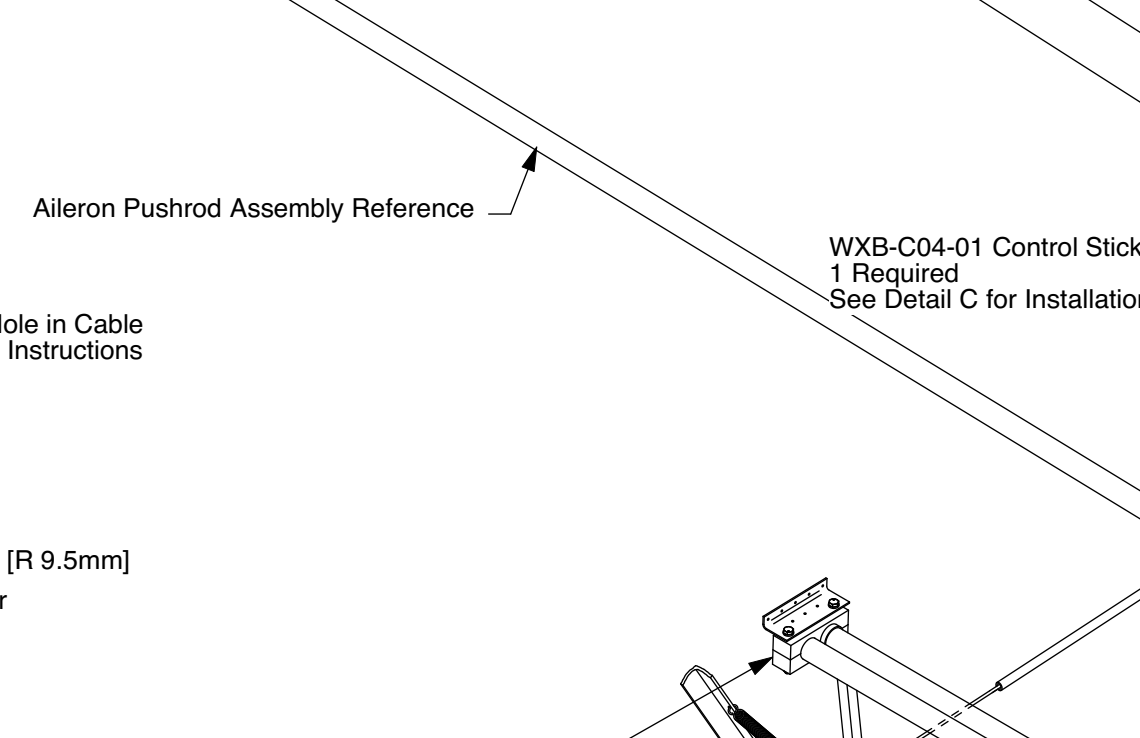
**Detail F**  
Detail of Rudder Cable Attach Typical Left and Right Sides  
Scale: 1/4



**Detail C**  
Detail of Control Stick Installation  
Scale: 1/4

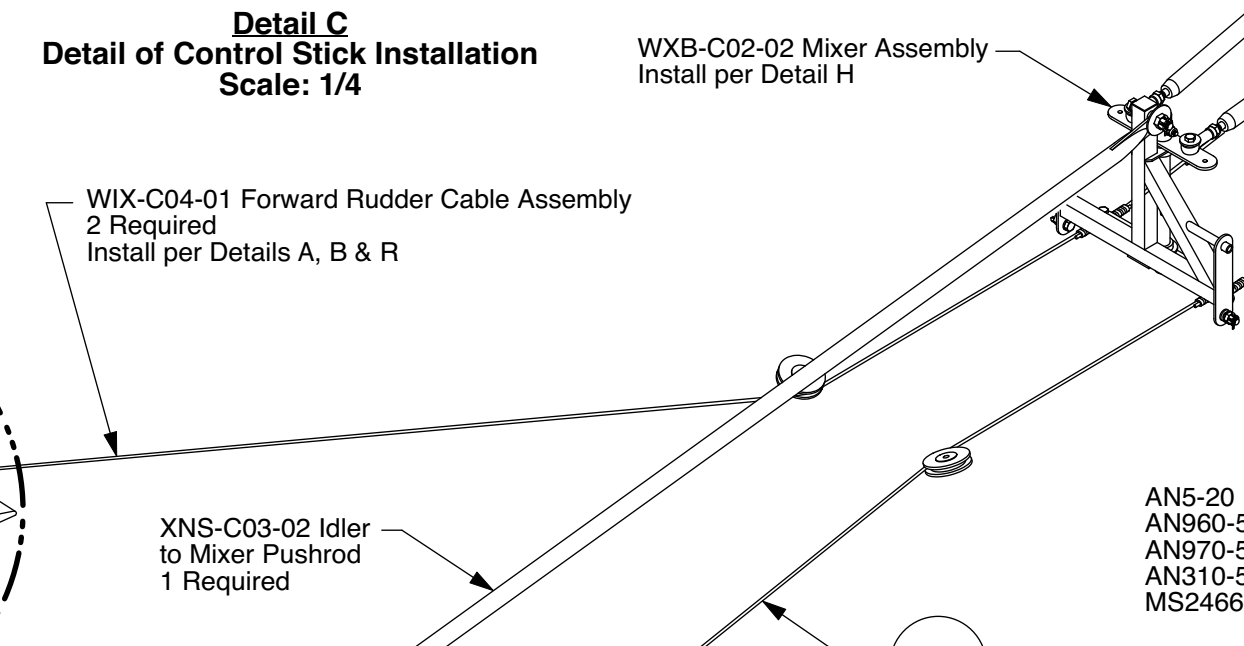


**Detail B**  
Detail of Cable Adjuster Trim  
Scale: 1/2

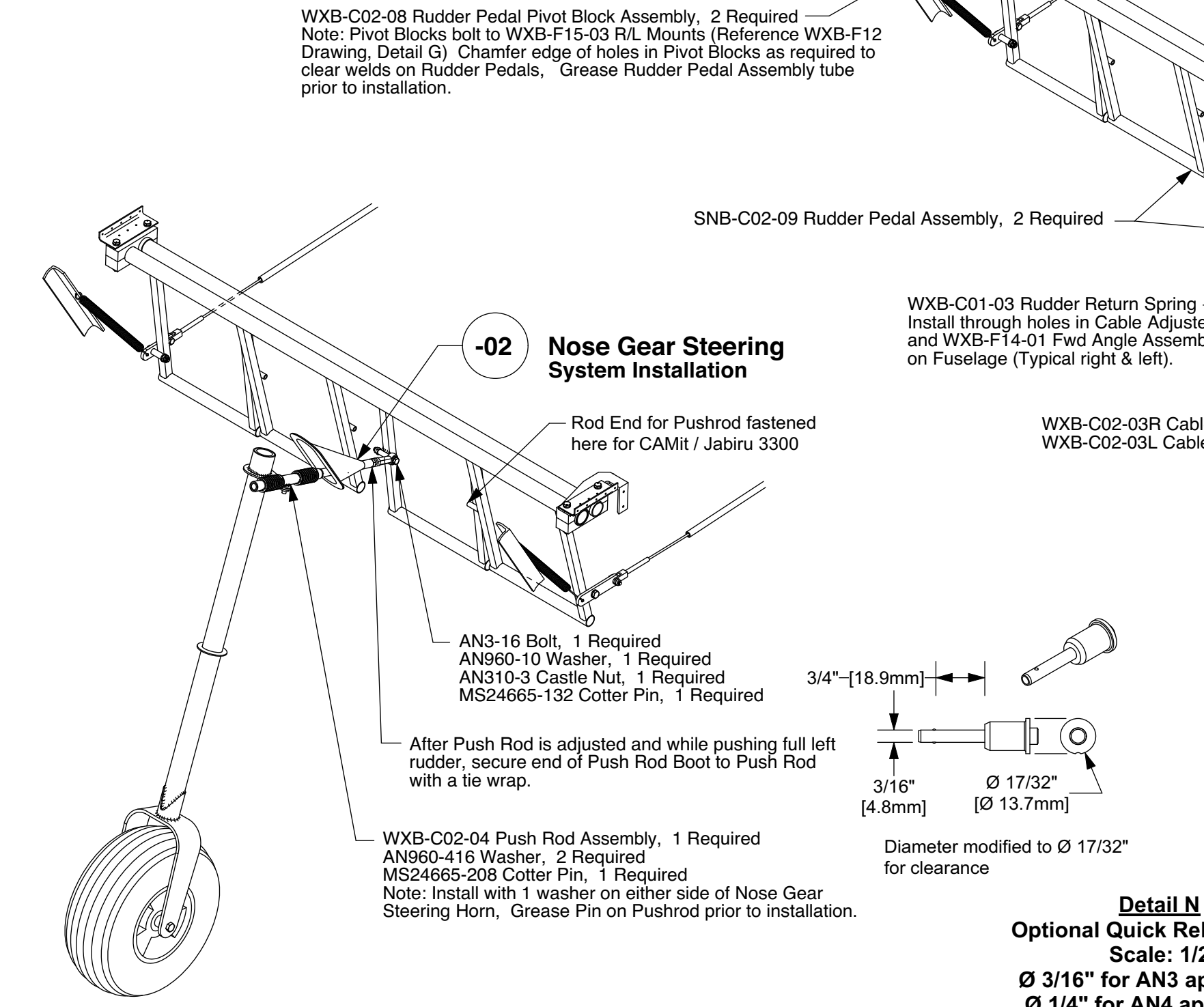


**Detail D**  
Detail of Stick to Idler Pushrod Installation at Control Stick  
Scale: 1/4

**Detail F**  
Detail of Rudder Cable Attach Typical Left and Right Sides  
Scale: 1/4

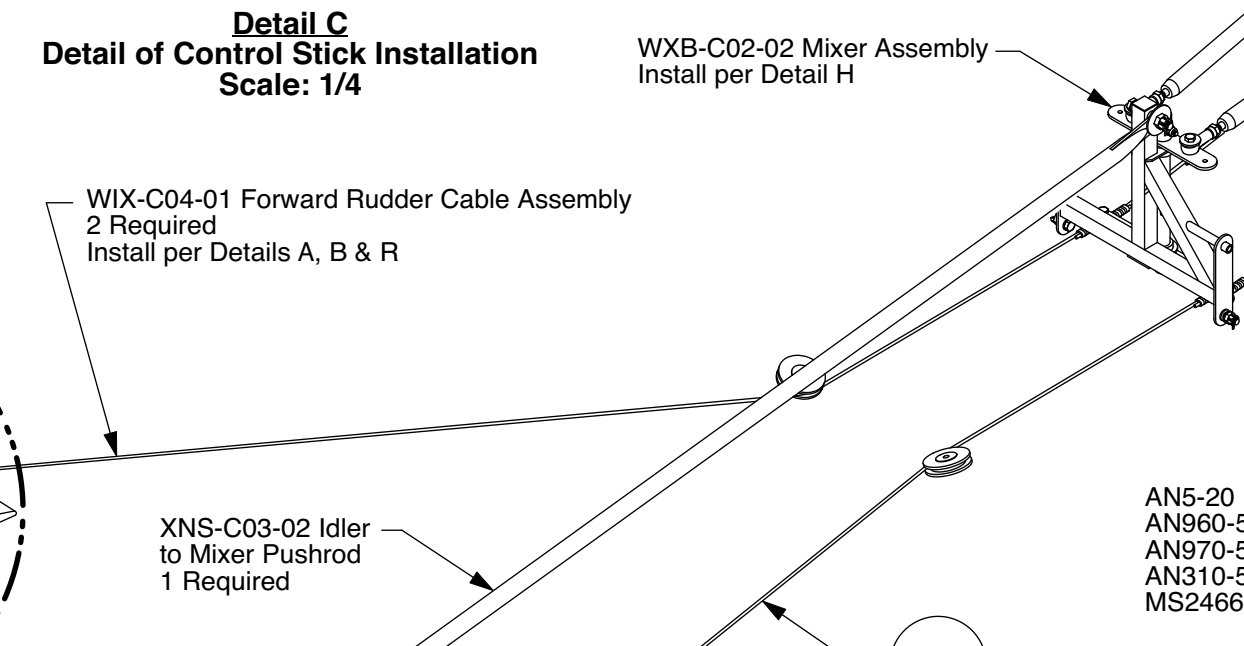


**Detail G**  
Flap Control Installation Looking Outboard at Right Hand Side  
Scale: 1/4



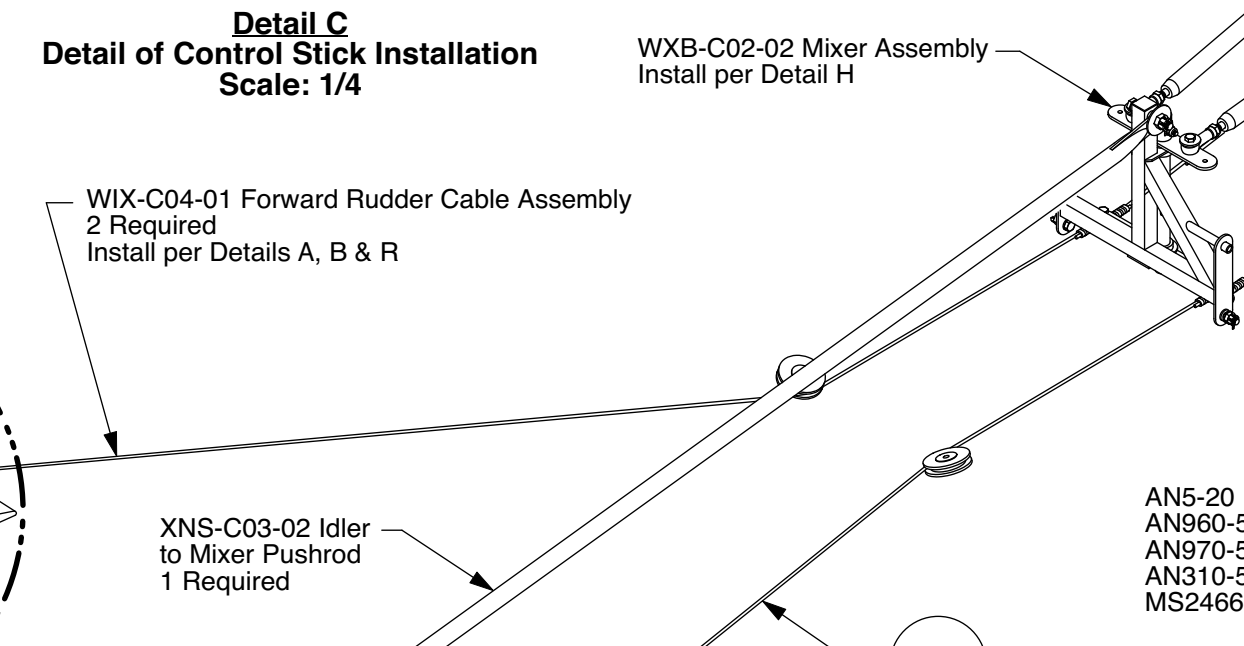
**Detail M**  
Detail of -02 Nose Gear Steering System Installation

**Detail F**  
Detail of Rudder Cable Attach Typical Left and Right Sides  
Scale: 1/4



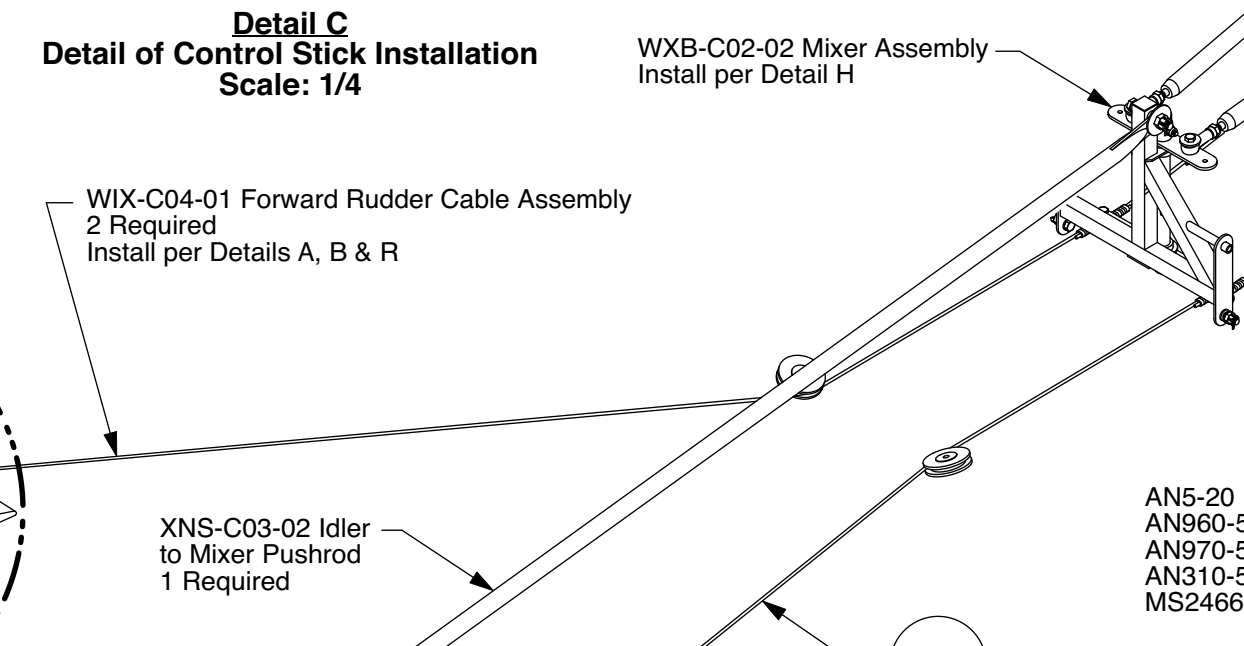
**Detail H**  
Detail of Mixer Installation  
Scale: 1/4

**Detail F**  
Detail of Rudder Cable Attach Typical Left and Right Sides  
Scale: 1/4



**Detail E**  
Elevator Push Rod Installation  
Scale: 1/4

**Detail F**  
Detail of Rudder Cable Attach Typical Left and Right Sides  
Scale: 1/4



**Detail P**  
Detail of Up Elevator Rig (No Rudder Input)  
Scale: 1/8

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Revision Letter	Change Description	Revision Date
A	Removed duplicate washer hardware from Details H and Q Replaced AN960-416 Washers with Flanged Bushings AN-11A Bolt with AN-11 Bolt Qty 2 total AN325-428 Elastic Stop Nut with AN310-4 Castle Nut, Qty 2 total Added MS24665-134 Cotter Pin, total 2 Flap Actuator is now SNB-C05-10 Electric Flap Actuator 05.18.2017	
B	Detail D AN-4 Bolt was AN-4-30. 12.17.20	
C	-01 Assembly, Detail G, General Rigging Order: References to SNB-F18-02R/L Removed or replaced by SNB-F18-03R/L Flap Actuator Brackets. 08.17.2021	
D	-01 Assembly, Detail G, General Rigging Order: SNB-C05-10 Flap Actuator Replaced with SNB-C05-11 Flap Actuator. SNB-C04-09 Flap Tube Replaced with SNB-C04-11 Flap Tube. SNB-F18-03R/L Flap Actuator Brackets Replaced with SNB-F18-04R/L Flap Actuator Brackets. AN-4-11 bolt (actuator mount to actuator brackets) replaced by AN-4-14 bolt. 12.19.2022	

Note: General Rigging Order

**Rudder Control System**

- 1) Install Mixer Assembly in Fuselage per Detail H.
- 2) Route WXB-C04-02 Aft Rudder Cable Assemblies through fairleads and Cross Ties in Fuselage.
- 3) Route WXB-C04-01 Forward Rudder Cable Assemblies through the Cross Ties and Pulleys in the Aft Fuselage.
- 4) Connect Forward and Aft Rudder Cables to Mixer Tiller per Detail R.
- 5) Adjust Aft Rudder Cables such that with Mixer Tiller held in the neutral position the Rudder is straight, and secure the Cable Assemblies to the Rudder per Detail F.
- 6) Install Rudder Pedals in Fuselage.
- 7) Temporarily install WXB-C02-03 R / L Cable Adjusters on Rudder Pedals.
- 8) Holding the left most Rudder Pedal 3/8" [9.5mm] from firewall (See Detail A) and holding the Rudder against the left stop, pull the left Cable tight and mark the left cable adjuster for the attachment hole location for the Cable.
- 9) Drill and Trim the left Cable Adjuster (See Detail B).
- 10) Permanently install the left Cable Adjuster on the Rudder Pedal and fasten the left Cable Assembly to the Adjuster.
- 11) While holding the lower tubes of the Rudder Pedals even, the Rudder in the Neutral Position and with both the left and right Cables tight, mark the right cable adjuster for the attachment hole location for the Cable.
- 12) Drill and Trim the right Cable Adjuster (See Detail B).
- 13) Permanently install the right Cable Adjuster on the Rudder Pedal and fasten the right Cable Assembly to the Adjuster.
- 14) Install the WXB-C01-03 Rudder Return Springs (Adjust length of Springs as required to center Rudder).
- 15) Check the Rudder Control System for smooth operation.

**Elevator Control System**

- 1) Install the WXB-C04-01 Control Stick Assembly in the Fuselage per Detail C.
- 2) Install the SNB-C03-04 Stick to Idler Pushrod (See Details D & E)
- 3) Temporarily fasten XNS-C03-02 Idler to Mixer Pushrod to the Idler Assembly in Fuselage (See Detail E).
- 4) With a 1/16" [1.6mm] thick shim between the Control Stick Frame and the Wing Spar Tunnel and with the Elevator against the full down stop, pilot drill and Cleco (1/8") the End Fitting to the Elevator Pushrod.
- 5) Drill the End Fitting and Elevator Pushrod for "tight fit" AN3 Bolts.
- 6) Install the XNS-C03-02 Idler to Mixer Pushrod (See Details E & H).
- 7) Verify smooth operation of the system from full down to full up.

**Ruddervator Pushrod Installation**

- 1) Temporarily install WXB-C03-04 Ruddervator Pushrod Assemblies (See Details H & Q).
- 2) Adjust Rod Ends on Ruddervator Pushrods to achieve 10" Up on the Ruddervators while holding the Mixer Pivot neutral (no rudder input) and with the Mixer against the full up stop (reference Detail P).
- 3) Verify minimum Rod End engagement per Detail K and secure the Jam Nuts on the Pushrods Assemblies.
- 4) Fully install the Pushrods (See Details H & Q).
- 5) Verify smooth operation of the system from full down to full up.

**Aileron Control System**

- 1) Fasten the Aileron Pushrods to the Control Stick Assembly per Detail L and Rig the Ailerons with the Control Stick and Ailerons in the neutral position (reference Detail J) by adjusting the Rod Ends on the Aileron Pushrods (make sure to secure nuts after rigging) Caution: Verify Minimum Thread Engagement in Rod End (See Detail K).

**Flap Control System**

- 1) Install Flap Actuator (See Detail G). Actuator arm should be centered on square tube arm in the Flap tube. Actuator can move as necessary between Mounts.
- 2) Fasten Flap Pushrods to horns on Control Stick Assembly (See Detail C).
- 3) With Actuator in Fully Retracted position, rig the right & left Flaps to the neutral position per Detail J by adjusting the Rod End at Flap (make sure to secure nuts after rigging). Caution: Verify Minimum Thread Engagement in Rod End per Detail K.

**Trim System Installation**

- 1) See WXB-C06 for Details

**Fairing Installation**

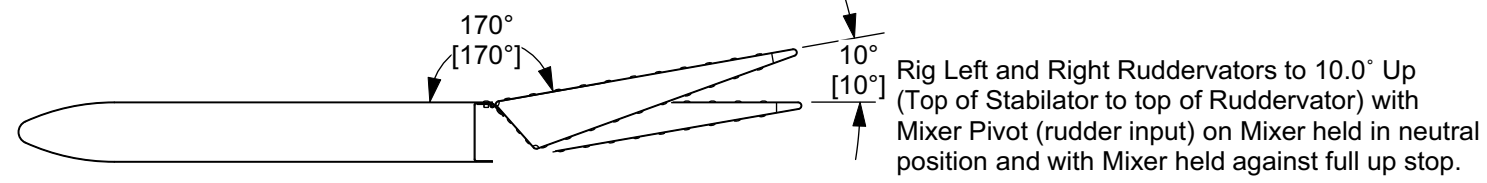
- 1) Complete the WXB-C07-01 Fairing Installation per the WXB-C07 Drawing.

**-02 Nose Gear Steering Control System**

- 1) Install and adjust WXB-C02-04 Push Rod per Detail M so that the Nose Gear is straight when the Rudder is in the neutral position
- 2) While pushing full left rudder, secure end of Push Rod Boot to Push Rod with a tie wrap.

Control Surface	Travel
"Elevator" (Ruddervator with No rudder input)	10" Up, 22" Down
Ailerons	20.5" Up, 11.5" Down
Rudder	25" Right & Left
Flaps	0', 10' & 30' Down

**Control Surface Travel**



Part / Assy Number	Qty.	Part Title	Next Assembly
WXB-C01-02	1	Nose Gear Steering Installation	WXB-B04
WXB-C01-01	1	Controls Installation	WXB-B04

**waix-B Controls Installation**

Drawing Scale	Drawing Number	Revision
1/8 & Noted	WXB-C01	D