

Chapter 07

LIFTING AND SHORING

FBA-2C1, FBA-2C2, FBA-2C3
FBA-2C4, FBA-2C3T, FBA-2C4T

Found Aircraft Canada
Maintenance Program FAC2-M200

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FBA-2C1, FBA-2C2, FBA-2C3
FBA-2C4, FBA-2C3T, FBA-2C4T

Found Aircraft Canada
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FBA-2C1, FBA-2C2, FBA-2C3
FBA-2C4, FBA-2C3T, FBA-2C4T

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07 LIFTING AND SHORING

07-00 GENERAL

Always jack the aircraft on level ground. The maximum differential allowed between main wheels during jacking and lowering, when both gears are being jacked, is two inches from level.

Any jacks that are used to lift the aircraft must be rated to the weight being lifted.

Never jack the aircraft when people are aboard.

Never jack the aircraft where wind may cause the aircraft to move.

Never refuel the aircraft when it is on jacks.

Never jack the aircraft higher than is required to carry out the work being done.

When lowering the aircraft, ensure that all obstacles are clear from beneath all parts of the aircraft. Always lower jacks slowly in a controlled manner.

Failure to follow any of the above may result in serious personnel injury and may also result in serious damage to the aircraft.

FBA-2C1, FBA-2C2, FBA-2C3
FBA-2C4, FBA-2C3T, FBA-2C4T

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07-10 JACKING

07-10-01 Jacking the Main Gear (2C1, 2C2 & 2C4)

Ensure that the jack is level and on secure footing. Place the jack under the main gear leg and raise jack until it mates with the ski attachment bracket. Raise the jack high enough to carry out the work required.

If the jack will not fit beneath the ski attachment bracket, then a jacking “block” may be fit to the leg as shown in Figure 07-10-01.

If a main gear leg is to be removed, then the aircraft may be jacked using the main gear cross truss as the jacking point. It will be necessary to remove gear leg fairings to do this. Ensure that the jacking plate spans the front and rear webs of the main gear cross truss. Ensure that the jacking plate is of sufficient strength or serious damage to the aircraft could result.

07-10-02 Jacking the Main Gear (2C3)

Ensure that the jack is level and on secure footing. Place the jack under the main gear leg and raise jack until it mates with the jacking pad mounted on the gear leg at the wheel – see Figure 07-10-02. Raise the jack high enough to carry out the work required.

If a main gear leg is to be removed, then the aircraft must be slung, reference 07-10-15.

07-10-03 Lifting the Tail (2C1, 2C2 & 2C4)

WARNING
ENSURE THAT THE MAIN GEAR IS ADEQUATELY CHOCKED TO PREVENT
ROLLING DURING LIFTING.

The tail of the aircraft may be lifted by inserting a bar of sufficient strength through the tail boom attachment bracket and jacking both ends of the bar.

The tail may also be jacked by placing a jack at Arm 180 (Ref: Chapter 6, Figure 06-20-01) on the starboard side, where the tail jacking pad is located, refer to Figure 07-10-01.

When the tail is at the desired height, secure the jack to ensure it will not release.

07-10-04 Jacking the Nose Gear (2C3)

The nose gear does not have designated jacking points. However, the nose wheel can be lifted off the ground by pushing down on the tail. When pushing down on the tail ensure the load is applied to the horizontal stabilizer along the rivet line of the **main spar** to avoid any damage to the skin.

WARNING

ENSURE THAT THE MAIN GEAR IS ADEQUATELY CHOCKED TO PREVENT
ROLLING DURING LIFTING.

Once the nose wheel is clear off the ground, tie the tail at the tail skid to secure the aircraft in the desired position – see Figure 07-10-02.

07-10-05 Slinging

The entire aircraft may be raised clear of the ground by means of a sling. There is provision on the aircraft to attach the sling at four points, all of which must be used. See Figure 07-10-01 (2C1 & 2C2), 07-10-02 (2C3) and 07-10-03 (2C4).

The 2C1 & 2C2 sling uses AN5 or equivalent strength attach bolts of the correct length.

The 2C3 & 2C4 sling uses 1/2-20 bolts in the front and 3/8-24 bolts in the rear airframe attach points. The bolts are an integral part of the sling. To access the front lifting lugs, the composite leading edge cuffs must be removed. To access the aft lifting lugs, remove two nylon plugs from the aft cabin roof skin – see Figure 07-10-04.

07-10-06 Trestling

A. 2C1, 2C2 and 2C4 Aircraft

There are specific positions to trestle the aircraft if required. The forward position is located at Arm +16.75 (Ref: Chapter 6, Figure 06-20-01). Removal of the main gear fairings is required to use the trestle point.

The support beam for the forward trestle shall be a minimum of four inches wide, four inches deep and shall be at least the width of the aircraft. The support beam shall be centered at Arm 16.75 (Ref : Figure 06-20-01). When the forward trestle is used, a weight of at least 150 pounds must be placed at the tail to prevent the aircraft from nosing over under certain circumstances. The weight may be placed equally on the left and right sides of the horizontal stabilizer, directly on the spars, as far inboard as possible, or may be secured to the tail boom.

The support beam for the aft trestle, shall be a minimum of three inches wide, three inches deep and shall be at least the width of the aircraft. The support beam may be centered beneath either frame at Arm 155 or Arm 178 (Ref: Figure 06-20-01).

Support beams shall be made of hardwood free of knots, cuts, rot, splits or any other visible defects and will be covered with a non abrasive material such as felt.

B. 2C3 Aircraft

Refer to Figure 07-10-05

The aircraft may be trestled. The trestle location is at Arm 37.24 (Ref: Chapter 6, Figure 06-20-01). Removal of the main gear fairings is required to use the trestle point.

The support beams shall be a minimum of two 12 inch long, 4 inch wide by 2 inch deep and, one 4 inch wide by 4 inch deep at least the width of the aircraft blocks.

When trestling the aircraft a weight between 15 – 60 lbs must be placed at the tail to prevent the aircraft from nosing over. The weight must be placed equally on the left and right horizontal stabilizers, directly on the spars, as far inboard as possible, or may be secured to the tail skid.

Support beams shall be made of hardwood free of knots, cuts, rot, splits or any other visible defects and will be covered with a non abrasive material such as felt.

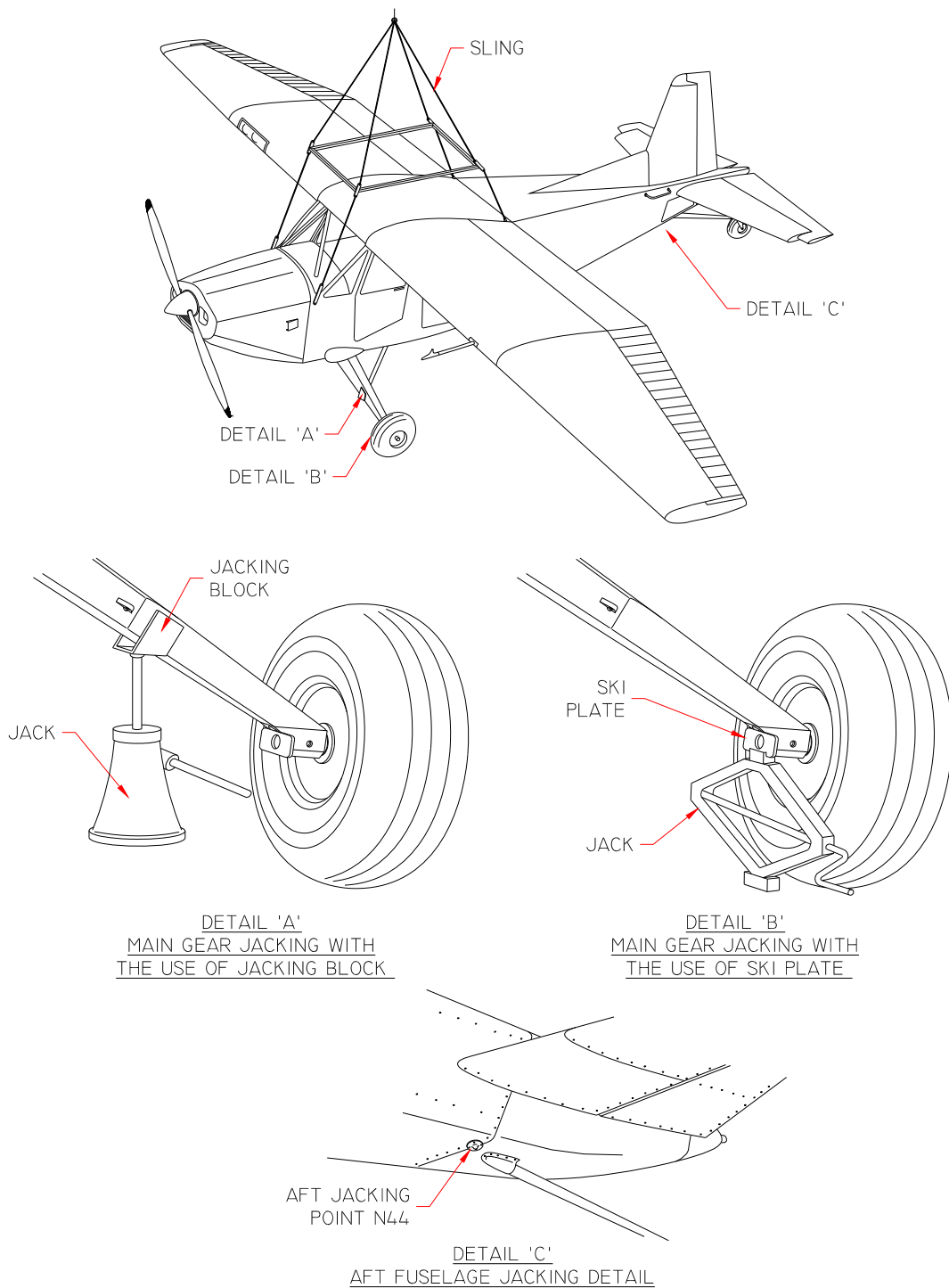


Figure 07-10-01: Slinging & Jacking Details (2C1 & 2C2)

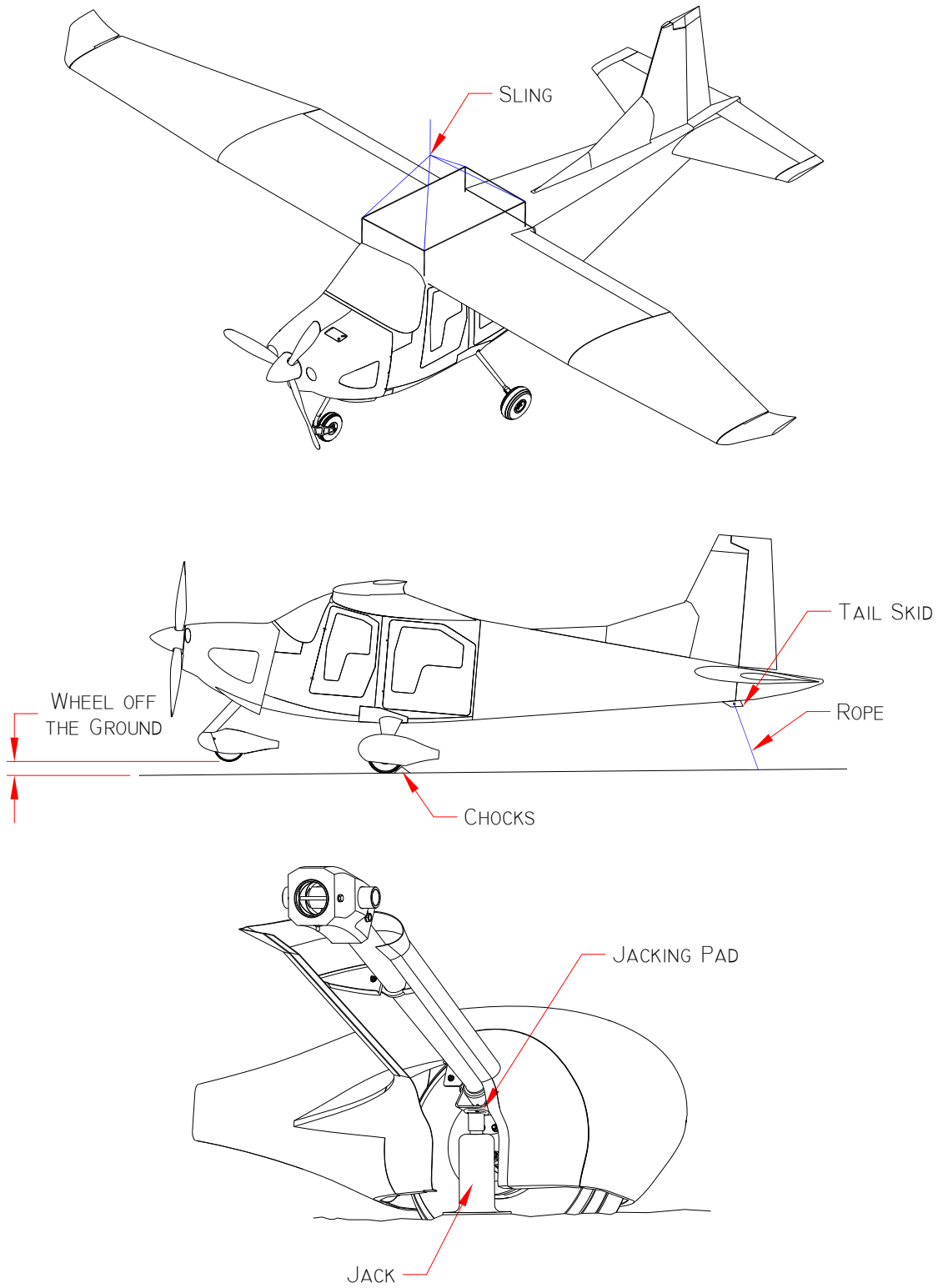


Figure 07-10-02: Slinging & Jacking Details (2C3)

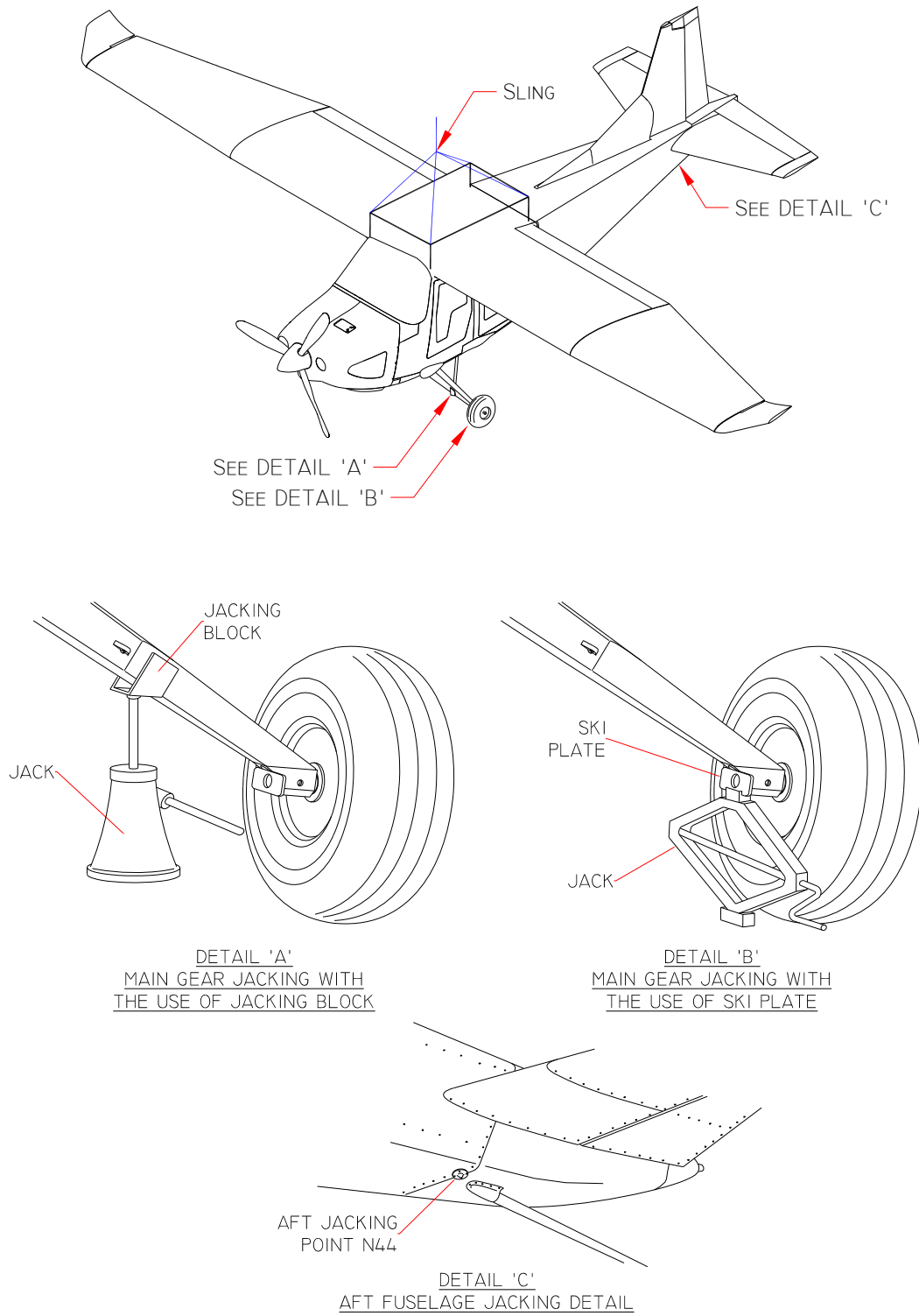


Figure 07-10-02: Slinging & Jacking Details (2C4)

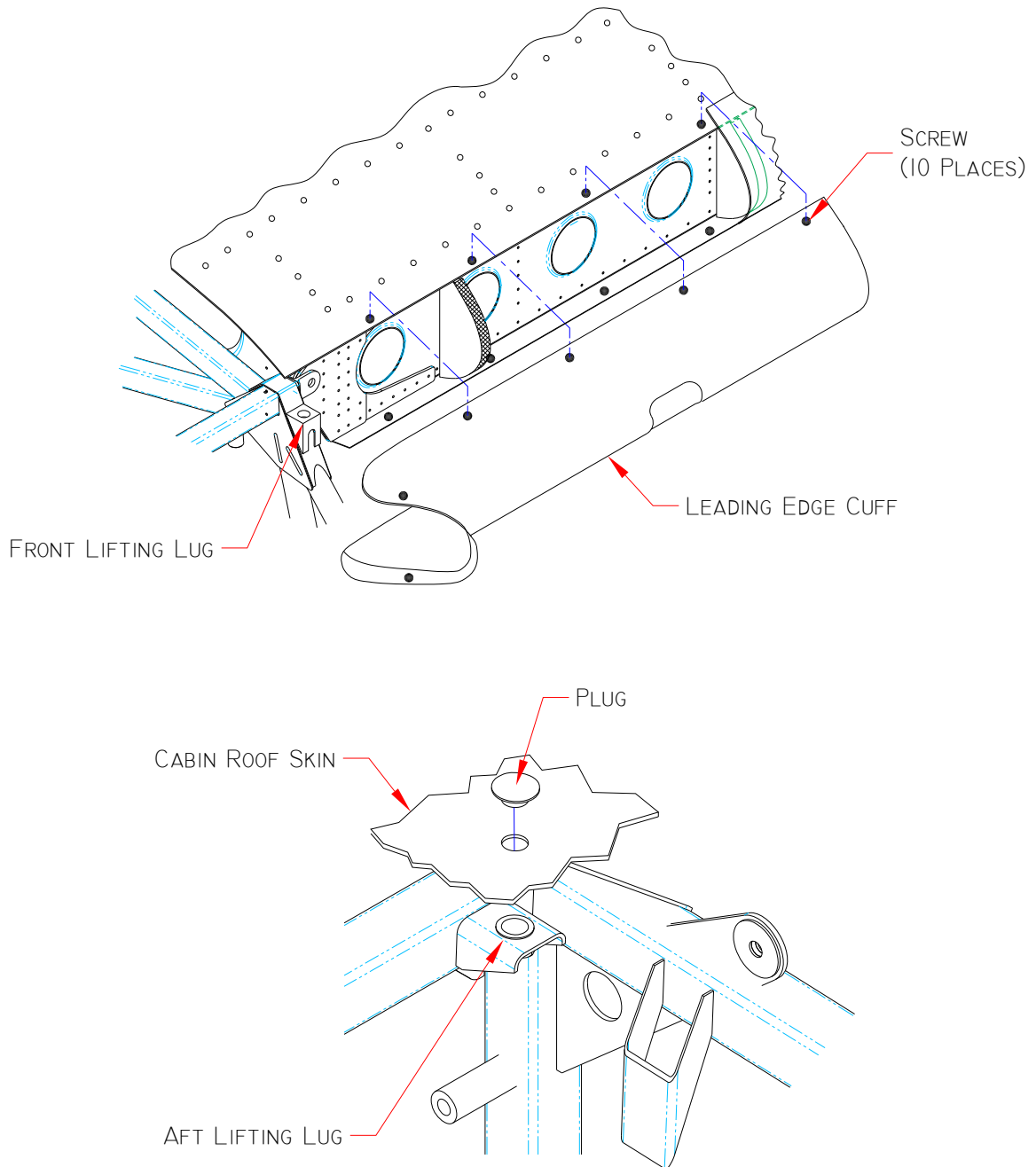


Figure 07-10-04: Lifting Lugs (2C3 & 2C4)

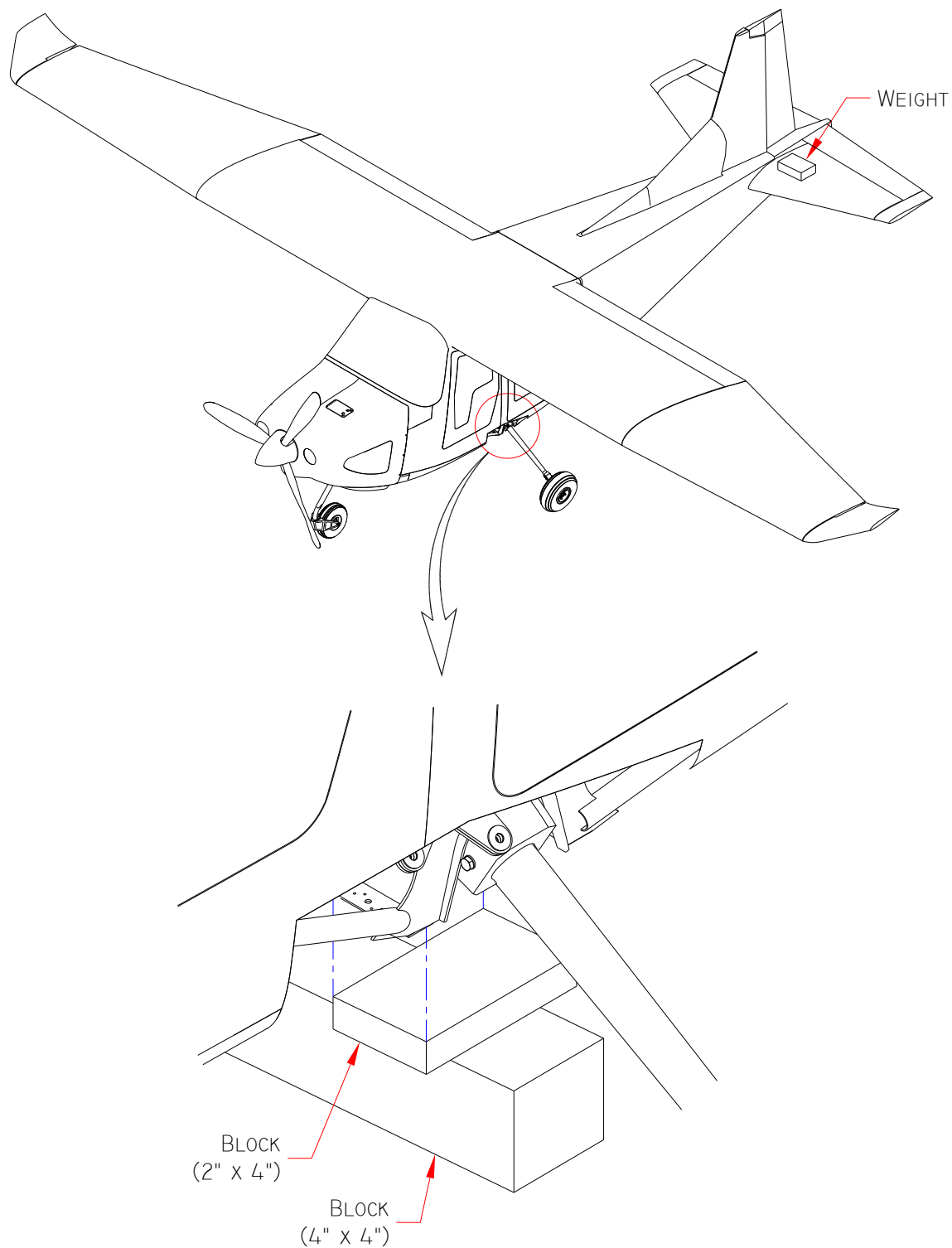


Figure 07-10-05: Trestling Detail (2C3)