



AIMCO Manufacturing

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AIMCO Articulated Jib Cranes

AIMCO's Articulated Jib Cranes have two 360-degree rotation bearing assemblies. The primary, located at the main mounting pivot, and the secondary, located at the attachment of the primary and secondary arms.

Each of these rotation bearing assemblies have some adjustment, which increases or decreases the compression placed on the bearings in the assembly. By adjusting compression, the arm rotation becomes easier or tighter.

Tools required:

- 1. Allen Wrenches**
- 2. Spanner Wrench**

Adjustment Instructions:

Primary Bearing:

- Locate the split black shaft compression nut at the top of the bearing assembly. Locate the allen head screw that tightens the split nut.
- With an Allen wrench, loosen the allen head screw. Do Not Remove the Screw.
- Place the spanner wrench on the outside diameter of the nut. Position the wrench so that it does not lie across the allen head screw area.
- Use the hammer to either tighten or loosen the compression nut. A one-eighth to one-quarter turn will make a difference. Do Not Loosen Completely; Compression on the bearings must be retained. Re-tighten the allen head screw in the split nut.

Secondary Bearing:

- The split black shaft compression nut is located at the bottom of the secondary bearing assembly.
- Follow the same instructions for loosening or tightening as outlined above (Steps B – D).

General Assembly Instructions:

The protruding hub of the CLAMPNUT is the side with the best thread to face squareness and is designed to be placed against the bearing or other component. The use of an anaerobic compound on the socket head cap screw is dependent on the customer's requirements and is applied just before assembly. With the cap screw loose, assemble the CLAMPNUT onto the shaft threads until the CLAMPNUT threads are fully engaged. Then hand tighten the cap screw while rotating the CLAMPNUT back and forth until a light drag is felt. This is essential to eliminate the pitch diameter differential between the threads. Failure to snug the cap screw could result in the opening of the CLAMPNUT threads during preloading and subsequent loss of holding power. It also pulls the CLAMPNUT central on the threads.

Warning

Never use an impact wrench or other automated device to initially start the CLAMPNUT onto the shaft threads as it may cause cross-threading due to the inherent flexibility of the split design.

The lightly snugged CLAMPNUT is now ready to be rotated into position against the bearing/components, preload applied, and cap screw tightened to the recommended torque. Do not over-torque the cap screws as the CLAMPNUT may close up completely with a possible loss of holding power.

CLAMPNUT Screw Recommended Torques

Low Head Metric Screw Size	Torque (Inch-Pounds)	Torque (Newton-metre)
M4	24	2.7
M6	70	7.9
M8	150	17.0
M10	300	34.0
M12	510	57.0

Unified National Screw Size	Torque (Inch-Pounds)
4-40	14
6-32	25
10-32	60
1/4-28	150
5/16-24	260

Reduce Stainless Steel Cap Screw torque by 30%