



## Instructions for Mounting and Operating Synchro-Angle Adjusting Hubs

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**FORM**  
**8461E**  
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### ⚠ WARNING

- Read and follow all instructions carefully.
- Disconnect and lock-out power before installation and maintenance.  
Working on or near energized equipment can result in severe injury or death.
- Do not operate equipment without guards in place. Exposed equipment can result in severe injury or death.

### ⚠ CAUTION

- Periodic inspections should be performed. Failure to perform proper maintenance can result in premature product failure and personal injury.

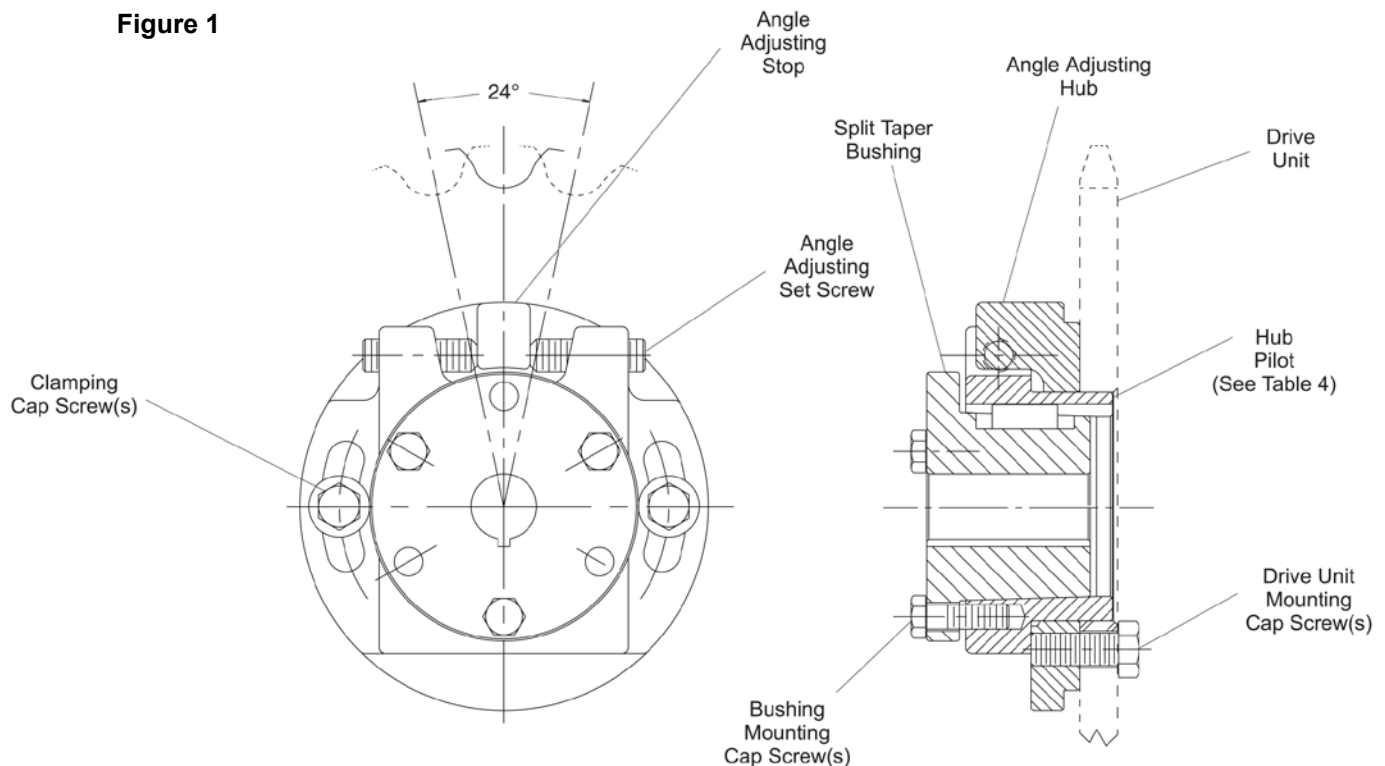
### BEFORE INSTALLATION:

Remove all paint, oil and grease from the hub area where the drive unit (Sprocket, Gear, etc.) will be mounted.

### MOUNTING THE DRIVE UNIT (See Figure 1)

1. Slide the drive unit bore over the hub pilot, align the (3) mounting holes in the drive unit with the (3) mounting holes in the Angle Adjusting Hub.
2. Use the appropriate size cap screw (see Table 2) to mount the drive unit to the Angle Adjusting Hub. Use SAE GRADE 5 cap screw(s) only.
3. Tighten the (3) drive unit cap screw(s) to the proper torque as shown by Table 2. The torque values shown in Table 2 are for SAE GRADE 5 cap screw(s) only.

**Figure 1**



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**NOTICE:** Do not lubricate the bushing taper or bore, the screws, the hub taper or threaded holes. Lubricating these parts or surfaces could lead to breakage of the product.

4. Slide the Angle Adjusting Hub over the shaft. Next slide the split taper bushing on the shaft and into the bore of the Angle Adjusting Hub. Align the entire assembly parallel with its running mate. The Angle Adjusting Hub Assembly may have to be repositioned on the shaft to compensate for slight axial motion of the assembly due to tightening the bushing in step 5. Both driving and driven members must be aligned for proper drive operation.

5. For mounting and securing the Angle Adjusting Hub and the split taper bushing to the shaft, follow the instructions on the Split Taper Bushing box, or refer to EPT Form No. 4013 (Split Taper Bushing Instructions).

## ADJUSTING THE HUB ANGLE

**CAUTION:** Remove all external loads on the Angle Adjusting Hub before attempting to make any adjustments. Failure to do so may result in bodily injury or equipment damage.

(See Figure 1)

6. To adjust the hub angle first loosen the 2 clamping cap screw(s) which prevent the Angle Adjusting Hub from rotating relative to the shaft.

**NOTICE:** Loosen the clamping cap screw(s) when adjusting the angle of the hub. Failure to do so may lead to breakage of the product.

7. Loosen one angle adjusting set screw and adjust the other set screw against the angle adjusting stop, until the desired angle is set.

8. Using a torque wrench, tighten both set screw(s) against the angle adjusting stop to the desired torque shown in Table 3 (50% Standard Torque).

9. Using a torque wrench, tighten the clamping cap screw(s) to the specified torque in Table 1.

**NOTICE:** Tighten the cap screw(s) and set screw(s) to torque values shown in Tables 1, 2 or 3. Failure to do so may lead to an unsafe assembly.

## CAP SCREW SIZE AND TIGHTENING TORQUE

Table 1

HUB PART NO.	SAE GRADE 5 CLAMPING CAP SCREW(S)	TIGHTENING TORQUE
AAH-G	1/4-20 NC	95 IN-LBS
AAH-H	1/4-20 NC	95 IN-LBS
AAH-Q	7/16-14 NC	620 IN-LBS

Table 2

HUB PART NO.	SAE GRADE 5 DRIVE UNIT CAP SCREW(S)	TIGHTENING TORQUE
AAH-G	1/4-20 NC	95 IN-LBS
AAH-H	3/8-16 NC	348 IN-LBS
AAH-Q	1/2-13 NC	840 IN-LBS

NOTE: Cap screw length is determined by the thickness of the drive unit. These Torque values shown apply to all SAE GRADE 5 cap screws used on the above products.

## SET SCREW SIZE AND TIGHTENING TORQUE

Table 3

HUB PART NO.	SET SCREWSIZE	TIGHTENING TORQUE
AAH-G	1/4-20 NC	45 IN-LBS
AAH-H	5/16-18 NC	80 IN-LBS
AAH-Q	1/2-13 NC	310 IN-LBS

Table 4

HUB PILOT O.D. TOLERANCES	
AAH-G	1.250/1.247
AAH-H	2.125/2.122
AAH-Q	3.500/3.497

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