

SCOPE OF THIS PROCEDURE IS TO INSURE PROPER INSTALLATION OF HOLLOWSHAFT ENCODERS TO MOTOR OR FAN COOLED HOUSING FOR STANDARD OR NON-STANDARD APPLICATIONS.

**STANDARD RECOMMENDED INSTALLATION PROCEDURE:**

1. MEASURE SHAFT LENGTH AND CALCULATE THE REQUIRED STANDOFF FOR BLINDSHAFT ENCODERS.
2. ASSEMBLE WASHERS AS SHOWN.
3. SLIDE ENCODER ON MOTOR SHAFT BUT DO NOT TIGHTEN THE COLLET CLAMP UNTIL STEP 5.
4. TIGHTEN TETHER BOLT IN MOTOR HOUSING.
5. COLLET CLAMP IS SELF GAPPING TO THE ENCODER. INSURE THAT ENCODER IS FREELY RESTING ON SHAFT WITHOUT STRESS FROM TETHER ARM AND TIGHTEN COLLET CLAMP SCREW USING THREAD LOCK AND 40 IN-LBS. TORQUE.
6. ROTATE SHAFT AND MEASURE BODY RUNOUT. IF ENCODER BODY RUNOUT EXCEEDS 0.010 INCH, REMOVE THE ENCODER AND REINSTALL.

**ADDITIONAL CONSIDERATIONS FOR NON-STANDARD INSTALLATIONS - PLEASE READ**

IF THE SHAFT OF THE MOTOR IS IN EXCESS OF THE ALLOWED MAXIMUM SHAFT PENETRATION, INSURE THAT THERE IS SUFFICIENT ADDITIONAL TETHER MOUNTING SPACERS OR STANDOFFS (DIMENSION "C") IN ORDER TO MOUNT THE TETHER IN A "NON-STRESS" POSITION. DO NOT BEND THE TETHER DURING THE INSTALLATION. THE TETHER IS ONLY DESIGNED TO FLEX DURING ROTATION OF THE SHAFT AND SHOULD BE INSTALLED IN A "NON-STRESSED" CONDITION TO INSURE MINIMUM STRESS AND MAXIMUM BEARING LIFE.

FOR OTHER MODELS: IF COLLET CLAMP IS NOT NATURALLY SELF-SPACING FROM THE HOUSING, SHIM THE CLAMP FROM THE HOUSING TO INSURE FREE ROTATION CLEARANCE WHEN MOTOR SHAFT AND ENCODER SHAFT ARE SPINNING. CAUTION IF A SHIM IS NOT USED, A MECHANICAL INTERFERENCE OR A COCKED CLAMP MAY RESULT.

IF THE TETHER MOUNTING HARDWARE IS NOT COMPATIBLE, I.E. BOLT DIAMETER DOES NOT MATCH WASHER INSIDE DIAMETERS, THEN CORRECT HARDWARE IS NECESSARY AND MUST BE OBTAINED IN ORDER TO ACHIEVE CORRECT CLAMPING OF THE TETHER. IT IS NOT RECOMMENDED TO ASSEMBLE THE TETHER TO THE MOTOR HOUSING WITHOUT THE PROPER STANDOFFS OR WASHERS.

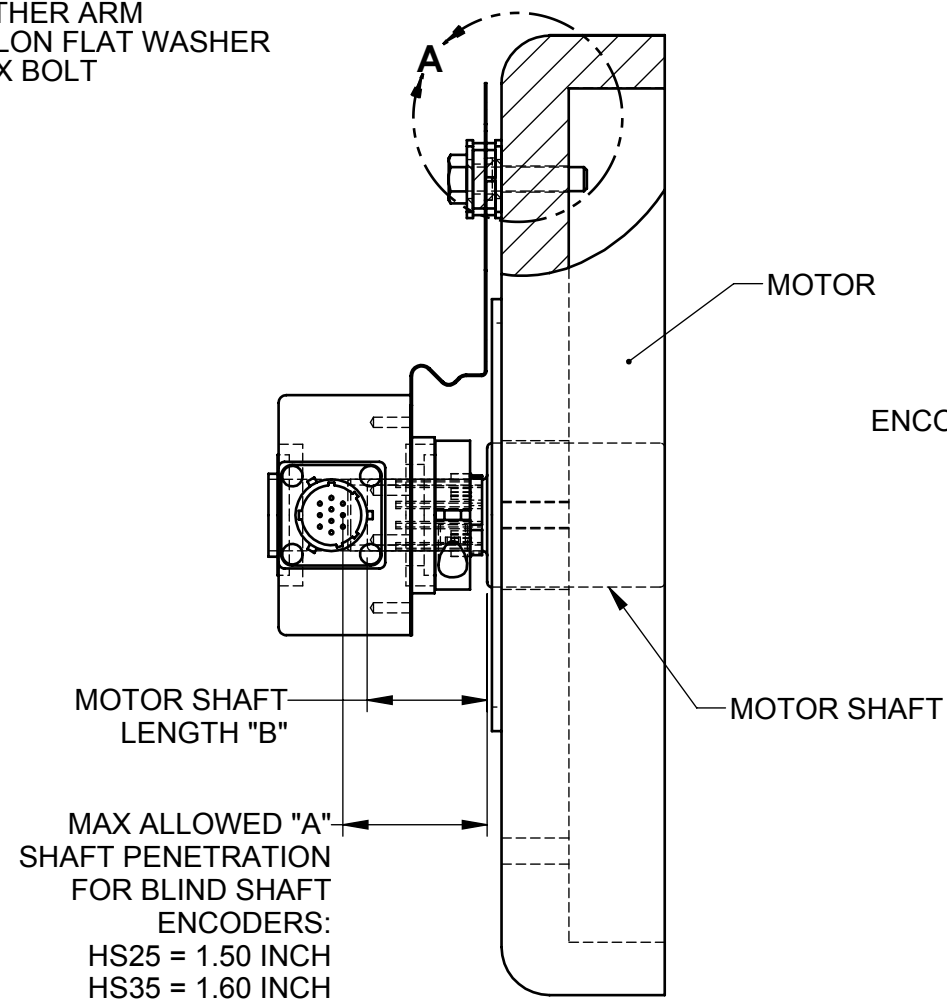
ACTUAL HARDWARE REQUIREMENTS FOR NON-STANDARD APPLICATIONS DEPENDS UPON ACTUAL APPLICATION REQUIREMENTS. HARDWARE SUPPLIED WITH A SPECIFIC TETHER KIT MAY DIFFER. CONSULT THE FACTORY IF NECESSARY.

FOR BLIND SHAFT ENCODERS ONLY  
IF B EXCEEDS A  
THEN SUFFICIENT STANDOFF OR WASHER ARE  
NEEDED TO ACHIEVE "NO STRESS" TETHER POSITION  
"C" = "B" - "A"

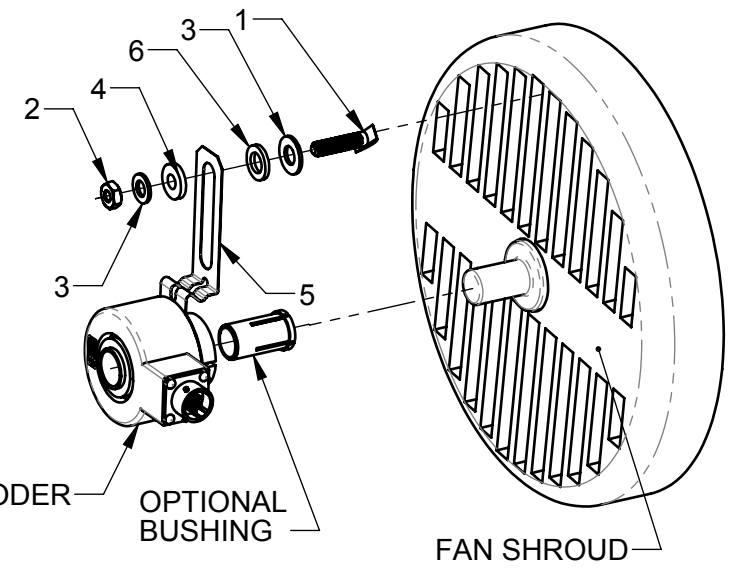
**R2 TETHER KIT**  
**ITEM DISCRPTION**

1. TEE BOLT
2. HEX NUT
3. SS FLAT WASHER
4. NYLON SHOULDER WASHER
5. TETHER ARM
6. NYLON FLAT WASHER
7. HEX BOLT

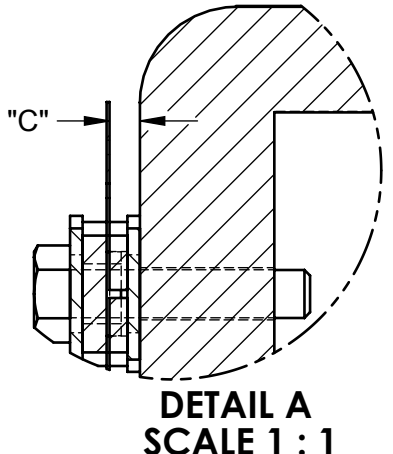
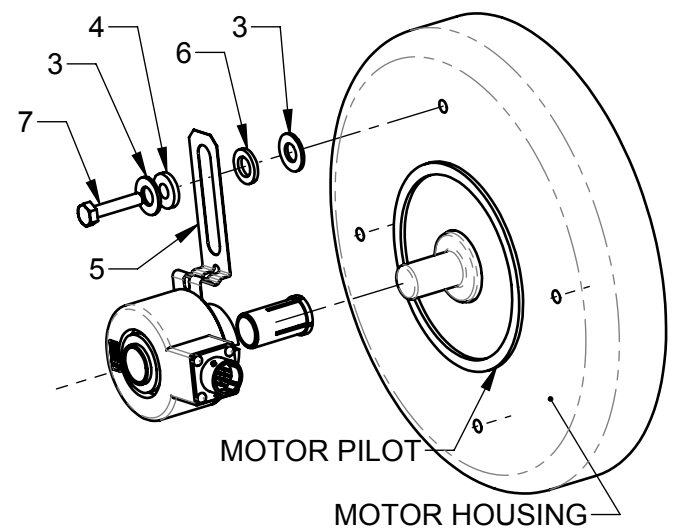
ZONE	REV.	REVISION DESCRIPTION	ECN NO.	DATE
	A			



TYPICAL INSTALLATION WITH FAN SHROUD INSTALLED



TYPICAL INSTALLATION OF "C" FACE MOTOR ACCESSORY SHAFT



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FIRST ISSUE DATE: 04/26/19  
DRAWN:DRC  
APPROVED:MFB  
DATE: 04/26/19  
ECN:  
DATE:  
MATERIAL:

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INTERPRET DIMENSIONING AND TOLERANCING PER ASME Y14.5-2009. UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES[MILLIMETERS] AND ARE INTENDED AS NOMINAL SEE PRODUCT SPECIFICATIONS FOR MORE DETAILS.

DO NOT SCALE DRAWING  
THIRD ANGLE PROJECTION

**Sensata Technologies**  
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THOUSAND OAKS, CA 93120

TITLE  
**RECOMMENDED HOLLOW SHAFT ENCODER INSTALLATION PROCEDURE**

SIZE DWG NO. REV.  
**B 09919-001 A**

SCALE 1:4 SOLIDWORKS SHEET 1 OF 1