

**NOTE:** All Knurls and Master Pinion are application specific and are sold seperately.  
The Knurls and Master Pinion included within the diagram are for reference purposes only.

REV	ZONE	ECN	REVISION DESCRIPTION	DATE	ENG
A	....	....	Released	08/21	SGB
B	....	5850	Added 192060 (2), Updated 192002	03/25	PA

ITEM NO.	PART NUMBER	DESCRIPTION	QTY.
1	192002	Shank - Adjusting Gear	1
2	192003-05	Center Plate	1
3	192038-05	Riser 2.00 (3/8-16)	3
4	192004-05	Front Plate	1
5	192039-05	Eccentric Roll Pin (.015)	3
6	192040	Pinion Arbor	1
7	192008	Eccentric Gear	3
8	192046	Spring: Compression, .845 OD x 3.00	1
9	192041	Adjusting Sleeve (Pinion)	1
10	140280	Screw: SSS, 1/4-28 x 0.250 Half Dog Pt.	3
11	192036-05	Carbide Bushing	3
12	192016	Washer (Ring Style)	1
13	192017	Thrust Bearing	3
14	192018	Thrust Washer	6
15	140366	Screw: LHCS, 3/8-16 x 0.750	3
16	134205	Bolt: Hex, 3/8-16 x 1.50, Grade 8	3
17	192044	Thrust Washer	1
18	836-B-6-6	Screw: BHCS, #8-32 x .375	1
19	192047	Spline Brake	1
20	125156	Screw: SHCS, #8-32 x .375	1
21	192042	Spring Retainer	1
22	192050	Thrust Washer	3
23	192060	Screw: SSS, 1/4-28 x 1.500 Cup Pt.	2
24	192061-05	Cover, Chip Guard 192 ES-05	1
25	836-B-11-10	SCREW: BHCS, 1/4-28 X 5/8"	3

**Features:** 2.00 inch spline roll capacity, allows for rolling of up to 1.75 inch splines without disengaging master pinion.

THIS DRAWING IS THE CONFIDENTIAL AND EXCLUSIVE PROPERTY OF C.J. WINTER MACHINE TECHNOLOGIES, INC. AND MAY NOT BE COPIED, REPRODUCED, OR DISCLOSED IN ANY WAY, WHATSOEVER, TO ANYONE WITHOUT THE EXPRESS WRITTEN PERMISSION OF C.J. WINTER MACHINE TECHNOLOGIES, INC. UNLAWFUL DISCLOSURE MAY RESULT IN PROSECUTION  
© 2004 C.J. WINTER MACHINE TECHNOLOGIES, INC.

UNLESS OTHERWISE SPECIFIED:  
DRAWING MUST COMPLY TO  
C. J. WINTER ENGINEERING  
STANDARD E1058 & ASME  
Y14.5M 1994. UNTOLERANCED  
DIMENSIONS ARE BASIC

 .020 A B C SW

DRAWN BY: S. Belpanno  
DWG DATE: 08/15/2021  
ENG. APPR: S. Belpanno  
APPR DATE: 08/15/2021  
MATERIAL:  
HEAT TRT:



Spline Attachment  
(2.000 OAL Roll)

DWG SIZE  
SCALE: 1:2  
B  
SHEET 1 OF 3  
DRAWING NO.  
192 ES-05

6

5

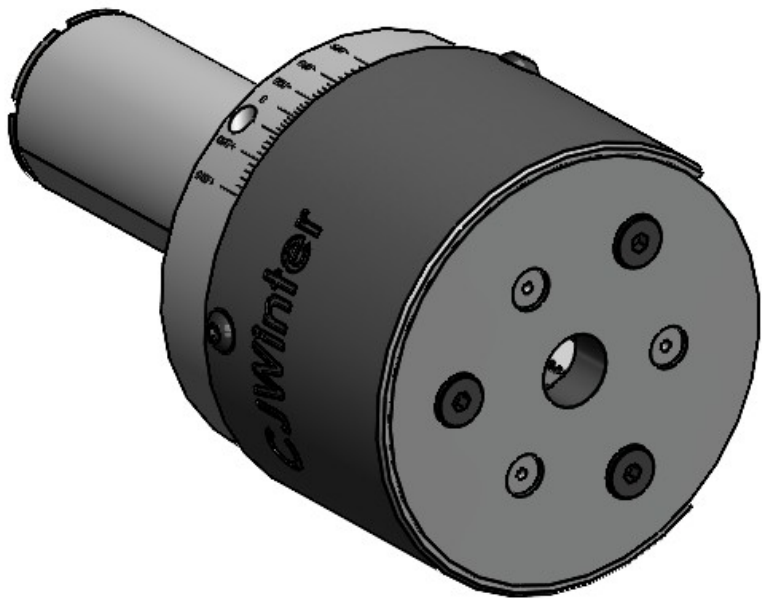
4

3

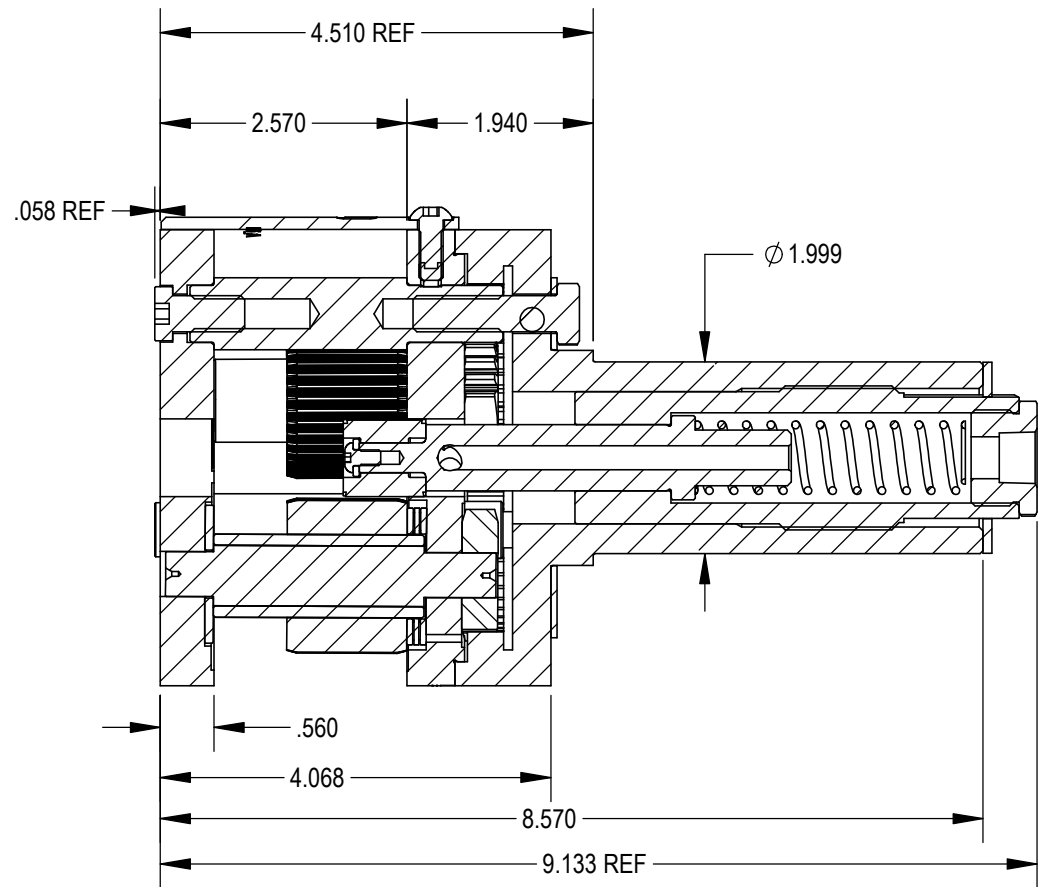
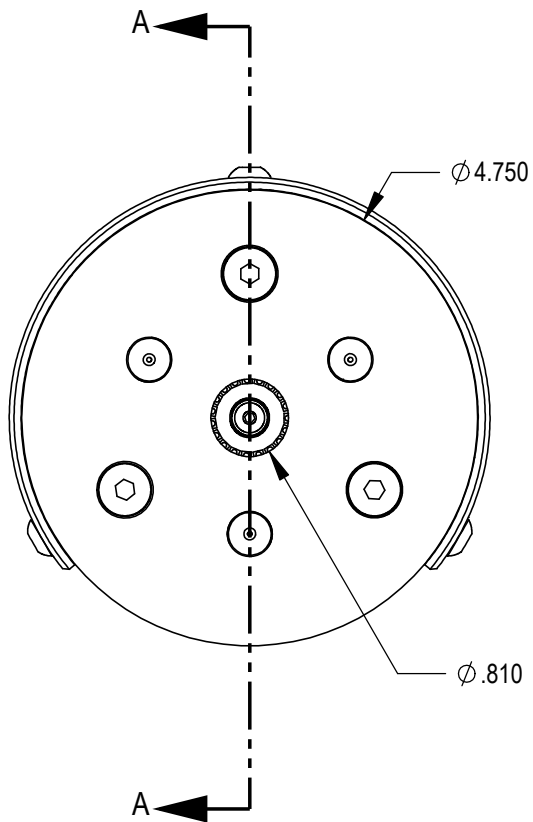
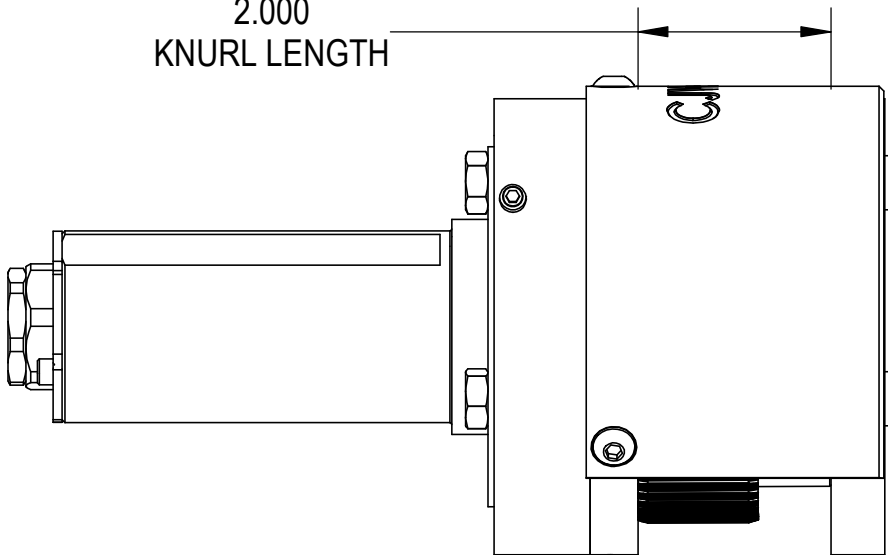
2

1

REV	ZONE	ECN	REVISION DESCRIPTION	DATE	ENG
A	....	....	Released	08/21	SGB



2.000  
KNURL LENGTH



SECTION A-A  
SCALE 1 : 2

THIS DRAWING IS THE CONFIDENTIAL AND EXCLUSIVE PROPERTY OF C.J. WINTER MACHINE TECHNOLOGIES, INC. AND MAY NOT BE COPIED, REPRODUCED, OR DISCLOSED IN ANY WAY, WHATSOEVER TO ANYONE WITHOUT THE EXPRESS WRITTEN PERMISSION OF C.J. WINTER MACHINE TECHNOLOGIES, INC. UNLAWFUL DISCLOSURE MAY RESULT IN PROSECUTION  
© 2004 C.J. WINTER MACHINE TECHNOLOGIES, INC.

UNLESS OTHERWISE SPECIFIED:  
DRAWING MUST COMPLY TO  
C. J. WINTER ENGINEERING  
STANDARD E1058 & ASME  
Y14.5M 1994. UNTOLERANCED  
DIMENSIONS ARE BASIC



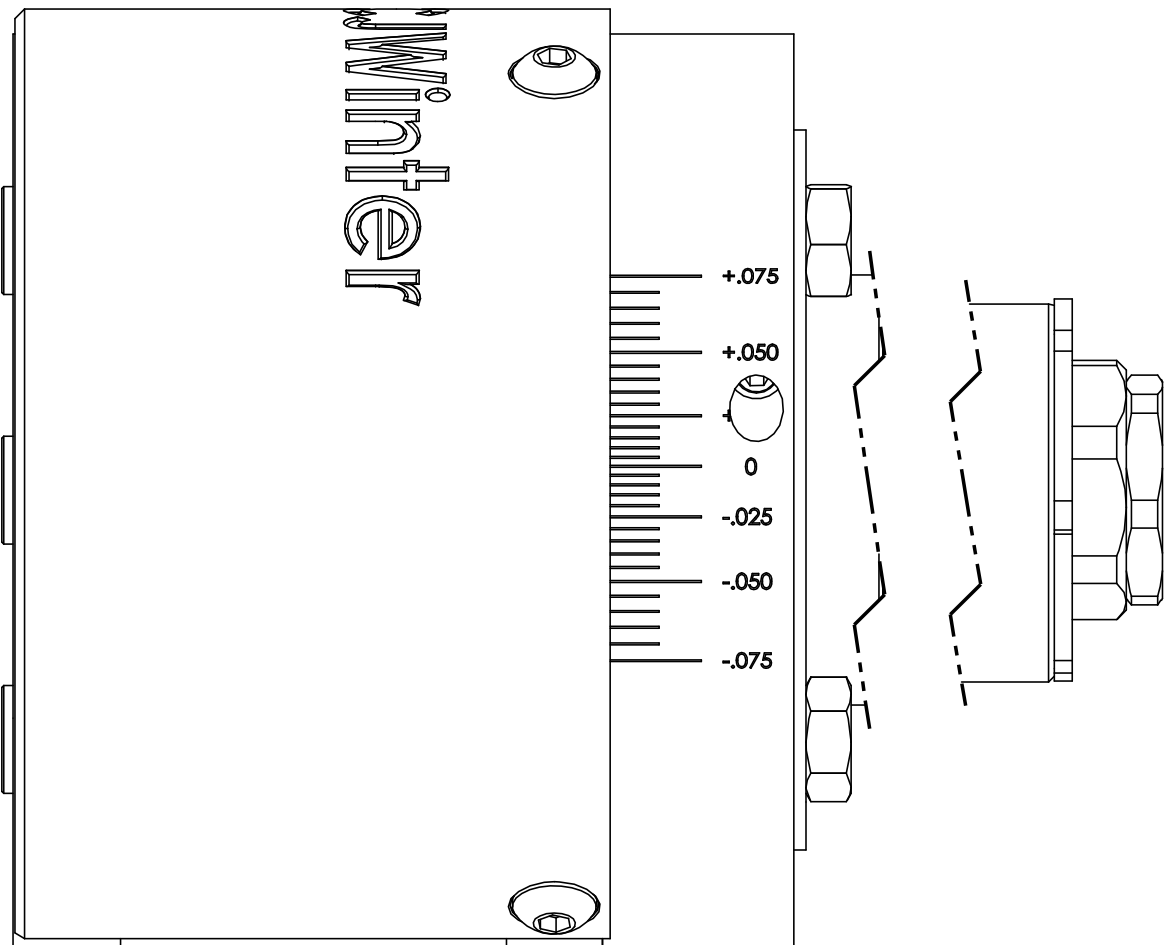
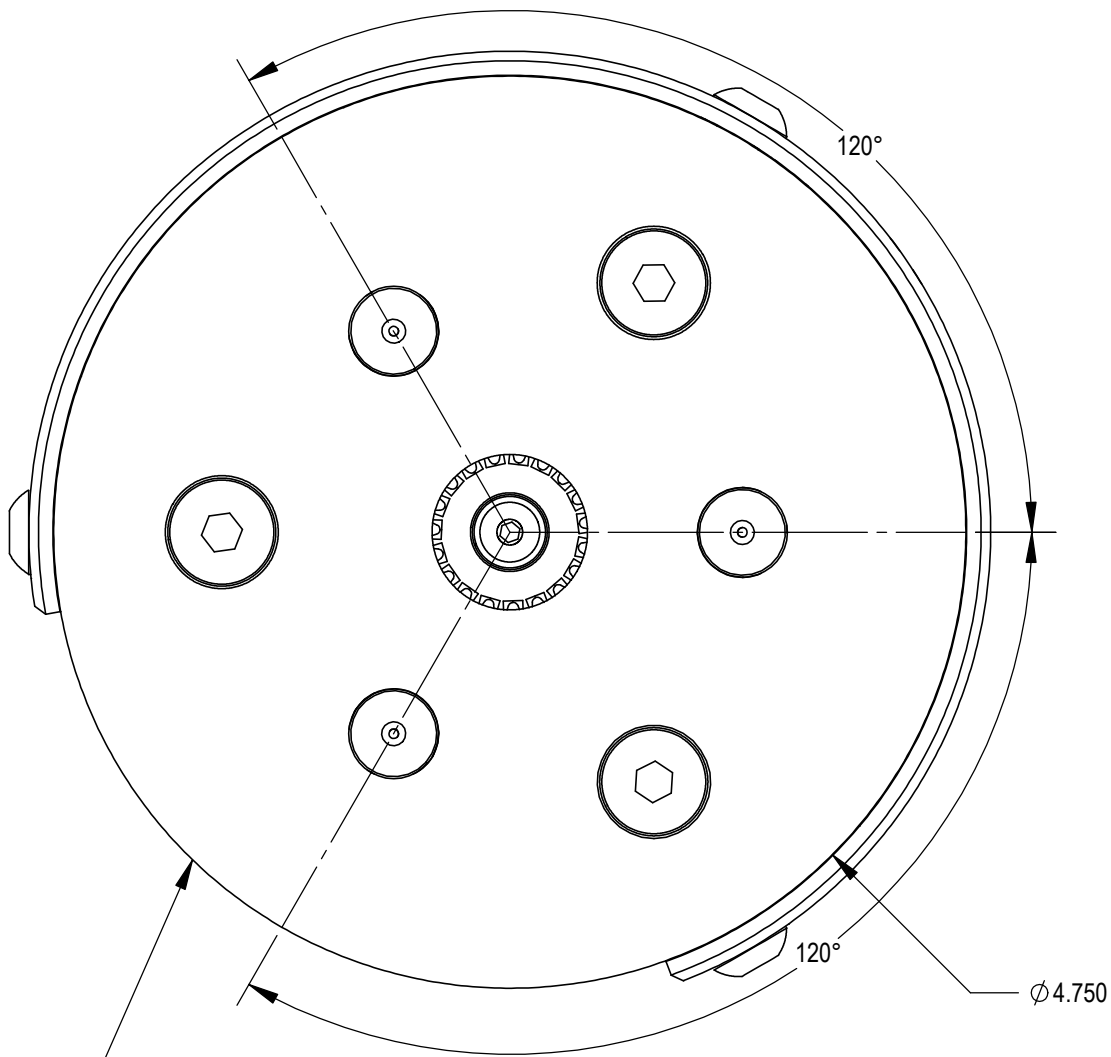
DRAWN BY: S. Belpanno  
DWG DATE: 08/15/2021  
ENG. APPR: S. Belpanno  
APPR DATE: 08/15/2021  
MATERIAL:  
HEAT TRT:



Spline Attachment  
(2.000 OAL Roll)

DWG SIZE  
SCALE: 1:2  
B  
SHEET 2 OF 3  
DRAWING NO.  
192 ES-05

REV	ZONE	ECN	REVISION DESCRIPTION	DATE	ENG
A	....	....	Released	02/11	PA



Scale	Chordal position
0.075	1.035
0.070	0.941
0.065	0.850
0.060	0.764
0.055	0.682
0.050	0.604
0.045	0.529
0.040	0.458
0.035	0.390
0.030	0.325
0.025	0.264
0.020	0.205
0.015	0.149
0.010	0.097
0.005	0.047
0.000	0.000
-0.005	-0.047
-0.010	-0.097
-0.015	-0.149
-0.020	-0.205
-0.025	-0.264
-0.030	-0.325
-0.035	-0.390
-0.040	-0.458
-0.045	-0.529
-0.050	-0.604
-0.055	-0.682
-0.060	-0.764
-0.065	-0.850
-0.070	-0.941
-0.075	-1.035

Mark Scale in 3 Places, Every 120°  
Visually Align -0- with roll pin within +/- 10°

PRIOR TO MARKING - SET HEAD TO CENTER OF ADJUSTMENT

- 1) Loosen 3 Hex Bolts Near Shank
- 2) Twist Head Until Fully Closed, Mark Across Both Parts w/ Sharpie
- 3) Twist Head Until Fully Open, Mark Across Both Parts w/ Sharpie
- 4) Adjust Until Mark on Head is Exactly 1/2 way Between Sharpie Marks
- 5) Tighten Hex Bolts

THIS DRAWING IS THE CONFIDENTIAL AND EXCLUSIVE PROPERTY OF C.J. WINTER MACHINE TECHNOLOGIES, INC. AND MAY NOT BE COPIED, REPRODUCED, OR DISCLOSED IN ANY WAY, WHATSOEVER TO ANYONE WITHOUT THE EXPRESS WRITTEN PERMISSION OF C.J. WINTER MACHINE TECHNOLOGIES, INC. UNLAWFUL DISCLOSURE MAY RESULT IN PROSECUTION

UNLESS OTHERWISE SPECIFIED:  
DRAWING MUST COMPLY TO  
C. J. WINTER ENGINEERING  
STANDARD E1058 & ASME  
Y14.5M 1994. UNTOLERANCED  
DIMENSIONS ARE BASIC

 .020 A B C SW

DRAWN BY: P. Allart  
DWG DATE: 02/23/2011  
ENG. APPR: P. Allart  
APPR DATE: 02/23/2011  
MATERIAL:  
HEAT TRT:



Spline Attachment  
(2.000 OAL Roll)

DWG SIZE  
SCALE: 1:1  
B  
Sheet 3 of 3  
DRAWING NO.  
192 ES-05