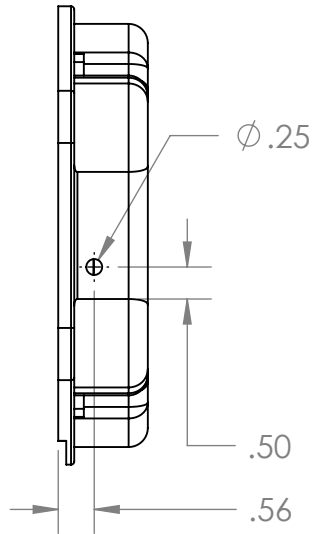
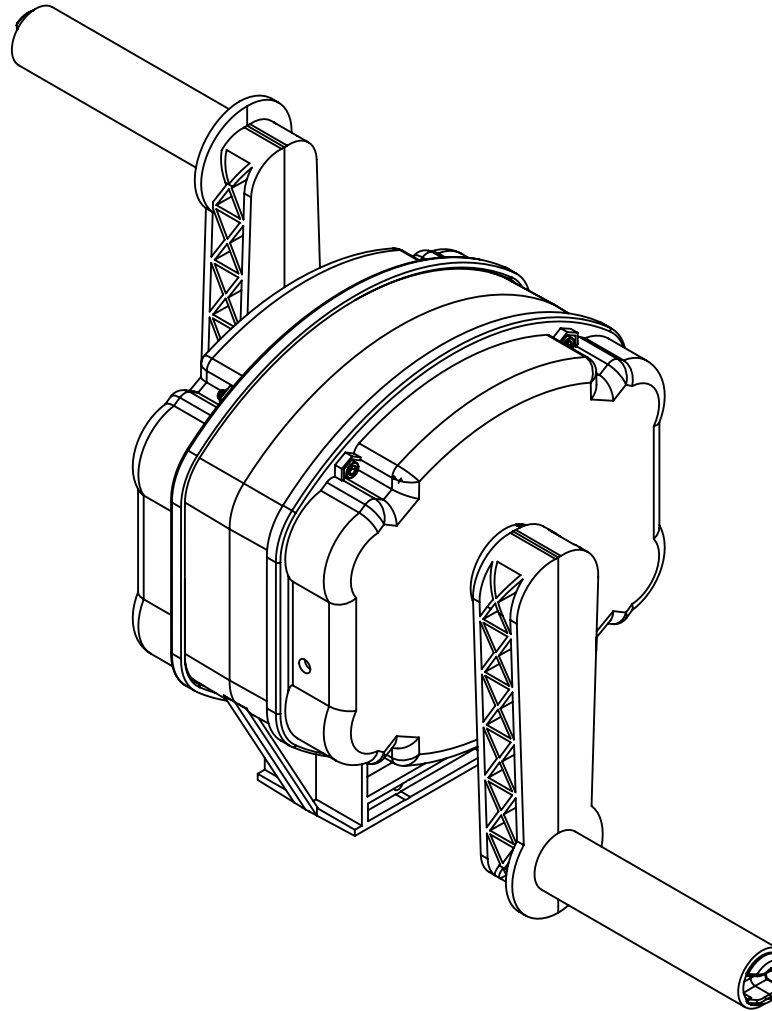
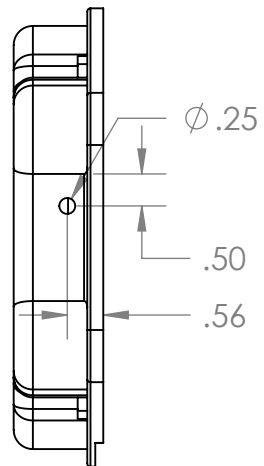


Drilled Hole Location:
(Both holes are drilled
into same cover half)

Power Cord Hole

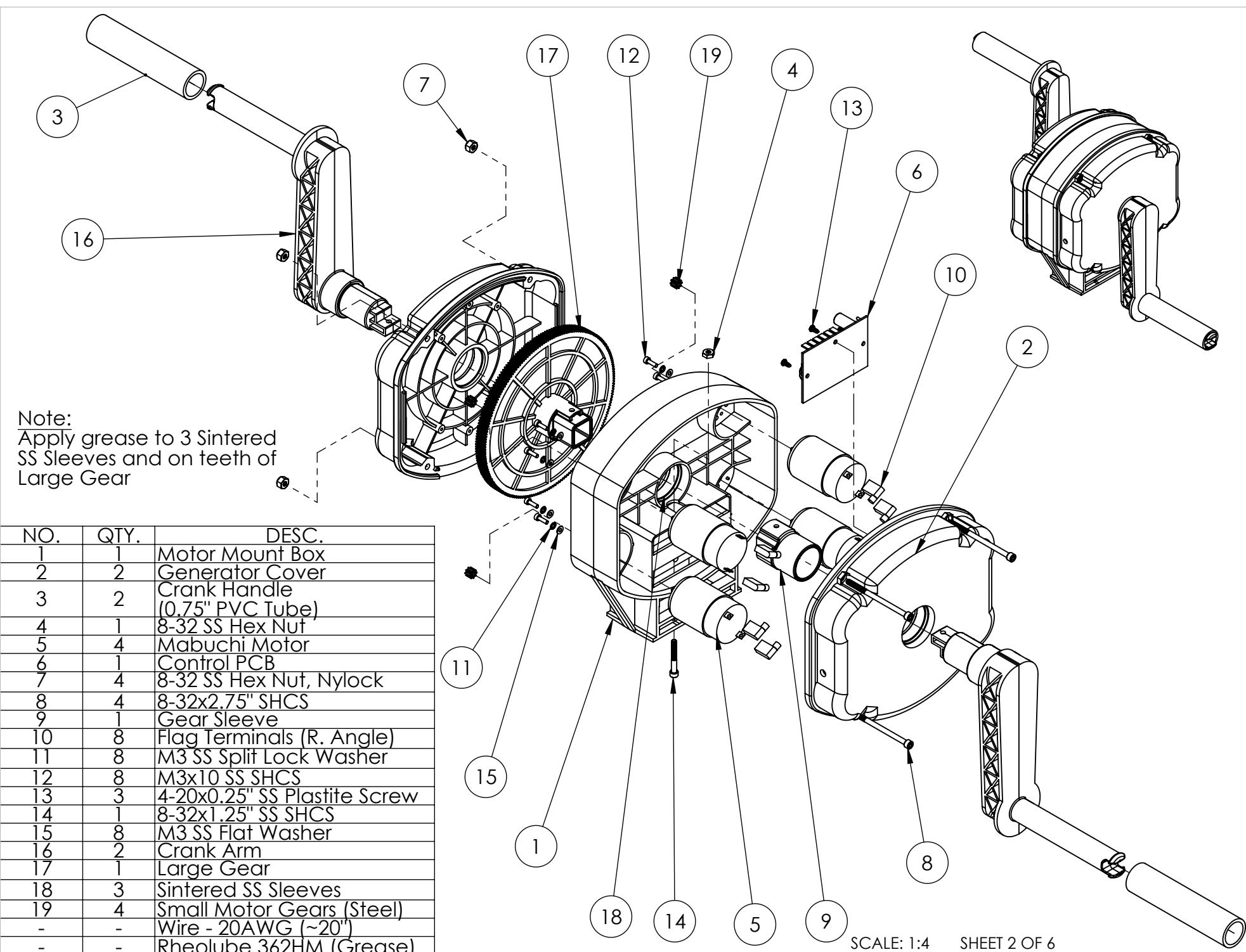


LED Indicator Hole



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		UNLESS OTHERWISE SPECIFIED:	NAME	DATE	Harbec Plastics Inc.	
		DIMENSIONS ARE IN INCHES	DRAWN	MAB	02/09/2009	TITLE:
		TOLERANCES:	CHECKED			Harbec Generator Assembly
		FRACTIONAL ±	ENG APPR.			SIZE DWG. NO. REV
		ANGULAR: MACH ± BEND ±	MFG APPR.			A
		TWO PLACE DECIMAL ±	Q.A.			SCALE: 1:3
		THREE PLACE DECIMAL ±	COMMENTS:			SHEET 1 OF 6
NEXT ASSY	USED ON	INTERPRET GEOMETRIC TOLERANCING PER:				
		MATERIAL				
		FINISH				
APPLICATION		DO NOT SCALE DRAWING				



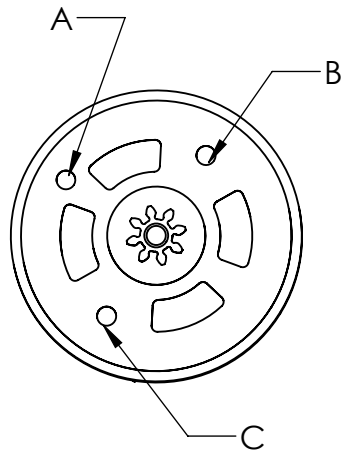
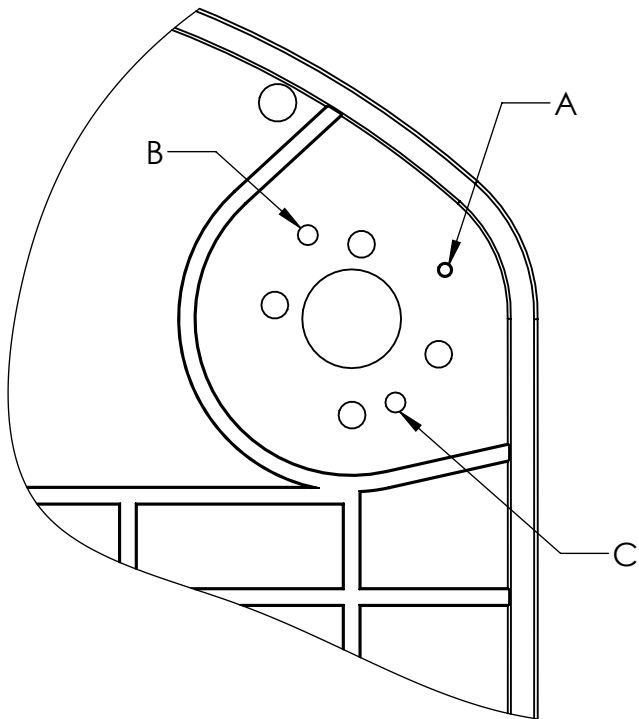
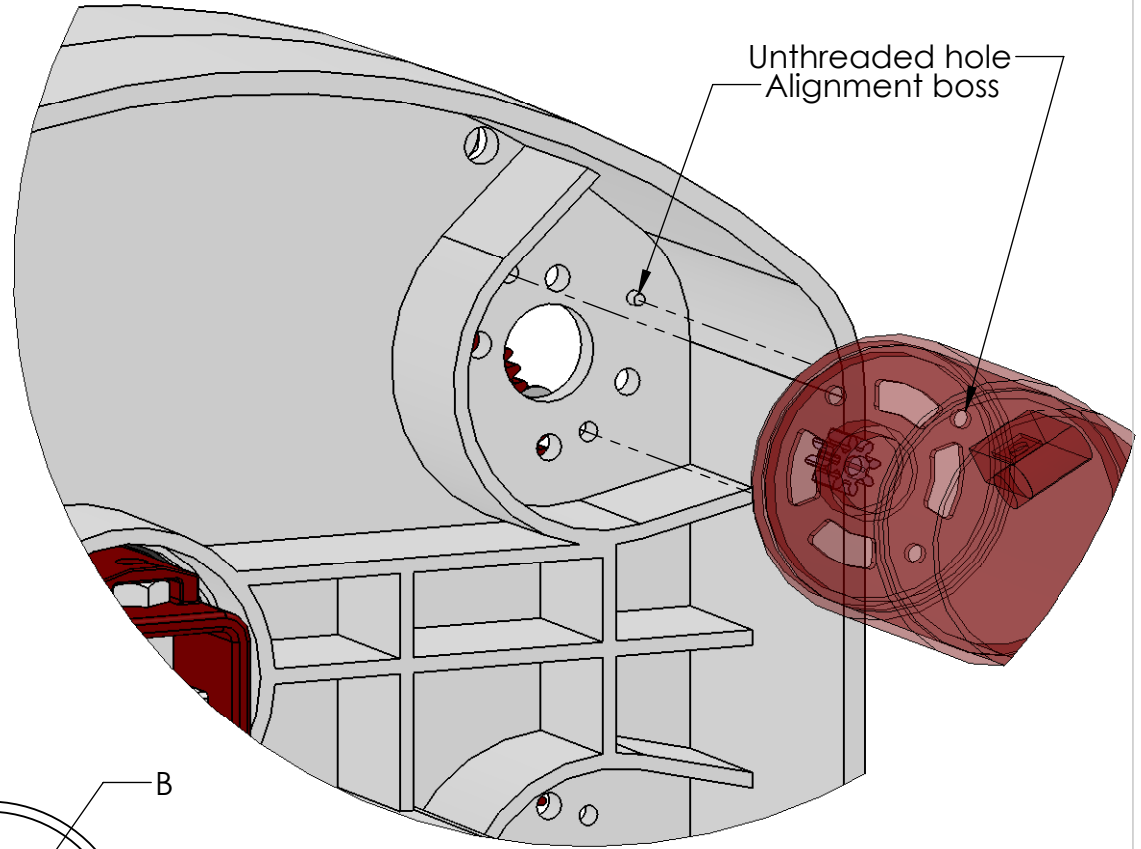
Note:
Apply grease to 3 Sintered
SS Sleeves and on teeth of
Large Gear

NO.	QTY.	DESC.
1	1	Motor Mount Box
2	2	Generator Cover
3	2	Crank Handle (0.75" PVC Tube)
4	1	8-32 SS Hex Nut
5	4	Mabuchi Motor
6	1	Control PCB
7	4	8-32 SS Hex Nut, Nylock
8	4	8-32x2.75" SHCS
9	1	Gear Sleeve
10	8	Flag Terminals (R. Angle)
11	8	M3 SS Split Lock Washer
12	8	M3x10 SS SHCS
13	3	4-20x0.25" SS Plastite Screw
14	1	8-32x1.25" SS SHCS
15	8	M3 SS Flat Washer
16	2	Crank Arm
17	1	Large Gear
18	3	Sintered SS Sleeves
19	4	Small Motor Gears (Steel)
-	-	Wire - 20AWG (~20')
-	-	Rheolube 362HM (Grease)

SCALE: 1:4 SHEET 2 OF 6

Fastening motor to main box:

- Align unthreaded motor hole over protruding boss (A-A)
- Threaded motor holes should now be concentric with "Motor Mount Box" holes (B-B & C-C)
- Fasten motor to "Motor Mount Box" with Flat washer, Lockwasher, and M3x10mm SHCS



Motor Alignment

SCALE: 1:1

SHEET 3 OF 6

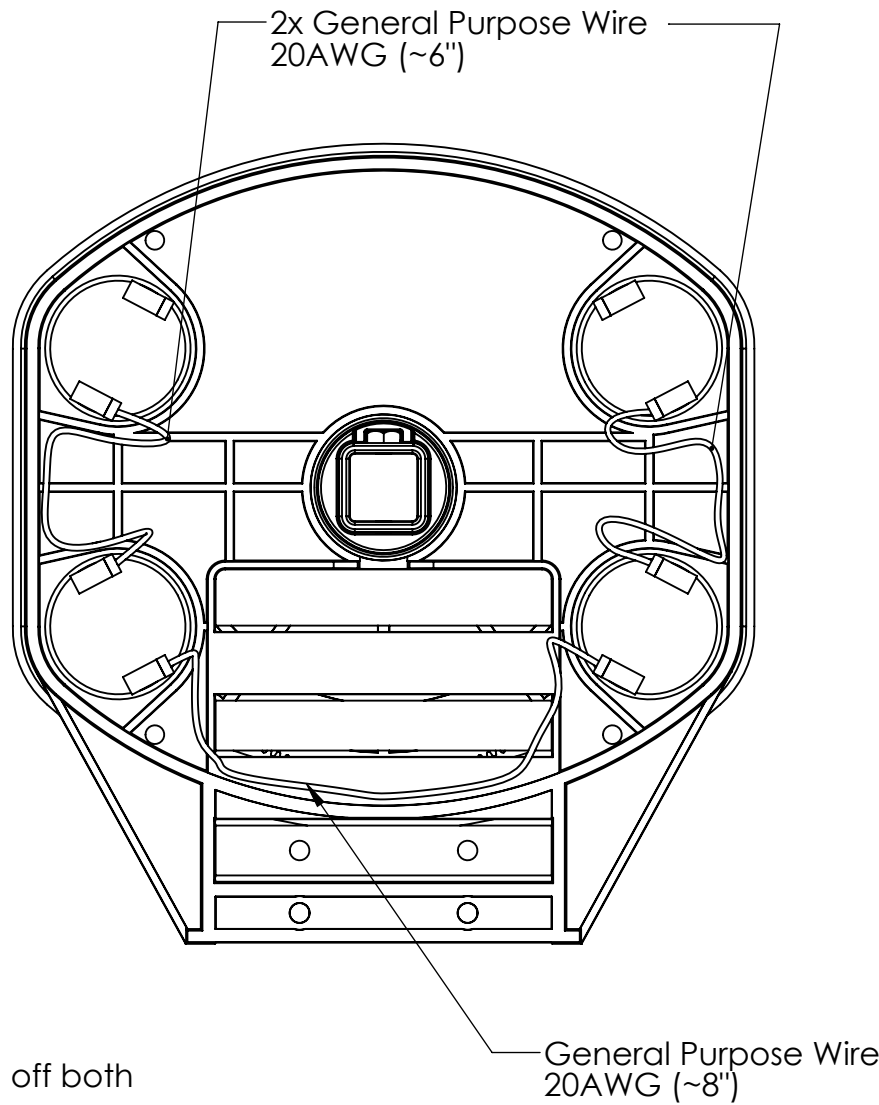
5

4

3

2

1

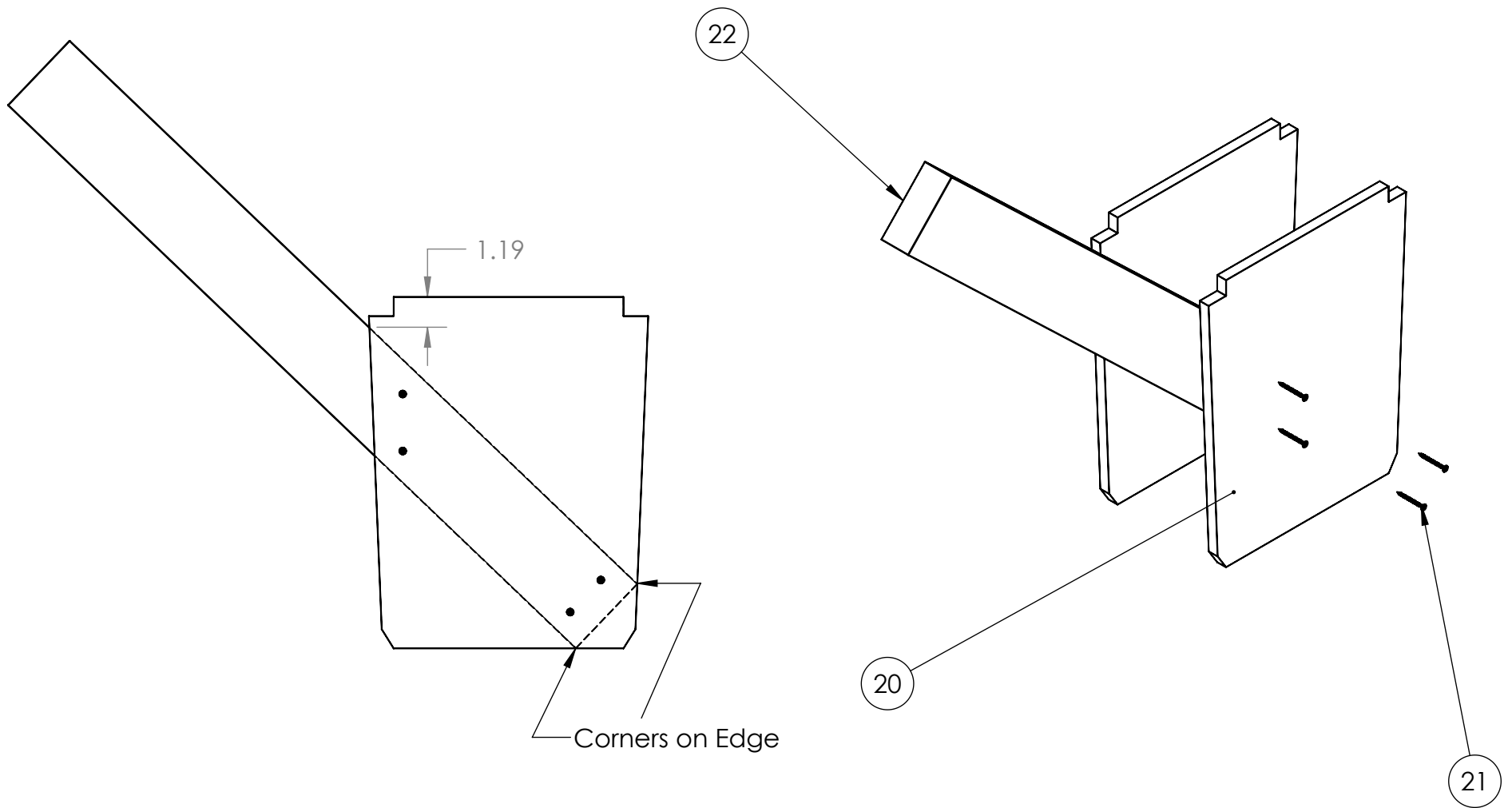


- Strip ~0.25" of wire insulation off both ends of each wire
- Each stripped wire end receives a right angle flag terminal to connect to the motor
- Once flag terminals are connected to the motors, neatly tuck wires against walls

Harbec Generator, Motor Wiring

SCALE: 1:2

SHEET 4 OF 6



NO.	QTY.	DESC.
20	2	Bucket Support Plates 0.5 in Exterior Plywood
21	8	1.5" Drywall Screw, Coarse Thread
22	1	Bucket Post 2x4

Harbec Generator
Wood Support
SCALE: 1:6 SHEET 5 OF 6

5

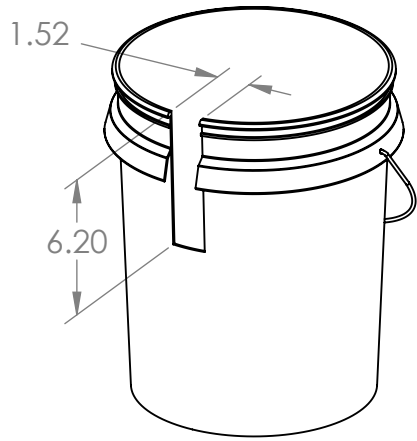
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3

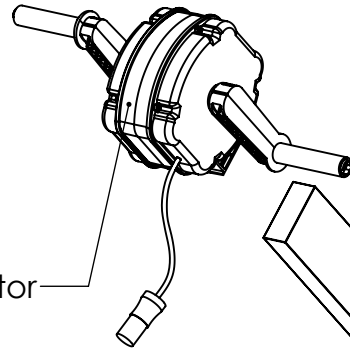
2

1

Support Bucket Notch:



Assembled Harbec Generator



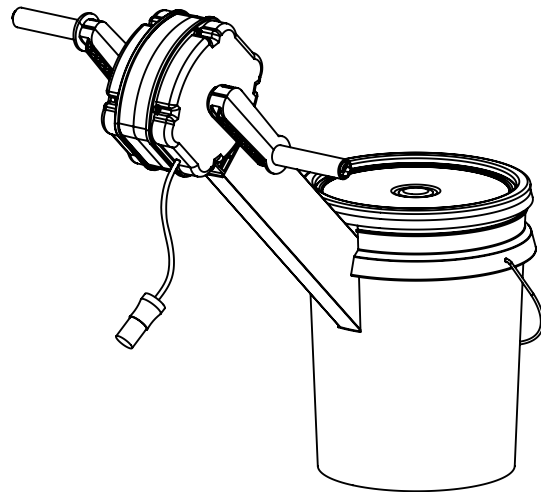
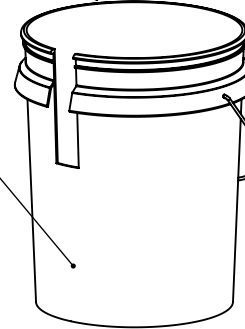
5 Gal. Bucket Lid



Generator Wood Support



5 Gal. Bucket with Post Notch



Harbec Generator, Support, and Bucket

SCALE: 1:10

SHEET 6 OF 6