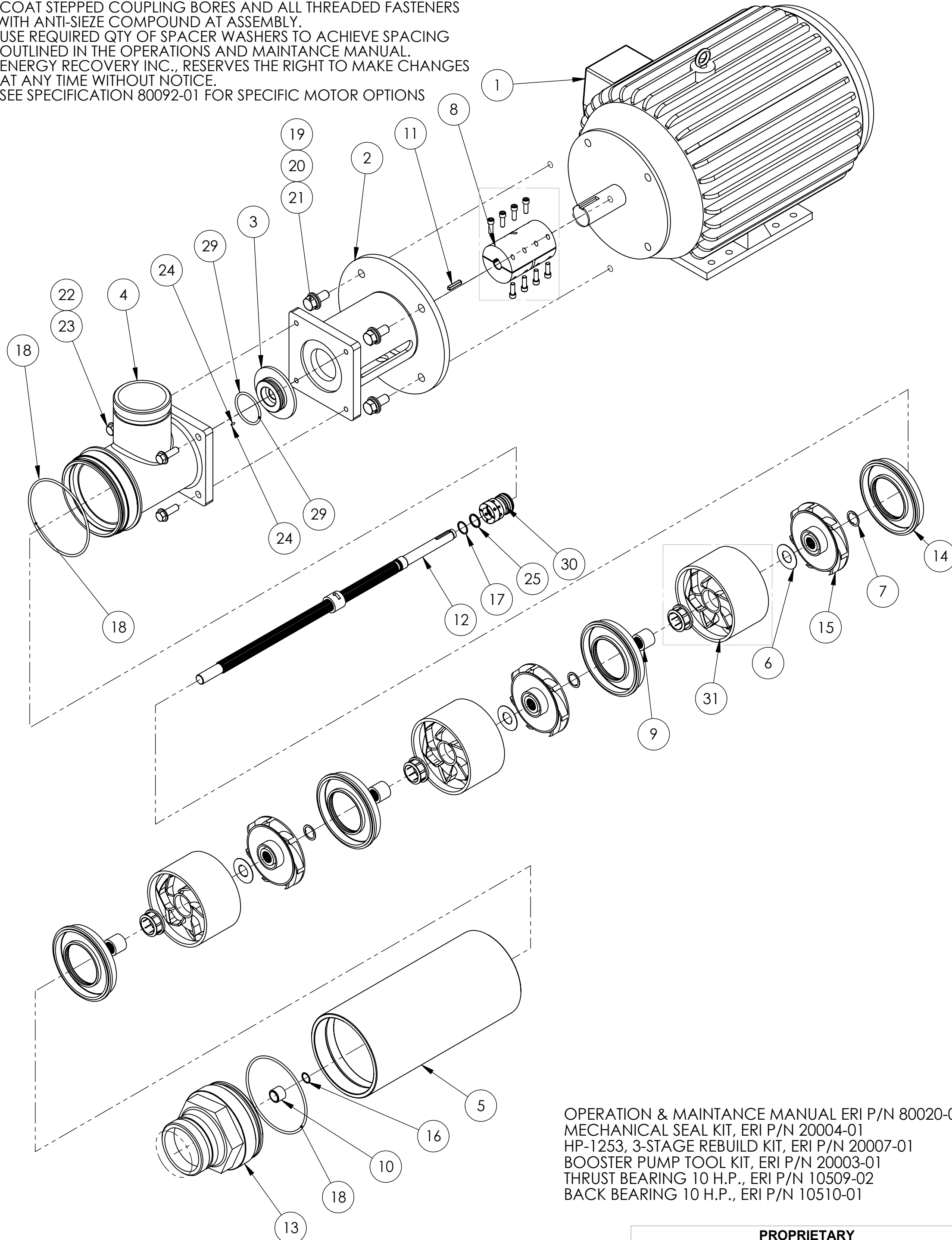


NOTES, UNLESS OTHERWISE SPECIFIED:

1. COAT STEPPED COUPLING BORES AND ALL THREADED FASTENERS WITH ANTI-SIEZE COMPOUND AT ASSEMBLY.
2. USE REQUIRED QTY OF SPACER WASHERS TO ACHIEVE SPACING OUTLINED IN THE OPERATIONS AND MAINTANCE MANUAL.
3. ENERGY RECOVERY INC., RESERVES THE RIGHT TO MAKE CHANGES AT ANY TIME WITHOUT NOTICE.
4. SEE SPECIFICATION 80092-01 FOR SPECIFIC MOTOR OPTIONS



OPERATION & MAINTANCE MANUAL ERI P/N 80020-01  
 MECHANICAL SEAL KIT, ERI P/N 20004-01  
 HP-1253, 3-STAGE REBUILD KIT, ERI P/N 20007-01  
 BOOSTER PUMP TOOL KIT, ERI P/N 20003-01  
 THRUST BEARING 10 H.P., ERI P/N 10509-02  
 BACK BEARING 10 H.P., ERI P/N 10510-01

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BILL OF MATERIALS

ITEM NO.	50002-01/QTY.	PART NUMBER	DESCRIPTION	MATERIAL
1	1	51231-XX	MOTOR, 10HP, 460V, 60HZ, 215T, B34R, GE	
2	1	51000-01	ADAPTER, MOTOR, FINISHED, HP-PUMP, ALUMINIUM	ALUM
3	1	51008-01	PLATE, SEAL, HP-PUMP, AL6XN	AL6XN
4	1	51066-01	HOUSING, SUCTION, IC, HP-PUMP, AL6XN	AL6XN
5	1	51011-03	SHELL, HP-1253, HP-PUMP, AL6XN	AL6XN
6	3	51026-01	WASHER, THRUST, HP-PUMP, AL6XN	AL6XN
7	6	51027-01	WASHER, SPACER, HP-PUMP, AL6XN	AL6XN
8	1	51029-01	COUPLING, SHAFT, RIGID, STEPPED, 5/8" X 1-3/8", HP-PUMP, TIT	TITANIUM
9	3	51025-01	BEARING, JOURNAL, HP-PUMP, AL6XN	AL6XN
10	1	51003-01	BUSHING, SLEEVE, HP-PUMP, RULON	RULON
11	1	51041-01	KEY, CUT, 3/16" SQ, X 1.00", SHAFT, HP-PUMP, 316	316 SS
12	1	51051-01	SHAFT, HP-1253, ASSY, ALL-SPLINE, AL6XN	AL6XN
13	1	51064-01	END-CAP, FINISHED, IC, HP-PUMP, AL6XN	AL6XN
14	4	10143-01	DIFFUSER, PLATE, PUMP, 1200, NORYL	NORYL
15	3	10147-01	IMPELLER, PUMP, 1200, NORYL	NORYL
16	1	10061-01	RING, RETAINING, SHAFT, .625", 276	C276
17	1	10066-01	RING, RETAINING, SHAFT, .750", 276	C276
18	2	10163-01	O-RING, EPDM, 249	EPDM
19	4	10068-01	WASHER, FLAT, 1/2" ID, .875" OD, 18-8	18-8 SS
20	4	10044-01	WASHER, LOCK, 1/2" ID, 316	316 SS
21	4	10067-01	SCREW, HEX-HEAD, 1/2"-13, X 1.25", 316	316 SS
22	4	10038-01	WASHER, FLAT, 3/8" ID, 316	316 SS
23	4	10070-01	SCREW, HEX-HEAD, 3/8"-16, X 1.25", 316	316 SS
24	1	10117-01	DOWEL, PIN, 3/32" DIA, X 1/4", NSF, ACE	ACETAL
25	1	10122-01	SPACER, .0875" OD, .75" ID, X .06", PVC	PVC
26	2	51218-01	HOUSING GUARD (CE ONLY, NOT SHOWN)	VINYL
27	1	30208-01	TAG, HP-PUMP, CE CERTIFICATION (CE ONLY, NOT SHOWN)	ALUM
28	1	30024-01	LABEL, SERIAL NUMBER	ALUM
29	1	10160-01	O-RING, EPDM, 225	EPDM
30	1	10123-01	SEAL, MECHANICAL, SHAFT, 316	316SS
31	3	10139-01	DIFFUSER, BOWL, PUMP, 1200, NORYL	NORYL

TOP LEVEL ASSEMBLIES	50002-01	50002-02	50002-31	50002-32
MOTOR CONFIG.:	460V/60HZ	380V/50HZ	460V/60HZ	380V/50HZ
MOTOR P/N:	51231-01	51231-01	51231-31	51231-31
STANDARD MOTOR - DUAL VOLTAGE - 460V/60HZ, 380V/50HZ	X	X		
STANDARD MOTOR - DUAL VOLTAGE - 460V/60HZ, 380V/50HZ - CE CERT			X	X

06	0749	REMOVED SCREWS OF COUPLING, BUSHING OF DIFFUSER OUT OF BOM	KT	6/10/22
-	0742	QTY. FOR ITEM P/N: 51218-01 CHANGED FROM 1 TO 2.	AL	10/05/21
05	0732	UPDATED 30205-01 CE TAG TO 30208-01; ADDED NOTE 1 & DIMS OF CENTER OF MASS ON SHEET 2	YR	05/13/21
04	0722	MADE CHANGES TO THE OAL DUE TO NEW MOTORS, ADDED CONFIGURATION TABLE, MADE CHANGES TO BEARING P/N	SD	5/4/2021
03	0490	CREATE A NEW MOTOR OPTION MATRIX & ADDED -05	TDR	10/4/13
03	408	ADDED NEW TABULATIONS -03 & -04	TDR	4/3/13
02	07-026	UPDATED ITEMS 4 & 30, REMOVED O-RING KIT NOTE AND ADDED BEARING PART NUMBERS NOTE. ALSO REFERENCED MOTOR OPTION SPEC.	FTM	09/11/2007
01	04-064	CHANGE TO ALL SPLINE SHAFT	RAC	09/01/2004
REV.	ECN NO.	DESCRIPTION	BY	DATE

REVISIONS

UNLESS OTHERWISE SPECIFIED:

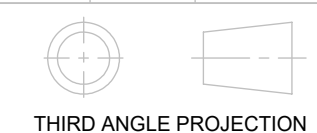
DIMENSIONS ARE IN INCHES

TOLERANCES:  
 FRACTIONAL: ± 1/32"  
 ANGULAR: MACH ± .5° BEND ± 1°  
 TWO PLACE DECIMAL: ± .01"  
 THREE PLACE DECIMAL: ± .005"  
 FOUR PLACE DECIMAL: ± .0002"

DIMENSIONING AND TOLERANCING PER ANSI Y14.5M (LATEST)

**Production**

DRAWING STATUS		
DRAWN	RAC	05/12/2003
CHECKED	TLS	05/28/2003
ENG APPR.	RLS	05/28/2003



1717 Doolittle Drive  
 San Leandro CA 94577  
**energyrecovery.com**  
 P 510.483.7370  
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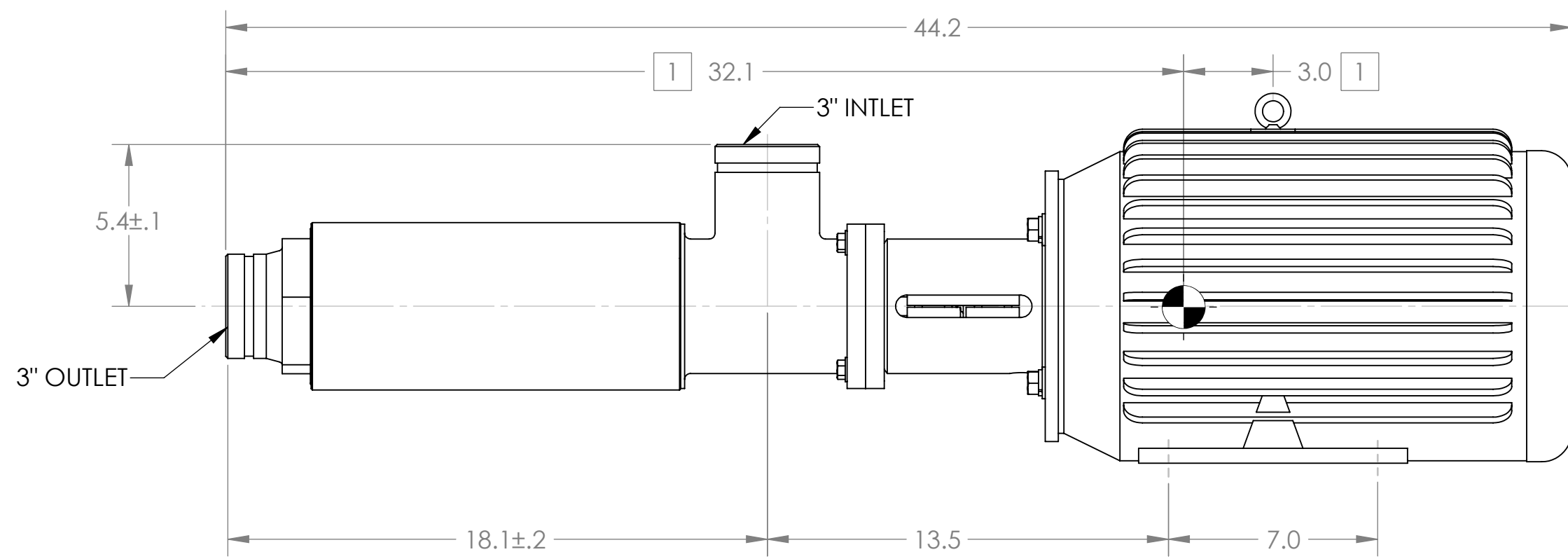
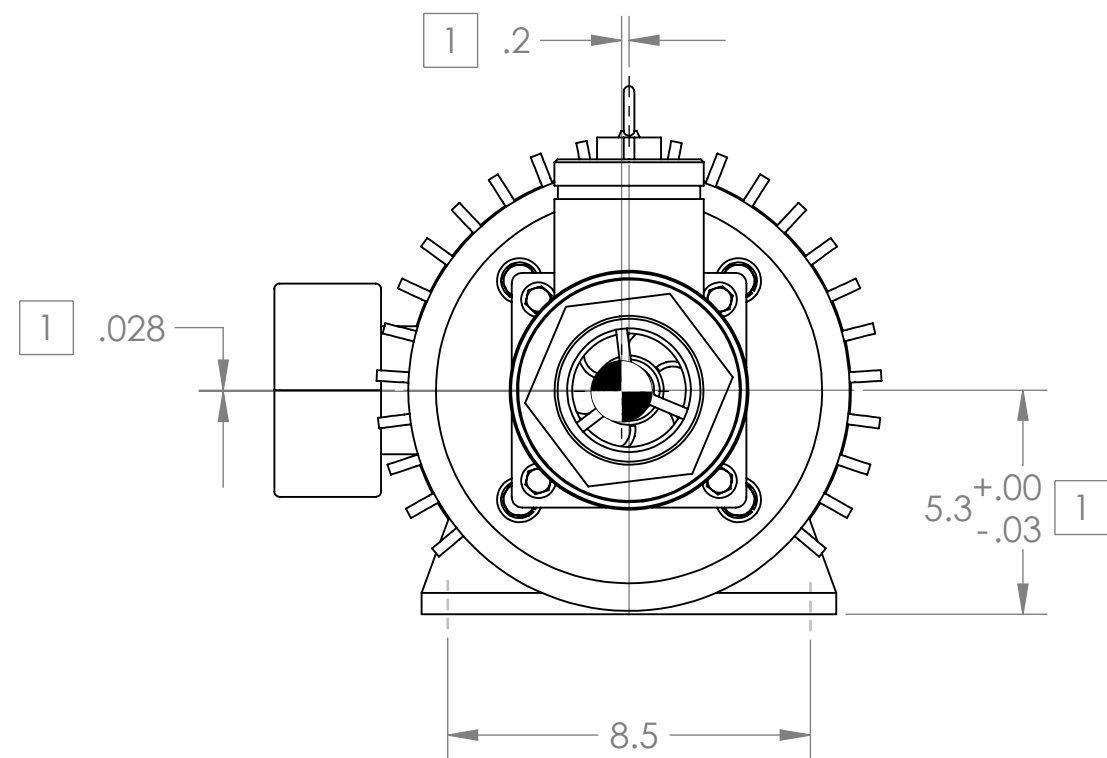
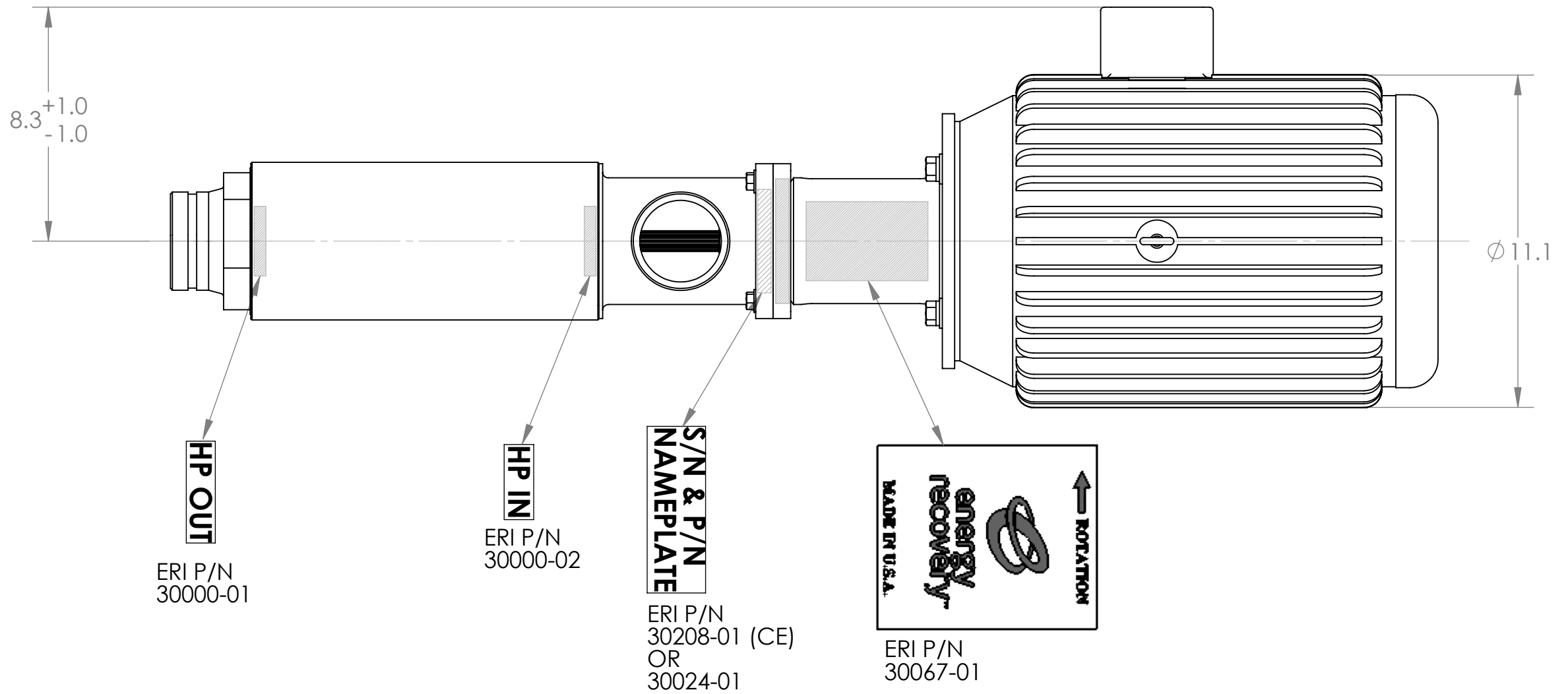


TITLE:  
**ASSY, PUMP, BOOSTER, HP-1253**

SIZE	DWG. NO.	REV
<b>C</b>	<b>50002</b>	<b>06</b>
WEIGHT:	SCALE: 1:1	SHEET 1 OF 3

NOTES, UNLESS OTHERWISE SPECIFIED:

1. CENTER OF MASS DIMENSIONS FOR ASSEMBLY ARE FOR REFERENCE ONLY.
2. MOTORS ARE CUSTOMIZED TO EMPLOY A SPECIAL THRUST BEARING. CONTACT ENERGY RECOVERY INC. FOR REPLACEMENT OR REPAIR.
3. ENERGY RECOVERY INC. RESERVES TO RIGHT TO MAKE SPECIFICATION OR DIMENSION CHANGES WITHOUT NOTICE.
4. LABEL LOCATIONS ARE APPROX AS SHOWN.



## OVERALL DIMENSIONS LABEL LOCATIONS

UNLESS OTHERWISE SPECIFIED:

*DIMENSIONS ARE IN INCHES*

TOLERANCES:  
 FRACTIONAL:  $\pm 1/32"$   
 ANGULAR: MACH  $\pm 5^\circ$  BEND  $\pm 1^\circ$   
 TWO PLACE DECIMAL:  $\pm .01"$   
 THREE PLACE DECIMAL:  $\pm .005"$   
 FOUR PLACE DECIMAL:  $\pm .0002"$

DIMENSIONING AND TOLERANCING  
 PER ANSI Y14.5M (LATEST)

**Production**

DRAWING STATUS		
DRAWN	RAC	05/12/2003
CHECKED	TLS	05/28/2003
ENG APPR.	RLS	05/28/2003

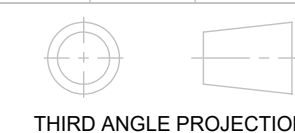
1717 Doolittle Drive  
 San Leandro CA 94577  
[energyrecovery.com](http://energyrecovery.com)  
 P 510.483.7370  
 F 510.483.7371



TITLE:  
**ASSY, PUMP, BOOSTER, HP-1253**

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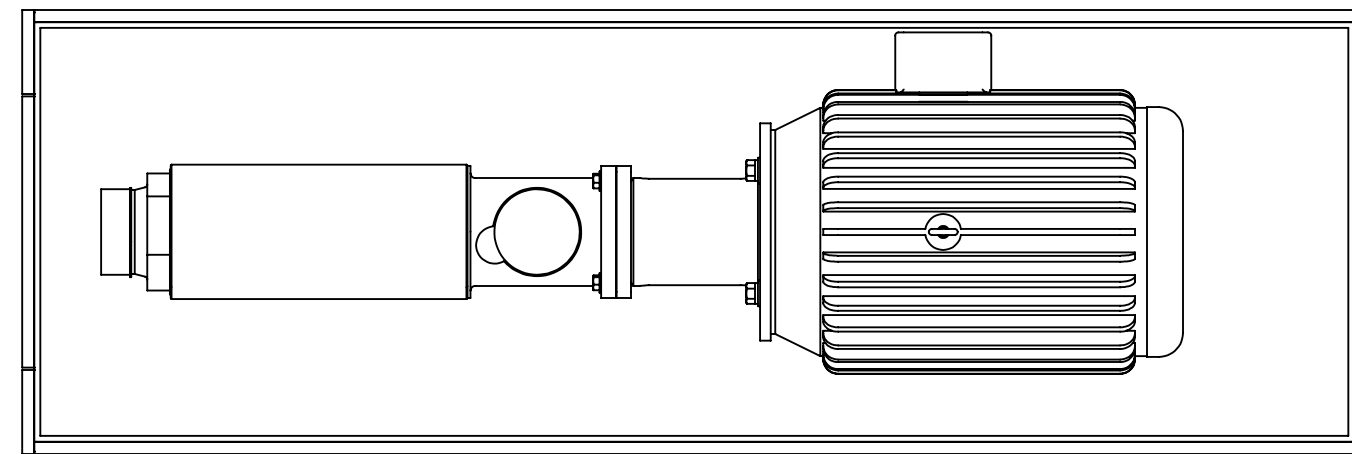
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THIRD ANGLE PROJECTION

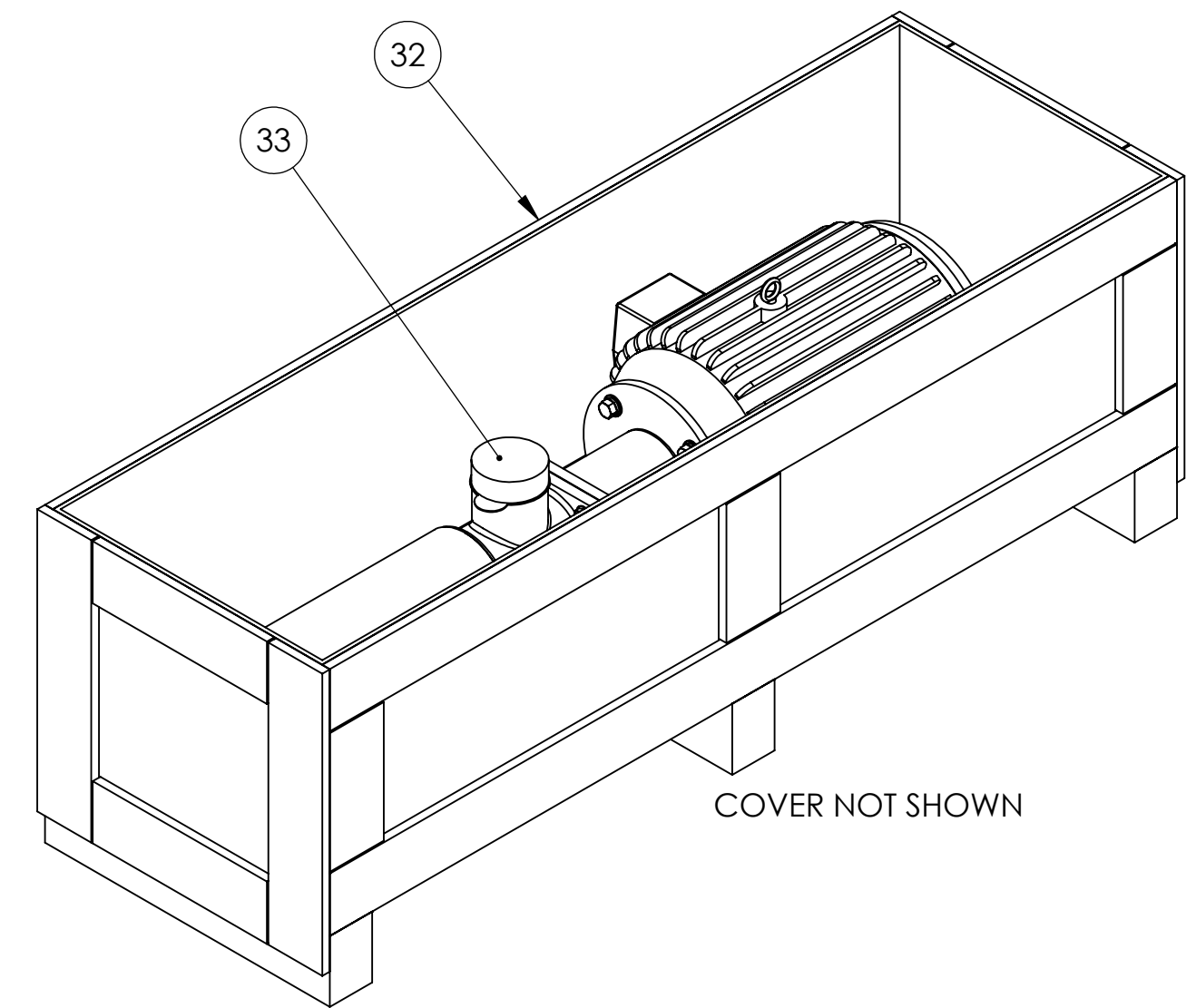
SIZE	DWG. NO.	REV
<b>C</b>	<b>50002</b>	<b>06</b>
WEIGHT:	SCALE: 1:4.5	SHEET 2 OF 3

BILL OF MATERIALS			
ITEM NO.	PART NUMBER	DESCRIPTION	MATERIAL
32	10010-01	CRATE, SHIPPING, PUMP, WOOD	Wood
33	10011-01	CAP-PLUG, SHIPPING, MALE, 3"DIA, PLA	PLASTIC

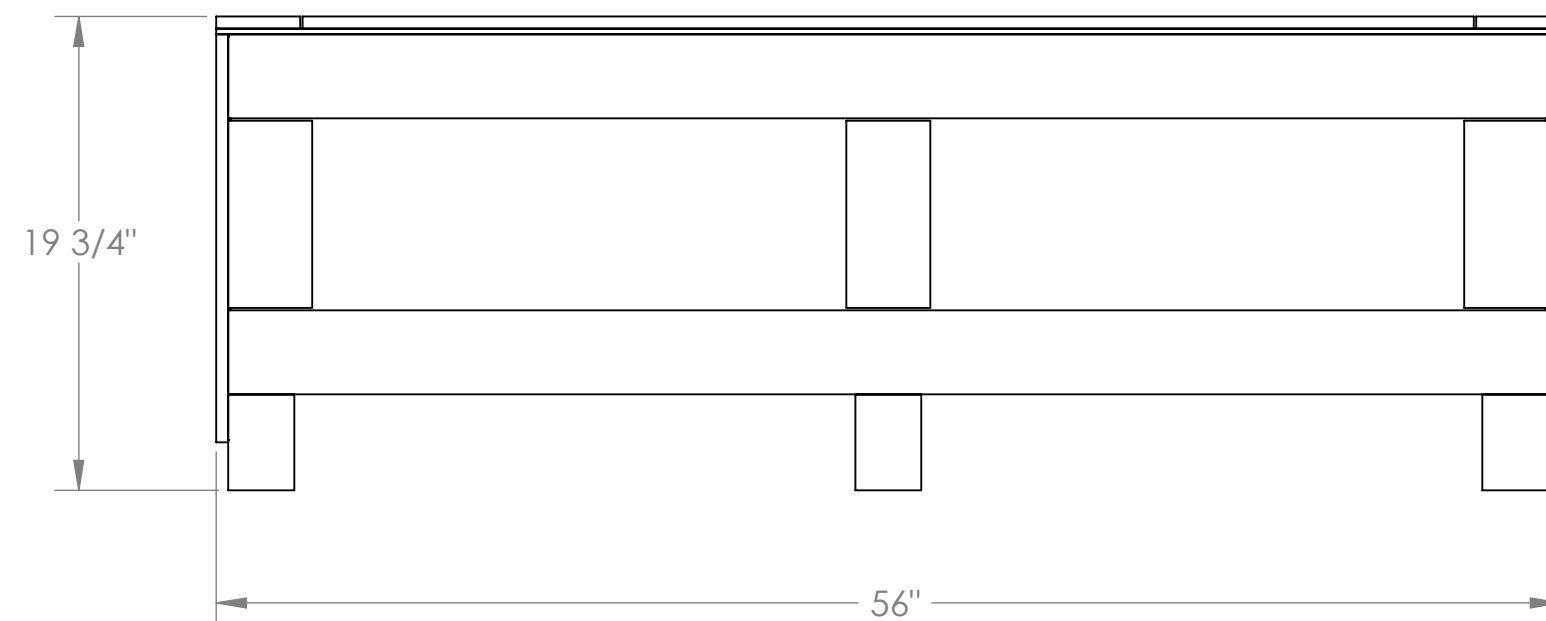
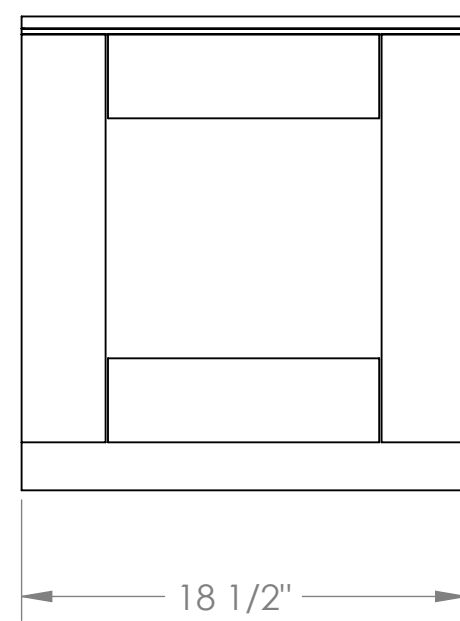


COVER NOT SHOWN

ATTACH BOOSTER PUMP ASSEMBLY TO BOTTOM OF CRATE USING HEX BOLT/WASHER SHORE PUMP TO KEEP FROM SHIFTING OR MOVEMENT INSIDE CRATE DURING TRANSIT



COVER NOT SHOWN



**SHIPPING WEIGHT: 300 LBS / 136 Kgs**

1717 Doolittle Drive  
 San Leandro CA 94577  
[energyrecovery.com](http://energyrecovery.com)  
 P 510.483.7370  
 F 510.483.7371



TITLE:  
**ASSY, PUMP, BOOSTER, HP-1253**

SIZE <b>C</b>	DWG. NO. <b>50002</b>	REV <b>06</b>
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WEIGHT:	SCALE: 1:8	SHEET 3 OF 3
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