

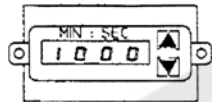
REV	DATE	DCN	REVISION DESCRIPTION	BY	CHK	DATE
A ₁	04/17/2010	A.1	PROTOTYPE			
B ₁	04/17/2010	009274	RELEASE FOR PRODUCTION	COM	COM	04/20/2010
C ₁	09/29/2010	010210	ADDED PARAMETERS FOR DIP SWITCH CONTROLLER. CORRECTED PPO ENTRIES.	COM	COM	09/29/2010

SPEED CONTROL PROGRAMMING FOR GEARMOTOR,
PN 64319 OR GEARMOTOR KIT PN 66186

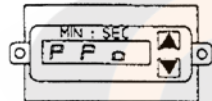
OVEN MODEL	PPO	RATE	PRESET NO.	DIP SWITCH SETTINGS FOR PN 37337								
				1	2	3	4	5	6	7	8	
PS200, PS220, PS224, PS540, BE/6G3240, PS640VE2, PS740VE2, PS840VE2	414	7056	12	ON	OFF	ON	ON	ON	ON	ON	ON	OFF
PS555	560	7056	14	ON	OFF	ON	OFF	OFF	ON	ON	ON	ON
PS570, PS570S, PS570M	713	7056	15	ON	OFF	OFF	ON	OFF	OFF	OFF	OFF	OFF
PS314, PS360, PS360WB, PS360EWB	555	7056	16	ON	OFF	ON	OFF	ON	OFF	OFF	OFF	OFF
PS360WB70	718	7056	17	ON	OFF	OFF	OFF	ON	ON	ON	ON	ON
PS360 TANDEM	1110	7056	--	OFF	ON	ON	OFF	ON	OFF	OFF	OFF	OFF

PPO: PULSES PER OVEN IS THE NUMBER OF ENCODER PULSES FOR THE BELT TO TRAVEL THE LENGTH OF THE OVEN CAVITY. VALUES SHOWN ARE WHAT SHOULD BE ENTERED INTO THE DISPLAY. (MOTOR WILL SEE 10X THIS VALUE)

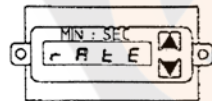
RATE: NUMBER OF PULSES OF THE MOTOR AT ITS MAXIMUM SPEED.



1. SIMULTANEOUSLY, PRESS AND HOLD THE UP/DOWN ARROW BUTTONS ON THE CONVEYOR SPEED CONTROL UNTIL THE DISPLAY CHANGES FROM 10:00 (OR OTHER TIME SHOWN) TO 'PPO'. DISPLAY WILL ALTERNATE BETWEEN 'PPO' AND A NUMBER.



2. PRESS THE UP OR DOWN ARROW TO OBTAIN THE PRESET SHOWN IN THE TABLE. IF YOU CANNOT OBTAIN THE PRESET NUMBER SHOWN, PROCEED TO THE NEXT STEP.



3. PRESS THE UP ARROW UNTIL THE CORRECT VALUE FOR THE PPO IS DISPLAYED, THEN RELEASE THE BUTTON. WAIT FOR THE DISPLAY TO CHANGE TO SHOW 'rate'. THE DISPLAY WILL ALTERNATE BETWEEN 'rate' AND A NUMBER.

4. PRESS THE APPROPRIATE ARROW BUTTON TO SET THE VALUE OF THE RATE. THEN RELEASE THE BUTTON. WAIT FOR THE DISPLAY TO RETURN TO SHOWING THE CONVEYOR SPEED IN MINUTES AND SECONDS.

5. THE CONTROL IS NOW PROGRAMMED FOR USE WITH THE NEW GEARMOTOR.

MATERIAL	GAUGE	TOLERANCE UNLESS SPECIFIED
FINISH		ANGLES + 0.5°
		DEC .X ± 0.010
		.XX ± 0.015
		.XXX ± 0.025
DRAWN RD	CHECKED RCMP	APPROVED NGS
03/01/2011	06/20/2011	06/20/2011
INSTR, GEARMTR PROGRAM		
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE DRAWING		PART NO 6 5 2 4 4
SHT 1 OF 1		REV E

GEARMOTOR REPLACEMENT INSTRUCTIONS:

1. FIND OVEN MODEL BEING SERVICED IN CHARTS ON EITHER DRAWING 65241 OR 65243. THIS PAGE WILL PROVIDE THE ASSEMBLY INSTRUCTION INFORMATION FOR THE CORRECT GEARMOTOR (1/2" OR 5/8" SHAFT).

2. FIND THE CORRECT CONFIGURATION ON THE CHART - SINGLE (SIB) OR SPLIT BELT (SPB) CONVEYOR. THE INFORMATION IN THIS ROW OF THE CHART WILL PROVIDE THE CORRECT MOTOR SPROCKET, CONVEYOR SPROCKET AND CHAINS REQUIRED TO GET NECESSARY SPEED FROM THE MOTOR. SOME CONFIGURATIONS DO NOT NEED A NEW CHAIN. THESE ARE DESIGNATED WITH 'NR' IN THE CHART.

3. ASSEMBLE THE GEARMOTOR ASSEMBLY PER THE INSTRUCTIONS. TAKING CARE TO ORIENT THE VARIOUS PARTS AS PICTURED IN THE DRAWING. THIS WILL PROVIDE THE PROPER ORIENTATION AND DIMENSIONAL CHARACTERISTICS NECESSARY TO FIT PROPERLY IN THE OVEN.

4. ATTACH THE MOTOR SPROCKET AS DESIGNATED IN THE CHART FOR THE OVEN BEING SERVICED. TO THE MOTOR SHAFT. ORIENT THE SPROCKET IN SIMILAR FASHION AS WAS THE SPROCKET ON THE MOTOR BEING REPLACED. IF THE OVEN HAS A SPLIT BELT, THERE IS NO NEED TO CHANGE THE SPROCKET ON THE OTHER MOTOR - ONLY THE ONE BEING REPLACED.

5. ATTACH THE NEW CONVEYOR SHAFT SPROCKET TO THE CONVEYOR SHAFT CORRESPONDING TO THE MOTOR THAT IS BEING REPLACED (FRONT OR BACK FOR A SPLIT BELT CONVEYOR). THERE IS NO NEED TO REPLACE THE OTHER CONVEYOR SHAFT SPROCKET - ONLY THE ONE CORRESPONDING TO THE MOTOR BEING REPLACED.

6. INSTALL THE GEARMOTOR ASSEMBLY IN SIMILAR FASHION AS THE MOTOR BEING REPLACED.

7. CONNECT THE SENSOR CABLE TO THE SPEED CONTROL TERMINALS. ATTENTION SHOULD BE PAID TO THE WIRE COLORS AND THEIR LOCATIONS, AS THEY ARE DIFFERENT FROM OTHER MOTORS USED PREVIOUSLY:

COM	ORANGE
COUNT	BLUE
+ 5V	BROWN

IF AN EXISTING EXTENSION WIRE IS BEING USED, CARE SHOULD BE TAKEN TO BE SURE THAT THE CONNECTIONS ARE MATING PROPERLY WITH THE WIRES AS CONNECTED AT THE SPEED CONTROLLER.

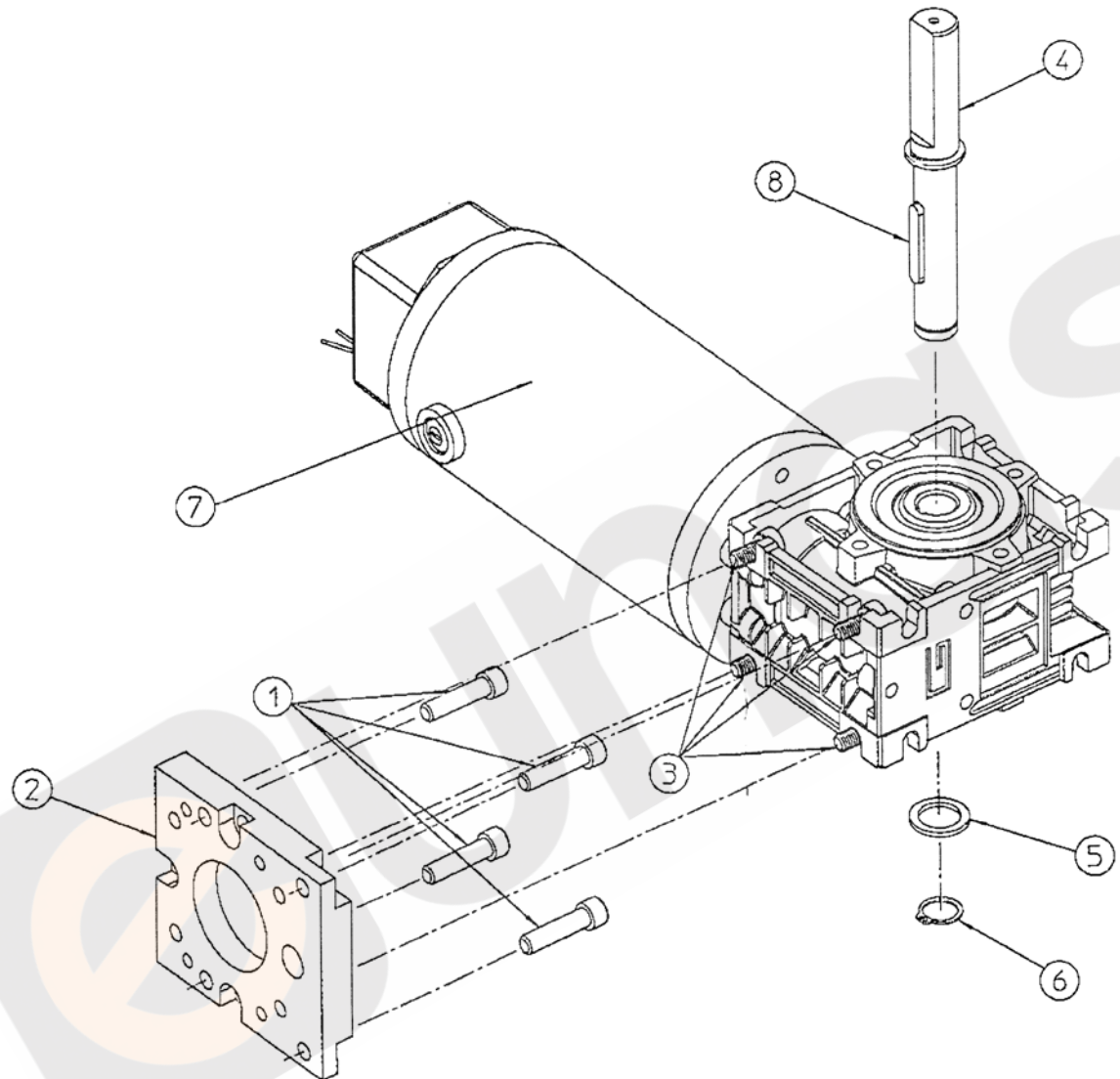
8. CONNECT THE TWO MOTOR WIRE LEADS TO THE SPEED CONTROLLER SIMILAR TO THE WIRING FOR THE MOTOR BEING REPLACED. REVERSE LEADS IF MOTOR ROTATION IS NOT AS REQUIRED.

9. PROGRAM THE SPEED CONTROLLER USING THE PROGRAMMING INSTRUCTIONS PROVIDED IN DRAWING 65244. NOTE THAT THE PARAMETERS REQUIRED FOR SETTING THE GEARMOTOR ARE REFERRED TO AS THE 'GRAY MOTOR' ON THE CHART LOCATED ON THE CONTROLLER BODY.

REV	DATE	EGN	REVISION DESCRIPTION	BY	CHK	DATE
C	02/21/2011	011048	REMOVED ITEM 13 P/N 64321. REPLACE ITEM 12 64320 W/64394	AJ	WSS	02/28/2011
D	10/10/2010	012154	ADDED 5/32 AND 3/8 HEX KEYS	MM	WSS	10/15/2010
E	01/07/2014	014003	CHANGED WIRE COLORS OR WAS RED, BLUE WAS GRN, GRN WAS BLK	AJ	WSS	01/10/2014

23	1	M2515	KEY,ALLEN 5MM
22	1	70076	KEY, HEX ALLEN 5/32
21	1	66221	TUBE,LOCITITE
20	1	65244	INSTR,GEARMTR PROGRAM
19	1	65243	INSTR,GEARMTR 1/2" SHAFT
18	1	65241	INSTR,GEARMTR KIT 5/8" SHAFT
17	4	65192	SCR,M6X12 SHC ZP
16	4	55374	SCR,CAP RD HD SS 10-32X3/4
15	4	30963	SCR,CAP SKT HD 1/4-20X1
14	1	65191	PLATE,MTG 80:1 GEARMOTOR
13			
12	1	66394	KIT,SHAFT GEARMTR 1/2 DIA/5/8
11	1	64319	GEARMTR W/BRKT 80:1 90VDC RA
10	2	22273-0001	LINK,MASTER #40
9	1	65332	CHAIN,ROLLER 63 LINK #40
8	1	31000-0040	CHAIN,ROLLER 45 LINK #40
7	1	31000-0036	CHAIN,ROLLER 27 LINK #40
6	1	31000-0026	CHAIN,ROLLER 49 LINK #40
5	1	60131	SPRKT,#35-12T-5/8 BORE
4	1	65183	SPROCKET,#25 2ST 1/2 BORE
3	1	65182	SPROCKET,#25 2ST 5/8 BORE
2	2	65141	SPROCKET,#40 12T 5/8 BORE
1	1	M0109	SPROCKET,#35 12T 1/2 BORE
ITEM	QTY	PART NO.	DESCRIPTION

MATERIAL	GAUGE:	TOLERANCE UNLESS SPECIFIED
FINISH		ANGLES ± 1.0°
		DEC .X ± .030
		.XXX ± .015
		.XXX ± .005
DRAWN AJ	CHECKED WSS	APPROVED WSS
01/07/2014	01/10/2014	01/10/2014
KIT, GEARMOTOR, UNIVERSAL		
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DO NOT SCALE DRAWING.		PART NO. 66186
QNT 1 of 1		REV E



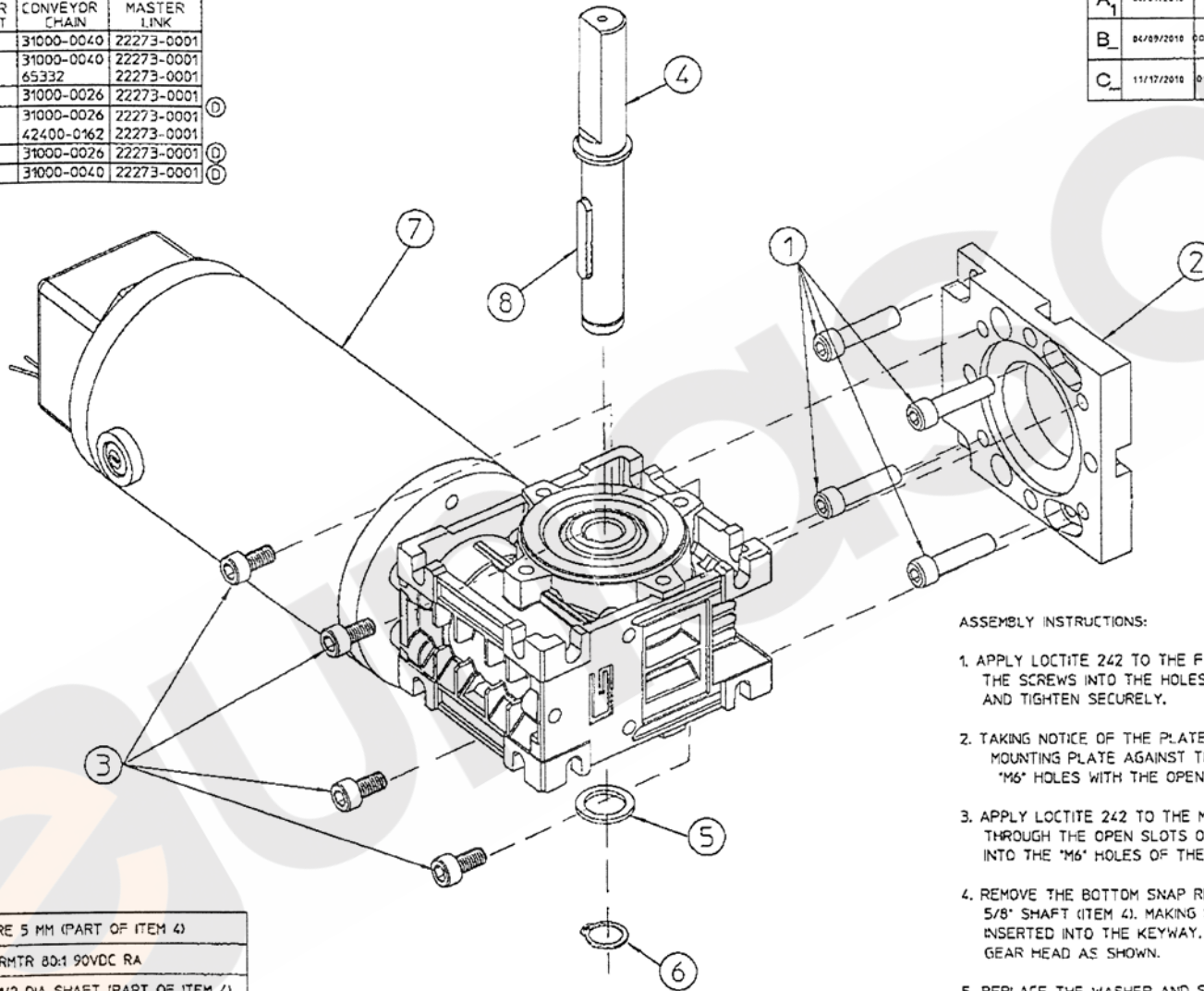
THIS DRAWING SHOWS THE ASSEMBLY FOR
MOTOR REPLACEMENT ON PSS70S/M ONLY

TOLERANCE UNLESS SPECIFIED	DHANN RD 02/24/2011	
ANGLES ± 1.0°	CHECKED	
DEC .XX ± 0.02	FECON/6/20/2011	
.XXX ± 0.01	APPROVED	
	WSS 06/20/2011	
INSTR, GEARMTR KIT 5/8" SHAFT		
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED DO NOT SCALE DRAWING	PART NO 65241	SHT 2 OF 2 REV D

FIELD SERVICE COMPONENTS

OVEN MODEL	SIB/SPB	MOTOR SPROCKET	CONVEYOR SPROCKET	CONVEYOR CHAIN	MASTER LINK
PS555, PS570	SIB	65141	65141	31000-0040	22273-0001
	SPB	65141	65141	31000-0040 65332	22273-0001 22273-0001
PS360/WB/EWB PS360WB70	SIB	65141	65141	31000-0026	22273-0001
	SPB	65141	65141	31000-0026 42400-0162	22273-0001 22273-0001
PS314	SIB	65141	65141	31000-0026	22273-0001
PS570S, M *	SIB	65141	65141	31000-0040	22273-0001

* SEE SHEET 2 FOR PS570S, M



ASSEMBLY INSTRUCTIONS:

1. APPLY LOCTITE 242 TO THE FOUR 1/4-20 CAP SCREWS (ITEM 1), THREAD THE SCREWS INTO THE HOLES MARKED "1/4" IN MOUNTING PLATE (ITEM 2) AND TIGHTEN SECURELY.
2. TAKING NOTICE OF THE PLATE ORIENTATION AS SHOWN, PLACE THE MOUNTING PLATE AGAINST THE GEARMOTOR FLANGE AND ALIGN THE "M6" HOLES WITH THE OPEN SLOTS OF THE GEARMOTOR FLANGE.
3. APPLY LOCTITE 242 TO THE M6 CAP SCREWS (ITEM 3). PUT THE SCREWS THROUGH THE OPEN SLOTS OF THE GEARMOTOR FLANGE, THREAD THEM INTO THE "M6" HOLES OF THE MOUNTING PLATE AND FASTEN SECURELY.
4. REMOVE THE BOTTOM SNAP RING AND WASHER (ITEMS 6 & 5) FROM THE 5/8" SHAFT (ITEM 4). MAKING SURE THAT THE SHAFT KEY (ITEM 8) IS INSERTED INTO THE KEYWAY. SLIDE THE SHAFT DOWN THROUGH THE GEAR HEAD AS SHOWN.
5. REPLACE THE WASHER AND SNAP RING (ITEMS 5 & 6) ONTO THE SHAFT.

ITEM	QTY	PART NO.	DESCRIPTION
8	1	65234	KEY,SQUARE 5 MM (PART OF ITEM 4)
7	1	64319	GEARMTR 80:1 90VDC RA
6	2	59765	RING, EXT. SNAP 1/2 DIA SHAFT (PART OF ITEM 4)
5	2	65233	WASHER,FLAT 556 X .780 X .060 (PART OF ITEM 4)
4	1	64321	KIT,SHAFT GEARMOTOR 5/8 DIA
3	4	65192	SCR,M6X12 SHC ZP
2	1	65191	PLATE,MTG 80:1 GEARMOTOR
1	4	30963	SCR,CAP SKT HD 1/4-20X1
ITEM	QTY	PART NO.	DESCRIPTION

THIS DRAWING IS A DUPLICATION OF PN 64221 (PAGE 2), TO BE INCLUDED WITH SERVICE KIT FOR GEARMOTOR REPLACEMENT.

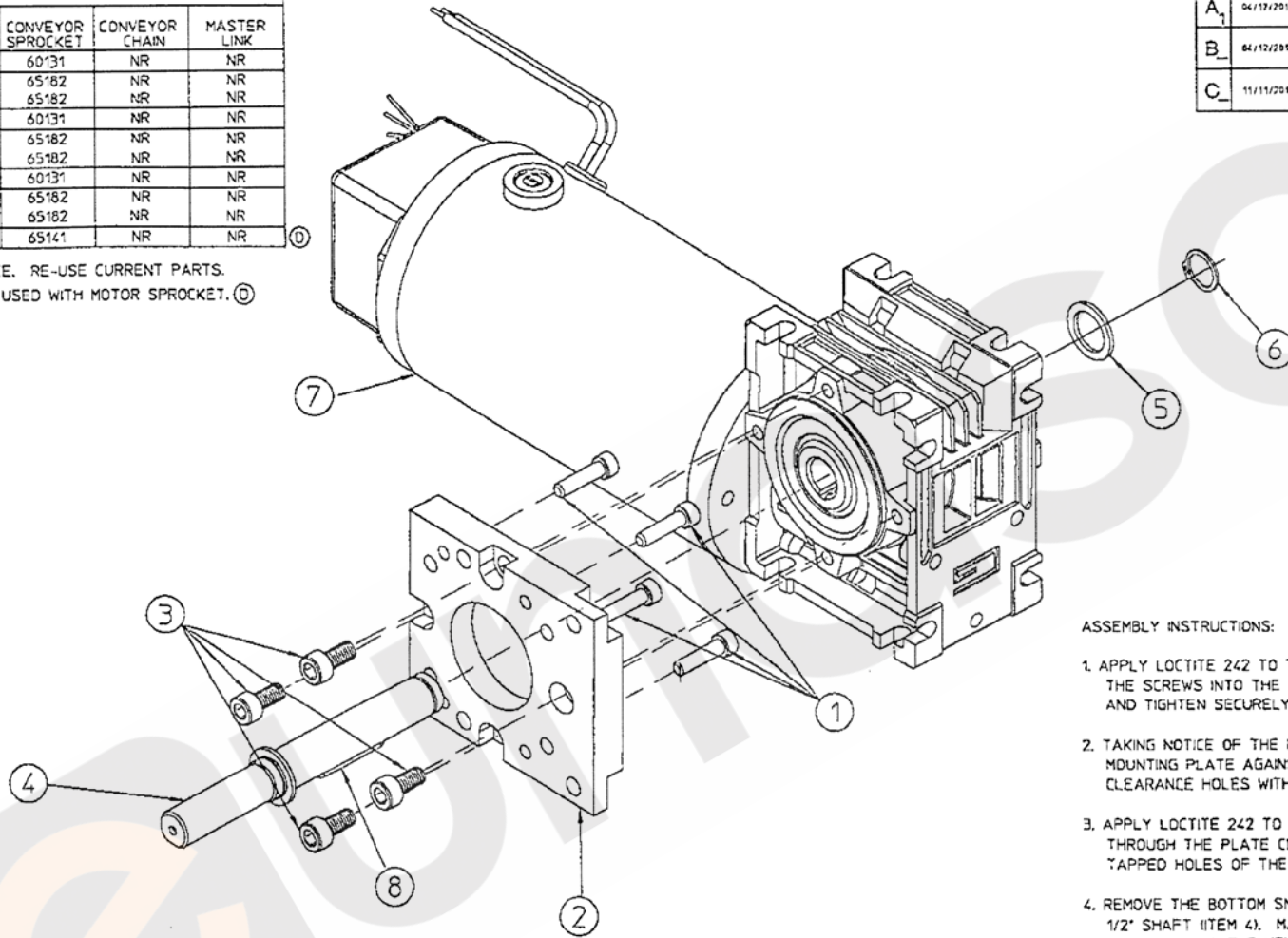
REV	DATE	EN	REVISION DESCRIPTION	BY	CHK	DATE
A ₁	04/09/2010	A. J.			COMP	
B ₁	04/09/2010	009274	RELEASE FOR PRODUCTION		COMP/COMP	04/20/2010
C ₁	11/17/2010	010254	ADDED CHART UPPER LEFT		COMP/COMP	12/07/2010

MATERIAL	GAUGE	TOLERANCE UNLESS SPECIFIED
FINISH		ANGLES ± 1.0°
		DEC .X ± .030
		.XX ± .015
		XXX ± .005
DRAWN BY	CHECKED	APPROVED
02/24/2011	08/20/2011	08/28/2011
INSTR, GEARMTR KIT 5/8" SHAFT		
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DO NOT SCALE DRAWING.		PART NO 65241
SHT 1 of 2	REV D ₁	

FIELD SERVICE COMPONENTS

OVEN MODEL	SIB/SPB	MOTOR SPROCKET	CONVEYOR SPROCKET	CONVEYOR CHAIN	MASTER LINK
PS540 BE/BG3240	SIB	M0109	60131	NR	NR
	SPB	65183 65183	65182 65182	NR NR	NR NR
PS640VE2	SIB	M0109	60131	NR	NR
	SPB	65183 65183	65182 65182	NR NR	NR NR
PS200/220/224	SIB	M0109	60131	NR	NR
	SPB	65183 65183	65182 65182	NR NR	NR NR
PSS70S, M	SPB	65141 *	65141	NR	NR

NR - NOT REQUIRED FOR FIELD SERVICE. RE-USE CURRENT PARTS.
 * 35000-1537 SLEEVE MUST BE USED WITH MOTOR SPROCKET. (D)



ASSEMBLY INSTRUCTIONS:

1. APPLY LOCTITE 242 TO THE FOUR 10-32 CAP SCREWS (ITEM 1), THREAD THE SCREWS INTO THE HOLES MARKED "10" IN MOUNTING PLATE (ITEM 2) AND TIGHTEN SECURELY.
2. TAKING NOTICE OF THE PLATE ORIENTATION AS SHOWN, PLACE THE MOUNTING PLATE AGAINST THE GEARMOTOR FLANGE AND ALIGN THE CLEARANCE HOLES WITH THE TAPPED HOLES OF THE GEARMOTOR FLANGE.
3. APPLY LOCTITE 242 TO THE M6 CAP SCREWS (ITEM 3). PUT THE SCREWS THROUGH THE PLATE CLEARANCE HOLES, THREAD THEM INTO THE TAPPED HOLES OF THE GEARMOTOR FLANGE AND FASTEN SECURELY.
4. REMOVE THE BOTTOM SNAP RING AND WASHER (ITEMS 6 & 5) FROM THE 1/2" SHAFT (ITEM 4). MAKING SURE THAT THE SHAFT KEY (ITEM 8) IS INSERTED INTO THE KEYWAY, SLIDE THE SHAFT DOWN THROUGH THE GEAR HEAD AS SHOWN.
5. REPLACE THE WASHER AND SNAP RING (ITEMS 5 & 6) ONTO THE SHAFT.

8	1	65234	KEY,SQUARE 5 MM (PART OF ITEM 4)
7	1	64319	GEARMTR 80:1 90VDC RA
6	2	59765	RING, EXT. SNAP 1/2 DIA SHAFT (PART OF ITEM 4)
5	2	65233	WASHER,FLAT .556 X .780 X .060 (PART OF ITEM 4)
4	1	64320	KIT,SHAFT GEARMOTOR 1/2 DIA
3	4	65192	SCR,M6X12 SHC ZP
2	1	65191	PLATE,MTG 80:1 GEARMOTOR
1	4	55374	SCR,CAP RD HD SS 10-32X3/4
ITEM	QTY	PART NO.	DESCRIPTION

THIS DRAWING IS A DUPLICATE OF FN 64322 (PAGE 2), TO BE INCLUDED WITH SERVICE KIT FOR GEARMOTOR REPLACEMENT.

REV	DATE	CDN	REVISION DESCRIPTION	BY	CHK	DATE
A ₁	06/17/2010	A.1	PROTOTYPE		CDMP	
B ₁	04/17/2010	009274	RELEASE FOR PRODUCTION		CDMP/CDMP	04/17/2010
C ₁	11/11/2010	016247	CORRECTED DESCRIPTION ITEM 4	C.J.	CDMP/CDMP	11/15/2010

MATERIAL	GAUGE	TOLERANCE UNLESS SPECIFIED
FINISH		ANGLES ± 1.0°
		D/C ± .030
		.XX ± .015
		.XXX ± .005
DRAWN RB	CHECKED FCMP 06/29/2011	APPROVED MCC 06/28/2011
INSTR, GEARMTR 1 / 2" SHAFT		
ALL DIMENSIONS ARE IN INCHES UNLESS OTHERWISE SPECIFIED. DO NOT SCALE DRAWING		PART NO 65243
SHT 1 of 1		REV D ₁