

5.5 PCBRM System 5.2 – Specific Parts

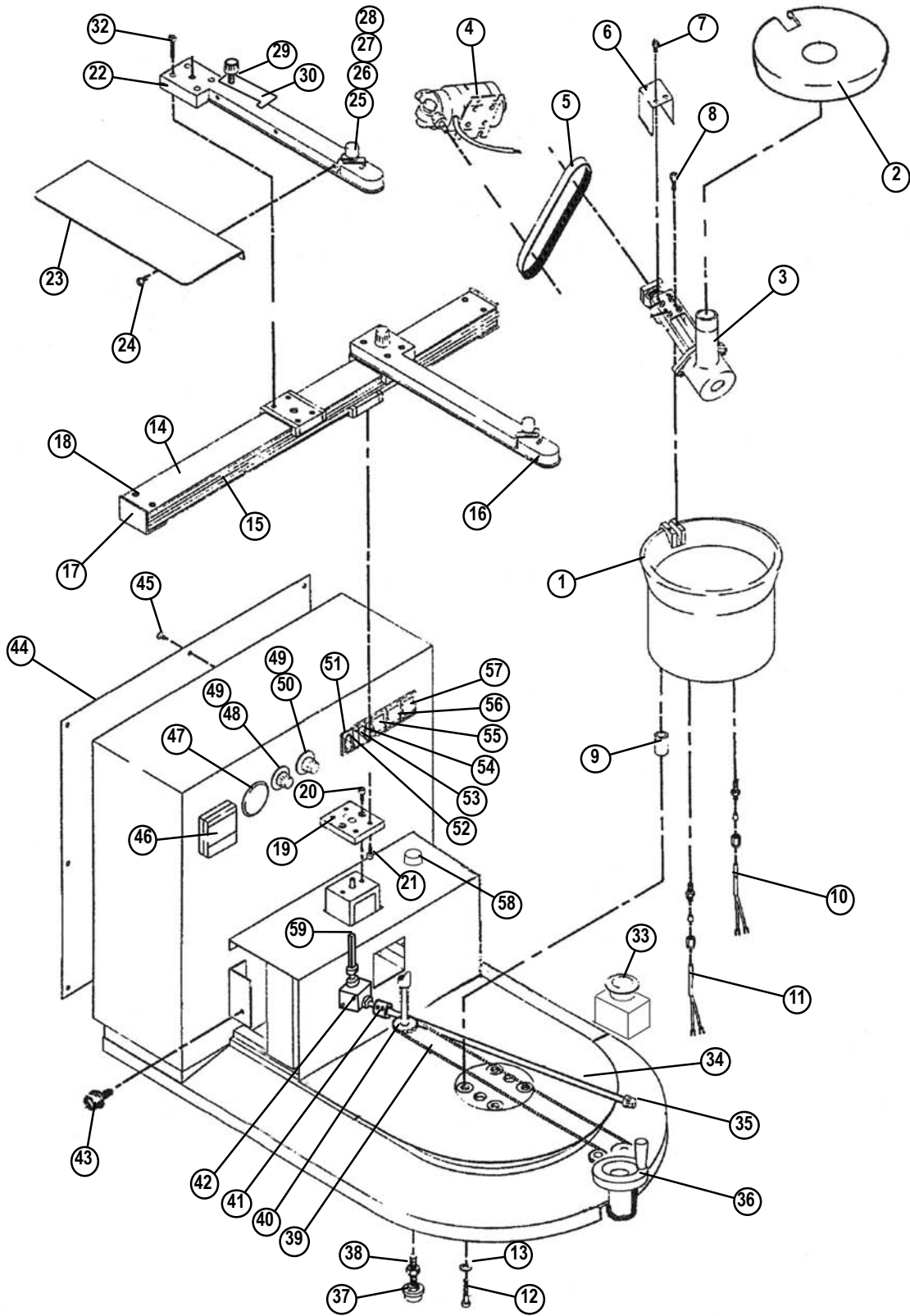
Note

SEE PCBRM15 FOR A LIST OF COMMON PARTS.



Item	Part#	Description
1	PH155	Temperature Controller
2	PH161	Circuit Breaker
3	Proj.DRS.SCS.73	Handle
4	4005.01.111	Handle Extension
5	12365-2	Bearing Block
6	ST350	Flow Well Heater Box (option)
7	PH154	Panel Heater
*	PH157	Panel Heater Thermocouple (not shown)

5.6 PCBRM15 & PCBRM System 5.2 Mechanical Breakdown – Exploded View



Mechanical Breakdown - Parts List

	<u>Description</u>	<u>Qty.</u>	<u>Part Number</u>
1.	Solder Pot	1	12510
2.	Solder Pot Cover	1	2004.01.108
3.	Pump Assembly, only	1	2004.01.040
4.	Motor Assembly	1	12420
5.	Drive Belt - High Temperature	1	12467
6.	Belt Guard	1	12461
7.	Belt Guard Hex Screw	2	59A
8.	Pump Mounting Screw	2	23A
9.	Pot Spacer	4	12511
10.	Thermocouple/Process with fitting	1	12801
11.	Thermocouple/Override with fitting	1	12802
12.	Pot Screw	4	21A
13.	Washer, Pot Screw	4	33A
14.	Upper Carrier Rail	1	12365
15.	Lower Carrier Rail	1	12366
16.	Right Carrier Arm Assembly	1	12305
17.	Rail Stop	2	12315
18.	Screw, 6-32 x 3/4, Rail Stop	4	6B
19.	Adaptor Plate	1	12325
20.	Adapter Screw	2	22A
21.	Carrier Attach Screw	8	30A
22.	Left Carrier Arm Assembly	1	12304
23.	Heat Shield	1	12322
24.	Screw, 6-32 x 1/4, Heat Shield	3	1A
25.	Bracket	1	12316
26.	Spring	1	12374
27.	Knob	1	12319-1
28.	Washer, #10	1	53A
29.	Y-Stop Knob	1	0100.03.046
30.	Y-Stop	1	12326
31.	Carrier Arm, Lock Knob	2	12306
32.	Arm Attach Screw	4	29B
33.	E-Stop	1	12837
34.	Carrier Lock Shaft	1	12320
35.	Carrier Lock Knob	1	12356
36.	Z-Crank Assembly	1	12CK
37.	Leveling Legs	4	12151
38.	Hex Nut, 5/16	1	36A
39.	Height Adjustment Belt	1	12CK6
40.	Drive Rod Gear	1	12353
41.	Coupling	1	12362
42.	Gear Box	1	12358
43.	Pot Shield Knob	2	12308
44.	Rear Panel	1	12812
45.	Rear Panel Screw	8	13B
46.	Temperature Controller	1	12860
47.	Air Gauge	1	12757
48.	Flow Potentiometer - 50k	1	9002.05.018
49.	Knob and Dial	2	9002.18.001
50.	Duration Potentiometer - 25k	1	9002.05.017
51.	Power Switch	1	12856
52.	Reset Switch	1	12853-2
53.	Power Light	1	12877-Z
54.	Cycle Light	1	12876
55.	Cycle Switch	1	12854
56.	Mode Switch	1	12855
57.	Temp Switch/Power	1	12856
58.	Air Regulator	1	9001.12.006
59.	Drive Shaft	1	12359

5.3 Pump Disassembly & Cleaning

CAUTION

SOLDER WILL BE HOT

7. Remove Pump Baffle (P) using needle nose pliers while pump is in the pot with solder.
8. Remove solder from pot using ladle supplied with unit.

Note

ALLOW MACHINE TO COOL BEFORE REMOVING PUMP FROM POT.

9. Remove two screws holding pulley guard to pump.
10. Remove two screws holding pump to pot.
11. Remove two screws holding pump housing (B) to pump bracket (A) and remove housing (B).

Note

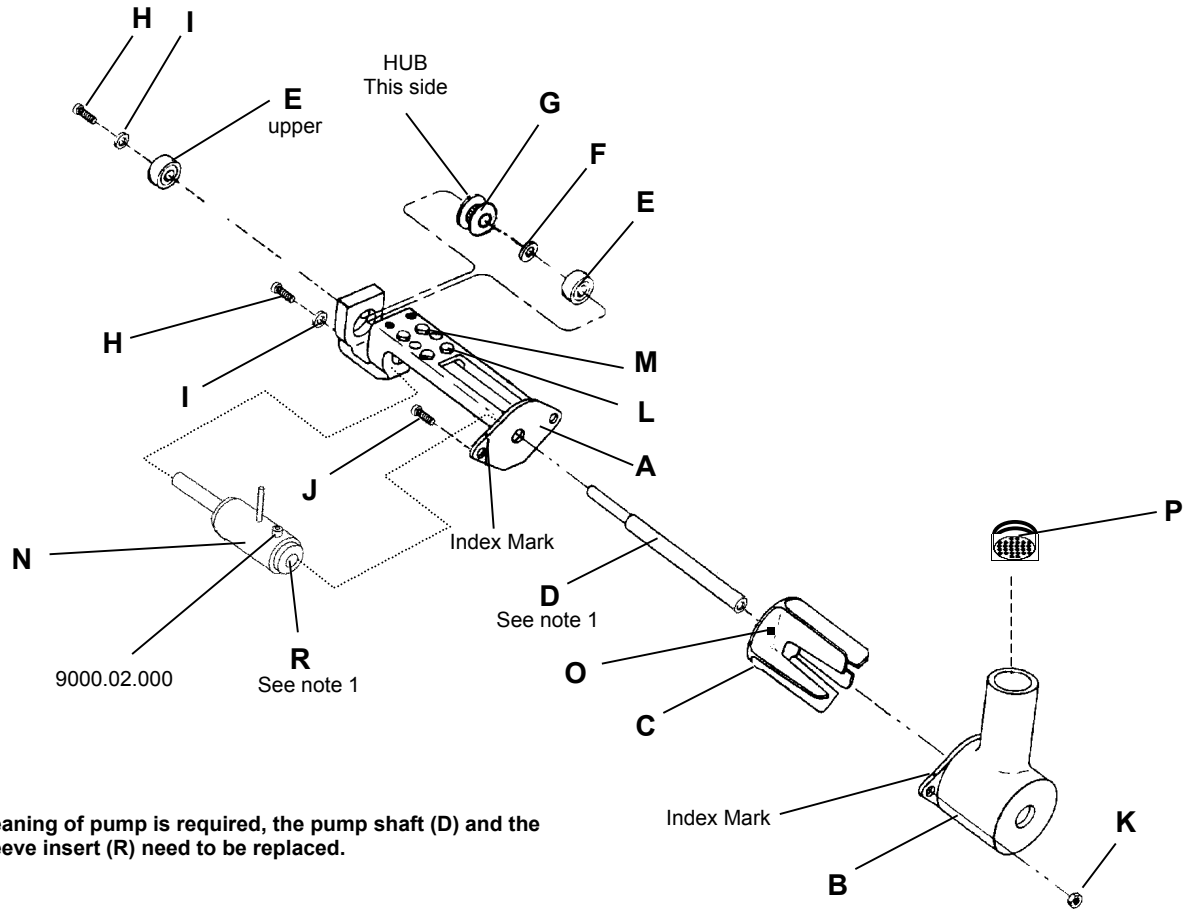
DO NOT LOOSEN OR REMOVE THE FOUR LEVELING NUTS (L) AND SET SCREWS (M) OR THE PUMP WILL NEED TO BE RE-LEVELED UPON INSTALLATION.

12. Loosen the two set screws on the pump pulley (G).
13. Remove the two bearing retaining screws (H) and washer (I).
14. Slide the pump shaft (D) with impeller (C) out of the pump bracket (A). Pump sleeve (N) will drop away at this point.
15. Remove pump bearings (E), spacer (F) and pulley (G) from pump bracket (A).

Note

INSPECT BEARINGS FOR SMOOTH MOVEMENT. REPLACE IF NECESSARY.

16. Remove pump shaft (D) from impeller (C) and discard.
17. Remove pump sleeve insert (R) and discard.
18. Clean all parts of solder and dirt using a wire brush or a tool to scrape solder from pieces.
19. Re-assemble pump as shown in drawing as follows:
 - Insert lower bearing into pump bracket.
 - Turn bracket upside down and insert pulley (hub side) into upper bearing hole.
 - Place spacer on top of pulley.
 - Insert shaft into bracket, through pump sleeve, bearing spacer and pulley.
 - Turn bracket over and insert upper bearing.
 - Install bearing retaining screws (H) and (I).
 - Tighten pulley set screws.
 - Install impeller onto shaft – before tightening the set screw be certain the play from the shaft and bearings will not cause impeller to hit pump bracket face. Allow for this clearance before tightening set screw.
 - Spin shaft with fingers and check for any interference. Correct as required.
 - Install pump housing (B) to bracket (A). Be certain the index marks are aligned exactly before tightening. If they are not, the pump will not be level.
 - Spin shaft with fingers and check for any interference between impeller and housing.
20. Pump is now ready for installation back into pot. Use anti-seize on the mounting screws when installing. Alternate tightening screws until snug. DO NOT OVERTIGHTEN. Over-tightening could cause pump to become un-level.
21. Check level of pump to carrier arms. Re-level if required.



NOTE 1:
 When cleaning of pump is required, the pump shaft (D) and the pump sleeve insert (R) need to be replaced.

Item	Description	Qty.	Part# (PCBRM15)
-	Pump Assembly-PCBRM15	1	2004.01.044
A	Pump Bracket	1	2004.01.102 (gray iron)
B	Pump Housing	1	2004.01.101 (gray iron)
C	Pump Impeller	1	2004.01.100 (gray iron)
D	Shaft	1	2004.01.103 (titanium)
E	Bearing	2	9001.09.020
F	Spacer	1	12464
G	Pulley	1	12453
H	Screw, 6-32 x 1/4 Button Hd	2	60A
I	Washer, #6 SAE	2	9A
J	Screw, 10-32 x 5/8	2	9000.00.000 (titanium)
K	Nut, 10-32	2	9000.06.002 (titanium)
L	Nut, 6-32 x	4	8B
M	Set Screw, 6-32 x 5/16	4	11A
N	Pump Sleeve Assembly	1	2004.01.041 (titanium)
O	Set Screw, 10-32 x 3/8	1	9000.10.249 (titanium)
P	Baffle Assembly	1	2004.01.043 (titanium)
Q	Pump Mounting screws (10-32 x _)	2	23A
R	Pump Insert	1	12418