

*CrownTM
Jewel*

Parts Manual

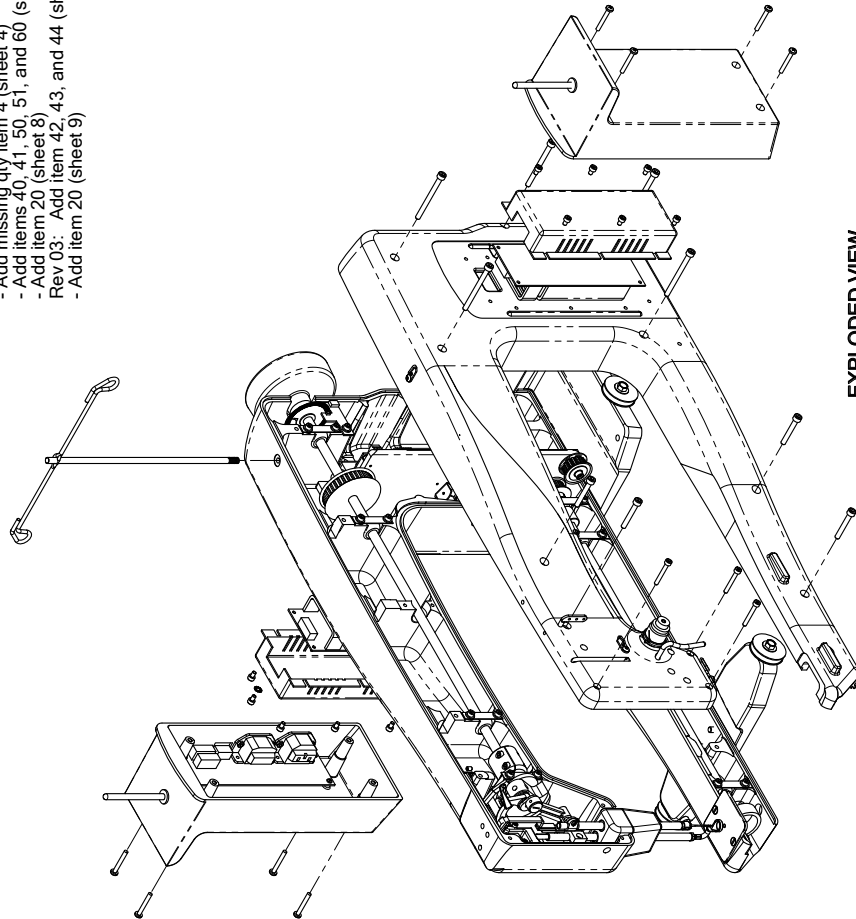
Model BLCJ18



FOR THE LOVE OF SEWING

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- Rev 01: Prototype release 06/21/10
- Rev 02: 07/08/10
- Delete erroneous bubble item 58 (Zone A2, sheet 3)
- Delete "not shown" item 22 from BOM (sheet 4)
- Add missing qty item 4 (sheet 4)
- Add items 40, 41, 50, 51, and 60 (sheet 4)
- Rev 03: Add item 42, 43, and 44 (sheet 6)
- Add item 20 (sheet 9)



**BLCJ18A
TOP ASSEMBLY**

EXPLODED VIEW

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES DIMENSIONS ARE FRACTIONAL ANGULAR: MACH ± 1° BEND ± MFG APPR. THREE PLACE DECIMAL ± 0.005	DRAWN CHECKED ENG APPR. MFG APPR. O.A. Filename	NAME DATE	BABY LOCK	
INTERPRET GEOMETRIC TOLERANCING PER MATERIAL FINISH	USED ON	APPLICATION	TOP ASSEMBLY	
SCALE: 1:5	WEIGHT: LBS	2	REV 03	
NEXT ASSY		SIZE DWG. NO B BLCJ18A		
APPLICATION		Sheet Name: Sheet2		
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D C B A

BILL OF MATERIALS			BILL OF MATERIALS (CONT'D)		
ITEM	PART NUMBER	DESCRIPTION	ITEM/PART NUMBER	DESCRIPTION	QTY
1	OM11863	FRAME, BACK, 18E	38	OM21865	CABLE, DC PWR TO CTRL P-POD, 18E
2	OM11864	FRAME, FRONT, 18E	39	OM21867	CABLE, DC PWR C-POD TO DRV R
3	OM19181	ASSY, MAIN SHAFT, 18	40	OM20111	CABLE, C-POD TO HB FRONT, 18
4	OM19185	ASSY, HEAD FRAME, 18E	41	OM20113	CABLE, C-POD TO HB REAR, 18
5	OM19182	ASSY, HOOK SHAFT	42	OM10901	M5 X 0.8 X 60 SHCS
6	OM19183	ASSY, DRIVE TRAIN, 18	43	OM10882	M4 X 7 X 30 SHCS, SS
7	OM10196	ASSY, TAKE-UP LEVER	44	OM10898	M5 X 0.8 X 35
8	OM19611	ASSY, HOPPING BLOCK	45	OM10574	WASHER, HOOK SHAFT/HEAD FRAME
9	OM21850	POD, CONTROL, 18E	46	OM10169	SCREW, M4 X 0.7 X 10 SHCS
10	OM21840	POD, POWER, 18E	47	OM10229	WASHER, M4
11	OM11621	BRACKET, POWER SUPPLY, 18	48	OM10887	SCREW, M4 X 0.7 X 30 PHILLIPS PAN HEAD
12	OM21821	POWER SUPPLY, 18	49	OM10883	SCREW, M4 X 0.7 X 20 SHCS
13	OM11872	HAND WHEEL, 18	50	OM10178	SCREW, M5 X 0.8 X 18 SHCS
14	OM10142	NEEDLE PLATE	51	OM10638	WASHER, 1/4 FLAT PLATED
15	OM10199	TENSION ASSY	52	QF10514	SCREW, HEX, 1/4-20 X .75
16	OM10208	THREAD GUIDE 400	53	OM10766	SCREW, HEX, 1/4-20 X 1.25
17	OM10205	THREAD GUIDE 100	54	OM10905	SCREW, M6 X 16 SHCS
18	OM10202	THREAD GUIDE, 3-HOLE	55	OM10907	SCREW, M6 X 8 SHSS FLAT POINT
19	OM11865	BASE PLATE, FRONT, 18	56	OM10889	SCREW, M4 X 0.7 X 8 FLAT PT SS, SLOTTED
20	OM11870	BASE PLATE, REAR, 18	57	OM10895	SCREW, M5 X 0.8 X 12 SBHS
21	OM00238	BOBBIN, M CLASS	58	OM10173	SCREW, M4 X 0.7 X 10 SBHCS
22	OM10217	THREAD STIRRUP	59	OM10170	SCREW, M4 X 0.7 X 14 SHCS
23	OM00244	NEEDLE	60	OM10769	SCREW, 4-40 X 5/16, PHILLIPS PAN HEAD
24	OM10103	RETAINER, HEAD FRAME	61	OM10172	SCREW, M4 X 0.7 X 8 SBHCS
25	OM10106	RETAINER, BEARING, 2-HOLE	62	OM10888	SCREW, M4 X 0.7 X 6, SHSS CUP POINT
26	OM10232	WHEEL, MACHINE/CARRIAGE	63	OM10450	WASHER, STAR, M4
27	OM22415	ENCODER, MAIN SHAFT, 18/24	64	OM10214	THREAD MAST
28	OM10631	SPRING, SMALL	65	OM11891	THERMAL PAD, 18E
29	OM10589	BOBBIN HOOK, M CLASS	66	OM22463	CABLE, ENCODER DISK, 18/24
30	OM00586	BOBBIN CASE, M CLASS			
31	OM10193	STOP FINGER			
32	OM10199	TENSION ASSY			
33	OM11896	BELT, 34 INCH, DOUBLE SIDED, 18			
34	OM11881	CLAMP, CABLE, FLAT			
35	OM21861	CABLE, AC TO PS C-POD, 18E			
36	OM21862	CABLE, AC TO PS P-POD, 18E			
37	OM21864	CABLE, DC PWR TO CTRL C-POD, 18E			

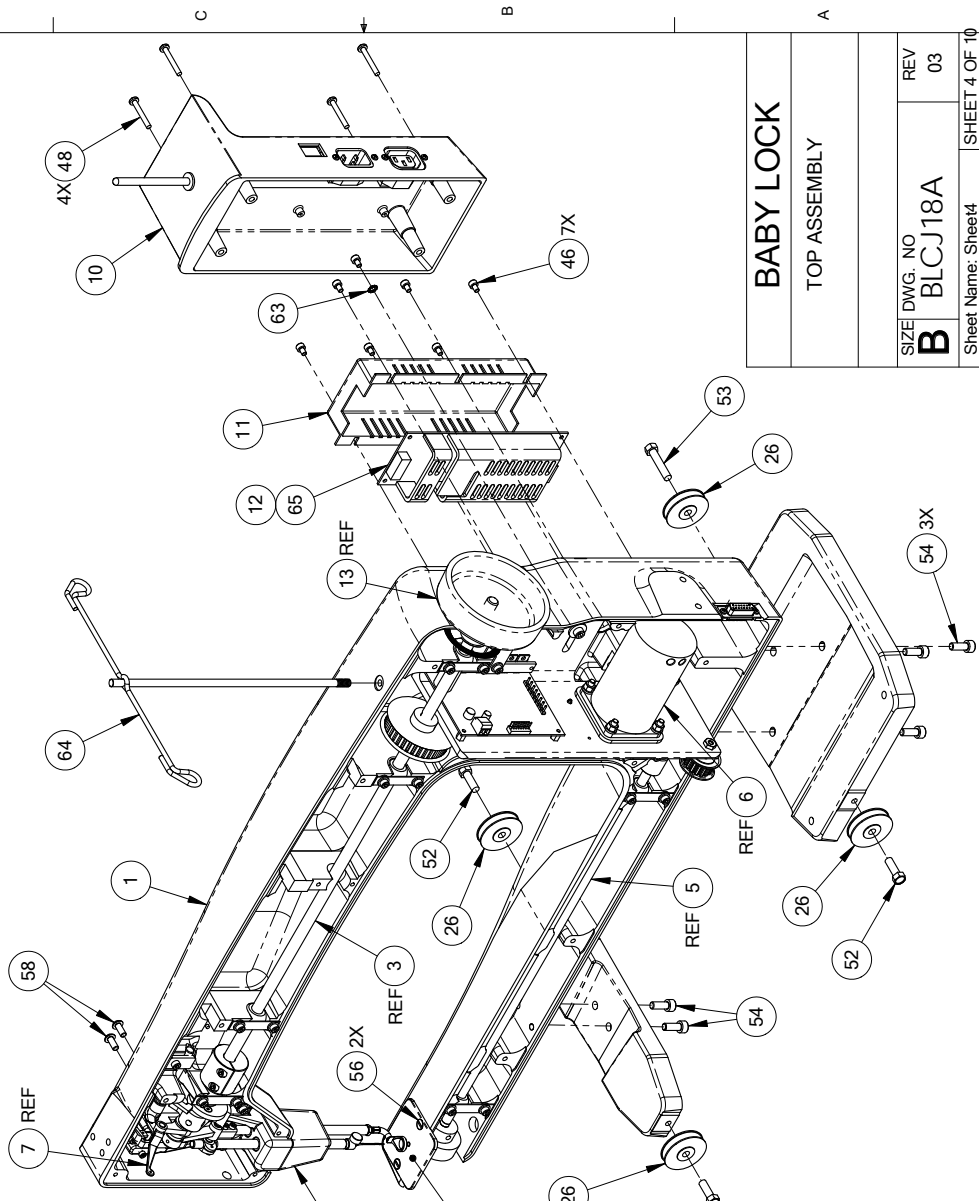
BABY LOCK

TOP ASSEMBLY

SIZE DWG. NO	REV
B BLCJ18A	03
Sheet Name: Sheet3	
SHEET 3 OF 10	

BILL OF MATERIALS, COMPLETE LIST

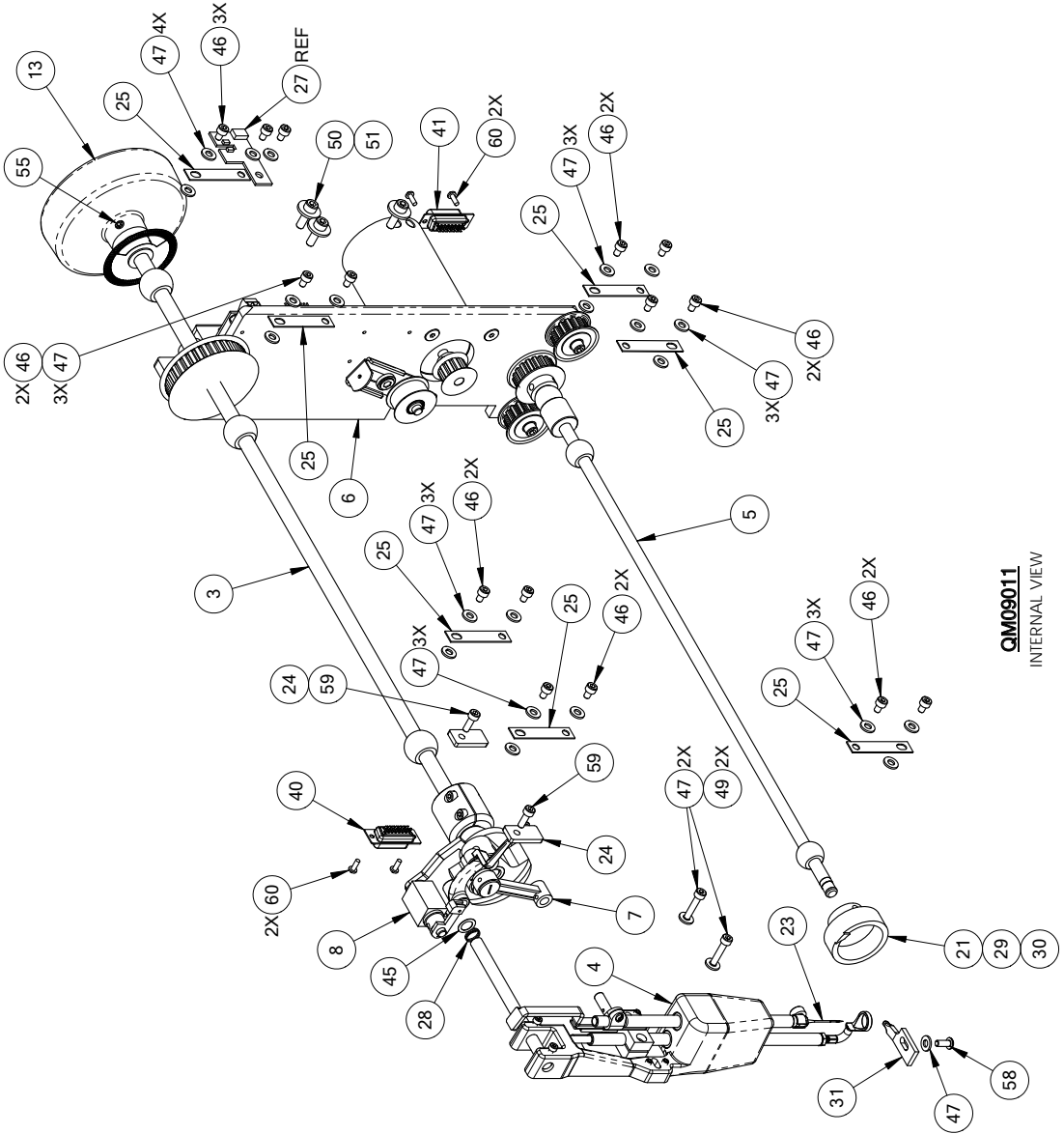
BILL OF MATERIALS (BACK FRAME)		
ITEM/PART NUMBER	DESCRIPTION	QTY
1	FRAME, BACK, 18E	1
10	ASSY, POD POWER, 18E	1
11	BRACKET, POWER SUPPLY, 18	1
12	POWER SUPPLY, 18	1
13	HAND WHEEL, 18	1
14	NEEDLE PLATE	1
26	WHEEL, MACHINE/CARRIAGE	4
46	SCREW, M4 X 0.7 X 10 SHCS	7
48	SCREW, M4 X 0.7 X 30 PHILLIPS PAN HEAD	4
52	SCREW, HEX, 1/4-20 X .75	3
53	SCREW, HEX, 1/4-20 X 1.25	1
54	SCREW, M6 X 16 SHCS	5
56	SCREW, M4 X 0.7 X 8 FLAT HEAD SS SLOTTED	2
58	SCREW M5 X 0.8 X 12 SBHCS	4
64	THREAD MAST	1
65	THERMAL PAD, 18E	1



BABY LOCK
TOP ASSEMBLY

SIZE DWG. NO	REV
B BLCJ18A	03
Sheet Name: Sheet14	
SHEET 4 OF 10	

1 2 3 4 5 6 7 8



BILL OF MATERIALS (INTERNAL)			
ITEM PART NUMBER	DESCRIPTION	QTY	
3	QM19181	ASSY, MAIN SHAFT, 18	1
4	QM19185	ASSY, HEAD FRAME, 18	1
5	QM19182	ASSY, HOOK SHAFT, 18	1
6	QM19183	ASSY, DRIVE TRAIN, 18	1
7	QM10196	ASSY, TAKE-UP LEVER	1
8	QM19611	ASSY, HOPPING BLOCK	1
13	QM11872	HAND WHEEL, 18	1
23	QM00244	NEEDLE	1
24	QM10103	RETAINER, HEAD FRAME	2
25	QM10106	RETAINER, BEARING, 2-HOLE	7
27	QM22415	ENCODER, MAIN SHAFT	1
28	QM10631	SPRING, SMALL	1
29	QM10589	BOBBIN HOOK, M CLASS	1
30	QM00586	BOBBIN CASE, M CLASS	1
31	QM10193	STOP FINGER	1
40	QM20111	CABLE, C-POD TO HB FRONT, 18	1
41	QM20113	CABLE, C-POD TO HB REAR, 18	1
45	QM10574	WASHER, HOOK SHAFT/HEAD FRAME	1
46	QM10169	SCREW, M4 X 0.7 X 10 SHCS	15
47	QM10229	WASHER, M4	24
49	QM10883	SCREW, M4 X 0.7 X 20 SHCS	2
50	QM10178	SCREW, M5 X 0.8 X 18 SHCS	3
51	QM10638	WASHER, 1/4 FLAT PLATED	3
55	QM10907	SCREW, M6 X 8 SHSS FLAT POINT	1
58	QM10173	SCREW, M4 X 0.7 X 10 SBHCS	1
59	QM10170	SCREW, M4 X 0.7 X 14 SHCS	2
60	QM10769	SCREW, 4-40 X 5/16, PHILLIPS PAN HEAD	4

BABY LOCK

TOP ASSEMBLY

SIZE DWG. NO	REV
B BLCJ18A	03
Sheet Name: Sheet5	
SHEET 5 OF 10	

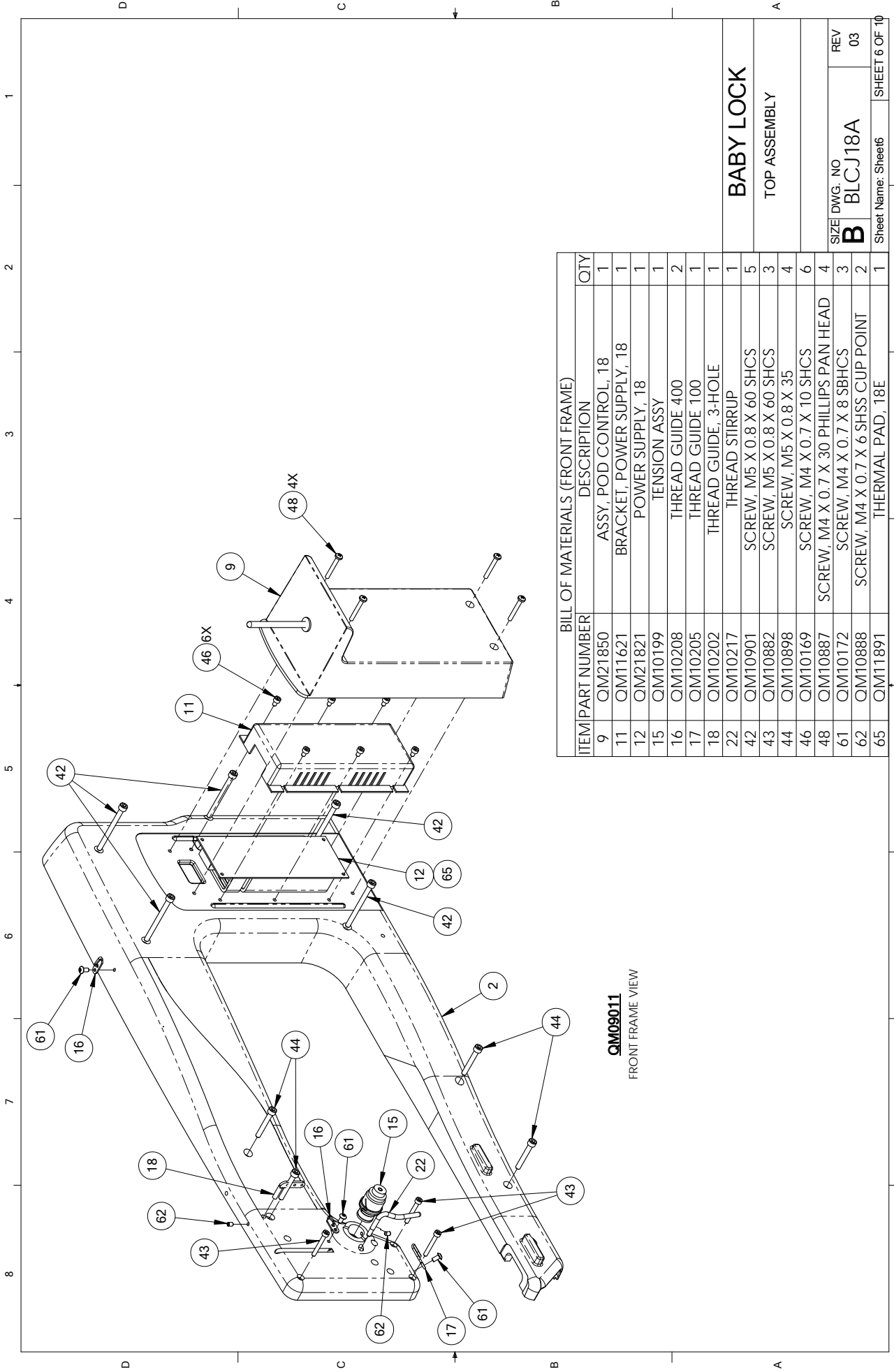
QM09011
INTERNAL VIEW

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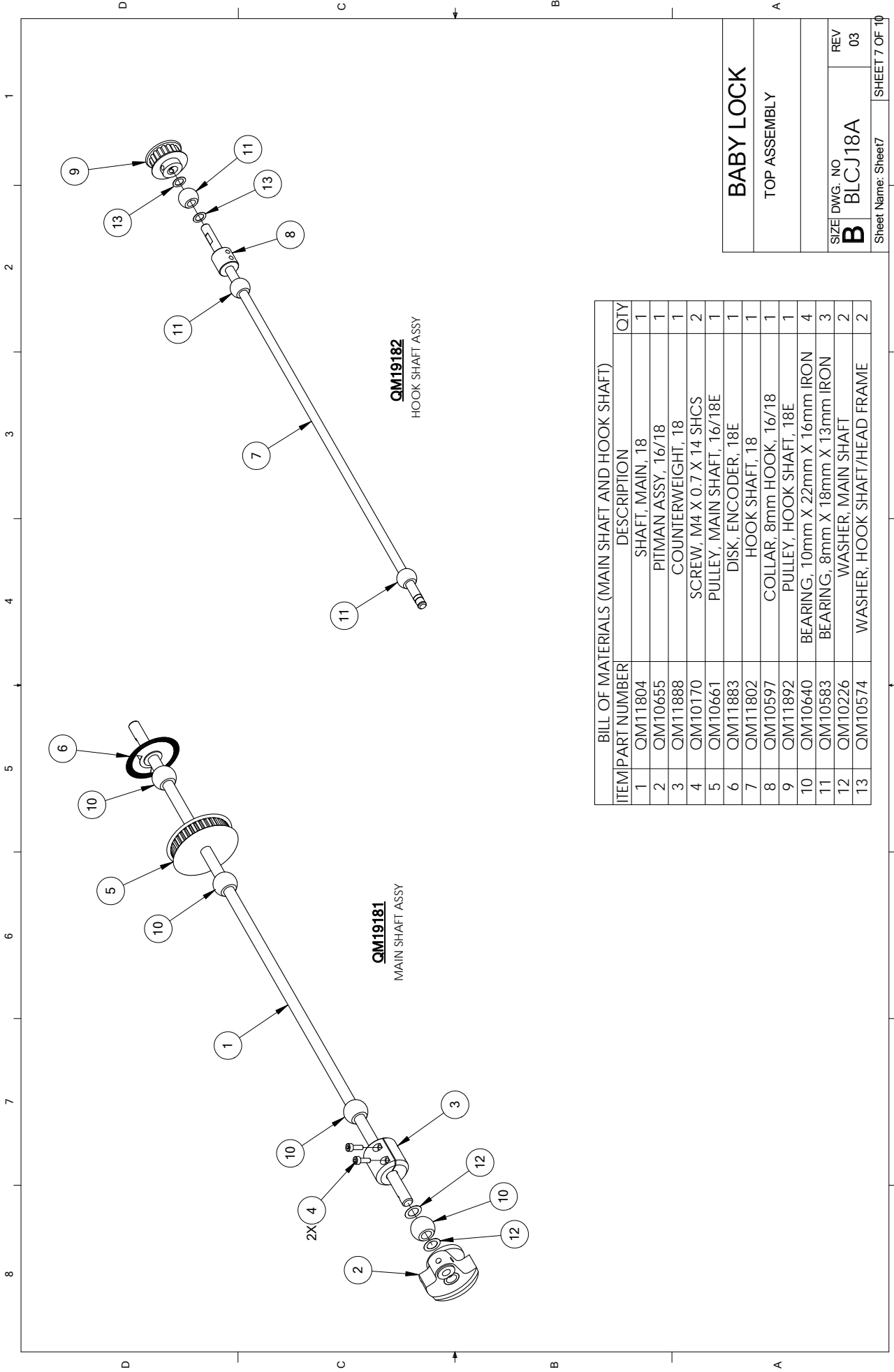
QM09011
FRONT FRAME VIEW

ITEM	PART NUMBER	DESCRIPTION	QTY
9	QM21850	ASSY, POD CONTROL, 18	1
11	QM11621	BRACKET, POWER SUPPLY, 18	1
12	QM21821	POWER SUPPLY, 18	1
15	QM10199	TENSION ASSY	1
16	QM10208	THREAD GUIDE 400	2
17	QM10205	THREAD GUIDE 100	1
18	QM10202	THREAD GUIDE, 3-HOLE	1
22	QM10217	THREAD STIRRUP	1
42	QM10901	SCREW, M5 X 0.8 X 60 SHCS	5
43	QM10882	SCREW, M5 X 0.8 X 60 SHCS	3
44	QM10898	SCREW, M5 X 0.8 X 35	4
46	QM10169	SCREW, M4 X 0.7 X 10 SHCS	6
48	QM10887	SCREW, M4 X 0.7 X 30 PHILLIPS PAN HEAD	4
61	QM10172	SCREW, M4 X 0.7 X 8 SBHCS	3
62	QM10888	SCREW, M4 X 0.7 X 6 SHSS CUP POINT	2
65	QM11891	THERMAL PAD, 18E	1

BABY LOCK

TOP ASSEMBLY

SIZE	DWG. NO	REV
B	BLCJ18A	03
Sheet Name: Sheet6		SHEET 6 OF 10



BILL OF MATERIALS (MAIN SHAFT AND HOOK SHAFT)

ITEM/PART NUMBER	DESCRIPTION	QTY
1	QM11804 SHAFT, MAIN, 18	1
2	QM10655 PITMAN ASSY, 16/18	1
3	QM11888 COUNTERWEIGHT, 18	1
4	QM10170 SCREW, M4 X 0.7 X 14 SHCS	2
5	QM10661 PULLEY, MAIN SHAFT, 16/18E	1
6	QM11883 DISK, ENCODER, 18E	1
7	QM11802 HOOK SHAFT, 18	1
8	QM10597 COLLAR, 8mm HOOK, 16/18	1
9	QM11892 PULLEY, HOOK SHAFT, 18E	1
10	QM10640 BEARING, 10mm X 22mm X 16mm IRON	4
11	QM10583 BEARING, 8mm X 18mm X 13mm IRON	3
12	QM10226 WASHER, MAIN SHAFT	2
13	QM10574 WASHER, HOOK SHAFT/HEAD FRAME	2

BABY LOCK

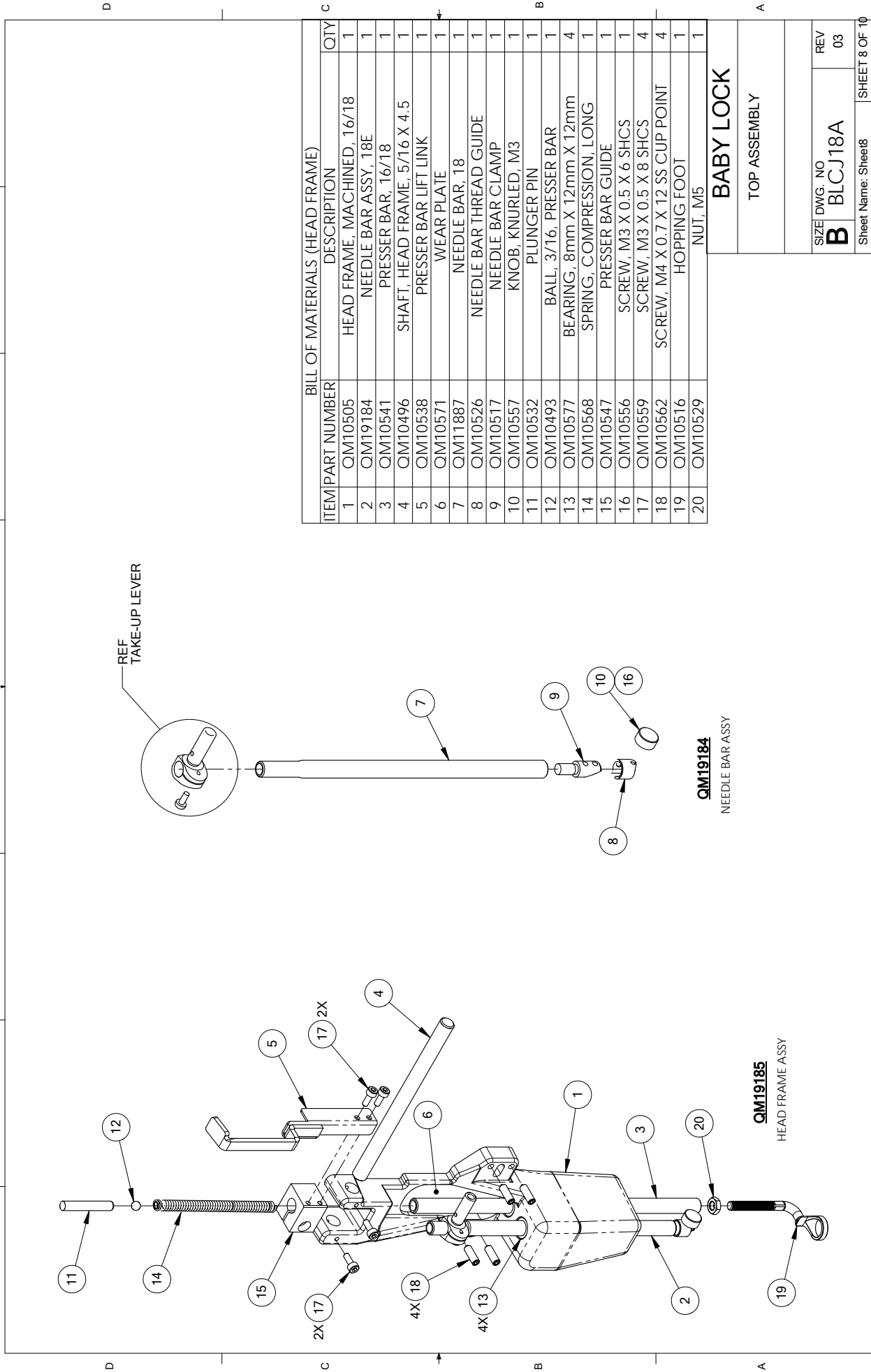
TOP ASSEMBLY

SIZE DWG. NO
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03

Sheet Name: Sheet7 SHEET 7 OF 10

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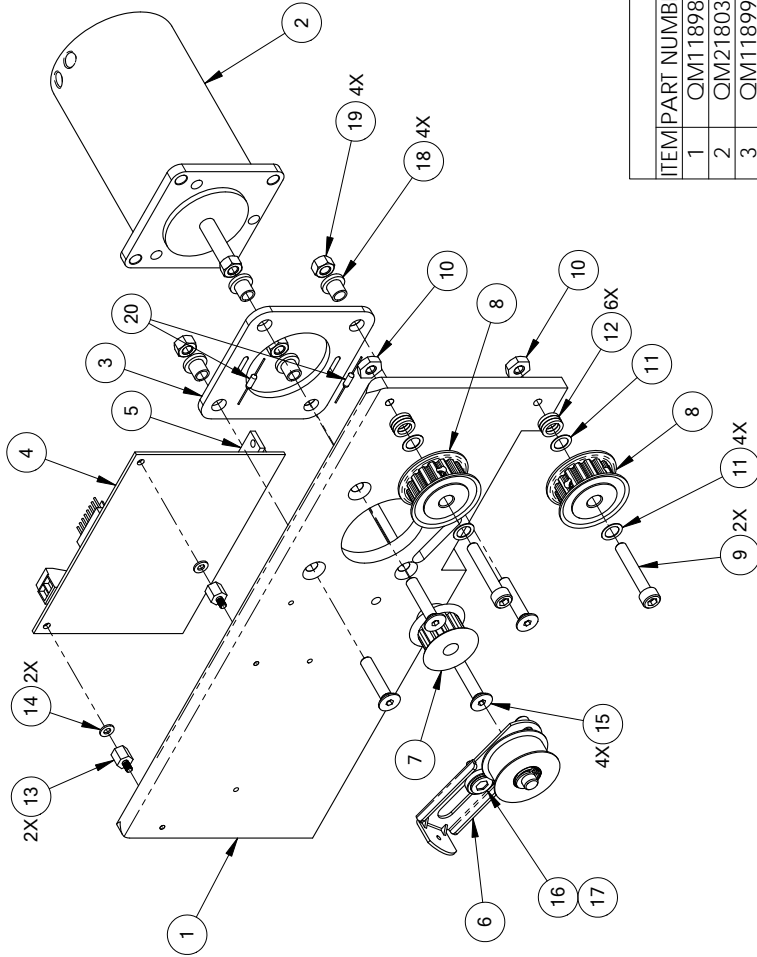
BILL OF MATERIALS (HEAD FRAME)			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	QM10505	HEAD FRAME, MACHINED, 16/18	1
2	QM19184	NEEDLE BAR ASSY, 18E	1
3	QM10541	PRESSER BAR, 16/18	1
4	QM10496	SHAFT, HEAD FRAME, 5/16 X 4.5	1
5	QM10538	PRESSER BAR LIFT LINK	1
6	QM10571	WEAR PLATE	1
7	QM11887	NEEDLE BAR, 18	1
8	QM10526	NEEDLE BAR THREAD GUIDE	1
9	QM10517	NEEDLE BAR CLAMP	1
10	QM10557	KNOB, KNURLED, M3	1
11	QM10532	PLUNGER PIN	1
12	QM10493	BALL, 3/16, PRESSER BAR	1
13	QM10577	BEARING, 8mm X 12mm X 12mm	4
14	QM10568	SPRING, COMPRESSION, LONG	1
15	QM10547	PRESSER BAR GUIDE	1
16	QM10556	SCREW, M3 X 0.5 X 6 SHCS	1
17	QM10559	SCREW, M3 X 0.5 X 8 SHCS	4
18	QM10562	SCREW, M4 X 0.7 X 12 SS CUP POINT	4
19	QM10516	HOPPING FOOT	1
20	QM10529	NUT, M5	1

BABY LOCK

TOP ASSEMBLY

SIZE	DWG. NO	REV
B	BLCJ18A	03
Sheet Name: Sheet8		SHEET 8 OF 10

1 2 3 4 5 6 7 8



QM19183
DRIVE TRAIN ASSY

ITEM PART NUMBER	DESCRIPTION	QTY
1	QM11898 BRACKET, DRIVE TRAIN	1
2	QM21803 MOTOR, 18E/24	1
3	QM11899 ISOLATOR SHIM, MOTOR MOUNT	1
4	QM21807 BOARD, MOTOR DRIVER 15A, 18E/24	1
5	QM11807 BRACKET, MOTOR DRIVER	1
6	QM11894 TENSIONER, DRIVE TRAIN	1
7	QM11890 PULLEY, MOTOR, 18E/24	1
8	QM11895 PULLEY, IDLER, DRIVE TRAIN	2
9	QM10768 SCREW, 1/4 X 3/4 SHOULDER SOCKET	2
10	QM10117 NUT, 10-24	2
11	QM12487 WASHER, SHIM, .010 X 1/4	4
12	QM12486 WASHER, SHIM, .0625 X 1/4	6
13	QM10255 STANDOFF, HEX, M/F 4-40 X 1/4	2
14	QM10275 WASHER, FIBER, #4 X .125 X .250, .029 THK	2
15	QM10182 SCREW, M5 X 0.8 X 25, FLAT HEAD SOCKET	4
16	QM10892 SCREW, M5 X 0.8 X 12 SHCS	1
17	QM12420 WASHER, TENSIONER DRIVE BELT	1
18	QM11897 WASHER, M5 NYLON SHOULDER	4
19	QM10751 NUT, M5 NYLOC	4
20	QM21899 RESISTOR, 2M, MOTOR SHIM	2

BABY LOCK

TOP ASSEMBLY

NOTES:

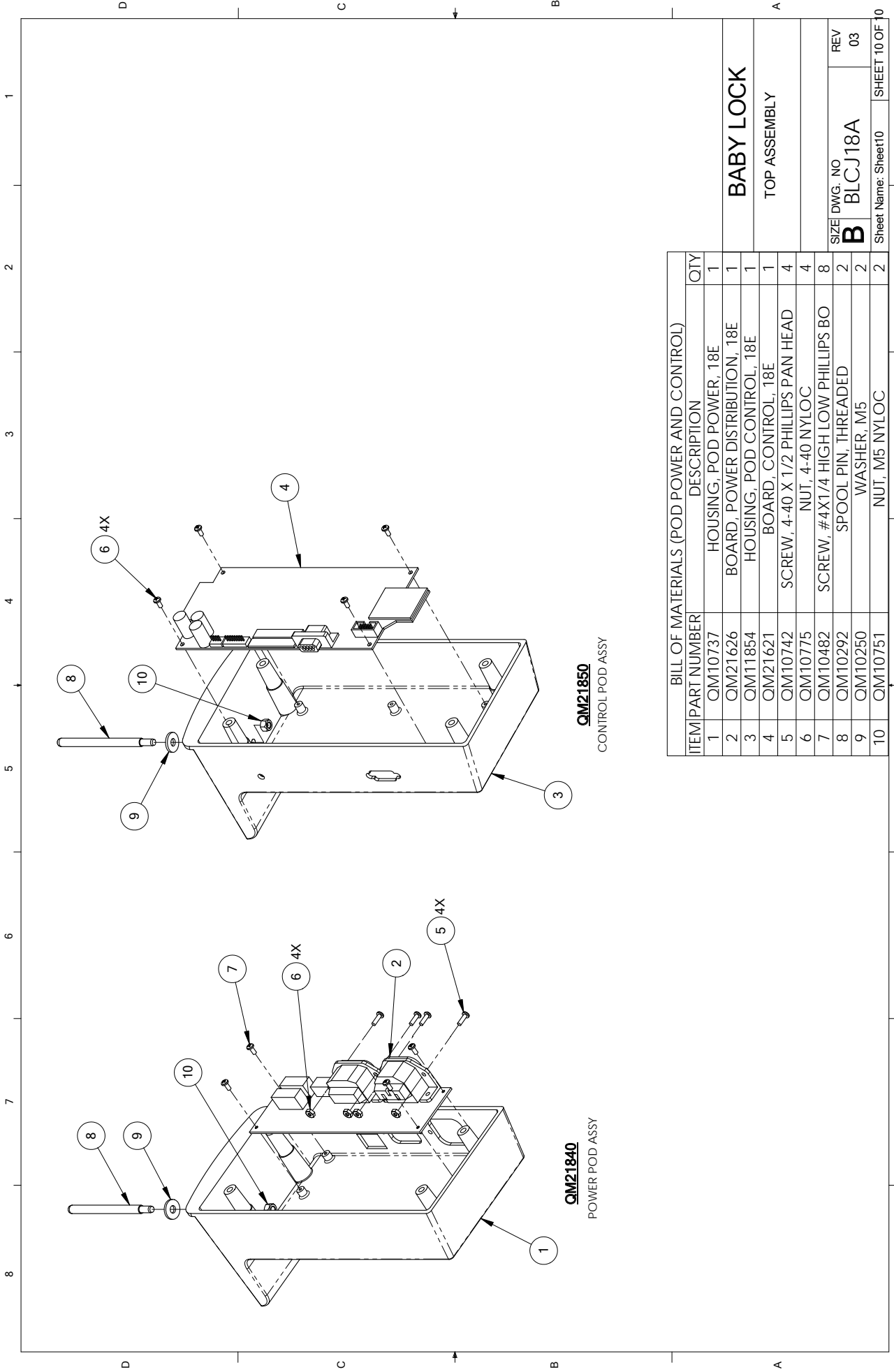
1 RESISTOR LEADS TO MAKE CONTACT WITH BRACKET AND MOTOR

SIZE DWG. NO
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Sheet Name: Sheet9

SHEET 9 OF 10



BILL OF MATERIALS (POD POWER AND CONTROL)			
ITEM	PART NUMBER	DESCRIPTION	QTY
1	QM10737	HOUSING, POD POWER, 18E	1
2	QM21626	BOARD, POWER DISTRIBUTION, 18E	1
3	QM11854	HOUSING, POD CONTROL, 18E	1
4	QM21621	BOARD, CONTROL, 18E	1
5	QM10742	SCREW, 4-40 X 1/2 PHILLIPS PAN HEAD	4
6	QM10775	NUT, 4-40 NYLOC	4
7	QM10482	SCREW, #4X1/4 HIGH LOW PHILLIPS BO	8
8	QM10292	SPOOL PIN, THREADED	2
9	QM10250	WASHER, M5	2
10	QM10751	NUT, M5 NYLOC	2

BABY LOCK

TOP ASSEMBLY

SIZE DWG. NO
B BLCJ18A
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 03

English
BLCJ18
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