

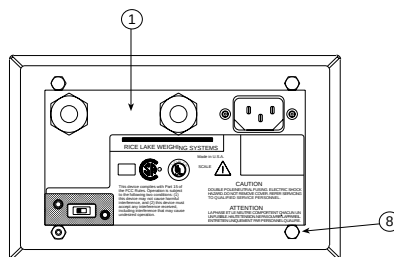
Indicators & Remote Displays

IQ PLUS® 310A DIGITAL WEIGHT INDICATOR

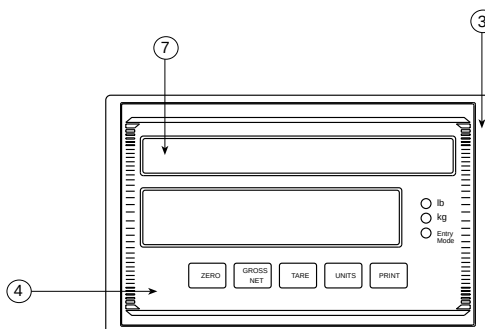
(See Diagram IQ plus 310A-A)



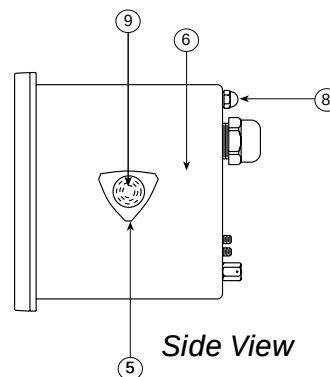
REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
	15438	Power cord	\$10.00
	22796	Washer, standoff	2.00
	19636	Tilt stand	45.00
	19652	Gasket, rear case, NEMA 4	60.00
	19664	Gasket, rear case	25.00
	23052	Parts kit	20.00
		Components of Part #23052:	
	14627	Nut, acorn, 8-32NC	1.00
	15133	Lock washer, No. 8, Type A	.50
	15156	Washer, neoprene 5/16	.50
	15438	Power cord, 7.5' long	10.00
	23040	Label cap	10.00
	23165	Terminal block	8.00
	52388	Cover plate	3.00
	52389	Stand off	3.00
	52390	Label	.75
1	23045	Rear panel (AC Version)	370.00
3	16092	Bezel	54.00
3	33615	Bezel, front, w/overlay	160.00
4	23063	Membrane switch panel	115.00
5	15397	Knob, tilt stand	4.00
6	23039	Enclosure	100.00
6	16095	Enclosure, NEMA 4	100.00
7	23040	Capacity label	10.00
8	14627	Acorn nut, 8-32NC hex, high	1.00
9	15156	Washer, neoprene for tilt stand	.50



Back View



Front View



Side View

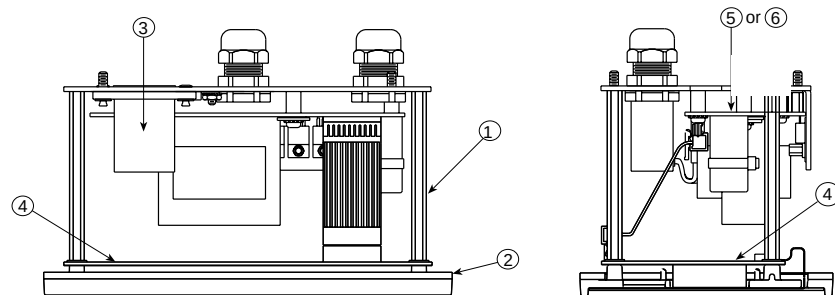
IQ plus 310A-A

Indicators & Remote Displays

IQ plus® 310A (Cont.)

(See Diagram IQ plus 310A-B)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
	22979	 Operating manual	\$35.00
1	19663	 Standoff, male-female shoulder, 3-1/4" L	4.00
2	23041	 Gasket, bezel	45.00
	19651	 Gasket, bezel, NEMA 4	75.00
3	23050	 EMI Filter	70.00
	23051	 Cable assembly, main board/power supply	25.00
	23165	 Terminal block, pluggable Phoenix 7-position	8.00
4	23042	 Main CPU/display board set	595.00
		Components of Part #23042:	
	23053	 IC, Program Processor, 75216, U1	165.00
	16332	 IC, EEPROM 1024-bit Serial, ER59C11, U2	20.00
	23056	 IC, A/D Converter, CS5520-BP, U3	80.00
	23057	 IC, Op-Amp, TLC2272CP, U6	7.00
	16259	 IC, RS-232 Transceiver, MAX232, U7	4.00
	16224	 IC, NAND Gate, 2 input, 74HCOO, U8	2.00
	16534	 Display, 14 segment, VFD	95.00
	23051	 Cable Assembly	25.00
	23058	 Resistor, 17-10046RO, 8-pin DIP	35.00
	23059	 Crystal 4.194 MHz, Y1, Y2	10.00
	30858	 Socket, IC, 64-pin	6.00
	29991	 Diode, surge, clamping, D3, D4	2.00
	16680	 Transistor, 2N2907A	1.00
5	23043	 AC Power supply board	350.00
		Components of Part #23043:	
	16375	 IC, Voltage Regulator, 7805K, Z2, Z4	5.00
	16393	 IC, Comparator, LM393, 8-pin, Z3	4.00
	26264	 IC, Voltage Regulator, 5 V, Fixed neg, 79M05, Z5	10.00
	16473	 Fuse, 5 x 20 mm 1/4 A Slo-Blo, (117 VAC), F1 & F2, 250 V	4.00
	16474	 Fuse, 5 x 20 mm 1/8 A Slo-Blo, (220 VAC), F1 & F2	10.00
	16639	 Capacitor, 4700 uF, 16 V, C6 & C8	5.00
	23049	 Transformer, 100, 115, 230, 240 VAC, T1	225.00
	23044	 DC Power supply board	350.00
		Components of Part #23044:	
	23060	 IC, Voltage Regulator, LT1071HVCT, U1	35.00
	16375	 IC, Voltage Regulator, 7805K, U3	5.00
	26264	 IC, Voltage Regulator, 5 V, Fixed neg, 79M05, U4	10.00
	16322	 IC, Flip-Flop, 74HCT74, U6	25.00
	23054	 Transformer, 15-160151, T1	130.00
	23062	 Fuse, 5 x 20 mm, 3 A, 250 V, F1	7.00



IQ plus 310A-B

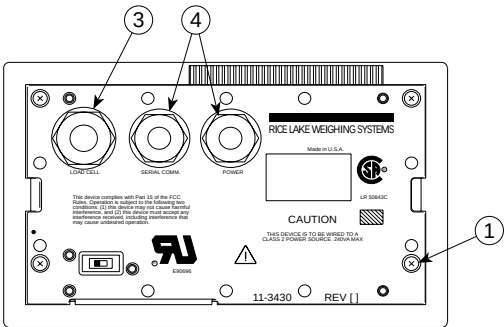
Indicators & Remote Displays

IQ PLUS® 310 DIGITAL WEIGHT INDICATOR

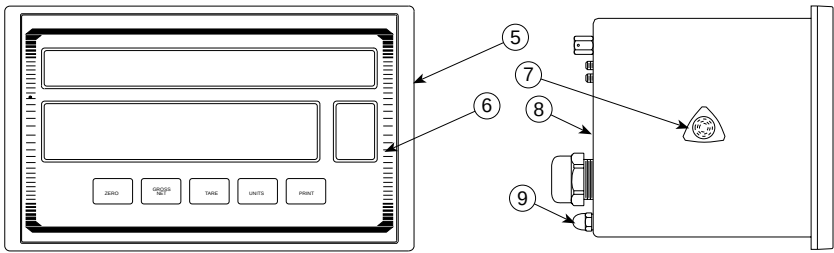
(See Diagram IQ plus 310-A)



REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
	19636	Tilt stand	\$45.00
	15156	Washer, neoprene for tilt stand	.50
	19652	Gasket, rear case, NEMA 4	60.00
	19664	Gasket, rear case, non-NEMA	25.00
1	22796	Washer	2.00
3	15671	Cable grip, 1/2" NPT	3.00
4	15670	Cable grip, 3/8" NPT	3.00
5	16092	Bezel	54.00
6	19653	Membrane switch panel	150.00
7	15397	Knob, tilt stand	4.00
8	16095	Enclosure	100.00
9	14627	Acorn nut, 8-32NC hex, high	1.00



Back View



Front View

Side View

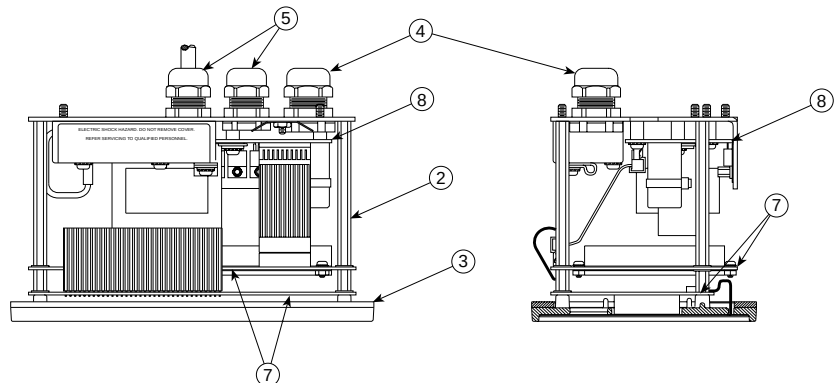
IQ plus 310-A

Indicators & Remote Displays

IQ plus® 310 (Cont.)

(See Diagram IQ plus 310-B)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
2	19663	Standoff, male-female shoulder, 3-1/4" L	\$4.00
3	19651	Gasket, bezel	75.00
4	15671	Cable grip assembly, 1/2" NPT	3.00
5	15670	Cable grip assembly, 3/8" NPT	3.00
7	N/A	Main CPU/display board set (unavailable as a complete unit)	N/A
		Components of Main CPU/Display Board Set:	
	16333	IC, Program Processor, 75216, Z24	165.00
	16332	IC, EPROM 1024-bit Serial, ER59C11, Z23	20.00
	16268	IC, 2-channel Mixer, CD4053, Z1, Z4 & Z13	3.00
	16396	IC, Op-Amp, LF356N 8-pin, Z2 & Z3	7.00
	26271	IC, Flip-Flop, CD4013B, Z20	8.00
	16406	IC, Op-Amp Op-07CP 8-pin, Z5 & Z6	7.00
	16309	IC, Gate 2 Input, 74HC02, Z8 & Z10	3.00
	16395	IC, Op-Amp, TLC1078 8-pin, Z12	14.00
	16407	IC, Non-Inverting Buffer, 74HC367, Z26	3.00
	26274	IC, Analog Multiplexer, CD4051B, Z14	4.00
	26283	IC, Dual Op-Amp, LF412CN, Z15	14.00
	16397	IC, A/D Comparator, LM311N, Z17	3.00
	16310	IC, Counter, 74HC393 14-pin, Z21	7.00
	16275	IC, Hex Inverter, 7414, Z7	2.00
	16292	IC, Binary Counter, 74HC161, Z19	3.50
	16394	IC, Op-Amp, LF353N 8-pin, Z9	7.00
	16364	IC, Optoisolator, 6N138, Z11	7.00
	16534	Display, 14-segment VFD	95.00
	30858	Socket, IC, 64-pin	6.00
8	19617	AC Power supply board	350.00
		Components of Part #19617:	
	16473	Fuse, 5 x 20 mm 1/4 A Slo-Blo, F1 & F2	4.00
	16375	IC, Voltage Regulator, 7805K, Z2 & Z4	5.00
	16384	IC, Voltage Regulator, 78M12, Z1	4.00
	16385	IC, Voltage Regulator, 79M12, Z6	6.00
	26264	IC, Voltage Regulator 5 V Fixed Neg, 79M05, Z5	10.00
	16639	Capacitor, 4700 MFD 16 V Filter Caps, C6 & C8	5.00
	16393	IC, Comparator, LM393 8-pin, Z3	4.00
	16757	Transformer, Power 100, 120, 220, 240 V	225.00
	16474	Fuse, 5 x 20 mm 1/8 A Slo-Blo (220 VAC), F1 & F2	10.00
8	25361	DC Power supply board	265.00
		Components of Part #25361:	
	16375	IC, Voltage Regulator, 7805K, U3	5.00
	16384	IC, Voltage Regulator, 78M12, U2	4.00
	16385	IC, Voltage Regulator, 79M12, U5	6.00
	26264	IC, Voltage Regulator, 79M05, U4	10.00
	16318	IC, Flip-Flop, 74C74 14-pin, U6	8.00
	16457	Fuse, Fastact 3A 3AG, F1	1.00



IQ plus 310-B

Indicators & Remote Displays

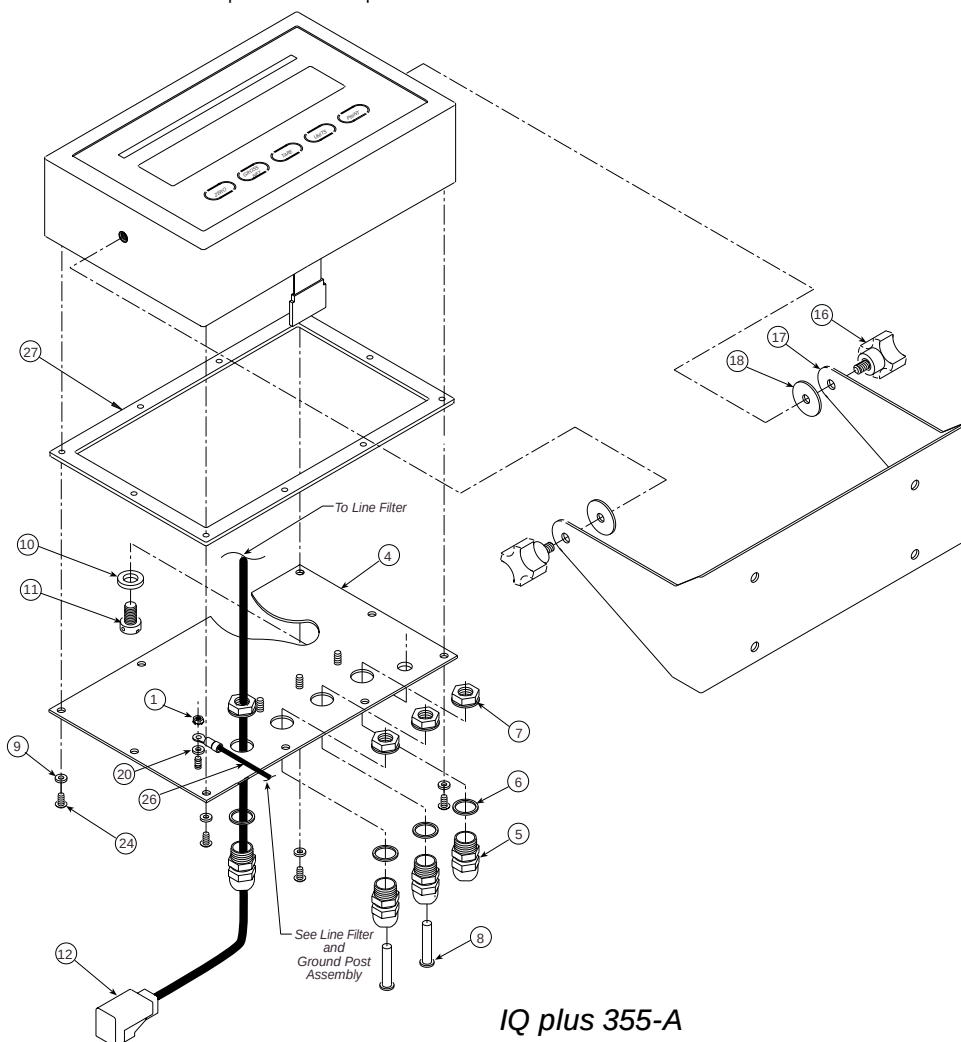
IQ PLUS® 355 DIGITAL WEIGHT INDICATOR



Backplate & Tilt Stand Assemblies (See Diagram IQ plus 355-A)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
1	14626	 Kep nuts, 8-32NC hex	\$1.00
4	39017	 Enclosure backplate	38.00
5	15626	 Cable grips, PG9	2.00
6	30375	 Nylon seal rings for cable grips	1.00
7	15627	 Locknuts, PCN9	1.00
8	19538	 Cable grip plugs	1.00
9	45042*	 Sealing washers	1.00
10	44676	 Sealing washer for setup switch access screw	1.00
11	42640	 Setup switch access screw, 1/4 x 28NF x 1/4	3.00
12	41965	 Power cord assembly, 115 VAC	20.00
12	45254	 Power cord assembly, 230 VAC	25.00
16	30342	 Wing knobs for tilt stand	4.00
17	29635	 Tilt stand	50.00
18	15144	 Nylon washers for tilt stand, 1/4 x 1 x 1/16	.95
20	15134	 Lock washers, internal tooth, No. 8, Type A	1.00
24	14862*	 Screws, 8-32NC x 3/8	1.00
26	45043	 Ground wire, 4", No. 8	1.00
27	39037	 Backplate gasket	7.00

* Additional parts included in parts kit



IQ plus 355-A

Indicators & Remote Displays

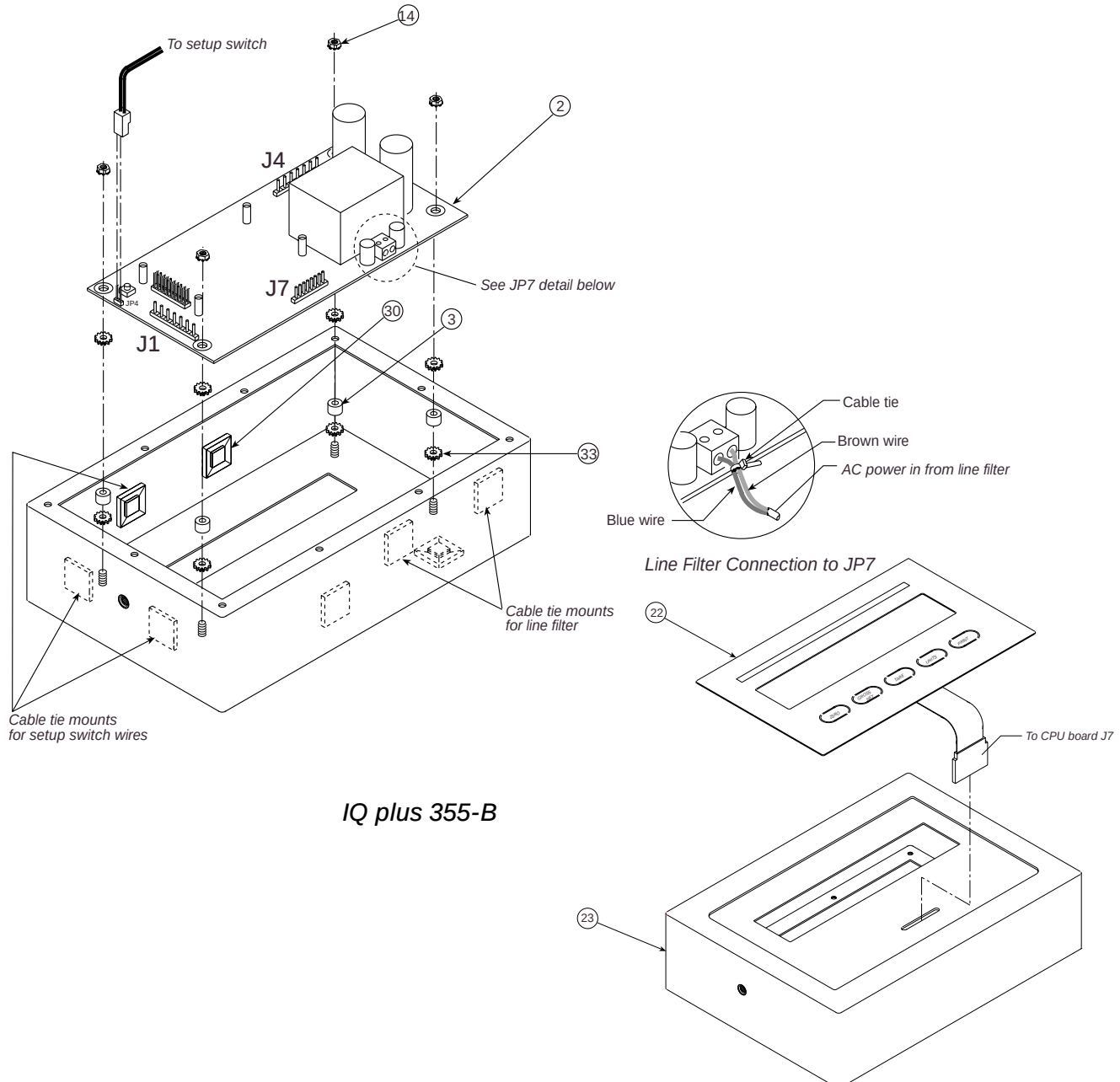
IQ plus® 355 (CONT.)

Enclosure & CPU Board

(See Diagram IQ plus 355-B)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
	53848	Fuse, 200 mA, 115 VAC	\$2.00
	53881	Fuse, 100 mA, 230 VAC	2.00
2	52211	Display and CPU board assembly, 115 VAC	345.00
2	52210	Display and CPU board assembly, 230 VAC	345.00
3	15365	Board mounting spacers	.50
14	14621	Kep nuts, 6-32NC hex	.50
22	50556	Overlay membrane panel	40.00
23	50555	Enclosure	86.00
30	15650*	Cable tie mounts	1.00
33	15131	Lock washers, external tooth, No. 6, Type A	.50

* Additional parts included in parts kit

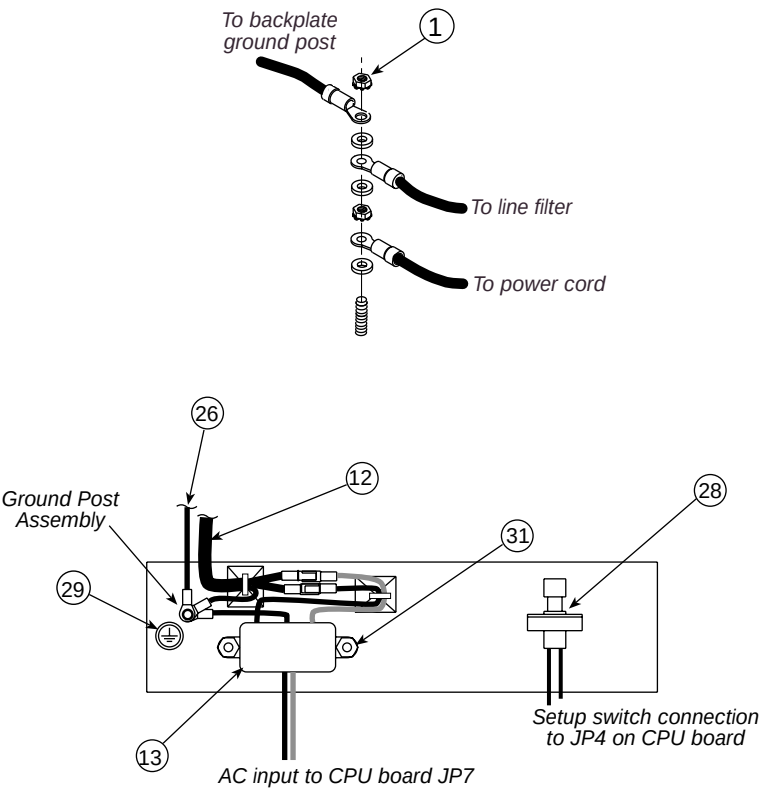


IQ plus 355-B

Indicators & Remote Displays

IQ plus® 355 (CONT.)
Line Filter & Ground Post Assembly (See Diagram IQ plus 355-C)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
1	14626	 Kep nuts, 8-32NC hex	\$1.00
12	41965	 Power cord assembly, 115 VAC	20.00
12	45254	 Power cord assembly, 230 VAC	25.00
13	41964	 Line filter assembly	21.00
26	45043	 Ground wire, 4", No. 8	1.00
28	51974	 Setup switch assembly	6.50
29	16892	 Ground/earth cable	9.00
31	45302	 Line filter standoffs	1.00



IQ plus 355-C

Indicators & Remote Displays

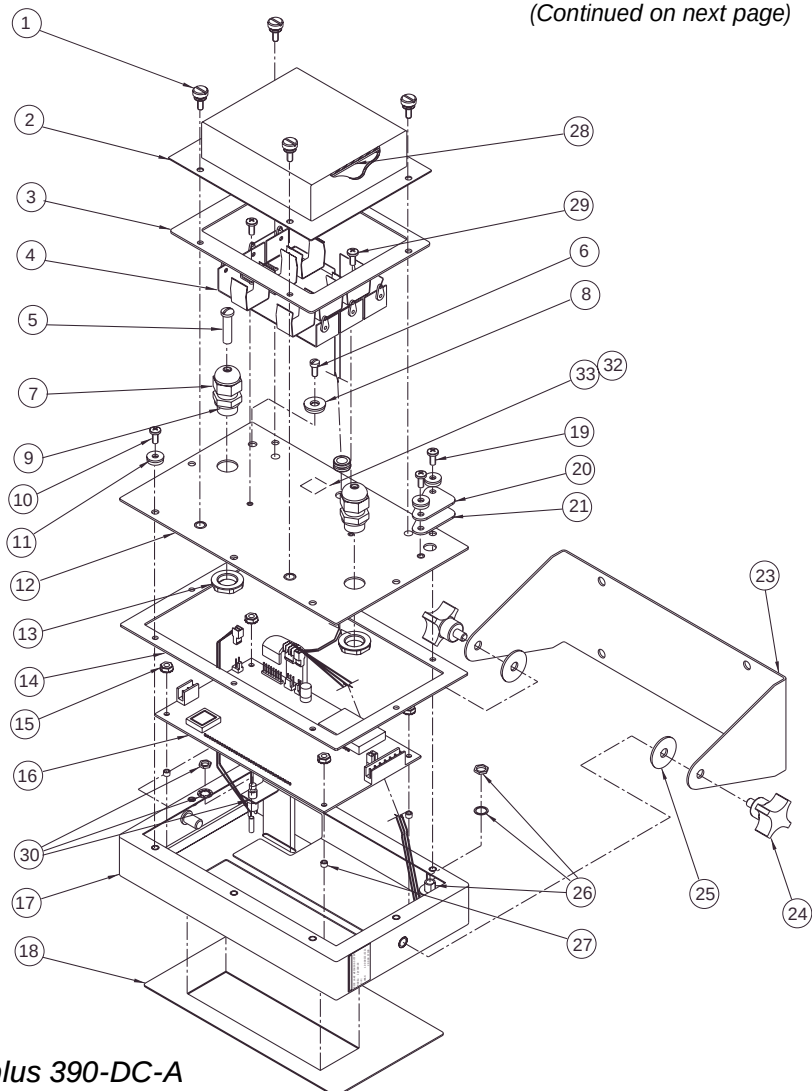
IQ PLUS® 390-DC DIGITAL WEIGHT INDICATOR

(See Diagram IQ plus 390-DC-A)



REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
	49978	 AC adapter, 115 VAC	\$12.00
	49977	 AC adapter, 230 VAC	40.00
	35993	 250 mA TR5 subminiature fuse	4.00
	49951	 Parts kit	16.00
1	49520	 Battery cover thumb screws	2.00
2	47939	 Battery cover	29.00
3	49557	 Battery cover gasket	4.00
4	49909	 Battery holder assembly	15.00
5	19538	 Cable grip plug	1.00
6	42640	 Setup switch access screw, 1/4 x 28NF x 1/4	3.00
7	15626	 Cable, grips PG9	2.00
8	44676	 Sealing washer for setup switch access screw, #14	1.00
9	30375	 Nylon seal rings for cable grips	1.00
10	14862*	 Screws, 8-32NC x 3/8	1.00
11	45042	 Sealing washers, #8	1.00
12	47940	 Enclosure backplate	27.00
13	15627	 Locknuts, PCN9	1.00
14	49558	 Backplate gasket	6.00
15	14626	 Kep nuts, 6-32NC hex	1.00

(Continued on next page)



IQ plus 390-DC-A

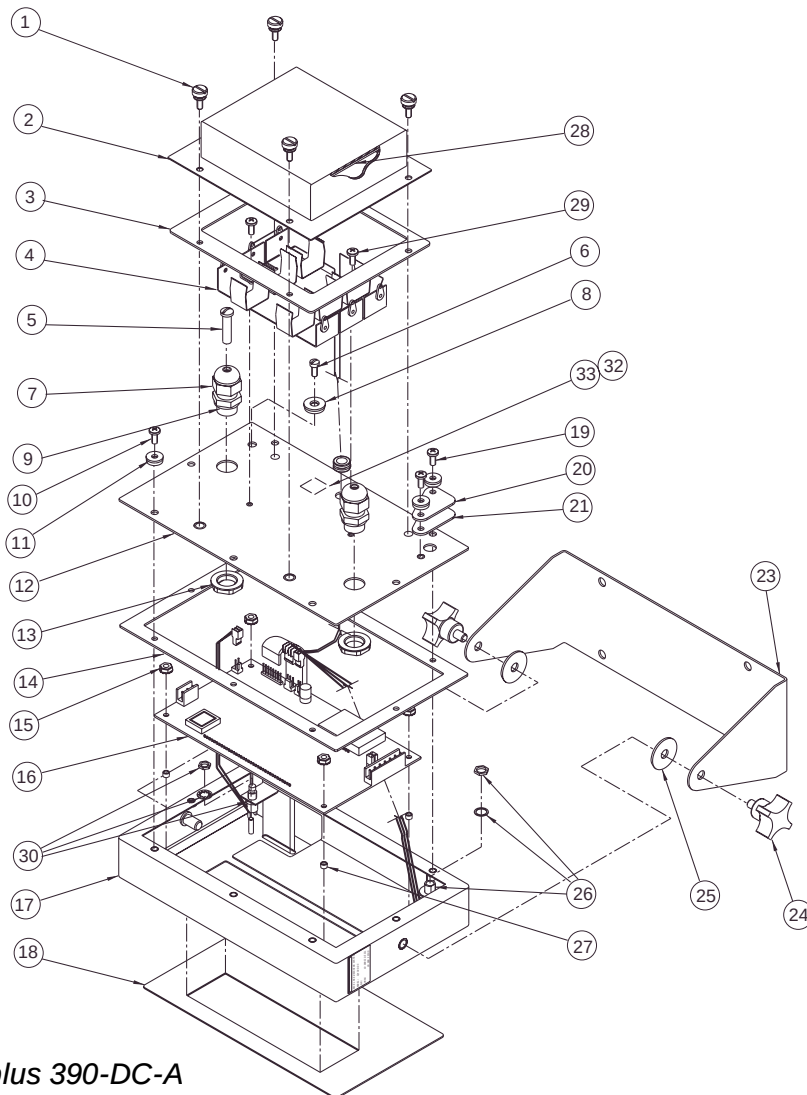
Indicators & Remote Displays

IQ plus® 390-DC (Cont.)

(See Diagram IQ plus 390-DC-A)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
16	49954	Display and CPU board assembly	\$395.00
		Components of Part #49954	
	47137	Display, 6-digit	31.00
	49743	EPROM (for CPU part #48816)	95.00
	65519	EPROM (for CPU part #52380)	95.00
17	47941	Enclosure	81.00
18	48790	Overlay membrane panel	45.00
19	49953	Screw, 8-32NC x 1/2	.10
20	49906	AC adapter port cover	3.00
21	49904	AC adapter port gasket	1.00
23	53073	Tilt stand	24.00
24	30342	Wing knobs for tilt stand	4.00
25	15144	Nylon washers for tilt stand, 1/4 x 1 x 1/16	.95
26	49908	AC adapter connector assembly	9.00
27	41980	Nylon spacers for board mounting	1.00
28	49905	Battery cover pad	2.70
29	49953	Screw, 8-32NC x 1/2	.10
30	49910	Setup switch assembly	8.00
32	15631*	Cable tie	1.00
33	15650*	Cable tie mount	1.00

* Additional parts included in parts kit.



IQ plus 390-DC-A

Prices F.O.B. Rice Lake, Wisconsin • January 1, 2001

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Indicators & Remote Displays

IQ PLUS® 590-DC DIGITAL WEIGHT INDICATOR

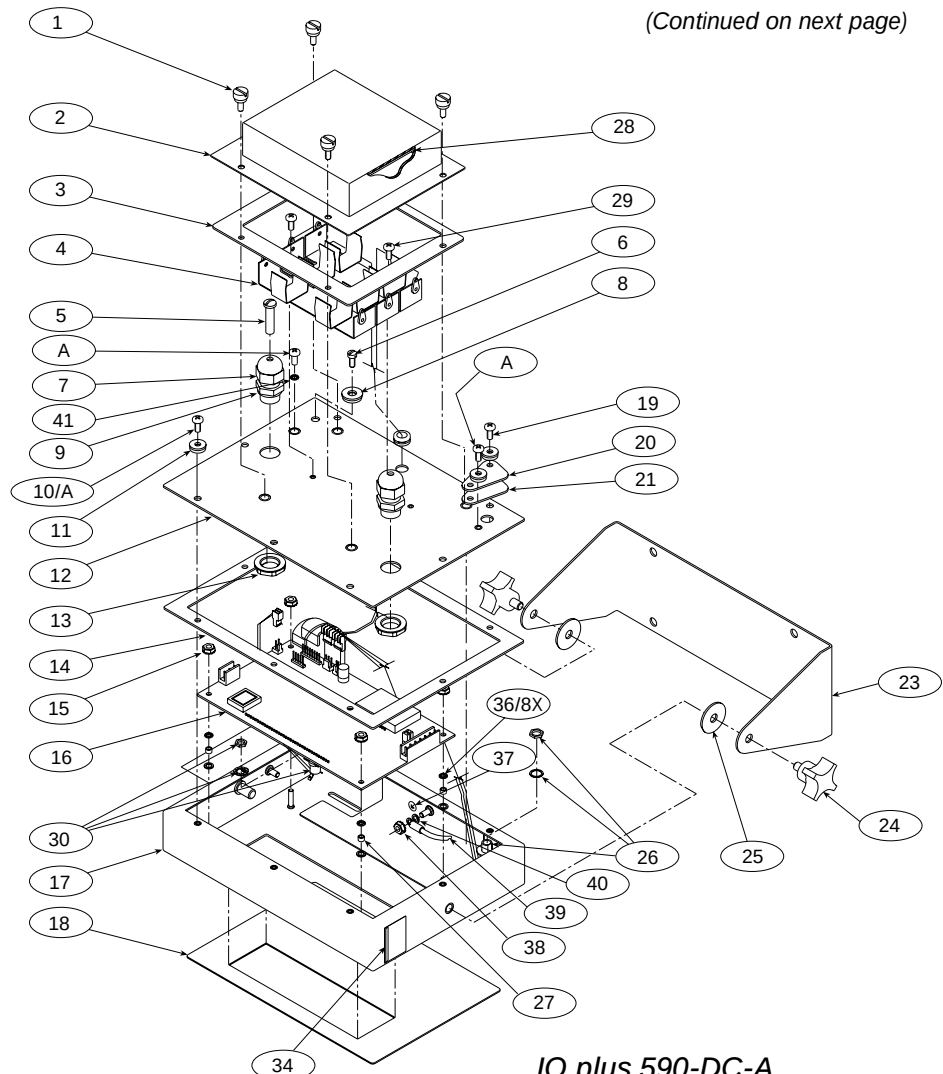
(See Diagram IQ plus 590-DC-A)



REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
	49978	 AC adapter, 115 VAC	\$12.00
	49977	 AC adapter, 230 VAC	40.00
1	49520	 Battery cover thumb screws	2.00
2	47939	 Battery cover	29.00
3	49557	 Battery cover gasket	4.00
4	49909	 Battery holder assembly	15.00
5	19538	 Cable grip plug	1.00
6	42640	 Setup switch access screw, 1/4 x 28NF x 1/4	3.00
7	15626	 Cable grips, PG9	2.00
8	44676	 Sealing washer for setup switch access screw, No. 14	1.00
9	30375	 Nylon seal rings for cable grips	1.00
10	14862*	 Screws, 8-32NC x 3/8	1.00
11	45042	 Sealing washers, No. 8	1.00
12	51970	 Enclosure backplate	29.00
13	15627	 Locknuts, PCN9	1.00
14	52382	 Backplate gasket	7.00
15	14626	 Kep nuts, 6-32NC hex	1.00

* Additional parts included in parts kit.

(Continued on next page)



IQ plus 590-DC-A

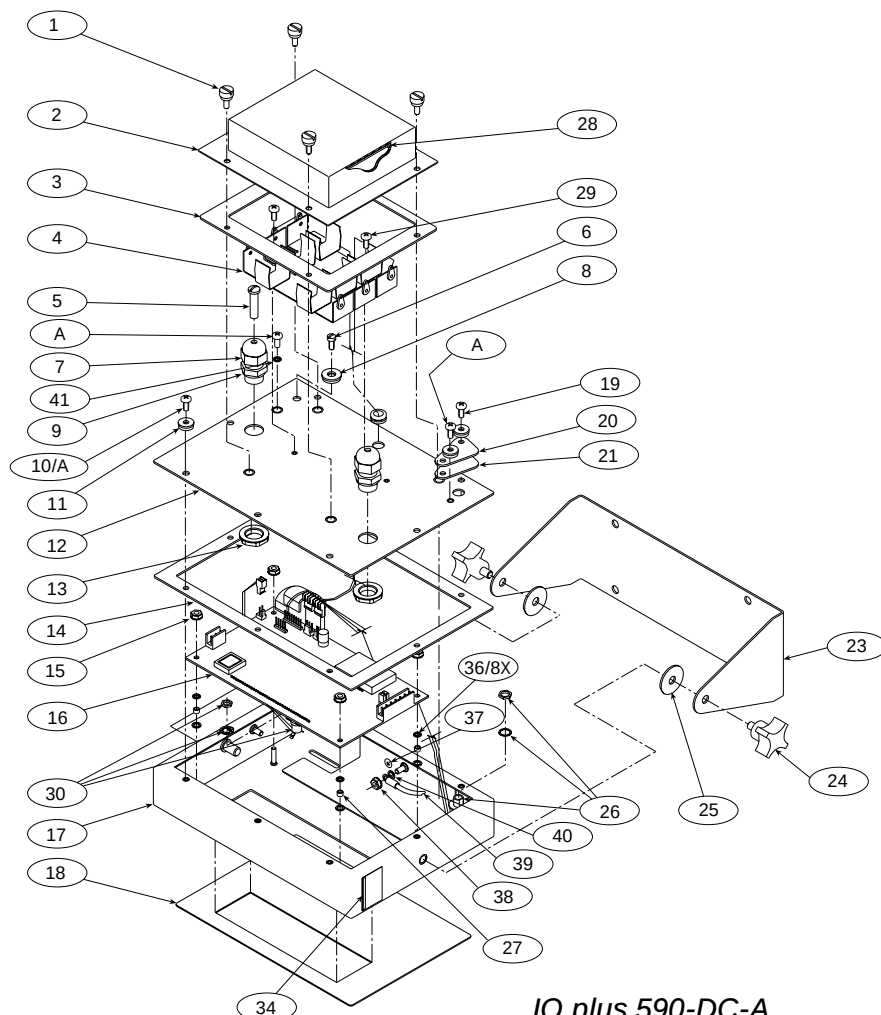
Indicators & Remote Displays

IQ plus® 590-DC (Cont.)

(See Diagram IQ plus 590-DC-A)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
16	52469	 Display and CPU board assembly	\$395.00
17	51971	 Enclosure	85.00
18	51972	 Overlay membrane panel	55.00
19	49953	 Screw, 8-32NC x 1/2	.10
20	49906	 AC adapter port cover	3.00
21	49904	 AC adapter port gasket	1.00
23	53073	 Tilt stand	24.00
24	30342	 Wing knobs for tilt stand	4.00
25	15144	 Nylon washers for tilt stand, 1/4 x 1 x 1/16	.95
26	49908	 AC adapter connector assembly	9.00
27	15365	 Brass spacers for board mounting	.50
28	49905	 Battery cover pad	2.70
29	14825	 Screws, 4-40NC x 1/4	1.00
30	49910	 Setup switch assembly	8.00
30	15631*	 Cable tie	1.00
30	15650*	 Cable tie mount	1.00
36	15130	 Lock washers, internal tooth, No. 6, Type A	1.00
37	16892	 Ground/earth label	9.00
38	14626	 Kep nuts, 8-32NC hex	1.00
39	45043	 Ground wire, 4", No. 8	1.00
40	15134	 Lock washers, internal tooth, No. 8, Type A	1.00

* Additional parts included in parts kit.



IQ plus 590-DC-A

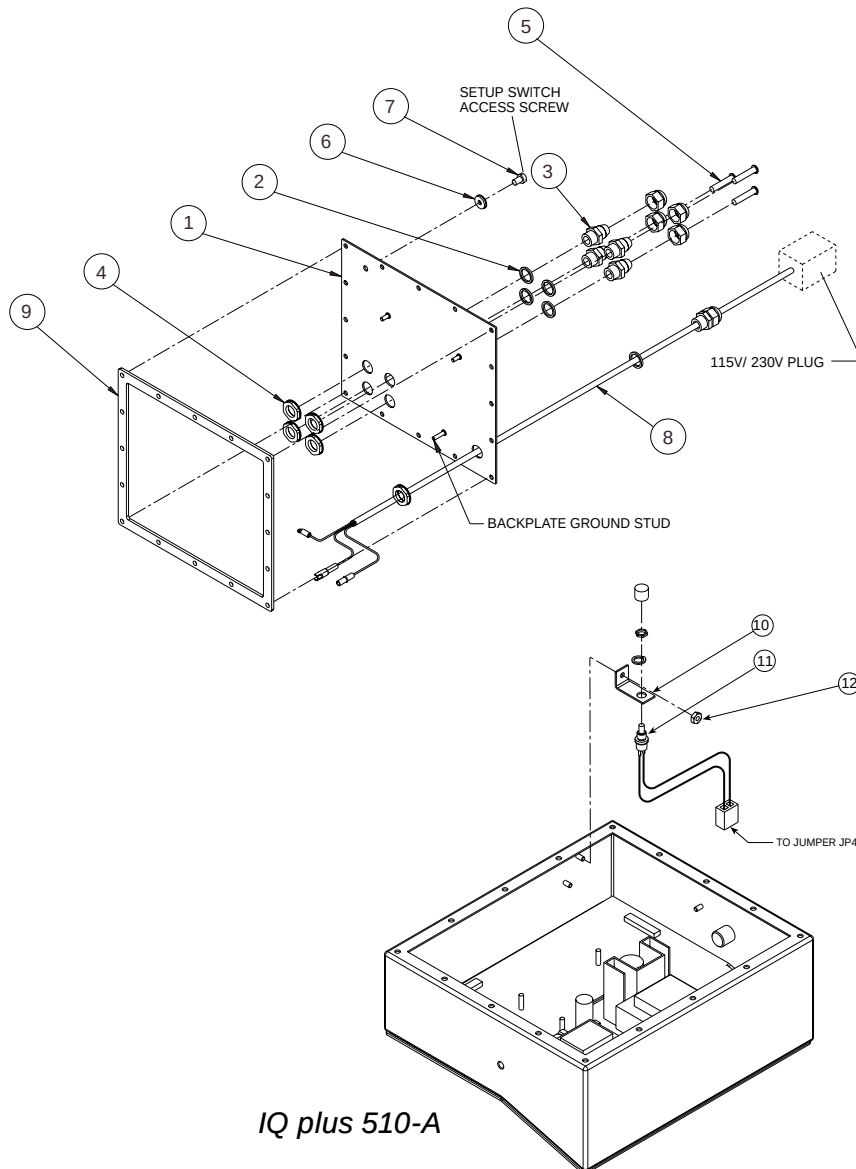
Indicators & Remote Displays

IQ PLUS® 510 DIGITAL WEIGHT INDICATOR



Backplate & Setup Switch Assemblies (See Diagram IQ plus 510-A)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
1	41398	 Enclosure backplate	\$42.00
2	30375	 Nylon seal rings for cable grips	1.00
3	15626	 Cable grips, PG9	2.00
4	15627	 Locknuts, PCN9	1.00
5	19538	 Cable grip plugs	1.00
6	44676	 Sealing washer for setup switch access screw	1.00
7	42640	 Setup switch access screw, 1/4 x 28NF x 1/4	3.00
8	41965	 Power cord assembly, 115 VAC	20.00
8	45254	 Power cord assembly, 230 VAC	25.00
9	41400	 Backplate gasket	8.00
10	46027	 Setup switch mounting bracket	2.00
11	44844	 Setup switch assembly	5.40
12	14621	 Kep nuts, 6-32NC hex (4-flat; 6 sloped)	.50



IQ plus 510-A

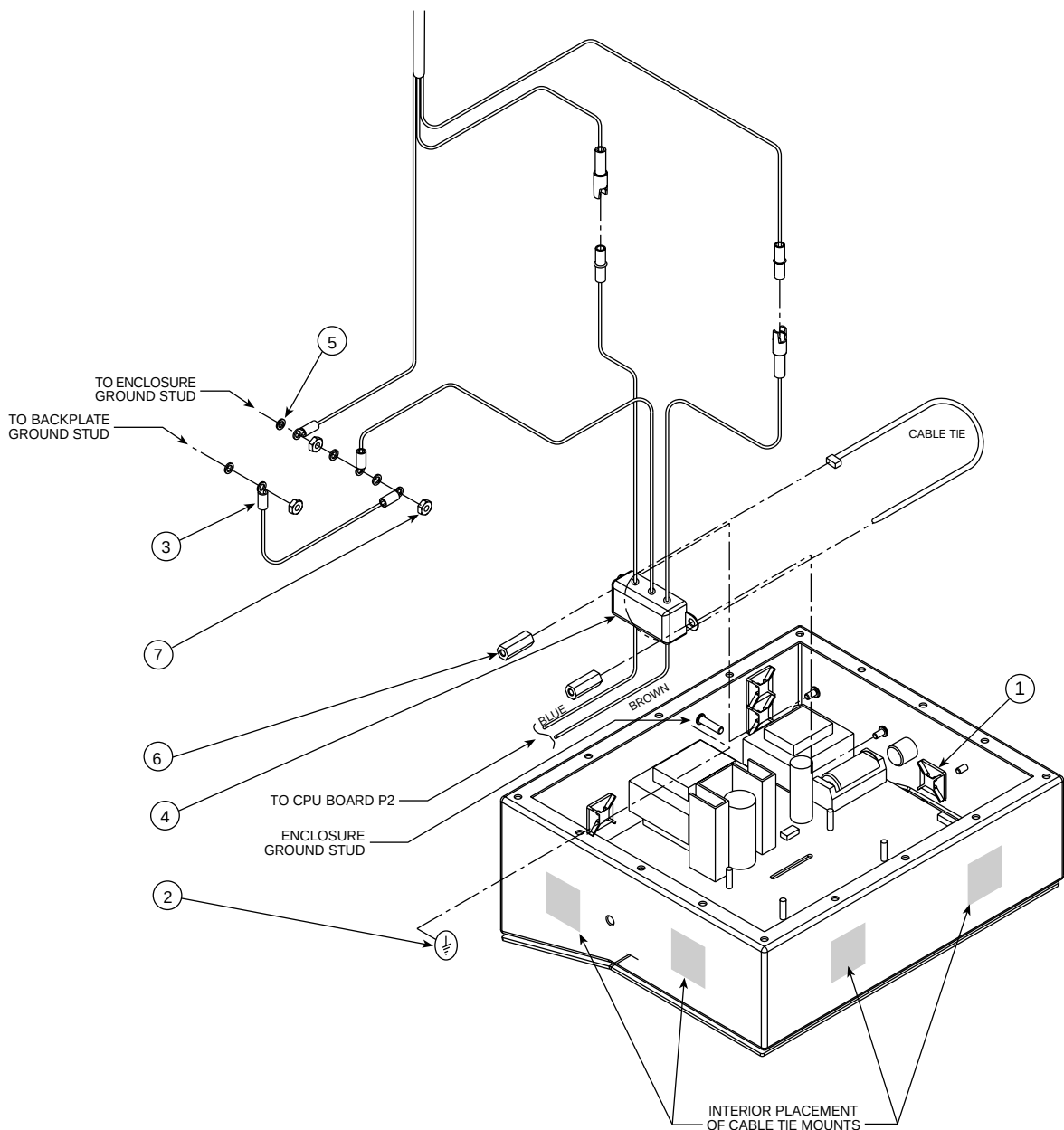
Indicators & Remote Displays

IQ plus® 510 (Cont.)

Enclosure & Line Filter Assembly* (See Diagram IQ plus 510-B)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
1	15650†	Cable tie mounts	\$1.00
2	16892	Ground/earth label	9.00
3	45043	Ground wire, 4" with No. 8 eye connector	1.00
4	45891	Line filter assembly	16.00
5	15134	Lock washers, No. 8	1.00
6	15369	Standoffs, fem 6-32NC x 3/4	.50
7	14626	Kep nuts, 8-32NC hex	1.00

* Rev. 1 CPU board shown in drawing. † Additional parts included in parts kit.



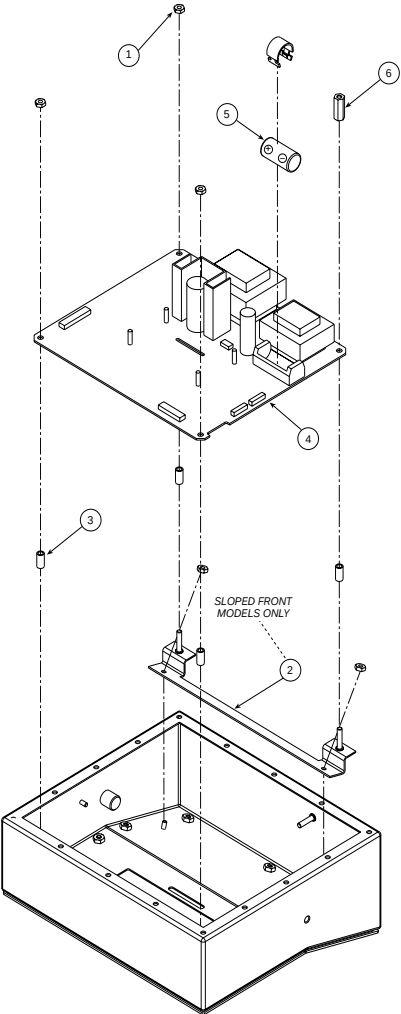
IQ plus 510-B

Indicators & Remote Displays

IQ plus® 510 (Cont.)
Enclosure & CPU Board Assembly* (See Diagram IQ plus 510-C)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
	42104	 7-position connectors for J1, J4, and J12	\$8.00
	46420	 10-position connector for J7	10.00
	45484	 160 mA TR5 subminiature fuses, 115 VAC	2.00
	45107	 80 mA TR5 subminiature fuses, 230 VAC	2.00
	51975	 Low pass filter kit (for CPU part #41648)	43.00
1	14621	 Kep nuts, 6-32NC hex (4-flat; 6 sloped)	.50
2	45401	 CPU board mounting tab, sloped front models	10.00
3	41982	 Nylon spacers for board mounting	1.00
4	64948	 Display and CPU board assembly, Rev. 2, 115 VAC	495.00
4	64949	 Display and CPU board assembly Rev. 2, 230 VAC	495.00
		Components of Display/CPU Board:	
	40698	 Display, VFD	77.00
	39557	 EPROM (for CPU part #41648)	95.00
	65348	 EPROM (for CPU part #64965)	95.00
5	19644	 3V cylindrical lithium battery	15.00
6	15369	 Standoffs, fem 6-32NC x 3/4	.50

* Rev. 1 CPU board shown in drawing.



IQ plus 510-C

Indicators/Remote Displays

Indicators & Remote Displays

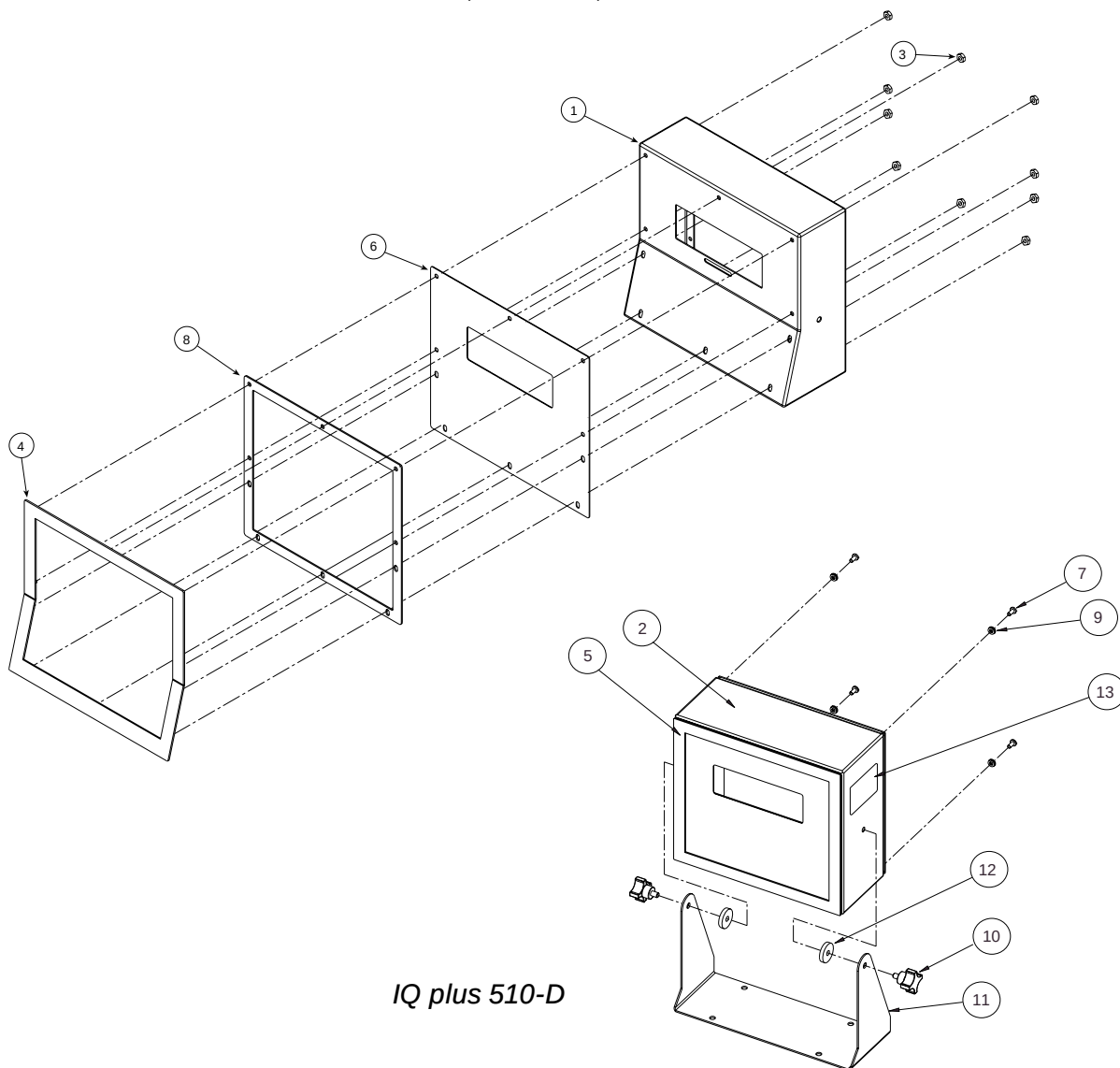
IQ plus® 510 (Cont.)

Bezel & Tilt Stand Assemblies

(See Diagram IQ plus 510-D)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
1	41397	 Enclosure, sloped front	\$106.00
2	41401	 Enclosure, flat front	110.00
3	14626	 Kep nuts, 8-32NC hex	1.00
4	45402	 Bezel, sloped front	47.00
5	41399	 Bezel, flat front	40.00
6	41385	 Switch panel membrane	55.00
7	14862*	 Screws, 8-32NC x 3/8	1.00
8	46252	 Bezel gasket, sloped front	8.00
8	45076	 Bezel gasket, flat front	8.00
9	45042*	 Sealing washers	1.00
10	30342	 Wing knobs for tilt stand	4.00
11	29635	 Tilt stand	50.00
12	15144	 Nylon washers for tilt stand, 1/4 x 1 x 1/16	.95
13	16903	 Model/serial number label	1.00

* Additional parts included in parts kit.



IQ plus 510-D

Indicators & Remote Displays

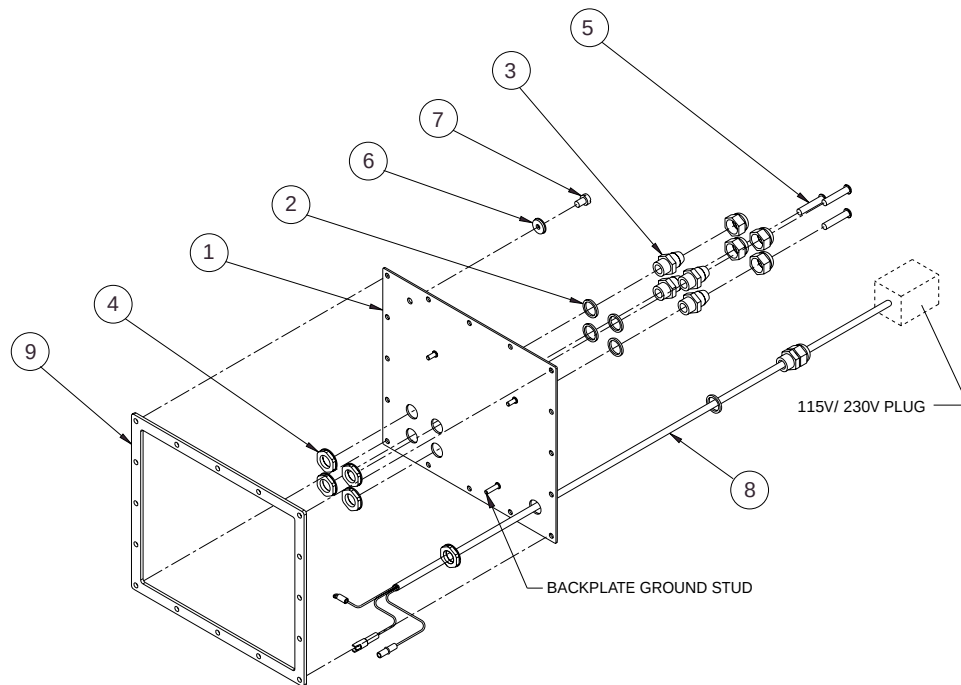
IQ PLUS® 710 DIGITAL WEIGHT INDICATOR



Backplate Assembly

(See Diagram IQ plus 710-A)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
1	41398	 Enclosure backplate	\$42.00
2	30375	 Nylon seal rings for cable grips	1.00
3	15626	 Cable grips, PG9	2.00
4	15627	 Locknuts, PCN9	1.00
5	19538	 Cable grip plugs	1.00
6	44676	 Sealing washer for setup switch access screw	1.00
7	42640	 Setup switch access screw, 1/4 x 28NF x 1/4	3.00
8	41965	 Power cord assembly, 115 VAC	20.00
8	45254	 Power cord assembly, 230 VAC	25.00
9	41400	 Backplate gasket	8.00



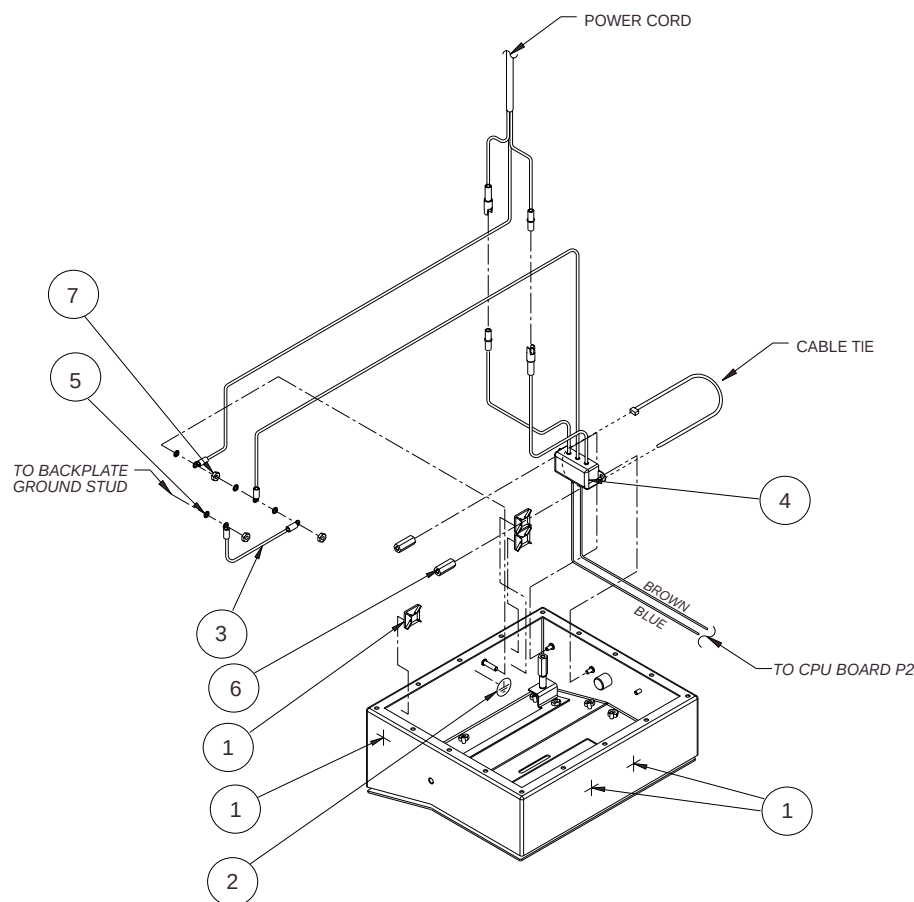
IQ plus 710-A

Indicators & Remote Displays

IQ plus® 710 (Cont.)
Enclosure & Line Filter Assembly (See Diagram IQ plus 710-B)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
1	15650*	Cable tie mounts	\$1.00
2	16892	Ground/earth label	9.00
3	45043	Ground wire, 4" with No. 8 eye connector	1.00
4	45891	Line filter assembly	16.00
5	15134	Lock washers, No. 8	1.00
6	15369	Standoffs, fem 6-32NC x 3/4	.50
7	14626	Kep nuts, 8-32NC hex	1.00

* Additional parts included in parts kit.



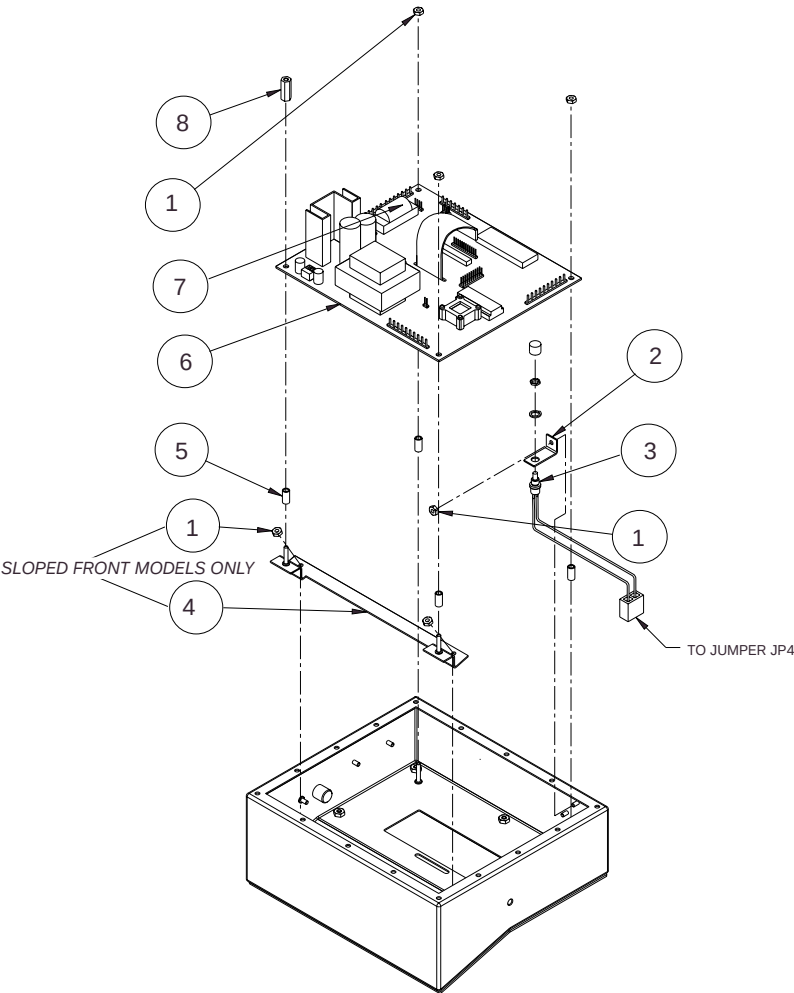
IQ plus 710-B

Indicators & Remote Displays

IQ plus® 710 (Cont.)
Enclosure & CPU Board Assembly (See Diagram IQ plus 710-C)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
	42104	 7-position connectors for J1, J4, and J12	8.00
	46420	 10-position connector for J7 and J8	10.00
	46445	 160 mA TR5 subminiature fuses, 115 VAC	2.00
	45107	 80 mA TR5 subminiature fuses, 230 VAC	2.00
	51975	 Low pass line filter kit (for CPU part #41698)	43.00
1	14621	 Kep nuts, 6-32NC hex (4-flat; 6 sloped)	.50
2	46027	 Setup switch mounting bracket	2.00
3	44844	 Setup switch assembly	5.40
4	45401	 CPU board mounting tab, sloped front models	10.00
5	48027	 Nylon spacers for board mounting	1.00
6	64956*	 Display and CPU board assembly, Rev. 2, 115 VAC	495.00
6	64960	 Display and CPU board assembly, Rev. 2, 230 VAC	495.00
	Components of Part #64956 & #64960		
	51975	 Low pass filter kit (for Rev. 1 PCB)	43.00
	39558	 EPROM (for CPU part #41648)	95.00
	65347	 EPROM (for CPU part #64965)	95.00
7	19644	 3V cylindrical lithium battery	15.00
8	15369	 Standoffs, female, 6-32NC x 3/4	.50

* When ordering part #64956, you must also order part #42104 and #46420.



IQ plus 710-C

Indicators & Remote Displays

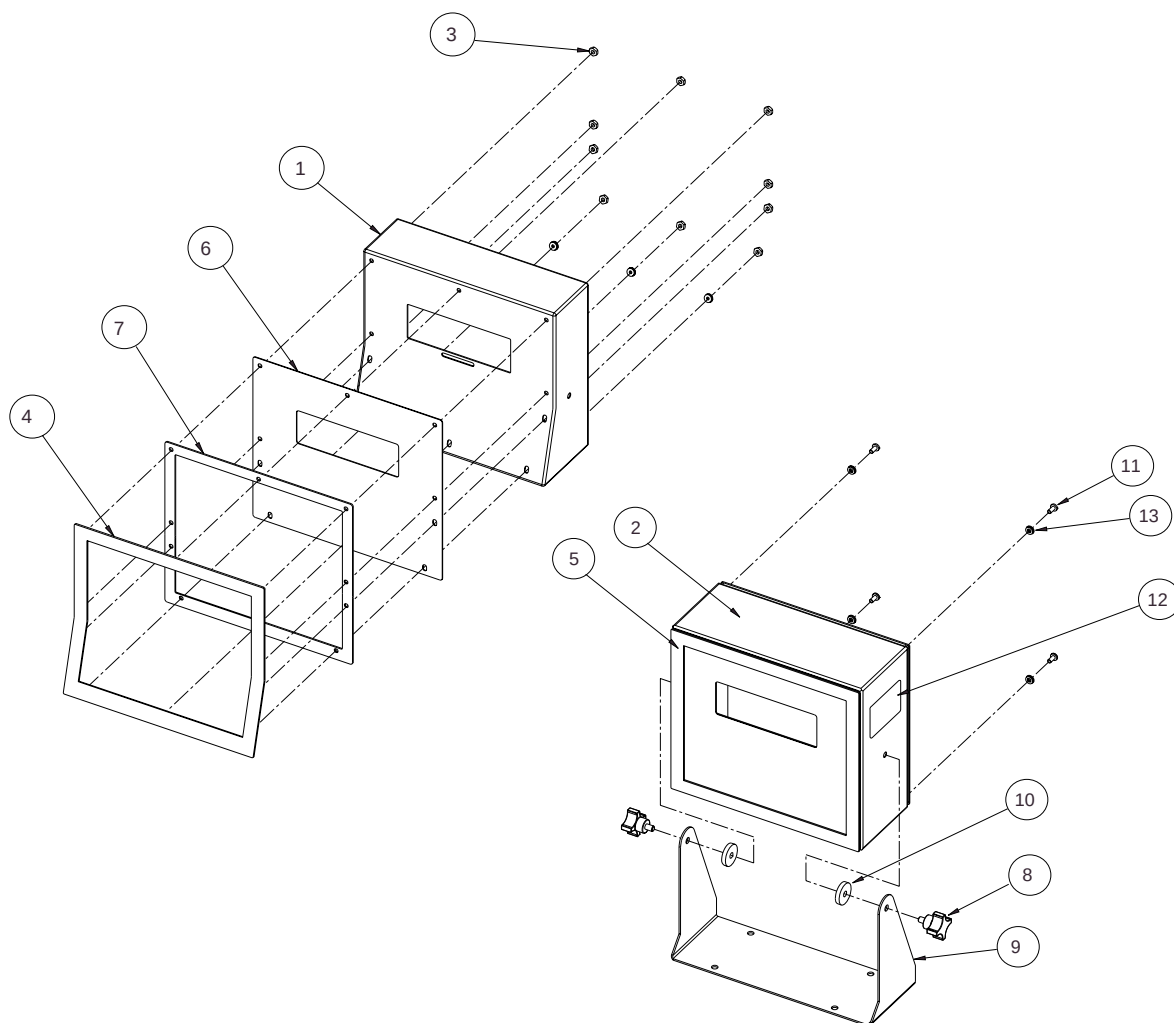
IQ plus® 710 (Cont.)

Bezel & Tilt Stand Assemblies

(See Diagram IQ plus 710-D)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
1	41397	 Enclosure, sloped front	\$106.00
2	41401	 Enclosure, flat front	110.00
3	14626	 Kep nuts, 8-32NC hex	1.00
4	45402	 Bezel, sloped front	47.00
5	41399	 Bezel, flat front	40.00
6	41386	 Switch panel membrane	60.00
7	46252	 Bezel gasket, sloped front	8.00
7	45076	 Bezel gasket, flat front	8.00
8	30342	 Wing knobs for tilt stand	4.00
9	29635	 Tilt stand	50.00
10	15144	 Nylon washers for tilt stand, 1/4 x 1 x 1/16	.95
11	14862*	 Screws, 8-32NC x 3/8	1.00
12	16903	 Model/serial number label	1.00
13	45042*	 Sealing washers.....	1.00

* Additional parts included in parts kit.



IQ plus 710-D

Indicators & Remote Displays

IQ plus® 800 DIGITAL WEIGHT INDICATOR (OLD STYLE)

(See Diagram IQ plus 800-A)



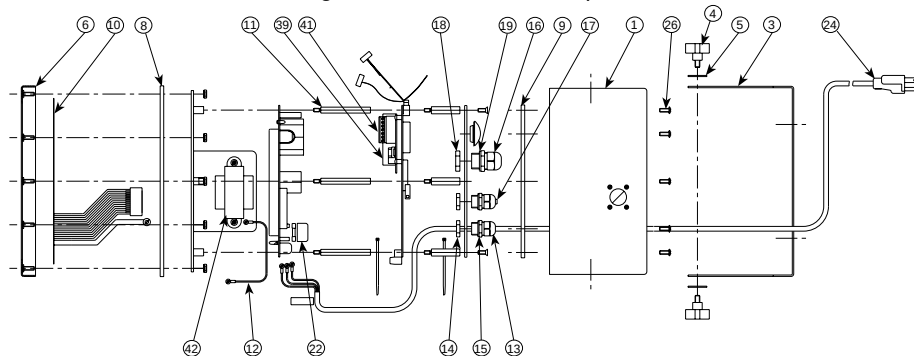
REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
	16039	Desiccant pack	\$1.80
	21735	Fuse, 4A, OPTO22	4.00
	15137	Neoprene washer	1.00
	36393	Main CPU board w/one A/D, volts calib. (SMT) (Ver. 3)	495.00
	36686	Main CPU board, 100 Hz w/volts calib. (jetpak) (SMT) (Ver. 3)	595.00
	36687	Main CPU board, dual channel w/volts calib. (SMT) (Ver. 3)	695.00
		Components of Part #36393, #36686, #36687:	
	36582	IC, EPROM, R10	85.00
	42354	Resistor, 5.1 OHM	1.00
	23155	IC, EPROM, 27C1001 32-pin, U2, Version 3.0 series	85.00
	19374	20mA chip, U22	25.00
	36584	Display/power supply board with battery (SMT)	560.00
		Components of Part #36584:	
	35993	Fuse, .25A (115)	4.00
	35994	Fuse, .125A (230)	4.00
	42355	Max 69, ACSA, U12	20.00
	19357	Analog output board	240.00
		Component of Part #19357:	
	22242	IC, Power Converter, HPR104	65.00
	19366	Quick connect	95.00
	60124	Conn., 6-pin female internal thread	18.00
	15762	Conn., 6-pin male external thread	19.00
	41106	Keyboard extension cable	15.00
	34020	Cable assembly, power, 10-position	20.00
	34021	Cable assembly, 40-pin to 10-pin	24.00
	42100	Operating manual (Version 3)	55.00
1	29642	Enclosure, cover	175.00
3	29635	Tilt stand	50.00
4	30342	Knob, wing 1/4-20NC	4.00
5	15144	Washer, nylon 1/4 x 1 x 1/16	\$.95
6	29639	Bezel, front	125.00
8	29634	Gasket, front keypad	40.00
9	29644	Gasket, rear	25.00
10	19623	Membrane switch panel	60.00
11	15401	Standoff, M-F 5/16 Hex 10-32 x 2-5/8	3.00
12	15601	Ground cable, 7"	3.00
13	15626	Cord grip, PG9	2.00
14	15627	Locknut, PG9	1.00
15	30375	Seal ring, PG9	1.00
16	15628	Cord grip, 1/2" NPT	2.00
17	19538	Plug, post screw	1.00
18	15630	Locknut, 1/2" NPT	2.00
19	30376	Seal ring, 1/2" NPT	1.00
20	15879	Terminal block, pluggable Phoenix 10-position	14.00
21	15880	Terminal block, pluggable Phoenix 12-position	14.00
22	16774	Fuse cover, 5 x 20 mm	1.00
23	19644	Battery 3 V, lithium	15.00
24	19645	Power cord assembly	9.00
25	22262	Sealing plug, 1/2" NPT	3.00
26	33257	Sealing screw, machine 10-32NF x 1/2 slotted pan-head, SS	2.00
27	15134	Washer, #8 internal tooth lock	1.00
28	14861	Screw, machine 8-32NC x 3/8 phillips pan-head	1.00
29	29637	Configuration switch access plate	15.00
30	29845	Gasket, access plate	10.00
31	14879	Screw, machine 10-32NF x 1/2 phillips flat	2.00
32	30623	Screw, 8-32NC x 7/16" drilled fillister-head	3.00
34	30625	Washer, #8 nylon	1.00
35	14632	Nut, kep 10-32NF ext star washer	1.00
36	14626	Nut, kep 8-32NC ext star washer	1.00
37	15378	Standoff, M-F 3/8 hex 10-32NC x 1-1/2	4.00
38	14869	Screw, machine 8-32NC x 3/4 phillips pan-head	1.00
39	19632	Single channel A/D (requires connector PN# 23165)	395.00

(Continued on next page)

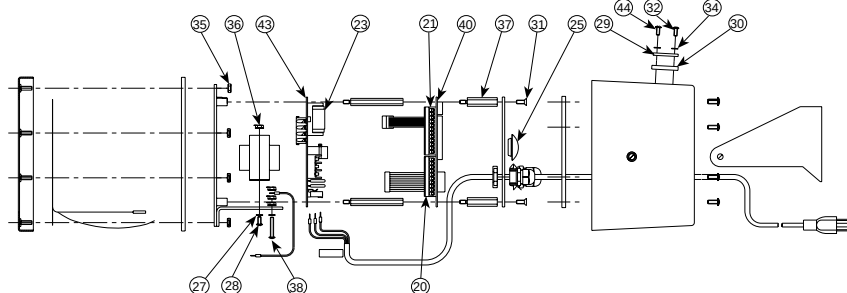
Indicators & Remote Displays

IQ plus® 800 (OLD STYLE) (Cont.) (See Diagram IQ plus 800-A)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
39	22825	Dual channel A/D (requires 2 connectors PN# 23165)	\$645.00
40	N/A	Main CPU board without A/D (unavailable as a complete unit)	N/A
		Components of Main CPU Board Without A/D:	
	16340	IC, EPROM, 27C1001 32-pin, U2, Version 2.3	85.00
	23155	IC, EPROM, 27C1001 32-pin, U2, Version 3.13 series	85.00
	16337	IC, 32K RAM, D43256AC 28-pin, U3	125.00
	16338	IC, µP 8-bit, 64180R, U1	158.00
	16339	IC, EEPROM 2K-bit CMOS, U15, 93C56 Version 2.3	18.00
	23072	IC, EEPROM 4K-bit CMOS, U15, 93C66 Version 3.0 series	18.00
	16394	IC, Op-Amp, LF353N 8-pin, U21	7.00
	16299	IC, Hex, inverter, 74HC04, U19	7.00
	16226	IC, 2 input OR gate, 74HC32, U17	2.00
	16322	IC, flip-flop, 74HCT74, U5 & U10	25.00
	16321	IC, decoder, 74HCT139, U14 & U16	4.00
	26252	IC, data latch, 74HCT373, U11	4.00
	16316	IC, flip-flop, 74HCT273, U12 & U13	7.00
	16309	IC, gate 2 input, 74HC02, U18	3.00
	16328	IC, shift register, 74HC594, U4	19.00
	16335	IC, Darlington array, U20	7.00
	16330	IC, counter, 74HC590, 16-pin, U6-U8	11.00
	16317	IC, octal buffer, 74HC244, U9	7.00
	16331	IC, RS-485 transceiver, U24	10.00
	16714	Transistor, MPS8099, Q4-Q7	2.00
	16696	Transistor, 2N3906	2.00
	15935	Switch slide PC mount	17.00
41	23165	Terminal block, pluggable Phoenix 7-position	8.00
42	19647	Transformer	140.00
43	36584	Display/power supply board	560.00
		Components of Part #36584:	
	16341	IC, µP, 75216, U1	100.00
	19644	Battery Assembly	15.00
	16473	Fuse, 1/4 A Slo-Blo, F1	4.00
	16384	IC, Voltage Regulator, 7812T, U4	4.00
	16385	IC, Voltage Regulator, 79M12, U5	6.00
	37339	IC, Voltage Regulator, 7805K, U7 & U8	5.00
	26264	IC, Voltage Regulator, 79M05, U6	10.00
	16393	IC, Comparator, LM393 8-pin, U9 & U11	4.00
	16336	IC, Voltage Monitor, MAX694, U12	85.00
	16318	IC, Flip-Flop, 74C74, U10	8.00
	16334	IC, Current Regulator, TL011CL, U13 & U14	15.00
	16534	Display, 14-segment VFD	95.00
	16719	Transistor, BUZ71A, Q3, Q7	12.00
	16497	Diode, 1N4749, D23	1.00
	16715	Transistor, 2N3904, NPN 5A	1.00
	29264	IC, LM358, Dual OP, AMP, 8-pin, DIP	14.00
44	33258	Screw, sealing, 8-32NC x 7/16 slotted pan-head SST	2.00



IQ plus 800-A



Indicators & Remote Displays

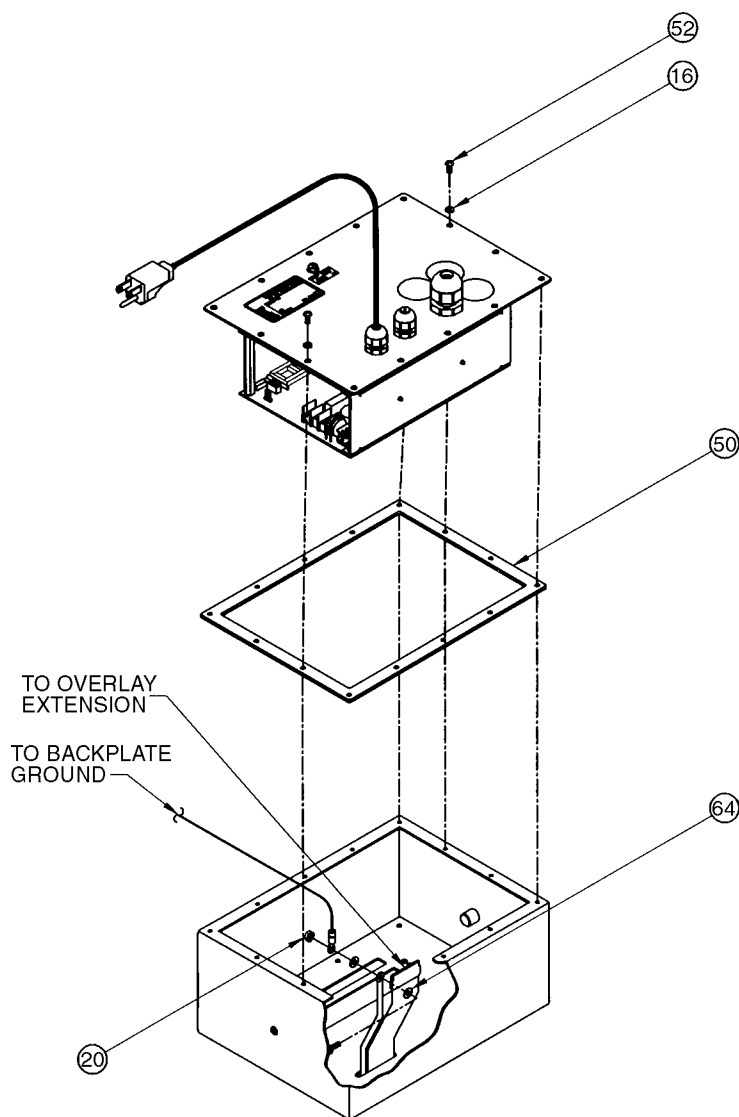
IQ plus® 800 DIGITAL WEIGHT INDICATOR (NEW STYLE)



Enclosure Assembly

(See Diagram IQ plus 800-B)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
16	45042	 Washer, bonded sealing, SS	\$1.00
20	14626	 Nut, kep, 8-32NC hex	1.00
50	40941	 Gasket, back plate	8.00
52	14862	 Screw, mach, 8-32NC x 3/8	1.00
64	15138	 Washer, plain std., No. 8, SS	1.00



IQ plus 800-B

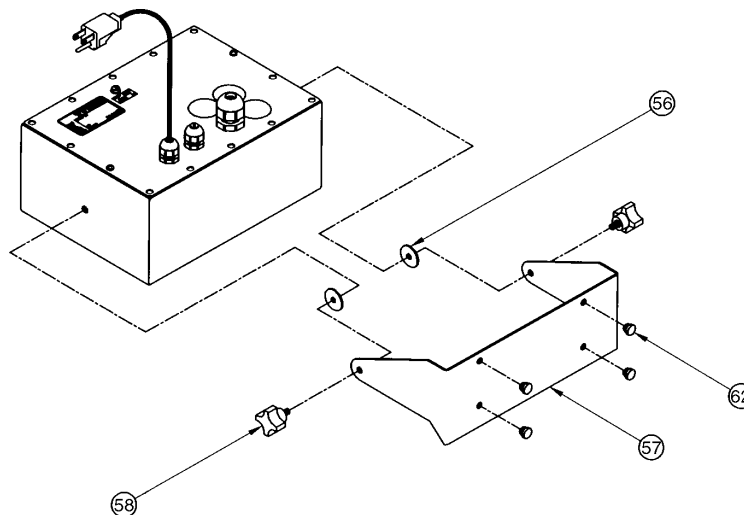
Indicators & Remote Displays

IQ plus® 800 (NEW STYLE) (Cont.)

Tilt Stand Assembly

(See Diagram IQ plus 800-C)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
56	15144	Washer, Nylon, 1/4 x 1 x 1 1/16	\$.95
57	29635	Tilt stand	50.00
58	30342	Knob, wing 1/4-20NC x 3/8	4.00
62	42149	Bumpers, rubber	1.00



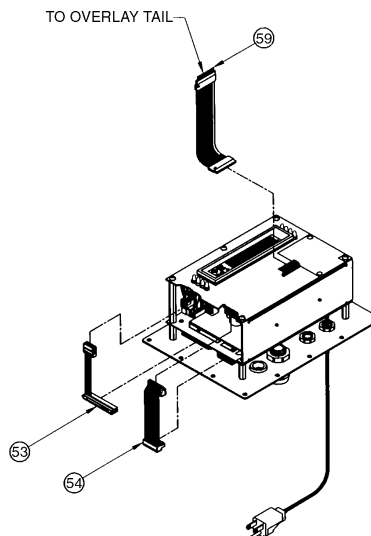
IQ plus 800-C

IQ plus® 800 (NEW STYLE) (Cont.)

Display/CPU Board Connections

(See Diagram IQ plus 800-D)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
53	34021	Cable assembly, data	\$24.00
54	34020	Cable assembly	20.00
59	41106	Ribbon cable, extension	15.00



IQ plus 800-D

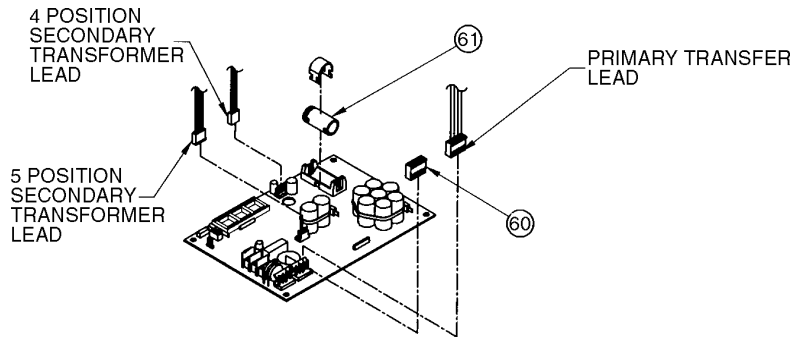
Indicators & Remote Displays

IQ plus® 800 (NEW STYLE) (Cont.)

115/230 Transformer

(See Diagram IQ plus 800-E)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
60	15695	Conn., mate-n-lock	\$2.00
61	19644	Battery, 3V cylindrical	15.00



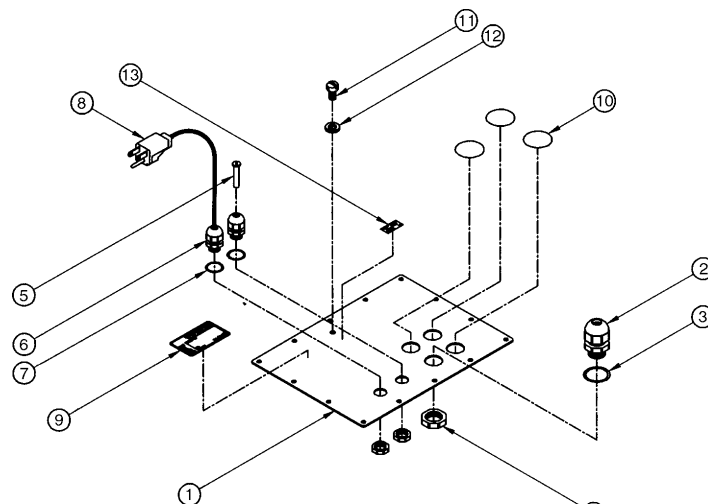
IQ plus 800-E

IQ plus® 800 (NEW STYLE) (Cont.)

Back Plate Assembly

(See Diagram IQ plus 800-F)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
1	40939	Back plate, SS	\$45.00
2	15628	Cord grip, 1/2 NPT, black	2.00
3	30376	Seal ring, nylon, 1/2 NPT, black	1.00
4	15630	Locknut, 1/2 NPT, black	2.00
5	19538	Post only, slotted	1.00
6	15626	Cable, grip, PG9	2.00
7	15657	O-ring, 0.5 x 0.07, No. 14	1.00
8	19645	Power cord assembly	9.00
9	16903	Label, model no.	1.00
10	22262	Seal, liquid tight, 1/2 NPT	3.00
11	42640	Screw, mach, 1/4-28NF x 1/4, slotted	3.00
12	44676	Washer, bonded sealing	1.00
13	41909	Label, setup switch	1.00



IQ plus 800-F

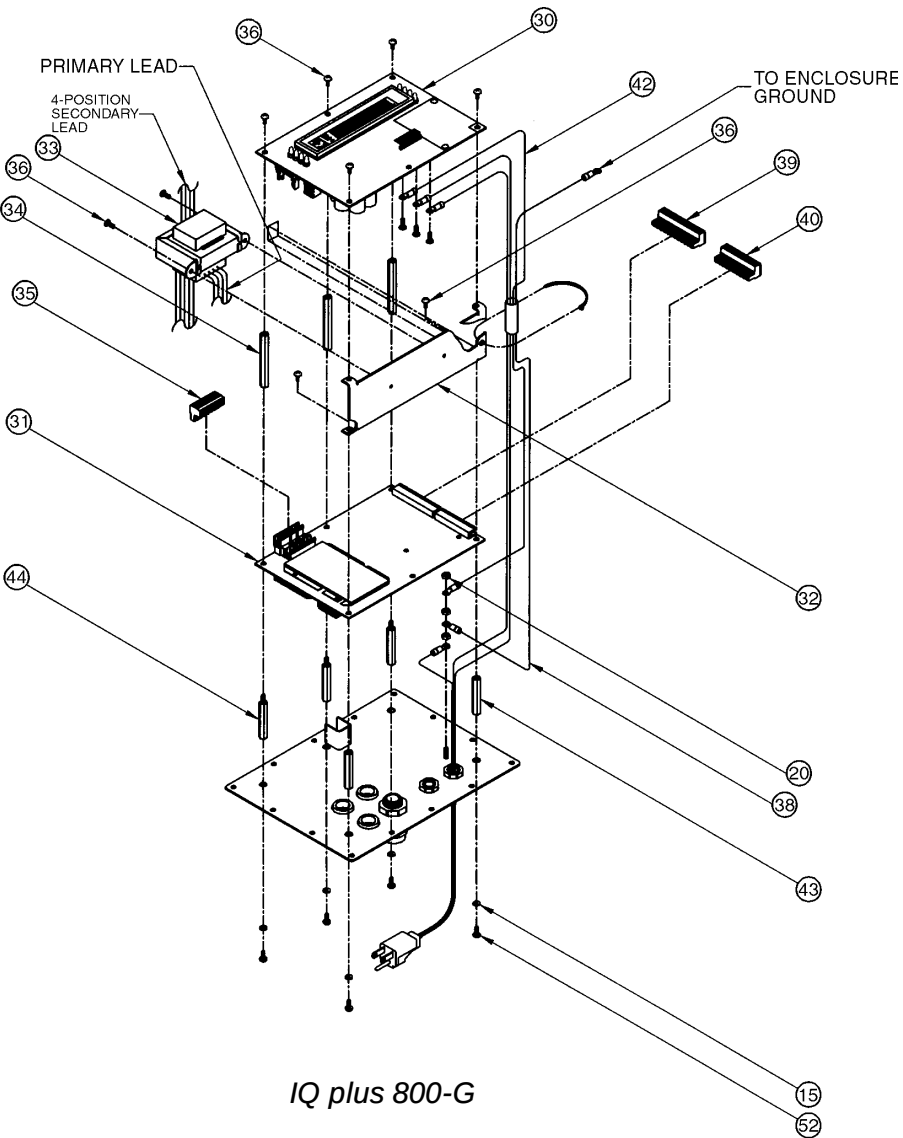
Indicators & Remote Displays

IQ plus® 800 (NEW STYLE) (Cont.)

Board Set Assembly

(See Diagram IQ plus 800-G)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
15	30625	Washer, plain, No. 8, nylon	\$1.00
20	14626	Nut, kep 8-32NC hex	1.00
30	36584	Board assembly, power display	560.00
31	36393	Board assembly, CPU	495.00
32	40942	Bracket, mounting	20.00
33	19547	Transformer	85.00
34	41573	Standoff, female-female, 8-32NC x 2 5/8 x 5/16	3.00
35	23165	Terminal block, 7-position	8.00
36	14859	Screw, mach 8-32NC x 5/16	2.00
38	15602	Wire, ground, 12" w/No. 8	3.00
39	15880	Terminal block, 12	14.00
40	15879	Terminal block, 10	14.00
42	15601	Wire, ground, 6" w/No. 8	3.00
43	41574	Standoff, female-female, 8-32NC x 1 3/4 x 5/16 hex	3.00
44	41575	Standoff, male-female, 8-32NC x 1 3/4 x 5/16 hex	3.00
52	14862	Screw, mach 8-32NC x 3/8	1.00



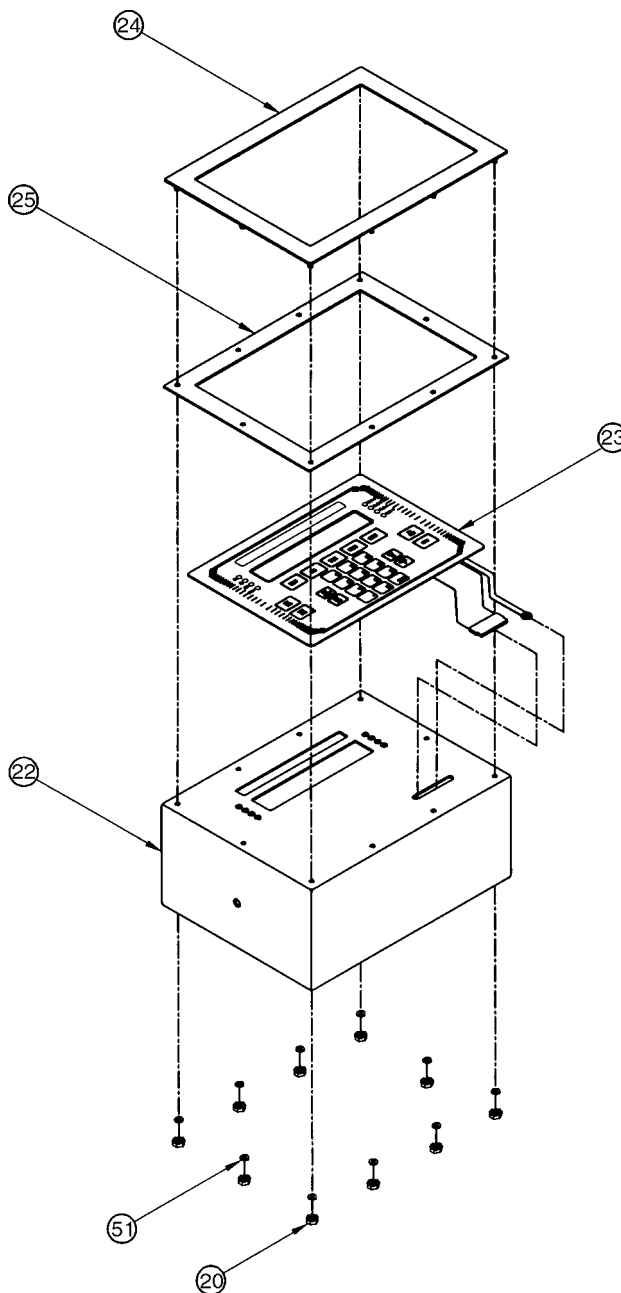
IQ plus 800-G

Indicators & Remote Displays

IQ plus® 800 (NEW STYLE) (Cont.)

Enclosure/Overlay/Bezel Assembly (See Diagram IQ plus 800-H)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
20	14626	Nut, kep 8-32NC hex	\$1.00
51	15137	Washer, neoprene, 0.145 x 0.31 x 0.062	1.00
22	40938	Enclosure, WLDT, SS	124.00
23	19623	Overlay, membrane switch	60.00
24	40940	Bezel, SS	46.00
25	41573	Gasket, bezel, SS	3.00



IQ plus 800-H

Indicators & Remote Displays

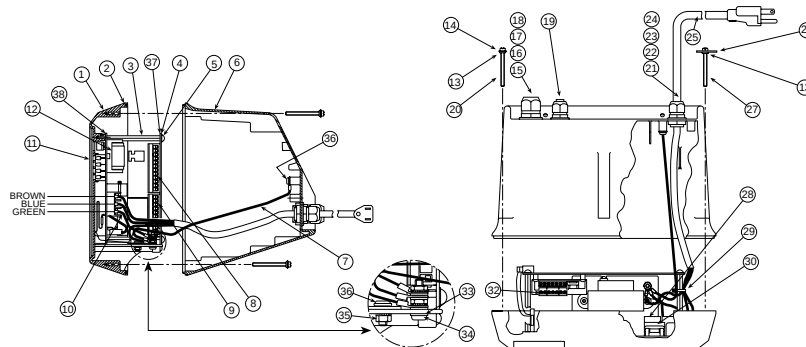
IQ plus® 810 DIGITAL WEIGHT INDICATOR

(See Diagram IQ plus 810-A)



REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
	16039	Desiccant pack	\$1.80
	42350	Capacity label	1.00
	38548	Expansion board with dual channel	640.00
	19374	Indicator option, 20mA full duplex	25.00
	35993	Fuse, .25A Slo-blo	4.00
	16880	Identification plate	3.00
	36393	Main CPU board w/one A/D, volts calib. (SMT) (Ver. 3)	495.00
	36686	Main CPU board, 100 Hz w/volts calib. (SMT) (Ver. 3)	595.00
	36687	Main CPU board, dual channel w/volts calib. (SMT) (Ver. 3)	695.00
		Components of Part #36393, #36686, #36687:	
	36582	IC, EPROM, R10	85.00
	23155	IC, EPROM, 27C1001 32-pin, U2, Version 3.0 series	85.00
	42354	Resistor, 5.1 OHM	1.00
	19374	20 mA chip, U22	25.00
	19632	Single channel A/D (requires connector P/N# 23165)	395.00
	22825	Dual channel A/D (requires 2 connectors P/N# 23165)	645.00
	23165	Terminal block, pluggable Phoenix 7-position	8.00
	19629	Expander board	895.00
	19647	Transformer	140.00
	36584	Display/power supply board with battery (SMT)	560.00
		Components of Part #36584:	
	35993	Fuse, .25A (115)	4.00
	35994	Fuse, .125A (230)	4.00
	42355	Max 69, ACSA, U12	20.00
	19357	Analog output board	240.00
		Component of Part #19357:	
	22242	IC, Power Converter, HPR104	65.00
	41106	Keyboard extension cable	15.00
	34020	Cable assembly, power, 10-position	20.00
	34021	Cable assembly, 40-pin to 10-pin	24.00
	40386	Expansion board w/dual channel A/D	640.00
	40385	Expansion board w/keyboard connector	250.00
	42100	Operating manual (Version 3)	55.00
1	19624	Enclosure, front	60.00
2	19635	Gasket "O"-ring	4.00
3	15401	Standoff, M-F 5/16 Hex 10-32 x 3-5/8	3.00
4	15140	Washer, #10 internal tooth lock	1.00
5	14875	Screw, MH 10-32 NF x 3/8 phillips pan-head	1.00
6	19625	Enclosure, rear	70.00
7	15602	Ground cable, 12"	3.00
8	15880	Terminal block, pluggable Phoenix 12-position	14.00
9	15879	Terminal block, pluggable Phoenix 10-position	14.00
10	15601	Ground cable, 6"	3.00
11	19623	Membrane switch panel	60.00
12	19644	Battery assembly, 3V cylindrical lithium type	15.00

(Continued on next page)



IQ plus 810-A

Prices F.O.B. Rice Lake, Wisconsin • January 1, 2001

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Indicators & Remote Displays

IQ plus® 810 (Cont.)

(See Diagram IQ plus 810-A)

REF #	PART #	DESCRIPTION	SUGGESTED LIST PRICE
13	15137	 Washer, neoprene .145 x .31 x .062	\$1.00
14	15138	 Washer, #8 flat	1.00
15	15628	 Cord grip, 1/2" NPT	2.00
16	15630	 Locknut, 1/2" NPT	2.00
17	30376	 Seal ring, nylon 1/2" NPT, .77 ID x .98 OD x .07	1.00
18	15665	 Reducing gland, 1/2" NPT	1.00
19	19538	 Plug, post screw	1.00
20	14873	 Screw, machine 8/32 NC x 1-3/4 SL fillister-head	1.00
21	15626	 Cord grip, PG9	2.00
22	15627	 Locknut, PG9	1.00
23	15664	 Reducing gland, 9mm & 3/8" NPT	1.00
24	15657	 "O"-Ring, .500 x .070 #014 PG9 & 3/8	1.00
25	19645	 Power cord assembly	9.00
26	19634	 Washer, sealing .062" steel	2.00
27	14872	 Screw, machine 8-32NC x 1-3/4 SL fillister-head CD	2.00
28	15695	 Mate-N-Lok housing, 4-position	2.00
29	15631	 Cable tie, 3"	1.00
30	16774	 Fuse cover, 5 x 20 mm	1.00
32	15884	 Terminal block, PCB mount 7-position	10.00
33	15134	 Washer, #8 internal tooth lock	1.00
34	14869	 Screw, machine 8-32NC x 3/4 phillips pan-head	1.00
35	14626	 Nut, kep 8-32NC ext star washer	1.00
36	14861	 Screw, machine 8-32NC x 3/8 phillips pan-head	1.00
37	N/A	 Main CPU board without A/D (unavailable as a complete unit)	N/A
		 Components of Main CPU Board Without A/D:	
	16340	 IC, EPROM, 27C1001 32-pin, U2, Version 2.3	85.00
	23155	 IC, EPROM, 27C1001 32-pin, U2, Version 3.13 series	85.00
	16337	 IC, 32K RAM, D43256AC 28-pin, U3	125.00
	16338	 IC, µP 8-bit, 64180R, U1	158.00
	16339	 IC, EEPROM 2K-bit CMOS, U15, 93C56 Version 2.3	18.00
	23072	 IC, EEPROM 4K-bit CMOS, U15, 93C66 Version 3.0 series	18.00
	16394	 IC, Op-Amp, LF353N 8-pin, U21	7.00
	16299	 IC, Hex Inverter, 74HC04, U19	7.00
	16226	 IC, 2 Input OR Gate, 74HC32, U17	2.00
	16322	 IC, Flip-Flop, 74HCT74, U5 & U10	25.00
	16321	 IC, Decoder, 74HCT139, U14 & U16	4.00
	26252	 IC, Data Latch, 74HCT373, U11	4.00
	16316	 IC, Flip-Flop, 74HC273, U12 & U13	7.00
	16309	 IC, Gate 2 Input, 74HC02, U18	3.00
	16328	 IC, Shift Register, 74HC594, U4	19.00
	16335	 IC, Darlington Array, U20	7.00
	16330	 IC, Counter, 74HC590 16-pin, U6-U8	11.00
	16317	 IC, Octal Buffer, 74HC244, U9	7.00
	16331	 IC, RS-485 transceiver	10.00
	16714	 Transistor, MPS8099, Q4-Q7	2.00
	16696	 Transistor, 2N3906	2.00
	15935	 Switch slide PC mount	17.00
38	36584	 Display/power supply board	560.00
		 Components of Part #19627:	
	16341	 IC, µP, 75216, U1	100.00
	19644	 Battery Assembly	15.00
	16473	 Fuse, 1/4 A Slo-Blo, F1	4.00
	16384	 IC, Voltage Regulator, 78M12, U4	4.00
	16385	 IC, Voltage Regulator, 79M12, U5	6.00
	37339	 IC, Voltage Regulator, LM2940CT, U7 & U8	5.00
	26264	 IC, Voltage Regulator, 79M05, U6	10.00
	16393	 IC, Comparator, LM393 8-pin, U9 & U11	4.00
	16336	 IC, Voltage Monitor, MAX694, U12	85.00
	16318	 IC, Flip-Flop, 74C74, U10	8.00
	16334	 IC, Current Regulator, TL011CL, U13 & U14	15.00
	16534	 Display, 14-segment VFD	95.00
	16719	 Transistor, BUZ71A, Q3, Q7	12.00
	16497	 Diode, 1N4749, D23	1.00
	16715	 Transistor, 2N3904, NPN 5A	1.00
	29264	 IC, LM358, Dual OP, AMP, 8-pin, DIP	14.00

Indicators & Remote Displays

SURVIVOR® 320HE & 310HE HOSTILE ENVIRONMENT DIGITAL WEIGHT INDICATORS



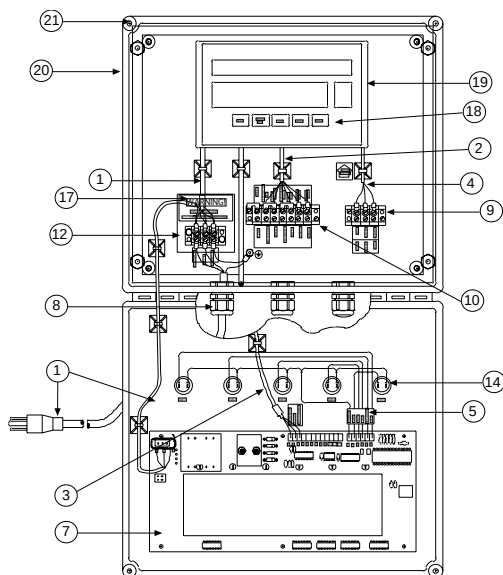
320HE



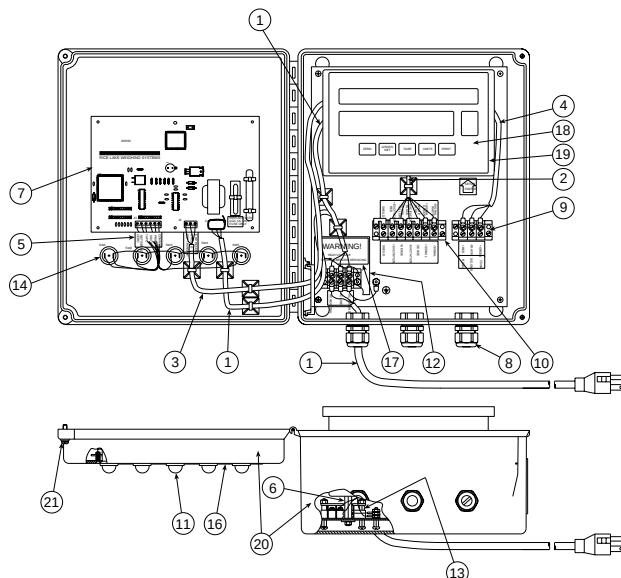
310HE

REF#	PART #	DESCRIPTION	SUGGESTED LIST PRICE
40948	.....	Light Bulb (320 HE)	\$33.00
40950	.....	Light Bulb (310 HE)	15.00
23042	.....	Main CPU/display board set, IQ plus 310A	595.00
		Components of Part #23042:	
23053	.....	IC, Program Processor, 75P216, U1	165.00
16332	.....	IC, EEPROM 1024-bit Serial, ER59C11, U2	20.00
23056	.....	IC, A/D Converter, CS5520-BP, U3	80.00
23057	.....	IC, Op-Amp, TLC2272CP, U6	7.00
16259	.....	IC, RS-232 Transceiver, MAX232, U7	4.00
16224	.....	IC, NAND Gate, 2 input, 74HCOO, U8	2.00
16534	.....	Display, 14 segment, VFD	95.00
23051	.....	Cable Assembly	25.00
23058	.....	Resistor, 17-10046RO, 8-pin DIP	35.00
23059	.....	Crystal 4.194 MHz, Y1, Y2	10.00
23043	.....	AC Power supply board	350.00
		Components of Part #23043:	
16375	.....	IC, Voltage Regulator, 7805K, Z2, Z4	5.00
16393	.....	IC, Comparator, LM393, 8-pin, Z3	4.00
26264	.....	IC, Voltage Regulator, 5 V, Fixed neg, 79M05, Z5	10.00
16473	.....	Fuse, 5 x 20 mm 1/4 A Slo-Blo, (120 VAC), F1 & F2, 250 V	4.00
16474	.....	Fuse, 5 x 20 mm 1/8 A Slo-Blo, (220 VAC), F1 & F2	10.00
16639	.....	Capacitor, 4700 uF, 16 V, C6 & C8	5.00
23049	.....	Transformer, 100, 120, 220, 240 VAC, T1	225.00
16456	.....	120 VAC fuse, 3AG 1A Slo-Blo	3.00
16445	.....	220 VAC fuse, 3AG 1/2A Slo-Blo	3.00
30911	.....	Additional mounting tabs (set of 4)	25.00
34952	.....	Addendum for SURVIVOR 320HE	5.00
22979	.....	Additional operating manual, IQ plus® 310A	35.00
1	30443	Power cord assembly, complete	30.00
2	30467	Cable assembly, load cell	15.00
3	30466	Cable assembly, EDP	12.00
4	30468	Cable assembly, printer	8.00
5	30469	Label, internal wiring (complete set)	6.00
6	30442	Standoff, 8-32NC x 1", 5/16 Hex	4.00
7	30250	310HE LCD display board with backlight	495.00

(Continued on next page)



320HE



310HE

Indicators & Remote Displays

SURVIVOR® 320HE & 310HE (Cont.)

REF#	PART #	DESCRIPTION	SUGGESTED LIST PRICE
7	35284	320HE LCD display board with backlight	695.00
		Components of Part #30250 & #35284:	
	33124	Transformer, power 115 VAC, 1" (Part #30250 only)	30.00
	36948	IC, CPU 320HE, AT89C52-12PC, (Part #35284 only)	102.00
	16375	IC, Voltage regulator 7805K	5.00
	16259	IC, RS-232 Transceiver Max 232	4.00
	16455	Fuse, Fastact 1A 3AG	2.00
	36945	Display, LCD 1"	135.00
	36946	Display, LCD 2"	360.00
	36944	Display, LCD 3"	650.00
	32703	LCD 3" display board, 115 VAC	1,025.00
8	15671	Cord grip assembly, 1/2 NPT	3.00
9	15859	Terminal strip, 3-position, dual post	4.00
10	15862	Terminal strip, 7-position, dual post	4.00
11	15895	Rubber switch cover	5.00
12	16065	Lexan power shield	3.00
13	15371	Standoff, male-female 1/2" L	1.00
	16039	Dessicant pack, 20g	1.80
14	15894	Switch, pushbutton, Type 4001	7.00
16	23117	310HE Overlay, front panel	25.00
16	35277	320HE Overlay, front panel	50.00
17	16861	Label, warning high voltage	1.00
18	23063	Membrane switch panel, IQ plus 310A	115.00
19	16092	Bezel, IQ plus 310A	54.00
20	23134	310HE Enclosure, fiberglass	345.00
20	35828	320HE Enclosure, fiberglass	345.00
21	30438	Screw, MACH 10-32NF x 3/4 slotted, drilled fillister head, SS	2.00

SURVIVOR® 390HE HOSTILE ENVIRONMENT DIGITAL WEIGHT INDICATOR

(See Diagram 390-HE)



REF#	PART #	DESCRIPTION	SUGGESTED LIST PRICE
1	49954	Display and CPU board	\$395.00
2	14845	Screws, 6-32NC x 3/8	1.00
3	53539	Push button switch assembly	72.00
4	49910	Setup switch assembly	8.00
5	14621	Kep nuts, 6-32NC hex	.50
6	53835	Setup switch bracket	8.00
7	53834	Back panel	40.00
8	53543	Power supply	115.00
9	53541	Enclosure	195.00
10	15630	Locknuts, 1/2" NPT	2.00
11	15895	Pushbutton covers	5.00
12	53542	Overlay	30.00
13	30376	Nylon seal rings, 1/2" NPT	1.00
14	15626	Cable grips, 1/2" NPT	2.00
15	15436	Power cord	8.00

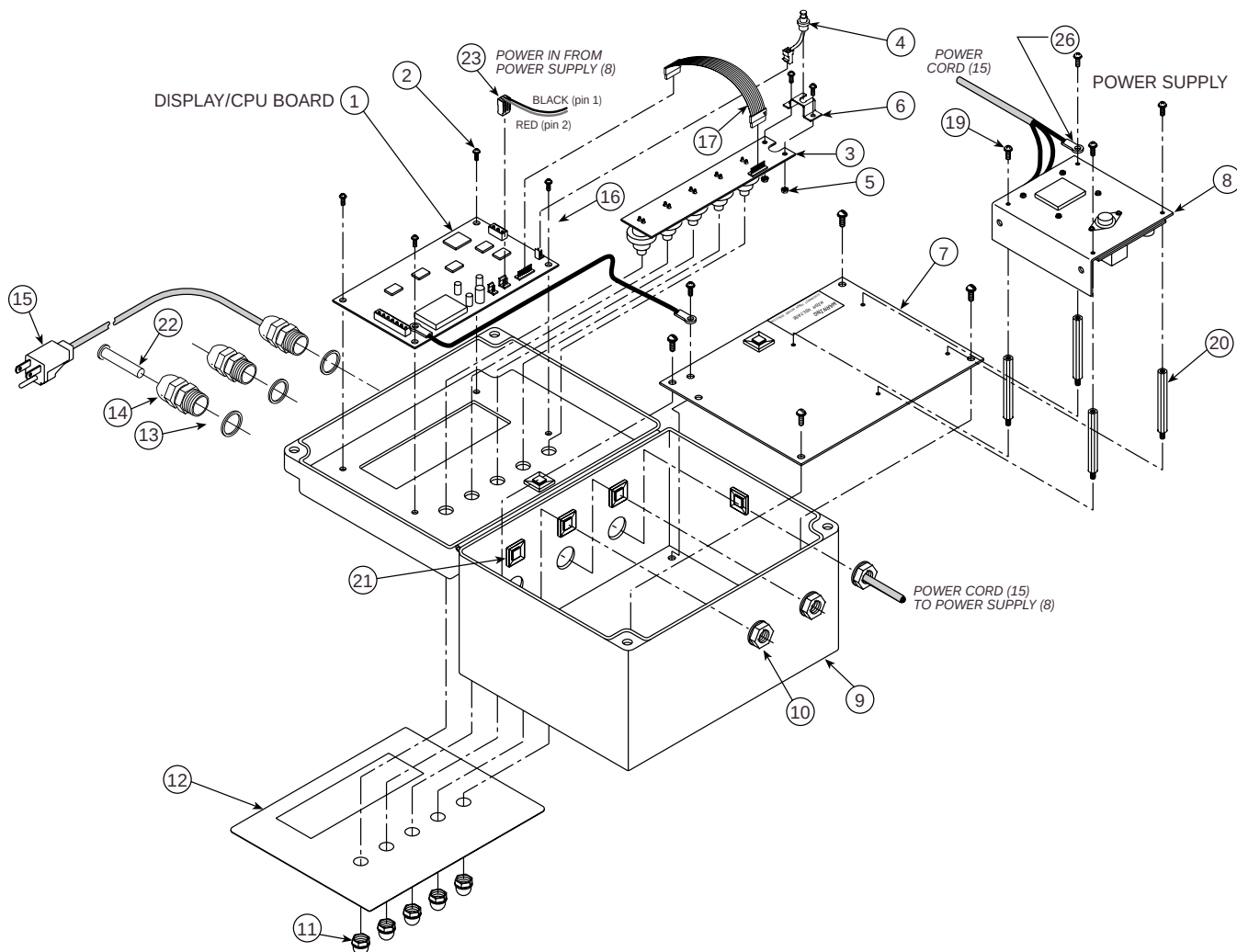
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Indicators & Remote Displays

SURVIVOR® 390HE (Cont.)

(See Diagram 390-HE)

REF#	PART #	DESCRIPTION	SUGGESTED LIST PRICE
16	15602	 Ground wire	\$3.00
17	53844	 Keypad ribbon cable assembly	25.00
19	14861	 Screws, 8-32NC x 3/8	1.00
20	61152	 Standoffs for power supply	5.00
21	15650	 Cable tie mounts	1.00
21	15631	 Cable ties	1.00
22	19538	 Cable grip plug	1.00
23	43601	 Power connector	1.00
26	15694	 Crimped eye connector	1.00



(390-HE)

Indicators & Remote Displays

SURVIVOR® 555HE HOSTILE ENVIRONMENT DIGITAL WEIGHT INDICATOR



PART #	DESCRIPTION	SUGGESTED LIST PRICE
15439	Power cord, KBE7314-1	\$21.00
60124	Socket, 6-pin internal thread	18.00
16425	Filter, EMI, KL349C	52.00
61363	UMC555 LED 12 VDC uncased	600.00
19590	Lens, red plexiglass	25.00
16052	Thumbscrew (for enclosure)	2.00
16015	Enclosure	125.00
19416	Panel, front, KHY7237D	19.00
19425	Connector kit, 6-pin unshielded, KBT7116-4	45.00
19492	Connector kit, 6-pin RFI shielded, KK7116-7	100.00
19578	Analog output 4-20 mA	545.00
19576	BCD option	545.00
15628	Cord grip, 1/2 NPT, black	2.00
15630	Locknut, 1/2 NPT, black	2.00
15894	Switch, push button	7.00
15895	Switch boot, rubber	5.00
19609	Display/keyboard assembly	250.00
19587	Power supply board, 10 V, KHA8924-1	128.00
	Components of Part #19587:	
16444	Fuse, 1/4 A Slo-Blo, F1	2.00
16748	Choke, Input, SC-02-06A2, L1	10.00
16727	Transformer, Power 120-240, T1	28.00
16488	Diode, Rectifier, IN4003, CR5-CR8	1.00
16639	Capacitor, 4700 MFD 16 V filter caps., C3 and C4	5.00
16376	IC, Voltage Regulator, LM2925T, U1 and U2	15.00
26235	Capacitor Radial Elect, 100 MFD 16 V Filter Caps, C7 and C8	2.00
19585	CPU board assembly, 10 V RFI, KGY8924-2	458.00
	Components of Part #19585:	
†19613	RFI Board, A/D Subassembly RFI	132.00
16187	EPROM, KBF1921-1-1, U11, (specify version)	28.00
16186	IC, Microprocessor, 80C31, U7	15.00
16259	IC, Transceiver Max 232 Chip, U8	4.00
16382	IC, Optoisolator, 6N136GT, U4	9.00
16224	IC, NAND Gate 2 Input, 74HC00, U6 and U10	2.00
†16255	IC, S-RAM, DS1220 24-pin, U14	30.00
†16240	IC, Hybrid A/D-63, KA8920	30.00
16298	IC, Binary Counter, 74HCT4520, U5	4.00
16376	IC, Voltage Regulator, LM2925T, U15	15.00
16262	IC, Quad 2 Input Tri-State, 74HCT257, U12	2.00
†16391	IC, Op-Amp, LT1013, U2	17.00
†16390	IC, Op-Amp, 8-pin, AD708JN, U1	18.00
26294	Voltage Comparitor, LM392, U13	4.00
63155	CPU board assembly, 10 V, KGY8924-1	458.00
	Components of Part #63155:	
16187	EPROM, KBF1921-1-1, U11, (specify version)	28.00
16186	Microprocessor, 80C31, U7	15.00
†16255	IC, S-RAM, DS1220 24-pin, U14	30.00
†16240	IC, Hybrid A/D-63, KA8920	30.00
16298	IC, Binary Counter, 74HCT4520, U5	4.00
16376	IC, Voltage Regulator, LM2925T, U15	15.00
16259	IC, Transceiver Max 232, U8	4.00
16382	IC, Optoisolator, 6N136GI, U4	9.00
16224	IC, NAND Gate 2 Input, 74HC00, U6 and U10	2.00
16262	IC, Quad 2 Input Tri-State, 74HCT257, U12	2.00
†16406	IC, Op-Amp Op-07CP 8-pin, U1 & U2	7.00
†16391	IC, Op-Amp LT1013, U3	17.00
26294	Voltage Comparitor, LM392, U13	4.00
19609	LED display board assembly	250.00
	Components of Part #19609:	
15894	Switch, Pushbutton, SW1-W4	7.00
15917	Switch, DIP 4-position, SW5	5.00
16234	IC, Display Driver, MM5450 40, U1 & U2	7.50
16529	Display, LED, HDSP-N101 7, D25-DS10	10.00
16530	LED, Light Bar, HLCP-A100, DS2, DS3, DS4, DS11 & DS12	4.00
19591	Legend Kit, Annunciator	2.00
16819	Operating manual	35.00
16815	Technical manual	85.00

† Replacement requires temperature compensation. Return to factory for repair.

Prices F.O.B. Rice Lake, Wisconsin • January 1, 2001

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Indicators & Remote Displays

IQ plus® 810HE / 810SS HOSTILE ENVIRONMENT DIGITAL WEIGHT INDICATORS



IQ plus 810HE



IQ plus 810SS

PART #	DESCRIPTION	SUGGESTED LIST PRICE
19659	Power cord assembly (IQ plus 810HE)	\$25.00
16052	Thumbscrew (for enclosure)	2.00
15404	Standoff, male to female, 10-32NC x 1/2	5.00
15879	Terminal block, pluggable Phoenix 10-position	14.00
15880	Terminal block, pluggable Phoenix 12-position	14.00
15885	Terminal block, pluggable, 4-position	9.00
15884	Terminal block, PCB mount 7-position	10.00
15895	Boot, push button, rubber (IQ plus 810HE)	5.00
15928	Lever, 3-position	45.00
15929	Contact block, N.O.	20.00
15930	Push-lock switch, 40mm	60.00
36722	Overlay, front panel	90.00
19623	Panel, membrane switch (IQ plus 810SS)	60.00
19626	Board, bar graph	195.00
19357	Board, analog output	240.00
36393	Main CPU board w/one A/D, volts calib. (SMT) (Ver. 3)	495.00
36686	Main CPU board, 100 Hz w/volts calib. (SMT) (Ver. 3)	595.00
36687	Main CPU board, dual channel w/volts calib. (SMT) (Ver. 3)	695.00
Components of Part #36393, #36686, #36687:		
36582	IC, EPROM, R10	85.00
42354	Resistor, 5.1 OHM	1.00
23155	IC, EPROM, 27C1001 32-pin, U2, Version 3.0 series	85.00
19632	Single channel A/D (requires connector P/N# 23165)	395.00
22825	Dual channel A/D (requires 2 connectors P/N# 23165)	645.00
N/A	Main CPU board without A/D (unavailable as a complete unit)	N/A
Components of Main CPU Board Without A/D:		
16340	IC, EPROM, 27C1001 32-pin, U2, Version 2.3	85.00
23155	IC, EPROM, 27C1001 32-pin, U2, Version 3.0 series	85.00
16337	IC, 32K RAM, D43256AC 28-pin, U3	125.00
16338	IC, µP 8-bit, 64180R, U1	158.00
16339	IC, EEPROM, 2K-bit CMOS, U15, 93C56 Version 2.3	18.00
23072	IC, EEPROM, 4K-bit CMOS, U15, 93C66 Version 3.0 series	18.00
16394	IC, Op-Amp, LF353N 8-pin, U21	7.00
16299	IC, Hex Inverter, 74HC04, U19	7.00
16226	IC, 2 Input OR Gate, 74HC32, U17	2.00
16322	IC, Flip-Flop, 74HCT74, U5 & U10	25.00
16321	IC, Decoder, 74HCT139, U14 & U16	4.00
26252	IC, Data Latch, 74HCT373, U11	4.00
16316	IC, Flip-Flop, 74HC273, U12 & U13	7.00
16309	IC, Gate 2 Input, 74HC02, U18	3.00
16328	IC, Shift Register, 74HC594, U4	19.00
16335	IC, Darlington Array, U20	7.00
16330	IC, Counter, 74HC590 16-pin, U6-U8	11.00
16317	IC, Octal Buffer, 74HC244, U9	7.00
23165	Terminal block, pluggable Phoenix 7-position	8.00
19629	Expander board	895.00
36854	Transformer	140.00
36584	Display/power supply board with battery (SMT)	560.00
Components of Part #36584:		
35993	Fuse, .25A (115)	4.00
35994	Fuse, .125A (230)	4.00
42355	Max 69, ACSA, U12	20.00
36584	Display/power supply board	560.00
15595	Cable assembly, power, 10-position	19.00
15596	Cable assembly, 40-pin to 10-pin	25.00
38004	Cable assembly, 10-pin (for expansion board)	27.00
38005	Cable assembly, 40-pin to 10-pin (for expansion board)	38.00
15597	Cable, keypad (810HE)	14.00
42100	Operating manual (Version 3)	55.00

Indicators & Remote Displays

SURVIVOR® IQ 700HE/IQ 700SS DIGITAL WEIGHT INDICATOR



SURVIVOR IQ 700HE

(The SURVIVOR IQ 700HE and IQ 700SS are unavailable as complete units)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
15439	Power cord, KBE7314-1	\$21.00
16052	Thumbscrew (for enclosure)	2.00
15589	Ribbon cable assembly	16.00
15590	Ribbon cable assembly 19-pin	18.00
15669	Cord grip assembly, 9mm	3.00
15895	Switch boot, rubber	5.00
16010	Enclosure, fiberglass (IQ 700HE)	175.00
16017	Enclosure, stainless steel (IQ 700SS)	589.00
29628	Overlay, mylar (IQ 700SS)	25.00
19492	Connector kit, RFI shielded 6-pin, KK7116-7	100.00
19493	Switch assembly, solid state, KL2900	202.00
19538	Plug, post screw, KF7241A	1.00
19578	Analog output 0-10 V/4-20 mA, KBY7116-4	545.00
19589	Display board assembly	400.00
19590	Window, red plexiglass	25.00
19571	AC CPU RFI board assembly, KBT7116-8	565.00
Components of Part #19571:		
16361	IC, EPROM, KBB1921-14-1, U11	28.00
16186	IC, Microprocessor, 80C31 40-pin, U7	15.00
16255	IC, S-RAM, DS1220 24-pin, U4	30.00
†16244	IC, S-RAM, DS1243 28-pin, U4 (Must have Part #16361 at U11)	60.00
16756	Transformer, Power 120-240 V/16 V @ .8, T1 DST 5-16	28.00
16444	Fuse, 1/4 A Slo-Blo, F1	2.00
16748	RFI CPU Coil KD7309A, L1	10.00
16376	IC, Voltage Regulator, LM2925T, 5V 5-pin to 220, U1	15.00
16370	IC, Voltage Regulator, LM2941CT, Adjustable 5-pin (600), U2	14.00
16371	IC, Voltage Regulator, LM2940T10, 10 V 3-pin (600), U3	6.50
16686	Transistor, NPN MJE721, Q4, 2N5191	2.00
16688	Transistor, PNP MJE711, Q5, 2N5194	3.00
†19613	Board, A/D Subassembly RFI	132.00
†16240	IC, Hybrid A/D KA8920, U3	30.00
†16390	IC, Op-Amp AD708JN, 8-pin, U1	18.00
†16391	IC, Op-Amp LT1013, U2	17.00
16298	IC, Binary Counter, 74HCT4520, U5	4.00
16259	IC, RS-232 Transceiver Max-232, U8	4.00
16382	IC, Optoisolator, 6N136GI, U14	9.00
26273	IC, Binary Counter, CD4024, U18	3.00
16224	IC, NAND Gate 2 Input, 74HC00, U6 & U10	2.00
26252	IC, Data Latch, 74HCT373, U9	4.00
16262	IC, Quad Input Tri-State, 74HCT257, U12	2.00
16326	IC, Flip-Flop Tri-State, 74HCT374, U13 and U19	7.00
16225	IC, Decoder, 74HC138 16-pin, U20	2.00
16488	Diode, Rectifier, IN4003, CR1-CR4	1.00
26242	IC, Resistor, 7.5-ohm 3W, R11	4.00
26294	IC, Voltage Comparitor, LM392, U17	4.00
16406	IC, Op-Amp, Op-07CP 8-pin, U16	7.00
26235	Capacitor, 100uF, 16V, C17	2.00
33718	Capacitor, 10uF, 25V, C27	2.50
16351	IC, RS-483 transceiver	23.00
19589	Keyboard and LED display assembly	400.00
Component of Part #19589		
15894	Switch, pushbutton	7.00
16837	Operating manual	25.00
16815	Technical manual	85.00

† Requires temperature compensation. Return to factory for replacement.

Indicators & Remote Displays

SURVIVOR® 1233HE HOSTILE ENVIRONMENT FLIP DIGIT INDICATOR



(The SURVIVOR 1233HE is unavailable as a complete unit)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
15669	Cord grip assembly, 9mm	\$3.00
15670	Cord grip assembly, 3/8" NPT	3.00
15671	Cord grip assembly, 1/2" NPT	3.00
15782	Connector, 25-pin D-subminiature solder type	22.00
15783	Connector, 25-socket, D-subminiature solder type	22.00
15786	Connector kit, 9-pin D-subminiature	18.00
15787	Connector kit, 15-pin D-subminiature	18.00
15788	Connector kit, 25-pin D-subminiature	23.00
15789	Connector kit, 37-pin D-subminiature	24.00
15894	Switch, front-panel	7.00
15895	Switch boot, rubber	5.00
16052	Thumbscrew (for enclosure)	2.00
16070	Enclosure, back panel	50.00
21025	CPU board and display	400.00
21030	Digit, 1.5" yellow	40.00

SURVIVOR® 2012HE HOSTILE ENVIRONMENT DIGITAL WEIGHT INDICATOR



(The SURVIVOR 2012HE is unavailable as a complete unit)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
15439	Power cord, KBE7314-1	\$21.00
15671	Cord grip assembly, 1/2" NPT	3.00
15787	Connector kit, 15-pin D-subminiature	18.00
15788	Connector kit, 25-pin D-subminiature	23.00
15789	Connector kit, 37-pin D-subminiature	24.00
16052	Thumbscrew (for enclosure)	2.00
16427	Filter, EMI, KK349B	20.00
19491	Parallel BCD terminal assembly, KJ8924-1	155.00
19550	Membrane switch assembly, KBD7182A	6.00
19435	CPU board assembly	685.00
Components of Part #19435:		
16442	Fuse, .25A	4.00
16375	IC, Voltage Regulator, 7805, U14 & U16	5.00
16384	IC, Voltage Regulator, 78M12, U15 & U20	4.00

(Continued on next page)

Indicators & Remote Displays

SURVIVOR® 2012HE (Cont.)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
Components of Part #19435 (Continued):		
16385	IC, Voltage Regulator, 79M12, U17 & U21	\$6.00
16745	Transformer, KJ7301A	50.00
16185	IC, EPROM, KAL1921-3-1, U2	28.00
16292	IC, Binary Counter, 74HCT161, U7	3.50
16275	IC, Hex Inverter, 7414, U6	2.00
16182	IC, I/O Expansion Port, 8243, U11 & U13	47.00
16220	IC, Hex Inverter, 7404, U19	2.00
16262	IC, Quad 2 Input Tri-State, 74HCT257, U4 & U5	2.00
16382	IC, Optoisolator, 6N136GI, U9 & U10	9.00
16639	Capacitor, 4,700 MFD 16 V Filter Cap, C1	5.00
16649	Capacitor, 1,000 MFD 35 V filter cap, C3 & C6	3.00
26235	Capacitor Radial Elect, 100 MFD 16 V Filter Cap, C2, 4, 5, 7, 27, 29	2.00
15914	Switch, 8-position DIP, S1-S3	7.00
16196	EPROM, KAL1921-1-1	28.00
19437	A/D board assembly, standard	495.00
19439	A/D board assembly, shielded	580.00
19445	A/D board assembly, shielded high speed	545.00
19521	A/D board assembly, 0-10 V w/analog zero pot	745.00
19522	A/D board assembly, 4-20 mA w/analog zero pot	995.00
Components of Parts #19437, #19439, #19445, #19521 & #19522:		
16369	IC, Op-Amp, LT 1012CH 8-pin, U1 & U2	15.00
16686	Transistor, NPN MJE721 4A, Q1	2.00
16688	Transistor, PNP MJE711 4A, Q2	3.00
19451	Filter, EMI Shielded A/D	90.00
16294	IC, Linear Switch, LF13333N, U3 & U9	11.00
16690	Transistor, Field Effect, PN4302, Q3 & Q4	2.00
16220	IC, Hex Inverter, 7404, U11	2.00
16277	IC, Quad 2 Input Nand, 74LS132, U12	2.00
16401	IC, Op-Amp, LM348 14-pin, U7	4.00
15917	Switch, 4-position DIP, S1 & S2	5.00
19478	Keyboard expander, KBR8924-1	201.00
Components of Part #19478:		
16262	IC, Quad 2 Input Tri-State, 74HCT257, U1 & U2	2.00
16207	IC, MC1488P RS-232 14-pin, U3	2.00
16382	IC, Optoisolator, 6N136GI, U4	9.00
16354	IC, EEPROM 8-pin, 93C46, U11	18.00
15914	Switch, 8-position DIP, S4 & S5	7.00
15917	Switch, 4-position DIP, S6	5.00
19502	Accumulator kit, KW116-34	82.00

UMC222 DIGITAL WEIGHT INDICATOR



PART #	DESCRIPTION	SUGGESTED LIST PRICE
64983	Overlay, membrane switch	\$35.00
63926	Board, CPU	400.00
64745	ESD suppressor board	30.00
56649	Screw, thumb	6.00
58983	Cable, grip, SL-7 w/nut	3.00
58994	Cable, grip, SL-9 w/nut	3.00
59001	Cable, grip, SL-11 w/nut	3.00
59143	Power cord	22.00
56575	Battery charger	100.00
56962	Battery, KE8902B	55.00

Indicators & Remote Displays

UMC444 & UMC555 DIGITAL WEIGHT INDICATORS



UMC444



UMC555

PART #	DESCRIPTION	SUGGESTED LIST PRICE
15726	Conn., 6-pin, male threaded, chassis mount	\$15.00
14849	Panel, captive screw	1.00
15337	Knob, tilt stand	3.00
15439	Power cord, KBE7314-1	21.00
60124	Socket, 6-pin internal thread	18.00
16425	Filter, EMI, KL349C	52.00
19425	Connector kit, unshielded 6-pin, KBT7116-4	45.00
19492	Connector kit, shielded 6-pin, KK7116-7	100.00
19578	Analog output 4-20 mA/0-10 V	545.00
19558	Enclosure, tan KT8720-1	60.00
19559	Bezel, front, KP7392B	53.00
19565	Back plate, KNY7272-1	25.00
19576	BCD option	545.00
63155	CPU assembly, 10 V RFI, KGY8924-2	458.00
Components of Part #63155:		
†19613	RFI Board, A/D Subassembly RFI (Part #63155 only)	132.00
†16390	IC, Op-Amp, 8-pin, AD708JN, U1 (Part #63155 only)	18.00
†16406	IC, Op-Amp Op-07CP 8-pin, U1 & U2	7.00
16187	IC, EPROM, KBF1921-1-1, U11 (specify version)	28.00
16186	IC, Microprocessor, 80C31, U7, KBF8918B	15.00
16259	IC, Transceiver Max RS-232, U8	4.00
16382	IC, Optoisolator, 6N136GI, U4	9.00
16224	IC, NAND Gate 2 Input, 74HC00, U6 and U10	2.00
†16255	IC, S-RAM, DS1220 24-pin, U14	30.00
†16240	IC, Hybrid A/D, KA8920	30.00
16298	IC, Binary Counter, 74HCT4520, U5	4.00
16376	IC, Voltage Regulator, LM2925T, U15	15.00
26252	IC, Data Latch, 74HCT373, U9	4.00
16262	IC, Quad 2 Input Tri-State, 74HCT257, U12	2.00
†16391	IC, Op-Amp, LT1013, U2	17.00
26294	IC, Voltage Comparitor, LM392, U13	4.00
19415	LED display assembly, KFL8924-1	183.00
Components of Part #19415:		
16234	IC, Display Driver, MM5450, U1 and U2	7.50
16522	Display Segments, LED, HDSP-5551, DS1-DS6	5.50
15917	Switch, 4-position DIP, S1	5.00
26282	POT, 10K OHM, 12-turn	12.00
19587	Power supply, 10V, KHA8924-1	128.00
Components of Part #19587:		
16444	Fuse, Slo-Blo, .25A, F1	2.00
16748	Choke, Input SC-02-06A2, L1	10.00
16727	Transformer, Power 120-240, T1	28.00
16488	Diode, Rectifier, IN4003, CR5-CR8	1.00
16639	Capacitor, 4,700 MFD 16 V Filter Caps, C3 and C4	5.00
16376	IC, Voltage Regulator, LM2925T, U1 and U2	15.00
26235	100 MFD 16 V Radical Elect., C7 and C8	2.00
58336	Power supply, 230 VAC, KHA8924-2	121.00
19612	Power supply, 12 VDC, external, KHF8924-1	82.00
59692	20 mA opto isolator 4N33, KMM1918A	4.65
30352	Rack/panel mount kit, KBT7116-5	40.00
19576	Parallel BCD, 115 VAC, KBY7116-1	545.00
55458	Parallel BCD, 230 VAC, KBY7116-2	545.00
57198	Parallel BCD, 12 VDC	575.00
57200	Serial I/O, KBY7116-11	245.00
55461	Tilt stand kit, KBY7116-3	39.00
19578	Analog 0-10 VDC or 4-20 mA, 115 VAC, KBY7116-4	545.00
55469	Analog 0-10 VDC or 4-20 mA, 230 VAC, KBY7116-5	545.00
19577*	Battery option, 115/230 VAC, KBY7116-8	160.00

* Replacement requires temperature compensation. Return to factory for repair.

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Indicators & Remote Displays

UMC444 & UMC555 (Cont.)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
30505	Switch cover, KET7302	\$4.00
19612	External 12 VDC power supply, KHF8924-1	82.00
58336	A/C power supply, 230 VAC, KHA8924-2	121.00
16819	Operating manual	35.00
16815	Technical manual	85.00
UMC444 only		
36145	Overlay, front panel, KHY7237G (UMC444)	19.00
55844	Replacement battery, KB8902A	65.00
30505	Cover bar front-panel, KET7302	4.00
54556	Front panel bezel, KMT7237-1	22.00
58031	Overlay, UMC444 stainless, KRB7237A	19.00
54206	Screw, face plate bracket	1.00
UMC555		
61363	LED 12 VDC uncased (UMC555)	600.00
19416	Overlay, front panel, KJY7237B (UMC555)	19.00
19557	Cover bar front-panel, KDF7302-1 (UMC555)	16.00
55886	Front panel plate, KHR7237-1 (UMC555)	19.00
14816	Screw, face plate bracket	12.00
19560	Board, power supply/charger 10V	295.00
19618	Round zero switch	2.00

* Use with KGH8924 power supply charger

UMC612 DIGITAL WEIGHT INDICATOR



PART #	DESCRIPTION	SUGGESTED LIST PRICE
59437	Solid state relay, KBD7431A	\$18.00
15439	Power cord, KBE7314-1	21.00
58271	Microprocessor, 80C31, KBF8918C	55.00
19488	Tilt stand kit, KBT7116-2	39.00
30352	Rack/panel mount kit, KBT7116-5	40.00
60124	6-pin standard load cell mating connector, KBT7116-9	18.00
55653	SS relay option, 4 input & 2 output, 115 VAC relays, KBT7116-16	245.00
Components of Part #55653		
59437	Relay output	218.00
57440	Relay input	28.00
55658	0-10 VSC/4-20 mA analog output, requires KBT7116-16, KBT7116-17	215.00
55660	Analog output board, KBT7116-18	230.00
55662	Relay and analog board, KBT7116-19	460.00
19575	Keyboard switch, KEF7182A	2.00
19574	Switch board assembly, JGW8924-1	114.00
19544	Face plate bracket, KHD7287-1	17.00
59500	Display assembly (LED), KJH8924-1	257.00
63227	CPU assembly, KJP8924-1	641.00
54388	Transformer, KN7301F	28.00
57143	EMI Filter, AC input, KNP7314-1	20.00
57872	Display overlay, red lens, KTW7237	8.00
19542	Front panel, KTJ7237-1	93.00
58644	Front panel overlay, keys, KTK7237A	19.00
56897	Board, ESD suppressor	42.00
55651	Relay cable, KBT7116-15	36.00
55825	Operation/calibration manual	35.00

Indicators & Remote Displays

IQ 700HB & UMC600 DIGITAL WEIGHT INDICATORS



IQ700HB



UMC600

PART #	DESCRIPTION	SUGGESTED LIST PRICE
15439	Power cord, KBE7314-1	\$21.00
58248	Nylon nut for 21-key keypad	.25
19488	Tilt stand kit, KBT7116-2	39.00
56897	Board, ESD suppressor	42.00
15337	Knob, tilt stand	3.00
19433	Foot, adhesive-backed, KN243D	2.00
15669	Cord grip assembly, 9mm	3.00
60124	Conn., 6-pin female internal thread, KBT7116-9	18.00
15748	Gasket, RFI shielding for load cell connector, KR7121A	1.00
15726	Chassis-mounted non-RFI load cell connector	15.00
16427	Filter, EMI, KL349B	20.00
55844	Battery, 12 V 1.9 AH, KB8902A (UMC600)	65.00
16436	Battery, 6 V 3AH (UMC600)	65.00
16727	Transformer (IQ 700HB) DST4A-16V non-RFI CPU bd	28.00
19391	Overlay, front-panel, full keyboard, KHK7237 (UMC600)	19.00
19404	Overlay, front-panel, full keyboard (IQ 700HB)	19.00
19406	Overlay, display, clear, KHG7237A	8.00
19539	Overlay, display, red, KMK7237B	8.00
19408	Overlay, 5-key, KHL7237A	8.00
19425	Connector kit, unshielded 6-pin, KBT7116-4	45.00
19492	Connector kit, RFI shielded 6-pin, KK7116-7	100.00
19516	Gasket, front cover, KN7121	8.00
19518	Gasket, back enclosure, KL7121	8.00
19535	Switch, power (UMC600), KDL7182A	12.00
19537	Boot, power switch, rubber (UMC600), KE7900A	7.50
19538	Plug, post screw, KF7241A	1.00
19542	Front bezel, KTJ72321	93.00
19543	Enclosure housing, stainless steel, KBE7125-1	109.00
19544	Bracket, face plate, KHD7287-2	17.00
19545	Display, 6-digit LCD, KL73758	76.00
19555	Back plate, KLT7272-1	30.00
23091	Standoff, 3-5/8"	3.00
19575	Switch, tactile (UMC600), KEF7182A	2.00
16489	Diode, 1N5817, 1A, 20V diode	2.00
16636	Capacitor, 1000NF, C-10	2.00
19578	Analog output 0-10 V/4-20 mA KBY7116-4	545.00
19571	AC CPU RFI assembly, KBT7116-8	565.00
Components of Part #19571:		
16361	IC, EPROM, KBB1921-14-1, U11	28.00
27998	IC, EPROM, KDA 1921-1, 512K, U11, KDA1921-15	28.00
16186	IC, Microprocessor, 80C31 40-pin, U7, KBF8918C	15.00
*16255	IC, S-RAM, DS1220 24-pin, U4	30.00
*16244	IC, S-RAM, DS1243 28-pin, U4 (Must have Part #16361 at U11)	50.00
16756	Transformer, Power 120-240 V/16 V @ .8, T1, DST5-16	28.00
16444	Fuse, 1/4 A Slo-Blo, F1	2.00
16748	RFI CPU Choke Input, SC-02-06A2 KD7309A, L1	10.00
16376	IC, Voltage Regulator, LM2925, 5 V 5-pin to 220, U1	15.00
16370	IC, Voltage Regulator, LM2941CT, Adjustable 5-pin (600), U2	14.00
16371	IC, Voltage Regulator, LM2940T10, 10 V 3-pin (600), U3	6.50
16686	Transistor, NPN, MJE721, Q4, 2N5191	2.00
16688	Transistor, PNP, MJE711, Q5, 2N5194	3.00
*19613	Board, A/D Subassembly RFI, KGJ8900-1	132.00
*16240	IC, Hybrid A/D, KA8920, U3 (component of Part # 19613)	30.00
*16390	IC, Op-Amp, AD708JN 8-pin, U1 (component of Part # 19613)	18.00
*16391	IC, Op-Amp, LT1013, U2 (component of Part # 19613)	17.00
16298	IC, Binary Counter, 74HC T4520,U5	4.00
16259	IC, RS-232 Transceiver MAX-232, U8	4.00
16382	IC, Optoisolator, 6N136GI, U14	9.00
* Replaces IQ600HB		

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Indicators & Remote Displays

IQ 700HB & UMC600 (Cont.)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
	Components of Part #19571 (Cont.):	
26273	IC, Binary Counter, CD4024, U18	\$3.00
16224	IC, NAND Gate 2 Input, 74HC00, U6 and U10	2.00
26252	IC, Data Latch, 74HCT373, U9	4.00
16262	IC, Quad Input Tri-State, 74HCT257, U12	2.00
16326	IC, Flip-Flop Tri-State, 74HCT374, U13 and U19	7.00
16225	IC, Decoder, 74HC138 16-pin, U20	2.00
16488	Diode, Rectifier, IN4003, CR1-CR4	1.00
26242	IC, Resistor 7.5-ohm 3W, R11	4.00
26294	IC, Voltage Comparitor, LM392, U17	4.00
16406	IC, Op-Amp, Op-07 8-pin, U16	7.00
26235	Capacitor, 100uF, 16V, C17	2.00
33718	Capacitor, 10uF, 25V, C27	2.50
36825	AC, CPU RFI, 230 VAC	565.00
N/A	DC CPU assembly, KFG8924-1 (UMC600) (unavailable as a complete unit)	N/A
	Components of DC CPU Assembly, KFG8924-1 (UMC600):	
16361	IC, EPROM, KBB1921-14-1	28.00
16186	IC, Microprocessor, 80C31 40-pin, U7	15.00
16255	IC, S-RAM, DS1220 24-pin, U14	30.00
16240	IC, Hybrid A/D, KA8920, U4	30.00
16406	IC, Op-Amp, Op-07CP 8-pin, U1 and U2	7.00
16372	IC, Op-Amp, AD648JN, 8-pin, U3	13.00
16376	IC, Voltage Regulator, LM2925T, U15 and U16	15.00
16381	IC, Voltage Regulator, LM317K, U19	7.00
16298	IC, Binary Counter, 74HC 4520, U5	4.00
16259	IC, RS-232 Transceiver MAX-232, U8	4.00
26252	IC, Data Latch, 74HCT373, U9	4.00
16262	IC, Quad 2 Input Tri-State, 74HCT257, U12	2.00
16224	IC, NAND Gate 2 Input, 74HCT00, U6 and U10	2.00
16326	IC, Flip-Flop Tri-State, 74HCT374, U13 and U19	7.00
26294	IC, Voltage Comparitor, LM392, U17	4.00
16351	RS-485 chip	23.00
19573	LED display board KGV8924-2	213.00
	Components of Part #19573:	
16234	IC, Display Driver, MM5450, U1 and U2	7.50
16236	IC, Shift Register, 74HCT164, U3	3.00
16233	IC, Hex Inverter, 74HCT04, U8	2.00
16522	Display Segments DS1-DS6	5.50
15917	Switch, 4-position DIP	5.00
16579	POT, 10K, 25-turn	7.00
16526	LED, P300, 5mm, red diffused	7.00
19600	LCD display board, KFU8924-1	231.00
	Components of Part #19600:	
16257	IC, Display Driver, MM5452, U1 and U2	12.00
16236	IC, Shift Register, 74HCT164, U3	3.00
16233	IC, Hex Inverter, 74HCT04, U8	2.00
16365	IC, Nand Buffer, 74HCT86, U4-U7	19.00
19545	DSI LCD Display Board, KC7375B	76.00
15917	Switch, 4-position DIP	5.00
16579	POT, 10K, 25-turn	7.00
19603	Keyboard with switch, KGW8924-2	125.00
19574	Switch assembly, 21-key keyboard, KGW8924-1	114.00
	Component of Part #19574:	
19575	Tactile Switch	2.00
55133	Dry contact relay (UMC600), KAT7431A	8.00
55844	Replacement battery (UMC600), KB8902A	65.00
16188	Eproms 27C256 (UMC600), KBB1921-8-1	28.00
59437	SS relays (UMC600), KBD7431A	18.00
19543	Housing enclosure w/special hole for relay kit (UMC600), KBE7125-3	109.00
19488	Tilt stand kit (UMC600), KBT7116-2	39.00
30352	Rack/panel mount kit (UMC600), KBT7116-5	40.00
55633	SS relay board, old style (UMC600), KBT7116-11	230.00
55637	Dry contact relay board, old style (UMC600), KBT7116-12	230.00

[†] Replacement requires temperature compensation. Return to factory for repair.

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Indicators & Remote Displays

IQ 700HB & UMC600 (Cont.)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
19544	Complete faceplate assembly	\$17.00
14816	Screw, face plate bracket	12.00
14847	Screw, sealing	3.00
14845	Screw, reg. SS, back enclosure	1.00
55640	RS-422/RS-485 serial board assembly (UMC600), KBT7116-13	73.00
55653	SS relay board, 4 input & 4 output, 115 VAC relays, new style (UMC600), KBT7116-16	245.00
	Components of Part #55653	
59437	Relay output	18.00
57440	Relay input	28.00
55658	0-10 VDC/4-20 mA analog output kit, no board, requires KBT7116-16 (UMC600), KBT7116-17	215.00
55662	Combination analog & relay board (UMC600), KBT7116-19 ...	460.00
55660	Analog output board, new style (UMC600), KBT7116-18	230.00
57923	Flange bezel, SST, KTT7237-1	109.00
16821	Operating manual (IQ700HB)	35.00
30261	Operating manual (UMC600)	35.00
16815	Technical manual	85.00

† Replacement requires temperature compensation. Return to factory for repair.

UMC1000 / 1000HE / 1000 PLUS DIGITAL INDICATORS



UMC1000

(The UMC1000 and 1000HE are unavailable as complete units)



UMC1000 Plus

(The UMC1000 Plus is unavailable as a complete unit)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
19432	Analog assembly, dual 1502, KAF8924-2	\$125.00
19492	RFI-shielded 6-wire connector, KK7116-7	100.00
19503	Thumbwheel tare assembly, KL8924-1	195.00
19297	Panel mount bracket kit, KW116-8	34.00
19493	Setpoint output assembly, KW116-40	202.00
57522	Front label (UMC1000)	18.00
54823	Eprom, KAR8918B	26.00
16189	Eprom, KAU1921-7-1 (UMC1000)	26.00
16190	Eprom, keyboard, KAU1921-16-1 (UMC1000AACC)	26.00
19422	Front panel, KJ7182 (UMC1000AAAA)	65.00
16743	Transformer, KDJ2301A	29.00
19580	Case, KE8720	137.00
59628	Crystal, KF357A	5.00
19547	Chassis assembly, KG7303-1	85.00
15437	Power cord (UMC1000HE)	15.00
15439	Power cord, KBE7314-1 (UMC1000/1000 Plus)	21.00
19417	Display assembly, KF8924-1 (UMC1000)	174.00
15748	RFI shielding gasket for load cell connector, KR7121A (UMC1000HE/1000 uncased)	1.00
19425	Connector kit, unshielded 6-pin, KBT7116-4	45.00
19433	Foot, rubber adhesive, KN243D	2.00
19492	Connector kit, RFI shielded 6-pin, KK7116-7	100.00
57494	Connector assembly, KK7116-1 (UMC1000)	18.00
15895	Switch boot (1000HE)	5.00
16476	Thermostat (1000HE)	77.00
16767	Heater pad (1000HE)	92.00
15894	Switch, push button (1000HE)	7.00
15669	Cord grip assembly, 9mm	3.00
15670	Cord grip assembly, 3/8" NPT	3.00

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Indicators & Remote Displays

UMC1000/1000HE/1000 (Cont.)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
15671	Cord grip assembly, 1/2" NPT	\$3.00
60124	Socket, 6-pin internal thread	18.00
15788	Connector kit, 25-pin D-subminiature	23.00
16425	Filter, EMI, KL349C (UMC1000/1000 Plus)	52.00
N/A	CPU board assembly, (UMC1000) (unavailable as a complete unit)	N/A
N/A	CPU board assembly, (UMC1000 Plus) (unavailable as a complete unit)	N/A
	Components of CPU Board Assembly (UMC1000/1000 Plus):	
16444	Fuse, 1/4 A Slo-Blo	2.00
16375	IC, Voltage Regulator, 7805, U16	5.00
16399	IC, Regulator, 78M15 15V, U17	4.00
16384	IC, Voltage Regulator, 78M12, U18	4.00
16385	IC, Voltage Regulator, 79M12, U19	6.00
16386	IC, Op-Amp Op-07/U4714C, U1, U2, U3, U20, U21	20.00
16294	IC, Linear Switch, LF13333N, U5	11.00
16401	IC, Op-Amp, LM348 14-pin, U4	4.00
16228	IC, NAND Gate 2 Input, 14-pin 74LS00, U7	2.00
16283	IC, uP INS8039 40-pin CMOS, U9	53.00
16189	IC, EPROM, KAU1921-7-1 (1000/1000HE), U11	26.00
16190	IC, EPROM, KAU1921-16-1 (1000 Plus), U11	26.00
16354	IC, EEPROM, 9346 Memory Chip 8-pin (1000 Plus)	18.00
16292	IC, Binary Counter, 74HCT161, U15	3.50
16182	IC, I/O INS8243 24-pin, U10	47.00
16276	IC, Buffer/Driver, 7417, U6	2.00
16207	IC, MC1488P RS-232 14-pin, U22	2.00
16743	Transformer, KDJ2301A	29.00
15914	Switch, 8-position DIP	7.00
19417	Display board, KF8924-1 (UMC1000, UMC1000 Plus)	174.00
	Components of Part #19417:	
16327	IC, Display Driver, 74C912, U1	95.00
16293	IC, Flip-Flop, 74LS377, U2	4.00
N/A	Display board (1000HE) (unavailable as a complete unit)	N/A
	Component of Display Board (1000HE):	
19464	Display segment, LED	3.00
16816	Operation/calibration manual (UMC1000)	35.00

Indicators & Remote Displays

UMC1004/1004SS DIGITAL INDICATORS



UMC1004SS

(The UMC1004 and UMC1004SS are unavailable as complete units)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
19492	RFI-shielded 6-wire connector, KK7116-7	\$100.00
19503	Thumbwheel tare assembly, KL8924-1	195.00
19297	Panel mount bracket kit, KW116-8	34.00
19493	Setpoint output assembly, KW116-40	202.00
19297	Panel mount bracket kit, W116-8	34.00
16191	Eprom, KAU1921-10-1 (UMC1004)	26.00
15436	Power cord, A7131 (UMC1004SS)	8.00
15439	Power cord, KBE7314-1 (UMC1004)	21.00
15748	RFI shielding gasket for load cell connector	1.00
19433	Foot, rubber adhesive, KN243D	2.00
19447	Overlay, front-panel auto zero, KWU182, (UMC1004)	29.00
19464	Display segment, LED, KBD375C	3.00
19492	Connector kit, RFI shielded 6-pin, KK7116-7	100.00
15669	Cord grip assembly, 9mm	3.00
15670	Cord grip assembly, 3/8" NPT	3.00
15671	Cord grip assembly, 1/2" NPT	3.00
60124	Socket, 6-pin internal thread	18.00
15788	Connector kit, 25-pin D-subminiature	23.00
19467	Bezel display assembly (UMC1004SS)	98.00
19472	Bezel display assembly (UMC1004)	108.00
15894	Switch, push button	7.00
15895	Switch boot, rubber	5.00
19609	Display/keyboard assembly	250.00
N/A	*CPU board assembly, KK77116-2, KAU1921-7-1 (unavailable as a complete unit)	N/A
	Components of CPU Board Assembly, KK77116-2, KAU1921-7-1:	
16444	Fuse, 1/4 A Slo-Blo	2.00
16375	IC, Voltage Regulator, 7805, U16	\$5.00
16399	IC, Regulator, 78M15 15 V, U17	4.00
16384	IC, Voltage Regulator, 78M12, U18	4.00
16385	IC, Voltage Regulator, 79M12, U19	6.00
16386	IC, Op-Amp Op-07/U4714C, U1, U2, U3, U20, U21	20.00
16294	IC, Linear Switch, LF13333N, U5	11.00
16401	IC, Op-Amp, LM348 14-pin, U4	4.00
16228	IC, NAND Gate 2 Input, 14-pin 74LS00, U7	2.00
16283	IC, uP INS8039 40-pin CMOS, U9	53.00
16292	IC, Binary Counter, 74HCT161, U15	3.50
16262	IC, Quad 2 Input Tri-State, 74HCT257, U13, U14	2.00
16182	IC, I/O INS8243 24-pin, U10	47.00
16276	IC, Buffer/Driver, 7417, U6	2.00
16207	IC, MC1488P RS-232 14-pin, U22	2.00
16743	Transformer, KDJ2301A	29.00
15914	Switch, 8-position DIP	7.00
19461	Display board, KQ116-12, KW116-12	284.00
	Components of Part #19461:	
16327	IC, Display Driver, 74C912, U1	95.00
16293	IC, Flip-Flop, 74LS377, U2	4.00
19547	Chassis assembly, KG7303-1	85.00
19472	Display bezel assembly, KW116-27 (UMC1004)	108.00
19580	Case, KE8720	137.00
59628	Crystal, KF357A	5.00
16822	Operating manual (UMC1000 Plus)	35.00
16816	Operating manual (UMC1000/15000)	35.00

Indicators & Remote Displays

UMC1100 DIGITAL INDICATOR



(The UMC1100 is unavailable
as a complete unit)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
19432	Analog assembly, dual 1502, KAF8924-2	\$125.00
15748	RFI shielding gasket for load cell connector, KR7121A	1.00
16743	Transformer, KDJ2301A	29.00
19417	Display assembly, KF8924-1	174.00
19433	Foot, rubber adhesive, A1GAA001	2.00
19464	Display segment, LED, KBD375C	3.00
16743	Transformer, KDJ2301A	29.00
19547	Chassis assembly, KG7303-1	85.00
19492	RFI-shielded 6-wire connector, KK7116-7	100.00
19503	Thumbwheel tare assembly, KL8924-1	195.00
19297	Panel mount bracket kit, KW116-8	34.00
19493	Setpoint output assembly, KW116-40	202.00
19297	Panel mount bracket kit, W116-8	34.00
19580	Case, KE8720	137.00
59628	Crystal, KF357A	5.00
16816	Operating manual	35.00

UMC1500 / UMC1502 DIGITAL INDICATORS



UMC1500

(The UMC1500 and UMC1502
are unavailable as complete units)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
19432	Analog assembly, dual 1502, KAF8924-2	\$125.00
19417	Display assembly, KF8924-1 (UMC1500)	174.00
15748	RFI shielding gasket for load cell connector, KR7121A	1.00
16425	Filter, EMI	52.00
16743	Transformer, KDJ2301A	29.00
16194	Eprom, KAW1921-2-1 (UMC1502)	26.00
19433	Foot, rubber adhesive, A1GAA001	2.00
19492	Connector kit, RFI shielded 6-pin, KK7116-7	100.00
57494	Connector assembly, KK7116-1 (UMC1500)	18.00
19547	Chassis assembly, KG7303-1	85.00
19492	RFI-shielded 6-wire connector, KK7116-7	100.00
19503	Thumbwheel tare assembly, KL8924-1	195.00
19493	Setpoint output assembly, KW116-40	202.00
19580	Case, KE8720	137.00
59628	Crystal, KF357A	5.00
16823	Operation/calibration manual	35.00

Indicators & Remote Displays

UMC2000 DIGITAL WEIGHT INDICATOR



PART #	DESCRIPTION	SUGGESTED LIST PRICE
19447	Overlay, front-panel auto zero	\$29.00
19449	Overlay, front-panel display check, KVT182	29.00
16185	Eprom, standard, KAL1921-3-1	28.00
16201	Eprom, full duplex, KAL1921-10-1	28.00
16197	Eprom, 6-digit display, KAL1921-14-1	28.00
19453	Filter, EMI A/D analog output, KBR125-2	152.00
19489	Board, RS-232 simplex, KDB8924-1	178.00
19498	Serial I/O kit, 20 mA full duplex, KW116-30	284.00
19500	Serial I/O kit, RS-232, KW116-31	284.00
19485	Board, 6-pack multiple serial out	295.00
15437	Power cord (old style) KSW314	15.00
15438	Power cord (new style)	10.00
16052	Thumbscrew for enclosure	2.00
16425	Filter, EMI, KL349C, KW349A	52.00
19385	Lens, KG lightbar, KY373A	2.50
19386	Lens, LB lightbar, KY373B	2.50
19456	Case, KHU1720	100.00
19435	CPU board assembly, KW116-33	685.00
	Components of Part #19435:	
16444	Fuse, .25A Slo-Blo	2.00
16375	IC, Voltage Regulator, 7805, U14 & U16	5.00
16384	IC, Voltage Regulator, 78M12, U15 & U20	4.00
16385	IC, Voltage Regulator, 79M12, U17 & U21	6.00
16745	Transformer, KJ7301A	50.00
16283	IC, Microprocessor, INS8039, 40-pin, CMOS, UMC 1-2000	53.00
16185	IC, EPROM, KAL1921-3-1, U2	28.00
16292	IC, Binary Counter, 74HCT161, U7	3.50
16275	IC, Hex Inverter, 7414, U6	2.00
16182	IC, I/O Expansion Port, 8243, U11 & U13	47.00
16220	IC, Hex Inverter, 7404, U19	2.00
16262	IC, Quad 2 Input Tri-State, 74HCT257, U4 & U5	2.00
16382	IC, Optoisolator, 6N136GI, U9 & U10	9.00
16639	Capacitor, 4,700 MFD 16 V filter cap, C1	5.00
26235	Capacitor Radial Elect., 100 MFD 16 V Filter Cap, C2, 4, 5, 7, 27, 29	2.00
16649	Capacitor, 1,000 MFD 35 V filter cap, C3 & C6	3.00
15914	Switch, 8-position DIP, S1-S3	7.00
16495	Diode, 1N914, CR4	1.00
19378	Display board assembly, 6-digit, KNW1924-3	284.00
19458	Display board assembly, 6-digit, KNW1924-1	284.00
19434	Display board assembly, 5-digit, KW116-11	284.00
	Components of Part #19434 & #19458:	
16327	IC, Display Driver, 74C912, U1	95.00
16293	IC, Flip-Flop, 74LS377, U2	4.00
19465	Cable, display board	48.00
19437	A/D board assembly, standard, KW116-9	495.00
19439	A/D board assembly, shielded	580.00
19441	A/D board assembly, shielded 0-10 V, KW116-7	695.00
19443	A/D board assembly, shielded 4-20 mA, KW116-17	895.00

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Indicators & Remote Displays

UMC2000 (Cont.)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
19445	A/D board assembly, shielded hi-speed	\$545.00
	Components of Parts #19437, #19439, #19441, #19443 & #19445:	
16369	IC, Op-Amp, LT 1012CH 8-pin, U1 & U2	15.00
16686	Transistor NPN, MJE721 4A, Q1	2.00
16688	Transistor PNP, MJE711 4A, Q2	3.00
19451	Filter, EMI shielded A/D, KBR125-1	90.00
16386	IC, Op-Amp, Op-07/VA714C, U4-U6	20.00
16294	IC, Linear Switch, LF1333N, U3 & U9	11.00
16690	Transistor, Field Effect, PN4302, Q3 & Q4	2.00
16220	IC, Hex Inverter, 7404, U11	2.00
16277	IC, Quad 2 Input Nand, 74LS132, U12	2.00
16401	IC, Op-Amp, LM348 14-pin, U7	4.00
15917	Switch, 4-position DIP, S1 & S2	5.00
19455	Shaft, analog zero	24.00
19460	"O"-Ring, analog zero shift	3.50
19508	Analog zero kit	15.00
19553	Cable, A/D to CPU	13.00
15338	Knob, analog zero control	9.00
15339	Knob, lock analog zero	20.00
54831	Thumbwheel assembly, KAA8924-1	190.00
19605	Tri-state buffer assembly, KBF8924-1	212.00
55109	Display digit, 0-9, KBJ375A	13.00
55112	Display digit, +/-1, KBJ375B	10.00
19478	Keyboard expander, KBR8924-1	201.00
19563	Filter plate, KBT2272	7.50
19480	Keyboard I/O assembly, KBT8924-1	103.00
54179	IC-output driver 8243, 611, 12, 13, 18, KFM1918V	29.00
59196	Remote solid state switch for setpoint operation 115/230 VAC at 1.5A, KHK431C	40.00
19491	Parallel I/O assembly, KJ8924-1	155.00
56883	Display expander assembly, KLB1924-1	79.00
57205	Cable assembly, KMA1314-1	48.00
15437	Power cord, old, KSW314	15.00
56503	DIP switch, 8-position, KTF182F	7.00
55395	Chassis, KTM303-1	48.00
16425	Filter, KU349A	52.00
19297	Panel mount bracket, KW116-8	34.00
19495	Setpoint/tare thumbwheel assembly, KW116-20	225.00
19497	Parallel BCD terminal, KW116-21	158.00
19502	Accumulate feature, KW116-34	82.00
15923	Pushbutton switch, oil-tight, KWD182A	50.00
29279	Resistor, 500-ohm, 20 turn POT, front	12.00
29276	Resistor, 20,000 20 turn POT, top	12.00
16824	Operating manual	35.00
16817	Technical manual	55.00
16830	Hi-speed batching manual supplement	25.00

See Rice Lake Weighing Systems' Distributor Policy Manual for Exchange Board Program details.

Indicators & Remote Displays

UMC2002/2004 DIGITAL WEIGHT INDICATORS



UMC2002

PART #	DESCRIPTION	SUGGESTED LIST PRICE
16052	Thumbscrew for enclosure	\$2.00
19467	Bezel, display	98.00
16185	Eprom, standard, KAL1921-3-1	28.00
16201	Eprom, full duplex, KAL1921-10-1	28.00
16197	Eprom, 6-digit display, KAL1921-14-1	28.00
16427	Filter, EMI, KK349B	20.00
15436	Power cord, A7131	8.00
15671	Cord grip assembly, 1/2" NPT	3.00
19467	Display bezel kit, KW116-26 (UMC2002/2004)	98.00
19386	Lens, LB light bar, KY373B	2.50
19385	Lens, KG light bar, KY373A	2.50
19468	Bezel, thumbwheel switch, KAJ392-1	25.00
19469	Cover, thumbwheel switch, clear	26.00
19495	Switch assembly, thumbwheel, KW116-20	225.00
19489	Board, simplex RS-232	178.00
15899	Switch, push button operator	34.00
15898	Contact block, switch single pole	21.00
19466	Terminal block, AC	5.00
19498	Serial I/O kit, 20 mA bidirectional	284.00
19500	Serial I/O kit, RS-232 bidirectional	284.00
16573	Potentiometer, 500-ohm 10-turn 1/4	60.00
16197	EPROM, 6-digit display, KAL1921-14-1	28.00
19435	CPU board assembly	685.00
	Components of Part #19435:	
16444	Fuse, Fastact .25A	2.00
16375	IC, Voltage Regulator, 7805, U14 & U16	5.00
16384	IC, Voltage Regulator, 78M12, U15 & U20	4.00
16385	IC, Voltage Regulator, 79M12, U17 & U21	6.00
16745	Transformer, KJ7301A	50.00
16185	EPROM, KAL1921-3-1, U2	28.00
16292	IC, Binary Counter, 74HCT161, U7	3.50
16275	IC, Hex Inverter, 7414, U6	2.00
16182	I/O Expansion Port, 8243, U11 & U13	47.00
16220	IC, Hex Inverter, 7404, U19	2.00
16262	IC, Quad 2 Input Tri-State, 74HCT257, U4 & U5	2.00
16382	IC, Optoisolator, 6N136GI, U9 & U10	9.00
16639	Capacitor, 4,700 MFD 16 V filter cap, C1	5.00
26235	Capacitor Radial Elect, 100 MFD 16 V Filter Cap, C2, 4, 5, 7, 27, 29	2.00
16649	Capacitor, 1,000 MFD 35 V filter cap, C3 & C6	3.00
15914	Switch, 8-position DIP, S1-S3	7.00
19458	Display board assembly, 6-digit, long cable, KNW1924-1	284.00
19461	Display board assembly, 5 1/2-digit, KW116-12	284.00
	Components of Part #19458 & #19461:	
16327	IC, Display Driver, 74C912, U1	95.00
16293	IC, Flip-Flop, 74LS377, U2	4.00
19437	A/D board assembly, standard	495.00
19439	A/D board assembly, shielded, KW116-6	580.00
19445	A/D board assembly, shielded hi-speed	545.00
19521	A/D board assembly, 0-10 V w/analog zero pot	745.00

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Indicators & Remote Displays

UMC2002/2004 (Cont.)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
19522	A/D board assembly, 4-20 mA w/analog zero pot	\$995.00
	Components of Parts #19437, #19439, #19445, #19521 & #19522:	
16369	IC, Op-Amp, LT 1012CH 8-pin, U1 & U2	15.00
16686	Transistor, NPN, MJE721 4A, Q1	2.00
16688	Transistor, PNP, MJE711 4A, Q2	3.00
19451	Filter, EMI Shielded A/D, KBR125-1	90.00
16386	IC, Op-Amp Op-07/VA714C, U4-U6	20.00
16294	IC, Linear Switch, LF13333N, U3 & U9	11.00
16690	Transistor, Field Effect, PN4302, Q3 & Q4	2.00
16220	IC, Hex Inverter, 7404, U11	2.00
16277	IC, Quad 2 Input Nand, 74LS132, U12	2.00
16401	IC, Op-Amp, LM348 14-pin, U7	4.00
15917	Switch, 4-position DIP, S1 & S2, KTF182G	5.00
15338	Knob, analog zero control	9.00
15339	Knob, lock analog zero	20.00
54831	Thumbwheel assembly, KAA8924-1	190.00
19605	Tri-state buffer assembly, KBF8924-1	212.00
55109	Display digit, 0-9, KBJ375A	13.00
55112	Display digit, +/-1, KBJ375B	10.00
19478	Keyboard expander, KBR8924-1	201.00
19563	Filter plate, KBT2272	7.50
19480	Keyboard I/O assembly, KBT8924-1	103.00
15438	Power cord, new, KFA1314A	10.00
54179	IC-output driver 8243, KFM1918V	29.00
59196	Remote solid state switch for setpoint operation 115/230 VAC at 1.5A, KHK431C	40.00
19491	Parallel I/O assembly, KJ8924-1	155.00
56883	Display expander assembly, KLB1924-1	79.00
57205	Cable assembly, KMA1314-1	48.00
56503	DIP switch, 8-position, KTF182F	7.00
55395	Chassis, KTM303-1	48.00
16425	Filter, KU349A	52.00
19297	Panel mount bracket, KW116-8	34.00
19497	Parallel BCD terminal, KW116-21	158.00
19502	Accumulate feature, KW116-34	82.00
15923	Pushbutton switch, oiltight, KWD182A	50.00
16824	Operating manual	35.00
16817	Technical manual	55.00
16830	Hi-speed batching manual supplement	25.00

Indicators & Remote Displays

UMC2006/2008 DIGITAL WEIGHT INDICATORS



UMC2006



UMC2008

PART #	DESCRIPTION	SUGGESTED LIST PRICE
15439	Power cord, KBE7314-1	\$20.00
16195	Eprom, standard, KAL1921-4-1	28.00
15671	Cord grip assembly, 1/2" NPT	3.00
55973	Connector kit, 15-pin D-subminiature, KKU354BW	21.00
55986	Connector kit, 25-pin D-subminiature, KKU354BZ	28.00
55947	Connector kit, 37-pin D-subminiature, KKU354CB	31.00
16427	Filter, EMI, KK349B	20.00
19447	Overlay, front-panel auto zero, KWU182	29.00
19466	Terminal block, KTV3300A (UMC2006)	5.00
19468	Bezel, thumbwheel	25.00
19495	Switch assembly, thumbwheel, KW116-20	225.00
19469	Cover, thumbwheel clear, KDU2302	26.00
19471	Cable, expander board, KGS1314-2	25.00
19472	Bezel, display, KW116-27	108.00
19473	Cable assembly, CPU, KBF7314-1	40.00
19491	Board, parallel BCD terminal assembly KJ8924-1	155.00
19461	Board, display, KW116-12	284.00
20938	Intellidrive board, 120 VAC 4-channel	250.00
54774	CPU board assembly w/out EPROM	665.00
	Components of Part #54774:	
16444	Fuse, slo blo	2.00
16375	IC, Voltage Regulator 7805, U14 & U16	5.00
16384	IC, Voltage Regulator, 78M12, U15 & U20	4.00
16385	IC, Voltage Regulator, 79M12, U17 & U21	6.00
16745	Transformer, KJ7301A	50.00
16292	IC, Binary Counter, 74HCT161, U7	3.50
16275	IC, Hex Inverter, 7414, U6	2.00
16182	I/O Expansion Port, 8243, U11 & U13	47.00
16220	IC, Hex Inverter, 7404, U19	2.00
16262	IC, Quad 2 Input Tri-State, 74HCT257, U4 & U5	2.00
16382	IC, Optoisolator, 6N136GI, U9 & U10	9.00
16639	Capacitor, 4,700 MFD 16 V Filter Cap, C1	5.00
16649	Capacitor, 1,000 MFD 35 V filter cap, C3 & C6	3.00
15914	Switch, 8-position DIP, S1-S3	7.00
19461	Display board assembly, KW116-12	284.00
	Components of Part #19461:	
16327	IC, Display Driver, 74C912, U1	95.00
16293	IC, Flip-Flop, 74LS377, U2	4.00
19437	A/D board assembly, standard, KW116-7	495.00
19439	A/D board assembly, shielded, KW116-6	580.00
19445	A/D board assembly, shielded high speed	545.00
19521	A/D board assembly, 0-10 V w/analog zero pot	745.00
19522	A/D board assembly, 4-20 mA w/analog zero pot	995.00
	Components of Parts #19437, #19439, #19445, #19521 & #19522:	
16369	IC, Op-Amp, LT 1012CH 8-pin, U1 & U2	15.00
16686	Transistor NPN, MJE721 4A, Q1	2.00
16688	Transistor PNP, MJE711 4A, Q2	3.00
19451	Filter, EMI Shielded A/D, KBR125-1	90.00
16386	IC, Op-Amp Op-07/VA714C, U4-U6	20.00
16294	IC, Linear Switch, LF13333N, U3 & U9	11.00
16690	Transistor, Field Effect, PN4302, Q3 & Q4	2.00
16220	IC, Hex Inverter, 7404, U11	2.00
16277	IC, Quad 2 Input Nand, 74LS132, U12	2.00
16401	IC, Op-Amp, LM348 14-pin, U7	4.00
15917	Switch, 4-position DIP, S1 & S2, KTF182G	5.00
15338	Knob, analog zero control	9.00
15339	Knob, lock analog zero	20.00

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Indicators & Remote Displays

UMC2006/2008 (Cont.)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
55109	 Display digit, 0-9, KBJ375A	\$13.00
55112	 Display digit, +/-1, KBJ375B	10.00
19478	 Keyboard expander, KBR8924-1	201.00
19563	 Filter plate, KBT2272	7.50
19480	 Keyboard I/O assembly, KBT8924-1	103.00
15438	 Power cord, new, KFA1314A	10.00
54179	 IC-output driver 8243, KFM1918V	29.00
59196	 Remote solid state switch for setpoint operation 115/230 VAC at 1.5A, KHK431C	40.00
19491	 Parallel I/O assembly, KJ8924-1	155.00
56883	 Display expander assembly, KLB1924-1	79.00
57205	 Cable assembly, KMA1314-1	48.00
19458	 6-digit display assembly, KNW1924-1	284.00
56503	 DIP switch, 8-position, KTF182F	7.00
55395	 Chassis, KTM303-1	48.00
16425	 Filter, KU349A	52.00
19297	 Panel mount bracket, KW116-8	34.00
19495	 Setpoint/tare thumbwheel assembly, KW116-20	225.00
19497	 Parallel BCD terminal, KW116-21	158.00
19502	 Accumulate feature, KW116-34	82.00
56815	 Option kit, KW116-37	790.00
19493	 Setpoint switch assembly, KW116-40	202.00
15923	 Pushbutton switch, oiltight, KWD182A	50.00
19486	 Setpoint expander board, KG8924-1	263.00
	 Components of Part #19486:	
16281	 IC, Quad 2 Input Mixer, 74LS257, U1-U7	2.00
16276	 IC, Buffer/Driver, 7417, U8	2.00
15914	 Switch, 8-position DIP, S4-S5	7.00
15917	 Switch, 4-position DIP, S6	5.00
54831	 Thumbwheel assembly, KAA8924-1	190.00
19605	 Tri-state buffer assembly, KBF8924-1	212.00
54481	 Setpoint output assembly, two setpoint outputs, KDM8900-1	202.00
54485	 Setpoint output assembly, four outputs, KDM8900-2	402.00
54489	 Setpoint output assembly, six outputs, KDM8900-3	605.00
19540	 Setpoint output assembly, eight outputs, KDM8900-4	804.00
19486	 Setpoint expander assembly, KG8924-1 (UMC2006)	263.00
19604	 Gasket, KHM121 (UMC2008)	2.00
54068	 Chassis assy (UMC2006)	72.00

Indicators & Remote Displays

UMC2010/ 2012 DIGITAL WEIGHT INDICATORS



UMC2010



UMC2012

PART #	DESCRIPTION	SUGGESTED LIST PRICE
15439	Power cord, KBE7314-1	\$21.00
15671	Cord grip assembly, 1/2" NPT	3.00
16196	Standard eprom, KAL1921-1-1	28.00
16200	Super batch eprom, KAL1921-5-1	28.00
16052	Thumbscrew (for enclosure)	2.00
16427	Filter, EMI, KK349B	20.00
19447	Overlay, front-panel auto zero, KWU182	29.00
19464	LED display segment, KBD375C	3.00
19466	AC Terminal block, KTV3300A (2010)	5.00
19472	Bezel, display	108.00
19476	Switch, keyboard membrane, 16-key, KBJ7182	75.00
19480	Display, keyboard, KBT8924-1	103.00
19482	Bezel, keyboard, KE7392-1	50.00
19483	Gasket, keyboard, KF7121	3.00
19491	Board, parallel BCD terminal assembly, KJ8924-1	155.00
19550	Membrane switch assembly, KBD7182 (2012)	6.00
19502	Accumulator kit KW116-34 (2012)	82.00
19385	Lens, KG lightbar	2.50
19386	Lens, LB lightbar	2.50
16573	Potentiometer, 500-ohm 10-turn 1/4	60.00
16196	EPROM, KAL1921-1-1	28.00
19605	Tri-state buffer assembly, KBF8924-1	212.00
55109	Display digit, 0-9, KBJ375A	13.00
55112	Display digit, +/-1, KBJ375B	10.00
19478	Keyboard expander, KBR8924-1	201.00
19563	Filter plate, KBT2272	7.50
19480	Keyboard I/O assembly, KBT8924-1	103.00
15438	Power cord, new, KFA1314A	10.00
55841	Microprocessor 8050, KFM1918AM	52.00
54179	IC-output driver 8243, KFM1918V	29.00
59196	Remote solid state switch for setpoint operation 115/230 VAC at 1.5A, KHK431C	40.00
16444	Fuse, 3AG, 1/4 Amp, 250 VAC, Slo-Blo, KJ350C	2.00
19491	Parallel I/O assembly, KJ8924-1	155.00
55973	Connector assembly, 15-pin load cell, KCU354BW	21.00
55986	Connector assembly, 25-pin setpoint or fixed tare, KCU354BZ	28.00
55947	Connector assembly, 37-pin, parallel BCD or serial I/O, KCU354CB	31.00
56883	Display expander assembly, KLB1924-1	79.00
57205	Cable assembly, KMA1314-1	48.00
56503	DIP switch, 8-position, KTF182F	7.00
55395	Chassis, KTM303-1	48.00
16425	Filter, KU349A	52.00
58500	Cable, standard, KFJ314-2	79.00
54481	Setpoint output assembly, two setpoint outputs, KDM8900-1	202.00
54485	Setpoint output assembly, four outputs, KDM8900-2	402.00

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Indicators & Remote Displays

UMC2010/2012 (Cont.)

PART #	DESCRIPTION	SUGGESTED LIST PRICE
54489	Setpoint output assembly, six outputs, KDM8900-3	\$605.00
19540	Setpoint output assembly, eight outputs, KDM8900-4	804.00
19297	Panel mount bracket, KW116-8	34.00
19495	Setpoint/tare thumbwheel assembly, KW116-20	225.00
19497	Parallel BCD terminal, KW116-21	158.00
19502	Accumulate feature, KW116-34	82.00
56815	Option kit, KW116-37	790.00
19493	Setpoint switch assembly, KW116-40	202.00
15923	Pushbutton switch, oiltight, KWD182A	50.00
19541	Bezel, Multidraft display	98.00
20938	Intellidrive board, 120 VAC 4-channel	250.00
54774	CPU board w/out EPROM	665.00
	Components of Part #19435:	
16442	Fuse, Fastact .25A	4.00
16375	IC, Voltage Regulator, 7805, U14 & U16	5.00
16384	IC, Voltage Regulator, 78M12, U15 & U20	4.00
16385	IC, Voltage Regulator, 79M12, U17 & U21	6.00
16745	Transformer, KJ7301A	50.00
16292	IC, Binary Counter, 74HCT161, U7	3.50
16275	IC, Hex Inverter, 7414, U6	2.00
16182	I/O Expansion Port, 8243, U11 & U13	47.00
16220	IC, Hex Inverter, 7404, U19	2.00
16382	IC, Optoisolator, 6N136GI, U9 & U10	9.00
16639	Capacitor, 4,700 MFD 16 V Filter Cap, C1	5.00
16649	Capacitor, 1,000 MFD 35 V filter cap, C3 & C6	3.00
26235	00 MFD 16 V Filter Cap Radial Elect, C2, 4, 5, 7, 27, 29	2.00
15914	Switch, 8-position DIP, S1-S3	7.00
19458	Display board assembly, 6-digit, KNW1924-1	284.00
	Components of Part #19458:	
16327	IC, Display Driver, 74C912, U1	95.00
16293	IC, Flip-Flop, 74LS377, U2	4.00
19465	Cable, display board	48.00
19437	A/D board assembly, standard	495.00
19439	A/D board assembly, shielded	580.00
19445	A/D board assembly, shielded high speed	545.00
19521	A/D board assembly, 0-10 V w/analog zero pot	745.00
19522	A/D board assembly, 4-20 mA w/analog zero pot	995.00
	Components of Parts #19437, #19439, #19445, #19521 & #19522:	
16369	IC, Op-Amp, LT 1012CH 8-pin, U1 & U2	15.00
16686	Transistor NPN, MJE721 4A, Q1	2.00
16688	Transistor PNP, MJE711 4A, Q2	3.00
19451	Filter, EMI shielded A/D, KBR125-1	90.00
16386	IC, Op-Amp, Op-07/VA714C, U4-U6	20.00
16294	IC, Linear Switch, LF13333N, U3 & U9	11.00
16690	Transistor, Field Effect, PN4302, Q3 & Q4	2.00
16220	IC, Hex Inverter, 7404, U11	2.00
16277	IC, Quad 2 Input Nand, 74LS132, U12	2.00
16401	IC, Op-Amp, LM348 14-pin, U7	4.00
15917	Switch, 4-position DIP, S1 & S2, KTF182G	5.00
19478	Keyboard expander, KBR8924-1	201.00
	Components of Part #19478:	
16262	IC, Quad 2 Input Tri-State, 74HCT257, U1 & U2	2.00
16207	IC, MC1488P RS232 14-pin, U3	2.00
16382	IC, Optoisolator, 6N136GI, U4	9.00
16354	IC, EEPROM 8-pin, 93C46, U11	18.00
15914	Switch, 8-position DIP, S4 & S5	7.00
15917	Switch, 4-position DIP, S6	5.00
54831	Thumbwheel assembly, KAA8924-1	190.00
19605	Tri-state buffer assembly, KBF8924-1	212.00
16826	Operating manual	35.00
16817	Technical manual	55.00