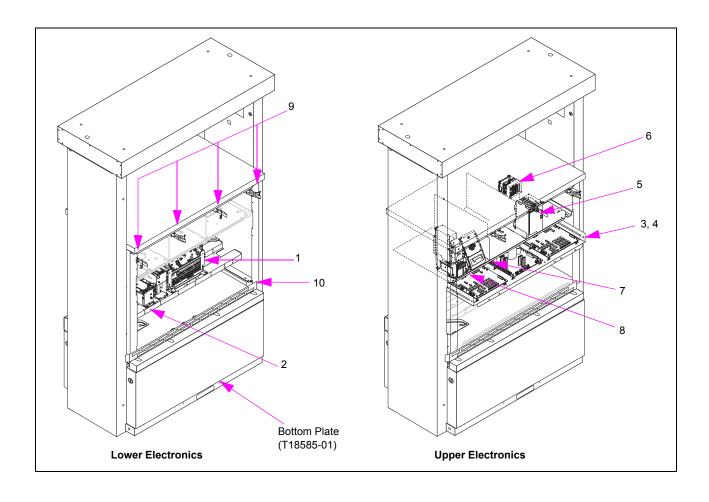
3 – Electronics Cabinet Section

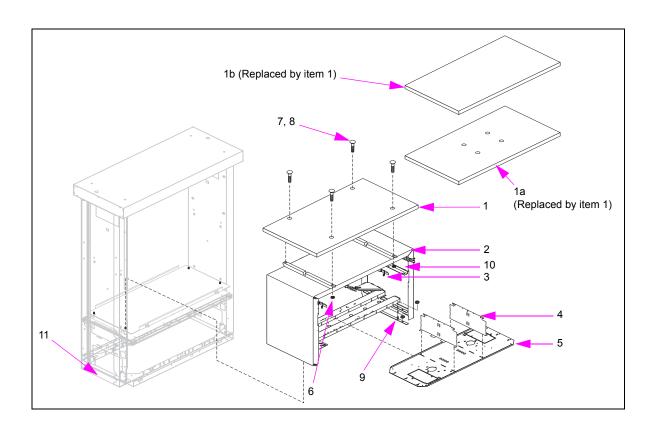
Electronics Assembly - 48-inch



Item #	Part Description	Current Part (Optimized)	Previous Part (Optimized)	Current Part (Modular)	Previous Part (Modular)	Quantity	Refer to
1	Blender Power Supply (no longer used after 4/1/99)	-		-	W02453-G4	1	"Blender Power Supply (W02453-G4)" on page 3-16
2	Main Power Supply Assembly	T19706-G3	T19706-G2	T19706-G1	T16513-G8	1	"Combined Power Supply (T19706-GX)" on page 3-15
3	CRIND Power Supply Logic Tray Assembly (single-line)	W03446-G1		-	-	1	PT-1736
4	CRIND Printer/Cutter Assembly	T20490-GX		-	T17684-GXR	2	PT-1736
5	Cash Acceptor RF	W03095-G2	M03898A001	-	-	2	PT-1736

Item #	Part Description	Current Part (Optimized)	Previous Part (Optimized)	Current Part (Modular)	Previous Part (Modular)	Quantity	Refer to
6	Draw Latch, Toggle with Wire Links: • For Slide in Mount • For Non-slide in Mount (Spare Parts Item)	Q12563-04 Q12563-01		-	-	8	-
7	Bolt Guides	R19439-01		-	-	8	-
8	Weld Nut	Q12516-01		-	-	1	-
9	Retaining Weld Nut Bracket	N23831-01		-	-	1	-
10	Screw	K85736-15		-	-	2	-
Not Sh	own						
-	Screw, Thread Forming, Hexagonal Washer Head	Q13292-40		-	-	2	-
-	Retainer, Screw	Q10922-02		-	-	2	-

Cabinet Assembly - 48-inch

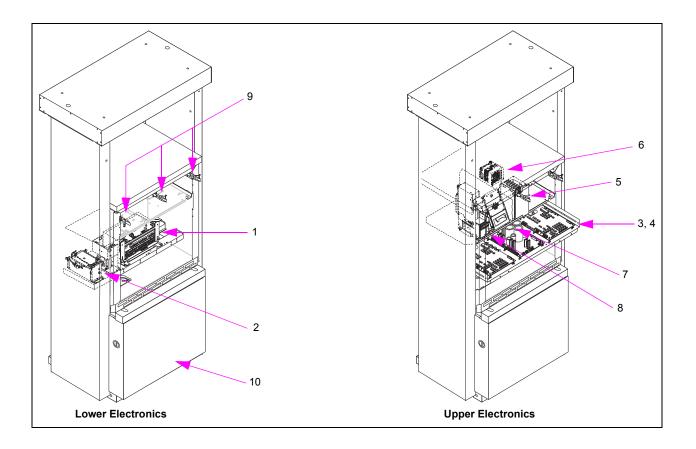


Item #	Part Description	Current Part	Previous Part	Quantity
1	Top Cover Assembly, 48" (order-entry Item)	T18600-XX		
	With Pem Studs	T18600-G1	-	1
	With no Pem Studs	T18600-01		
1a	Top Cover, 48" (used from 5/93 to 7/96)	-	T18600-XX (see note 1)	1

Item #	Part Description	Current Part	Previous Part	Quantity
1b	Top Cover, 48" (used from 1/91 to 5/93) kit (see note 1) (obsolete, see note 9)	-	T17569-G2	1
-	Top Plate, 48" (used with T17569-G2) (not shown)	-	T17572-G2	1
2	Chassis Kit, 48" frame (see notes 3 and 5)	K96585-01	T17502-G3	1
3	Latch Toggle, Snap-In (rivet base) (see note 4)	-	Q12563-03 Q12563-05	
	Draw Latch [clip base, see note 4 (Spare Parts Item)]	Q12563-04	Q12563-01	8
4	Center Bracket, Black	T17731-04	T17731-G3	2
5	Printer Tray, 48"	K91113-01	T18700-G3	1
6	Nut, Hexagonal, Flange Serrated, #10-24	Q11890-07	-	4
7	Bolt, Black #10-24 X 3/4" (see note 6)	K02394-50	-	4
8	Bolt, Stainless Steel #10-24 X 3/4" (see note 6)	K02394-51	-	4
9	Mounting Bracket, Lower	T20421-G1	-	1
10	Mounting Bracket, Upper	T20422-01	-	1
11	Base, Cosmetic Cover	T18585-01**XX (see note 7)	-	1
Not Sho	wn	1		l
-	Top Cover Bracket Kit	K96605-01	-	1

- 1. Quantities per unit.
- 2. T17729-G2 was built from 01/91 to 05/93. T18599-G1 was built from 05/93 to 7/96. Current and previous parts cannot replace each other.
- 3. T17732-G3 was used on units built before 4/20/98. T20114-GX was used on units built after 4/20/98. To install new T20114 on units built before 4/20/98, order K96585-02 Kit.
- 4. Draw Latch Clips (Q12563-04) on unit while Latch (Q12563-01) is attached using bolts #10-32.
- 5. The bracket configurates one required for older units before 12/22/98 to adapt the hole configuration on the current chassis.
- 6. Customer to use black or stainless steel bolts as required for specific Top Cover unit.
- 7. **XX indicates color is required.
- 8. All parts may not be available as spare parts.
- 9. No replacement.

Electronics Assembly - 36-inch



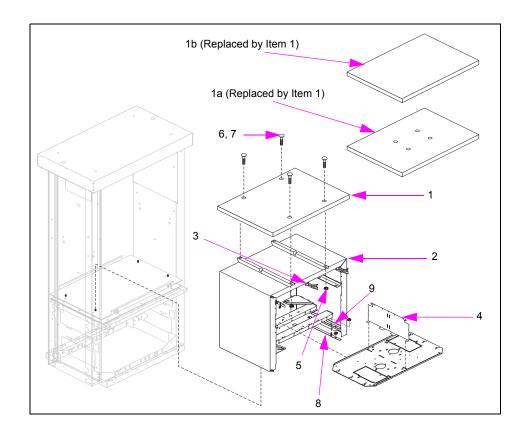
Item #	Part Description	Current Part (Optimized)	Previous Part (Optimized)	Current Part (Modular)	Previous Part (Modular)	Quantity	Refer to
1	Main Power Supply Assembly	T19706-G3	T19706-G2	T19706-G1	T16513-G8	1	"Combined Power Supply (T19706-GX)" on page 3-15
2	CRIND Printer/Cutter Assembly	T20490-GX		-	T17684-GXR	2	PT-1736
3	Draw Latch, Toggle with Wire Links	Q12563-04		-	-	6	-
4	Base, Cosmetic Cover	T18585-01**XX (see note 1)		-	-	1	-
Not Sh	own						
-	Blender Power Supply (no longer used after 4/1/99)	-		-	W02453-G4	1	"Blender Power Supply (W02453-G4)" on page 3-16
-	Logic Tray Assemblies	-		-	-	-	-
Notes:							

Notes:

1. **XX indicates color is required.

2. All parts may not be available as spare parts.

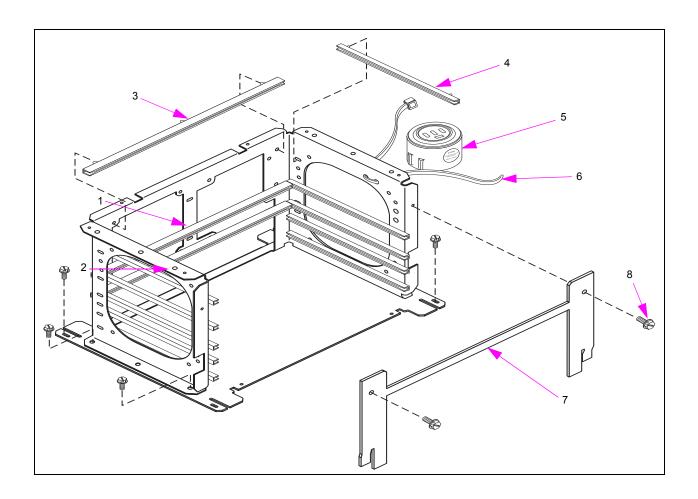
Cabinet Assembly - 36-inch



Item #	Part Description	Current Part	Previous Part	Quantity
1	Top Cover, 36" (order-entry Item), Color Coded	T18599-01**XX (see note 7)	-	1
1a	Top Cover, 36", Black (see note 1), Color Coded	-	T18599-XX (see note 6)	1
1b	Top Cover Assembly, 36", Black (see note 1), Color Coded	-	T17729-G2	1
2	Chassis Kit, 36" Frame (see notes 2 and 4)	K96585-02	T17732-G3	1
3	Draw Latch [clip base, see note 3 (Spare Parts Item)]	Q12563-04	Q12563-01	6
4	Center Bracket, Black	T17731-04	T17731-G3	1
5	Nut, Hexagonal, Flange Serrated, #10-24 (see note 5)	Q11890-07	-	4
6	Bolt, Black #10-24 X 3/4" (see note 5)	K02394-50	-	2
7	Bolt, Stainless Steel #10-24 X 3/4"	K02394-51	-	2
8	Mounting Bracket, Lower	T20421-G1	-	1
9	Mounting Bracket, Upper	T20422-01	-	1
Not Sho	own			•
-	Top Plate Assembly, 36" [used with T17729-G2 (see note 1)]	-	T17728-G2	1
-	Top Plate Assembly, 36" [used with T17729-G2 (see note 1)]	-	T17728-G2	1

- 1. Quantities per unit.
- 2. T17729-G2 was built from 01/91 to 05/93. T18599-G1 was built from 05/93 to 7/96. Current and previous parts cannot replace each other.
- 3. T17732-G3 was used on units built before 4/20/98. T20114-GX was used on units built after 4/20/98. To install new T20114 on units built before 4/20/98, order K96585-02 Kit.
- 4. Draw Latch Clips (Q12563-04) on unit while Latch (Q12563-01) is attached using bolts #10-32.
- 5. The bracket configurates one required for older units before 12/22/98 to adapt the hole configuration on the current chassis.
- 6. Customer to use black or stainless steel bolts as required for specific Top Cover unit.
- 7. **XX indicates color is required.
- 8. All parts may not be available as spare parts.

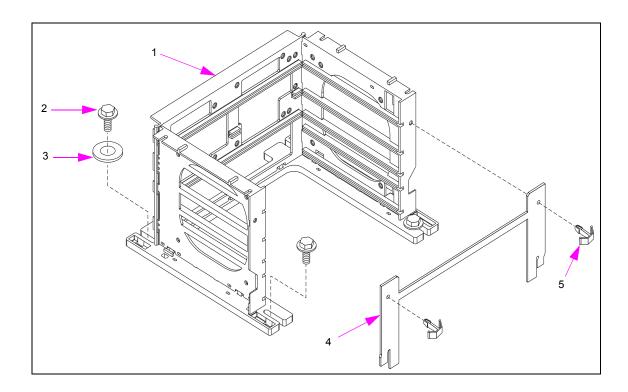
Modular Card Cage Assembly (Metal Type)



Item #	Part Description	Current Part	Previous Part	Quantity
1	Card Cage (used from 1/90 through 3/99) (see note 1)	T17288-G3	-	1
2	Screw, Hexagonal-head, Unslotted, #10-32 X 1/2"	K85736-15	-	4
3	Snap-in Card Guide, 8"	Q10233-06	-	3
4	Snap-in Card Guide, 6"	Q10233-05	-	10
5	Transducer, Audio (see note 2)	Q11763-01	-	1
6	Cable-tie (see note 2)	Q10178-07	-	1
7	Retainer Bracket	T19073-01	T19073-G1	1
8	Screw, #6-20 X 3/8"	Q11677-24	-	2

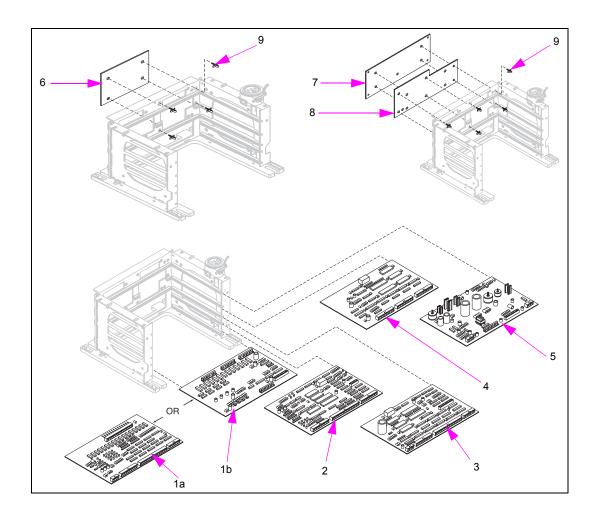
- 1. T20361-G1 (plastic) is a direct replacement for T17288-G3 except for units using VaporVac system.
- 2. Cable-tie and Transducers are not on Card Cage Assemblies (PGT18914-G37, -G39, -G41, -G43, -G44, and -G45).
- 3. All parts may not be available as spare parts.

Modular Card Cage Assembly (Plastic Type)



Item #	Part Description	Current Part	Previous Part	Quantity	G Level PGT18914-GXX
1	Plastic Card Cage	T20361-G1	-	1	G1 through G45
2	Bolt and Washer Combination	Q13702-01	-	4	G1 through G45
3	Washer, Nylon	K83513-13	-	1	G1 through G45
4	Front Bracket	T20361-05	-	1	G1 through G45
5	Stand-off	Q13701-01	-	2	G1 through G45

Modular Card Cage PCBs

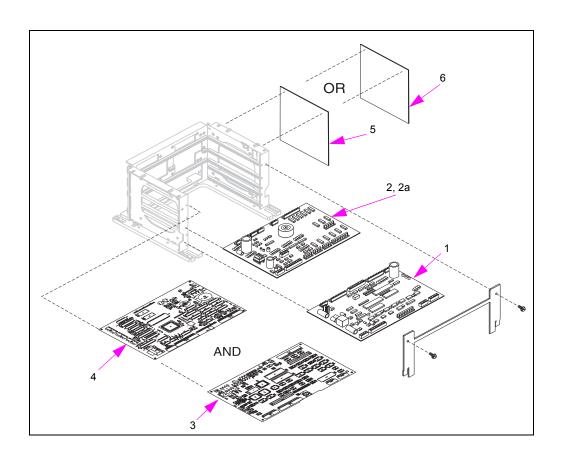


Item #	Part Description	Current Part	Previous Part	Quantity	G Level
1a	Hydraulic Interface Board (MPDs)	T18024-G2	-	1	G1, G5, G6, G10, G33, G34, G35,
					G36
1b	Valve Driver Board (blenders)	T17461-G2	-	1	G3, G8
2	Hydraulic Interface Board (blenders)	T18156-G1	-	1	G3, G8
3	Pump Controller Board (see note 3)	T20005-G4	T18202-G4	1	G1, G3, G5, G6, G8, G10
4	PPP Board (see notes 3 and 5)	T17331-G3	-	1	G6, G8, G10
5	Main Regulator Board	T17723-G1	T17723-G2	1	G1, G3, G5, G6, G8, G10, G33,
					G34, G35, G36
6	Grade Select Board (1 to 3-grades)	T19756-G1	-	1	G5, G10, G15, G20, G23, G26,
	(see note 8)				G29, G32 G35, G36

Item #	Part Description	Current Part	Previous Part	Quantity	G Level
7	Grade Select Board (4-grades)	T19800-G1	-	1	G5, G10, G35, G36
8	Submersible Turbine Pump (STP) Driver Bracket	R19776-02	-	1	G5, G10, G35, G36
9	Circuit Board Support, 1/4" (see note 7)	Q10651-02	-	1	G5, G10, G35, G36, G39, G41, G44, G45

- 1. Card Cage Assembly (PGT18914-GXX) includes Items 1 through 10. G Level column lists specific dash numbers for each Card Cage Assembly. For additional parts, refer to "Modular Card Cage Assembly (Plastic Type)" on page 3-7.
- 2. For latest board configurations, refer to "Modular Card Cage Board Configurations" on page 3-10.
- 3. Use T17331-G4 and T18202-G5 for European models. T18202-G5 has been replaced by T20005-G5, Item 10.
- 4. T17723-G2 used for new units.
- 5. This position is used for T19501-G1 board when monochrome is used.
- 6. T20005-G5 is non-illustrated. CE European use only.
- 7. Circuit Board Support is used for both modular and optimized units. Quantities will vary between the two units. Use quantity of 8 on circuit boards -G5, -G10, -G35, -G36; use quantity of 4 on circuit boards -G39, -G41, -G44, -G45.
- 8. Grade Select Board (T19756-G1) used only with modular units.
- 9. All parts may not be available as spare parts.

Optimized Electronics Card Cage PCBs



Item #	Part Description	Current Part	Previous Part	Quantity	Card Cage Assembly PGT18914-GXX (obsolete, see note 5)
1	Pump Interface Assembly	T20076-G3	T20076-G1	1	G37, G39, G41, G43, G44, G45
2	Pump Controller Board (see note 2)	T20011-G1	-	1	G37, G39, G41
2a	Pump Controller Board (see note 2)	T20011-G2	-	1	G43, G44, G45
3	Optimum Automatic Temperature Compensation (ATC) Control, Printed Circuit Assembly (PCA) (Canada only) (see note 3)	T20569-G1	-	1	G44
4	Optimum Monochrome CPU (see note 3)	T19501-G2	T19501-G1	1	(see note 3)
5	Optimum Relay PCB (see note 4)	T20284-G1	-	1	G41, G45
6	Optimum Grade Select PCB	T20275-G1	-	1	G39, G44
Not Sho	wn				
-	Plastic Card Cage Assembly (see note 1)	T20361-G1	-	1	G1 through G45

- 1. For latest board configurations, refer to "Optimized Card Cage Board Configurations" on page 3-11.
- 2. T20287-G1 and T19501-G2 are optional boards.
- 3. T20284-G1 is used with six-hose Blender.
- 4. All parts may not be available as spare parts.
- 5. No replacement.

Modular Card Cage Board Configurations

				Use Board Item #	Part Number (PGT18914-GXX) (MFG only)	Replaced P/N (see note 3)
Unit Description (see note 1)	PPP	ATC	Hose Outlet	(see note 2)	(obsolete, see note 5)	
Blenders						
36" SB, 48" SB or FB	-	-	Other	1b, 2, 3, 5	-G3	-
36" SB, 48" SB or FB	Yes	-	Other	1b, 2, 3, 4, 5	-G8	-
36" SB, 48" SB or FB	-	-	VaporVac	1b, 2, 3, 5	-G13	replaced by -G3
36" SB, 48" SB or FB	Yes	-	VaporVac	1b, 2, 3, 4, 5	-G18	replaced by -G8
36" SB, 48" SB or FB	-	Yes	Other	1b, 2, 3, 5	-G22	replaced by -G3
36" SB, 48" SB or FB	Yes	Yes	Other	1b, 2, 3, 4, 5	-G25	replaced by -G8
36" SB, 48" SB or FB	-	Yes	VaporVac	1b, 2, 3, 5	-G28	replaced by -G3
36" SB, 48" SB or FB	Yes	Yes	VaporVac	1b, 2, 3, 4, 5	-G31	replaced by -G8
Non-Blenders						
36", 48" Dispenser or Pump, 1-3 grades	-	-	Other	1a, 3, 5	-G1	-
48" Dispenser, 4-grades	-	-	Other	1a, 3, 5, 6, 7, 9	-G5	-
36", 48" Dispenser or Pump, 1-3 grades	Yes	-	Other	1a, 3, 4, 5	-G6	-
48" Dispenser, 4-grades	Yes	-	Other	1a, 3, 4, 5, 6, 7, 9	-G10	-
36", 48" Dispenser or Pump, 1-3 grades	-	-	VaporVac	1a, 3, 5	-G11	replaced by -G1
48" Dispenser, 4-grades	-	-	VaporVac	1a, 3, 5, 6, 7,9	-G15	replaced by -G5
36", 48" Dispenser or Pump, 1-3 grades	Yes	-	VaporVac	1a, 3, 4, 5	-G16	replaced by -G6
48" Dispenser, 4-grades	Yes	-	VaporVac	1a, 3, 4, 5, 6, 7, 9	-G20	replaced by -G10
36", 48" Dispenser or Pump, 1-3 grades	-	Yes	Other	1a, 3, 5	-G21	replaced by -G1
48" Dispenser, 4-grades	-	Yes	Other	1a, 3, 5, 6, 7, 9	-G23	replaced by -G5

Unit Description (see note 1)	PPP	ATC	Hose Outlet	Use Board Item # (see note 2)	Part Number (PGT18914-GXX) (MFG only) (obsolete, see note 5)	Replaced P/N (see note 3)
36", 48" Dispenser or Pump, 1-3 grades	Yes	Yes	Other	1a, 3, 4, 5	-G24	replaced by -G6
48" Dispenser, 4-grades	Yes	Yes	Other	1a, 3, 4, 5, 6, 7, 9	-G26	replaced by -G10
36", 48" Dispenser or Pump, 1-3 grades	-	Yes	VaporVac	1a, 3, 5	-G27	replaced by -G1
48" Dispenser, 4-grades	-	Yes	VaporVac	1a, 3, 5, 6, 7, 9	-G29	replaced by -G5
36", 48" Dispenser or Pump, 1-3 grades	Yes	Yes	VaporVac	1a, 3, 4, 5	-G30	replaced by -G6
48" Dispenser, 4-grades	Yes	Yes	VaporVac	1a, 3, 4, 5, 6, 7, 9	-G32	replaced by -G10
36", 48" Dispenser or Pump, 1-3 grades (European) (obsolete, see note 5)	-	-	Other	1a, 5, 10	-G33	-
36", 48" Dispenser or Pump, 1-3 grades (European) (obsolete, see note 5)	Yes	-	Other	1a, 5, 10	-G34	-
48" Dispenser, 4-grades (European) (obsolete, see note 5)	-	-	Other	1a, 5, 6, 7, 9, 10	-G35	-
48" Dispenser, 4-grades (European) (obsolete, see note 5)	Yes	-	Other	1a, 5, 6, 7, 9, 10	-G36	-

- 1. FB = Fixed Blender. SB = Selectable Blender.
- 2. For board definitions and part number, refer to "Modular Card Cage Board Configurations" on page 3-10.
- 3. This column shows a list of all part numbers (P/N) that are replaced with another dash (-) number.
- 4. All parts may not be available as spare parts.
- 5. No replacement.

Optimized Card Cage Board Configurations

Unit Description	PPP	ATC	Hose Outlet	Use Board item #	Part Number (PGT18914-GXX) (MFG only) (obsolete, see note 3)
Blenders	FFF	AIC	nose Outlet	(see note 1)	(Obsolete, see Hote 3)
Advantage with Optimized Electronics X + 1, 4 + X, 5 + X (obsolete, see note 3)	Yes	-	-	1, 2, 6, 9	-G39
Advantage with Optimized Electronics Six-hose (obsolete, see note 3)	Yes	-	-	1, 2, 5, 9	-G41
Advantage with Optimized Electronics X + 1, 4 + X, 5 + X (CE European) (obsolete, see note 3)	Yes	-	-	1, 2a, 6, 9	-G44
Advantage with Optimized Electronics Six-hose (CE European) (obsolete, see note 3)	Yes	-	-	1, 2a, 5, 9	-G45
Non-Blenders	•		•		
Advantage with Optimized Electronics 3-grades (obsolete, see note 3)	Yes	-	-	1, 2	-G37
Advantage with Optimized Electronics 3-grades (CE European) (obsolete, see note 3)	Yes	-	-	1, 2	-G43
				•	

- 1. For board definitions and part numbers, refer to "Optimized Card Cage Board Configurations" on page 3-11.
- 2. All parts may not be available as spare parts.
- 3. No replacement.

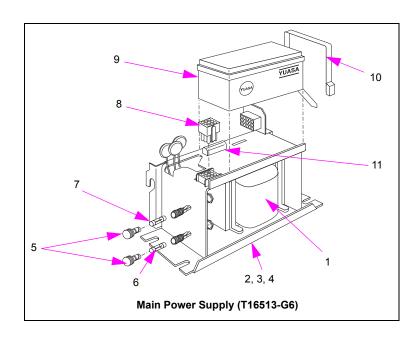
Main Power Supply Distribution

For this Period	The Advantage model	Requires This Power Supply	G Level	Has These Features	Interchangeable With
Before 7/97	Modular	T16513*	-G6	Supplies backlight power and has battery	None
	Modular and 4 X 4	K94441-01	-G8	Uses IDC connectors and does not use battery	K94441-01 except 4 X 4
8/97-7/98	All, except 4 X 4 and Optimized Electronics	T19706	-G1	Combine CRIND and main power supplies. Direct replacement for T16513-G8 with K94441-01 Kit. Not interchangeable with -G3. 60 V	None
4/1/99	With Optimized Electronics		-G3	Combine CRIND and main power supplies. Not interchangeable with -G1. 24 V	None
-	4 X 4			Direct replacement for T16513-G8 with K94434-01 Kit. (obsolete, see note 3)	-
7/97	4 X 4 and Optimum	T19868	-G1	Combined power supply replaces T16513-G8	None

Notes:

- 1. *Q11955-01 Battery is replaceable for T16513-G5 and -G6. (T16513-G5 is obsolete and no replacement.)
- 2. All parts may not be available as spare parts.
- 3. K94434-01 is obsolete and no replacement.

Main Power Supply (T16513-G6)

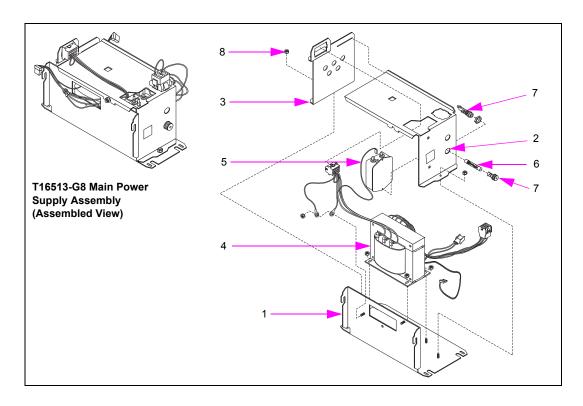


Item #	Part Description	T16513-G6	T16513-G5 (obsolete, see note 4)	Quantity
1	Transformer Subassembly	Q12939-02	Q12190-01	1
2	Power Supply Bracket, Top	T17478-G2	-	1
3	Power Supply Bracket, End	T17479-G2	-	1
4	Power Supply Bracket, Base	T17477-G2	-	1
5	Fuse Holder Assemblies	Q11781-01	-	2
6	Fuse, 3 A, 250 V	Q10131-03	-	1
7	Fuse, 4 A, 250 V	Q10131-26	-	1
8	Variable Voltage Plug (order-entry Item)	N21120-GXX	-	1
9	Battery, Lead Acid 2.5 AH	Q11955-01	-	1
10	Cable-tie	Q10178-06	-	1
11	Resistor	K89231-07	-	1
Not Shown				
-	Fuse Decal	R16795-34	R16795-31	1
-	Main Power Supply Assembly (see note 1)			
	• 09/93 to 10/95	-G6	-	-
	• Before 09/93	-	-G5	-

- 1. Quantities per main power supply.
- 2. Assembly includes Items 1 through 13.
- 3. All parts may not be available as spare parts.
- 4. T16513-G5 is obsolete and no replacement.

Main Power Supply (K94441-01)

Note: Replaced by "Main Power Supply Distribution (T19706-G1)" in 08/97. Refer to "Combined Power Supply (T19706-GX)" on page 3-15.

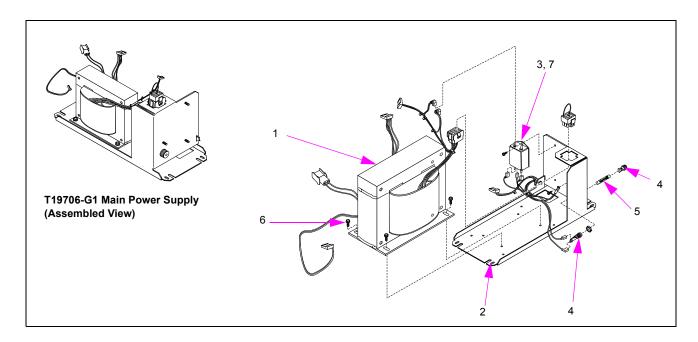


Item #	Part Description	Current Part	Previous Part	Quantity	
Not Shown					
-	Main Power Supply Assembly				
	• 10/95 to 08/97 (see notes 1 and 2)	K94441-01	-	1	
Notes:					

- 1. Quantities per main power supply.
- 2. Main Power Supply Assembly includes Items 1 through 8.
- 3. All parts may not be available as spare parts.

Combined Power Supply (T19706-GX)

Note: Released in 08/97. Replaces "Main Power Supply (K94441-01)".

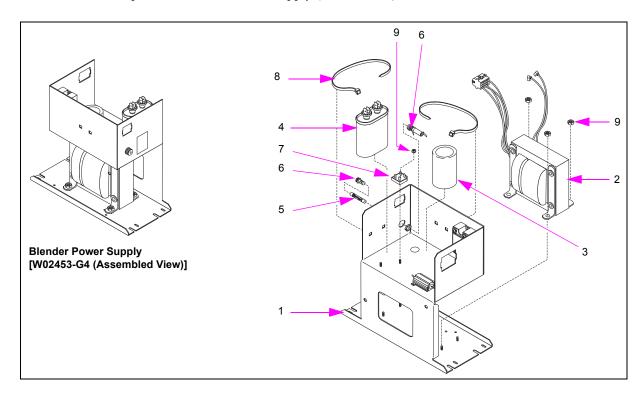


Item #	Part Description	Current Part	Previous Part	Quantity
1	Transformer Subassembly	T19706-G1	-	1
2	Power Supply Base Bracket (see note 5)	T19696-01	-	1
3	Filter	Q10895-07	-	1
4	Fuse Holder Assembly	Q11781-01	-	1
5	Fuse, 5 A, 250 V	Q10131-04	-	1
6	Screw, #10-32 X 1/4"	K85736-14	-	4
7	Screw, #8-32 X 1/4" (obsolete, see note 7)	-	K85736-13	3
Not Sho	wn			
-	Fuse Decal	R16795-45	-	1
-	Combined Power Supply Assembly (see note 1)	-	-	-
	4/99 to Present (see note 3)	T19706-G3	T19706-G2	1
	08/97 to Present (see note 2) – part of K94441-01	T19706-G1	T16513-G8	1

- 1. Quantities per combined power supply.
- 2. Combined Power Supply assembly includes Items 1 through 8. Replaces Main Power Supply Assembly (T16513-G8).
- 3. Power Supply (T19706-G1) built after 7/97. Used on all Advantage models except 4 X 4 and Optimized Electronic units.
- 4. Power Supply (T19706-G2) built after 8/98; replaced by T19706-G3 beginning in 2/00. Used on 4 X 4 and Optimized Electronic units.
- 5. Power Supply Base Bracket (T19696-01) is not sold individually. It is sold as a part of T19706-G1.
- 6. All parts may not be available as spare parts.
- 7. No replacement.

Blender Power Supply (W02453-G4)

Note: Replaces "Blender Power Supply (W02453-G2)".



Item #	Part Description	Current Part	Previous Part	Quantity
1	Power Supply Chassis	W03459-G2	-	1
	Decal, Fuse	R16795-25	-	1
2	Valve Driver Assembly	R18988-G1	-	1
3	Capacitor, 2100 MF, 75 VDC	Q10271-31	-	1
4	Capacitor, 2 MF, 600 VAC	Q12018-01	-	1
5	Time-delay Fuse, 4 A, 250 VAC	Q10131-37	-	1
6	Fuse Holder	Q11781-01	-	2
7	Bridge Rectifier	Q10459-03	-	1
8	Cable-tie	Q10178-05	-	2
9	Nut, Hexagonal, #8-32	Q12068-03	-	6
Not Sho	wn			
-	Blender Power Supply Assembly (see note 1)			
-	Units Manufactured Before 4/99 (see notes 2 and 3)	W02453-G4	W02453-G2	1
N I - 4	1		<u> </u>	1

- 1. Assembly includes Items 1 through 9. Used in Advantage Series blenders.
- 2. For units built after 4/99 with Optimized Electronics, refer to T19706-G3, "Combined Power Supply (T19706-GX)" on page 3-15.
- 3. Power Supply (W02453-G2) is inactive since 1995.
- 4. All parts may not be available as spare parts.