

Illustrated Parts List

10

The Illustrated Part List (IPL) contains the illustrations and the parts lists for the different assemblies in the printer. The parts lists give the part numbers, description and quantity of all the items and the modules in the printer. You can order the items and the modules for which the part numbers are given.

How to Read the IPL

This section describes how the higher assemblies are broken down to their related sub assemblies and other separate parts.

Illustrations

Table 10-1 on page 10-2 shows the symbols used to indicate the different levels of main assemblies in a printer, and the sub assemblies under the main assembly.

Assembly	Symbol
Main Assembly	□
Sub Assembly 1	○
Sub Assembly 2	○
Sub Assembly 3	△
Sub Assembly 4	◇

Table 10-1: Symbols Representation - Assemblies

-----► Indicates further explosion.

Alphabets

- An alphabet is assigned to the main assemblies of a printer and each sub assembly under the main assembly. See Figure 10-1 on page 10-3. For example: If A, B, C and D identify the main assemblies of a printer, then the alphabets E, F, and so on identify sub assemblies below each main assembly in a sequence.
- The alphabets assigned to main assemblies are used only for one time.
- The alphabets “I” and “O” are not used because they look like the numbers 1 and 0.

Numbers

A natural number (1,2,3.....) is assigned to the stand alone parts (in ascending order) through out the breakdown of main assemblies. See Figure 10-1.

Note: The numbers assigned to main assemblies can be used only for one time.

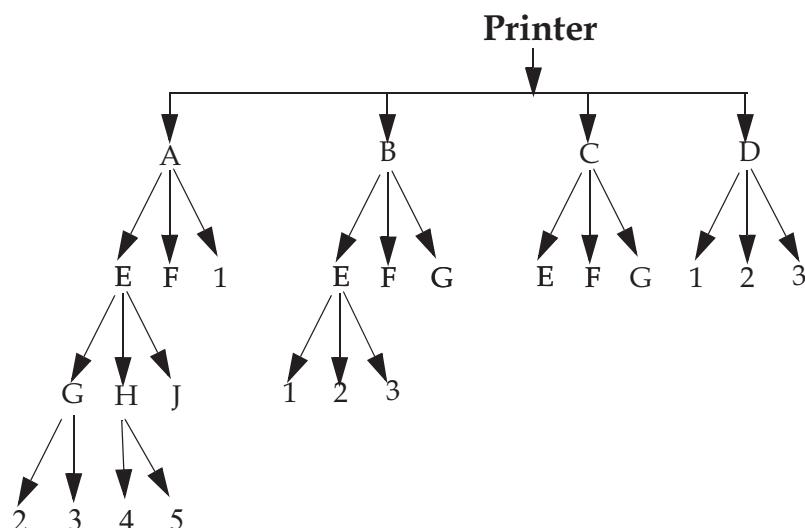


Figure 10-1: Graphical Representation of the Different Subassemblies and Parts

Tables

Figure 10-2 describes the styles used to show the explosion of the main assemblies in parts lists.

The diagram illustrates the structure of a parts list table. The columns are labeled: Item Number, P/N, Description, and Qty. The rows are categorized by assembly level:

- Main Assembly:** Contains item A (P/N 3).
- Subassembly 1:** Contains item E (P/N 4).
- Subassembly 2:** Contains item H (P/N 5).
- Parts under the Subassembly OR Stand-alone Part:** Contains items 6, J, and 7.
- Stand-alone Part:** Contains item 8.

Arrows point from the category labels to the corresponding rows in the table.

	Item Number	P/N	Description	Qty
Main Assembly	A			
	3			
Subassembly 1	E			
	4			
Subassembly 2	H			
	5			
Parts under the Subassembly OR Stand-alone Part	6			
	J			
	7			
	8			

Figure 10-2: Representation of the different Subassemblies and parts in the Table

Notes

Notes provide useful information. Some examples for note are as follows:

Note: To order this item, use part number of item 9 in this table.

Note: This screw is a part of Core Module.

Note: This item can be ordered separately.

Videojet 1610 Excel Printer

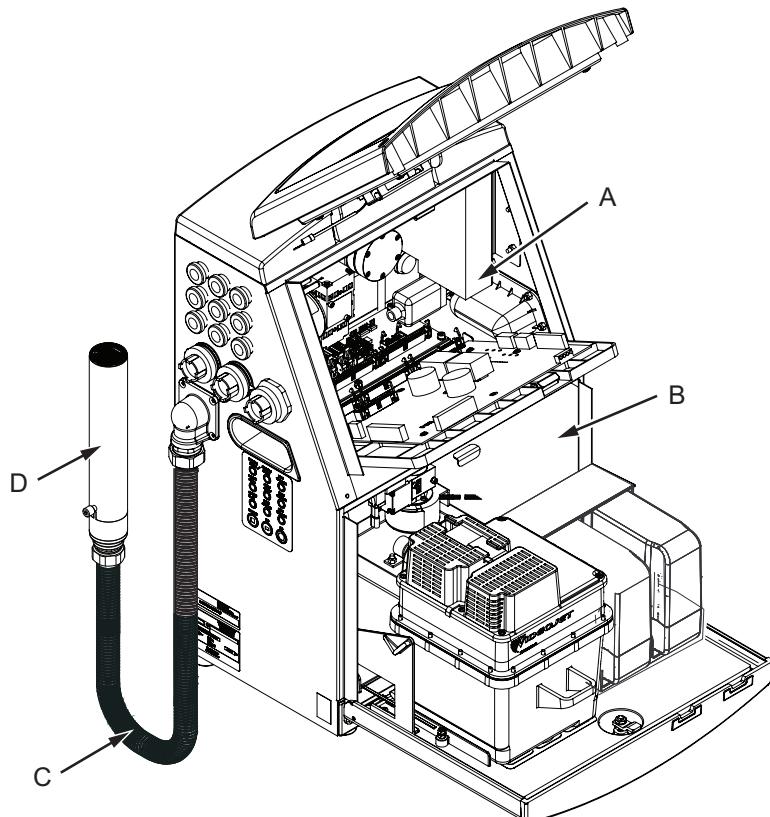


Figure 10-3: Main Parts of the Printer

Table 10-2 shows the sub assemblies of the printer.

Item	Descriptions
A	Electronics Compartment
B	Ink Compartment
C	Umbilical
D	Printhead

Table 10-2: Videojet 1610 Excel Printer Assemblies

Electronics Compartment

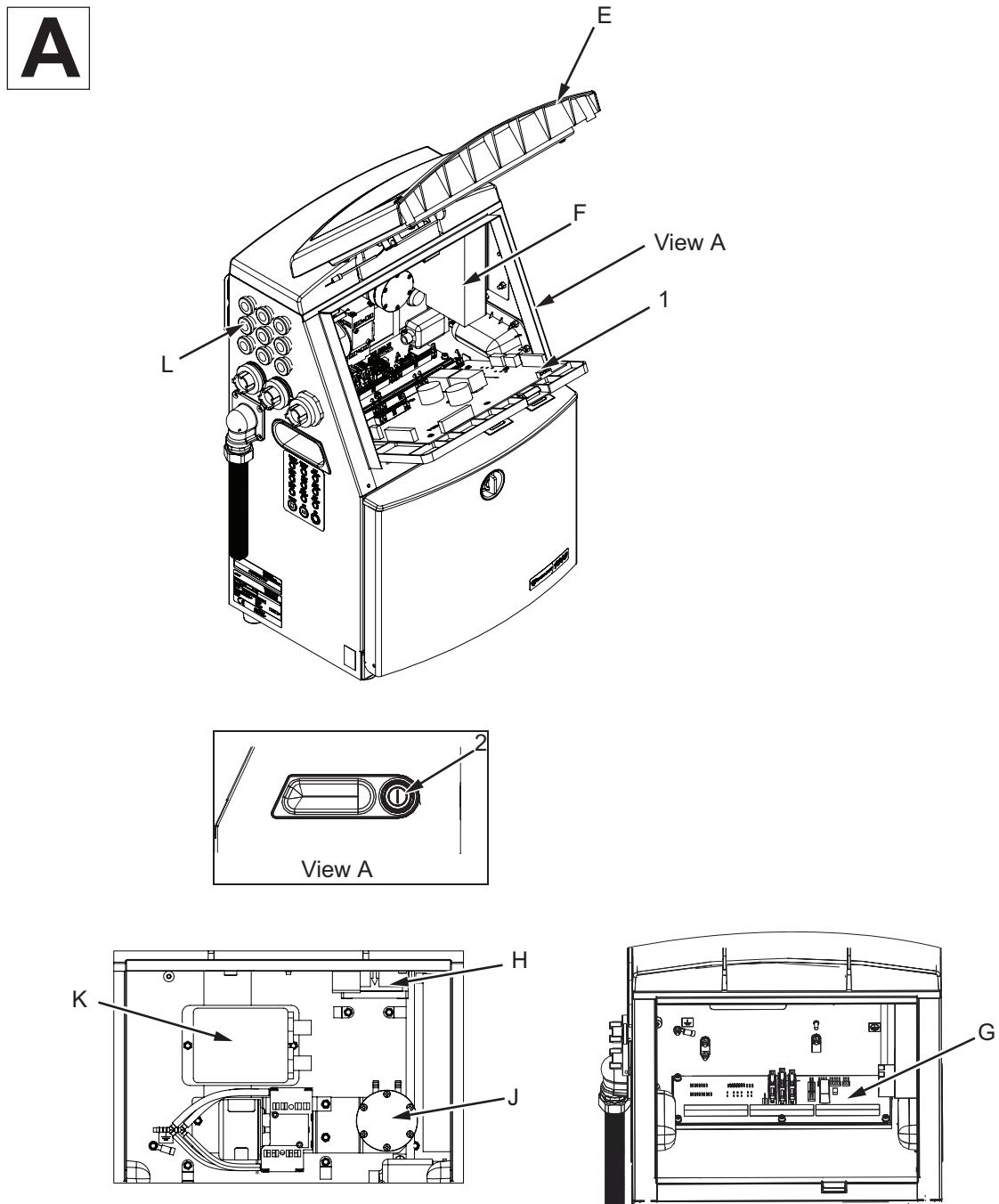


Figure 10-4: Electronics Compartment

Control System Board (CSB) with Back Plate

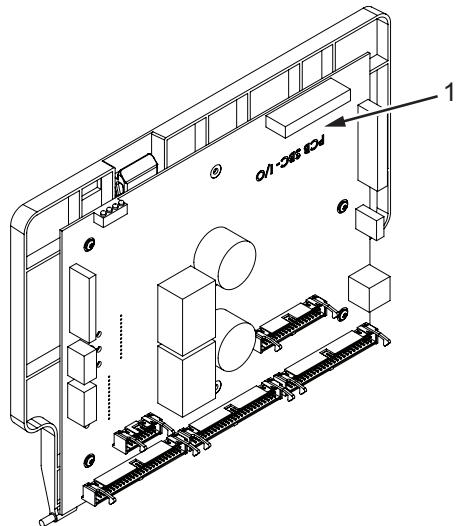


Figure 10-5: Control System Board Assembly with Back Plate

Power Switch

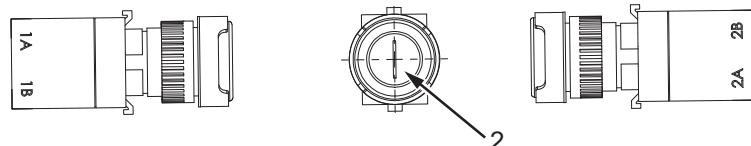


Figure 10-6: Power Switch

Electronics Door Assembly

E

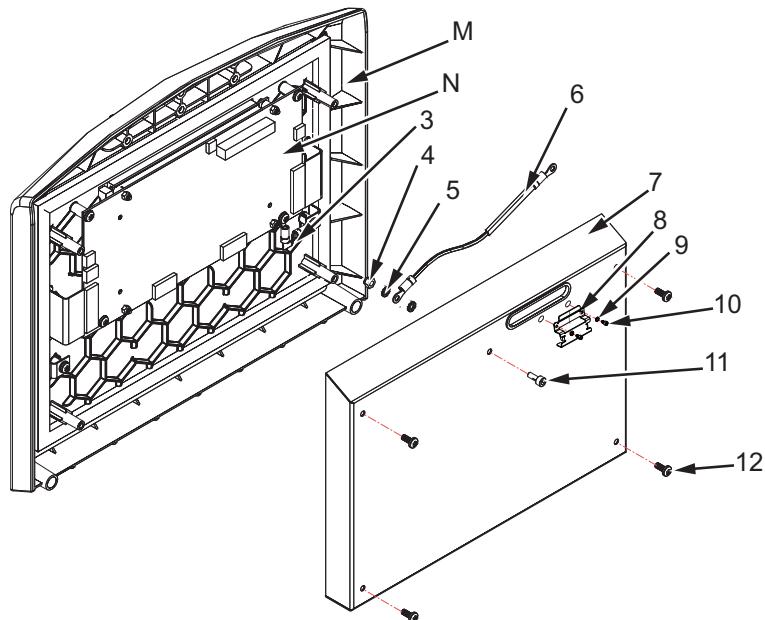


Figure 10-7: Electronics Door Assembly

Display Door

M

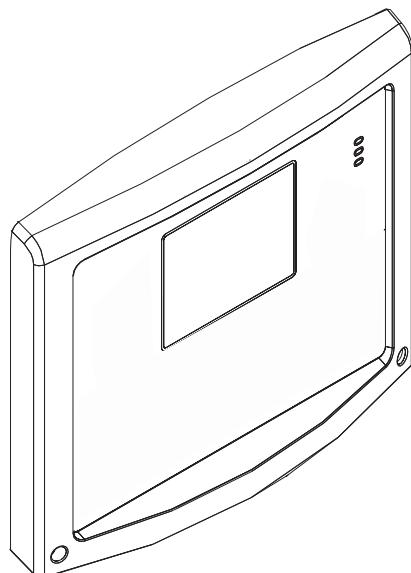


Figure 10-8: Display Door

LCD and FIB Assembly

N

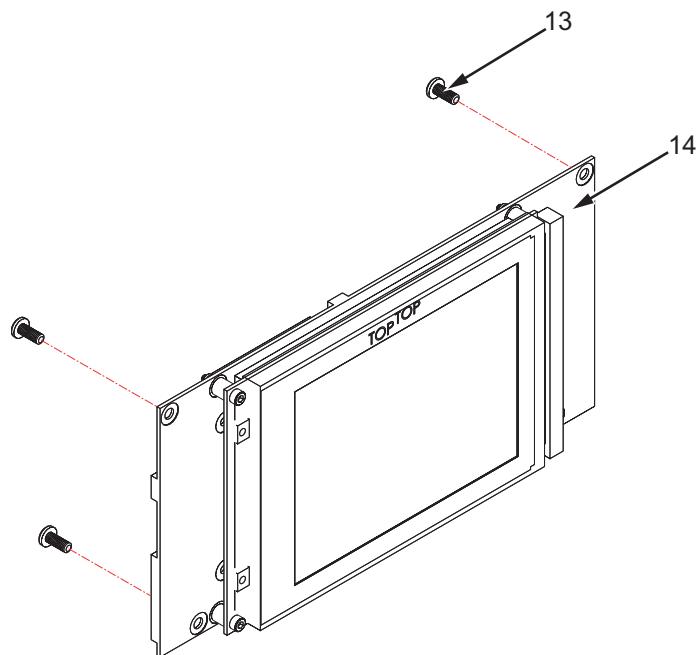


Figure 10-9: LCD and FIB

Power Supply Unit Assembly

F

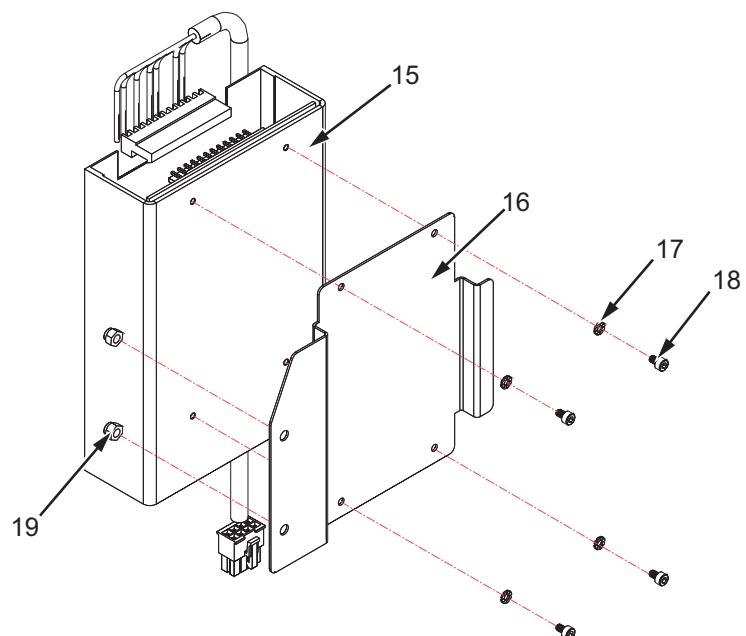


Figure 10-10: Power Supply Unit Assembly

Printer Interface Board Assembly (PIB)

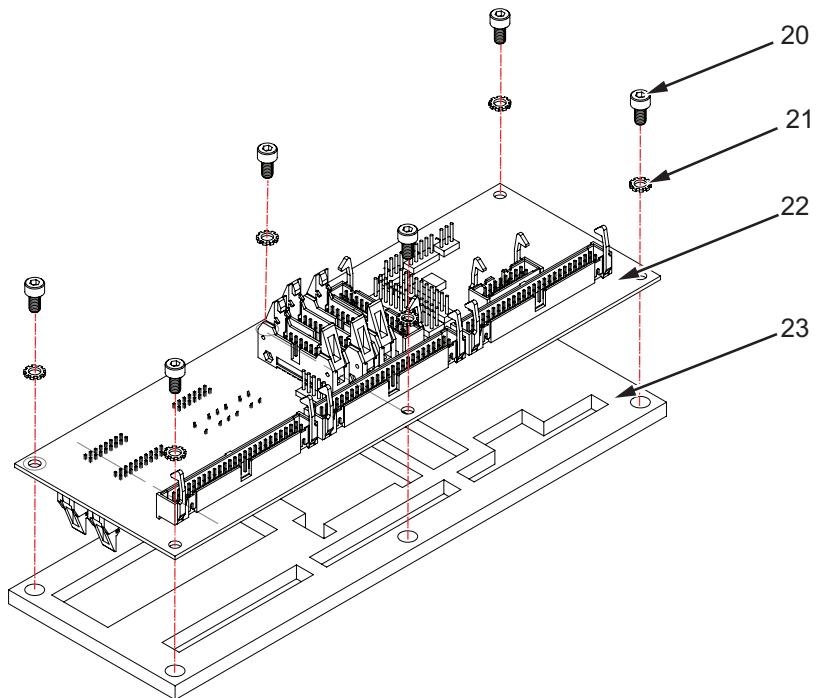


Figure 10-11: Printer Interface Board Assembly

Electronics Fan Assembly

H

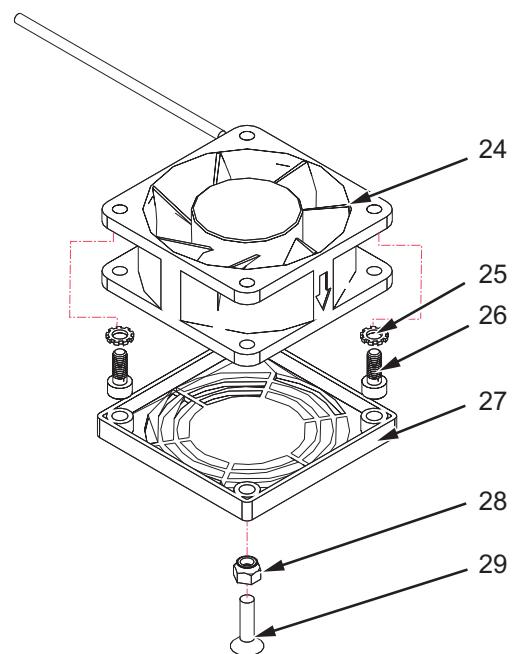


Figure 10-12: Electronics Fan Assembly

Positive Air Pump Assembly

J

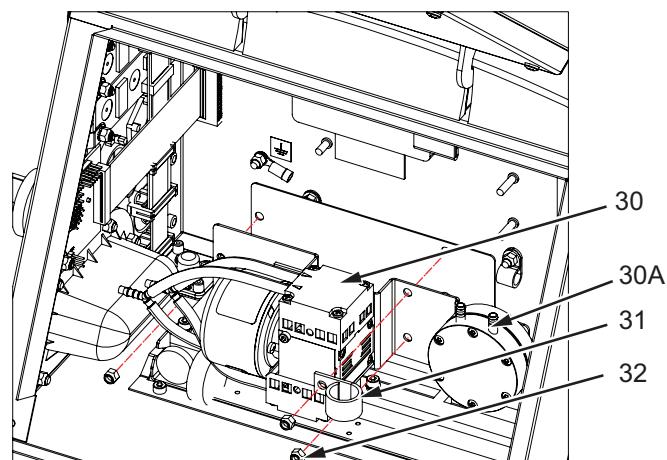


Figure 10-13: Positive Air Pump Assembly

EHT Module

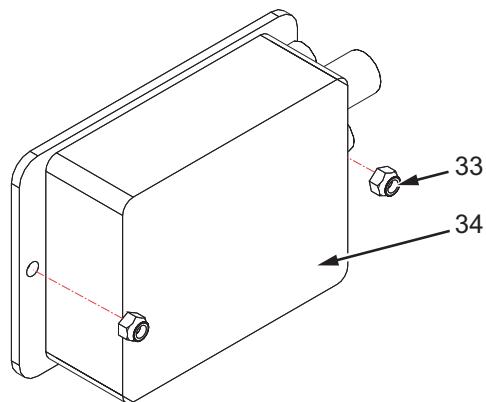


Figure 10-14: EHT Module

Connector Panel

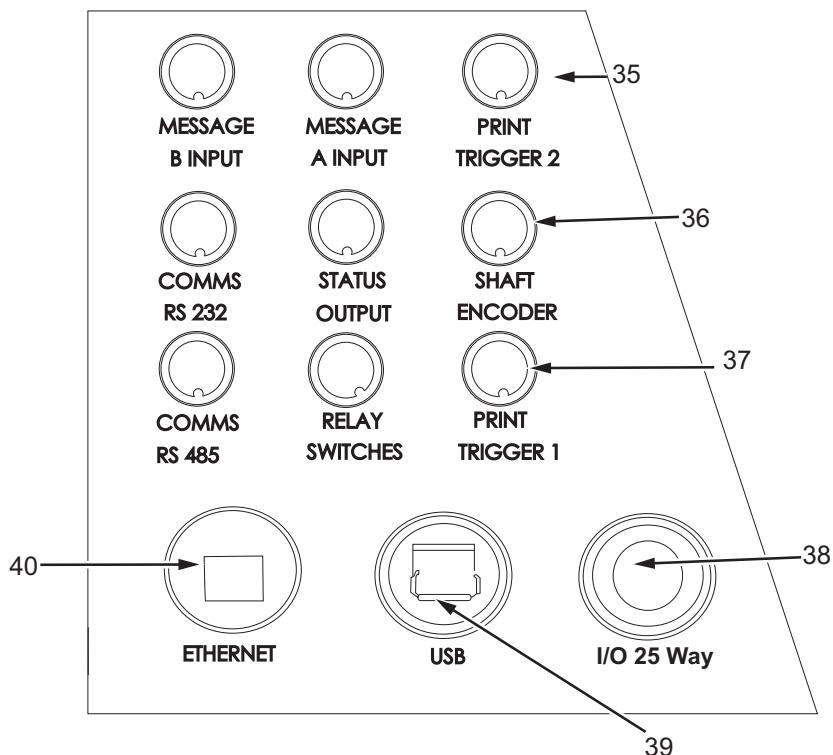


Figure 10-15: Connector Panel

PCB Assemblies

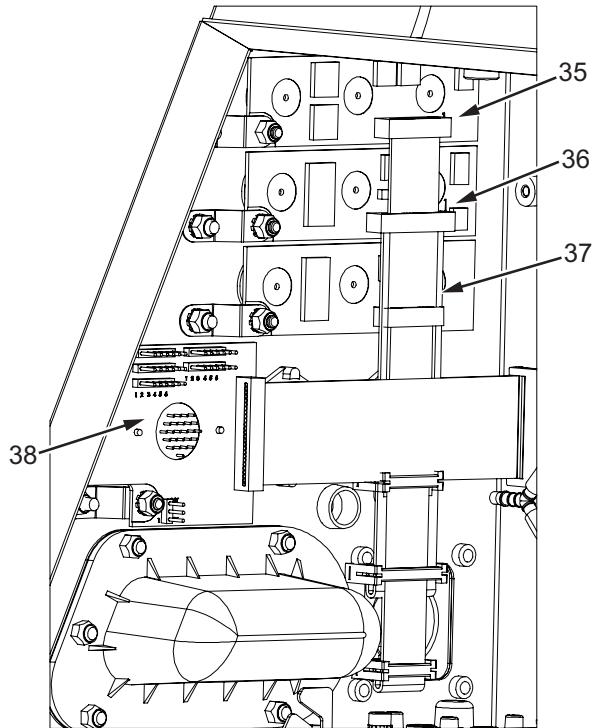


Figure 10-16: PCB 1,2,3 and 4 Assembly

Item Number	P/N	Description	Qty
A		Electronics Compartment	
1	SP399394E	Control System Board (CSB) with Back Plate	1
2	219041	Power Switch	1
E		Electronics Door Assembly	
3		Membrane Ground Wire	1
4		M4 Nyloc Nut	1
5		M4 ET Washer	2
6		Display Ground Wire	1
7		Display Rear Cover	1
8		Display Ribbon Connector Clamp	1

Table 10-3: Electronics Compartment

Item Number	P/N	Description	Qty
9		M4 ET Washer	2
10		M4 x 8 Cap-head Screw	2
11		M4 x 10 Cap-head Screw	1
12		K40 x 10 Pan-head Torx Screw	4
M		Display Door with Keypad (See Table 10-4 on page 10-15 for part numbers of different languages)	
N	399091	Liquid Crystal Display and Front Panel Interface Board Assembly	
13		K40 x 10 Pan-head Torx Screw	4
14		LCD and FIB Assembly	1
F	399077	Power Supply Unit (PSU) with Mount	
15		PSU	1
16		PSU Mounting Plate	1
17		M3 ET Washer	4
18		M3 x 5 Cap-head Screw	4
19		M4 Nyloc Nut	2
G	399473	Printer Interface Board (PIB) Assembly	
20		M4 x 8 Cap-head Screw	6
21		M4 ET Washer	6
22		PIB	1
23		PIB Gasket	1
H	399079	Electronics Fan Assembly	
24		Fan, 60 mm	1
25		M4 ET Washer	2
26		M4 x 10 Cap-head Screw	2
27		Finger guard, 60 mm	1
28		M4 Nyloc Nut	2
29		M4 x 16 Counter Sunk Screw	2

Table 10-3: Electronics Compartment (Continued)

Item Number	P/N	Description	Qty
J	SP399399	Double Headed Air Pump Kit	
30		Positive Air Pump	1
30A		Dampener	1
31		P-Clip	1
32		M4 Nyloc Nut	3
K	399081	EHT Module Assembly	
33		M4 Nyloc Nut	2
34		EHT Module	1
L		Connector Panel	
35	SP500096	PCB 3 Assembly	1
36	SP500097	PCB 2 Assembly	1
37	SP500095	PCB 1 Assembly	1
38	399475	PCB 4 Assembly	1
39	399084	USB Connector	1
40	399083	Ethernet Connector	1

Table 10-3: Electronics Compartment (Continued)

Display Door with Keypad in Different Languages

Part Number	Display Door with Keypad (EXCEL)	Country
399101	Display door with keypad European Excel	French, German, Spanish, Portuguese (Brazilian), Italian, Dutch, Norwegian, Finnish, Swedish, Danish, Portuguese (Portugal), Swiss (German), Swiss (French), Swiss (Italian), Spanish (CALA)
399102	Display door with keypad Turkish Excel	Turkish
399103	Display door with keypad Korean Excel	Korean
399105	Display door with keypad Polish Excel	Polish

Table 10-4: Display Door with Keypad - Excel

Part Number	Display Door with Keypad (EXCEL)	Country
399106	Display door with keypad Katakana Excel	Japanese
399107	Display door with keypad US Excel	English (US), Chinese (Simplified), English (UK and Ireland), Indian (English), Philippines (English)
399108	Display door with keypad Chinese Excel	Chinese (Traditional)
399109	Display door with keypad Russian Excel	Russian
399110	Display door with keypad Greek Excel	Greek
399111	Display door with keypad Bulgarian Excel	Bulgarian
399112	Display door with keypad Czech Excel	Czech, Hungarian
399113	Display door with keypad Arabic Excel	Arabic
399114	Display door with keypad Hebrew Excel	Hebrew
399541	Display door with keypad Thai Excel	Thai
399543	Display door w/ keypad Vietnamese	Vietnamese

Table 10-4: Display Door with Keypad - Excel

Ink Compartment

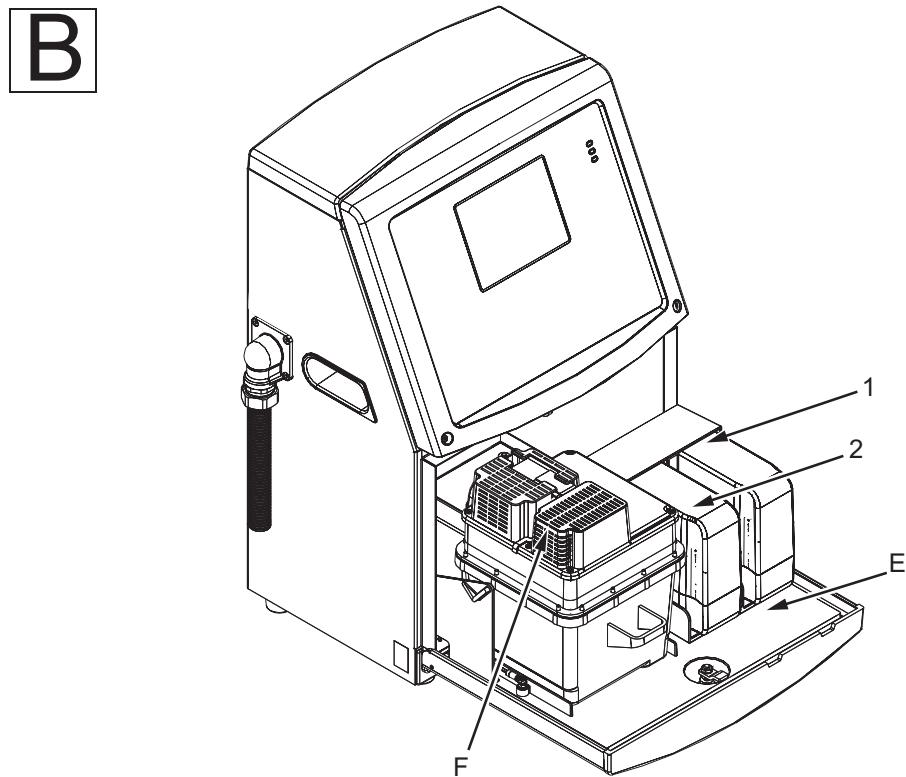


Figure 10-17: Ink System

Ink Cartridge

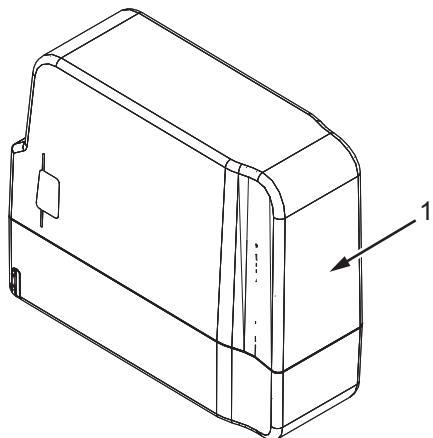


Figure 10-18: Ink Cartridge

Make-up Cartridge

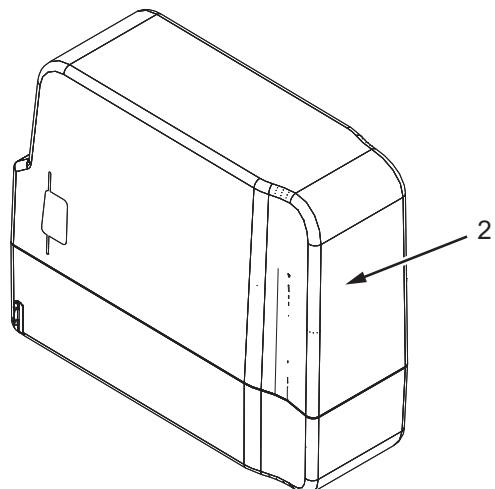


Figure 10-19: Make-up Cartridge

Ink Door Assembly

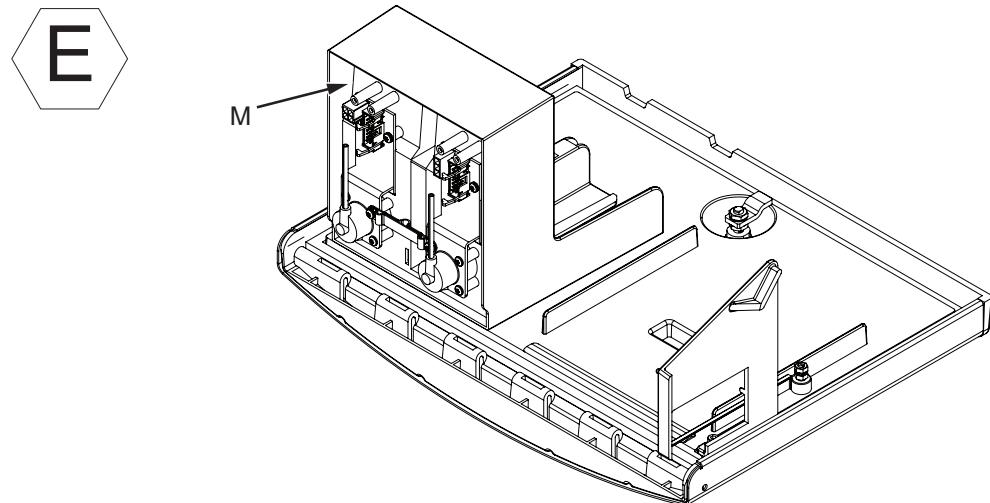


Figure 10-20: Ink Door Assembly

Septum Assembly

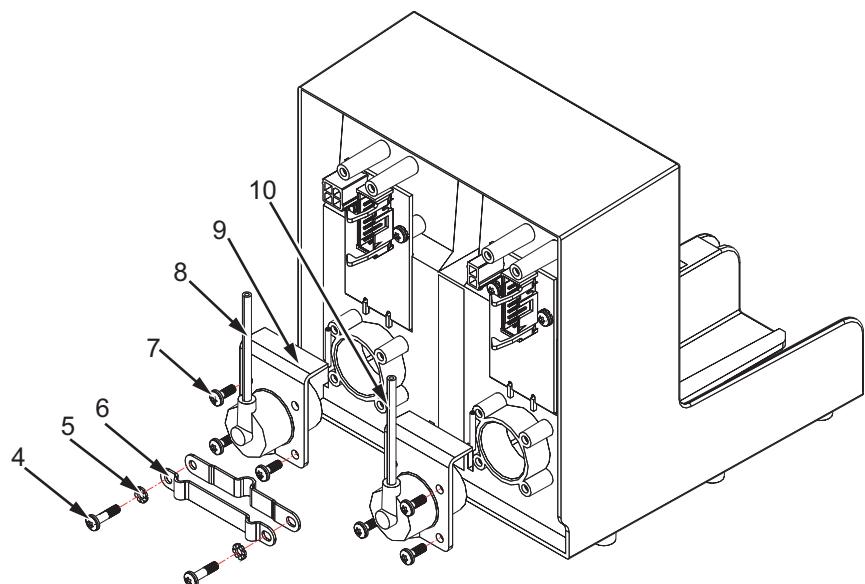


Figure 10-21: Septum Assembly

Ink Core Module Assembly

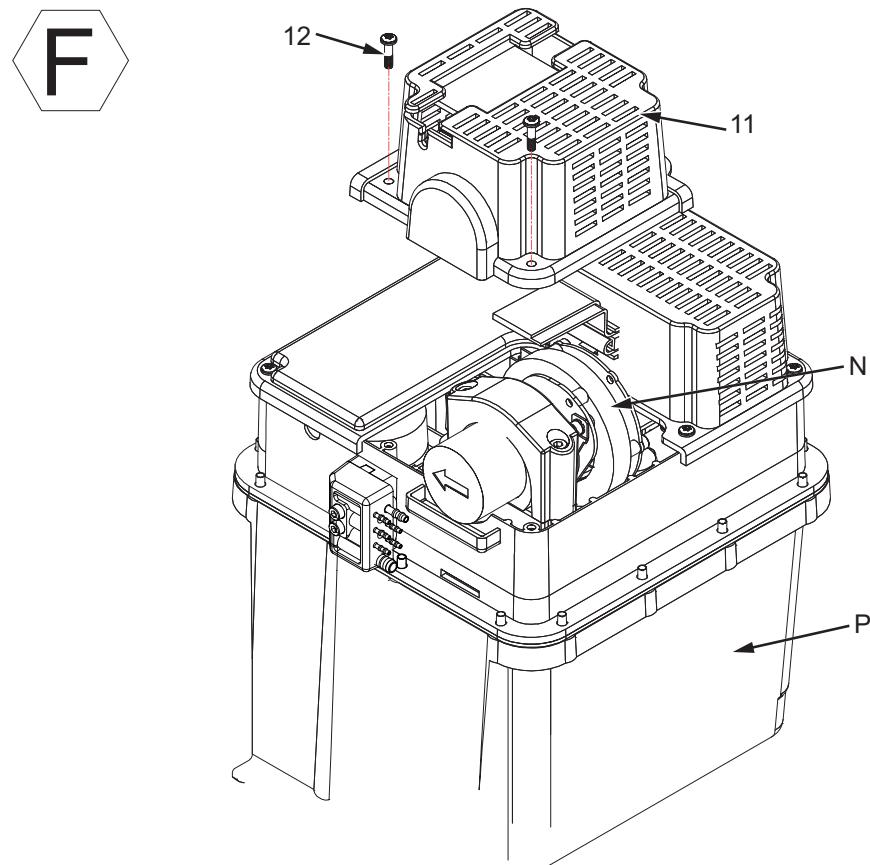


Figure 10-22: Core Module

Ink Core Pump

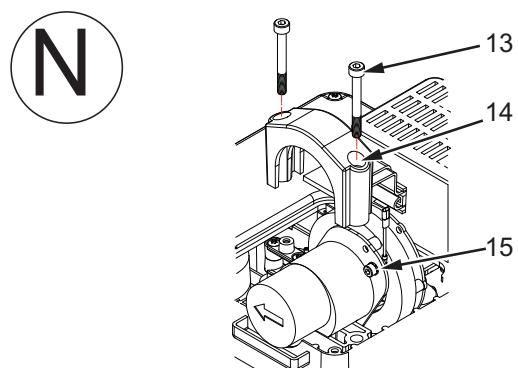


Figure 10-23: Ink Core Pump Assembly

P

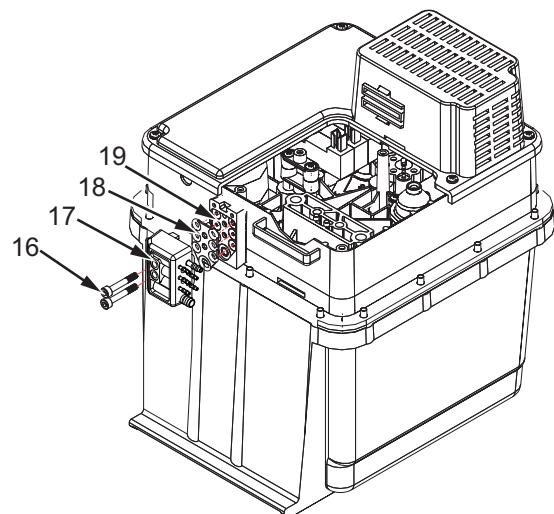


Figure 10-24: Ink Core Module Without Pump

Gutter Pump Assembly

G

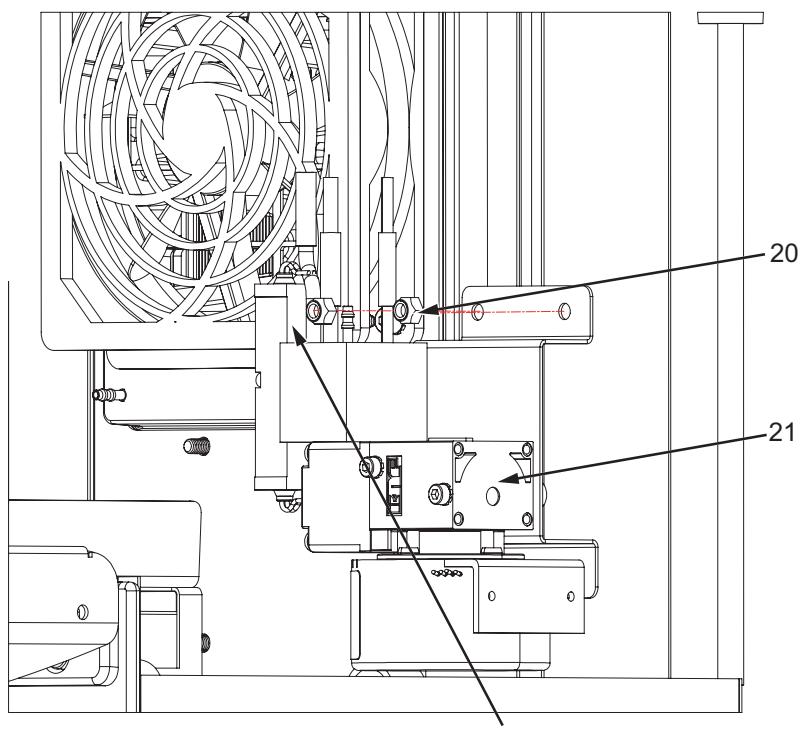


Figure 10-25: Gutter Pump Assembly

Ink System Fan

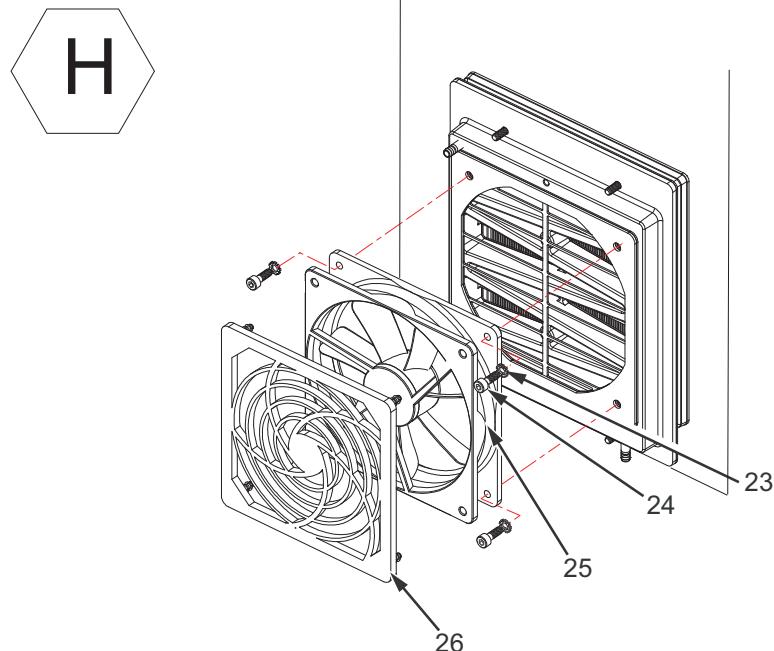


Figure 10-26: Ink System Fan Assembly

Condenser Assembly

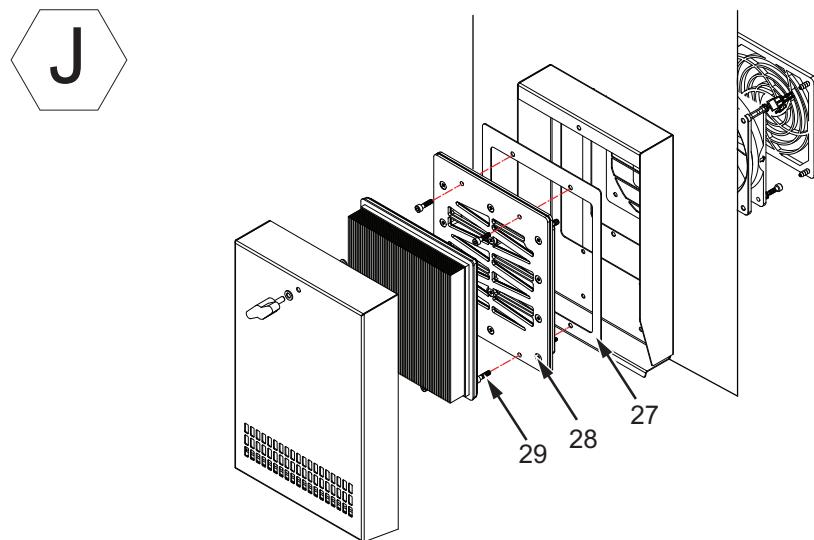


Figure 10-27: Condenser Assembly

Ink System Filter Assembly

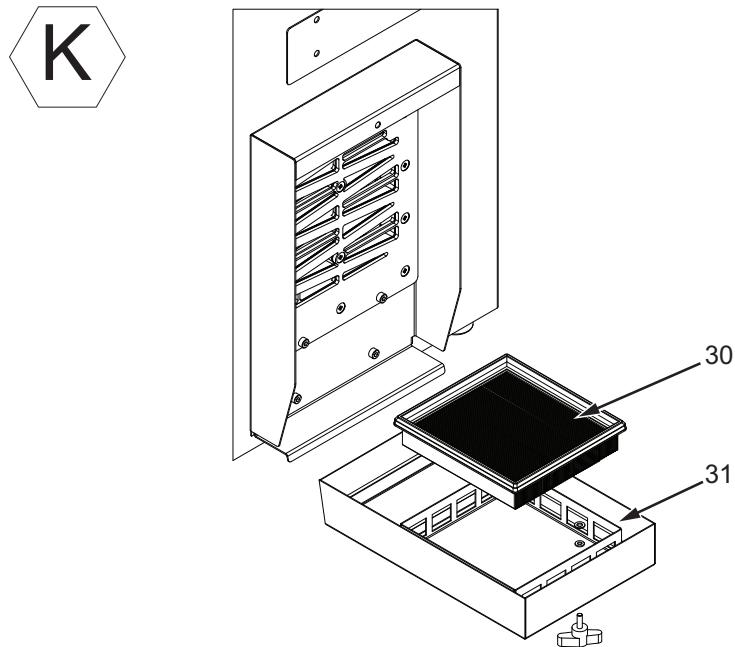


Figure 10-28: Ink System Filter Assembly - IP65

Floor Filter

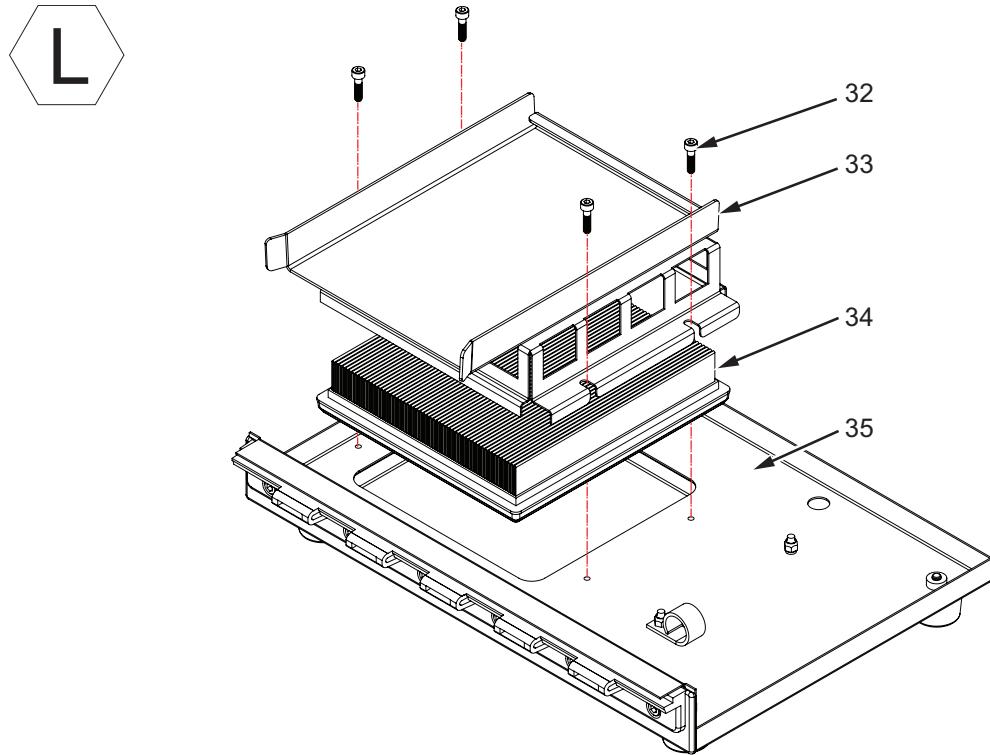


Figure 10-29: Floor Filter IP65

Item Number	P/N	Description	Qty
1		Ink Cartridge	1
2		Make-up Cartridge	1
E	399472	Ink Door Assembly	
3*		Hinge Pin	1
M	399073	Septum Assembly	
4		K30 x 12 Pan-head Torx Screw	2
5		M3 ET Washer	2
6		Tube and Ribbon Cable Clamp	1
7		K30 x 8 Pan-head Torx Screw	6
8		Black Stripe Tube (Ink System)	1

Table 10-5: Ink Compartment

Item Number	P/N	Description	Qty
9		Septum	2
10		Green Stripe Tube (Make-up System)	1
F	399340	Ink Core with Pump	
11		Ink Core Pump Cover	1
12		K30 x 12 Pan-head Torx Screw	2
N	399076	Ink Core Pump	
13		M4 x 35 Cap-head Screw	2
14		Saddle Clamp	1
15		Ink Core Pump	1
P	399341	Ink Core without Pump	
16		M3 x 7 Manifold Screw	2
17		Ink Core Manifold (Male)	1
18		Ink Core Manifold Gasket	1
19		Ink Core Manifold (Female)	1
G	399171	Gutter Pump Assembly	
20		M4 Nyloc Nut	2
21		Gutter Pump	1
22		3 Way Valve	1
H	399080	Ink System Fan Assembly	
23		M4 ET Washer	4
24		M4 x 12 Cap-head Screw	4
25		Fan	1
26		Fan Guard	1
J	399350	Condenser Assembly	
27		Condenser Body Gasket	1
28		Condenser 1610 Assembly	1
29		M4 x 16 Cap-head Screw	4

Table 10-5: Ink Compartment

Item Number	P/N	Description	Qty
K		Ink System Filter Assembly	
	399521	1610E Filter Kit Spares <i>Note: This kit has 8 filters (P/N 234502)</i>	
30	234502	Filter Element	1
31	399529	Filter Cover	1
L		Floor Filter Assembly	
32		M4 x 16 Cap-head Screw	4
33		Ink Core Support	1
34	234502	Filter Element	1
35		Drip Tray	1

Table 10-5: Ink Compartment

*- Items are not shown in the figure

Printhead

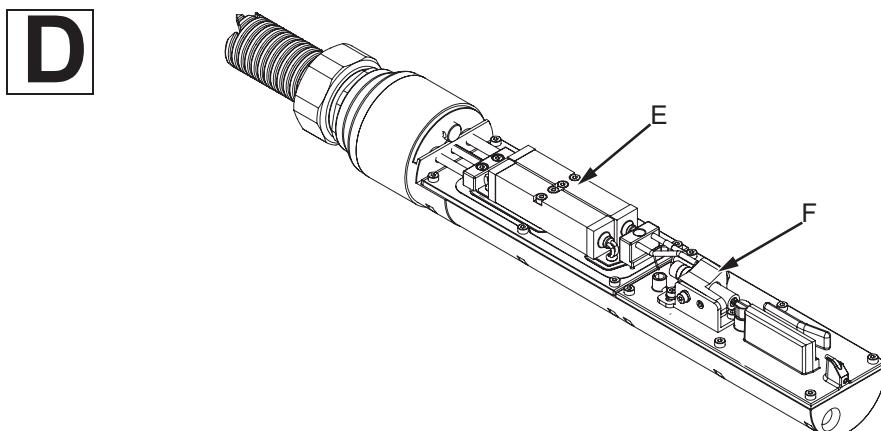


Figure 10-30: Printhead

Printhead Valve Module

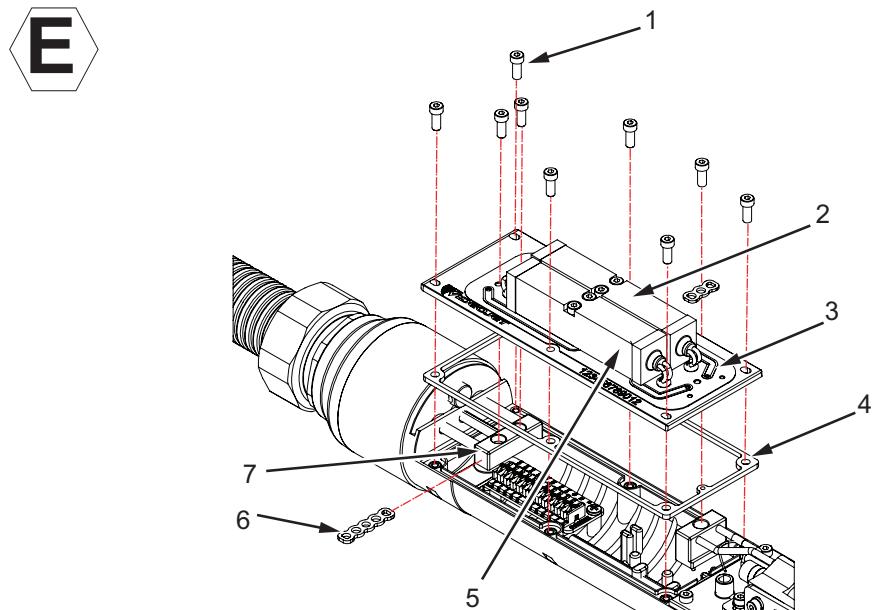


Figure 10-31: Printhead Valve Module

Printhead Engine

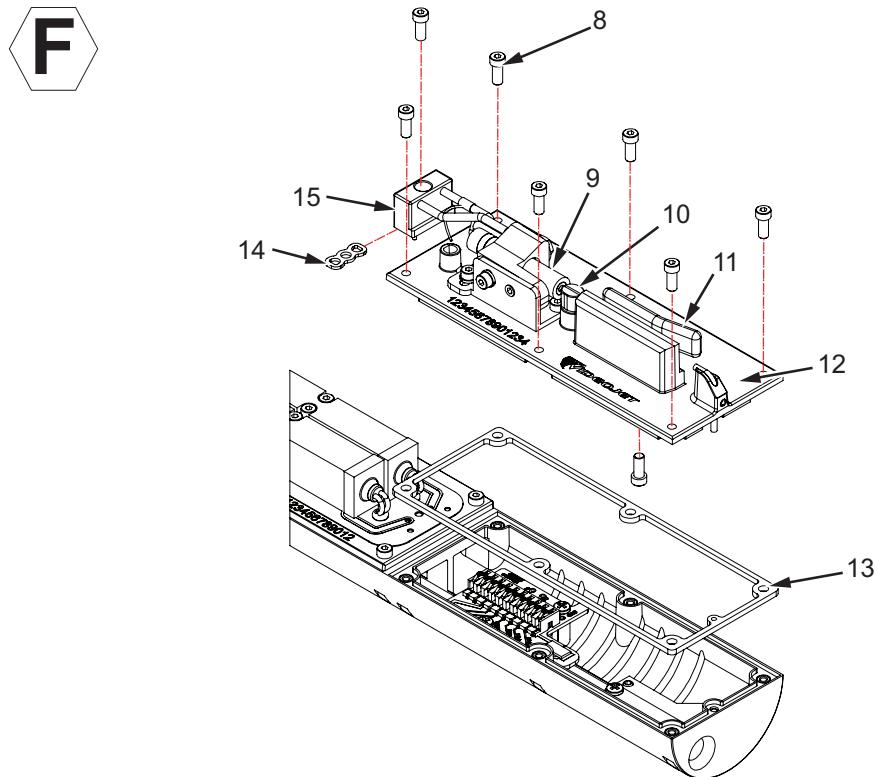


Figure 10-32: Printhead Engine

Item Number	P/N	Description	Qty
D		Printhead	
E	399181	Printhead Valve Module	
1		M2 x 6 Cap-head Screw	9
2		Gutter Valve	1
3		Printhead Valve Module Deck	1
4	Refer to Item 16	Printhead Valve Module Gasket	1
5		Feed Valve	1
6	Refer to Item 16	Rear Manifold Gasket	1
7		3 Way Manifold Assembly (Rear Tubing Manifold)	1

Table 10-6: Printhead Assembly

Item Number	P/N	Description	Qty
F	399422	Printhead Engine (60 micron)	
8		M2 x 6 Cap-head Screw	8
9		Nozzle Assembly	1
10		Charge Electrode	1
11		Deflector Plate	1
12		Printhead Engine Deck	1
13	Refer to Item 16	Printhead Engine Gasket	1
14	Refer to Item 16	Front Tubing Manifold Gasket	1
15		2 Way Manifold Assembly (Front Tubing Manifold)	1
16	399336	Printhead Gasket Kit	
		Gasket, Printhead	10
		Gasket, 3 way Manifold	10
		Gasket, 2 way Manifold	10
*		Connection Manifold Gasket	10
*		4.47 x 1.78 o-ring	10

Table 10-6: Printhead Assembly

*- Items are not shown in the figure

Cables

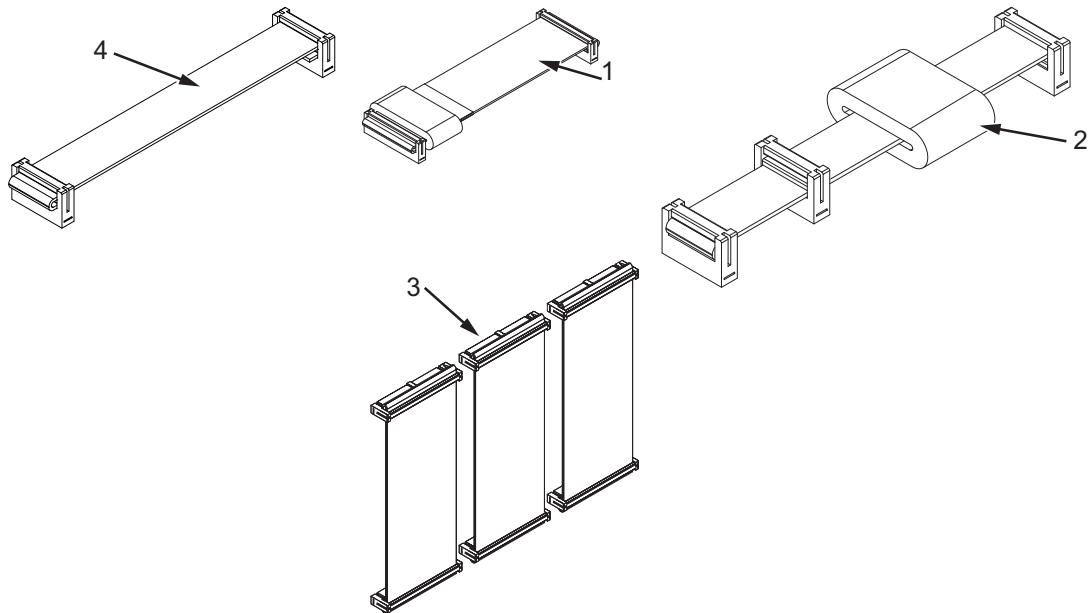


Figure 10-33: Cables

Item Number	P/N	Description	Qty
	399505	Cables Kit	
1		Ribbon Cable Assembly Display	1
2		Ribbon Cable Assembly Smart Chip and Pump 14 Way	1
3		50 Way Ribbon Cables	3
4		16 Way Ribbon Cable	1

Table 10-7: Cables

Optional Accessories

Beacon Kit

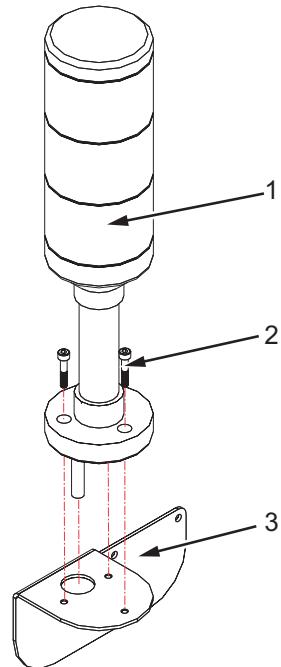


Figure 10-34: Beacon Kit

Dry Air Kit Assembly

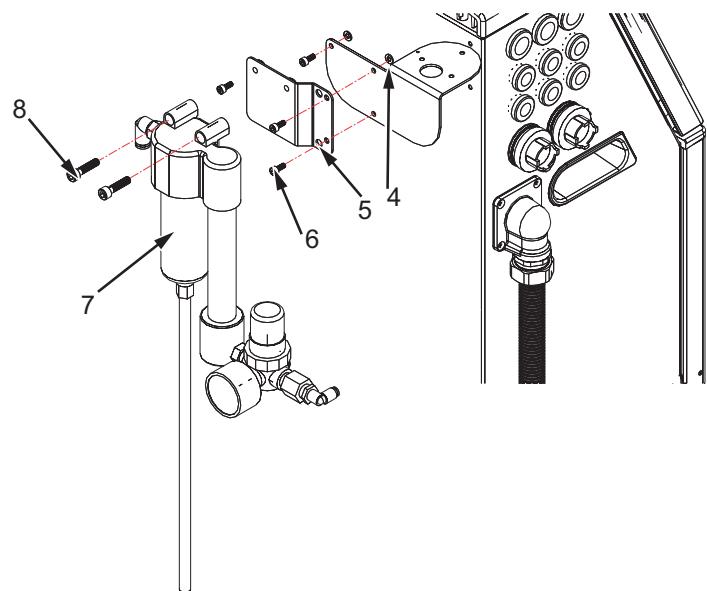


Figure 10-35: Dry Air Kit Assembly

Static Stand

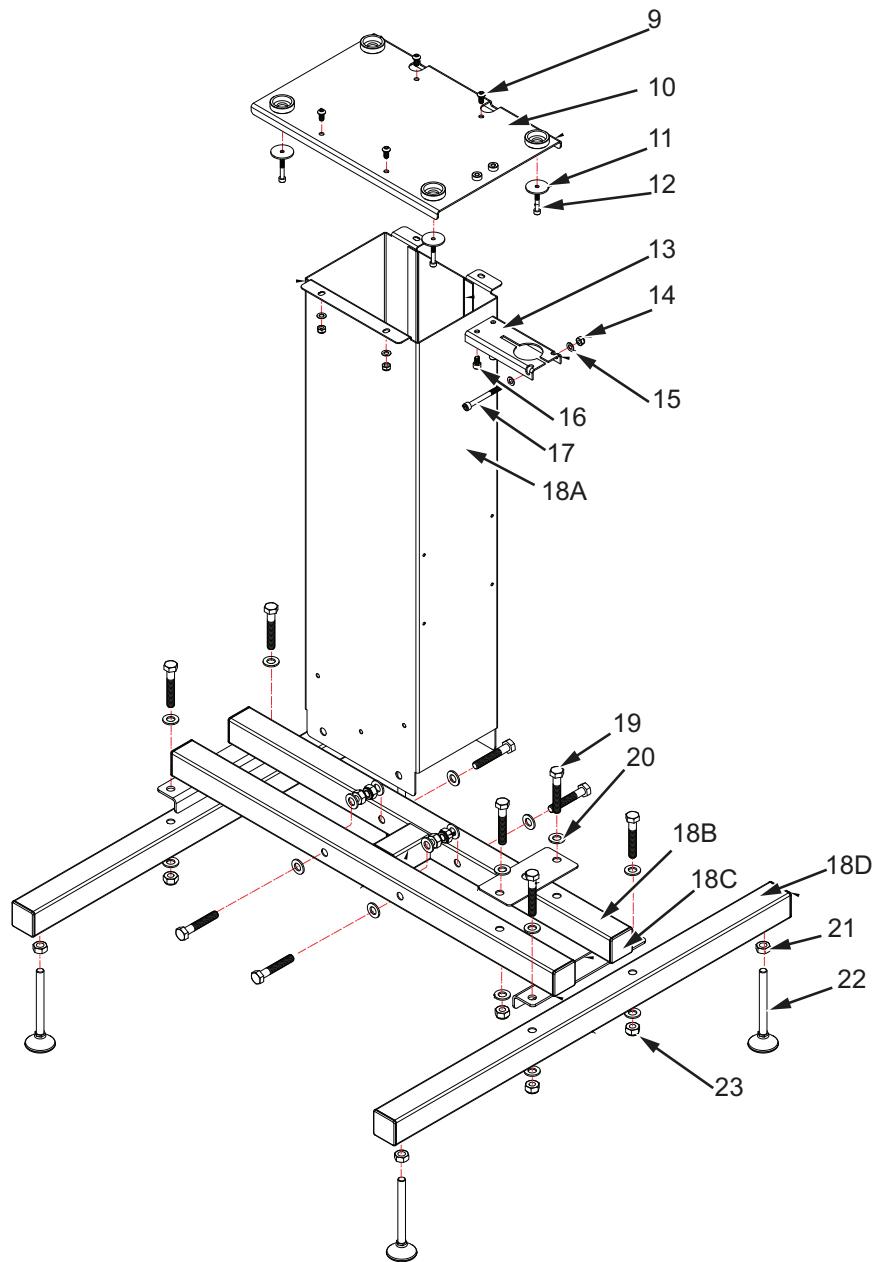


Figure 10-36: Static Stand

Note: You can use the adaptor plates with the existing printer stands.

Mobile Stand

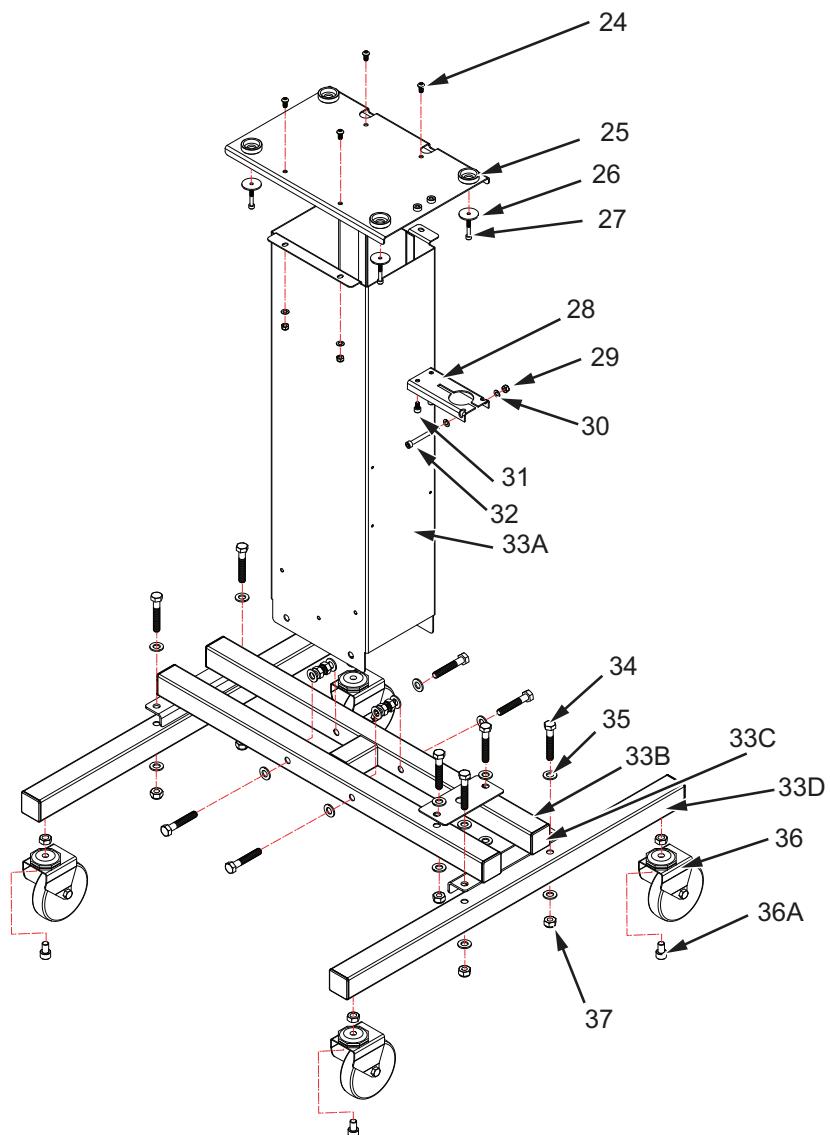


Figure 10-37: Mobile Stand

Note: You can use the adaptor plates with the existing printer stands.

Printhead Stand

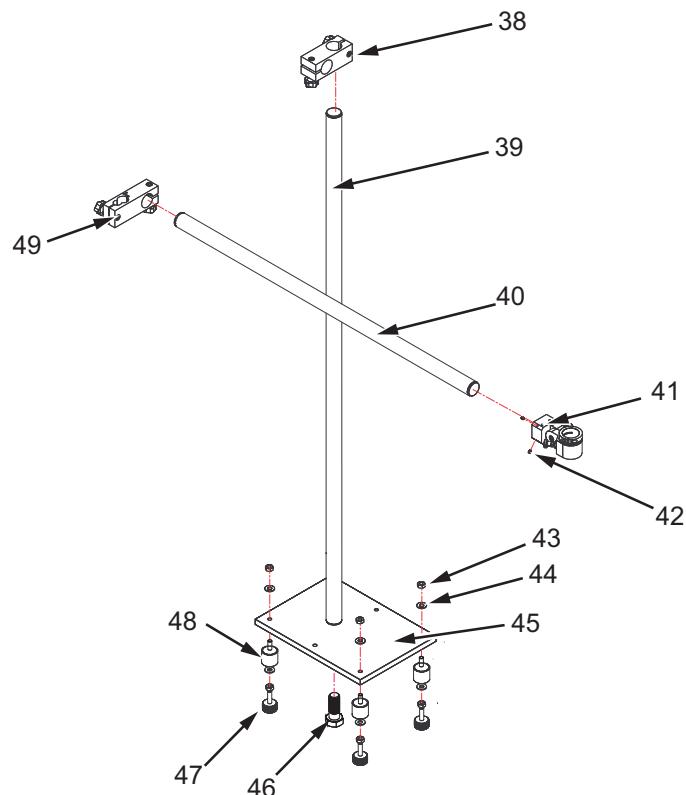


Figure 10-38: Printhead Stand

Printhead Holder

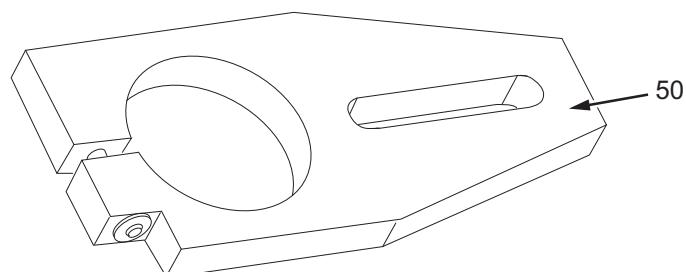


Figure 10-39: Printhead Photocell Holder - 8 mm

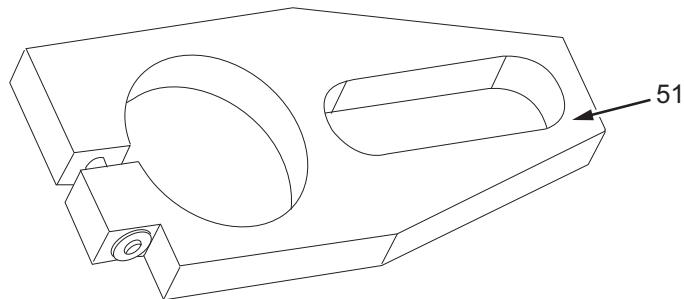


Figure 10-40: Printhead Photocell Holder - 18 mm

Mounts to Printhead Holder

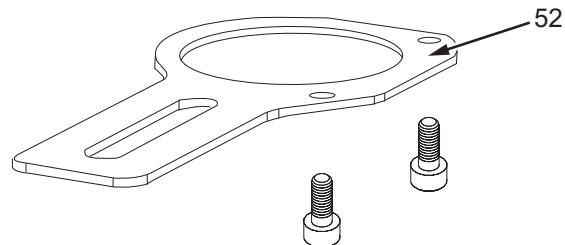


Figure 10-41: Mounts to Printhead Photocell Holder - 8

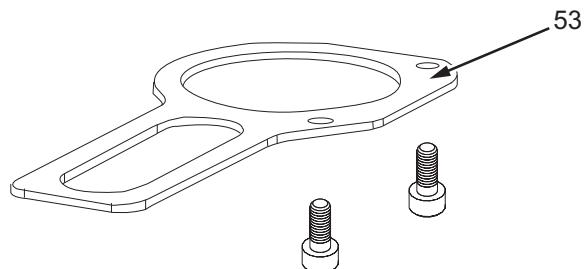


Figure 10-42: Mounts to Printhead Photocell Holder - 18mm

Wash Station Assembly

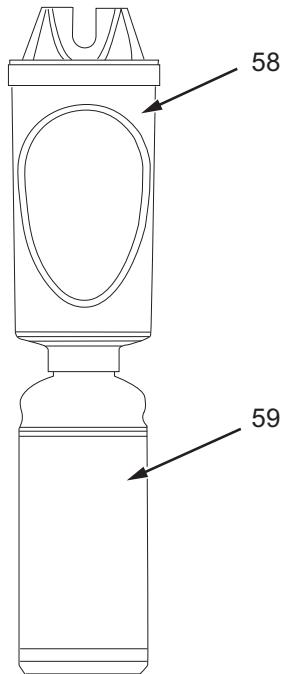


Figure 10-43: Wash Station Assembly

Shaft Encoder



Figure 10-44: Shaft Encoder

Shaft Encoder Accessories

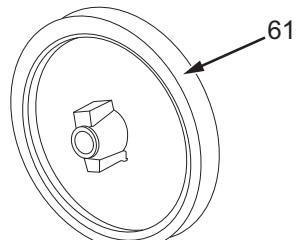


Figure 10-45: Circular Wheel

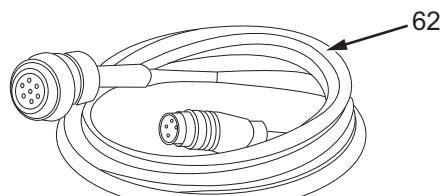


Figure 10-46: Shaft Cable



Figure 10-47: Spring Bracket

Product Detectors



Figure 10-48: Detector EZ

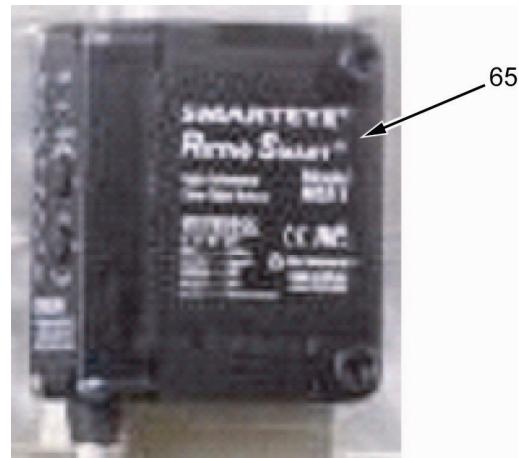


Figure 10-49: Detector Retro Smart

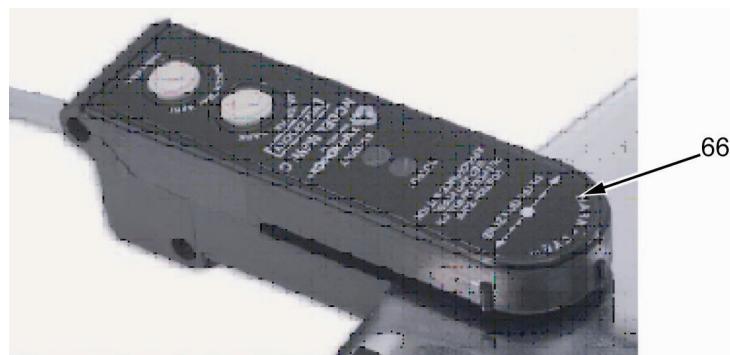


Figure 10-50: Detector Label Eye

Power Accessories



Figure 10-51: Power Conditioner

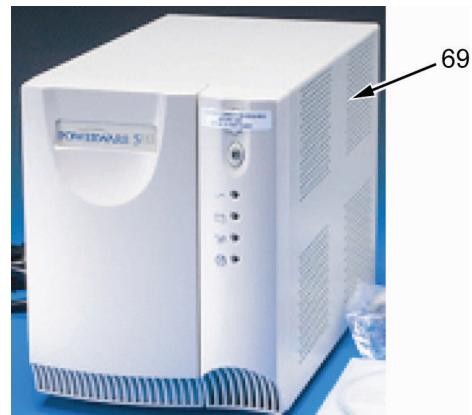


Figure 10-52: Uninterrupted Power Supply

Power Cord

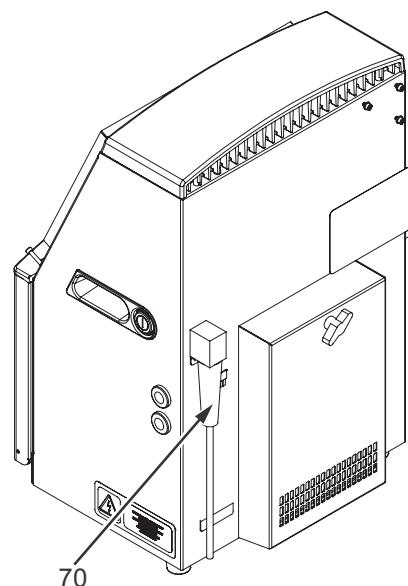


Figure 10-53: Power Cord

Din Plugs



Figure 10-54: 3 Way DIN Plug



Figure 10-55: 7 Way DIN Plug

Item Number	P/N	Description	Qty
	399089	Beacon Assembly	
1		Beacon	1
2		M4x10 Socket-head Cap Screw	3
3		Beacon Mounting Bracket	1
	399474	Air Dryer Assembly	
4		Air Dryer Mounting Bracket	1
5		M4 Nylon Washers	2
6		M4 x 10 Socket-head Cap Screw	3
7		Air Dryer	1
8		1/4 inch-20 x 1 inch Socket-head Screw	2
	399363	Static Stand Standard	
	399502	Static Stand - Harsh Environment	
9		M6 x 12 Button Socket-head Screw	4
10	399337	Adapter Plate	1
11		Stand Foot Clamp Washer	4
12		M5 x 30 Cap Head Screw	4
13		Stand Tube Clamp	1
14		M6 Nyloc Nut	5
15		M6 Plain Washer	6
16		M6 x 10 Cap Head Screw	2
17		M6 x 60 Cap Head Screw	1
18A		Stand Column	1
18B		Stand Cross Brace Detail Assembly	1
18C		Tube Plug 40mm SQ	8
18D		Stand Leg Detail Assembly	2
19		M10 x 60 Hex Bolt	10

Table 10-8: Accessories

Item Number	P/N	Description	Qty
20		M10 Washer	20
21		M10 Nut	4
22		M10 x 100 Levelling Foot	4
23		M10 Nyloc Nut	10
	399362	Mobile Stand Standard	
	399501	Mobile Stand - Harsh Environment	
24		M6 x 12 Button Socket-head Screw	4
25	399337	Adapter Plate	1
26		Stand Foot Clamp Washer	4
27		M5 x 30 Cap Head Screw	4
28		Stand Tube Clamp	1
29		M6 Nyloc Nut	5
30		M6 Plain Washer	6
31		M6 x 10 Cap Head Screw	2
32		M6 x 60 Cap Head Screw	1
33A		Stand Column	1
33B		Stand Cross Brace Detail Assembly	1
33C		Tube Plug 40mm SQ	8
33D		Stand Leg Detail Assembly	2
34		M10 x 60 Hex Bolt	10
35		M10 Washer	20
36		100m Castor	4
36A		M10 x 16 Cap Head Screw	4
37		M10 Nyloc Nut	10
	399086	Printhead Stand	
38		Clamp Assembly	1
39		Vertical Tube	1
40		Printhead Cross Tube	1

Table 10-8: Accessories (Continued)

Item Number	P/N	Description	Qty
41		Printhead Mount Assembly	1
42		M6 x 8 Grub Screw	2
43		M10 Nut	8
44		M10 Washer	8
45		Stand Base Plate	1
46		M16 X 40 Hex Bolt	1
47		Adjustable Foot	4
48	399093	Anti-vibration Mounting	4
49		Umbilical Clamp Assembly	1
50	399248	Printhead Photocell Holder 8 mm	1
51	399278	Printhead Photocell Holder 18 mm	1
52	399293	Printhead Mount Photocell Holder 8mm	1
53	399294	Printhead Mount Photocell Holder 18mm	1
58	399085	Wash Station Assembly	1
	202047	250ml Wash Bottle	1
59	301-0007-005	Empty 1 Liter Bottle	1
60		Shaft Encoder	
		Encoders	
	41000255	2500 PPR	1
	377530	3600 PPR (use with 21000217)	1
	41000256	5000 PPR	1
		Encoder Kits	
	378815	1800 PPR kit (encoder, 25ft cable)	1
	40331750	2500 PPR kit (encoder, mounting bracket, wheel)	1
	378821	3600 PPR kit (encoder, 25ft cable)	1
	80200266	5000 PPR kit (encoder, mounting bracket, wheel)	1

Table 10-8: Accessories (Continued)

Item Number	P/N	Description	Qty
61	21000217	12 inch Circular Wheel	1
	377529	12 inch Circular Wheel (With replaceable ring)	1
	377523	Replaceable ring for part 377529	1
62	378192	3 m Shaft Cable	1
	378193	6 m Shaft Cable	1
	378985	Encoder Adapter Cable Kit (To convert from older style Conxall (excel) connectors to new DIN connectors)	1
63	377519	Spring Bracket	1
64	234211	Detector EZ-Pro Proximity Fiber	1
	234212	Detector EZ-Pro Through Beam fiber	1
65	234215	Detector Retro Smart (Clear Materials)	1
66	234213	Detector Label Eye (Web Printing)	1
	234214	Detector Mark Eye (Web Registration Mark)	1
67*	378981	Product Detector Adapter Cable (To convert from older style Conxall (excel) connectors to new DIN connectors)	1
68	356841-02	120 V Power Conditioner	1
	234597	240 V Power Conditioner	1
69	80000008	Uninterrupted Power Supply (120 V Version)	1
70		Power Cord (Refer to Table 10-9 on page 10-47)	1
71	500-0036-578	3 Way DIN Plug (Photo Cell) For product detector and reverse printing input	1
72	500-0036-583	7 Way DIN Plug (Relays) For Print Ready output and warnings	1
73*	500-0036-577	6 Way DIN Plug (Alert Beacon)	1
74*	500-0036-581	4 Way DIN Plug (Shaft Encoder)	1
75*	500-0036-584	8 Way DIN Plug (Message Select A/B)	1
76*	500-0076-141	DIN Plug Dust Cap	1
77*	399133	Exhaust Kit	1
78*	Refer item 48	Anti Vibration Kit Stand	1

Table 10-8: Accessories (Continued)

Item Number	P/N	Description	Qty
79*	399068	Printhead Mounting	1
80*	399098	Universal Printhead Mounting	1
81*	500-0036-582	5 Way DIN Plug (RS232)	1
82*	234433	5 Way DIN Plug (RS485)	1
83*	399504	25 way I/O (PCB 4) Cable	1
84*	SP378810	Alarm cable - 7 way DIN connector with 6ft cable	1
85*	SP378982	Encoder Adapter Cable	1
86*	399475	25 way I/O (PCB 4) Cable Kit	1

Table 10-8: Accessories (Continued)

*- Items are not shown in the figure

Power Cord

Part Number	Description
SP399205	Mains Power Cable EUROPEAN
SP399204	Mains Power Cable US CAN
399251	US 120V Molded Plug Power Cord (Type B)
399252	European Union Molded Plug Power Cord (Type F)
399253	Danish Molded Plug Power Cord (Type K)
399254	Italian Molded Plug Power Cord (Type C)
399255	Swiss Molded Plug Power Cord (Type J)
399256	UK Molded Plug Power Cord (Type G)
399257	China Molded Plug Power Cord (Type I)
399258	India Molded Plug Power Cord (Type D)
399261	Swedish Molded Plug Power Cord
399262	Finnish Molded Plug Power Cord
399263	Norwegian Molded Plug Power Cord

Table 10-9: Power Cord

Miscellaneous Accessories

Connectivity

Part Number	Description
399186	Extension Cables 3 m RS485
399062	Extension Cables 6 m RS232
399279	Lampstack Extension Cable Beacon 6m
223213	External Ethernet Connector Cable 5 m
SP399083	Ethernet Connector Kit Spares
SP399084	USB Connector Kit Spares

Table 10-10: Connectivity

Hydraulics

Part Number	Description
399472	Ink Door Spare
399171	Gutter Pump Spare
399072	Tubing kit Spare

Table 10-11: Hydraulics

Printhead and Umbilical

Part Number	Description
399506	Printhead and Umbilical Complete (3 m) 60 micron (Standard for Videojet 1610 Excel)
399507	Printhead and Umbilical Complete (6 m) 60 micron (Optional for Videojet 1610 Excel)
399508	Printhead Chassis and Umbilical (3 m) (Standard for Videojet 1610 Excel)
399509	Printhead Chassis and Umbilical (6 m) (Optional for Videojet 1610 Excel)
SP399355	Printhead Sleeve and Screw
223277	Printhead Screw Only

Table 10-12: Printhead and Umbilical

Tools Kit

There are several tools in the tool kit for normal maintenance of printer.

The Service Tool Kit (TL399250)

Table 10-13 lists the tool kit items and their part numbers.

Part Number	Description
234639	Allen/Hex Key, 0.035 inch, Set of 5
234638	M4 Nut Spinner (7mm)

Table 10-13: TL399250 Tool Kit Parts List

Part Number	Description
234642	Ball Driver 2mm
234643	Ball Driver 2.5mm
234644	Ball Driver 3mm
234645	Ball Driver 4mm
234650	Side Cutters
234640	Allen/Hex Key 1.27mm, Set of 5
234641	Allen/Hex Key 1.5mm, Set of 5
234651	Folding Knife
234652	Knife Blades
234653	Spanner/Wrench 7mm
234654	Spanner/Wrench 1/2 inch
234655	Screwdriver Flat Blade 2.5mm
234657	DIN Spanner/Wrench
234658	Tube Cutter
355269	Loupe Magnifying Glass
234494	USB A to USB A Cable
399280	System Manifold Pressure Test Tool
399247	Nozzle Bypass Manifold Kit
234646	Torx Driver T10
234647	Torx Driver T20
234632	USB Memory Stick 2GB
234638	M4 Nut Spinner (7mm)
234648	No.1 Pozidrive
234649	No.2 Pozidrive
399519	Bonding Strap
	Tool Bag

Table 10-13: TL399250 Tool Kit Parts List (Continued)