
5. Parts List (PL)

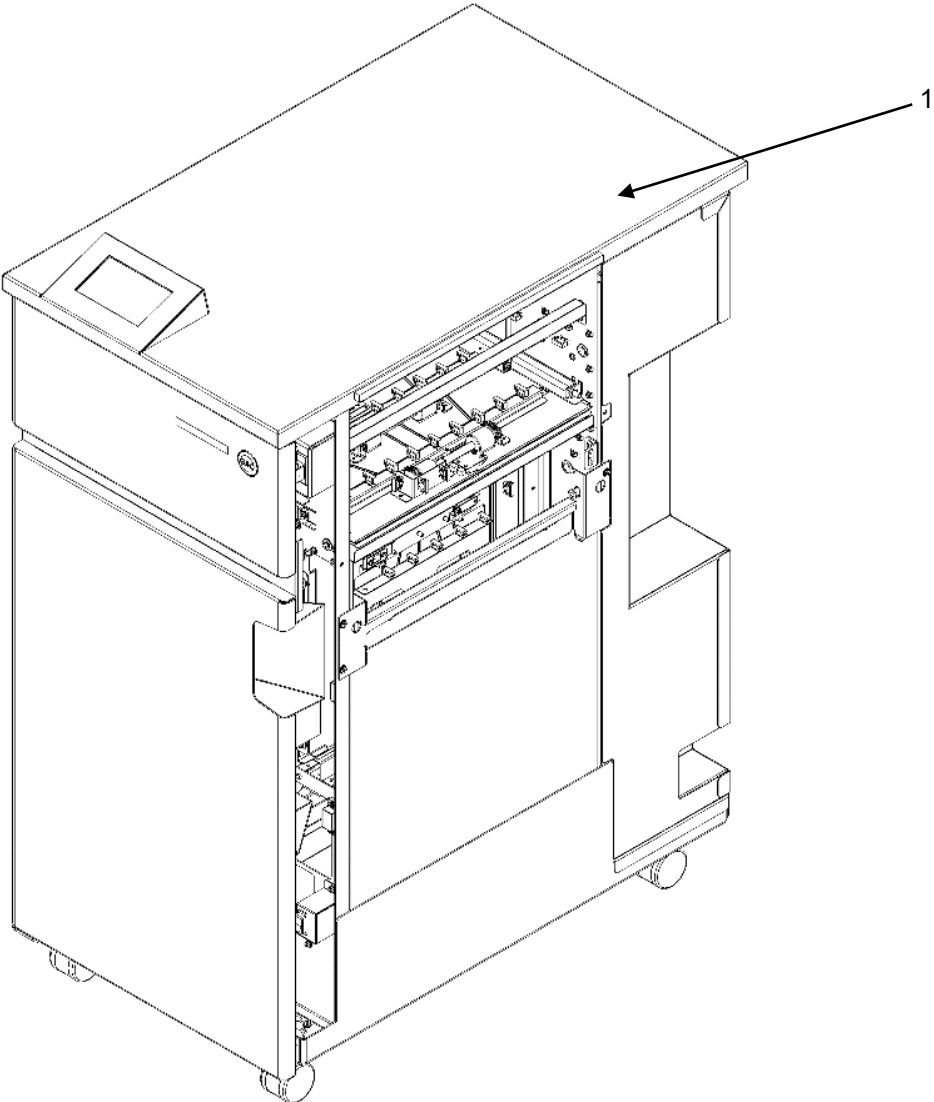
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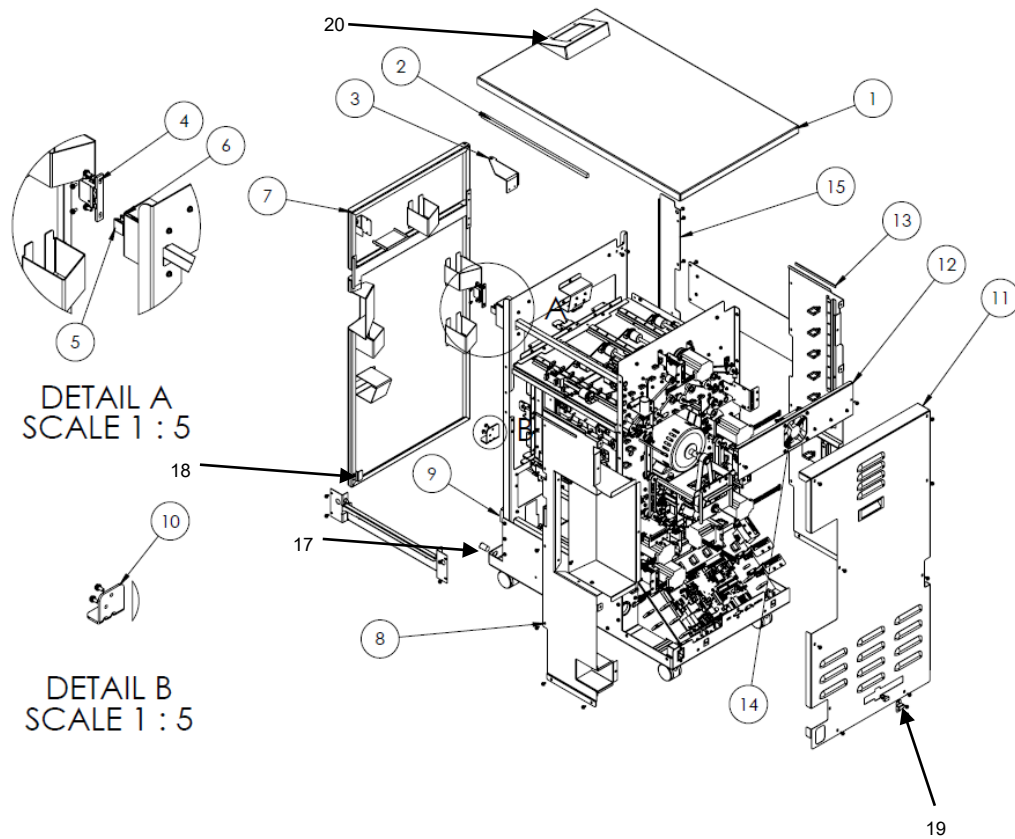
Main Assembly

PL 1.1. Final Assembly

ITEM	Part #	DESCRIPTION	QTY
1	-	SmartPunch Plus 115V	1
	-	SmartPunch Plus 230V	1



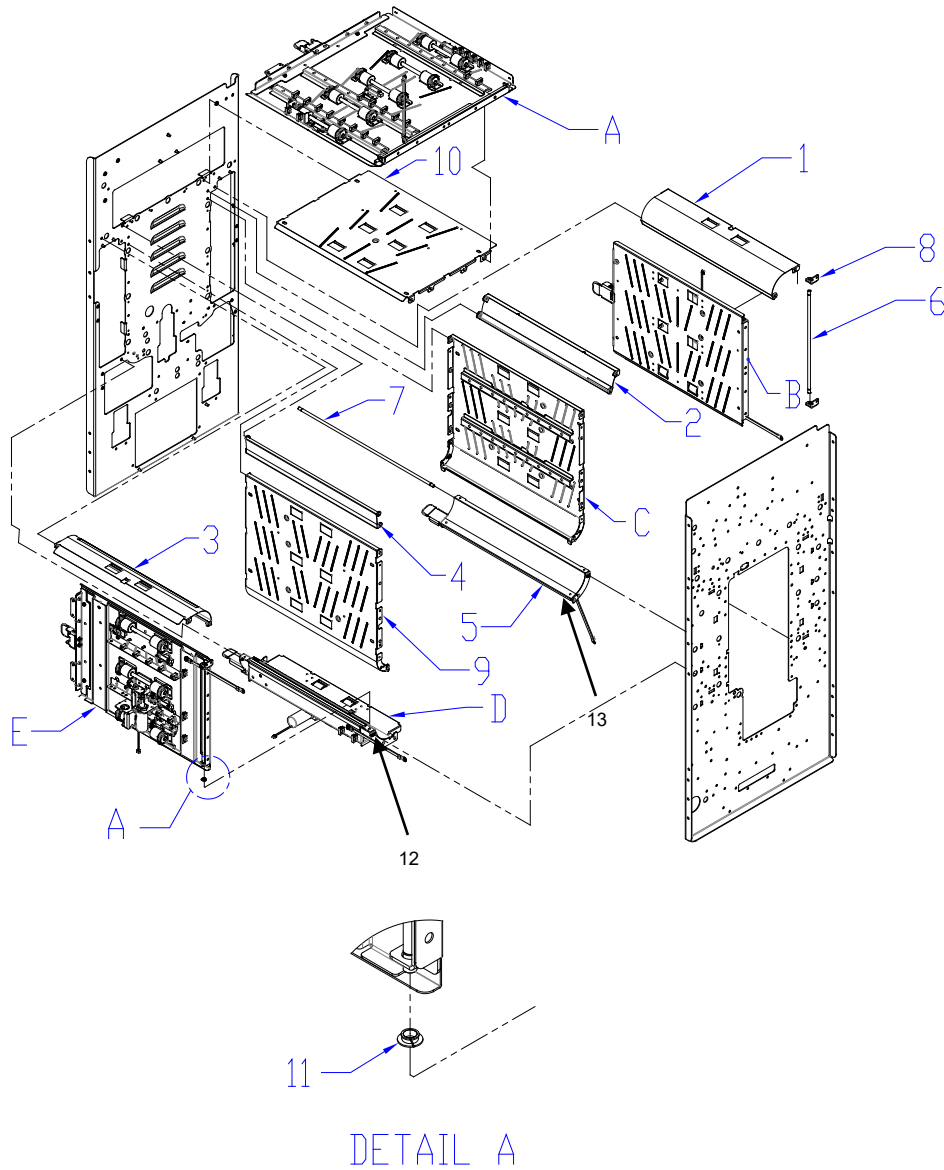
PL 1.2. Cabinet- Covers



ITEM	PART #	DESCRIPTION	QTY
1	0PTZ7724517///	COVER, TOP, ASSEMBLY, SP PLUS	1
2	0PT7715670///	FOAM, TOP COVER	1
3	0PTZ7724507///	BRACKET, FRONT DOOR HINGE, TOP	1
4	0PT7706486///	LATCH, PUSH TO CLOSE, SOUTHCO	1
5	0PTZ7724859///	INTERLOCK SWITCH	1
6	0PT7715793///	BRACKET, INTERLOCK SWITCH, SPARTA	1
7	0PTZ7724503///	DOOR, FRONT, ASSEMBLY, SP PLUS	1
8	0PTZ7724528///	COVER, SIDE, UPSTREAM, SP PLUS	1
9	0PT7715195///	MAGNET, PANEL, OPEN, STRONG	1
10	0PTZ7724506///	BRACKET, DOOR HINGE, BOTTOM, FRAME	1
11	0PTZ7724529///	COVER, REAR, ASSEMBLY, SP PLUS	1
12	0PT7715575///	EXHAUST FAN, BRACKET, ASSY, SPARTA (WITH FAN)	1
-	0PT771574///	EXHAUST FAN, BRACKET	1
13	0PTZ7724527///	COVER, WELDMENT, SIDE, DOWNSTREAM, SP PLUS	1
14	0PT7715267///	FAN, EXHAUST	1
15	0PTZ7724526///	COVER, SIDE, DOWNSTREAM, FRONT, SP PLUS	2
16	0PT7704376///	ROCKER SWITCH, MP-2500IX	1
17	0PT7706447///	MAGNET, FRONT DOOR	1
18	0PT7715766///	BRACKET, DOOR, MAGNET	1
19	0PT7715828///	COVER, USB DRIVE	1
20	0PTZ7723665///	LCD TOUCHSCREEN, 4.3"	1
21	0PT1823902///	SCREW, PHILIPS-HEX HD W/EXT STAR WASHER, M3 X 10	-
22	0PT1824103///	NUT, HEX, NYLOCK, M4	-

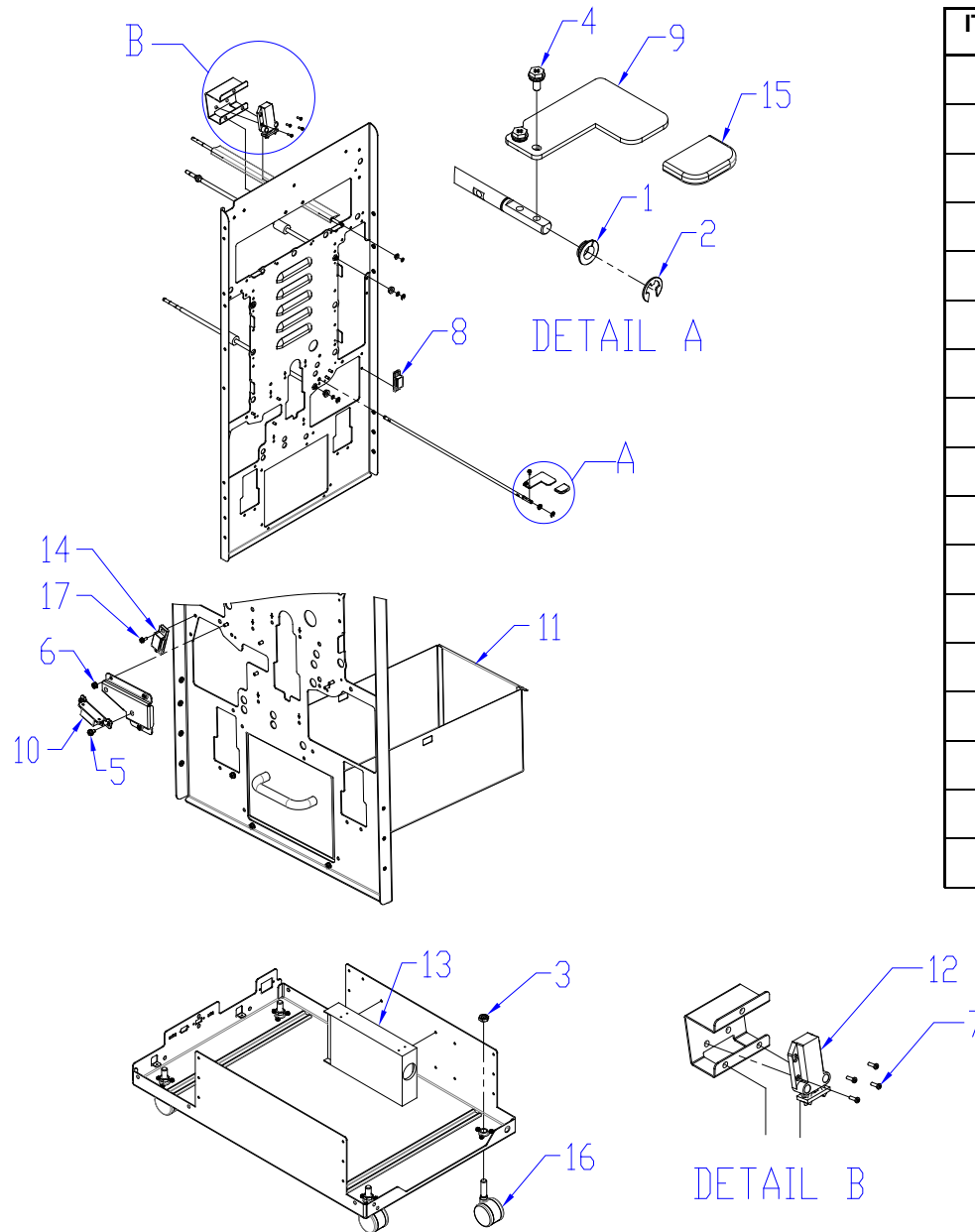
Frame Assembly

PL 2.1. Frame Assembly- Paper path panels



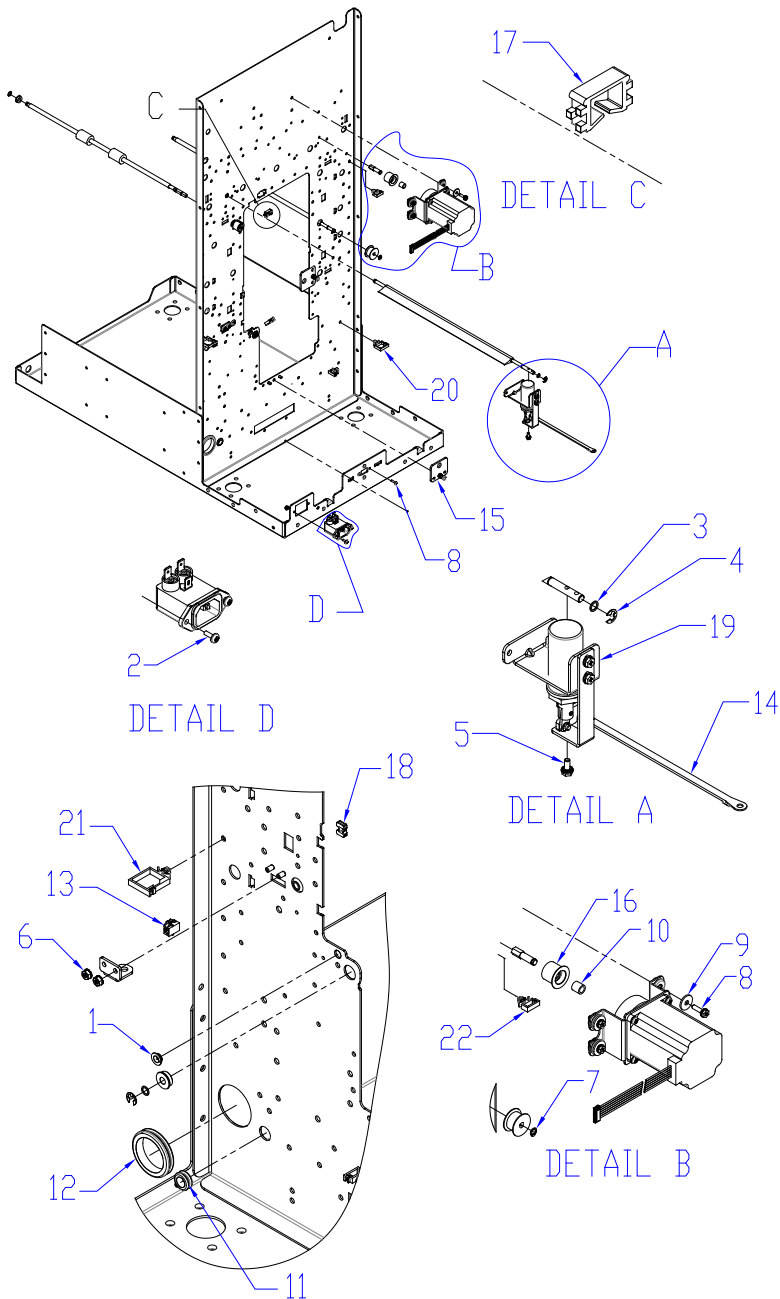
ITEM	PART #	DESCRIPTION	QTY
A	PL 5.5	UPPER BYPASS PANEL	1
B	PL 5.2	ENTRANCE IDLER PANEL	1
C	PL 5.1	ENTRANCE DRIVE PANEL	1
D	PL 5.3	ACCELERATION IDLER PANEL	1
E	PL 5.4	EXIT IDLER PANEL	1
1	0PT7718522///	PANEL, ENTRANCE, LOWER	1
2	0PT7715102///	PANEL, ENTRANCE, INNER	1
3	0PT7715146///	PANEL, EXIT, LOWER	1
4	0PT7715153///	PANEL, EXIT, INNER	1
5	0PT7724137///	PANEL ASSEMBLY, LOWER, EXIT	1
6	0PT7715209///	SHAFT, IDLER PANEL HINGE	2
7	0PT7718619///	SHAFT, IDLER PANEL, WITH GROOVE, EXIT SIDE	
8	0PT7715251///	BRACKET, IDLER PANEL MOUNT	6
9	0PT7715150///	PANEL WELDMENT, DRIVE, EXIT	1
10	0PT7715128///	PANEL WLDMNT, BYPASS, LOWER	1
11	0PT1821209///	SNAP-IN BEARING, 6MM ID [Qty. (2) used on all Idler panels- #A, #B, #D, #E and #5	10
12	0PT7715210///	SHAFT, IDLR PANEL HINGE, LONG	1
13	0PT7718593///	BRUSH, ANTI STATIC, SUS, LONG	1

PL 2.2. Frame Assembly- Front side



ITEM	PART #	DESCRIPTION	QTY
1	OPT1821209///	Snap-in Bearing, 6mm ID	2
2	OPT1822202///	E-RING, JE-5	4
3	OPT1823711///	JAM NUT, M16X2.0	4
4	OPT1823901///	SCREW, HX, W/SEMS,M3X6	2
5	OPT1823909///	SCREW, HX, W/SEMS M4X6	2
6	OPT1824001///	NUT, KEPS M4	3
7	OPT1821606///	SCREW, PHILLIPS PAN HD, M3X10	6
8	OPT7715195///	MAGNET, PANEL, OPEN, STRONG	1
9	OPT7715215///	HANDLE, ACCEL IDLER LATCH	1
10	OPT7715385///	MAGNET, BRACKET, ASSY	1
11	OPT7715427///	CHIP TRAY, ASSEMBLY	1
12	OPT7715650///	LATCH, BYPASS	1
13	OPT7715637///	POWER SUPPLY, 24V, MW SP 480,	1
14	OPT7715789///	MAGNET, PANEL, OPEN, WEAK	3
15	OPT7708163///	CAP, RUBBER, RAIN BLUE	2
16	OPT7715630///	CASTER, ADJUSTABLE	4
17	OPT18///23913	SCREW, HX, W/SEMS, M3 X 8	8

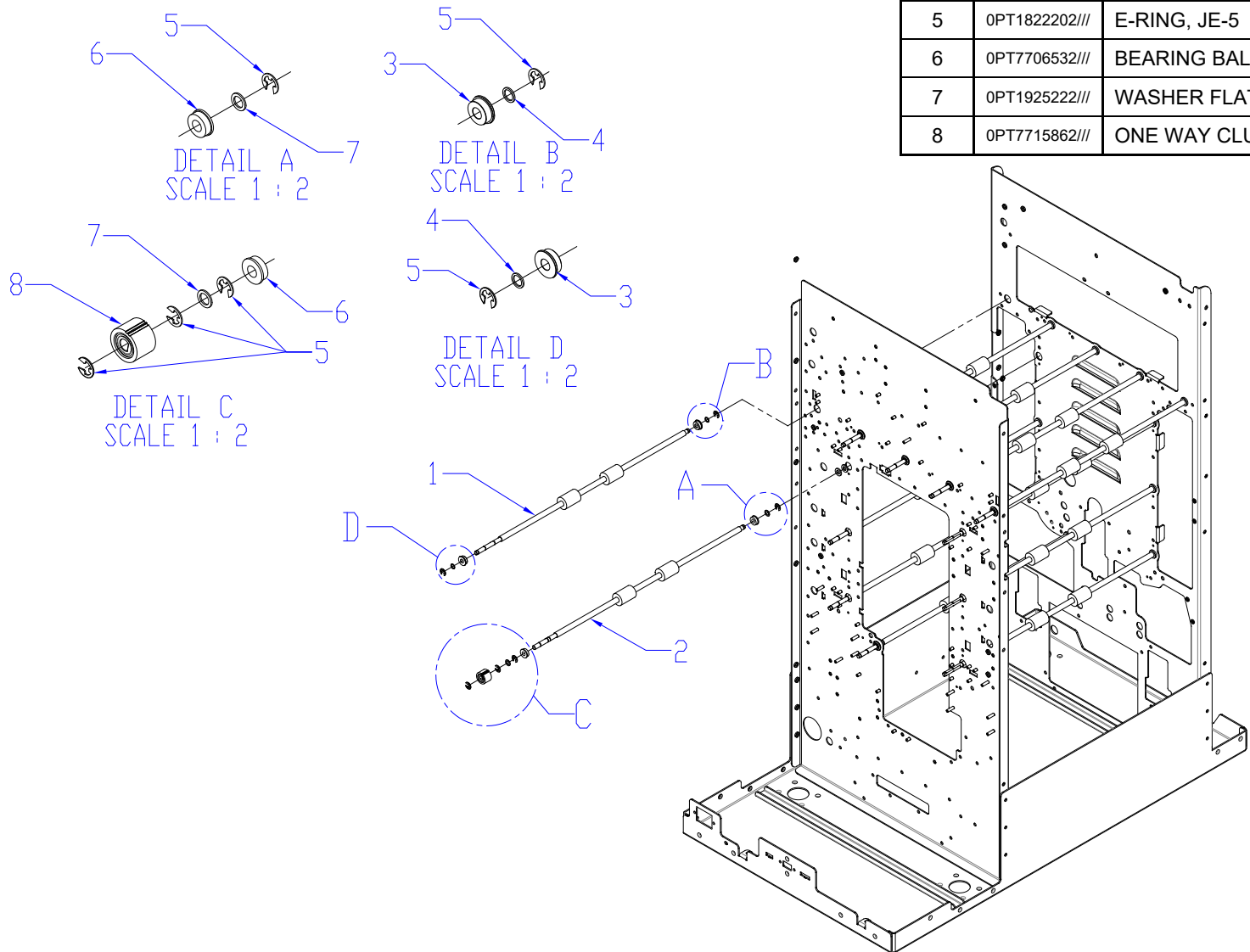
PL 2.3. Frame Assembly- Rear Side



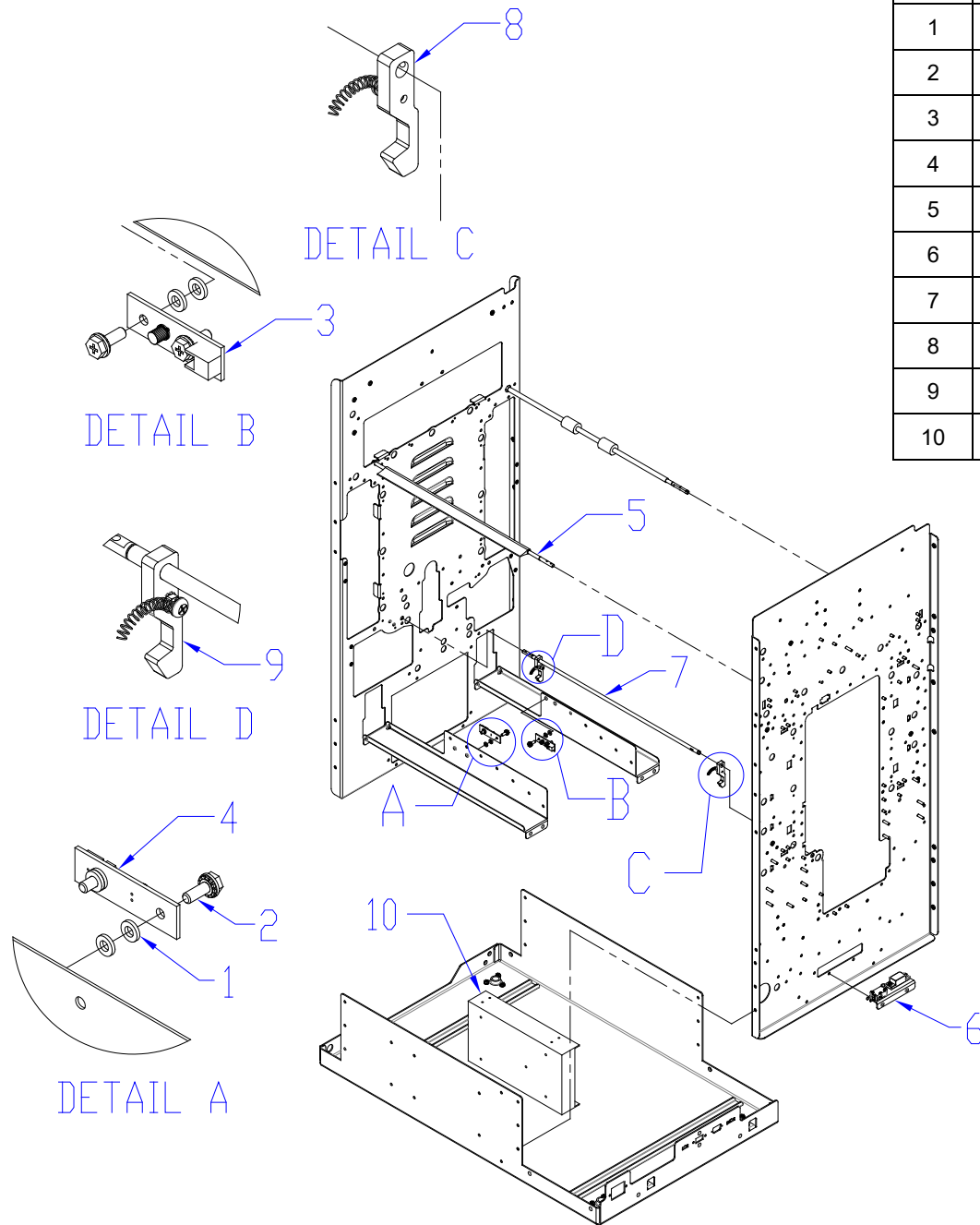
ITEM	PART #	DESCRIPTION	QTY
1	0PT1821209///	Snap-in Bearing, 6mm ID	2
2	0PT1821611///	SCREW, PHILLIPS HD W/SEMS, M3X10	2
3	0PT1822005///	WASHER, FLAT, 6.025 X 8 X 0.75	2
4	0PT1822202///	E-RING, JE-5	7
5	0PT1823910///	SCREW, PHILLIPS HX HD W/SEMS M4 X 14	12
6	0PT1824001///	NUT, KEPS M4	32
7	0PT1825501///	RETAINING RING, 6MM SHAFT	15
8	0PT1902863///	SCREW, MACHINE PAN #4-40x15/32 PHILLIPS	2
9	0PT1925044///	WSHR, .192 ID X .625 OD X .060 T	20
10	0PT1952208///	SPACER, TIMING BELT IDLERS, BRONZE	4
11	0PT1954011///	GROMMET, 3/8 I.D X 1/2 O.D	11
12	0PT1954032///	GROMMET, 1 1/4 I.D. X 1 1/2 O.D.	1
13	0PT7712703///	WIRE HEADER CONNECTOR, 2 POS	6
14	0PT7714679///	GROUND STRAP, M4	1
15	0PT7715185///	BRACKET, PUNCH MODULE MOUNT	2
16	0PT7715383///	ROLLER, IDLER, DRIVE ASSY,	4
17	0PT7715390///	WIRE CLAMP, EDGE	1
18	0PT7715445///	WIRE CLAMP, EDGE, SMALL	2
19	0PT7715813///	SOLENOID, BRACKET, DIVERTER, SUB ASSY	1
20	0PT7715818///	WIRE SADDLE, MEDIUM, LOCKING TOP, V-0	10
21	0PT7715819///	WIRE SADDLE, LARGE, LOCKING TOP, V-0	8
22	0PT7715817///	WIRE SADDLE, SMALL, LOCKING TOP, V-0	32

PL 2.4. Frame Assembly- Drive Rollers

ITEM	PART #	DESCRIPTION	QTY
1	0PT7715093///	ROLLER ASSY, DRIVE	11
2	0PT7715097///	ROLLER ASSY, ONE WAY CLUTCH DRIVE	1
3	0PT1821116///	BEARING, BALL, FLANGE 6X13X5, SUJ2	22
4	0PT1822005///	WASHER, FLAT, 6.025 X 8 X 0.75	22
5	0PT1822202///	E-RING, JE-5	26
6	0PT7706532///	BEARING BALL FLANGE	2
7	0PT1925222///	WASHER FLAT, 1/4X3/8X1/32	2
8	0PT7715862///	ONE WAY CLUTCH SUB ASSEMBLY	1

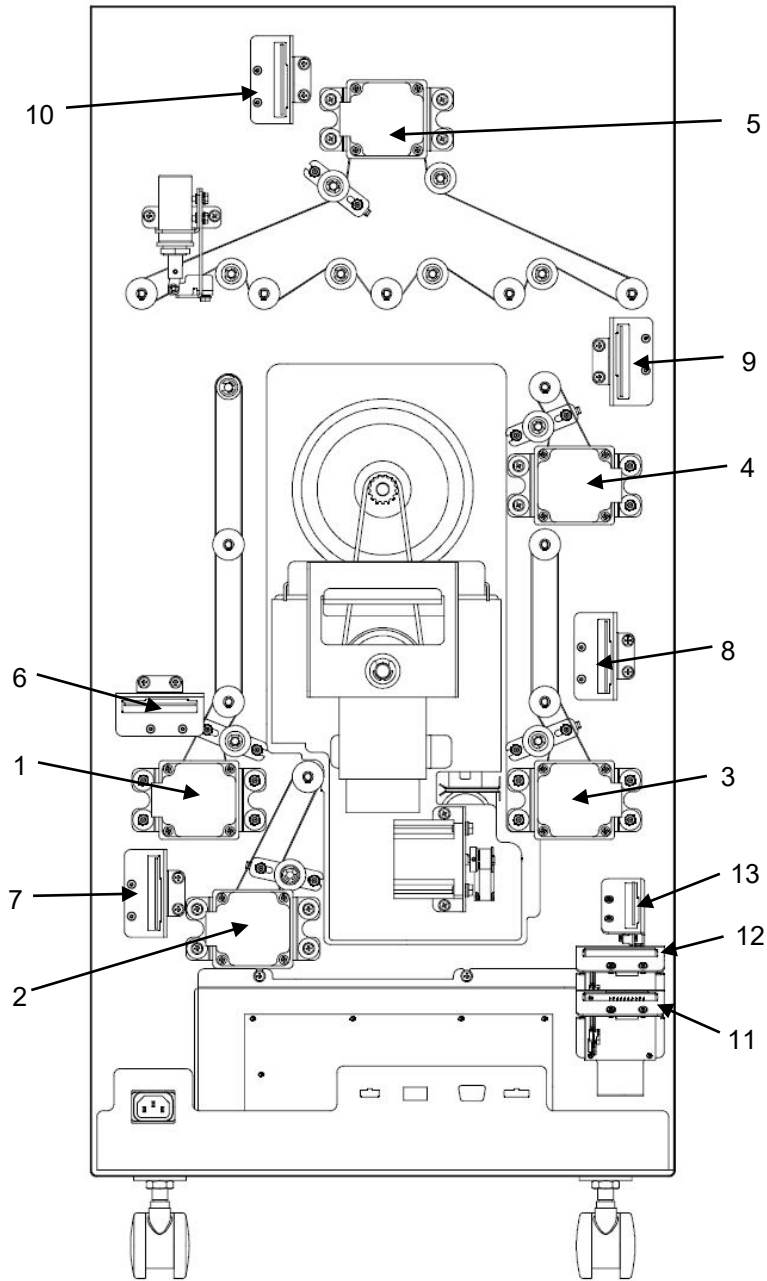


PL 2.5. Frame Assembly- Internal Parts



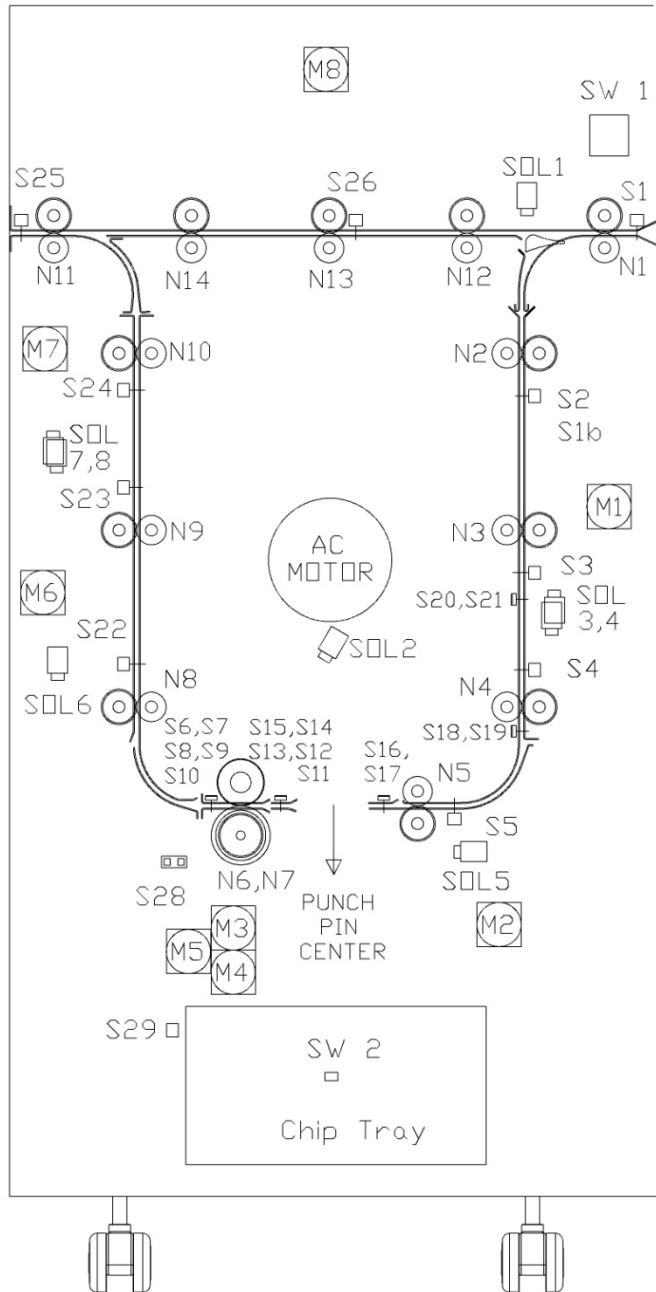
ITEM	PART #	DESCRIPTION	QTY
1	0PT1822108///	WASHER, FLAT, 4.1X8X1.5	8
2	0PT182391///	SCREW, PHILLIPS HX HD W/SEMS M4 X 10	4
3	0PT7711970///	EMITTER	1
4	0PT7711973///	RECEIVER	1
5	0PT7715131///	BYPASS DIVERTER	1
6	0PT7715186///	CHIP TRAY SENSOR MOUNT ASSY	1
7	0PT7715213///	SHAFT, ACCEL IDLER LATCH	1
8	0PT7724141///	LATCH, ASSY, REAR, ACCEL IDLER PANEL	1
9	0PT7724140///	LATCH, ASSY, FRONT, ACCEL IDLER PANEL	1
10	0PT7715637///	POWER SUPPLY, 24V, MW SP 480	1

PL 2.6. Frame Assembly- Motors and Motor Drivers



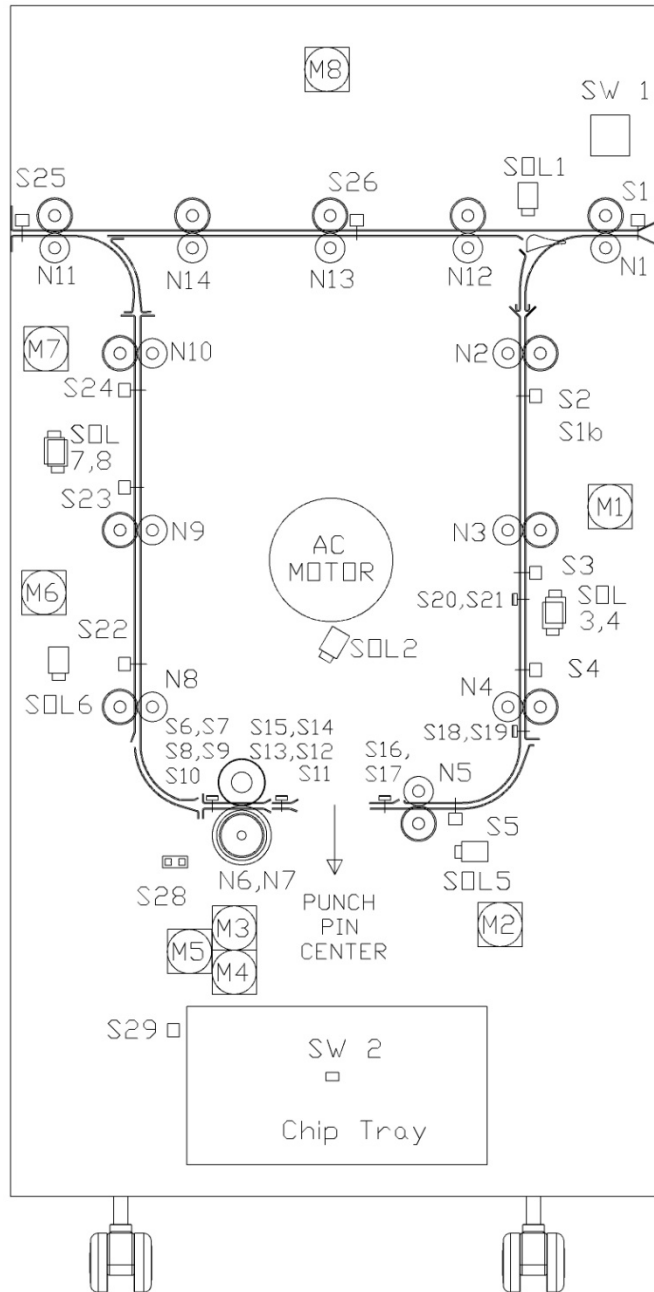
ITEM	PART #		DESCRIPTION	QTY
1	0PT7715159///	M1	ENTRANCE MOTOR STEPPER AND MOUNT ASSY	1
2	0PT7715159	M2	ACCEL MOTOR STEPPER AND MOUNT ASSY	1
3	0PT7715159	M6	EXIT MOTOR STEPPER AND MOUNT ASSY	1
4	0PT7715159	M7	DECEL MOTOR STEPPER AND MOUNT ASSY	1
5	0PT7715159	M8	BYPASS MOTOR STEPPER AND MOUNT ASSY	1
6	0PT7715275///	DRV M1	M1 STEPPER DRIVER DRIVER AND BRACKET ASSY, TWO PHASE	1
7	0PT7715275///	DRV M2	M2 STEPPER DRIVER DRIVER AND BRACKET ASSY, TWO PHASE	1
8	0PT7715275///	DRV M6	M6 STEPPER DRIVER DRIVER AND BRACKET ASSY, TWO PHASE	1
9	0PT7715275///	DRV M7	M7 STEPPER DRIVER DRIVER AND BRACKET ASSY, TWO PHASE	1
10	0PT7715275///	DRV M8	M8 STEPPER DRIVER DRIVER AND BRACKET ASSY, TWO PHASE	1
11	0PT7715275///	DRV M3	M3 STEPPER DRIVER DRIVER AND BRACKET ASSY, TWO PHASE	1
12	0PT7715275///	DRV M4	M4 STEPPER DRIVER DRIVER AND BRACKET ASSY, TWO PHASE	1
13	0PT7715275///	DRV M5	M5 STEPPER DRIVER DRIVER AND BRACKET ASSY, TWO PHASE	1
SEE PL 6.3 FOR STEPPER MOTOR M3, M4 AND M5 POSITIONS				

PL 2.7. Frame Assembly- Sensors

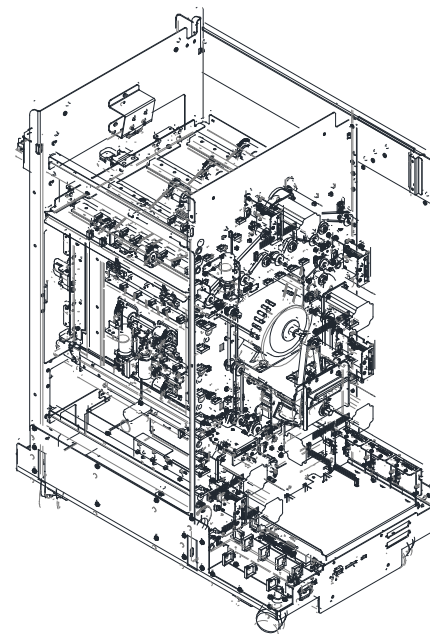


ITEM	PART #		DESCRIPTION	QTY
1	0PTZ7718520	S1 S27	SENSOR AND BRACKET ASSEMBLY, S1 AND S27	1
2	0PT7715291///	S2	ENTRANCE SENSOR, TOP	1
3	0PT7715291///	S3	ENTRANCE SENSOR, MIDDLE	1
4	0PT7715291///	S4	ENTRANCE SENSOR, BOTTOM	1
5	0PT7715291///	S5	ACCEL SENSOR	1
6	0PT7715692///	S6 S7 S8 S9 S10	SKEW SENSOR BOARD	1
7	0PT7718567///	S11 S12 S13 S14 S15	ALIGNMENT SENSOR BOARD, SWITCHABLE	1
8	0PTZ7724178///	S16 S17	BACKAGE SENSOR BOARD ASSY	1
9	0PTZ7724178///	S18 S19	MID PUNCH LARGE, SENSOR BACKAGE SENSOR BOARD ASSY	1
10	0PTZ7724178///	S20 S21	MID PUNCH X- LARGE, SENSOR BACKAGE SENSOR BOARD ASSY	1
11	0PT7715291///	S22	EXIT SENSOR, BOTTOM	1
12	0PT7715291///	S23	EXIT SENSOR, MIDDLE	1
13	0PT7715291///	S24	EXIT SENSOR, TOP	1
14	0PT7715291///	S25	EXIT SENSOR	1
15	0PT7715291///	S26	BYPASS SENSOR, MIDDLE	1
16	0PT7715597///	S28	ALIGN HOME SENSOR	1
17	0PT7711970///	S29	CHIP LEVEL SENSOR - EMITTER	1
	0PT7711973///	S29	CHIP LEVEL SENSOR - RECEIVER	1
18	0PT7715774///	S1B	CLEAR COVER SENSOR-EMITTER	1
	0PT7711973///	S1B	CLEAR COVER SENSOR-RECEIVER	1

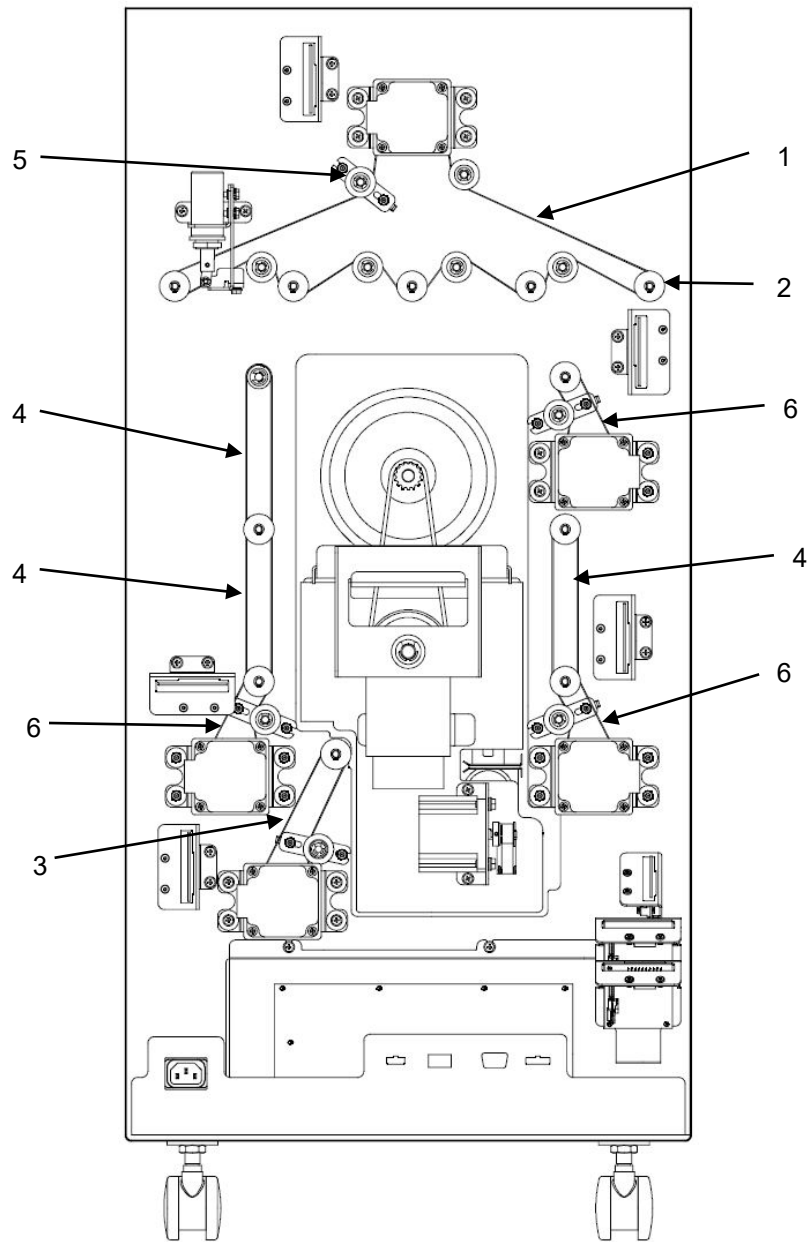
PL 2.8. Frame Assembly- Solenoids / Switches



ITEM	PART #		DESCRIPTION	QTY
1	0PT7715813///	SOL 1	DIVERTER SUBASSEMBLY	1
2	0PT771502///0	SOL 2	PUNCH CLUTCH	1
3	0PT7724133///	SOL 3	ENTRANCE IDLER SOLENOID, MIDDLE	1
4	0PT7724133///	SOL 4	ENTRANCE IDLER SOLENOID, BOTTOM	1
5	0PT7724133///	SOL 5	ACCELERATION ROLLER SOLENOID	1
6	0PT7724133///	SOL 6	EXIT IDLER SOLENOID, BOTTOM	1
7	0PT7724133///	SOL 7	EXIT IDLER SOLENOID, MIDDLE	1
8	0PT7724133///	SOL 8	EXIT IDLER SOLENOID, TOP	1
9	0PT7610501//	SW1	FRONT DOOR INTERLOCK SWITCH	1
10	0PT7715186///	SW2	CHIP TRAY HOME SWITCH ASSEMBLY	1



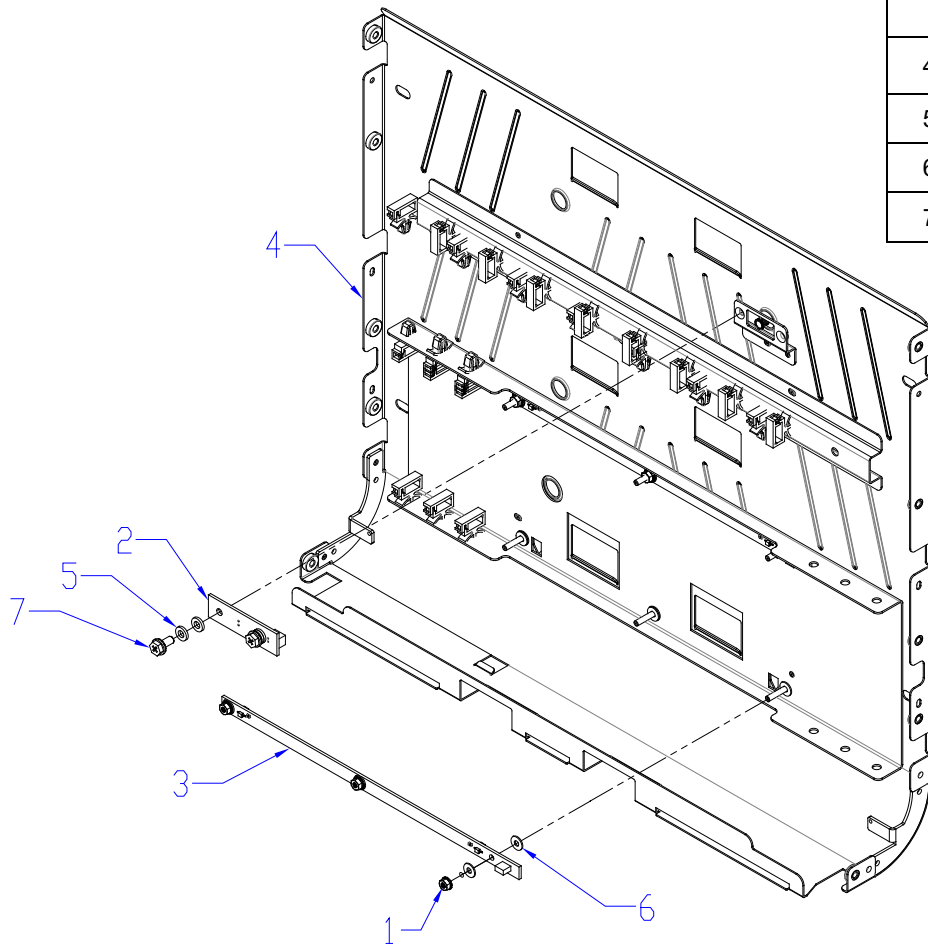
PL 2.9. Frame Assembly- Belts



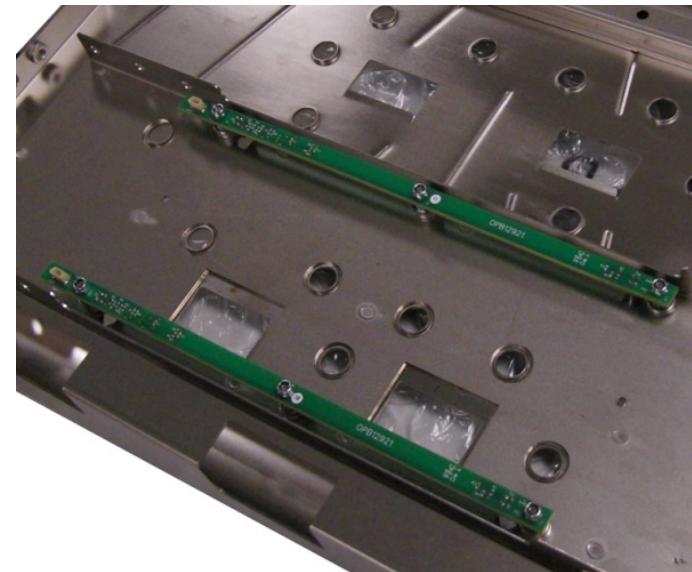
ITEM	PART #	DESCRIPTION	QTY
1	0PT7715202///	BELT, 534T, 2MM 2GT	1
2	0PT7715204///	PULLEY,TIMING,2MM 2GT,30T	14
3	0PT7715206///	BELT, 179T, 2MM 2GT	1
4	0PT7715243//	BELT, 150 T, 2MM 2GT	3
5	0PT7715245///	TENSIONER ASSEMBLY	5
6	0PT7715246///	BELT, 134T, 2MM 2GT	3

Paper Path

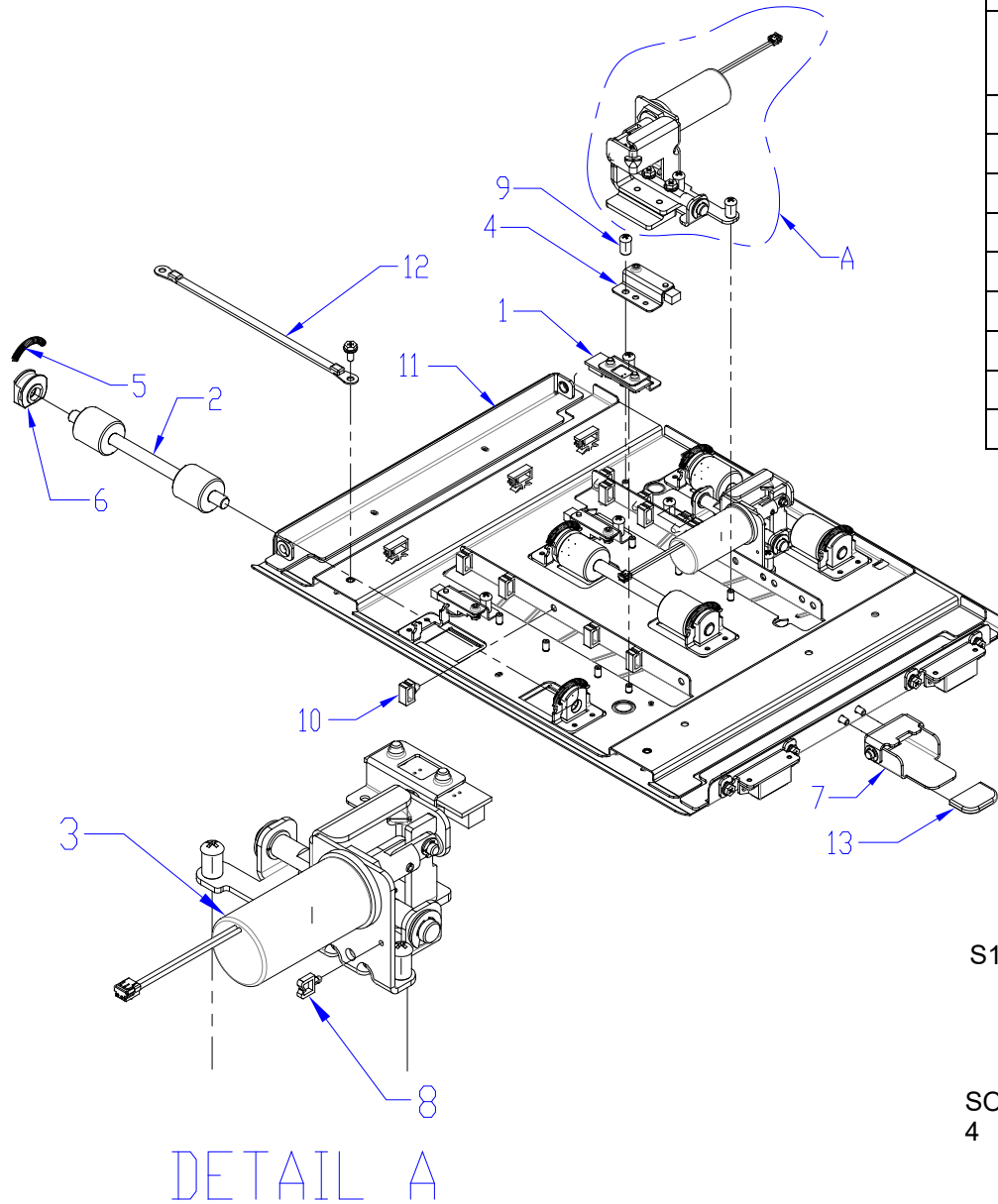
PL 3.1. Paper Path- Entrance Drive Panel



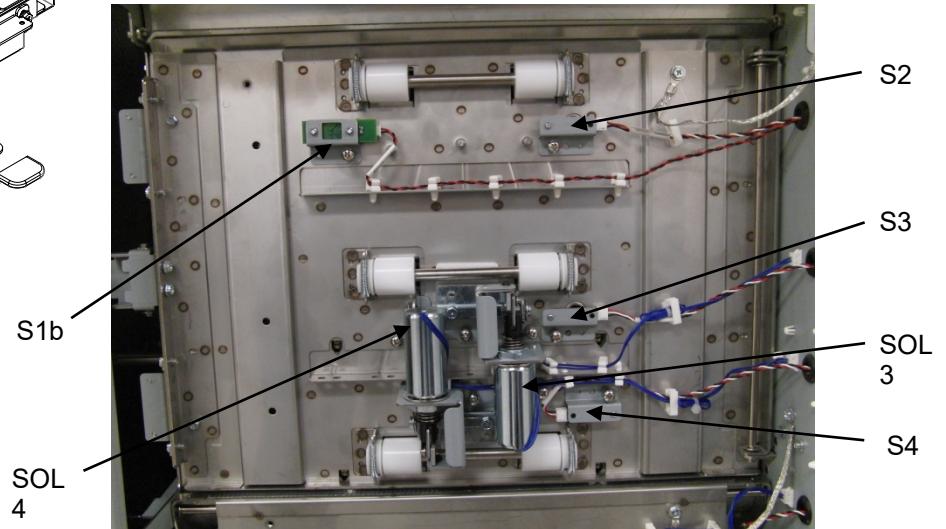
ITEM	PART #		DESCRIPTION	QTY
1	OPT1824002///		NUT, KEPS, M3	6
2	OPT7711973///		RECEIVER	1
3	OPT7724178///	S18 S19	MID PUNCH, LARGE, SENSOR BOARD BOARD ASSY, BACKGAGE SENSOR	1
	OPT7724178///	S20 S21	MID PUNCH, X LARGE, SENSOR BOARD BOARD ASSY, BACKGAGE SENSOR	1
4	OPT7715871///		PANEL WLDMNT,DRIVE,ENTRANCE,SERVICE	1
5	OPT1822108///		WASHER, FLAT, 4.1X 8X1.5	4
6	OPT1822117///		WASHER, 3.2ID, 8OD, 0.75MM THICK	12
7	OPT1823903///		SCREW, PHILLIPS, HX HD M4X8	2



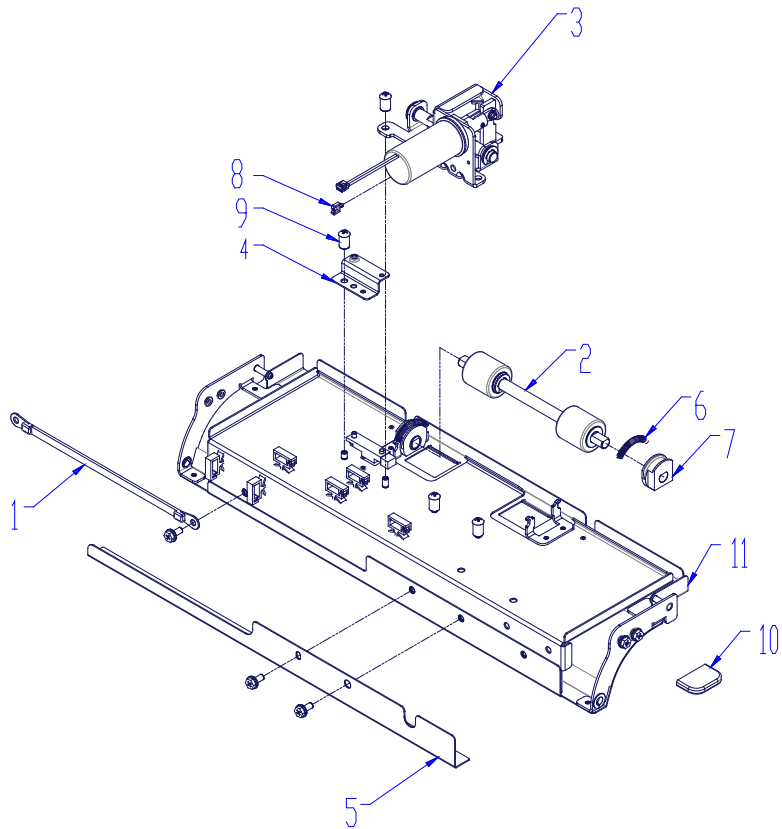
PL 3.2. Paper Path- Entrance Idler Panel



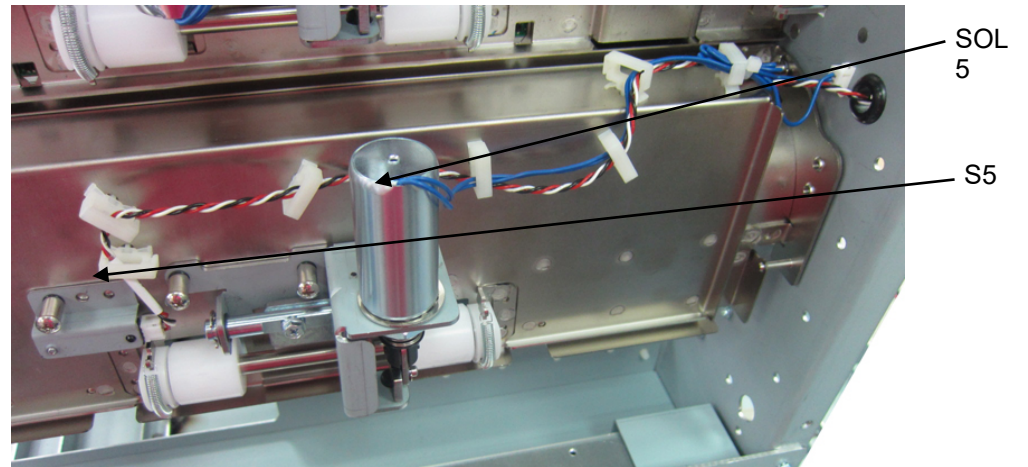
ITEM	PART #		DESCRIPTION	QTY
1	0PT7711970///	S1b	EMITTER	1
2	0PT7715103///		ROLLER ASSY, IDLER	3
3	0PT7724133///	SOL3 SOL4	MODULE, SOLENOID, DISENGAGING ROLLER	2
4	0PT7715291///	S2 S3 S4	SENSOR AND BRACKET ASSY	3
5	0PTZ7717410///		SPRING, TRANSPORT IDLR ROLLER	6
6	0PT7715382///		BEARING HOUSING	6
7	0PT7715384///		HANDLE ASSY, IDLER PANELS	1
8	0PT7715625///		WIRE SADDLE, SHORT	2
9	0PT7715629///		SCREW, BARREL, M4, 7MM DEEP	13
10	0PT7715639///		WIRE SADDLE, SMALL, SIDE OPEN	11
11	0PT7715873///		PANEL WLDMT, IDLER, ENTRY	1
12	0PT7714679///		GROUND STRAP, M4	1
13	0PT7708163///		CAP, RUBBER	1



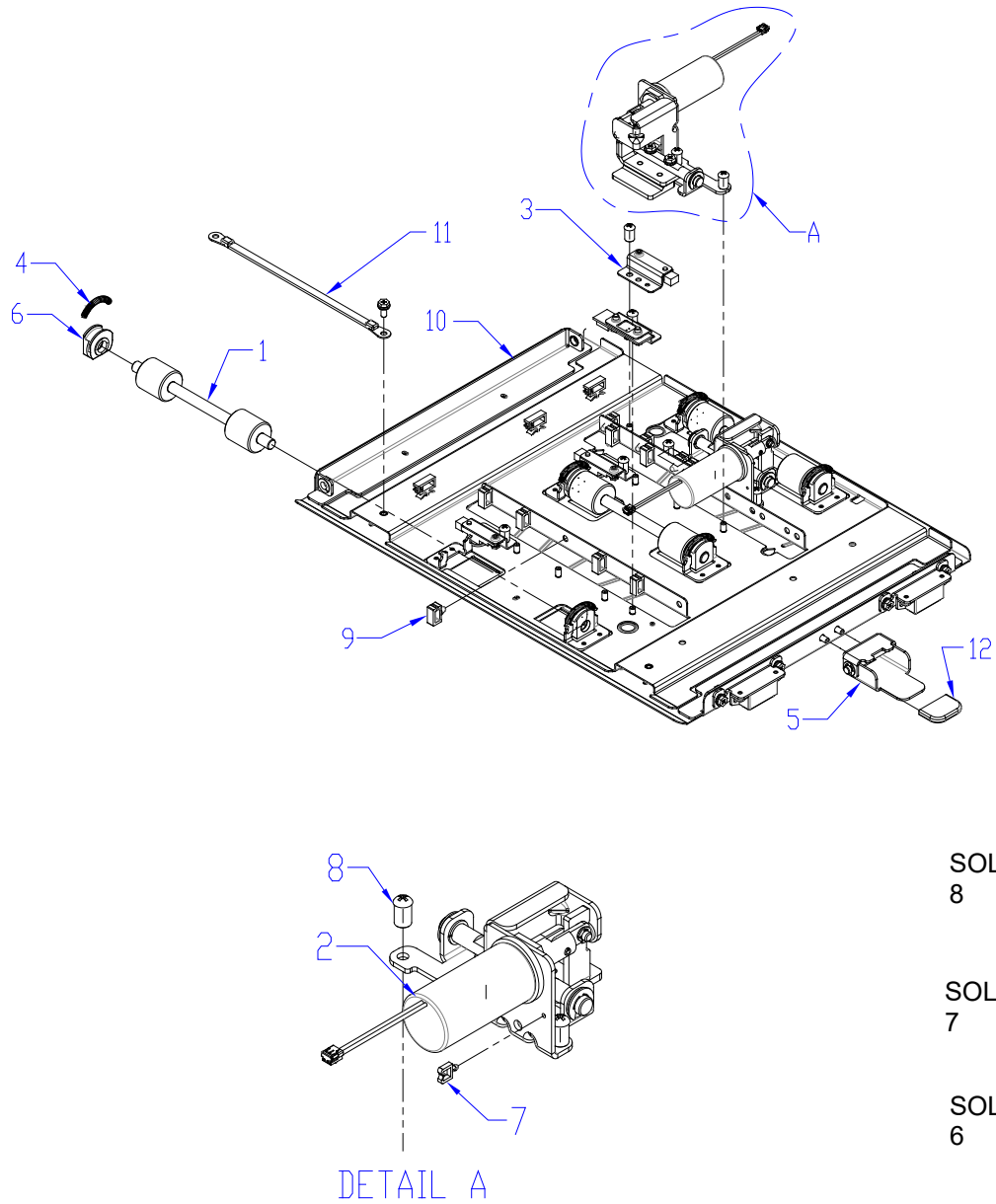
PL 3.3. Paper Path- Acceleration Roller Idler



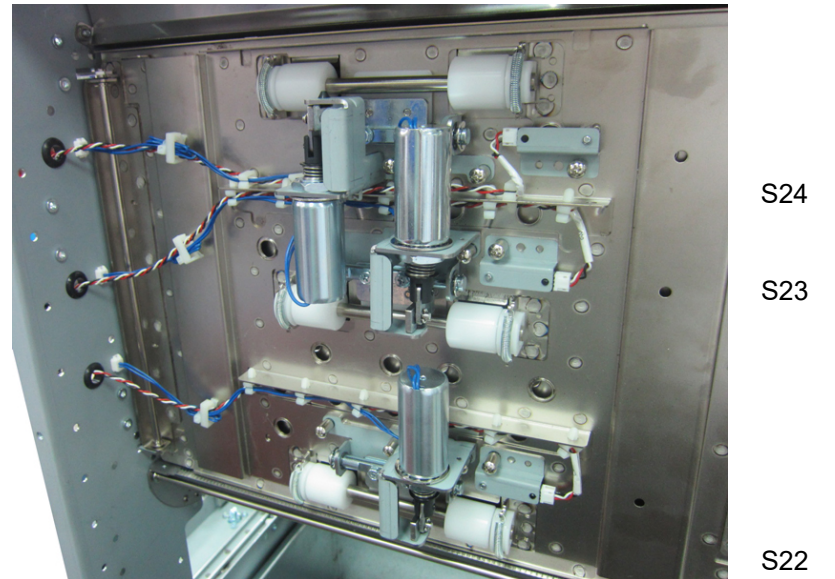
ITEM	PART #		DESCRIPTION	QTY
1	0PT771467///9		GROUND STRAP, M4	1
2	0PT7715103///		ROLLER ASSY, IDLER	1
3	0PT7715223///	SOL 5	MODULE, SOLENOID, DISENGAGING ROLLER	1
4	0PT7715291///	S5	SENSOR AND BRACKET ASSEMBLY	1
5	0PT7718626///		BRUSH PLATE, WITH BRUSH	1
6	0PTZ7717410///		SPRING, TRANSPORT IDLER ROLLER	2
7	0PT7715382///		BEARING HOUSING ASSY	2
8	0PT7715625///		WIRE SADDLE, SHORT	5
9	0PT7715629///		SCREW, BARREL, M4, 7MM DEEP	4
10	0PT7715824///		RUBBER, RAIN BLUE	1
11	0PT7718627///		PANEL WELDMENT, IDLER, ENTRANCE	1



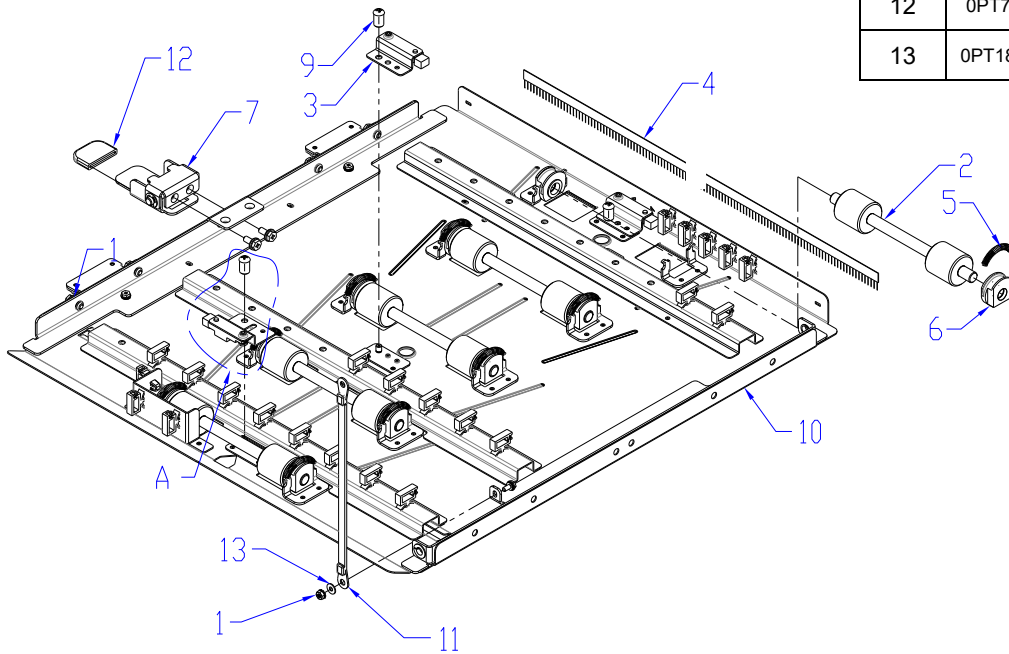
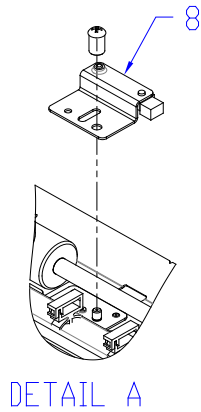
PL 3.4. Paper Path- Exit Idler Panel



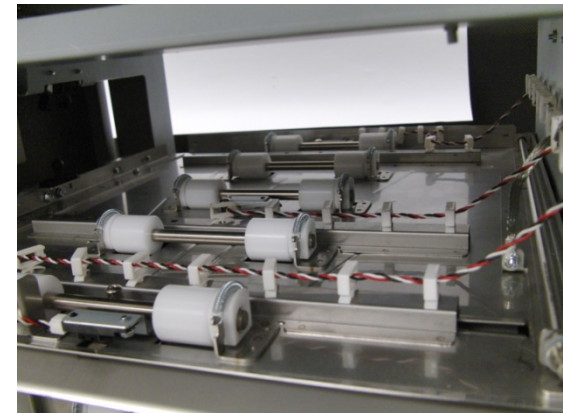
ITEM	PART #		DESCRIPTION	QTY
1	0PT7715103///		ROLLER ASSY, IDLER	3
2	0PT7724133///	SOL6 SOL7 SOL8	MODULE, SOLENOID, DISENGAGING ROLLER	3
3	0PT7715291///	S22 S23 S24	SENSOR AND BRACKET ASSY	3
4	0PTZ7717410///		SPRING, TRANSPORT IDLER ROLLERS	6
5	0PT7715384///		HANDLE ASSY, IDLER PANELS	1
6	0PT7715382///		BEARING HOUSING ASSY	6
7	0PT7715625///		WIRE SADDLE, SHORT	3
8	0PT7715629///		SCREW, BARREL, M4, 7MM DEEP	12
9	0PT7715639///		WIRE SADDLE, SM, SIDE OPEN	8
10	0PT7715874///		PANEL WELDMENT, IDLER, EXIT	1
11	0PT7714679///		GROUND STRAP, M4	1
12	0PT7708163///		CAP, RUBBER	1



PL 3.5. Paper Path- Upper Bypass Panel

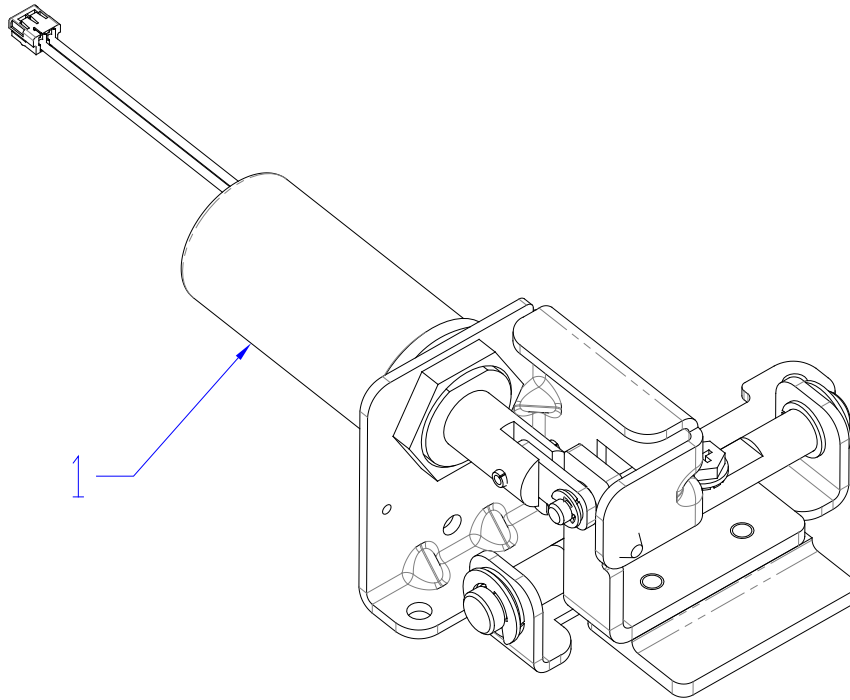


ITEM	PART #		DESCRIPTION	QTY
1	OPT1824002///		NUT, KEPS, M3	1
2	OPT7715103///		ROLLER ASSY, IDLER	5
3	OPT7715291///	S25 S26	SENSOR AND BRACKET ASSEMBLY	2
4	OPT7718593///		BRUSH, ANTI-STATIC, SHORT	2
5	OPTZ7717410///		SPRING, TRANSPORT IDLER ROLLER	10
6	OPT7715382///		BEARING HOUSING ASSY	10
7	OPT7715384///		HANDLE ASSY, IDLER PANELS	1
8	OPTZ7718520///	S1 S27	SENSOR AND BRACKET ASSEMBLY, S1 AND S27	1
9	OPT7715629///		SCREW, BARREL, M4, 7MM DEEP	3
10	OPT7718518///		PANEL WELDMENT, BYPASS, UPPER	1
11	OPT7714679///		GROUND STRAP, M4	1
12	OPT7708163///		CAP, RUBBER	1
13	OPT1822117///		WASHER, 3.2ID, 8OD, 0.75MM THICK	1



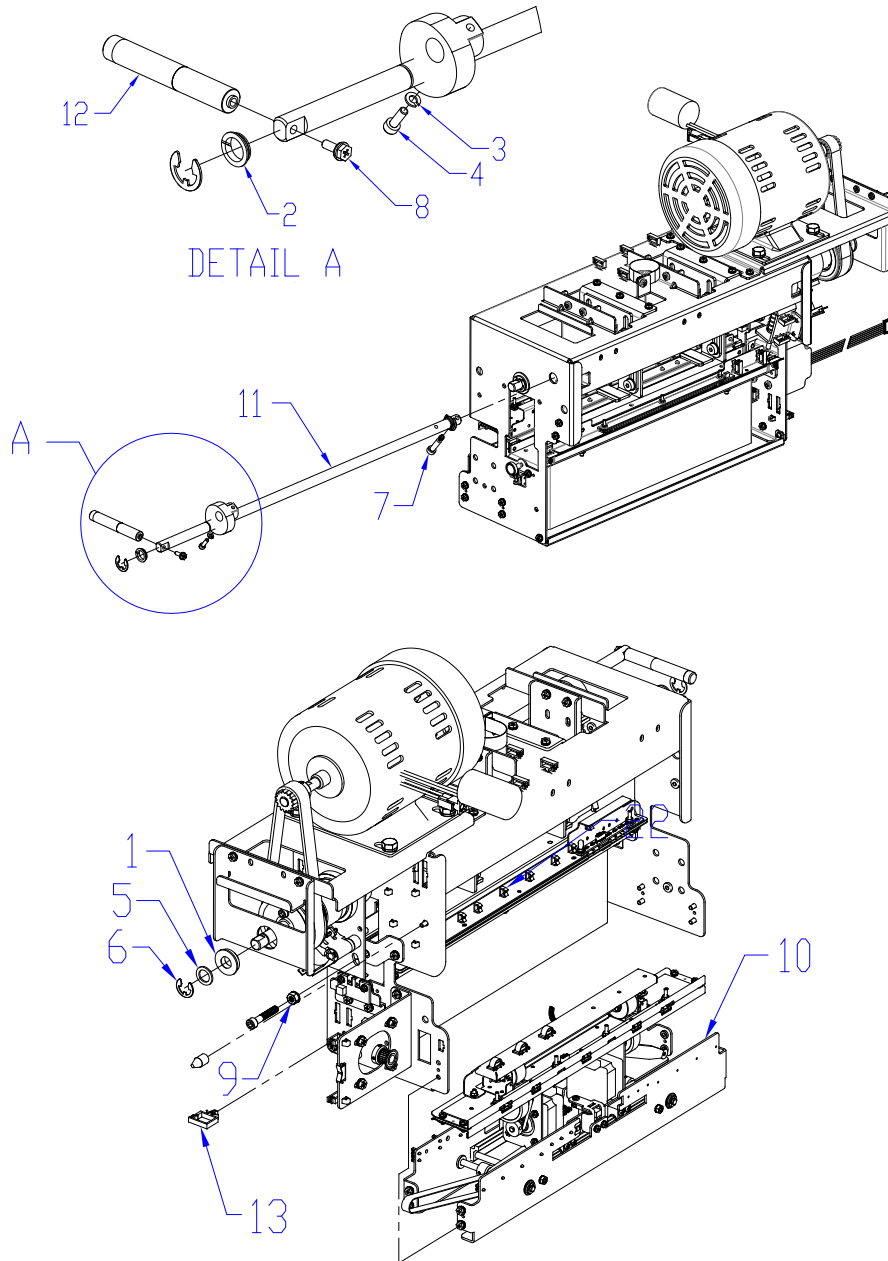
PL 3.6. Paper Path- Disengaging Roller Solenoid

ITEM	PART #		Description	QTY
1	0PTZ7724133///	SOL 3 SOL 4 SOL 5 SOL 6 SOL 7 SOL 8	SOLENOID, LINK, SUB ASSEMBLY, 2X FORCE	6

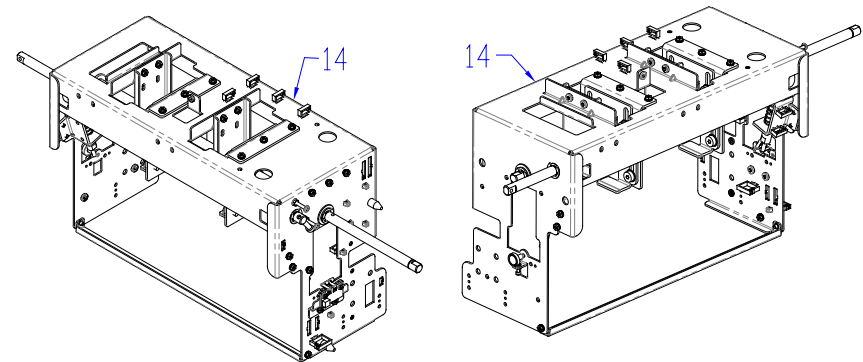


Punch Module

PL 4.1. Punch Module

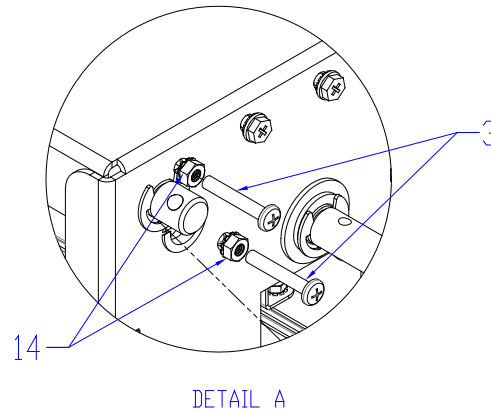
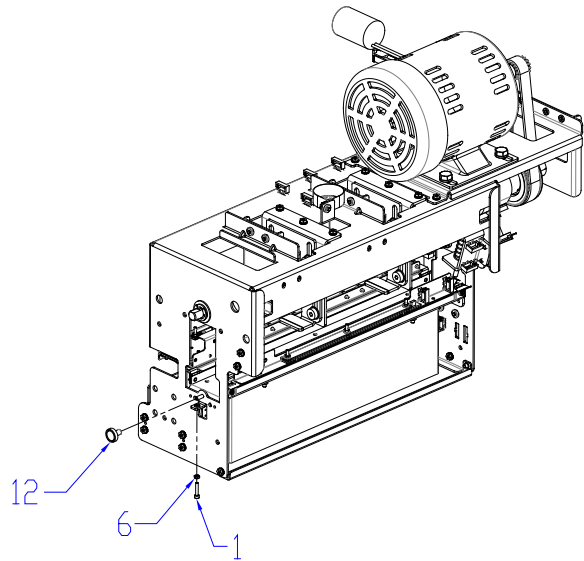
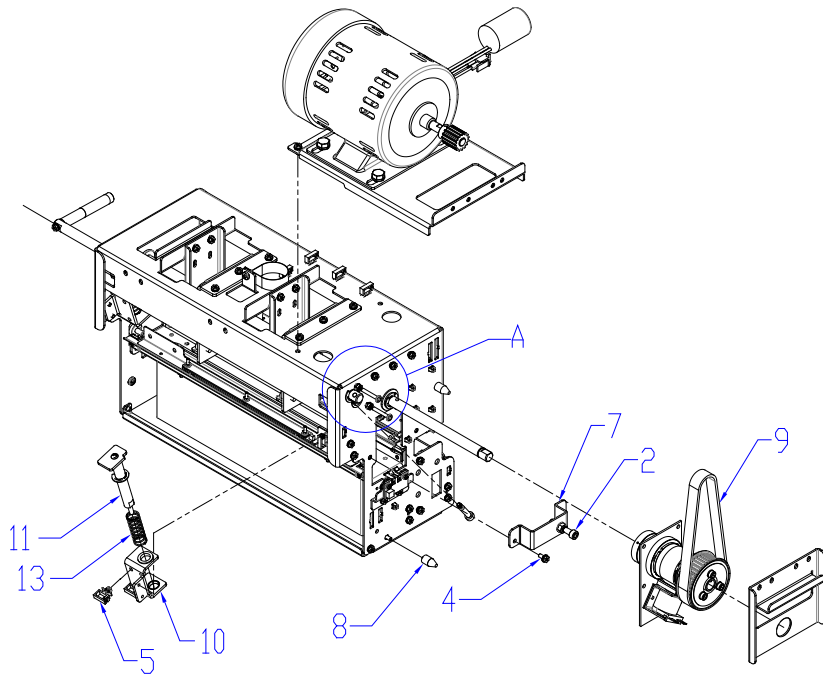


ITEM	PART #		DESCRIPTION	QTY
	0PT7723650///	115V	PUNCH MODULE, ASSY, 115V	1
	0PT7723651///	230V	PUNCH MODULE, ASSY, 230V	1
1	0PT1821118///		BEARING,BALL,FLANGE,12X24X6,SUJ 2	3
2	0PT1821215///		BEARING, CLIP, 12MM	2
3	0PT1821802///		Spring washer M4	2
4	0PT1821532///		SCREW, SHCS, M4 X 12	2
5	0PT1822016///		WASHER,NYLON, ID12.7, OD19, 1.5THK	2
6	0PT1822205///		E-RING, JE-10	5
7	0PT1823203///		SCREW, SOCKET, M5, 6MM SHOULDER	1
8	0PT1823911///		SCREW, PHILLIPS W/SEMS M4X10	1
9	0PT1824003///		NUT, KEPS, M6	1
10	0PT7715033///		STEERING MODULE SUB ASSY	1
11	0PT7715237///		SHAFT, DIE LOCK	1
12	0PT7715368///		HANDLE, DIE LOCK	1
13	0PT7715818///		WIRE SADDLE,MEDIUM,LOCK TOP,V-0	1
14	0PT7715886///		PUNCH MODULE SHELL, SERVICE	1
15	0PT1821806///		WASHER, SPLIT LOCK, M3.5	8

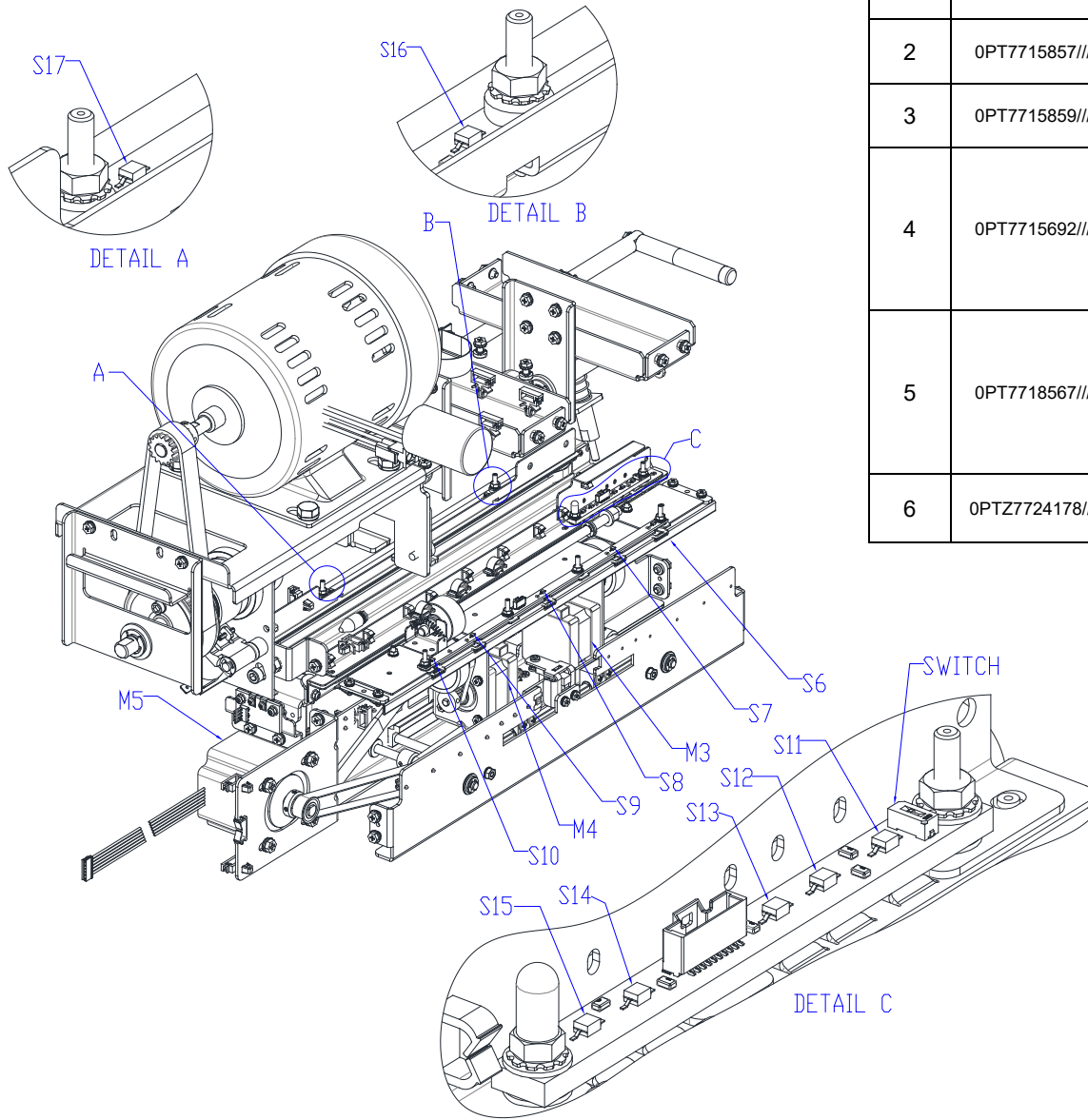


PL 4.2. Punch Module (continued)

ITEM	PART #		DESCRIPTION	QTY
1	0PT1821514///		SHCS, M3X12	1
2	0PT1821541///		SCREW, SOCKET HD,M6,35MM LONG	1
3	0PT1821655///		SCREW, PHILLIPS, PAN HD, M4X25	2
4	0PT1823903///		SCREW, PHILLIPS, HX HD M4X8	54
5	0PT1825203///		WIRE SADDLE, SNAP TYPE, SMALL	2
6	0PT1823701///		NUT, HEX, M3	1
7	0PT7715030///		BRACKET, CLUTCH STUD	1
8	0PT7715079///		MOUNT PIN, PUNCH MODULE	2
9	0PT7715232///	115V	BELT, TIMING, 82 GROOVE, 5MM HTD	1
	0PT7715372///	230V	BELT, TIMING, 80 GROOVE, 5MM HTD	1
10	0PT7715238///		BRACKET & BEARING ASSY,DIE LOCK	2
11	0PT7715239///		PLUNGER & STRIPPER ASSY,DIE LOCK	2
12	0PT7715320///		MAGNET, DIE STOP	1
13	0PT7715374///		SPRING, DIE LOCK RETURN	2
14	0PT1824001///		NUT, KEPS M4	2



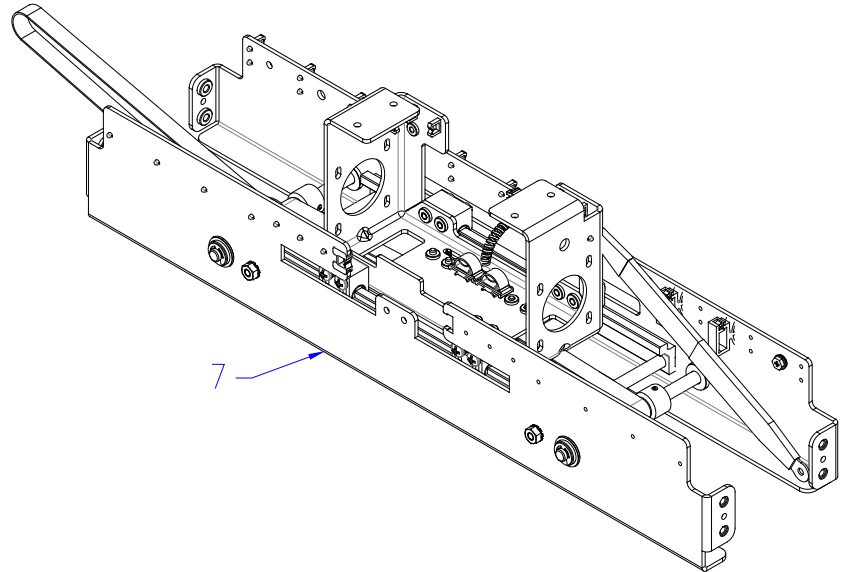
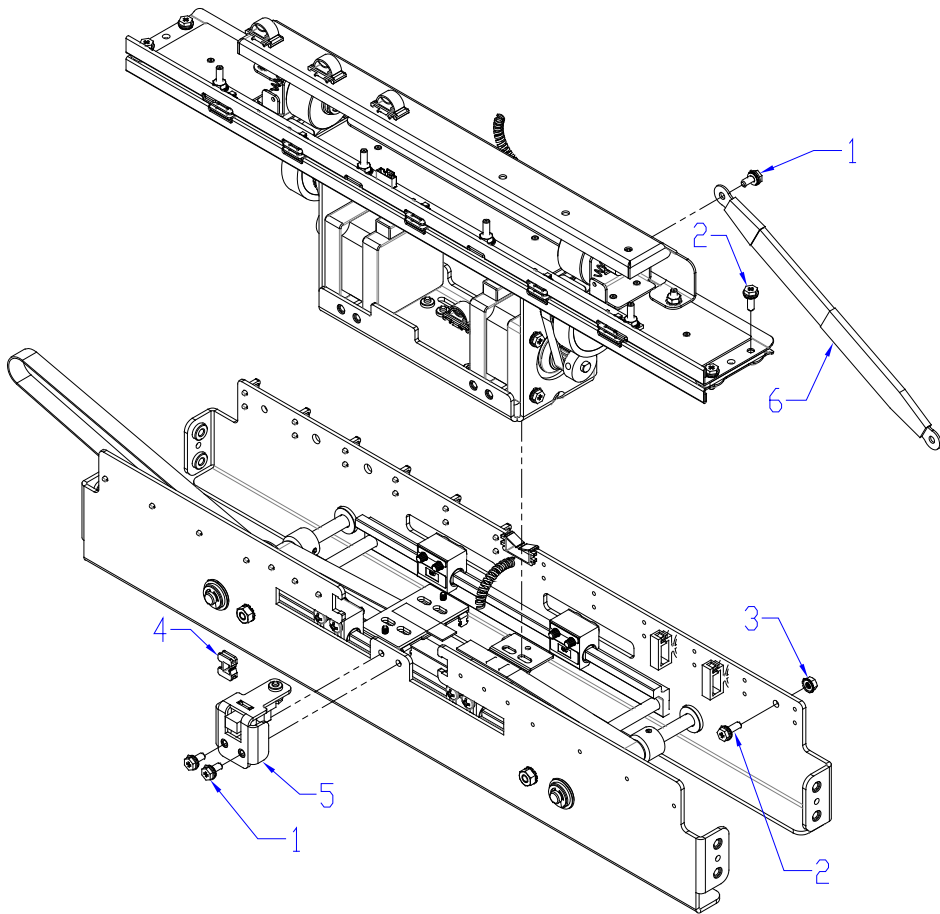
PL 4.3. Punch Module- Motors/Sensors



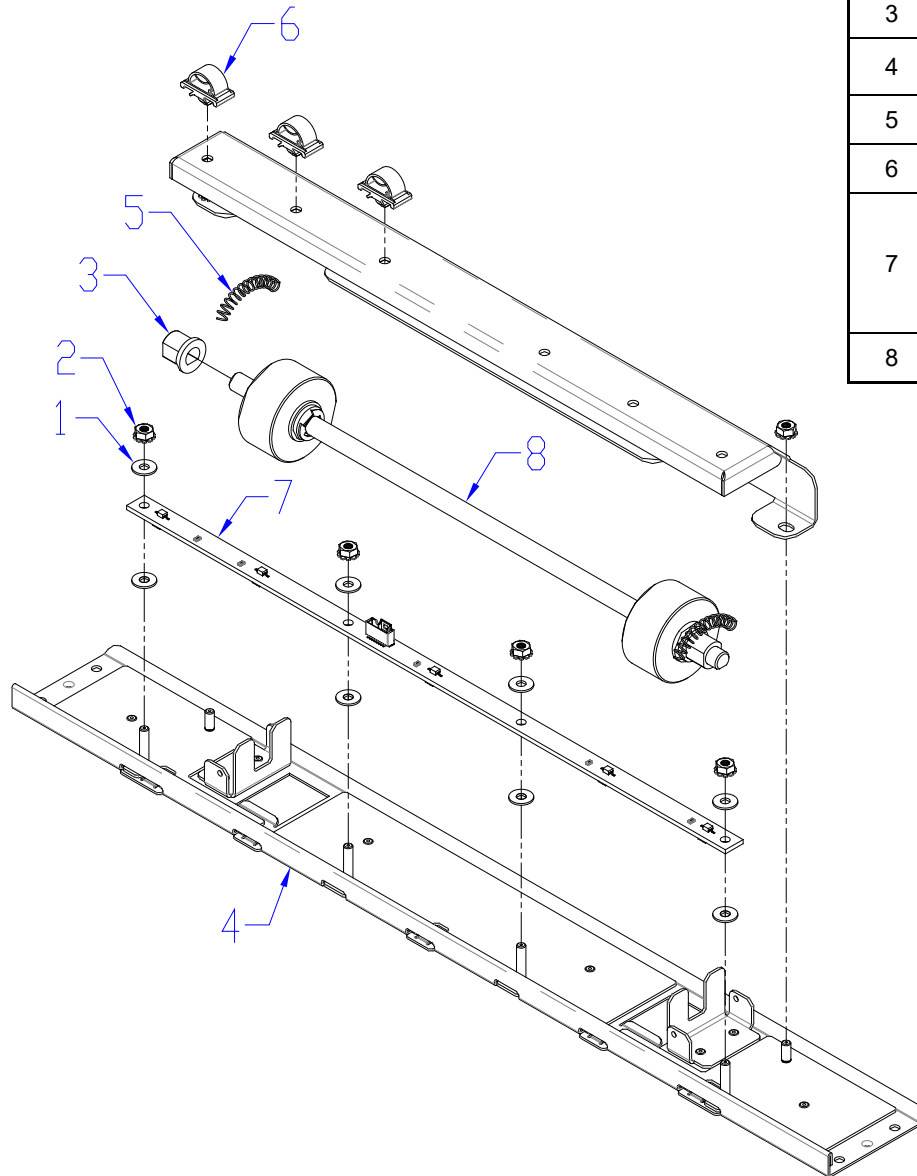
ITEM	PART #		DESCRIPTION	QTY
1	0PT7715857///	M3	LEFT / FRONT STEERING MOTOR AND PULLEY.	1
2	0PT7715857///	M4	RIGHT / REAR STEERING MOTOR AND PULLEY.	1
3	0PT7715859///	M5	ALIGNMENT STEPPER MOTOR AND PULLEY.	1
4	0PT7715692///	S6 S7 S8 S9 S10	SKEW SENSOR BOARD	1
5	0PT7718567///	S11 S12 S13 S14 S15	ALIGNMENT SENSOR BOARD, SWITCHABLE	1
6	0PTZ7724178///	S16 S17	BACKAGE SENSOR BOARD	1

PL 4.4. Punch Module- Steering Module

ITEM	PART #		DESCRIPTION	QTY
-	0PT7715430///		STEERING MODULE SUB ASSY	1
1	0PT1823901///		SCREW, PHILLIPS HX W/SEMS, M3X6	4
2	0PT1823913///		SCREW,PHILIPS-HEX LOCK, M3X8	4
3	0PT1824002///		NUT, KEPS, M3	1
4	0PT7715445///		WIRE CLAMP, EDGE, SMALL	1
5	0PT7715597///	S28	SENSOR, VEIN, BRACKET, SUB ASSLY	1
6	0PT7715779///		GROUND STRAP, STEERING CARRIAGE	1
7	0PT7715877///		ALIGNMENT CARRIAGE,SUB ASSY, SERVICE	1
8	0PT1821658///		SCREW, PHILLIPS, PAN HD, SEMS, M2.5	2

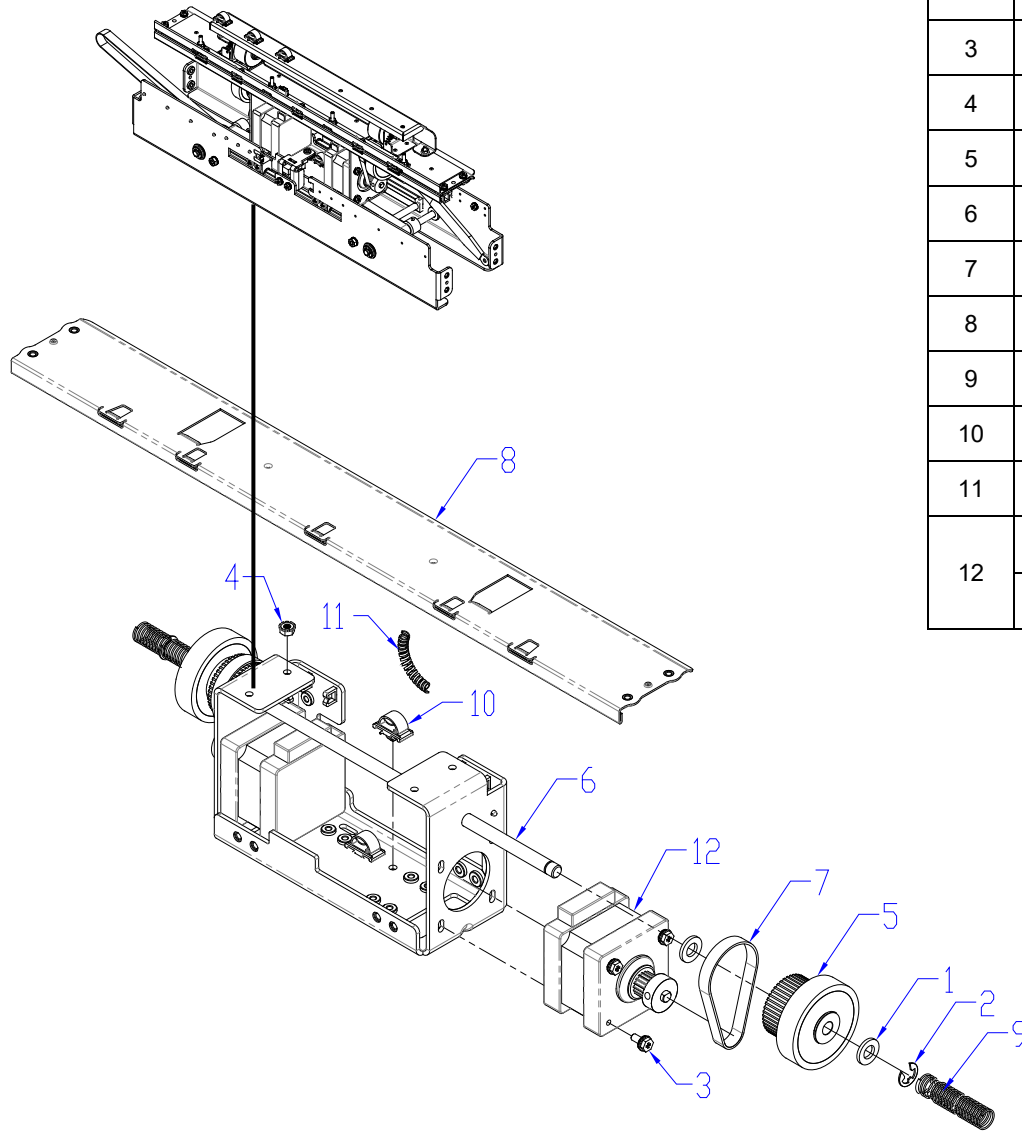


PL 4.5. Punch Module- Steering Module - Steering Idler Panel Sub Assembly



ITEM	PART #		DESCRIPTION	QTY
1	0PT1822117///		WASHER, 3.2ID, 8OD, 0.75MM THK	8
2	0PT1824002///		NUT, KEPS, M3	6
3	0PT7706488///		BEARING, DOUBLE "D" FLANGE	2
4	0PT7715062///		PANEL WELDMENT, IDLER, STEERING	1
5	0PTZ7717410///		SPRING, STEERING IDLER ROLLER	2
6	0PT7715648///		WIRE CLAMP, LOCKING	3
7	0PT7715692///	S6 S7 S8 S9 S10	BOARD ASSY, SKEW SENSOR	1
8	0PT7715816///		ROLLER ASSY, IDLER, STEERING	1

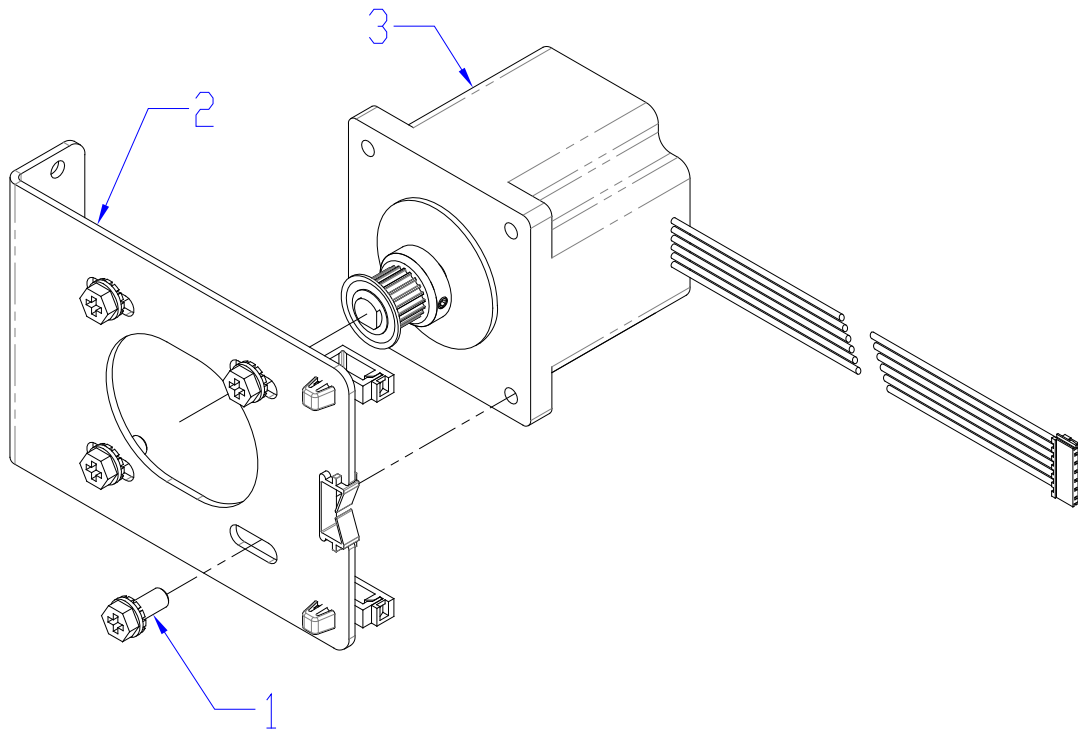
PL 4.6. Punch Module- Steering Module - Drive Panel Steering



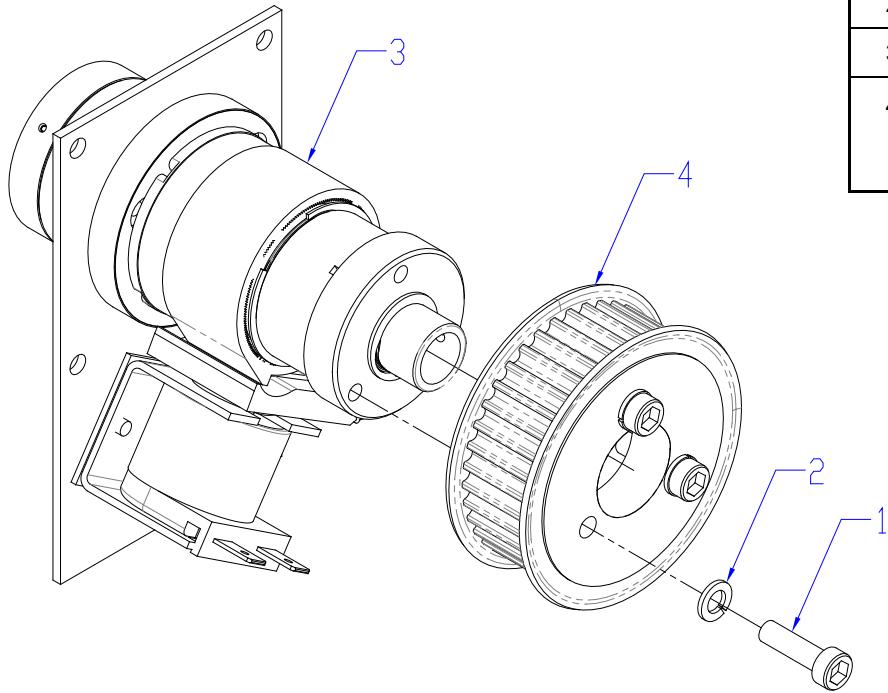
ITEM	PART #		DESCRIPTION	QTY
1	OPT1822008///		WASHER, FLAT, 6.4X12X1.5	4
2	OPT1822202///		E-RING, JE-5	4
3	OPT1823901///		SCREW, PHILLIPS HX W/SEMS, M3X6	8
4	OPT1824002///		NUT, KEPS, M3	4
5	OPT7715039///		ROLLER ASSEMBLY, DRIVE, STEERING	2
6	OPT7715044///		SHAFT, STEERING DRIVE	1
7	OPT7715047///		BELT,STEERING,65 GROOVES,2MM 2GT	2
8	OPT7715053///		PANEL WELDMENT, DRIVE, STEERING	1
9	OPT7715377///		SPRING, STEERING DRIVE ROLLER	2
10	OPT7715648		WIRE CLAMP, LOCKING	2
11	OPT7715777///		SLEEVE, SPIRAL, MOTOR WIRES	1
12	OPT7715857///	M3	STEPPER MOTOR AND PULLEY, STEERING, SERVICE	1
	OPT7715857///	M4	STEPPER MOTOR AND PULLEY, STEERING, SERVICE	1

PL 4.7. Punch Module- Stepper Alignment Bracket

ITEM	PART #		DESCRIPTION	QTY
1	0PT182390///6		SCREW,PHILLIPS HX W/SEM M5X10	4
2	0PT7715078///		BRACKET,ALIGN STEPPER MOUNT	1
3	0PT7715859///	M5	STEPPER MOTOR AND PULLEY, ALIGNMENT, SERVICE	1



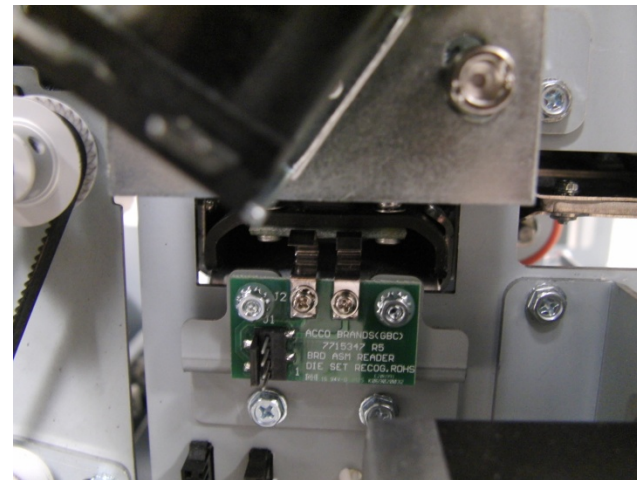
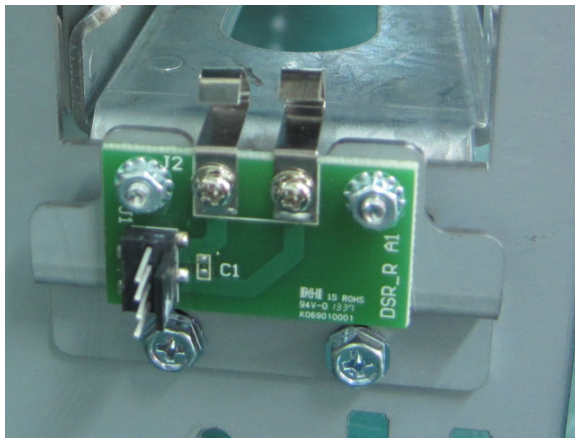
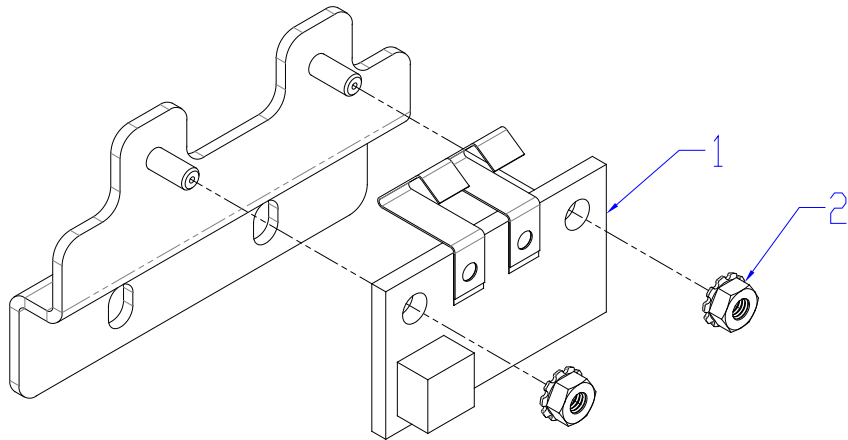
PL 4.8. Punch Module- Punch Clutch



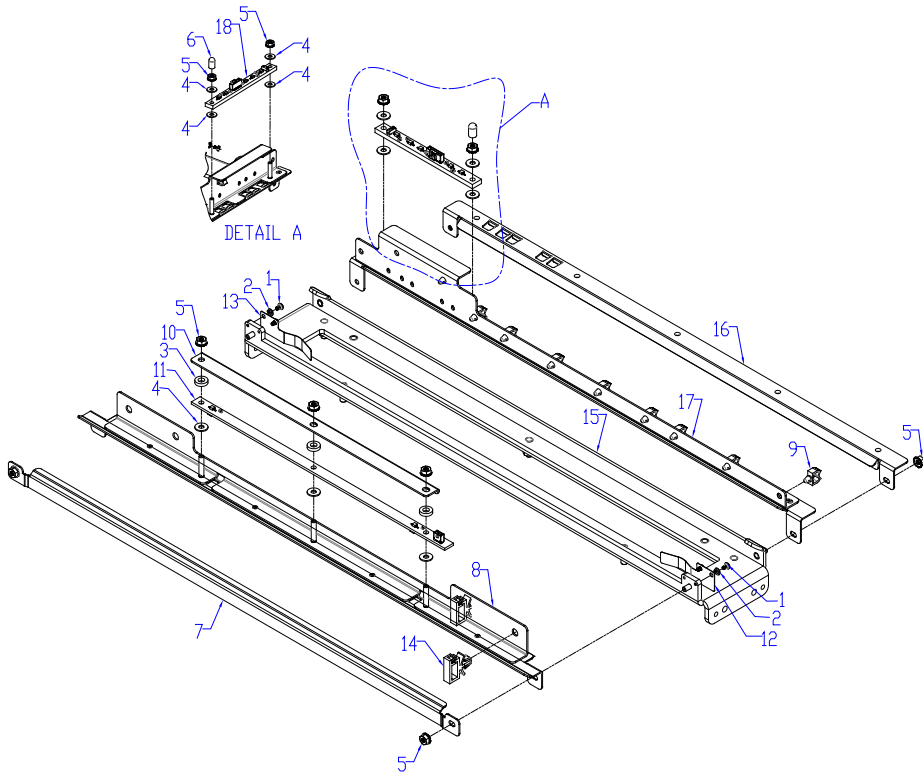
ITEM	PART #		DESCRIPTION	QTY
1	0PT1821531///		SCREW, SHCS, M5X18	3
2	0PT1821801///		WASHER, SPLIT LOCK, M5	3
3	0PT7715020///		CLUTCH, WRAP SPRING	1
4	0PT7715231///	115V	PULLEY & FLANGE,5MM HTD,38T	1
	0PT7715371///	230V	PULLEY & FLANGE,5MM HTD,34T	1

PL 4.9. Punch Module- Die Set Recognition Reader Board

ITEM	PART #	DESCRIPTION	QTY
1	0PT7715347///	BOARD, READER, DIE SET RECOGNITION	1
2	0PT1824002///	NUT, KEPS, M3	2

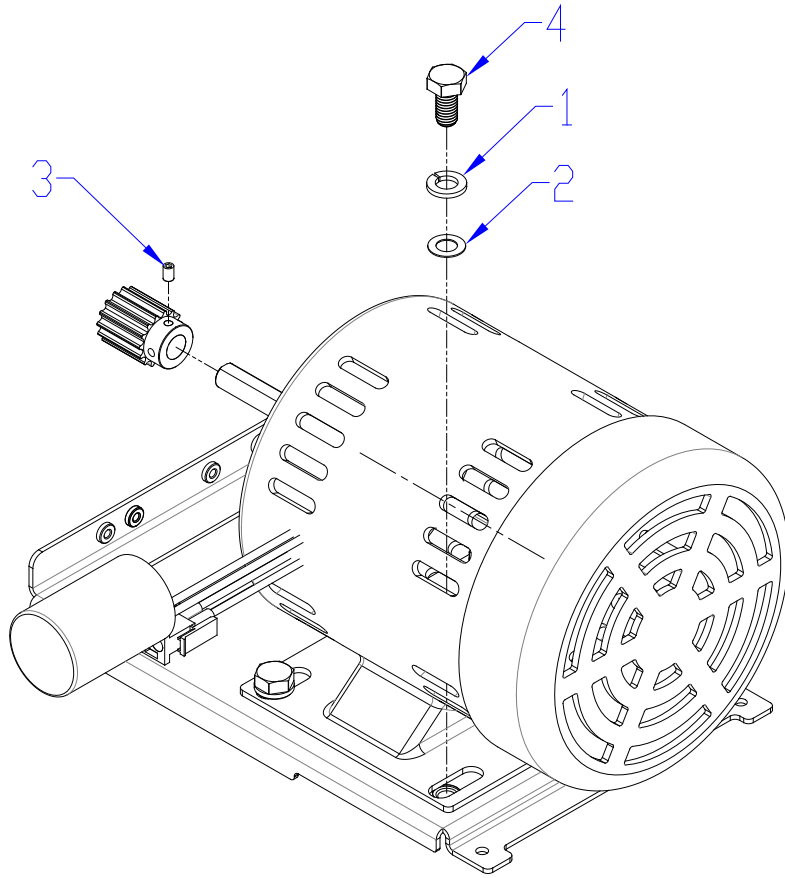


PL 4.10. Punch Module- Die Rail, Backgage, Align Sensors, Sub Assembly

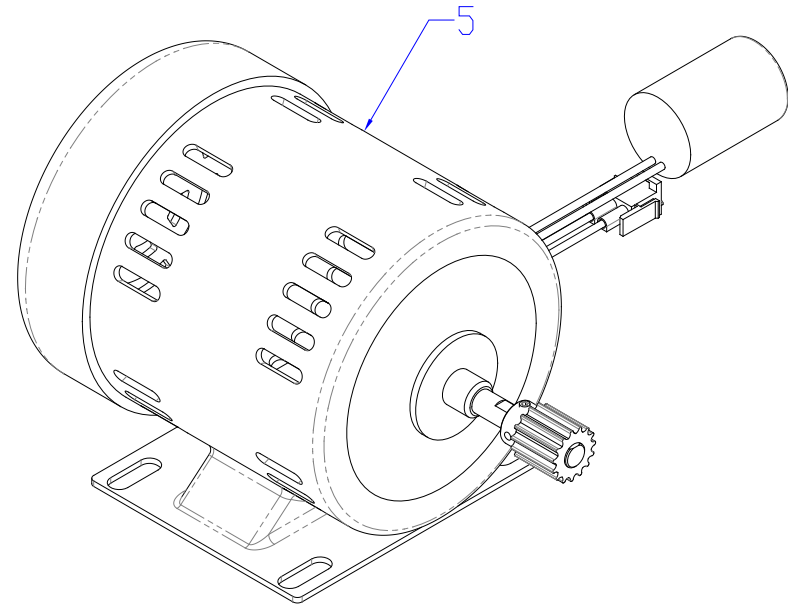


ITEM	PART #		DESCRIPTION	QTY
1	0PT1821610///		SCREW, PHILLIPS, PAN HD, M2, 3MM	4
2	0PT1821808///		LOCK WASHER, SPLIT, M2	4
3	0PT1822114///		WASHER, FLAT, 4.1x8x2	3
4	0PT1822117///		WASHER, 3.2ID, 8OD, 0.75MM THK.	7
5	0PT1824002///		NUT, KEPS, M3	9
6	0PT7708814///		CAP, RUBBER, 1/8 X 1/4 X .040	1
7	0PT7715032///		BRACKET, BACKGAGE SENSOR, LOWER	1
8	0PT7715080///		BRACKET WLDMNT, BACKGAGE SENSOR	1
9	0PT7715640///		WIRE SADDLE, SHORT, ALIGN SENSOR WIRES	9
10	0PT7715645///		COVER, BACKGAGE SENSOR	1
11	0PTZ7724178///	S16 S17	BOARD ASSY, BACKGAGE SENSOR	1
12	0PT7715787///		SPRING, DIE RAIL, POSITION, 1	1
13	0PT7715799///		SPRING, DIE RAIL, POSITION, 2	1
14	0PT7715817///		WIRE SADDLE, SMALL, LOCKING TOP, V-0	2
15	0PT7715986///		DIE RAIL, ASSEMBLY	1
16	0PT7715988///		GUIDE, ALIGNMENT SENSOR, BOTTOM	1
17	0PT7715990///		BRACKET WLDMNT, ALIGNMENT SENSOR	1
18	0PT7718567///	S11 S12 S13 S14 S15	BOARD ASSY, ALIGNMENT SENSOR, SWITCHABLE	1

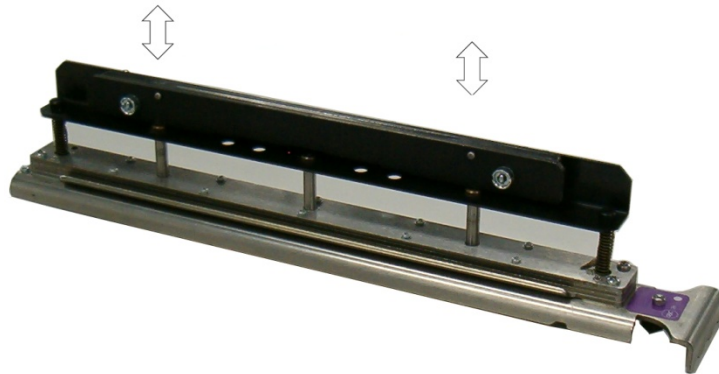
PL 4.11. Punch Module- AC Motor



ITEM	PART #		DESCRIPTION	QTY
1	0PT1821807///		WASHER, SPLIT LOCK, M8	4
2	0PT1822113///		WASHER, FLAT, 8X14X0.5	4
3	OPT1823602///		SET SCREW, NYLON PATCH, M4X6	1
4	0PT1824703///		SCREW, HEX CAP, M8, 16MM LONG	4
5	0PT7724220///	115V	MOTOR AND PULLEY, PUNCH, 0.5HP, 115V, SERVICE	1
	0PT7724221///	230V	MOTOR AND PULLEY, PUNCH, 0.5 HP, 230V, SERVICE	1



Die Sets



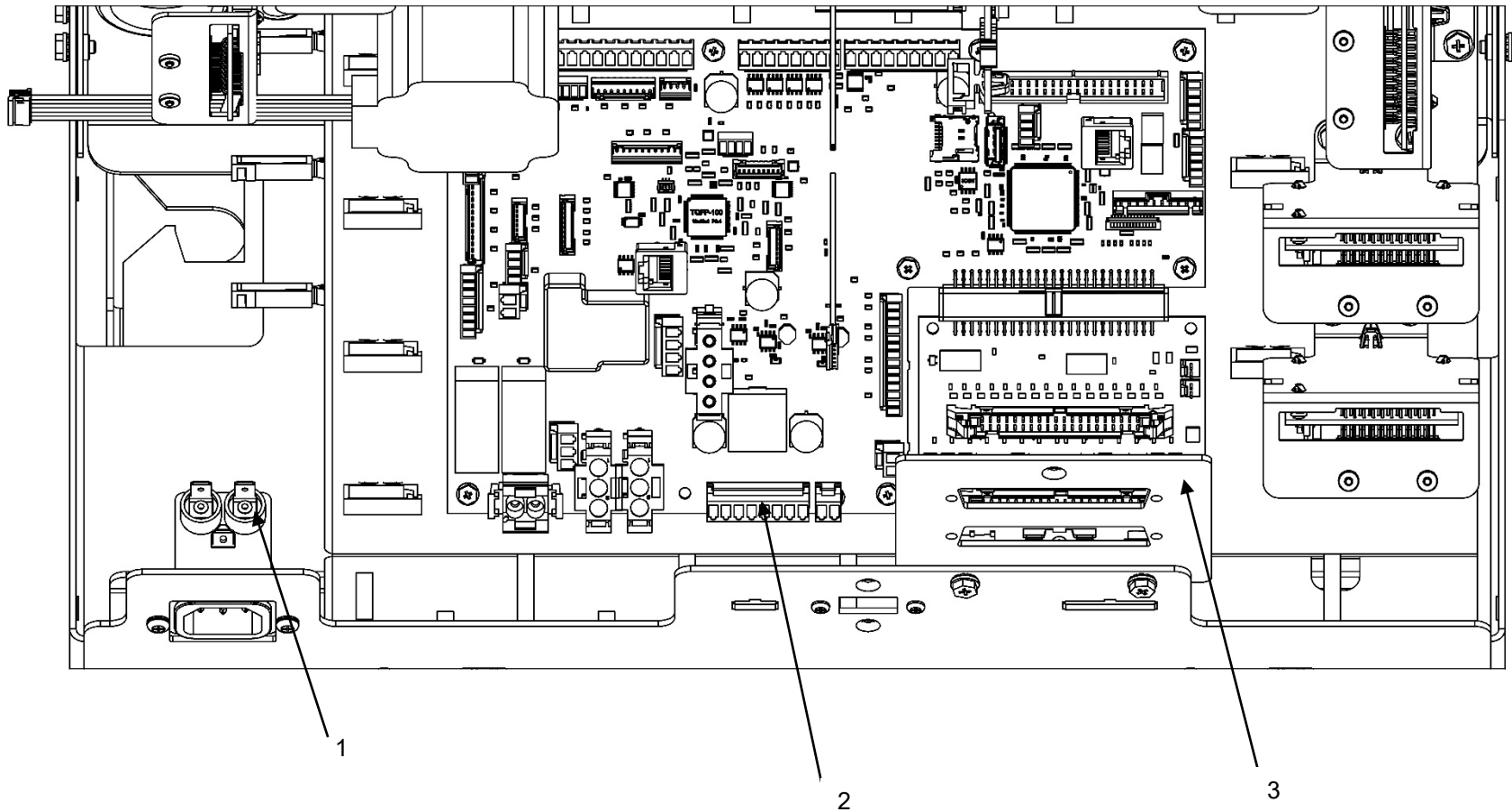
ORDER THESE DIE-SETS THROUGH SHARP SUPPLIES

ITEM	DESCRIPTION	GBC Part #
1	DIE, Coil, Rnd	WSM7724570
2	DIE, Wire 2:1, Rnd	WSM7724571
3	DIE, Wire 3:1, Rnd	WSM7724572
4	DIE, 3 Hole, 8mm	WSM7724573
5	DIE, 3/5/7 Hole, 8mm	WSM7724574
6	DIE, 4 Hole, 8mm	WSM7724575
7	DIE, 4 Hole, 6.5mm	WSM7724576
8	DIE, 4 Hole Scan	WSM7724577
9	DIE, VeloBind®, 11 Hole, Ltr	WSM7724578
10	DIE, VeloBind®, 12 Hole, A4	WSM7724579
11	DIE, CombBind	WSM7724580
12	DIE, Wire 2:1, Sq	WSM7724581
13	DIE, Wire 3:1, Sq	WSM7724582
14	DIE, Coil, Oval	WSM7724583
15	DIE, Coil, Rnd, 47H HD	WSM7724584
16	DIE, 3 Hole, 8mm, HD	WSM7724585
17	DIE, CombBind, 21H HD	WSM7724586
18	DIE, eWire, Round	WSM7724587
19	DIE, eWire, Square	WSM7724588
20	DIE, Perforation, 75-120 gsm	WSM7724589
21	DIE, Perforation, 120-300 gsm	WSM7724590
22	Die, CREASE	WSM7724591

Electronics

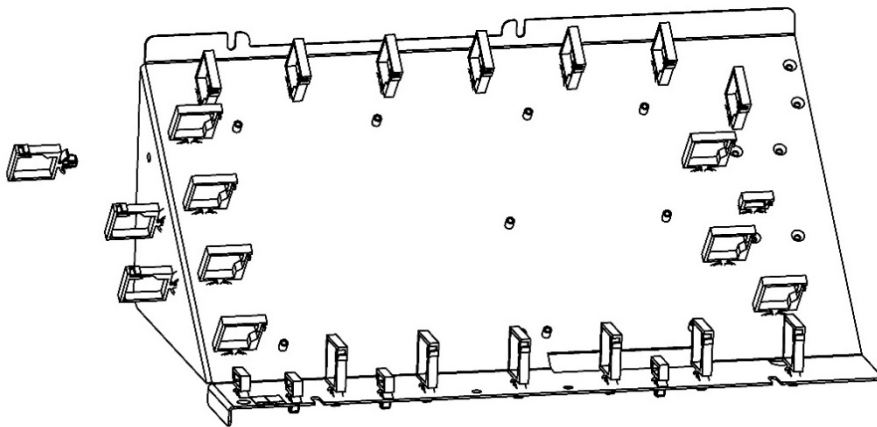
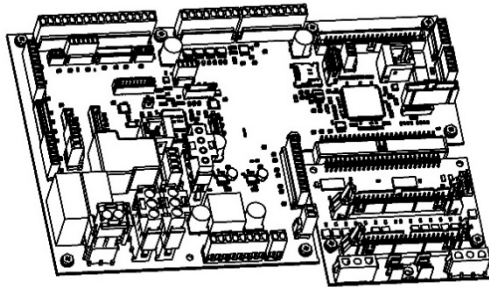
PL 6.1. Electronics PCB Assembly

ITEM	PART #	DESCRIPTION	QTY
1	0PT6195001///	RFI POWER FILTER	1
2	0PTZ7724694///	BOARD, CONTROL, MAIN	1
3	0PT7718530///	BOARD, CONTROL, COMM	1
4	0PTZ7724171///	FUSE, AC POWER, 250V, 8A	1
5	0PTZ7723646///	ADAPTER PCB, LCD TOUCHSCREEN	1



PL 6.2. Control Board Bracket Sub Assembly

ITEM	PART #	DESCRIPTION	QTY
1	0PT7715817///	WIRE SADDLE, SMALL, LOCKING	8
2	0PT7715819///	WIRE SADDLE, LARGE, LOCKING	23



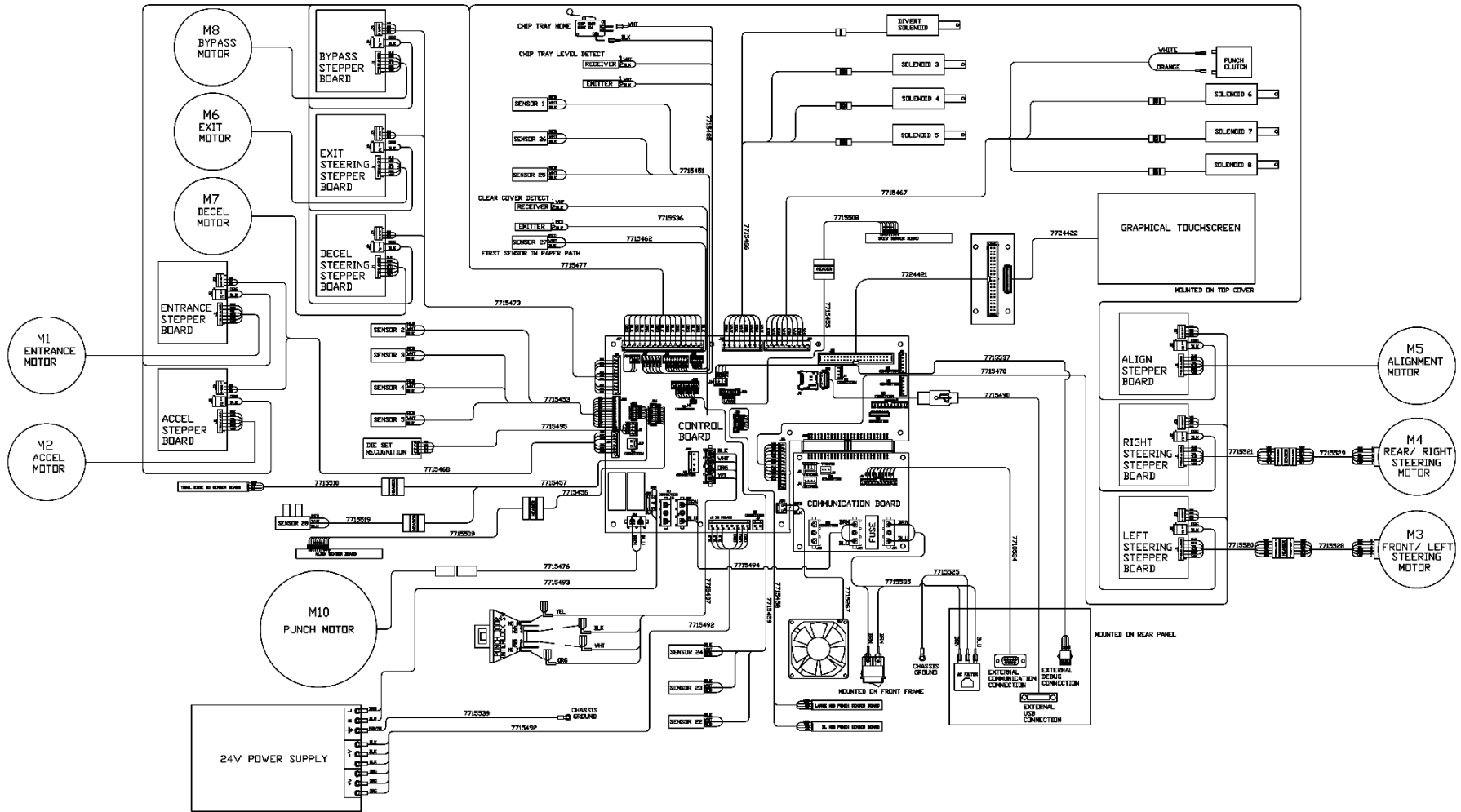
PL 6.3. Cable Part Number Index

Refer to the Wiring drawing on the next page to locate the cables

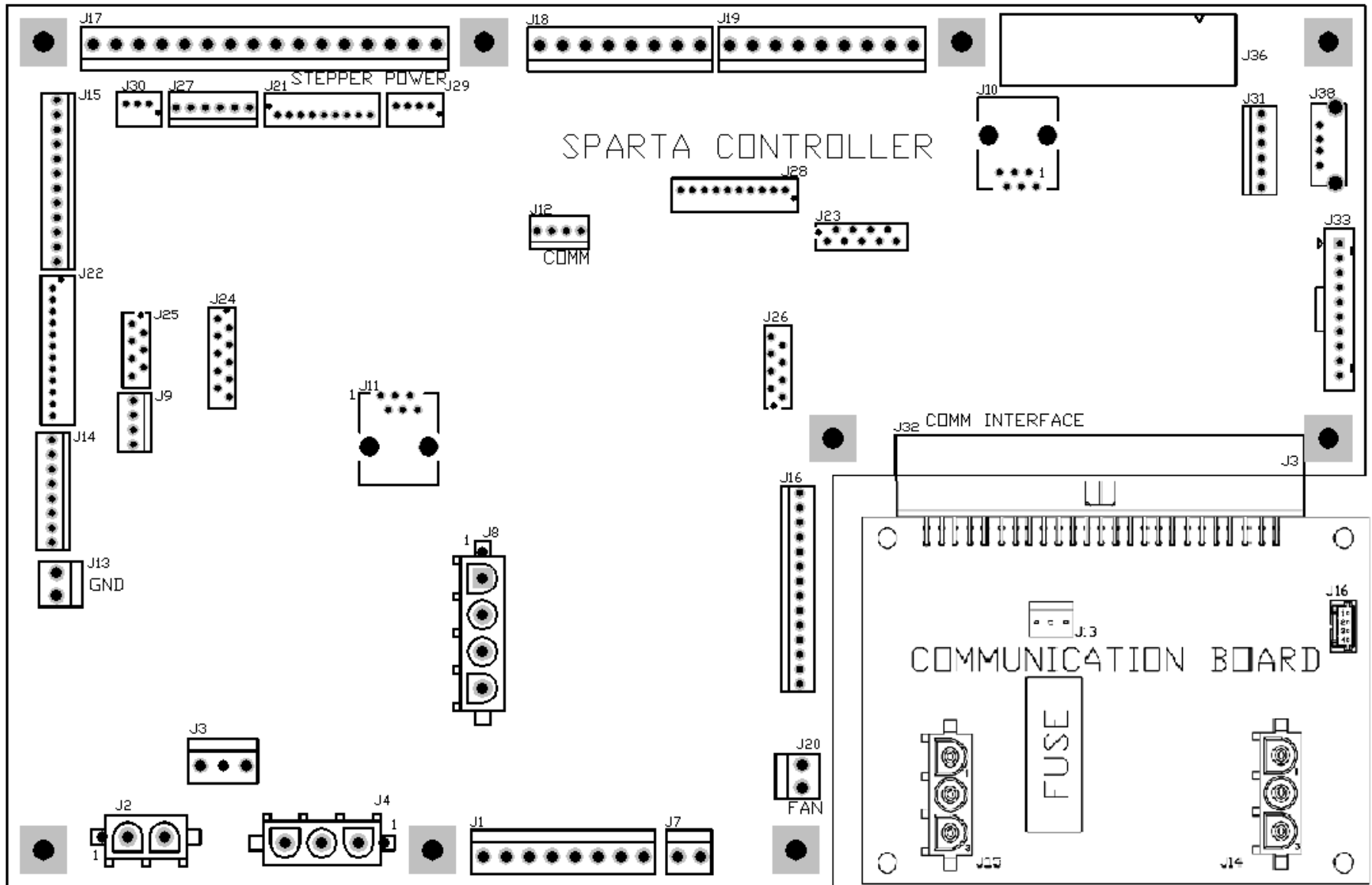
PART #	DESCRIPTION
0PT7715451///	CABLE, SENSORS S1,S25,S26
0PT7715453///	CABLE, SENSORS, ENTRY
0PT7715455///	CABLE, SENSORS, SKEW, BRD TO HDR
0PT7715456///	CABLE, SENSORS, ALIGN, BRD TO HDR
0PT7715457///	CABLE, SENSORS, BG & ALGN HM, BRD TO HDR
0PT7715458///	CABLE, SENSORS, MID BG L & XL
0PT7715459///	CABLE, SENSORS, EXIT
0PT7715466///	CABLE, SOLENOIDS, ENTRY, BRD TO HDR
0PT7715467///	CABLE, SOLENOIDS, EXIT, BRD TO HDR
0PT7715468///	CABLE, ENTRANCE & ACCEL, DRIVER
0PT7715470///	CABLE, ALIGN & STEERING, DRIVER
0PT7715473///	CABLE, EXIT, DECEL & BYPASS DRIVER
0PT7715476///	CABLE, PUNCH MOTOR
0PT7715477///	CABLE, POWER, STEPPER, DRIVERS
0PT7715485///	CABLE, CHIP TRAY
0PT7715487///	CABLE, DOOR INTERLOCK
0PT7715490///	CABLE, USB
0PT7715492///	CABLE, DC POWER
0PT7715493///	CABLE, AC TO PSU
0PT7715494///	CABLE, AC TO BOARD

0PT7715495///	CABLE, DIESET RECOGNITION
0PT7715535///	CABLE, INLET FILTER TO AC SWITCH
0PT7715508///	CABLE, SKEW, HDR TO SENSOR
0PT7715509///	CABLE, ALIGN, HDR TO SENSOR
0PT7715510///	CABLE, BG, HDR TO SENSOR
0PT7715519///	CABLE, ALIGN HOME, HDR TO SENSOR
0PT7715520///	CABLE, LEFT STEER, DRV TO HDR
0PT7715521///	CABLE, RIGHT STEER, DRV TO HDR
0PT7715523///	CABLE, LCD
0PT7715525///	CABLE, AC FILTER, GROUND
0PT7715528///	CABLE, STEERING MOTOR, MTR TO HDR, LEFT
0PT7715529///	CABLE, STEERING MOTOR, MTR TO HDR, RIGHT
0PT7715536///	CABLE, THRU BEAM, CLEAR COVER
0PT7715537///	CABLE, DEBUG TO PANEL
0PT7715539///	CABLE, GROUND, PSU TO CHASSIS
0PT7715538///	CABLE, COMM TO PANEL
0PT7715462///	CABLE, SENSOR, S27
0PTZ7724421///	RIBBON CABLE, LCD

PL 6.4. Wiring Drawing



PCB'S Main Control Board and Communication Board



Installation Kit Parts

ITEM	PART #	APPLICABLE MODELS	DESCRIPTION	QTY
1	0PT6200001///	115V	POWER CORD, US, 115V	1
2	0PT6200002///	230V	POWER CORD, EUROPE	1
3	0PT6200014///	230V	POWER CORD, UK,	1
4	0PT6200015///	230V	POWER CORD, SWISS	1
5	0PTZ7724513///	BOTH	KIT, CABLES, SMARTPUNCH PLUS	1
6	0PTZ7724533///	BOTH	CABLE ASSY, COMM AND BRACKET, SMARTPUNCH PLUS	1
7	0PT7712823///	BOTH	BRACKET, REAR, ENTRY WELDMENT	1
8	0PT7712826///	BOTH	BRACKET, FRONT, ENTRY	1
9	0PTZ7718527///	BOTH	ENTRANCE GUIDE, ASSY,	1
10	0PT7715734///	BOTH	BRACKET, EXIT GUIDE	1

Miscellaneous

ITEM	PART #	DESCRIPTION
1	0PT1823905///	SCREW, PHILLIPS HX HD W/SEMS, M4X35
2	0PT1822208///	E-RING, JE-3
3	0PT7712583///	OIL, 3 IN 1
4	0PT7715632///	SCREW, ROUND TIP, HEX HD, PHILLIPS, M4 X 8
5	0PT7715684///	DRIVE, USB STICK, FLASH DRIVE

Revision History				
Date	Page#	PL#	Item#	Notes
7/19/2021				Initial Release
9/20/2021				Large part update, 0PT-/// added