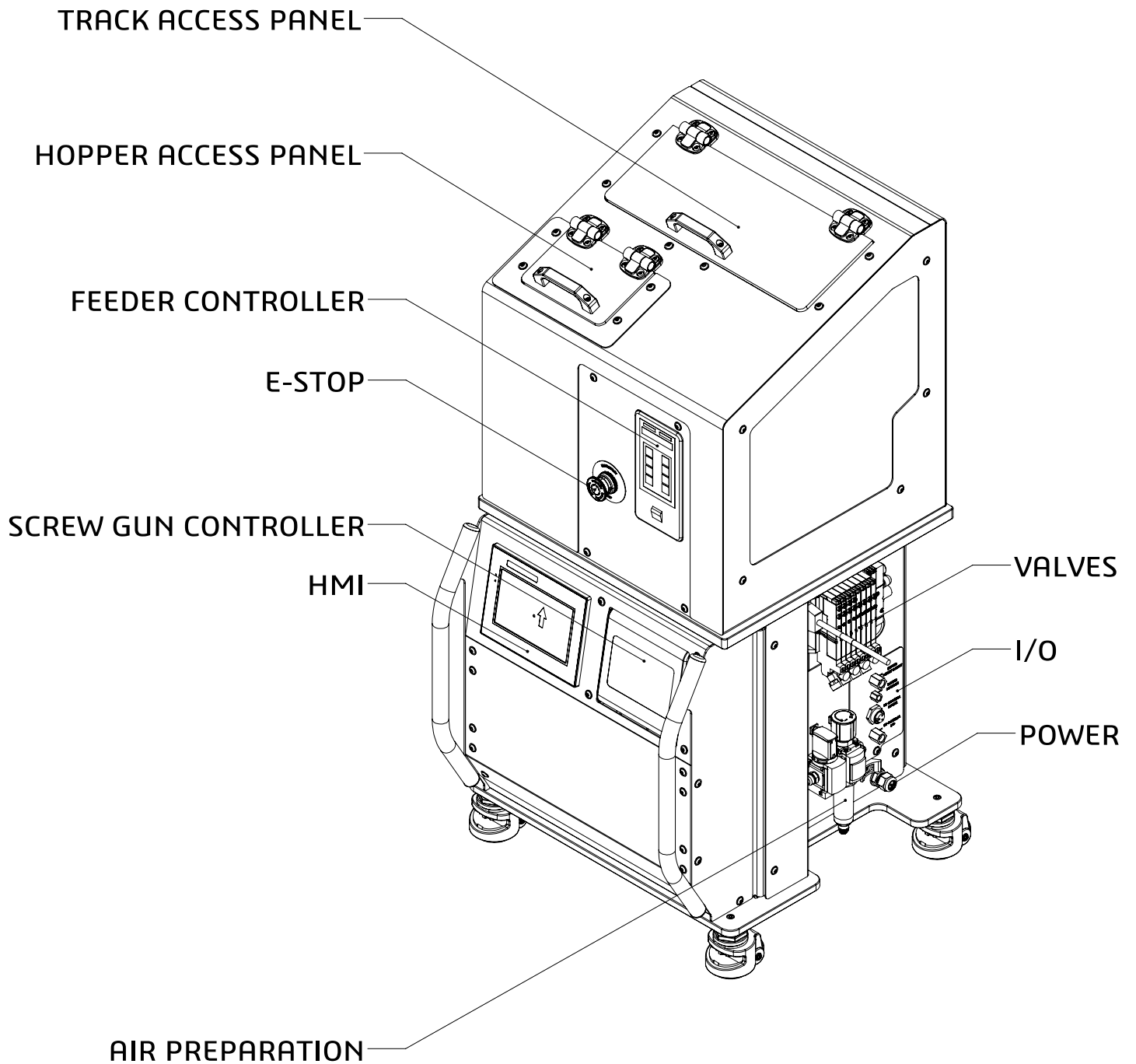


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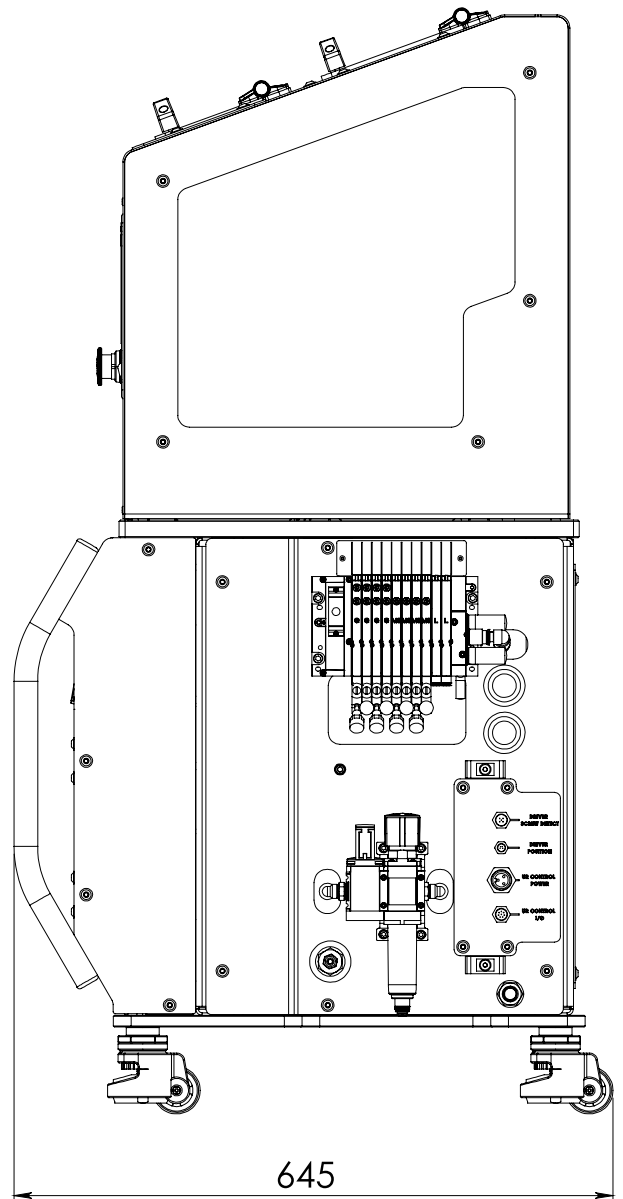
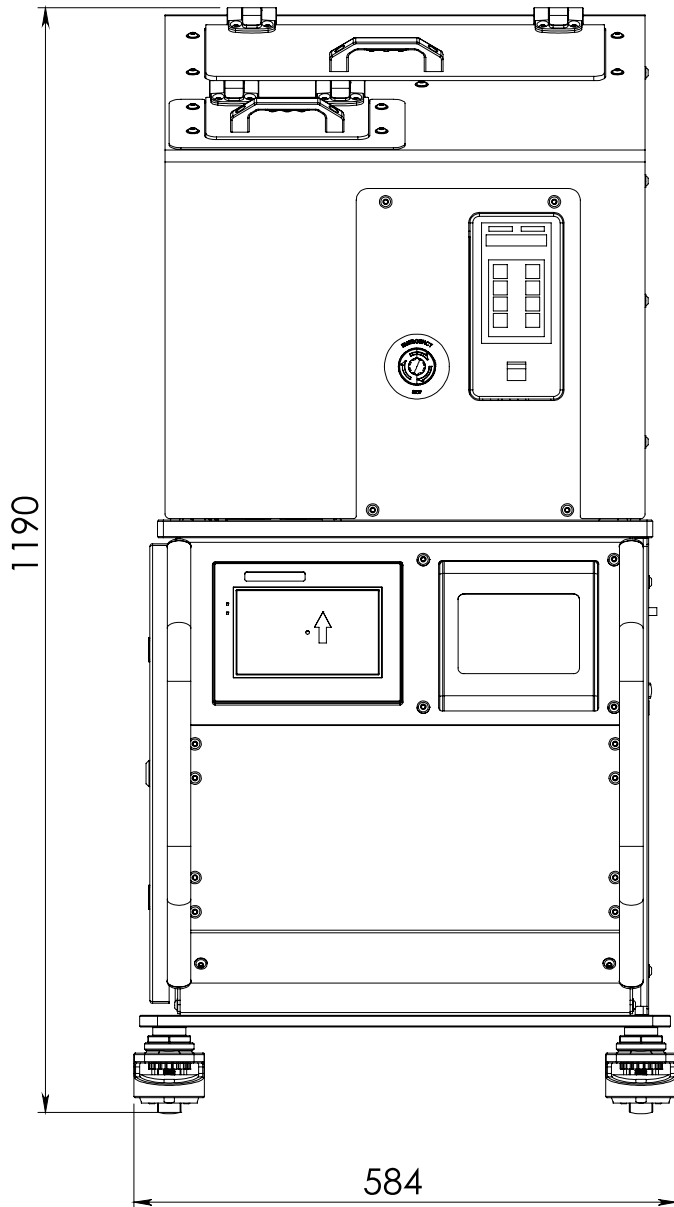
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## 1.0 Overview



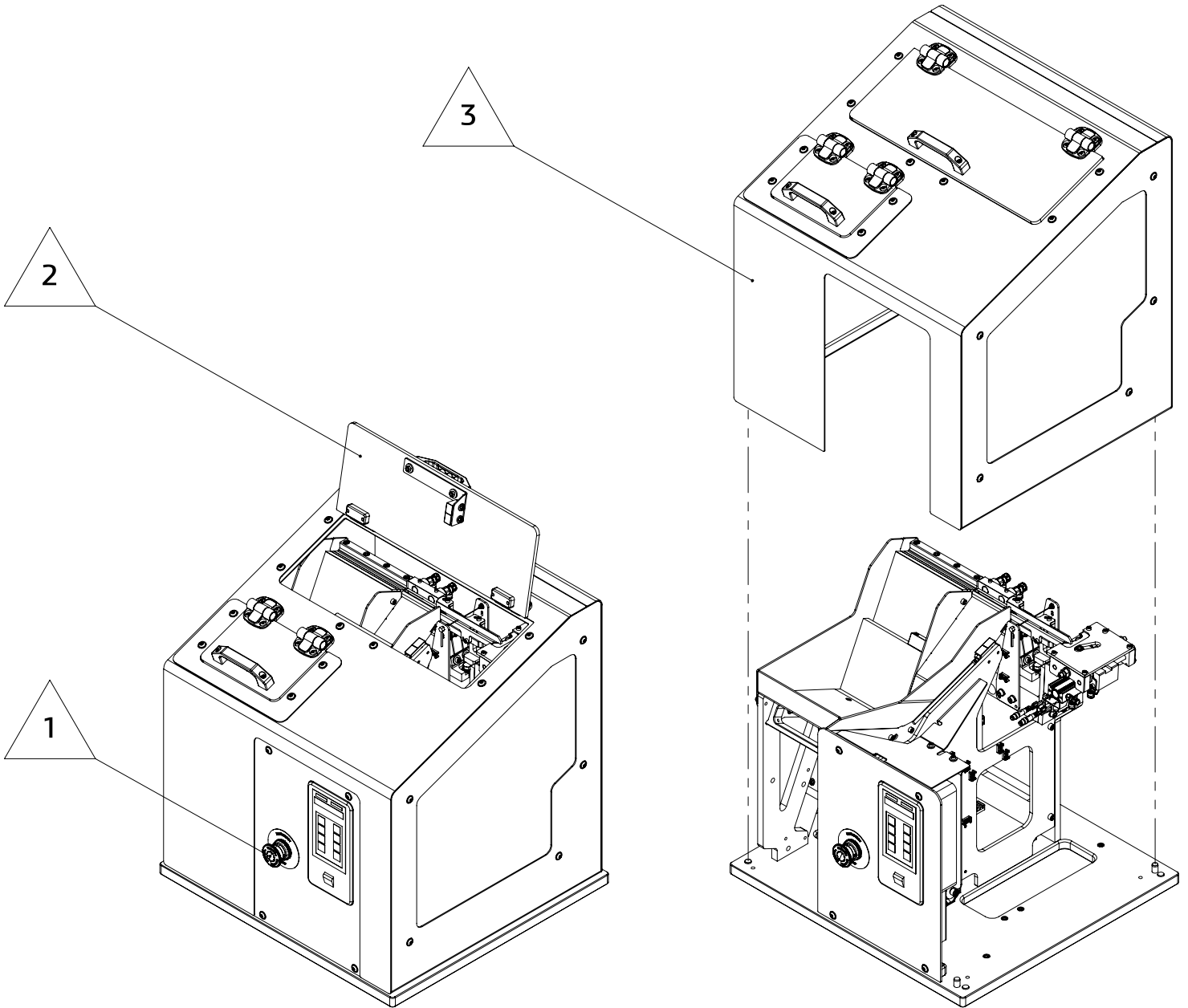
## 2.0 Technical Specifications

- Weight: 129kg
- Electrical Requirements: 120vac
- Pneumatic Requirements: 0.55 - 0.8 MPa,



STEP FEEDER PNEUMATICS ARE DISABLED UNDER THREE CONTIONS:

- 1 E-STOP ACTIVATION
- 2 UPPER LID OPENING
- 3 COVER LIFT OFF

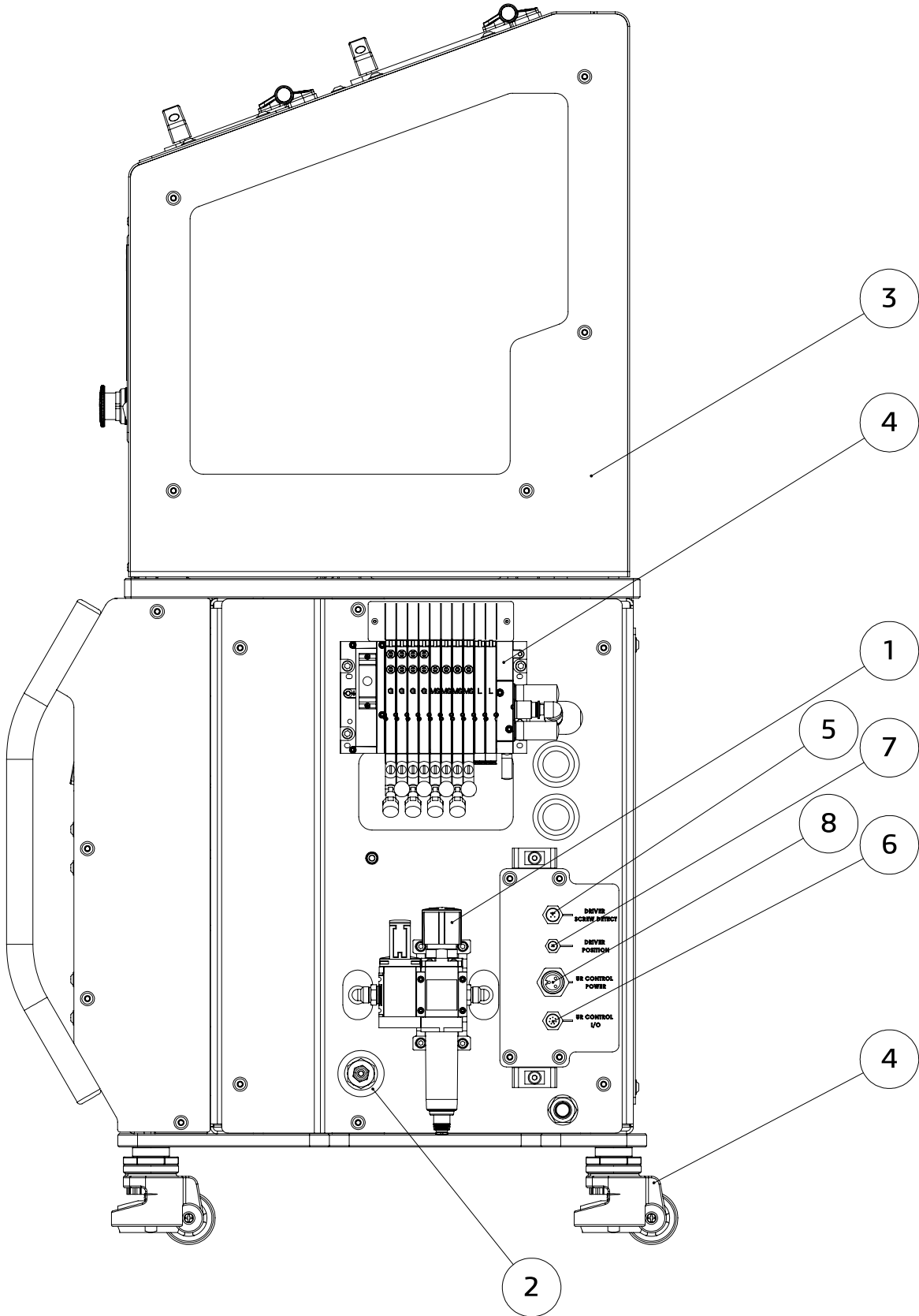


### 3.0 Diagrams

#### 3.1 7530-012-0000 Control Cart

ITEM	QTY	PART NUMBER	DESCRIPTION	MANUFACTURER	RECOMMEDED SPARE
1	1	7530-012-3000	AIR PREP ASSEMBLY	PROTO MACHINE	
2	1	7530-012-4000	AIR CONNECTION	PROTO MACHINE	
3	1	7530-011-0000	STEP FEEDER	PROTO MACHINE	
4	1	569926 34P-MS1-D-10A-GPCVEGPAVEGPAVEGPAVE MSPAVEMSPAVEMSPAVEMSPAVELL DD	MANIFOLD, 10 POS	FESTO	
5	1	FK FS 4.5-M12	BULKHEAD, M12 5 PIN	TURCK	
6	1	FK FS 8-M12	BULKHEAD, M12 8 PIN	TURCK	
7	1	MFSV MFKV 4-M8	BULKHEAD, M8 4 PIN	TURCK	
8	1	RSF RKF 30-22	BULKHEAD, .875-16 3 PIN	TURCK	

# 7530-012-0000 Control Cart

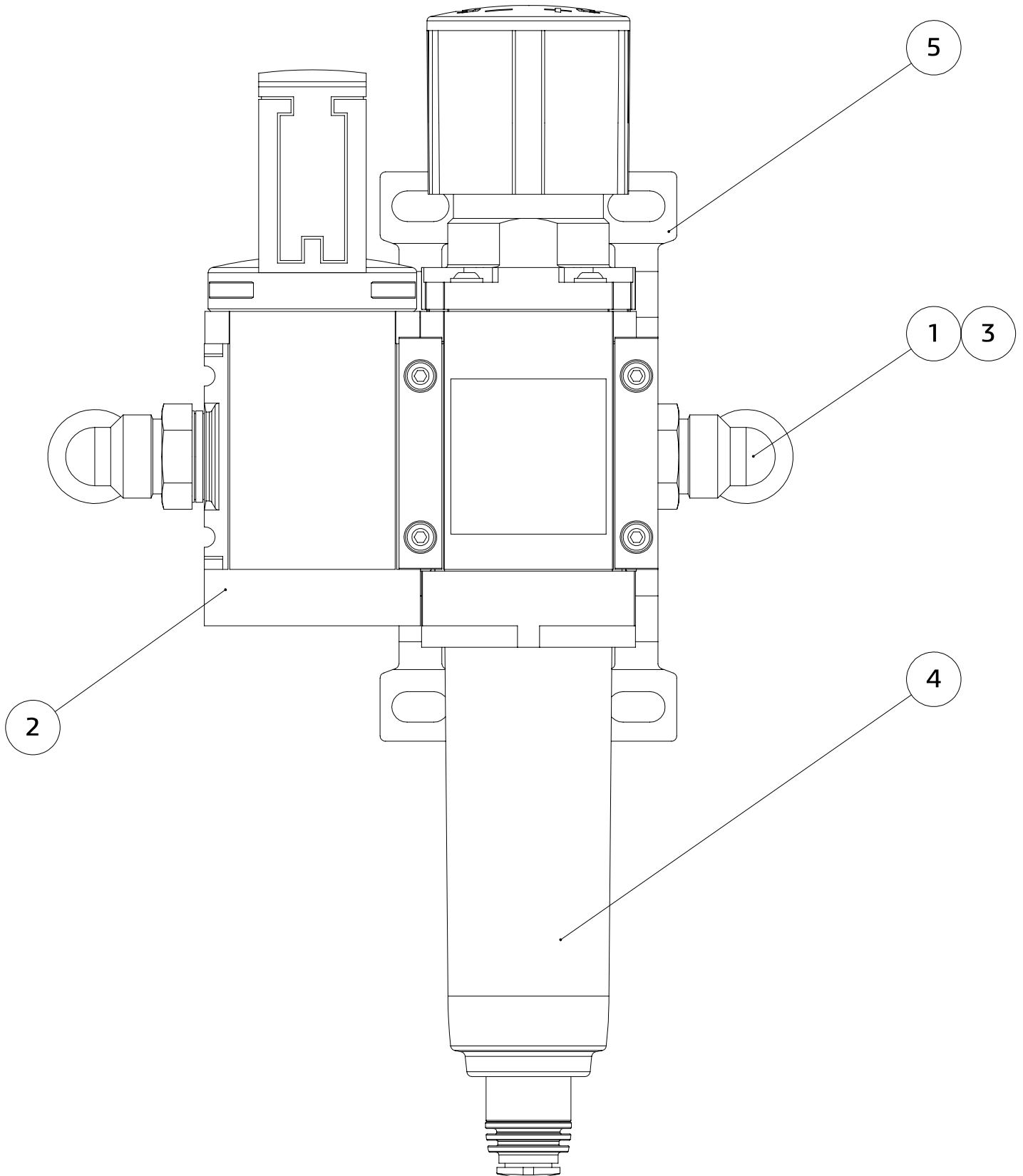


3.2 7530-012-3000 Air Prep Assembly

ITEM	QTY	PART NUMBER	DESCRIPTION	MANUFACTURER	RECOMMEDED SPARE
1	2	186122	FITTING, ELBOW, 10MM TUBE TO .25 G THREAD	FESTO	
2	1	541258	SHUT OFF, SIZE 4	FESTO	
3	1	542966	MOUNTING PLATE, SIZE 4	FESTO	
4	1	8098256	FILTER REGULATOR, G.25 THREAD	FESTO	
5	2	8118600	BRACKET, FRL MOUNTING SIZE 4	FESTO	



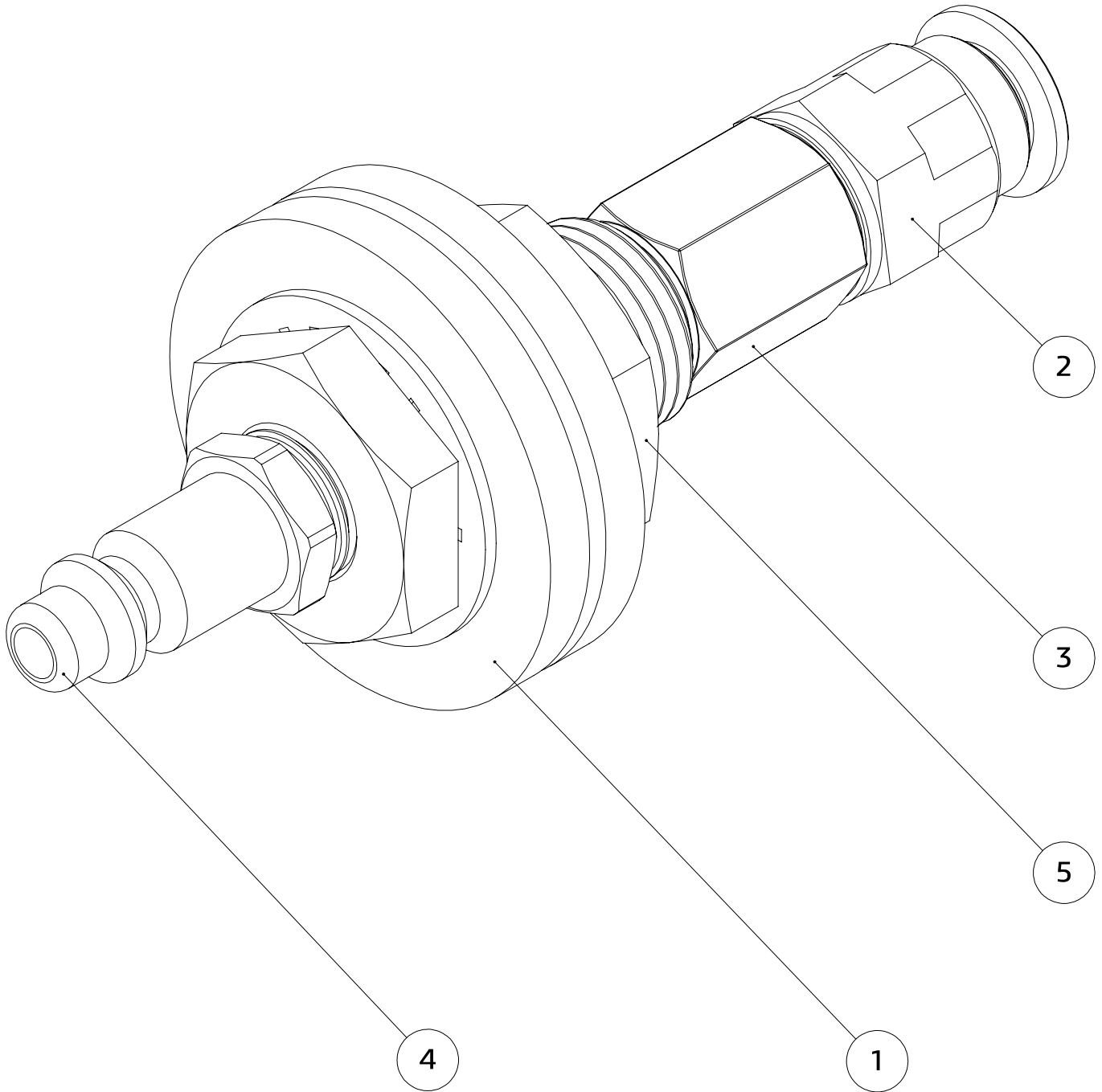
# 7530-012-3000 Air Prep Assembly



### 3.3 7530-012-4000 Air Connection

ITEM	QTY	PART NUMBER	DESCRIPTION	MANUFACTURER	RECOMMEDED SPARE
1	2	7530-012-4000-001	WASHER	PROTO MACHINE	
2	1	186101	FITTING, STRAIGHT, 10MM TUBE TO .25 G THREAD	FESTO	
3	1	1786N121	FITTING, ADAPTER .25 NPT TO .25 G	MCMASTER CARR	
4	1	4342K27	QUICK DISCONNECT, .25 COUPLING TO .25 NPT	MCMASTER CARR	
5	1	50785K273	BULKHEAD, .25 NPT	MCMASTER CARR	

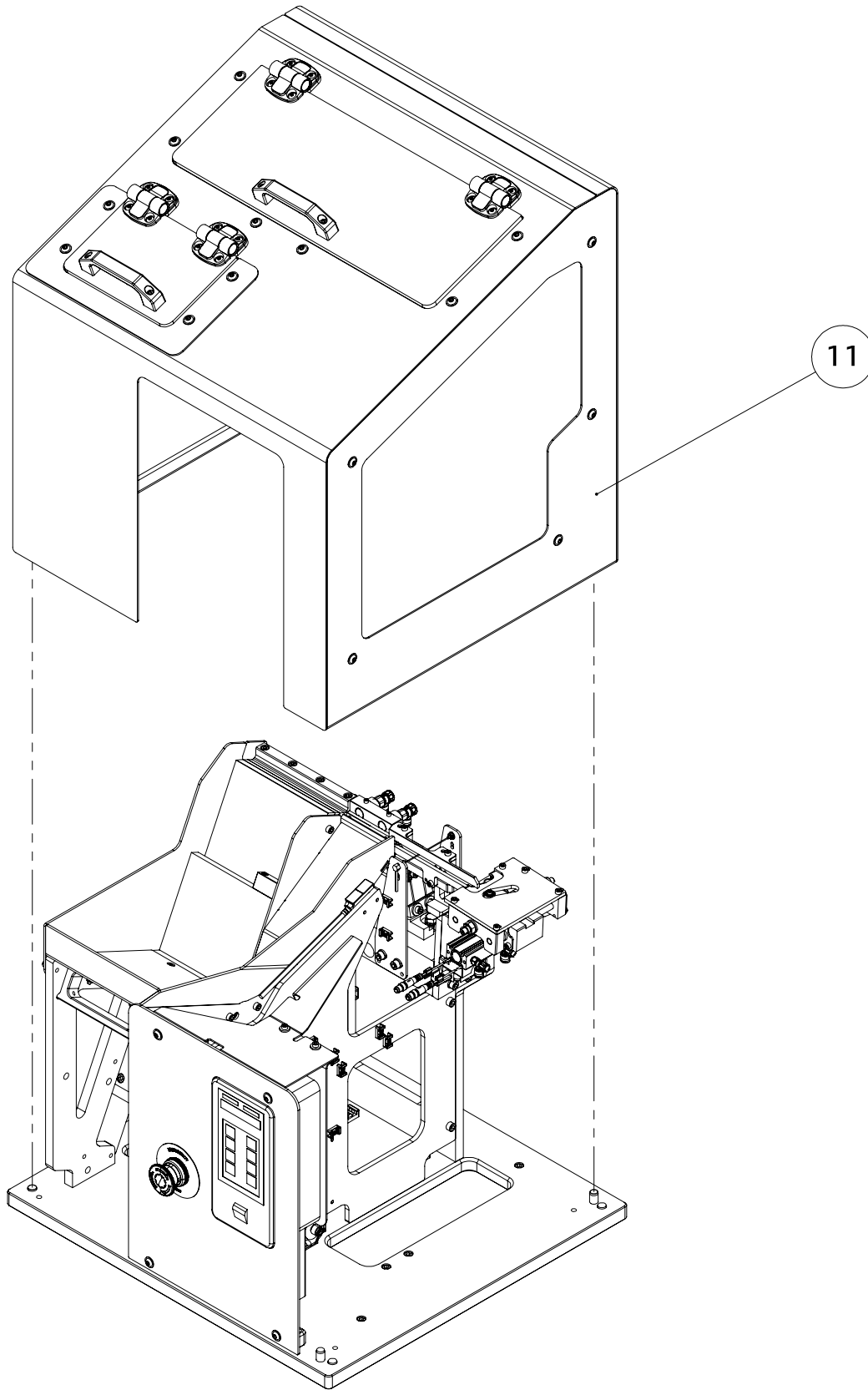
# 7530-012-4000 Air Connection



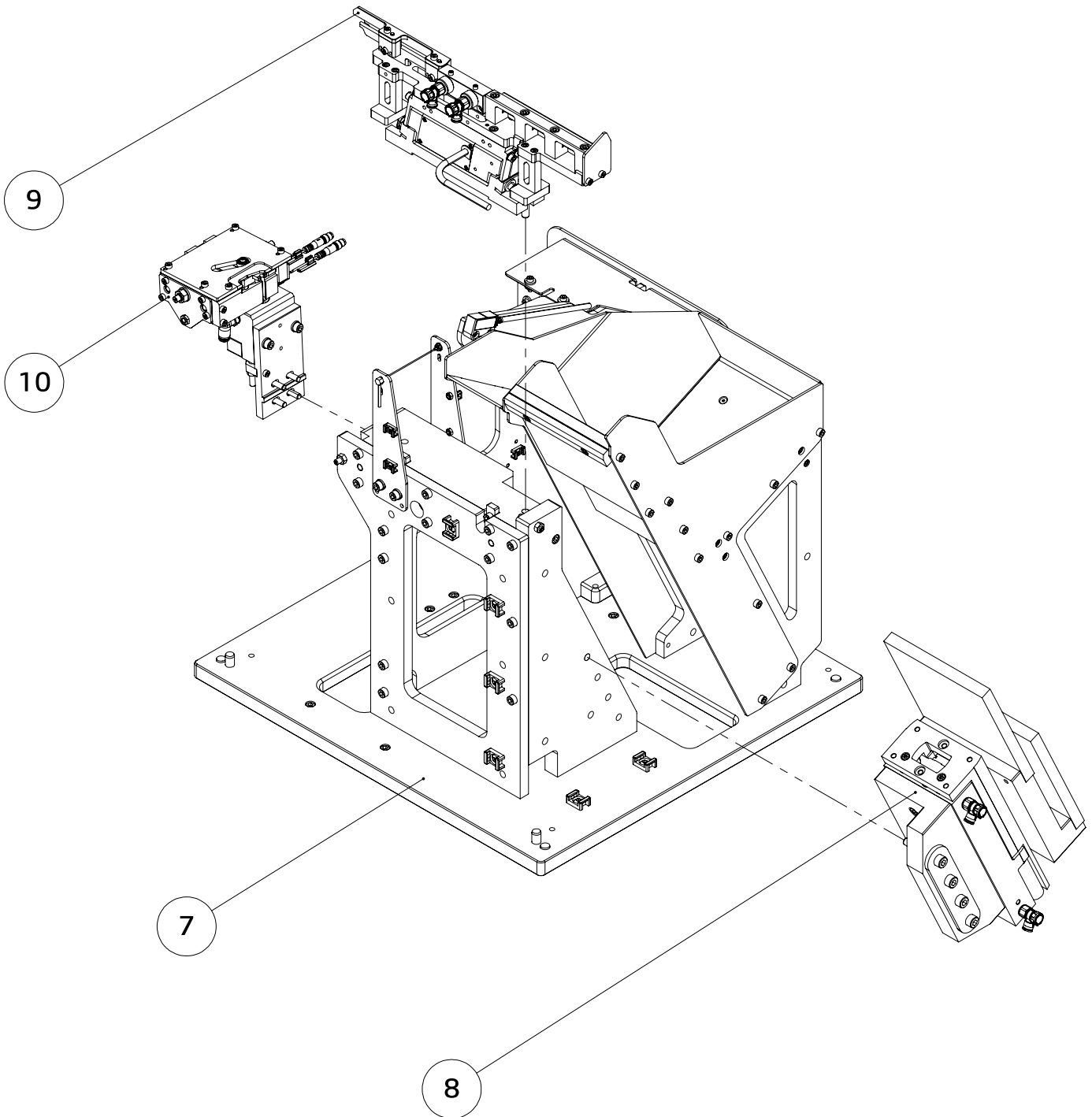
### 3.4 7530-011-0000 Step Feeder

ITEM	QTY	PART NUMBER	DESCRIPTION	MANUFACTURER	RECOMMEDED SPARE
1	1	SIGA B.7_65.1 (V6)	CONTROL UNIT, SCREW FEEDER, 08	AFAG	
2	1	8000-88460-0000000	DISTRIBUTION BLOCK, 4PIN M12 SOCKETS, 8 PORT, PNP, M12 12 PIN QD	AUTOMATION DIRECT	
3	1	AHX720-5A	LEGEND, E-STOP, FUJI 30MM PILOT	AUTOMATION DIRECT	
4	1	AR30V0R-01RZC	E STOP, FUJI 30MM, 1 NC CONTACT INCLUDED	AUTOMATION DIRECT	
5	1	AR9B291	NC CONTACT, FOR FUJI 30MM BUTTON	AUTOMATION DIRECT	
6	1	MPR-114014	SAFETY SWITCH, MAGNETIC NON CONTACT	AUTOMATION DIRECT	
7	1	7530-011-1000	FEEDER BASE	PROTO MACHINE	
8	1	7530-011-2000	STEP MECHANISM	PROTO MACHINE	
9	1	7530-011-3000	FEED TRACK	PROTO MACHINE	
10	1	7530-011-4000	ESCAPEMENT	PROTO MACHINE	
11	1	7530-011-6000	STEP FEED ENCLOSURE	PROTO MACHINE	
12	1	FS-N41C	FIBEROPTIC AMP, M8 CONNECTOR	KEYENCE	
13	1	FU-77TG	SENSOR, FIBER THRU BEAM, STAINLESS BRAIDED	KEYENCE	
14	1	OP-88245	BRACKET	KEYENCE	
15	2	90710A035	M4X0.7 JN-CZN	MCMaster CARR	
16	2	91455A340	M4 PW-CZN-G10.9	MCMaster CARR	
17	2	91502A106	M3X0.5 BY 14 SHCS-BZN	MCMaster CARR	
18	2	91502A126	M4X0.7 BY 14 SHCS-BZN	MCMaster CARR	
19	2	91502A127	M4X0.7 BY 16 SHCS-BZN	MCMaster CARR	

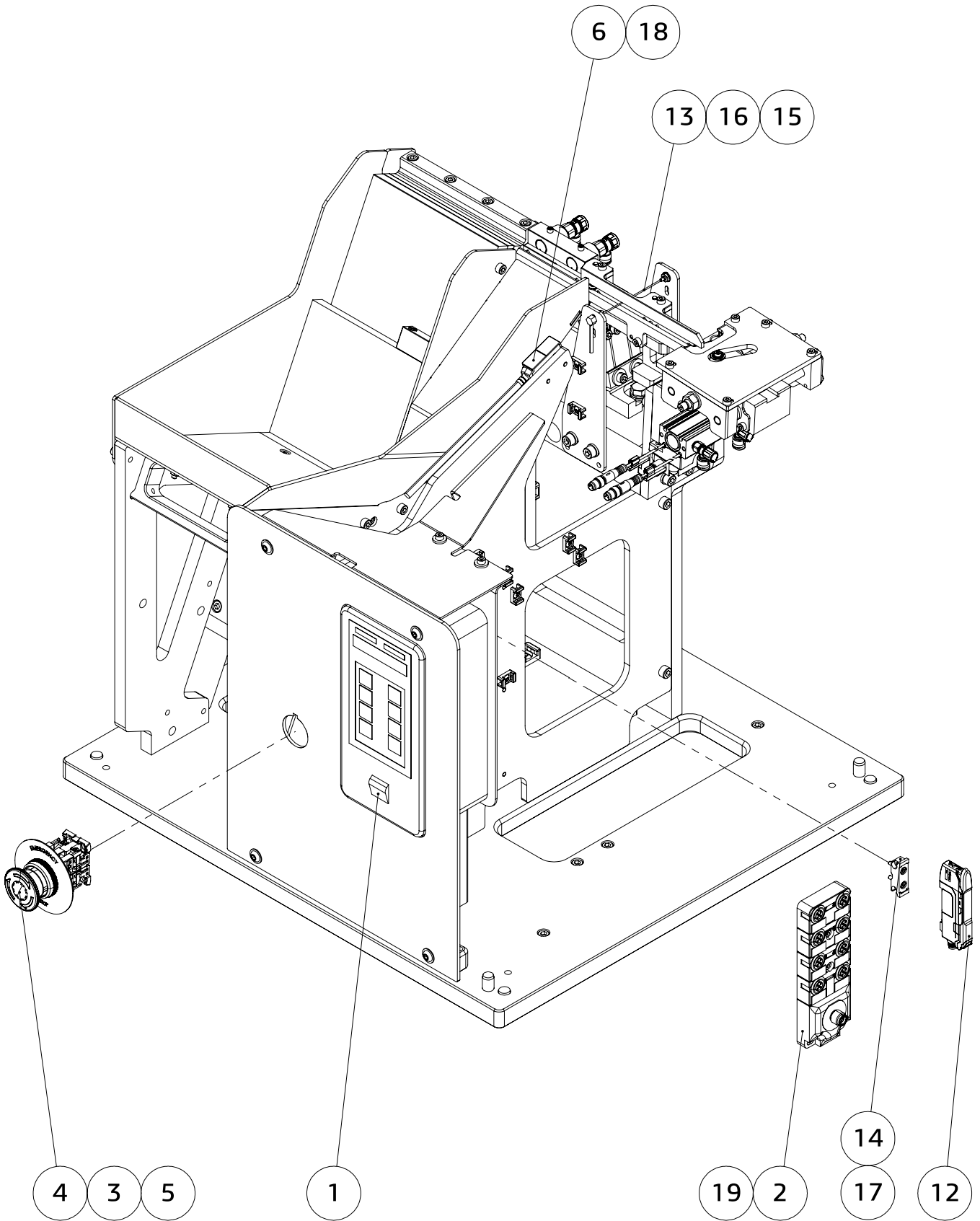
7530-011-0000 Step Feeder



# 7530-011-0000 Step Feeder



# 7530-011-0000 Step Feeder



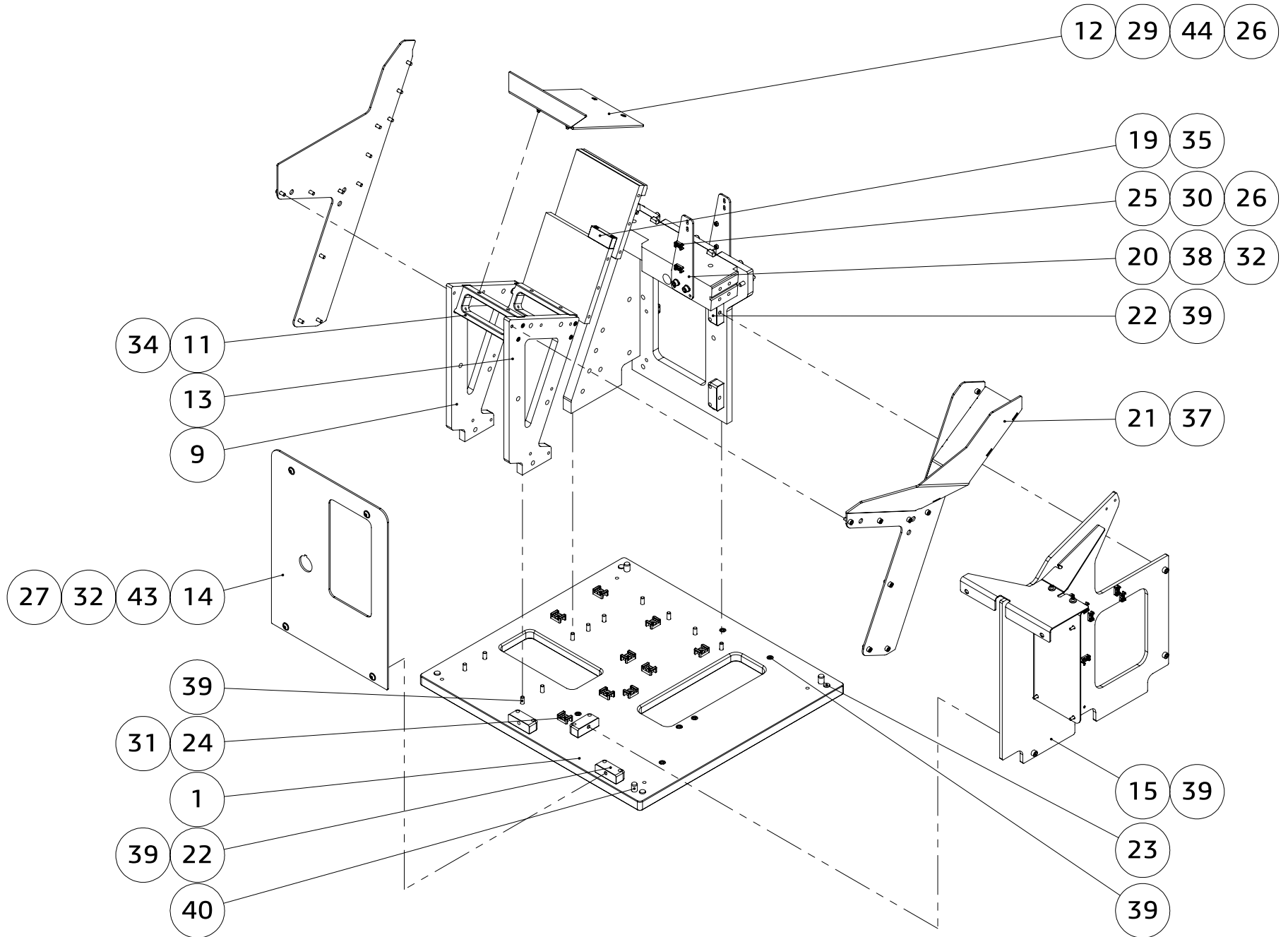
### 3.5 7530-011-1000 Feeder Base

ITEM	QTY	PART NUMBER	DESCRIPTION	MANUFACTURER	RECOMMEDED SPARE
1	1	7530-011-1000-001	BASE PLATE	PROTO MACHINE	
2	1	7530-011-1000-002	BACK PLANE	PROTO MACHINE	
3	1	7530-011-1000-003	SIDE PLANE	PROTO MACHINE	
4	1	7530-011-1000-004	TRACK MOUNT	PROTO MACHINE	
5	2	7530-011-1000-005	PUSH BLOCK	PROTO MACHINE	
6	1	7530-011-1000-006	LOWER STATIC STEP	PROTO MACHINE	
7	1	7530-011-1000-007	UPPER STATIC STEP	PROTO MACHINE	
8	1	7530-011-1000-008	UPPER TRANSITION	PROTO MACHINE	
9	1	7530-011-1000-009	LH HOPPER FRAME	PROTO MACHINE	
10	1	7530-011-1000-010	LH HOPPER SIDE	PROTO MACHINE	
11	2	7530-011-1000-011	PLATE MOUNT	PROTO MACHINE	
12	1	7530-011-1000-012	SLIDE PLATE	PROTO MACHINE	
13	1	7530-011-1000-013	RH HOPPER FRAME	PROTO MACHINE	
14	1	7530-011-1000-014	STATIONARY PANEL	PROTO MACHINE	
15	1	7530-011-1000-015	CENTER PANEL	PROTO MACHINE	
16	1	7530-011-1000-016	TOP SUPPORT	PROTO MACHINE	
17	1	7530-011-1000-017	CONTROL BRACKET	PROTO MACHINE	
18	2	7530-011-1000-018	AMP SIDE SUPPORT	PROTO MACHINE	
19	1	7530-011-1000-019	SCREW BLOCKER	PROTO MACHINE	
20	2	7530-011-1000-020	FIBER HEAD MOUNT	PROTO MACHINE	
21	1	7530-011-5000-000	HOPPER CHUTE WELDMENT	PROTO MACHINE	
22	5	7530-012-2000-009	PANEL CONNECTOR	PROTO MACHINE	
23	4	3810N115	THREADED BUMPER, 10MM OD, 10MM TALL, M4X0.7	MCMaster CARR	
24	13	7566K68	CABLE HOLDER, .875 BY .625	MCMaster CARR	
25	14	7566K740	4MM SCREW CABLE HOLDER	MCMaster CARR	

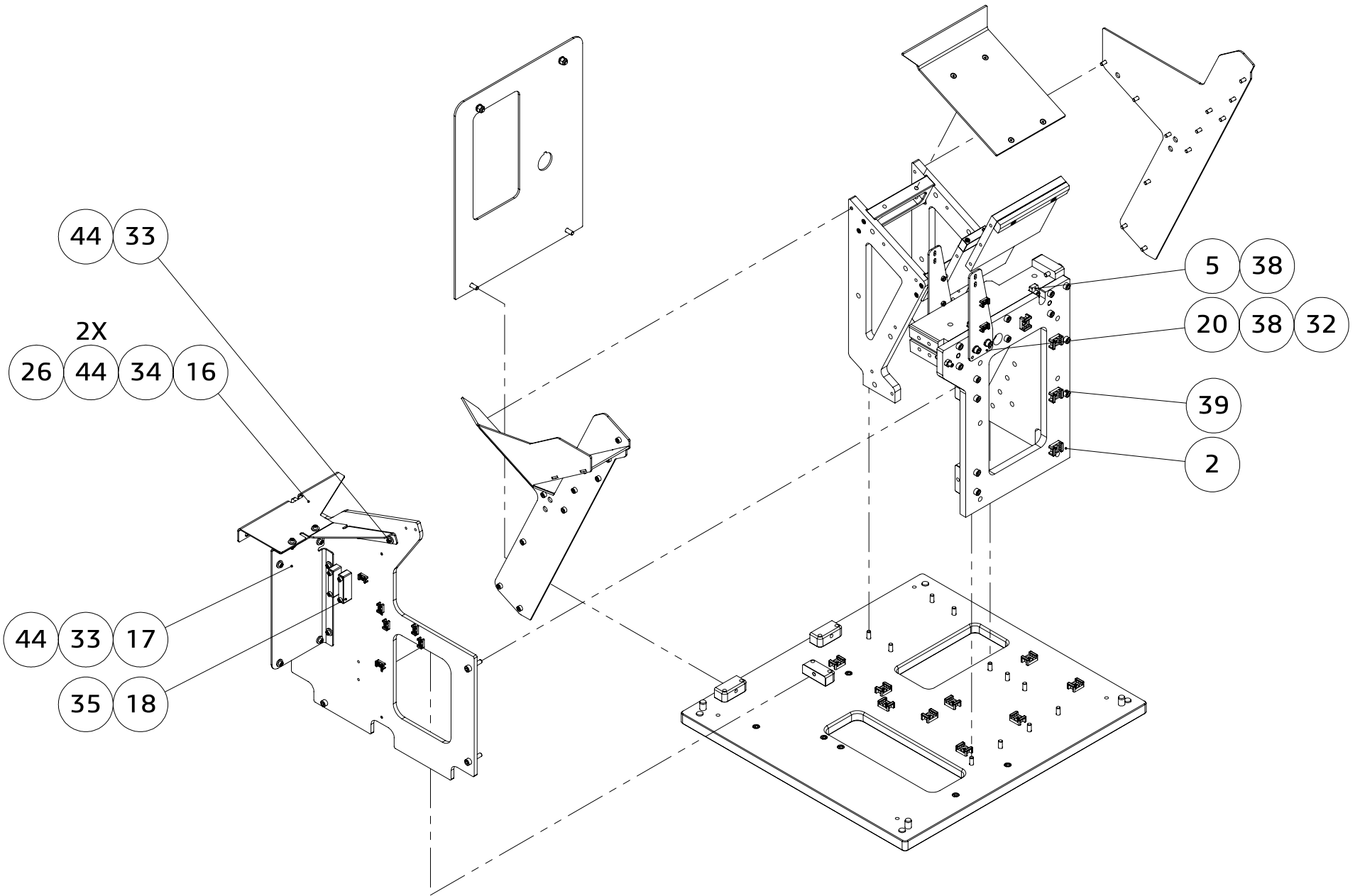


ITEM	QTY	PART NUMBER	DESCRIPTION	MANUFACTURER	RECOMMEDED SPARE
26	10	90576A103	M4X0.7 LN-CZN	MCMaster CARR	
27	2	90576A115	M6X1.0 LN-CZN	MCMaster CARR	
28	2	90591A151	Zinc-Plated Steel Hex Nut	MCMaster CARR	
29	4	91304A115	M4X0.7 BY 20 FHCS-BZN	MCMaster CARR	
30	14	91352A121	M4X0.7 BY 8 BHCS-BZN	MCMaster CARR	
31	13	91352A141	M6X1.0 BY 10 BHCS-BZN	MCMaster CARR	
32	6	91455A120	M6 TW-CZN-G10.9	MCMaster CARR	
33	8	91502A125	M4X0.7 BY 12 SHCS-BZN	MCMaster CARR	
34	10	91502A126	M4X0.7 BY 14 SHCS-BZN	MCMaster CARR	
35	6	91502A130	M4X0.7 BY 25 SHCS-BZN	MCMaster CARR	
36	2	91502A143	M5X0.8 BY 10 SHCS-BZN	MCMaster CARR	
37	24	91502A144	M5X0.8 BY 12 SHCS-BZN	MCMaster CARR	
38	6	91502A165	M6X1.0 BY 16 SHCS-BZN	MCMaster CARR	
39	40	91502A169	M6X1.0 BY 25 SHCS-BZN	MCMaster CARR	
40	3	91585A881	DOWEL PIN, TAPERED ENDS, M10 BY 24	MCMaster CARR	
41	2	91595A558	M8 BY 20 DP	MCMaster CARR	
42	2	92605A138	SET SCREW, 18_8 STAINLESS, M6X1.0 BY 35	MCMaster CARR	
43	4	96660A216	FLANGE BOLT, M6X1.0 BY 16MM	MCMaster CARR	
44	16	97310A112	WASHER, M4 OVERSIZED	MCMaster CARR	

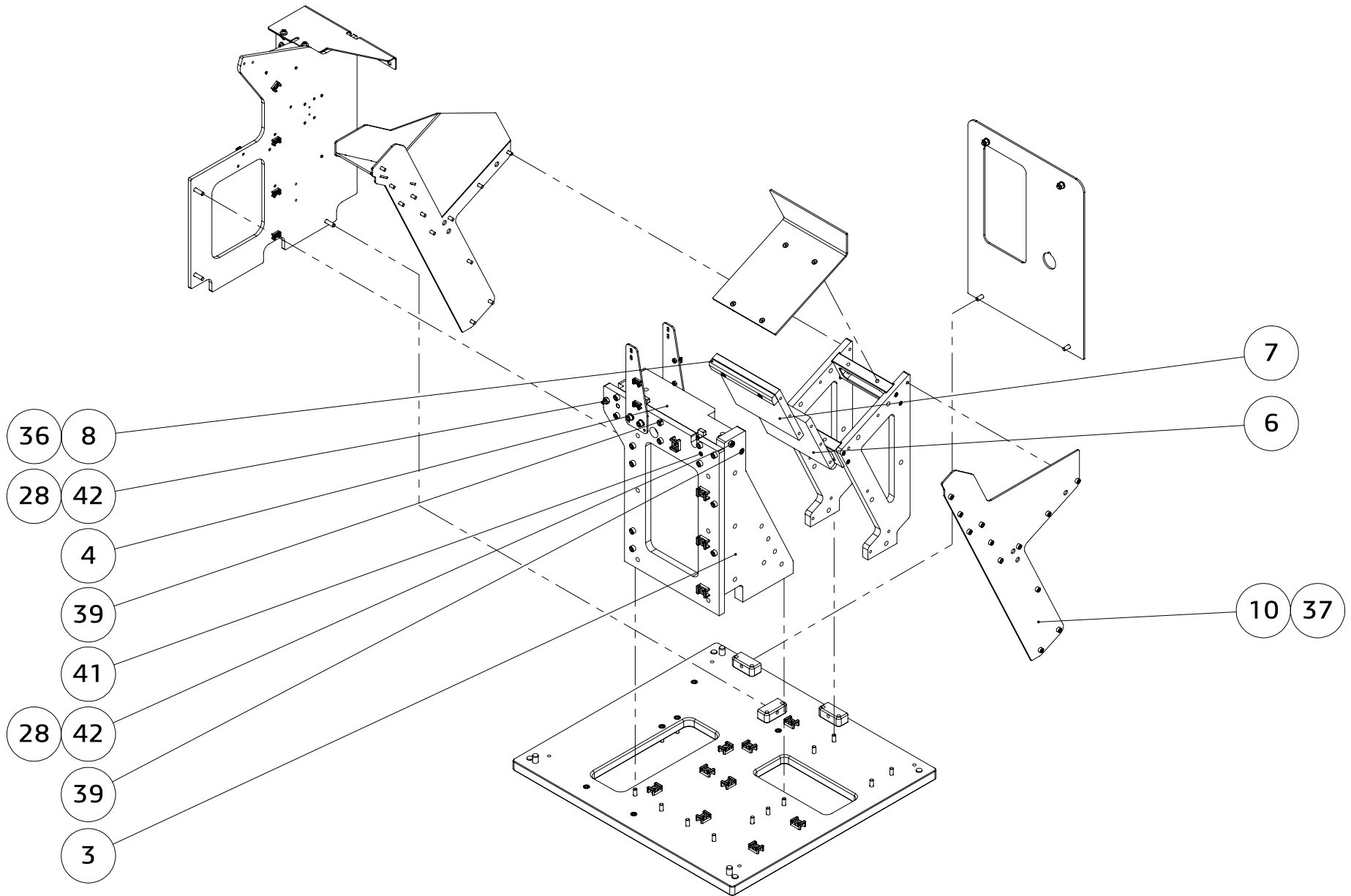
7530-011-1000 Feeder Base



7530-011-1000 Feeder Base



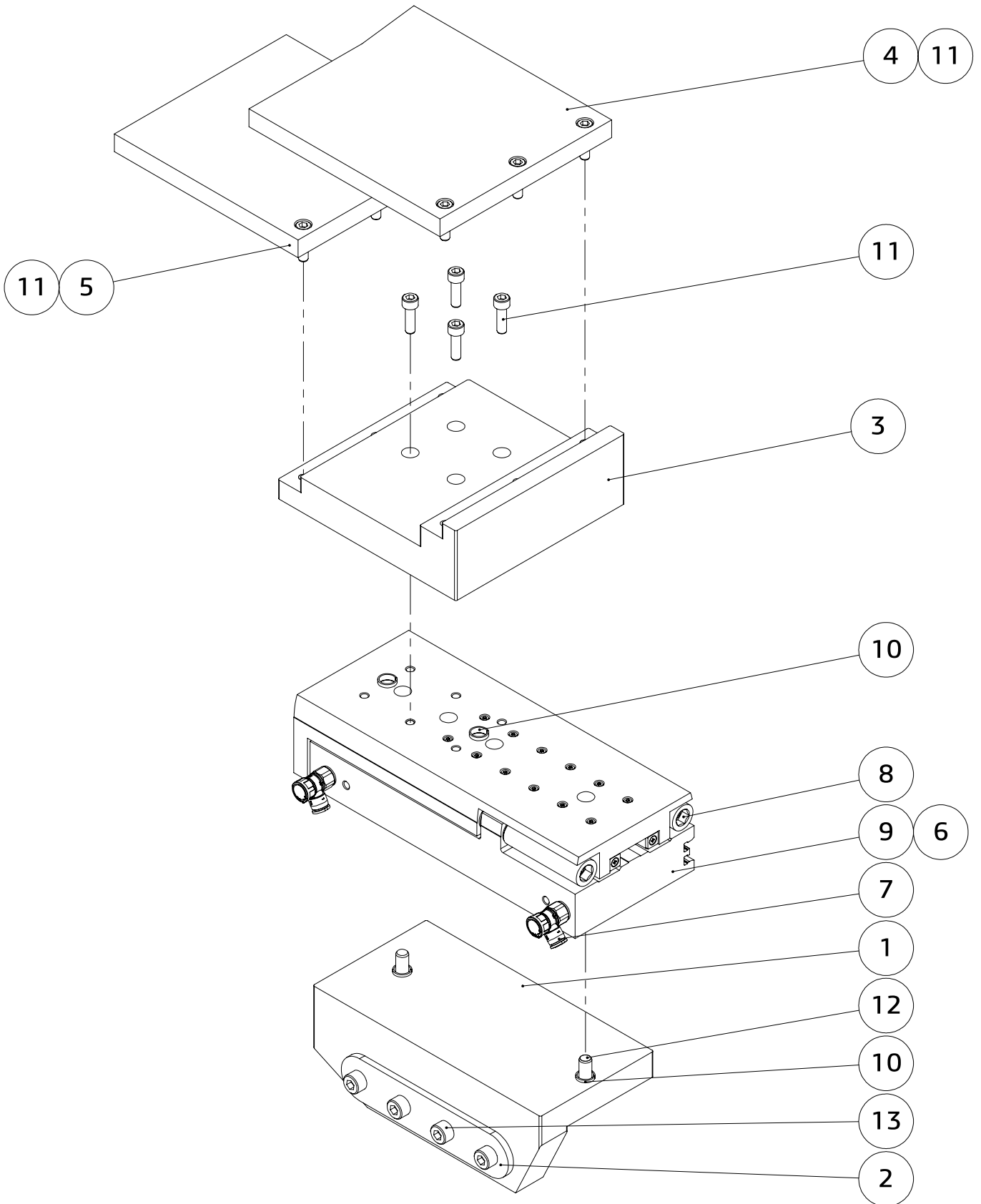
7530-011-1000 Feeder Base



### 3.6 7530-011-2000 Step Mechanism

ITEM	QTY	PART NUMBER	DESCRIPTION	MANUFACTURER	RECOMMEDED SPARE
1	1	7530-011-2000-001	ACTUATOR MOUNT	PROTO MACHINE	
2	1	7530-011-2000-002	MOUNTING WASHER	PROTO MACHINE	
3	1	7530-011-2000-003	STEP BASE	PROTO MACHINE	
4	1	7530-011-2000-004	LOWER STEP	PROTO MACHINE	
5	1	7530-011-2000-005	UPPER STEP	PROTO MACHINE	
6	2	574334	SENSOR, M8 3PIN, PNP, 0.3M L	FESTO	
7	2	8068726	VFOE-LE-T-G18-Q6 FLOW CONTROL VALVE	FESTO	
8	2	8073917	SHOCK ABSORBER, 10MM SIZE, 10MM STROKE	FESTO	
9	1	8078879	CYLINDER, GUIDED, 25MM BORE, 125MM STROKE	FESTO	
10	4	81437185	CENTERING RING, SLIDE MOUNT, 12MM OD	FESTO	
11	10	91502A167	M6X1.0 BY 20 SHCS-BZN	MCMaster CARR	
12	2	91502A197	M8X1.25 BY 25 SHCS-BZN	MCMaster CARR	
13	4	91502A202	M8X1.25 BY 50 SHCS-BZN	MCMaster CARR	

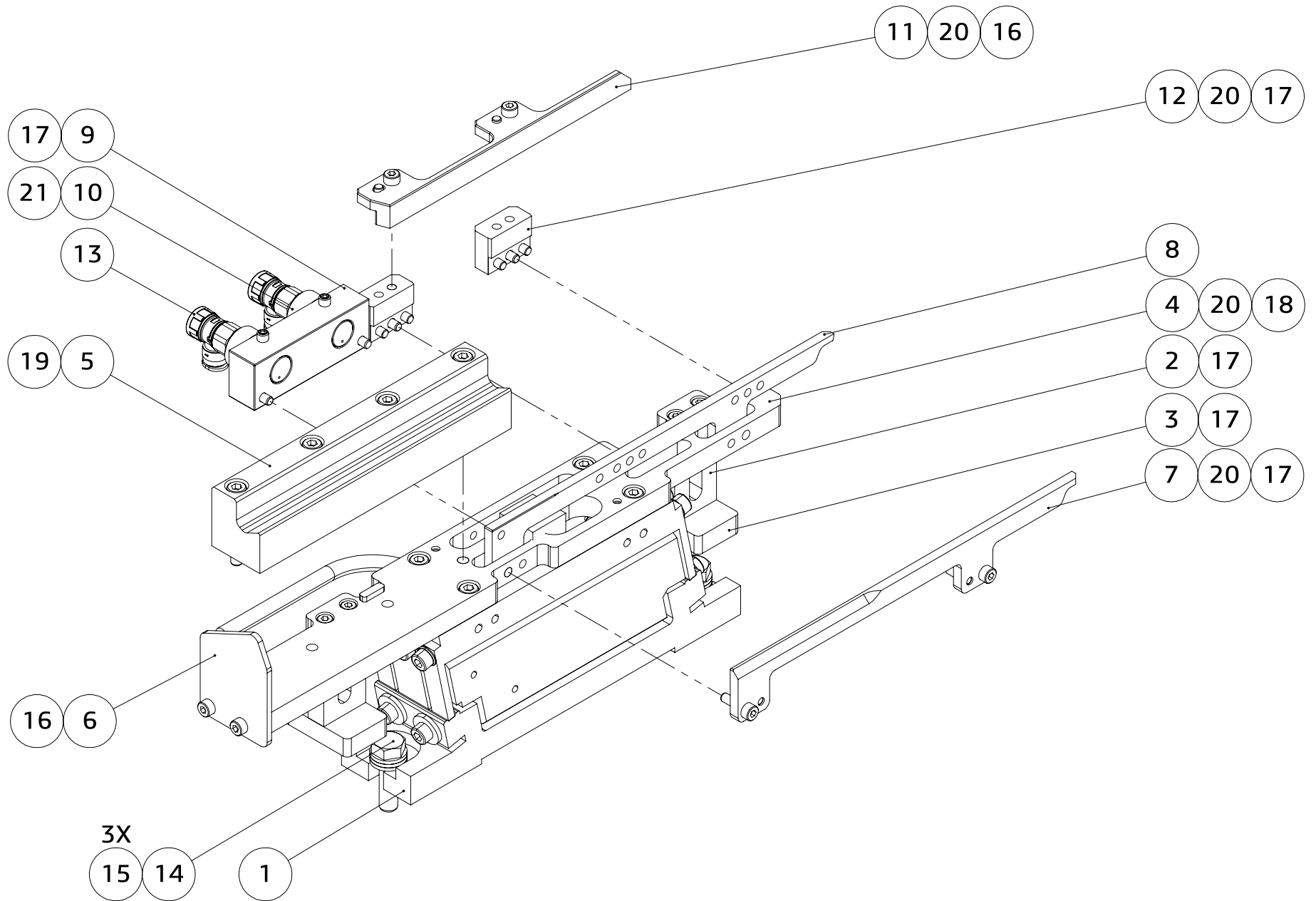
# 7530-011-2000 Step Mechanism



3.7 7530-011-3000 Feed Track

ITEM	QTY	PART NUMBER	DESCRIPTION	MANUFACTURER	RECOMMEDED SPARE
1	1	50270770	LINEAR FEEDER, HLF12-M	AFAG	
2	2	7530-011-3000-001	FRONT MASS HANGER	PROTO MACHINE	
3	2	7530-011-3000-002	MASS	PROTO MACHINE	
4	1	7530-011-3000-003	TRACK SUPPORT	PROTO MACHINE	
5	1	7530-011-3000-004	TRACK CATCH	PROTO MACHINE	
6	1	7530-011-3000-005	TRACK BACK STOP	PROTO MACHINE	
7	1	7530-011-3000-006	FRONT TRACK	PROTO MACHINE	
8	1	7530-011-3000-007	REAR TRACK	PROTO MACHINE	
9	1	7530-011-3000-008	AIR BLOW BLOCK	PROTO MACHINE	
10	2	7530-011-3000-009	AIR BLOW	PROTO MACHINE	
11	1	7530-011-3000-010	TRACK TOP	PROTO MACHINE	
12	2	7530-011-3000-011	TRACK TOP MOUNT	PROTO MACHINE	
13	2	8068748	SPEED CONTROL, ELBOW, METER IN, 6MM TUBE TO .125 G	FESTO	
14	2	90854A170	M8X1.25 BY 30 HHCS-YZN	MCMaster CARR	
15	6	91455A130	M8 TW-CZN-G10.9	MCMaster CARR	
16	4	91502A124	M4X0.7 BY 10 SHCS-BZN	MCMaster CARR	
17	14	91502A126	M4X0.7 BY 14 SHCS-BZN	MCMaster CARR	
18	4	91502A144	M5X0.8 BY 12 SHCS-BZN	MCMaster CARR	
19	4	91502A151	M5X0.8 BY 35 SHCS-BZN	MCMaster CARR	
20	10	91595A155	M4 BY 12 DP	MCMaster CARR	
21	2	92015A119	SET SCREW, M5X0.8 BY 8MM, SS, CUP POINT	MCMaster CARR	

# 7530-011-3000 Feed Track



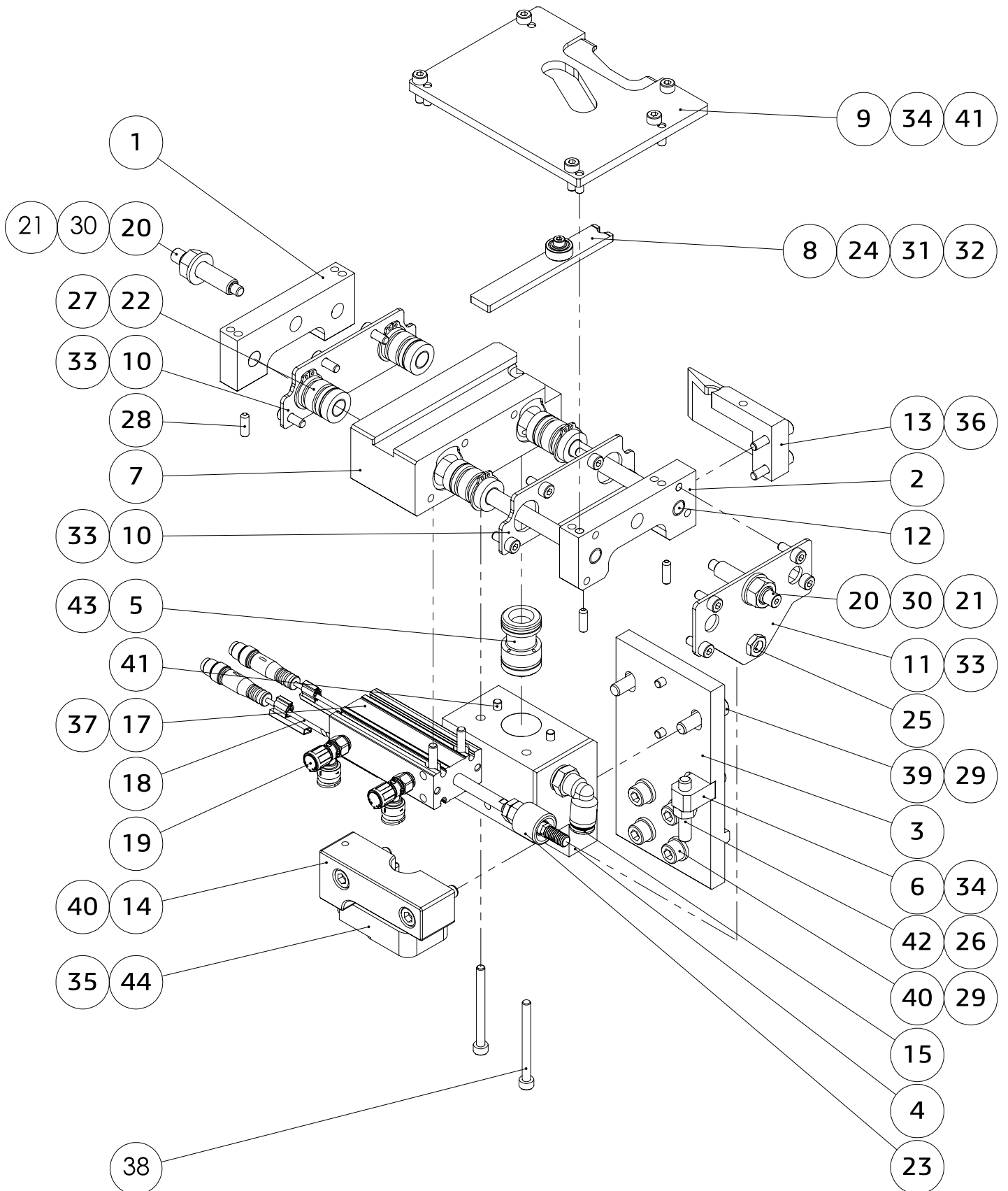


### 3.8 7530-011-4000 Escapement

ITEM	QTY	PART NUMBER	DESCRIPTION	MANUFACTURER	RECOMMEDED SPARE
1	1	7530-011-4000-001	GUIDE ROD BLOCK	PROTO MACHINE	
2	1	7530-011-4000-002	GUIDE ROD BLOCK	PROTO MACHINE	
3	1	7530-011-4000-003	MOUNT	PROTO MACHINE	
4	1	7530-011-4000-004	BLOW HOUSING	PROTO MACHINE	
5	1	7530-011-4000-005	BLOW NOZZLE	PROTO MACHINE	
6	1	7530-011-4000-006	VERTICAL ADJUSTER	PROTO MACHINE	
7	1	7530-011-4000-007	ESCAPEMENT BODY	PROTO MACHINE	
8	1	7530-011-4000-008	ESCAPEMENT FINGER	PROTO MACHINE	
9	1	7530-011-4000-009	ESCAPEMENT CAM PLATE	PROTO MACHINE	
10	2	7530-011-4000-010	BEARING COVER	PROTO MACHINE	
11	1	7530-011-4000-010	BEARING COVER	PROTO MACHINE	
12	2	7530-011-4000-012	GUIDE ROD	PROTO MACHINE	
13	1	7530-011-4000-013	SEPERATOR	PROTO MACHINE	
14	1	7530-011-4000-014	TUBE SENSOR MOUNT	PROTO MACHINE	
15	1	186117	FITTING, ELBOW, 6MM TUBE TO .125 G THREAD	FESTO	
16	1	2061	FLOATING JOINT, M6X1.0 THREAD	FESTO	
17	1	4833190	CYLINDER, 16MM BORE, 30MM STROKE	FESTO	
18	2	551375	SENSOR, ROUND SLOT, M8 3PIN, PNP, 0.3M L	FESTO	
19	2	8068724	SPEED CONTROL, ELBOW, METER OUT, 6MM TUBE TO M5X0.8	FESTO	
20	2	8073914	SHOCK ABSORBER, 5MM SIZE, 5MM STROKE	FESTO	
21	2	4391N111	NUT, M8X1.0, ZINC, HIGH STRENGTH	MCMaster CARR	
22	4	60605K920	8MM ID, 16MM OD, 25MM LNG LINEAR BEARING	MCMaster CARR	
23	1	6740K7	FLOATING JOINT, M6X1.0	MCMaster CARR	
24	1	7804K113	13MM OD, 6MM ID, 5MM THK, BALL BEARING	MCMaster CARR	

ITEM	QTY	PART NUMBER	DESCRIPTION	MANUFACTURER	RECOMMEDED SPARE
25	1	90370A206	JAM NUT, M6X1.0, ZINC	MCMaster CARR	
26	1	90591A151	Zinc-Plated Steel Hex Nut	MCMaster CARR	
27	4	90967A205	16MM RETAINING RING, 15.2MM GROOVE DIA	MCMaster CARR	
28	4	91390A115	M4X0.7 BY 12 UPSS-UNCOATED	MCMaster CARR	
29	6	91455A120	M6 TW-CZN-G10.9	MCMaster CARR	
30	2	91455A130	M8 TW-CZN-G10.9	MCMaster CARR	
31	1	91455A330	M3 TW-CZN-G10.9	MCMaster CARR	
32	1	91502A102	M3X0.5 BY 6 SHCS-BZN	MCMaster CARR	
33	12	91502A124	M4X0.7 BY 10 SHCS-BZN	MCMaster CARR	
34	7	91502A125	M4X0.7 BY 12 SHCS-BZN	MCMaster CARR	
35	2	91502A126	M4X0.7 BY 14 SHCS-BZN	MCMaster CARR	
36	2	91502A129	M4X0.7 BY 20 SHCS-BZN	MCMaster CARR	
37	2	91502A130	M4X0.7 BY 25 SHCS-BZN	MCMaster CARR	
38	2	91502A134	M4X0.7 BY 45 SHCS-BZN	MCMaster CARR	
39	2	91502A168	M6X1.0 BY 22 SHCS-BZN	MCMaster CARR	
40	6	91502A169	M6X1.0 BY 25 SHCS-BZN	MCMaster CARR	
41	8	91595A152	M4 BY 10 DP	MCMaster CARR	
42	1	92605A138	SET SCREW, 18-8 STAINLESS, M6X1.0 BY 35	MCMaster CARR	
43	2	9452K6	O RING, NO 16, BUNA N	MCMaster CARR	
44	1	BI20R-Q14-AP6X2-H1141	RING SENSOR, 20MM ID	TURCK	

# 7530-011-4000 Escapement



### 3.9 7530-011-6000 Step Feed Enclosure

ITEM	QTY	PART NUMBER	DESCRIPTION	MANUFACTURER	RECOMMEDED SPARE
1	1	MPR-114014	SAFETY SWITCH, MAGNETIC NON CONTACT	AUTOMATION DIRECT	
2	1	7530-011-6000-001	ACCESS PANEL	PROTO MACHINE	
3	1	7530-011-6000-002	SCREW HOPPER PANEL	PROTO MACHINE	
4	1	7530-011-6000-003	LARGE PANEL DOUBLER	PROTO MACHINE	
5	1	7530-011-6000-004	SMALL PANEL DOUBLER	PROTO MACHINE	
6	4	7530-011-6000-005	HINGE PLATE	PROTO MACHINE	
7	1	7530-011-6000-006	LOWER HANDLE WASHER PLATE	PROTO MACHINE	
8	1	7530-011-6000-007	SCRATCH GUARD	PROTO MACHINE	
9	1	7530-011-6000-008	UPPER HANDLE WASHER PLATE	PROTO MACHINE	
10	1	7530-011-6000-009	UPPER LID CATCH	PROTO MACHINE	
11	1	7530-011-6000-010	SIDE VIEW PANEL	PROTO MACHINE	
12	4	7530-011-6000-011	HINGE MOUNT	PROTO MACHINE	
13	1	7530-011-6100-000	ENCLOSURE WELDMENT	PROTO MACHINE	
14	4	14965A516	HINGE, M5 MOUNTING, 6IN-LB, 180 DEG	MCMaster CARR	
15	2	2471N2	HANDLE, M5 FASTNER	MCMaster CARR	
16	4	90128A256	M5X0.8 BY 30 SHCS-CZN	MCMaster CARR	
17	2	90576A103	M4X0.7 LN-CZN	MCMaster CARR	
18	12	90576A104	M5X0.8 LN-CZN	MCMaster CARR	
19	15	90576A115	M6X1.0 LN-CZN	MCMaster CARR	
20	16	91306A734	M5X0.8 BY 18 BHCS-CZN	MCMaster CARR	
21	2	91502A127	M4X0.7 BY 16 SHCS-BZN	MCMaster CARR	
22	10	96660A216	FLANGE BOLT, M6X1.0 BY 16MM	MCMaster CARR	
23	5	96660A217	FLANGE BOLT, M6X1.0 BY 20MM	MCMaster CARR	
24	2	97310A112	M4 FW-CZN	MCMaster CARR	
25	4	97310A113	M5 FW-CZN	MCMaster CARR	
26	5	97310A114	M6 FW-CZN, OVERSIZED	MCMaster CARR	

# 7530-011-6000 Step Feed Enclosure

