

**ECO-1200-EI**  
**Envelope Inserter**  
**FEEDER**  
**REPLACE-A-STATION SERIES**  
*Model ECO-Football Separation*

***Parts Manual***



***SURE-FEED ENGINEERING***

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## **VERSION HISTORY**

The table below summarizes the history of this document as it is published onto the company website(s). It identifies the version, date of issue and revisions and changes.

VERSION	DATE	CHANGES
1200-EI-ECO_PARTS_REV0	9-30-08	ORIGINAL RELEASE

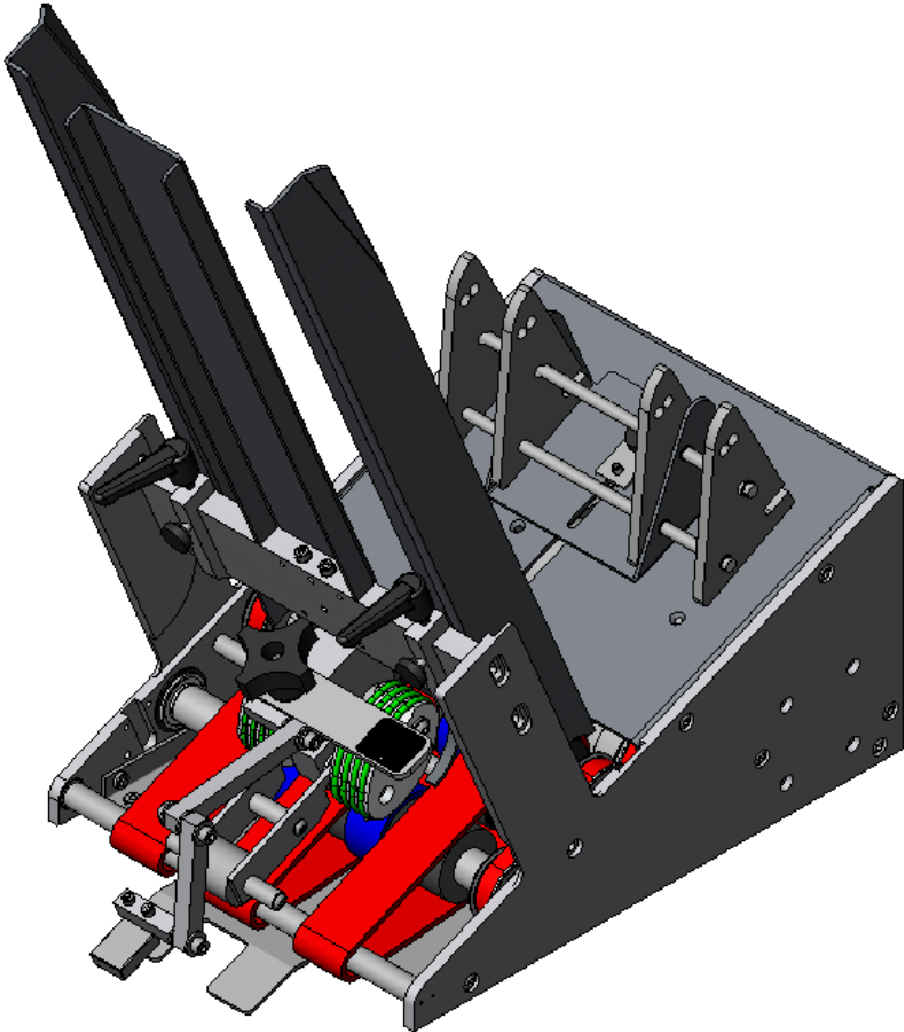
### **REVISION CONVENTIONS-DOCUMENT**

**VERSION:** name of document with revision\_level of entire document- level designates minor changes that do not require revision change

**DATE:** date of issue for copying and publication of document.

**CHANGES:** details of document revision\_level.

# **ECO-1200 EI FEEDER**



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**ECO-1200 EI FEEDER ASSEMBLY (Fig. 1)**  
**(10022-047r0)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	SEE FIG. 2	1	ASSY, ECO SEPARATOR (10020-005)
2	SEE FIG. 3	1	ASSEMBLY, FRONT SHAFT (10020-022)
3	SEE FIG. 4	1	ASSEMBLY, NIP ROLLER SHAFT (10020-030)
4	SEE FIG. 5	1	ASSEMBLY, MAIN SHAFT (10020-045)
5	SEE FIG. 6	1	ASSEMBLY, CLUTCH SHAFT (10020-053)
6	SEE FIG. 7	1	ASSEMBLY, IDLER SUPPORT SHAFT (10020-037)
7	SEE FIG. 8	1	ASSEMBLY, ELEVATOR SHAFT (10020-057)
8	SEE FIG. 9	1	ASSEMBLY, MOTOR (10020-061)
9	SEE FIG. 10	1	ASSEMBLY, CHASSIS (10020-070)
10	SEE FIG. 11	1	ASSEMBLY, SENSOR ARM (10020-007)
11	SEE FIG. 12	1	ASSEMBLY, TRAILING ARM (10020-073)
12	SEE FIG. 13	1	ASSEMBLY, SIDE GUIDES (10020-010)
13	SEE FIG. 14	1	ASSEMBLY, PAPER SLIDE (10020-058)
14	10003-003	1	CROSSBAR
15	17005-002	1	GUIDE, EXTENSION
16	99000-004	3	BELT, RED GUM
17	99000-005	2	BELT, ELEVATOR (RED)
18	99000-001	1	BELT, TIMING, 90XL037
19	99000-002	1	BELT, TIMING, 110XL037
20	99000-003	1	BELT, TIMING, 120XL037
21	-	2	SCREW, BUTTON HEAD, #10-24 X 3/8
22	-	2	NUT, HEX, #10-24
23	-	2	SCREW, SKT HD, 5/16-18 X 2-1/2
REF	SEE FIG. 15	1	ASSEMBLY, KNOCKDOWN (10017-001)

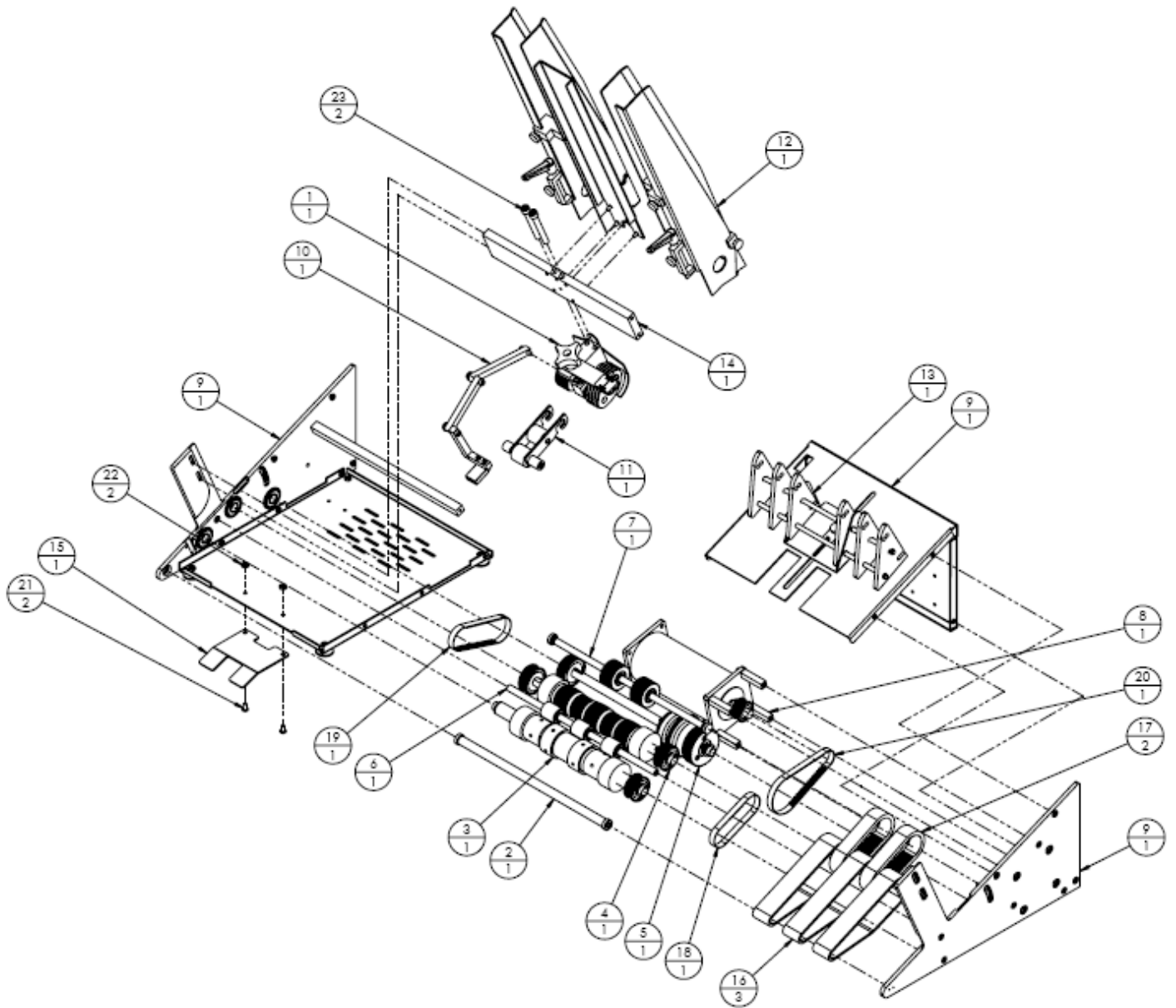


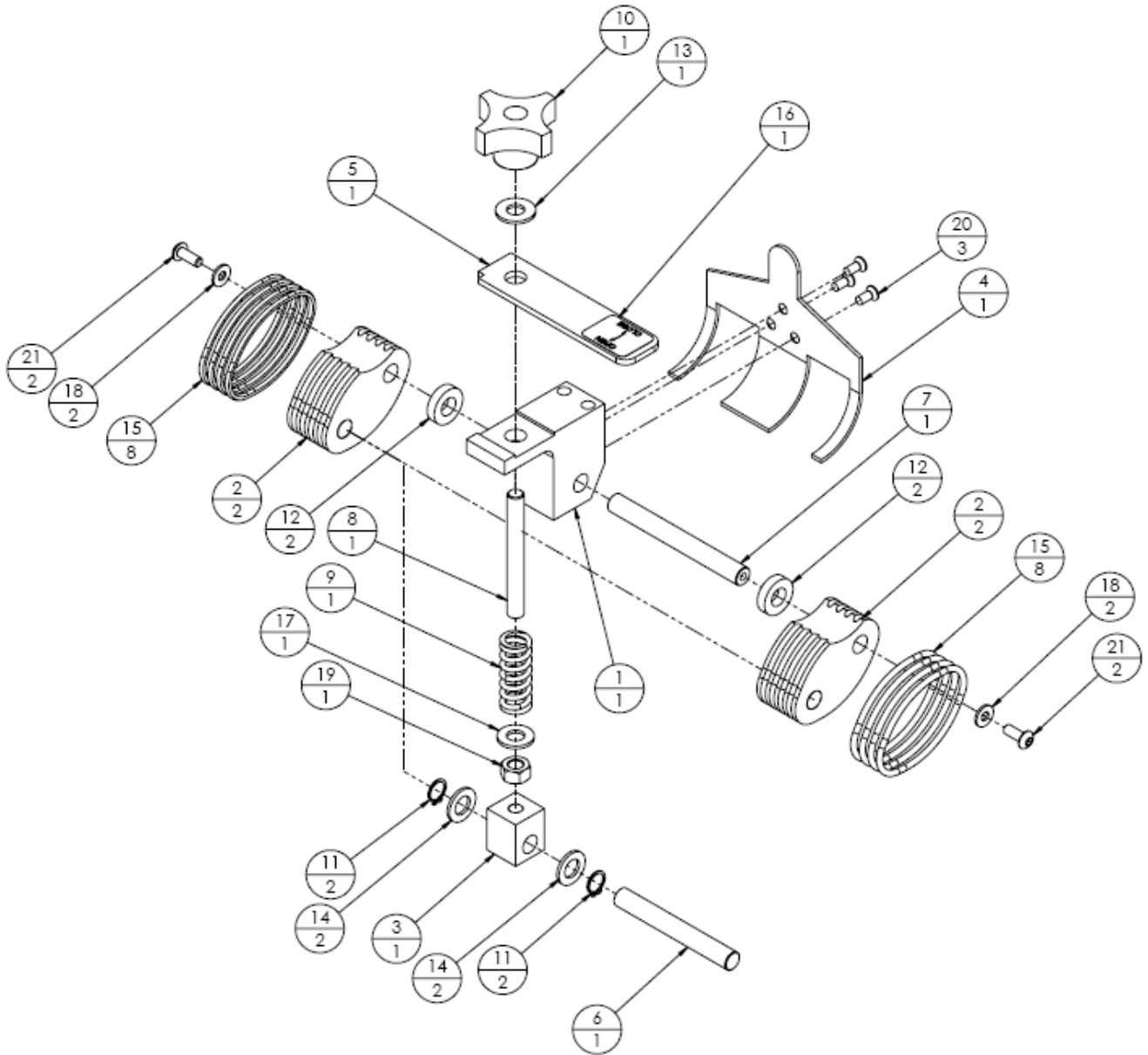
FIG 1 r0

FEEDER WITH ECO SEPARATOR

**ECO-1200 EI FEEDER ASSEMBLY (Fig. 2)  
ECO SEPARATOR (10020-005r0)**

<b>ITEM</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>DESCRIPTION</b>
1	10007-002	1	BLOCK, SEPARATOR-FOOTBALL
2	10007-005	2	BLOCK, FOOTBALL SEPARATOR (O-RING)
3	10007-012	1	BLOCK, TONGUE
4	10005-025	1	SHROUD, SEPARATOR-FOOTBALL
5	10008-024	1	BAR, SEPARATOR RELEASE
6	10004-059	1	SHAFT, FOOTBALL ALIGNING
7	10004-058	1	SHAFT, SEPARATOR
8	10004-028	1	STUD, SEPARATOR ADJUSTING
9	99005-045	1	SPRING, SEPARATOR
10	99004-001	1	KNOB, FEMALE 5/16-24
11	99022-003	2	SNAP RING, 3/8
12	10012-005	2	SPACER, FOOTBALL
13	99003-015	1	WASHER, NYLON, 5/16 X 1/16 THK
14	99003-017	2	WASHER, NYLON, 3/8 X 1/16 THK
15	10014-010	8	O-RING, FOOTBALL
16	18017-008	1	LABEL, FEEDER SEPARATOR ADJUSTING
17	-	1	FLAT WASHER, 5/16
18	-	2	FLAT WASHER, #8
19	-	1	HEX NUT, 5/16
20	-	3	SCREW, FLAT HD, #8-32 X 3/8
21	-	2	SCREW, BUTTON HD, #10-24 X 1/2
REF	10003-003	1	CROSS BAR

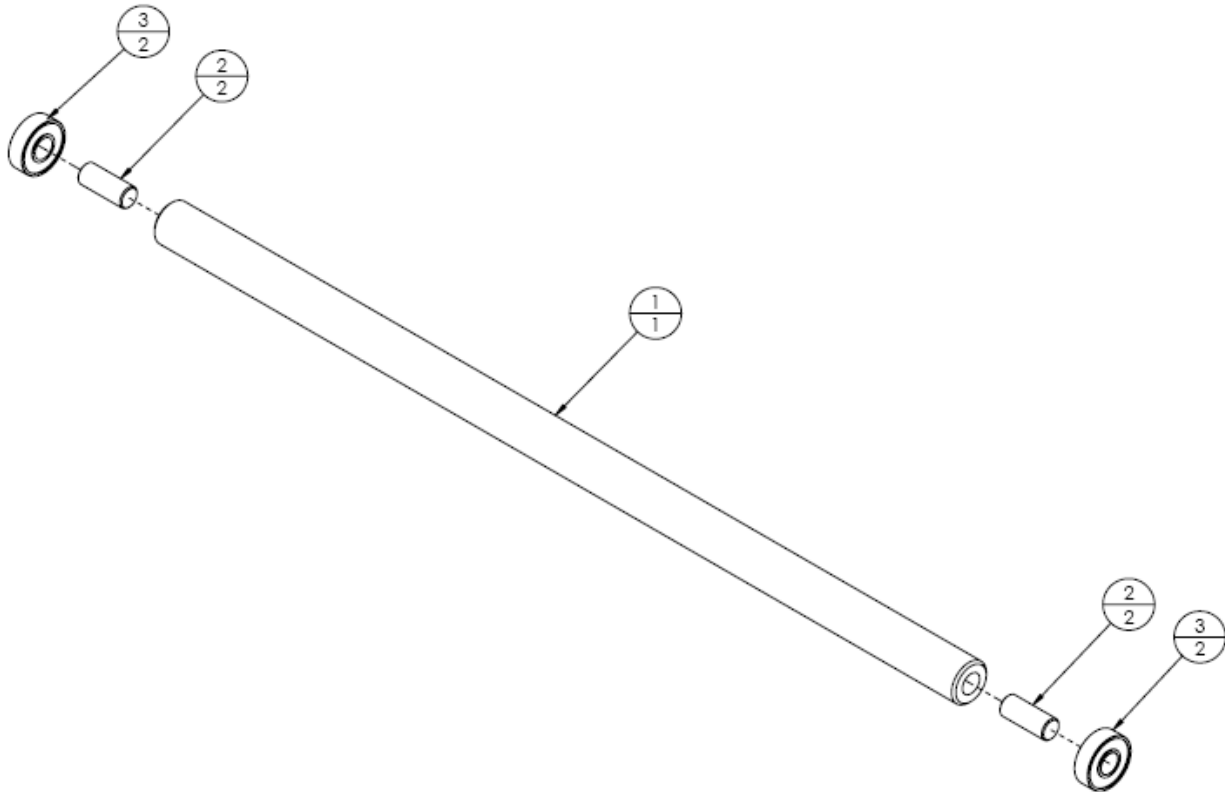
FIG 2 r0





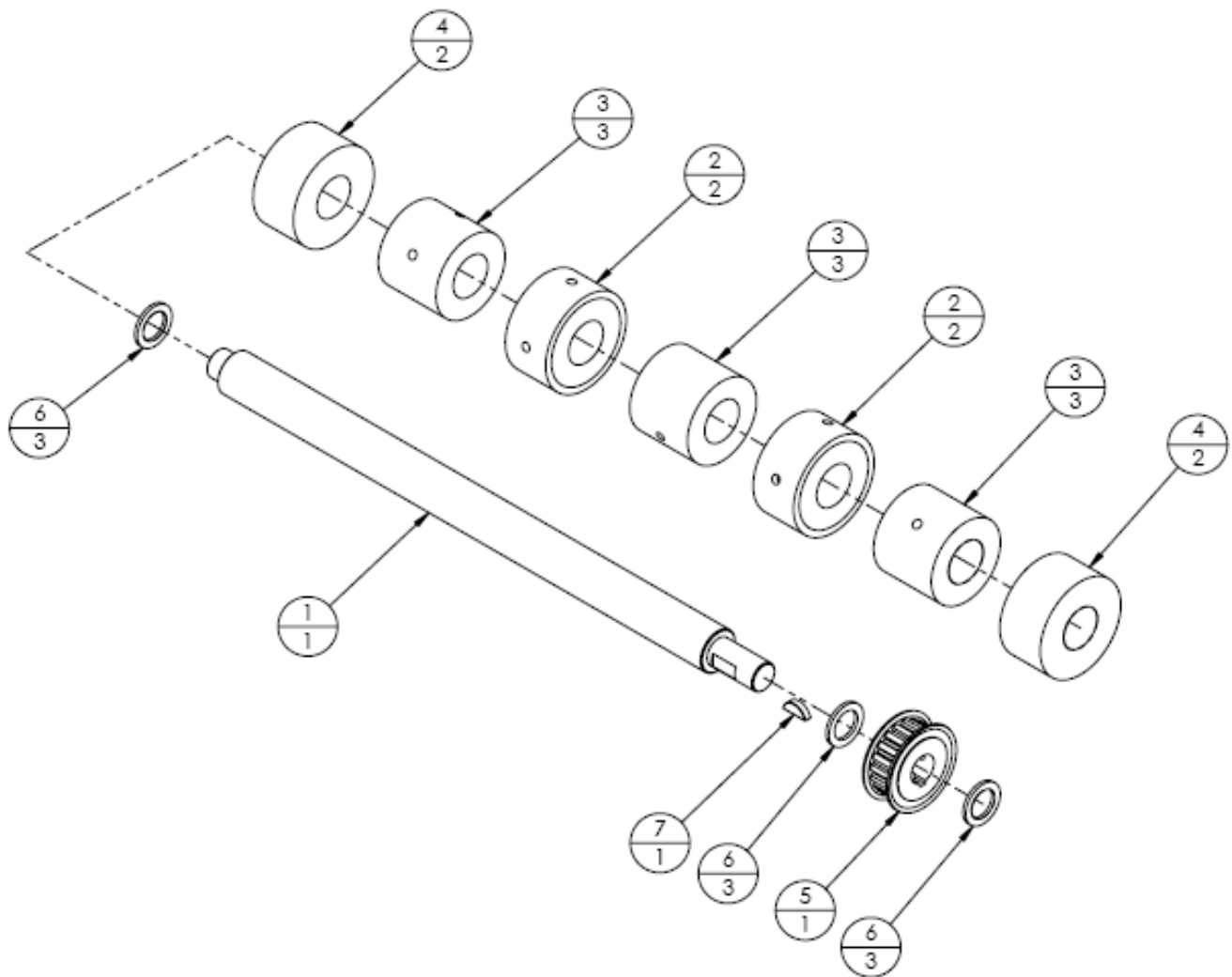
**ASSEMBLY, FRONT SHAFT (10020-022r0) (Fig. 3)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10004-009	1	SHAFT, FRONT
2	99006-028	2	PIN, DOWEL, 1/4 X 5/8
3	99003-056	2	BEARING, 1/4 X 5/8 SEALED



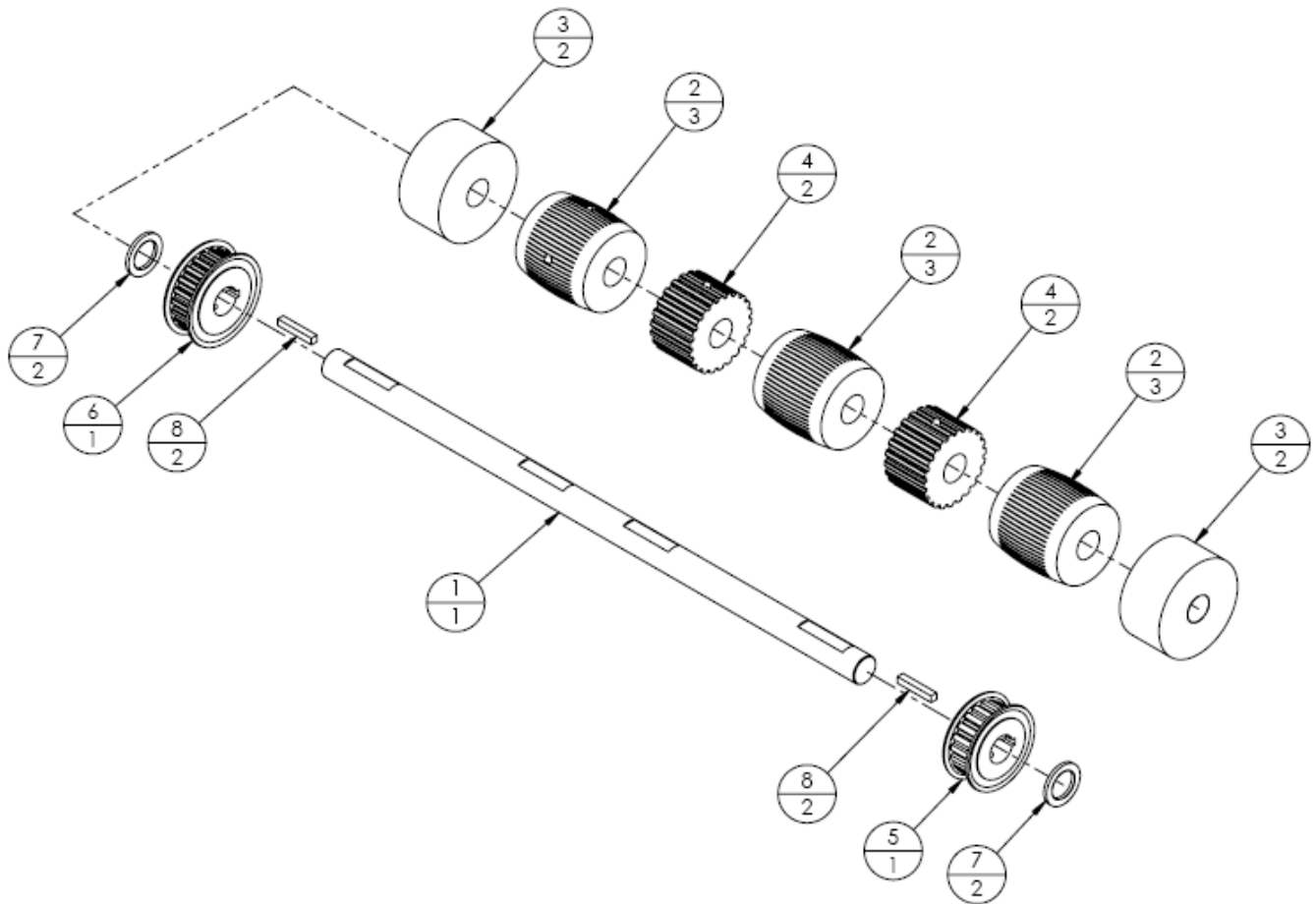
**ASSEMBLY, NIP ROLLER SHAFT (10020-030r0) (Fig. 4)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10004-123	1	SHAFT, NIP ROLLER-3/4B
2	10006-070	2	ROLLER, NIP, 3/4 B
3	10006-071	3	PULLEY, MATE, 3/4 B
4	10006-069	2	ROLLER, FEEDER, 3/4 B
5	99002-054	1	PULLEY, 20XL037, 1/2B
6	99003-018	3	WASHER, NYLON, 1/2 X 1/16
7	99034-004	1	KEY, WOODRUFF, 1/8 X 1/2



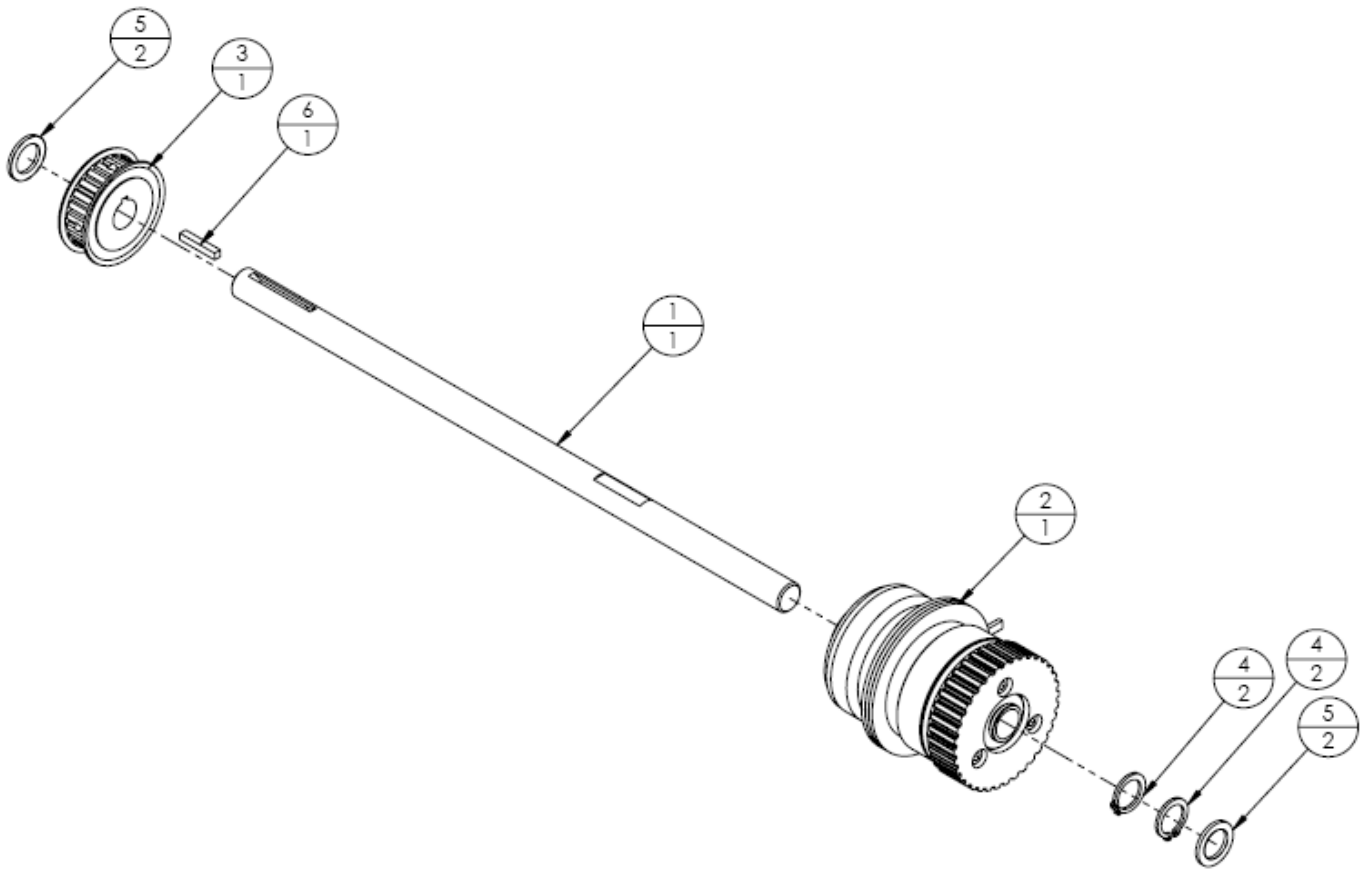
**ASSEMBLY, MAIN SHAFT (10020-045r0) (Fig. 5)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10004-045	1	SHAFT, MAIN DRIVE
2	10006-018	3	PULLEY, CROWNED
3	10006-007	2	ROLLER, FEEDER, 1/2 B
4	10006-021	2	PULLEY, ELEVATOR DRIVE
5	99002-054	1	PULLEY, 20XL037, 1/2B
6	99002-074	1	PULLEY, TIMING, 22XL037, 1/2B W/KEYWAY
7	99003-018	2	WASHER, NYLON, 1/2 X 1/16
8	99034-003	2	KEY, SQUARE, 1/8 X 3/4



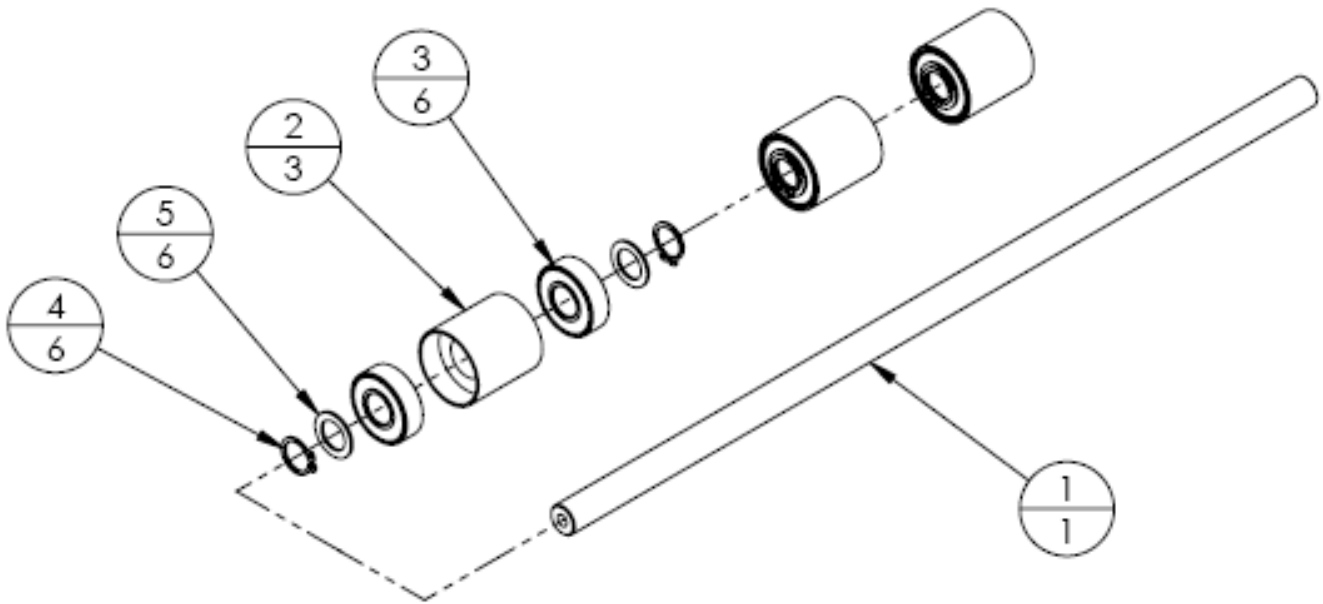
**ASSEMBLY, CLUTCH SHAFT (10020-053r0) (Fig. 6)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10004-156	1	SHAFT, CLUTCH
2	99008-010	1	CLUTCH, BRAKE, 24V (LENZA)
3	99002-031	1	PULLEY, TIMING, 24XL037, 1/2B
4	99022-004	2	SNAP RING, 1/2
5	99003-018	2	WASHER, NYLON, 1/2 X 1/16
6	99034-003	1	KEY, SQUARE, 1/8 X 3/4



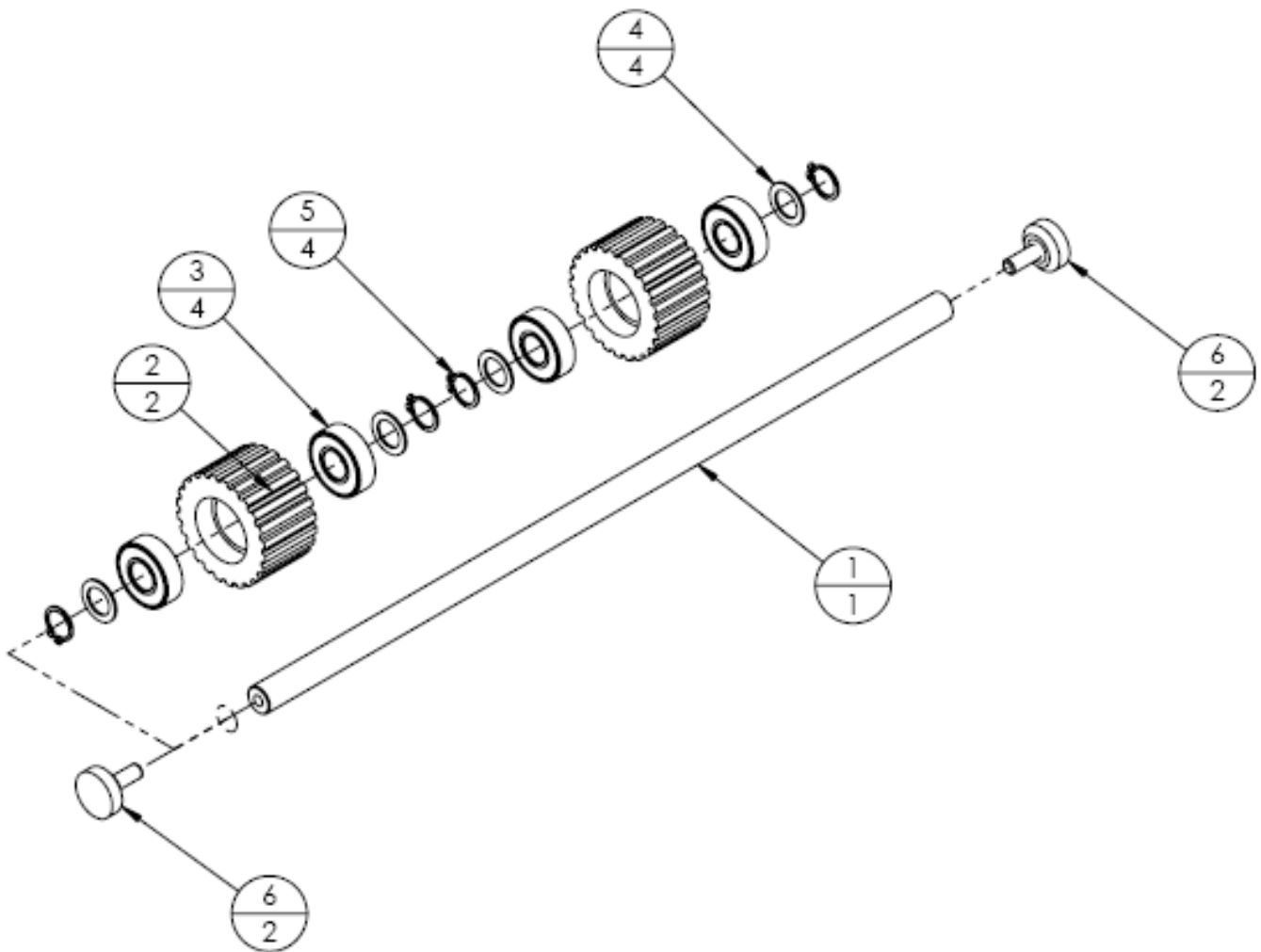
**ASSEMBLY, SUPPORT IDLER SHAFT (10020-037r0) (Fig. 7)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10004-046	1	SHAFT, SUPPORT IDLER
2	10006-012	3	ROLLER, IDLER
3	99003-001	6	BEARING, SEALED, 3/8 X 7/8
4	99022-003	6	SNAP RING, 3/8
5	99003-016	6	WASHER, NYLON, 3/8 X 1/32



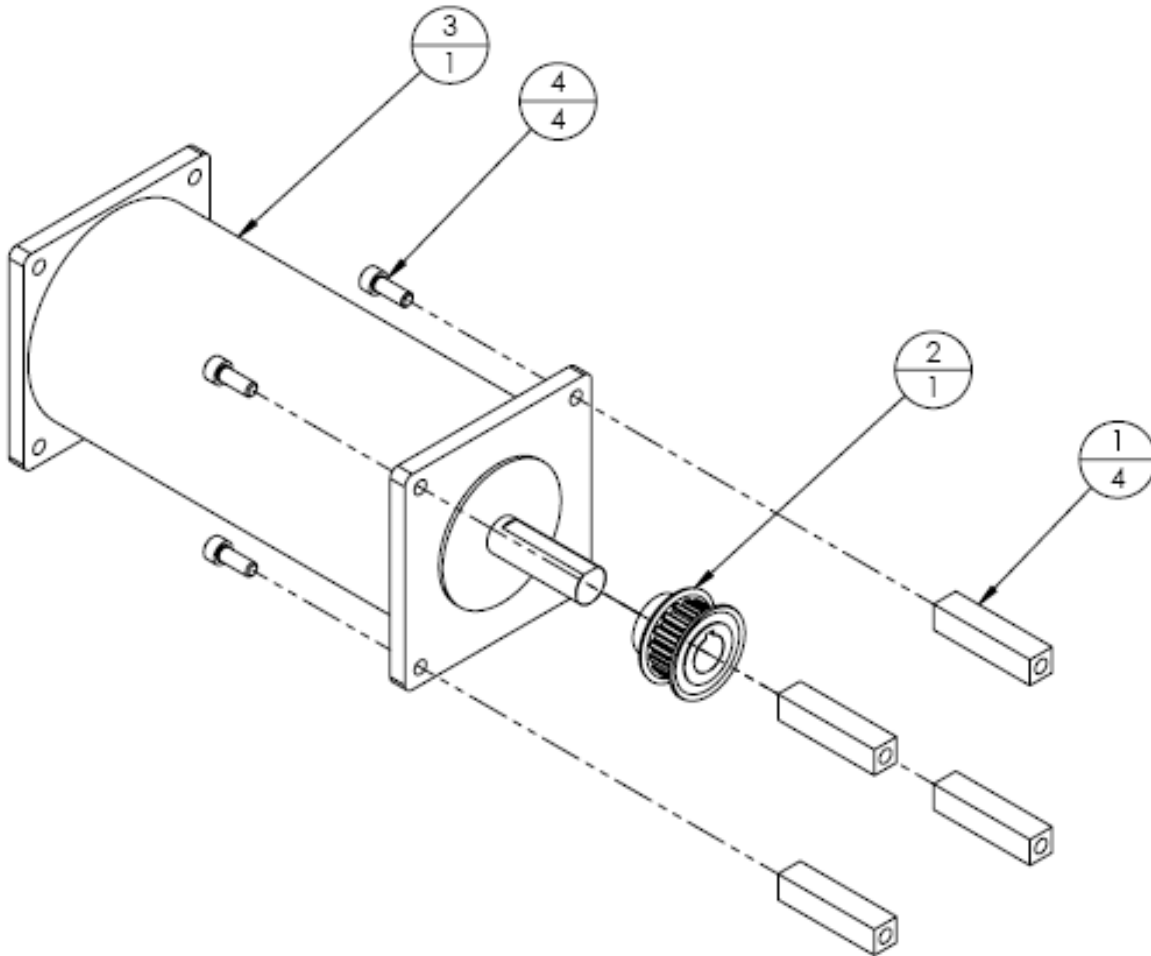
**ASSEMBLY, ELEVATOR SHAFT (10020-057r0) (Fig. 8)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10004-046	1	SHAFT, SUPPORT IDLER
2	10006-022	2	PULLEY, ELEVATOR IDLER
3	99003-001	4	BEARING, SEALED, 3/8 X 7/8
4	99003-016	4	WASHER, NYLON, 3/8 X 1/32
5	99022-003	4	SNAP RING, 3/8
6	10020-317	2	ASSY, KNOB, #10-24 X 1/2



**ASSEMBLY, MOTOR (10020-061r0) (Fig. 9)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10012-004	4	STANDOFF, MOTOR
2	99002-007	1	PULLEY, TIMING, 16XL037-1/2B
3	99001-002	1	MOTOR, 1/8 HP, 4Z140
4	-	4	SCREW, SKT HD, #10-24 X 1/2
N/S	98016-021	1	CONNECTOR, 5-POS FEMALE (.093)
N/S	98016-057	2	CONTACT PIN, 18-24 AWG
N/S	98010-092	0.5 FT	WIRE, 16 AWG, GREEN/YELLOW

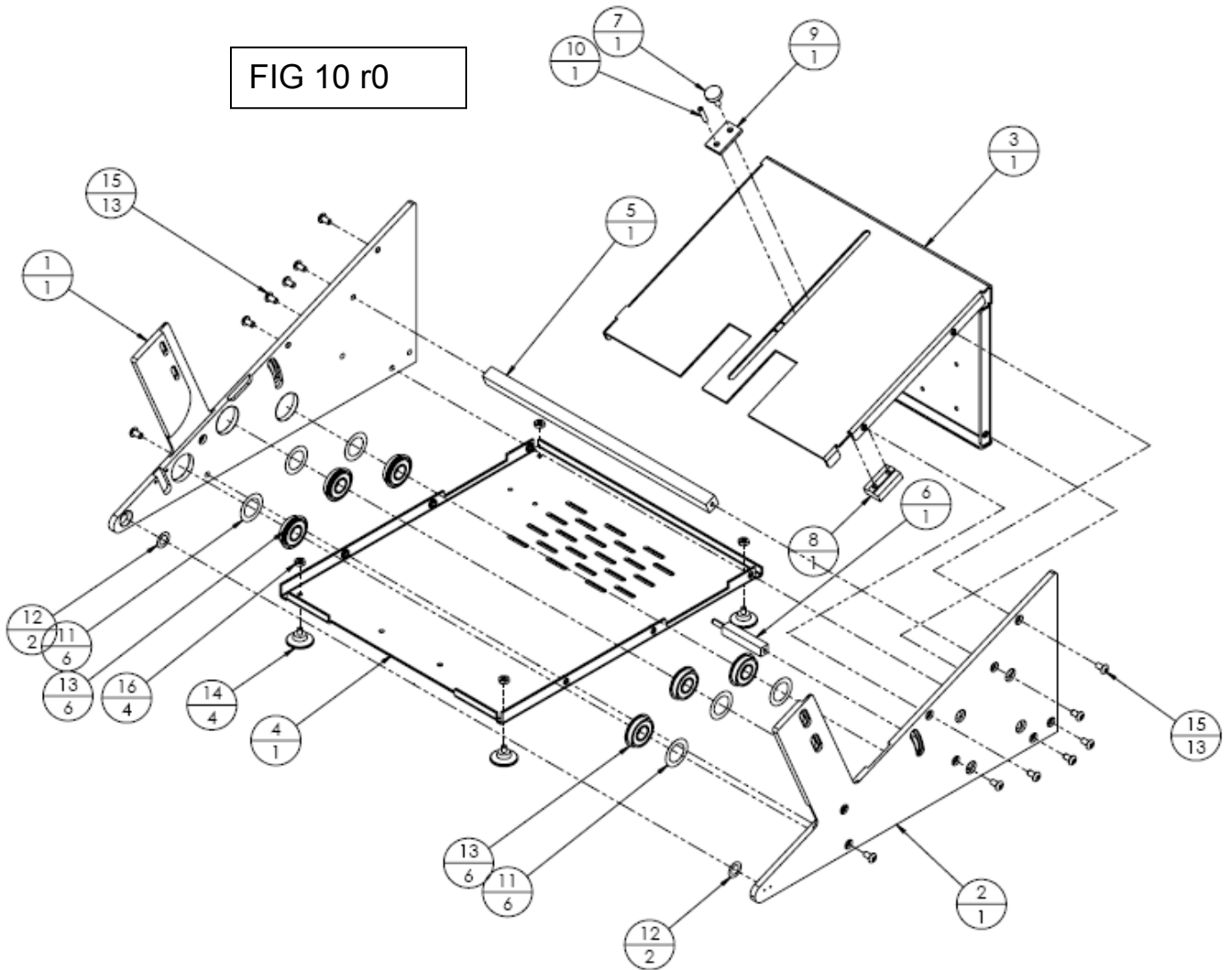


**ASSEMBLY, CHASSIS (10020-070rA) (Fig. 10)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10000-006	1	SIDE FRAME, RH
2	10000-005	1	SIDE FRAME, LH
3	10001-060	1	COVER, TOP
4	10002-003	1	BOTTOM COVER
5	10008-003	2	CROSS BRACE
<b>6</b>	<b>10020-447</b>	<b>1</b>	<b>ASSY, CLUTCH STOP</b>
-	10008-006	1 EA	CLUTCH STOP
-	99006-021	1 EA	PIN, ROLL, 3/16 X 1-1/4
7	10020-317	1	ASSY, KNOB, #10-24 X 1/2
8	10007-003	1	NUT, PAPER SLIDE
9	10007-004	1	WASHER, PAPER SLIDE
10	99006-020	1	PIN, ROLL, 5/32 X 3/4
11	99036-003	6	SHIM, BEARING, 3/4 X 1-1/8 X .006
12	99036-005	2	SHIM, ARBOR, 3/8 X 5/8 X .006
13	99003-083	6	BEARING, 1/2 X 1-1/8 SEALED
14	99007-001	4	FOOT, SUCTION, #8-32
15	-	13	SCREW, BUTTON HD, #10-24 X 3/8
16	-	4	HEX NUT, #6-32



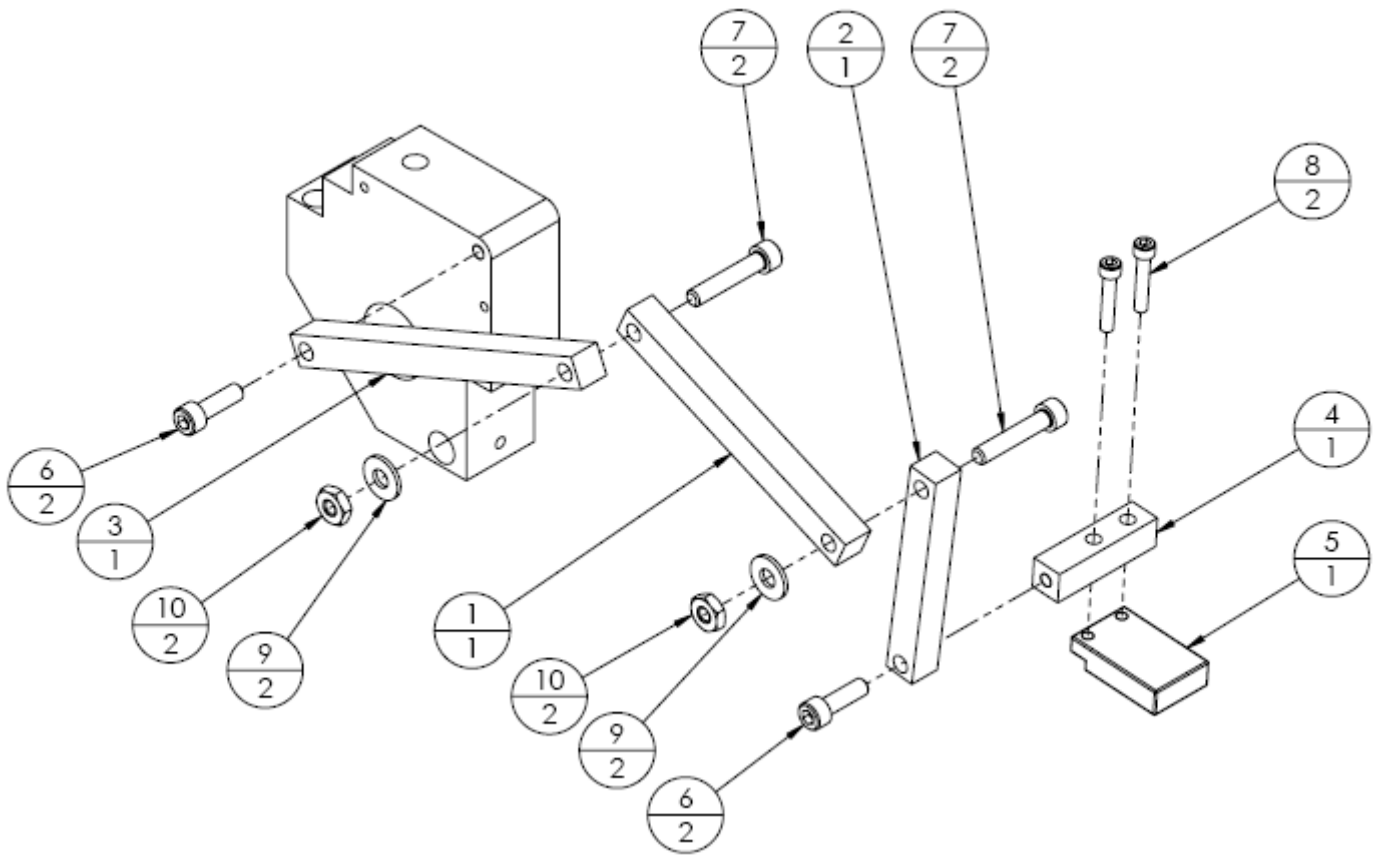
FIG 10 r0



**ASSEMBLY, SENSOR ARM (10020-007r0) (Fig. 11)**

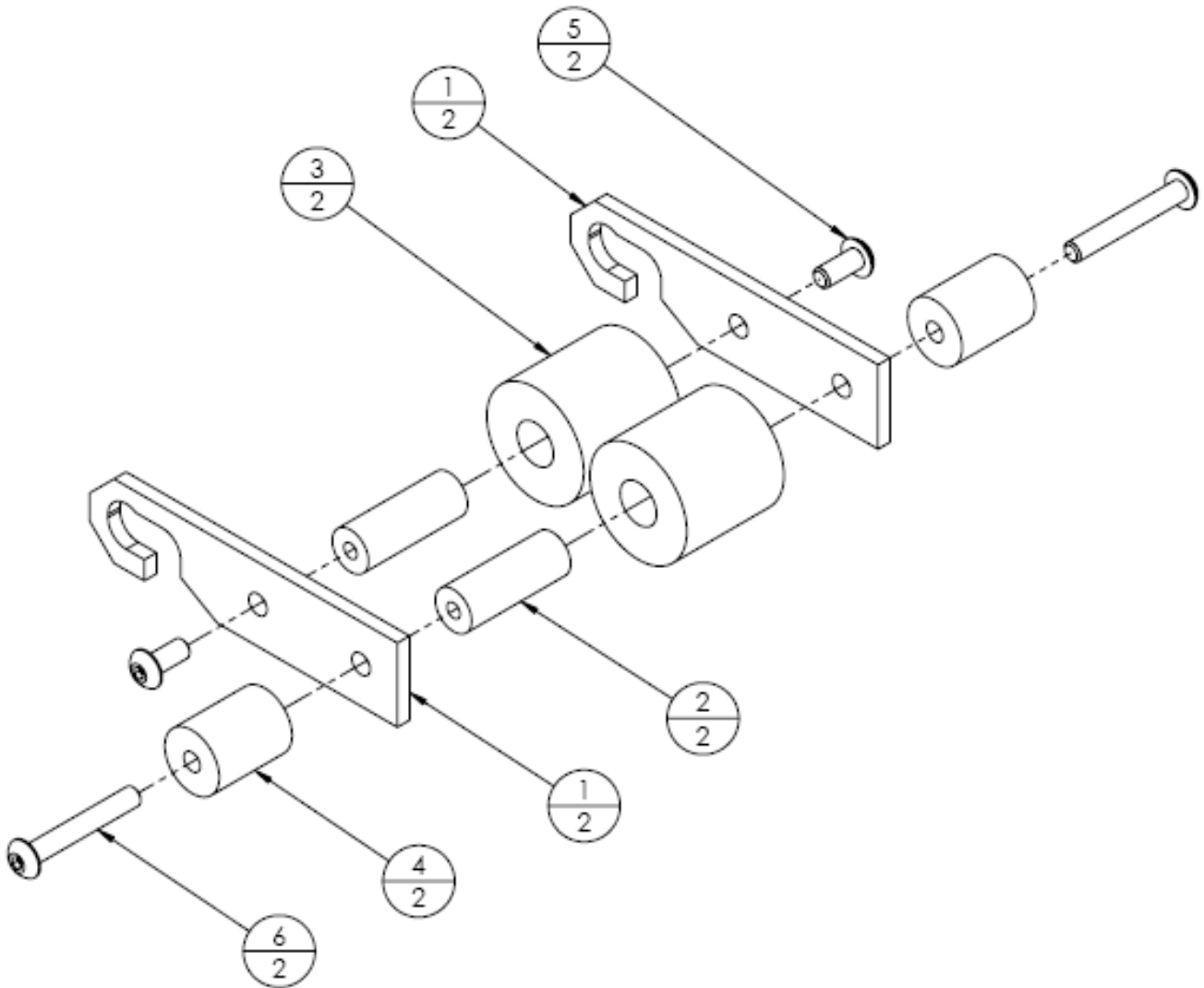
ITEM	PART NO.	QTY.	DESCRIPTION
1	10009-011	1	ARM, SENSOR
2	10009-007	1	ARM, SENSOR
3	10009-008	1	ARM, SENSOR
4	10009-006	1	MOUNT, SENSOR
5	98009-001	1	SENSOR, DIFFUSE RELECTIVE
6	-	2	SCREW, SKT HEAD, #10-24 X 5/8
7	-	2	SCREW, SKT HEAD, #10-24 X 1
8	-	2	SCREW, SKT HEAD, #6-32 X 3/4
9	-	2	FLAT WASHER #10
10	-	2	HEX NUT, #10
N/S	98016-116	1	CONNECTOR, RECEPTACLE, 3 POS
N/S	98016-056	3	CONTACT, SOCKET

NOTE: Actual assembly is mirrored to opposite hand and mounted on other side of block.



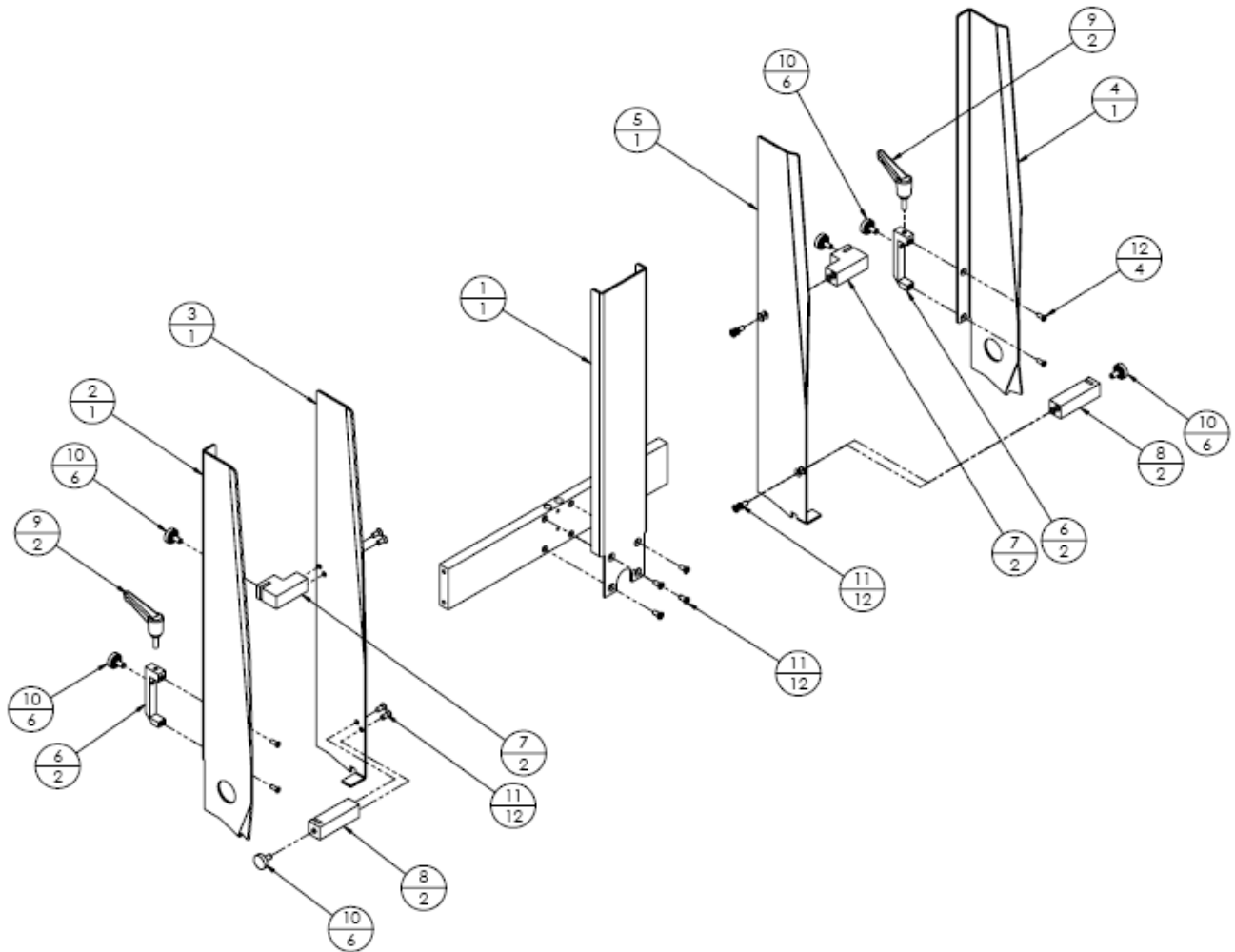
**ASSEMBLY, TRAILING ARM (10020-073r0) (Fig. 12)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10011-006	2	PLATE, ROLLER MTG
2	10012-003	2	SPACER, TONGUE
3	10006-016	2	ROLLER, TONGUE
4	10004-016	2	WEIGHT
5	-	1	SCREW, BUTTON HEAD, #8-32 X 3/8
6	-	1	SCREW, BUTTON HEAD, #8-32 X 1-1/8



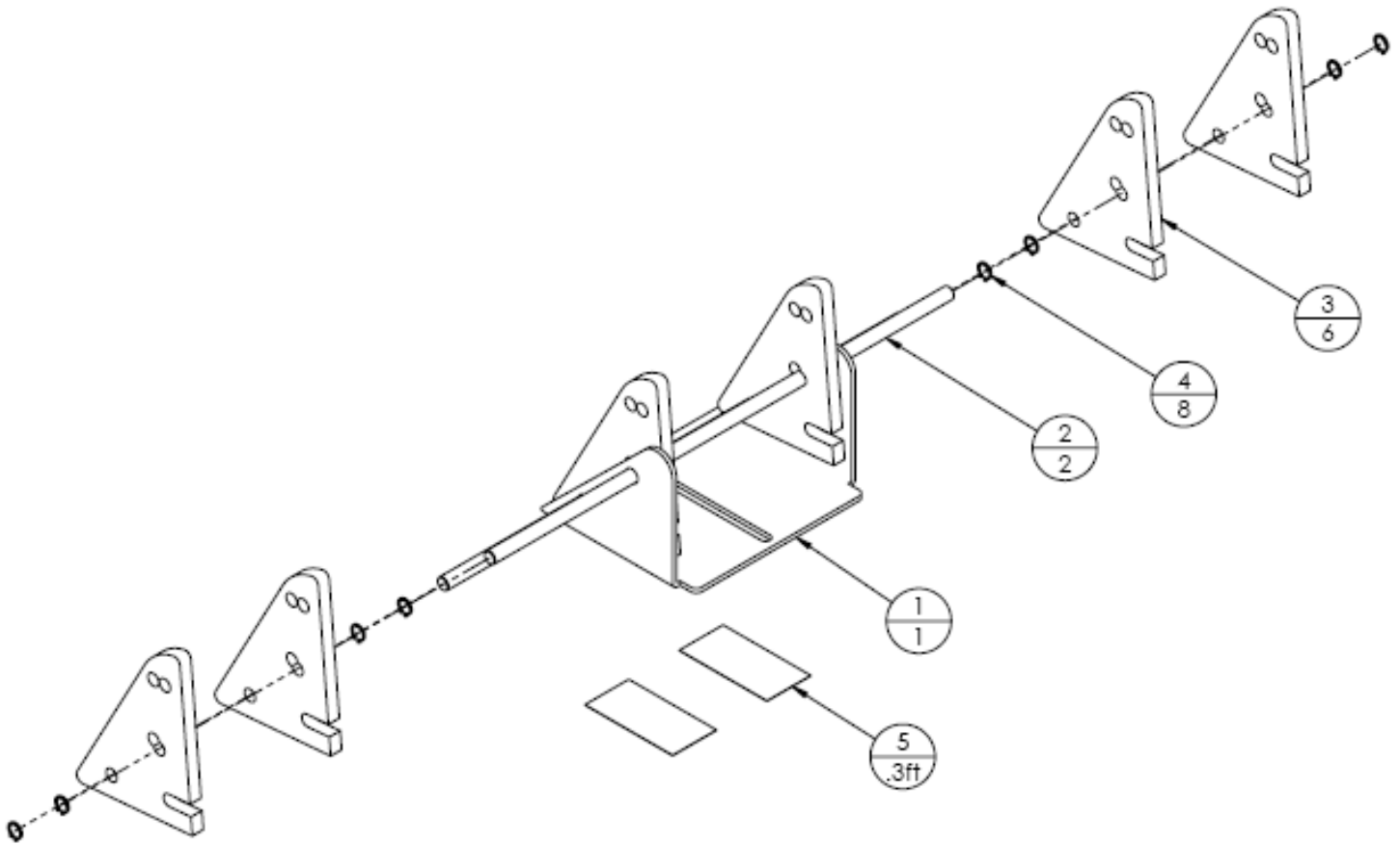
**ASSEMBLY, SIDE GUIDES (10020-010r0) (Fig. 13)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10005-200 <sup>a</sup>	1	GUIDE, FRONT PAPER
2	10005-008	1	SIDE GUIDE, LH
3	10005-015	1	GUIDE BUSINESS, LH TALL
4	10005-009	1	SIDE GUIDE, RH
5	10005-014	1	GUIDE BUSINESS, RH TALL
6	10009-002	2	BRACKET, SIDE GUIDE MTG
7	10007-007	2	CLAMP, BUSINESS GUIDE, UPPER
8	10007-008	2	CLAMP, BUSINESS GUIDE
9	99004-003	2	HANDLE, RATCHET, #10-24 X 5/8
10	10020-316	6	ASSY, KNOB, #10-24 X 3/8
11	-	12	SCREW, FLAT HD, #8-32 X 3/8
12	-	4	SCREW, FLAT HD, #6-32 X 3/8



**ASSEMBLY, PAPER SLIDE (10020-058r0) (FIG. 14)**

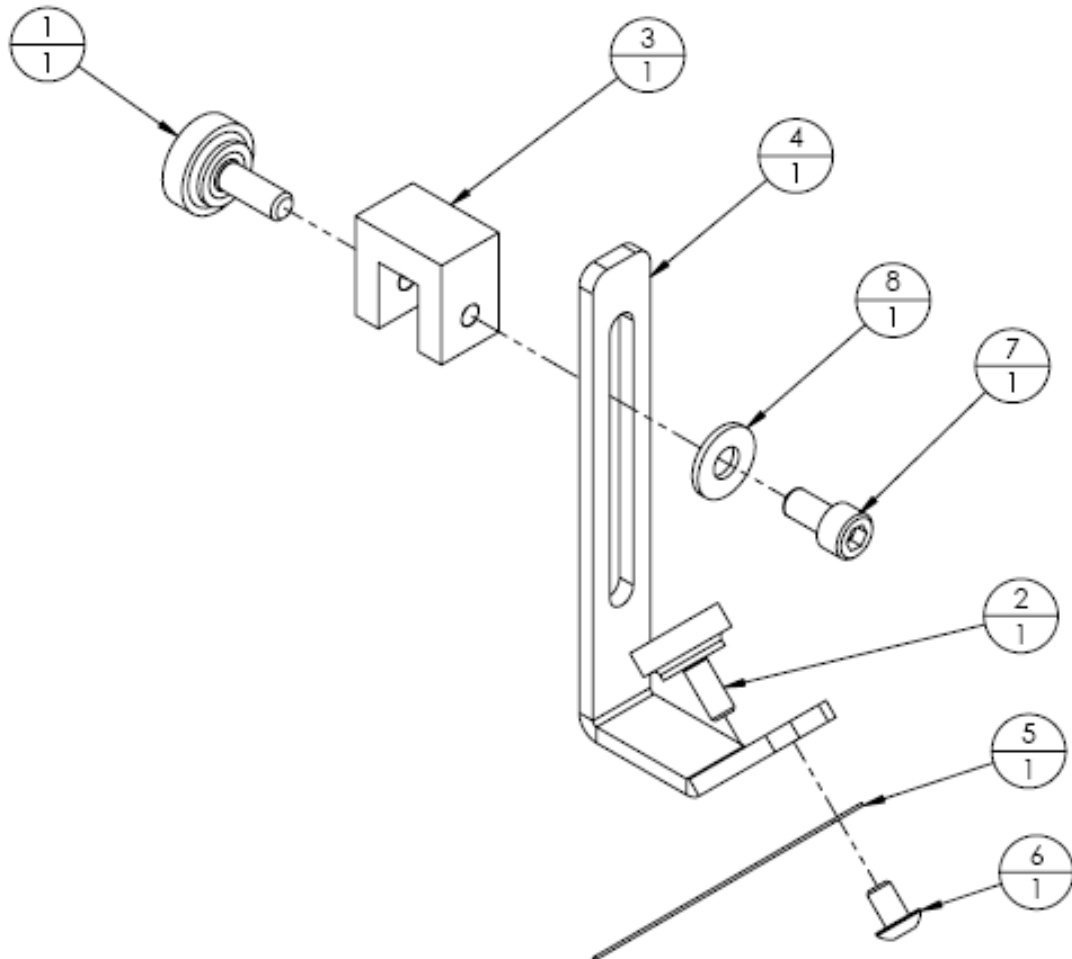
ITEM	PART NO.	QTY.	DESCRIPTION
1	10009-003	1	BRACKET, PAPER SLIDE
2	10004-006	2	SHAFT, PAPER SLIDE
3	10005-016	6	SLIDE, PAPER
4	99022-001	8	SNAP RING, 1/4"
5	99039-009	0.3 FT	ANTI-SKID TAPE, BLACK



**ASSEMBLY, PAPER KNOCKDOWN (10017-001r0) (FIG. 15)**

ITEM	PART NO.	QTY.	DESCRIPTION
1	10020-317	1	ASSY, KNOB, #10-24 X 1/2
2	10020-318	1	ASSY, KNOB, #8-32 X 3/8
3	10007-019	1	BLOCK, KNOCKDOWN
4	10009-021	1	BRACKET, KNOCKDOWN
5	10005-040	1	GUIDE, SPRING STEEL
6	-	1	SCREW, BUTTON HD, #8-32 X 1/4
7	-	1	SCREW, SKT HD, #10-24 X 3/8
8	-	1	FLAT WASHER, #10

QTY (2) REQUIRED PER FEEDER-TO BE MOUNTED ON CUSTOMER EQUIPMENT



**ASSEMBLY, ELECTRICAL (10018-013) (FIG. 16)**

<b>ITEM</b>	<b>PART NO.</b>	<b>QTY.</b>	<b>DESCRIPTION</b>
1	98000-001	1	SWITCH, ROCKER - RED - ILLUM
2	98001-002	1	TERMINAL STRIP 12 CONN. (FEED
3	98004-032	1	CIRCUIT BREAKER 3 AMP (FEEDER)
4	98005-001	1	CONTROLLER, MOTOR 90V DC
5	98003-001	1	RECEPTACLE, POWER CORD
6	98006-021 <sup>a</sup>	1	KNOB, SPEED POT (old # 99004-015)
7	98007-005	1	CORD, POWER, STRAIGHT
8	98023-001	1	I/O BOARD EI SERIES
9	98008-001	1	TRANSFORMER (120V)
10	98006-004	1	DIAL, SPEED POT (KB)
11	98006-037	1	SPEED POT, 1MEGΩ
12	98016-116	1	CONNECTOR, 3- POS FEMALE (.093)
13	98016-021	1	CONNECTOR, 5- POS FEMALE (.093)
14	98016-024	2	CONNECTOR, 2-POS FEMALE (.093)
15	98016-056	12	CONTACT, SOCKET, 24-18 AWG