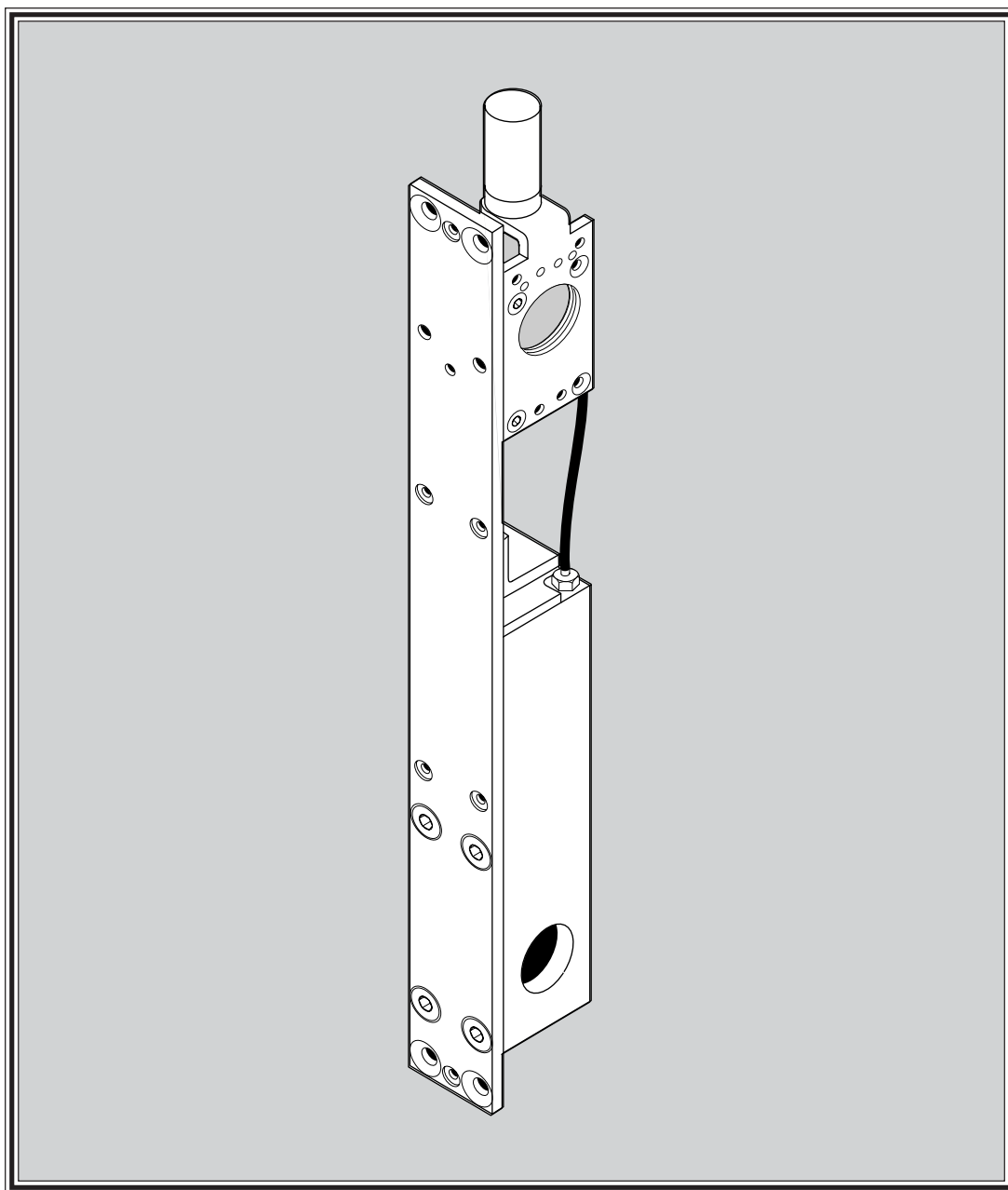
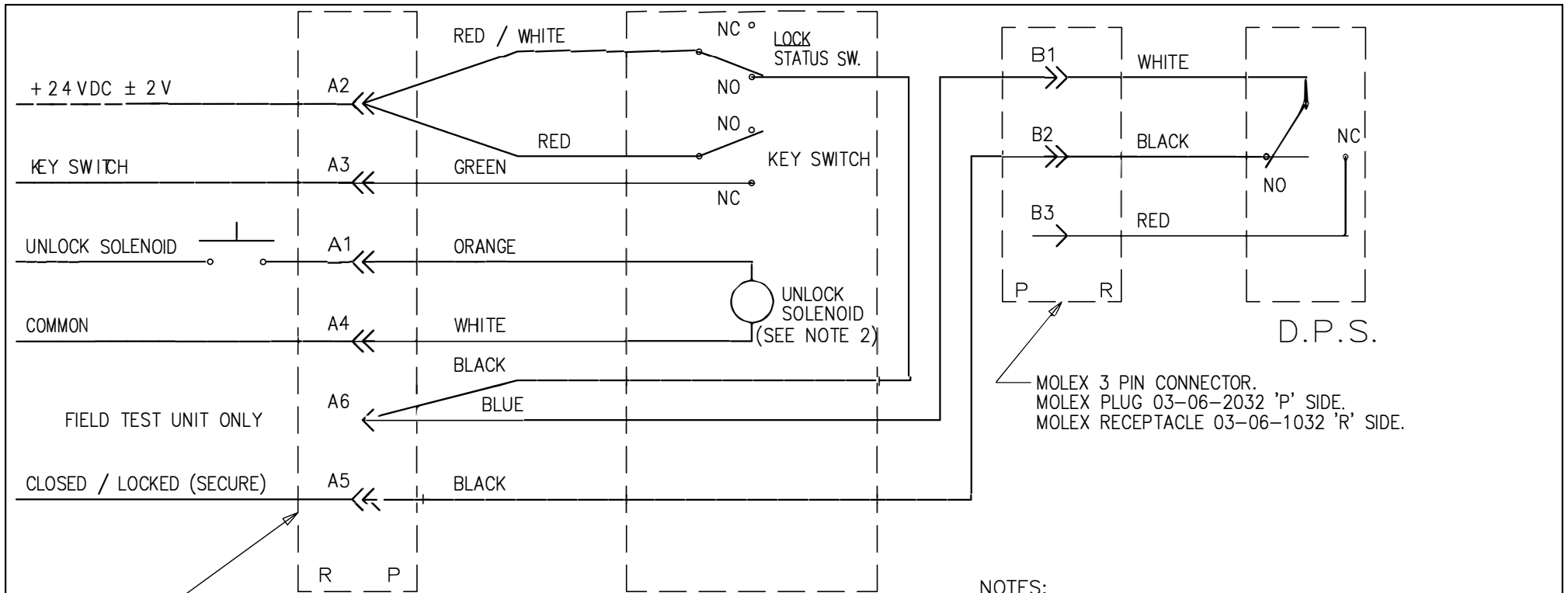




9500 SERIES LOCK






MOLEX 6 PIN CONNECTOR.
MOLEX PLUG 03-06-2061 'P' SIDE.
MOLEX RECEPTACLE 03-06-1062 'R' SIDE.

- NOTES:
1. SCHEMATIC SHOWN WITH DOOR IN THE CLOSED AND LOCKED (SECURE) POSITION.
 2. SOLENOID: 1.5 WATT MAX.
 3. SWITCH CONTACTS: 5A.
 4. ALWAYS INSTALL IN ACCORDANCE WITH LOCAL REGULATIONS AND THE NATIONAL ELECTRIC CODE (NEC). POWER DEVICE FROM A CLASS 2 POWER SOURCE WHEN PNEUMATIC TUBING OCCUPIES THE SAME SPACE AS CONTROL WIRING.

REV.	ECN	DESCRIPTION	DRN	DATE	CHK
07	2572	SEE ECN	DEE	2/7/03	
06	1500	MALE PINS WERE FEMALE & FEMALE PINS WERE MALE IN 3 PIN MOLEX CONNECTOR.	DCB	11-7-94	
05	1297	REDRAWN, BLK WIRE TO A6 WAS TO B1	DCB	5-21-93	
04	1228	ADD NOTE 2.	DCB	6-8-92	
03	1005	RED / WHITE WIRE WAS RED WIRE	DCB	1-10-91	
REVISIONS					



TITLE WIRING DIAGRAM,
9400, 9500
& 9700 LOCKS

© 1989 AIRTEQ SYSTEMS.	SIZE B	DWG. NO. EL-0011-B	REV 07
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9500 SWING LOCK PARTS LIST

<u>ITEM</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>	
1	1	146-9500-086	ASSY, LOCK BODY	
2	1	216-9500-126	LATCHBOLT	
3	1	313-0000-116	SEAL, U-CUP	
4	1	313-0000-050	O-RING, 2-016, VITON	
5	1	313-0000-052	PISTON RING, 1.25 X .070	
6	1	216-9524-011	SPRING	
7	1	216-9500-119	TOP COVER	
8	3	310-1032-003	SCREW, SHCS, 10-32 X 3/8	
9	1	310-0632-006	SCREW, SHCS, 6-32 X 1/4	
10	1	216-9524-004	SWITCH BRACKET	
11	1	216-9500-025	INSULATOR PAD	
12	1	160-9500-000	ASSY, LOCK STATUS SWITCH	
13	4**	310-0256-002	SCREW, SHCS, 2-56 X 9/16	(KEY SWITCH MODELS ONLY)
14	1	330-0000-086	FITTING BARB, 10-32 X 1/16	
15	1	216-9524-003	RACK, 9500	
16	4	310-2520-019	SCREW, FH SOC., 1/4-20 X 1/2	
17	1	216-9524-006	MOUNTING PLATE, SHOWN	
18	1*	216-9400-133	MORTISE CYLINDER PLATE	
19	4**	310-0632-009	SCREW, FH, SOC., 6-32 X 3/8	
20	2	310-0632-006	SCREW, SHCS, 6-32 X 1/4	
21	1	331-0000-053	SOLENOID	
22	2	330-0000-133	FITTING, 90 BARB, 10-32 X .078	
23	1	216-9400-132	MORTISE CYLINDER PLATE, UNIVERSAL	
24	4**	319-0000-052	SPACER, KEY SWITCH	(KEY SWITCH MODELS ONLY)
25	2**	160-9400-020	ASSY, KEY SWITCH	(KEY SWITCH MODELS ONLY)
26	3	319-0000-044	SPACER, LONG	
27	2	216-9400-134	GEAR SUPPORT PLATE	
28	3	319-0000-045	SPACER, GEAR	
29	2	313-0000-072	WASHER, PLASTIC	
30	1	146-9400-035	ASSY, GEAR, 3/16	
31	3	310-0632-010	SCREW, SHCS, 6-32 X 1	
32	2**	310-0832-015	SET SCREW, 8-32 X 7/16	
33	1	216-9500-023	FACEPLATE	
33	1	216-9500-151	(OR) FACEPLATE, BRASS	
34	6	311-0000-056	SCREW, TP, FH, 6-32 X 1/4, STNLS	
34	6	311-0632-008	(OR) SCREW, TP, FH, 6-32 X 1/4, BRASS	
35	1	330-1206-000	TUBING, 1/8 OD X 1/16 ID, POLYURETHANE, 7"	
36	1	340-0000-205	SPLIT LOOM, 5"	
37	1	SEE WIRING DIAGRAM	ASSY, 3 PIN MOLEX CONNECTOR	
38	1	SEE WIRING DIAGRAM	ASSY, 6 PIN MOLEX CONNECTOR	
39	1	330-0000-414	TUBING COUPLING HALF	
40	1	330-0000-415	TUBING COUPLING HALF (FIELD SIDE, NOT SHOWN)	
41	1	330-1206-000	TUBING, 1/8 OD X 1/16 ID, POLYURETHANE, 7"	
42	1	216-9400-206	WIRE RETAINER, 5/16	
43	4**	216-9400-152	MOUNTING BLOCK	
44	4**	310-0832-014	SCREW, FH SOC., 8-32 X 1/2	
45	2**	340-0000-133	SWITCH LEVER, MICROSWITCH, #JS-7	(KEY SWITCH ONLY)
46	2	310-0000-014	SCREW, SHCS, 2-56 X 3/8	
47	3	313-0000-088	LOCK WASHER, #6	
48	1	216-9524-007	ACTUATOR ROD	
49	1	316-0000-058	ROLL PIN, 3/32 X 3/8	
50	1	216-9524-004	SWITCH BRACKET	
51	3	313-0000-088	LOCK WASHER, #6	

* USED ON KEYED BOTH SIDES MODELS ONLY

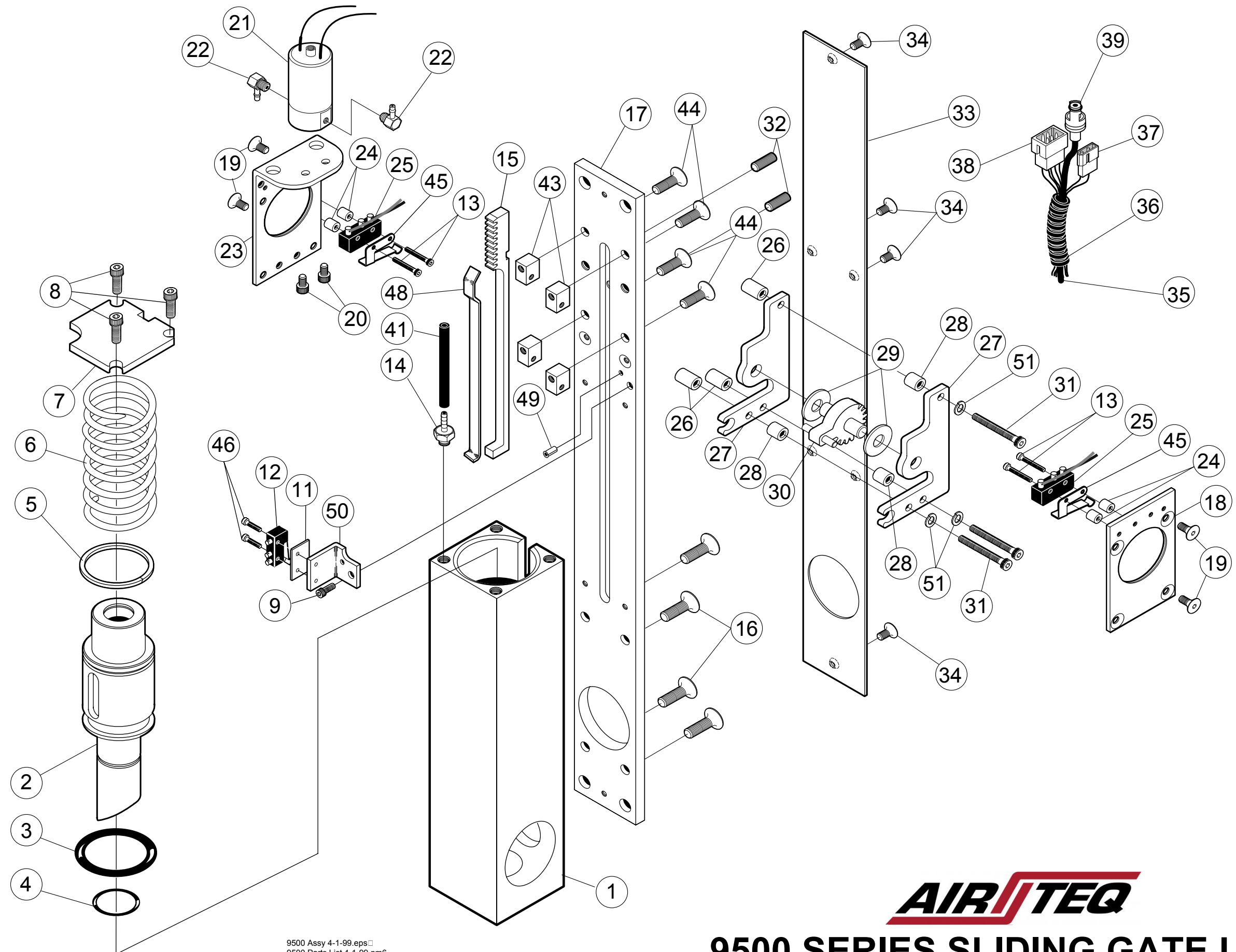
** DIVIDE QTY BY (2) FOR KEYED ONE SIDE MODELS

9500 SLIDE LOCK PARTS LIST

<u>ITEM</u>	<u>QTY</u>	<u>PART NUMBER</u>	<u>DESCRIPTION</u>
1	1	146-9500-087	ASSY, LOCK BODY, SLIDING GATE
2	1	216-9500-090	LATCHBOLT, SLIDING GATE
3	1	313-0000-116	SEAL, U-CUP
4	1	313-0000-050	O-RING, 2-016, VITON
5	1	313-0000-052	PISTON RING, 1.25 X .070
6	1	216-9524-011	SPRING
7	1	216-9500-119	TOP COVER
8	3	310-1032-003	SCREW, SHCS, 10-32 X 3/8
9	1	310-0632-006	SCREW, SHCS, 6-32 X 1/4
10	1	216-9524-004	SWITCH BRACKET
11	1	216-9500-025	INSULATOR PAD
12	1	160-9500-000	ASSY, LOCK STATUS SWITCH
13	4**	310-0256-002	SCREW, SHCS, 2-56 X 9/16 (KEY SWITCH MODELS ONLY)
14	1	330-0000-086	FITTING BARB, 10-32 X 1/16
15	1	216-9524-003	RACK, 9500
16	4	310-2520-019	SCREW, FH SOC., 1/4-20 X 1/2
17	1	216-9500-091	MOUNTING PLATE, SLIDING GATE
18	1*	216-9400-133	MORTISE CYLINDER PLATE
19	4**	310-0632-009	SCREW, FH, SOC., 6-32 X 3/8
20	2	310-0632-006	SCREW, SHCS, 6-32 X 1/4
21	1	331-0000-053	SOLENOID
22	2	330-0000-133	FITTING, 90 BARB, 10-32 X .078
23	1	216-9400-132	MORTISE CYLINDER PLATE, UNIVERSAL
24	4**	319-0000-052	SPACER, KEY SWITCH (KEY SWITCH MODELS ONLY)
25	2**	160-9400-020	ASSY, KEY SWITCH (KEY SWITCH MODELS ONLY)
26	3	319-0000-044	SPACER, LONG
27	2	216-9400-134	GEAR SUPPORT PLATE
28	3	319-0000-045	SPACER, GEAR
29	2	313-0000-072	WASHER, PLASTIC
30	1	146-9400-035	ASSY, GEAR, 3/16
31	3	310-0632-010	SCREW, SHCS, 6-32 X 1
32	2**	310-0832-015	SET SCREW, 8-32 X 7/16
33	1	216-9500-067	FACEPLATE, MODIFIED, STAINLESS
34	6	311-0000-056	SCREW, TP, FH, 6-32 X 1/4, STNLS
34	6	311-0632-008	(OR) SCREW, TP, FH, 6-32 X 1/4, BRASS
35	1	330-1206-000	TUBING, 1/8 OD X 1/16 ID, POLYURETHANE, 7"
36	1	340-0000-205	SPLIT LOOM, 5"
37	1	SEE WIRING DIAGRAM	ASSY, 3 PIN MOLEX CONNECTOR
38	1	SEE WIRING DIAGRAM	ASSY, 6 PIN MOLEX CONNECTOR
39	1	330-0000-414	TUBING COUPLING HALF
40	1	330-0000-415	TUBING COUPLING HALF (FIELD SIDE, NOT SHOWN)
41	1	330-1206-000	TUBING, 1/8 OD X 1/16 ID, POLYURETHANE, 7"
42	1	216-9400-206	WIRE RETAINER, 5/16
43	4**	216-9400-152	MOUNTING BLOCK
44	4**	310-0832-014	SCREW, FH SOC., 8-32 X 1/2
45	2**	340-0000-133	SWITCH LEVER, MICROSWITCH, #JS-7 (KEY SWITCH ONLY)
46	2	310-0000-014	SCREW, SHCS, 2-56 X 3/8
47	3	313-0000-088	LOCK WASHER, #6
48	1	216-9524-007	ACTUATOR ROD
49	1	316-0000-058	ROLL PIN, 3/32 X 3/8
50	1	216-9524-004	SWITCH BRACKET
51	3	313-0000-088	LOCK WASHER, #6

* USED ON KEYED BOTH SIDES MODELS ONLY

** DIVIDE QTY BY (2) FOR KEYED ONE SIDE MODELS



9500 Assy 4-1-99.eps
 9500 Parts List 4-1-99.pm6



9500 SERIES SLIDING GATE LOCK

9500 SERIES LOCK LUBRICATION/SEAL REPLACEMENT

The 9500 Series Lock is lubricated at the factory and should require no further lubrication. Lubrication is only required when replacing the lock seals. Extensive testing has shown that the lock seals should last 5 years under normal operating conditions. Should the seals ever need replacing, a seal replacement kit is available (AIRTEQ PART NUMBER 400-9500-002).

TO REPLACE LOCK SEALS

1. Remove latchbolt from lock body and remove old piston ring and O-rings.
2. Carefully clean latchbolt and lock body bores with solvent. DO NOT scratch piston or lock body bores.
3. After parts are clean, lightly lubricate new O-rings with lubricant provided and install on latchbolt. Install new piston ring on latchbolt.
4. Lightly lubricate the lock body bores with lubricant provided. Carefully insert latchbolt assembly into lock body. DO NOT tear the seals as they enter the bores or pass by the notch in lock body. DO NOT scratch lock body bores.
5. Reassemble lock and check for proper operation.

NOTE:

Lubricant provided is SYNCO SUPER LUBE WITH TEFLON. Use only approved lubricant.

9500B SERIES LOCK

RECOMMENDED SPARE PARTS LIST

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
331-0000-053	SOLENOID
340-0000-133	SWITCH LEVER
216-9524-011	SPRING
160-9400-020*	ASSY, KEY SWITCH
160-9400-013	ASSY, LOCK STATUS SWITCH
330-0000-414	COUPLING HALF
330-0000-415	COUPLING HALF (FIELD SIDE)
400-9500-002	REPAIR KIT, 11B-9500 LOCK
340-0000-209	TERMINAL, MALE

*** NOT USED ON ALL MODELS**



LOCK MAINTENANCE INFORMATION

PNEUMATIC LOCKING DEVICES

A. Lubrication and cleaning

1. Each Airlock is well lubricated at the time of assembly. However, all lubricants deteriorate eventually and need replacing on a regularly scheduled basis in order to prevent equipment failure. Airteq Systems recommends cleaning and lubricating each type of lock according to the following instructions approximately every (2) years. (Yearly for locks in high use areas).

9400 SERIES LOCK:

Remove the side cover plate and lubricate the angled ramp surface on the sideplate that the deadlatch bolt dowel pin rides against. Lubricate the stop side of the deadlatch bolt (back side). When replacing the side cover, be sure the lever of the lock status switch is not trapped under the retainer plate or actuator. The lower lock mechanism should be checked and cleaned once a year (or more often if special conditions exist) for accumulated dirt and other debris that would interfere with proper operation. Lubrication of upper lock mechanism is not necessary nor recommended.

9600 SERIES LOCK:

Remove the slide cover. Remove the housing cover. Remove the slide assembly. Clean and re-lubricate the slide with a thin coating of recommended lubricant on the following surfaces:

- a.) The 45° angled surface that contacts the deadbolt.
- b.) The flat "shelf" that lifts the back of the latchbolt.
- c.) The two small areas where the slide contacts the back wall of the slide cavity.
- d.) The edges of the two "rails" which contact the side of the right side cover.
- e.) The front and rear faces of the slide which contact the slide cavity walls.

When replacing the slide assembly, hold the latchbolt retracted into the lock housing while inserting the slide assembly near the top of the cavity so that it drops in above the lock status switch lever arm and not on top of it. Replace the housing cover and slide cover and fasten securely.

Lubrication of the upper lock mechanism is not necessary nor recommended.

PNEUMATIC LOCKING DEVICES

9700 SERIES LOCK:

Remove one side cover plate and lubricate the deadbolt shaft and cam surface. Lubricate the latchbolt shaft and the stop sides of both bolts.

9700P SERIES LOCK: (PARACENTRIC KEYING)

Remove one side cover plate and lubricate the deadbolt shaft and cam surface. Lubricate the latchbolt shaft and the stop sides of both bolts.

KEYS AND LEVER TUMBLERS:

- 1) Key wear can cause improper operation of the lock and may damage the lock's lever tumblers. Keys in constant use should be periodically compared to a similar new key. When grooves due to wear are noted in the steps on the key bit, the old key should be replaced.
- 2) When rekeying is performed, new tumbler stacks should be purchased as a set including a new key. This enables Airteq to maintain complete keying records.

WARNING:

- 1) Never use WD40 or similar silicone based lubricants.
- 2) Never use graphite powder as a lubricant.
- 3) Never lubricate the lever tumblers.

ALL LOCKS:

2. RECOMMENDED LUBRICANTS:

Multipurpose teflon based grease: Lubricate internal moving parts with SYNCO SUPER LUBE WITH TEFLON or equivalent.

Stick lubricant: Lubricate the beveled surfaces of all latch bolts and strikes with stick lubricant as required. Use PANEF WHITE STICK LUBRICANT WITH SILICONE or equivalent.

B. Electrical:

1. The electrical system of this lock is operated on regulated 24VDC current. Any other voltage or current condition is not acceptable and will result in failure of the solenoid.

TROUBLESHOOTING

9400, 9500 AND 9700 LOCKS

If the lock is not working properly, the following chart may be used as a guide to locate and correct the problem.

Because the lock receives its signal from the electronic control system, a thorough check of the control system should be conducted. Using a volt/ohm meter known to be accurate, verify the correct power signal input at the appropriate connector pin. If the proper electronic signal is not evident, begin checking “upstream” from the connector. If the electronic signal input is correct, the problem is within the locking device, use the following chart to locate and correct the problem.

The recommended air pressure at the lock is 80 P.S.I.. If the correct air pressure is not evident, begin checking “upstream” from the lock. If the air pressure is correct, the problem is within the locking device, use the following chart to locate and correct the problem.

PROBLEM	CHECK
LATCHBOLT WILL NOT RETRACT	<ul style="list-style-type: none"> *AIR SUPPLY TO LOCK *MECHANICAL INTERFERENCE *POWER INPUT TO UNLOCK SOLENOID (POWER SHOULD BE PRESENT DURING LOCK OPEN CYCLE) *BROKEN OR LOOSE WIRING *FAULTY OR CONTAMINATED SOLENOID VALVE
LATCHBOLT WILL NOT EXTEND	<ul style="list-style-type: none"> *MECHANICAL INTERFERENCE *BROKEN OR LOOSE WIRING (SHORT TO GROUND) *POWER INPUT TO UNLOCK SOLENOID (POWER SHOULD NOT BE PRESENT DURING LOCK SECURE CYCLE) *FAULTY KEYSWITCH
LOCK RETRACTS/EXTENDS SLOWLY	<ul style="list-style-type: none"> *AIR PRESSURE TO LOCK *MECHANICAL INTERFERENCE *FAULTY OR CONTAMINATED SOLENOID VALVE
MANUAL OVERRIDE NOT WORKING PROPERLY	<ul style="list-style-type: none"> *MECHANICAL INTERFERENCE *PROPER ENGAGEMENT OF KEY CYLINDER CAM IN LOCK
DOOR POSITION SIGNAL NOT GIVEN	<ul style="list-style-type: none"> *BROKEN OR LOOSE WIRING (SEE WIRING DIAGRAM)
LATCHBOLT POSITION SIGNAL NOT GIVEN	<ul style="list-style-type: none"> *BROKEN OR LOOSE WIRING (SEE WIRING DIAGRAM)