

SERVICE MANUAL

MODEL 9712/9712P 120 VAC SOLENOID SWING LOCK



***2511 Midpark Road • Montgomery, Alabama 36109
(334)281-8440 • FAX (334)286-6421***

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REVISION HISTORY:

PRELIMINARY RELEASE	1/2012
UPDATE FOR LOGO & ADDRESS	6/2021

WIRING DIAGRAM

MODEL 9712/9712P 120 VAC SOLENOID SWING LOCK



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LOCK MAINTENANCE INFORMATION

**MODEL
9712/9712P
120 VAC
SOLENOID
SWING LOCK**

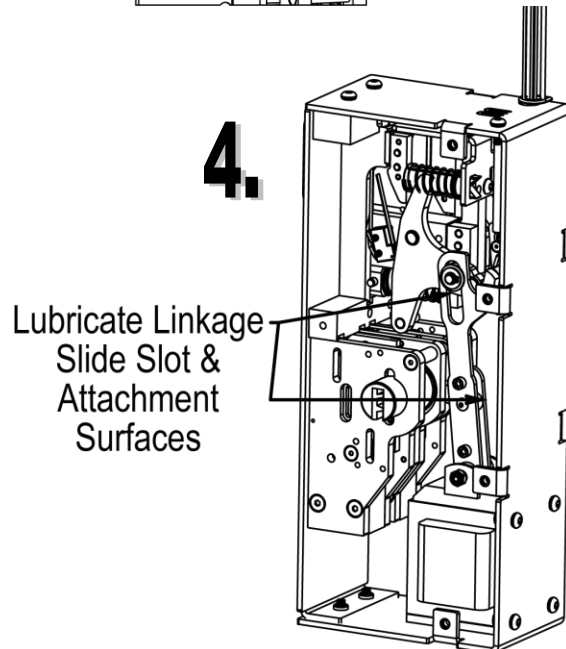
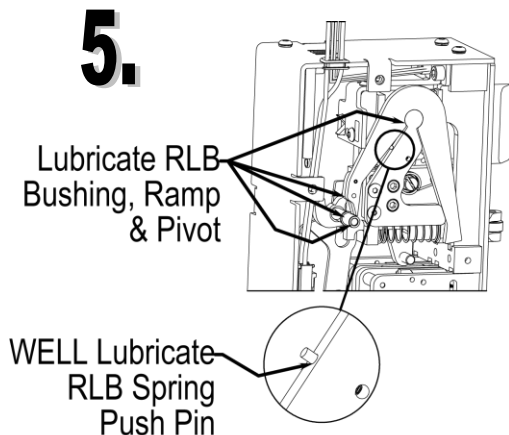
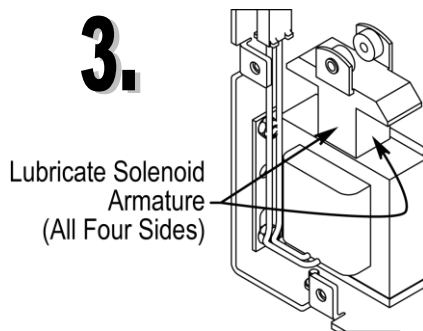
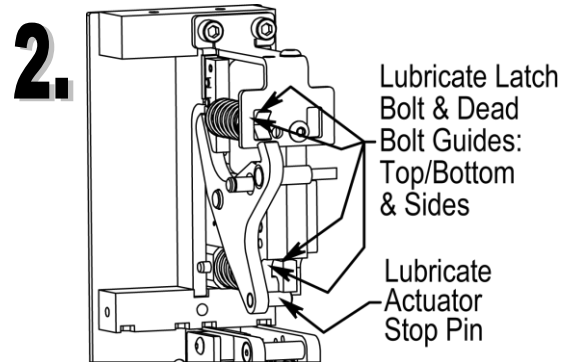
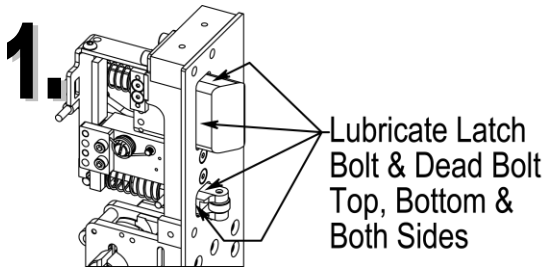


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GENERAL 9712/9712P LOCK LUBRICATION

On high traffic and/or exterior doors / gates check lock lubrication once a year. On all other doors check lubrication every five years. The following components should be well lubricated - in the areas shown - with Super Lube® Multi-Purpose Synthetic Lubricant/Grease with PTFE (Teflon®) or equivalent. **DO NOT USE WD-40, GRAPHITE POWDER, LITHIUM GREASE or other lubricants when servicing these locks:**

1. Latch bolt and Dead bolt top, bottom & both sides
2. Latch bolt & Dead bolt guides top, bottom & both sides & Actuator Stop Pin
3. Solenoid Armature
4. Solenoid Attachment Linkage
5. RLB feature

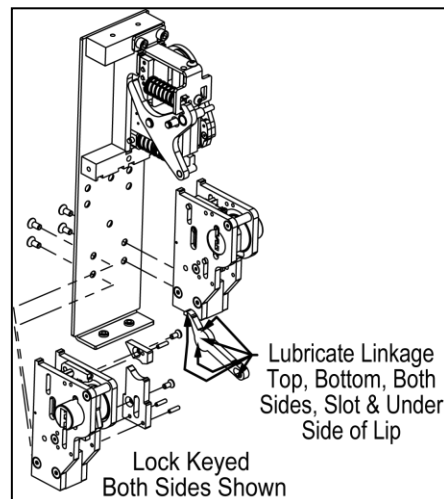
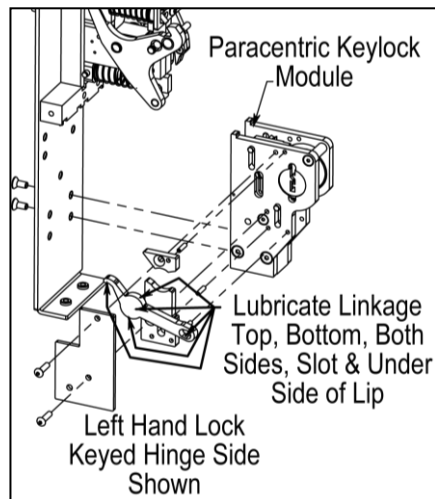


PARACENTRIC 9712P COMPONENT LUBRICATION

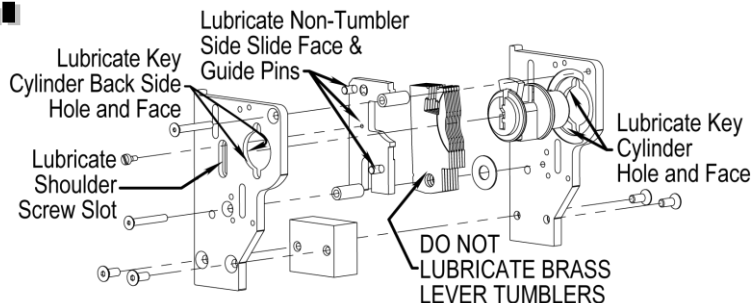
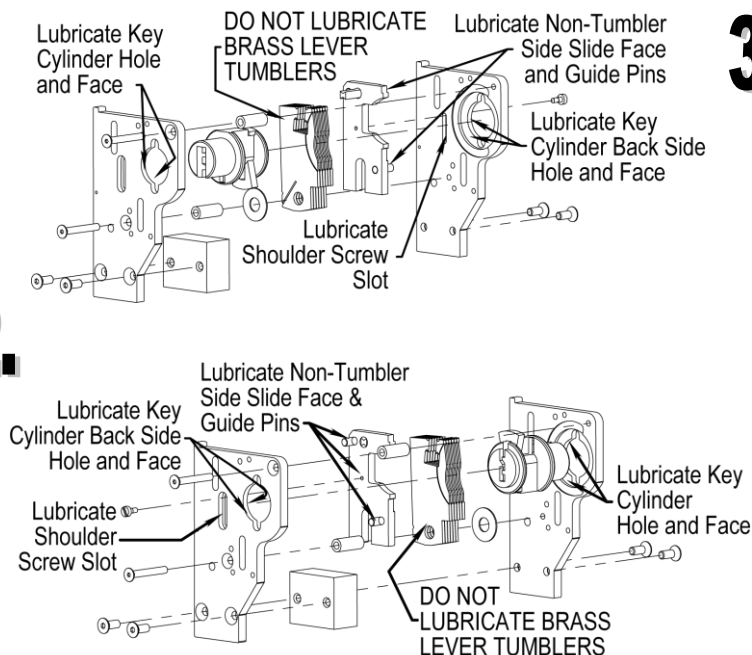
If 9712P keyed operation becomes difficult / restricted the paracentric keylock module(s) should be removed and components lubricated as indicated- with Super Lube® Multi-Purpose Synthetic Lubricant/Grease with PTFE (Teflon®) or equivalent. **DO NOT USE WD-40, GRAPHITE POWDER, LITHIUM GREASE or other lubricants when servicing these locks:**

1. Paracentric Linkage (Keyed one side and keyed both sides shown)
2. Key Modules (DO NOT LUBRICATE TUMBLERS, CLEAN & WIPE OFF ONLY)
3. ELHB Lubrication shown for Paracentric locks with ELHB feature

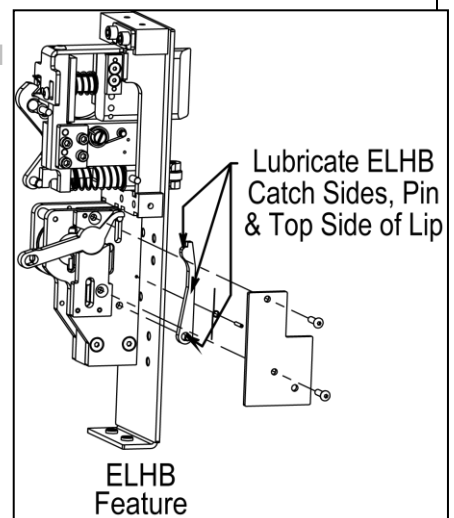
1.



2.



3.



GENERAL LOCK MAINTENANCE INFORMATION

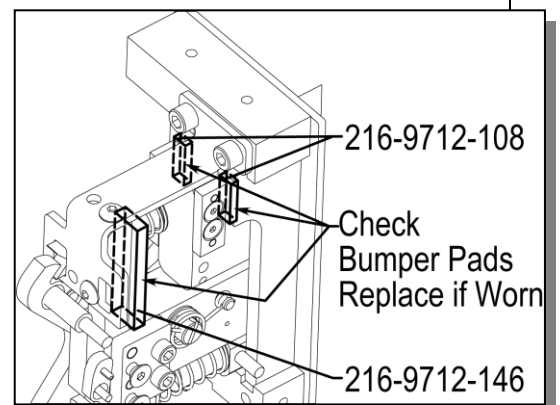
Keys and Lever Tumblers:

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.

Lubricate Latch bolt external beveled surface (and strike) with Panef WhiteStick Lubricant with Silicone or equivalent.

Solenoid Lock Bumper Pads:

1. A Solenoid lock's unlocking action is instantaneous, requiring rubber bumpers as buffers to prevent the lock from destroying itself by its own operation.
2. When maintenance is performed the Bumper pads (two front and one rear) should be inspected for integrity and must be replaced if worn.



Troubleshooting

If the lock is not working properly the following instructions may be used as a starting point to help locate and correct the problem:

Lock Not Operating/Unlocking When 120VAC Control Signal Is Provided:

NO SOLENOID RESPONSE/ACTIVATION DETECTED:

Using a calibrated (or at least reliable) volt/ohm meter, verify that 120VAC is being supplied to the lock (see lock wiring diagram.) If 120VAC is being supplied to the lock, verify that 120VAC is reaching the solenoid inside the lock (2 pin connector.) If 120VAC is being supplied to the solenoid, verify that it is activating – if not the solenoid should be replaced.

SOLENOID IS ACTIVATING – LOCK NOT UNLOCKING:

Check mechanical interference – debris (toilet paper, paper clips etc. inserted into latch bolt / dead bolt gaps etc.)

Check internal linkages, actuator, keylock mechanism connection to solenoid linkage etc.

Lock Not Operating/Unlocking When 120VAC Control Signal Is Provided (continued):

SOLENOID OPERATES, LOCK UNLOCKS, BUT LATCHBOLT DOES NOT EXTEND:

For locks with Remote Latch Back (RLB): The latch bolt will only extend when door is opened (i.e. dead latch is completely extended) after lock has been unlocked

Check mechanical interference – debris (toilet paper, paper clips etc. inserted into latch bolt / dead bolt gaps etc.)

Check internal linkages, actuator, keylock mechanism connection to solenoid linkage etc.

Check RLB (latch back) feature bushing not rotating, dead latch pin not pushing on RLB arm, etc.

Check Latch Bolt Spring broken or Dead Latch spring broken.

Lock Not Indicating Deadlock Condition:

Push Dead Latch in: Check Actuator for Physical Deadlock Condition (shown →)

If Actuator does not move into physical dead lock: Check extension spring (shown) and actuator rotary spring (on opposite side of lock (not shown))

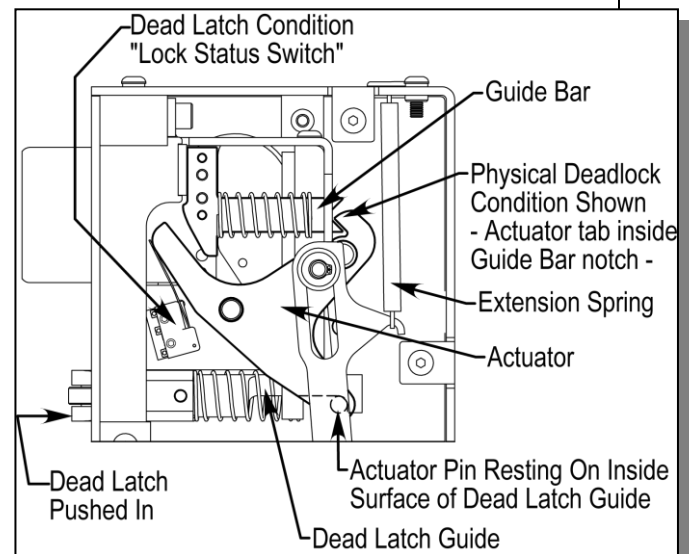
If springs are attached in good working order and actuator does not move into physical deadlock: Check other linkage and mechanical obstructions.

If Actuator moves into physical deadlock check Lock Status Switch for actuation.

An audible 'click' should be heard when the switch makes. The switch should only make when the latch bolt is physically dead locked. The lock status switch should release before the Actuator tab fully exits the Guide Bar Notch. (i.e. the latch bolt should still be restricted from being physically pushed in from outside the lock when the switch unmakes.)

If lock status switch is audibly making when physically deadlocked: Use a calibrated/reliable volt/ohm meter to check electrical contact being made at the correct pins (see wiring diagram) when the lock status switch makes.

If lock status switch operation at pins is verified: Check for correct door gap and check control system (control side wiring/relays/other control system issues.)



RECOMMENDED SPARE PARTS

**MODEL
9712/9712P
120 VAC
SOLENOID
SWING LOCK**



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RECOMMENDED SPARE PARTS

9712/9712P

<u>PART NUMBER</u>	<u>DESCRIPTION</u>
• 160-9712-100	9712 Main Wiring Harness
• 160-9712-108	Solenoid & Connector Assembly
• 216-9712-108	Front Bumper (2 Per Lock)
• 216-9712-146	Rear Bumper
• 216-9700-271	Actuator Cam Torsion Spring
• 315-0000-015	Latch Bolt Spring
• 315-0000-016	Dead Latch Spring
• 315-9712-101	Linkage Lift Spring
• 340-9712-301M	Terminal, Male, 14-20AWG
• 340-9712-302M	Terminal, Male, 24-28AWG

**DETAIL DRAWINGS
EXPLODED VIEWS
PARTS LISTS**

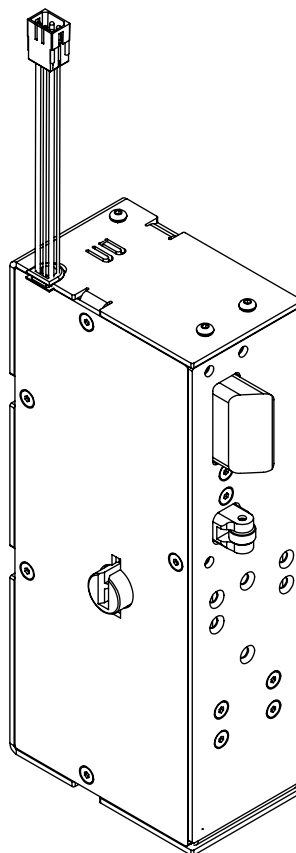
**MODEL
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120 VAC
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ITEM NO.	PART NUMBER	DESCRIPTION	9712P, LH K2S/QTY.	9712P, LH K2S RLB/QTY.	9712P, LH KHS RLB/QTY.	9712P, LH KSS RLB/QTY.	9712P, RH K2S/QTY.	9712P, RH K2S RLB/QTY.	9712P, RH KHS RLB/QTY.	9712P, RH KSS RLB/QTY.	9712P, LH K2S ELHB/QTY.	9712P, RH K2S ELHB/QTY.
1	146-9712-410A	PARACENTRIC KEYLOCK ASSY, SIDE A	1	1	1	-	1	1	-	1	1	1
2	146-9712-410B	PARACENTRIC KEYLOCK ASSY, SIDE B	1	1	-	1	1	1	1	-	1	1
3	146-9712-450L	PARACENTRIC LINKAGE ASSEMBLY	1	1	1	1	-	-	-	-	1	-
4	146-9712-450R	PARACENTRIC LINKAGE ASSEMBLY	-	-	-	-	1	1	1	1	-	1
5	146-9712-500L	MAIN LOCK SUBASSY, LH	1	-	-	-	-	-	-	-	1	-
6	146-9712-500RLB	MAIN LOCK SUBASSY, LH w/RLB	-	1	1	1	-	-	-	-	-	-
7	146-9712-500R	MAIN LOCK SUBASSY, RH	-	-	-	-	1	-	-	-	-	1
8	146-9712-500RLB	MAIN LOCK SUBASSY, RH w/RLB	-	-	-	-	-	1	1	1	-	-
9	146-9712-510	REAR HOUSING ASSY.	1	1	1	1	1	1	1	1	1	1
10	150-9712-421	PARACENTRIC ELHB CATCH WELDMENT	-	-	-	-	-	-	-	-	1	1
11	160-9712-100	9712 Main Wiring Harness	1	1	1	1	1	1	1	1	1	1
12	216-9500-025	INSULATOR PAD	1	1	1	1	1	1	1	1	1	1
13	216-9712-120B	Side A Blank Cover Plate	-	-	-	1	-	-	1	-	-	-
14	216-9712-120P	Side A Paracentric Cover Plate	1	1	1	-	1	1	-	1	1	1
15	216-9712-121B	Side B Blank Cover Plate	-	-	1	-	-	-	-	1	-	-
16	216-9712-121P	Side B Paracentric Cover Plate	1	1	-	1	1	1	1	-	1	1
17	216-9712-139	PARACENTRIC ELHB SPRING, McM 9271K83 or eq.	-	-	-	-	-	-	-	-	1	1
18	216-9712-140	SET SCREW, 2-56x1/2, SS, Cup Point	-	-	-	-	-	-	-	-	1	1
19	216-9712-204	SOLENOID BUSHING (F-F STANDOFF)	1	1	1	1	1	1	1	1	1	1
20	216-9712-402	PARACENTRIC HINGE BLOCK, LOWER	1	1	1	1	1	1	1	1	1	1
21	216-9712-403	PARACENTRIC HINGE BLOCK, UPPER	1	1	1	1	1	1	1	1	1	1
22	216-9712-405	PARACENTRIC KEYLOCK LINKAGE	1	1	1	1	1	1	1	1	1	1
23	216-9712-406	PARACENTRIC HINGE DOWEL, McM 98381A471 or eq.	3	3	3	3	3	3	3	3	3	3
24	216-9712-408	KEYED ONE SIDE KEYLOCK PLATE	-	-	1	1	-	-	1	1	-	-
25	310-0000-014	SCREW SHCS 2-56x3/8 Black W/LOCKING PATCH	2	2	2	2	2	2	2	2	2	2
26	310-0832-016	SCREW, BH SOC, 8-32 X 1/4	2	2	2	2	2	2	2	2	2	2
27	310-0832-026	SCREW, 8-32 X .375 FH BLACK	2	2	-	-	2	2	-	-	2	2
28	310-0832-030	8-32 X .625 BUTTON HEAD CAPSCREW, HEX	-	-	2	2	-	-	2	2	-	-
29	310-1032-017	SCREW, FH SOC., 10-32 X 3/8	10	10	10	10	10	10	10	10	10	10
30	310-1032-030	SCREW BHCS 10-32X1/2 W/NYLOX PATCH	4	4	4	4	4	4	4	4	4	4
31	310-1032-032	SCREW, FH SOC., 10-32 X 7/16	4	4	2	2	4	4	2	2	4	4
32	310-9712-000	SH Shoulder Screw, .188DX1.25LX8-32 McMaster 94035A209 or Eq	1	1	1	1	1	1	1	1	1	1
33	312-0832-005	NUT, 8-32, Thin NYLOCK, McMaster 90101A009 or eq.	1	1	1	1	1	1	1	1	1	1
34	313-0000-010	WASHER LOCK SPLIT #10 PLT	4	4	4	4	4	4	4	4	4	4
35	313-0000-063	WSHR, FLAT, .255 ID X .505 OD X .030 THK, STL	1	1	1	1	1	1	1	1	1	1
36	313-9712-001	UHMW Polyethylene Flat Washer .38"IDx .63"OD, .03" Thick, McMaster #95649A241 or eq.	2	2	2	2	2	2	2	2	2	2
37	313-9712-002	WASHER, .192"ID, .375"OD, .05"- .07" Thk, Zc Plt Steel, McMaster #90183A215 or eq.	-	1	1	1	-	1	1	1	-	-
38	315-9712-001	1/4" Shaft External Retainer Ring, McMaster # 97633A130 or eq.	1	1	1	1	1	1	1	1	1	1
39	315-9712-101	LINKAGE LIFT SPRING	1	1	1	1	1	1	1	1	1	1
40	317-9712-001	Bushing, 3/16"ID x .313"OD x .5"Len, McMaster 6391K116 or eq.	-	1	1	1	-	1	1	1	-	-

REVISIONS			
ECN #	REV.	DESCRIPTION	DATE
	A	INITIAL RELEASE	4/29/2009
	B	LOCK MODIFIED PER INITIAL TESTING	5/17/10



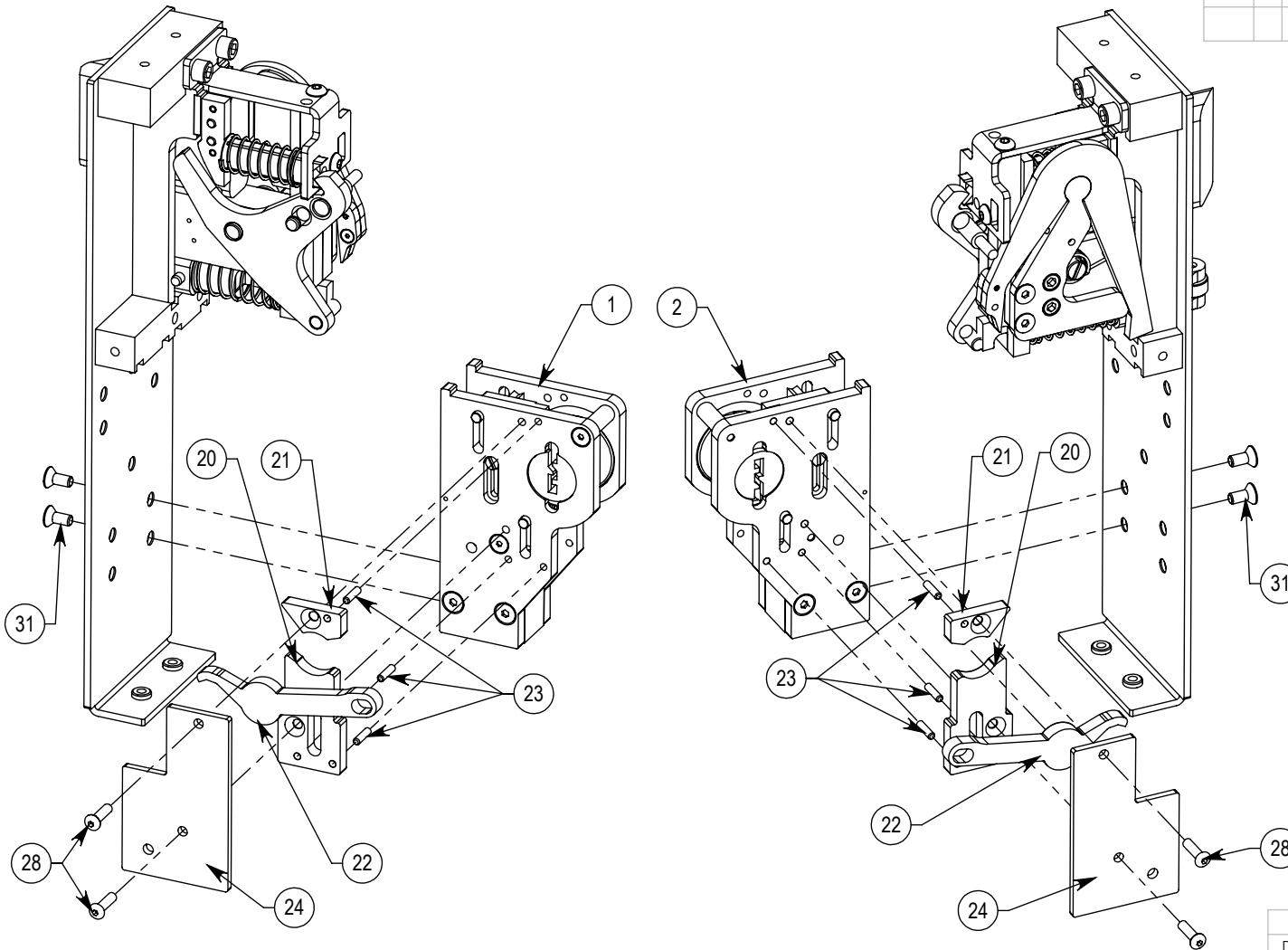
Left Hand Keyed Both Sides Shown

DATE		NAME	
5/17/10		RLP	
DRAWN			
CHECKED			
TITLE:			
9712 PARACENTRIC KEYED LOCK			
FINISH: NONE (SEE REFERENCED PARTS)		SIZE	DWG. NO.
		A	9712P
		SCALE: 1:4	SHEET 1 OF 7
		REV	B



Keyed One Side Lock Details

REVISIONS				
ECN #	REV.	DESCRIPTION	DATE	APPROV.
	A	INITIAL RELEASE	4/29/2009	
	B	LOCK MODIFIED PER INITIAL TESTING	5/17/10	



Left Hand Locks Keyed Hand Side
Right Hand Locks Keyed Stop Side

(Left Hand Lock Shown)

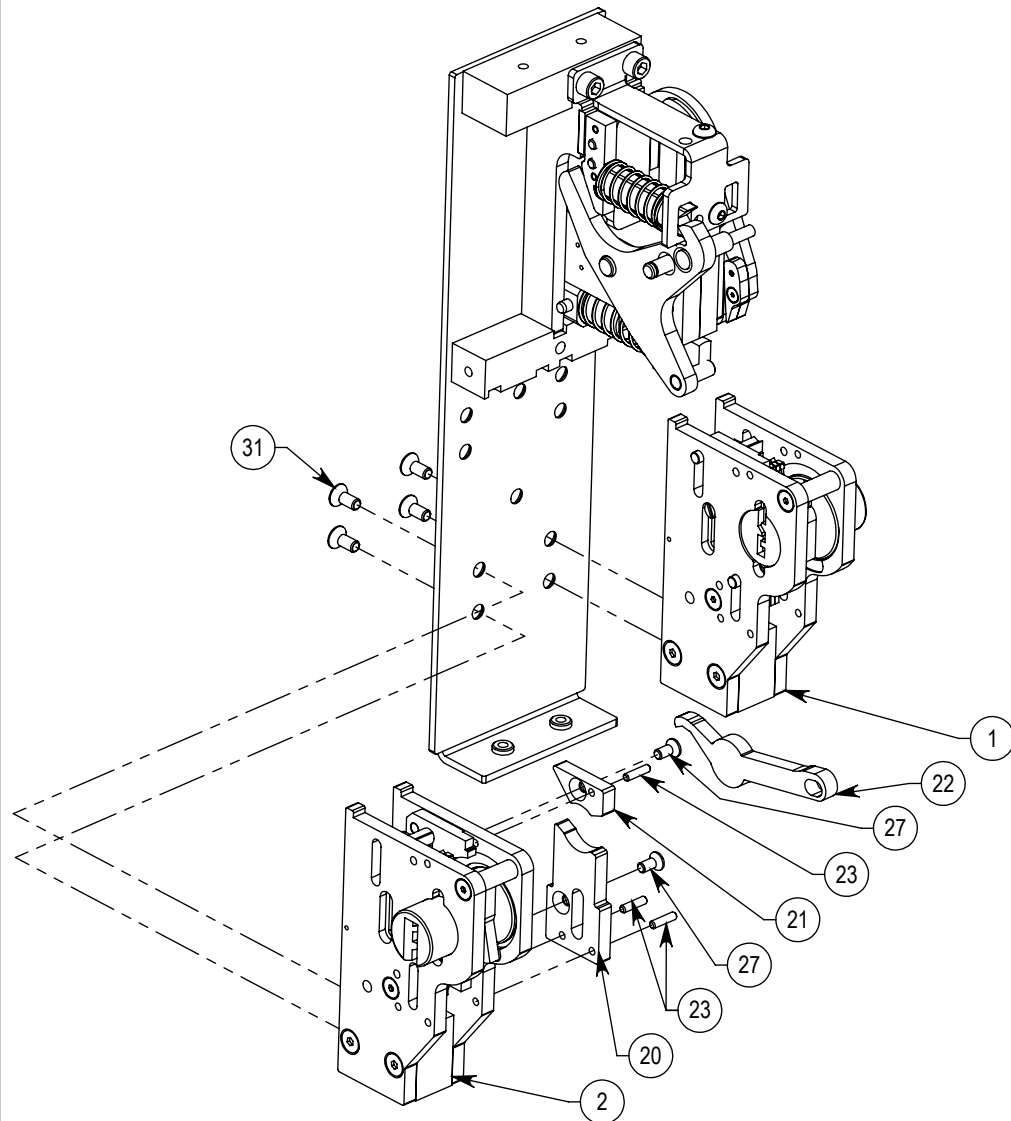
Left Hand Locks Keyed Stop Side
Right Hand Locks Keyed Hand Side

(Left Hand Lock Shown)

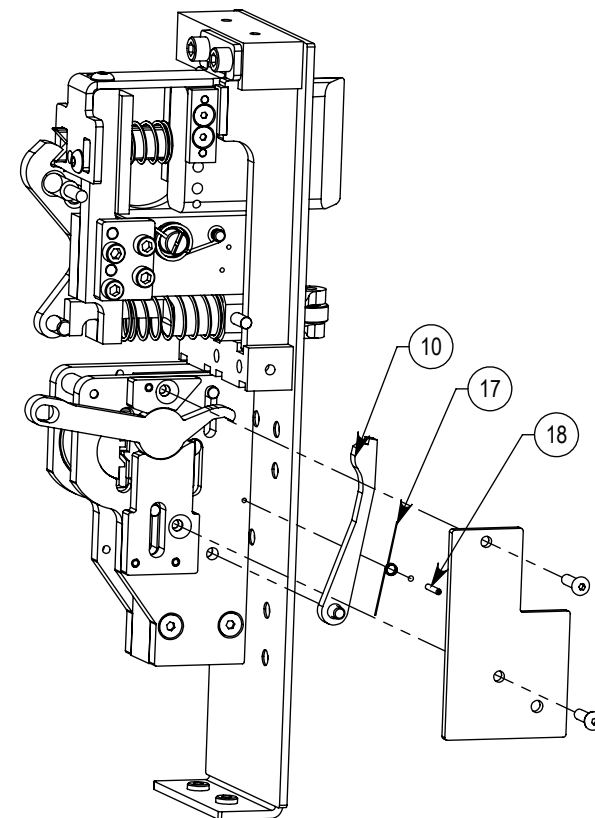
	DATE	NAME	
DRAWN	5/17/10	RLP	
CHECKED			
TITLE:			
9712 PARACENTRIC KEYED LOCK			
FINISH: NONE (SEE REFERENCED PARTS)	SIZE A	DWG. NO. 9712P	REV B
SCALE: 1:3		SHEET 2 OF 7	

Keyed Two Side Lock Detail & ELHB Function Detail

REVISIONS				
ECN #	REV.	DESCRIPTION	DATE	APPROV.
	A	INITIAL RELEASE	4/29/2009	
	B	LOCK MODIFIED PER INITIAL TESTING	5/17/10	



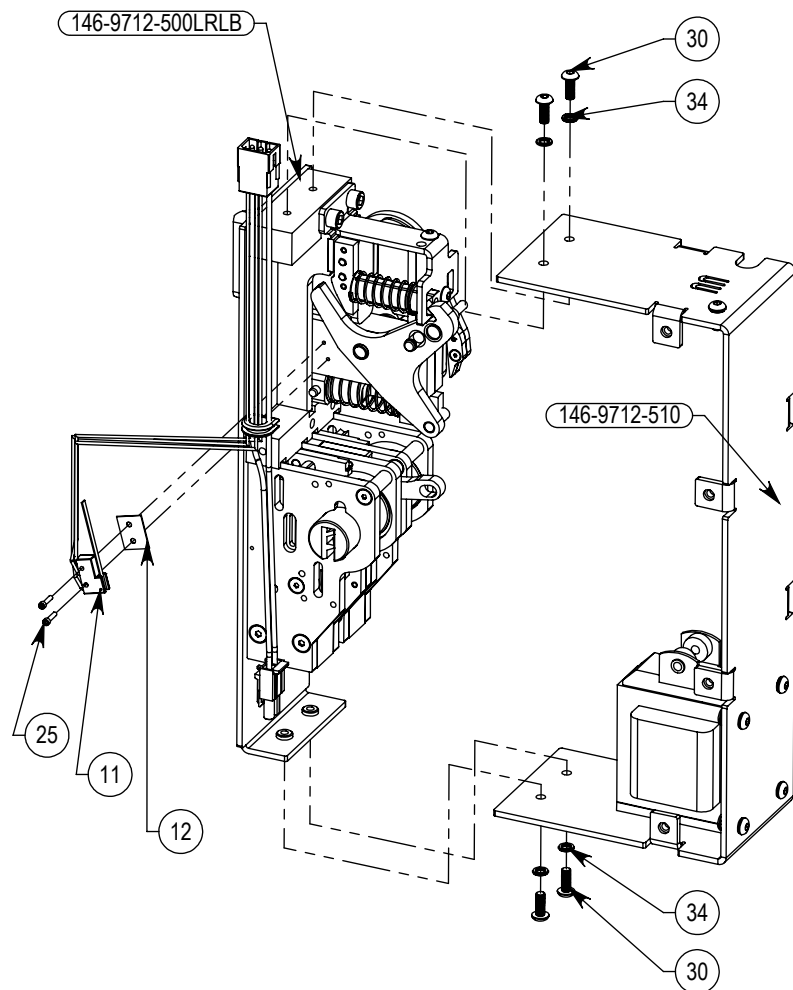
Components For Paracentric Locks
Keyed Both Sides



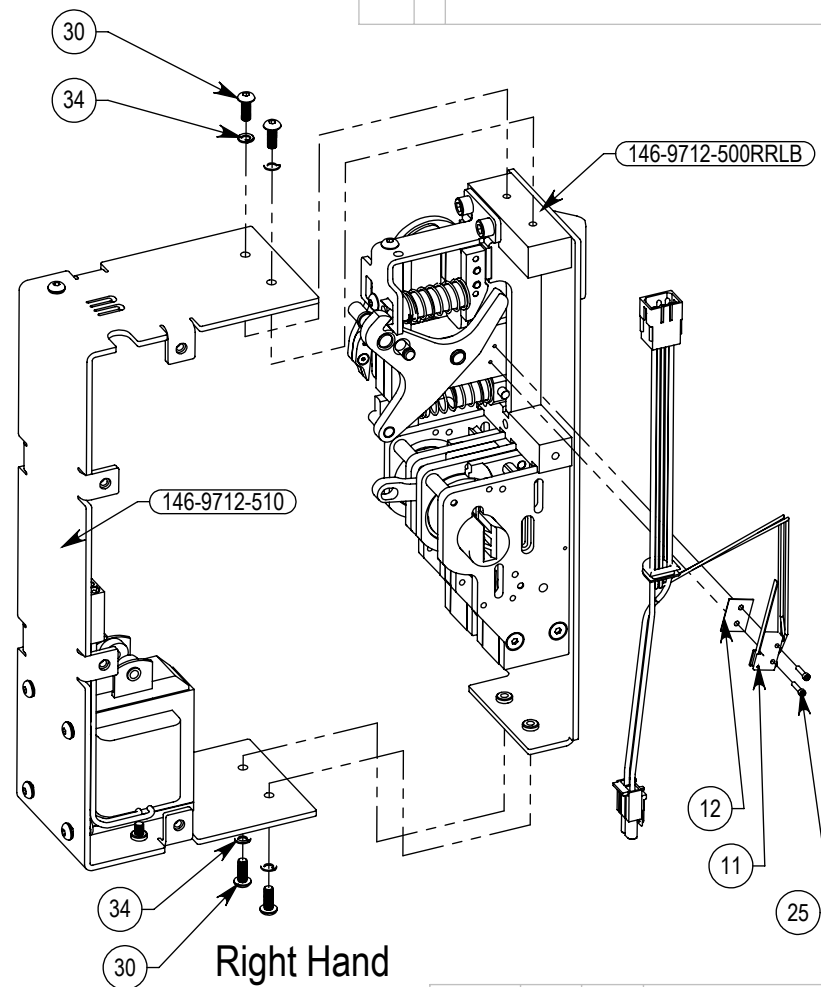
For Any Paracentric Keyed Lock Add the Following for
ELHB Functionality
(Left Hand, Keyed Stop Side Lock Shown)

DATE	NAME	AIR/TEQ
5/17/10	RLP	
DRAWN	CHECKED	TITLE:
		9712 PARACENTRIC KEYED LOCK
FINISH: NONE (SEE REFERENCED PARTS)	SIZE A	DWG. NO. 9712P
SCALE: 1:3		REV B
		SHEET 3 OF 7

REVISIONS				
ECN #	REV.	DESCRIPTION	DATE	APPROV.
	A	INITIAL RELEASE	4/29/2009	
	B	LOCK MODIFIED PER INITIAL TESTING	5/17/10	



Left Hand



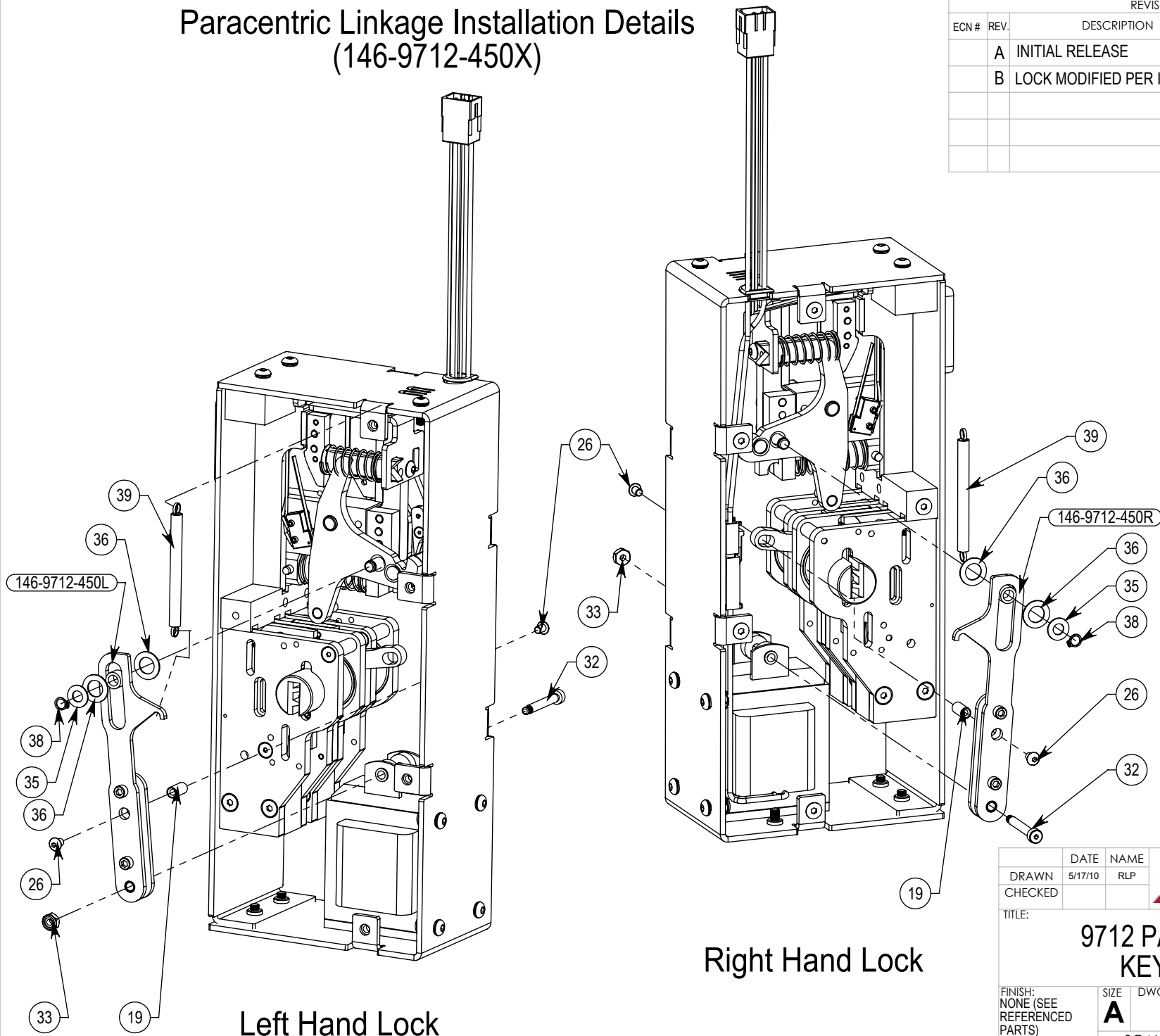
Right Hand

Lock Rear Housing & Wire Harness Limit Switch Attachment Detail

	DATE	NAME	
DRAWN	5/17/10	RLP	
CHECKED			
TITLE:			
9712 PARACENTRIC KEYED LOCK			
FINISH: NONE (SEE REFERENCED PARTS)	SIZE	DWG. NO.	REV
	A	9712P	B
SCALE: 1:4			SHEET 4 OF 7

Paracentric Linkage Installation Details (146-9712-450X)

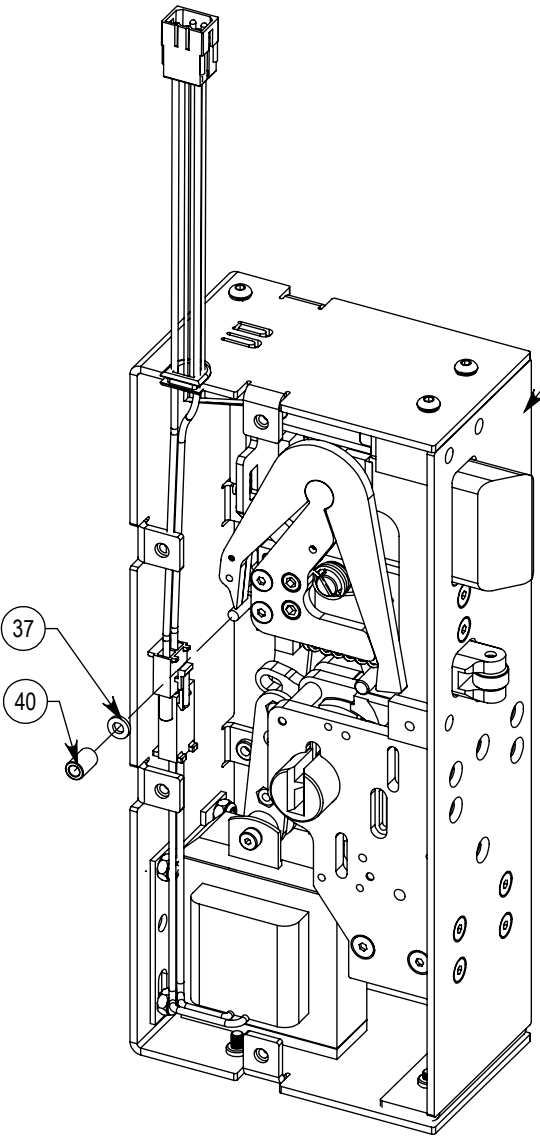
REVISIONS				
ECN #	REV.	DESCRIPTION	DATE	APPROV.
	A	INITIAL RELEASE	4/29/2009	
	B	LOCK MODIFIED PER INITIAL TESTING	5/17/10	



DATE		NAME	
DRAWN	5/17/10	RLP	
CHECKED			
TITLE:			9712 PARACENTRIC KEYED LOCK
FINISH: NONE (SEE REFERENCED PARTS)	SIZE A	DWG. NO. 9712P	REV B
SCALE: 1:3		SHEET 5 OF 7	

RLB Detail

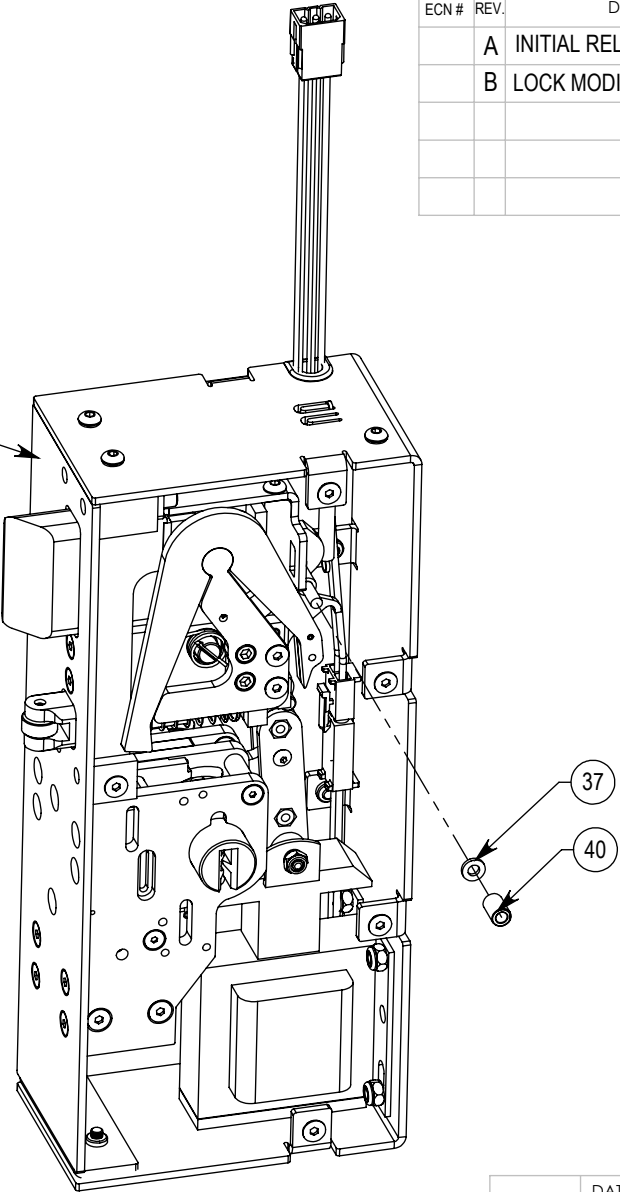
REVISIONS				
ECN #	REV.	DESCRIPTION	DATE	APPROV.
	A	INITIAL RELEASE	4/29/2009	
	B	LOCK MODIFIED PER INITIAL TESTING	5/17/10	



Left Hand Lock with RLB

146-9712-500RLB

146-9712-500RRLB

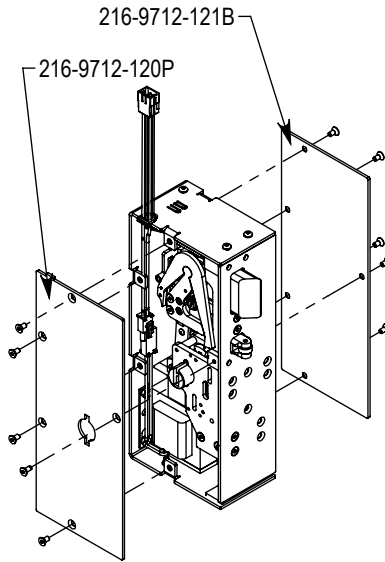


Right Hand Lock with RLB

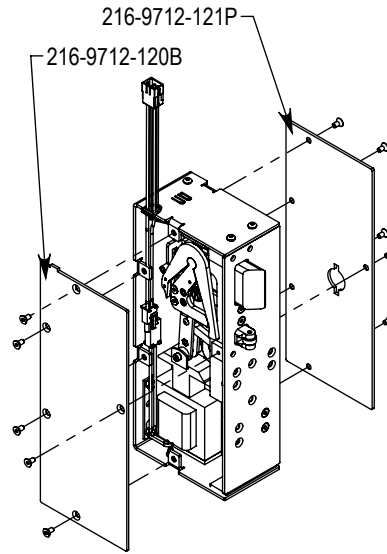
		DATE	NAME				
DRAWN	5/17/10	RLP					
CHECKED							
TITLE:							
9712 PARACENTRIC KEYED LOCK							
FINISH: NONE (SEE REFERENCED PARTS)		SIZE A	DWG. NO. 9712P			REV B	
SCALE: 1:3					SHEET 6 OF 7		

Lock Cover Details

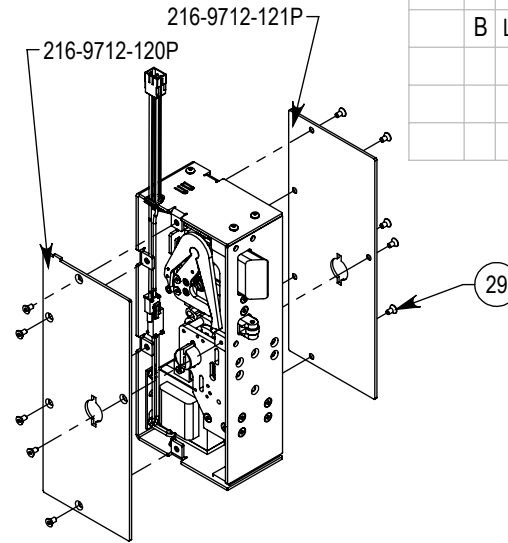
REVISIONS				
ECN #	REV.	DESCRIPTION	DATE	APPROV.
	A	INITIAL RELEASE	4/29/2009	
	B	LOCK MODIFIED PER INITIAL TESTING	5/17/10	



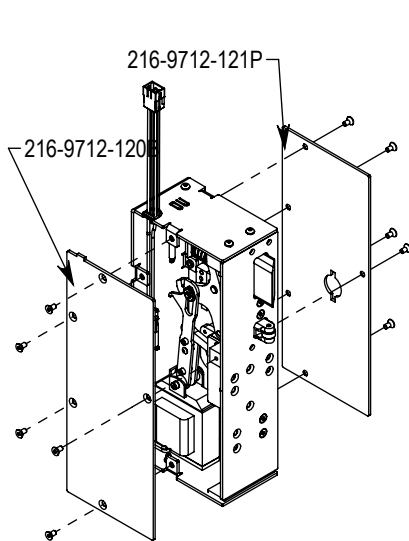
Left Hand Keyed
Hinge Side



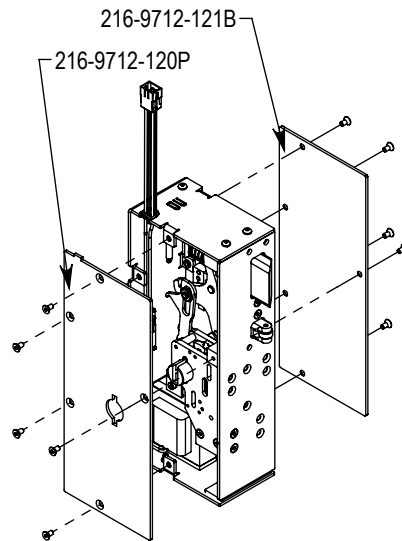
Left Hand Keyed
Stop Side



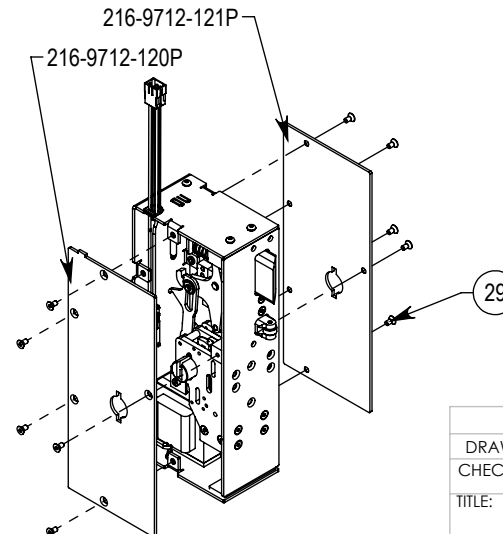
Left Hand Keyed
Both Sides



Right Hand
Keyed Hinge Side



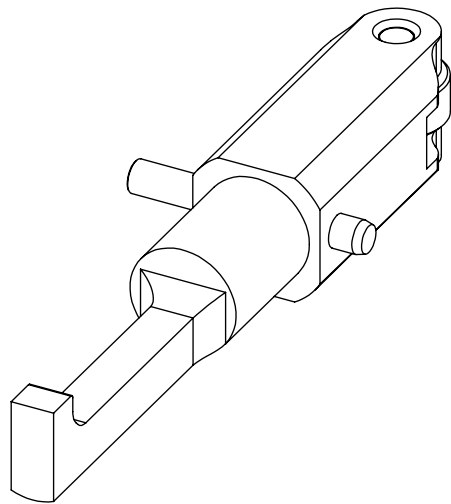
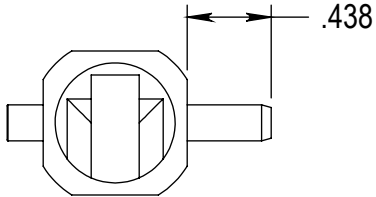
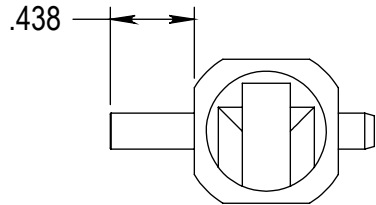
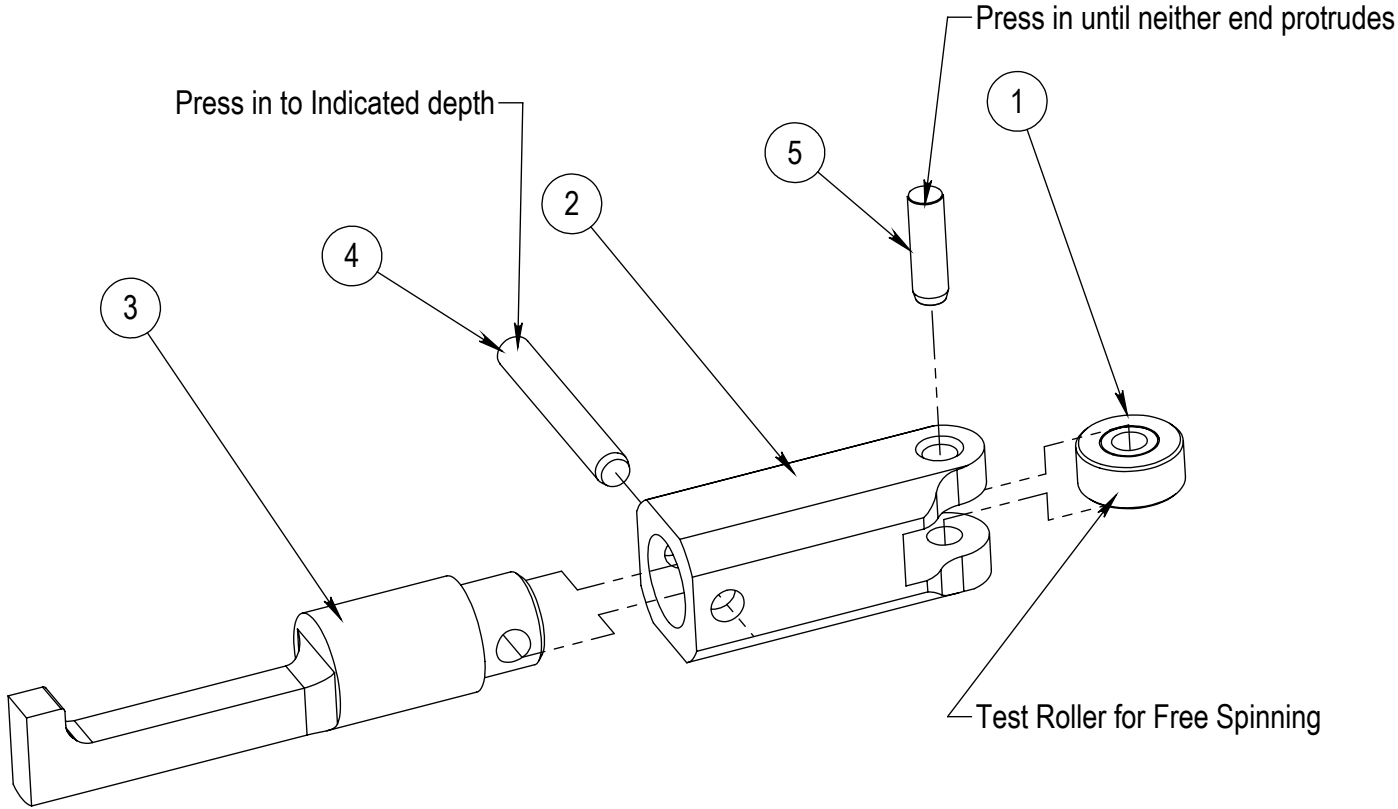
Right Hand
Keyed Stop Side



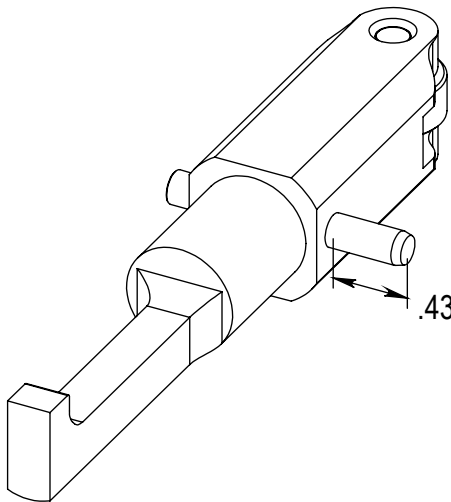
Right Hand
Keyed Both Sides

	DATE	NAME	
DRAWN	5/17/10	RLP	
CHECKED			
TITLE:			
9712 PARACENTRIC KEYED LOCK			
FINISH: NONE (SEE REFERENCED PARTS)	SIZE A	DWG. NO. 9712P	REV B
SCALE: 1:3		SHEET 7 OF 7	

1. THIS PART MUST CONFORM TO THE APPLICABLE REQUIREMENTS OUTLINED IN THE GENERAL NOTES



146-09712-040L
Left Hand

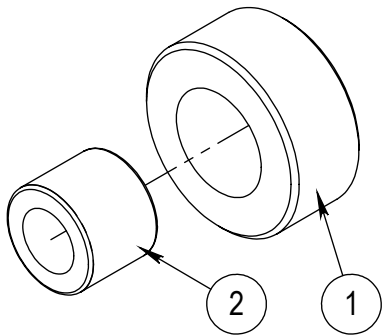


146-09712-040R
Right Hand

REVISIONS

ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED
		A	INITIAL RELEASE	4/30/2009	

ITEM NO.	PART NUMBER	DESCRIPTION	146-9712-040L/QTY.	146-9712-040R/QTY.
1	146-9600-049	ASSY, Deadlatch ROLLER	1	1
2	216-9700-101	ROLLER DEADLATCH BOLT	1	1
3	216-9712-210	DEAD LATCH CAM	1	1
4	316-0000-034	PIN, DOWEL, 3/16 X 1 3/8 LG, H&G	1	1
5	316-0000-055	DOWEL PIN, 3/16 X 5/8 LG, H & G	1	1

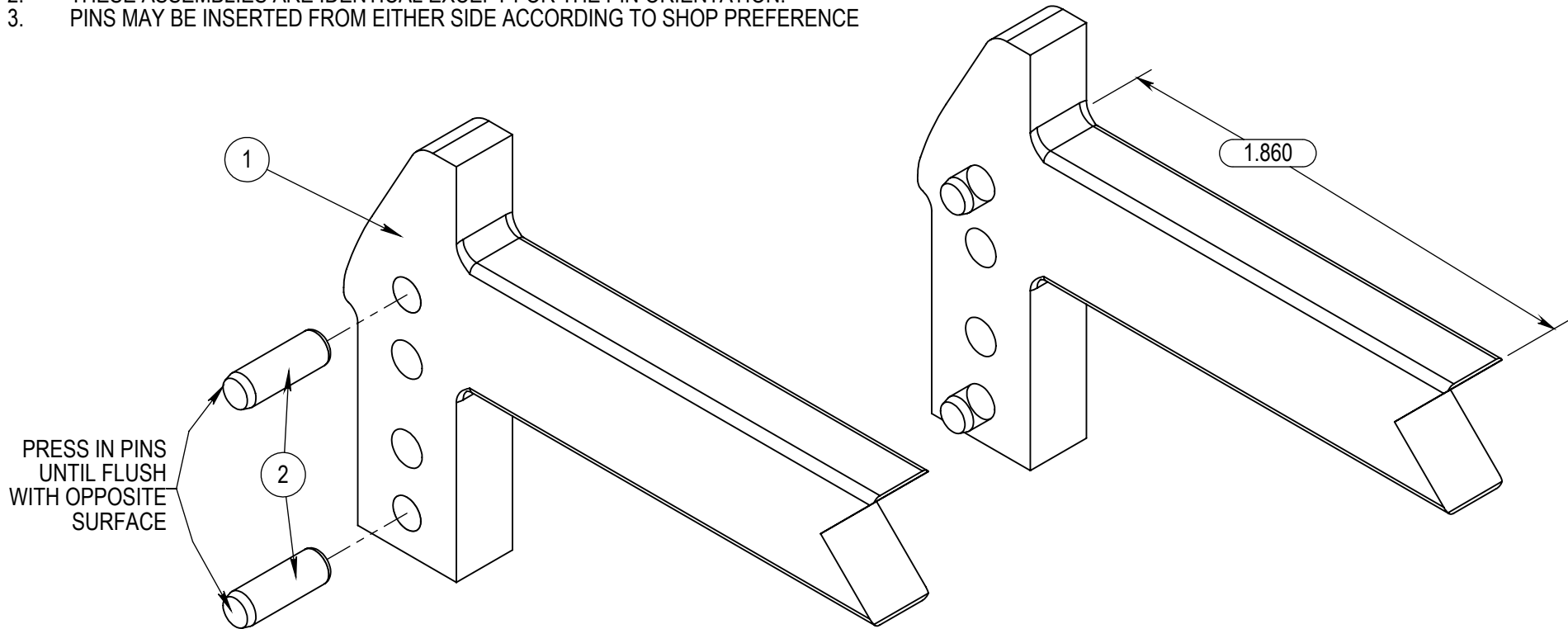


ITEM NO.	QTY.	PART NUMBER	DESCRIPTION
1	1	216-9600-142	Dead Latch ROLLER
2	1	317-0000-019	Bushing, 3/16"ID x .315"OD x .25"Len, Berg 6-5 or Eq.

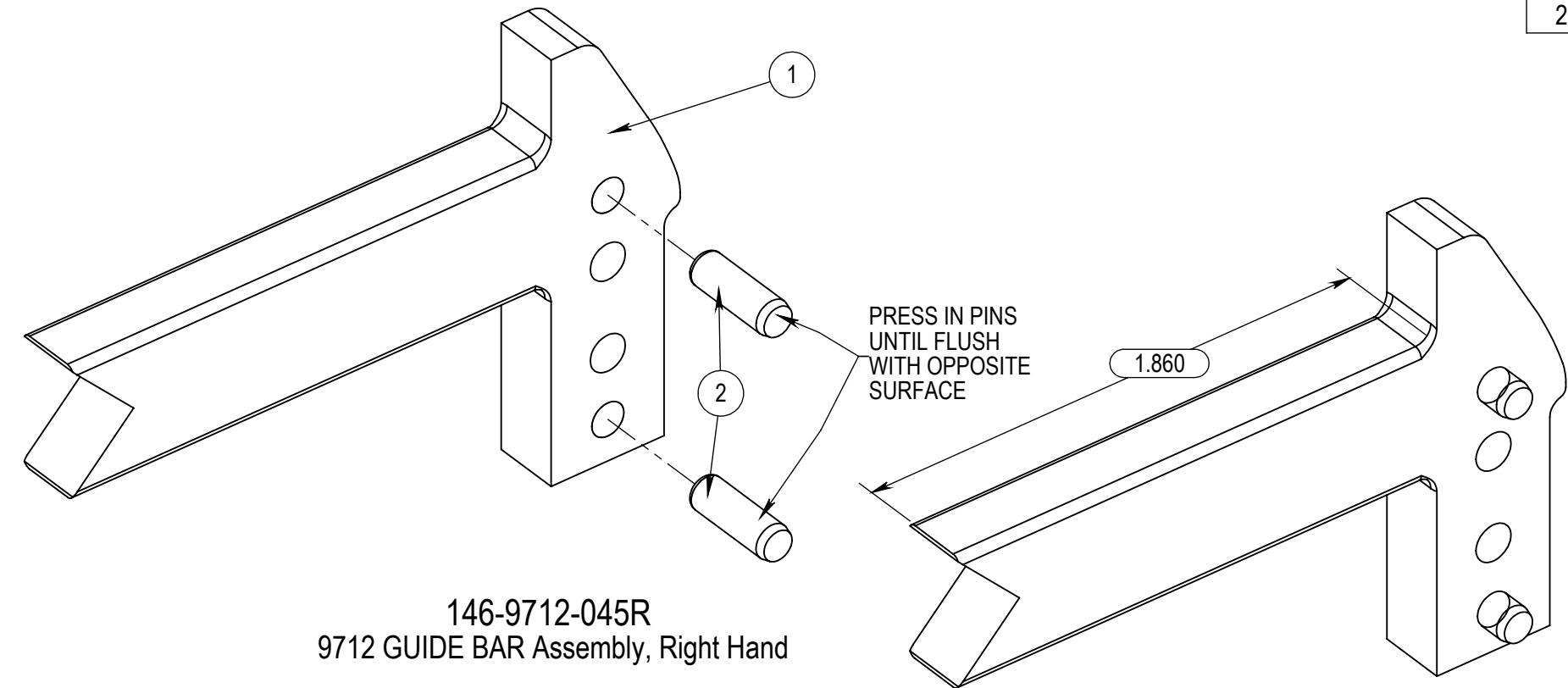
146-9600-049 Deadlatch Roller Assembly Detail

PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AIRTEQ . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AIRTEQ IS PROHIBITED. UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005 INTERPRET GEOMETRIC TOLERANCING PER:	DRAWN	DATE	NAME	 TITLE: 9712 ROLLER BOLT ASSEMBLY	
	CHECKED	4/30/2009	JVF		
	MATERIAL:				
	FINISH: NONE (SEE REFERENCED PARTS)			SIZE B	DWG. NO. 146-9712-040X
				SCALE: 1:1	WEIGHT: SHEET 1 OF 1

1. THIS PART MUST CONFORM TO THE APPLICABLE REQUIREMENTS OUTLINED IN THE GENERAL NOTES
2. THESE ASSEMBLIES ARE IDENTICAL EXCEPT FOR THE PIN ORIENTATION.
3. PINS MAY BE INSERTED FROM EITHER SIDE ACCORDING TO SHOP PREFERENCE



146-9712-045L
9712 GUIDE BAR Assembly, Left Hand

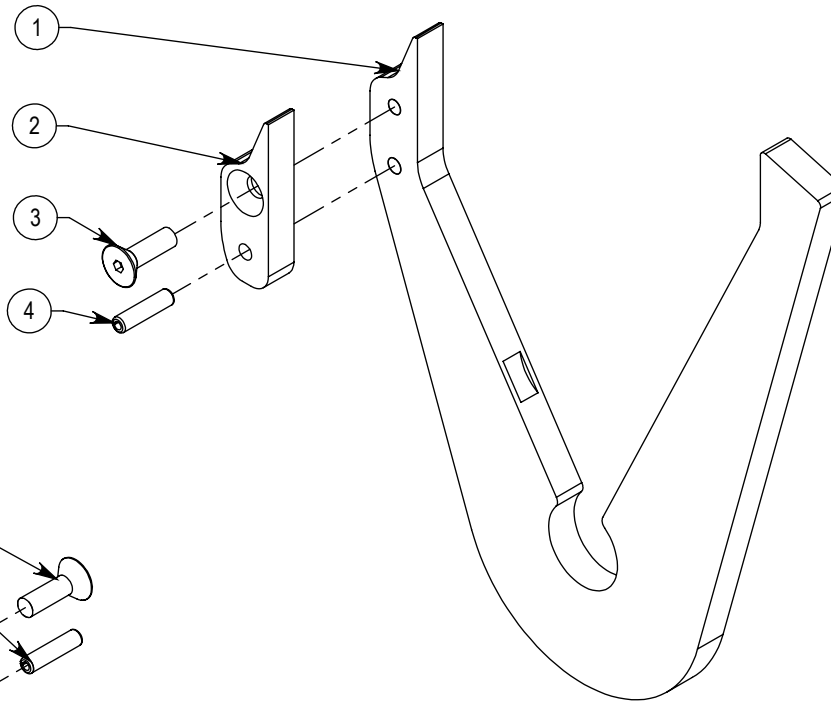


146-9712-045R
9712 GUIDE BAR Assembly, Right Hand

REVISIONS					
ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED

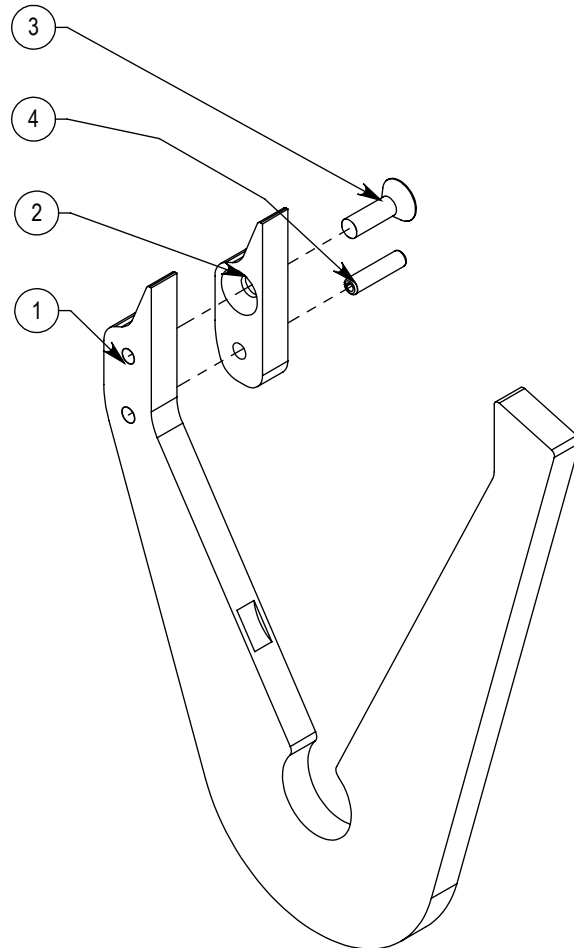
f	PART NUMBER	DESCRIPTION	146-9712-045R/QTY.	146-9712-045L/QTY.
1	216-9712-106	9712 GUIDE BAR	1	1
2	316-0000-031	DOWEL PIN, 1/8 X 3/8 LG, H&G	2	2

PROPRIETARY AND CONFIDENTIAL		DATE	NAME			
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AIRTEQ . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AIRTEQ IS PROHIBITED.		DRAWN	4/26/10	RLP	TITLE: 9712 GUIDE BAR Assembly See Detail for LH & RH	
		CHECKED				
		MATERIAL:				
UNLESS OTHERWISE SPECIFIED:					SIZE DWG. NO. REV B 146-9712-045X	
DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005		FINISH:				
INTERPRET GEOMETRIC TOLERANCING PER:		SCALE: 2:1 WEIGHT: SHEET 1 OF 1				



146-9712-301L
RLB Pawl Assembly Left

REVISIONS				
ECN #	REV.	DESCRIPTION	DATE	APPROV.
	A	Initial Release	4/21/10	



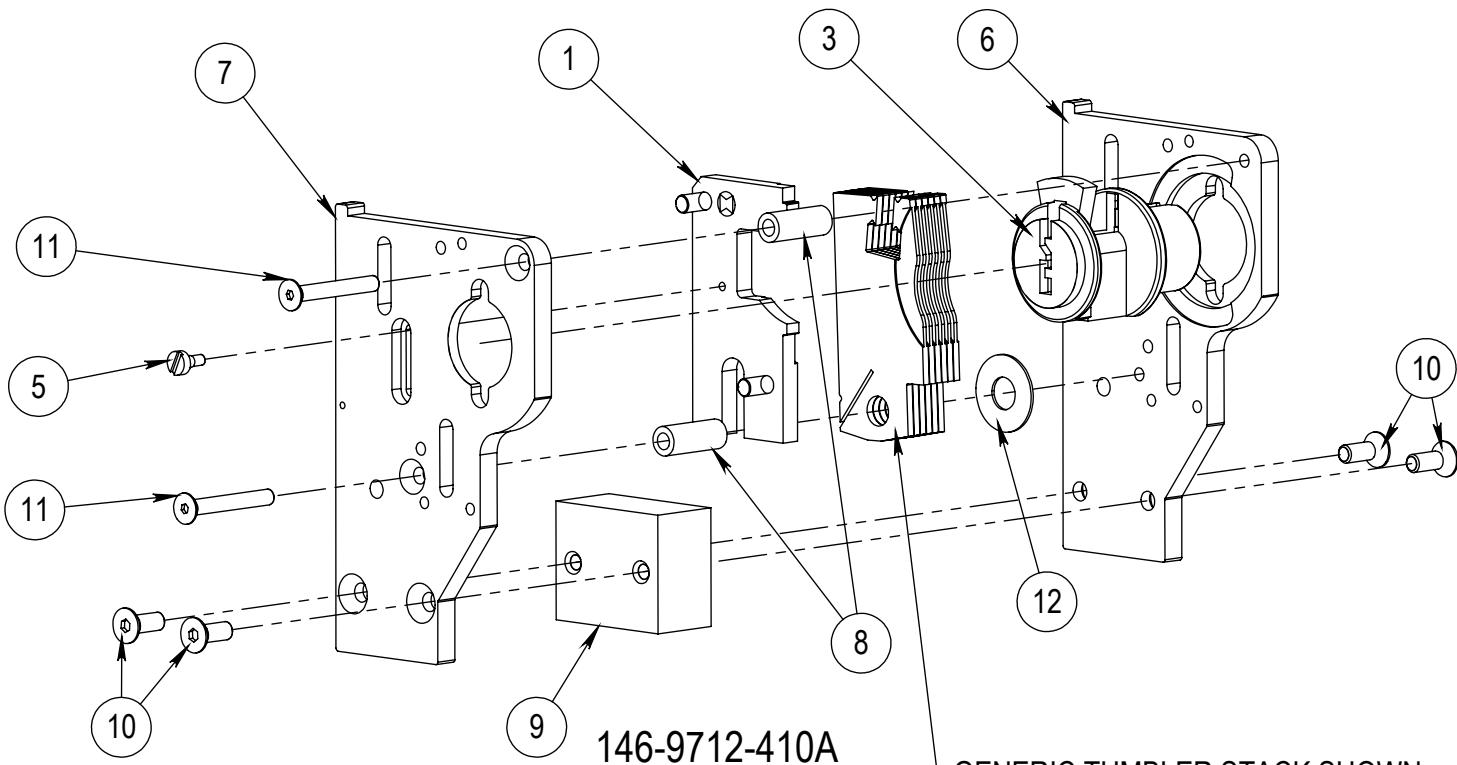
146-9712-301R
RLB Pawl Assembly Right

ITEM NO.	PART NUMBER	DESCRIPTION	146-9712-301R/QTY.	146-9712-301L/QTY.
1	216-9712-301	9712 RLB Pawl	1	1
2	216-9712-302	9712 RLB Pawl Suppliment	1	1
3	310-0440-016	SCREW FHCS, 4-40 X 3/8 Zinc Plated	1	1
4	316-0000-058	PIN, ROLL, 3/32 X 3/8 LG	1	1

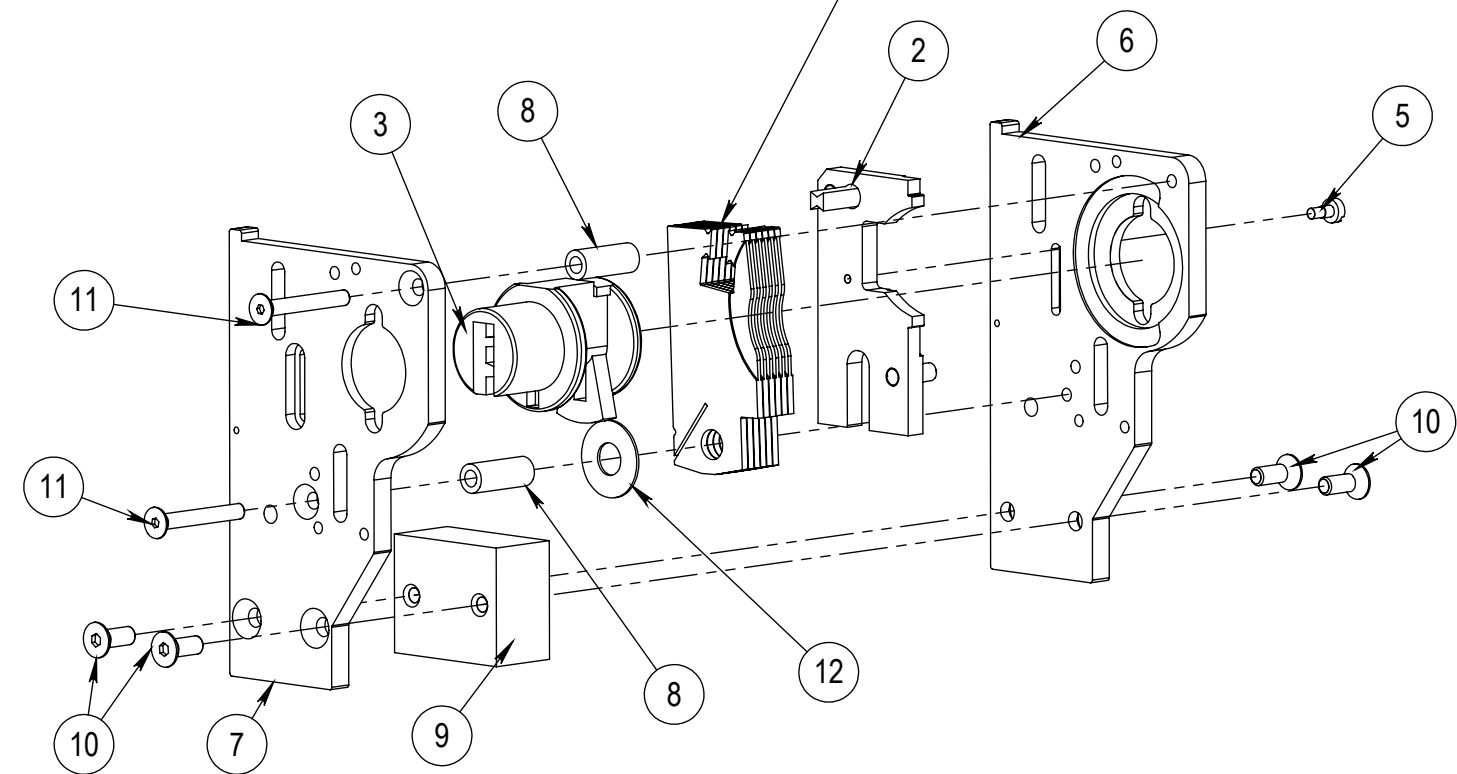
DATE		NAME	
4/21/10		RLP	
DRAWN		CHECKED	
TITLE:			
RLB Pawl Assembly			
FINISH:		SIZE	DWG. NO.
		A	146-9712-301X
		REV	A
SCALE: 1:1		SHEET 1 OF 1	



1. THIS PART MUST CONFORM TO THE APPLICABLE REQUIREMENTS OUTLINED IN THE GENERAL NOTES



GENERIC TUMBLER STACK SHOWN,
TUMBLER STACK QUANTITY &
TUMBLER P/N DEPENDENT UPON
KEY CODE



146-9712-410B

REVISIONS

ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED
		A	INITIAL RELEASE	4/20/2009	
		B	Added 313-7300-003 Spacing Washer & Rev B 150-9712-420X Slide Weldment	10/20/10	

ITEM NO.	146-9712-410A/QTY.	146-9712-410B/QTY.	PART NUMBER	DESCRIPTION
1	1	-	150-9712-420A	PARACENTRIC CAM FOLLOWER, SIDE A
2	-	1	150-9712-420B	PARACENTRIC CAM FOLLOWER, SIDE B
3	1	1	216-5001-002	KEY CYLINDER, "B" KEYWAY
4	6	6	216-5016-008	TUMBLER 1
5	1	1	216-9712-409	Shldr Screw, Low Profile, Slot Head, 1/8" Dia x1/8" Len Shldr x 4-40 Thread McM #99154A330 or Eq.
6	1	1	216-9712-411	FRONT PLATE PARACENTRIC KEYLOCK
7	1	1	216-9712-412	PARACENTRIC KEYLOCK BACK PLATE
8	2	2	216-9712-414	PARACENTRIC KEYLOCK STANDOFF
9	1	1	216-9712-415	PARACENTRIC KEYLOCK MOUNT BLOCK
10	4	4	310-0000-009	SCREW, FH, SOC., 10-32 X 1/2
11	2	2	310-0832-029	SCREW FH 8-32 X 1 1/4 BLACK
12	1	1	313-9712-003	WASHER, .344"ID, .813"OD, .031" Thk, Steel, McMaster #3088A793 or eq.

PROPRIETARY AND CONFIDENTIAL

THE INFORMATION CONTAINED IN THIS
DRAWING IS THE SOLE PROPERTY OF
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OR AS A WHOLE WITHOUT THE WRITTEN
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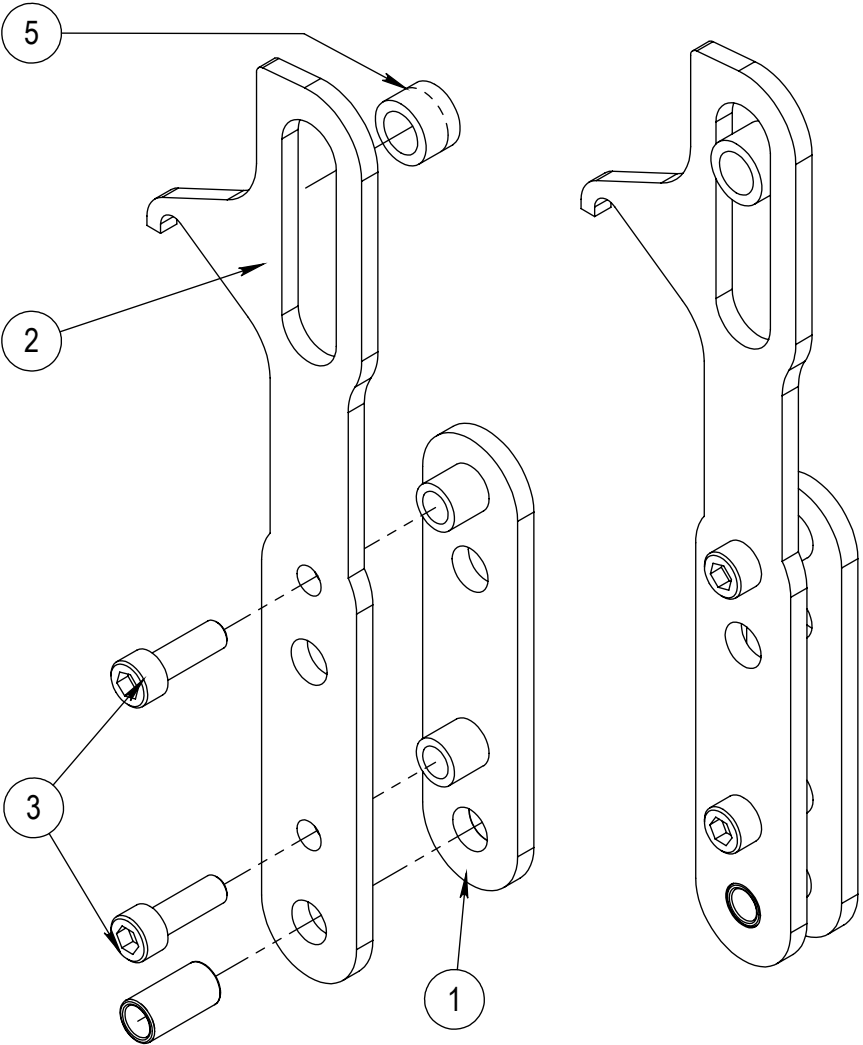
UNLESS OTHERWISE SPECIFIED:

DIMENSIONS ARE IN INCHES
TOLERANCES:
ANGULAR: ± 1
TWO PLACE DECIMAL $\pm .015$
THREE PLACE DECIMAL $\pm .005$

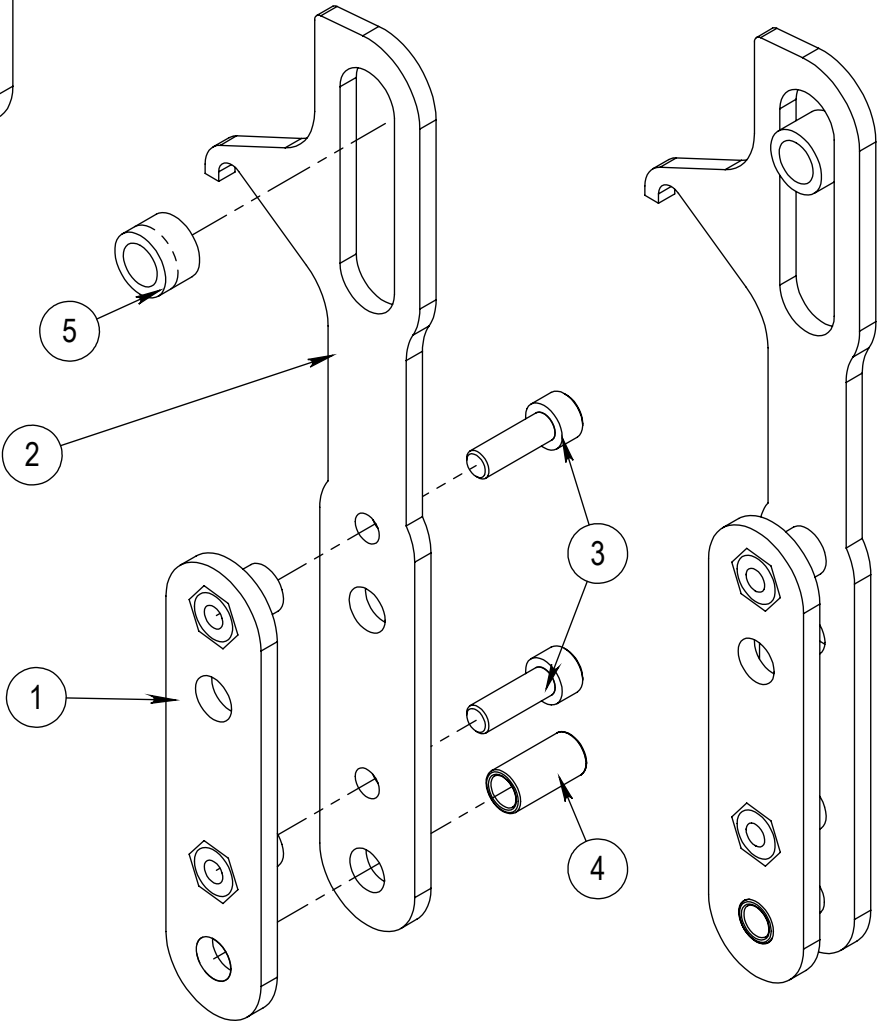
INTERPRET GEOMETRIC
TOLERANCING PER:

	DATE	NAME	 TITLE: PARACENTRIC KEYLOCK ASSEMBLY		
DRAWN	4/20/2009	JVF			
CHECKED					
MATERIAL: -			SIZE B DWG. NO. 146-9712-410X REV B		
FINISH: NONE (SEE REFERENCED PARTS)					
SCALE: 1:2					

1. THIS PART MUST CONFORM TO THE APPLICABLE REQUIREMENTS OUTLINED IN THE GENERAL NOTES



146-9712-450R

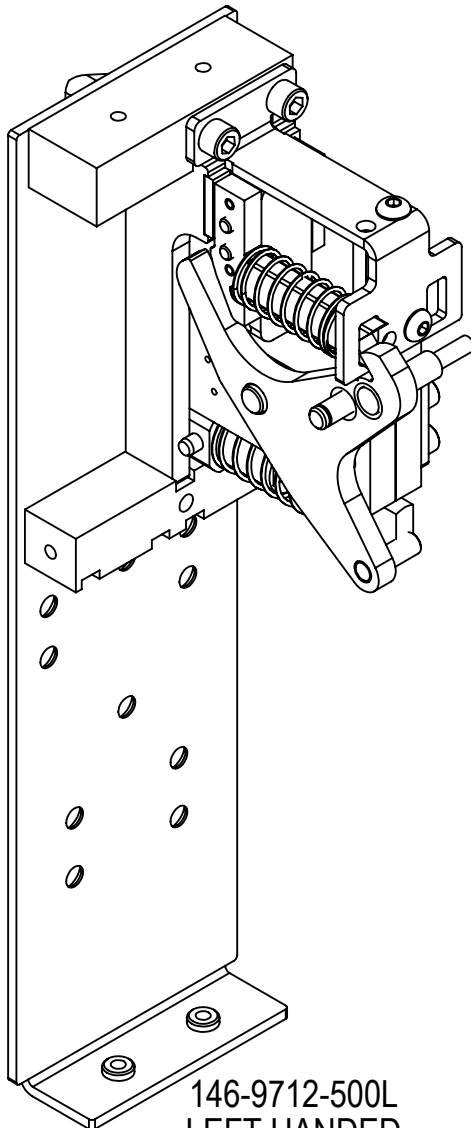
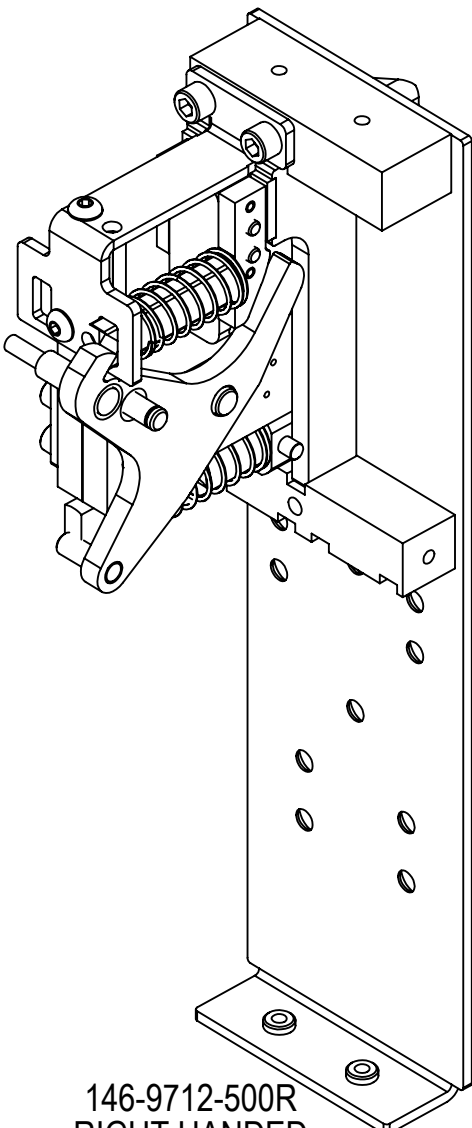


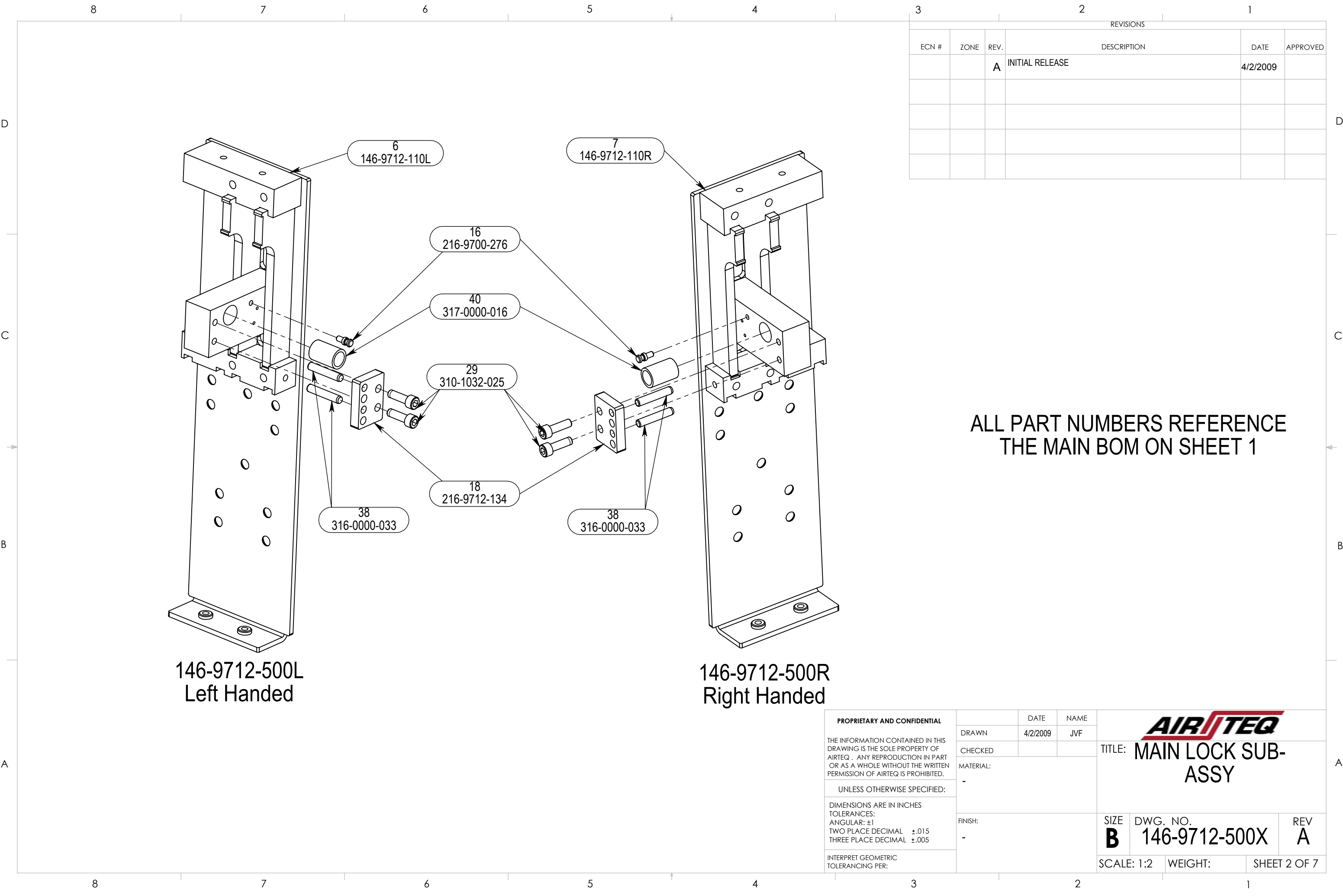
146-9712-450L

REVISIONS					
ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED
		A	INITIAL RELEASE	5/12/2009	
		B	Added bushings, additional changes to part geometry	5/12/10	

ITEM NO.	QTY	PART NUMBER	DESCRIPTION
1	1	146-9712-431	PARACENTRIC, SECONDARY PULL BAR ASSY
2	1	216-9712-433	MAIN PARACENTRIC PULL BAR
3	2	310-0832-009	SCREW, SHCS 8-32 X 1/2
4	1	317-9712-002	Bronze Bushing, 3/16"ID x .25"OD x .5"Len McMaster 6391K124 or eq.
5	1	317-9712-003	Nylon Sleeve Bearing, .25"ID x .375"OD x .25"Len, McMaster 6389K352 or eq.

PROPRIETARY AND CONFIDENTIAL		DATE	NAME	 TITLE: PARACENTRIC LINKAGE ASSY.			
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AIRTEQ . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AIRTEQ IS PROHIBITED.		DRAWN	5/12/2009				JVF
		CHECKED					
UNLESS OTHERWISE SPECIFIED:		MATERIAL:		REV B			
DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005		-					
		FINISH: NONE (SEE REFERENCED PARTS)					
INTERPRET GEOMETRIC TOLERANCING PER:		SIZE B		DWG. NO. 146-9712-450X			
				SCALE: 1:1		WEIGHT:	
						SHEET 1 OF 1	

1. THIS PART MUST CONFORM TO THE APPLICABLE REQUIREMENTS OUTLINED IN THE GENERAL NOTES							3					2		1																																																																
2. UNLESS OTHERWISE NOTED: USE APPROPRIATE THREAD-LOCKING ADHESIVE ON ALL FASTENERS							<table><tr><th colspan="6">REVISIONS</th></tr><tr><th>ECN #</th><th>ZONE</th><th>REV.</th><th>DESCRIPTION</th><th>DATE</th><th>APPROVED</th></tr><tr><td></td><td></td><td>A</td><td>INITIAL RELEASE</td><td>4/2/2009</td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr><tr><td></td><td></td><td></td><td></td><td></td><td></td></tr></table>									REVISIONS						ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED			A	INITIAL RELEASE	4/2/2009																																														
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ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED																																																																									
		A	INITIAL RELEASE	4/2/2009																																																																										
ITEM NO.	PART NUMBER	DESCRIPTION	146-9712-500L QTY	146-9712-500LRLB QTY	146-9712-500R QTY	146-9712-500RRLB QTY	 146-9712-500L LEFT HANDED  146-9712-500R RIGHT HANDED <table><tr><td colspan="4">PROPRIETARY AND CONFIDENTIAL</td><td colspan="2">DATE</td><td colspan="2">NAME</td></tr><tr><td colspan="2">DRAWN</td><td colspan="2">4/2/2009</td><td colspan="2">JVJ</td><td colspan="2" rowspan="3">TITLE: MAIN LOCK SUB-ASSY</td></tr><tr><td colspan="2">CHECKED</td><td colspan="2"></td><td colspan="2"></td></tr><tr><td colspan="2">MATERIAL:</td><td colspan="2"></td><td colspan="2"></td></tr><tr><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td><td colspan="2" rowspan="3">SIZE B DWG. NO. 146-9712-500X REV A</td></tr><tr><td colspan="2">FINISH:</td><td colspan="2"></td><td colspan="2"></td></tr><tr><td colspan="2"></td><td colspan="2"></td><td colspan="2"></td></tr><tr><td colspan="4">DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005</td><td colspan="4">SCALE: 1:2 WEIGHT: SHEET 1 OF 7</td></tr><tr><td colspan="4">INTERPRET GEOMETRIC TOLERANCING PER:</td><td colspan="4"></td></tr></table>								PROPRIETARY AND CONFIDENTIAL				DATE		NAME		DRAWN		4/2/2009		JVJ		TITLE: MAIN LOCK SUB-ASSY		CHECKED						MATERIAL:												SIZE B DWG. NO. 146-9712-500X REV A		FINISH:												DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005				SCALE: 1:2 WEIGHT: SHEET 1 OF 7				INTERPRET GEOMETRIC TOLERANCING PER:							
PROPRIETARY AND CONFIDENTIAL				DATE		NAME																																																																								
DRAWN		4/2/2009		JVJ		TITLE: MAIN LOCK SUB-ASSY																																																																								
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DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005				SCALE: 1:2 WEIGHT: SHEET 1 OF 7																																																																										
INTERPRET GEOMETRIC TOLERANCING PER:																																																																														
1	146-9712-040L	Roller Bolt Assembly, 9712, Left Hand	1	1	-	-																																																																								
2	146-9712-040R	Roller Bolt Assembly, 9712, Right Hand	-	-	1	1																																																																								
3	146-9712-045L	9712 GUIDE BAR Assembly, Left Hand	1	1	-	-																																																																								
4	146-9712-045R	9712 GUIDE BAR Assembly, Right Hand	-	-	1	1																																																																								
5	146-9712-047	Latch Bolt Bevel Side Bumper Assembly	1	1	1	1																																																																								
6	146-9712-110L	SIDE HOUSING L.H. PEM ASSY.	1	1	-	-																																																																								
7	146-9712-110R	SIDE HOUSING R.H. PEM ASSY.	-	-	1	1																																																																								
8	146-9712-301L	RLB Pawl Assembly Left	-	1	-	-																																																																								
9	146-9712-301R	RLB Pawl Assembly Right	-	-	-	1																																																																								
10	150-9712-107L	ASSY, ACTUATOR CAM (LEFT)	1	1	-	-																																																																								
11	150-9712-107R	ASSY, ACTUATOR CAM (RIGHT)	-	-	1	1																																																																								
12	150-9712-150L	RLB PIVOT WELDMENT, FOR 9712 (L.H.)	-	1	-	-																																																																								
13	150-9712-150R	RLB PIVOT WELDMENT FOR 9712 (R.H.)	-	-	-	1																																																																								
14	216-9700-122	LATCHBOLT	1	1	1	1																																																																								
15	216-9700-271	TORSION SPRING, ACTUATOR CAM	1	1	1	1																																																																								
16	216-9700-276	ANCHOR PIN, TORSION SPRING	1	1	1	1																																																																								
17	216-9712-108	Front Bumper Pad, Latch Bolt	1.5	1.5	1.5	1.5																																																																								
18	216-9712-134	BOLT BOSS EXTENSION	1	1	1	1																																																																								
19	216-9712-136L	L.H. REAR LATCH SUPPORT BAR	1	1	-	-																																																																								
20	216-9712-136R	R.H. REAR LATCH SUPPORT BAR	-	-	1	1																																																																								
21	216-9712-137L	L.H. FRONT LATCH SUPPORT BAR	1	1	-	-																																																																								
22	216-9712-137R	R.H. FRONT LATCH SUPPORT BAR	-	-	1	1																																																																								
23	216-9712-145	BOLT GUIDE Top Support	1	1	1	1																																																																								
24	216-9712-146	Rear Bumper Pad, Latch Bolt	1.875	1.875	1.875	1.875																																																																								
25	310-0832-018	SCREW, SHCS, 8-32 X 1.00	2	2	2	2																																																																								
26	310-0832-029	SCREW FH 8-32 X 1 1/4 BLACK	2	2	2	2																																																																								
27	310-1032-007	SCREW, SHCS, 10-32 X 1	2	-	2	-																																																																								
28	310-1032-018	SCREW FH SOC 10-32X1 1/4 W/NYLOX PA	-	2	-	2																																																																								
29	310-1032-025	SCREW, SHCS, 10-32 X 5/8, Black Oxide	2	2	2	2																																																																								
30	310-1032-030	SCREW BHCS 10-32X1/2 W/NYLOX PATCH	2	2	2	2																																																																								
31	310-2520-035	SCREW, SHCS, 1/4-20 X .500, BLK	2	2	2	2																																																																								
32	313-0000-070	WASHER, .384IDx.564ODx.030 Steel, SEASTROM #5702-133-30	1	1	1	1																																																																								
33	313-0000-077	WASHER, Nylon,.38 ID X .68 OD X .031	1	1	1	1																																																																								
34	315-0000-013	RETAINING RING, ROTO CLIP SH-37STPA	1	1	1	1																																																																								
35	315-0000-015	SPRING, (LATCHBOLT) CENTURY #S-64	1	1	1	1																																																																								
36	315-0000-016	SPRING (DEADLATCH) CENTURY #10602	1	1	1	1																																																																								
37	315-0000-061	SPRING CENTURY # O-56 OR EQUIV.	-	1	-	1																																																																								
38	316-0000-033	PIN, DOWEL, 3/16 X 1 LG, H&G	2	2	2	2																																																																								
39	316-0000-087	DOWEL PIN, 3/32 X 3/8 LG, H&G	-	1	-	1																																																																								
40	317-0000-016	3/8"ID, 1/2"OD, 3/4" Length, BUSHING, BRONZE	1	1	1	1																																																																								



REVISIONS					
ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED
		A	INITIAL RELEASE	4/2/2009	

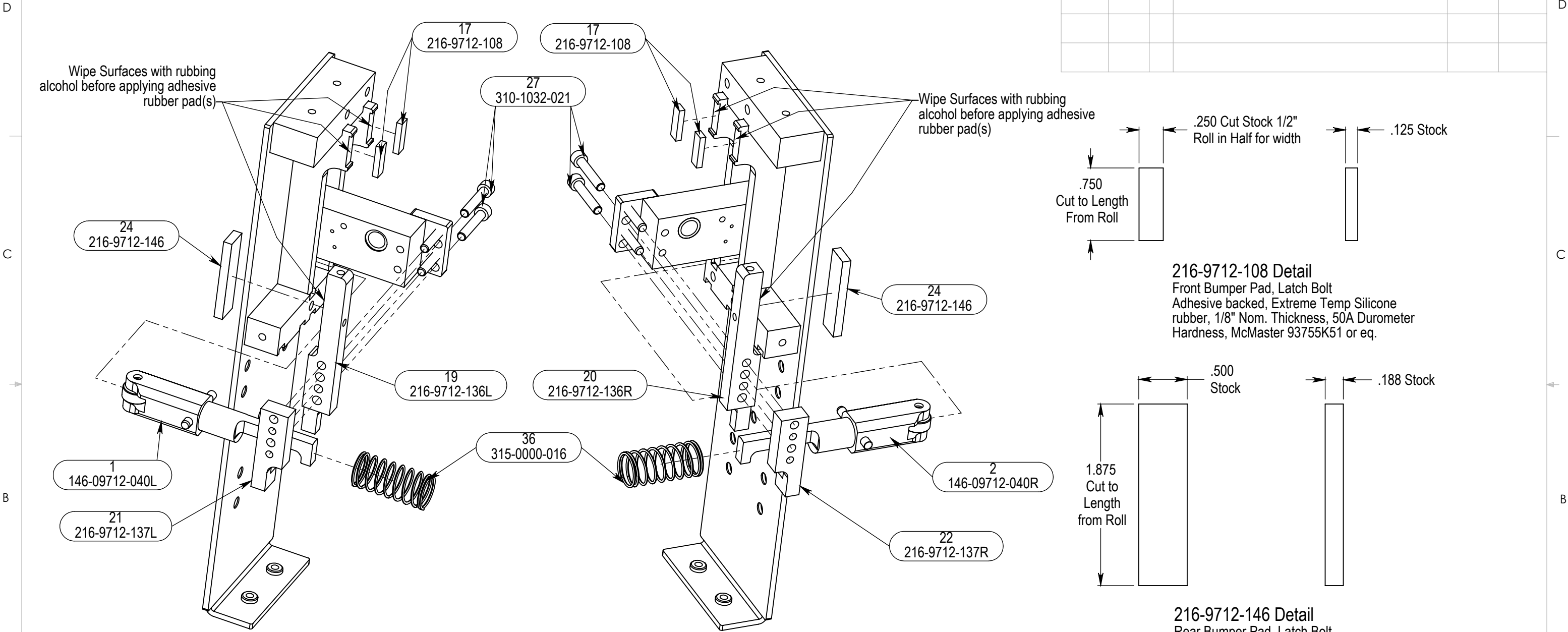
ALL PART NUMBERS REFERENCE
THE MAIN BOM ON SHEET 1

PROPRIETARY AND CONFIDENTIAL THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AIRTEQ . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AIRTEQ IS PROHIBITED. UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005 INTERPRET GEOMETRIC TOLERANCING PER:		DATE	NAME	 TITLE: MAIN LOCK SUB-ASSY	
		DRAWN	JVF		
		CHECKED			
		MATERIAL:	-		
		FINISH:	-	SIZE	DWG. NO.
				B	146-9712-500X
				REV	A
		SCALE: 1:2	WEIGHT:	SHEET 2 OF 7	

1: FOR LOCKS WITHOUT RLB USE THIS ASSEMBLY STEP

FOR LOCKS WITH RLB USE NEXT PAGE ASSEMBLY STEP

REVISIONS					
ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED
		A	INITIAL RELEASE	4/2/2009	



146-9712-500L
Left Handed

146-9712-500R
Right Handed

ALL PART NUMBERS REFERENCE
THE MAIN BOM ON SHEET 1

PROPRIETARY AND CONFIDENTIAL		DATE	NAME					
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AIRTEQ . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AIRTEQ IS PROHIBITED.		DRAWN	4/2/2009	JVF				
		CHECKED						
UNLESS OTHERWISE SPECIFIED:		MATERIAL:			TITLE: MAIN LOCK SUB-ASSY			
		-						
DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005		FINISH:			SIZE	DWG. NO.	REV	
					B	146-9712-500X	A	
INTERPRET GEOMETRIC TOLERANCING PER:					SCALE: 1:2		WEIGHT:	SHEET 3 OF 7

1: FOR LOCKS WITH RLB: USE THIS ASSEMBLY STEP (note install latch bolt assembly (sheet 5 before attaching 150-9712-150X)

			REVISIONS		
ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED
		A	INITIAL RELEASE	4/2/2009	

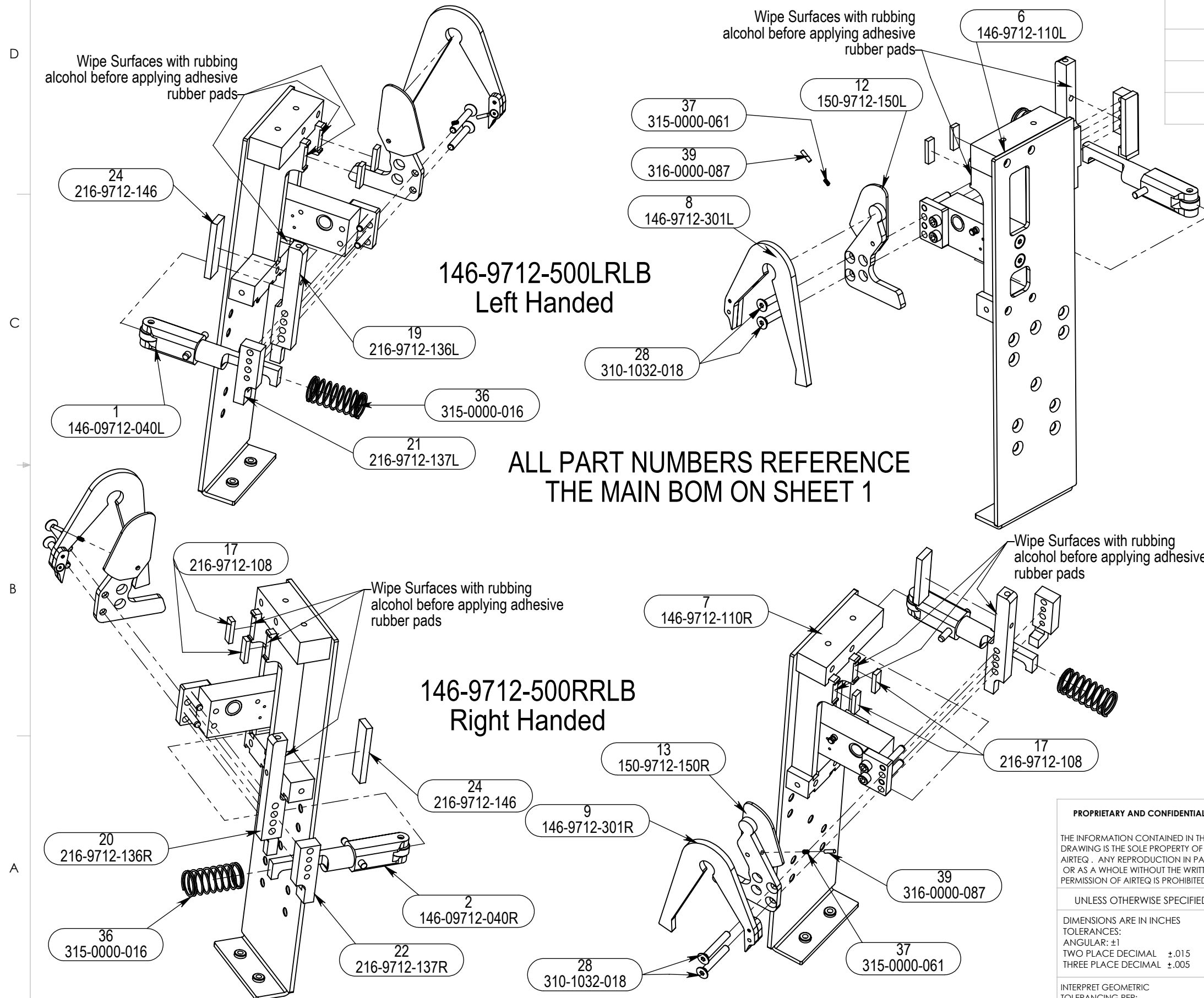


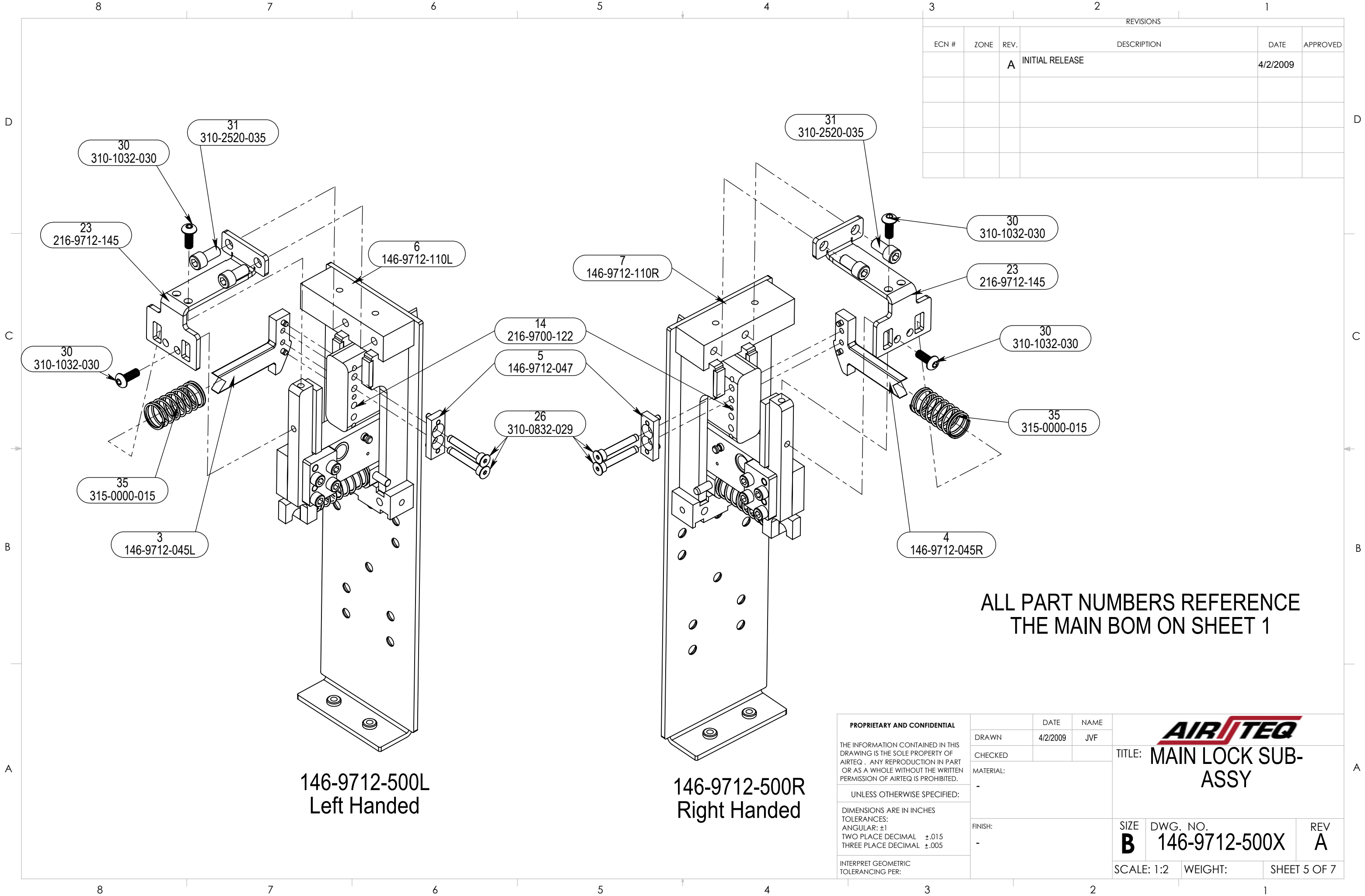
Diagram illustrating the width of the stock and the cut roll:

- Stock width: .125
- Cut roll width: .250 (labeled "Cut Roll in Half for width")
- Label: "Cut to Length From Roll"

216-9712-108 Detail
Front Bumper Pad, Latch Bolt
Adhesive backed, Extreme Temp Silicone
rubber, 1/8" Nom. Thickness, 50A Durometer
Hardness, McMaster 93755K51 or eq.

216-9712-146 Detail
Rear Bumper Pad, Latch Bolt
Adhesive Backed, Extreme Temp Silicone
Rubber, 50A Durometer Hardness, 1/2" Wide x
3/16" Thick, McMaster 93755K71 or Eq.

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	DRAWN	4/2/2009	JVF		
	CHECKED				
	MATERIAL: -				
	FINISH: -	SIZE B		DWG. NO. 146-9712-500X	REV A
		SCALE: 1:3		WEIGHT:	SHEET 4 OF 7



REVISIONS					
ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED
		A	INITIAL RELEASE	4/2/2009	

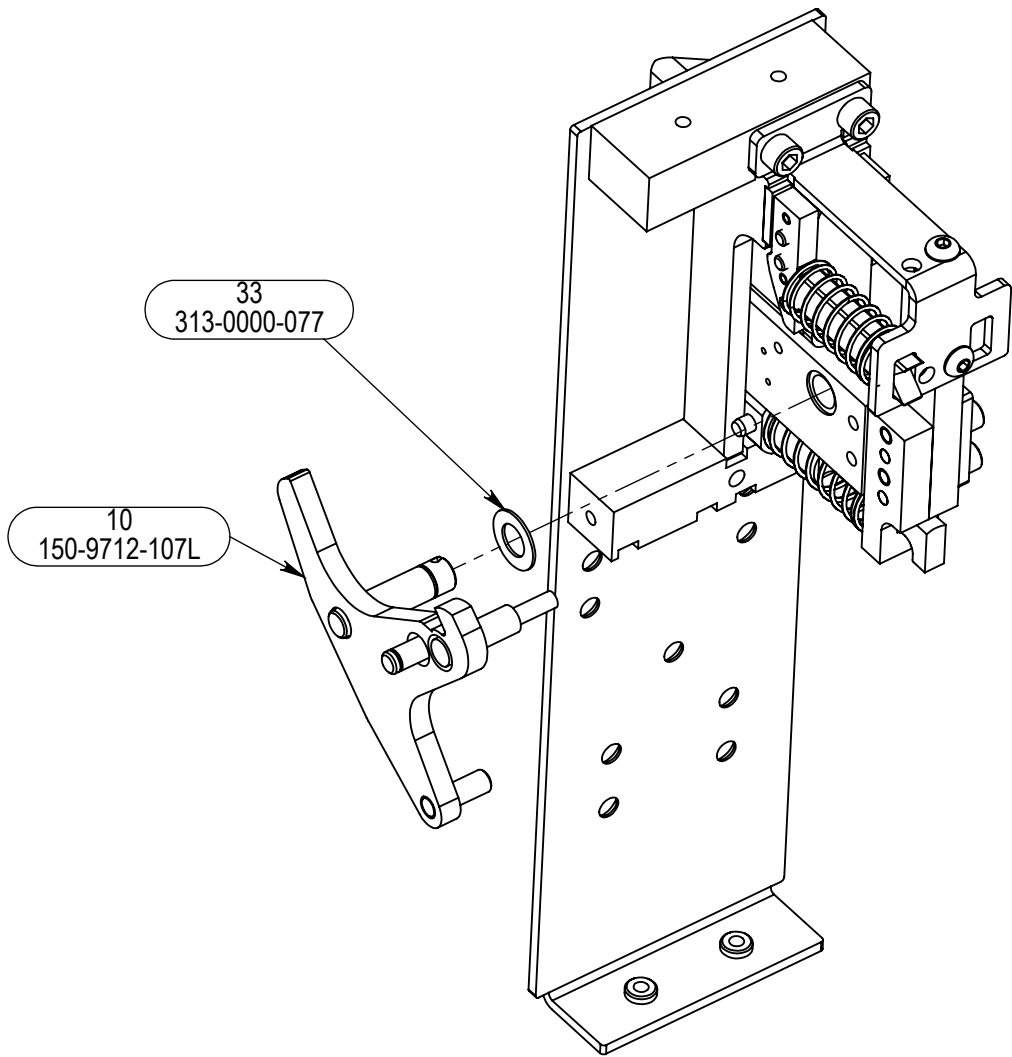
ALL PART NUMBERS REFERENCE
THE MAIN BOM ON SHEET 1

146-9712-500L
Left Handed

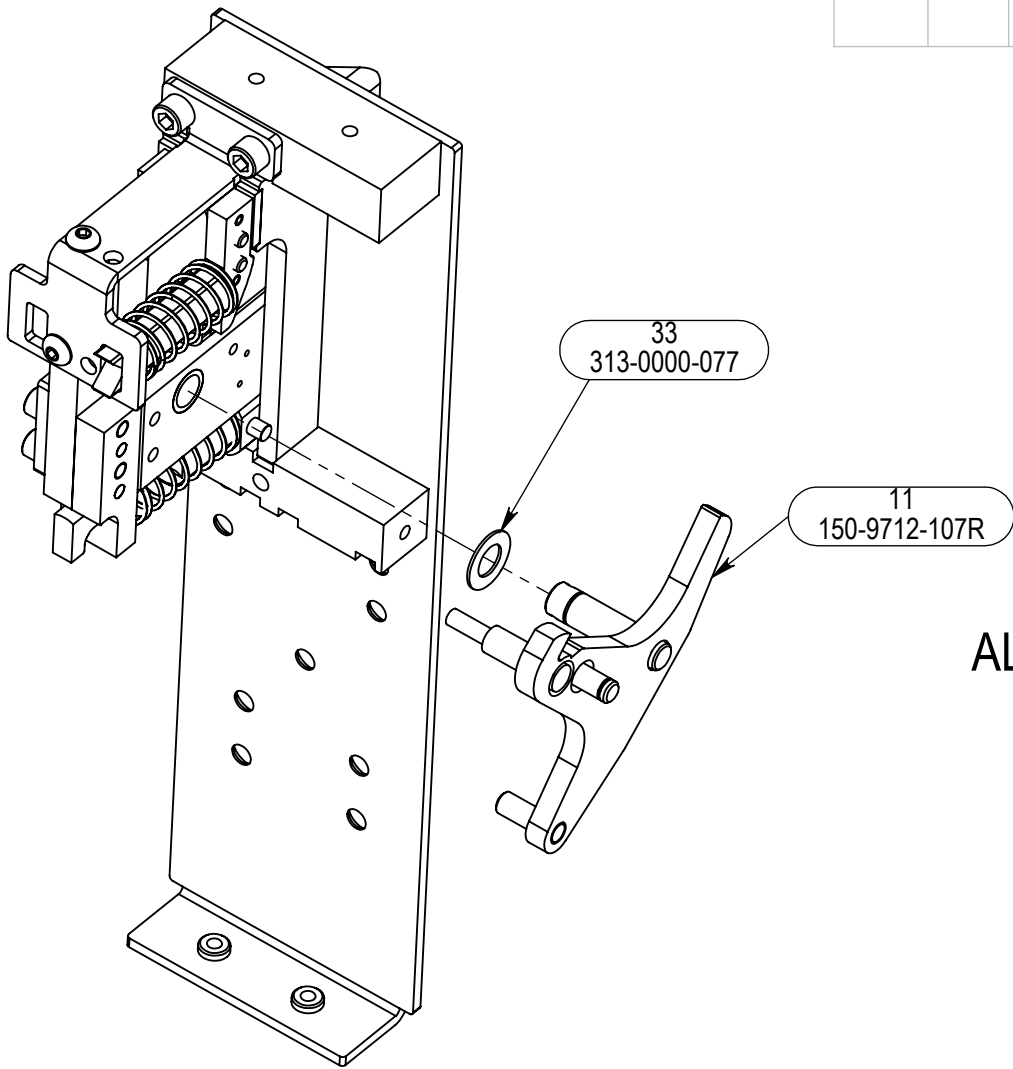
146-9712-500R
Right Handed

PROPRIETARY AND CONFIDENTIAL		DATE	NAME					
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AIRTEQ . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AIRTEQ IS PROHIBITED.		DRAWN	4/2/2009	JVF				
		CHECKED						
UNLESS OTHERWISE SPECIFIED:		MATERIAL:			TITLE: MAIN LOCK SUB-ASSY			
		-						
DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005		FINISH:			SIZE	DWG. NO.	REV	
					B	146-9712-500X	A	
INTERPRET GEOMETRIC TOLERANCING PER:					SCALE: 1:2		WEIGHT:	SHEET 5 OF 7

D
C
B
A



146-9712-500L
Left Handed



146-9712-500R
Right Handed

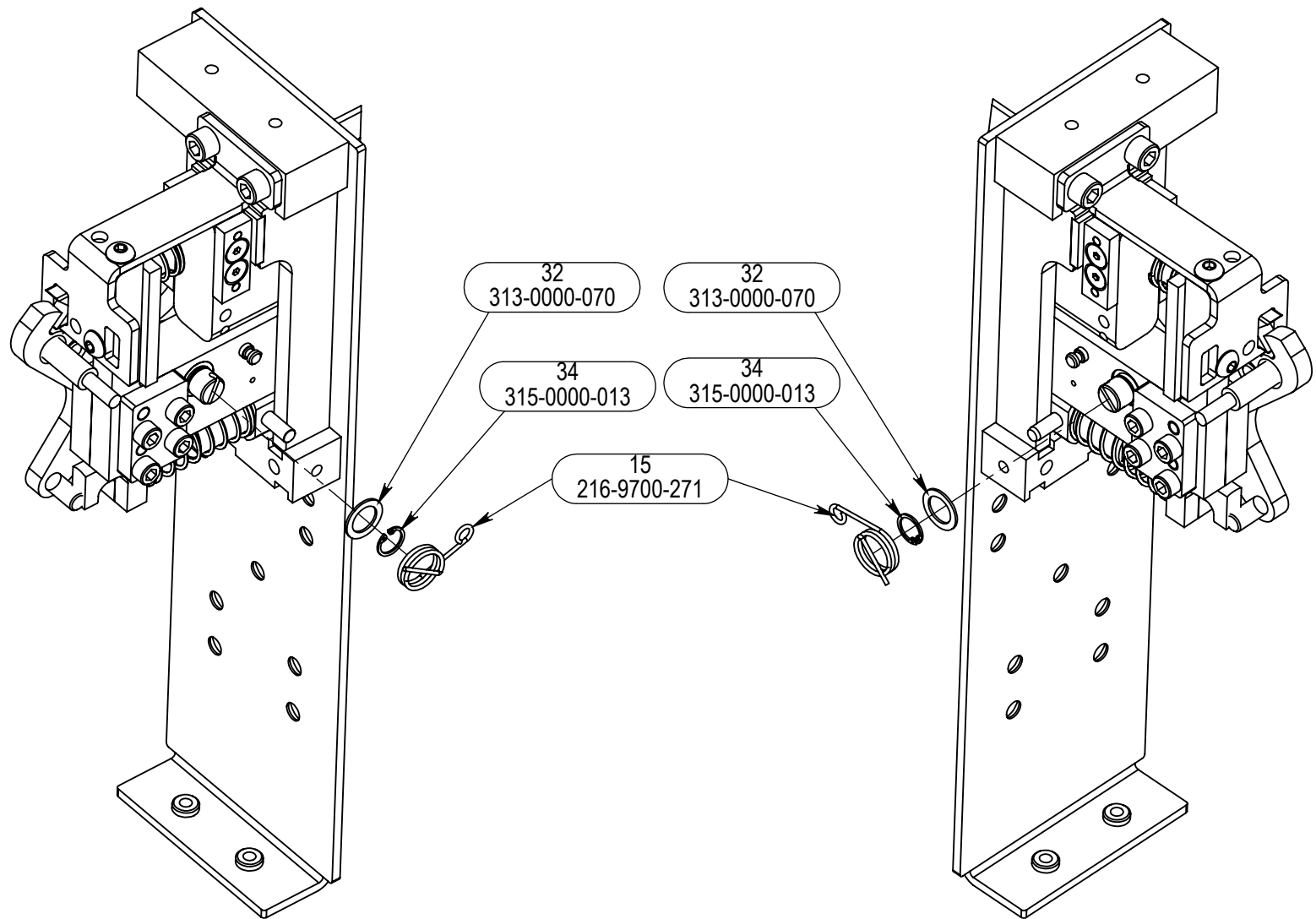
ALL PART NUMBERS REFERENCE
THE MAIN BOM ON SHEET 1

REVISIONS					
ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED
		A	INITIAL RELEASE	4/2/2009	

PROPRIETARY AND CONFIDENTIAL		DATE	NAME	 TITLE: MAIN LOCK SUB-ASSY			
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AIRTEQ . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AIRTEQ IS PROHIBITED.		DRAWN	4/2/2009				JVF
		CHECKED					
		MATERIAL: -					
UNLESS OTHERWISE SPECIFIED:							
DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005		FINISH: -		SIZE B	DWG. NO. 146-9712-500X	REV A	
INTERPRET GEOMETRIC TOLERANCING PER:				SCALE: 1:2	WEIGHT:	SHEET 6 OF 7	

8 7 6 5 4 3 2 1

8 7 6 5 4 3 2 1



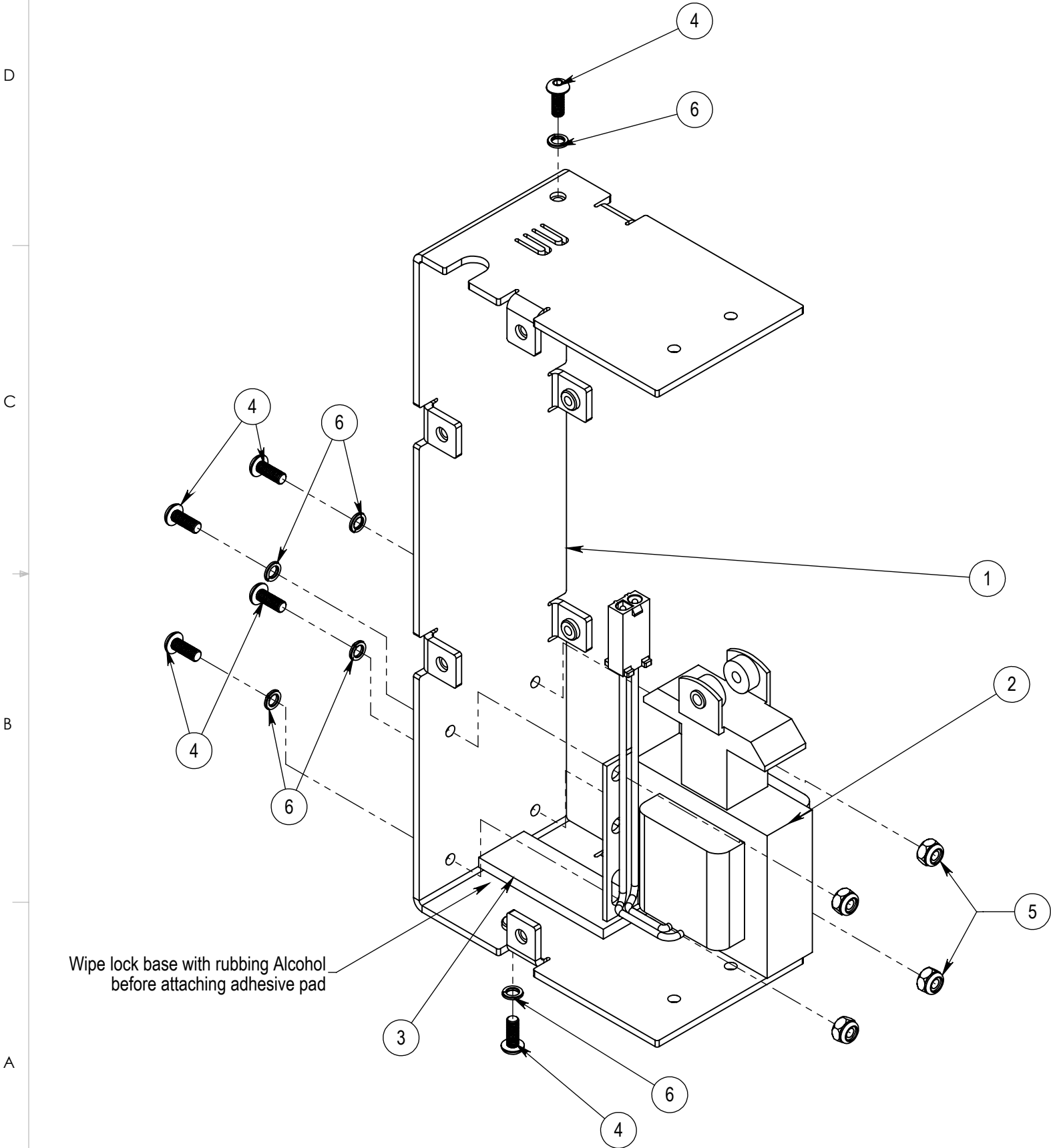
146-9712-500L
Left Handed

146-9712-500R
Right Handed

ALL PART NUMBERS REFERENCE
THE MAIN BOM ON SHEET 1

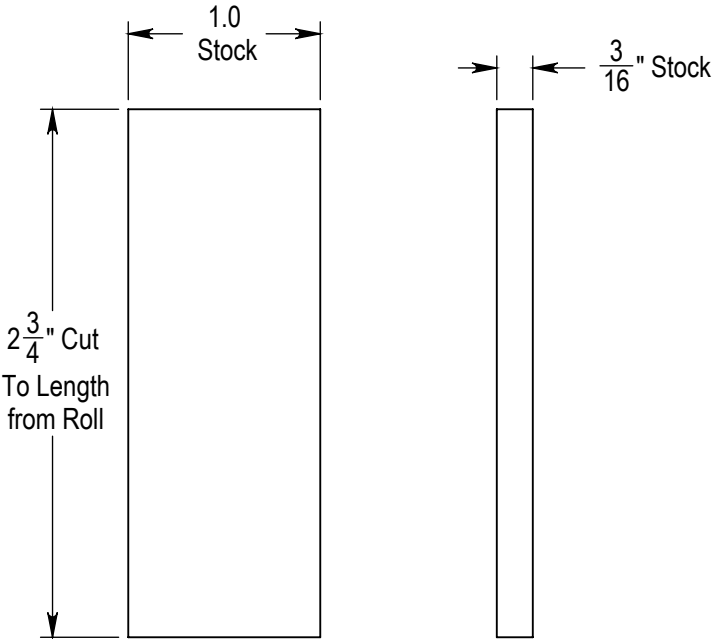
PROPRIETARY AND CONFIDENTIAL		DATE	NAME	 TITLE: MAIN LOCK SUB-ASSY		
THE INFORMATION CONTAINED IN THIS DRAWING IS THE SOLE PROPERTY OF AIRTEQ . ANY REPRODUCTION IN PART OR AS A WHOLE WITHOUT THE WRITTEN PERMISSION OF AIRTEQ IS PROHIBITED.		DRAWN	4/2/2009			JVF
		CHECKED				
		MATERIAL:				
UNLESS OTHERWISE SPECIFIED:		-				
DIMENSIONS ARE IN INCHES TOLERANCES: ANGULAR: ±1 TWO PLACE DECIMAL ±.015 THREE PLACE DECIMAL ±.005		FINISH:		SIZE	DWG. NO.	REV
		-		B	146-9712-500X	A
INTERPRET GEOMETRIC TOLERANCING PER:				SCALE: 1:2		WEIGHT:
						SHEET 7 OF 7

1. THIS PART MUST CONFORM TO THE APPLICABLE REQUIREMENTS OUTLINED IN THE GENERAL NOTES



Wipe lock base with rubbing Alcohol
before attaching adhesive pad

REVISIONS					
ECN #	ZONE	REV.	DESCRIPTION	DATE	APPROVED
		A	INITIAL RELEASE	9/1/10	



216-9712-102 Detail
Adhesive backed Polyurethane Solenoid base
Adhesive backed Polyurethane, 90A Durometer Hardness, 1"Wide x 3/16"
Thick, McMaster 8997K525 or eq.

ITEM NO.	QTY	PART NUMBER	DESCRIPTION
1	1	146-9712-100	MAIN HOUSING PEM ASSY.
2	1	160-9712-108	Solenoid Wire Assembly
3	2.75	216-9712-102	Adhesive backed Polyurethane Solenoid base
4	6	310-1032-030	SCREW BHCS 10-32X1/2 W/NYLOX PATCH
5	4	312-1032-003	NUT, 10-32, NYLOCK (nylon insert)
6	6	313-0000-010	WASHER LOCK SPLIT #10 PLT

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		CHECKED	9/1/10	RLP		
		MATERIAL:				
		FINISH:			SIZE B	DWG. NO. 146-9712-510
					REV A	
		SCALE: 1:2		WEIGHT:	SHEET 1 OF 1	