

Service Letter

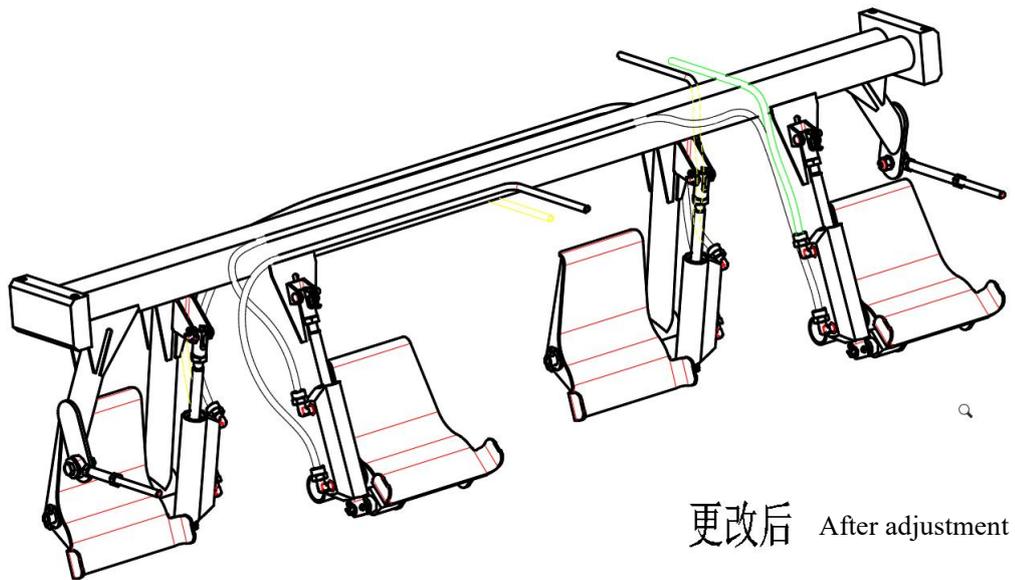
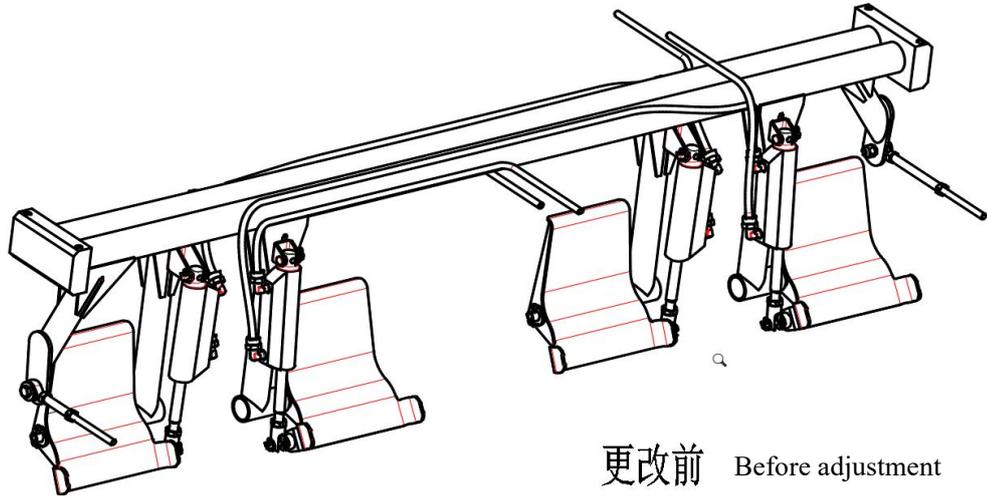
Hunan Sunward Aircraft Co., Ltd.

No.: 2023-SA60L-32-01

Edition: 02

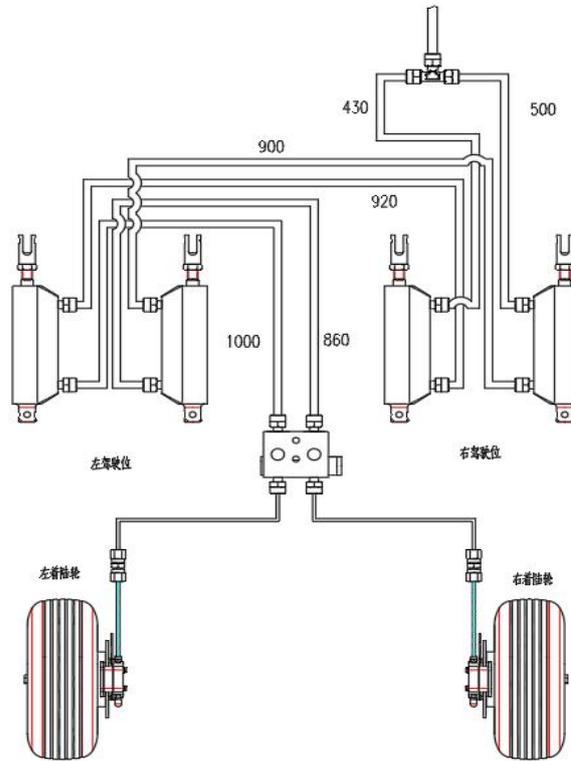
Date: 2023 年 04 月 21 日

Title	Installation Optimization for Master Cylinder
Classes	Importance
Scope of Application	This letter applies to the Aurora SA60L series and Aurora SA70L series light sports aircraft listed in attached sheet 1
Reason	<p>The master cylinders of some Aurora SA60L and Aurora SA70L aircraft are mounted with the piston rod facing down. After prolonged operation, the rubber seals inside the master cylinders may wear to a certain extent, which may cause air to enter the brake system line and reduce brake efficiency. Air discharge must be performed according to the maintenance manual. Our company has made a design change to the installation form of the master cylinder. After the change, the piston rod of the master cylinder is mounted upward to prevent air from entering the brake system pipeline after the rubber seals are worn. Therefore, this service letter is issued.</p> <p>Issued Date: 2023.04.04 Commencement Date: 2023.04.04</p>
Requirement	<p>1、 Follow the steps below to adjust the master cylinder installation way</p> <pre> graph TD A[Re-install the master cylinder replacement with piston rod facing up] --> B[To adjust angle by new tubing connector and reinstall it] B --> C[The brake tubing is connected and secured] C --> D[Filling in brake oil] D --> E{Whether the connector can be removed} E -- No ↑ --> F[Remove tubing connector on master cylinder] F --> G[Remove master cylinder] G --> H[Remove brake oil tube] H --> I[Brake oil discharge] I --> J[Filling in brake oil] E -- Yes ↓ --> K[Clean the thread holes on the master cylinder and the thread glues on joint threads] K --> L[The master cylinder is remounted on the pedal with the piston rod facing up] L --> M[Adjust the Angle of the tubing connector and reinstall it] M --> N[Connecting and securing the brake tubing] N --> O[Filling in brake oil] </pre> <p>2、 The diagram before and after adjusting the installation mode of the master cylinder is as follows</p>

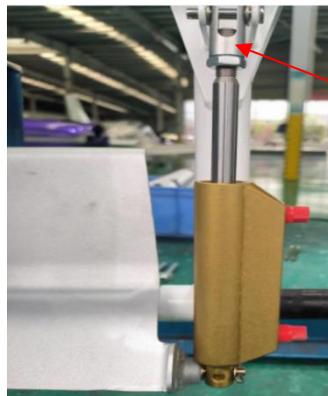


3、 The steps to change the installation mode of the master cylinder are as follows:

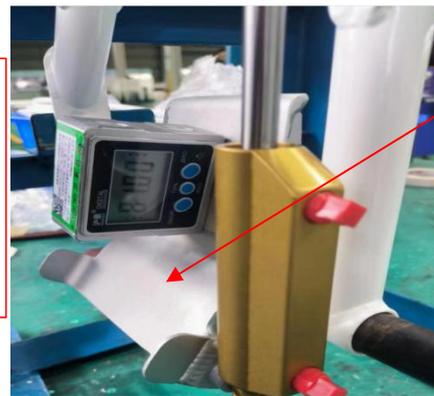
- ① The schematic diagram of the brake tubing and the length of each section are shown below. The brake tubing is prebent and formed in the factory according to the batch production process. The bending radius is not less than 25mm, and the temperature of the hot air is adjusted to 120-150°C.:



- ② The removed master cylinder is marked to ensure that the cylinder corresponding to each foot pedal is unchanged. If the removed cylinder needs to be replaced with a new one, adjust the height of the cylinder connector to ensure that the foot pedal installation Angle is $81 \pm 0.5^\circ$.

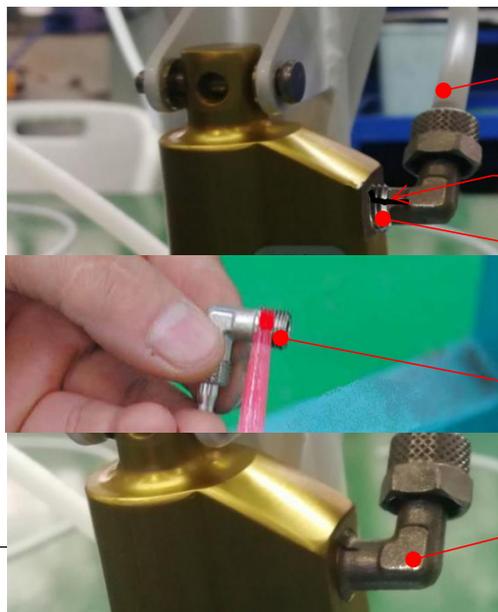


Master cylinder connector



foot pedal installation Angle is $81 \pm 0.5^\circ$

- ③ The installation Angle of the 90° right angle elbow shall be determined according to the nylon tube direction shown in the modified schematic diagram, and glue Le Tai 243 after underline mark for reinstallation.



Preassemble nylon tube according to pipe direction, insert and finish

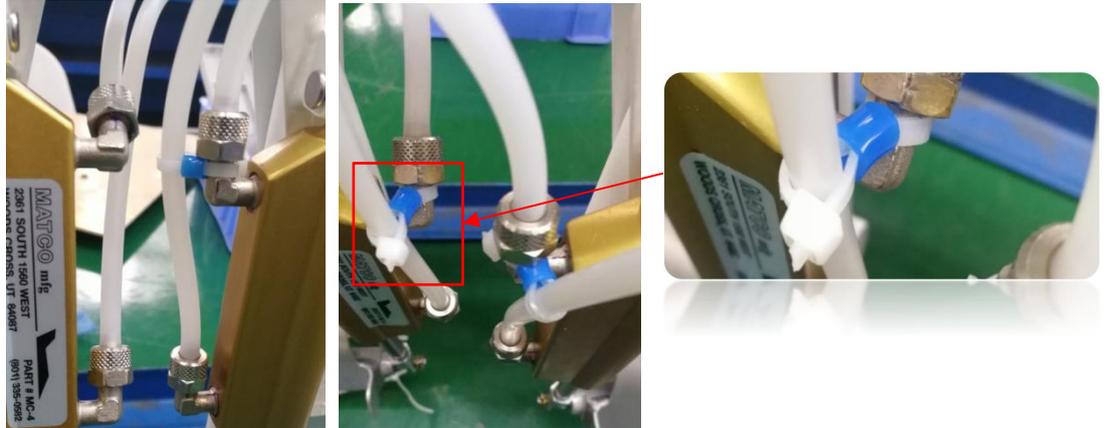
Underline mark and confirm the angle of the connector

Preassembly, screw into 2-3 buckle

Do not glue the Le Tai 243 on both 1 and 2 buckles

Screw the thread in place to ensure the appropriate angle of the connector

- ④ If the nylon pipe and the connector are close to each other when the master cylinder are operated, use a cable tie to separate them from each other crossing a piece of rubber pipe to prevent wear.



- ⑤ For other disassembly steps, refer to 《SWT/JYF101014A90 Maintenance manual, Edition 09》 5.3 Brake system section.

4、 Replace the required parts list:

(1) Disassemble parts:

No	Description No.	Description	Qty	Remark
1	730201000560	Master Cylinder ZF06T013-OE	On Demand	original parts
	730099900001	Master Cylinder A-110-10		
2	701703002003	Pin 2X10 GB/T 91	8	original parts
3	730102000095	Right Angle elbow (nylon)1/8-D6XD4	On Demand	original parts
4	730599000154	Nylon tube D6Xd4	4.1M	original parts

(2) Replaced parts:

序号	Description No.	Description	Qty	备注
1	730201000560	Master Cylinder ZF06T013-OE	On Demand	New
2	701703002003	Pin 2X10 GB/T 91	8	New
3	730102000095	Right Angle elbow (nylon)1/8-D6XD4	On Demand	New
4	730599000154	Nylon tubeD6Xd4	5M	New
5	729901000001	cable tie CHS 3X100	10	
6	760301000046	Brake oil 41 MIL-PRF-5606J	0.5L	

	5、 After the execution is completed, record it in the "Service Notice Execution Record" and "Replacement Parts Record" sections in the "Aircraft History Book" of the corresponding aircraft.		
Reference documents	SWT/JYF101014A90Maintenance manua, Edition 09		
Tools	12mm Open-end wrench, 8mm Open-end wrench, Diagonal pliers, Needle-nose pliers, Torque wrench		
Weight and balance	No effects		
Special tools	None		
Contact	Person: Peng Liang	Tel.: 4006635288	Email: safety@sunward.cc
Approval	This letter has been approved by the Civil Aviation Airworthiness Administration of China.		

Sheet 1: The serial number for the corresponding aircraft

No	Serial Number	No	Serial Number	No	Serial Number
1	SA60LS00167	35	SA60LS00208	69	SA60LS00247
2	SA60LS00168	36	SA60LS00209	70	SA60LS00248
3	SA60LS00169	37	SA60LS00210	71	SA60LS00249
4	SA60LS00173	38	SA60LS00211	72	SA60LS00251
5	SA60LS00174	39	SA60LS00212	73	SA60LS00252
6	SA60LS00175	40	SA60LS00213	74	SA60LS00253
7	SA60LS00176	41	SA60LS00215	75	SA60LS00255
8	SA60LS00177	42	SA60LS00216	76	SA60LS00256
9	SA60LS00178	43	SA60LS00217	77	SA60LS00257
10	SA60LS00179	44	SA60LS00218	78	SA60LS00258
11	SA60LS00180	45	SA60LS00219	79	SA60LS00259
12	SA60LS00182	46	SA60LS00220	80	SA60LS00260
13	SA60LS00183	47	SA60LS00221	81	SA60LS00261
14	SA60LS00184	48	SA60LS00222	82	SA60LS00262
15	SA60LS00185	49	SA60LS00223	83	SA60LS00263
16	SA60LS00186	50	SA60LS00225	84	SA60LS00265
17	SA60LS00187	51	SA60LS00226	85	SA60LS00266
18	SA60LS00188	52	SA60LS00227	86	SA60LS00267
19	SA60LS00189	53	SA60LS00228	87	SA60LS00268
20	SA60LS00190	54	SA60LS00230	88	SA60LS00269
21	SA60LS00191	55	SA60LS00231	89	SA60LS00270
22	SA60LS00192	56	SA60LS00232	90	SA60LS00271
23	SA60LS00193	57	SA60LS00233	91	SA60LS00272
24	SA60LS00195	58	SA60LS00235	92	SA60LS00273
25	SA60LS00196	59	SA60LS00236	93	SA60LS00275
26	SA60LS00197	60	SA60LS00237	94	SA60LS00276
27	SA60LS00198	61	SA60LS00238	95	SA60LS00277
28	SA60LS00199	62	SA60LS00239	96	SA60LS00280
29	SA60LS00200	63	SA60LS00240	97	SA60LS00281
30	SA60LS00201	64	SA60LS00241	98	SA60LS00282
31	SA60LS00202	65	SA60LS00242	99	SA60LS00283
32	SA60LS00205	66	SA60LS00243	100	SA60LS00285
33	SA60LS00206	67	SA60LS00245	101	SA60LS00286
34	SA60LS00207	68	SA60LS00246	102	SA60LS00287

Sheet 1: The serial number for the corresponding aircraft (Continued)

No	Serial Number	No	Serial Number	No	Serial Number
103	SA60LS00288				
104	SA60LS00290				
105	SA60LS00291				
106	SA60LS00292				
107	SA60LS00293				
108	SA60LS00295				
109	SA60LS00296				
110	SA60LS00301				
111	SA60LS00302				
112	SA60LS00303				
113	SA60LS00305				
114	SA60LS00306				
115	SA60LS00307				
116	SA60LS00308				
117	SA60LS00309				
118	SA60LS00311				
119	SA60LS00313				
120	SA60LS00315				
121	SA60LS00317				
122	SA60LS00318				
123	SA60LS00319				
124	SA60LS00320				
125	SA60LS00321				
126	SA70LS00102				
127	SA60LS00310				
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