



MODIFICATION BULLETIN

AIRPL
MODEL
91

91.2/2

Safir

PAGE 1 OF 2

Nose gear. Replacement of fork

URGENCY: III

EFFECT ON WEIGHT DISTRIBUTION:

TIME OF DELIVERY
FOR NECESSARY PARTS: June 26th 1948

WEIGHT CHANGE
LBS.

STATION
IN.

MOMENT CHANGE
LBSIN.

c/c

-

-

-

MARKING: None

Drawings: Not essential
505065 Strut, Nose gear

Aircraft concerned:

91102-91148
(Number of aircraft: 47)

Parts required on each plane:

Item		
01	1 Fork	SA 592305
02	1 Friction washer	550666
03	4 Cyl. splined pin	4X10 AS 211301
04	2 Screws	M5X12 AS 212106

Spare parts not involved

Following parts on each plane are now obsolete.

1	Forward pivot	505108	} Scrap
1	Fork	505105	
2	Lock washers	524290 ur	
4	Screws	M3X23 AS 212107	
2	Screws	M5X24 AS 212106	
2	Cyl. pins	5m6X20 AS 211101	

Occasionally on taking off from and landing on rough fields the nose fork and the forward pivot have been damaged. Furthermore in one case the nose wheel swivelled, causing similar damage.

For this reason a sturdier nose fork and pivot should be installed, which are welded into one assembly.

The lateral movement of the nose wheel has been limited to 30° to either side by welding the stops to the fork. These are provided with rubber buffers to dampen the shocks against the nose fork bearing. Furthermore a friction washer should be installed between the nose fork bearing and the pivot shoulder in order to dampen shimmying. When a fork, provided with stops, has been installed, a steering bar or steering fork should be used in towing of the airplane. This may be manufactured according to fig. 2, easy to disassemble and stow in the airplane luggage compartment.

Working procedure

Take the load off the nose gear.

SAAB SERVICE DEPT

SAAB DESIGN DEPT

ROYAL SWEDISH AERONAUTICS BOARD

C. Carlsson

O. Östberg

Stenlund

Dismount the nose wheel.

Unscrew the nut, item 05, according to fig. 1.

Remove the cover, item 06, and push in the spring guide, item 07.

Remove the nose fork together with the forward pivot.

Drill at assembly the friction washer, item 02, with the nose bearing, item 08,

to ID $0,1575 \pm 0,0029$ in. ($= 4 \pm 0,075$ mm) hole for the cylindrical pins, item 03

Install the friction washer on the nose fork bearing.

Remove the mud guard from the old fork.

Cut off the mud guard 0,787 in. (20 mm) from the upper end and drill new holes in the mud guard by using the holes in the fork, item 01, as guides.

Assemble the fork and the mud guard with screws and use the old lock nuts M5.

Push in the springs, item 11, together with the spring guide, item 07, and install the fork, item 01, on the nose fork bearing assembly, item 08.

Mount the wheel.

Check the wheel deflection in relation to the center line of the airplane. The wheel should be turned 2° to the left in order to counteract the action of the propeller slip stream.

In case this deflection is not met with, the fork, the wheel and the spring guides should be removed, whereupon the groove in the spring guide should be filed off enough to ensure a proper wheel deflection of 2° to the left after reassembly.

Check that the bottom of the groove is plane.

Assemble the spring guides, the fork and the wheel.

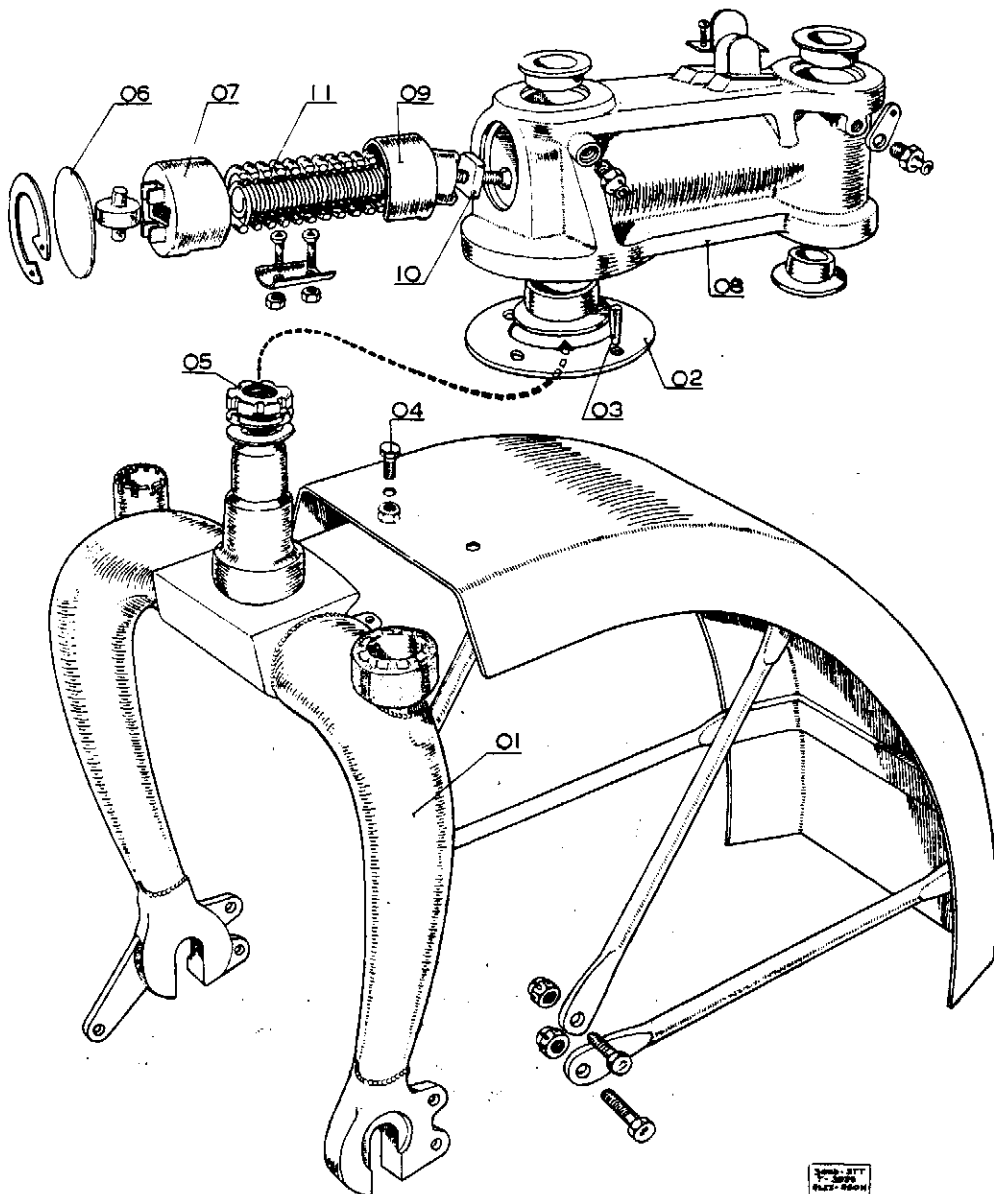
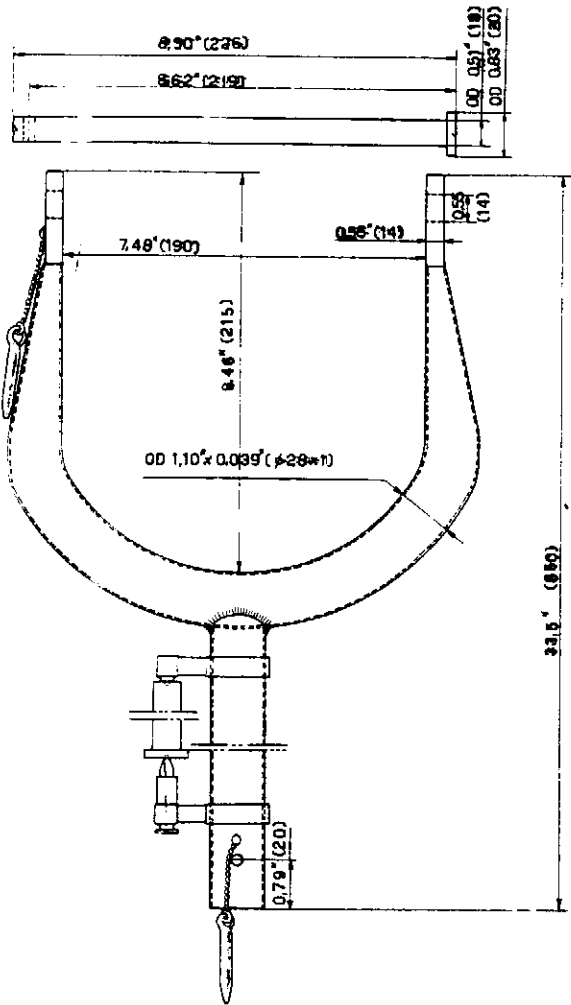
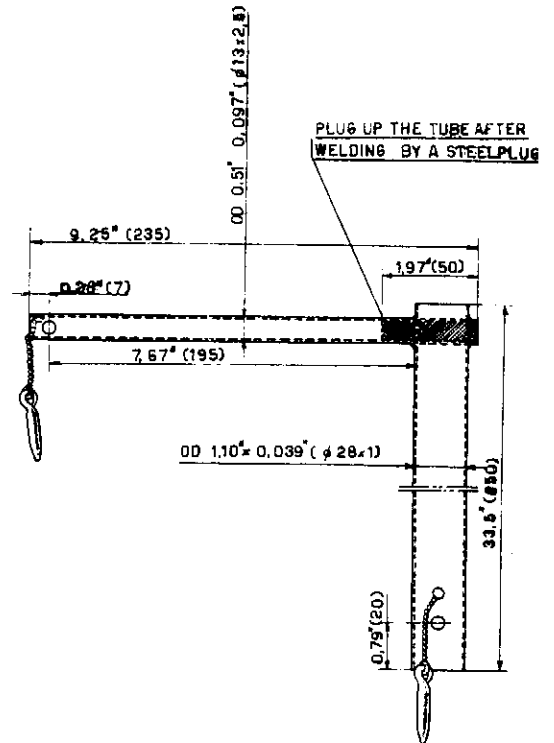


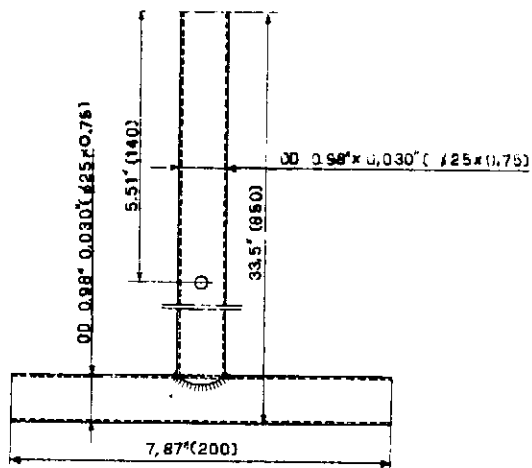
FIG. 1



ALT. I



ALT. II



MATERIAL: STEEL TUBES

SAAB 577
P-3795
Johansson

FIG. 2