

- Subject:** Installation of a LIESE after-muffler to the G 115/G 115A with SENSENICH propeller
- Concerned:** G115/G115A with SENSENICH propeller.
- Urgency:** Optional
- Background: Information** Tests in the course of an amended type certification process of the G 115/G 115A equipped with a SENSENICH propeller showed, that the installation of the LIESE after-muffler reduces the noise to a level which fulfills the enhanced noise requirements (in Germany). The LIESE after-muffler reduces the noise level to 67.7 dB(A). This is 6.3 dB(A) less than the required noise limit (74.0 dB(A)) according to LSL Chapter X.
- Actions:**
- 1. Installation**
The installation of the LIESE after-muffler P/N LIESE-V60-G (Drawing Number LIESE-G-115-01) must be performed following Installation Procedure No. 1078-56.
 - 2. Operating/Maintenance Instructions**
 - Supplement 1 to the Flight Manual G 115/G 115A must be incorporated according to Revision 2.
 - An additional 50 hour examination of the LIESE after-muffler has been included in Chapter 05-20 of the Maintenance Manual (Revision 4).
 - 3. Noise Certificate**
Following the installation, a new noise certificate from the national airworthiness authority is necessary (if applicable).
- Material:**
- Installation Procedure No. 1078-56
 - Parts as listed in Installation Procedure
- Weight and Balance:**
- The installation of the LIESE after-muffler increases the mass by 1.2 kg (2.64 lb.). The center of the new mass is 1.4 m (55.1 in) forward of the aircraft datum plane (BE). The new empty weight and empty-weight-center-of-gravity must be calculated after installation.
- Remarks:**
1. The proper installation has to be certified into the log book by an authorized inspector.
 2. If you have sold your aircraft in the meantime, would you kindly pass this information on to the new owner and forward his name and address and aircraft S/N to us.

Mattsies, 12 December 1995



Dipl. Ing. Jürgen R. Altmann

Manager
Airworthiness/Certification

LBA approved:

This Service Bulletin is originally written in German and approved by the German LBA on the 04 Jan. 1996. The translation has been performed to the best of our knowledge and judgement.

The Installation Procedure No. 1078-56 is part of SB 1078-56 and contains the installation instructions for an additional LIESE after-muffler to comply with the enhanced noise protection requirements.

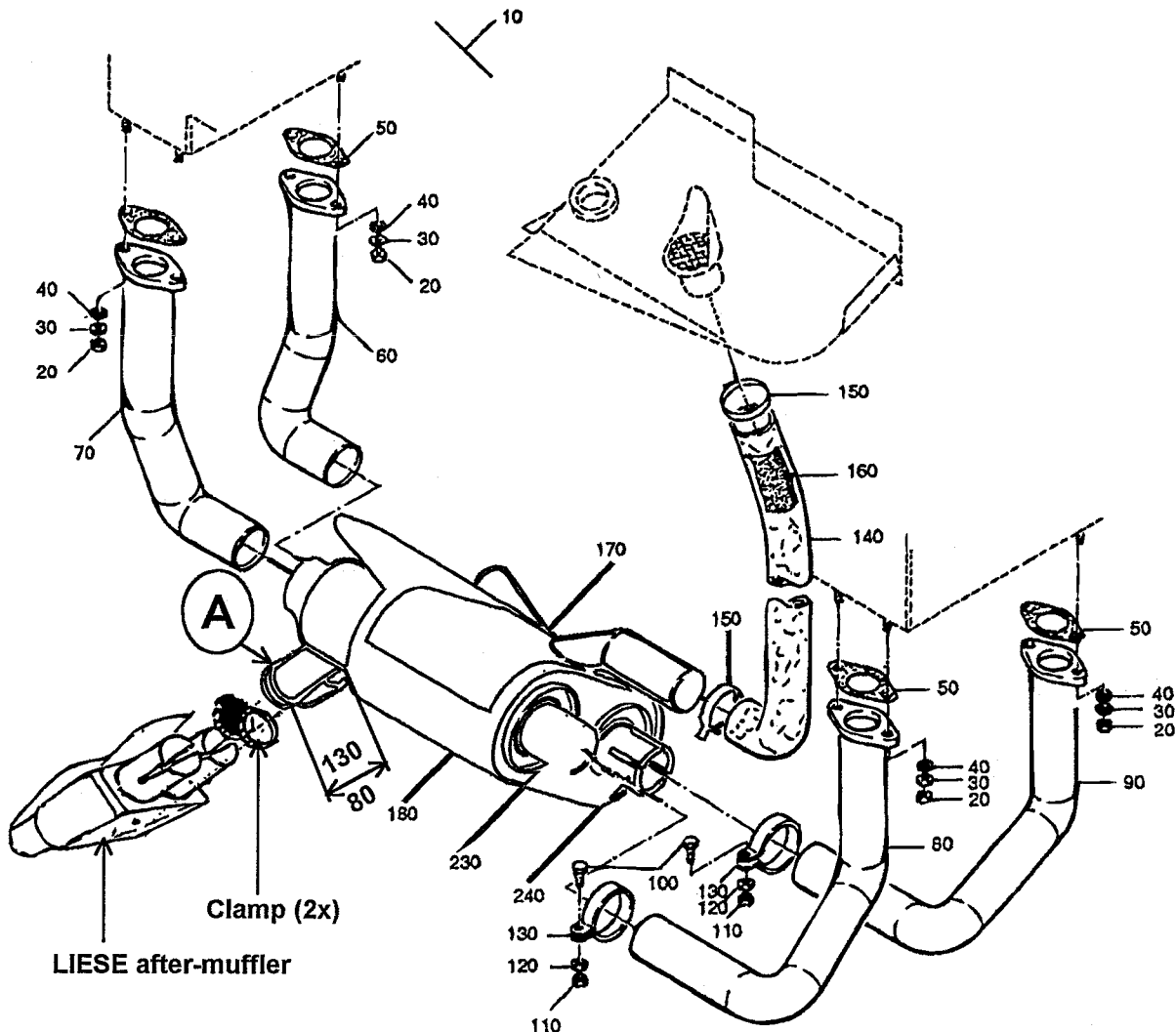
Material:

- LIESE after-muffler LIESE-V60-G
- 2 mounting clamps complete with screws, washers and nuts

Tools: Usual set of tools

Work Order:

1. Remove the upper and lower engine cowlings.



2. Cut both exhaust pipes at (A), as follows:
 - cut the forward pipe 130 mm measured on the bottom surface of the pipe, at the longest point.
 - cut the rear pipe 80 mm measured on the bottom surface of the pipe, at the longest point.
 (Note: To make cutting easier, first remove the connecting clamps to both pipes)
3. Remove the bottom cover (Item No. 180) from the heat exchanger.
4. Remove both mounting clamps (Item No. 130).



5. Twist the front and rear muffler to the rear and put the new after-muffler in position on the outlet pipes.
6. Make sure the muffler is correctly aligned. Both end pipes of the LIESE after-muffler must be aligned parallel to the aircraft's longitudinal axis at the rear. If not, the forward muffler must be aligned, i.e. it must be shifted approximately 1 to 2 cm (0.4 to 0.8 in.) to the right (when facing against the direction of flight). If necessary, loosen all the exhaust pipes (Items No. 60 - 90) (including the exhaust gas temperature sensor at tube Item No. 80). If necessary, shorten the front pipe (Item No. 80) by 1 to 2 cm (0.4 to 0.8 in.).
7. Tighten all the exhaust pipe connections. And tighten the exhaust gas temperature sensor.
8. Install the heat exchanger bottom cover.
9. Install mounting clamps (Item No. 130). Drill new holes for the locking pins (\varnothing 5 mm/ 0.2 in.).
10. Make sure that the new muffler is correctly aligned. Install the mounting clamps for the new muffler (direction according to clamps, Item No. 130). Drill new holes for the locking pins (\varnothing 5 mm/ 0.2 in.).
11. Increase the outlet hole for the exhaust in the lower engine cowling for the new muffler. There must be a gap of at least 1 cm (0.4 in.) around the muffler.
12. Make sure that all joints in the muffler and heat-exchanger systems seal correctly. And make sure that all the mountings are secure.
13. Install the lower and upper engine cowlings.
14. Perform a ground run and a test flight.

The installation of the LIESE after-muffler must be inspected by a person approved by the airworthiness authority of the country in which the aircraft is registered. The inspector must make a record of the installation in the aircraft log book.