

**ROTAX****SERVICE INFORMATION**

11 UL 87/E

Nov. 1987

EXHAUST SYSTEMS FOR ROTAX UL-ENGINES TYPE 377/447/462/503/532

1) INTRODUCTION

The exhaust systems supplied so far

"2 x 90 degrees"
"sidemount"
"straight"

with only 1 ball joint between exhaust manifold and exhaust muffler allow simple muffler installation but are under certain circumstances (e.g. unsuitable muffler suspension) subject to breakage.

Problem:

- The weight of the muffler itself and the acceleration forces impose load on the exhaust manifold and inlet cone.
- Depending on engine installation, engine vibrations are transmitted to the exhaust muffler.

Tests with a double ball joint showed that this solution means a sensible improvement interrupting transfer of engine vibrations to the muffler.

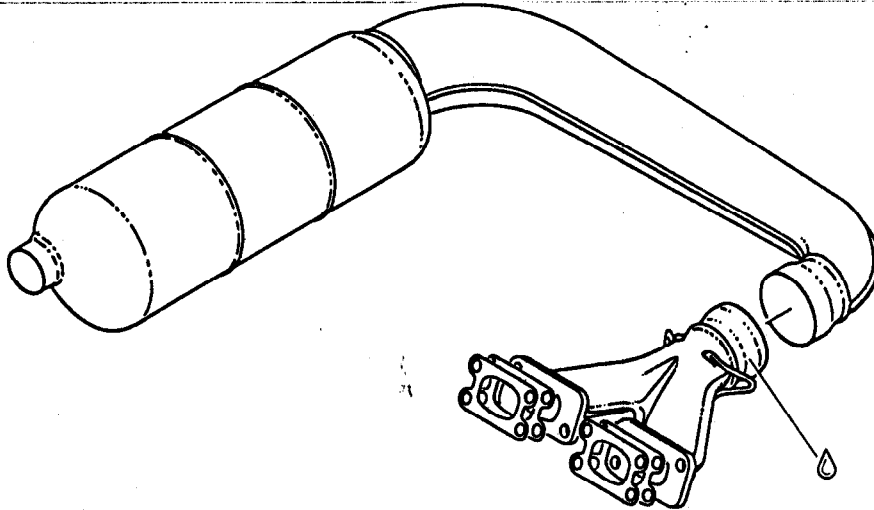
The lifetime of the exhaust systems herewith is noticeably increased.

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2) Listing of exhaust systems concerned:

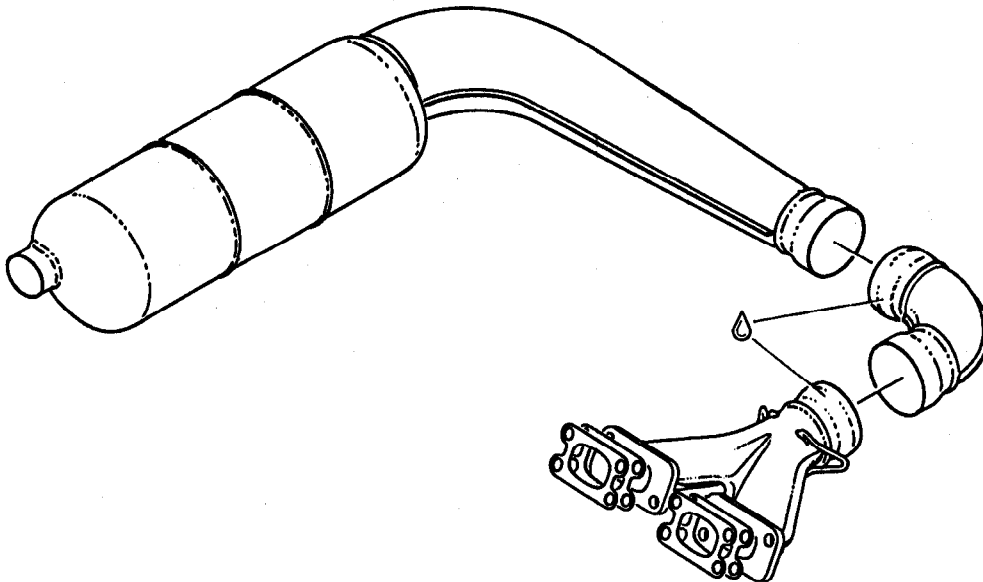
2.1. Version "2 x 90 degrees"



with	I	type 377/447	I	type 462/503	I	type 532	I
exhaust manifold	I	879 458	I	878 936	I	973 122*	I
and muffler	I	973 194*/195	I	973 194*/195	I	973 194*	I

WILL BE NEW

Version "1 x 90 degrees with connecting elbow"

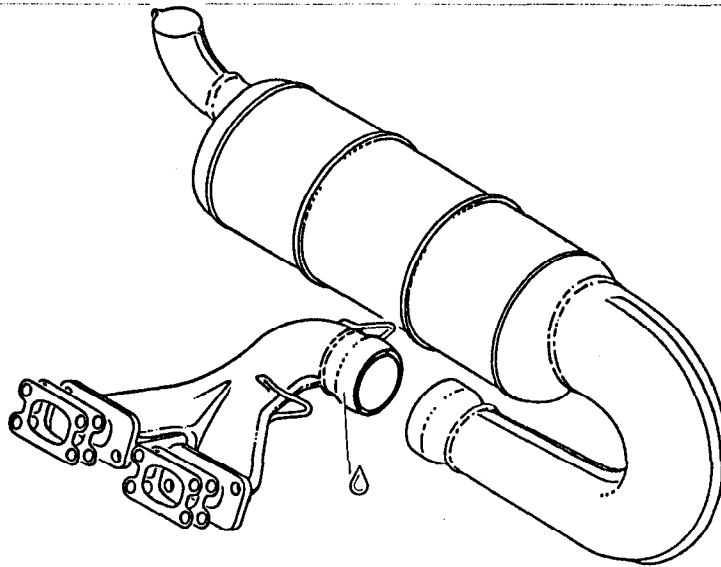


with	I	type 377/447	I	type 462/503	I	Type 532	I
exhaust manifold	I	879 458	I	878 936	I	973 122*	I
connecting elbow	I	973 180*/184	I	973 180*/184	I	973 180*	I
and muffler	I	973 274*/275	I	973 274*/275	I	973 274*	I

* for these parts the suspension hooks are supplied loose, not welded.



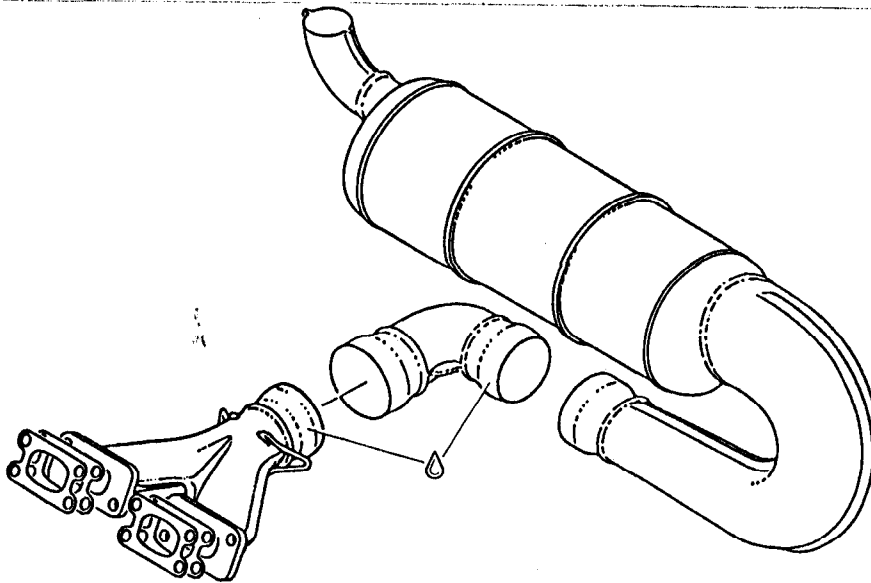
2.2. Version "sidemount"



with	I	type 377/447	I	type 462/503	I	type 532	I
exhaust manifold	I	879 454	I	879 144	I	----	I
and muffler	I	973 198	I	973 198	I	----	I

WILL BE NEW

Version "sidemount mit connecting elbow"

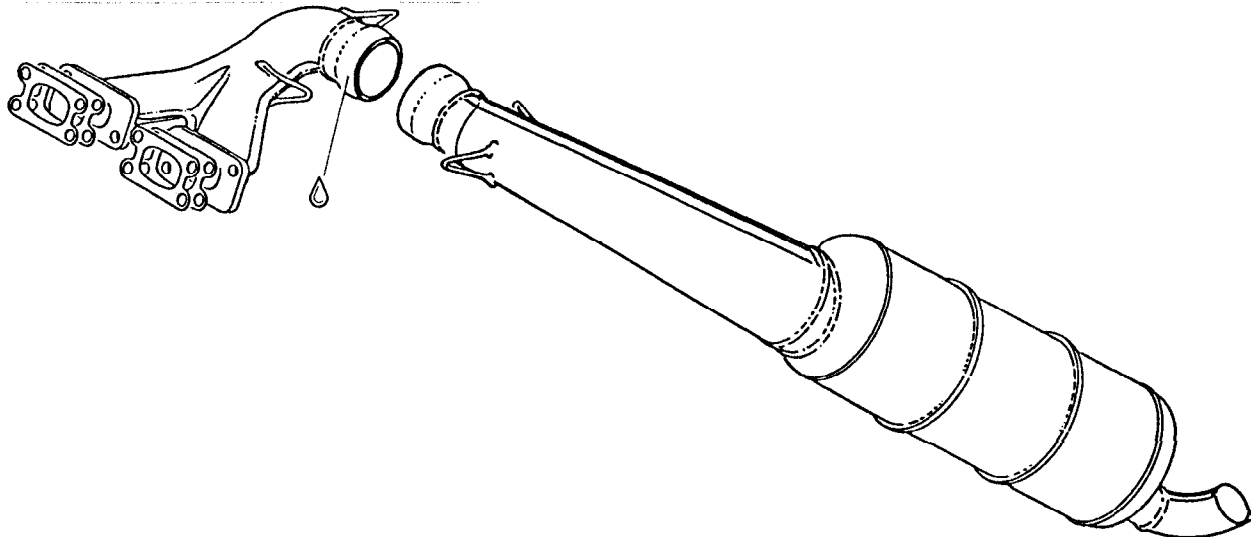


with	I	type 377/447	I	type 462	I	type 503	I	type 532	I
exhaust manifold	I	879 458	I	878 936	I	878 936	I	973 122*	I
connecting elbow	I	973 182	I	973 182	I	973 182	I	973 180*	I
and muffler	I	973 198	I	973 197*	I	973 198	I	973 197*	I

* for these parts the suspension hooks are supplied loose, not welded.



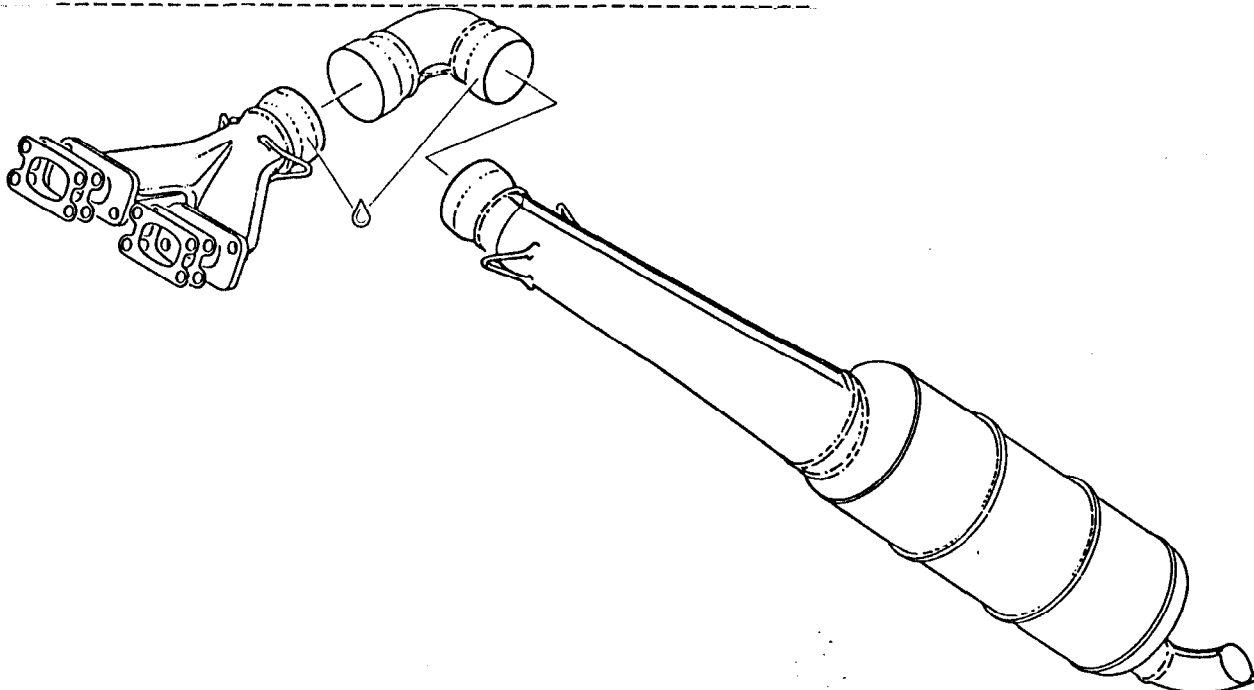
2.3. Version "straight"



with	I type 377/447	I type 462	I type 503	I type 532	I
exhaust manifold	I 879 454	I 879 144	I 879 144	I ----	I
and muffler	I 973 191	I 973 192	I 973 191	I ----	I

WILL BE NEW

Version "straight with connecting elbow"



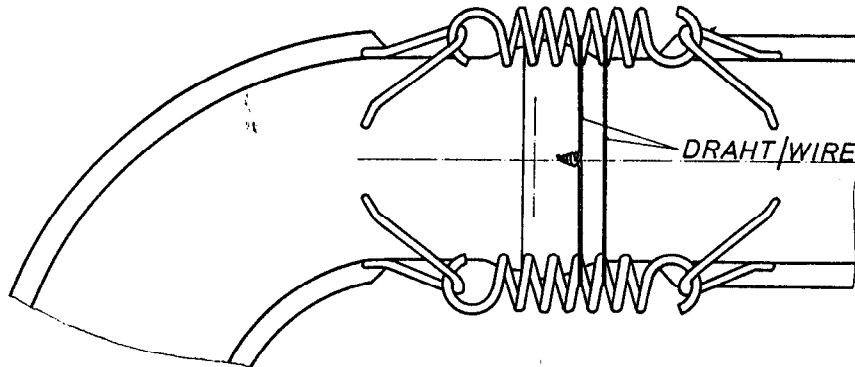
with	I type 377/447	I type 462	I type 503	I type 532	I
exhaust manifold	I 879 458	I 878 936	I 878 936	I 973 122*	I
connecting elbow	I 973 182	I 973 182	I 973 182	I 973 180*	I
and muffler	I 973 191	I 973 192	I 973 191	I 973 192	I

* for these parts the suspension hooks are supplied loose, not welded.



3) INSTALLATION INSTRUCTIONS

- 3.1. It is absolutely important that all ball joints be greased with heat resistant LOCTITE Antiseize (ROTAX part no. 297 431) to assure free movement of the ball joints and to avoid muffler breakage.
- 3.2. The mufflers must be suspended on engine and frame and be secured against loss without squeezing the ball joints.
- 3.3. Secure the muffler springs by wire lock to avoid loss.



MEMBER: MUFFLERS
SBM/Wa 87 12 21