

## **EU-Operation Licence / EG-Betriebserlaubnis / EU-Typgodkännande**

For Type / Für den Typ / För Typ: E4AH5

Vehicles/Fahrzeuge/Fordon:

Audi A3 Turbo  
Seat Leon Turbo  
VW Golf Turbo  
VW Scirocco Turbo  
VW Eos Turbo

All vehicle models listed in this document are covered by an EC Type approval (E4AH5). Please note that this does not mean that an exhaust system is available for every model listed in this approval. Also, an exhaust listed in the manufacturer's catalogue does not mean it has Type Approval for every model or engine.

To ensure that a Type approved exhaust is available for your particular vehicle, your vehicle and engine size must be listed in the manufacturer's catalogue and your vehicle and engine code must be listed in this Type Approval document.

Alle Fahrzeugmodelle, die in diesem Dokument aufgeführt sind, werden durch die EWG-Betriebserlaubnis (E4AH5) abgedeckt. Bitte beachten Sie, dass dies nicht bedeutet, dass es für jedes der aufgelisteten Fahrzeuge eine Auspuffanlage gibt. Zudem bedeutet dies auch, dass eine Auspuffanlage aus den Herstellerkatalog nicht zwingend eine EWG-Betriebserlaubnis für jedes Modell oder jeden Motor hat.

Um sicherzustellen, dass es für Ihr Fahrzeug einen passenden geprüften Auspuff gibt, prüfen Sie ob Ihr Fahrzeug und Motor sowohl im Hersteller Katalog wie auch in diesem Gutachten Dokument aufgeführt sind.

Alla de fordon som listas i detta dokument omfattas av EU-typgodkännande (E4AH5). Detta betyder dock inte att det för varje listat fordon finns ett passande avgassystem. Inte heller betyder detta att ett avgassystem som tillverkaren specificerar att passa till en viss kombination av fordon/motorstorlek nödvändigtvis är typgodkänt.

För att vara säker på att ett typgodkänt avgassystem finns tillgängligt för just din bil måste fordonet vara specificerat av tillverkaren att passa just det fordonet och dessutom måste fordonet jämte motorkod finnas listat i detta typgodkännande

Manufacturer / Hersteller / Tillverkare:

Ray Metallfabrik AB. Lagmanshagavägen 1, S-51455 Ljungsarp, Sweden

## EC TYPE-APPROVAL CERTIFICATE

Communication concerning the

- type-approval <sup>(1)</sup>
- ~~extension of type-approval <sup>(1)</sup>~~
- ~~refusal of type-approval <sup>(1)</sup>~~
- ~~withdraw of type-approval <sup>(1)</sup>~~

of a type of a ~~vehicle/component~~/separate technical unit <sup>(1)</sup> with regard to Directive 70/157/EEC, as last amended by Directive 2013/15/EU

Type-approval number:

**e24\*70/157\*2007/34\*3021\*00**

Reason for extension:

**N/A**

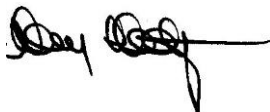
### SECTION I

- |       |                                                                                                                  |                                                                                     |
|-------|------------------------------------------------------------------------------------------------------------------|-------------------------------------------------------------------------------------|
| 0.1   | Make (trade name of manufacturer):                                                                               | <b>RAY</b>                                                                          |
| 0.2   | Type and general commercial description:                                                                         | <b>E4AH5</b>                                                                        |
| 0.3   | Means of identification of type if marked on the separate technical unit <sup>(1)</sup> <sup>(2)</sup> :         | <b>Letters and digits</b>                                                           |
| 0.3.1 | Location of that marking:                                                                                        | <b>On the lower surface of the muffler</b>                                          |
| 0.4   | Category of vehicle <sup>(3)</sup> :                                                                             | <b>M1</b>                                                                           |
| 0.5   | Name and address of manufacturer:                                                                                | <b>RAY Metallfabrik AB<br/>Lagmanshagavägen 1<br/>S-514 55 Ljungsarp<br/>Sweden</b> |
| 0.7   | In the case of components and separate technical units, location and method of affixing of the EC approval mark: | <b>On the lower surface of the muffler,<br/>type plate solded</b>                   |
| 0.8   | Address(es) of assembly plant(s):                                                                                | <b>RAY Metallfabrik AB<br/>Lagmanshagavägen 1<br/>S-514 55 Ljungsarp<br/>Sweden</b> |

Type-approval number:

**e24\*70/157\*2007/34\*3021\*00**

**SECTION II**

1. Additional information (where applicable): **See Addendum**
2. Technical Service responsible for carrying out the tests: **TÜV AUSTRIA  
AUTOMOTIVE GmbH,  
Deutschstraße 10,  
1230 Vienna,  
Austria.**
3. Date of test report: **10.04.2019**
4. Number of test report: **19-TAAS-0648/SRA**
5. Remarks (if any): **See Addendum**
6. Place: **Dublin**
7. Date: **11<sup>th</sup> December, 2019**
8. Signature: 
9. The index to the information package lodged with the approval authority, which may be obtained on request, is attached.
10. List of documents:
  1. Enclosure 1
  2. Enclosure 2
  3. Enclosure 3
  4. Technical report with annexes and drawings



|                     |                                        |                  |                                         |                              |
|---------------------|----------------------------------------|------------------|-----------------------------------------|------------------------------|
| Annex 2<br>Anlage 2 | Test Report No.<br>zum Prüfbericht Nr. | 19-TAAS-0648/SRA | Manufacturer / Hersteller<br>Type / Typ | RAY Metallfabrik AB<br>E4AH5 |
|---------------------|----------------------------------------|------------------|-----------------------------------------|------------------------------|

Field of application  
Verwendungsbereich (Fahrzeugdaten)

| VOLKSWAGEN-VW                                                                                         |                                      |                     |                                  |                |                                    |                                                 |                           |  |  |
|-------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------|----------------------------------|----------------|------------------------------------|-------------------------------------------------|---------------------------|--|--|
| Hersteller/ Manufacturer                                                                              | Vehicle type approval no.            | Category of vehicle | Engine type (type of combustion) | Stroke         | Engine capacity [cm <sup>3</sup> ] | Rated max. engine power [kW/min <sup>-1</sup> ] | Configuration see Annex 1 |  |  |
| Trade mark or commercial description                                                                  | Fahrzeugtyp (und Genehmigungsnummer) | Fahrzeug-klasse     | Motortyp (Verbrennungsverfahren) | Art des Motors | Hubraum [cm <sup>3</sup> ]         | Nennleistung [kW/min <sup>-1</sup> ]            | Anordnung nach Anl. 1     |  |  |
| No. addendum to EC type-approval certificate / laufende Nummer der Anlage zum EG-Typgenehmigungsbogen |                                      |                     |                                  |                |                                    |                                                 |                           |  |  |
| 1.2.                                                                                                  | 1.3.                                 | 1.4.                | 1.4.1.                           | 1.4.2.         | 1.4.3.                             | 1.4.4.                                          |                           |  |  |
| VW Golf                                                                                               | AU                                   | M1                  | CHH                              | 4-stroke       | 1984                               | 169/4700-6200                                   | 1)2)3)4)5)                |  |  |
|                                                                                                       |                                      |                     | CHH                              |                | 1984                               | 162/4500                                        |                           |  |  |
|                                                                                                       |                                      |                     | CNT                              |                | 1984                               | 162/4500                                        |                           |  |  |
|                                                                                                       |                                      |                     | CXC                              |                | 1984                               | 162/4500                                        |                           |  |  |
|                                                                                                       |                                      |                     | CXD                              |                | 1984                               | 162/4500                                        |                           |  |  |
|                                                                                                       |                                      |                     | CXC                              |                | 1984                               | 155/4500                                        |                           |  |  |
|                                                                                                       |                                      |                     | CNT                              |                | 1984                               | 155/5300                                        |                           |  |  |
|                                                                                                       |                                      |                     | CXB                              |                | 1798                               | 125/5000                                        |                           |  |  |
|                                                                                                       |                                      |                     | CXB                              |                | 1798                               | 125/5000                                        |                           |  |  |
|                                                                                                       |                                      |                     | CNS                              |                | 1798                               | 125/5000                                        |                           |  |  |
|                                                                                                       |                                      |                     | CNS                              |                | 1798                               | 125/5000                                        |                           |  |  |
|                                                                                                       |                                      |                     | DAD                              |                | 1498                               | 110/5000-6000                                   |                           |  |  |
|                                                                                                       |                                      |                     | CZE                              |                | 1395                               | 110/5000-6000                                   |                           |  |  |
|                                                                                                       |                                      |                     | CZD                              |                | 1395                               | 110/5000-6000                                   |                           |  |  |
|                                                                                                       |                                      |                     | CHP                              |                | 1395                               | 110/5000-6000                                   |                           |  |  |
|                                                                                                       |                                      |                     | CPT                              |                | 1395                               | 103/4500                                        |                           |  |  |
|                                                                                                       |                                      |                     | CHP                              |                | 1395                               | 103/4500                                        |                           |  |  |
|                                                                                                       |                                      |                     | DAC                              |                | 1498                               | 96/5000-6000                                    |                           |  |  |

|          |                     |                  |                           |                     |
|----------|---------------------|------------------|---------------------------|---------------------|
| Annex 2  | Test Report No.     | 19-TAAS-0648/SRA | Manufacturer / Hersteller | RAY Metallfabrik AB |
| Anlage 2 | zum Prüfbericht Nr. |                  | Type / Typ                | E4AH5               |

Field of application  
Verwendungsbereich (Fahrzeugdaten)

| VOLKSWAGEN-VW, AUDI, SEAT                                                                             |                                     |                                      |                     |                                   |                |                                    |                                                 |                           |
|-------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------|---------------------|-----------------------------------|----------------|------------------------------------|-------------------------------------------------|---------------------------|
| No. of vehicle                                                                                        | Hersteller/ Manufacturer            | Vehicle type approval no.            | Category of vehicle | Engine type (type of combustion)  | Stroke         | Engine capacity [cm <sup>3</sup> ] | Rated max. engine power [kW/min <sup>-1</sup> ] | Configuration see Annex 1 |
| LE/N: Fzg.                                                                                            | Fabrikmarke oder Handelsbezeichnung | Fahrzeugtyp (und Genehmigungsnummer) | Fahrzeugklasse      | Motorotyp (Verbrennungsverfahren) | Art des Motors | Hubraum [cm <sup>3</sup> ]         | Nennleistung [kW/min <sup>-1</sup> ]            | Anordnung nach Anl. 1     |
| No. addendum to EC type-approval certificate / laufende Nummer der Anlage zum EG-Typgenehmigungsbogen |                                     |                                      |                     |                                   |                |                                    |                                                 |                           |
|                                                                                                       | 1.2.                                | 1.3.                                 | 1.4.                | 1.4.1.                            | 1.4.2.         | 1.4.3.                             | 1.4.4.                                          |                           |
| 19                                                                                                    | VW Golf                             | AU                                   | M1                  | CPV                               | 4-stroke       | 1395                               | 92/5000-6000                                    | 1)2)3)4)5)                |
| 20                                                                                                    |                                     | e1*2007/46*0623..                    |                     | CZC                               |                | 1395                               | 92/5000-6000                                    |                           |
| 21                                                                                                    |                                     |                                      |                     | CPV                               |                | 1395                               | 92/5000-6000                                    |                           |
| 22                                                                                                    |                                     |                                      |                     | CMB                               |                | 1395                               | 90/5000                                         |                           |
| 23                                                                                                    |                                     |                                      |                     | CPV                               |                | 1395                               | 90/5000                                         |                           |
| 24                                                                                                    |                                     |                                      |                     | CXS                               |                | 1395                               | 90/5000                                         |                           |
| 25                                                                                                    |                                     |                                      |                     | CHZ                               |                | 999                                | 85/5000-5500                                    |                           |
| 26                                                                                                    |                                     |                                      |                     | CYV                               |                | 1197                               | 81/4600-5600                                    |                           |
| 27                                                                                                    |                                     |                                      |                     | CHZ                               |                | 999                                | 81/5000-5500                                    |                           |
| 28                                                                                                    |                                     |                                      |                     | CJZ                               |                | 1197                               | 77/4500-5500                                    |                           |
| 29                                                                                                    |                                     |                                      |                     | CYV                               |                | 1197                               | 63/4300-5300                                    |                           |
| 30                                                                                                    |                                     |                                      |                     | CHZ                               | 999            | 63/5000-5500                       |                                                 |                           |
| 31                                                                                                    |                                     |                                      |                     | CJZ                               | 1197           | 63/4300-5300                       |                                                 |                           |
| 32                                                                                                    | VW Golf                             | 1K                                   |                     | CUL                               |                | 1984                               | 162/4500-6200                                   |                           |
| 33                                                                                                    |                                     |                                      |                     | CCZ                               |                | 1984                               | 155/5300                                        |                           |
| 34                                                                                                    |                                     |                                      |                     | CAW                               |                | 1984                               | 147/5100                                        |                           |
| 35                                                                                                    |                                     |                                      |                     | BYD                               |                | 1984                               | 147/5100                                        |                           |
| 36                                                                                                    |                                     |                                      |                     | BWA                               |                | 1984                               | 147/5100                                        |                           |
| 37                                                                                                    |                                     |                                      |                     | AXX                               |                | 1984                               | 147/5100                                        |                           |

|          |                     |                  |                           |                     |
|----------|---------------------|------------------|---------------------------|---------------------|
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| Anlage 2 | zum Prüfbericht Nr. |                  | Type / Typ                | E4AH5               |

Field of application  
Verwendungsbereich (Fahrzeugdaten)

| Hersteller/ Manufacturer                                                                              |                                      | VOLKSWAGEN-VW, AUDI, SEAT |                                      | Category of vehicle | Engine type (type of combustion)  | Stroke         | Engine capacity [cm <sup>3</sup> ] | Rated max. engine power [kW/min <sup>-1</sup> ] | Configuration see Annex 1 |
|-------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------------|--------------------------------------|---------------------|-----------------------------------|----------------|------------------------------------|-------------------------------------------------|---------------------------|
| No. of vehicle                                                                                        | Trade mark or commercial description | Vehicle type approval no. | Fahrzeugtyp (und Genehmigungsnummer) |                     |                                   |                |                                    |                                                 |                           |
| LE-Nr. Fzg.                                                                                           | Fabrikmarke oder Handelsbezeichnung  |                           |                                      | Fahrzeugklasse      | Motorotyp (Verbrennungsverfahren) | Art des Motors | Hubraum [cm <sup>3</sup> ]         | Nennleistung [kW/min <sup>-1</sup> ]            | Anordnung nach Anl. 1     |
| No. addendum to EC type-approval certificate / laufende Nummer der Anlage zum EG-Typgenehmigungsbogen |                                      |                           |                                      |                     |                                   |                |                                    |                                                 |                           |
|                                                                                                       | 1.2.                                 | 1.3.                      | 1.4.                                 | 1.4.1.              | 1.4.2.                            | 1.4.3.         | 1.4.4.                             |                                                 |                           |
| 38                                                                                                    | VW Golf                              | 1K                        | M1                                   | BLG                 | 4-stroke                          | 1390           | 125/6000                           |                                                 | 1)2)3)4)5)                |
| 39                                                                                                    |                                      | e1*2001/116*0242* ..      |                                      | CAV                 |                                   | 1390           | 125/6000                           |                                                 |                           |
| 40                                                                                                    |                                      |                           |                                      | CTK                 |                                   | 1390           | 118/5800                           |                                                 |                           |
| 41                                                                                                    |                                      |                           |                                      | CTH                 |                                   | 1390           | 118/5800                           |                                                 |                           |
| 42                                                                                                    |                                      |                           |                                      | CNW                 |                                   | 1390           | 118/5800                           |                                                 |                           |
| 43                                                                                                    |                                      |                           |                                      | CAV                 |                                   | 1390           | 118/5800                           |                                                 |                           |
| 44                                                                                                    |                                      |                           |                                      | CDA                 |                                   | 1390           | 118/5800                           |                                                 |                           |
| 45                                                                                                    |                                      |                           |                                      | CZD                 |                                   | 1390           | 110/5000-6000                      |                                                 |                           |
| 46                                                                                                    |                                      |                           |                                      | BMV                 |                                   | 1390           | 103/5600                           |                                                 |                           |
| 47                                                                                                    |                                      |                           |                                      | CZC                 |                                   | 1390           | 92/5000-6000                       |                                                 |                           |
| 48                                                                                                    |                                      |                           |                                      | CXS                 |                                   | 1390           | 92/5000-6000                       |                                                 |                           |
| 49                                                                                                    |                                      |                           |                                      | CAX                 |                                   | 1390           | 90/5000                            |                                                 |                           |
| 50                                                                                                    |                                      |                           |                                      | CYV                 |                                   | 1197           | 77/4500                            |                                                 |                           |
| 51                                                                                                    |                                      |                           |                                      | CBZ                 |                                   | 1197           | 77/4500                            |                                                 |                           |
| 52                                                                                                    |                                      |                           |                                      | CBZ                 |                                   | 1197           | 63/4800                            |                                                 |                           |
| 53                                                                                                    | VW Golf                              | AUV                       | e1*2007/46*0627* ..                  | DAD                 |                                   | 1498           | 110/5000-6000                      |                                                 |                           |
| 54                                                                                                    |                                      |                           |                                      | CZD                 |                                   | 1395           | 110/5000-6000                      |                                                 |                           |
| 55                                                                                                    |                                      |                           |                                      | DAC                 |                                   | 1498           | 96/5000-6000                       |                                                 |                           |
| 56                                                                                                    |                                      |                           |                                      | CPV                 |                                   | 1395           | 92/5000-6000                       |                                                 |                           |

|                     |                                        |                  |                                         |                              |
|---------------------|----------------------------------------|------------------|-----------------------------------------|------------------------------|
| Annex 2<br>Anlage 2 | Test Report No.<br>zum Prüfbericht Nr. | 19-TAAS-0648/SRA | Manufacturer / Hersteller<br>Type / Typ | RAY Metallfabrik AB<br>E4AH5 |
|---------------------|----------------------------------------|------------------|-----------------------------------------|------------------------------|

Field of application  
Verwendungsbereich (Fahrzeugdaten)

| VOLKSWAGEN-VW, AUDI, SEAT                                                                             |                                      |                                      |                     |                                   |                |                                    |                                                 |                           |  |  |  |
|-------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------|---------------------|-----------------------------------|----------------|------------------------------------|-------------------------------------------------|---------------------------|--|--|--|
| Hersteller/ Manufacturer                                                                              | Trade mark or commercial description | Vehicle type approval no.            | Category of vehicle | Engine type (type of combustion)  | Stroke         | Engine capacity [cm <sup>3</sup> ] | Rated max. engine power [kW/min <sup>-1</sup> ] | Configuration see Annex 1 |  |  |  |
| Unt. Fzg.                                                                                             | Fabrikmarke oder Handelsbezeichnung  | Fahrzeugtyp (und Genehmigungsnummer) | Fahrzeugklasse      | Motorotyp (Verbrennungsverfahren) | Art des Motors | Hubraum [cm <sup>3</sup> ]         | Nennleistung [kW/min <sup>-1</sup> ]            | Anordnung nach Anl. 1     |  |  |  |
| No. addendum to EC type-approval certificate / laufende Nummer der Anlage zum EG-Typgenehmigungsbogen |                                      |                                      |                     |                                   |                |                                    |                                                 |                           |  |  |  |
|                                                                                                       | 1.2.                                 | 1.3.                                 | 1.4.                | 1.4.1.                            | 1.4.2.         | 1.4.3.                             | 1.4.4.                                          |                           |  |  |  |
| 57                                                                                                    | VW Golf                              | AUV                                  | M1                  | CZC                               | 4-stroke       | 1395                               | 92/5000-6000                                    | 1)2)3)4)5)                |  |  |  |
| 58                                                                                                    |                                      | e1*2007/46*0627*..                   |                     | CHZ                               |                | 999                                | 85/5000-5500                                    |                           |  |  |  |
| 59                                                                                                    |                                      |                                      |                     | CYV                               |                | 1197                               | 81/4600-5600                                    |                           |  |  |  |
| 60                                                                                                    |                                      |                                      |                     | CHZ                               |                | 999                                | 81/5000-5500                                    |                           |  |  |  |
| 61                                                                                                    |                                      |                                      |                     | CHZ                               |                | 999                                | 63/5000-5500                                    |                           |  |  |  |
| 62                                                                                                    | VW Golf                              | 1KP                                  | e1*2001/116*0304*.. | CAV                               | 1390           | 125/6000                           |                                                 |                           |  |  |  |
| 63                                                                                                    |                                      |                                      |                     | BLG                               | 1390           | 125/6000                           |                                                 |                           |  |  |  |
| 64                                                                                                    |                                      |                                      |                     | CTH                               | 1390           | 118/5800                           |                                                 |                           |  |  |  |
| 65                                                                                                    |                                      |                                      |                     | CNW                               | 1390           | 118/5800                           |                                                 |                           |  |  |  |
| 66                                                                                                    |                                      |                                      |                     | CAV                               | 1390           | 118/5800                           |                                                 |                           |  |  |  |
| 67                                                                                                    |                                      |                                      |                     | BMV                               | 1390           | 103/5600                           |                                                 |                           |  |  |  |
| 68                                                                                                    |                                      |                                      |                     | CAX                               | 1390           | 90/5000                            |                                                 |                           |  |  |  |
| 69                                                                                                    |                                      |                                      |                     | CBZ                               | 1197           | 77/5000                            |                                                 |                           |  |  |  |
| 70                                                                                                    |                                      |                                      |                     | CBZ                               | 1197           | 63/4800                            |                                                 |                           |  |  |  |
| 71                                                                                                    | VW EOS                               | 1F                                   | e1*2001/116*0349*.. | CUL                               | 1984           | 162/4500-6200                      |                                                 |                           |  |  |  |
| 72                                                                                                    |                                      |                                      |                     | CCZ                               | 1984           | 155/5300                           |                                                 |                           |  |  |  |
| 73                                                                                                    |                                      |                                      |                     | CCZ                               | 1984           | 147/5100                           |                                                 |                           |  |  |  |
| 74                                                                                                    |                                      |                                      |                     | CAW                               | 1984           | 147/5100                           |                                                 |                           |  |  |  |
| 75                                                                                                    |                                      |                                      |                     | BWA                               | 1984           | 147/5100                           |                                                 |                           |  |  |  |

|          |                     |                  |                           |                     |
|----------|---------------------|------------------|---------------------------|---------------------|
| Annex 2  | Test Report No.     | 19-TAAS-0648/SRA | Manufacturer / Hersteller | RAY Metallfabrik AB |
| Anlage 2 | zum Prüfbericht Nr. |                  | Type / Typ                | E4AH5               |

Field of application  
Verwendungsbereich (Fahrzeugdaten)

| VOLKSWAGEN-VW, AUDI, SEAT                                                                             |                                      |                     |                                   |                |                                    |                                                 |                           |  |
|-------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------|-----------------------------------|----------------|------------------------------------|-------------------------------------------------|---------------------------|--|
| Hersteller/ Manufacturer                                                                              | Vehicle type approval no.            | Category of vehicle | Engine type (type of combustion)  | Stroke         | Engine capacity [cm <sup>3</sup> ] | Rated max. engine power [kW/min <sup>-1</sup> ] | Configuration see Annex 1 |  |
| Fabrikmarke oder Handelsbezeichnung                                                                   | Fahrzeugtyp (und Genehmigungsnummer) | Fahrzeug-Klasse     | Motor Typ (Verbrennungsverfahren) | Art des Motors | Hubraum [cm <sup>3</sup> ]         | Nennleistung [kW/min <sup>-1</sup> ]            | Anordnung nach Anl. 1     |  |
| No. addendum to EC type-approval certificate / laufende Nummer der Anlage zum EG-Typgenehmigungsbogen |                                      |                     |                                   |                |                                    |                                                 |                           |  |
| 1.2.                                                                                                  | 1.3.                                 | 1.4.                | 1.4.1.                            | 1.4.2.         | 1.4.3.                             | 1.4.4.                                          |                           |  |
| VW EOS                                                                                                | 1F                                   | M1                  | CAV                               | 4-stroke       | 1390                               | 125/6000                                        | 1)2)3)4)5)                |  |
|                                                                                                       |                                      |                     | CTH                               |                | 1390                               | 118/5800                                        |                           |  |
|                                                                                                       |                                      |                     | CAV                               |                | 1390                               | 118/5800                                        |                           |  |
|                                                                                                       |                                      |                     | CAX                               |                | 1390                               | 90/5000                                         |                           |  |
| VW Scirocco                                                                                           | 13                                   |                     | CUL                               |                | 1984                               | 162/4500-6200                                   |                           |  |
|                                                                                                       |                                      |                     | CCZ                               |                | 1984                               | 155/5300                                        |                           |  |
|                                                                                                       |                                      |                     | CAW                               |                | 1984                               | 147/5100-6000                                   |                           |  |
|                                                                                                       |                                      |                     | CUL                               |                | 1984                               | 132/4500                                        |                           |  |
|                                                                                                       |                                      |                     | CAV                               |                | 1390                               | 125/6000                                        |                           |  |
|                                                                                                       |                                      |                     | CTK                               |                | 1390                               | 118/5800                                        |                           |  |
|                                                                                                       |                                      |                     | CTH                               |                | 1390                               | 118/5800                                        |                           |  |
|                                                                                                       |                                      |                     | CNW                               |                | 1390                               | 118/5800                                        |                           |  |
|                                                                                                       |                                      |                     | CAV                               |                | 1390                               | 118/5800                                        |                           |  |
|                                                                                                       |                                      |                     | CZD                               |                | 1395                               | 110/5000-6000                                   |                           |  |
|                                                                                                       |                                      |                     | CTH                               |                | 1390                               | 103/4500                                        |                           |  |
|                                                                                                       |                                      |                     | CZD                               |                | 1395                               | 96/5000-6000                                    |                           |  |
|                                                                                                       |                                      |                     | CZC                               | 1395           | 92/5000-6000                       |                                                 |                           |  |
|                                                                                                       |                                      |                     | CXS                               | 1395           | 92/5000-6000                       |                                                 |                           |  |
|                                                                                                       |                                      |                     | CMS                               | 1390           | 90/5000                            |                                                 |                           |  |
|                                                                                                       |                                      |                     | CAX                               | 1390           | 90/5000                            |                                                 |                           |  |

|                     |                                        |                  |                                         |                              |
|---------------------|----------------------------------------|------------------|-----------------------------------------|------------------------------|
| Annex 2<br>Anlage 2 | Test Report No.<br>zum Prüfbericht Nr. | 19-TAAS-0648/SRA | Manufacturer / Hersteller<br>Type / Typ | RAY Metallfabrik AB<br>E4AH5 |
|---------------------|----------------------------------------|------------------|-----------------------------------------|------------------------------|

Field of application  
Verwendungsbereich (Fahrzeugdaten)

| VOLKSWAGEN-VW, AUDI, SEAT                                                                             |                                      |                     |                                   |                |                       |                                    |                           |            |
|-------------------------------------------------------------------------------------------------------|--------------------------------------|---------------------|-----------------------------------|----------------|-----------------------|------------------------------------|---------------------------|------------|
| Hersteller/ Manufacturer                                                                              | Vehicle type approval no.            | Category of vehicle | Engine type (type of combustion)  | Stroke         | Engine capacity [cm³] | Rated max. engine power [kW/min⁻¹] | Configuration see Annex 1 |            |
| Lfd.Nr. Fzg.                                                                                          | Fahrzeugtyp (und Genehmigungsnummer) | Fahrzeugklasse      | Motor Typ (Verbrennungsverfahren) | Art des Motors | Hubraum [cm³]         | Nennleistung [kW/min⁻¹]            | Anordnung nach Anl. 1     |            |
| No. addendum to EC type-approval certificate / laufende Nummer der Anlage zum EG-Typgenehmigungsbogen |                                      |                     |                                   |                |                       |                                    |                           |            |
|                                                                                                       | 1.2.                                 | 1.3.                | 1.4.                              | 1.4.1.         | 1.4.2.                | 1.4.3.                             | 1.4.4.                    |            |
| 96                                                                                                    | Audi A3/S3                           | 8V                  | M1                                | CHH            | 4-stroke              | 1984                               | 162/4500-6200             | 1)2)3)4)5) |
| 97                                                                                                    |                                      | e1*2007/46*0607..   |                                   | CNT            |                       | 1984                               | 162/5000-6000             |            |
| 98                                                                                                    |                                      |                     |                                   | CZP            |                       | 1984                               | 140/4200                  |            |
| 99                                                                                                    |                                      |                     |                                   | CZR            |                       | 1984                               | 137/4200                  |            |
| 100                                                                                                   |                                      |                     |                                   | CJS            |                       | 1798                               | 132/5100                  |            |
| 101                                                                                                   |                                      |                     |                                   | CJS            |                       | 1798                               | 132/4500                  |            |
| 102                                                                                                   |                                      |                     |                                   | CNS            |                       | 1798                               | 125/4500                  |            |
| 103                                                                                                   |                                      |                     |                                   | DAD            |                       | 1498                               | 110/5000-6000             |            |
| 104                                                                                                   |                                      |                     |                                   | CZE            |                       | 1395                               | 110/5000-6000             |            |
| 105                                                                                                   |                                      |                     |                                   | CWL            |                       | 1395                               | 110/5000                  |            |
| 106                                                                                                   |                                      |                     |                                   | CPT            |                       | 1395                               | 103/4500                  |            |
| 107                                                                                                   |                                      |                     |                                   | CZC            |                       | 1395                               | 92/5000-6000              |            |
| 108                                                                                                   |                                      |                     |                                   | CXS            |                       | 1395                               | 92/5000-6000              |            |
| 109                                                                                                   |                                      |                     |                                   | CXS            |                       | 1395                               | 90/5000-6000              |            |
| 110                                                                                                   |                                      |                     |                                   | CMB            |                       | 1395                               | 90/5000-6000              |            |
| 111                                                                                                   |                                      |                     |                                   | CZC            | 1395                  | 85/5000-5500                       |                           |            |
| 112                                                                                                   |                                      |                     |                                   | CHZ            | 999                   | 85/5000-5500                       |                           |            |
| 113                                                                                                   |                                      |                     |                                   | DKR            | 999                   | 85/5000-5500                       |                           |            |
| 114                                                                                                   |                                      |                     |                                   | CYV            | 1197                  | 81/4600-5600                       |                           |            |
| 115                                                                                                   |                                      |                     |                                   | CJZ            | 1197                  | 77/4500                            |                           |            |

|          |                     |                  |                           |                     |
|----------|---------------------|------------------|---------------------------|---------------------|
| Annex 2  | Test Report No.     | 19-TAAS-0648/SRA | Manufacturer / Hersteller | RAY Metallfabrik AB |
| Anlage 2 | zum Prüfbericht Nr. |                  | Type / Typ                | E4AH5               |

Field of application  
Verwendungsbereich (Fahrzeugdaten)

| No. of vehicle                                                                                        | Hersteller/ Manufacturer            | AUDI                                 | Vehicle type approval no. | Category of vehicle               | Engine type (type of combustion) | Stroke | Engine capacity [cm <sup>3</sup> ] | Rated max. engine power [kW/min <sup>-1</sup> ] | Configuration see Annex 1 |
|-------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------|---------------------------|-----------------------------------|----------------------------------|--------|------------------------------------|-------------------------------------------------|---------------------------|
| LE Nr. Fzg.                                                                                           | Fabrikmarke oder Handelsbezeichnung | Fahrzeugtyp (und Genehmigungsnummer) | Fahrzeugklasse            | Motorotyp (Verbrennungsverfahren) | Art des Motors                   |        | Hubraum [cm <sup>3</sup> ]         | Nennleistung [kW/min <sup>-1</sup> ]            | Anordnung nach Anl. 1     |
| No. addendum to EC type-approval certificate / laufende Nummer der Anlage zum EG-Typgenehmigungsbogen |                                     |                                      |                           |                                   |                                  |        |                                    |                                                 |                           |
|                                                                                                       | 1.2.                                | 1.3.                                 | 1.4.                      | 1.4.1.                            | 1.4.2.                           | 1.4.3. | 1.4.4.                             |                                                 |                           |
| 1*6                                                                                                   | Audi A3/S2                          | 8P                                   | M1                        | CCZ                               | 4- stroke                        | 1984   | 147/5100                           |                                                 | 1)(2)(3)(4)(5)            |
| 1*7                                                                                                   |                                     | e1*2001/116*0217* ..                 |                           | CAW                               |                                  | 1984   | 147/5100                           |                                                 |                           |
| 1*8                                                                                                   |                                     |                                      |                           | BWA                               |                                  | 1984   | 147/5100                           |                                                 |                           |
| 1*9                                                                                                   |                                     |                                      |                           | AXX                               |                                  | 1984   | 147/5100                           |                                                 |                           |
| 120                                                                                                   |                                     |                                      |                           | CZR                               |                                  | 1984   | 137/4200                           |                                                 |                           |
| 121                                                                                                   |                                     |                                      |                           | CDA                               |                                  | 1798   | 118/4500                           |                                                 |                           |
| 122                                                                                                   |                                     |                                      |                           | BZB                               |                                  | 1798   | 118/4500                           |                                                 |                           |
| 123                                                                                                   |                                     |                                      |                           | BYT                               |                                  | 1798   | 118/4500                           |                                                 |                           |
| 124                                                                                                   |                                     |                                      |                           | DAD                               |                                  | 1498   | 110/5000-6000                      |                                                 |                           |
| 125                                                                                                   |                                     |                                      |                           | CMS                               |                                  | 1390   | 92/5000                            |                                                 |                           |
| 126                                                                                                   |                                     |                                      |                           | CAX                               |                                  | 1390   | 92/5000                            |                                                 |                           |
| 127                                                                                                   |                                     |                                      |                           | CBZ                               |                                  | 1197   | 77/5000                            |                                                 |                           |

|                     |                                        |                  |                                         |                              |
|---------------------|----------------------------------------|------------------|-----------------------------------------|------------------------------|
| Annex 2<br>Anlage 2 | Test Report No.<br>zum Prüfbericht Nr. | 19-TAAS-0648/SRA | Manufacturer / Hersteller<br>Type / Typ | RAY Metallfabrik AB<br>E4AH5 |
|---------------------|----------------------------------------|------------------|-----------------------------------------|------------------------------|

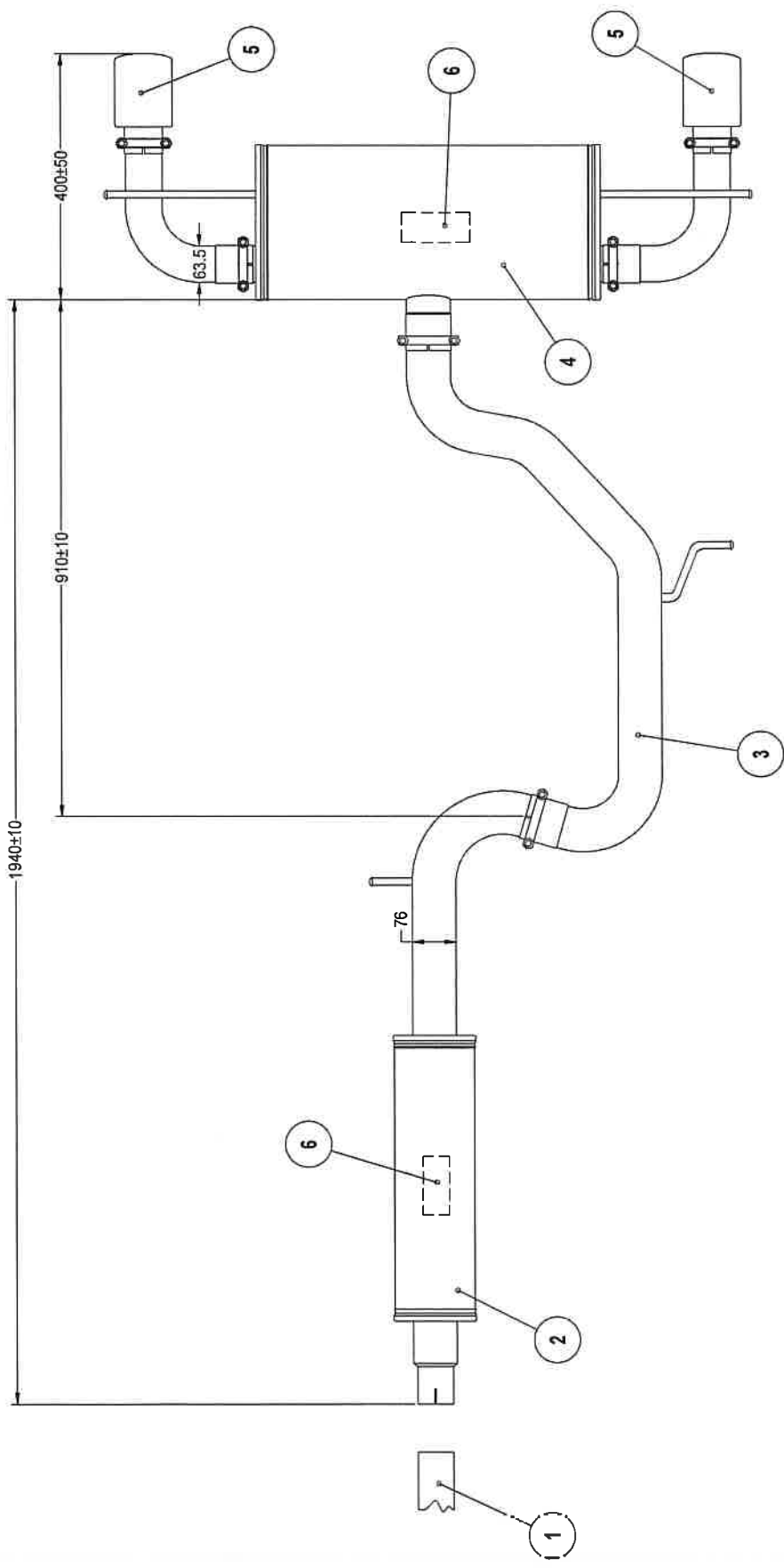
Field of application  
Verwendungsbereich (Fahrzeugdaten)

| Hersteller/ Manufacturer                                                                              |                                      | VOLKSWAGEN-VW, AUDI, SEAT            |                     |                                   |                |                                    |                                                 |                           |
|-------------------------------------------------------------------------------------------------------|--------------------------------------|--------------------------------------|---------------------|-----------------------------------|----------------|------------------------------------|-------------------------------------------------|---------------------------|
| No. of vehicle                                                                                        | Trade mark or commercial description | Vehicle type approval no.            | Category of vehicle | Engine type (type of combustion)  | Stroke         | Engine capacity [cm <sup>3</sup> ] | Rated max. engine power [kW/min <sup>-1</sup> ] | Configuration see Annex 1 |
| LE-Nr. Fzg.                                                                                           | Fabrikmarke oder Handelsbezeichnung  | Fahrzeugtyp (und Genehmigungsnummer) | Fahrzeugklasse      | Motor Typ (Verbrennungsverfahren) | Art des Motors | Hubraum [cm <sup>3</sup> ]         | Nennleistung [kW/min <sup>-1</sup> ]            | Anordnung nach Anl. 1     |
| No. addendum to EC type-approval certificate / laufende Nummer der Anlage zum EG-Typgenehmigungsbogen |                                      |                                      |                     |                                   |                |                                    |                                                 |                           |
|                                                                                                       | 1.2.                                 | 1.3.                                 | 1.4.                | 1.4.1.                            | 1.4.2.         | 1.4.3.                             | 1.4.4.                                          |                           |
| 128                                                                                                   | Seat Leon                            | 5F                                   | M1                  | CJS                               | 4-Stroke       | 1798                               | 132/5100-6200                                   | 1)2)3)4)5)                |
| 129                                                                                                   |                                      | e9*2007/46*0094*..                   |                     | CJS                               |                | 1798                               | 132/4500-6200                                   |                           |
| 130                                                                                                   |                                      |                                      |                     | CZE                               |                | 1395                               | 110/5000-6000                                   |                           |
| 131                                                                                                   |                                      |                                      |                     | CZD                               |                | 1395                               | 110/5000-6000                                   |                           |
| 132                                                                                                   |                                      |                                      |                     | CPT                               |                | 1395                               | 103/4500                                        |                           |
| 133                                                                                                   |                                      |                                      |                     | CHP                               |                | 1395                               | 103/4500                                        |                           |
| 134                                                                                                   |                                      |                                      |                     | CZC                               |                | 1395                               | 92/5000-6000                                    |                           |
| 135                                                                                                   |                                      |                                      |                     | CXS                               |                | 1395                               | 90/5000-6000                                    |                           |
| 136                                                                                                   |                                      |                                      |                     | CMB                               |                | 1395                               | 90/5000                                         |                           |
| 137                                                                                                   |                                      |                                      |                     | DKR                               |                | 999                                | 85/5000-5500                                    |                           |
| 138                                                                                                   |                                      |                                      |                     | CHZ                               |                | 999                                | 85/5000-5500                                    |                           |
| 139                                                                                                   |                                      |                                      |                     | CPW                               |                | 1395                               | 81/4600-5600                                    |                           |
| 140                                                                                                   |                                      |                                      |                     | CYV                               |                | 1197                               | 81/4600-5600                                    |                           |
| 141                                                                                                   |                                      |                                      |                     | CJZ                               |                | 1197                               | 77/4500-5500                                    |                           |
| 142                                                                                                   |                                      |                                      |                     | CJZ                               |                | 1197                               | 63/4300-5300                                    |                           |
| 143                                                                                                   |                                      |                                      |                     | CYV                               |                | 1197                               | 63/4300-5300                                    |                           |

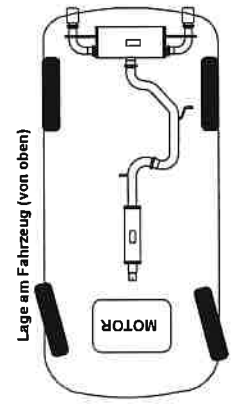
|          |                     |                  |                           |                     |
|----------|---------------------|------------------|---------------------------|---------------------|
| Annex 2  | Test Report No.     | 19-TAAS-0648/SRA | Manufacturer / Hersteller | RAY Metallfabrik AB |
| Anlage 2 | zum Prüfbericht Nr. |                  | Type / Typ                | E4AH5               |

Field of application  
Verwendungsbereich (Fahrzeugdaten)

| No. of vehicle                                                                                        | Hersteller/ Manufacturer            | SEAT                                 |                                      | Category of vehicle | Engine type (type of combustion)  | Stroke         | Engine capacity [cm <sup>3</sup> ] | Rated max. engine power [kW/min <sup>-1</sup> ] | Configuration see Annex 1 |
|-------------------------------------------------------------------------------------------------------|-------------------------------------|--------------------------------------|--------------------------------------|---------------------|-----------------------------------|----------------|------------------------------------|-------------------------------------------------|---------------------------|
|                                                                                                       |                                     | Vehicle type approval no.            | Fahrzeugtyp (und Genehmigungsnummer) |                     |                                   |                |                                    |                                                 |                           |
| LEI Nr. Fzg.                                                                                          | Fabrikmarke oder Handelsbezeichnung | Fahrzeugtyp (und Genehmigungsnummer) |                                      | Fahrzeugklasse      | Motor Typ (Verbrennungsverfahren) | Art des Motors | Hubraum [cm <sup>3</sup> ]         | Nennleistung [kW/min <sup>-1</sup> ]            | Anordnung nach Anl. 1     |
| No. addendum to EC type-approval certificate / laufende Nummer der Anlage zum EG-Typgenehmigungsbogen |                                     |                                      |                                      |                     |                                   |                |                                    |                                                 |                           |
|                                                                                                       | 1.2.                                | 1.3.                                 | 1.4.                                 | 1.4.1.              | 1.4.2.                            | 1.4.3.         | 1.4.4.                             |                                                 |                           |
| 144                                                                                                   | Seat Leon                           | 1P                                   | e9*2001/116*0052* ..                 | M1                  | 4-Stroke                          | 1984           | 155/5300                           | 1)2)3)4)5)                                      |                           |
| 145                                                                                                   |                                     |                                      |                                      |                     |                                   | 1984           | 147/5100-6000                      |                                                 |                           |
| 146                                                                                                   |                                     |                                      |                                      |                     |                                   | 1984           | 135/5100                           |                                                 |                           |
| 147                                                                                                   |                                     |                                      |                                      |                     |                                   | 1798           | 118/4500                           |                                                 |                           |
| 148                                                                                                   |                                     |                                      |                                      |                     |                                   | 1798           | 118/4500                           |                                                 |                           |
| 149                                                                                                   |                                     |                                      |                                      |                     |                                   | 1390           | 92/5000                            |                                                 |                           |
| 150                                                                                                   |                                     |                                      |                                      |                     |                                   | 1197           | 77/5000                            |                                                 |                           |



FABRIKSCHILD  
RAY  
E4AH5  
e24 033021



| Materialqualität          | Schweden | Europa              | USA      |
|---------------------------|----------|---------------------|----------|
| Kategorie A : Normalstahl | SS 1142  | EN 10130 DC01       | -----    |
| Kategorie B : Chromstahl  | -----    | EN X 5 CrTi 12      | AISI 409 |
| Kategorie C : Edelstahl   | SS 2332  | EN X 6 CrNi 18 10   | AISI 304 |
|                           | SS 2333  | EN X 8 CrNi 18 12   | AISI 305 |
|                           | SS 2337  | EN X 6 CrNiTi 18 10 | AISI 321 |

|                 |     |                             |                |                 |              |              |
|-----------------|-----|-----------------------------|----------------|-----------------|--------------|--------------|
| 6               | 1   | Fabrik Schild               | Kat. A / B     | VW Golf VII GTI | Erstellen    | Erstellt von |
| 5               | 2   | Endrohr                     |                |                 |              |              |
| 4               | 1   | Nachschalldämpfer           |                |                 |              |              |
| 3               | 1   | Verbindungsrohr             | Kat. A / B / C | Ø 76 mm         | Taggeber Nr. | P41126       |
| 2               | 1   | Vorschalldämpfer            |                |                 |              |              |
| 1               | 1   | Serieanlage mit Katalysator |                |                 | Abweichung   | A            |
| Positiv         | Art | Bezeichnung                 | Material       | Code            | Stück        | 1:8          |
| Kommt           | IN  | Top                         | Kommt          | Stück           | Stück        | 1:8          |
| VW Golf VII GTI |     |                             |                |                 |              | P41126       |
| e24 033021      |     |                             |                |                 |              | A            |
| e24 033021      |     |                             |                |                 |              | 14126        |

### **Mounting Instruction**

1. Before the removal of the silencer system, it is necessary to check which components of the silencer system are defective. In many cases, the exhaust pipes have to be replaced as well.
2. The condition of accessories (e.g. joints, screws, nuts, ...) has to be considered as well.
3. Connection assemblies and connecting elements affected by seizing have to be treated with a rust removing agent before removal.
4. Original equipment parts have to be removed by undoing screw or slip joints.
5. The connecting parts of the new components have to be lubricated before mounting (e.g. formulations of oil with solid lubricants).
6. Parts connected to the vehicle have to be in the loose mounting position first. After adjustment, all connecting parts and mounting brackets can be tightened.
7. All connection assemblies have to be checked for leak-tightness.
8. All silencers and exhaust pipes have been made from high quality stainless and acid-proof steel.
9. Residues from the road pavement may cause surface rust. These residues can be removed by a stainless steel brush or other appropriate detergents. No further surface conservation actions are necessary.