Automotive industry and the Basel Convention guidelines – global implications on circular economy

APRA (Automotive Parts Remanufacturers Association)
and
CLEPA (European Association of Automotive Industry)

Side Event at the Conference of the parties to the Basel Convention
4-15 May 2015
Geneva
Switzerland

Definition of an automotive core and overview of the reman production process in the automotive industry

Automotive Remanufactured Products - Examples

Engine-Management

Steering

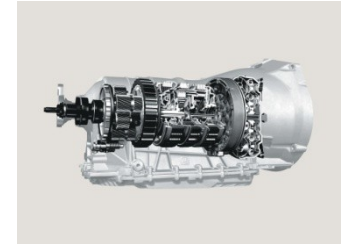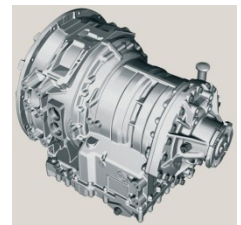Braking

Driveshaft

Small-power motors

Starter / Alternator / A/C

axle

clutch

(automated) gear box

Definition of an automotive core

"A core is a used automotive part, intended to become a remanufactured part*. During reverse logistics it is properly protected, handled and identified for remanufacturing to avoid damage and to preserve its value. A core is not waste or scrap and will not be reused before remanufacturing."

*As per common definition for a remanufactured part (of ACEA, APRA, CLEPA, FIRM, VDA).

Reman production process
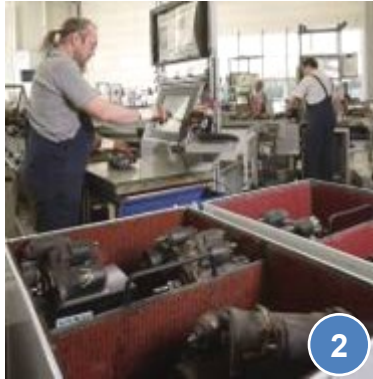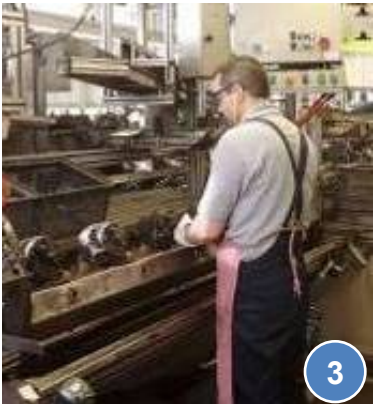
1. Core collecting
2. Core sorting
3. Complete Dismantling
4. Cleaning of components
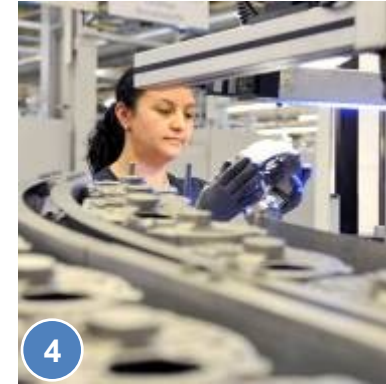5. Restoring components or replace with new parts
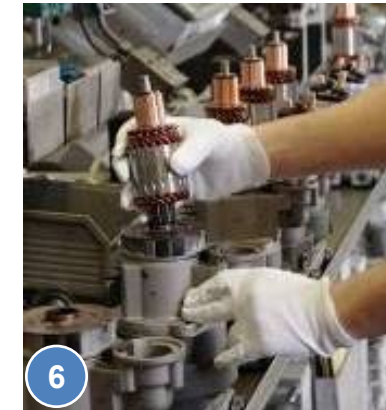6. Re-assembly
7. End of line testing
8. Packaging

① Core collecting
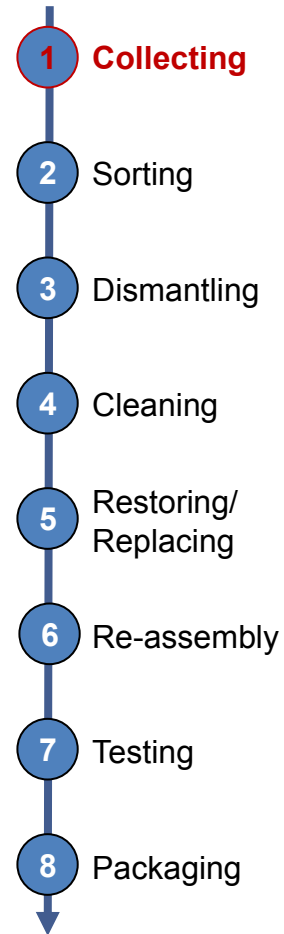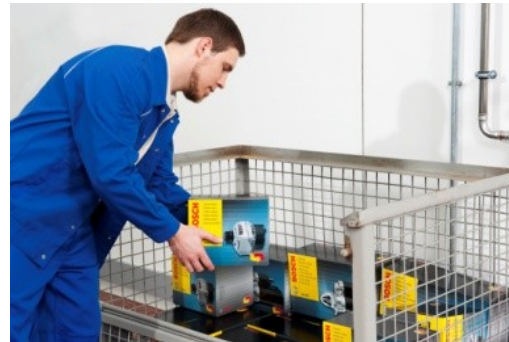
With purchasing a remanufactured part, the customer gets the right to return a core. Often the packaging of this reman part is used for the core-return. Then it is placed in a box, ready to be collected by a reverse logistic service provider.

1 **Collecting**

2 Sorting

3 Dismantling

4 Cleaning

5 Restoring/ Replacing

6 Re-assembly

7 Testing

8 Packaging

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② Core sorting

Cores are identified, evaluated, sorted and stored.
This is a precondition for the industrial remanufacturing process.

1 Collecting

2 **Sorting**

3 Dismantling

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6 Re-assembly

7 Testing

8 Packaging
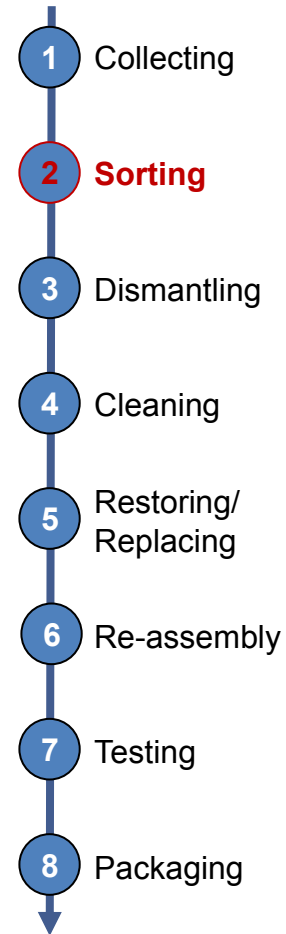
③ Complete dismantling

After complete dismantling the core, the sorted components are available for the further process steps.

1. Collecting
2. Sorting
3. **Dismantling**
4. Cleaning
5. Restoring/ Replacing
6. Re-assembly
7. Testing
8. Packaging
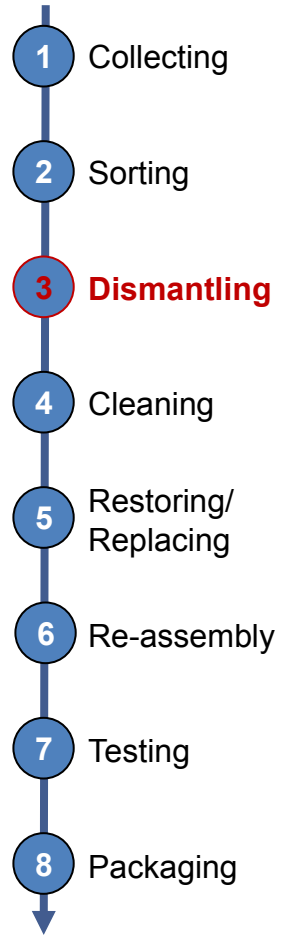
④ Cleaning of components

All components a carefully cleaned with specific cleaning methods / processes. Afterwards each component is inspected and evaluated.

1 Collecting

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4 **Cleaning**

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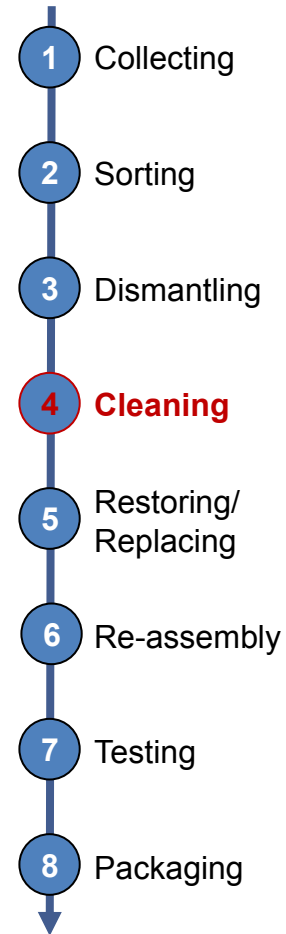
⑤ Restoring components / replace with new parts

The target is to reuse as many components of the core as possible. If feasible defect components are restored.
Defined components are systematically replaced by 100%.

1	Collecting
2	Sorting
3	Dismantling
4	Cleaning
5	**Restoring/ Replacing**
6	Re-assembly
7	Testing
8	Packaging

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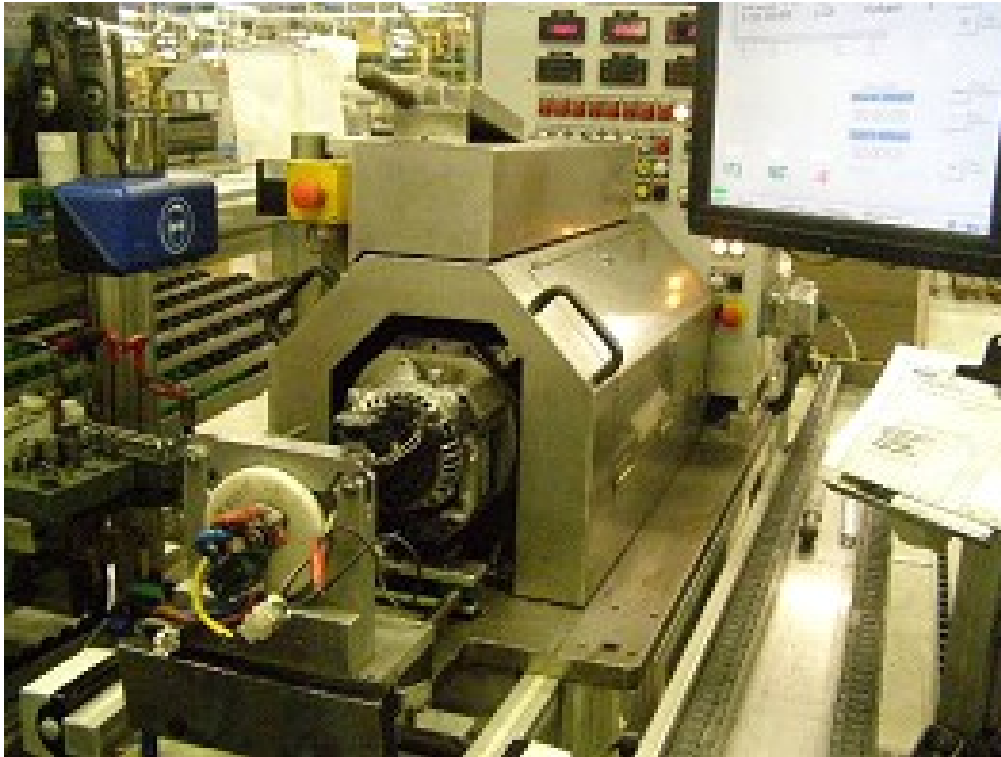
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⑥ Re-assembly

Re-assembly is fulfilling the requirements of the automotive industry. Standardized industrial processes with proven process capability.

1. Collecting
2. Sorting
3. Dismantling
4. Cleaning
5. Restoring/ Replacing
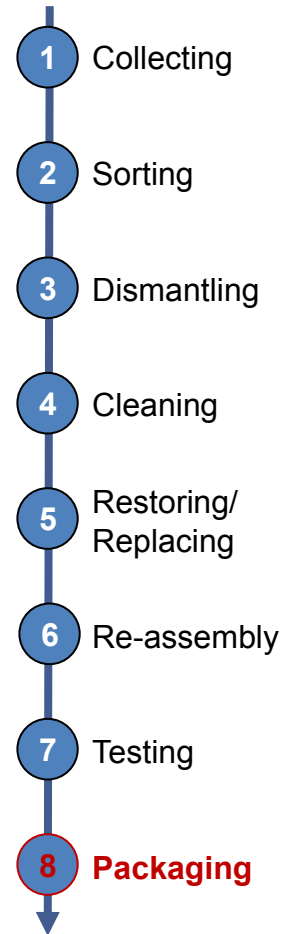6. **Re-assembly**
7. Testing
8. Packaging
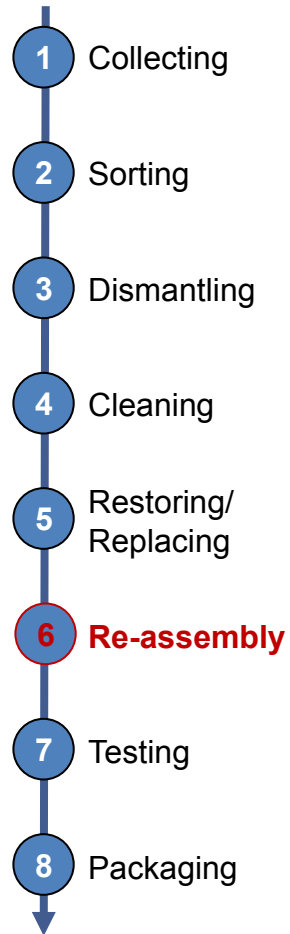
⑦ End of line testing

Within the end of line testing the capability of the remanufacturing process to produce quality reman parts is confirmed and documented.

1 Collecting

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6 Re-assembly

7 **Testing**
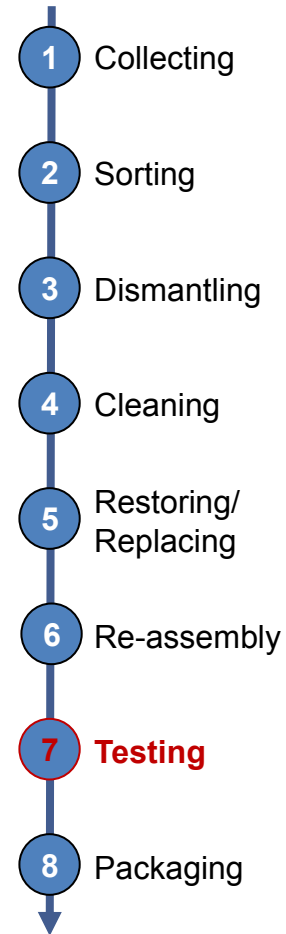
8 Packaging

⑧ Packaging

Each remanufactured part is clearly marked as remanufactured in the packaging process.

1 Collecting

2 Sorting

3 Dismantling

4 Cleaning

5 Restoring/ Replacing

6 Re-assembly

7 Testing

8 **Packaging**

Automotive Industry at SIWG is represented by

APRA – The Automotive Parts Remanufacturers Association is a modern, up to date and innovative association with a clear mission and strong communication. Representing the remanufacturing business with more then 1.000 members world wide, APRA is well connected. APRA is the first worldwide active industry association for remanufacturing and act as communication platform for remanufacturer. APRA is providing networking and informational events for their members and is actively defending their interests.

CLEPA - The European Association of Automotive Suppliers: 112 of the world's most prominent suppliers for car parts, systems and modules and 26 National trade associations and European sector associations are members of CLEPA, representing more than 3,000 companies, employing more than 5 million people and covering all products and services within the automotive supply chain. Based in Brussels, CLEPA is recognised as the natural discussion partner by the European Institutions, United Nations and fellow associations (ACEA, JAMA, MEMA, etc.).