DRAFT

Spare Parts Ordering

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Imagination at work.

Project Description

Organizational Need

GE have engage in 2014, on a Long Term Spares Agreement with Eskom to facilitate the ordering of parts by the power station directly, to ensure that spare parts are order on time for the coming works.

Important loss of time, in back and forward communication via meetings between different stakeholders (internal and external), to agree on a part code number to fulfill a particular work. Lack of technical knowledge from the different level of the stakeholders, important turn over in term of resources.

Finding a solution to smooth the spare part selection for a particular system, which will increase the turnover in term of commitments, reducing CoPQ as well as the time between intend and order, increase customer satisfaction. The system will have to be adapted to a large panel of person from no technology knowledge to engineers.

Project Description

Organizational Need

Steps & Timeframe:

- Identify the different internal and external stakeholder (week 1)
- Meeting them to identify their needs, issue and gaps (week 1)
- Brainstorming on potential ways to solve the issue (week 2)
- Coming out with a realistic solution (week 2)
- Going back to stakeholders to check their support towards the solution (week 3)
- Identify the way to support the solution (week 3)

EMPATHIZE

EMPATHIZE

Interviews

Individual meetings were held internally within GE and with Eskom procurement at one power station and with the respective Eskom System engineer, here below are the challenge encounter by them :

1. Eskom Procurement :
    - Felling like a mail box between GE and Eskom System engineer
    - Lack of reactivity from GE on answering RFQ
    - Change of point of contact within GE on a regular basis
2. Eskom Engineering :
    - No data base of parts for a particular unit, LTSA description too light
    - Have to search parts via old O&M manuals (time consuming)
    - GE Resident Engineer do not know where to find the parts either
    - Some part list been created many years ago but now some parts have change denomination (reliability of the information)
    - Not knowing what the part name is , or what if the particular part is needed and his location (technology know-how)
    - LTSA not used because not firendly

EMPATHIZE

Interviews

1. GE Procurement :
    - Felling like a mail box between GE and Eskom procurement
    - Lack of reactivity from Eskom on part clarification
    - Long process for Eskom to emit a PO link to a part
    - Not ordering following the LTSA list
2. GE Engineering :
    - Parts information not all the time easily accessible inside RPDM
    - Have to go through old assembly drawing to identify the particular parts (time consuming) and sometime consulting overseas engineer to identify a part, as drawing may be not in English.
    - Not a huge added value vs other task more important
    - LTSA list created few years ago but design of unit have changed and LTSA list not updated.
    - Back and forward with the customer to identify the part that he wants
    - Most of the time a drawing help to solve the issue to localize the parts needed

DEFINE

DEFINE

Objectives

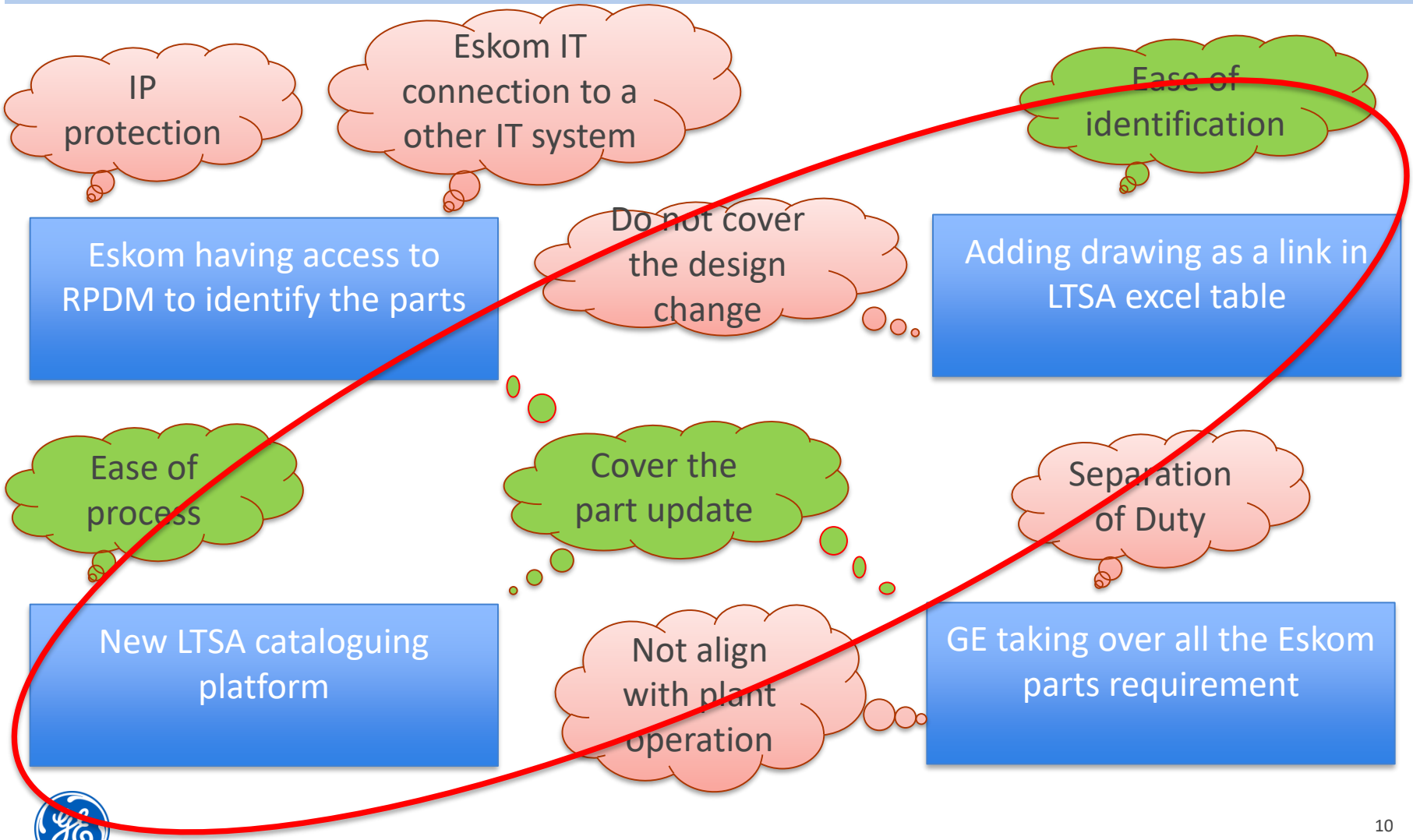
- Faster identification of the parts
- Ease and avoid delays in the process of ordering the parts
- Free time to work on more added value projects
- Reduce level of frustration from the customer and GE on the spare parts
- Up to date parts number
- Less human interactions – more ownership/accountability
- System have to be easy to use

✓ As the parts are an important elements of GE turnover, and Eskom request an increase in localization of parts manufacturing. The solution will have to take in consideration the need for localization of the parts, via supplier qualification, manufacturing quality and dimensions.

IDEATE

DEFINE

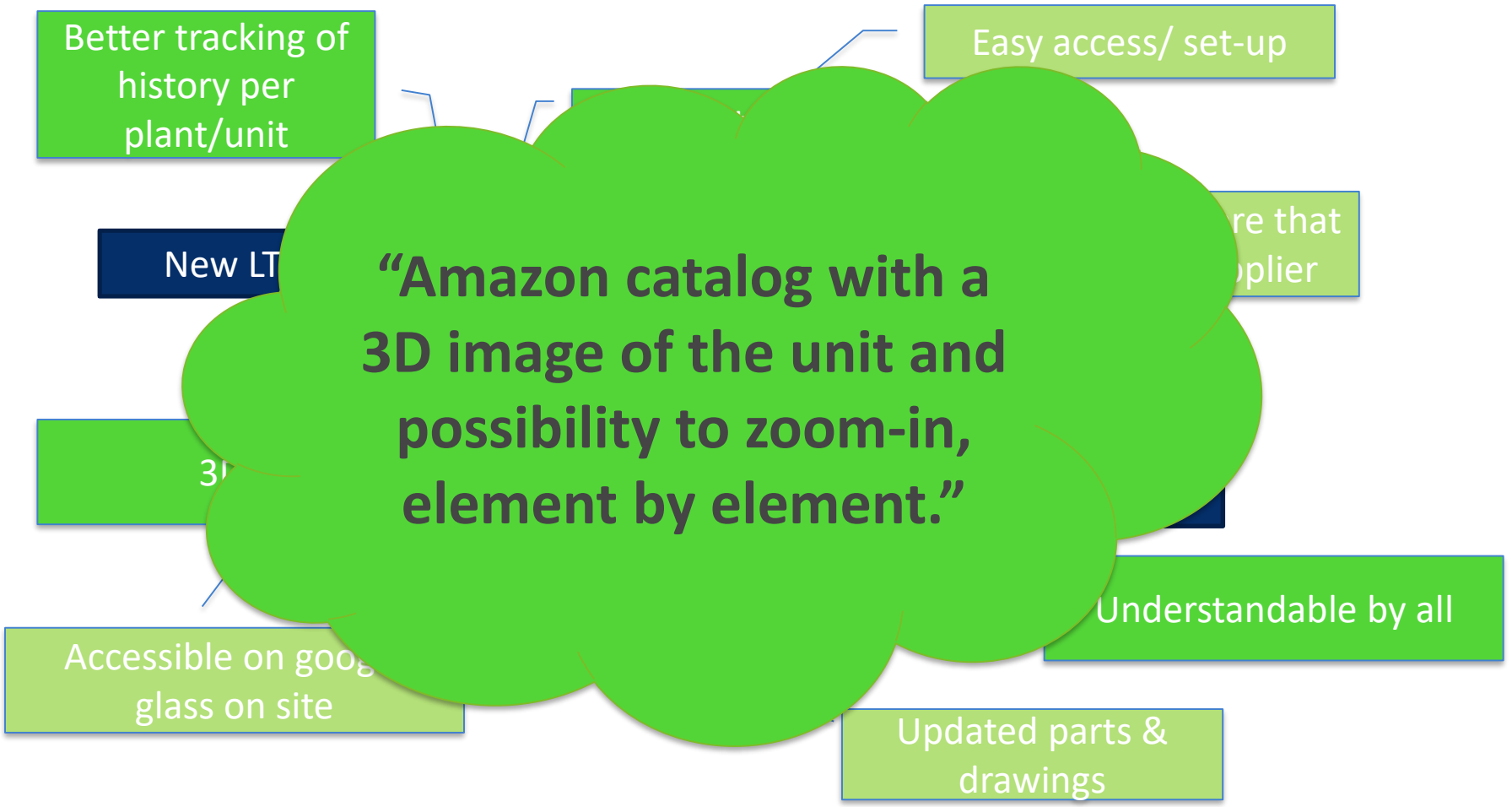
Ideas



PROTOTYPE

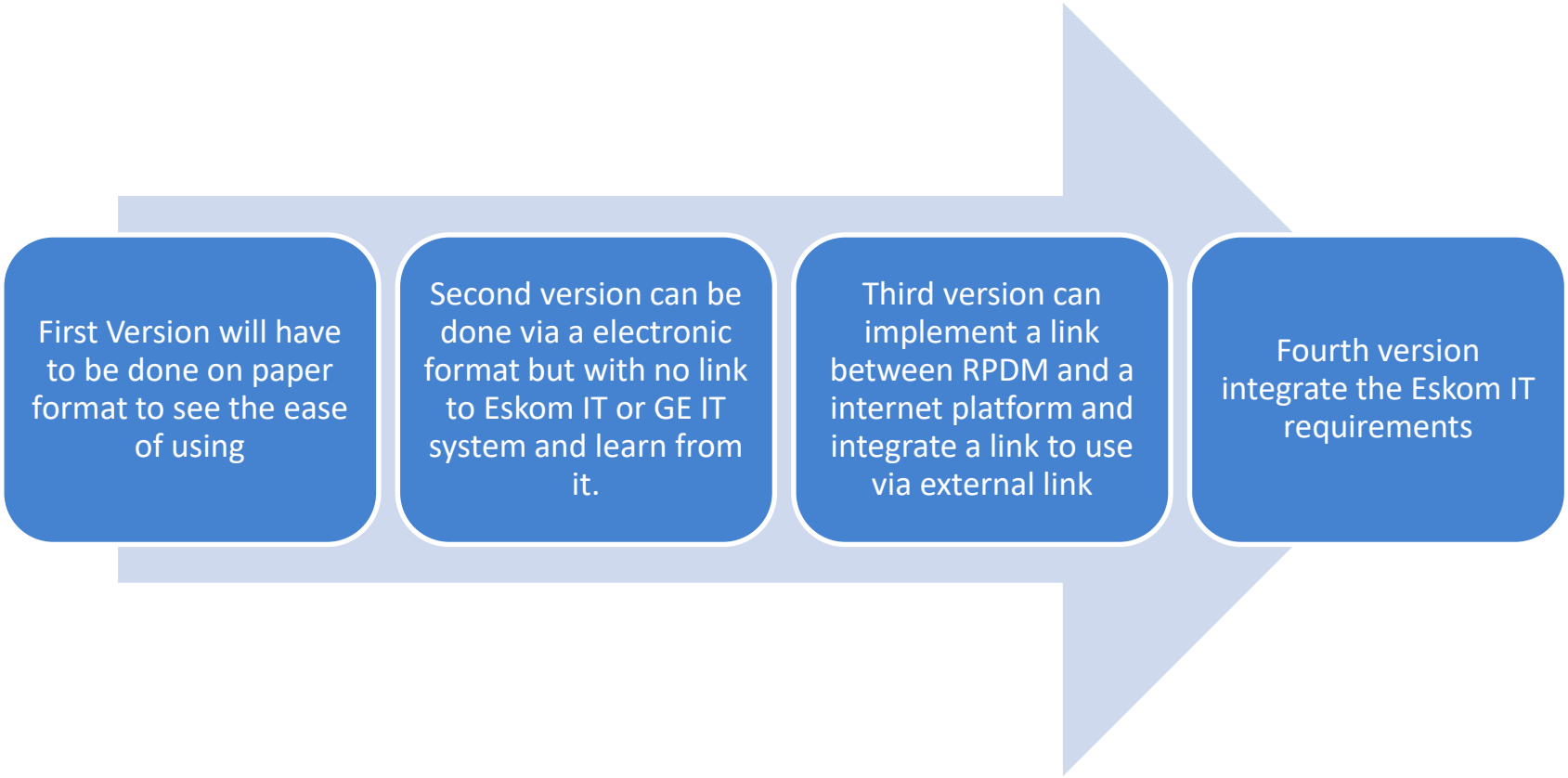
Prototype

Storyboard



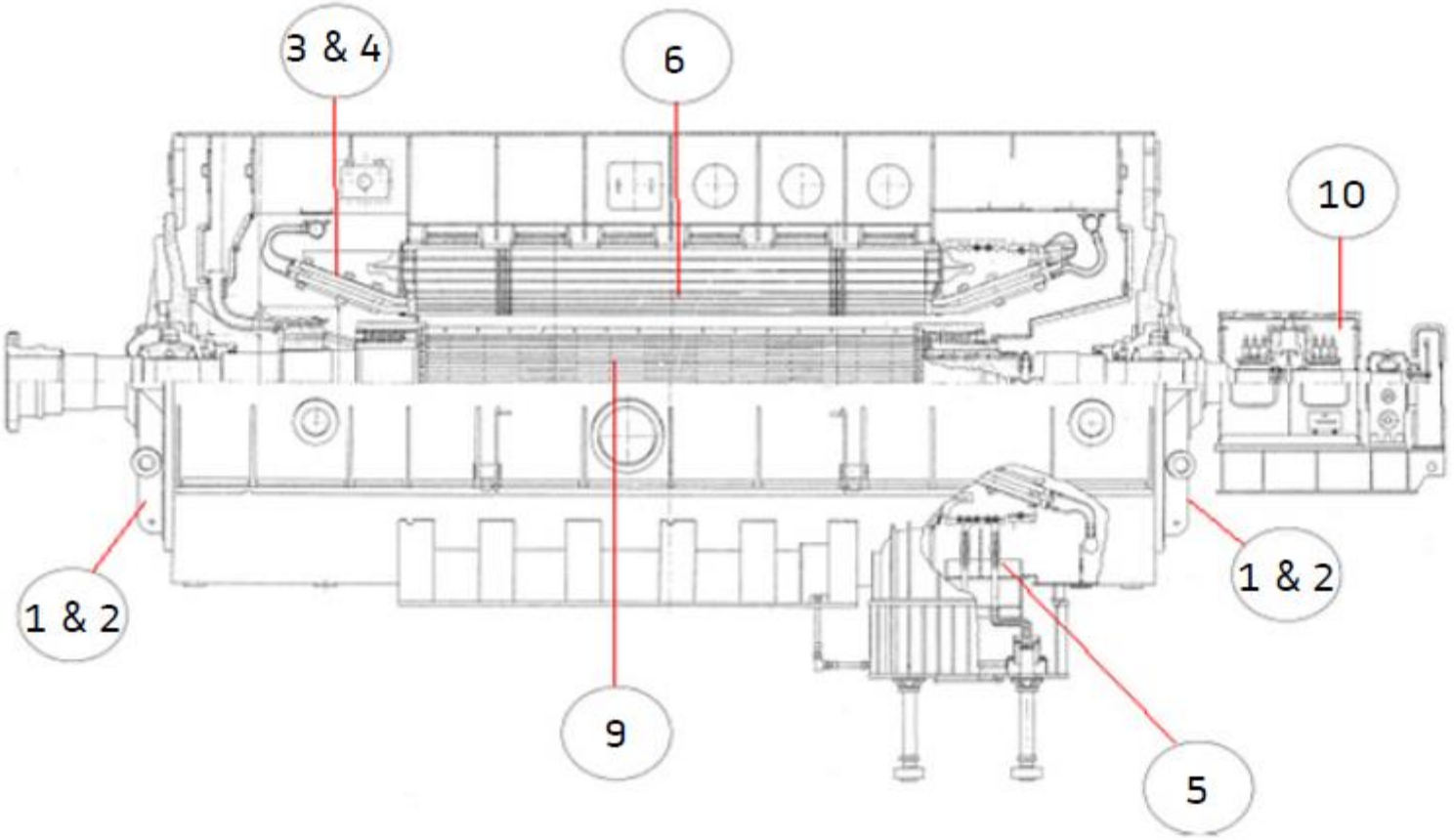
Prototype

Design



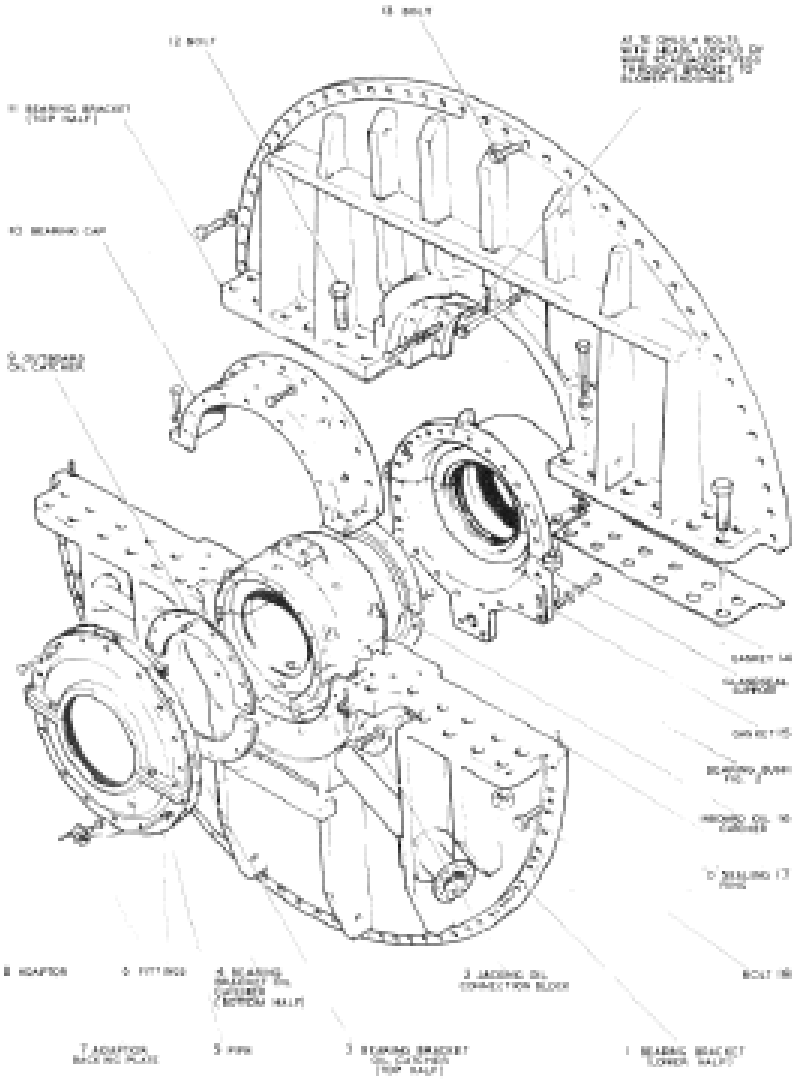
TEST

Generator Zone Areas



Front End & Rear End Bearing Bracket

Zone 1 & 2



Front End & Rear End Bearing Bracket

Zone 1 & 2