

# Importance of Engineering Change Notice in Technical Publications

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**Abstract**— Technical Publications documents refers to any type of documents that describes the operations, functionality, maintenance and architecture of the end product and enables the end users to understand the intricate engineering drawing at their reading comprehension level. Today, Technical publications is often accompanied with illustrations which is obtained from 2D -3D graphic data, which in turn makes documentation more user friendly and eliminates misinterruptions about the product and thus improves end users satisfaction, most of the organizations realizes that user centric documents adds value to the product and in turn increases the customer satisfaction, Engineering Change Notice plays a vital role in reflecting the latest engineering changes to the document. In the present study the importance of change notice in Technical Publications is explained with the help of an example.

**Key words:** Technical Publications Documents, Engineering Change Notice (ECN), Customer Satisfaction

## I. INTRODUCTION

In most of the companies the engineering change process starts when design is completed its initial stage Engineering Change Notice is a process in which the product document changes are executed. This includes the engineering phase in which Product Engineering files are created, updated and released. It also includes the implementation phase in which the new or revised parts are put into production

### A. Process for the creation of Change Notice (CN):

- 1) Change Notice is created whenever a change is required in the process, this can be identified by the person who is working on the process and once it is identified it has to be presented before an expert, now he determines whether a change needs to be made or not
- 2) If a change is required than a change notice is created stating the description of change and an Effectivity date
- 3) Now this CN is circulated to all the departments, once each department head receives the CN , he has to sign a form stating whether the change is needed in his unit, say for example a technical publication document requires a change than the concerned Team lead of Techpubs has to sign the form stating the change is required in the Technical Publication documents.
- 4) Once a CN is received it has to be worked on and close

## II. PROCESS FLOW FOR CHANGE NOTICE

- 1) Step 1: A Change Notice (ECN) is released by the engineer which may include the description of change.
- 2) Step 2: The CN is assigned to each individuals by team lead. For the assigned ECN, the cover sheet, R&S sheet are downloaded from the teamcenter. Then for the given platform number, platform sheet is downloaded.
- 3) Step 3: The CN is analysed according to the data given in the cover sheet and R&S sheet. The cover sheet

contains description of change, platforms, project number, tech pubs implementation tasks and comments etc., The R&S sheet consists of kits, Modules, part numbers, assemblies, items and item numbers that are added, deleted and obsoleted item number.

- 4) Step 4: The CN is analysed using the charts and drawings. An impact analysis is carried out for the assemblies or kits given in the R&S sheet. From this the affected manuals can be found out. Also the manuals can be downloaded from the teamcenter using the final assembly number. The manuals, charts, drawings, revision logs are downloaded from the teamcenter.
- 5) Step 5: If there are any queries or confusions or difficulty in analysing then intimate to the team and get it resolved. If there are doubts related to the drawings then it can be resolved with the help of design team members.
- 6) Step 6: Update the changes in the respective manuals. Then a group review is conducted by all team members and they will approve the same.
- 7) Step 7: Then the respective sections are compiled with the manuals. The same updates are recorded in the revision log. These updated manuals are uploaded to teamcenter by team lead there by closing the CN

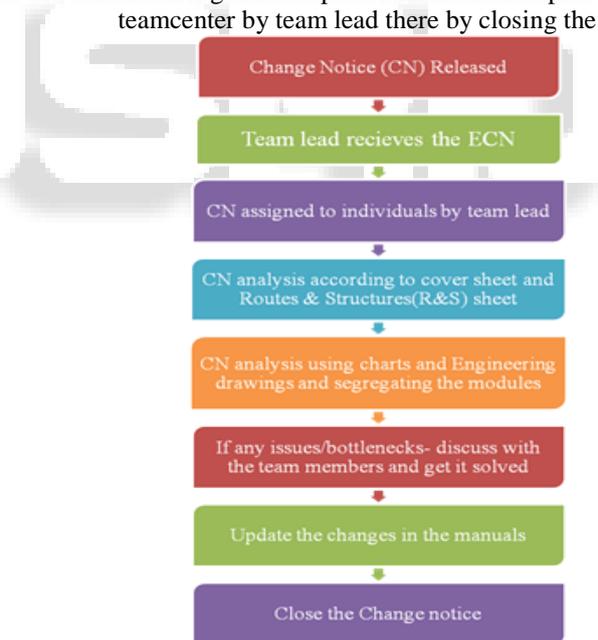


Fig. 1: Process Flow for Change Notice

## III. EXAMPLE

The CN is explained with the help of the Change Notice CNYYYY-01

The inputs which will be given for the completion of change notice is Route & structures, coversheet, Teamcenter

- Coversheet gives you the brief description about the change notice such as the description of change, affected vehicles, reason for change, Techpubs tasks, Effectivity date and so on

- Routes & Structure gives you the information about the Modules that are affected, and whether the Part is getting deleted, serviced, obsolete and that part which has to be replaced with the old part
- Teamcenter gives you the updated drawings of Modules/kits, UG file, Vismockup file according to which the manuals are to be updated.
- Modules are the assembly which consists of child components

A. Coversheet:

CN	CNYYYY-01
Description of Change	Replacing the old P/N 845077G01 with new P/N 80290G02
Project no.	100025
Reason for change	Cost Reduction
Affected Modules	1. 90992G01 2. 91539G01

Table.1: Cover sheet

B. Routes and Structure Sheet

Modules	Added	Deleted
90992G01	80290G02	845077G01
91539G01	80290G02	845077G01

Table 2: Route and structure sheet

C. Manual 1

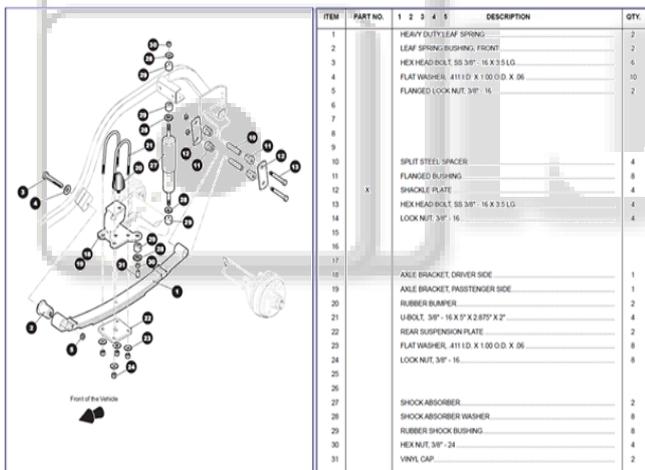


Fig. 2: Manual 1

D. Manual 2

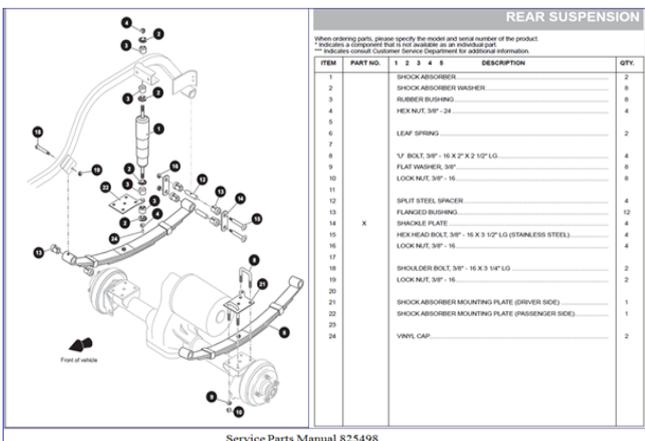


Fig. 3: Manual 2

In both the manuals the shackle plate P/N "X" has to be replaced from P/N 845077G01 with new P/N 80290G02 as per the Engineering Change Notice

IV. CONCLUSION

This study shows how the Engineering Change Notice plays an important role in reflecting the latest information about the change of shackle plate part number (P/N) due to cost cutting aspects so whenever this shackle plate is to be serviced, the new shackle plate is given because of its low cost aspects which is included in the service parts manual as per CNYYYY-01

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