



RESEARCH ON FASTENING SYSTEM DAMAGE TO THE DRUM ON LG WASHING MACHINE

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Abstract: This paper presents aspects of the fastening system damage drum LG washing machine model. Research undertaken leads to the idea that the material it is made fastening system of the drum on LG washing machine model is inadequate.

1. INTRODUCTION

Figure 1 shows the LG washing machine model disassembled.

The main components of LG washing machine model are:

- Hull (1)
- The electric motor (2)
- Drum with shaft motor and fastening system type star with three arms (3)
- The electrical and electronics installation (4)

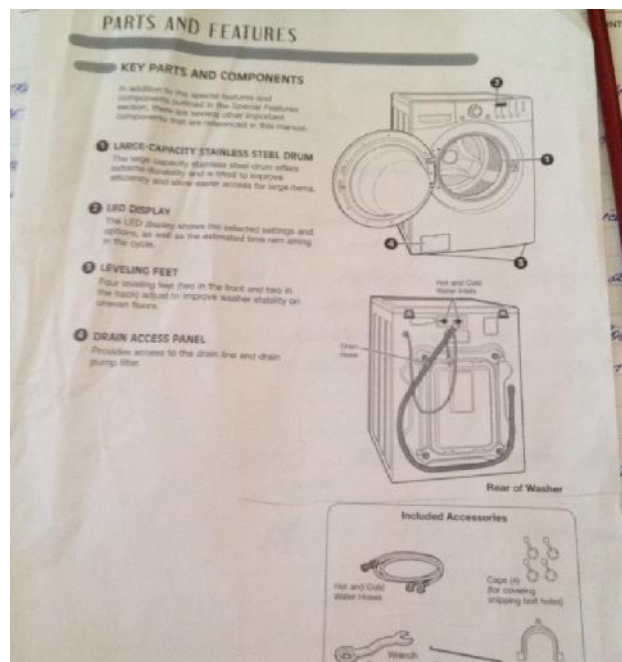


Figure 1: The main components of LG washing machine

2. PARTS OF THE LG WASHING MACHINE MODEL

The LG washing machine are built with horizontally drum mounted on the shaft motor through a fastening system with three arms secured to the bottom lid of the drum (Fig. 1).



Figure 2: The LG washing machine model disassembled

The material used for the star fastening system with three arms secured to the bottom lid of the drum is an aluminum with a very grainy internal structure.



Figure 3: The material used for the star fastening system with three arms

The drum is mounted on the shaft motor using a ball bearing.
Can be observed the detachment of the three arms of the star fastening system of the drum through his bottom lid.



Figure 4: The fastening system of the drum with three branches deteriorated

3. CONCLUSIONS

In this paper were presented only the constructive aspects and the elements of the damaged fastening system with three arms, so that in the following papers we will presents the cause of breakage of the three arms of the fastening system of the drum through the lid or bottom.

Also, in future papers we will present proposals for the material that its made the fastening system of the rolling drum and technology of its grip.

4. REFERENCES

- [1] STANESCU, C. D. – Psihologia materialelor, UPB, 1998.
- [2] STANESCU, C. D. – Materiale metalice pentru constructii de masini, 2005.
- [3] ***LG Electronic U.S.A. Inc