

Vex Robotics Instructional Video (Six Bar Design)

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Definitions:

- Six Bar: A lift mechanism that is used to reach greater heights than the traditional 4 bar.
- Elastics: Rubber bands or other types of Vex legal spring like material that is used to assist mechanical mechanisms.
- Symmetry: The act of making a mechanism that is the same from one side to the other.

This short video is meant to help both experienced and rookie teams in the building of a strong and reliable competition ready Six Bar lift. Some of the main points in the video are the importance of being both symmetrical and using elastics to assist the lifting of the arm. By being symmetrical the Six Bar is both very strong and has the potential to reach over 30", the same height as the tallest goal this year.

In the competition this year the game object are relatively heavy, due to this, it is very important that teams use elastics to help assist their lift whether using 1:5 ratio or a 1:7 ratio gears. Overall we hope that many teams can learn from this video and that it will help them gain an edge in their future competitions.

Special thanks to:

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