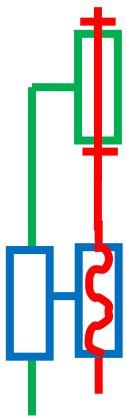




You are fond of restoring vintage cars and you do it in a local club owning its own workshop. This weekend sees a big event as you receive a second-hand electromechanical lift that has just been bought from a local garage out of business.

Your skills are required to identify the different parts.

Using the standardized designation (Turning pair, Helical pair, Prismatic pair) label the three pairs on the picture below.



Which system do you know with exactly the same Kinematic Diagram?

What is the pitch of the screw (definition)?

How could you measure it?

You found 6 mm for it. How many turns of the screw are required to lift the car up for two meters?

Name:

date:

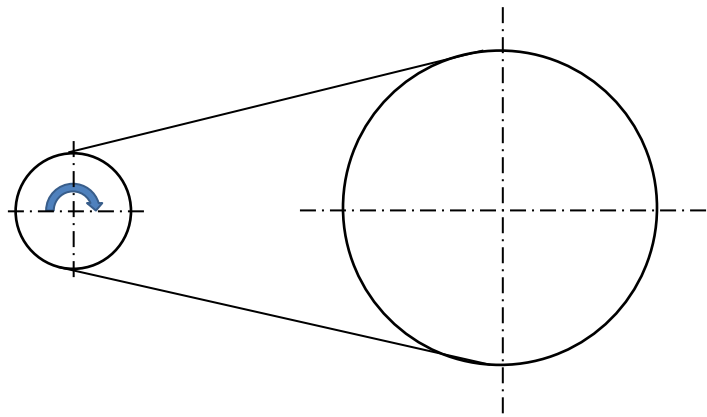
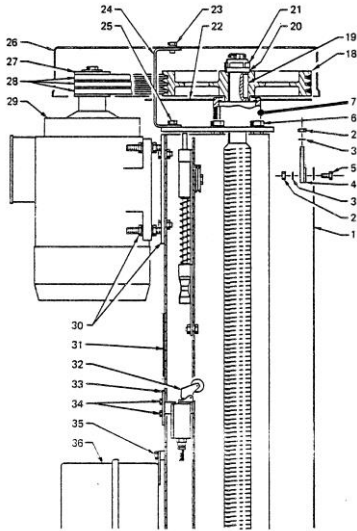
Technical study of the system  
**AUTOMOTIVE LIFT**



Let's now consider the transmission at the top of the pillar, between the motor (number 29 of the technical plan) and the screw (number 7)

What is it called?

What is its purpose?



Label the diagram of the transmission with the names, driver and follower.

The leading wheel has a diameter of 40 mm and the follower 180 mm.

When the motor rotates at 1500 rpm (revs per min), what is the rotational speed of the screw?