Knowledge Domain: Mechanical

Unit: Lubrication

Skill: Unfreezing Painted Joints

Tools and Parts Required:

1) Putty Knife

2) Utility Knife

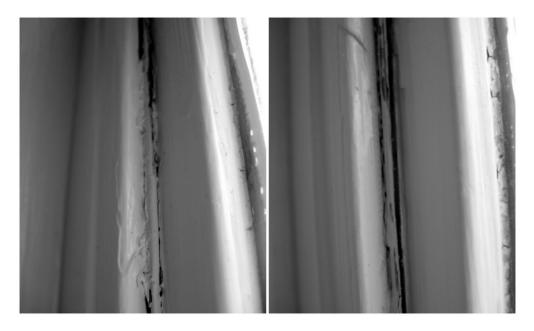
3) Object with frozen joint (window, door, cabinet door, etc)

Introduction

Paint often causes door hinges and windows to be frozen. When joints are frozen, they cannot be moved.

Example

Below is window with painted joints before (left) and after (right) they were unfrozen.



Identification and Diagnosis

A joint is frozen when you cannot open or close an object. Examine the hinge or joint. If you see paint on or around the joint, you may be able to unfreeze the joint with the procedure below.

Procedure

 Using a utility knife, score the paint between the sash and the window frame.



2. Insert a wide stiff-blade putty knife along your scored edge



- 3. Try the following:
 - Gently tap the back of the putty knife with your hand, a rubber mallet or a hammer. Be careful not to bang too hard. (left picture)
- Slide the putty knife along the crevice
- Move the putty knife from side to side. The leverage will cause the paint to break. (right picture)





4. Try opening or closing the joint. If you can, you're done! If you cannot open the joint, repeat steps 1-4 all around the joint.



Note: you can also use these techniques to open a painted door. If the door hinge is painted and frozen, open and close the door ten times instead of scraping the hinge.



Exercise

Your instructor will give you a painted joint. Unfreeze the joint. Your instructor must verify your work before you continue.

Preventative Maintenance and Calibration

Always be careful of joints when painting. If you must paint around a joint, move the joint periodically to insure the joint is not stuck. Always calibrate every medical device before returning it to use.