

**Harford District  
2016 Cub Scout Day Camp  
June 27 - July 1  
Cubstruction**

# **Bike Repair**



## **Station Volunteer's Guide**

Thank you for being a station volunteer! The stations are the heart of camp and truly provide our scouts with an opportunity to try out a new skill (or build on one they know) while having a great time. Our volunteers' knowledge and enthusiasm is what makes our camp great!

To make running the station easier, please take some time to read through the station guide. **While, what is being covered at the station needs to remain as outlined so that the scouts earn the correct achievements, how it is covered is only one of many methods.** If you find a better way to accomplish the requirements or if the method we have outlined doesn't seem to be working...please feel free to change it! This is only a guide...do what works best for you and the scouts coming to your station.

**One other thing to keep in mind** - some stations will be visited by all ranks. That means you may have 6 year olds through 11 year olds and may have to simplify or intensify the methods to meet the skills and knowledge of all the scouts.

Thanks again - we are glad to have you as part of Harford Day Camp!

## **Station Procedures**

- The first station begins at 10:15 on Monday and 9:15 other days...so you have some time! We've tried to only schedule 2 dens at a time (max. 24 boys) but, there may be times when you have 3. Consult your station schedule so you will know who to expect and when.
- Greet dens as they arrive. Many will have a den cheer, ask to hear it!
- Once all the dens arrive or the start time has come, begin going through the procedures for the station. **It is very important that you start and end on time!** Each time slot lasts 45 minutes. If a den arrives 10 minutes late, they **CANNOT** stay 10 minutes past the end of the station...that would make you and them late for the next station. If a den doesn't get finished, suggest they come back during a break or take the remaining activity with them to work on at the den.
- **Execute the station with energy and enthusiasm!** Let the scouts do as much for themselves as possible. It doesn't need to be perfect, they just need to Do Their Best!
- Don't forget the beads. Each scout earns a bead at every station for participating. Beads can be given to the den leader for distribution.
- Once the den is finished, begin resetting for the next group.
- Close the station at the end of the day by packing/organizing the supplies and cleaning and disposing of all trash. Let the Program Director responsible for the station (either Tiger/Wolf/Bear or Webelos) know if supplies are running short!

## **Station Overview**

Discussion and hands-on activities will complete this station. The hands on activities will be completed with the boys in pairs.

### **Set-up:**

Open Handyman bins and:

- 1) Locate the bikes.
- 2) Spread the bikes out in a semi-circle facing the instructor.
- 3) Distribute the wrenches to the bikes (checking for fit)
- 4) Make sure that at least one bike tire is at a low pressure
- 5) Keep the cans of WD40 until needed and have the youth volunteers pass out

### **Station Objectives:**

Handyman Requirements for this station:

1. Make a repair to a bicycle, such as tightening a chain, fixing a flat tire, or adjusting the seat or handlebars.
2. Properly lubricate the chain and crank on a bicycle.
3. Properly inflate the tires on a bicycle.

### **Introduction:**

First, have the boys sit in front of you while you explain the first task.

**READ ALOUD:** A handyman can do many different jobs. He knows how to take care of a car and a bike. He uses tools to make repairs around the house, and he takes care of the lawn. When you work on this activity badge, you can learn a lot about keeping a car, bike, and home in good shape.

A bicycle is a lot simpler to maintain than a car. But it is a machine, too, so it needs to be taken care of just as a car does.

Explain to the boys that they will pair up for this activity, and each pair will:

- Inflate bicycle tires properly
- Lubricate chains properly
- Adjust handle bars and seats correctly
- Adjust a bike chain

### Task #1 Inflating the tires

**READ ALOUD:** A bicycle's tires should be kept at the correct pressure. The pressure may be stamped on the side of the tire. If it isn't, check with the bicycle owner's manual.

Show the boys how to use the gauge to check the pressure. If the pressure is too low (**which it should be after the leaders let some air out**), show the boys how to inflate a tire with a hand pump. You should keep checking the pressure until it is right.

Then, distribute the boys among the bikes and have them check and inflate the tires.

### Task #2 Lubricating the chains

**READ ALOUD:** Oil prevents rust and helps to keep a bicycle running smoothly.

To lubricate the chain, turn the bicycle upside down. Use the pedals to make the crank turn, and then spray the chain with WD40. The WD40 will coat the chain as you move the pedals.

When all the links of the chain have a light coating of WD40, you are done. Wipe any extra from the chain and sprocket with a rag.

Return the boys to the bikes to have them complete the task.

### Task #3 Adjust Handle Bars and Seats Correctly

**READ ALOUD:** Scouts, why do you think that you would need to adjust the seat or the handle bars?

Possible answers include: the bike rider may have grown and now the seat and handle bars are too low, the bike may have been borrowed from a different sized friend, etc.

**To adjust the seat or handle bars of the bike, all you will need is the right wrench.** To change the height of the seat, loosen the bolt that keeps the seat post tight in the frame and then raise or lower the seat post to the height that you need. **Make sure that you leave at least 2 inches of the seat post in the frame.**

**You can raise and lower the handlebars on your bike and also change the position of the handlebars.** Find the bolts that control these adjustments and loosen the bolts.

Send the boys to the bikes to have them complete both adjustments.

#### **Task #4 Adjust a Bike Chain**

Turn the bike upside down.

**READ ALOUD:** Sometimes a bike chain may be too loose and fall off the axle while you are riding. If that happens, you will need to tighten the chain. First, you will need to turn the bike upside down.

Loosen the two axle nuts on the rear wheel with a wrench. If the bicycle has a coaster brake, loosen the brake arm mounting nuts, too. Now pull the wheel back until the chain has about  $\frac{1}{2}$  inch of play in the center. Tighten the axle nut on the chain side. Make sure that the wheel is centered between the chain stays. Then tighten the other axle nut and the coaster brake arm mounting nuts. (Don't try to adjust the chain on a multispeed bike that has a derailleur.)

Send the boys to the bikes to have them complete the adjustment.

#### **Break-Down**

1. Stack the bikes in one area for overnight storage.
2. Return the tools and WD40 to the bins.
3. Dispose of the rags and trash.