

# Bird Baja Restoration Project

## Project:

Restore a 1980 Byrd Baja go-cart.

## Expectations:

Students will:

- Tear down the machine
- Inventory parts that can be reused
  - Bag and label parts and keep an inventory of them
- Inventory parts that will need to be replaced
  - Bag and label parts to keep to compare with new parts to ensure that they will fit
- Order new parts
  - Look up new parts
  - Order new parts
  - Reconcile shipping receipt with new parts
- Clean and Paint parts that will be reused
  - Includes glass beading
- Clean and repair the body as needed
- Assemble machine
- Test run engine and machine
  - Ultimately take a field trip to Pine Lake Race Track to test run the newly restored machine.
- Fabricate new parts if/when necessary by collaborating with other school programs, such as Welding and Precision Engineering.

## **Major Components:**

### **5 HP Tecumseh 4-Stroke Engine**

- Disassembly
- Inspect for wear
- Order new parts
  - This also includes interacting with the machine shop
- Engine assembly
  - Piston Rings
  - Cylinders
  - Heads
  - Set timing
  - Test run

### **Peerless Axle Assembly**

- Disassemble
- Inspect for wear
- Order new parts if needed
- Paint housing
- Assemble axle