# **Attex Superchief Restoration Project**

#### **Project:**

Restore an Attex Superchief.

#### **Expectations:**

Students will assess a current 6x6 machine and find out what will be needed to restore it. Students will restore an Attex Superchief.

#### 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 (may include polishing)
- 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 some of the other programs within the school such as Welding, and Precision Engineering.

#### **Major Components:**

## **Chaparral G50b 2-Stroke Engine**

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

#### **T-20 Transmission**

- Disassembly
- Inspect for wear
- Order new parts
  - Seals
  - o O-Rings
  - Send bands out for relining
- Reassembly
- Test

### **Axle Fabrication**

- Order 6-18" 1" diameter 1144 Stressproof steel bars
- Fabricate 6 axles

#### Wheel Hubs

- Locate 6 wheel hubs
- Locate 6 3 to 5 wheel hub adapters