DETAILING GROUP!

Alexandra Orbuch, Audrey Zhang, Magnus von Ziegesar
Overview of our responsibilities

1. Labeling drawers and organizing all of the tools
2. Degreasing/Sandblasting parts
3. Working with bondo
4. Sanding parts
5. Polishing parts
6. Priming/Spray painting parts
7. Designing and ordering the class hoodie and crew neck
Degreasing/Sandblasting

- Wash with soap and water
- Degrease in degreaser tub
- Sandblast—Abrasive blasting
  - Silica sand, sometimes: walnut shells and corn husks
  - Don’t sandblast too much—take off metal
  - Kick the tub if the sand does not get into the pipe
The English Wheel!
Reversing a dent in the fender

- An English Wheel: A tool that can shape aluminum and steel
- Used for panel beating and it is for forming metal
- There are many different shapes of anvils to roll out the metal (different levels of beveling, or “crowns”)
- Start with the low-crowned and work your way up
- The English Wheel was partially helpful.
- To get the rest of the dent out, we used a hammer:
  - We put a towel on the floor, the fender on top, and hit it around the same area multiple times to reverse the dent.
BONDOPUTTY

ALL-PURPOSE
PUTTY

Quickly and easily fills, patches, seals, and repairs almost anything in and around the home.

Repairs - Metal, wood, drywall, concrete and masonry surfaces.

Paintable • Permanent • Non-Shrinking

WARNING. OXIDIZER. FLAMMABLE LIQUID AND VAPOR. CAUSES EYE IRRITATION. MAY CAUSE ALLERGIC SKIN REACTION.

Read carefully all cautions on the side/back panel.

Net Wt: Putty 1.9 lb (861 g)
Hardener 1 oz (28 g)

3M
Bondo is a putty used to cover holes or rough and uneven surfaces.

- The putty is a mixture of fiberglass (polyester) resin and talc
- The polyester resin makes bondo a good adhesive and the talc allows it to flow smoothly
- Hardener is added to catalyze a chemical reaction that allows the putty to harden.
• First, we mixed bondo with hardener
• Then, we used a scraping device to apply the bondo to different parts of the motorcycle (ex: the fenders and the engine)
We let the bondo dry and then used sandpaper to create a smooth finish.

After that, we applied primer to the parts and then spray painted them.
Sanding!!
Sand parts

- We sanded parts prior to priming and after priming in order to smooth out the surfaces of our parts. Only then could we paint!
- Sandpaper is made of abrasive materials to smooth the metal parts
- Emory Paper:
  - We mostly used 320
Spray Painting!!!
Spray Painting/Aerosol Can Science

Aerosol Can Components:

- **Liquid** (paint, primer, hairspray...)
  - liquid at room temp

- **Propellant**
  - Gas at room temp/low pressure
    - Needs to be pumped into can
  - But, liquid at high pressures (so liquid in the can)

- **Ball bearing**
  - mixes liquid and propellant together inside can

- When you press down nozzle, the pressure in the can lowers
- The propellant boils
- Paint/primer is released and atomized, released as a fine spray
Spray Painting Technique

- Shake can thoroughly
  - Ball bearing mixes liquids
- Hold it at correct distance
  - Too close=too much paint!
- Start the spray away from object
- Keep can upright
- Move slowly/carefully/evenly
- Paint enough for it to be glossy
  - But not enough for drips!
PAINTING THE BADGES!

- I used a fine q-tip and gently dabbed the lettering.
- Then I let it dry and applied a second coat of paint.
- I had to be careful not to paint outside the lines!
ATTACHING THE LIGHT
Finding the right screw

- We first looked at the parts manual (Triumph Replacement Parts No.10.)
- We found the screw and tried to look on Ebay for replacements
  - But they wouldn’t arrive on time
- So we searched through all the screws and one that was about 1 inch long with a 3/16 diameter and 32 threads per inch.
- We used a caliper!
Finding the right spring

- We searched through Jon’s drawer of springs
- We put the spring between the protruding part of the headlight and the head of the screw—this would help with the tension of the parts
- We also attached the speedometer and other parts of the head temporarily for show (the cables were not attached)
SWEATSHIRTS!
Art References and Ibis Paint X
The design went through many iterations (128 hours+ of work)
We designed and ordered grey crewnecks and white hoodies through Custom Ink.

A special thank you to Professor Littman for all your help during this process!
Glowing Wheels :)
Final Task: Make a presentation
THANK YOU! & QUESTIONS