



Frame Group

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Part 1 - Dismantling

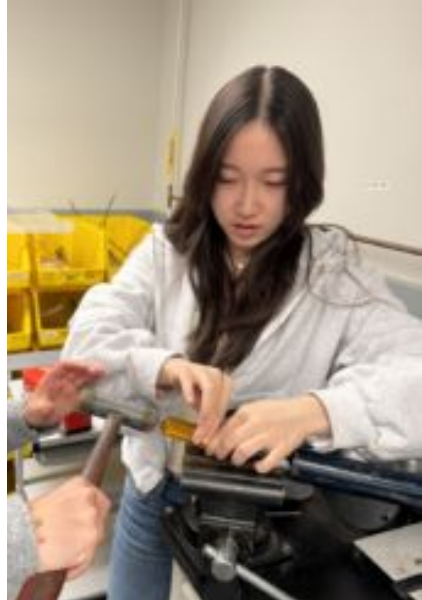
- Dismantled the motorcycle.
- Learned to use Whitworth wrenches as the motorcycle was manufactured in the UK.



More Dismantling



Professor Littmann helped to separate the forks from the frame.



We separated the fork parts by pulling them apart.



We tried to empty out any remaining oil from the oil chambers but found them already empty.

Part 2 - Cleaning and Repairing



Once the frame has been dismantled, we removed any remaining bolts and labelled them carefully.



We then used the parts cleaner to clean the oil chambers.

Sandblasting



In order to remove any remaining paint and rust and check the frame for any cracks, we sandblasted it. Before sandblasting any part, we had to cover up any points of entry into the frame to prevent sand from getting inside the frame.

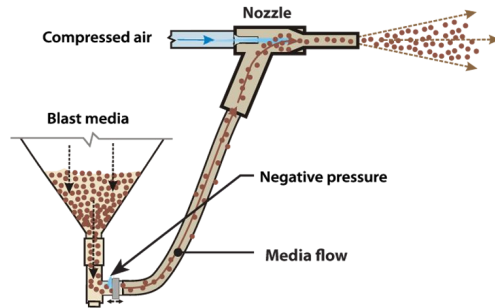


This was a lengthy process - it took us several weeks of lab time to sandblast the frame.

The Technicalities

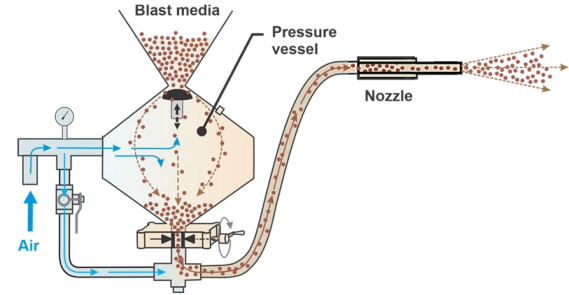
Siphon Blast Cabinets

- Also referred to as “suction cabinets”
- Release sand in a continuous manner
- Preferable for smaller jobs or general cleaning
- Require higher pressure for better results



Pressure Blast Cabinets

- Use a pressurized vessel to push the sand through a hose directly at the object
- More aggressive type of blasting than Siphon Blasting; higher productivity



We utilized the **Siphon Blast Cabinet**; therefore, the sandblasting process was more lengthy, but we were able to remove the paint with better precision and work with smaller objects.

Part 3 - Re-Painting

Once the motorcycle's frame had been sandblasted at its joints and inspected for cracks, the parts were ready to be sent to the powder coater to be painted again. Over spring break, the parts went...



From this...



To this!!

Part 4- Final Prep for Painting: Bondo



- Bondo can be used to fill dents or smooth scratches and can be applied on various surfaces such as wood, steel, and aluminum
- Before mixing the Bondo, the surface needs to be thoroughly cleaned and sanded down to remove paint and rust
- Then to activate the Bondo, the filler must be completely mixed with a hardener
- This mixing process initiates an **exothermic** reaction, and therefore generates heat
- The Bondo cures for about 24 hours and then can be sanded down with a drill for a completely smooth surface



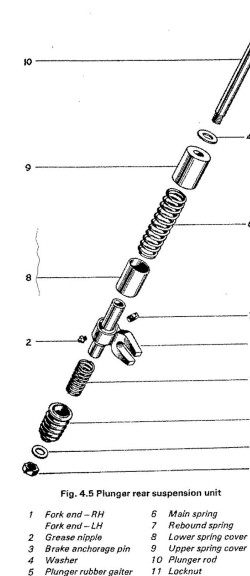
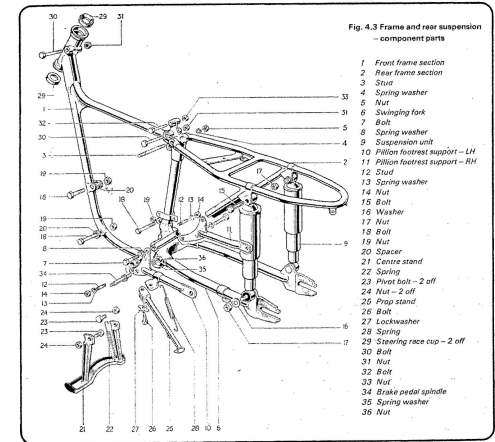
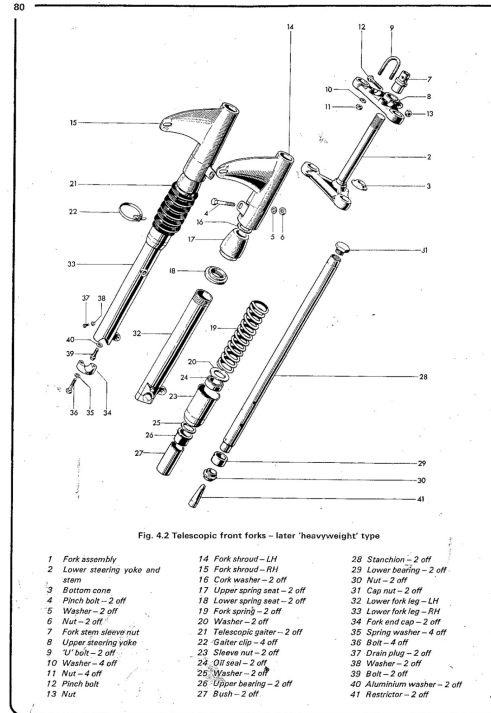
Part 5 - Priming and Painting

- Once the fenders and the fuel tank had all been completely sandblasted and the bondo on the fuel tank sanded down we were able to prime them.
- Priming these surfaces ensures that the paint is able to adhere well to them, resulting in a smooth finish. It also helps to protect the metal and prevent it from rusting.



Part 6 - Reassembly

- Once the parts had all been cleaned, repaired and repainted we were able to start reassembling the motorcycle.
- We referred to the manual and the labels we had put on each part to facilitate this process as there are many similar looking bolts.



Thank you for listening!

