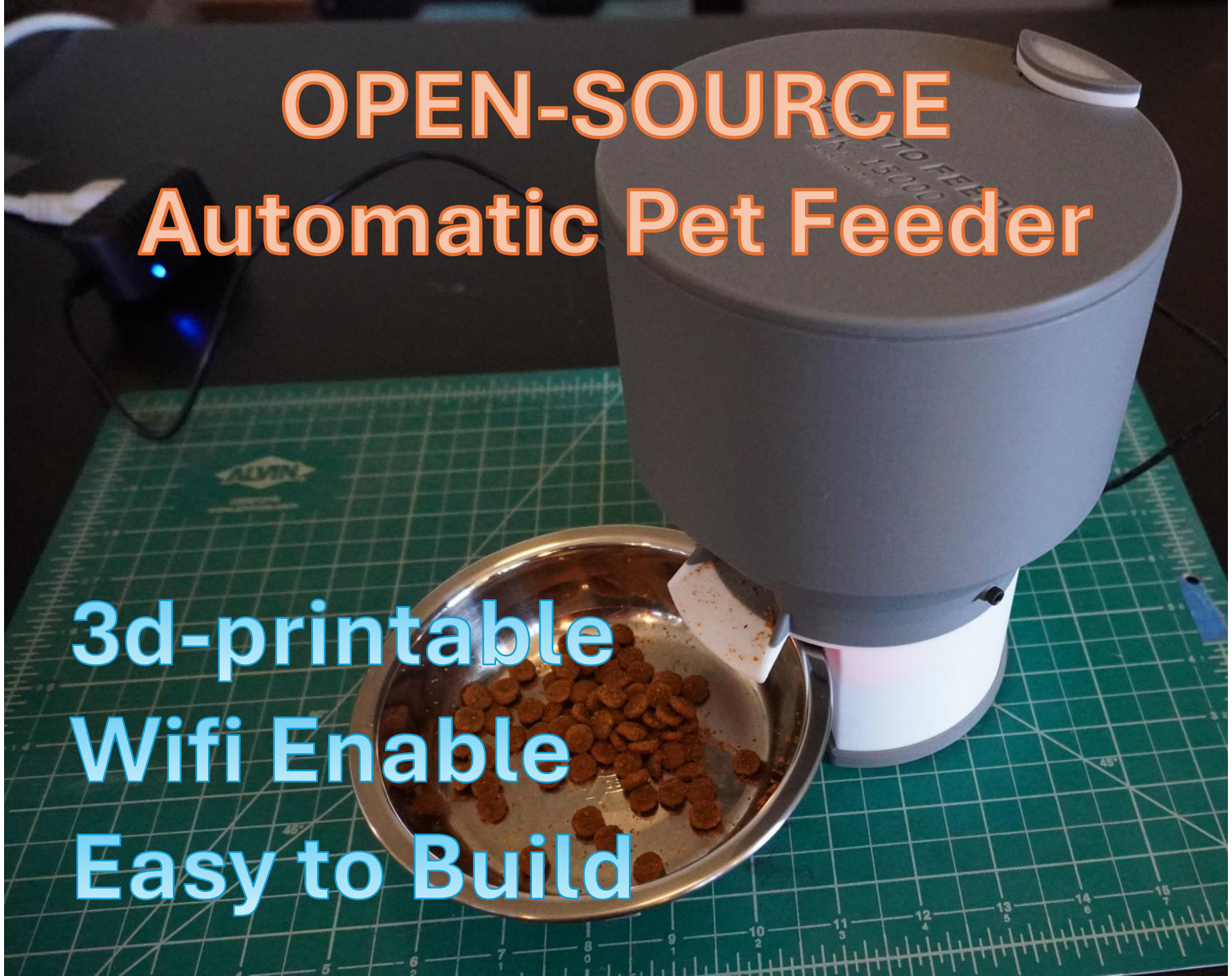
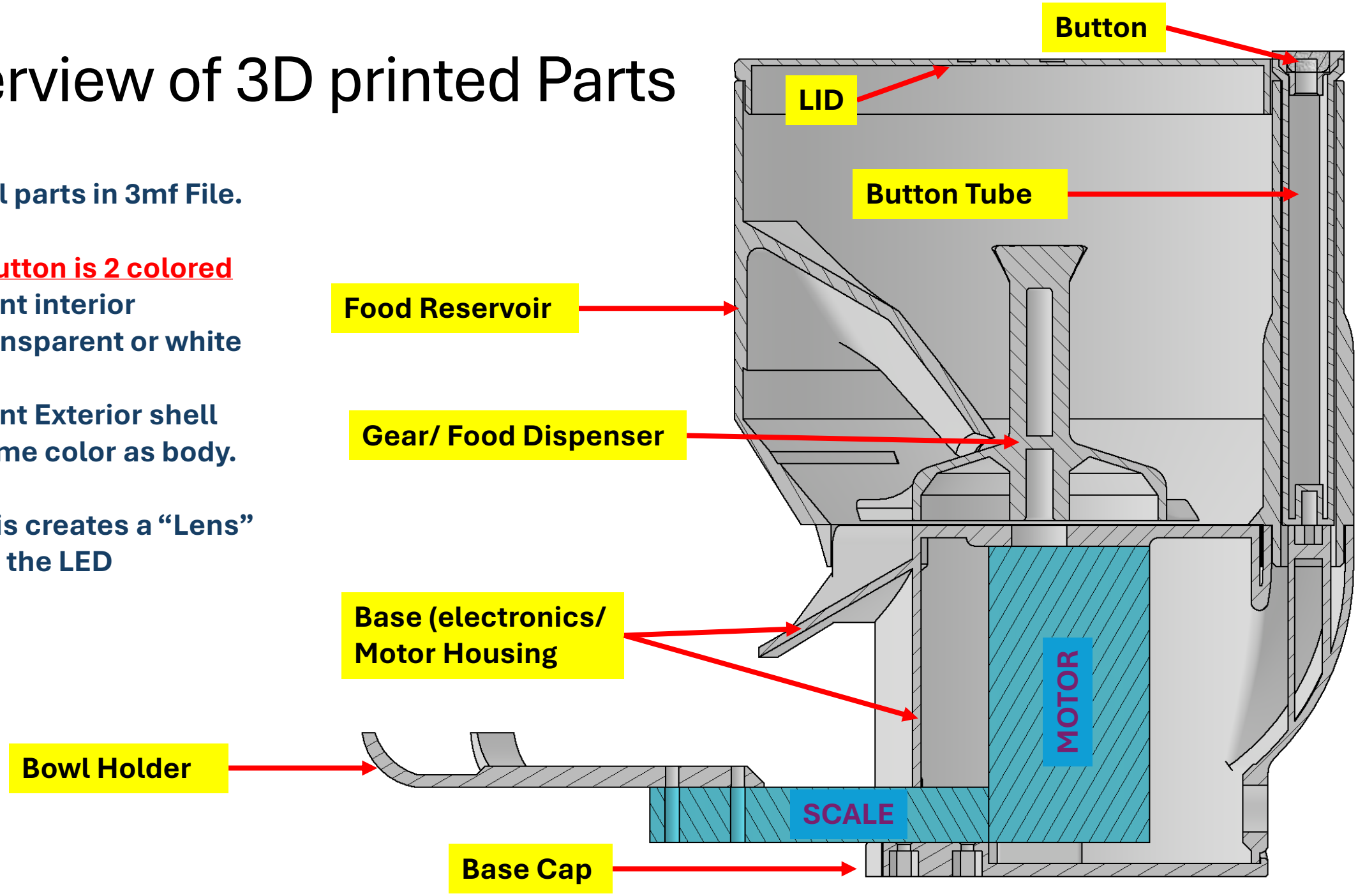
Rito Feedo
Mk 15000

Assembly Guide


OPEN-SOURCE
Automatic Pet Feeder
3d-printable
Wifi Enable
Easy to Build

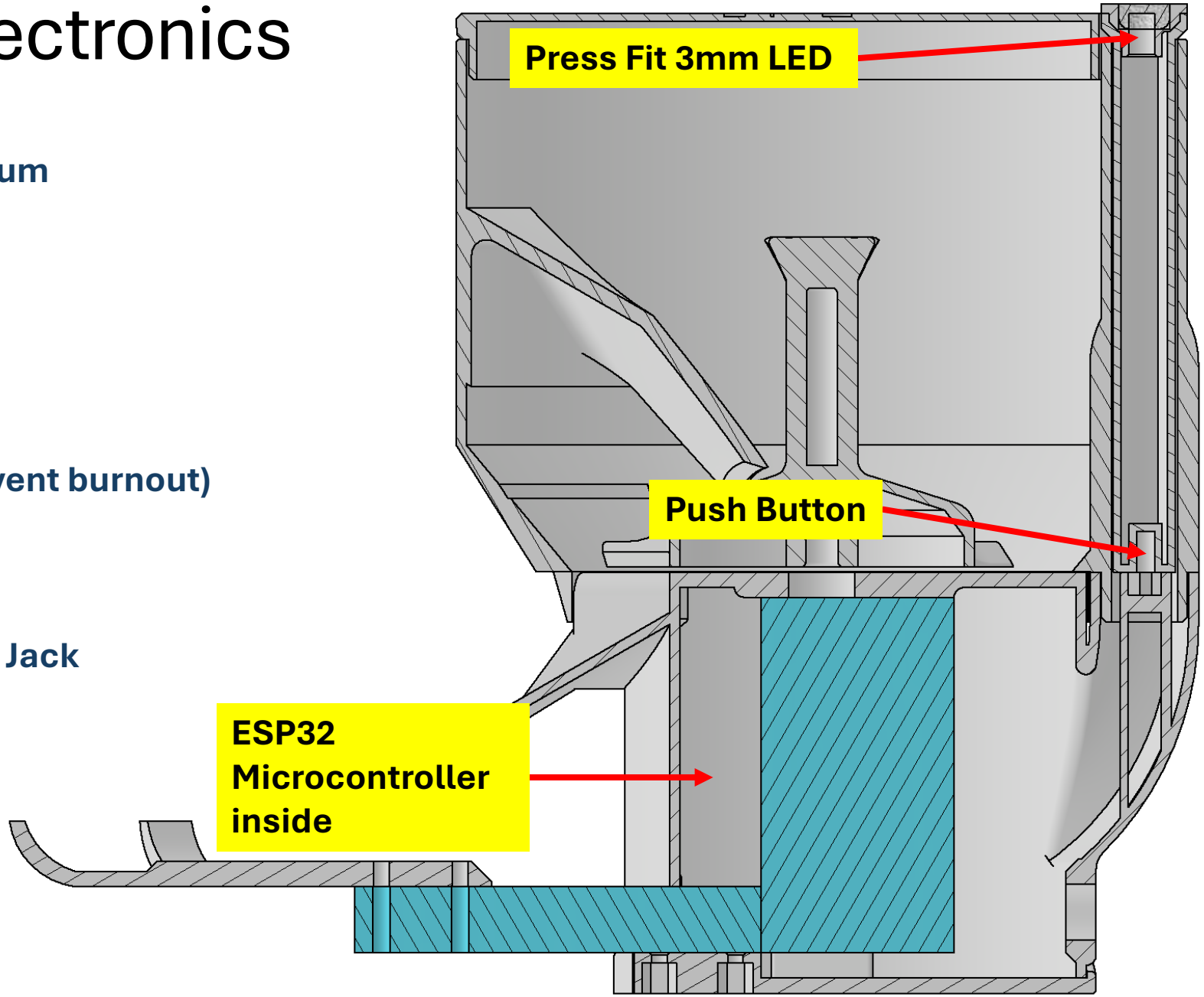
1. Overview of 3D printed Parts

- Print all parts in 3mf File.
- Note Button is 2 colored
  - Print interior transparent or white
  - Print Exterior shell same color as body.
  - This creates a “Lens” for the LED



2(a). Overview of Electronics

- Tried to keep electronics to minimum
- Here is what you need
  - ESP32
  - Load Cell
  - 6x6x10mm Push Button
  - 5mm LED
  - ~400 OHM Resistor
    - (In series with LED to prevent burnout)
  - Transistor
    - FQP30N06
  - High Torque Motor
  - 9v Power Supply – Male Barrel Jack
  - Female Barrel Jack adaptor

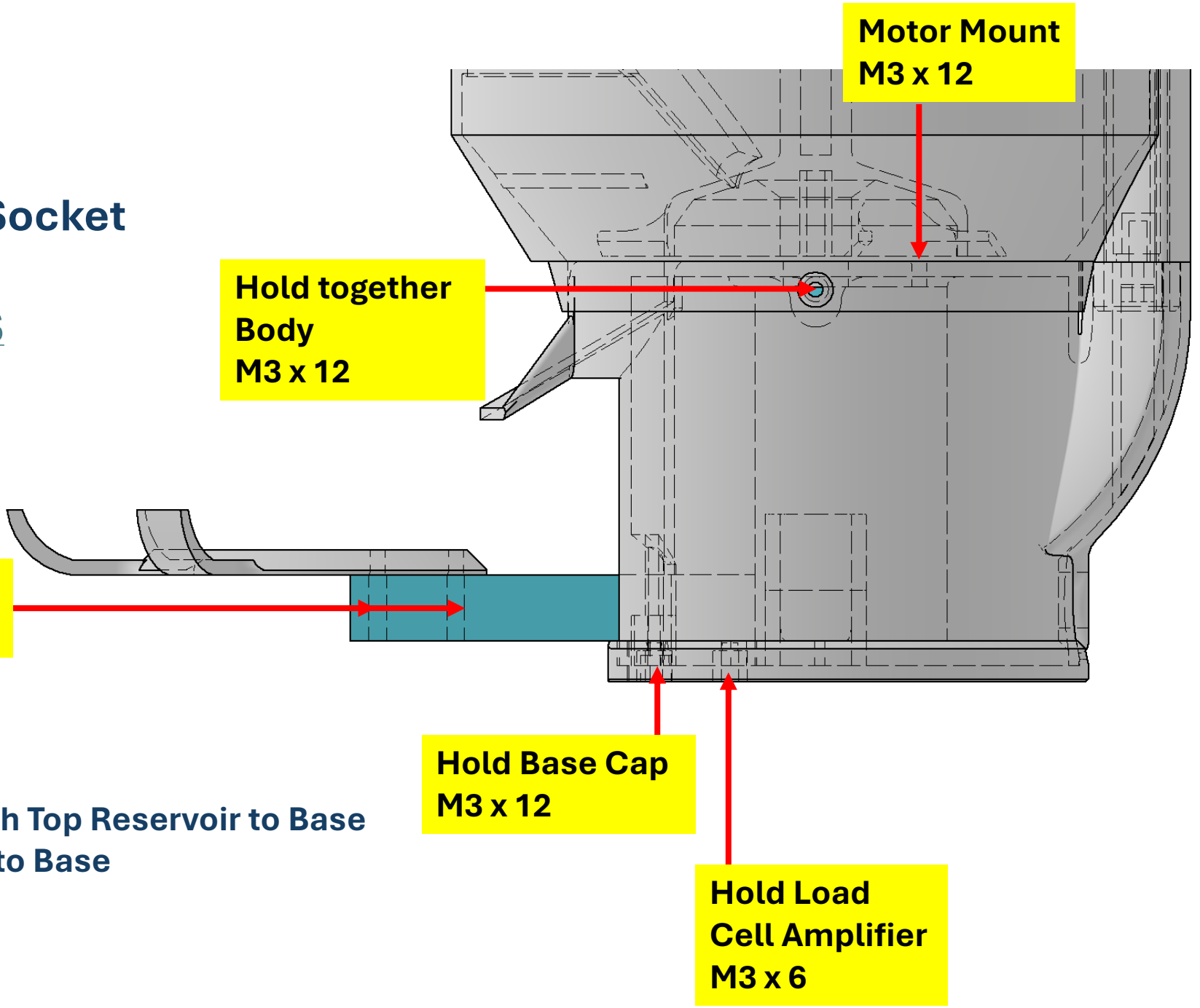


2(b). Where to get Electronics

- **ESP32**
  - https://www.amazon.com/gp/product/B0B18JQF16/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&th=1
- **Load Cell & Amplifier**
  - https://a.co/d/9zBQCtL
- **6x6x10mm Push Button**
  - https://www.amazon.com/gp/product/B085SWHFMK/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
- **5mm LED & ~400 OHM Resistor**
  - https://www.amazon.com/gp/product/B077X95F7C/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&th=1
  - **Pack comes with Resistor place in series with LED to prevent burnout.**
- **Transistor (FQP30N06)**
  - https://www.amazon.com/gp/product/B08B8WRQP1/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
- **High Torque Motor**
  - https://www.amazon.com/gp/product/B071XCWM2J/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&th=1
- **9v Power Supply – Male Barrel Jack**
  - https://www.amazon.com/gp/product/B0DD33CKG4/ref=ppx_yo_dt_b_search_asin_title?ie=UTF8&psc=1
- **Female Barrel Jack adaptor**
  - https://a.co/d/h4yClyS

3. Hardware

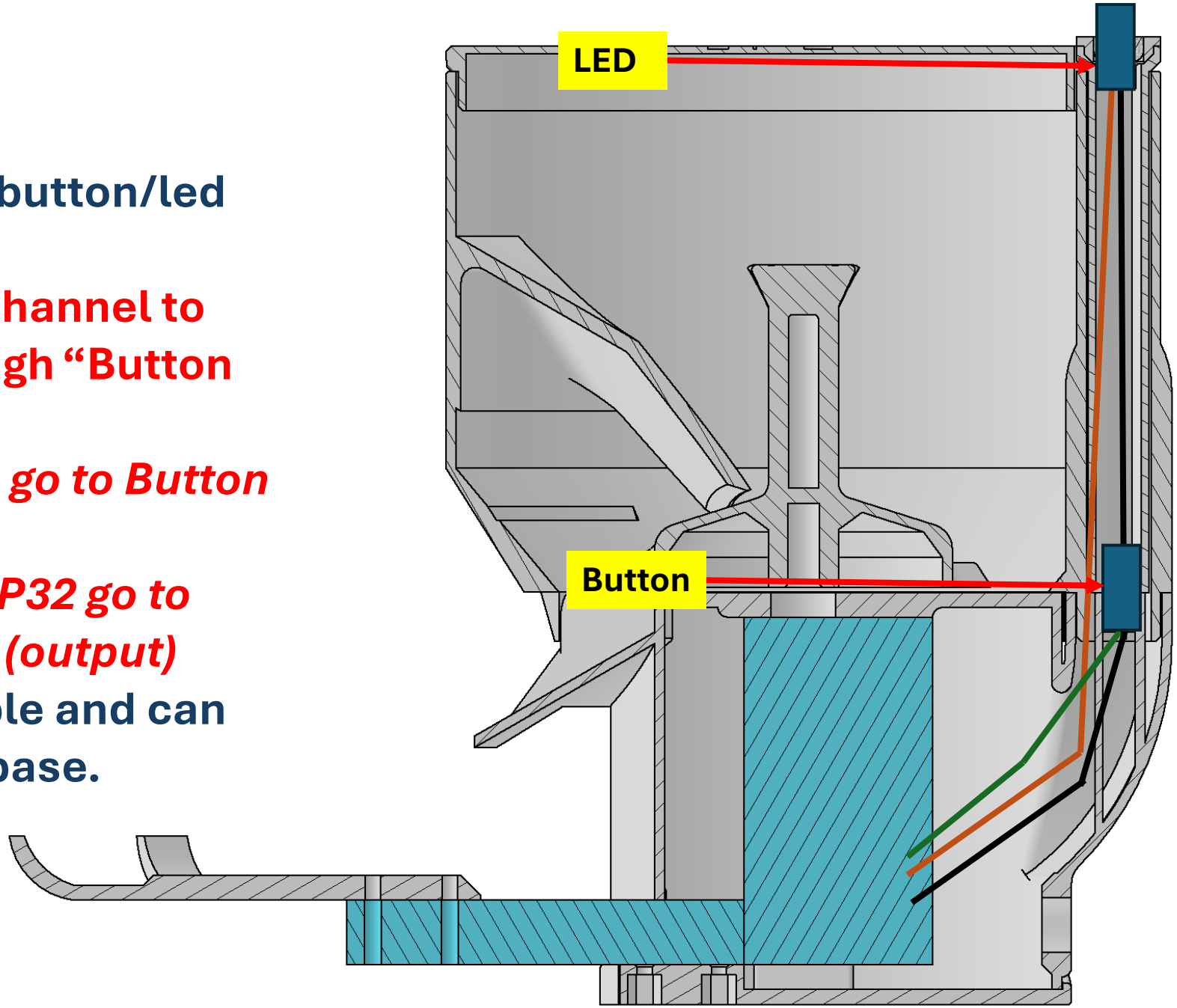
- **Everything uses M3 Hex Socket**
- **I bought this pack**
  - **https://a.co/d/7HtiFjS**



- **2 (M3 x 16) for Load Cell**
- **4 (M3 x 12) for Base Cap and attach Top Reservoir to Base**
- **2 (M3 x 6) for Load Cell Amplifier to Base**
- **2 (M3 x 10) for Attaching Motor**

4. Wiring of LED

- **Challenge in Assembly is button/led wiring**
  - **There is passthrough channel to get power to LED through “Button Tube”**
  - ***Need Single Ground to go to Button And LED***
  - ***2 Digital wires from ESP32 go to button (input) and LED (output)***
  - **All other wiring is simple and can just be crammed into base.**



4. Circuit Diagram