

# LNRC 2026

## Additional Parts Catalogue

LIGNUM National Rocketry Competition - Caribbean Apex Challenge - Morant Point, Jamaica - August 16, 2026

### 1. Overview

Every registered LNRC 2026 team receives a full competition kit in July 2026 containing all the parts needed to build the rocket and PicoSat. Some teams will still want extras - a spare 9V battery, a second Arduino in case one is bricked during programming, or a replacement body tube after a hard landing during test flights. This catalogue lists additional parts available for purchase from Lignum Propulsion.

All prices are in Jamaican Dollars (JMD). There is no minimum order. Prices are valid for the duration of the LNRC 2026 season.

### 2. How to Order

1. Submit a parts request through the Q&A system on the LIGNUM website (opens May 30, 2026) or by email to [lignumpropulsion@gmail.com](mailto:lignumpropulsion@gmail.com). Include your team name, the items you want, and the quantity.
2. Lignum Propulsion will confirm availability and total cost within 3 business days.
3. Payment is collected before parts are dispatched. Bank transfer details will be provided on confirmation.
4. Parts are typically delivered within 7 to 14 days of payment. Pick-up from Kingston is available by arrangement.

### 3. Parts List

#### 3a. Avionics & Electronics

Item	Pack Size	Unit	Price
Arduino Nano R3 (clone)	1 board	Single	\$1,500 JMD
GY-521 MPU-6050 IMU (gyro + accel)	1 module	Single	\$700 JMD
GY-BMP280 Altitude / Pressure Sensor	1 module	Single	\$400 JMD
Micro SD Card Reader Module (SPI)	1 module	Single	\$300 JMD
128 MB Micro SD Card	1 card	Single	\$400 JMD

95 dB Buzzer / Alarm	1 piece	Single	\$250 JMD
On / Off Switch (SPDT toggle)	1 piece	Single	\$150 JMD
400 Tie-Point Breadboard	1 piece	Single	\$700 JMD
Breadboard Jumper Wire Set	1 mixed set	Set	\$700 JMD
9V Battery (alkaline)	1 battery	Single	\$150 JMD
9V Battery Connector (snap)	1 piece	Single	\$100 JMD

### 3b. Rocket Body & Structure

Item	Pack Size	Unit	Price
2-Inch Body Tube (cardboard / phenolic, 24 in length)	1 tube	Single	\$2,500 JMD
3-Inch Body Tube (cardboard / phenolic, 24 in length)	1 tube	Single	\$2,500 JMD
Ogive Nose Cone, 2-Inch (3D-printed PLA)	1 cone	Single	\$1,000 JMD
Ogive Nose Cone, 3-Inch (3D-printed PLA)	1 cone	Single	\$1,500 JMD
Corrugated Plastic Sheet (Coroplast, 18 in x 24 in)	1 sheet	Single	\$850 JMD
Balsa Wood Sheet (1/8 in x 6 in x 36 in)	1 sheet	Single	\$500 JMD
Shock Cord (1/4 in tubular nylon)	2 ft	Per length	\$500 JMD
Ripstop Nylon Parachute Fabric	Per sq ft	Per sq ft	\$500 JMD
Parachute Shroud Line (1.5 mm braided nylon)	10 ft	Per length	\$1,000 JMD

### 3c. Wiring & Accessories

Item	Pack Size	Unit	Price
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18-Gauge Hookup Wire	25 ft length	Per length	\$1,500 JMD
Electric Match (motor igniter)	1 igniter	Single	\$300 JMD
Heat-Shrink Tubing Assortment	1 set	Set	\$700 JMD
Epoxy Adhesive (small tube, 5-min)	1 tube	Single	\$600 JMD
Sandpaper Assortment	1 pack	Pack	\$700 JMD

### 3d. Replacement Motors

Replacement LP-KNSB-34-165 motors are available on request. Motors are assembled and validated by Lignum Propulsion staff and dispatched once a request is confirmed. Maximum of 2 additional motors per team to keep supply equitable across the competition.

Item	Pack Size	Unit	Price
LP-KNSB-34-165 Replacement Motor	1 motor	Single	\$3,000 JMD

### 4. Custom 3D-Printed Parts

Teams may request custom-geometry 3D-printed components (alternate nose cone profiles, fin templates, payload bays, mounting brackets) directly from Lignum Propulsion. Submit your STL file or geometry sketch through the Q&A system. Pricing is calculated on filament mass used and complexity, but as a rough guide:

Part Type	Typical Filament	Price
Small bracket / centring ring (under 50 g)	30 - 50 g PLA	\$500 JMD
Custom nose cone (50 - 150 g)	60 - 120 g PLA	\$1,500 JMD
Payload bay / structural part (150 - 300 g)	200 - 300 g PLA	\$3,000 JMD
Per-gram pricing (any custom geometry)	Charged on actual filament mass	\$30 JMD / gram

The per-gram rate applies when your design does not fit cleanly into one of the categories above (very small parts, very large parts, or unusual geometries). Lead time on custom prints: 5 to 10 business days after design approval.

## 5. Important Notes

- All sales are final once parts are dispatched. Defective or damaged-on-arrival items will be replaced free of charge if reported within 5 days of receipt.
- Replacement motors are limited to 2 per team beyond the 3 included in the kit.
- All non-kit parts that are not addressed in the Game Manual still require Q&A approval before use in competition.
- Lignum Propulsion does not stock every item shown above at all times. If a part is out of stock, an estimated restocking date will be provided.

## 6. Contact

Parts requests and questions:

Email: [lignumpropulsion@gmail.com](mailto:lignumpropulsion@gmail.com)

Q&A System (opens May 30, 2026): [www.lignumpropulsion.com](http://www.lignumpropulsion.com)