



2018

# SCNC

SKILLS CANADA  
NATIONAL COMPETITION

# OCMT

OLYMPIADES CANADIENNES  
DES MÉTIERS ET  
DES TECHNOLOGIES



SkillsCompétences  
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Edmonton2018

COMPONENT LIST / LISTE DES PIÈCES

# MOBILE ROBOTICS ROBOTIQUE MOBILE

SECONDARY /  
NIVEAU SECONDAIRE



| Description                                   | QTY | Weight (lbs) |
|---|-----|--------------|
| <b>Sensors, Controllers, and Batteries</b>    |     |              |
| Prizm Robotics Controller                     | 1   |              |
| 12V 3,000 mAh NiMH Battery Pack w/20 amp fuse | 1   | 0.5          |
| 12V 3,000 mAh NiMH Battery Pack w/20 amp fuse | 1   | 0.5          |
| NiMH Battery Pack Charger                     | 1   | 0.5          |
| Line Finder Sensor Pack                       | 1   | 0.1          |
| Ultrasonic Sensor Pack                        | 1   | 0.1          |
| 30cm Extender Cable                           | 1   | 0.1          |
| <b>Servos and Motors</b>                      |     |              |
| DC Motor Power Lead                           | 4   | 0.25         |
| Single Standard Scale Servo Bracket (2 pack)  | 1   | 0.5          |
| Servo Extension                               | 2   | 0.5          |
| 485 Servo Pack                                | 2   | 0.5          |
| DC Motor Mount                                | 2   | 0.5          |
| Standard Servo Front Mount Bracket (2 pack)   | 1   | 0.5          |
| DC Gear Motor 12 volt Torque Nado             | 2   | 0.5          |
| 1425CR Continuous Rotation Servo Motor        | 1   | 0.5          |
| Standard Servo Mounting Kit                   | 2   | 0.5          |
| <b>Wheels, Gears and Drive Train</b>          |     |              |
| 101mm (4 inch) Omni Wheels (2 pack)           | 2   | 0.5          |
| 4 Inch Traction Wheel                         | 2   | 0.5          |
| 40 Tooth Aluminum Gear ( 2 pack)              | 2   | 0.5          |
| 6mm Shaft Hubs (2 pack)                       | 4   | 0.5          |
| 80 Tooth Aluminum Gear                        | 2   | 0.5          |
| 4.7mm x 100mm Steel Axle (6 pack)             | 1   | 0.5          |
| Gear Hub Aluminum Spacer (2 pack)             | 1   | 0.5          |
| 4.7mm x 12mmL Shaft Bronze Bushings (12 pack) | 1   | 0.5          |
| Steel Shaft Set Collar ( 6 pack)              | 1   | 0.5          |
| 16 Tooth Aluminum Sprocket (2 pack)           | 1   | 0.5          |
| 24 Tooth Aluminum Sprocket ( 2 pack)          | 1   | 0.5          |
| 4.7mm Shaft Hubs (2 pack)                     | 4   | 0.5          |
| 1/4 inch Chain with Master Links (5 feet)     | 1   | 0.5          |
| Motor Axle Shaft Couplers (2 pack)            | 1   | 0.5          |
| 6mm x 80mm Steel Axle (6 pack)                | 1   | 0.5          |

|   |   |     |
|---|---|-----|
| Bronze Bushing                                  | 1 | 0.5 |
| 6mm D-Shaft Collar (2 pack)                     | 2 | 0.1 |
| Shaft Servo Hub                                 | 1 | 0.5 |
| Stand-Off Posts 6-32 x 16 mm                    | 1 | 0.5 |
| 4.7mm x 4mmL Shaft Bronze Bushings (12 pack)    | 1 | 0.5 |
| <b>Brackets and Structural Components</b>       |   |     |
| L Bracket (2 pack)                              | 2 | 0.5 |
| 32mm Channel (2 pack)                           | 6 | 0.5 |
| 96mm Channel (2 pack)                           | 1 | 0.5 |
| 160mm Channel (2 pack)                          | 1 | 0.5 |
| 288mm Channel (2 pack)                          | 3 | 0.5 |
| 288mm Flat Bar Beam (2 pack)                    | 1 | 0.5 |
| Angles 144mm (Pkg of 2)                         | 1 | 0.5 |
| Inside C Connector (2 pack)                     | 2 | 0.5 |
| 160mm x 32mm Flat Bracket (2 pack)              | 2 | 0.5 |
| 96mm x 32mm Flat Bracket (2 pack)               | 2 | 0.5 |
| 64mm x 32mm Flat Connector (2 pack)             | 2 | 0.5 |
| 90 Degree Inside Corner Bracket (2 pack)        | 2 | 0.5 |
| Rack and Pinion Linear Slide Pack               | 1 | 0.5 |
| Flat Spacer (6 pack)                            | 1 | 0.5 |
| 16mmL Threaded Spacer (2 pack)                  | 1 | 0.5 |
| Standard- Scale Pivot Arm with Bearing Pack     | 1 | 0.5 |
| Aluminum Linkage (15 Hole)                      | 2 | 0.5 |
| Aluminum Plates                                 | 2 | 0.5 |
| Aluminum Gusset 90 Degree                       | 1 | 0.5 |
| Aluminum Gusset 120 Degree                      | 1 | 0.5 |
| <b>Fasteners</b>                                |   |     |
| 6-32 KEP Lock Nut (100 pack)                    | 1 | 0.5 |
| 1/2 inch 6-32 Socket Head Cap Screw (100 pack)  | 1 | 0.5 |
| 5/16 inch 6-32 Socket Head Cap Screw (100 pack) | 1 | 0.5 |
| 3/8 inch Nylon Spacer Pack (6 pack)             | 1 | 0.5 |
| 32mm Standoff Posts (12 pack)                   | 1 | 0.5 |
| 3/8 inch L 6-32 Button Head Cap Screw (50 pack) | 1 | 0.5 |