



TP-197-004

WC1000-DM4-E 4WD ATR PLATFORM

SuperDroid Robots, Inc    

 919.557.9162

 SDR@SDRobots.com

 224 Technology Park Lane, Fuquay Varina, NC 27526

Revised Sep 14, 2020

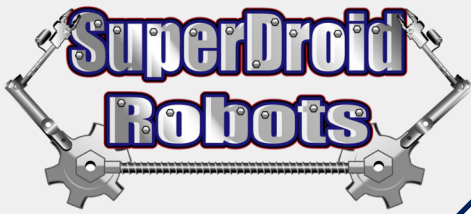
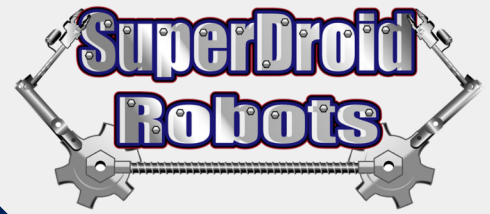


TABLE OF CONTENTS

TABLE OF CONTENTS.....	2
LEGAL INFORMATION	3
SAFETY GUIDE	4
Safety Precautions	4
SECTION 1 - ASSEMBLY	5
Mechanical Assembly.....	5
SECTION 1 - ASSEMBLY CONTINUED	6
SECTION 2 - ELECTRICAL ASSEMBLY.....	6
Resources	6

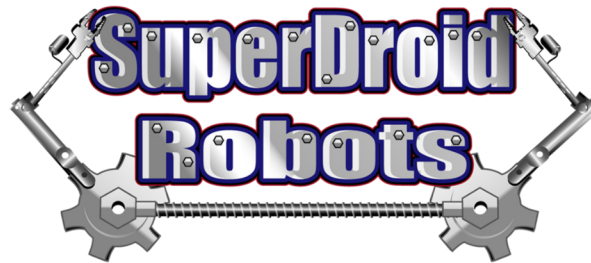


LEGAL INFORMATION

Accurate content is of the utmost importance to the authors of this document. If you find an error or see an item that needs more clarification report it to www.superdroidrobots.com

SuperDroid Robots Inc. is incorporated in Wake County, NC USA
SuperDroid Robots also does business as Team Half-Life
SuperDroid Robots is a registered trademark of Team Half-Life.
Prior to purchasing review our Terms (<https://www.superdroidrobots.com/terms.htm>)

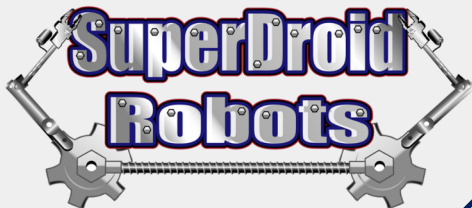
SuperDroid Robots Inc.
<https://www.SuperDroidRobots.com>
SuperDroid Robots Inc.
224 Technology Park Lane
Suite 100
Fuquay Varina, NC 27526



1. SuperDroid Robots, Inc is not responsible for special incidental, or consequential damages resulting from any warranty or under any legal theory, including, but not limited to lost profits, downtime, goodwill, damage to, or replacement equipment or property, or any cost of recovering, reprogramming, or reproducing any data stored. ANY LIABILITY SHALL BE LIMITED TO REPLACEMENT OF DEFECTIVE PARTS. SuperDroid Robots, Inc. is further not responsible for any personal damages, including, but not limited to bodily and health damages resulting from any use of our products.
2. SuperDroid Robots, Inc. makes no representations as to the fitness of its products for specific uses. ANY IMPLIED WARRANTY OF MERCHANTABILITY OR FITNESS FOR A PARTICULAR PURPOSE IS HEREBY EXCLUDED.
3. Agreements shall be construed in accordance with the laws of the State of North Carolina, and the rights and obligations created hereby shall be governed by the laws of North Carolina.
4. In the event a dispute or controversy arises, such dispute or controversy (including claims of default) shall be brought in the courts of Wake County, North Carolina and the plaintiff hereby agrees to this choice of venue.

The following section contains a list of non-warrantable items. Any procedure covered in this section will void the coverage warranty of the robot, or robots, you have purchased.

1. *Removal of the lid, or access to the interior of the robot is considered abuse and neglect and as such will void warranty; Unless otherwise instructed by SuperDroid Robots.*
2. *Using the robot for purposes that it is not intended, or in any situation that could cause damage outside of the normal wear and tear of the robot, will not be covered under warranty and be seen as neglect of the robot system.*
3. *Improper maintenance and overall disregard to the upkeep of the robot can harm, and/or cause severe damage to the robot, leading to malfunctions and/or destruction of the functionality of the robot.*
4. *Located throughout the entirety of this document are other warranty voidable perimeters displayed by RED text Any of which will again cause an immediate void of the warranty and disqualify repairs of the robot.*



SAFETY GUIDE

Thank you for purchasing this product!



WARNING - Before using, read this manual to ensure correct usage and operation. After reading, store in a safe place for future reference. Incorrect handling of this robot could result in personal injury or physical damage. The manufacturer assumes no responsibility for any damage caused by mishandling that is beyond normal usage defined in these manuals of this product.

NOTE - The information in this manual is subject to change without notice.

- The manufacturer assumes no responsibility for any errors that may appear in this manual.
- The reproduction, transmission or use of this document or contents is not permitted without express written authority.

Safety Precautions



This symbol indicates an additional warning (including caution). The content will be clearly indicated in an illustration or nearby.



This symbol indicates a prohibited action. The content will be clearly indicated in an illustration or nearby.



Do not operate the robot if it isn't working properly.

If you notice something unusual when operating the robot, immediately stop operating it and turn the unit off. Contact our technicians at info@sdrobots.com and explain the issue. Unusual can include things such as smoke, strange odor, damage to the chassis or components etc.



Be careful when operating around children and animals

Children and animals may not understand that the robot has moving parts. Exercise caution when operating the robot and remain aware of your surroundings.



Do not expose interior to liquid or insert foreign objects

1. Do not place the robot near water while interior is exposed (ex. flooded area, bathroom etc.).
2. Do not insert any foreign objects into the robot.
3. Avoid placing the robot into a container/bag/case that contains objects besides it's own components.



Be careful when interacting with internal components of the robot.

The robot contains moving and electric components. Modification and/or disassembly of the robot could result in personal injury. **ALWAYS** disconnect the power before working on the robot.



Do not drop, throw, or otherwise cause an impact to the robot

The robot contains moving components, wiring, and electrical systems. If the robot is dropped or otherwise receives an impact, internal components could be damaged. If the robot is dropped or otherwise falls and is damaged, turn it off immediately.



Pinching hazard

The treaded systems have very powerful motors. The treaded design presents many pinch points! If fingers or hands are inside the treaded section and the motors energize, injury may occur.

SECTION 1 - ASSEMBLY

Mechanical Assembly

NOTE

Your robot may come in a crate or carry case. As you unpack your robot, note how everything fits so you can store your platform.

1. Before starting the assembly of the robot, be sure to follow the instructions to remove the brake from the back of the motors. The brake is engaged by default. Running the motor with the brake on will damage it beyond repair.
2. Once the brake is removed, remove the six socket head screws that hold the outer clamping plate to the motor. This plate will not be used and can be discarded. Keep the socket head screws that were removed and use them to mount the motor to the chassis. Use Loctite to keep the screws from vibrating loose. See **Figure 2A** and **2B**.
3. Let air out of the pneumatic wheels so that they are easier to manipulate. Take care not to pinch the inner tube when bolting to the hub. After the wheel is bolted in place, fill the tire with air to match the specifications on the side wall of the tire. See **Figure 3**.

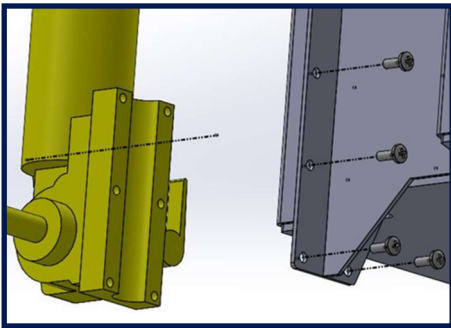


Figure 2A

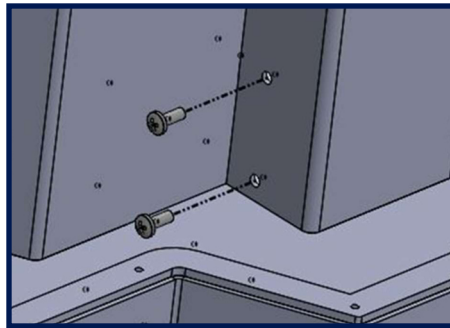


Figure 2B

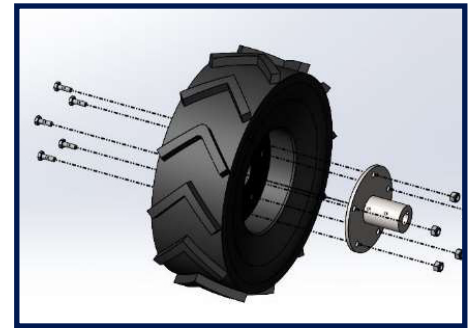


Figure 3

4. Align the key slot on the hub with the key stock on the motor shaft. Slide components together and secure with the provided M10 nut. See **Figure 4A**, **Figure 4B**, and **Figure 4C**.

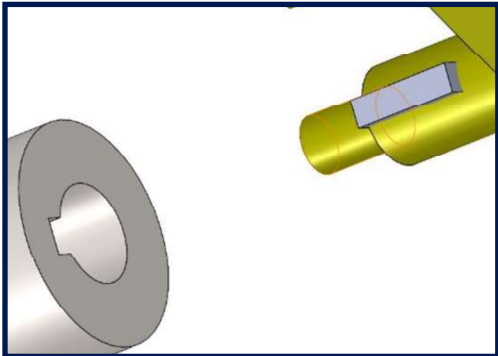


Figure 4A

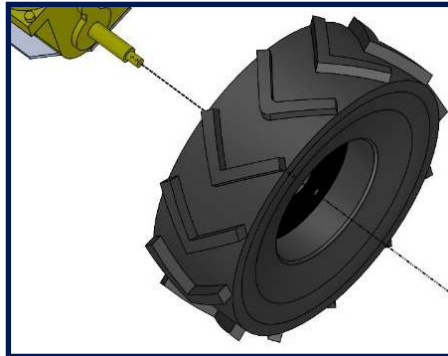


Figure 4B

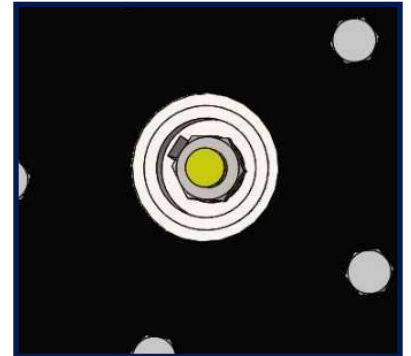
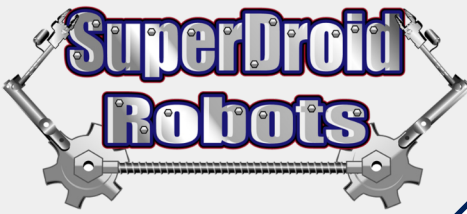


Figure 4C



SECTION 1 - ASSEMBLY CONTINUED

5. Install cord grips for the motor cables to enter the chassis. The cord grip has a nut that turns off the back end of the grip housing (**Figure 5A**). Remove the cord grip nut and insert cord grip into the chassis holes located near the motor (**Figure 5B**). Screw on the nut from the inside of the chassis to lock cord grip in place (**Figure 5C**). Feed motor cable through cord grip and tighten down the cord grip cap until snug.
6. Use lid screws to install chassis lid. (**Figure 6**)

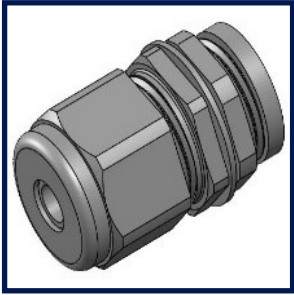


Figure 5A

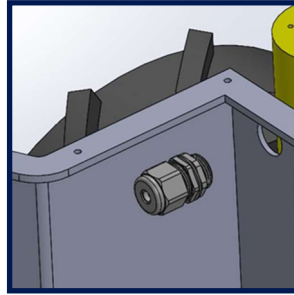


Figure 5B



Figure 5C

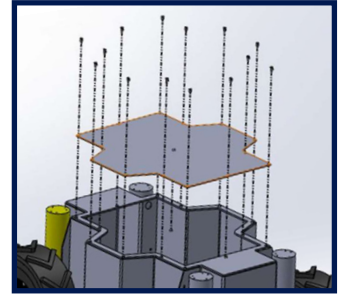


Figure 6

7. The mounting of any additional components will require the use of basic hand tools for drilling and mounting. Be sure to place the object in position before creating any permanent changes to the chassis. This allows the opportunity to check for ease of placement, or any interference the component may have with active parts of the robot.

SECTION 2 - ELECTRICAL ASSEMBLY

Resources

NOTE

Never charge batteries unattended. Regularly charge batteries to prevent levels from dropping below point of recovery.

http://www.superdroidrobots.com/terms_batteries.html

For electrical assembly locate the schematic associated with the motor controller in your system. Link can be found below.

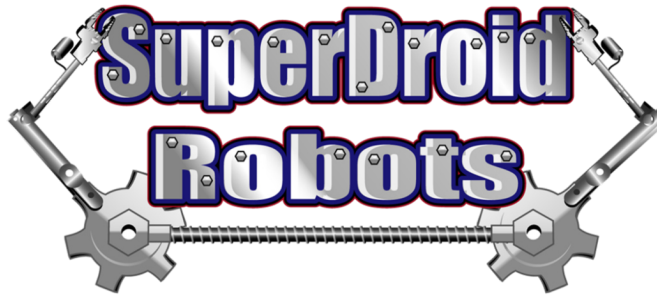
[Electrical Assembly Schematics](#)

For additional support on wiring, soldering, and crimping, please visit the following support pages.

[Electrical Motor Hookup](#)

[Electrical Power Hookup](#)

[General Electrical Support Pages](#)



CONNECT WITH US ON SOCIAL MEDIA

TAG US AND SHARE YOUR ROBOT EXPERIENCE!



SDRROBOTS



SUPERDROIDROBOTS



SDROBOTS



SUPERDROIDROBOTS



SUPERDROIDROBOTS

SCAN THE QR CODE TO VISIT US AT

[SUPERDROIDROBOTS.COM](https://superdroidrobots.com)

