



RADIO CERTIFICATIONS

CE: GTS2023060192EV1

FCC: 2A2UNRTX4C00

IC: 24025-RTX4C00

Batteries not included



Link to the most recent version of this manual with exploded views and parts lists:
www.redcatracing.com/pages/manuals



Warnings

AGE WARNING! You must be 14 years of age or older to operate this vehicle. It is the buyer's responsibility to ensure that this product is safely operated. This radio controlled (RC) vehicle is not a toy. It is the responsibility of the parents or guardian to ensure that minors receive appropriate guidance and supervision when operating or working on this product.

The buyer assumes all risks associated with the use of this product. Namero LLC d/b/a Redcat Racing and their retail partners, dealers, distributors, manufactures and affiliates cannot control the use and operation of this product and as such shall not be held responsible or liable for any injury, accident or damage resulting from the use of this product.

Always perform a prerun inspection to ensure that there is no damage and that all screws and wheel nuts are secure. If damage is found, repair or replace prior to use.

Fully read all instructions, manuals and warnings that come with your RC vehicle and any accessories required to operate the product.

Never operate your RC vehicles on public roads, near bystanders, children, pets other animals. Never lose sight of your vehicle while it is in operation and always leave a safe distance around your RC vehicles when driving so that in the event you lose control you don't damage the vehicle, hurt yourself or others. Always keep clear of the wheels or other moving parts on the vehicle and never attempt to pick up the vehicle if the wheels are in motion. Do not attempt to touch the motor, ESC, battery or other electrical components during or immediately after use as these items will get hot during operation.

Always allow the vehicle time to cool down between runs. Overheating the electronics can shorten the life of your electronic components.

Never leave the battery connected when not in use and store batteries in accordance with the manufactures instructions.

Never leave a battery unattended while being charged. Never charge batteries while they are inside of the RC vehicle.

There is a risk of fire and explosion when dealing with batteries. Rechargeable batteries may become hot and catch fire if left unattended, charged too quickly, charged too often, if overcharged, if over discharged or if previously damaged. Never charge at a rate higher than 1C. (2000Mah pack = 2 amp charge rate). Always use a LIPO safe charging pouch when charging LIPO batteries. Only use a LIPO specific charger when charging LIPO batteries.

Never use a LIPO battery that has previously overheated and/or shows signs of damage or swelling. If you suspect the battery to be damaged, immediately discontinue use and properly dispose of the battery. Never dispose of a LIPO battery with regular trash, check with local authorities for proper disposal.

Always check the ESC settings to ensure that they match the battery type during operation. If using a LIPO battery, the ESC must be set to LIPO or damage may occur.

Never mix old and new batteries. Do not change or charge batteries in a hazardous location. Do not mix alkaline, lithium, standard (carbon zinc), or rechargeable (NiMh, cadmium) batteries.

If you do not agree with or are unable to follow these warnings and are not willing to accept full and complete liability for the use of this RC product; immediately return the product to your place of purchase in new and unused condition.

INSTALLING THE WHEEL CENTERCAPS

17mm Wheel nut wrench Centercaps 2mm Allen key M2.5x6 Cap-head screws			
Locate 4-centercaps, 25 - M2.5x6 cap head screws, a 17mm wheel wrench, and a 2mm allen key.	Using the 17mm wheel wrench, make sure all wheel nuts are tight.	Using the 2mm allen key, loosely screw in 5 - M2.5x6 cap head screws per centercap.	Once all the screws are in place, tighten each one carefully. The wheels are plastic, so don't over tighten.

Start Up

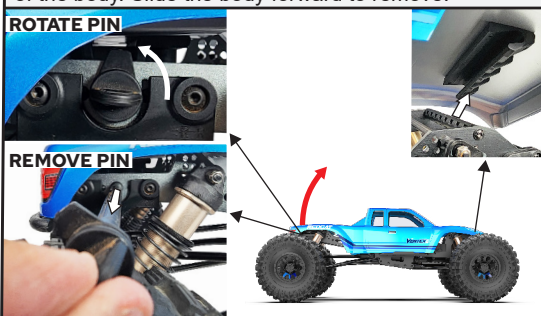
Attention: The ESC is set to LIPO from the factory.

Note: When using a LIPO battery, the ESC MUST be set to LIPO or damage to the battery may occur. See full online manual.

1. Insert 4 brand new AA batteries into the controller. Be sure to line up the positive (+) side of the battery with the (+) mark inside the battery compartment. (see above warnings)



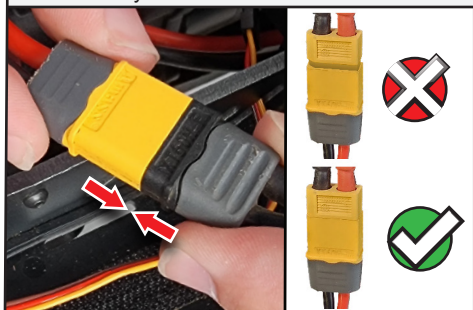
2. Remove the rear body retaining pin and lift the rear of the body. Slide the body forward to remove.



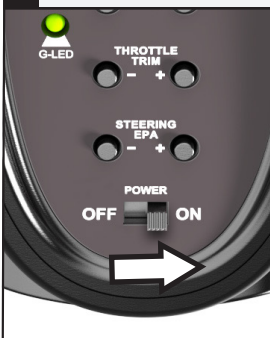
3. Strap in a fully charged battery pack.



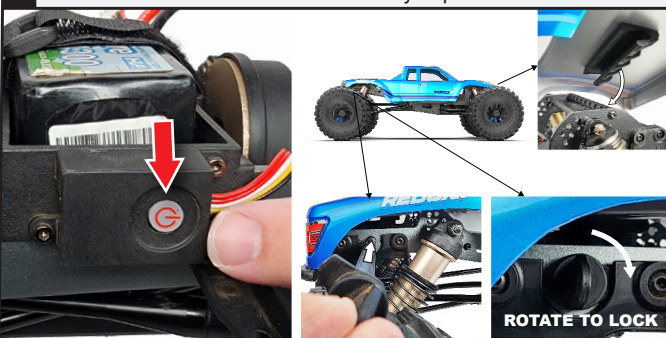
4. Plug in the battery. CAUTION! Do not turn on the ESC yet!



5. Turn on the radio.



6. Power on the ESC and secure the body in place.



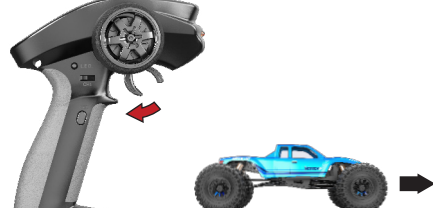
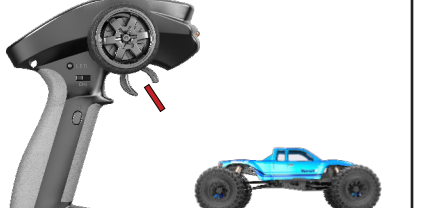
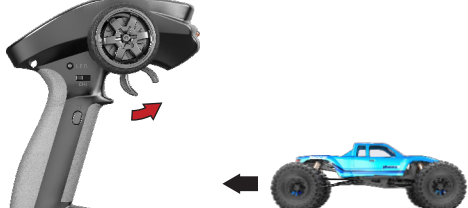
NOTE: You can also operate the ON/OFF button by reaching into the front left wheel well.



Steering

Straight	Left	Right
		

Throttle

Forward	Brake - Auto Braking	Reverse
		

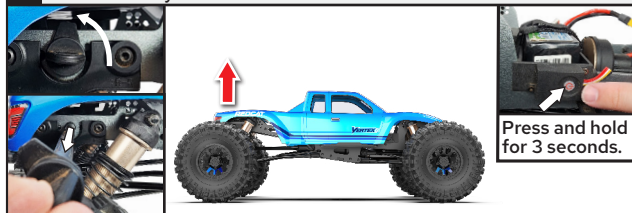
Trail & Underdrive Control

Press CH3 BUTTON to toggle between "trail" and "underdrive" settings.

 TRAIL	 UNDERDRIVE	Trail: The front and rear wheels rotate at the same speed. This setting offers predictable handling and a laid-back feel. Best used when driving on flat surfaces, such as heading to the trailhead or approaching obstacles. Underdrive: The rear wheels rotate 33.3% slower than the front wheels. This setting allows the front wheels to pull the vehicle through obstacles and helps with making tight maneuvers. Best used when driving over or climbing obstacles.
--	--	---

Shut Down

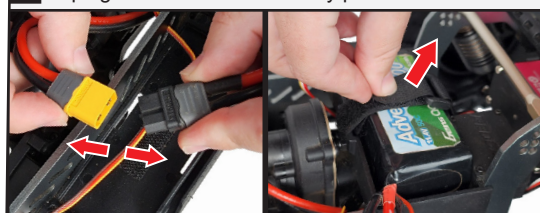
1. Remove body and turn off the vehicle.



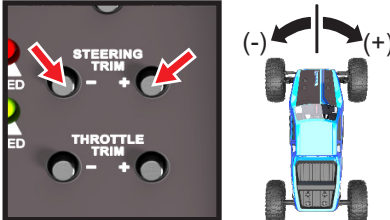
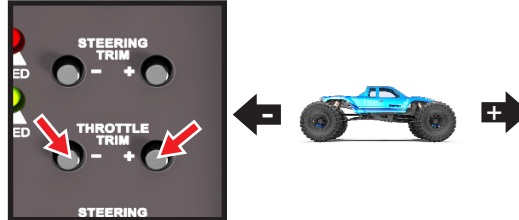
2. Turn off the radio.



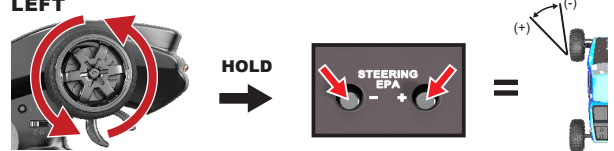
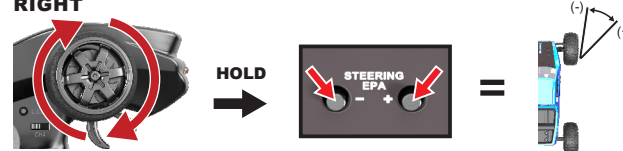
3. Unplug and remove the battery pack.



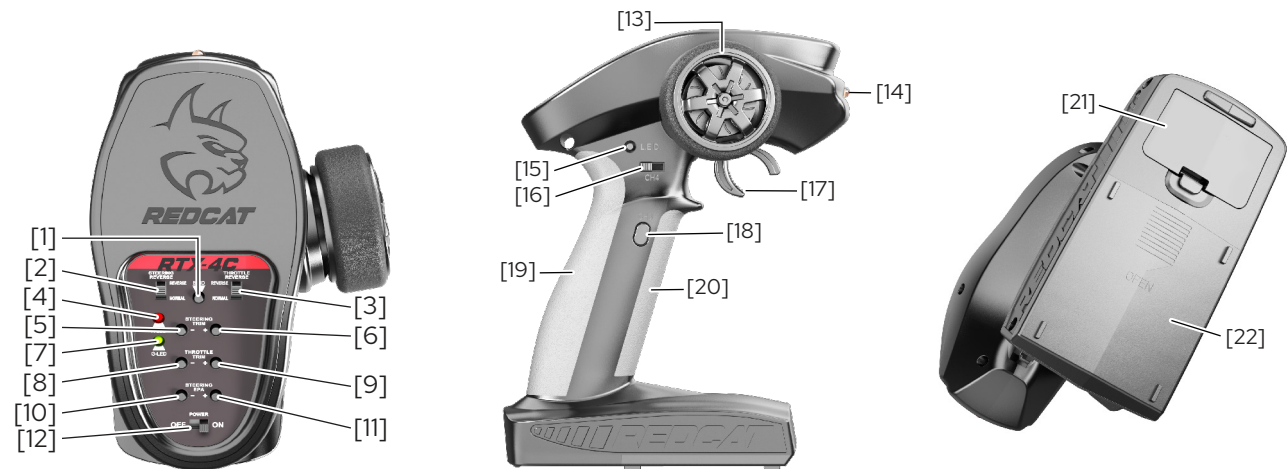
Radio Adjustments

Servo Reverse	Steering Trim - Steering Neutral	Throttle Trim - Throttle Neutral
 While driving away from you, if the vehicle steers to the left while you steer the controller to the right, reverse channel 1 by flipping the switch labeled "STEERING REVERSE". The switch labeled "THROTTLE REVERSE" is for reversing throttle orientation.		

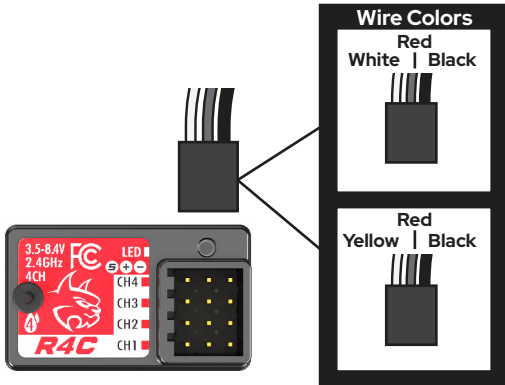
Steering EPA - Maximum Steering Endpoint Adjustment

LEFT	RIGHT
	

RTX-4C Radio Guide



1. Bind Button	12. Power Switch
2. Steering Reverse	13. Steering Wheel. (CH1)
3. Throttle Reverse	14. LED Light
4. Power Indicator LED - RED (R. LED)	15. LED Light (ON/OFF) Button
5. Steering Trim (-)	16. Three Position Switch (CH4)
6. Steering Trim (+)	17. Throttle Trigger (CH2)
7. Status Indicator LED - Green (G.LED)	18. Button (CH3)
8. Throttle Trim (-)	19. Rubber Grip Rear
9. Throttle Trim (+)	20. Rubber Grip Front
10. Steering End Point Adjustment (-) (EPA)	21. Tool & Spare Parts Compartment
11. Steering End Point Adjustment (+) (EPA)	22. Battery Compartment - 4 AA Batteries



Compliance & Warnings

DoC Declaration: Hereby, [Redcat Racing] declares that the Radio Equipment [RTX-4C] is in compliance with RED 2014/53/EU. The full text of the EU DoC is available at the following internet address: www.flysky-cn.com.

CE: GTS2023060192EV1
FCC ID: 2A2UNRTX4C00
IC: 24025-RTX4C00

Warning: The antenna(s) used for this transmitter must be installed to provide a separation distance of at least 20 cm from all persons and must not be co-located or operating in conjunction with any other transmitter. End-users and installers must be provided with antenna installation instructions and transmitter operating conditions for satisfying RF exposure compliance.

FCC This equipment has been tested and found to comply with the limits for a Class B digital device pursuant to part 15 of the FCC rules. These limits are designed to provide reasonable protection against harmful interference in a residential installation. This equipment generates, uses and can radiate radio frequency energy and, if not installed and used in accordance with the instructions, may cause harmful interference to radio communications. However, there is no guarantee that interference will not occur in a particular installation. If this equipment does cause harmful interference to radio or television reception, which can be determined by turning the equipment off and on, the user is encouraged to try to correct the interference by one or more of the following measures:

- Reorient or relocate the receiving antenna.
- Increase the separation between the equipment and receiver.
- Connect the equipment into an outlet on a circuit different from that to which the receiver is connected.
- Consult the dealer or an experienced radio/TV technician for help.

To assure continued compliance, any changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate this equipment.

This equipment complies with Part 15 of the FCC Rules. Operation is subject to the following two conditions: (1) This device may not cause harmful interference and (2) This device must accept any interference received, including interference that may cause undesired operation.

This device contains licence-exempt transmitter(s)/receiver(s) that comply with Innovation, Science and Economic Development Canada's licence-exempt RSS(s). Operation is subject to the following two conditions:

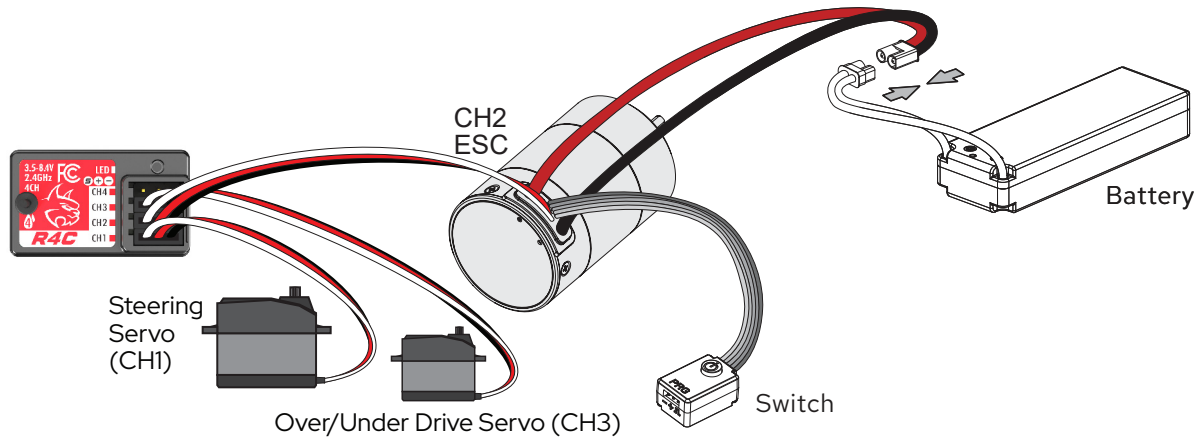
- (1) This device may not cause interference.
- (2) This device must accept any interference, including interference that may cause undesired operation of the device.

Caution!

- The manufacturer is not responsible for any radio or TV interference caused by unauthorized modifications to this equipment. Such modifications could void the user authority to operate the equipment.
- The 2.4GHz radio band is limited to line of sight. Always keep your model in sight as a large object can block the RF signal and lead to loss of control.
- To ensure the best signal quality make sure that the receiver antenna is mounted perpendicular to the model body in an upright position. Be sure the receiver antenna is not touching or right next to conductive materials, such as metal or carbon fiber.
- Low battery alarm: When the battery is lower than 4.2v, the G.LED on the transmitter panel will flash slowly. Turn off the vehicle and stop operation immediately when the batteries are low. Replace the transmitter batteries with (4) new AA batteries before further use.
- Do not cut, kink, damage or alter the antennas at any time. If an antenna is damaged, stop use immediately.

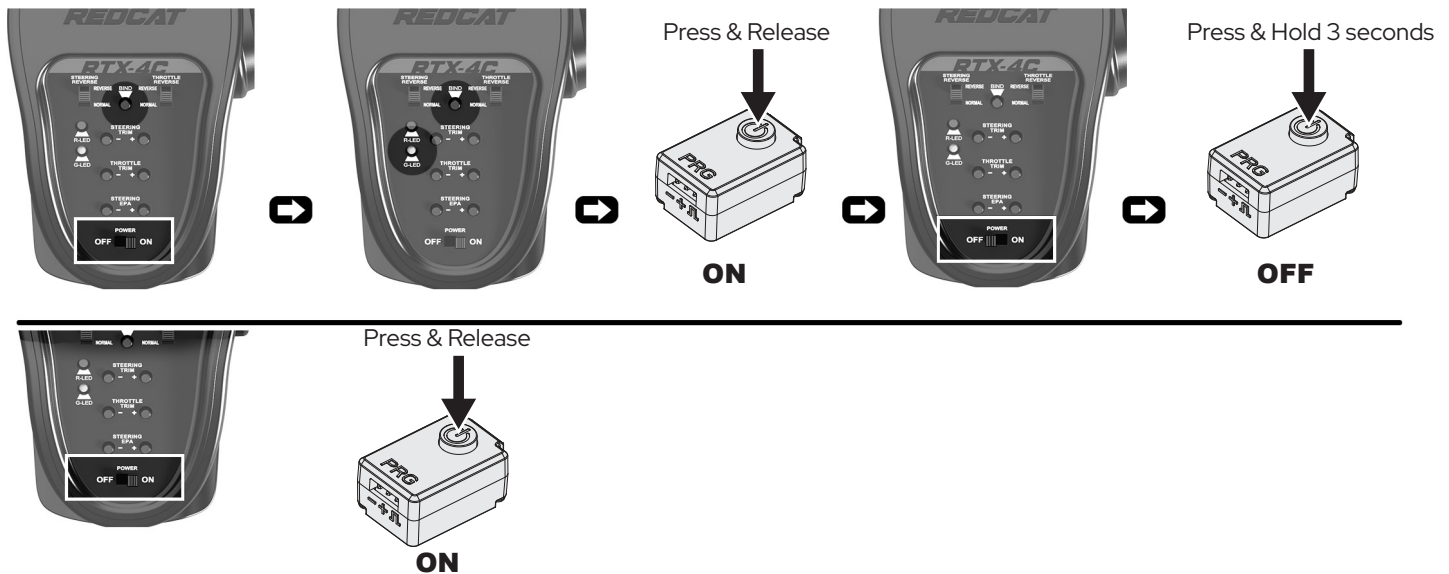


Receiver Connections



Binding Process

NOTE: The radio is already bound from the factory and only needs to be done if the receiver can't find the radio's signal. Before attempting to bind the radio, be sure there are new batteries in the radio, a fully charged battery pack in the vehicle and that both are turned on.



Calibration

This function is used to set the neutral position for the throttle trigger and steering wheel.

Every transmitter is calibrated before leaving the factory, however if recalibration is required, please follow these steps:

1. Turn and hold the wheel as far clockwise as it will turn, move the throttle trigger to the full reverse position and turn on the transmitter. If done correctly, both Red and Green LEDs will double flash on and off.
2. Calibrate wheel: Turn the wheel completely clockwise, then completely counterclockwise.
 - When calibration is completed the Red LED will turn off.
3. Trigger calibration: Pull the trigger to the full throttle position.
 - When calibration is completed the Green LED will turn off.
4. Once calibration is complete press the bind button to save the settings and exit calibration mode.

Radio Functions

-CHANNEL DESCRIPTION-

The transmitter outputs a total of 4 channels, which are allocated as follows:

CH1: Steering Wheel

CH2: Throttle Trigger

CH3: Accessory Button (2 Position button)

CH4: Accessory Switch (3 Position Switch)

Note: By default the output of CH3 is in the position of 1000us. Pressing the button will toggle between 1000 and 2000us.

-CHANNEL REVERSE-

This function is used to adjust each channel's direction of movement in relation to its input. The STEERING REVERSE and THROTTLE REVERSE switches directly effect CH1 and CH2. If the switch is up, the channel is reversed. If the switch is down, the channel is in its normal orientation.

-TRIMS-

The STEERING TRIM buttons are used to center the steering servo (CH1). If the vehicle steers without transmitter steering input, use these buttons to adjust the vehicle so that it drives straight without steering input from the transmitter. STEERING TRIM can be multiplexed to trim CH3 and CH4. For multiplexing instructions, refer to the [Mode Switching] section.

The THROTTLE TRIM buttons are used to ensure the vehicle remains still while there is no transmitter throttle input (CH2). If the vehicle drives forward or backward without transmitter throttle input, use these buttons to trim the throttle until the vehicle is completely still.

Adjustment range: -120us - + 120us, each step is 4us.

STEERING TRIM + / THROTTLE TRIM +: Increases adjustment steps.

STEERING TRIM - / THROTTLE TRIM -: Decreases adjustment steps.

LED Indicator:

- While using the trim buttons, the G.LED flashes slowly on short presses and quickly on long presses.
- When the trim adjustment value is in the neutral position, the G.LED will flash twice slowly.
- When the trim adjustment value is at its maximum setting (+ 120us / -120us), the G.LED will no longer flash with each press of the button, indicating it is at its maximum value.

-END POINT ADJUSTMENTS (EPA)-

STEERING EPA is used to set the steering servo's maximum amount of travel. This is used to ensure the steering servo provides enough throw to steer the front wheels to their maximum capacity without damaging the servo. To set the steering end points, press the "STEERING EPA (-)" button several times, then turn and hold the transmitter's steering wheel all the way to one side. Gradually press the "STEERING EPA (+)" button until front wheels have reached their maximum steering capacity. If you hear the steering servo buzzing, press the "STEERING EPA (-)" until the buzzing stops.

The end point adjustments can be multiplexed to adjust CH2 (throttle), CH3 and CH4. For multiplexing instructions, refer to the [Mode Switching] section.

Adjustment range: 0-120%(the default is 100%), the step value is 5%.

STEERING EPA +: Increases servo travel.

STEERING EPA -: Decreases servo travel.

LED Indicator:

- When using the trim keys the G.LED will flash slowly on short presses and quickly on long presses.
- When the end point adjustment value is at its maximum setting, the G.LED will no longer flash with each press of the button.

-MODE SWITCHING-

This function is for reusing the STEERING TRIM and STEERING EPA buttons for different channels. Refer to the [Trims] and [END POINT ADJUSTMENTS (EPA)] sections above to view their effect on the vehicle.

Function settings:

After turning on the transmitter, quickly press the Bind button twice (within 1 second) to cycle through modes 1, 2, 3, and 4. The default setting when powered on is mode 1.

Mode 1: G.LED flashes slowly once, STEERING TRIM adjusts CH1 and STEERING EPA adjusts CH1.

Mode 2: G.LED flashes twice slowly, STEERING TRIM adjusts CH1 and STEERING EPA adjusts CH2.

Mode 3: G.LED flashes three times slowly, STEERING TRIM adjusts CH3 and STEERING EPA adjusts CH3.

Mode 4: G.LED flashes slowly four times, STEERING TRIM adjusts CH4 and STEERING EPA adjusts CH4.

-FAILSAFE-

This function dictates what the receiver will do in the event that it loses signal from the transmitter, this includes servo position, throttle position, etc.

Function settings:

1. Turn on the transmitter and make sure it is connected to the receiver.

2. Hold the control surface at the desired failsafe position.

3. Press and hold the bind button for 3 seconds, the G.LED will flash for 2 seconds, indicating that the settings were saved.

Note: The failsafe function is not set at the factory by default. If no failsafe setting has been set, the receiver will maintain the output of the last signal when the signal is lost. Failsafe is intended as a safety measure during transmitter signal loss and will not work if the receiver loses power.

-BEGINNER MODE-

Beginner mode is designed for the people who are new to the hobby.

In this mode the throttle is limited to 50 percent and the channel range defaults are set to 1250~1500~1750us.

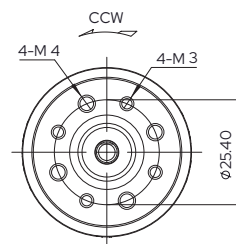
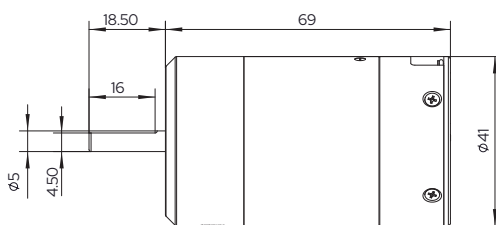
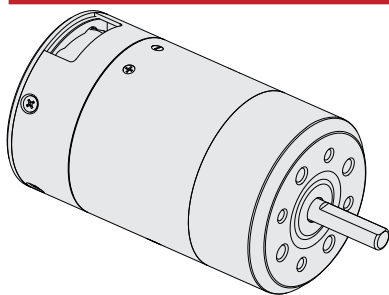
Function settings:

To switch between beginner and normal modes, press and hold the CH3 button while turning the steering wheel completely counterclockwise, as far as it can go. While holding, turn on the transmitter.

Note: By default, the system is set to normal mode. When set to beginner mode, the G.LED will double flash for 3 seconds after turning on the transmitter.



FUSION RTR BRUSHLESS 2-in-1 - MOTOR/ESC GUIDE



Specifications

FUSION RTR - ESC/MOTOR	
CONTINUOUS CURRENT	60A
MAIN APPLICATIONS	1/8 CRAWLER
LIPO CELLS	2-4S LIPO, 6-12 CELLS NIMH
BEC OUTPUT	6V/7.4V/8.4V, 4A
SIZE/WEIGHT	41mm(DIAMETER) X 69mm(LENGTH)
PROGRAMMING PORT	INDEPENDENT PROGRAMMING INTERFACE (ON THE ON/OFF SWITCH BOX)
MOTOR KV	1800KV
DIAMETER / LENGTH OF MOTOR	41mm / 69mm
SHAFT DIAMETER / EXPOSED SHAFT LENGTH	5mm / 18.5mm
MOTOR POLES	4

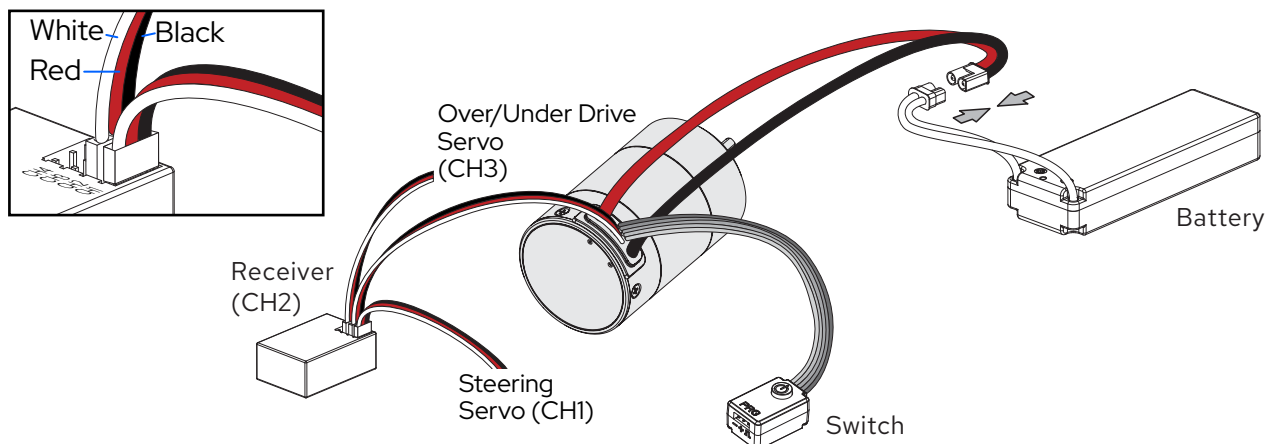
Features

- The integrated design of the ESC and the motor greatly reduces overall volume and weight, making layout and wiring simpler and more convenient.
- High torque and smooth running at very low speeds, which is far superior to common sensed brushless power systems and even rivals brushed power systems at low speeds.
- High efficiency results in low operating temperatures, which extends product longevity. The motor also runs quietly and is very responsive to minor throttle input variations, resulting in maximum control.
- With a protection grade of IP67, the entire system has excellent splash and dust resistance. The whole system can easily handle various weather conditions.
- Intelligent torque output and speed closed-loop control. The system automatically adjusts torque output as the resistance of the motor changes, resulting in smooth steep slope slow descents.
- Five levels of adjustable drag brake force allows the driver to control how the vehicle behaves on steep slopes when they let their finger off the trigger.
- Multiple protection functions: battery low voltage protection, system overheat protection, throttle loss protection, and drivetrain lock-up protection.
- Supports an LED program box to set the ESC parameters, which makes setting parameters more convenient and with less guess work.

Warnings & Compliance

- Please make sure that all wires and connections are well insulated before the ESC is connected to a battery, because a short circuit will damage the ESC.
- Please make all connections carefully. If connected improperly, you may experience abnormal control and/or equipment damaged may occur.
- If you need to re-solder any of the wires or connectors of the ESC, be sure to use a soldering iron rated at least 60W to ensure a firm solder joint and to prevent damage to the ESC.
- Do not let the external temperature of the system exceed 90°C/194°F, high temperatures will damage the power system.
- After use, remember to disconnect the battery from the ESC. If the battery isn't disconnected, the ESC will continue to drain the battery, even if the ESC is turned off. The battery will eventually be completely discharged if let plugged in for long periods of time, thus resulting in battery failure and possible damage to the ESC. We are not responsible for any damage caused by this!

Connections



• Connect the receiver:

Insert the ESC/motor's receiver cable into the throttle channel (CH2) of receiver. The red wire of the ESC/motor's receiver cable supplies 7.4V to the receiver so there is no need to provide the receiver with an additional power supply. Do not plug an additional power supply into the receiver, as it will damage the receiver. If you want to use an external BEC and power supply, you must first remove the red wire from the ESC/motor's receiver plug and wrap it with electrical tape or electrical shrink wrap to ensure it doesn't short out. If the inner metal of the red wire touches anything conductive, the ESC/motor will be damaged.

• Connect the battery:

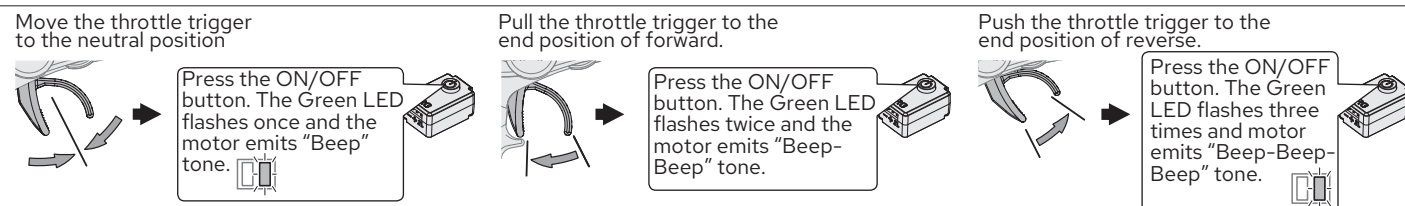
Plug in the battery as shown on page 1 of this manual. Be sure to line up the positive with positive and negative with negative polarities.

Powering ON/OFF & LED Status Indicator

- Powering the ESC on and off: Short press the switch button to power on and long press the switch button to power off.
- ESC/Motor tones: Power on the ESC as stated above; the number of beeps emitted by motor indicates the number of LIPO Cells plugged into the ESC. Example: "Beep, Beep" indicates a 2S LIPO; "Beep, Beep, Beep" indicates a 3S LIPO. The last long tone "beep —" indicates that self-check is complete and the ESC can be run.
- Note: The power button also flashes in sequence with the motor's tones.

Setting the ESC Throttle Range & Calibration

1. Turn on the radio, adjust the "D / R", "EPA", "ATL" of the throttle channel to 100% (if the radio has no display screen, adjust the corresponding knob to the maximum position), and adjust the "TRIM" of the throttle channel to 0 (if the remote control has no display screen, adjust the corresponding knob to the middle position).
2. In power off state, press the power button and hold it continuously. The red light on the ESC's switch starts to flash, then release the power button immediately (If the power button is not released within 8 seconds, the ESC will enter other modes, and need to start over) , the motor will sound synchronously.



3. At this time, three points need to be set: the neutral position, the end position of forward and the end position of backward.
 - The throttle trigger stays at the neutral position, press the power button, the green light flashes once, and the motor emits "beep" once, indicating that the neutral position has been stored.
 - Move the throttle trigger to the end position of forward, press power button, the green light flashes twice, and the motor emits "beep" twice, indicating that the end position of forward has been stored.
 - Push the throttle trigger to the end position of backward, press power button, the green light flashes three times, and the motor emits "beep" three times, indicating that the end position of backward has been stored.
4. After calibrating, the motor can be operated normally.

ESC Programmable Items

To set the programmable items, use the LED program box. The instructions can be found on the next page.

NOTE: The highlighted options in the following table are the default values of programmable items.

No.	Setting item	Option 1	Option 2	Option 3	Option 4	Option 5	Option 6	Option 7
1	Running Mode	<i>Forward/Reverse(RPM Matching)</i>	Forward/Reverse with Brake(Normal mode)					
2	Cutoff Voltage	Disabled	Low	<i>Medium</i>	High			
3	Motor Rotation	<i>CCW</i>	CW					
4	BEC Voltage	6.0V	7.4V	<i>8.4V</i>				
5	Drag Brake Force	Disabled	Level 1	Level 2	Level 3	Level 4	Level 5	<i>Level 6</i>
6	Drag Brake Rate	Level 1	<i>Level 2</i>	Level 3	Level 4	Level 5	Level 6	
7	Max.Brake Force	10%	25%	40%	<i>55%</i>	70%	85%	100%
8	Max.Reverse Force	25%	<i>50%</i>	75%	100%			

1. Running Mode:

Option 1: Forward/Reverse(RPM Matching)

When the throttle trigger is pushed to reverse, the motor reverses immediately. When the resistance of the vehicle changes, the ESC will automatically adjust the torque output.

Option 2: Forward/Reverse with Brake(Normal mode)

The vehicle brakes the first time you push the throttle trigger to the reverse/brake position. If the motor is at a complete stop when the throttle trigger returns to the neutral position and then pushed again to the reverse position, the vehicle will reverse. If the motor is not completely stopped, then the vehicle will continue to brake until the vehicle has stopped. The throttle trigger will need to return to the neutral position and then pushed to the reverse position again, to go into reverse. This method prevents the vehicle from being accidentally reversed. In this mode, the ESC will not automatically adjust the output torque.

2. Cutoff Voltage:

This function is to prevent non-recoverable damage the the Lipo battery pack, caused by over discharging. If the voltage protection is turned on, the ESC will monitor the battery voltage during operation. Once the voltage is lower than the set threshold value, the motor's power output will reduce 50% of the normal power within 2 seconds. The motor's power output will be completely cutoff after 40 seconds. When entering the low-voltage protection, the red LED will blink in the way of "☆ —, ☆ —, ☆ —" in a single cycle. When set to no protection, the ESC will not cut off power due to low voltage. When using Lipo Cells, be sure to set the cutoff voltage according to the battery being used, or damage to the battery may occur. For NiMH batteries, it's recommended to set this parameter to no protection. The low, medium, and high options correspond to 3.0V/Cell, 3.25V/Cell, 3.5V/Cell.

3. Motor Rotation:

If holding the motor where the shaft faces you, and the radio's throttle is increased in the forward direction, the motor shaft will rotate in the direction of the setting. CCW will be counterclockwise and CW will be clockwise. You can change the rotation if needed.

4. BEC Voltage:

BEC voltage supports 6V/7.4V/8.4V. While 6.0V is suitable for standard servos, 7.4V/8.4V is suitable for high-voltage servos. Be sure to set it according to the servo specs. If not set correctly, poor performance or servo damage may occur.

Note: 1. Do not set the BEC voltage above the maximum operating voltage of the servo and receiver, as this may damage the servo, receiver, or even the system.

Note: 2. Due to the limits of the BEC circuit, when using a 7.4V(2S) Lipo, the BEC can not maintain a 7.4V/8.4V output. The BEC output will match the battery voltage. It is recommended to use a 3S or 4S Lipo with the 7.4V/8.4V BEC setting.

5. Drag Brake Force:

Drag brake is the automatic brake force on the motor when the throttle is released to the neutral position. "Disabled" means the drag brake force is 0; the corresponding drag brake force increases from level 1 to level 5. Select the appropriate drag brake force according to the situation.

6. Drag Brake Rate:

This is the rate, or speed, at which the drag brake force engages from zero to the set value when the throttle trigger is released to the neutral position. The higher the level is, the faster the drag brake will activate. Setting this value to a reasonable value stable stopping.

7. Max. Brake Force:

This sets the percentage of available braking power when full brake is applied. A high value will provide immediate braking, but it may damage your pinion and spur. A low value will offer smoother braking, but may not stop the vehicle completely on a steep incline. Choosing a setting somewhere in the middle is usually a safe bet.

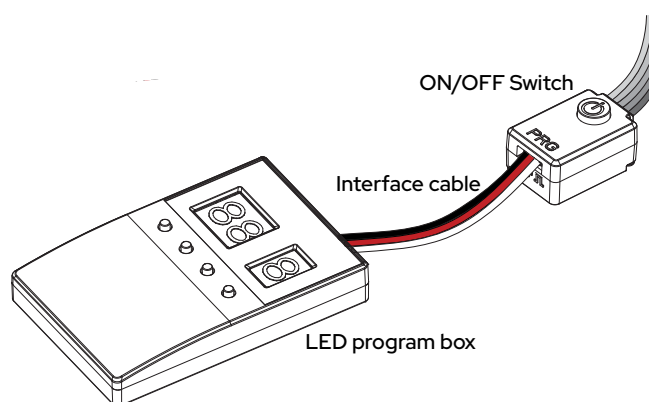
8. Max.Reverse Force:

This sets the maximum reversing speed when the throttle trigger is pushed to the maximum reverse position. A high value may feel too abrupt and put excess strain on the drivetrain. Setting this to a middle or low value will offer smooth reversing and good control.

FUSION RTR BRUSHLESS 2-in-1 - MOTOR/ESC GUIDE

Setting ESC Parameters

To set the ESC parameters, use the LED program box. Connect the program box as shown below.



Using the LED program box to set ESC parameters.

With the ESC powered off, connect the 3-pin setting interface cable into the ESC's ON/OFF switch (PRG). Connect the other end of the cable into the program box, using the slot marked (100).

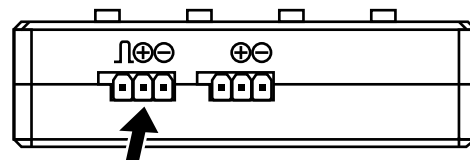
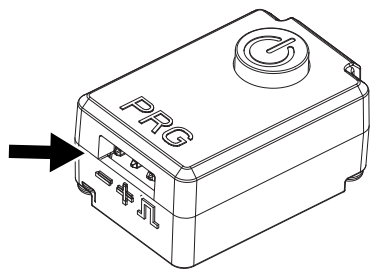
Power on the ESC.

After a few seconds, all ESC parameters can be displayed on the program box.

Use the "ITEM" button to select the item you wish to change and the "VALUE" button to select the option number of the value you wish to set. (See chart)

Press "OK" to save the new parameters to the ESC.

Remove the rubber dust plug from the "PRG" port on the ESC switch. Plug one end of the program cable into the switch, being sure the black wire is plugged into the (-) side of the "PRG" port.



Use this port, on the program box to plug in the other end of the program cable. Be sure the black wire is plugged into the (-) side of the port.

Factory Reset

Using the LED program box to restore factory settings.

After connecting the program box and the ESC, press the "RESET" button and then press the "OK" button.

Automatic Motor Pairing

If the motor has been subjected to severe impact or has abnormal heating or power output during operation, do the following automatic motor pairing sequence below.

1. Disconnect the ESC from CH2 of the receiver and remove the motor's pinion gear.
2. Connect the battery, press and hold the ESC's ON/OFF button. The button will flash red first, then after 8 seconds flash green indicating the ESC is ready to start the automatic motor pairing process.
3. Release the ON/OFF button and the motor will automatically start rotating. Wait for the motor to stop rotating. After about 5 seconds, the system will restart and self-check (report Lipo cells), which indicates that the pairing has been completed.
4. Power off the ESC and disconnect the battery.
5. Reconnect the ESC to CH2 of the receiver and reinstall the motor pinion gear to resume normal operation of the vehicle.

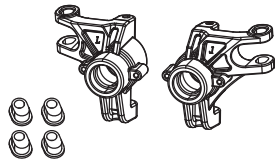
Note: Be sure to remove the motor gear before this operation, otherwise it may lead to incorrect pairing.

Troubleshooting

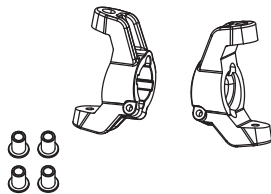
TROUBLE	POSSIBLE CAUSE	POSSIBLE SOLUTIONS
The ESC will not power on.	1. There isn't a battery plugged into the ESC. 2. The LIPO battery being used isn't charged.	1. Plug a fully charged LIPO battery into the ESC and try again. (PG.1) 2. Contact Redcat support.
The vehicle ran backward when you pulled the throttle trigger towards you.	1. The radio "Throttle Reverse" switch may be improperly set. 2. The motor direction is set incorrectly.	1. Switch the radio "Throttle Reverse" switch. (PG.2) 2. Be sure the motor direction is set correctly in the ESC. (PG.8-9.).
Vehicle moves with no throttle input.	1. Throttle trim is not set properly. 2. The transmitter needs to be calibrated.	1. Set transmitter throttle trim. (PG.2) 2. Calibrate the transmitter. (PG.7)
The motor suddenly stops working.	1. Transmitter signal is lost 2. The battery pack needs charging or the thermal protection may have been activated.	1. Be sure the transmitter has good batteries and is turned on. 2. Check the battery voltage and the ESC temperature. Let cool and recharge battery. (PG.9)
Power on and finish inspecting the number of LIPO cells (Green light flashes N times), red light flashes quickly.	1. Throttle signal is not detected by the ESC; 2. The neutral position of ESC and radio is unmatched.	1. Check that the ESC is plugged into the receiver (CH2) correctly and that the radio is turned on. 2. Be sure the throttle is in neutral position. Recalibrate the throttle range on the ESC.
The indicator light is not on after powering on the ESC and the motor is irresponsive.	1. The battery voltage is not received by the ESC. 2. The ESC's switch is damaged.	1. Be sure there's a good connection between the battery and the ESC. 2. Be sure the battery is charged and undamaged. 3. Replace the switch.
Clicking noise while steering.	1. The servo horn is stripped. 2. The servo gears are stripped.	1. Replace the servo horn. 2. Replace the servo.
Vehicle won't steer or move.	1. Battery pack not charged. 2. Battery wires loose. 3. Did not follow proper start-up instructions.	1. Charge the battery pack. 2. Plug in the battery securely. 3. Follow the start-up sequence on PG.1.
Vehicle turns to the side automatically.	1. Steering trim needs adjusting. 2. Steering servo horn needs realigning or replaced. 3. Servo gears are stripped.	1. Adjust transmitter steering trim. (PG.2) 2. Check servo horn, replace if worn or stripped. 3. Replace the servo.
Vehicle steers to the left when you steer to the right.	1. Steering reverse (on transmitter) is set incorrectly. 2. You are driving towards yourself and it just seems like it's backwards.	1. Set the steering reverse on transmitter. (PG.2) 2. Practice driving the vehicle to get used to steering with different vehicle orientations. When driving towards yourself, it just seems like the steering is backwards.

SPARE PARTS

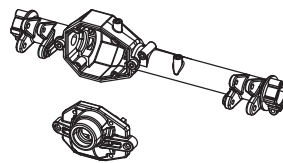
RER41315 - Steering Knuckle L/R (Plastic) (1pr)



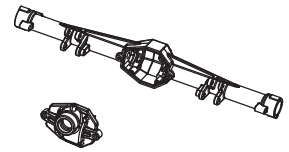
RER41316 - Front C-Hub L/R (Plastic) (1pr)



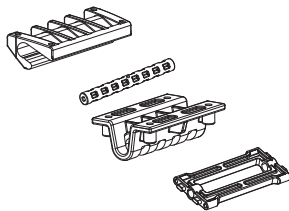
RER41317 - Front Axle Housing w/ 3rd Member (1set)



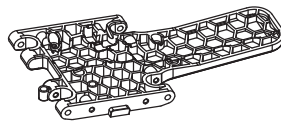
RER41318 - Rear Axle Housing w/ 3rd Member (1set)



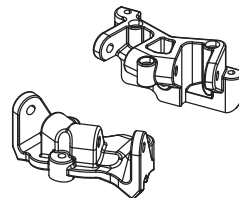
RER41319 - Body Mount Set (1set)



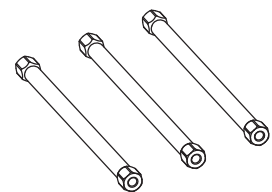
RER41320 - Center Skid Plate (1pc)



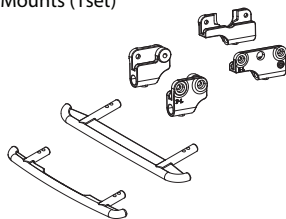
RER41321 - Upper Link Mounts F/R (1pr)



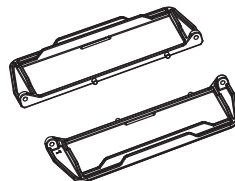
RER41322 - Frame Rail Brace Set (Plastic)(1set)



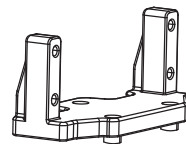
RER41323 - F/R Bumpers w/ Mounts (1set)



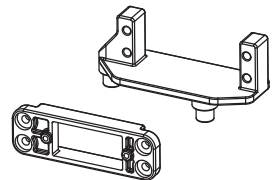
RER41324 - Side Guards/Battery Tray (1pr)



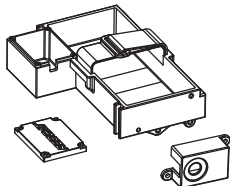
RER41325 - Steering Servo Mount (1pc)



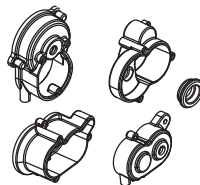
RER41326 - Overdrive Servo Mount (1pc)



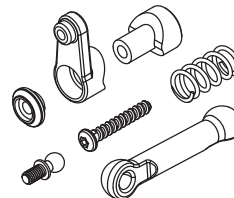
RER41327 - Battery Tray/Receiver box (1pc)



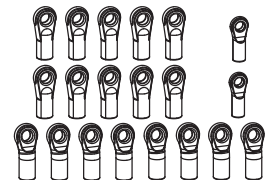
RER41328 - Transmission Housing (Plastic) (1pc)



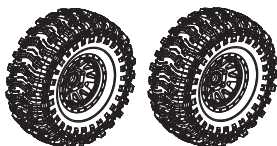
RER41329 - Overdrive Servo Saver Set (1set)



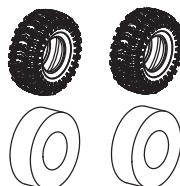
RER41330 - Rod End Set (Plastic) (1set)



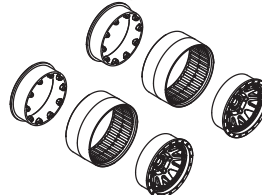
RER41331 - Pre-Mounted 1/6 Crawler Tires w/ Wheels (Black) (2pc)



RER41332 - 1/6 Crawler Tires w/ Insert (2pc)



RER41333 - 2.9 Inch Beadlock Wheels (Black)(1pr)



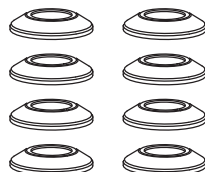
RER41334 - Wheel Center Cap (2pc)



RER41335 - 1/6 Vertex Body w/ window mask (Clear) (1pc)



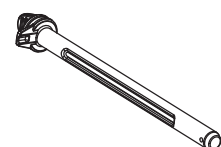
RER41336 - Body Washers (Plastic) (8pc)



RER41337 - 1/6th Vertex Body Set (Blue)(1set)

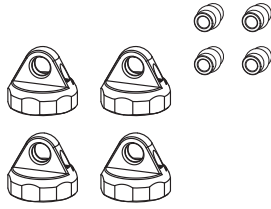


RER41338 - Body Latch Pin (Plastic) (1pc)

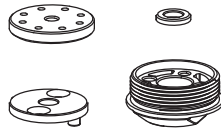


SPARE PARTS

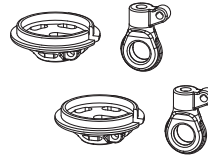
RER41339 - Shock Caps w/ Bushings (Aluminum) (4pc)



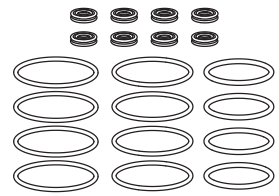
RER41340 - Lower Shock Parts Set w/ Piston (1set)



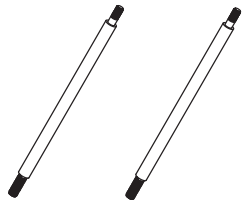
RER41341 - Shock Rod Ends and Cups (4pcs)



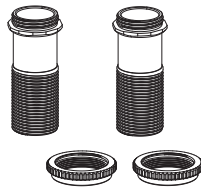
RER41342 - Shock O-ring Set (1set)



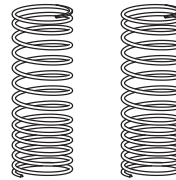
RER41343 - Shock Shafts (2pc)



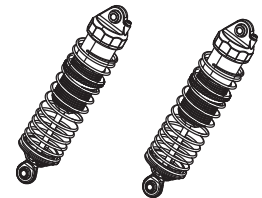
RER41344 - Shock Bodies w/ Collars (Aluminum) (2pc)



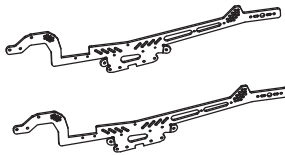
RER41345 - Shock Springs (2pc)



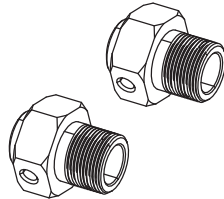
RER41346 - Shock Set Complete (2pc)



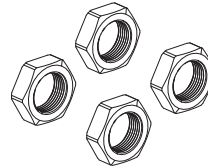
RER41347 - Aluminum Frame Rails (Black) (1set)



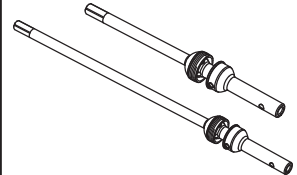
RER41348 - 17mm Wheel Hex (Aluminum) (2pc)



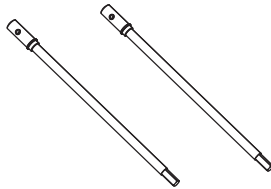
RER33253 - 17mm Wheel Nuts (Black)(4pcs)



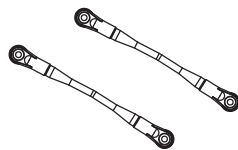
RER41349 - Double CV Front Axle Shafts L/R (1pr)



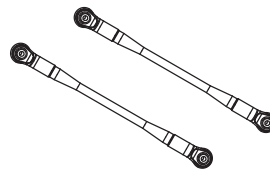
RER41350 - Rear Axle Shafts (1pr)



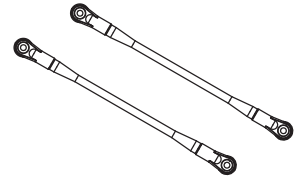
RER41351 - Front Upper Links (157mm) (1pr)



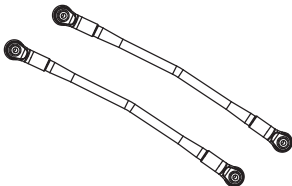
RER41352 - Front Lower Links (173.5mm) (1pr)



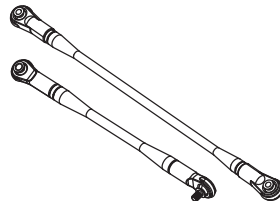
RER41353 - Rear Upper Links (204mm) (1pr)



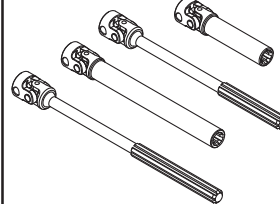
RER41354 - Rear Lower Links (219mm) (1pr)



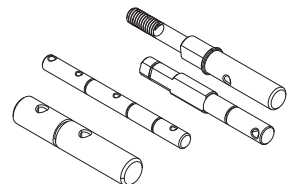
RER41355 - Steering links (2pc)



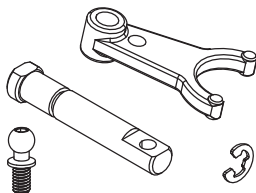
RER41356 - Center Drive Shaft Set (1set)



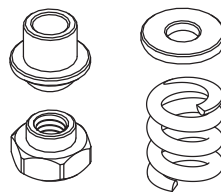
RER41357 - Transmission Shaft Set (1set)



RER41358 - Shift Fork w/ Shaft (1set)



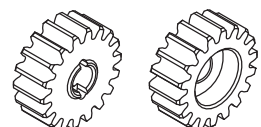
RER41359 - Slipper Clutch Hardware Set (1set)



RER41361 - Underdrive Locker (1pc)

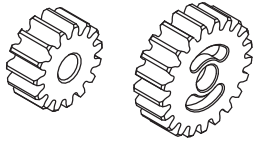


RER41362 - Underdrive Gearset 0% (18Tx2) (2pc)

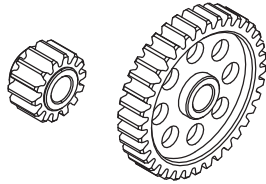


SPARE PARTS

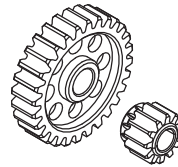
RER41363 - Underdrive Gearset
33% (21T,15T) (2pc)



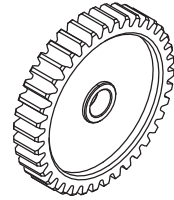
RER41364 - Reducer Gears 36T,14T
(1set)



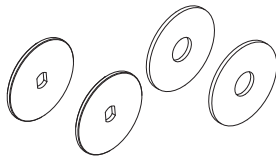
RER41365 - Reducer Gears 28T, 12T
(1set)



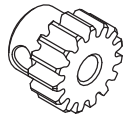
RER41366 - Spur Gear (38T)(Mod1)
(1pc)



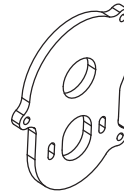
RER41367 - Slipper pads w/ Plates
(2pc)



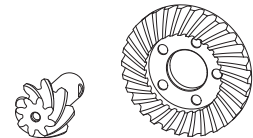
RER19572 - Pinion Gear 16T



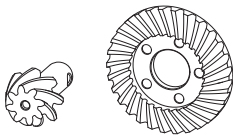
RER41369 - Motor Plate
(aluminum)(1pc)



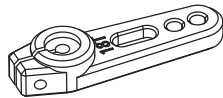
RER41370 - Front Ring and Pinion
Set (30T,8T) (1set)



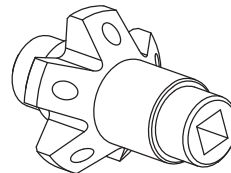
RER41371 - Rear Ring and Pinion
Set (30T,8T) (1set)



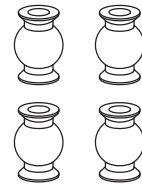
RER41372 - Clamping Servo Horn
(15T) (Aluminum)(1pc)



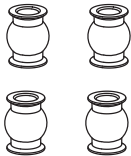
RER41373 - Spool Hub (1pc)



RER41376 - Suspension Balls 9mm
(4pc)



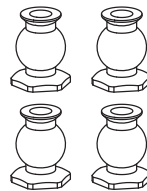
RER41377 - Suspension Balls 6.8m
Long (4pc)



RER41378 - Suspension Balls 6.8m
Short (4pcs)



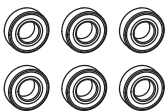
RER41379 - Hex Suspension Balls
9mm (4pc)



RER41408 - E-Clips 5mm



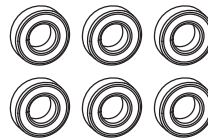
RER11368 - Ball Bearing 6x12x4



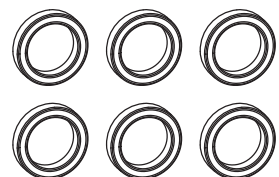
RER26822 - Ball Bearing 6x13x5



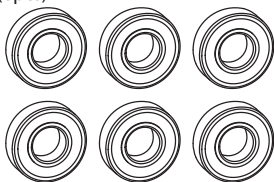
98053 - Ball Bearing 8x16x5



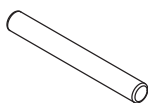
RER41380 - 15x21x4 Ball Bearings
(6pcs)



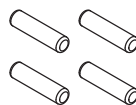
RER41381 - 10x22x6 Ball Bearings
(6pcs)



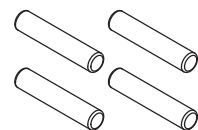
RER41382 - 3x25mm Pin (1pc)



RER41383 - 2x8mm Pins (4pc)

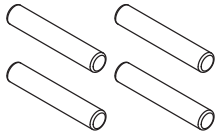


RER41384 - 3x15mm Pins (4pc)

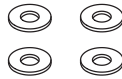


SPARE PARTS

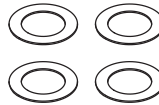
RER41385 - 3x17mm Pins (4pc)



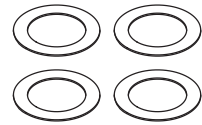
RER41386 - 2.6x5.9x0.5mm Shims (4pc)



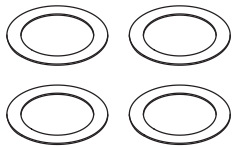
RER41387 - 6.1x9.5x0.2mm Shims (4pc)



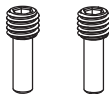
RER41388 - 8.1x12x0.2mm Shims (4pc)



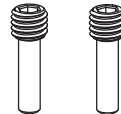
RER41389 - 10.1x14x0.2mm Shims (4pc)



RER41390 - 4x12mm Machined Thread Screw Pins (2pc)



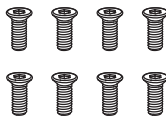
RER41391 - 6x15mm Machine Thread Screw Pins (2pc)



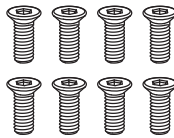
RER12507 - Flat Head Screw M2.5x8



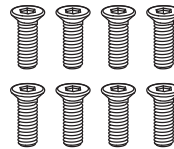
RER11383 - Flat Head Screw M3x8



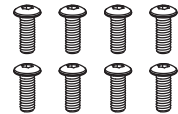
BS810-100- Flat Head Screw M4x10



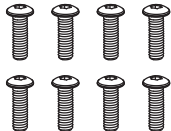
BS501-055 - Flat Head Screw M4x12



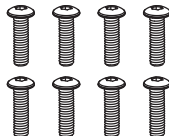
RER11375 - Button Head Screws M3x8



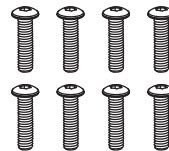
50100 - Button Head Screws M3x10



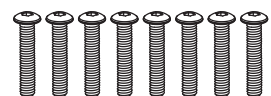
50101 - Button Head Screws M3x12



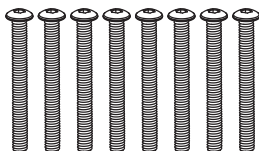
14582 - Button Head Screws M3x14



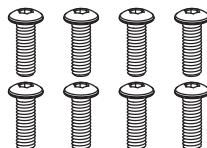
82047 - Button Head Screws M3x20



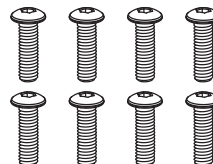
RER41392 - 3x38mm Button Head Machine Thread Screws (8pc)



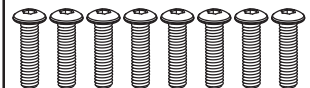
BS501-056 - Button Head Screws M4x12



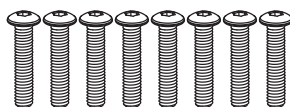
50103 - Button Head Screws M4x15



RER27426 - Button Head Screws M4x18



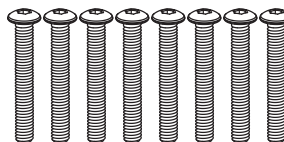
50104 - Button Head Screws M4x25



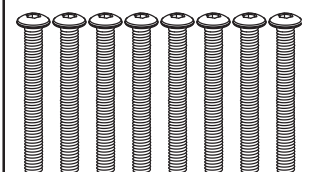
RER19112 - Button Head Screws M4x30



RER32510 - Button Head Screws M4x35



RER41393 - 4x40mm Button Head Machine Thread Screws (8pc)

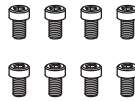


SPARE PARTS

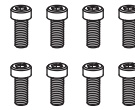
RER11378 - Cap Head Screws M2x6



RER41394 - 2.5x4mm Cap Head Machine Thread Screws (8pc)



RER41395 - 2.5x6mm Cap Head Machine Thread Screws (8pc)



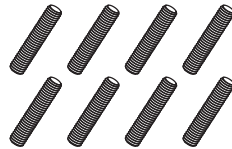
RER23802 - Cap Head Screws M2.5x8



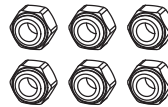
50108 - Set Screws M5x5



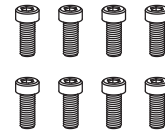
RER41397 - 5x25mm Course Thread Set Screws (8pc)



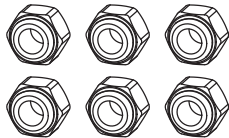
18038 - Nylock Nut M2.5



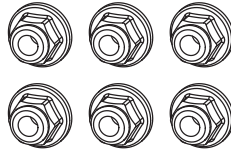
RER11375 - Cap Head Screws M3x8



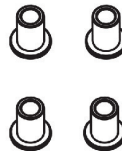
BS903-093 - Nylock Nut M4



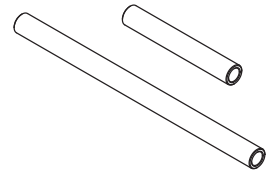
RER27428 - Flange Nylock Nut M4



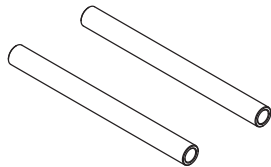
RER41405 - King Pin Bushings



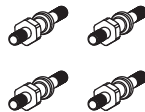
RER41399 - Front Axle Tubes (1set)



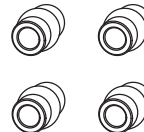
RER41400 - Rear Axle Tubes (1set)



RER41401 - Shock StandOffs (Steel) (4pc)



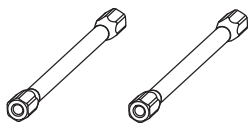
RER41402 - Shock Cap Bushings (Plastic)(4pc)



RER41403 - 2x4mm Cap Head Machine Thread Screws (8pc)



RER41404 - Frame Rail Braces (Steel) (2pc)



RER13475 - Button Head Screws M2x6



RER41406 - Decal Sheet

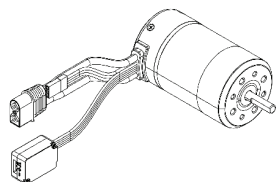


02099 - 4x4mm set screw

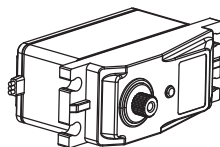


SPARE PARTS

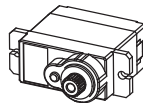
RER41374 - Hobbywing Fusion 2n1 Motor and ESC (1pc)



RER41375 - HX-LS 70KG Servo (1pc)



RER41407 - HX-M4K 4kg Coreless Metal Gear Servo (Long Wire)(1pc)

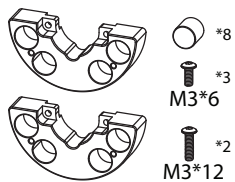


RER20924 - RTX-4C 4 Channel 2.4Ghz Radio W/ Receiver(1pr)



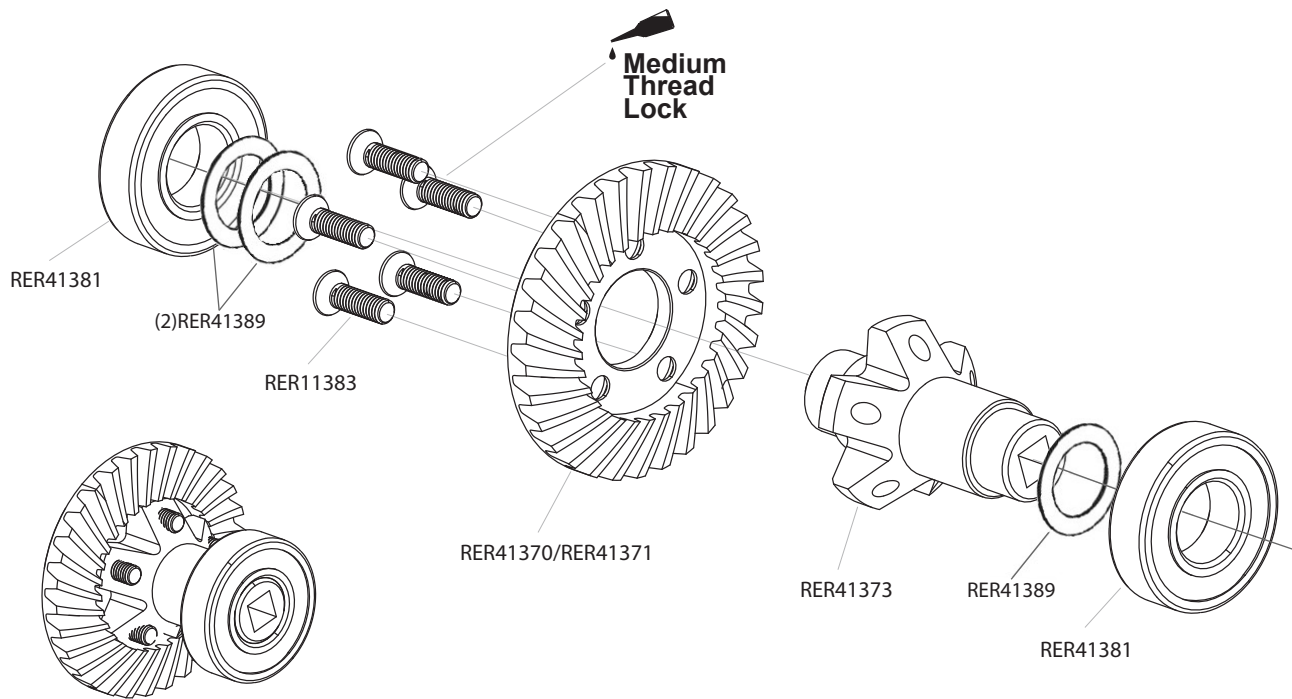
HOP-UP PARTS

RER41398 - Axle Weights (Steel) (1pr)(Sold Separately)

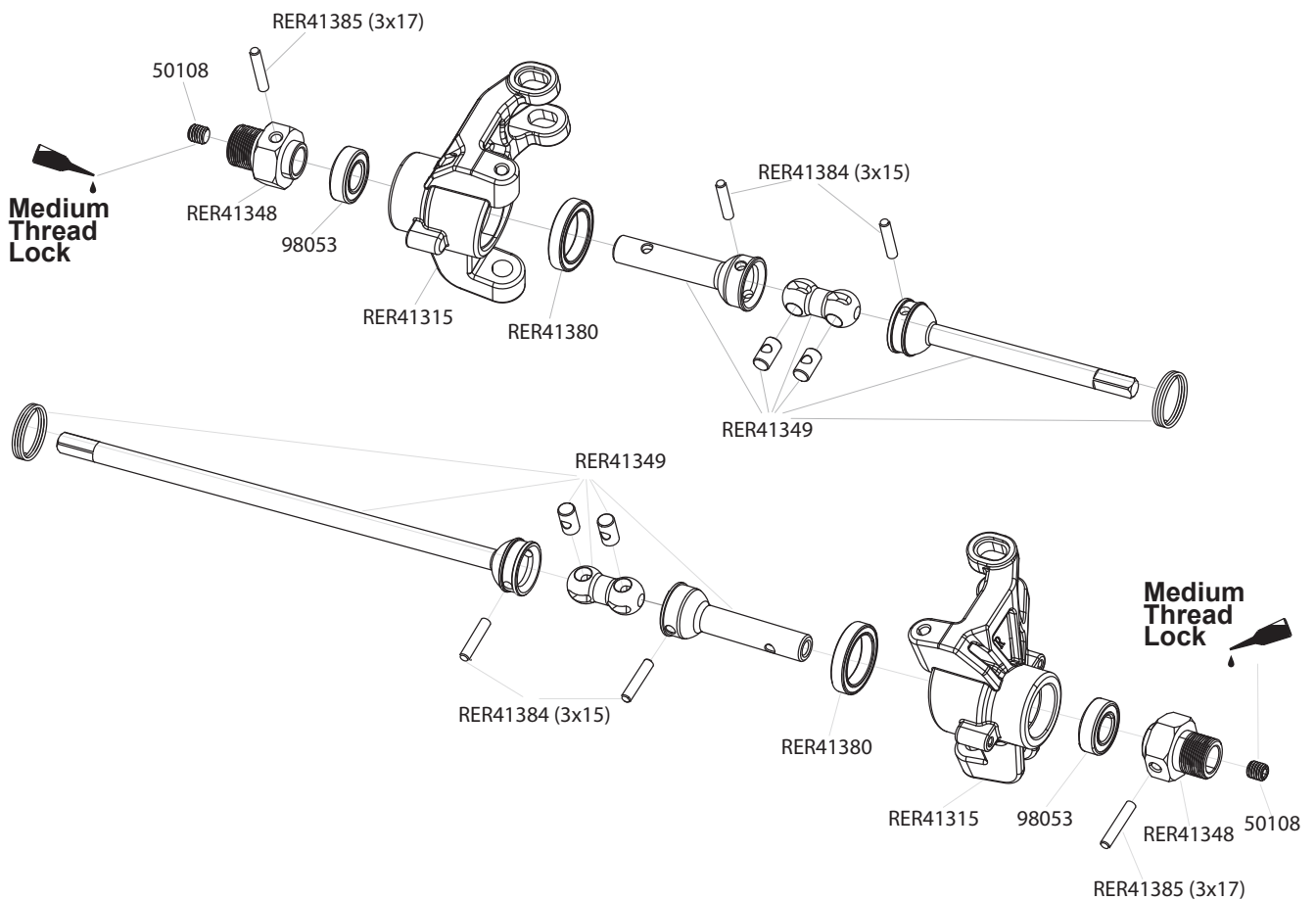


EXPLODED VIEWS

DRIVE GEAR

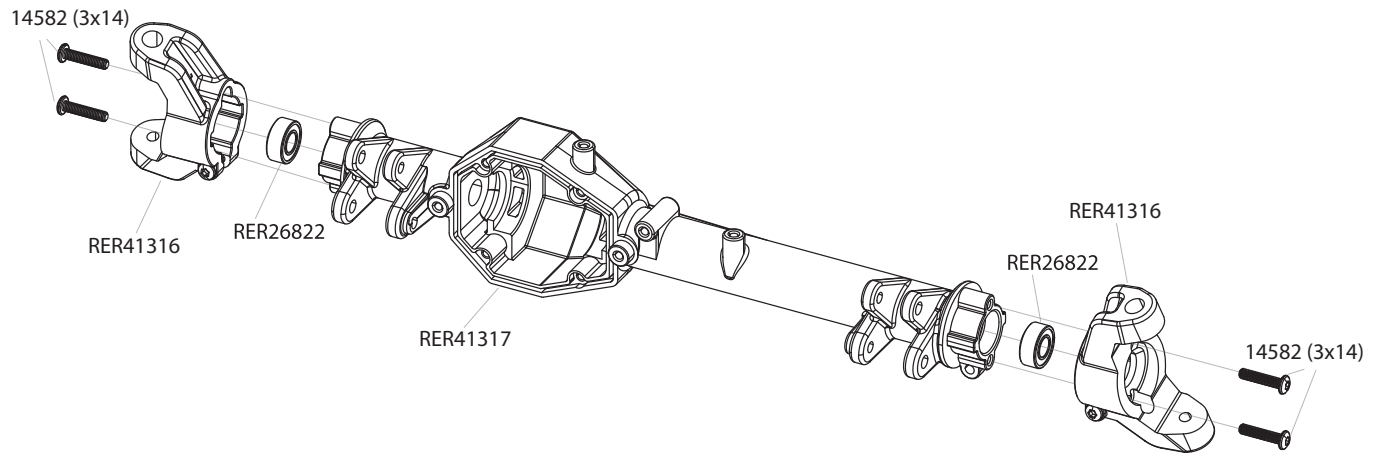


SPINDLE SET

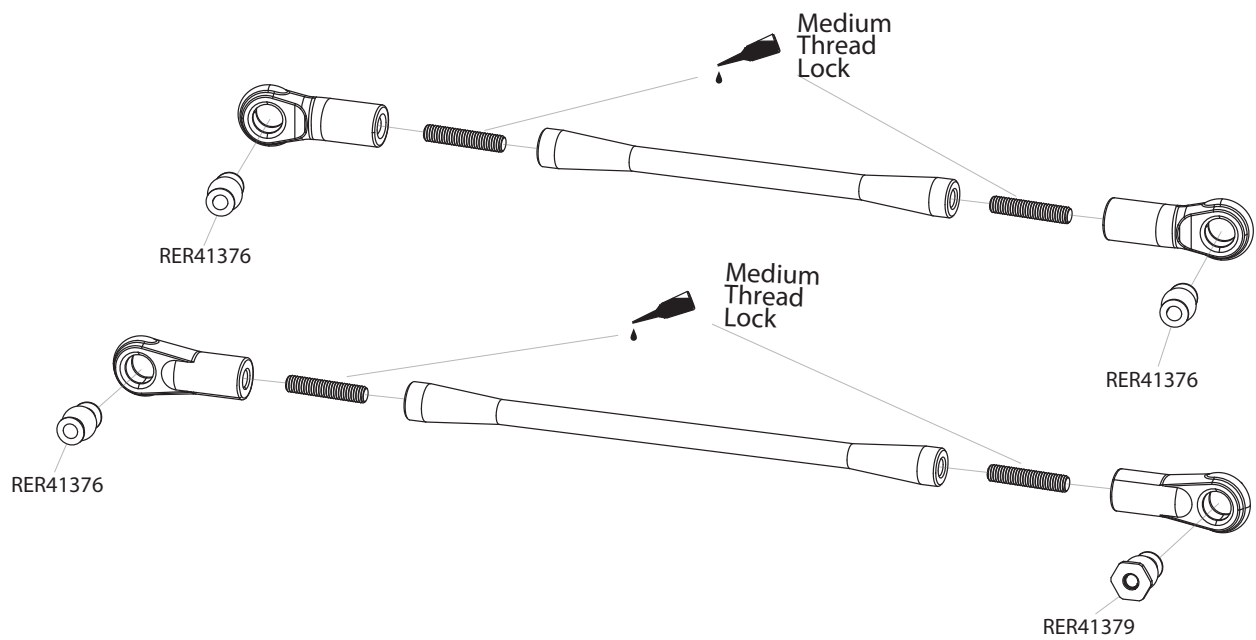


EXPLODED VIEWS

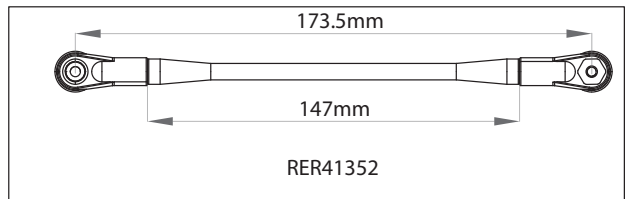
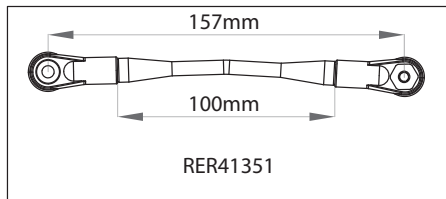
FRONT C-HUBS



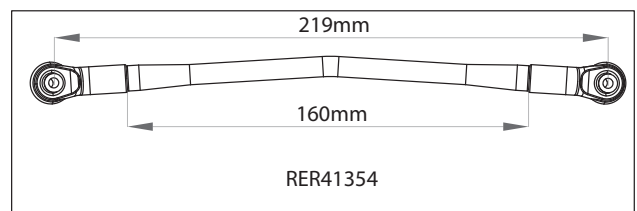
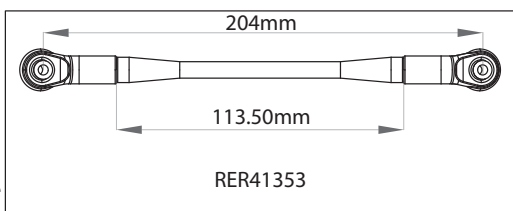
LINKAGE ASSEMBLY



Upper Linkage
Ball Head

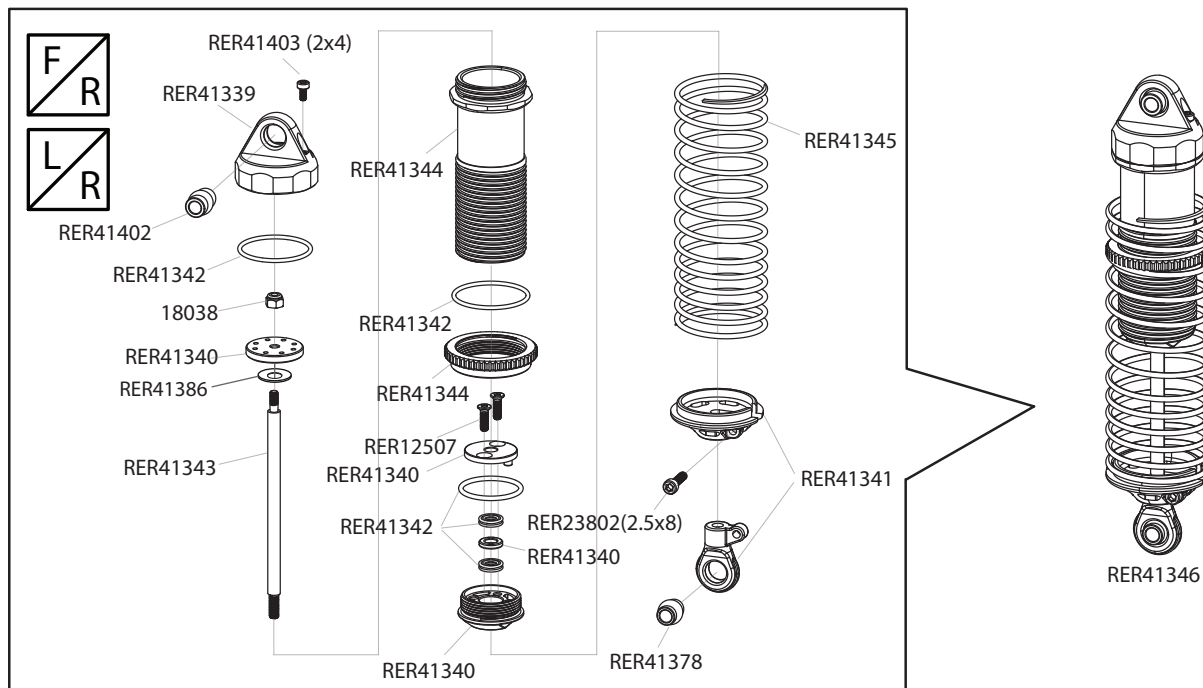


Lower Linkage
Ball Head

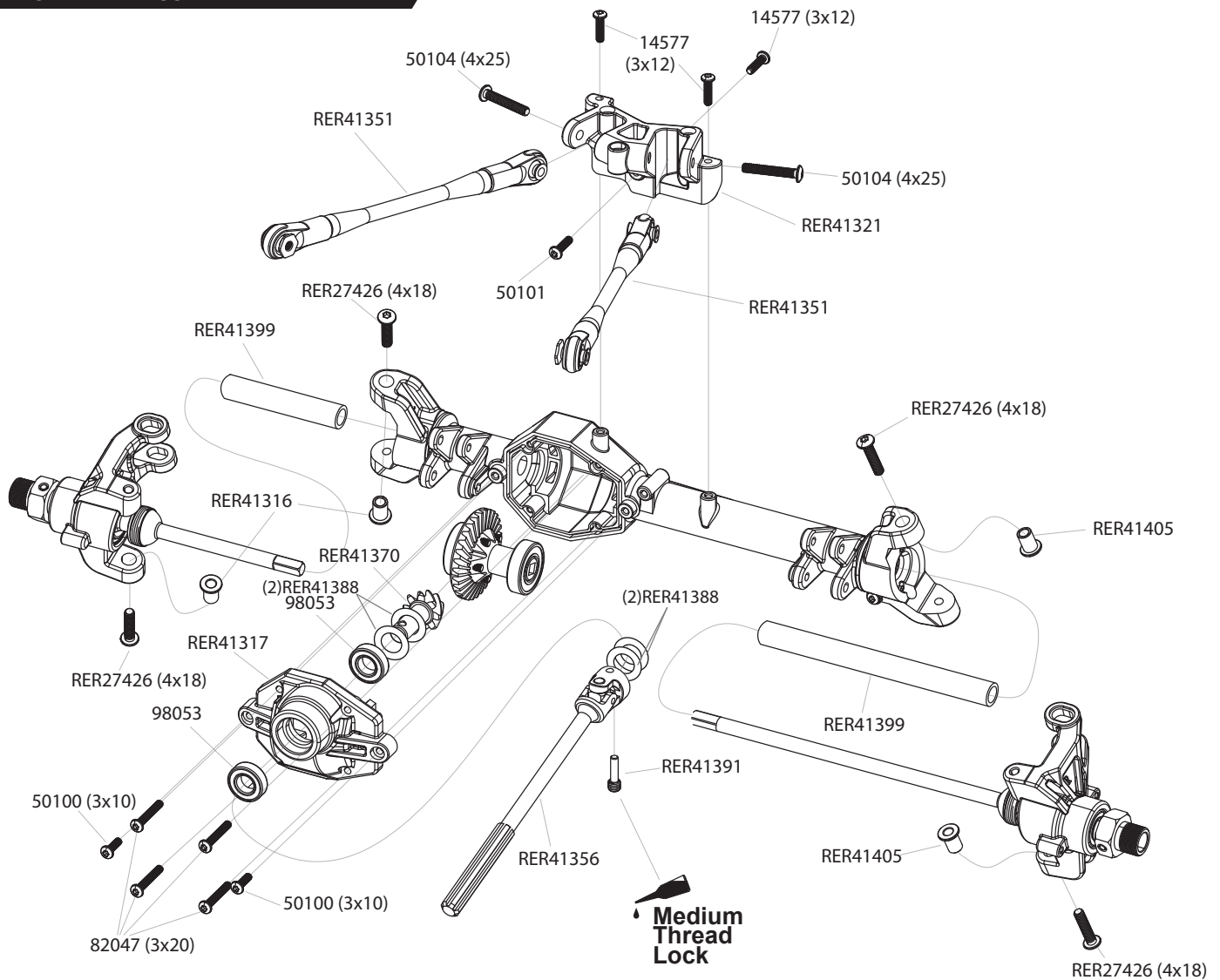


EXPLODED VIEWS

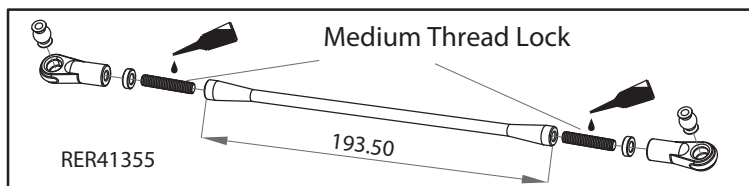
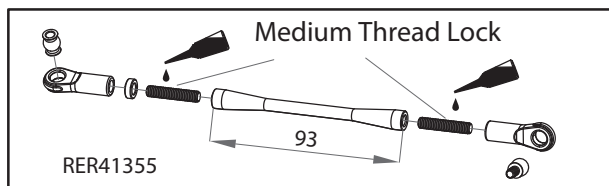
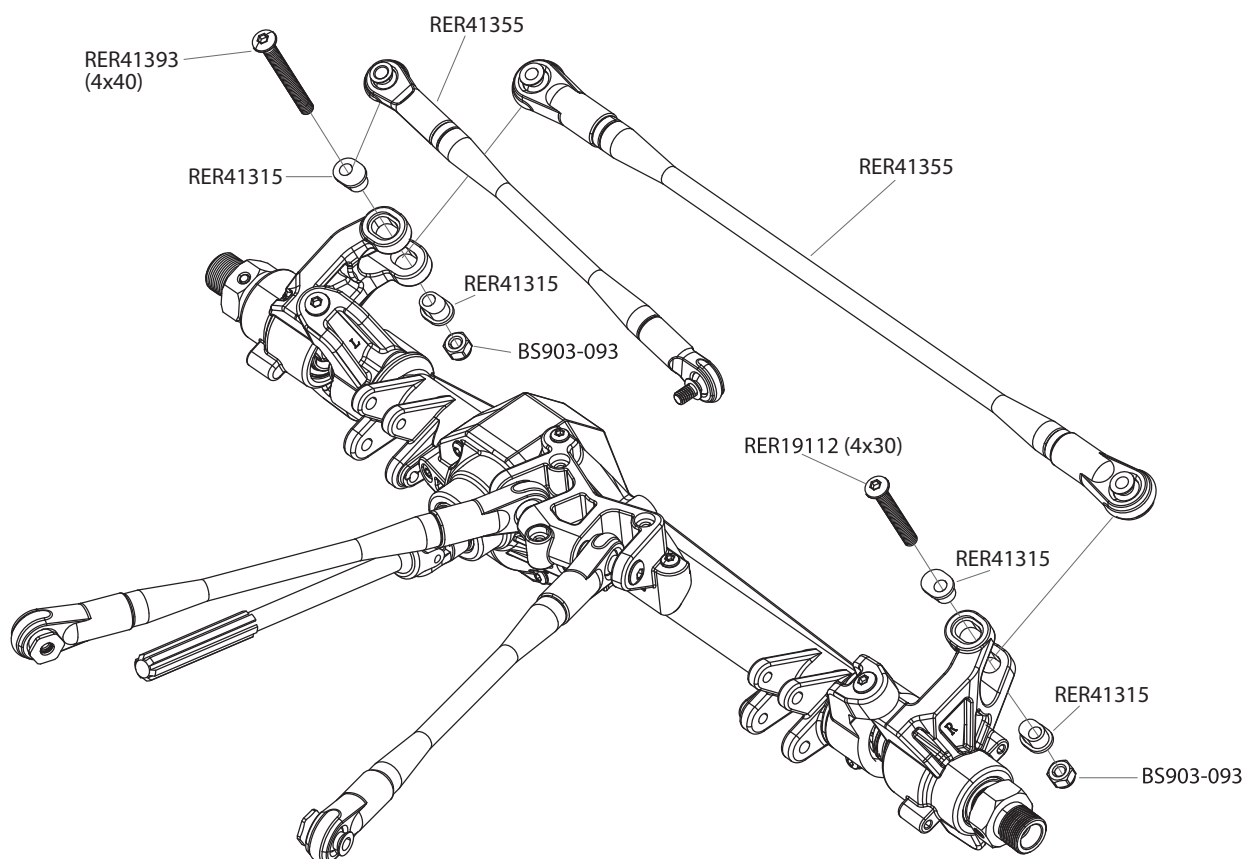
SHOCK ASSEMBLY



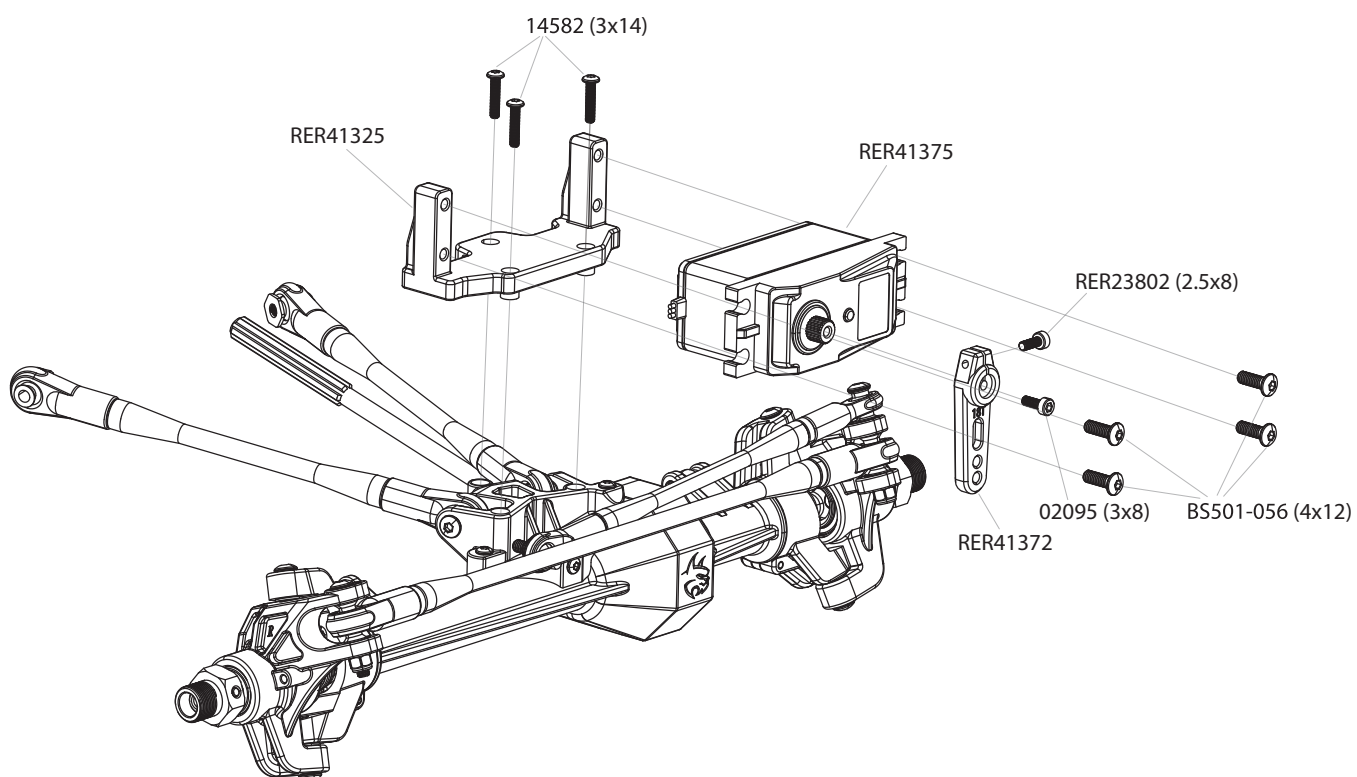
FRONT AXLE ASSEMBLY



EXPLODED VIEWS
STEERING ASSEMBLY

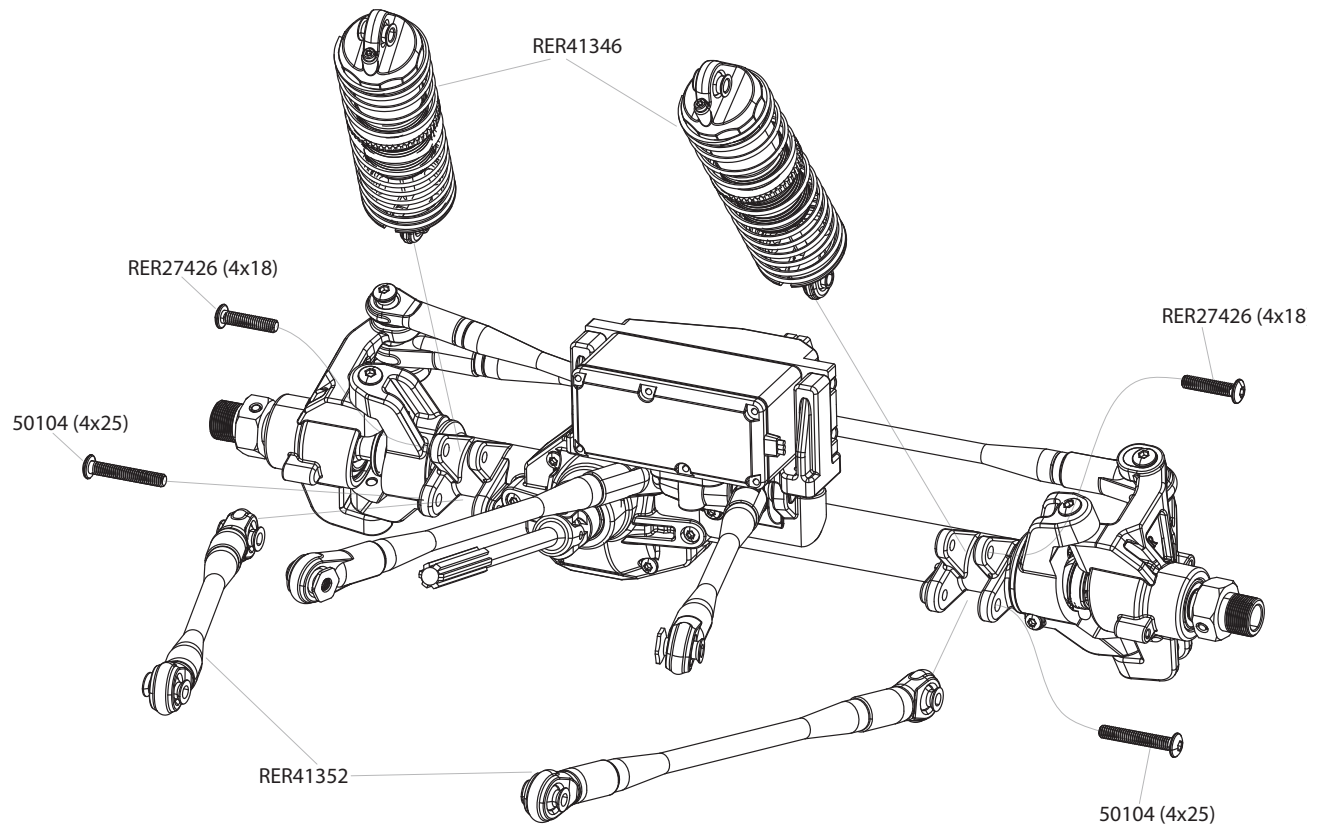


STEERING ASSEMBLY

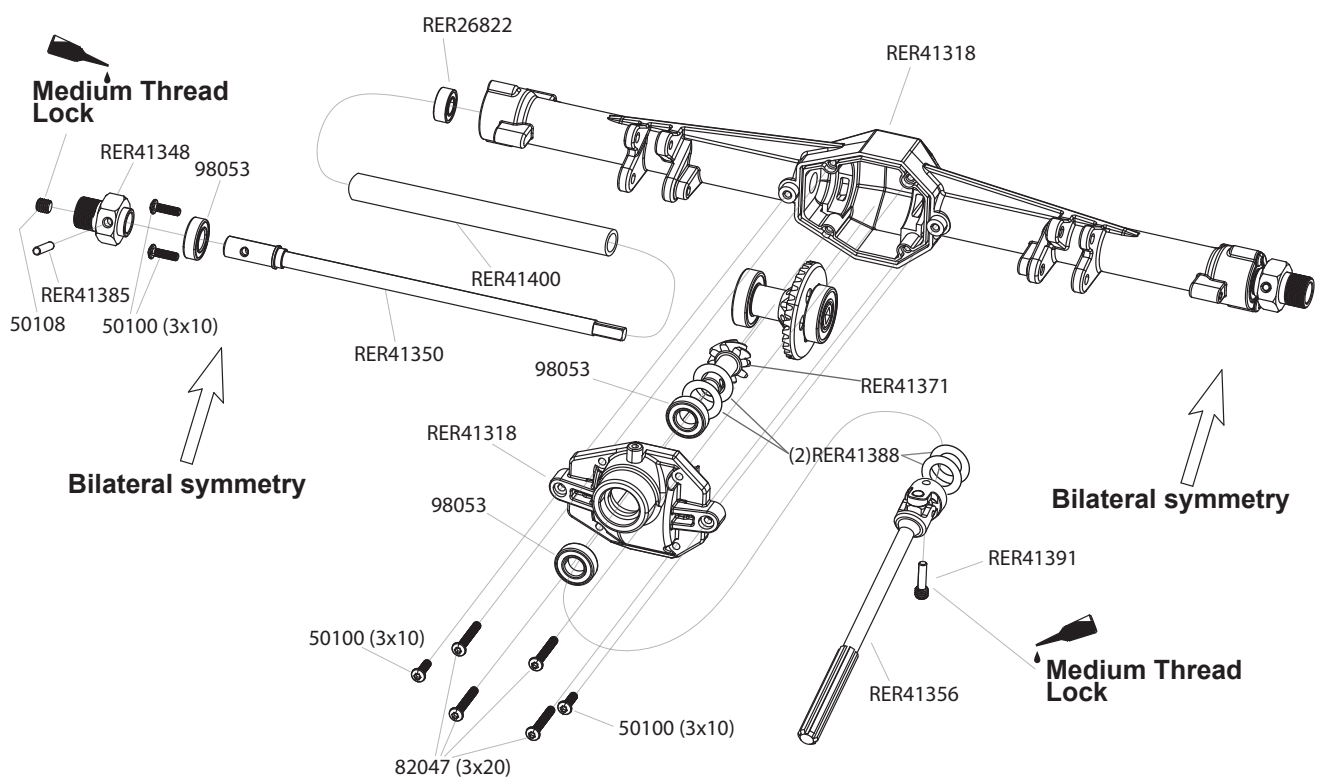


EXPLODED VIEWS

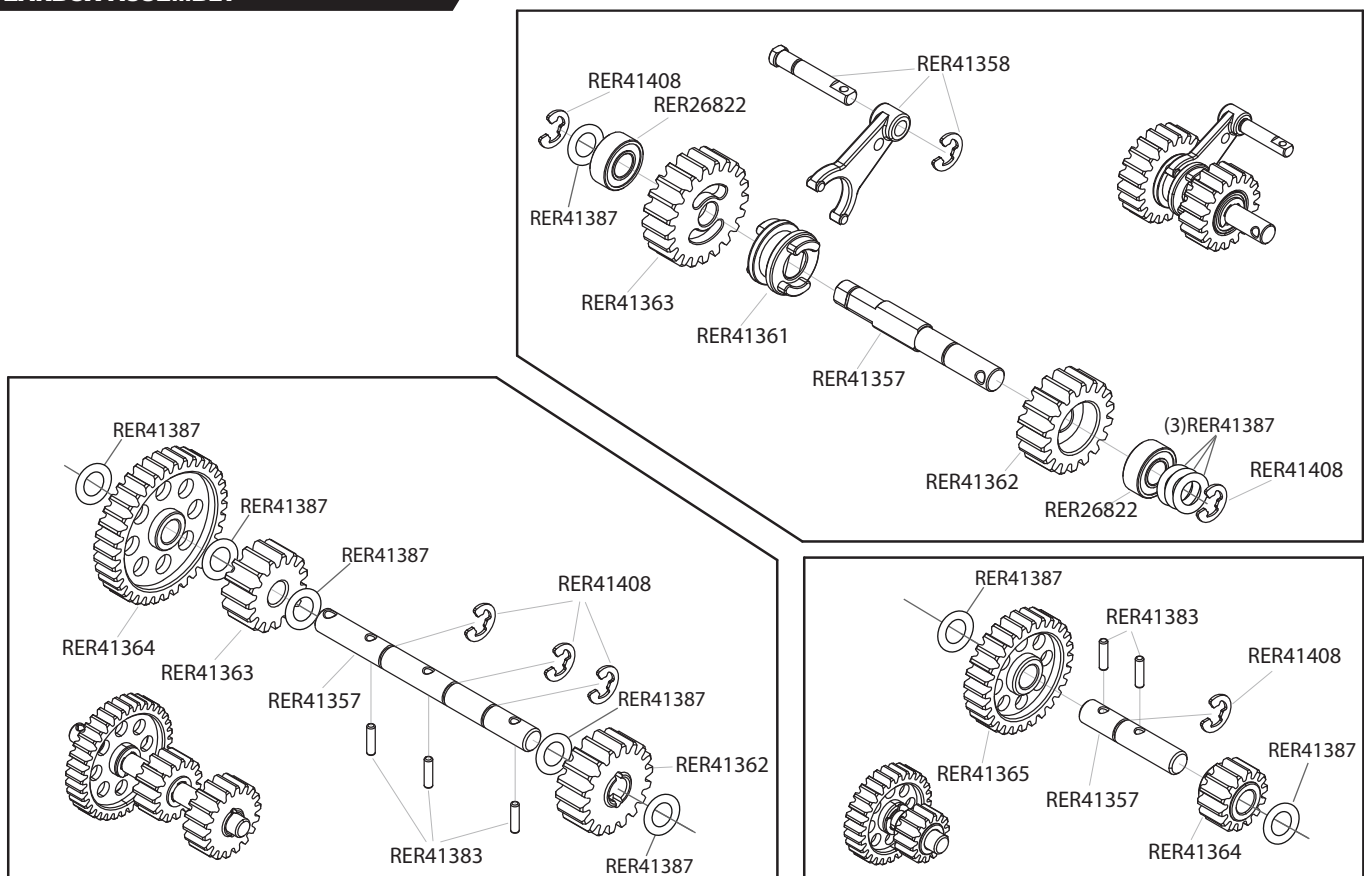
FRONT AXLE



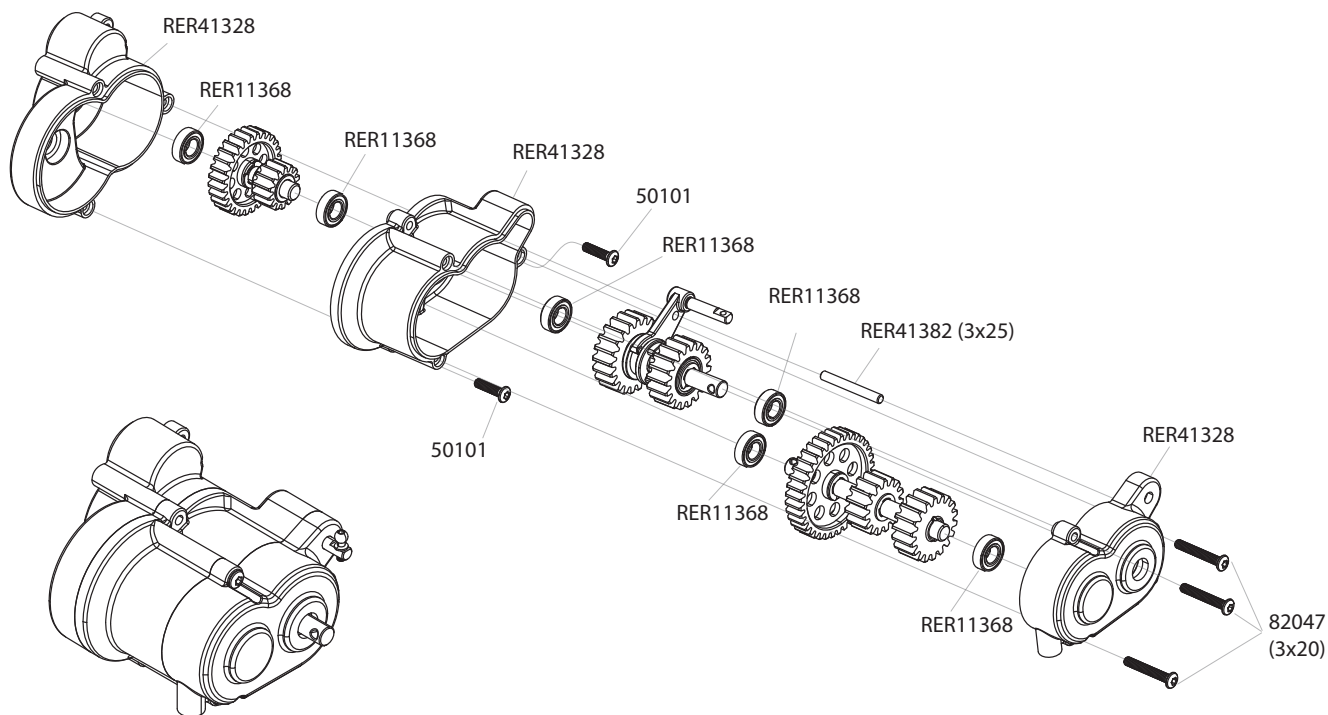
REAR AXLE ASSEMBLY



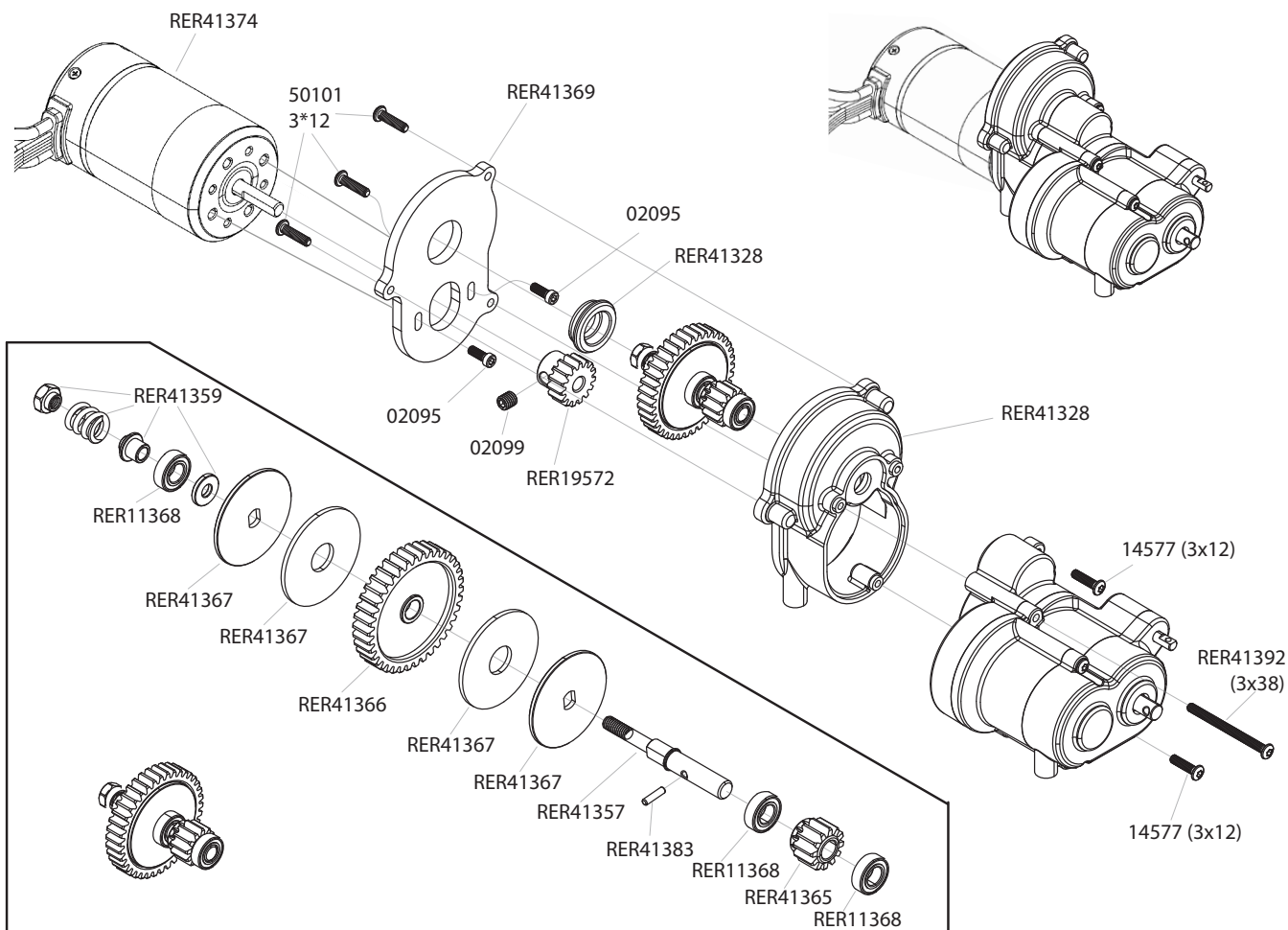
REAR AXLE



EXPLODED VIEWS
GEARBOX ASSEMBLY

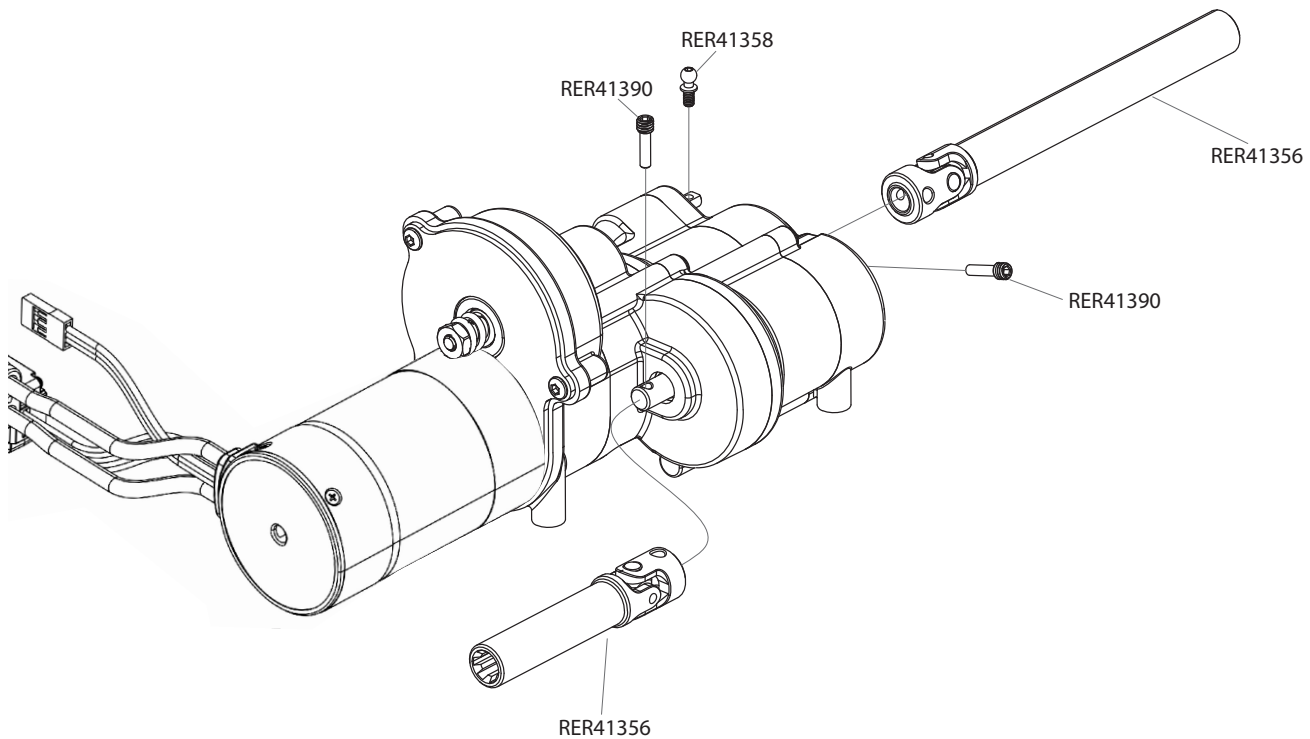


GEARBOX ASSEMBLY

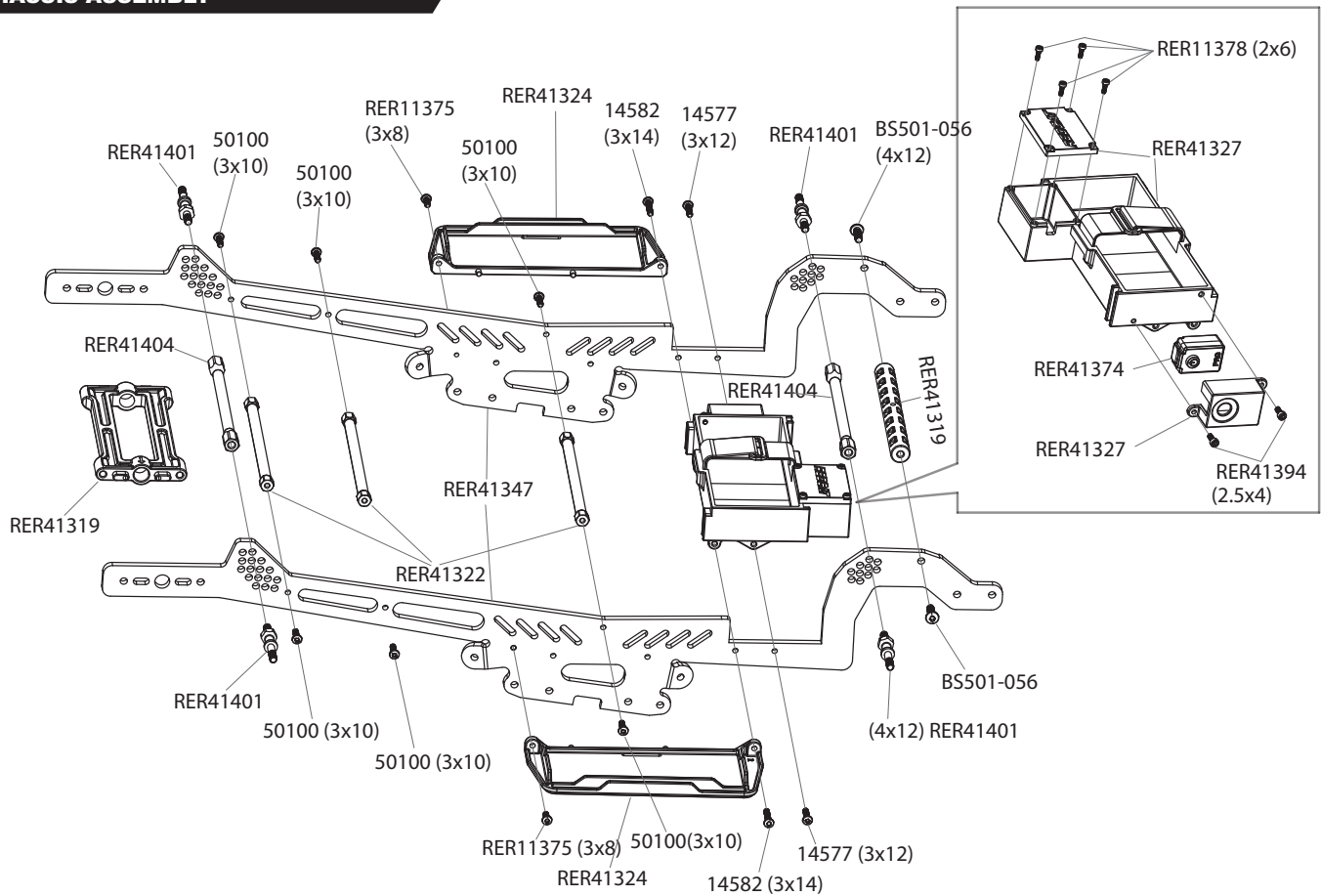


EXPLODED VIEWS

GEARBOX ASSEMBLY

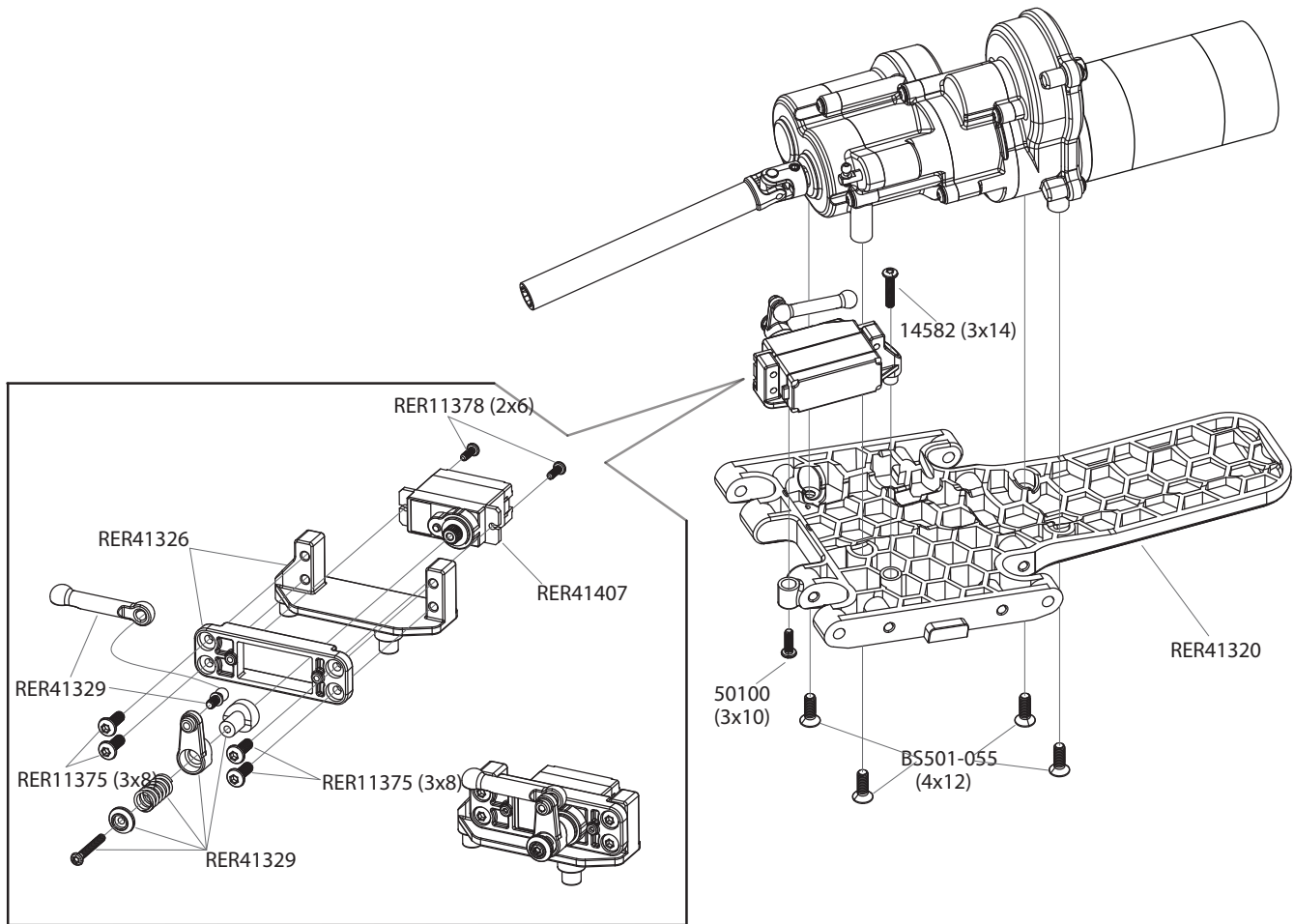


CHASSIS ASSEMBLY

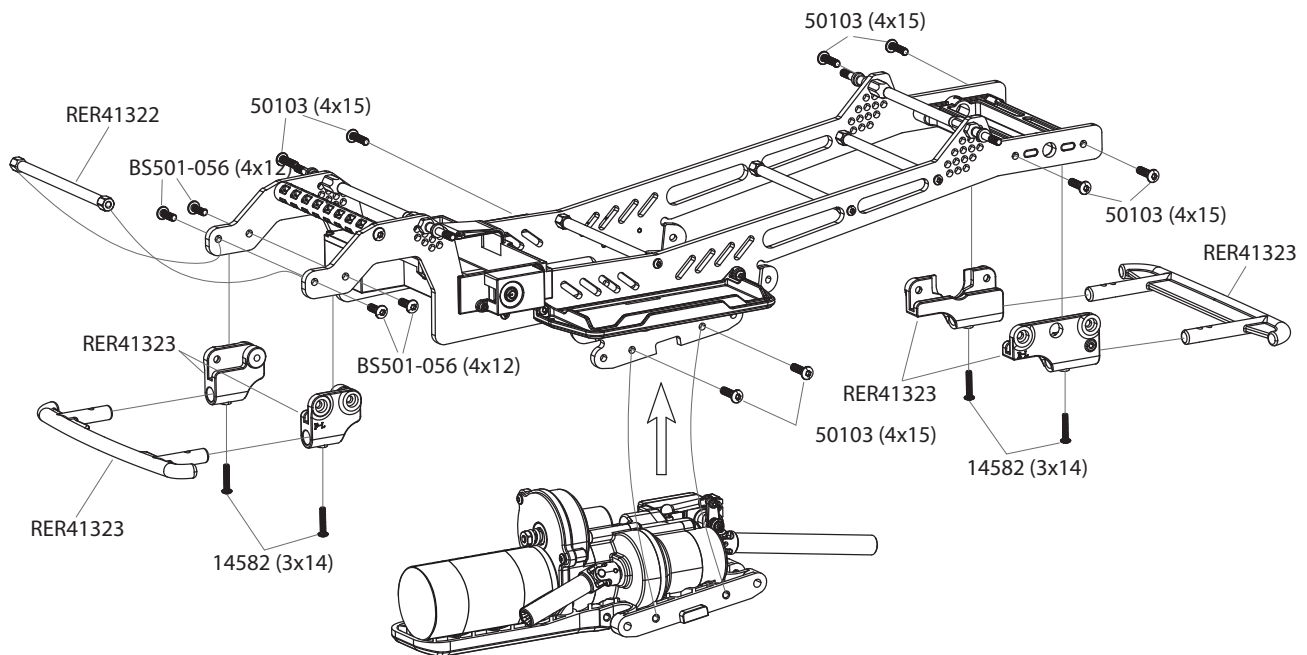


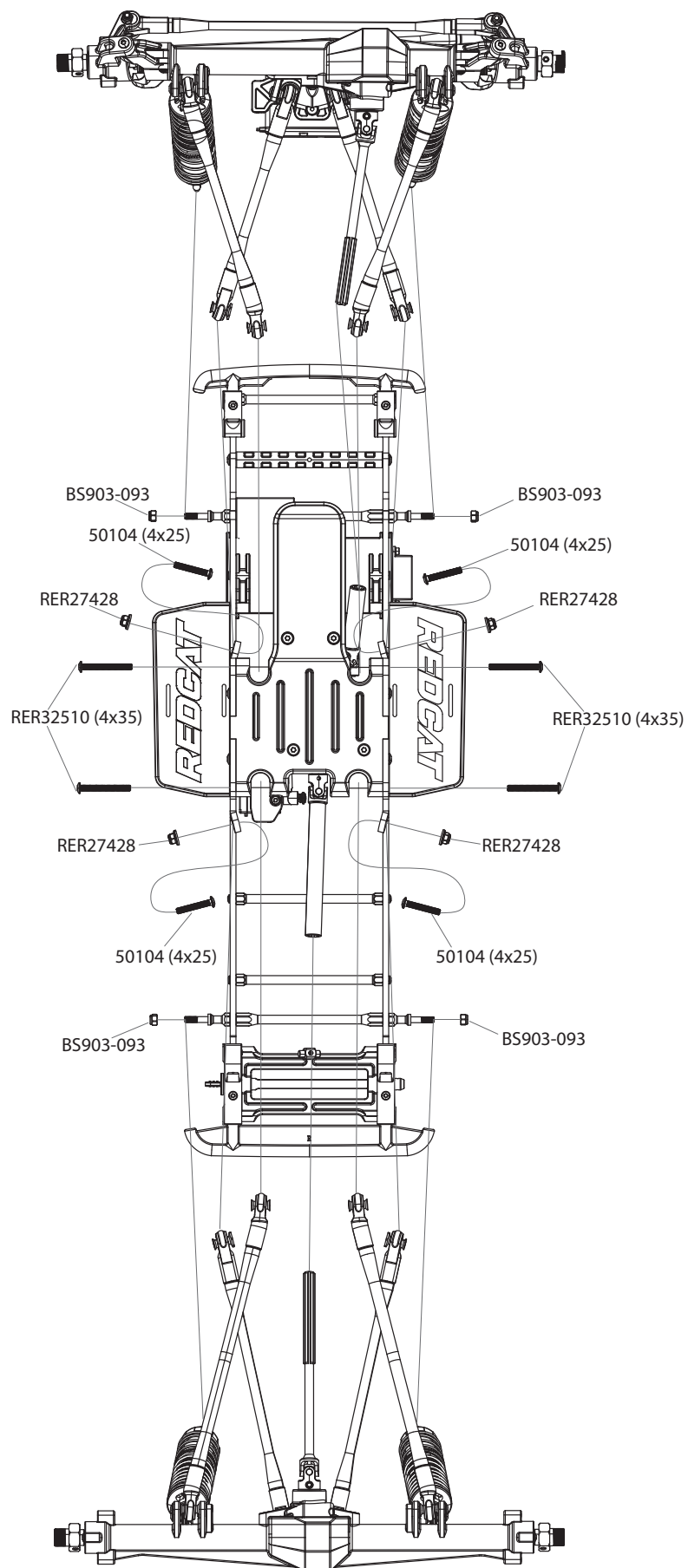
EXPLODED VIEWS

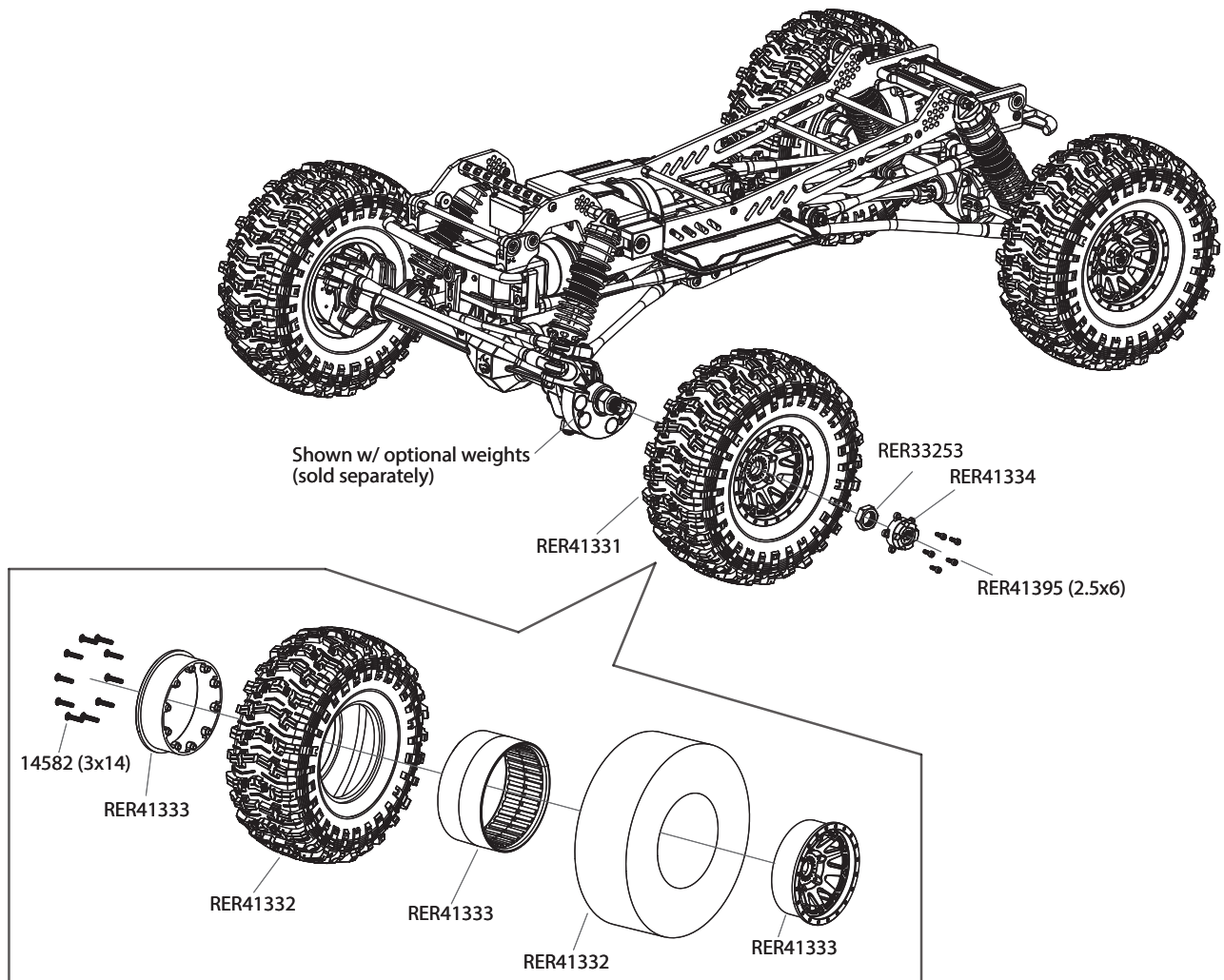
CHASSIS ASSEMBLY

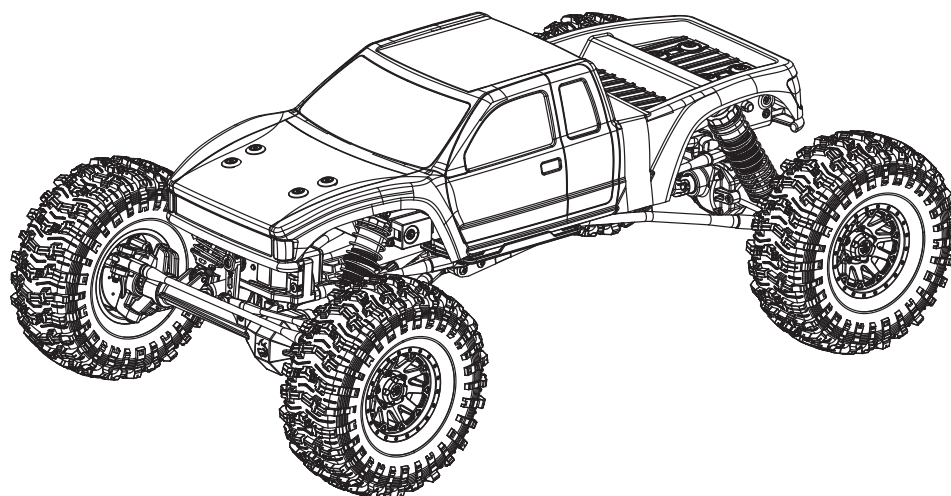
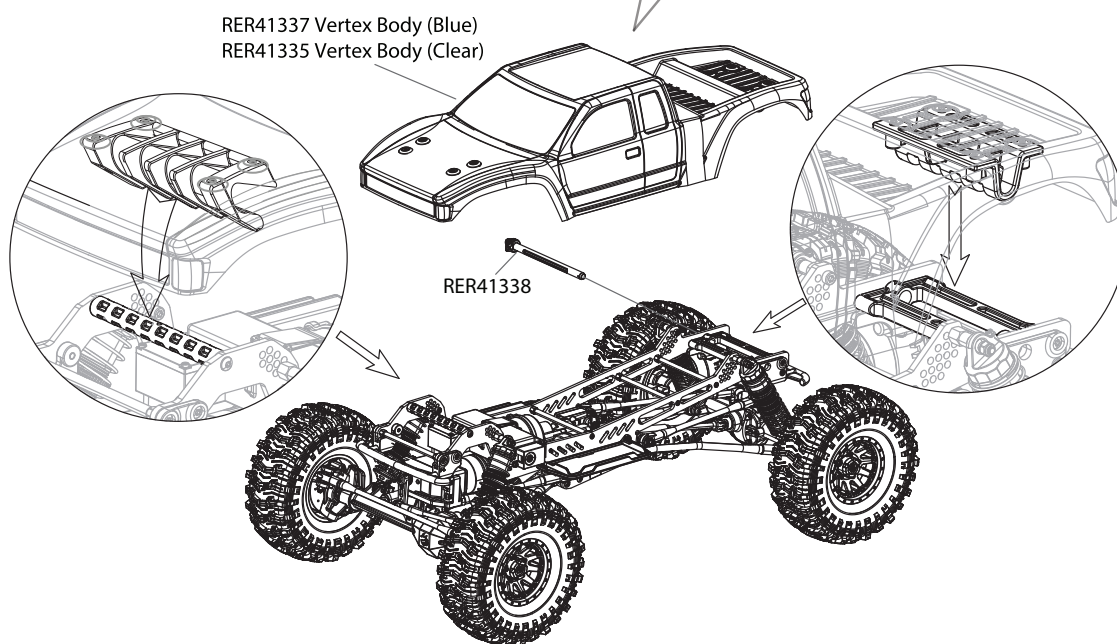
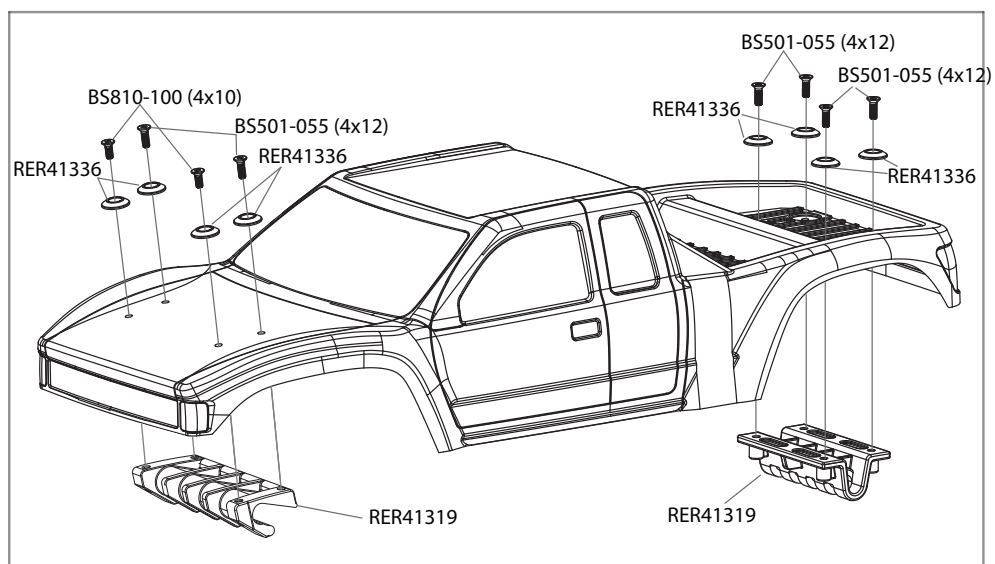


CHASSIS ASSEMBLY











www.redcatracing.com

Follow us on social media

Take a photo, create a video, post and share your Redcat experience.

Stay up to date on the latest Redcat news, products, and creative content. While these profiles are not customer service channels, you might find that one of our subject experts or another member of the community is able to assist you. If you have an issue or need technical and or product support, please reach out to Redcat directly through our website.

-  <https://www.facebook.com/RedcatRacing>
-  <https://www.instagram.com/redcatracing/>
-  <https://www.youtube.com/RedcatRacing>
-  <https://twitter.com/RedcatRacing>
-  <https://www.pinterest.com/redcatracing/>
-  <https://www.tiktok.com/@redcatracing>