



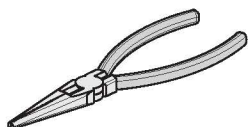
VS4HD PHOENIX

READY TO RUN



INSTRUCTION MANUAL

■ **NECESSARY FOR MAINTENANCE**



NEEDLE NOSE PLIERS
(NOT INCLUDED)



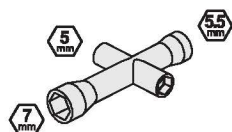
GREASE
(INCLUDED)



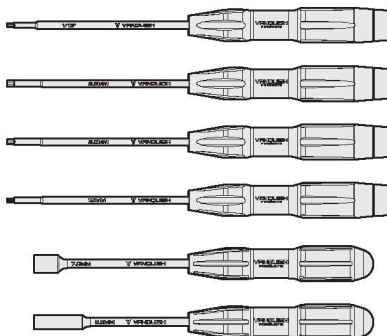
SIDE CUTTERS
(NOT INCLUDED)



THREAD LOCK
(INCLUDED)



CROSS WRENCH
(INCLUDED)



SUGGESTED TOOLS (NOT INCLUDED):
VPS08410 STANDARD TOOL SET
VPS08400 METRIC TOOL SET
VPS08440 METRIC NUT DRIVER TOOL SET

First Stop:

Carefully read the entire instruction manual and any accompanying materials. Follow all directions in this manual to prevent serious damage to your model. This manual contains instructions for safety, operation and maintenance. It is essential to read and follow all the instructions and warnings in the manual, prior to setup or use, in order to operate correctly and avoid damage or serious injury. Failure to operate this product in a safe and responsible manner could result in injury or damage to the product or other property. This product is not intended for use by children without direct adult supervision. Do not use incompatible components or alter this product in any way outside of the instructions provided by Vanquish Products.

FCC Compliance

This device contains a module that complies with the limits for a Class B digital device as described in 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.

The limits for a Class B digital device are designed to provide reasonable protection against harmful interference in residential settings. This product generates, uses and can radiate radio frequency energy, and, if not operated in accordance with the instructions, may cause harmful interference to radio communications. The user is cautioned that changes or modifications not expressly approved by the party responsible for compliance could void the user's authority to operate the equipment.

Canada, Industry Canada (IC)

This Class B digital apparatus complies with Canadian ICES-003 and RSS-210. This device complies with Industry Canada license exempt RSS standard(s). Operation is subject to the following two conditions: This device may not cause interference, and This device must accept any interference, including interference that may cause undesired operation of the device.

Radio Frequency (RF) Exposure Statement

This equipment complies with radio frequency exposure limits set forth by FCC and Industry Canada for an uncontrolled environment. This equipment should be installed and operated with a minimum distance of 20 centimeters between the radiator and your body or bystanders and must not be co-located or operating in conjunction with any other antenna or transmitter.

Operation Frequency: 2405.0 - 2478.0 Mhz

Output Power: 0.0043 Watts

Notice:

All instructions, warranties and other collateral documents are subject to change at the sole discretion of Vanquish Products. For up-to-date product literature, visit vanquishproducts.com.

Age Recommendation: Not for children under 14 years. This is not a toy.

The buyer assumes all risks associated with the use of this product. ASB Products Inc. d/b/a Vanquish Products and their retail partners, dealers, distributors, manufacturers 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 fully read all instructions, manuals and warnings that come with your RC vehicle and any accessories required to operate the product.

Items Needed to Complete

- Vehicle battery (6 cell NiMH or 2-3s LiPo)
 - Battery Charger (compatible with battery type chosen to be used)
-

Important Safety Precautions and Warnings

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

Note: When using a LiPo battery, the ESC jumper clip **MUST** be set to LiPo or damage to the battery may occur.

Note: If using a NiMH battery, the ESC jumper clip must be set to NiMH.

Fire Hazard

Your model is able to use LiPo batteries. Charging and discharging batteries has the potential for fire, explosion, serious injury, and property damage if not performed per the instructions. Before use, read and follow all manufacturer's instructions, warnings, and precautions. In addition, Lithium Polymer (LiPo) batteries pose a SEVERE risk of fire if not properly handled per the instructions and require special care and handling procedures for long life and safe operation. LiPo batteries are intended only for advanced users that are educated on the risks associated with LiPo battery use. Vanquish Products does not recommend that anyone under the age of 14 use or handle LiPo battery packs without the supervision of a knowledgeable and responsible adult. Dispose of used batteries according to the instructions.

- Never leave the battery connected when not in use and store batteries in accordance with manufacturer's 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 or charged too quickly.
- Always use extra caution when charging LiPo batteries. Always, only use a LiPo specific charger when charging LiPo batteries.
- Always use a LiPo safe charging pouch when charging LiPo batteries.
- Always charge batteries away from flammable materials and in a well ventilated space.
- Overcharging can lead to fire and explosion.
- Always store battery packs in a cool dry place.
- 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. To safely dispose of LiPo batteries, refer to your local disposal authority or recycling center.
- 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.

Before Use

As the user of this product, you are solely responsible for operating in a manner that does not endanger yourself and others or result in damage to the product or property of others. This model is controlled by a radio signal subject to interference from many sources outside your control. This interference can cause momentary loss of control, so it is advisable to always keep a safe distance in all directions around your model as this margin will help avoid collisions or injury.

- Never operate your model with low transmitter batteries.
- Always operate your model in open spaces away from full-size vehicles, traffic and people.
- Never operate the model in the street or in populated areas for any reason.
- Carefully follow the directions and warnings for this and any optional support equipment (chargers, rechargeable battery packs, etc.) you use.
- Keep all chemicals, small parts and anything electrical out of the reach of children.
- Never lick or place any portion of the model in your mouth as it could cause serious injury or even death.
- Exercise caution when using tools and sharp instruments.
- Take care during maintenance as some parts may have sharp edges.
- Immediately after using your model, do NOT touch equipment such as the motor, electronic speed control and battery, because they generate high temperatures. You may burn yourself seriously touching them.
- Do not put fingers or any objects inside rotating and moving parts, as this may cause damage or serious injury.
- Always turn on your transmitter before you turn on the receiver in the car. Always turn off the receiver before turning your transmitter off.
- Keep the wheels of the model off the ground when checking the operation of the radio equipment.

Water-Resistance Warning

Your new Vanquish Products vehicle has been designed to be water-resistant and allow you to operate the product in many wet conditions, these conditions may include puddles, creeks, and wet grass. While the entire vehicle is water-resistant, it is not completely waterproof and your vehicle should NOT be submerged in water. The components used in the vehicle, such as the Electronic Speed Control (ESC), servo and receiver are water-resistant, furthermore, most of the mechanical components are also water-resistant and should not be submerged. Metal parts, including the bearings, hardware, electrical contacts, will be susceptible to corrosion if appropriate maintenance is not performed after running in wet conditions. To maintain any applicable warranty and prolong the life of your vehicle, the procedures described in the "Additional Maintenance" section below must be performed regularly after subjecting your vehicle to moisture. If you are not willing to perform the additional maintenance required, then you should not operate the vehicle in those conditions.

CAUTION: Failure to exercise caution while using this product and complying with the following precautions could result in product malfunction and/or void the warranty.

PRECAUTIONS

- Read through the Additional Maintenance procedures and make sure that you have all tools required to properly maintain your vehicle.
- Not all batteries can be used in wet conditions. Refer to the battery manufacturer's guidance before use. Caution should be taken when using Li-Po batteries in wet conditions.
- The transmitter included with the vehicle is not water-resistant.
- Never operate your transmitter or vehicle where lightning may be present.
- Do not operate your vehicle where it could come in contact with salt water (ocean water or water on salt-covered roads), contaminated or polluted water. Salt water is very conductive and highly corrosive, so use caution.
- Driving in wet conditions can reduce the life of the motor. The additional resistance of operating in water causes excess strain.

Additional Maintenance

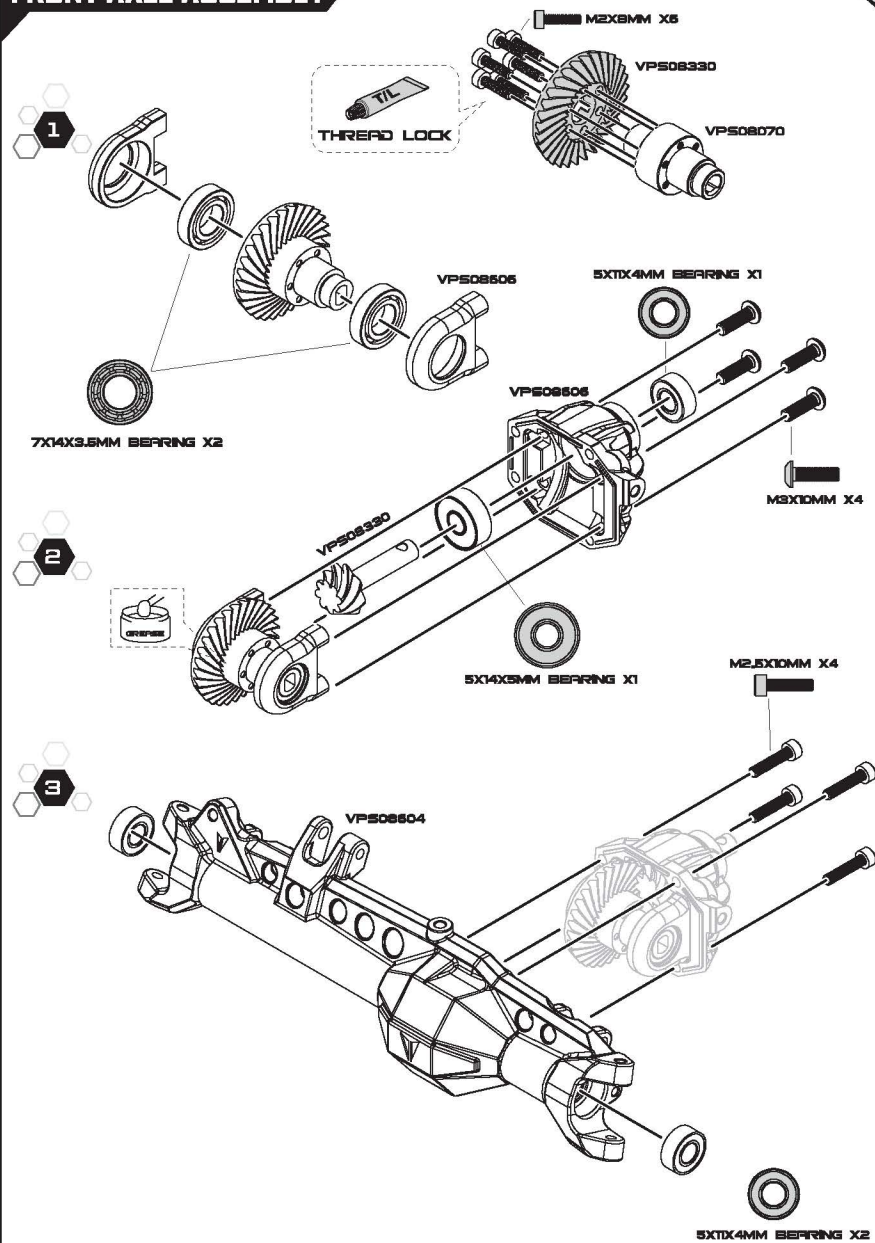
After your vehicle has been run in any wet conditions, the following additional maintenance steps should be taken to ensure the vehicle is in proper working condition.

- Drain any water that has collected in the tires. With the body removed, place the vehicle upside down and pull full throttle for a few short bursts until the water has been removed. **CAUTION:** Always keep hands, fingers, tools and any loose or hanging objects away from rotating parts when performing the above drying technique.
- Remove the battery pack(s) and dry the contacts. If you have an air compressor or a can of compressed air, blow out any water that may be inside the recessed connector housing.
- Remove the tires/wheels from the vehicle and gently rinse the mud and dirt off with a garden hose. Avoid rinsing the bearings and transmission.

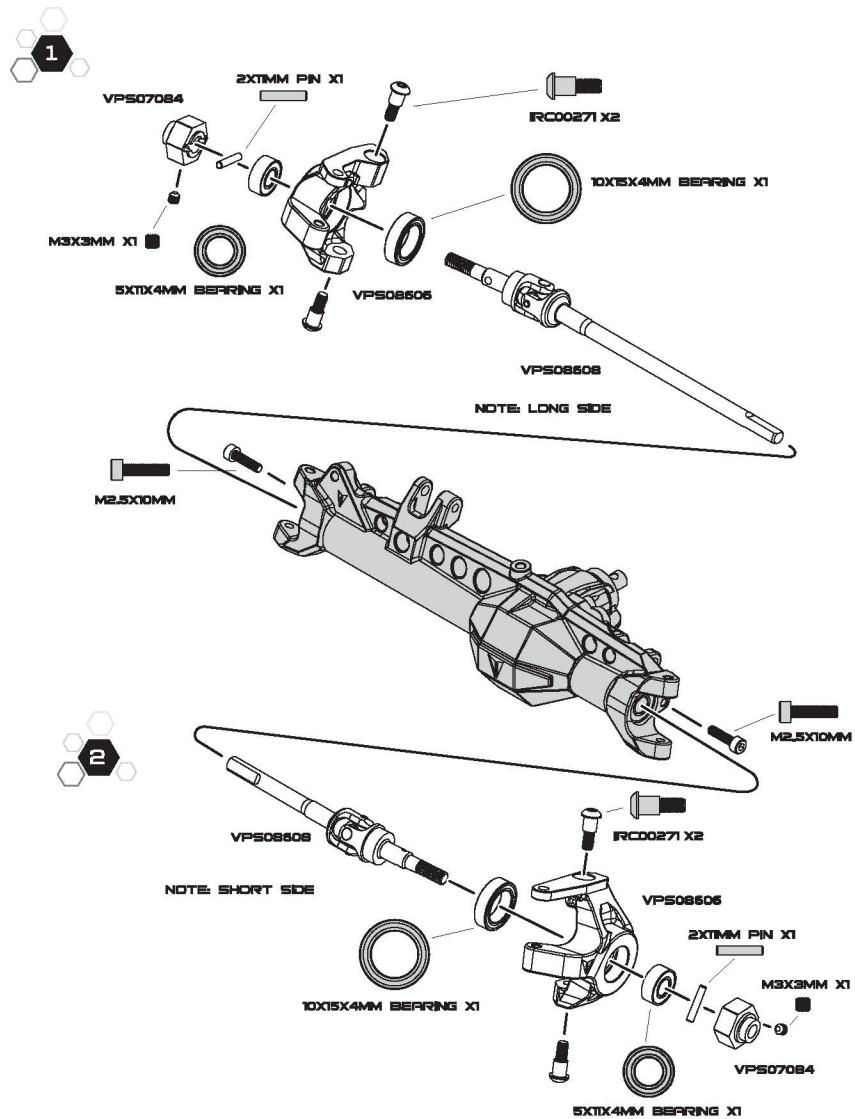
NOTICE: Never use a pressure washer to clean your vehicle.

- Use an air compressor or a can of compressed air to dry the vehicle and help remove any water that may have gotten into small crevices or corners.
- Spray the bearings, drive train, fasteners and other metal parts with a water-displacing light oil. Do not spray the motor.
- Let the vehicle air dry before you store it. Water (and oil) may continue to drip for a few hours.
- Increase the frequency of disassembly, inspection and lubrication of the following:
 - Front and rear axle hub assembly bearings.
 - All transmission cases, gears and differentials.
 - Motor—clean with an aerosol motor cleaner and re-oil the bushings with lightweight motor oil.

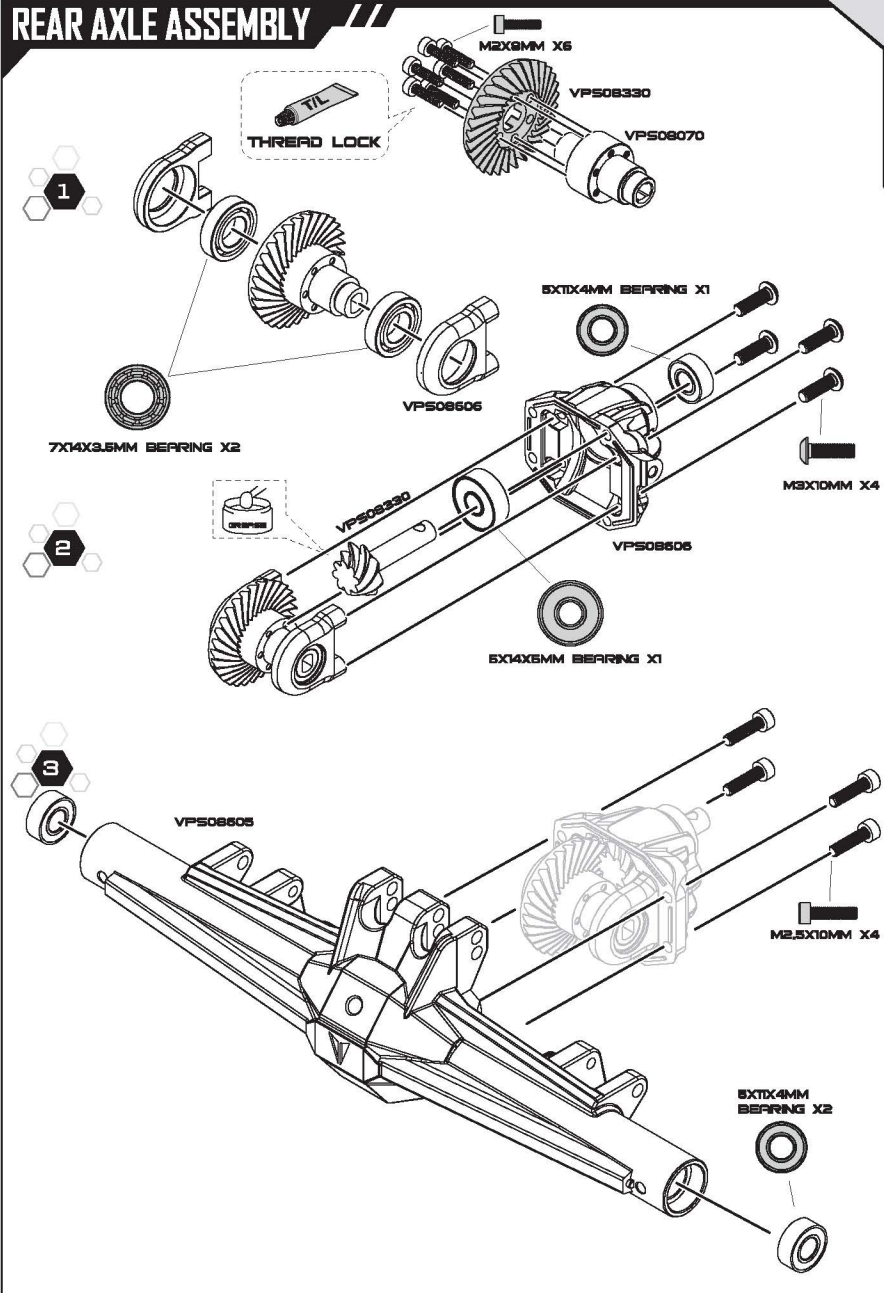
FRONT AXLE ASSEMBLY //



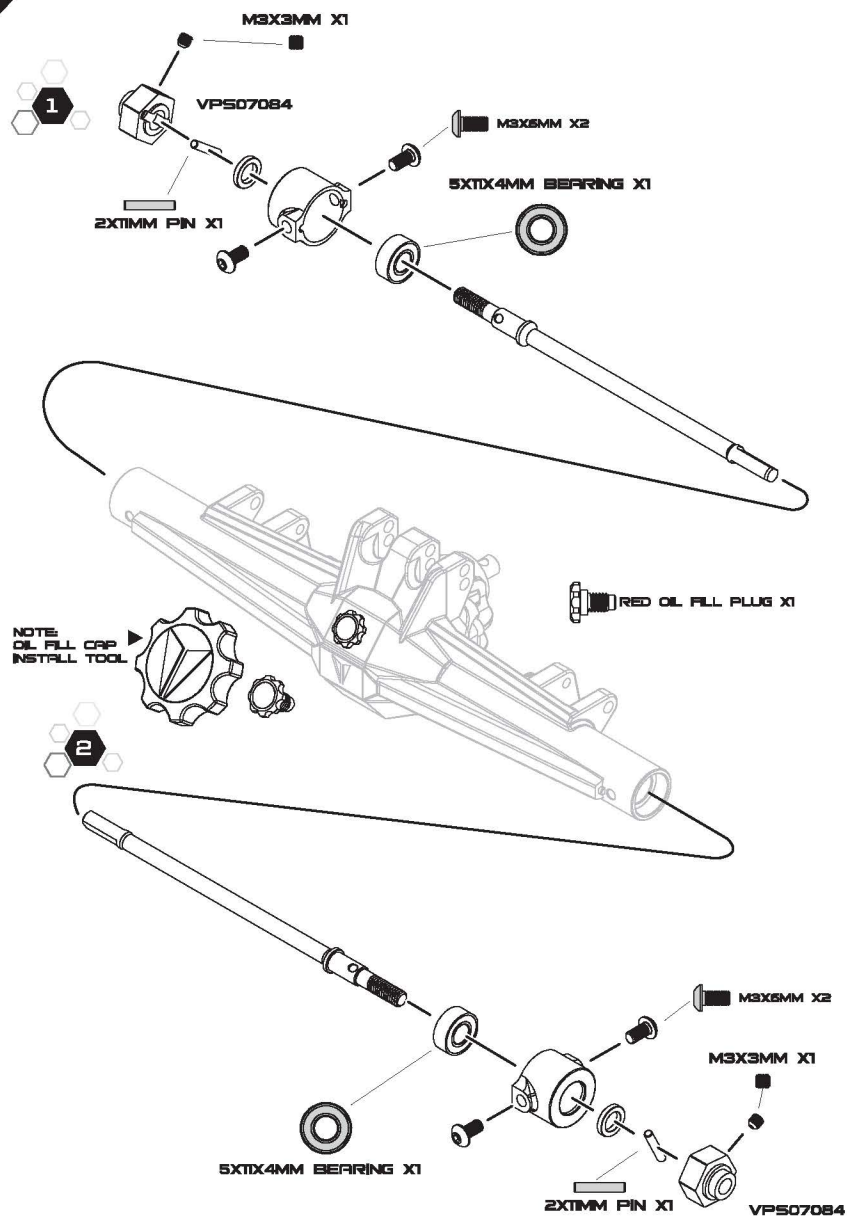
FRONT AXLE ASSEMBLY



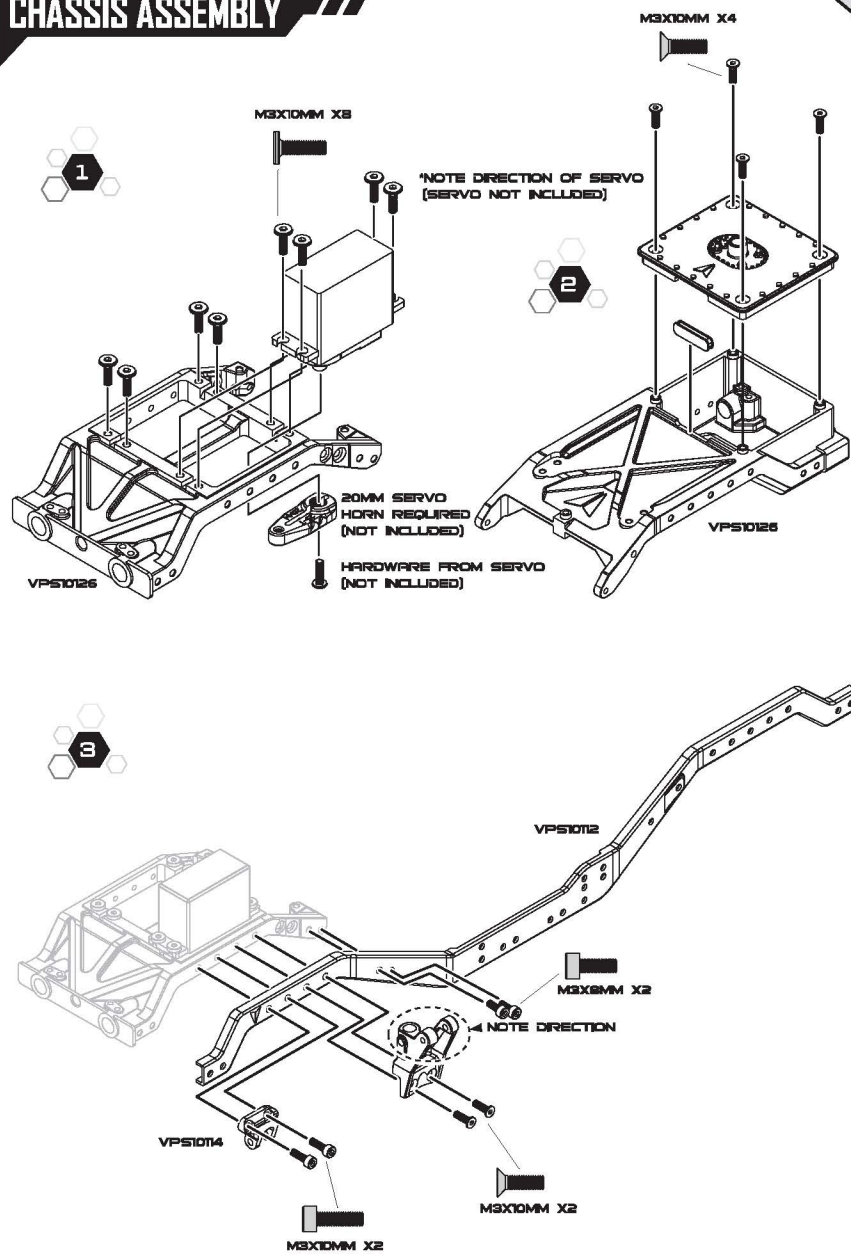
REAR AXLE ASSEMBLY



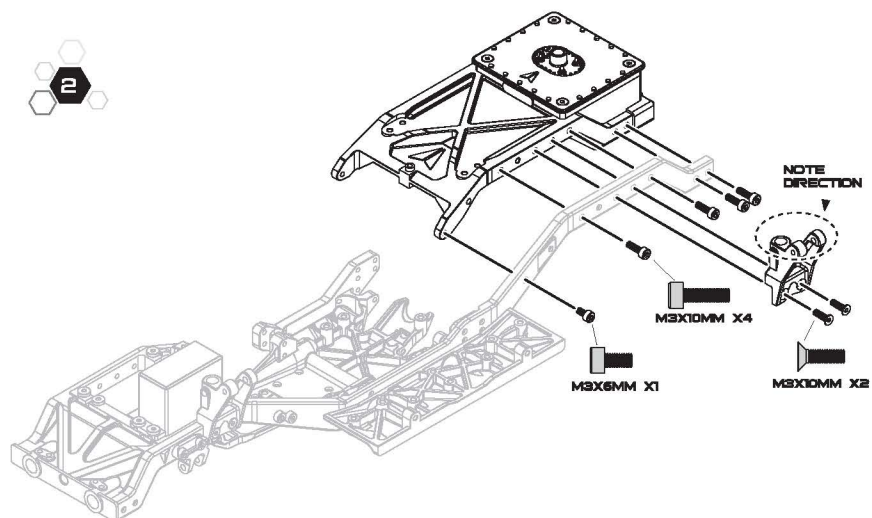
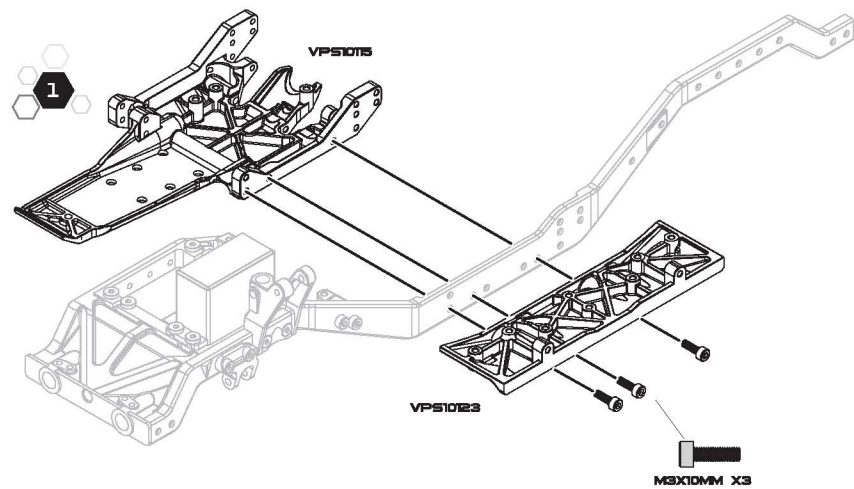
REAR AXLE ASSEMBLY //



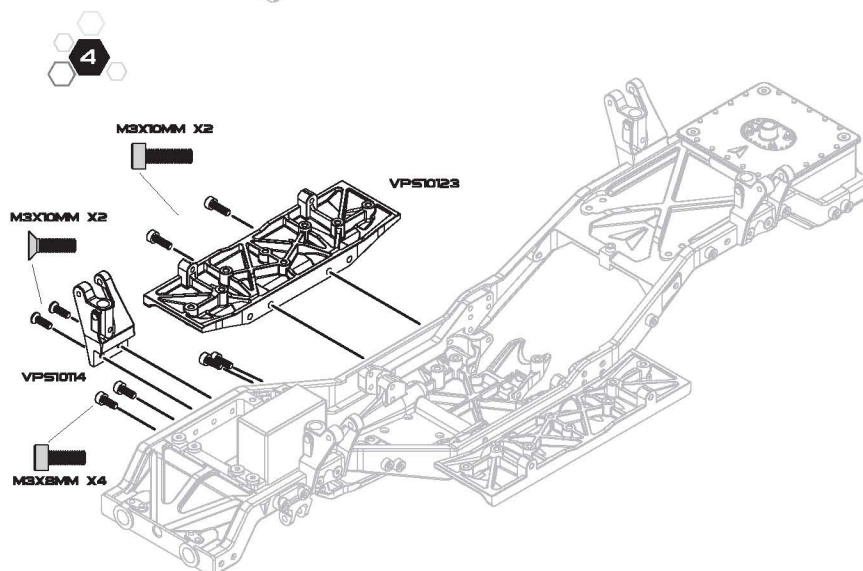
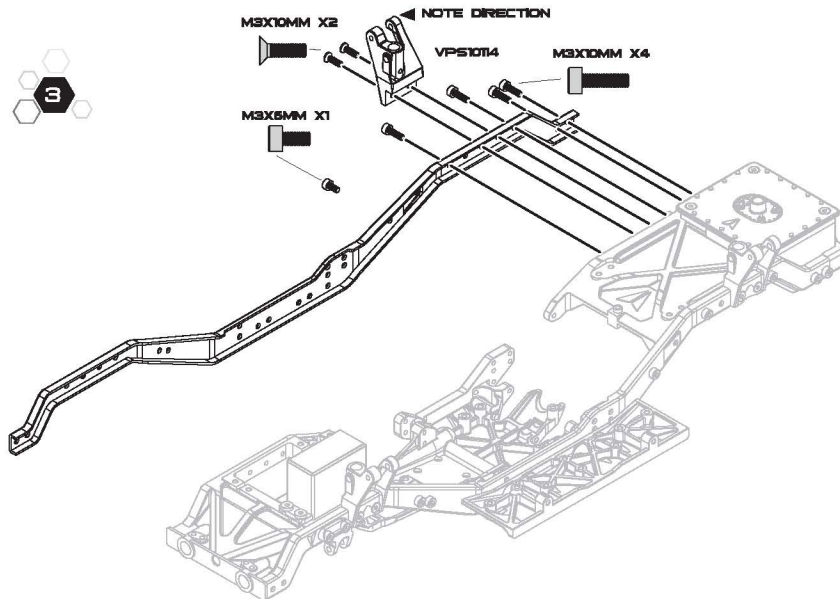
CHASSIS ASSEMBLY



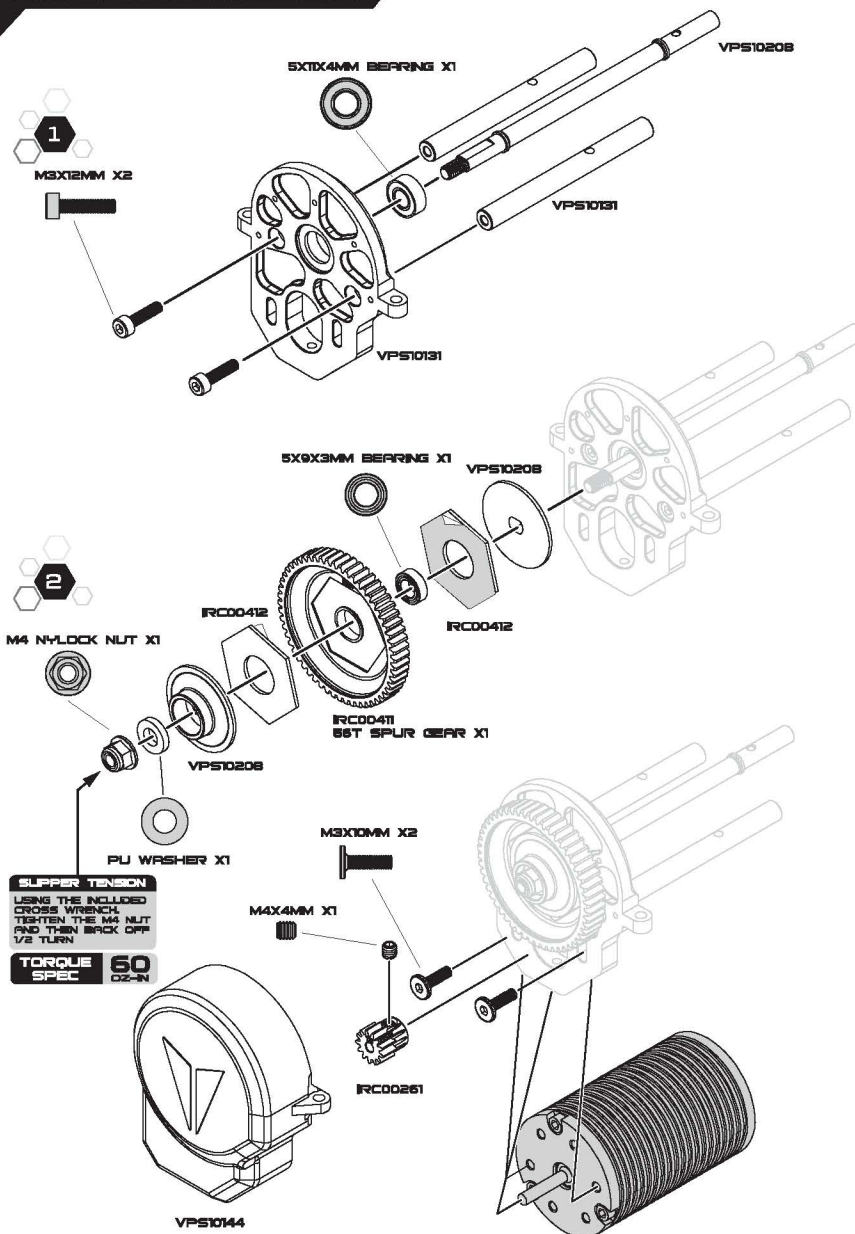
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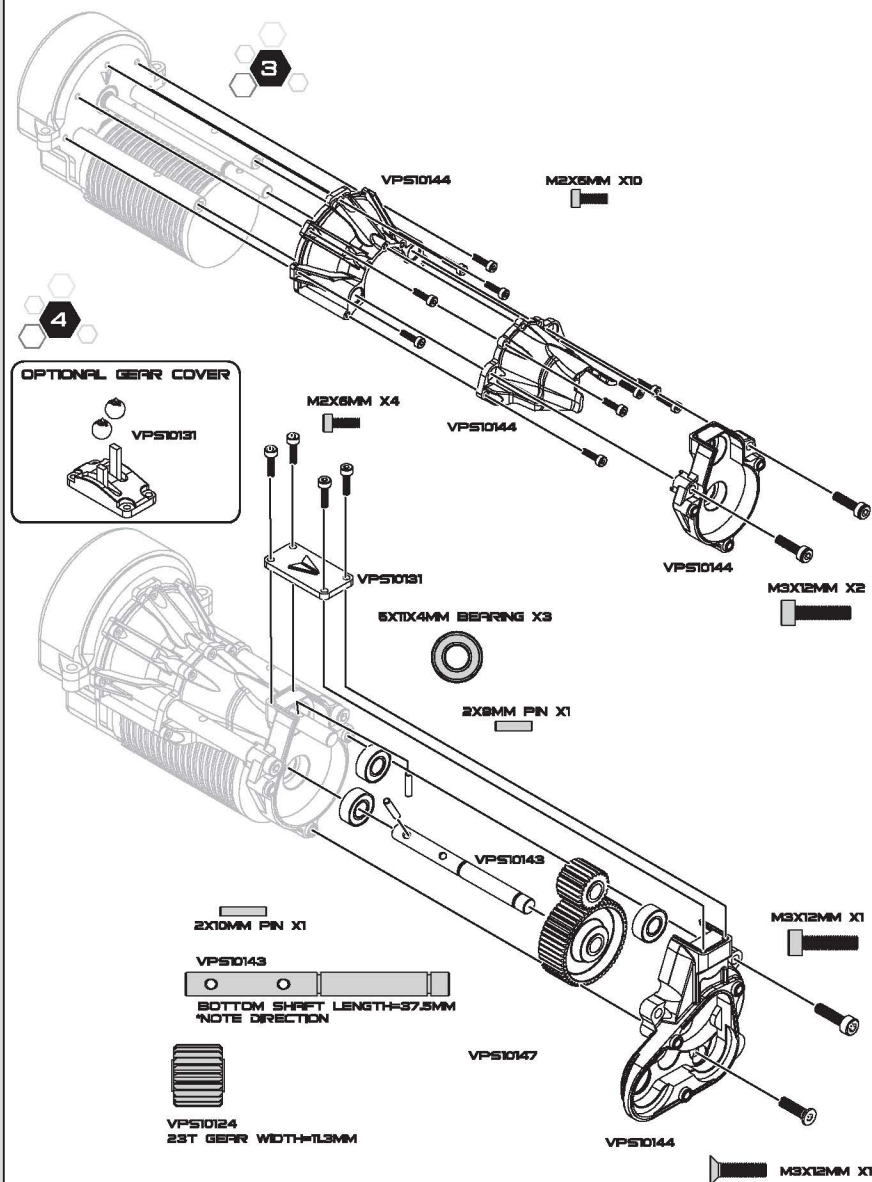
CHASSIS ASSEMBLY



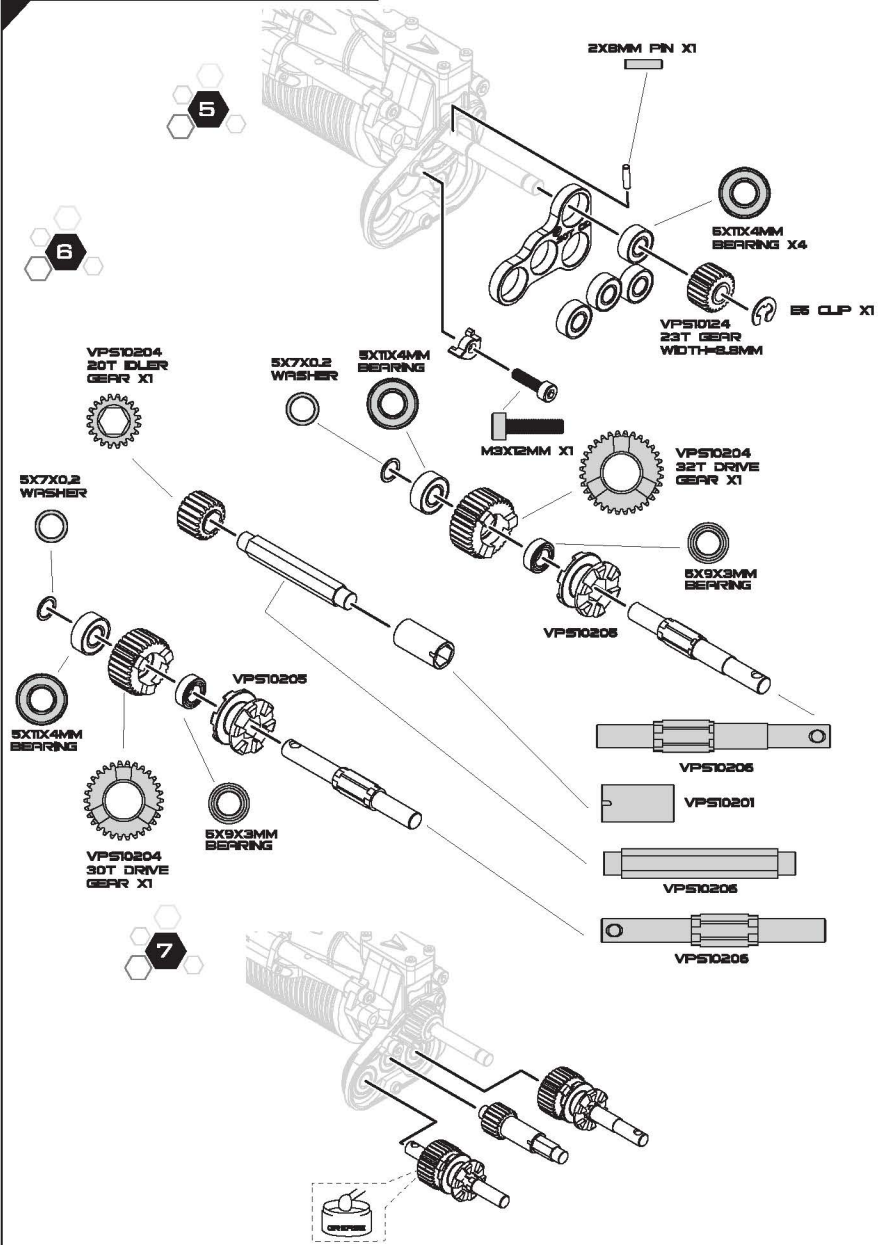
TRANSMISSION ASSEMBLY //



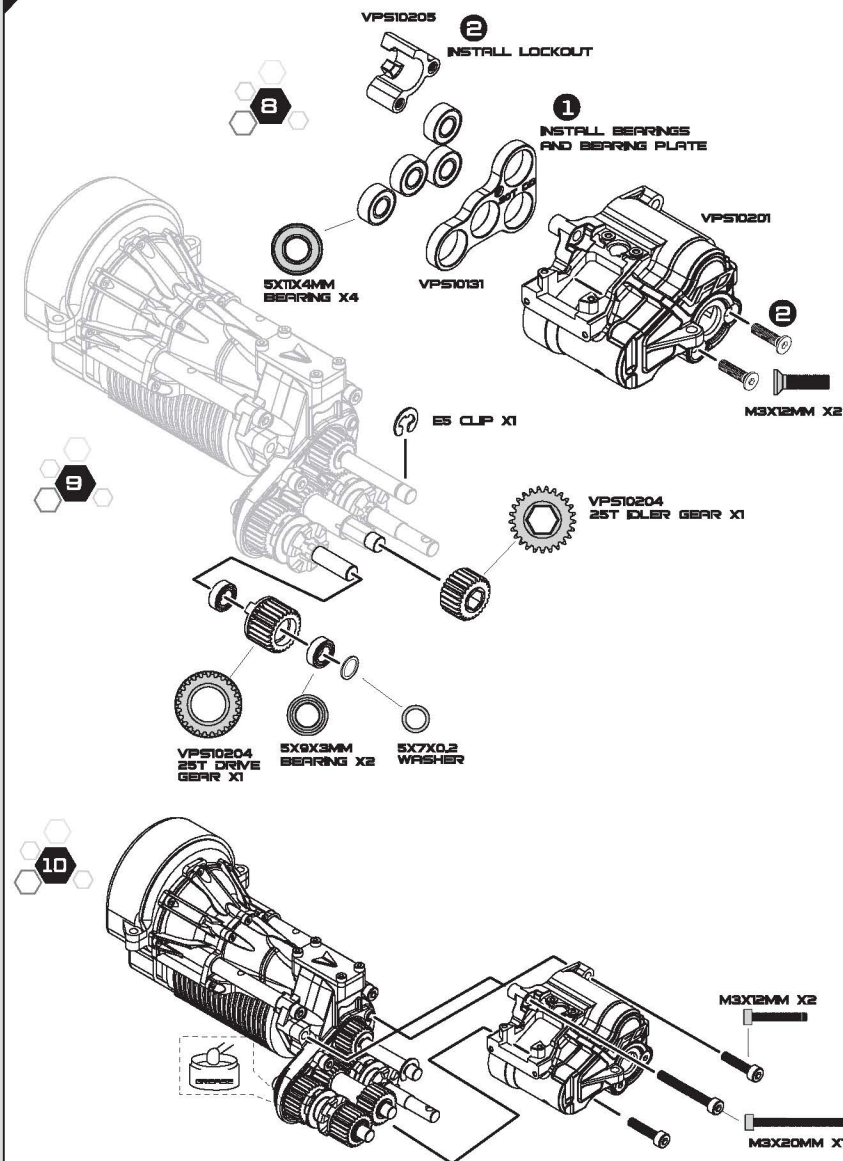
TRANSMISSION ASSEMBLY



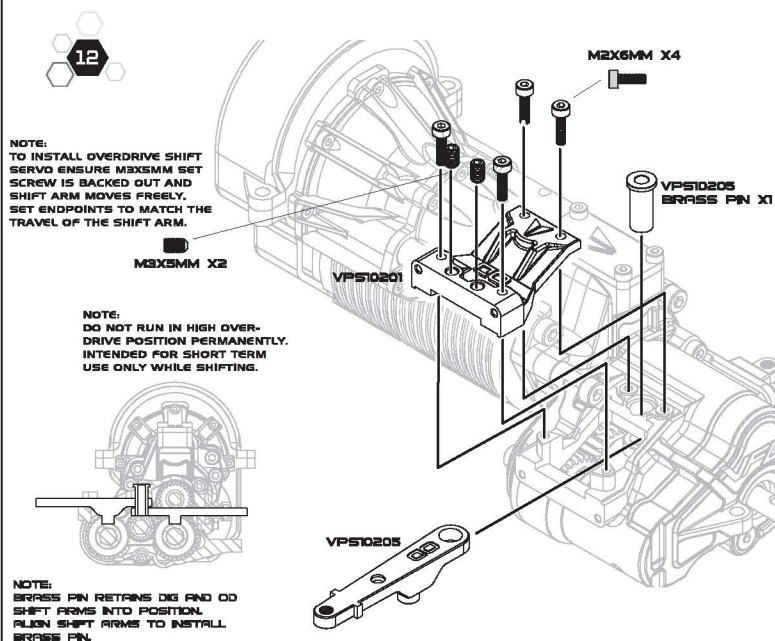
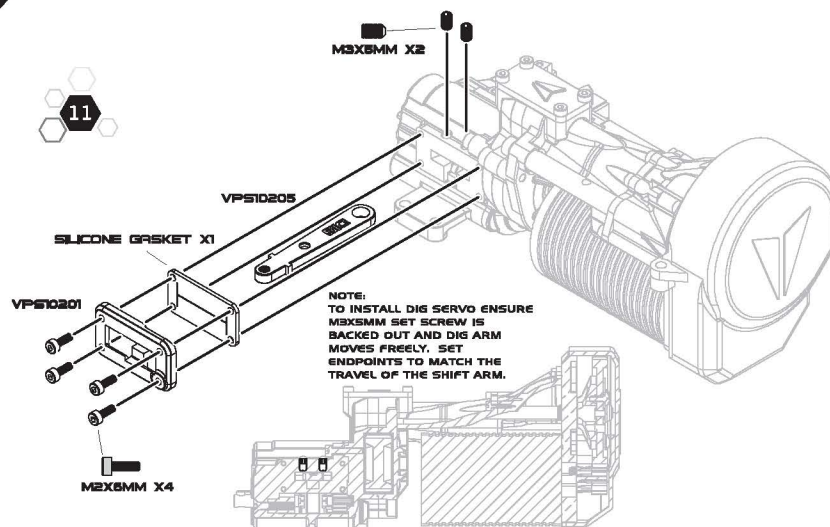
TRANSMISSION ASSEMBLY



TRANSMISSION ASSEMBLY //

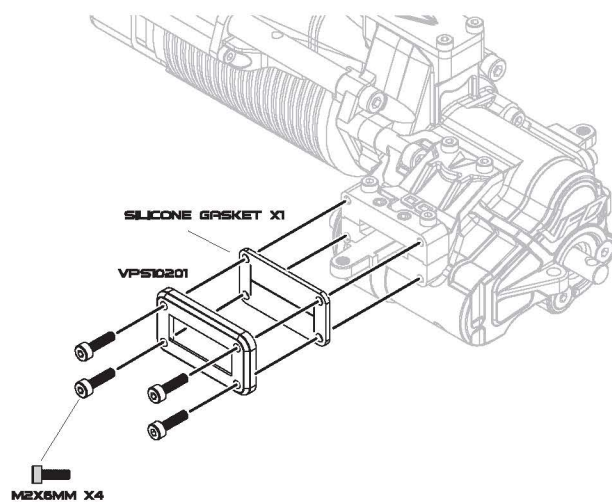


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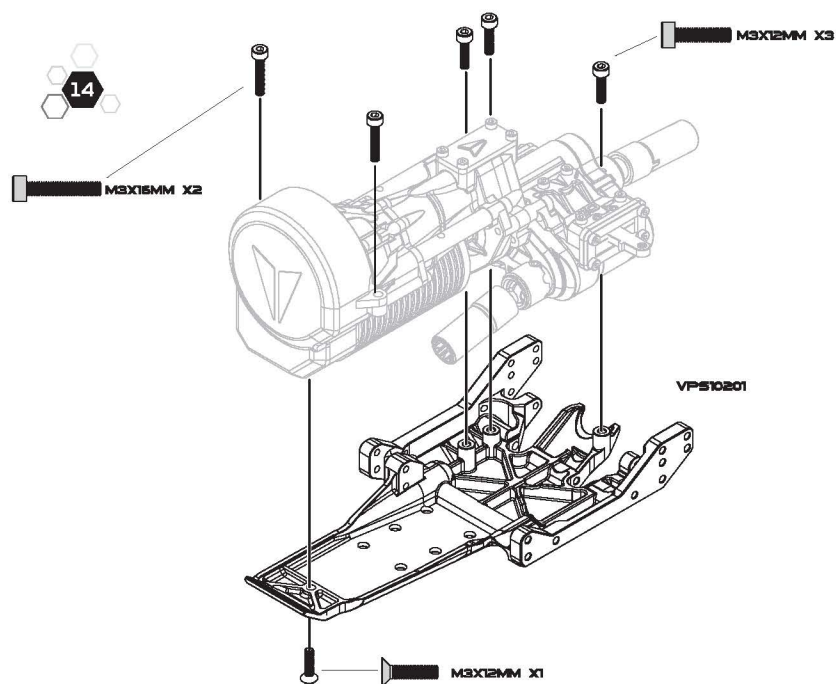


TRANSMISSION ASSEMBLY //

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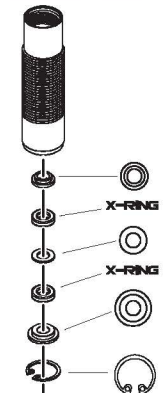


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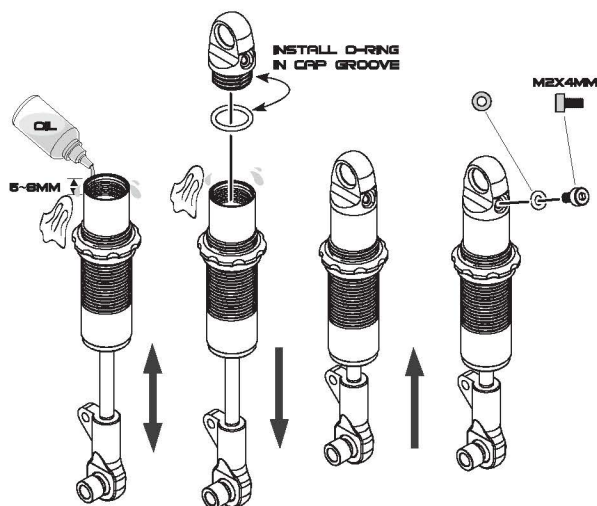


SHOCK ASSEMBLY //

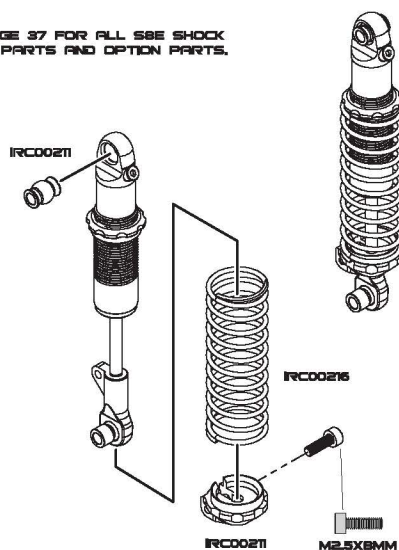
ASSEMBLY STEP 1



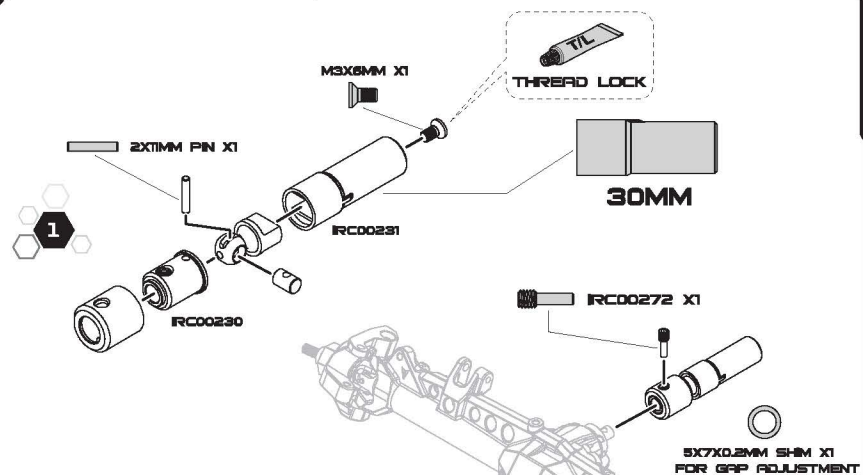
ASSEMBLY STEP 2



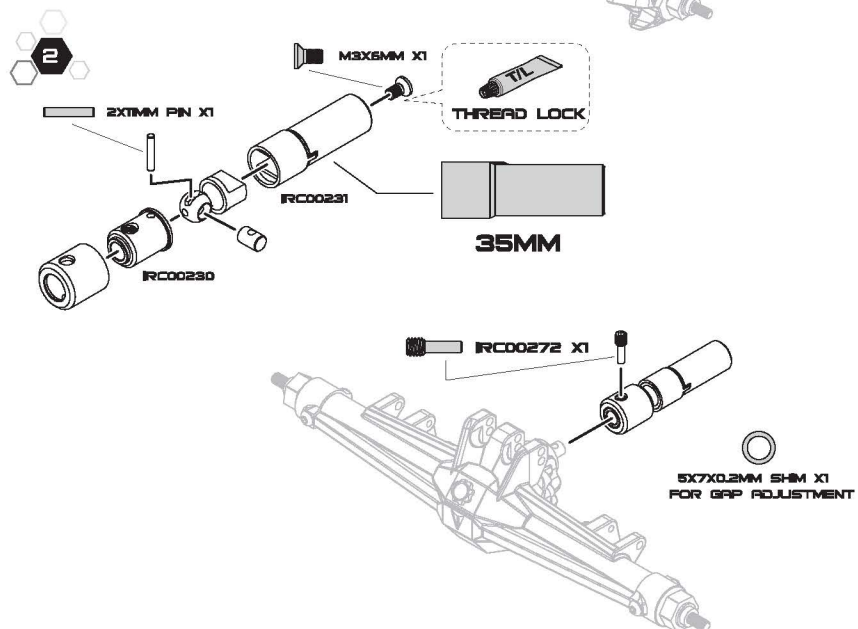
NOTE:
SEE PAGE 37 FOR ALL S8E SHOCK
SPARE PARTS AND OPTION PARTS.



DRIVESHAFT ASSEMBLY



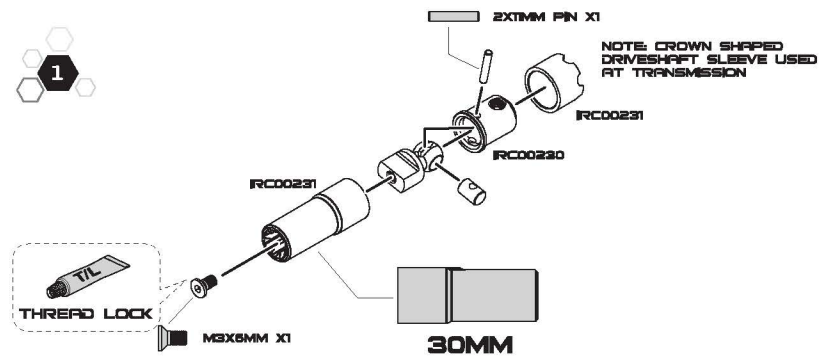
■ REAR AXLE



DRIVESHAFT ASSEMBLY

FRONT

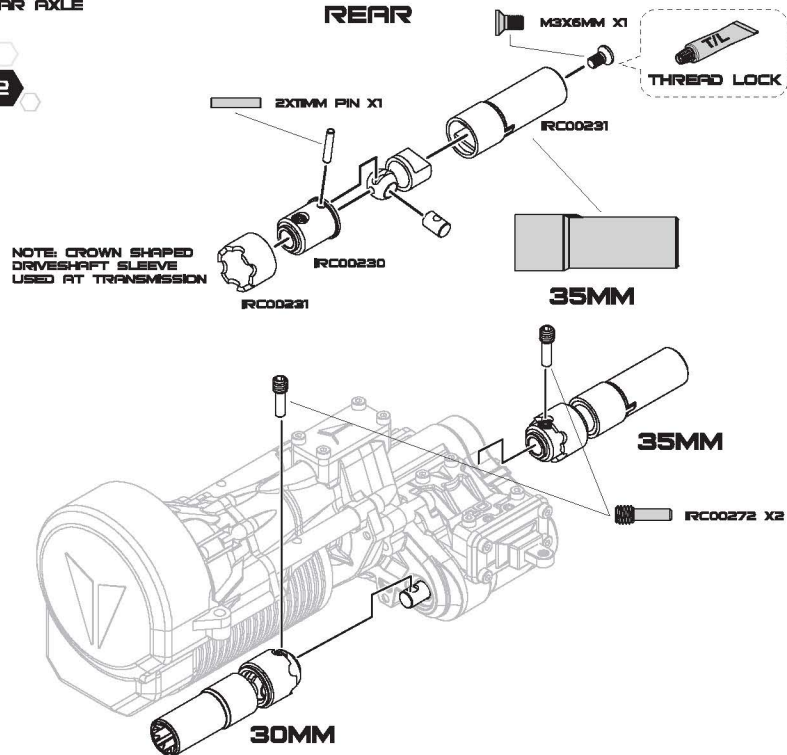
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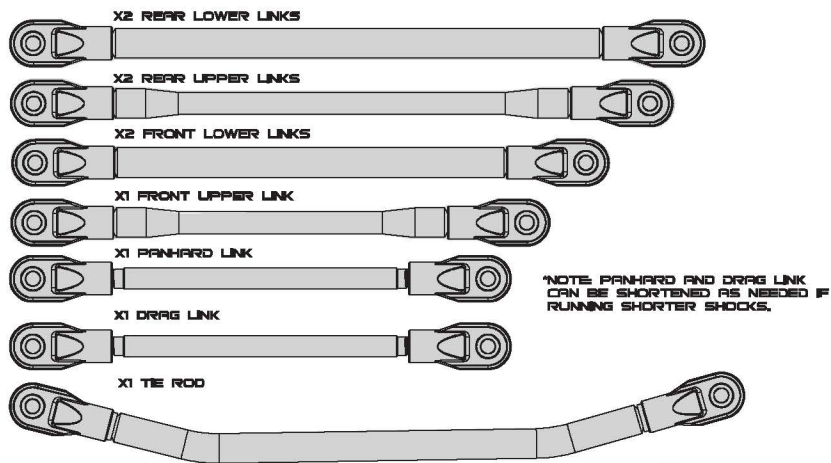
REAR AXLE

2

REAR

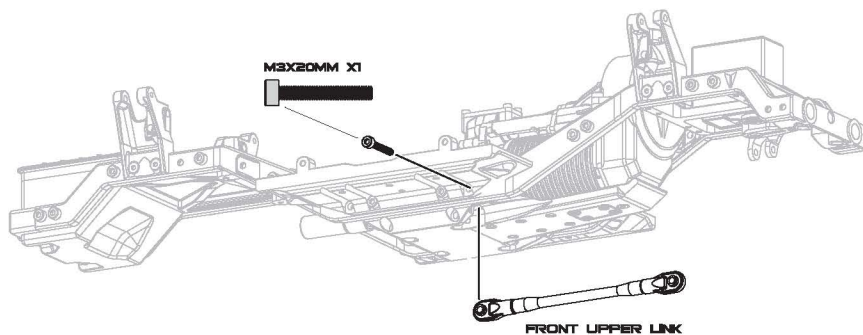
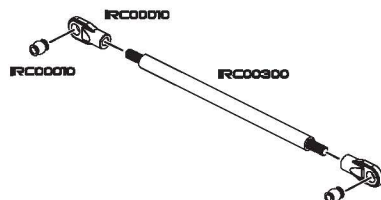


SUSPENSION ASSEMBLY

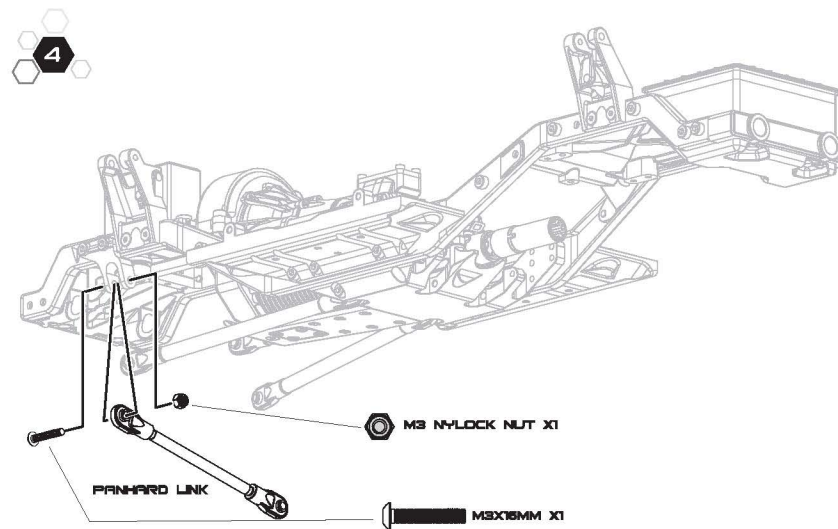
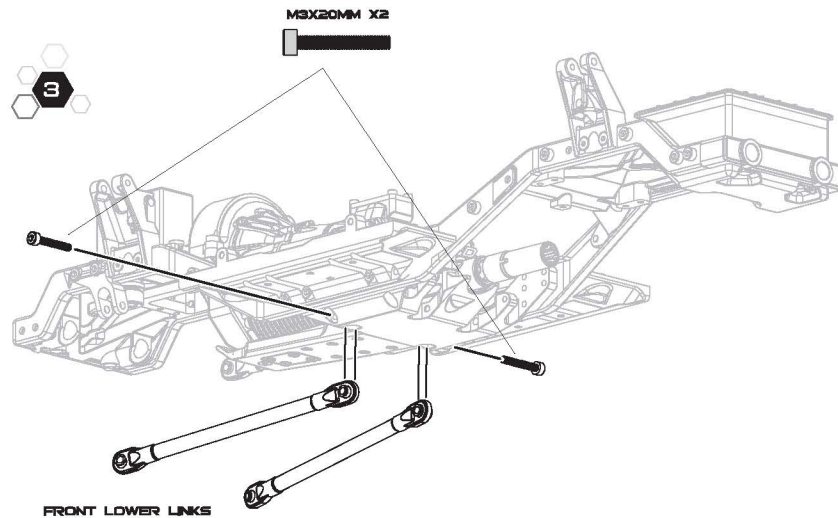


*NOTE: INSTALL 5X4X1.0 SPACER EACH SIDE FOR TOE ADJUSTMENT AS NEEDED.

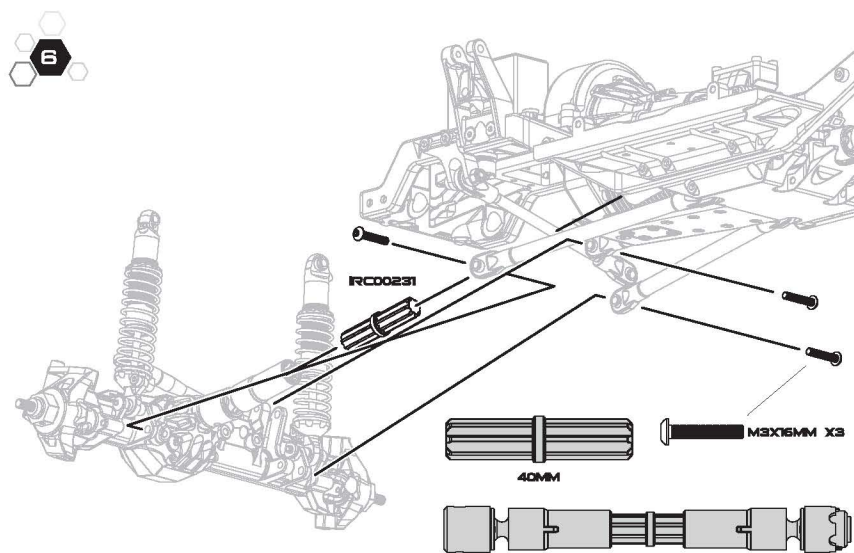
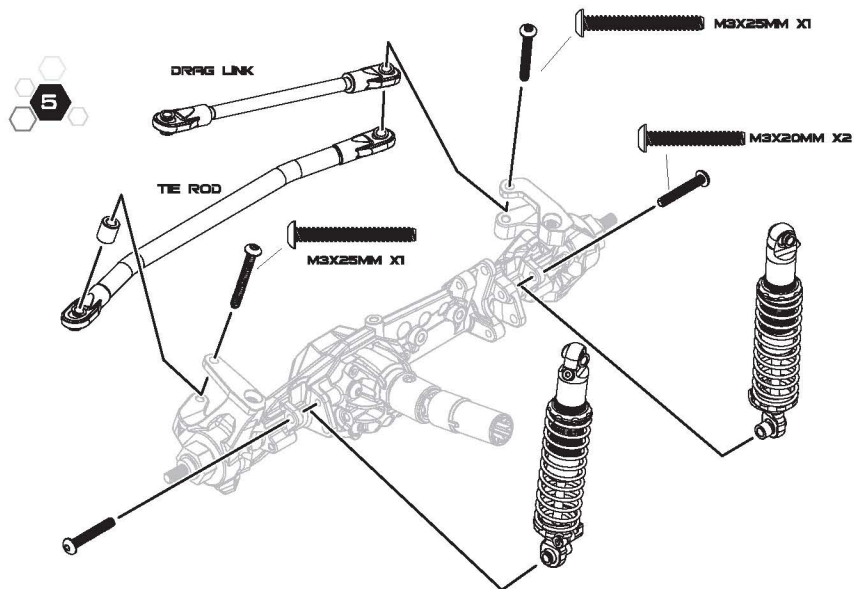
5X4X1.0 SPACER X2



SUSPENSION ASSEMBLY //

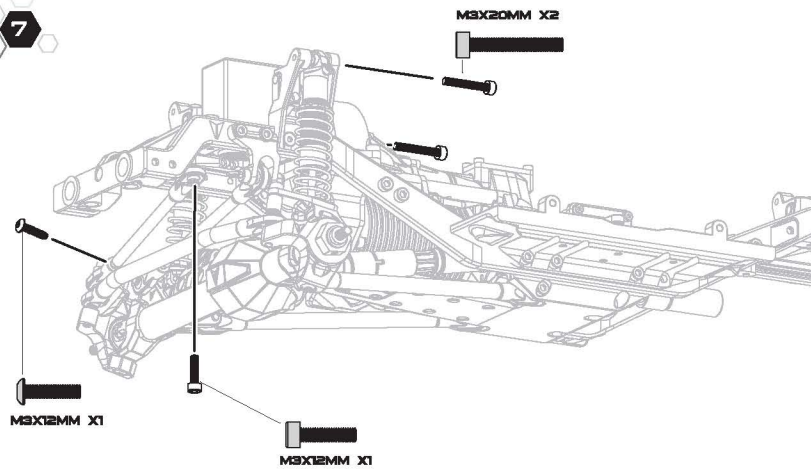


SUSPENSION ASSEMBLY //

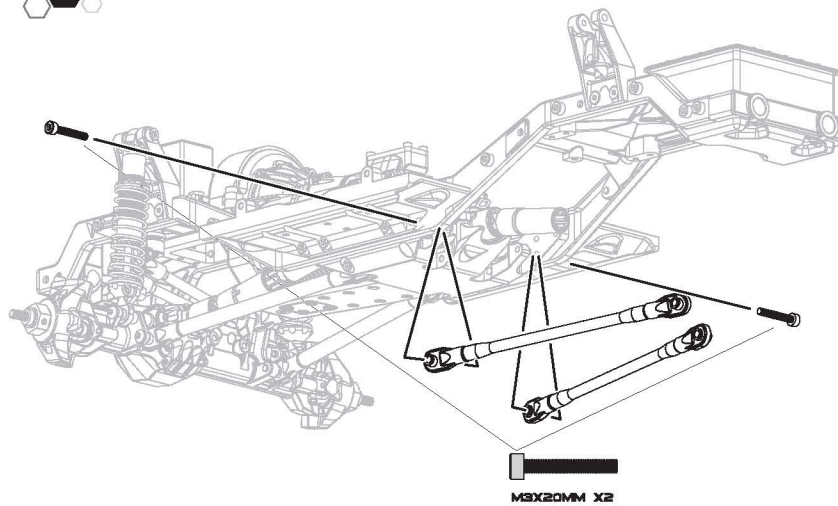


SUSPENSION ASSEMBLY ///

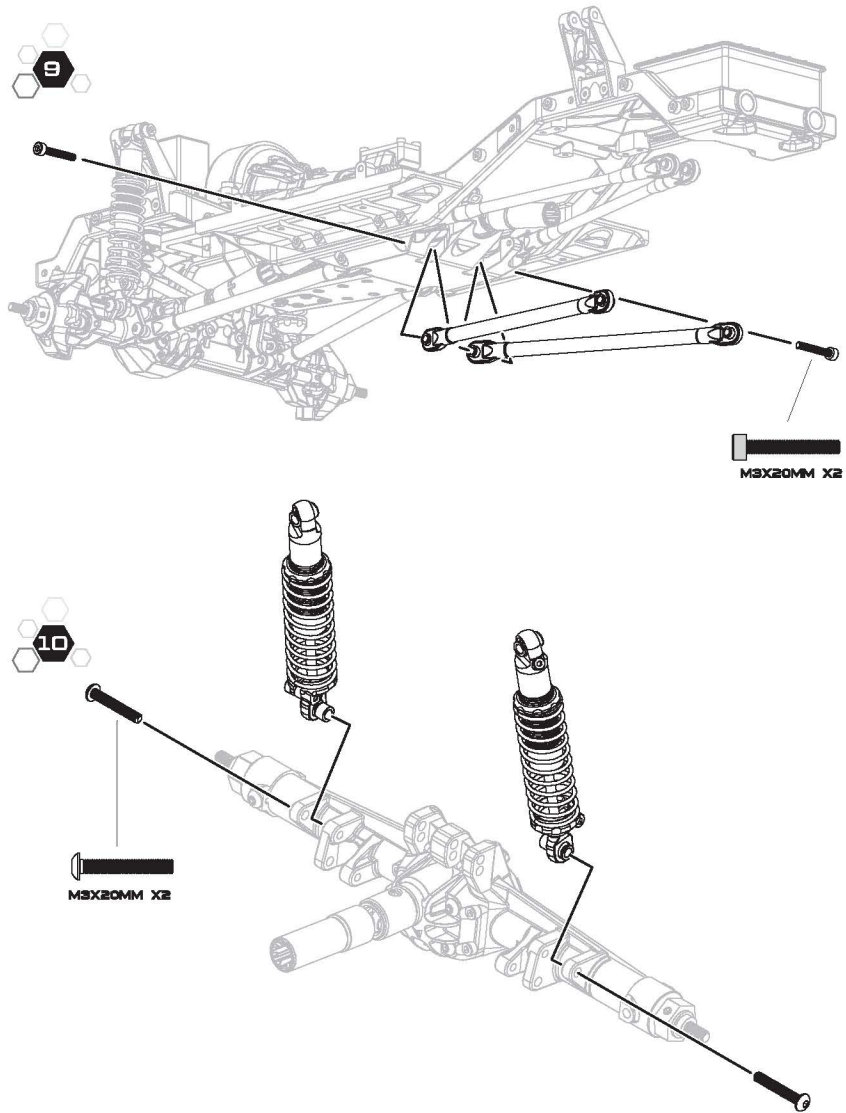
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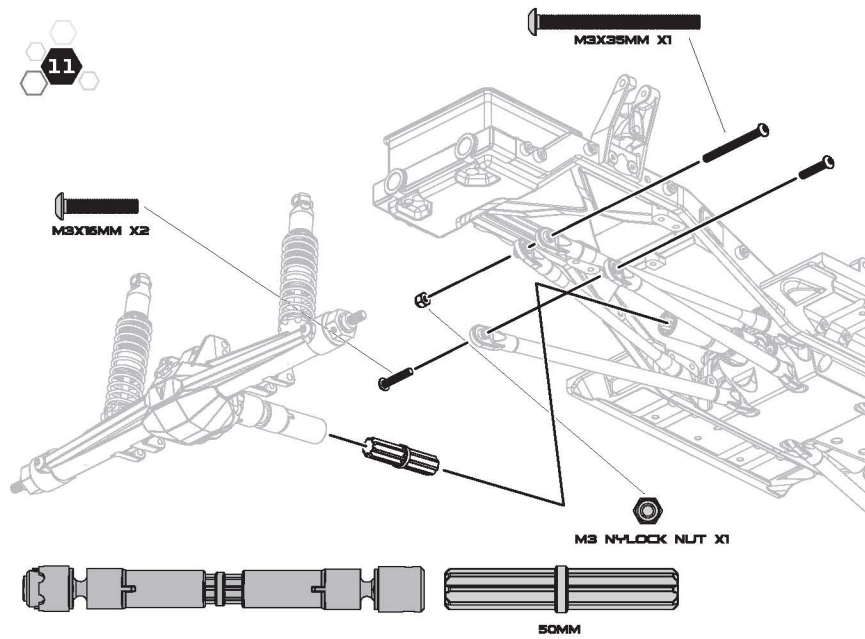


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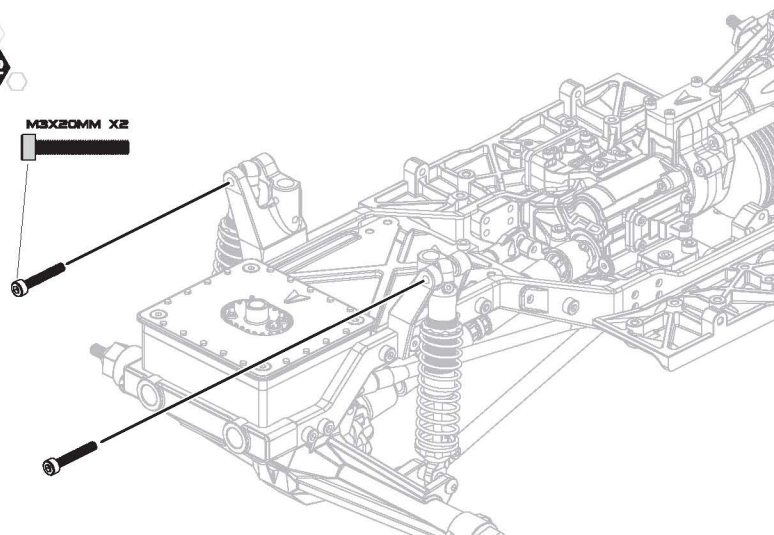


SUSPENSION ASSEMBLY //

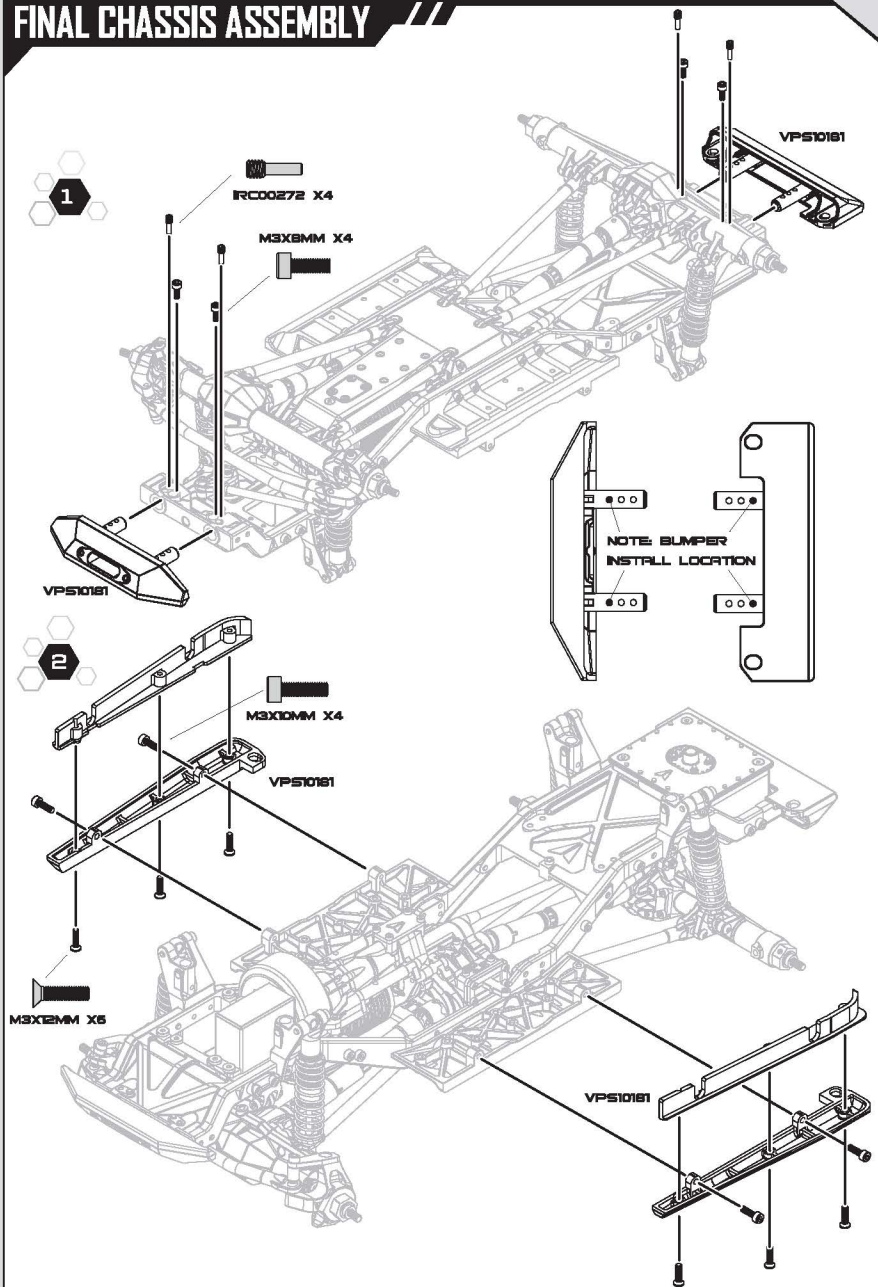
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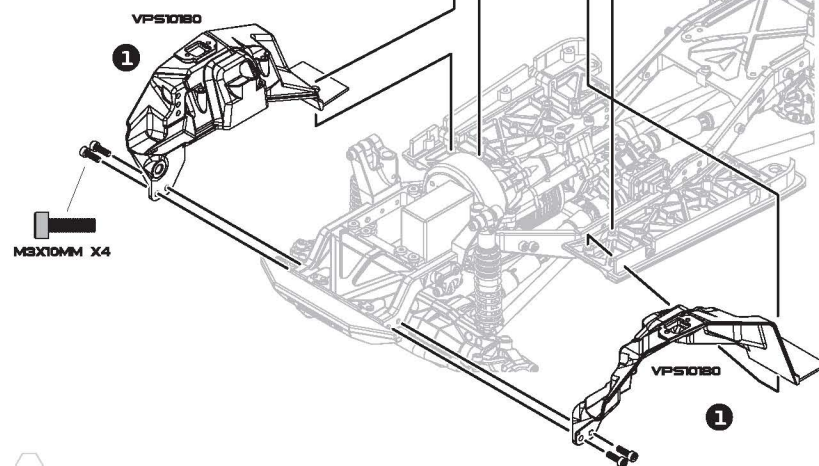
FINAL CHASSIS ASSEMBLY //



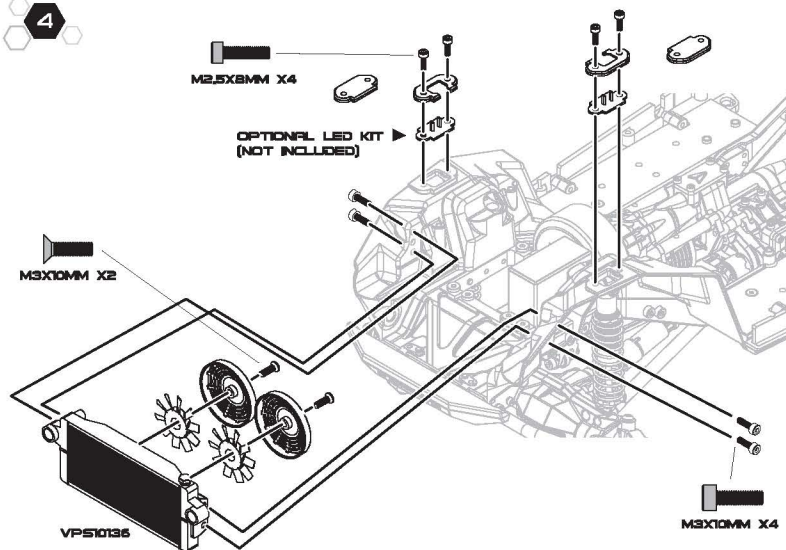
FINAL CHASSIS ASSEMBLY

3

THE INNER FENDER GETS INSTALLED FIRST **1**,
THEN ELECTRONIC PLATE SECOND **2**

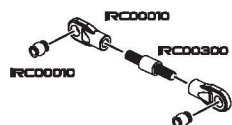


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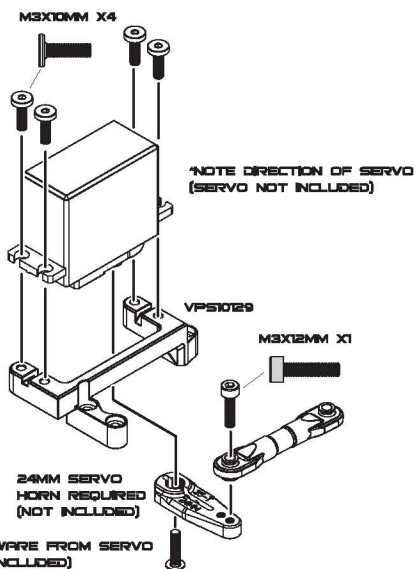
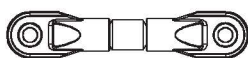


FINAL CHASSIS ASSEMBLY

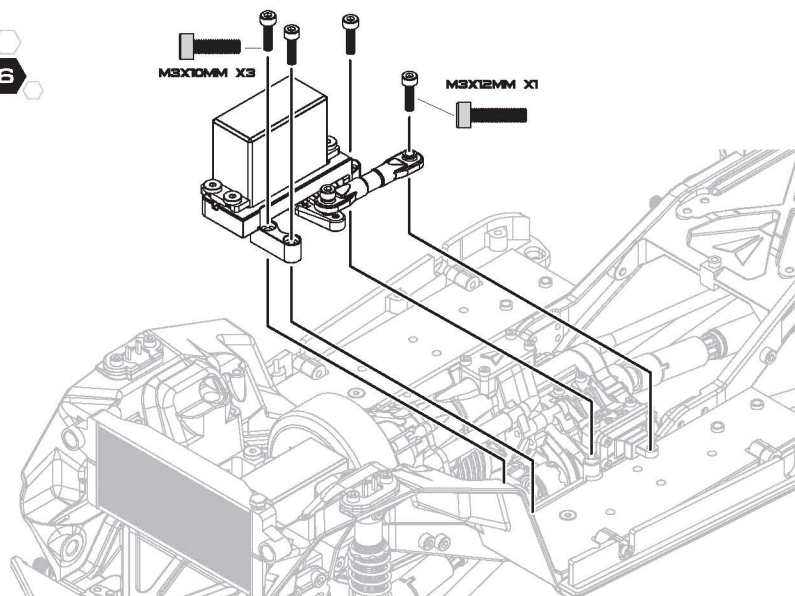
5



X1 OD SHIFT LINKS

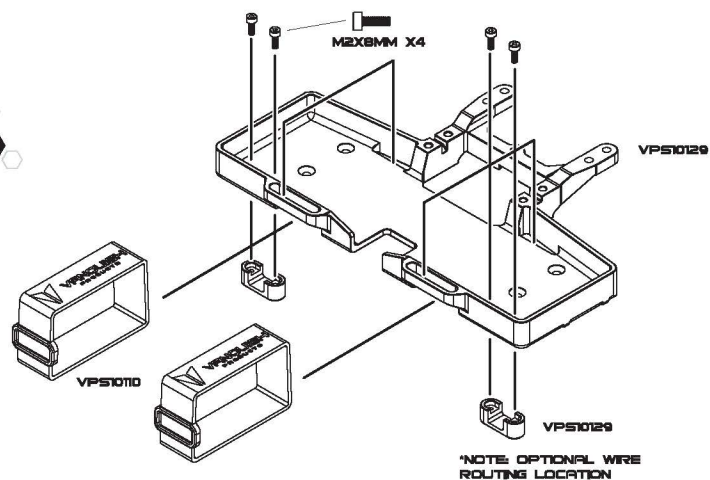


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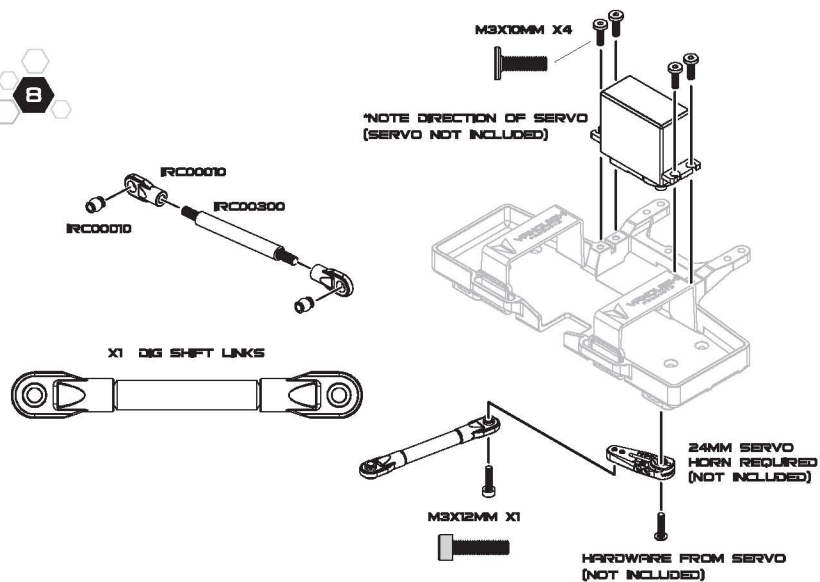


FINAL CHASSIS ASSEMBLY //

7

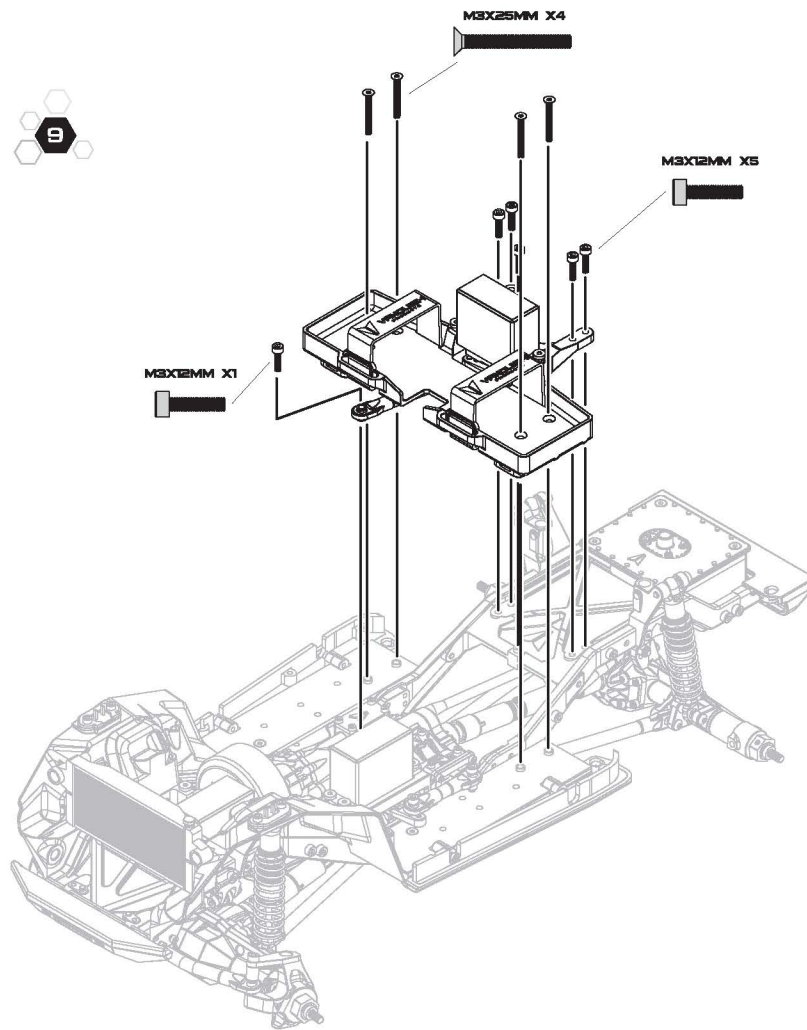


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FINAL CHASSIS ASSEMBLY //

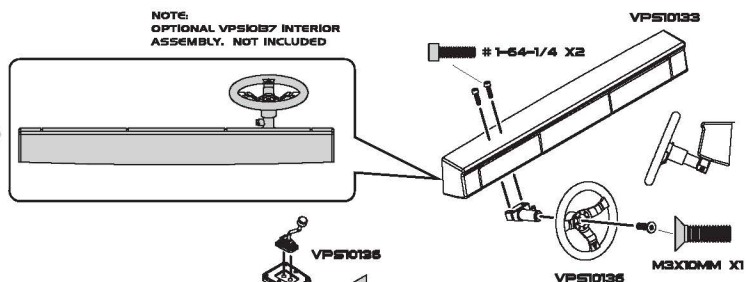
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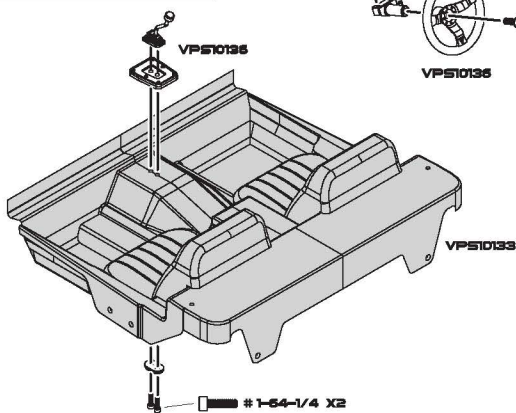
BODY ASSEMBLY //

NOTE:
OPTIONAL VPS1037 INTERIOR
ASSEMBLY. NOT INCLUDED

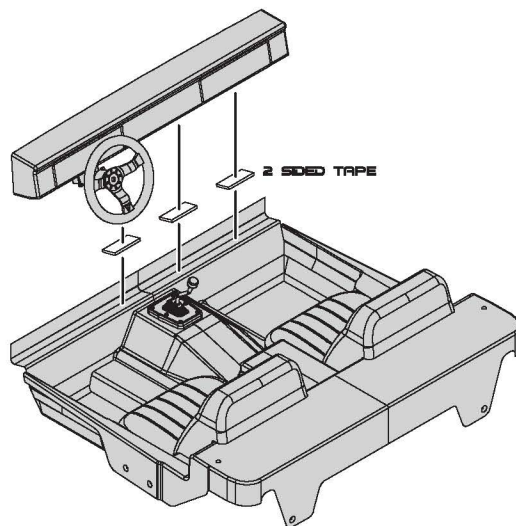
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2

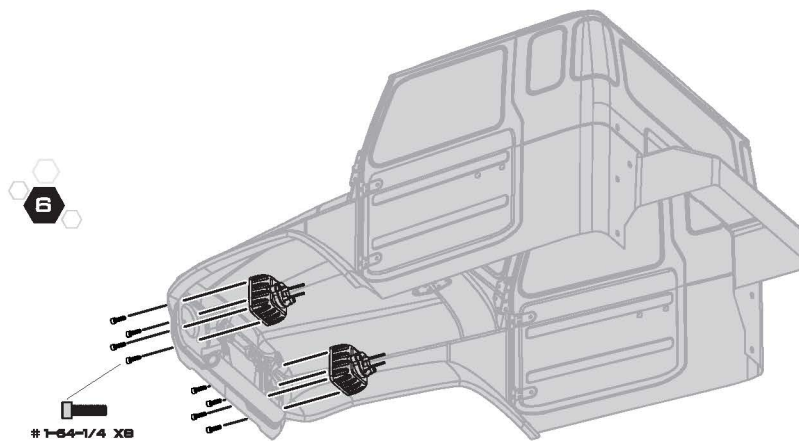
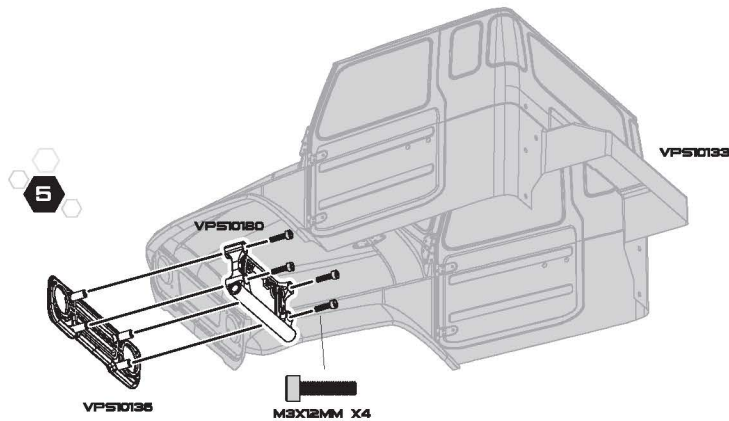
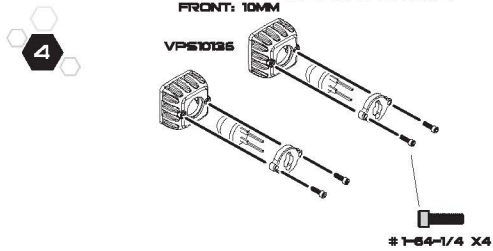


3



BODY ASSEMBLY //

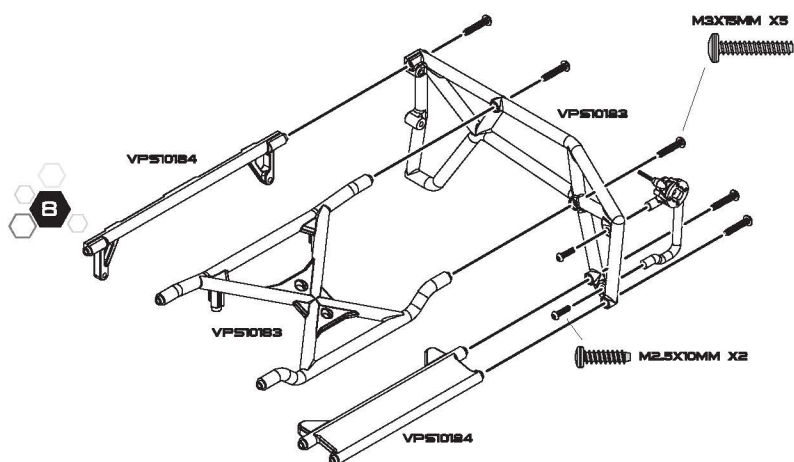
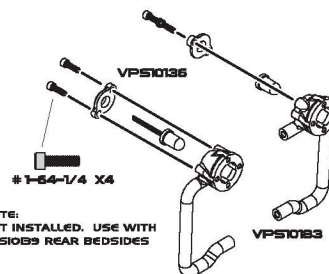
* NOTE LED BULBS NOT INCLUDED
FRONT: 10MM



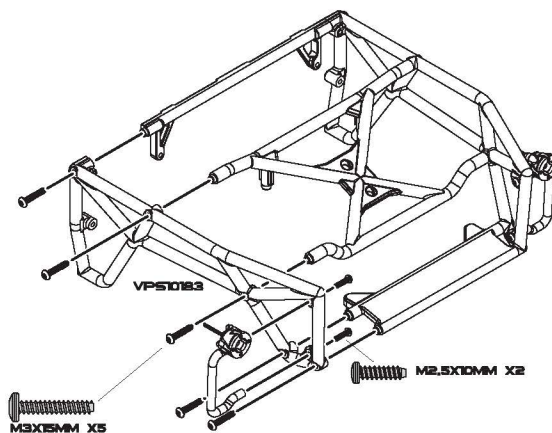
BODY ASSEMBLY //

* NOTE LED BULBS NOT INCLUDED
REAR: 5MM

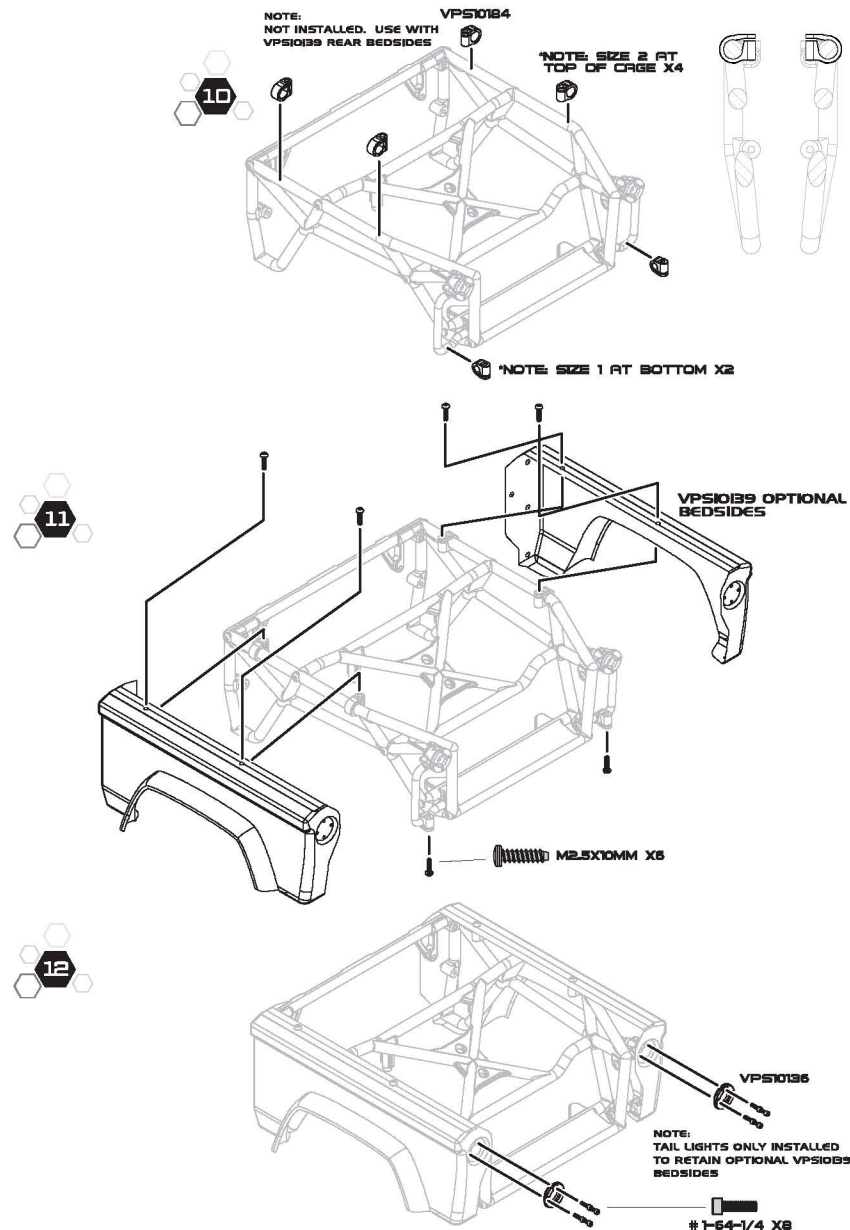
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9



BODY ASSEMBLY //



BODY ASSEMBLY //

■ BODY ASSEMBLY

13

M3X6MM X6

VP510134

14

#1-64-1/4 X4

VP510136

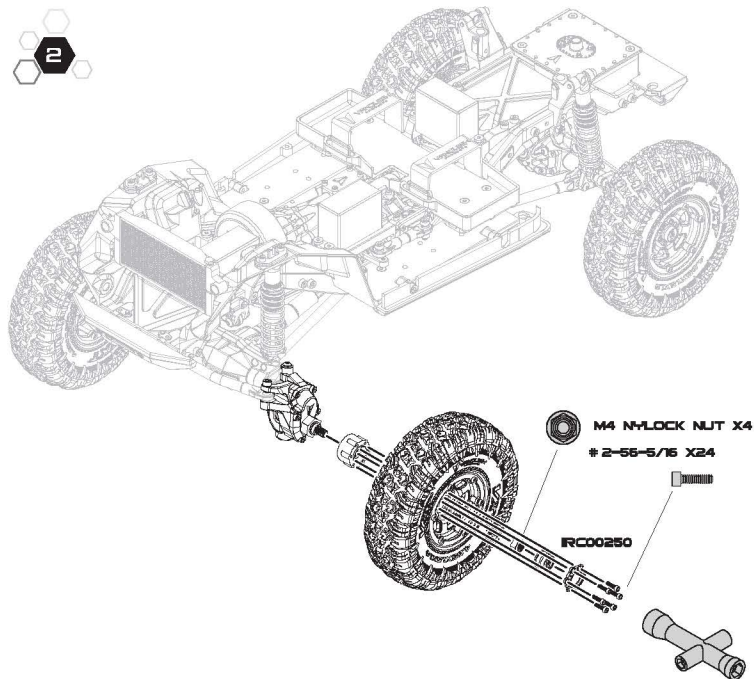
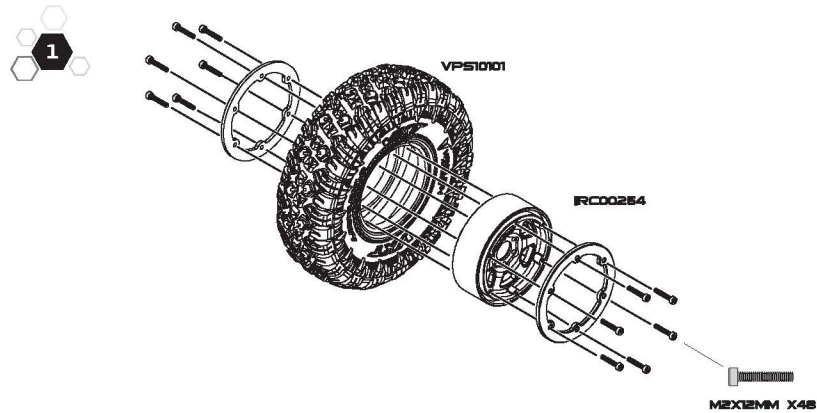
NOTE:
OPTIONAL VP510137 INTERIOR
TRAY INSTALL SHOWN

15

M3X10MM X2

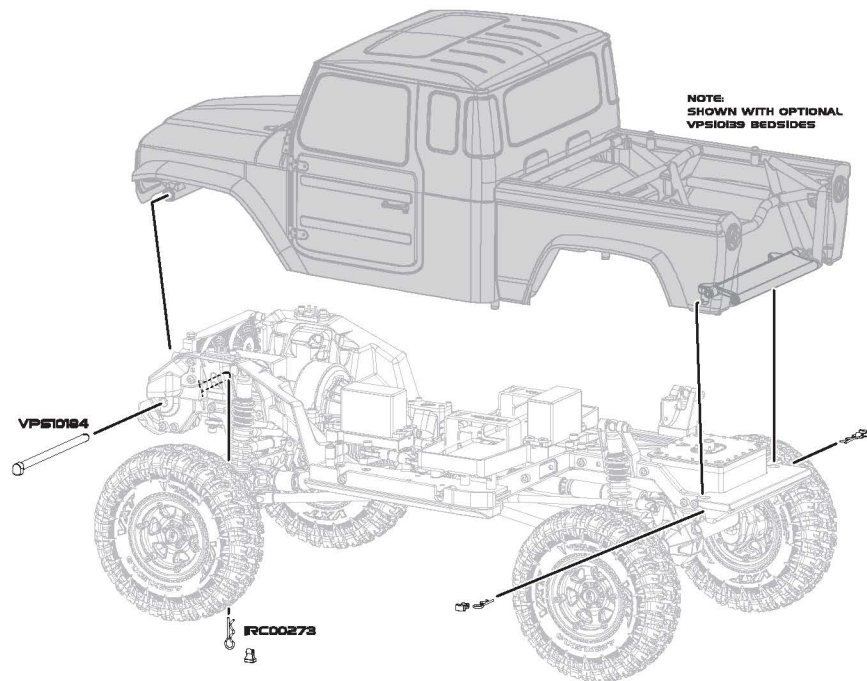
VP510136

WHEEL AND TIRE ASSEMBLY //



FINAL ASSEMBLY //

3



VANQUISH[®] PRODUCTS

PARTS LIST

IRC00010	ROD ENDS WITH PIVOT BALLS (12)	VPS00820	F10 FRONT AXLE HOUSING
IRC00140	4MM FLANGED WHEEL LOCK NUTS	VPS00821	F10 REAR AXLE HOUSING
IRC00181	INCISION V54-10 VDI UNIVERSALS	VPS00822	F10 STEERING KNUCKLES AND REAR LOCKOUTS
IRC00230	ISD10 DRIVESHAFT SET	VPS10101	VANQUISH VXT 1.9 TIRES (2)
IRC00231	ISD10 REPLACEMENT PARTS TREE	VPS10110	VANQUISH VELCRO STRAP
IRC00250	INCISION 1.5 KMC XD229 MACHETE BLACK PLASTIC	VPS10112	V54-10 FRAME RAIL (2)
IRC00261	13T 32P PINION	VPS10113	V54-10 BODY POST SET
IRC00270	INCISION MOTOR PLATE CAPHEAD WASHER	VPS10114	V54-10 SHOCK TOWER SET (2 PAIR)
IRC00271	INCISION KINGPIN SHOULDER SCREWS (4)	VPS10123	V54-10 CHASSIS SLIDER MOUNTS WITH UNIVERSAL SLIDERS
IRC00272	M4 SCREW SHAFT (10)	VPS10126	V54-10 CHASSIS BRACES / SERVO MOUNT
IRC00273	BODY PINS (10)	VPS10129	V54-10 MOLDED BATTERY AND ELECTRONIC TRAYS
IRC00275	WASHER HEAD SCREW (4)	VPS10131	V54-10 MACHINED PANHARD MOUNT
IRC00280	INCISION 12MM LOCKING HEX BLACK ANODIZED	VPS10133	PHOENIX BODY SET WVRD1 CAGE
IRC00411	VFD 56T 32P SLIPPER SPUR GEAR	VPS10136	PHOENIX GRILL AND BODY DETAIL PARTS SET
IRC00412	VFD 32P PAD	VPS10142	V54-10 VFD BEARING PLATE SET 30T OVERDRIVE
IRC00501	S8E 80MM SHOCK SET	VPS10144	V54-10 VFD TRANSMISSION HOUSING
IRC00502	S8E SHOCK MOLDED COMPONENTS	VPS10180	V54-10 NARROW MOLDED INNER FENDERS
IRC00505	S8E 80MM SHOCK BODY	VPS10181	PHOENIX BUMPER AND SLIDERS
IRC00506	S8E 80MM SHOCK SHAFT	VPS10182	VRD1 REAR CAGE SET
IRC00507	S8E SHOCK REBUILD KIT	VPS10183	VRD1 REAR CAGE PARTS
IRC00508	E-2 CLIP	VPS10184	VRD1 BODY MOUNTS
IRC00509	S8E UPPER AND LOWER SHOCK PIVOT BALL SET	VPS10200	VFD TWIN TRANSMISSION KIT
IRC00523	SHOCK TUNING ROD ENDS	VPS10201	VFD TWIN COMPONENTS MOLD
VPS00070	6 HOLE SPOOL / LOCKER	VPS10204	VFD TWIN GEAR SET
VPS00082	V54-10 REAR AXLE SHAFTS	VPS10205	VFD TWIN SHIFTING COMPONENT SET
VPS00330	30T/8T HYPOID GEAR SET	VPS10206	VFD TWIN SHAFT SET
VPS00602	F10 FRONT AXLE SET	VPS10207	E-5 CLIP
VPS00603	F10 REAR AXLE SET	VPS10208	VFD SLIPPER SET
VPS00606	F10 AXLE COMPONENTS		

OPTION PARTS

IRC00132	INCISION ALUMINUM WHEEL HUBS #3	IRC00514	S8E MACHINED SHOCK CAP Black
IRC00133	INCISION ALUMINUM WHEEL HUBS #4	IRC00515	S8E MACHINED SHOCK CAP Orange
IRC00134	INCISION ALUMINUM WHEEL HUBS #5	IRC00516	S8E MACHINED SHOCK CAP Blue
IRC00135	INCISION ALUMINUM WHEEL HUBS #6	IRC00517	S8E MACHINED Spring COLLAR SET Black
IRC00220	INCISION STEEL DRIVESHAFT SET	IRC00518	S8E MACHINED Spring COLLAR SET Orange
IRC00260	12T 32P PINION	IRC00519	S8E MACHINED Spring COLLAR SET Blue
IRC00262	14T 32P PINION	IRC00520	S8E 80MM SHOCK BODY HARD ANODIZED
IRC00263	15T 32P PINION	IRC00521	S8E 90MM SHOCK BODY HARD ANODIZED
IRC00264	16T 32P PINION	IRC00522	S8E MACHINED PISTON SET
IRC00265	17T 32P PINION	VPS02410	CLAMPING 25T SERVO HORN - 24MM
IRC00282	BRASS 12MM HEX	VPS02412	STEERING CLAMPING 25T SERVO HORN - 20MM
IRC00302	V54-10 PHOENIX TITANIUM LINK SET	VPS00331	33T/8T UNDERDRIVE HYPOID GEAR SET
IRC00303	V54-10 F10 1/4 STAINLESS STEEL 10PC LINK KIT	VPS00600	F10 PORTAL FRONT AXLE SET
IRC00410	VFD 52T 32P SLIPPER SPUR GEAR	VPS00601	F10 PORTAL REAR AXLE SET
IRC00450	INCISION SERIES 1 LIGHT KIT	VPS10102	VXT2 1.9 TIRES
IRC00451	INCISION SERIES 2 LIGHT KIT	VPS10148	V54-10 VFD MACHINED MOTOR PLATE
IRC00500	S8E 80MM SHOCK SET	VPS10149	VFD LIGHT WEIGHT ALUMINUM MOTORPLATE
IRC00503	S8E 80MM SHOCK BODY	VPS10151	V54-10 VFD ALUMINUM TRANS POST
IRC00504	S8E 80MM SHOCK SHAFT	VPS10209	VFD SLIPPER LOCKOUT SET
IRC00510	S8E TINI 80MM SHOCK SHAFT	VPS10210	VFD TWIN MACHINED GEAR SET
IRC00511	S8E TINI 80MM SHOCK SHAFT	VPS07060	12MM HEX CLEAR ANODIZED
IRC00512	S8E 80MM SPRING SET	VPS07062	12MM HEX BLACK ANODIZED
IRC00513	S8E 80MM SPRING SET		

GEAR RATIO CHART

Axle Ratio: 3.75
Rear Ratio without spur/pinion: 16.5 / 11.80
Front Ratio Standard 6.5% OD without spur/pinion: 11.1
Front Ratio High 46% OD without spur/pinion: 7.4

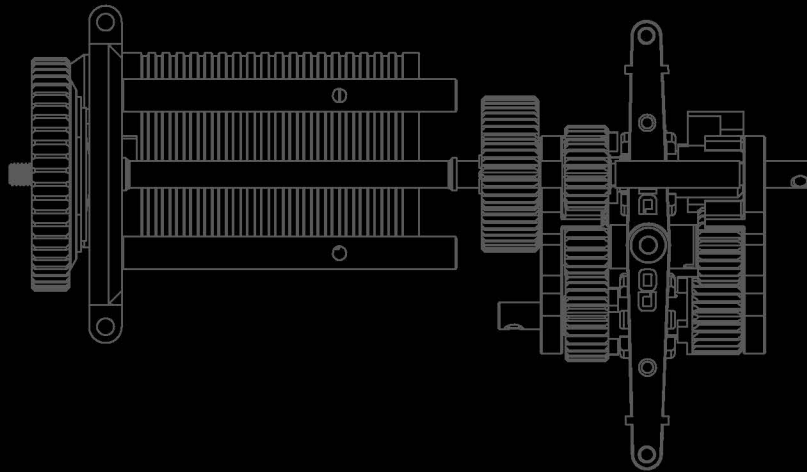
Note: Not all Spur and Pinion combinations are compatible

32P Front Standard OD 6.5% Output Drive Ratio					
	Spur Gear				
Pinion	48	50	52	54	56
11	48.3	50.3	52.3	54.3	56.3
12	44.2	46.1	47.9	49.8	51.6
13	40.8	42.5	44.2	45.9	47.6
14	37.9	39.5	41.1	42.7	44.2
15	35.4	36.9	38.3	39.8	41.3
16	33.2	34.6	35.9	37.3	38.7
17	31.2	32.5	33.8	35.1	36.4

32P Rear output Ratio					
	Spur Gear				
Pinion	48	50	52	54	56
11	51.5	53.6	55.8	57.9	60.1
12	47.2	49.1	51.1	53.1	55.0
13	43.6	45.4	47.2	49.0	50.8
14	40.4	42.1	43.8	45.5	47.2
15	37.7	39.3	40.9	42.5	44.0
16	35.4	36.9	38.3	39.8	41.3
17	33.3	34.7	36.1	37.5	38.9

32P Front High OD 33% output Ratio					
	Spur Gear				
Pinion	48	50	52	54	56
11	32.2	33.5	34.9	36.2	37.5
12	29.5	30.7	31.9	33.2	34.4
13	27.2	28.4	29.5	30.6	31.8
14	25.3	26.3	27.4	28.4	29.5
15	23.6	24.6	25.6	26.5	27.5
16	22.1	23.0	24.0	24.9	25.8
17	20.8	21.7	22.6	23.4	24.3

NOTE: //



DESIGNED IN CALIFORNIA 

Vanquish Products • 5710 Roseville Rd Sacramento CA 95842 • Parts Manufactured in Taiwan

www.vanquishproducts.com