

VANQUISH
PRODUCTS



V54-10 PHOENIX PORTAL

**1:10 SCALE HIGH PERFORMANCE
4 WHEEL DRIVE OFFROAD VEHICLE KIT**



INSTRUCTION MANUAL

■ THANK YOU

Thank you for selecting this Vanquish Products vehicle kit. This kit is designed to be fun to drive and uses top quality parts for durability and performance. The instruction manual you are reading was designed to be easy to follow yet thorough in its explanations.

If you come across any problems or need some help getting through a step, please contact us through our website www.VanquishProducts.com.

This is a high performance R/C kit, and it requires regular maintenance for best performance.

If you don't do regular maintenance the performance will suffer.

Vanquish Products has all the necessary parts and accessories available to keep your kit performing at its best. Please read and understand the instructions carefully before proceeding.

BEFORE RUNNING

- Please read manual (with parent, guardian or a responsible adult if necessary).
- Make sure that all screws and nuts are properly tightened.
- Always use fresh batteries for your transmitter and receiver to avoid losing control of the model.
- Please confirm the neutral throttle trigger position.

WHILE OPERATING

- Please do not run on a public street, this could cause serious accidents, personal injuries and/or property damage.
- Please do not run near pedestrians or small children.
- Please do not run in small or confined areas.

AFTER OPERATING

- Turn OFF receiver first, then turn OFF transmitter. This will prevent the car from losing control.
- After running a Vanquish Products vehicle, it is necessary to perform routine maintenance.
Failure to do this can result in increased wear and damage to the vehicle.

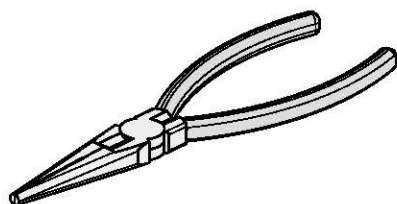
BATTERY SAFETY

- Please be careful when handling the battery. It will be hot after running. If the wire is frayed, a short circuit can cause a fire.
- Please read all instructions and warnings provided by your battery manufacturer for more safety information.

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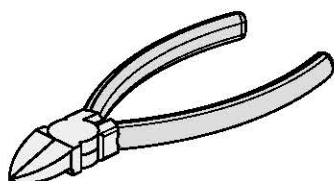
■ NECESSARY FOR MAINTENANCE



NEEDLE NOSE PLIERS
(NOT INCLUDED)



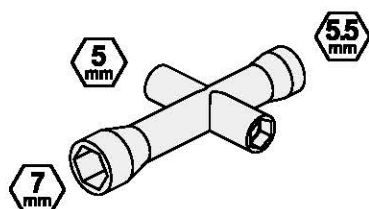
GREASE
(INCLUDED)



SIDE CUTTERS
(NOT INCLUDED)



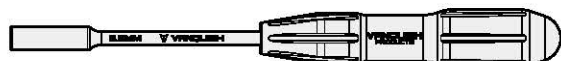
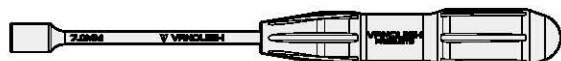
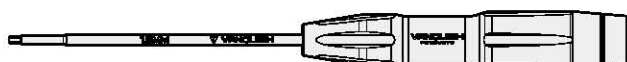
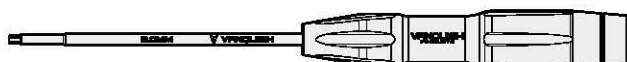
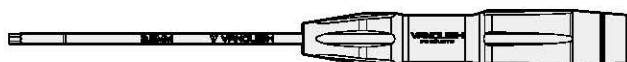
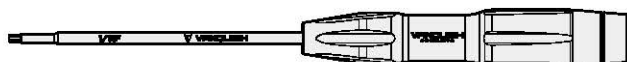
THREAD LOCK
(INCLUDED)



CROSS WRENCH
(INCLUDED)



8MM HEX ADAPTER
(INCLUDED)

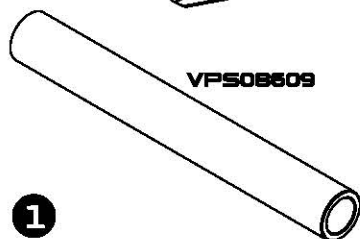
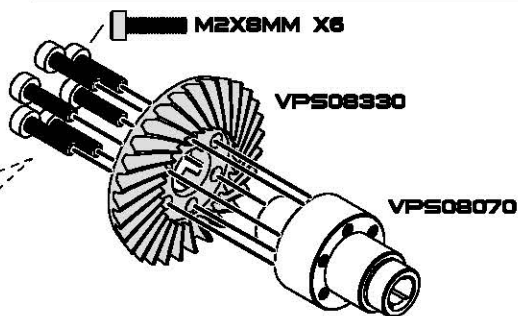


SUGGESTED TOOLS (NOT INCLUDED):

VP508410 STANDARD TOOL SET

VP508400 METRIC TOOL SET

VP508440 METRIC NUT DRIVER TOOL SET



**INSERT LONG SIDE BRASS
TUBE INTO AXLE HOUSING**



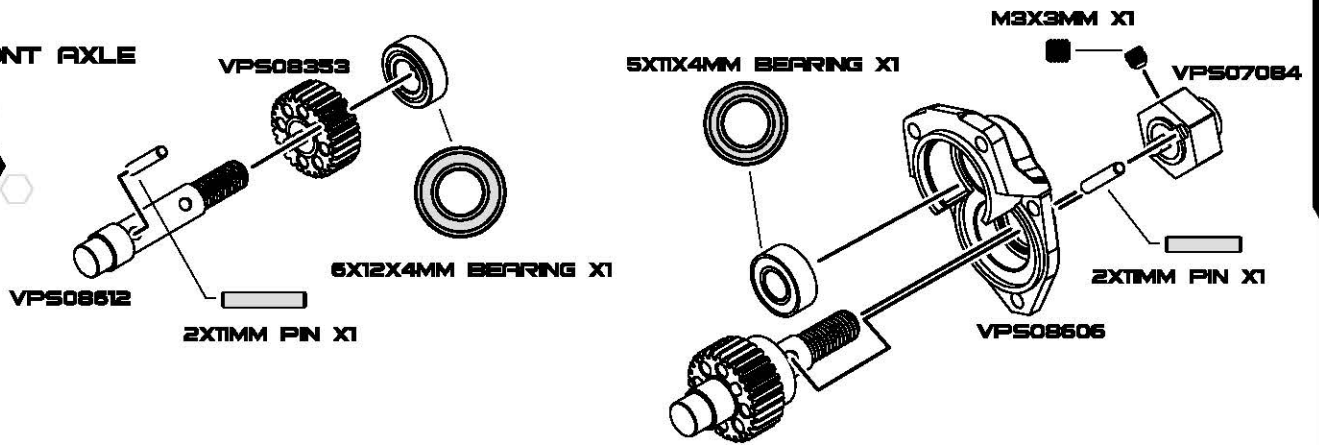
INSERT SHORT SIDE BRASS TUBE INTO AXLE HOUSING



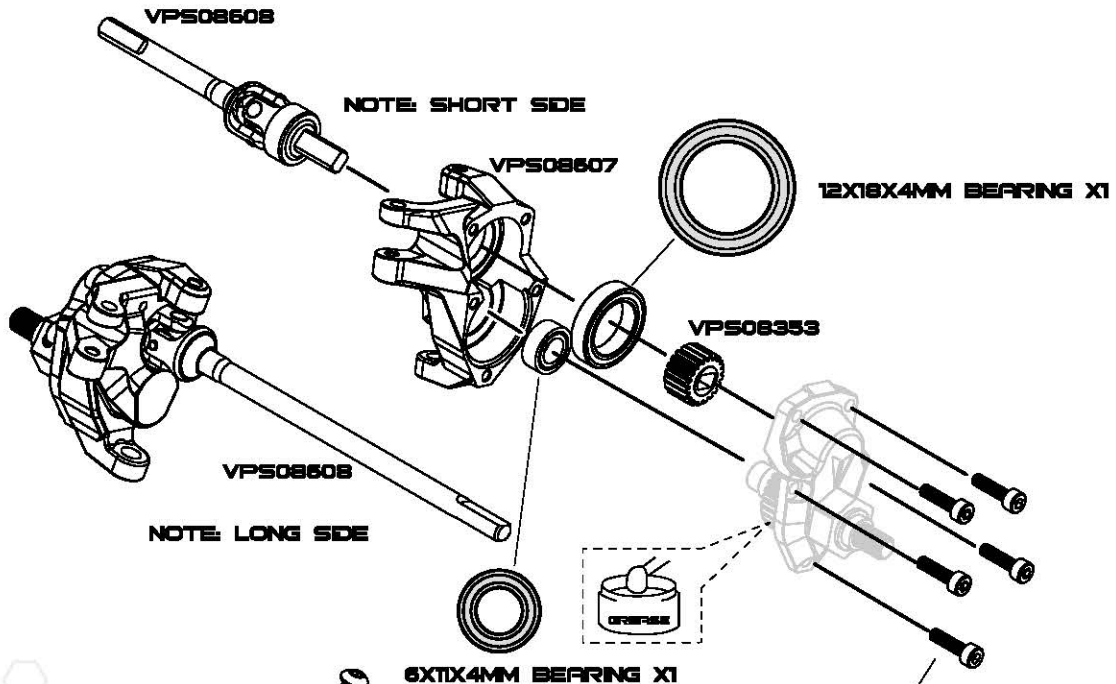
BAG A

FRONT AXLE

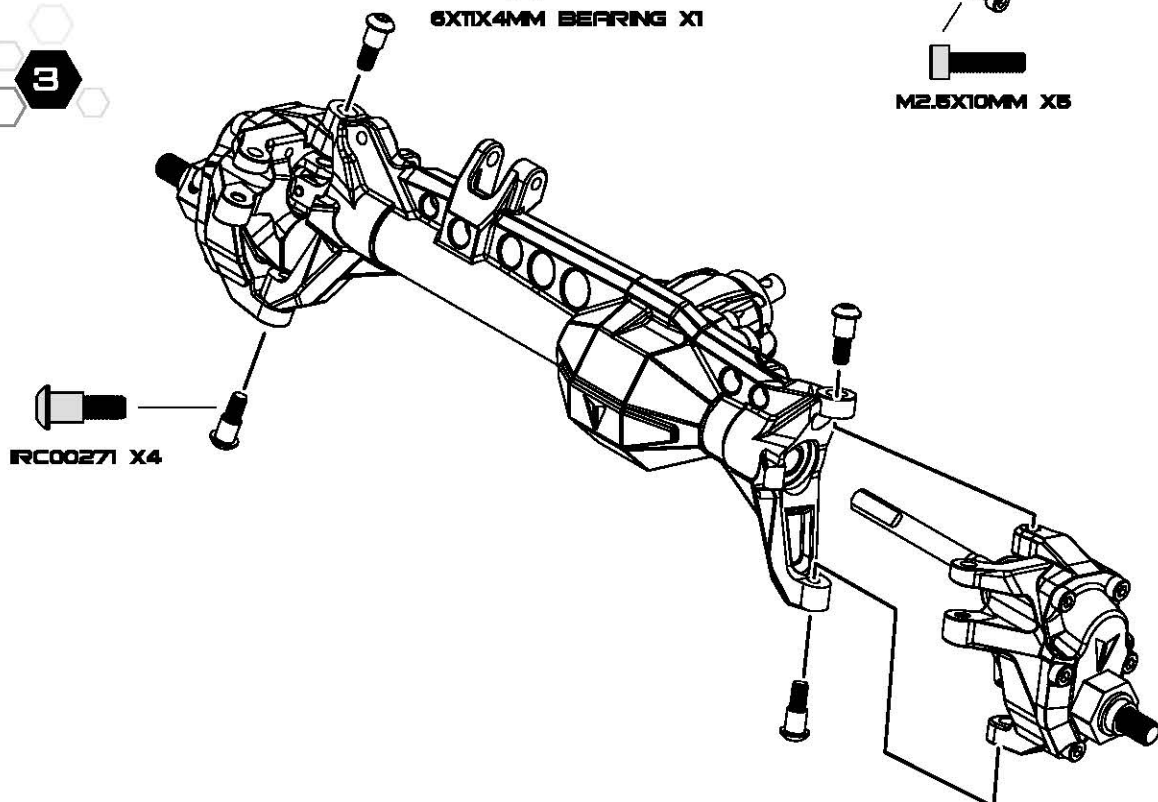
1



2



3

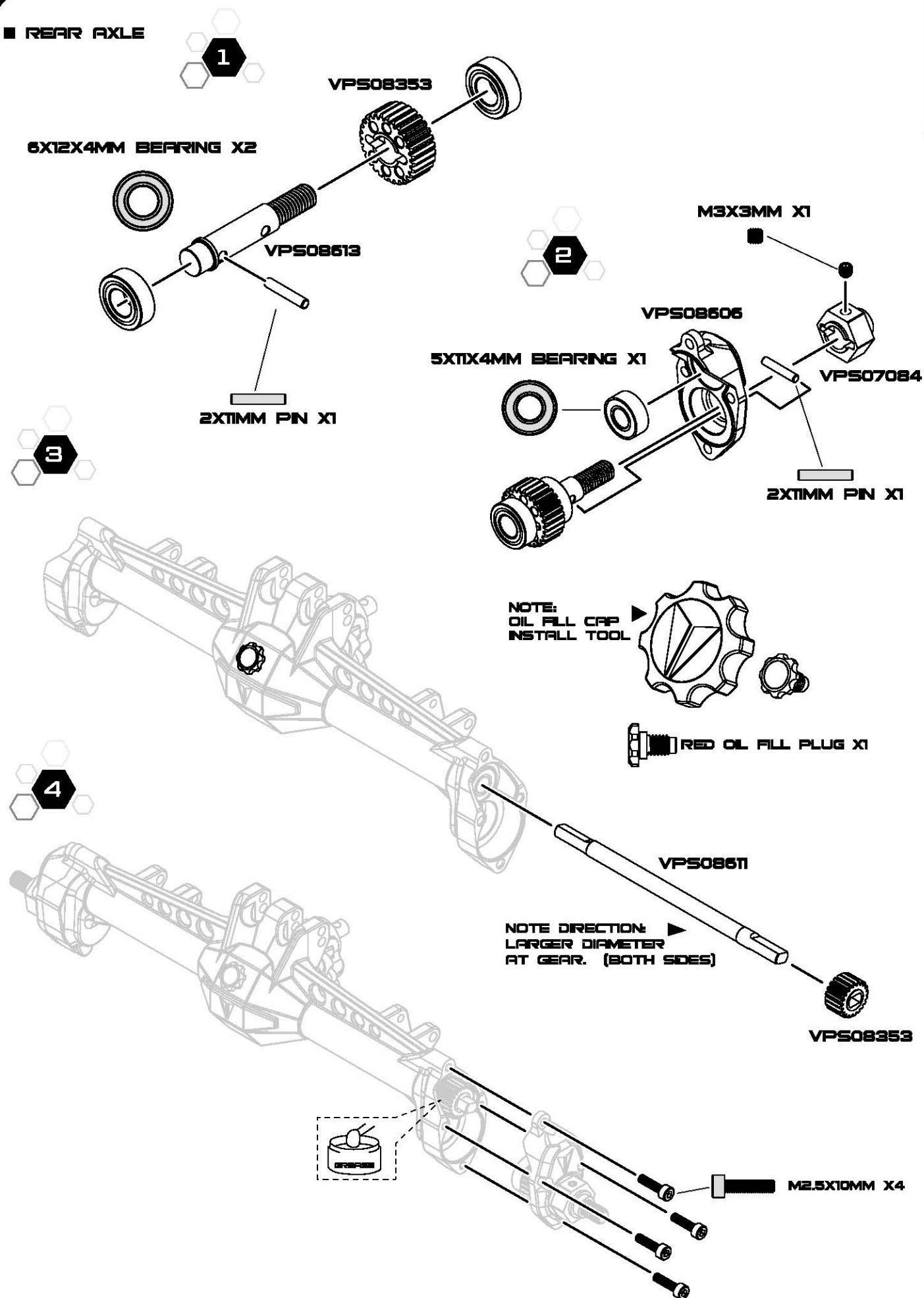


■ OPEN BAG B



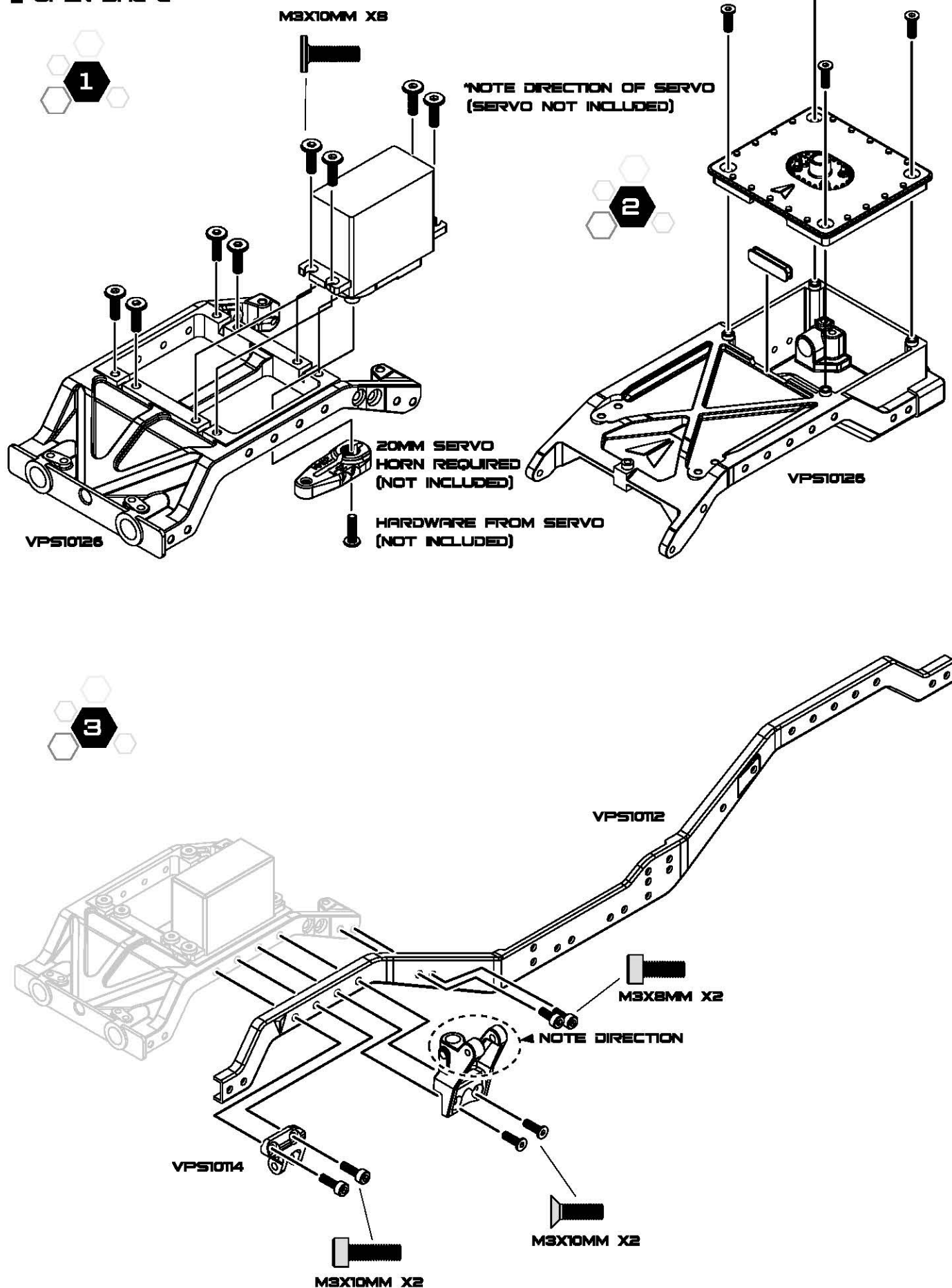
BAG B

■ REAR AXLE



BAG C

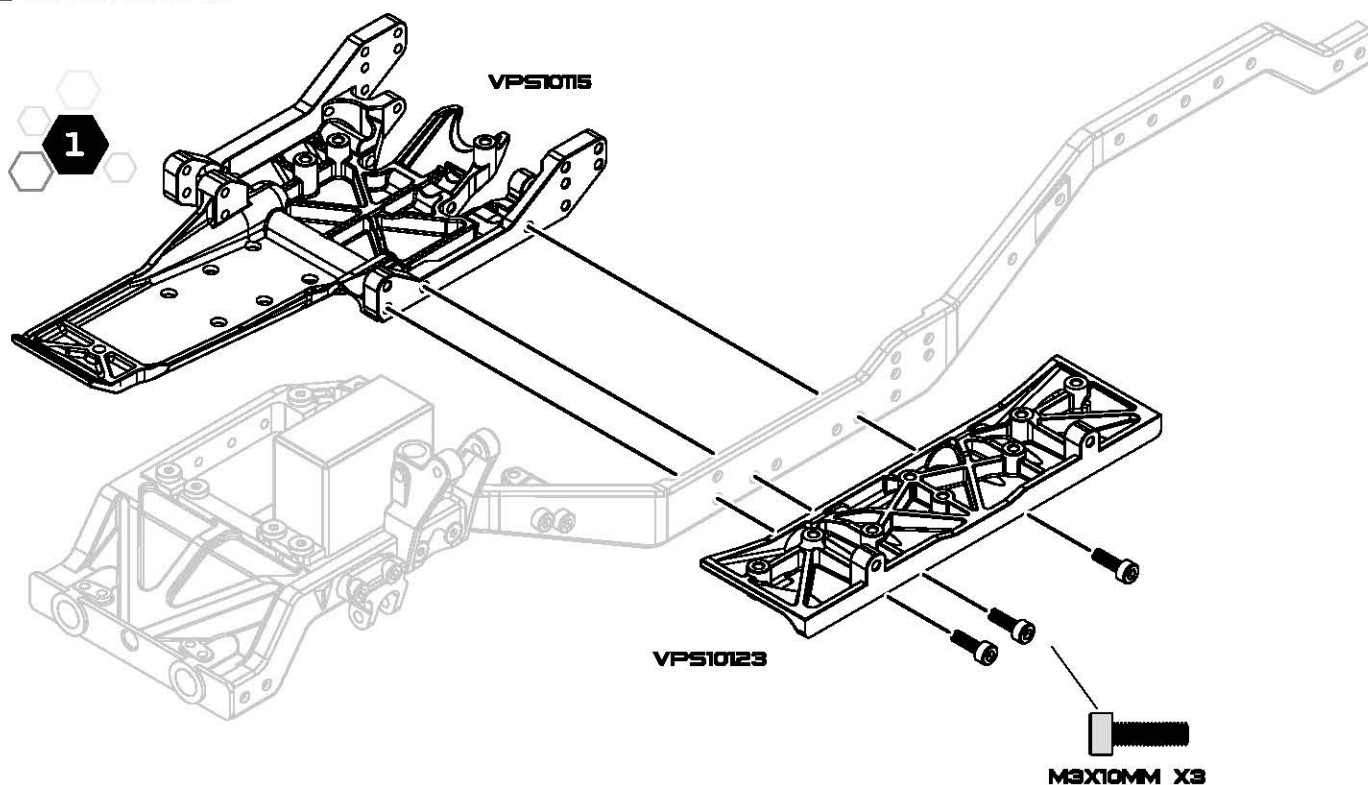
CHASSIS OPEN BAG C



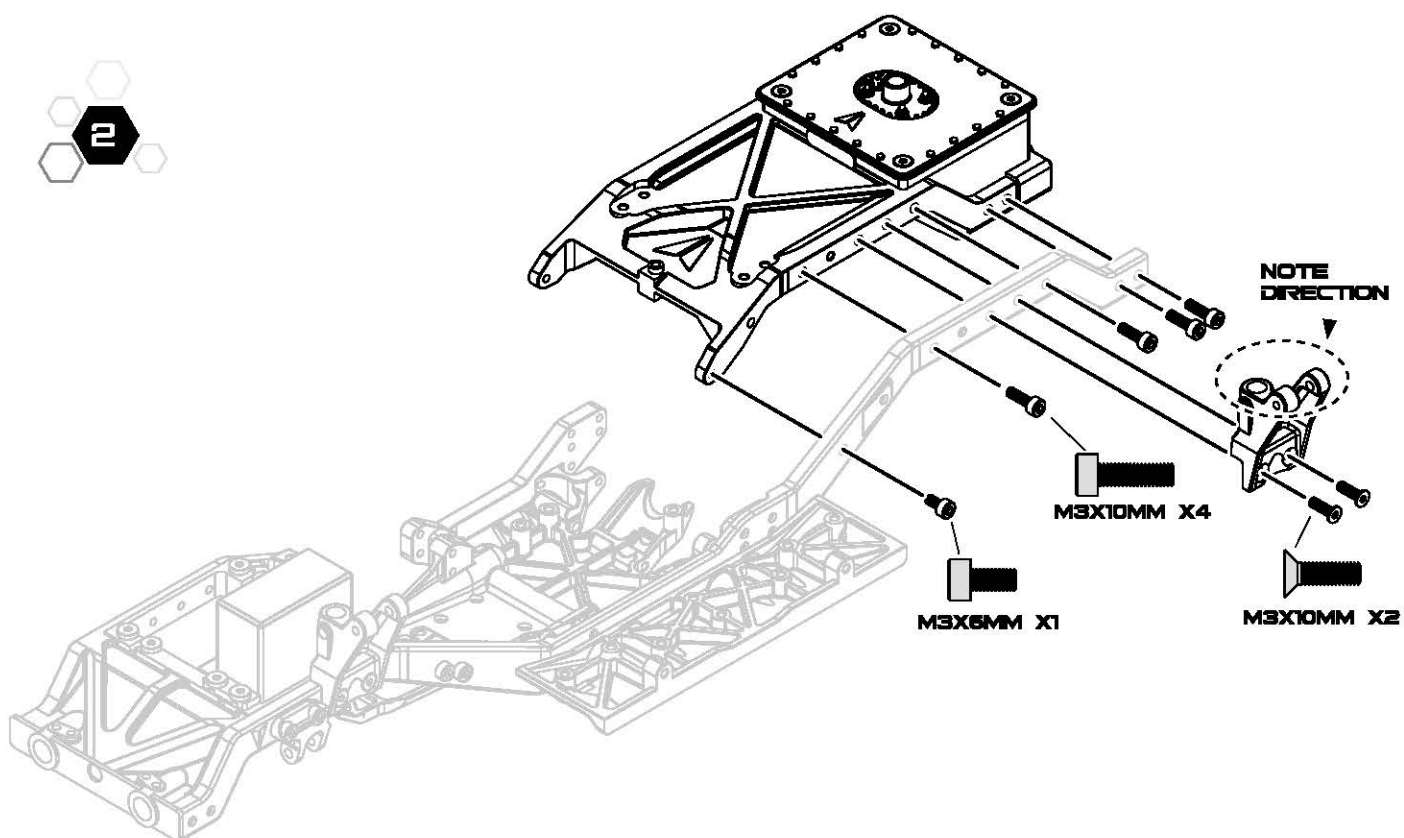
BAG C

CHASSIS OPEN BAG C

1

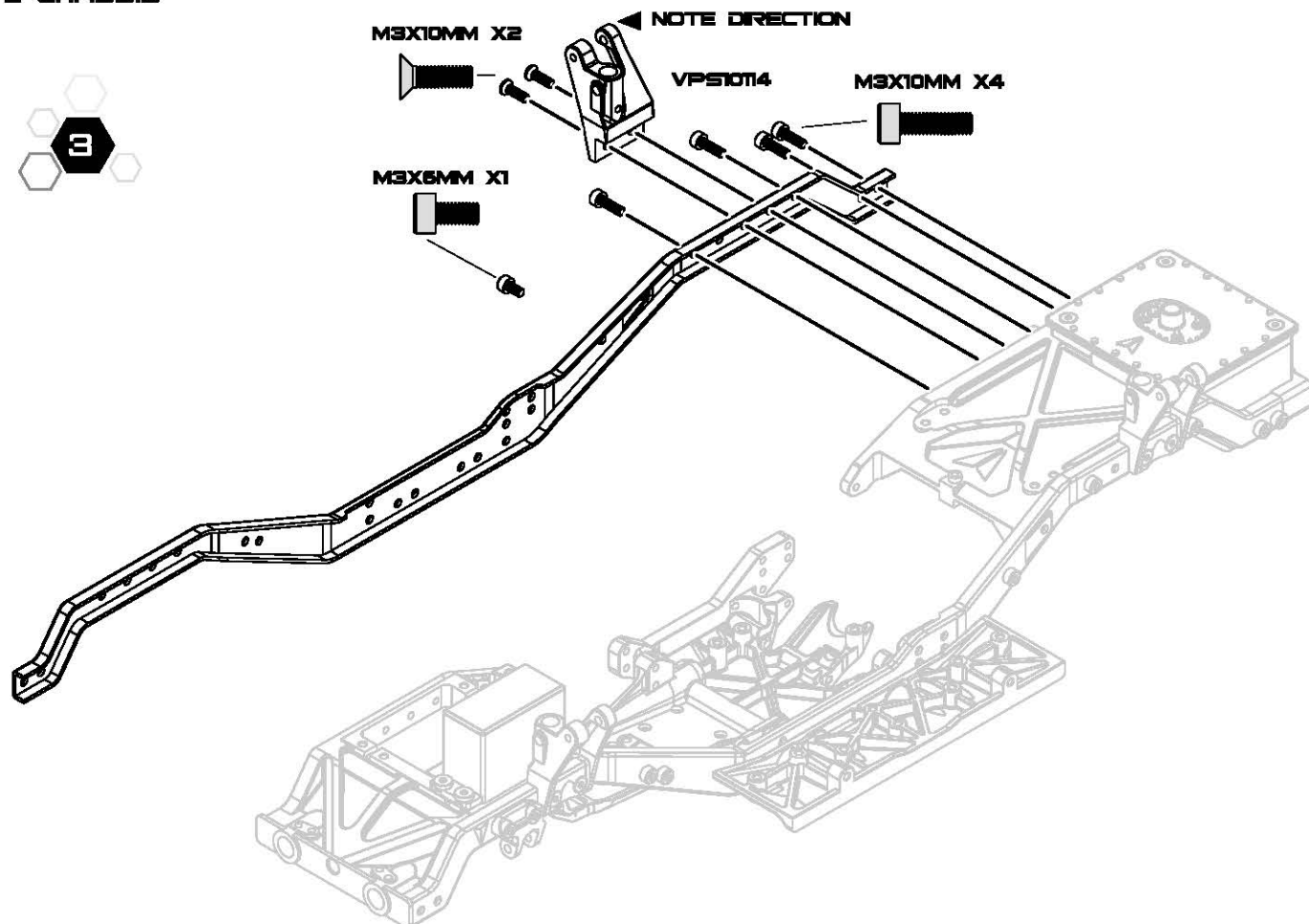


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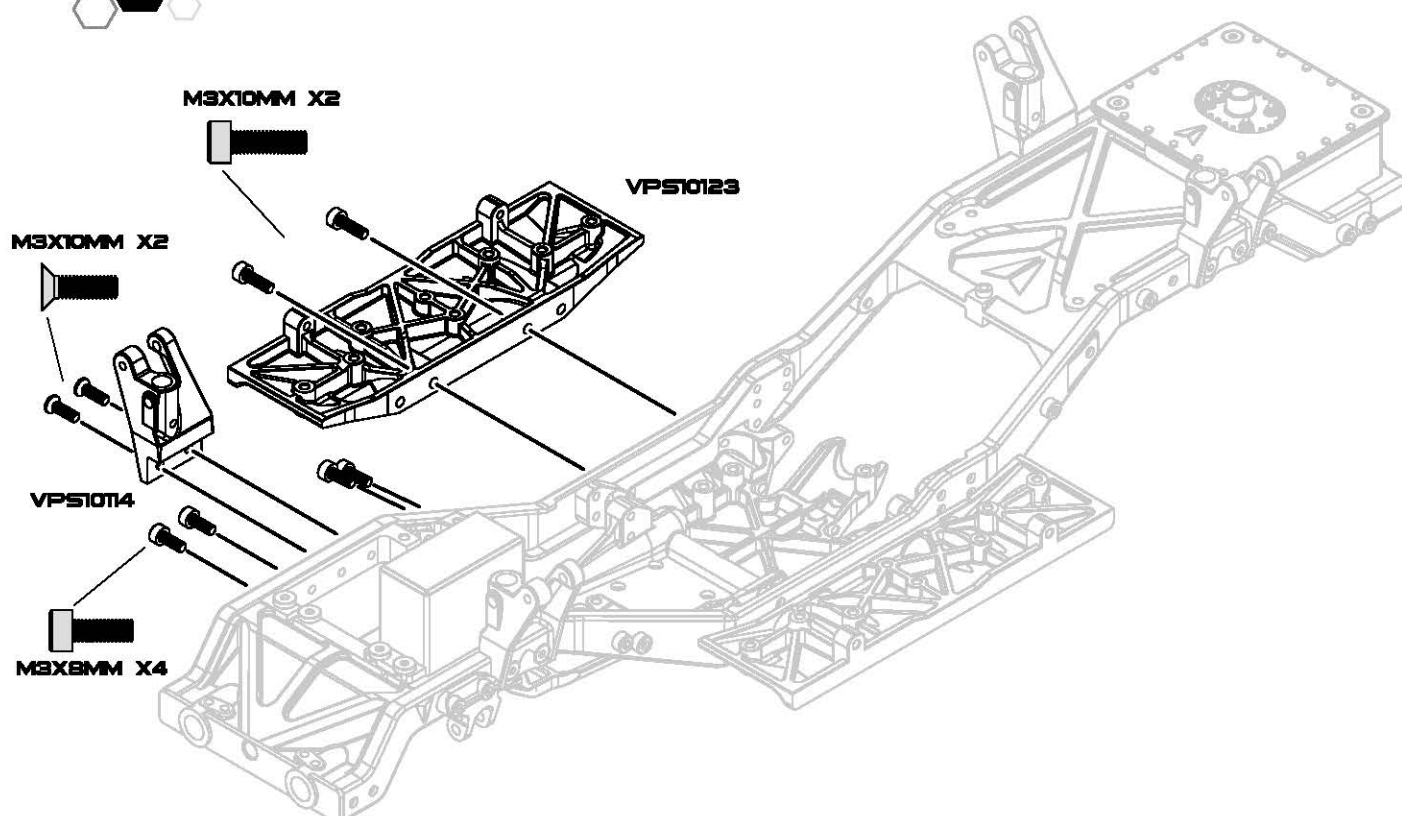


■ CHASSIS

3



4

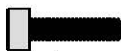


BAG D

■ OPEN BAG D



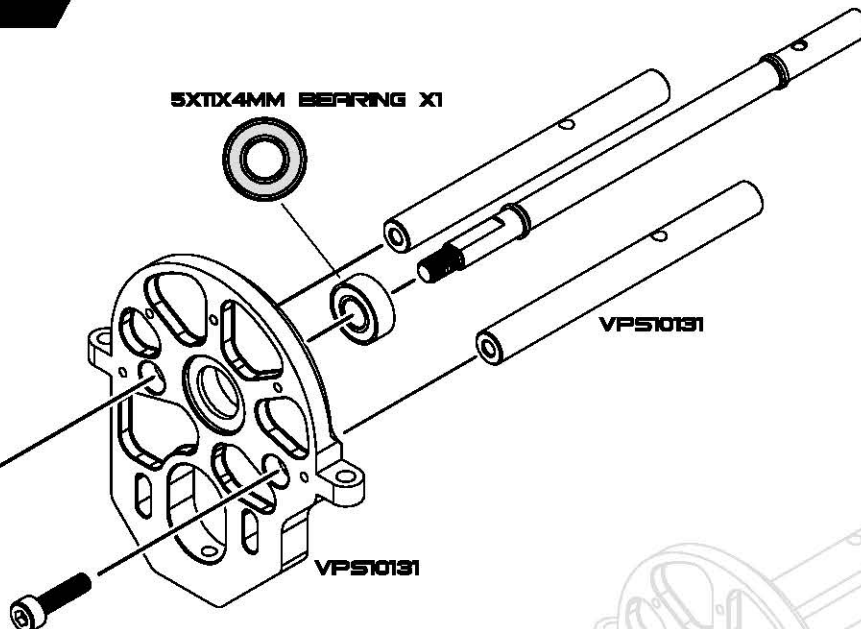
M3X12MM X2



5X10X4MM BEARING X1



VP510208



VP510131

VP510131



PU WASHER X1

M4 NYLOCK NUT X1



5X9X3MM BEARING X1



VP510208

IRC00412

IRC00410
52T SPUR GEAR X1

VP510208

IRC00412

SLIPPER TENSION

USING THE INCLUDED CROSS WRENCH,
TIGHTEN THE M4 NUT
AND THEN BACK OFF
1/2 TURN.

**TORQUE
SPEC**

**60
OZ-IN**

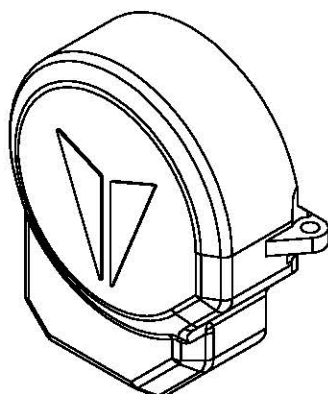
M3X10MM X2



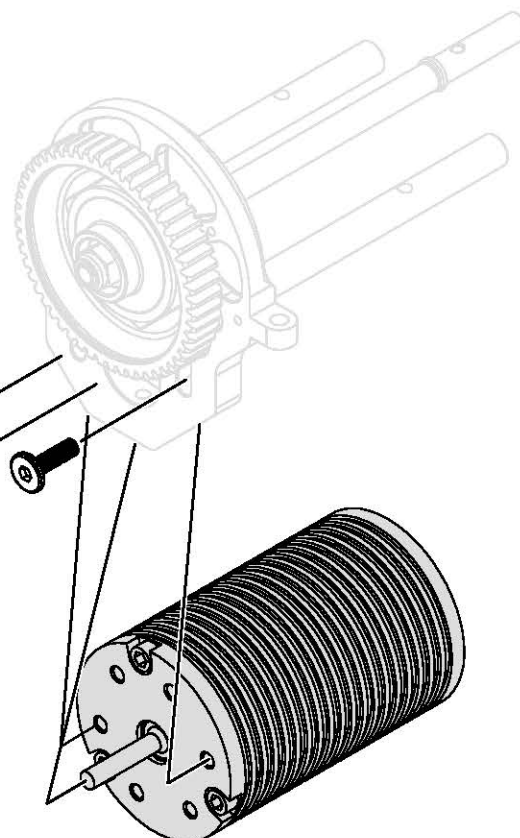
M4X4MM X1



IRC00263

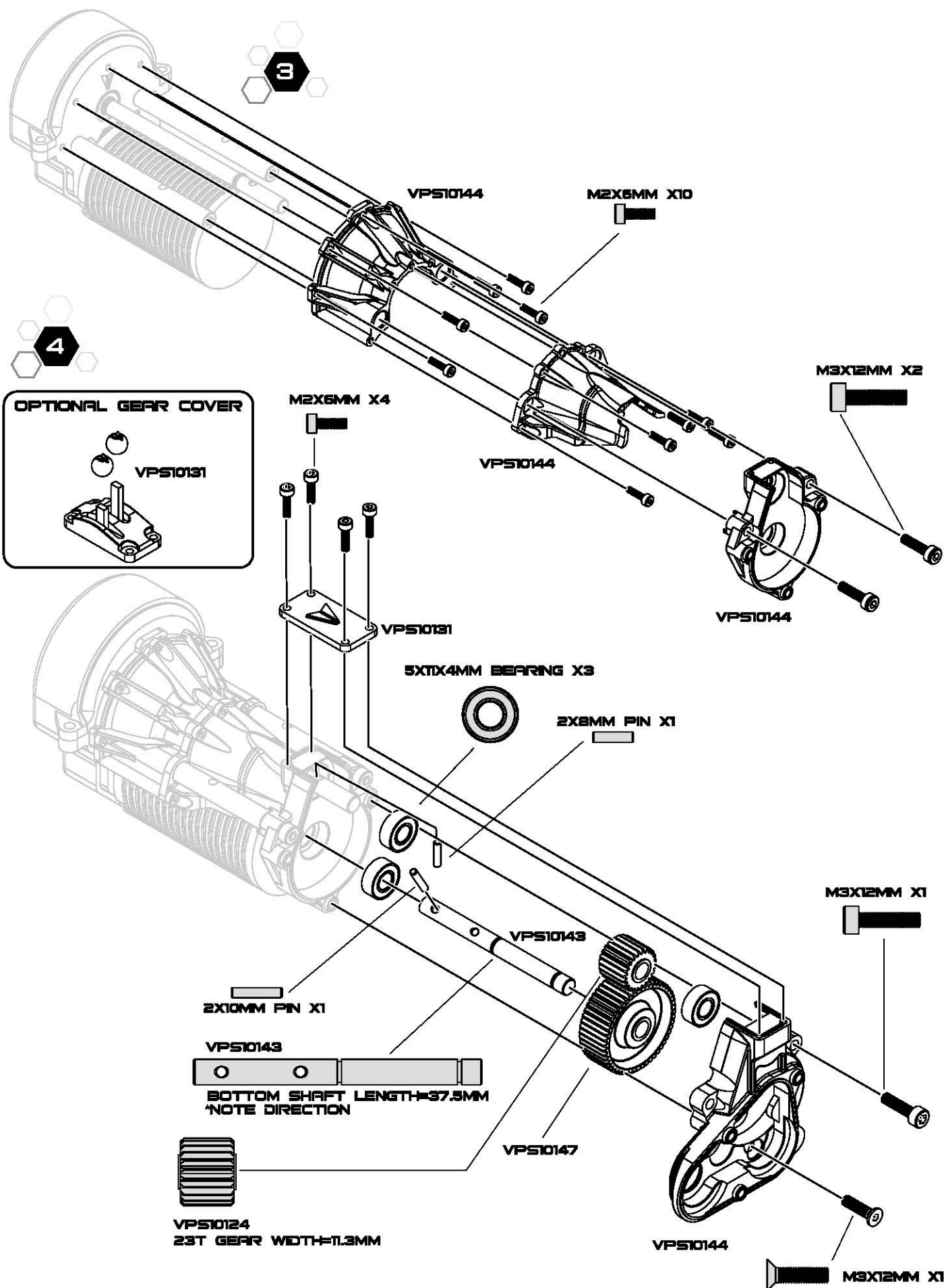


VP510144



BAG D

■ TRANSMISSION



E

11/11/2019

5XTX4MM
BEARING X4

E5 CLIP X1

VPS10124 6
23T GEAR
WIDTH=8.8MM

VPS10204
20T DLER
GEAR X1

**5X7X0.2
WASHER**

**5XTIX4MM
BEARING**



VP510204
32T DRIVE
GEAR X1

**5X7X0.2
WASHER**

**5X9X3MM
BEARING**

VP510205

VP510205

**5XTIX4MM
BEARING**

VP510204
30T DRIVE
GEAR X1

**5X9X3MM
BEARING**

VP510206

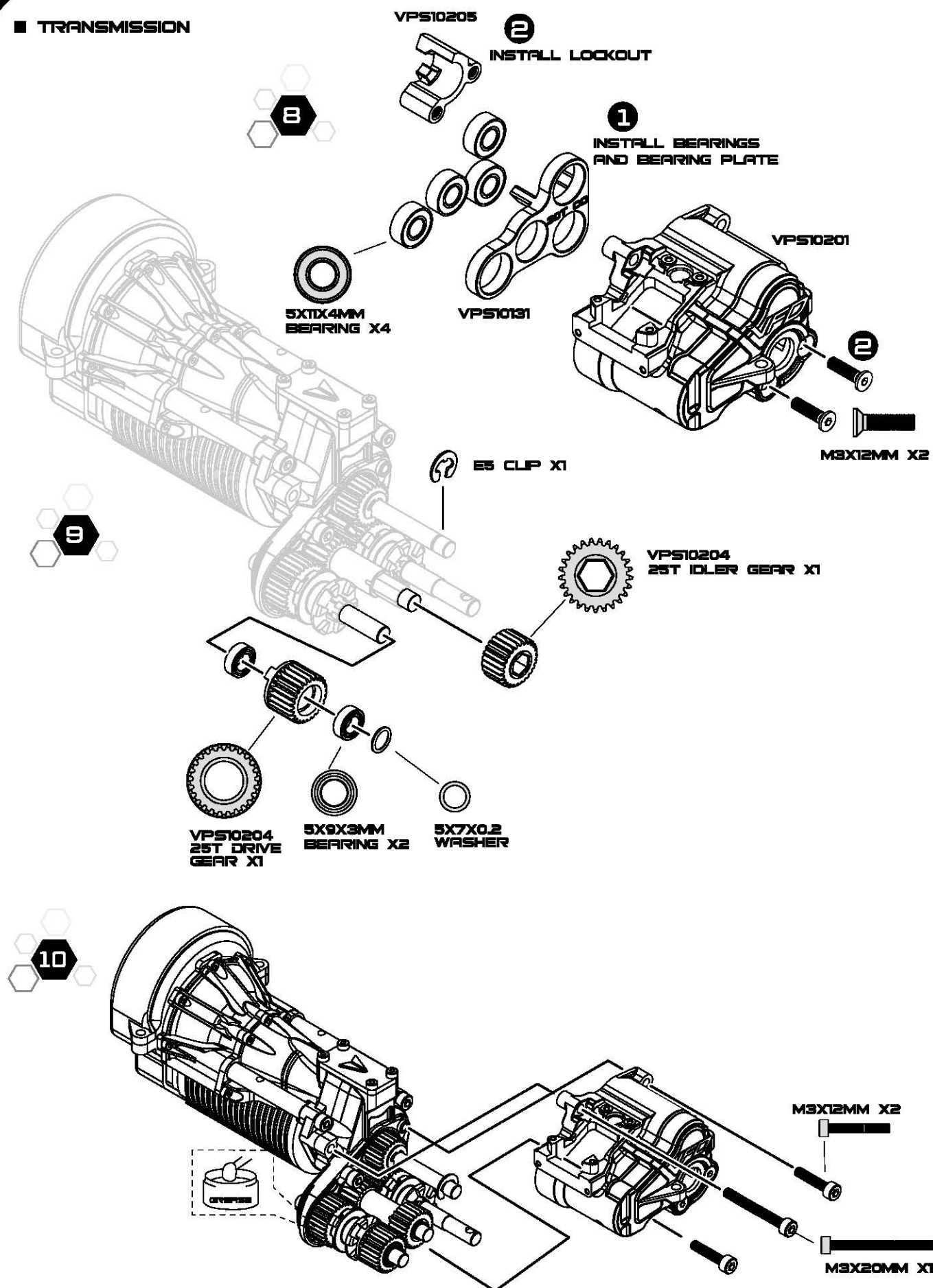
VPST0201

VP510206

VP510205

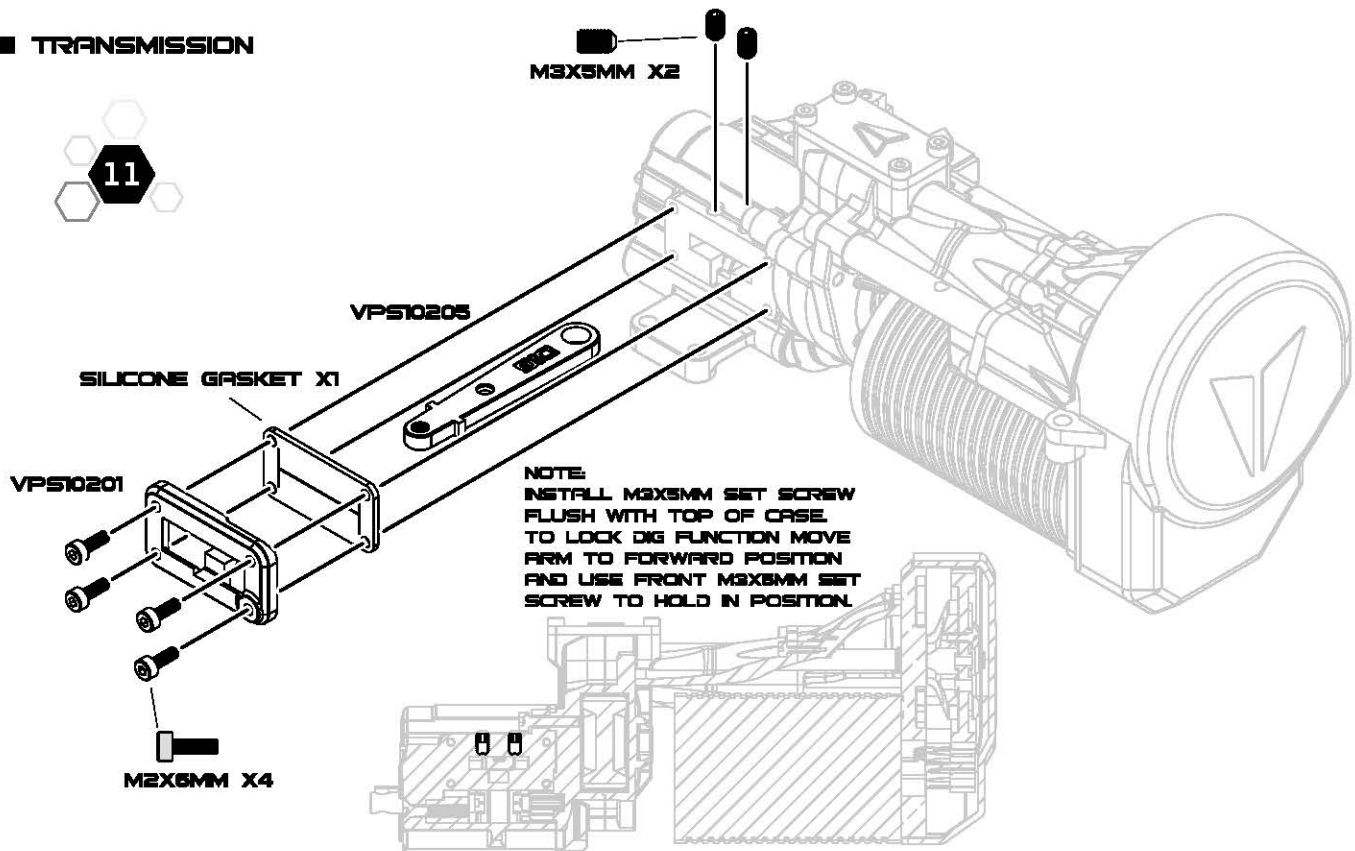
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■ TRANSMISSION



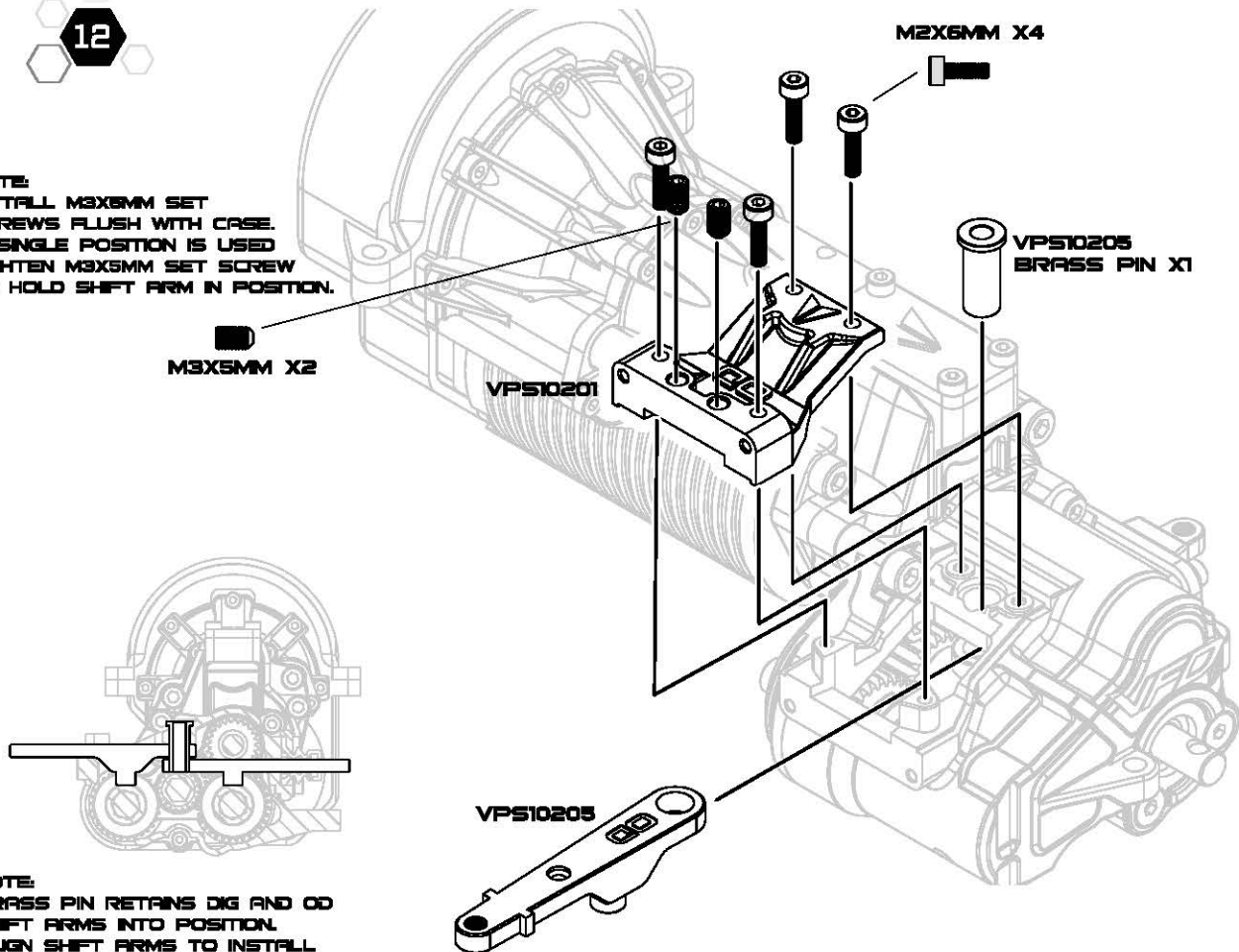
TRANSMISSION

11



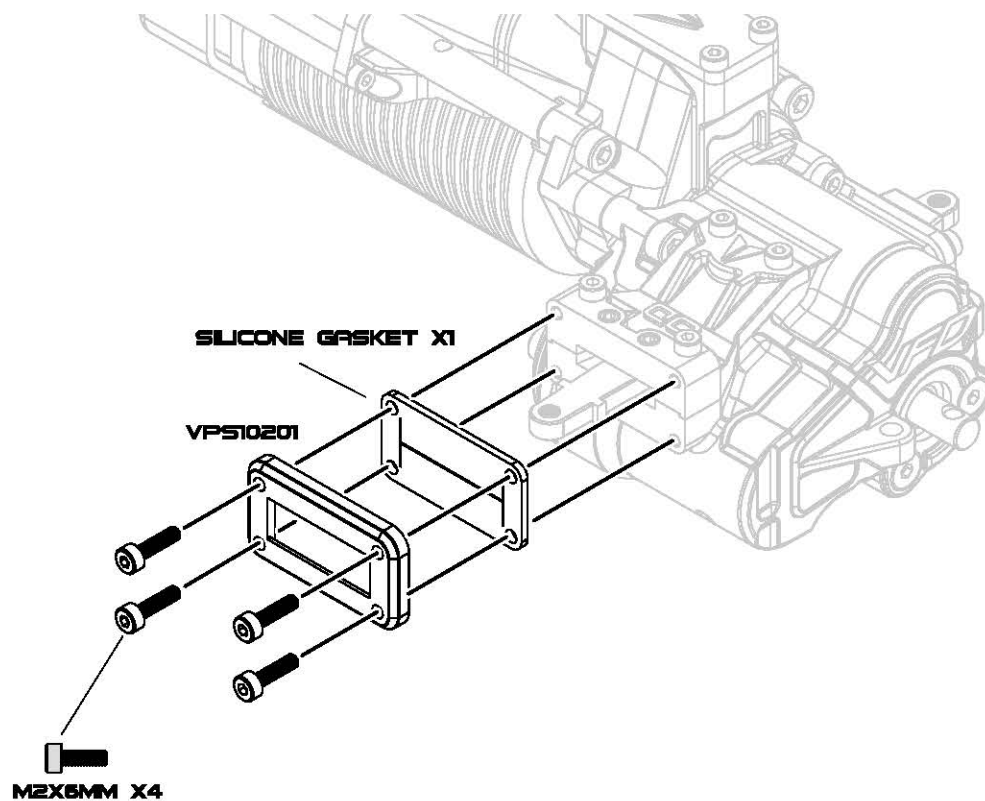
12

NOTE:
INSTALL M3X6MM SET
SCREWS FLUSH WITH CASE.
IF SINGLE POSITION IS USED
TIGHTEN M3X5MM SET SCREW
TO HOLD SHIFT ARM IN POSITION.

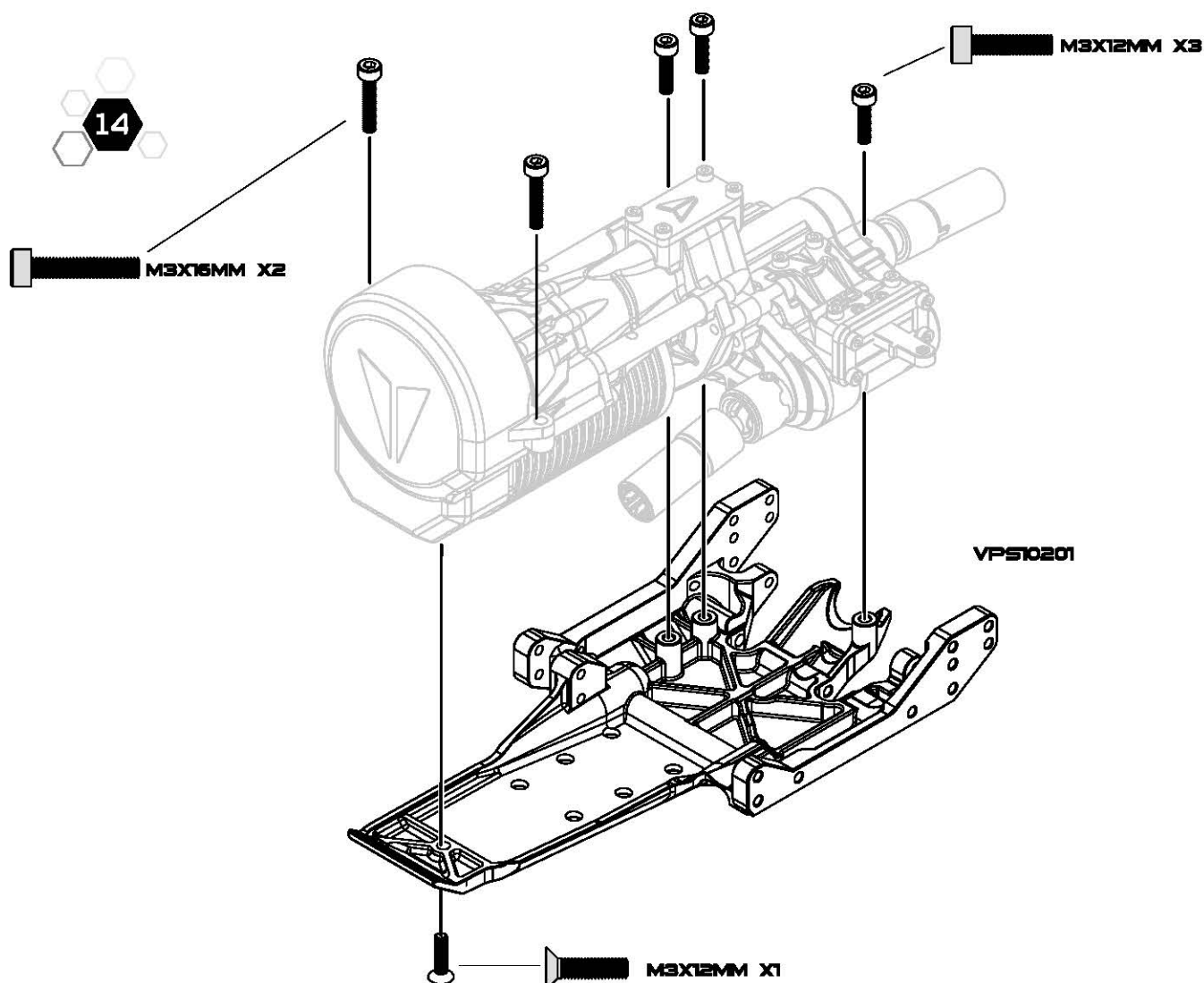


■ TRANSMISSION

13

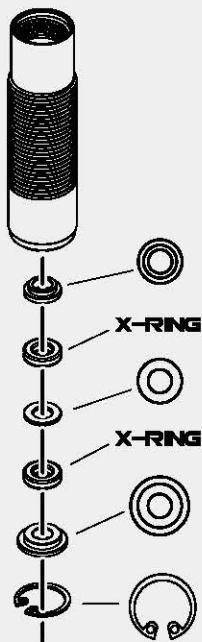


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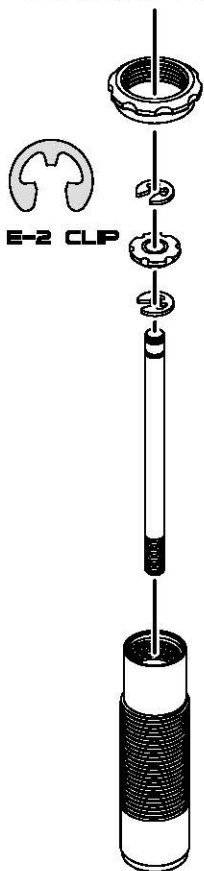
SHOCKS OPEN BAG E

ASSEMBLY STEP 1

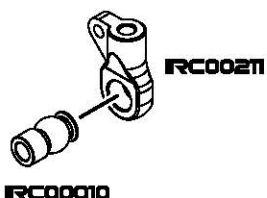


PRE-ASSEMBLED

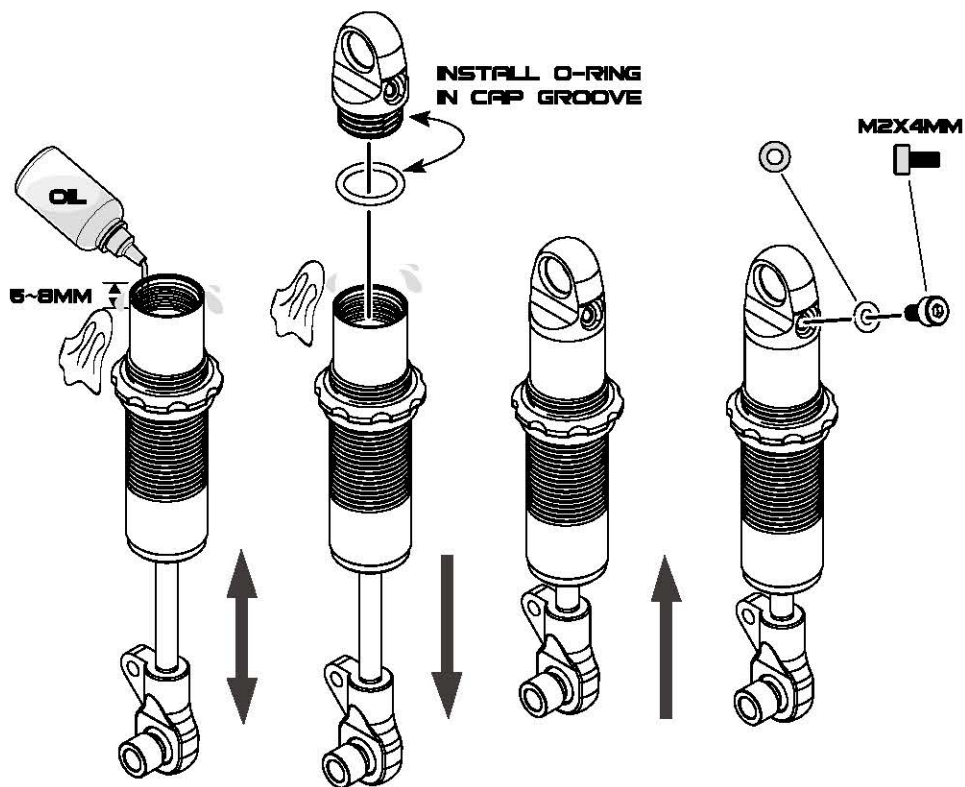
ASSEMBLY STEP 2



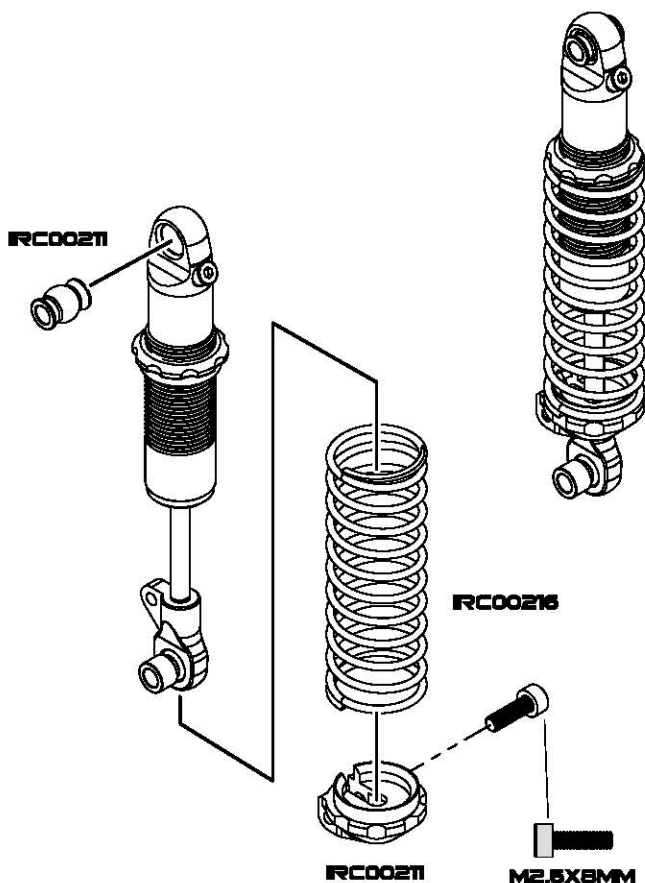
E-2 CLIP



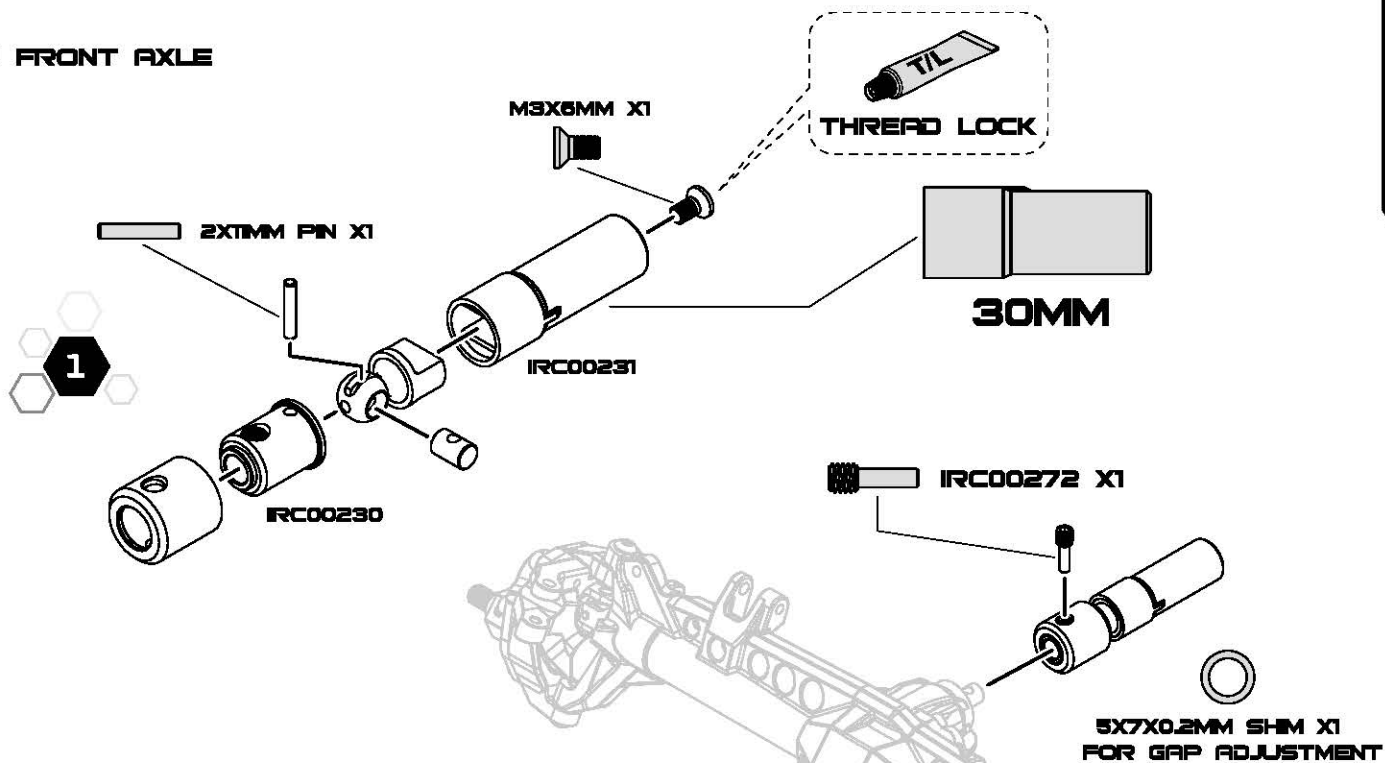
RC00010



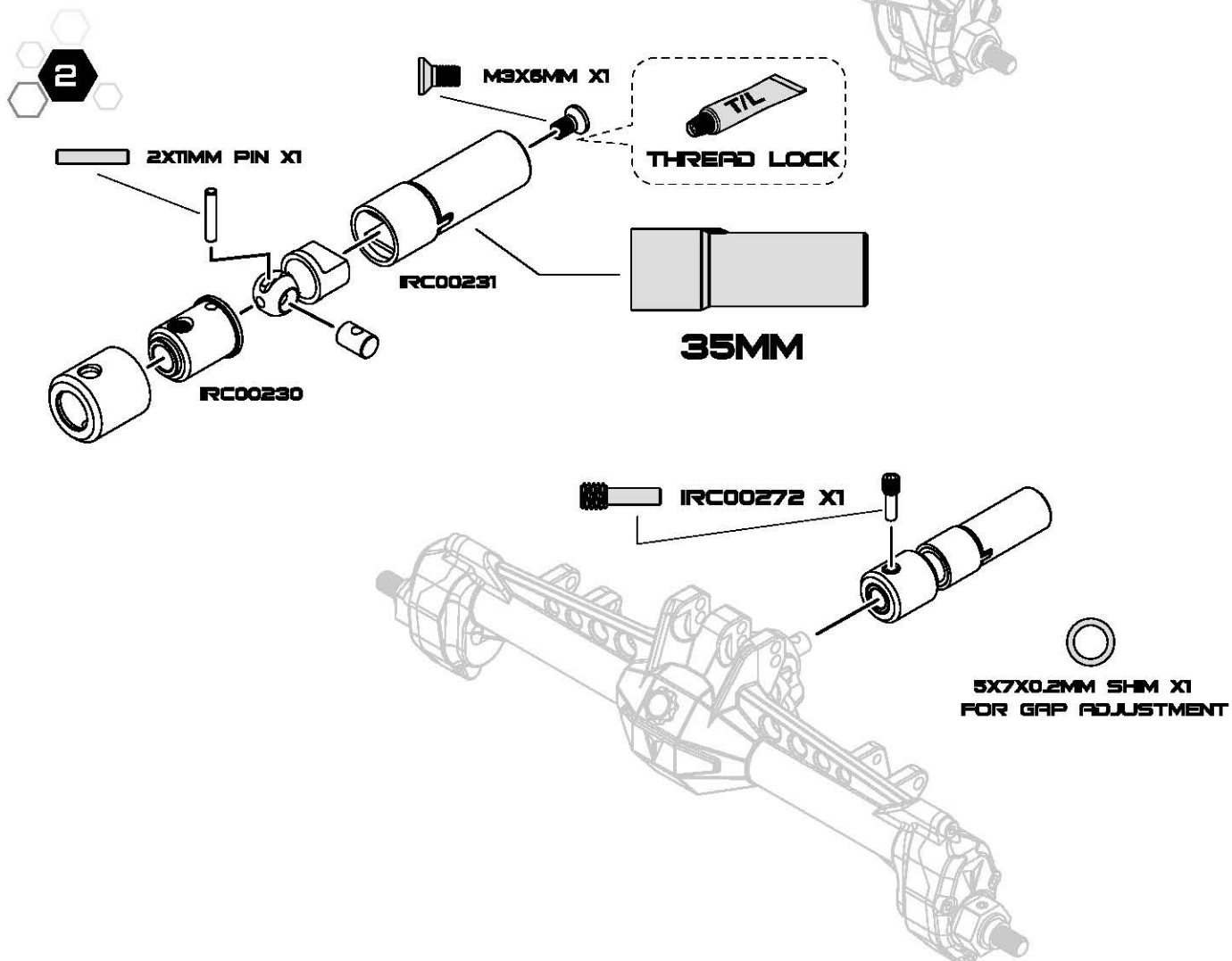
NOTE:
SEE PAGE 37 FOR ALL S8E SHOCK
SPARE PARTS AND OPTION PARTS.



FRONT AXLE

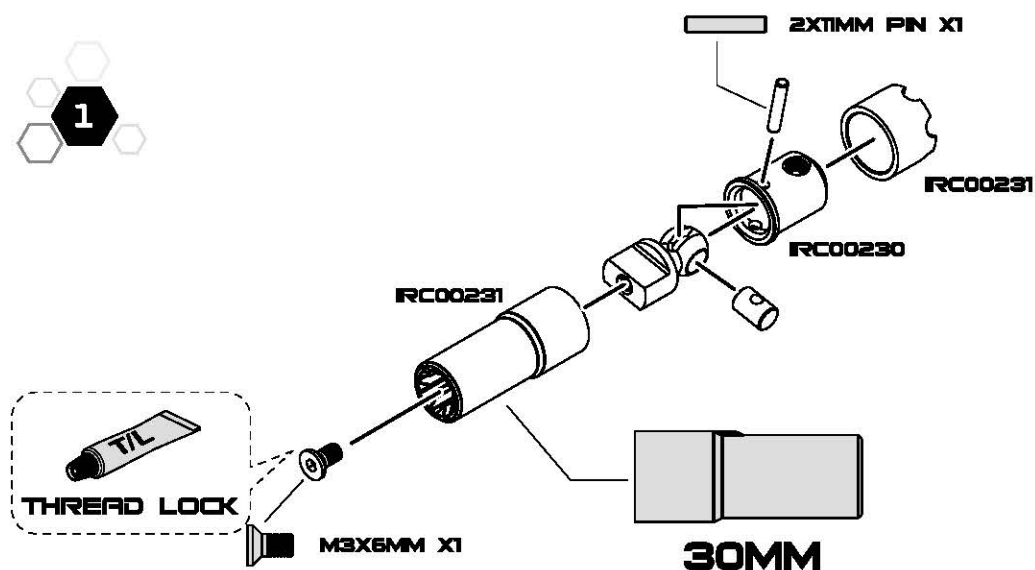


REAR AXLE



FRONT

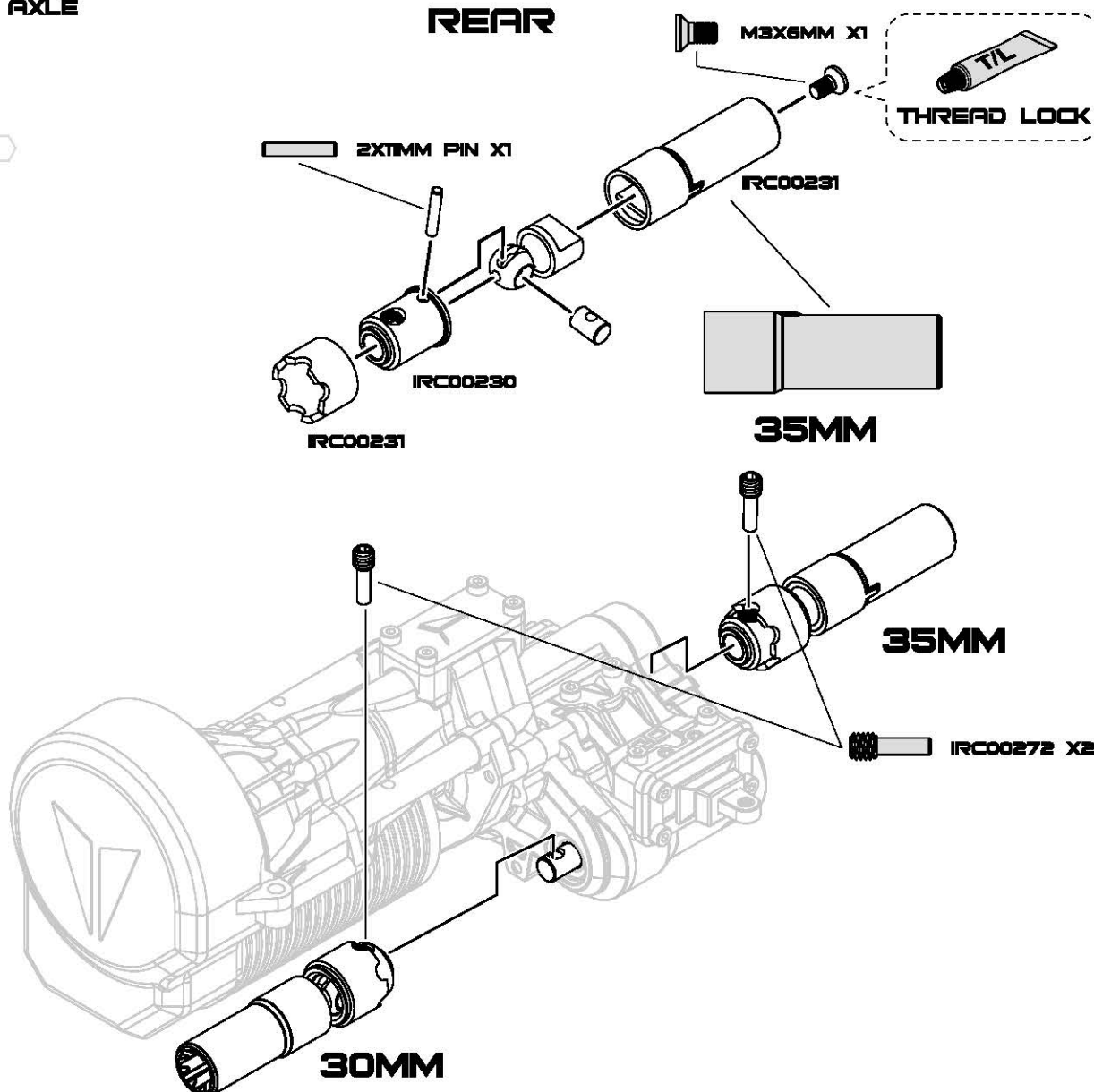
FRONT AXLE



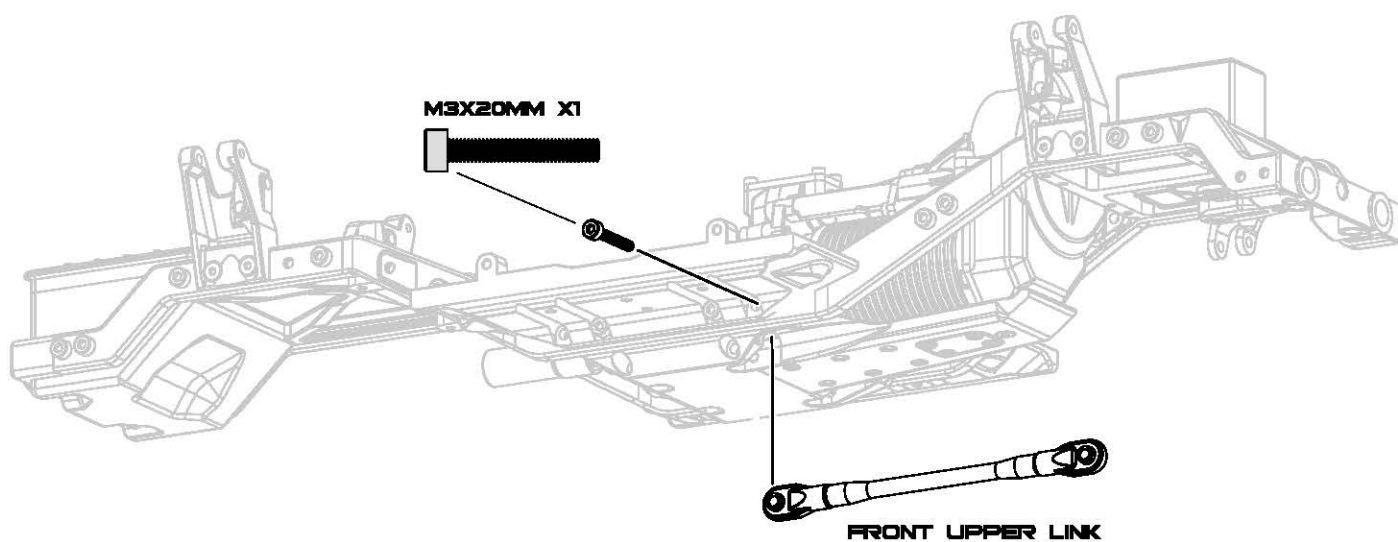
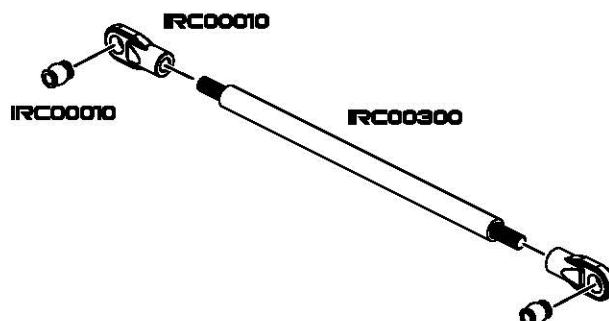
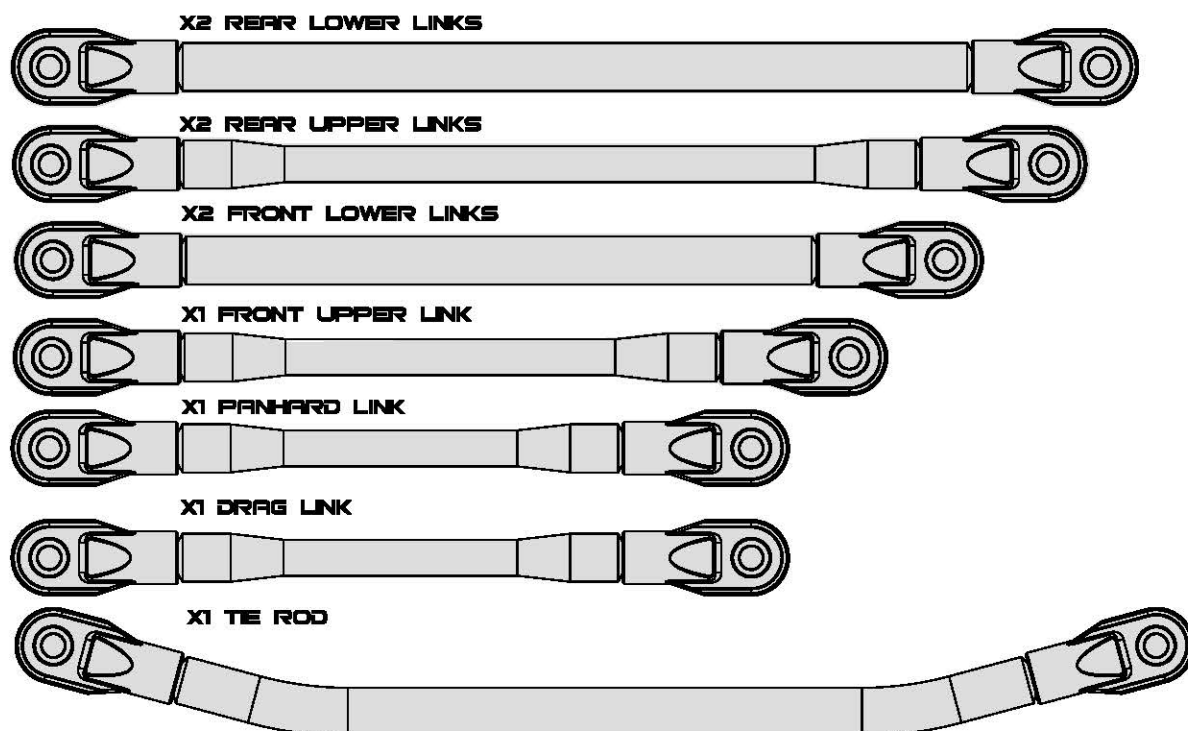
REAR AXLE



REAR



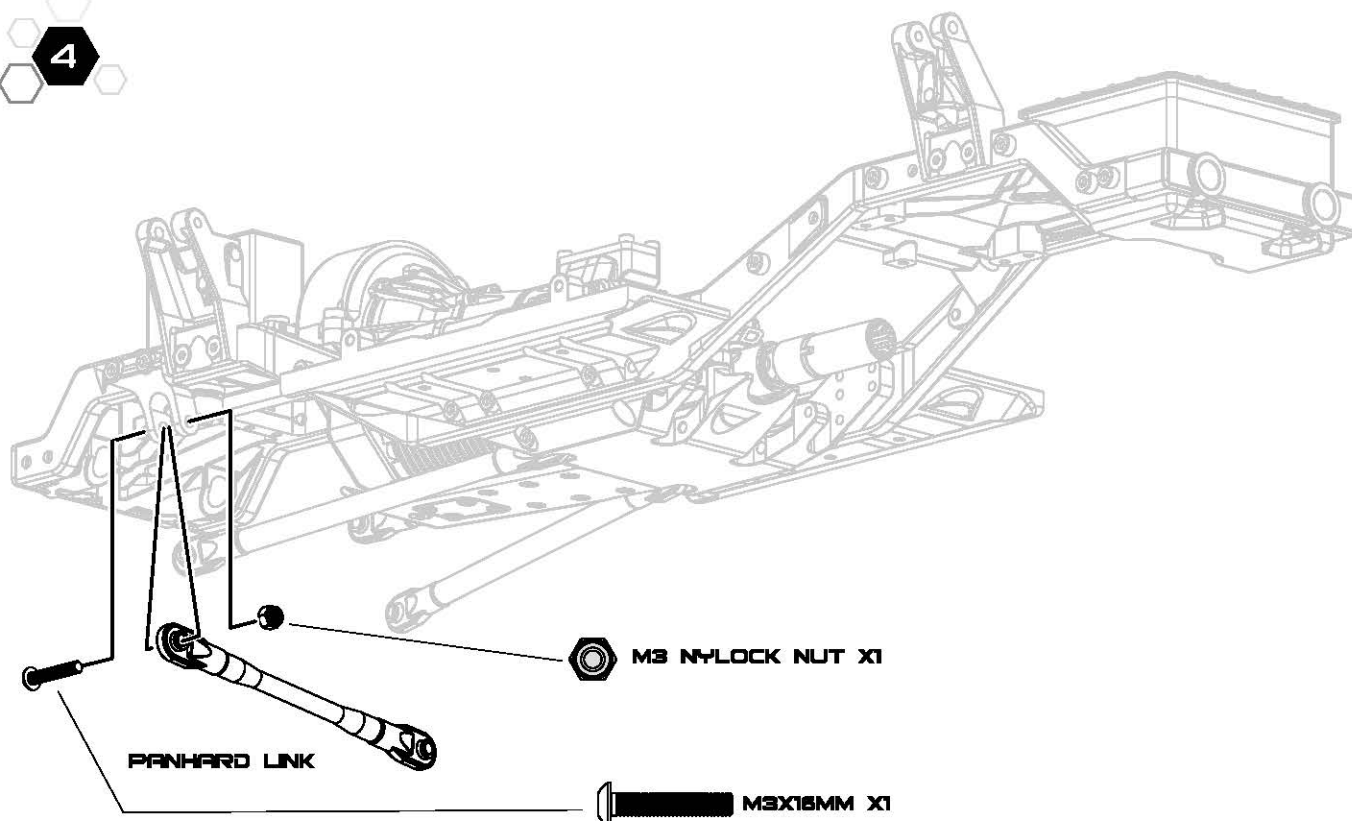
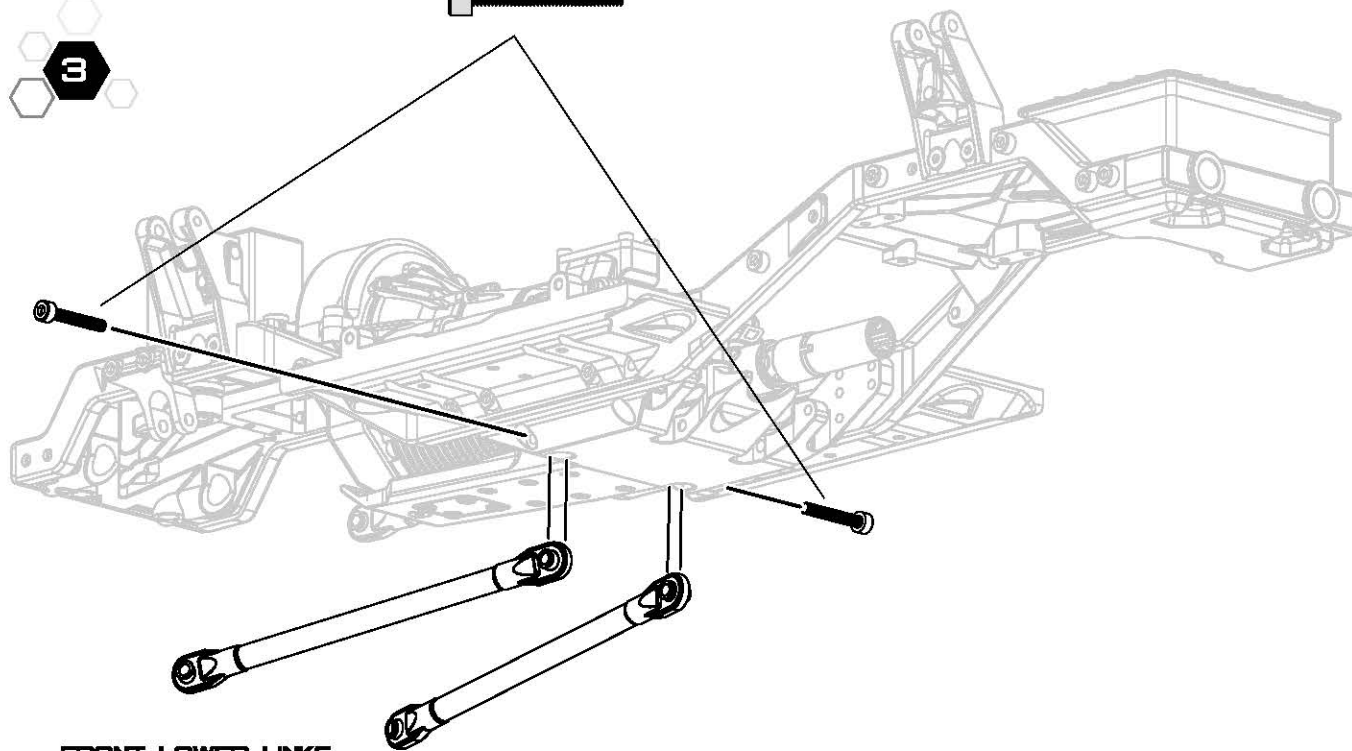
■ OPEN BAG G



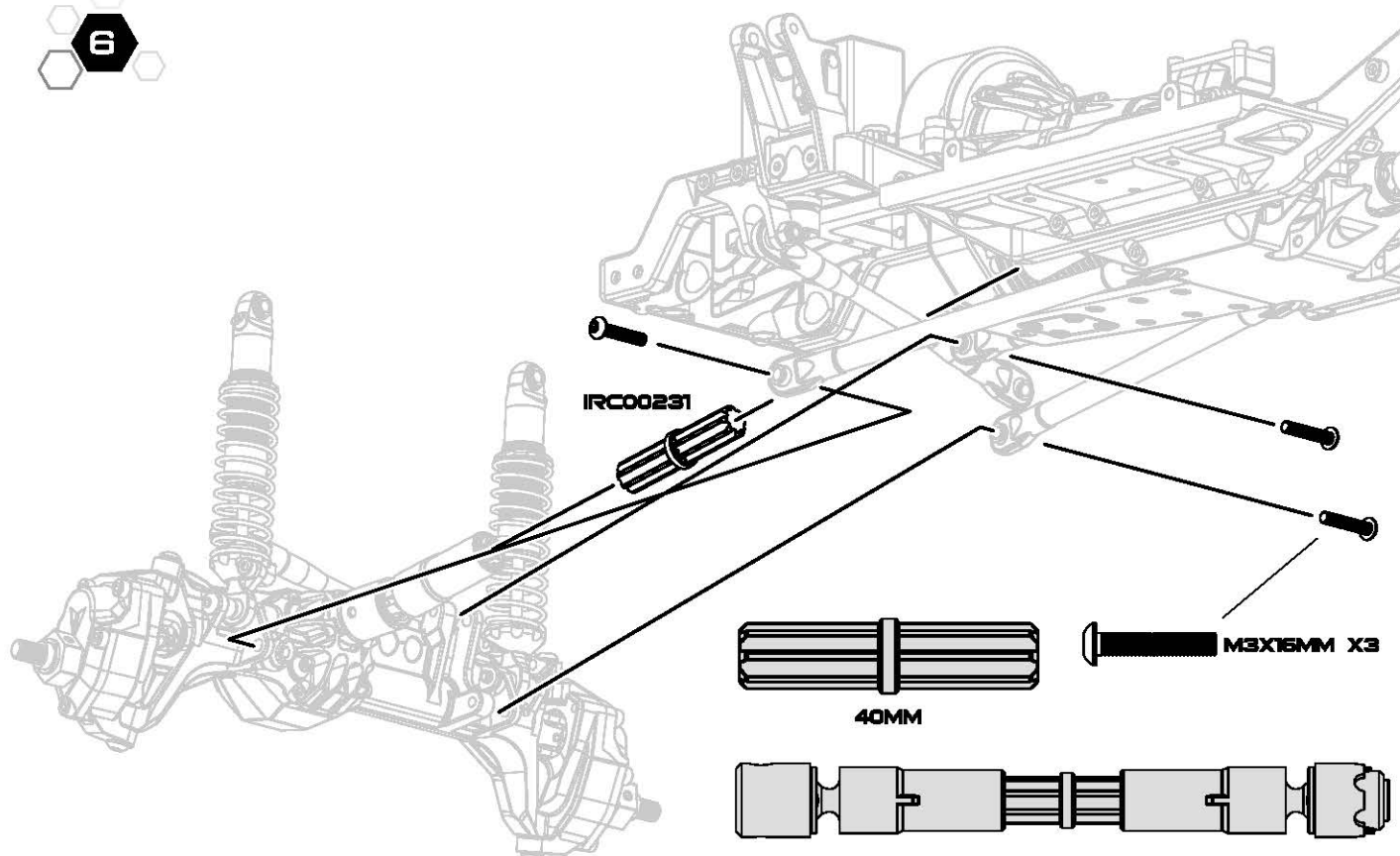
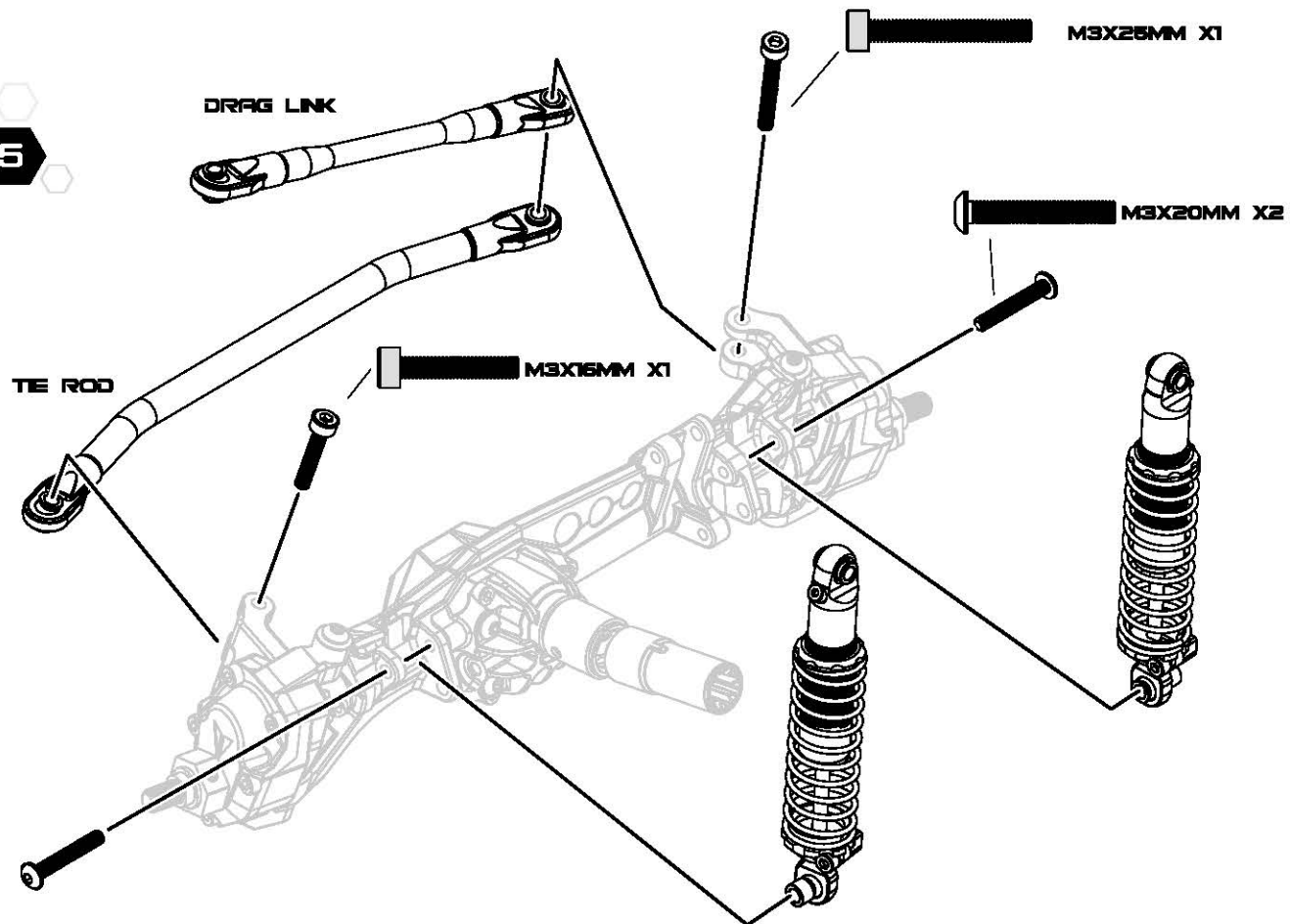
■ LINKS



M3X20MM X2

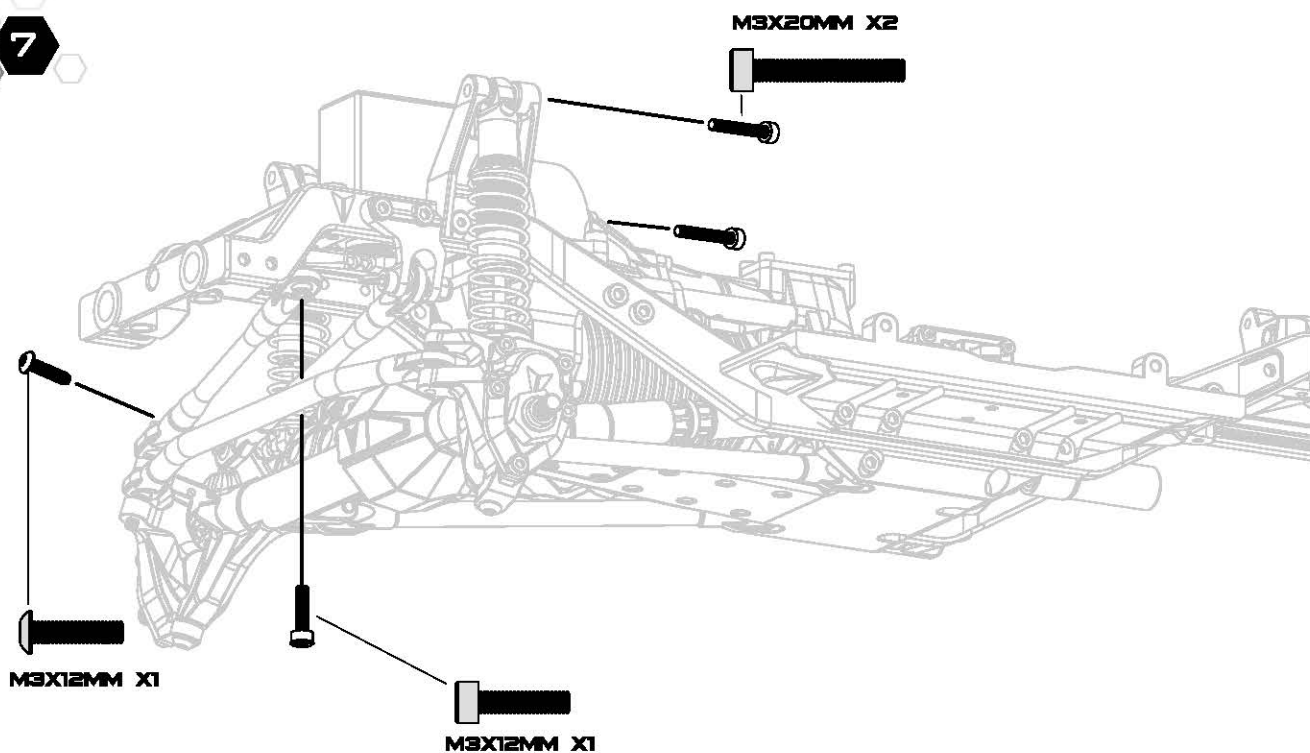


■ INSTALL FRONT AXLE

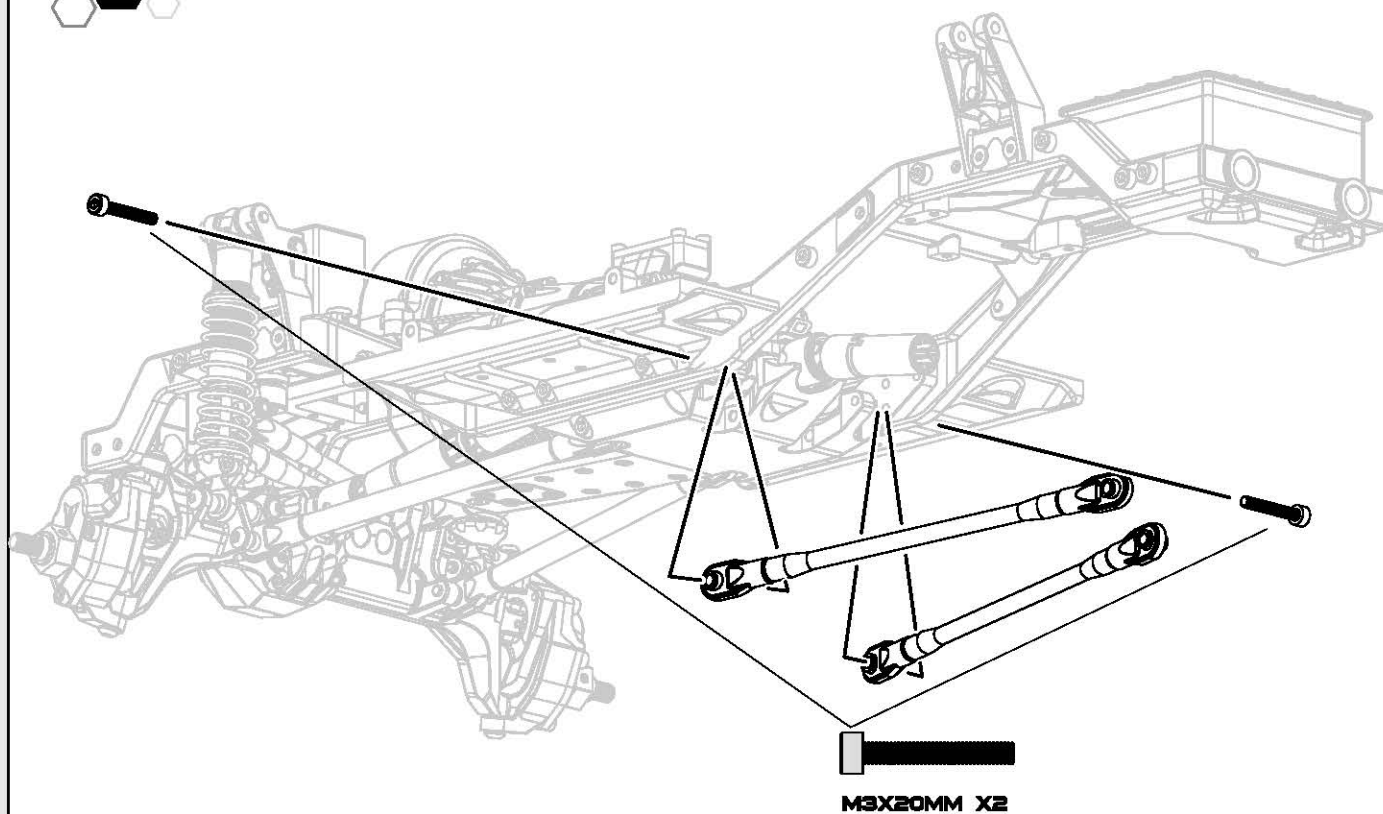


■ INSTALL FRONT AXLE

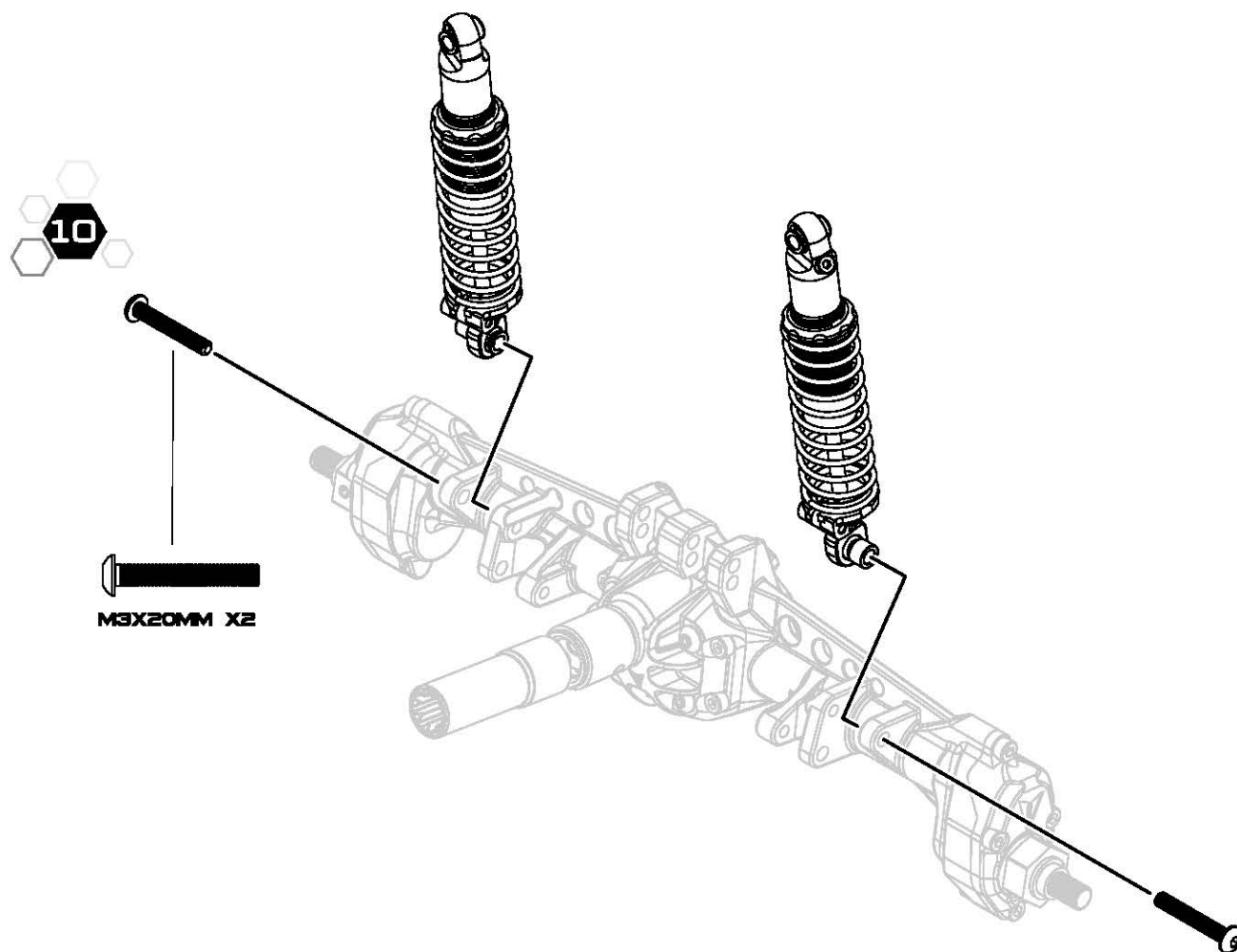
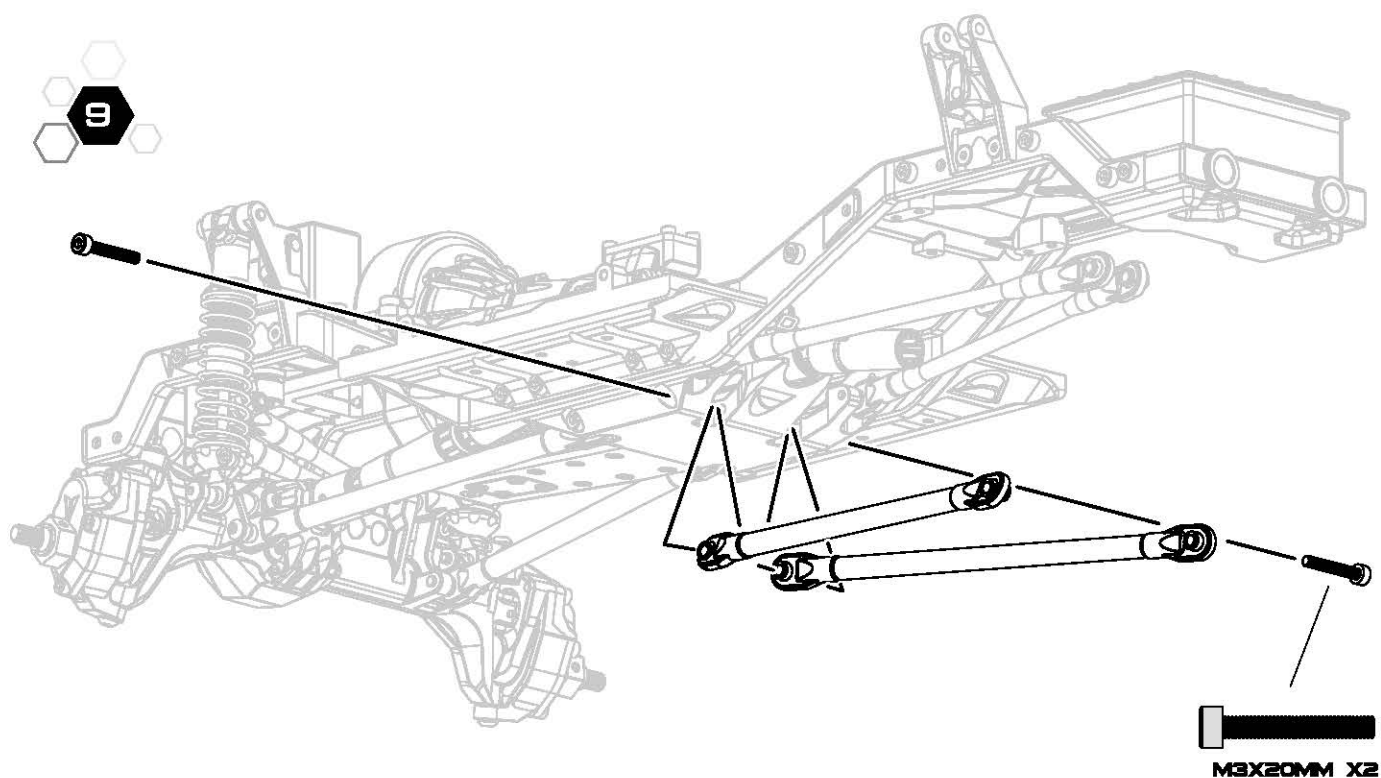
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8

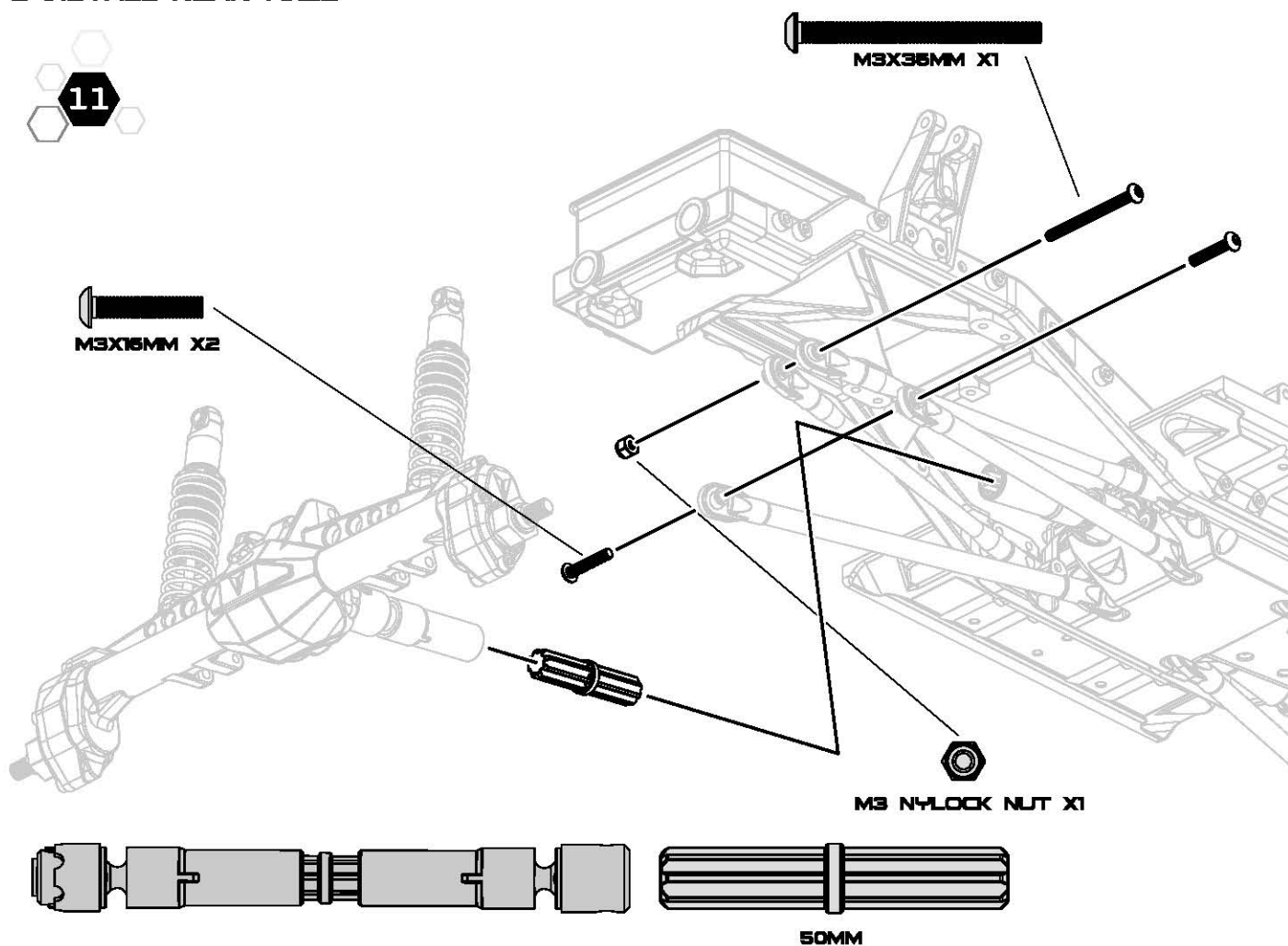


■ INSTALL REAR AXLE

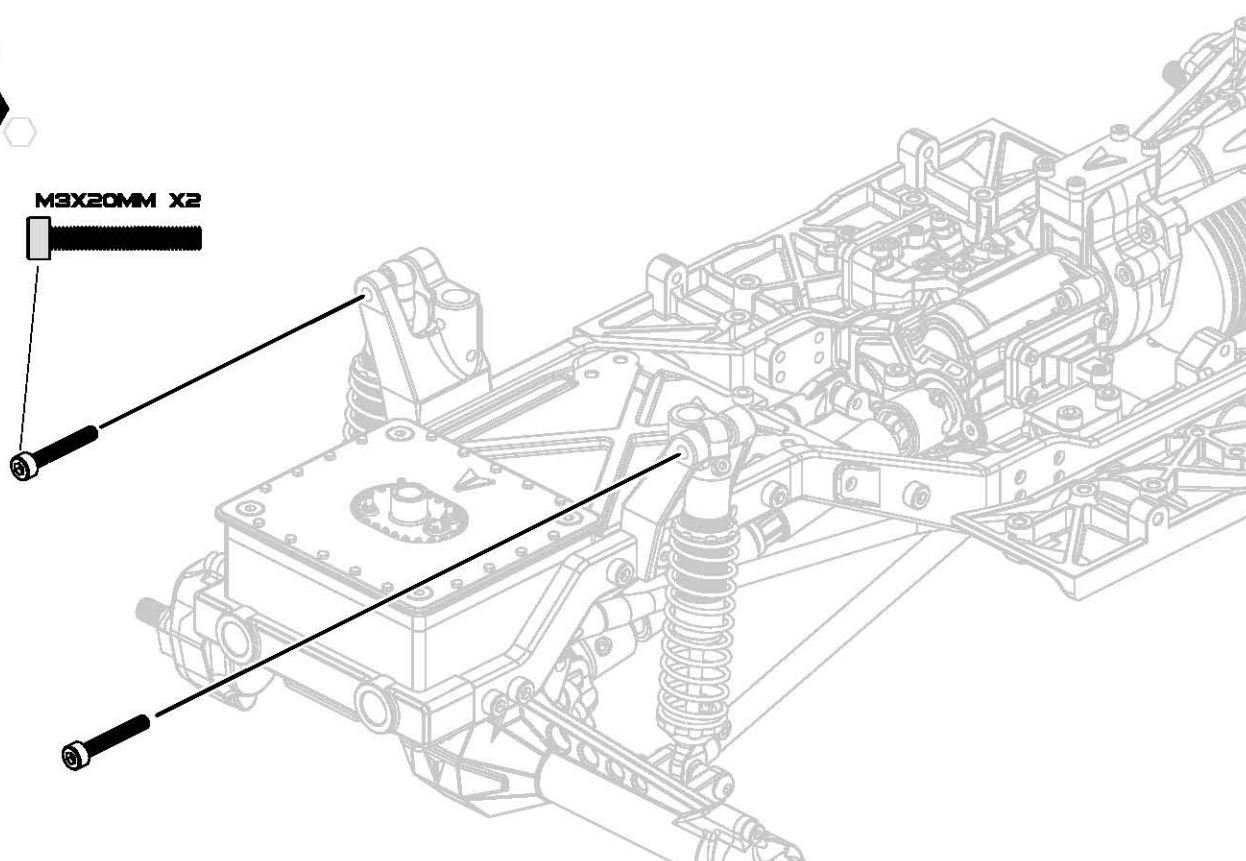


■ INSTALL REAR AXLE

11

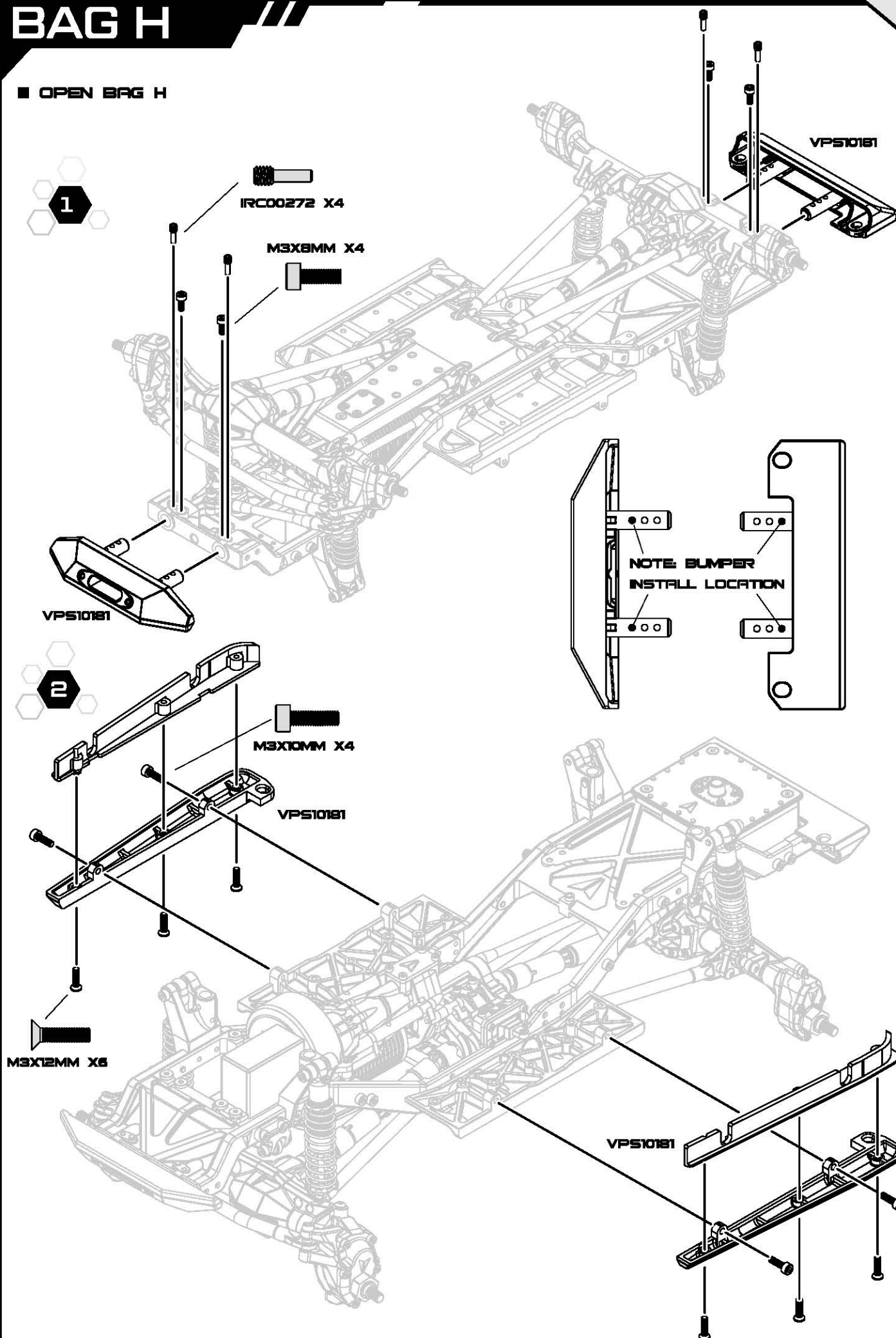


12



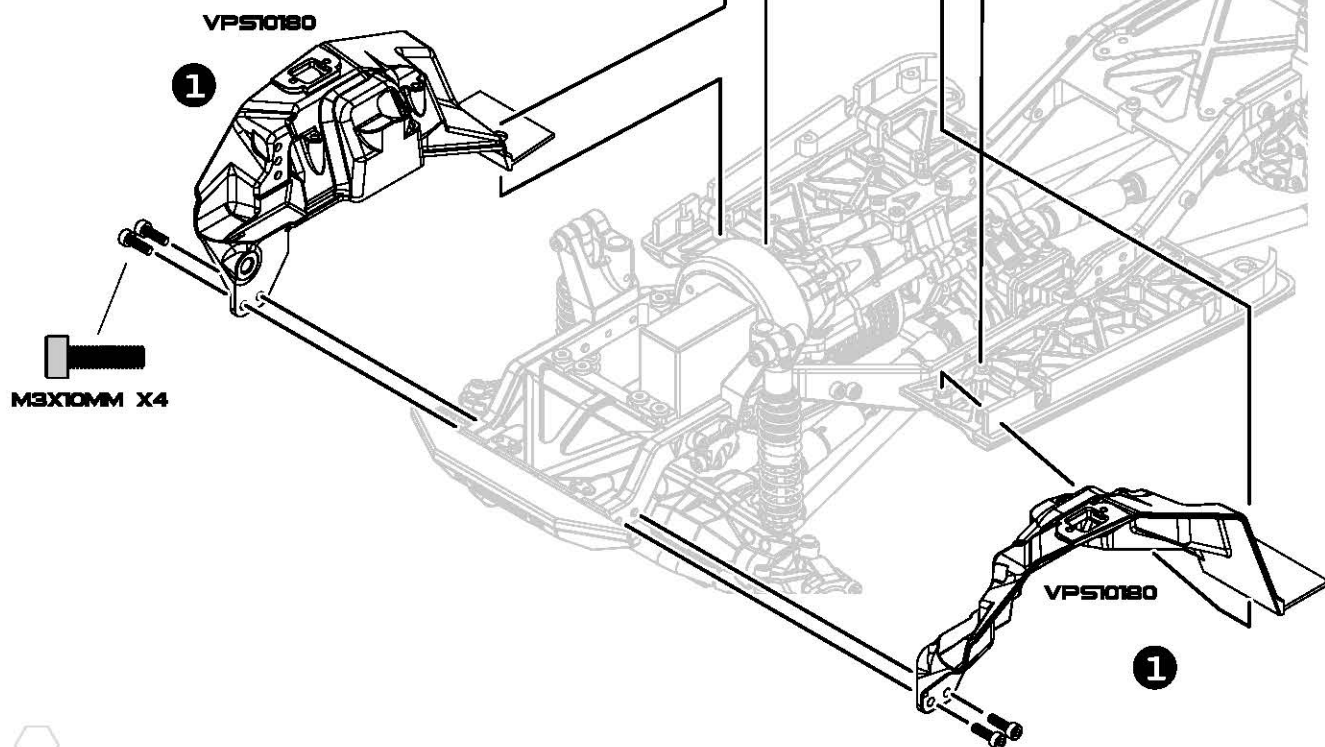
BAG H

■ OPEN BAG H

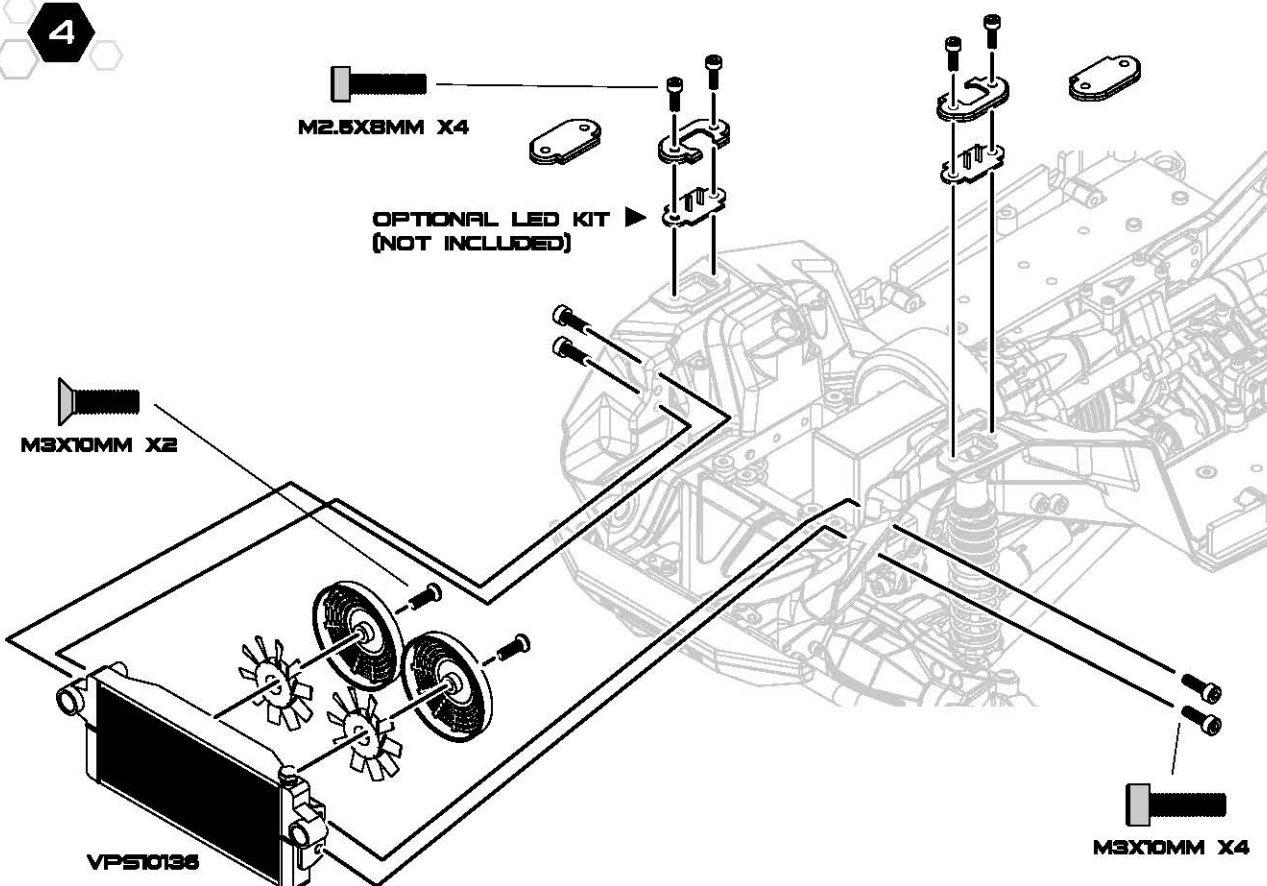


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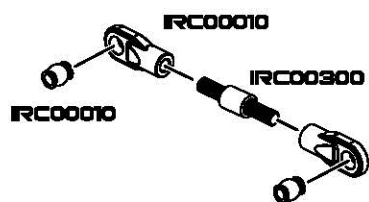
THE INNER FENDER GETS INSTALLED FIRST **1**,
THEN ELECTRONIC PLATE SECOND **2**



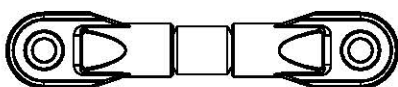
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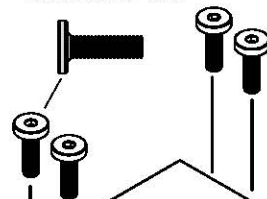
5



X1 OD SHIFT LINKS



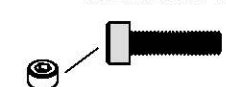
M3X10MM X4



*NOTE DIRECTION OF SERVO
(SERVO NOT INCLUDED)

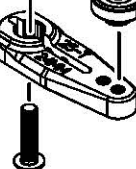
VP510129

M3X12MM X1



24MM SERVO
HORN REQUIRED
(NOT INCLUDED)

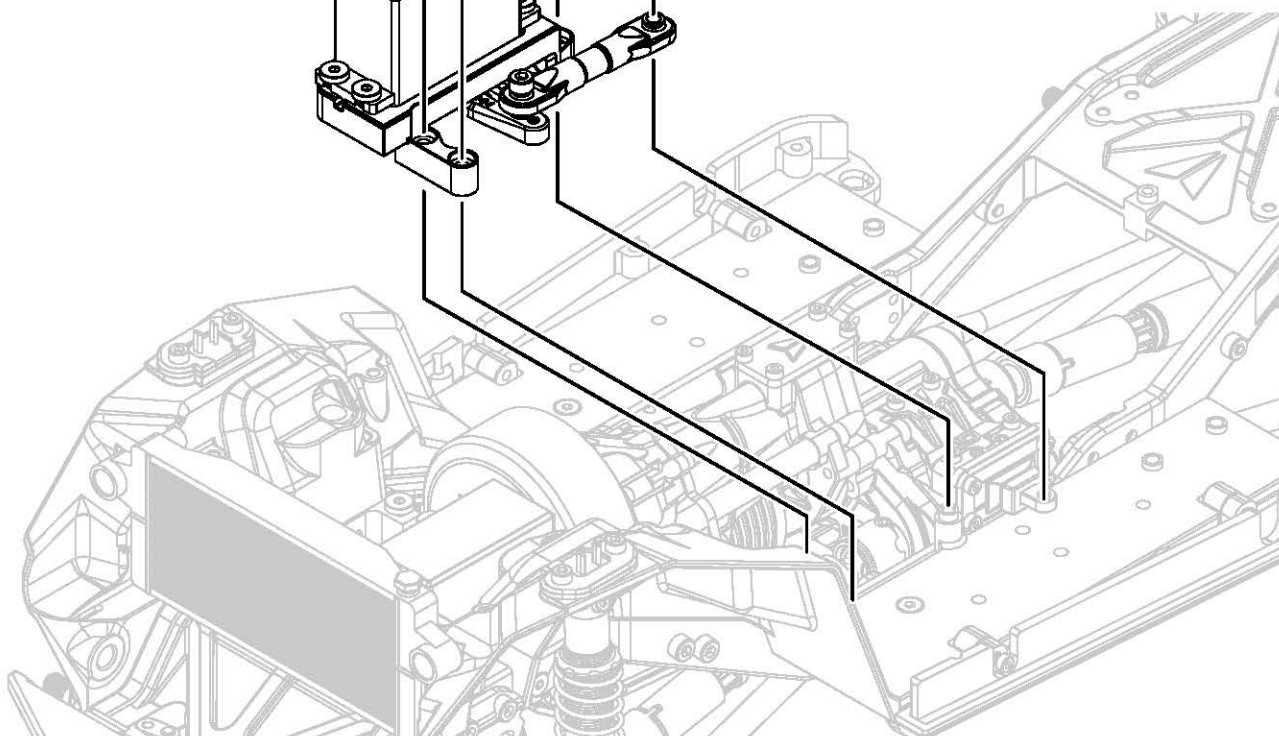
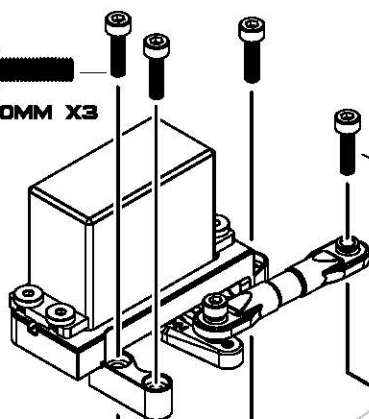
HARDWARE FROM SERVO
(NOT INCLUDED)



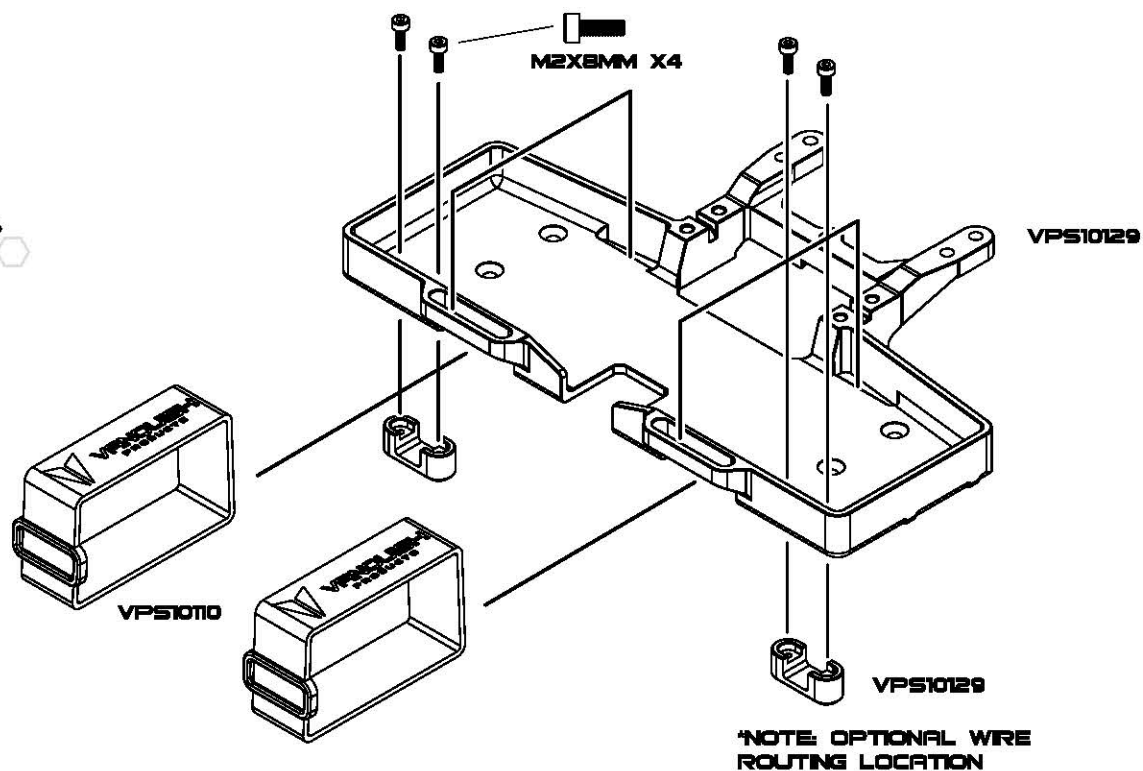
6

M3X10MM X3

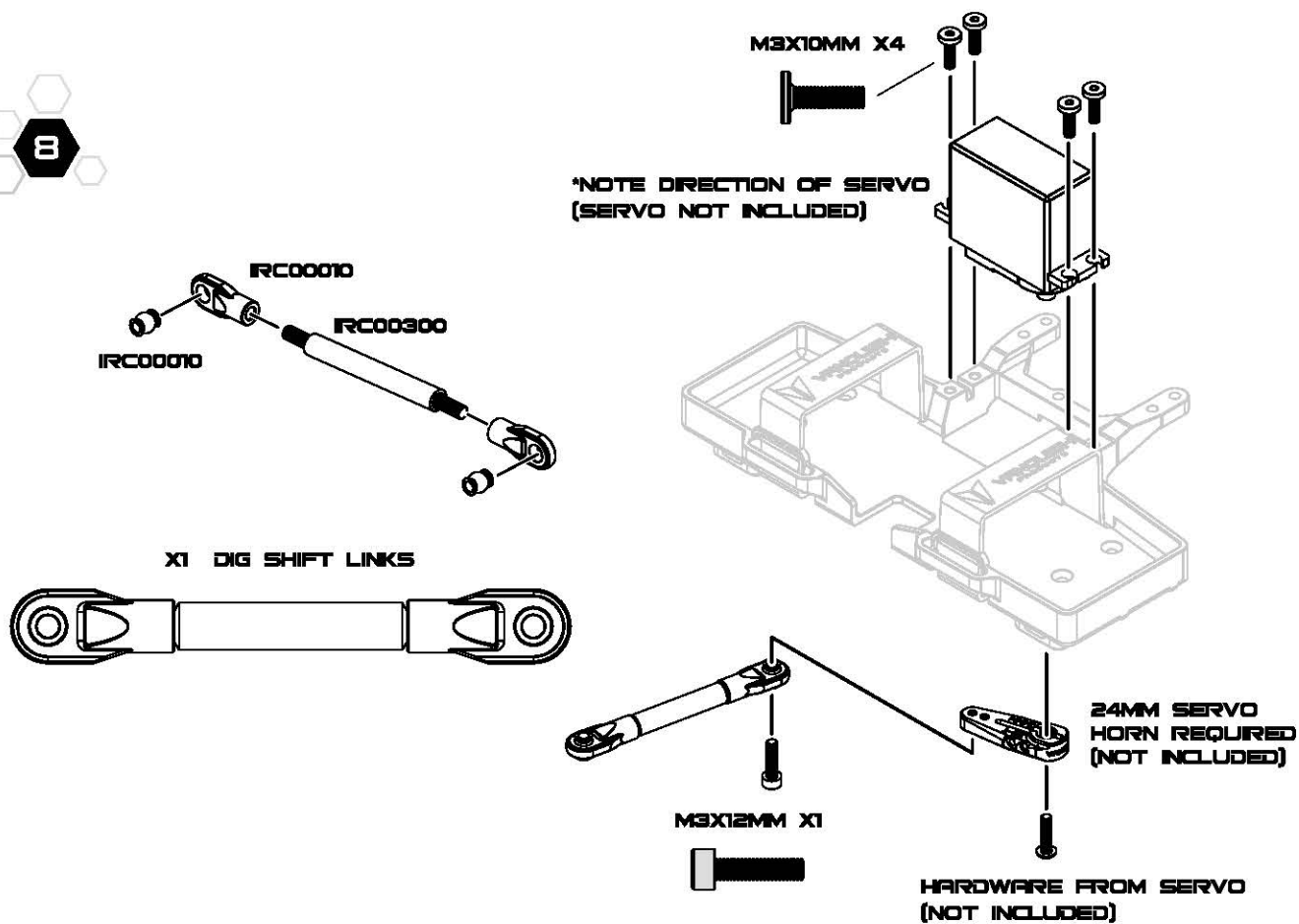
M3X12MM X1

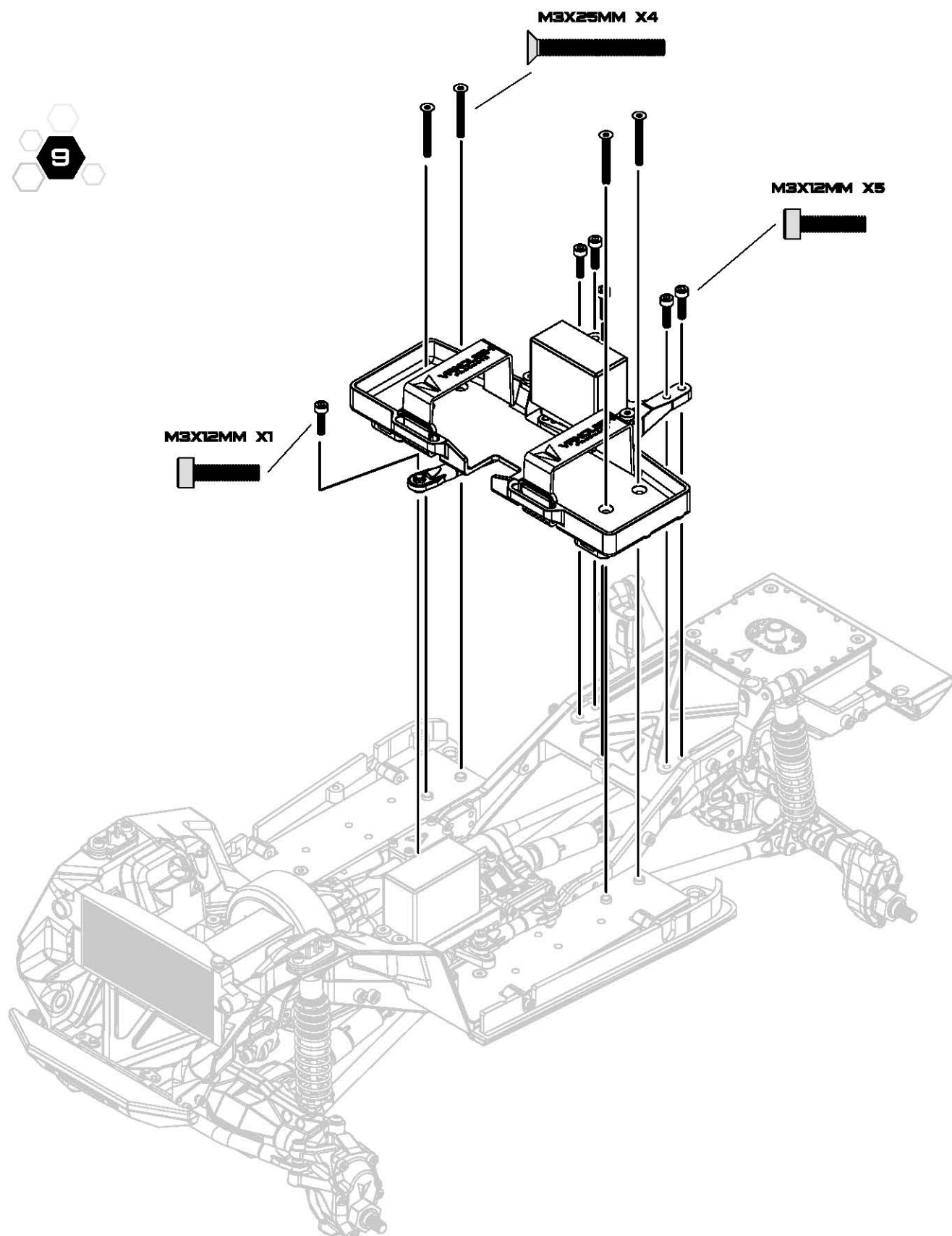


7



8

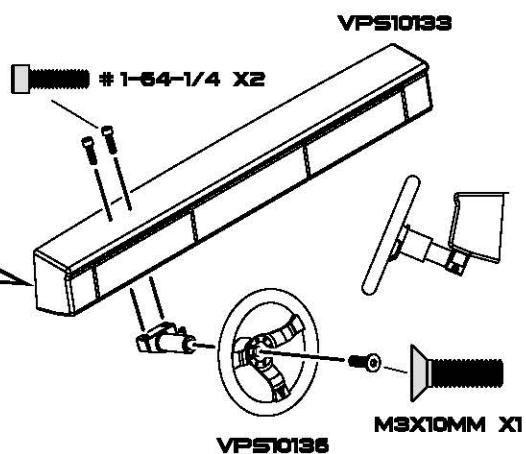
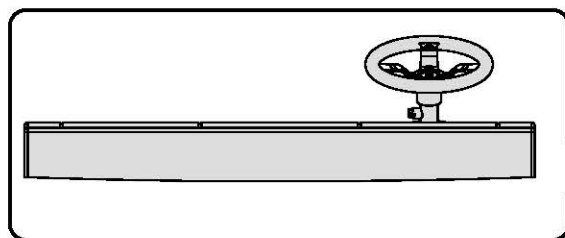




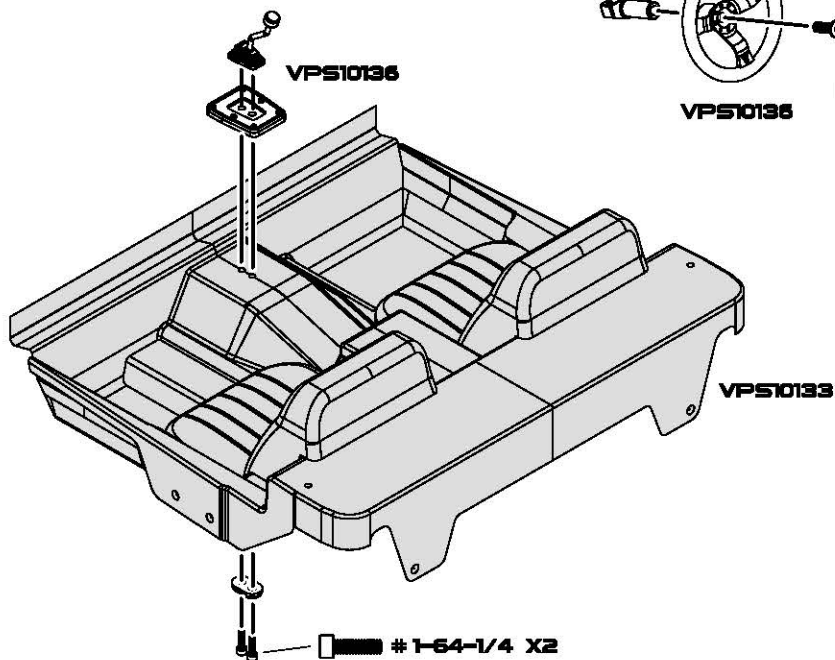
BAG I

■ OPEN BAG I

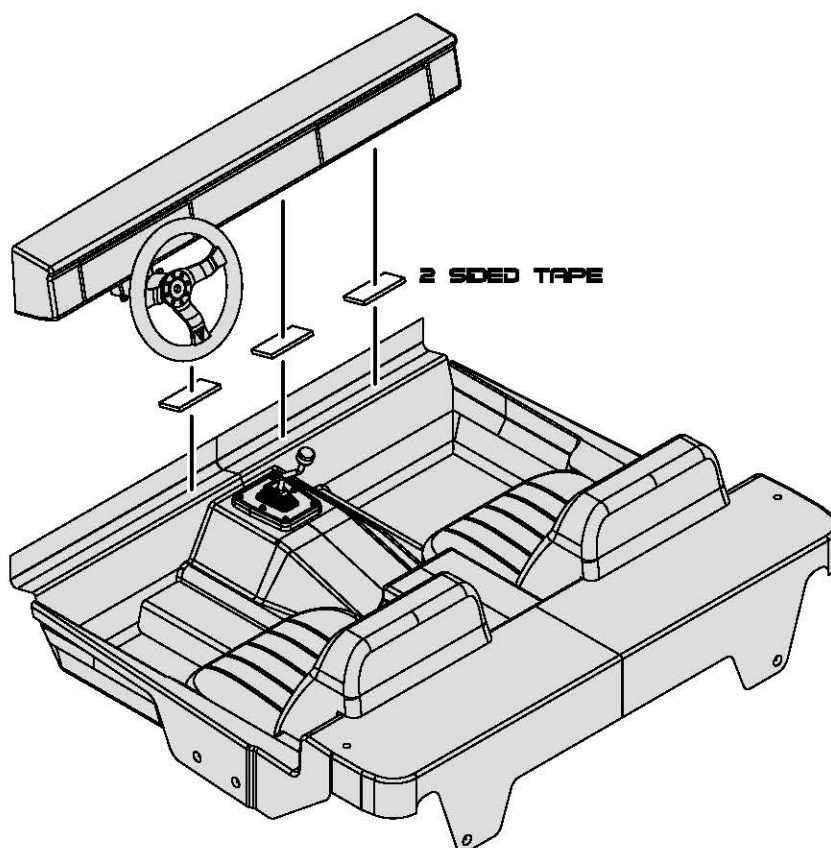
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2



3



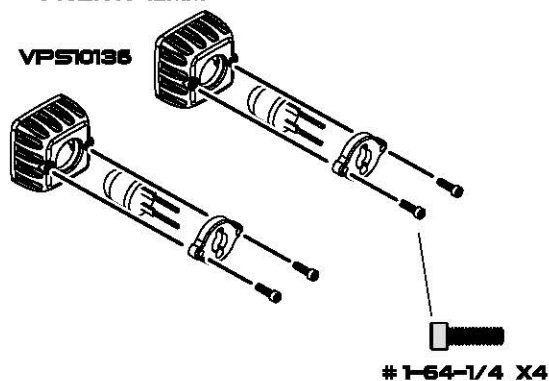
BAG I

■ BODY

* NOTE LED BULBS NOT INCLUDED
FRONT: 10MM

4

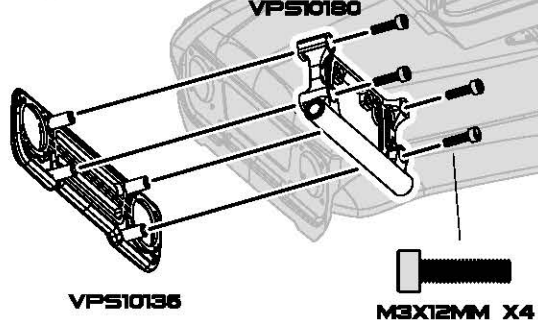
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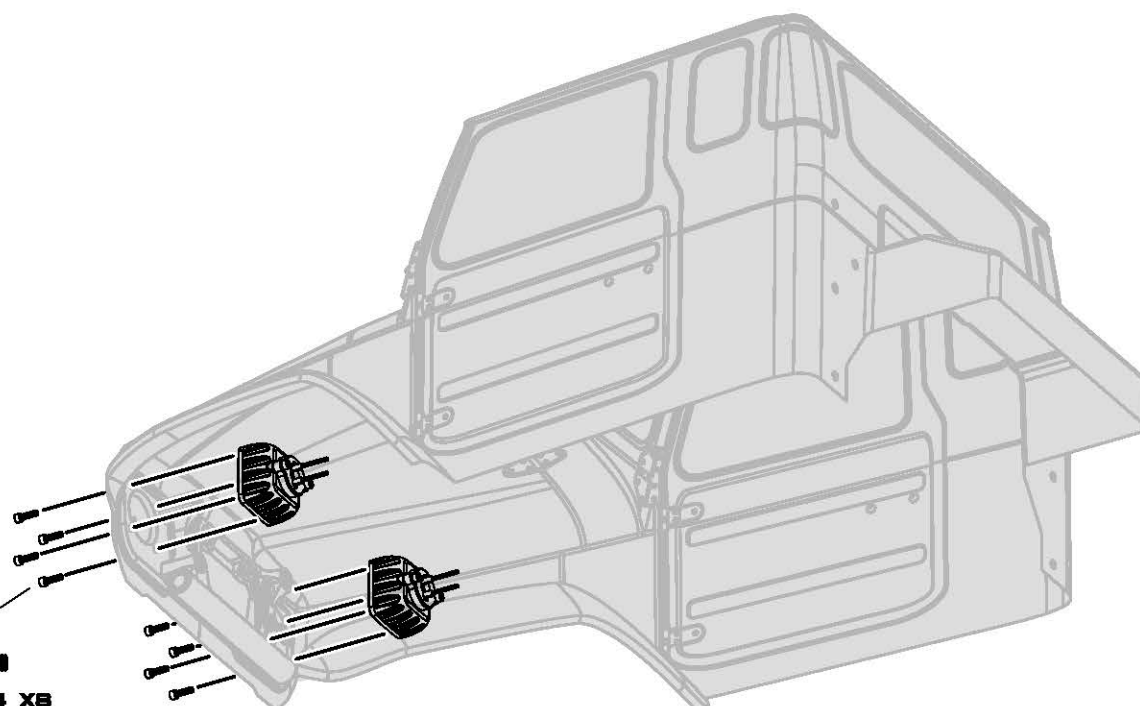
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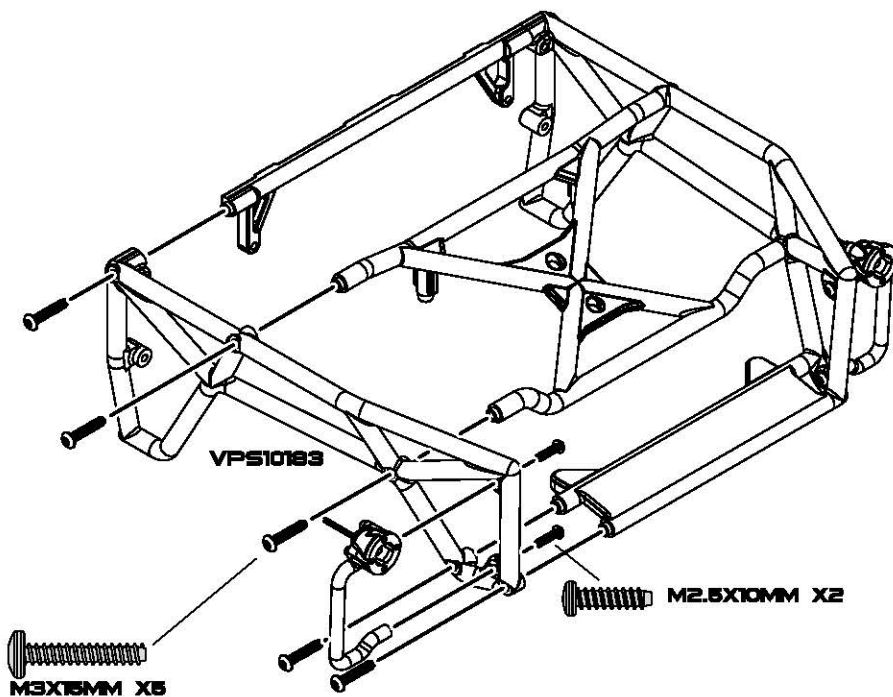
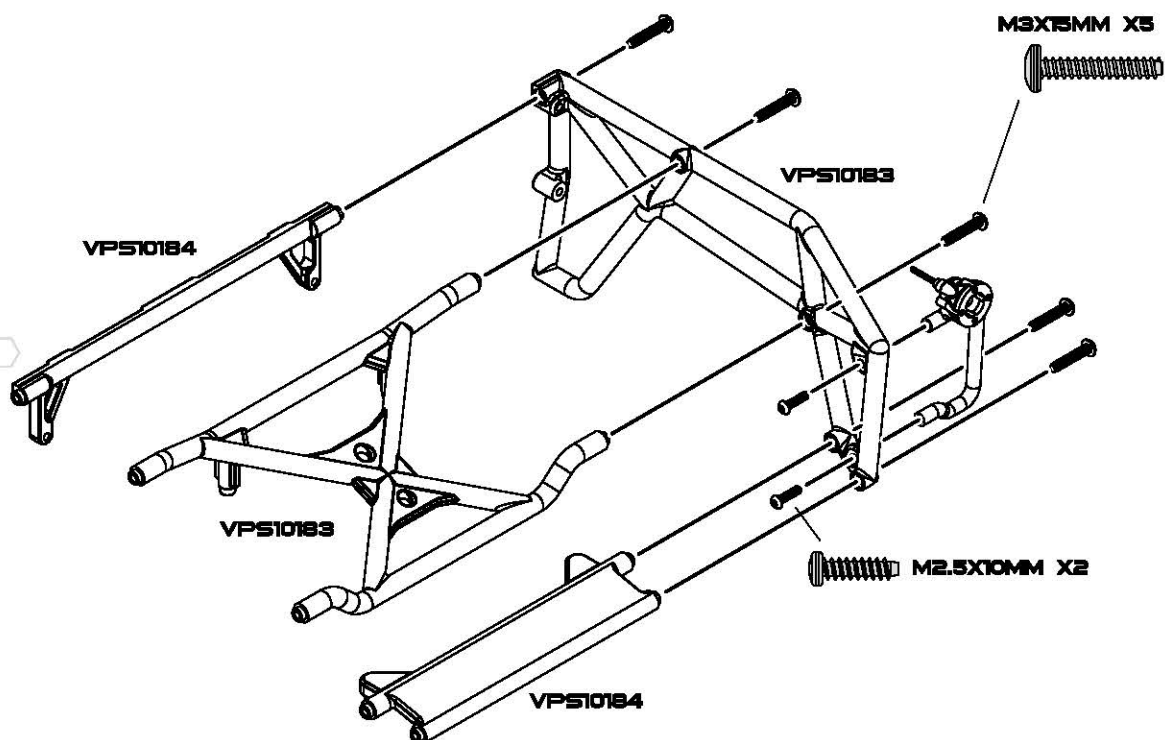
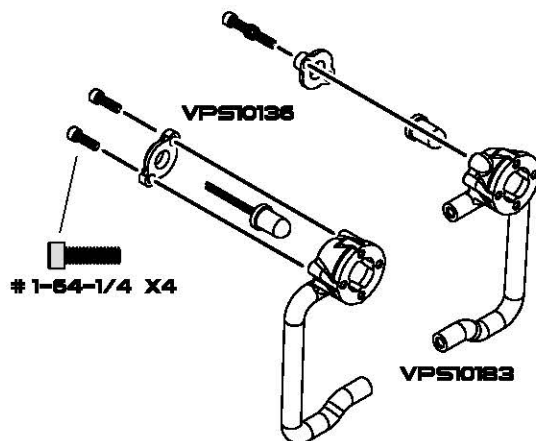
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#1-64-1/4 X8



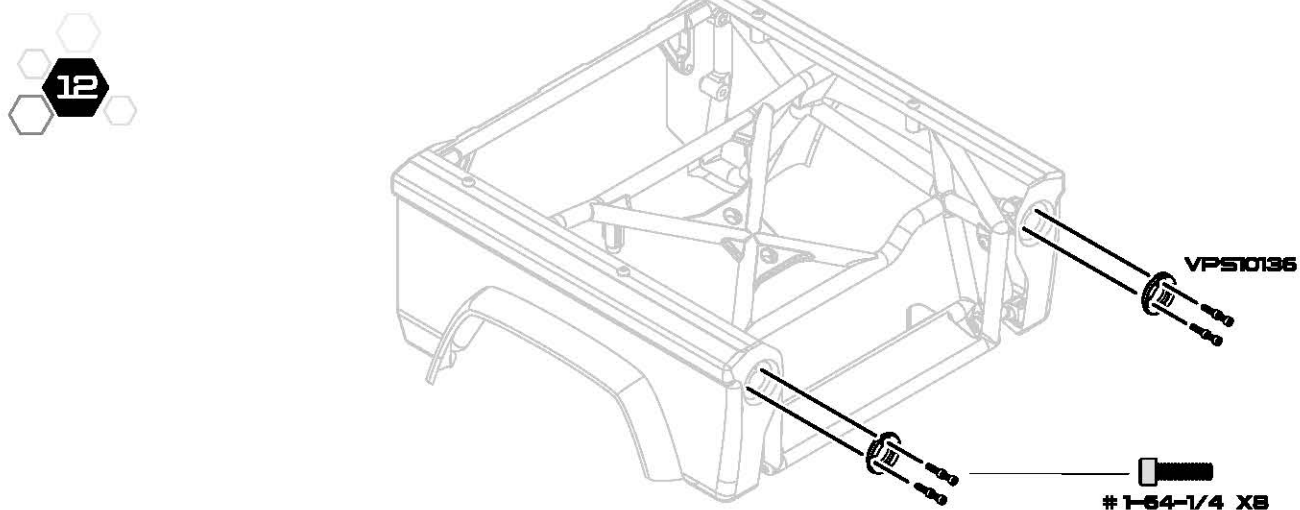
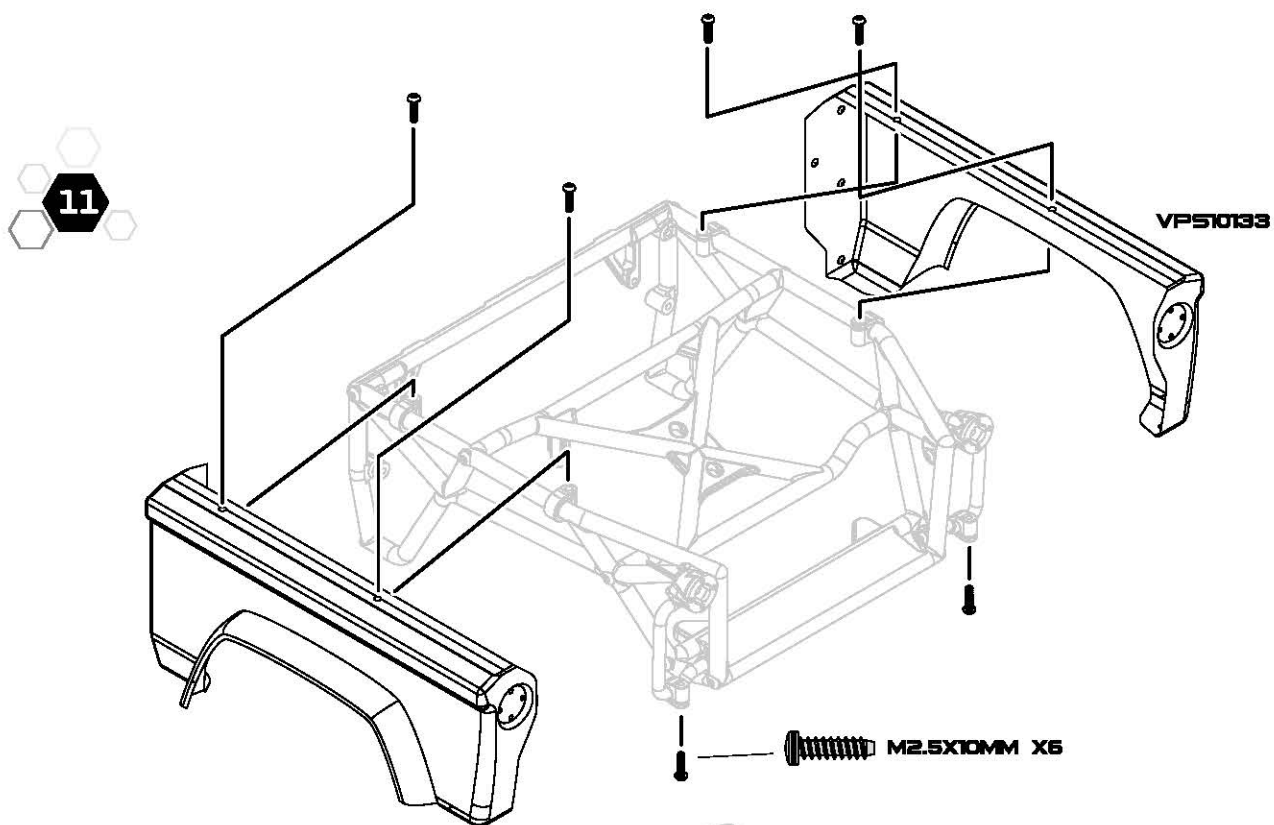
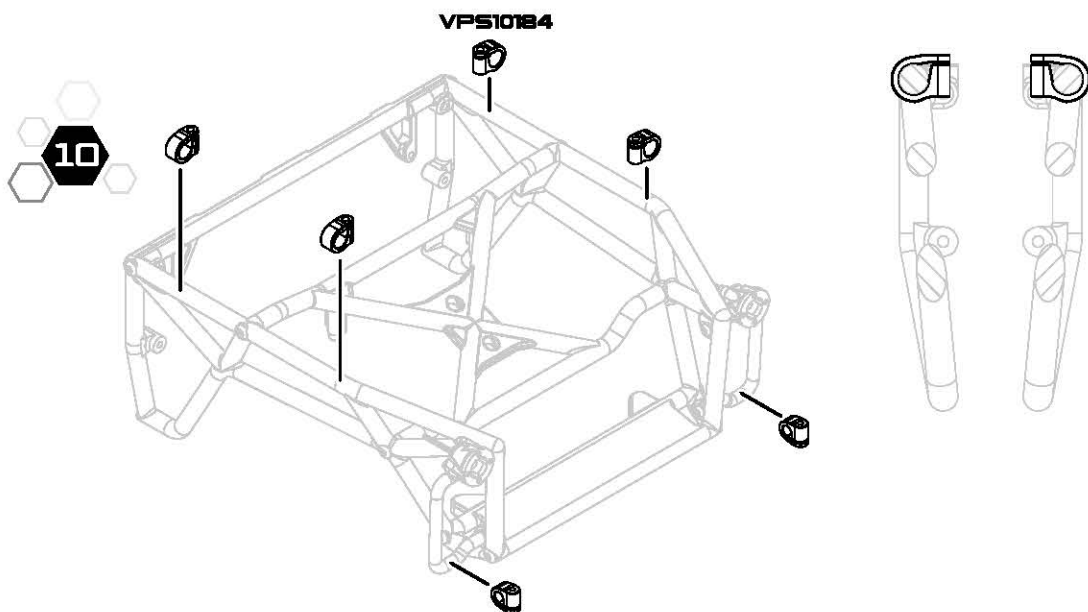
* NOTE LED BULBS NOT INCLUDED
REAR: 5MM

■ BODY



BAG I

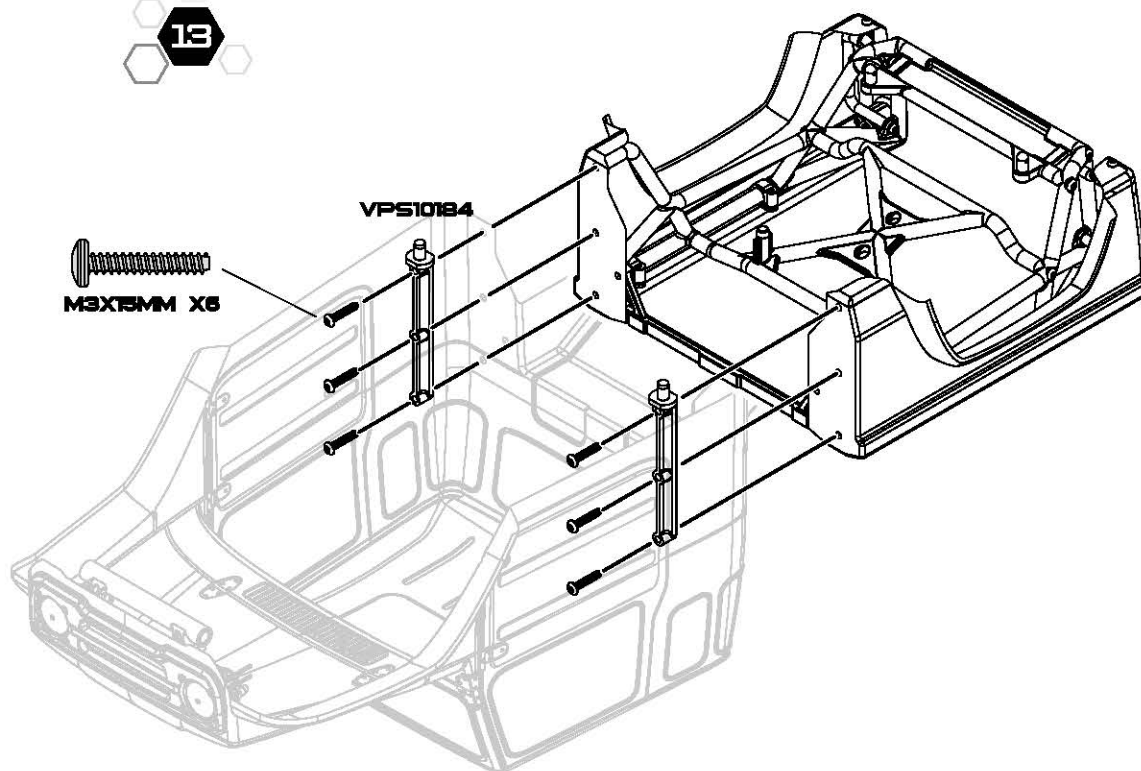
■ BODY



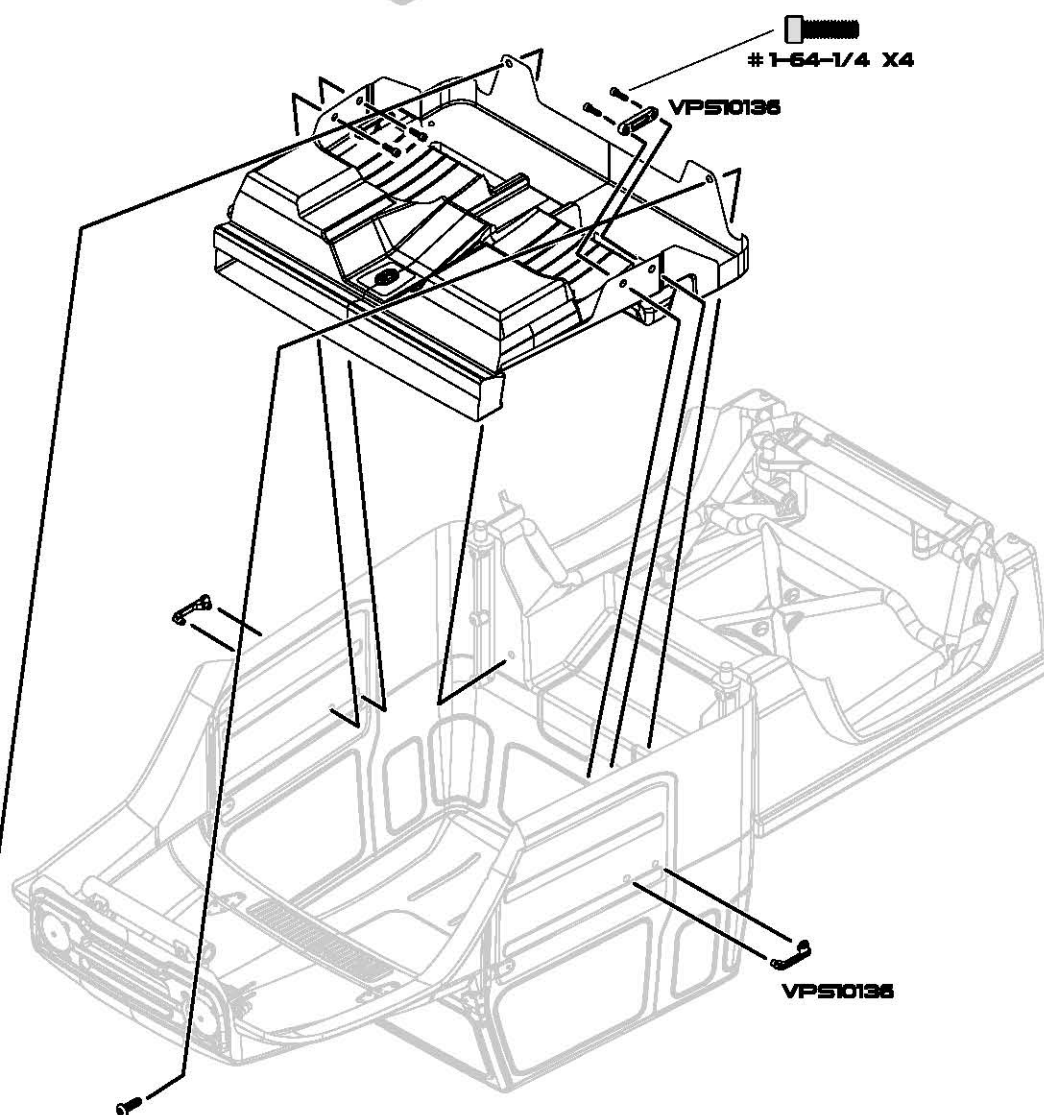
BAG I

■ BODY

13



14



15

M3X10MM X2

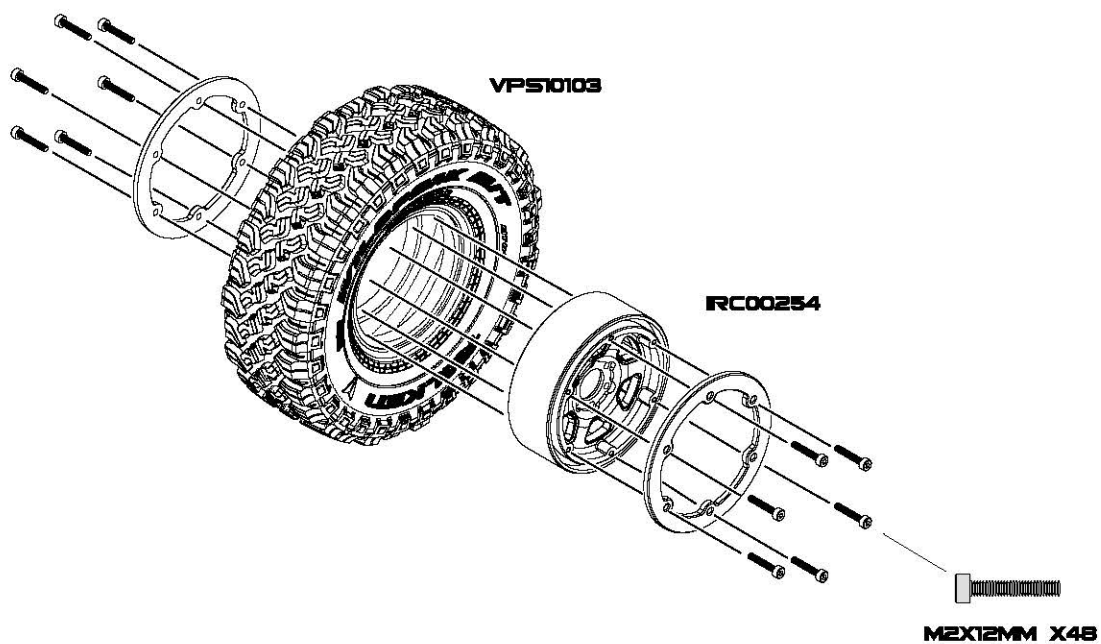


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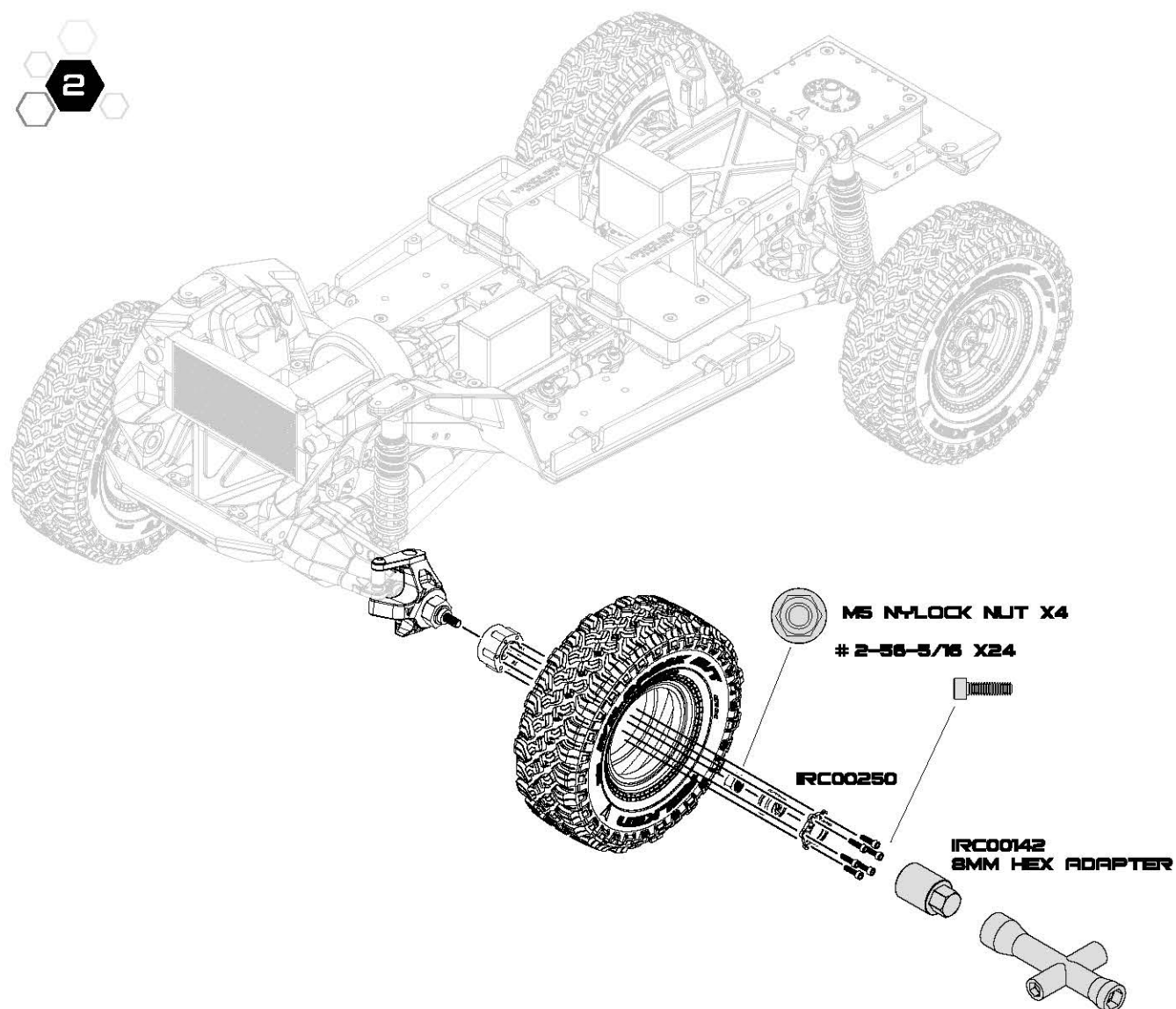
BAG J

WHEEL AND TIRE ASSEMBLY OPEN BAG J

1

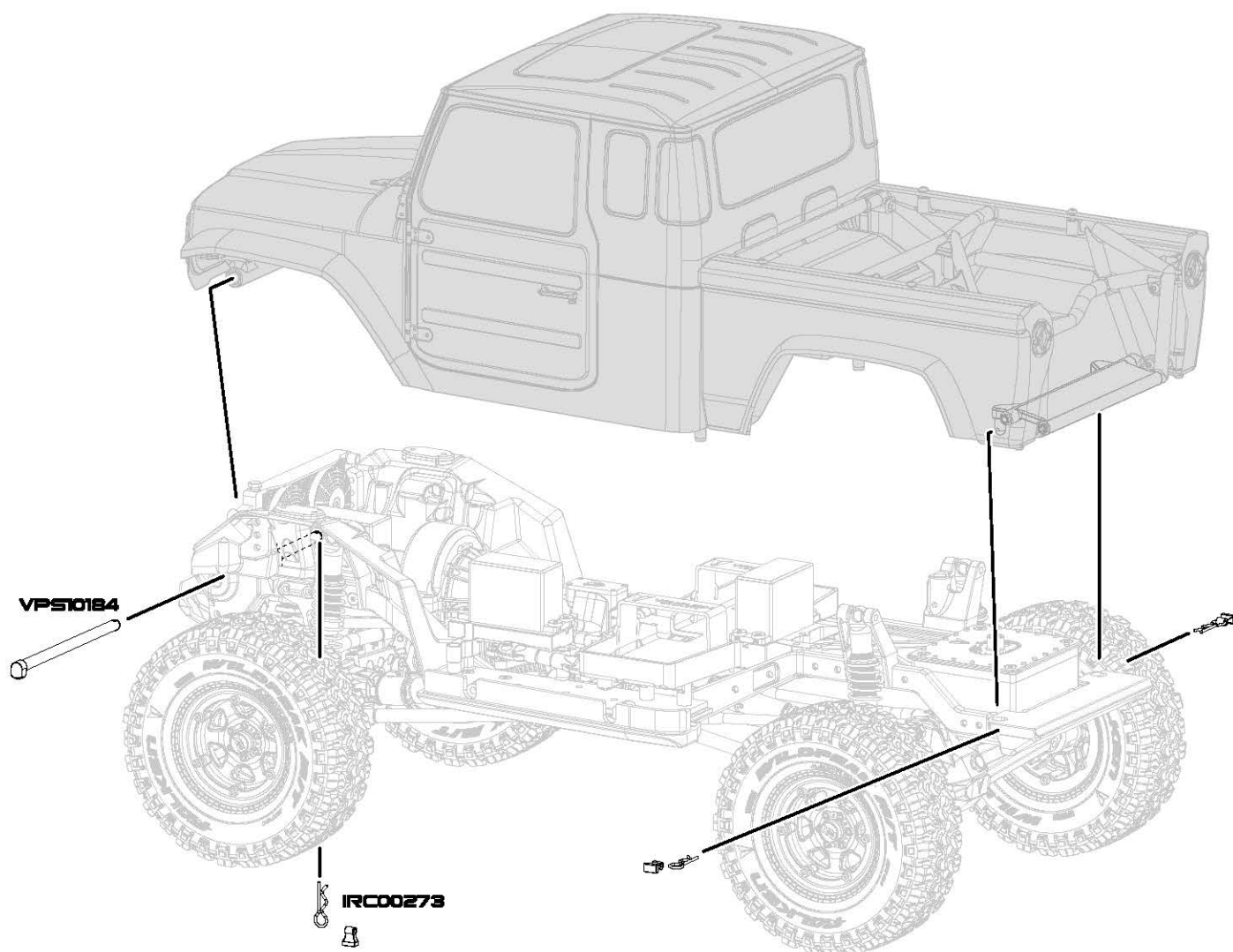


2



BAG J

WHEEL AND TIRE ASSEMBLY OPEN BAG J



PART NUMBER

■ SPARE PARTS

IRC00010	ROD ENDS WITH PIVOT BALLS (12)
IRC00220	INCISION DRIVESHAFT SET
IRC00230	ISD10 DRIVESHAFT SET
IRC00231	ISD10 REPLACEMENT PARTS TREE
IRC00250	INCISION 1.9 KMC XD229 MACHETE BLACK PLASTIC
IRC00260	12T 32P PINION
IRC00261	13T 32P PINION
IRC00262	14T 32P PINION
IRC00263	15T 32P PINION
IRC00264	16T 32P PINION
IRC00265	17T 32P PINION
IRC00270	INCISION MOTOR PLATE CAPHEAD WASHER
IRC00271	INCISION KINGPIN SHOULDER SCREWS (4)
IRC00272	M4 SCREW SHAFT (10)
IRC00273	BODY PINS (10)
IRC00275	WASHER HEAD SCREW (4)
IRC00410	VFD 52T 32P SLIPPER SPUR GEAR
IRC00411	VFD 56T 32P SLIPPER SPUR GEAR
IRC00412	VFD SLIPPER PAD
IRC00500	S8E 80MM SHOCK SET
IRC00501	S8E 90MM SHOCK SET
IRC00502	S8E SHOCK MOLDED COMPONENTS
IRC00503	S8E 80MM SHOCK BODY
IRC00504	S8E 80MM SHOCK SHAFT
IRC00505	S8E 90MM SHOCK BODY
IRC00506	S8E 90MM SHOCK SHAFT
IRC00507	S8E SHOCK REBUILD KIT
IRC00508	E-2 CLIP
IRC00509	S8E UPPER AND LOWER SHOCK PIVOT BALL SET
IRC00510	S8E TINI 80MM SHOCK SHAFT
IRC00511	S8E TINI 90MM SHOCK SHAFT
IRC00512	S8E 80MM SPRING SET
IRC00513	S8E 90MM SPRING SET
IRC00514	S8E MACHINED SHOCK CAP Black
IRC00515	S8E MACHINED SHOCK CAP Orange
IRC00516	S8E MACHINED SHOCK CAP Blue
IRC00517	S8E MACHINED Spring COLLAR SET Black
IRC00518	S8E MACHINED Spring COLLAR SET Orange
IRC00519	S8E MACHINED Spring COLLAR SET Blue
IRC00520	S8E 80MM SHOCK BODY HARD ANODIZED
IRC00521	S8E 90MM SHOCK BODY HARD ANODIZED
IRC00522	S8E MACHINED PISTON SET
VPS07084	12MM PORTAL HEX
VPS08070	6 HOLE SPOOL / LOCKER
VPS08330	30T/8T HYPOID GEAR SET

VPS08335	5MM NON-FLANGED WHEEL NUTS
VPS08353	PORTAL OVERDRIVE GEAR SET (28T/20T)
VPS08354	PORTAL STANDARD GEAR SET (30T/18T)
VPS08363	PORTAL REAR AXLE SHAFTS
VPS08600	F10 PORTAL FRONT AXLE SET
VPS08601	F10 PORTAL REAR AXLE SET
VPS08604	F10 PORTAL FRONT HOUSING
VPS08605	F10 PORTAL REAR HOUSING
VPS08606	F10 PORTAL AXLE COMPONENTS
VPS08607	F10 PORTAL AXLE KNUCKLES
VPS08608	F10 PORTAL VDI
VPS08609	F10 PORTAL FRONT AXLE BRASS TUBES
VPS08610	F10 PORTAL REAR AXLE BRASS TUBES
VPS08611	F10 PORTAL REAR AXLE SHAFTS
VPS08612	F10 PORTAL FRONT STUB SHAFTS
VPS08613	F10 PORTAL REAR STUB SHAFTS
VPS10101	VANQUISH VXT 1.9 TIRES (2)
VPS10110	VANQUISH VELCRO STRAP
VPS10112	VS4-10 FRAME RAIL (2)
VPS10113	VS4-10 BODY POST SET
VPS10114	VS4-10 SHOCK TOWER SET (2 PAIR)
VPS10123	VS4-10 CHASSIS SLIDER MOUNTS WITH UNIVERSAL SLIDERS
VPS10126	VS4-10 CHASSIS BRACES / SERVO MOUNT
VPS10129	VS4-10 MOLDED BATTERY AND ELECTRONIC TRAYS
VPS10131	VS4-10 MACHINED PANHARD MOUNT
VPS10133	PHOENIX BODY SET WVRD1 CAGE
VPS10136	PHOENIX GRILL AND BODY DETAIL PARTS SET
VPS10142	VS4-10 VFD BEARING PLATE SET 30T OVERDRIVE
VPS10144	VS4-10 VFD TRANSMISSION HOUSING
VPS10148	VS4-10 VFD MACHINED MOTOR PLATE
VPS10151	VS4-10 VFD ALUMINUM TRANS POST
VPS10180	VS4-10 NARROW MOLDED INNER FENDERS
VPS10181	PHOENIX BUMPERS AND SLIDERS
VPS10182	VRD1 REAR CAGE SET
VPS10183	VRD1 REAR CAGE PARTS
VPS10184	VRD1 BODY MOUNTS
VPS10200	VFD TWIN TRANSMISSION KIT
VPS10201	VFD TWIN COMPONENTS MOLD
VPS10204	VFD TWIN GEAR SET
VPS10205	VFD TWIN SHIFTING COMPONENT SET
VPS10206	VFD TWIN SHAFT SET
VPS10207	E-5 CLIP
VPS10208	VFD SLIPPER SET
VPS10209	VFD SLIPPER LOCKOUT SET
VPS10210	VFD TWIN MACHINED GEAR SET

GEAR RATIO CHART

Axle Ratio: 5.25

Rear Ratio without spur/pinion: 16.5

Front Ratio Standard 6.5% OD without spur/pinion: 15.5

Front Ratio High 33% OD without spur/pinion: 12.9

Note: Not all Spur and Pinion combinations are compatible

32P Rear output Ratio

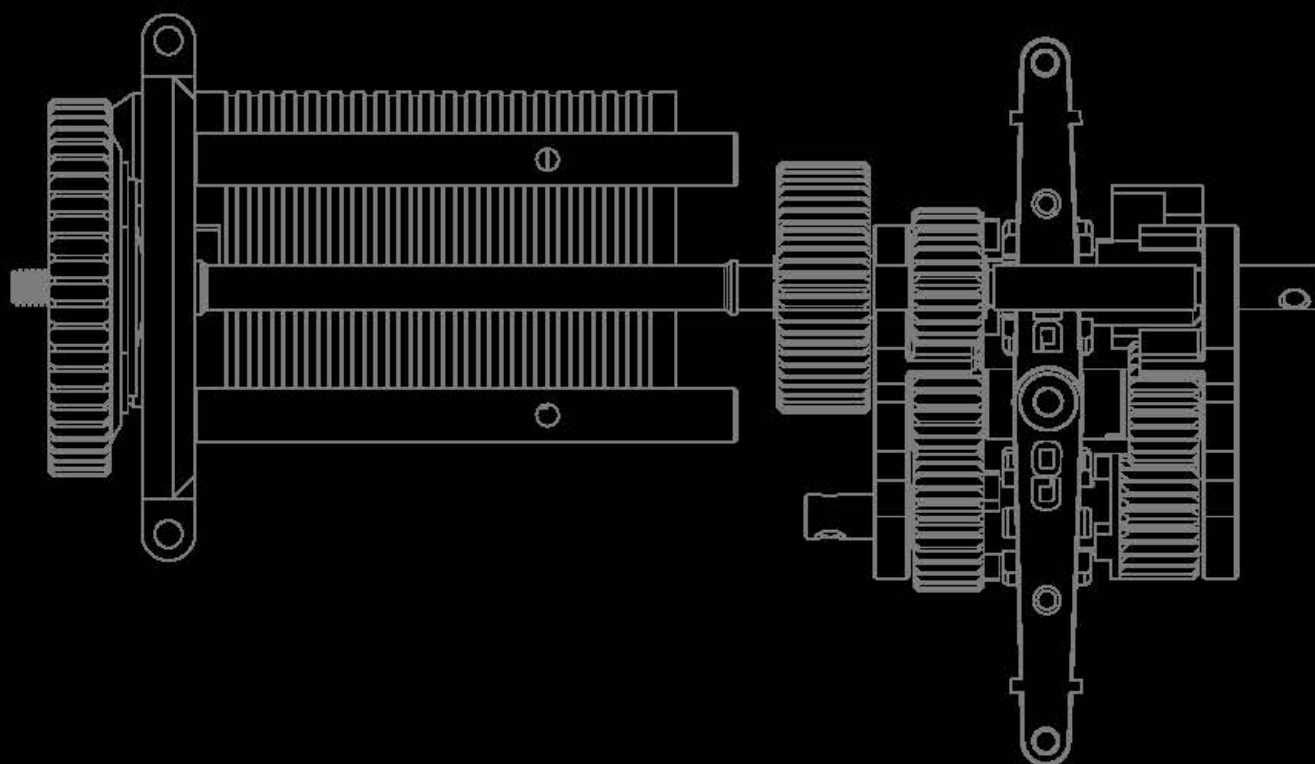
	Spur Gear				
Pinion	48	50	52	54	56
11	72.1	75.1	78.1	81.1	84.1
12	66.1	68.8	71.6	74.3	77.1
13	61.0	63.5	66.1	68.6	71.1
14	56.6	59.0	61.3	63.7	66.1
15	52.8	55.0	57.2	59.5	61.7
16	49.5	51.6	53.7	55.7	57.8
17	46.6	48.6	50.5	52.5	54.4

32P Front High OD 33% output Ratio

	Spur Gear				
Pinion	48	50	52	54	56
11	56.3	58.6	61.0	63.3	65.7
12	51.6	53.8	55.9	58.1	60.2
13	47.6	49.6	51.6	53.6	55.6
14	44.2	46.1	47.9	49.8	51.6
15	41.3	43.0	44.7	46.4	48.2
16	38.7	40.3	41.9	43.5	45.2
17	36.4	37.9	39.5	41.0	42.5

32P Front Standard OD 6.5% Output Drive Ratio

	Spur Gear				
Pinion	48	50	52	54	56
11	67.6	70.4	73.2	76.0	78.8
12	61.9	64.5	67.1	69.7	72.2
13	57.2	59.5	61.9	64.3	66.7
14	53.1	55.3	57.5	59.7	61.9
15	49.5	51.6	53.7	55.7	57.8
16	46.4	48.4	50.3	52.3	54.2
17	43.7	45.5	47.4	49.2	51.0



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