



VANQUISH
PRODUCTS



V54-10 PHOENIX X 1:10 SCALE HIGH PERFORMANCE 4 WHEEL DRIVE OFFROAD VEHICLE KIT

PORTAL



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.

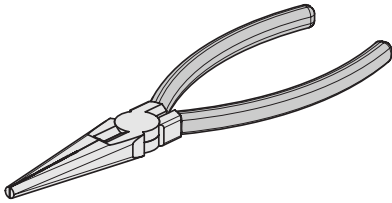
BATTERY SAFETY

- 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.

■ CONTENTS

Section	Contents	Page
BAG A	Front Axle Assembly	03
BAG B	Rear Axle Assembly	05
BAG C	Chassis Assembly	07
BAG D	Transmission Assembly	10
BAG E	Shock Assembly	16
BAG F	Driveshaft Assembly	17
BAG G	Links to Chassis Assembly	19
BAG H	Chassis Assembly	25
BAG I	Body and Interior Assembly	30
BAG J	Wheel and Tire Assembly	35
SPARE PARTS LIST		37
GEAR CHART		37

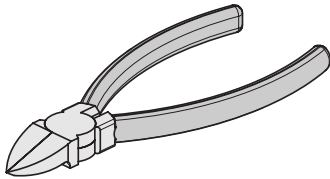
■ NECESSARY FOR MAINTENANCE



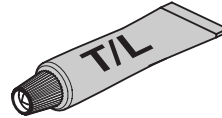
NEEDLE NOSE PLIERS
(NOT INCLUDED)



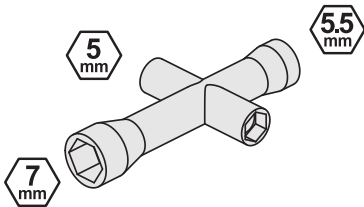
GREASE
(INCLUDED)



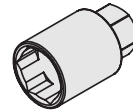
SIDE CUTTERS
(NOT INCLUDED)



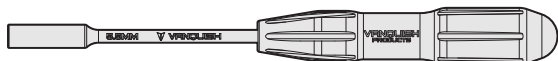
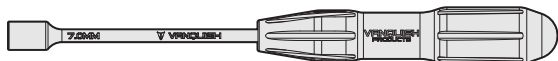
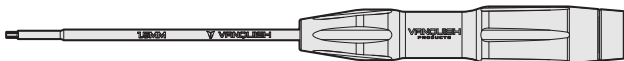
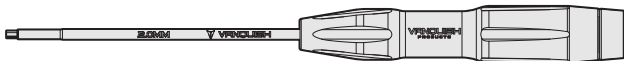
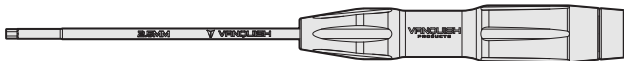
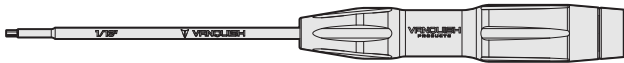
THREAD LOCK
(INCLUDED)



CROSS WRENCH
(INCLUDED)



8MM HEX ADAPTER
(INCLUDED)



SUGGESTED TOOLS (NOT INCLUDED):

VPS08410 STANDARD TOOL SET

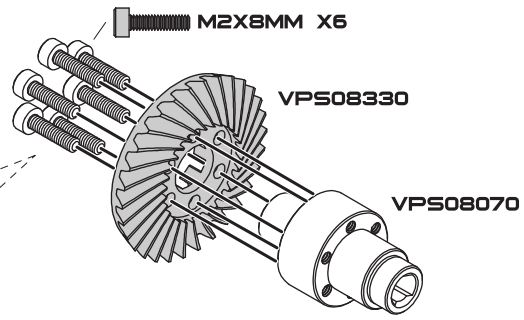
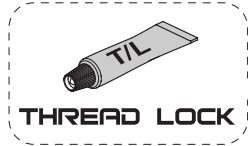
VPS08400 METRIC TOOL SET

VPS08440 METRIC NUT DRIVER TOOL SET

BAG A

OPEN BAG A

1

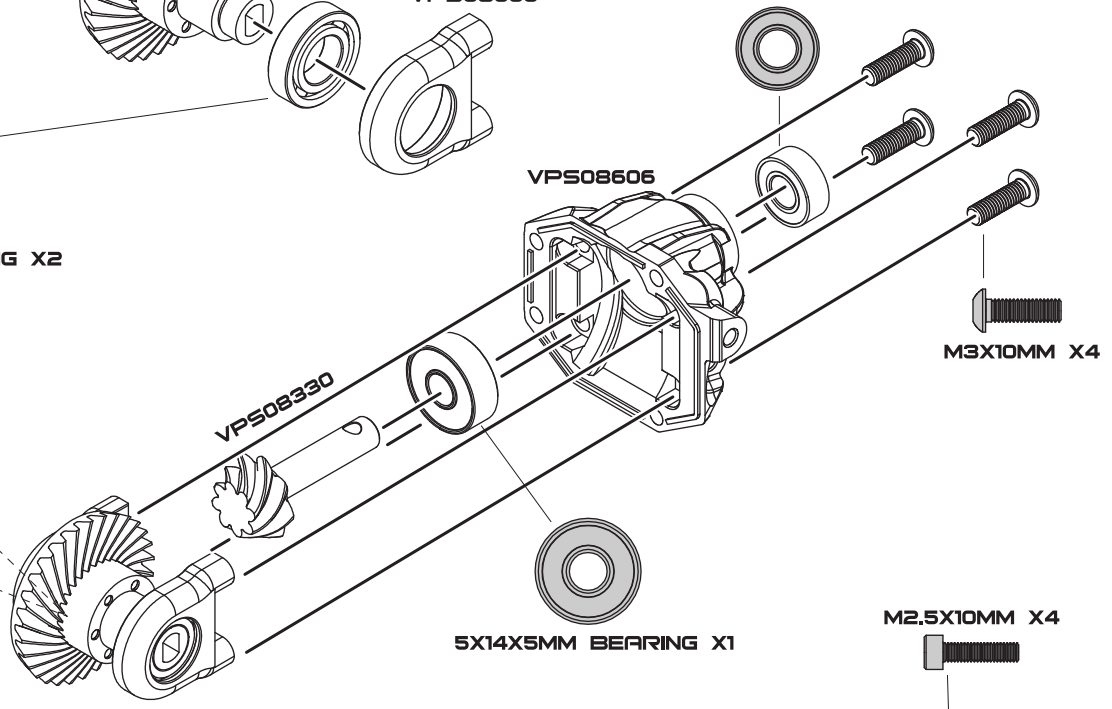


7X14X3.5MM BEARING X2

VPS08606

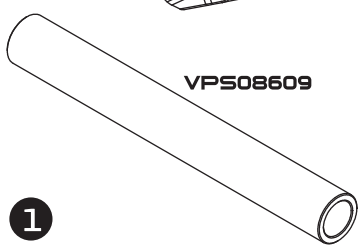
5X11X4MM BEARING X1

2

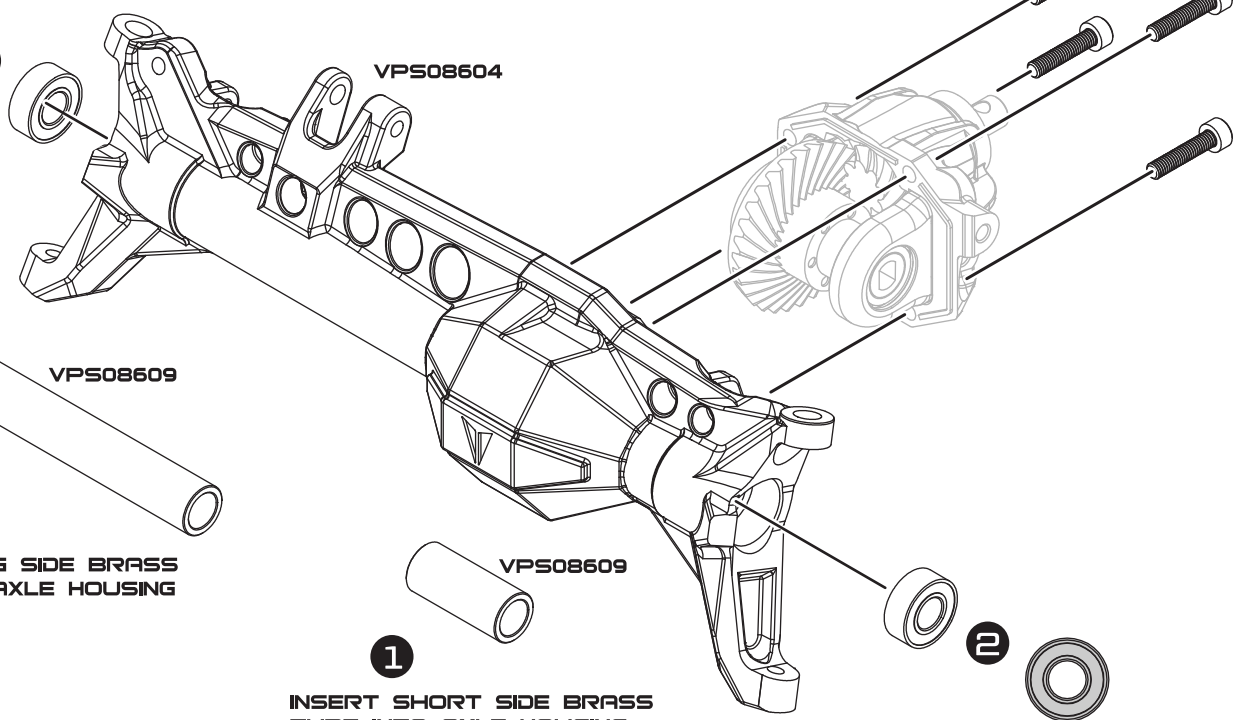


3

2



1
INSERT LONG SIDE BRASS TUBE INTO AXLE HOUSING



1

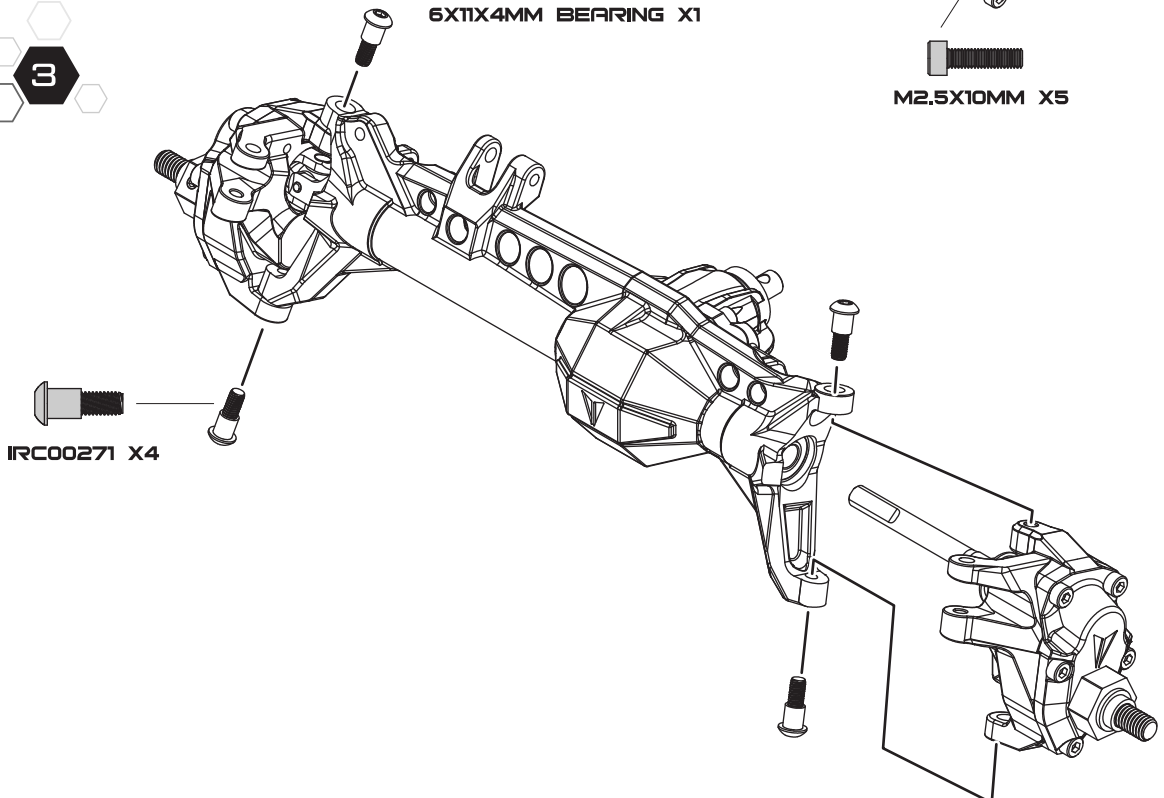
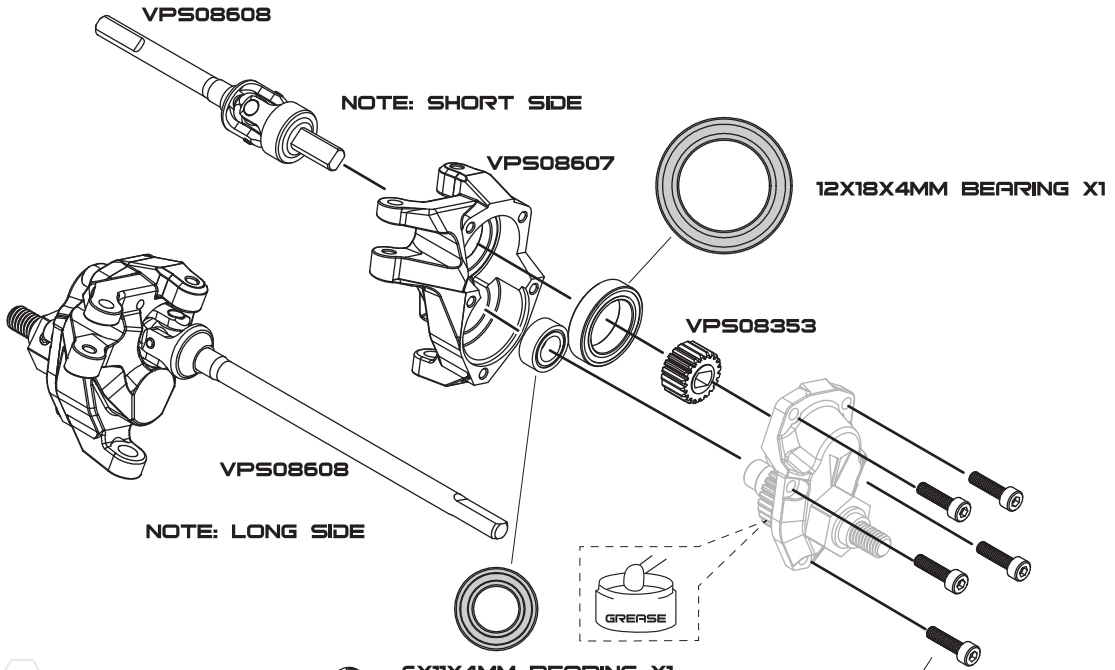
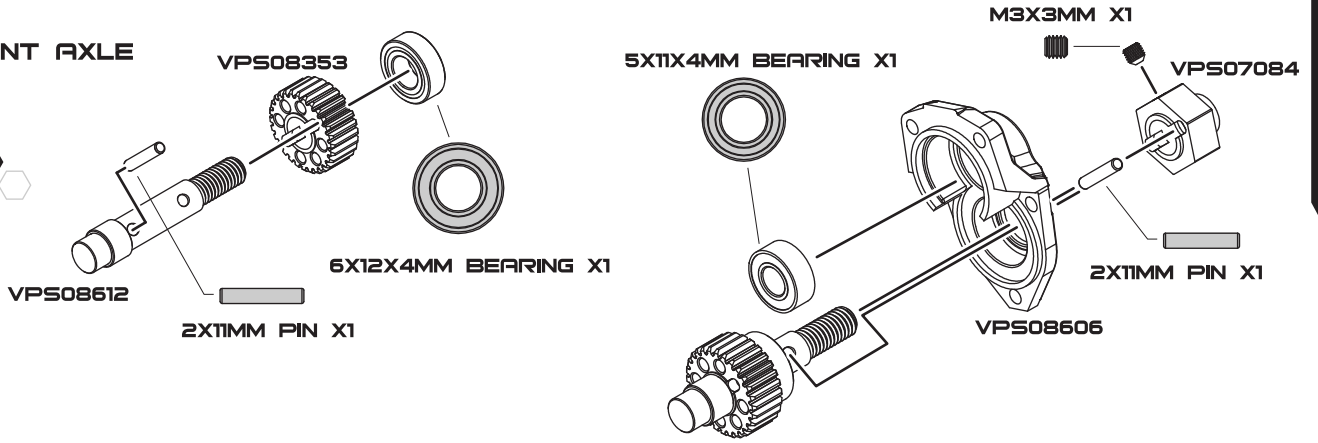
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INSERT SHORT SIDE BRASS TUBE INTO AXLE HOUSING

2

5X11X4MM BEARING X2

BAG A

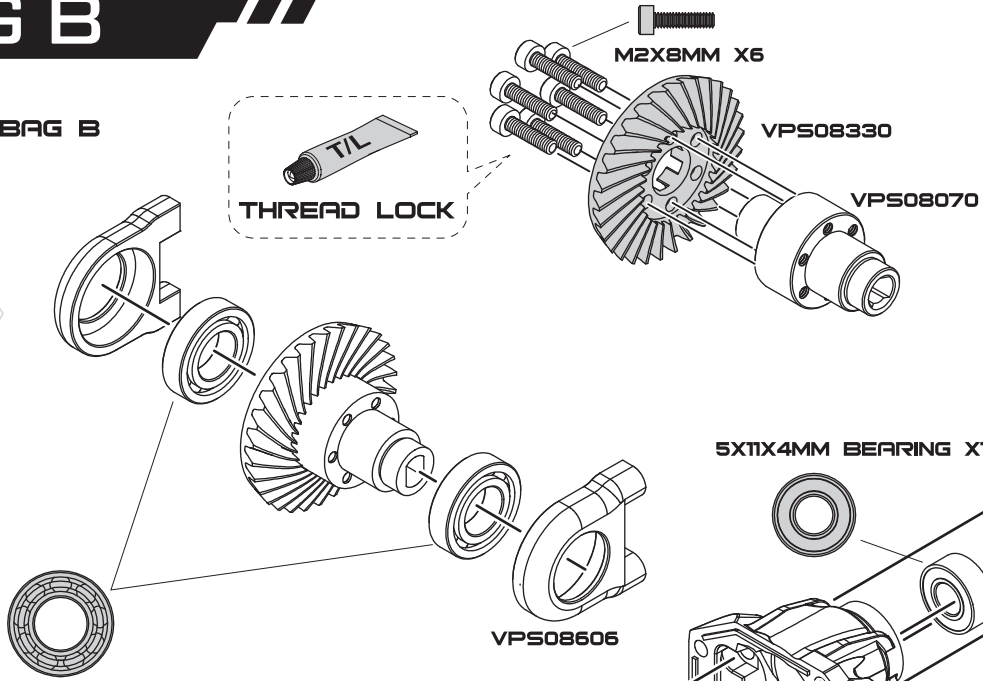
FRONT AXLE



BAG B

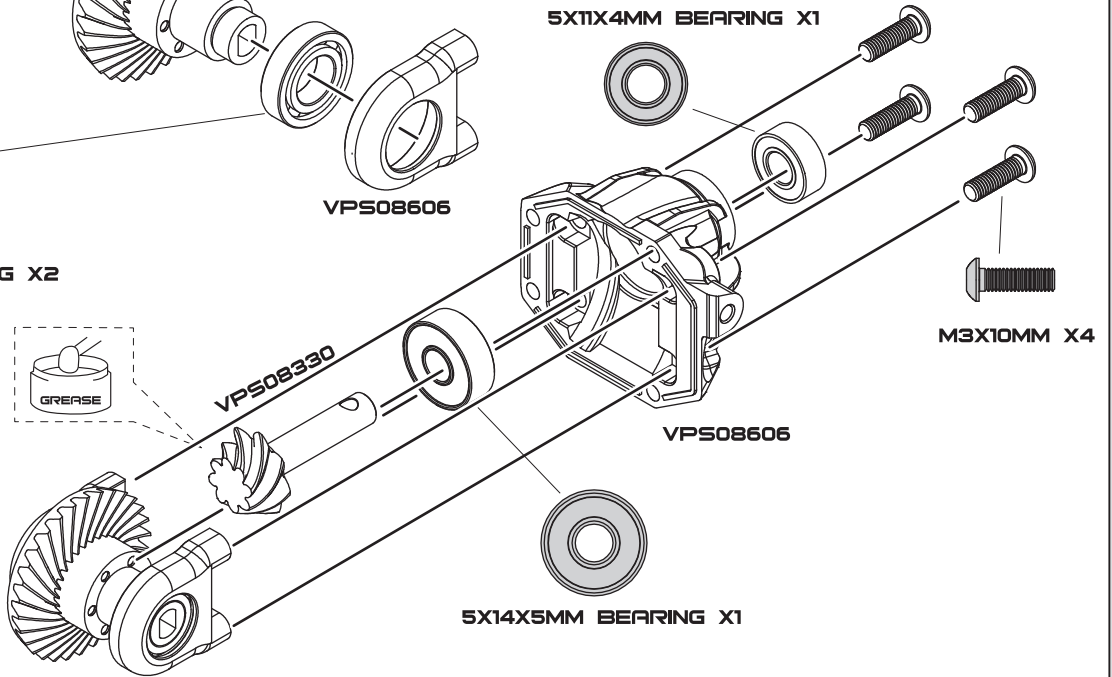
■ OPEN BAG B

1



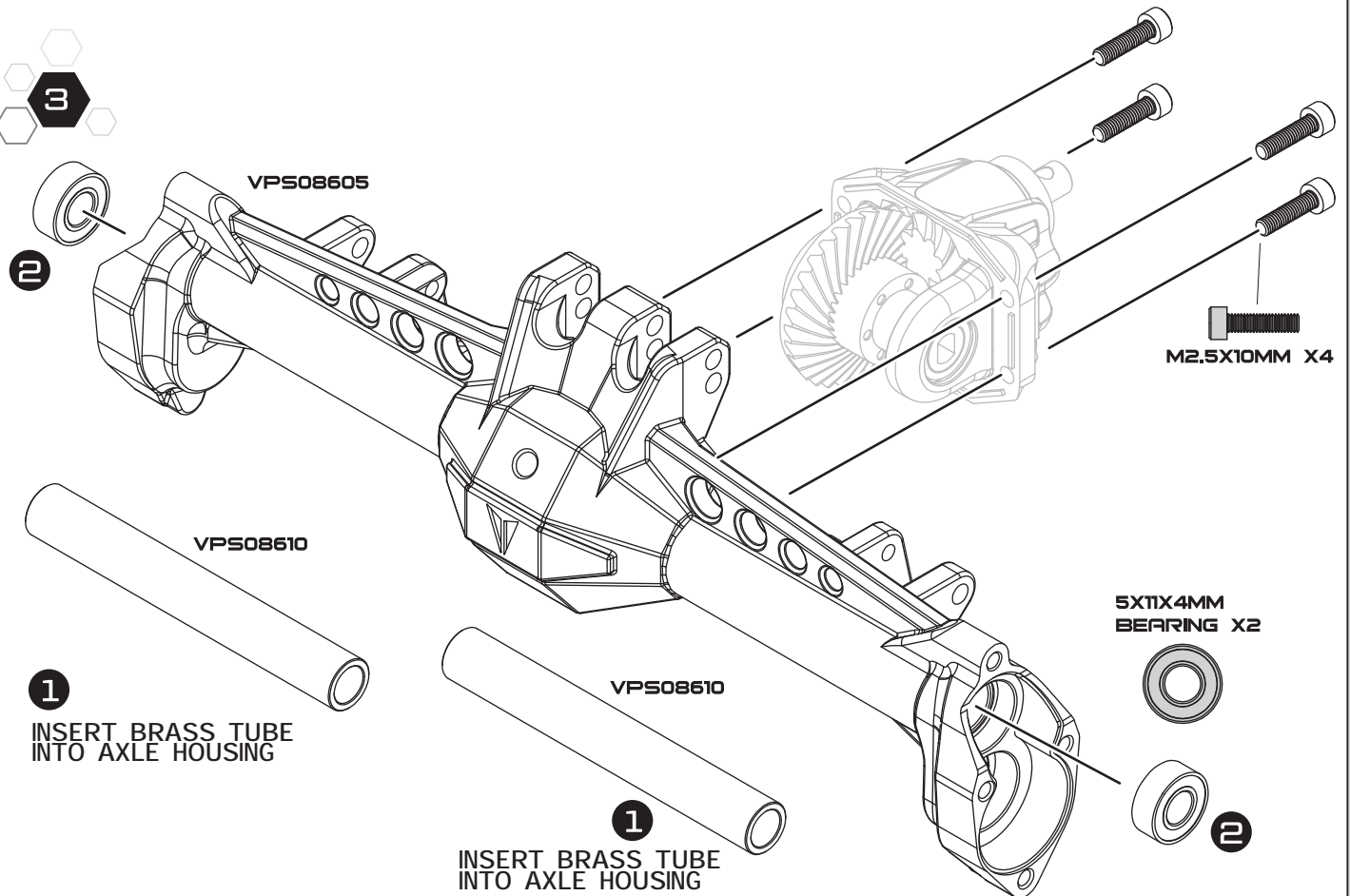
7X14X3.5MM BEARING X2

2



5X14X5MM BEARING X1

3



M2.5X10MM X4

5X11X4MM BEARING X2

1
INSERT BRASS TUBE INTO AXLE HOUSING

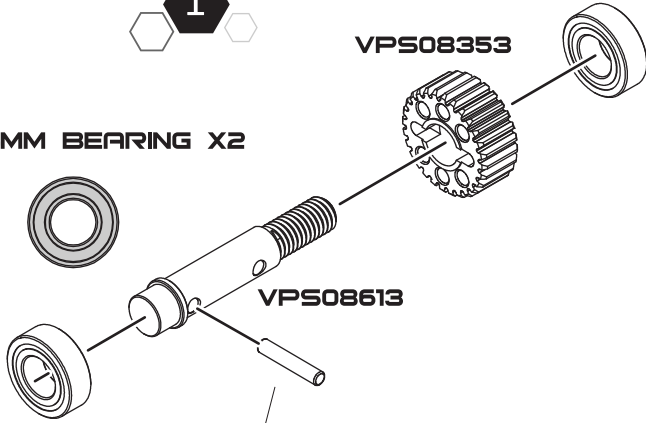
1
INSERT BRASS TUBE INTO AXLE HOUSING

BAG B

REAR AXLE



6X12X4MM BEARING X2



VPS08353

VPS08613

2X11MM PIN X1



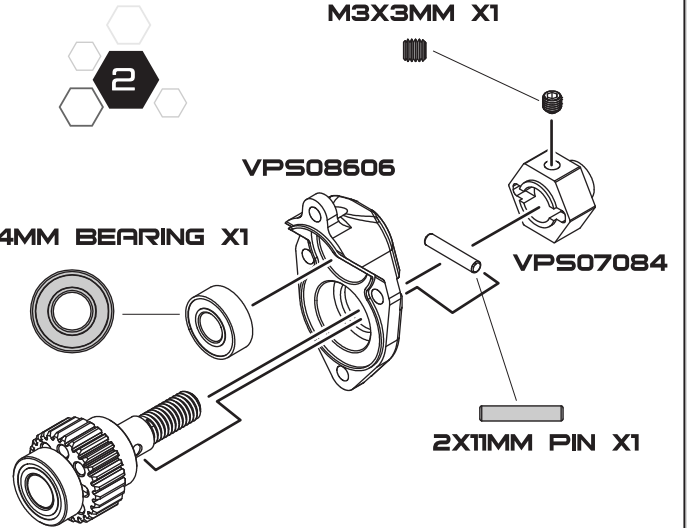
M3X3MM X1

5X11X4MM BEARING X1

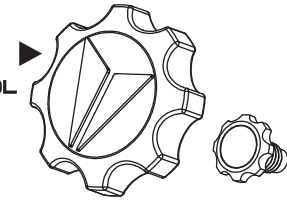
VPS08606

VPS07084

2X11MM PIN X1



NOTE:
OIL FILL CAP
INSTALL TOOL

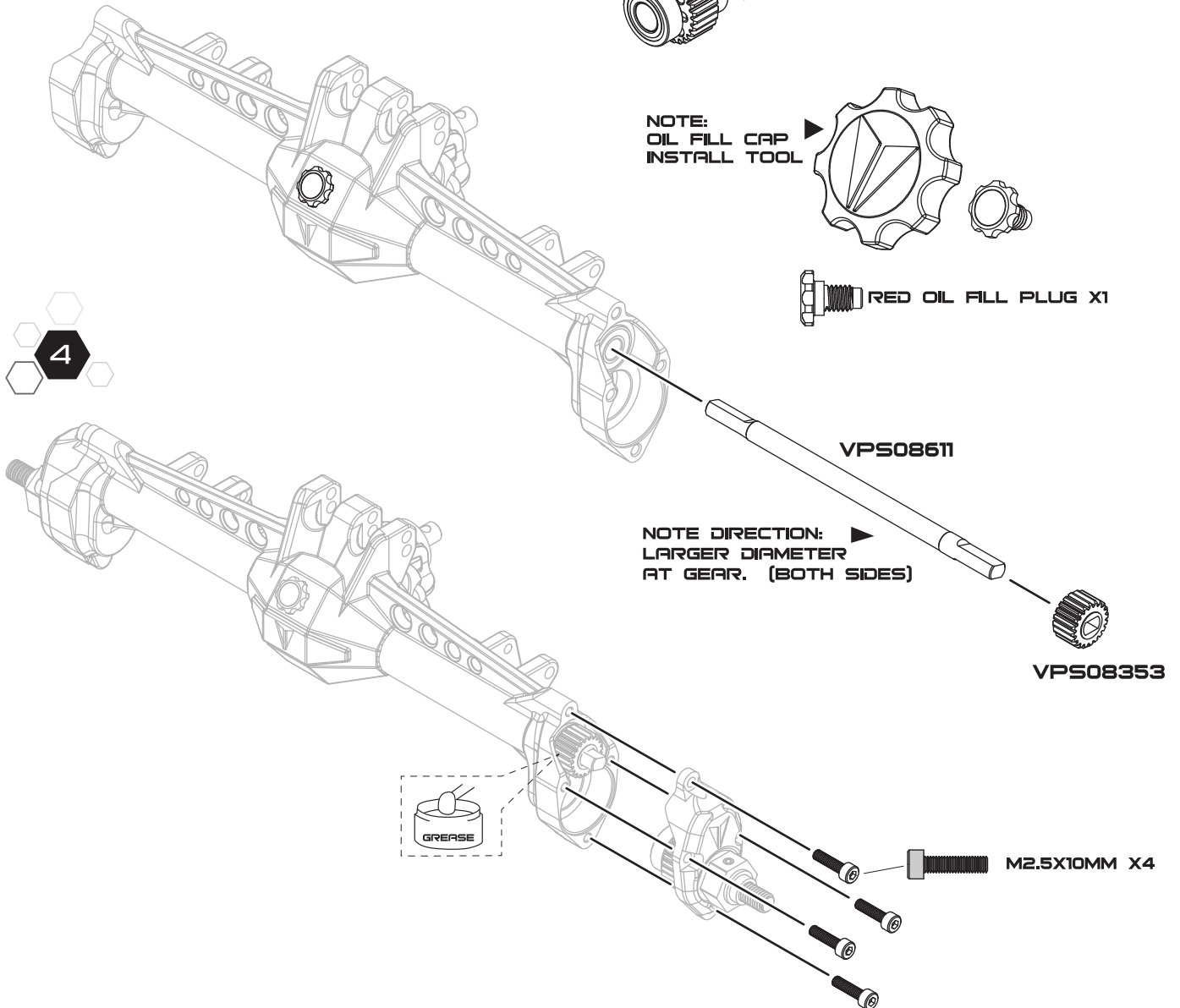


RED OIL FILL PLUG X1



VPS08611

NOTE DIRECTION:
LARGER DIAMETER
AT GEAR. (BOTH SIDES)



VPS08353

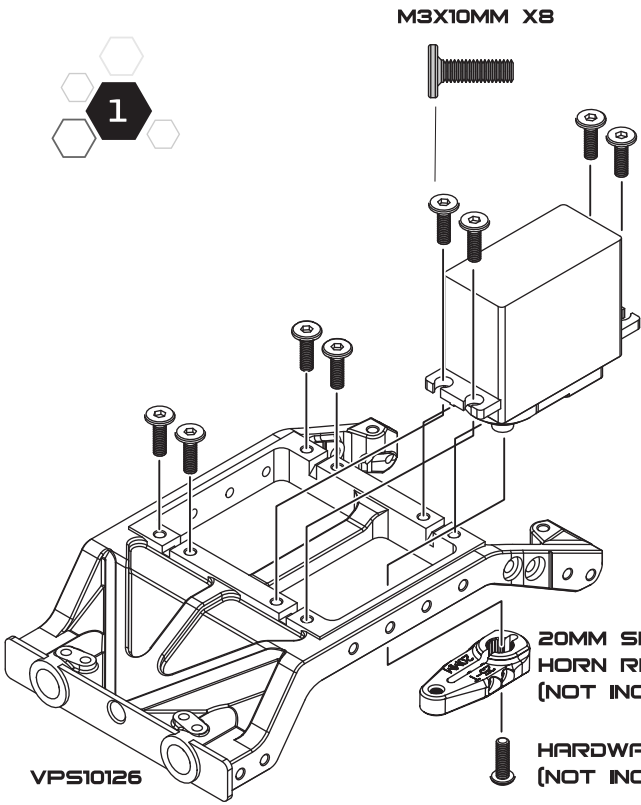
M2.5X10MM X4

GREASE

BAG C

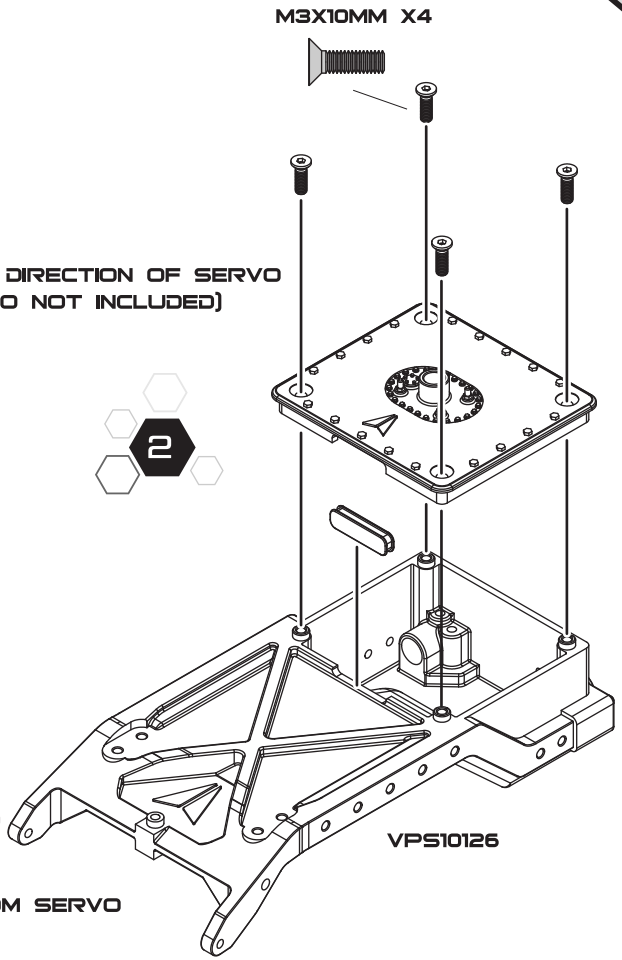
CHASSIS OPEN BAG C

1

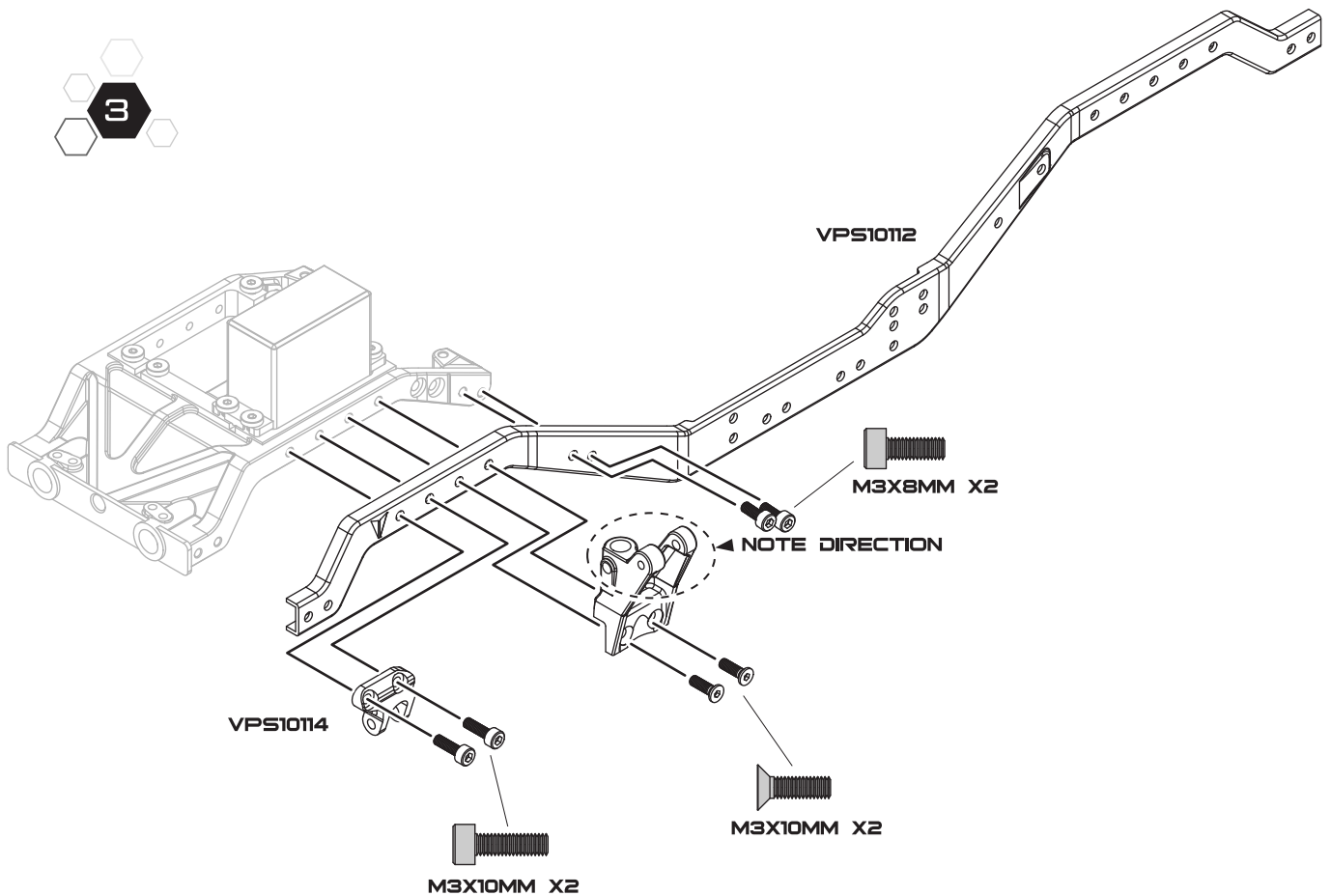


*NOTE DIRECTION OF SERVO
(SERVO NOT INCLUDED)

2



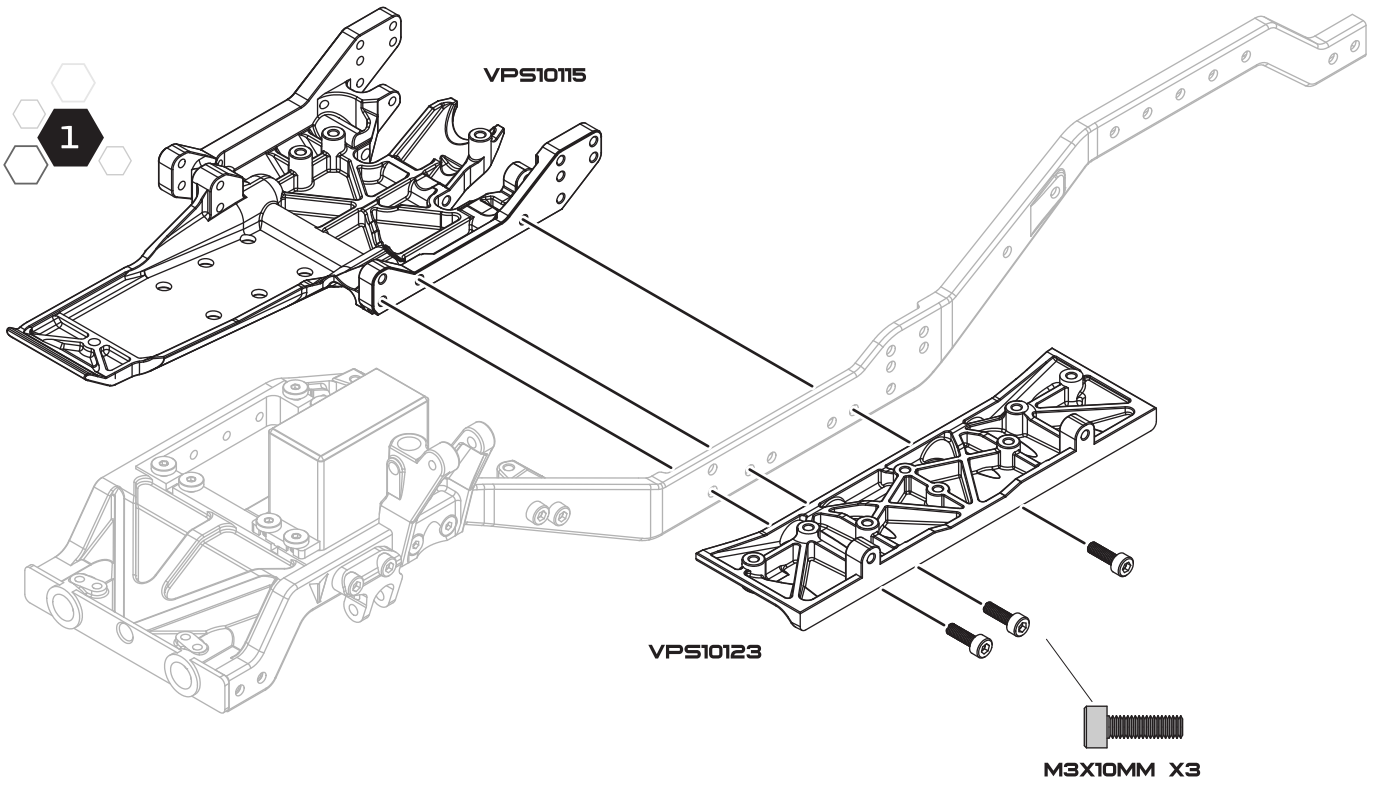
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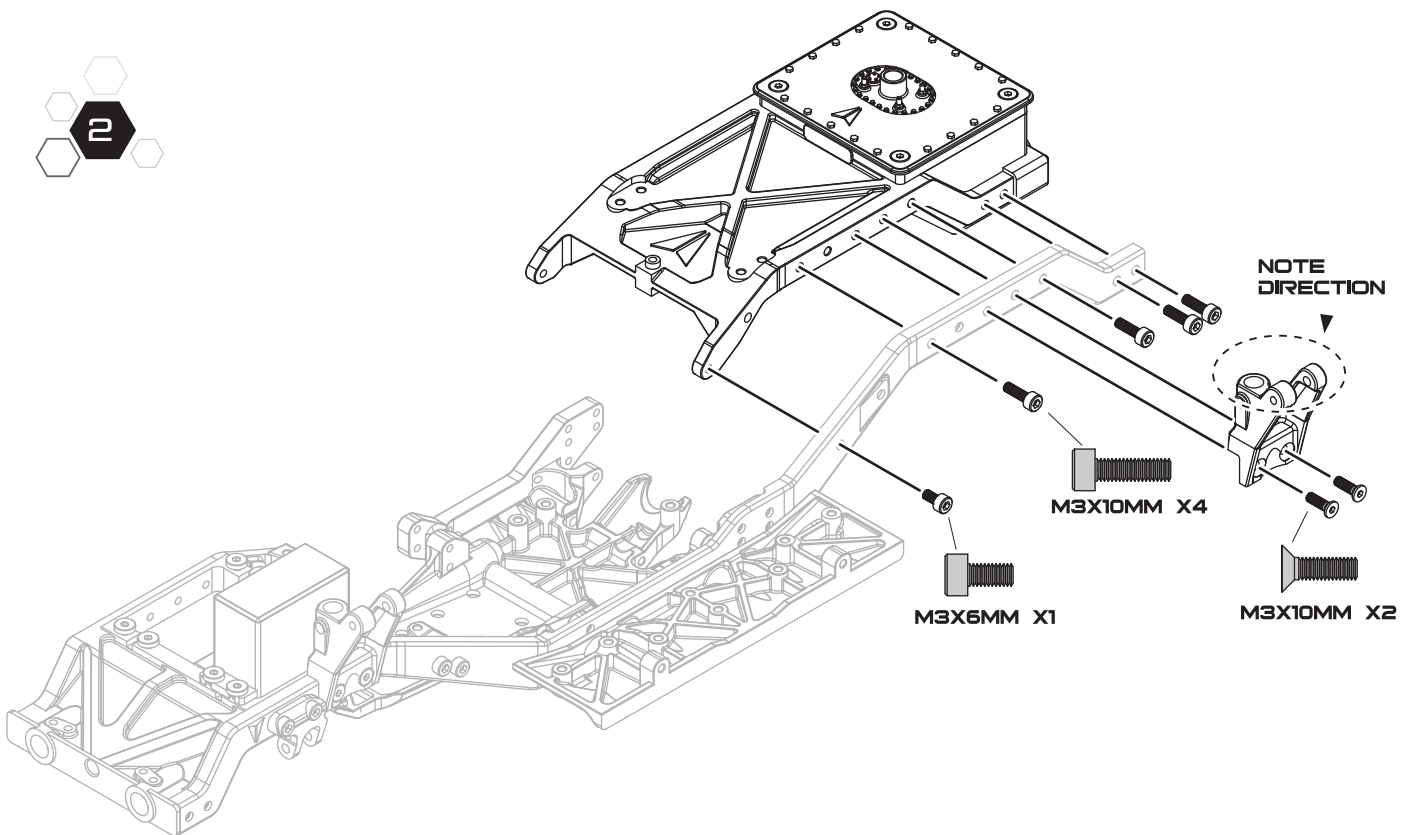
BAG C

CHASSIS OPEN BAG C

1

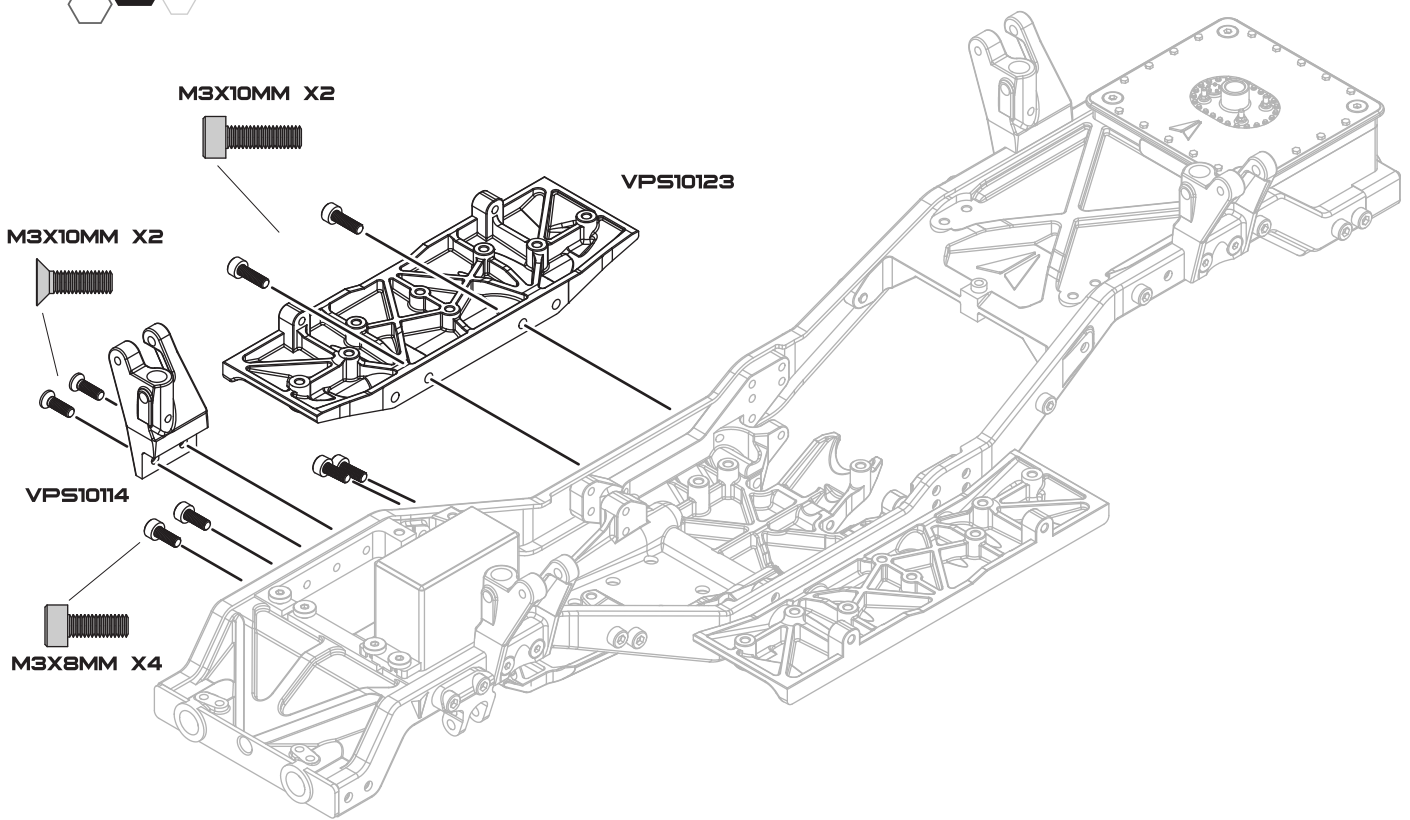
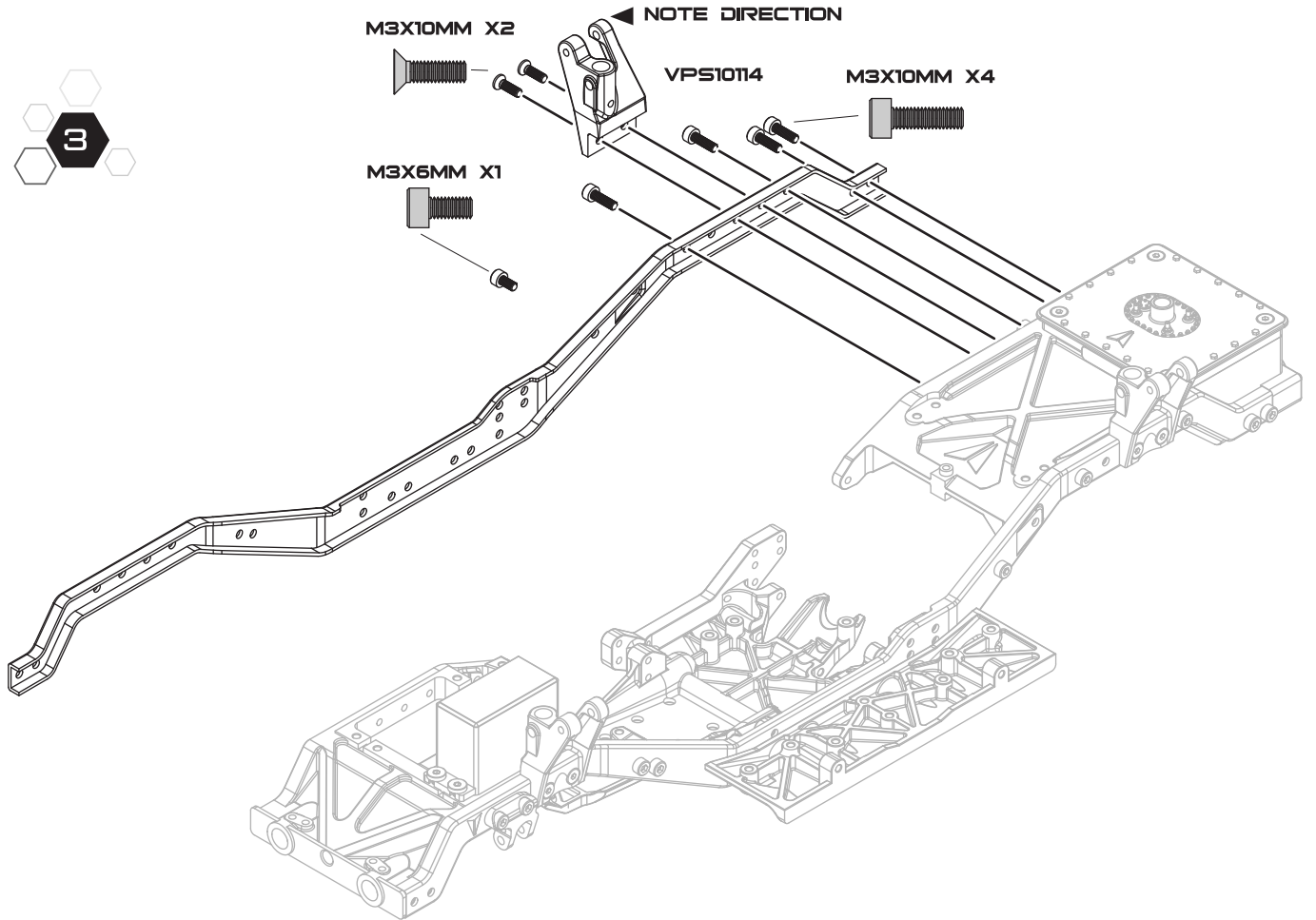


2



BAG C

■ CHASSIS

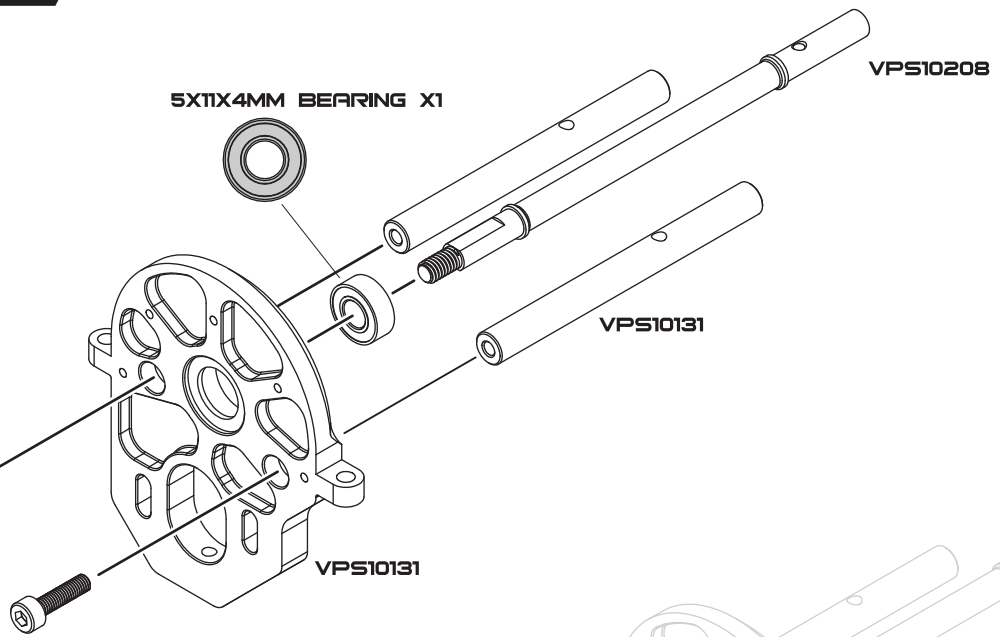


BAG D

■ OPEN BAG D



M3X12MM X2



M4 NYLOCK NUT X1



IRC00412

5X9X3MM BEARING X1



VPS10208

IRC00412

IRC00410
52T SPUR GEAR X1

VPS10208

PU WASHER X1



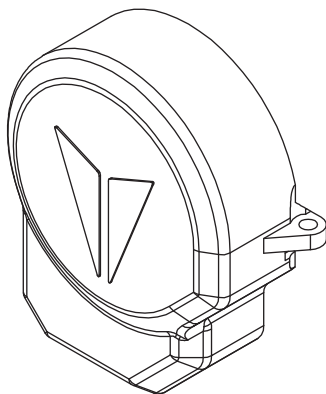
M3X10MM X2



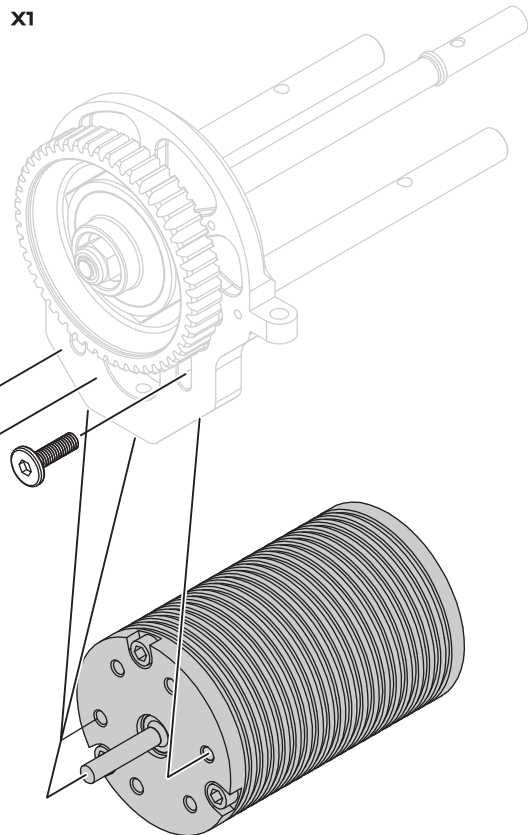
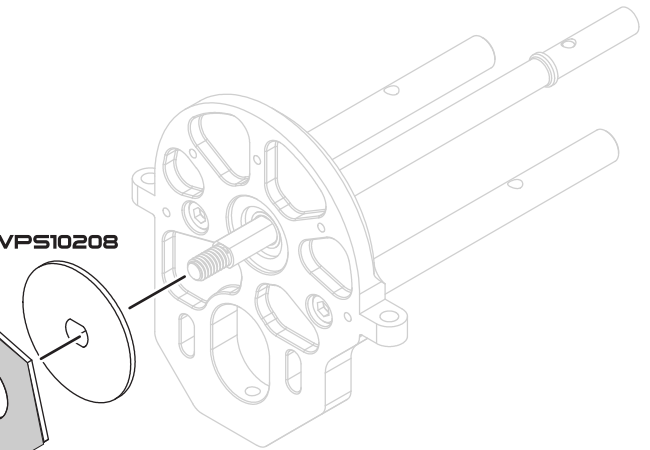
M4X4MM X1



IRC00263

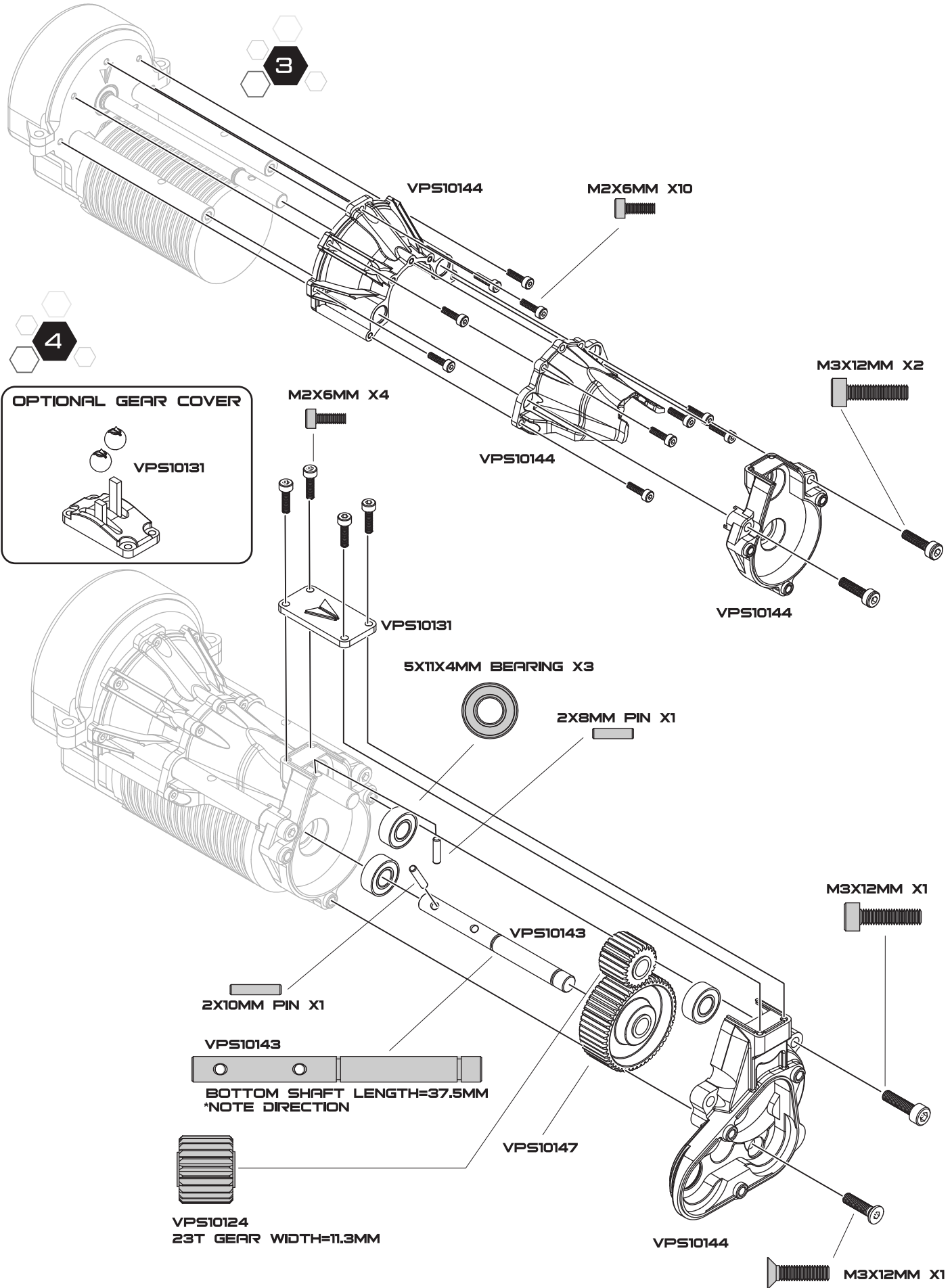


VPS10144



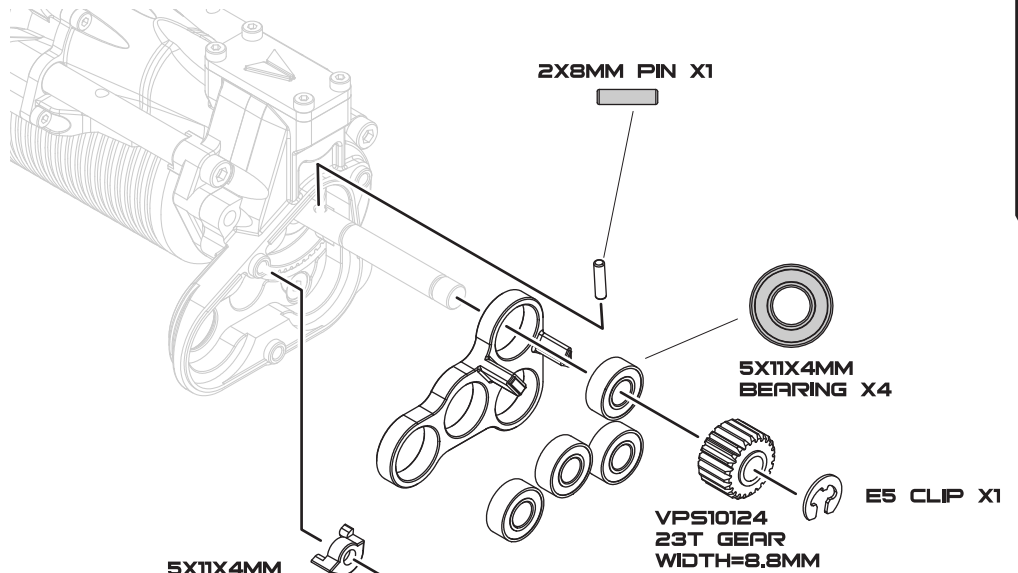
BAG D

TRANSMISSION



BAG D

■ TRANSMISSION



VPS10204 20T IDLER GEAR X1

5X7X0.2 WASHER

5X11X4MM BEARING

M3X12MM X1

VPS10204 32T DRIVE GEAR X1

5X7X0.2 WASHER

5X9X3MM BEARING

VPS10205

5X11X4MM BEARING

VPS10205

VPS10206

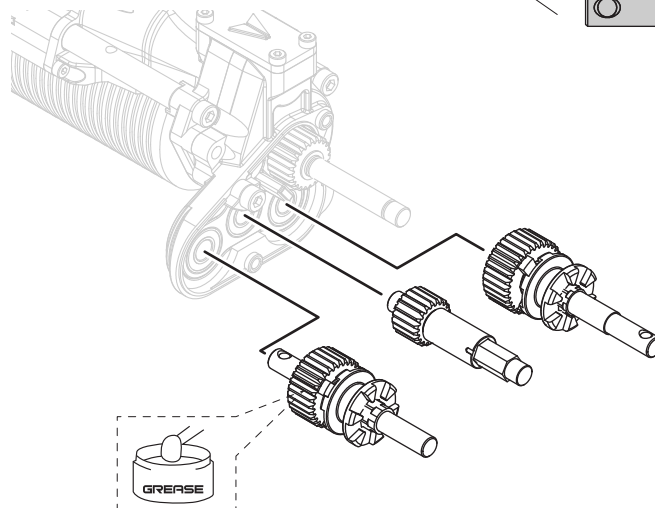
VPS10201

VPS10206

VPS10206

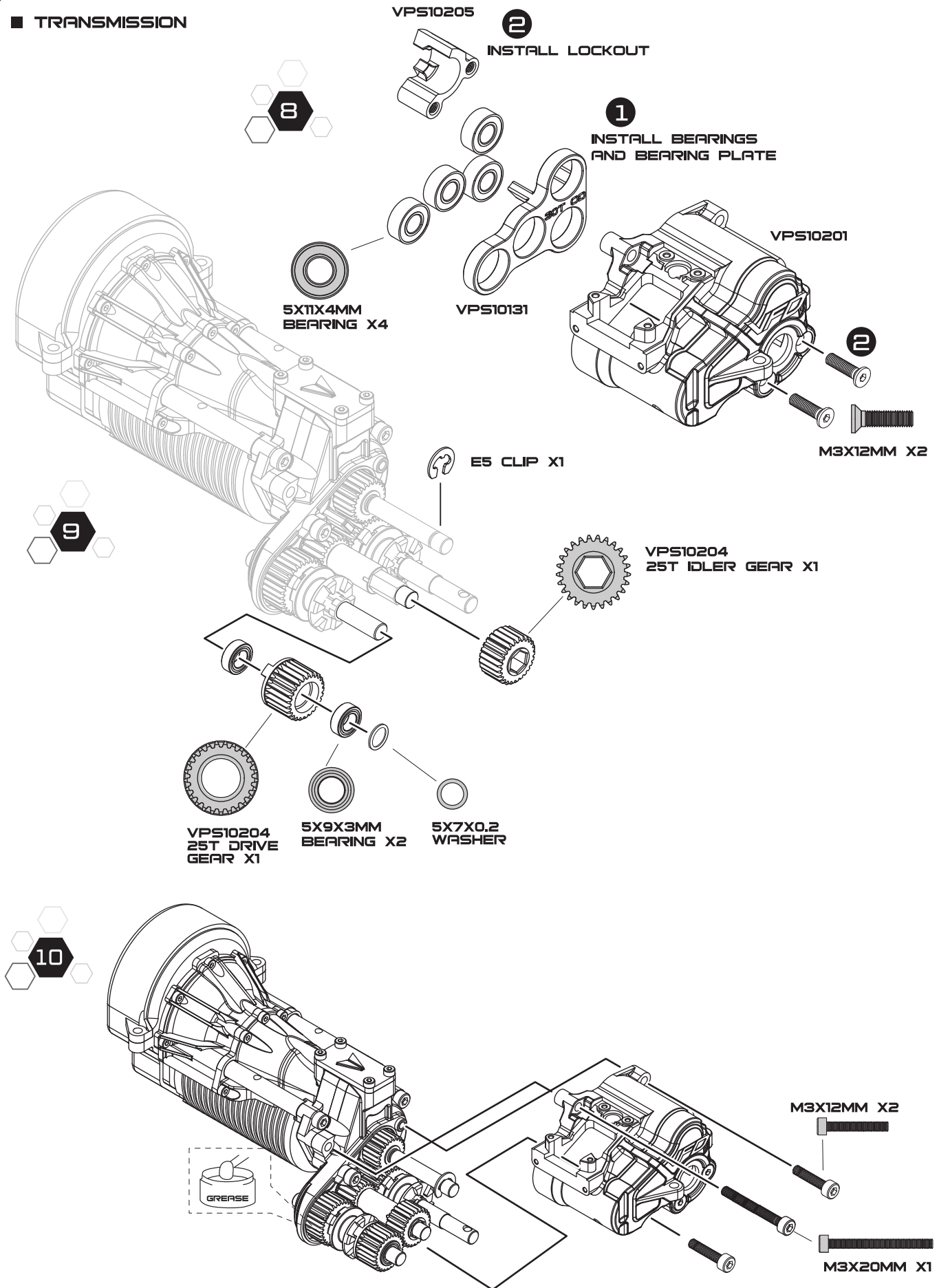
VPS10204 30T DRIVE GEAR X1

5X9X3MM BEARING



BAG D

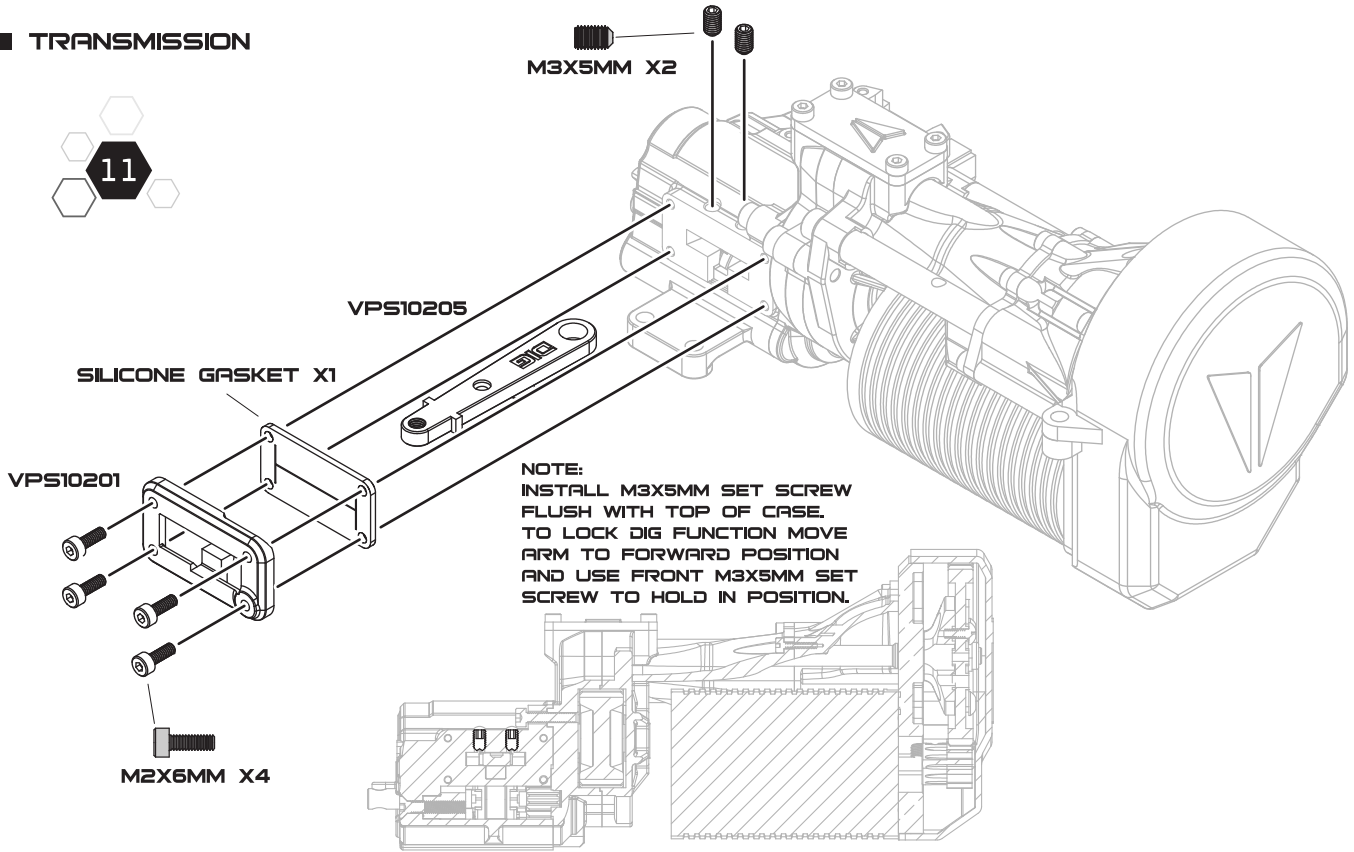
■ TRANSMISSION



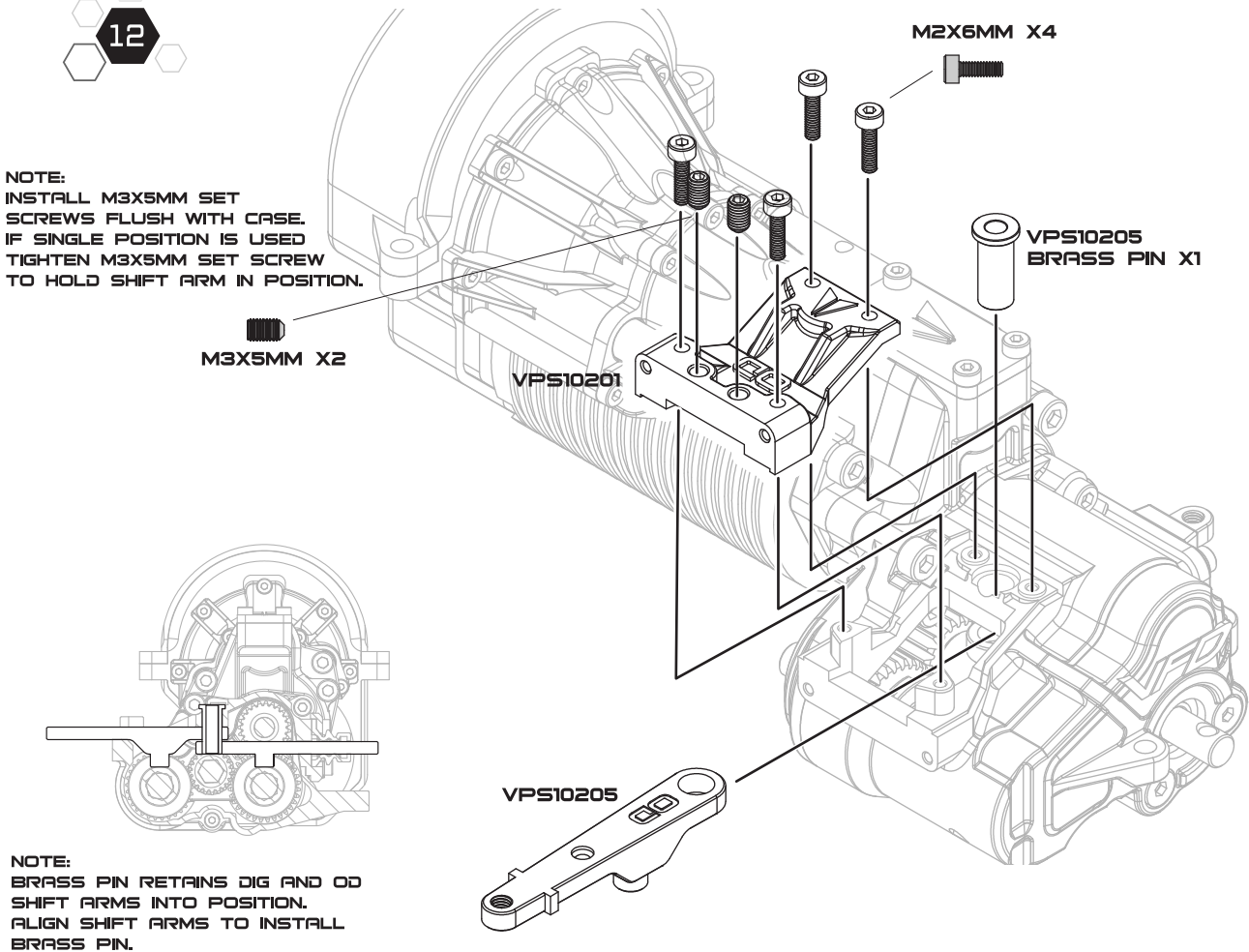
BAG D

TRANSMISSION

11

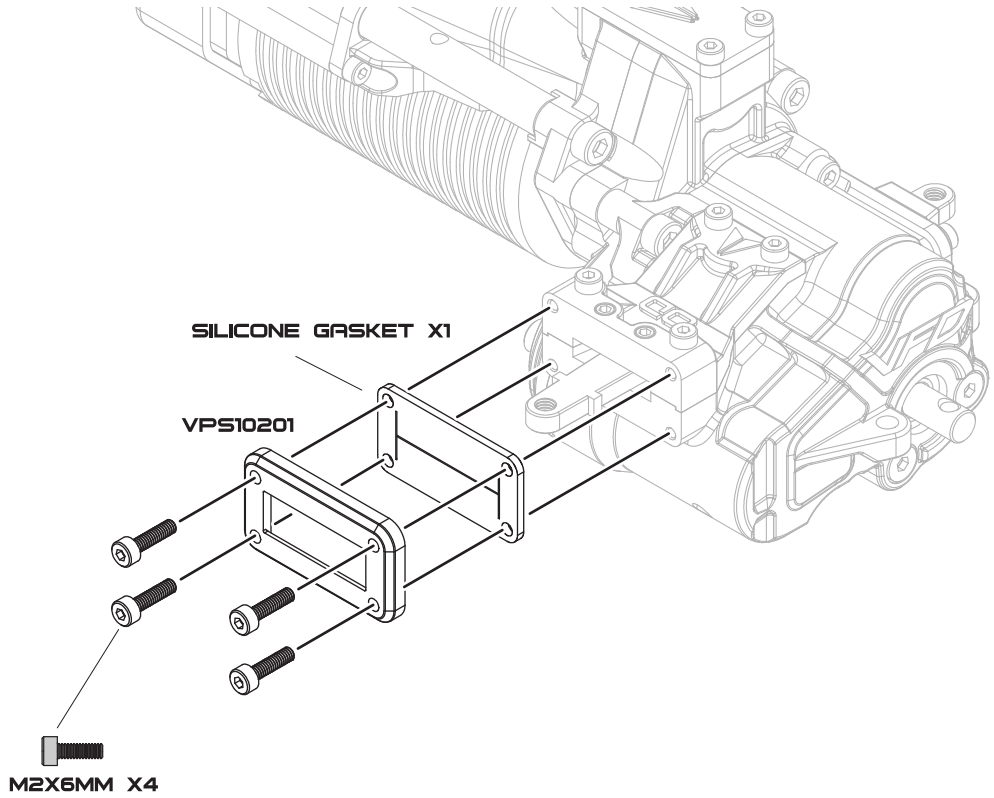


12

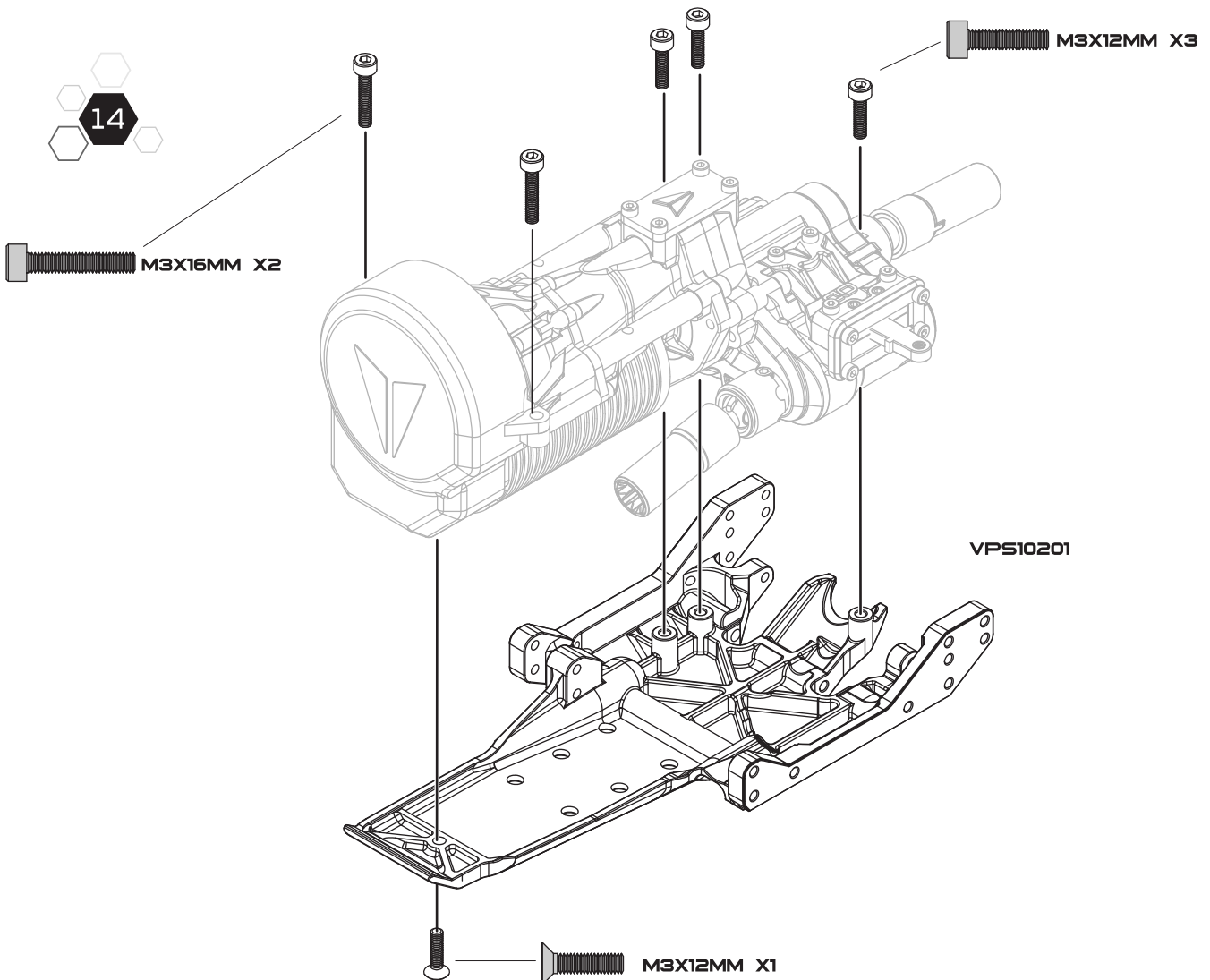


TRANSMISSION

13



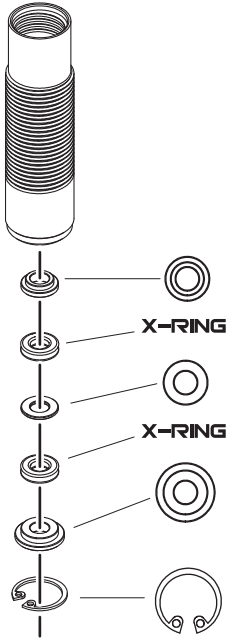
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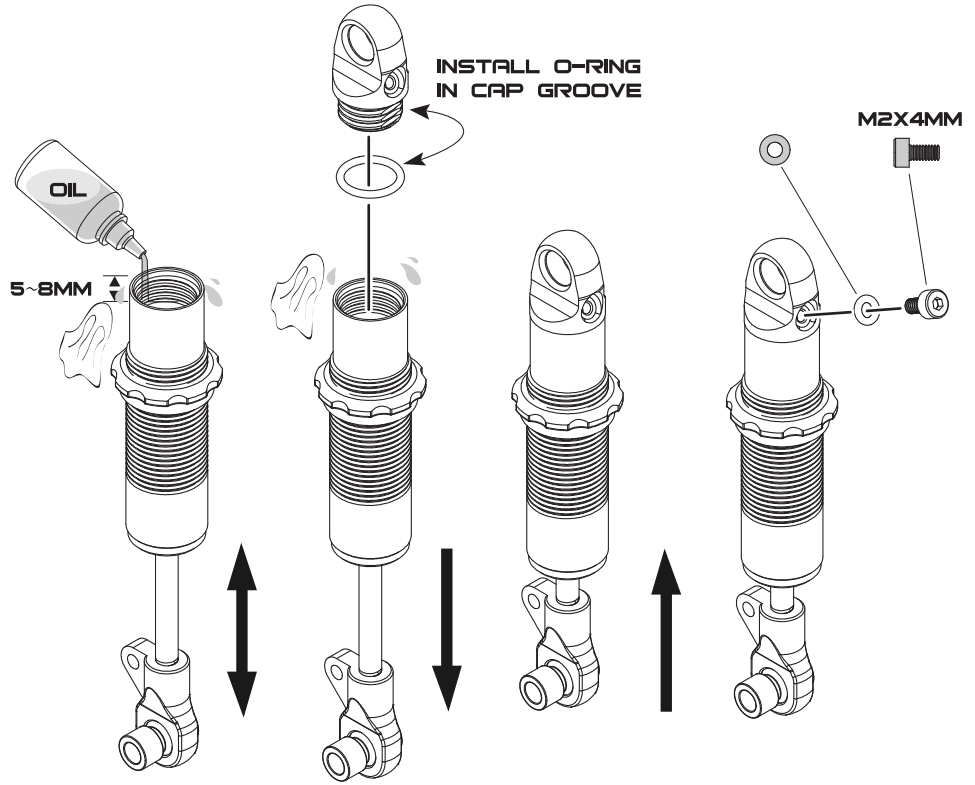
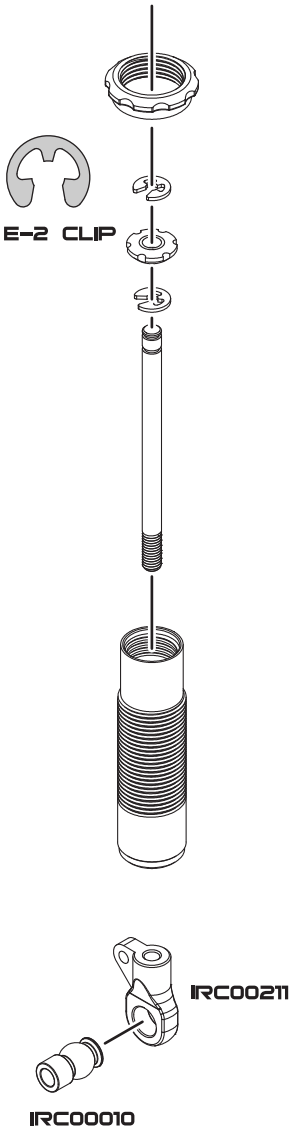
BAG E

SHOCKS OPEN BAG E

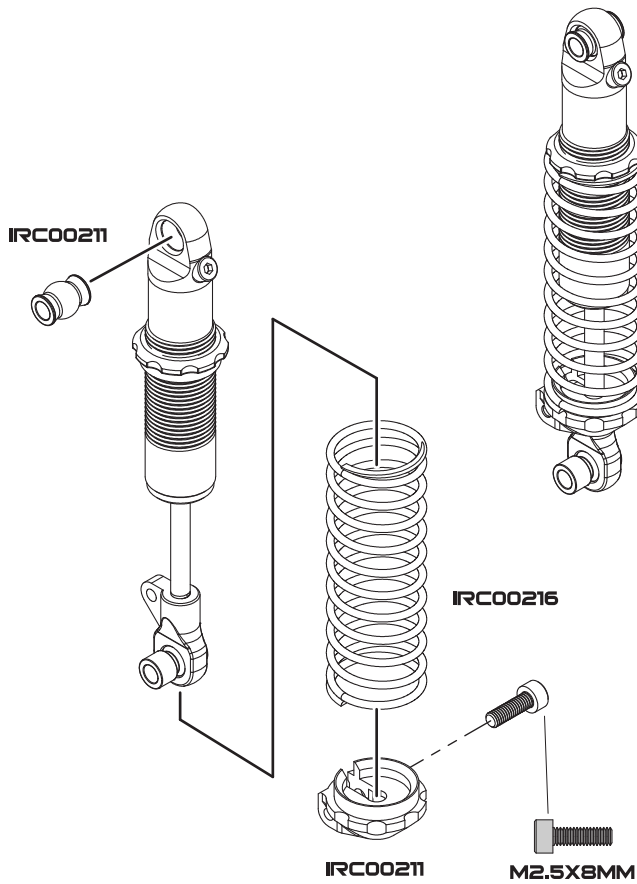
ASSEMBLY STEP 1



ASSEMBLY STEP 2

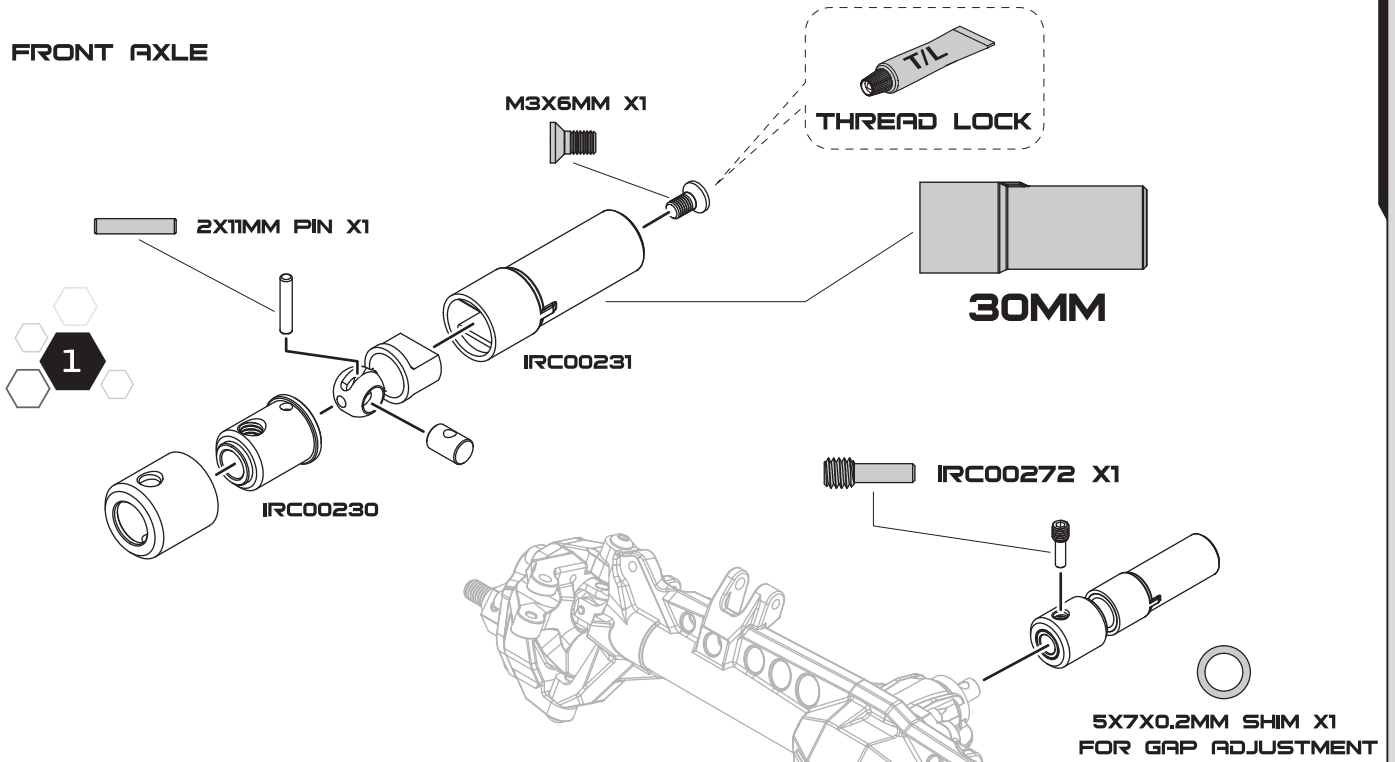


NOTE:
SEE PAGE 37 FOR ALL S8E SHOCK
SPARE PARTS AND OPTION PARTS.

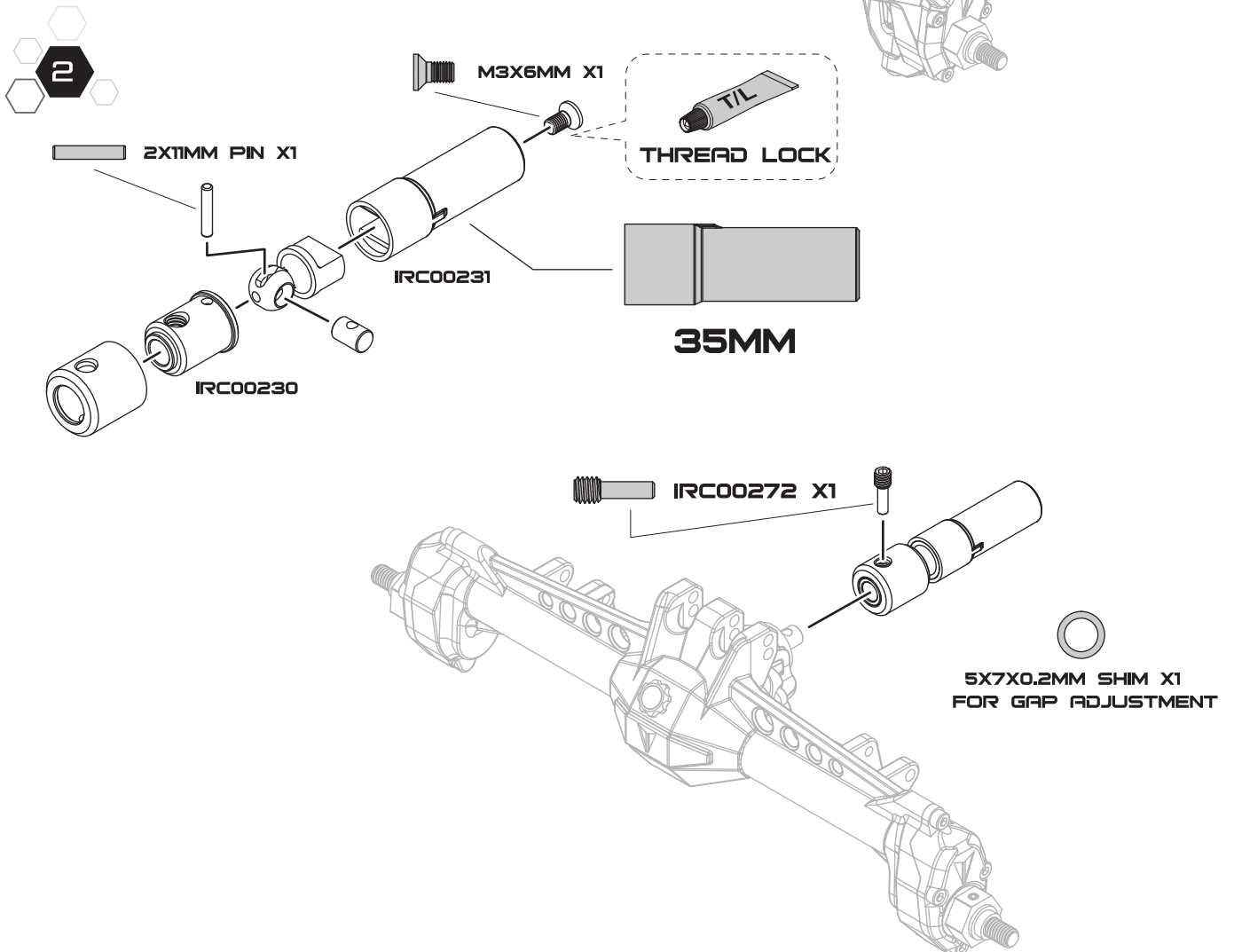


BAG F

FRONT AXLE

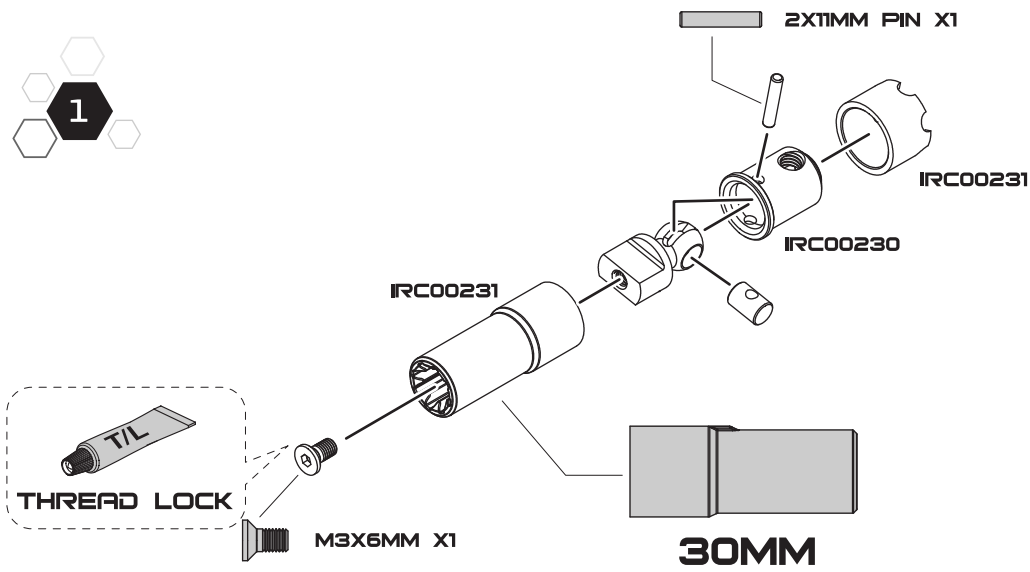


REAR AXLE



FRONT

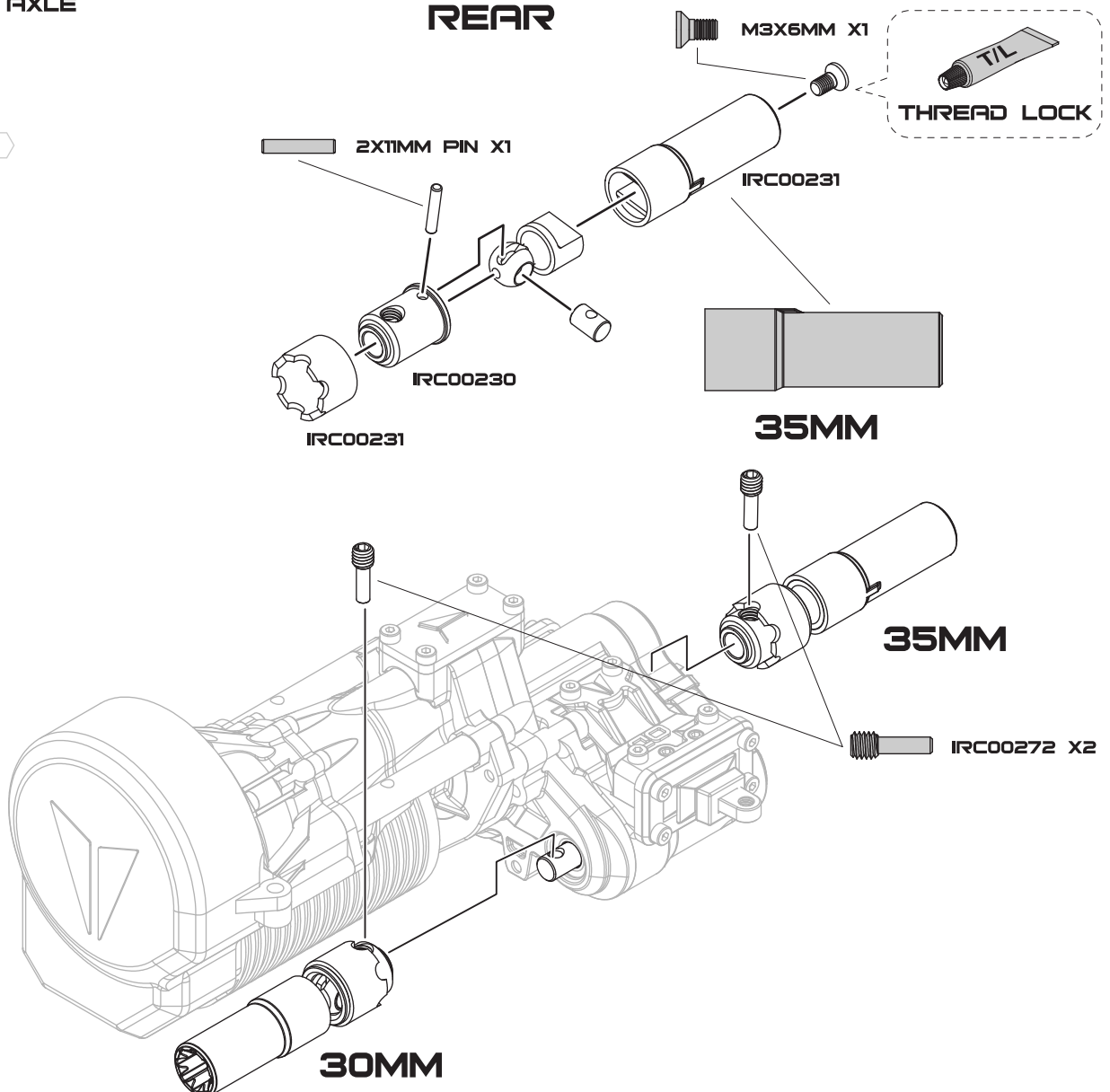
FRONT AXLE



REAR AXLE



REAR



■ OPEN BAG G

X2 REAR LOWER LINKS



X2 REAR UPPER LINKS



X2 FRONT LOWER LINKS



X1 FRONT UPPER LINK



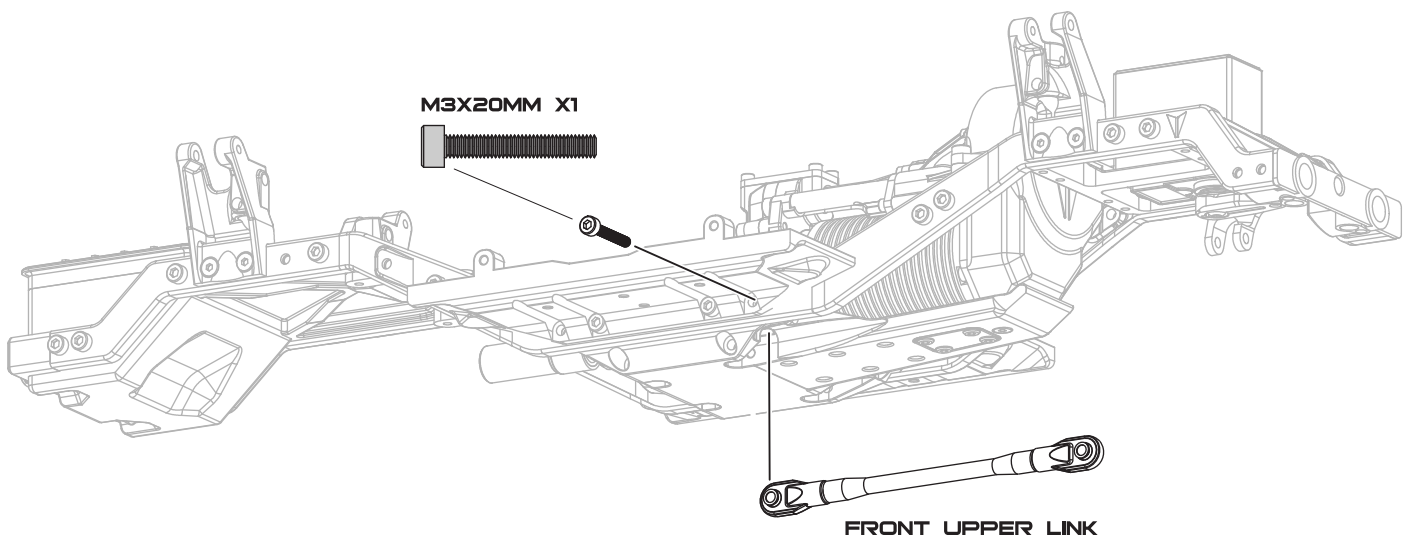
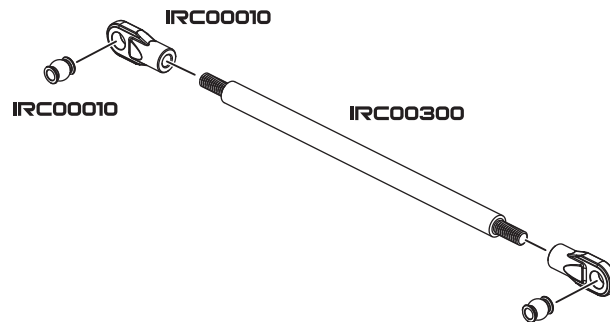
X1 PANHARD LINK



X1 DRAG LINK

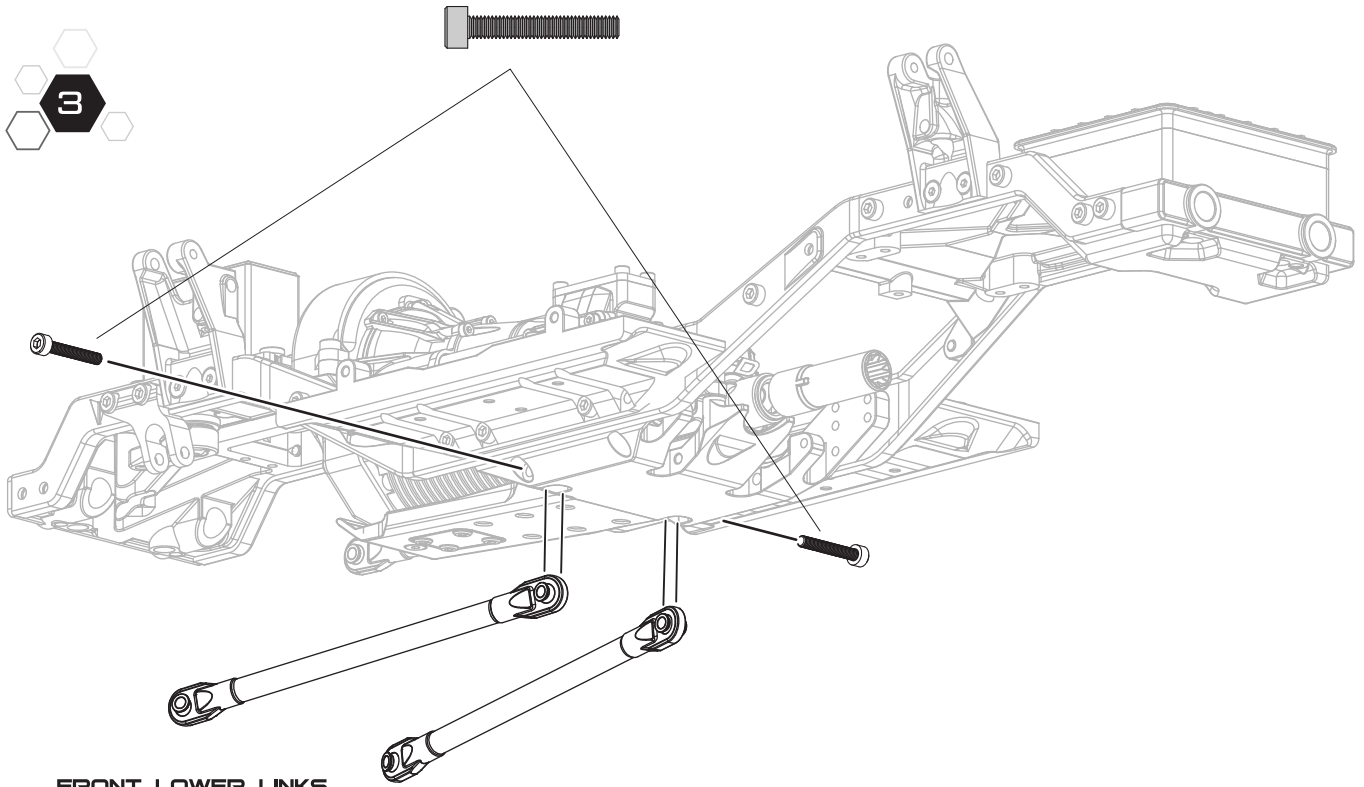


X1 TIE ROD

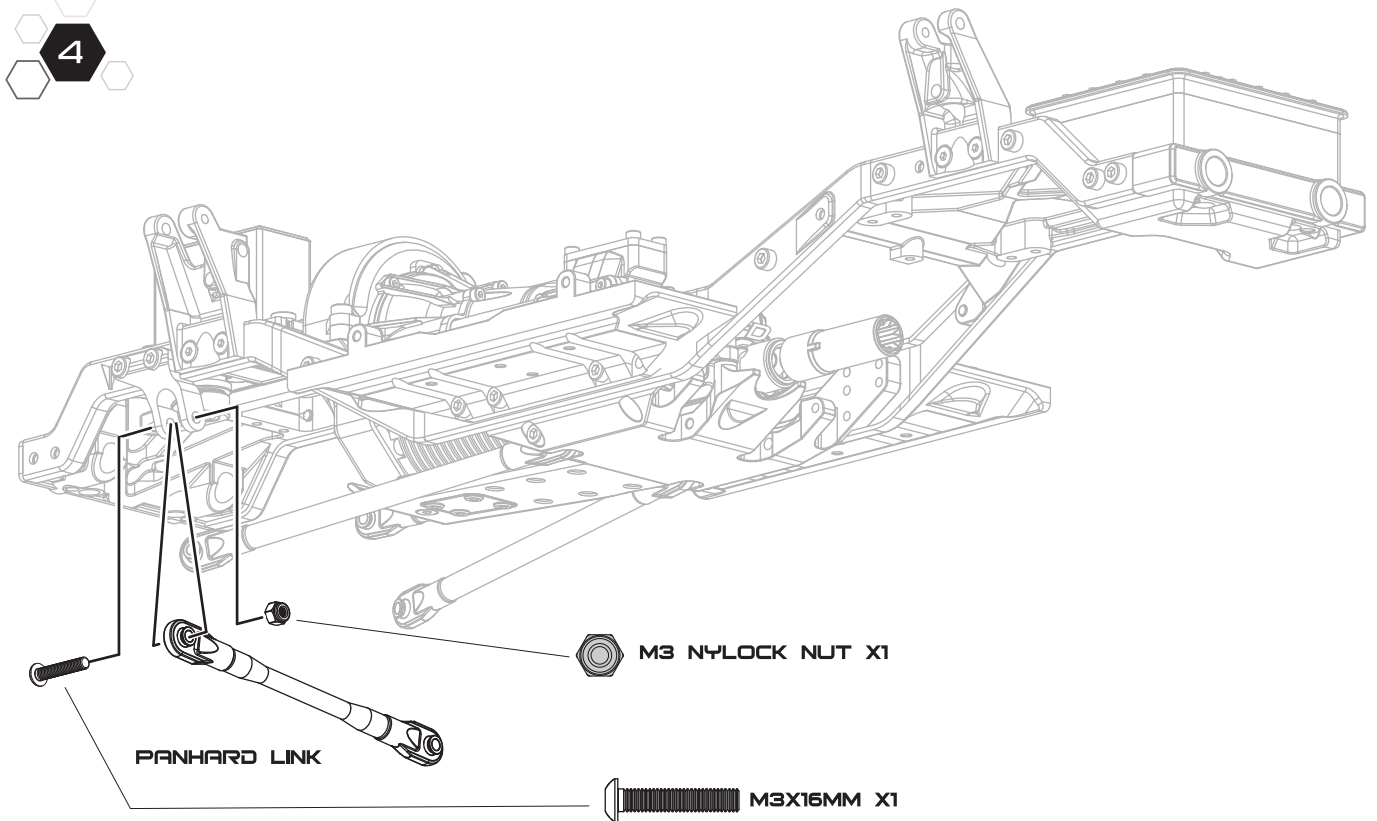


LINKS

M3X20MM X2



FRONT LOWER LINKS



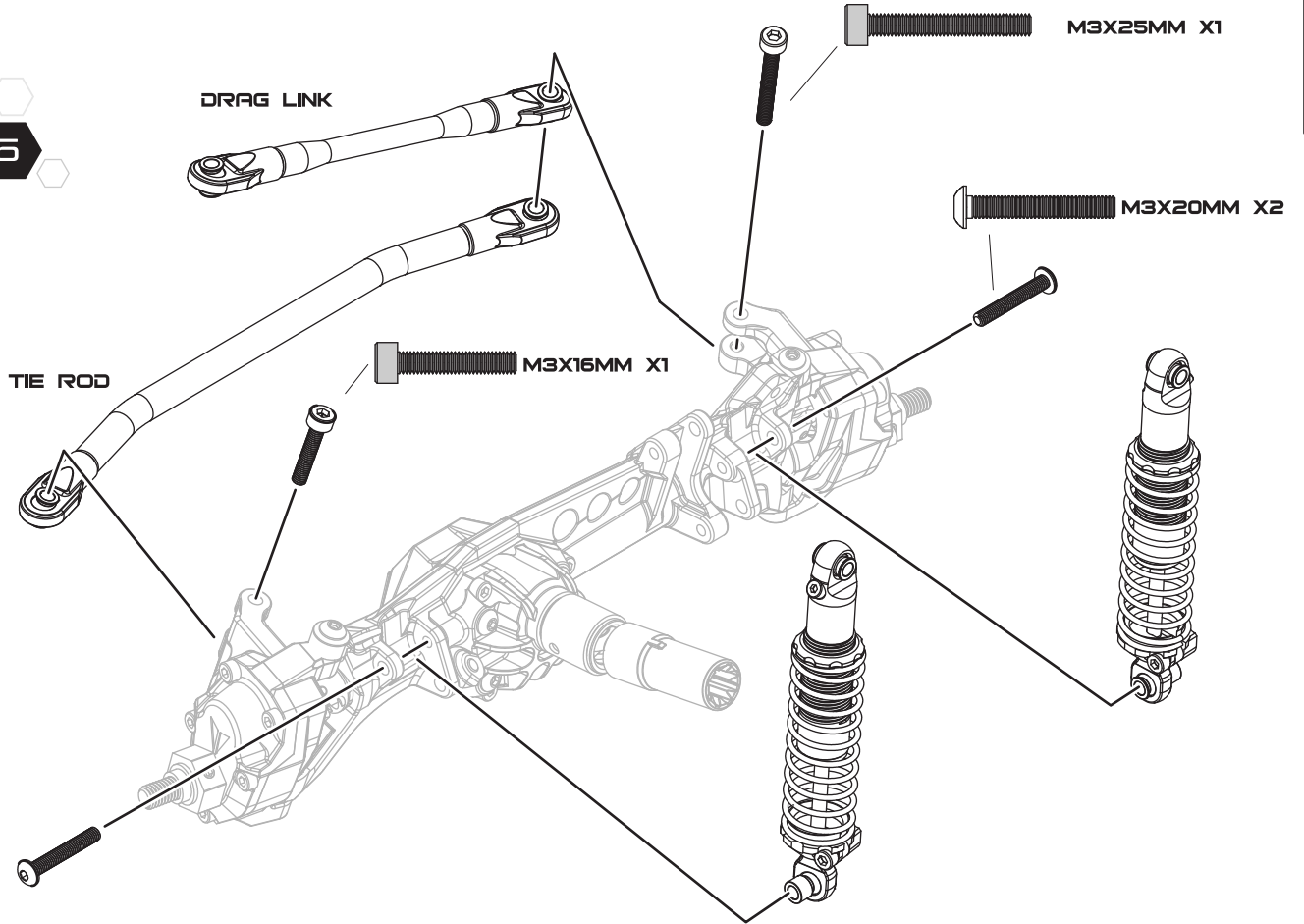
M3 NYLOCK NUT X1

PANHARD LINK

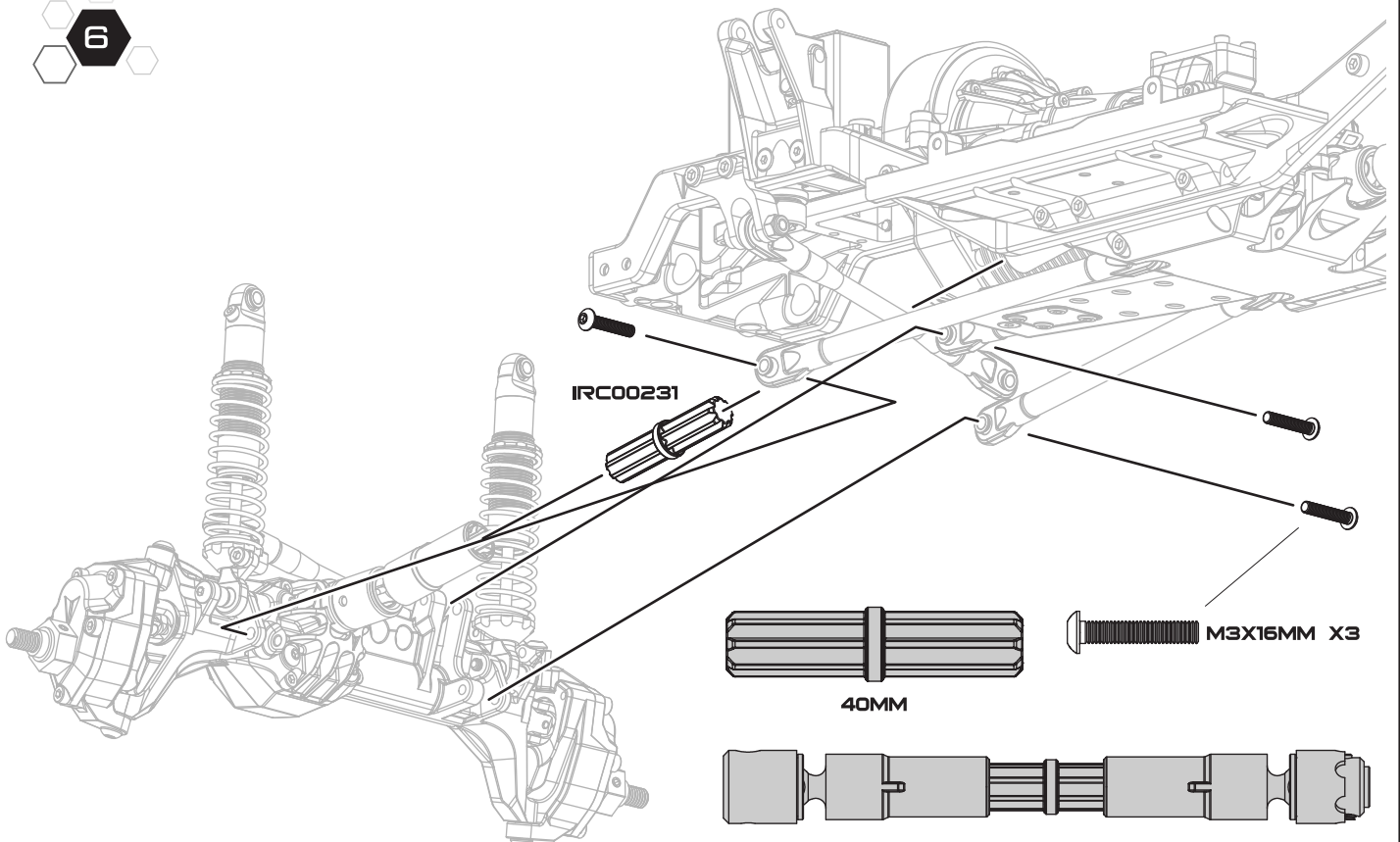
M3X16MM X1

■ INSTALL FRONT AXLE

5

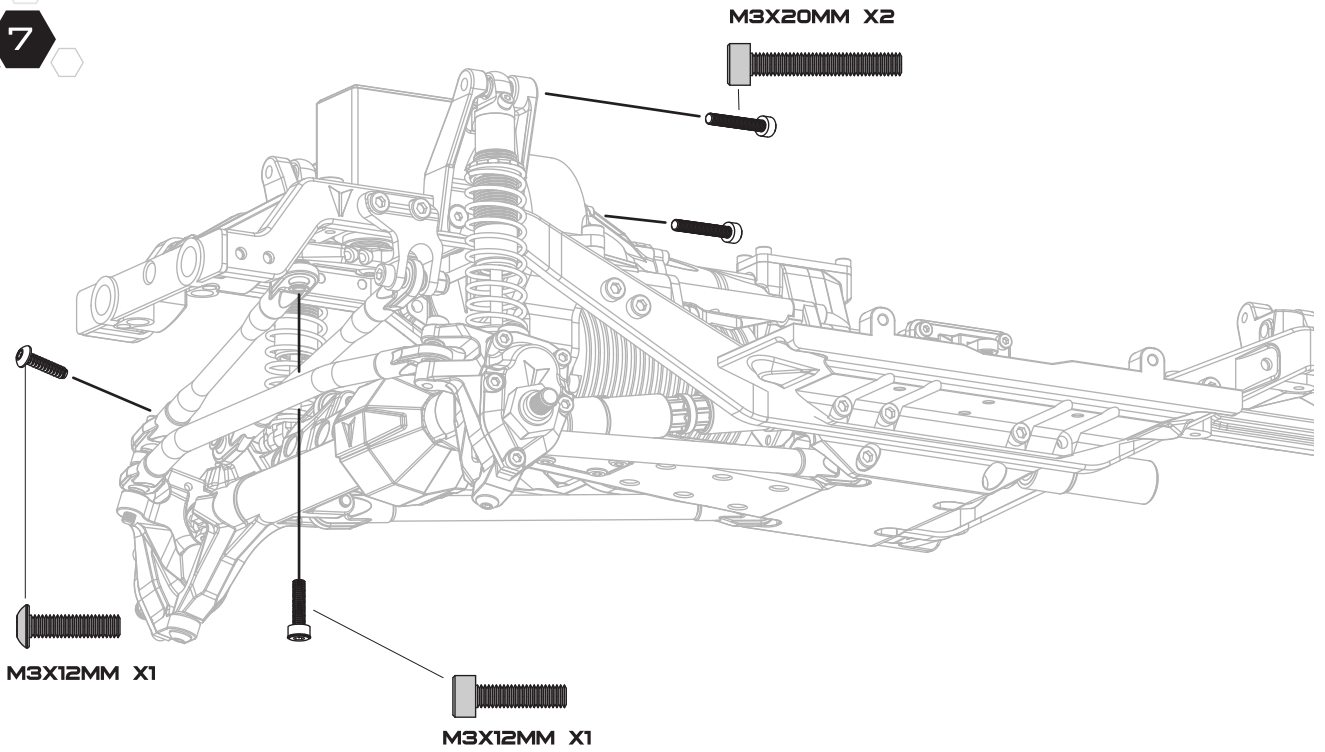


6

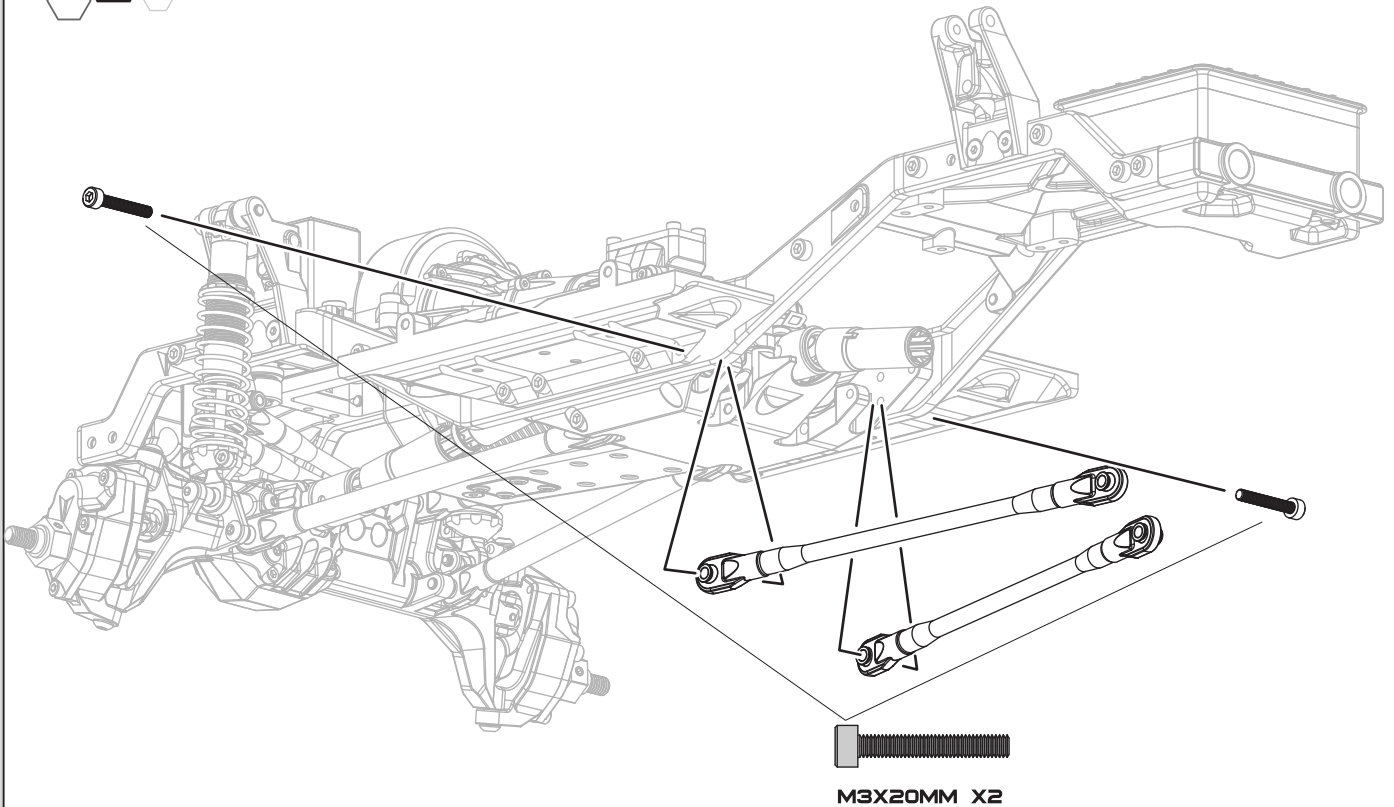


■ INSTALL FRONT AXLE

7

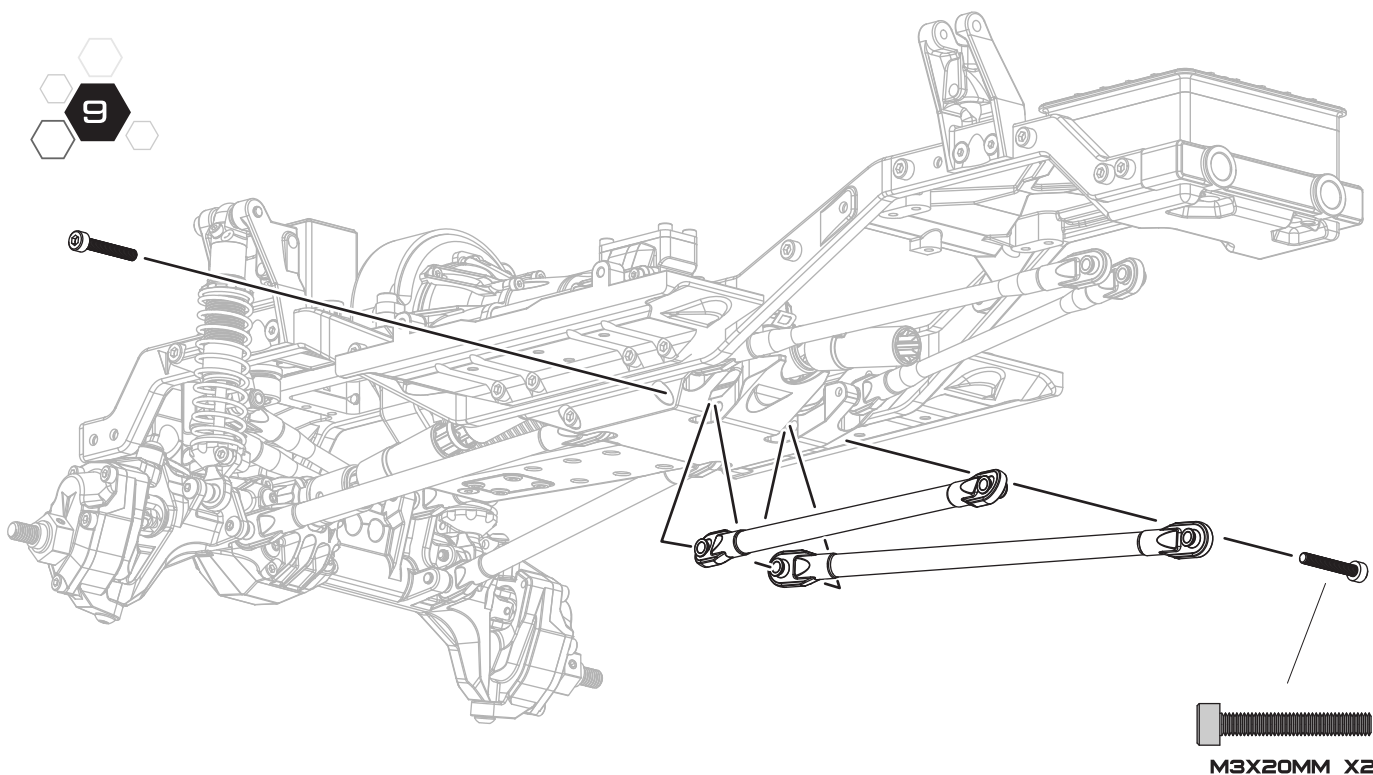


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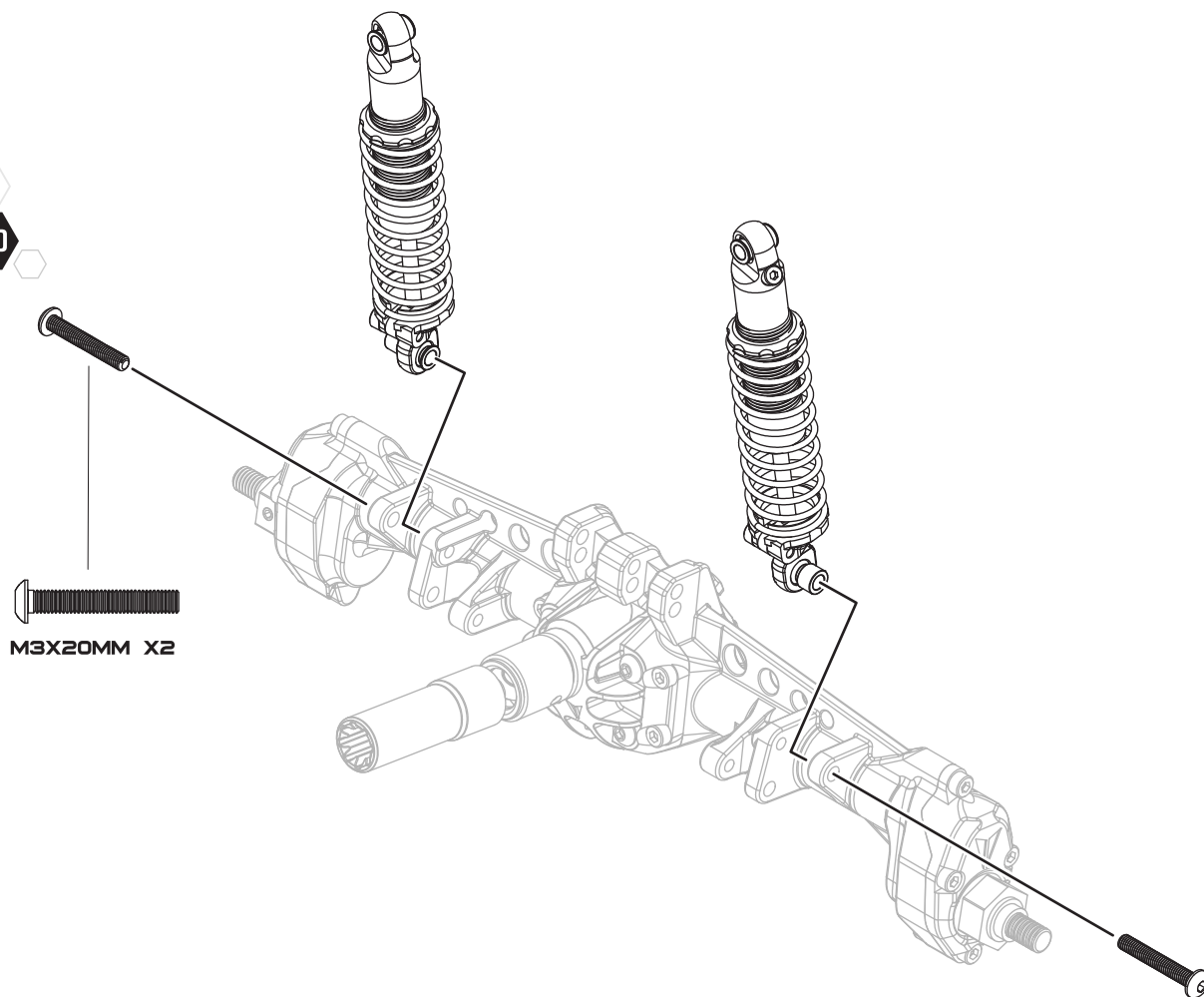


■ INSTALL REAR AXLE

9

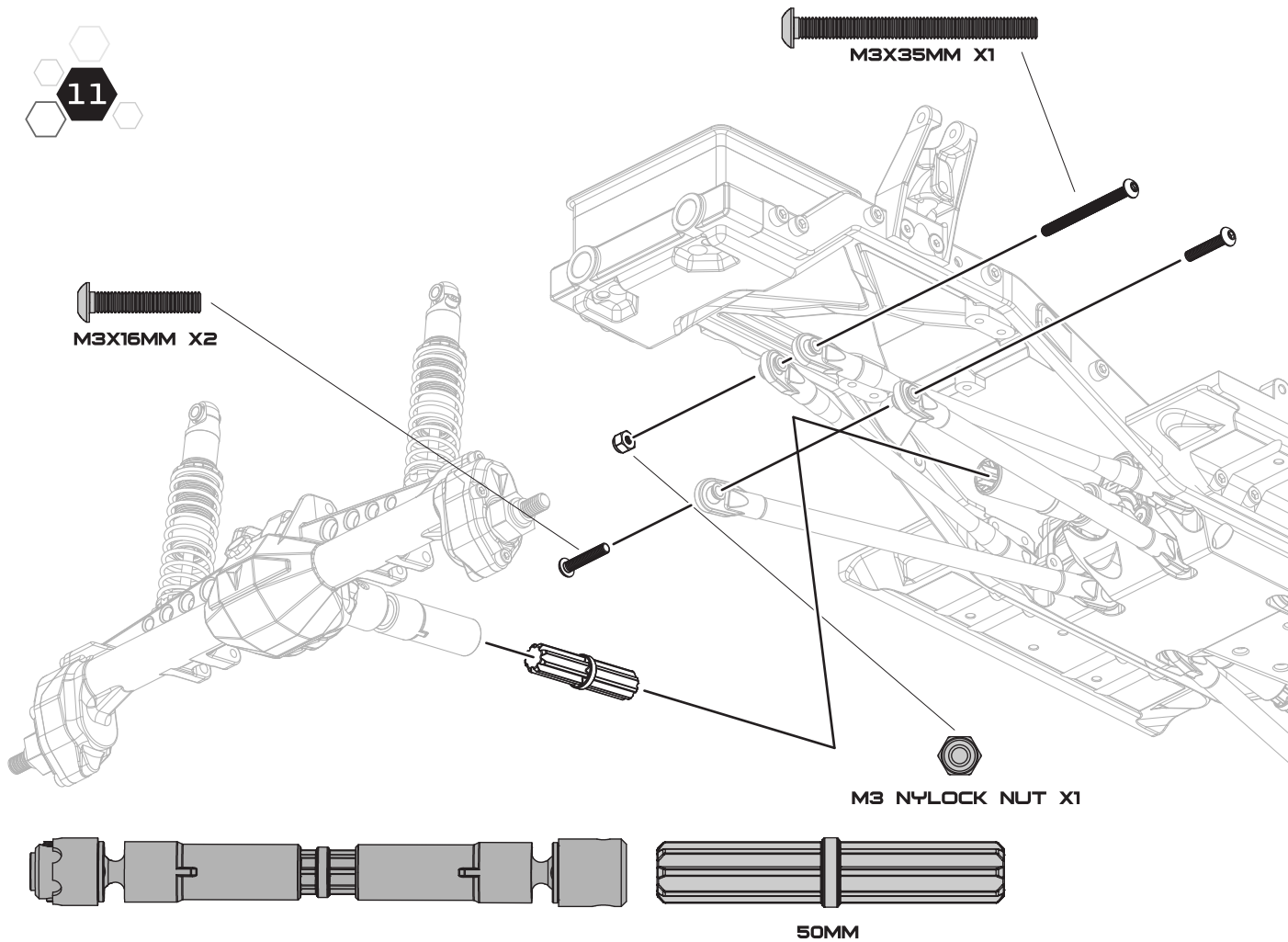


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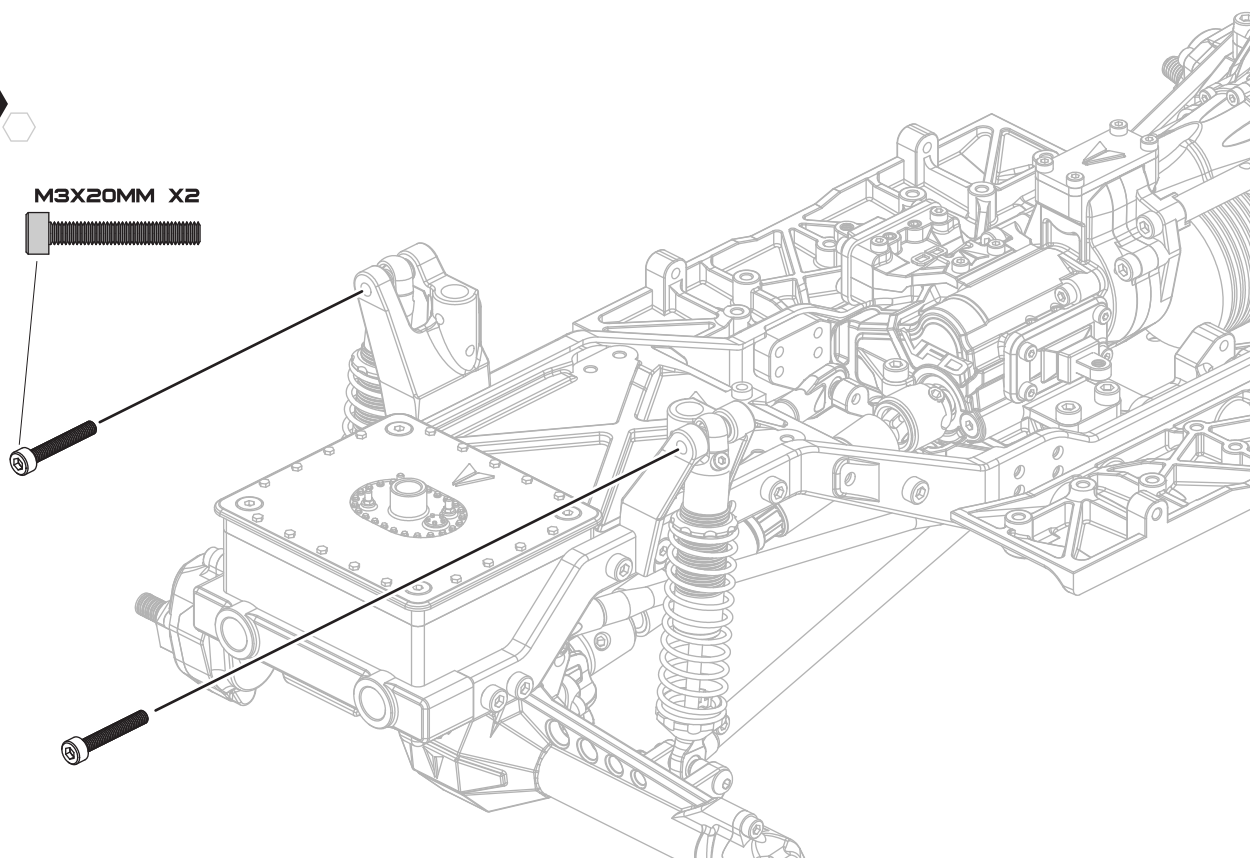


■ INSTALL REAR AXLE

11



12



BAG H

■ OPEN BAG H

1

IRC00272 X4

M3X8MM X4

VPS10181

VPS10181

NOTE: BUMPER
INSTALL LOCATION

2

M3X10MM X4

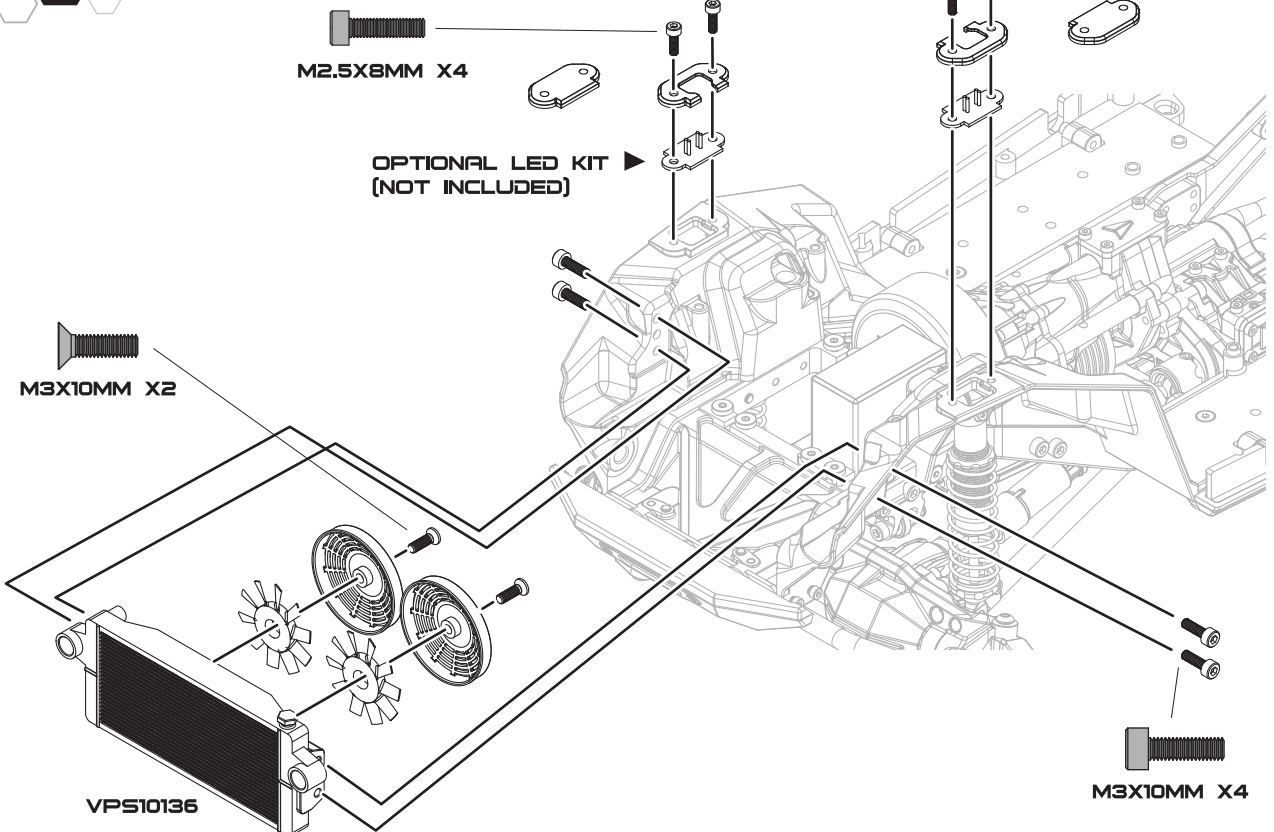
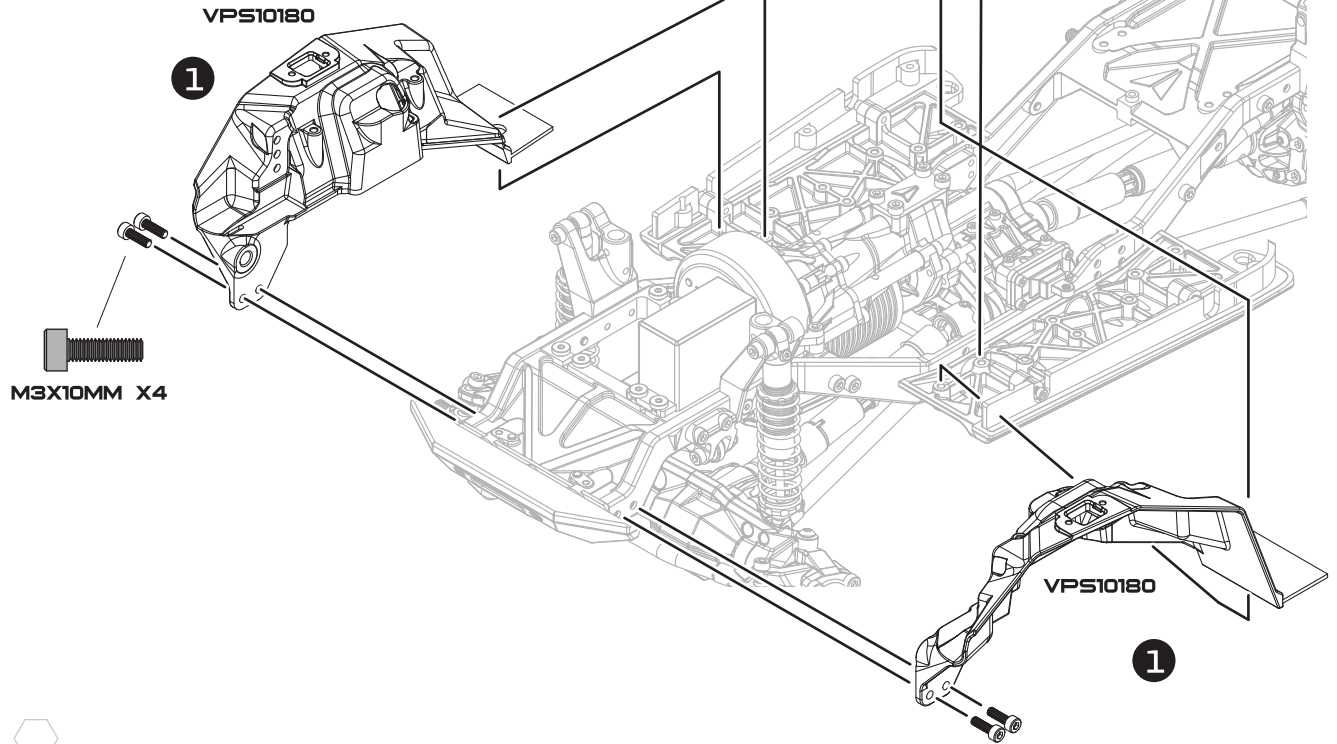
VPS10181

M3X12MM X6

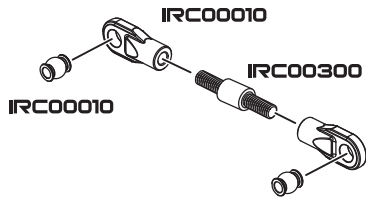
VPS10181



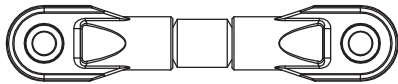
THE INNER FENDER GETS INSTALLED FIRST **1**,
THEN ELECTRONIC PLATE SECOND **2**



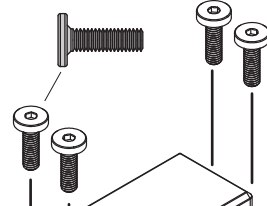
5



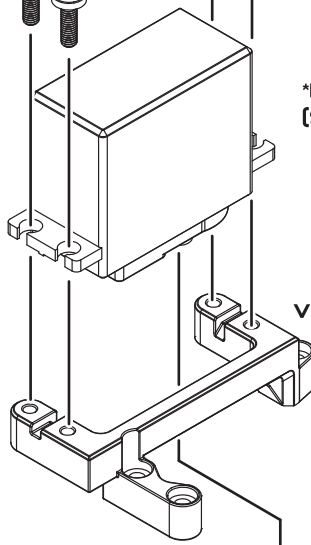
X1 OD SHIFT LINKS



M3X10MM X4



*NOTE DIRECTION OF SERVO
(SERVO NOT INCLUDED)

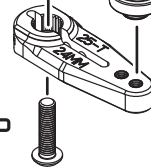


VPS10129

M3X12MM X1



24MM SERVO
HORN REQUIRED
(NOT INCLUDED)

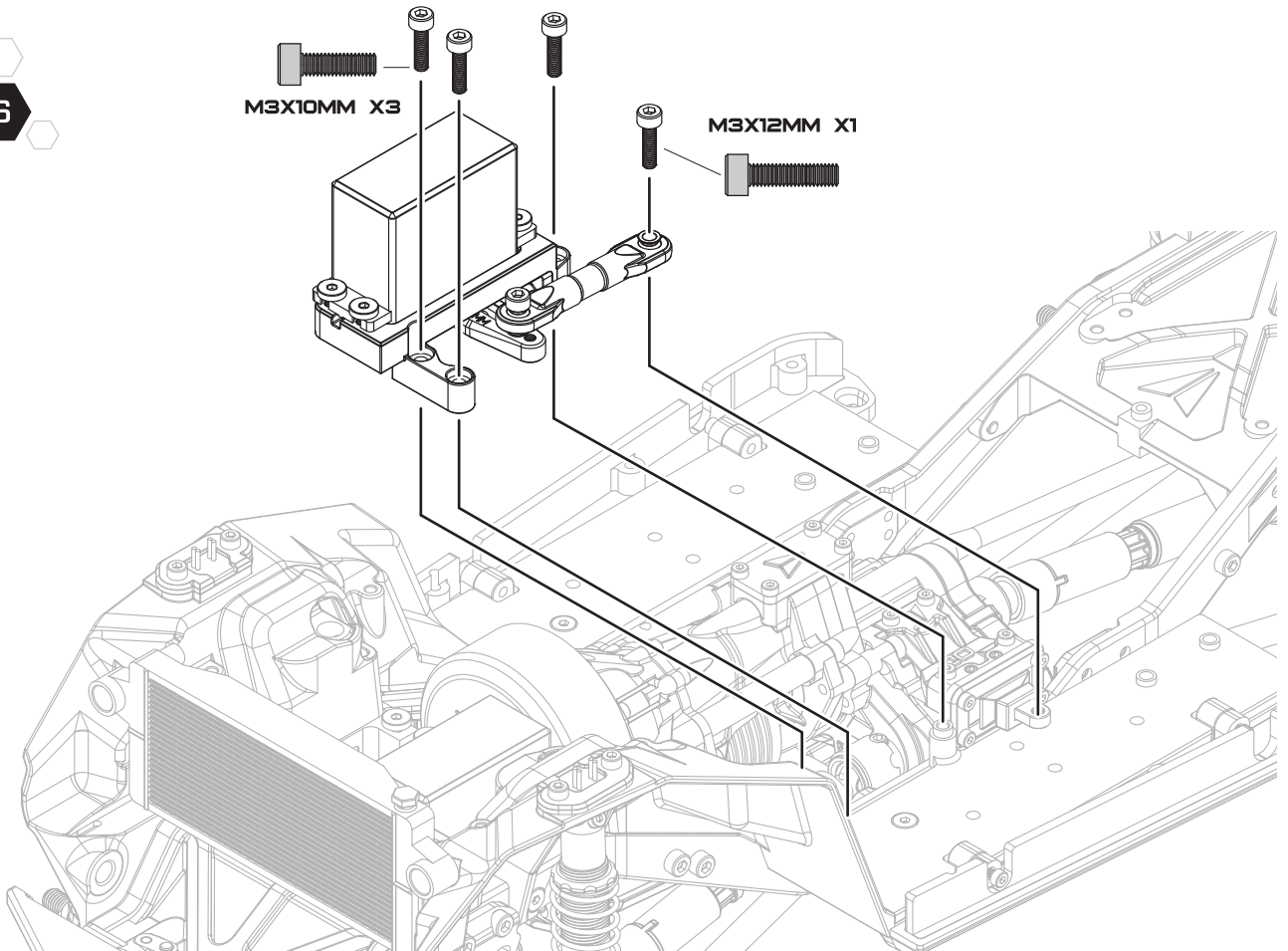


HARDWARE FROM SERVO
(NOT INCLUDED)

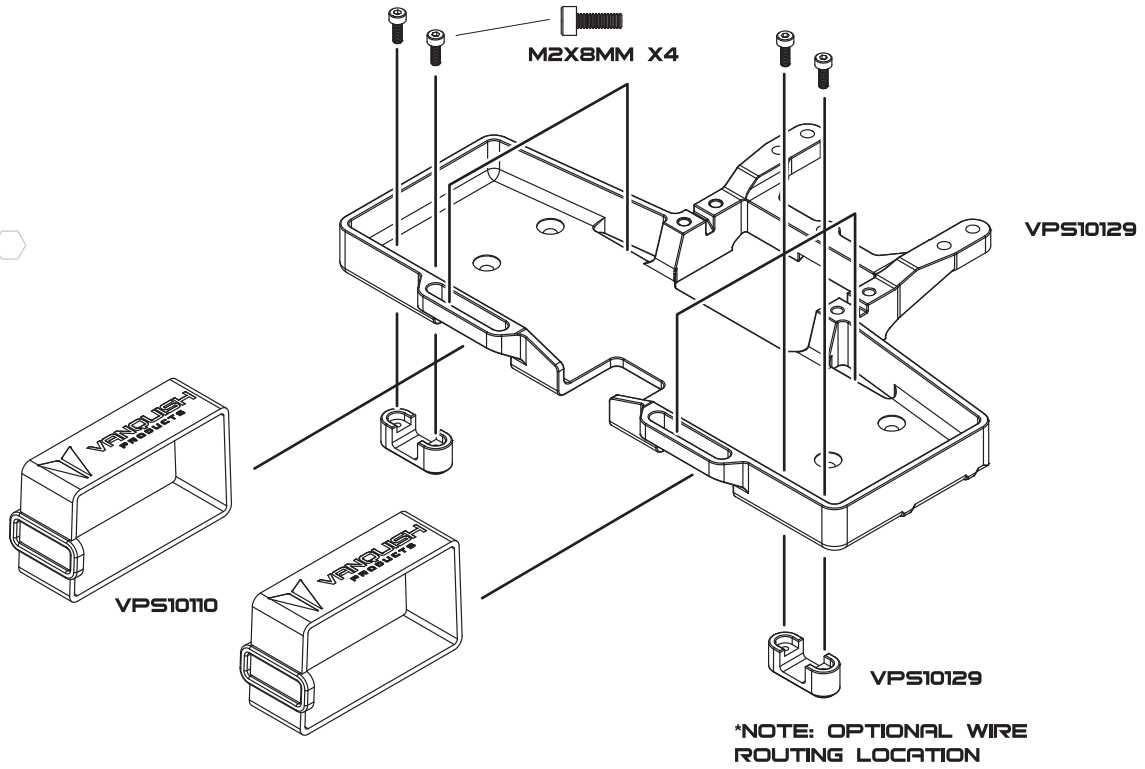
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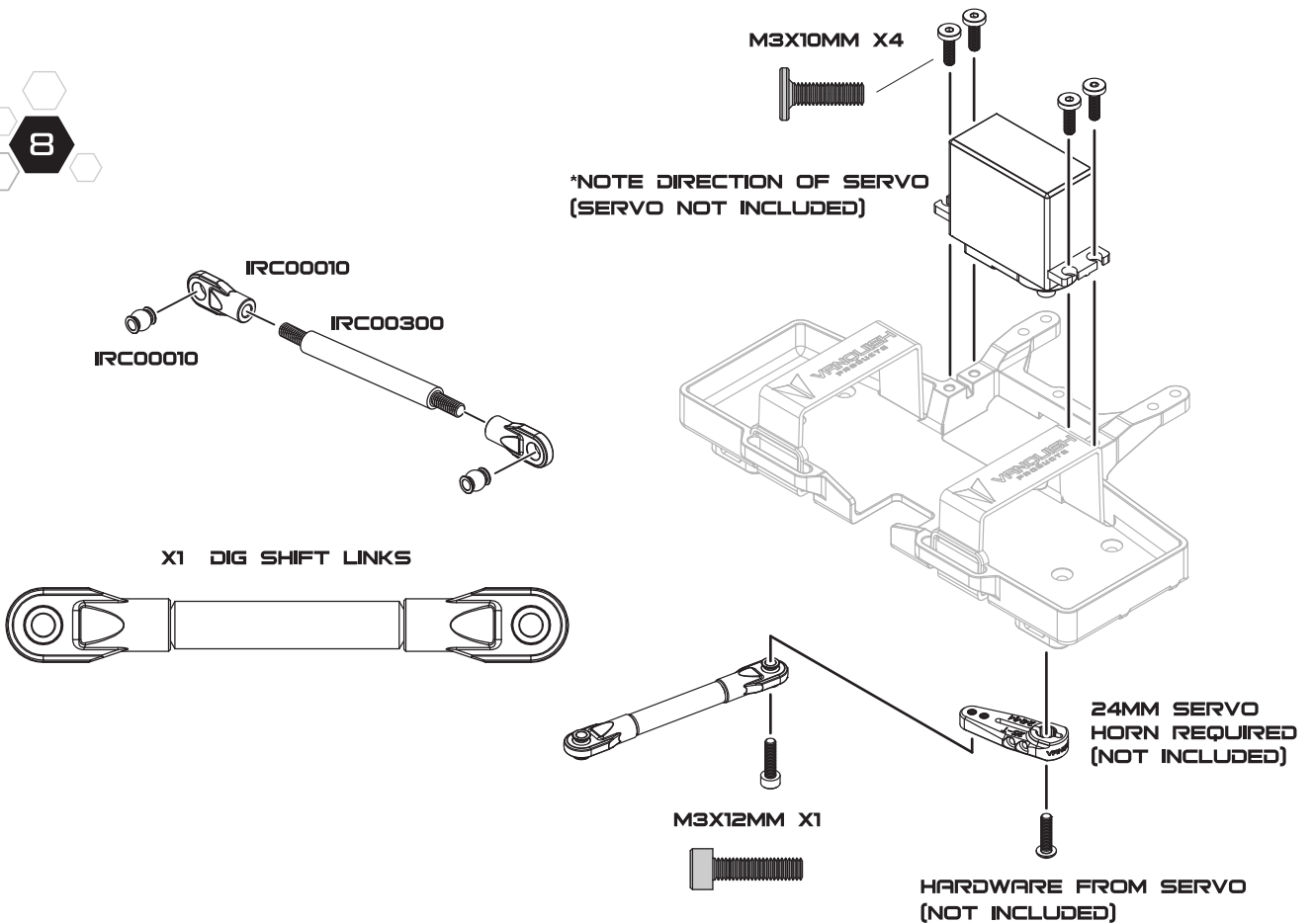
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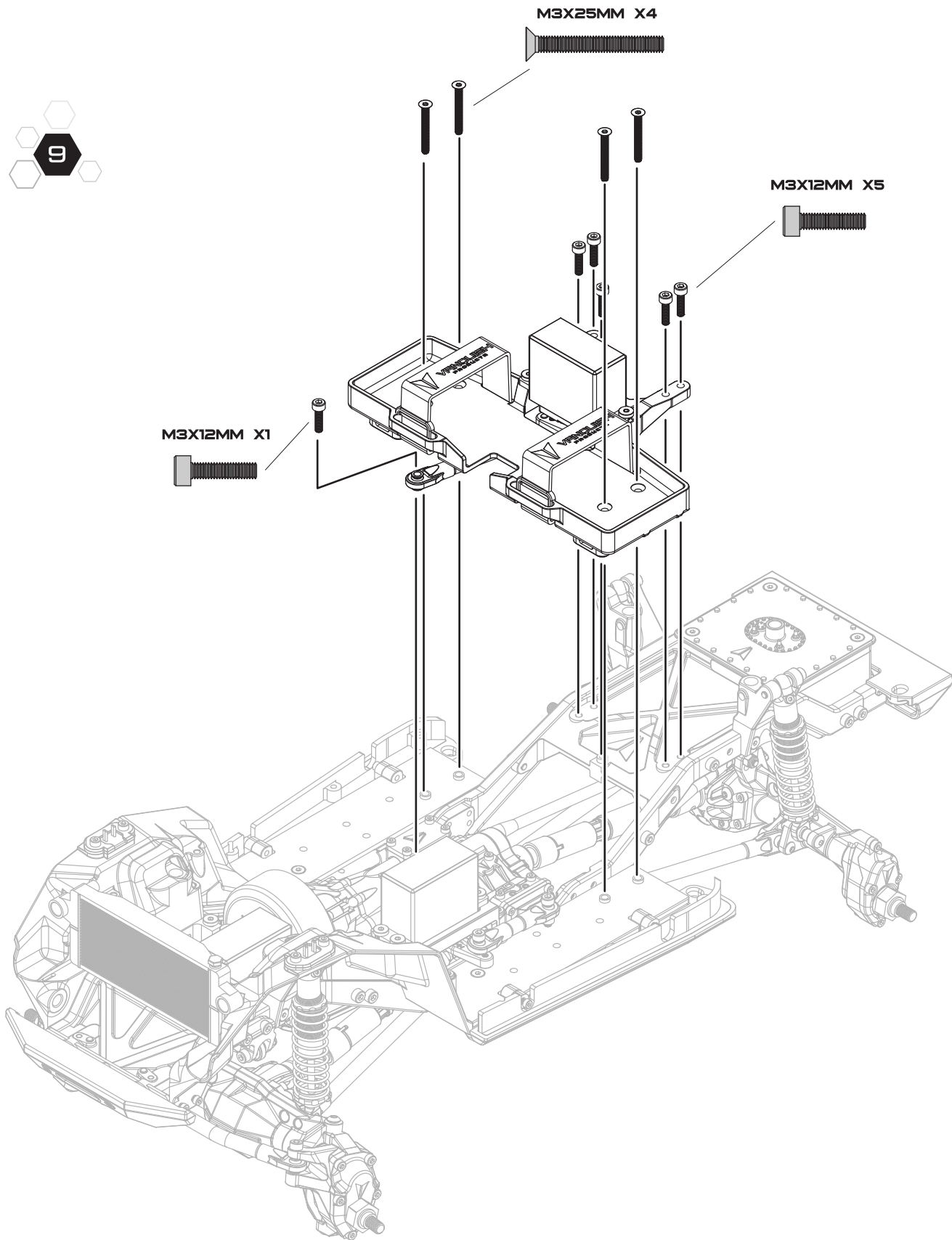


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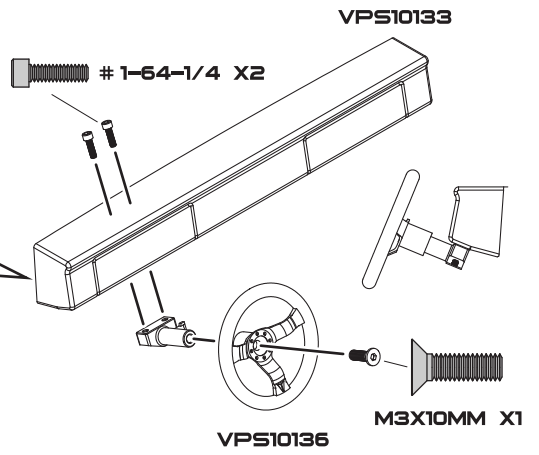
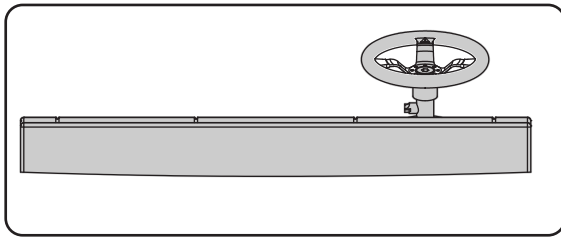




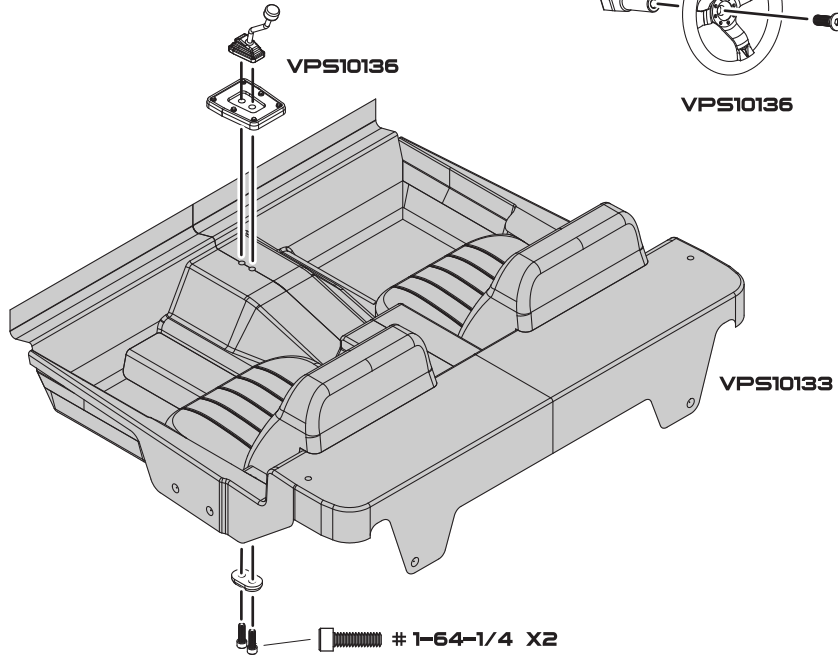
BAG I

■ OPEN BAG I

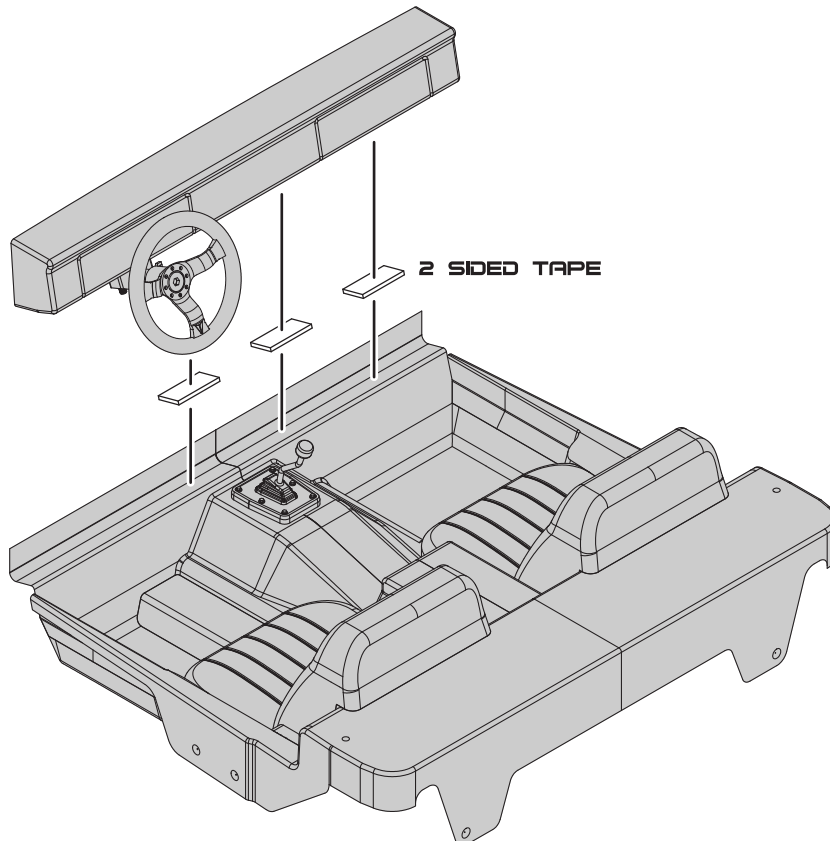
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2



3



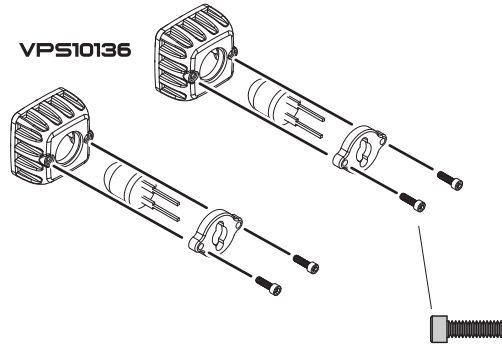
BAG I

■ BODY

* NOTE LED BULBS NOT INCLUDED
FRONT: 10MM

4

VPS10136

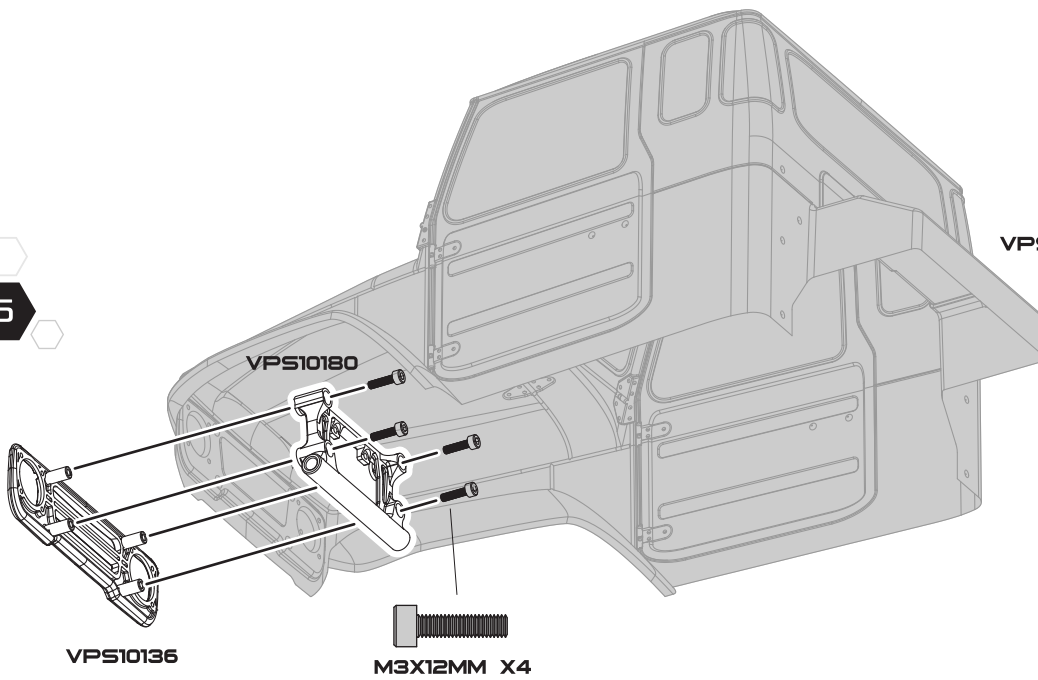


1-64-1/4 X4

5

VPS10180

VPS10133

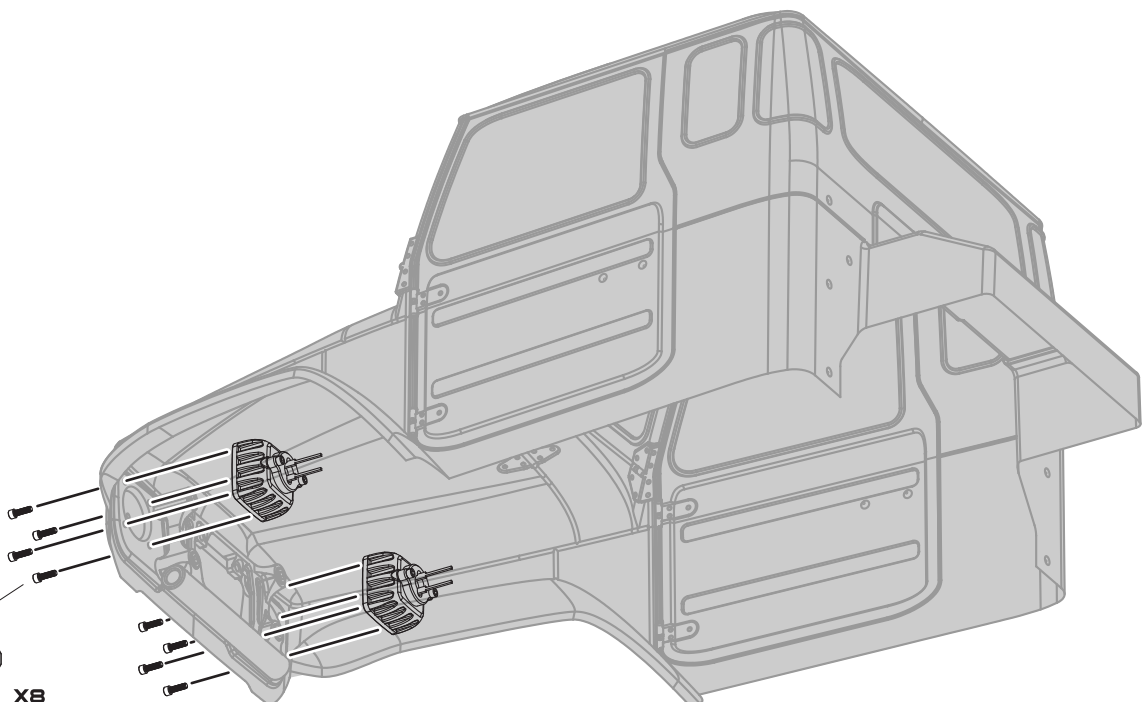


VPS10136

M3X12MM X4

6

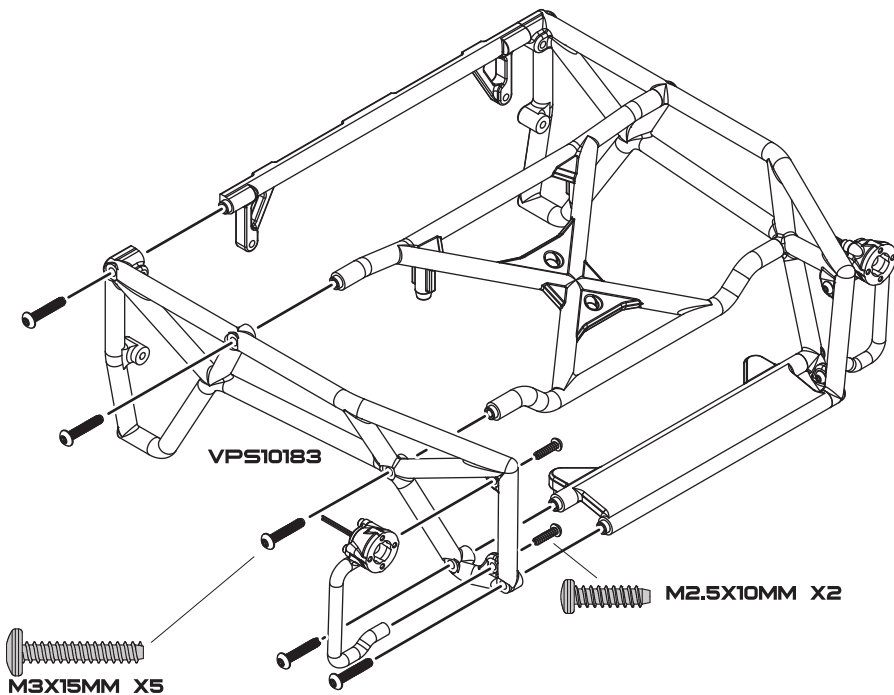
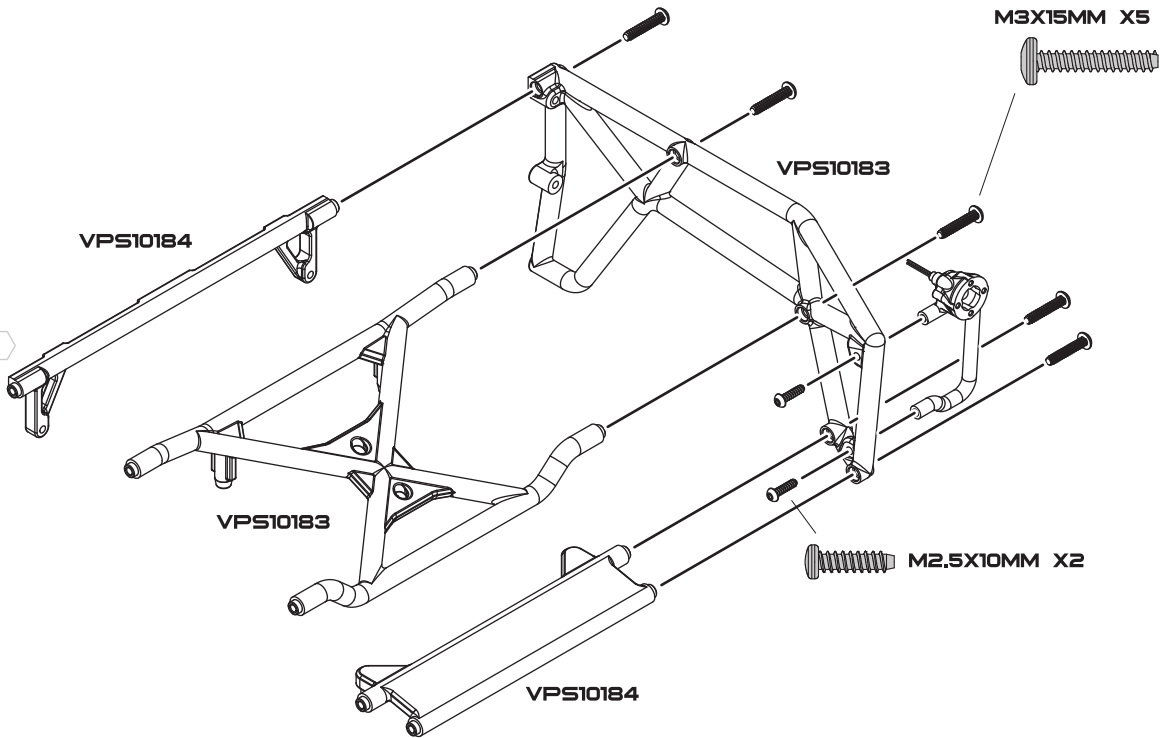
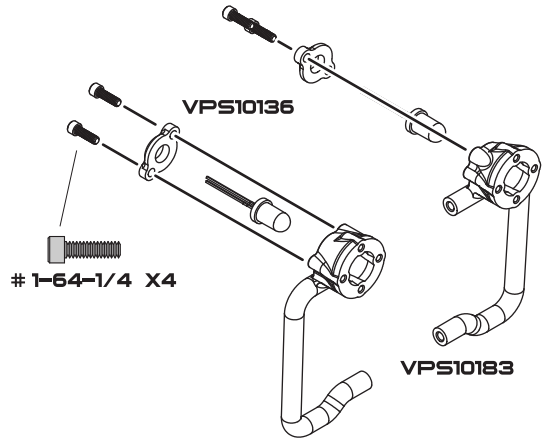
1-64-1/4 X8



BAG I

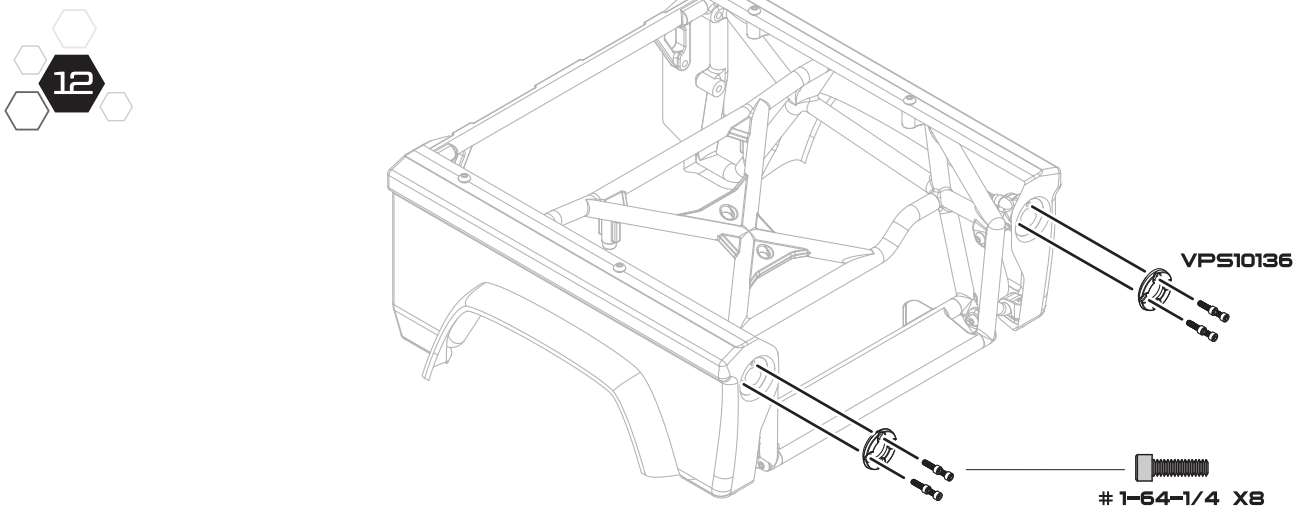
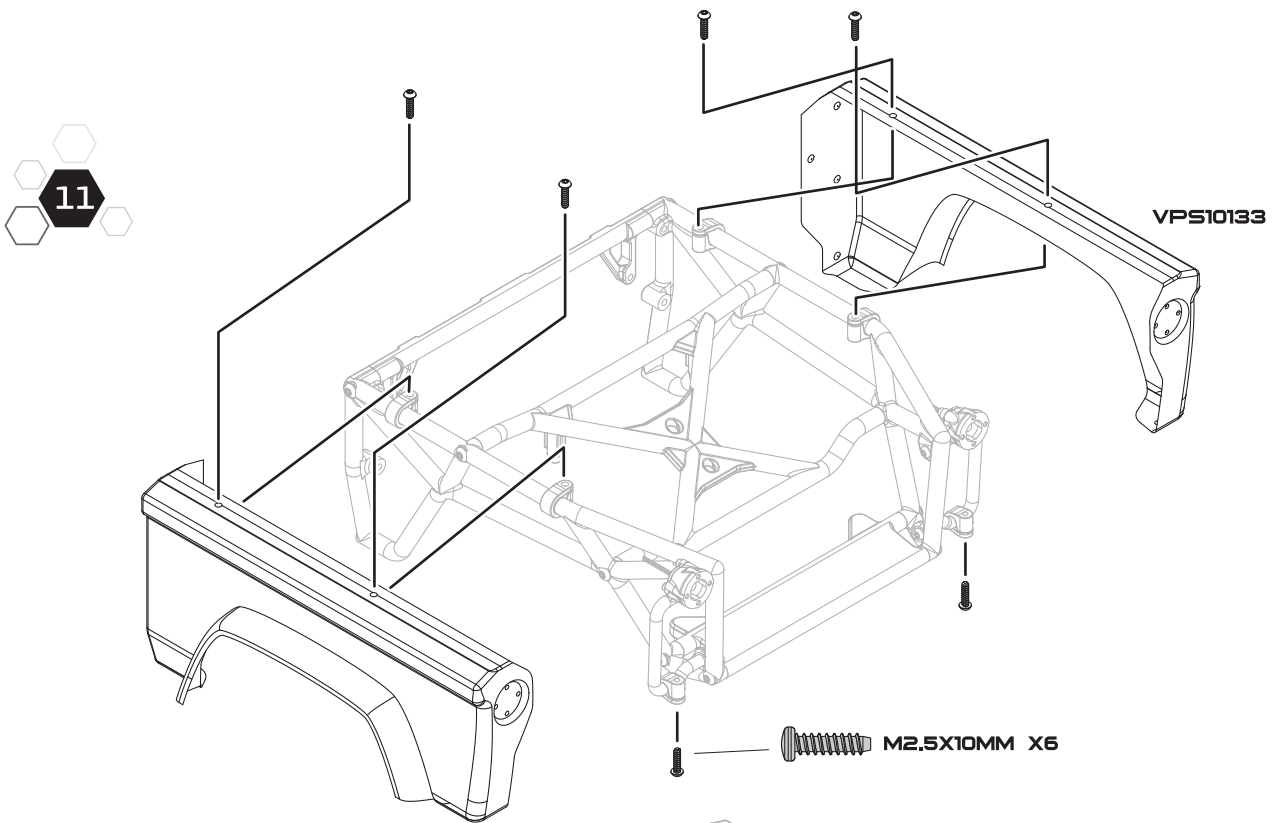
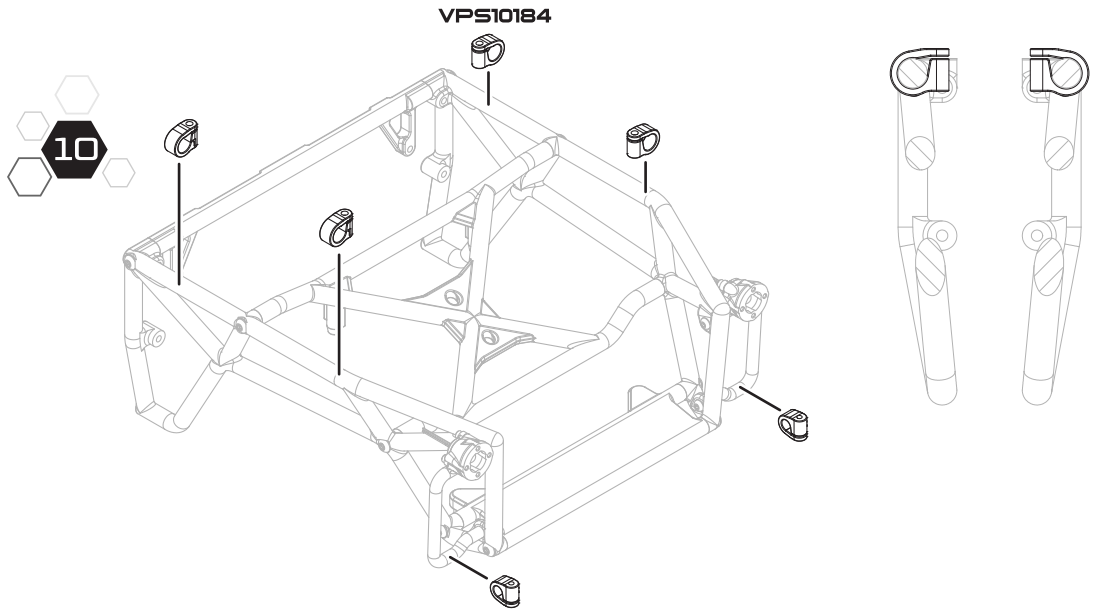
* NOTE LED BULBS NOT INCLUDED
REAR: 5MM

■ BODY



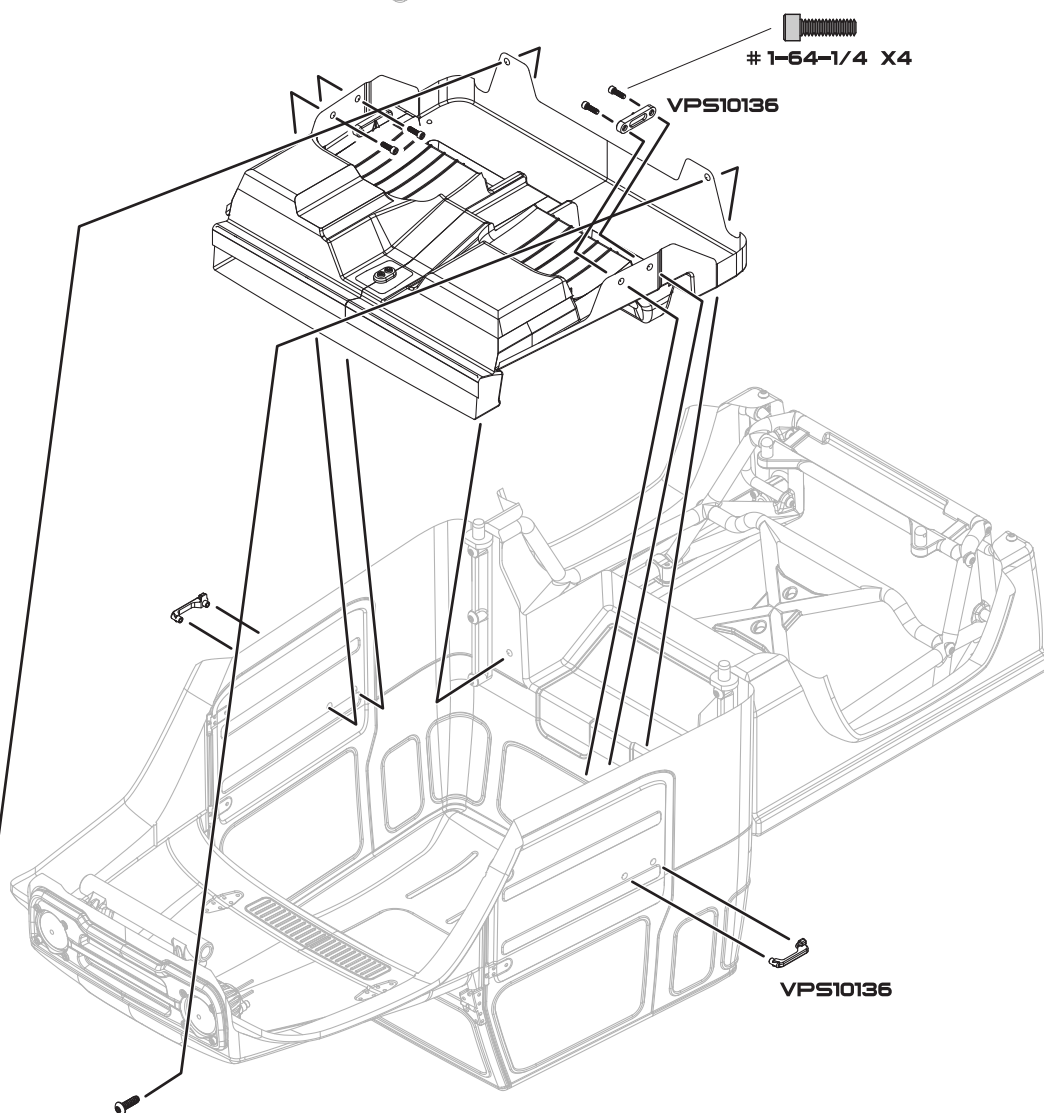
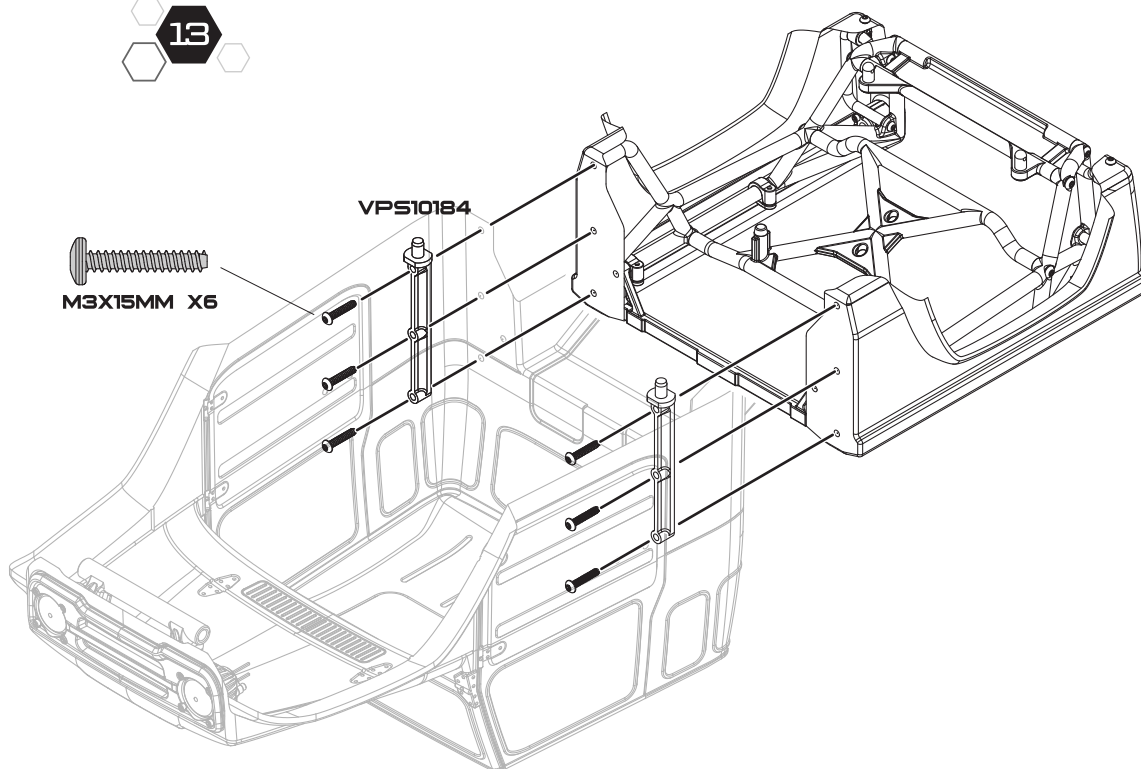
BAG I

■ BODY

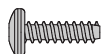


BAG I

■ BODY



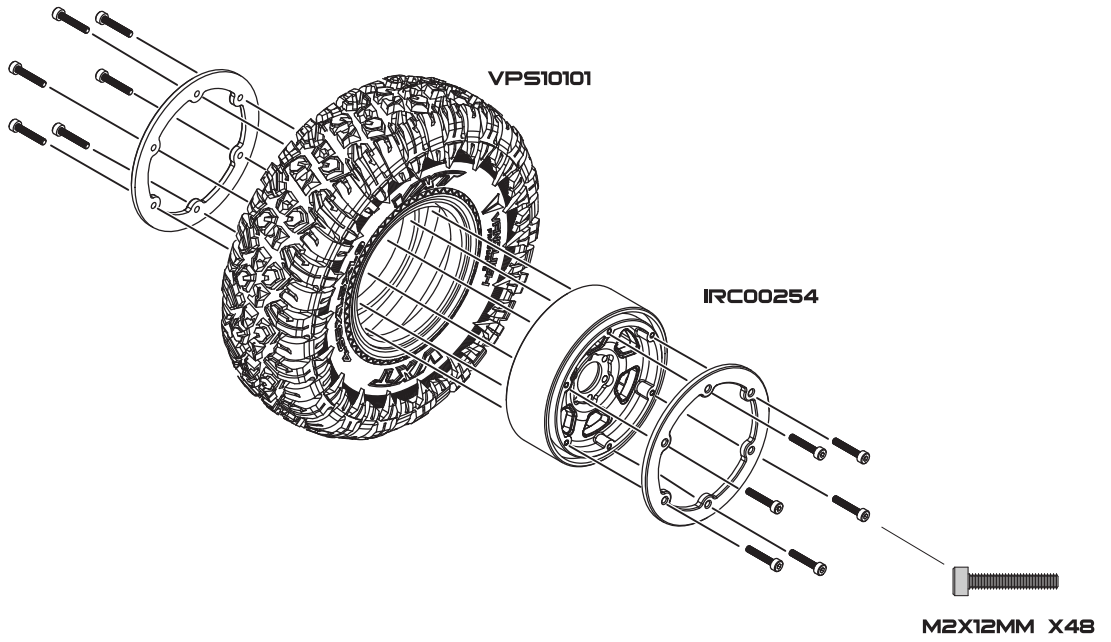
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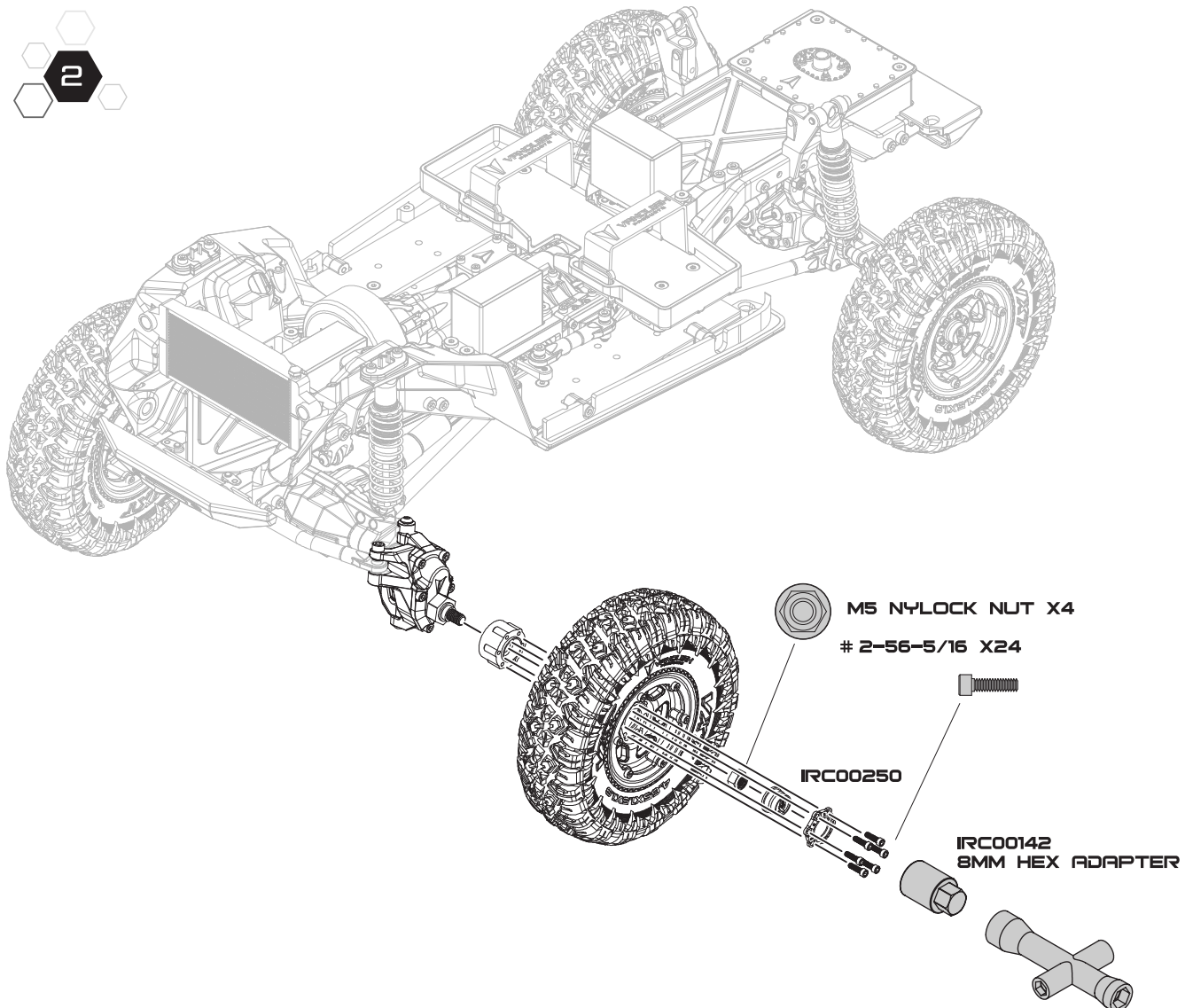
BAG J

WHEEL AND TIRE ASSEMBLY OPEN BAG J

1

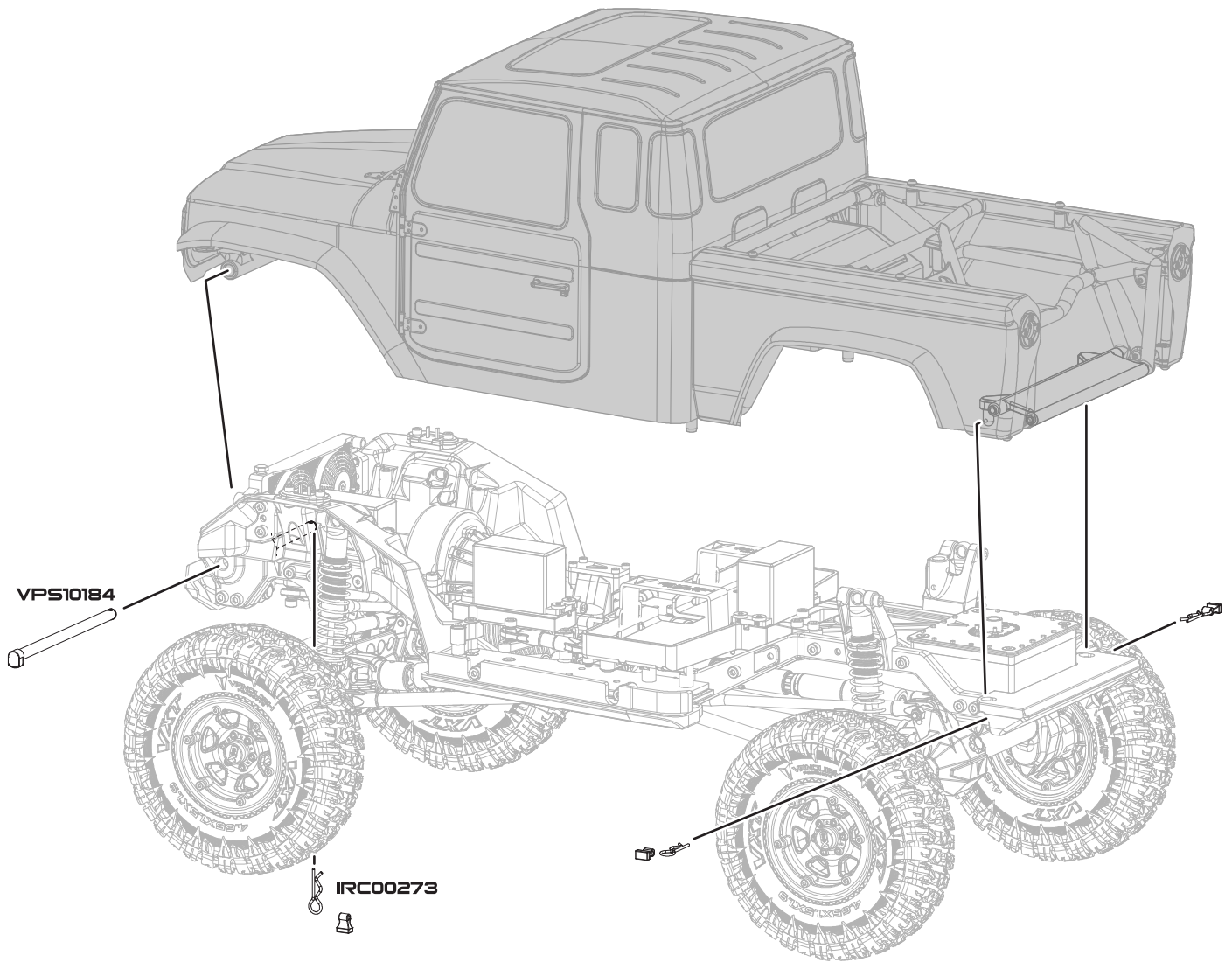


2



BAG J

WHEEL AND TIRE ASSEMBLY OPEN BAG J



PART NUMBER

■ SPARE PARTS

IRC00010	ROD ENDS WITH PIVOT BALLS (12)	VPS08335	5MM NON-FLANGED WHEEL NUTS
IRC00220	INCISION DRIVESHAFT SET	VPS08353	PORTAL OVERDRIVE GEAR SET (28T/20T)
IRC00230	ISD10 DRIVESHAFT SET	VPS08354	PORTAL STANDARD GEAR SET (30T/18T)
IRC00231	ISD10 REPLACEMENT PARTS TREE	VPS08363	PORTAL REAR AXLE SHAFTS
IRC00250	INCISION 1.9 KMC XD229 MACHETE BLACK PLASTIC	VPS08600	F10 PORTAL FRONT AXLE SET
IRC00260	12T 32P PINION	VPS08601	F10 PORTAL REAR AXLE SET
IRC00261	13T 32P PINION	VPS08604	F10 PORTAL FRONT HOUSING
IRC00262	14T 32P PINION	VPS08605	F10 PORTAL REAR HOUSING
IRC00263	15T 32P PINION	VPS08606	F10 PORTAL AXLE COMPONENTS
IRC00264	16T 32P PINION	VPS08607	F10 PORTAL AXLE KNUCKLES
IRC00265	17T 32P PINION	VPS08608	F10 PORTAL VDI
IRC00270	INCISION MOTOR PLATE CAPHEAD WASHER	VPS08609	F10 PORTAL FRONT AXLE BRASS TUBES
IRC00271	INCISION KINGPIN SHOULDER SCREWS (4)	VPS08610	F10 PORTAL REAR AXLE BRASS TUBES
IRC00272	M4 SCREW SHAFT (10)	VPS08611	F10 PORTAL REAR AXLE SHAFTS
IRC00273	BODY PINS (10)	VPS08612	F10 PORTAL FRONT STUB SHAFTS
IRC00275	WASHER HEAD SCREW (4)	VPS08613	F10 PORTAL REAR STUB SHAFTS
IRC00410	VFD 52T 32P SLIPPER SPUR GEAR	VPS10101	VANQUISH VXT 1.9 TIRES (2)
IRC00411	VFD 56T 32P SLIPPER SPUR GEAR	VPS10110	VANQUISH VELCRO STRAP
IRC00412	VFD SLIPPER PAD	VPS10112	VS4-10 FRAME RAIL (2)
IRC00500	S8E 80MM SHOCK SET	VPS10113	VS4-10 BODY POST SET
IRC00501	S8E 90MM SHOCK SET	VPS10114	VS4-10 SHOCK TOWER SET (2 PAIR)
IRC00502	S8E SHOCK MOLDED COMPONENTS	VPS10123	VS4-10 CHASSIS SLIDER MOUNTS WITH UNIVERSAL SLIDERS
IRC00503	S8E 80MM SHOCK BODY	VPS10126	VS4-10 CHASSIS BRACES / SERVO MOUNT
IRC00504	S8E 80MM SHOCK SHAFT	VPS10129	VS4-10 MOLDED BATTERY AND ELECTRONIC TRAYS
IRC00505	S8E 90MM SHOCK BODY	VPS10131	VS4-10 MACHINED PANHARD MOUNT
IRC00506	S8E 90MM SHOCK SHAFT	VPS10133	PHOENIX BODY SET W/VRD1 CAGE
IRC00507	S8E SHOCK REBUILD KIT	VPS10136	PHOENIX GRILL AND BODY DETAIL PARTS SET
IRC00508	E-2 CLIP	VPS10142	VS4-10 VFD BEARING PLATE SET 30T OVERDRIVE
IRC00509	S8E UPPER AND LOWER SHOCK PIVOT BALL SET	VPS10144	VS4-10 VFD TRANSMISSION HOUSING
IRC00510	S8E TiNi 80MM SHOCK SHAFT	VPS10148	VS4-10 VFD MACHINED MOTOR PLATE
IRC00511	S8E TiNi 90MM SHOCK SHAFT	VPS10151	VS4-10 VFD ALUMINUM TRANS POST
IRC00512	S8E 80MM SPRING SET	VPS10180	VS4-10 NARROW MOLDED INNER FENDERS
IRC00513	S8E 90MM SPRING SET	VPS10181	PHOENIX BUMPERS AND SLIDERS
IRC00514	S8E MACHINED SHOCK CAP Black	VPS10182	VRD1 REAR CAGE SET
IRC00515	S8E MACHINED SHOCK CAP Orange	VPS10183	VRD1 REAR CAGE PARTS
IRC00516	S8E MACHINED SHOCK CAP Blue	VPS10184	VRD1 BODY MOUNTS
IRC00517	S8E MACHINED Spring COLLAR SET Black	VPS10200	VFD TWIN TRANSMISSION KIT
IRC00518	S8E MACHINED Spring COLLAR SET Orange	VPS10201	VFD TWIN COMPONENTS MOLD
IRC00519	S8E MACHINED Spring COLLAR SET Blue	VPS10204	VFD TWIN GEAR SET
IRC00520	S8E 80MM SHOCK BODY HARD ANODIZED	VPS10205	VFD TWIN SHIFTING COMPONENT SET
IRC00521	S8E 90MM SHOCK BODY HARD ANODIZED	VPS10206	VFD TWIN SHAFT SET
IRC00522	S8E MACHINED PISTON SET	VPS10207	E-5 CLIP
VPS07084	12MM PORTAL HEX	VPS10208	VFD SLIPPER SET
VPS08070	6 HOLE SPOOL / LOCKER	VPS10209	VFD SLIPPER LOCKOUT SET
VPS08330	30T/8T HYPOID GEAR 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

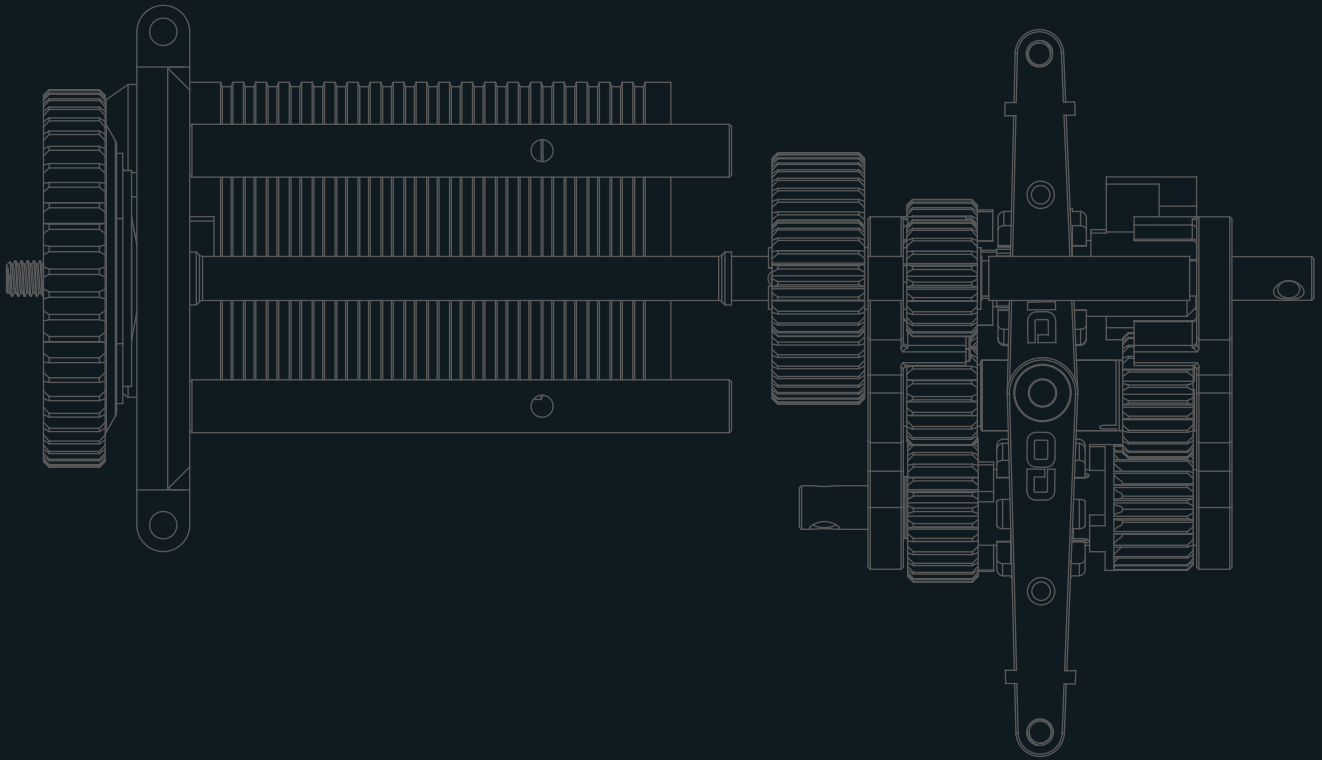
32P Rear output Ratio					
	Spur Gear				
Pinion	48	50	52	54	56
11	72.1	75.1	78.1	81.1	84.1
12	66.1	68.8	71.6	74.3	77.1
13	61.0	63.5	66.1	68.6	71.1
14	56.6	59.0	61.3	63.7	66.1
15	52.8	55.0	57.2	59.5	61.7
16	49.5	51.6	53.7	55.7	57.8
17	46.6	48.6	50.5	52.5	54.4

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

VFD TWIN

DIG & OVERDRIVE TRANSMISSION



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