



VRD

CARBON

1:10 SCALE HIGH PERFORMANCE COMPETITION CHASSIS KIT



VANQUISH
PRODUCTS

F10
HIGH PERFORMANCE AXLE

PORTAL
EQUIPPED

INCISION

VRD

VFD
EQUIPPED

■ 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.

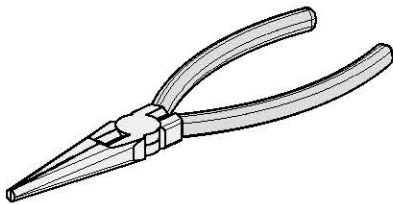
BATTERY SAFETY

- 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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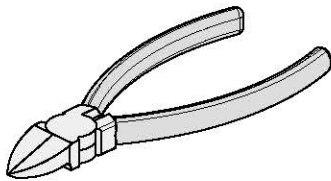
NECESSARY FOR MAINTENANCE



**NEEDLE NOSE PLIERS
(NOT INCLUDED)**



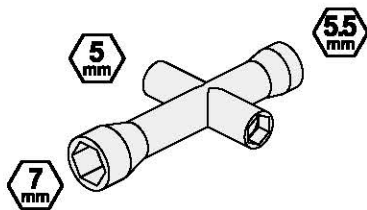
**GREASE
(INCLUDED)**



**SIDE CUTTERS
(NOT INCLUDED)**



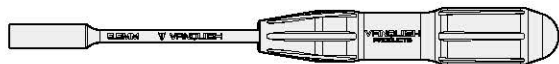
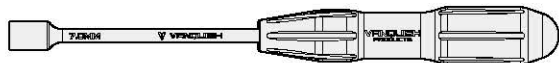
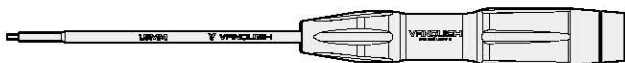
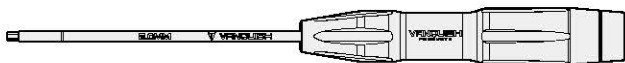
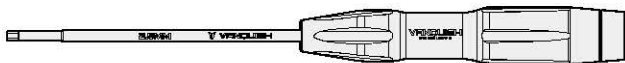
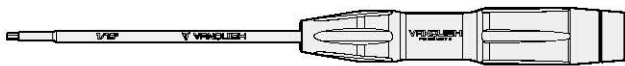
**THREAD LOCK
(INCLUDED)**



**CROSS WRENCH
(INCLUDED)**



**8MM HEX ADAPTER
(INCLUDED)**



SUGGESTED TOOLS (NOT INCLUDED):

VPS08410 STANDARD TOOL SET

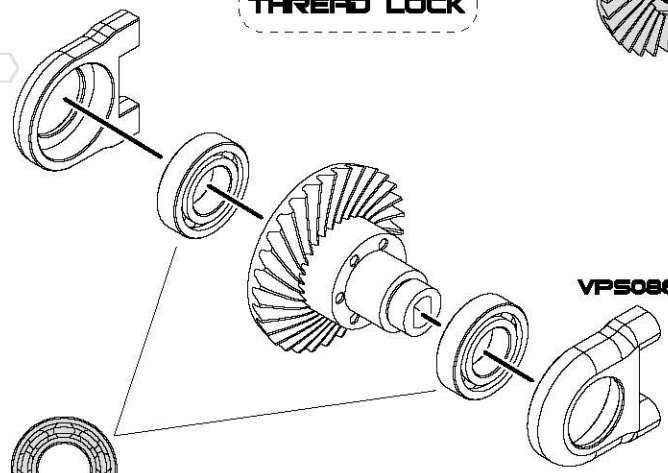
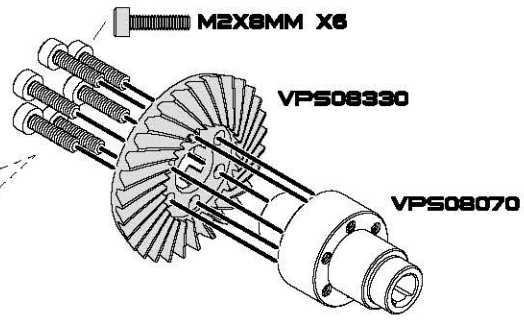
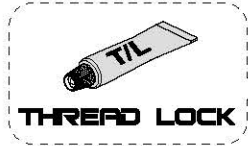
VPS08400 METRIC TOOL SET

VPS08440 METRIC NUT DRIVER TOOL SET

BAG A

■ OPEN BAG A

1

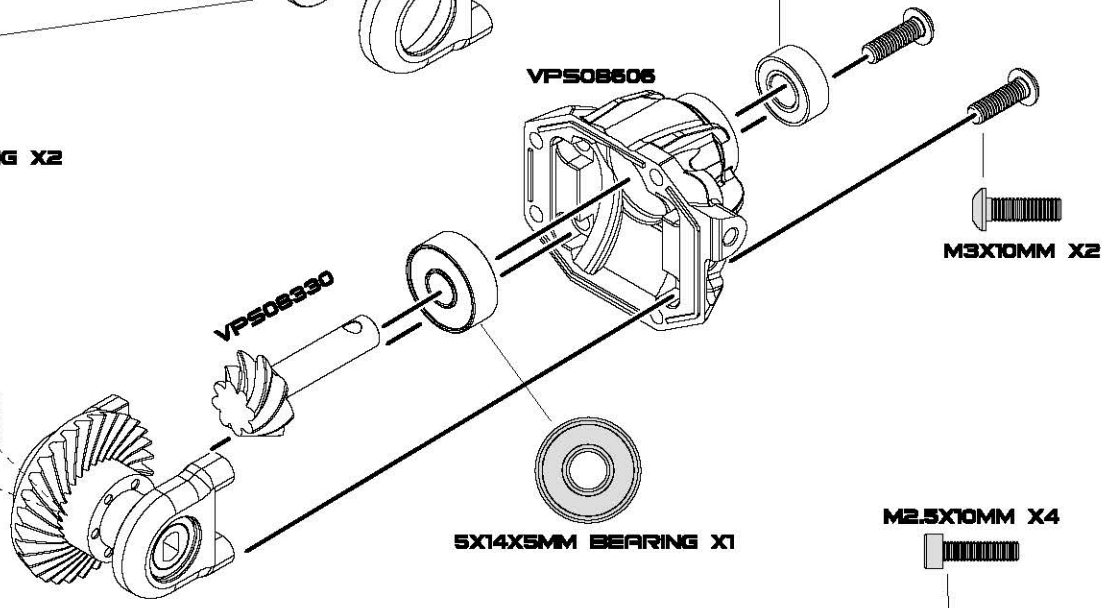
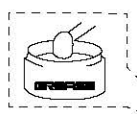


7X14X3.5MM BEARING X2

VPS08606

5X14X5MM BEARING X1

2



VPS08330

VPS08606

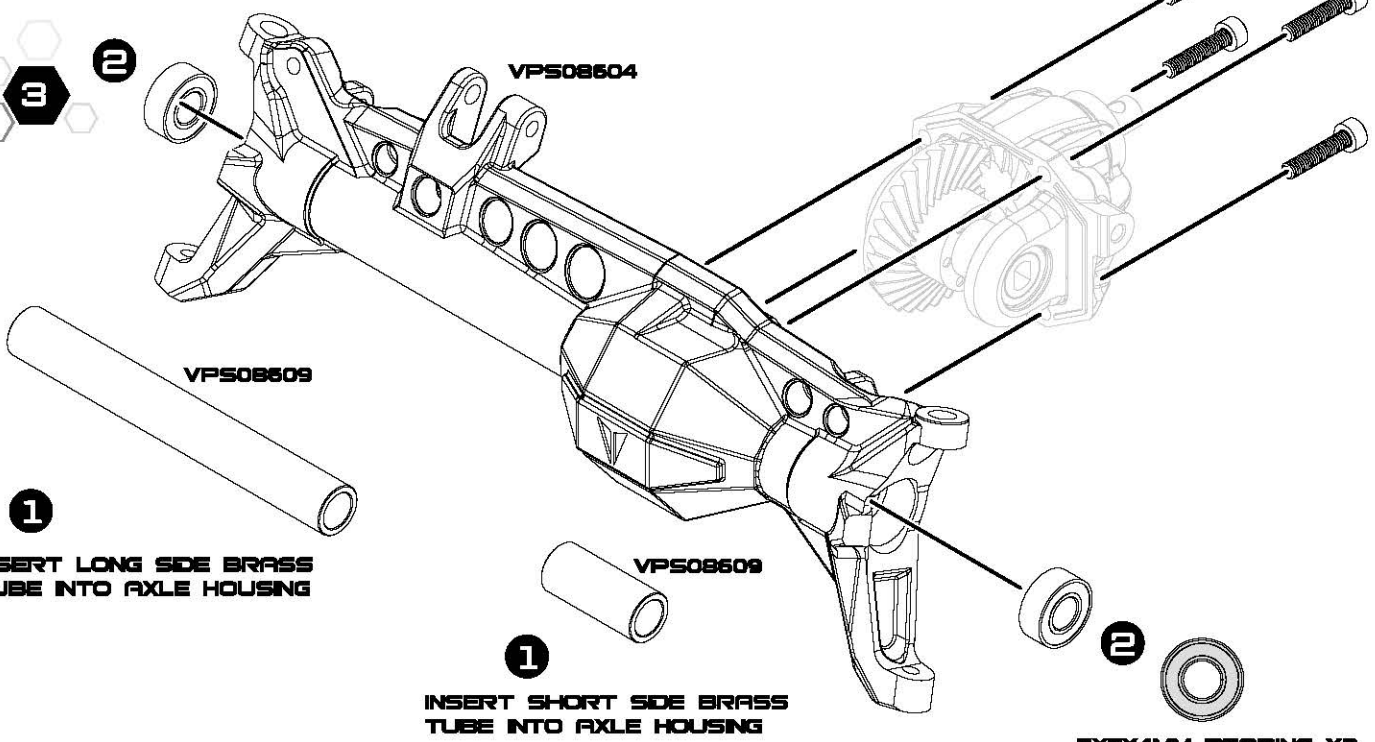
5X14X5MM BEARING X1

M3X10MM X2

M2.5X10MM X4

3

2



VPS08604

VPS08609

VPS08609

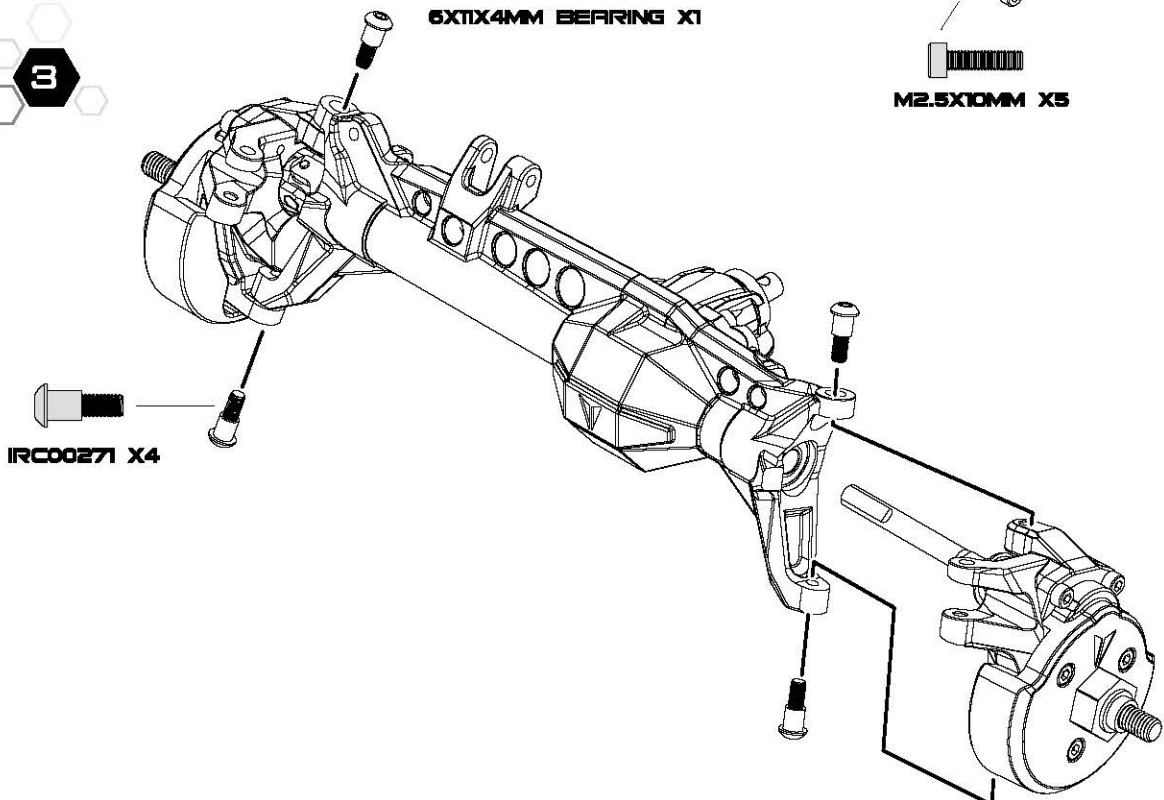
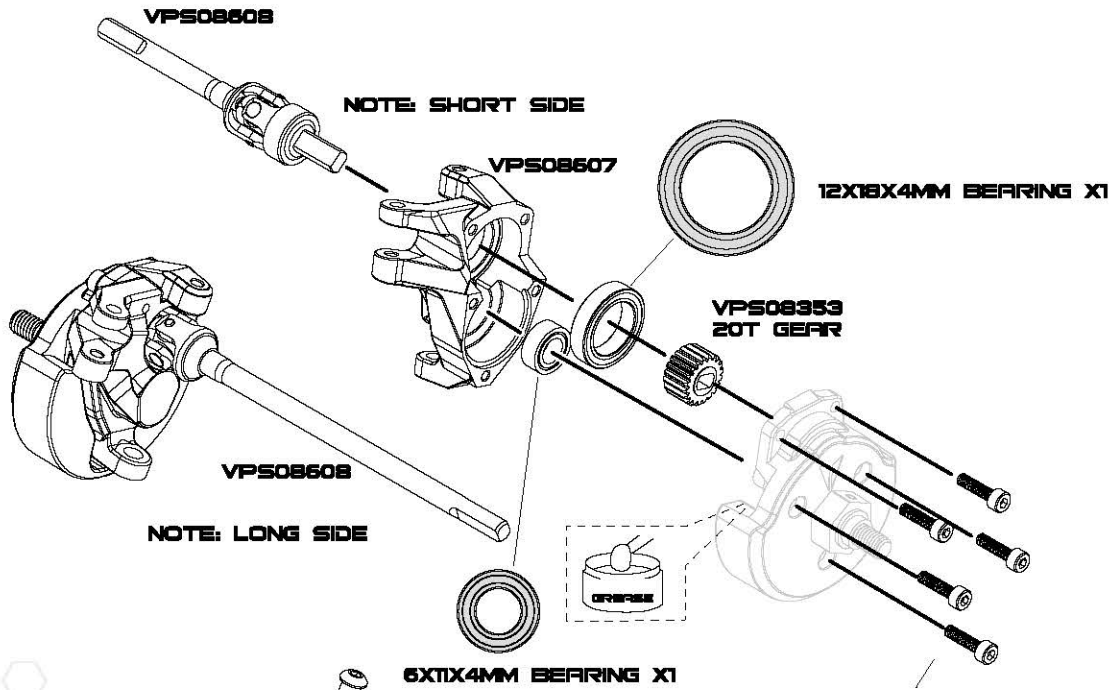
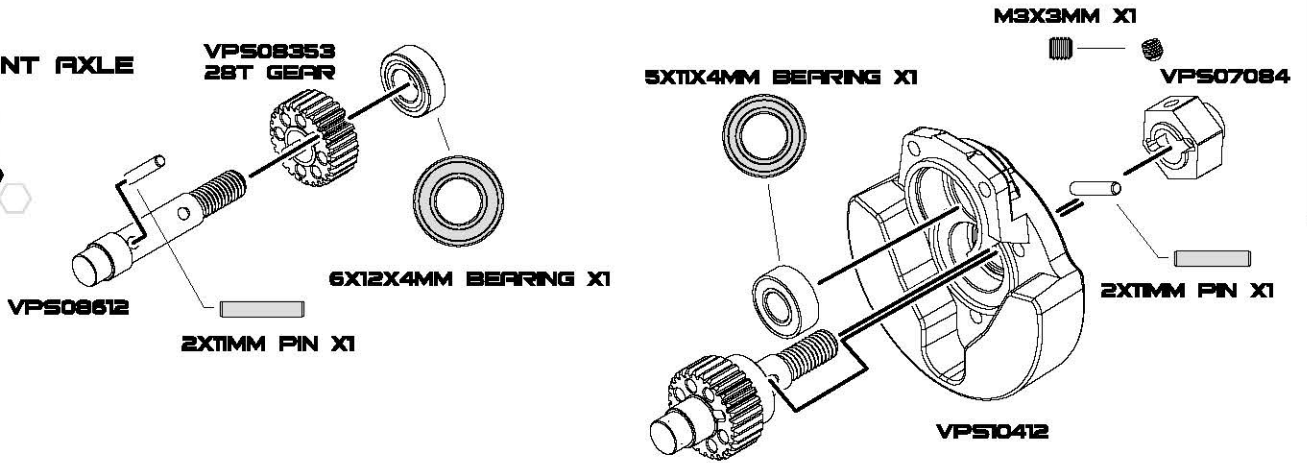
INSERT LONG SIDE BRASS TUBE INTO AXLE HOUSING

INSERT SHORT SIDE BRASS TUBE INTO AXLE HOUSING

5X14X5MM BEARING X2

BAG A

FRONT AXLE



BAG A

FRONT AXLE

1

20MM 25T SERVO HORN
INCLUDED
SERVO HORN REQUIRED FOR
23,24 SPLINE SERVOS.

HARDWARE FROM SERVO
(NOT INCLUDED)

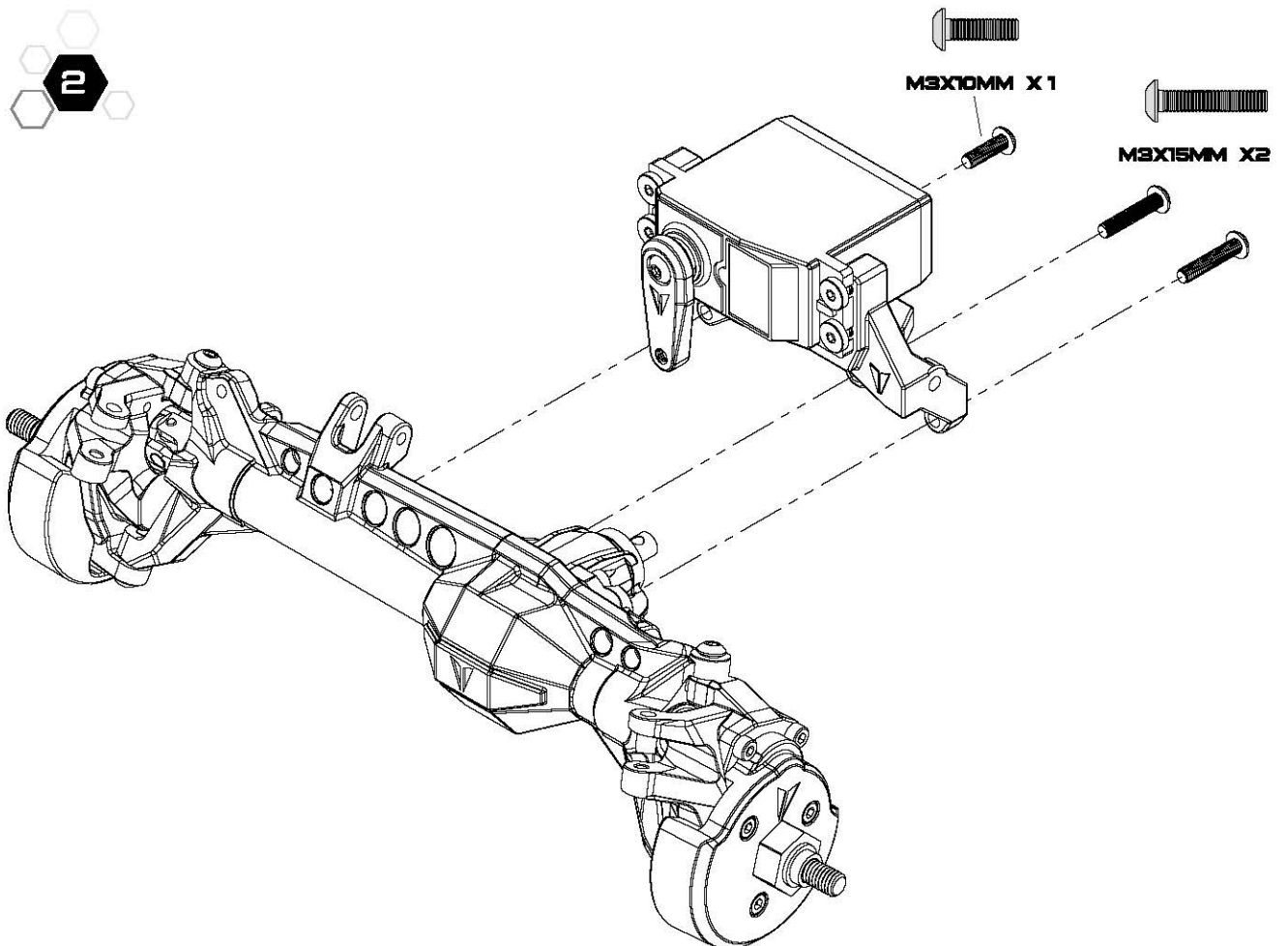
M3X10MM X4

*NOTE DIRECTION OF SERVO
(SERVO NOT INCLUDED)

2

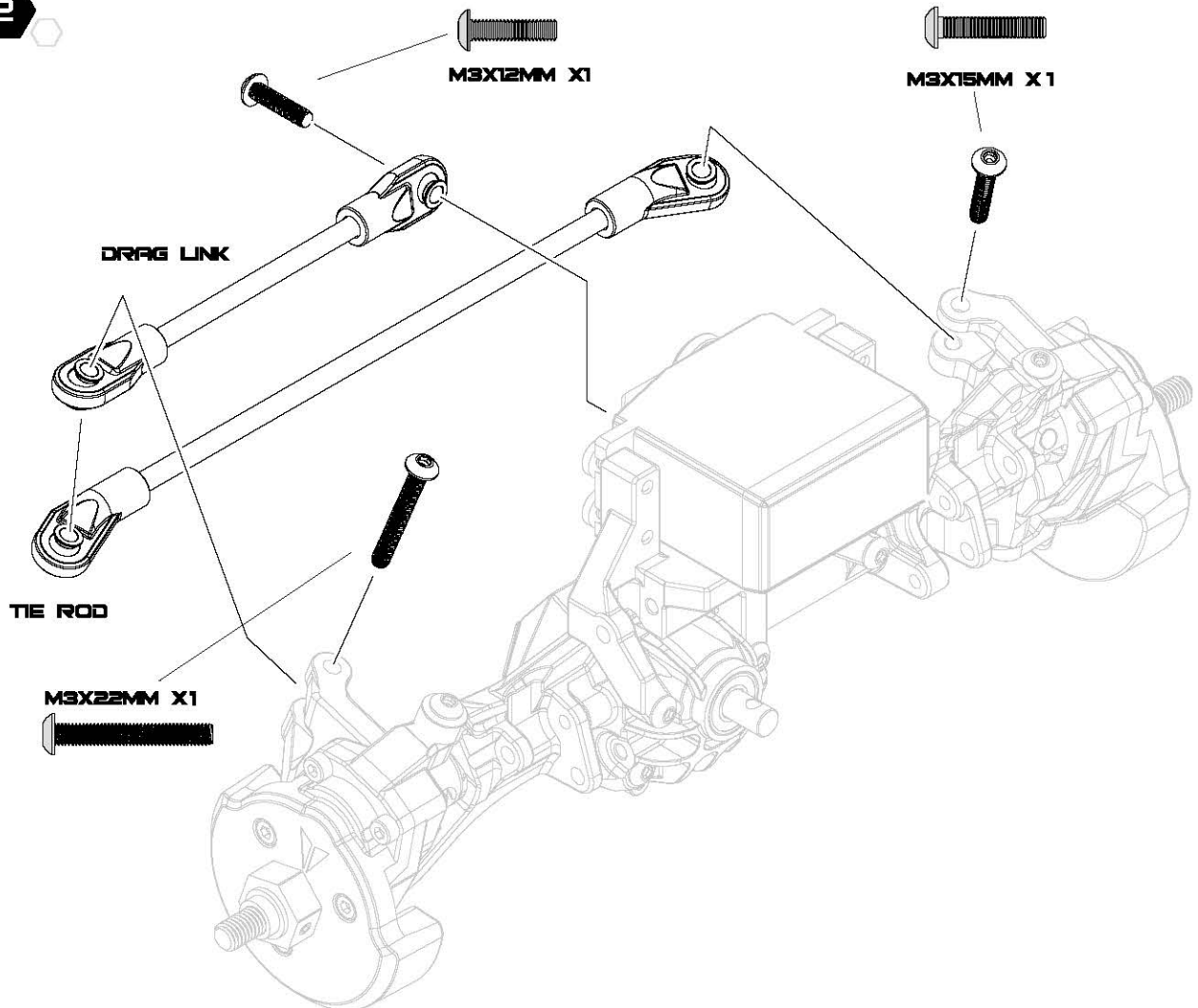
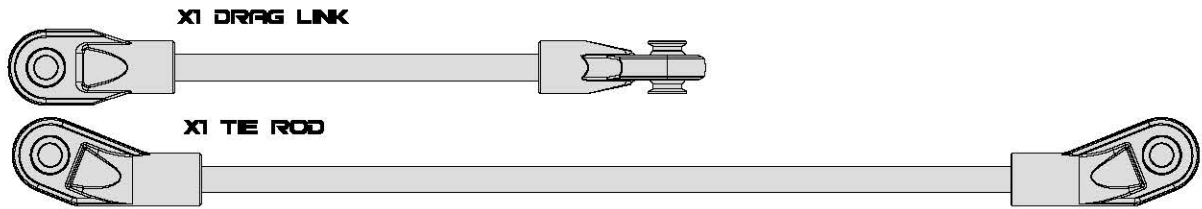
M3X10MM X1

M3X15MM X2



BAG A

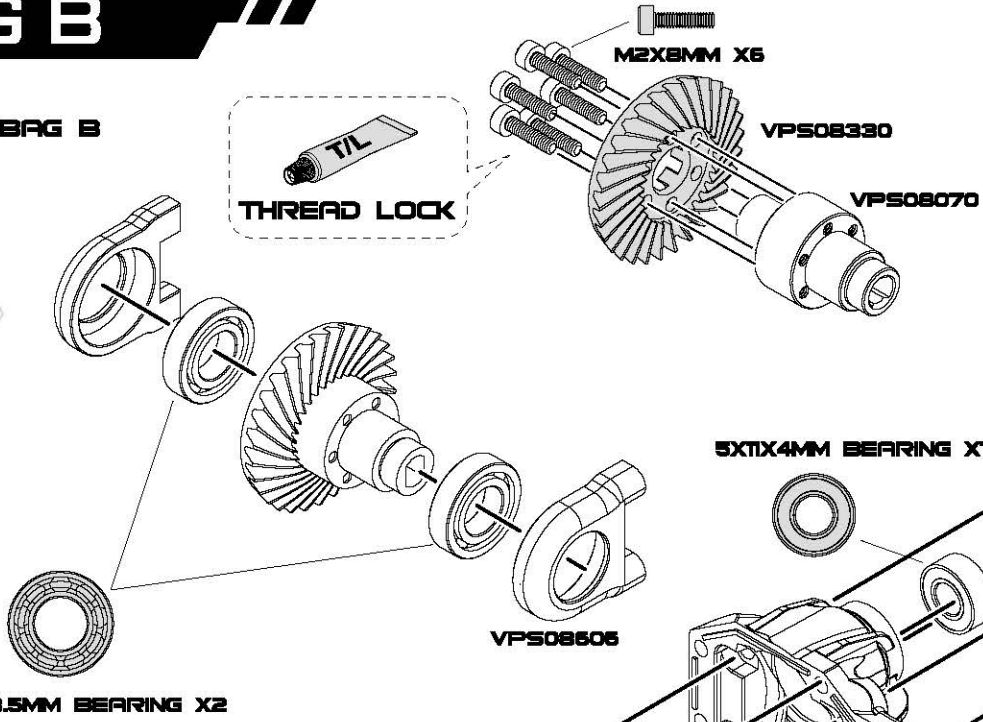
FRONT AXLE



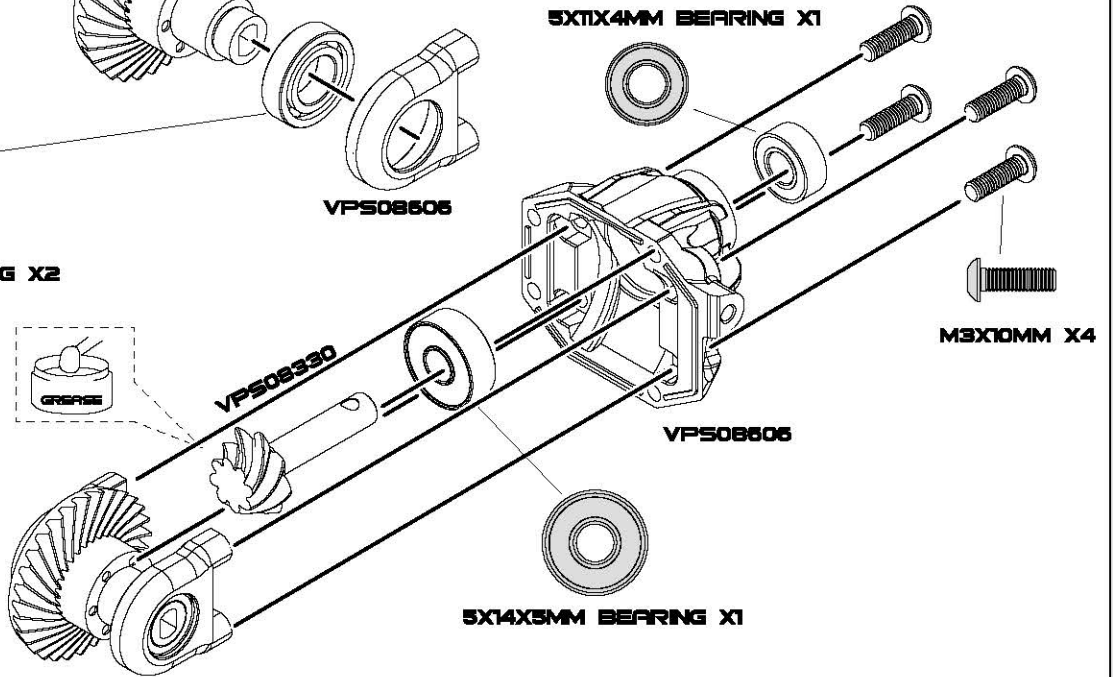
BAG B

■ OPEN BAG B

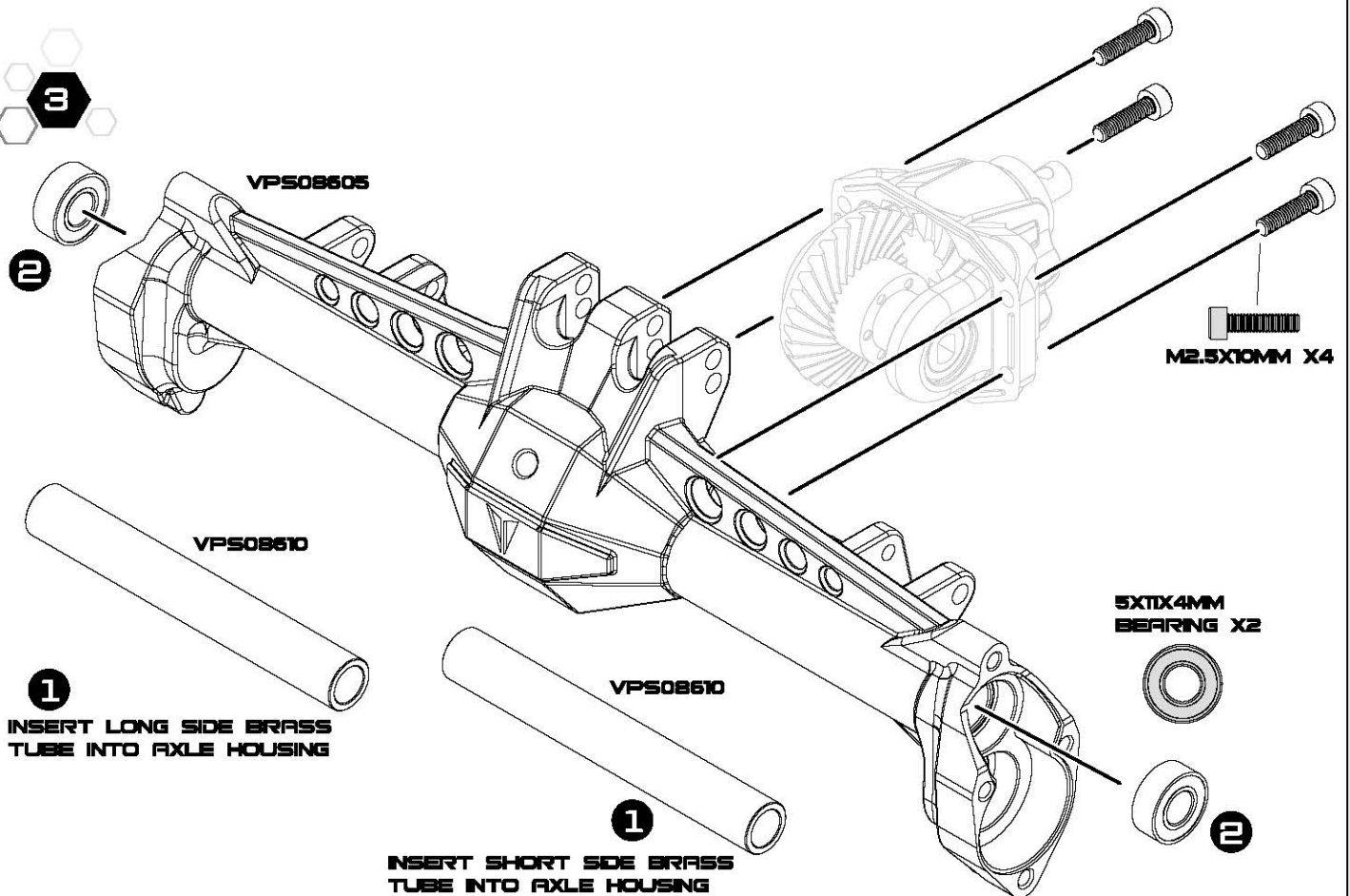
1



2



3

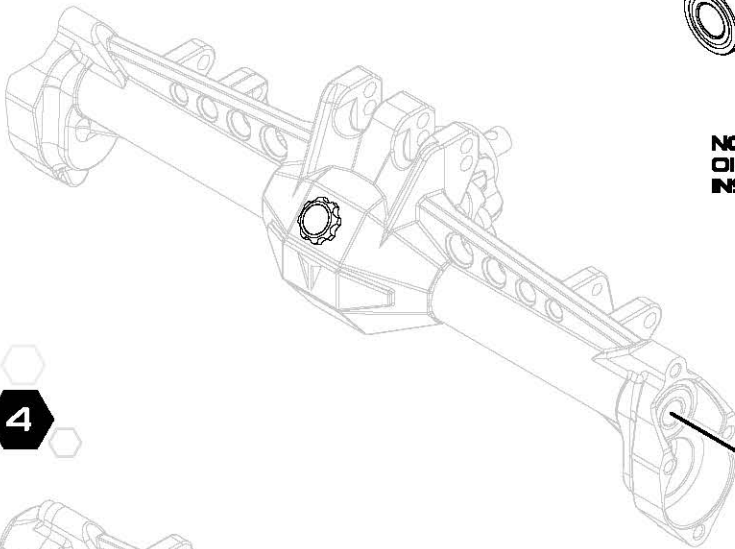
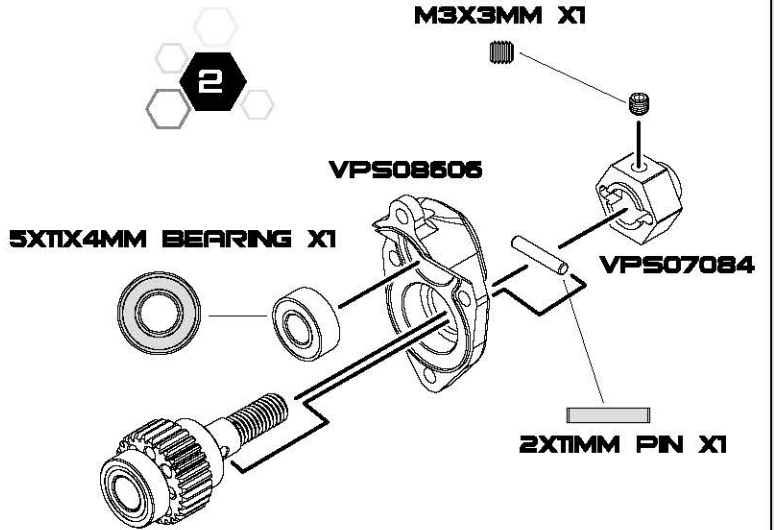
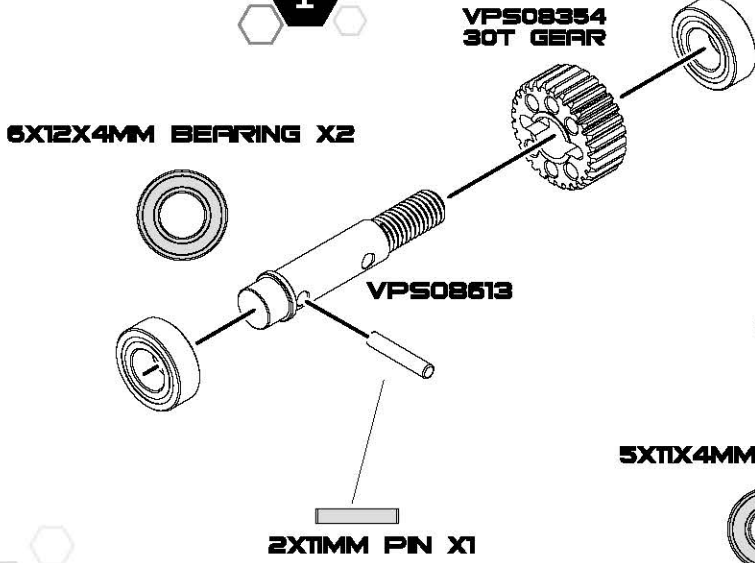


1
INSERT LONG SIDE BRASS
TUBE INTO AXLE HOUSING

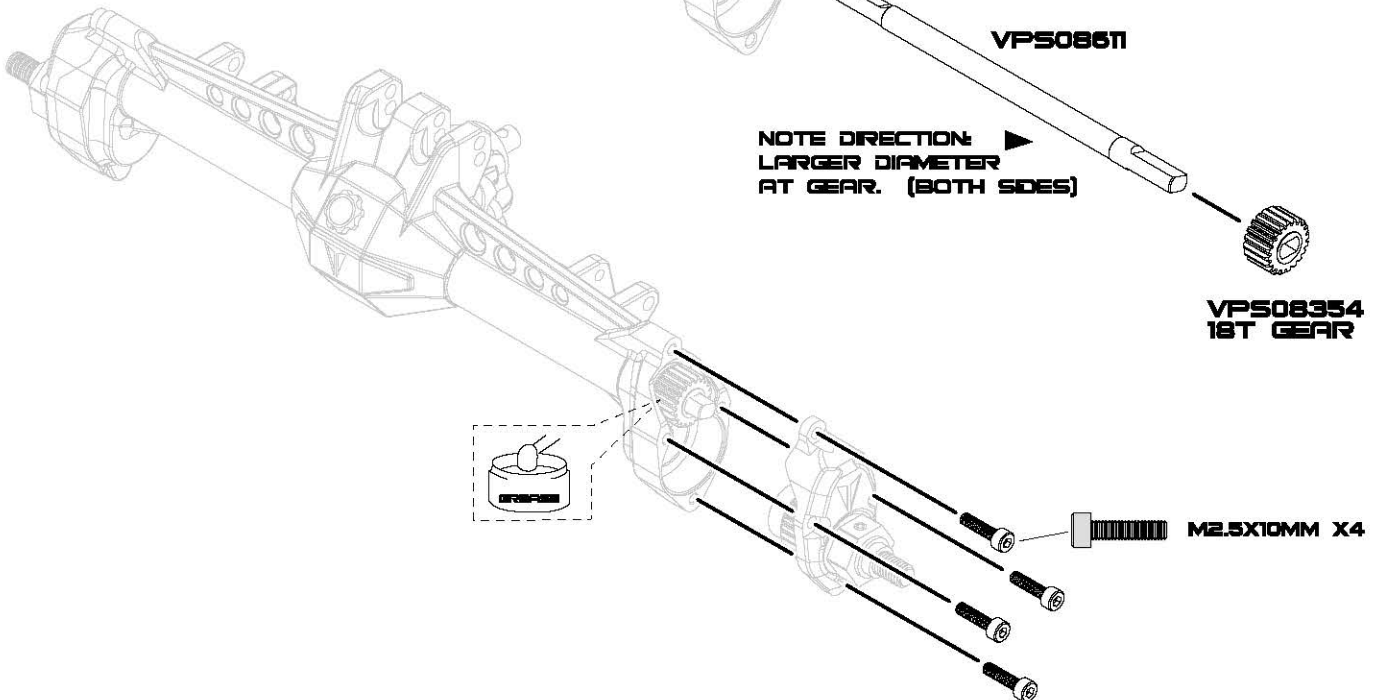
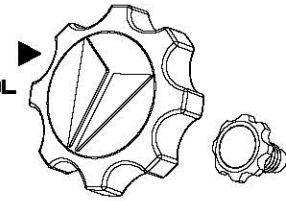
1
INSERT SHORT SIDE BRASS
TUBE INTO AXLE HOUSING

BAG B

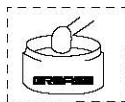
REAR AXLE



NOTE:
OIL FILL CAP
INSTALL TOOL

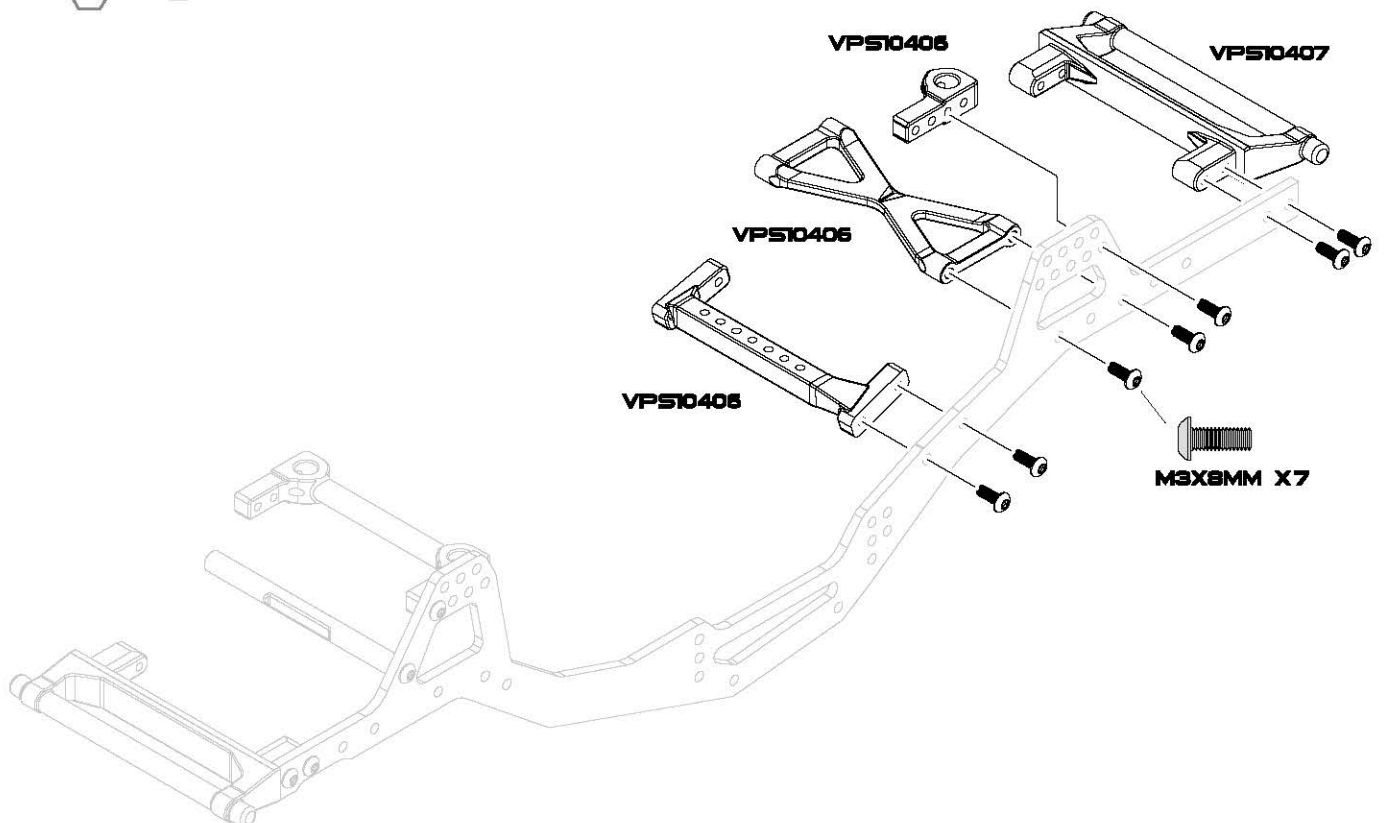
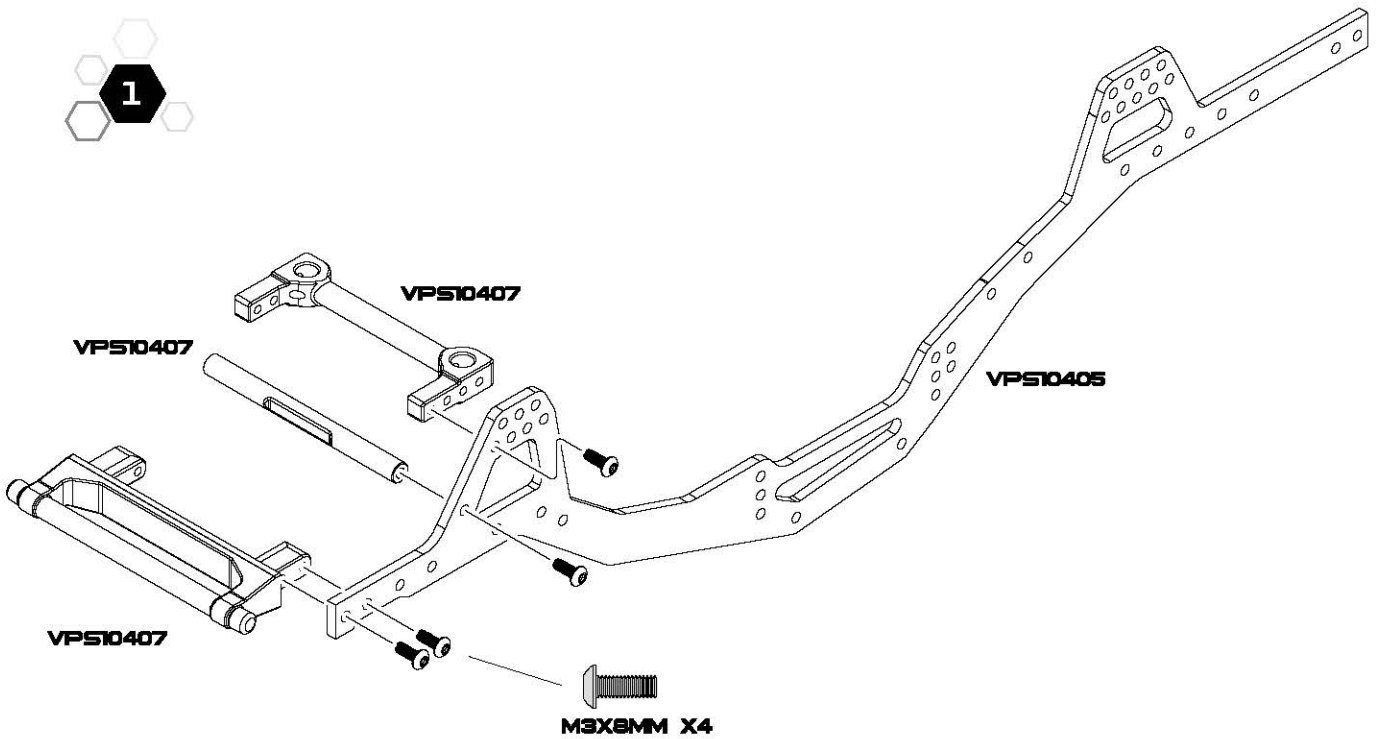


NOTE DIRECTION:
LARGER DIAMETER
AT GEAR. (BOTH SIDES)



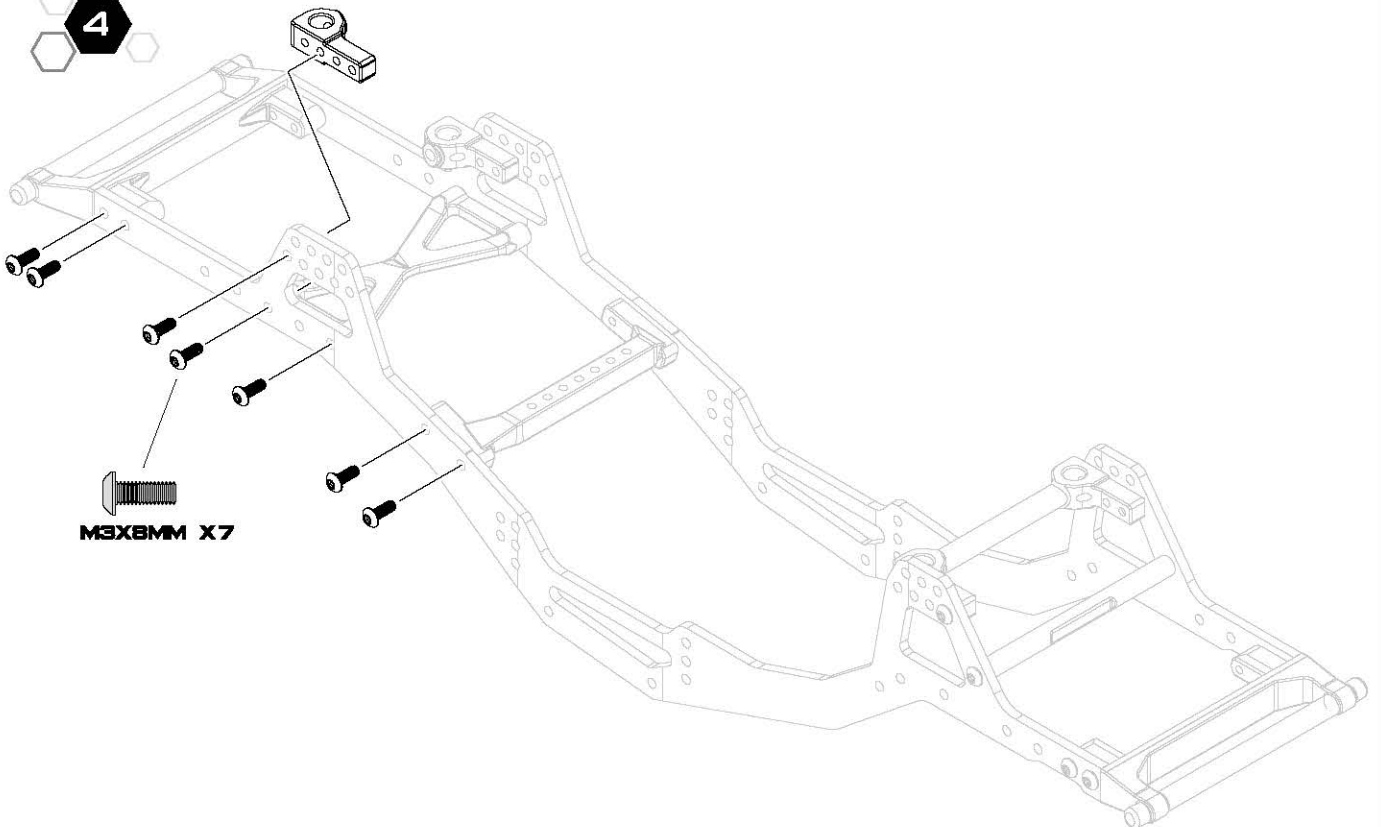
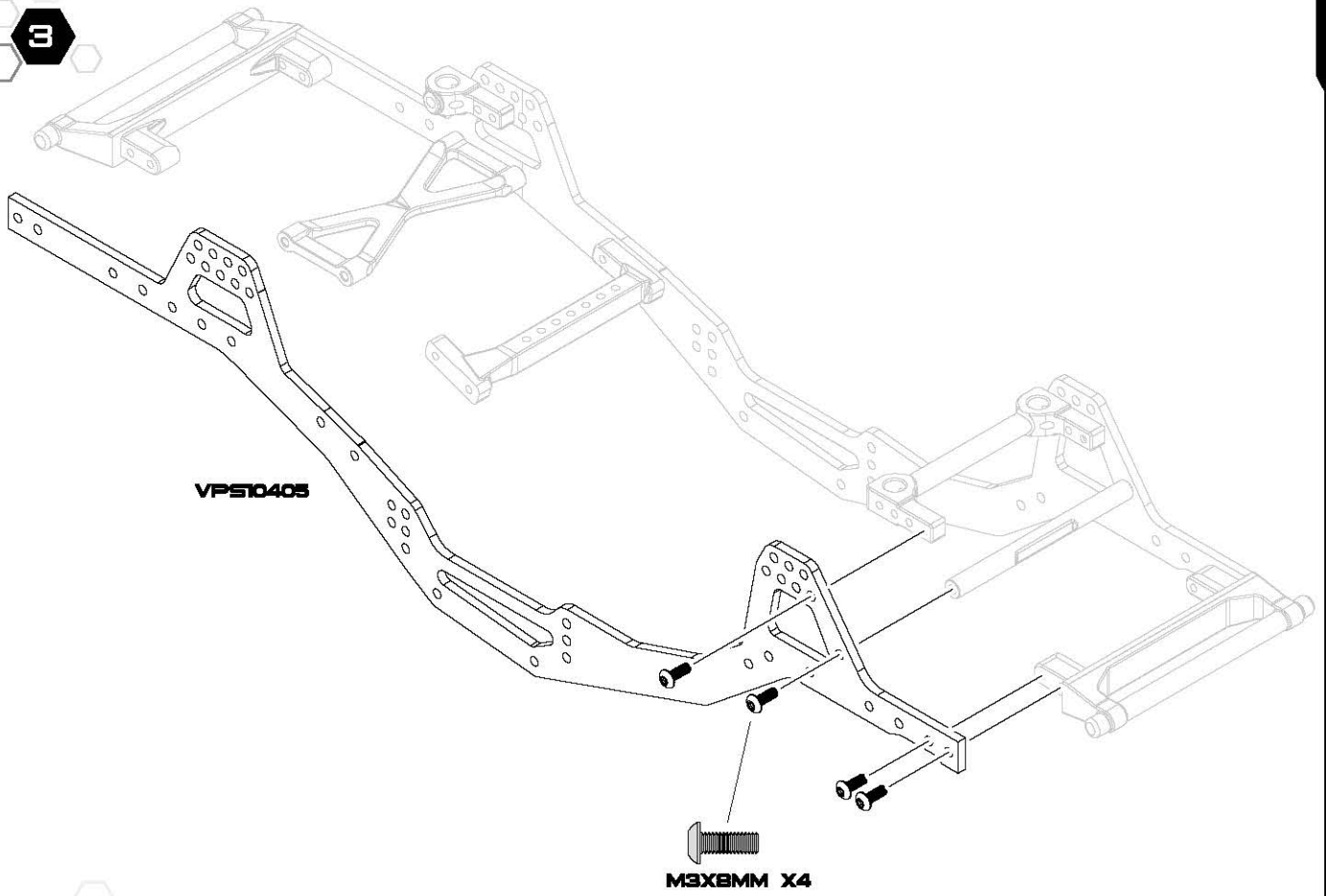
BAG C

CHASSIS OPEN BAG C



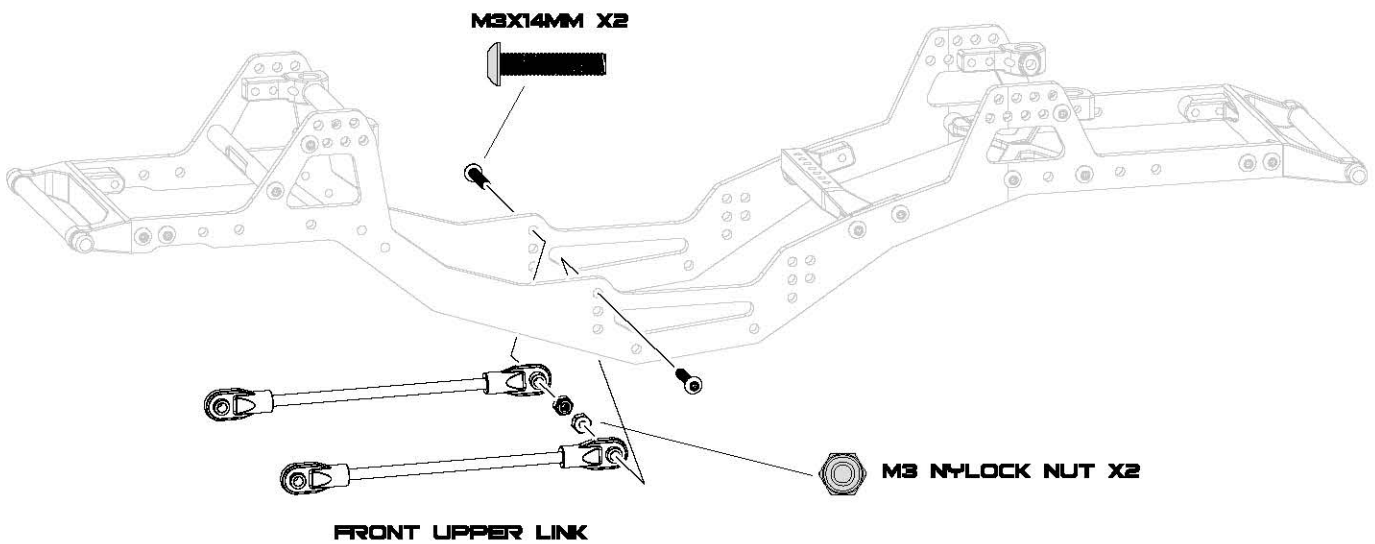
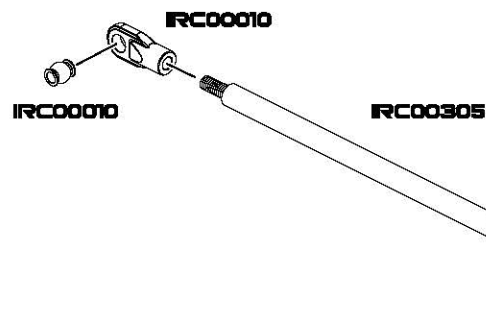
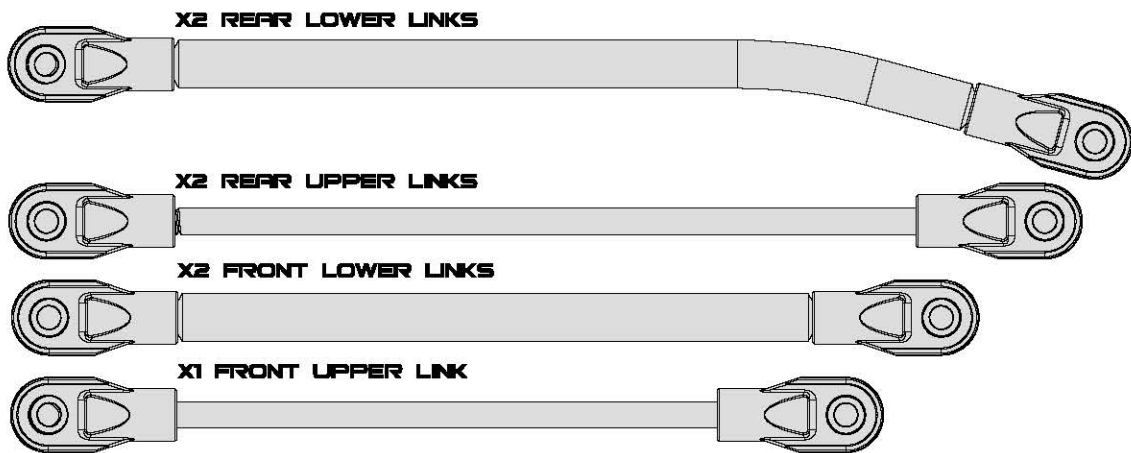
BAG C

■ CHASSIS



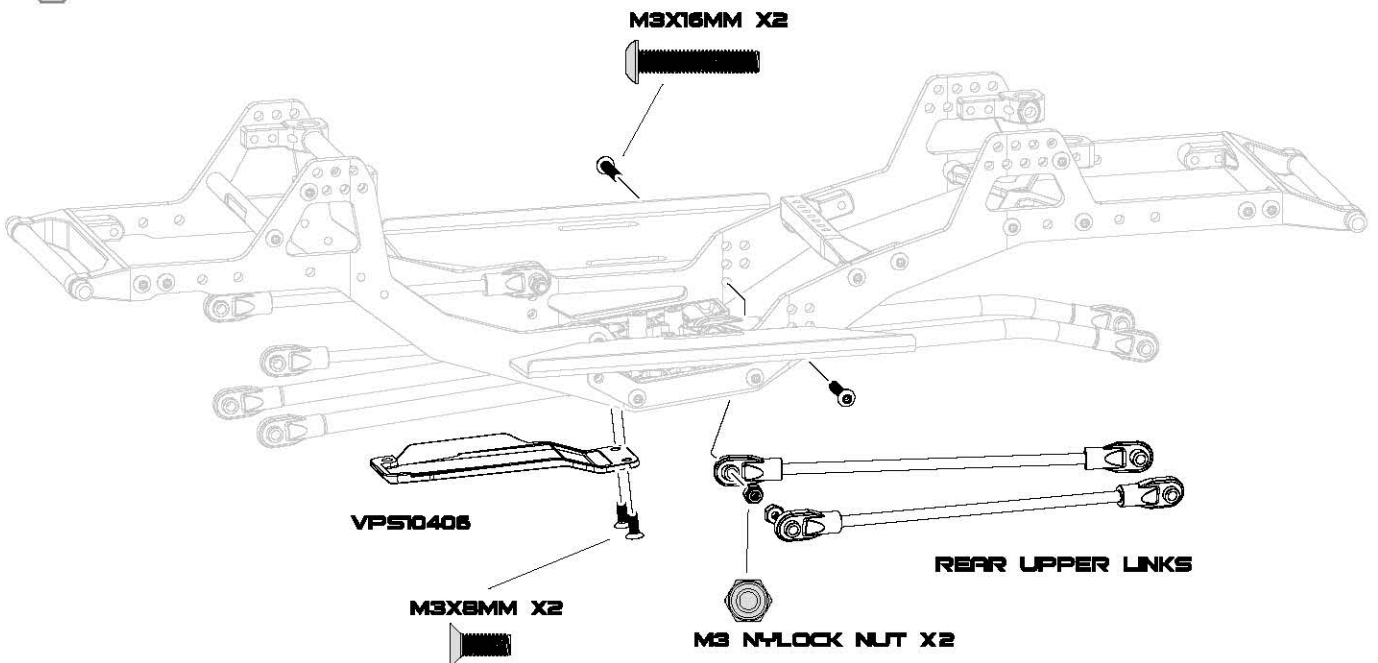
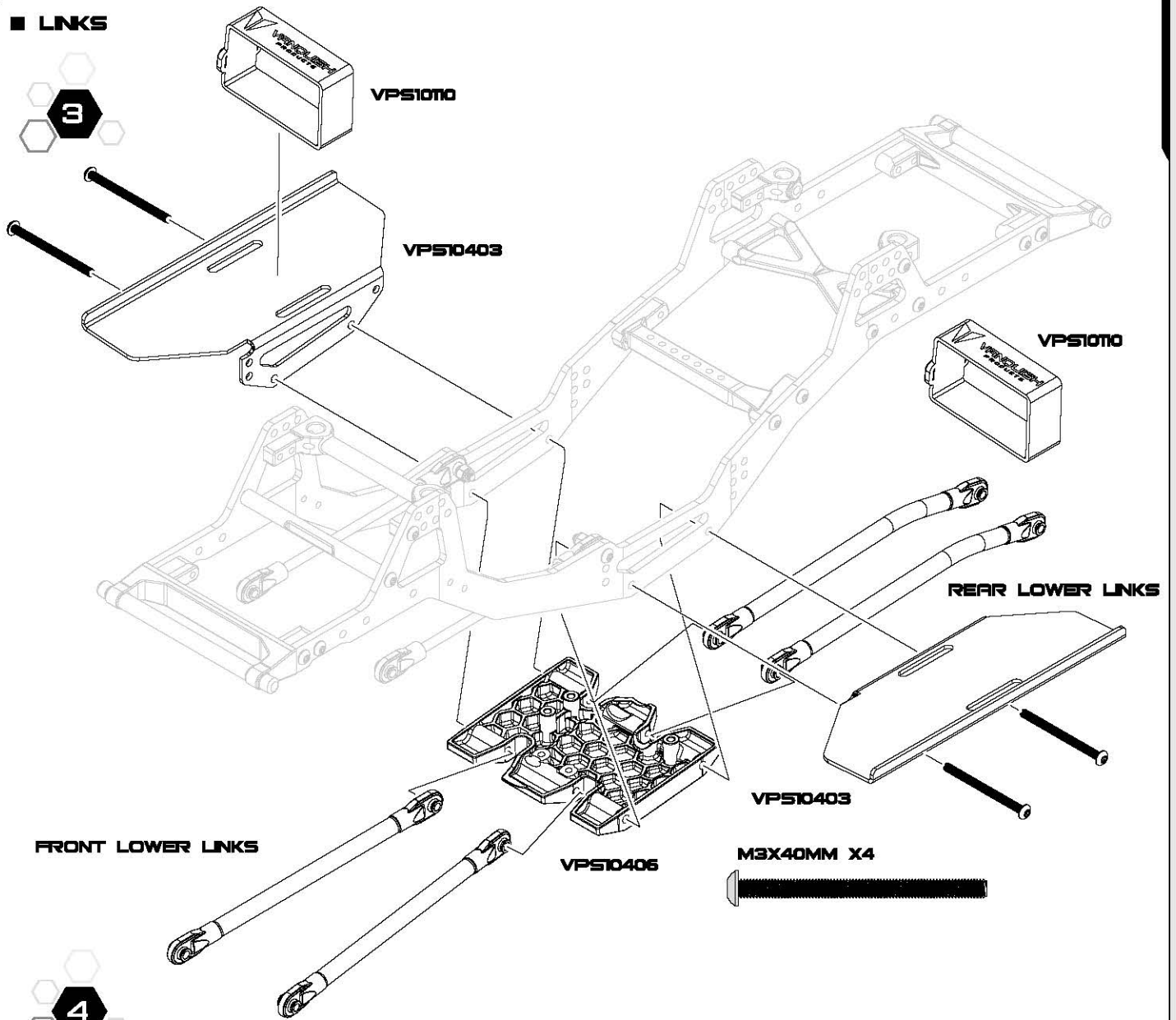
BAG C

LINKS TO CHASSIS



BAG C

LINKS

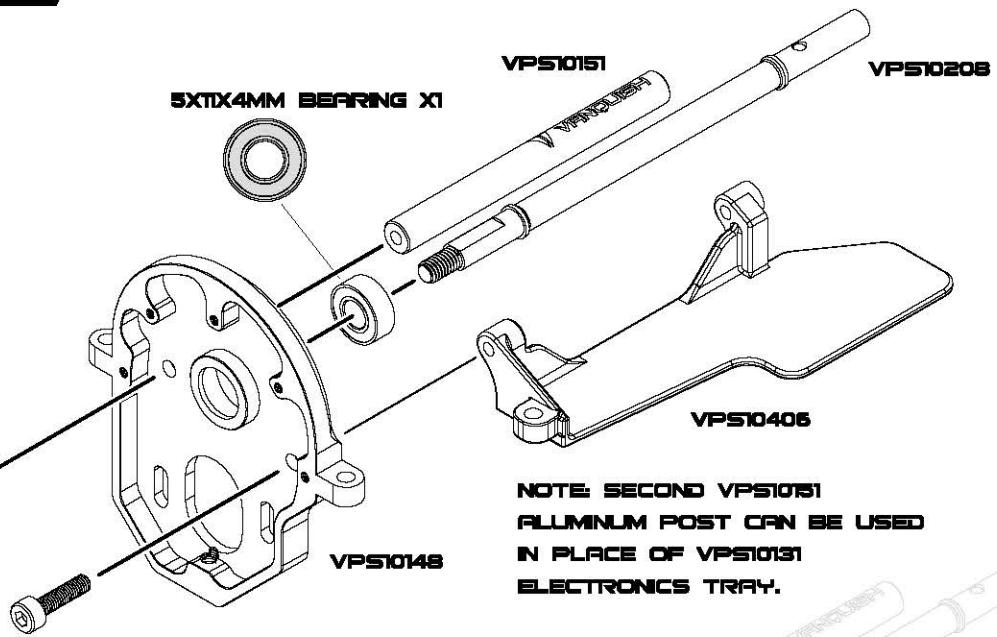


BAG D

■ OPEN BAG D



M3X12MM X2

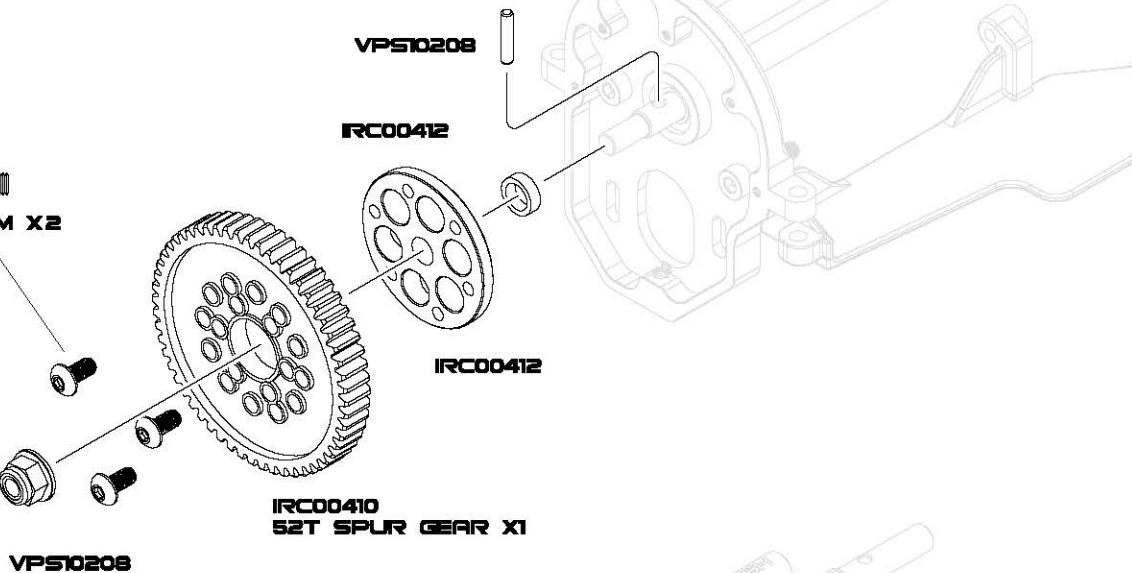


NOTE: SECOND VPS10151 ALUMINUM POST CAN BE USED IN PLACE OF VPS10131 ELECTRONICS TRAY.



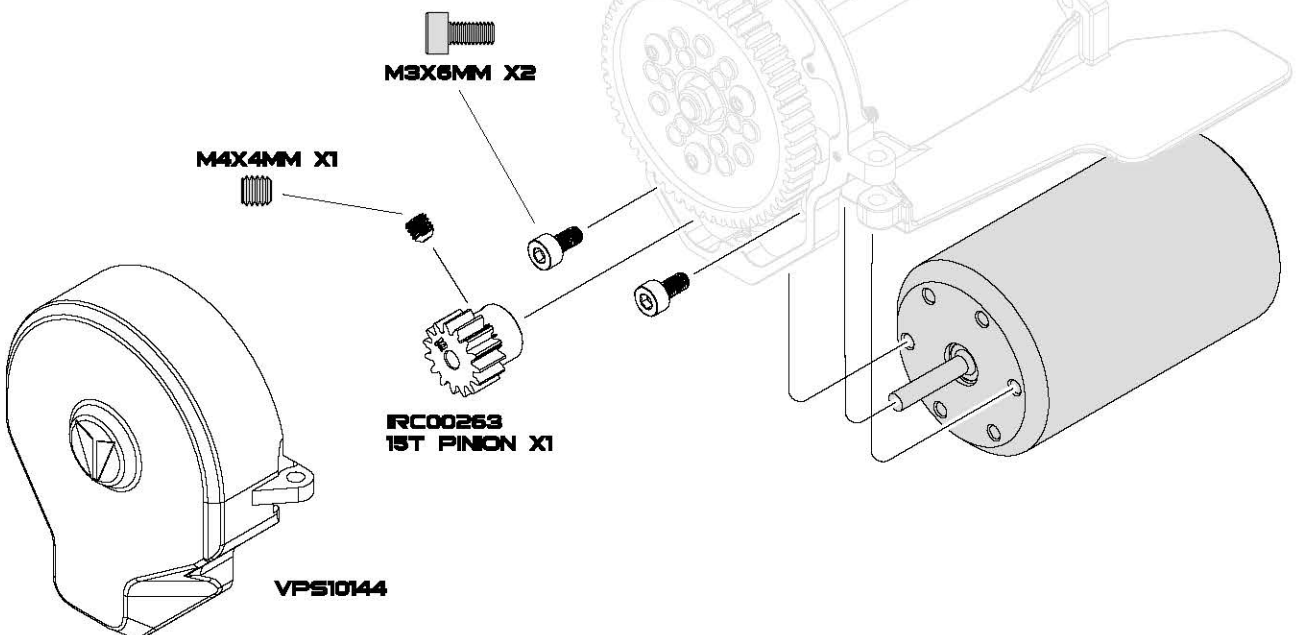
M3X6MM X2

M4 NY-LOCK NUT X1



TORQUE SPEC 60 OZ-IN

VPS10208



BAG D

■ TRANSMISSION

3

M3X16MM X1

VPS10406

M3X12MM X1

VPS10406

M3X12MM X2

VPS10144

4

M2X6MM X4

VPS10144

5X11X4MM BEARING X3

2X8MM PIN X1

M3X12MM X1

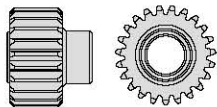
VPS10143

BOTTOM SHAFT LENGTH=37.5MM
*NOTE DIRECTION

2X10MM PIN X1

VPS10143

VPS10144



VPS10145
23T GEAR
11.30MM GEAR WIDTH

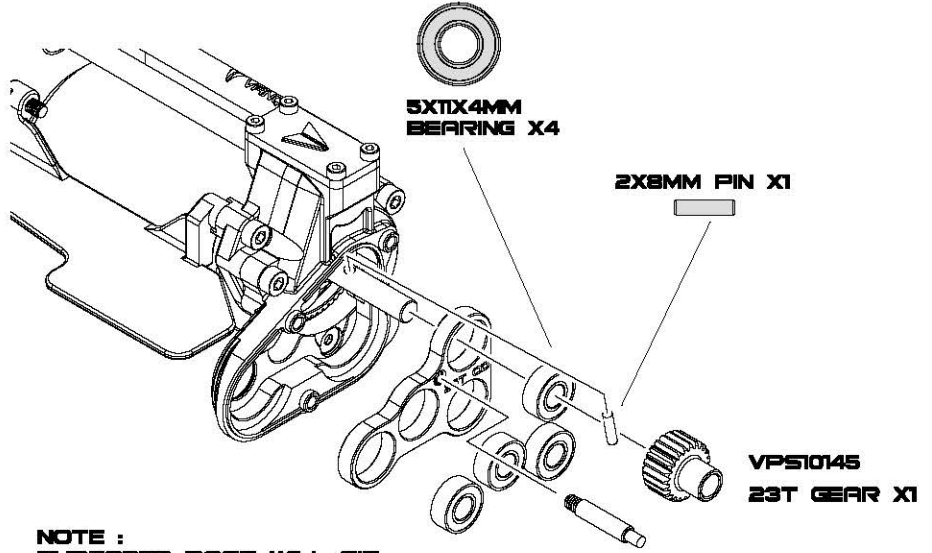
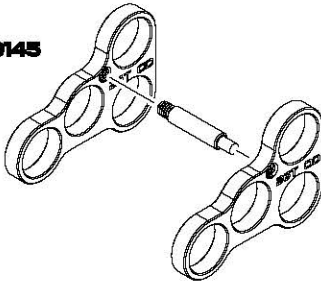
M3X12MM X1

BAG D

■ TRANSMISSION

5

VPS10145



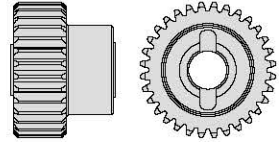
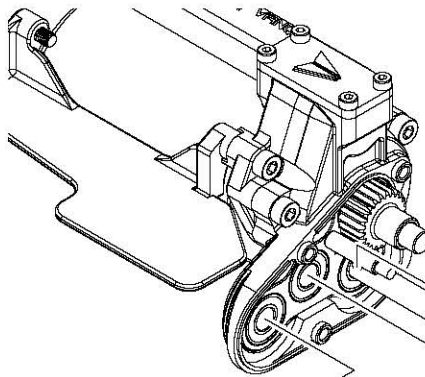
5X11X4MM
BEARING X4

2X8MM PIN X1

VPS10145
23T GEAR X1

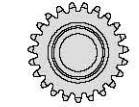
NOTE :
THREADED POST WILL SIT
BETWEEN BEARING PLATES
AT FINAL ASSEMBLY STEP 7.

6

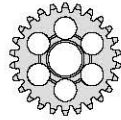


VPS10145
32T GEAR X1
13.80MM GEAR WIDTH

2X10MM PIN X1

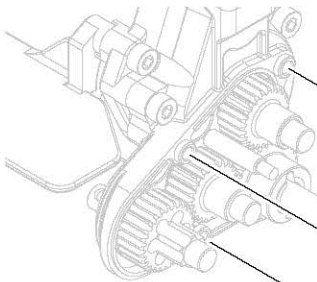


VPS10145
23T GEAR X1



VPS10145
26T GEAR X1

7



1
INSTALL BEARINGS
AND BEARING PLATE



5X11X4MM
BEARING X5

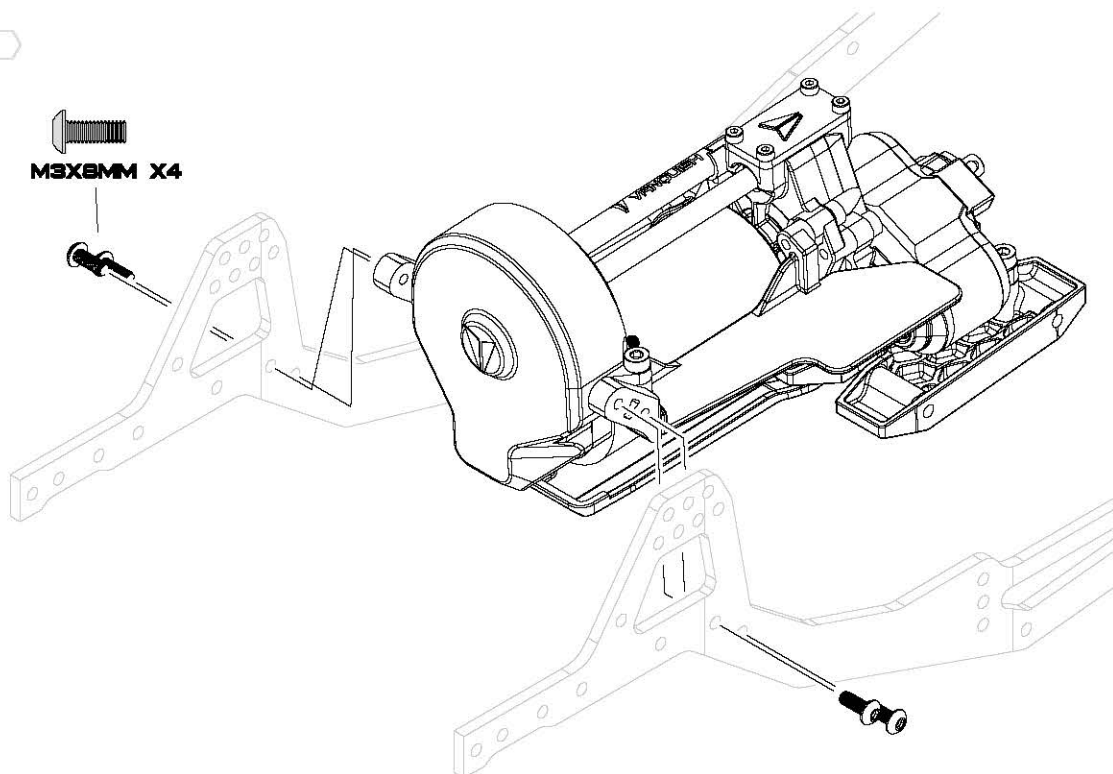
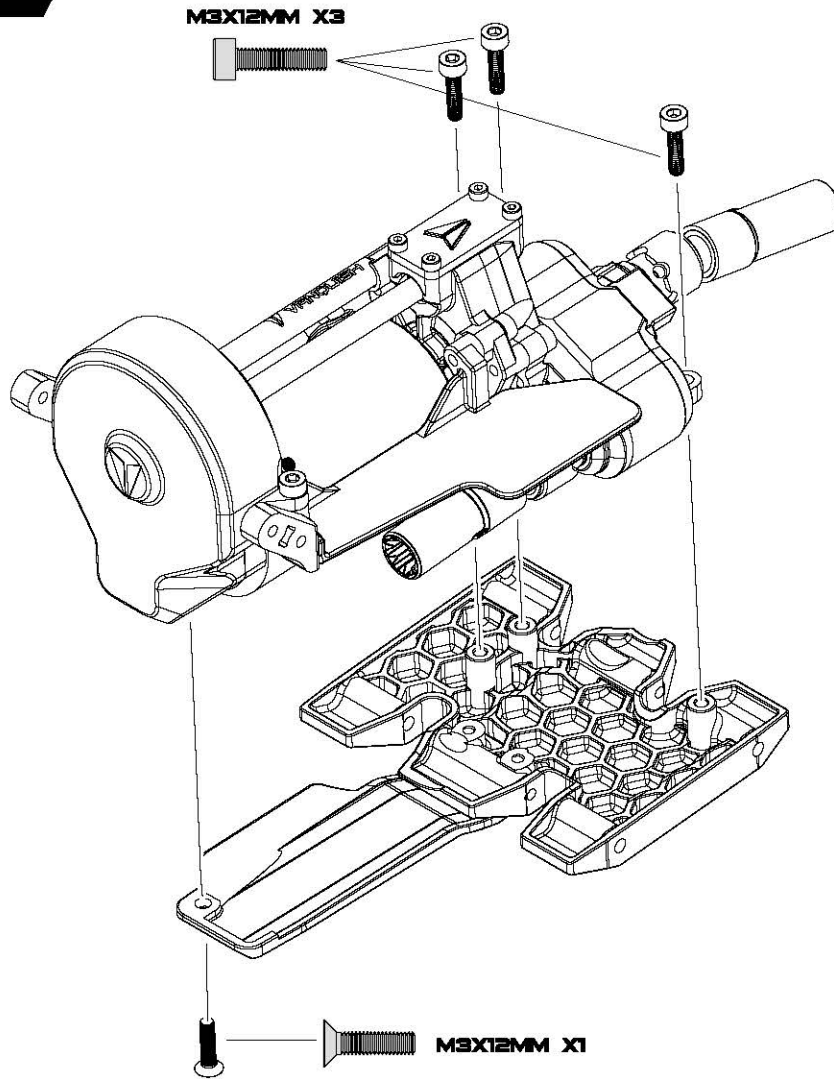
VPS10144

M3X12MM X2

M3X30MM X1

BAG D

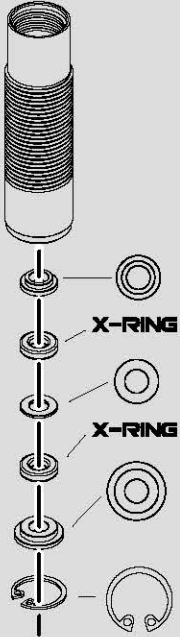
■ TRANSMISSION



BAG E

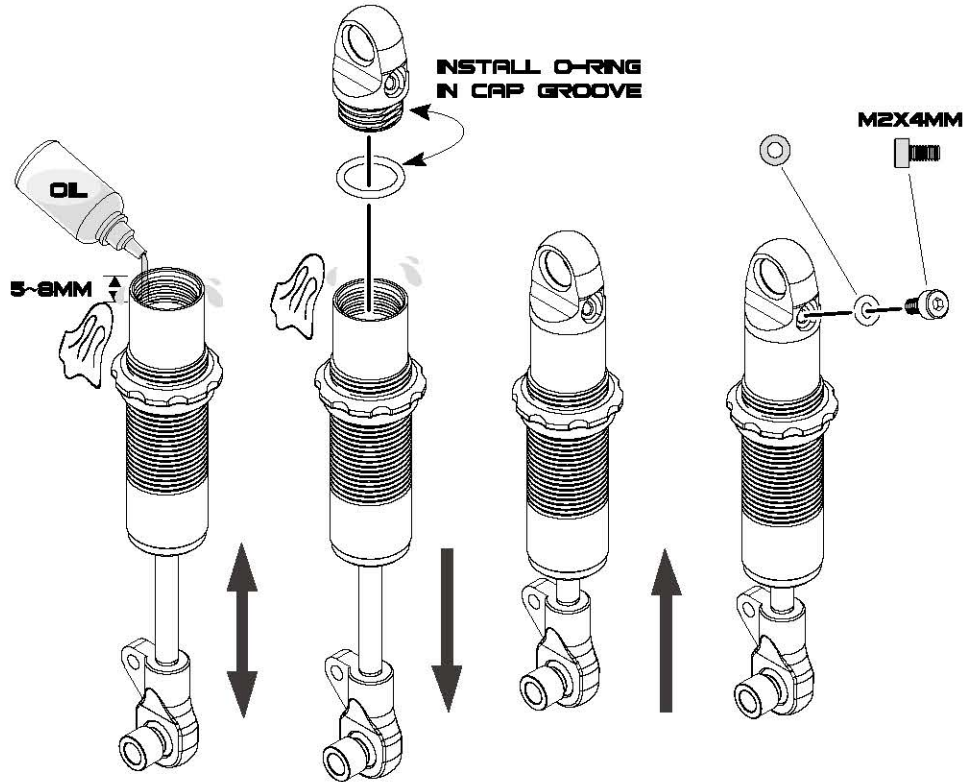
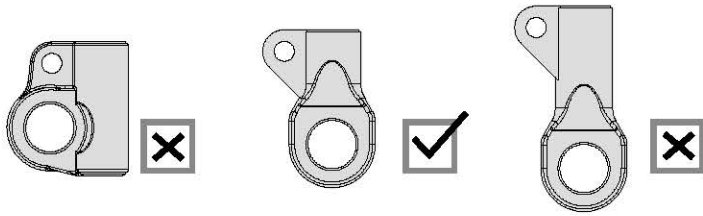
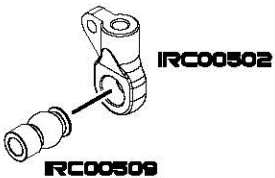
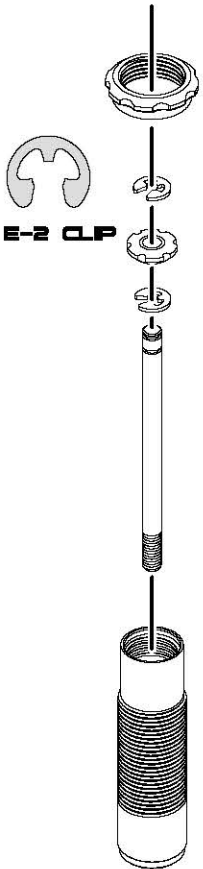
SHOCKS OPEN BAG E

ASSEMBLY STEP 1

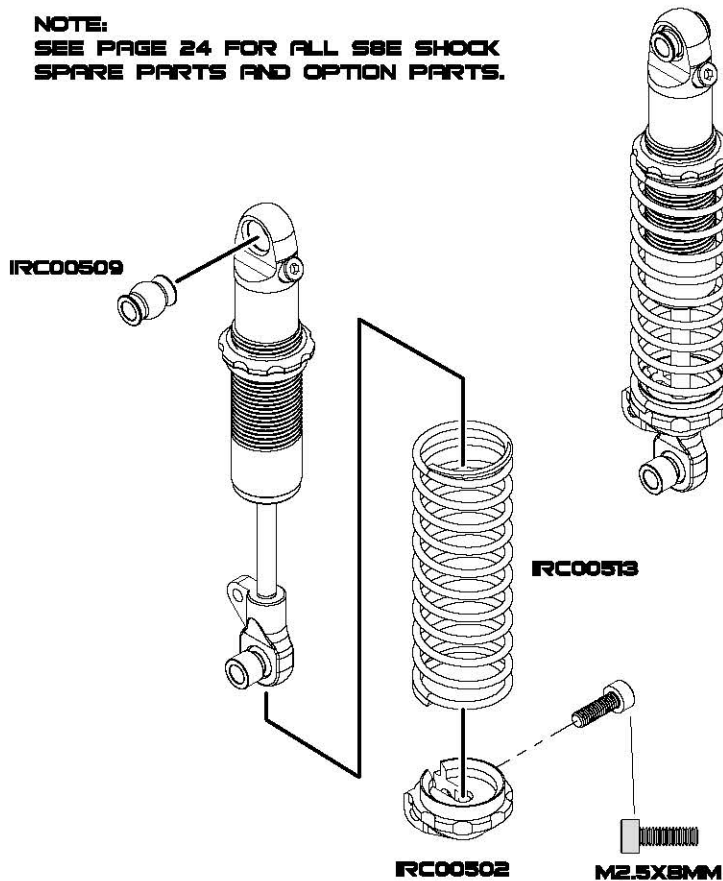


PRE-ASSEMBLED

ASSEMBLY STEP 2

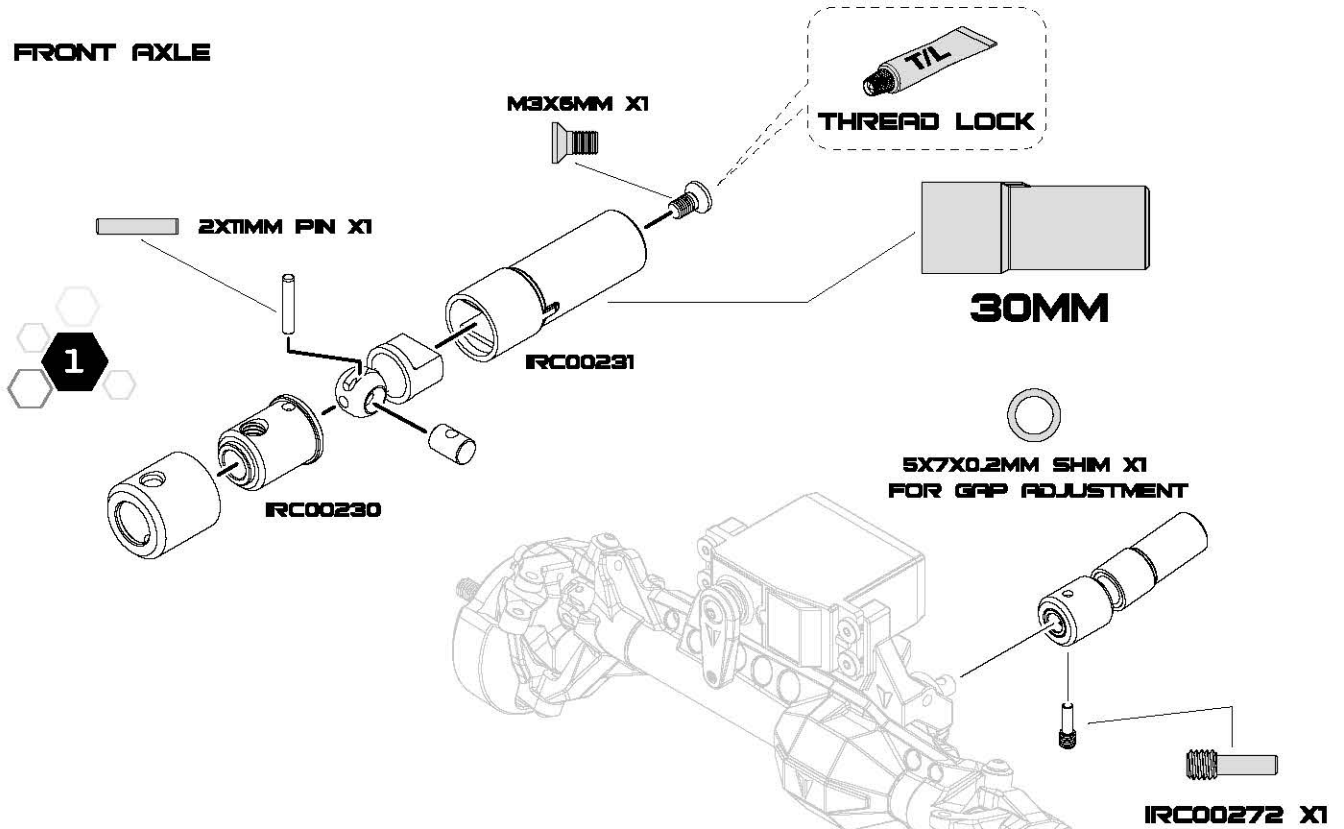


NOTE:
SEE PAGE 24 FOR ALL S8E SHOCK
SPARE PARTS AND OPTION PARTS.

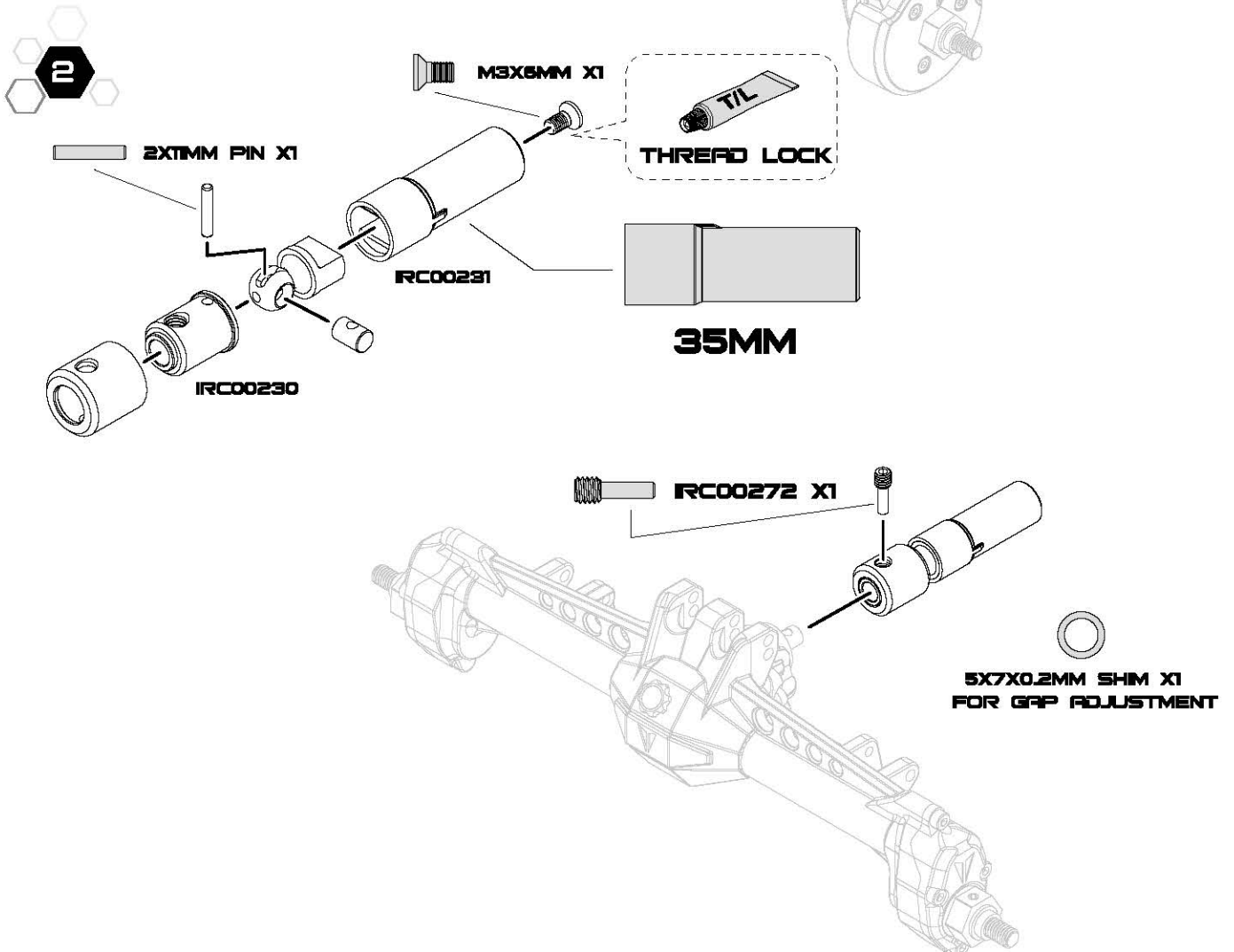


BAG F

FRONT AXLE



REAR AXLE

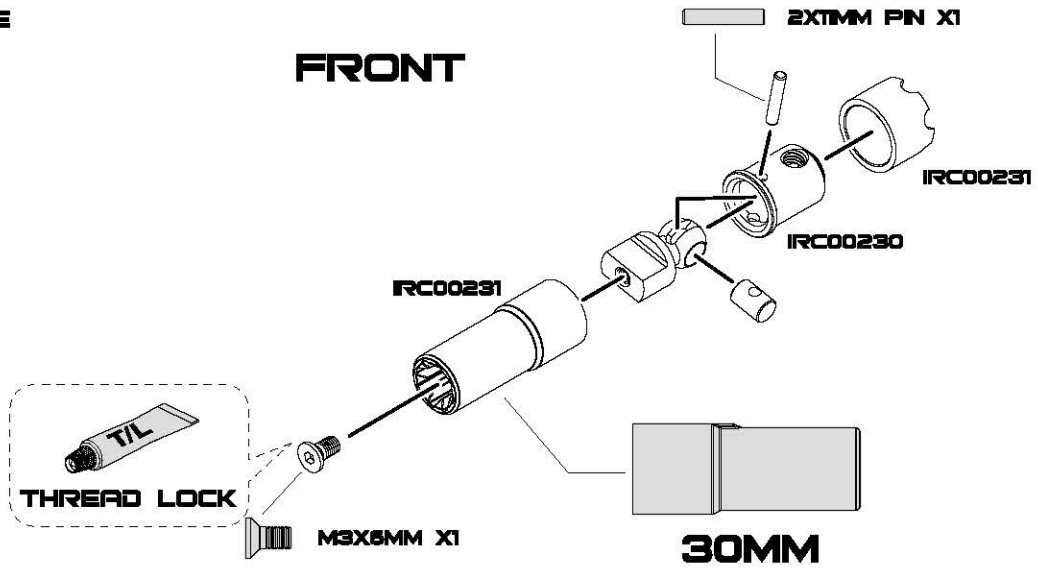


BAG F

FRONT AXLE



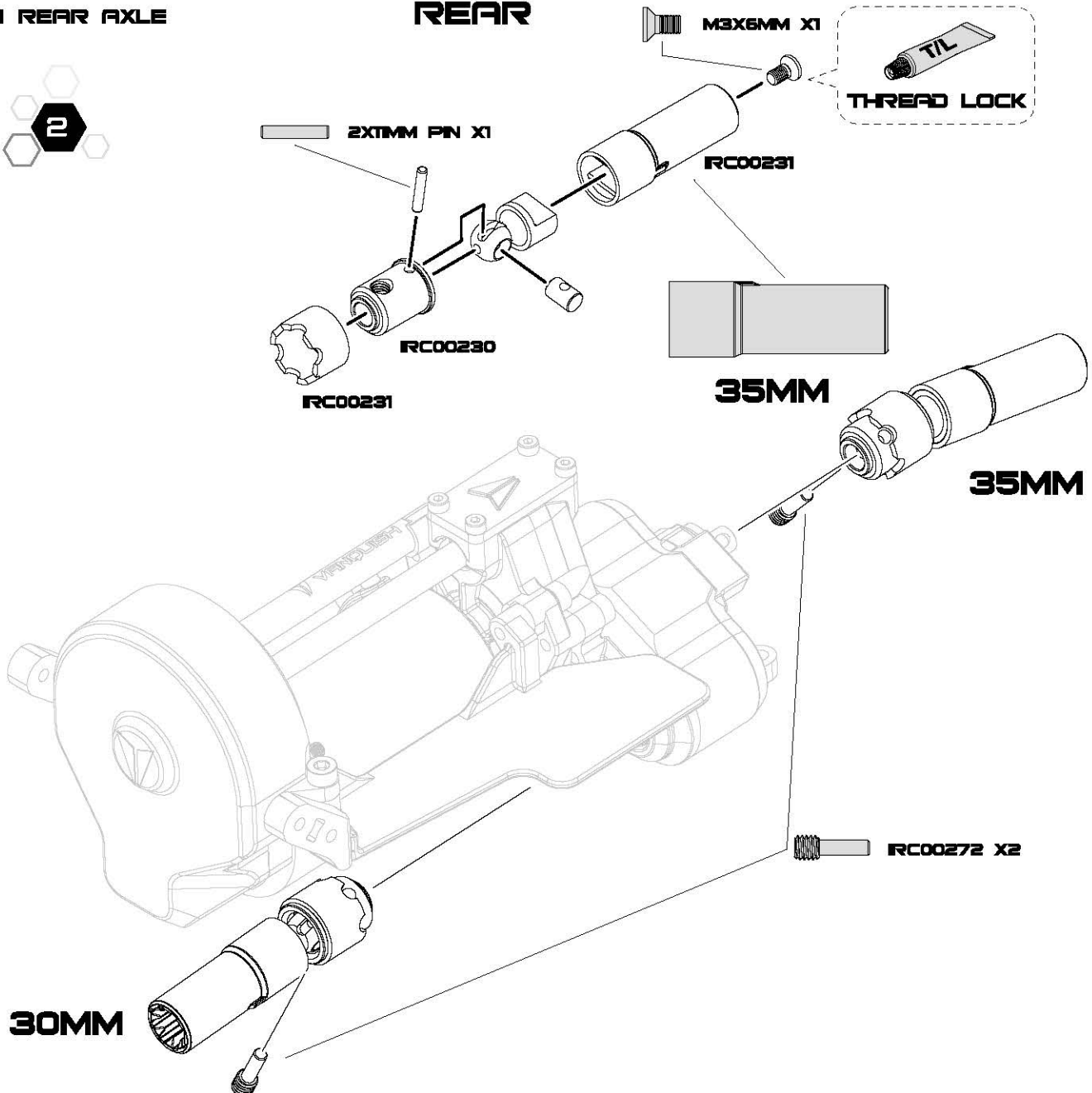
FRONT



REAR AXLE

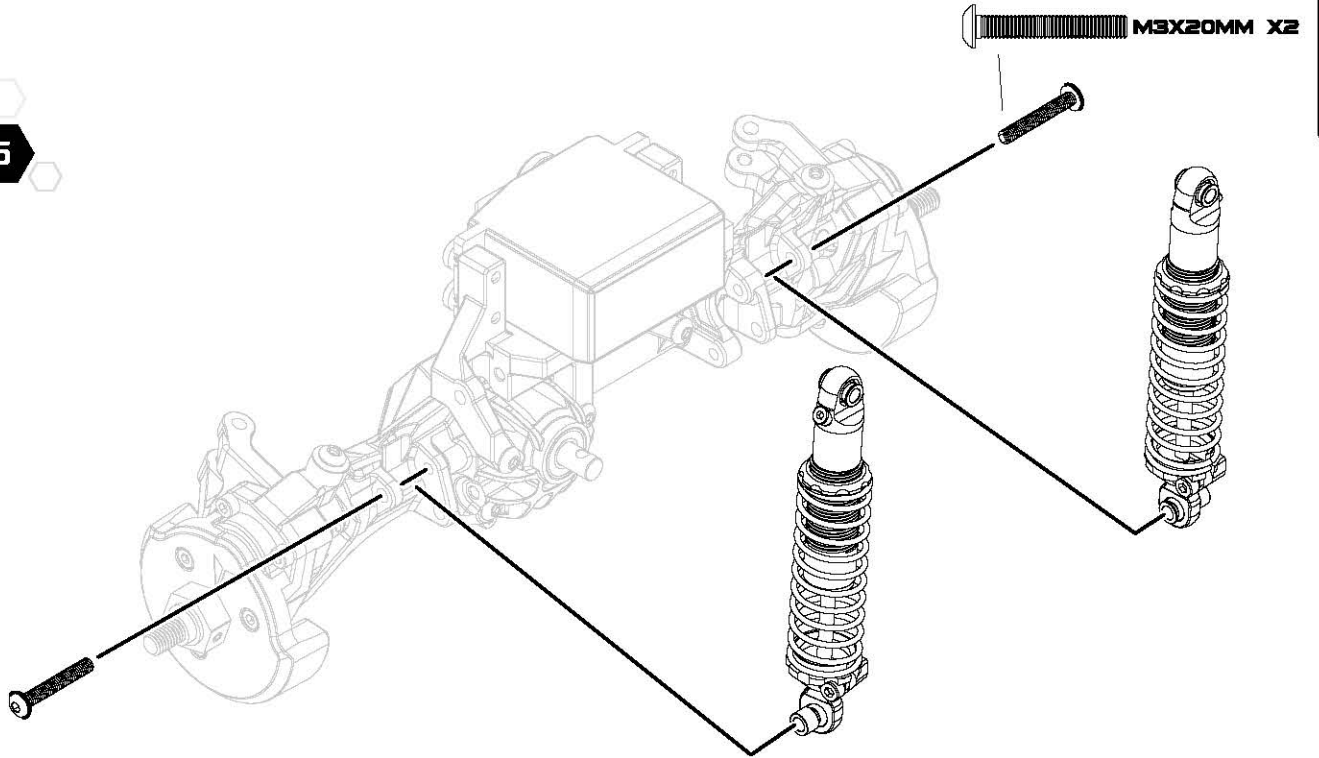


REAR

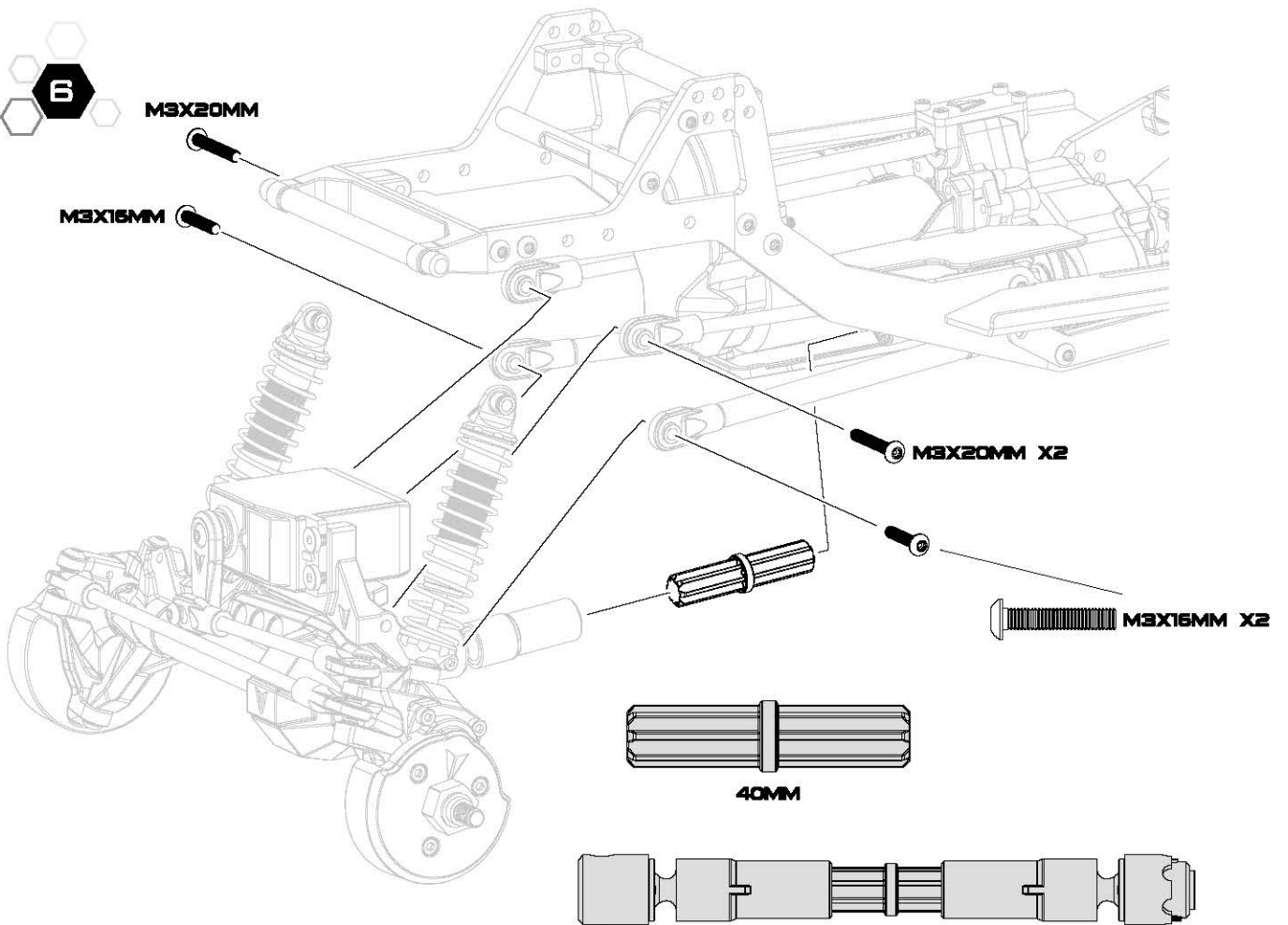


■ INSTALL FRONT AXLE

5

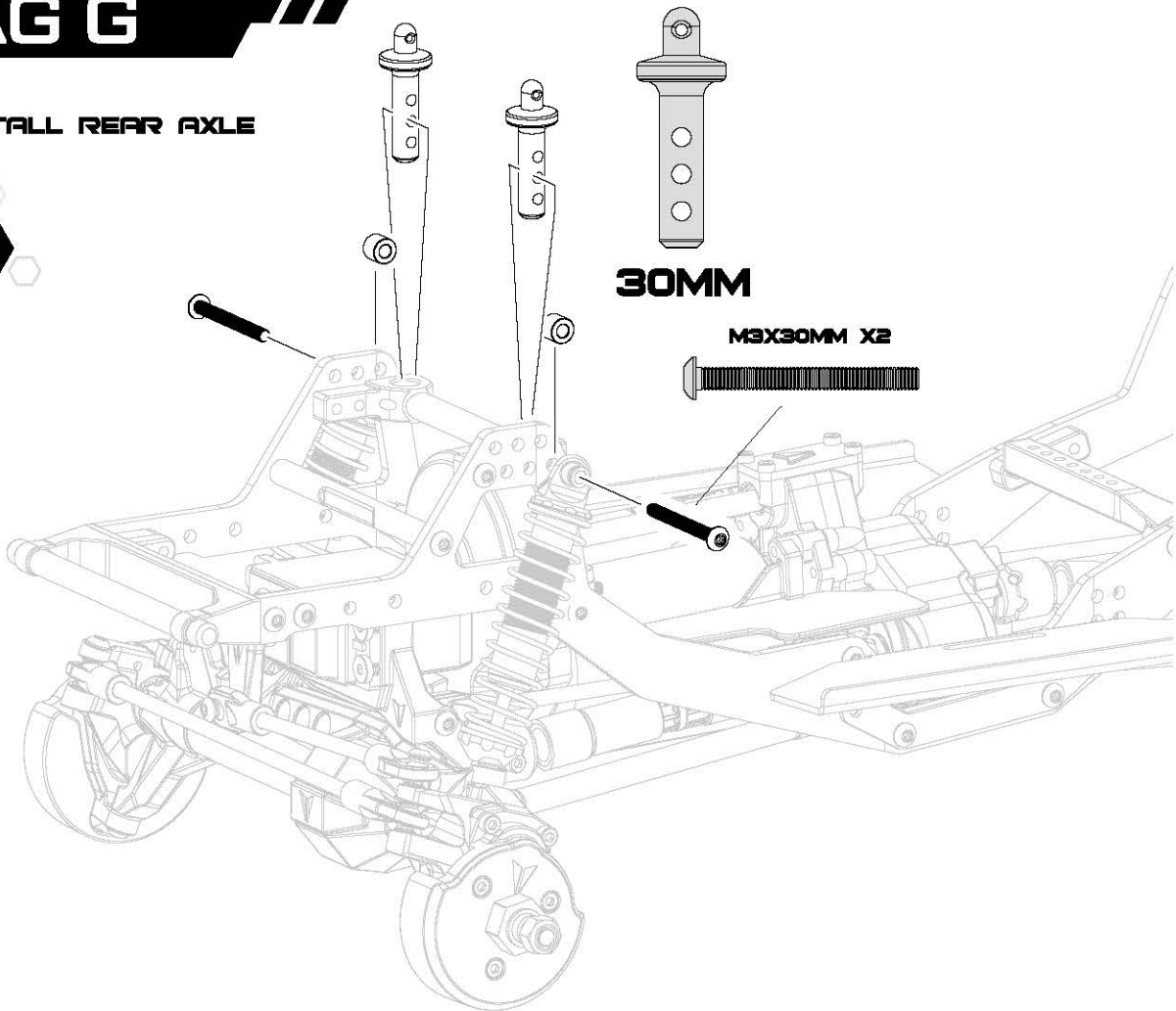


6

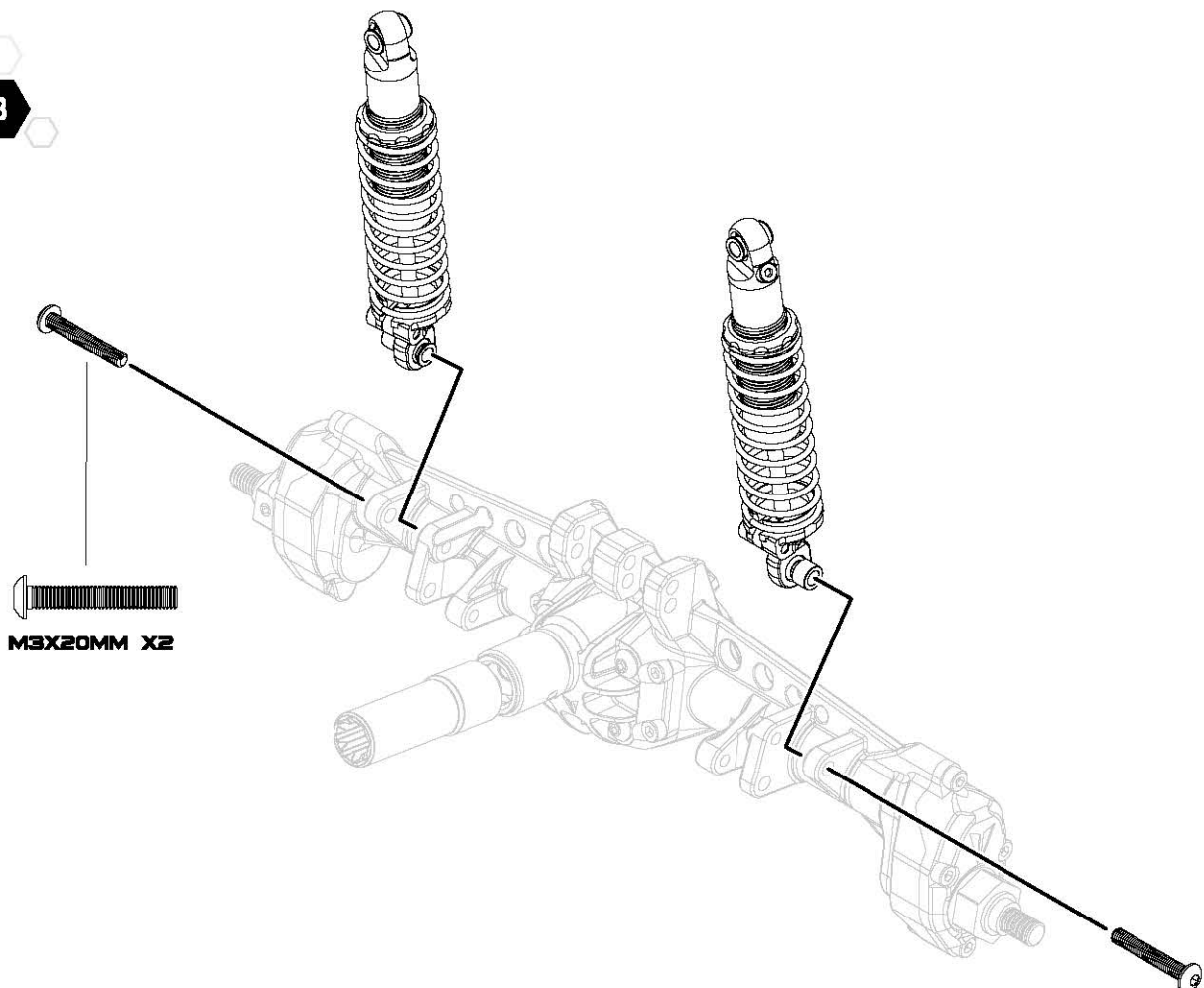


■ INSTALL REAR AXLE

7

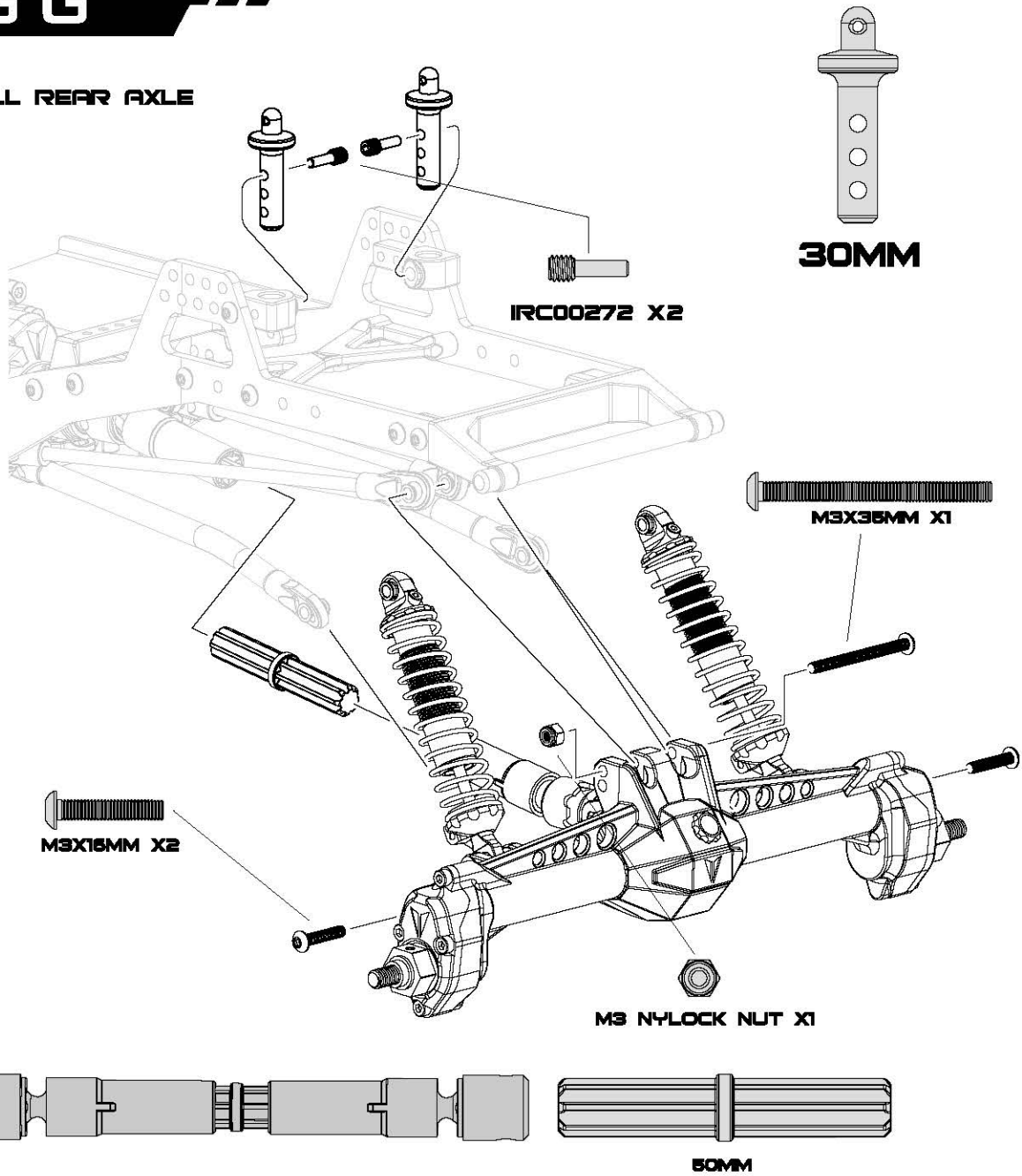


8

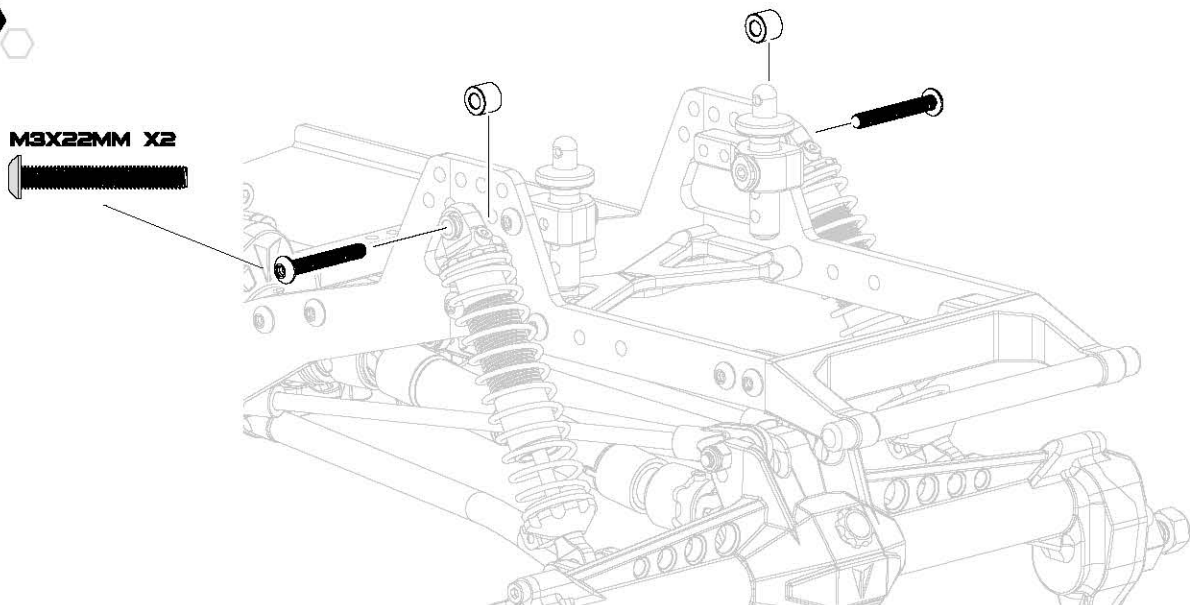


■ INSTALL REAR AXLE

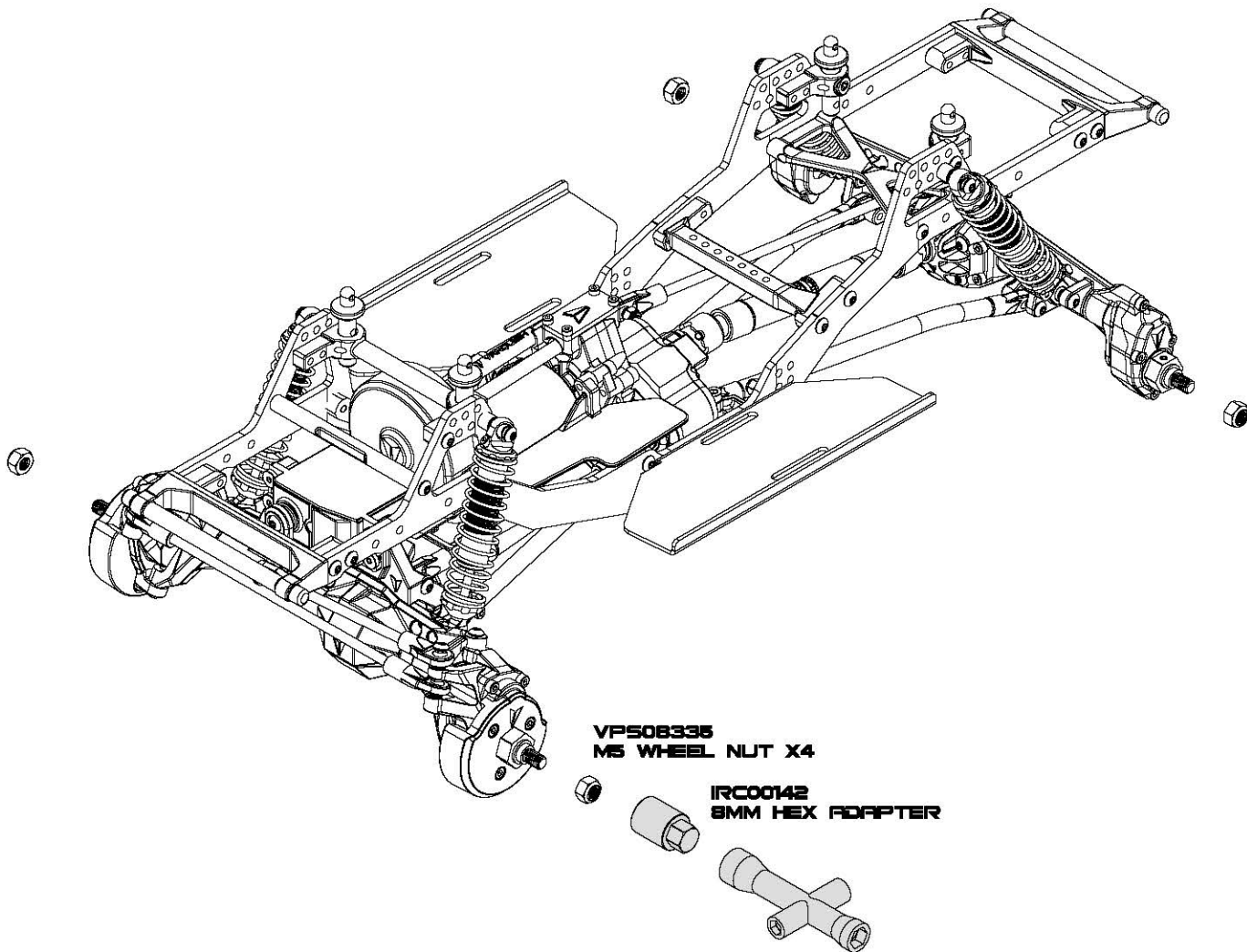
9



10

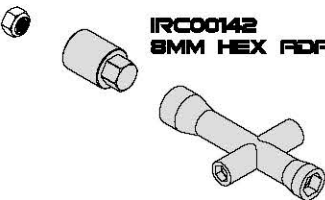


■ INSTALL REAR AXLE



VP508336
MS WHEEL NUT X4

IRC00142
BMM HEX ADAPTER



PART NUMBER

■ SPARE PARTS

IRC00013	PRO ROD ENDS WITH PIVOT BALLS (12)	VPS08600	F10 PORTAL FRONT AXLE SET
IRC00014	PRO BENT ROD ENDS WITH PIVOT BALLS (4)	VPS08601	F10 PORTAL REAR AXLE SET
IRC00206	F10 VRD SOA DRAG LINK AND TIE ROD SET	VPS08604	F10 PORTAL FRONT HOUSING
IRC00230	ISD10 DRIVESHAFT SET	VPS08605	F10 PORTAL REAR HOUSING
IRC00231	ISD10 REPLACEMENT PARTS TREE	VPS08606	F10 PORTAL AXLE COMPONENTS
IRC00263	15T 32P PINION	VPS08607	F10 PORTAL AXLE KNUCKLES
IRC00270	INCISION MOTOR PLATE CAPHEAD WASHER	VPS08608	F10 PORTAL VDI
IRC00271	INCISION KINGPIN SHOULDER SCREWS (4)	VPS08609	F10 PORTAL FRONT AXLE BRASS TUBES
IRC00272	M4 SCREW SHAFT (10)	VPS08610	F10 PORTAL REAR AXLE BRASS TUBES
IRC00273	BODY PINS (10)	VPS08611	F10 PORTAL REAR AXLE SHAFTS
IRC00275	WASHER HEAD SCREW (4)	VPS08612	F10 PORTAL FRONT STUB SHAFTS
IRC00304	126MM TIE ROD 4MM STRAIGHT	VPS08613	F10 PORTAL REAR STUB SHAFTS
IRC00305	VRD COMPLETE LINK SET	VPS10110	VANQUISH VELCRO STRAP
IRC00403	52T 32P SPUR GEAR	VPS10113	VS4-10 BODY POST SET
IRC00502	S8E SHOCK MOLDED COMPONENTS	VPS10144	VS4-10 VFD TRANSMISSION HOUSING
IRC00506	S8E 90MM SHOCK SHAFT	VPS10145	VFD LIGHTWEIGHT TRANSFER CASE GEAR SET
IRC00507	S8E SHOCK REBUILD KIT	VPS10148	VS4-10 VFD MACHINED MOTOR PLATE
IRC00508	E-2 CLIP	VPS10151	VS4-10 VFD ALUMINUM TRANS POST
IRC00509	S8E UPPER AND LOWER SHOCK PIVOT BALL SET	VPS10153	VFD LIGHTWEIGHT FRONT GEAR SET
IRC00521	S8E 90MM SHOCK BODY HARD ANODIZED	VPS10207	E-5 CLIP
VPS02420	POWDER METAL SERVO HORN	VPS10208	VFD SLIPPER SET
VPS07084	12MM PORTAL HEX	VPS10403	VRD S23 STAMPED SLIDERS
VPS08070	6 HOLE SPOOL / LOCKER	VPS10404	VRD S23 ALUMINUM CHASSIS RAILS
VPS08330	30T/8T HYPOID GEAR SET	VPS10405	VRD S23 CARBON CHASSIS RAILS
VPS08335	5MM NON-FLANGED WHEEL NUTS	VPS10406	VRD CHASSIS COMPONENTS MOLD
VPS08353	PORTAL OVERDRIVE GEAR SET (28T/20T)	VPS10407	VRD CHASSIS END CAPS AND BUMPER MOLD
VPS08354	PORTAL STANDARD GEAR SET (30T/18T)	VPS10412	PM KNUCKLE WEIGHTS
VPS08363	PORTAL REAR AXLE SHAFTS	VPS10414	ALUMINUM SHOCK SPACER - 5MM

■ OPTION PARTS

IRC00220	INCISION DRIVESHAFT SET	VPS08602	F10 STRAIGHT FRONT AXLE SET
IRC00260	12T 32P PINION	VPS08603	F10 STRAIGHT REAR AXLE SET
IRC00261	13T 32P PINION	VPS08615	CURRIE F10 ALUMINUM FRONT AXLE HOUSING - BLACK ANODIZED
IRC00262	14T 32P PINION	VPS08616	CURRIE F10 ALUMINUM FRONT AXLE HOUSING - CLEAR ANODIZED
IRC00264	16T 32P PINION	VPS08617	CURRIE F10 ALUMINUM REAR AXLE HOUSING - BLACK ANODIZED
IRC00265	17T 32P PINION	VPS08618	CURRIE F10 ALUMINUM REAR AXLE HOUSING - CLEAR ANODIZED
IRC00404	56T 32P SPUR GEAR	VPS08623	F10 FRONT AXLE THIRD MEMBER - BLACK ANODIZED
IRC00500	S8E 80MM SHOCK SET	VPS08624	F10 FRONT AXLE THIRD MEMBER - CLEAR ANODIZED
IRC00501	S8E 90MM SHOCK SET	VPS08625	F10 REAR AXLE THIRD MEMBER - BLACK ANODIZED
IRC00503	S8E 80MM SHOCK BODY	VPS08626	F10 REAR AXLE THIRD MEMBER - CLEAR ANODIZED
IRC00504	S8E 80MM SHOCK SHAFT	VPS08640	F10 PORTAL ALUMINUM FRONT KNUCKLE - BLACK ANODIZED
IRC00505	S8E 90MM SHOCK BODY	VPS08641	F10 PORTAL ALUMINUM FRONT KNUCKLE - CLEAR ANODIZED
IRC00510	S8E TINI 80MM SHOCK SHAFT	VPS08650	BRASS F10 PORTAL KNUCKLE WEIGHT
IRC00511	S8E TINI 90MM SHOCK SHAFT	VPS08651	BRASS F10 REAR PORTAL COVER WEIGHT
IRC00512	S8E 80MM SPRING SET	VPS10102	VXT2 1.9 TIRES RED COMPOUND
IRC00513	S8E 90MM SPRING SET	VPS10131	VS4-10 MACHINED PANHARD MOUNT
IRC00514	S8E MACHINED SHOCK CAP Black	VPS10148	VFD ALUMINUM MOTORPLATE BLACK
IRC00515	S8E MACHINED SHOCK CAP Orange	VPS10209	VFD SLIPPER LOCKOUT SET
IRC00516	S8E MACHINED SHOCK CAP Blue	VPS10306	4.75" STANCE PRO FOAMS
IRC00517	S8E MACHINED Spring COLLAR SET Black	VPS10401	VRD CMS KIT
IRC00518	S8E MACHINED Spring COLLAR SET Orange	VPS10402	STUBBY CONVERSION KIT
IRC00519	S8E MACHINED Spring COLLAR SET Blue	VPS10408	VRD STUBBY MOLDED COMPONENTS
IRC00520	S8E 80MM SHOCK BODY HARD ANODIZED	VPS10409	STANCE CLEAR BODY
IRC00522	S8E MACHINED PISTON SET	VPS10410	STANCE BODY PRE PAINTED SILVER
IRC00530	KMC KM237 RIOT BEADLOCK	VPS10411	STANCE BODY PRE PAINTED GREEN
VPS08331	AR44 AXLE UNDERDRIVE GEAR SET - 33T/8T	VPS10413	PM HEAVY 0.8 CLAMP RINGS

GEAR RATIO CHART

Front Axle Ratio: 5.25:1
 Rear Axle Ratio: 6.25:1
 Transmission Ratio Rear Output: 10.90:1
 Transmission Ratio Front Output: 8.86:1
 Transmission Overdrive: 21%
 Total Overdrive Ratio: 37%

Note: Not all Spur and Pinion combinations are compatible

Rear Ratio without spur/pinion

19.66:1

32P Rear output Ratio

	Spur Gear				
Pinion	48	50	52	54	56
11	85.8	89.4	92.9	96.5	100.1
12	78.6	81.9	85.2	88.5	91.7
13	72.6	75.6	78.6	81.7	84.7
14	67.4	70.2	73.0	75.8	78.6
15	62.9	65.5	68.2	70.8	73.4
16	59.0	61.4	63.9	66.4	68.8
17	55.5	57.8	60.1	62.4	64.8

Rear Ratio without spur/pinion

13.42:1

32P Front Output Drive Ratio (37% Overdrive)

	Spur Gear				
Pinion	48	50	52	54	56
11	58.6	61.0	63.4	65.9	68.3
12	53.7	55.9	58.1	60.4	62.6
13	49.5	51.6	53.7	55.7	57.8
14	46.0	47.9	49.8	51.8	53.7
15	42.9	44.7	46.5	48.3	50.1
16	40.3	41.9	43.6	45.3	47.0
17	37.9	39.5	41.0	42.6	44.2

NOTE:



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