Ely.Q®

USER MANUAL
MANUALE D'USO
BENUTZER HANDBUCH
MANUEL D'UTILISATION

Competition Vision 90

Introduction / Introduzione / Einführung / Introduction

Introduction

Congratulation for your choice! Our Vision 90c is designed for modelers who love building and flying an highest quality model helicopter. The Vision 90c requires a short time for assembly and easy maintenance using standard hobby tools. This model, thanks to high performance and top flight features, is ideal for both beginner and expert pilots.

Warning

The Vision 90c is a precision machine requiring proper assembly and setup in order to avoid serious body injury. The manufacturer and distributors assume no liability for damages that could occur from the assembly or misuse of this product. It is under owner responsibility to operate the helicopter in a safe mode, so we recommend seeking help and guidance from other accomplished model helicopter pilots to ensure quick and successful learning.

Read carefully this manual first

Keep the model KIT parts away from children.
Once finished assembling, the model is ready for testing; it is highly recommended that beginners seek the help of experienced RC helicopters pilots, or contact a Flying Club in order to get the necessary knowledge on how to use the model.
If you are in doubt of your ability or on the current safety rules, we strongly recommend you to ask for assistance from experienced radio controlled helicopter modelers or join your local model flying club to gain the required knowledge and skill.

ElyQ does not assume the liability for the use and / or misuse of the model.

This model is not a toy.

ElyQ reserves the right to make any changes considered necessary without prior notice and shall not be liable for technical or editorial errors or omissions contained herein. For updates or further info, please visit our site www.elyq.com

Introduzione

Congratulazioni per aver scelto il nostro modello Vision 90c, un elicottero studiato con l'obbiettivo di rendere estremamente semplice il montaggio e soprattutto la manutenzione. Questa meccanica, grazie alle elevate prestazioni e caratteristiche di volo che la distinguono, è ideale sia per i principianti che per i più esperti.

Avvertenze

L'elicottero Vision 90c è un apparecchio di precisione che richiede un corretto assemblaggio e settaggio per evitare incidenti o conseguenze che potrebbero risultare dannose. E' responsabilità del possessore utilizzare in maniera corretta e sicura il modello, per evitare danni a cose o persone, a causa di mancanza di sicurezza o di uso scorretto.

Leggere prima questo manuale di montaggio.
Non lasciate che i bambini utilizzino il materiale incluso nel KIT senza la supervisione di un adulto.
Una volta completato il montaggio ed installato con cura i componenti necessari, il vostro modello è pronto per il collaudo. Se non avete ancora un sufficiente controllo nel volo, raccomandiamo caldamente l'assistenza di personale dotato di esperienza nel telecomandare gli elicotteri o di rivolgersi al Vs. "Flying Club" per acquisire la necessaria conoscenza e utilizzo del prodotto.
Chiedete informazioni, tramite personale dotato di esperienza, in riferimento alle norme di sicurezza durante le prove e i voli. Anche in questo caso suggeriamo di rivolgersi al Vs. più vicino "Flying Club" per acquisire le norme sulla sicurezza relative agli elicotteri R / C.

Se è il Vision 90c è il vostro primo elicottero R / C che assemblate raccomandiamo caldamente di farvi assistere da un pilota esperto per la messa a punto e per le prime istruzioni di volo.

ElyQ non si assume nessuna responsabilità relativa all'uso del prodotto.
Questo modello non è un giocattolo.

ElyQ declina ogni responsabilità per eventuali errori e / o imprecisioni nelle informazioni riportate e si riserva il diritto di apportare ogni modifica ritenuta necessaria, senza alcun preavviso.
Visitate il nostro sito per eventuali aggiornamenti e / o ulteriori informazioni: www.elyq.com

Einleitung

Wir gratulieren Ihnen zu der Wahl unseres Hubschraubers Vision 90c. Dieser Hubschrauber wurde mit dem Ziel entworfen, die Montage und vor allem die Wartung extrem leicht zu gestalten. Dieses Modell eignet sich dank seiner Leistungen und optimalen Flugeigenschaften ideal für Anfänger und für Experten.

Hinweise

Der Hubschrauber Vision 90c ist ein Präzisionsgerät, das eine korrekte Montage und Einstellung verlangt, um Unfälle oder Schaden bringende Folgen zu vermeiden. Es liegt in der Verantwortung des Benutzers, das Modell korrekt und sicher zu benutzen, um Schäden an Gegenständen und Personen zu vermeiden, die auf Grund von fehlender Sicherheit und nicht korrektem Gebrauch entstehen können.

Lesen Sie zuerst dieses Montagehandbuch.
Lassen Sie Kinder nicht das Material, das in dem Bausatz enthalten ist, benutzen.
Wenn die Montage abgeschlossen ist und die notwendigen Komponenten installiert sind, ist Ihr Modell bereit für die Endkontrolle; wenn Sie noch keine ausreichenden Erfahrungen mit dem Umgang eines Modellhubschrau bers haben, empfehlen wir Ihnen die Unterstützung durch erfahrene Piloten. Wenden Sie sich an Ihren nächstgele genen Modellflugverein, um die notwendigen Kenntnisse zu erwerben und das Fliegen zu lernen.
Informieren Sie sich auch über die Sicherheitsvorschriften während der Tests und des Flugs. Auch in diesem Fall empfehlen wir Ihnen, sich an den nächsten Modellflugve rein zu wenden, um die Sicherheitsnormen für die Hub schrauber R / C zu bekommen.

Für ferngesteuerte Flug modelle besteht die generelle Pflicht einer Modellflug-Haftpflichtversicherung. Eine private Haftpflichtversiche rung ist nicht ausreichend.

ElyQ übernimmt keinerlei Verantwortung bezüglich des Gebrauch des Produkts.
Dieses Modell ist kein Spielzeug.

ElyQ entzieht sich jeglicher Verantwortung für eventuelle Fehler und / oder Abweichungen bei den angegebenen Informationen und behält sich außerdem das Recht vor, jede für notwendig gehaltene Veränderung ohne Vorankündigung vorzunehmen.
Besuchen Sie unsere Webseite für eventuelle Aktualisierungen und weitere Informationen: www.elyq.com

Introduction

Nous tenons à vous féliciter d'avoir choisi notre hélicoptère Vision 90c, un hélicoptère étudié dans l'objectif de rendre extrêmement simple le montage et surtout l'entretien. Ce modèle, grâce aux prestations et aux caractéristiques élevées de vol, est idéal pour les débutants et pour les personnes les plus expérimentées.

Avertissements

L'hélicoptère Vision 90c est un appareil de précision qui demande un assemblage et un réglage correct pour éviter tout accident ou des conséquences qui pourraient s'avérer nuisibles. Le propriétaire de l'hélicoptère est responsable de son utilisation correcte et sûre, pour éviter des dommages aux choses ou aux personnes, à cause de manque de sécurité ou d'usage incorrect.

Lire auparavant ce manuel de montage.
Ne pas laisser le matériel inclus dans le KIT à la portée des enfants.
Une fois le montage terminé et les composants nécessaires installés, votre modèle est prêt pour l'essai; mais vous n'avez pas encore un contrôle suffisant du vol, par conséquent nous vous conseillons vivement de recourir à l'assistance de personnel expérimenté dans la télécommande des hélicoptères ou de vous adresser à votre "Flying Club" pour acquérir les connaissances nécessaires pour utiliser ce produit.
Demandez des informations, par l'intermédiaire du personnel expérimenté, en référence aux normes de sécurité pendant les essais et les vols. Dans ce cas également nous vous conseillons de vous adresser au "Flying Club" le plus proche de votre domicile pour prendre connaissance des normes sur la sécurité relatives aux hélicoptères R / C.

S'il s'agit du premier hélicoptère R / C que vous réalisez. nous vous conseillons vivement de vous faire aider par un pilote expérimenté pour la mise au point et pour les premières instructions de vol.

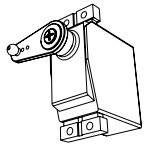
ElyQ ne se peut être tenue responsable quant à l'utilisation du produit.
Ce modèle n'est pas un jouet.

ElyQ décline toute responsabilité en cas d'éventuelles erreurs et / ou imprécisions dans les informations reportées et se réserve le droit d'apporter toute modification jugée nécessaire, sans aucun préavis.
Visitez notre site pour des mises à jour éventuelles et / ou ultérieures informations: www.elyq.com

Equipment required for Assembly

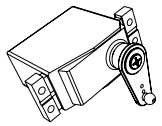
Standard Servo

4x



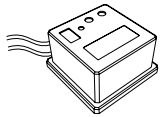
Specific Tail Servo

1x



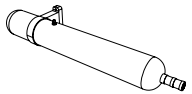
Head Lock Gyro

1x



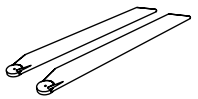
Muffler (.90)

1x



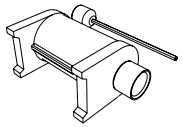
690/720 Blades

1x set



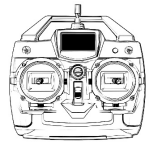
Engine Starter

1x



Transmitter 6ch or more

1x



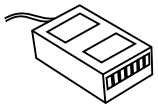
Helicopter System

Heli Engine (.90)

1x

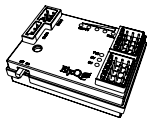
Receiver (6ch or more)

1x



ElyQ - Voltage Regulator

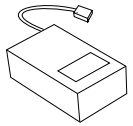
1x



Recommended

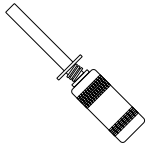
7.4V-1.5A/2A Lipo Battery

1x



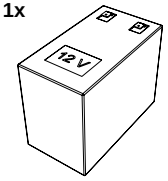
Glow Starter

1x



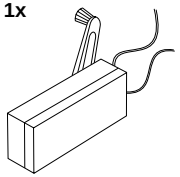
12V Battery

1x

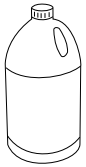


Fuel Pump

1x

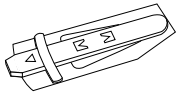


Fuel



Pitch Gauge

1x

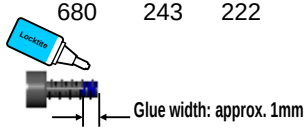


Glow Plug Wrench

1x

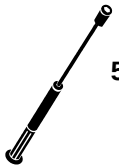
Tools required for assembly - Attrezzi richiesti per l'assemblaggio - Benötigte Werkzeuge für die Montage - Outils nécessaires pour l'assemblage

680 243 222



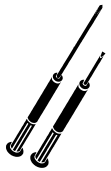
Hobby cutter knife

Socket Drivers



5.5
7
8
10

Screw Drivers



Scissors

Hex Wrench

1.5
2
2.5
3

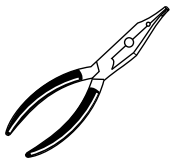
Pliers

638

641

Retention of bearings onto shafts and into housings

Ball Link Pliers



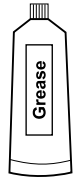
Cutting Pliers

Cyano Acrylate

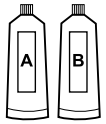
Blue Lockite

243

Grease



Epoxy



(Bag EQ9000)

Fuel Tank Assembly
The fuel tank comes assembled from the factory.

❶ The Silicon fuel clunk tube (4), plugged into the Fuel Tank (3), has a top quality feature and it is designed in order to work with very high nitromethane percentage. In spite of this characteristic, we recommend to make periodic controls to avoid possible anomalies. If the control should highlight deterioration, we suggest a replacement, otherwise it can break off.

EN

(Bag EQ9000)

Fuel Tank Assembly
Questa parte viene fornita già assemblata.

❶ Il Silicone fuel clunk tubing (4) inserito nel Fuel Tank (3) è di ottima qualità ed il materiale è stato selezionato per operare con percentuali di nitrometano molto alte. Ciò nonostante è consigliabile, al fine di evitare possibili anomalie, di effettuare controlli periodici. Qualora si dovesse evidenziare un deterioramento se ne suggerisce la sostituzione.

IT

(Bag EQ9000)

Fuel Tank Assembly
Dieses Teil wird bereits montiert geliefert.

❶ Der Silikonschlauch (4), der in den Kraftstofftank (3) eingesetzt wird, hat eine optimale Qualität, damit auch sehr hoch nitromethanhaltiger Sprit benutzt werden kann. Dennoch ist es ratsam, eine regelmäßige Kontrolle durchzufüh ren, um mögliche Schäden am Schlauch und am Tank zu vermeiden. Falls die Kon trolle eine Verschlechterung aufweisen sollte, ist eine sofortige Erneuerung not wendig.

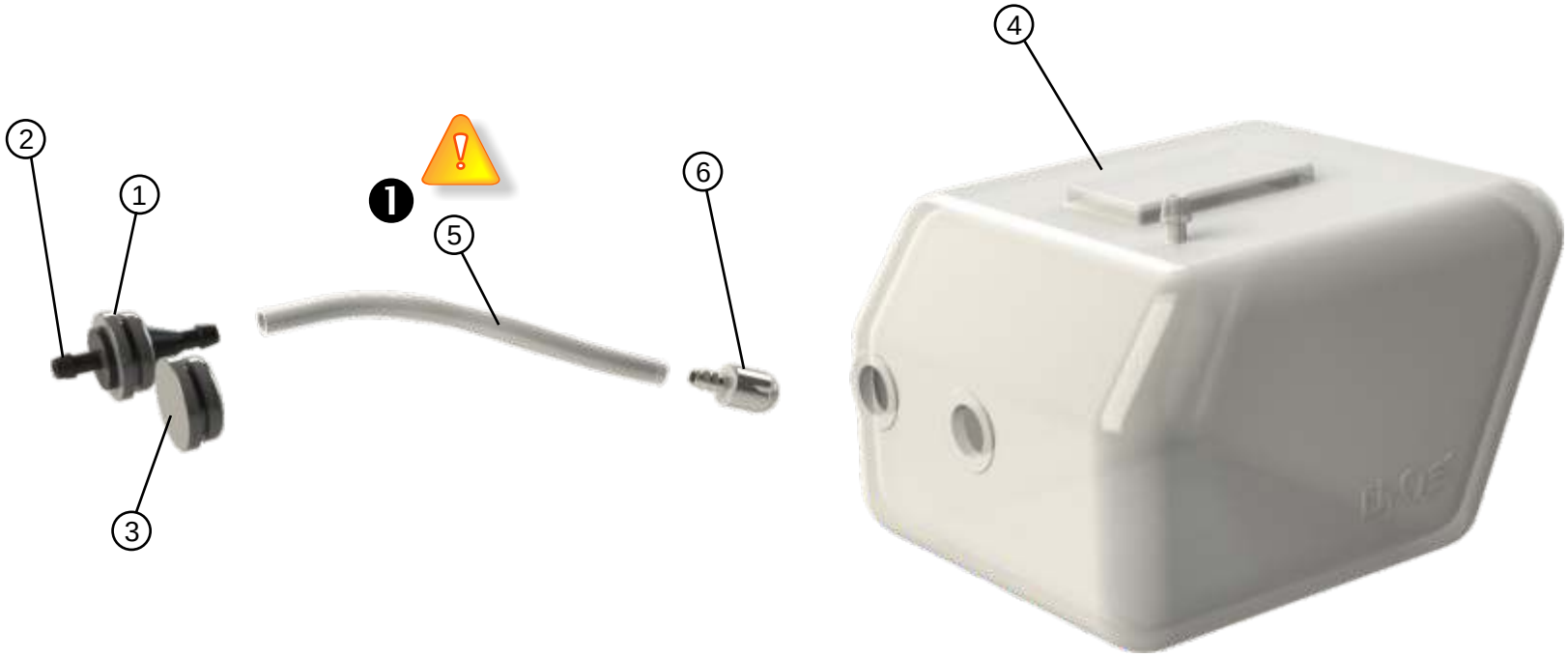
DE

(Bag EQ9000)

Fuel Tank Assembly
Cet ensemble est fourni déjà assemblé.

❶ Le Silicone fuel clunk tubesng (4) inséré dans le Fuel Tank (3) est d'excellente qualité et le matériel a été sélectionné pour opérer avec des pourcentages de nitrométhane très élevés. Cependant il est conseillé, afin d'éviter de possibles anomalies, d'effectuer un contrôle périodique. Au cas où le contrôle devait révéler une détérioration, il est conseillé de procéder au remplacement.

FR

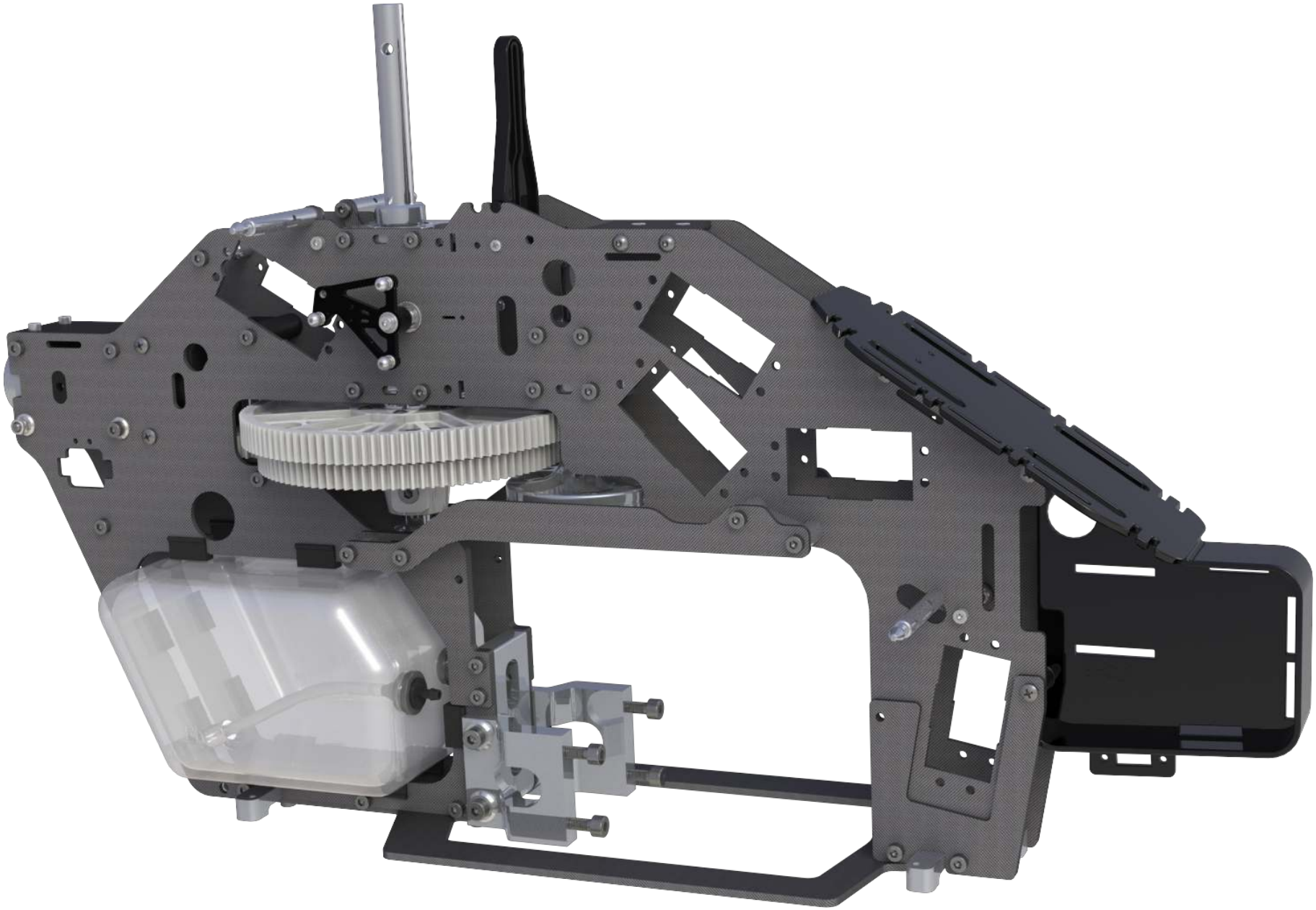


Item	Code	Description	Q.ty
1	8003100A	Fuel tank stopper	1
2	8004400A	Fuel tank nipple	1
3	8002103A	Fuel Tank Plug (V90c)	1
4	8001503A	Fuel Tank (V90c)	1
5	8011000A	Silicon fuel tube L=80mm d2.5, D6	1
6	8103600A	Fuel Clunk	1
7	8402700A	Fuel Tank Assy (V90c)	

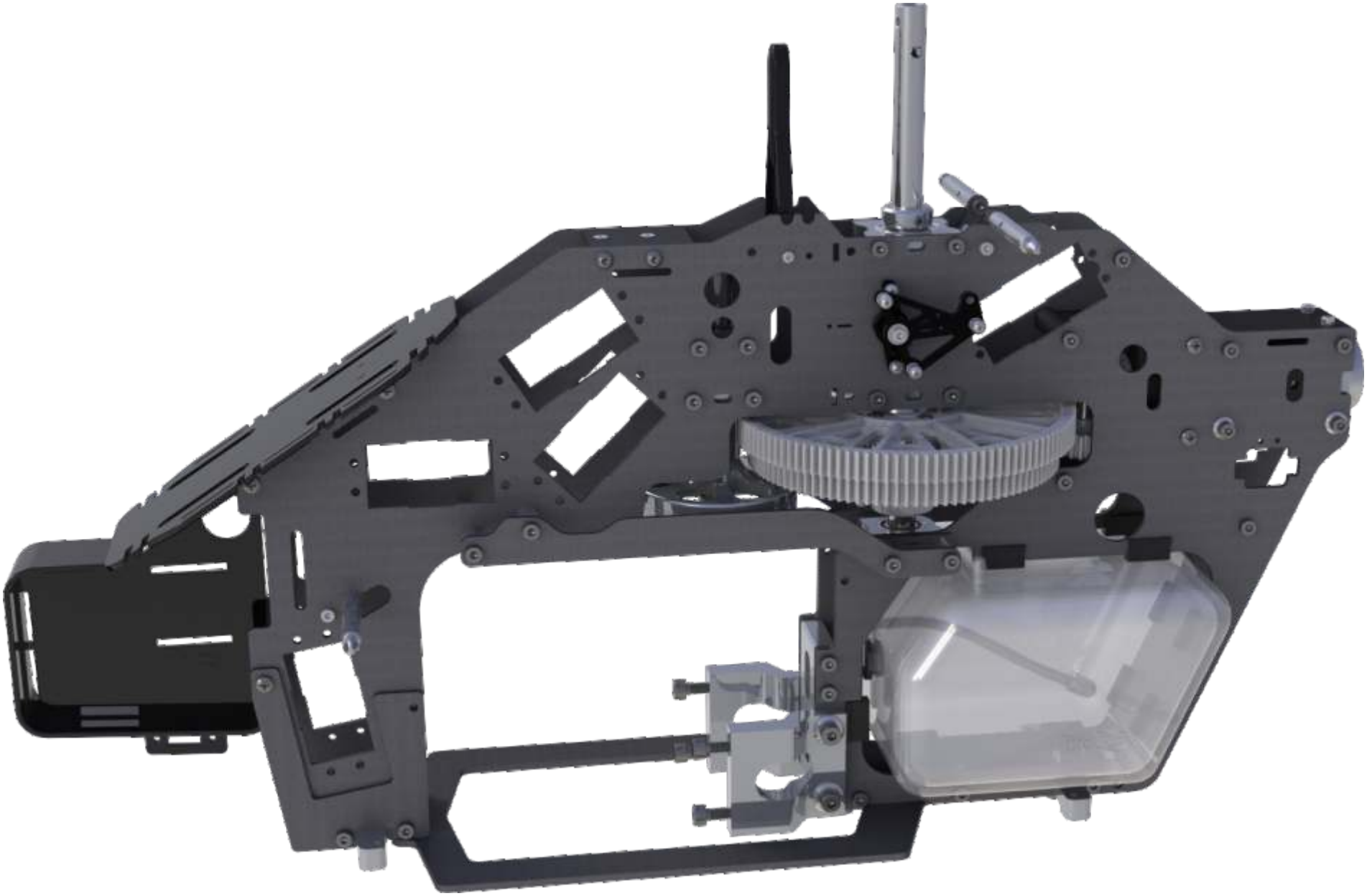
7

Preview

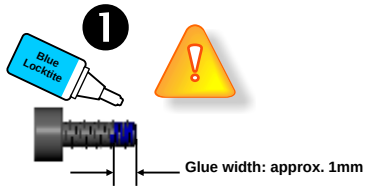
Main Frame Assy (Right)

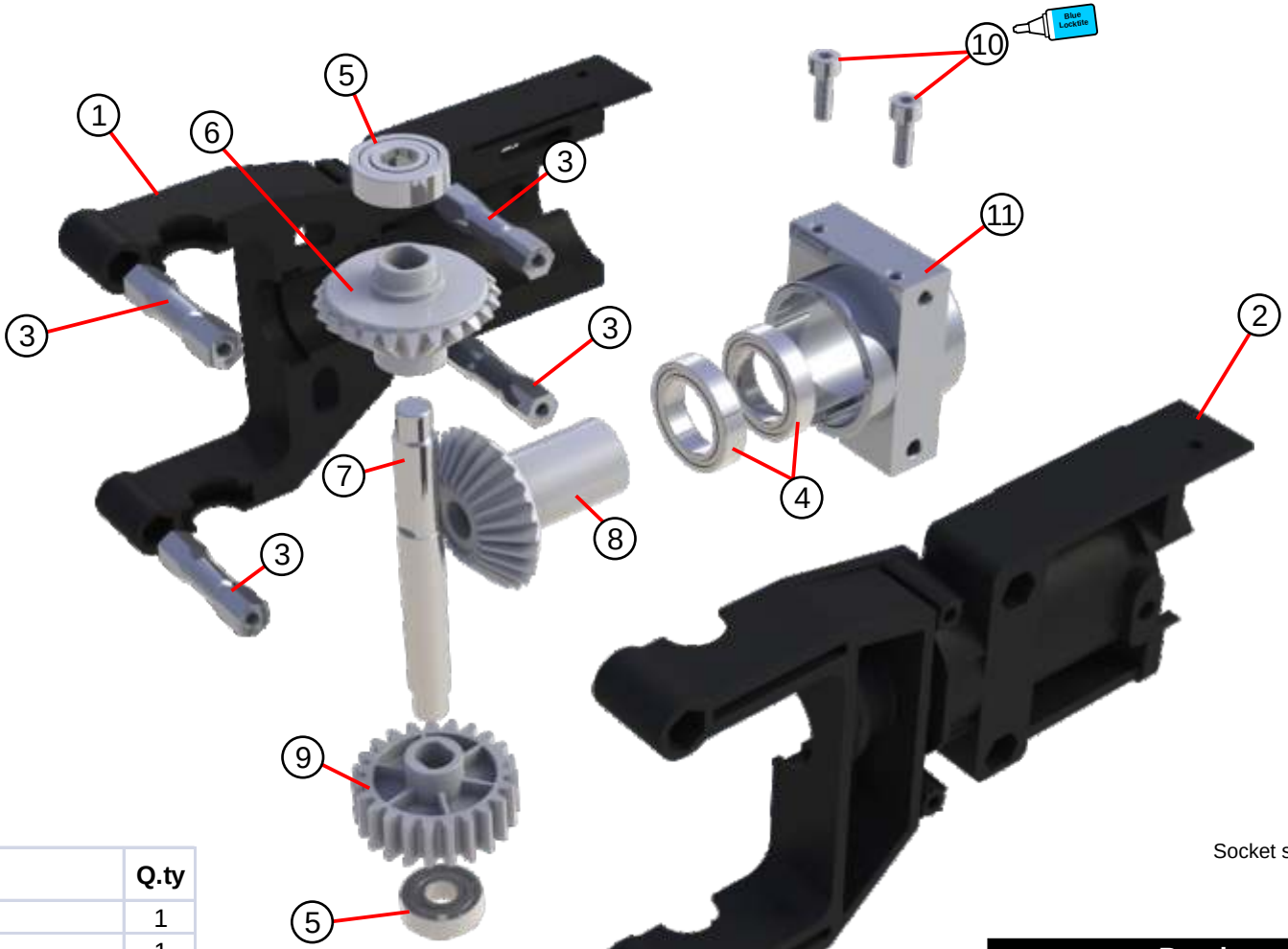


Main Frame Assy (Left)



BAG EQ9001 Tail Case Assy



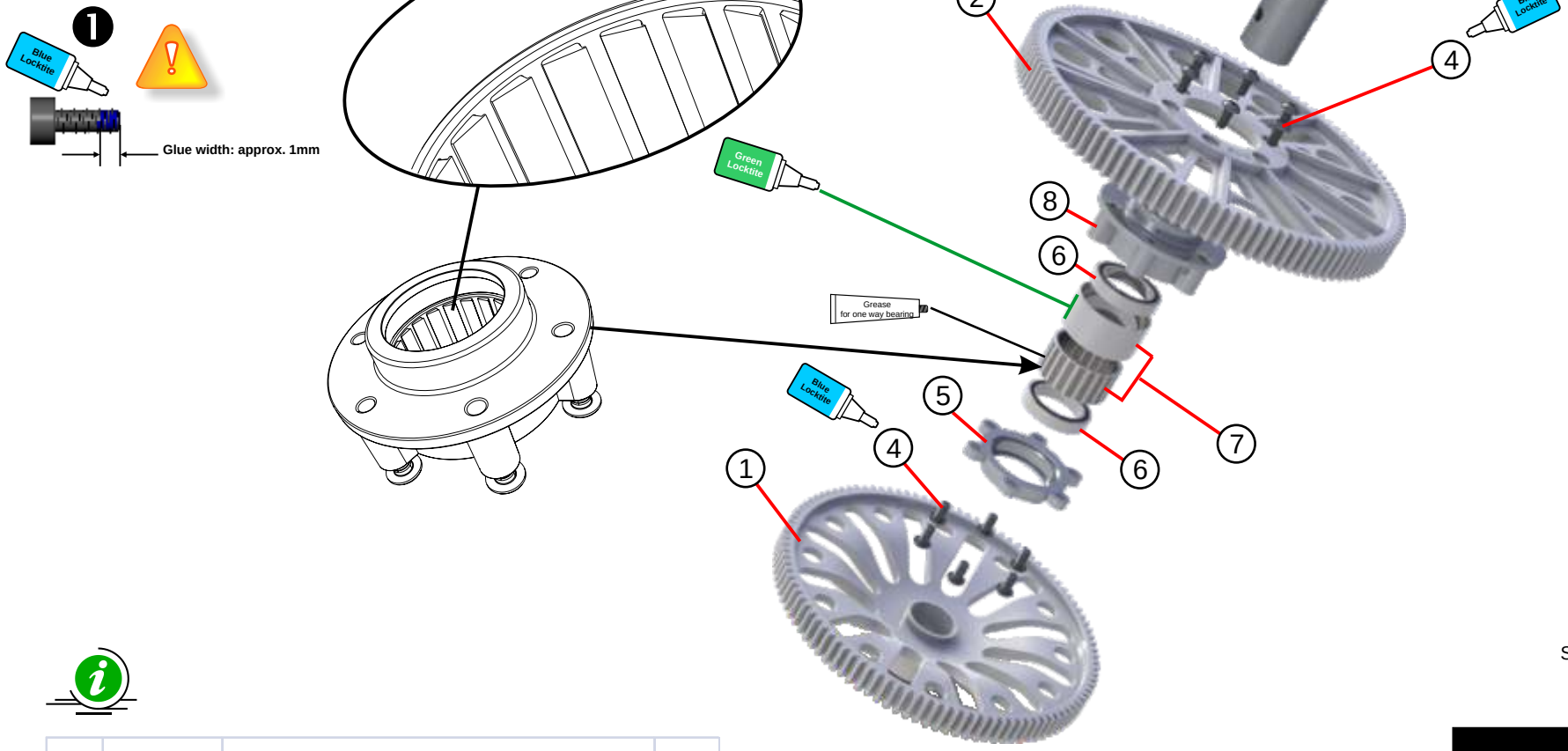


11 Socket screw M2.5x8 (x2)

Item	Code	Description	Q.ty
1	8000603A	Tail Boom Mount V90c (R)	1
2	8000503A	Tail Boom Mount V90c (L)	1
3	8100803A	26mm Hex Mount	4
4	8602400A	Bearing d12, D18, W4	2
5	8602900A	Bearing d5, D13, W4	2
6	8000703A	24T Front Drive Bevel Gear	1
7	8101503A	Front Drive Gear Shaft	1
8	8000903A	24T Front Drive Long Bevel Gear	1
9	8002903A	23T Front Drive Gear M1 (V90c)	1
10	8204700A	Socket Screw M2.5 x 8 --- 8S	2
11	8109400A	Tail Boom Clamp (V50c)	1

Preview

BAG EQ9003 Main Gear Assy



638 — Green Locktite

641 — Yellow Locktite

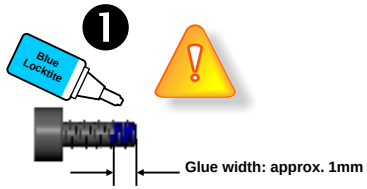
Retention of bearings onto shafts and into housings

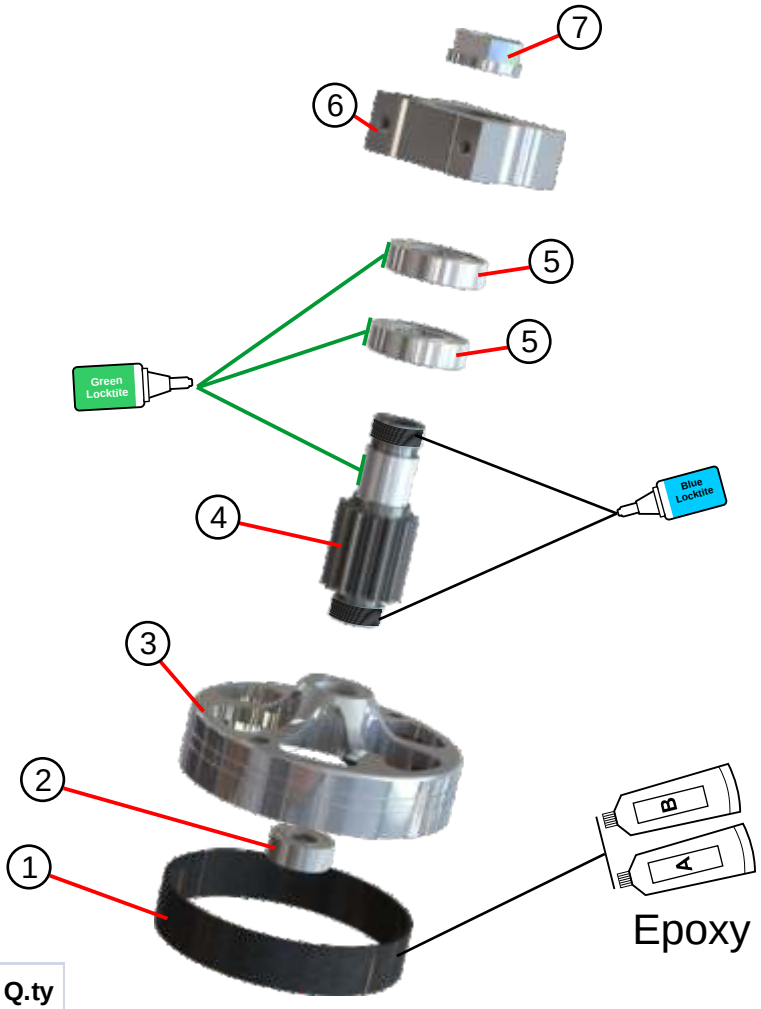
④ Socket button head screw M3x6 (x12)

Item	Code	Description	Q.ty
1	8003003A	104T Autorotation Gear M1 (V90c)	1
2	8000203A	115T Main Gear	1
3	8106303A	OneWay Shaft d12 (V90c)	1
4	8202400A	Socket Button Head Screw M3 x 6	12
5	8105303A	OneWay Bearing Mount (V90c)	1
6	8602300A	Bearing d15, D21, W4	2
7	8604400A	OneWay Bearing (Sprag Type)	1
8	8105403A	OneWay Housing (V90c)	1

Preview

BAG EQ9010 Clutch Bell Assy

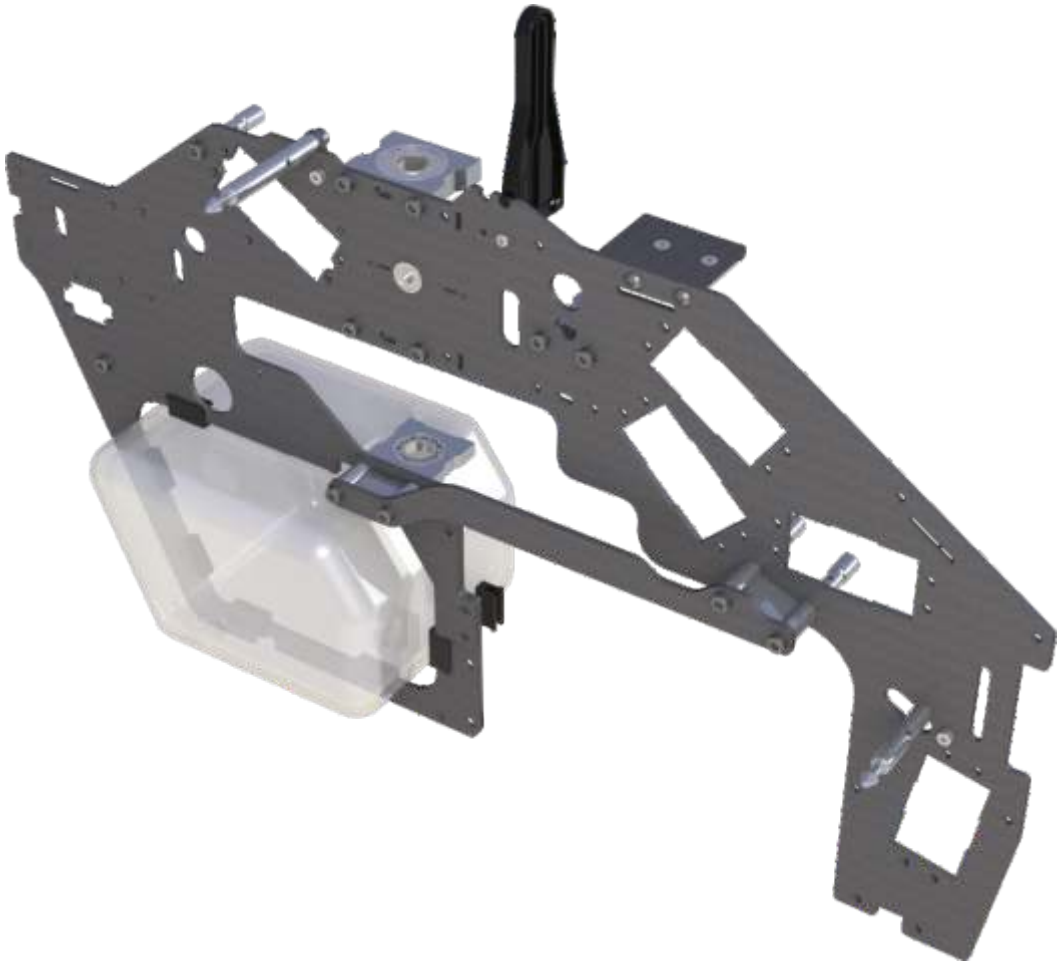




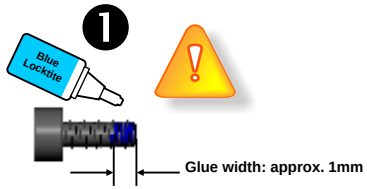
Item	Code	Description	Q.ty
1	8003103A	Clutch Liner (V90c)	1
2	8601000A	Bearing d6, D13, W5	1
3	8100603A	Clutch Bell (V90c)	1
4	8100703A	14T Pinion (V90c)	1
5	8603100A	Bearing d10, D19, W5	2
6	8101403A	Bearing d10, D19, W5 Support (V90c)	1
7	8100903A	Pinion Nut (V90c)	1

Preview

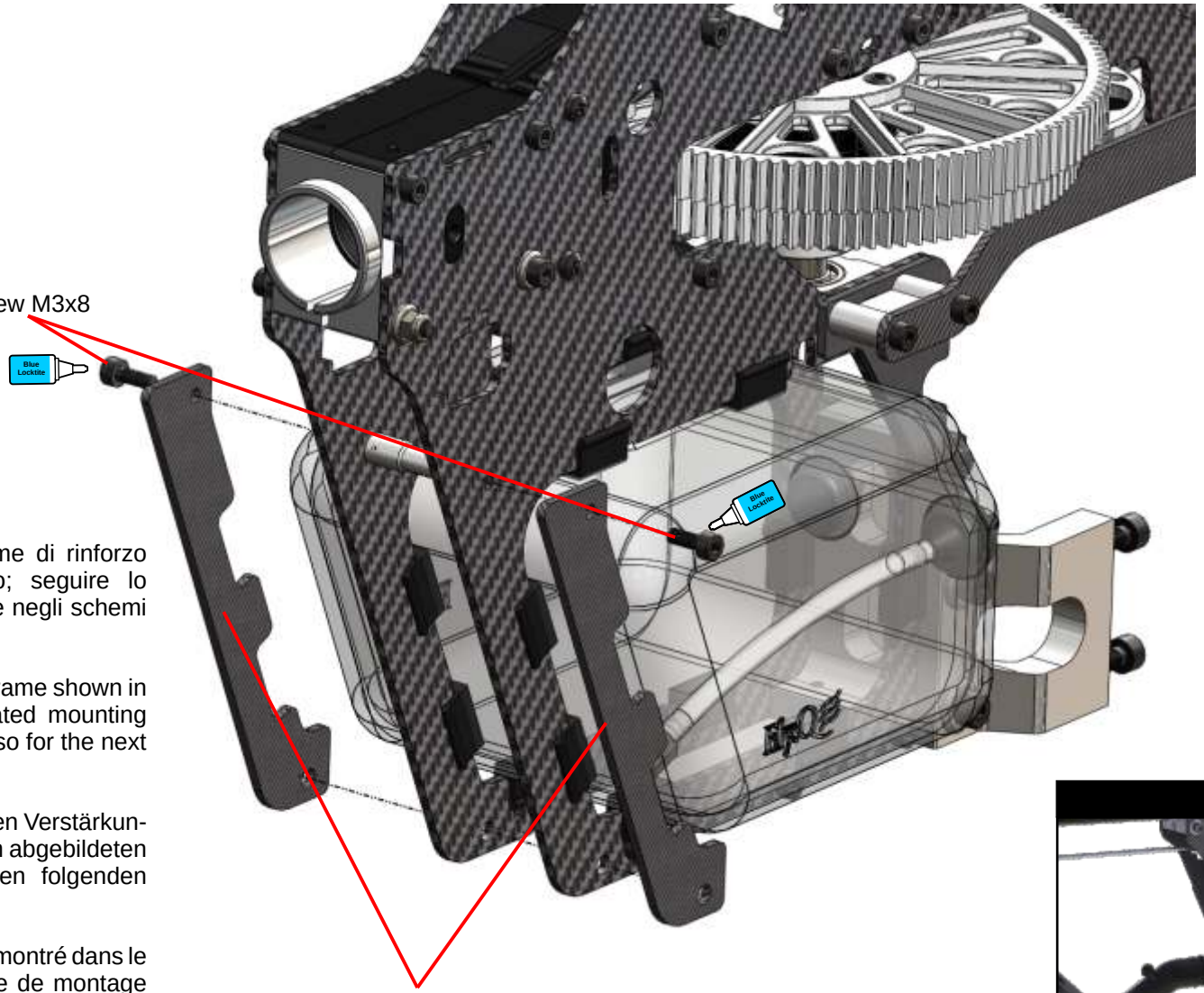
BAG EQ9004 Main Frame Part 01



BAG EQ9004 Main Frame Part 01



8201800A Socket Screw M3x8



8004003A C.F. Rear Frame Brace (V90c)

Socket screw M3x8 (x2)

Preview

A Se il vostro kit contiene il frame di rinforzo mostrato nella figura accanto; seguire lo schema di montaggio illustrato e negli schemi successivi prevedere questa variante.

IT

If your kit contains the reinforcement frame shown in the picture, please follow the illustrated mounting process and consider this variation also for the next schemes.

EN

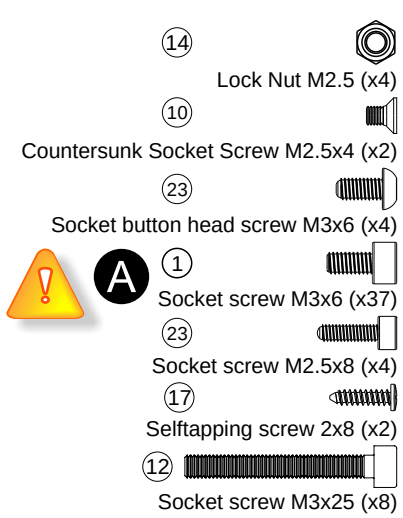
Wenn Ihr Bausatz den im Bild gezeigten Verstärkungsrahmen enthält, folgen Sie bitte dem abgebildeten Montageverlauf und verfahren in den folgenden Abschnitten ebenso.

DE

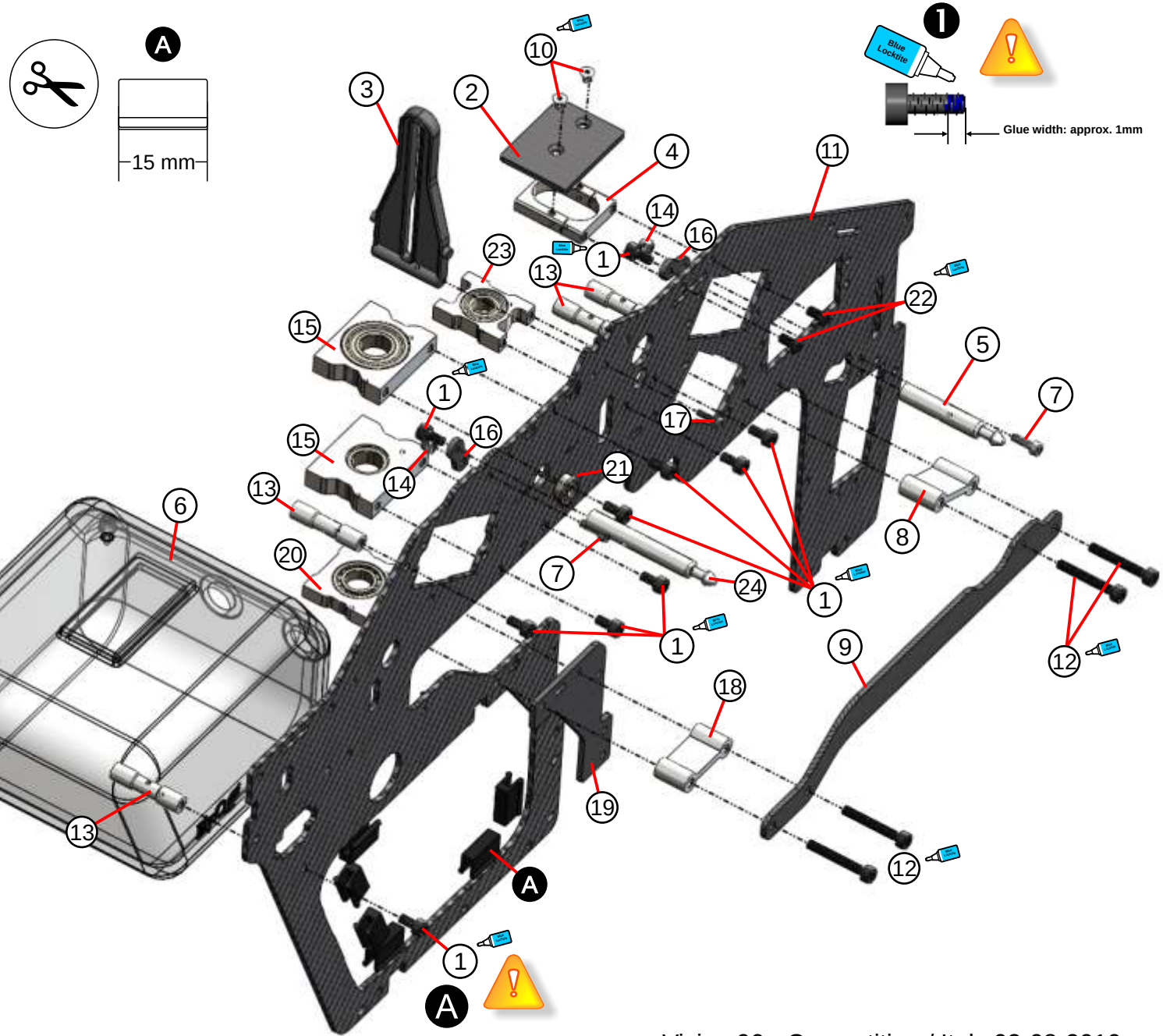
Si votre kit contient le frame de renfort montré dans le image a coté, suivez-Vous le schème de montage illustré et prevoiez-Vous cette variante dans le passes suivantes.

FR

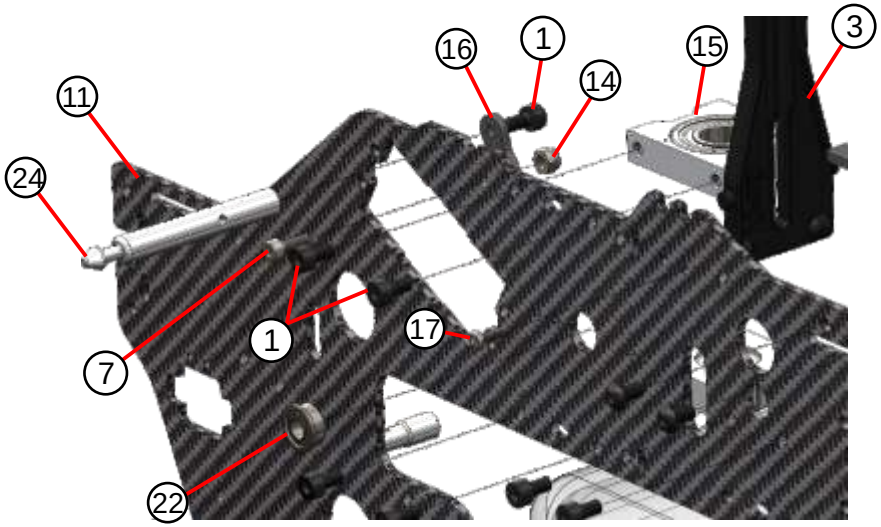
BAG EQ9004 Main Frame Part 01

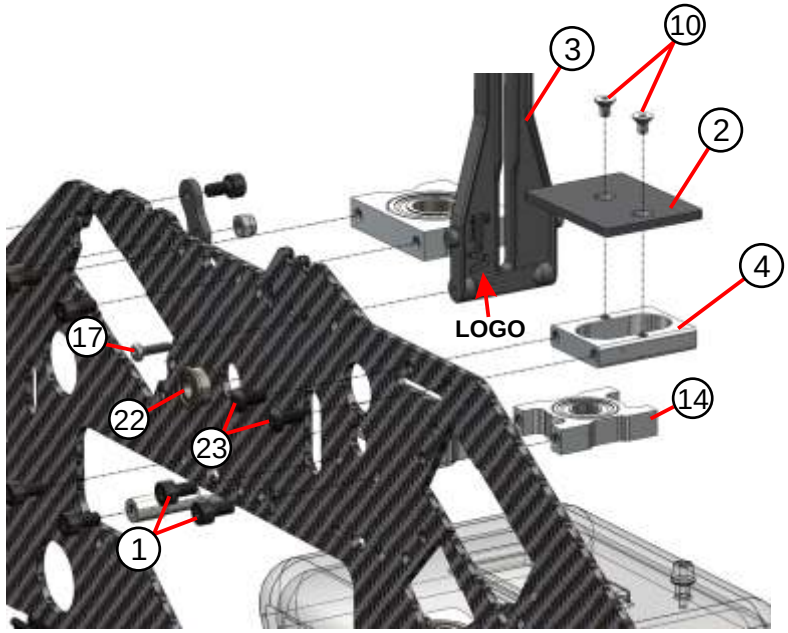


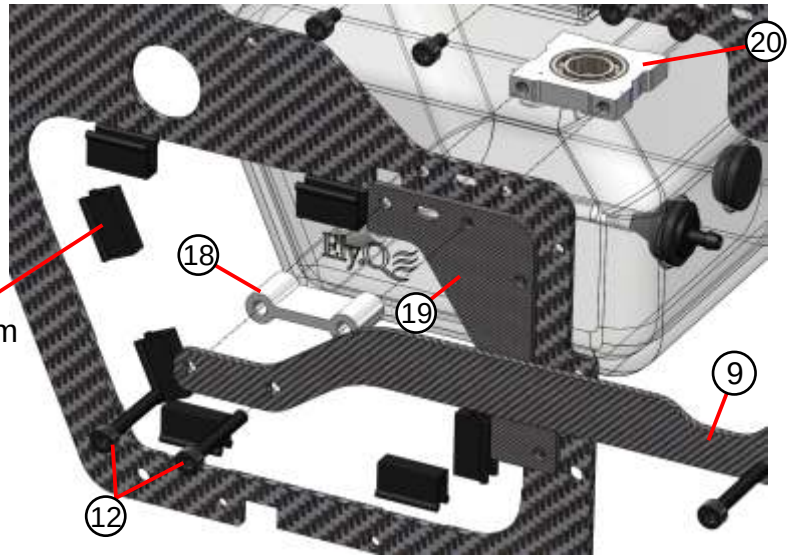
Item	Code	Description	Q.ty
1	8205200A	Socket Screw M3 x 6	37
2	8002303A	Gyro Mount CF (V90c)	1
3	8010500A	Antirotation (V50c)	1
4	8103403A	Gyro Block (V90c)	1
5	8109200A	Canopy Mounting (V50c)	2
6	8402700A	Fuel Tank Assy (V90c)	1
7	8204700A	Socket Screw M2.5 x 8	4
8	8101303A	Frame Spacer Large (V90c)	2
9	8001103A	Carbon Side Plate (V90c)	2
10	8207100A	Countersunk Socket Screw M2.5x4	2
11	8001003A	Main Frame CF (V90c)	2
12	8202800A	Socket Screw M3 x 25	8
13	8108900A	26 mm spacer (V50c)	5
14	8200800A	Lock Nut M2.5	4
15	8106103A	Main Rotor Brg Support d12, D24, W6 (V90c)	2
16	8009700A	Carbon Breakout Tab (V50c)	4
17	8202500A	Self Tapping screw 2x8	2
18	8109100A	Frame Spacer Medium (V50c)	2
19	8001403A	Carbon Support Frame (V90c)	2
20	8105903A	Brg Support d10, D19, W5 (V90c)	1
21	8603500A	Bearing Flange d4, D9, W4	2
22	8202400A	Socket Button Head Screw M3x6	4
23	8108300A	Bearing d6,D15,W5 Support (V50c)	1
24	8105503A	Canopy Mounting Short (V90c)	2



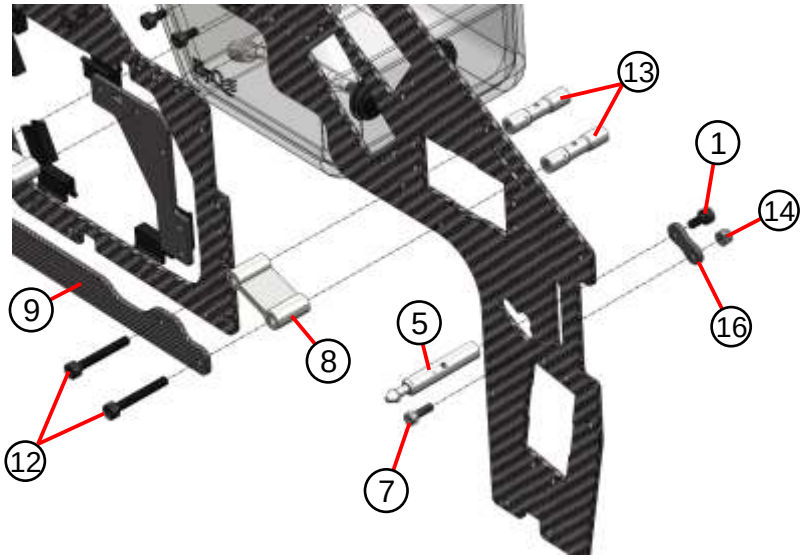
BAG EQ9004 Main Frame Part 01



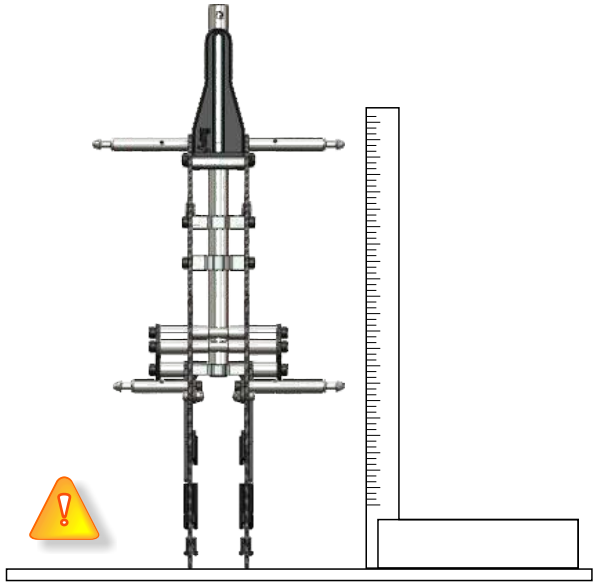




L=15mm



BAG EQ9004 Main Frame Part 02



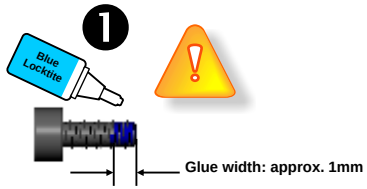
Il montaggio successivo prevede la chiusura del Main Frame sinistro con la struttura. Prima di serrare completamente l'assieme, inserire il Main Shaft per garantire il perfetto allineamento dei cuscinetti e, dopo aver poggiato la struttura su un piano di vetro, assicurarsi che la struttura sia normale al piano. Solo dopo questo controllo provvedere al serraggio completo delle viti.

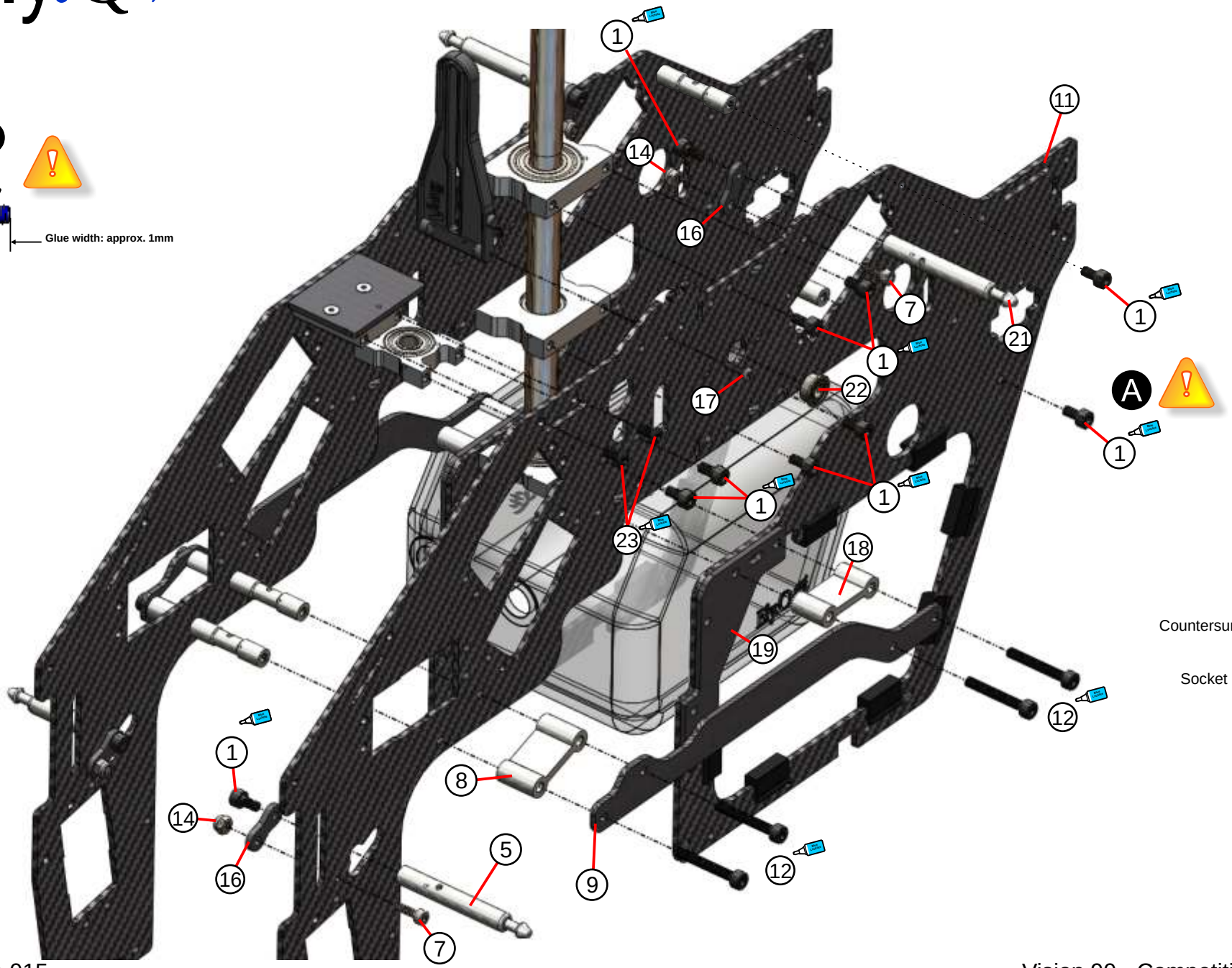
Next step is the locking up of the left Main Frame with the structure. Before tightening the assy completely, please insert the Main Shaft to ensure perfect alignment of the bearing blocks and, after having put the structure on a glass surface, make sure that the frames are perpendicular to this surface. Complete tightening of the screws only after having double checked this.

Im nächste Schritt verbinden Sie den linken Hauptrahmen mit dem Chassis. Bevor das komplette Chassis fest verschraubt wird, führen Sie die Hauptrotorwelle in das Chassis ein um eine perfekte Ausrichtung der Lagerböcke sicherzustellen. Stellen Sie das Chassis nun auf eine Glasfläche und kontrollieren Sie, ob das Chassis im rechten Winkel zur Glasfläche steht. Ziehen Sie die Schrauben erst nach dieser Kontrolle fest.

Le montage suivant necessite la clôture du Main Frame gauche avec la structure. Avant de serrer complètement l'assemblage, insérez-vous le Main Shaft pour vous assurer du parfait alignement des roulements, et apres avoir posè la structure sur un plan de verre, assurez-vous que la structure est perpendiculaire au plan. Seulement après cet contrôle procéder-vous à le serrage des vis. Ne pas fermer les vis. Elles sont a fermer durant le montage du moteur et après la procédure de alignement."

BAG EQ9004 Main Frame Part 02





14 Lock Nut M2.5 (x4)

10 Countersunk Socket Screw M2.5x4 (x2)

23 Socket button head screw M3x6 (x4)

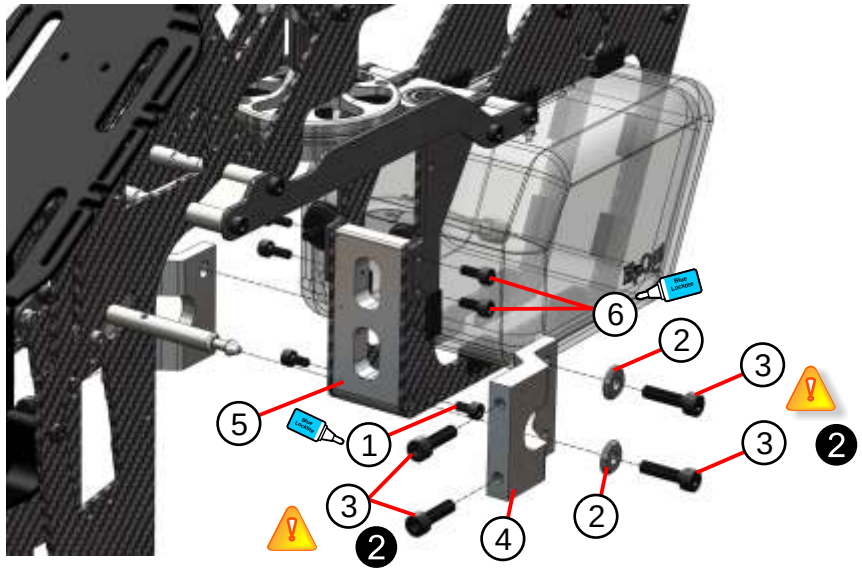
1 Socket screw M3x6 (x37)

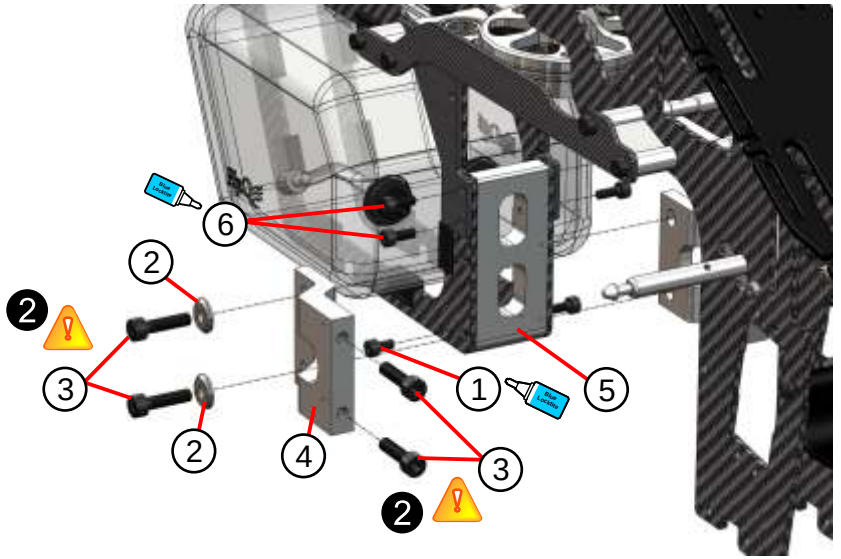
23 Socket screw M2.5x8 (x4)

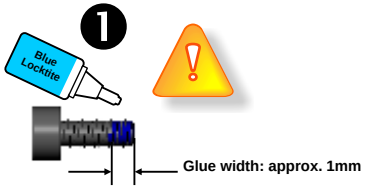
17 Selftapping screw 2x8 (x2)

12 Socket screw M3x25 (x8)

BAG EQ9004 Main Frame Part 03







2 Non serrare le viti; queste verranno completamente fissate nella fase di montaggio del motore e dopo la procedura di allineamento.

Do not tighten the screws: they will be completely fixed during the engine mounting process and after the alignment procedure.

Ziehen Sie die Schrauben noch nicht fest: Sie werden erst im späteren Verlauf der Motormontage und Motorausrichtung fest angezogen.

Item	Code	Description	Q.ty
1	8205200A	Socket Screw M3 x 6 --- 6S	2
2	8201400A	Flat Washer d4, D11, W1.7	4
3	8206200A	Socket Screw M4 x 16 --- 16N	8
4	8100303A	Motor Mount Side (V90c)	2
5	8100203A	Motor Mount Center (V90c)	1
6	8201800A	Socket Screw M3 x 8 --- 8S	4

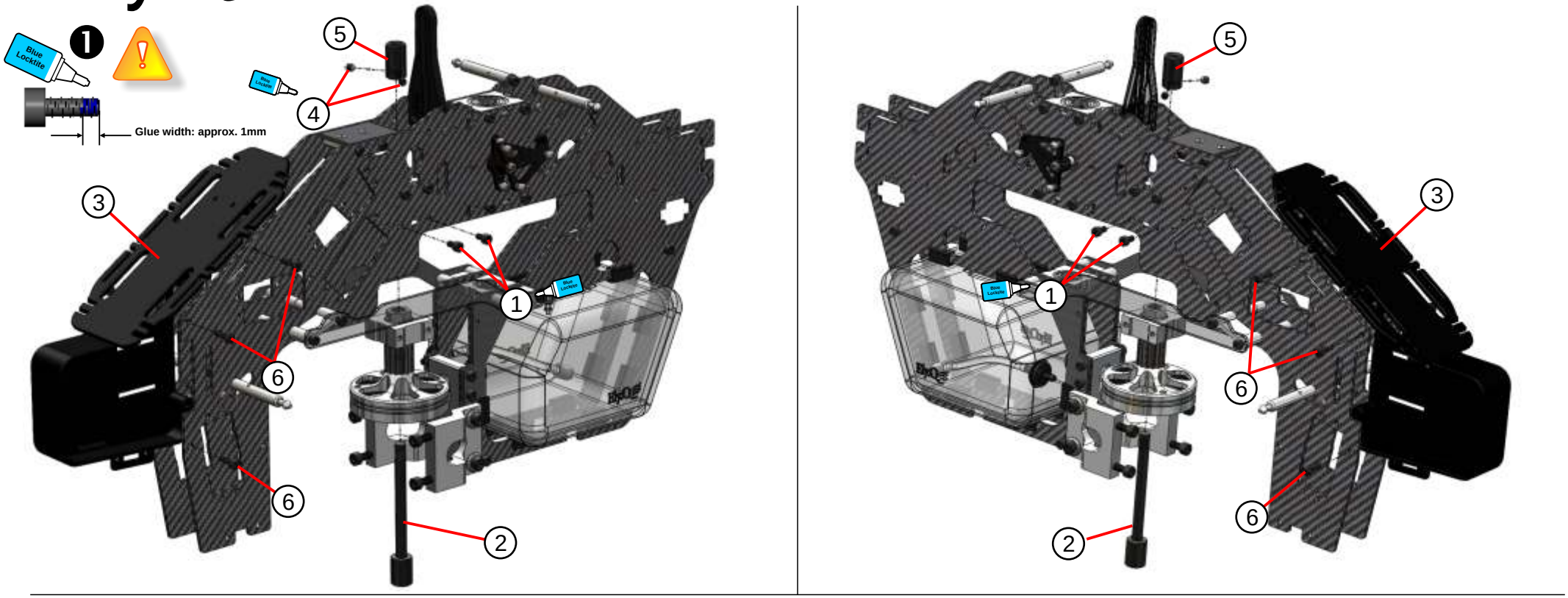
2 Washer d4, D11, W1.7 (x4)

3 Socket screw M4x16 (x8)

6 Socket screw M3x8 (x4)

1 Socket screw M3x6 (x2)

BAG EQ9004-06-10 Main Frame Part 03



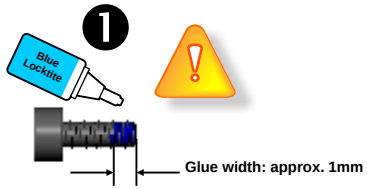
Item	Code	Description	Q.ty
1	8205200A	Socket Screw M3 x 6 --- 6S	4
2	8101103A	Starter Shaft (V90c)	1
3	8010100A	Radio Tray V2 (V50c)	1
4	8204600A	Set Screw - M4 x 4-S	2
5	8100000A	Starter Coupling	1
6	8200000A	Self Tapping screw 3x12	6

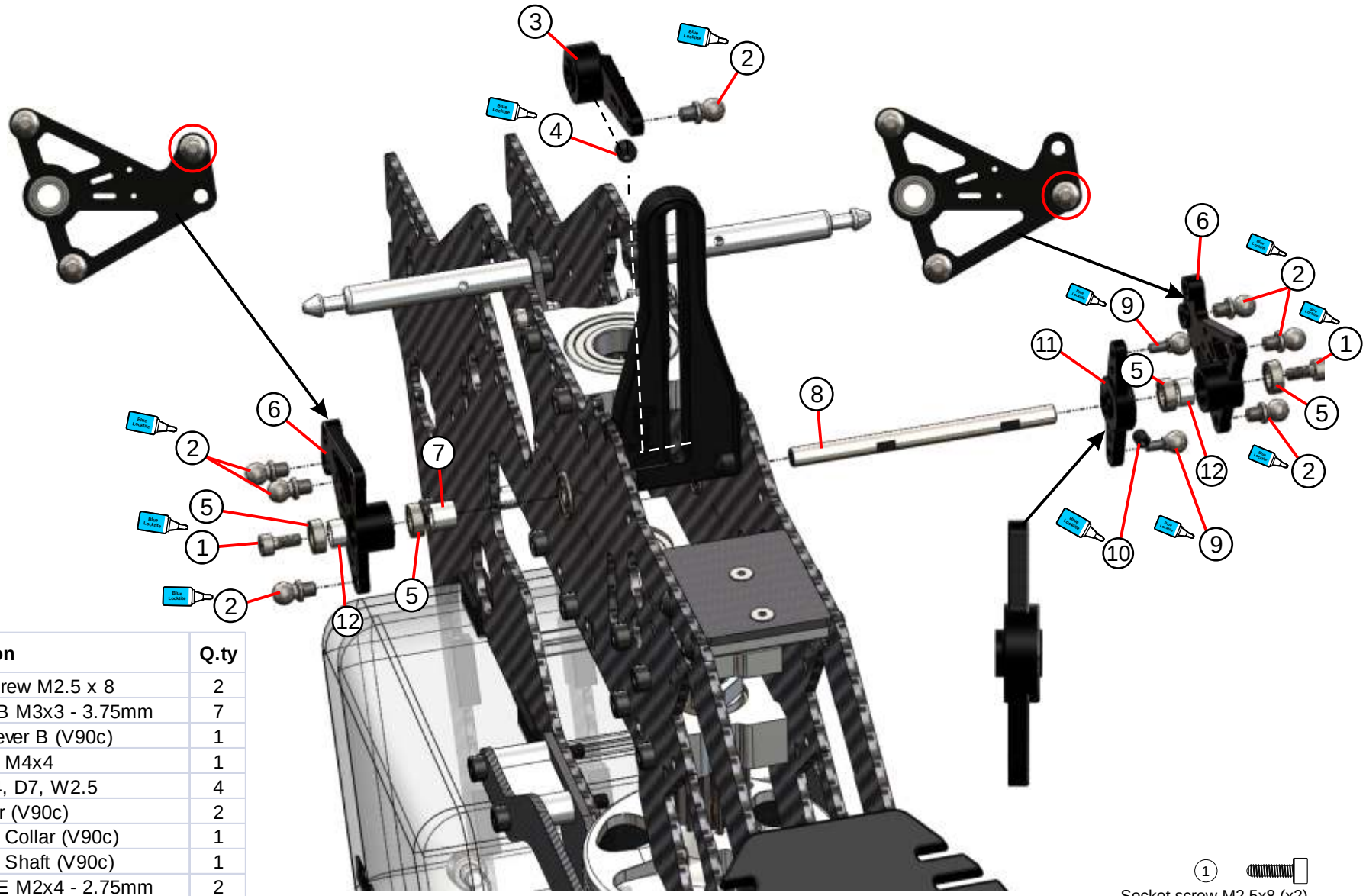
④ Set Screw M4x4 (x2)

⑥ Selftapping screw 3x12 (x6)

① Socket screw M3x6 (x4)

BAG EQ9021 Main Frame Part 03

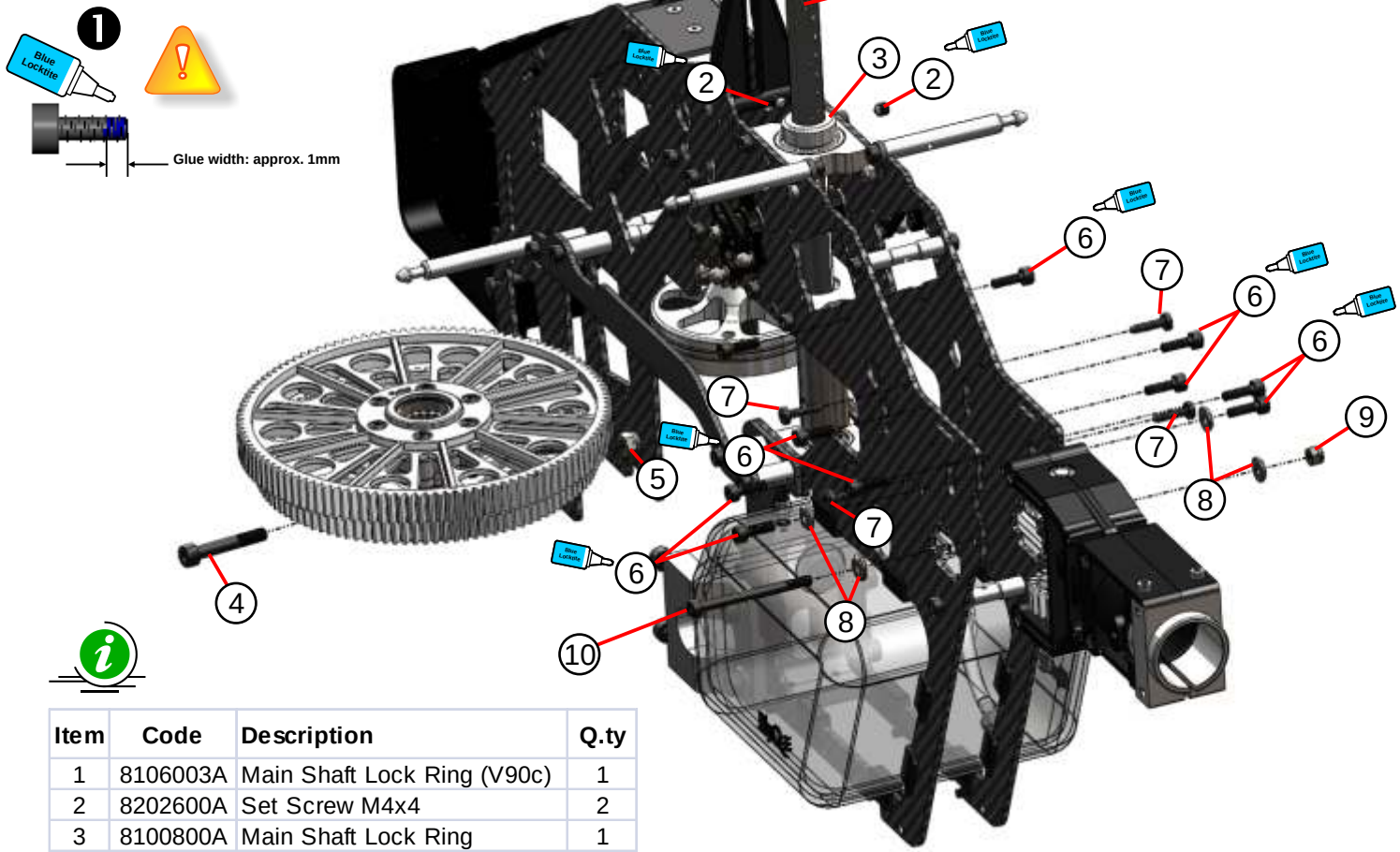


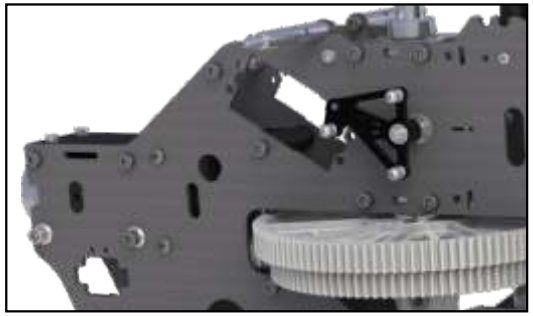


Item	Code	Description	Q.ty
1	8204700A	Socket Screw M2.5 x 8	2
2	8104100A	Ball Type B M3x3 - 3.75mm	7
3	8102103A	Elevator Lever B (V90c)	1
4	8204600A	Set Screw M4x4	1
5	8601100A	Bearing d4, D7, W2.5	4
6	8102203A	Pitch Lever (V90c)	2
7	8101803A	Bell Crank Collar (V90c)	1
8	8101903A	Bell Crank Shaft (V90c)	1
9	8104400A	Ball Type E M2x4 - 2.75mm	2
10	8200200A	Set Screw - M3 x 4	1
11	8102003A	Elevator Lever A (V90c)	1
12	8107703A	Inner Bell Crank Collar (V90c)	2

Socket screw M2.5x8 (x2)

BAG EQ9001-03 Main Frame Part 04





9 Lock Nut M3 (x1)

10 Socket screw M3x38 (x1)

6 Socket screw M3x10 (x10)

2 Set Screw M4x4 (x2)

8 Washer d3,D8,W1.5 (x4)

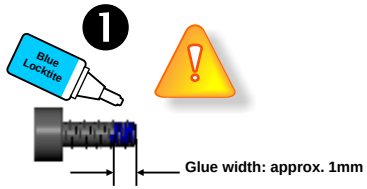
5 Lock Nut M4 (x1)

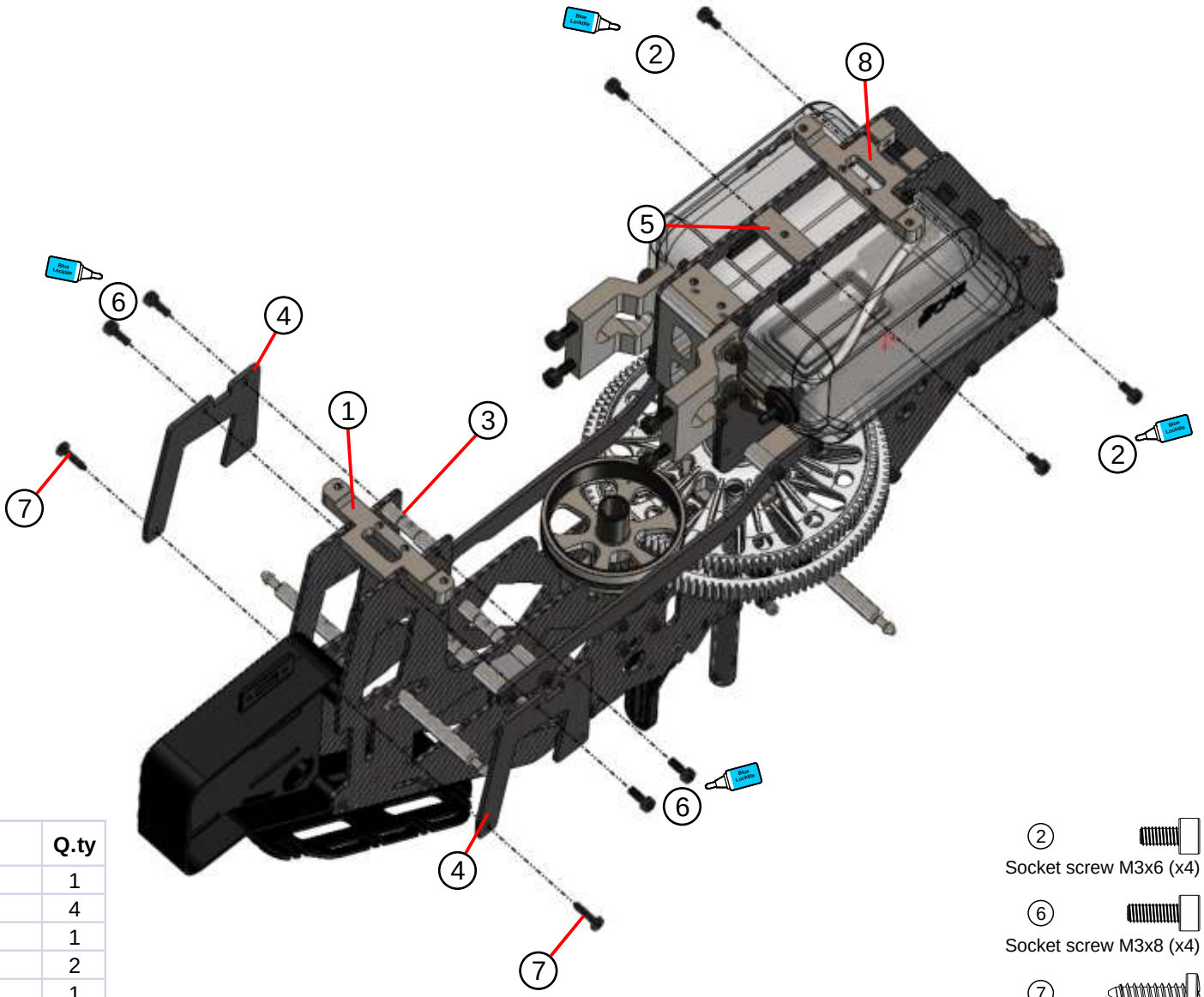
7 Selftapping screw 3x12 (x4)

4 Socket Screw M4x25 (15+10) (x1)

Item	Code	Description	Q.ty
1	8106003A	Main Shaft Lock Ring (V90c)	1
2	8202600A	Set Screw M4x4	2
3	8100800A	Main Shaft Lock Ring	1
4	8207300A	Socket Screw M4 x 25 - 10N	1
5	8203100A	Lock Nut M4	1
6	8203900A	Socket Screw M3 x 10	10
7	8200000A	Self Tapping screw 3x12	4
8	8201200A	Flat Washer d3, D8, W1.5	1
9	8200400A	Hexagon Lock Nut M3	1
10	8205300A	Socket Screw M3 x 38 --- 8S	1

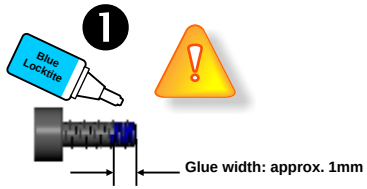
BAG EQ9004 Main Frame Part 04

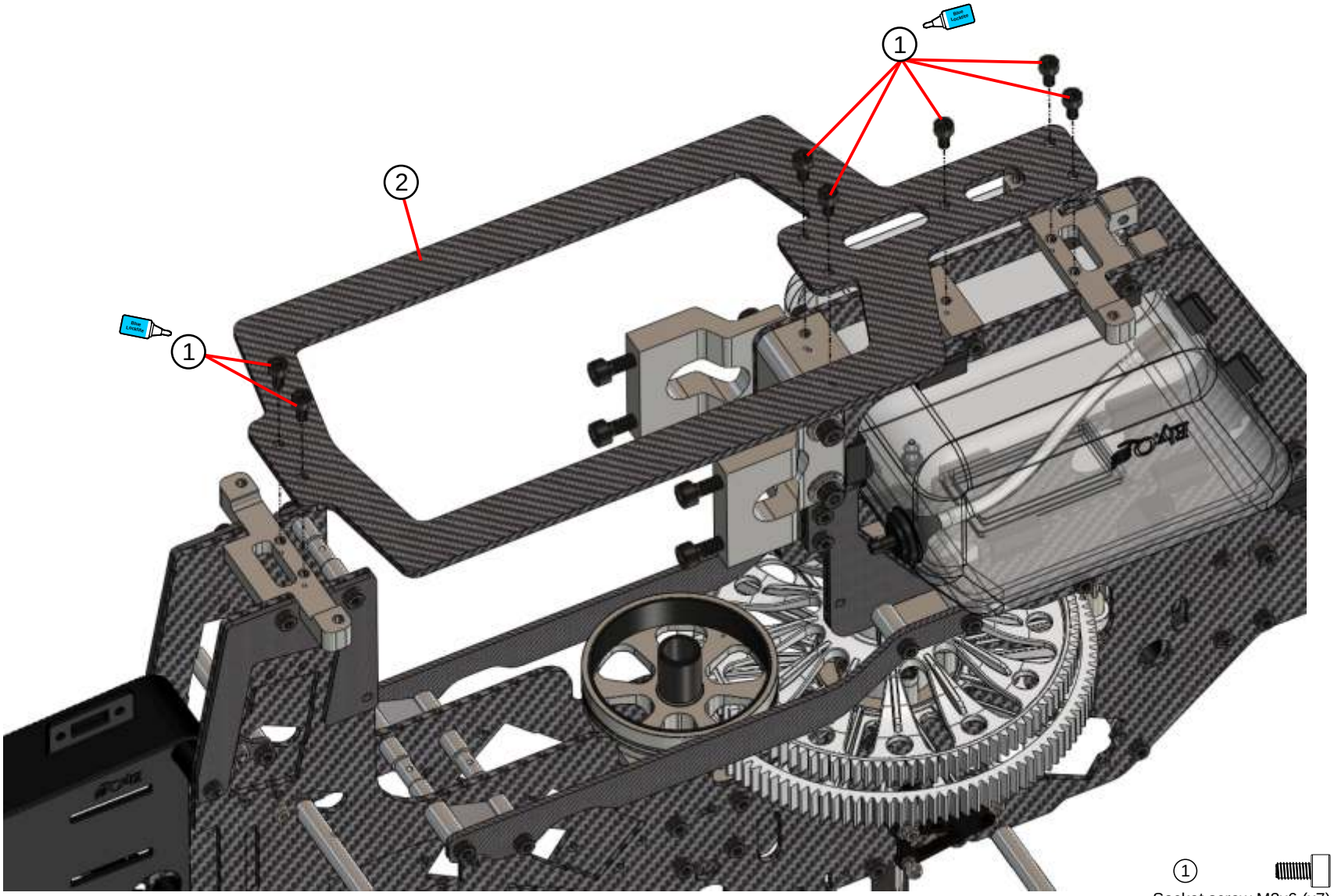




Item	Code	Description	Q.ty
1	8109300B	Landing Skid Brace Mount (V50c)	1
2	8205200A	Socket Screw M3 x 6	4
3	8108900A	26 mm spacer (V50c)	1
4	8001603A	C.F. Frame Brace Set (V90c)	2
5	8110300A	Bottom Reinforcement Block	1
6	8201800A	Socket Screw M3 x 8	4
7	8200000A	Self Tapping screw 3x12	2
8	8105603A	Landing Skid Brace Mount Rear (V90c)	

BAG EQ9005 Main Frame Part 05

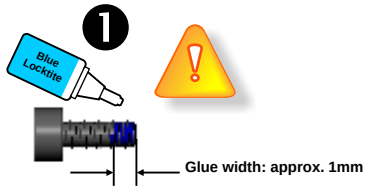


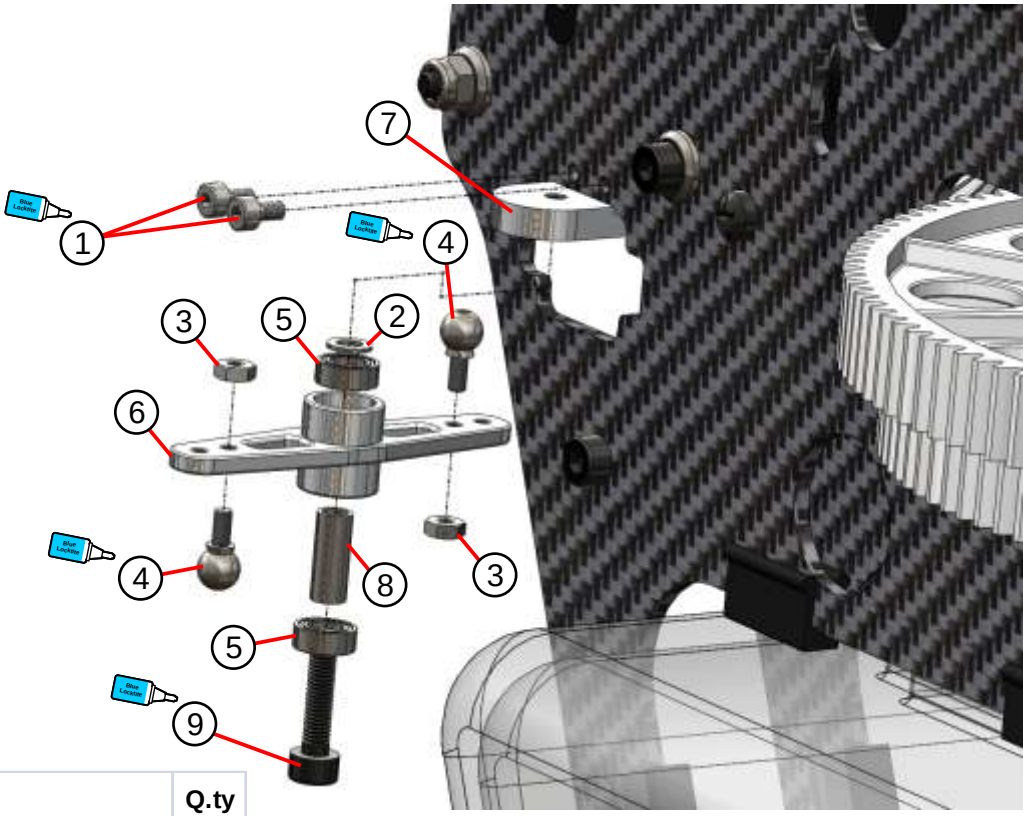


1 Socket screw M3x6 (x7)

Item	Code	Description	Q.ty
1	8205200A	Socket Screw M3 x 6	7
2	8001303A	Bottom Plate CF (V90c)	1

BAG EQ9018 Main Frame Part 06 (Tail Bell Crank)





2 Flat Washer d3,D5,W0.5 (x1)

3 Nut M2 (x1)

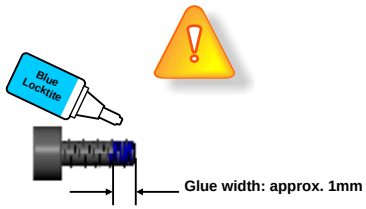
1 Socket screw M2x4 (x2)

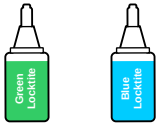
9 Socket screw M3x14 (x1)

Item	Code	Description	Q.ty
1	8205100A	Socket Screw M2x4	2
2	8201300A	Flat Washer d3, D5, W0.5	1
3	8203000A	Hexagon Nut M2	2
4	8104400A	Ball Type E M2x4 - 2.75mm	2
5	8601100A	Bearing d4, D7, W2.5	2
6	8106000A	Tail Rotor Bell Crank	1
7	8108800A	Tail Rotor Bell Cranck Support (V50c)	1
8	8101900A	Collar (d3, D4, W10)	1
9	8200900A	Socket Screw M3x14	1

Preview

BAG EQ9011 Swash Plate d12 R1.00 Assy (V90c)

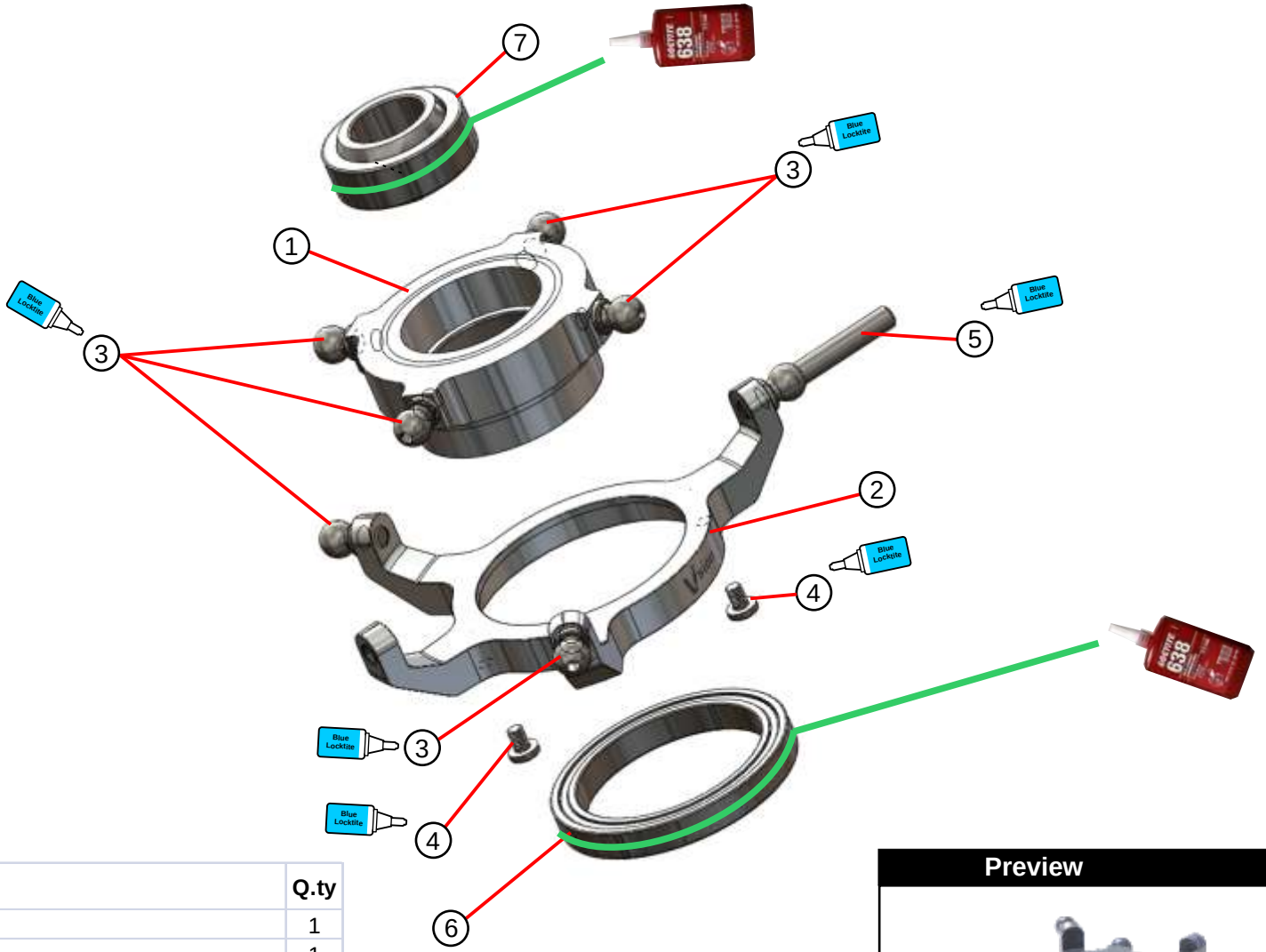




680 243

638 641

Retention of bearings onto shafts and into housings

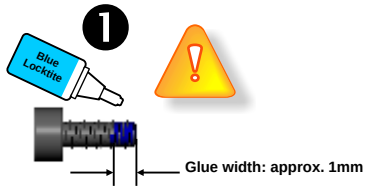


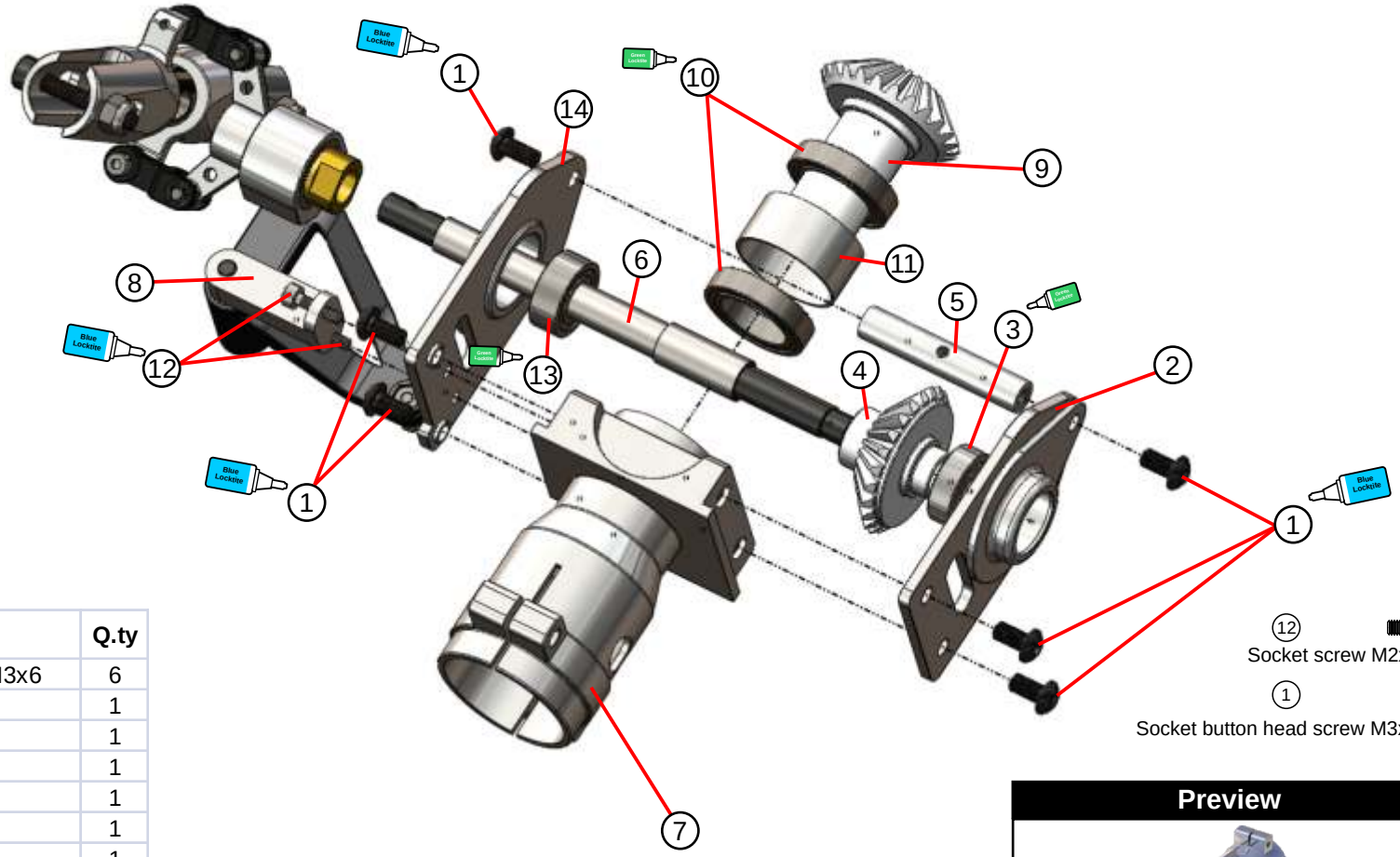
Item	Code	Description	Q.ty
1	8106203A	SwashPlate Upper R1.00 (V90c)	1
2	8106403A	SwashPlate Lower R1.00 (V90c)	1
3	8104100A	Ball type B M3x3 - 3,75 mm	6
4	8206300A	TC Screw M2 x 4 - Z --- 3S	2
5	8104300A	Ball type D M3x3 - 20 mm	1
6	8602200A	Bearing d25, D37, W7	1
7	8604200A	Radial Spher. Plain Bearing d12, D22, w7, W10 (GE12C)	1
8	8402900A	Swash Plate d12 R1.00 Assy (V90c)	

Preview

BAG EQ9014 Tail Unit Assy V90c Part 01

Already assembled by ElyQ. Befor flying, please check if the screws are fixed withe loctite.





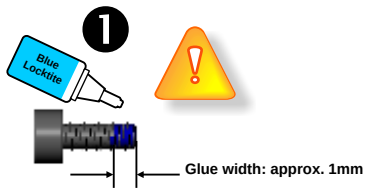
Item	Code	Description	Q.ty
1	8202400A	Socket Button Head Screw M3x6	6
2	8103603A	Metal Tail Plate (V90c)	1
3	8602900A	Bearing d5, D13, W4	1
4	8000703A	24T Front Drive Bevel Gear	1
5	8103703A	29mm Spacer	1
6	8103803A	Tail Rotor Shaft (V90c)	1
7	8103503C	Metal Tail Case (V90c)	1
8	8111500A	Tail Control Arm (V50c TT)	1
9	8000903A	24T Front Drive Long Bevel Gear	1
10	8602400A	Bearing d12, D18, W4	2
11	8110900A	Tail Spacer d17, D18, W9	1
12	8207800A	Socket Screw M2 x 8 (12.9)	2
13	8601000A	Bearing d6, D13, W5	1
14	8106703A	Metal Tail Plate R (V90c)	1

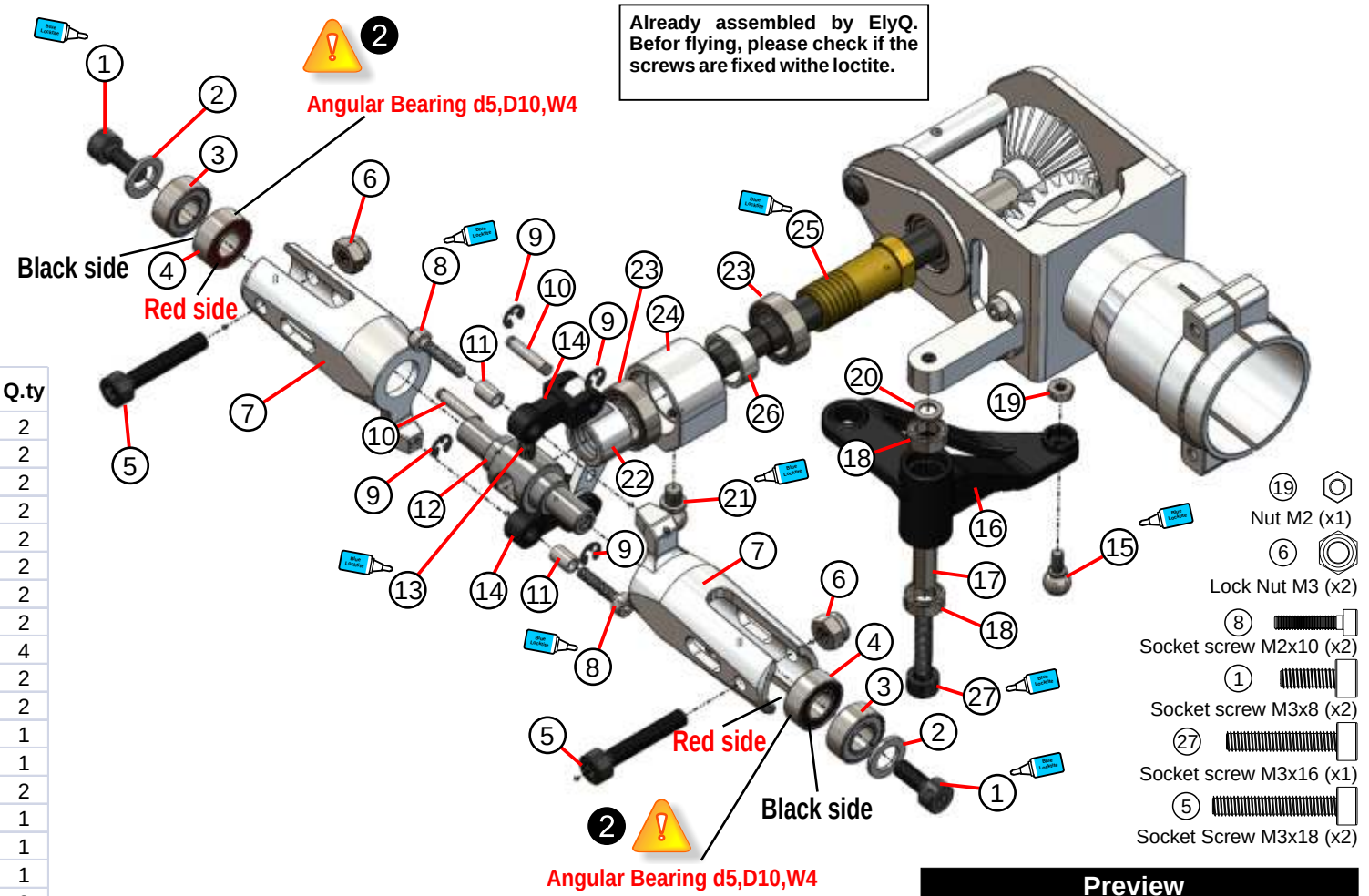
(12) Socket screw M2x8 (x2)

(1) Socket button head screw M3x6 (x6)

Preview

BAG EQ9014 Tail Unit Assy V90c Part 02





Item	Code	Description	Q.ty
1	8201800A	Socket Screw M3x8	2
2	8205600A	Flat Washer d3, D8, W0.75	2
3	8600500A	Bearing d5, D10, W4	2
4	8602600A	Angular Bearing d5, D10, W4	2
5	8204000A	Socket Screw M3 x 18	2
6	8200400A	Hexagon Lock Nut M3	2
7	8106700A	Tail Rotor Housing (Metal)	2
8	8205700A	Socket Screw M2 x 10	2
9	8200600A	E-ring	4
10	8101700A	Pin 2x10	2
11	8101800A	Collar d2, D3, W4.3	2
12	8108103A	Tail Rotor Hub (V90c)	1
13	8204600A	Set Screw - M4 x 4	1
14	8001900A	Tail Pitch Control Link	2
15	8104400A	Ball Type E M2x4 - 2.75mm	1
16	8002403A	Tail Pitch Control Lever (V90c)	1
17	8101900A	Collar (d3, D4, W10)	1
18	8601100A	Bearing d4, D7, W2.5	2
19	8203000A	Hexagon Nut M2	1
20	8201300A	Flat Washer d3, D5, W0.5	1
21	8104100A	Ball Type B M3x3 - 3.75mm	1
22	8104003A	Metal Tail Fork (V90c)	1
23	8603900A	Bearing d8, D12, W3.5	2
24	8104103A	Metal Tail Pitch Control Slider (V90c)	1
25	8103903A	Metal Slide Tail Shaft (V90c)	1
26	8104703A	Tail Pitch Control Slider Collar (V90c)	1
27	8203800A	Socket Screw M3 x 16 (12.9)	1

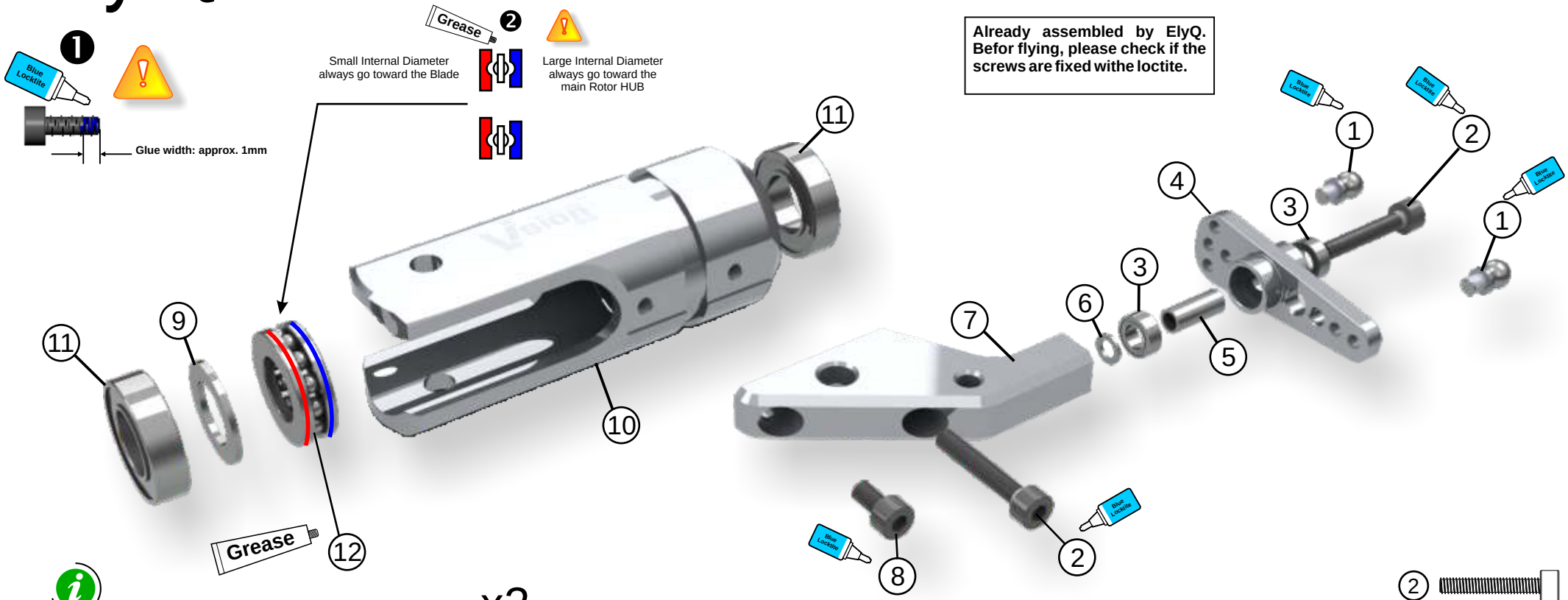
Preview

2 Controllare l'orientamento degli Angular Bearing durante l'assemblaggio. Assicurarsi che il lato identificato dal colore nero sia rivolto verso le pale di coda. Se si inverte il senso di inserimeto si avrà la rottura di tutto il sistema.

Pay special attention to Angular Bearing inserting direction during the assembling process. Make sure side marked with black colour is oriented towards tail blades. Should you invert inserting direction this will lead to the whole structure break.

Geben Sie besonders bei der Montage der "Angular Bearings" acht. Stellen Sie sicher, dass die Seite mit der schwarzen Markierung in Richtung der Heckrotorblätter zeigt. Eine verkehrte Montage kann zu einer Fehlfunktion bzw. Bruch des Heckrotors führen.

BAG EQ9017 Main Rotor Grip Assy (V90c)



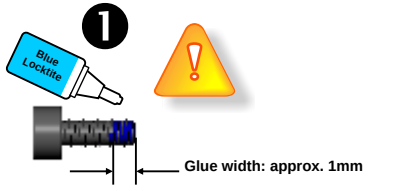
Item	Code	Description	Q.ty
1	8104100A	Ball Type B M3x3 - 3.75mm	1
2	8204000A	Socket Screw M3 x 18 (12.9)	2
3	8601100A	Bearing d4, D7, W2.5	2
4	8103103A	Mixer Lever Metal (V90c)	1
5	8101900A	Collar (d3, D4, W10)	1
6	8201300A	Flat Washer d3,D5,W0.5	1
7	8100103A	Main Blade Grip Arm V90 Aluminum	1
8	8205200A	Socket Screw M3 x 6 (12.9)	1
9	8206400A	Flat Washer d10, D15, W1	1
10	8100003A	Main Blade Grip V90 Aluminum	1
11	8603100A	Bearing d10, D19, W5	2
12	8603700A	Thrust Bearing d10, D18, W5.5	1

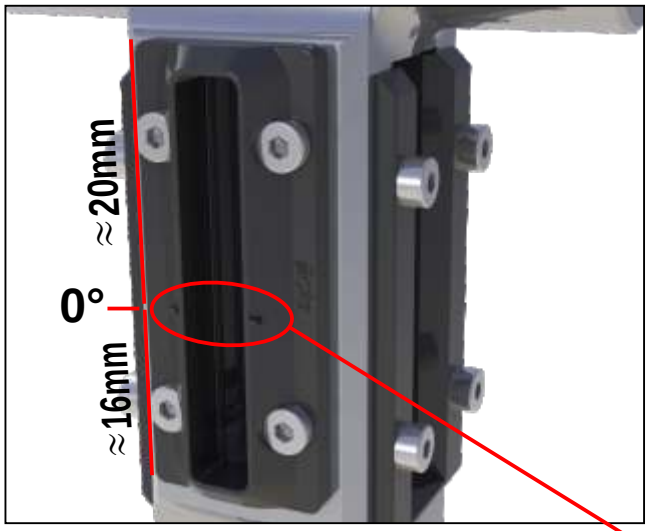
Socket screw M3x18 (x4)

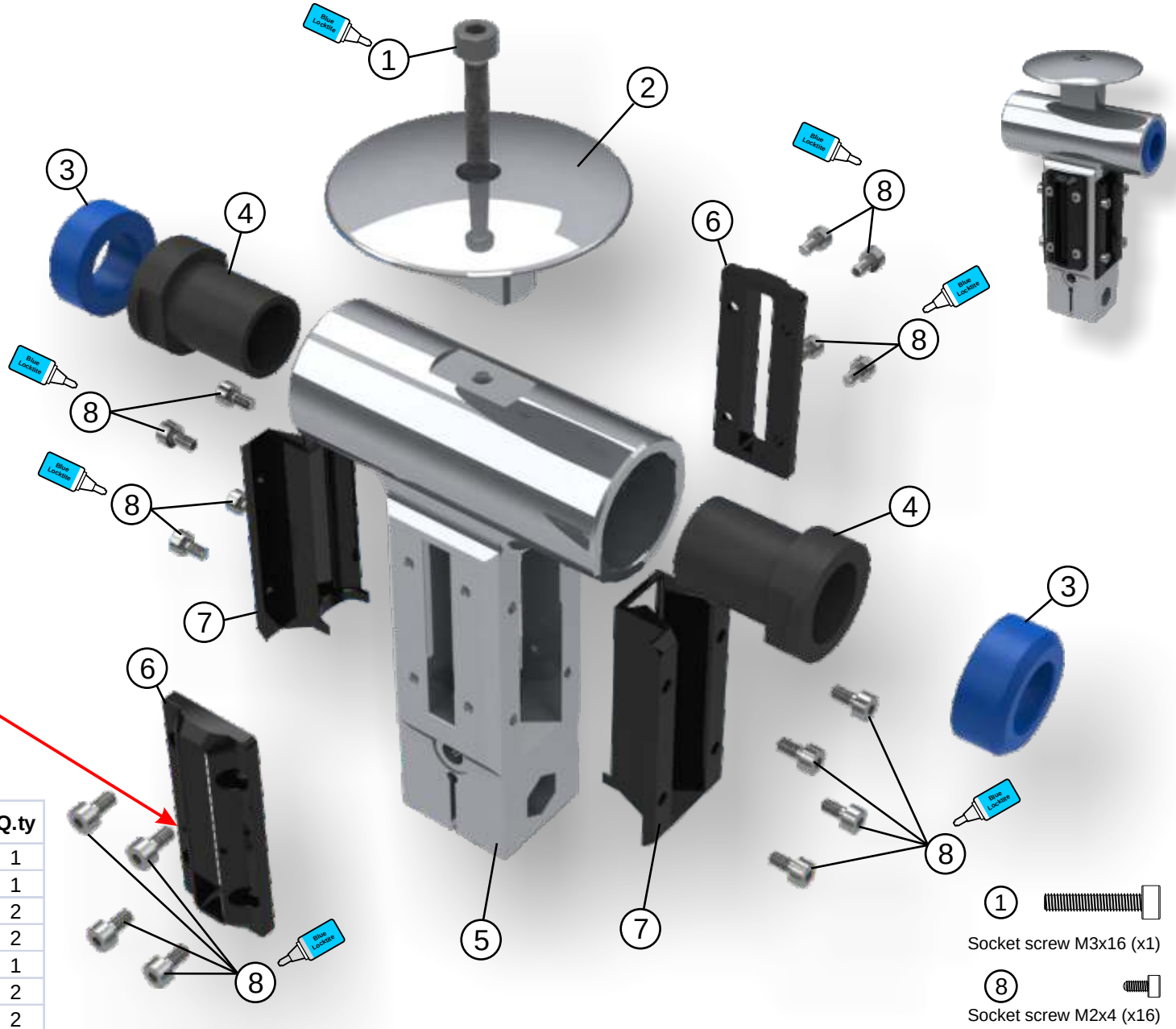
Socket screw M3x6 (x2)

Preview

Center HUB Assy (V90c)

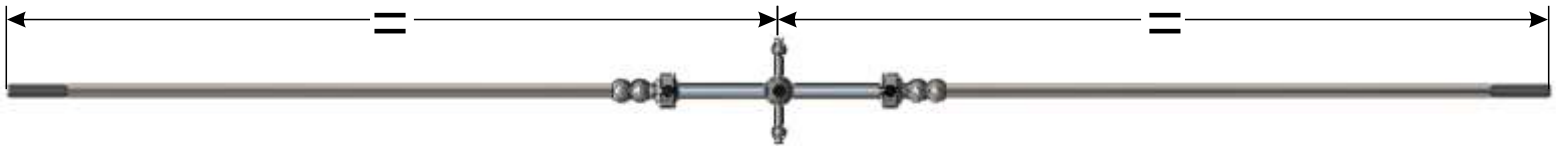


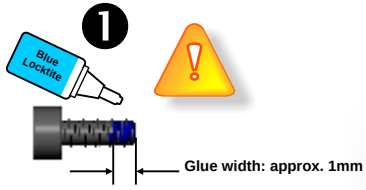


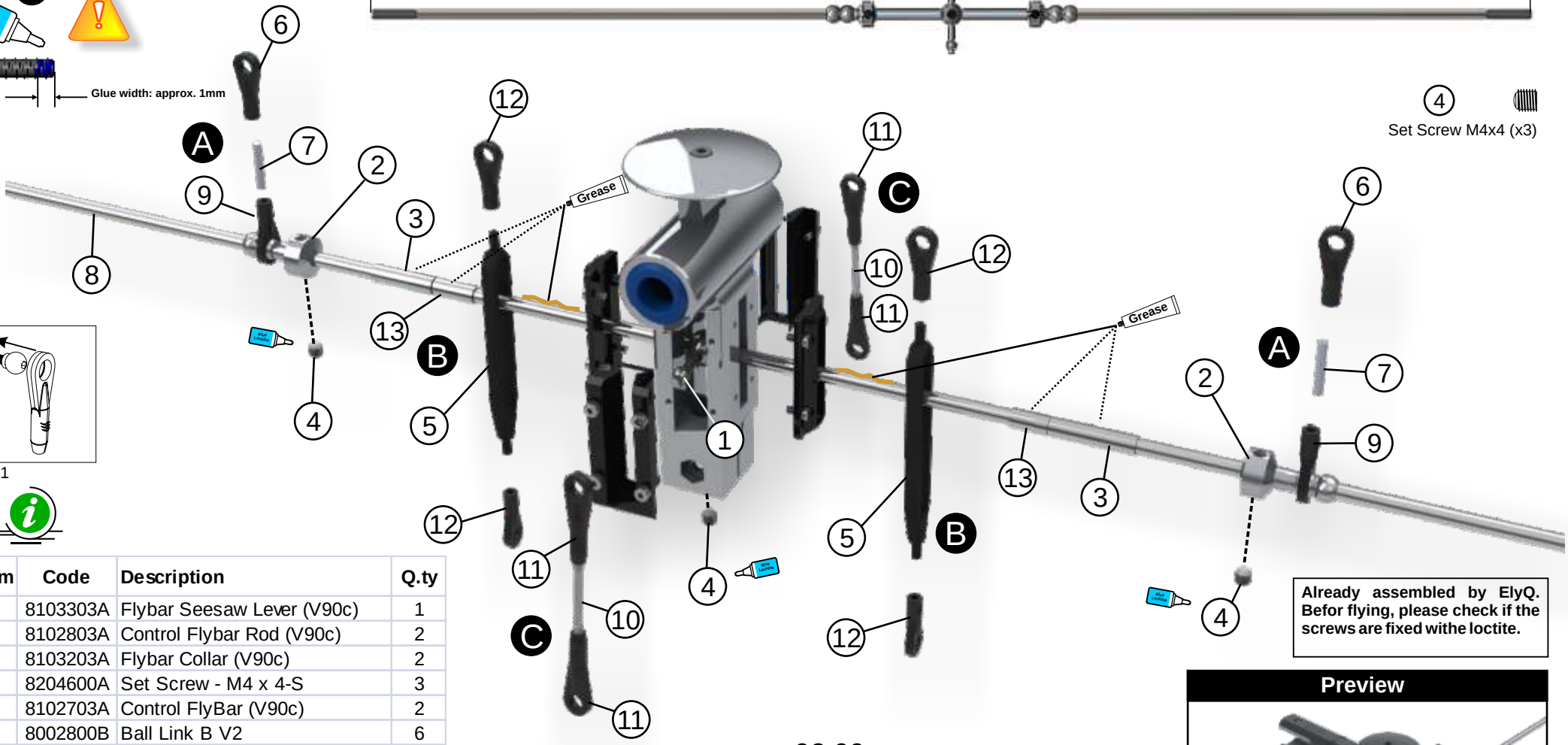


Item	Code	Description	Q.ty
1	8203800A	Socket Screw M3 x 16 (12.9)	1
2	8109700A	Head Stop (V50c)	1
3	8001803A	Damper Blu (V90c)	2
4	8002203A	Spindle Sleeve (V90c)	2
5	8105703A	Center Hub (V90c) R2.00	1
6	8001903A	FlyBar Guide (V90c)	2
7	8002003A	FlyBar SeeSaw Guide (V90c)	2
8	8205100A	Socket Screw M2 x 4	16

BAG EQ9013 Center HUB Assy (V90c)







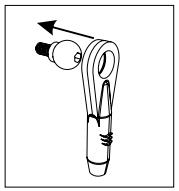
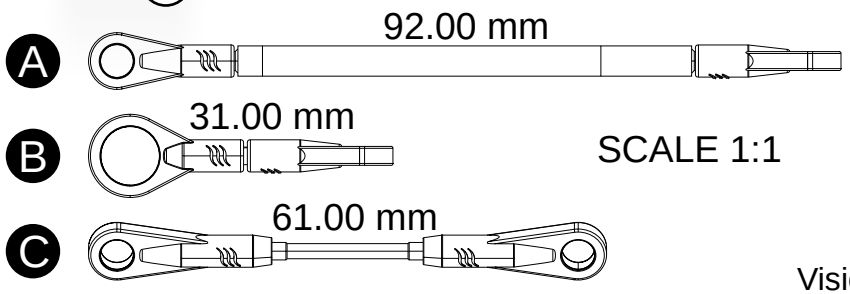


Fig. 1

Item	Code	Description	Q.ty
1	8103303A	Flybar Seesaw Lever (V90c)	1
2	8102803A	Control Flybar Rod (V90c)	2
3	8103203A	Flybar Collar (V90c)	2
4	8204600A	Set Screw - M4 x 4-S	3
5	8102703A	Control FlyBar (V90c)	2
6	8002800B	Ball Link B V2	6
7	8103200A	Link M2.3x14mm	2
8	8102903A	Flybar (V90c)	1
9	8001703A	Ball Link C	2
10	8103003A	Link M2.3x40mm	2
11	8002700B	Ball Link A V2	4
12	8003203A	Plastic Ball Link M3	4
13	8106603A	Inner Flybar Collar (V90c)	2



SCALE 1:1

Preview

Center HUB Assy (V90c)

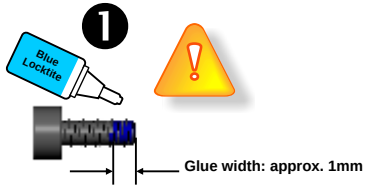
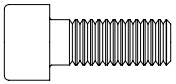
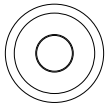


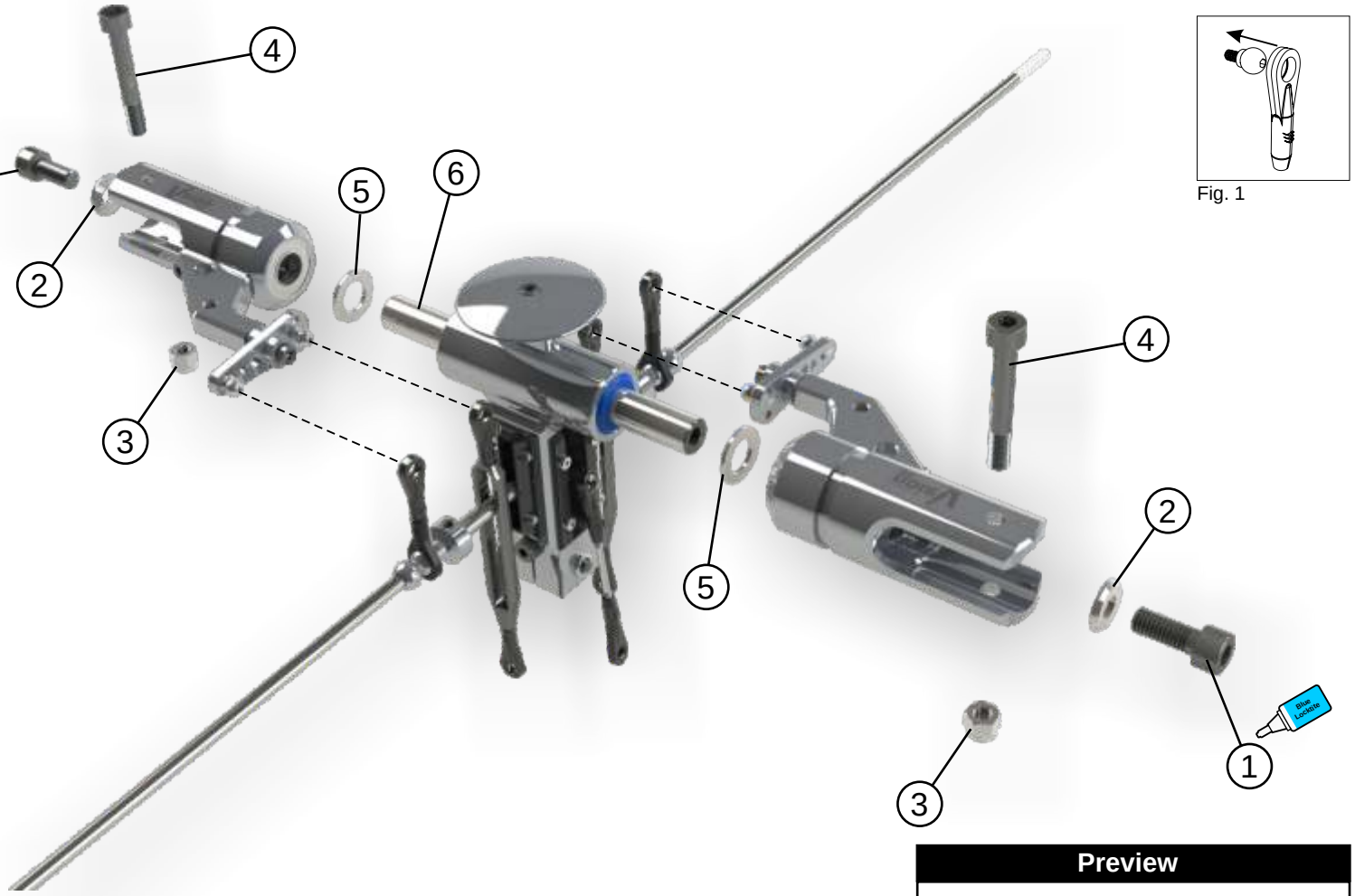
Fig. 1


1
Socket Screw M6x16 (x2)


2
Flat Washer d6, D13, W1.7 (x2)

3
8206800A Lock Nut M5 (x2)

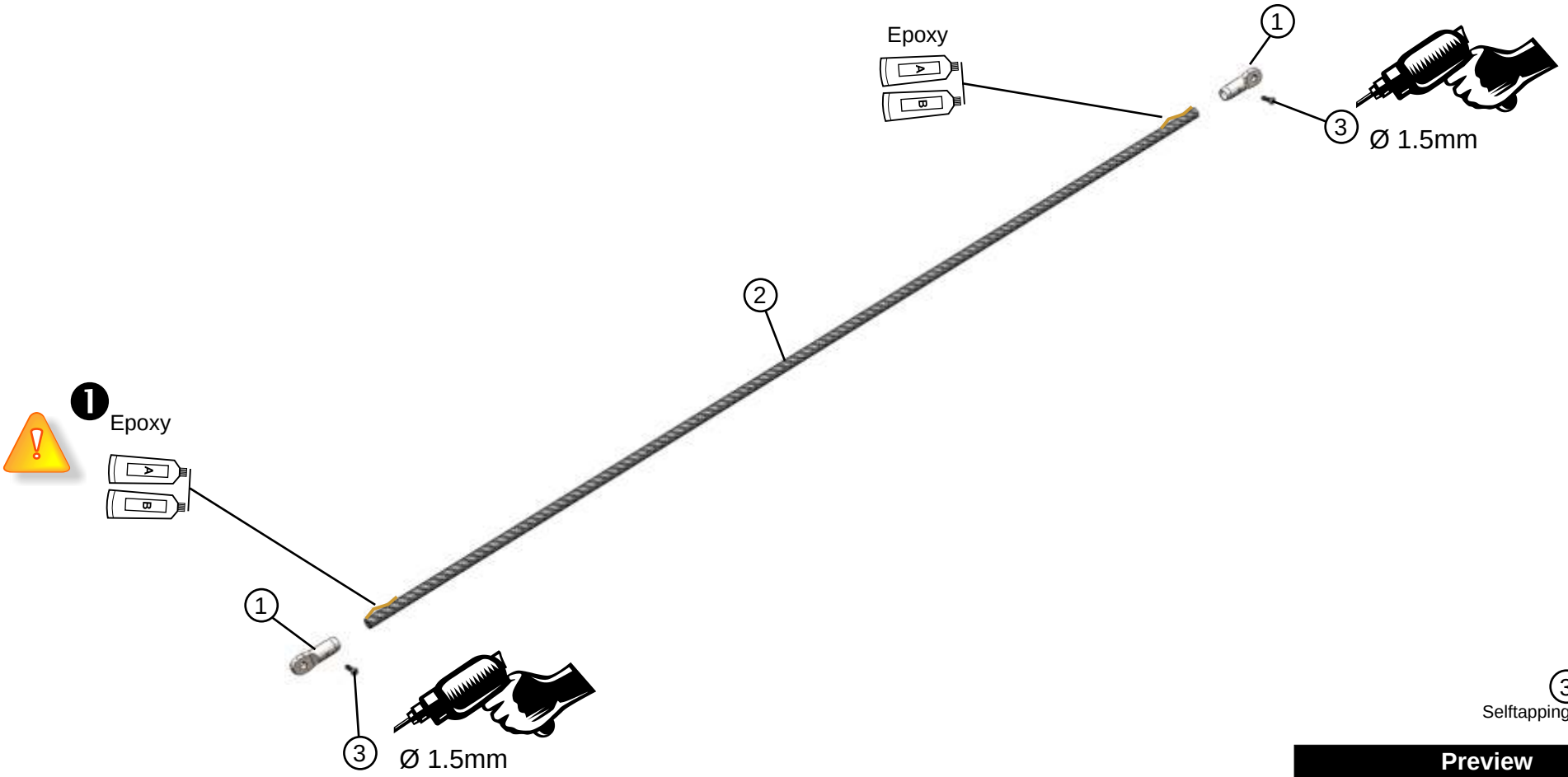
4
Socket Screw M5 x 35 - 15N (x2)



Item	Code	Description	Q.ty
1	8206600A	Socket Screw M6x16	2
2	8206700A	Flat Washer d6, D13, W1.7	2
3	8206800A	Lock Nut M5	2
4	8206900A	Socket Screw M5 x 35 - 15N	2
5	8206400A	Flat Washer d10, D15.5, W1	2
6	8102603A	Spindle (V90c)	1

Preview

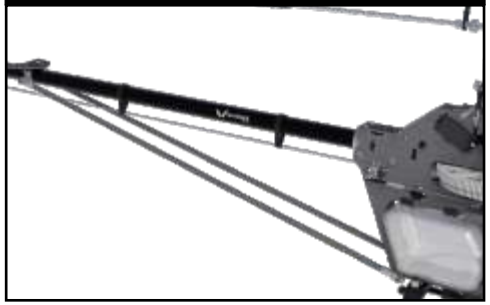
BAG EQ9008 Tail Support Rod Assy



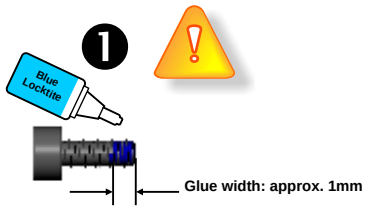
3 Selftapping screw 2x8 (x4)

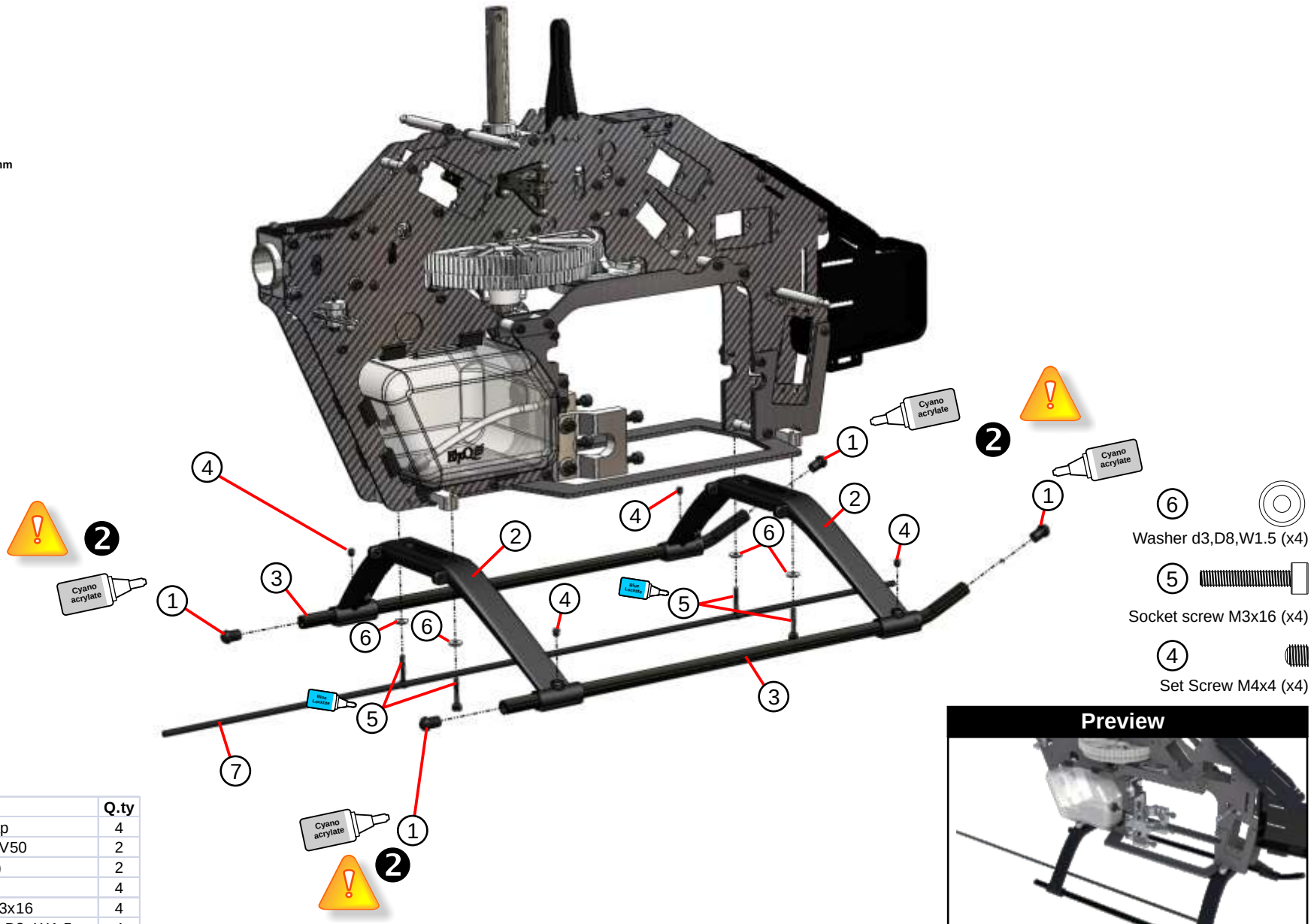
Item	Code	Description	Q.ty
1	8104303A	Metal Tail Support Rod End (V90c)	4
2	8002503A	C.F. Tail Support Rod d4, D6, W600	2
3	8202500A	Self tapping screw 2x8	4

Preview



BAG EQ9002 Landing Skid Assy

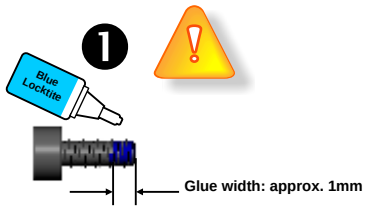


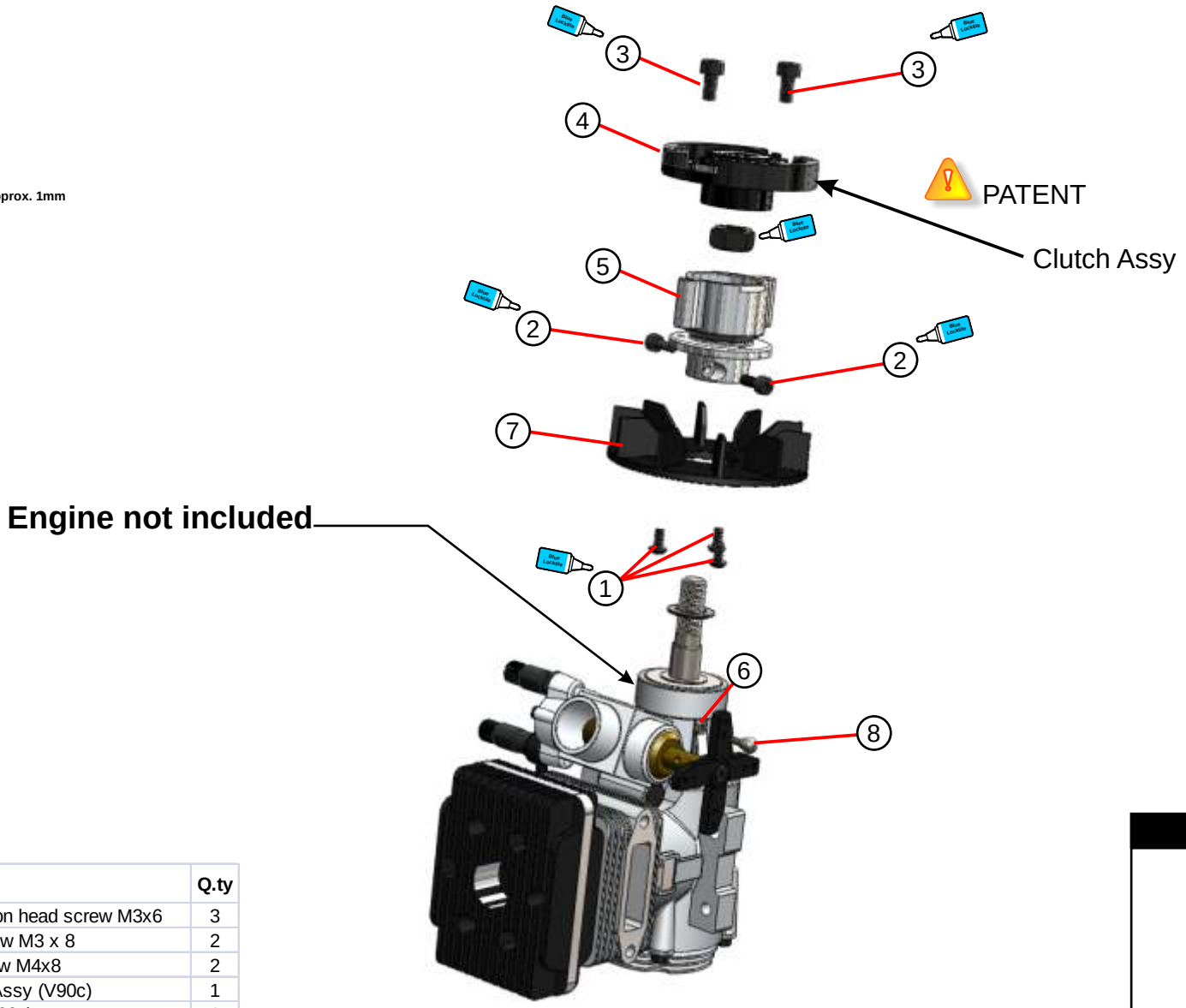


Item	Code	Description	Q.ty
1	8003500A	Skid pipe end cap	4
2	8007800A	Skid Brace 3D - V50	2
3	8101703A	Skid Pipe (V90c)	2
4	8204600A	Set screw M4x4	4
5	8203800A	Socket Screw M3x16	4
6	8201200A	Flat Washer d3, D8, W1.5	4
7	8006200A	Antenna Tube	1

Preview

BAG EQ9012 Engine Mount Assy





6 Nut M2 (x1)

3 Socket Screw M4x8 (x2)

2 Socket screw M3x8 (x12)

1 Socket button head screw M3x6 (x3)

Item	Code	Description	Q.ty
1	8202400A	Socket button head screw M3x6	3
2	8201800A	Socket Screw M3 x 8	2
3	8202300A	Socket screw M4x8	2
4	8402500A	Clutch V2 Assy (V90c)	1
5	8102503A	Fan HUB (V90c)	1
6	8203000A	Hexagon Nut M2	1
7	8010000A	Fan V50c	1
8	8104400A	Ball Type E M2x4 - 2.75mm	1

Preview

BAG EQ9006 Engine Fan Conveyor Assy

8106803A Governor Sensor Mount (V90c)

8202500A Self Tapping screw 2x8

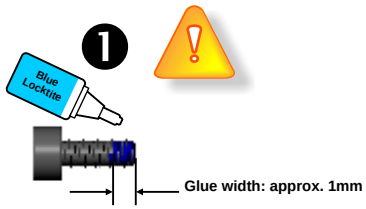
OPTIONAL

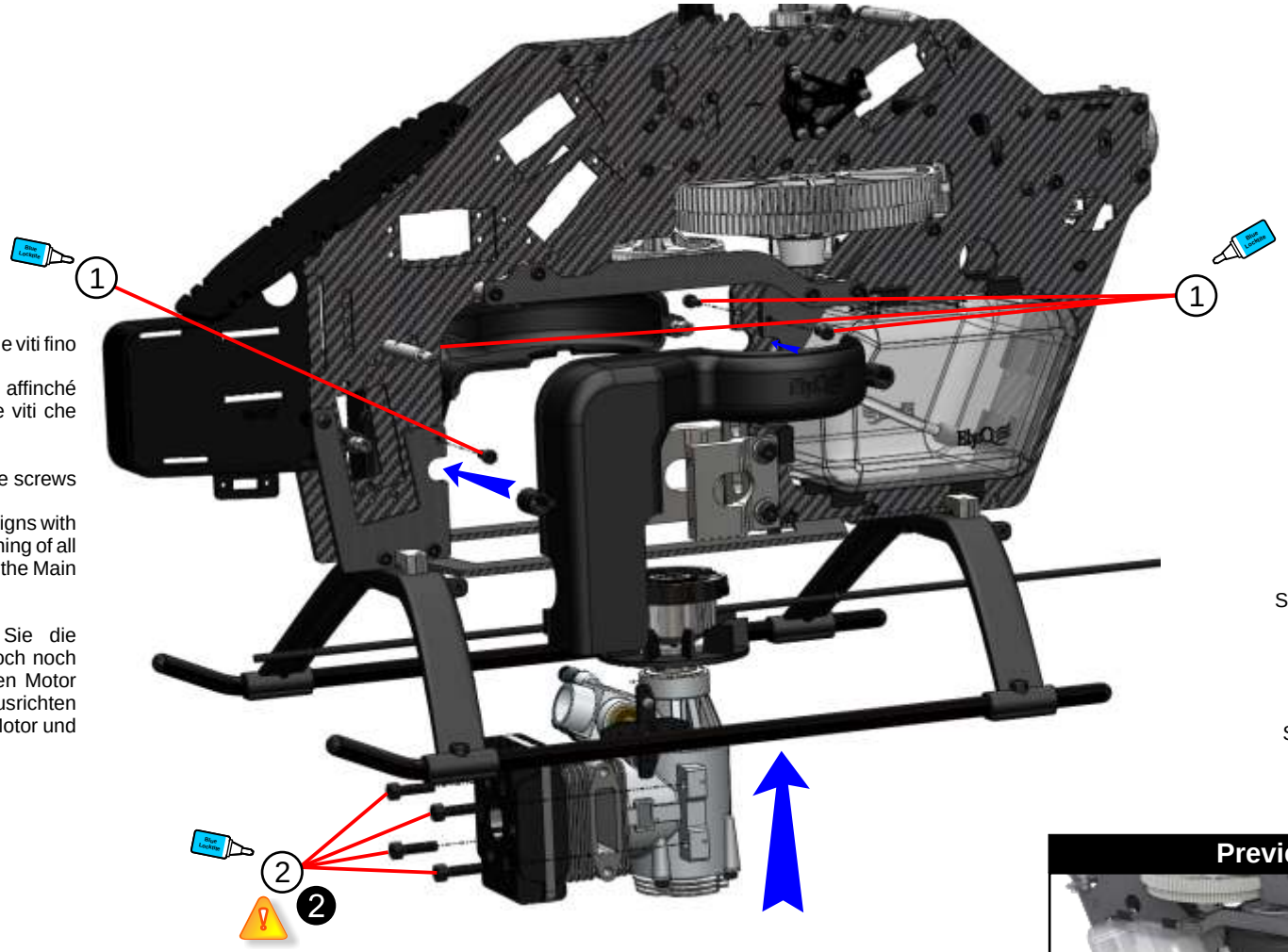
EQ90079 Governor Sensor Mount Set

Preview

Item	Code	Description	Q.ty
1	8100803A	26mm Hex Mount	2
2	8000003A	Engine Fan Conveyor (R)	1
3	8000103A	Engine Fan Conveyor (L)	1

BAG EQ9007 Engine Mount





2 Procedura di allineamento del motore: Avvitare le viti fino alla battuta.
Far girare brevemente il motore con l'avviatore affinché questo si allinei; ora serrare completamente tutte le viti che fissano il motore e il castello motore al Main Frame.

Procedure for the alignment of the engine: tighten the screws until the stop.
Make the engine briefly run with the starter so that it aligns with the structure; now you can proceed with the full tightening of all the screws which fasten the engine and its support to the Main Frame.

Vorgang zum Ausrichten des Motors: Ziehen Sie die Schrauben leicht an, bis diese bündig anliegen jedoch noch nicht fest sind. Drehen Sie nun mit dem Starter den Motor einige Sekunden, so dass er sich selbst im Chassis ausrichten kann. Jetzt können Sie die Schrauben, welche den Motor und den Motorträger halten, festziehen.

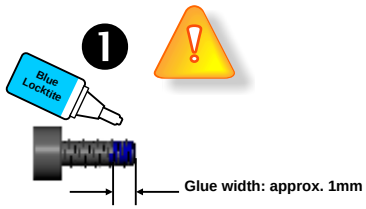
2 Socket screw M4x16 (x4)

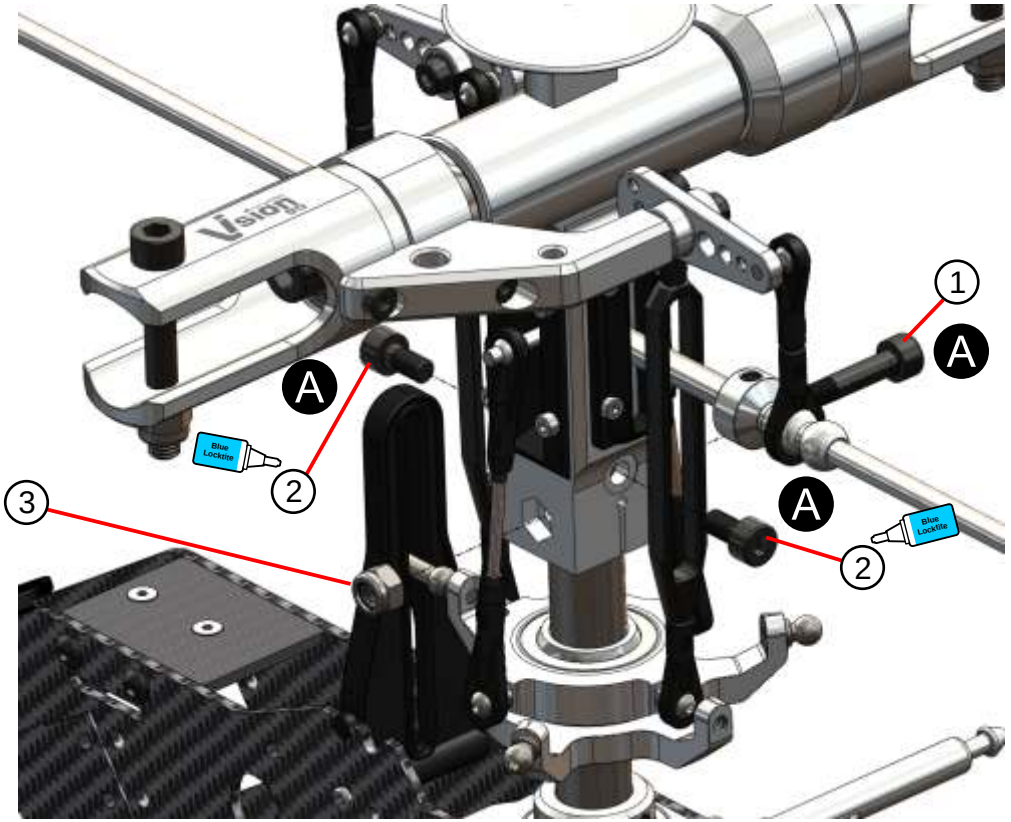
1 Socket Screw M4x8 (x4)

Preview

Item	Code	Description	Q.ty
1	8201800A	Socket Screw M3 x 8 --- 8S	4
2	8206200A	Socket Screw M4 x 16 --- 16N	4

BAG EQ9013 Main Rotor





3 Lock Nut M4 (x1)

2 Socket Screw M4x8 (x2)

1 Socket Screw M4x20 (x1)

A Assicurarsi che vi sia, dove necessario, sufficiente lockite e che il serraggio delle viti sia effettuato in maniera appropriata.
Durante i primi voli effettuare un controllo del serraggio. Se si dovesse volare senza che le viti del center hub abbiano il giusto serraggio si potrebbe alterare la sede interna dove si inserisce il main shaft e questo potrebbe innescare dannose vibrazioni.

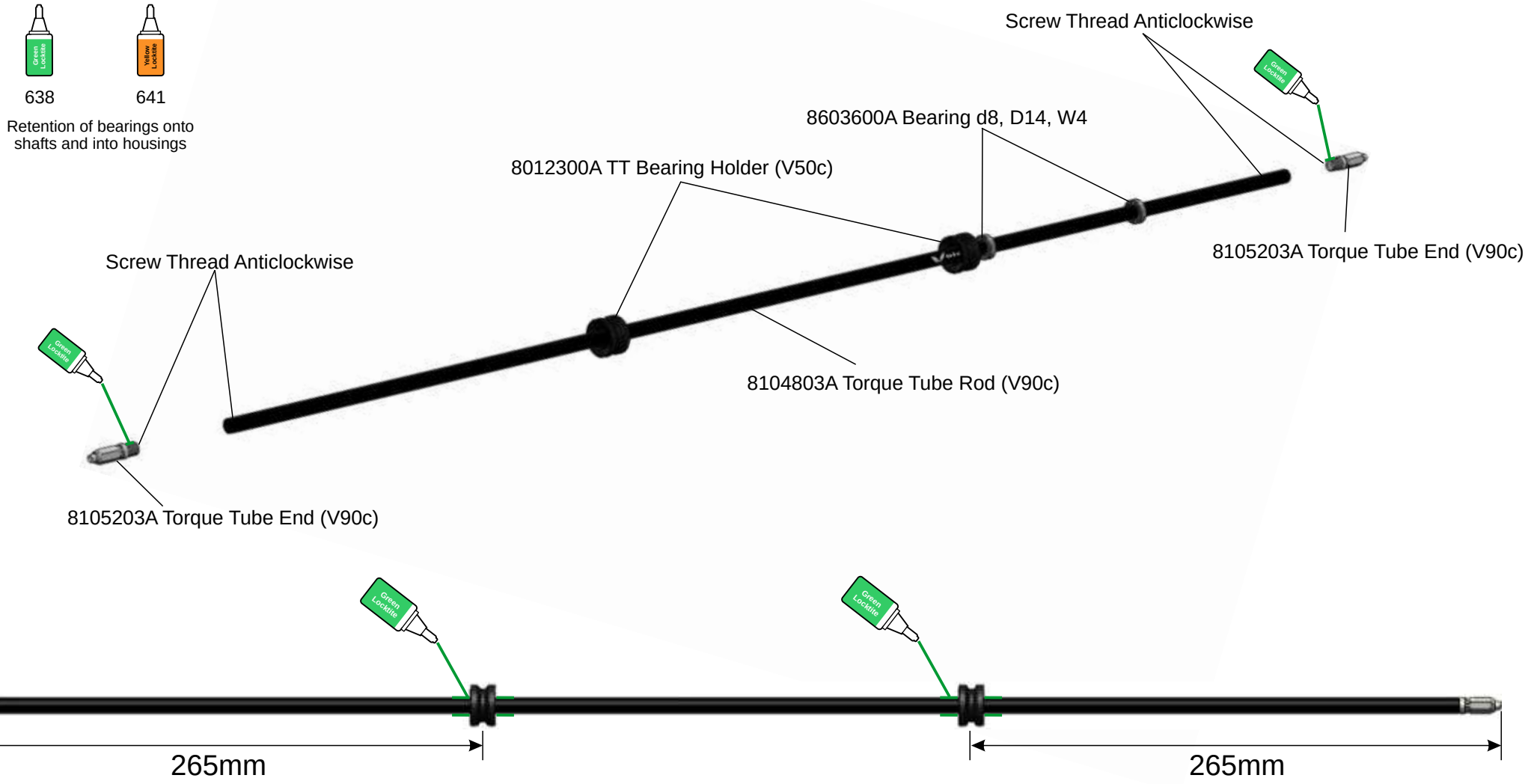
Make sure that there is, where necessary, sufficient Locktite and that the tightening of the screws has been done properly.
During the first flights, please check the tightening. If you fly with the center hub screws uncorrectly tightened, the internal seat, where the main shaft is inserted, could be altered and lead to harmful vibrations.

Stellen Sie sicher, dass dort, wo es nötig ist, ausreichend Schraubensicherung verwendet wurde und das die Schrauben korrekt festgeschraubt sind. Kontrollieren Sie den festen Sitz der Schrauben während der ersten Flüge. Wenn Sie mit nicht korrekt festgeschraubten Zentralstück-Schrauben fliegen, kann sich der innere Sitz, wo die Hauptrotorwelle eingeführt wird, ändern und zu schädlichen Vibrationen führen.

Item	Code	Description	Q.ty
1	8206500A	Socket Screw M4 x 20 --- 7N	1
2	8202300A	Socket Screw M4 x 8 --- 8S	2
3	8203100A	Lock Nut M4 - S	1

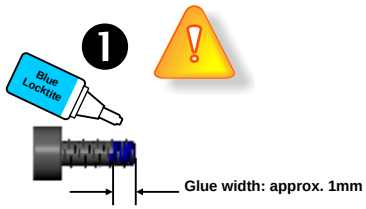
Preview

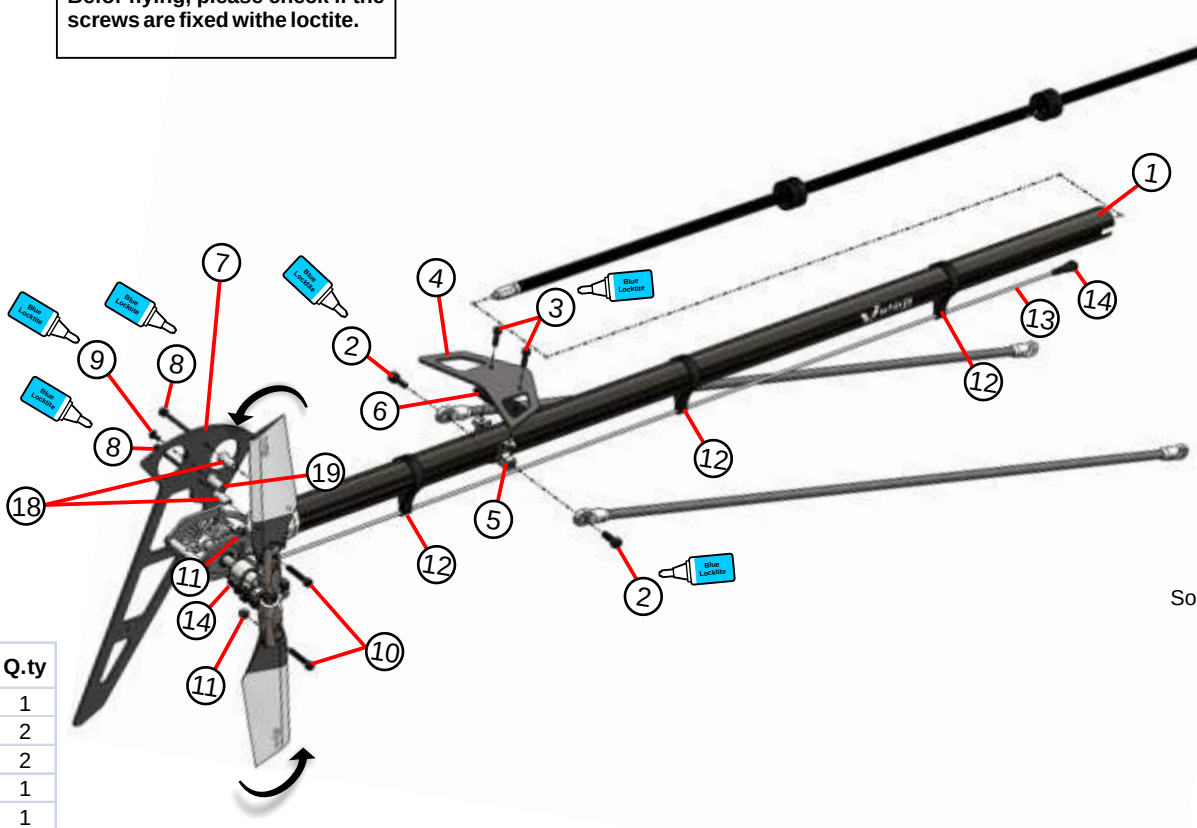
BAG EQ9019 Torque Tube Assy



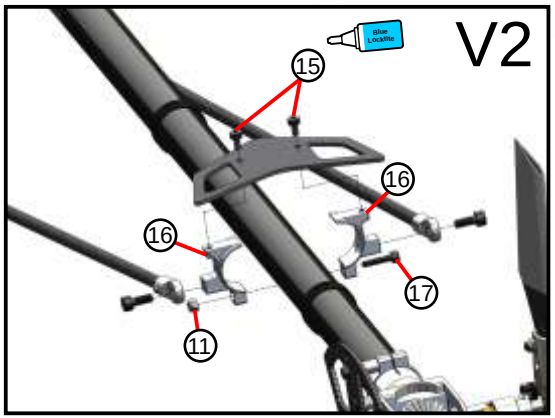
BAG EQ9009 Tail Assy

Already assembled by ElyQ. Befor flying, please check if the screws are fixed withe loctite.





Item	Code	Description	Q.ty
1	8101603A	Tail Boom (V90c)	1
2	8201500A	Socket Screw M4x10	2
3	8203900A	Socket Screw M3x10	2
4	8002500A	Horizontal Stabilizer (C.F.)	1
5	8104203A	Metal Stabilizer Mount Lower (V90c)	1
6	8002300A	Stabilizer Mount Upper	1
7	8002703A	C.F. Vertical Stabilizer (V90c)	1
8	8202800A	Socket Screw M3x25	2
9	8202400A	Socket Button Head Screw M3x6	1
10	8204000A	Socket Screw M3x18	2
11	8200400A	Hexagon Lock Nut M3	2
12	8000403A	Tail Control Guide (V90c)	3
13	8102303A	SUS Rear Servo ROD (V90c)	1
14	8002700B	Ball Link A V2	2
15	8205200A	Socket Screw M3 x 6 - 6S	2
16	8107603A	Metal Stabilizer Mount V2 (V90c)	2
17	8200900A	Socket Screw M3 x 14 -14S	1
18	8111600A	12mm Single Spacer (V50e)	2
19	8104603A	Vertical Stabilizer Spacer (V90c)	1



17 Socket screw M3x14 (x1)

15 Socket screw M3x6 (x2)

10 Socket Screw M3x18 (x2)

8 Socket screw M3x25 (x2)

9 Socket button head screw M3x6 (x12)

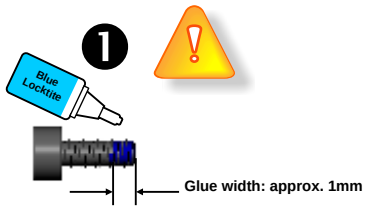
11 Lock Nut M3 (x2)

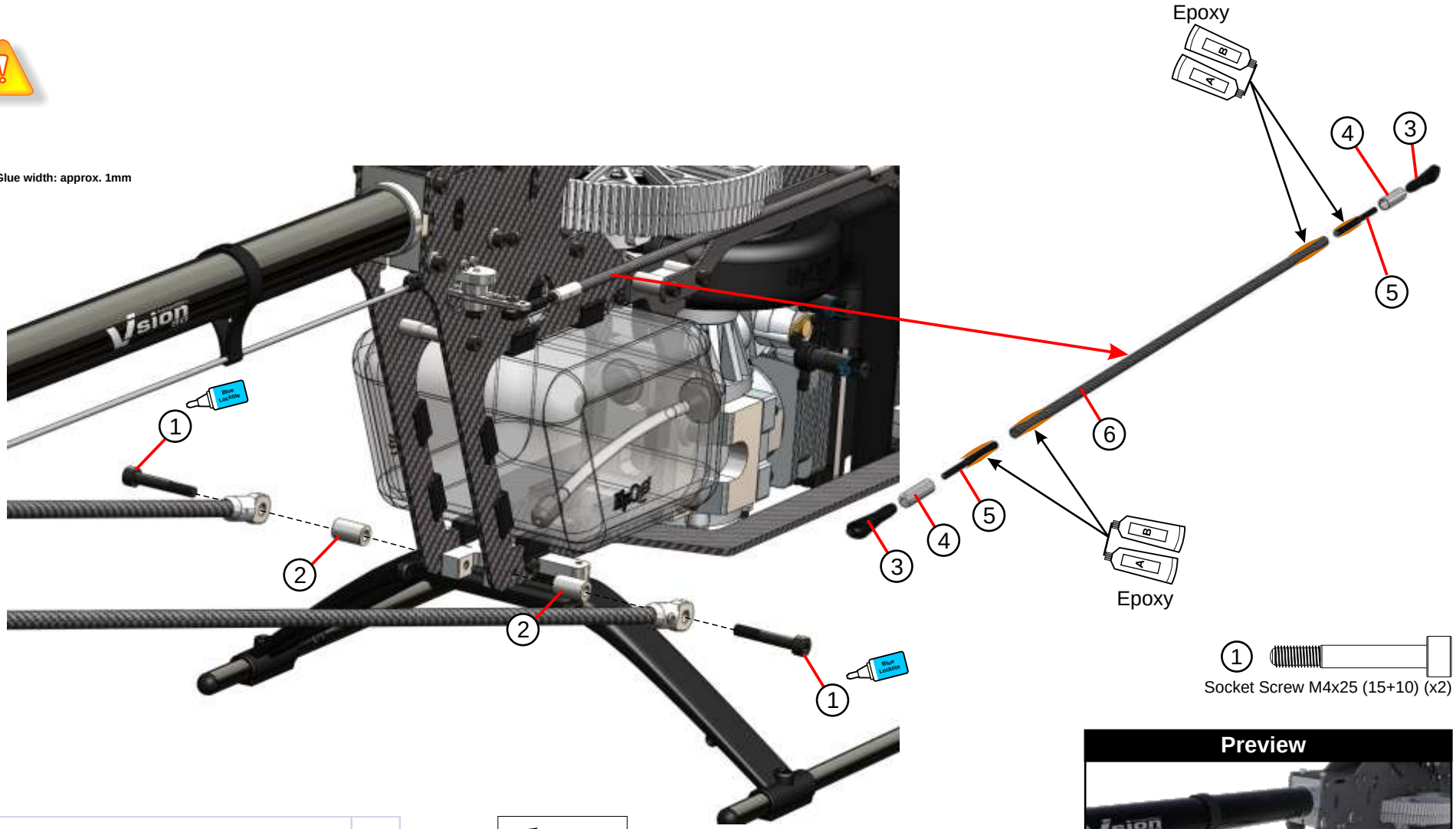
3 Socket screw M3x10 (x2)

2 Socket Screw M4x10 (x2)

Preview

BAG EQ9009-18 Tail Assy





1 Socket Screw M4x25 (15+10) (x2)

Item	Code	Description	Q.ty
1	8207300A	Socket Screw M4 x 25 - 10N	2
2	8104403A	Tail Boom Brace Collar (V90c)	2
3	8002700B	Ball Link A V2	2
4	8107700B	Coupler d4	2
5	8112700A	Link M2.3-M3	2
6	8009300A	Carbon Fiber Rear Servo Rod d3, D4, W220mm	1

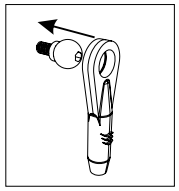
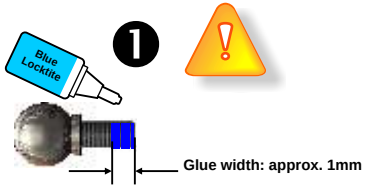
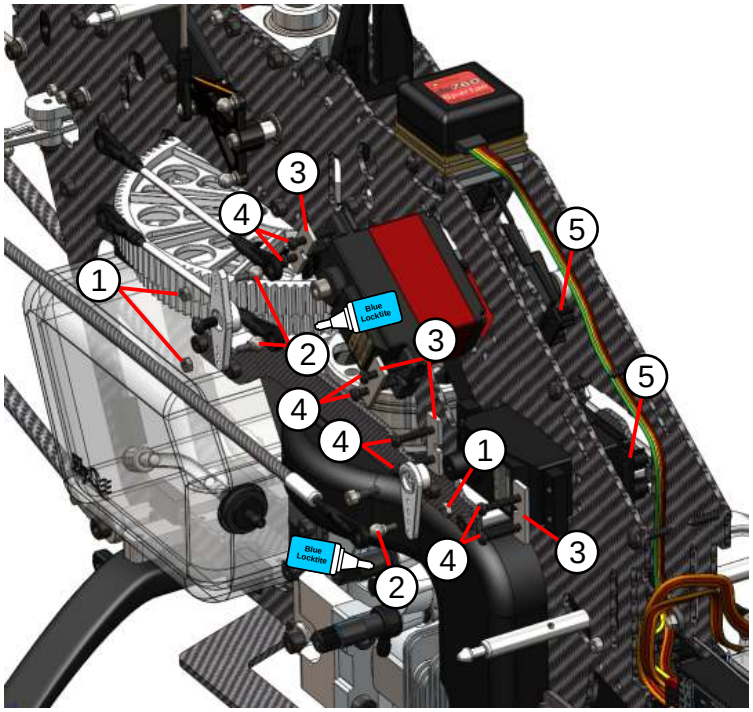


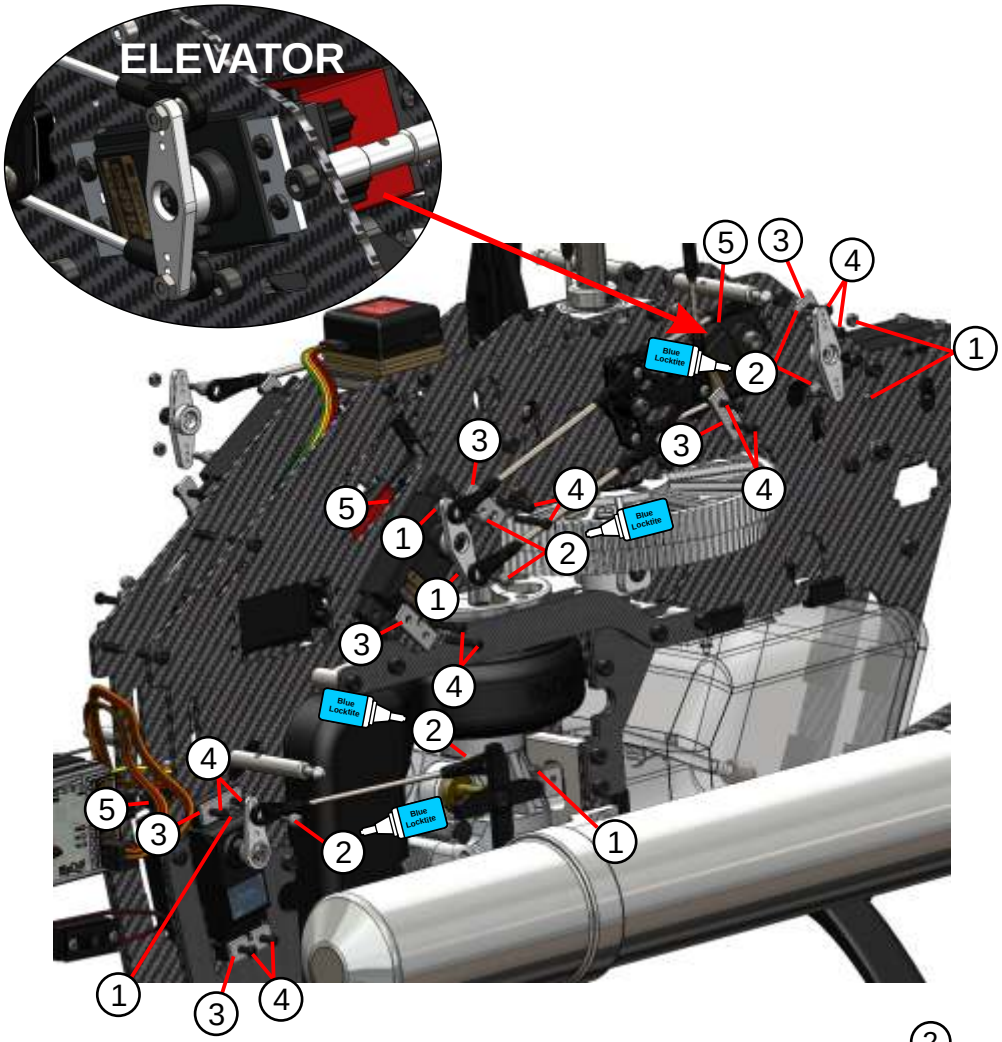
Fig. 1

Preview

BAG EQ9020 Servo Installation (Part 1.00)







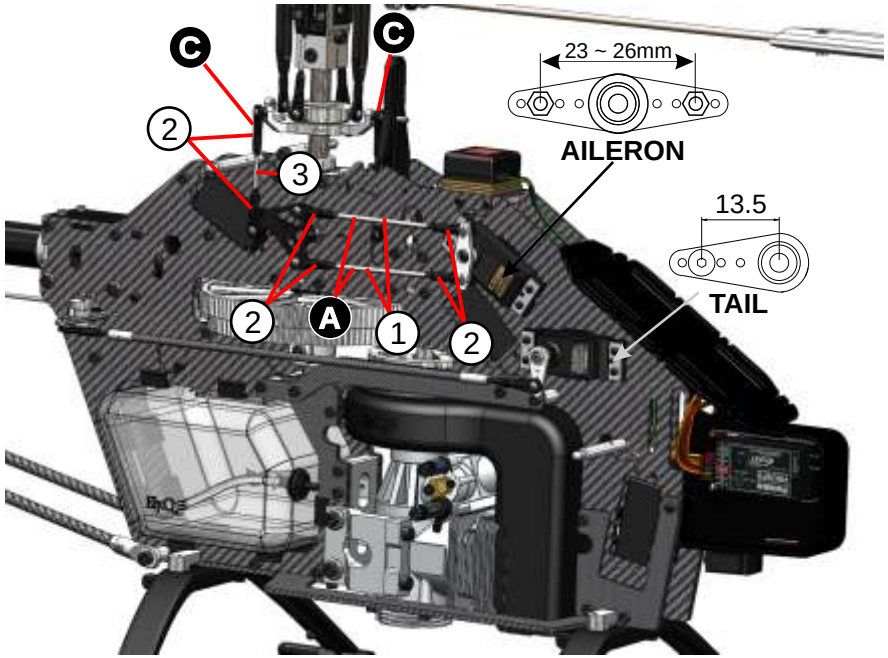
Item	Code	Description	Q.ty
1	8203000A	Hexagon Nut M2	9
2	8104400A	Ball Type E M2x4 - 2.75mm	9
3	8101400A	Servo Mounting Plate	10
4	8205800A	Self Tapping Screw 2.5x16	20
5	8010400A	Servo Mount (V50c)	5

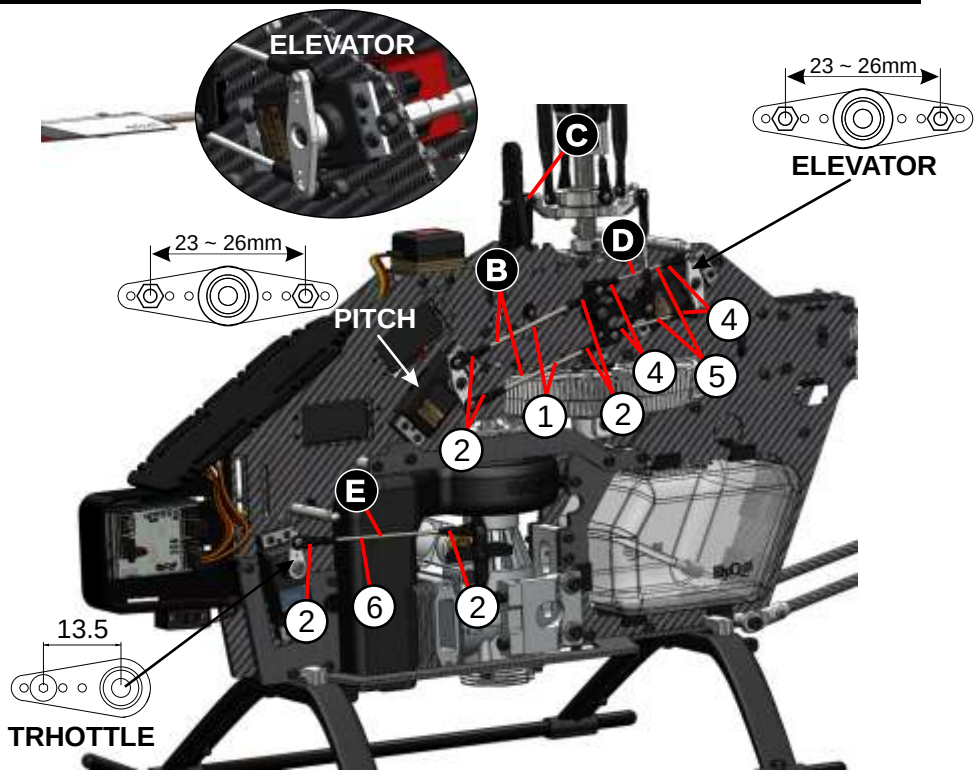
Ball Type E M2x4 - 2.75 (x9)

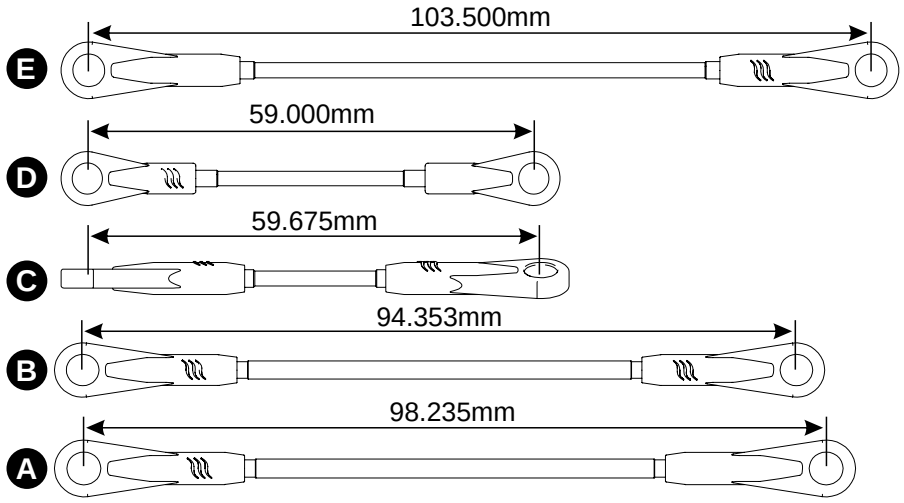
Nut M2 (x9)

Self Tapping Screw 2.5x16 (x20)

BAG EQ9020 Servo Installation (Part 2.00)







Item	Code	Description	Q.ty
1	8102403A	Link M2.3x75mm (V90c)	4
2	8002700B	Ball Link A V2	16
3	8103003A	Link M2.3x40mm	3
4	8002800B	Ball Link B V2	4
5	8104800A	Link M2.3x46.5mm	2
6	8113500A	Link M2.3x85 mm	1

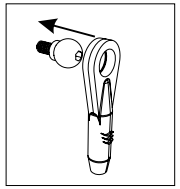
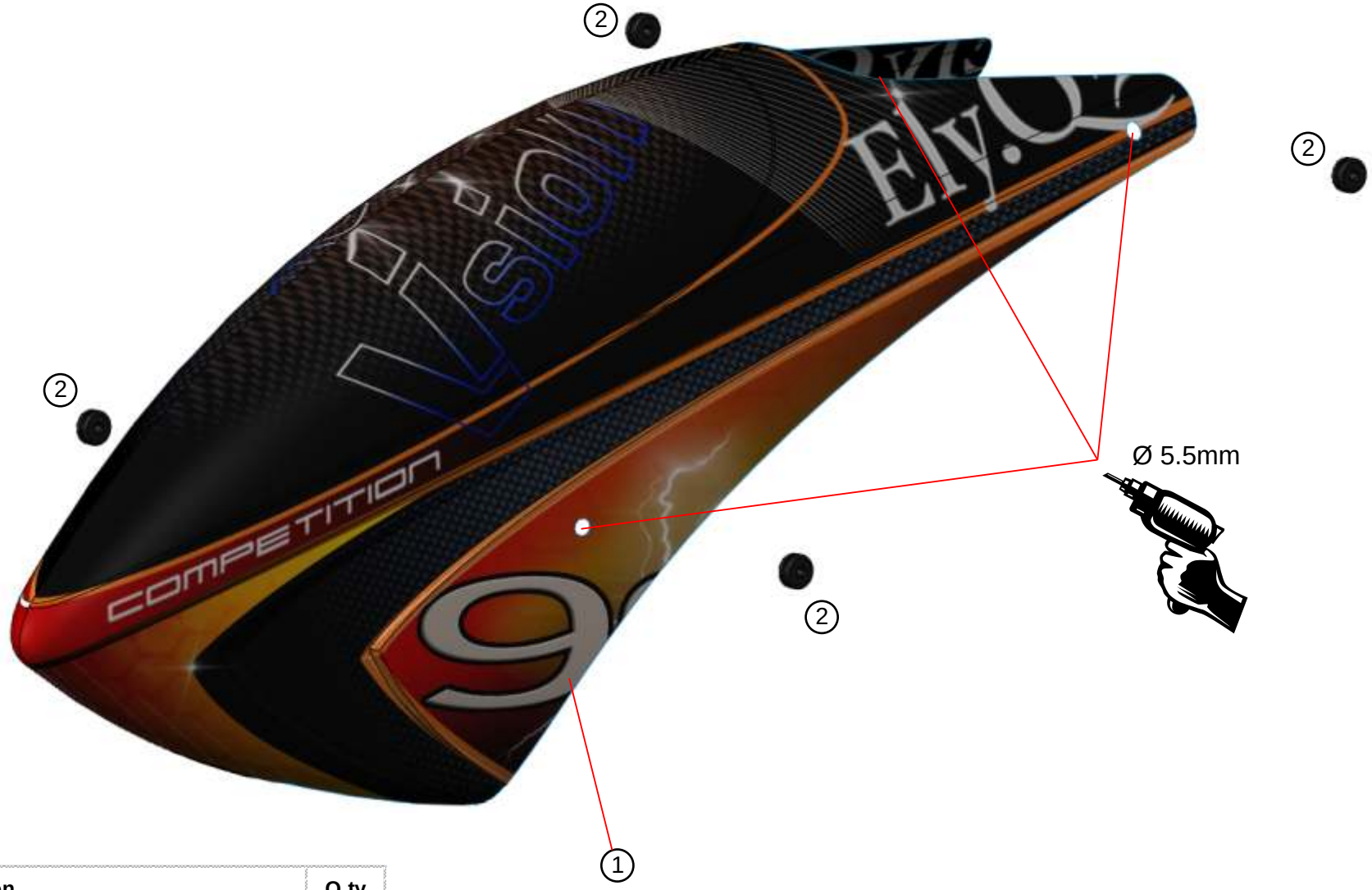
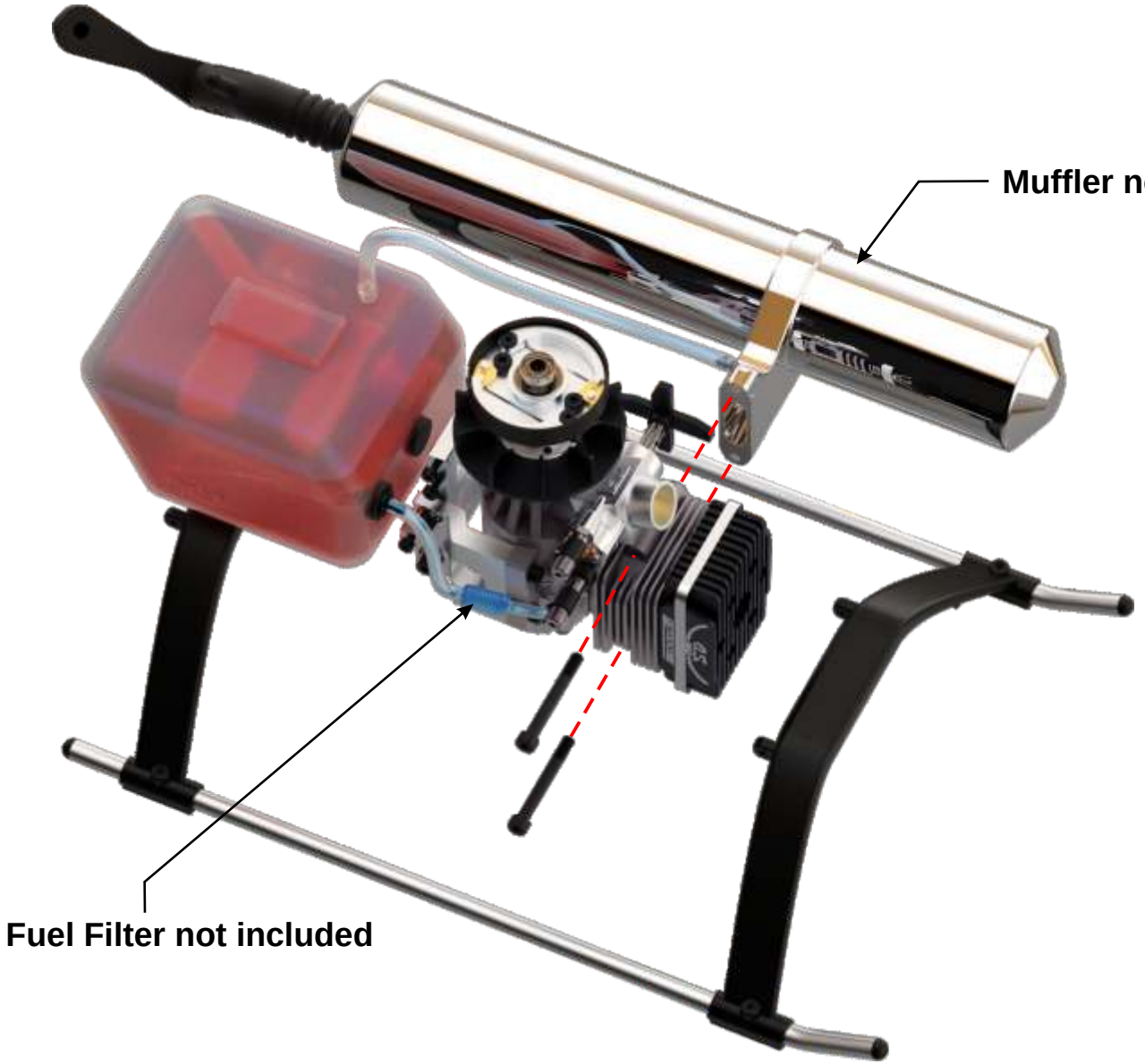


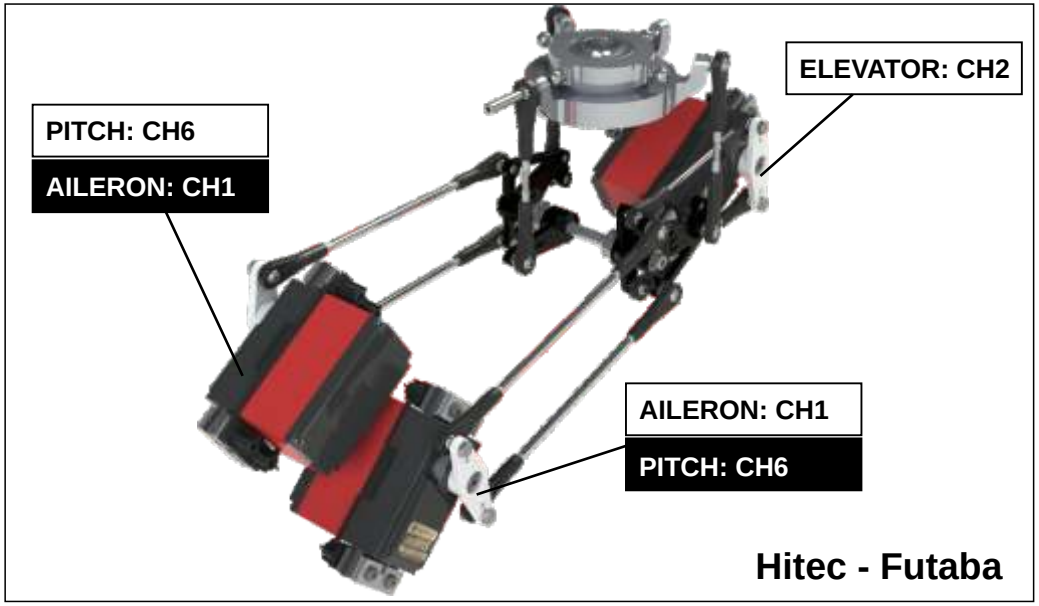
Fig. 1

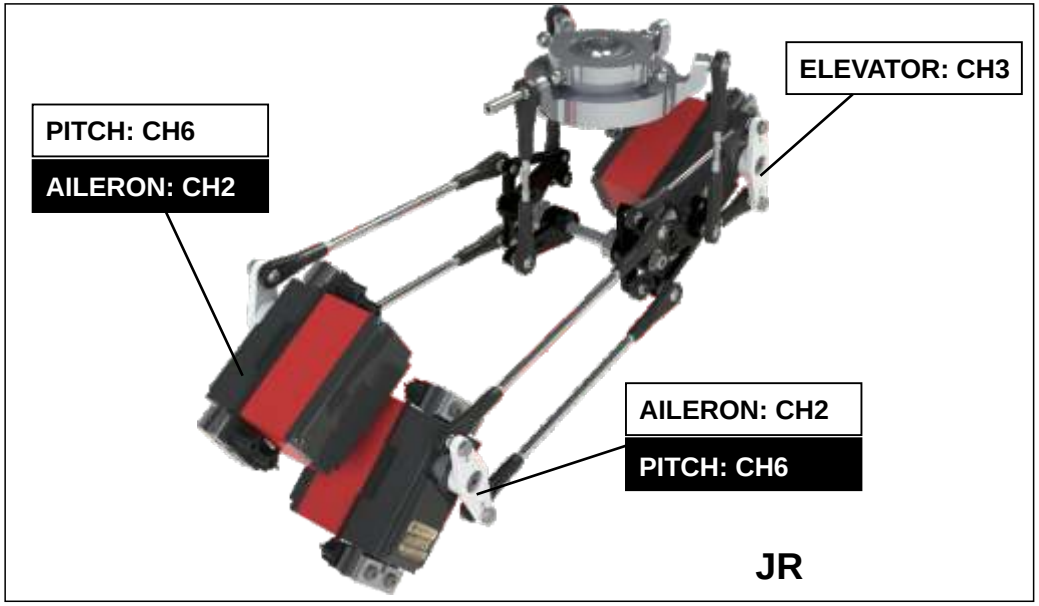


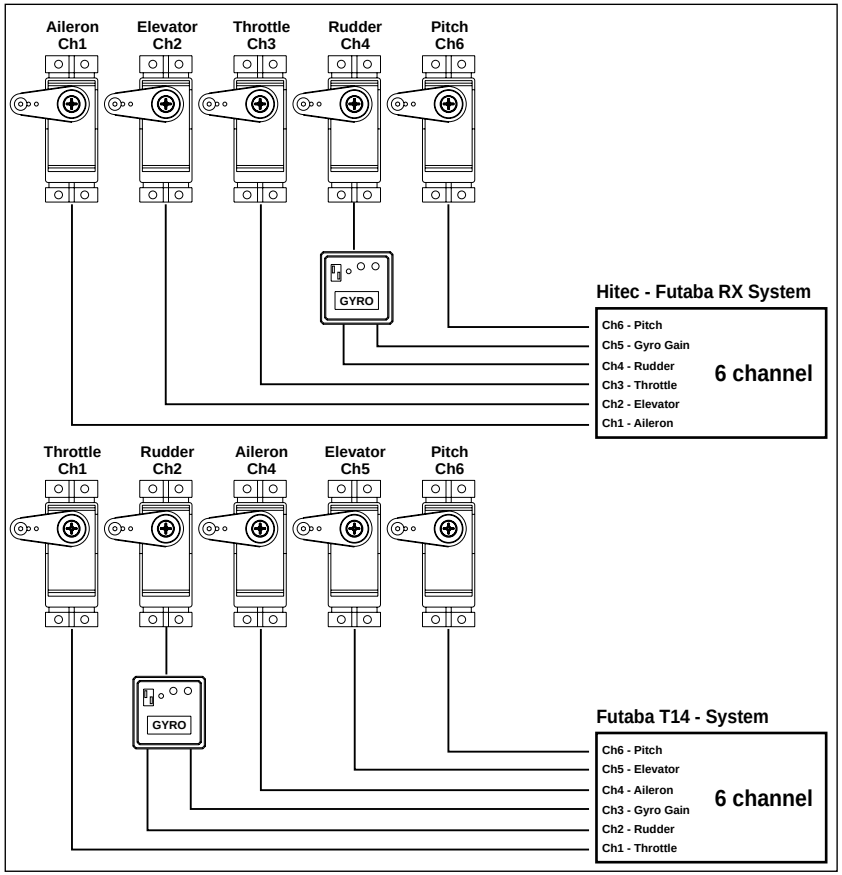
Item	Code	Description	Q.ty
1	8003603A	Canopy FG V90c Painted RED (R1.00)	1
2	8004300A	Rubber Grommets	4

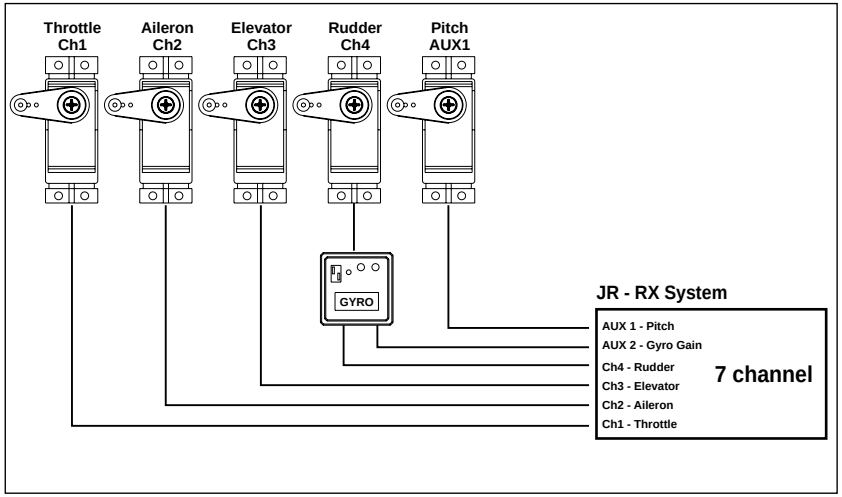
Fuel Tube and Muffler Setting



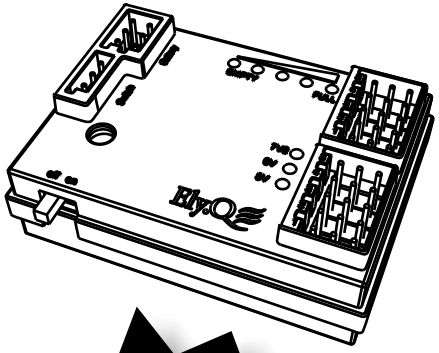

PITCH: CH6
AILERON: CH1
ELEVATOR: CH2
AILERON: CH1
PITCH: CH6
Hitec - Futaba


PITCH: CH6
AILERON: CH2
ELEVATOR: CH3
AILERON: CH2
PITCH: CH6
JR


Aileron Ch1
Elevator Ch2
Throttle Ch3
Rudder Ch4
Pitch Ch6
GYRO
Hitec - Futaba RX System
Ch6 - Pitch
Ch5 - Gyro Gain
Ch4 - Rudder
Ch3 - Throttle
Ch2 - Elevator
Ch1 - Aileron
6 channel
Throttle Ch1
Rudder Ch2
Aileron Ch4
Elevator Ch5
Pitch Ch6
GYRO
Futaba T14 - System
Ch6 - Pitch
Ch5 - Elevator
Ch4 - Aileron
Ch3 - Gyro Gain
Ch2 - Rudder
Ch1 - Throttle
6 channel


Throttle Ch1
Aileron Ch2
Elevator Ch3
Rudder Ch4
Pitch AUX1
GYRO
JR - RX System
AUX 1 - Pitch
AUX 2 - Gyro Gain
Ch4 - Rudder
Ch3 - Elevator
Ch2 - Aileron
Ch1 - Throttle
7 channel

Ely.Q®



V 2

OPTIONAL

8900203A

ElyQ annuncia la disponibilità della versione "**V2**" del Voltage Regulator con la nuova funzione LVD (Low Voltage Detector).
Questa funzione permette, durante il volo, di leggere e memorizzare il valore minimo di tensione raggiunto dalla batteria.
Finito il volo è possibile, prima di spegnere l'elicottero a cui è collegato, leggere il valore minimo di tensione raggiunto durante il volo tramite il relativo led lampeggiante.
Nel qual caso si evidenzino valori minimi eccessivamente bassi (segnalati dai led arancione o rosso lampeggianti), si potrà ricondurre la segnalazione a quattro possibili cause:

- batteria scarica;
- batteria vecchia;
- batteria non dimensionata adeguatamente;
- non adeguato dimensionamento della sezione dei cavi della batteria;
- batteria connessa, erroneamente, con un solo connettore.

ElyQ is proud to announce the new version **V2** of the Voltage Regulator including the new function LVD (Low Voltage Detector).
This feature enables the pilot to read and keep in memory during the flight the minimum voltage value reached by the battery.
After the flight and before switching the connected helicopter off the minimum power value reached is readable looking at the blinking of the respective led.
In case that minimum values are excessively low (this is outlined with the led flashing orange or red), this may depend on one of the cases listed here below::

- low battery
- old battery
- wrong battery size
- wrong settlement of the battery cables size
- battery connected, by mistake, with only one connector

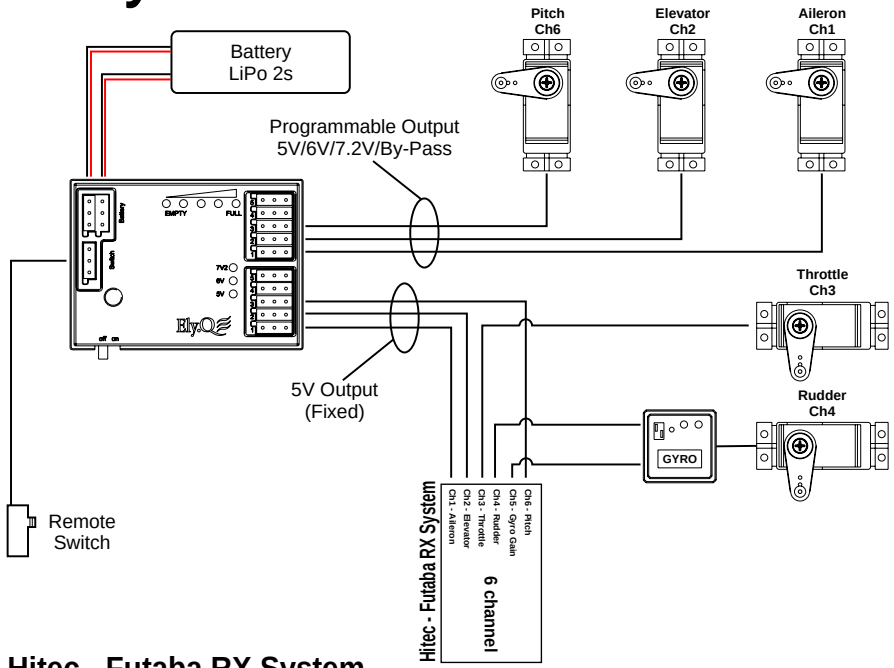
HEADQUARTERS
Strada di Oselin, 39
Remanzacco (UD) - ITALY
Tel. +39 (0432) 66.70.35
Fax +39 (0432) 64.93.78

Http://www.elyq.com
e-mail: info@elyq.com

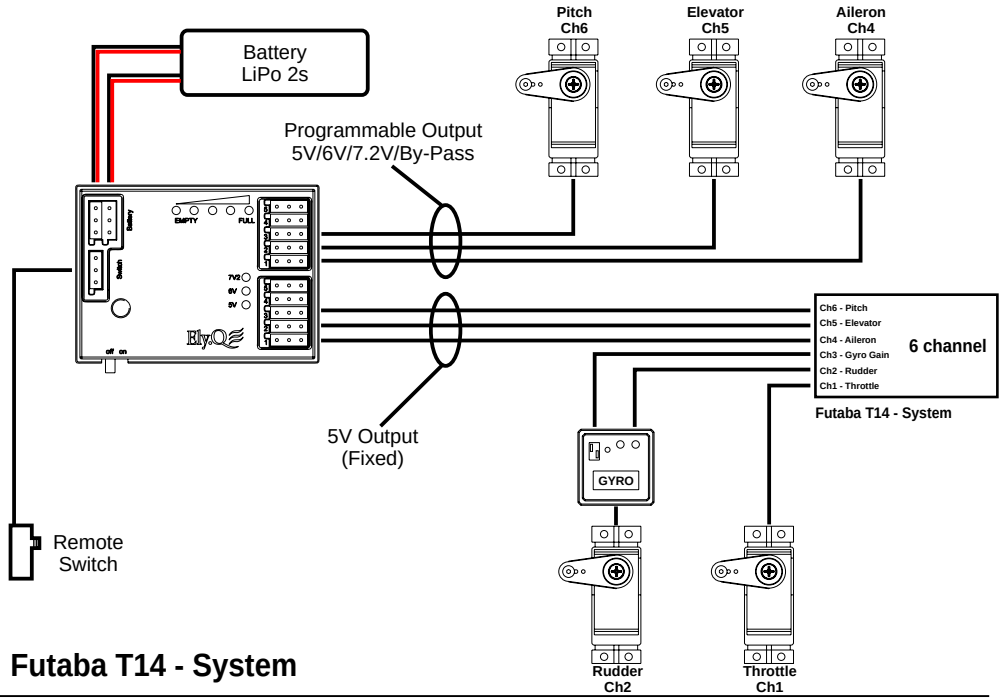
CHINA
G/F shop 1. no.30 Ha Heung Road Tok
Wawan, Kowloon
Shenzhen - China

Voltage Regulator-Installation Guidelines

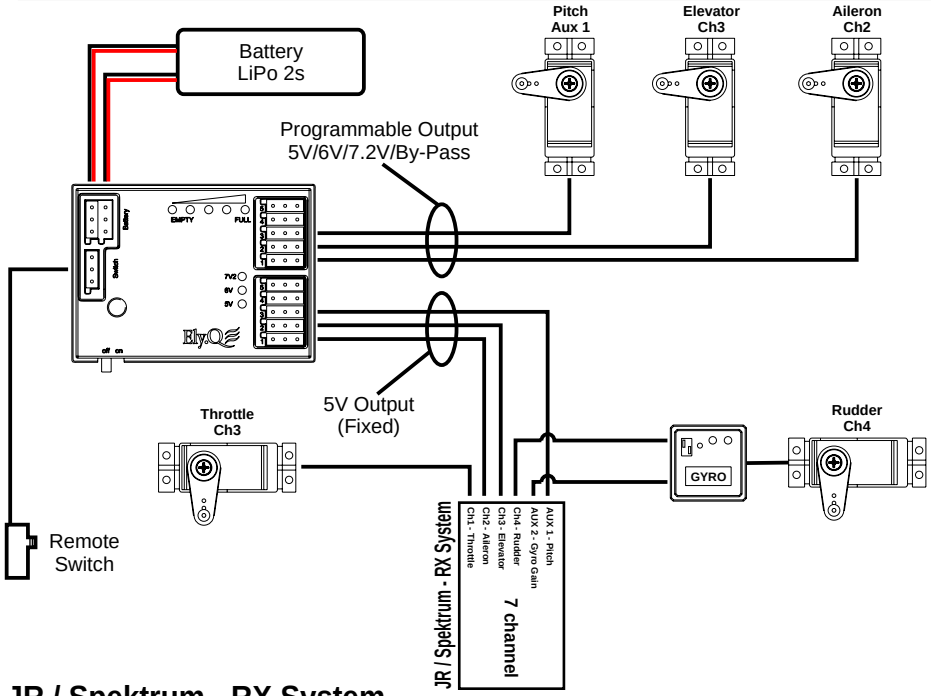
Voltage Regulator (Hitec/Futaba/JR/Spektrum RX System)



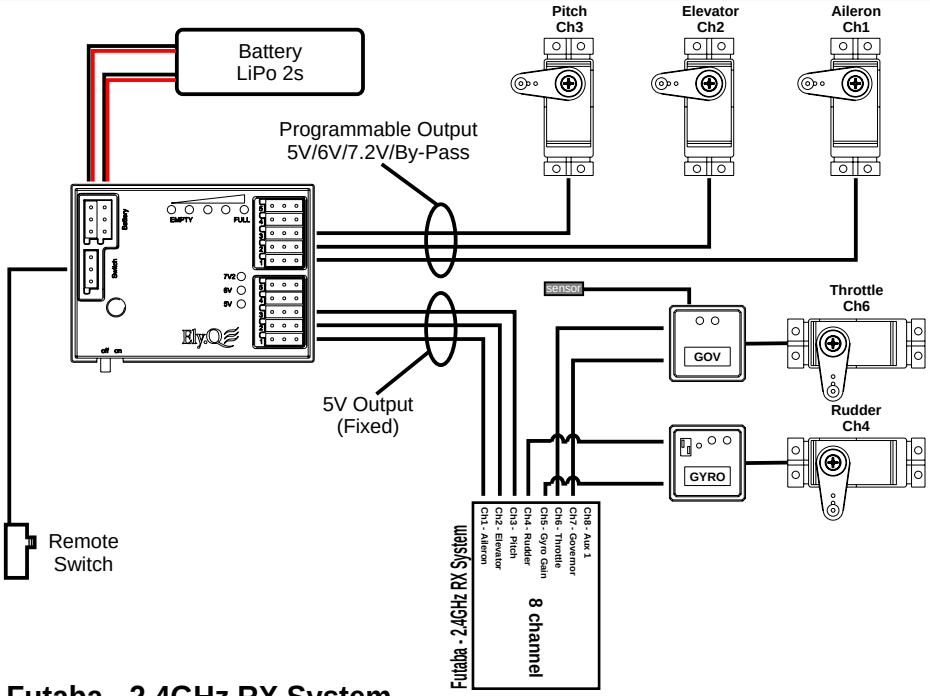
Hitec - Futaba RX System



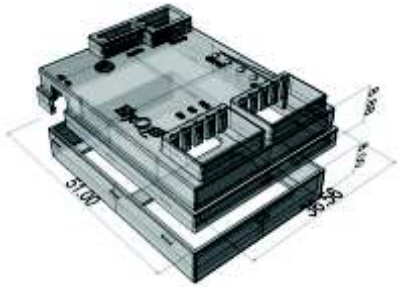
Futaba T14 - System



JR / Spektrum - RX System



Futaba - 2.4GHz RX System



Manuale Regolatore di Tensione
Voltage Regulator User's Manual
Spannungsregler Handbuch

Caratteristiche principali

Dimensioni ridotte: 50 x 37 x 13 mm
Peso: 20g
Tipi batterie supportate:
Lipo, LiFe, Lion (due celle)
NiCd, NiMh (da 5 a 7 celle)
V-Meter di precisione
Non necessari circuiti di step-down
Tensione di uscita programmabile

Main Features

Reduced Dimensions: 50 x 37 x 13 mm
Light weight: 20g
Multi battery type:
Lipo, LiFe, Lion (two cells)
NiCd, NiMh (5 to 7 cells)
Precision V-Meter
Local and remote switch
No need to use step-down circuits
Programmable output voltage

Technische Daten

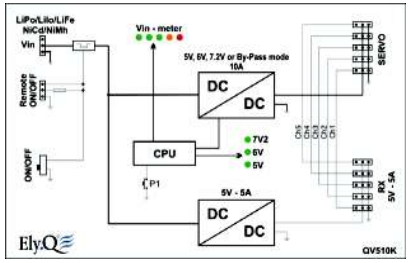
Größe: 50 x 37 x 13 mm
Gewicht: 20g
Einstellbare Akkutypen:
Lipo, LiFe, Lion (2 Zellen)
NiCd, NiMh (von 5 bis 7 Zellen)
Präzision Voltmeter
Es wird kein Step-down benötigt
Programmierbare Ausgangsspannung

Introduzione

ElyQ ha una provata esperienza nel campo della elettronica di potenza soprattutto per quanto concerne convertitori AC/DC, DC/AC e UPS (gruppi di continuità). Nel campo dei modelli RC c'è un grande interesse per tali dispositivi, e per questo motivo è stato sviluppato un **Regolatore di Tensione** professionale. Le principali caratteristiche del regolatore sono le seguenti:

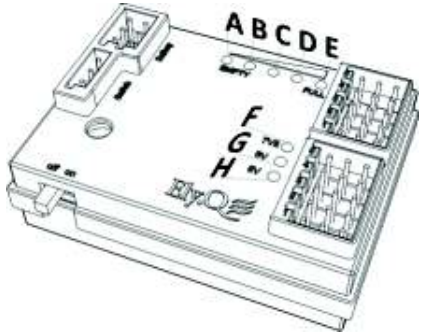
- **Uscite separate**: una uscita a 5V (5A) dedicata espressamente alla ricevente (RX), che garantisce una corrente stabile evitando disturbi legati alla alimentazione. L'altra uscita può essere programmata in quattro modalità (5V, 6V, 7,2V e by-pass), e ha ottime caratteristiche di potenza supportando l'ultima generazione di servi (sono gestiti spunti di corrente da 10A fino a 100A).
- **Peso ridotto**: sia il peso (20 g circa) che le dimensioni (50 x 37 x 13 mm) sono minime.
- **Tipi batterie**: si possono usare batterie Lipo, LiFe, Lion, NiCd e NiMh. Per le Lipo, LiFe e Lion, si possono utilizzare solo 2 celle, mentre batterie del tipo NiCd possono avere da 5 a 7 celle. In questo modo si garantisce una ottima flessibilità e si aumenta la vita delle batterie.
- **V–Meter di precisione**: in ogni istante si controlla lo stato di carica delle batterie con un V-Meter a 5 led.
- **Consumo ridotto (modalità OFF)**: spegnendo il dispositivo si reduce la scarica delle batterie (l'utente potrebbe non averle sconnesse e/o non utilizzate per lungo tempo). Il layout del circuito (congiuntamente al fatto che la ricevente è alimentata separatamente), evita l'utilizzo di ulteriori filtri nel circuito di alimentazione. Inoltre, per la configurazione avanzata, si utilizza un microprocessore.

Segue una breve descrizione funzionale del regolatore:



Configurazione regolatore

Per entrare in modalità configurazione (**Setup Mode)**, il regolatore deve essere acceso tenendo premuto il tasto P1: il gruppo di cinque led del V-Meter inizierà a lampeggiare indicando il nuovo stato.



Per modificare il valore della tensione in uscita premendo brevemente il pulsante P1. Si possono scegliere 4 differenti tensioni di uscita:

- **Mode1**: uscita 5V in continua (DC), LED H ON.
- **Mode2**: uscita 6V in continua (DC), LED G ON.
- **Mode3**: uscita 7.2V in continua (DC), LED F ON.
- **Mode4 – ByPass**: la tensione di ingresso è uguale alla tensione di uscita ed il gruppo di led F,G,H LED è ON.

Una volta selezionata la tensione, è possibile selezionare il tipo di batteria (**BATTERY TYPE SETUP MODE)** premendo per almeno tre secondi il tasto P1.

Selezione tipo batteria

Scegliere il tipo di batteria premendo brevemente il tasto P1. Si possono scegliere 4 tipi di batterie::

- **Li-Po / Li-Fe**: LED A ON
- **Li-Ion**: LED B ON
- **NiCd**: LED C ON
- **NiMh**: LED D ON

Per confermare la selezione, tener premuto il tasto P1 per almeno 3 secondi. In questo modo si uscirà anche dalla modalità configurazione.

Nota: per batterie del tipo NiCd o NiMh, è necessario specificare anche il numero di celle. Scegliere tale numero premendo brevemente il tasto P1. E' possible scegliere tra:

- **5 celle**: LED A ON
- **6 celle**: LED A e B ON
- **7 celle**: LED A, B e C ON

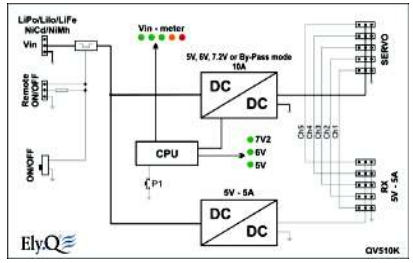
Per confermare la selezione, tener premuto il tasto P1 per almeno 3 secondi. In questo modo si uscirà anche dalla modalità configurazione.

Introduction

ElyQ has developed a wide experience in the field of converting power energy, through a specific unit that has been working for years in this area developing AC/DC, DC/DC and UPSs (also of a high power – up to 60KW). The market of RC models has revealed a big deal of interest for these devices, inducing ElyQ to realize the lightest and most reliable version of Voltage Regulator (about 20gr). The main features of the device can be summarized as follows:

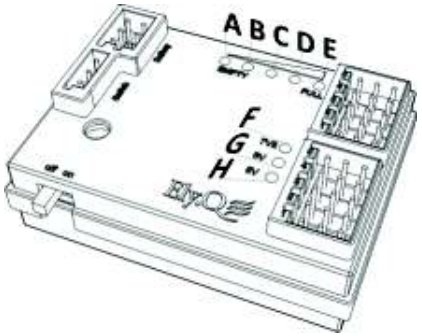
- **Separate outputs**: first output at 5V (5A) dedicated to RX, guarantees perfect current avoiding troubles induced by power services. The other output can be programmed (5V, 6V, 7.2V or bypass mode - current reaches directly the final output) and has a formidable power capacity in order to support the last generation of high peak servos (from 10A to 100A).
- **Light Weight**: about 20 g and reduced dimensions (50 x 37 x 13 mm).
- **Multi battery type**: the regulator support Lipo, LiFe, Lion, NiCd and NiMh batteries. In the case of Lipo, LiFe and Lion, only 2 cells are foreseen, while NICD batteries can have from 5 up to 7 cells. It is obvious that the possibility of programming batteries is a good enhancement for peak current and life of themselves.
- **Precision V – Meter**: the user can check the charging of the batteries through 5 leds.
- **Very low consumption in OFF mode**: useful to reduce the problem of discharging, either if the user forgets the battery plugged or if the limit is over due when not in use for a long time. The layout, the circuital typology and the fact that RX is supplied separately, avoid the need of further filters on the power supply circuit. The programmability management is allowed trough a microprocessor.

In the picture below, there is a short description of the regulator:



Regulator Configuration

In order to enter in the **Setup Mode**, the regulator must be switched on keeping pressed the P1 button. The upper group of 5 LEDs start blinking and the Voltage Regulator enters Setup Mode.



It is now possible to change the voltage output by pressing the P1 button shortly. There are 4 different output modes:

- **Mode1**: 5V DC output, LED H ON.
- **Mode2**: 6V DC output, LED G ON.
- **Mode3**: 7.2V DC output, LED F ON.
- **Mode4 – ByPass**: the output voltage is equal to the input voltage and the F,G,H LED Group is ON.

When the desired voltage has been selected, hold the P1 button pressed for about 3 seconds, in order to enter the **BATTERY TYPE SETUP MODE**.

Battery Type Setup Mode

Choose the type of batteries by pressing the P1 button shortly. It is possible to choose between 4 different types of batteries:

- **Li-Po / Li-Fe**: LED A ON
- **Li-Ion**: LED B ON
- **NiCd**: LED C ON
- **NiMh**: LED D ON

Once selected the battery type, hold the P1 button pressed about 3 seconds to exit the setup mode.

Warning: for NiCd or NiMh batteries, it is necessary to define the cell number. Please select the value by pressing shortly the P1 button. It is possible to choose between:

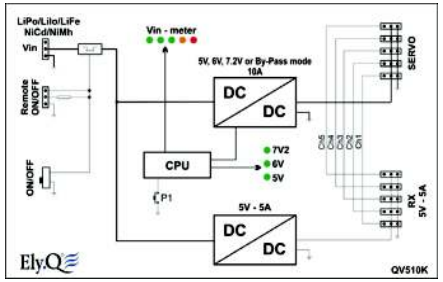
- **5 cells**: LED A ON
- **6 cells**: LED A and B ON
- **7 cells**: LED A, B and C ON

Hold the P1 button pressed for at least 3 seconds in order to confirm the selection and to exit the configuration process.

Einleitung

ElyQ hat eine lange Erfahrung im Bereich der Leistungselektronik, was AC/DC, DC/AC- Konverter und UPS (Kontinuitätsgruppen) angeht. Im RC Bereich gibt es ein großes Interesse für diese Vorrichtungen und deshalb wurde ein professioneller Spannungsregler entwickelt. Der Regulator besitzt folgende Eigenschaften:

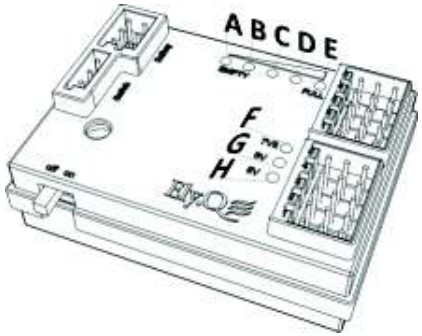
- **Getrennte Ausgänge:** Ein Ausgang mit 5V (5A), der ausdrücklich für den Empfänger (RX) gedacht ist und der eine ständige Spannung garantiert, um Spannungsprobleme zu vermeiden. Der zweite Ausgang kann programmiert werden (5V, 6V, 7,2V oder Bypass). Dieser ist für Stromspitzen von 10A bis zu 100A geeignet, womit auch die neuste Generation von Servos betrieben werden können.
- **Kompakt**: Das Gewicht (ca. 20 g) und die Dimensionen (50 x 37 x 13 mm) sind sehr kompakt. Dadurch findet der Regulator überall Platz.
- **Akkutypen**: Man kann Lipo, LiFe, Lion, NiCd und NiMh Batterien benutzen. Bei Verwendung von Lipo, LiFe und Lion kann man nur 2 Zellen benutzten, bei NiCd- und NiMH -Akkus können 5 bis 7 Zellen genutzt werden. Auf diese Weise sind hohe Flexibilität und lange Akkulaufzeiten garantiert.
- **Präzisions V–Meter**: Durch die 5-LED-Anzeige kann man einfach und schnell den Ladungszustand des Akkus prüfen.
- **Geringer Verbrauch (Mode OFF)**: Im ausgeschalteten Zustand entsteht keine Entladung des Akkus (bei langer Nichtnutzung). Das Layout der Schaltung, insbesondere die Tatsache, dass die Spannungsversorgung des Empfängers separat ist, macht eine Verwendung von weiteren Filtern unnötig. Außerdem wird ein Mikroprozessor zum programmieren benutzt.



Nachfolgend das Schema des Regulators:

Einstellung der Spannung

Zum Aufruf der Programmierfunktion muss der Spannungsregler eingeschaltet und die Taste P1 gedrückt sein. Die Taste P1 gedrückt halten und den Spannungsregler einschalten. Die obere Gruppe mit den 5 LEDs blinkt und der Spannungsregler geht in den Programmiermodus über.



Durch kurzes Antippen der Taste P1 kann nun die Ausgangsspannung gewählt werden.
Es stehen vier verschiedene Ausgangsspannungen zur Verfügung:

- **Modus 1**: 5V DC Ausgang, LED H leuchtet
- **Modus 2:** 6V DC Ausgang, LED G leuchtet
- **Modus 3:** 7.2V DC Ausgang, LED F leuchtet
- **Modus 4:** Bypass: Eingangsspannung= Ausgangsspannung (Vout = Vin), LEDs F,G,H leuchten

Nachdem die gewünschte Spannung gewählt wurde, die Taste P1 noch 3 Sekunden gedrückt halten, dadurch wird auf die nächste Programmierfunktion umgeschaltet: EINSTELLUNG DES AKKUTYPS.

Einstellung des Akkutyps:

Die Art des zu verwendenden Akkus durch kurzes Antippen der Taste P1 wählen.
Es stehen 4 Akkutypen zur Wahl:

- **Li-Po / Li-Fe:** LED A leuchtet
- **Li-Ion:** LED B leuchtet
- **NiCd:** LED C leuchtet
- **NiMh:** LED D leuchtet

Nachdem der gewünschte Akkutyp gewählt wurde, die Taste P1 noch 3 Sekunden gedrückt halten. Wenn der Batterietyp Li-Po/Li-Fe oder Li-Ion gewählt wurde, wird damit die Programmierfunktion verlassen.
Wenn dagegen der Batterietyp NiCd oder NiMh gewählt wurde, muss nun die Anzahl der Zellen des Batteriepakets angegeben werden.
Die Anzahl der zu verwendenden Zellen durch kurzes Antippen der Taste P1 wählen.
Es kann gewählt werden zwischen:

- **5 Zellen**: LED A leuchtet
- **6 Zellen**: LEDs A und B leuchten
- **7 Zellen**: LEDs A, B und C leuchten

Nachdem die gewünschten Anzahl von Batteriezellen gewählt wurde, die Taste P1 noch 3 Sekunden gedrückt halten, um die Programmierfunktion zu verlassen.

HEADQUARTERS
Strada di Oselin, 39
Remanzacco (UD) / ITALY
Tel. +39 (0432) 66.70.35
Fax +39 (0432) 64.93.78

Http://www.elyq.com
e-mail: info@elyq.com

CHINA
G/F shop 1. no.30 Ha Heung Road Tok
Wawan, Kowloon
Shenzhen - China

NOTE:
Additional information on this product and answers to frequently asked question can be found at our Customer Support Website.

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Ulteriri informazioni su questo prodotto e risposte alle domande più comuni sono reperibili sul nostro sito Web di Assistenza tecnica.

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HINWEIS:
Zusätzliche Informationen über dieses Produkt und Antworten auf häufig gestellte Fragen finden Sie auf unserer Customer Support-Website.

Gedruckt in Italien

NOTE:
Des informations complémentaires sur ce produit et des réponses à des questions fréquemment posées sont disponibles sur notre site Web d'assistance client.

Printed in Italy

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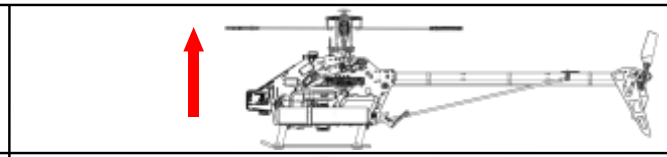
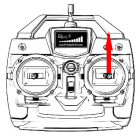
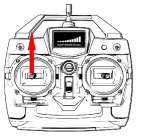
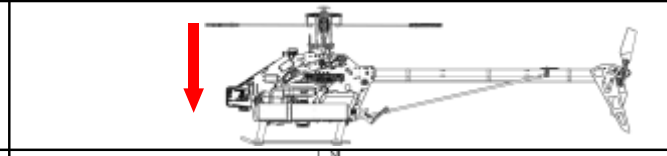
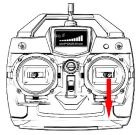
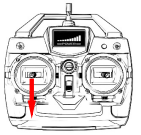
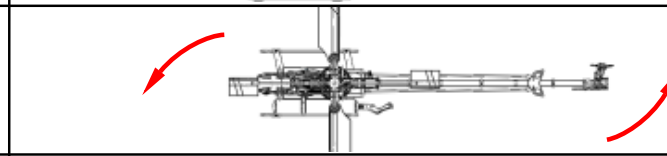
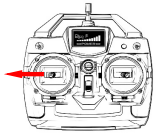
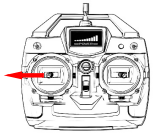
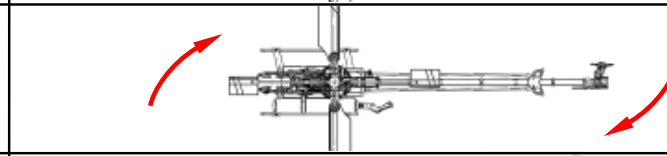
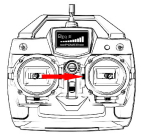
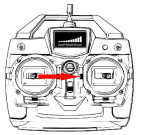
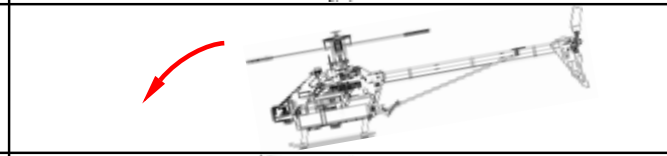
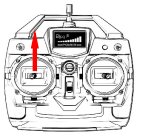
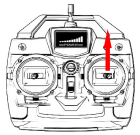
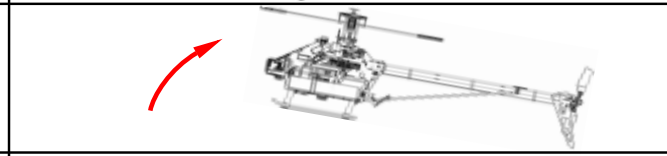
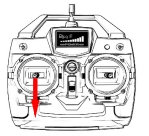
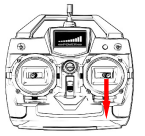
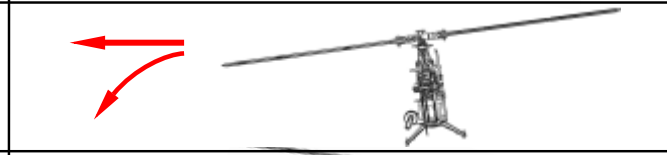
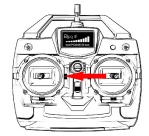
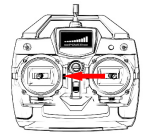
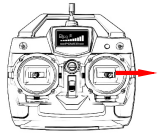
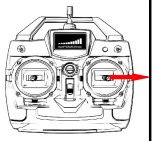
Flight Adjustment and settings

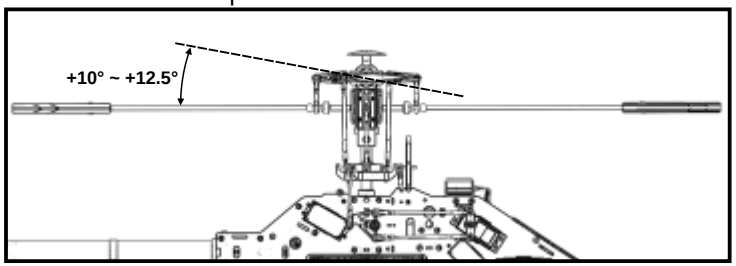
Tutti i comandi fanno riferimento al modello visto da dietro.
All inputs refer to the model seen from the rear side.

			Mode 1		Mode 2	
Salita	Ascent			Spingere in avanti lo stick dell'Acceletatore		Push up the throttle stick
Discesa	Descent			Spingere indietro lo stick dell'Acceletatore		Push down the throttle stick
Rotazione a sinistra	Head left rotation			Spostare a sinistra lo stick del Rotore di Coda		Move to the left the tail Rotor stick
Rotazione a destra	Head right rotation			Spostare a destra lo stick del Rotore di Coda		Move to the right the tail Rotor stick
Picchia	Pitch down/ nose down			Spingere in avanti lo stick dell'Elevatore		Push up the Elevator stick
Cabra	Pitch up/ nose up			Spingere indietro lo stick dell'Elevatore		Push down the Elevator stick
Trasla a sinistra	Translate to the left			Spostare a sinistra lo stick degli Alettoni		Move to the left the Ailerons stick
Trasla a destra	Translate to the right			Spostare a destra lo stick degli Alettoni		Move to the right the Ailerons stick

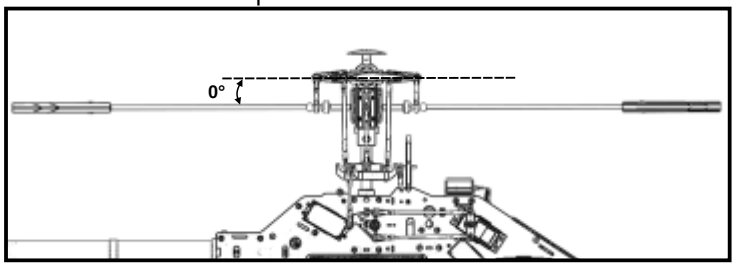
Pitch and Throttle setting

SETUP FOR NORMAL FLIGHT

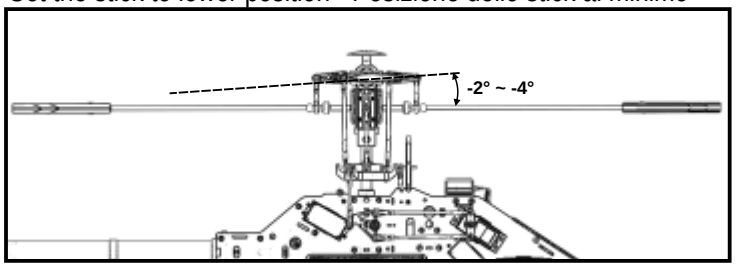
Set the stick to max position - Posizione dello stick al massimo

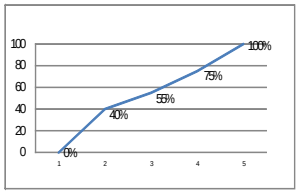


Set the stick to middle position - Posizione dello stick al centro

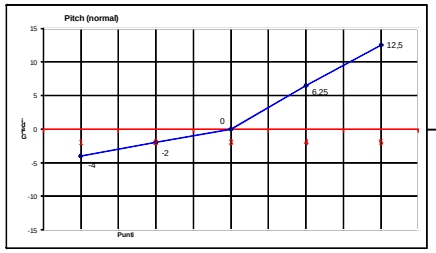


Set the stick to lower position - Posizione dello stick al minimo





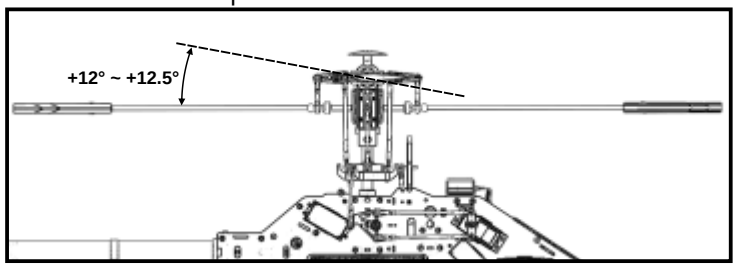
Throttle - NORMAL



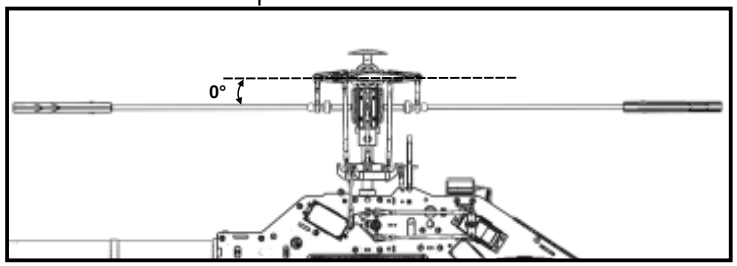
Pitch - NORMAL

SETUP FOR 3D FLIGHT - HOLD

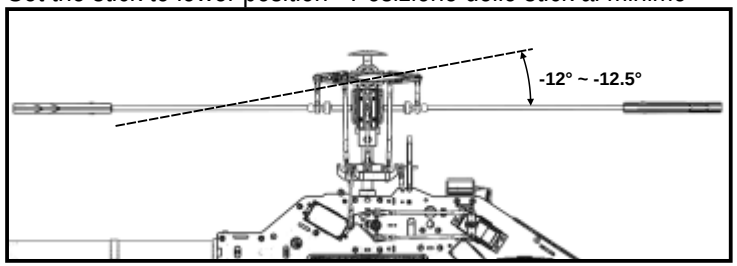
Set the stick to max position - Posizione dello stick al massimo

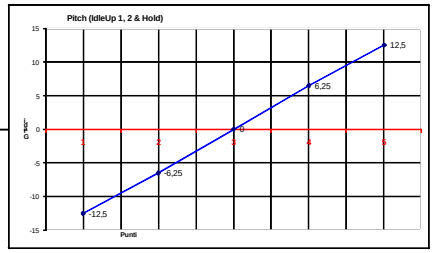


Set the stick to middle position - Posizione dello stick al centro

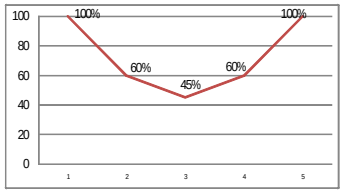


Set the stick to lower position - Posizione dello stick al minimo

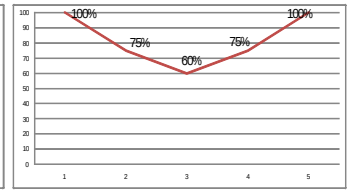




Pitch - IDLE 1, IDLE 2, HOLD



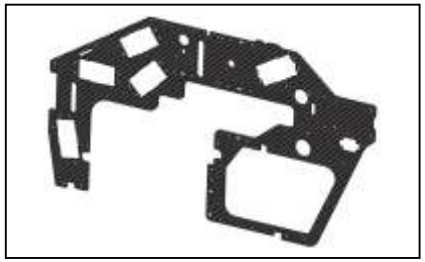
Throttle - IDLE 1, HOLD



Throttle - IDLE 2

Se durante il volo il motore tende al sovraccarico, modificare e se necessario ridurre i valori del passo.

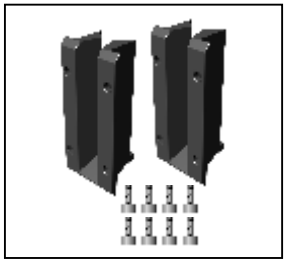
If the engine overloads, you need to reduce pitch values.

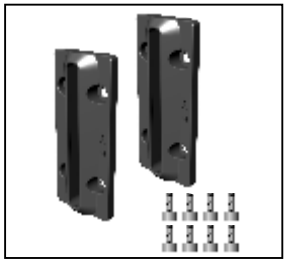

EQ90001 Main Frame C.F. 2mm (V90c)

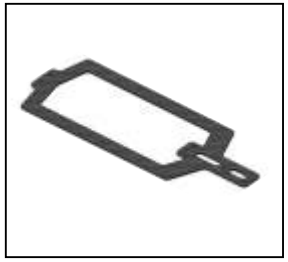
EQ90002 Side Plate Set C.F. 2mm (V90c)

EQ90003 Engine Fan Conveyor (V90c)

EQ90004 Fuel Tank (V90c)

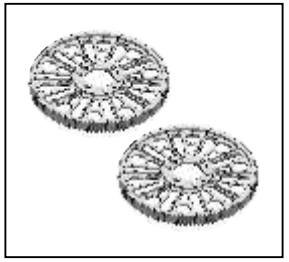

EQ90005 FlyBar SeeSaw Guide (V90c)


EQ90006 Flybar Guide Set (V90c)

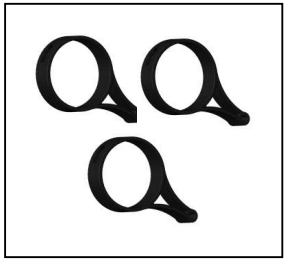

EQ90007 C.F. Bottom Plate 2mm (V90c)

EQ90008 C.F. Support Frame 2mm (V90c)

EQ90009 C.F. Frame Brace Set (V90c)

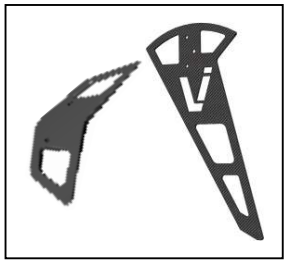

EQ90010 115T Main Spur Gear M1

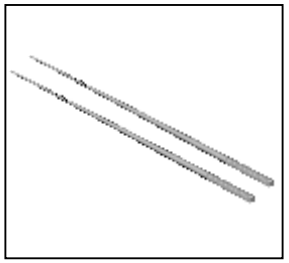
EQ90011 Auto Rotation Gear M1 (V90c)

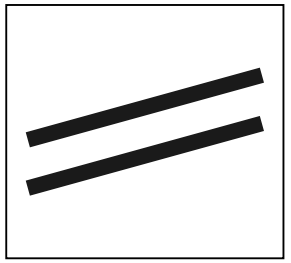

EQ90012 Tail Rod Guide (V90c)

EQ90013 Flybar Plastic Ball Link

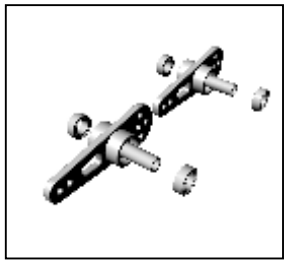
EQ90014 Control FlyBar Set (V90c)


EQ90015 Carbon Fiber Tail Fin (V90c)


EQ90016 Flaybar Rod (V90c)


EQ90017 Clutch Liner (V90c)

EQ90018 Main Rotor Pitch Housing (V90c)


EQ90019 Mixing Lever (V90c)

EQ90020 Motor Mount Center (V90c)

EQ90021 Motor Mount Side Set (V90c)

EQ90022 Control Flybar Rod Set (V90c)

EQ90023 Center Hub (V90c)

EQ90024 One Way Autor. Shaft (V90c)

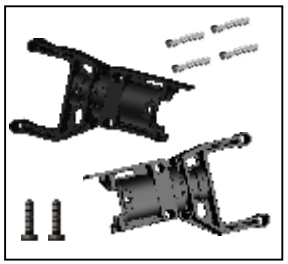
EQ90025 Starter Shaft (V90c)

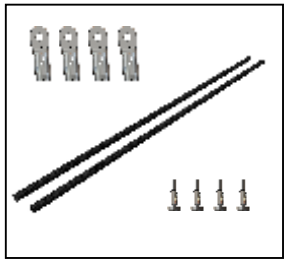
EQ90026 Spindle (V90c)

EQ90027 Main Shaft (V90c)

EQ90028 14T Drive Pinion M1

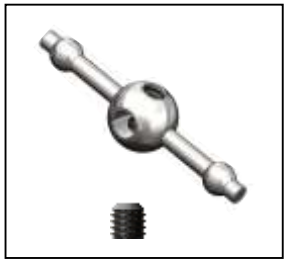
EQ90029 Clutch Bell (V90c)


EQ90030 Tail Boom Case (V90c)



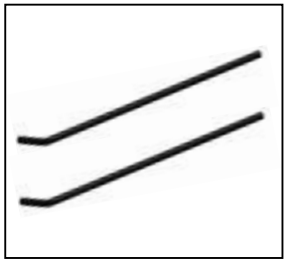
EQ90031 Carbon Tail Boom Brace Set (V90c)

EQ90032 Main Shaft Lock Ring (V90c)

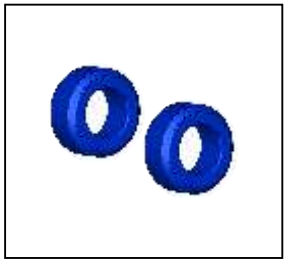


EQ90033 Flybar Seesaw Lever (V90c)

EQ90034 FAI Swash Plate Assy (V90c)



EQ90035 Skid pipe set (V90c)



EQ90036 Flap Dampers (V90c)

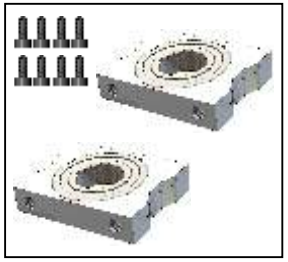
EQ90037 Blade Holder (V90c)

EQ90038 Stabilazer Fin bracket (V90c)

EQ90039 Fan HUB (V90c)

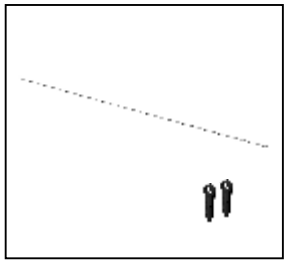
EQ90040 Flybar Collar Set (V90c)

EQ90041 Oneway Autorotation Set (V90c)

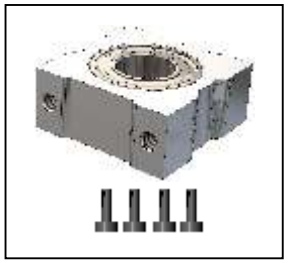


EQ90042 Main Rotor Support (V90c)

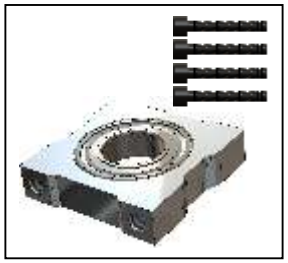
EQ90043 Tail Boom Brace End Spacer (V90c)



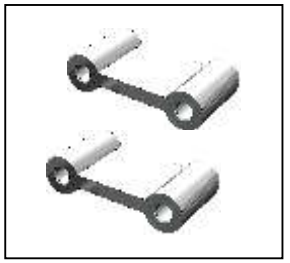
EQ90044 SUS Rear Servo Rod (V90c)



EQ90045 Pinion Drive Support (V90c)

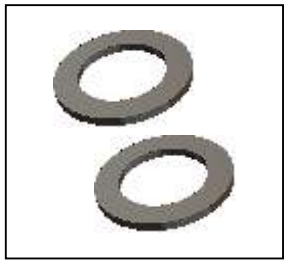


EQ90046 Lower Third Block Set (V90c)



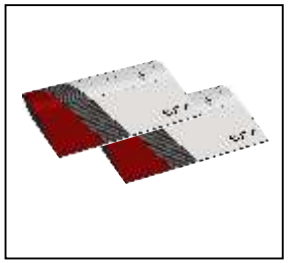
EQ90047 Frame Spacer Large (V90c)

EQ90048 Tail Boom Black V90c with Logo

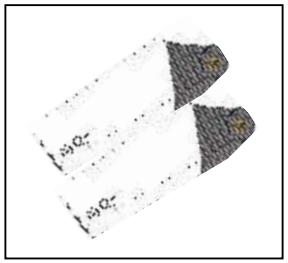


EQ90049 Flap Collar (V90c)

EQ90050 Front Gyro Mount (V90c)

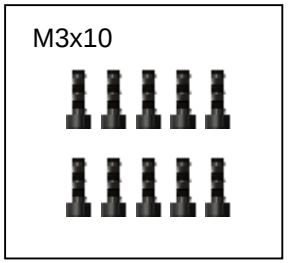


EQ90051 C.F. Flybar Paddle (V90c)

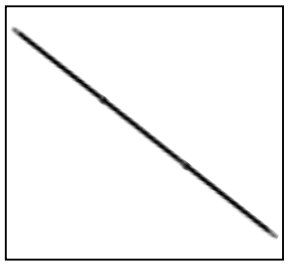


EQ90052 C.F. Tail Rotor Blade (V90c)

EQ90053 Clutch (V90c)



EQ90054 Screw Bag M3x10 (10pcs)

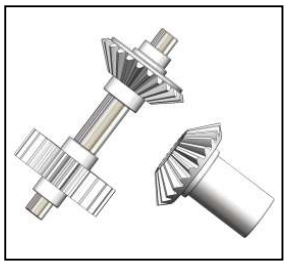


EQ90055 Torque Tube (V90c)

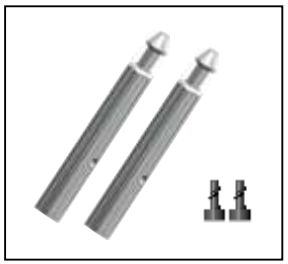
EQ90056 TT Metal Tail Case (V90c)

EQ90057 Tail Rotor Control Arm (V90c)

EQ90058 Tail Pitch set (V90c)

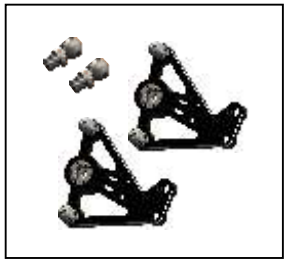


EQ90059 TT Front Drive Gear Set (V90c)



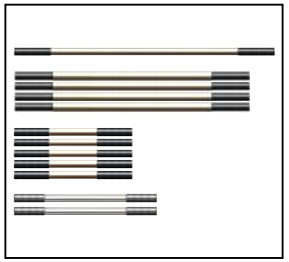
EQ90060 Short Body Retaining Frame (V90c)

EQ90061 Elevator Arm Set (V90c)



EQ90062 Aileron/Pitch Lever Set (V90c)

EQ90063 Push Pull Shaft Set (V90c)



EQ90064 Metal Link Set (V90c)

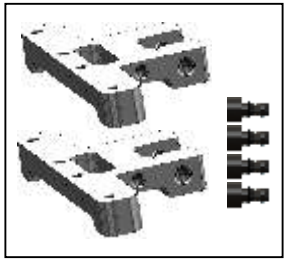
EQ90065 Tail Rotor Shaft Set (V90c)

EQ90066 Thrust Main Rotor Grip (V90c)

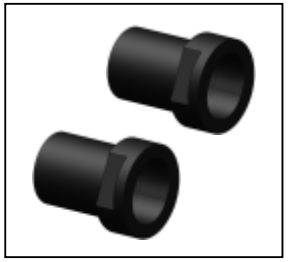
EQ90067 Brg. Main Rotor Grip (V90c)

EQ90068 Main Blade Screws Set (V90c)

EQ90069 Ball Link B M3 (10pcs)



EQ90070 Rear Landing Skid Brace Mount (V90c)



EQ90071 Spindle Sleeve (V90c)

EQ90072 Hook-And-Loop Fastener

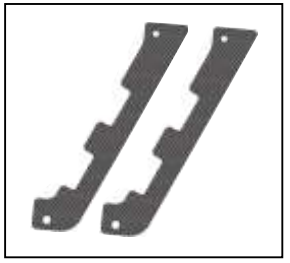
EQ90073 Canopy FG V90c White

EQ90074 Tail Rotor Grip Set (Carbon Reinforced)

EQ90075 FG Painted Canopy "The Lizard"

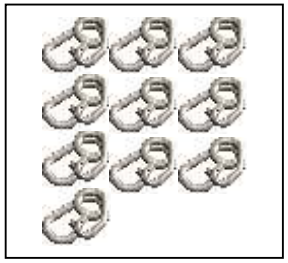
EQ90076 FG Painted Canopy "The Monkey"

EQ90077 FG Painted Canopy "The Parrot"



EQ90078 C.F. Rear Frame Brace (V90c)

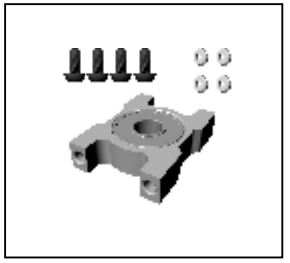
EQ90079 Governor Sensor Mount Set



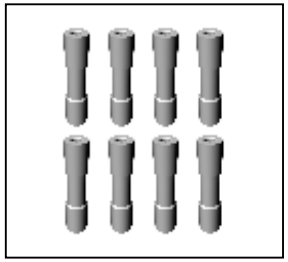
EQ90082 Clutch Spring (V90c)

EQ90083 Tail Rotor Hub (V90c)

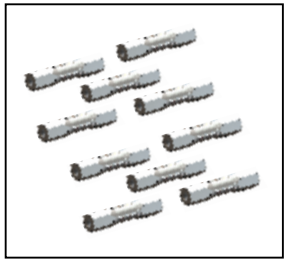
EQ30062 TT Bearing Holder



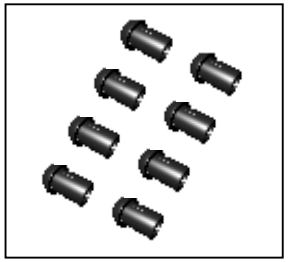
EQ30036 Brg d6,D15,W5 Support (V50c)



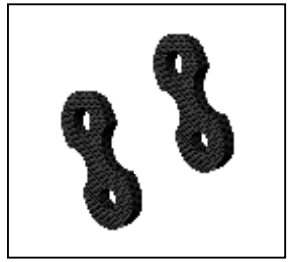
EQ30022 26 mm spacer (V50c)



EQ30068 26mm Hex Metal Mount



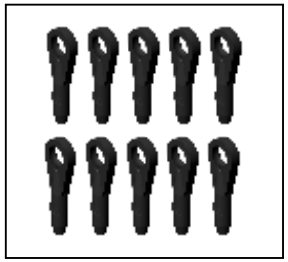
EQ0454B Skid Pipe End Cap



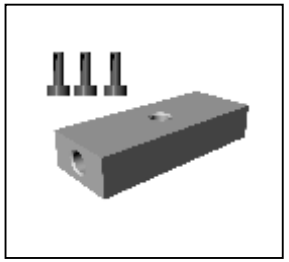
EQ30010 C.F. Breakout Tab 2mm (V50c)

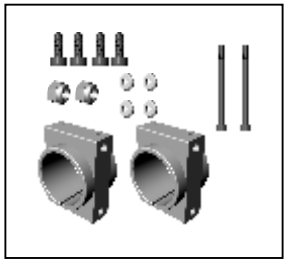
EQ30013 Anti Rotation Bracket (V50c)

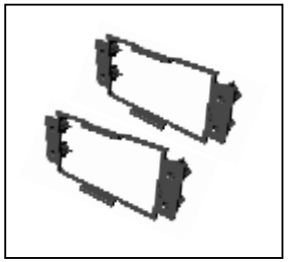
EQ10369 Tail Rotor Grip Set (Metal)

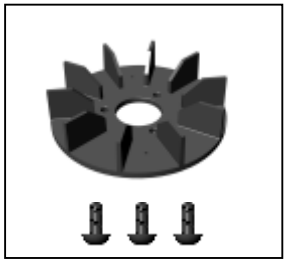

EQ0041V2 Ball Link A

EQ0040V2 Ball Link B

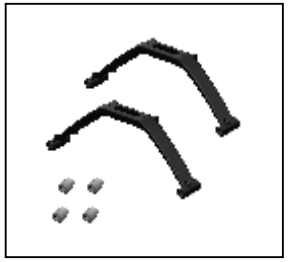

EQ30032 Bottom Reinforcement Block (V50c)


EQ30025 Tail Boom Clamp Set (V50c)


EQ30017 Servo Mount (V50c)

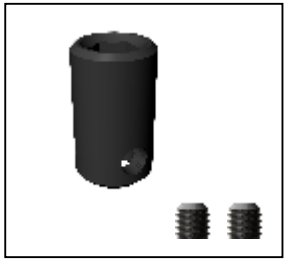

EQ10367 Fan V50c

EQ10370 Angular Bearing d5, D10, W4

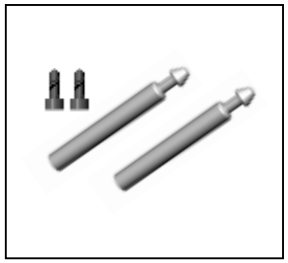

EQ2075-2 3D - Landing Skid Structure Set 2x

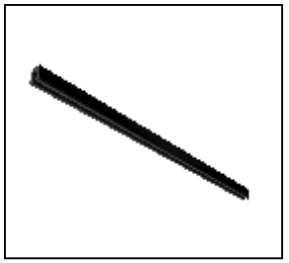
EQ70357 One Way Bearing Grease

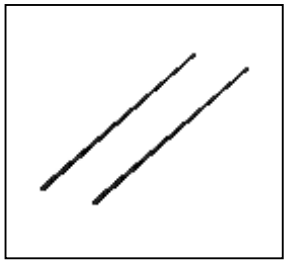
EQ30066 Bearing d12,D18,W4 / d3,D10,W4


EQ0361 Starter HEX Adapter

EQ30007 Radio tray Carbon Reinf. (V50c)

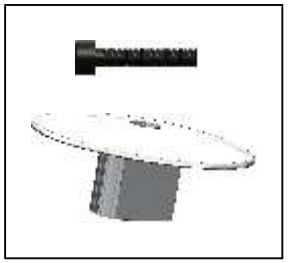

EQ30006 Body Retaining Frame (V50c)

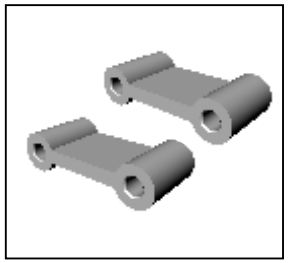

EQ30038 Fuel Tank Rubber Seal (V50c)

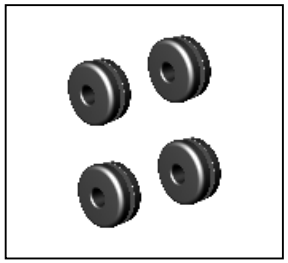

EQ30047 C. F. Rear Servo Rod d3,D4,L220mm

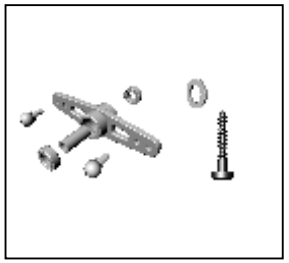
EQ30046 Threaded Coupler d4, M2.3

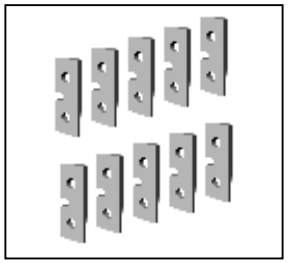
EQ30028 Landing Skid Brace Mount (V50c)

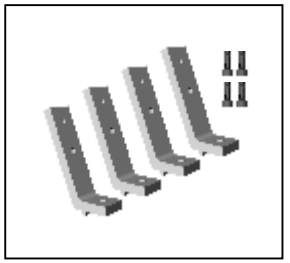

EQ30029 Head Stop (V50c)


EQ30030 Frame Spacer Medium (V50c)

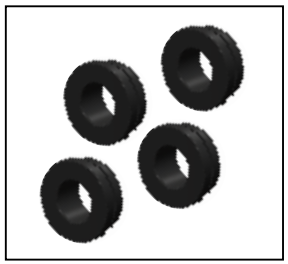

EQ0062 Rubber Grommets (Black)

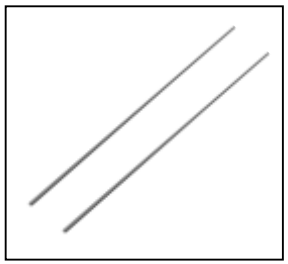

EQ2071 Tail Rotor Bell Crank (Metal)


EQ0054 Servo Mounting Plate


EQ30024 Servo Mount Side Set (V50c)

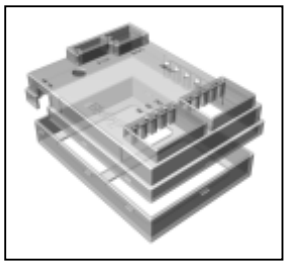
EQ10379 Swash Plate UltraLight (V50)

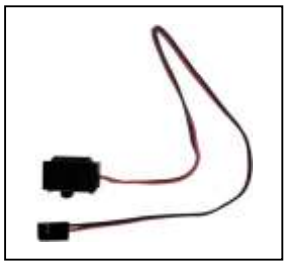

EQ10373 Fuel Tank Grommets (Black)


EQ2001 Antenna Tube

EQ30021 Tail Rotor Bell Cranck Support (V50c)

EQ10381 HiperFan (Metal)

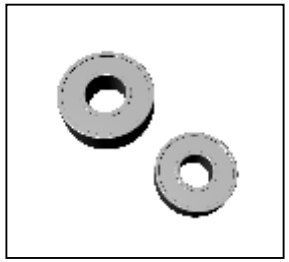

EQ10359 Voltage Regulator Plastic Box


EQ3000 Switch ON/OFF for Voltage Regulator

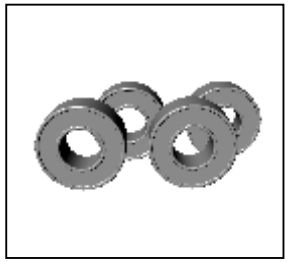
EQ3001 RX cable for Voltage Regulator male/male Futaba housing

EQ3002 RX cable for Voltage Regulator male/male JR housing

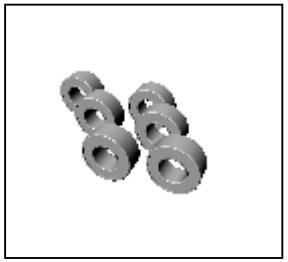
EQ3003 Y Cable for Voltage Regulator



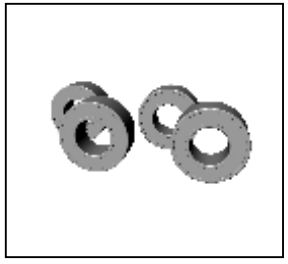
EQ2013 Starter Brg d8,D19,W6-d6,D15,W5



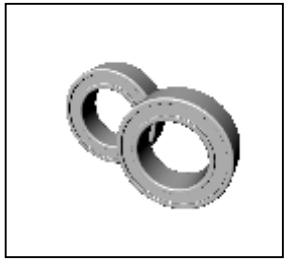
EQ2014 Bearing d6, D13, W5



EQ2011 Bearing d3, D6, W2.5

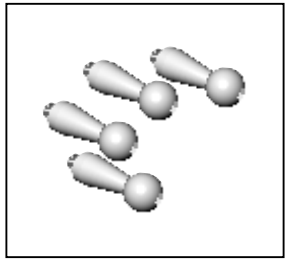


EQ2017 Bearing d5, D10, W4

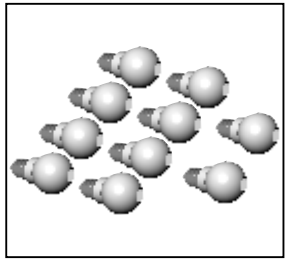


EQ2016 Bearing d6, D10, W3

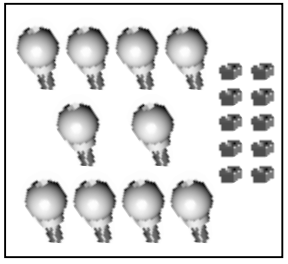
EQ2012 Bearing d4, D7, W2.5



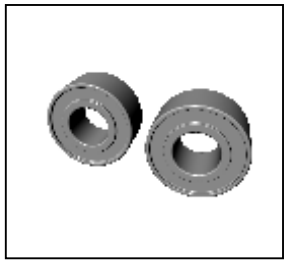
EQ2005 Ball M3 L=11 (stainless steel)



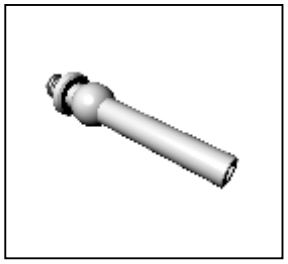
EQ2006 Ball SelfTapp.(stainless steel)



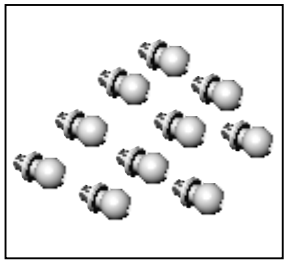
EQ2002 Ball M2 (stainless steel)



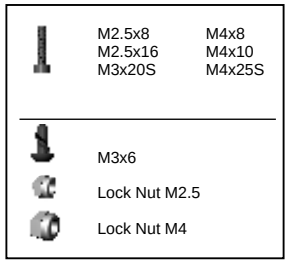
EQ2018 Bearing d5, D11, W5



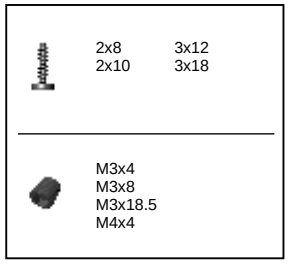
EQ2003 Ball M3 L=20 (stainless steel)



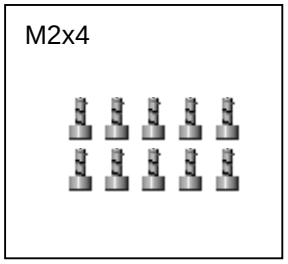
EQ2004 Ball M3 (stainless steel)



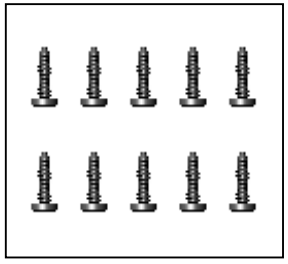
EQ2051 Screw Bag (5pcs each)



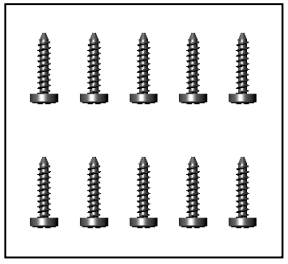
EQ2052 Screw Bag (10pcs each)



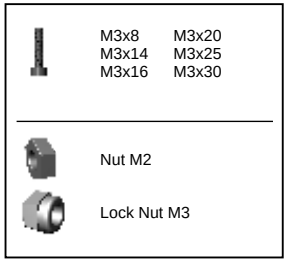
EQ30039 Screw Bag M2x4 (10pcs)



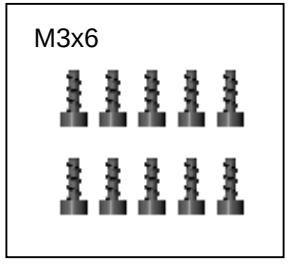
EQ2053 Screw Selftapping 2.6x12



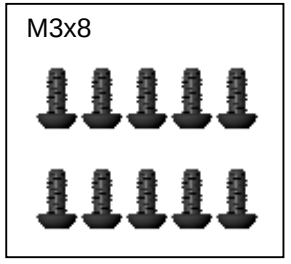
EQ30056 Self-tapping Screw 2.5x16



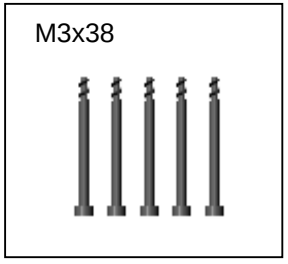
EQ2050 Screw Bag (10pcs each)



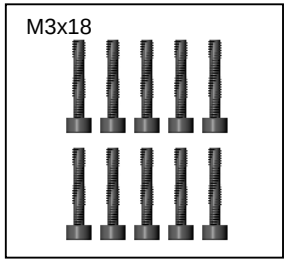
EQ30040 Screw Bag M3x6 (10pcs)



EQ30041 Button Head Screw Bag M3x8 (10pcs)

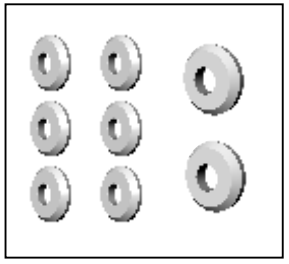


EQ30042 Screw Bag M3x38 (5pcs)

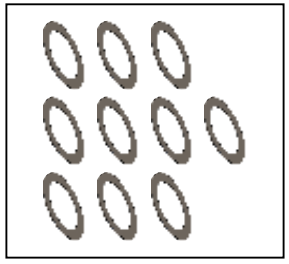


EQ30043 Screw Bag M3x18 (10pcs)

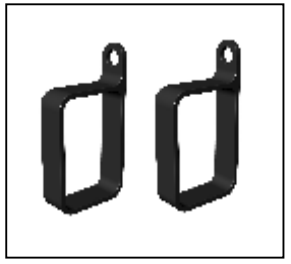
EQ30044 Screw Bag M3x22 (10pcs)



EQ2054 Washer Bag



EQ30074 Washer Shims d5, D7, W0.1 (10pcs)



EQ0312 Header Tank Spare Bracket

Ely.Q®

HEADQUARTERS
Strada di Oselin, 39 - Remanzacco (UD) / ITALY
Tel. +39 (0432) 66.70.35 r.a.
Fax +39 (0432) 64.93.78
Http://www.elyq.com e-mail: info@elyq.com

CHINA
G/F shop 1. no.30 Ha Heung Road Tok
Wawan, Kowloon
Shenzhen - China

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