

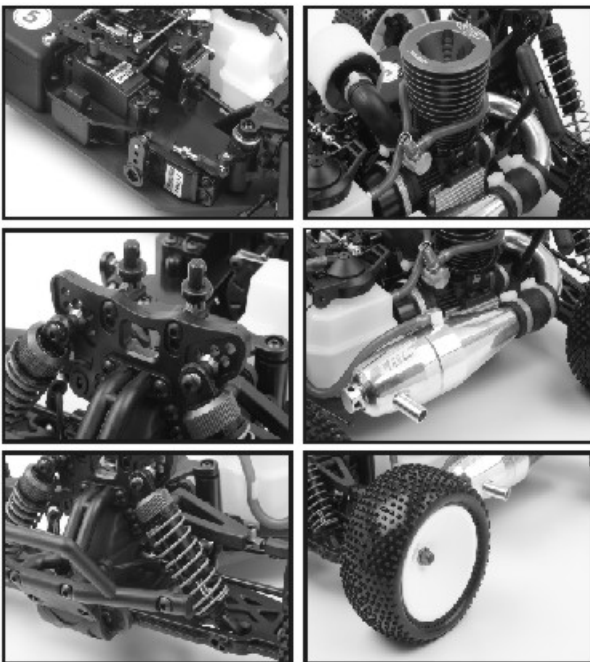
CRTS

READY TO RIP



1/12 Scale 4WD Nitro Off-Road Mini Truggy

4WD
FOUR WHEEL DRIVE



PRE-ASSEMBLED
ASSEMBLED CHASSIS WITH RADIO AND ENGINE INSTALLED

ADDITIONAL PARTS NEEDED

- GLOW STARTER AND GLOW PLUGS.
- GLOW PLUG CROSS WRENCH.
- RC CAR FUEL (20%).
- "AA" TYPE BATTERY FOR TRANSMITTER.
- "AAA" TYPE BATTERY FOR RECEIVER.
- FOR NON-PULL START ENGINES, YOU WILL NEED A 12V HAND HELD STARTER OR STARTER BOX.

THIS IS NOT A TOY!

- DO NOT USE WITH CHILDREN YOUNGER THAN 16 YEARS.

需另購物件

- * 火星塞。
- * 拆火星塞扳手。
- * 模型引擎用燃油(20%)。
- * 可充電點火夾。
- * 發射機用"AA"3號型乾電池。
- * 接收機用"AAA"4號型乾電池。
- * 若使用非手拉器起動引擎者，則請自備12V起動馬達或起動台。

本產品非一般玩具!

- 不適合16歲以下兒童使用。(不熟悉模型組裝使用者，請洽專業人士指導。)

HN

鴻諾企業有限公司
HONG NOR ENTERPRISE CO., LTD.

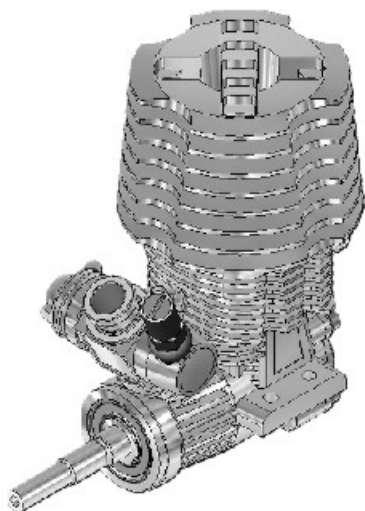
5F NO. 181-2, CHUNG HSING ROAD,
HSICHIH CITY, TAIPEI HSIEN,
TAIWAN, R.O.C.

TEL: 886 2-2694-0345
FAX: 886 2-2694-1632
www.hongnor.com

圖示產品有可能為試樣品，包裝內容以實際出貨為準。規格配備內容更改恕不另行通知。
MODEL SHOWN MAY BE PROTO TYPE AND VERY SLIGHTLY FROM KIT. SPECIFICATIONS ARE SUBJECT TO CHANGE WITHOUT PRIOR NOTICE.

THINGS NEED BESIDES THE KIT

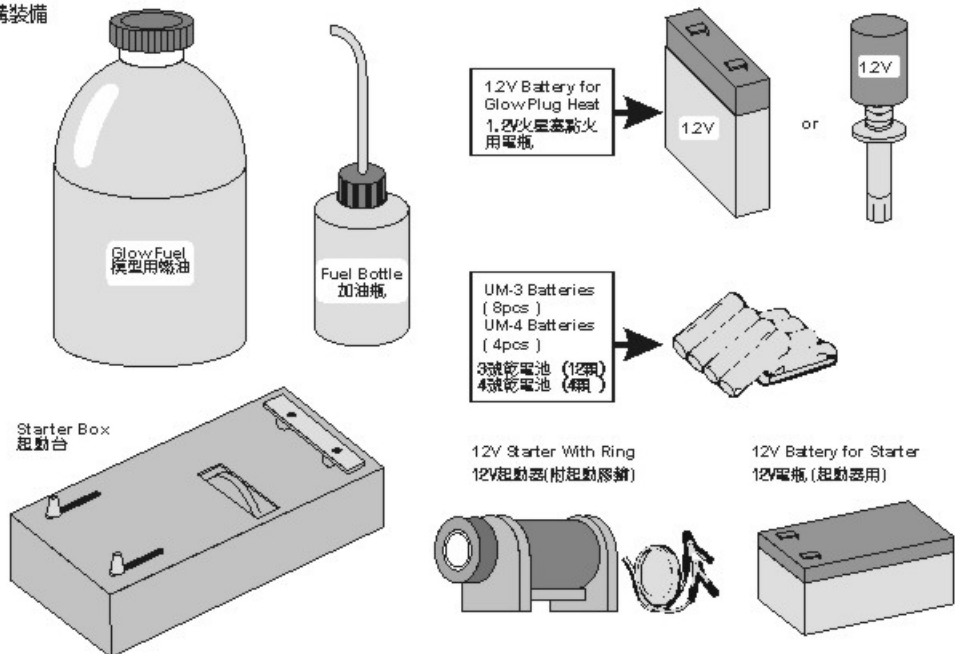
Note: The engine may not include in kit.
引擎可能不包含在套件內



REAR EXHAUST 12 CLASS (2.1 cc) ENGINE

有關引擎使用及調整方式，請參閱引擎工廠之手冊。

另購裝備



RADIO CONTROL UNIT

2動作遙控器組



Careful read the instruction manual of your 2 channel radio controller before using.
使用遙控器前請先仔細閱讀原廠說明書



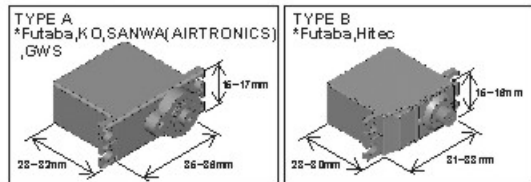
Radio must be set at neutral position before installing in the kit.

SEQUENCE TO SET NEUTRAL

遙控在組合前必須需要設立中立點

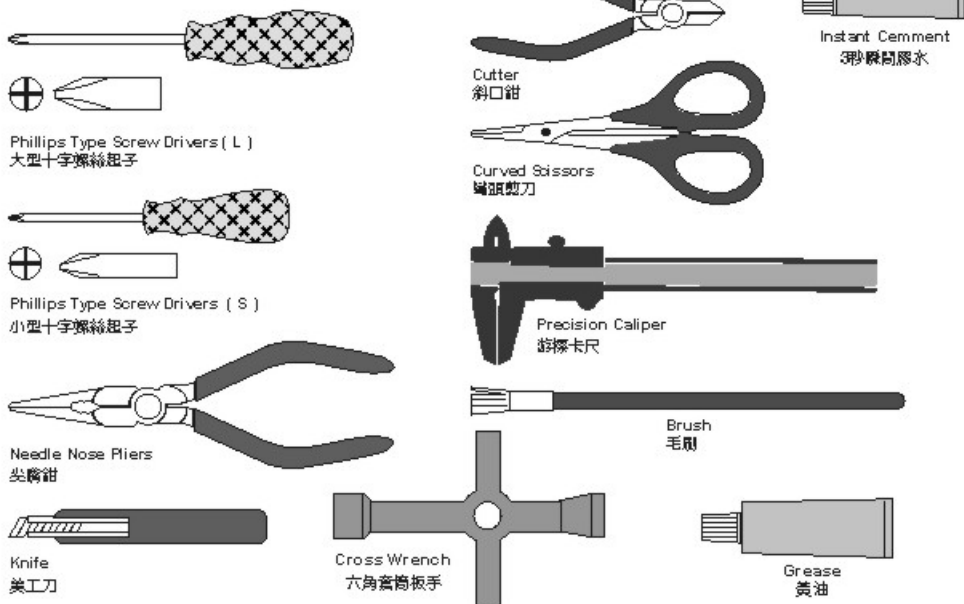
- | | |
|--|---------------------------------------|
| 1 Install 8 pieces UM-3 AA type battery. | 裝入3號乾電池(發射機用) |
| 2 Extend the antenna. (Transmitter) | 拉出天線 |
| 3 Install 4 pieces UM-4 AAA type battery. | 裝入4號乾電池(盒接收機用) |
| 4 After installing the battery, connect the battery box to switch and receiver. | 連接電池盒至開關 |
| 5 Extend the antenna. (Receiver) | 拉長接收機天線 |
| 6 Set the trim level at center. | 調整微調鈕至中央位置 |
| 7 Turn on the switch. (Transmitter) | 打開發射機電源 |
| 8 Turn on the switch. (Receiver) | 打開接收機電源 |
| 9 Make sure the servos are in command. | 確認伺服機的動作良好 |
| 10 When the operation steering wheel and throttle stick is in neutral, servo horns must be in neutral as will. (Adjustment can be made by re-installing the servo horn.) | 當遙控位於中立點時，伺服盤必須在中立位置。(拆下伺服盤可做調整中央位置。) |
| 11 Turn off the switch. (Receiver) | 關閉接收機電源 |
| 12 Turn off the switch. (Transmitter) | 關閉發射機電源 |
| 13 Retract the antenna. (Transmitter) | 收回發射機天線 |

SUITABLE SERVO SIZE
何種機適合尺寸



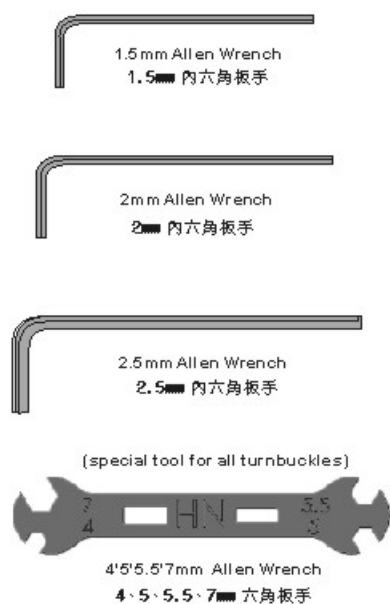
TOOLS NOT INCLUDED IN KIT

需使用之工具

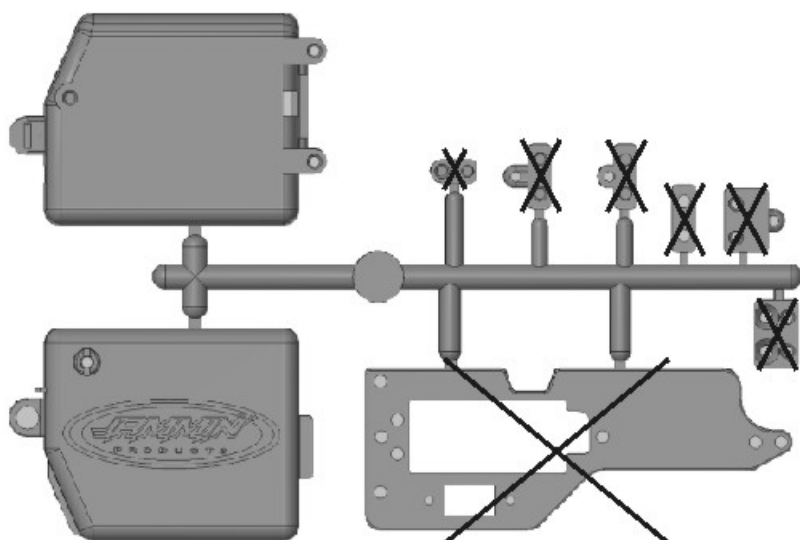


INCLUDED WITH KIT

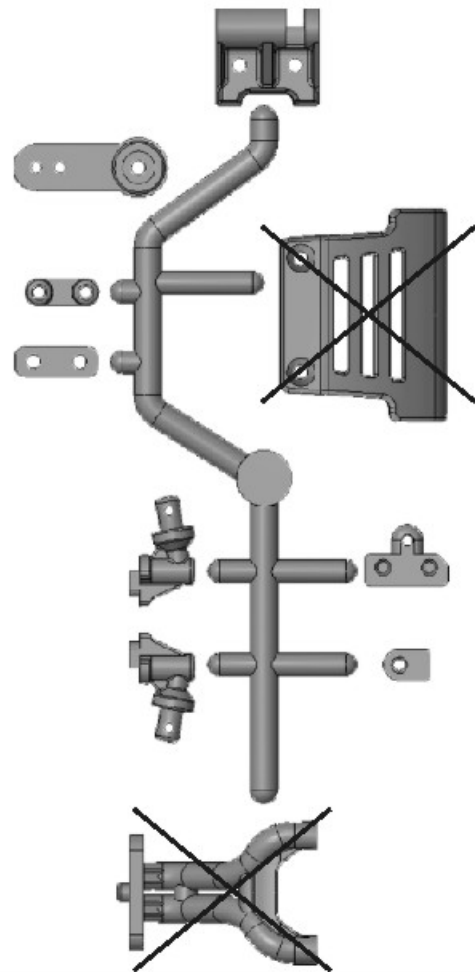
套件內裝備



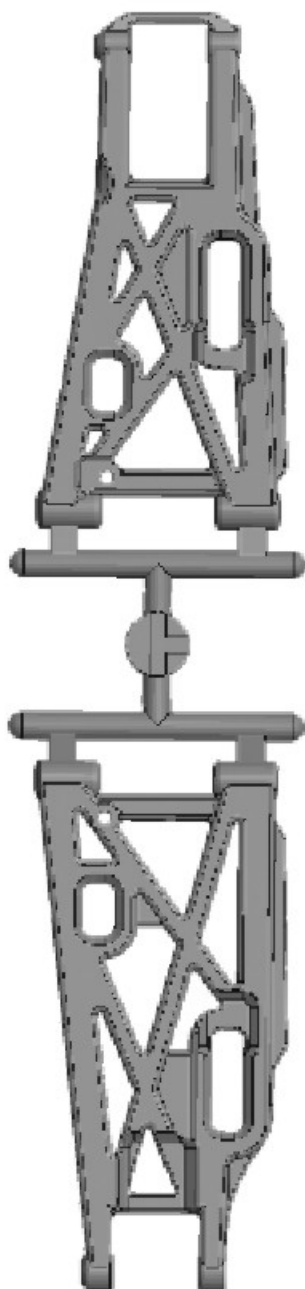
TM-33
RECEIVER BOX
防塵盒塑膠品



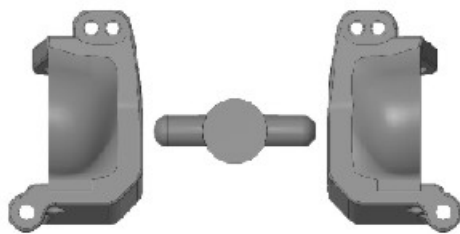
TM-59
BUMPER & RADIOTRAY POST & BODY POST
防撞板、二樓板支柱、車殼支柱塑膠品



TM-36
FRONT AND REAR LOWER ARM
前、後下擺臂塑膠品



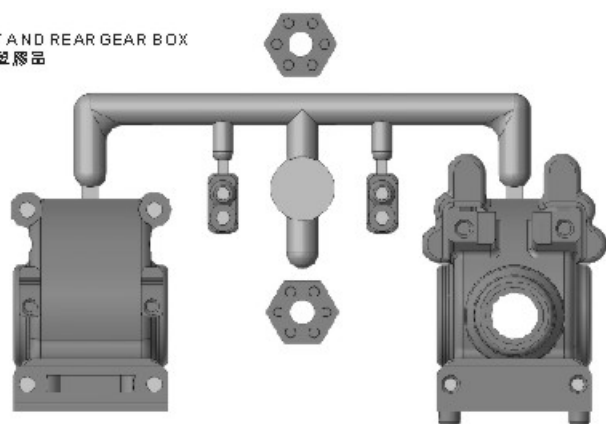
TM-39
FRONT C HUB
C型座塑膠品



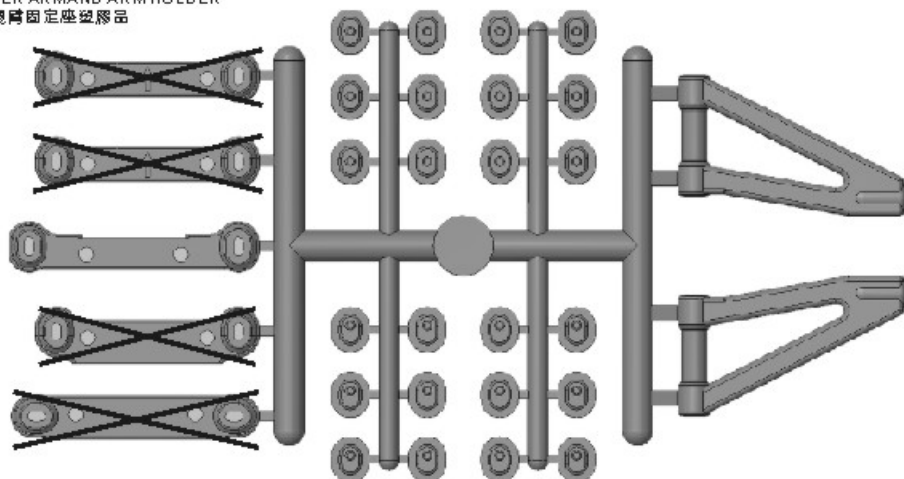
TM-35
DIFF. CASE
差速殼塑膠品



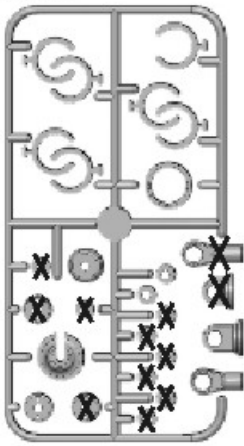
TM-40
FRONT AND REAR GEAR BOX
齒輪箱塑膠品



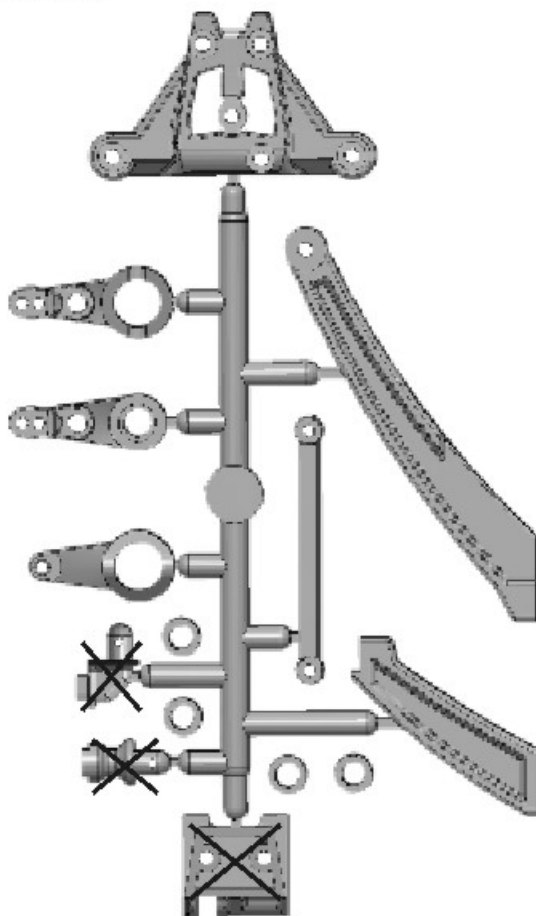
TM-37
FRONT UPPER ARM AND ARM HOLDER
前上擺臂、擺臂固定座塑膠品



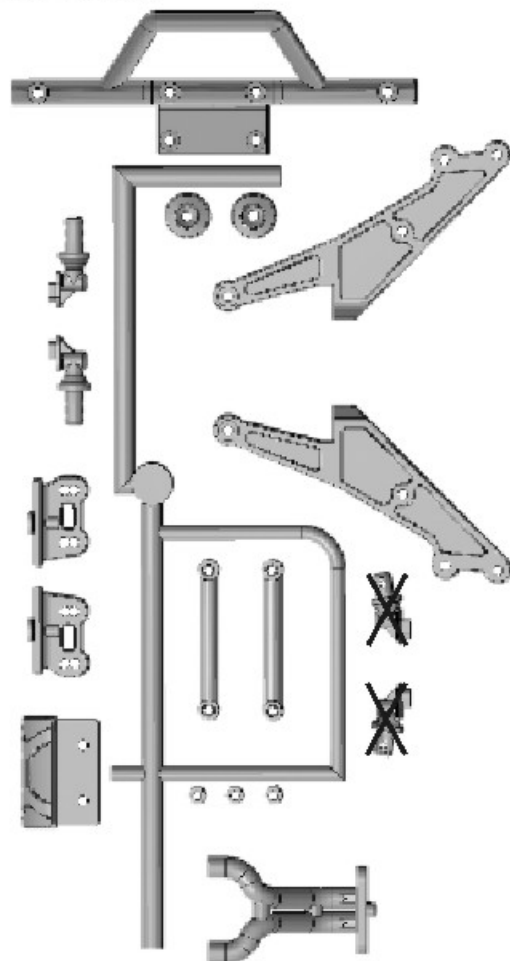
E-10
SHOCK PLASTIC
避震器塑膠品



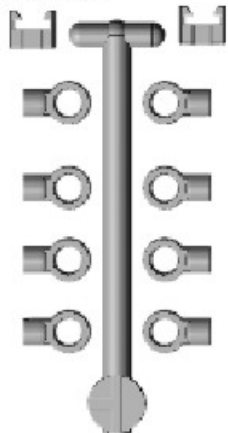
TM-34
SERVO SAVER
緩衝組塑膠品



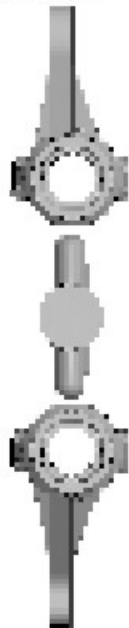
TM-42
WING STAY & BUMPER
定風翼架、防撞板塑膠品



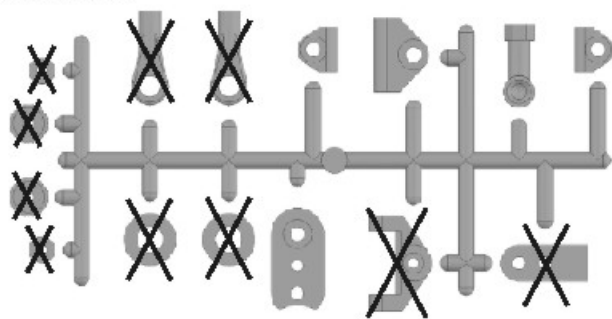
TM-48
STABILIZER BALL END
平衡桿球頭塑膠品



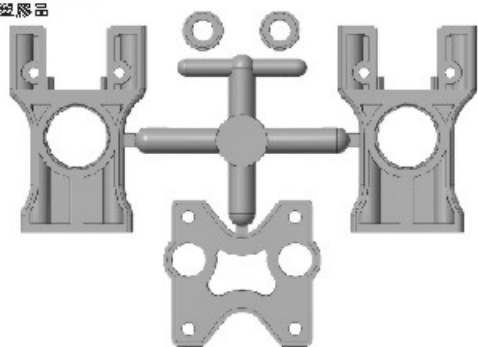
TM-41
FRONT KNUCKLEARM
轉向座L、R塑膠品



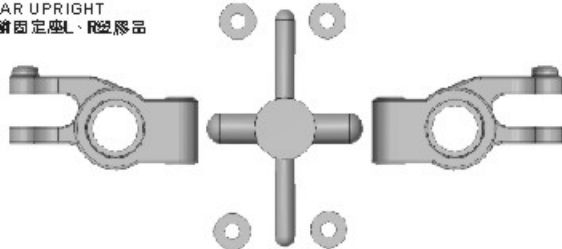
A-80B
THROTTLE LINKAGE PLASTIC
油門拉桿塑膠品



TM-44
CENTER DIFF. MOUNT
中差座塑膠品



TM-43
REAR UPRIGHT
後辦固定座L、R塑膠品



TM-52
WING
定風翼塑膠品



SYMBOL USED THROUGHOUT THE INSTRUCTION MANUAL
說明書附註使用標示



遙控車在操作上雖好玩且容易，但如果想玩的更安全和更不一樣的體驗，請遵守以列幾點。另外，由於此模型車的時速超過60公里，如果不小心使用，可能會傷及他人。

1. 哪兒是適合操作的場地呢？

- ◎任何乾燥的空地。勿在水池或濕地。
- ◎勿在大街上，因為它可能會被行駛中的車輛輾過或碰撞而導致有所損傷。
- ◎勿在空間狹窄的地方操作；因為它的速度快很容易碰撞物件。
- ◎勿駕駛於人群或動物旁；如您是非專業人士操作，他們都可能發生危險。
- ◎由於當它被啟動後會發出很大聲響，在操作前請先考慮其周圍的環境。
- ◎勿在晚上操作模型車，因可能視線不佳而導致它發生碰撞。
- ◎勿在室內操作；因為發動引擎後所排出的廢氣對人體有害。

2. 燃油

- ◎它是有害身心的。
- ◎它是易燃的。
- ◎別讓它從油瓶溢出。
- ◎勿將其他非專業燃油放入引擎中。

3. 第一次發動引擎

注意！
在您發動引擎前請先確認以下幾點：

- ◎將主油針設定在3圈位置（富油狀態）。
- ◎別獨自一人組裝，請找位有經驗的朋友幫忙一起完成。
- ◎裝滿油箱試著別溢出油箱於容器上。
- ◎遲些將模型車放置地面上，避免一開始它亂跑。
- ◎發動引擎前，請先確認無線電設備是否已連結。
- ◎發動引擎前，請先打開遙控發射機和接收器的電源，並檢查各項連結桿。
- ◎需要安裝空氣濾清器在化油器上，使其不被弄髒。

4. 磨合引擎

- ◎閱讀後面幾頁。
- 5. 緊急停止正發動中的引擎
 - ◎移除空氣濾器和堵住化油器的入口。
 - ◎握緊油管直到引擎停止。
 - ◎用破布等填塞物，堵住廢氣排放口。
- 6. 操作後之收藏動作
 - ◎移除油箱和油管中的燃油。
 - ◎關閉模型車上的無線電。
 - ◎滴入少許保養油於引擎中，以免它生鏽。
 - ◎用去污布擦去底盤上的油污。

7. 叮嚀注意事項

- ◎此模型車並非一般玩具，操作時至少二人，一為操作者，一為監督者。
- ◎溫度過高的零件－如排氣管、引擎等，勿用手觸碰，以免燙傷。
- ◎運轉中的零件－如車輪、齒輪和引擎等，勿用動手去調整。
- ◎無線電－在操作前先檢查電池的電量，當電量不足時，將不能完全控制油門及剎車或行進方向。此刻請立即停駛，並換上新電池。如果不立即改善，將導致人體受傷或車子受損；我們極力建議裝配“防暴走”裝置在你的車上。
- ◎燃料油－勿讓油溢出瓶口；因為它的成份中含有甲醇和甲烷皆為易燃物且一旦吸入是有害健康的。

油品應當置放於低溫且通風的地方，並貼上“小心使用”的標籤。

- ◎車子上的油箱－在操作後，別存留油於油箱中，如不慎流出會破壞引擎。
- ◎平時不操作模型車時，必要將關閉車上電源，然後關閉遙控器。
- ◎如果車子因無法控制以致損壞，將導致不在保證之內。

忽略閱讀磨合引擎的相關說明，將會失去保證條款。

IMPORTANT-READ THIS BEFORE RUNNING

Running nitro kits is fun and easy, but to make this a safe and good experience you must observe a few rules. This kit is extremely fast, easily over 65KPH, and can seriously injure someone if you are not careful.

1. Where to run car?

- ⊙ Any running area you choose must be dry. Do not run car near any water or wet dirt.
- ⊙ Do not run on public streets. It is very easy to have the car run over or be damaged by hitting the curb.
- ⊙ Do not operate the car in tight confined places. The car is very fast and will easily hit something.
- ⊙ Do not run near people or animals. The car is very fast and could easily hit someone if you are not an expert driver.
- ⊙ Due to noise, you will want to consider the surrounding area when operating the car.
- ⊙ Do not operate the car at night. You will not be able to drive it safely.
- ⊙ Do not operate the car indoors. Engine exhaust fumes are dangerous.

2. Glow Fuel

- ⊙ Glow fuel is poisonous!
- ⊙ Glow fuel is flammable!
- ⊙ Do not leave in fuel bottle with lid off at any time.
- ⊙ Do use any fuel other than glow fuel in this engine.

3. First Time Starting the Engine

Caution!

When starting the engine make sure the following is observed.

- ⊙ Set engine Master needle to 3 turns (rich setting)
- ⊙ Do not do this alone, get an experienced friend to help for the first time.
- ⊙ Fill fuel tank, try not to spill fuel. Do not spill fuel on receiver.
- ⊙ Hold car off the ground, so it will not runaway when it first starts.
- ⊙ Turn on the radio and check the linkage before starting engine.
- ⊙ Turn on car receiver battery switch.
- ⊙ Always have an air filter on the carburetor to keep dirt out.

4. Engine Break-in

- ⊙ See section.

5. Emergency Engine Stopping

- ⊙ Remove air filter and cover carb. intake.
- ⊙ Squeeze fuel line and hold until engine stops.
- ⊙ With a rag, cover exhaust outlet.

6. Storing Car After Running

- ⊙ Remove fuel from tank and fuel lines
- ⊙ Turn off radio in the car
- ⊙ Put a few drops of after run in the engine to keep it from rusting.
- ⊙ Clear oil and dirt from chassis with a degreaser.

7. Precautions

- ⊙ This kit is not a toy. Always run car with a second person as a spotter and pitman.
- ⊙ Hot Parts-The pipe, manifold, engine and head are very hot and will cause burns.
- ⊙ Rotating Parts-Keep hands away from the drive train, wheels, and engine when engine is running.
- ⊙ Radio-Check battery life before running the car. The radio does not have full control of the car with steering and/or throttle/brake, do not run until corrected. Failure to correct this will result in possible injury and damage to the car or property. We strongly recommend using a Failsafe.
- ⊙ Glow fuel-Do not leave the glow fuel unattended with the lid off. Fuel contains Methanol and Nitro Methane and is flammable and poisonous.

Store fuel in cool ventilated location.

Refer to the glow fuel label for additional precautions.

- ⊙ Fuel tank in the car- Never store fuel in car tank, it will ruin the engine if left in tank.
- ⊙ Always turn off the car BEFORE turning off the radio.
- ⊙ DAMAGE DUE CAR RUN AWAY IS NOT A WARRANTY ISSUE.

IF YOU DO NOT BREAK-IN ENGINE CORRECTLY, AT LOW-MID RPM, YOU WILL BREAK THE CONNECTING ROD!

FAILURE TO READ AND FOLLOW BREAK-IN ENGINE INSTRUCTIONS WILL VOID WARRANTY!

OPERATING YOUR MODEL SAFELY 安全的操作說明

操作前 Before Running

Your radio control model can move at high speed and therefore can cause injury to people or damage property. It is your responsibility to operate your model safely.

你所駕駛的遙控模型車的速度是很快的，因此很容易會造成人員受傷或財產損失，所以操作者需負責其安全性。

For radio equipment, refer to the manual included with the radio.

無線電設備，包含了模型車上的接收器和遙控器。

Check that all screws and nuts are tight.

確認所有的螺絲是否已全部鎖緊。

If the model begins to operate by itself, there is someone else on your frequency. Do not try to operate your model under these conditions for it may go out of control.

如果一開始模型車不受你控制時，可能是受到另一個頻率干擾到，在這種情況之下，請別一再嘗試去控制你的模型車，以免它失控。

Fill in the fuel.

加滿油箱。



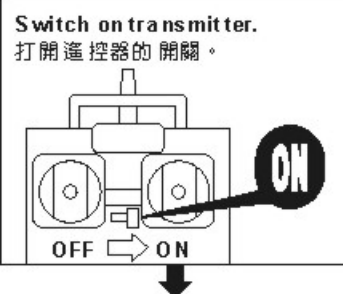
Fully extend transmitter antenna.

把遙控器上的天線完全伸展。



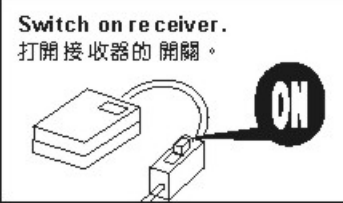
Switch on transmitter.

打開遙控器的開關。



Switch on receiver.

打開接收器的開關。



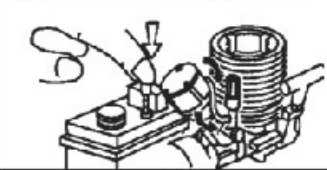
啟動引擎 Engine Start-Up

For engine use, refer to the manual included with the engine. 閱讀其引擎說明書。



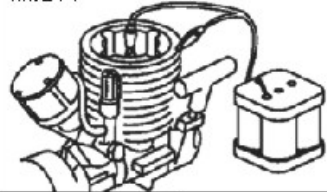
To prime the engine with fuel, press down the primer button.

首先，裝填引擎燃料，再按下進油幫浦（如果有此裝備）。



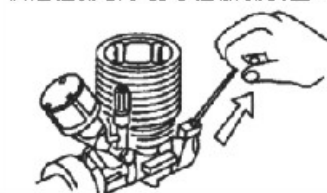
Attach one clip to the glowplug's end and the other clip to one of the cylinder cooling fins.

使用一個啟動火星塞用電夾，一端夾住火星塞，一端夾住散熱片。



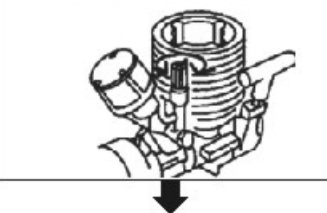
Quickly pull the starter rope (to start the engine).

快速拉動引擎的手拉啟動裝置。

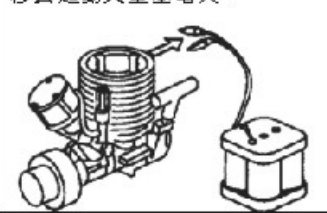


Adjust by screwing the needle little by little.

以順時針方向逐漸地微調油針。



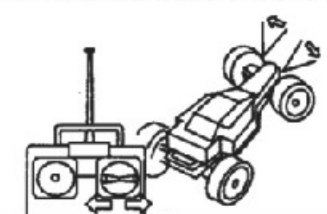
Remove the clips from the engine. 移去起動火星塞電夾。



操作時 While Running

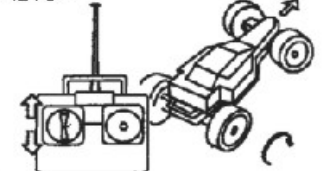
Check that the model turns in proportion to the amount you move the steering control of the transmitter.

試跑遙控車的行進方向是否和你操作的遙控器左右方向相同。



Check that the speed of the model changes in proportion to the amount you move the speed control of the transmitter.

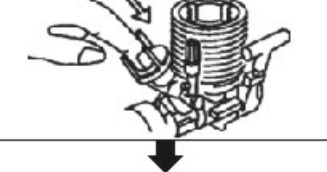
試跑遙控車的行進方向是否和你操作的遙控器前後方向相同。



操作後 After Running

By pushing with your fingers the air cleaner, interrupt the engine.

用手指壓下空氣濾清器，可以中斷引擎。



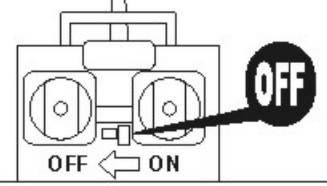
Switch off receiver.

關閉接收器電源。



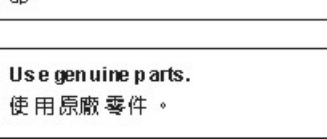
Switch off transmitter.

關閉遙控器的電源。



Proper maintenance extends the life of the model.

正確的保養可延長模型車的壽命。



Use genuine parts.

使用原廠零件。

安全注意事項 Cautions for Safety

Do not run your model through water. This may cause rust or electrical problems.

勿駕駛遙控車接近水池或溼地。此行為會導致引擎電子零件故障！



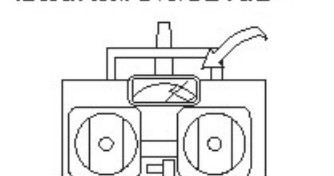
If model does not operate correctly stop it and find the cause.

如果遙控車有不正確表現，請停止操作，並立即檢查原因。



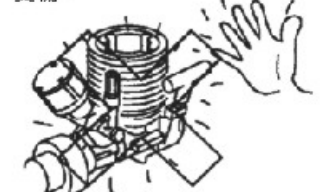
Check the batteries.

確認發射機電力是否充足。

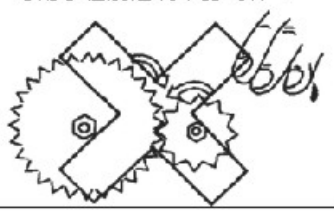


After each run, the model is hot. Beware of getting burned.

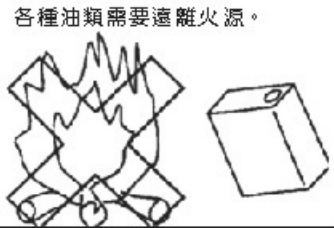
每次行駛都將導致引擎在高溫中，請勿用手觸摸引擎，以免燙傷。



Keep hands and tools away from moving parts. 勿用手碰觸運轉中的零件。



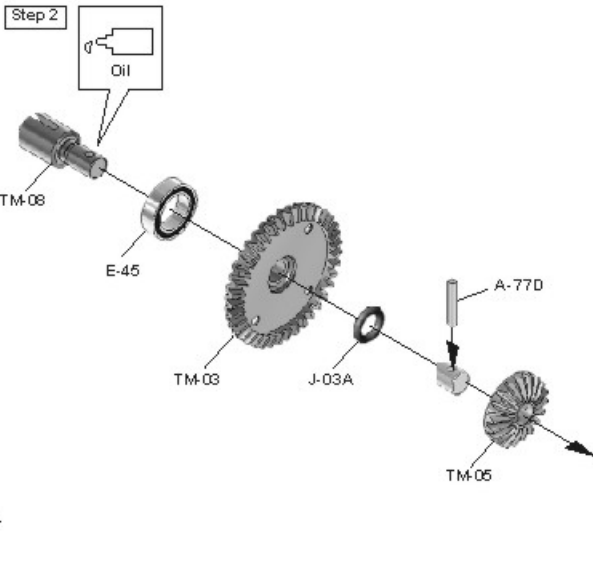
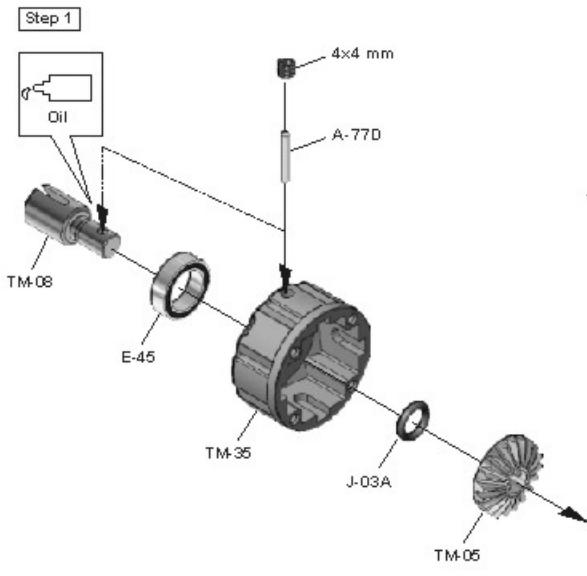
Never throw burning, gleaming or smouldering things into fuel can even if these happen to be empty. This is very dangerous to life! 各種油類需要遠離火源。



1 ASSEMBLY OF THE FRONT AND REAR DIFF. 前後差速齒輪組合

Builds two differentials for front and rear.
需組合兩個差速器為前後使用。

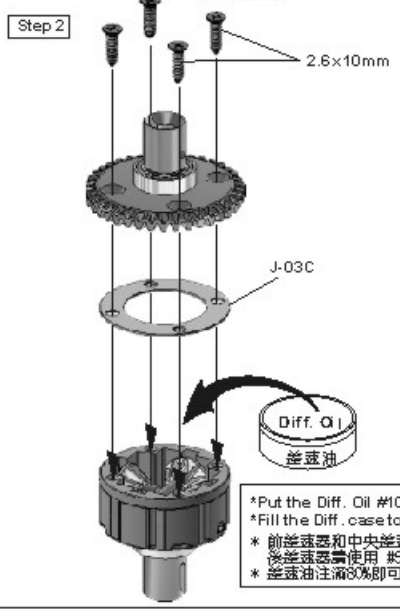
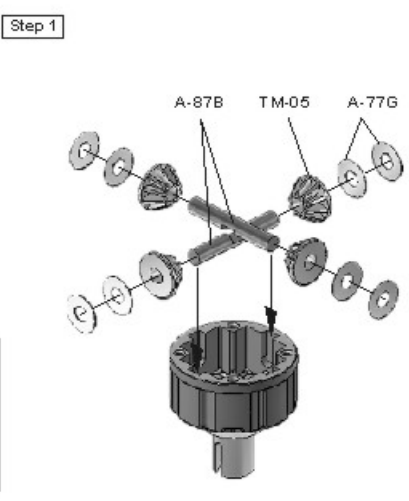
- A-77D
2x12.8mm Pin
滾針x4
- 4x4mm
Set Screw
止付螺絲x2
- J-03A
P6 O-Ring
P6 O環x4
- E-45
10x15mm Ball Bearing
培林x4



2 ASSEMBLY OF THE FRONT AND REAR DIFF. 前後差速齒輪組合

Builds two differentials for front and rear.
需組合兩個差速器為前後使用。

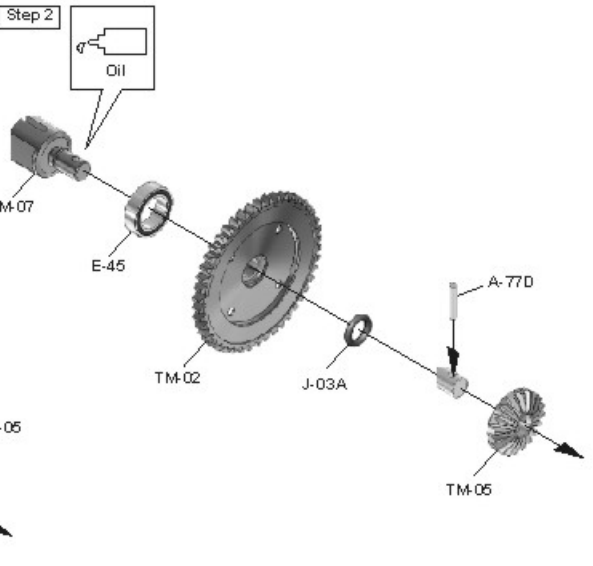
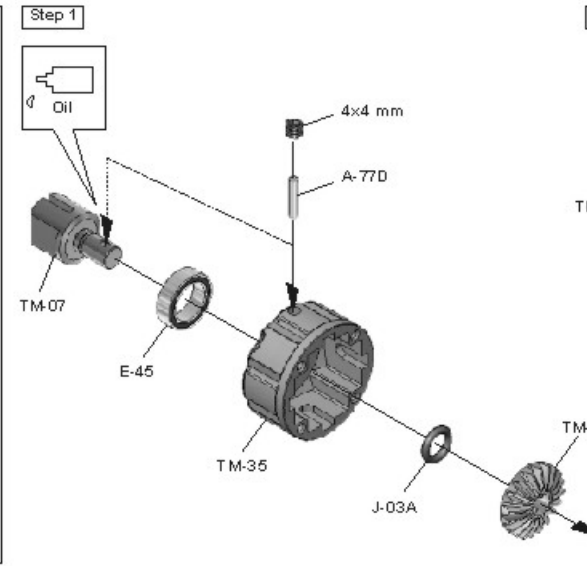
- A-77G
4x10mm Washer
墊片x16
- 2.6x10mm
Flat Head Screw
皿自攻螺絲x8
- A-87B
4mm
Cross Pin
4mm 十字銷心x4



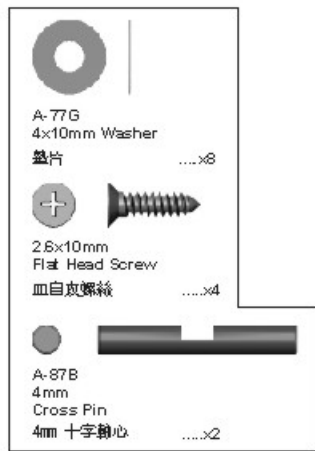
*Put the Diff. Oil #1000 for front and the #500 for rear
*Fill the Diff. case to approx. 80% with the Diff. Oil
* 前差速器和中央差速器需使用 #1000 差速油
* 後差速器需使用 #500 差速油
* 差速油注滿80%即可

3 ASSEMBLY OF THE CENTER DIFF. 中央差速齒輪組合

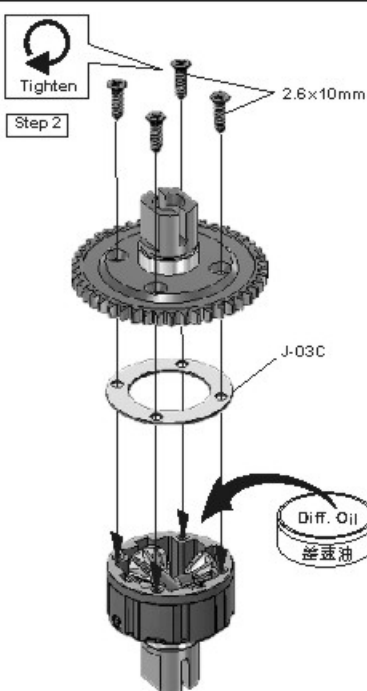
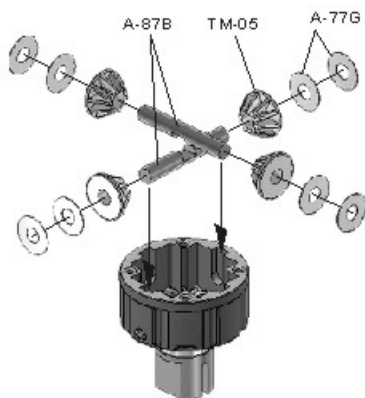
- A-77D
2x12.8mm Pin
滾針x2
- 4x4mm
Set Screw
止付螺絲x1
- J-03A
P6 O-Ring
P6 O環x2
- E-45
10x15mm Ball Bearing
培林x2



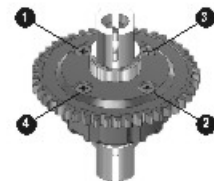
4 ASSEMBLY OF THE CENTER DIFF. 中央差速齒輪組合



Step 1



Tight the diff screws in this order.
請依圖示順序上緊螺絲。

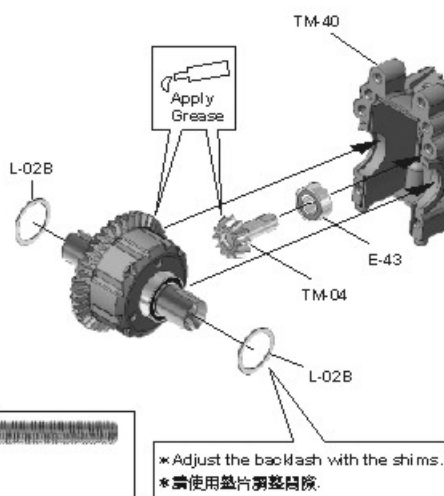


Use 1000 weight diff. oil in the center.
Fill the Diff. Case to approx. 80% with the Diff. Oil.
中差速器請使用#1000差速油注滿80%即可

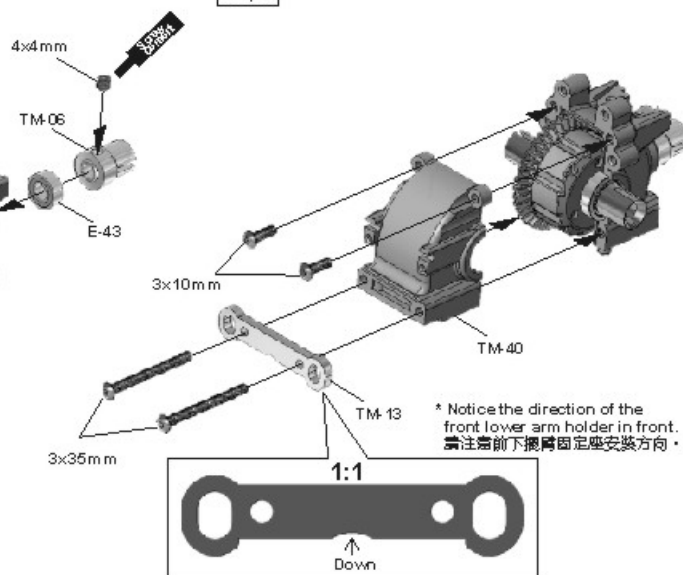
5 ASSEMBLY OF THE FRONT GEAR CASE 前齒輪箱組合



Step 1



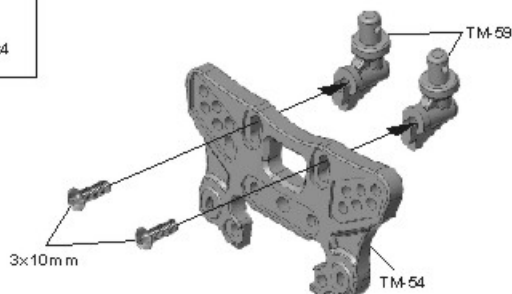
Step 2



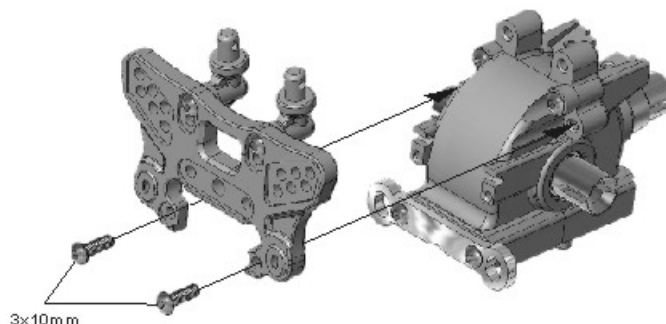
6 ASSEMBLY OF THE FRONT SHOCK STAY 前油壓架組合



Step 1



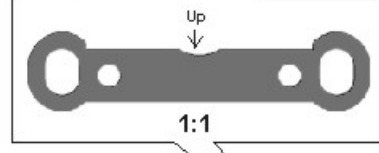
Step 2



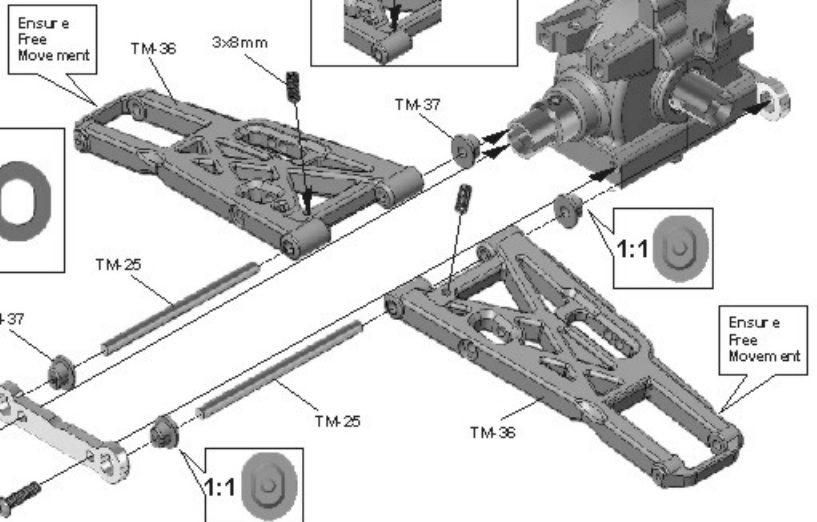
7 ASSEMBLY OF THE FRONT LOWER ARMS 前下擺臂組合

- 3x8mm Set Screw 止付螺絲2
- 3x12mm Hex Screw 半丸內六角螺絲2

* Notice the direction of the front lower arm holder in rear.
* 注意前下擺臂後座安裝方向。



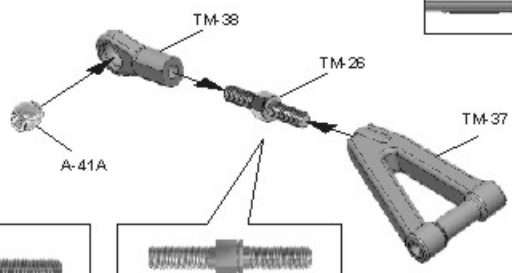
* A 3x8mm set screw is used to adjust ride height.
3x8mm 止付螺絲 調整車高用。
3x8mm Set Screw 止付螺絲



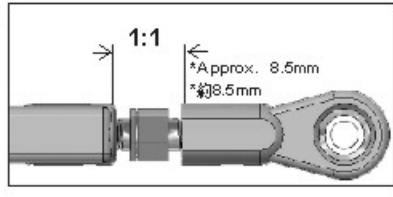
8 ASSEMBLY OF THE FRONT UPPER ARMS 前上擺臂組合

- 3x12mm Hex Screw 半丸內六角螺絲2
- A-41A 6mm Ball 球型2

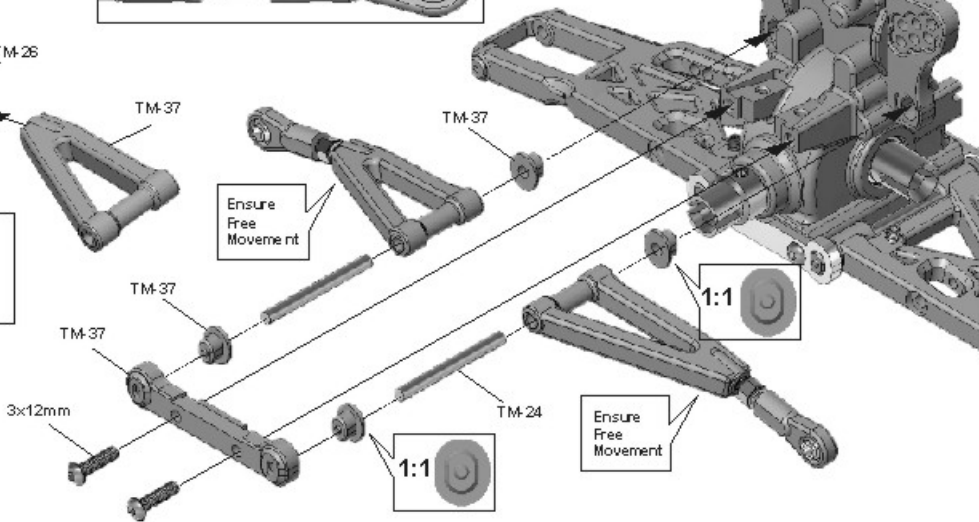
Step 1



Anti-clockwise mark.



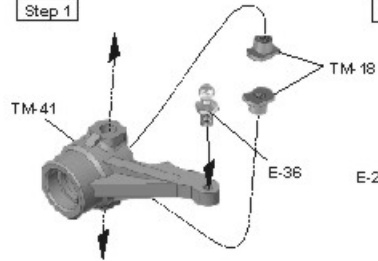
Step 2



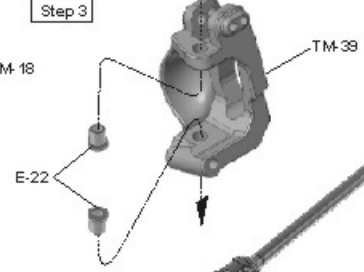
9 ASSEMBLY OF THE KNUCKLE ARMS 轉向座組合

- E-22 King Pin Bushing 大王銷襯套x4
- 3x10mm Hex Screw 半丸內六角螺絲x4
- E-43 5x11mm Ball Bearing 培林x4
- E-39 2x10.8mm Pin 滾針x4

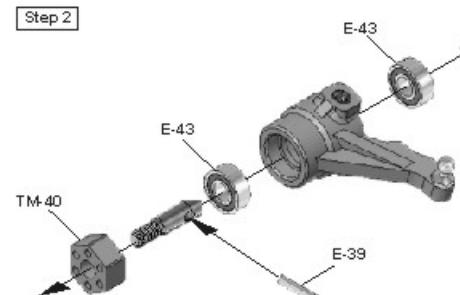
Step 1



Step 3

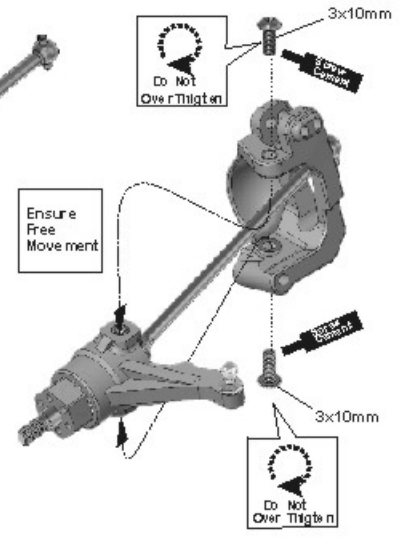


Step 2



Assembly for both right and left side.
* 組合左 / 右兩側。

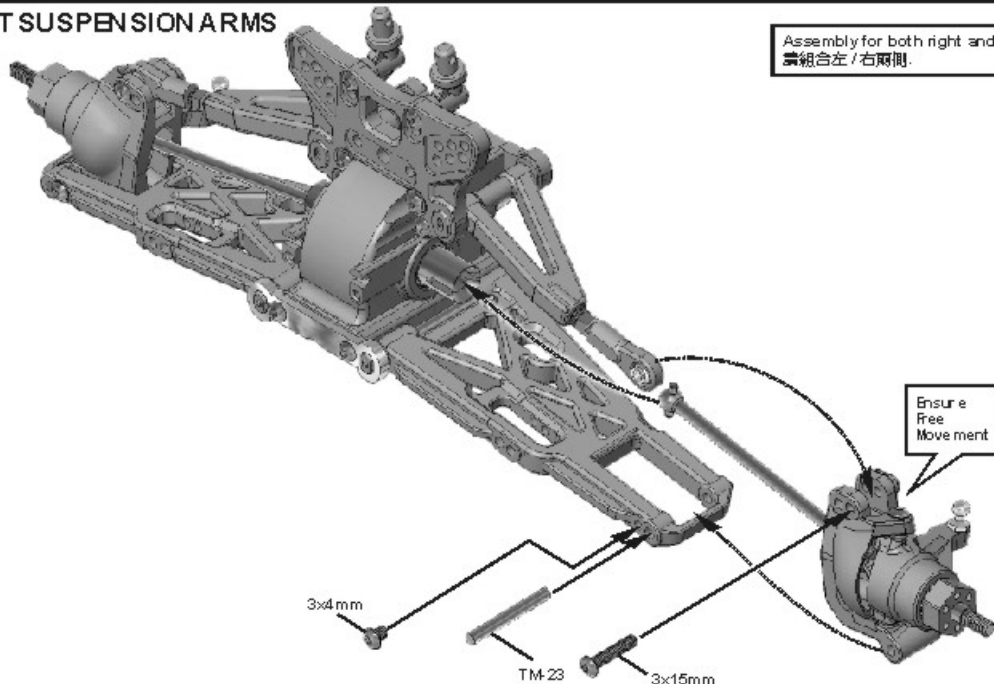
Step 4



10 ASSEMBLY OF THE FRONT SUSPENSION ARMS

前懸吊系統組合

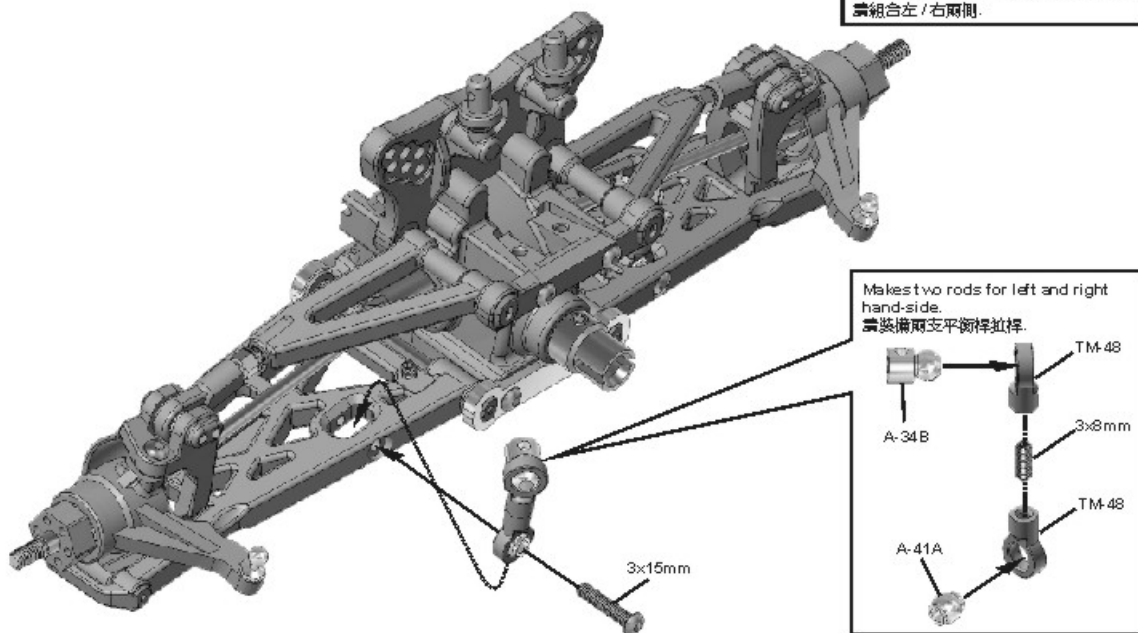
Assembly for both right and left side.
請組合左/右兩側。



11 ASSEMBLY OF THE FRONT STABILIZER

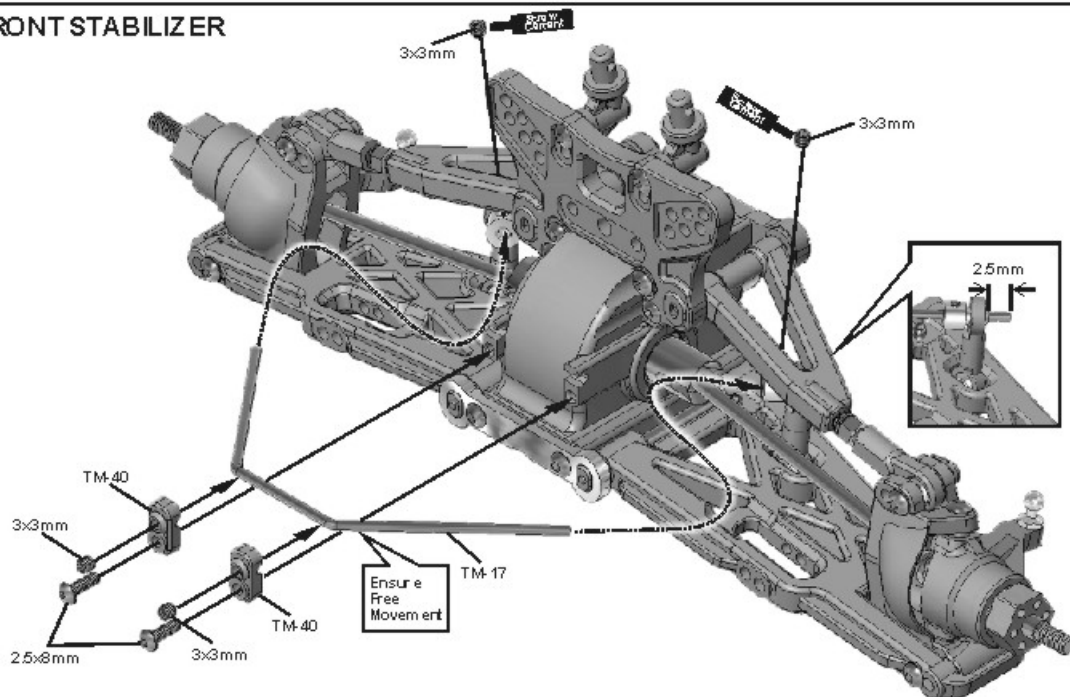
前平衡桿組合

Assembly for both right and left side.
請組合左/右兩側。



12 ASSEMBLY OF THE FRONT STABILIZER

前平衡桿組合

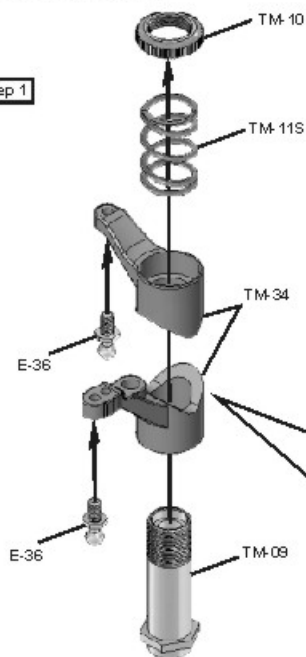


13 ASSEMBLY OF THE SERVO SAVER

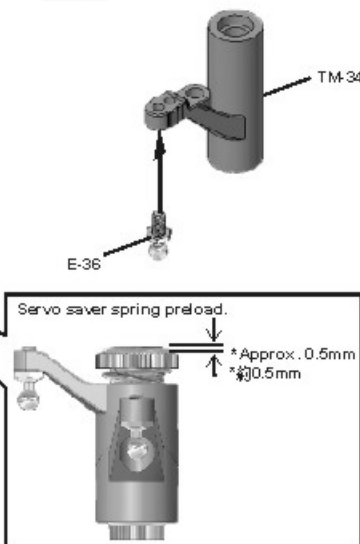
緩衝組組合



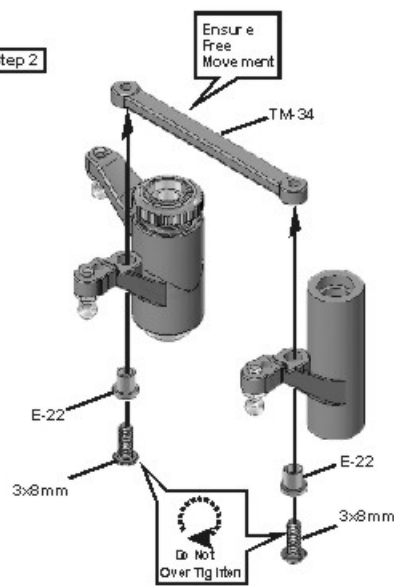
Step 1



Step 2



Step 2

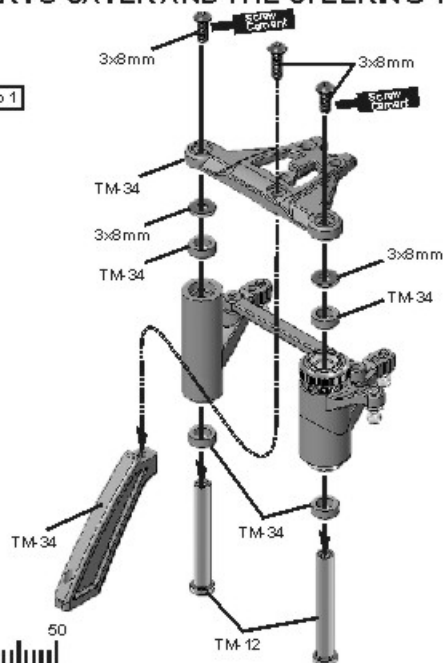


14 ASSEMBLY OF THE SERVO SAVER AND THE STEERING TIE-ROD

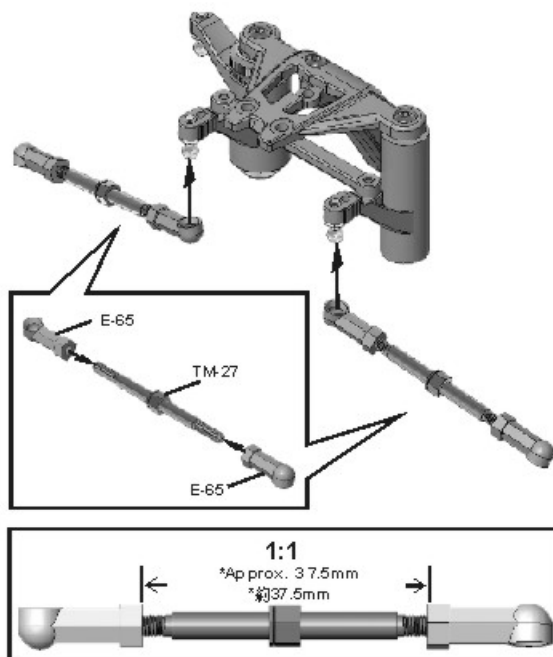
緩衝組及轉向拉桿組合



Step 1

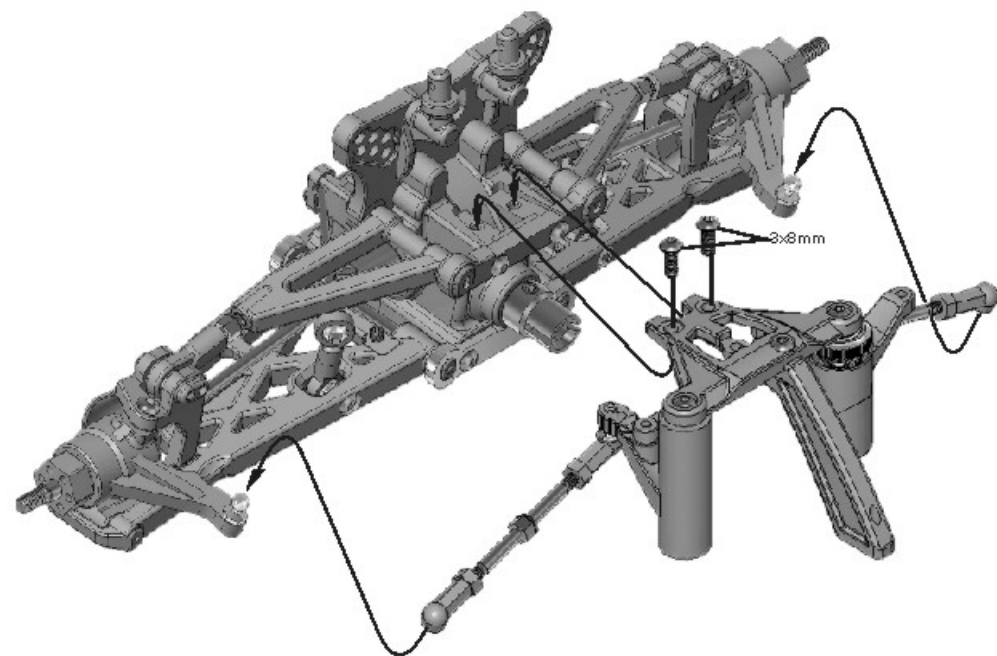


Step 2

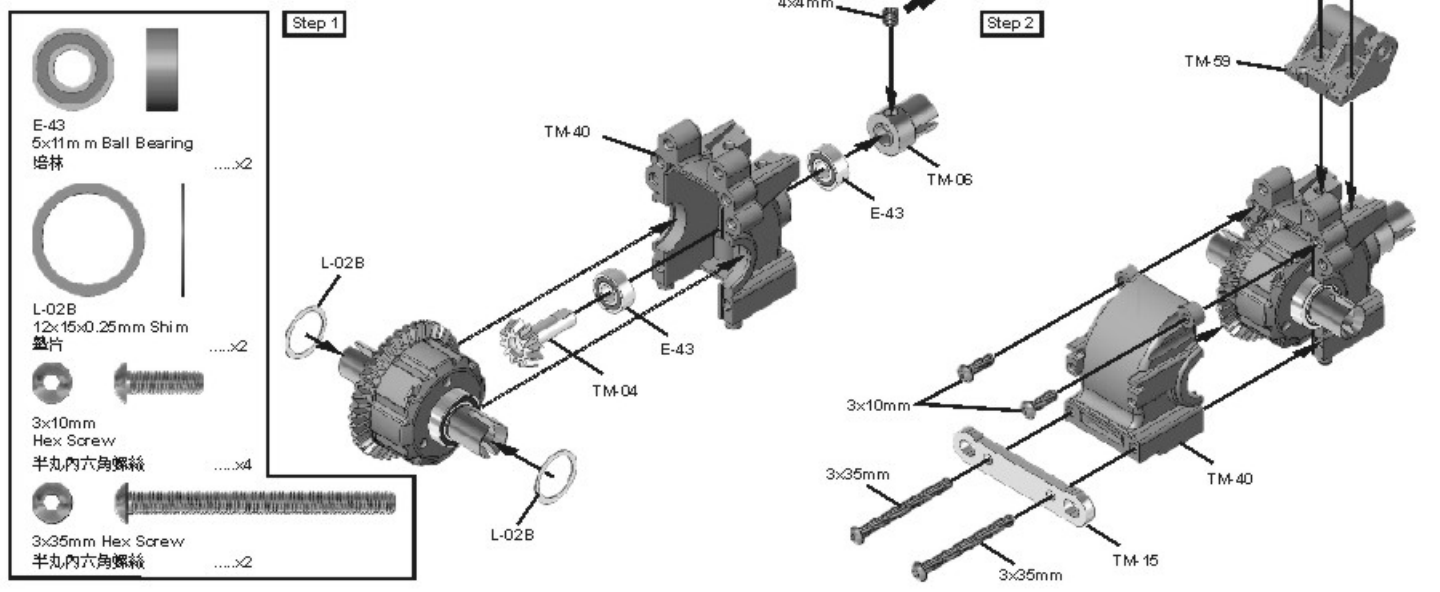


15 ASSEMBLY OF THE SERVO SAVER ONTO THE FRONT GEAR BOX

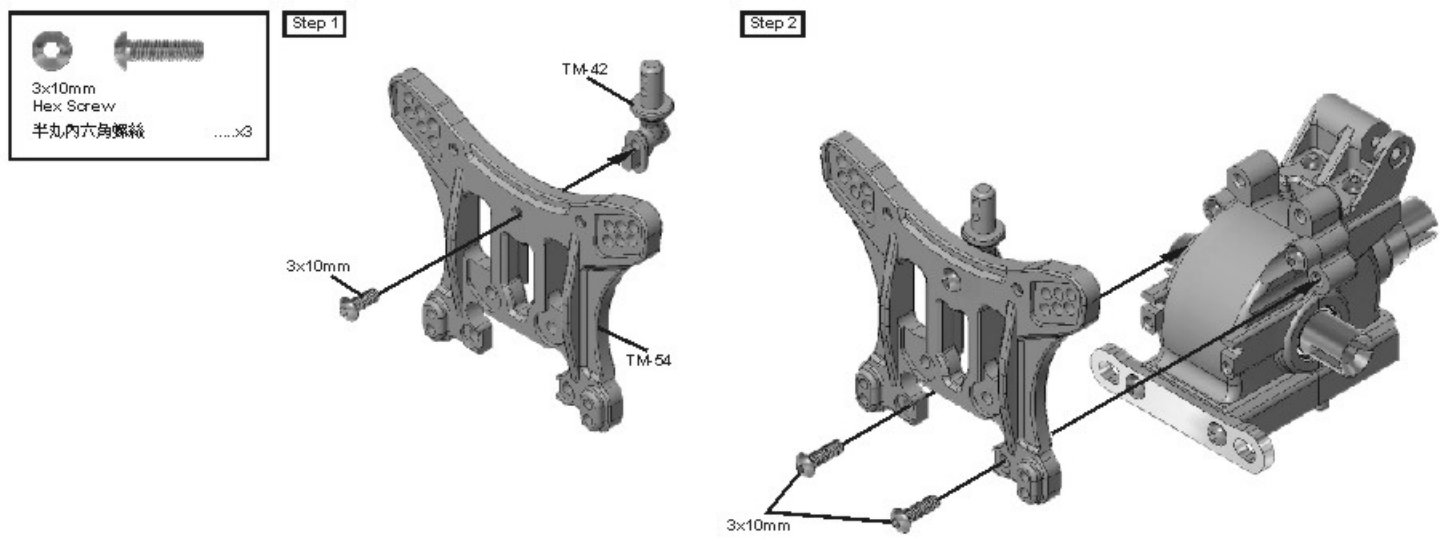
緩衝組與前齒輪箱組合



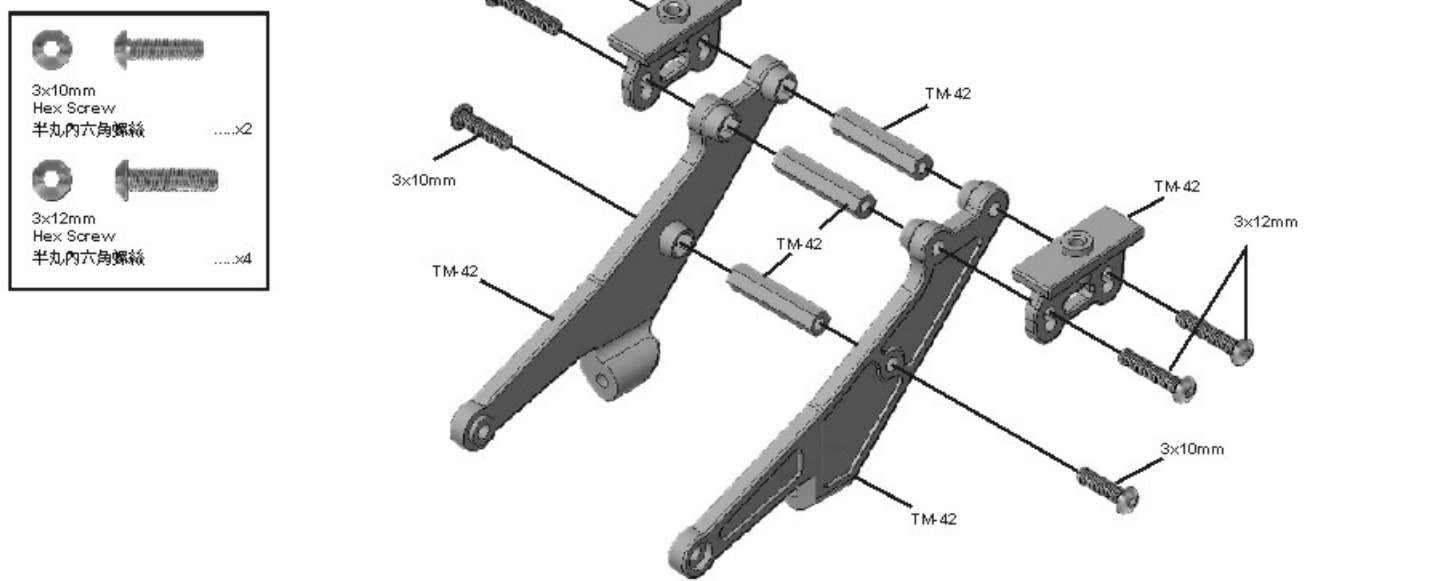
16 ASSEMBLY OF THE REAR GEAR CASE
後齒輪箱組合



17 ASSEMBLY OF THE REAR SHOCK STAY
後油壓架組合



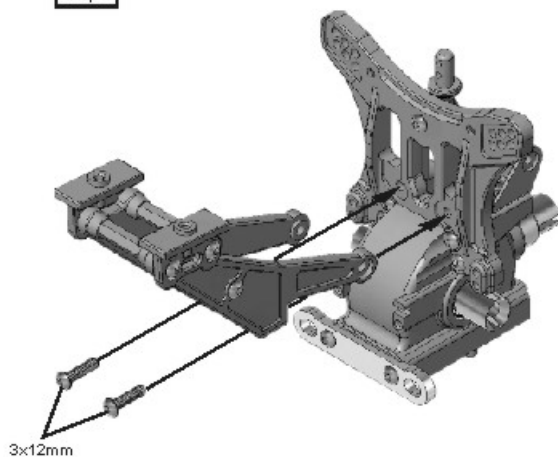
18 ASSEMBLY OF THE WING STAY
後定風翼架組合



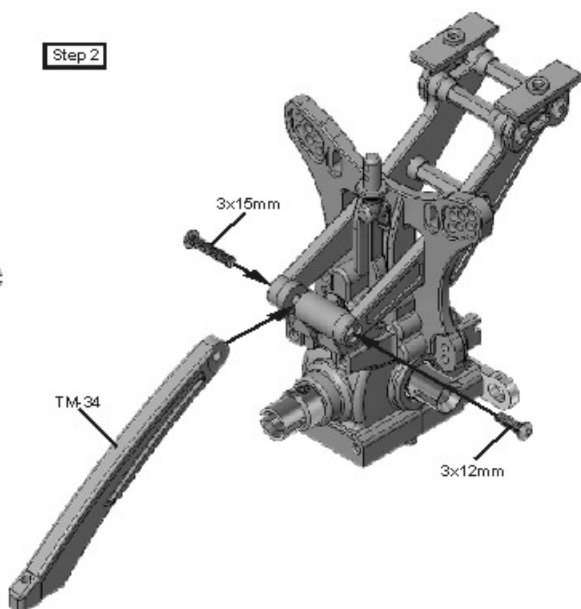
19 ASSEMBLY OF THE WING STAY 後定風翼架組合



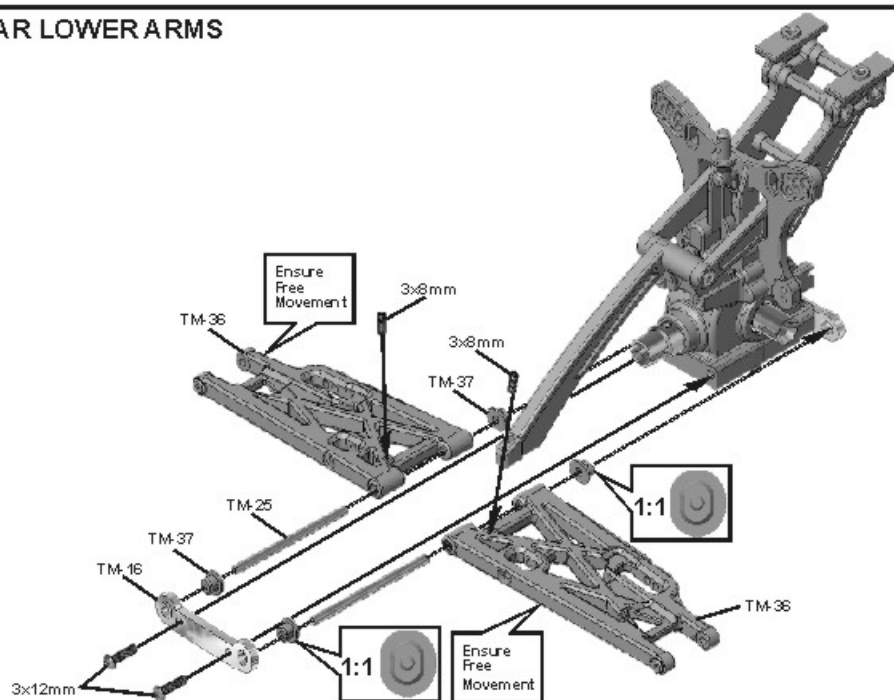
Step 1



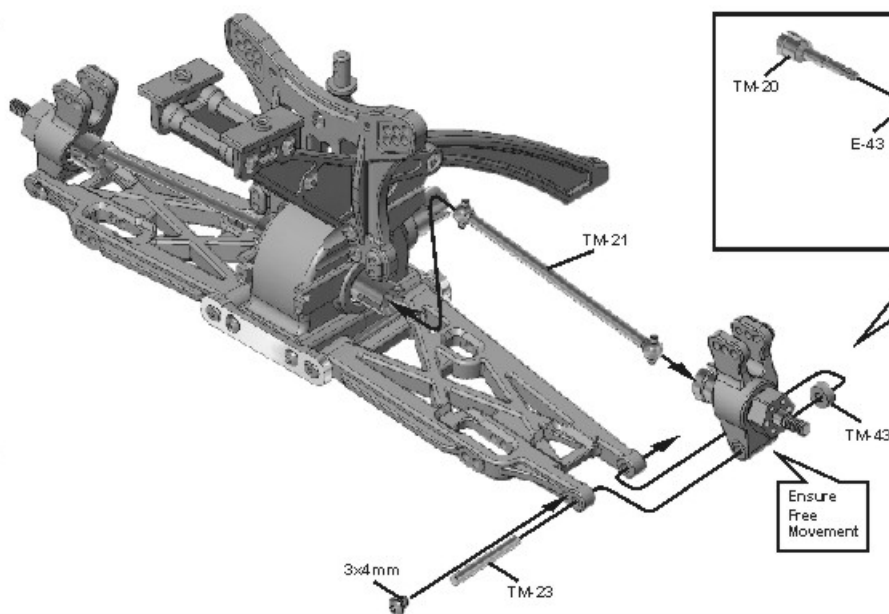
Step 2



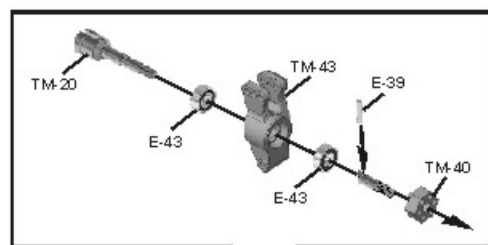
20 ASSEMBLY OF THE REAR LOWER ARMS 後下擺臂組合



21 ASSEMBLY OF THE REAR SUSPENSION ARMS 後懸吊系統組合

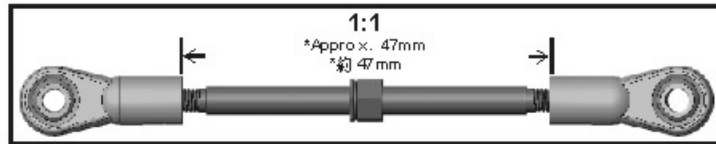
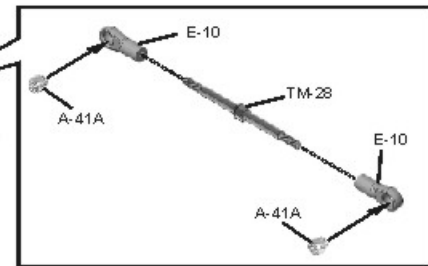
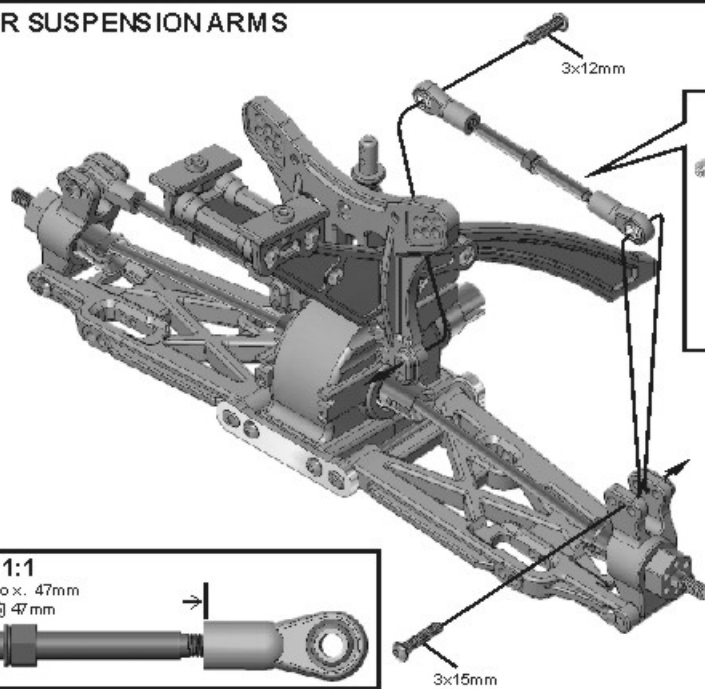
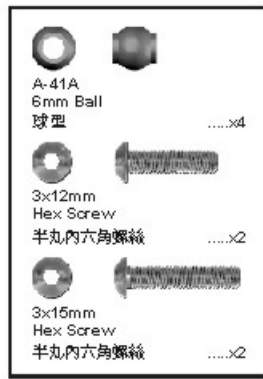


Assembly for both right and left side.
請組合左/右兩側。



22 ASSEMBLY OF THE REAR SUSPENSION ARMS 後懸吊系統組合

Assembly for both right and left side.
請組合左/右兩側。

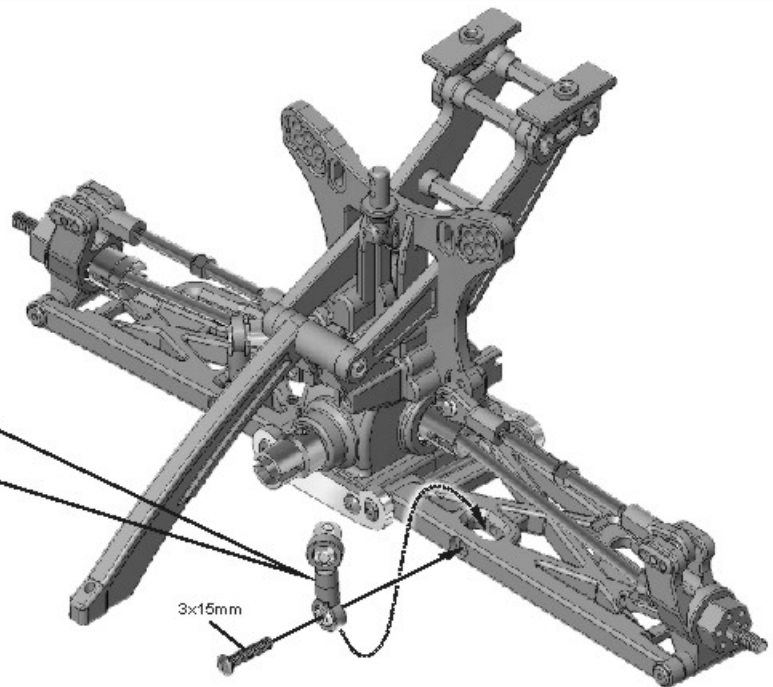
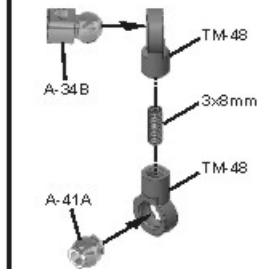


23 ASSEMBLY OF THE REAR STABILIZER 後平衡桿組合

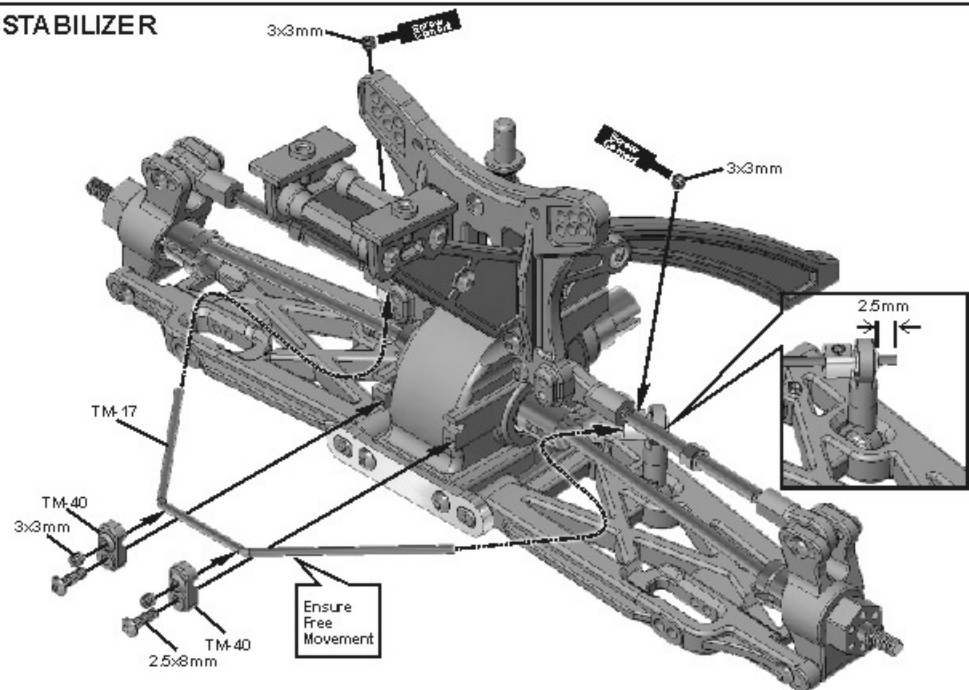


Assembly for both right and left side.
請組合左/右兩側。

Makes two rods for left and right hand-side.
請裝兩支平衡桿直桿。



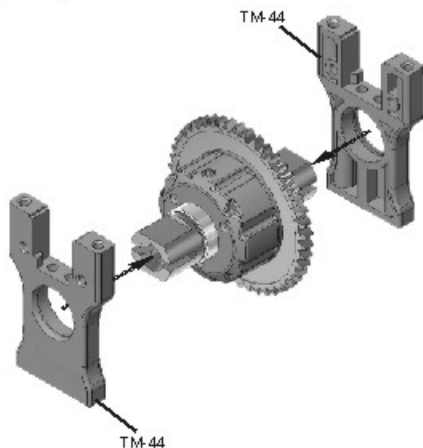
24 ASSEMBLY OF THE REAR STABILIZER 後平衡桿組合



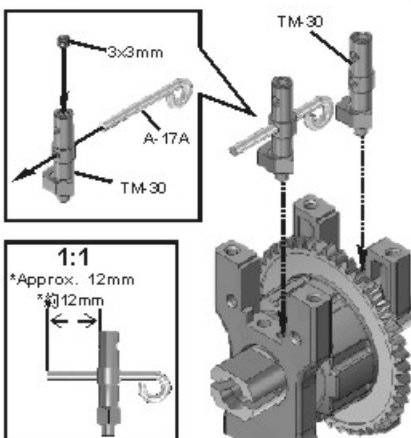
25 ASSEMBLY OF THE CENTER DIFF. MOUNT 中央差速器與中差座組合



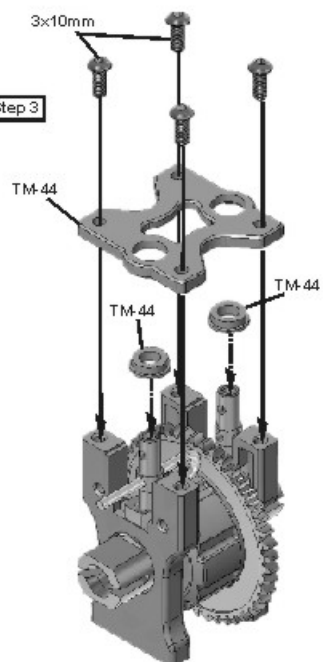
Step 1



Step 2



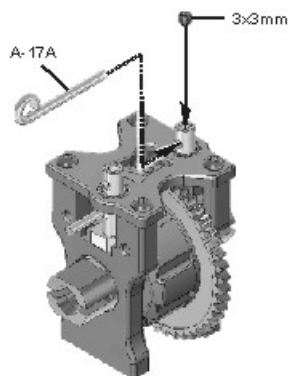
Step 3



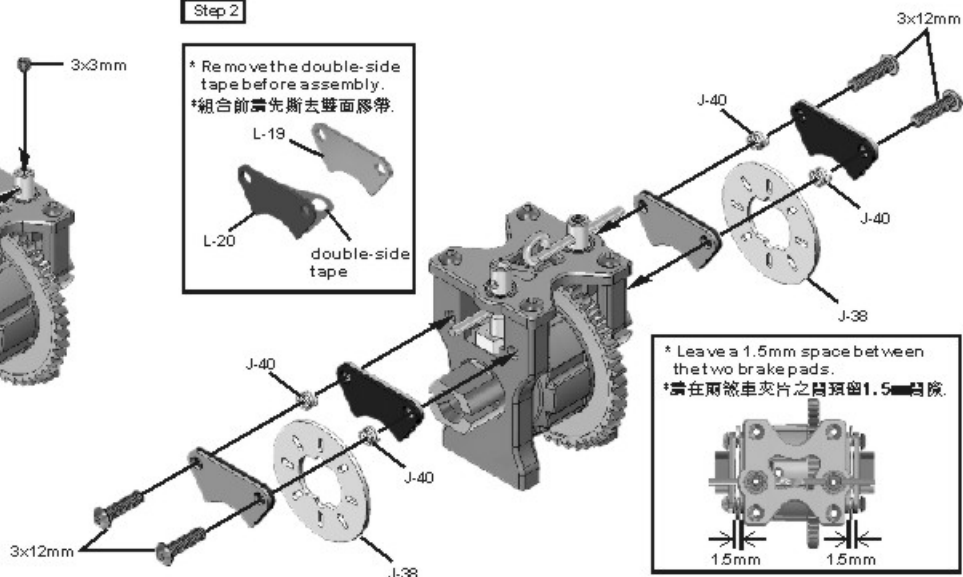
26 ASSEMBLY OF THE BRAKE DISK INTO CENTER DIFF. 煞車片與中差座組合



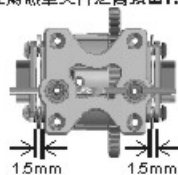
Step 1



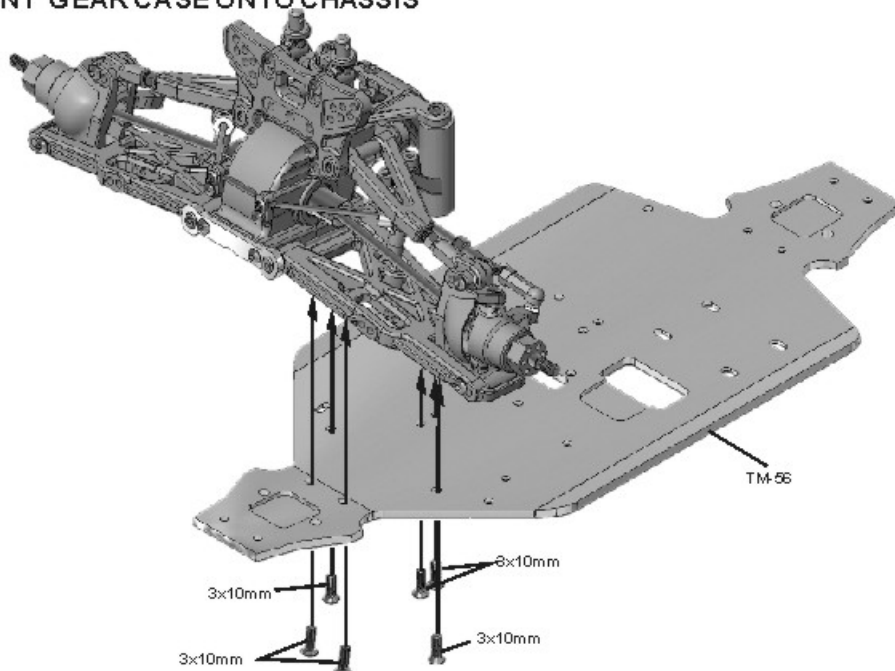
Step 2



* Leave a 1.5mm space between the two brake pads.
*請在兩煞車夾片之間預留1.5mm空隙。

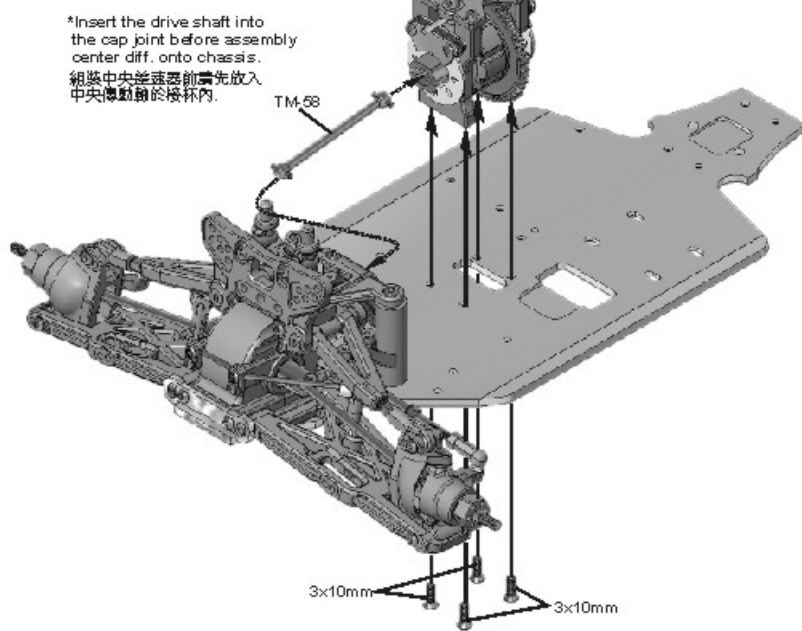


27 ASSEMBLY OF THE FRONT GEAR CASE ONTO CHASSIS 前齒輪箱與底盤組合



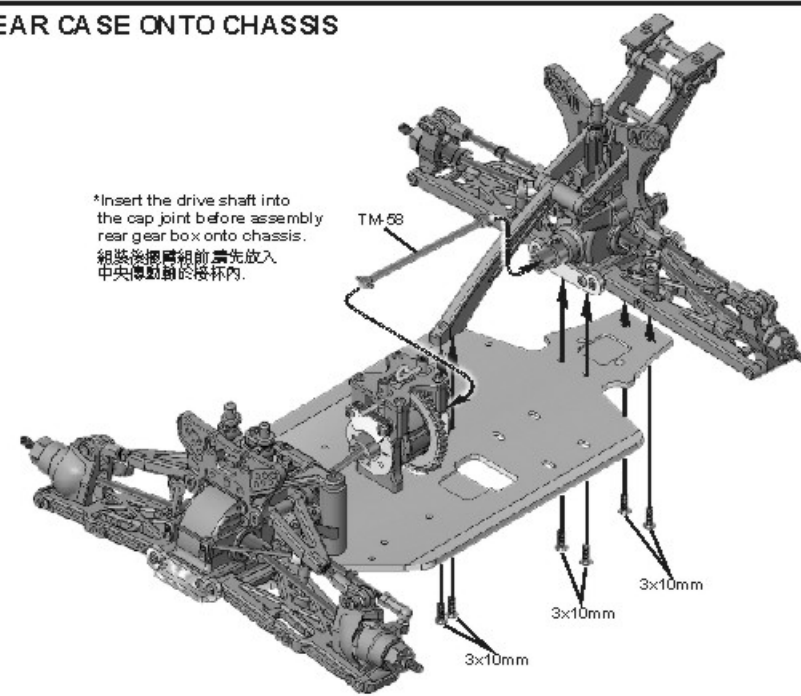
28 ASSEMBLY OF THE CENTER DIFF. ONTO CHASSIS
組合中差座至底盤

-  3x10mm Flat Head Hex Screw
 皿頭內六角螺絲x4



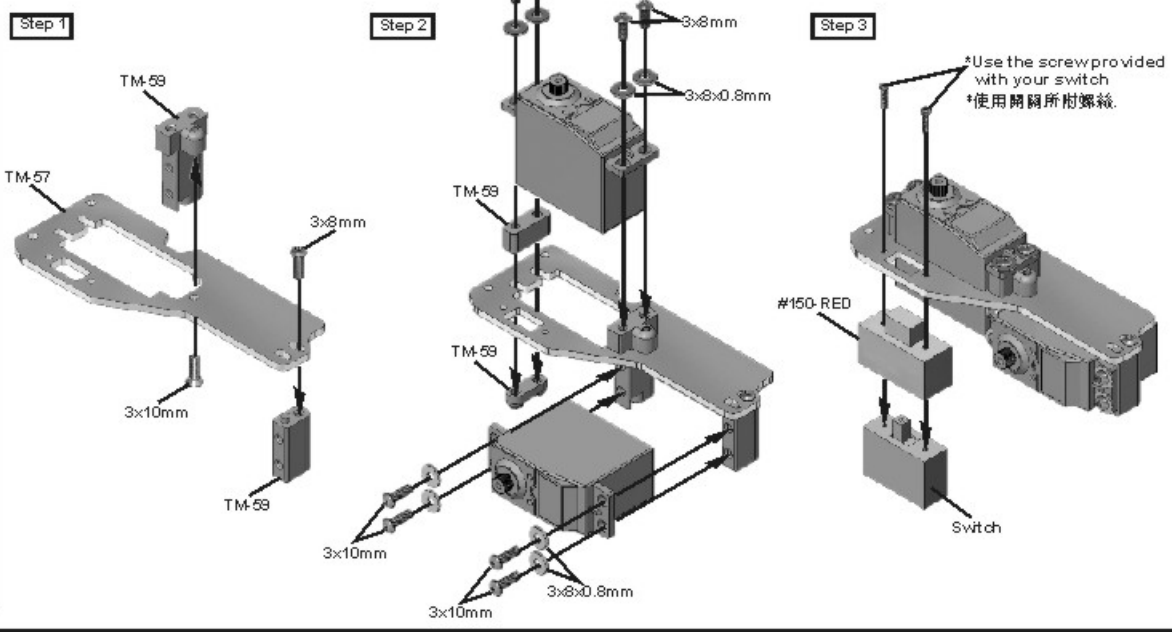
29 ASSEMBLY OF THE REAR GEAR CASE ONTO CHASSIS
組合後齒輪箱至底盤

-  3x10mm Flat Head Hex Screw
 皿頭內六角螺絲x6

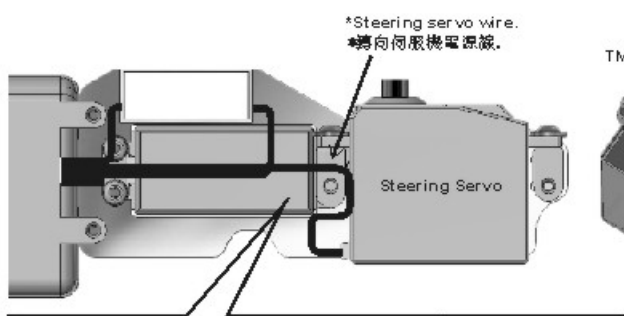


30 ASSEMBLY OF THE RADIO TRAY
二樓板組合

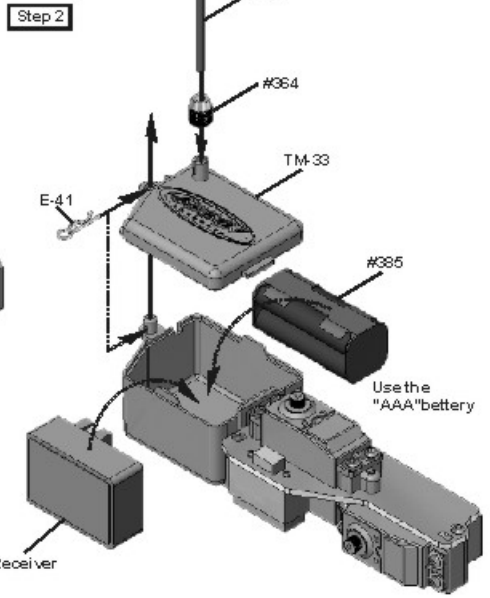
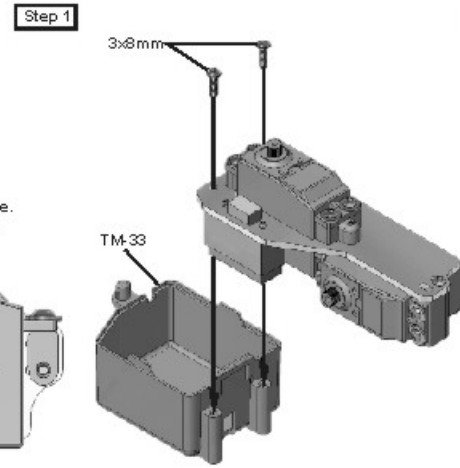
-  3x8x0.8mm Washer
 墊片x8
-  3x10mm Flat Head Hex Screw
 皿頭內六角螺絲x1
-  3x8mm Hex Screw
 半丸內六角螺絲x3
-  3x10mm Hex Screw
 半丸內六角螺絲x4
-  3x18mm Hex Screw
 半丸內六角螺絲x2



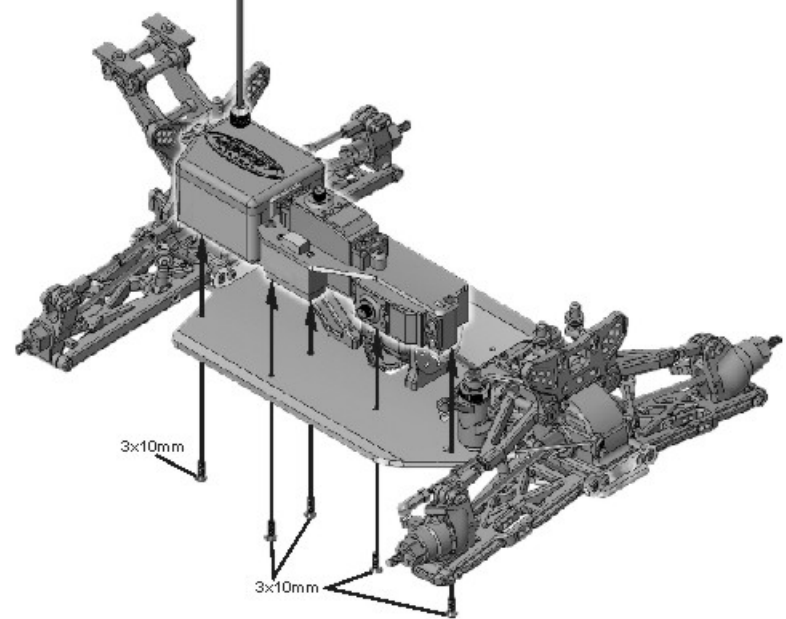
31 ASSEMBLY OF THE RADIO TRAY AND RECEIVER BOX 二樓板與防水盒組合



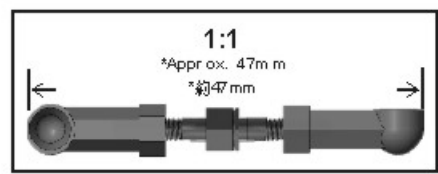
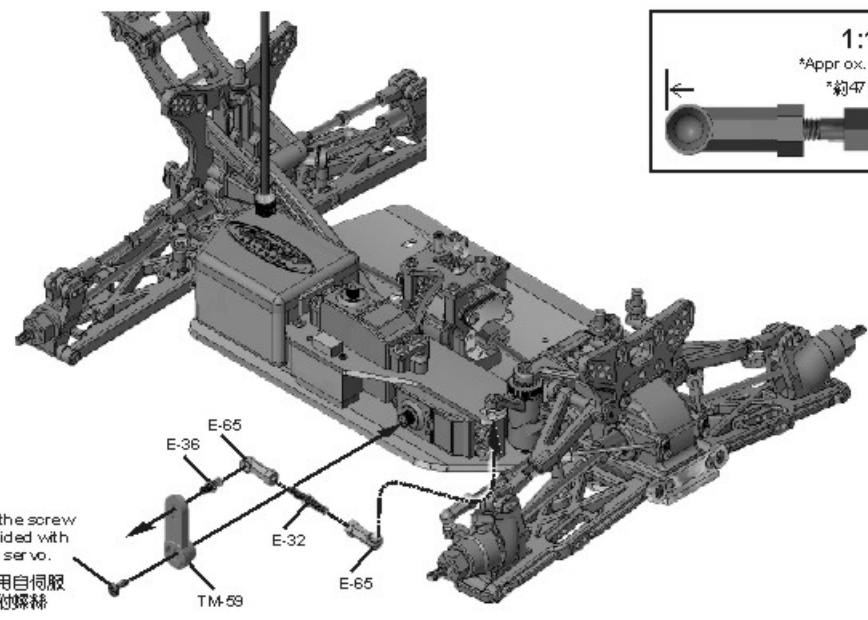
*Put the Servo and Switch wire into receiver box and connect to receiver.
*伺服機及開關接頭放入防水盒內並接上接收機。
*請將轉向伺服機電線依圖示安裝。



32 ASSEMBLY OF THE RADIO TRAY ONTO CHASSIS 組合二樓板至底盤



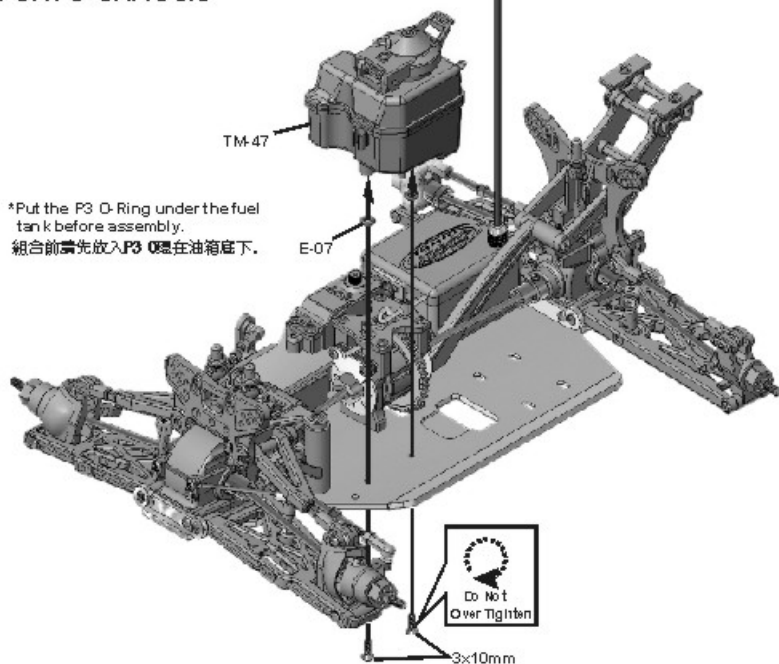
33 ASSEMBLY OF THE STEERING SERVO AND STEERING ROD 轉向伺服機與轉向拉桿組合



34 ASSEMBLY OF THE FUEL TANK ONTO CHASSIS 組合油箱至底盤

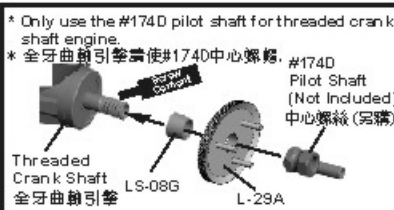


*Put the P3 O-Ring under the fuel tank before assembly.
組合前請先放入P3 O環在油箱底下。

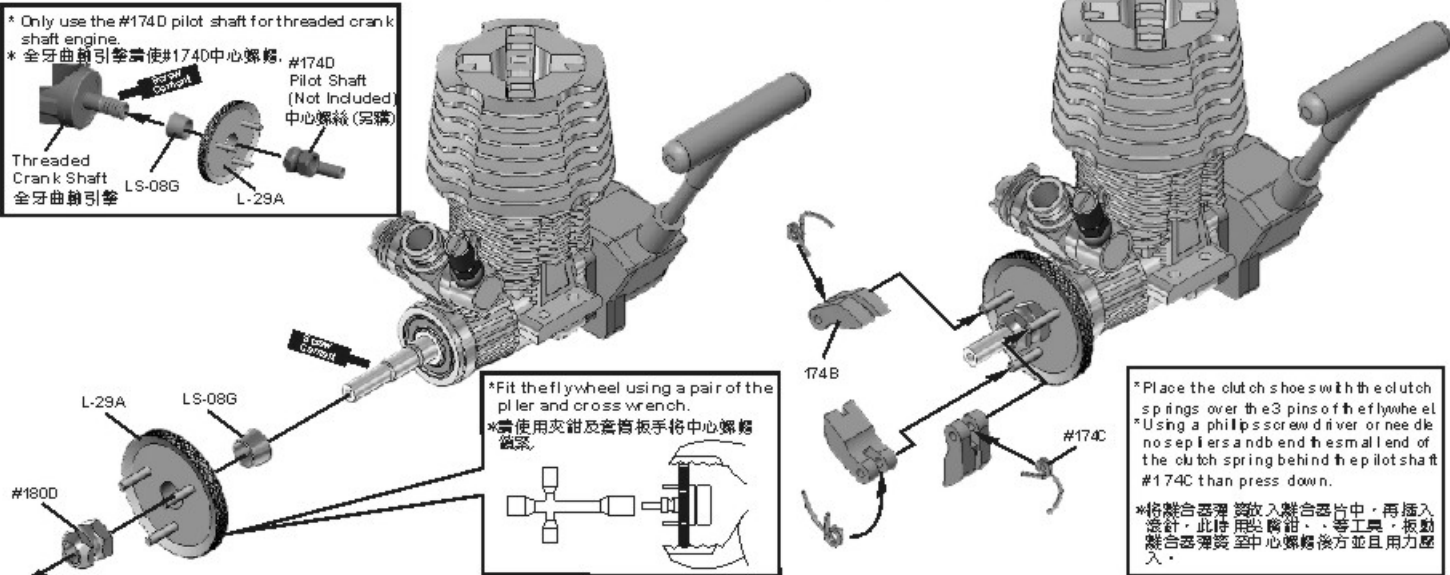


35 ASSEMBLY OF THE CLUTCH 組合離合器

Step 1

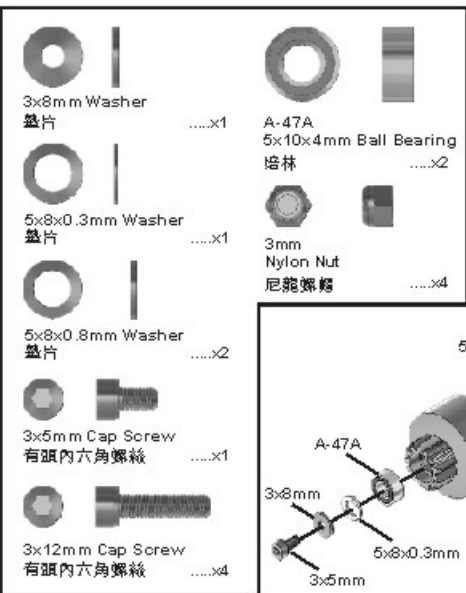


Step 2

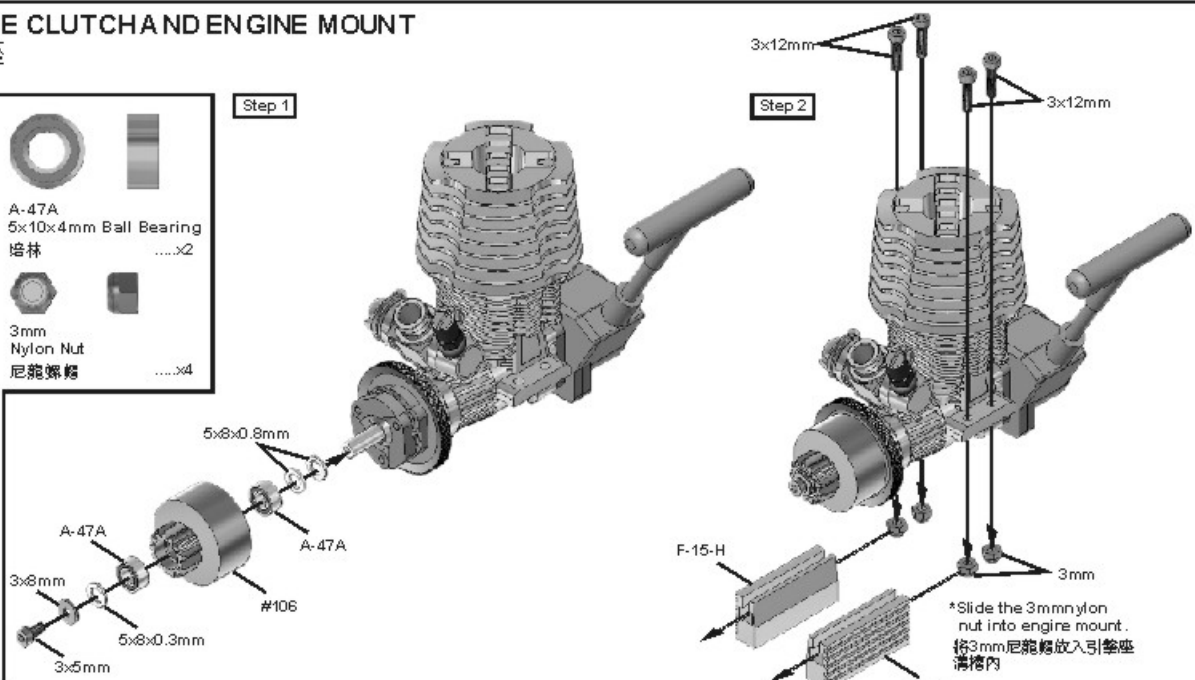


36 ASSEMBLY OF THE CLUTCH AND ENGINE MOUNT 組合離合器與引擎座

Step 1



Step 2

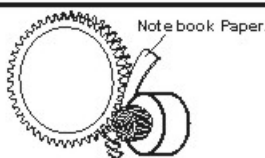


37 ASSEMBLY OF THE ENGINE ONTO CHASSIS

組合引擎至底盤



3x8mm
Hex Screw
半丸內六角螺絲x4

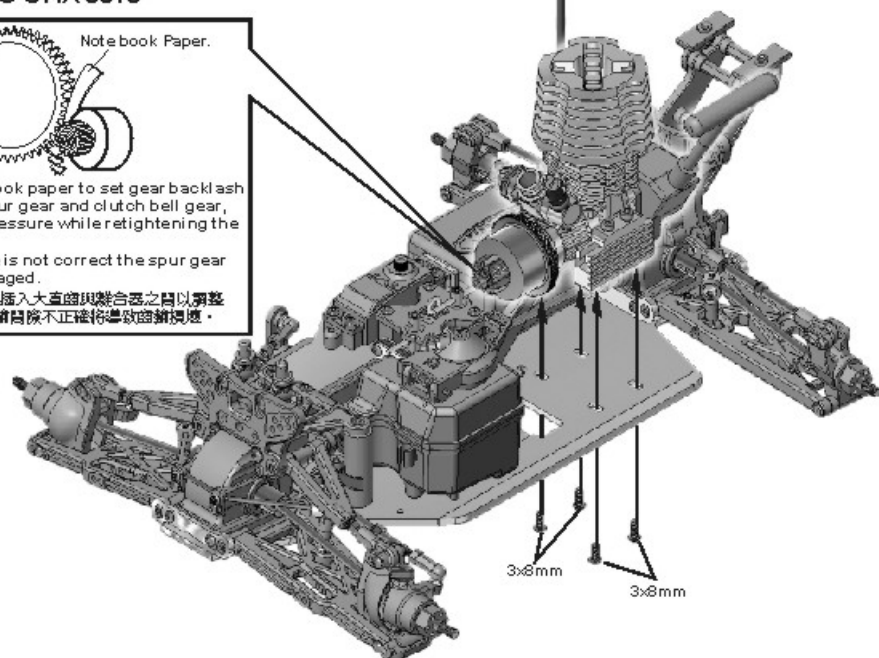


Note book Paper.

*Use note book paper to set gear backlash between spur gear and clutch bell gear, applying pressure while retightening the engine.

*If the space is not correct the spur gear will be damaged.

使用筆記本紙插入大齒輪與离合器之間以調整齒輪間隙。齒輪間隙不正確將導致齒輪損壞。



3x8mm 3x8mm

38 ASSEMBLY OF THE MANIFOLD AND MUFFLER

排氣管與彎管組合



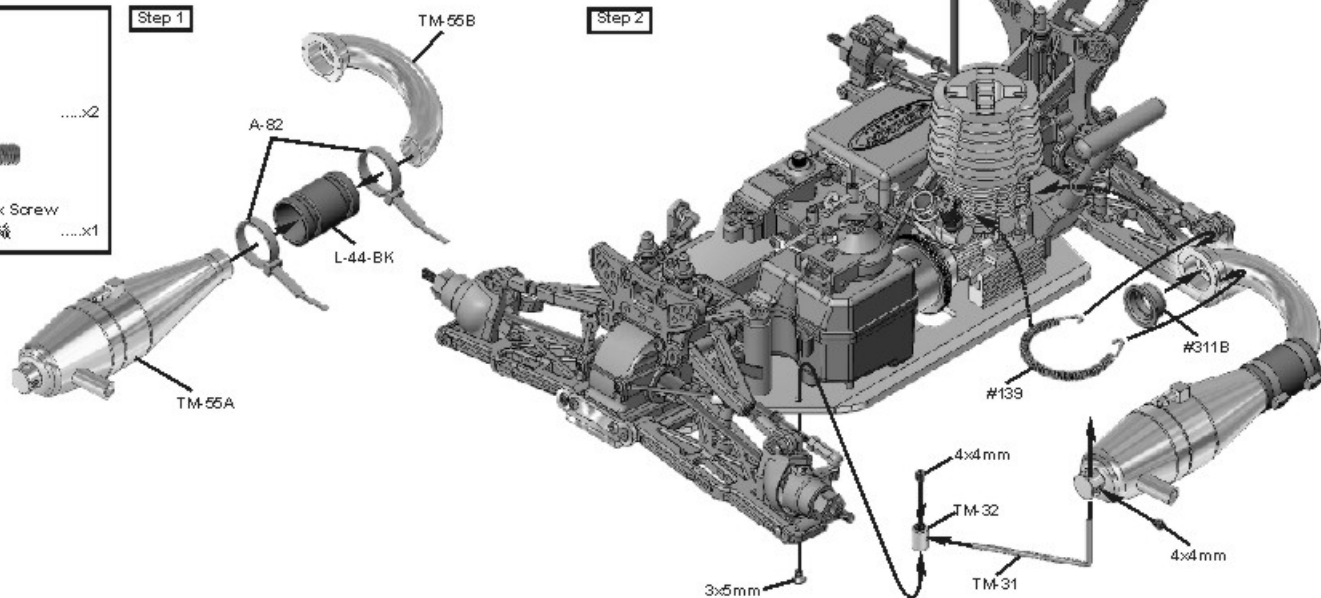
4x4mm
Set Screw
止付螺絲x2



3x5mm
Flat Head Hex Screw
平頭內六角螺絲x1

Step 1

Step 2

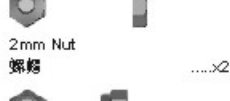


39 ASSEMBLY OF THE THROTTLE LINKAGE

油門伺服盤與煞車調整組組合



3x3mm
Set Screw
止付螺絲x2



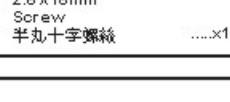
2mm Nut
螺帽x2



J-47F
2.5mm Nylon Nut
止緊螺帽x1



2x8mm
Screw
半丸十字螺絲x2

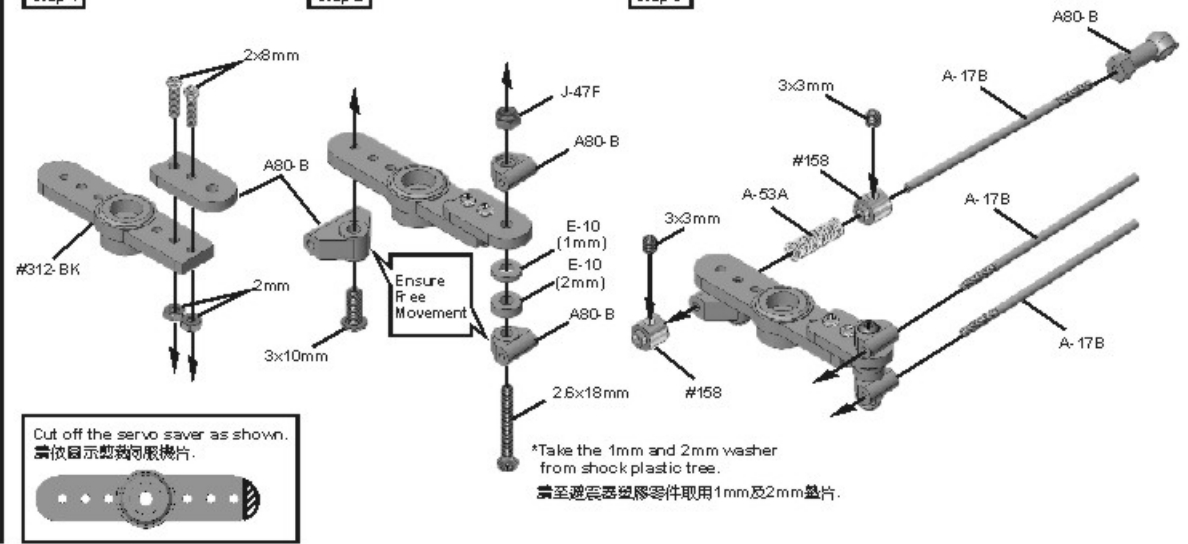


2.6x18mm
Screw
半丸十字螺絲x1

Step 1

Step 2

Step 3



Cut off the servo saver as shown.
請按圖示剪掉伺服機片。

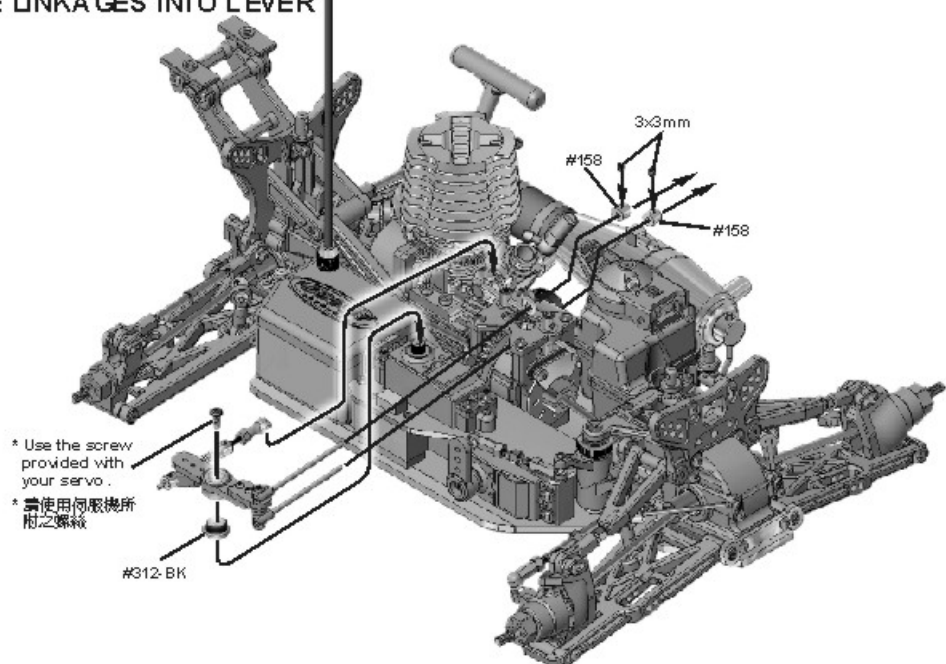
*Take the 1mm and 2mm washer from shock plastic tree.
請至避震器塑膠零件取用1mm及2mm墊片。

40 ASSEMBLY OF THE THROTTLE LINKAGES INTO LEVER 油門伺服盤與煞車調整組組合



3x3mm
Set Screw
止付螺絲

.....x2



* Use the screw provided with your servo.

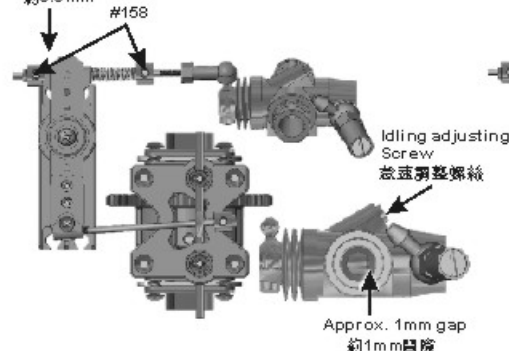
* 請使用伺服機所附之螺絲

#312-BK

41 ADJUSTING THE ENGINE CONTROL LINKAGES 油門 / 煞車拉桿組調整

(Neutral)
中立點位置

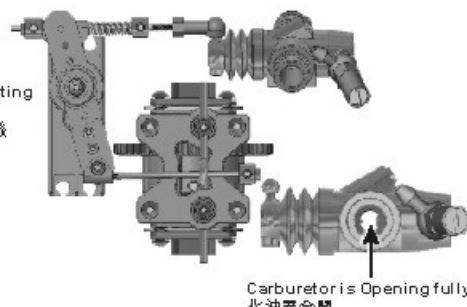
Approx. 0.5mm
約0.5mm



- * Turn on the Transmitter then Receiver and set the Engine Control Servo Trim to the neutral position.
- * Adjust the idling adjusting screw on the Carburetor to be open approx. 1mm gap.
- * Adjust both of the #158 Engine Control and Brake linkage accordingly.
- * Adjust the Engine while it is not running.

- * 開啟遙控器和接收機的電源並且調整伺服機片在中立位置
- * 調整怠速螺絲使北油器開口約1mm間隙
- * 調整 # 158 鉛鎖檔與油門滑座約0.5mm間隙且油門 / 煞車拉桿在中立位置
- * 調整引擎怠速中，車子不可行走。

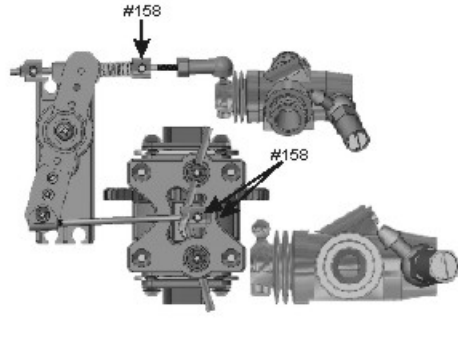
(Throttle High)
全速油門位置



- * Adjust the Servo-Horn mounting position for the Carburetor to be full open.
- * Change the pivot mounting position on the servo horn in case the Carburetor is not opening fully or if it is opening excessively. Or if available on the Transmitter, adjust the Throttle high end point.

- * 將遙控器油門開啟在全速位置。
- * 如果北油器開啟不足或過度請改變油門滑座和伺服片的安裝孔位，使北油器開啟至全開位置。若是遙控器有油門行程調整功能，也可使用調整全速油門位置。

(Brake)
煞車位置



- * Adjust #158 so the brakes work smoothly.
- * If the brakes apply too much or not enough, adjust #158 accordingly. Or if available on the Transmitter, adjust the High-End Brake adjustment.
- * Adjust #158 to Change the front or Rear Brake.

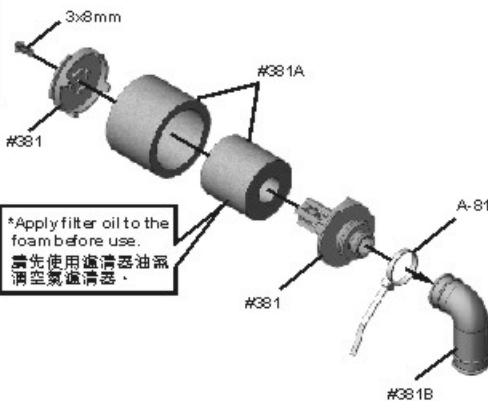
- * 調整彈簧鉛鎖檔使煞車動作得順。
- * 如果煞車不足或過度，請調整 #158 鉛鎖檔位置，或是遙控器有煞車行程調整功能，也可使用調整煞車位置。
- * 調整 A-80A 調整鉛檔，改變前 / 後煞車力度。

42 ASSEMBLY OF THE AIR FILTER 空氣過濾器組合

3x8mm
Hex Screw
半丸內六角螺絲

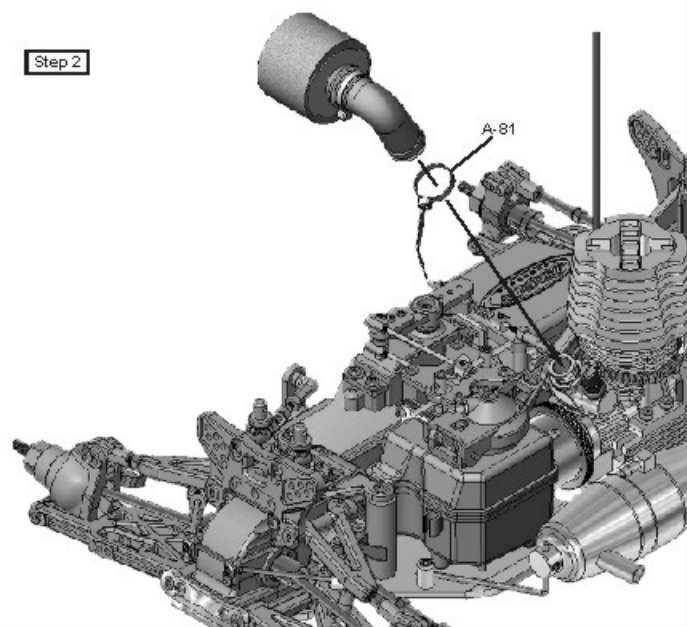
.....x1

Step 1



* Apply filter oil to the foam before use.
請先使用濾油油氣清潔濾油器。

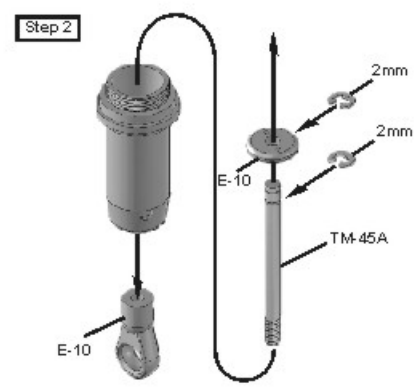
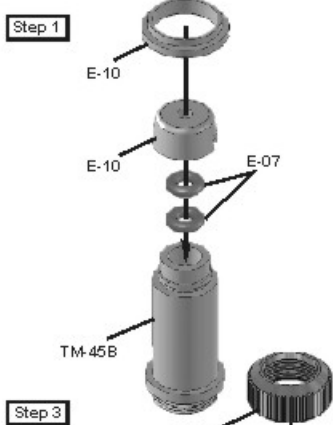
Step 2



43 ASSEMBLY OF THE FRONT SHOCKS 前避震器組合

*Assemble 2 sets for front
請組合 2 支前面用

- E-07
P3 O-Ring
P3 O環x4
- A-41A
6mm Ball
球型x2
- 3x20mm
Hex Screw
半孔內六角螺絲x2



CORRECT SHOCK ASSEMBLY 油壓避震器正確組合

Carefully screw the shock shaft into the bottom of the plastic ball and until the distance between the ball end and the shock body is 18mm for the front.

N.B. Do not over tighten as the plastic will strip.

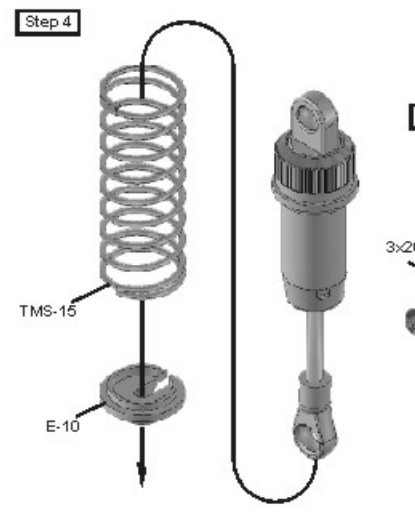
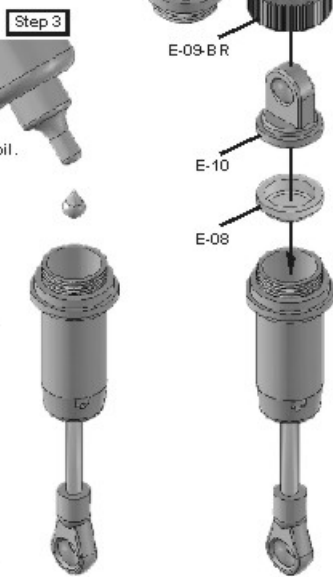
請小心組合避震器塑膠球頭，並鎖入至塑膠球頭底部，並保持前油壓避震器球頭與避震器筒身距離為18mm。

*請勿將塑膠球頭鎖得太緊，以免滑牙。

Fill the shocks with oil.
加入避震油

- 1.Pull down piston and pour oil into shock cylinder.
- 2.To remove air bubbles by slowly moving piston up and down.
- 3.Pull down piston, attach pressure top and shock oil overflow with tissue paper.

1. 拉下活塞到底部並注入避震油。
2. 輕微上下拉動活塞以使氣泡消失。
3. 拉下活塞並放入氣室，用棉紙擦拭溢出的避震油。



3x20mm

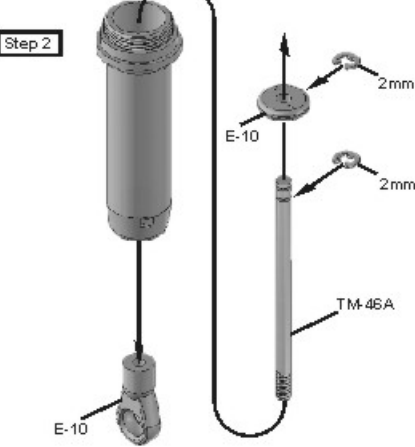
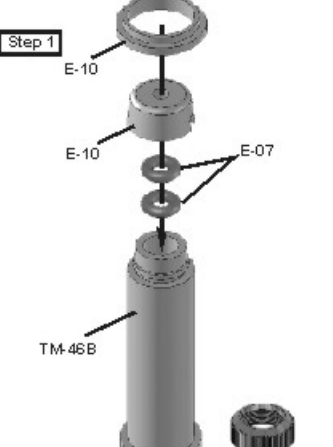
#280-BR

A-41A

44 ASSEMBLY OF THE REAR SHOCKS 後避震器組合

*Assemble 2 sets for rear
請組合 2 支後面用

- E-07
P3 O-Ring
P3 O環x4
- A-41A
6mm Ball
球型x2
- 3x20mm
Hex Screw
半孔內六角螺絲x2



CORRECT SHOCK ASSEMBLY 油壓避震器正確組合

Carefully screw the shock shaft into the bottom of the plastic ball and until the distance between the ball end and the shock body is 3mm for the rear.

N.B. Do not over tighten as the plastic will strip.

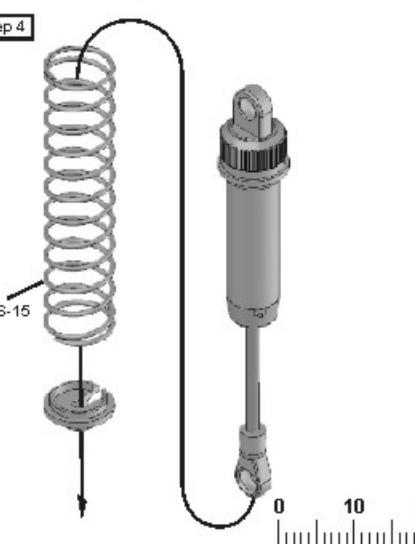
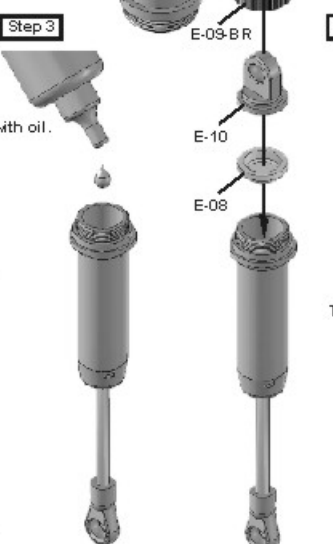
請小心組合避震器塑膠球頭，並鎖入至塑膠球頭底部，並保持前油壓避震器球頭與避震器筒身距離為3mm。

*請勿將塑膠球頭鎖得太緊，以免滑牙。

Fill the shocks with oil.
加入避震油

- 1.Pull down piston and pour oil into shock cylinder.
- 2.To remove air bubbles by slowly moving piston up and down.
- 3.Pull down piston, attach pressure top and shock oil overflow with tissue paper.

1. 拉下活塞到底部並注入避震油。
2. 輕微上下拉動活塞以使氣泡消失。
3. 拉下活塞並放入氣室，用棉紙擦拭溢出的避震油。

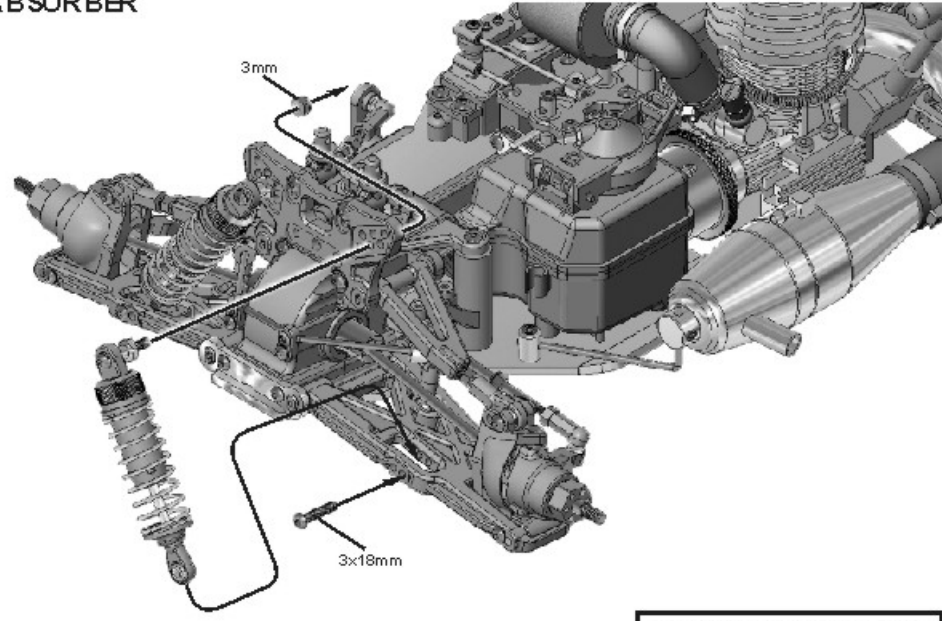


3x20mm

#280-BR

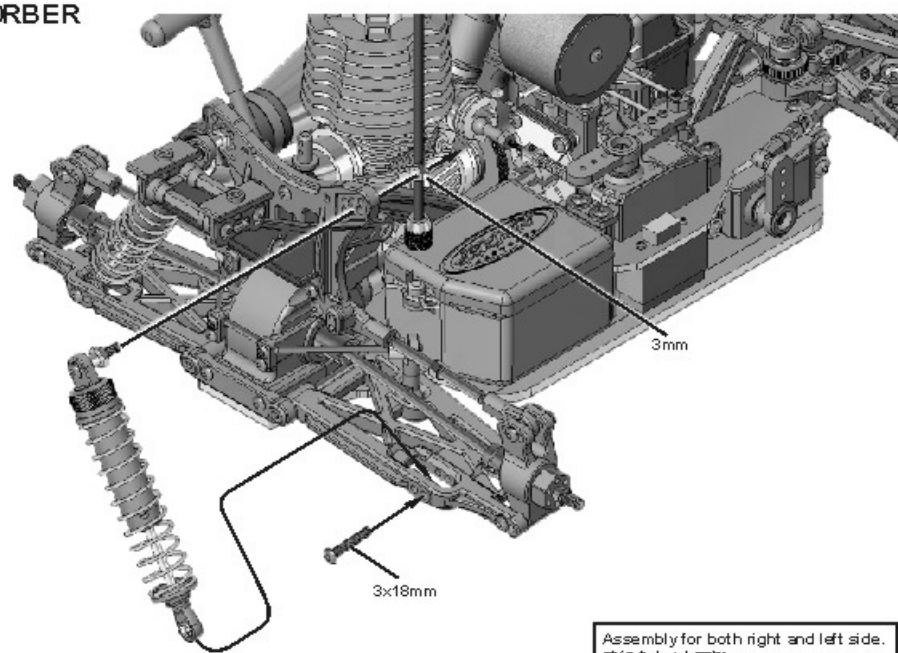
A-41A

45 ASSEMBLY OF THE FRONT SHOCK ABSORBER
前避震器與油壓架組合



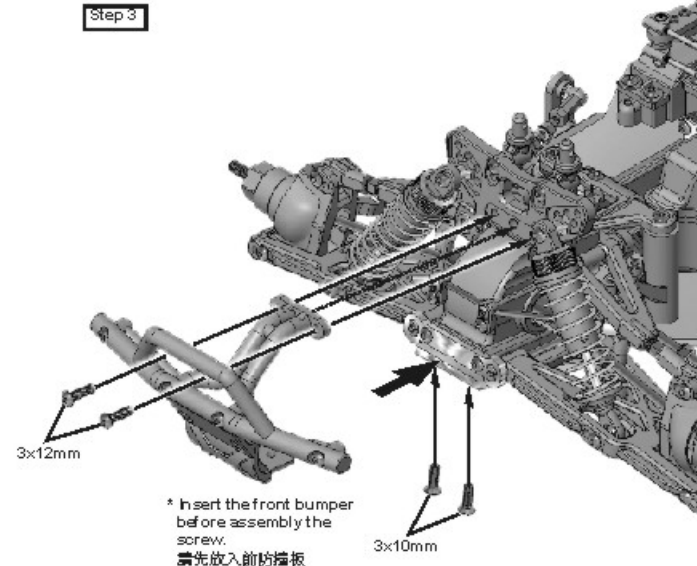
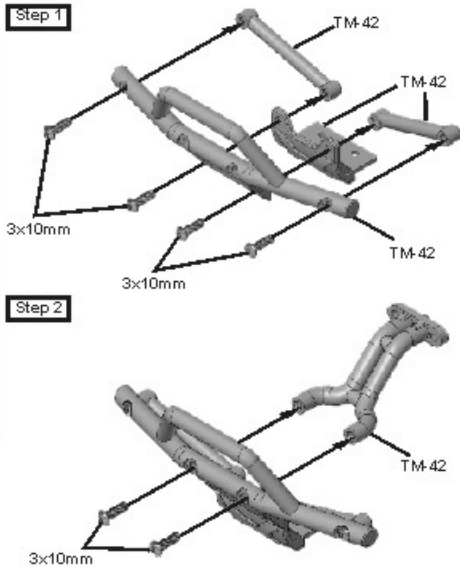
Assembly for both right and left side.
請組合左/右兩側。

46 ASSEMBLY OF THE REAR SHOCK ABSORBER
後避震器與油壓架組合



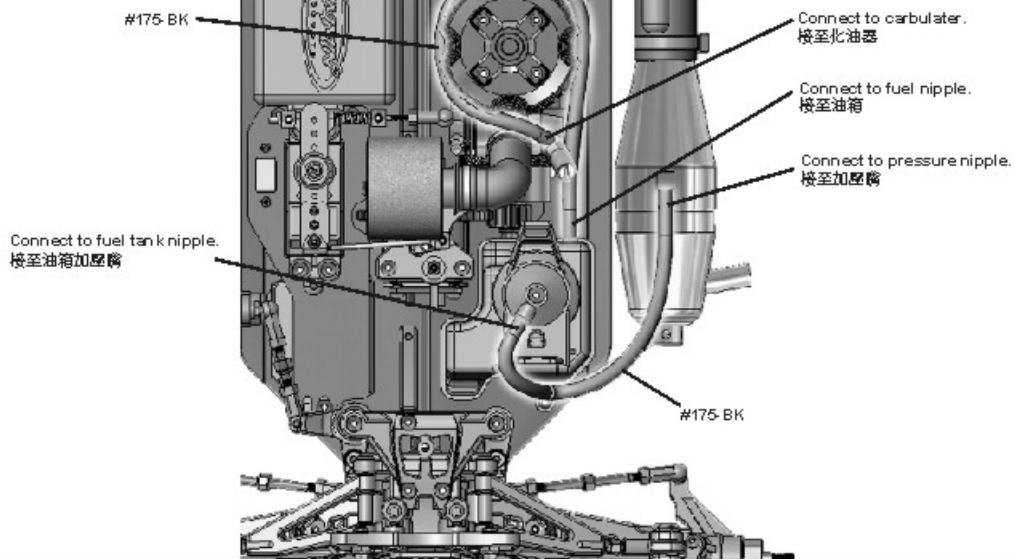
Assembly for both right and left side.
請組合左/右兩側。

47 ASSEMBLY OF THE FRONT BUMPER
前防撞板組合

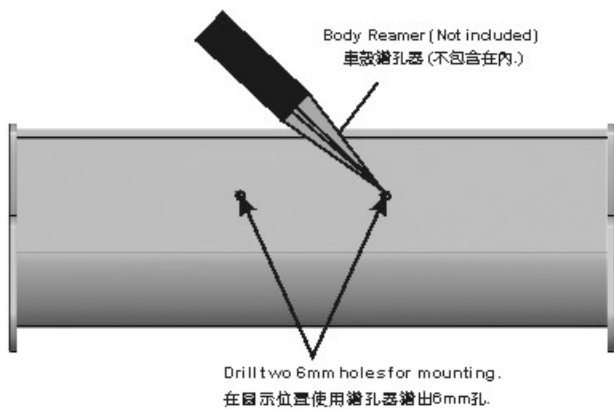


* Insert the front bumper before assembly the screw.
請先放入前防撞板再鎖上螺絲。

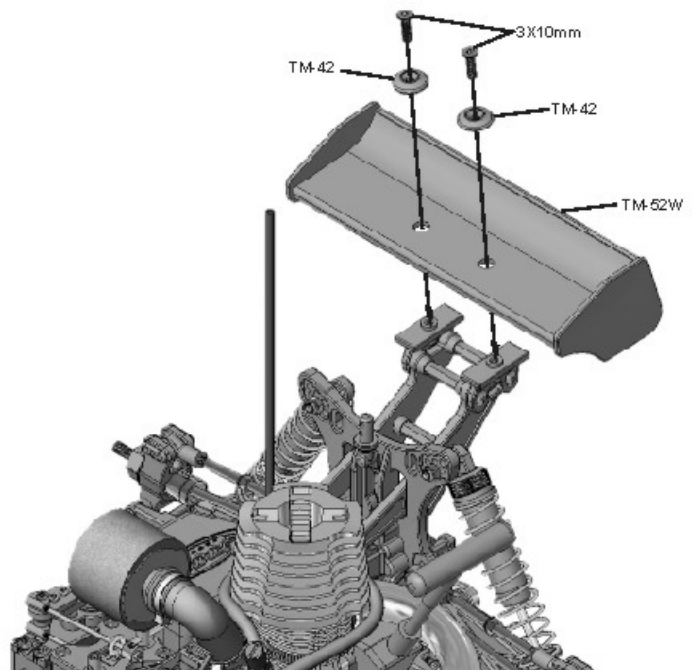
48 ASSEMBLY OF THE FUEL TUBE 油管組合



49 ASSEMBLY OF THE WING 定風翼架組合

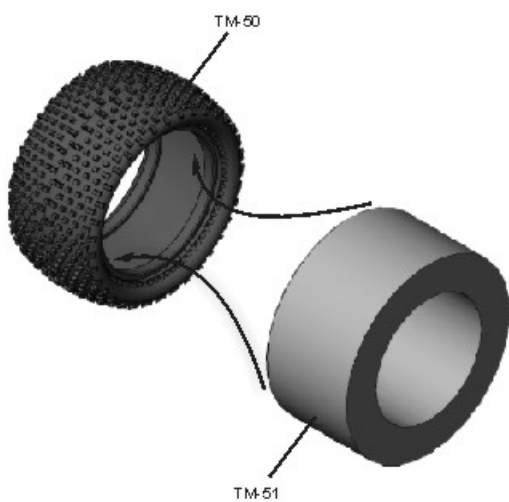


3x10mm
Flat Head Hex Screw
皿頭內六角螺絲x2

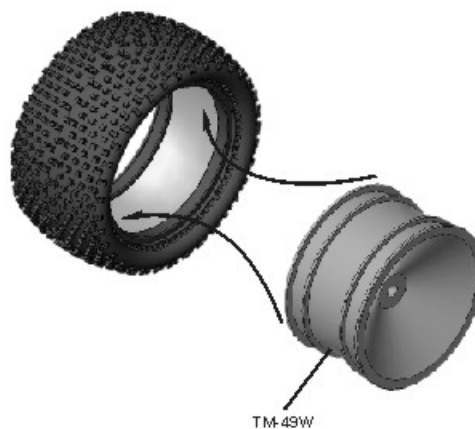


50 ASSEMBLY OF THE TIRES AND WHEELS 輪胎與輪圈組合

Step 1

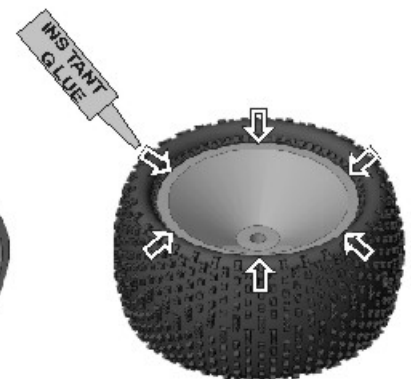


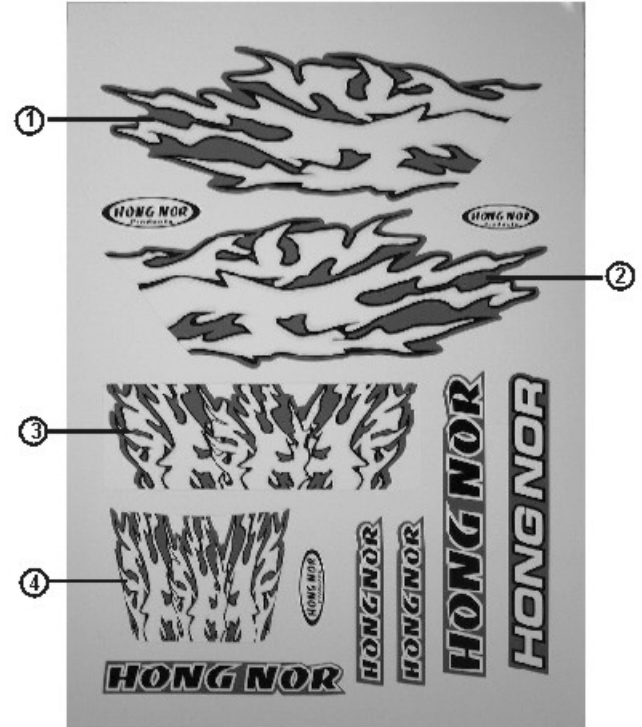
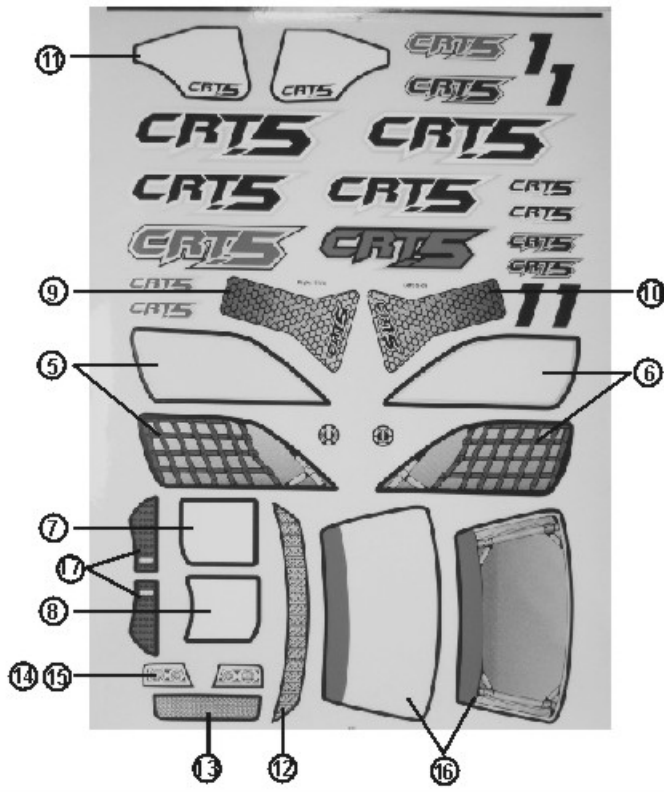
Step 2



Step 3

Apply instant glue into the groove of the wheel.
請在輪圈與輪胎的接合處用瞬間膠水黏合。





52 PUT THE STICKER ON THE BODY AND WING

將貼紙敷於車殼上



(Right Side)
(右邊)



(Left Side)
(左邊)



(Front)
(前方)



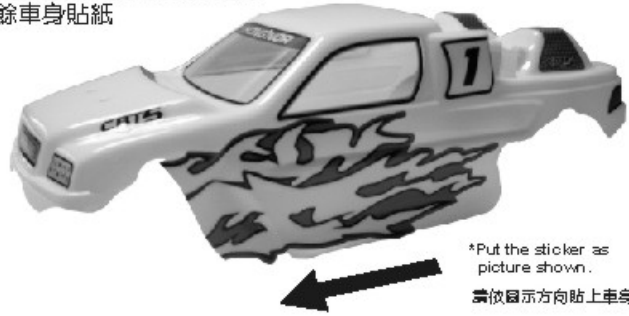
(Rear Wing)
(定風翼)



(Side Wing)
(定風翼側面)

53 CUT THE EXTRA STICKER

剪裁多餘車身貼紙



*Put the sticker as picture shown.
請依圖示方向貼上車身貼紙。



*Use hobby knife and cut the extra part.
請用多餘貼紙。

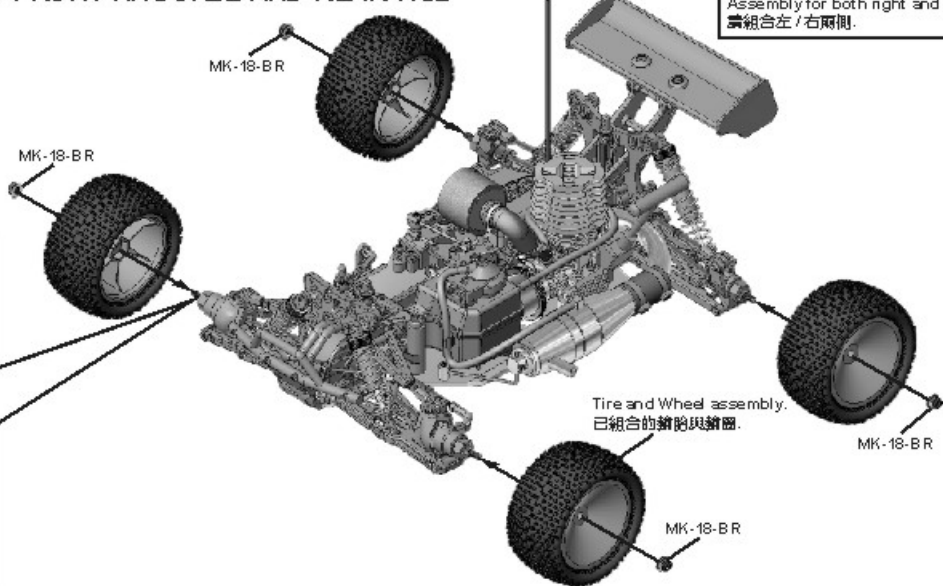
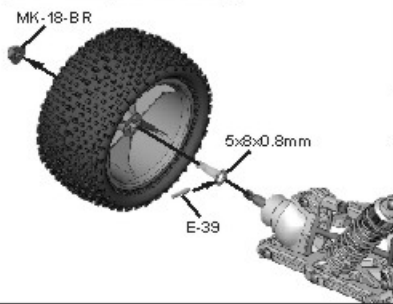
54 ASSEMBLY OF THE TIRE ONTO FRONT KNUCKLE AND REAR HUB

安裝輪胎至車體

Assembly for both right and left side.
請組合左/右兩側。

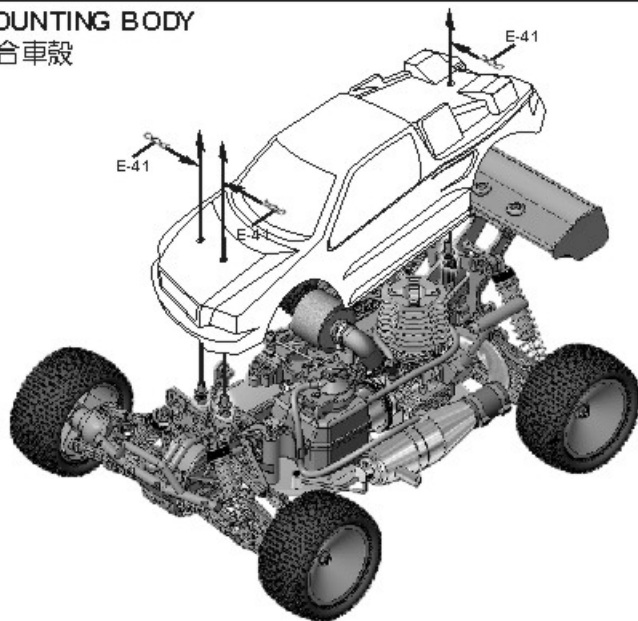
*For other wheels please assembly as picture shown.
*請依照圖示使用其他種類輪胎。

*Put the 5x8x0.8mm washer behind the 2mm pin.
*將5x8x0.8mm 墊片放在2mm 針之後。



55 MOUNTING BODY

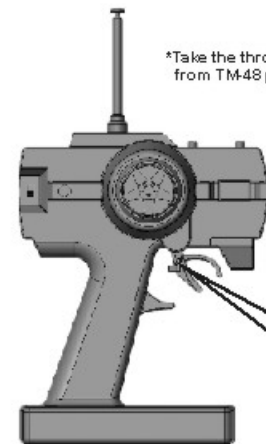
組合車殼



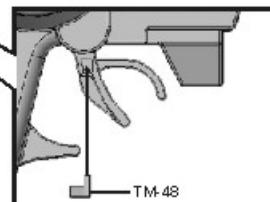
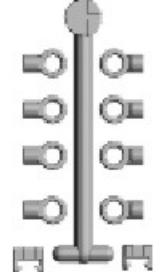
56 ASSEMBLY THE THROTTLE STOPPER ONTO TRANSMITTER

按裝油門止擋器

*Take the throttle stopper from TM48 plastic parts.



TM-48
STABILIZER BALL END
平衡桿球頭塑膠品



57 STARTING OF THE ENGINE

啟動引擎

How to start the engine:

1. Turn on transmitter and then receiver.
2. Fill fuel tank with fuel bottle.
3. Connect 1.2V glow plug igniter.
4. Start the engine with pull starter.
5. After the engine be started, remove the 1.2V glow plug starter.

* Follow the engine manufacturer instruction manuals regarding engine set-up, carburetor and maintenance.

如何啟動引擎

1. 先開啟發射機電源, 打開接收機電源.
2. 將燃油加入油箱內.
3. 接上1.2V 火星塞電夾至火星塞上.
4. 使用引擎背後手拉器, 啟動引擎.
5. 引擎啟動後移開1.2V 火星塞電夾.

* 請依照引擎製造商的說明書以調整及保養引擎。

G low P lu g (Not Included)

火星塞(不包含在內)



Normal Plug

普通火星塞

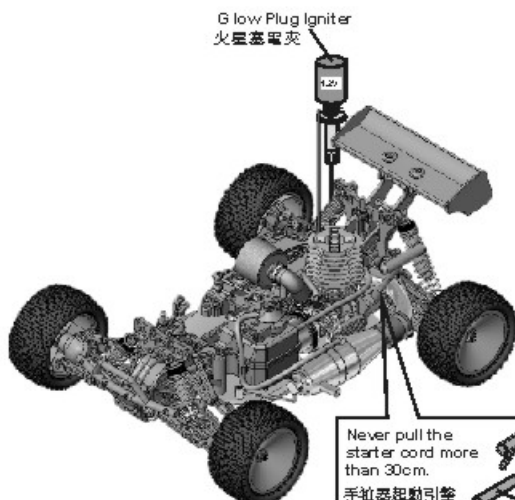
Turbo Plug

Turbo 火星塞

There is 2 types of glow plug available "NORMAL or Turbo" depending of the type of the engine.

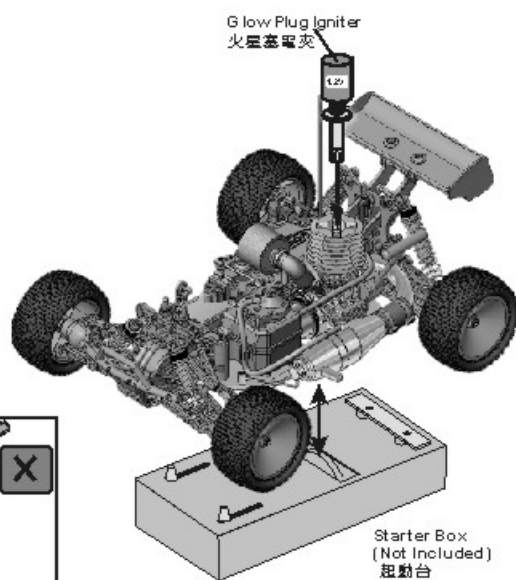
請依使用的引擎選擇普通 火星塞或 Turbo 火星塞。

*Use the pull starter to star the engine.
使用手拉器啟動引擎。



*Use a starter box, applied to the flywheel exposed through the chassis.

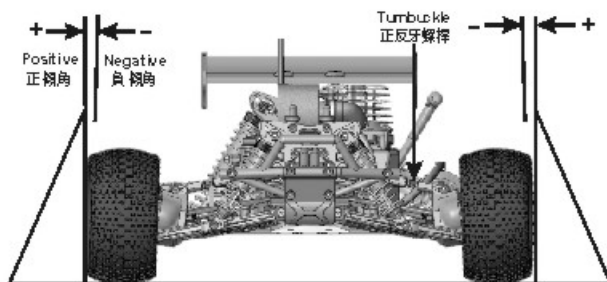
使用起動台, 將底座下方引擎飛輪對準起動台膠線以起動引擎(注意起動台旋轉方向。)



Starter Box
(Not Included)
起動台

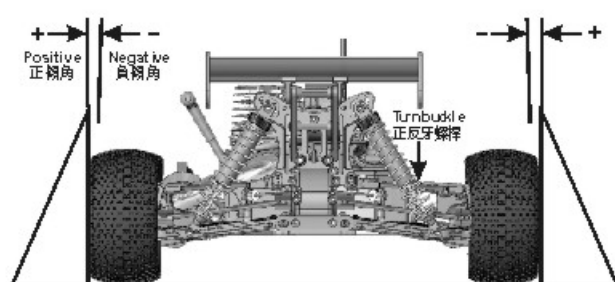
SETTING GUIDE 輪胎角度設定

FRONT CAMBER ANGLE SETTING 前胎傾角調整



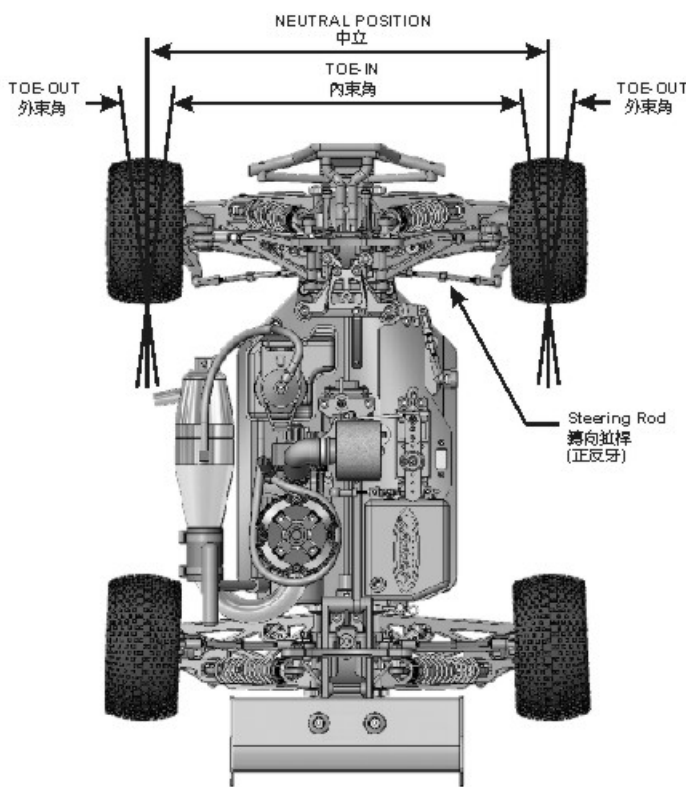
Place the model car on flat surface. Raise the chassis to it's maximum clearance before the wheels leave the ground.
Adjust the length of the front and rear upper arms so that the wheels are right angle to the ground.
The camber angle adjustment can be moving the turnbuckle rod on the upper arms, clockwise or anti-clockwise.
(We suggest use zero degree for the front and 1.5 negative degree for the rear.)

REAR CAMBER ANGLE SETTING 後胎傾角調整



1. 將車體放置在平穩桌面上並保持在正確離地高度。
調整上擺臂長度使輪胎與地面垂直(0度)。
2. 調整上擺臂"正反牙螺桿"長度可改變正負傾角設定。
加長上擺臂-傾角變為-正傾角。
縮短上擺臂-傾角變為-負傾角。
(我們建議前輪為0度,後輪為負1.5度。)

FRONT TOE-IN AND TOE-OUT SETTING 前輪內束角/外束角調整



Adjust the length of front tie rod to change the toe angle.

Making the tie rod longer will make the front tires become toe-in.
Response will be slower and will over steer.

Making the tie rod shorter will make the front tires become toe-out.
Response will be quicker and will under steer.

改變前轉向拉桿之長度可以改變前輪"內束角"與"外束角"。

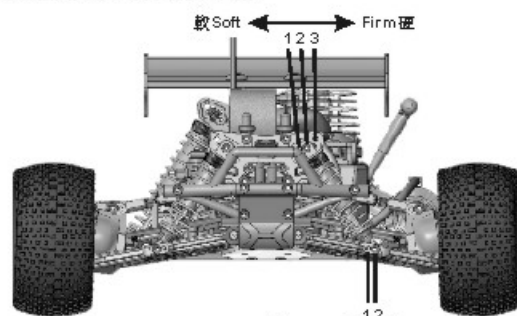
1. 將前轉向拉桿拉長, 前輪會變為內束角, 此種轉向反應較慢, 並且會轉向過度情形產生。

2. 將前轉向拉桿拉短, 前輪會變為外束角, 此種轉向反應較快, 並且會轉向不足情形產生。

FRONT SHOCK ANGLE SETTING

前油壓避震器角度調整

前油壓避震器若安裝在不正確位置, 而會使避震系統產生不良駕駛特性。
前油壓避震器安裝位置應往車軸中心, 過前反應較快, 後輪避震系統較慢, 會產生不良抓地力特性。
油壓避震器安裝孔位, 實地場地不良而調整在不正確位置。

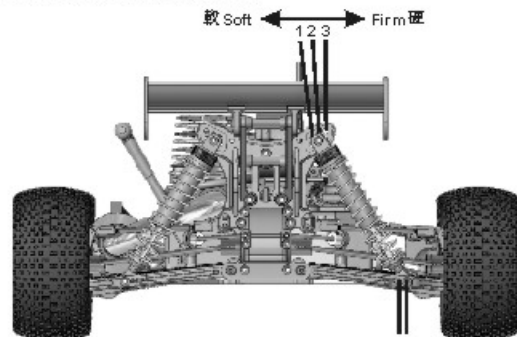


Firm front suspension, less steering. 前輪硬-轉向不足
Soft front suspension, more steering. 前輪軟-轉向過度

REAR SHOCK ANGLE SETTING

後油壓避震器角度調整

後油壓避震器若安裝在不正確位置, 而會使避震系統產生不良駕駛特性。
後油壓避震器安裝位置應往車軸中心, 過前反應較快, 後輪避震系統較慢, 會產生不良抓地力特性。
油壓避震器安裝孔位, 實地場地不良而調整在不正確位置。



Firm rear suspension, over steering. 後輪硬-轉向過度
Soft rear suspension, under steering. 後輪軟-轉向不足

CASTER ANGLE

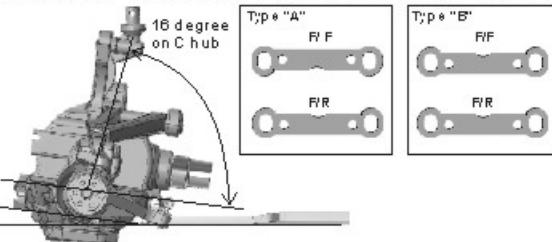
Adjust the front caster angle by changing the arm block "A" or "B" on the front upper arm.

After you set the caster angle, you will also need to adjust the front upper suspension.

The final caster also depends on the Kick-Up setting.

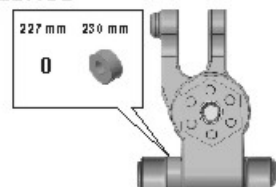
Example: 1.6 degree caster on C-hub + 7 degree Kick-Up + "A" low arm block = 22 degree final caster.

1.6 degree caster on C-hub + 7 degree Kick-Up + "B" low arm block = 23 degree final caster.



Caster angle	Characteristics
Less caster	Increases off-power steering into a corner. Decreases on-power steering out of and in a corner. Decreases straight-line stability.
More caster	Decreases off-power steering into a corner. Increases on-power steering out of and in a corner. Increases straight-line stability.

REAR WHEELBASE



Adjust the wheel base by using the spacers on either side of the rear upright (at the bottom pin).
IMPORTANT! Make equal adjustment on both left and right sides of the car.

Shorter wheelbase

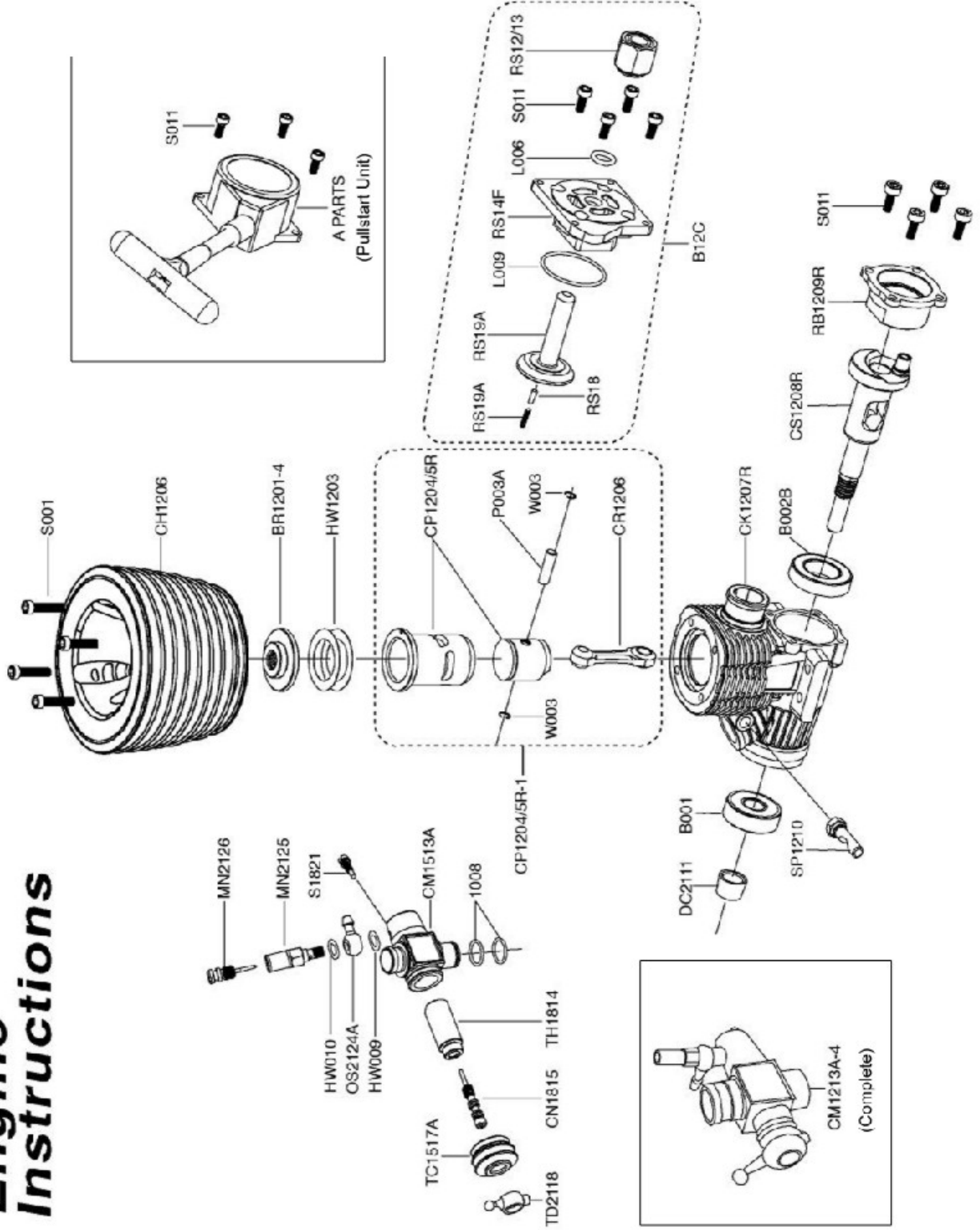
Use spacers in front of the rear upright.
- Increase rearward weight transfer during acceleration.
- Increase on-power traction.
- quicker response steering into corner.
- slight tendency to push on power into corners.
- increase steering response.
- better on tighter, more technical track.

Longer wheelbase

More spacers in front of the rear upright.
- decrease off-power steering into steep corners.
- increase stability.
- no oversteer tendency (off-power).
- improve on-power steering into corners.
- better handling over bumps and rutts.
- better on more open tracks with high-speed corners.

X-12 REAR EXHAUST ENGINE.

Engine Instructions



PARTS LIST

ITEM NO.	DESCRIPTION
B001	BALL BEARING 607Z
B002B	BALL BEARING 6801
BR1201-4	BURN ROOM
CH1206	CYLINDER HEAD
CK1207R	CRANKCASE-BLACK
CM1513A	COMPOSITE CARB MAIN BODY
CM1213A-4	COMPOSITE CARB COMPLETELY SET
CN1815	IDLE NEEDLE
CP1204/5R	CYLINDER SLEEVE/PISTON
CP1204/5R-1	CYLINDER SLEEVE/PISTON SET
CR1206	CONNECTING ROD
CS1208R	CRANKSHAFT SG
DC2111	DRIVE BRASS WASHER
DG2112A	DRIVE GEAR
HW009	WASHER 0.6X4.1X7.5MM
HW010	WASHER 0.6X5.1X7.5MM
HW1203	CYLINDER HEAD WASHER 1pcs
L004	MAIN NEEDLE VALVE "O" RING
L008	CARBURETOR "O" RING
MN2125	MAIN NEEDLE VALVE HUB
MN2126	MAIN NEEDLE
MN2126-1	MAIN NEEDLE SET
OS2124A	FUEL NIPPLE
P003A	PISTON GUIDEON PIN
RB1209R	REAR PLATE
S001	CYLINDER HEAD BOLT 4PCS
S1821	ADJUST SCREW
SP1210	CARB PINCH BOLT
TC1517A	DUST COVER
TD2118	THROTTLE SCREW CAP
TH1814A	THROTTLE & COUNTER NEEDLE VALVE
W003	"G" PIN RETAINERS
ULL STARTER ASSEMBLY	
A + B12C	RECOIL START UNIT ASSEMBLY
A Parts	A PARTS ASSEMBLY - PLASTIC PART
B 12C	B PARTS ASSEMBLY
L006	"O" RING-CONNECTIVE SEAT
L009	REAR COVER "O" RING
RS12/13	ONE WAY BEARING SET
RS14F	CONNECTIVE SEAT
RS17E	STARTING DISK
RS18	STARTING PIN
RS19A	PRESSURE SPRING
S011	REAR COVER BOLT 2.6x7



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