INSTRUCTION MANUAL
BEFORE YOU START

The T4 is a high-competition, high-quality, 1/10-scale touring car intended for persons aged 16 years and older with previous experience building and operating RC model racing cars. This is not a toy; it is a precision racing model. This model racing car is not intended for use by beginners, inexperienced customers, or by children without direct supervision of a responsible, knowledgeable adult. If you do not fulfill these requirements, please return the kit in unused and unassembled form back to the shop where you have purchased it.

Before building and operating your T4, YOU MUST read through all of the operating instructions and instruction manual and fully understand them to get the maximum enjoyment and prevent unnecessary damage. Read carefully and fully understand the instructions before beginning assembly.

Make sure you review this entire manual, download and use set-up book from the web, and examine all details carefully. If for some reason you decide The t4 is not what you wanted or expected, do not continue any further. Your hobby dealer cannot accept your T4 kit for return or exchange after it has been partially or fully assembled.

Contents of the box may differ from pictures. In line with our policy of continuous product development, the exact specifications of the kit may vary without prior notice.

CUSTOMER SUPPORT

We have made every effort to make these instructions as easy to understand as possible. However, if you have any difficulties, problems, or questions, please do not hesitate to contact the XRAY support team at info@teamxray.com. Also, please visit our Web site at www.teamxray.com to find the latest updates, set-up information, option parts, and many other goodies. We pride ourselves on taking excellent care of our customers.

You can join thousands of XRAY fans and enthusiasts in our online community at: www.teamxray.com

SAFETY PRECAUTIONS

Failure to follow these instructions will be considered as abuse and/or neglect.

Improper operation may cause personal and/or property damage. XRAY and its distributors have no control over damage resulting from shipping, improper construction, or improper usage. XRAY assumes and accepts no responsibility for personal and/or property damages resulting from the use of improper building materials, equipment and operations. By purchasing any item produced by XRAY, the buyer expressly warrants that he/she is in compliance with all applicable federal, state and local laws and regulation regarding the purchase, ownership and use of the item. The buyer expressly agrees to indemnify and hold harmless XRAY for all claims resulting directly or indirectly from the purchase, ownership or use of the product. By the act of assembling or operating this product, the user accepts all resulting liability. If the buyer is not prepared to accept this liability, then he/she should return this kit in new, unassembled, and unused condition to the place of purchase.

IMPORTANT NOTES – GENERAL

- This product is not suitable for children under 16 years of age without the direct supervision of a responsible and knowledgeable adult.
- Carefully read all manufacturers warnings and cautions for any parts used in the construction and use of your model.
- Assemble this kit only in places away from the reach of very small children.
- First-time builders and users should seek advice from people who have building experience in order to assemble the model correctly and to allow the model to reach its performance potential.
- Exercise care when using tools and sharp instruments.
- Take care when building, as some parts may have sharp edges.
- Keep small parts out of reach of small children. Children must not be allowed to put any parts in their mouth, or pull vinyl bag over their head.
- Read and follow instructions supplied with paints and/or cement, if used (not included in kit).
- Immediately after using your model, do NOT touch equipment on the model such as the motor and speed controller, because they generate high temperatures. You may seriously burn yourself seriously touching them.
- Follow the operating instructions for the radio equipment at all times.
- Do not put fingers or any objects inside rotating and moving parts, as this may cause damage or serious injury as your finger, hair, clothes, etc. may get caught.
- Be sure that your operating frequency is clear before turning on or running your model, and never share the same frequency with somebody else at the same time. Ensure that others are aware of the operating frequency you are using and when you are using it.
- Use a transmitter designed for ground use with RC cars. Make sure that no one else is using the same frequency as yours in your operating area. Using the same frequency at the same time, whether it is driving, flying or sailing, can cause loss of control of the RC model, resulting in a serious accident.
- Always turn on your transmitter before you turn on the receiver in the car. Always turn off the receiver before turning your transmitter off.
- Keep the wheels of the model off the ground when checking the operation of the radio equipment.
- Disconnect the battery pack before storing your model.
- When learning to operate your model, go to an area that has no obstacles that can damage your model if your model suffers a collision.
- Remove any sand, mud, dirt, grass or water before putting your model away.
- If the model behaves strangely, immediately stop the model, check and clear the problem.
- To prevent any serious personal injury and/or damage to property, be responsible when operating all remote controlled models.
- The model car is not intended for use on public places and roads or areas where its operation can conflict with or disrupt pedestrian or vehicular traffic.
- Because the model car is controlled by radio, it is subject to radio interference from many sources that are beyond your control. Since radio interference can cause momentary loss of control, always allow a safety margin in all directions around the model in order to prevent collisions.
- Do not use your model:
  - Near real cars, animals, or people that are unaware that an RC car is being driven.
  - In places where children and people gather.
  - In residential districts and parks.
  - In limited indoor spaces.
  - In wet conditions.
  - In the street.
  - In areas where loud noises can disturb others, such as hospitals and residential areas.
  - At night or anytime your line of sight to the model may be obstructed or impaired in any way.

To prevent any serious personal injury and/or damage to property, please be responsible when operating all remote controlled models.

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E-mail: xray@rcamerica.com

CONTENTS
**IMPORTANT NOTES - ELECTRICAL**

- Insulate any exposed electrical wiring (using heat shrink tubing or electrical tape) to prevent dangerous short circuits. Take maximum care in wiring, connecting and insulating cables. Make sure cables are always connected securely. Check connectors for if they become loose. And if so, reconnect them securely. Never use R/C models with damaged wires. A damaged wire is extremely dangerous, and can cause short-circuits resulting in fire. Please have wires repaired at your local hobby shop.
- Low battery power will result in loss of control. Loss of control can occur due to a weak battery in either the transmitter or the receiver. Weak running battery may also result in an out of control car if your car’s receiver power is supplied by the running battery. Stop operation immediately if the car starts to slow down.
- When not using RC model, always disconnect and remove battery.
- Do not disassemble battery or cut battery cables. If the running battery short-circuits, approximately 300W of electricity can be discharged, leading to fire or burns. Never disassemble battery or cut battery cables.
- Use a recommended charger for the receiver and transmitter batteries and follow the instructions correctly. Over-charging, incorrect charging, or using inferior chargers can cause the batteries to become dangerously hot.

**R/C & BUILDING TIPS**

- Make sure all fasteners are properly tightened. Check them periodically.
- Make sure that chassis screws do not protrude from the chassis.
- For the best performance, it is very important that great care is taken to ensure the free movement of all parts.
- Clean all ball-bearings so they move very easily and freely.
- Tap or pre-thread the plastic parts when threading screws.
- Self-tapping screws cut threads into the parts when being tightened. Do not use excessive force when tightening the self-tapping screws because you may strip out the thread in the plastic. We recommended you stop tightening a screw when you feel some resistance.
- Ask your local hobby shop for any advice.

**WARRANTY**

XRAY guarantees this model kit to be free from defects in both material and workmanship within 30 days of purchase. The total monetary value under warranty will in no case exceed the cost of the original kit purchased. This warranty does not cover any components damaged by use or modification or as a result of wear. Part or parts missing from this kit must be reported within 30 days of purchase. No part or parts will be sent under warranty without proof of purchase. Should you find a defective or missing part, contact the local distributor. Service and customer support will be provided through local hobby store where you have purchased the kit, therefore make sure to purchase any XRAY products at your local hobby store. This model racing car is considered to be a high-performance racing vehicle. As such this vehicle will be used in an extreme range of conditions and situations, all which may cause premature wear or failure of any component. XRAY has no control over usage of vehicles once they leave the dealer, therefore XRAY can only offer warranty against all manufacturer’s defects in materials, workmanship, and assembly at point of sale and before use. No warranties are expressed or implied that cover damage caused by what is considered normal use, or cover or imply how long any model cars’ components or electronic components will last before requiring replacement.

Due to the high performance level of this model car you will need to periodically maintain and replace consumable components. Any and all warranty coverage will not cover replacement of any part or component damaged by neglect, abuse, or improper or unreasonable use. This includes but is not limited to damage from crashing, chemical and/or water damage, excessive moisture, improper or no maintenance, or user modifications which compromise the integrity of components. Warranty will not cover components that are considered consumable on RC vehicles. XRAY does not pay nor refund shipping on any component sent to XRAY or its distributors for warranty. XRAY reserves the right to make the final determination of the warranty status of any component or part.

**QUALITY CERTIFICATE**

XRAY MODEL RACING CARS uses only the highest quality materials, the best compounds for molded parts and the most sophisticated manufacturing processes of TQM (Total Quality Management). We guarantee that all parts of a newly-purchased kit are manufactured with the highest regard to quality. However, due to the many factors inherent in model racecar competition, we cannot guarantee any parts once you start racing the car. Products which have been worn out, abused, neglected or improperly operated will not be covered under warranty. We wish you enjoyment of this high-quality and high-performance RC car and wish you best success on the track!

**LIMITATIONS OF LIABILITY**

XRAY makes no other warranties expressed or implied. XRAY shall not be liable for any loss, injury or damages, whether direct, indirect, special, incidental, or consequential, arising from the use, misuse, or abuse of this product and/or any part or accessory required to operate this product. In no case shall XRAY’S liability exceed the monetary value of this product.

Take adequate safety precautions prior to operating this model. You are responsible for this model’s assembly and safe operation.

Disregard of the any of the above cautions may lead to accidents, personal injury, or property damage. XRAY MODEL RACING CARS assumes no responsibility for any injury, damage, or misuse of this product during assembly or operation, nor any additions that may arise from the use of this product.

All rights reserved.

In line with our policy of continuous product development, the exact specifications of the kit may vary. In the unlikely event of any problems with your new kit, you should contact the model shop where you purchased it, quoting the part number. We do reserve all rights to change any specification without prior notice. All rights reserved.
To ensure that you always have access to the most up-to-date version of the XRAY Set-up Book, XRAY will now be offering only the digital online version at our Web site at www.teamxray.com. By offering this online version instead of including a hardcopy printed version in kits, you will always be assured of having the most current updated version.

XRAY offers a wide range of optional tuning parts which are listed in a table like this. Please refer to the exploded view of each main section to verify which part is included in the kit while all other parts are available only as an optional part and must be purchased separately.

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At the beginning of each section is an exploded view of the parts to be assembled. There is also a list of all the parts and part numbers that are related to the assembly of that section. The part descriptions are color-coded to make it easier for you to identify the source of a part. Here are what the different colors mean:

- **Style A** - indicates parts that are included in the bag marked for the section.
- **Style B** - indicates parts that are included in the box.
- **Style C** - indicates parts that are already assembled from previous steps.

**CHASSIS PREPARATION**

To protect and seal edges of graphite parts, sand edges smooth and then apply CA glue.

Do this for: chassis edges, countersunk holes, and shock towers.

Apply only a bit of CA glue in the countersunk holes.
1. GEAR DIFFERENTIAL & FRONT SOLID AXLE

**GEAR DIFFERENTIAL**

OPTIONAL:

#304971 HUDY SPRING STEEL™ OUTDRIVES

**COMPOSITE SOLID AXLE**

OPTIONAL:

#305137 STEEL SOLID AXLE DRIVESHAFT ADAPTERS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
</tr>
</thead>
<tbody>
<tr>
<td>90 2310</td>
<td>HEX SCREW SF M3x10 (10)</td>
</tr>
<tr>
<td>90 3256</td>
<td>HEX SCREW SFH M2.5x6 (10)</td>
</tr>
<tr>
<td>94 1015</td>
<td>HIGH-SPEED BALL-BEARING 10x15x4 RUBBER SEALED (2)</td>
</tr>
<tr>
<td>96 4031</td>
<td>WASHER S 5.5x10x0.2 (10)</td>
</tr>
<tr>
<td>96 4050</td>
<td>WASHER S 5.5x15x0.3 (10)</td>
</tr>
<tr>
<td>97 1240</td>
<td>SILICONE O-RING 24x0.7 (10)</td>
</tr>
<tr>
<td>97 2050</td>
<td>SILICONE O-RING 5x2 (10)</td>
</tr>
<tr>
<td>98 1210</td>
<td>PIN 2x10 (10)</td>
</tr>
</tbody>
</table>

**NOTE ORIENTATION**

STEP 1 DETAIL

Use tweezers to insert pin.

**CUTAWAY VIEW**
After disassembling the gear diff the large O-ring may have an increased size and may be more difficult to re-install. We recommend either inserting the old O-ring carefully in the diff cover, or replacing the old O-ring with a new O-ring if the old one cannot be made to fit properly.

TO ENSURE YOU HAVE THE SAME AMOUNT OF OIL FROM REBUILD TO REBUILD, DO THE FOLLOWING:

1. Put the diff (without oil) on the scale and check the weight (approximately 7.90g).

2. Slowly pour oil into the diff and watch the weight. Add 1.3g of oil into the diff. The approximate weight of the diff including oil is 9.20g.

TIPS FOR DIFFERENTIALS

LOW-TRACTION

<table>
<thead>
<tr>
<th>Oils</th>
<th>HUDY #</th>
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</thead>
<tbody>
<tr>
<td>1000cSt</td>
<td>106410</td>
</tr>
<tr>
<td>2000cSt</td>
<td>106420</td>
</tr>
<tr>
<td>3000cSt</td>
<td>106430</td>
</tr>
<tr>
<td>5000cSt</td>
<td>106450</td>
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</table>

MEDIUM-TRACTION

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</thead>
<tbody>
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</tr>
<tr>
<td>3000cSt</td>
<td>106430</td>
</tr>
<tr>
<td>5000cSt</td>
<td>106450</td>
</tr>
</tbody>
</table>

HIGH-TRACTION

<table>
<thead>
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<th>HUDY #</th>
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</thead>
<tbody>
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</tr>
<tr>
<td>6000cSt</td>
<td>106460</td>
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<tr>
<td>7000cSt</td>
<td>106470</td>
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<tr>
<td>8000cSt</td>
<td>106480</td>
</tr>
<tr>
<td>9000cSt</td>
<td>106490</td>
</tr>
<tr>
<td>10000cSt</td>
<td>106510</td>
</tr>
</tbody>
</table>

SUPER HIGH-TRACTION

<table>
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<tr>
<th>Oils</th>
<th>HUDY #</th>
</tr>
</thead>
<tbody>
<tr>
<td>10000cSt</td>
<td>106510</td>
</tr>
<tr>
<td>15000cSt</td>
<td>106515</td>
</tr>
<tr>
<td>20000cSt</td>
<td>106520</td>
</tr>
</tbody>
</table>

NOTE: Softer oil increases rear traction, harder oil increases on-power steering and stability. It is important not to use soft oils in high-traction conditions as this would not increase traction, but would make the car loose as the car would become too twitchy.

LOW-TRACTION

However, if the oil is too soft, it could generate the same effect like the car has no traction. Therefore it is very important to choose the correct oil very carefully. We suggest to always try soft oil and then harder oil to understand better the car behavior at the track and then choose the oil accordingly.

TIPS FOR FRONT DIFFERENTIAL

To increase on-power steering and cornering speed, the gear diff can also be used in the front. Note: If you use the gear diff in the front, we recommend using optional #304971 HUDY Spring Steel™ outrivets because the stress on the outrivets in the front is much higher than in the rear.

USE THESE OILS FOR FRONT DIFFERENTIAL

<table>
<thead>
<tr>
<th>Oils</th>
<th>HUDY #</th>
</tr>
</thead>
<tbody>
<tr>
<td>500,000 cSt</td>
<td>106650</td>
</tr>
<tr>
<td>1,000,000 cSt</td>
<td>106692</td>
</tr>
</tbody>
</table>

To make the front differential tighter, you can use cleaning gum instead of oil.

IMPORTANT! Using cleaning gum in the gear differential can lead to gear breakage because the gears are working under dry conditions.

TOOL TIPS

Fill differential up to the top of the diff pin. DO NOT fill the diff to the top of the housing.
1. GEAR DIFFERENTIAL & FRONT SOLID AXLE

Tighten the screws equally but do NOT tighten them completely.

Finish tightening in this order.

BEARING OIL (HUDY #106230)

OPTIONAL:

#305137 STEEL SOLID AXLE DRIVESHAFT ADAPTERS

#305136 ALU SOLID DRIVESHAFT ADAPTERS

CUTAWAY VIEW

FRONT & REAR AXLES

#304900 GEAR DIFFERENTIAL

#305105 XRAY ALU MULTI-OFF™

#305188 COMPOSITE SOLID AXLE 38T PULLEY

NOTE ORIENTATION

BEARING OIL (HUDY #106230)
2. CENTRAL TRANSMISSION

- **Bag 02**
  - **30 2034-O**: T4 ALU UPPER CLAMP WITH 5 ADJ. ROLL-CENTERS (L + R) - ORANGE
  - **30 2062**: T4 COMPOSITE ADJUSTMENT BALL-BEARING HUB (4)
  - **30 2085**: T4 SHOCK TOWER FRONT 3.0MM GRAPHITE
  - **30 2760-O**: T4'15 ALU LOWER ADJUSTMENT BULKHEAD - FRONT R, REAR L - ORANGE
  - **30 2761-O**: T4'15 ALU LOWER ADJUSTMENT BULKHEAD - FRONT L, REAR R - ORANGE
  - **30 3055-O**: T4'15 ALU MOTOR MOUNT - ORANGE
  - **30 3056-O**: T4 ALU LAYSHAFT BULKHEAD CLOSED L/R - ORANGE
  - **30 3058-O**: T4 SHOCK TOWER FRONT 3.0MM GRAPHITE
  - **30 5432**: HIGH-PERFORMANCE KEYLAR DRIVE BELT FRONT 3 x 513 MM
  - **30 5446**: HIGH-PERFORMANCE KEYLAR DRIVE BELT REAR 3 x 189 MM
  - **30 5521-K**: ALU SOLID LAYSHAFT - BLACK
  - **30 5577**: COMPOSITE FIXED PULLEY 20T (2)
  - **30 5778**: OFFSET SPUR GEAR 70T / 48 (OPTION)
  - **30 5781**: OFFSET SPUR GEAR 81T / 48 (OPTION)
  - **30 5784**: SPUR GEAR 84T / 48
  - **30 5862**: OFFSET SPUR GEAR 92T / 64 (OPTION)
  - **30 5866**: OFFSET SPUR GEAR 96T / 64 (OPTION)
  - **30 5870**: OFFSET SPUR GEAR 100T / 64 (OPTION)
  - **30 5874**: OFFSET SPUR GEAR 104T / 64 (OPTION)
  - **30 5876**: OFFSET SPUR GEAR 106T / 64 (OPTION)
  - **30 5878**: OFFSET SPUR GEAR 108T / 64 (OPTION)
  - **30 5880**: OFFSET SPUR GEAR 110T / 64 (OPTION)
  - **30 5882**: OFFSET SPUR GEAR 112T / 64 (OPTION)
  - **30 5884**: OFFSET SPUR GEAR 114T / 64 (OPTION)
  - **90 2304**: HEX SCREW SH M3x4 - STAINLESS (10)
  - **90 2306**: HEX SCREW SH M3x6 (10)
  - **90 3306**: HEX SCREW SH M3x6 (10)
  - **90 3310**: HEX SCREW SH M3x10 (10)
  - **94 0510**: HIGH-SPEED BALL-BEARING 5x10x4 RUBBER SEALED (2)
  - **96 0030**: NUT M3 (10)
  - **96 0550**: E-CLIP 5 (10)
  - **98 1212**: PIN 2x12 (10)
  - **30 4900**: XRAY GEAR DIFFERENTIAL - SET
  - **30 5188**: COMPOSITE SOLID AXLE 38T - SET
  - **30 1137**: T4'15 CHASSIS 2.2MM GRAPHITE
2. CENTRAL TRANSMISSION

**Gearing Adjustment**

- 902306 SH M3x4
- 903306 SH M4x6
- 903310 SH M3x10
- 960030 H-40

**Note Orientation**

- Only when using XRAY OFFSET spur gears.

**Spur Gears 48P**

- #305778 OFFSET SPUR GEAR 78T / 48P
- #305781 OFFSET SPUR GEAR 81T / 48P
- #305784 SPUR GEAR 84T / 48P

**Spur Gears 64P**

- #305862 OFFSET SPUR GEAR 92T / 64P
- #305866 OFFSET SPUR GEAR 96T / 64P
- #305870 OFFSET SPUR GEAR 100T / 64P
- #305874 OFFSET SPUR GEAR 104T / 64P
- #305876 OFFSET SPUR GEAR 108T / 64P
- #305880 OFFSET SPUR GEAR 110T / 64P
- #305882 OFFSET SPUR GEAR 112T / 64P
- #305884 OFFSET SPUR GEAR 114T / 64P

**Important!**

- Tighten screws in order indicated.
- M3 nut must always be tightened fully. When tightening the nut, use pliers.

**Bearin Oil**

- (HUDY #106230)

**Set-Up Hook**

- 940510 BB 5x1 8x4

**Central Transmission**

- 991212 T 3x12

**CUTAWAY VIEW**

- Note orientation only when using XRAY OFFSET spur gears.

**Tighten Screws in Order Indicated.**

- M3 nut must always be tightened fully.

- When tightening the nut, use pliers.

**IMPORTANT!**

- Do not tighten fully.

- Short belt Long belt
### FRONT BELT TENSION ADJUSTMENT

Front diff upper position provides more steering but provides less front traction. Recommended for medium - high grip tracks and technical tracks.

Initial position:
- Place tab in this bottom notch

To loosen front belt: Rotate both front nylon hubs in arrow direction A

To tighten front belt: Rotate both front nylon hubs in arrow direction B

### REAR BELT TENSION ADJUSTMENT

Rear diff upper position provides more on-power steering but makes the rear slightly more loose. Recommended for medium - high traction tracks.

Initial position:
- Place tab in this bottom notch

To loosen rear belt: Rotate both rear nylon hubs in arrow direction A

To tighten rear belt: Rotate both rear nylon hubs in arrow direction B

### OPTIONAL:

#303071 Belt Tensioner may be used when the front belt becomes worn and loose. Belt tensioner is NOT included in the kit and must be purchased separately.

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Front diff lower position provides more front traction but makes the car push more on power. Recommended for low - high traction tracks.

Rear diff lower position provides more rear traction, mainly on power traction and makes the car more stable in the chicanes, but makes the car push more on power. Recommended for low - medium traction tracks.

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Front diff upper position provides more steering but provides less front traction. Recommended for medium - high grip tracks and technical tracks.

Rear diff upper position provides more on-power steering but makes the rear slightly more loose. Recommended for medium - high traction tracks.

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Front diff lower position provides more front traction but makes the car push more on power. Recommended for low - high traction tracks.

Rear diff lower position provides more rear traction, mainly on power traction and makes the car more stable in the chicanes, but makes the car push more on power. Recommended for low - medium traction tracks.
For better stability and to make the car easier to drive, optional #302190 and #303190 graphite stiffeners may be used. Using only 4 screws, the graphite stiffener can be installed or removed which would completely change the characteristics of the car. Stiffeners may be used independently at front and/or rear.

**IMPORTANT!** Install/remove stiffeners equally on left & right sides.

**TIP**

For better stability and to make the car easier to drive, optional #302190 and #303190 graphite stiffeners may be used. Using only 4 screws, the graphite stiffener can be installed or removed which would completely change the characteristics of the car. Stiffeners may be used independently at front and/or rear. **IMPORTANT!** Install/remove stiffeners equally on left & right sides.

#30 2190
GRAPHITE FRONT LOWER ARM PLATE 1.6MM (2)

#30 3190
GRAPHITE REAR LOWER ARM PLATE 1.6MM (2)

#30 3192
ARS GRAPHITE REAR LOWER ARM PLATE 1.6MM (2)
### 3. FRONT & REAR SUSPENSION

#### STANDARD REAR SUSPENSION

**INITIAL SETTING**

- **LEFT REAR ARM**
  - 3x10mm
- **REAR LEFT ARM**
  - COMPLETED ASSEMBLY
  - RIGHT REAR ARM
  - 4x8mm
- **REAR RIGHT ARM**
  - 2.3mm
  - 5mm

**OPTIONAL:**
- #303169 - GRAPHITE ARM - REAR
  - More traction and more stable but more fragile (recommended for all kinds of conditions)

#### ACTIVE REAR SUSPENSION™

- **LEFT REAR ARM**
  - 3x10mm
- **REAR LEFT ARM**
  - COMPLETED ASSEMBLY
  - RIGHT REAR ARM
  - 4x8mm
- **REAR RIGHT ARM**
  - 2.3mm
  - 5mm

**OPTIONAL:**
- #303171 - GRAPHITE ARS ARM - REAR
  - More traction and more stable but more fragile (recommended for all kinds of conditions)

### FRONT ARMS

- **FRONT RIGHT ARM**
  - 4x8mm
  - COMPLETED ASSEMBLY
  - FRONT RIGHT ARM
  - 2.2mm
- **FRONT LEFT ARM**
  - 3mm
  - FRONT LEFT ARM
  - 3x10mm

**OPTIONAL:**
- #302169 - Graphite arm - front
  - More traction and more stable but more fragile (recommended for all kinds of conditions)
The new Xray rear alu lower suspension holders provide even greater range of adjustment for the rear suspension. Using different combinations of eccentric bushings, fine adjustment of rear squat, rear toe-in, rear roll center, and rear track-width can be obtained. For more information about the influence of rear squat, rear toe-in, rear roll center and rear track-width on car handling, please refer to HUDY Set-up Book (#209100).

**Initial Setting**

**Alternative: Standard Rear Suspension**

**Alternative: Active Rear Suspension™**

**Eccentric Bushings Have Two Different Offsets From the Center.**

- **Middle Position:** 0.5 mm or 0.5° from center
- **Outer Position:** 1 mm or 1° from center

**NOTE ORIENTATION**

- Middle position = 0.5 mm or 0.5° from centre
- Outer position = 1 mm or 1° from centre

**Optional:**

- #303710-O Alu lower 2-piece suspension holder

For more steering, we recommend using the optional alu separate suspension holders.
It is extremely important that the arms move freely on the pivot pins. If they do not, use the #107633 HUDY Arm Reamer to slightly resize the holes in the arms.

COMPOSITE ECCENTRIC BUSHINGS

ECCENTRIC BUSHINGS HAVE TWO DIFFERENT OFFSETS FROM THE CENTER.

- Middle position = 0.5 mm or 0.5° from center
- Outer position = 1 mm or 1° from center

The new Xray front alu lower suspension holders provide even greater range of adjustment for the front suspension. Using different combinations of eccentric bushings, fine adjustment of front anti-squat, front kick-up, front toe-in, front roll center, and front track-width can be obtained. For more information about the influence of front anti-dive, front kick-up, front toe-in, front roll center and front track-width on car handling, please refer to HUDY Set-up Book (#209100).
4. STEERING

To change Ackermann angle, use 2 identical shims (of same thickness) between the alu steering plate and ball ends.

NOTE ORIENTATION

Tighten the screws gently but fully, and then loosen 1/3 turn so the composite dual servo saver moves freely.

OPTIMAL:
#302525 - Alu Dual Servo Saver Arm
We recommend using the aluminum dual servo saver arms when better steering response is needed. Also recommended for asphalt tracks.

Use bearing oil for all bearings (HUDY #106230)

NOTE ORIENTATION

Do not use for basic set-up

6mm thread

SERVO LINK
Adjust servo link to fit your servo

approximately 47mm

65.4mm

LEFT LIGHT

65.4mm

Use bearing oil for all bearings

NOTE ORIENTATION

BAG

WARNING

Tighten the screws gently but fully, and then loosen 1/3 turn so the composite dual servo saver moves freely.
For more in-corner steering and better steering response, aluminum servo horns may be used.

**IMPORTANT!**
When the aluminum horn is used, the steering servo saver is not used. This increases the risk of breaking the servo in serious crashes.

**OPTIONAL:**
#301196 T4 Graphite Upper Deck 1.6mm - V2
We recommend using optional 1.6mm top deck for super-low traction conditions as it provides more overall traction and steering.

**OPTIONAL:**
#306516-O T4 Alu Top Deck Mount - Orange
Optional alu top deck mount improves forward and rear traction and makes the car more stable and easier to drive under low-traction conditions, however generates more on-power push. Recommended for low and medium traction conditions.

When the aluminum top deck mount is used, the screws from layshaft bulkheads and M3 nut from motor holder must be removed.

**SMART CHASSIS FLEX調整されると、追加のアルミニウム制御板に適合できます。この設定により、フレキシブルな設定が可能になり、よりアグレッシブなハンドリングと増大された制御が実現できます。**

**OPTIONAL:**
#302570 Graphite Steering Plate Set
Smart chassis flex adjustment via graphite steering plate which can be mounted on an additional aluminum stand. Using only the graphite steering plate, chassis flex is medium; using the aluminum stand for reinforcement, the flex becomes stiffer. Stiffer flex results in more aggressive handling and increased steering.

**HUDY ALU SERVO HORNS**

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Model</th>
<th>Offset</th>
</tr>
</thead>
<tbody>
<tr>
<td>293491</td>
<td>KD, JR, Sanwa, Airtr.</td>
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### 5. Front & Rear Transmission

<table>
<thead>
<tr>
<th>Part Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>302201-O</td>
<td>ALU BRACE POST FOR ARS 3x5x9MM (2)</td>
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<tr>
<td>302291</td>
<td>STEEL STEERING BUSHING (2+2)</td>
</tr>
<tr>
<td>302363</td>
<td>COMPOSITE C-HUB RIGHT - 4° DEG. - MEDIUM - V2</td>
</tr>
<tr>
<td>302364</td>
<td>COMPOSITE C-HUB LEFT - 4° DEG. - MEDIUM - V2</td>
</tr>
<tr>
<td>302369</td>
<td>COMPOSITE C-HUB RIGHT - 0° DEG. - HARD</td>
</tr>
<tr>
<td>302370</td>
<td>COMPOSITE C-HUB LEFT - 0° DEG. - HARD</td>
</tr>
<tr>
<td>302663</td>
<td>COMPOSITE BALL JOINT 4.9MM - OPEN - V2 (8)</td>
</tr>
<tr>
<td>302804</td>
<td>ANTI-ROLL BAR FOR BALL BEARINGS - FRONT 1.4MM</td>
</tr>
<tr>
<td>302827-K</td>
<td>ALU SHIM 3x3x1.0MM - BLACK (10)</td>
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<tr>
<td>302828-K</td>
<td>ALU SHIM 3x3x2.0MM - BLACK (10)</td>
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<tr>
<td>302829-K</td>
<td>ALU SHIM 3x3x4.0MM - BLACK (10)</td>
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<tr>
<td>302829</td>
<td>COMPOSITE SET OF SHIMS (3x1MM, 1-2MM) (2)</td>
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<tr>
<td>302831</td>
<td>ALU ADJ. TURNBUCKLE A3/L/R 26 MM - SWISS 7075 T6 (2)</td>
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<td>303129</td>
<td>ALU DRIV SHAFT SWISS 7075 T6 - HARDCOATED - 52MM (OPTION)</td>
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<td>303131</td>
<td>ALU DRIV SHAFT SWISS 7075 T6 - HARDCOATED - 50MM (OPTION)</td>
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<td>303330</td>
<td>EQUALIZED CORNERING SPEED (ECS) DRIVER SHAFT 52MM (OPTION)</td>
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<tr>
<td>303331</td>
<td>EQUALIZED CORNERING SPEED (ECS) DRIVER SHAFT 50MM (OPTION)</td>
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<td>303332</td>
<td>DRIVER AXLE - LIGHTWEIGHT - HUDY SPRING STEEL™</td>
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<tr>
<td>303333</td>
<td>ALU WHEEL HUB - BLACK (2)</td>
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<tr>
<td>303334</td>
<td>ALU ANTI-ROLL BAR BUSHING - ORANGE (2)</td>
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<td>COMPOSITE ANTI-ROLL BAR BALL JOINT 4.9 MM (4)</td>
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<td>303336</td>
<td>COMPOSITE ANTI-ROLL BAR BALL JOINT 3.8 MM (4)</td>
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<td>COMPOSITE ANTI-ROLL BAR BALL JOINT 5.0 MM (4)</td>
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<td>COMPOSITE ANTI-ROLL BAR BALL JOINT 6.3 MM (4)</td>
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<td>901901</td>
<td>HEX SCREW SB M3x2.5 (10)</td>
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<td>HEX SCREW SB M3x3 (10)</td>
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<td>901903</td>
<td>HEX SCREW SB M3x4 (10)</td>
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<td>HEX SCREW SH M3x5 (10)</td>
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<td>901905</td>
<td>HEX SCREW SH M3x6 (10)</td>
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<tr>
<td>901906</td>
<td>HEX SCREW SH M3x7 (10)</td>
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<tr>
<td>901907</td>
<td>BALL-BEARING 4x7x2.5 (2)</td>
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<td>901908</td>
<td>BALL-BEARING 5x10x4 RUBBER SEALED (2)</td>
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<td>901909</td>
<td>BALL-BEARING 5x10x4 RUBBER SEALED (2)</td>
</tr>
<tr>
<td>901900</td>
<td>PIN 2x10 (10)</td>
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</tbody>
</table>

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**FOR ALTERNATIVE SETTING**

**ACTIVE REAR SUSPENSION™**

---

**BAG**

---

**FOR ALTERNATIVE SETTING**

**ACTIVE REAR SUSPENSION™**

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**BAG**

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**FOR ALTERNATIVE SETTING**

**ACTIVE REAR SUSPENSION™**

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**BAG**

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**FOR ALTERNATIVE SETTING**

**ACTIVE REAR SUSPENSION™**
**5. FRONT & REAR TRANSMISSION**

**REAR TRANSMISSION**

**ALTERNATIVE STANDARD REAR SUSPENSION**

**INITIAL SETTING**

- **0° OUTBOARD TOE-IN UPRIGHTS**
  - Left UPRIGHT = Right UPRIGHT

  **BEARING OIL**
  (HUDY #106230)

Use alu 50mm Drive Shaft in rear

Longer drive shafts (52mm) make the car easier to drive because they give more traction and better stability, mainly in chicanes. However, the car will understeer more than with shorter (50mm) shafts which give a lot of steering and impart aggression to the car.

Both left & right shafts should ALWAYS be the same length at one end of the car (front or rear).

52mm shafts are recommended for carpet and large asphalt tracks. 50mm shafts are recommended for small-medium tight asphalt tracks.

**IMPORTANT!**

DO NOT use the plastic caps with composite solid axle included in the kit.

3.5mm plastic caps are for use ONLY with GEAR diffs, ALU ball diffs, or the XRAY Multi-Diff™.

**ALTERNATIVE ACTIVE REAR SUSPENSION™**

- **Left Steering Block = Right Steering Block**

  **BEARING OIL**
  (HUDY #106230)

Use alu 50mm Drive Shaft in rear

**DRIVE SHAFTS**

<table>
<thead>
<tr>
<th>#</th>
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<th>Material</th>
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<td>305326</td>
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<td>ECS</td>
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<td>305331</td>
<td>50MM</td>
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**GRAPHITE GREASE**
(HUDY #106210)

**ECS DRIVE SHAFTS - OPTIONAL**

ECS shafts are available optionally in both 50mm and 52mm lengths. The ECS drive shafts were developed to decrease front wheel vibration when racing with a solid front axle, thus providing a much smoother and quieter ride and increased steering.

**T4 OPTIONAL PARTS**

**UPRIGHTS**

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<td>0° - R/L - MEDIUM - 2-HOLE</td>
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<td>1° - R - HARD - 2-HOLE</td>
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<td>0° - R/L - HARD - 2-HOLE</td>
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<td>1° - L - MEDIUM - 2-HOLE</td>
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<td>0° - R/L - MEDIUM - 1-HOLE</td>
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<td>ALU 1° - R/L - 4-HOLE</td>
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<tr>
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<td>ALU 2° - R/L - 4-HOLE</td>
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**WHEEL HUBS**

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<td>ALU - OFFSET -0.75 MM</td>
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<tr>
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<td>ALU - OFFSET +0.75 MM</td>
</tr>
<tr>
<td>305353</td>
<td>ALU - OFFSET +1.5 MM</td>
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**STEERING BLOCKS**

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**SET-UP BOOK**

REAR TOE-IN TRACK WIDTH

"For easy installation of the #305241 plastic caps, use pliers as shown."
5. FRONT & REAR TRANSMISSION

**FRONT TRANSMISSION**
- Use Steel 52mm Drive Shafts in front.
- Left Steering Block = Right Steering Block

**ACTIVE REAR SUSPENSION™**
- Right C-Hub marked 4L
- Left C-Hub marked 0L

**T4 OPTIONAL PARTS**

<table>
<thead>
<tr>
<th>Item Code</th>
<th>Description</th>
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<tbody>
<tr>
<td>#302334</td>
<td>ALU 0° - R = L</td>
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<tr>
<td>#302335</td>
<td>ALU 2° - RIGHT</td>
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<td>#302336</td>
<td>ALU 2° - LEFT</td>
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<tr>
<td>#302337</td>
<td>ALU 4° - RIGHT</td>
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<td>#302371</td>
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<td>#302383</td>
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**C-HUBS FRONT TRANSMISSION**

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<td>#302360</td>
<td>0° - LEFT - MEDIUM</td>
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<tr>
<td>#302369</td>
<td>0° - RIGHT - HARD</td>
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<tr>
<td>#302370</td>
<td>0° - LEFT - HARD</td>
</tr>
<tr>
<td>#302379</td>
<td>0° - RIGHT - GRAPHITE</td>
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<tr>
<td>#302380</td>
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**C-HUBS ACTIVE REAR TRANSMISSION**

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<td>0° - RIGHT - GRAPHITE</td>
</tr>
<tr>
<td>#302380</td>
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</table>

**BEARING OIL**
- Use Steel 52mm Drive Shafts in front.

**STANDARD**

- ALU - OFFSET 0 MM
- ALU - OFFSET -0.75 MM
- ALU - OFFSET +0.75 MM
- ALU - OFFSET +1.5 MM

**STEERING BLOCKS**

- ALU
- MEDIUM
- HARD
5. FRONT & REAR TRANSMISSION

REAR TRANSMISSION

ALTERNATIVE

STANDARD REAR SUSPENSION
INITIAL SETTING

LEFT UPRIGHT ≠ RIGHT UPRIGHT

1-HOLE REAR UPRIGHTS - OPTIONAL
An optional 1-hole rear upright is available for fine tuning. This optional upright may be used on high-traction tracks or tracks with long sweepers, since the position of the center hole will allow faster driving through those corners because of better cornering speed.

ALTERNATIVE

ACTIVE REAR SUSPENSION™

STEP 1

TIGHTEN GENTLY

L=R
**ALTERNATIVE ACTIVE REAR SUSPENSION™**

**STEP 2**

The angle of ARS linkage – which is made by adding/removing shims on the steering block and ARS post mount – changes the toe-in characteristics of the rear tires under rolling effect; when the car is pressed the toe in can either increase or decrease.

Check the toe-in change on your set up system when the car is in neutral position and when it is pressed to the floor. For more information see the HUDY Set-Up Book.

---

**FRONT TRANSMISSION**

---

**REAR TRANSMISSION**

---

**IMPORTANT**

Do not use for basic set-up.
RECOMMENDED BUMPSTEER SETTINGS:

CARPET - 1mm thick shim
ASPHALT - 4mm thick shims

The number of shims changes the angles of the steering linkage. When no shims are used, the car is easy to drive into the corner. As the number of shims is increased, in-corner steering increases but the car becomes more difficult to drive.
When the bars are set, verify that both sides move at the same time. If they do, the bars are set up correctly. If not, make sure that both downstops are the same and that the bar wire is flat.

If the sides still do not move at the same time, adjust the length of the bar holders.
5. FRONT & REAR TRANSMISSION

REAR ANTI-ROLL BAR

STANDARD SUSPENSION

Use the INNER ball on low-traction tracks (mainly low-traction carpet tracks). The car will have more traction & more steering, but will be more difficult to drive because the car will roll more.

Use the MIDDLE ball on low- to medium-traction tracks (asphalt, carpet). The car will have a little less rear traction and the car will roll a little less which will make it easier to drive with more cornering speed.

Use the OUTER ball on high-traction tracks (mainly high-traction asphalt tracks). The car will roll even less which will allow the use of more throttle in the corners, however the car will have less traction.

ACTIVE REAR SUSPENSION™

ARS arm has only two holes which are identical as inner and middle ball on the standard rear arm.

INITIAL POSITION = MIDDLE BALL

INITIAL POSITION = MIDDLE BALL

OUTER MIDDLE INNER

DETAIL

Set the bar into the center, remove the play in the bushings, and tighten the setscrews fully.

When the bars are set, verify that both sides move at the same time. If they do, the bars are set up correctly. If not, make sure that both stopnuts are the same and that the bar wire is flat.

If the sides still does not move at the same time, adjust the length of the bar holders.
### 6. SHOCK ABSORBERS

<table>
<thead>
<tr>
<th>Part Number</th>
<th>Description</th>
<th>Quantity</th>
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<tbody>
<tr>
<td>30 8037</td>
<td>COMPOSITE PISTONS 4-HOLE 1.0-1.2MM, 3-HOLE 1.0-1.2MM</td>
<td>(4)</td>
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<tr>
<td>30 8042-O</td>
<td>T4 ALU SHOCK ADJUSTABLE NUT - ORANGE (2)</td>
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<td>30 8082</td>
<td>T4 SHOCK ABSORBER MEMBRANE (4)</td>
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<td>30 8092</td>
<td>T4 SHOCK FOAM INSERTS (4)</td>
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<td>30 8307-O</td>
<td>XRAY T4 ALU SHOCK ABSORBER-SET - ORANGE (2)</td>
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<td>30 8316</td>
<td>SHOCK BALL JOINT - OPEN (4)</td>
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<td>30 8323</td>
<td>T4 ALU XRAY SHOCK BODY (2)</td>
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<tr>
<td>30 8327-O</td>
<td>ALU CAP FOR XRAY SHOCK BODY - ORANGE</td>
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<tr>
<td>30 8333</td>
<td>T4 COMPOSITE SHOCK PARTS FOR ALU SHOCKS</td>
<td>(4)</td>
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<tr>
<td>30 8333-O</td>
<td>T4 ALU SHOCK CAP-NUT WITH VENT HOLE - ORANGE (2)</td>
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<td>30 8344</td>
<td>T4 HARDENED SHOCK SHAFT FOR ALU SHOCKS (2)</td>
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<tr>
<td>30 86275</td>
<td>XRAY SPRING-SET C = 2.5</td>
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<tr>
<td>96 5023 E-CLIP 2.3</td>
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<tr>
<td>97 0130 O-RING 13 x 1.5</td>
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<td>(10)</td>
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<tr>
<td>97 2030 SILICONE O-RING 3 x 2</td>
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#### XRAY SPRINGS

<table>
<thead>
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<th>Description</th>
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<td>#308264</td>
<td>T4 SPRING C = 2.5-2.8</td>
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<td>#308274</td>
<td>T4 SPRING C = 2.3</td>
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<td>#308275</td>
<td>T4 SPRING C = 2.5</td>
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<td>#308276</td>
<td>T4 SPRING C = 2.6</td>
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<td>#308277</td>
<td>T4 SPRING C = 2.9</td>
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**Image:**
- Diagram of shock absorbers and associated parts.
- Diagram of 4 holes Ø1.1mm.
SHOCK DAMPING

SHOCK OILS

<table>
<thead>
<tr>
<th>Part Number</th>
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<td>100cSt</td>
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<td>200cSt</td>
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<td>250cSt</td>
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<td>300cSt</td>
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<td>350cSt</td>
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<td>400cSt</td>
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<tr>
<td>#106345</td>
<td>450cSt</td>
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<td>1000cSt</td>
</tr>
<tr>
<td>#106420</td>
<td>2000cSt</td>
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</tbody>
</table>

970130 O 13x1.5
972030 O 3x2

HINT:
Pre-thread the ball joint using an M3 screw.

WARNING! Be careful not to pre-thread too far, since the ball joint may split or the plastic threads may strip out.

INCORRECT

CORRECT

1mm

NOTE

ORIENTATION

FOAM INSERT

After you insert the membrane, ensure that it is fully seated inside the alu cap.

SET-UP BOOK
SHOCK DAMPING

SHOCK FILLING

1. Fully extend the piston rod so the piston is at the bottom of the shock body.
2. Hold the shock upright and slightly overfill the shock body with shock oil.
3. Let the oil settle and allow air bubbles to rise to the top. Slowly move the piston up and down to allow oil into all cavities within the shock body.
4. Extend the piston rod most of the way out of the shock body. Let the shock rest for 5 minutes to allow the air bubbles to escape.
5. Add shock oil as necessary.

When installing the shock cap assembly on the shock body, some oil will leak out... this is normal.

Tighten the cap and clean off any excess oil.

After the shock is assembled, the shock rod will push itself out of the shock body fairly quickly.

Follow the next procedure to adjust the rebound.

Be careful not to cross-thread the collar on the shock body.

After the shock is assembled, the shock rod will push itself out of the shock body fairly quickly.

Follow the next procedure to adjust the rebound.
Follow this tech tip to properly install pivot balls into the top pivot and bottom ball joint.

Parts Needed:
• M3x16 SH screw
• M3 shim

Note that the composite parts have two sides, noticeable around the pivot ball hole: one side has a shiny finish, the other side has a regular finish.

1. **SHINY FINISH SIDE**
   
   Install pivot balls into top pivot or lower ball joint as shown, on the proper sides.

   Note that the lower pivot ball has an extra shoulder.

2. **SHINY FINISH SIDE**
   
   Ensure pivot balls move freely.

3. **SHINY FINISH SIDE**
   
   Remove screw and shim.

---

**SHOCK LENGTH ADJUSTMENT:**

It is VERY important that all shocks are equal length. Fully extend the shock absorber and measure the end-to-end length; we recommend using digital calipers to give an accurate measurement. If a shock absorber is shorter or longer than others, adjust the shock length by tightening or loosening the ball joint on the shock rod.

**REBOUND ADJUSTMENT**

1. Release the shock cap by 2-3 turns.
2. Push the shock shaft fully up. For the first time the extra oil will release through the hole in the alu cap-nut.
3. Tighten the shock cap. When tightening the shock cap, extra oil will again release through the hole in the alu cap - nut. When tightening, the shock shaft will push out from the shock body.

**REBOUND CHECK**

It is very important to push the shock shaft into the shock body slowly otherwise air can come into the shock body which would create bubbles.

- 100% rebound - do not do step 2 and 3
- 75% rebound - repeat step 2 and 3 until the shock shaft will push out 75% of its length
- 50% rebound - repeat step 2 and 3 until the shock shaft will push out 50% of its length
- 25% rebound - repeat step 2 and 3 until the shock shaft will push out 25% of its length
- 0% rebound - repeat step 2 and 3 until the shock shaft will push out 0% of its length

If the shock shaft does not rebound enough, you will have to refill the shock with shock oil, and then repeat the bleeding and rebound adjustment procedure.
<table>
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<th>Description</th>
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<td>30 1202</td>
<td>COMPOSITE BUMPER</td>
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<tr>
<td>30 1213</td>
<td>GRAPHITE BUMPER UPPER HOLDER 2.5MM (OPTION)</td>
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<td>COMPOSITE BUMPER UPPER HOLDERbrate</td>
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<tr>
<td>30 1218</td>
<td>COMPOSITE UPPER HOLDER FOR BUMPER</td>
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<td>30 1322</td>
<td>FRONT BODY MOUNT SET</td>
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<td>30 1323</td>
<td>FRONT BODY MOUNT SET + 1MM HEIGHT (OPTION)</td>
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<tr>
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<td>FRONT BODY MOUNT SET + 2MM HEIGHT (OPTION)</td>
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<td>T4 COMPOSITE BRACE FOR BUMPER - LOW (2)</td>
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<td>30 3129</td>
<td>COMPOSITE SET OF WHEELBASE SHIMS (3x1MM, 1x2MM) (2)</td>
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<tr>
<td>90 2308</td>
<td>HEX SCREW SH M3x8 (10)</td>
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<td>30 8307-O</td>
<td>XRAY T4 ALU SHOCK ABSORBER-SET - ORANGE (2)</td>
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</tbody>
</table>

**Front & Rear Assembly**

![Diagram of front & rear assembly components](image)
7. FRONT & REAR ASSEMBLY

**SHOCK POSITION**

**RIDE HEIGHT**

**DROOP**

---

**FRONT SHOCK**

**C2.5 SPRING**

---

**OPTIONAL:**

#301351-O

Alu Adjustable Body Post Stop (2)

Very handy, easily externally adjustable body post from Swiss 7075 T6 aluminum. Allows for adjustment of body height by 3mm without needing to change the position on the body post.

---

**303129**

**902308**

---

**INITIAL POSITION**

---

**303129**

---
Very handy, easily externally adjustable body post from Swiss 7075 T6 aluminum. Allows for adjustment of body height by 3mm without needing to change the position on the body post.

**Optional:**
#301351-O
Alu Adjustable Body Post Stop (2)
Add shims between servo and alu servo mounts in case you want to move the servo (weight) more forward. There are 3 different thickness of shims.
For improved weight balance and for more space for electronics, we recommend using a narrow, light servo.

Attach servo arm to servo output shaft using screw from servo. Servo saver must be perpendicular to chassis when servo is in neutral.

**IMPORTANT!** When adjusting steering on the radio, we recommend using full steering adjustment in order to get the best steering from the car. It is important to verify that the steering block does not touch the C-hub; that would lead to chassis tweak due to extra servo strain.

Adjust the motor so the pinion meshes with the spur gear properly. Make sure the gear mesh is not too tight.

There should be a small amount of play between the teeth of the pinion gear and the spur gear.

For tightening and loosening the pinion set screw, use the indicated chassis hole.

For improved weight balance and for more space for electronics, we recommend using a narrow, light servo.

Feed the receiver wire into the antenna tube

**NOTE:** In case the antenna tube does not hold the antenna properly, apply a small drop of the CA glue to the outside end of the antenna tube while inserting it into the holder. Make sure not to apply glue to the inside of the antenna tube, or the antenna wire may get permanently stuck.

**IMPORTANT!** When adjusting steering on the radio, we recommend using full steering adjustment in order to get the best steering from the car. It is important to verify that the steering block does not touch the C-hub; that would lead to chassis tweak due to extra servo strain.

Adjust the motor so the pinion meshes with the spur gear properly. Make sure the gear mesh is not too tight.

There should be a small amount of play between the teeth of the pinion gear and the spur gear.

For tightening and loosening the pinion set screw, use the indicated chassis hole.

Some motors do not have a chamfer on the motor housing. If your motor does not have a chamfer on the housing and you want to use a small pinion, the motor may touch the top deck. Use a moto-tool with grinding bit or file to remove material from the top-deck; this will allow the motor to be moved closer to the spur gear.
7. FINAL ASSEMBLY

**TIP**
Using the optional stand and shims with screw, there is a possibility to adjust side battery position which has direct influence on the side balance of the car.

**OPTIONAL:**
#306191
T4 Graphite + Alu Fully Adjustable Battery Holder

**OPTIONAL:**
#306186 Alu LiPo Battery Backstops (F+R)

---

**WARNING!**
Follow the adhesive manufacturer’s instructions for proper use and safety. Wear proper eye and hand protection.

**WARNING!**
Make sure the wheel nuts are very tight, so the wheels do not loosen during racing.

**4x**

**WHEELS & TIRES & INSERTS (NOT INCLUDED)**

**LIPO BATTERY PACK (NOT INCLUDED)**

**OPTIONAL:**
#306165 Graphite Battery Strap
For LiPo is designed for LiPo batteries and ensures fast and comfortable mounting of the battery pack into the car. Depending on the height of LiPo batteries additional shims may have to be mounted below the stands.