

ARx-540 NITRO model kit 1:4 MX Bike



# Assembly and Instruction Manual

# Warranty

AR Racing guarantees that the product is not defective. The value guaranteed does not exceed however the cost of purchase of the product. The guarantee does not cover any damage that may occur after the purchase from the damage of the individual components or any parts that were modified. Any claims of missing or defective parts must be made within 7 days of the date of purchase. In the case of defective components, it will be necessary to provide AR Racing with the defective component. The client requesting the missing or defective components has to present the proof of purchase. The client has to present the request of missing or defective components to the store where the bike was purchased, or directly to AR Racing if the purchase was made via the AR Racing web site, by sending a mail to info@armodelling.com.



# Introduction

Thanks for purchasing the ARx-540 Nitro model kit. AR Racing works to develop scale models of the highest quality as a result of research to create innovative products.

This manual contains all of the necessary information to prepare the model for its use. AR Racing hopes that you will carefully follow the instructions in the manual during assembly and become comfortable with the product once assembled and completed with the radio control components before a full use. AR Racing believes that it is necessary to spend some hours practicing before being able to have the most fun with the product.

# Necessary components for assembling and use

# Tools necessary for the assembling

- 4 Allen wrenches of good quality with the following dimensions: 3.0mm, 2.5mm, 2.0mm,
- 1.5mm;
- 1 7mm Socket wrench;
- 1 Philips Screwdriver (small);
- 1 Needle-nosed Pliers;
- 1 Cutter;
- 1 Blue Thread lock;
- CA glue;
- Ruler or caliper;

#### Personal safety components

- Safety glasses;
- Safety gloves;

# Not included components necessary for the use of the product

- Remote-Control and Receiver
- NiMh 4 cells AAA battery pack
- Motor (Kit Version Only)
- Clutch (Kit Version Only)
- Clutch Bell (13T) (Kit Version Only)
- Nitro Fuel

#### Other useful elements

Oil



# Important: read carefully the following section before starting the assembling phase

- 1. Warning: This product is not a toy. This product is not intended for people younger than 16 years of age. This product can be used by persons younger than 18 years old only if assisted by a responsible adult. Specific use of the product: Remote-controlled bike. Keep this product and all the relevant components away from children younger than 3 years old as the small components can be a choking/swallowing hazard!!! Note: in case of cold climate conditions (below 5°C) it is possible that some of the model's components can become brittle and break during use. In case of use under this conditions, avoid possible collisions with obstacles.
- 2. This is a high performance product. Before its full use, AR Racing advices to become comfortable with the use of the model and to follow the instruction manual carefully.
- 3. DO NOT use this product where forbidden; on public roads, in case of rain, in crowded places, near an airport or in whatever area where the use of radio-controlled models is forbidden.
- 4. When using with the remote control, check if you are in an area where there are radio frequency prohibitions or limitations and/or if other people are using the same radio frequency.
- 5. The improper use of the product can cause damage to people or property. AR Racing and its distributors are not responsible for damages resulting from the shipping, improper assembly, or from the improper use of the product.
- 6. AR Racing does not assume and doesn't accept any responsibility for damages to property or persons caused by the use of materials different from what is indicated in the Manual, or from the improper use of the product. From the moment the buyer begins the assembly process, he/she is assuming the responsibility for any consequence resulting from improper use or assembly. If the Customer does not intend to assume such responsibility, he/she should return the kit, new, unused and with complete packaging, to the place of purchase.
- 7. AR Racing advises you to carefully follow the Manual and remove the components from the numbered boxes according to the phase of assembly.
- 8. Not carefully following the Manual can compromise the assembly of the model and/or damage the components.
- 9. Not applying thread lock where advised could cause the gears to work loose.
- 10. Over-tightening of the screws, can cause the pieces to become deformation and not fit properly.
- 11. Because of the high number moving parts, a break-in period of 4-6 battery packs is necessary to achieve the best functionality.
- 12. The gears are self lubricating and do not require the application of grease. The use of grease is left to the discretion of the user.



# Assembling phases

The ARx-540 model kit Assembly and Instruction Manual is comprised of 11 assembly phases, divided logically, necessary for assembly:

# **Instruction Modules:**

- Phase 1: Rear wheel
- Phase 2: Front wheel
- Phase 3: Rear axle
- Phase 4: Setting chain tension and steering
- Phase 5: Front forks
- Phase 6: Frame
- Phase 7: Shock absorber
- Phase 8: Engine
- Phase 9: Tank
- Phase 10: Servo Linkage
- Phase 11: Before Start Driving



# PHASE 1 - REAR WHEEL ASSEMBLING

Note: All gears used in this assembling module are with colored to facilitate the readers. All rears in the ARx-540 Model Kit are black colored.

Ph.	num	Instruction	Picture
1.	2.	From box X-002 extract the right wheel shell (with pins). PICTURE  Note: do not extract the screws, keep them in the bag for future use!!!  From box X-031 extract the spur gear and 6 fixing screws. PICTURE	TTTTT
1.	3.	Insert carefully the spur gear in the internal part of the wheel shell matching pins. Note: side of the spur gear as in the picture, with grooved part above.	
1.	4.	Screw delicately the six fixing screws matching the pins. PICTURE	
1.	5.	From bag X-004 extract all parts.	
1.	6.	Position the right rear flange above the rear wheel shell, aligning the holes. PICTURE	



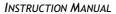


Ph.	num	Instruction	Picture
1.	7.	From the internal part of the rear wheel shell, screw the 6 fixing screws once applied the thread lock. PICTURE	
1.	8.	From bag X-002, extract the left rear wheel shell. I	From bag X003, extract all parts.
1.	9.	Position the left rear flange above the left rear wheel shell, aligning the holes. PICTURE	
1.	10.	From the internal part of the left rear wheel shell, screw the 6 fixing screws, once applied the thread lock. PICTURE	
1.	11.	From bag X-005, extract all parts	
1.	12.	Insert the spur gear in the rear left flange and screw the 6 fixing screws, applied the thread lock. PICTURE.	
1.	13.	At this stage of the assembling of the rear wheel shell, please go ahead with the following steps.	
1.	14.	From bag X-032, extract all parts	



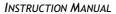


Ph.	num	Instruction	Picture
1.	15.	Block the satellite gear shaft with the screws, once applied the thread lock. PICTURE.  This blocking action must be firm, and the satellite gear shaft must be handled with hands to avoid ruining the surface with pliers or other objects.	
1.	16.	Screw the grain, only a bit, in the hole on the satellite gear shaft as in the PICTURE	
1.	17.	Keep aside the satellite gear shaft and go ahead wi	th the following steps.
1.	18.	From bag X-034, extract the wheel pin, and a sege	·
1.	19.	Note: the following step must be done used safety glasses.  Insert the seger in the predisposed way on the wheel pin, close to the milled flat part, using the pliers. Verify that all the three snug of the seger are placed correctly in the predisposed way.  PICTURE	
1.	20.	Take again the satellite gear shaft. Insert the wheel pin in the satellite gear shaft, aligning the fixing grain with the milled flat part of the wheel pin. PICTURE	
1.	21.	Screw firmly the grain, once applied the thread lock. Note: verify that the grain stands on the flat part of the pin. PICTURE.  Note: put the part aside and go on with the following instructions.	
1.	22.	From bag X-031, extract two bearings and the cluto	ch shoe flange.





Ph.	num	Instruction	Picture
1.	23.	Remove possible protuberances existing on the clutch shoe flange using sand paper or a cutter, obtaining a surface perfectly plain. PICTURE	
1.	24.	Insert the bigger bearing in the predisposed way of the flange. PICTURE	
1.	25.	Insert the smaller bearing in the other predisposed way of the flange. PICTURE	
1.	26.	Be sure that the bearings all perfectly put in the fl	ange.
1.	27.	From bag X-033, extract all parts.	
1.	28.	Screw the 6 grains in the predisposed threaded holes of the clutch shoes, once applied the thread lock. PICTURE  Note: the grains are used to make the clutch shoes heavier, this is useful on slow track and is suggested for the beginners.	
1.	29.	The grains have not to jut out from both sides of the clutch shoes.	
1.	30.	Fix one of the two springs to one of the two clutch shoes, screwing the screws in the predisposed way, once applied the thread lock.  Repeat this step with the second spring. PICTURE	





Ph.	num	Instruction	Picture	
1.	31.	Apply the other end of the springs to the second clutch shoe, using the other two screws, once applied the thread lock. PICTURE  Note: the springs have not to jut out from both sides of the clutch shoes.		
1.	32.	Insert both the clutch shoes in the clutch shoes flange, with the springs close to the flange.  PICTURE		
1.	33.	From bag X-031, extract 4 satellites and insert them on the predisposed satellite gear shafts. (PICTURE)  Note: if the gears don't spin freely unscrew the hex screws and tight them again.		
1.	34.	Insert the flange on the wheel pin, engaging the gears of the satellites with the gears of the satellite gear flange. PICTURE		
1.	35.	Verify the rolling of the satellite gear flange; it must be free and without friction.		
1.	36.	From bag X-034, extract the 2mm spacer and insert it in the wheel close to the bearing.  PICTURE		





Ph.	num	Instruction	Picture
1.	37.	From bag X.030, extract the flywheel and insert it on the wheel pin. PICTURE	
1.	38.	Verify the free rolling of the flywheel.	
1.	39.	From bag X-034, extract the second seger.	
1.	40.	Note: the following step must be done used safety glasses.  Insert the seger in the predisposed way on the wheel pin close to the flywheel. Verify that all the three snug of the seger are placed correctly in the predisposed way. PICTURE	
1.	41.	From bag X-034, extract the 4mm spacer (medium one) and insert it in the wheel pin, flywheel side. PICTURE	
1.	42.	Insert the left wheel shell (the one with the spur gear) and insert it in the wheel pin, flywheel side. PICTURE.	





Ph.	num	Instruction	Picture
1.	43.	From bag X-034, extract the smaller spacer (1mm) and insert it in the wheel pin. PICTURE.	
1.	44.	From bag X-034, extract a 4mm washer and insert it in the threaded pin. PICTURE.	
1.	45.	From bag X-034, extract 1 nut and screwing it with hands in the pin. PICTURE	
1.	46.	From bag X-034, extract the bigger spacer (7.5mm) and insert it in the wheel pin, satellite gear shaft side. PICTURE.	
1.	47.	Insert the right wheel shell in the wheel pin, matching the fixing screws holes. PICTURE.	



Ph.	num	Instruction	Picture
1.	48.	From bag X-034, extract the smaller spacer (1mm) and insert it in the wheel pin. PICTURE.	
1.	49.	From bag X-034, extract the second washer, and insert it in the threaded pin. PICTURE.	
1.	50.	From bag X-034, extract the second nut and screw it, manually, in the pin. PICTURE	
1.	51.	From bag X-031, extract the 6 cross screws, and screw them in the predisposed ways, avoiding to force. PICTURE	→ (S) (A) (A) (A) (A) (A) (A) (A) (A) (A) (A
1.	52.	From the box, take the rear tire (the one with bigger gear cutting and smaller diameter) and the sticky sponge (placed in the interior of tire).	
1.	53.	Lift a small portion of the sticky sponger and begin to adhere it on the wheel as described in the PICTURE.	
1.	54.	Go ahead with this action gradually removing the protection from the sticky sponge, completing an entire round.	
1.	55.	Fit the tire on the wheel. PICTURE.	

Phase 1 is completed. Now go ahead with the following assembling stage.



# PHASE 2: FRONT WHEEL ASSEMBLING

Mod	num	Instruction	PICTURE
2.	56.	Take all the parts from bag x-001 and all	the parts form bag x-006.
2.	57.	Slide one side of the wheel shell on the wheel hub keeping the holes aligned with the threaded holes on the hub.  Screw the 6 screws in using thread lock.  PICTURE	
2.	58.	Repeat the same operation with the second wheel shell and fix using the screws with applied thread lock. PICTURE	
2.	59.	Screw in the 2 Philips screws without tightening too much. PICTURE	
2.	60.	Take out the self adhesive foam from the	tire.
2.	61.	Take away a small portion of the protective tape and start to glue it as from PICTURE.  Go on taking slowly away the protective tape till when you have completed the work.	
2.	62.	Take the tire form the box.	
2.	63.	Put the tire on the wheel. PICTURE	

Phase 2 is completed. Now go ahead with the following assembling phase.



# PHASE 3: REAR AXEL ASSEMBLING

Ph.	num	Instruction	Picture
3.	64.	From bag, extract the swing arm.	
3.	65.	Unscrew, not completely, the chain regulation grains. PICTURE.	
3.	66.	Putting the 1mm spacers between the bearings and the swing arms, insert the back wheel pin in the swing arm space. Align the milled plain side of the pin and be sure that the side of the swing arm is correct as in the PICTURE: spur gear on right and swing arm without visible holes OR spur gear on the left and swing arm with visible holes.  Note: in order to insert the wheel it is necessary to press by hands the two wheel hubs.	
3.	67.	From bag X-043, extract the bike stand ar	nd place the rear wheel in it.
3.	68.	From bag X-021, extract the shaft.	
3.	69.	Insert the shaft in the swing arm bearings PICTURE.	
3.	70.	From bag X-023, extract the pinion and th	ne 4mm grain.





Ph.	num	Instruction	Picture
3.	71.	Screw two rounds only the grain in the pinion hole.	
3.	72.	Insert the pinion in the shaft on the spur gear side and complete to screw the grain, once applied the thread lock.  Note: verify that the grain rests on the plain part of the pin. PICTURE.	
3.	73.	From bag X-022, extract the sprocket flar	ge and 4 screws. From bag X-025 extract the sprocket.
3.	74.	Insert the flange in the sprocket, alinging the fixing holes. PICTURE.	
3.	75.	Screw completely the 4 screws, one applied the thread lock. PICTURE.	





Ph.	num	Instruction	Picture
3.	76.	Insert the sprocket in the shaft. PICTURE.	
3.	77.	From bag X-022, extract a grain and screw it the predisposed hole of the flange, once applied the thread lock.  Note: verify that the grain rests on the plain part of the pin. PICTURE.  Before screw completely the grain, avoid any play applying a small pressure with hands as in the PICTURE.	
3.	78.	From bag X-048, extract the chain and the as a replacement part, for future need.	ne 2 closing link. Keep one of the two closing link in a separate place
3.	79.	Put one end of the chain on one sprocket pawl. PICTURE.	
3.	80.	Make the chain running and complete the round. PICTURE.	



Ph.	num	Instruction	Picture
3.	81.	Apply the closing link to close the chain. PICTURE.	
3.	82.	Move the chain until the closing plate is easier to manage.	
3.	83.	Apply the closing plate on the two pins. PICTURE.	
3.	84.	Apply the "C" closing link plate, as in the PICTURE using pliers. PICTURE.  1.	2.

Phase 3 is completed. Now go ahead with the following assembling Phase.



# PHASE 4: CHAIN TENSION SETTING

Mod	num	Instruction	Pictures
4.	85.	Apply some thread lock on the adjusting screw. PICTURE.	
4.	86.	Screw inn the screws alternatively till when you reach a tension that doesn't allow the chain to hit the swing arm. PICTURE.	
4.	87.	Check that the wheel is aligned with the swing arm. PICTURE.	
4.	88.	Now you're ready to go on with the assembling. PICTURe.	

Phase 4 is completed. Now go ahead with the following assembling phase.



# PHASE 5 - FRONT FORK ASSEMBLING

Ph.	num	Instruction	Picture
5.	89.	From bag X-039, extract the shaft holder Ring.	and a screw. From X-040, extract a grain. From X-041 extract an O-
5.	90.	Insert an O-Ring into the fork shaft. Fix the shaft holder using the screw, once applied the thread lock. PICTURE	
5.	91.	Insert the grain and screw it, not completely, in the shaft holder.  Note: due to the fact that the front fork is partially assembled, go directly to Instruction 5.9. Instructions 5.4-5.8 are useful in case of future disassembling of the fork for maintenance.	
5.	92.	From bag X-041, extract the two O-Ring, the Derlin® axle box, the Derlin® piston and the screw.  From bag X-038, extract the threaded ring.  Insert components in the stem as in the PICTURE. Complete this activity screwing the screw, not completely, once applied the thread lock.  Note: the screw shouldn't be screwed too much in order to avoid ruining the piston.	
5.	93.	From bag X-038, extract the fork shaft.	





Ph.	num	Instruction	Picture
5.	94.	Insert the stem, including the piston, in the fork shaft from the threaded side. PICTURE. Note: slacken the screw in case of difficulties to insert the stem.	
5.	95.	Insert the axle box in the shaft. PICTURE.	
5.	96.	Screw completely the ring nut. PICTURE.	
5.	97.	From bag X-041, extract a spring and insert it in the fork shaft. PICTURE.	O STATE OF THE STA
5.	98.	From bag X-038, extract the hexagonal cap and screw it on the fork shaft, pushing inside the spring. PICTURE.	
5.	99.	Verify the fluidity of the fork movement. In case of limited fluidity, unscrew a bit the ring nut and/or the piston fixing screw.	





Ph.	num	Instruction	Picture
5.	100.	Ripetere le istruzioni da 1 a 11 per l'assemblaggio della seconda forcella prima di passare al montaggio delle piastre di sterzo. PICTURE.	
5.	101.	From bag X-042, extract a fork plate. Fro	m bag X-036, extract 2 shafts and 2 screws.
5.	102.	Fix one of the two shafts to the fork plate screwing the screw, once applied the thread lock. PICTURE.	
5.	103.	Repeat the instruction for the second shaft and put the plate on the table. PICTURE.	
5.	104.	From bag X-036, extract 2 spacers and insert them in the two shafts. PICTURE.	
5.	105.	From bag X-036, extract 2 bearings and insert them in the two shafts. PICTURE	





Ph.	num	Instruction	Picture
5.	106.	From bag X-037, extract two connecting rods and insert them in the shafts until the bearings. PICTURE.	
5.	107.	From bag X-036, extract two bearings and insert them in the shafts and put them into the connecting rods. PICTURE.	
5.	108.	From bag X-036, extract two spacers and insert them in the shafts. PICTURE.	
5.	109.	From bag X-036, extract two screws. Fix the fork plate to the two shafts screwing a bit the screws, with no much pressing, once applied the thread lock. PICTURE.	
5.	110.	Put the two plates on the table and pressing a bit, screw the screws completing the assembling of the fork plates. PICTURE.	
5.	111.	From bag X-017, extract the connecting r screws.	od plate. From bag x-036, extract the remaining two shafts and two





Ph.	num	Instruction	Picture
5.	112.	Fix one of the two shaft to the plate screwing on screw, once applied the thread lock. PICTURE.	
5.	113.	Repeat the instruction for the second shaft. PICTURE.	
5.	114.	From bag X-036, extract the remaining two spacers and insert them in the shafts. PICTURE.	
5.	115.	From bag X-036, extract two bearings and insert them in the shafts. PICTURE	
5.	116.	Insert the already assembled fork plate in the shafts. PICTURE.	

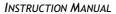


Ph.	num	Instruction	Picture
5.	117.	From bag X-036, extract two bearings and insert them in the shafts and in the connecting rod. PICTURE.	
5.	118.	From bag X-036, extract two bearings insert them in the shafts. PICTURE.	
5.	119.	From the second bag X-036 extract the connecting rod plate.	e remaining two screws, and from bag X-017 extract the second
5.	120.	Fix the plate on the shafts screwing the screw, once applied the thread lock. PICTURE.	
5.	121.	From the second bag X-042, extract four screws and screw them using hands for 2-3 rounds. PICTURE.	
5.	122.	Insert, delicately, the fork pipe in the holes of the fork plates. PICTURE.	Phase 3 / Pag. 24





Ph.	num	Instruction	Picture
7 77.	nam	mot decion	rictare
5.	123.	Note: insert the fork pipe as in the PICTURE.	
5.	124.	Screw the 4 crews.  Note: an exagerated screwing of the two lower screws may limit the efficacy and complete fluidity of the piston.	
5.	125.	From the second bag X-007 extract the ha	andlebar, the handlebar levers and the screws.
5.	126.	Insert the two protuberances of the handlebar into the predisposed upper ways of the connecting rod plate. PICTURE.	
5.	127.	Screw the screws on the handlebar. PICTURE.	





Ph.	num	Instruction	Picture
5.	128.	At this stage of the assembling, the fork should be like the PICTURE.	
5.	129.	From bag X-026, extract the steering con	necting plate and a screw.
5.	130.	Position the steering connecting plate corresponding the central hole of the lower connecting rod plate and screw the screw. Note: the collar of the steering connecting plate must be external as in the PICTURE.	
5.	131.	From bag X-026, extract the bearing and	the second screw.
5.	132.	Position the slot of the steering connecting plate above the hole of the lower fork plate, insert the bearing and screw the screw.	
5.	133.	From bag X-045, extract the front mask,	he mudguard, the screw and the washer.
5.	134.	Cut the front mask and the mudguard following the predisposed shape lines. PICTURE.	
5.	135.	Drill the mudguard in the predisposed sign (4mm diameter) PICTURE	





Ph.	num	Instruction	Picture
5.	136.		
5.	137.	Block front mask and mudguard on the fork screwing the screw and washer.  Note: adapt previously the shape of the front mask to the screws shape on the fork to align holes. PICTURE.  You can use the remaining screw to keep the upper part of the front mask close to the triples.	
5.	138.	From bag X-040, extract the wheel pin an	d two spacers.
5.	139.		
5.	140.	Insert the wheel pin in the front rear. PICTURE.	



<i>Ph.</i> 5.	141.	Insert the second spacer. PICTURE.	Picture
5.	142.	Insert the wheel pin in the second PIEDINO and block the grains.  Note: place the plain side of the wheel pin versus the grains to be blocked.  PICTURE.	Prints potitis cial perso ricola verzo prince de modes.
5.	143.	Phase 5 is completed. Verify the fluidity of the forks movement. In case of limited fluidity, unscrew the grains that fix the pin, compress completely the fork and fix again the grains.	

Phase 5 is completed. Now go ahead with the following assembling stage.



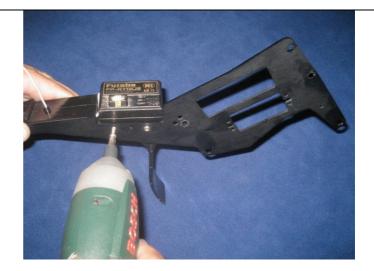
# PHASE 6 - FRAME ASSEMBLY

Mod	num	Istruzione	Fotografie
6.	1.	Remove from bag X-113 the top righ frame ( which has a window to fix a servo in the lower part). PHOTO.	
6.	2.	Open bag X-046 and remove what is inside	
6.	3.	Insert the receiver antenna (Please note that receiver is not included in our package) in the plastic tail saver and fix the receiver on top of it with doule side glued tape (not included) as per PHOTO	FILE DE GEO ANT IS ANT IS GEO TO THE CONTROL OF THE





6. 4. Fix the right top frame to the tail saver using 2 screw for plastic without tightening too much.

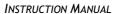


6. 5. Insert the hex screw in the hole. PHOTO



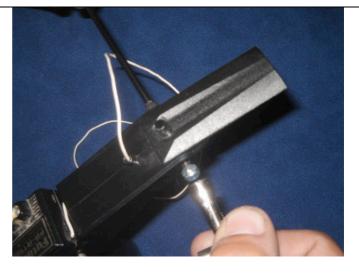
6. Remove from bag X-113 the left top frame ( which has a window to fix a servo in the upper part)and fix it to the tail saver with 2 screw for plastic without tightening too much. PHOTO.







6. 7. Tighten the bolt. PHOTO



6. Remove from bag X-112 the 2 lower frames plates and lay them on a table as shown in the PHOTO.



6. 9. Remove from bag X-019 the bearing holders and the 4 hex screw.

6. Insert the bearing holders as shown in the picture and screw the hex screws in after applying a little of thread lock.

Repeat on the other side plate.







6.	11.	Remove from bag X-120 a long threaded spacer and a hex screw with rounded head. Attach the spacer by tightening the hex screw after applying a little of thread lock. Please be sure to have the spacer properly inserted in the hole of the frame. PHOTO.	
6.	12.	Make up the shock absorber following section 7	
6.	13.	Assemble the engine following section 8.  The example is based on Novarossi engine which is part of the combo version, but you proceed in the same way even with different engine.	
6.	14.	Make up the tank following section 9	
6.	15.	Now take the rear end that you have just assembled and put it on the table as shown in the PHOTO.	WHE DESCRIPTION OF THE PROPERTY OF THE PROPERT
6.	16.	Remove from bag X-021 the longest spacer (6x7.5mm) and slide it on the shaft as shown in the PHOTO.	



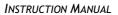


6. 17. Slide the spacer already screwed to the frame into the hole of the tank carrier. 6. 18. Check the correct alignment of the tank carrier pin with the hole in the frame as in the PHOTO. 6. Proceed fixing the front engine 19. mounting stand (from bag x-120, it has the brake holder) using a 4x8 mm hex screw.





6.	20.	Put in place slowly the engine previously assembled with the rear stand.	
6.	21.	Fix the engine to the front stand with two 4x10 hex screws, don't tighten these screws.	
6.	22.	With one 4x10 hex screw fix the rear stand to the left frame plate.	



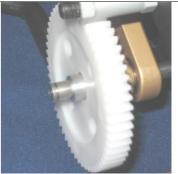


6. 23. Insert the rear end previously prepared into the bearing.



6. 24. Remove from bag X-021 the shorter spacer and slide onto the shaft as per PICTURE.





6. 25. Remove from bag X-121 the brake lever and brake shoe.

Glue the brake shoe onto the lever using Cyano glue.

Insert the brake shoe in the proper place.



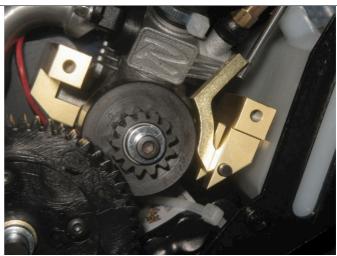




6. Insert the ø3x20 shaft in its hole, check the brake shoe can turn around this pivot point.



6. 27. Check the brake can move freely



6. 28. Assemble the right frame plate. Be sure to align properly the rear arm shaft to the bearing and the tank carrier pin to the hole in the frame.

Fix it with a 3x8 hex screw.







6. 29. Fix the engine stand to the frame with 4x10 hex screws and tighten the screws those hold the motor to the front stand.



6. Clip on the seger from bag X-021 to the groves on both sides of the rear arm shaft.



6. 31. You reached this point!

Please not that your exhaust is single and on the chain side only, this double side version will be available in future.



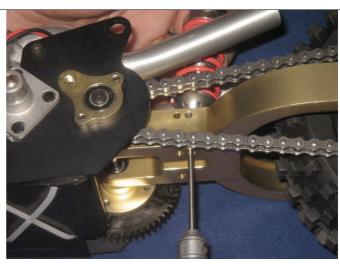




6. 32. Slide the shock absorber previously prepared into the rear arm and fix it with a ø3 pin inserted in the selected hole ( rear hole is suggested).



6. 33. Lock the pin with a M4 set screw.



6. 34. Remove from bag X-014 the parts. Insert the bearing as per PICTURE.







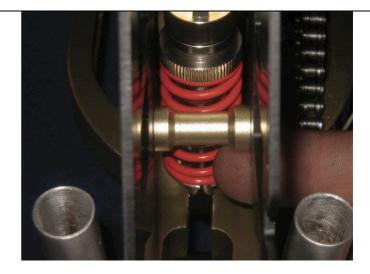
6. 35. Insert the spacer. 6. Using a M4x35 hex screw fix in place 36. the shock absorber top part in the chosen hole. 6. Lock the hex screw in place bolting on a 37. M4 bolt.





6. Remove from bag X-016 what is inside.

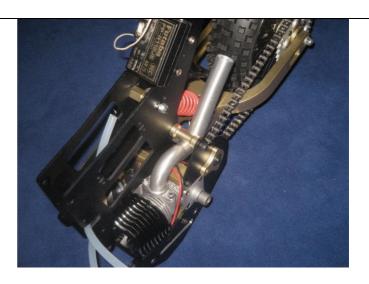
Place one spacer between the two plate of the top frame aligned with the 6mm hole in the back.

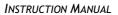


6. 39. Slide the brace through the frame, prior to this you have just located the spacers aligned with the 6mm hole. Total spacers used 3, one was located in the previous instruction.



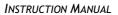
6. 40. This is the result.







6. Repeat the last steps for the front brace. 6. 42. This is the result. 6. 43. Tighten the crash bar holder in the front brace.



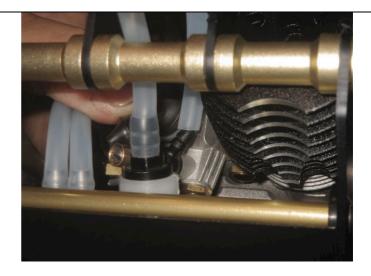


6.	44.	Repeat for the rear brace.	
6.	45.	You are at this point	
6.	46.	Insert the 4 M4x4 set screws into the crash bar holders.	



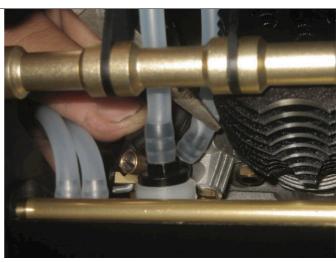


6. 47. Connect the hose coming from the tank to the carb.



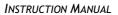
6. 48. For this operation you can use a pliers, be careful not to damage the hose.

DO NOT SHORTEN THE HOSE, THE FUEL INSIDE IT WILL KEEP ENGINE ON IN CASE OF AN UPSIDE DOWN CRASH.



6. 49. Connect on of the two lateral hose to the pressure plug on the exhaust.







6.	50.	Assemble the front fork previously prepared using two M4x35 hex screws.	
6.	51.	Lock the screws in place bolting 2 M4 bolts as per PICTURE.	
6.	52.	Check that the rear of the front fender doesn't hit the frame while steering, If needed trim it accordingly.	





6. S3. Insert the refilling hose in the pin on the handlebar.



6. Remove the objects from bag X-010 and fix the foot supports using 2 M4x12 hex screws after applying tread lock.



6. 55. Insert the crash bars into the crash bars holders.



6. 58. Before moving to the next assembling module check the alignment between the rear tire and the rear body shell retaining pin.

6. 59. Unscrew the rear M4 nut. Slide in the exhaust pipe support code X-135. Set in place the silencer code X-133 sliding the silicon pipe X-134 onto the exhaust pipe.

Secure in place the silencer using the cable ties.

Module 6 is completed. Proceed with the next assembling module.

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## PHASE 7 - SHOCK ABSORBER ASSEMBLING

Ph.	num	Instruction	Picture
7.	144.	From bag X-028, extract the shock absorber.	
7.	145.	Slacken completely the spring regulation ring. PICTURE.	
7.	146.	Insert a screwdriver (3mm diameter) in the hole of the lower shaft end. PICTURE.	
7.	147.	This step is necessary to extract the shock absorber bottom: keep the screwdriver with the left hand, the spring with the right hand and press the spring to free the shock absorber bottom. PICTURE.  Note use gloves. Gloves are not present in the picture to facilitate the demonstration.	
7.	148.	Unscrew the lower shaft end from the stem maintaining blocked the stem with pliers putting some paper or some adequate material to avoid damaging the stem. Use the screwdriver to unscrew.	



7.	149.	Unthread the plastic lower shaft end from the stem and put it in the X-029 bag (for another use afterwards). PICTURE	
7.	150.	From bag X-049, extract the steel lower shaft end and screw it on the stem, once applied the thread lock. PICTURE	
7.	151.	Re-insert the spring in the shock absorber e re-insert the bottom. PICTURE	

Phase 7 is completed. Now go ahead with the following assembling stage.



# PHASE 8 - ENGINE ASSEMBLING

Mod	num	Istruzione	Fotografie
8.	152.	Remove all the objects from bag X-127	. 2223. 33.10
8.	153.		NOVAROSSI NOVAROSSI MICROENGINES  ANOSSI  MANOSSI  MANOSS
8.	154.	Slide on the flywheel, align it to the cone.	
8.	155.	Insert the 6mm washer.	





Mod	num	Istruzione	Fotografie
8.	156.	Lock all with a bolt, tight it firmly.	
8.	157.	Insert the 2 clutch drums as per picture.	
8.	158.	Close the spring forming a ring.	





Mod	num	Istruzione	Fotografie
8.		With big attention slide the spring on the clutch drums into the groove, be careful and don't lengthen the spring.	
8.	160.	Insert the washer.	
8.	161.	Insert the 5x1.2mm spacer.	





Mod	num	Istruzione	Fotografie
8.	162.	Remove from bag X-124/13 the clutch cover and bearings, insert the bearing as per picture in the front hole.	
8.	163.	Insert the bearing in the rear hole.	
8.	164.	Slide the clutch cover on the engine shaft.	





8.	165.	Insert a 5x1.2 spacer and lock it with a mm3 screw after having located the small washer. Apply thread glue and tight it firmly.	Fotografie
8.	166.	Check that the clutch cover can spin freely on the engine shaft, it must have a axial gap of 0.1-0.5 mm.	
8.	167.	Remove from bag X-128 the air filter.  Locate it on the carb and fix it with a tie rap.	THE ET LITTER





Mod	num	Istruzione	Fotografie
8.	168.	Take the rear engine support (the one without groove for the brake) and two 4X10 screw from bag X-120. Tighten the screw taking care to keep the arm of the support parallel to the engine shaft.	
8.	169.	Insert two 3x25 screw into the hole to fix the exhaust.	
8.	170.	Insert the gasket on the screws (gasket included in engine box)	



8.	171.	Screw on the exhaust.	Fotografie
8.	172.	Once the screw are tight, secure them with two M3 bolts.	
8.	173.	Check that when the carb is fully closet the controller lever is about 1.0/2.0mm far away from the engine support, if not relocate the lever opening and closing the M8 bolt.	

This module has been completed.



## PHASE 9 - TANK ASSEMBLY

PHAS	SE 9 -	TANK ASSEMBLY	
Mod	num	Istruzione	Fotografie
9.	174.	Remove the parts from bag X-130. PHOTO.	
9.	175.	Check that tank is clean without debris. PHOTO.	
9.	176.	Cut the smaller hose (4x2) to a length of 32mm and slide it on the weight.	





Mod	num	Istruzione	Fotografie
9.	177.		
9.	178.	Insert the weight and hose into the tank. PHOTO.	
9.	179.	Lock the plug to the tank with a 8 mm wrench.  Please be careful to insert the plug vertically into the tank hole.	





Mod	num	Istruzione	Fotografie
9.	180.	Tight the plug fully, the O-ring is no more visible.	
9.	181.	Slide on the central pin the shortest 6x3 hose. PHOTO.	
9.	182.	Insert on the other 2 pins the remaining hoses. PHOTO.	



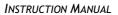
Mod	num	Istruzione	Fotografie
9.	183.		
9.	184.	Take a 4 AAA battery pack, it is a 4.8 volts pack for receiver, not included but we sell it separately, AR RACING code ARX-481. PHOTO.	ARX-481 1000mAh@4.8V
9.	185.	Fix the battery to the tank retainer using 2 tie-rap and position the tank inside the tank retainer. PHOTO.	Market Articles of Months Articles of Arti

This module has been completed.



## PHASE 10: SERVO LINKAGE

ГПАЗ	PHASE 10: SERVO LINKAGE			
Mod	num	Istruzione	Fotografie	
10.	186.	Use a servo horn like the one in the PHOTO and cut it where u see the red crosses. Where you see the arrows, those holes must be enlarged to 3mm.		
10.	187.	Remove from bag X-132 the stuff you see in the picture.		
10.	188.	Screw a round head hex screw in the hole number 1 of the picture number 1 to fix one of the cylinder with the bigger hole, 2.2mm.  Use strong thread glue, tight the screw fully then go back 1/turn, the cylinder must be able to spin freely on the servo horn.		





10.	189.	Repeat the same for hole number 2, this time you have to use a cylinder with a small hole, 1.6mm, and screw it on the internal side of the horn. Let this part rest until the thread glue is dry.	
10.	190.	Insert the brake lever as per PICTURE.	
10.	191.	Slide on a little piece of silicone hose.	





10.	192.	Screw a hex screw into a cylinder with a big hole.	
10.	193.	Lock it on the top of the brake lever.	
10.	194.	Insert the lever in the brake shoe hole.	



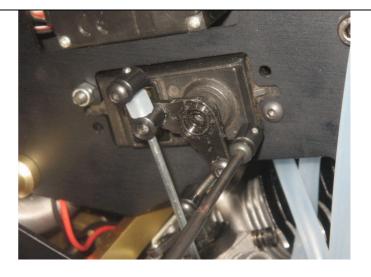


10.	195.	Take one cylinder with a small hole and slide in it the gas lever, lock the cylinder near the first bent.	
10.	196.	Slide in the spring.	
10.	197.	Insert the gas lever in the carb controller as in the PICTURE.  Be careful not to bend or damage the gas lever or the carb controller.	



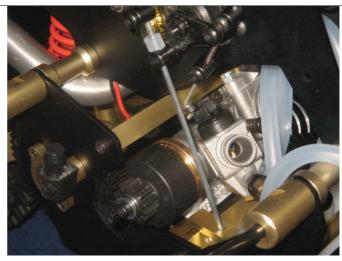


10. 198. Lock the last cylinder near the servo horn using a set screw.



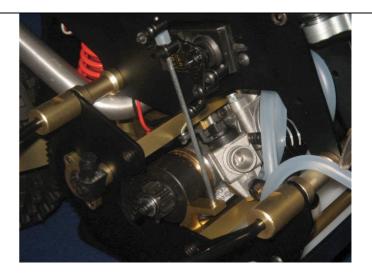
10. 199. Turning the servo check that the carb fully open and that the brake is trong enough to lock the rear wheel.

If needed change the length of the silicone hose and/or the position of the cylinders on the levers.



10. 200. Check that the servo has a smooth action, if anything obstruct its operation find the problem and repair

It is very important the servo operation is smooth and freely.







10.	201.	Remove all the object from bag X-029. PHOTO.	
10.	202.	Screw the plastic rod end onto the threaded steering bar.	
10.	203.	Screw both set screws in the holes of the stoppers.	
10.	204.	Slide one of the stoppers onto the threaded bar.	
10.	205.	Slide one spring onto the threaded bar.	
10.	206.	Insert the white sliders.	





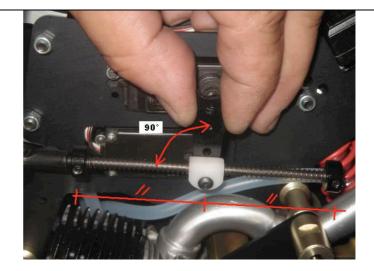
10.	207.	Slide on the second spring. FOTO.	
10.	208.	Insert the second stopper, align the parts as in the picture and screw in the set screw into the stopper.	
10.	209.	Align the parts as in the picture. FOTO.	
10.	210.	Connect the plastic rod end to sthe steering lever with a M3 hex screw, as shown by arrow.  Screw the servo horn extension to the servo horn using 2 M3 round head screws.  Fix the with slider to the central hole of the metal extension.  Lock the screw with a M3 bolt, the screw must not be too tight and the with slider must turn freely around this screw.	



10. 211. Check that the servo horn make a 90 degrees angle with the steering lever, the front wheel is straight and the length of the two spring is the same.

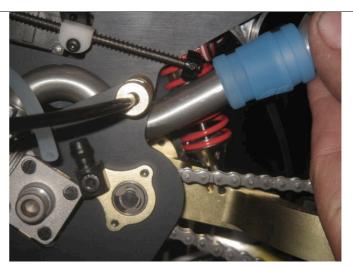
If it is not so, work on the position of the spring stoppers to solve the problem.

The more the spring are compressed the more the bike will be reactive but less stable and vice versa.



10. 212. Turn the front wheel all the way to left and check that the lever does not touch the exhaust.

Fix the silencer to the holder using the 2 zip ties, fix the exhaust pipe to the silencer using the silicon pipe and the 2 zip ties.



You competed module 10.



# Phase 11 - Before start driving

Warning: Please, follow carefully the next Instructions before starting driving the ARx-540 Nitro:

#### 1. Break in:

Please refer to the motor instructions for the break in procedure.

#### 2. Remote Control Check

Once completed installing the motor bike, the remote control with its servo check the proper functioning: positioning the stick of the steering on the right side, the wheel should steer to the left. Move the reverse steering channel if it doesn't happen.

#### 3. Flywheel test

Position the motor bike on the stand with the engine on controlling that the rear wheel doesn't touch the ground. Now, keeping the bike with one hand on the saddle (WARNIG: AVOID ABSOLUTELY TO PUT THE HAND NEAR THE REAR WHEEL AND/OR THE CHAIN TO AVOID INJURIES!!!) accelerate as much as possible for some seconds, controlling the correct sense of direction. Then break completely and verify if the flywheel is continuing to rotate in the rear wheel, noticing some vibrations.

**BUON DIVERTIMENTO DA PARTE DI AR RACING!** 



## **ELENCO PEZZI ARx-540 NITRO**

## RC MOTORBIKE & COMBO

CODE KIT DESCRIPTION

ARX-N ARX-540 NITRO KIT
ARX-NC ARX-540 NITRO COMBO

ARX-NCARR ARX-540 NITRO COMBO ASSEMBLED

#### **ADD ONS**

CODE KIT DESCRIPTION

ARX-RC ACCOMS AGGRESSOR 2,4GHz ARX-CHARGER CARICABATTERIE 12v/220v

ARX-RADIO KIT RADIO FUTABA

ARX-HEX SET CHIAVI ESAGONALI FRESATE

ARX-012 MOTORE 2,5CC NOVAROSSI

## PARTS LIST

CODE	KIT DESCRIPTION
X-001	FRONT WHEEL
X-002	REAR WHEEL
X-003	REAR LEFT WHEEL HUB
X-004	REAR RIGHT WHEEL HUB
X-005	SPROCKET
X-006	FRONT HUB
X-007	HANDLEBAR
X-008/A	REAR TIRE
X-009/A	FRONT TIRE
X-010	FOOT RESTS
X-011	REAR SWING ARM
X-012	LOWER FRAME PLATES
X-013	UPPER FRAME PLATES
X-014	UPPER SHOCK END
X-015	THREADED SPACER SET
X-016	FRAME BRACE SET
X-017	STEERING HOLDER
X-018	BODY MOUNTS
X-019	SWING ARM BEARING CASE
X-021	SWING ARM SHAFT WITH SPACERS
X-022	SPUR GEAR HOLDER
X-023/8	8T CHAIN PINION

X-023/9 9T CHAIN PINION
X-025/56 SPUR GEAR 56T
X-026 STEERING ARM
X-028 SHOCK ABSORBER
X-029 STEERING ROD KIT

X-030 FLY WHEEL
X-031 GYRO GEARS
X-032 GYRO HOLDER
X-033 CLUTCH SHOES

X-034 REAR WHEEL SHAFT WITH SPACERS

X-035 CRASH BARS X-036 STEERING RODS

X-037 STEERING CONNECTING RODS

X-038 FRONT FORK TUBES X-039 FRONT FORK STEMS

X-040 FRONT FORK LOVER ENDS

X-041 FRONT FORK SPRING AND BUSHES

X-042 TRIPLES
X-043 BIKE STAND
X-044 DRIVER FIGURE

X-045 BODY + BODY STICKERS X-046 REAR PROTECTION X-047 SERVO SCREWS

X-048 CHAIN SET

X-049 SHOCK ABSORBER LOVER ROD END

X-050 INSTRUCTION CD X-052 2 x BEARINGS 4X9X4 X-053 2 x BEARINGS 6X13X5 X-054 2 x BEARINGS 5X10X4

X-055 5 x SPACER 6X1 X-056 5 X SPACER 5X1

X-057 2 X CLUTCH SHOE SPRINGS X-058 2 X FRONT FORKS SPRINGS X-059 4 X STEERING SPRINGS

X-060 5 X BODY CLIPS

X-061 10 X HEX SCREWS M3X6 X-062 10 X HEX SCREWS M3X5

x-063 10 X HEX SCREWS M3X10 n° 10

X-064 10 X HEX SCREWS M3X25 X-065 10 X HEX SCREWS M3X30 X-066 5 X HEX SCREWS M4X35 X-067 6 + 6 X PLASTIC SCREWS

X-068 10 X GRAINS M3X3 X-069 5 + 5 GRAINS M4 X-070 5 + 5 + 5 X WASHERS X-071 2 X HEX SCREWS M3X10

X-072 5 X NUTS M3
X-073 5 X NUTS M4
X-074 ROTOR ø4
X-075 ROTOR ø5
X-076 ROTOR ø3,17

X-077 2 X FLANGED BEARINGS 4X9X4

X-078 CRYSTAL SEAT

X-079	BODY STICKERS
X-080 X-081	BODY MOD. SHOCK ABSORBER SHAFT
X-082	SWING ARM SHAFT
X-083	WHEEL SHAFT
X-120	MOTOR MOUNT
X-121	BRAKE PAD
X-124/13	CLUTCH BELL 13T
X-127	CLUTCH
X-128	AIR FILTER
X-129	EXHAUST PIPE
X-130	TANK
X-131	TANK SHELL
X-132	GAS SERVO LINKAGE
X-133	SILENCER
X-134	SILENCER SILICON PIPE

## PARTS LIST

## CODE KIT DESCRIPTION

ARX-RC ACCOMS AGGRESSOR 2,4GHz ARX-CHARGER BATTERY CHARGER 12v/220v

ARX-RADIO RADIO KIT FUTABA

ARX-HEX MACHINED HEX SCREWS

ARX-N ARX-540 NITRO KIT

ARX-NC ARX-540 NITRO COMBO

ARX-NCARR ARX-540 NITRO COMBO ASSEMBLED

ARX-012 NOVAROSSI 0,12 ENGINE