Preview

The story began at 14/8/10 when a friend of mine (***Ron Tossman***) owns a TDR, after seeing it's performance at the flying field it was like there are RC HELI's and there is a TDR (nothing to compare).

He said "Just send a mail to Jan and wait", few hours later that day I sent an e-mail to Mr. Jan Henseleit asking to place me on his waiting list for the amazing machine called TDR.

10 months later I received an e-mail from Jan saying – wake up man: It's your time to own one!

I was lucky to get that e-mail just before going to the Masters competition (as a viewer☺), to get my TDR at Holland, to meet Jan face to face and even to see the TDR make History in the competition and even with the same canopy and color scheme that I choose for my TDR.

At the masters I also bought a KONTRONIK speed controller (HELI JIVE-120) + Engine (PYRO 700-52), a full size V-Bar unit, RADIX 105mm tail blade and other small accessories for my setup.

At 25/7/11 I came back from the masters with the Israeli team, happy for the personal achievement of ***Eitan Goldstain*** **for** taking the 5 place at the Masters Competition and with the special RC HELI Kit in my suitcase. It took few more days to get my Servos (QUTRAGE Torque), Charger (BANTAM BC8), Batteries and I was ready…

So here is a little taste of how it all goes!

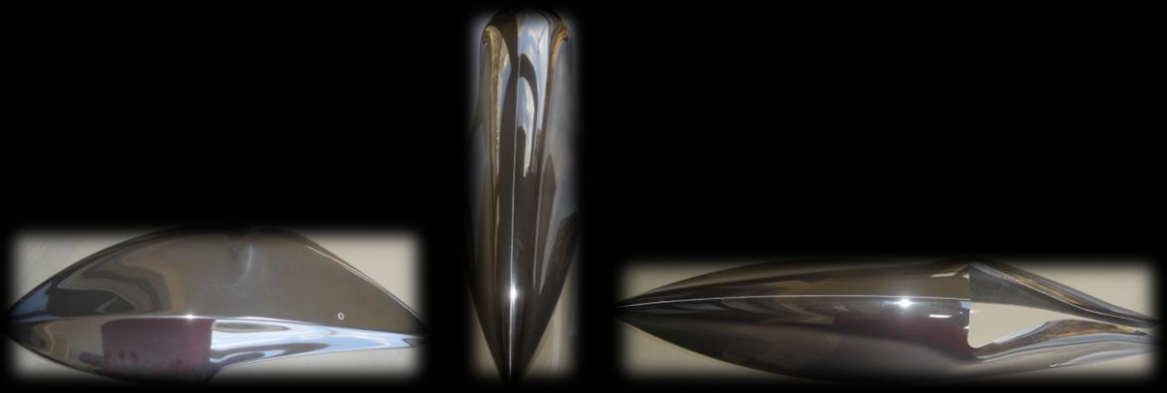
Enjoy!

The Kit

Well, it's defiantly one of the strangest RC HELI Kit I ever got!

I forgot to take a picture of the Canopy Stickers but basically the kit contains a box size 25cmX25cm with all metal parts arranged in small plastic bags + a plastic bag with the carbon main frame parts, vertical stabilizer, controller base, Gyro base + Boom with skid pips, torque tube + Canopy (You can choose its color when ordering the Kit)

Personally, I like the Black one!



Assembling The RIGID

First thing to do is downloading the most updated user manual from Henseleit Helicopters web site at:

http://www.henseleit-helicopters.de/index_e.html

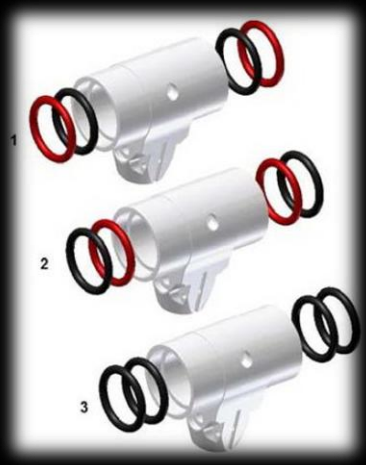
Like the HELI Kit it's not a traditional RC HELI manual, it's more like a book contains 50 pages with a limited but very impressing and detailed CAD drawings of how to assemble the TDR.

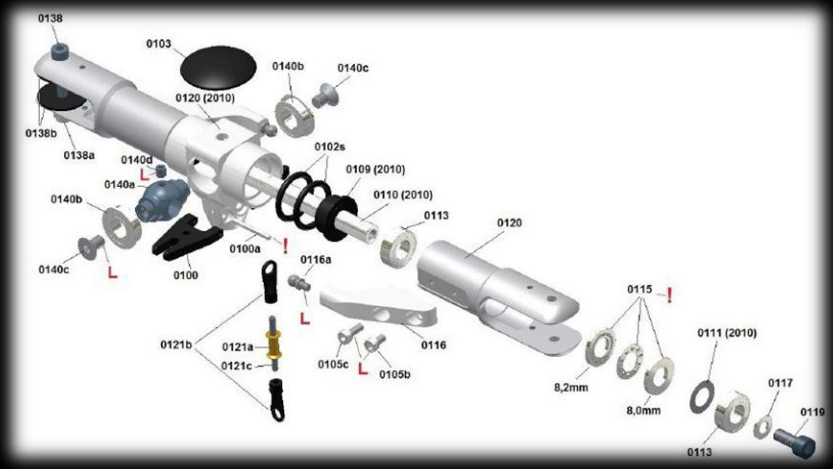
It's a step by step manual contains a lot of explanations about what stands behind the design of the parts of this HELI, Tip's for maintenance, recommendations for setup's .A lot to read but still very simple and important, it's an expensive and unique HELI so make sure you read and understand the manual before getting started - nothing to worry about, this HELI is very simple for assembling but it's different from anything called a RC HELI you may assembled before.

All plastic bags mark with stickers in German but in English too ☺

Assembling the Head

Right from the beginning of the assembling process you will notice the high quality of the HELI components & parts. Some of them are Pre Assembled with no need to disassemble first like in other HELI's.

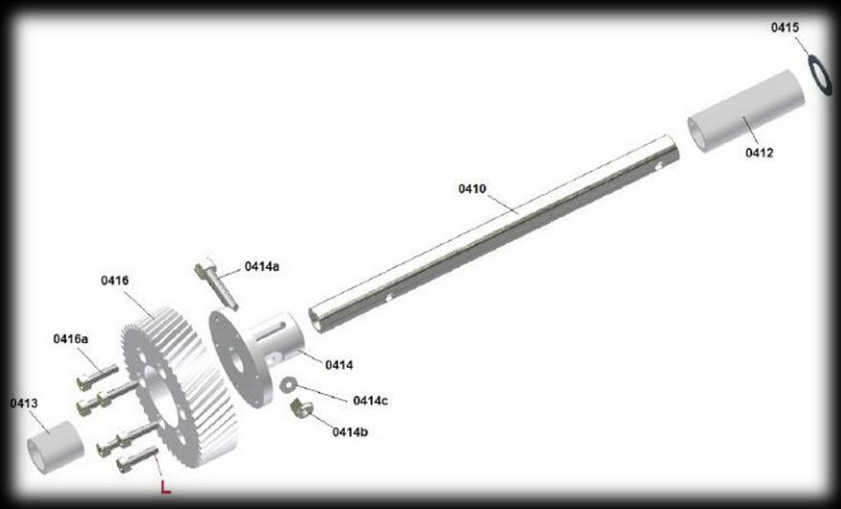


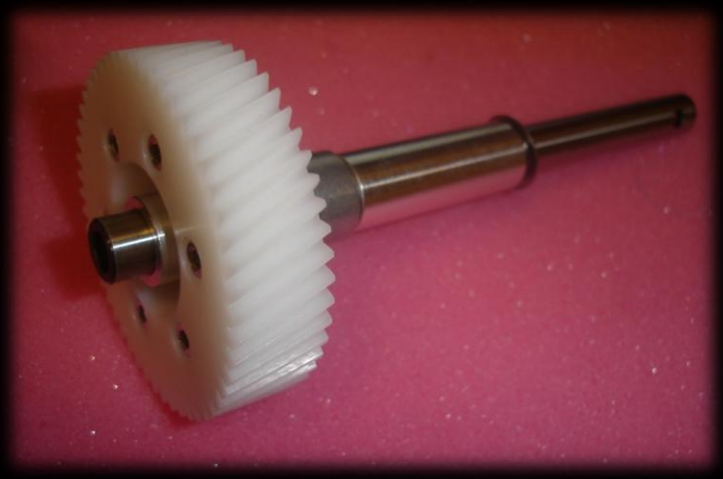


Two kind of Damping case can be used (black from the kit or white from the old 2009 kit) +Dumping O Rings that can stiff the head of the HELI in six different levels. I assembled the TDR with the old white Dumping case with a combination of option No.2 (orange dumpers to central hub and black ones outside).

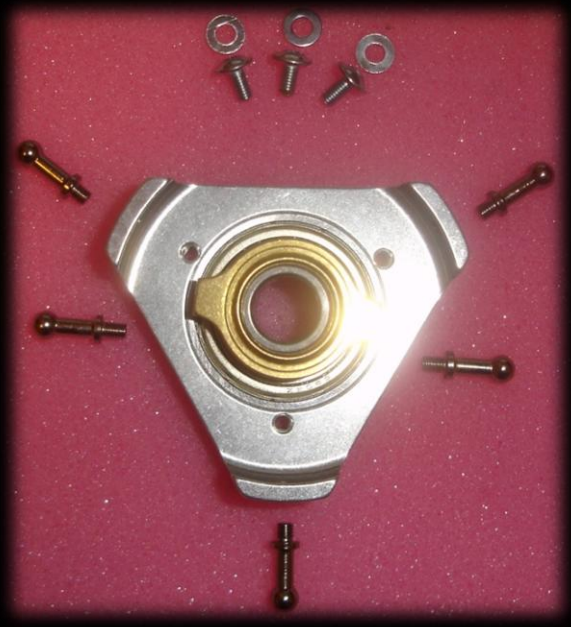
Note: The two white Dumping cases + the Orange Dumping O Rings are not part of the kit and needs to be ordered separately. Kit comes with 2 black Dumping cases + 4 Black O Rings by default (2 for each grip).

Main Shaft Unit

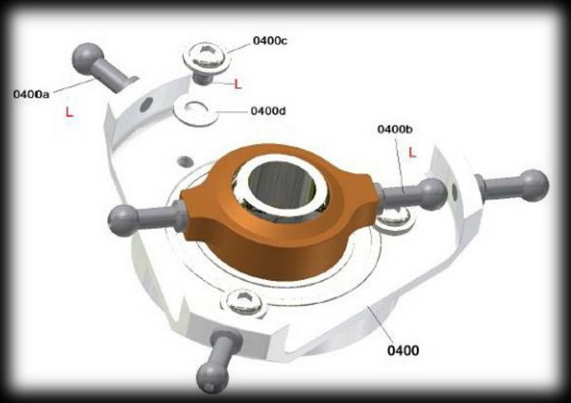




Swash Plate




TDR
HENSELEIT


0400c
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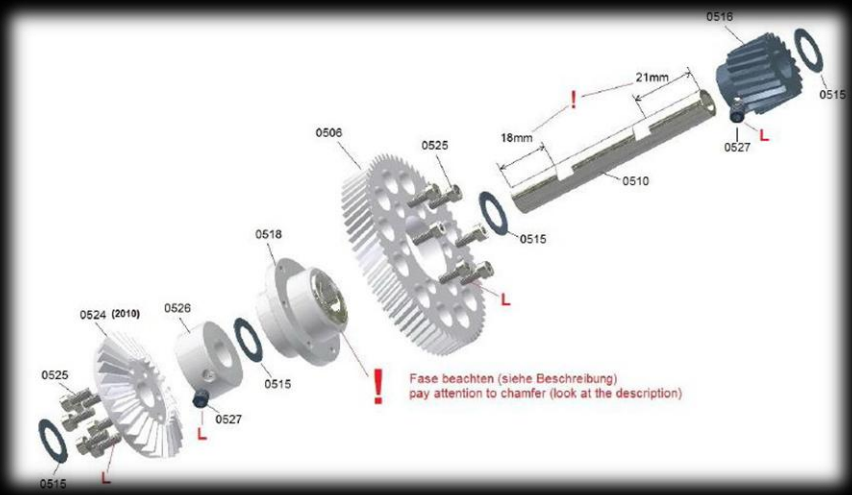
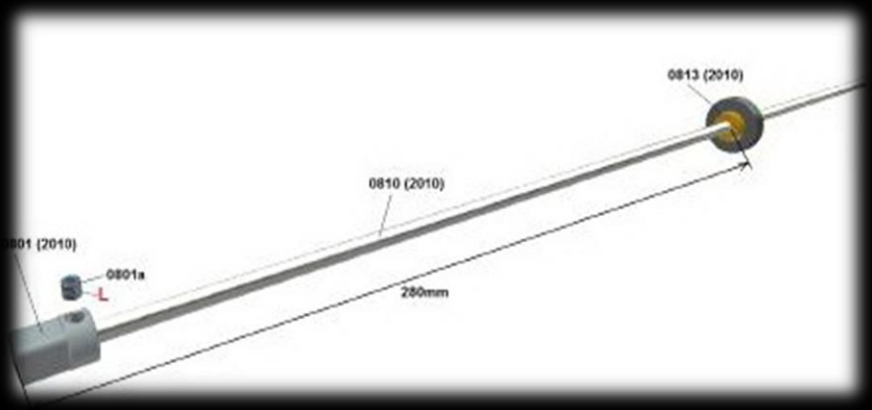
L
L
0400d
0400b
L
0400


TDR
HENSELEIT

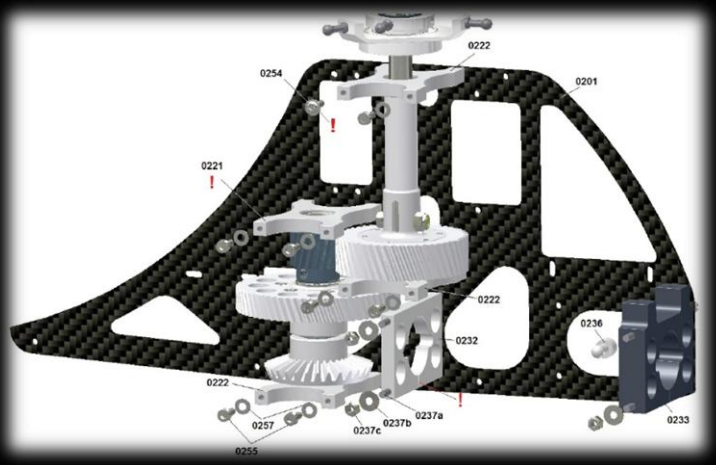
Intermediate Shaft Unit

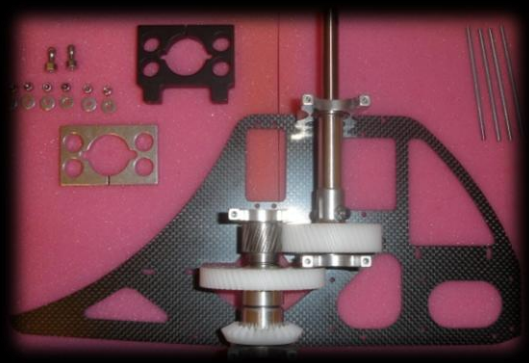


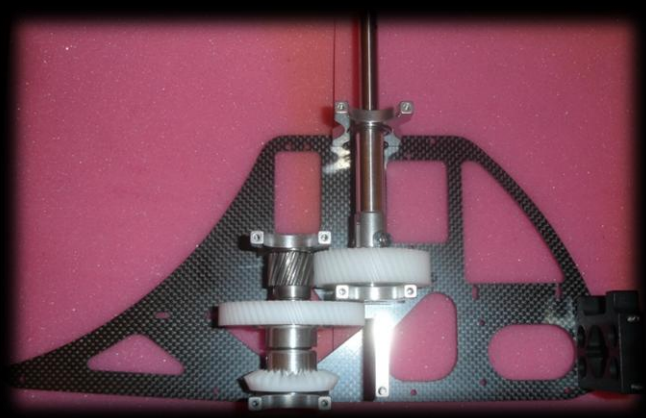
Tail Unit – Torque Tube

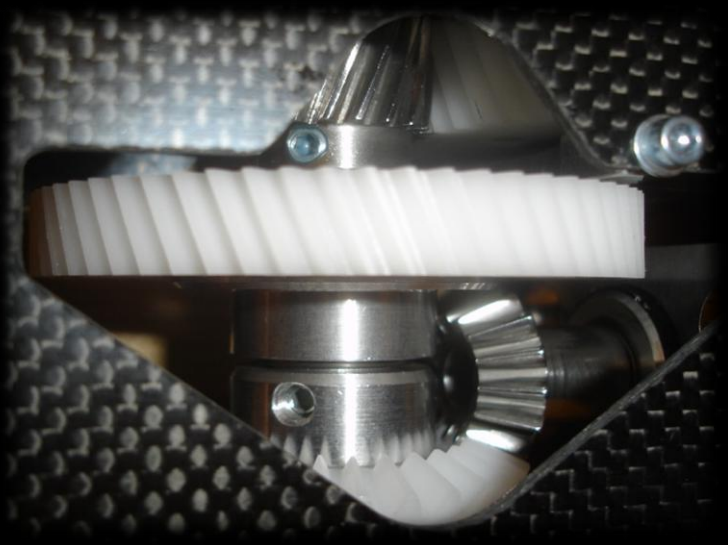


Main Frame – Upper Right side

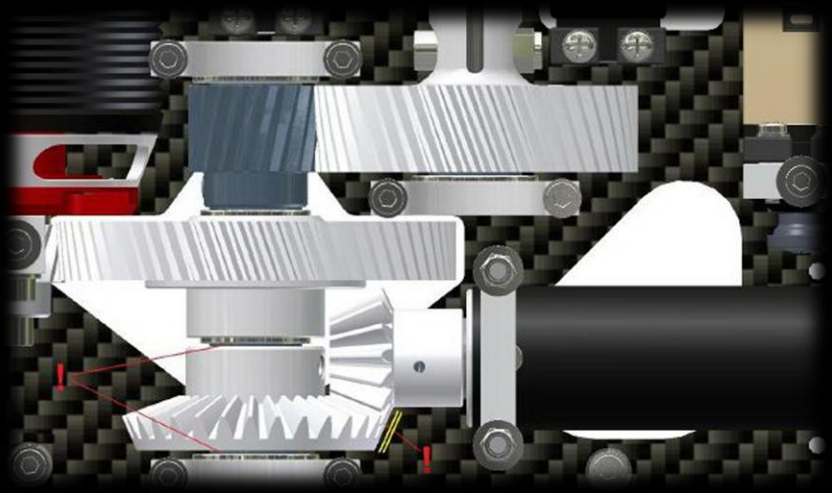




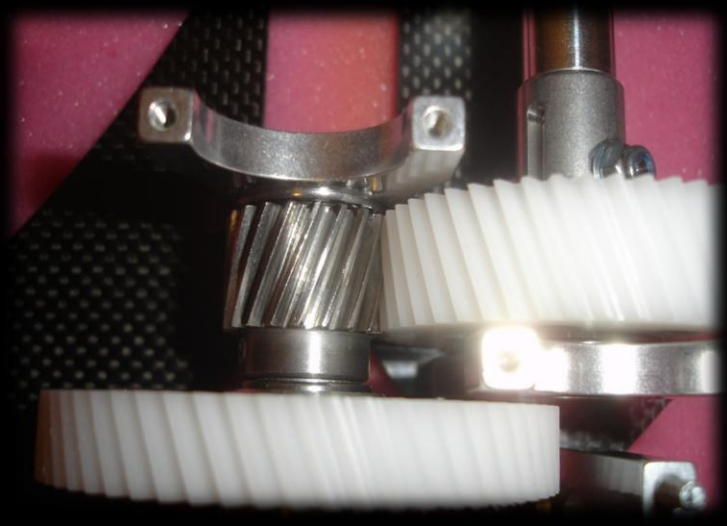





HENSELEIT
TDR

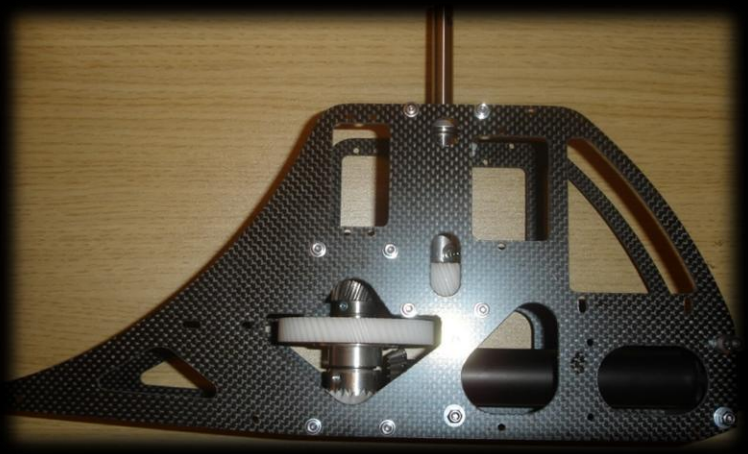


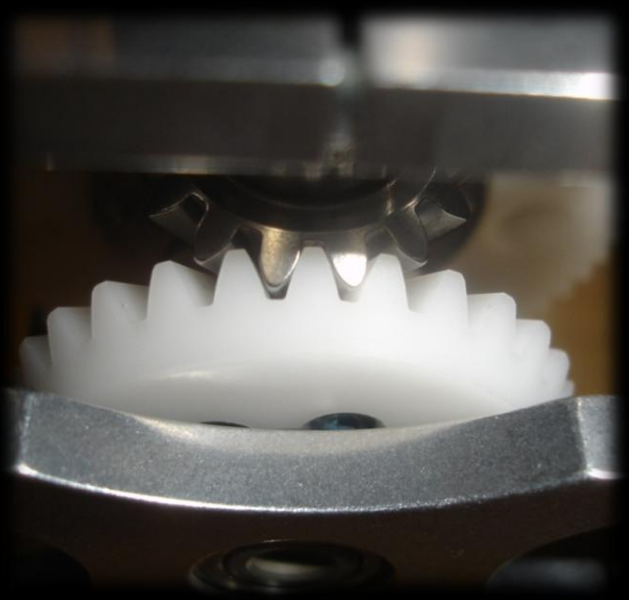

TDR

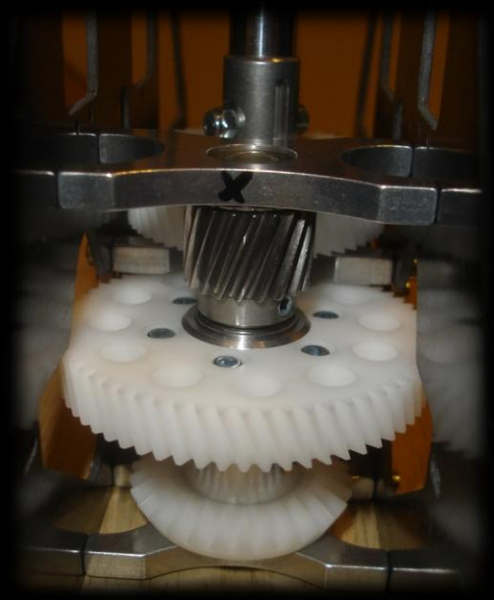


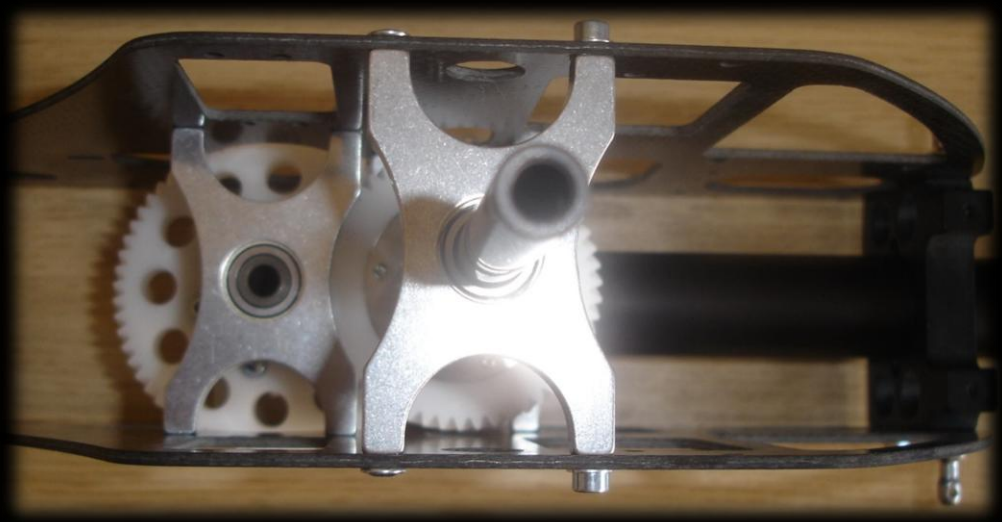

TDR

Main Frame – Upper Left Side

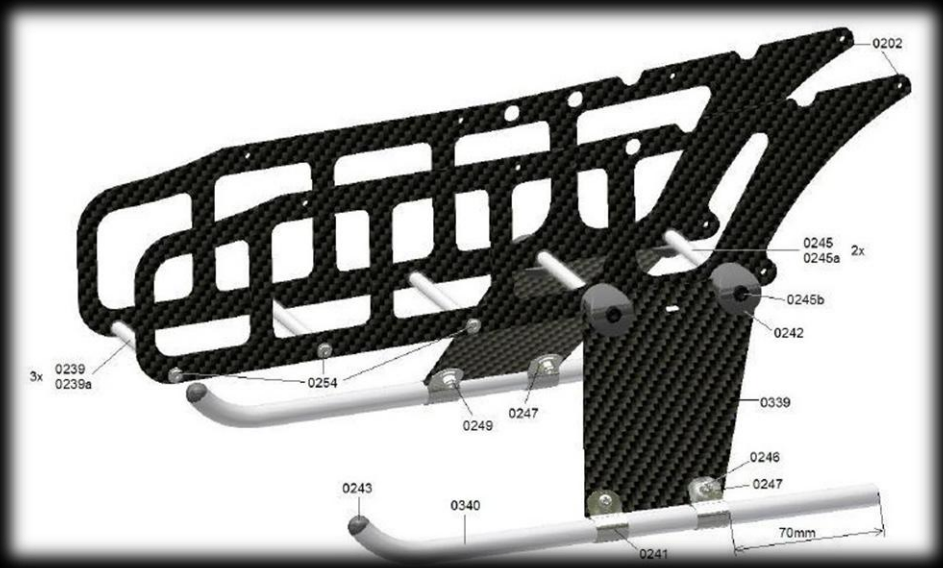


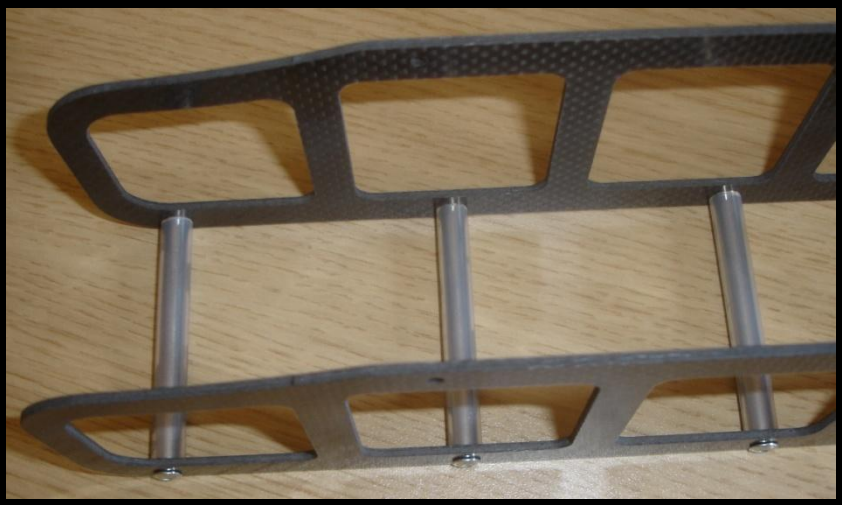




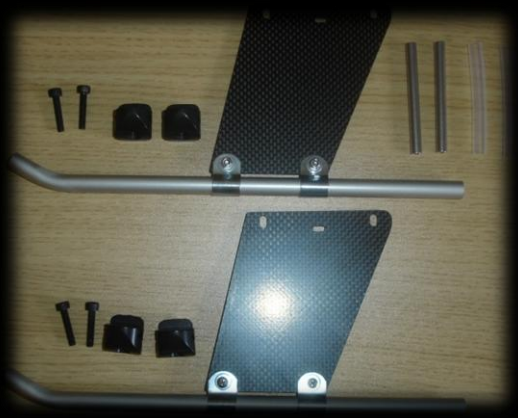


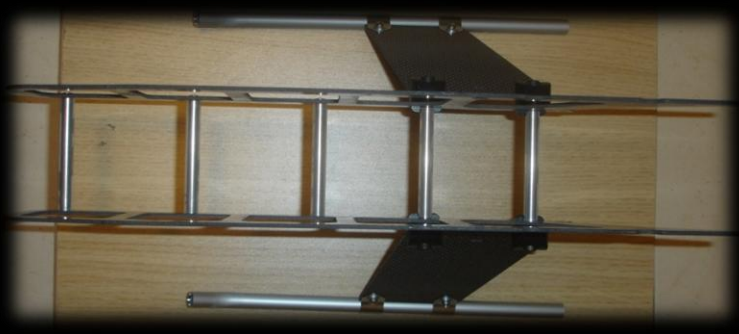
Main Frame – Lower Frame, Battery Tray and skids





Skids and Pip's Assembly



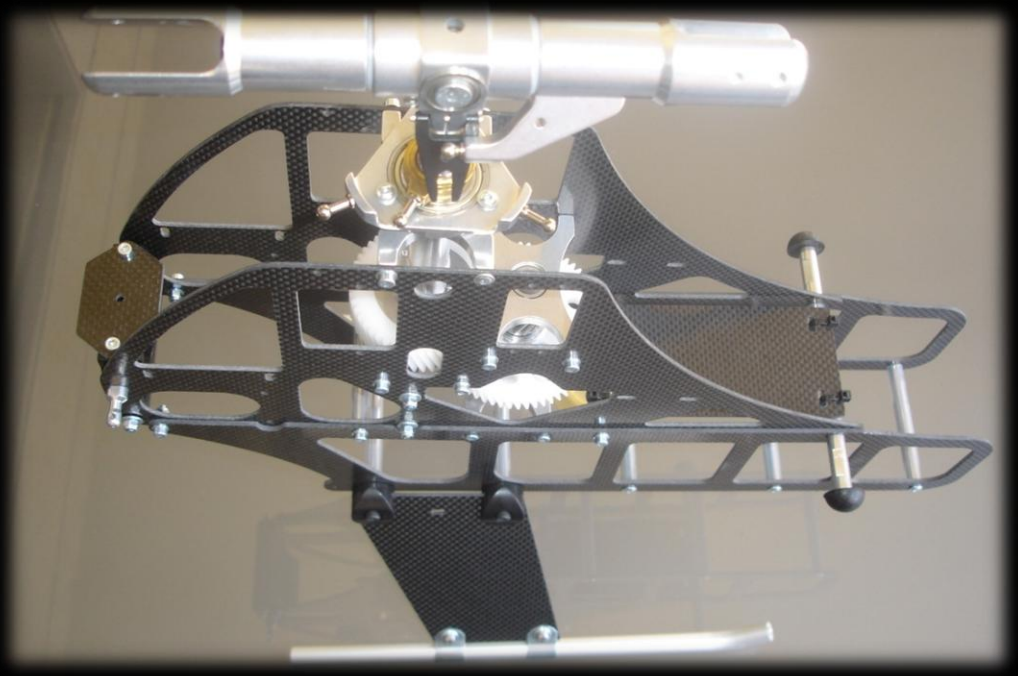


Controller Mounting Carbon Plate

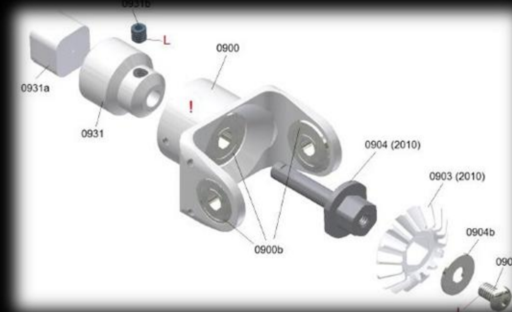
It’s strange but this part is assembled using plastic strips only!

Assembling the Upper Frame to the Lower Frame

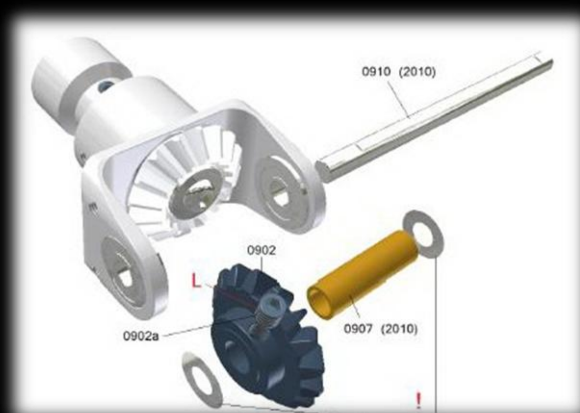
Connecting the frames to each other and adding the Gyro sensor carbon plate at the back of the HELI.

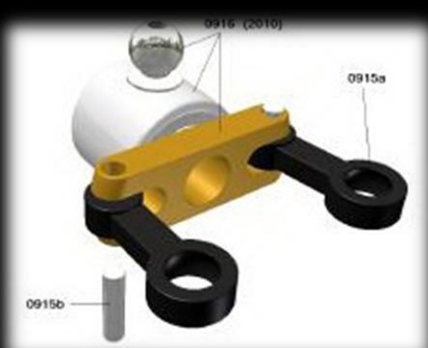


Tail Gear

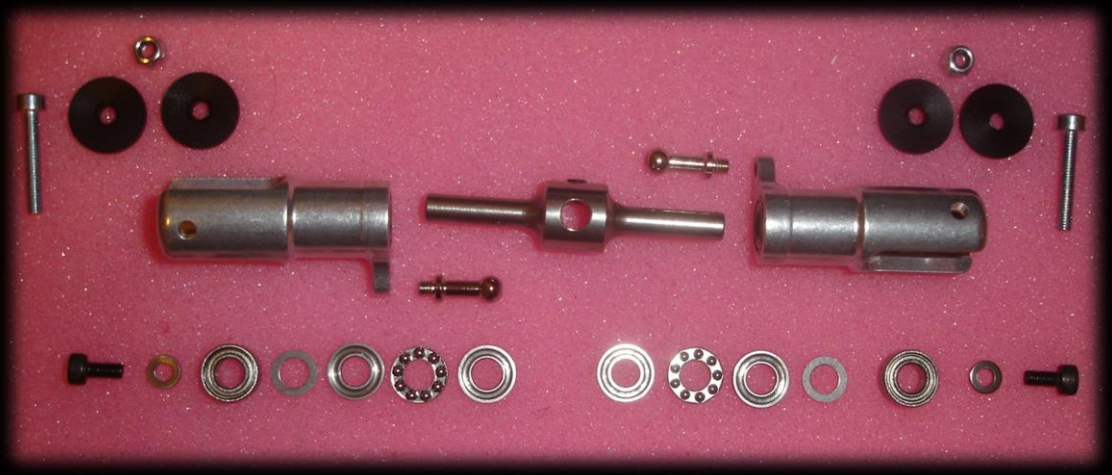

0931a
0931
0900
0904 (2010)
0903 (2010)
0904b
0904a
0900b


Scott Yow
TDR
HENSELEIT
HELICOPTERS


0910 (2010)
0902
0902a
0907 (2010)


0916 (2010)
0915a
0915b

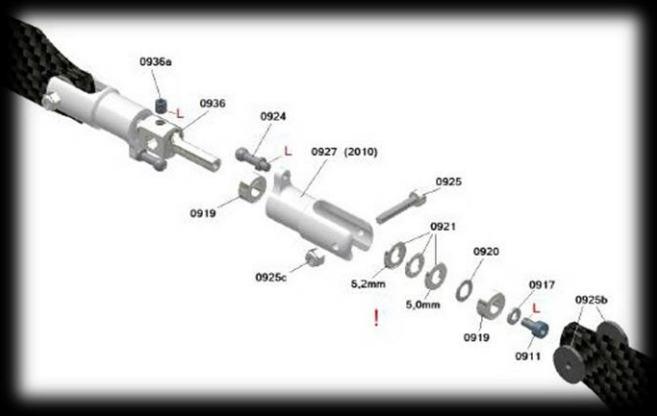
Tail Grip's



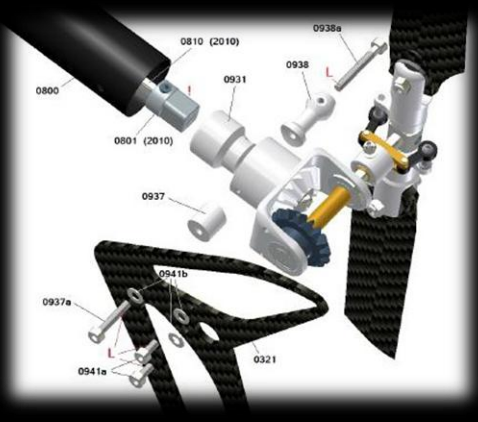
I found a problem assembling one Grip; I sent an e-mail to Jan explaining the problem.

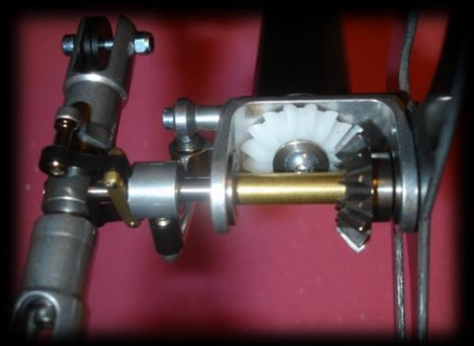
I got answer after 48 hours and two days later an envelope with new parts came by Air Mail.

Great Service Jan Thanks for that one!

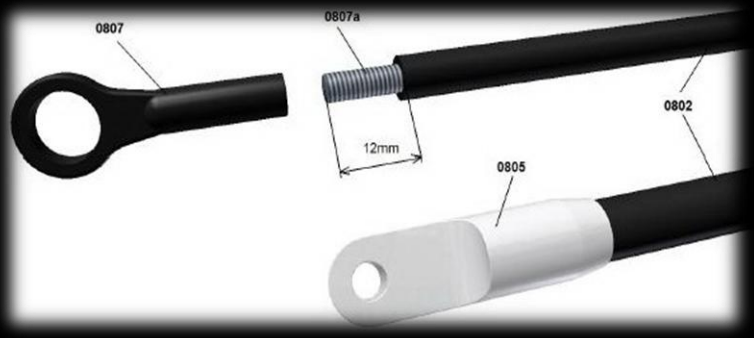


Assembling the Tail Unit to the Boom

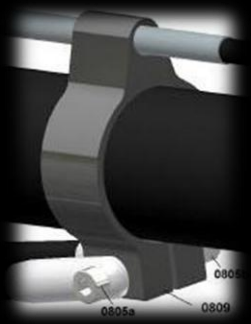




Boom Support



Tail Push Rod

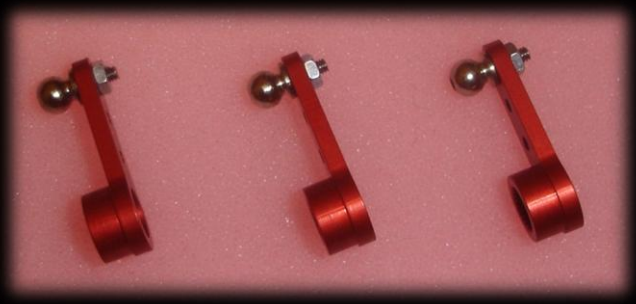


Electronics

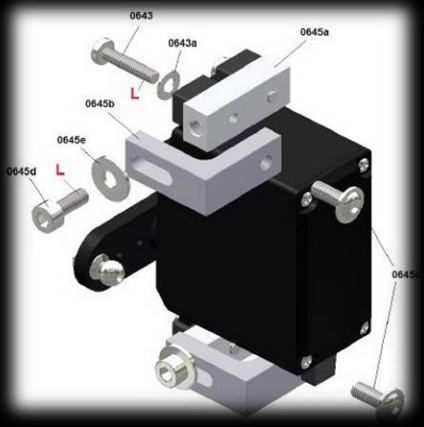
Traditionally as a first step I'm drawing an electric scheme for all connections then I connect all of the electric components before assembling those to the HELI in order to check full functionality of the system and to prevent future electricity connection mistakes that can or may cause damage.

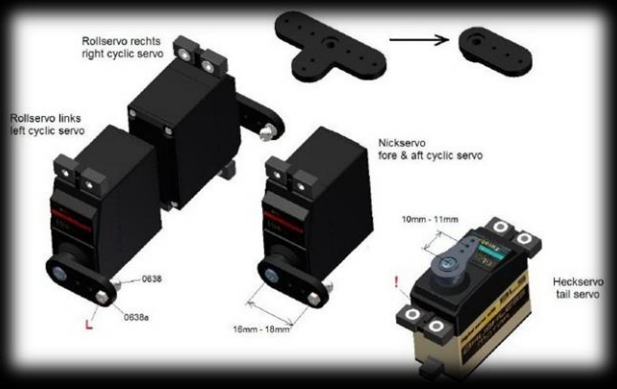
I use Outrage Torque Servos BL9180 for cyclic and BL9188 for the tail, all high voltage – gives (together) 48K/cm for cyclic/collective torque using external RC 15C 2000mah LIPO battery (KONTRONIK BEC is limited to 6V only).

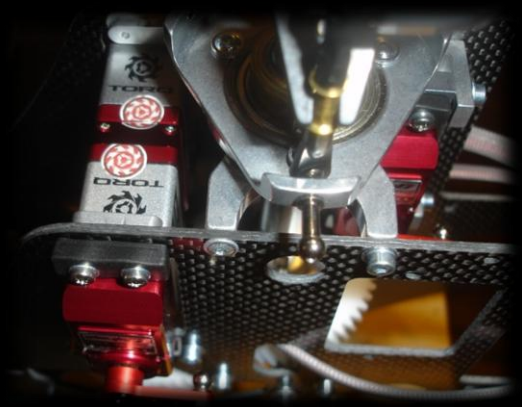
Also added Quick UK high quality servo metal arm's

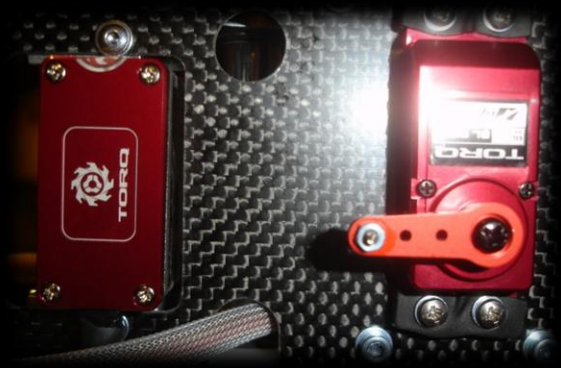


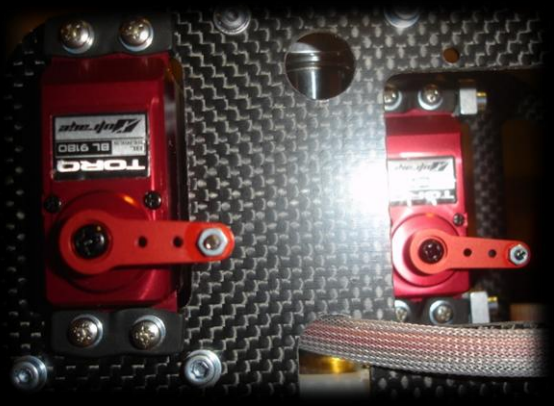
Mounting the Servos

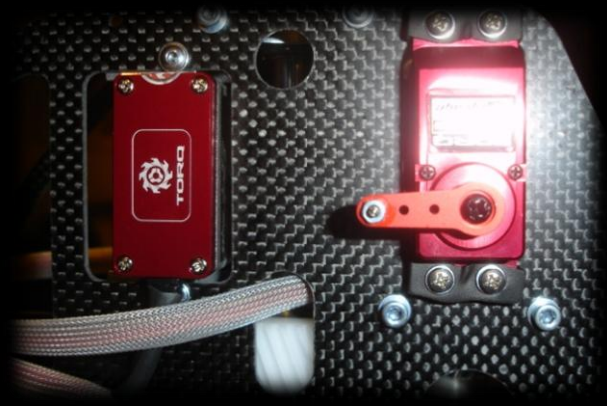


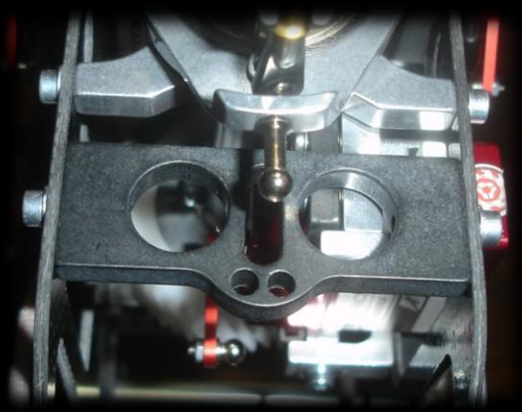


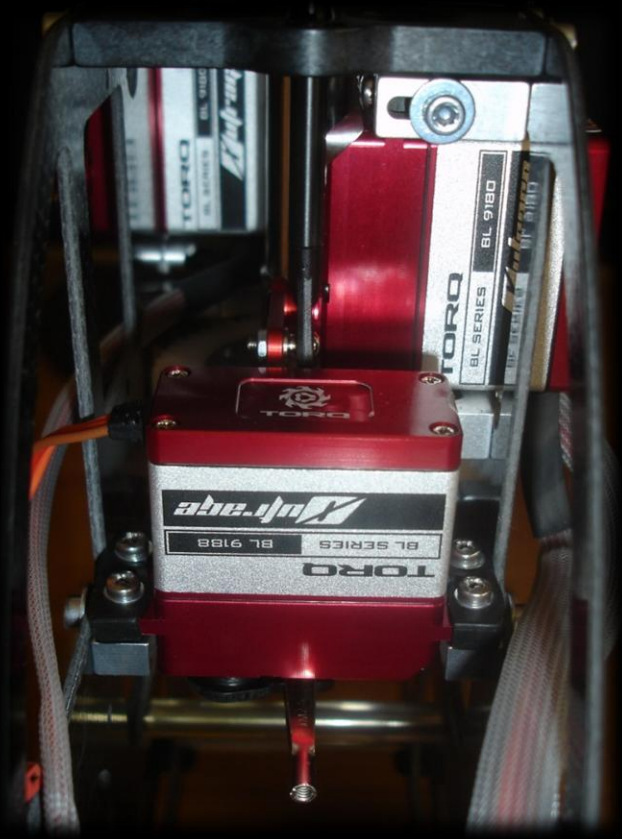


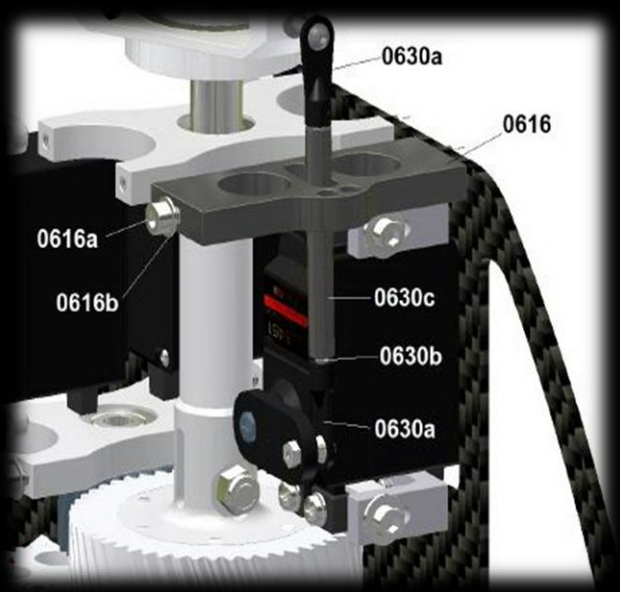



TORO
BL 9180

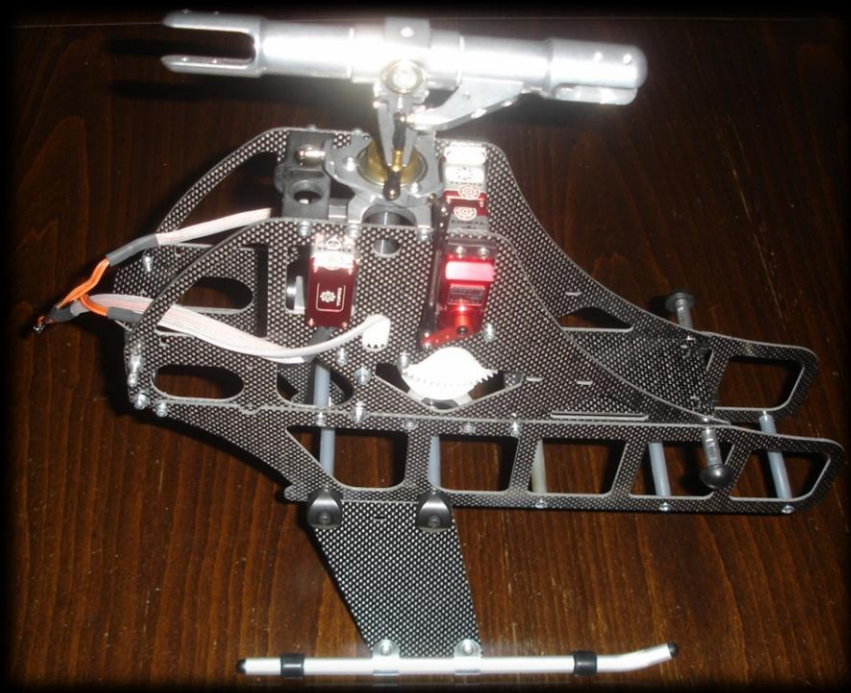

TORO




TORO
BL SERIES
BL 9180

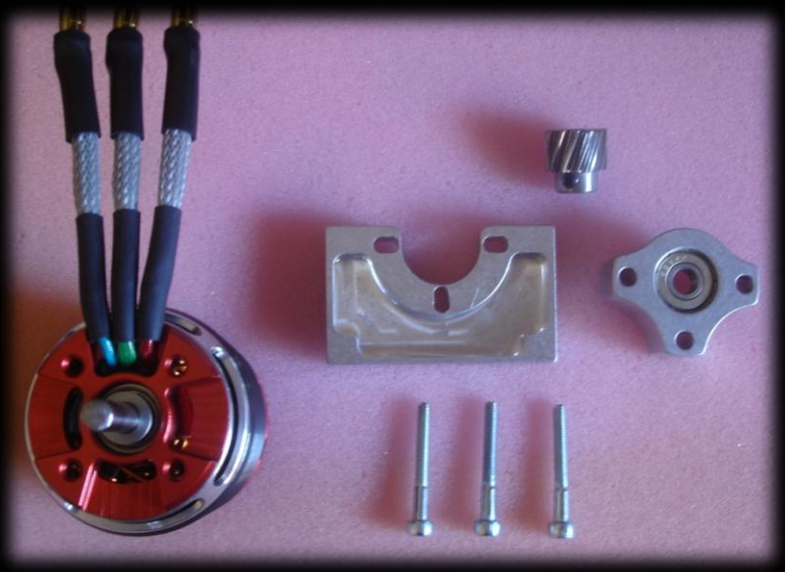

0630a
0616
0616a
0616b
0630c
0630b
0630a

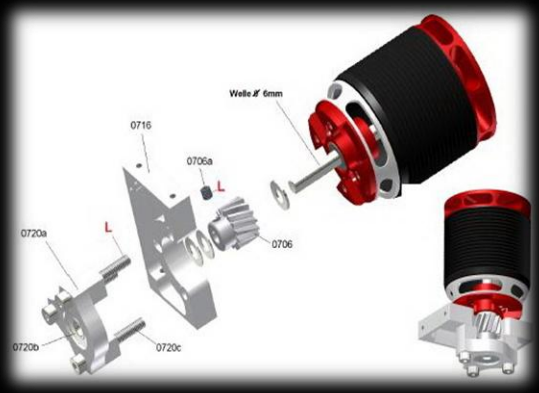

0630d
0642
0630d
ca. 27 mm
0630d
0643



Engine

KONTRONIK PYRO 700-52





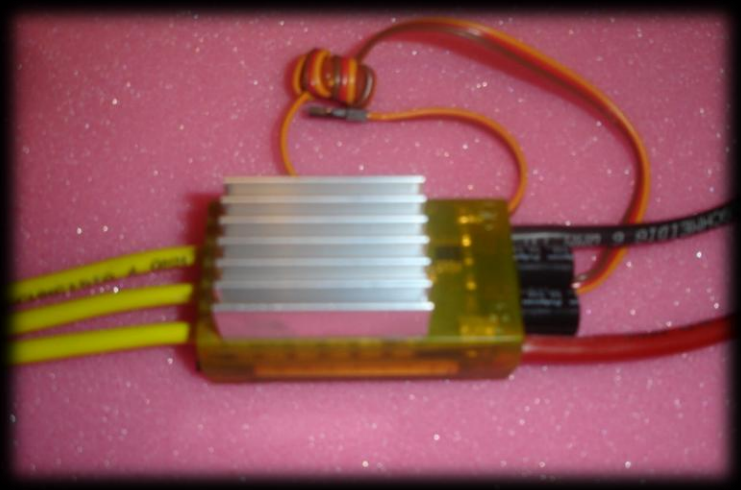
Speed Control

KONTRONIK HELI Jive-120

I got the HELI Jive with the limited edition Yellow case sold at the 3DM 2011 competition.

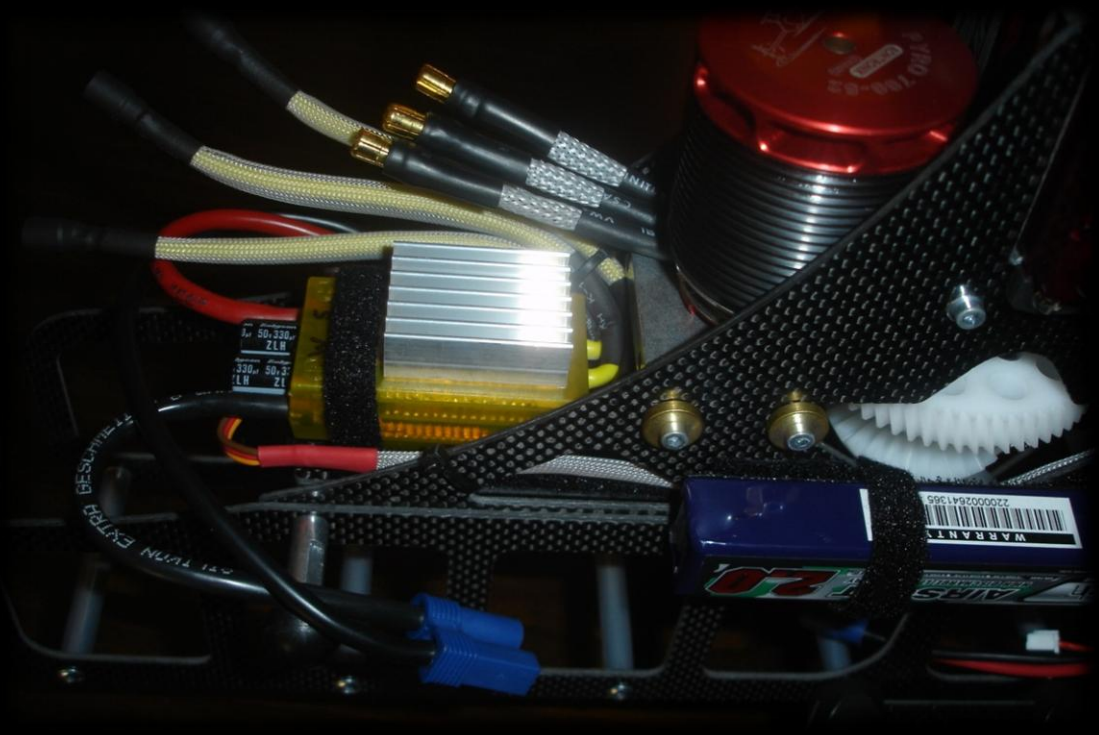
The case feels like it's made of a kind of silicon and is not the same as the original red plastic one.

According to KONTRONIK gluing a Heat sink to the controller can double the current consumption that this controller can deliver. It's important on such a HELI that its canopy completely covers the Engine and the controller during Flight.

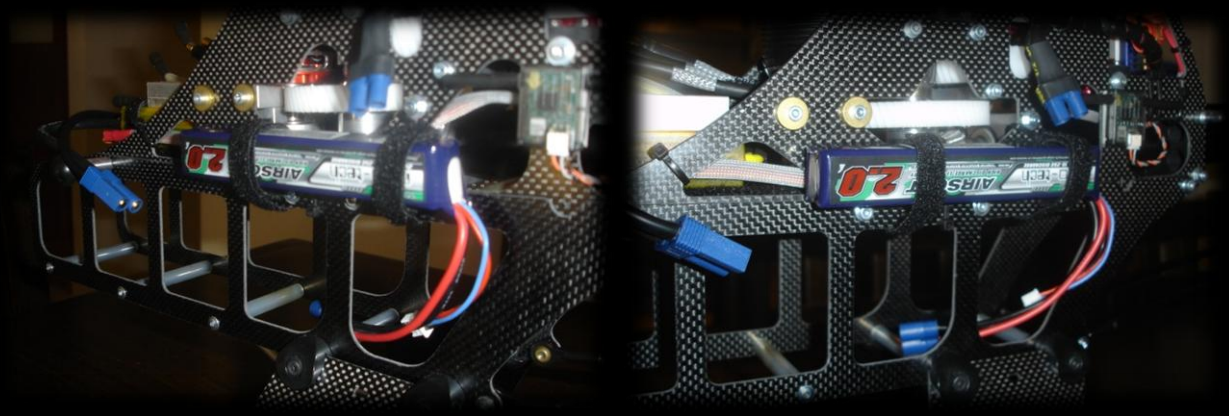


Electronic components assembly

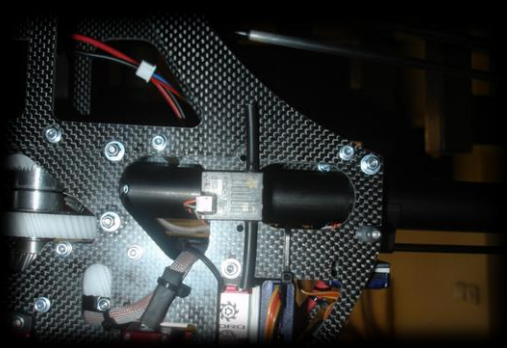
Speed control + Engine



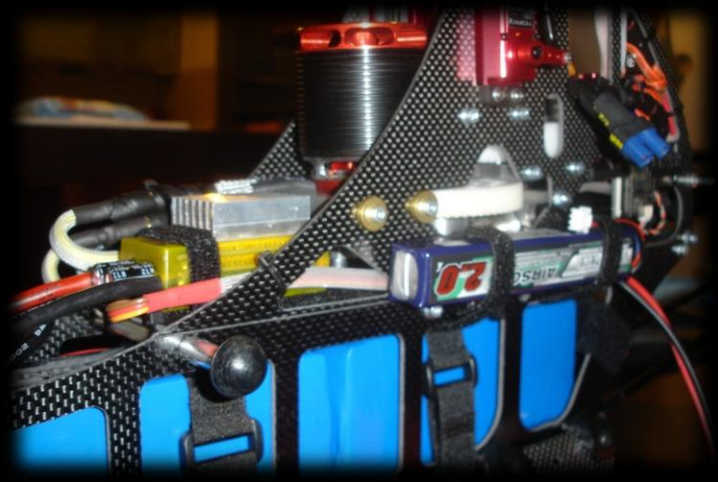
RX LIPO Battery

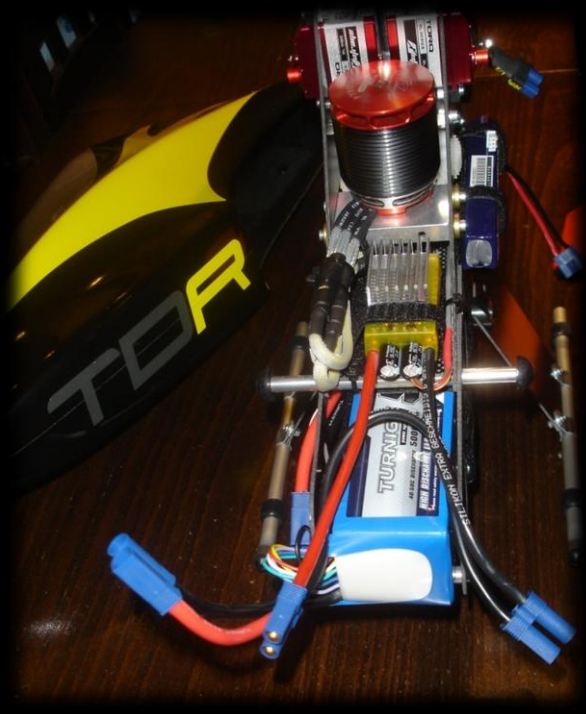


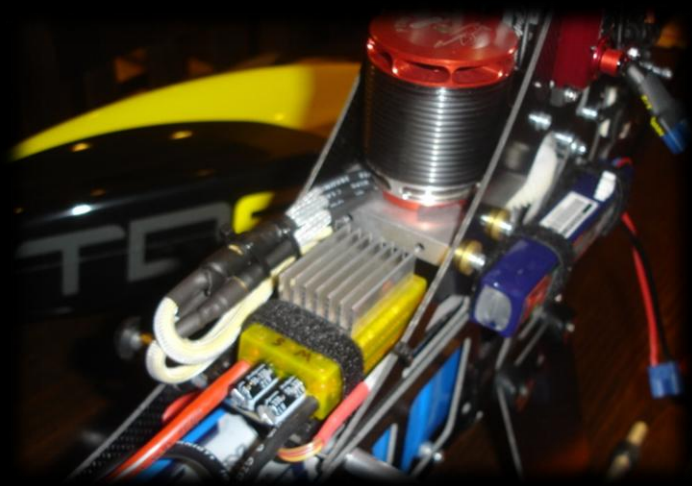
Placing the RX receivers on each side of the HELI frames 90deg to each other (For RX Diversity efficient)



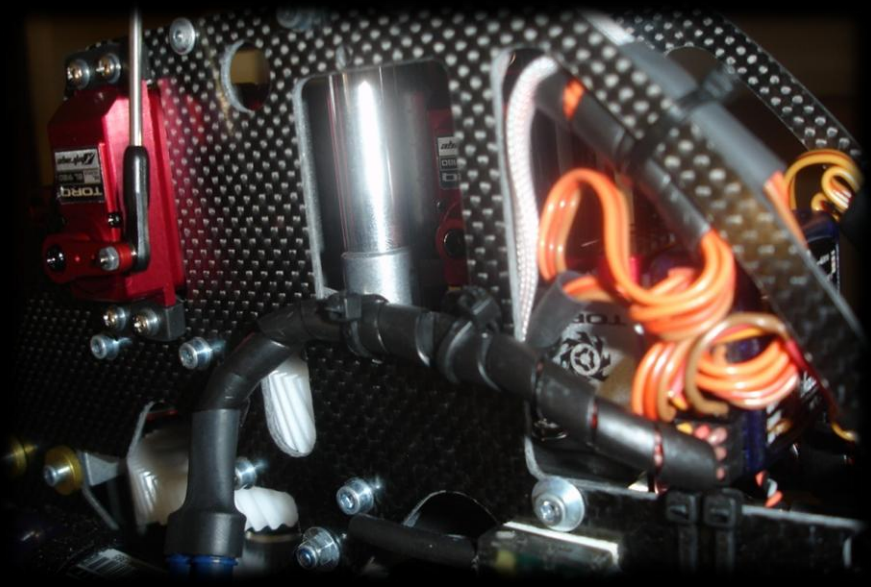
All wires in place and last setup





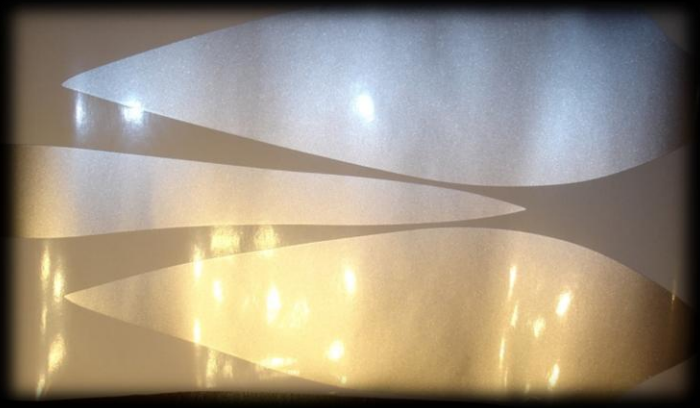


V-BAR full size placed on the tail servo next to the Gyro sensor.

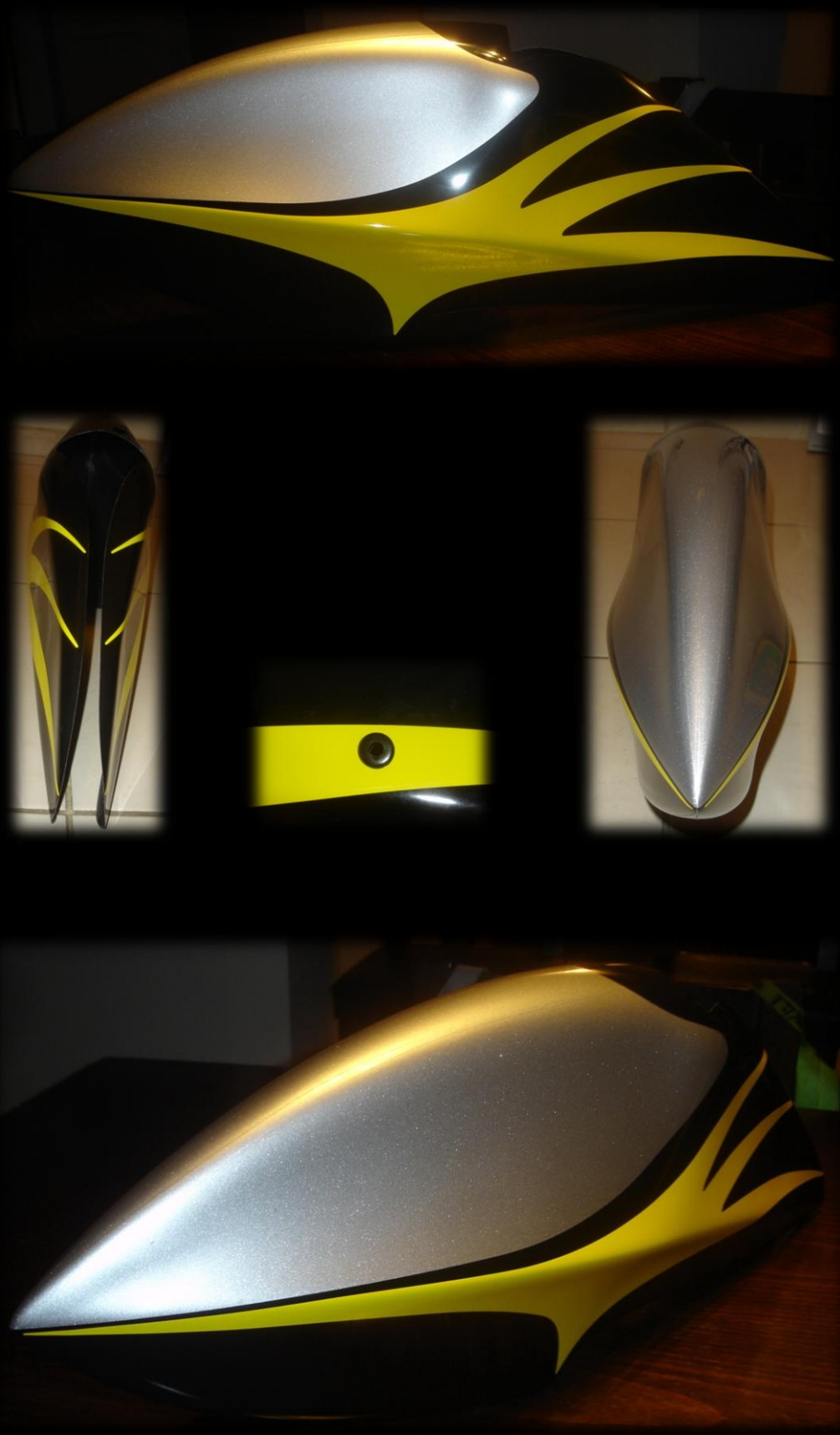


Canopy

Like the HELI itself the canopy is a handy job mission for you as a customer ☺.You need to download a movie from Henseleit web site that shows you in real time how to do the Canopy part, at the beginning it doesn't looks so easy but nothing to worry about, it's really doesn't required any pro skills to get cool results, The secret is using soap, water and to be patient, that's it.



Final Results:



Last Preparations for Test Flight:

Test Flight

First flight is always exciting moment but with this HELI it's a WOW!

Few days after the test flight I got a gorgeous canopy from FUSONO (Thank you Steve ☺).It gave my TDR a new cool look!

Thanks!

To ***Jan Henseleit*** for designing this HELI and for the service support

To ***Guy Roglit*** – for the help in ordering Servos, Charger and the Canopy

To ***Steve*** (FUSONO CANOPY) – For the custom High End Canopy that he sent me.

To ***Ron Tossman*** – for all the assembling tip's

To ***Shmuel Tossman*** – for taking part at the buying experience of this HELI with me

To ***Nir Goldman*** – For helping with the engine and for first setup of the controller

To ***Uzi & Roy Carmel*** – The pioneer of TDR in Israel!

To ***Chen Zarfati*** – The one and only test Pilot of this HELI.

To ***Amit Shussel*** – For all the nice and pro pictures at the test flight

Remember: "Quality Never Go Out Of Style!"

ZIKI