

Predator 60/70

SE & Max 90 ***Instruction Manual***



SPECIFICATIONS

	<u>60/70</u>	<u>60/70 SE</u>	<u>Max 90</u>
⇒ MAIN BLADES	690mm	690mm	720mm
⇒ MAIN ROTOR SPAN	60.6 in	60.6 in	62.9 in
⇒ TAIL ROTOR SPAN	10.5 in	10.5 in	11.2 in
⇒ OVERALL LENGTH	54.5 in	54.5 in	55.7 in
⇒ HEIGHT	17.2 in	17.2 in	18.2 in
⇒ ENGINE	60 ~ 70	60 ~ 70	80 ~ 90

Century Helicopter Products

Designed and Developed in USA

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Building Instructions for the Predator series eCCPM helicopter kits.

Introduction

Congratulations on your purchase of Century Helicopter Product's newest RC helicopter model. The Predator eCCPM is the most anticipated and long awaited Century model helicopter. The attention is well deserved as the Predator will be unmatched in affordability, quality and performance. Compared to other 60 class models, pilots will be elated to find the Predator is built to please. This kit will exceed your expectations for precision control at an affordable price.

It is recommended that the Predator be equipped with high quality radio equipment that has 8 to 9 channels and a minimum of 5 points on the throttle and pitch curves. Servos used should be quality coreless, ball bearing and having a minimum torque rating of 70 oz/in. The gyro and its servo should be quality with a servo speed of 0.11sec/60⁰ or faster.

Warning

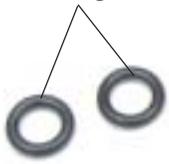
This radio controlled model is not a toy! It is a precision machine requiring proper assembly and setup to avoid accidents. It is the responsibility of the owner to operate this product in a safe manner as it can inflict serious injury otherwise. It is recommended that if you are doubt of your abilities, seek assistance from experienced radio control modelers and associations. As manufacturer, we assume no liability for the use of this product.

Pre-assembly Information

Upon opening the kit, all the major component parts are bagged by relationship to the different sections of the helicopter. Various assemblies have been pre-assembled only requiring the final assembly and installation onto the particular part, screws and nuts required for each step are packaged in the same bag as the parts. Be careful when opening each bag as not to lose any hardware. Care has been taken in filling and packing of each bag however mistakes do happen, if there is a parts shortage or missing hardware please contact us at:

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#HI6181
Head Damping
O-Rings



#HI6160
Rotor Head
Block

1

Press in the damping o-rings into the rotor head block.
Lubricate with light oil.

#CN2215A
Silver Head Button

SE & Max
only



2

Bond the threaded stud into the head button using permanent locktight then apply more permanent locktight and bond into the top of the rotor head block.

#HI3167F
Bearing Cups

#HI3167B
Offset Plates

#CNBB48

#HI3167G
Tie Bars &
Spacers

#CNBB37

M3x6
Button Head
Screw

M3x15 Button
Head Screw
#HW6001

#HI6167
Special Ball

3

Assemble the seesaw part around the rotor head block. Bond the bearing cups to the metal offset plates.

Steel Ball on
Left side.



4

Make sure that the steel ball is mounted on the left when on the rotor head.

#HI6153
Washout
Guide

M3x4 Set
Screw



5

The washout guide should be positioned against the rotor head block, with the pins aligned parallel to the feathering spindle.

#HI6189
Bell Mixing
Arm

#CNBB37F

#CNLR1014
Short Ball

#CNLR1020
Medium Ball

M3x18 Special
Shoulder Bolt
#HW6001

6

Bell Mixer Ratios			
○ ○ ●	●	1:1	3D
○ ● ○	●	1:1.3	3D & Sport
● ○ ○	●	1:1.6	Sport & FAI

Press the M3x7 Flanged bearings into the seesaw capturing one steel spacer in between. Attach to the blade grip with the special shoulder bolt.



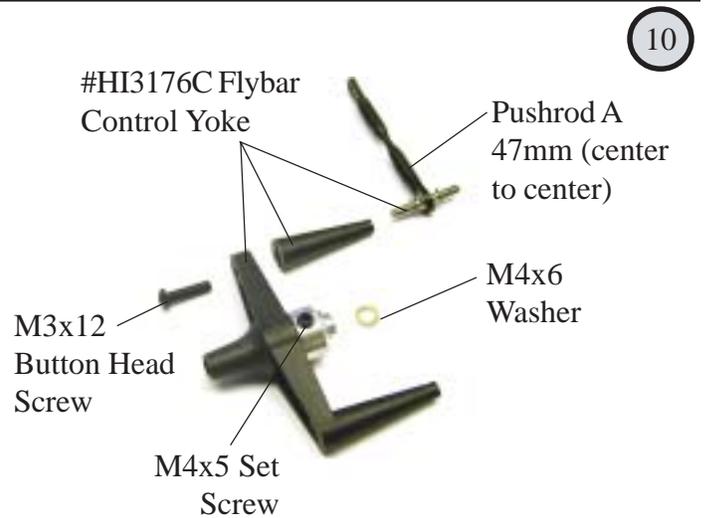
Insert one ball bearing into each end of the main blade grip. Slide the M14 Thrust Washer against the inside bearing.



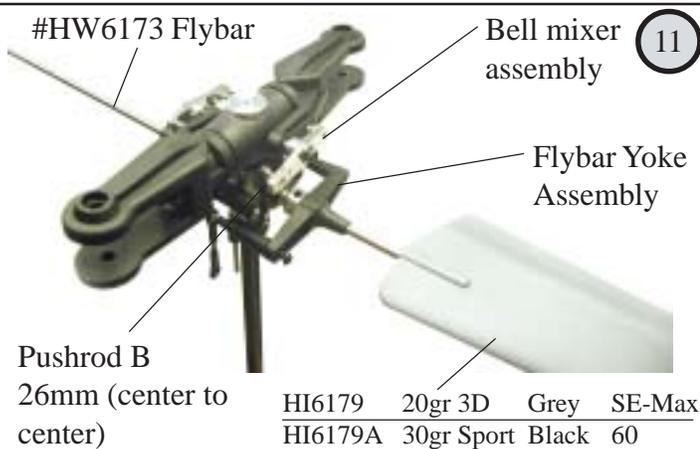
Attach the seesaw assembly with one M3x18 special socket screw threaded into the blade grip. Be careful not to over-tighten the screw.



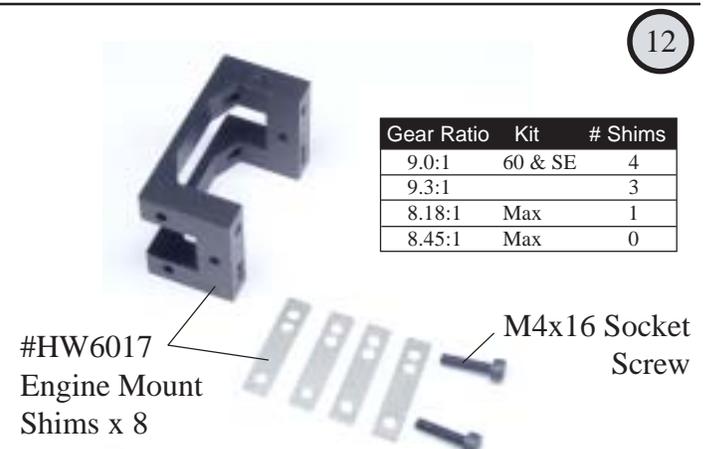
Slide three shims onto the feathering spindle, followed by the blade grip assembly. Pitch arm is on leading edge. Grease and install the thrust bearing and secure with the M5x10 socket screw and washer using threadlock.



Assemble each flybar control arm half before it is installed by threading the double studded ball into the end of the tapered end of the control arm.



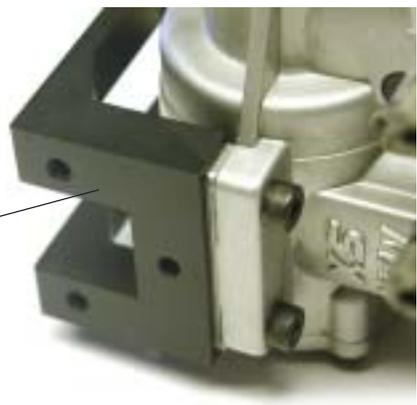
Assemble the flybar, paddles and flybar yoke around the rotor head and secure with the M4x5 set screws attached from the top of the arms using threadlock. Adjust pushrod and attach to from the seesaw to the medium ball on the adjustable side of the bell mixer.



Before installing the engine, check the gear ratio to determine the correct number of shims to install between the mounting lugs on the engine and the engine mount.

13

Engine centered in engine mount.



Install the engine into the mount using the correct number of shims and ensure that the engine is centered in the mount. Use locktight on the M4 socket screws.

14

#HI6009 Cooling Fan

#HW6012 Fan Hub

Hole for governor magnet.



If a governor is planned to be installed, install the magnets into the holes already molded into the bottom of the cooling fan.

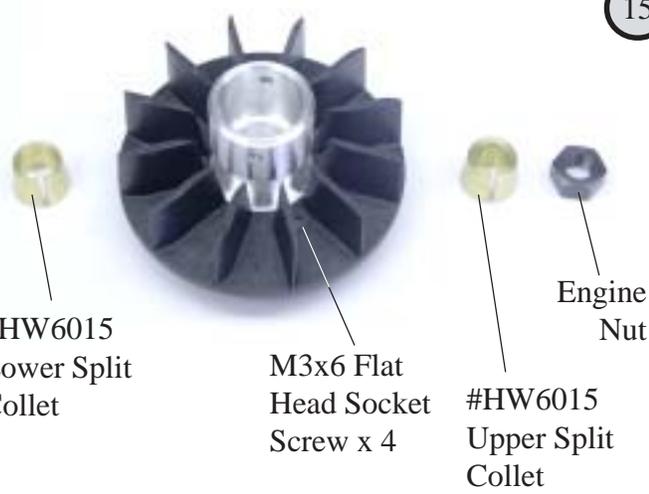
15

#HW6015 Lower Split Collet

M3x6 Flat Head Socket Screw x 4

#HW6015 Upper Split Collet

Engine Nut



The fan and hub are pre-assembled in the kit. The engine collets will fit both O.S. Max and Y.S. crankshafts.

16

Lower Collet

Oil Collets before tightening

Engine Thrust Washer



Ensure that the split in the collet is positioned away from slot for the Woodruff key. The lower collet is a tight fit to the crankshaft. Use the engine nut to start the collet onto the crankshaft, apply oil to collet.

17

Position the fan assembly, apply oil to the collet and insert the upper split collar and the original engine nut. Clean the engine threads and apply locktight to the engine nut and tighten in place.



18

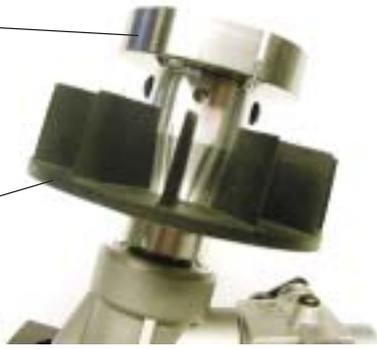
#HW6011 Clutch Shoe

M3x6 Button Head Screws x 2

Apply light grease to the Torrington bearing in the center of the clutch shoe. Be sure that no grease contacts the clutchbell.



Clutch Shoe
Fan Assembly



Attach the clutch shoe with the M3 button socket bolts using threadlock.

19

#HW6045
Lower Short Bearing Block (top surface is flat)

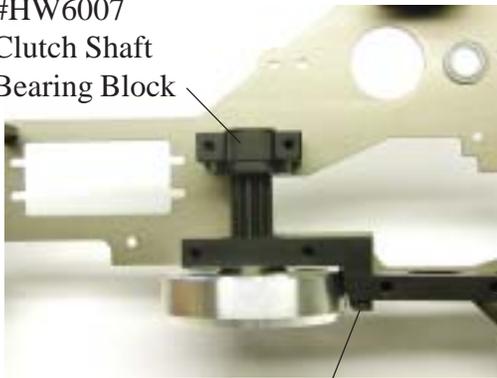
#HW6013 Clutch Bell Assembly 10T
#HW6013A Clutch Bell Assembly 11T
#HW6014 Replacement Clutch Lining

Clean the clutchbell and inside of the bearing with alcohol. Apply a small amount of permanent locktight around the top 15mm edge of the aluminum clutchbell where it will contact the bearing. Ensure the bearing is against the clutchbell. Press evenly and firmly as this is a very tight fit.



20

#HW6007
Clutch Shaft Bearing Block



M3x12 Socket Screw x 2

Clean the top of the clutchbell gear and inside of the upper bearing with alcohol. Apply a small amount of permanent locktight around the top edge of the clutch gear where it will contact the bearing. Press the clutch shaft bearing block in place. Attach the long bearing block with M3x12 socket screws but do not tighten at this time.

21

#HW6045
Lower Long Bearing Block

#HW6042 Main Shaft Bearing Block #HW6110 Upper left Side Frame

26mm Threaded Hex Spacer

M3x8 Socket Screws x 8

Attach the clutchbell and bearing block assembly, main shaft bearing block and front hex threaded spacer with M3x8 socket screws to the left upper side frame. Do not use locktight at this time. Notice the countersunk hole below the bearing is on the outside.

22

#HI3205
Servo Mount Tabs



Rubber servo tabs, eyelets and screws provided with radio.

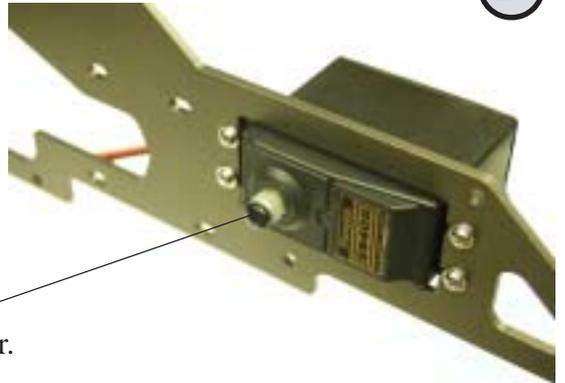
Prepare the rear ccpm servo, attach the rubber servo tabs and the eyelets from the top of the servo.

23

Servo output shaft to rear of helicopter.

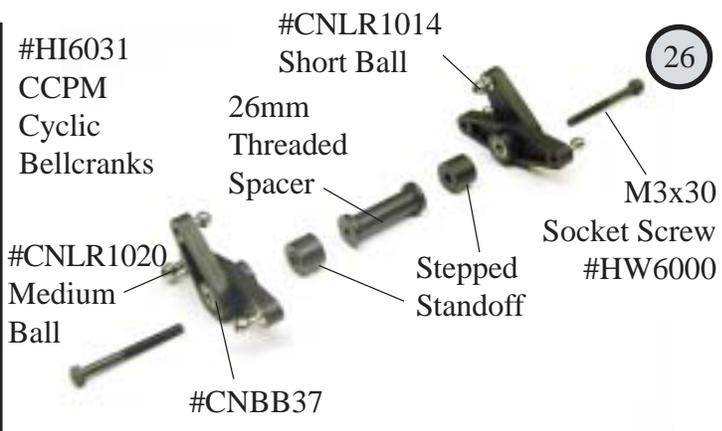
Install the rear ccpm servo into the inside of the right side of the upper side frames. Be careful, look for the countersunk hole below the bearing is on the outside.

24

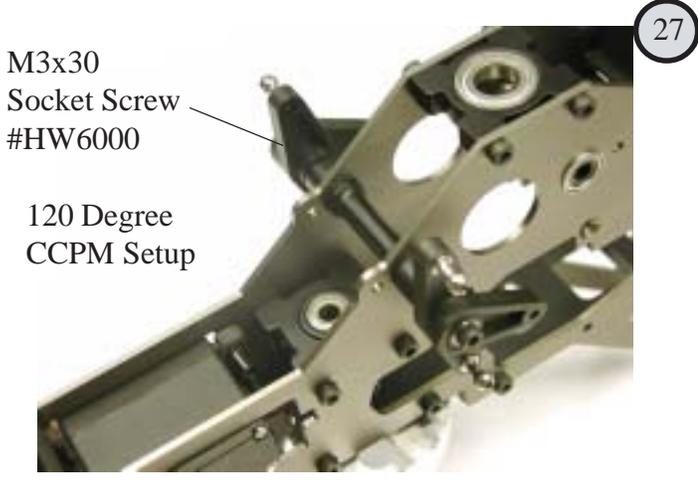




Install the rear ccpm lever into the upper frames flush with the bearing on the left side, having the mount extend out the right side frame. Assemble the upper frames but do not use locktight at this time.



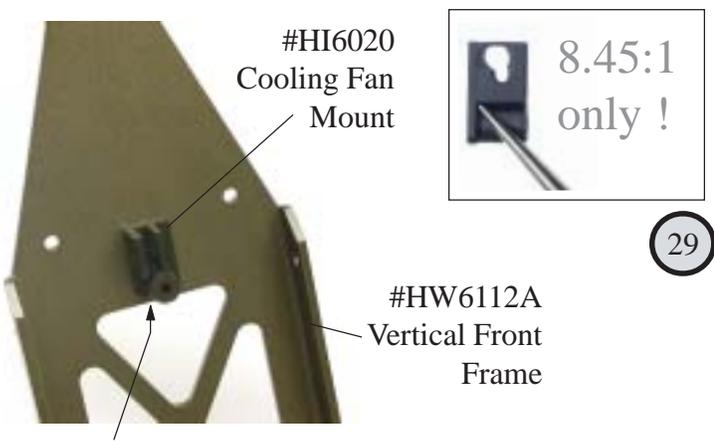
The stepped standoff is positioned with the step against the ball bearing in the ccpm bellcrank. Correct orientation has the two symmetric steel ball facing outwards and the obtuse angle towards the swashplate.



Apply locktight to the threads on the inside standoff, insert between the frames and attach the ccpm cyclic bellcranks being careful to observe the correct direction. For 140 Degree ccpm setup, move bellcranks to forward holes.



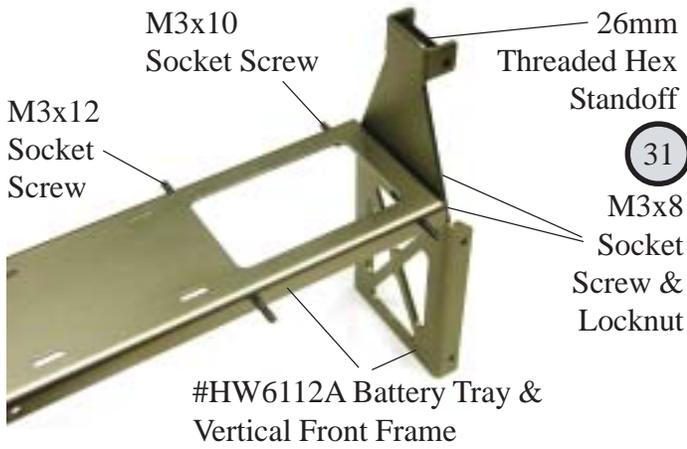
Press the rear ccpm lever onto the mount that sticks out of the right side of the upper frames with the steel ball downwards. Secure with the M3 button head screw.



Attach the front cooling fan mount to the vertical front frame inserting the M3 screw from the flat side of the frame. Note: 8.45:1 gear ratio requires the shroud mount hole to be modified.

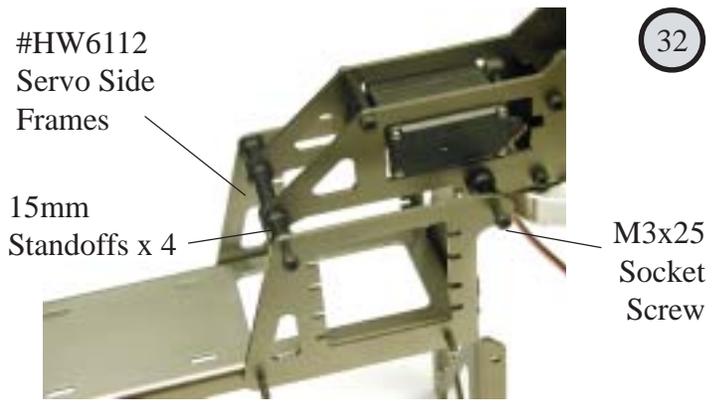


Ensure that the correct standoffs are used in the correct locations. The 26mm threaded hex standoffs are not shown.



31

Attach two M3x12 Socket screws from the inside of the battery tray at the forward holes and two M3x10 Socket screws to the rear holes. Attach the vertical frame (note flanges are rearward) to the battery tray with M3x8 screws.



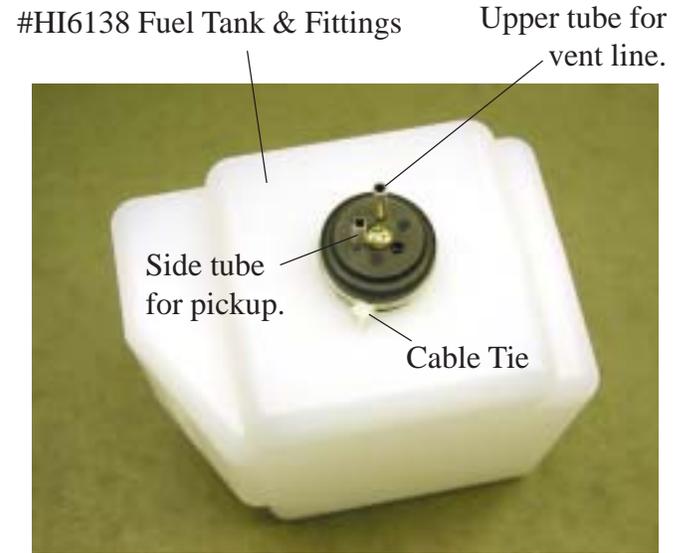
32

Attach the servo frames, battery tray and upper frames together using M3x25 Socket screws. Do not use locktight at this time. These will be secured after the engine alignment is complete.



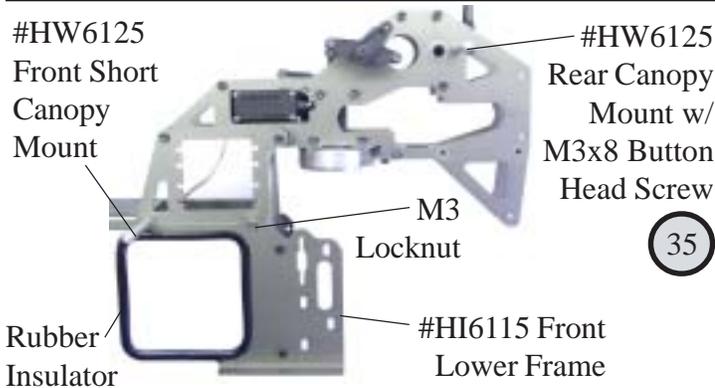
33

Assemble the fuel tank fittings. Gently bend the vent line and test until it reaches the top of the fuel tank. Order is larger outside cap, rubber stopper, smaller inside cap. Test the pickup line so it can move freely in the fuel tank.



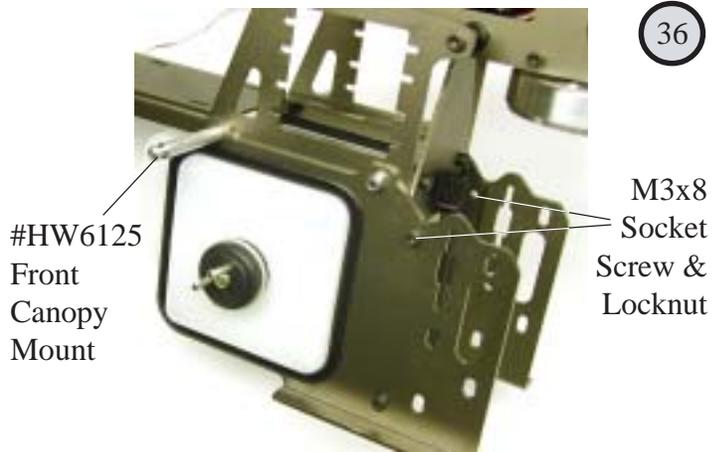
34

After the fuel tank fittings are inserted, tighten the M2.5x18 self tap screw and attach the cable tie around the outside of the stopper.



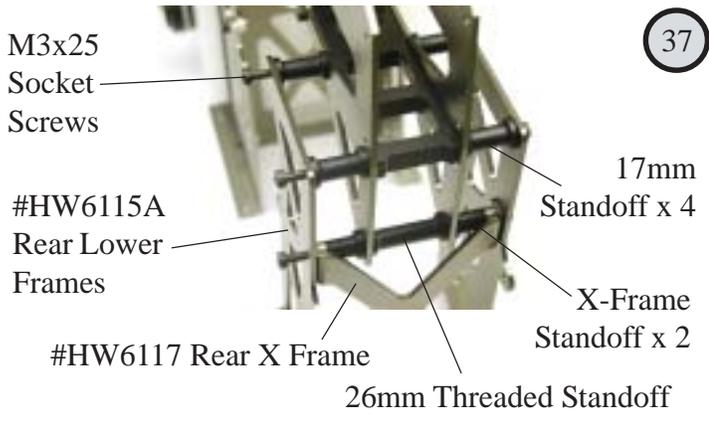
35

Install the rubber insulators to the frames. Install the left side front lower frame over the M3 threaded studs on the battery tray. Attach the shorter canopy standoff to the front stud and a locknut to the rear stud. Attach the longer, rear canopy standoff to the upper frames using M3x10 Button head screw from the inside of the frames.



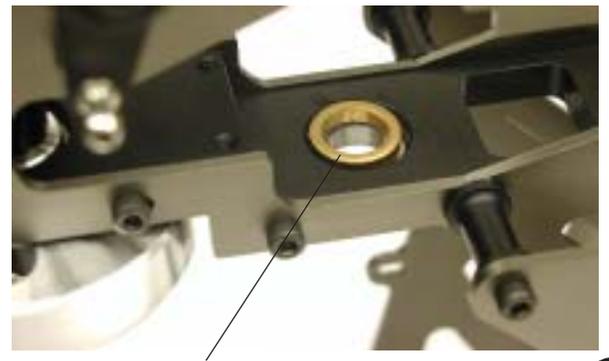
36

Install fuel tank (only fits one way) and attach the other front lower side frame. Similarly secure it to the vertical frame with M3x8 socket screws and locknuts.



37

Attach the X Frame to the lower side frames first using M3x25 Socket screws and locknuts at the lower hole on a flat surface. Attach to the upper frames with M3x25 Socket screws, apply threadlock to the holes on the upper side frames.



#HW6054 Spacer 38

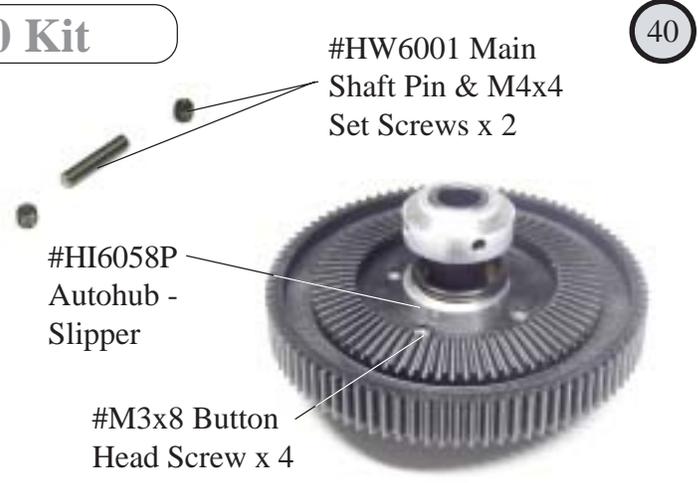
Before the main gear assembly can be inserted, make sure that the M10x14x3.5 spacer is positioned on top of the lower main shaft bearing. It will simply self align in the block. Remember, do not locktight any bolts on the clutchbell or starting shaft bearing blocks until the engine is installed.



60/70 Kit

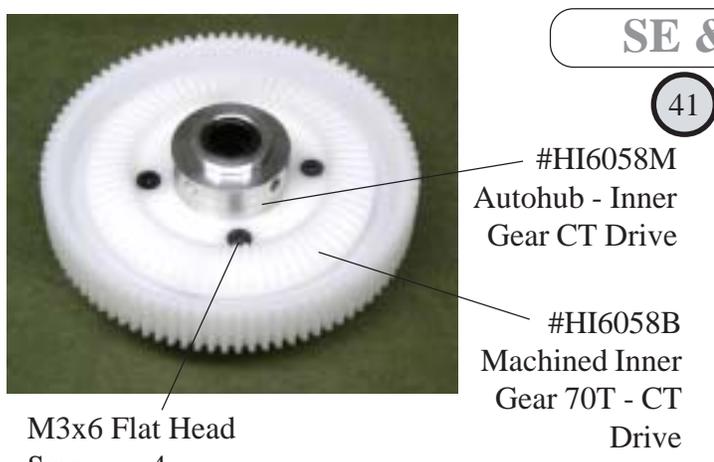
39

Thread the slipper cap onto the sleeve until the holes align together. Insert two M4x4 set screws at 180 degrees apart and tighten gently. Later when the main shaft pin is attached, these can be removed and locktightened in place.



40

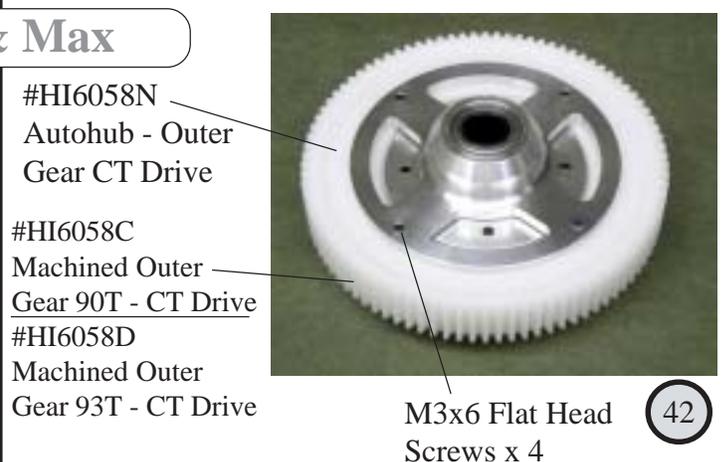
Slide the autohub for the slipper drive from the bottom of the main gear. Attach with M3 button head screws and tightening evenly. Insert the slipper cap assembly, capturing the o-ring under the cap against the autohub.



41

Install inner gear autohub from the bottom side the inner (tail) gear using threadlock. Attach with M3 flat head screws and tightening evenly. Note the autohub is pre-assembled.

SE & Max



42

Install outer gear autohub from the bottom side the outer main gear using threadlock. Attach with M3 flat head screws and tightening evenly. Overtightening these screws could touch the upper side frames.

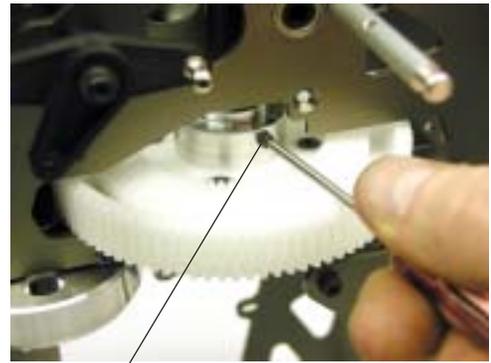


43

Main gear assembly, slipper or constant drive type.

#HW6001 Main Shaft M3 Pin

Insert the main gear assembly from the side and slide the main shaft through the upper main shaft bearing block. Align the M4 threaded hole with 3mm hole on the main shaft and insert the pin.



44

#HW6001 M4x4 Set Screw x 2

After the main shaft pin is started, press it in and start threading the M4 set screws. Continue adjusting until the pin is centered in the autohub assembly. Remove one at a time and apply locktight. These do not need to be torqued down.



45

#HW6054 Bottom Collar & M3x6 Flat head screws x 2

Slipper Main Gear

Inspect the bottom collar, make sure the step in the collar is towards the ball bearing. Press firmly on the main shaft until the top threaded hole aligns with the holes in the bottom collar. Apply locktight to the M3 Flat head screws.



46

#HW6054 Bottom Collar & M3x6 Flat head screws x 2

#CNBB1018T & 0.25mm Shim

Constant Drive Main Gear

Install the main shaft thrust bearing (SE & Max only) and 0.25mm shim against the lower bearing followed by the bottom collar. Make sure the step in the collar is away from the thrust bearing. Apply locktight to the two M3 Flat head screws.

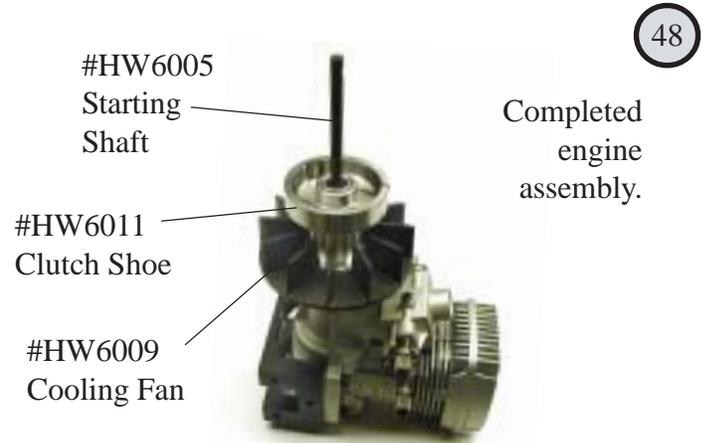


47

#HW6053 Main Shaft

#HW6054 Mast Stopper & M2.6x8 Socket screw
#HW6002 Hex Coupler & M4x4 Set Screw x 2

To set the upper mast stopper, press down firmly on the main shaft and tighten the M2.6 Socket screw using locktight. Install the starting shaft, pull up on the shaft and apply locktight to the top of the shaft and position one of the set screws on the flat spot.



48

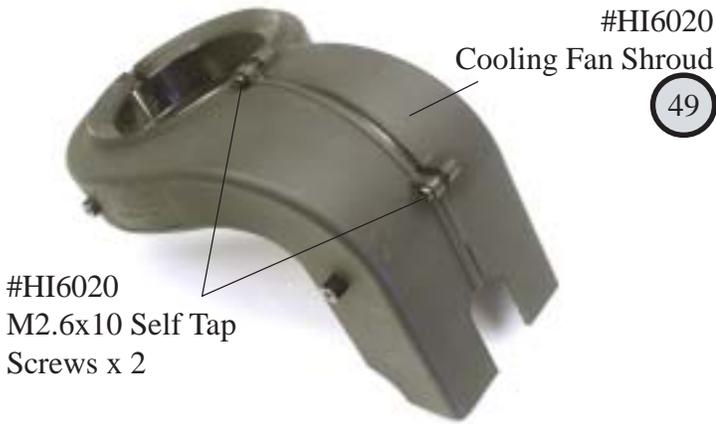
#HW6005 Starting Shaft

#HW6011 Clutch Shoe

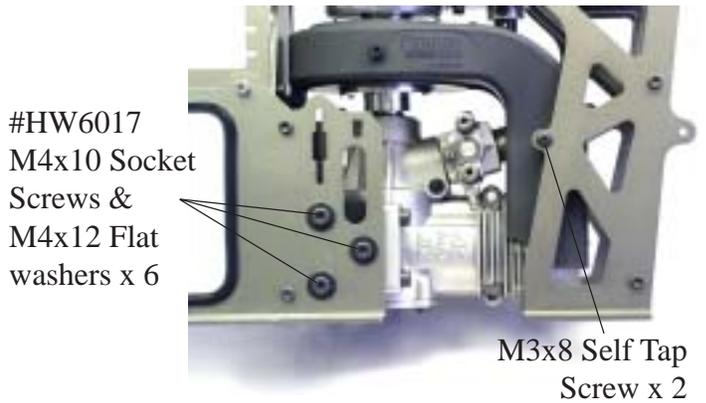
#HW6009 Cooling Fan

Completed engine assembly.

Check once more that everything is ready on the engine. Make sure that the carburetor has been seated properly and the securing screw is tight.



49



Slide the engine assembly in place and install the M4 Socket bolts and washers. Do not locktight these and leave these loose until the clutch is aligned to the clutchbell. Some fore - aft adjustment is possible. Install the M3 screws for the shroud and leave loose for adjustment later.

50

Match the cooling fan shroud together and secure with M2.6 screws. Do not install the frontmost screw at this time.

51

Paper strip to set gear mesh.

M3x12 Socket Screws x 2

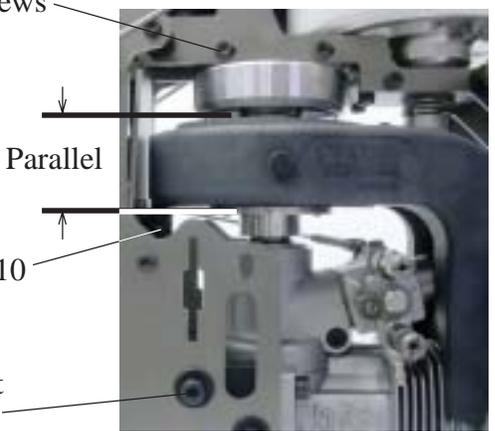


Remove and locktight M3x8 Socket screw.

Cut a strip of paper 1/2" (12mm) wide to set the gear mesh between the clutch bell and the main gear. The paper should run through the gears without tearing. After the M4 engine screws are tight, the M3x12 screws are tightened last.

M3 Socket Screws

Clutch must be parallel fore - aft and side to side.



Sighting the bottom of the clutch bell, adjust until the clutch is parallel to the clutchbell in both the left/right and front/back directions. Fore-Aft is adjusted by the M3 screws at the top of the servo tray. Once satisfied, carefully remove and locktight all the M3 and M4 bolts. Insert the M2.6 screw to capture the front of the cooling shroud.

52

53

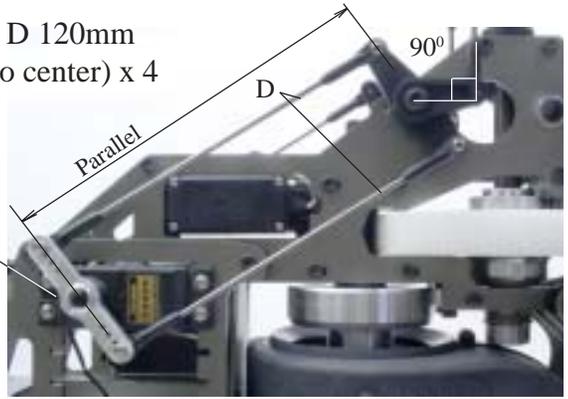


Gap

By loosening the M3x8 and M2.6 self tap screws that hold the cooling fan shroud to the frames, the shroud can be adjusted until it does not touch the cooling fan.

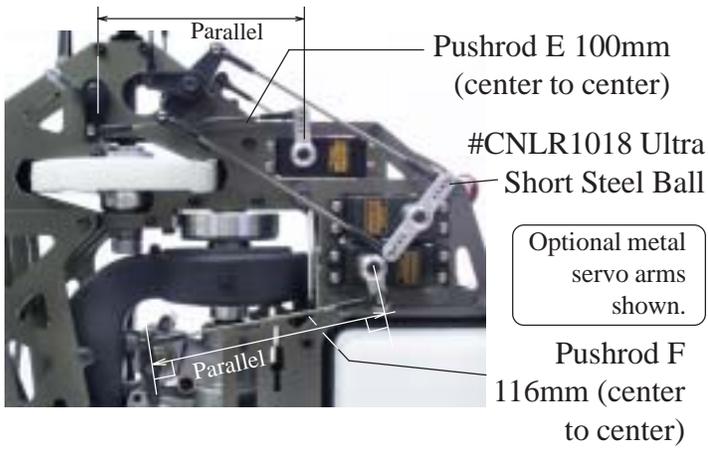
Pushrod D 120mm (center to center) x 4

Left front ccpm servo



Install both left and right front ccpm servos to the servo frames. Secure using the servo tabs held by pliers from behind. Install the short steel ball to the underside of the servo arm at a 20mm radius with M2 hex nut on top. Ensure the 90 degree angle on bellcrank to swashplate pushrod at midstick.

54



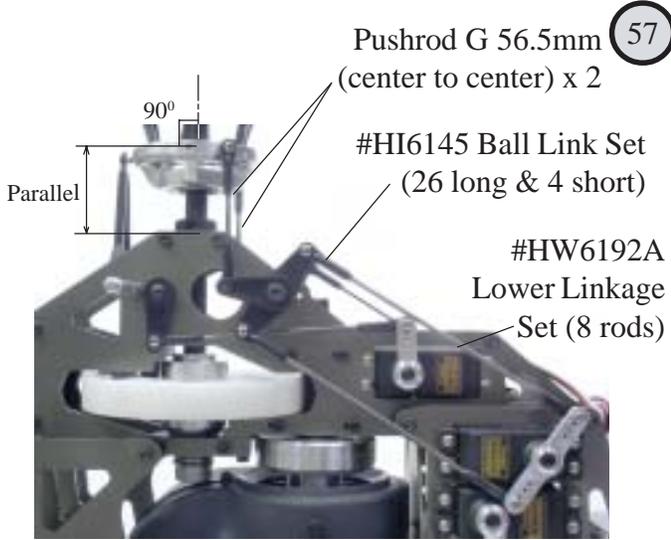
Install throttle servo to the right side frames. Attach the short ball with M2 thread to the carburetor lever arm with M2 nut and the short steel ball to the top side of the servo arm at 13.5mm. Ensure the 90 degree angle from the pushrod to the servo and carburetor arm for linear setup at midstick.

55



The double bearing swashplate requires no maintenance. If a steel ball needs changing, insert the 2.5 hex key through one of the extra holes in the outside ring. Two medium ball on the inside race.

56



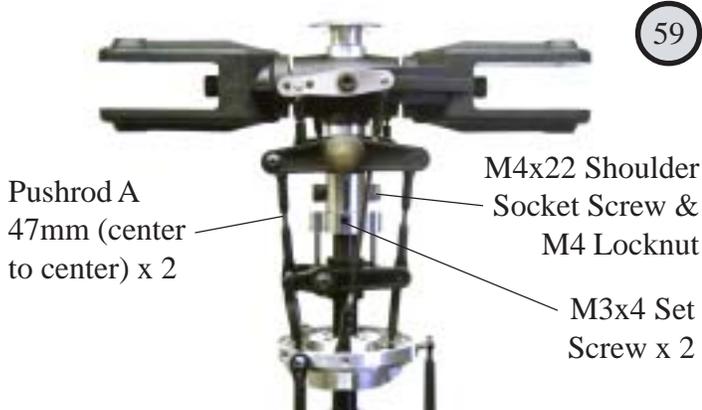
Install the swashplate on the main shaft and connect to the rear and front cpm pushrods. Trim the radio to level the swashplate, set to 90 degrees to the main shaft.

57



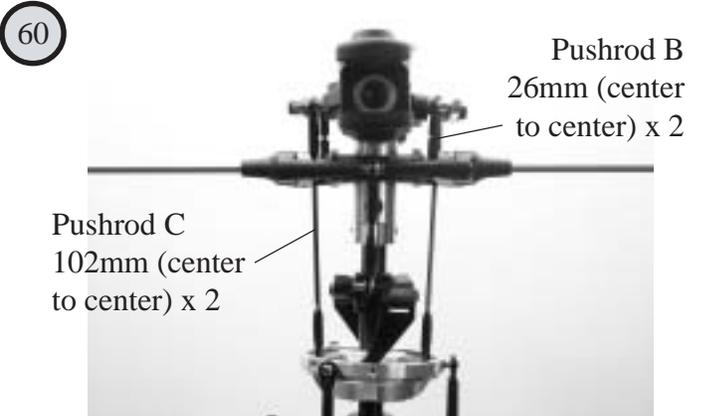
The washout unit comes assembled. Slide onto the main shaft and ensure that the screw is on the left side of the main shaft.

58



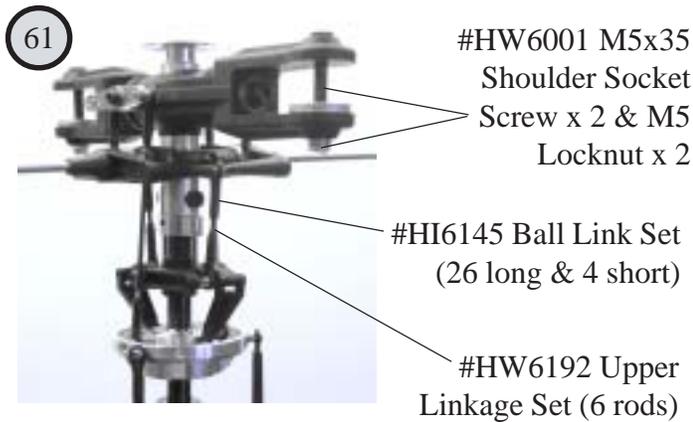
Slide the washout guide and align the washout pins with the washout guide. Attach the rotor head with M4 socket head cap screw and M4 locknut. Insert the M3 set screws and position the guide with the screws aligned to the slot in the head block.

59



Attach pushrod C from the long ball on the inside race of the swashplate to the single ball (non adjustable) on the bell-hiller mixing arms. These pushrod lengths are starting points, adjustment is necessary for the particular style of flying.

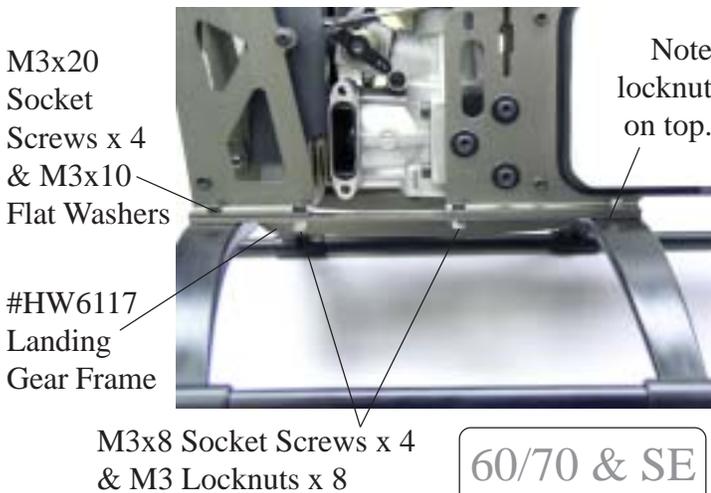
60



The main rotor grips will accept rotor blades that have a root thickness that is from 12mm to 18mm and have a 5mm hole. Carbon Rotortech and wooden Aerotech blades are designed for 5mm blades bolts.



Assemble the landing skids onto the struts, note the correct direction is to have the struts sweep forward. Position the rear strut at approximately 37mm from the end and secure the skid with the M3 set screw. Leave the front loose for now.



Attach the landing gear frame to the mechanics with M3x8 socket screws and locknuts. Attach the landing gear with M3x20 socket screws, M3x10 flat washers (against struts) and locknuts, sliding the front skids into final position. Secure the M3 set screws.



Attach the landing gear frame to the mechanics with M3x8 socket screws and locknuts. Attach the landing gear with M3x20 socket screws, M3x10 flat washers (against struts), M3x9x4 spacers and M3 locknuts, sliding the front skids into final position. Mark, scuff and bond the skids to the struts with JB Weld.



The front tail transmission is assembled. Open and apply locktight to the back edge of the bevel gear for added security.

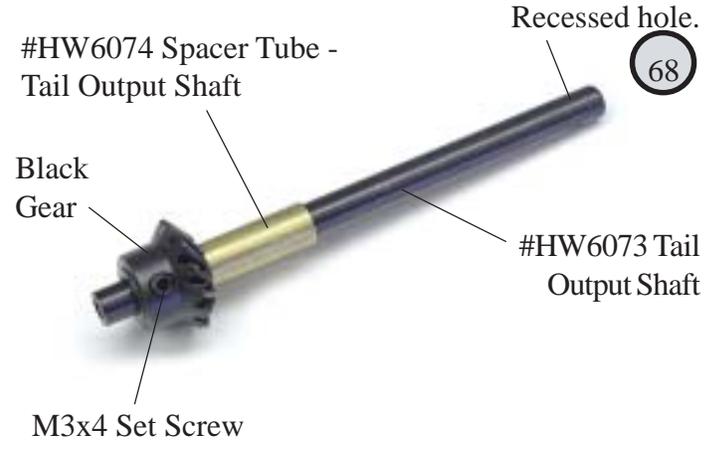


Insert the 26mm hex spacers into the transmission half.



67

Looking down on the two tail gears notice that the black gear has teeth that are in the opposite direction to the silver gear. Make sure the black gear is mounted to the tail output shaft.



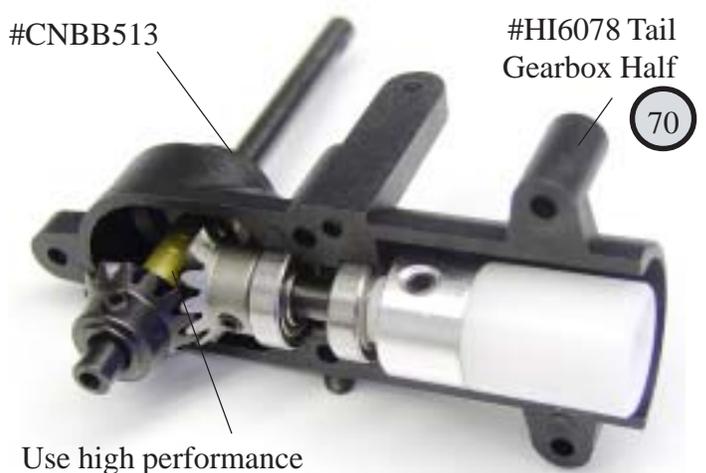
68

Align the hole in the black gear over the hole in the end of tail output shaft and secure with the M3 set screw using locktight. Slide the spacer tube against the gear.



69

Align the hole in the silver gear over the hole in the end of the tail input shaft and secure with the M3 set screw. Slide two M5x13 bearings and install temporarily into one half of the gearbox (positioning the bearings) and secure the torque coupler with M4 set screw over the flat spot using threadlock.



70

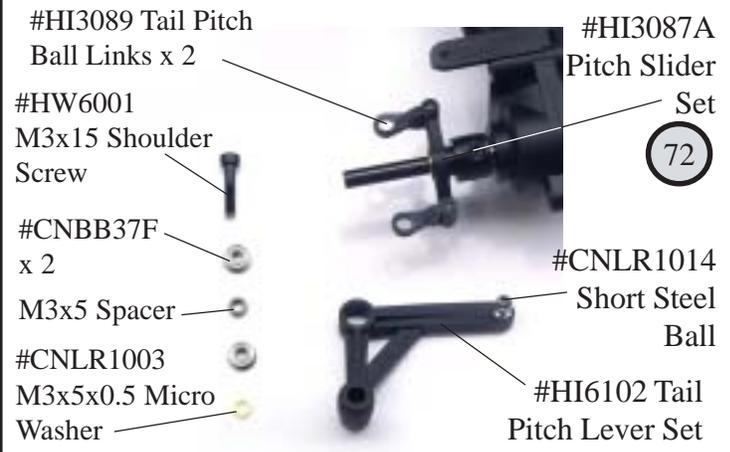
Use high performance grease for metal gears.

Press one M5x13 bearing into the right hand side (with mount for tail pitch lever) of the tail gearbox. Position the tail output shaft and input shaft into the gearbox half. Adjust torque fitting if necessary. Pack gears with quality grease.



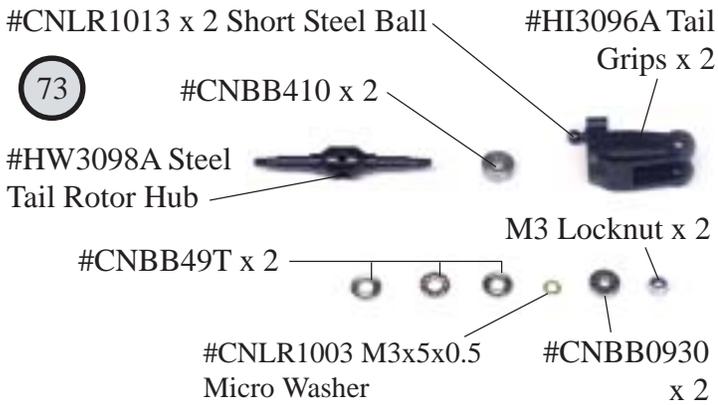
71

Insert the torque drive shaft using a little oil on the o-rings as it is pressed into the tailboom (press towards the bearing) and align the tailboom end to the molded key in the tail gearbox. Close the gearbox with the M3 socket screws and locknuts.



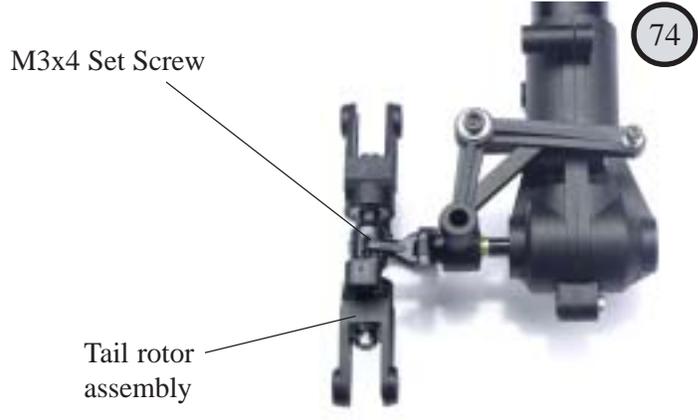
72

Slide the tail pitch slider set onto the tail output shaft and insert the M3 shoulder screw from the bottom of the pitch lever with the micro washer between the lever and the mount on the gearbox and tighten in place.



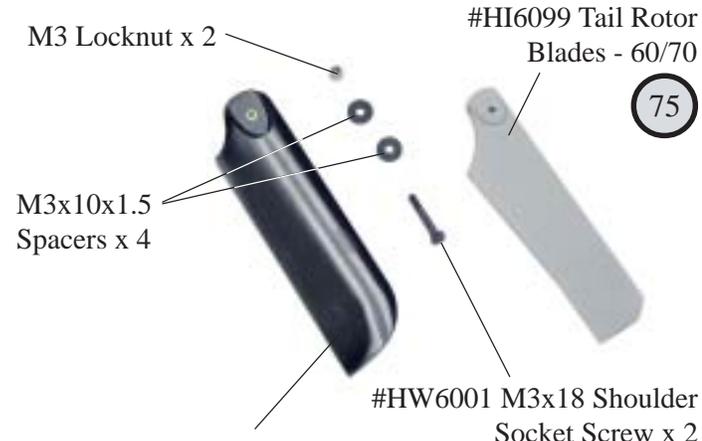
73

Press the M4 bearing into the end, slide the M3 thrust bearing (in correct order), micro washer, M3 bearing and locknut from inside the grip. Use locktight on the locknut.



74

Insert tail rotor grip assembly onto the tail output shaft, aligning the set screw over the indent in the shaft using locktight. Attach the tail pitch ball links to the balls, the steel ball is on the leading edge of the blades.



75

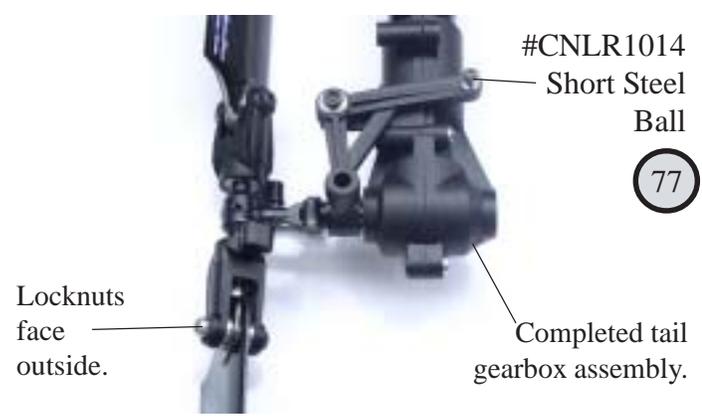
#CN260956 Rotortech 95mm Tail Blades - SE
#CN261056 Rotortech 105mm Tail Blades - Max 90

Tail rotor blades are installed with the leading edge rotating upwards into the downwash of the main blades. Looking at the left side of the Predator, the blades turn clockwise with the steel ball on the leading edge.



76

The carbon tail blades will not fit the tail rotor grips without trimming the ends. Attach the two blades together and grind 3-4mm off the end of the blades as shown.



77

Install the tail rotor blades to the tail rotor grips with the M3 shoulder socket cap screws, M3 spacers on both sides the blades and secured with M3 locknuts, fitted into the molded recess on the tail blade grips.



78

Insert the front of the tail boom into the front tail transmission half and close the transmission. Secure with M3 socket screws locknuts. Attach the tail boom assembly to the mechanics with M3x8 screws first then the Flat head screws. Attach first, then remove and locktight all the screws.

Only complete one end now!



79

Insert the M2 threaded rod 10mm into the grey ball link. Slide the end cap over the carbon tube and make a mark, remove and sand the carbon up to this mark for better adhesion. Using JB Weld or Epoxy bond in place. Only complete one end at this time. Thread the ball link into the end cap until it stops using threadlock.

80

#HW6202 Tail Support Strut Set - Aluminum



60/70 only.

The Aluminum support struts are ready for installation.

#HW6202A Carbon Support Struts x 2



81

SE & Max 90 only.

Insert and mark each end of the carbon struts where the strut fittings will overlap. Remove and sand down each carbon end until they slide easily into the fittings. Scratch inside the fittings also. Using JB Weld or Epoxy, bond the fittings in place. Make sure each strut has the fittings 90° degrees to each other.

82

#HI6080 Tail Servo Mount Set



M2.5x12 Self Tapping Screw x 4

Install the rudder servo into the tail rudder servo mounts using M2.5 self tapping screws inserted through the top of the servo grommets into the vertical mounts.

#HI6080 Tail Mount Liner x 2
M2.5x12 Socket Screw x 2

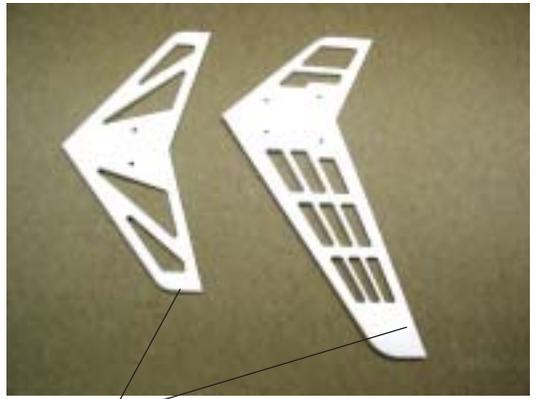
83

M2.5x12 Socket Screw x 2



Wrap the tail mount liners around the tail boom and trim if necessary. Install the rudder servo mount assembly onto the tail boom, over the liners and secure using the M2.5 socket screws. Leave these loose until after the tail pushrod has been attached. Attach the rudder servo horn, positioning the steel ball at 12-14mm from the servo center.

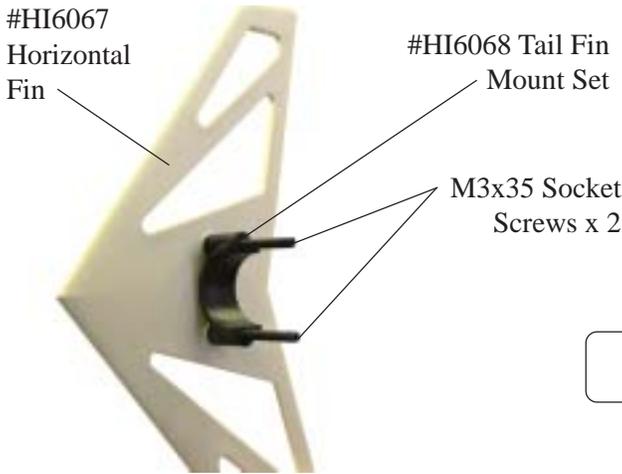
84



#HI6067 Tail Fin Set - Horizontal & Vertical

60/70 only.

Install the decals for the fins at this time.



85

#HI6067
Horizontal
Fin

#HI6068 Tail Fin
Mount Set

M3x35 Socket
Screws x 2

60/70 only.

Insert the M3 socket screws through the top of the plastic fin and through the top tail fin mount (straight ends). Notice that the bottom fin mount is angled for comparison.

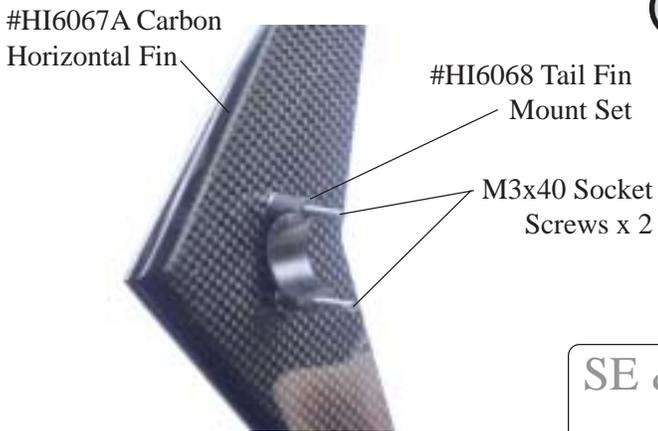


86

#HI6067
Vertical Fin

M3x35 Socket
Screws x 2

Insert the M3 socket screws through the front holes in the plastic vertical fin and through the vertical fin mount.



87

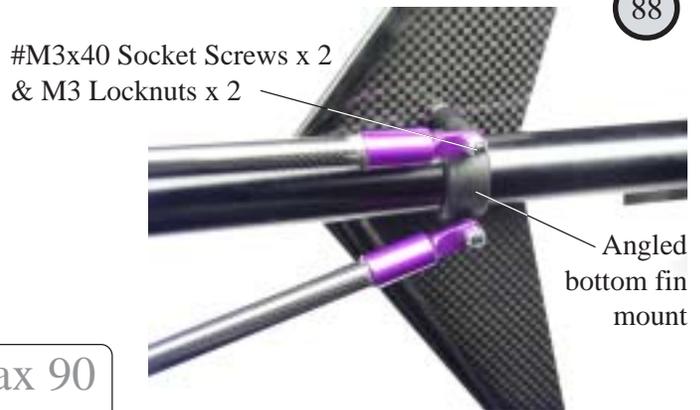
#HI6067A Carbon
Horizontal Fin

#HI6068 Tail Fin
Mount Set

M3x40 Socket
Screws x 2

SE & Max 90
only.

Insert the M3 socket screws through the top of the carbon fin and through the top tail fin mount (straight ends). Notice that the bottom fin mount is angled for comparison.



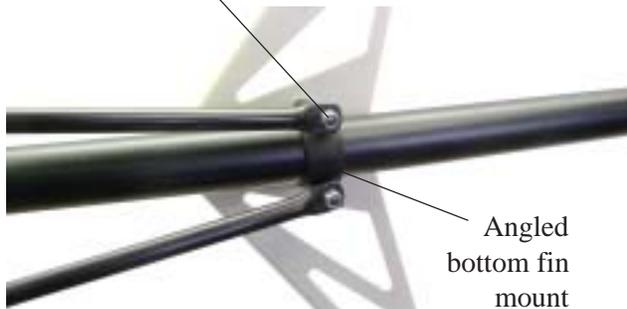
88

#M3x40 Socket Screws x 2
& M3 Locknuts x 2

Angled
bottom fin
mount

Slide the bottom fin mount (taller side of angled ends towards mechanics) over the M3 screws and insert the carbon tail struts and secure with M3 locknuts.

#M3x35 Socket Screws x 2
& M3 Locknuts x 2



89

Angled
bottom fin
mount

Slide the bottom fin mount (taller side of angled ends towards the mechanics) over the M3 screws and insert the aluminum tail struts and secure with M3 locknuts.

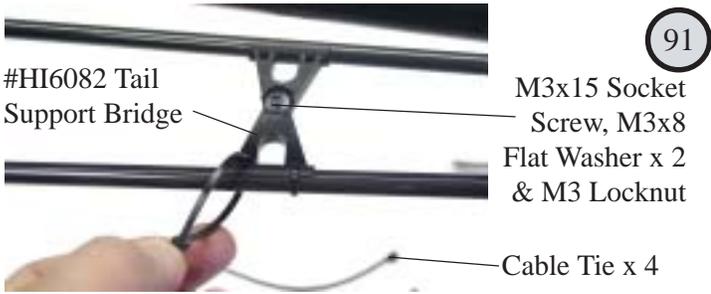


90

M3x12 Socket Screws x 2 &
M3 Locknuts x 2

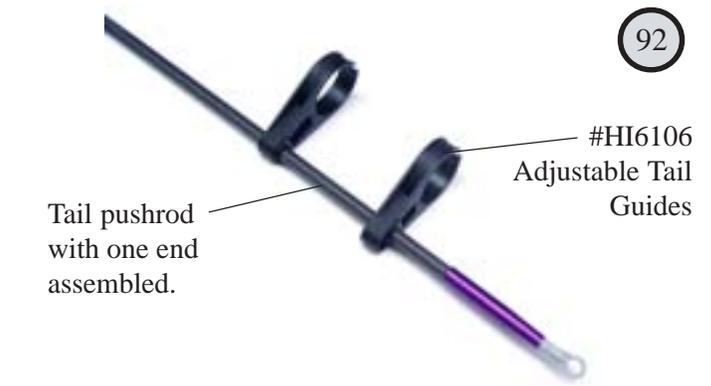
M3x9x3
Spacer x 2

Attach the struts (aluminum or carbon) to the main mechanics using M3 socket screws, M3x9x3 plastic spacer on the outside and secure with M3 locknuts on the inside of the frames.

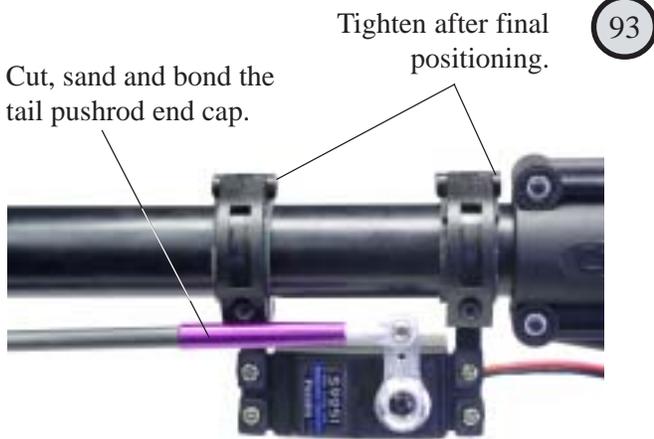


SE & Max 90 only.

Assemble the support bridge with M3 hardware. Press each side onto the support strut and secure with the cable tie wraps provided.



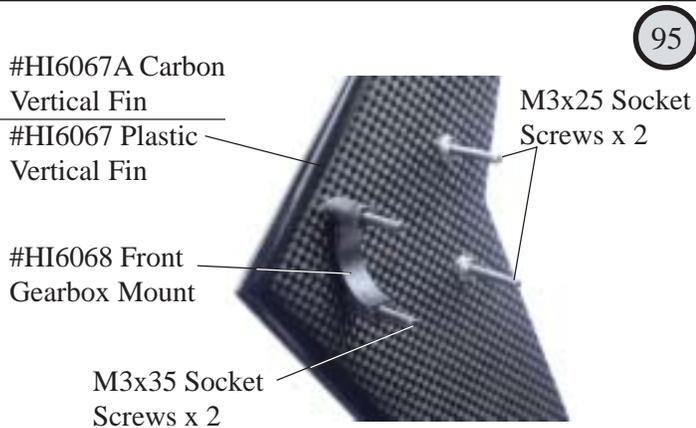
Slide the two tail pushrod clamps over the unfinished end of the tail pushrod and attach to the tail boom. Press the ball link onto the steel ball on the tail pitch bellcrank. Position the one guide in front of the horizontal fin and one half way between the fin and the mechanics bringing the pushrod to the right side of the helicopter.



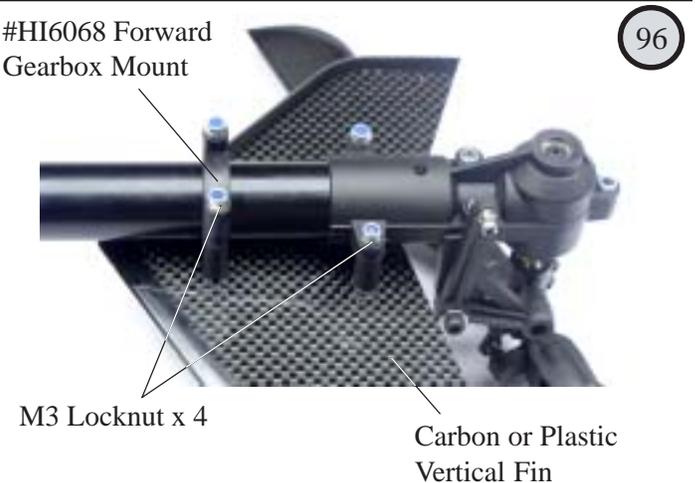
Assemble the other pushrod end cap and ball link to mark and cut the tail pushrod to match the steel ball on the servo. Bond the end cap in place and fine tune the position by moving the rudder servo mount and then tighten in place.



Remove the pushrod from the servo and slide through the entire range of movement. Continue adjusting the guides until the pushrod moves very smooth and then secure the tail guides with the cable ties.



Insert the M3 socket screw through the vertical fin and through the first gearbox mount.



Engage the rear M3 socket screws through the mounts on the tail gear box and attach the forward gear box mount capturing the tail boom and secure in place with M3 locknuts.

#HI6133
Windshield



97

Leave the protective coating in place until after it is drilled for mounting screws. Rough cut the windshield leaving 3mm [1/8"] then carefully cut out the windshield following the line molded into the windshield.

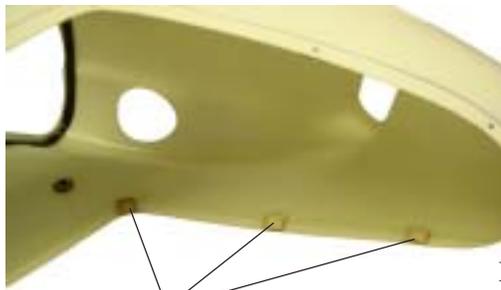
#HI6130 Fiberglass
Gelcoat Canopy



98

Drill 8-9 holes.

Position the windshield and tape in place. Mark and drill pilot holes around the windshield edge, centered through the matching recess of the canopy.



99

#HW6125
Wood inside
mounts

Flush to canopy
edge.



Bond the wood inside mounts into the inside of the canopy with Epoxy. Center each block over the holes with the top edge flush to the canopy edge. Once cured, drill the final hole size for the screws.



100

#HW6125
Rubber
Grommets x 4
#HI6131 Decal
Sheet

Install lower
grommet after the
decals is applied.

Clean the canopy. Trim the decals from the sheet and apply to the side of the canopy before the lower grommet is installed. Cut through the decal and install the lower grommet through the canopy.

Attach the windshield with the M3 self tapping screws being careful not to overtighten them.

101

M3x6 Self Tap
Screws x 10

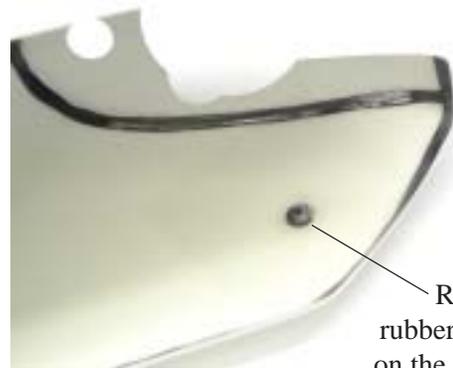


60/70 SE &
Max 90

Decal Locations

- | | | |
|----|-----|---|
| 1. | 8. | Lower cheek of canopy. |
| 2. | 7. | Middle, below windshield. |
| 3. | 6. | From edge below rear grommet |
| 4. | 10. | Horizontal Fin (top & bottom on 60/70). |
| 5. | 9. | Vertical Fin (above & below on 60/70). |

102



Reinforce the
rubber grommets
on the inside using
"Goop" adhesive.

After the canopy is finished, the wooden blocks can be painted white to match the canopy. The rubber grommets should be reinforced using "Goop" adhesive or similar.

Predator 60, SE & Max Replacement Parts

HI6009	COOLING FAN	HW6017	ENGINE MOUNT - OS/YS w/SHIMS
HI6020	COOLING FAN SHROUD SET	HW6042	MAIN SHAFT BEARING BLOCK w/BEARING
HI6031	CCPM CYCLIC BELLCRANKS	HW6045	LOWER BEARING BLOCK ASSEMBLY w/BB
HI6032	CCPM ELEVATOR LEVER SET	HW6053	MAIN SHAFT
HI6056	MAIN GEAR - 90T	HW6054	MAST STOPPER w/BOTTOM COLLAR
HI6058B	MACHINED TAIL GEAR - 70T CT DRIVE	HW3057	TAIL TRANSMISSION BEVEL GEAR
HI6058C	MACHINED MAIN GEAR - 90T CT DRIVE	HW6059	TAIL TRANSMISSION DRIVE SHAFT
HI6058D	MACHINED MAIN GEAR - 93T CT DRIVE	HW6062	TAIL BOOM - 60/70
HI6058F	CONSTANT TAIL DRIVE ASSEMBLY - 90T	HW6062A	TAIL BOOM - MAX 90
HI6058G	CONSTANT TAIL DRIVE ASSEMBLY - 93T	HW6063	TAIL DRIVE SHAFT SET - 60/70
HI6058J	SLIPPER SLEEVE	HW6063A	TAIL DRIVE SHAFT SET - MAX 90
HI6058K	SLIPPER CAP	HW6065	TAIL PITCH CONTROL ROD SET - CARBON
HI6058L	SLIPPER O-RINGS (2)	HW6070	TAIL GEARBOX INPUT SHAFT
HI6058M	INNER TAIL GEAR AUTO HUB - CT DRIVE	HW6073	TAIL GEARBOX OUTPUT SHAFT
HI6058N	OUTER MAIN GEAR AUTO HUB W/T.B. - CT DRIVE	HW6074	SPACER TUBE - TAIL OUTPUT SHAFT
HI6058P	SLIPPER AUTOROTATION HUB W/T.B.	HW6075	TAIL GEAR SET
HI6060	FRONT TAIL TRANSMISSION (L&R)	HW3098A	STEEL TAIL ROTOR HUB
HI6067	TAIL FIN SET - PLASTIC	HW6110	UPPER SIDE FRAME - L&R
HI6067A	TAIL FIN SET - CARBON	HW6112	SERVO SIDE FRAMES (2)
HI6068	TAIL FIN MOUNT SET	HW6112A	VERTICAL FRAME & BATTERY TRAY
HI6078	TAIL GEARBOX (L&R)	HW6115	FRONT LOWER FRAMES - L&R
HI6080	TAIL BOOM SERVO MOUNT SET	HW6115A	REAR LOWER FRAME - L&R
HI6082	TAIL STRUT SUPPORT BRIDGE SET	HW6117	LANDING GEAR FRAME & REAR X FRAME
HI3087A	TAIL PITCH SLIDER SET	HW6123	LANDING SKIDS - ALUMINUM
HI3089	TAIL PITCH BALL LINKS	HW6123A	LANDING SKIDS - CARBON
HI3096A	TAIL BLADE GRIP SET	HW6125	CANOPY MOUNTS & GROMMET SET
HI6099	TAIL ROTOR BLADES - PLASTIC (2)	HW6127	FRONT FRAME STANDOFF SET
HI6102	TAIL PITCH LEVER SET	HW6127A	REAR FRAME STANDOFF SET
HI6106	TAIL PUSHROD GUIDES - ADJUSTABLE SLOT	HW6146	CCPM SWASHPLATE 120-140 DEGREE
HI6122	LANDING STRUTS - PLASTIC	HW6173	FLYBAR
HI6122A	LANDING STRUTS - CARBON	HW6180	FEATHERING SHAFT
HI6130	FIBERGLASS CANOPY ONLY	HW6192	UPPER LINKAGE SET (6 RODS)
HI6131	PREDATOR & MAX DECAL	HW6192A	LOWER LINKAGE SET (8 RODS)
HI6132	INSTRUCTION MANUAL - 60, SE & MAX	HW6202	TAIL BOOM SUPPORT STRUTS (2)
HI6133	WINDSHIELD ONLY	HW6202A	TAIL BOOM SUPPORT STRUTS - CARBON
HI6138	FUEL TANK w/FUEL FITTINGS & ISOLATORS	CN2215A	HEAD BUTTON - SILVER
HI6145	BALL LINK SET (26 LONG, 4 SHORT)	CN2341	AEROTECH 690mm H/P ARF MAIN BLADES
HI3152A	RADIUS LINK W/PIN (2)	CN267001	ROTORTECH 700mm 3D CARBON BLADES
HI3152C	WASHOUT SET - 10MM	CN267201	ROTORTECH 720mm 3D CARBON BLADES
HI6153	WASHOUT GUIDE	CN260956	ROTORTECH TAIL BLADES 95mm
HI6154	TORQUE TUBE DRIVE COUPLER	CN261056	ROTORTECH TAIL BLADES 105mm
HI6160	ROTOR HEAD YOKE	CNBB37	Bearing - seesaw, washout, cyclic & bell mixers
HI6167	SPECIAL BALL SET	CNBB37F	Bearing - tail pitch lever
HI3167B	SEESAW OFFSET PLATES (2)	CNBB0930	Bearings - tail grip (2)
HI3167F	BEARING CUPS & SPACERS (2) - M8	CNBB48	Bearing - flybar
HI3167G	SEESAW TIE BAR & SPACERS (2)	CNBB49T	Bearing - tail grip thrust
HI3176C	SYMMETRICAL FLYBAR YOKE SET	CNBB410	Bearing - tail grip
HI6179	FLYBAR PADDLES - 20 GRAM 3D	CNBB511	Bearing - start shaft, tail trans & output
HI6179A	FLYBAR PADDLES - 30 GRAM SPORT	CNBB513	Bearing - tail trans, tail input & output
HI6181	HEAD DAMPING O-RINGS (6)	CNBB610	Bearing - tail pitch plate
HI6184	MAIN ROTOR BLADE GRIPS (2)	CNBB812F	Bearing - elevator lever
HI6189	METAL BELL MIXER ARM SET	CNBB815T	Bearing - main grip thrust
HI3205	SERVO MOUNTING TABS (10)	CNBB816	Bearing - main grips, tail drive support
HW6000	HARDWARE PACK	CNBB1018T	Bearing - main shaft thrust
HW6001	HEAD BOLT & WASHER SET	CNBB1019	Bearing - main shaft
HW6002	HEX ADAPTER	CNLR1000S	BALL LINK 2MM Rudder Pushrod (10)
HW6005	STARTER SHAFT	CNLR1013	SHORT STEEL BALL M2 (2)
HW6007	START SHAFT BEARING BLOCK w/BB	CNLR1014	SHORT STEEL BALL M3 (2)
HW6011	CLUTCH SHOE	CNLR1018	ULTRA SHORT STEEL BALL M2 (2)
HW6012	COOLING FAN HUB	CNLR1019	LONG STEEL BALL M3 (2)
HW6013	CLUTCH BELL ASSEMBLY - 10T	CNLR1020	MEDIUM STEEL BALL M3 (2)
HW6013A	CLUTCH BELL ASSEMBLY - 11T		
HW6014	CLUTCH LINING		
HW6015	SPLIT COLLET SET - OS/YS		