# CONCEPT 30

- THE SE COMES WITH LIGHTWEIGHT NYLON FLYBAR PADDLES FOR EXCELLENT RESPONSIVENESS FOR THE ADVANCED PILOT.
  - THE DX IS EQUIPPED WITH HEAVIER ALUMINUM FLYBAR PADDLES PROVIDING EXCELLENT STABILITY FOR THE NOVICE PILOT.
    - DDF STYLE ROTOR HEAD FOR OUTSTANDING STABILITY.
    - FLEXIBLE LANDING GEAR TO ABSORB MANY HARD LANDINGS.
      - FASY STEP-BY-STEP INSTRUCTION MANUAL.
      - COMPOSITE FIBERGLASS-FOAM BLADES FOR EXCELLENT BALANCE AND C.G. (27% FROM LEADING EDGE).
        - EASY ACCESS CONE STARTING SYSTEM.
        - HIGHLY ATTRACTIVE BODY AND DECAL DESIGN FOR REALISTIC APPEARANCE.
          - THE DX COMES WITH 18 BALL BEARINGS.
  - . THE SE COMES WITH FULL BALL BEARINGS AT EVERY FRICTION POINT.

RADIO: 4 TO 5 CHANNEL
\* GYRO RECOMMENDED
(NOT INCLUDED)

**MAIN ROTOR SPAN 1,160 mm** 



KIT NO.4089 (DX KIT) KIT NO.4090 (SE KIT)



#### WARNING!

This Radio Controlled Helicopter is not a toy! It is a complex machine that is capable of serious bodily harm and property damage. IT IS YOUR RESPONSIBILITY AND YOURS ALONE — to complete this kit correctly, properly install all R/C components, and to test fly the helicopter. IF YOU ARE JUST STARTING R/C MODELING, CONSULT YOUR LOCAL HOBBY SHOP OR WRITE TO THE ACADEMY OF MODEL AERONAUTICS TO FIND AN EXPERIENCED INSTRUCTOR IN YOUR AREA.

ENTIRE CONTENTS @ 1989. HOBBICO INC.

## **ASSEMBLY NOTES**

Important: Check contents thoroughly to ensure that no parts are missing. Refer to Bagged Parts List (pp. 34-35).

 Before you begin, carefully read through the manual. This will give you a better understanding of the construction of this model.



 Certain symbols are used throughout the instructions. Pay attention to their location.



Points where Grease/Oil should be applied. (This will reduce wear and friction and provide a smoother operating joint.)



Places where Screw Lock (Zap Lock, etc.) should be applied. This will prevent screws and nuls from loosening up during operation due to the vibration of the model.

Where you see this face, are steps that you should pay extra particular attention to when building this model.

 When installing any control rod make sure that the word "Kyosho" faces outwards.



A few different types of screws are used in the construction of your model. Here are some examples of them and how they will be indicated in the instructions. For example, Self Tapping will simply be S/T screw.

#### SCREW



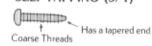


If it is an ordinary screw it will be marked "screw".

#### ALLEN HEAD SCREW (A/H)

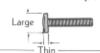


SELF TAPPING (S/T)



FLAT HEAD SCREW (F/H)

Tapered Head PAN HEAD SCREW (P/H)



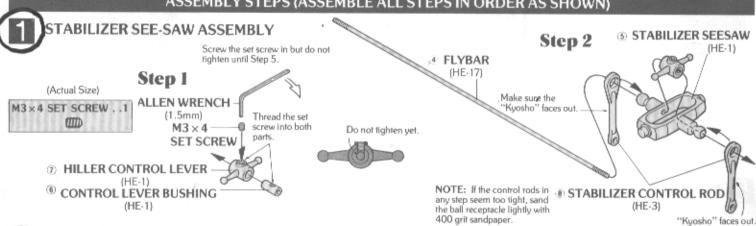
Use the exploded diagram to compare the shapes of the small parts used with each step.

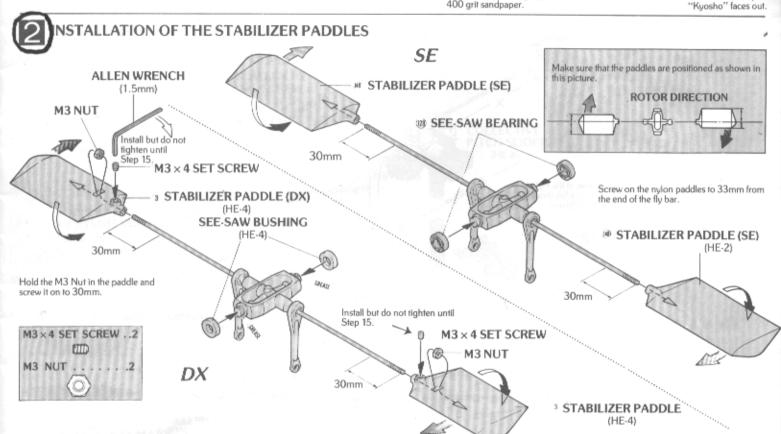
Do not use excessive force when tightening S/T type screws into plastic. Overtightening will cause the threaded portion of the plastic to strip. It is recommended to stop tightening when some resistance is felt after the threaded portion enters the plastic.

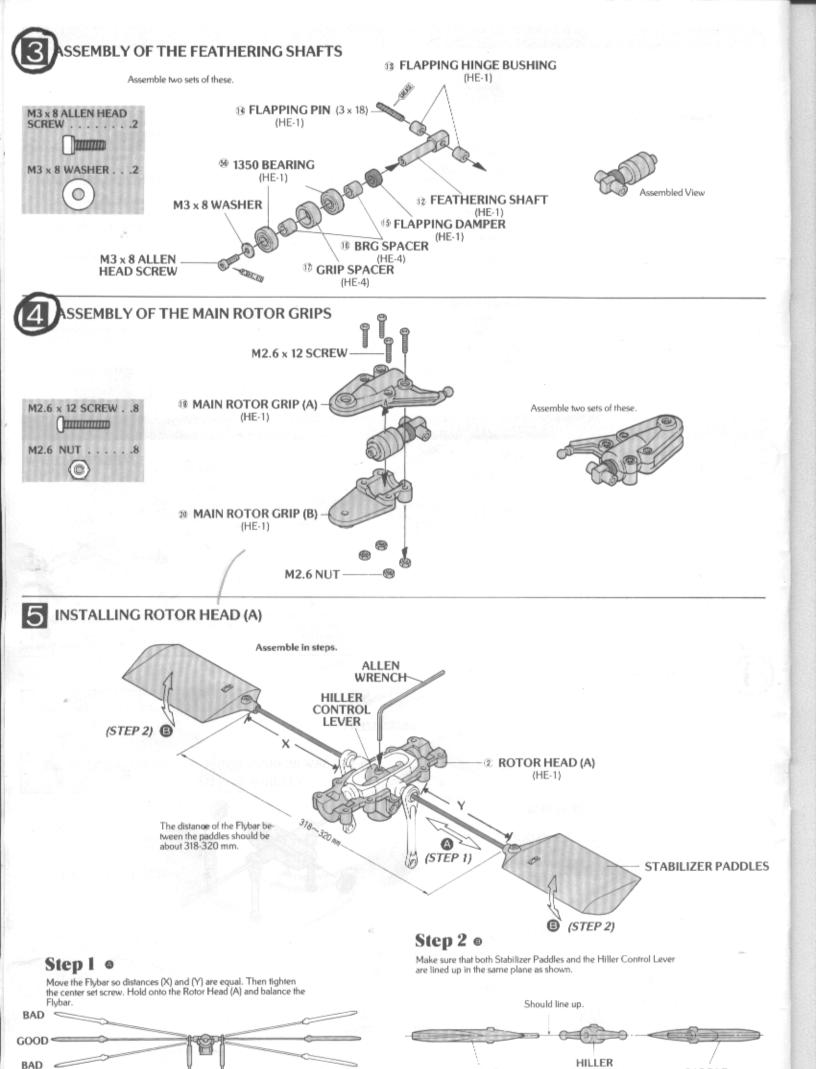




# ASSEMBLY STEPS (ASSEMBLE ALL STEPS IN ORDER AS SHOWN)





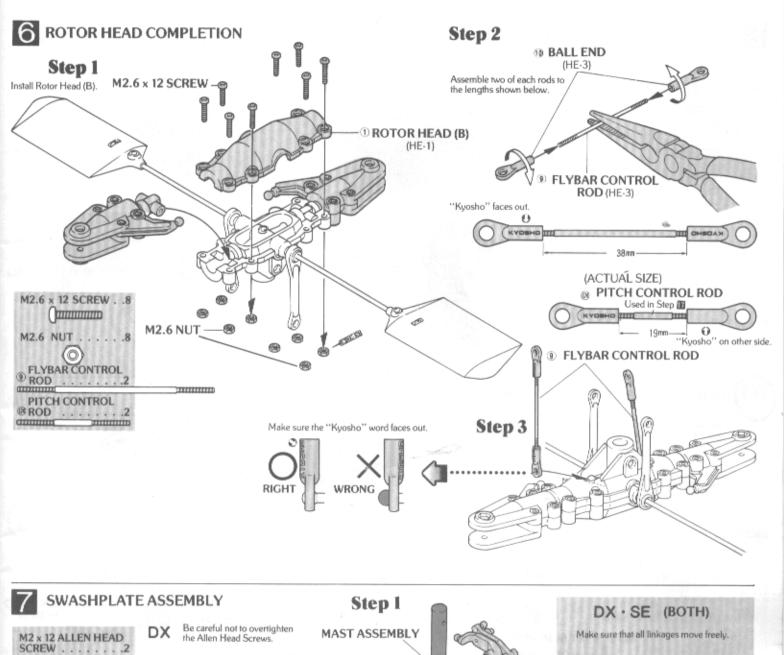


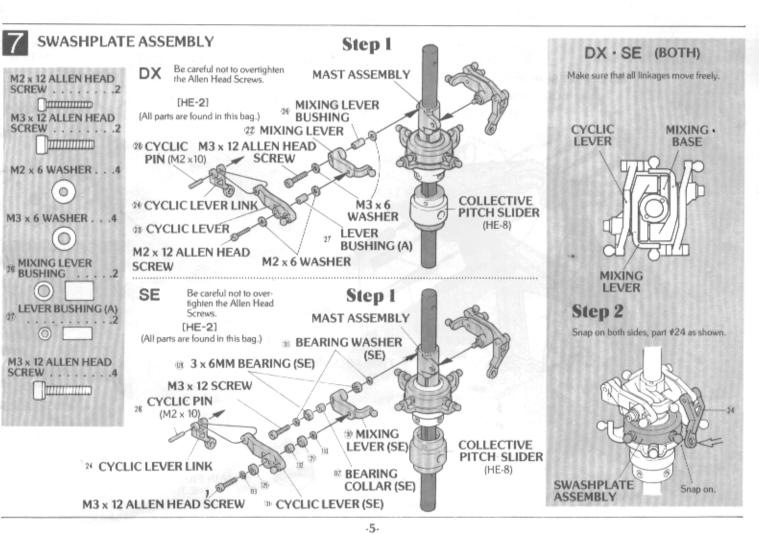
Make sure that the Flybar is horizontal. If not, balance it using decals or tape on the higher paddle.

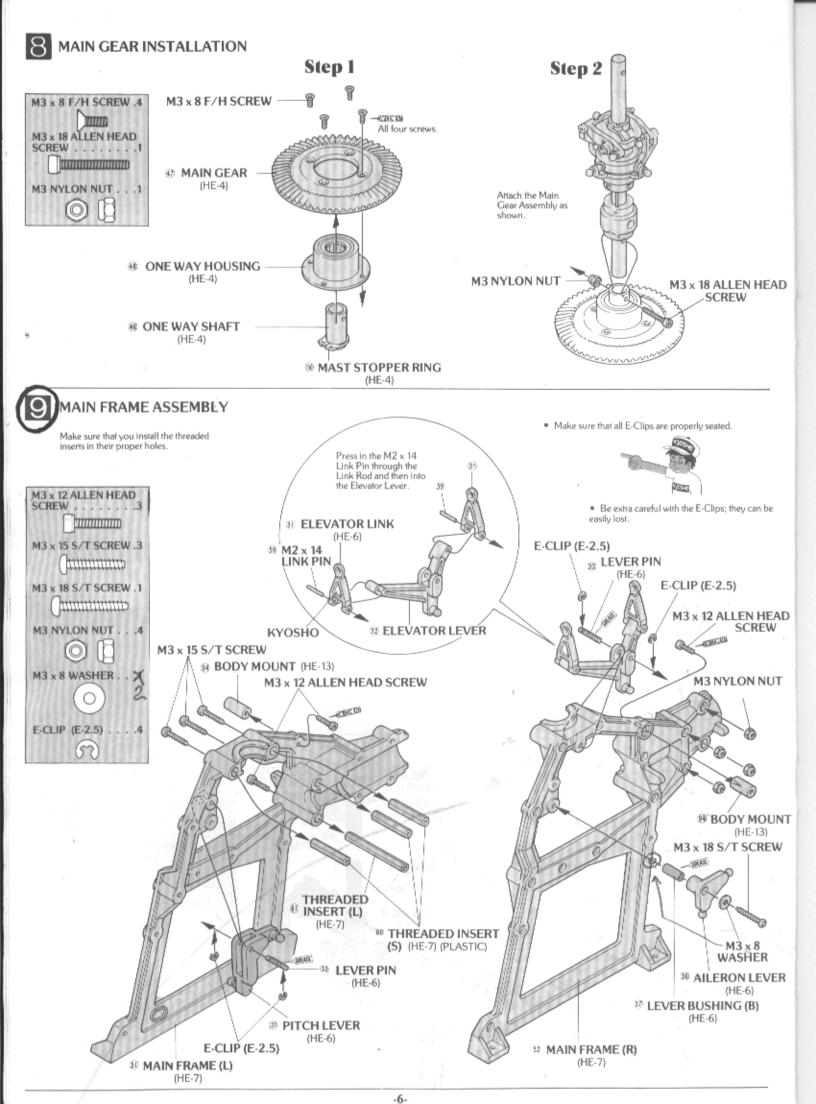
PADDLE

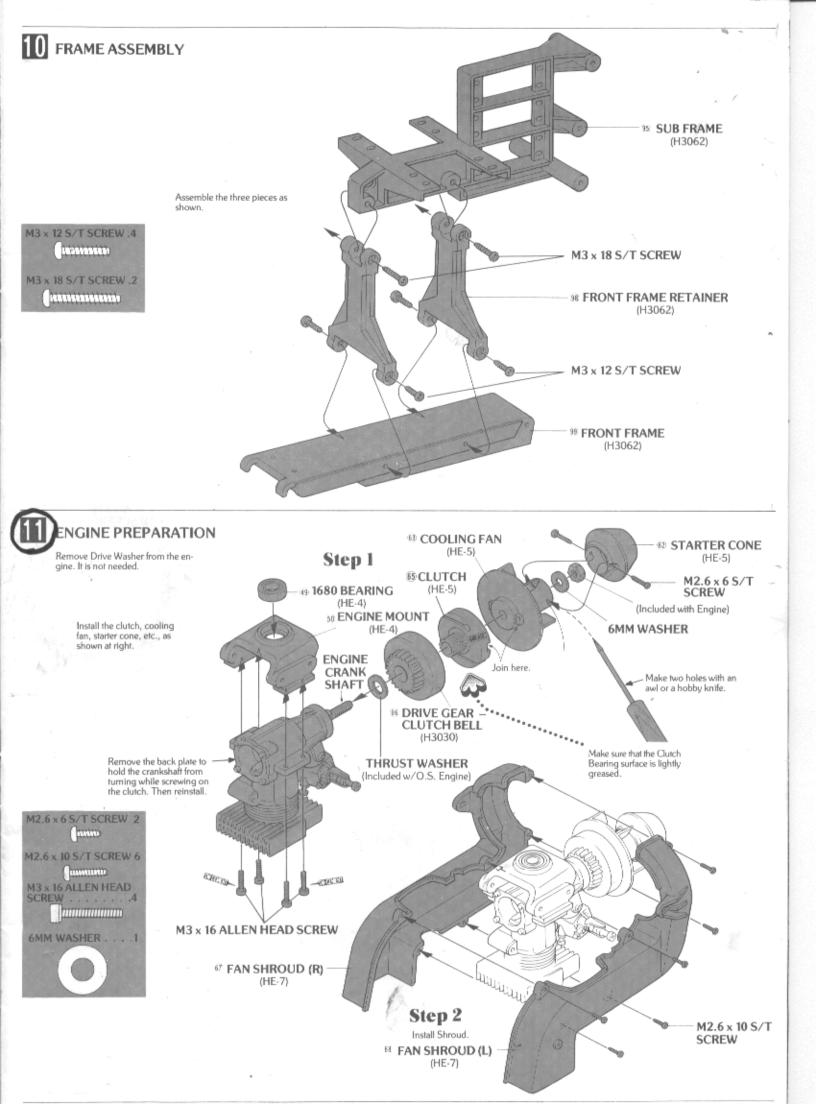
HILLER CONTROL LEVER

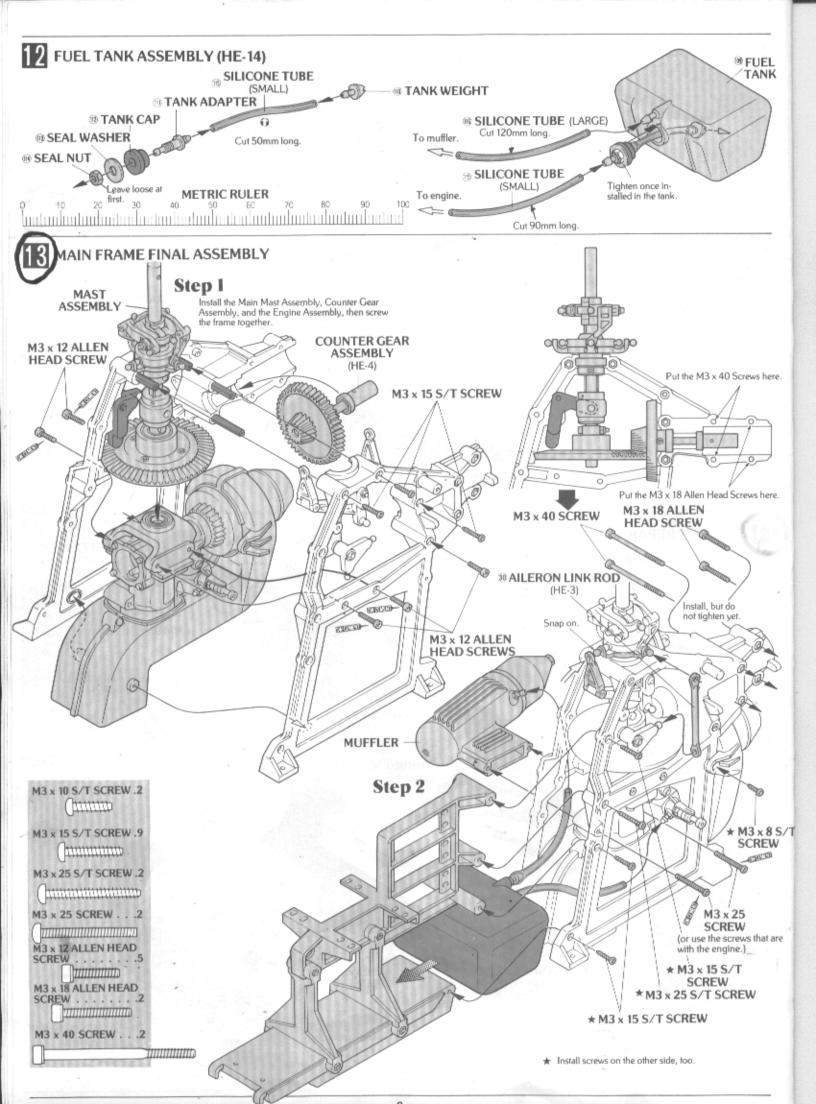
PADDLE

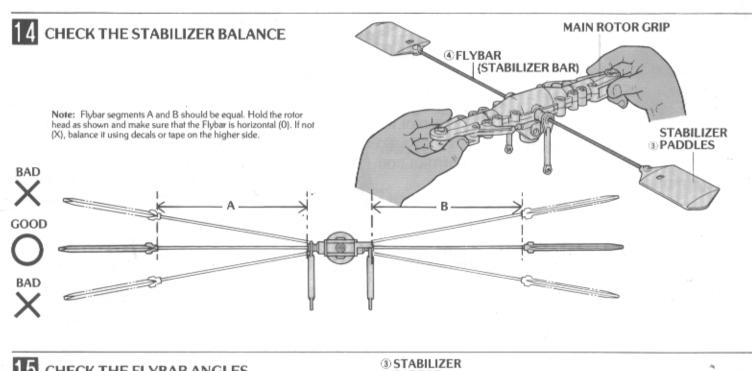


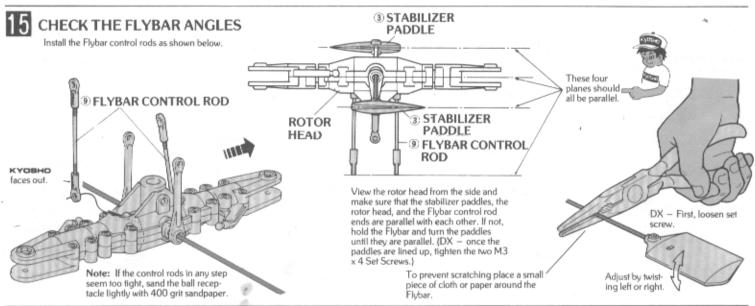


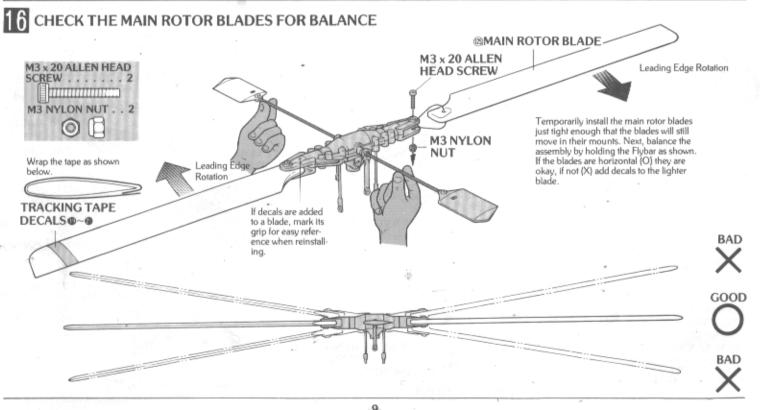


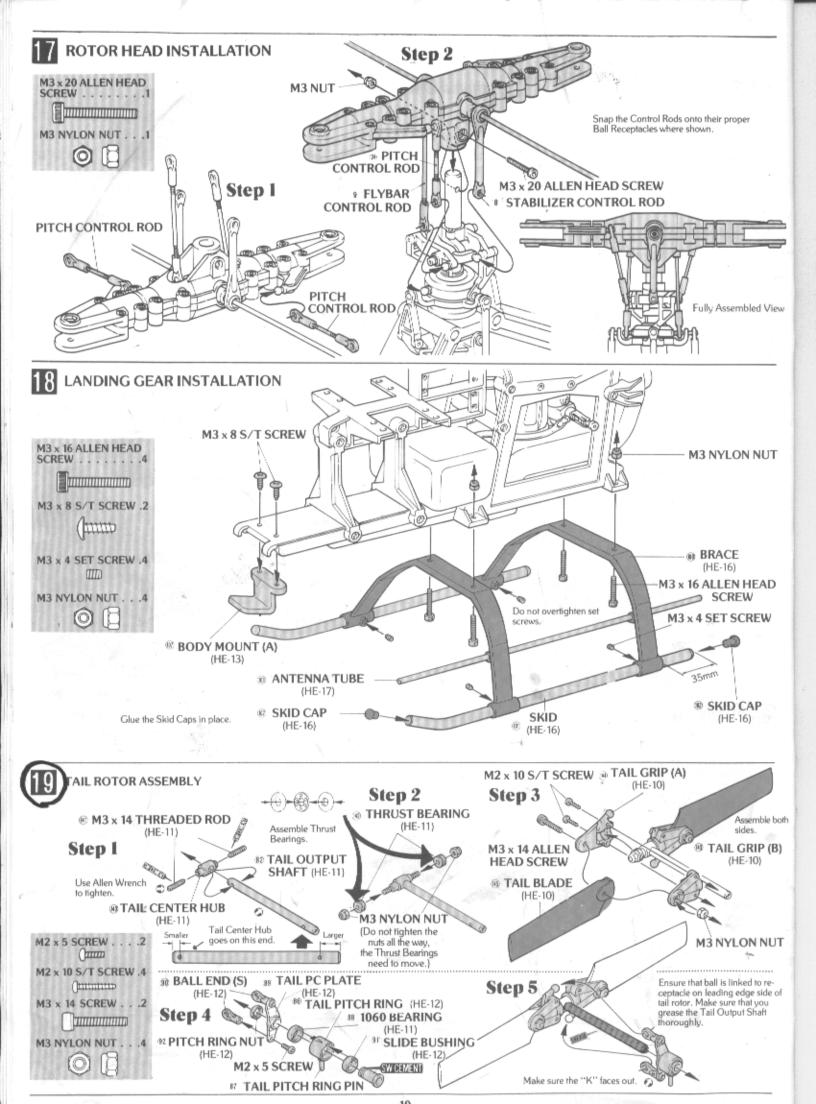


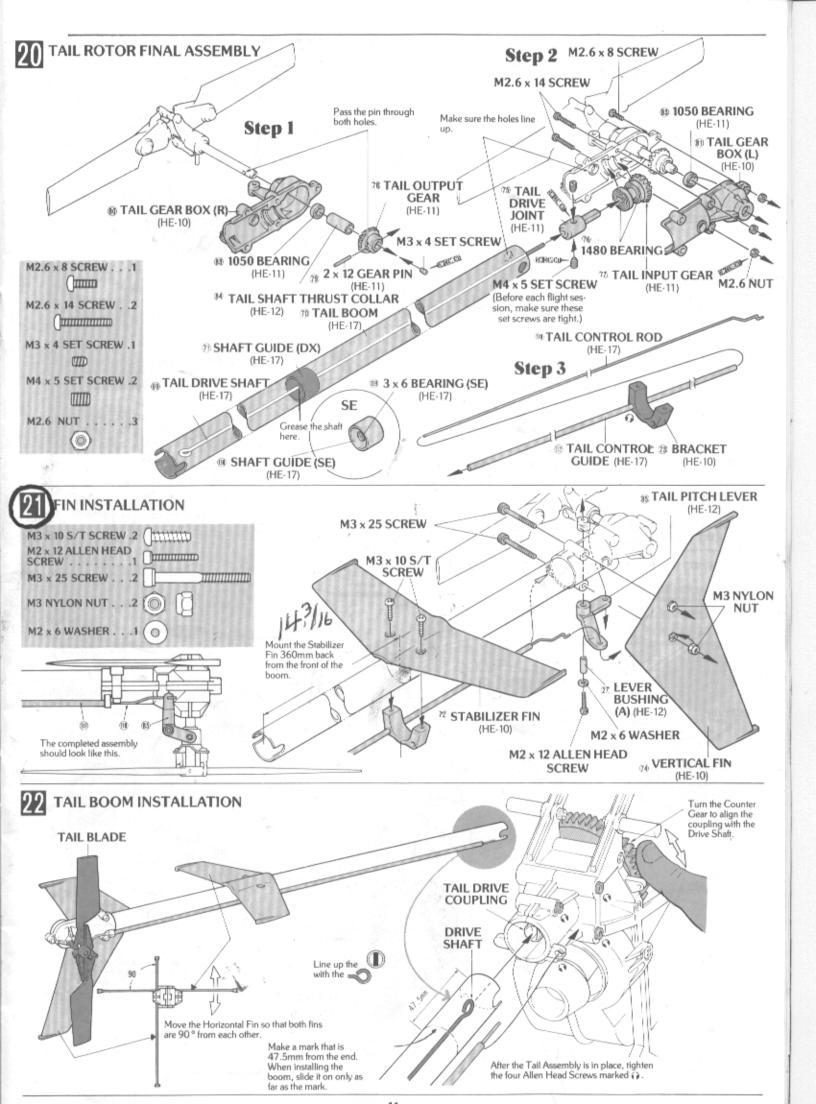


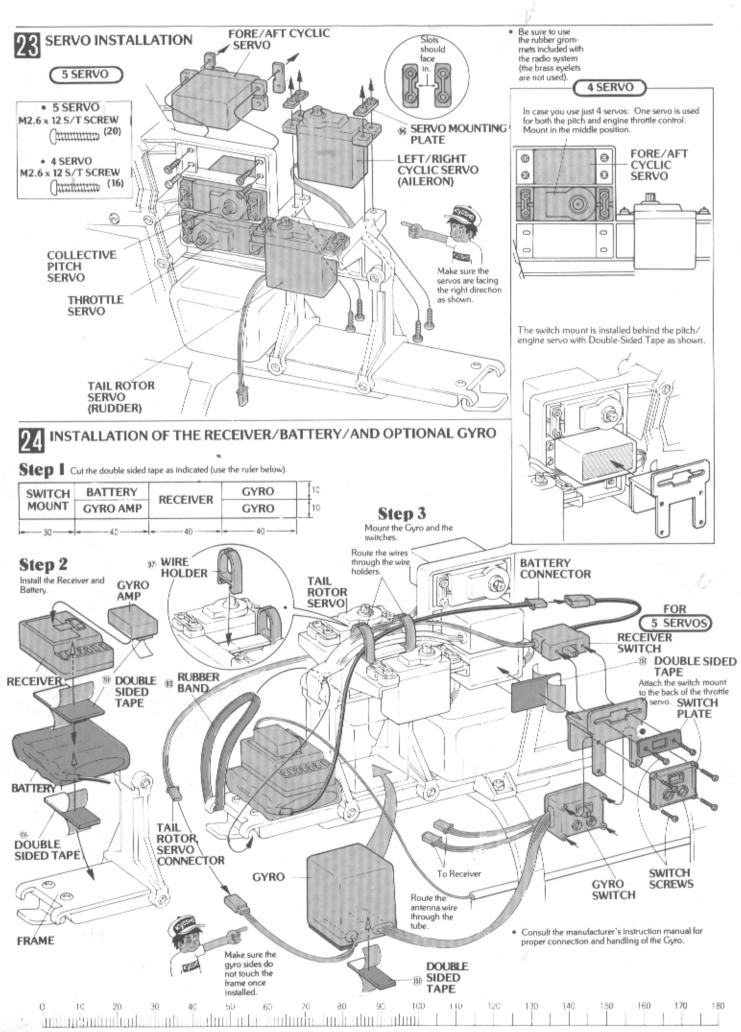


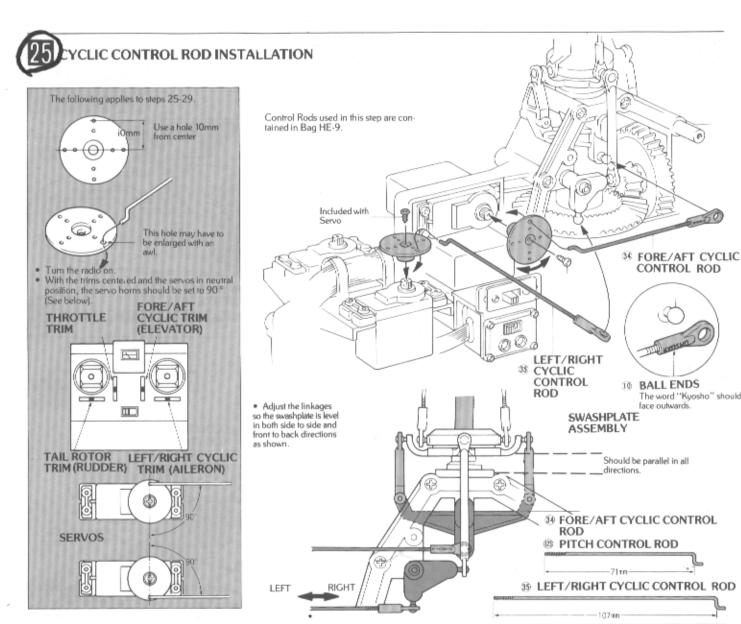




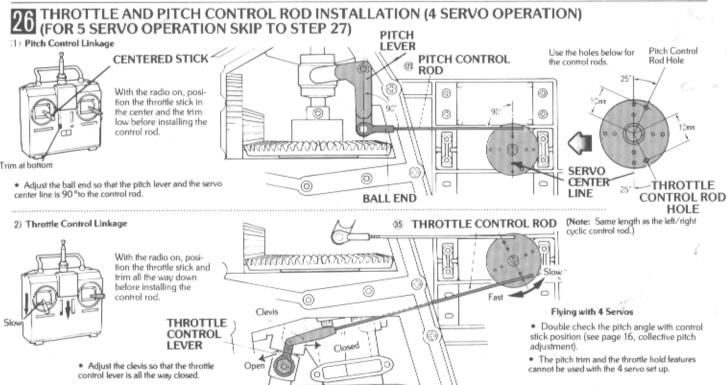


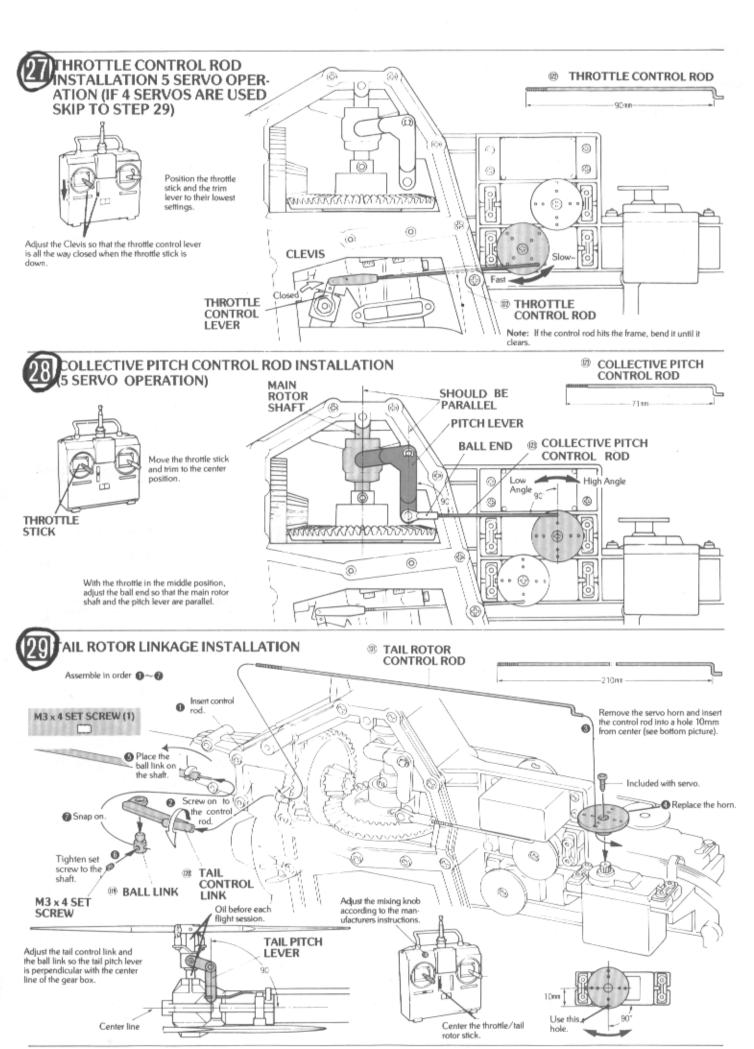


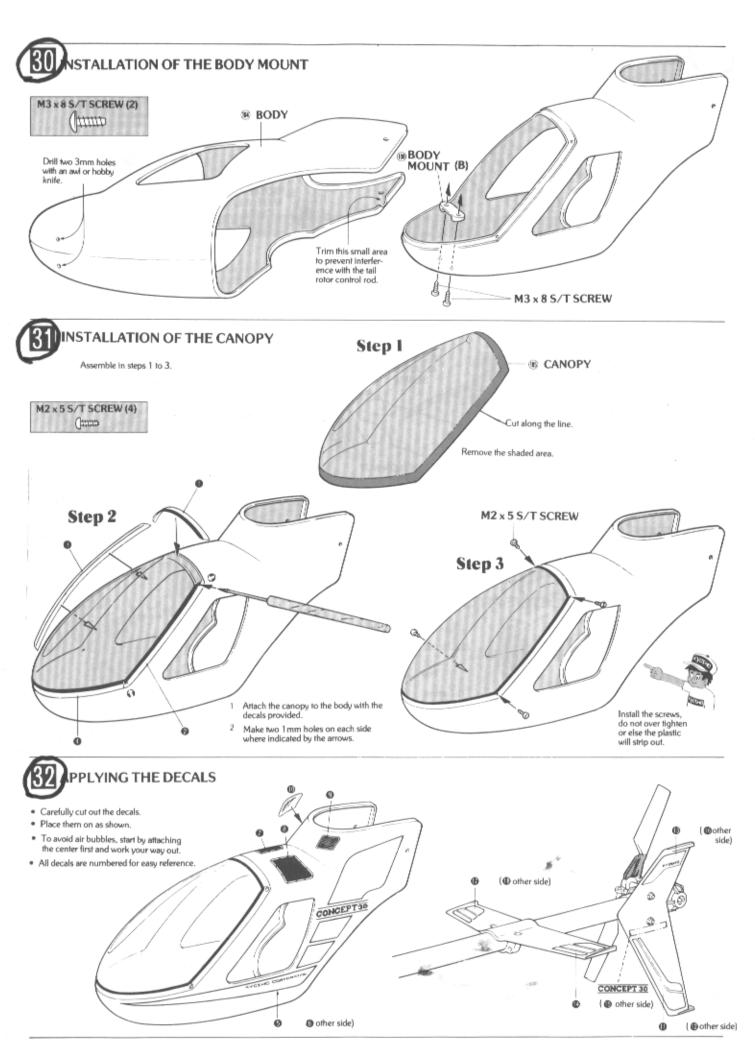


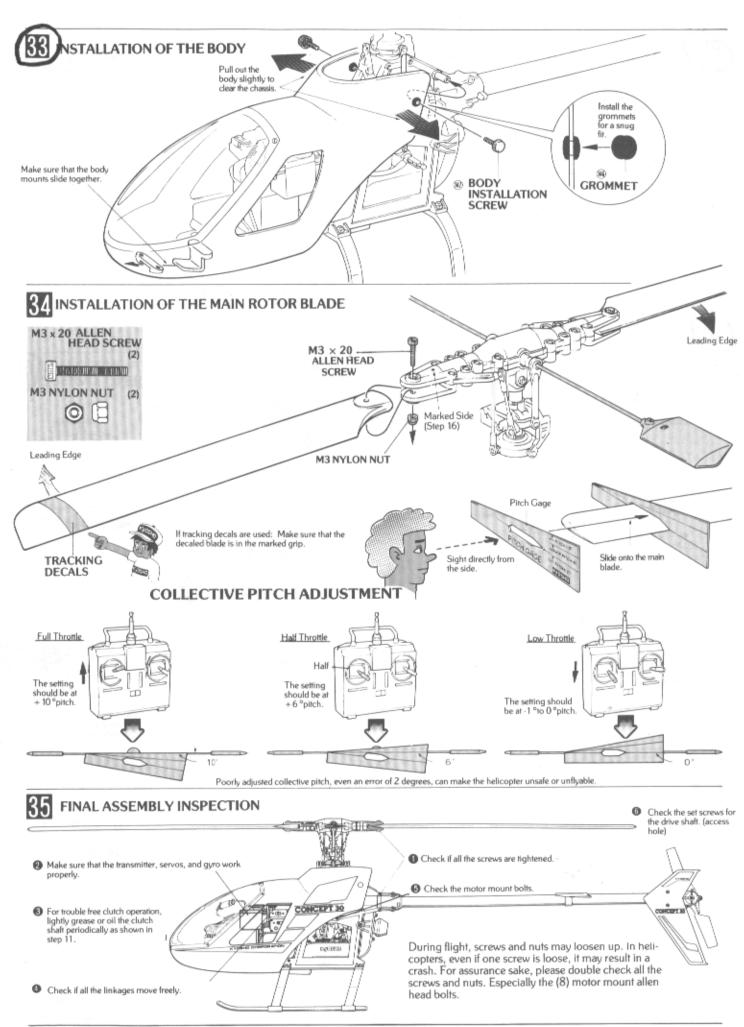


The word "Kyosho" should







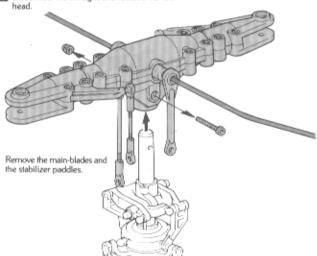


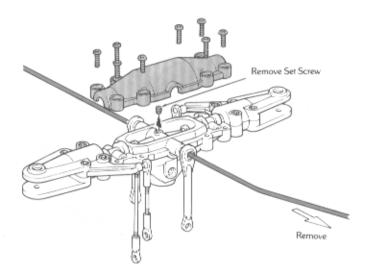
# PARTS REPLACEMENT

#### REPLACEMENT OF THE STABILIZER BAR (FLYBAR)

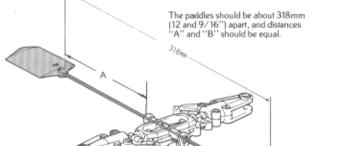
Disconnect the linkages and remove the rotor

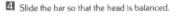
First remove the top cover and then the set screw. Next, pull the bar out.





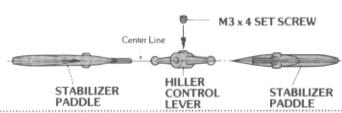
- Insert the new stabilizer bar and reinstall the stabilizer paddles.





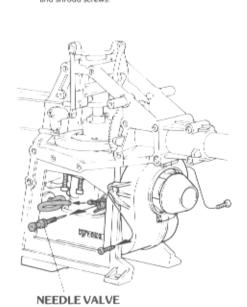


Tighten the Set Screw

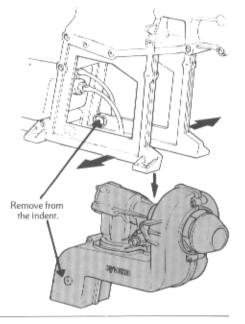


#### REMOVING THE ENGINE (INSTALL IN THE REVERSE ORDER)

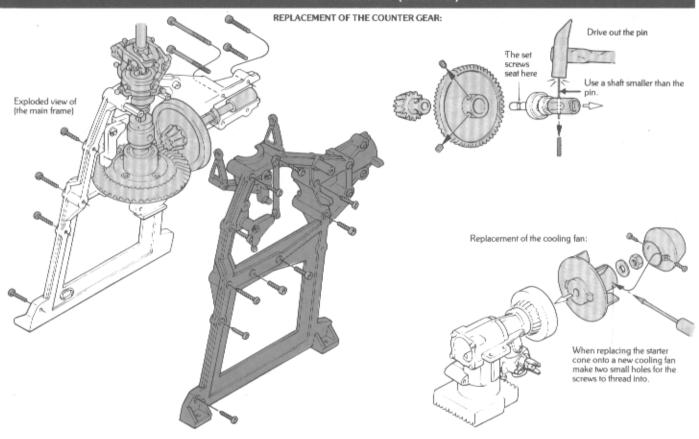
- Remove the landing skids.
- Next, remove the muffler, fuel line, linkage rod, and the needle valve. Then remove the engine mounting and shroud screws.



Spread the lower frame outward, lower the engine together with the fan shroud.

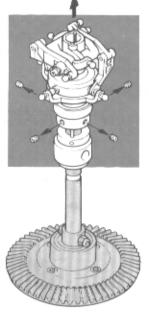


# PARTS REPLACEMENT (CONT'D)

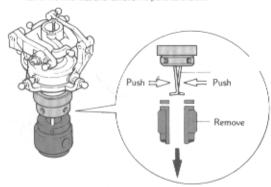


# DISASSEMBLING THE SWASHPLATE

Remove the 4 set screws and pull the assembly off the mast.



Push in the wire rods and remove the parts as shown.



Disassembled Parts





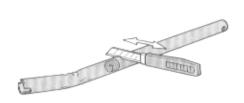




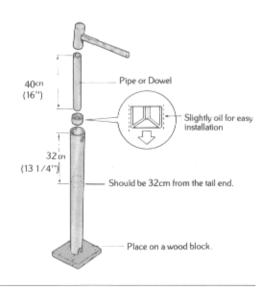


# REPLACEMENT OF THE DRIVE SHAFT GUIDE.

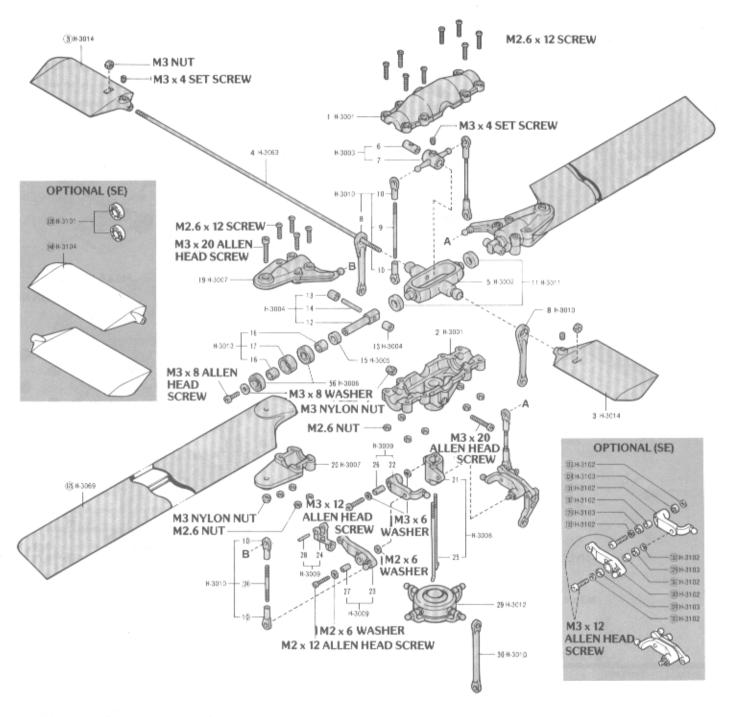
Cut the boom on both sides of the guide and then carefully tap it out with a hammer and dowel rod (or pipe).



 ${\color{red} \, \boxtimes \,}$  To insert, drive the guide in its proper direction using a short pipe or dowel.



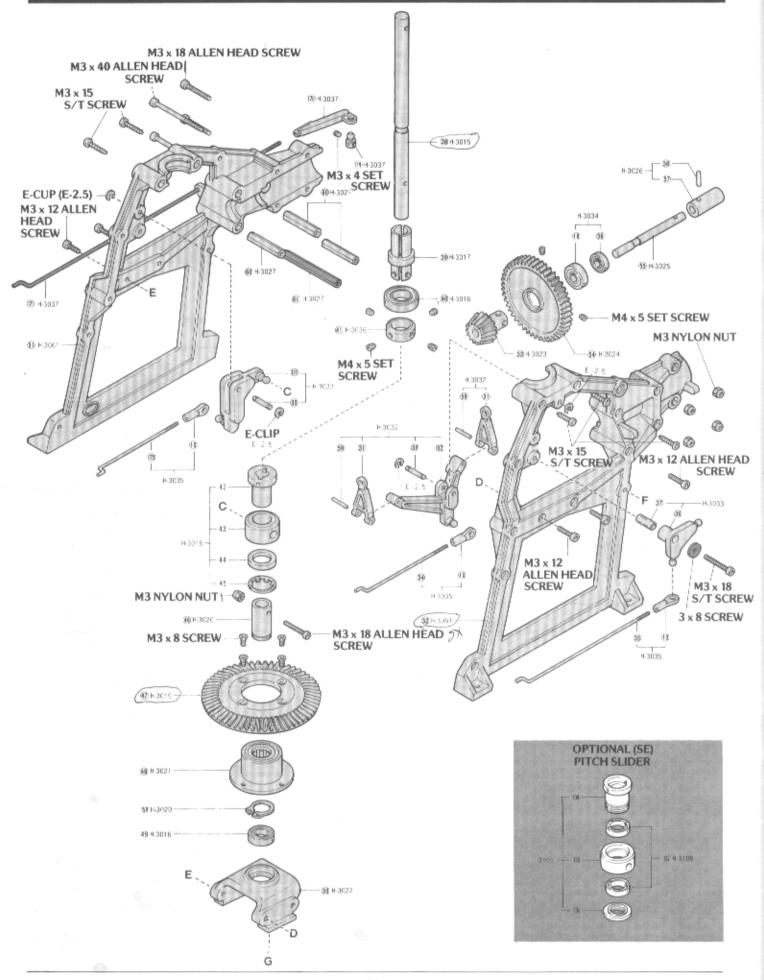
## **EXPLODED PARTS DIAGRAM**



STOCK# PARTS PACK		DESCRIPTION	CONTAINS	RETAIL	
KYOE1010	H-3001	Main Rotor Head	1 2 × 1	8.95	
KYOE1020	H-3002	Stabilizer See-Saw	1×1	7.95	
KYOE1030	H-3003	Hiller Control Lever Set	6-7×1	7.95	
KYOE1040	H-3004	Feathering Shalt Set	9 HX2 HX4	14.95	
KYOE1050	H-3005	Flapping Damper	15 ×10	6.95	
KYOE1060	H-3006	Blade Grip Bearing	55 × 2	12.95	
KYOE1070	H-3007	Main Rotor Grip	9 #X2	8.95	
KYOE1080	H-3008	Mixing Base	11 X 1 15 X 2	7.95	
KYOE1090	H-3009	Mixing Lever Set (DX)	22 23 24 26 27 26 × 2	11.95	
KYOE1100	H-3010	Linkage Set (A)	10×10.3 0×2 (0×8	11.95	
KYOE1110	H-3011	Stab. Seesaw Bushing (DX)	®×2	4.95	

STOCK #	PARTS PACK	DESCRIPTION	CONTAINS	RETAIL 34.95	
KYOE1120	H-3012	Swash Plate Assembly	29 × 1		
KYOE1130	H-3013	Grip Spacer Set	17×2 16×4	8.95	
KYOE1140	H-3014	Stabilizer Paddles	3 × 2	19.95	
KYOE1150	H-3063	Stabilizer Bar	4 X 2	9.95	
KYOE1160	H-3069	Main Rotor Blade	8×2	35.95	
KYOE1300	H-3101	Stab. Seesaw Bearing (SE)	9 × 2	13.95	
KYOE1310	H-3102	Mixing Lever Set (SE)	N N N T X 2 N X 4 T X 8	15.95	
KYOE1320	H-3103	Mixing Lever Bearing (SE)	®×4	24.95	
KYOE1330	H-3104	(Stabilizer Paddle (SE)	Flox 2	12.95	

## **EXPLODED PARTS DIAGRAM**



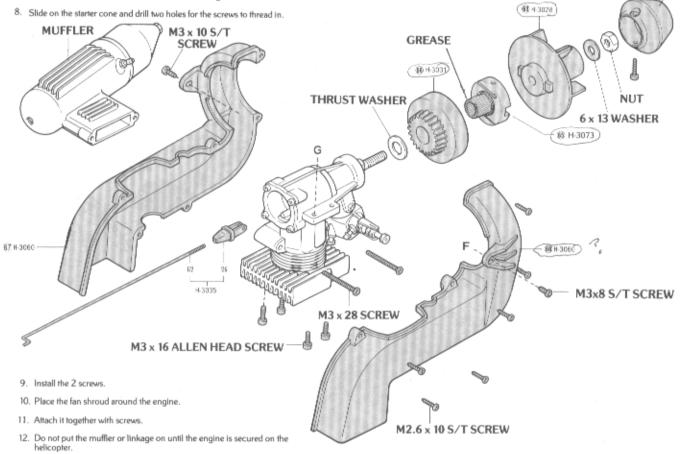
## **EXPLODED PARTS DIAGRAM**

€2 H-3028

M2.6 x 6 S/T SCREW-

## **ENGINE INSTALLATION:**

- 1. Remove the engines back plate.
- 2. Put the thrust washer and drive gear onto the crankshaft.
- 3. Grease the bearing surface of the clutch liberally. [For trouble free operation, periodically grease the clutch where shown.]
- 4. Carefully hold the crankshaft from turning and screw on the clutch.
- 5. Replace the back plate.
- 6. Place the fan onto the clutch.
- 7. Install the washer and nut onto the crankshaft and tighten.



	STOCK#	PARTS PACK	DESCRIPTION	CONTAINS	RETAIL	STOCK#	PARTS PACK	DESCRIPTION	CONTAINS	RETAIL	1
*	KYOE2010	H-3015	Main Mast	81×1	11.95	KYOE2155	H-3073	One Piece Clutch	(65) X1	\$34.95	1 3
"	KYOE2020	H-3016	Main Mast Bearing	40 49 X 1	15.95	KYOE2170	H-3031	Drive Gear	66×1	11.95	7
	KYOE2030	H-3017	Pirch Rod Guide	29 × 1	6.95	KYOE2180		Elevator Lever Set	31 11×1 11 16×2	7.95	
	KYOE2040	H-3018	Pitch Slider Set (DX)	42 43 44 45 X 1	12.95	KY0E2190	H-3033	Alleron, Pitch Lever Set	33 25 37 IF X 1	7.95	
€	KYOE2050	H-3019	Main Gear	" #7×1	7.95	KYOE2200	H-3034	Secondary Shaft Bearing	18: 16 × 1	12.95	
K K K	KYOE2060	H-3020	One-Way Shall	65	7.95	KYOE2210	H-3035	Linkage Set (B)	34 35 W D 0 X1 11 X3	7.95	
	KYO32070	H-3021	One-Way Housing	43	33.95	KYOE2220	H-3036	Mast Stopper	41 × 1	6.95	
	KYOE2080	H-3022	Engine Mount	9)×1	15.95	KYOE2230	H-3037	Rudder Linkage Rod	8 08 P × 1	7.95	
	KYOE2090	H-3023	Bevel Pinion Gear	53 X 1	18.95	KYO€2240	H-3060	Fan Shroud	57 68 × 1	8.95	1 ≯
	KYOEZI00	H-3024	Counter Gear	54.X.1	7.95	KYOE2250	H-3061	Main Frame	51 52 × 1	25.95	1
	KYOE2110	H-3025	Secondary Shaft	55 × 1	7.95						T.
	KYOE2120	H-3026	Tall Drive Coupling	57 98 × 1	5.95	工學出來及於	100000		STREET, STREET		16
	KYOE2130	H-3027	Threaded Inserts	61 × 1 60 × 3	5.95	KYOE2260	H-3105	Pirch Slider Ser (SE)	9 H 0 × 1	20.95	
×	KYOE2140	H-3028	Starter Cone Set	® @×1	11.95	KYOE2270	H-3106	Pitch Slider Bearing (SE)	®×2	12.95	
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