General Instructions

APPLIES TO ALL YS 4 STROKE ENGINES EXCEPT 140DZ

FUEL RECOMMENDATION:

YS 20/20. This fuel is made by several different fuel manufacturers. All are suitable. 30% heli fuel also works well for those desiring more power.

GLOW PLUG:

YS #4 or OS Type F.

PROP SIZE RECOMMENDATIONS:

YS 63 -- 11 x 7, 11 x 8, 12 x 6, 12 x 7, 13 x 5, 14 x 4.
YS 91/110 -- 13 x 12, 14 x 10, 14 x 12, 15 x 8, 16 x 6.
YS 140 Sport - 15 x 13, 16 x 12, 17 x 8, 17 x 10.
YS 140DZ -- 16 x 14, 17 x 12, 18 x 8.

Other prop sizes may be used as long as the engines run in the recommended RPM ranges. In hot weather and break-in of new engines, use the smaller prop sizes to lessen the load on the engine to help it run cooler.

RECOMMENDED RPM RANGES:

YS 63 -- 10,500 to 11,500
YS 91/110 -- 8,800 to 9,800
YS 140 Sport -- 8,000 to 9,000
YS 140DZ -- 8,000 to 8,500

WHEN READYING ANY YS 4-STROKE ENGINE (EXCEPT DZ) FOR RUNNING, FOLLOW THESE PROCEDURES:

1. Be sure that the engines has fuel lines connected per the instruction sheet supplied with the engine.

2. Open high-speed needle valve 2 turns.

3. With fuel tank filled completely and the fuel lines connect properly, prime the

engine by running it at full throttle with the starter for 5 - 10 seconds. DO NOT CONNECT THE STARTING BATTERY WHILE DOING THIS.

4. Set throttle at 1/4 open. Have a helper hold the airplane if so mounted.

5. Connect starting battery and apply starter. Engine should start immediately. If it does not, check for fuel delivery and make sure the glow plug is operating properly.

6. Upon starting, allow the engine to run at 1/4 throttle for at least 30 seconds.

7. Advance throttle to full and adjust the high-speed needle to a slightly rich full power setting. When set, slowly reduce throttle to a fast idle.

8. Allow the fast idle to continue for a few seconds, then advance the throttle to full. If the transition from low to high is rich, the regulator screw should be turned clockwise. If the transition is lean, turn the screw counter-clockwise to richen. Adjustment should be made 1/4 turn at a time until you are very close then 1/8 turn for fine adjustment. DO THIS ADJUSTMENT WITH THE ENGINE STOPPED FOR SAFETY.

9. When the transition is set correctly, then reduce the throttle to full idle. If the idle speed slowly rises, screw the idle screw clockwise to richen. If the idle speed slowly drops, open the idle screw to lean. Work 1/8 turn at a time with the idle screw adjustment. Correct idle speed is 2200 to 2400 RPM. At this point the engine should be set correctly. FURTHER ADJUSTMENTS WILL BE REQUIRED AS THE ENGINE BREAKS IN.