

# Breaking in Your YD-A Engine

## Running in

The good chrome bore makes a big difference, as you know, it needs to heat cycle. Your initial rpm readings will not be the highest when the engines are new - one aspect that is important to remember and keep in mind.

YD-A 56 We recommend using a 22/8, 23/8 or 22/10 prop to start the break-in. Run it. Wind the high needle in (lean it) until the engine drops speed (this is the lean setting) then richen it up until the speed stops increasing.

YD-A 112 We recommend using a 26/10, 27/10, 28/8 prop to start the break-in. Run it. Wind the high needle in (lean it) until the engine drops speed (this is the lean setting) then richen it up until the speed stops increasing.

***note - This should be within about half a turn of the lean setting. If the needle richens up and the speed isn't increasing, then there is no point in opening it up any more.***

## Running in on a stand (Not our preference for more than the first tankful)

Run the engine hard for a couple of minutes, let it idle for a couple of minutes then run it hard again - tune the idle at the same time as these runs. Let it idle for another couple of minutes then switch it off to let it cool down. Engines on stands notoriously overheat due to stalled props not giving good airflow over the fins - keep the runs on stands to less than 10 minutes each time.

Repeat this process about half a dozen times then install it in the plane, give it a final tune and go fly it.

## Running in on the plane (Our preference)

Tune it as mentioned above, and then go fly it. Make sure there is good airflow over the engine at all times during the first Gallon or so (don't do any hovers etc). It will continually increase its rpm's as it runs in - It will also need retuning every couple of tanks full - you will hear when it needs a retune.

## Fuel Mix

- NO Lawnboy or similar EVER
- NO Amsoil - EVER

### ***If using Mineral Oil***

- Pennzoil Outdoor

### ***If using high quality synthetic oil***

- Castrol (do not mix it too rich)
- Redline
- Royal Purple
- Bel Ray
- Stihl Ultra

**Mineral and Synthetic oils should be mixed at 40:1 gas/oil.**

## Spark Plug

Make sure the gap is right - around 0.020" or 0.5mm  
Make sure it is a **genuine NGK CM6** -  
**NEVER use the Chinese CM6** with the black connector on top.

**Exhausts**

**Pitts Style Mufflers**

We recommend the **RC Aero Products, J'Tec or Bisson Large volume Pitts** for the single cylinder series. Ensure the end away from the exhaust port is well supported - otherwise they break too.

**Cans**

These will rob a couple of hundred rpm or more. For the single cylinder engines make sure a canister for at least a 60cc is used - most of the 50cc cans are too small in volume.

***If all these steps get followed, you will be happy and will tell everyone about it.***