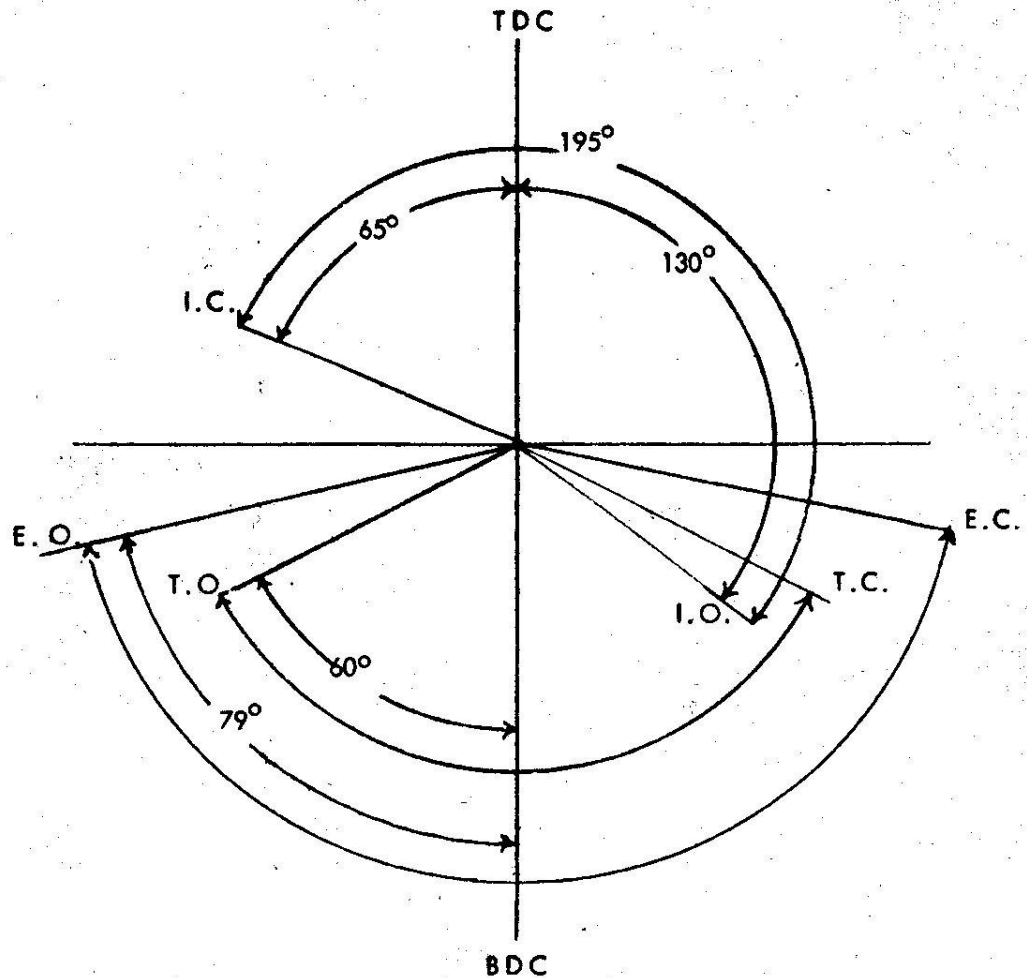


# Komet K-88 Specifications

Engine ..... Komet - mfg. by Sesim; Milano, Italy  
 Model ..... K-88  
 Type ..... Horizontal single cylinder, two stroke/  
 cycle air cooled engine. Loop scavenged.  
 Rotary disc valve induction  
 Rated Horsepower ..... 15 @ 8200 rpm  
 Maximum Torque ..... 6 ft. lbs. @ 7800 rpm  
 Bore ..... 1.98" (50.8 mm)  
 Stroke ..... 1.91" (48.5 mm)  
 Piston Displacement ..... 5.99 C.I. (98.25 cc)  
 Compression Ratio . . . 10.5:1 (computed on effective stroke)  
 Exhaust Port Duration . . . 158° (79° from B.D.C. to  
 closure)  
 Transfer Port Duration . . . 120° (60° from B.D.C. to  
 closure)  
 Boost Port Duration . . . 117° (58°30' from B.D.C. to  
 closure)  
 Inlet Duration . . . . . 195° (port opening to full closure)



2

Exhaust Port Opens . . . 101° (1.303" or 33.09 mm) after  
T.D.C. +/- .020"

Transfer Port Opens . . . . . 120° (1.523" or 38.07mm)  
after T.D.C. +/- .020"

Boost Port Opens . . . . . 124°30' (1.611" or 40.92 mm) after  
T.D.C. +/- .020"

Blow Down Time . . . . . 19° (+ /-1°)

Disc Valve Opens . . . . . 50° after B.D.C. (+/-1°)  
is fully open . . . . . 101° after B.D.C. (+/-1°)  
begins to close . . . . . 15° after T.D.C. (+/-1°)  
Closes . . . . . 65° after T.D.C. (+/-1°)

Disc Valve Opening . . . . . 142° (+/-1°)

Inlet Port Opening . . . . . 50° (+/-1°)

Lubrication System . . . . . Oil mist (fuel/oil mixture)

Recommended Fuel Mixture . . . . . 12:1

Recommended Lubricant . . . . . SAE 30W 2-cycle oil

Recommended Fuel . . . . . Premium grade gasoline

Combustion Chamber Volume . . . . . 9cc (+/-1cc)

## CARBURETOR

Type . . . . . Double diaphragm Tillitson instrument with  
butterfly throttle control

Model . . . . . HL227

Main Jet Needle Orifice . . . . . #52 drill (.0635")

Idle Jet Needle Orifice . . . . . #65 drill (.035")

Venturi Diameter . . . . . 7/8" (22.2 mm)

Throttle Bore Diameter . . . . . 1" (25.4mm)

Venturi Discharge Nozzle Outlet . . . . . .003" Sq. In.

Inlet Orifice - High Speed Circuit . . . . . #44 drill (.086")

Inlet Orifice - Low Speed Circuit . . . . . #60 drill (.040")

Low Speed Primary Bypass Port . . . . . #70 drill (.028")

Low Speed Secondary Bypass Port . . . . . #60 drill (.040")

Idle Circuit Air Bleed . . . . . #65 drill (.035")

Inlet Seat Orifice Diameter . . . . . 3/32" (.094")

Inlet Valve Control Arm Adjustment. Flush with floor of body  
casting (+ .010")

Initial Settings

High Speed Needle . . . . . 1 1/4 turns from closed

Low Speed Needle . . . . . 1 1/4 turns from closed

Special Service Note! . . . . . Inlet passage in venturi dis-  
charge nozzle must align with inlet passage in body casting.

Carburetor Pressure Test . . . . . 6 lbs. for 3 minutes. Maxi-  
mum permissible leak-down-1 lb.

## MAGNETO

3

Type . . . . . 6 volt Pagani-CEV flywheel magneto  
with external (energy transfer) ignition coil

Model . . . . . 6076

Ignition Primary Coil:

Rated Output . . . . . 5.2 volts @ 2600 rpm  
8.3 volts @ 8000 rpm

Coil Resistance . . . . . 2 ohms

Coil Core Clearance (air gap) . . . . . .010" to .012" (.25mm  
to .3mm)

Ignition Coil:

Primary Resistance . . . . . 8 ohms

Secondary Resistance . . . . . 4800 ohms

Coil Power Test . . . . . Steady fire over  
6mm 3 pt. gap @ 500 rpm  
8mm 3 pt. gap @ 3000 rpm

Cranking Voltage Check . . . . . Steady fire over  
5mm gap (use Wico test plug part #S-14821)

Low Tension Wiring Connection . . . . . Black wire to coil -  
gray wire to ground

Recommended Spark Plug(s) . . . . . Auto-Lite  
AG 701 (break in)  
AG 603 (hot)  
AG 403 (normal)  
AG 203 (cold)

Spark Plug Reach . . . . . 3/4"

Electrode Gap . . . . . .024" to .027" (.3mm to .4mm)  
(Note! Do not reset side pin electrode plug  
gaps as pin may work loose and ruin cylinder head)

Flywheel Magnets . . . . . 4-pole, permanent type - riveted  
into flywheel

Contact Breaker Point Gap . . . . . .012" to .015" (.3mm to  
.4mm)

Contact Breaker Point Spring Tension . . . . . 35 oz. minimum  
(measured at center of contact point  
with Sunnen spring gage)

Condenser Capacitance . . . . . .23 to .27 Mf. (+/-10%)

Firing Point (ignition timing) . . . . . 23° 30" (.096" or 2.4mm)  
B.T.D.C.

Ignition Advance or Retard . . . . . Movable stator plate

## CRANKCASE PRESSURE TEST

Starting Pressure . . . . . 10 lbs.

length of test . . . . . 5 minutes

max. allowable leakdown . . . . . 1 lb.



### PISTON & CYLINDER MEASUREMENTS

Piston to Cylinder Clearance . . . .0015" to .003" (.04mm to .075mm)

Service Note! . . . Measure piston at bottom of skirt at a right angle to wrist pin bore. On engines with minimum clearance (.0015") an extensive break-in period is required. For short break-in time set clearance at .0025"

Piston Ring End Gap Clearance . . .007" to .025" (.17mm to .65 mm)

Piston Ring to Ring Land Clearance . .001" to .003" (.03 mm to .1mm)

Piston Pin to Piston Fit . .Thumb push at room temperature

Maximum Allowable Cylinder Wear (taper) . . . . .0015"

Piston Diameter (new std. piston) . . 1.96" (+/- .0005") (see service note above)

Maximum Allowable Wear . . . . .002" (see service note above)

Oversize Pistons Available . . 50.9mm, 51mm, 51.1 mm, 51.2 mm

Compression Pressure . . . . . 100 to 160 lbs.

Service Note! . . . Komet engines running in excess of 160 lbs. compression pressure risk severe detonation problems.

### IGNITION TIMING CHART

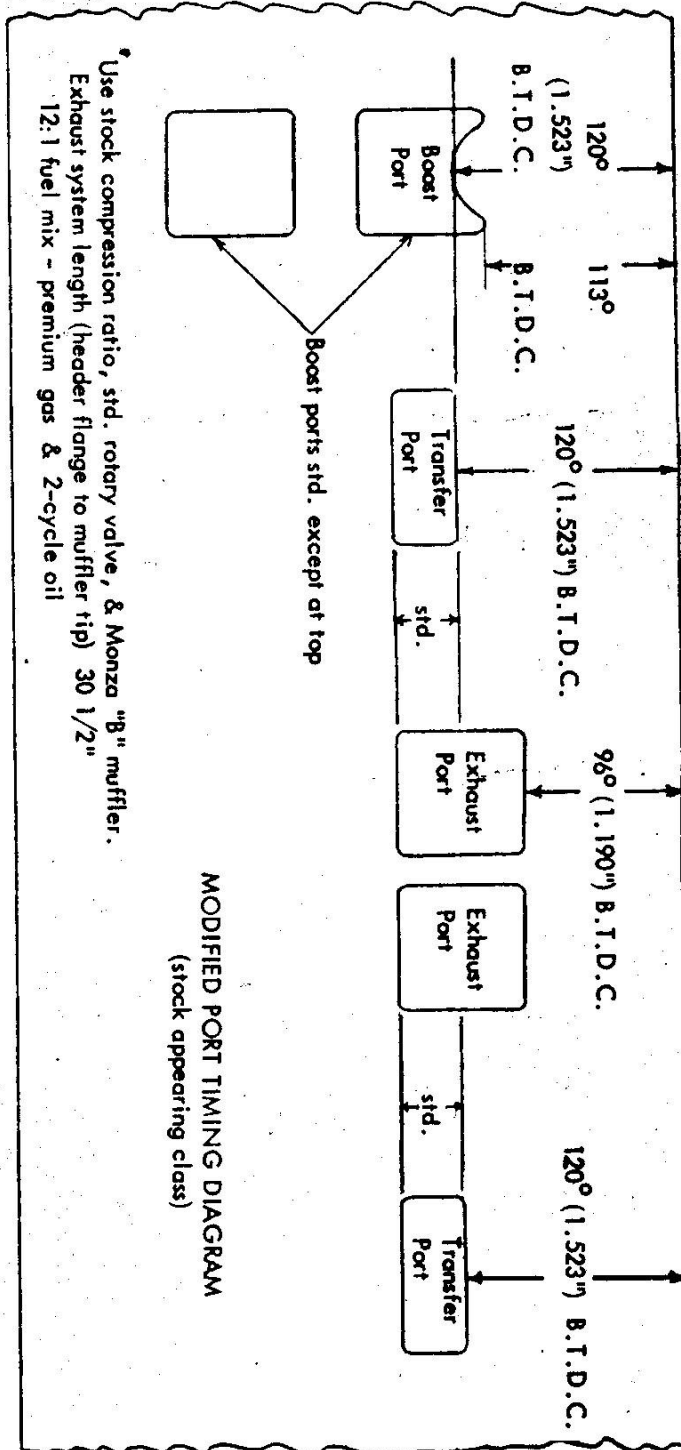
**figures expressed in degrees, millimeters and thousands**

20° - 1.745 mm - 0.069"	} Normal Timing range
21° - 1.921 mm - 0.076"	
22° - 2.104 mm - 0.083"	
23° - 2.297 mm - 0.091"	
24° - 2.498 mm - 0.102"	
25° - 2.798 mm - 0.110"	
26° - 2.919 mm - 0.115"	
27° - 3.142 mm - 0.124"	
28° - 3.373 mm - 0.133"	
29° - 3.610 mm - 0.142"	
30° - 3.850 mm - 0.152"	

## FACTORY RECOMMENDED PORT TIMING (for stock appearing class)

6

Exhaust Port Opens . . . . . 96° (1.190") after T.D.C.  
 Transfer Port Opens . . . . . 120° (1.523") after T.D.C.  
(stock timing)  
 Boost Port Opens . . . . . 113°—120° after T.D.C.

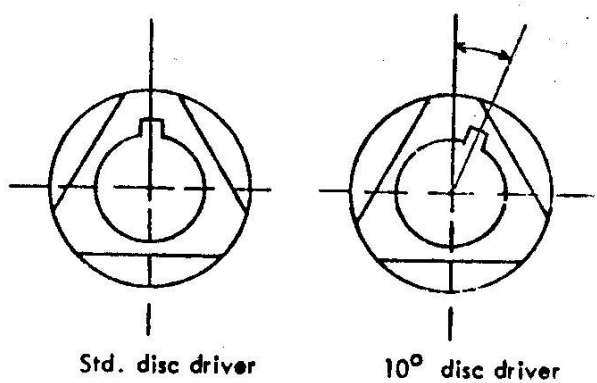


### TORQUE SETTINGS

- 8 mm Cylinder Head Nuts . . . . . 150 in. lbs. (1.70 Kg. m.)
- 8 mm Engine Base Nuts . . . . . 150 in. lbs. (1.70 Kg. m.)
- 6x18 mm Rotary Valve Cover Allen Screws . 60 in. lbs. (.67 Kg. m.)
- 6x45 mm Rotary Valve Cover Allen Screws . 60 in. lbs. (.67 Kg. m.)
- 6x55 mm Crankcase Allen Screws . . . . . 60 in. lbs. (.67 Kg. m.)
- Flywheel nut (or clutch adapter shaft) . . . 490 in. lbs. (5.70 Kg. m.)
- Sprocket nut . . . . . 490 in. lbs. (5.70 Kg. m.)
- 6x18mm Exhaust Header Allen Screw . . . . . 60 in. lbs. (.67 Kg. m.)
- Spark Plug . . . . . 300 in. lbs. (3.5 Kg. m.)

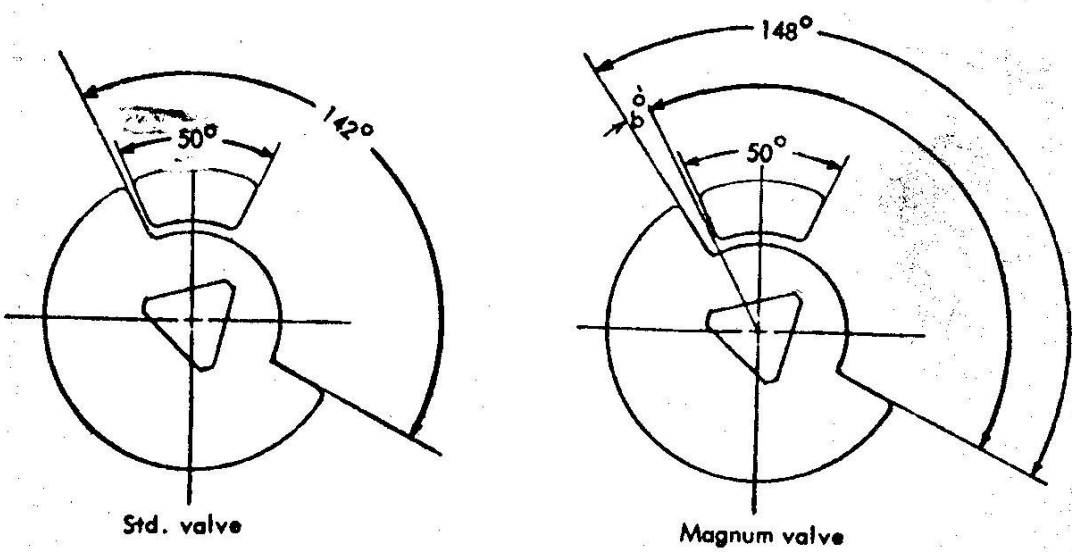
### OPTIONAL RACING PARTS

#### 10° ROTARY VALVE DISC DRIVERS



Std. disc driver      10° disc driver

#### MAGNUM ROTARY VALVE



Std. valve      Magnum valve

Note - Magnum valve opens 6° more on trailing edge only