

# 4610809

tarmac rally - race

Opel C20XE with distributor

I-4cyl 2.0L 16v DOHC (DTH/DTH)



### intake

### exhaust

#### camshaft data:

lash ramp	: 0.25mm	0.25mm
duration @ 0.1mm	: 301°	293°
duration @ 1.0mm	: 254°	246°
valve lift	: 12.50mm	12.00mm
cam lift	:	
lobe angle	: 106°	106°
timing @ 1.0mm	: 21° / 53°	49° / 17°
valve lift @ TDC	: 3.95mm	3.40mm

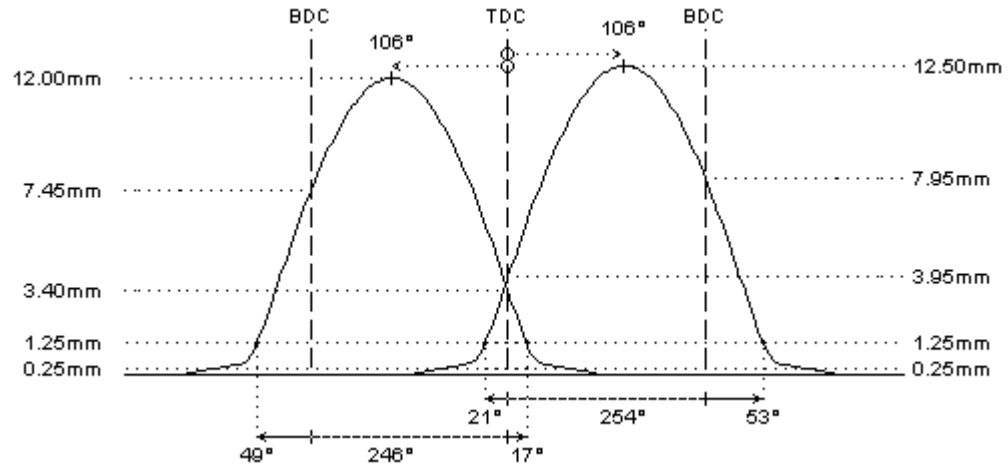
#### parts setup:

cam wheels :	: <b>CSK5058</b>	: <b>CSK5058</b>
follower	: <b>CC004</b>	: <b>CC004</b>
valve lash	: <b>TS102</b>	: <b>TS102</b>
valve	: O.E.M.	: O.E.M.
valve locks	: O.E.M.	: O.E.M.
upper retainer	: <b>99341</b>	: <b>99341</b>
lower retainer	: <b>remove</b>	: <b>remove</b>
exterior spring	: <b>PAC-E92009</b>	: <b>PAC-E92009</b>
interior spring	: <b>PAC-I92009</b>	: <b>PAC-I92009</b>

fitted load / length	: 33kg @ 33.5mm	: 33kg @ 33.5mm
max. load / lift	: 94kg @ 12.5mm	: 94kg @ 12.5mm

#### REMARKS :

# replace OEM lower retainer to obtain a correct installation / fitted length (currently not available)



#### REMARKS :

- # - profiles for conversion to mechanic race cam followers
- camshafts available in cast iron or optional gundrilled steel billet (short competition version without distributor drive end)
- # FOR COMPETITION APPLICATIONS ONLY. Following details must be verified:
  - the camshafts must turn smooth in the cylinderhead, provide free travel by machining where needed
  - distance between valve seal and retainer at full lift must be 0.6mm at least
  - minimum valve spring travel of 1.0mm at full lift must be provided
  - distance between valve and piston 1.0mm (pref. 1.5mm). check 5-15° before TDC on exhaust, and after TDC on intake
- # ONLY for use in competition engines with independent engine management (throttle position sensor) or carburettors