

# 7608134

tarmac rally - race

Volkswagen AER, ALL 50hp

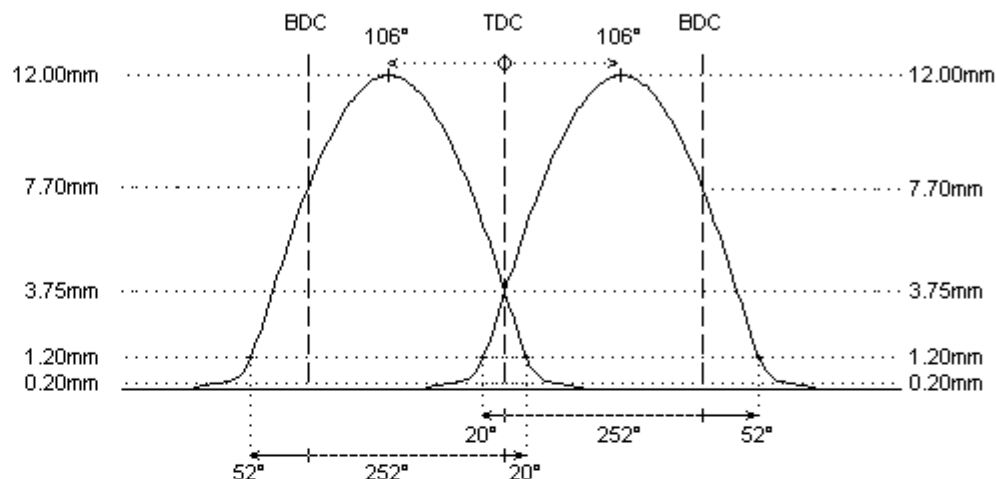
I-4cyl 1.0L 8v SOHC (DTH/DTH)



|                       | intake          | exhaust         |
|-----------------------|-----------------|-----------------|
| <b>camshaft data:</b> |                 |                 |
| lash ramp             | : 0.20mm        | 0.20mm          |
| duration @ 0.1mm      | : 290°          | 290°            |
| duration @ 1.0mm      | : 252°          | 252°            |
| valve lift            | : 12.00mm       | 12.00mm         |
| cam lift              | :               |                 |
| lobe angle            | : 106°          | 106°            |
| timing @ 1.0mm        | : 20° / 52°     | 52° / 20°       |
| valve lift @ TDC      | : 3.75mm        | 3.75mm          |
| <b>parts setup:</b>   |                 |                 |
| cam wheels :          | :               | :               |
| follower              | :  CC005        | :  CC005        |
| valve lash            | :  TS102        | :  TS102        |
| valve                 | : O.E.M.        | : O.E.M.        |
| valve locks           | : O.E.M.        | : O.E.M.        |
| upper retainer        | : O.E.M.        | : O.E.M.        |
| lower retainer        | : O.E.M.        | : O.E.M.        |
| exterior spring       | :  PAC-E92009   | :  PAC-E92009   |
| interior spring       | :  PAC-I99861   | :  PAC-I99861   |
| fitted load / length  | : 32kg @ 31.5mm | : 32kg @ 31.5mm |
| max. load / lift      | : 95kg @ 12.0mm | : 95kg @ 12.0mm |

## REMARKS :

- # different valve spring setups have been used in the original engines:  
please double check the measurements and contact Catcams in case of doubt
- # ONLY for 7mm valves with tripple groove (MK-7H valve keepers)



## REMARKS :

- # Different OEM camshafts were used in this engine family. For ordering the correct sports camshaft, please check:
  - engine reference code
  - cam reference code
  - cam lift
  - keyway position: centered between 1st and 2nd cam lobe (54°)(76061xx) OR close to 1st cam lobe (22°)(76161xx)
- Example: engine code "AER" has camshaft code "030 BG", cam lift "8.5mm" and keyway close to 1st cam lobe.
- # a) 8mm valve stem - engines until 07/1994  
use hard anodised aluminum retainers (ref. 99326) and double valve springs (ref. 902-5009) with fitted length 35-36mm  
b) 7mm/0.275" valve stem engines from 08/1994 (types: AEV, ABD, ADX, AEA, ABU, AEE, AEX, AKU, AEF)  
use single valve springs (ref. 902-0019) on hard anodised aluminum retainers (ref. 99376)
- # - valve clearance is to be adjusted using mechanical lash caps  
- please make sure that the lash cap does not touch the valve locks !
- # 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 carburetors