1031511

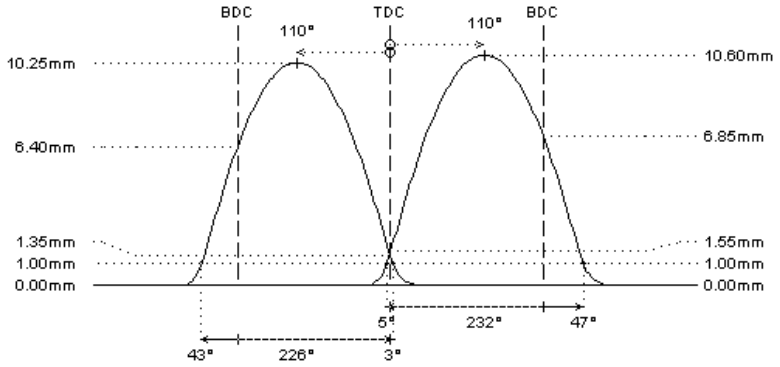
sport

Fiat 192 A4.000 133hp

I-4cyl 1.7L 16v DOHC (DTH/DTH)

	intake	exhaust
camshaft data:		
lash ramp	: hydro	hydro
duration @ 0.1mm	: 265°	257°
duration @ 1.0mm	: 232°	226°
valve lift	: 10.60mm	10.25mm
cam lift	:	
lobe angle	: 110°	110°
timing @ 1.0mm	: 5° / 47°	43° / 3°
valve lift @ TDC	: 1.55mm	1.35mm
parts setup:		
cam wheels :	:	:
follower	: O.E.M.	: O.E.M.
valve lash	: O.E.M.	: O.E.M.
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	: O.E.M.	: O.E.M.
interior spring	: O.E.M.	: O.E.M.
fitted load / length	: 39kg @ 33.8mm	: 39kg @ 33.8mm
max. load / lift	: 80kg @ 10.5mm	: 77kg @ 10.0mm

REMARKS :



REMARKS :

\# camshafts for use with STD VVT (vanos) system

\# The VANOS (VVT) system on the intake camshaft changes the PD from 117° to 92°.
The data are shown for full intake retard (disengaged VVT). Check distance between valves and piston to be 1mm at least with VVT engaged. Wrong installation will cause severe engine damage!

\# ONLY for dirt track applications and pro street use with adjustable engine management or carburettors

1031512

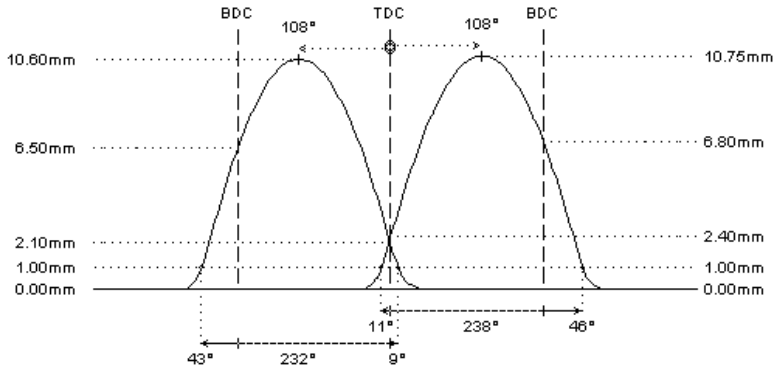
sport

Fiat 192 A4.000 133hp

I-4cyl 1.7L 16v DOHC (DTH/DTH)

	intake	exhaust
camshaft data:		
lash ramp	: hydro	hydro
duration @ 0.1mm	: 268°	265°
duration @ 1.0mm	: 237°	232°
valve lift	: 10.75mm	10.60mm
cam lift	:	
lobe angle	: 108°	108°
timing @ 1.0mm	: 11° / 46°	43° / 9°
valve lift @ TDC	: 2.40mm	2.10mm
parts setup:		
cam wheels :	:	:
follower	: O.E.M.	: O.E.M.
valve lash	: O.E.M.	: O.E.M.
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	: O.E.M.	: O.E.M.
interior spring	: O.E.M.	: O.E.M.
fitted load / length	: 39kg @ 33.8mm	: 39kg @ 33.8mm
max. load / lift	: 80kg @ 10.5mm	: 77kg @ 10.0mm

REMARKS :



REMARKS :

\# camshafts for use with STD VVT (vanos) system

\# The VANOS (VVT) system on the intake camshaft changes the PD from 117° to 92°.
The data are shown for full intake retard (disengaged VVT). Check distance between valves and piston to be 1mm at least with VVT engaged. Wrong installation will cause severe engine damage!

\# ONLY for dirt track applications and pro street use with adjustable engine management or carburettors

1031563

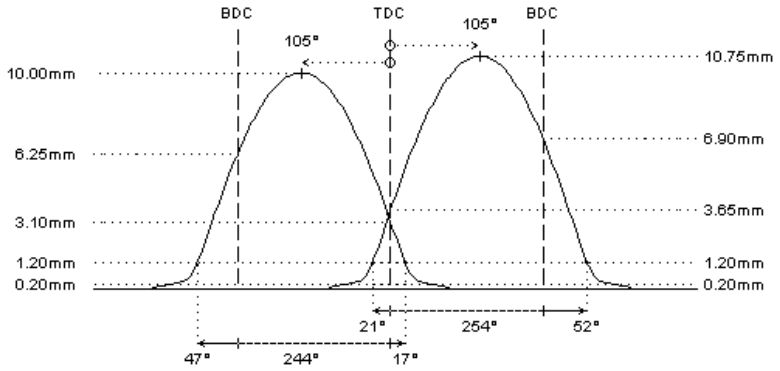
hot street - dirt track

Fiat 192 A4.000 133hp

I-4cyl 1.7L 16v DOHC (DTH/DTH)

	intake	exhaust
camshaft data:		
lash ramp	: 0.20mm	0.20mm
duration @ 0.1mm	: 291°	283°
duration @ 1.0mm	: 253°	244°
valve lift	: 10.75mm	10.00mm
cam lift	:	
lobe angle	: 105°	105°
timing @ 1.0mm	: 21° / 52°	47° / 17°
valve lift @ TDC	: 3.65mm	3.10mm
parts setup:		
cam wheels :	: CTAR001	: CTAR001
follower	: CC002	: CC002
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	: O.E.M.	: O.E.M.
interior spring	: O.E.M.	: O.E.M.
fitted load / length	: 39kg @ 33.8mm	: 39kg @ 33.8mm
max. load / lift	: 77kg @ 10.5mm	: 77kg @ 10.5mm

REMARKS :



REMARKS :

camshafts for use with STD VVT (vanos) system

valve clearance is to be adjusted using mechanical lash caps. these can have different shapes according the application:
- plates available in different diameters and thickness
- cups for different valve stem diameters. these center on either tappet or valve stem
- other specific shapes available on request

FOR COMPETITION APPLICATIONS ONLY. Following details must be verified:
- the camshafs 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

1031575

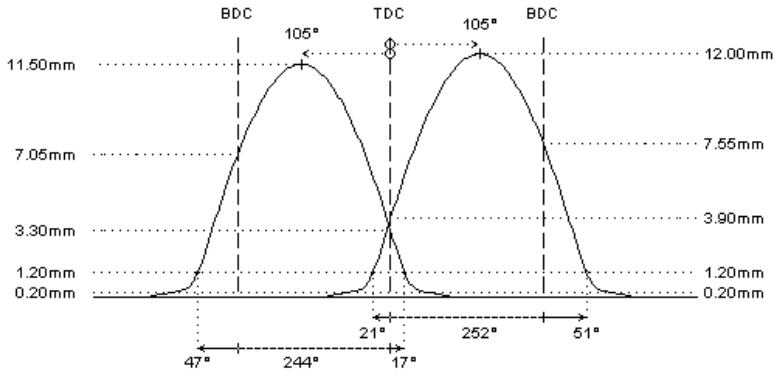
tarmac rally - race

Fiat 192 A4.000 133hp

I-4cyl 1.7L 16v DOHC (DTH/DTH)

	intake	exhaust
camshaft data:		
lash ramp	: 0.20mm	0.20mm
duration @ 0.1mm	: 290°	282°
duration @ 1.0mm	: 252°	244°
valve lift	: 12.00mm	11.50mm
cam lift	:	
lobe angle	: 105°	105°
timing @ 1.0mm	: 21° / 51°	47° / 17°
valve lift @ TDC	: 3.90mm	3.30mm
parts setup:		
cam wheels :	: **CTAR001**	: **CTAR001**
follower	: **CC002**	: **CC002**
valve lash	: **TS102**	: **TS102**
valve	: O.E.M.	: O.E.M.
valve locks	: O.E.M.	: O.E.M.
upper retainer	: **99371**	: **99371**
lower retainer	: O.E.M.	: O.E.M.
exterior spring	: **PAC-E92009**	: **PAC-E92009**
interior spring	: **PAC-I92009**	: **PAC-I92009**
fitted load / length	: 39kg @ 33.0mm	: 39kg @ 33.0mm
max. load / lift	: 100kg @ 12.5mm	: 100kg @ 12.5mm

REMARKS :



REMARKS :

\# camshafts for use with STD VVT (vanos) system

\# valve clearance is to be adjusted using mechanical lash caps. these can have different shapes according the application:
- plates available in different diameters and thickness
- cups for different valve stem diameters. these center on either tappet or valve stem
- other specific shapes available on request

\# FOR COMPETITION APPLICATIONS ONLY. Following details must be verified:
- the camshafs 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

1031576

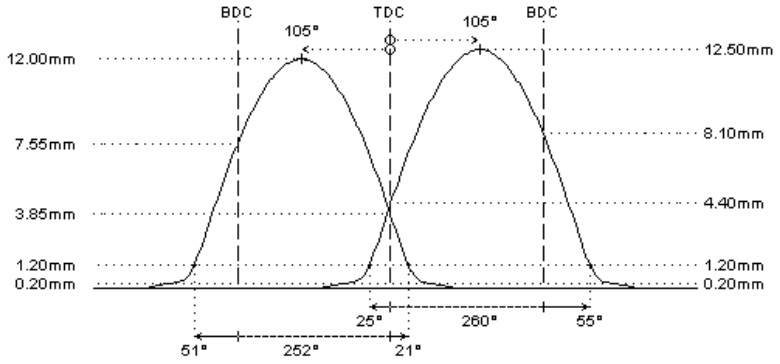
tarmac rally - race

Fiat 192 A4.000 133hp

I-4cyl 1.7L 16v DOHC (DTH/DTH)

	intake	exhaust
camshaft data:		
lash ramp	: 0.20mm	0.20mm
duration @ 0.1mm	: 298°	290°
duration @ 1.0mm	: 260°	252°
valve lift	: 12.50mm	12.00mm
cam lift	:	
lobe angle	: 105°	105°
timing @ 1.0mm	: 25° / 55°	51° / 21°
valve lift @ TDC	: 4.40mm	3.85mm
parts setup:		
cam wheels :	: **CTAR001**	: **CTAR001**
follower	: **CC002**	: **CC002**
valve lash	: **TS102**	: **TS102**
valve	: O.E.M.	: O.E.M.
valve locks	: O.E.M.	: O.E.M.
upper retainer	: **99371**	: **99371**
lower retainer	: O.E.M.	: O.E.M.
exterior spring	: **PAC-E92009**	: **PAC-E92009**
interior spring	: **PAC-I92009**	: **PAC-I92009**
fitted load / length	: 39kg @ 33.0mm	: 39kg @ 33.0mm
max. load / lift	: 100kg @ 12.5mm	: 100kg @ 12.5mm

REMARKS :



REMARKS :

\# camshafts for use with STD VVT (vanos) system

\# valve clearance is to be adjusted using mechanical lash caps. these can have different shapes according the application:
- plates available in different diameters and thickness
- cups for different valve stem diameters. these center on either tappet or valve stem
- other specific shapes available on request

\# FOR COMPETITION APPLICATIONS ONLY. Following details must be verified:
- the camshafs 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

1031577

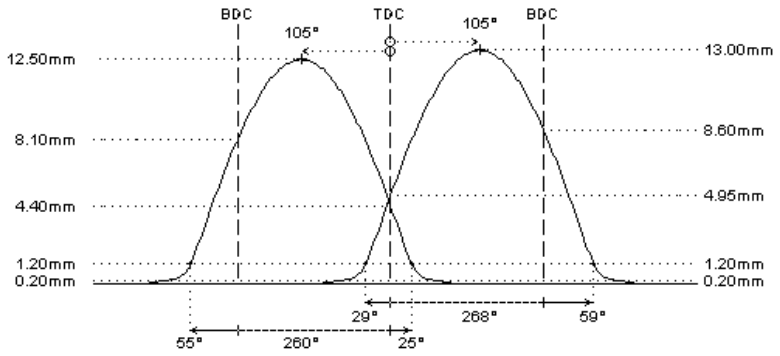
full race

Fiat 192 A4.000 133hp

I-4cyl 1.7L 16v DOHC (DTH/DTH)

	intake	exhaust
camshaft data:		
lash ramp	: 0.20mm	0.20mm
duration @ 0.1mm	: 307°	298°
duration @ 1.0mm	: 268°	260°
valve lift	: 13.00mm	12.50mm
cam lift	:	
lobe angle	: 105°	105°
timing @ 1.0mm	: 29° / 59°	55° / 25°
valve lift @ TDC	: 4.95mm	4.40mm
parts setup:		
cam wheels :	: **CTAR001**	: **CTAR001**
follower	: **CC002**	: **CC002**
valve lash	: **TS102**	: **TS102**
valve	: O.E.M.	: O.E.M.
valve locks	: O.E.M.	: O.E.M.
upper retainer	: **99371**	: **99371**
lower retainer	: O.E.M.	: O.E.M.
exterior spring	: **PAC-E92009**	: **PAC-E92009**
interior spring	: **PAC-I92009**	: **PAC-I92009**
fitted load / length	: 39kg @ 33.0mm	: 39kg @ 33.0mm
max. load / lift	: 100kg @ 12.5mm	: 100kg @ 12.5mm

REMARKS :



REMARKS :

\# camshafts for use with STD VVT (vanos) system

\# valve clearance is to be adjusted using mechanical lash caps. these can have different shapes according the application:
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- the camshafs 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

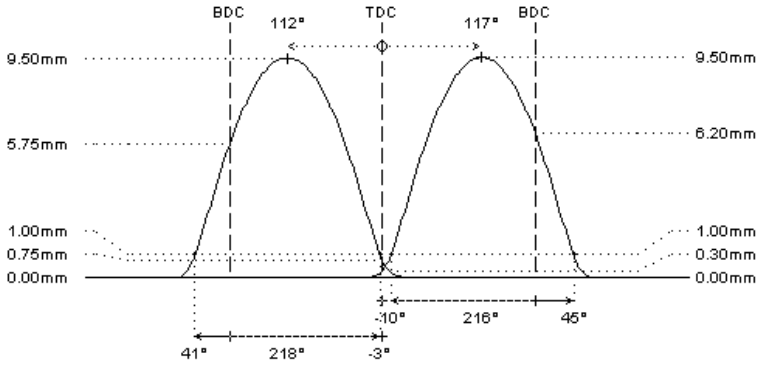
O.E.M.

Fiat 192 A4.000 133hp

I-4cyl 1.7L 16v DOHC (DTH/DTH)

	intake	exhaust
camshaft data:		
lash ramp	: hydro	hydro
duration @ 0.1mm	: 247°	251°
duration @ 1.0mm	: 215°	218°
valve lift	: 9.50mm	9.50mm
cam lift	:	
lobe angle	: 117°	112°
timing @ 1.0mm	: -10° / 45°	41° / -3°
valve lift @ TDC	: 0.30mm	0.75mm
parts setup:		
cam wheels :	:	:
follower	: O.E.M.	: O.E.M.
valve lash	: O.E.M.	: O.E.M.
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	: O.E.M.	: O.E.M.
interior spring	: O.E.M.	: O.E.M.
fitted load / length	: 39kg @ 33.8mm	: 39kg @ 33.8mm
max. load / lift	: 80kg @ 10.5mm	: 77kg @ 10.0mm

REMARKS :



REMARKS :

\# camshafts for use with STD VVT (vanos) system

\# The VANOS (VVT) system on the intake camshaft changes the PD from 117° to 92°.
The data are shown for full intake retard (disengaged VVT). Check distance between valves and piston to be 1mm at least with VVT engaged. Wrong installation will cause severe engine damage!