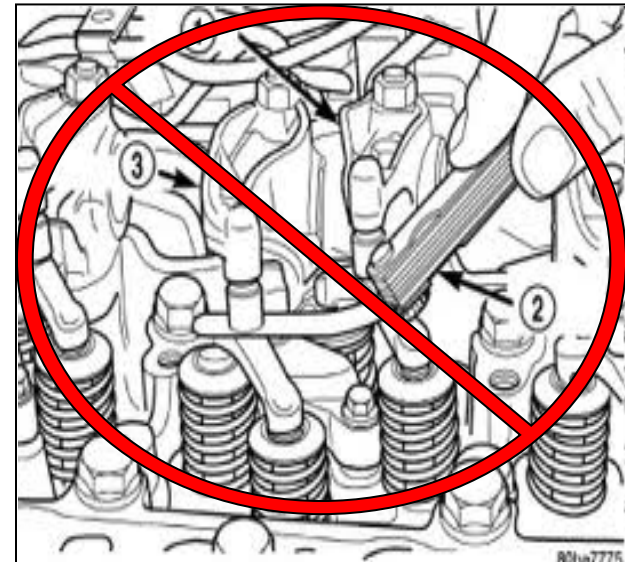


Traditional automatic lash adjusting valvetrains cannot be fitted to valvetrains with engine retarders (such as Jake Brake)

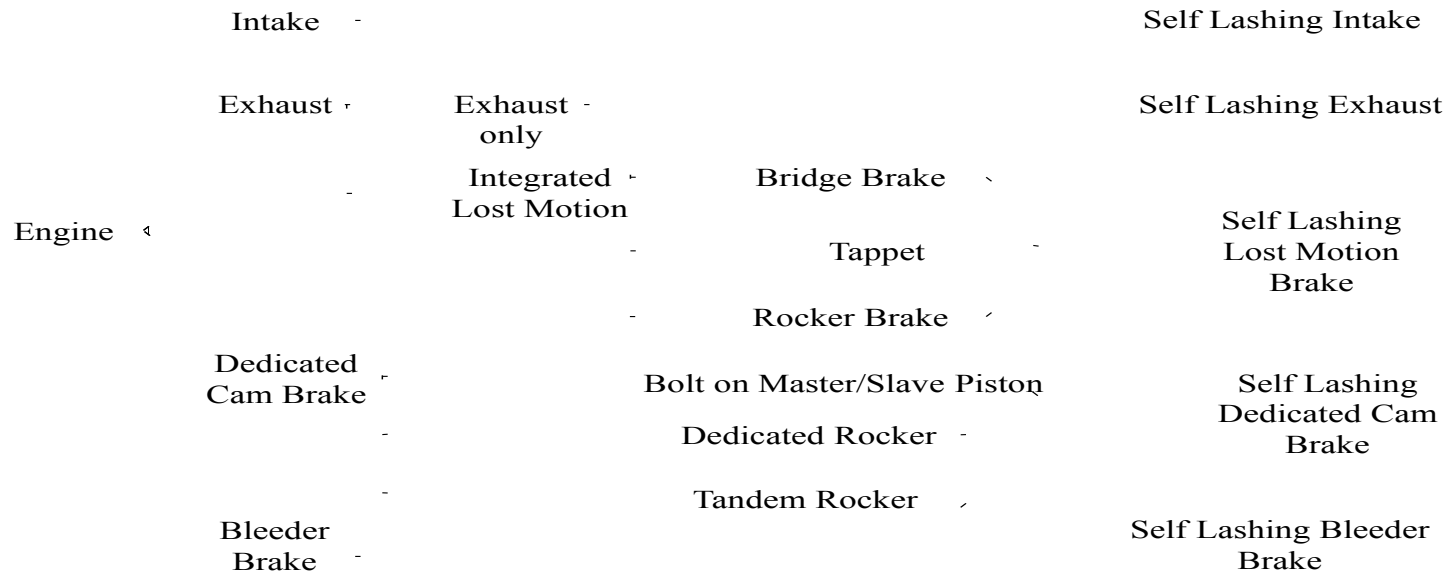
- Separation of exhaust bridge from rocker result in lash adjuster pump up
- Pump up result in piston to valve interference

Jacobs lashless system for valvetrains incorporating engine retarders

- Adjust lash during assembly and operation (positive power and retarding)
- Reduced assembly time / cost for engine OEM
- Improved valve timing accuracy
- Reduced maintenance for owner.



Lashless Road Map



Challenges:

- Variants in mechanism architecture depending on valvetrain architecture
- Minimize cost impact of additional functionality
- Robust confirmation of all system benefits beyond the need for lash setting on engine assembly and in service
- Repeatability of valve opening / closing and valve lift resulting in P&E benefit
- Reduced valve train related NVH and improved valve train durability