SPARK PLUG INSTALLATION TIPS

- Refer to current NGK catalogue for correct spark plug selection
- · Check condition and cleanliness of threads in cylinder head
- Ensure plug is gapped according to vehicle manufacturers specification (*fig 1*)
- Multi ground electrode and precious metal plugs should not be regapped visual inspection only
- Install new spark plug *by hand* until it seats *(fig 2)* a length of rubber tubing pushed over the insulator can be a useful aid for plug installation where access is difficult
- Tighten to specified torque setting as shown in the chart below (fig 3)
- If a torque wrench is unavailable then refer to vehicle/engine manufacturers
 installation instructions or the tightening angle advice which is displayed on current
 NGK packaging (excluding specialist race plugs). Note that this angle advice can
 differ between part numbers due to individual spark plug design (e.g. seating type,
 thread diameter and gasket material)
- It is important not to over or under tighten spark plugs during installation. Overtightening can lead to distortion of the spark plug. Under-tightening can cause overheating due to poor heat dissipation. *In extreme cases incorrect tightening can cause spark plug breakage and/or engine damage*
- NGK does not recommend the application of lubricant to spark plug threads as the resultant reduction of frictional forces at the thread faces will render the torque charts inaccurate and over tightening could occur
- If a gasket type spark plug is re-installed, it should only require a further 1/12 of a turn after it has been seated
- Always carefully use the correct tools for removal/installation to prevent damage to the spark plug or engine

3	FOF	TAPER SEAT TYPE						
Thread Ø	18 mm	14 mm	12 mm	10 mm 8 mm		18 mm	14 mm	
Cast iron head	35-45Nm	25-35Nm	15-25Nm	10-15Nm	-	20-30Nm	15-25Nm	
	(3.5-4.5kgm)	(2.5-3.5kgm)	(1.5-2.5kgm)	(1.0-1.5kgm)		(2.0-3.0kgm)	(1.5-2.5kgm)	
	(25.3-32.5lbs ft)	(18.0-25.3lbs ft)	(10.8-18.0lbs ft)	(7.2-10.8lbs ft)		(14.5-21.6lbs ft)	(10.8-18.0lbs ft)	
Aluminium head	35-40Nm	25-30Nm	15-20Nm	10-12Nm	8-10Nm	20-30Nm	10-20Nm	
	(3.5-4.0kgm)	(2.5-3.0kgm)	(1.5-2.0kgm)	(1.0-1.2kgm)	(0.8-1.0kgm)	(2.0-3.0kgm)	(1.0-2.0kgm)	
	(25.3-28.9lbs ft)	(18.0-21.6lbs ft)	(10.8-14.5lbs ft)	(7.2-8.7lbs ft)	(5.8-7.2lbs ft)	(14.5-21.6lbs ft)	(7.2-14.5lbs ft)	

Inspect spark plug cover and renew if necessary

Important: Some spark plugs differ in gasket design or material, refer to tightening advice on specific spark plug packaging

SPARK PLUG GAP SETTINGS

Important: Spark plug gap settings are given in millimetres. Practical equivalents are shown below.

mm	0.4	0.5	0.6	0.7	0.8	0.9	1.0	1.1	1.3	1.4	1.5	1.6	1.8	2.0
-														
ins	.016	.020	.024	.028	.032	.035	.039	.043	.051	.055	.059	.063	.071	.079



