

## ULTRAGATE SPRING UPGRADE KIT INSTRUCTIONS

### IMPORTANT NOTES ON FITTING YOUR ULTRAGATE SPRING UPGRADE KIT

Turbosmart recommends that this kit is fitted by an appropriately qualified technician.

Please visit the Turbosmart web-site [www.turbosmart.com.au](http://www.turbosmart.com.au) for the latest updates on fitting this product.

Fitting this Ultragate Spring Upgrade Kit to your wastegate allows the tuner to add a 7 psi inner wastegate spring to the existing 7 psi or 10 psi outer wastegate springs. By using combinations of these 3 springs the following base boost pressures can be achieved.

Base Boost Pressure	7 psi	10 psi	14 psi	17 psi
Ultra-Gate 7 psi Inner Spring			•	•
Ultra-Gate 7 psi Outer Spring	•		•	
Ultra-Gate 10 psi Outer Spring		•		•

### PACKING LIST

Please check that the following items have been supplied in your Ultragate Spring Upgrade Kit.

QTY	Part Number	Description
1	RM-AKEY-5MM	5mm Allen Key
1	FG-WG-SPANNER	Wastegate Valve Spanner
1	MP-WG-DIASUP-UP	Upper Diaphragm Spring Support
1	MP-WG-DIASUP-LW	Lower Diaphragm Support
1	RM-WG35-SPNG-07IN	Ultra-Gate 7 psi Inner Spring
1	RM-WG35-SPNG-10	Ultra-Gate 10 psi Outer Spring
1	RM-WG-M6GLOCK-SS	M6 GlennLock Nut
2	RM-WG35-GSKT-BM	Gasket, Belpa Mica
2	RM-WG35-M8 NUT	M8 Nut
2	RM-M8x25 SHCS	M8x25 Screw
2	RM-M8x35 SHCS	M8x35 Screw

### WASTEGATE SPRING IDENTIFICATION

To aid in the identification of these springs they are supplied colour coded. If this colour coding is not clear please use the dimensions in the following table to identify the wastegate spring.

Part Number	Spring Type	OD	Length	Wire Diameter	Colour
RM-WG35-SPNG-07IN	Ultra-Gate 7 psi Inner	36.5mm	54.0mm	3.15mm	<b>WHITE</b>
RM-WG35-SPNG-07	Ultra-Gate 7 psi Outer	45.0mm	75.0mm	3.15mm	<b>PURPLE</b>
RM-WG35-SPNG-10	Ultra-Gate 10 psi Outer	45.0mm	77.0mm	3.50mm	<b>BLUE</b>

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### FITTING YOUR ULTRAGATE RETROFIT KIT

Please thoroughly read and understand these fitting instructions before commencing this installation

1. Remove the Ultragate from the exhaust manifold. Use **CAUTION!** the wastegate may still be **HOT!**

2. Using the supplied 5mm Allen Key, remove the 6mm Allen head screws that secure the upper wastegate cap.

**WARNING!** The cap is under spring tension, wear safety glasses and remove with care!



3. Remove the wastegate spring and inspect the upper diaphragm spring support.

If your wastegate is fitted with a billet machined upper diaphragm spring support as pictured below, you do not need to replace the upper and lower diaphragm spring supports. Proceed to step **13**.



4. If your wastegate is fitted with a pressed upper diaphragm spring support as pictured below, proceed to the next step. (Step 5.)



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5. Lock the wastegate valve by locating the pins on the wastegate spanner on the top of the wastegate valve as shown below.



6. Remove the M6 GlennLock nut using a 10mm wrench or spanner and discard.



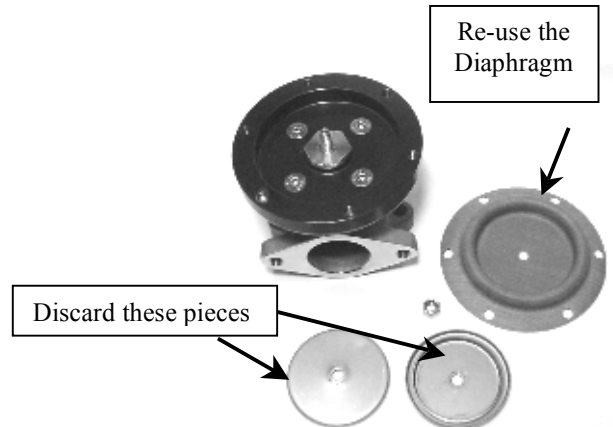
7. Remove the pressed upper diaphragm spring supports and discard.

Carefully remove the wastegate diaphragm.

**CAUTION!** Do not tear or damage the diaphragm as it must be re-used when re-assembling your Ultragate.



8. Remove the pressed lower diaphragm spring support and discard.



9. Fit the new billet machined lower diaphragm support with the smooth side up and the lipped side facing down.

Lipped side  
faces down.



10. Refit the wastegate diaphragm, smooth side down, with the moulded roll facing upwards as shown below.



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**11.** Fit the new billet machined upper diaphragm spring support, smooth side down, with the grooved surface facing upwards.



**12.** Fit the new M6 GlennLock nut using Loctite or a similar thread locking product.

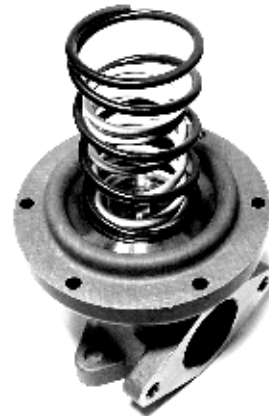
Lock the wastegate valve again using the wastegate spanner and tighten the M6 GlennLock nut to a torque of 5 N-m (3.7 lb-ft) using a tension wrench.



**13.** Align the six holes on the outer ring of the wastegate diaphragm with the 6 holes in the lower wastegate cap.



**14.** Select and fit the required wastegate spring or springs to the upper diaphragm spring support. See (spring info) for information on wastegate spring identification.



**15.** Refit the upper wastegate cap re-using the 6mm Allen head screws. Use Loctite or a similar thread locking product on these screws.

Ensure that the diaphragm remains correctly aligned.

Tighten the 6mm Allen head screws using the supplied 5mm Allen Key, or suitable tool, and torque to 8 N-m (5.9 lb-ft)

**16.** Refit the wastegate to the exhaust manifold using the supplied gaskets and screws if required.



**PART  
NUMBER**

## **ULTRAGATE SPRING UPGRADE KIT INSTRUCTIONS**

### **WARRANTY**

Turbosmart warrants its products to be free from faults or defects for the life of the product. \*  
\* Subject to Turbosmart trading terms and conditions

### **WARNING!**

Incorrect use of this product may result in damage to your vehicle. Failure to observe any notes or recommendations may result in incorrect use of this product. This product is intended for use in off-road racing only. Turbosmart will accept no responsibility for the incorrect use of this product.

### **DISCLAIMER!**

Turbosmart will not be held responsible for any damage caused to property or person, directly or indirectly related to the use of any Turbosmart products.

### **THE TURBOSMART PLEDGE**

**DO NOT USE ANY TURBOSMART PRODUCT UNTIL YOU HAVE CAREFULLY READ AND UNDERSTOOD THE FOLLOWING AGREEMENT.**

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We sometimes make mistakes, as do our dealers, distributors and suppliers. Even customers can sometimes order the wrong parts. Do not use, modify, install, trial assemble, nick, drop, scratch or adjust any part until you first check for any damage. Damage must be reported immediately. NO EXCEPTIONS. If there are any components missing please contact your authorised reseller immediately upon receipt of your shipment. Missing components must be reported within five (5) business days of receipt. Parts returned for any reason MUST BE IN RESALABLE CONDITION. It is YOUR responsibility, "THE CUSTOMER" to carefully package any returns to avoid shipping damage. Insurance is highly recommended. Credit cannot be issued for damaged goods.

Turbosmart Pty Ltd warrants the quality of the products it designs and manufactures to be free of defects in material and workmanship. This limited warranty is extended only to the original purchaser and may not be transferred or assigned. This limited warranty applies to any product, which after careful inspection by Turbosmart Pty Ltd, after receipt of the product from our authorised reseller, is found to have a defect in either material or workmanship. Any modifications to the product will void any and all warranties and will not be exchanged. Before installation, check new car warranty. Turbosmart Pty Ltd is not responsible for voiding any original manufactures warranty.

All warranty claims must be returned to the authorised reseller, you must return the product and sales receipt, at your own expense, accompanied by a letter stating the reason for the claim. Proof of purchase must be provided with any warranty claim and will be verified with the authorised reseller from which the product was purchased.

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