

# GREDDY

## BLOW OFF VALVE FV11

### Instruction Manual

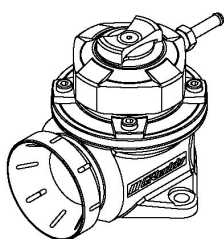
Please read the manual carefully before installing and using this product.

This product is for off road use only.

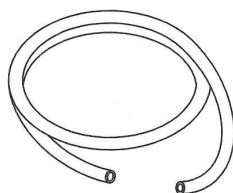
#### PARTS LIST

- |                             |    |                    |    |
|-----------------------------|----|--------------------|----|
| 1. BLOW OFF VALVE           | ×1 | 5. GASKET          | ×1 |
| 2. VACUUM HOSE 4.5φ         | ×1 | 6. BOLT·WASHER·NUT | ×2 |
| 3. THREE WAY FITTING 4-4-4φ | ×1 |                    |    |
| 4. THREE WAY FITTING 6-4-6φ | ×1 |                    |    |

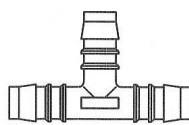
#### PARTS LIST



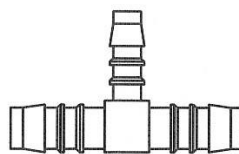
1



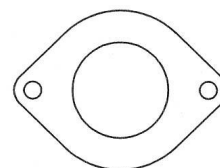
2



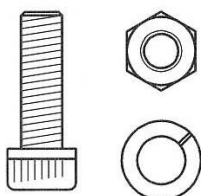
3



4



5



6

## SAFETY INFORMATION

### Important

- This Manual will explain the proper installation procedure of this product.  
Please read this manual carefully.
- This manual was created considering the vehicle to be completely factory spec.
- While using this product, please keep this manual to use as a reference.
- The notation shown below is used through out this manual.



#### Caution

This notation will indicate the important procedures and instructions to prevent accidents and injury.



#### Warning

This notation will indicate the important procedures and instructions to prevent life treating accidents and injury.

To install this product, the GReddy blow off valve mounting flange is required.  
In addition, please prepare other necessary parts such as piping and hoses.

Product Name	Description	Code
Mounting Flange	Aluminum	11900455

- ◆ Install the blow off valve between the intercooler and throttle valve.
- ◆ If sub injectors are used make sure to mount the injectors after the blow off valve between the blow off valve and the throttle body.
- ◆ On some applications, there are possibilities of engine stall if the air is released out to the atmosphere.

It is recommended to re-circulate the air back into intake system before the turbo in-let

To re-circulate the air, replacement of the discharge funnel with optional re-circulation hose adapter is required. .

※ Please prepare necessary part for installation.

Product Name	Description	Code
Re-circulation Adapter	19 $\phi$	11900440
	29 $\phi$	11900441
	32 $\phi$	11900442
	34 $\phi$	11900443



#### Caution

DO NOT disassemble or mishandle this product.  
This will cause the product failure and may damage the engine.

## Important

1. This product is for Competition “Racing” Use only in the USA.

In the USA, it is unlawful to tamper with your vehicle’s emissions equipment. GReddy / GPP (GReddy Performance Products, Inc.) products are designed and sold for sanctioned off-road/competition, non-emissions controlled vehicles only and may never be used on a public road or highway. Using GReddy/GPP products for street/road use on public roads or highways is prohibited by law unless a specific regulatory exemption exists (more information can be found on the SEMA Action Network website: [www.semasan.com/emissions](http://www.semasan.com/emissions) for state by state details in the USA.) It is the responsibility of the installer and/or user of this product to ensure compliance with all applicable local and federal laws and regulations. Please check with your local vehicle authority before purchasing, using or installing any GReddy/GPP product.

Legal for sale or use in CA only on vehicles which may never be driven on a public highway.

2. Installation of this product should be performed by an experienced mechanic.

Special tools and modification skills are necessary for the installation of this product.

3. Inspect the vehicle before the installation of this product.

Inspect the vehicle and make sure that there are no problems with the vehicle before installation.

4. Do not use this product for purpose other than what is intended for.

Damage due to modifications or misuse of this product will void any warranty.

## Important

1. Disconnect the negative terminal of the battery before installation
2. Make sure the engine room has cooled down before installation.
3. Removal and disassemble caution

Please follow the basic manufacturer’s recommended procedure.

Make sure to clean the parts that are reused and replace any parts that are damaged.

4. Installation and reassembly caution

Clean the parts thoroughly before installing the parts.

Make sure to replace gaskets with new part.

Please refer to the manufacturer’s torque spec chart for the proper torque specs for the bolts and nuts.

## Jacking and lifting precautions



### Caution

- When jacking up the front and rear of the vehicle, please make sure to lift the vehicle up at the proper jack points and use safety stands and Wheels chocks.
- When Lifting the vehicle, ensure that the front and rear of the vehicle are well balanced at the proper lift points.

**Important**



**Caution** Make sure to check the installation before operating the vehicle.



**Caution** Before starting the engine, make sure that there are no flammable items around the exhaust system and in the engine room.



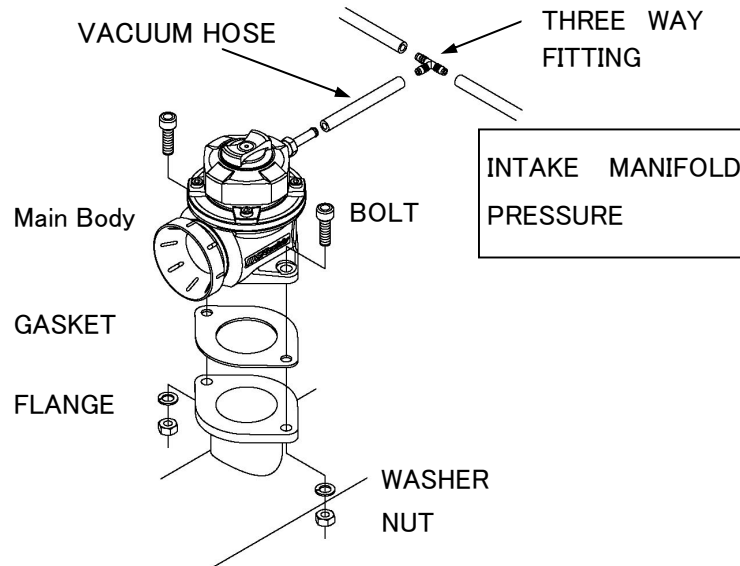
**Warning** Start the engine in a well-ventilated area.

Although we have taken all the possible measures to provide the highest quality products, we will not be responsible for any damage, or accidents caused by improper use, incorrect installation.

**GReddy Performance Products, Inc.**

## Installation

- (1) Install the blow off valve to the mounting flange (sold separately) using the provided gasket and hardware.
- (2) Connect the vacuum nipple on the top housing to the intake manifold pressure source. Use the three way fitting if necessary.



## Precautions regarding hose nipple replacement

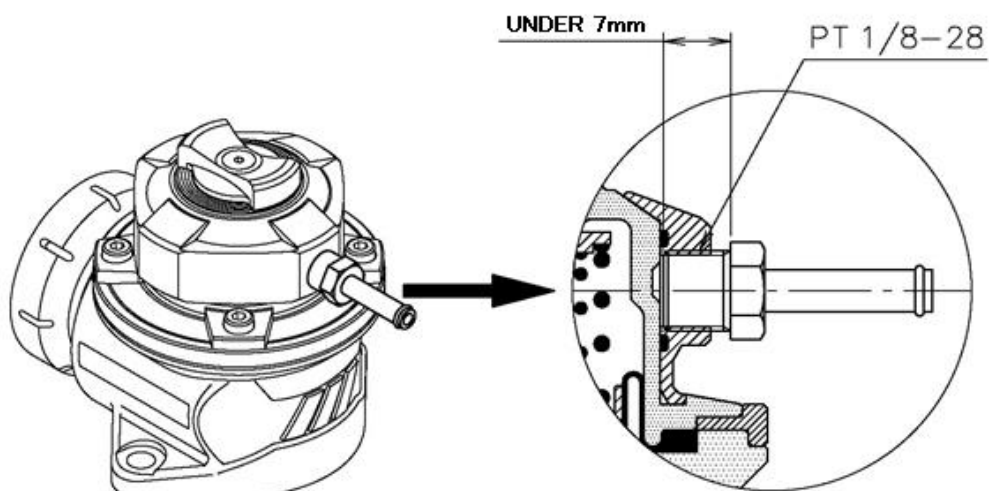
The threaded part of the hose nipple uses PT 1 / 8-28.

Due to the clearance with the internal components, we use special fitting with shorter threaded end.

If any fitting other than the included hose nipple is used, it may come in contact with internal parts of the BOV.

This will cause issues such as rough rotation of the top cover, pressure leakage, and damage to the threads.

When using other than what is supplied, refer to the specifications shown in the figure below. Be sure to use the one that meets the requirements or one that has been modified as shown in the figure below. Also make sure that the top cover rotates smoothly after assembly and that there is no pressure leak or damage to the threads.



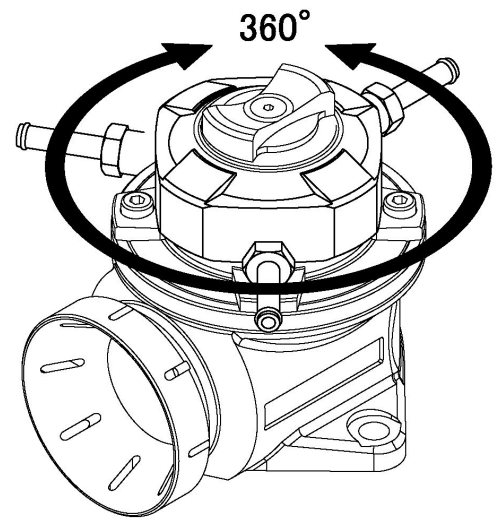
## Top cover instruction

The top cover with the union fitting can swivel 360 degrees to position the fitting to desired position by turning the housing.

If the housing is too stiff to rotate, loosen the 4 cap screws on top one turn to help loosen the housing. Once rotated to desired position, tighten the screws.

\*Top cover is spring loaded so please DO NOT remove the 4 cap bolts completely off.  
\*The o-ring inside the top cover may cause the housing not to turn smoothly. Try to free the seal by turning the housing left and right lightly without applying too much force to prevent damaging the o-ring.

When the M4 cap bolts were loosened to make the adjustments, please re-torque the bolts to N•m(kgf•m) 1.5(0.15)



## Starting the engine

- (1) Inspect the installation. Reconnect the negative terminal of the battery and start the engine.
- (2) Check and make sure that there no air leaks, clearance problems or irregular sound.
- (3) Lightly rev up the engine couple times to check if the blow off valve is operating.

## Adjustment after installation

The preload of the valve can be adjusted by turning the knob on the top of the unit.

Turn clockwise to increase the load to stiffen the valve. (HARD)

Turn counterclockwise to decrease to soften the valve. (SOFT)

The unit is shipped from the factory at the softest setting (full counterclockwise)

The knob has 6.5 rotation range.

- Turn the knob slowly, if turned too fast with force, the spring inside can turn with the knob internally and it will prevent proper adjustment.

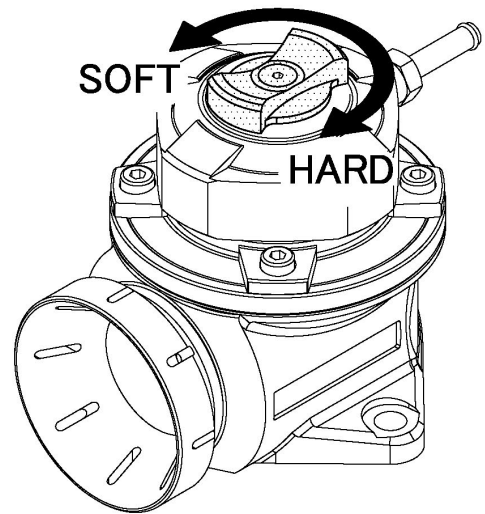
- If irregular idle or engine stall occurs, turn the adjustment knob clockwise until the problem is eliminated.

- To delay the relief timing or reduce the relief amount, turn the adjustment knob on top of the unit clockwise to desired setting.

**\*DO NOT try to rotate the knob past the rotation range. forcing the knob can damage the unit.**

- **Adjustment knob turned full clockwise takes out the stroke of the valve and will affect the proper operation of the valve.**

When venting the outlet to the atmosphere, depending on the application, the airflow meter voltage can drop enough to stall the vehicle when the blow off valve is discharged. If adjustment of the top screw cannot prevent the engine stall, ECU calibration will be required to prevent the engine stall or recirculation of the valve back to the intake pipe after the airflow meter will be required.



### Warning

If the engine stalls while operating the vehicle, the steering and the Brakes will not operate properly and can be very dangerous.