Product Name: BOV Kompact Supersonic Honda CTR

Product Description: BOV Kompact Supersonic Honda Civic

CTR/RS

Product Number: TS-0203-1017



IMPORTANT NOTES ON YOUR BOV

- Turbosmart accepts NO responsibility whatsoever for incorrect installation of this product which is potentially hazardous and can cause serious engine damage or personal injury.
- The Kompact series BOV is designed for use as a factory replacement
- Ensure the engine is cold prior to installation.

RECOMMENDATIONS

Turbosmart recommends that your Blow off valve (BOV) is fitted by an appropriately qualified technician

KIT CONTENTS

Please check that the following items have been provided in your BOV packaging

Part	Description	Use
1	Turbosmart Kompact Series BOV	Main unit
2	Hose Clamp	Fix plumb back hose to BOV
3	M6 Flange Bolts	Mount BOV to turbocharger compressor cover
4	Hose	Connect BOV to signal source
5	Turbosmart Sticker	Turbosmart sticker

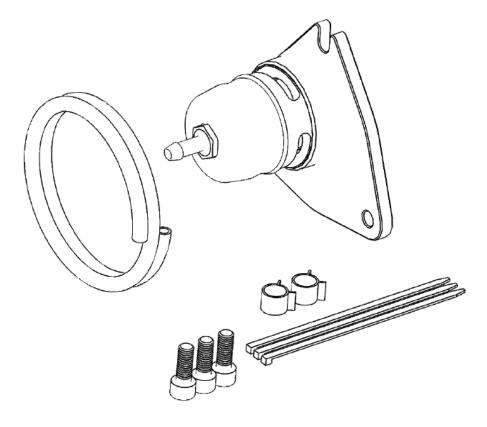


Figure 1 - Kit Contents

TOOLS REQUIRED

- 5mm hex key
- Screw drivers
- Pliers
- Socket Set

ABOUT YOUR KOMPACT SERIES BOV

A direct fit high performance replacement for the factory all plastic unit, the Turbosmart Kompact BOV suits the Honda Civic CTR/RS. The Turbosmart unit is made of billet aerospace grade aluminium with high temperature seals that allows for minimal leakage and a complete seal across the bypass aperture providing as much performance as possible.

Benefits include:

- Direct fit upgrade for the factory BOV on Honda Civic CTR/RS
- All billet CNC construction and attractive anodized finish
- Manufactured, assembled and validated in-house at Turbosmart HQ

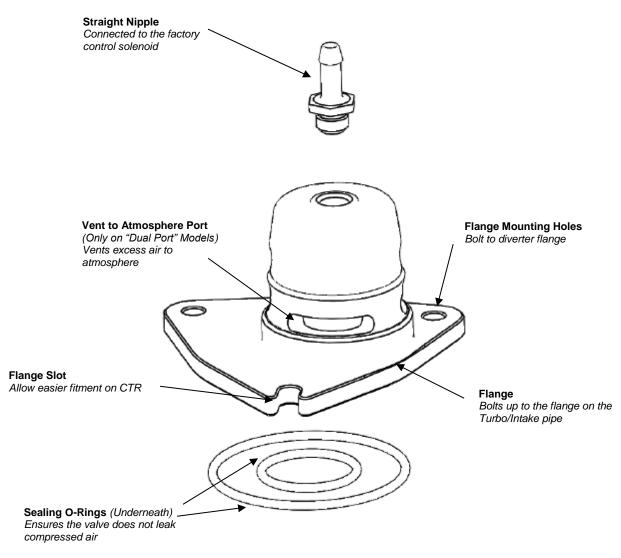


Figure 2 - i30N Kompact BOV Overview

FITTING YOUR BOV

1

Identify Diverter valve location

Identify the location of the factory Diverter Valve assembly, the diverter valve of the Civic is located on towards the front of the vehicle on the left when viewed from the front, it can be easily accessed on the RS variant however some parts will need to be removed to allow access on the CTR.

NOTE!

It may be required to remove auxiliary components to access the diverter valve, ensure you consult your local specialist or a service manual for correct disassembly procedures.



RS Diverter Valve



CTR Diverter Valve

2

Remove the OEM diverter valve

Remove the signal hose from the valve by releasing the spring action hose clamp.

Remove the three bolts holding the diverter valve to the charge pipe and remove from the engine bay.



RS Diverter Valve

After Removing the intake pipe from the CTR, the signal hose can be disconnected, and the three bolts removed from the valve.



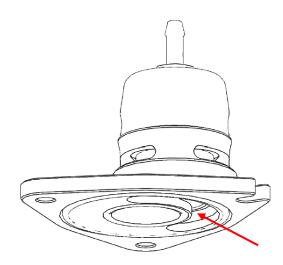
CTR Diverter Valve

3

Mount your new Turbosmart Kompact BOV

RS

Ensure both O-Rings are installed in the bottom of your Turbosmart BOV, align the slot in the bottom of the flange with the slot on the flange of the manifold



Bolt down using the supplied bolts.

CTR

Screw in one of the supplied bolts into the lowest mounting hole for the diverter valve. This only need to be screwed in a couple of threads

Ensure the O-rings are fitted to the flange of the BOV and slide the BOV into position past the heater hose aligning the slot in the flange with the pre-installed bolt. Manoeuvre the BOV to allow the other two bolts to be installed. Before tightening down ensuring the O-Rings are sitting correctly in the grooves.



Install Signal hose

Ensure O-Ring is on supplied nipple and screw into the cap of the BOV.

Follow the OEM signal hose to where it meets hard-line running over the top of the engine. Remove the factory rubber vacuum hose and replace with supplied hose using hose clamps, Connect the other end of the hose to your new Turbosmart BOV.

Trim to length for desired fitment and use supplied cable ties to tie the hose in place

Congratulations, your Turbosmart Kompact Series BOV is installed and ready for use. Double check all connections and mounting screws. Start your engine and check for leaks.

ADJUSTING YOUR BOV

The aim of the adjustment on the Dual port is to make sure that the piston is hard closed at idle and that the piston closes fast enough to minimise backfiring and not stall the engine. In most cases, the cap is in the correct position from factory.

INSTALL THE BOV WITH THE FACTORY SETTING FIRST BEFORE PERFORMING ANY ADJUSTMENT.

Adjustment to the BOV is made by rotating the cap. To increase the spring force on the piston, rotate the cap clockwise in the direction of hard as marked on the top of the cap. To decrease the spring force on the piston, rotate the cap anticlockwise in the direction of soft as marked on the top of the cap - <u>CAUTION</u> - Do not rotate the cap beyond the O-Ring groove.

- Start with the BOV cap at the maximum soft position (The indicator O-Ring should be completely covered by the edge of the cap)
- With the engine at idle the exhaust port should be closed off by the piston the piston should be hard against the seat and not floating or moving
- Free rev the engine and back off quickly, the engine should return to normal idle speed if the engine drops below idle or stalls increase the spring tension by one turn
- Repeat this process until the engine free revs and returns to normal idle speed
- Test drive the car and ensure that when decelerating or changing gears that the engine has minimal backfiring and no stalling. If
 backfiring is excessive or stalling is noticed then check all connections made during the installation, otherwise increase the spring
 tension

TROUBLE SHOOTING

The following points should be checked if you find that your engine is dipping below normal idle, stalling or if the BOV is functioning poorly. Please note: the following checks will cure 99% of problems experienced with a BOV.

- Check the vacuum hose for splits, cracks, loose connection, kinking or any obstruction old or fatigued hose may collapse under vacuum causing an obstruction.
- With the engine running remove the vacuum / boost hose from the nipple in the cap of the BOV, there should a loud hissing sound. The engine should idle poorly, double check by covering the end of the hose with your finger otherwise the hose is blocked
- Check to see if the BOV is blocked or contaminated with dirt or debris.
- Ensure that the vacuum / boost source is not shared and that the vacuum source is directly from the inlet manifold.
- Check the seal between the charge pipe flange and the BOV. Make sure the supplied O-Rings are installed properly and the BOV Flange is secured on the compressor cover flange with the 3 supplied screws.
- Ensure the spring clamps are secured on silicon hoses and fittings.
- If the valve does not open properly or is slow to react, it could be due to the mapping of the drive by wire system from such things as aftermarket chips and engine tunes. Check with the tuner that the mapping of the throttle is the same as OEM.
- The valve may not open if the engine is just free reved. Check that the valve operates by driving the vehicle.
