

**STANCEPARTS**



# INSTRUCTION MANUAL

**YOU ARE EXPECTED TO ASSEMBLE AND USE  
THE SYSTEM ACCORDING TO THIS MANUAL**

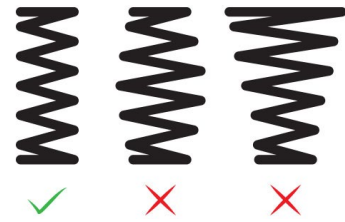
# 1. FITMENT

## SPRINGS

The air cups can only be installed on linear springs, it will not fit on "shaped" springs as shown in the figure.

**Maximum** spring outer diameter: 99mm.

**Minimum** spring inner diameter: 61mm. (57mm on request)



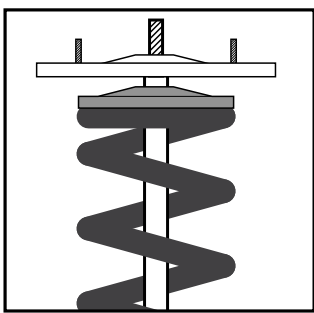
## RIDE HEIGHT

The air cup will take between 20 and 30mm of height. The air cup itself is 20mm thick and with most coilovers the top hat comes on top of the air cup, this will take around 10mm. If there is enough thread left on the coilovers to lower the springs, it won't be a problem. If not, you will need to install shorter springs.

## CLEARANCE

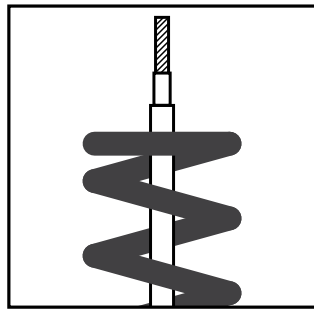
Make sure you have enough clearance around the coilovers, the air cups are 120mm in diameter, the fitting is 17mm. (110mm air cups available on request)

# 2. AIR CUP ASSEMBLY



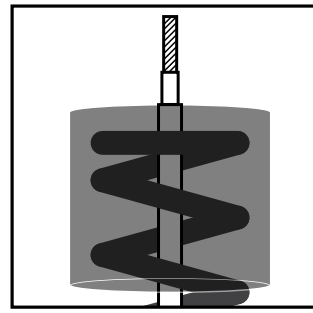
Start disassemble all the parts above the spring, take off any dust caps and bumpstops from the shaft.

Make sure that the shaft is not damaged and cleanse it from dirt.



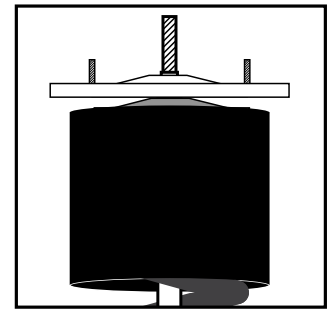
Lower the spring with 30mm to make place for the air cup. If present, remove any washers or clips from the shaft.

**\*optional:** Cut the bumpstops to give the damper more travel. We recommend to keep at least 15mm of bumpstop.



Place the aircup carefully over the shaft and make sure the air cup sits on the lower/thickest part of the shaft.

Make sure the spring fits well into the air cup.



Now assemble all parts in reverse order on top of the air cup. We recommend to set a minimal preload (step 3).

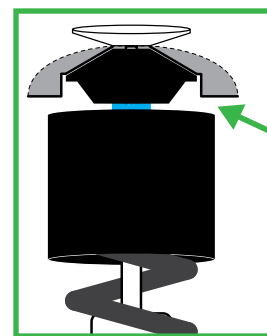
**\*if needed, place a spacer on top of the air cup.** See next step Clearance for more info.

# CLEARANCE

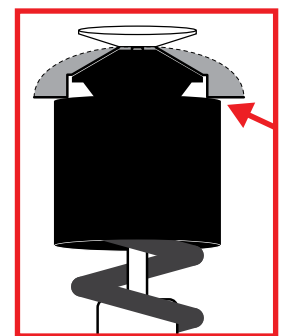
**Applies to MacPherson (rotating) coilovers only.**

Do you have MacPherson (rotating) coilovers on front? Keep in mind that the air cups will turn with the lower coilover body with steering. You have to make sure the air cups can rotate freely without coming in contact with the chassis. You can increase the clearance by adding a spacer on top of the air cup.

**Regularly check if the air cups don't twist, if they do then the clearance is too small.**



Good



Wrong

# 3. DROOP / REBOUND

The lift from the air cups comes from the droop / rebound of the coilovers. If you don't have enough droop, the air cups simply can't lift the full 50mm. A side effect of this is that when the air cups can't lift the full 50mm, the remaining lift will be compressing the spring. Depending on how much, this can cause a stiffer ride when aired up.

**If you're using the standard spring rates that came with your coilovers, it should be fine.**

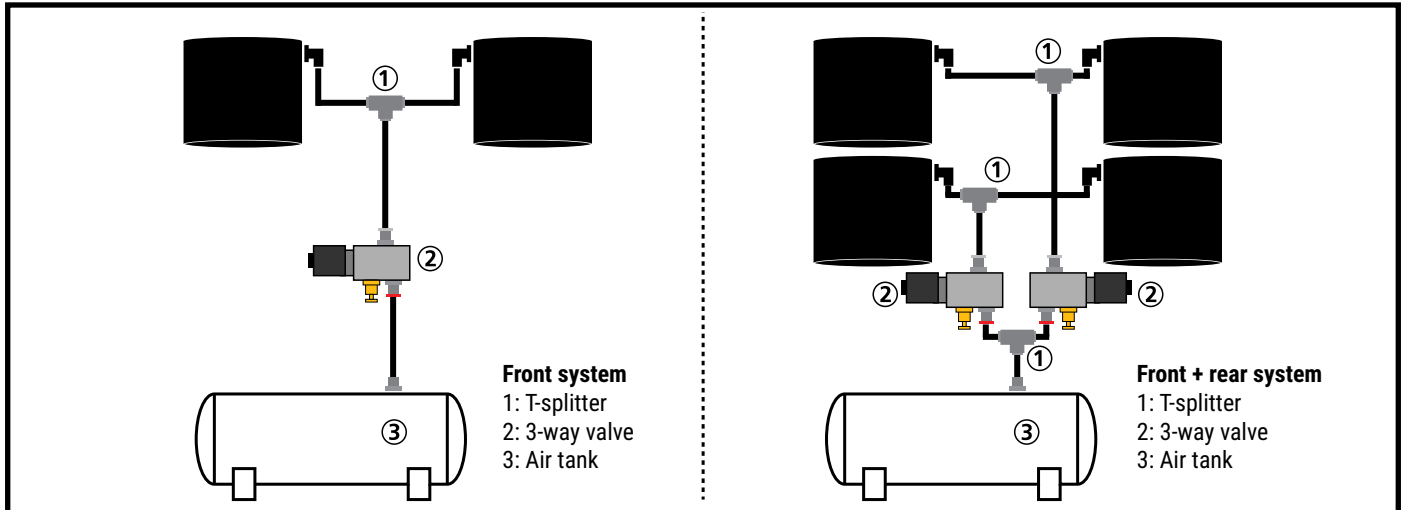


### WHAT IS DROOP?

Droop, also called rebound, is basically the amount of travel you have between ride height and full extension. **Too much preload will decrease droop, we recommend to set a minimal preload.**

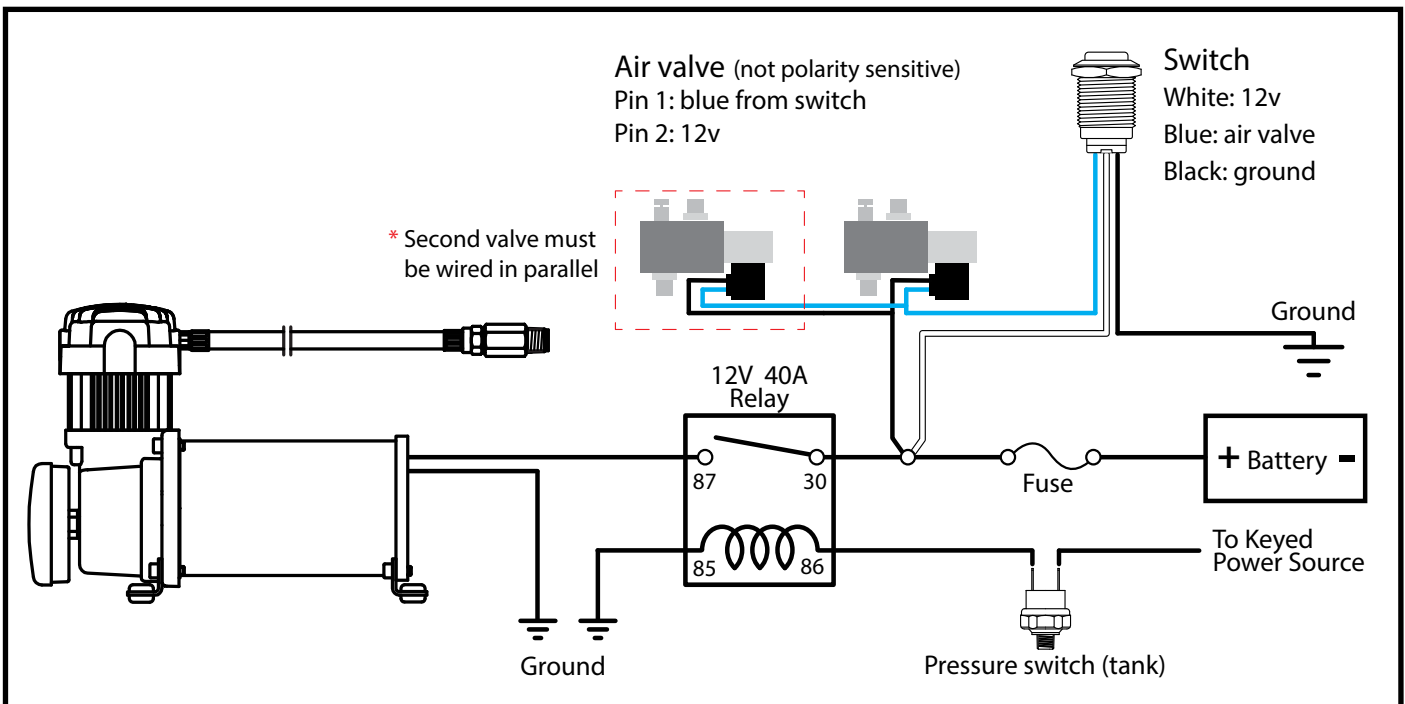
\* If you're using extreme high spring rates, the weight of the car won't compress the springs enough to create enough droop. This problem can be solved by installing helper springs, these will create enough droop for the air cups to lift.

## 4. ASSEMBLY SCHEME



Cut the lines straight and make sure they are firmly connected into the fittings. This prevents that they come off or will leak. **Attention!** If you don't use the VIAIR compressor kit, make sure that there is a safety valve of 12 bar/175psi in the system.

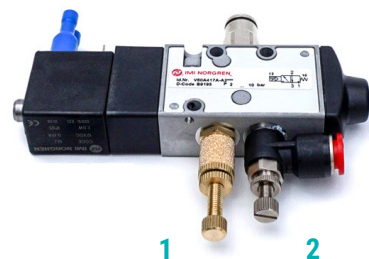
## 5. ELECTRIC SCHEME



## 6. SPEED CONTROL

The speed of lifting / dropping can be controlled by adjusting the 2 fittings on the valve. Turn the screws in to slow down the lift / drop.

- Fitting 1 will adjust the speed of dropping
- Fitting 2 will adjust the speed of lifting



## INSTRUCTIONS

**You must put the system into service as described below.**

- The system is only pressurized if you want to pass an obstacle. So normally you will drive without pressure in the air cups.
- The system should only be used at speeds below 60 kmh / 40mph and you have to pass obstacles with appropriate speed.
- Only use the system when it is mounted on the car, keep your fingers and hands away from the air cups when it's in use.
- The system should only be used in two modes: low (no pressure) and high (6 - 10 bar / 90 – 150 psi).

Stanceparts is not responsible for property damage and / or personal injury resulting from improper use or installation of the system.  
The use of the air cup system is at your own risk.

## MAINTENANCE

### **Air cups**

Wash the air cups monthly with water (low pressure) so that dirt does not accumulate. Only use water, with the use of soap or other cleaning agents it's possible that the lubrication in the air cup washes away.

### **Compressor and tank**

1. Check the air filter every 3 to 6 months and replace it if necessary.
2. Drain the tank every 2 to 3 months by turning the tap open. Make sure there is a minimum pressure in the tank (as described in the VIAIR Manual).

## WARRANTY

2 year warranty on the air cups.

1 year warranty on the compressor setup, covered by the manufacturer: VIAIR.

### **Warranty terms:**

- Proof of purchase.
- Properly used according to instructions.
- Proper installation according to this manual.

# #STANCEPARTS