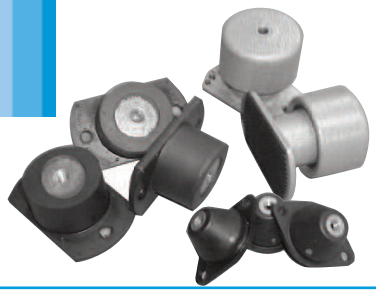


NAV
Anti-Vibration Mounts
Installation and Maintenance

1.0 Introduction

Anti-vibration mounting kits are available in both rubber and spring type, the correct selection and type employed will depend on the accurate calculation of the weight of the assembly to be supported.

IMPORTANT

WARNING: Anti-Vibration mounts must only be subjected to compressional forces and MUST NOT be used in a configuration that places these parts under tension or shear force.

2.0 General Installation

AV mounts should not be fitted to a fan/silencer assembly unless there are flexible connectors fitted between the assembly and associated duct work. AV mounts should be installed with the matched mounting feet and positioned such that they carry an equal proportion of the assembly weight. This is particularly important where fans and silencers are installed on suspension rods.

IMPORTANT

AV mounts isolate the fan only.
Silencers/ back-draught dampers and other "significant mass" accessories should form part of the fixed ductwork after the flexible connection.

3.0 Rubber Type NAV's

3.1 Dimensions & Weight

Unit Code	NAV Type	Max. Loaded Weight (Kg)	Central Insert Size	A (mm)	B (mm)
NAV1	Rubber	20	M8	30	50
NAV2	Rubber	83	M10	40	75
NAV3	Rubber	187	M10	40	75
NAV4	Rubber	270	M10	40	75
NAV5	Rubber	135	M10	40	75
NAV6	Rubber	330	M12	50	100

Figure 1. NAV1 to NAV5 (rubber type).

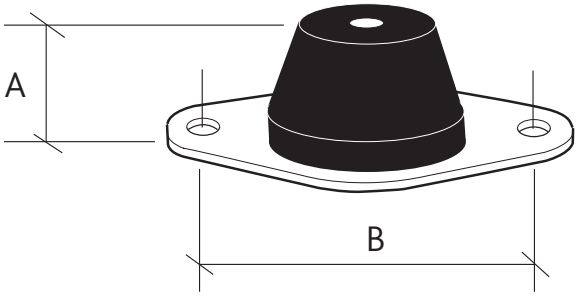
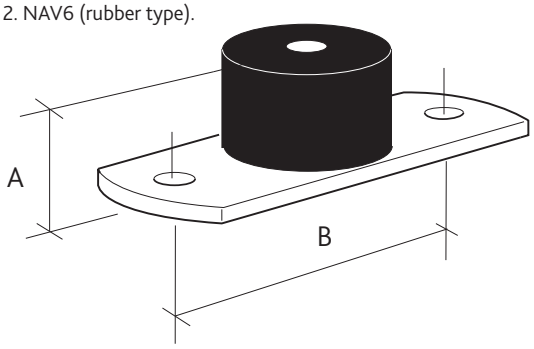


Figure 2. NAV6 (rubber type).



3.2 Rubber AV Installation

Secure the NAV to its mounting location using the two holes on the baseplate and appropriate fixings for the application (provided by others).

Lower the unit onto the NAV's, ensuring that the mounting points of the unit are in line with the central inserts in the top of the NAV's.

Screw the fixings i.e. bolts, washers and nuts (provided by others) through the mounting points of the unit into the central inserts of the NAV's.

If the unit needs to be raised above the height of the NAV, additional nuts can be used for height adjustment (see fig. 3) or alternatively packing shims should be inserted either between the top cover and the unit mounting point or underneath the NAV as appropriate.

Once all NAV's are levelled to their nominal working height, ensure the unit is level.

3.3 Rubber AV Installation Example

NAV1 to NAV5 shown in floor (see fig. 3) and suspended (see fig. 4) applications. Fans using NAV6 require supporting steelwork to be designed (by others) for suspended applications.

Figure 3. Example of NAV 1-5 mount in a 'floor' application.

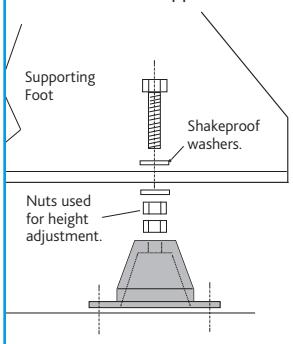


Figure 4. Example of NAV 1-5 mount in a 'suspended' application.

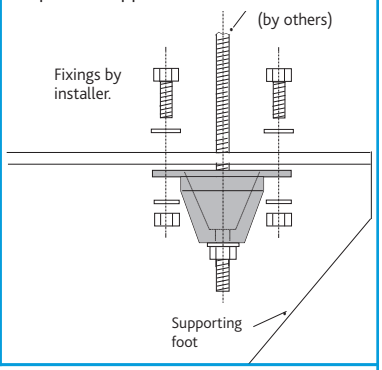
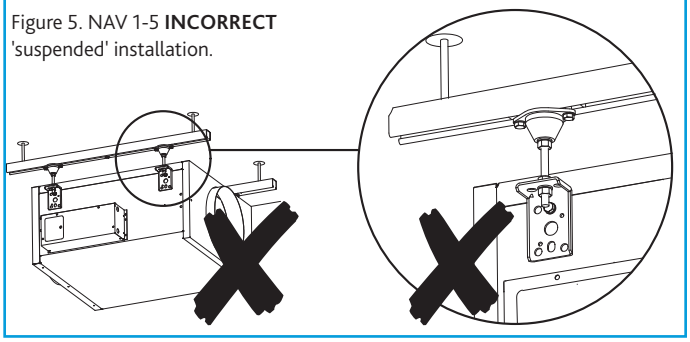


Figure 5. NAV 1-5 **INCORRECT** 'suspended' installation.

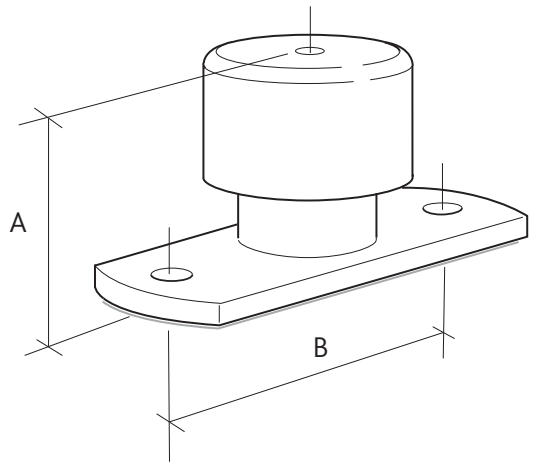


4.0 Spring Type NAV's

4.1 Dimensions & Weight

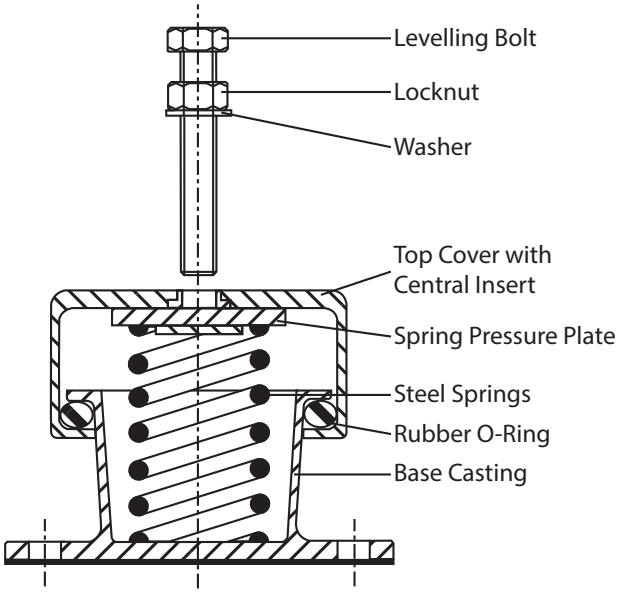
Unit Code	NAV Type	Max. Loaded Weight (Kg)	A (mm)	B (mm)
NAV37	Spring	20	59	55
NAV38	Spring	35	59	55
NAV39	Spring	45	59	55
NAV40	Spring	50	59	55
NAV41	Spring	65	59	55
NAV42	Spring	75	59	55
NAV43	Spring	90	59	55
NAV44	Spring	110	59	55
NAV45	Spring	120	59	55
NAV46	Spring	155	77	76
NAV47	Spring	240	77	76
NAV48	Spring	315	77	76
NAV49	Spring	400	77	76
NAV50	Spring	480	77	76
NAV51	Spring	520	77	76
NAV52	Spring	600	87	127
NAV53	Spring	700	87	127
NAV54	Spring	800	87	127
NAV55	Spring	950	87	127
NAV56	Spring	1110	87	127
NAV57	Spring	1270	87	127
NAV58	Spring	1430	87	127

Figure 6. Spring NAV mount sectional drawing.



4.2 Spring NAV Installation

Figure 7. Spring NAV mount sectional drawing.



Remove the levelling bolt, locknut and washer from the Anti-Vibration (NAV) mounts (see fig. 7). Secure the NAV to its mounting location using appropriate fixings (provided by others) for the application.

Lower the unit onto the NAV's, ensuring that the mounting points of the unit are in line with the threaded holes in the top covers of the NAV's.

Fit the locknut and washers to the levelling bolts (see fig. 7). Screw the levelling bolts through the mounting points of the unit into the top cover of the NAV's until resistance is felt. Slowly raise the NAV to its nominal working height by screwing down the levelling bolts in equal increments (i.e. 2 to 3 turns per bolt) at each NAV. Once all NAV's are levelled to their nominal working height, ensure the unit is level.

A NAV should never be raised above the given dimension 'A' (unloaded height). If the unit needs to be raised above the maximum height, packing shims should be inserted either between the top cover and the unit mounting point or underneath the NAV.

IMPORTANT

If the maximum height is exceeded the spring NAV becomes rigid and is no longer effective as a vibration isolator.

With the unit levelled, its movement should be observed during start-up and shut-down. If the movement needs to be reduced, raise the top cover of the NAV to increase its damping as per the process described above. The best isolation efficiency will typically be achieved when the unit can be rocked by hand.

With the adjustment of the unit and the NAV's complete, lock off the levelling bolts by tightening the locknuts and washers down onto the unit mounting point.

5.0 Maintenance

AV mounts are maintenance free but a periodical inspection is recommended to check security of fixings and condition of rubbers and springs.

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