

AIRSEP

INSTALLATION INSTRUCTIONS FOR VOLVO PENTA TAMD60-C SINGLE TURBO MARINE ENGINES

KWTAMD60C-1HPSI HIGH PERFORMANCE AIRSEP PKG. (Drawing# DX9)

1. List of Parts Included In Kit

<u>Parts</u>	<u>Quantity</u>	<u>Part #</u>
Walker AirSep w. HP Silencer	1	7408T35GBS2
Vacuum Regulator Assembly	1	PR2000
Drain Check Valve Assembly	1	MD105
1/2" Oil Drain Hose (70" length)	1	CD285
1-1/4" Flex Hose (36" length)	1	CD600
1-1/4" 90° Elbow	1	CD2761
1/2" Hose Clamp	4	CD291
1-1/4" Hose Clamp	4	CD299
1/4 NPT by 1/2" Hose Barb	1	CD243
Volvo Spin-On Adapter (Aux.)	1	CD570
1-1/2" to 1-1/4" Breather Reducer	1	MD109
2-3/4" to 4" Hump Hose	1	CD417
3" Hose Clamp For Hump Hose	1	CD306
4" Hose Clamp For Hump Hose	1	CD312

2. Engine Preparation Prior To Installing The AirSeps

To receive optimum performance from your engine and the maximum benefits from the AirSep **it is advisable to clean the air induction system of the engine**, including the aftercooler or intercooler.

3. Installation Instructions

The following instructions must be followed for the proper installation of an AirSep on a Volvo Penta TAMD 60 C Single Turbo Marine Engine.

(a) From the turbo charger air inlet pipe, remove the existing air cleaner / filter. Disconnect and remove the existing breather tube from the valve cover breather. Also remove any existing brackets.

If the subject engine has a stock vent canister inline with the crankcase breather, this must be removed to allow a direct connection to the breather.



(b) With correct sized hose, attach the AirSep unit to the turbo inlet pipe as indicated in the attached diagram. The hump hose may have to be shortened by cutting it, to enable the AirSep drain to clear obstructions on the engine. The 1-1/4" breather inlet on the AirSep must be on top and the 3/8 NPT oil drain outlet must be on the bottom. It is important to note that the oil drain must be perpendicular to the axis of the AirSep (it should be pointed straight down). If the position of the oil drain outlet deviates more than five degrees (5°) from perpendicular the AirSep will not operate properly.

(c) Make the following hose connections to the valve cover breather.

It is important to note that the hose lengths should be trimmed as needed to ensure a clean installation. SECURE ALL CONNECTION POINTS WITH THE HOSE CLAMPS PROVIDED.

(1) Connect the 1-1/2" by 1-1/4" Breather Reducer to the crankcase vent breather. At the installers option you may forgo the Breather adapter and use the auxiliary Volvo spin-on breather adapter.

(2) Connect the supplied 1-1/4" x 36" Flex hose to the breather configuration and route toward the AirSep.

(3) Install the supplied 1-1/4" 90° elbow to the top inlet of the AirSep.

(4) Fit the PR2000 Vacuum Regulator to the opposing end of the 90° degree hose, just installed, and affix the 1-1/4" Flex hose (attached from Step 2). Trim Flex hose as needed to make routing clean.

Note: The PR2000 Vacuum Regulator must be installed with the cover at the 12 o'clock position. The inlet and outlet pipes may be angled to allow for installation clearances. The directional arrows on the regulator must point toward the AirSep.

(5) Review diagram to ensure proper sequence and orientation of installed parts. Tighten all clamps.

Next-

(d) The oil collected by the AirSep, through the vapor separation process, must be drained through the oil drain assembly with check valve and back into the crankcase. In most cases this can be done through an auxiliary plug located on the crankcase. The drain return location can be through the auxiliary dipstick plug and should ideally be located above the oil level in the block, although the AirSep will operate if the plug is located below the oil level. Remove the plug and insert the 1/4"NPT by 1/2" hose barb. If the plug you have selected is larger than the 1/4 NPT of the barb, you may have to obtain a thread adapter.

On some engines a plug may not be available or may be located in a position that will not allow the separated oil to gravity feed through the check valve and back into the block. If this situation should arise, check to see if there is an auxiliary dip stick hole through which the oil can be returned. If neither a plug or the auxiliary dip stick hole is available, it may be necessary to weld a small Y on to the existing dip stick holder. The separated oil can then run down the existing dip stick.

(e) The check valve must be installed between the AirSep drain and the point that the separated oil is returned to the crankcase. The check valve should be installed as in as vertical of a position as the installation will allow.

The check valve will not operate properly if there is not a vertical drop of at least 10" to 12" above the top of the valve.

(f) After determining where the lowest point where the check valve can be installed, cut the 1/2" line and connect the check valve to the barb and then cut the 1/2" line to connect the top of the check valve to the AirSep drain.

Make sure the check valve is installed at an angle no greater than 30° from vertical with directional arrows on the side of the check valve pointing downward.

As the draining oil cannot travel uphill, be sure your final installation of the drain line follows an even downward drop and is void of low spots, peaks and valleys, etc.

g) Tighten any clamps not previously tightened. **Be very careful not to over tighten any clamp placed on the AirSep.** Over tightening a clamp on the AirSep will damage the unit and void any warranty!

(h) **Note:** The AirSep is a closed crankcase system. **Be sure all openings into the engine (such as the oil filter cap, the dip stick hole and any other openings) are properly sealed.** If they are not the AirSep will not operate properly.

Carefully review the enclosed maintenance requirements for the AirSep filter. If the air restriction gauge on the AirSep turns red the air filter must be cleaned or replaced. Air Filters supplied with the AirSep can under normal circumstances be cleaned and oiled up to three times. Cleaning and oiling kits, part # DDF9016, are sold by Walker Engineering and our factory authorized dealer network.

**If you have any questions during installation of the AirSep please call:
Walker Engineering Enterprises Inc.**

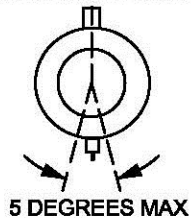
(818) 252-7788 (Phone)

(818) 252-7785 (Fax)

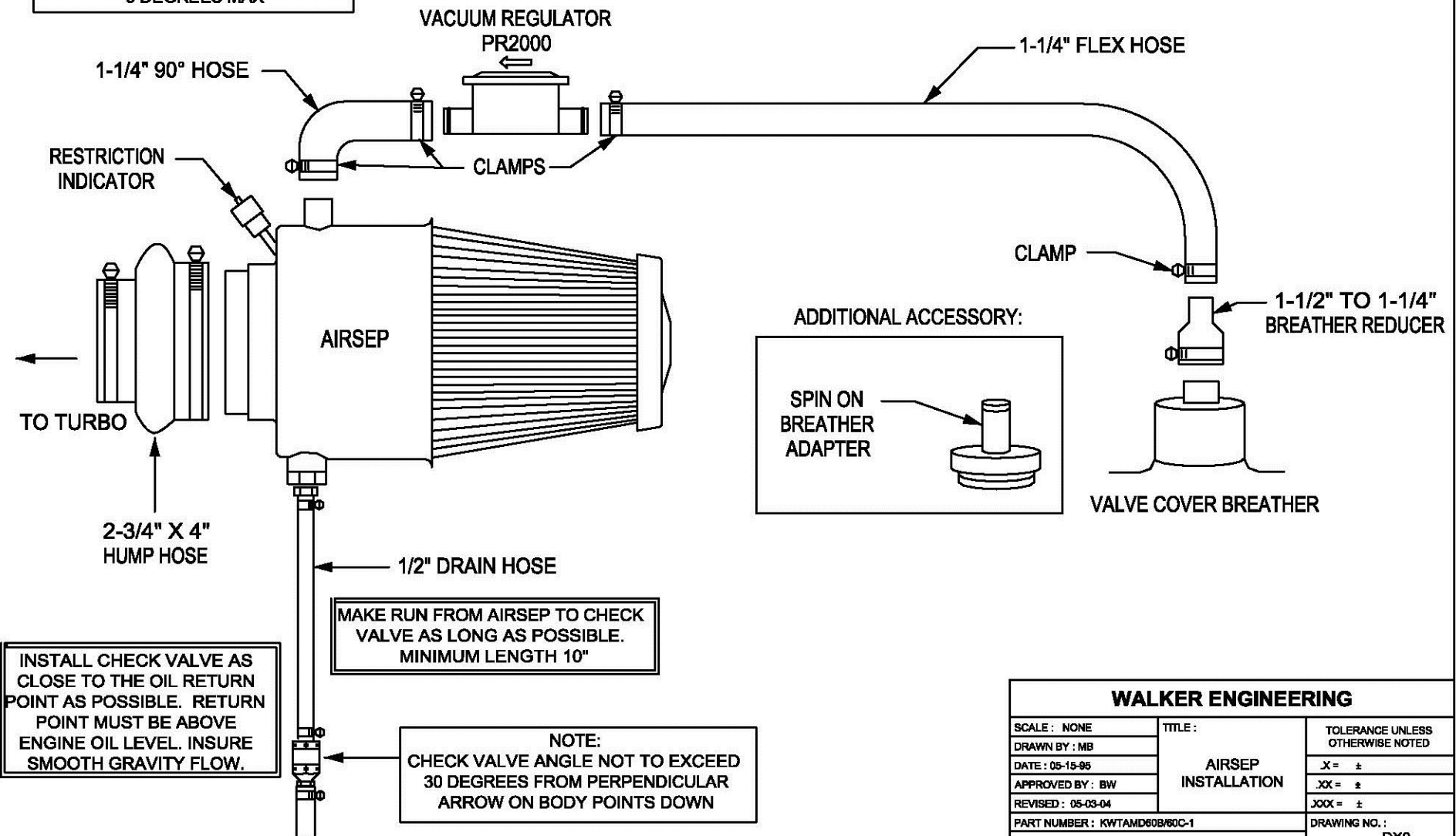
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AIRSEP INSTALLATION INSTRUCTIONS FOR A VOLVO PENTA TAMD 60B/60C SINGLE TURBO MARINE ENGINE

NOTE:
AIR-SEP MUST BE MOUNTED WITH
THE DRAIN AT THE BOTTOM.



NOTE: The Vacuum Regulator should be mounted
horizontally. The Vacuum Regulator is clearly
marked with the direction of flow.

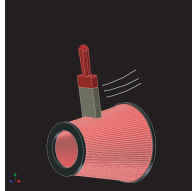


WALKER ENGINEERING

SCALE : NONE	TITLE :	TOLERANCE UNLESS OTHERWISE NOTED
DRAWN BY : MB	AIRSEP INSTALLATION	.X = ±
DATE : 05-15-95		.XX = ±
APPROVED BY : BW		.XXX = ±
REVISED : 05-03-04		DRAWING NO. :
PART NUMBER : KWTAMD60B/60C-1		DX9

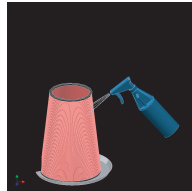


AIR FILTER CLEANING INSTRUCTIONS



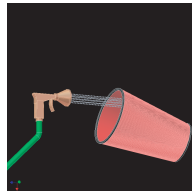
1) PRE-CLEANING

Remove air filter from AIRSEP. Tap filter element to dislodge any large dirt particles. Gently brush with a soft bristle brush.



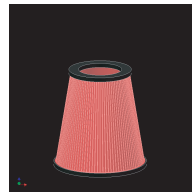
2) SPRAY ON CLEANER

Spray liberal amount of cleaning solution onto entire filter element and allow to soak for 10 minutes.



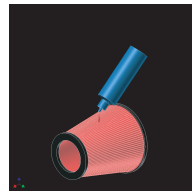
3) RINSE OFF

Rinse off the element with low pressure water. Always flush from the clean side to dirty side. This removes the dirt and does not drive it into the filter.



4) DRYING THE FILTER

Always dry naturally. After rinsing, shake off all excess water and allow the element to air dry naturally or in the sun.



5) RE-OILING THE FILTER

After cleaning air filter always re-oil before using. Apply oil down each pleat. Wait ten minutes and re-oil any light visible spots

6) CLEAN VACUUM REGULATOR/LIMITER

Using a slot head screwdriver, loosen clamp and remove filter. Then follow steps 1 through 5. To clean the Vacuum Limiter do not attempt to remove the filter. Remove the entire vacuum limiter and follow steps 1 through 5.

7) AIR FILTER INSTALLATION

Reinstall air filter on AIRSEP. Use Walker Air Filter Sealing Compound (CD955) when reinstalling air filter. Be sure to inspect springs and replace if worn.

FAQ's and Air Filter Cleaning Tips

This kit cleans and oils up to four (4) 9x12 or equivalent sized filters.

How often do I need to clean my air filter? You should clean your air filter every 250 to 300 hours, or every year whichever comes first.

How often should I replace my air filter? Replace your air filter after four (4) cleanings or every 3 or 4 years depending on condition of filter.

Is it better for my engine if I clean the air filter more often? No, follow the cleaning interval listed above. Cleaning too often will impair the vacuum action of the AIRSEP.

Can I use other liquids to clean and oil my air filter? No, your AIRSEP air filter may be damaged by harsh detergents or liquids other than the recommended cleaner in this kit. Other oils may be too light or too heavy to properly capture airborne dirt. Use the appropriate Walker kit to clean and recondition your standard or blue air filters.

CAUTION

NEVER CLEAN USING:

Gasoline
Part Cleaner Solvents
Caustic Cleaning Solutions
Strong Detergents
High Pressure Water
High Pressure Air
Steam Cleaners

NEVER OIL FILTER:

Using Transmission Fluid
Using Motor Oil
Using Diesel Fuel
Using WD-40
Using Other Oils