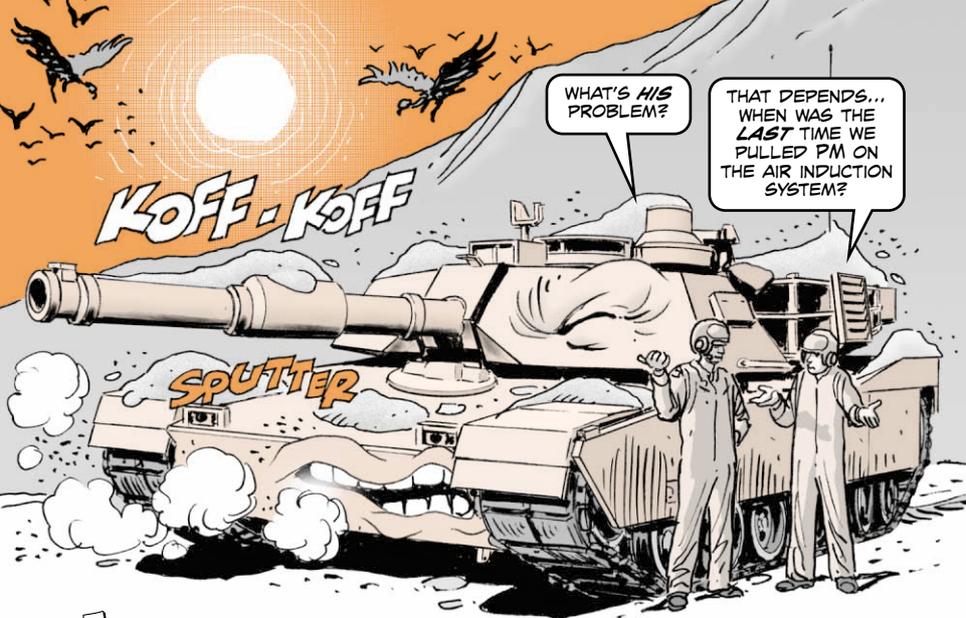


KEEP TANK BREATHING FRESH AIR



WHAT'S HIS PROBLEM?

THAT DEPENDS... WHEN WAS THE LAST TIME WE PULLED PM ON THE AIR INDUCTION SYSTEM?

The air induction system on your tank is like a giant vacuum cleaner—it sucks up anything that gets close. That's the reason for your tank's seals and filters. They screen out sand and dirt so that only clean air can get through. They also keep out larger debris that can dent, crack or break compressor blades.

If you want them to continue to stop potential damage, pay special attention to these important PM points:

Precleaner

Trees and bushes make a good hiding place for your tank, but they also result in clogged air precleaners.

Leaves that fall on or near the air inlets get sucked onto the precleaner. Enough leaves will cut off airflow and lower power output.

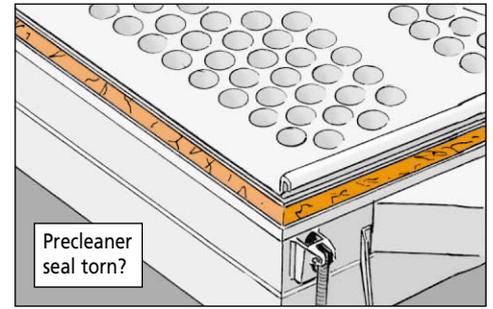
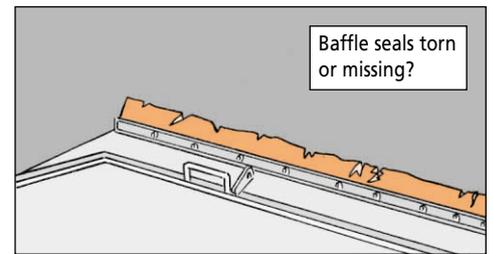


If the AIR CLEANER CLOGGED FILTER light comes on, make the precleaner one of your first checks.

While you're there, take a close look at the baffle seals. Cracked, torn or missing seals allow dirt and oil from the engine to clog the air cleaner assembly element strainers.

NSN 5330-01-225-6106 gets a new short seal. The longer seal is NSN 5330-01-320-3696.

Next, eyeball the bottom pre-cleaner seal. If the seal is missing, loose or torn, replace it. There are two different seals available: NSN 5330-01-166-5798 and NSN 5330-01-329-6614. The seal you use depends on the type of pre-cleaner in your tank. Check your -24P-1 TM to match the correct seal with your pre-cleaner.



A NEW SEAL IS USELESS, THOUGH, UNLESS YOU PUT IT ON RIGHT. HERE'S HOW...



1. Clean off the old seal and adhesive completely. To do it right you'll need a lot of elbow grease—combined with a rag, dry cleaning solvent and a wire brush.
2. Spread adhesive, NSN 8040-00-664-4318, in the seal groove. Use enough to hold the seal, but not so much that it squeezes out around the seal. The right amount of adhesive keeps the seal from sticking to the airbox frame and ripping loose every time you remove the pre-cleaner.
3. Apply a very light coat of adhesive to the bottom of the new seal and press it into the groove with your finger. Take extra care not to twist the seal as you put the rounded side in the mounting groove. A twisted seal is not airtight.
4. Let the adhesive dry completely before you put the pre-cleaner back in place. Put a dab of adhesive on a piece of paper. When it's dry, the seal should be, too.

Skirt Seals

If you're having problems with clogged air cleaner intake filter elements (V-packs), missing fender skirt seals could be the cause. Those rubber strips are there to seal the area between the skirts and hull.

Missing seals let dirt and dust get sucked inside the fender skirts. The engine pulls the dirt into the intake system where it clogs up the V-packs.

All the seals are important, but pay special attention to the seals at skirts 4, 5 and 6 on the left side of the vehicle. These seals are closest to the air intake grills and can let in the most dirt.

NSNs for the seals are listed in Figs 261-264 and 266 of TM 9-2350-255-24P-1 (Oct 92) for the M1, Figs 263-266 and 268 of TM 9-2350-264-24P-1 (Sep 01) for the M1A1, Figs 242-245 and 247 of TM 9-2350-288-24P-1 (Jul 01) for the M1A2 and Figs 241-244 and 246 of TM 9-2350-388-24P-1 for the M1A2 SEP (Feb 01).



V-Packs

The three V-packs on all tanks not equipped with the pulse jet system (PJS) should be removed, cleaned and inspected after every operation. V-packs on PJS-equipped tanks are self-cleaning.

The preferred cleaning method is the V-pack cleaning wand. You'll find info on the wand in the "unusual conditions" section of your -10-2 TM's operating instructions.



If the cleaning wand isn't available, shake the V-packs, making sure not to hit them against anything harder than your hand. Brush dirt and dust from the elements properly cleaned by your unit maintenance folks as soon as possible.



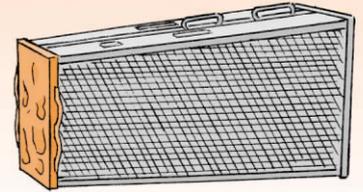
WHILE THE V-PACKS ARE OUT, INSPECT THE PLENUM BOX AND ELEMENTS FOR POTENTIAL PROBLEMS...



- Eyeball the bead on the front face of each V-pack element for dents or sharp edges that could cut the plenum box seal. Then check for buckling on the rear face of the element. Either problem means you need a new V-pack.
- Look for broken welds and cracks in the plenum air box. Dust trails along the welds and seams of the box are a good sign of a leak, so tell your mechanic.
- Look for torn, cracked or missing plenum box seals. A missing seal makes your tank NMC.

Those three seals also deteriorate over time, so check each one by measuring the depth of the depression made by the V-pack bead in the seal. If the depression measures more than 3/16 inch, get the plenum box seal replaced.

Look for dents or buckling



HERE'S ANOTHER WAY TO CHECK THE SEALS...



1. Apply chalk to the raised portion of the V-pack bead.
2. Install the V-pack and secure the holding clamp.
3. Remove the V-pack and eyeball the plenum box seal. There should be a complete chalk line around the seal from contact with the V-pack bead.

If the chalk line is broken, the V-pack may not be sealing correctly. So, get your mechanic to install a new seal, NSN 5330-01-098-6807. Remember to wipe the chalk off the V-pack bead and seal after testing.

This method works especially well if you are putting new V-packs in without replacing the plenum box seals. But, it's a good idea to put in new seals along with the new V-packs whenever possible.

