

KEEP COMBAT READY WITH FILTER PM!

YOUR M1-SERIES TANK IS A **BEAST!**
IT CAN HANDLE MOST ANYTHING
THROWN ITS WAY.

GRRRR!



BUT THERE ARE THINGS THAT
CAN **STOP** IT IN ITS TRACKS...

SCREEECH!

OOF!



YES THE **SMALLEST** THINGS,
LIKE LEAVES AND OTHER
DEBRIS, EVEN DIRT AND
SAND, CAN BRING YOUR TANK
TO A REAL QUICK **STOP**.



THAT'S WHY IT'S SO **IMPORTANT** TO KEEP
YOUR TANK'S SEALS AND FILTERS IN
GOOD CONDITION.

THEY SCREEN OUT BAD STUFF LIKE DIRT
AND SAND SO ONLY CLEAN AIR GETS
THROUGH.

THEY ALSO KEEP OUT LARGER DEBRIS
THAT CAN DENT, CRACK OR BREAK
COMPRESSOR BLADES.



PAY
SPECIAL
ATTENTION
TO THESE
**IMPORTANT
PM POINTS**
SO THAT
THOSE
SEALS AND
FILTERS CAN
STOP THE
BAD STUFF
BEFORE IT
STOPS YOUR
MISSION...

Precleaner

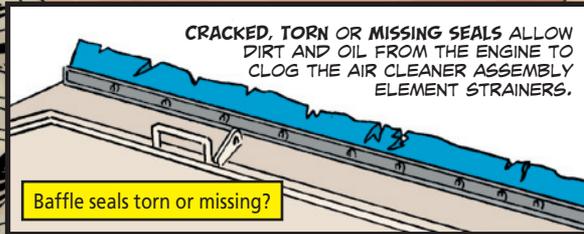
TREES AND BUSHES MAKE A GOOD HIDING PLACE FOR US TANKS, BUT THEY CAN ALSO RESULT IN CLOGGED AIR PRECLEANERS.

LEAVES THAT FALL ON OR NEAR THE AIR INLETS GET SUCKED INTO THE PRECLEANER. ENOUGH LEAVES WILL RESTRICT AIRFLOW AND LOWER POWER OUTPUT.



Make sure precleaner surface is free of debris

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.

Baffle seals torn or missing?

NSN 5330-01-225-6106 GETS A NEW SHORT SEAL. THE LONGER SEAL IS NSN 5330-01-320-3696.

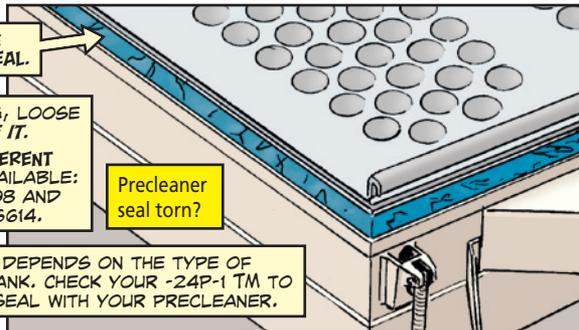
THEN CHECK OUT THE BOTTOM PRECLEANER SEAL.

IF THE SEAL IS MISSING, LOOSE OR TORN, REPLACE IT.

THERE ARE TWO DIFFERENT PRECLEANER SEALS AVAILABLE: NSN 5330-01-166-5798 AND NSN 5330-01-329-6614.

Precleaner seal torn?

THE SEAL YOU USE DEPENDS ON THE TYPE OF PRECLEANER IN YOUR TANK. CHECK YOUR -24P-1 TM TO MATCH THE CORRECT SEAL WITH YOUR PRECLEANER.



HERE'S HOW TO PUT THE SEAL ON THE RIGHT WAY...

1 CLEAN OFF THE OLD SEAL AND ADHESIVE COMPLETELY. 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 PRECLEANER.

3 APPLY A VERY LIGHT COAT OF ADHESIVE TO THE BOTTOM OF THE NEW SEAL AND PRESS IT INTO THE GROOVE WITH YOUR FINGER.

YOU WON'T GET AN AIRTIGHT SEAL IF YOU INSTALL ME LIKE THIS!

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 PRECLEANER BACK IN PLACE. PUT A DAB OF ADHESIVE ON A PIECE OF PAPER. WHEN IT'S DRY, THE SEAL SHOULD BE, TOO.

OK! MY SEAL'S DRY! Y'CAN GET ME INSTALLED NOW!

DING!

WHILE YOU'RE AT IT, CHECK TO MAKE SURE THE NBC WARNING DECAL IS IN PLACE.

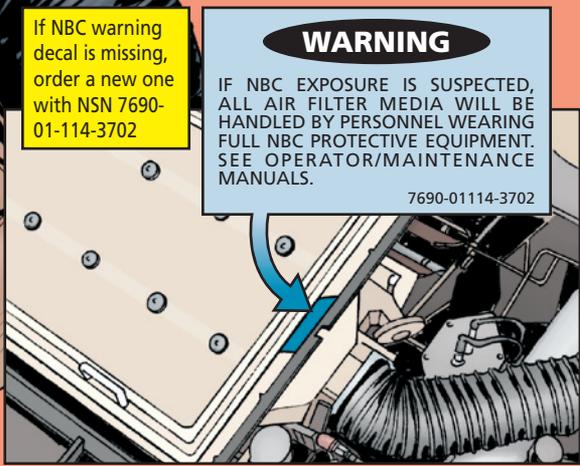
THE DECAL, NSN 7690-01-114-3702, WARNS THAT ALL AIR FILTER SYSTEM PARTS MUST BE HANDLED BY NBC PERSONNEL IF ANY NBC CONTAMINATION IS SUSPECTED, REGARDLESS OF WHETHER THE PRECLEANER IS EQUIPPED WITH THE PULSE JET SYSTEM (PJS) OR NOT.

If NBC warning decal is missing, order a new one with NSN 7690-01-114-3702

WARNING

IF NBC EXPOSURE IS SUSPECTED, ALL AIR FILTER MEDIA WILL BE HANDLED BY PERSONNEL WEARING FULL NBC PROTECTIVE EQUIPMENT. SEE OPERATOR/MAINTENANCE MANUALS.

7690-01114-3702

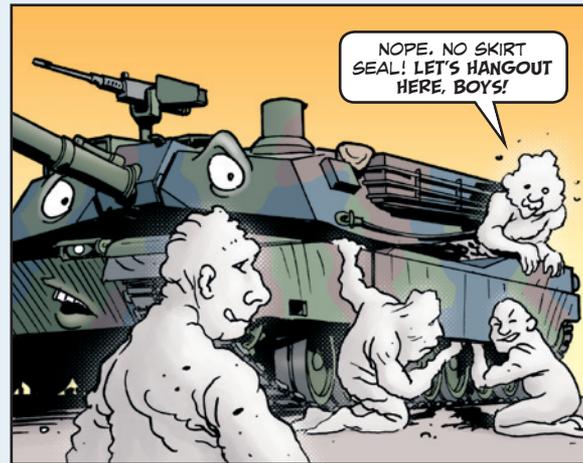


Skirt Seals

IF YOU'RE HAVING PROBLEMS WITH CLOGGED 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.

ALSO, A WORKING PRECLEANER SCAVENGER FAN IS CRITICAL TO KEEPING THE TANK'S AIR INDUCTION SYSTEM UP AND RUNNING. ALL IT TAKES TO KNOCK OUT THE FAN IS A SMALL ROCK OR CHUNK OF DIRT.

WE MAY BE LITTLE BUT WE CAN PACK A WHALLOP!



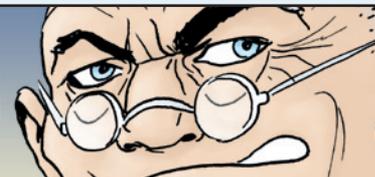
IF A ROCK GETS SUCKED INTO THE SCAVENGER FAN, IT CAN JAM BETWEEN THE FAN BLADES AND THE HOUSING. THE SUDDEN STOP SNAPS THE HOLLOW ALUMINUM FAN SHAFT.

THAT MEANS THE FAN STOPS WORKING.

DIRT, LEAVES AND OTHER DEBRIS THAT COLLECT ON THE PRECLEANER WON'T GET REMOVED. AFTER THAT, THE V-PACKS GET CLOGGED FASTER THAN NORMAL AND PRETTY SOON THE TANK'S OUT OF BUSINESS.

NSNS FOR THE SEALS ARE LISTED IN TM 9-2350-264-24P-1 (JUN 11, W/CH 1, JAN 13) FOR THE M1A1...

...AND IN TM 9-2350-388-13&P IN IETM EM 0334 (JUN 14) FOR THE M1A2.



ALSO, KEEP IN MIND YOU NEVER WANT TO STORE ANYTHING ON TOP OF THE AIR INTAKE CLEANER. STORING ITEMS THERE CUTS OFF COOLING AIR TO THE ENGINE. NOT ONLY THAT, BUT BUMPS AND VIBRATION DURING MOVEMENT CAN DAMAGE THE AIR INTAKE CLEANER.

Never store items on top of air intake cleaner



SO STORE THAT EXTRA OIL, TOOLS AND BII ITEMS PROPERLY AND LET THE AIR INTAKE CLEANER DO ITS JOB.

Y'KNOW MY V-PACKS ARE CLOGGING QUICKER'N USUAL!

YEAH! MINE, TOO!

SAME HERE!

IF YOU'RE GETTING A LOT OF THESE COMPLAINTS...



...CHECK THE THE SCAVENGER FAN SHAFT. IF IT'S BROKEN. HAVE YOUR MECHANIC REPLACE IT PRONTO!



V-Packs

THE THREE V-PACKS ON ALL TANKS THAT ARE NOT PJS-EQUIPPED 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 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 WITH YOUR HAND.



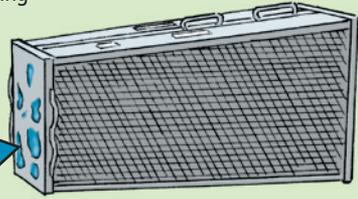
THEN, HAVE THE ELEMENTS PROPERLY CLEANED BY YOUR UNIT MAINTENANCE FOLKS AS SOON AS POSSIBLE. WEIGH THE ELEMENT AFTER IT'S BEEN CLEANED. IF IT'S WEIGHT EXCEEDS THE WEIGHT SHOWN ON THE AIR FILTER'S DECAL OR IF IT'S HEAVIER THAN 43 POUNDS, REPLACE IT.

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 dents or buckling



- 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.

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 PLENUM BOX SEALS ALONG WITH THE NEW V-PACKS WHENEVER POSSIBLE.



YOU CAN KEEP V-PACK FILTERS DRY AND CLEAN BY COVERING THE AIR CLEANER INTAKE WITH A CANVAS OR PLASTIC TARP WHILE YOUR TANK IS SITTING.



JUST MAKE SURE YOU REMOVE THE TARP BEFORE STARTING THE VEHICLE.



High-Pressure Cleaning

HEY, ~~SPLUTE~~ BUB! KEEP ~~SPLUTTER~~ IT BELOW MY ~~SPLUTE~~ TURRET LINE, WILL YA?



KEEPING YOUR TANK NICE AND CLEAN HELPS KEEP THE BAD STUFF OUTTA THE FILTERS AND SEALS.

BUT HIGH-PRESSURE WATER, AIR OR STEAM CAN END UP DOING MORE HARM THAN GOOD.

YOU SAID IT, HALF-MAST!



IF HIGH-PRESSURE WATER, AIR OR STEAM IS FORCED INTO THE AIR INTAKE SYSTEM, YOU'RE LOOKING AT **CLOGGED V-PACKS** THAT CAN SHUT YOUR TANK DOWN **FAST**.

THAT'S WHY IT'S VERY IMPORTANT TO FOLLOW ALL THE STEPS IN THE CLEANING AND LUBRICATION PMCS SECTION OF YOUR -10 TM.

THOSE STEPS OUTLINE ALL THE PRECAUTIONS NEEDED TO MAKE SURE I NOT ONLY COME OUT OF THE WASH RACK CLEAN, BUT ALSO BATTLE-READY.

BETTER NOW?

IT'S AMAZING WHAT A LITTLE AIR FILTER PM WILL DO FOR A FELLOW!

