

UNCLASSIFIED

SUPREME HEADQUARTERS ALLIED POWERS EUROPE
GRAND QUARTIER GENERAL DES PUISSANCES ALLIEES EN EUROPE

B-7010, SHAPE, Belgium

To: Executive Officers,
Landa Divisions,
Member Nations N.A.T.O. Command.

August 1981.

Subject:- Turbocharger Lubrication

The TEP Turbocharger lubrication systems, have completed a vigorous three year test period to N.A.T.O. specification approved to NAMSA-Capellen requirements.

NAMSA authorized a budget figure to the test authority:-
Van Doorne's Bedrijfswagenfabriek D.A.F. BV a major supplier of Diesel Turbocharged engines to NAMSA Command. The product range has been found to provide direct benefits to all engines of logistic categories shown on seperate notification dated July 81.

The advantages of installation in briefest details are as follows,

- A. Drivers and Operators training on starting and stopping procedures now not considered necessary, a problem of the past with Turbo charged engines.
- B. During the test period Turbo life has been more than doubled on all controlled and recorded tests of mobile and standby engines. Tests have been extended until any Turbo bearing wear is evident or otherwise.
- C. Continual stop-start tests completed January 1981 recorded 3.M. cycles, without any visible or measured wear to component parts, ie 'O' ring seals, oilite bush bearings, Etc.
- D. Specifications to NAMSA requirements include.
 1. Intermittent stop-start at 5.g. force (Armoured Equipment)
 2. Start at minus 32^o.c. using only 12 volts, after 3 months standing oil pressure delivery instantaneous (vital on generators and standby engines fitted with automatic throttles since 1979.)
 3. High temperature test 130^o.c. enclosed conditions installed on logistic mobile vehicles
 4. Vibration tests included in item .1. for the pump, also included installation brackets supplied in universal form NAMSA No. 6090/LSE. All hose assemblies approved for use of PTFE stainless steel covered construction, to minus 40^o.c. to plus 170^o NAMSA No. 6089/MTM.
 5. Oil contamination tests show 'O' ring seals and non-return valves met specification test number 236291. without any undue damage to the components in question.

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6. All form of NAMSA specified oil additives were used during the tests, and all modified 'O' rings were found satisfactory.

Summary

The full results together with NAMSA-Capellen, stores number will be circulated shortly together with part numbers.

This command strongly advises member Nations to forward their purchase requirements, on receipt of budget approvals through normal procedures. The Chief of Staffs, Logistic and Armaments have already authorized purchase of pumps for the following vehicles under the control of this office.

American Motor Corporation Model M 354 Z. White engine type Turbo-charged Diesel fitted with Schwitzer Turbo Model 11663392.

Quantities and method of fitment advised to the suppliers:-

Trans Europe Production Ltd., Essex, England.

FOR SUPREME ALLIED COMMANDER EUROPE

R.J. Engelen,
Colonel B.E.A. Executive Officer,
LANDA DIVISION.

van Doorne's Bedrijfswagenfabriek DAF B.V.

DAF

Trans Europe (Production) Limited,
Stephensons Road,
Gorse Lane Industrial Estate,
CLACTON-ON-SEA/ESSEX.
England.

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Geldropseweg 303
telefoon-centrale (040) 14 01 11
telex 51085
telegram-adres: DAF AUTO
bank: Amro Bank Eindhoven
rekening 44 40 25 006

Attention: Mr. F.J. Taylor.

Re: TEP-TURBO LUBRICATION

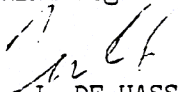
Dear Sirs,

The N.A.M.S.A. authorities have asked D.A.F. to contact you, to ask if your Company has any connection with NYCAL COMPANY INC. of NEW JERSEY U.S.A.

This product does not meet the full N.A.T.O. test specification and is detrimental on engine start up, by having to supply oil from the engine to the cauister, starving the Turbo for up to two minutes. Then only acts as a non pressurised gravity feed, once the engine is switched off. I understand the manufacturers of Turbochargers to military engines, have also suggested the NYCAL product should not be used.

Please confirm if any connection exists or whether you are independent Company, if so orders will follow for test samples against a test budget supplied by N.A.M.S.A.

Kind Regards


J. DE HASS

MILITARY PURCHASE DEPT
VAN DOORNE'S BEDRIJESWAGENFABRIEK. B.V.