

## DND ENVIRONMENTAL ASSESSMENT

**NSN 2350–21–920-4873 Leopard 1C2, Main Battle Tank (MBT)  
Including NSN 2510-12-346-9544 MBT Turret**

RDIMS: 3668156

**File:** 2184-01267-02 VOL 0002 (DLEPS 6/DGLEPM – 2843)

**Date:** 31 July 2014

### ***PART I - PROJECT IDENTIFICATION***

#### **1. Registration**

- 1.1. Type of EA: Disposal
- 1.2. EA Start Date: 20 June 2014
- 1.3. OPI: Capt. K. Lozier, Director Armament Sustainment Program Management, DASPM 4, (819) 997-2867
- 1.4. Assessed by: K. Mellow, Director Land Equipment Program Staff, DLEPS 6-C6, (819) 994-8666
- 1.5. Project Activity Location: NDHQ / ADM(Mat) / DGLEPM / DASPM and 25 Canadian Forces Supply Depot (25 CFSD), Montreal, Quebec

#### **2. Project Description**

- 2.1. DASPM 4 and the DND/CF are preparing to dispose of the Department's holdings of NSN 2350–21–920-4873 Leopard 1C2 Main Battle Tank in their "as is" state. This will also include the disposal of NSN 2510-12-346-9544 Turret, Main Battle Tank.
- 2.2. Disposal action may involve any, or all, of the following options:
  - a. Disposal as a Display Monument;
  - b. Disposal as a Museum Artefact;
  - c. Disposal by Sale in "as is" condition to authorized nations or organizations; and/or
  - d. Demilitarization and Disposal as scrap.
- 2.3. The MBT has a demilitarization code of "F" (DMC-F) indicating that the vehicle is classified as a controlled good under the Controlled Technology Access Transfer (CTAT) requirements. Unless the Leopard 1C2 MBT is sold to an authorized buyer, demilitarization of the vehicles is required.
- 2.4. This assessment is based on the consideration that the vehicles are received at the two CFSDs for disposal in their authorized configuration and all checklist items have

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been removed including weapons, ammunition, communication systems and Equipment Issue Scale (EIS).

### **3. Risk Assessment Summary**

- 3.1. It was determined that the main environmental risks associated with the disposal of the Leopard 1C2 Main Battle Tank include asbestos, polychlorinated biphenyls (PCBs), ozone depleting substances (Halon 1301 and 1211), global warming substances (HFC-134A), heavy metals, rubbers, plastics, optics, and coatings such as Chemical Agent Resistant Coating (CARC) in the end item as well as consumables such as fuel, lubricants, adhesives, sealants and batteries used in the operation and maintenance of the end-item. In preparing disposal instructions, the TA/LCMM is required to action the recommendations made herein in order to comply with federal and applicable local regulations.

### **4. Equipment Description**

- 4.1. The Leopard 1C2 Main Battle Tank (MBT) NSN 2350-21-920-4873 is a medium sized combat tank, constructed of a cast steel turret and welded armoured steel plates in the hull, and is fully tracked with river crossing capabilities that allow it to cross inland waterways (up to 2.2m with preparation). Krauss-Maffei and Wegmann (now KMW) manufactured the tank in the 1970s. Its 360° traversable turret is operable under hydraulic or manual control, however, the turret hydraulic gun-laying system has been made inoperable as part of the preparations. The fording hydraulic system has not been removed. This hydro-pneumatic system permits the sealing of the hull openings (air intake and exhaust flaps).
- 4.2. The tank is fitted with the British designed L7A3, 105mm tank gun and is capable of engaging targets during the day and at night with effective fire, while on the move under limited climatic conditions. This was achieved with a primary stabilized gun-laying system and an EMIS 18 Integrated Fire Control System (IFCS). A Model TRP5A Panoramic Telescope was fitted as the commander's fire control system (and as a backup in case the IFCS failed). A 7.62mm C6 Machine Gun is co-axially mounted internally. Another C6 machine gun can be mounted on either of the turret hatch cupolas as an anti-aircraft machine gun. Also mounted are eight (four on each side) 76 mm smoke and fragmentation grenade dischargers.
- 4.3. The Leopard 1C2 Tank is capable of firing NATO standard ammunitions, including armour-piercing fin stabilized discarding sabot (APFSDS), high explosive squash head (HESH), high explosive anti-tank (HEAT) and smoke. Stowage racks are provided to stow ammunition and grenades.
- 4.4. The tank is a minimum-maintenance armoured fighting vehicle, with visual lubricant level checks and minimum crew maintenance requirements. Complete replacement

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- of the power pack (engine, transmission and cooling system) is possible in 30 minutes under field conditions. The tank may be “sealed-off” against nuclear-biological-chemical (NBC) threats. The tank has a cruising range of plus-600 kilometres (375 miles) at 40 km/h (25 mph), an average fuel consumption of 165 L per 100 km (1.74 mpg) and a maximum speed of 62 km/h (38.75 mph) on land and 5.0 km/h (3.1 mph) in water. It has an MTU MB838Ca M-500, 10 cylinder, V90, four-stroke, multi-fuel engine with pre-combustion chamber and mechanical supercharger producing 610kW (830 HP), coupled with a ZF 4HP 250 automatic transmission.
- 4.5. Steering is effected with the aid of a power-shift and steering transmission. The service brake is a hydraulically operated disc brake system, acting upon the left-and-right hand final drive shafts, while the parking brake acts mechanically on the service brake discs.
- 4.6. The tank’s suspension system consists of 14 transverse torsion bars, with volute springs. The tracks are double pin, rubber bushed, replaceable rubber pads, with 84 shoes on each side. Twenty-eight (14 duals) aluminium road wheels with solid rubber tires complete the track system.
- 4.7. Four fixed Halon 1211 fire extinguisher cylinders were utilized to extinguish fires in the engine compartment. Four fixed Halon 1301 fire extinguisher cylinders were also utilized to extinguish fires in the crew compartment.
- 4.8. Without crew, stowage and fuel, the Leopard 1C2 Tank weighed 40,400 kg. At combat weight (42,400 kg) it exerted a specific ground pressure of 0.9 kg/cm<sup>2</sup>.
- 5. Scope**
- 5.1. The assessment has been conducted in support of the divestment and disposal of the Leopard 1C2 MBT. It has been prepared to assist the ADM(Mat) Technical Authority (TA) in preparing and executing the disposal plan and in the preparation and issuance of subsequent disposal instructions. It does not address the environmental impacts of vehicle use after sale.
- 5.2. The TA does not have command authority over the organizations and personnel actually conducting the disposal activities and is therefore limited in ability to ensure measures identified herein have been appropriately executed at the local level. Local functional authorities are responsible to ensure appropriate trade practices and mitigation measures are utilized and that the demilitarization and disposal instructions are appropriately conducted in accordance with federal and applicable local regulations and practices.
- 5.3. An environmental assessment on the Night Viewer, Night Driving and Observation Kit, AN/VVS-501 for disposal was separately conducted and is available within the Records, Document and Information Management System (RDIMS) as document number 2597712. Accordingly, this item is not addressed within this assessment.

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### 6. Documentation

#### 6.1. **Regulations, Policies and Guidance Documents:**

- CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999 (CEPA)
- LIST OF TOXIC SUBSTANCES, CEPA 1999, SCHEDULE 1
- TRANSPORTATION OF DANGEROUS GOODS ACT, 1992
- DEFENCE PRODUCTION ACT, 1985 (DPA)
- ENVIRONMENT CANADA'S NATIONAL POLLUTANT RELEASE INVENTORY, 2011 (NPRI)
- TRANSPORTATION OF DANGEROUS GOODS REGULATIONS, 2011 (TDGR)
- EXPORT AND IMPORT OF HAZARDOUS WASTES REGULATIONS, 1992 (EIHWR)
- FEDERAL HALOCARBON REGULATION, 2003 (FHR)
- GUIDELINES FOR EFFLUENT QUALITY AND WASTEWATER TREATMENT AT FEDERAL ESTABLISHMENTS, APRIL 1976
- ENVIRONMENTAL CODE OF PRACTICE FOR ELIMINATION OF FLUOROCARBON EMISSIONS FROM REFRIGERATION AND AIR CONDITIONING SYSTEMS, MARCH 1996
- ENVIRONMENTAL CODE OF PRACTICE FOR ELIMINATION OF FLUOROCARBON EMISSIONS FROM REFRIGERATION AND AIR CONDITIONING SYSTEMS, 1996
- OZONE DEPLETING SUBSTANCES REGULATIONS, 1998 (ODSR)
- ASBESTOS PRODUCTS REGULATIONS, SOR/2007
- PCB REGULATIONS SOR/2008-273
- CANADA OCCUPATIONAL HEALTH AND SAFETY REGULATIONS, SOR/86-304
- PROPOSED REGULATIONS RESPECTING PRODUCTS CONTAINING CERTAIN SUBSTANCES LISTED IN SCHEDULE 1 TO THE CANADIAN ENVIRONMENTAL PROTECTION ACT, 1999
- CONTROLLED GOODS REGULATIONS, 2000 (CGR)
- CONTROLLED PRODUCTS REGULATIONS, SOR/88-66, FEBRUARY 23, 2010
- CONTROLLED TECHNOLOGY ACCESS AND TRANSFER, MANUAL 2011 (CTAT)
- ENVIRONMENTAL DIRECTIVE 4003-05: HALOCARBON MANAGEMENT, (2004)
- ENVIRONMENTAL DIRECTIVE 4003-01: SPILL REPORTING, (2003)
- DEPARTMENT OF NATIONAL DEFENCE CANADIAN FORCES ASBESTOS MANAGEMENT DIRECTIVE, MARCH 2007
- DEFENCE ADMINISTRATION ORDERS AND DIRECTIVES (DAOD) 3013-1, DISPOSAL OF SURPLUS MATERIEL 2012

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- DAOD 4003-1 HAZARDOUS MATERIALS MANAGEMENT, 1998-01-30
- ULC C1058.18-2004, THE SERVICING OF HALON AND CLEAN AGENT EXTINGUISHING SYSTEMS
- UNITED STATES DEPARTMENT OF DEFENSE MANUAL NUMBER 4160.28, VOLUME 2, DEFENSE DEMILITARIZATION: DEMILITARIZATION CODING, JUNE 7, 2011
- WORKPLACE HAZARDOUS MATERIAL INFORMATION SYSTEM, 1988 (WHMIS)
- C-02-007-000/AG-001, DEPARTMENT OF NATIONAL DEFENCE DEMILITARIZATION MANUAL (DRAFT) UNDATED
- C-02-040-007/TS-001 GENERAL SAFETY PRECAUTIONS 1988
- C-71-010-008/MN-000 PROCEDURE FOR PREPARING EQUIPMENTS AS MEMORIAL OR MUSEUM PIECES 2011
- A-GG-040-004/AG-001 HAZARDOUS MATERIALS SAFETY AND MANAGEMENT MANUAL, 2005
- A-LM-007-014/AG-001, CANADIAN FORCES SUPPLY MANUAL, 1 JULY 2013
- DGLEPM MERCURY MANAGEMENT PLAN, 9 MAR 2012

#### 6.2. **Other References:**

References used in the development of this document and pertaining to the Leopard and Leopard series Family of Vehicles (FOV) are listed in Annex A.

7. **Site Visit** No site visits were conducted for this review.

## ***PART II ENVIRONMENTAL ASSESSMENT***

### **8. Ionizing Radiation Sources**

8.1. From a review of the technical data package (TDP), no ionizing radiation sources were identified to be currently associated with the MBT. Upon review of the existing documentation, tritium was located in the turret traverse indicator dials and pointers (10 millicuries) upon initial delivery, but these have since been removed. As such, there exists no significant environmental risk under this aspect.

### **9. Non-ionizing Radiation Sources: Lasers, Radar and Radio**

9.1. As stated in section 2.4, all EIS, fire control systems, and communication equipment have been removed prior to disposal activities. A publication and parts review did not identify any other non-ionizing radiation sources. Therefore, there are no environmental risks presented in terms of this environmental aspect.

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#### 10. Asbestos

- 10.1. *Aspect:* Asbestos is a hazardous and regulated substance that was formerly widely used in heat resistant textiles, linings for vehicle brakes, material in gaskets for high temperature applications and other heat resistant applications. Asbestos containing materials (ACMs) are present in the different configurations of the Leopard 1C2, including the MBT as identified in Table 1 that follows.

**Table 1: Identified Asbestos Containing Materials in the MBT**

Part No. / NSN	PART	LOCATION	REFERENCE
2990-12-142-8797	COLLAR, EXHAUST MANIFOLD	Exhaust System	C30730000MY000
2930-12-142-8900	GASKET	Cooling System	C30730000MX001
2990-12-142-8798	MANIFOLD,EXHAUST	Exhaust System	C30730000MY000
2990-12-142-8801	MANIFOLD,EXHAUST	Exhaust System	C30730000MY000
2990-12-142-8800	MANIFOLD,EXHAUST	Exhaust System	C30730000MY000
2990-12-142-8799	MANIFOLD,EXHAUST	Exhaust System	C30730000MY000
2990-12-143-0297	PIPE,EXHAUST	Exhaust System	C30730000MY000
5330-12-156-4599	GASKET	Electrical System	C30730000MX001
5330-12-142-8802	GASKET	Engine Assembly	C30730000MX001

- 10.2. *Impact:* Asbestos is regulated by the Asbestos Products Regulations, SOR/2007-260 as part of the Canada Consumer Product Safety Act. It is included in the Environment Canada's National Pollutant Release Inventory (NPRI), and List of Toxic Substances Managed under the Canadian Environmental Protection Act (CEPA: Schedule 1). Asbestos becomes a health hazard when its fibres are disturbed and become airborne, and therefore, inhalable. Current regulations lead towards the elimination/replacement of asbestos from equipment. Within the Canadian Occupational Health and Safety Regulations, a worker is to be kept free from airborne chrysotile asbestos in excess of one fibre per cubic centimetre. The Department of National Defence Canadian Forces Asbestos Management Directive outlines the different types of asbestos work, their management practices and abatement procedures.
- 10.3. Direct exposure to asbestos can cause asbestosis (scarring of the lungs resulting in loss of lung function that often progresses to disability and eventually death); mesothelioma (cancer affecting the membranes lining the lungs and abdomen) and lung cancer. All the products highlighted in Table 1 can pose a threat to personnel handling them through the inhalation of dust and particulates.
- 10.4. *Mitigation:* Asbestos work activity will occur in CF facilities equipped with infrastructure that permits hazardous substance containment. As outlined in the Department of National Defence Canadian Forces Asbestos Management Directive,

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- when working with or removing asbestos-containing materials, personnel should be wearing proper personal protective equipment (PPE) such as disposable coveralls, gloves and boots, and National Institute of Occupational Safety and Health (NIOSH) approved powered air purifying respirator equipped with a full face-piece. If during work, there is a possibility that asbestos can become airborne, the material work area should be wetted down to reduce airborne fibres and ACM wastes shovelled (not swept) into clean, dry, labelled containers and covered. A HEPA filter can be used to capture asbestos fibres from the air. Disposal by secure landfill may be acceptable.
- 10.5. For the MBTs that are to be disposed of by sale, the new owners should formally accept the asbestos parts within the MBT and the risks associated with these items prior to delivery. New owners must be given a list of asbestos parts and their locations in the vehicles as well as the PPE requirements.
- 10.6. As Display Monuments and Museum Artefacts, it is unlikely that the public will come into contact with the asbestos-containing parts. However, asbestos-containing parts should be properly documented and permanent labels in bilingual format should be affixed to the interior of the vehicle to identify the asbestos parts and their locations to facilitate the removal of ACMs prior to the MBT's final disposal. The inclusion of Table 1 information into a label such as NSN: 7690-21-902-0668 (DND1081-5-86), adjusted in size to the information, would be suitable. Receiving units are to formally accept these ACMs and their associated risks prior to vehicle delivery and maintenance personnel must be informed of the location of the asbestos-containing parts and be notified of proper PPE requirements to facilitate any servicing/repairs and their eventual final disposal.
- 10.7. *Significance:* Upon the application of mitigation measures identified above, the environmental risks associated with asbestos are deemed acceptable.
- 11. Mercury and Mercury-Containing Items**
- 11.1. From a review of the technical data package (TDP), there was no mercury or mercury containing items identified with the current configuration of the MBT. As such, this aspect is not pertinent to this disposal project.
- 12. Polychlorinated Biphenyls (PCB)**
- 12.1. *Aspect:* PCBs are synthetic compounds that became widely used for industrial uses because of their stable chemical properties. In Canada, PCBs were first identified as toxic in 1976 and, as a result, the manufacturing, processing, importing and offering for sale of PCBs have been prohibited in Canada since 1977. The Leopard MBT was manufactured and introduced into the CF inventory during this time period. As such, the review of the supporting documentation identified several PCB containing

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parts (Table 2 refers) within the Leopard MBT, and therefore, the environmental risks presented by PCBs are very much present with this disposal project.

**Table 2: Identified Leopard 1C2 MBT PCB Components**

NSN	ITEM/DESCRIPTION	LOCATION	REFERENCE
5910-12-158-1682	CAPACITOR, FIXED, PAPER DIELECTRIC	Bilge Pump Motor	C-30-731-K22/MY-001
5910-12-163-0349	CAPACITOR, FIXED, PAPER DIELECTRIC	Heater Control Box	C-30-731-K22/MY-001
5910-12-151-5082	CAPACITOR ASSEMBLY	NBC Main Blower Motor	C-30-731-K22/MY-001
5910-12-173-9010	CAPACITOR ASSEMBLY	NBC Dust Ejection Blower Motor	C-30-731-K22/MY-001
5910-12-152-4388	CAPACITOR, FIXED, PAPER DIELECTRIC	Ventilator Box Assembly, p/o Gun, 105MM	C-71-278-000/MX-000
5910-12-175-2860	CAPACITOR, FIXED, PAPER DIELECTRIC	NBC Main Blower Motor	C-30-731-K22/MY-001
5910-12-173-7824	CAPACITOR, FIXED, PAPER DIELECTRIC	NBC Dust Ejection Blower Motor	C-30-731-K22/MY-001

- 12.2. Missing from the above list, are two capacitors that have been removed from the Leopard 1C2. These include a fixed paper dielectric capacitor NSN 5910-00-194-8758 which was replaced with a non-PCB capacitor, and a plastic metalized amplifier capacitor NSN 5910-12-172-5500 originally located in the Electrical Slave Drive which was removed when the Leo 1A5 was modified to the 1C2.
- 12.3. The capacitors identified in Table 2 are required for the proper operation of their higher assemblies within the vehicle, such as the NBC system and its fording equipment. The capacitors are assumed to have PCB concentrations of greater than 50-mg/kg (ppm).
- 12.4. *Impact:* Polychlorinated biphenyls (PCBs) are a class of chemicals belonging to the chlorinated hydrocarbon family. The physical and chemical properties of PCBs include a high capacity for heat, low flammability, high stability, low vapour pressure and low electrical conductivity. PCBs are known to be among the most widespread environmental pollutants, having been detected in virtually all environmental media. Similarly, exposure to low levels of PCBs is thought to cause various acute and chronic health effects in humans and animals. According to the US EPA, PCBs are probable human carcinogens and can also cause non-cancer health effects, such as reduced ability to fight infections, low birth weights and learning disabilities. Due to PCBs' environmental [toxicity](#) and classification as a [persistent organic pollutant](#), PCB production was banned by the [Stockholm Convention on Persistent Organic](#)



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Pollutants in 2001. PCBs have also been classified as known human carcinogens by the International Agency for Research on Cancer (IARC).

- 12.5. *Mitigation:* Existing PCB-containing components are permitted in vehicles when located in their communication, navigation or electronic control equipment or cables. According to the current PCB Regulations, the sale of a product containing PCBs with a concentration of 50-mg/kg or more is generally prohibited, however, since the capacitors are within an electronic control (permitted) application, there is no requirement to remove these capacitors from the MBTs being sold. Therefore, for these vehicles, the new authorized owner must be advised on the presence of the PCB-containing items and must adhere to local regulations, be it in Canada or elsewhere.
- 12.6. For MBTs that are designated to become Display Monuments or Museum Artefacts, all PCB-containing items must be removed. Removal of the PCB-containing items must be done by trained personnel following standard procedure and safety practices. The locations of the PCB-containing items are identified in Table 2.
- 12.7. Once a vehicle has officially been deemed to be surplus to requirement, according to the PCB Regulations, either the equipment shall be placed in a PCB storage facility within 30 days, or the PCB containing item is to be removed and placed in a labelled PCB waste container within a PCB storage facility within 30 days (of the equipment being declared surplus). All PCB container(s) must be labelled in accordance to the PCB Regulations, Section 19, paragraph (1)(b).
- 12.8. *Significance:* Upon application of the mitigation measures, the environmental risks associated with PCBs are considered acceptable.

### **13. Ozone Depleting Substances (ODS)**

- 13.1. *Aspect:* With the Ozone Depleting Substances Regulation of 1998, ODS containing products have no longer been utilized in the operation and maintenance of the Leopard tanks, with the exception of the permitted Fire Extinguishing System (FES) of the vehicles.
- 13.2. The MBTs' crew compartment fire-extinguishing system (FES) consists of four (4) cylinders (NSN: 1377-21-899-9011) containing 3.5-kg (each) of Halon 1301 (Bromotrifluoromethane or BTM), otherwise known as Freon 13B1. Halon 1301 has an Ozone Depleting Potential (ODP) of 10 and a Global Warming Potential (GWP) of 5,600.
- 13.3. The FES system for the engine compartment consists of four (4) steel cylinders (NSN: 4210-12-148-6952) containing 5.53-kg (each) of Halon 1211 (Bromochlorodifluoromethane or BCF), also known as Freon 12B1. Halon 1211 has an ODP of 3 and a GWP of 1,300 (Table 3 refers).

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- 13.4. The MBT also contains one portable fire-extinguisher (NSN 4210-21-798-0682, ammonium phosphate, 10-lbs) within its Equipment Issue Scale (EIS). Since all EIS will be stripped from the MBTs prior to disposal, this fire-extinguisher is expected to be returned to the CFSS for re-use and re-issue. Hence, it will not be considered within this assessment.

**Table 3: Ozone Depleting Substances (ODS) Used Within the MBT**

NSN	NSN Description	Location	ODS Product
1377-21-899-9011	Fire Extinguisher, Cylinder, 682311, Spec DOT 3AA1800	Crew, Four (4) Cylinders	Halon 1301 (Freon 13B1) 3.5-kg (7.72-lb) or 14-kg (30.8-lbs) total
4210-12-148-6952	Fire Extinguisher, Cylinder, S-150A, Spec EN 1964-1	Engine, Four (4) Cylinders	Halon 1211 (Freon 12B1) 5.53-kg (12.13-lb) or 22.1-kg (48.7-lbs) total

- 13.5. Halons are favoured as fire suppressants as they possess the following desirable qualities: highly stable, non-residual, effective, non-flammable, and non-thermal shocking. However, Halons are ozone-depleting substances (ODS) and greenhouse gases.
- 13.6. *Impact:* Halon spills into the environment will lead to the depletion of ozone within the upper levels of the atmosphere which protects the earth from ultraviolet rays (UV) from the sun. With a decrease in upper level ozone, higher surface UV levels can be expected to penetrate the earth, which can lead to a higher rate of skin cancers and eye damage amongst humans and animal life. Additionally, with increased ground-level ozone, greater adverse human health effects can be expected due to the toxicity of ozone in the smog or haze that is associated with it.
- 13.7. For these reasons, the manufacturing, importation and exportation of Halons are regulated under the Ozone Depleting Substances Regulations (ODSR, 1998). The use and handling as well as spillage and reporting of Halons are regulated by the Federal Halocarbon Regulations (FHR), ODSR, and the applicable provincial/territorial regulations as dictated by its location. The disposal of the Leopard's FES must comply with these regulations.
- 13.8. *Mitigation:* All MBTs shall have their Halon systems decommissioned. Decommissioning must be done in accordance with the FHR and in adherence to the requirements within ULC/ORD-C1058.18-2004, "The Servicing of Halon and Clean Agent Extinguishing Systems", including the attachment of the decommissioning certificate and the updating of service logs. All Halon must be recovered and returned to the Halon Bank located in CFB Borden. Personnel conducting the

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- decommissioning of the FES do not have to be certified or possess a ULC qualification if the FES is never to be re-commissioned (for the vehicles that are to become display monuments), but they do require minimum Department specified environmental training.
- 13.9. If the potential exists for the FES to be reactivated in the future, the decommissioning of the FES must be performed by a certified (within the applicable province) technician, or by a ULC certified company that has been certified to the appropriate service level, and adheres to the requirements of the FHR and ULC/ORD-C1058.18-2004. Any Halon releases shall be reported in accordance with the requirements of the FHR and Environmental Directive 4003-1/2003 Spill Reporting (ED 4003-1/2003) through SpillNet. SpillNet is a web application developed by the Assistant Deputy Minister Infrastructure and Environment (ADM IE) that exists mainly to allow the input and updating of hazardous spill information by users within DND. A copy of this report must also be forwarded to D Env P. As well, any spill greater than 10-kg is to be reported to Environment Canada (Sections 32, 33 and Schedule 2, Item 8 of the FHR refer).
- 13.10. All records and disposal notices must be kept on-site for a period of at least five years from their date of issuance.
- 13.11. Any reactivation of the FES with Halon 1211 and/or Halon 1301 by new owners will need to be in compliance with legislations, regulations, bylaws, standards and requirements in place within their jurisdiction. All Halon cylinders will also need to be verified for regulatory compliance and currency of the pressure certifications for the extinguishant (Halon 1301 or Halon 1211) as well as its appropriate labelling. Any substitution of extinguishant (e.g. CO<sub>2</sub> in place of Halon 1301) will require re-certification of the whole FES system, as deviation from design parameters will void prior FES performance certification.
- 13.12. For the MBTs that are to be sold, the environmental compliance of the FES cannot be guaranteed and this aspect should be conveyed to the prospective buyers.
- 13.13. *Significance:* Upon the decommissioning and removal of the FES from the vehicles, the environmental risks associated with this aspect are deemed acceptable.
- 14. Global Warming Potential (GWP) Products**
- 14.1. *Aspect:* Micro climate systems (MCSs) consisting of mechanical chillers and portable liquid chiller units (PLCUs) were installed in the Leopard 1C2 MBT together with liquid circulating garments (LCGs) to be used by personnel under hot conditions. These MCSs connect directly to LCGs through hoses and use 0.31-kg (D1C250) and 0.198-kg (PLCU600) of refrigerant HFC-134A for a total of 0.508-kg total of HFC-134A per vehicle. Only three (3) MBTs were modified with the micro climate systems.

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- 14.2. *Impact:* HFC-134A is not an ODS and it has a low toxicity level. However it is a global warming substance, having a global warming potential of 1300 (i.e. 1,300 times that of CO<sub>2</sub>). Its release to the environment has a great impact and so it is regulated by the FHR. Unauthorized or improper servicing and/or decommissioning of the system could lead to non-FHR compliance, leaks/spills and contribute to global warming. Under the FHR, compliance activities include: trained and qualified workers, maintenance and leak testing, record keeping, appropriate equipment, notices and permits.
- 14.3. *Mitigation:* The systems are charged chiller units and as such can be removed as a unit and returned to supply. Removal of the refrigerant is not required prior to removing the unit. A written record of the information set out in Schedule 3 of the FHR shall be maintained for a refrigeration or air-conditioning system, whenever work is done on the system that can result in the release of a halocarbon for a period of five years.
- 14.4. Any halocarbon spills greater than 10 kg must be reported in accordance with the requirements of the Environmental Directive 4003-1/2003 Spill Reporting through SpillNet, as well as the requirements of the FHR to the appropriate Environment Canada regional offices, through the appropriate chain of command. All spills of less than 10 kg of refrigerant are also to be recorded in SpillNet and reported twice annually in accordance with the FHR due dates to Environment Canada.
- 14.5. *Significance:* By following the mitigation measures, the environmental risks associated with refrigeration systems are deemed acceptable.

## **15. Fuels, Fluids and Lubricants**

- 15.1. *Aspect:* The Leopard 1C2 utilizes mostly commercially available products, typically adhering to commercial performance standards and/or military specifications. Annex B lists the different fuels, fluids and lubricants (and other related items) that are used in the vehicles. In the following data summary the dry volume capacities in the MBT are identified to highlight the typical maximum amounts of fluids available within the vehicle:

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**Table 4: Leopard 1C2 MBT Dry Volumes**

COMPONENT (HULL)	QUANTITY (L)
Right Fuel Tank	475.00
Left Fuel Tank	480.00
Turret Hydraulic System	20.00
Commander's Seat	0.34
Fording Hydraulics	1.50
Cooling System	165.00
Transmission	105.00
Engine	54.00
Fuel Feeder Tank	30.00
Brake System	105.00
Final Drive	3.50

- 15.2. *Impact:* The largest quantities of fluids associated with the Leopard MBT are its fuel, hydraulic fluid, engine coolant, transmission fluid and engine oil, which present the greatest spill potential. These fluids (Annex B refers) have great potential for spilling and are in many cases potential fire hazards. Leakage of these fluids can pose risks to health (e.g. toxicity, skin irritation), safety, (e.g. flashing, combustion) and the local environment (e.g. soil and ground water contamination, contact with flora and fauna).
- 15.3. *Mitigation:* During transport of the vehicles to any location, all fluids not required for vehicle operation such as those fluids stored, either in containers within the vehicle or in the fluid tanks, be emptied and flushed. If there are some fluid storage tanks that are to be shipped with the vehicles, shipment must be compliant to the Transportation of Dangerous Goods Regulations (TDGR). POL spills of greater than 50-L of product are reportable as per ED 4003-01/2003. Spill kits sufficient to the volumes present in the vehicle are to accompany their transport to address any potential spills.
- 15.4. For vehicles that are to be sold or become Museum Artefacts, only those fluids required for operation are to be included and all other fluids removed. As a Museum Artefact, once placed in final position it is recommended that bulk fluids are drained from the vehicles to avoid leaks, spills and fire hazards. This will also prevent aged products from being used in operation and risking future equipment failures. Flushing of lines and reservoirs and the capture of their waste fluids is recommended to ensure that the vehicles do not leak over time.
- 15.5. For vehicles that are to be demilitarized and disposed of as scrap or used as Display Monuments, all fluids must be removed and drained from the reservoirs and tanks. Lines (e.g. tubes, hoses) must be flushed clean, or removed, to ensure that no fluid residuals remain.

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- 15.6. Fluids (fuels, fuel filters, oils, greases, engine coolants, chemicals) removed from the Leopards are to be disposed of through Base Supply and certified hazardous waste disposal contractors in compliance with regulations.
- 15.7. The preferred method of disposal is recycling or reprocessing of these fluids. A second preference is incineration with energy recovery. If neither of these options is available, certified hazardous waste disposal companies should be utilized to dispose of oils and lubricants in accordance with local regulations at an approved facility.
- 15.8. Personnel working with fuels, fluids and lubricants must at all times wear proper PPE (refer to product MSDS). POLs are fire hazards, therefore sources of ignition, sparks, etc. must be kept away from the work area. A spill kit and fire extinguisher must be near the work area and be easily accessible to personnel.
- 15.9. *Significance:* Environmental risks are deemed negligible upon application of the mitigation measures identified above.

#### **16. Electrical Systems and Batteries**

- 16.1. *Aspect:* The Leopard MBT utilizes a 24-VDC electrical system by connecting six (6) 12-VDC (nominal), 100-Ah, sealed lead-acid, absorbed glass mat (AGM) batteries (NSN: 6140-12-190-9027) connected in series/parallel (2 batteries in series, 3 groups in parallel) to provide 24-V. There is also an auxiliary battery to supply power to the vehicles' periscope aperture Image Intensifier Driving Device on the driver's station. There may also be wiring harnesses and other electrical components to be removed.
- 16.2. *Impact:* The electrolyte used in these batteries is a sulphuric acid which is a corrosive substance. Although the batteries are sealed, there is a spill potential for the acid if the batteries get punctured or impacted. Aside from the potential to burn or blind personnel, gas from batteries can also cause an explosion or to a lesser extent cause environmental damage (e.g. metal corrosion). Lead is a toxic metal (Section 13.11 refers). Lead is also an NPRI listed substance, and listed in CEPA: Schedule 1 (Toxic Substances List).
- 16.3. *Mitigation:* For the MBTs designated for sale or as Museum Artefacts, the electrical system and batteries should be kept in the vehicles as they are crucial to the vehicles' operations. The electrical system, along with all the other systems in the vehicles, is to be maintained until their handover to the new owners.
- 16.4. For those MBTs deemed to be disposed of as scrap or as Display Monuments, the batteries and electrical system must be removed from the vehicles. Batteries removed from the vehicles can be re-used by the unit if serviceable, or prepared for

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disposal if not. Batteries for disposal should be returned to Base Supply for proper disposal action.

- 16.5. When working on all electrical systems, including batteries, metal objects such as tools and jewellery are to be kept away from the system. Battery posts and cables touched by metals can short circuit and burn personnel. Only qualified tradespeople utilizing proper maintenance techniques and equipment are to work on the electrical system and components of the vehicles. Energized electrical systems and equipment within the Leopard possess the potential to cause injury and burns. Therefore, when working on the vehicles' electrical systems, ensure that the system power has been disconnected or isolated and the energized system discharged prior to conducting any work. Proper PPE: chemical resistant gloves and safety goggles should be worn and spill kits, neutralizing agents and fire extinguishers should be nearby in order to minimize the risks associated with acid spillage.
- 16.6. All checklist batteries (disposables, spares, etc.) and/or batteries that are included in checklist items (e.g. flashlights, portable tool kits, etc) are to be removed from the vehicle as part of the disposal preparation procedures. It is important to group the batteries according to their chemical make-up because their toxicities differ from each other and to facilitate their disposal/recycling through Base Supply Hazardous Waste Disposal Sections.
- 16.7. *Significance:* Upon application of the mitigation measures, the environmental risks associated with electrical system and batteries are insignificant.

## **17. Optics**

- 17.1. *Aspect:* The Leopard MBT is kitted with: 8 periscopes (NSN: 6650-12-171-9741) with laser filters at the commander's hatch to enable panoramic viewing; and image intensifiers, AN/VSS-501(NSN: 5855-01-052-3664). A separate environmental assessment has been completed for the AN/VVS-501 for its disposal. This assessment is available in RDIMS (Document #2597712).
- 17.2. *Impact:* Laser protected optical devices used in the MBT (i.e. periscopes) can utilize materials such as germanium, silicon, tellurium, gallium arsenide (contained within the image intensifiers as photocathodes) and phosphors. Although in their usable state these optical devices do not pose significant risk, upon disposal, they can pose risks associated with liberation of harmful fumes due to heating and mechanical processing (e.g. shredding). These metals can cause eye, skin and respiratory tract infection while others such as arsenic (in gallium arsenide) and its compounds are considered toxic according to CEPA.
- 17.3. There can be films attached to the optical devices with thermosetting synthetic resins (e.g. styrene-polyester adhesives with tertiary butyl perbenzoate catalyst). These films are also considered hazardous in the form of dust and oxides as results of heat generating activities and mechanical processing.

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- 17.4. *Mitigation:* Because this equipment is costly, every effort should be made to return it to the Original Equipment Manufacturer (OEM) for recycle/reuse in another vehicle. Should any optical equipment be disposed of by crushing personnel must utilize proper PPE in order to avoid exposure to toxic dust and particulates. Proper PPE includes impervious gloves, eye protection, coveralls, and NIOSH approved positive pressure powered air supply generator. The shredding of optical equipment is not recommended unless adequate dust control measures have been put in place.
- 17.5. *Significance:* Upon application of the mitigation measures, the environmental risks associated with optics are deemed insignificant.

#### **18. Heavy Metals, Metal Work and Coatings**

- 18.1. *Aspect:* Apart from the chassis and major vehicle components, there are many smaller parts in the Leopard MBT that are metallic such as washers, nuts, bolts, clamps, adapters and cotter pins to name a few. Metals present in the Leopard include aluminium, cadmium, chromium, lead, nickel, steel and zinc. To resist corrosion, most of these metallic parts are either treated (i.e. passivated or provided with metal oxide coatings) or painted (i.e. with Chemical Agent Resistant Coating (CARC). As well, the MBT could have been treated with several different types of CARC (i.e. American, Canadian and/or German). CARC is covered in the ensuing section of this Environmental Assessment.
- 18.2. In addition to CARC, other coatings of concern include a chromate conversion coating which is applied to aluminium surfaces prior to applying a primer and topcoat. Aluminium chromate conversion coatings improve the durability and resistance to oxidation of the equipment and provide an excellent base for subsequent painting or powder coating services. Steel and stainless steel surfaces are normally first prepared with a wash primer that can contain hexavalent chromium (a carcinogen).
- 18.3. *Impact:* Heavy metals are hazardous because they are toxic and tend to bio-accumulate. The heavy metals most often implicated in human poisoning are lead, mercury, arsenic and cadmium. In small amounts, some heavy metals are required by the body (i.e. zinc, copper, chromium, iron and manganese), but these same elements can be toxic in larger quantities.
- 18.4. Under the Canadian Environmental Protection Act (CEPA), Schedule 1, List of Toxics, metals such as lead, mercury, inorganic cadmium and hexavalent chromium are identified as known persistent and bio-accumulative toxic (PBT) metals. Components made of or containing these metals, should be removed when feasible, and segregated from other waste streams for safe and appropriate disposal, due to their potential environmental impacts.



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- 18.5. During normal operations, exposure to these metals is not significantly hazardous, however heat generating activities for disposal preparation (e.g. sanding, grinding, and welding) can cause metals to be liberated and contaminate personnel and the environment. Heavy metals can enter the body in food, water, or air, or by absorption through the skin. Once in the body, excessive amounts of metals can cause imbalances and/or can compete with other metals in the body, interfering organ system functions.
- 18.6. Also, when working with different metals, (i.e. during grinding, sanding, etc.) the potential exists to create thermite (composed of powdered aluminium and iron oxide), a primary constituent of incendiary bombs. Under the right conditions, the aluminium acts as a reducing agent with the iron oxide, resulting in molten iron, aluminium oxide and large amounts of heat. A fireball can then ensue causing injury and damage to the surrounding environment.
- 18.7. *Mitigation:* When working (grinding, sanding, welding, etc.) with metallic parts, personnel should wear proper PPE to include welding gloves, welding mask, safety goggles, safety boots/shoes etc. Fire-extinguishers should be nearby while heat-generating activities are taking place.
- 18.8. To prevent the formation of thermite, it should also be noted that during any grinding/sanding of aluminium, the belt or wheel and surrounding area should be thoroughly cleaned before moving on to other metals, such as iron.
- 18.9. Metallic parts that are no longer required or waste metals (e.g. screws, nuts, bolts, shavings, etc.) should be gathered and recycled as much as possible. Metals for disposal should be sent to metal recyclers through Base Supply.
- 18.10. If mandated, paint stripping processes will produce a hazardous waste stream, which may result in leachable cadmium and chromium/chromates in the waste stream, in addition to any solvents used. These should be collected and disposed of in accordance with local regulations.
- 18.11. *Significance:* With the use of qualified trades' people wearing appropriate Personal Protective Equipment (PPE), adherence to waste stream disposal compliance and utilizing appropriate engineering controls and recycling of non-controlled goods e-wastes through the National Standing Offer, the risks posed by heavy metals during disposal activities will result in minimal environmental risk.

## **19. Chemical Agent Resistant Coating (CARC)**

- 19.1. *Aspect:* CARC is a coating system that provides surfaces that are easily and effectively decontaminated after exposure to liquid chemical agents. There are three types of coatings in the CARC system: an epoxy polyamide primer, an aliphatic polyurethane paint (PUP), and epoxy polyamide enamel. Each of the coatings is

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- supplied as a two-component system. When the two components are combined, a terminal reaction begins which makes an impermeable coating. The exterior of the Leopard 1C2 MBTs have likely been treated with Chemical Agent Resistant Coating (CARC).
- 19.2. *Impact:* Some of the primers used in CARC may contain hexavalent chromium, a known carcinogen. If CARC topcoats are heated above 170°C, for instance during welding, grinding or sanding activities, the urethane chemical linkages start to decompose and hazardous decomposition products (isocyanates) are released. If the primer contains hexavalent chromium, it may also be liberated. Isocyanates cause irritation to skin, and mucous membranes, chest tightness and breathing difficulty. They are also classified as potential human carcinogens and known to cause cancer in animals. Earlier applied conversion coatings contained hexavalent chromium, a known carcinogen. Mechanical and/or heat processing can liberate this toxin from of the metal.
- 19.3. A cured CARC topcoat is not considered a hazardous material (hazmat). The curing also means that the CARC has been demilitarized (and thus CTAT does not apply). As such, the coating need not be removed unless special instructions stipulate its removal. The hazards associated with CARC are present only when heat is applied (for its removal for example) or if incineration of CARC treated items is undertaken.
- 19.4. *Mitigation:* If CARC removal is dictated for the intent to sell or else if disposal involves incineration, then Personal Protective Equipment (PPE) to include impervious gloves, eye protection, coveralls and a National Institute of Occupational Safety (NIOSH) approved positive pressure powered air supplied respirator, must be worn when performing disposal activities applying heat to CARC surfaces.
- 19.5. For the vehicles being sold, they should be verified for stencilling with "CARC". New owners must be informed that painted surfaces are CARC-treated if such is the case, and of the environmental risks associated with CARC. The new owners will also need to be verified for CARC appropriate maintenance facilities and signify acceptance of the CARC coating and its accompanying environmental requirements.
- 19.6. As a Display Monument or a Museum Artefact, CARC does not present significant risks as heat-generating activities on metals are unlikely to take place; therefore, stripping of CARC is not necessary. However, new owners/maintainers and personnel must be made aware of the presence of CARC. To ensure that CARC is easily identifiable, a permanent metal plate is to be affixed to the exterior of the Leopard MBT to ensure that the CARC is properly addressed during service and final disposal. The plate is to be embossed with the following warning (in bilingual format):

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### WARNING ISOCYANATE TOXICITY

*The exterior coating of this vehicle contains elements that make it a Chemical Agent Resistant Coating (CARC). Toxic substances including isocyanates, heavy metals and possibly hexavalent chromium (a carcinogen) can be released during heat generating activities such as sanding, grinding, welding or drilling. In addition to ensuring a well-ventilated work area, wear the following personal protective equipment during these types of activities: a National Institute for Occupational Safety and Health approved positive pressure powered air supplied respirator, goggles, impervious gloves and coveralls.*

*Dust and other materials from these activities shall be treated as hazardous waste.*

**Do not remove or cover this warning unless all exterior coatings have been totally removed.**

### AVERTISSEMENT TOXICITE DES ISOCYANATES

*Le revêtement extérieur de ce véhicule contient des éléments qui en font un revêtement résistant aux agents chimiques (RRAC). Des substances toxiques comprenant entre autres des isocyanates, des métaux lourds et la possibilité de chrome hexavalent (un cancérigène) sont libérés lors d'opérations tels que le ponçage, le meulage, la soudure ou le forage générant de la chaleur. En plus d'assurer une zone de travail bien aérée, le personnel doit porter l'équipement de protection tels que: un appareil de protection respiratoire à adduction d'air filtré à cartouche de produits chimiques anti-vapeurs organiques qui sont approuvés par l'Institut national pour la sécurité et de la santé, des lunettes de protections, des gants imperméables et des salopettes. Tous les résidus et sous-produits des activités et opérations reliés à ce revêtement doivent-êtré considérés et traités comme des déchets dangereux.*

**N'enlevez pas ou ne couvrez pas cet avertissement à moins que tout le revêtement extérieur ait été totalement enlevé.**

19.7. To further mitigate the environmental risks, it is recommended to advise new owners/personnel of Display Monuments and Museum Artefacts to apply non-CARC paints over the existing exterior surface, should they desire to improve the vehicles' outside appearance.

19.8. Significance: With adherence to these mitigations measures the environmental risks are not deemed significant.

## **20. Rubbers, Plastics and Composites**

20.1. *Aspect*: The Leopard 1C2 MBT contains different parts in different locations that are made of, or contain, rubbers and plastics. Such parts include cables, connectors, gaskets, grommets, hoses, pads, seals, belts, protective caps, insulators, terminal

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- boards, etc. Plastics and rubbers are two of the most stable and inert polymers, and therefore will persist in the environment for a very long duration due to their stability and slow degradation. As such, the disposal of rubbers and plastics presents more environmental risk than their usage during normal activities. Annex D lists the rubber and plastic parts in the MBT that should be removed and segregated.
- 20.2. *Impact:* A number of the constituent chemicals of rubber and plastic are very stable and do not readily biodegrade, but can over time leach pollutant chemicals thereby contributing to the contamination of soils and ground water. Although resilient, rubbers and plastics disintegrate upon introduction of heat and produce hazardous substances. These fumes can consist of furans and dioxins which are toxic and are on the Canadian Environmental Protection Act (CEPA), Schedule 1, List of Toxic Substances, as well as phthalates and other plasticizers which can have significant impact on human health even in low concentrations.
- 20.3. Shredded rubber is susceptible to self-heating and can spontaneously ignite at a lower ambient temperature if present in shredded form, in large volumes. The risk of ignition increases if the rubber contains contaminants such as moisture and rust from the surrounding metallic parts. The risk of rubber self-ignition also increases in poorly ventilated storage areas.
- 20.4. *Mitigation:* For Museum Artefacts and Display Monuments, the degradation and contamination of the surrounding environment is dependent upon the environmental conditions. Displays located indoors will not likely pose any significant risk, however long term displays located outdoors may experience degradation and contribute to environmental contamination. Therefore, to limit the quantity of deterioration and potential contamination, the removal of rubbers, plastics, polymers and composites items are recommended, especially if they do not contribute to the visual display of the tank.
- 20.5. For vehicles that will be designated as Display Monuments or Museum Artefacts, rubber and plastic parts that require removal should be segregated by type to facilitate their proper disposal through Base Supply and by certified hazardous waste recycling/disposal contractors.
- 20.6. For the MBTs that are being demilitarized and disposed of as scrap, it is recommended to have all rubber and plastic materials removed, where feasible, from the vehicle. Removal procedures should facilitate reuse and recycling of the wastes as much as possible. All detached rubber and plastic parts are to be segregated by type and disposed through Base Supply and their certified recycling/hazardous waste disposal contractors. Disposal by recycling is the preferred environmental method.
- 20.7. Whenever possible, heat-generating activities (i.e. welding of neighbouring metallic parts, hot-gluing, etc.) should be avoided around rubber and plastic parts to prevent

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the generation of hazardous fumes. Personnel performing the disposal procedures should wear the proper PPE: gloves and safety glasses, and face mask.

- 20.8. *Significance:* Overall, rubber and plastic parts of the Leopard MBT pose little environmental risk. Upon application of the mitigation measures, these risks are deemed to be insignificant.

#### 21. **Adhesives and Sealants**

- 21.1. *Aspect:* During the production of the vehicle and as a result of maintenance actions taken during its life with the CF, cured adhesives and sealants are present in/on the Leopard MBT (Annex B refers). During operations, these items would have insignificant environmental impact, however during disposal procedures, the application of new adhesives and/or removal of cured adhesives and sealants can be an environmental hazard. Some of these consumables pose an environmental, health and safety (EHS) threat through misuse, spills or improper use of protective equipment and control procedures during maintenance activities.
- 21.2. *Impact:* Heat-generating activities, such as grinding, sanding, and other types of mechanical processing can liberate dusts and fumes including those of the adhesives and sealants. This dust can contain toxic substances, carcinogens, and chemicals (phthalates, etc.) that can be easily inhaled thus presenting potential health hazards to personnel. In addition, certain adhesives and sealants will leach chromate compounds when used or removed, which are hazardous to the health of humans, aquatic species and wildlife. Application or re-application of adhesives and sealants bring about hazards to personnel as well. Adhesives and sealants tend to have a WHMIS classification of D – Items causing toxic effects. For example, Loctite 222 Threadlocker (NSN: 8030-01-054-3968), used in locking screws in place, and is being used in the MBT is classified as D2B. Additionally, adhesives can be corrosive, flammable and can cause eye, skin and respiratory tract irritation.
- 21.3. *Mitigation:* Regardless of the disposal option exercised, process controls are required for the use, storage, removal and disposal of hazardous substances and products to ensure that environmental safety and health risks are minimized whenever possible. Care should be taken during any part removal or refurbishment to ensure that workers are adequately protected (e.g. body protection suits/lab coat, safety glasses, gloves, NIOSH approved respirator) and wastes are collected and disposed of accordingly. Adequate ventilation combined with the use of PPE must be in place during equipment preparations and demilitarization activities for any grinding, sanding, or other mechanical process that can create toxic or carcinogenic dust. Solid and liquid wastes created during the dismantling and disposal process must be collected and disposed of in accordance with regulations.
- 21.4. *Significance:* With the mitigation measures in place, risks associated to these aspects are deemed acceptable.

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#### **22. Cleaning and Washing Activities**

- 22.1. *Aspect:* Preparations for disposal will entail the cleaning and washing of the vehicles. Regular vehicle operations will result in the accumulation of fuel, oil and water beneath the floorboards. Biological growth will occur over time given the presence of hydrocarbons, moisture and air.
- 22.2. *Impact:* The accumulation of substances (i.e. fluids, lubricants, etc.) and biological organisms can pose health and safety risks when cleaning. With sufficient time, this mixture could result in some growth activity that can result in the attack of parts, such as gaskets in the hull plugs and belly plates. These could result in environmental spills. The personnel cleaning and washing the vehicle can also be exposed to these substances and biologicals that can be associated with health risks.
- 22.3. Cleaning agents such as detergents, sanitizers, etc. are hazardous materials that pose health risks when inhaled/ingested, and safety and environmental risks when released to the ground or the environment. Furthermore, cleaning waste and wastewater can also have a negative impact on the environment. Cleaning effluent sediments may have contaminants that reach concentrations where sludge can be considered a regulated waste. Along with the hazardous substances from the cleaners used, the effluent may also include heavy metals, elevated levels of oil and grease (hydrocarbons) and unacceptable levels of acidity or alkalinity.
- 22.4. *Mitigation:* Before any disposal activities commence, the vehicles should be washed and thoroughly cleaned. The interior must be steam cleaned in order to remove any residual fluids. Proper PPE (refer to product's MSDS) must be worn.
- 22.5. All detergents, alcohols, solvents, etc. must be stored in proper containers and all cleaning activities must be performed in an approved site with adequate water supply and waste water treatment system. All waste water from these cleaning operations should be monitored for compliance to sewer discharge level requirements or contained and disposed of as oil contaminated waste water.
- 22.6. *Significance:* Cleaning of the tanks will be a maintenance requirement of the new owners for those MBTs sold or provided to museums. With the application of the proposed mitigation measures, the environmental risks associated with this subject are deemed insignificant.

#### **23. Demilitarization**

- 23.1. *Aspect:* The Leopard MBT is a controlled good and is assigned a demilitarization code DMC of "F". As per DAOD 3013-1, the Defence Production Act (DPA) and the Controlled Goods Regulations (CGR), the sale of controlled goods that are declared surplus materiel is restricted to authorized third parties. Demilitarization of the MBT must be conducted prior to pursuing its disposal as a Display Monument or Museum Artefact.

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- 23.2. Demilitarization is the action that renders an item unusable for its intended military or strategic purpose. The demilitarization process can involve the destruction of some parts or removal of weapons (or the rendering of them permanently inoperable), hazardous materials (oils, hydraulic fluids, greases, etc.), components and sub-assemblies prior to disposal.
- 23.3. *Impact:* Many of these procedures involve the use of heat (torch cutting) or the generation of heat (drilling, sawing, etc.). Since the vehicle exterior is coated with CARC, these processes pose the risk of generating isocyanates or the release of hexavalent chromium (see Section 13.11 for more information on CARC). Risks of generating heavy metal in emissions and in the shavings can also be present.
- 23.4. There is also potential risk of sparks and flames with the removal process of petroleum oils and lubricants. Hydraulic fluids that are only combustible in use can become flammable within confined spaces. These fluids can also burst when suddenly released from being under pressure. Adherence to demilitarization instructions issued by the technical authority is required.
- 23.5. *Mitigation:* Only trained and qualified personnel should perform the demilitarization and destruction process due to the hazardous nature of the work (i.e. grinding, cutting, torching, etc.). Persons involved in the final demilitarization process are to consult publications prior to commencing work to ensure that the appropriate procedures and precautions are taken. During demilitarization activities, appropriate PPE must be worn: work gloves, safety boots, appropriate face mask and clothes must be worn and safety precautions (most often, standard procedures) must be taken while these activities are taking place.
- 23.6. For the vehicles that are to become Display Monuments, fluid tanks, lines and hoses must be cleaned and dried. Also, any passage (i.e. holes, ports, doors, ramps, etc) must be sealed to prevent water and pest/rodent entry. Parts that are easily removable such as radiator/fuel caps, as well as moving parts, must be welded in place.
- 23.7. *Significance:* Upon application of the mitigation measures, the environmental risks associated with the demilitarization of the Leopard MBT are deemed acceptable.

## **24. Noise, Vibration and Ground Pressure**

- 24.1. *Aspect:* The Leopard 1C2 MBT by design incorporates shock values (noise, vibration and ground pressure) during operation and movement. The NATO Article RTO-MP-AVT-110, *Protecting Crew Members against Military Vehicle Noise* identifies that the Leopard 1C2 MBT generates a noise level of about 115-117 dBA (decibel – unit of A-weighted sound pressure level).

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- 24.2. Noise due to weapons firing is not covered in this assessment, since all weapons and ammunition have been removed prior to the MBT's processing for disposal.
- 24.3. *Impact:* Canada Labour Code (CLC) through Canada Occupational Health and Safety Regulations (COHSR) stipulate that noise exposure level must be, on average, no greater than 87 dBA over an eight-hour period. Anything greater than this average can result in hearing damage.
- 24.4. Operation of the Leopard 1C2 MBT will result in noise exposure of operators and workers around the vehicle. Furthermore, industrial processes such as smelting, cutting and grinding can also emit loud noises. Workers, operators and personnel located around the tank should limit exposure to noise sources as much as possible and use hearing protection as appropriate to meet regulated exposure limits.
- 24.5. For the tanks destined to be a Museum Artefact, the vehicles will be operational. Noise, vibration and ground pressure will be present during operations and while running tanks into their new positions. This can pose an environmental risk to other artefacts and museum infrastructure, and a health and safety risk to museum personnel.
- 24.6. As a Display Monument, if the MBT is rendered a "non-runner," this aspect is deemed insignificant as the vehicle will be non-operational and will propose no noise or vibration dangers. However, if the vehicle is "a runner" upon delivery to the monument site, it will most likely use its own power to position itself onto a display platform. In this case, a noise risk will be present to the personnel in the positioning of the tank to its display position. The display site must also be appropriately prepared to bear the vehicle's weight.
- 24.7. *Mitigation:* According to the Canada Occupational Health and Safety Regulations (COHSR), at every work place with an A-weighted sound pressure level greater than 87 dBA, the employer shall, post and keep posted signs warning of a potentially hazardous level of sound in the work place. The Leopard generates a noise level of about 115-117 dBA.
- 24.8. Workers, operators and personnel located around the tank should limit exposure to noise sources as much as possible and use hearing protection as appropriate to meet regulated exposure limits. Museum operators of the tank will need to mitigate against the noise of running the vehicles into new positions, as required, by wearing ear defenders. As a Display Monument or Museum Artefact, this environmental aspect will not be present to the public and its impact is deemed insignificant.
- 24.9. The final resting location for a Leopard MBT as a Display Monument/Museum Artefact must be prepared to ensure that its weight does not cause ground compaction and site disruption. Site preparation will be required to ensure the proper display of the vehicle. A separate local environmental assessment should be



## DND ENVIRONMENTAL ASSESSMENT

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- conducted to further address the impacts of the vehicle in terms of its weight and ground pressure.
- 24.10. For transportation of the tank, the weight of the vehicle is required to ensure safe transport over bridges, ferries and surface roads. With the identified weight of the MBT, proper planning can be facilitated for the time and intended route of delivery to ensure that no significant impacts occur. Transportation should be ensured to be done over appropriate roads and bridge classifications, and the appropriate time of year.
- 24.11. *Significance:* Upon the application of the mitigation measures, environmental risks associated with the noise, vibration and ground pressure of the Leopard 1C2 MBT are deemed insignificant.

## **25. Diesel Exhaust Emissions**

- 25.1. *Aspect:* The Leopard's engine is reflective of 1970's design and technology, hence lacking the sophistication, efficiency and emission controls of today's engines. Diesel exhaust emissions can contain carbon monoxide (CO), carbon dioxide (CO<sub>2</sub>), nitrogen oxides (NO<sub>x</sub>), volatile organic compounds (VOCs), polycyclic aromatic hydrocarbons (PAHs) and suspended particulate matter (PM). Until the vehicles reach the final disposal point, or are deemed non-operational, they will continue to produce emissions.
- 25.2. *Impact:* These exhaust emissions can be toxic upon inhalation, contribute to smog formation in addition to some being global warming substances, all contributing to the local ambient air quality.
- 25.3. CO is a gas that is slightly heavier than oxygen and is toxic to humans and animals in low concentrations over long periods of time, or high concentrations over short periods of time. CO reduces the ability of the blood to carry oxygen and high concentrations compound this fact significantly. Smokers, people with heart disease, and those with anaemia are especially sensitive.
- 25.4. CO<sub>2</sub> is a greenhouse gas i.e. it entraps incoming solar radiation (heat) from the sun which prevents it from radiating out. Unlike CO, CO<sub>2</sub> is non-toxic, however in an enclosed space and/or high concentration it can cause suffocation that is manifested by dizziness, headache, visual and hearing dysfunction, and unconsciousness.
- 25.5. NO<sub>x</sub> and SO<sub>x</sub> form smog upon reacting with many different chemicals in the air and sunlight. The addition of water creates acid that leads to acid rain formation. Acid rain affects flora and fauna and causes corrosion and damage to infrastructure that are exposed. Smog can also inflame breathing passages and cause eye and nose irritation.

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- 25.6. PAHs as pollutants are of a concern because they can be carcinogenic (cause cancer), mutagenic (cause change in the genetic material of an organism) or teratogenic (cause malformation of embryo or fetus due to mother's exposure).
- 25.7. *Mitigation:* The use of exhaust hoses and ventilation systems are required within maintenance facilities (enclosed facilities/spaces) to ensure adequate air supplies and to reduce worker exposure to toxic emissions. The use of exhaust socks (e.g. Sourcetec Industries, Etobicoke, Ontario) is recommended when short term engine operation is required within a maintenance facility and connection to the buildings ventilation system/exhaust hoses is impractical.
- 25.8. For MBTs that will be transported under their own power, outside of enclosed spaces (outdoors), the use of Ultra Low Sulphur Diesel Fuel (ULSDF) and/or approved biodiesels, using high quality lubricants, keeping vehicles well maintained and within design specs are all options for further reducing emissions and impact on the environment.
- 25.9. For the MBTs that are to be sold and become Museum Artefacts, the new owners must be informed of the emissions. For the MBTs that are to be monuments, there are no significant environmental risks associated with the exhaust emissions as these vehicles will be non-operational.
- 25.10. *Significance:* Upon application of the mitigation measures environmental risks associated with emissions are acceptable.

**26. Valued Ecosystem Components (VECs)**

<b>Physical:</b>	Atmosphere, Surface Water, Ground Water, Soils, Terrain and Ambient Noise
<b>Biological:</b>	Terrestrial Animals
<b>Social:</b>	People/Health

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**Environmental Effects Matrix**

PROJECT Environmental Aspect/Activity	Valued Ecosystem Components Shown: potential effects with a "X"											
	Physical					Biological					Social	
	Atmosphere	Surface water	Ground water	Soils	Terrain and Noise	Terrestrial Animals	Aerial habitat	Aquatic animals	Aquatic habitat	Vegetation	Heritage/historical	Rec./Aesthetic
1. Ionizing Radiation Sources												
2. Non-Ionizing Radiation Sources: Lasers, Radar, Radio												
3. Asbestos	X											X
4. Mercury	X	X	X	X								X
5. Polychlorinated Biphenyls (PCBs)	X	X	X	X		X						X
6. Fire Extinguishing Systems	X											X
7. Refrigerants	X											X
8. Fuels, Fluids and Lubricants		X	X	X		X						X
9. Batteries			X	X								X
10. Optics	X											X
11. Heavy Metals, Metal Work, and Coatings	X	X	X	X								X
12. Rubbers and Plastics	X	X	X									X
13. Adhesives and Sealants	X											X
14. Noise, Vibration and Ground Pressure	X			X	X	X						X
15. Exhaust Emissions	X											X
16. Washing and Cleaning Activities		X										X

**DND ENVIRONMENTAL ASSESSMENT**

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**PART III CONCLUSION AND SIGNOFF**

**27. Assessment Summary**

27.1. The disposal of the Leopard 1C2 Main Battle Tank (MBT) by sale is an effective way to promote the advantages of recycling and reducing the amount of material used and produced globally. Similarly, the disposal of the MBTs as Display Monuments and Museum Artefacts are a prudent measure to reduce the quantity of hazardous materials used and disposed of globally, while contributing positively to the maintenance of our Canadian military heritage.

27.2. It was determined that the main environmental risks associated with the disposal of the Leopard 1C2 Main Battle Tank include asbestos, polychlorinated biphenyls (PCBs), ozone depleting substances (Halon 1301 and 1211), global warming substances (HFC-134A), heavy metals, rubbers, plastics, optics, and coatings such as Chemical Agent Resistant Coating (CARC) in the end item as well as consumables such as fuel, lubricants, adhesives, sealants and batteries used in the operation and maintenance of the end-item.

27.3. The vehicles incorporate innate environmental risks but if operated and maintained properly, these risks are minimized to acceptable levels. Proper preparation for transport of the Leopard 1C2 MBT is required in order to minimize the risk of accidents and spills. Overall the environmental risks associated with the disposal of the MBT are considered to be negligible provided that the mitigation measures are observed and that the vehicles are prepared and transported properly.

27.4. With the use of worker PPE during demilitarization and disposal activities, and the utilization of workshop engineering controls and processes, the impact of the system and its associated components is acceptable.

**27.5. Environmental Assessment Determination:**

\_\_\_\_\_ Unknown - Consultant assisted study required

  **X**   Effects not likely significant - may proceed

\_\_\_\_\_ Effects likely significant - may not proceed

27.6. **Follow-Up Program Required:** No

**DND ENVIRONMENTAL ASSESSMENT**

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**28. Signoff**

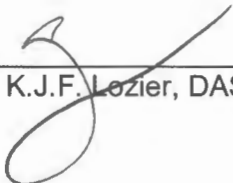
28.1. **Environmental Assessment Prepared by:** K. Mellow, DLEPS 6-C6, 819-994-8666

28.2. **Environmental Assessment Reviewed by:**

  
\_\_\_\_\_  
H. Chen, DLEPS 6, (819) 994-7144

14 August 2014  
Date

28.3. **Environmental Assessment Approved by:**

  
\_\_\_\_\_  
Capt. K.J.F. Lezier, DASPM 4, (819) 997-2867

18 August 2014  
Date

**Annexes**

- Annex A: List of Other References
- Annex B: Fuels, Oils, Lubricants, Sealants, Adhesives and Coatings
- Annex C: Hazardous Materials and Products of Environmental Concern Report – Rubbers and Plastics
- Annex D: Hazardous Materials and Products of Environmental Concern Report – Metals and Composites
- Annex E: Summary of Mitigation Measures and Action Points According to Environmental Aspects and Disposal Means

**List of Other References**

SER	CFTO	DESCRIPTION	DATE
1	C-30-730-000/CF-001	MODIFICATION INSTRUCTION, PRIORITY B, INSTALLATION OF WIRE SEAL AND DECAL ON FIRE EXTINGUISHER MANUAL SWITCH, TANK LEOPARD C1 MBT, ARV AND AVLB	1980-08-15
2	C-30-730-000/CF-002	PRIORITY B, MODIFICATION INSTRUCTION, REPLACEMENT OF THE FOURTH TRACK SUPPORT ROLLER AXLE ON LEOPARD C1 FAMILY OF VEHICLES	1988-06-03
3	C-30-730-000/CF-003	PRIORITY "B" - WELDING REPAIR PROCEDURES ON FINAL DRIVE HOUSING ASSEMBLY LEOPARD C1 FAMILY	1991-05-31
4	C-30-730-000/CF-004	MODIFICATION OF THE EMERGENCY BRAKE AND LOW BRAKE FLUID PRESSURE WARNING SYSTEM IN THE LEOPARD FAMILY OF VEHICLES	1989-02-01
5	C-30-730-000/CF-005	MODIFICATION INSTRUCTION, PRIORITY C, TRANSMISSION ODOMETER ON LEOPARD	1986-05-29
6	C-30-730-000/CF-006	PRIORITY C, INSTALLATION OF OIL SAMPLING TAPS ON LEOPARD C1 POWER PACK	1989-10-24
7	C-30-730-000/CF-007	TRACK CENTRE GUIDE AND END CONNECTOR WEAR GAUGE ADDITIONAL MARKING	1990-01-23
8	C-30-730-000/CF-008	INSTALLATION OF BRAKE FLUID LINE RETAINING CLAMP	1989-01-19
9	C-30-730-000/CF-009	REINFORCED SPLIT PIN FOR THE TRACK CONNECTING FIXTURE IN THE REAR	1988-12-19
10	C-30-730-000/CF-010	PRIORITY "C" - LEOPARD C1 INSTALLATION OF FUEL LINE VIBRATION DAMPING CLAMPS	1989-08-31
11	C-30-730-000/CF-011	SUBMERGENCE HYDRAULIC SYSTEM RESERVOIR HAND PUMP IMPROVED GASKET	1990-01-25
12	C-30-730-000/CF-012	MOUNTING OF THE FIRST FIRE EXTINGUISHER BOTTLE WITH A MODIFIED PURN BUCKLE LAYOUT	2000-11-23
13	C-30-730-000/CF-013	MODIFICATION INSTRUCTION - BATTERY POWERED HAZZARD WARNING LIGHT HEAT PROTECTION SHIELD	1990-02-14
14	C-30-730-000/CF-014	MODIFICATION INSTRUCTION - NEW WASHER PUMP FOR VISION BLOCK WIPER/WASHER SYSTEM	1990-09-17
15	C-30-730-000/CF-015	PRIORITY C - INSTALLATION OF AN OIL LEVEL INDICATOR FOR VISUAL CONTROL OF THE SUBMERGENCE HYDRAULIC PUMP RESERVOIR	1990-04-04
16	C-30-730-000/CF-016	CHANGE TO NBC DRAIN LINE	2000-11-24
17	C-30-730-000/CF-017	INSTALLATION OF IMPROVED BATTERY AND DELETION OF AIR DEFLECTOR BOXES	1990-09-17
18	C-30-730-000/CF-018	ADJUSTABLE DAMPER IN THE HEATER DUCT	2000-11-24
19	C-30-730-000/CF-019	FLEXIBLE HAND LEVER FOR THE SUBMERSION HYDRAULIC PUMP	1989-05-23
20	C-30-730-000/CF-020	PRIORITY C - THROTTLE LINKAGE SUPPORT BRACKET	1994-05-20
21	C-30-730-000/CF-021	PRIORITY C - LEOPARD C1 BRAKE VALVE BLOCK	1992-03-05
22	C-30-730-000/CF-022	TRANSMISSION CONTAINER	1991-10-03
23	C-30-730-000/CF-023	LEOPARD CI RADIATOR SHROUD	1992-04-08
24	C-30-730-000/CF-024	FUEL CELL REPAIR HISTORY DECALS LEOPARD C1	1992-09-16
25	C-30-730-000/CF-025	LEOPARD FOV CONVERSION FROM OIL TO GREASE IN THE ROAD WHEEL, IDLER WHEEL AND SUPPORT ROLLER HUBS	1997-06-26

**List of Other References**

SER	CFTO	DESCRIPTION	DATE
26	C-30-730-000/CF-026	MODIFICATION INSTRUCTION - PORTABLE FIRE EXTINGUISHER AND BRACKET	2000-09-30
27	C-30-730-000/CF-027	MODIFICATION INSTRUCTION - AUDIBLE ALARM LEOPARD FIRE EXTINGUISHER SYSTEM	2003-10-15
28	C-30-730-000/CF-028	MODIFICATION INSTRUCTION - REPLACEMENT OF NAVIGATION SET, SATELLITE SIGNAL AN/PSN-11(V)1 IN THE LEOPARD, ARMoured RECOVERY VEHICLE, TAURUS	2007-10-11
29	C-30-730-000/CS-001	SPECIAL INFORMATION, LEOPARD FAMILY OF VEHICLES, REPAIR PROCEDURE, TRACK ADJUSTING TOOL	1981-10-22
30	C-30-730-000/CS-002	LEOPARD FAMILY OF VEHICLES - REPAIR PROCEDURES FOR TRACK MOUNTING FIXTURES	1990-09-10
31	C-30-730-000/CS-003	LEOPARD C1 FAMILY OF VEHICLES NEW FINAL DRIVE MOUNTING BOLTS	1992-09-24
32	C-30-730-000/CS-004	LEOPARD C1 FAMILY OF VEHICLES FUEL INJECTION PUMP TIMING WRINCH	1993-02-11
33	C-30-730-000/CS-005	LEOPARD C1 FAMILY OF VEHICLES GEAR SELECTOR FUZE REPLACEMENT	1993-02-16
34	C-30-730-000/CS-006	LEOPARD C1 MBT/AVLB SAFETY FOAM BALLS	1997-04-07
35	C-30-730-000/CS-007	LEOPARD C1 ARV/AEV SAFETY FOAM BALLS	1997-04-07
36	C-30-730-000/CS-008	INSTALLATION INSTRUCTION PORTABLE FIRE EXTINGUISHER AND BRACKET LEOPORD ARV,AVLB AND AEV	2000-04-018
37	C-30-730-000/CS-009	ACCES PANELS FOR LEOPARD FUEL TANKS	2011-12-19
38	C-30-730-000/DU-001	LEOPARD C1 MBT AND VARIANTS	1992-02-07
39	C-30-730-000/LP-000	MAIN BATTLE TANK LEOPARD C1 CF PROJECT IMPLEMENTATION PLAN (RESTRICTED)	1980-05-01
40	C-30-730-000/ME-001	INSTALLATION INSTRUCTION - PORTABLE FIRE EXTINGUISHER AND BRACKET LEOPORD ARV, AVLB AND AEV	1999-01-13
41	C-30-730-000/MF-001	DESCRIPTION AND MAINTENANCE INSTRUCTION SEALED, LEAD ACID BATTERIES NSN 6140-12-190-9027	1993-05-05
42	C-30-730-000/MF-002	TIMING WRINCH FUEL PUMP LEOPARD	1993-01-18
43	C-30-730-000/MN-001	FIRST AND SECOND LINE MAINTENANCE INSTRUCTIONS LEOPARD - FAMILY OF VEHICLES (FOV)	2006-09-27
44	C-30-730-000/MS-000	HANDBOOK - LEOPARD C1 - TEST SET AUTOMATIC FIRE ALARM AND EXTINGUISHER	1985-10-31
45	C-30-730-000/MS-001	OPERATING AND MAINTENANCE INSTRUCTIONS - TEST EQUIPMENT HYDRAULIC SYSTEMS - 4940-12-175-5348	2006-09-27
46	C-30-730-000/MX-001	LEOPARD C1 FAMILY OF VEHICLES COMMON ITEMS	1996-11-08
47	C-30-730-000/MY-000	LEOPARD C1 ILLUSTRATED PARTS LIST FOR POWER PACK OF MAIN BATTLE TANK ARMoured RECOVERY VEHICLE (TAURUS) ARMoured VEHICLE LAUNCHING BRIDGE (BEAVER)	1990-04-19
48	C-30-730-000/MY-001	ILLUSTRATED PARTS LIST - CROSS REFERENCE INDEX - MANUFACTURER'S PART NUMBER TO NATO STOCK NUMBER (NSN) AND NATO STOCK NUMBER TO MANUFACTURER'S PART NUMBER FOR LEOPARD C1 FAMILY OF VEHICLES COMMON ITEMS	2002-04-23

**List of Other References**

SER	CFTO	DESCRIPTION	DATE
49	C-30-730-000/NP-000	PERMISSIVE REPAIR SHCHEDULE (PRS) AND STANDARD REPAIR TIMES (SRTS) LEOPARD 1C2 FAMILY OF VEHICLES, CHASSIS	2006-09-27
50	C-30-730-000/NS-001	SPECIAL INFORMATION INSTRUCTION ¿ INSPECTION OF THE MULTIPURPOSE ENGINE SLING	2012-07-20
51	C-30-730-000/TP-001	MAINTENANCE PROCEDURES - ARMoured VEHICLE LEOPARD C1 FAMILY - WELDING MAINTENANCE TECHNIQUE	1990-01-23
52	C-30-730-000/TP-002	FUELTANKS LEOPARD C-1 F.O.V.'S	1993-01-22
53	C-30-730-000/TR-001	STANDARD REPAIR PROCEDURE LEOPARD C1 TRANSMISSION (4HP250) STUD REMOVAL KIT	1992-11-16



**Fuels, Oils, Lubricants, Sealants, Adhesives and Coatings**

NSN	Type	Class	Location
8010219090063	Epoxy	Adhesive	Turret
8040218525931	Unknown	Adhesive	NBC/ Turret Systems
8040218781346	Adhesive (Rubber & Plastic)	Adhesive	Fuel System
8040218781356	Glue, Terokal 244	Adhesive	Turret
9905219047328	SIGN FACE,ADHESIVE	Adhesive	Turret
9905219047329	SIGN FACE,ADHESIVE	Adhesive	Turret
9905219093449	PLATE,INSTRUCTION Adhesive	Adhesive	Fuel System
6850218024078	Ethylene Glycol	Antifreeze	Cooling System
8010219101562	Surface Filler	Body Filler	Body Assembly
6810215722540	Alcohol, Denatured, 3-GP-530	Cleaner & Degreaser	Various Parts
6850219100064	Decontaminating Agent (C1)	Cleaner & Degreaser	Body Assembly
DX 330	Cleaner, Lubricant & Preservative	Cleaner & Degreaser	Body Assembly
DX 380	Cleaner, Lubricant & Preservative	Cleaner & Degreaser	Body Assembly
9150218935931	Cleaner/Lub/Preserv. S-758, MIL-L-63460	Cleaning Compound	Turret
2910121288594	Filter Element, Fluid	Contaminated (Fuel)	Fuel System
2910121428169	Filter Element, Fluid	Contaminated (Fuel)	Fuel System
2520121430207	Filter Element, Fluid	Contaminated (Oil)	Transmission system
2520121430208	Filter Element, Fluid	Contaminated (Oil)	Transmission system
2520218995632	Filter Element, Fluid	Contaminated (Oil)	Transmission system
2940121428182	Filter Element, Fluid	Contaminated (Oil)	Engine Assembly
9130218663372	Turbine Fuel, Aviation, F-34, CAN/CGSB 3.23	Fuel, Motor	Fuel System
9140219124621	Diesel, Type A	Fuel, Motor	Fuel System
6830219047194	Nitrogen	Gas	Turret
9150215780007	Multi-Purpose, -23 to 50 Deg. C, 80W90, O-226, 3-GP-390	Gear Oil	Final Drive Assembly
9150001900904	Automotive & Artillery, Lithium, NATO Code G-403, Mil-PRF-10924	Grease	Various Parts
9150002234004	Molybdenum Disulfide, G-353, Mil-G-21164	Grease	Turret
9150007542595	Molybdenum Disulfide, G-353, Mil-G-21164	Grease	Driveline System

**Fuels, Oils, Lubricants, Sealants, Adhesives and Coatings**

NSN	Type	Class	Location
9150009355851	Aircraft, G395, Mil-G-81322	Grease	Turret
9150011977691	Automotive & Artillery, Lithium, NATO Code G-403, Mil-PRF-10924	Grease	Various Parts
9150011977692	Automotive & Artillery, Lithium, NATO Code G-403, Mil-PRF-10924	Grease	Various Parts
9150011977693	Automotive & Artillery, Lithium, NATO Code G-403, Mil-PRF-10924	Grease	Driveline System
9150200001301	Mineral oil, wire rope and exposed gear	Grease	Turret
9150215787503	Aircraft, Synthetic, G-354, Mil-G-23827	Grease	Starting Motor/Cooling System
9150218799427	Grease, MIL-G-4343, Nato Code G-392	Grease	Turret
9150009359807	Petroleum Based, Mil-H-6083, NATO Code C-635	Hydraulic Fluid	Turret
9150006874241	Dicarboxylic ester, semifluid, NATO Code O-158, Mil-L-46000	Lubricating Oil	Turret
9150215783915	Lube Oil, GP, Mineral Base, O-142, Mil-I-7870, 3-GP-335	Lubricating Oil	Turret
9150218656598	Lubricating Oil, HDO-10, O-237, Mil-PRF-2104	Lubricating Oil	Starting Motor / Turret
9150218832944	Lubricating Oil, Mineral, 15W40, O-1236, Mil-L-2104	Lubricating Oil	Engine Assembly / Turret
9150218981595	Mineral oil, commercial vehicle, 5W30	Lubricating Oil	Brake & Transmission systems
8010012297540	Polyurethane, CARC	Paint	Body Assembly
8010012297543	Polyurethane coating	Paint	Body Assembly
8010012297546	Polyurethane, CARC	Paint	Body Assembly
8010014468958	CARC	Paint	Body Assembly
8010219058622	CARC	Paint	Turret
8010219058624	Catalyst	Paint	Body Assembly
8010219101567	CARC	Paint	Body / Turret Assembly
8010219101568	CARC	Paint	Body Assembly
8010219101635	Catalyst (CARC topcoat)	Paint	Body / Turret Assembly
8510008170295	Talcum Powder	Preservative	Turret
8010013090328	Epoxy primer	Primer	Body Assembly
8010219058625	Corrosion Inhibiting primer coating	Primer	Turret
8010219058626	Primer/Catalyst	Primer	Turret

**Fuels, Oils, Lubricants, Sealants, Adhesives and Coatings**

<b>NSN</b>	<b>Type</b>	<b>Class</b>	<b>Location</b>
8010219101636	Primer/Catalyst (CARC primer)	Primer	Body Assembly
8030215794362	Vinyl Wash Primer (CAN/CGSB 1.213 replaces CAN/CGSB 1.121-93)	Primer	Body Assembly
Mil-P-53084	Epoxy coating	Primer	Body Assembly
8010218591722	Acrylic lacquer	Resin	Fuel System
8030010693046	Loctite 222, Dimethacrylate Ester (Sealing compound)	Resin	NBC/ Turret Systems
Grade 30x60	Silica (Blast Media)	Sand	Various Parts
9150002500926	Petrolatum	Soft Film Lubricant	Turret
6810002709989	Talc, Technical, A-A-52518	Solid Film Lubricant	NBC Systems
	Sodium Bicarbonate (Blast Media)	Soluble	Various Parts
6810215750997	Xylene	Solvent	Body Assembly
8010215765523	Paint Thinner, Mineral Spirits, 1-GP-4M	Thinner	Turret

**Hazardous Materials and Products of Environmental Concern Report**  
**Rubbers and Plastics**

NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
6230001616422	FLASHLIGHT	Check list	Plastic	ABS	L30731000LC000 L30731A30LC001	ABS plastic case, plastic filter, plastic reflector, plastic polycarbonate lens.
8415218991796	GLOVES,HEAT PROTECTIVE	Tools & Equipment (On-Board)	Plastic	Aramid		
4730219048049	COUPLING HALF,QUICK DISCONNECT	NBC Systems	Plastic	Delrin	C87277000MS001	
5920008929311	FUSEHOLDER,EXTRACTOR POST	NBC Systems	Plastic	Diallyl Phthalate	C87277000MS001	
5330121663389	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121786269	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121786270	O-RING	Electrical System	Plastic	Fluoroelastomer	C30730000MX001	
5330121786281	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121786290	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121786294	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121786295	O-RING	Fuel System	Plastic	Fluoroelastomer	C30730000MX001	
5330121786302	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121786308	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121786321	PACKING,PREFORMED	Supercharger Drive	Plastic	Fluoroelastomer	C30730A00MY001	
5330121786321	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121786358	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121786742	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121817180	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121989614	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121989616	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5330121989618	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121989620	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121989624	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121989626	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330121989633	O-RING	Cooling System	Plastic	Fluoroelastomer	C30730000MX001	
5330123043698	O-RING	Electrical System	Plastic	Fluoroelastomer	C30730000MX001	
5330123061855	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330123079838	O-RING	Fuel System	Plastic	Fluoroelastomer	C30730000MX001	
5330123082694	O-RING	Cooling System	Plastic	Fluoroelastomer	C30730000MX001	
5330123082696	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330123082697	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330123082698	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330123082754	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5330123082755	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730000MX001	
5331121663389	O-RING	Supercharger Drive	Plastic	Fluoroelastomer	C30730C03MY001	
5331121786269	O-RING	Supercharger Drive	Plastic	Fluoroelastomer	C30730B01MY001	
5331121786270	O-RING	Pump, Injection	Plastic	Fluoroelastomer	C30730B01MY001	
5331121786274	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
5331121786281	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
5331121786290	O-RING	Supercharger Drive	Plastic	Fluoroelastomer	C30730C03MY001	
5331121786294	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
5331121786295	O-RING	Supercharger Drive	Plastic	Fluoroelastomer	C30730C03MY001	
5331121786302	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
5331121786308	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
5331121786358	O-RING	Supercharger Drive	Plastic	Fluoroelastomer	C30730C03MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5331121786742	O-RING	Supercharger Drive	Plastic	Fluoroelastomer	C30730C03MY001	
5331121817180	O-RING	Supercharger Drive	Plastic	Fluoroelastomer	C30730C03MY001	
5331121865055	O-RING	Cooling System	Plastic	Fluoroelastomer	C30730B01MY001	
5331121989614	O-RING	Fuel System	Plastic	Fluoroelastomer	C30730C03MY001	
5331121989616	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
5331121989618	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
5331121989620	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
5331121989624	O-RING	Heating System	Plastic	Fluoroelastomer	C30730B01MY001	
5331121989628	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
5331123061855	O-RING	Pump, Injection	Plastic	Fluoroelastomer	C30730C03MY001	
5331123079838	O-RING	Supercharger Drive	Plastic	Fluoroelastomer	C30730C03MY001	
5331123082695	O-RING	Supercharger Drive	Plastic	Fluoroelastomer	C30730C03MY001	
5331123082696	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
5331123082697	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
5331123082698	O-RING	Supercharger Drive	Plastic	Fluoroelastomer	C30730C03MY001	
5331123082754	O-RING	Oil Pump	Plastic	Fluoroelastomer	C30730B01MY001	
5331123082755	O-RING	Engine Assembly	Plastic	Fluoroelastomer	C30730B01MY001	
3940219204474	WEBBING ASSEMBLY,SINGLE LEG	Tools & Equipment (On-Board)	Plastic	Nylon	L71345X02LC001	
4020218742586	CORD,FIBROUS	Accessories	Plastic	Nylon	C30730000MX001	May also be Polyester.
5310121466985	NUT,SELF-LOCKING,HEXAGON	Turret	Plastic	Nylon	C71278000MX000	Nut made of metal/chromate
5935001349715	SOCKET,PLUG-IN ELECTRONIC COMPONENTS	Brake system	Plastic	Nylon	C30730000CF004	Plastic polyamide nylon.
5975005709598	STRAP,TIEDOWN,ELECTRICAL COMPONENTS	Turret	Plastic	Nylon	C71345000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5975010938781	STRAP,TIEDOWN,ELECTRICAL COMPONENTS	NBC Systems	Plastic	Nylon	C87277000MS001	
5975011426169	STRAP,TIEDOWN,ELECTRICAL COMPONENTS	NBC Systems	Plastic	Nylon	C87277000MS001	
5975218872633	STRAP,TIEDOWN,ELECTRICAL COMPONENTS	Brake system	Plastic	Nylon	C30730000CF004	
4720121727626	HOSE ASSEMBLY,NONMETALLIC	Hydraulic System	Plastic	Polyamide	C30730000MS001	Plastic polyester cord inner, and plastic polyamide outer.
4720121809674	HOSE ASSEMBLY,NONMETALLIC	Hydraulic System	Plastic	Polyamide	C30730000MS001	Plastic polyamide, with rubber (synthetic) cord inner, and rubber (polyurethane) outer.
4720121809676	HOSE ASSEMBLY,NONMETALLIC	Hydraulic System	Plastic	Polyamide	C30730000MS001	Plastic polyamide, with rubber (synthetic) cord inner, and rubber (polyurethane) outer.
4720121818757	HOSE ASSEMBLY,NONMETALLIC	Tools & Equipment (On-Board)	Plastic	Polyamide	L71345X02LC001	
4720121855231	HOSE ASSEMBLY,NONMETALLIC	Tools & Equipment (On-Board)	Plastic	Polyamide	L71345X02LC001	
4720121918757	HOSE ASSEMBLY,NONMETALLIC	Tools & Equipment (On-Board)	Plastic	Polyamide	L71345X02LC001 L71345X01LC001	Also contains Polyester cord.
5305121909676	SCREW,SELF-LOCKING	Starting Motor	Plastic	Polyamide	C30730F06MY001	
5305121932833	SCREW,SELF-LOCKING	Starting Motor	Plastic	Polyamide	C30730F06MY001	
5305123058145	SCREW,SELF-LOCKING	Turret	Plastic	Polyamide	C71278000MX000	
5330123239143	GASKET	Engine Assembly	Plastic	Polyamide	C30730B01MY001	
5330123239144	GASKET	Engine Assembly	Plastic	Polyamide	C30730000MX001	
5330123239146	GASKET	Engine Assembly	Plastic	Polyamide	C30730000MX001	
5330123239149	GASKET	Engine Assembly	Plastic	Polyamide	C30730000MX001	
5330123239150	GASKET	Engine Assembly	Plastic	Polyamide	C30730B01MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5330123239151	GASKET	Engine Assembly	Plastic	Polyamide	C30730000MX001	
5330123239152	GASKET	Engine Assembly	Plastic	Polyamide	C30730B01MY001	
5330123239153	GASKET	Engine Assembly	Plastic	Polyamide	C30730000MX001	
5330123239154	GASKET	Pump, Injection	Plastic	Polyamide	C30730A00MY001	
5330123239156	GASKET	Cooling System	Plastic	Polyamide	C30730000MX001	
5330123242413	GASKET	Engine Assembly	Plastic	Polyamide	C30730000MX001	
5330123242414	GASKET	Supercharger Drive	Plastic	Polyamide	C30730C03MY001	
5330123242415	GASKET	Engine Assembly	Plastic	Polyamide	C30730B01MY001	
5330123253303	GASKET	Supercharger Drive	Plastic	Polyamide	C30730F06MY001	
5330123258503	GASKET	Engine Assembly	Plastic	Polyamide	C30730B01MY001	
5330123288830	GASKET	Cooling System	Plastic	Polyamide	C30730000MX001	
5330123288834	GASKET	Cooling System	Plastic	Polyamide	C30730000MX001	
5330123301390	GASKET	Transmission system	Plastic	Polyamide	C30730000MX001	
5330123307282	GASKET	Cooling System	Plastic	Polyamide	C30730000MX001	
5340121576092	CLAMP,LOOP	Turret	Plastic	Polyamide	C71278000MX000	
5975004515001	STRAP,TIEDOWN,ELECTRICAL COMPONENTS	NBC Systems	Plastic	Polyamide	C87277000MS001	Mil-M-20693
5975007275153	STRAP,TIEDOWN,ELECTRICAL COMPONENTS	Turret	Plastic	Polyamide	C71345000MX001	
5975121322570	ROPE	Tools & Equipment (On-Board)	Plastic	Polyamide		
P/N 186-452	CABLE WRAP	UPS	Plastic	Polyamide	C71345000CF001	
1005219087722	COVER,GUN MOUNT	Tools & Equipment (On-Board)	Plastic	Polyester	L30731A30LC001	
4020121333052	CORD,FIBROUS	Check list	Plastic	Polyester	L30731A30LC001	



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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
8030218923809	SEALING COMPOUND	Turret	Plastic	Polyester Urethane	C71345000MN001 C71345000MM001	Item is "Hylomar", sealing compound, blue paste, polyester urethane, 100 gram or 3.5 oz tube.
5330123122510	GASKET	Turret	Plastic	Polyethylene	C71345000MX001	
5340002081989	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Polyethylene	C71345000MX001	
5340002118188	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Polyethylene	C71345000MX001	
5340002577682	CAP-PLUG,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Polyethylene	C71345000MX001	
5340004376461	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Polyethylene	C71345000MX001	
5340004935835	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Polyethylene	C71345000MX001	
5340123096619	COVER,ACCESS	Turret	Plastic	Polyethylene	C71345000MX001	
5310121734021	WASHER,FLAT	Turret	Plastic	Polymethylenoxide	C71345000MX001	
5970000523301	INSULATION SLEEVING,ELECTRICAL	NBC Systems	Plastic	Polyolefin	C87277000MS001	
5970007276728	INSULATION SLEEVING,ELECTRICAL	Mount	Plastic	Polyolefin	C10125000CF005	PN# M23053/5-207-C. Item is used in the Simulator, Cannon Fire (Simcan) mounting kit for the Leopard 1C2.
5970008122969	INSULATION SLEEVING,ELECTRICAL	Mount	Plastic	Polyolefin	C10125000CF005	PN# M23053/5-104-0. Item is used in the Simulator, Cannon Fire (Simcan) mounting kit for the Leopard 1C2.
5970008151295	INSULATION SLEEVING,ELECTRICAL	NBC Systems	Plastic	Polyolefin	C87277000MS001	Mil-I-23053/5

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5970121514345	INSULATION SLEEVING,ELECTRICAL	Turret	Plastic	Polyolefin	C71345000MX001	
5970121542201	INSULATION SLEEVING,ELECTRICAL	Turret	Plastic	Polyolefin	C71278000MX000	
5970121584568	INSULATION SLEEVING,ELECTRICAL	Turret	Plastic	Polyolefin	C71345000MX001	
5970218957524	INSULATION SLEEVING,ELECTRICAL,SPECIAL PURPOSE	Mount	Plastic	Polyolefin	C10125000CF005	PN# 222D963-4-42. Item is used in the Simulator, Cannon Fire (Simcan) mounting kit for the Leopard 1C2.
3120121707798	BEARING,PLAIN,ROD END	Transmission system	Plastic	Polytetrafluoroethylene	C30730G07MY001	
5935002583023	ADAPTER,CONNECTOR	Check list	Plastic	Polytetrafluoroethylene	L49071411LC003	Aluminum alloy shell. Surface finish is cadmium and chromate plated.
4220219140800	LIFE PRESERVER,YOKE	Check list	Plastic	Polyurethane	L30731000LC000	Polyurethane coated nylon cover.
6145008093663	WIRE,ELECTRICAL	Brake system	Plastic	Polyvinyl Chloride	C30730000CF004	Plastic PVC and plastic polyamide.
6150121590453	LEAD,ELECTRICAL	Electrical System	Plastic	Polyvinyl Chloride	C30730F06MY001	
6150121590454	LEAD,ELECTRICAL	Electrical System	Plastic	Polyvinyl Chloride	C30730F06MY001	
6150121590455	LEAD,ELECTRICAL	Electrical System	Plastic	Polyvinyl Chloride	C30730F06MY001	
6150121590456	LEAD,ELECTRICAL	Electrical System	Plastic	Polyvinyl Chloride	C30730F06MY001	
6150121590457	LEAD,ELECTRICAL	Electrical System	Plastic	Polyvinyl Chloride	C30730F06MY001	
9330121302788	PLASTIC ROUND SECTION	Turret	Plastic	Polyvinyl Chloride	C71278000MX000	
9905121643104	SIGN FACE,ADHESIVE	Turret	Plastic	Polyvinyl Chloride	C71278000MX000	
3120219076691	BUSHING,SLEEVE	NBC Systems	Plastic	Polyvinylchloride	C87277000MS001	
5970009427612	INSULATION SLEEVING,ELECTRICAL	NBC Systems	Plastic	Polyvinylchloride	C87277000MS001	Mil-I-230532

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
4820010577244	VALVE,ANGLE	Power Pac	Plastic	Teflon	C30730000CF006	Teflon disc, polytetrafluorethylene.
8030218652650	TAPE,ANTISEIZING	Power Pac	Plastic	Teflon	C30730000CF006	
2815121428659	GASKET	Engine Assembly	Plastic	Unknown	C30730000MX001	
4020121279912	ROPE	Accessories	Plastic	Unknown	C30730000MX001	
4240215520525	GOGGLES,INDUSTRIAL	Check list	Plastic	Unknown	L30731000LC000 L30731A30LC001	
4240219121522	CANISTER,CHEMICAL-BIOLOGICAL MASK	Check list	Plastic	Unknown	L30731A30LC001	Chemical-biological mask, thermoplastic material (type unknown), plastic sealing cap and plug.
4930121762893	OILER,HAND	Check list	Plastic	Unknown	L30731A30LC001	Flexible spout - plastic with wire core.
5120002348913	SCREWDRIVER,CROSS TIP	Check list	Plastic	Unknown	L30731000LC000 L30731A30LC001	Screwdriver, metal, plastic handle (type unknown).
5120002362127	SCREWDRIVER,FLAT TIP	Check list	Plastic	Unknown	L30731A30LC001	Screwdriver, metal with plastic handle (type unknown).
5120121205965	SCREWDRIVER,FLAT TIP	Check list	Plastic	Unknown	L30731000LC000 L30731A30LC001	Screwdriver, metal, plastic handle (type unknown).
5120121211103	SCREWDRIVER,FLAT TIP	Check list	Plastic	Unknown	L30731000LC000	Screwdriver, metal, plastic handle (type unknown).
5120121264484	EXTRACTOR	Optical Sight Assembly	Plastic	Unknown	L71345X02LC001	
5120121550184	SCREWDRIVER,FLAT TIP	Check list	Plastic	Unknown	L30731000LC000	Screwdriver, metal, plastic handle (type unknown).
5120121652891	KEY,SOCKET HEAD SCREW	Tools & Equipment (On-Board)	Plastic	Unknown	L71345X02LC001 L71345X01LC001	Item is a Screwdriver with plastic handle.

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5120121660210	KEY, SOCKET HEAD SCREW	Tools & Equipment (On-Board)	Plastic	Unknown	L71345X02LC001 L71345X01LC001	Item is a Screwdriver with plastic handle.
5120121660211	KEY, SOCKET HEAD SCREW	Tools & Equipment (On-Board)	Plastic	Unknown	L71345X02LC001 L71345X01LC001	Item is a Screwdriver with plastic handle.
5120121660212	KEY, SOCKET HEAD SCREW	Tools & Equipment (On-Board)	Plastic	Unknown	L71345X02LC001 L71345X01LC001	Item is a Screwdriver with plastic handle.
5120121660325	KEY, SOCKET HEAD SCREW	Tools & Equipment (On-Board)	Plastic	Unknown	L71345X02LC001 L71345X01LC001	Item is a Screwdriver with plastic handle.
5120121706501	KEY, SOCKET HEAD SCREW	Tools & Equipment (On-Board)	Plastic	Unknown	L71345X02LC001 L71345X01LC001	Item is a Screwdriver with plastic handle.
5120123080452	KEY, SOCKET HEAD SCREW	Tools & Equipment (On-Board)	Plastic	Unknown	L71345X02LC001 L71345X01LC001	Item is a Screwdriver with plastic handle.
5120211052423	SCREWDRIVER, FLAT TIP	Check list	Plastic	Unknown	L49071410LC007	Screwdriver is metal with plastic handle (plastic unknown)
5120211052427	SCREWDRIVER, FLAT TIP	Check list	Plastic	Unknown	L49071410LC007	Screwdriver is metal with plastic handle (plastic unknown)
5120211166102	SCREWDRIVER, FLAT TIP	Tools & Equipment (On-Board)	Plastic	Unknown	L30731A30LC001	Screwdriver, metal with plastic handle (type unknown).
5120218006890	SCREWDRIVER, FLAT TIP	Tools & Equipment (On-Board)	Plastic	Unknown	L30731A30LC001	Screwdriver, metal with plastic handle (type unknown).
5310999604292	WASHER, FLAT	Turret	Plastic	Unknown	C71345000MX001	
5310999604293	WASHER, FLAT	Turret	Plastic	Unknown	C71345000MX001	
5315123042206	PIN, STRAIGHT, HEADLESS	Turret	Plastic	Unknown	C71278000MX000	
5325121598317	GROMMET, NONMETALLIC	Turret	Plastic	Unknown	C71278000MX000	
5330121429918	SEAL, PLAIN ENCASED	Final Drive Assembly	Plastic	Unknown	C30730000MX001	
5330121468220	SEAL, PLAIN ENCASED	Cooling System	Plastic	Unknown	C30730000MX001	
5330121468560	PACKING, PREFORMED	Engine Assembly	Plastic	Unknown	C30730000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5330121587538	PACKING,PREFORMED	Fuel System	Plastic	Unknown	C30730000MX001	
5330121590278	PACKING,PREFORMED	Engine Assembly	Plastic	Unknown	C30730000MX001	
5330121989617	PACKING,PREFORMED	Engine Assembly	Plastic	Unknown	C30730000MX001	
5330121989623	PACKING,PREFORMED	Engine Assembly	Plastic	Unknown	C30730000MX001	
5330122339145	GASKET	Engine Assembly	Plastic	Unknown	C30730B01MY001	
5330123086823	PACKING,PREFORMED	Engine Assembly	Plastic	Unknown	C30730000MX001	
5330123086824	PACKING,PREFORMED	Engine Assembly	Plastic	Unknown	C30730000MX001	
5330123239145	GASKET	Engine Assembly	Plastic	Unknown	C30730000MX001	
5330123239147	GASKET	Engine Assembly	Plastic	Unknown	C30730000MX001	
5330123239160	GASKET	Glowplug Supply Bar	Plastic	Unknown	C30730F06MY001	
5330123306963	GASKET	Engine Assembly	Plastic	Unknown	C30730000MX001	
5331121587538	O-RING	Super Structure	Plastic	Unknown	C30730C03MY001	
5331121590278	O-RING	Supercharger Drive	Plastic	Unknown	C30730F06MY001	
5331121989617	O-RING	Engine Assembly	Plastic	Unknown	C30730B01MY001	
5331121989623	O-RING	Engine Assembly	Plastic	Unknown	C30730B01MY001	
5340001914898	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Unknown	C71345000MX001	
5340004947597	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Unknown	C71345000MX001	
5340121416319	PLUG,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Unknown	C71345000MX001	
5340121455783	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Transmission system	Plastic	Unknown	C30730A00MY001	
5340121465289	PLUG,PROTECTIVE,DUST AND MOISTURE SEAL	Final Drive Assembly	Plastic	Unknown	C30730000MX001	
5340121493834	PLUG,PROTECTIVE,DUST AND MOISTURE SEAL	Chassis	Plastic	Unknown	C30730000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5340121503778	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Heating System	Plastic	Unknown	C30730B01MY001	
5340121642994	PLUG,PROTECTIVE,DUST AND MOISTURE SEAL	Chassis	Plastic	Unknown	C30730000MX001	
5340121796563	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Unknown	C71345000MX001	
5340121796564	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Unknown	C71345000MX001	
5340121812482	PLUG,PROTECTIVE,DUST AND MOISTURE SEAL	Hydraulic System	Plastic	Unknown	C30730000MS001	
5340121863148	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Unknown	C71345000MX001	
5340121889238	PLUG,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Unknown	C71345000MX001	
5340121891882	PLUG,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Unknown	C71345000MX001	
5340121994536	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Plastic	Unknown	C71345000MX001	
5355006826753	KNOB	NBC Systems	Plastic	Unknown	C87277000MS001	
5355121436017	KNOB	MG Mount	Plastic	Unknown	C71271000MX001	
5355121496038	KNOB	Turret	Plastic	Unknown	C71345000MX001	
5355121496038	KNOB	Turret	Plastic	Unknown	C71345000MX001	
5355121595769	KNOB	Turret	Plastic	Unknown	C71345000MX001	
5355121783254	KNOB	Engine Assembly	Plastic	Unknown	C30730B01MY001	

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5910006327554	CAPACITOR, FIXED, PLASTIC DIELECTRIC	Electrical System	Plastic	Unknown	C30730000MX001	5910-00-632-7554: Capacitor, Vehicle Harness, Generic (Radio Communications). Item is part of the communications equipment referenced by ERN 53239. Case Insulation material is Plastic/Unknown. Tested at ETC, Environment Canada 26-11-2003. PCB content is 3.1 mg/kg < 50 mg/kg therefore CONTAINS NO PCBs.
5970121241924	INSULATION SLEEVING, ELECTRICAL	Turret	Plastic	Unknown	C71278000MX000	
5970121516240	INSULATION SLEEVING, ELECTRICAL	Turret	Plastic	Unknown	C71278000MX000	
5970121590304	INSULATION SLEEVING, ELECTRICAL	Supercharger Drive	Plastic	Unknown	C30730F06MY001	
6140121943653	RETAINER	Electrical System	Plastic	Unknown	C30731000CF012	Item is metal with a thin coat of plastic material.
6210000227980	LENS, LIGHT	Fire Suppression System	Plastic	Unknown	C30730000MX001	
6210001515358	LENS, LIGHT	Fire Suppression System	Plastic	Unknown	C30730000MX001	
6210001830513	LENS, LIGHT	Fire Suppression System	Plastic	Unknown	C30730000MX001	
6230219133377	FLASHLIGHT	Tools & Equipment (On-Board)	Plastic	Unknown		

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6625219010512	MULTIMETER	Tools & Equipment (On-Board)	Plastic	Unknown	L71345X01LC001	
6685121419140	GAGE,PRESSURE,DIAL INDICATING	Check list	Plastic	Unknown	L49071411LC003	Steel gauge with plastic crystal bezel (plastic type unknown).
7240121320378	CAN,MILITARY	Accessories	Plastic	Unknown	C30730000MX001	Can is identified as a water can.
7240121406486	FUNNEL	Tools & Equipment (On-Board)	Plastic	Unknown		
9320121734631	RUBBER STRIP	Turret	Plastic	Unknown	C71345000MX001	
9905218724237	REFLECTOR SET,HIGHWAY WARNING,TRIANGULAR	Tools & Equipment (On-Board)	Plastic	Unknown	L30731A30LC001	Also has non-skid Rubber feet.
4720011494980	TUBING	Tools & Equipment (On-Board)	Plastic	Vinyl	L71345X02LC001	Item is plastic / vinyl (Tygon).
7690219075572	LABEL	Mount	Plastic	Vinyl	C10125000CF005	PN# DND 1597. Item is used in the Simulator, Cannon Fire (Simcan) mounting kit for the Leopard 1C2. Modification label contains 3M-DM vinyl #3650 and a permanent adhesive.
4240219041836	BOOT,SEALING,RESPIRATOR CANISTER	NBC Systems	Rubber	Bromobutyl	C87277000MS001	
4240219125345	BOOT,SEALING,RESPIRATOR CANISTER	NBC Systems	Rubber	Bromobutyl	C87277000MS001	
5330121224224	O-RING	Lubrication System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121225492	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121251873	O-RING	Starting Motor	Rubber	Butadiene-Acrylonitrile	C30730F06MY001	



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5330121253626	O-RING	Lubrication System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121260445	O-RING	Brake system	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121274622	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121309183	O-RING	Lubrication System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121334320	O-RING	Chassis	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121348900	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121348905	O-RING	Lubrication System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121413628	O-RING	Lubrication System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121415101	O-RING	Lubrication System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121415109	O-RING	Lubrication System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121430169	O-RING	Turret	Rubber	Butadiene-Acrylonitrile	C71278000MX000	
5330121430173	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121434260	O-RING	Lubrication System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121437638	O-RING	Lubrication System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121439839	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730000MX001	

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5330121439845	O-RING	Lubrication System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121452022	SEAL,PLAIN	Hydraulic System	Rubber	Butadiene-Acrylonitrile	C30730000CF011	
5330121461867	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121468558	O-RING	Lubrication System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121468577	O-RING	Electrical System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121470597	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121493830	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121576493	SEAL,PLAIN	Turret	Rubber	Butadiene-Acrylonitrile	C71345000MX001	
5330121587460	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121587485	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121587491	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121587493	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121587505	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121587518	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121590267	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730000MX001	

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5330121590334	O-RING	Cooling System	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330121659911	SEAL, NONMETALLIC ROUND SECTION	Turret	Rubber	Butadiene-Acrylonitrile	C71345000MX001	
5330121665752	GASKET	Turret	Rubber	Butadiene-Acrylonitrile	C71345000MX001	
5330121774506	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330123054210	GASKET	Turret	Rubber	Butadiene-Acrylonitrile	C71345000MX001	
5330123148567	O-RING	Chassis	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5330123151715	GASKET	Turret	Rubber	Butadiene-Acrylonitrile	C71345000MX001	
5331005793158	O-RING	Turret	Rubber	Butadiene-Acrylonitrile	C71345000MX001	
5331005822133	O-RING	Turret	Rubber	Butadiene-Acrylonitrile	C71345000MX001	
5331005840266	O-RING	Turret	Rubber	Butadiene-Acrylonitrile	C71345000MX001	
5331006180801	O-RING	Turret	Rubber	Butadiene-Acrylonitrile	C71345000MX001	
5331121225492	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730B01MY001	
5331121430173	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730G07MY001	
5331121434260	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730G07MY001	
5331121437638	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730G07MY001	

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5331121439845	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730G07MY001	
5331121461867	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730G07MY001	
5331121468577	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730F06MY001	
5331121470597	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730B01MY001	
5331121493830	O-RING	Transmission system	Rubber	Butadiene-Acrylonitrile	C30730G07MY001	
5331121587460	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730B01MY001	
5331121587485	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730B01MY001	
5331121587491	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730B01MY001	
5331121587493	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730B01MY001	
5331121587518	O-RING	Supercharger Drive	Rubber	Butadiene-Acrylonitrile	C30730B01MY001	
5331121590267	O-RING	Supercharger Drive	Rubber	Butadiene-Acrylonitrile	C30730B01MY001	
5331121654986	O-RING	Brake system	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
5331121774506	O-RING	Engine Assembly	Rubber	Butadiene-Acrylonitrile	C30730B01MY001	
5331123429948	O-RING	Hydraulic System	Rubber	Butadiene-Acrylonitrile	C30730000CF015	
5331128808832	O-RING	Chassis	Rubber	Butadiene-Acrylonitrile	C30730000MX001	

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5331218852651	O-RING	Chassis	Rubber	Butadiene-Acrylonitrile	C30730000MX001	
4720013254727	HOSE,AIR DUCT	NBC Systems	Rubber	Butyl	C87277000MS001	
4720013254728	HOSE,AIR DUCT	NBC Systems	Rubber	Butyl	C87277000MS001	
4720219121964	HOSE,AIR DUCT	NBC Systems	Rubber	Butyl	C87277000MS001	
4720219121967	HOSE,AIR DUCT	NBC Systems	Rubber	Butyl	C87277000MS001	
4720121953366	HOSE ASSEMBLY,NONMETALLIC	Final Drive Assembly	Rubber	Chloroprene	C30730000MX001	
5330121561378	PACKING,PREFORMED	Turret	Rubber	Chloroprene	C71278000MX000	
5330999430154	O-RING	Turret	Rubber	Chloroprene	C71278000MX000	
4720121426340	HOSE,NONMETALLIC	Starting Motor	Rubber	Ethylene-Propylene	C30730F06MY001	
4720121590393	HOSE,NONMETALLIC	Starting Motor	Rubber	Ethylene-Propylene	C30730F06MY001	
5330121709497	PACKING,PREFORMED	Turret	Rubber	Ethylene-Propylene	C71345000MX001	
5330123264502	PACKING,PREFORMED	Cooling System	Rubber	Fluorocarbon	C30730000MX001	Class FPM.
5330121468625	GASKET	Transmission system	Rubber	Fluorosilicone	C30730G07MY001	
5330121468626	GASKET	Transmission system	Rubber	Fluorosilicone	C30730000MX001	
5330121468627	GASKET	Transmission system	Rubber	Fluorosilicone	C30730G07MY001	
5330121468628	GASKET	Transmission system	Rubber	Fluorosilicone	C30730000MX001	
5330121468629	GASKET	Transmission system	Rubber	Fluorosilicone	C30730000MX001	
5330121468630	GASKET	Transmission system	Rubber	Fluorosilicone	C30730000MX001	
5330219016911	GASKET	NBC Systems	Rubber	Natural	C87277000MS001	
5340121590394	BUMPER	Starting Motor	Rubber	Natural	C30730F06MY001	
5340121590396	BUMPER	Starting Motor	Rubber	Natural	C30730F06MY001	

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5340121590399	BUMPER	Starting Motor	Rubber	Natural	C30730F06MY001	
2590219083046	PAD,CUSHIONING	NBC Systems	Rubber	Neoprene	C87277000MS001	
4720121430636	HOSE ASSEMBLY,NONMETALLIC	Cooling System	Rubber	Neoprene	C30730000MX001	
4720121520484	HOSE ASSEMBLY,NONMETALLIC	Accessories	Rubber	Neoprene	C30730000MX001	
5935007553494	CONNECTOR,RECEPTACLE,ELECTRICAL	Fire Suppression System	Rubber	Neoprene	C30730000MX001	
5935008016615	CONNECTOR,RECEPTACLE,ELECTRICAL	Turret	Rubber	Neoprene	C71278000MX000	Shell made of metal/cadmium
5935008016621	CONNECTOR,RECEPTACLE,ELECTRICAL	Fire Suppression System	Rubber	Neoprene	C30730000MX001	
5935008144120	CONNECTOR,RECEPTACLE,ELECTRICAL	Fire Suppression System	Rubber	Neoprene	C30730000MX001	
5935008210345	CONNECTOR,RECEPTACLE,ELECTRICAL	Fire Suppression System	Rubber	Neoprene	C30730000MX001	
6150219087945	WIRING HARNESS	Turret	Rubber	Neoprene	C71345000MX001	
4720123041951	HOSE,PREFORMED	Fuel System	Rubber	Nitrile	C30730C03MY001	
4720123041952	HOSE,PREFORMED	Fuel System	Rubber	Nitrile	C30730F06MY001	
5330121624110	SEAL,PLAIN ENCASED	Pump, Injection	Rubber	Nitrile	C30730B01MY001	Also Cadmium plated outer metal surface
5331121224224	O-RING	Transmission system	Rubber	Nitrile	C30730G07MY001	
5331121253626	O-RING	Transmission system	Rubber	Nitrile	C30730G07MY001	
5331121274622	O-RING	Transmission system	Rubber	Nitrile	C30730G07MY001	
5331121301669	O-RING	Transmission system	Rubber	Nitrile	C30730G07MY001	
5331121309183	O-RING	Transmission system	Rubber	Nitrile	C30730G07MY001	

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5331121317412	O-RING	Transmission system	Rubber	Nitrile	C30730000MX001	
5331121348905	O-RING	Transmission system	Rubber	Nitrile	C30730G07MY001	
5331121413628	O-RING	Transmission system	Rubber	Nitrile	C30730G07MY001	
5331121415101	O-RING	Transmission system	Rubber	Nitrile	C30730G07MY001	
5331121415109	O-RING	Transmission system	Rubber	Nitrile	C30730G07MY001	
5331121430109	O-RING	Transmission system	Rubber	Nitrile	C30730A00MY001	
5331121468558	O-RING	Transmission system	Rubber	Nitrile	C30730G07MY001	
5340121516290	CLIP,SPRING TENSION	Turret	Rubber	Phosphate	C71345000MX001	
8135123050941	CUSHION,SHIPPING AND STORAGE CONTAINER	Hydraulic System	Rubber	Polyethylene	C30730000MS001	Shipping and storage container insert.
2590121988375	PAD,CUSHIONING	Turret	Rubber	Polyurethane	C71345000MX001	
5330121972573	PACKING,PREFORMED	Charging System	Rubber	Polyurethane	C30730000MX001	
5330121972574	PACKING,PREFORMED	Chassis	Rubber	Polyurethane	C30730000MX001	
1240219066322	EYESHIELD,OPTICAL INSTRUMENT	Turret	Rubber	Silicone	C71345000MX001	
5330121508358	SEAL,PLAIN ENCASED	Engine Assembly	Rubber	Silicone	C30730000MX001	Seal, Plain, Encased.
8379972082	HOSE,NONMETALLIC	Electrical System	Rubber	Synthetic	C30730000MX001	
4720112435951	HOSE,NONMETALLIC	Tools & Equipment (On-Board)	Rubber	Synthetic	L71345X02LC001	
4720121287259	HOSE,NONMETALLIC	Cooling System	Rubber	Synthetic	C30730000MX001	
4720121413162	HOSE,NONMETALLIC	Electrical System	Rubber	Synthetic	C30730000MX001	
4720121428547	HOSE,NONMETALLIC	Engine Assy & Heating System	Rubber	Synthetic	C30730000MX001	

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4720121428549	HOSE ASSEMBLY, NONMETALLIC	Supercharger Drive	Rubber	Synthetic	C79291000MX001	
4720121428566	HOSE, NONMETALLIC	Fuel System	Rubber	Synthetic	C30730C03MY001	
4720121428570	HOSE, NONMETALLIC	Fuel System	Rubber	Synthetic	C30730F06MY001	
4720121428604	HOSE, NONMETALLIC	Engine Assembly	Rubber	Synthetic	C30730000MX001	
4720121430123	HOSE ASSEMBLY, NONMETALLIC	Brake system	Rubber	Synthetic	C30730000MX001	
4720121430284	HOSE ASSEMBLY, NONMETALLIC	Cooling System	Rubber	Synthetic	C30730000MX001	
4720121430285	HOSE ASSEMBLY, NONMETALLIC	Cooling System	Rubber	Synthetic	C30730000MX001	
4720121430339	HOSE ASSEMBLY, NONMETALLIC	Cooling System	Rubber	Synthetic	C30730000MX001	
4720121430341	HOSE ASSEMBLY, NONMETALLIC	Transmission system	Rubber	Synthetic	C30730000MX001	
4720121430342	HOSE ASSEMBLY, NONMETALLIC	Transmission system	Rubber	Synthetic	C30730A00MY001	
4720121430342	HOSE ASSEMBLY, NONMETALLIC	Brake system	Rubber	Synthetic	C30730000MX001	
4720121430343	HOSE ASSEMBLY, NONMETALLIC	Transmission system	Rubber	Synthetic	C30730A00MY001	
4720121430343	HOSE ASSEMBLY, NONMETALLIC	Brake system	Rubber	Synthetic	C30730000MX001	
4720121433705	HOSE, NONMETALLIC	Transmission system	Rubber	Synthetic	C30730A00MY001	
4720121435951	HOSE ASSEMBLY, NONMETALLIC	Tools & Equipment (On-Board)	Rubber	Synthetic	L71345X02LC001	
4720121436405	HOSE, NONMETALLIC	Engine Assembly	Rubber	Synthetic	C30730000MX001	
4720121476406	HOSE ASSEMBLY, NONMETALLIC	Check list	Rubber	Synthetic	L49071411LC002	



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4720121511175	HOSE, NONMETALLIC	Electrical System	Rubber	Synthetic	C30730000MX001	
4720121661824	HOSE ASSEMBLY, NONMETALLIC	Tools & Equipment (On-Board)	Rubber	Synthetic	L71345X02LC001	
4720121944643	HOSE ASSEMBLY, NONMETALLIC	Turret	Rubber	Synthetic	C71345000MX001	
4720121944644	HOSE ASSEMBLY, NONMETALLIC	Turret	Rubber	Synthetic	C71345000MX001	
4720123070886	HOSE, NONMETALLIC	Cooling System	Rubber	Synthetic	C30730000MX001	
4720123173166	HOSE, NONMETALLIC	Transmission system	Rubber	Synthetic	C30730A00MY001	
4720123288789	TUBING, NONMETALLIC	Cooling System	Rubber	Synthetic	C30730000MX001	
5325121346448	GROMMET, NONMETALLIC	Turret	Rubber	Synthetic	C71278000MX000	
5325219055970	GROMMET, NONMETALLIC	NBC Systems	Rubber	Synthetic	C87277000MS001	
5330005302772	PACKING WITH RETAINER	Turret	Rubber	Synthetic	C71345000MX001	
5330007383414	GASKET	Turret	Rubber	Synthetic	C71345000MX001	
5330011428540	PACKING, PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121222779	PACKING, PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121224620	PACKING, PREFORMED	Turret	Rubber	Synthetic	C71345000MX001	
5330121248904	PACKING, PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121301669	PACKING, PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121308738	PACKING, PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121316171	GASKET	Accessories	Rubber	Synthetic	C30730000MX001	
5330121327544	PACKING, PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121328475	SEAL, PLAIN ENCASED	Transmission system	Rubber	Synthetic	C30730000MX001	

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5330121328614	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121368580	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121408490	O-RING	Hull System	Rubber	Synthetic	C30730000MX001	
5330121415115	PACKING,PREFORMED	Brake system	Rubber	Synthetic	C30730000MX001	
5330121416478	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121416479	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121416480	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121420768	GASKET	Turret	Rubber	Synthetic	C71345000MX001	
5330121428155	GASKET	Glowplug Supply Bar	Rubber	Synthetic	C30730F06MY001	
5330121428535	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121428537	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121428538	O-RING	Generator	Rubber	Synthetic	C30730F06MY001	
5330121428539	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121428541	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121429912	SEAL,PLAIN ENCASED	Chassis	Rubber	Synthetic	C30730000MX001	
5330121430105	PACKING,PREFORMED	Chassis	Rubber	Synthetic	C30730000MX001	
5330121430109	PACKING,PREFORMED	Brake system	Rubber	Synthetic	C30730000MX001	
5330121430112	RETAINER, PACKING	Chassis	Rubber	Synthetic	C30730000MX001	
5330121430113	PACKING,PREFORMED	Cooling System	Rubber	Synthetic	C30730000MX001	
5330121430114	PACKING,PREFORMED	Cooling System	Rubber	Synthetic	C30730000MX001	
5330121430115	PACKING,PREFORMED	Hull System	Rubber	Synthetic	C30730000MX001	
5330121430118	PACKING,PREFORMED	Chassis	Rubber	Synthetic	C30730000MX001	
5330121430166	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5330121430166	PACKING,PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	

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5330121430168	PACKING,PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121430170	PACKING,PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121430171	PACKING,PREFORMED	Lubrication System	Rubber	Synthetic	C30730000MX001	
5330121430172	PACKING,PREFORMED	Final Drive Assembly	Rubber	Synthetic	C30730000MX001	
5330121430579	PACKING,PREFORMED	Chassis	Rubber	Synthetic	C30730000MX001	
5330121437248	GASKET	Turret	Rubber	Synthetic	C71345000MX001	
5330121455747	PACKING,PREFORMED	Brake system	Rubber	Synthetic	C30730000MX001	
5330121456318	PACKING,PREFORMED	Turret	Rubber	Synthetic	C71278000MX000	
5330121456388	GASKET	Cooling System	Rubber	Synthetic	C30730000MX001	
5330121461852	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121461858	PACKING,PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121465291	PACKING,PREFORMED	Chassis	Rubber	Synthetic	C30730000MX001	
5330121465296	PACKING,PREFORMED	Brake system	Rubber	Synthetic	C30730000MX001	
5330121468341	GASKET	Turret	Rubber	Synthetic	C71278000MX000	
5330121468553	PACKING,PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121468555	PACKING,PREFORMED	Chassis	Rubber	Synthetic	C30730000MX001	
5330121468556	PACKING,PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121468557	PACKING,PREFORMED	Chassis	Rubber	Synthetic	C30730000MX001	
5330121468561	PACKING,PREFORMED	Final Drive Assembly	Rubber	Synthetic	C30730000MX001	
5330121468567	PACKING,PREFORMED	Lubrication System	Rubber	Synthetic	C30730000MX001	
5330121468569	PACKING,PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121468572	PACKING,PREFORMED	Chassis	Rubber	Synthetic	C30730000MX001	

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5330121468576	PACKING,PREFORMED	Chassis	Rubber	Synthetic	C30730000MX001	
5330121468578	PACKING,PREFORMED	Chassis	Rubber	Synthetic	C30730000MX001	
5330121474126	PACKING,PREFORMED	Cooling System	Rubber	Synthetic	C30730000MX001	
5330121476107	PACKING,PREFORMED	Chassis	Rubber	Synthetic	C30730000MX001	
5330121496062	PACKING,PREFORMED	Turret	Rubber	Synthetic	C71278000MX000	
5330121496066	PACKING,PREFORMED	Turret	Rubber	Synthetic	C71278000MX000	
5330121514025	PACKING,PREFORMED	Chassis	Rubber	Synthetic	C30730000MX001	
5330121526280	PACKING,PREFORMED	Power Pac	Rubber	Synthetic	C30730000MX001	
5330121542267	GASKET	Turret	Rubber	Synthetic	C71345000MX001	
5330121568402	GASKET	Chassis	Rubber	Synthetic	C30730000MX001	
5330121587481	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121587543	PACKING,PREFORMED	Cooling System	Rubber	Synthetic	C30730000MX001	
5330121587550	PACKING,PREFORMED	Cooling System	Rubber	Synthetic	C30730000MX001	
5330121590259	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121590283	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121590313	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121600438	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121627812	PACKING,PREFORMED	Transmission system	Rubber	Synthetic	C30730000MX001	
5330121644379	GASKET	Brake system	Rubber	Synthetic	C30730000MX001	
5330121653519	GASKET	Brake system	Rubber	Synthetic	C30730000MX001	
5330121654991	PACKING,PREFORMED	Brake system	Rubber	Synthetic	C30730000MX001	
5330121780034	PACKING,PREFORMED	Turret	Rubber	Synthetic	C71278000MX000	
5330121786274	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121786300	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730B01MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5330121865055	PACKING,PREFORMED	Engine Assembly	Rubber	Synthetic	C30730000MX001	
5330121868899	PACKING,PREFORMED	Turret	Rubber	Synthetic	C71345000MX001	
5330123012471	PACKING,PREFORMED	Turret	Rubber	Synthetic	C71278000MX000	
5330123040921	PACKING,PREFORMED	Brake system	Rubber	Synthetic	C30730000MX001	
5330123102826	SEAL,PLAIN	Turret	Rubber	Synthetic	C71345000MX001	
5330123246522	PACKING,PREFORMED	Final Drive Assembly	Rubber	Synthetic	C30730000MX001	
5331121222779	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121223432	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121260445	O-RING	Transmission system	Rubber	Synthetic	C30730A00MY001	
5331121327544	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121348904	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121368580	O-RING	Pump, Injection	Rubber	Synthetic	C30730C03MY001	
5331121408490	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121415115	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121416478	O-RING	Engine Assembly	Rubber	Synthetic	C30730B01MY001	
5331121416479	O-RING	Engine Assembly	Rubber	Synthetic	C30730B01MY001	
5331121416480	O-RING	Engine Assembly	Rubber	Synthetic	C30730B01MY001	
5331121428535	O-RING	Engine Assembly	Rubber	Synthetic	C30730B01MY001	
5331121428537	O-RING	Oil Pump	Rubber	Synthetic	C30730B01MY001	
5331121428539	O-RING	Heating System	Rubber	Synthetic	C30730B01MY001	
5331121428540	O-RING	Cooling System	Rubber	Synthetic	C30730B01MY001	
5331121428541	O-RING	Pump, Injection	Rubber	Synthetic	C30730C03MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5331121430167	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121430168	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121430170	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121430171	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121455735	O-RING	Transmission system	Rubber	Synthetic	C30730A00MY001	
5331121455747	O-RING	Transmission system	Rubber	Synthetic	C30730A00MY001	
5331121461852	O-RING	Supercharger Drive	Rubber	Synthetic	C30730C03MY001	
5331121468553	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121468556	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121468569	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121468570	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331121526280	O-RING	Power Pac	Rubber	Synthetic	C30730A00MY001	
5331121587481	O-RING	Fuel System	Rubber	Synthetic	C30730C03MY001	
5331121590259	O-RING	Engine Assembly	Rubber	Synthetic	C30730B01MY001	
5331121590283	O-RING	Supercharger Drive	Rubber	Synthetic	C30730C03MY001	
5331121590313	O-RING	Supercharger Drive	Rubber	Synthetic	C30730C03MY001	
5331121600438	O-RING	Pump, Injection	Rubber	Synthetic	C30730B01MY001	
5331121627812	O-RING	Transmission system	Rubber	Synthetic	C30730G07MY001	
5331123040921	O-RING	Transmission system	Rubber	Synthetic	C30730A00MY001	
5340121430895	BUMPER	Turret	Rubber	Synthetic	C71345000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5340121475609	BUMPER	Power Pac	Rubber	Synthetic	C30730000MX001	
5340121483045	BUMPER	Transmission system	Rubber	Synthetic	C30730A00MY001	
5340121987624	PLUG,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Rubber	Synthetic	C71345000MX001	
5340121987624	PLUG,PROTECTIVE,DUST AND MOISTURE SEAL	Turret	Rubber	Synthetic	C71345000MX001	
5340123035686	BUMPER	Engine Assembly	Rubber	Synthetic	C30730000MX001	
9390121428780	NONMETALLIC SPECIAL SHAPED SECTION	Fuel System	Rubber	Synthetic	C30730000MX001	
0009973183	HOSE,NONMETALLIC	Cooling System	Rubber	Unknown	C30730000MX001	
1240121505195	CAP,EYEPIECE	Optical Sight Assembly	Rubber	Unknown	L71345X02LC001	
2520121431064	RING,DUST PROTECTION	Power Take-Off	Rubber	Unknown	C30730000MX001	
2530121430246	BOOT, DUST AND MOISTURE	Brake system	Rubber	Unknown	C30730000MX001	
2530121527074	PAD,TRACK SHOE	Chassis	Rubber	Unknown	C30730000MX001	Track Shoe Pad.
2530121636465	WHEEL,SOLID RUBBER TIRE	Chassis	Rubber	Unknown	C30730000MX001	
2590121430910	SEAL,RUBBER	Turret	Rubber	Unknown	C71278000MX000	
2930121430293	HOSE ASSEMBLY	Controls	Rubber	Unknown	C30730000MX001	
2930121430340	HOSE ASSEMBLY,COOLANT LINES	Cooling System	Rubber	Unknown	C30730000MX001	
4720121254845	HOSE,NONMETALLIC	Cooling System	Rubber	Unknown	C30730000MX001	
4720121428544	HOSE,NONMETALLIC	Cooling System	Rubber	Unknown	C30730000MX001	
4720121428924	HOSE ASSEMBLY,NONMETALLIC	Cooling System	Rubber	Unknown	C30730000MX001	
4720121430292	HOSE,NONMETALLIC	Cooling System	Rubber	Unknown	C30730000MX001	
4720121623712	HOSE,PREFORMED	Cooling System	Rubber	Unknown	C30730000MX001	
4720121629332	HOSE,NONMETALLIC	Hull System	Rubber	Unknown	C30730000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
4720121629333	HOSE, NONMETALLIC	Hull System	Rubber	Unknown	C30730000MX001	
4720121700152	HOSE ASSEMBLY, NONMETALLIC	Hydraulic System	Rubber	Unknown	C30730000MS001	
4720123024904	HOSE ASSEMBLY, NONMETALLIC	Cooling System	Rubber	Unknown	C30730000MX001	
4720123093257	HOSE, NONMETALLIC	Cooling System	Rubber	Unknown	C30730000MX001	
4720123231721	TUBING, NONMETALLIC	Cooling System	Rubber	Unknown	C30730000MX001	
4720123231722	TUBING, NONMETALLIC	Cooling System	Rubber	Unknown	C30730000MX001	
4720123231723	TUBING, NONMETALLIC	Cooling System	Rubber	Unknown	C30730000MX001	
4730121271704	SEAL BONNET, TUBE	Engine Assembly	Rubber	Unknown	C30730000MX001	
4930218827541	LUBRICATING GUN, HAND	Check list	Rubber	Unknown	L30731000LC000	Flexible rubber hose extension.
4940121476418	DETEKTOR, UNIVERSAL	Check list	Rubber	Unknown	L49071411LC003	Rubber hose with soft plastic foil (type unknown) protective covering.
5310121576672	WASHER, FLAT	Transmission system	Rubber	Unknown	C30730A00MY001	
5325219080708	GROMMET, NONMETALLIC	NBC Systems	Rubber	Unknown	C87277000MS001	
5330121223432	PACKING, PREFORMED	Lubrication System	Rubber	Unknown	C30730000MX001	
5330121429981	SEAL, PLAIN ENCASED	Chassis	Rubber	Unknown	C30730000MX001	
5330121430167	PACKING, PREFORMED	Transmission system	Rubber	Unknown	C30730000MX001	
5330121436954	GASKET	Cooling System	Rubber	Unknown	C30730000MX001	
5330121450372	SEAL, PLAIN ENCASED	Starting Motor	Rubber	Unknown	C30730F06MY001	Also has Cadmium treated steel outer case.
5330121481408	RUBBER STRIP	MG Mount	Rubber	Unknown	C71271000MX001	
5330121498658	PACKING, PREFORMED	Chassis	Rubber	Unknown	C30730000MX001	
5330121528159	PACKING, PREFORMED	Brake system	Rubber	Unknown	C30730000MX001	



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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5330121556896	RUBBER STRIP	Hull System	Rubber	Unknown	C30730000MX001	
5330121587449	PACKING,PREFORMED	Engine Assembly	Rubber	Unknown	C30730000MX001	
5330121587553	PACKING,PREFORMED	Cooling System	Rubber	Unknown	C30730000MX001	
5330121589062	GASKET	Transmission system	Rubber	Unknown	C30730000MX001	
5330121589065	GASKET	Transmission system	Rubber	Unknown	C30730G07MY001	
5330121590260	PACKING,PREFORMED	Engine Assembly	Rubber	Unknown	C30730000MX001	
5330121654567	PACKING,PREFORMED	Brake system	Rubber	Unknown	C30730000MX001	
5330121654984	PACKING,PREFORMED	Brake system	Rubber	Unknown	C30730000MX001	
5330121654987	PACKING,PREFORMED	Brake system	Rubber	Unknown	C30730000MX001	
5330121654990	PACKING,PREFORMED	Brake system	Rubber	Unknown	C30730000MX001	
5330121790443	GASKET	Cooling System	Rubber	Unknown	C30730000MX001	
5330123023492	SEAL,PLAIN ENCASED	Final Drive Assembly	Rubber	Unknown	C30730000MX001	
5330123118850	BOOT,RUBBER	Turret	Rubber	Unknown	C71345000MX001	
5330123323284	O-RING	Chassis	Rubber	Unknown	C30730000MX001	
5331010221328	O-RING	Engine Assembly	Rubber	Unknown	C30730000MX001	
5331218903518	O-RING	Brake system	Rubber	Unknown	C30730000MX001	
5340121217542	CAP,PROTECTIVE,DUST AND MOISTURE SEAL	Brake system	Rubber	Unknown	C30730000MX001	
5340121428515	CLAMP,LOOP	Starting Motor	Rubber	Unknown	C30730F06MY001	
5340121428516	CLAMP,LOOP	Starting Motor	Rubber	Unknown	C30730F06MY001	
5340121428519	CLAMP,LOOP	Glowplug Supply Bar	Rubber	Unknown	C30730F06MY001	
5340121428543	CLAMP,LOOP	Heating System	Rubber	Unknown	C30730B01MY001	Metal portion is zinc coated.
5340121428672	BUMPER	Engine Assembly	Rubber	Unknown	C30730000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5340121428673	BUMPER	Fuel System	Rubber	Unknown	C30730000MX001	
5340121430044	MOUNT,RESILIENT,GENERAL PURPOSE	Turret	Rubber	Unknown	C71345000MX001	
5340121430327	MOUNT,RESILIENT,GENERAL PURPOSE	Power Pac	Rubber	Unknown	C30730A00MY001	
5340121430845	MOUNT,RESILIENT,GENERAL PURPOSE	Turret	Rubber	Unknown	C71345000MX001	
5340121430931	MOUNT,RESILIENT,GENERAL PURPOSE	Turret	Rubber	Unknown	C71345000MX001	
5340121431134	MOUNT,RESILIENT,GENERAL PURPOSE	Cooling System	Rubber	Unknown	C30730000MX001	
5340121468179	MOUNT,RESILIENT,GENERAL PURPOSE	Turret	Rubber	Unknown	C71345000MX001	
5340121468179	MOUNT,RESILIENT,GENERAL PURPOSE	Turret	Rubber	Unknown	C71345000MX001	
5340121520482	MOUNT,RESILIENT,GENERAL PURPOSE	Power Pac	Rubber	Unknown	C30730000MX001	
5340121520483	MOUNT,RESILIENT,GENERAL PURPOSE	Power Pac	Rubber	Unknown	C30730000MX001	
5340121590401	CLAMP,LOOP	Starting Motor	Rubber	Unknown	C30730F06MY001	
5340121616767	PLUG,PROTECTIVE,DUST AND MOISTURE SEAL	Transmission system	Rubber	Unknown	C30730000MX001	
5340121620025	MOUNT,RESILIENT,GENERAL PURPOSE	Cooling System	Rubber	Unknown	C30730000MX001	Also has steel member that is phosphate coated.
5340121842112	MOUNT,RESILIENT,GENERAL PURPOSE	Transmission system	Rubber	Unknown	C30730A00MY001	Metal portion phosphated.
5365007968402	BUSHING,NONMETALLIC	Turret	Rubber	Unknown	C71345000MX001	
5935001677775	CONNECTOR,PLUG,ELECTRICAL	NBC Systems	Rubber	Unknown	C87277000MS001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5935004356738	CONNECTOR,RECEPTACLE,ELECTRICAL	Turret	Rubber	Unknown	C71278000MX000	Shell made of metal/cadmium
5935009006281	ADAPTER,CONNECTOR	NBC Systems	Rubber	Unknown	C87277000MS001	
5975121444574	CABLE NIPPLE,ELECTRICAL	Electrical System	Rubber	Unknown	C30730F06MY001	
5975121475608	CABLE NIPPLE,ELECTRICAL	Electrical System	Rubber	Unknown	C30730F06MY001	
5999121428596	CAP,ELECTRICAL	Electrical System	Rubber	Unknown	C30730000MX001	
5999121428677	CAP,ELECTRICAL	Electrical System	Rubber	Unknown	C30730000MX001	
5999121475396	CAP,ELECTRICAL	Electrical System	Rubber	Unknown	C30730000MX001	
6680121274194	COUNTER,ROTATING	Check list	Rubber	Unknown	L49071411LC003	Counter, rotating, 1 hollow rubber tube with rubber tip.
9320121590493	RUBBER STRIP	Engine Assembly	Rubber	Unknown	C30730000MX001	
9320121714602	RUBBER SHEET,CELLULAR	Turret	Rubber	Unknown	C71345000MX001	
9320121714603	RUBBER STRIP	Turret	Rubber	Unknown	C71345000MX001	
18X24N272	HOSE,NONMETALLIC	Engine Assembly	Rubber	Unknown	C30730000MX001	
OR105X3,5WS857	PACKING,PREFORMED	Engine Assembly	Rubber	Unknown	C30730000MX001	
V95943-70X6X100	HOSE	Cooling System	Rubber	Unknown	C30730000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5970999604243	INSULATOR, BUSHING	Turret	Composite	Fabric, Synthetic Resin Bonded	C71278000MX000	
5970999604244	INSULATOR, BUSHING	Turret	Composite	Fabric, Synthetic Resin Bonded	C71278000MX000	
5970999604245	INSULATOR, BUSHING	Turret	Composite	Fabric, Synthetic Resin Bonded	C71278000MX000	
5970999604288	INSULATOR, BUSHING	Turret	Composite	Fabric, Synthetic Resin Bonded	C71345000MX001	
5970999604289	INSULATOR, BUSHING	Turret	Composite	Fabric, Synthetic Resin Bonded	C71345000MX001	
3120121514788	BEARING,SLEEVE	Turret	Composite	Lead & Plastic	C71345000MX001	
5330123255212	GASKET	Cooling System	Composite	Rubber & Plastic	C30730000MX001	
1015219142461	COVER,THERMAL JACKET,LOWER	Turret	Metal	Aluminium Magnesium	C71345000MX001	Item was mis-identified in the MX as containing Asbestos. This item is a replacement for Asbestos containing cloth, NSN: 1015-12-156-1382 for the Leopard 1C2.
1015219142462	COVER,THERMAL JACKET,UPPER	Turret	Metal	Aluminium Magnesium	C71345000MX001	Item was mis-identified in the MX as containing Asbestos. This item is a replacement for Asbestos containing cloth, NSN: 1015-12-156-1382 for the Leopard 1C2.
4240218717842	CANISTER,CHEMICAL-BIOLOGICAL MASK	Check list	Metal	Anodized	L30731000LC000	Chemical-biological mask, particulate filter, anodized finish, plastic sealing cap, rubber plug.
5305121785070	SETSCREW	Turret	Metal	Black Oxide	C71345000MX001	
5305219044852	SCREW,CAP,SOCKET HEAD	Turret	Metal	Black Oxide	C71345000MX001	
5310121464014	WASHER,SPRING TENSION	Turret	Metal	Black Oxide	C71345000MX001	
4730004979342	CLAMP,HOSE	Fuel System	Metal	Cadmium	C30730F06MY001	
5305006825135	SCREW,MACHINE	Turret	Metal	Cadmium	C71345000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5305009585483	SCREW,MACHINE	Turret	Metal	Cadmium	C71345000MX001	
5305009846194	SCREW,MACHINE	NBC Systems	Metal	Cadmium	C87277000MS001	
5305121508356	SCREW,EXTERNALLY RELIEVED BODY	Engine Assembly	Metal	Cadmium	C30730B01MY001	
5305121619503	SCREW,CLOSE TOLERANCE	Transmission system	Metal	Cadmium	C30730G07MY001	
5305121708558	SETSCREW	Turret	Metal	Cadmium	C71345000MX001	
5306002259084	BOLT,MACHINE	Turret	Metal	Cadmium	C71278000MX000	
5310121620938	WASHER,SHOULDERED AND RECESSED	Transmission system	Metal	Cadmium	C30730G07MY001	
5310121736324	NUT,PLAIN,KNURLED	Turret	Metal	Cadmium	C71345000MX001	
5310999419962	NUT,PLAIN,HEXAGON	Turret	Metal	Cadmium	C71345000MX001	
5340121428523	CLAMP,LOOP	Electrical System	Metal	Cadmium	C30730F06MY001	
5340121469244	LOCKING PLATE,NUT AND BOLT	Turret	Metal	Cadmium	C71345000MX001	
5340121487865	PLATE,MENDING	Turret	Metal	Cadmium	C71345000MX001	
5340121667317	INSERT (SCREW)	Turret	Metal	Cadmium	C71345000MX001	
5340121827363	BRACKET,MOUNTING	Turret	Metal	Cadmium	C71345000MX001	
5340121903267	CLAW,FLUSH CATCH	MG Mount	Metal	Cadmium	C71271000MX001	
5360121513661	SPRING,HELICAL,COMPRESSION	Turret	Metal	Cadmium	C71345000MX001	
5935010922906	CONNECTOR,RECEPTACLE,ELECTRICAL	Fire Suppression System	Metal	Cadmium	C30730000MX001	Also contains Insert-Rubber/Silicone.
5935011088437	CONNECTOR,PLUG,ELECTRICAL	NBC Systems	Metal	Cadmium	C87277000MS001	
5935011645169	CONNECTOR,PLUG,ELECTRICAL	NBC Systems	Metal	Cadmium	C87277000MS001	Also has Insert Rub/Silicone
5935011648601	CONNECTOR,RECEPTACLE,ELECTRICAL	NBC Systems	Metal	Cadmium	C87277000MS001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5935011794832	CLAMP,CABLE,ELECTRICAL CONNECTOR	NBC Systems	Metal	Cadmium	C87277000MS001	
4030002705436	HOOK,CHAIN,S	Power Pac	Metal	Cadmium & Chromate	C30730000CF006	
5305007195209	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Cadmium & Chromate	C71345000MX001	
5305009836651	SCREW,CAP,SOCKET HEAD	Turret	Metal	Cadmium & Chromate	C71278000MX000	
5306121618891	BOLT,MACHINE	Transmission system	Metal	Cadmium & Chromate	C30730G07MY001	
5310000453296	WASHER,LOCK	Turret	Metal	Cadmium & Chromate	C71345000MX001	
5310000877493	WASHER,FLAT	Turret	Metal	Cadmium & Chromate	C71345000MX001	
5310005825965	WASHER,LOCK	Turret	Metal	Cadmium & Chromate	C71345000MX001	
5310005845272	WASHER,LOCK	Turret	Metal	Cadmium & Chromate	C71345000MX001	
5310008113494	NUT,SELF-LOCKING,HEXAGON	NBC Systems	Metal	Cadmium & Chromate	C87277000MS001	Also has Insert - Plastic/Nylon.
5310012809149	WASHER,FLAT	NBC Systems	Metal	Cadmium & Chromate	C87277000MS001	
5310121499964	WASHER,FLAT	Turret	Metal	Cadmium & Chromate	C71345000MX001	
5340008091490	CLAMP,LOOP	Fire Suppression System	Metal	Cadmium & Chromate	C30730000MX001	Also has Cushion - Rubber/Unknown.
5935011150215	CONNECTOR,PLUG,ELECTRICAL	NBC Systems	Metal	Cadmium & Chromate	C87277000MS001	Also has Insert Rub/Silicone
5935012019225	CLAMP,CABLE,ELECTRICAL CONNECTOR	NBC Systems	Metal	Cadmium & Chromate	C87277000MS001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5935012275707	CONNECTOR,RECEPTACLE,ELECTRICAL	Turret	Metal	Cadmium & Chromate	C71278000MX000	Shell made of metal coated with cadmium and chromate
5935121995541	COVER,ELECTRICAL CONNECTOR	Turret	Metal	Cadmium & Chromate	C71345000MX001	
5310121481428	WASHER,KEY	MG Mount	Metal	Cadmium & Phosphate	C71271000MX001	
5305002855269	SCREW,ASSEMBLED WASHER	Turret	Metal	Cadmium or Zinc	C71345000MX001	
5305006857698	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Cadmium or Zinc	C71345000MX001	
5305121419922	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Chromate	C71278000MX000	
5305121534948	SCREW,CAP,HEXAGON HEAD	Check list	Metal	Chromate	L49071411LC003	Finish is zinc plated, chromated.
5340013360793	CATCH,CLAMPING	NBC Systems	Metal	Chromate	C87277000MS001	
5355123119104	KNOB	Turret	Metal	Chromate	C71345000MX001	
5120002634139	SOCKET,SOCKET WRENCH	Check list	Metal	Chrome	L49071410LC007	
5120121263023	WRENCH,SOCKET	Tools & Equipment (On-Board)	Metal	Chrome	L71345X02LC001 L71345X01LC001	
5120121308481	SOCKET,SOCKET WRENCH	Check list	Metal	Chrome	L49071410LC007	
5120218967738	BIT,SCREWDRIVER	Tools & Equipment (On-Board)	Metal	Chrome	L71345X02LC001 L71345X01LC001	Item is a Screwdriver bit.
5210121648995	SETTING MECHANISM	Check list	Metal	Chrome	L49071411LC002	Setting Mechanism, hard chromed.
5210121648999	ADJUSTING GEAR	Check list	Metal	Chrome	L49071411LC002	Finish hard chrome.
5120121214456	SOCKET,SOCKET WRENCH	Check list	Metal	Chrome & Nickel	L49071411LC004	Finish is chrome-nickel plated or nickel plated.
5120121235320	KEY,SOCKET HEAD SCREW	Tools & Equipment (On-Board)	Metal	Chrome & Nickel	L71345X02LC001 L71345X01LC001	May also be just Nickel plated.

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5120121314397	SCREWDRIVER ATTACHMENT, SOCKET WRENCH	Check list	Metal	Chrome & Nickel	L49071411LC003	Finish is gloss nickel plated or chromium plated over gloss nickel.
5120121338165	PLIERS, RETAINING RING	Check list	Metal	Chrome & Nickel	L49071411LC003	Finish is gloss nickel or chromium plated over gloss nickel.
5120128954637	WRENCH, BOX	Tools & Equipment (On-Board)	Metal	Chrome & Nickel	L71345X02LC001 L71345X01LC001	May also be Black Oxide.
5120218954637	WRENCH, BOX	Tools & Equipment (On-Board)	Metal	Chrome & Nickel	L71345X02LC001 L71345X01LC001	May also be Black Oxide.
5120219213832	SOCKET, SOCKET WRENCH	Tools & Equipment (On-Board)	Metal	Chrome & Nickel	L71345X01LC001	Item may also be just nickel.
5120121235262	WRENCH, OPEN END BOX	Tools & Equipment (On-Board)	Metal	Chrome Vanadium	L71345X02LC001 L71345X01LC001	
5120121648784	WRENCH, OPEN END BOX	Tools & Equipment (On-Board)	Metal	Chrome Vanadium	L71345X02LC001 L71345X01LC001	
5120121719944	WRENCH, OPEN END BOX	Tools & Equipment (On-Board)	Metal	Chrome Vanadium	L71345X02LC001 L71345X01LC001	Subcommodity change noted from Chrome to Chrome Vanadium on 15 Jan 04.
5120219205083	KEY, SOCKET HEAD SCREW	Tools & Equipment (On-Board)	Metal	Chrome Vanadium	L71345X02LC001 L71345X01LC001	
5120002278074	EXTENSION, SOCKET WRENCH	Check list	Metal	Chromium	L49071410LC007	Finish is bright chrome plated or nickel.
5120002278104	ADAPTER, SOCKET WRENCH	Check list	Metal	Chromium	L49071411LC003	Finish is chromium plated or nickel plated or oxide.
5120002408703	ADAPTER, SOCKET WRENCH	Tools & Equipment (On-Board)	Metal	Chromium	L30731A30LC001	Item may also contain nickel.
5120002437326	EXTENSION, SOCKET WRENCH	Check list	Metal	Chromium	L49071410LC007	



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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5120002437328	EXTENSION, SOCKET WRENCH	Check list	Metal	Chromium	L49071410LC007	
5120002612846	SOCKET, SOCKET WRENCH	Check list	Metal	Chromium	L49071411LC003	Finish is bright chrome (chromium) or bright nickel.
5120002780352	PLIERS, SLIP JOINT	Check list	Metal	Chromium	L49071410LC007	With vinyl coated handles.
5120002874150	SOCKET, SOCKET WRENCH	Check list	Metal	Chromium	L49071410LC007	
5120010798033	SCREWDRIVER ATTACHMENT, SOCKET WRENCH	Check list	Metal	Chromium	L49071411LC002	
5120011045346	SCREWDRIVER ATTACHMENT, SOCKET WRENCH	Check list	Metal	Chromium	L49071410LC007	
5120121545446	WRENCH, SOCKET	Tools & Equipment (On-Board)	Metal	Chromium	L30731A30LC001	Chromium or nickel finish.
5120216392357	HANDLE, SOCKET WRENCH	Check list	Metal	Chromium	L49071410LC007	Finish is bright chrome plate or bright nickel.
5120218459925	PLIERS, SLIP JOINT	Check list	Metal	Chromium	L30731000LC000 L30731A30LC001	
4010121342846	CHAIN, WELDLESS	MG Mount	Metal	Galvanized	C71271000MX001	
4010121484031	CHAIN, WELDED	Turret	Metal	Galvanized	C71345000MX001	
4730121241174	FITTING, LUBRICATION	Engine Assembly	Metal	Galvanized	C30730A00MY001	
2930121430186	RADIATOR, ENGINE COOLANT	Power Pac	Metal	Lead	C30730000MX001	Used for engine coolant.
2930121590329	CORE, RADIATOR	Cooling System	Metal	Lead	C30730000MX001	
6140121909027	BATTERY, STORAGE	Electrical System	Metal	Lead Acid	C30731000MX000 C30731000CF012	Battery, Storage, 12 VDC, 100Ah, Lead-Acid (qty 6 per vehicle), AGM, Hawker Armasafe Plus, EnerSys Ltd (Formerly Hawker Energy Products)
5120219133145	TOOL, THREADED, STABILIZER ALIGNMENT	Tools & Equipment	Metal	Manganese Phosphate	L71345X02LC001 L71345X01LC001	Item is an Alignment tool.

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
		(On-Board)				
5120121214420	SOCKET, SOCKET WRENCH	Tools & Equipment (On-Board)	Metal	Nickel	L71345X02LC001 L71345X01LC001	May also be Chrome over Nickel.
5120121235452	BAR, SOCKET WRENCH HANDLE	ools	Metal	Nickel	L71345X02LC001 L71345X01LC001	May also be Chromium & Nickel.
5120121462628	SCREWDRIVER ATTACHMENT, SOCKET WRENCH	Check list	Metal	Nickel	L49071410LC007	Finish is gloss nickel plated or chromium plated over gloss nickel.
5310121730075	WASHER, SPRING TENSION	Electrical System	Metal	Nickel	C30731000CF012	
5310999604291	NUT, PLAIN, BARREL	Turret	Metal	Nickel	C71345000MX001	
3040999604265	COLLAR, SHAFT	Turret	Metal	Phosphate Coating	C71278000MX000	
3040999604273	COLLAR, SHAFT	Turret	Metal	Phosphate Coating	C71345000MX001	
3120121970656	BEARING, PLAIN, SELF-ALIGNING	Turret	Metal	Phosphate Coating	C71345000MX001	
3120999643891	BUSHING, SLEEVE	Turret	Metal	Phosphate Coating	C71345000MX001	
4730121240425	PLUG, MACHINE THREAD	Turret	Metal	Phosphate Coating	C71345000MX001	
4730121468187	CAP, TUBE	Turret	Metal	Phosphate Coating	C71345000MX001	
4730121469348	ADAPTER, STRAIGHT, TUBE TO BOSS	Turret	Metal	Phosphate Coating	C71345000MX001	
4730121968936	ADAPTER, STRAIGHT, TUBE TO BOSS	Turret	Metal	Phosphate Coating	C71345000MX001	
5120121452637	WRENCH, SPANNER	Tools & Equipment (On-Board)	Metal	Phosphate Coating	L71345X02LC001 L30731000LC000	
5120121453612	WRENCH, BOX AND OPEN END, COMBINATION	Tools & Equipment (On-Board)	Metal	Phosphate Coating	L30731000LC000 L30731A30LC001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5120121573286	WRENCH,OPEN END	Tools & Equipment (On-Board)	Metal	Phosphate Coating	L71345X02LC001 L71345X01LC001	
5305121420729	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Phosphate Coating	C30730B01MY001	
5305121428207	SCREW,CAP,HEXAGON HEAD	Supercharger Drive	Metal	Phosphate Coating	C30730F06MY001	
5305121428237	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Phosphate Coating	C30730B01MY001	
5305121428248	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Phosphate Coating	C30730B01MY001	
5305121428268	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Phosphate Coating	C30730B01MY001	
5305121428702	SCREW,EXTERNALLY RELIEVED BODY	Engine Assembly	Metal	Phosphate Coating	C30730B01MY001	
5305121428906	SCREW,EXTERNALLY RELIEVED BODY	Engine Assembly	Metal	Phosphate Coating	C30730B01MY001	
5305121428909	SCREW,EXTERNALLY RELIEVED BODY	Supercharger Drive	Metal	Phosphate Coating	C30730B01MY001	
5305121509470	SCREW,CAP,HEXAGON HEAD	Check list	Metal	Phosphate Coating	L49071411LC003 C30730V00MP000	
5305121564916	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Phosphate Coating	C30730B01MY001	
5305121564943	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Phosphate Coating	C30730B01MY001	
5305121570958	SCREW,CAP,SOCKET HEAD	Turret	Metal	Phosphate Coating	C71345000MX001	
5305121620023	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Phosphate Coating	C30730B01MY001	
5305121620024	SCREW,CAP,HEXAGON HEAD	Supercharger Drive	Metal	Phosphate Coating	C30730C03MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5305121659033	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Phosphate Coating	C71345000MX001	
5305121664532	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Phosphate Coating	C71345000MX001	
5305999601977	SCREW,MACHINE	Turret	Metal	Phosphate Coating	C71345000MX001	
5305999604229	SCREW,EXTERNALLY RELIEVED BODY	Turret	Metal	Phosphate Coating	C71345000MX001	
5305999604230	SCREW,MACHINE	Turret	Metal	Phosphate Coating	C71345000MX001	
5305999604236	SETSCREW	Turret	Metal	Phosphate Coating	C71345000MX001	
5305999604237	SCREW,MACHINE	Turret	Metal	Phosphate Coating	C71345000MX001	
5305999604238	SCREW,MACHINE	Turret	Metal	Phosphate Coating	C71345000MX001	
5305999604239	SCREW,MACHINE	Turret	Metal	Phosphate Coating	C71345000MX001	
5305999604295	SETSCREW	Turret	Metal	Phosphate Coating	C71345000MX001	
5305999604302	SCREW,EXTERNALLY RELIEVED BODY	Turret	Metal	Phosphate Coating	C71345000MX001	
5305999615804	SCREW,MACHINE	Turret	Metal	Phosphate Coating	C71345000MX001	
5307121841825	STUD,RECESSED	Transmission system	Metal	Phosphate Coating	C30730G07MY001	
5307121841826	STUD,RECESSED	Transmission system	Metal	Phosphate Coating	C30730G07MY001	
5307121841827	STUD,PLAIN	Transmission system	Metal	Phosphate Coating	C30730G07MY001	
5307121841828	STUD,RECESSED	Transmission system	Metal	Phosphate Coating	C30730G07MY001	
5307121841830	STUD,RECESSED	Transmission system	Metal	Phosphate Coating	C30730G07MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5307999604231	STUD, SHOULDERED AND STEPPED	Turret	Metal	Phosphate Coating	C71345000MX001	
5310121308819	WASHER, FLAT	Turret	Metal	Phosphate Coating	C71345000MX001	
5310121329927	WASHER, FLAT	Transmission system	Metal	Phosphate Coating	C30730A00MY001	Also a coating of oil
5310121383347	WASHER, KEY	Turret	Metal	Phosphate Coating	C71345000MX001	
5310121428717	WASHER, CONVEX	Engine Assembly	Metal	Phosphate Coating	C30730B01MY001	
5310121430305	WASHER, FLAT	Engine Assembly	Metal	Phosphate Coating	C30730A00MY001	
5310121446200	WASHER, SPRING TENSION	Turret	Metal	Phosphate Coating	C71345000MX001	
5310121468422	NUT, SELF-LOCKING, HEXAGON	Chassis	Metal	Phosphate Coating	C30730000MX001	
5310121469350	WASHER, FLAT	Turret	Metal	Phosphate Coating	C71345000MX001	
5310121469351	WASHER, FLAT	Turret	Metal	Phosphate Coating	C71345000MX001	
5310121493907	NUT, PLAIN, HEXAGON	Turret	Metal	Phosphate Coating	C71345000MX001	
5310121590419	WASHER, KEY	Starting Motor	Metal	Phosphate Coating	C30730F06MY001	
5310123195585	NUT, SELF-LOCKING, HEXAGON	Chassis	Metal	Phosphate Coating	C30730000MX001	
5310999604227	NUT, PLAIN, EXTENDED WASHER, HEXAGON	Turret	Metal	Phosphate Coating	C71345000MX001	
5310999604246	NUT, PLAIN, KNURLED	Turret	Metal	Phosphate Coating	C71345000MX001	
5310999604297	NUT, PLAIN, SLOTTED, HEXAGON	Turret	Metal	Phosphate Coating	C71345000MX001	
5315121292142	PIN, SPRING	Track System	Metal	Phosphate Coating	C30730000CF009	
5315121292143	PIN, SPRING	Turret	Metal	Phosphate	C71345000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
				Coating		
5315121308802	PIN,COTTER	MG Mount	Metal	Phosphate Coating	C71271000MX001	
5315121329917	PIN,SPRING	Turret	Metal	Phosphate Coating	C71278000MX000	
5315121347269	PIN,COTTER	MG Mount	Metal	Phosphate Coating	C71271000MX001	
5315121348588	PIN,SPRING	Turret	Metal	Phosphate Coating	C71345000MX001	
5315121424774	PIN,STRAIGHT,HEADLE SS	MG Mount	Metal	Phosphate Coating	C71271000MX001	
5315121429244	PIN,SPRING	Exhaust System	Metal	Phosphate Coating	C30730D04MY001	
5315121449516	PIN,SPRING	MG Mount	Metal	Phosphate Coating	C71271000MX001	
5315121481405	PIN,STRAIGHT,HEADLE SS	MG Mount	Metal	Phosphate Coating	C71271000MX001	
5315121659040	PIN,STRAIGHT,HEADED	Turret	Metal	Phosphate Coating	C71345000MX001	
5315121659041	PIN,STRAIGHT,HEADED	Turret	Metal	Phosphate Coating	C71345000MX001	
5315121659913	PIN,STRAIGHT,HEADED	Turret	Metal	Phosphate Coating	C71345000MX001	
5315123004949	PIN,ECCENTRIC	Turret	Metal	Phosphate Coating	C71345000MX001	
5315123004949	PIN,ECCENTRIC	Turret	Metal	Phosphate Coating	C71278000MX000	
5315123089602	PIN,SPRING	Exhaust System	Metal	Phosphate Coating	C30730D04MY001	
5315999604280	PIN,STRAIGHT,HEADED	Turret	Metal	Phosphate Coating	C71345000MX001	
5315999604285	PIN,STRAIGHT,HEADED	Turret	Metal	Phosphate Coating	C71345000MX001	
5325121564642	RING,RETAINING	MG Mount	Metal	Phosphate Coating	C71271000MX001	
5340121428796	PLATE,MENDING	Fuel System	Metal	Phosphate	C30730C03MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
				Coating		
5340121469128	LOCKING PLATE,NUT AND BOLT	Turret	Metal	Phosphate Coating	C71345000MX001	
5340121469343	LOCKING PLATE,NUT AND BOLT	Turret	Metal	Phosphate Coating	C71345000MX001	
5340121516290	CLIP,SPRING TENSION	Turret	Metal	Phosphate Coating	C71345000MX001	
5340121535075	CLIP,SPRING TENSION	Hydraulic System	Metal	Phosphate Coating	C30730000CF011	
5340121587534	STRAP,RETAINING	Supercharger Drive	Metal	Phosphate Coating	C30730C03MY001	
5340121764772	BRACKET,ANGLE	Engine Assembly	Metal	Phosphate Coating	C30730B01MY001	
5340121910255	CLAMP,LOOP	Turret	Metal	Phosphate Coating	C71278000MX000	
5340121957478	TORSION BAR,HINGE	Air Intake System	Metal	Phosphate Coating	C30731000CF007	
5360003320079	SPRING,HELICAL,COMPRESSION	Turret	Metal	Phosphate Coating	C71345000MX001	
5360121469839	SPRING,HELICAL,COMPRESSION	Transmission system	Metal	Phosphate Coating	C30730G07MY001	
5360121482917	SPRING,HELICAL,EXTENSION	Exhaust System	Metal	Phosphate Coating	C30730D04MY001	
5360121562887	SPRING,HELICAL,TORSION	Turret	Metal	Phosphate Coating	C71345000MX001	
5360121765671	SPRING,HELICAL,EXTENSION	Starting Motor	Metal	Phosphate Coating	C30730F06MY001	
5365121263424	PLUG,MACHINE THREAD	Transmission system	Metal	Phosphate Coating	C30730G07MY001	
5365121329208	PLUG,MACHINE THREAD	Turret	Metal	Phosphate Coating	C71345000MX001	
5365121909370	SPACER,SLEEVE	Turret	Metal	Phosphate Coating	C71345000MX001	
5365999643892	SPACER,SLEEVE	Turret	Metal	Phosphate Coating	C71345000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
4010121517743	WIRE ROPE ASSEMBLY, SINGLE LEG	Check list	Metal	Zinc	L30731000LC001	Zinc coated.
4030121721693	HOOK,CHAIN,S	Turret	Metal	Zinc	C71345000MX001	
4710121843959	TUBE ASSEMBLY,METAL	Turret	Metal	Zinc	C71345000MX001	
4730121231810	CLAMP,HOSE	Turret	Metal	Zinc	C71345000MX001	
4730121250310	FITTING,LUBRICATION	MG Mount	Metal	Zinc	C71271000MX001	
4730121334339	CLAMP,HOSE	Transmission system	Metal	Zinc	C30730A00MY001	
4730121361127	CLAMP,HOSE	Transmission system	Metal	Zinc	C30730A00MY001	
4730121430131	CLAMP,HOSE	Power Pac	Metal	Zinc	C30730A00MY001	
4730121430223	ELBOW,TUBE	Transmission system	Metal	Zinc	C30730A00MY001	
4730121430318	REDUCER,TUBE	Brake system	Metal	Zinc	C30730A00MY001	
4730121430319	REDUCER,TUBE	Transmission system	Metal	Zinc	C30730A00MY001	
4730121482774	CAP,TUBE	Supercharger Drive	Metal	Zinc	C30730C03MY001	
4730121482806	CLAMP,HOSE	Heating System	Metal	Zinc	C30731000CF008	
4730121611593	CLAMP,HOSE	Fuel System	Metal	Zinc	C30730F06MY001	
4730121656953	CLAMP,HOSE	Engine Assembly	Metal	Zinc	C30730B01MY001	
4730121737388	ADAPTER BUSHING	Fuel System	Metal	Zinc	C30730C03MY001	
4730121787768	ELBOW,TUBE	Turret	Metal	Zinc	C71345000MX001	
4730121840979	ADAPTER,STRAIGHT,TUBE TO BOSS	Turret	Metal	Zinc	C71345000MX001	
4730121840982	ADAPTER,STRAIGHT,TUBE TO BOSS	Turret	Metal	Zinc	C71345000MX001	
4730121840983	ADAPTER,STRAIGHT,TUBE TO BOSS	Turret	Metal	Zinc	C71345000MX001	
4730121840984	ADAPTER,STRAIGHT,TUBE TO BOSS	Turret	Metal	Zinc	C71345000MX001	



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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
4730121843638	ADAPTER,STRAIGHT,TU BE TO BOSS	Turret	Metal	Zinc	C71345000MX001	
4730121859974	ELBOW,FLANGE TO TUBE	Turret	Metal	Zinc	C71345000MX001	
4730121869209	ADAPTER,STRAIGHT,TU BE TO BOSS	Turret	Metal	Zinc	C71345000MX001	
4730121882244	PLUG	Turret	Metal	Zinc	C71345000MX001	
4730121942207	ADAPTER,STRAIGHT,TU BE TO BOSS	Turret	Metal	Zinc	C71345000MX001	
4730121942212	ADAPTER,STRAIGHT,TU BE TO BOSS	Turret	Metal	Zinc	C71345000MX001	
4730121954627	CLAMP,HOSE	Fuel System	Metal	Zinc	C30730C03MY001	
4730121966549	ADAPTER,STRAIGHT,TU BE TO BOSS	Turret	Metal	Zinc	C71345000MX001	
4730123068334	ELBOW,FLANGE TO TUBE	Turret	Metal	Zinc	C71345000MX001	
4730123093725	ADAPTER,STRAIGHT,TU BE TO BOSS	Turret	Metal	Zinc	C71345000MX001	
5220121812699	GAGE,TEST	Check list	Metal	Zinc	L49071411LC002	Gage (Gauge) Test.
5305121277811	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121330420	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121334735	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121383745	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121408266	SCREW,CAP,SOCKET HEAD	Supercharger Drive	Metal	Zinc	C30730C03MY001	
5305121419799	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121419820	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121419826	SCREW,CAP,HEXAGON HEAD	Electrical System	Metal	Zinc	C30730F06MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5305121419838	SCREW,CAP,HEXAGON HEAD	MG Mount	Metal	Zinc	C71271000MX001	
5305121419839	SCREW,CAP,HEXAGON HEAD	Supercharger Drive	Metal	Zinc	C30730C03MY001	
5305121419861	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc	C30730B01MY001	
5305121419886	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121419888	SCREW,CAP,HEXAGON HEAD	Heating System	Metal	Zinc	C30730B01MY001	
5305121419889	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121419891	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121419896	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc	C30730G07MY001	
5305121419903	SCREW,CAP,HEXAGON HEAD	Engine Air Filter	Metal	Zinc	C30730B01MY001	
5305121420028	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121420047	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121420048	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121420049	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121420051	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121420054	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121420071	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121420083	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121420084	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121420085	SCREW,MACHINE	Starting Motor	Metal	Zinc	C30730F06MY001	
5305121420096	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121420103	SCREW,MACHINE	Alternator	Metal	Zinc	C30730F06MY001	
5305121420136	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5305121420494	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc	C30730A00MY001	
5305121420891	SCREW,CAP,HEXAGON HEAD	Starting Motor	Metal	Zinc	C30730F06MY001	
5305121420989	SCREW,CAP,SOCKET HEAD	Engine Assembly	Metal	Zinc	C30730B01MY001	
5305121421006	SCREW,CAP,SOCKET HEAD	Supercharger Drive	Metal	Zinc	C30730C03MY001	
5305121421294	SCREW,CAP,SOCKET HEAD	Supercharger Drive	Metal	Zinc	C30730C03MY001	
5305121422958	SCREW,CAP,SOCKET HEAD	Supercharger Drive	Metal	Zinc	C30730C03MY001	
5305121422962	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc	C30730B01MY001	
5305121423028	SETSCREW	Exhaust System	Metal	Zinc	C30730D04MY001	
5305121425126	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425180	SCREW,CAP,HEXAGON HEAD	Power Pac	Metal	Zinc	C30730B01MY001	
5305121425840	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425841	SCREW,CAP,SOCKET HEAD	Pump, Injection	Metal	Zinc	C30730B01MY001	
5305121425846	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425868	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425882	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425894	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425896	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425901	SCREW,CAP,SOCKET	Turret	Metal	Zinc	C71345000MX001	

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**Metals and Composites**

NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
	HEAD					
5305121425912	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425913	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425914	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425916	SCREW,CAP,SOCKET HEAD	Electrical System	Metal	Zinc	C30730F06MY001	
5305121425920	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425933	SCREW,CAP,SOCKET HEAD	MG Mount	Metal	Zinc	C71271000MX001	
5305121425937	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425938	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425943	SCREW,CAP,SOCKET HEAD	Starting Motor	Metal	Zinc	C30730F06MY001	
5305121425964	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425970	SCREW,CAP,SOCKET HEAD	Transmission system	Metal	Zinc	C30730G07MY001	
5305121425974	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425980	SCREW,CAP,SOCKET HEAD	Transmission system	Metal	Zinc	C30730G07MY001	
5305121425982	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425984	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425988	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121425990	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121428213	SCREW,CAP,SOCKET	Transmission	Metal	Zinc	C30730G07MY001	

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**Metals and Composites**

NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
	HEAD	system				
5305121428238	SCREW,CAP,SOCKET HEAD	Starting Motor	Metal	Zinc	C30730F06MY001	
5305121428409	SCREW,CAP,HEXAGON HEAD	Starting Motor	Metal	Zinc	C30730F06MY001	
5305121428417	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121428418	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121428444	SCREW,CAP,SOCKET HEAD	Electrical System	Metal	Zinc	C30730F06MY001	
5305121428451	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121428452	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc	C30730B01MY001	
5305121428453	SCREW,CAP,HEXAGON HEAD	Starting Motor	Metal	Zinc	C30730F06MY001	
5305121428480	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121428495	SCREW,CAP,SOCKET HEAD	Power Pac	Metal	Zinc	C30730B01MY001	
5305121428497	SCREW,CAP,HEXAGON HEAD	Starting Motor	Metal	Zinc	C30730F06MY001	
5305121428501	SCREW,CAP,HEXAGON HEAD	Cooling System	Metal	Zinc	C30730B01MY001	
5305121428708	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc	C30730B01MY001	
5305121430015	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121430329	SCREW,CLOSE TOLERANCE	Power Pac	Metal	Zinc	C30730A00MY001	
5305121444020	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc	C30730G07MY001	

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**Metals and Composites**

NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5305121464047	SCREW,CAP,SOCKET HEAD	Starting Motor	Metal	Zinc	C30730F06MY001	
5305121469304	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121476033	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc	C30730G07MY001	
5305121526465	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121531883	SCREW,MACHINE	Brake system	Metal	Zinc	C30730000CF004	
5305121543827	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121544003	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121556878	SCREW,CAP,HEXAGON HEAD	Starting Motor	Metal	Zinc	C30730F06MY001	
5305121564858	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc	C30730G07MY001	
5305121564861	SCREW,CAP,HEXAGON HEAD	Electrical System	Metal	Zinc	C30730F06MY001	
5305121564862	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc	C30730A00MY001	
5305121564865	SCREW,CAP,HEXAGON HEAD	Electrical System	Metal	Zinc	C30730F06MY001	
5305121564869	SCREW,CAP,HEXAGON HEAD	Supercharger Drive	Metal	Zinc	C79291000MX001	
5305121564872	SCREW,CAP,HEXAGON HEAD	Power Pac	Metal	Zinc	C30730B01MY001	
5305121564886	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121564887	SCREW,MACHINE	Brake system	Metal	Zinc	C30730000CF004	
5305121564888	SCREW,MACHINE	Power Pac	Metal	Zinc	C30730A00MY001	
5305121564890	SCREW,MACHINE	Pump, Injection	Metal	Zinc	C30730C03MY001	
5305121564898	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc	C30730A00MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5305121564932	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121564941	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc	C30730B01MY001	
5305121564949	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc	C30730G07MY001	
5305121576717	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121576721	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121580033	SCREW,CAP,HEXAGON HEAD	Electrical System	Metal	Zinc	C30730F06MY001	
5305121581648	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121587063	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc	C30730B01MY001	
5305121616131	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121619083	SCREW,CAP,SOCKET HEAD	Starting Motor	Metal	Zinc	C30730F06MY001	
5305121619085	SCREW,CAP,SOCKET HEAD	MG Mount	Metal	Zinc	C71271000MX001	
5305121658401	SCREW,CAP,SOCKET HEAD	Electrical System	Metal	Zinc	C30730F06MY001	
5305121663829	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305121665105	SCREW,MACHINE	Electrical System	Metal	Zinc	C30730F06MY001	
5305121716693	SCREW,CAP,SOCKET HEAD	Brake system	Metal	Zinc	C30730000CF004	
5305121754476	SETSCREW	Turret	Metal	Zinc	C71345000MX001	
5305121762693	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305121810177	SCREW,CAP,SOCKET HEAD	Electrical System	Metal	Zinc	C30730F06MY001	
5305121853046	SCREW,CAP,SOCKET HEAD	Electrical System	Metal	Zinc	C30730F06MY001	
5305121934540	SCREW,MACHINE	Starting Motor	Metal	Zinc	C30730F06MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5305121945305	SETSCREW	Turret	Metal	Zinc	C71345000MX001	
5305123053142	SCREW,SELF-LOCKING	Turret	Metal	Zinc	C71345000MX001	
5305123053143	SCREW,SELF-LOCKING	Turret	Metal	Zinc	C71345000MX001	
5305123053144	SCREW,SELF-LOCKING	Turret	Metal	Zinc	C71345000MX001	
5305123092617	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc	C71345000MX001	
5305991210065	SCREW,MACHINE	Turret	Metal	Zinc	C71345000MX001	
5305991275028	SETSCREW	Turret	Metal	Zinc	C71345000MX001	
5306121462957	BOLT,EYE	Tools & Equipment (On-Board)	Metal	Zinc	L71345X02LC001	
5306121489637	BOLT,EYE	Turret	Metal	Zinc	C71345000MX001	
5306121620501	BOLT,INTERNALLY RELIEVED BODY	Engine Assembly	Metal	Zinc	C30730B01MY001	
5307121841829	STUD,PLAIN	Transmission system	Metal	Zinc	C30730G07MY001	
5307121841831	STUD,PLAIN	Transmission system	Metal	Zinc	C30730G07MY001	
5307121841832	STUD,PLAIN	Transmission system	Metal	Zinc	C30730G07MY001	
5307121841833	STUD,PLAIN	Transmission system	Metal	Zinc	C30730G07MY001	
5310121442164	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc	C71345000MX001	
5310121590415	WASHER,RECESSED	Starting Motor	Metal	Zinc	C30730F06MY001	
5310121621201	NUT,PLAIN,HEXAGON	Engine Assembly	Metal	Zinc	C30730B01MY001	
5310121693560	WASHER,FLAT	Turret	Metal	Zinc	C71345000MX001	
5310219132705	WASHER,FLAT	Turret	Metal	Zinc	C71345000MX001	
5310219134080	WASHER,FLAT	Turret	Metal	Zinc	C71345000MX001	
5310991204032	WASHER,FLAT	Turret	Metal	Zinc	C71345000MX001	
5310999418640	WASHER,FLAT	Turret	Metal	Zinc	C71345000MX001	
5315121257816	PIN,COTTER	Turret	Metal	Zinc	C71345000MX001	
5315121478826	PIN,COTTER	Turret	Metal	Zinc	C71345000MX001	



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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5315121674902	PIN,COTTER	Turret	Metal	Zinc	C71345000MX001	
5315121949492	PIN,SPRING	MG Mount	Metal	Zinc	C71271000MX001	
5315219078293	PIN,LOCK	Power Pac	Metal	Zinc	C30730000CF006	
5335121425846	SCREW,MACHINE	Engine Assembly	Metal	Zinc	C30730B01MY001	
5340013510232	STRIKE,CATCH	Turret	Metal	Zinc	C71345000MX001	
5340121428513	CLAMP,LOOP	Electrical System	Metal	Zinc	C30730F06MY001	
5340121428514	CLAMP,LOOP	Electrical System	Metal	Zinc	C30730000MX001	Also has Insert/Rubber/Synthetic.
5340121428517	CLAMP,LOOP	Heating System	Metal	Zinc	C30730B01MY001	
5340121428518	CLAMP,LOOP	Supercharger Drive	Metal	Zinc	C30730C03MY001	
5340121428521	CLAMP,LOOP	Starting Motor	Metal	Zinc	C30730F06MY001	
5340121428524	CLAMP,LOOP	Heating System	Metal	Zinc	C30730B01MY001	
5340121428531	CLAMP,LOOP	Supercharger Drive	Metal	Zinc	C30730C03MY001	
5340121428532	CLAMP,LOOP	Supercharger Drive	Metal	Zinc	C30730C03MY001	
5340121428567	HANGER,PIPE	Electrical System	Metal	Zinc	C30730F06MY001	
5340121428715	CLAMP,LOOP	Engine Assembly	Metal	Zinc	C30730B01MY001	
5340121428715	CLAMP,LOOP	Supercharger Drive	Metal	Zinc	C30730C03MY001	
5340121430057	CLAMP,LOOP	Cooling System	Metal	Zinc	C30730000MX001	Also has Cushion - Rubber/Unknown.
5340121430100	CLAMP,LOOP	Transmission system	Metal	Zinc	C30730G07MY001	
5340121436377	CLAMP,LOOP	Electrical System	Metal	Zinc	C30730000MX001	Insert is a rubber cushion material.
5340121444576	CLAMP,LOOP	Starting Motor	Metal	Zinc	C30730F06MY001	
5340121459307	STRAP,RETAINING	Supercharger Drive	Metal	Zinc	C30730C03MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5340121468487	CLAMP,LOOP	Transmission system	Metal	Zinc	C30730F06MY001	
5340121468488	CLAMP,LOOP	Transmission system	Metal	Zinc	C30730F06MY001	
5340121468495	CLAMP,LOOP	Power Pac	Metal	Zinc	C30730A00MY001	
5340121468504	CLAMP,LOOP	Transmission system	Metal	Zinc	C30730G07MY001	
5340121469105	LOCKING PLATE,NUT AND BOLT	Turret	Metal	Zinc	C71345000MX001	
5340121482800	CLAMP,LOOP	Heating System	Metal	Zinc	C30731000CF008	
5340121578777	CLAMP,LOOP	Fuel System	Metal	Zinc	C30730000CF010	Metal, zinc plated with synthetic rubber cushion.
5340121587532	STRAP,RETAINING	Fuel System	Metal	Zinc	C30730C03MY001	
5340121587533	PLATE,MENDING	Fuel System	Metal	Zinc	C30730C03MY001	
5340121587536	PLATE,MENDING	Supercharger Drive	Metal	Zinc	C30730C03MY001	
5340121590264	BRACKET,ANGLE	Heating System	Metal	Zinc	C30730B01MY001	
5340121590325	BRACKET,ANGLE	Supercharger Drive	Metal	Zinc	C79291000MX001	
5340121590326	BRACKET,ANGLE	Supercharger Drive	Metal	Zinc	C79291000MX001	
5340121590328	BRACKET,ANGLE	Supercharger Drive	Metal	Zinc	C30730C03MY001	
5340121590397	PLATE,MENDING	Starting Motor	Metal	Zinc	C30730F06MY001	
5340121594283	CLAMP,LOOP	Fuel System	Metal	Zinc	C30730000MX001	Also has Insert-Rubber/Synthetic.
5340121594283	CLAMP,LOOP	Supercharger Drive	Metal	Zinc	C79291000MX001	
5340121658587	CLAMP,LOOP	Turret	Metal	Zinc	C71345000MX001	Also has Cushion - Rubber/Synthetic.
5340121764769	BRACKET,ANGLE	Starting Motor	Metal	Zinc	C30730F06MY001	
5340123044307	BRACKET,ANGLE	Turret	Metal	Zinc	C71345000MX001	
5340218773261	CLAMP,LOOP	Power Pac	Metal	Zinc	C30730000CF006	Zinc plated with neoprene cushion.
5365121508479	SPACER,SLEEVE	Supercharger Drive	Metal	Zinc	C30730C03MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5365123181363	SHIM	MG Mount	Metal	Zinc	C71271000MX001	
5365219062428	RING,CONNECTING,RO UND	NBC Systems	Metal	Zinc	C87277000MS001	
5365219062429	RING,CONNECTING,RO UND	NBC Systems	Metal	Zinc	C87277000MS001	
5305121406973	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121416587	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121416600	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121416605	SCREW,CAP,HEXAGON HEAD	MG Mount	Metal	Zinc & Chromate	C71271000MX001	
5305121416606	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc & Chromate	C30730A00MY001	
5305121419828	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc & Chromate	C30730F06MY001	
5305121419837	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121419850	SCREW,CAP,HEXAGON HEAD	Supercharger Drive	Metal	Zinc & Chromate	C30730A00MY001	
5305121419906	SCREW,CAP,HEXAGON HEAD	Throttle System	Metal	Zinc & Chromate	C30730000CF020	
5305121420055	SCREW,MACHINE	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5305121420070	SCREW,MACHINE	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5305121420088	SCREW,MACHINE	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5305121420091	SCREW,MACHINE	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5305121420092	SCREW,MACHINE	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5305121420139	SCREW,MACHINE	Transmission	Metal	Zinc &	C30730G07MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
		system		Chromate		
5305121420188	SCREW,CAP,HEXAGON HEAD	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5305121420190	SCREW,CAP,HEXAGON HEAD	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5305121420511	SCREW,CAP,HEXAGON HEAD	Electrical System	Metal	Zinc & Chromate	C30730F06MY001	
5305121420610	SCREW,MACHINE	Supercharger Drive	Metal	Zinc & Chromate	C30730C03MY001	
5305121420666	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121420667	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71278000MX000	
5305121422952	SCREW,CAP,SOCKET HEAD	Transmission system	Metal	Zinc & Chromate	C30730A00MY001	
5305121422953	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121422956	SCREW,CAP,SOCKET HEAD	Electrical System	Metal	Zinc & Chromate	C30730F06MY001	
5305121425284	SCREW,CAP,HEXAGON HEAD	Mounting	Metal	Zinc & Chromate	C30730000CS003	
5305121425843	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121425845	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71278000MX000	
5305121425921	SCREW,CAP,SOCKET HEAD	Supercharger Drive	Metal	Zinc & Chromate	C30730C03MY001	
5305121425940	SCREW,CAP,SOCKET HEAD	Heating System	Metal	Zinc & Chromate	C30730B01MY001	
5305121425942	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121425947	SCREW,CAP,SOCKET HEAD	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5305121425949	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5305121425956	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121425976	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121425977	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121428198	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5305121428204	SCREW,CAP,SOCKET HEAD	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5305121428218	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121428221	SCREW,CAP,HEXAGON HEAD	Electrical System	Metal	Zinc & Chromate	C30730F06MY001	
5305121428226	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5305121428231	SCREW,CAP,HEXAGON HEAD	Pump, Injection	Metal	Zinc & Chromate	C30730C03MY001	
5305121428256	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5305121428262	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5305121428267	SCREW,CAP,HEXAGON HEAD	Exhaust System	Metal	Zinc & Chromate	C30730D04MY001	
5305121428276	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5305121428310	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5305121428317	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71278000MX000	
5305121428446	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71278000MX000	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5305121428455	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121428457	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121428476	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5305121428496	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5305121430005	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121436369	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5305121437855	SCREW,CAP,HEXAGON HEAD	Air Intake System	Metal	Zinc & Chromate	C30731000CF007	
5305121454367	SCREW,CAP,HEXAGON HEAD	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5305121460732	SCREW,CAP,HEXAGON HEAD	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5305121461767	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121462633	SCREW,CAP,HEXAGON HEAD	Brake system	Metal	Zinc & Chromate	C30730000CF008 C30731000CF006	
5305121464039	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121468443	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121482782	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121493805	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121501261	SCREW,MACHINE	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5305121514434	SCREW,CAP,SOCKET	Electrical	Metal	Zinc &	C30730F06MY001	

**Hazardous Materials and Products of Environmental Concern Report**  
**Metals and Composites**

NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
	HEAD	System		Chromate		
5305121526416	SCREW,CAP,SOCKET HEAD	Rectifier	Metal	Zinc & Chromate	C30730F06MY001	
5305121535302	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121535721	SCREW,CAP,HEXAGON HEAD	Distribution Box	Metal	Zinc & Chromate	C30730F06MY001	
5305121564860	SCREW,CAP,HEXAGON HEAD	Supercharger Drive	Metal	Zinc & Chromate	C30730C03MY001	
5305121564863	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc & Chromate	C30730C03MY001	
5305121564864	SCREW,CAP,HEXAGON HEAD	Distribution Box	Metal	Zinc & Chromate	C30730F06MY001	
5305121564870	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5305121564873	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121564874	SCREW,CAP,HEXAGON HEAD	Heating System	Metal	Zinc & Chromate	C30730B01MY001	
5305121564875	SCREW,CAP,HEXAGON HEAD	Heating System	Metal	Zinc & Chromate	C30730B01MY001	
5305121564876	SCREW,CAP,HEXAGON HEAD	Exhaust System	Metal	Zinc & Chromate	C30730D04MY001	
5305121564877	SCREW,CAP,HEXAGON HEAD	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5305121564878	SCREW,CAP,HEXAGON HEAD	Power Pac	Metal	Zinc & Chromate	C30730A00MY001	
5305121564881	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121564895	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5305121564917	SCREW,CAP,SOCKET	Transmission	Metal	Zinc &	C30730G07MY001	

**Hazardous Materials and Products of Environmental Concern Report**  
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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
	HEAD	system		Chromate		
5305121564960	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5305121587150	SCREW,CAP,HEXAGON HEAD	MG Mount	Metal	Zinc & Chromate	C71271000MX001	
5305121588840	SCREW,MACHINE	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121590358	SCREW,MACHINE	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5305121591883	SCREW,MACHINE	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121598289	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121598300	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121620022	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc & Chromate	C30730A00MY001	
5305121626299	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121641002	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121646668	SCREW,CAP,HEXAGON HEAD	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5305121651304	SCREW,CAP,SOCKET HEAD	Electrical System	Metal	Zinc & Chromate	C30730F06MY001	
5305121664531	SCREW,MACHINE	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5305121679076	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121679076	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc & Chromate	C71278000MX000	
5305121696253	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121697149	SCREW,MACHINE	Turret	Metal	Zinc & Chromate	C71345000MX001	



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**Metals and Composites**

NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5305121735029	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121742872	SCREW,MACHINE	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121754465	SETSCREW	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121762709	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305121765225	SCREW,MACHINE	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5305121936524	SCREW,CAP,HEXAGON HEAD	Hydraulic System	Metal	Zinc & Chromate	C30730000CF011	
5305121996291	SCREW,CAP,SOCKET HEAD	Turret	Metal	Zinc & Chromate	C71345000MX001	
5305123036869	SETSCREW	Turret	Metal	Zinc & Chromate	C71345000MX001	
5307121908282	STUD,PLAIN	Exhaust System	Metal	Zinc & Chromate	C30730D04MY001	
5310121303250	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121416604	NUT,PLAIN,HEXAGON	Engine Assembly	Metal	Zinc & Chromate	C30730A00MY001	
5310121420481	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121420639	WASHER,FLAT	Power Pac	Metal	Zinc & Chromate	C30730B01MY001	
5310121420640	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121420644	WASHER,FLAT	Heating System	Metal	Zinc & Chromate	C30730B01MY001	
5310121420645	WASHER,FLAT	Air Intake System	Metal	Zinc & Chromate	C30730G07MY001	
5310121420649	WASHER,LOCK	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5310121420650	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	

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**Metals and Composites**

NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5310121420651	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121420653	WASHER,LOCK	Pump, Injection	Metal	Zinc & Chromate	C30730C03MY001	
5310121420654	WASHER,LOCK	Transmission system	Metal	Zinc & Chromate	C30730A00MY001	
5310121420656	WASHER,LOCK	Brake system	Metal	Zinc & Chromate	C30730000CF004	
5310121420657	WASHER,LOCK	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5310121420659	WASHER,LOCK	Power Pac	Metal	Zinc & Chromate	C30730F06MY001	
5310121420705	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121420706	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121428151	WASHER,SPRING TENSION	Electrical System	Metal	Zinc & Chromate	C30730F06MY001	
5310121428157	WASHER,SPRING TENSION	Transmission system	Metal	Zinc & Chromate	C30730A00MY001	
5310121428158	WASHER,LOCK	Pump, Injection	Metal	Zinc & Chromate	C30730C03MY001	
5310121428159	WASHER,SPRING TENSION	Exhaust System	Metal	Zinc & Chromate	C30730D04MY001	
5310121428161	WASHER,SPRING TENSION	Fuel System	Metal	Zinc & Chromate	C30730C03MY001	
5310121428162	WASHER,SPRING TENSION	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5310121428163	WASHER,SPRING TENSION	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5310121428168	WASHER,SPRING TENSION	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5310121428171	WASHER,SPRING TENSION	Supercharger Drive	Metal	Zinc & Chromate	C30730C03MY001	
5310121428173	WASHER,SPRING TENSION	Engine Assembly	Metal	Zinc & Chromate	C30730C03MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5310121428176	WASHER,CONVEX	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5310121428468	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121428710	WASHER,FLAT	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5310121429915	WASHER,SPRING TENSION	Rectifier	Metal	Zinc & Chromate	C30730F06MY001	
5310121430312	NUT,SLEEVE	Engine Assembly	Metal	Zinc & Chromate	C30730A00MY001	
5310121431138	WASHER,FLAT	Engine Assembly	Metal	Zinc & Chromate	C30730A00MY001	
5310121431639	NUT,PLAIN,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121433720	NUT,PLAIN,CASTELLATED,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121436307	WASHER,SPRING TENSION	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5310121437684	WASHER,LOCK	Electrical System	Metal	Zinc & Chromate	C30730F06MY001	
5310121437993	WASHER,SPRING TENSION	Electrical Accessories	Metal	Zinc & Chromate	C30730F06MY001	
5310121437999	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121438990	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121443934	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121443947	WASHER,SPRING TENSION	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121444157	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121446120	NUT,PLAIN,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121446120	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5310121446138	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121446147	NUT,PLAIN,HEXAGON	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5310121446199	NUT,PLAIN,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730A00MY001	
5310121446201	NUT,PLAIN,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121446214	NUT,PLAIN,HEXAGON	Engine Assembly	Metal	Zinc & Chromate	C30730A00MY001	
5310121446215	NUT,PLAIN,SLOTTED,HEXAGON	MG Mount	Metal	Zinc & Chromate	C71271000MX001	
5310121452658	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121452665	NUT,PLAIN,CASTELLATED,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121452669	NUT,PLAIN,SLOTTED,HEXAGON	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5310121454158	WASHER,SPRING TENSION	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121455627	NUT,PLAIN,CASTELLATED,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121455631	NUT,PLAIN,HEXAGON	Exhaust System	Metal	Zinc & Chromate	C30730D04MY001	
5310121455636	NUT,SELF-LOCKING,HEXAGON	Brake system	Metal	Zinc & Chromate	C30730000CF004	Zinc plated with chromate, and plastic nylon polyamide insert.
5310121455638	NUT,SELF-LOCKING,HEXAGON	Hull System	Metal	Zinc & Chromate	C30730000MX001	Also has Insert - Plastic/Nylon.
5310121455778	WASHER,KEY	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121455792	WASHER,KEY	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121455792	WASHER,KEY	Power Pac	Metal	Zinc & Chromate	C30730A00MY001	
5310121455802	WASHER,KEY	Turret	Metal	Zinc &	C71345000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
				Chromate		
5310121456382	WASHER,KEY	Fuel System	Metal	Zinc & Chromate	C30730C03MY001	
5310121460646	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121460711	NUT,PLAIN,SLOTTED,H EXAGON	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5310121460806	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121462630	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121462679	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121463142	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121463146	WASHER,KEY	MG Mount	Metal	Zinc & Chromate	C71271000MX001	
5310121463828	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121464992	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121465008	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121465026	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121465036	WASHER,LOCK	MG Mount	Metal	Zinc & Chromate	C71271000MX001	
5310121466320	WASHER,KEY	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121468168	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121468413	NUT,PLAIN,CASTELLAT ED,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121468425	NUT,PLAIN,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121472103	WASHER,FLAT	Turret	Metal	Zinc &	C71345000MX001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
				Chromate		
5310121472190	WASHER,KEY	MG Mount	Metal	Zinc & Chromate	C71271000MX001	
5310121474191	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121479939	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121486469	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121490448	WASHER,KEY	Fuel System	Metal	Zinc & Chromate	C30730C03MY001	
5310121494352	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121494353	WASHER,FLAT	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5310121514078	WASHER,LOCK	Exhaust System	Metal	Zinc & Chromate	C30730D04MY001	
5310121514095	WASHER,SPRING TENSION	Heating System	Metal	Zinc & Chromate	C30731000CF008	
5310121514104	WASHER,SPRING TENSION	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121514235	WASHER,LOCK	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121514579	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121514627	WASHER,LOCK	Transmission system	Metal	Zinc & Chromate	C30730A00MY001	
5310121514718	WASHER,SPRING TENSION	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121514842	WASHER,LOCK	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5310121516127	WASHER,KEY	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5310121522034	WASHER,LOCK	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5310121522097	WASHER,LOCK	Alternator	Metal	Zinc &	C30730F06MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
				Chromate		
5310121522102	WASHER,LOCK	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5310121525341	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121526266	WASHER,KEY	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121526616	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121541106	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121542147	NUT,SELF-LOCKING,HEXAGON	Turret	Metal	Zinc & Chromate	C71278000MX000	Also has Insert-Plastic/Polyamide.
5310121542190	WASHER,FLAT	Transmission system	Metal	Zinc & Chromate	C30730A00MY001	
5310121543949	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121564906	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121564912	WASHER,FLAT	Electrical System	Metal	Zinc & Chromate	C30730F06MY001	
5310121564913	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121564914	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121564915	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121564939	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121564956	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121564971	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121564982	NUT,PLAIN,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121564984	NUT,PLAIN,HEXAGON	Rectifier	Metal	Zinc &	C30730F06MY001	

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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
				Chromate		
5310121564988	NUT,PLAIN,HEXAGON	Pump, Injection	Metal	Zinc & Chromate	C30730C03MY001	
5310121564990	NUT,PLAIN,HEXAGON	Electrical System	Metal	Zinc & Chromate	C30730F06MY001	
5310121564991	NUT,PLAIN,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121564996	NUT,PLAIN,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121565471	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121590293	WASHER,SPRING TENSION	Supercharger Drive	Metal	Zinc & Chromate	C30730C03MY001	
5310121590363	NUT,PLAIN,HEXAGON	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5310121590440	WASHER,FLAT	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5310121596453	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121613677	NUT,PLAIN,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730A00MY001	
5310121615743	WASHER,FLAT	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5310121627599	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121627601	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121627817	WASHER,FLAT	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5310121628611	NUT,PLAIN,HEXAGON	Pump, Injection	Metal	Zinc & Chromate	C30730C03MY001	
5310121628764	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121639423	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121647840	WASHER,FLAT	Turret	Metal	Zinc &	C71345000MX001	



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NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
				Chromate		
5310121647841	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121660907	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121660907	WASHER,LOCK	Pump, Injection	Metal	Zinc & Chromate	C30730C03MY001	
5310121665642	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121702726	NUT,SELF-LOCKING,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730A00MY001	
5310121730413	NUT,PLAIN,SLOTTED,HEXAGON	Transmission system	Metal	Zinc & Chromate	C30730G07MY001	
5310121738808	WASHER,FLAT	Engine Assembly	Metal	Zinc & Chromate	C30730B01MY001	
5310121742405	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121757538	WASHER,SPRING TENSION	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121762620	WASHER,RECESSED	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5310121781880	NUT,SELF-LOCKING,HEXAGON	Starting Motor	Metal	Zinc & Chromate	C30730F06MY001	
5310121803050	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121804358	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121805961	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310121848509	WASHER,FLAT	Alternator	Metal	Zinc & Chromate	C30730F06MY001	
5310121869919	NUT,PLAIN,SLOTTED,HEXAGON	Engine Assembly	Metal	Zinc & Chromate	C30730A00MY001	
5310121943021	WASHER,FLAT	Tools & Equipment	Metal	Zinc & Chromate	L71345X01LC001	

**Hazardous Materials and Products of Environmental Concern Report**  
**Metals and Composites**

NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
		(On-Board)				
5310123026643	WASHER,LOCK	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310123041077	NUT,PLAIN,HEXAGON	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310123047221	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5310123080967	WASHER,FLAT	Turret	Metal	Zinc & Chromate	C71345000MX001	
5315121317424	PIN,COTTER	Turret	Metal	Zinc & Chromate	C71345000MX001	
5340121465293	CLAMP,LOOP	Transmission system	Metal	Zinc & Chromate	C30730A00MY001	Also rubber cushion
5340121468490	CLAMP,LOOP	Power Pac	Metal	Zinc & Chromate	C30730A00MY001	and rubber cushion
5305121564900	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc Dichromate	C30730B01MY001	
5305121590490	SCREW,CAP,SOCKET HEAD	Electrical System	Metal	Zinc Dichromate	C30730F06MY001	
5305121267615	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc Phosphate	C71345000MX001	
5305121348615	SCREW,CAP,SOCKET HEAD	Electrical System	Metal	Zinc Phosphate	C30730F06MY001	
5305121412738	SCREW,CAP,HEXAGON HEAD	Engine Assembly	Metal	Zinc Phosphate	C30730B01MY001	
5305121428698	SCREW,EXTERNALLY RELIEVED BODY	Engine Assembly	Metal	Zinc Phosphate	C30730B01MY001	
5305121428913	SCREW,EXTERNALLY RELIEVED BODY	Generator Drive	Metal	Zinc Phosphate	C30730B01MY001	
5305121430014	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc Phosphate	C71345000MX001	
5305121469650	SCREW,CLOSE TOLERANCE	Transmission system	Metal	Zinc Phosphate	C30730G07MY001	
5305121469651	SCREW,CLOSE TOLERANCE	Transmission system	Metal	Zinc Phosphate	C30730G07MY001	

**Hazardous Materials and Products of Environmental Concern Report**  
**Metals and Composites**

NSN / Part No.	Item Name	Location	Class	Type	Publications	Notes
5305121469652	SCREW,CLOSE TOLERANCE	Transmission system	Metal	Zinc Phosphate	C30730G07MY001	
5305121663832	SCREW,CAP,HEXAGON HEAD	Turret	Metal	Zinc Phosphate	C71345000MX001	
5307121841824	STUD,PLAIN	Transmission system	Metal	Zinc Phosphate	C30730G07MY001	
5310121587463	WASHER,FLAT	Engine Assembly	Metal	Zinc Phosphate	C30730B01MY001	

**Summary of Mitigation Measures and Action  
 Points According to Environmental Aspects and Disposal Means**

Environmental Aspect / Activity	Mitigation Measures / Action Points			
	Demilitarization and Disposal	Disposal by Sale	Display Monument	Museum Artefact
Ionizing Radiation Sources	No Environmental Risks associated with this item.	No Environmental Risks associated with this item.	No Environmental Risks associated with this item.	No Environmental Risks associated with this item.
Non-Ionizing Radiation Sources: Lasers, Radar, Radio	No Environmental Risks associated with this item.	No Environmental Risks associated with this item.	No Environmental Risks associated with this item.	No Environmental Risks associated with this item.
Asbestos	All asbestos containing parts must be removed and disposed of in accordance with the Asbestos Products Regulations, the Canadian Occupational Health and Safety Regulations and the Department of National Defence Canadian Forces Asbestos Management Directive. PPE requirements must be provided to staff for final disposal	New owners should formally accept the asbestos parts within the MBT and the risks associated with these items prior to delivery. New owners must be given a list of asbestos parts and their locations in the vehicles as well as the PPE requirements.	All asbestos containing parts must be removed and disposed of in accordance with the Asbestos Products Regulations, the Canadian Occupational Health and Safety Regulations and the Department of National Defence Canadian Forces Asbestos Management Directive. PPE requirements must be provided to staff for final disposal	Asbestos containing parts must be properly documented and locations must be known. Permanent labels in bilingual form should be affixed in the interior of vehicle. PPE requirements must be provided to museum staff for final disposal.
Mercury and Mercury Containing Items	MCIs are to be removed from MBTs designed to be demilitarized and disposed of as scrap. Similarly, removed MCIs are to be segregated, labelled as containing mercury in accordance with the DGLEPM Management Plan and forwarded to Base Supply for disposal as a hazardous waste.	MCIs remaining after demilitarization processes must be recorded and the documentation updated. This information must be forwarded to the new owners.	MCIs must be removed and then labelled with the name of the product and "Contains Mercury." The waste must be treated as a hazardous waste and returned to Base Supply for disposal action.	MCIs remaining after demilitarization processes must be recorded and the documentation updated. This information must be forwarded to the new owners.
Polychlorinated Biphenyls (PCBs)	All PCB items must be removed. PCB wastes must be disposed of or stored according to regulations.	All PCB items in a non-permitted application must be removed. PCB wastes must be disposed of or stored according to regulations.	All PCB items must be removed. PCB wastes must be disposed of or stored according to regulations.	All PCB items must be removed. PCB wastes must be disposed of or stored according to regulations.
Refrigerants	Micro Climate Systems are returned to supply so that they can be used in other armoured vehicles. The cooling systems need not be decommissioned in accordance with FHR.	Micro Climate Systems are returned to supply so that they can be used in other armoured vehicles. The cooling systems need not be decommissioned in accordance with FHR.	Micro Climate Systems are returned to supply so that they can be used in other armoured vehicles. The cooling systems need not be decommissioned in accordance with FHR.	Micro Climate Systems are returned to supply so that they can be used in other armoured vehicles. The cooling systems need not be decommissioned in accordance with FHR.

**Summary of Mitigation Measures and Action  
 Points According to Environmental Aspects and Disposal Means**

Environmental Aspect / Activity	Mitigation Measures / Action Points			
	Demilitarization and Disposal	Disposal by Sale	Display Monument	Museum Artefact
Fuels, Fluids and Lubricants	During transport of vehicles, fluid content in the vehicles must be minimized to required amounts. Wastes must be captured and disposed of as hazardous waste through Base Supply. All fluids must be drained and all lines must be cleaned. Wastes must be captured and disposed of as hazardous waste through Base Supply.	During transport of vehicles, fluid content in the vehicles must be minimized to required amounts. Wastes must be captured and disposed of as hazardous waste through Base Supply.	During transport of vehicles, fluid content in the vehicles must be minimized to required amounts. Wastes must be captured and disposed of as hazardous waste through Base Supply. All fluids must be drained and all lines must be cleaned. Wastes must be captured and disposed of as hazardous waste through Base Supply.	During transport of vehicles, fluid content in the vehicles must be minimized to required amounts. Once in place it is recommended that bulk fluids are drained to avoid leaks, spills, fire hazards and future equipment failures. Flushing of lines and reservoirs and the capture of their waste fluids is recommended to ensure that the vehicles do not leak over time. Wastes captured must be disposed of as hazardous waste through Base Supply. All fluids must be drained and all lines must be cleaned. Wastes must be captured and disposed of as hazardous waste through Base Supply.
Electrical System and Batteries	The electrical system must be stripped from the vehicle as they are no longer required for operations. When working on electrical systems and batteries, metal objects such as tools, jewellery and watches are to be kept away from the system. Battery posts and cables touched by metals can short circuit and burn personnel. Only qualified trades people utilizing proper maintenance techniques and equipment are to work on the electrical system and components of the vehicles. Batteries that are removed from the vehicles should be returned to Base Supply for proper disposal action. Proper PPE: chemical resistant gloves and safety goggles should be worn and spill kits, neutralizing agents and fire extinguishers should be nearby in order to minimize the risks associated with acid spillage.	When working on electrical systems and batteries, metal objects such as tools, jewellery and watches are to be kept away from the system. Battery posts and cables touched by metals can short circuit and burn personnel. Only qualified trades people utilizing proper maintenance techniques and equipment are to work on the electrical system and components of the vehicles. Batteries that are removed from the vehicles should be returned to Base Supply for proper disposal action.	The electrical system must be stripped from the vehicle as they are no longer required for operations. When working on electrical systems and batteries, metal objects such as tools, jewellery and watches are to be kept away from the system. Battery posts and cables touched by metals can short circuit and burn personnel. Only qualified trades people utilizing proper maintenance techniques and equipment are to work on the electrical system and components of the vehicles. Batteries that are removed from the vehicles should be returned to Base Supply for proper disposal action. Proper PPE: chemical resistant gloves and safety goggles should be worn and spill kits, neutralizing agents and fire extinguishers should be nearby in order to minimize the risks associated with acid spillage.	When working on electrical systems and batteries, metal objects such as tools, jewellery and watches are to be kept away from the system. Battery posts and cables touched by metals can short circuit and burn personnel. Only qualified tradespeople utilizing proper maintenance techniques and equipment are to work on the electrical system and components of the vehicles. Batteries that are removed from the vehicles should be returned to Base Supply for proper disposal action.

**Summary of Mitigation Measures and Action  
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Environmental Aspect / Activity	Mitigation Measures / Action Points			
	Demilitarization and Disposal	Disposal by Sale	Display Monument	Museum Artefact
Optics	Return to the Original Equipment Manufacturer (OEM) for recycle/reuse. Should any optical equipment be disposed of by crushing personnel must utilize proper PPE to avoid exposure to toxic dust and particulates. The shredding of optical equipment is not recommended unless dust control measures have been put in place.	Return to the Original Equipment Manufacturer (OEM) for recycle/reuse. If necessary, dispose with proper PPE: protective gloves and NIOSH respirators in poor ventilation conditions.	Return to the Original Equipment Manufacturer (OEM) for recycle/reuse. If necessary, dispose with proper PPE: protective gloves and NIOSH respirators in poor ventilation conditions.	Return to the Original Equipment Manufacturer (OEM) for recycle/reuse. If necessary, dispose with proper PPE: protective gloves and NIOSH respirators in poor ventilation conditions.
Heavy Metals, Metal Work, and Coatings	Wear proper PPE: welding gloves, welding mask, safety goggles, safety boots/shoes etc. when working with metals. Metallic parts that are no longer required or items to be replaced, e.g. screws, nuts, bolts, etc. must be gathered and recycled as much as possible. Metals for disposal should be sent to certified contractors. New owners/maintainers must be made known of the presence of CARC. Vehicles must be verified for "CARC" stencilling. A permanent metal plate is to be affixed to the exterior of the MBT to ensure that the CARC is properly addressed during service and final disposal.	Wear proper PPE: welding gloves, welding mask, safety goggles, safety boots/shoes etc. when working with metals. Metallic parts that are no longer required or items to be replaced, e.g. screws, nuts, bolts, etc. must be gathered and recycled as much as possible. Metals for disposal should be sent to certified contractors. New owners/maintainers must be made known of the presence of CARC. Vehicles must be verified for "CARC" stencilling. A permanent metal plate is to be affixed to the exterior of the MBT to ensure that the CARC is properly addressed during service and final disposal.	Wear proper PPE: welding gloves, welding mask, safety goggles, safety boots/shoes etc. when working with metals. Metallic parts that are no longer required or items to be replaced, e.g. screws, nuts, bolts, etc. must be gathered and recycled as much as possible. Metals for disposal should be sent to certified contractors. New owners/maintainers must be made known of the presence of CARC. Vehicles must be verified for "CARC" stencilling. A permanent metal plate is to be affixed to the exterior of the MBT to ensure that the CARC is properly addressed during service and final disposal.	Wear proper PPE: welding gloves, welding mask, safety goggles, safety boots/shoes etc. when working with metals. Metallic parts that are no longer required or items to be replaced, e.g. screws, nuts, bolts, etc. must be gathered and recycled as much as possible. Metals for disposal should be sent to certified contractors. New owners/maintainers must be made known of the presence of CARC. Vehicles must be verified for "CARC" stencilling. A permanent metal plate is to be affixed to the exterior of the MBT to ensure that the CARC is properly addressed during service and final disposal.
Rubbers and Plastics	Rubber and plastic parts that require replacement should be removed and segregated by type to facilitate their proper disposal through Base Supply and their recycle contractors. Avoid heat-generating activities done on rubbers and plastics	Rubber and plastic parts that require replacement should be removed and segregated by type to facilitate their proper disposal through Base Supply and their recycle contractors. Avoid heat-generating activities done on rubbers and plastics	All rubber and plastic materials should be removed. Removal procedures should facilitate reuse and recycle as much as possible. All detached rubber and plastic parts must be disposed through Base Supply and their recycle contractors.	Rubber and plastic parts that require replacement should be removed and segregated by type to facilitate their proper disposal through Base Supply and their recycle contractors. Avoid heat-generating activities done on rubbers and plastics

**Summary of Mitigation Measures and Action  
 Points According to Environmental Aspects and Disposal Means**

Environmental Aspect / Activity	Mitigation Measures / Action Points			
	Demilitarization and Disposal	Disposal by Sale	Display Monument	Museum Artefact
Adhesives and Sealants	Personnel working with adhesives/sealants or on parts containing adhesives/sealants should wear proper PPE: chemical resistant gloves, safety glasses and lab coat at minimum, while working. Adequate ventilation must be in place. Solid and liquid wastes created during the dismantling and disposal procedures must be collected and disposed of through certified hazardous waste contractors.	Personnel working with adhesives/sealants or on parts containing adhesives/sealants should wear proper PPE: chemical resistant gloves, safety glasses and lab coat at minimum, while working. Adequate ventilation must be in place. Solid and liquid wastes created during the dismantling and disposal procedures must be collected and disposed of through certified hazardous waste contractors.	Personnel working with adhesives/sealants or on parts containing adhesives/sealants should wear proper PPE: chemical resistant gloves, safety glasses and lab coat at minimum, while working. Adequate ventilation must be in place. Solid and liquid wastes created during the dismantling and disposal procedures must be collected and disposed of through certified hazardous waste contractors.	Personnel working with adhesives/sealants or on parts containing adhesives/sealants should wear proper PPE: chemical resistant gloves, safety glasses and lab coat at minimum, while working. Adequate ventilation must be in place. Solid and liquid wastes created during the dismantling and disposal procedures must be collected and disposed of through certified hazardous waste contractors.
Noise, Vibration and Ground Pressure	During operation, operators should wear proper hearing protection. Operators and workers must not be allowed to be exposed to MBT's noise beyond the time span outlined in C-02-040-009/AG-001 Chapter 10, Annex A. Transportation should be ensured to be done over appropriate roads and bridge classifications and the appropriate time of year.	During operation, operators should wear proper hearing protection. Operators and workers must not be allowed to be exposed to MBT's noise beyond the time span outlined in C-02-040-009/AG-001 Chapter 10, Annex A. Transportation should be ensured to be done over appropriate roads and bridge classifications and the appropriate time of year.	During operation, operators should wear proper hearing protection. Operators and workers must not be allowed to be exposed to MBT's noise beyond the time span outlined in C-02-040-009/AG-001 Chapter 10, Annex A. Transportation should be ensured to be done over appropriate roads and bridge classifications and the appropriate time of year. Site must be prepared to accept the load of the vehicle.	During operation, operators should wear proper hearing protection. Operators and workers must not be allowed to be exposed to MBT's noise beyond the time span outlined in C-02-040-009/AG-001 Chapter 10, Annex A. Transportation should be ensured to be done over appropriate roads and bridge classifications and the appropriate time of year. Site must be prepared to accept the load of the vehicle.
Exhaust Emissions	When vehicles are being operated in enclosed space good ventilation must be ensured. The use of exhaust socks is recommended to when engine is being operated. If possible, use regulated ultra low-sulphur diesel fuels or biodiesel blends of ultra low sulphur diesel fuels to reduce exhaust emissions.	When vehicles are being operated in enclosed space good ventilation must be ensured. The use of exhaust socks is recommended to when engine is being operated. If possible, use regulated ultra low-sulphur diesel fuels or biodiesel blends of ultra low sulphur diesel fuels to reduce exhaust emissions.	When vehicles are being operated in enclosed space good ventilation must be ensured. The use of exhaust socks is recommended to when engine is being operated. If possible, use regulated ultra low-sulphur diesel fuels or biodiesel blends of ultra low sulphur diesel fuels to reduce exhaust emissions.	When vehicles are being operated in enclosed space good ventilation must be ensured. The use of exhaust socks is recommended to when engine is being operated. If possible, use regulated ultra low-sulphur diesel fuels or biodiesel blends of ultra low sulphur diesel fuels to reduce exhaust emissions.

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Environmental Aspect / Activity	Mitigation Measures / Action Points			
	Demilitarization and Disposal	Disposal by Sale	Display Monument	Museum Artefact
Washing and Cleaning Activities	The vehicles should be washed and thoroughly cleaned. The interior must be steam cleaned in order to remove any residual fluids. Proper PPE (refer to product's MSDS) must be worn. All cleaning agents must be stored in proper containers and all cleaning activities must be performed in an approved site with adequate water supply and waste water treatment system. All waste water from these cleaning operations should be monitored for compliance to sewer discharge level requirements or contained and disposed of as oil contaminated waste water.	The vehicles should be washed and thoroughly cleaned. The interior must be steam cleaned in order to remove any residual fluids. Proper PPE (refer to product's MSDS) must be worn. All cleaning agents must be stored in proper containers and all cleaning activities must be performed in an approved site with adequate water supply and waste water treatment system. All waste water from these cleaning operations should be monitored for compliance to sewer discharge level requirements or contained and disposed of as oil contaminated waste water.	The vehicles should be washed and thoroughly cleaned. The interior must be steam cleaned in order to remove any residual fluids. Proper PPE (refer to product's MSDS) must be worn. All cleaning agents must be stored in proper containers and all cleaning activities must be performed in an approved site with adequate water supply and waste water treatment system. All waste water from these cleaning operations should be monitored for compliance to sewer discharge level requirements or contained and disposed of as oil contaminated waste water. Fluid tanks, lines and hoses must be detached, cleaned and dried. Any passage (i.e. holes, ports, etc) must be sealed to prevent water and pest/rodent entry. All removable items such as caps, lids, etc and moving parts must be welded in place.	The vehicles should be washed and thoroughly cleaned. The interior must be steam cleaned in order to remove any residual fluids. Proper PPE (refer to product's MSDS) must be worn. All cleaning agents must be stored in proper containers and all cleaning activities must be performed in an approved site with adequate water supply and waste water treatment system. All waste water from these cleaning operations should be monitored for compliance to sewer discharge level requirements or contained and disposed of as oil contaminated waste water
Demilitarization	Only trained and qualified personnel should perform the demilitarization and destruction process. Demilitarization processes must take place in a well ventilated facility with proper systems for the collection and disposal of solid and liquid wastes. Sources of ignition and electrical sources must be kept away from the work area. Spill kits and appropriate fire extinguishers should be accessible within the work area.	Only trained and qualified personnel should perform the demilitarization and destruction process. Demilitarization processes must take place in a well ventilated facility with proper systems for the collection and disposal of solid and liquid wastes. Sources of ignition and electrical sources must be kept away from the work area. Spill kits and appropriate fire extinguishers should be accessible within the work area.	Only trained and qualified personnel should perform the demilitarization and destruction process. Demilitarization processes must take place in a well ventilated facility with proper systems for the collection and disposal of solid and liquid wastes. Sources of ignition and electrical sources must be kept away from the work area. Spill kits and appropriate fire extinguishers should be accessible within the work area.	Only trained and qualified personnel should perform the demilitarization and destruction process. Demilitarization processes must take place in a well ventilated facility with proper systems for the collection and disposal of solid and liquid wastes. Sources of ignition and electrical sources must be kept away from the work area. Spill kits and appropriate fire extinguishers should be accessible within the work area.