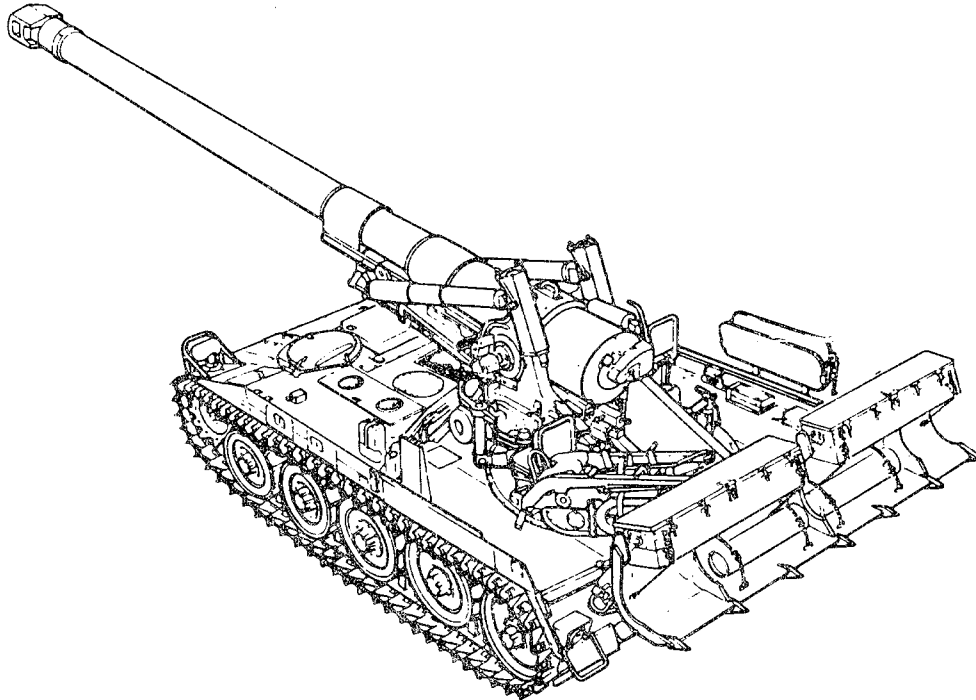


TECHNICAL MANUAL

**UNIT, DIRECT SUPPORT, AND GENERAL
SUPPORT MAINTENANCE REPAIR PARTS
AND SPECIAL TOOLS LIST (INCLUDING
DEPOT MAINTENANCE REPAIR PARTS AND
SPECIAL TOOLS)**



**HOWITZER, HEVY
SELF-PROPELLED
8-INCH, M110A2
(2350-00-041-4590) (EIC: 3E3)**

HULL COMPONENTS

Distribution: Statement A: Approved for public release; distribution is unlimited

**This Manual supersedes hull and related components portions of
TM 9-2350-304-20P, dated July, 1981, including all changes and
TM 9-2350-30434P-1, dated July, 1980, including all changes**

HEADQUARTERS, DEPARTMENT OF THE ARMY

APRIL 1994

**UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT MAINTENANCE
 REPAIR PARTS AND SPECIAL TOOLS LIST
 (INCLUDING DEPOT MAINTENANCE REPAIR PARTS AND SPECIAL TOOLS)**

**HULL COMPONENTS
 USED ON
 HOWITZER, HEAVY, SELF-PROPELLED: 8-INCH, M110A2
 (2350-01-041-4590) (EIC:3E3)**

Current as of 2 June 1993

DISTRIBUTION STATEMENT A. Approved for public release; distribution is unlimited.

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or if you know of a way to improve the procedures, please let us know. Mail your letter, or DA Form 2028-2 located in the back of this manual direct to: Commander, US Army Tank Automotive Command, ATTN: AMSTA-MCC, Warren, MI 48397-5000. A reply will be furnished to you.

TABLE OF CONTENTS

| | | Page | Illus/ Figure |
|--------------------|---|----------|------------------|
| Section I. | Introduction | 1 | |
| Section II. | Repair Parts List | | |
| Group 0100 | Engine and Related Parts | 1-1 | 1 |
| Group 0100 | Engine Mount..... | 2-1 | 2 |
| | 0106 External Oil Lines and Fittings (Upper Engine) | 3-1 | 3 |
| | 0106 External Oil Lines and Fittings (Scavenger Reservoir) | 4-1 | 4 |
| Group 03 | 0304 Engine Air Cleaner System..... | 5-1 | 5 |
| | 0304 Air Cleaner Centrifugal Fan 10905010..... | 6-1 | 6 |
| | 0305 Engine Intake Air Ducts | 7-1 | 7 |
| | 0305 Turbocharger Air Intake Filter and Related Items (Engine Model 7083-7398) | 8-1 | 8 |
| | 0305 Turbocharger Air Intake Screen and Related Items (Engine Model 7083-7395) | 9-1 | 9 |

*This manual supersedes hull components portions of TM 9-2350-304-20P, including all changes, dated July 1981, and TM 9-2350-304-34P-1, including all changes, dated July 1980.

TABLE OF CONTENTS (cont)

| | | Page | Illus Figure |
|----------|---|------|-----------------|
| 0306 | Fabric Fuel Cell Filler Blocks | 10-1 | 10 |
| 0306 | Fabric Fuel Cell Installation..... | 11-1 | 11 |
| 0306 | Fuel Lines and Fittings (Low Pressure) Couplings to Engine | 12-1 | 12 |
| 0306 | Fuel Lines and Fittings (Low Pressure) Couplings to Fuel Cells..... | 13-1 | 13 |
| 0311 | Fuel and Purge-and-Prime Lines and Fittings (Engine Model 7083-7398) | 14-1 | 14 |
| 0311 | Fuel and Purge-and-Prime Lines and Fittings (Engine Model 7083-7395) | 15-1 | 15 |
| 0312 | Throttle and Accelerator Controls and Linkage (Driver's Compartment) | 16-1 | 16 |
| 0312 | Throttle and Accelerator Controls and Linkage (Engine Compartment) | 17-1 | 17 |
| Group 04 | | | |
| 0401 | Exhaust System (Engine Model 7083-7398)..... | 18-1 | 18 |
| 0401 | Exhaust System (Engine Model 7083-7395)..... | 19-1 | 19 |
| Group 05 | | | |
| 0501 | Radiator and Related Parts | 20-1 | 20 |
| 0501 | Radiator Support Beam and Related Parts..... | 21-1 | 21 |
| 0501 | Surge Tank and Related Parts | 22-1 | 22 |
| 0503 | Cooling System Hoses, Pipes, and Related Parts | 23-1 | 23 |
| 0503 | Aeration Detector..... | 24-1 | 24 |
| 0505 | Cooling System Fan Tensioner and Related Parts | 25-1 | 25 |
| 0505 | Radiator Cooling Vaneaxial Fan 10956561-1 | 26-1 | 26 |
| Group 06 | | | |
| 0601 | Generator and Cooling Air Intake System | 27-1 | 27 |
| 0602 | Voltage Regulator and Related Parts | 28-1 | 28 |
| 0603 | Starter Relay and Related Items | 29-1 | 29 |
| 0606 | Neutral Position Switch and Related Parts | 30-1 | 30 |
| 0607 | Driver's Instrument Panel Installation | 31-1 | 31 |
| 0607 | Driver's Instrument Panel 10898510 | 32-1 | 32 |
| 0607 | Driver's Instrument Panel 10892415 | 33-1 | 33 |
| 0607 | Warning Light 12355239..... | 34-1 | 34 |
| 0607 | Indicator Light 8376500..... | 35-1 | 35 |
| 0607 | Air Box Heater Controls Bracket Assembly | 36-1 | 36 |
| 0607 | Miscellaneous Electrical Components | 37-1 | 37 |
| 0608 | Electrical Accessories Power Bus Panel 11675629 | 38-1 | 38 |
| 0609 | Headlight, Dome Light, Warning Light, and Stoplight-Taillight Installation | 39-1 | 39 |
| 0609 | Headlight Assembly MS53022-1 | 40-1 | 40 |
| 0609 | Left Stoplight-Taillight 8378785..... | 41-1 | 41 |
| 0609 | Right Stoplight-Taillight 8378786 | 42-1 | 42 |
| 0609 | Driver's Compartment Dome Light 7064671..... | 43-1 | 43 |
| 0610 | Sending Units, Warning Switches, and Indicator Light..... | 44-1 | 44 |
| 0610 | Low Engine Coolant Warning Indicator Light 11675565..... | 45-1 | 45 |
| 0611 | Audible Warning Horn and Related Parts..... | 46-1 | 46 |

TABLE OF CONTENTS (cont)

| | Page | Illus Figure |
|--|------|-----------------|
| 0612 Batteries, Electrical Leads, and Related Parts..... | 47-1 | 47 |
| 0613 Electrical Wiring Installation Attaching Hardware | 48-1 | 48 |
| 0613 Generator to Ground Engine Ignition Lead 10914937 and Starter to Ground Electrical Lead 10901839 | 49-1 | 49 |
| 0613 Horn to Warning Relay Wiring Harness 10919885 | 50-1 | 50 |
| 0613 Disconnect to Forward Air Cleaner Blower Motor Electrical Lead 10934867 | 51-1 | 51 |
| 0613 Electrical Wiring (Hull Aft)..... | 52-1 | 52 |
| 0613 Suspension Lockout System Warning Light Ground and Horn Ground Electrical Leads 10892526 | 53-1 | 53 |
| 0613 Line Connection to Right Headlamp Disconnect Branched Wiring Harness 10901827 | 54-1 | 54 |
| 0613 Trailer Receptacle Assembly to Disconnect Branched Wiring Harness 10901829 | 55-1 | 55 |
| 0613 Battery to Circuit Breaker Electrical Lead 10901835..... | 56-1 | 56 |
| 0613 Gages and Lights Disconnect to Instrument Panel Branched Wiring Harness 10901838..... | 57-1 | 57 |
| 0613 Bulkhead Disconnect to Generator Armature Electrical Lead 10901840..... | 58-1 | 58 |
| 0613 Bulkhead Disconnect to Starter Electrical Lead 10901842..... | 59-1 | 59 |
| 0613 Bulkhead to Bulkhead Generator Circuit Electrical Lead 10901844..... | 60-1 | 60 |
| 0613 Bulkhead Disconnect to Voltage Regulator Assembly Wiring Harness 10901852..... | 61-1 | 61 |
| 0613 Circuit Breaker to Bulkhead Disconnect Branched Wiring Harness 10901853..... | 62-1 | 62 |
| 0613 Floor Disconnect to Bulkhead Disconnect Wiring Harness 10901855..... | 63-1 | 63 |
| 0613 Bulkhead Disconnect to Magnetic Clutch Branched Wiring Harness 10901856..... | 64-1 | 64 |
| 0613 Hull Disconnect, Interphone Amplifier to Bulkhead Disconnect and Driver's Control Box Branched Wiring Harness 10908425..... | 65-1 | 65 |
| 0613 Driver's Controls Branched Wiring Harness 10914680..... | 66-1 | 66 |
| 0613 Blower to Ground Electrical Lead 10914828..... | 67-1 | 67 |
| 0613 Generator Control Circuits to Bracket Disconnect Branched Wiring Harness 10919889..... | 68-1 | 68 |
| 0613 Bulkhead Disconnect to Driver's Control Branched Wiring Harness 12254061 | 69-1 | 69 |
| 0613 Engine Warning Lights Circuits to Bulkhead Disconnect Branched Wiring Harness 10919945..... | 70-1 | 70 |
| 0613 Lighting Switch to Vehicle Accessories and Disconnect Branched Wiring Harness 11592728..... | 71-1 | 71 |

TABLE OF CONTENTS (cont)

| | Page | Illus Figure |
|---|------|-----------------|
| 0613 Battery to Bulkhead Disconnect Cable Assembly 12289960..... | 72-1 | 72 |
| 0613 Bulkhead to Bulkhead Starter Circuit Branched Wiring Harness 11592731 | 73-1 | 73 |
| 0613 Bulkhead Disconnect to Trailer Receptacle Disconnect and Taillights Branched Wiring Harness 11592733..... | 74-1 | 74 |
| 0613 Disconnect to Headlamp Wiring Harness 11592755..... | 75-1 | 75 |
| 0613 Relay to Starter and Neutral Position Switch Branched Wiring Harness 12290396..... | 76-1 | 76 |
| 0613 Fuel Purge-and-Prime Switch to Solenoid Electrical Lead 11675547 (Engine Model 7083-7398) | 77-1 | 77 |
| 0613 Fuel Purge-and-Prime Switch to Solenoid Electrical Lead 12254008 (Engine Model 7083-7395) | 78-1 | 78 |
| 0613 Warning Light Low Coolant Detector to Bulkhead Disconnect Branched Wiring Harness 11675566..... | 79-1 | 79 |
| 0613 Aeration Detector Branched Wiring Harness 11675567..... | 80-1 | 80 |
| 0613 Low Coolant Warning Light to Bulkhead Disconnect Branched Wiring Harness 11675568..... | 81-1 | 81 |
| 0613 Master Relay to Bulkhead Disconnect Cable Assembly 12289961..... | 82-1 | 82 |
| 0613 Voltage Regulator to Bulkhead Disconnect Slave Receptacle and Accessories Panel Cable Assembly 12322791..... | 83-1 | 83 |
| 0613 Slave Receptacle (NATO) and Ground Electrical Lead 12322792..... | 84-1 | 84 |
| 0615 Hub Cap Radio Static Suppression Helical Spring 7379067 | 85-1 | 85 |
| Group 07 | | |
| 0710 Transmission Assembly 5703079..... | 86-1 | 86 |
| 0710 Transmission Components..... | 87-1 | 87 |
| 0714 Transmission Plugs..... | 88-1 | 88 |
| 0721 Oil Sampling Drain Cock and Related Items | 89-1 | 89 |
| Group 08 | | |
| 0801 Transfer and Final Drive Assemblies..... | 90-1 | 90 |
| 0801 Final Drive Assembly 8351824..... | 91-1 | 91 |
| 0801 Auxiliary Drive Installation..... | 92-1 | 92 |
| 0801 Auxiliary Drive Assembly 11675634 (Vehicular Drive)..... | 93-1 | 93 |
| 0801 Auxiliary Drive Assembly 11675634 (Clutch Drive) | 94-1 | 94 |
| 0801 Auxiliary Drive Assembly 11675634 (Generator Drive)..... | 95-1 | 95 |

TABLE OF CONTENTS (cont)

| | | Page | Illus Figure |
|----------|---|-------|-----------------|
| 0801 | Auxiliary Drive Assembly 11675634 (Input Drive)..... | 96-1 | 96 |
| 0801 | Oil Filler Neck 10934580..... | 97-1 | 97 |
| 0801 | Oil Drain Tube Assembly 10902501-1..... | 98-1 | 98 |
| 0803 | Shifting Control and Linkage..... | 99-1 | 99 |
| 0804 | Hydraulic System Components, Lines, and Fittings..... | 100-1 | 100 |
| 0804 | Fluid Filter..... | 101-1 | 101 |
| 0804 | Rotary Pump 10906747..... | 102-1 | 102 |
| Group 09 | Auxiliary Drive Shafts, Universal Joints, and Related Parts..... | 103-1 | 103 |
| | Auxiliary Drive Line Carrier Ball Bearing Unit 10902580..... | 104-1 | 104 |
| Group 12 | | | |
| 1201 | Parking Brake Control and Linkage..... | 105-1 | 105 |
| 1201 | Parking Brake Assembly 12254047..... | 106-1 | 106 |
| 1206 | Mechanical Brake Control and Linkage..... | 107-1 | 107 |
| Group 13 | | | |
| 1301 | Torsion Bars and Sockets..... | 108-1 | 108 |
| 1301 | Roadwheel Arm and Hub Assembly and Attaching Parts..... | 109-1 | 109 |
| 1301 | Roadwheel Pivot Arm Assembly 10891653..... | 110-1 | 110 |
| 1301 | Roadwheel Suspension Hub 11631593..... | 111-1 | 111 |
| 1303 | Idler Wheel, Roadwheel Wheel, and Left Lubrication Tube..... | 112-1 | 112 |
| 1303 | Idler Wheel Arm and Hub Assembly and Attaching Parts..... | 113-1 | 113 |
| 1303 | Idler Wheel Arm and Hub 10891675..... | 114-1 | 114 |
| 1303 | Idler Wheel Vehicular Wheel Hub 10891677..... | 115-1 | 115 |
| 1304 | Drive Hub Sprockets and Related Parts..... | 116-1 | 116 |
| 1305 | Vehicular Track Shoe Installation..... | 117-1 | 117 |
| 1305 | Vehicular Track Shoe 10934639..... | 118-1 | 118 |
| Group 14 | | | |
| 1401 | Steering Controls and Linkage, and Steering Rod Assembly 12253961..... | 119-1 | 119 |
| Group 15 | | | |
| 1503 | Towing Pintle Assembly..... | 120-1 | 120 |
| 1503 | Tow Hook and Related Parts..... | 121-1 | 121 |
| Group 16 | | | |
| 1604 | Lockout Cylinder and Related Parts..... | 122-1 | 122 |
| 1604 | Hydraulic Suspension Lockout Cylinder Assembly 12254156..... | 123-1 | 123 |
| 1604 | Suspension Lockout System Control Valve and Associated Parts..... | 124-1 | 124 |
| 1604 | Suspension System Hydraulic Lines and Fit Suspension System Hydraulic Lines and Fittings (Right Side) and Access Cover..... | 26-1 | 126 |

TABLE OF CONTENTS (cont)

| | | Page | Illus Figure |
|----------|--|-------|-----------------|
| 1604 | Suspension System Hydraulic Lines and Fittings (Left Side)..... | 127-1 | 127 |
| 1604 | Suspension System Hydraulic Lines and Fittings (Left Side) and Attaching Hardware..... | 128-1 | 128 |
| 1604 | Suspension System Hydraulic Lines and Fittings | 129-1 | 129 |
| Group 18 | | | |
| 1801 | Hull Covers and Access Doors..... | 130-1 | 130 |
| 1801 | Hull Covers, Doors, and Plates | 131-1 | 131 |
| 1801 | Air Cleaner Blower Access Door Assembly 10903996..... | 132-1 | 132 |
| 1801 | Battery Access Cover 12355134 | 133-1 | 133 |
| 1801 | Air Cleaner Access Door 12355090..... | 134-1 | 134 |
| 1801 | Engine Fuel Filter Access Door 11643066..... | 135-1 | 135 |
| 1801 | Hull Deck and Miscellaneous Components..... | 136-1 | 136 |
| 1801 | Engine Deck Lid Assembly 10956703 and Attaching Parts | 137-1 | 137 |
| 1801 | Transmission Deck Lid Assembly 10956704 and Attaching Parts | 138-1 | 138 |
| 1801 | Travel Lock | 139-1 | 139 |
| 1802 | Mud Guards, Hose Guards, Fender Extensions, and Attaching Parts..... | 140-1 | 140 |
| 1803 | Driver's Hatch Cover and Cupola Hinge Torsion Bar 12254130 | 141-1 | 141 |
| 1804 | Hull Drain Plugs, Valves, and Related Parts..... | 142-1 | 142 |
| 1806 | Driver's Seat and Associated Parts | 143-1 | 143 |
| 1806 | Individual Seat 10901351..... | 144-1 | 144 |
| 1806 | Personnel Seat and Associated Parts..... | 145-1 | 145 |
| 1808 | Hull Stowage (Driver's Compartment) and Bracket Assembly 12254040..... | 146-1 | 146 |
| 1808 | Hull Stowage (Exterior) and Stowage Box Assembly 10904303 | 147-1 | 147 |
| 1808 | Projectile Clamp Chain Assembly 12253928 | 148-1 | 148 |
| 1808 | Pioneer Tools Bracket Assembly 734692 | 149-1 | 149 |
| 1808 | Water Can Bracket Assembly 10904052..... | 150-1 | 150 |
| 1808 | Rifle Rack Assembly 10881934..... | 151-1 | 151 |
| 1808 | Fire Extinguisher Bracket 7357907-1 | 152-1 | 152 |
| 1808 | Hand Grenade Box Assembly 8700274..... | 153-1 | 153 |
| Group 20 | | | |
| 2004 | Power Takeoff Installation..... | 154-1 | 154 |
| 2004 | Transmission Power Takeoff 10902000-1 | 155-1 | 155 |
| 2005 | Spade and Related Parts and Loop Clamp 10946300..... | 156-1 | 156 |
| 2005 | Spade Lifting Cylinder Assembly 10891960 | 157-1 | 157 |
| 2005 | Spade Control Lever | 158-1 | 158 |
| 2005 | Spade Hydraulic Lines and Fittings | 159-1 | 159 |
| Group 22 | | | |
| 2210 | Vehicle Data Plates..... | 160-1 | 160 |

TABLE OF CONTENTS (cont)

| | Page | Illus Figure |
|---|-------|-----------------|
| Group 33 | | |
| 3303 Winterization Kit 11643600 | 161-1 | 161 |
| 3303 Heater Installation Kit 11643540 | 162-1 | 162 |
| 3303 Heater Installation Kit 11643540 (Battery Box Supports and Related Items) | 163-1 | 163 |
| 3303 Heater Installation Kit 11643540 (Battery Box and Covers) | 164-1 | 164 |
| 3303 Heater Installation Kit 11643540 (Hoses and Fittings) | 165-1 | 165 |
| 3303 Heater Installation Kit 11643540 (Fuel Lines and Fittings) | 166-1 | 166 |
| 3303 Heater Installation Kit 11643540 (Driver's Heater Air Hoses) | 167-1 | 167 |
| 3303 Heater Installation Kit 11643540 (Air Intake Blower, Fuel Filter Heaters, and Connecting Harness) | 168-1 | 168 |
| 3303 Heater Installation Kit 11643540 (Electrical Components and Wiring) | 169-1 | 169 |
| 3303 Heater Installation Kit 11643540 (Air Intake Covers, Plates, and Related Items) | 170-1 | 170 |
| 3303 Battery Positive Terminal to Circuit Breaker Electrical Lead 10934557 | 171-1 | 171 |
| 3303 Coolant Heater Circuit Breaker to Line Disconnect Cable Assembly 11643550 | 172-1 | 172 |
| 3303 Heater Control Box to Driver's Heater Wiring Harness 12322871 | 173-1 | 173 |
| 3303 Bulkhead Disconnects to Master Relay and Circuit Breakers Cable Assembly 11643585 | 174-1 | 174 |
| 3303 Bulkhead Disconnect to Circuit Breakers and Electrical Components Branched Wiring Harness 11643591 | 175-1 | 175 |
| 3303 Engine Compartment Branched Wiring Harness 11643592 | 176-1 | 176 |
| 3303 Filter Mounting Fluid Filter 12322867 | 177-1 | 177 |
| 3303 Pyrometer Panel Assembly 11643533 and Indicator Light 8729063 | 178-1 | 178 |
| 3303 Engine Blower Assembly 10956647 | 179-1 | 179 |
| 3303 Heater Electrical Control Box 11669705 | 180-1 | 180 |
| 3303 Engine Coolant Heater 11643561 | 181-1 | 181 |
| 3303 Coolant Heater Assembly Branched Wiring Harness 11617762 | 182-1 | 182 |
| 3303 Engine Coolant Heater Assembly 11601698 (Interior Parts) | 183-1 | 183 |
| 3303 Engine Coolant Heater Assembly 11601698 (Exterior Parts) | 184-1 | 184 |
| 3303 Coolant Heater Blower Assembly G702591 | 185-1 | 185 |
| 3303 Vehicular Heater (Driver's Compartment) 12322854 | 186-1 | 186 |
| 3303 Vehicular Heater 10530B | 187-1 | 187 |

TABLE OF CONTENTS (cont)

| | Page | Illus Figure |
|---|-------|-----------------|
| 3303 Blower Assembly G706014 | 188-1 | 188 |
| 3303 Heater Component Bracket G706064..... | 189-1 | 189 |
| 3303 Driver's Windshield Enclosure Kit 11643510 (Electrical Wiring) | 190-1 | 190 |
| 3303 Driver's Windshield Enclosure Kit 11643510 (Enclosure | 191-1 | 191 |
| 3303 Vehicular Window 11643497..... | 192-1 | 192 |
| 3303 Vehicular Window 11643494..... | 193-1 | 193 |
| 3303 Windshield Wiper Motor Assembly 12355188 | 194-1 | 194 |
| 3303 Wiper Motor and Defroster Lead Disconnects Electrical Lead Assembly 11643498..... | 195-1 | 195 |
| 3303 Circuit Breaker to Wiper Motor and Defroster Switch Electrical Lead Assembly 11643499 | 196-1 | 196 |
| 3303 Disconnect Defroster to Switch Lead Disconnects 12355164 and Defroster Ground Lead Disconnects 11643576-2 Electrical Leads | 197-1 | 197 |
| 3303 Wiper Motor to Switch Electrical Lead 11643608 | 198-1 | 198 |
| 3303 Personnel Vehicular Heater 11643097 (Electrical Leads and Related Parts) | 199-1 | 199 |
| 3303 Personnel Vehicular Heater 11643097 (Heater and Related Parts) | 200-1 | 200 |
| 3303 Circuit Breaker to Line Disconnect Bracket Electrical Lead 10882042..... | 201-1 | 201 |
| 3303 Line Disconnect Bracket to Heater Control Electrical Lead 10882043..... | 202-1 | 202 |
| 3303 Battery Positive Terminal to Circuit Breaker Electrical Lead 10934557..... | 203-1 | 203 |
| 3303 Personnel Vehicular Heater Assembly | 204-1 | 204 |
| 3303 Personnel Heater Tank Assembly 12322719..... | 205-1 | 205 |
| 3303 Control Box Assembly to Heater Assembly Wiring Harness 10934482..... | 206-1 | 206 |
| 3303 Crew Personnel Shelter Kit 11643054 (Shroud and Related Parts)..... | 207-1 | 207 |
| 3303 Crew Personnel Shelter Kit 11643054 (Cover and Strap Hooks)..... | 208-1 | 208 |
| 3303 Crew Personnel Shelter Kit 11643054 (Stowage Items and Related Parts) | 209-1 | 209 |
| 3303 Crew Personnel Shelter Kit 11643054 (Dome Lights and Related Parts)..... | 210-1 | 210 |
| 3303 Crew Personnel Shelter Kit 11643054 (Shroud Supports and Related Items)..... | 211-1 | 211 |
| 3303 Crew Personnel Shelter Kit 11643054 (Turret Flanges and Related Parts)..... | 212-1 | 212 |
| 3303 Crew Personnel Shelter Kit 11643054 (Floors, Covers, and Related Parts)..... | 213-1 | 213 |
| 3303 Dome Lights Branched Wiring Harness 10934558 | 214-1 | 214 |
| 3303 Dome Light Assembly 7064671..... | 215-1 | 215 |
| 3303 Arctic Traction Kit 11643271 | 216-1 | 216 |
| 4701 Speedometer, Tachometer, and Related Parts..... | 217-1 | 217 |

TABLE OF CONTENTS (cont)

| | | | Page | Illus Figure |
|---------------------|--------------------------------|---|-------------|-------------------------|
| Group 76 | 7639 | Fixed Fire Extinguisher Control System..... | 218-1 | 218 |
| | 7639 | Fixed Fire Extinguisher Connecting Lines and Fittings | 219-1 | 219 |
| | 7639 | Fixed Fire Extinguisher Forward Nozzle, Lines and Fittings | 220-1 | 220 |
| | 7639 | Fixed Fire Extinguisher Rear Nozzle, Lines and Fittings | 221-1 | 221 |
| | 7639 | Fire Extinguisher Cylinder Bracket 10946585 | 222-1 | 222 |
| Group | 9401 | Repair Kits | KITS-1 | |
| Group | 9501 | Bulk..... | BULK-1 | |
| Section III. | Special Tools List | | | |
| Group | 2604 | Special Tools..... | 223-1 | 223 |
| Group | 2604 | Special Tools..... | 224-1 | 224 |
| Group | 2604 | Special Tools..... | 225-1 | 225 |
| Section V. | Cross Reference Indexes | | | |
| | | National Stock Number Index | I-1 | |
| | | Part Number Index..... | I-36 | |
| | | Figure and Item Number Index | I-111 | |

**UNIT, DIRECT SUPPORT, AND GENERAL
SUPPORT MAINTENANCE
REPAIR PARTS AND SPECIAL TOOLS LIST**

Section I. INTRODUCTION

1. SCOPE. This RPSTL lists and authorizes spares and repair parts; special tools; special test, measurement, and diagnostic equipment (TMDE); and other special support equipment required for performance of unit, direct support, and general support maintenance of the M1 0A2 Self-Propelled, Heavy Howitzer. It authorizes the requisitioning, issue, and disposition of spares, repair parts, and special tools as indicated by the source, maintenance, and recoverability (SMR) codes.

2. GENERAL. In addition to Section I, Introduction, this Repair Parts and Special Tools List is divided into the following sections:

a. Section II. Repair Parts List. A list of spares and repair parts authorized by this RPSTL for use in the performance of maintenance. The list also includes parts which must be removed for replacement of the authorized parts. Parts lists are composed of functional groups in ascending alphanumeric sequence, with the parts in each group listed in ascending figure and item number sequence. Bulk materials are listed in item name sequence. Repair parts kits are listed separately in their own functional group within Section II. Items listed are shown on the associated illustration(s)/figure(s).

b. Section III. Special Tools List. A list of special tools, special TMDE, and other special support equipment authorized by this RPSTL (as indicated by Basis of Issue (BOI) information in DESCRIPTION AND USABLE ON CODE column) for the performance of maintenance.

c. Section IV. Cross-reference Indexes. A list, in National Item Identification Number (NIIN) sequence, of all National stock numbered items appearing in the listing, followed by a list in alphanumeric sequence of all part numbers appearing in the listings. National stock numbers and part numbers are cross-referenced to each illustration figure and item number appearance. The figure and item number index lists figure and item numbers in alphanumeric sequence and cross-references NSN, CAGEC, and part numbers.

3. EXPLANATION OF COLUMNS (SECTIONS II AND III).

a. ITEM NO. (Column (1)). Indicates the number used to identify items called out in the illustration.

b. SMR CODE (Column (2)). The Source, Maintenance, and Recoverability (SMR) code is a 5-position code containing supply/requisitioning information, maintenance level authorization criteria, and disposition instruction, as shown in the following breakout:

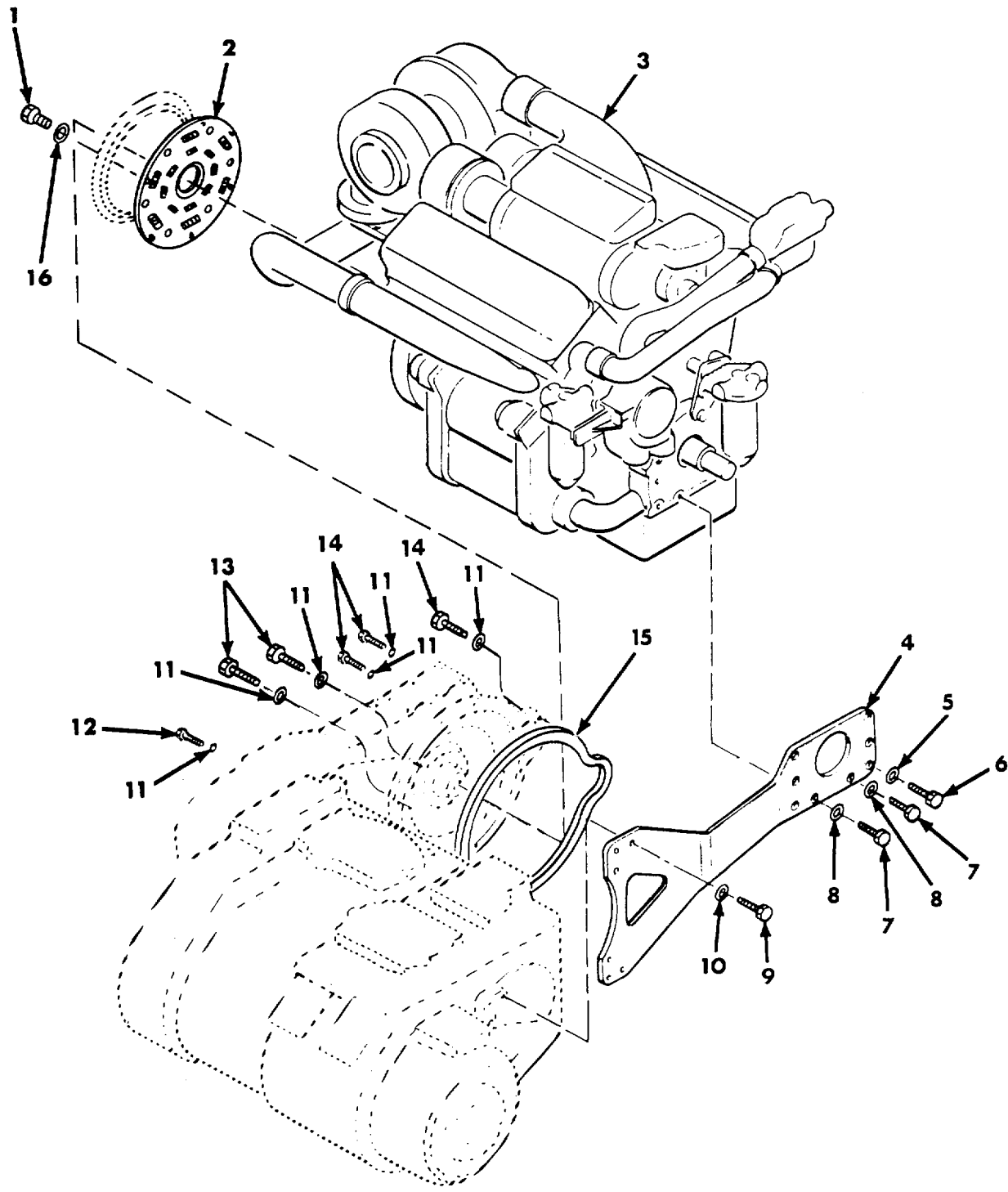


Figure 1. Engine and Related Parts.

SECTION II

TM 9-2350-304-24P-1

| (1) ITEM NO | (2) SMR CODE | (3) CAGEC | (4) PART NUMBER | (5) DESCRIPTION AND USABLE ON CODES (UOC) | (6) QTY |
|--------------------------------|--------------------|--------------|-----------------------|--|------------|
| GROUP 0100 | | | | | |
| FIG.1 ENGINE AND RELATED PARTS | | | | | |
| 1 | PAFZZ | 96906 | MS35764-1291 | BOLT, SELF-LOCKING .375-16UNC-2A X..... .875..... | 12 |
| 2 | PAFZZ | 19207 | 11662761 | COUPLING, SHAFT, FLEX ENGINE TO..... POWER TRAIN..... | 1 |
| 3 | PAFHD | 19207 | 5705715 | ENGINE, W CONTAINER DETROIT DIESEL-..... GMC SERIES 8V71T, MOD 7083-7395 (FOR..... REPAIR PARTS, SEE TM 9-2815-202-34P)..... | 1 |
| 4 | PAFZZ | 19207 | 10904375 | SUPPORT, TRANSMISSIO ENGINE TO..... TRANSMISSION..... | 1 |
| 5 | PAFZZ | 96906 | MS35338-48 | WASHER, LOCK 1/2 NOM SIZE..... | 4 |
| 6 | PAFZZ | 80204 | B1821BH050C400N | SCREWICAPHEXAGON H..... | 4 |
| 7 | PAFZZ | 80204 | B1821BH038C113N | SCREW, CAP, HEXAGON H 3/8-16UNC-2A X..... 1.125, GRADE 8..... | 2 |
| 8 | PAFZZ | 96906 | MS35338-46 | WASHER, LOCK 3/8 NOM SIZE..... | 2 |
| 9 | PAFZZ | 80204 | B1821BH063C200N | SCREW, CAP, HEXAGON H 5/8-11UNC-2A X..... 2.000, GRADE 8..... | 6 |
| 10 | PAFZZ | 80045 | 23MS35338-50 | WASHERTLOCK..... | 6 |
| 11 | PAFZZ | 96906 | MS35338-47 | WASHERTLOCK..... | 14 |
| 12 | PAFZZ | 96906 | MS90725-96 | SCREWICAPIHEXAGON H..... | 2 |
| 13 | PAFZZ | 80204 | B18218H044C150N | SCREW, CAPVHEXAGON H..... | 9 |
| 14 | PAFZZ | 80204 | B1821SH031C044N | SCREW, CAP, HEXAGON H 7/16-14UNC-2A..... X 2.250, GRADE 8..... | 3 |
| 15 | PAFZZ | 19207 | 12289974 | GASKET FLYWHEEL HOUSING..... | 1 |
| 16 | PAFZZ | 81349 | M83248/1-235 | PACKING, PREFORMED .135 DIA, 3.0 ID..... | 1 |

END OF FIGURE

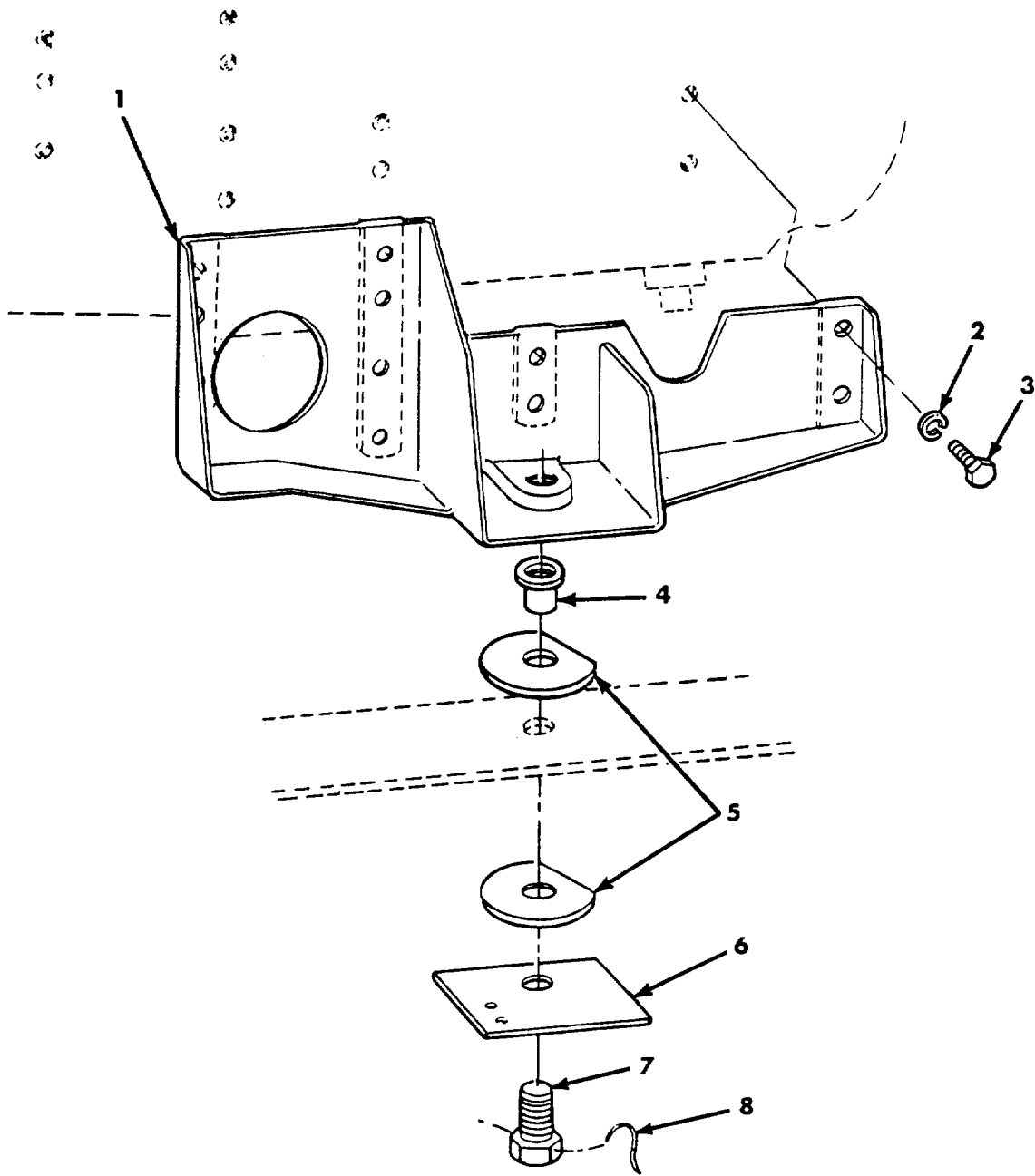


Figure 2. Engine Mount.

SECTION II

TM 9-2350-304-24P-1

| (1) ITEM NO | (2) SMR CODE | (3) CAGEC | (4) PART NUMBER | (5) DESCRIPTION AND USABLE ON CODES (UOC) | (6) QTY |
|-------------------|--------------------|--------------|-----------------------|--|------------|
| | | | | GROUP 0100 | |
| | | | | FIG.2 ENGINE MOUNT | |
| 1 | PAOZZ | 19207 | 11631501 | BRACKETIMOUNTING | 1 |
| 2 | PAOZZ | 96906 | MS35338-46 | WASHER, LOCK 3/8 NOM SIZE | 12 |
| 3 | PAOZZ | 80204 | B1821BH038C125N | SCREW, CAPIHEXAGON H 3/8-16UNC-2A X | 12 |
| | | | | 1.250, GRADE 8..... | |
| 4 | PAOZZ | 19207 | 10898445 | TUBE, SPACER, MOUNTP..... | 1 |
| 5 | PAOZZ | 19207 | 10882021 | PAD, CUSHIONING | 2 |
| 6 | PAOZZ | 19207 | 10882022 | WASHERENGINE MOUNT..... LOCK WIRE PLATE | 1 |
| 7 | PAOZZ | 96906 | MS51096-513 | SCREW, CAP, HEXAGON H 1.0-12UNF-2A X..... | 1 |
| | | | | 3.00..... | |
| 8 | MOOZZ | 96906 | MS20995C91 | WIRE, NONELECTRICAL MFD FROM 9505- | V |
| | | | | 00-236-9343 | |

END OF FIGURE

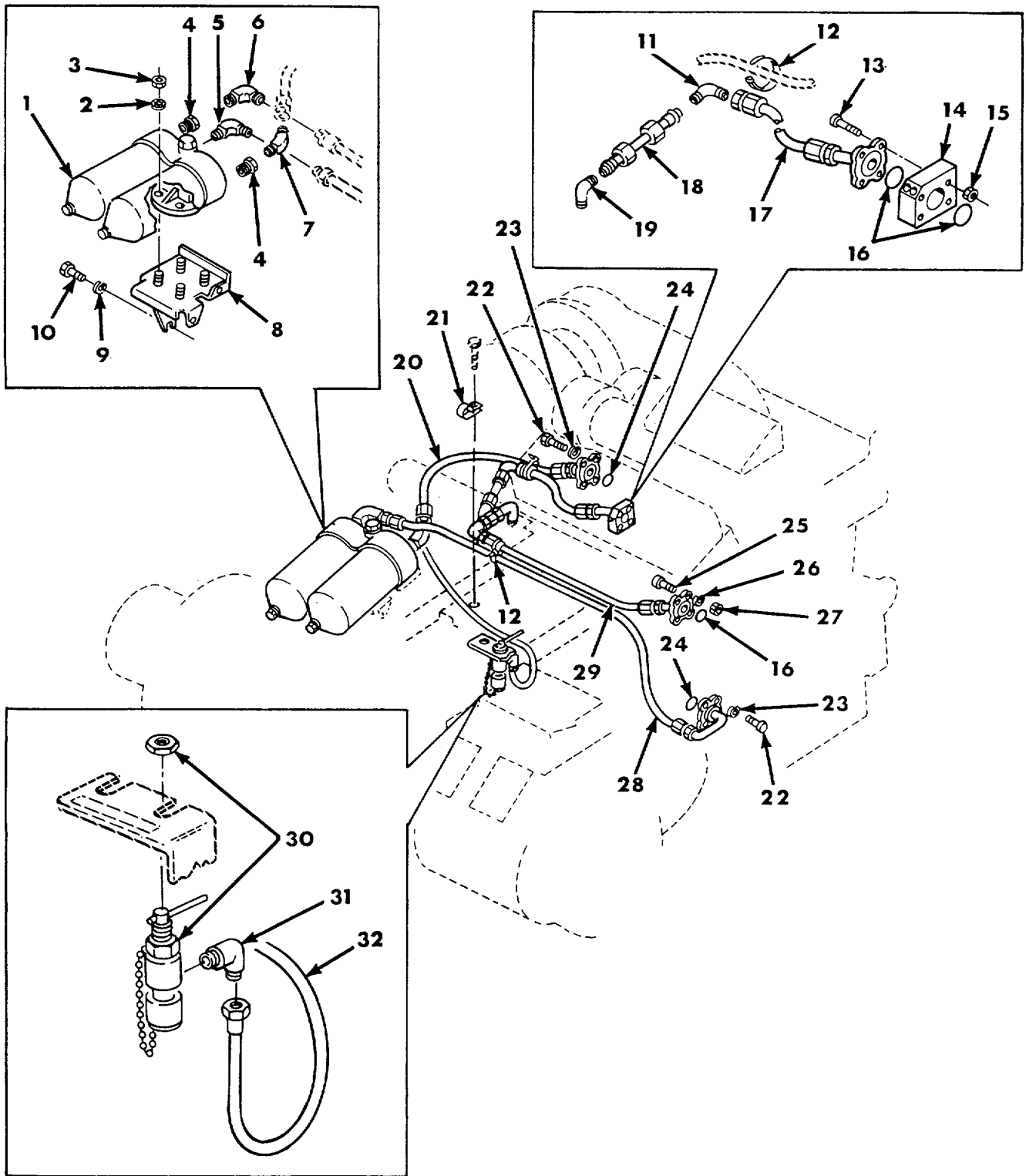


Figure 3. External Oil Lines and Fittings (Upper Engine).

SECTION II

TM 9-2350-304-24P-1

| (1) ITEM NO | (2) SMR CODE | (3) CAGEC | (4) PART NUMBER | (5) DESCRIPTION AND USABLE ON CODES (UOC) | (6) QTY |
|---|--------------------|--------------|-----------------------|--|------------|
| GROUP 0106 | | | | | |
| FIG.3 EXTERNAL OIL LINES AND FITTINGS (UPPER ENGINE) | | | | | |
| 1 | PAOZZ | 72582 | 5126546 | FILTER, FLUID | 1 |
| 2 | PAOZZ | 96906 | MS35333-42 | WASHER, LOCK INT-TOOTH 3/8 NOM SIZE..... | 4 |
| 3 | PAOZZ | 96906 | MS51968-8 | NUT, PLAIN, HEXAGON 3/8-Z4UNF..... | 4 |
| 4 | PAOZZ | 81348 | WW-P-471BDQBCGE | BUSHING, PIPE 1-1/4 X 3/4 NPT..... | 2 |
| 5 | PAOZZ | 96906 | MS51504A4-4 | ELBOW, PIPE TO TUBE..... | 1 |
| 6 | PAOZZ | 96906 | MS51815-14 | ELBOW, PIPE TO TUBE 3/4NPTF PIPE TO..... 3/4 TUBE | 1 |
| 7 | PAOZZ | 19207 | 10917222-6 | ELBOW, PIPE TO TUBE OIL FILTER..... COOLER HOSE | 1 |
| 8 | PAOZZ | 19207 | 11642652 | BRACKET, OIL FILTER | 1 |
| 9 | PAOZZ | 96906 | MS35338-46 | WASHER, LOCK..... | 1 |
| 10 | PAOZZ | 96906 | MS90725-58 | SCREW, CAPIHEXAGON H 3/8-16UNC-2A X | 1 |
| 11 | PAOZZ | 96906 | MS21904-16 | ELBOW, TUBE FLARELESS TUBE 1.0 TUBE | 1 |
| 12 | PAOZZ | 19207 | 10921769 | BANDOMARKER OIL HOSES | 2 |
| 13 | PAOZZ | 96906 | MS90727-129 | SCREW, CAP?HEXAGON H 1/2-20UNF-2A X..... 6 100GRADE 8..... | 4 |
| 14 | PAOZZ | 19207 | 10914794 | MANIFOLD, OIL RESERV OIL RESERVOIR | 1 |
| 15 | PAOZZ | 96906 | MS21044N8 | NUT, SELF-LOCKING, HE 1/2-20UNF..... | 4 |
| 16 | PAOZZ | 96906 | MS28775-228 | PACKING, PREFORMED 2.234 ID, 2.512 OD | 3 |
| 17 | PAOZZ | 19207 | 8712200 | HOSE ASSEMBLYX TRAN RUBBER, | 1 |
| 18 | PAOZZ | 19207 | 10881937 | TRANSMISSION TO OIL COOLER..... TUBE ASSEMBLYTMETAL PREFORMED, | 1 |
| 19 | PAOZZ | 96906 | MS51815-48 | TRANSMISSION TO OIL COOLER..... ELBOW, PIPE TO TUBE 90 DEG, 1.ONPTF | 2 |
| 20 | PAOZZ | 19207 | 10906363 | PIPE TO 1.0 TUBE..... HOSE ASSEMBLY, NONME RUBBER, OIL..... FILTER COOLER..... | 1 |
| 21 | PAOZZ | 96906 | MS21333-120 | CLAMP, LOOP | 1 |
| 22 | PAOZZ | 80204 | B1821BH044C125N | SCREW, CAP, HEXAGON H 7/16-14UNC X..... 1.250..... | 8 |
| 23 | PAOZZ | 96906 | MS35338-47 | WASHERILOCK 7/16 NOM SIZE | 8 |
| 24 | PAOZZ | 96906 | MS28775-222 | PACKING, PREFORMED 1.484 1D, 1.762 OD..... | 2 |
| 25 | PAOZZ | 96906 | MS90727-122 | SCREW, CAPTHEXAGON H 1/2-20UNF-2A X..... 3.750, GRADE 8..... | 4 |
| 26 | PAOZZ | 96906 | MS35338-48 | WASHER, LOCK 1/2, NOM SIZE..... | 4 |
| 27 | PAOZZ | 96906 | MS51968-14 | NUT, PLAINIHEXAGON 1/2-20UNF..... | 4 |
| 28 | PAOZZ | 98441 | 213038-12-0444 | HOSE ASSEMBLY, NONME RUBBER, ENGINE | 1 |
| 29 | PAOZZ | 19207 | 10914574 | OIL FILTER..... HOSE ASSEMBLYTNONME TRANSMISSION | 1 |
| 30 | PAOZZ | 19207 | 11669424 | TO OIL COOLER | 1 |
| 31 | PAOZZ | 96906 | MS51506A4 | COCK, DRAIN..... | 2 |
| 32 | PAOZZ | 96906 | MS8OOE-320A | ELBOW, PIPE TO TUBE..... HOSE ASSEMBLY, NONME | 1 |

END OF FIGURE

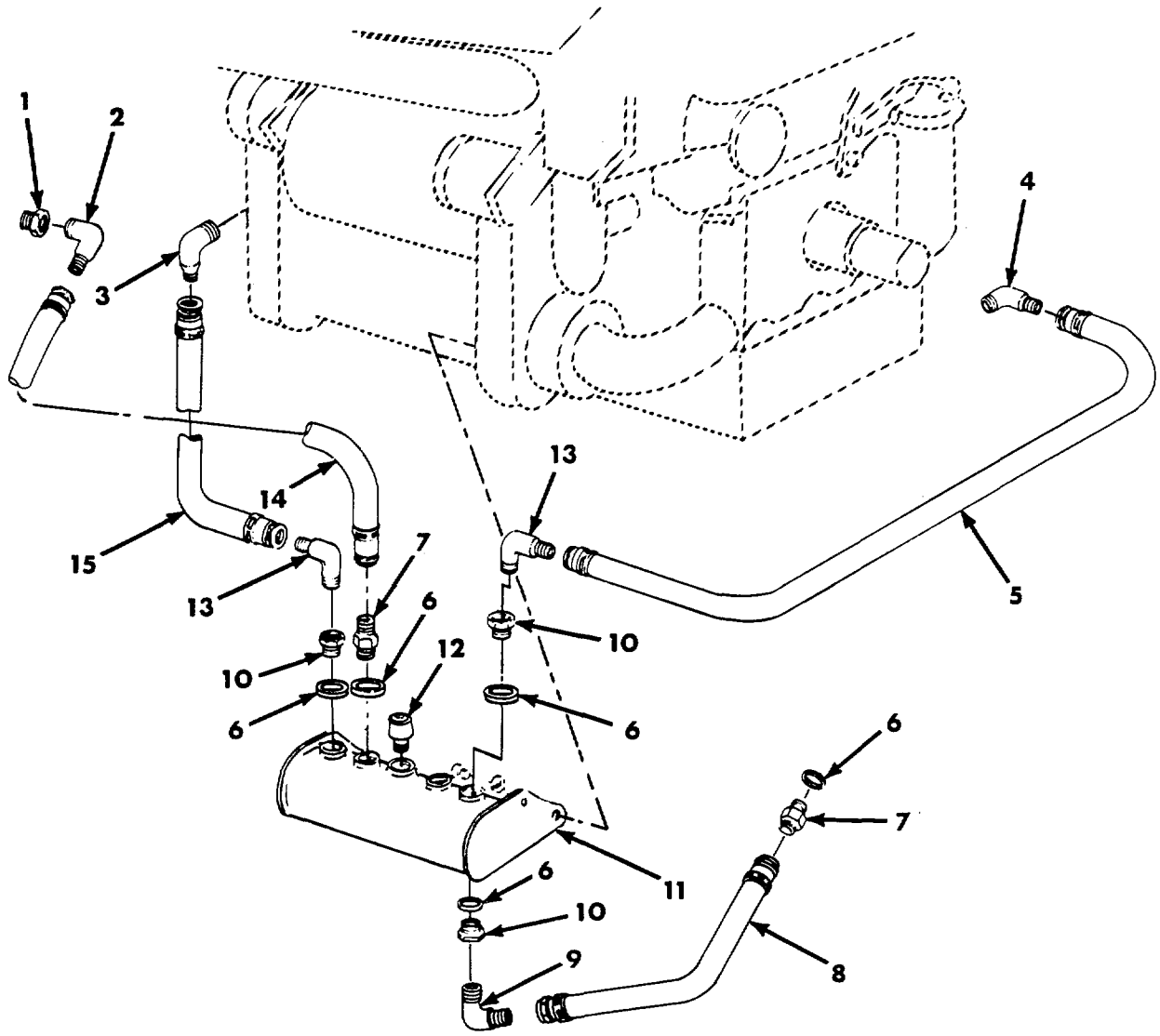


Figure 4. External Oil Lines and Fittings (Scavenger Reservoir),

SECTION II

TM 9-2350-304-24P-1

| (1) ITEM NO | (2) SMR CODE | (3) CAGEC | (4) PART NUMBER | (5) DESCRIPTION AND USABLE ON CODES (UOC) | (6) QTY |
|--|--------------------|--------------|-----------------------|--|------------|
| GROUP 0106 | | | | | |
| FIG.4 EXTERNAL OIL LINES AND FITTINGS (SCAVENGER RESERVOIR) | | | | | |
| 1 | PAOZZ | 81348 | WW-P471BDQBCCB | BUSHING, PIPE 3/8 X 1/4NPT | 1 |
| 2 | PAOZZ | 96906 | MS51815-5 | ELBOW, PIPE TO TUBE 1/4NPTF PIPE TO..... 1/4 TUBE | 1 |
| 3 | PAOZZ | 96906 | MS51815-3 | ELBOW, PIPE TO TUBE 1/8NPTF PIPE TO..... 1/4 TUBE | 1 |
| 4 | PAOZZ | 19207 | 10917222-1 | ELBOW, PIPE TO TUBE PIPE TO TUBE, ENGINE BLOCK DRAIN..... | 1 |
| 5 | PAOZZ | 19207 | 10906356 | HOSE ASSEMBLY, NONME RUBBER, ENGINE BLOCK DRAIN | 1 |
| 6 | PAOZZ | 96906 | MS28778-4 | PACKING, PREFORMED .351 ID, .495 OD | 5 |
| 7 | PAOZZ | 96906 | MS21902-4 | NIPPLE, BOSS 1/4 TUBE OD | 2 |
| 8 | PAOZZ | 19207 | 10911012 | HOSE ASSEMBLY, NONME RUBBER, RESERVOIR DRAIN | 1 |
| 9 | PAOZZ | 96906 | MS21907-4 | ELBOW, TUBE BULKHEAD UNIV 1/4 TUBE OD | 1 |
| 10 | PAOZZ | 88044 | AN6289-4 | LOCKNUT, TUBE FITTIN FLARED TUBE..... FITTING 7/16-20UNF | 3 |
| 11 | PAOZZ | 19207 | 10904381 | RESERVOIR, ENGINE O..... | 1 |
| 12 | PAOZZ | 19207 | 10915154 | BREATHER..... | 1 |
| 13 | PAOZZ | 96906 | MS21908-4 | ELBOW, TUBE BULKHEAD UNIV 1/4 TUBE OD | 2 |
| 14 | PAOZZ | 19207 | 10913170 | HOSE ASSEMBLY, NONME RUBBER | 1 |
| | | | | TRANSFER CASE DRAIN | 1 |
| 15 | PAOZZ | 19207 | 10913169 | HOSE ASSEMBLY, NONME RUBBER, ENGINE CONDENSATION | 1 |

END OF FIGURE

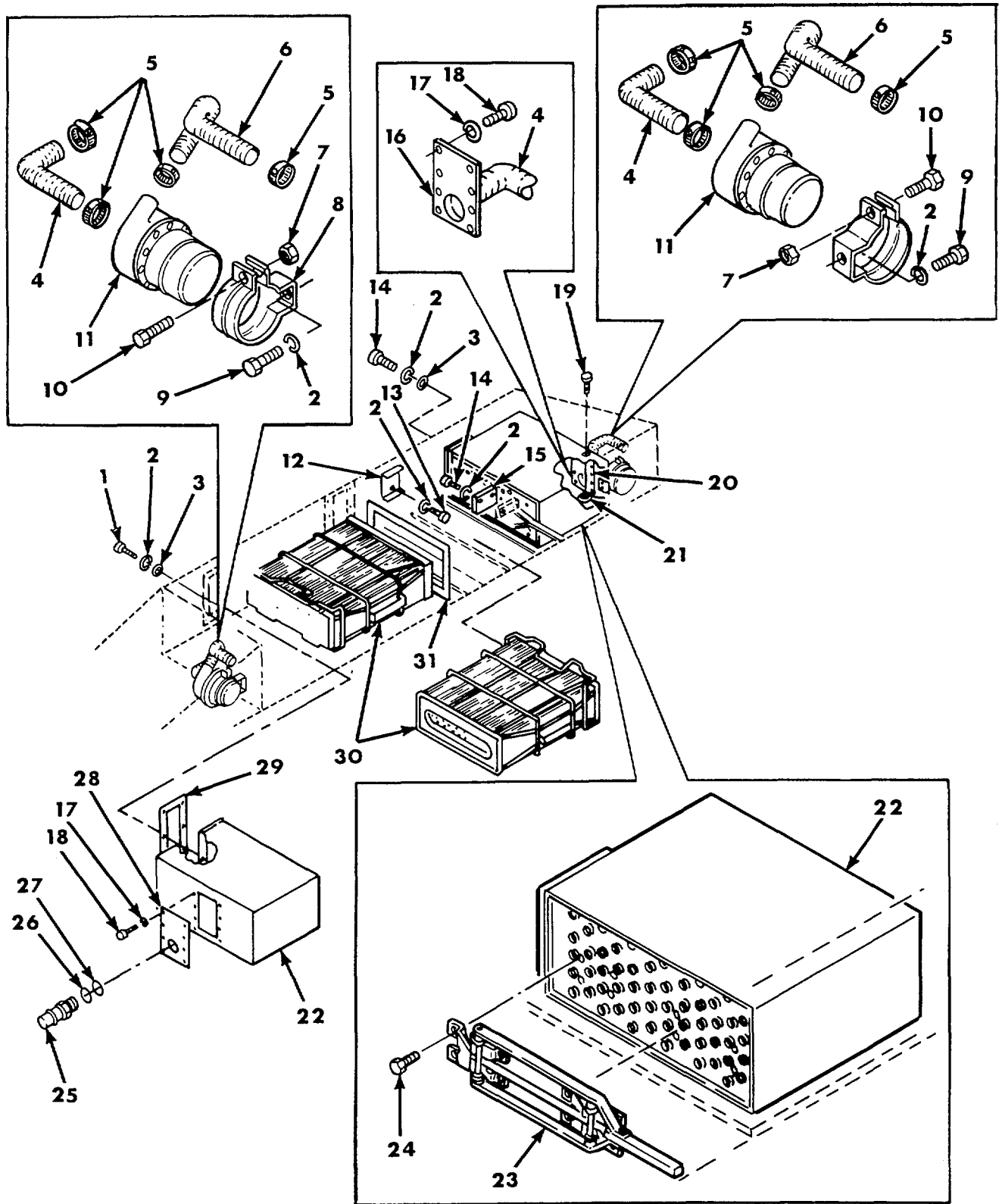


Figure 5. Engine Air Cleaner System.

SECTION II

| (1) ITEM NO | (2) SMR CODE | (3) FSCM | (4) PART NUMBER | (5) DESCRIPTION AND USABLE ON CODES (UOC) GROUP 0304 FIG.5 ENGINE AIR CLEANER SYSTEM | (6) QTY |
|-------------------|--------------------|-------------|-----------------------|---|------------|
| 1 | PAOZZ | 96906 | MS90727-60 | SCREW,CAP,HEXAGON H 3/8-24UNF-2A X 1.000,GRADE 8 | 6 |
| 2 | PAOZZ | 96906 | MS35338-46 | WASHER,LOCK 3/8 NOM SI ZE | 24 |
| 3 | PAOZZ | 96906 | MS27183-14 | WASHER,FLAT .406 ID,.812 OD,.065 THK | 12 |
| 4 | MOOZZ | 19207 | 8724783 | HOSEAIR DUCT BLOWER INLET,MFD FROM 4720-00-882-1669 | V |
| 5 | PAOZZ | 96906 | MS35842-12 | CLAMPIHOSE NO.8 NOM SIZEZ | 8 |
| 6 | MOOZZ | 19207 | 8724783-10 | HOSEAIR DUCT BLOWER OUTLET,MFD FROM 4720-00-882-1669 | V |
| 7 | PAOZZ | 96906 | MS21044N5 | NUT,SELF-LOCKINGIHE 5/16-24UNF | 2 |
| 8 | PAOZZ | 19207 | 10934628 | BRACKET CLAMP AIR CLEANER BLOWER | 2 |
| 9 | PAOZZ | 80204 | B1821BH038C075N | SCREW,CAP,HEXAGON H 3/8-24UNF-2A X 6251GRADE 5 | 4 |
| 10 | PAOZZ | 96906 | MS90726-36 | SCREW,CAP,HEXAGON H 5/16-24UNF-2A X 1.2501GRADE 5 | 2 |
| 11 | PAOFF | 192070 | 10905010 | FAN,CENTRIFUGAL AIR CLEANER SEE FIG 6 ASSY BKDN* | 1 |
| 12 | PAOZZ | 19207 | 12355149 | BRACKET,MOUNTING CLEANER BASKET | 2 |
| 13 | PAOZZ | 96906 | MS90727-55 | SCREW,CAPHEXAGON H 3/8-24UNF-2A X 500,GRADE 8 | 4 |
| 14 | PAOZZ | 96906 | MS90727-58 | SCREW,CAPIHEXAGON H 3/8-24UNF-2A X 750,GRADE 8 | 10 |
| 15 | PAOZZ | 19207 | 12355148 | BRACKET,MOUNTING PLACEMENT GUIDE | 2 |
| 16 | PAOZZ | 19207 | 10919794 | DOOR,AIR CLEANER,EX AFT AIR SEPARATOR BLOWER ADAPTER | 1 |
| 17 | PAOZZ | 96906 | MS35338-44 | WASHER,LOCK 1/4 NOM SIZE..o1.1.111 | 16 |
| 18 | PAOZZ | 96906 | MS90725-5 | SCREW,CAP,HEXAGON H 1/4-20UNC-2A X .625,GRADE 5 | 16 |
| 19 | PAOZZ | 96906 | MS90727-63 | SCREW,CAP,HEXAGON H 3/8-24UNF-2A X 1,375,GRADE 5 | 1 |
| 20 | PAOZZ | 19207 | 8762879 | GASKET | 1 |
| 21 | PAOZZ | 96906 | MS35692-21 | NUT,PLAINISLOTTEDIH 3/8-24UNF | 1 |
| 22 | PAOZZ | 19207 | 10934626 | AIR CLEANER,IN TAKE | 2 |
| 23 | PAOZZ | 19207 | 12355157 | RETAINER ASSEMBLY, | 2 |
| 24 | PAOZZ | 21450 | 186491 | BOLT,ASSEMBLED WASH 1/4-20UNC X 1/2 | 16 |
| 25 | PAOZZ | 19207 | 10919791 | ADAPTER,STRAIGHTIHO HOSE TO BOSS, FWD AIR SEPARATOR END PLATE DOOR | 1 |
| 26 | PAOZZ | 19207 | 10956619 | GASKET FWD AIR SEPARATOR OUTLET ADAPTER | 1 |
| 27 | PAOZZ | 88044 | AN960-2616 | WASHER,FLAT 1.640 rD,2.375 OD,.090 THK | 1 |
| 28 | PAOZZ | 19207 | 10919793 | COVER,ACCESS FWD AIR SEPARATOR BLOWER ADAPTER | 1 |
| 29 | PAOZZ | 19207 | 10934570 | GASKET DUCT | 2 |
| 30 | PAOZZ | 78940 | W260DX-3 | FILTER ELEMENT,INTA. | 2 |
| 31 | PAOZZ | 19207 | 12355122 | SEAL ASSEMBLYTAIR F | 2 |

END OF FIGURE