

SPECIAL PACKAGING INSTRUCTION

*Form Approved
OMB No. 0704-0188*

**-BK
MB**

The public reporting burden for this collection of information is estimated to average 30 days per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. **PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.**

1. PART OR DRAWING NO. (CAGE) NOMENCLATURE RE538996 (3PSD7) ENGINE, DIESEL			2. CAGE 19207		3. SPI NO. AK15866168	
4. NATIONAL STOCK NO. 2815-01-586-6168			5. DATE 8/24/2011		6. REVISION	
7. QUP 1 EACH	8. ICQ NONE	9. UNIT PACK WT (LB.) 1802.0	10. UNIT PACK CU (CU. FT.) 84.544		11. UNIT PACK SIZE (INCHES) 55.8 X 44.3 X 59.1	
12. MILITARY PRESERVATION MIL-STD-2073-1D, METHOD 53			18. STEPS	19. REQD	20. DESCRIPTION	
13. CLEANING MIL-STD-2073-1D & NOTE B			1-C	A/R	SPECIAL EQUIPMENT LIST	
			2-D	A/R	ENGINE PRESERVATION	
14. DRYING MIL-STD-2073-1D & NOTE B			3-E	A/R	CAPS/PLUGS: NAS-847	
			4-F	A/R	PRESERVATIVE: MIL-PRF-16173, GR 4	
15. PACKING			5-G	1	WRAP: MIL-PRF-121, TY II, SIZE: 96 X 169	
			6-H	1	CUSHIONING: A-A-59135, CL 1, GR A,	
a. LEVEL A MIL-STD-2073-1D & NOTE M					SIZE: 48 X 192 X 1/4" THICKNESS	
			7-I	96	DESICCANT: MIL-DTL-3464, TY II	
b. LEVEL B NOT APPLICABLE			8-J	1	ENVELOPE: MIL-DTL-6060E, SIZE: 96 X 174	
			9-K	2	BLOCKING/BRACING: ASTM-D6199, SIZE: 2 X 6 X 34	
16. MARKING MIL-STD-129 & NOTE N			10-L	1	CONTAINER: ASTM-D7478, TY II, CL 2, ST A,	
					SIZE: 53-1/2 X 42 X 52	

17. NOTES:

A. PRESERVATION AND PACKING SHALL BE INSPECTED IN ACCORDANCE WITH MIL-STD-2073-1D AND ANY APPLICABLE CONTAINER SPECIFICATIONS.

B. CLEAN AND DRY ITEM BY ANY SUITABLE PROCESS BEFORE APPLICATION OF PRESERVATIVE AND PACKAGING MATERIALS.

C. SPECIAL EQUIPMENT NEED FOR ENGINE PRESERVATION:

1. TWO(2) PRESERVATIVE SUPPLY HOSE, APPROXIMATELY 24" IN LENGTH. ONE (1) SHALL BE EQUIPPED WITH A FITTING THAT WILL MATE WITH THE FUEL INLET FITTING (6-ORFS). THE OTHER SHALL BE A 3/8" I.D. COMMERCIAL GRADE HOSE TO DRAIN FROM THE FUEL RETURN LINE.
2. FUEL SUPPLY LINE TO CONNECT THE FILTER ASSEMBLY TO THE FUEL PUMP. THIS HOSE ASSEMBLY SHALL BE 72 - 84 INCHES LONG, ONE END SHALL HAVE A 6-ORFS FITTING THE OTHER SHALL HAVE A FITTING TO MATE TO THE FUEL PUMP (M14 X 1.5 THREAD).
3. 24 VOLT POWER SUPPLY WITH A STARTER RELAY (JOHN DEERE P/N RE164448).
4. SLAVE FUEL FILTER (JOHN DEERE P/N RE522878).
5. SLAVE OIL FILTER (JOHN DEERE P/N RE504836).
6. AIR COMPRESSOR (MAX 15 PSI) OR MANUAL PUMP EITHER UNIT SHALL BE CAPABLE OF PROVIDING SPRAY OR FOG PATTERNS.
7. TWO (2) 5-GALLON PAILS OR EQUIVALENT.

D. THE FOLLOWING PROCEDURE DESCRIBES THE APPROVED METHOD FOR PRESERVATION OF THIS ENGINE:

- **ANY DEVIATIONS FROM THIS PROCEDURE SHALL BE PRE-APPROVED BY TACOM AND THE ENGINE MANUFACTURER.**

SPECIAL PACKAGING INSTRUCTION (Continuation Sheet)

Form Approved -BK
OMB No. 0704-0188 MB

The public reporting burden for this collection of information is estimated to average 30 days per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

1. PART OR DRAWING NO. (CAGE) NOMENCLATURE RE538996 (3PSD7) ENGINE, DIESEL	2. CAGE 19207	3. SPI NO. AK15866168
4. NATIONAL STOCK NO. 2815-01-586-6168	5. DATE 8/24/2011	6. REVISION

- 17. NOTES:**
1. REPLACE FUEL FILTERS (P/N RE522878) AND OIL FILTER (P/N RE504836) WITH SLAVE FILTERS FROM SPECIAL EQUIPMENT LIST. SET ORIGINAL FILTERS ASIDE TO BE RE-INSTALLED AFTER PRESERVATION PROCESS IS COMPLETE (DWG 2.1 1).
 2. FILL 5-GALLON PRESERVATIVE PAIL FROM SPECIAL EQUIPMENT LIST WITH PRESERVATIVE MIL-PRF-21260E, TYPE PE-10.
 3. FILL PRESERVATIVE SPRAYER WITH 50 PERCENT VCI OIL CONFORMING TO MIL-P-46002A, GRADE 2, AND 50 PERCENT ENGINE OIL.
 4. REMOVE TWO (2) CAPS (DWG 2.1), JOHN DEERE P/N 38H5141, FROM FUEL FILTER ASSEMBLY AND PLUG (DWG 1.1), JOHN DEERE P/N RE46684, FROM FUEL PUMP. SET CAPS AND PLUGS ASIDE TO BE REINSTALLED AFTER PRESERVATION.
 5. INSTALL FUEL SUPPLY LINE FROM FUEL FILTER ASSEMBLY TO FUEL PUMP INLET (DWG 3.1).
 6. INSTALL PRESERVATIVE SUPPLY HOSE FROM 5-GALLON PRESERVATIVE PAIL (STEP 2) TO FUEL FILTER INLET (DWG 3).
 7. REMOVE CAP FROM RETURN LINE, ATTACH 3/8" PRESERVATIVE DRAIN HOSE, POSITION HOSE OVER 5-GALLON DRAINAGE CONTAINER (DWG 1.1).
 8. CHECK ENGINE OIL LEVELS AND PROCEED AS FOLLOWS. (DWG 4)
 - a) IF OIL IS AT OPERATIONAL LEVELS DRAIN 1/2 THE VOLUME (7 QUARTS) AND ADD VCI OIL CONFORMING TO MIL-P46002A, GRADE 2.
 - b) IF OIL LEVELS ARE LOW OR EMPTY DRAIN ALL OIL AND FILL CRANKCASE TO OPERATIONAL LEVEL WITH A VCI OIL MIXTURE (50 PERCENT VCI OIL CONFORMING TO MIL-P-46002A, GRADE 2, AND 50 PERCENT ENGINE OIL).
 9. CONNECT STARTER TO 24 VOLT POWER SUPPLY WITH RELAY (DWG 3.3).
 10. REMOVE FLYWHEEL COVER AND FOG WITH A THIN AMOUNT OF VCI OIL MIXTURE (50 PERCENT VCI OIL CONFORMING TO MIL-P-46002A, GRADE 2, AND 50 PERCENT ENGINE OIL) ON THE FLYWHEEL, HOUSING AND RING GEAR TEETH (DWG 4).
 11. REMOVE CAPS FROM TURBO INTAKE AND EXHAUST PORTS, FOG EACH PORT (DWG 4.1) WITH 1ml OF VCI OIL MIXTURE (50 PERCENT VCI OIL CONFORMING TO MIL-P-46002A, GRADE 2, AND 50 PERCENT ENGINE OIL).
 12. REMOVE CAP FROM INTAKE MANIFOLD, INJECT 12-15ml OF VCI OIL MIXTURE (50 PERCENT VCI OIL CONFORMING TO MIL-P-46002A AND 50 PERCENT ENGINE OIL) INTO PORT (SEE DWG 4.2).
 13. CYCLE ENGINE USING STARTER, DO NOT CYCLE FOR MORE THAN 5 SECONDS ALLOWING THE STARTER TO REST 30 SECONDS BETWEEN CYCLES. CONTINUE TO CYCLE UNTIL 36-45ml (TOTAL) OF VCI OIL MIXTURE HAS BEEN PROCESSED THROUGH THE INTAKE MANIFOLD.

SPECIAL PACKAGING INSTRUCTION (Continuation Sheet)

Form Approved -BK
OMB No. 0704-0188 MB

The public reporting burden for this collection of information is estimated to average 30 days per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

1. PART OR DRAWING NO. (CAGE) NOMENCLATURE RE538996 (3PSD7) ENGINE, DIESEL	2. CAGE 19207	3. SPI NO. AK15866168
4. NATIONAL STOCK NO. 2815-01-586-6168	5. DATE 8/24/2011	6. REVISION

17. NOTES:

- 14. DISCONNECT POWER SUPPLY AND RELAY.
- 15. REMOVE PRESERVATIVE HOSES AND FUEL SUPPLY HOSE.
- 16. REPLACE SLAVE OIL AND FUEL FILTER WITH ORIGINAL FILTERS.
- 17. DRAIN OIL FROM CRANKCASE, REPLACE DRAIN PLUG TORQUE TO 25LB/FT (DWG 4.4).
- 18. REPLACE ALL REMOVED CAPS AND PLUGS.
- 19. CAP BREATHER TUBE WITH POLY BAG, SECURE WITH TAPE ASTM-D6123. (DWG 4)
- 20. COOLING SYSTEM: IT IS ASSUMED THIS ENGINE, IF NEW, HAS BEEN PREVIOUSLY RUN WITH COOLANT UTILIZING NON-CHROMATE INHIBITORS BY THE MANUFACTURER. THEREFORE, THE COOLING SYSTEM PRESERVATION IS NOT REQUIRED.

PACKAGING INSTRUCTIONS BEGIN ON PAGE 6.

DWG 1.1



**PLUG
P/N RE46684**

**FUEL
RETURN LINE**

DWG 1



SPECIAL PACKAGING INSTRUCTION (Continuation Sheet)

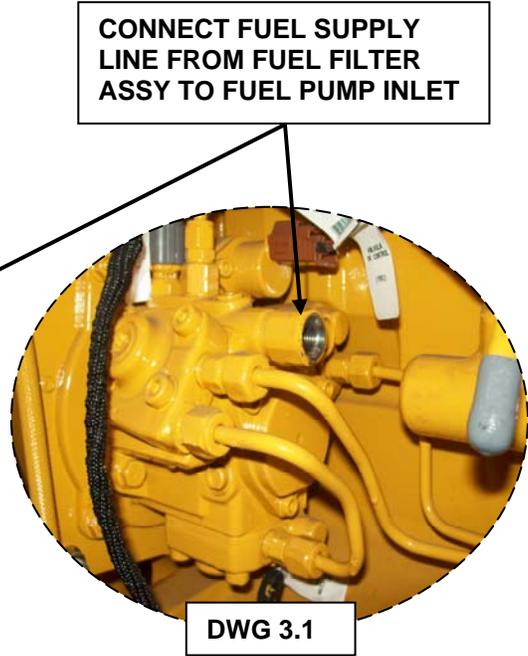
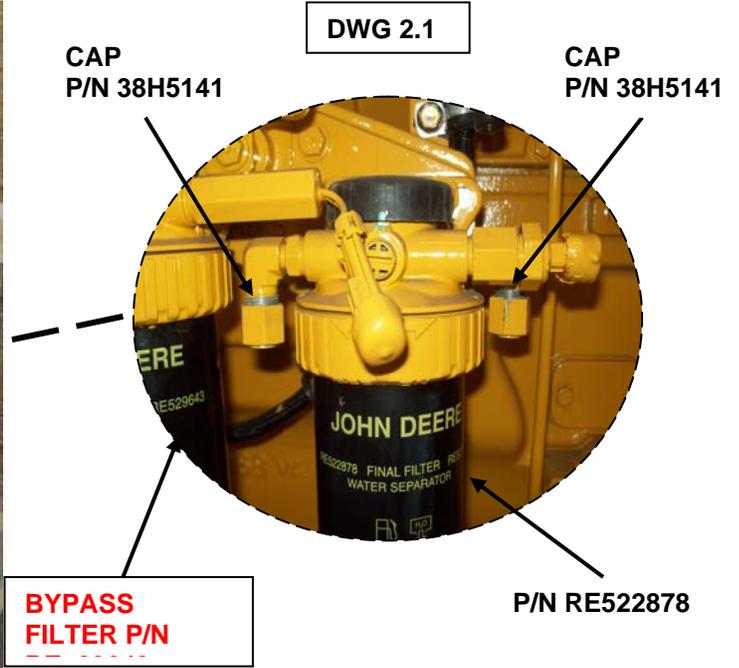
Form Approved -BK
OMB No. 0704-0188 MB

The public reporting burden for this collection of information is estimated to average 30 days per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

1. PART OR DRAWING NO. (CAGE) NOMENCLATURE RE538996 (3PSD7) ENGINE, DIESEL	2. CAGE 19207	3. SPI NO. AK15866168
4. NATIONAL STOCK NO. 2815-01-586-6168	5. DATE 8/24/2011	6. REVISION

17. NOTES:

ENGINE PRESERVATION REFERENCE



SPECIAL PACKAGING INSTRUCTION (Continuation Sheet)

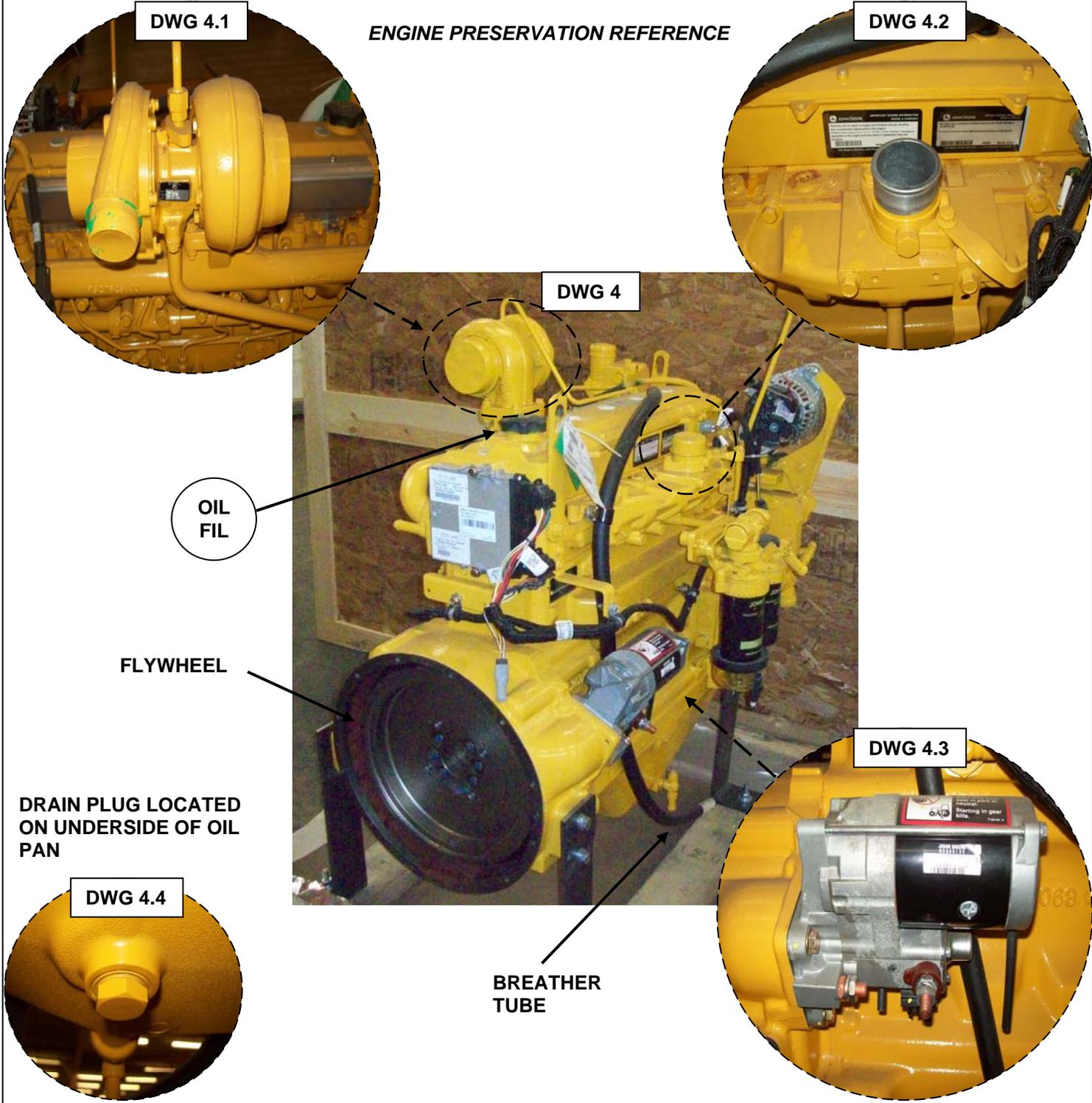
Form Approved -BK
OMB No. 0704-0188 MB

The public reporting burden for this collection of information is estimated to average 30 days per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

1. PART OR DRAWING NO. (CAGE) NOMENCLATURE RE538996 (3PSD7) ENGINE, DIESEL	2. CAGE 19207	3. SPI NO. AK15866168
4. NATIONAL STOCK NO. 2815-01-586-6168	5. DATE 8/24/2011	6. REVISION

17. NOTES:

ENGINE PRESERVATION REFERENCE



DWG 4.1

DWG 4.2

DWG 4

DWG 4.3

DWG 4.4

**OIL
FIL**

FLYWHEEL

**DRAIN PLUG LOCATED
ON UNDERSIDE OF OIL
PAN**

**BREATHER
TUBE**

SPECIAL PACKAGING INSTRUCTION (Continuation Sheet)

Form Approved -BK
OMB No. 0704-0188 MB

The public reporting burden for this collection of information is estimated to average 30 days per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

1. PART OR DRAWING NO. (CAGE) NOMENCLATURE RE538996 (3PSD7) ENGINE, DIESEL	2. CAGE 19207	3. SPI NO. AK15866168
4. NATIONAL STOCK NO. 2815-01-586-6168	5. DATE 8/24/2011	6. REVISION

17. NOTES:

PACKAGING INSTRUCTION

E. SEAL ALL OPENINGS TO ENGINE INTERIOR WITH CAPS/PLUGS OF APPROPRIATE SIZE.

F. APPLY PRESERVATIVE TO ALL UNPAINTED, UNPLATED **EXTERNAL** METALLIC SURFACES INCLUDING ALL ENGINE TO BRACKET MOUNTING POINTS.

G. WRAP PRESERVED ENGINE WITH GREASE PAPER, SECURE WITH TAPE ASTM-D6123.

H. DOUBLE WRAP IN FOAM CUNSHIONING AS REQUIRED TO PREVENT ENGINE PROTRUSIONS FROM PUNCTURING WATER/VAPOR PROOF BARRIER.

I. PLACE DESICCANT BAGS IN VOID BENEATH ENGINE OIL PAN WITHIN FOIL BARRIER BEFORE CLOSURE.

J. ENVELOPE FABRICATION SHALL BE IN ACCORDANCE WITH SPECIFICATION MIL-DTL-6060. MATERIAL USED FOR FABRICATION OF GASKETS SHALL CONFORM TO SPECIFICATION ASTM F 104. GASKETS SHALL BE CEMENTED TO EACH SIDE OF THE BARRIER AT THE MOUNTING LOCATION USING MMM-A-260 ADHESIVE OR COMMERCIAL EQUIVALENT. AFTER POSITIONING BARRIER OVER BOLTS, A SUFFICIENT QUNATITY OF ADHESIVE SHALL BE APPLIED AROUND BOLT AND GASKET TO PROVIDE AIRTIGHT SEAL.

K. LUMBER SIZES ARE NOMINAL UNLESS OTHERWISE SPECIFIED, SECURE APPLICABLE BLOCKING TOGETHER AND/OR TO THE INTERIOR OF THE CONTAINER USING NAILS/STAPLES CONFORMING TO ASTM-F1667, SEE PAGES 6 - 10 FOR SIZES AND ORIENTATION.

L. CLOSE CONTAINER IN ACCORDANCE WITH CONTAINER SPECIFICATION ASTM-D7478.

M. THE UNIT CONTAINER IS THE SHIPPING CONTAINER.

N. SPECIAL MARKING SHALL BE APPLIED AS FOLLOWS:

1. IN ADDITION TO MIL-STD-129 MARKINGS, THE UNIT CONTAINER SHALL BE MARKED ON THE TOP AND SIDES WITH MINIMUM 1/2 INCH HIGH BLACK LETTERS "**REUSABLE CONTAINER, DO NOT DESTROY**". IN ADDITION, THE TOP AND ENDS SHALL BE MARKED "**REMOVE LAG SCREWS TO OPEN CONTAINER**" USING 1/2 INCH HIGH BLACK LETTERS.
2. SECURE WARNING TAG(S) IN A CONSPICUOUS LOCATION ON THE ENGINE TO STATE, "**ENGINE OIL SYSTEM PRESERVED. ENGINE FUEL SYSTEM AND CYLINDERS PRESERVED. BEFORE CRANKING, REMOVE ALL CAP/PLUGS AND TAPE AND ADD PROPER OPERATIONAL LUBRICANT TO CRANKCASE.**"

SPECIAL PACKAGING INSTRUCTION (Continuation Sheet)

Form Approved -BK
OMB No. 0704-0188 MB

The public reporting burden for this collection of information is estimated to average 30 days per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

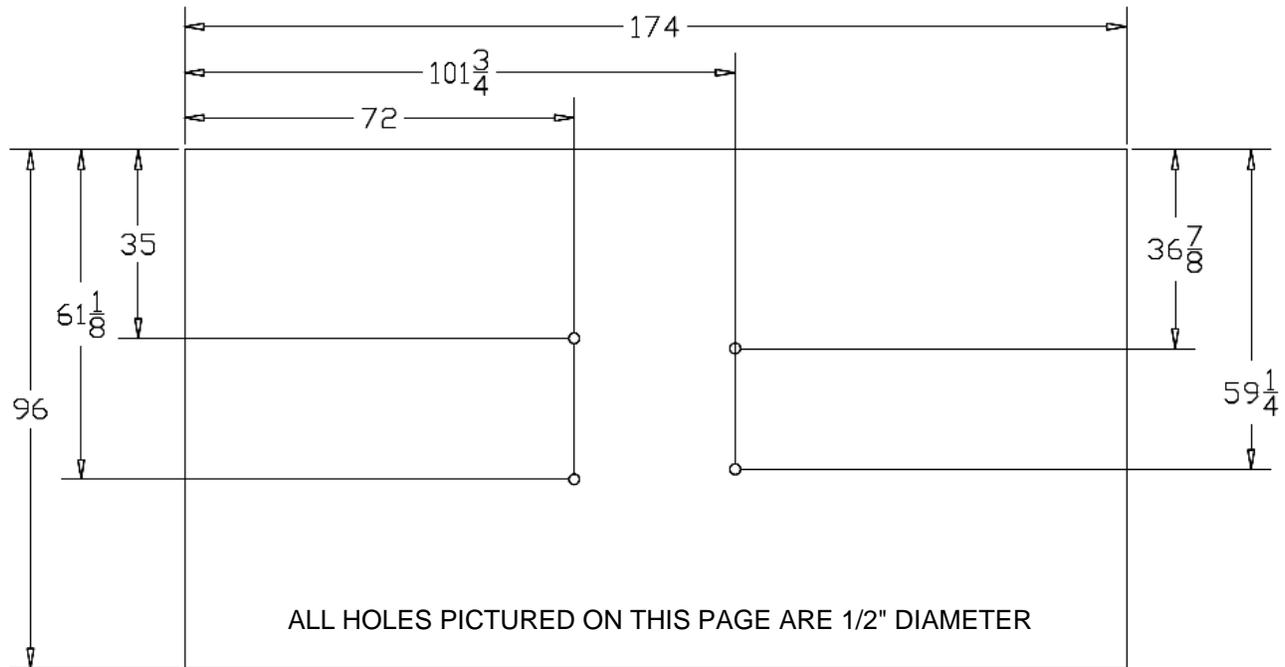
1. PART OR DRAWING NO. (CAGE) NOMENCLATURE RE538996 (3PSD7) ENGINE, DIESEL	2. CAGE 19207	3. SPI NO. AK15866168
4. NATIONAL STOCK NO. 2815-01-586-6168	5. DATE 8/24/2011	6. REVISION

17. NOTES:

PACKAGING BILL OF MATERIAL

ITEM	SIZE	QTY	REFERENCE
A	2 X 6 X 34	2	ASTM-D6199
B	96 X 169 PAPER	1	MIL-PRF-121, TY II
C	48 X 192 FOAM	1	A-A-59135, CL I, GR A
D	96 X 174 FOIL ENVELOPE	1	MIL-PRF-131
E	38 X 29 GASKET	2	ASTM F 104
F	16-1/4 L BRACKET	2	FABRICATED USING COMMERCIAL GRADE 1/2" PLATE STEEL WITH A MINIMUM WIDTH OF 3 INCHES. SEE DWG ON PG 6.
G	14-3/4 L BRACKET	2	FABRICATED USING COMMERCIAL GRADE 1/2" PLATE STEEL WITH A MINIMUM WIDTH OF 3 INCHES. SEE DWG ON PG 6.
H	M12 – 1.75 X 35MM HARDWARE SET	8	HARDWARE SET CONSISTS OF: 1PC M12 – 1.75 X 35MM HEX BOLT, 1PC M12 FLAT WASHER & 1PC M12 LOCK WASHER.
I	1/2 X 5 HARDWARE SET	4	HARDWARE SET CONSISTS OF: 1PC 1/2 X 6 CARRIAGE BOLT, 1PC 1/2 FLAT WASHER, 1PC 1/2 LOCK WASHER & 1PC 1/2 NUT.

ITEM "D" FLAT LAYOUT



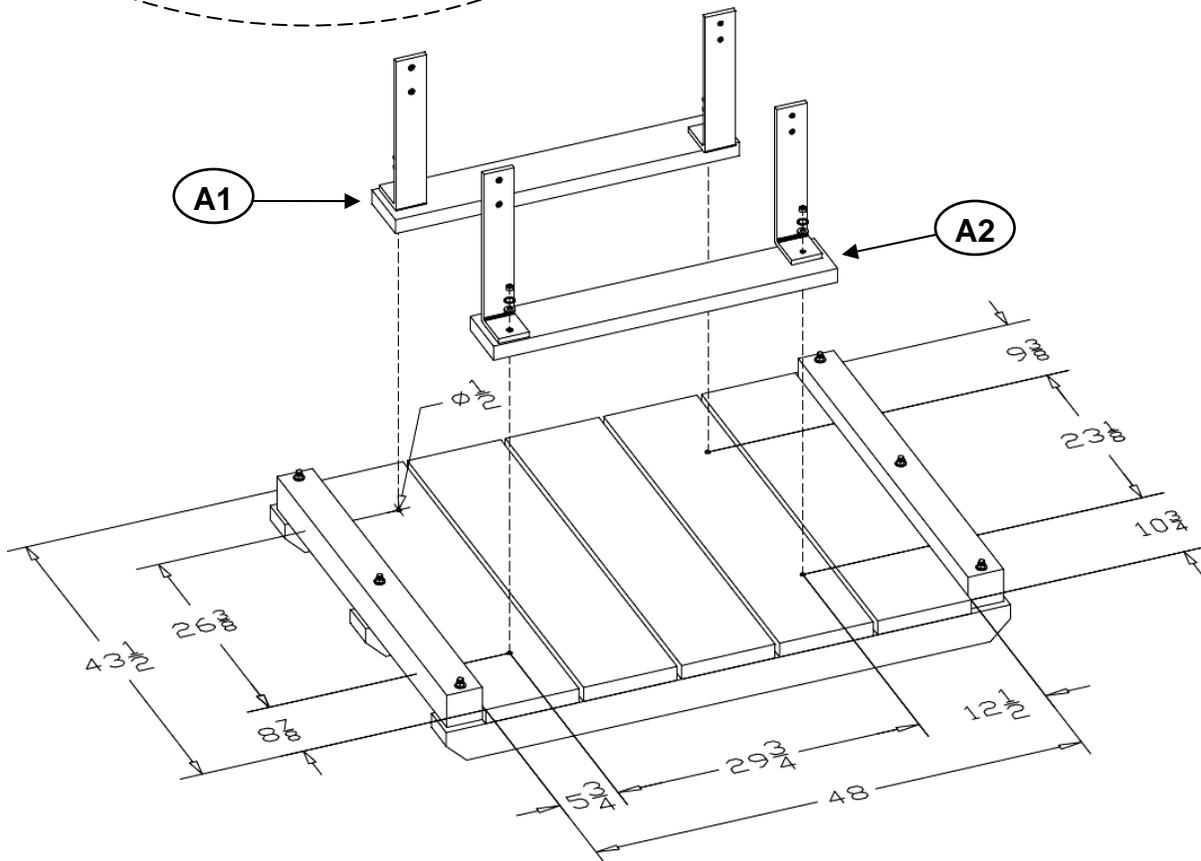
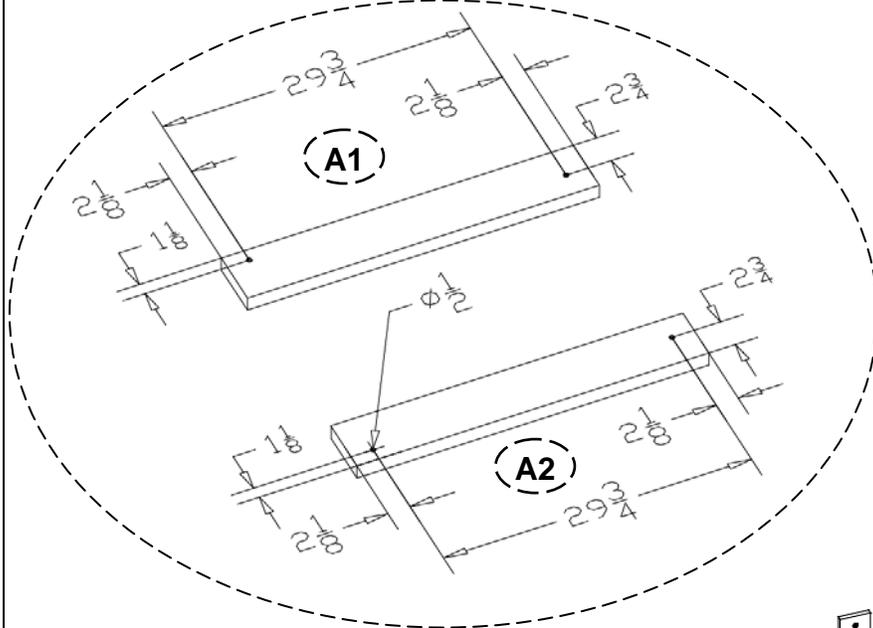
SPECIAL PACKAGING INSTRUCTION (Continuation Sheet)

Form Approved -BK
OMB No. 0704-0188 MB

The public reporting burden for this collection of information is estimated to average 30 days per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

1. PART OR DRAWING NO. (CAGE) NOMENCLATURE RE538996 (3PSD7) ENGINE, DIESEL	2. CAGE 19207	3. SPI NO. AK15866168
4. NATIONAL STOCK NO. 2815-01-586-6168	5. DATE 8/24/2011	6. REVISION

17. NOTES:



SPECIAL PACKAGING INSTRUCTION (Continuation Sheet)

Form Approved -BK
OMB No. 0704-0188 MB

The public reporting burden for this collection of information is estimated to average 30 days per response, including the time for reviewing instructions, searching existing data sources, gathering and maintaining the data needed, and completing and reviewing the collection of information. Send comments regarding this burden estimate or any other aspect of this collection of information, including suggestions for reducing the burden, to the Department of Defense, Executive Services and Communications Directorate (0704-0188). Respondents should be aware that notwithstanding any other provision of law, no person shall be subject to any penalty for failing to comply with a collection of information if it does not display a currently valid OMB control number. PLEASE DO NOT RETURN YOUR COMPLETED FORM TO THE ABOVE ORGANIZATION.

1. PART OR DRAWING NO. (CAGE) NOMENCLATURE RE538996 (3PSD7) ENGINE, DIESEL	2. CAGE 19207	3. SPI NO. AK15866168
4. NATIONAL STOCK NO. 2815-01-586-6168	5. DATE 8/24/2011	6. REVISION

17. NOTES:

