ENGINEERING CHANGE PROPOSAL (ECP), PAGE 1

1. DATE (YYMMDD): 030904

Form Approved
OMB No. 0704-0188

Public reporting burden for this collection of information is estimated to average 2 hours 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 this burden, to Department of Defense, Washington Headquarters Services, Directorate for Information Operations and Reports, 1215 Jefferson Davis Highway, Suite 1204, Arlington, VA 22202-4302, and to the Office of Management and Budget, Paperwork Reduction Project (0704-0188) Washington, DC 20503.

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2. PROCURING ACTIVITY NO.: L3T3014

3. DODAAC:

4. ORIGINATOR

a. TYPED NAME (First, Middle Initial, Last): James C. Janke

b. ADDRESS (Street, City, State, Zip Code): TACOM-ARDEC, AMSTA-AR-CCL-FM, ROCK ISLAND, IL. 61299-7300

5. CLASS OF ECP: I

6. JUST. CODE: D

7. PRIORITY: R

8. ECP DESIGNATION

a. MODEL/TYPE	b. CAGE CODE	c. SYSTEM DESIGNATION	d. ECP NO.	e. TYPE	f. REV
M1 FOV	19200	Tank, Combat		F	

9. BASELINE AFFECTED: [ ] FUNCTIONAL [X] PRODUCT [ ] ALLOCATED

10. OTHER SYS./CONFIG. ITEMS AFFECTED: [ ] YES [X] NO

11. SPECIFICATIONS AFFECTED

	CAGE Code	Specification/Document No.	Rev.	SCN
a. SYSTEM				
b. DEVELOPMENT				
c. PRODUCT				

12. DRAWINGS AFFECTED

CAGE Code	Number	Rev.	NOR
19200	13004771	-	001

13. TITLE OF CHANGE: Update Part Number Call-outs

14. CONTRACT NO. LINE ITEM

15. PROCURING CONTRACTING OFFICER
a. NAME (First, Middle Initial, Last)
b. CODE
c. TELEPHONE NO.

16. CONFIGURATION ITEM NOMENCLATURE: M1A1 and M1A2 Tank Turret

17. IN PRODUCTION: [ ] YES [X] NO

18. ALL LOWER LEVEL ITEMS AFFECTED

a. NOMENCLATURE	b. PART NO.	c. NSN
Repair Kit, Gearbox Assembly	13004771	

19. DESCRIPTION OF CHANGE

Change part number call-outs for National Stock Number (NSN) 3110-00-277-0129 and 3110-01-073-9731 on mandatory parts replacement list drawing 13004771. Also to change several errors currently on drawing 13004771.

20. NEED FOR CHANGE

The change is needed to allow for commanality and standardization between the CWS Gearbox MRP Drawing 13004771 and CWS Gearbox Drawing 12285320 and to clarrify current MRP drawing.

21. PRODUCTION EFFECTIVITY BY SERIAL NUMBER: N/A

22. EFFECT ON PRODUCTION DELIVERY SCHEDULE: N/A

23. RETROFIT

a. RECOMMENDED ITEM EFFECTIVITY: N/A

b. SHIP / VEHICLE CLASS AFFECTED: N/A

c. ESTIMATED KIT DELIVERY SCHEDULE: N/A

d. LOCATIONS OR SHIP / VEHICLE NUMBERS AFFECTED: N/A

24. ESTIMATED COSTS / SAVINGS UNDER CONTRACT: N/A

25. ESTIMATED NET TOTAL COSTS / SAVINGS: N/A

26. SUBMITTING ACTIVITY
a. AUTHORIZED SIGNATURE
b. TITLE: GENERAL ENGINEER

27. APPROVAL / DISAPPROVAL

a. CLASS I: [ ] APPROVAL RECOMMENDED [ ] DISAPPROVAL RECOMMENDED

b. CLASS II: [ ] APPROVED [ ] DISAPPROVED

c. CLASS II: [ ] CONCUR IN CLASSIFICATION OF CHANGE [ ] DO NOT CONCUR IN CLASSIFICATION OF CHANGE

d. GOVERNMENT ACTIVITY

e. SIGNATURE

f. DATE SIGNED (YYMMDD)

g. APPROVAL: [X] APPROVED W/MOD [ ] DISAPPROVED

h. GOVERNMENT ACTIVITY: RONALD E. ELBE, Chief, Production and Field Support Team

i. SIGNATURE

j. DATE SIGNED (YYMMDD): 20030925

DD Form 1692, APR 92

Previous editions are obsolete

Statement A, Unlimited
controlling DOD office: AMSTA-AR-ESW

NOTICE OF REVISION (NOR) THIS REVISION DESCRIBED BELOW HAS BEEN AUTHORIZED FOR THE DOCUMENT LISTED	1. DATE (YYYYMMDD) 20030904	Form Approved OMB No. 0704-0188

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2. PROCURING ACTIVITY NO.: L3T3014

3. DODAAC:

4. ORIGINATOR a. TYPED NAME (First, Middle Initial, Last) James C. Janke	b. ADDRESS (Street, City, State, Zip Code) TACOM-ARDEC, AMSTA-AR-CCL-FM Rock Island, Il. 61299-7300	5. CAGE CODE 19200 7. CAGE CODE 19200	6. NOR NO. 001 8. DOCUMENT NO. 13004771

9. TITLE OF DOCUMENT	10. REVISION LETTER a. CURRENT	b. NEW	11. ECP NO.
REPAIR KIT GEARBOX ASSEMBLY	-		L3T3014

12. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES	NOR SHT	ECP SHT
M1FOV HEAVY COMBAT TANK	001	2 of 3

13. DESCRIPTION OF REVISION

CHANGE: Sheet Two

FROM:

7	Ring, retaining	1	ASME-B18.27.1	96906	R271NAA0028NN056NNCE1	5325-00-282-5289
8	Ring, retaining	1	ASME-B18.27.1	96906	R27NAA0075NN056NNCE1	5325-00-282-6972

TO:

7	Ring, retaining	1	MS16624	96906	MS16624-2028	5325-00-282-5289
8	Ring, retaining	1	MS16624		MS16624-2075	5325-00-282-6972

CHANGE: Sheet Two

FROM:

12	Key, woodruff	1	AIA/NASM 35726	80205	AIA/NASM 35726	5315-00-616-5519

TO:

12	Key, woodruff	1	AIA/NASM 35756	80205	~~AIA/NASM 35756-1~~ MS35756-1	5315-00-616-5519

CHANGE: Sheet Two

FROM:

14	Bearing, ball, annular	1	97038X1E	24617	97038X1E	3110-00-277-0129

TO:

14	Bearing, ball, annular	1	A-A-59581	58536	AA59581-408JFBH	3110-00-277-0129

CHANGE: Sheet Two

FROM:

49	Bearing, ball, annular	1	7601956	19200	7601956	3110-00-529-0573

TO:

49	Bearing, ball, annular	1	A-A-59581	58536	AA59581-408JCFH	3110-00-529-0573

14. THIS SECTION FOR GOVERNMENT USE ONLY

a. (X one)

- [X] (1) Existing document supplemented by this NOR may be used in manufacture.
- [ ] (2) Revised document must be received before manufacturer may incorporate this change.
- [ ] (3) Custodian of master document shall make above revision and furnish revised document.

b. ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT	c. TYPED NAME (First, Middle Initial, Last)	
d. TITLE Ronald E. Elbe, Configuration Manager Production and Field Support Team	e. SIGNATURE Ronald E. Elbe	f. DATE SIGNED (YYYYMMDD) 20030925
15.a. ACTIVITY ACCOMPLISHING REVISION	b. REVISION COMPLETED (SIGNATURE)	c. DATE SIGNED (YYYYMMDD)

DD FORM 1695, AUG 96 (EG) Previous revisions are obsolete Statement A, UNLIMITED

controlling DOD office: AMSTA-AR-ESW

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2. PROCURING ACTIVITY NO.	L3T3014
3. DODAAC	

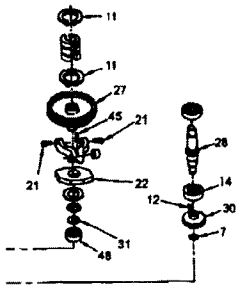
4. ORIGINATOR a. TYPED NAME (First, Middle Initial, Last)	b. ADDRESS (Street, City, State, Zip Code)	5. CAGE CODE	6. NOR NO.
James C. Janke	TACOM-ARDEC, AMSTA-AR-CCL-FM Rock Island, Il. 61299-7300	19200	001
		7. CAGE CODE 19200	8. DOCUMENT NO. 13004771

9. TITLE OF DOCUMENT	10. REVISION LETTER a. CURRENT	b. NEW	11. ECP NO.
REPAIR KIT GEARBOX ASSEMBLY	-		L3T3014

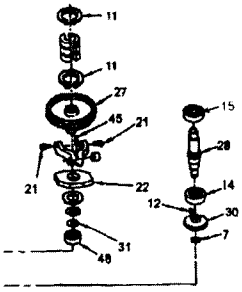
12. CONFIGURATION ITEM (OR SYSTEM) TO WHICH ECP APPLIES	NOR SHT	ECP SHT
M1FOV HEAVY COMBAT TANK	002	3 of 3

13. DESCRIPTION OF REVISION

CHANGE: Sheet Four
FROM:



TO:



14. THIS SECTION FOR GOVERNMENT USE ONLY

a. (X one)		
	X	(1) Existing document supplemented by this NOR may be used in manufacture.
		(2) Revised document must be received before manufacturer may incorporate this change.
		(3) Custodian of master document shall make above revision and furnish revised document.

b. ACTIVITY AUTHORIZED TO APPROVE CHANGE FOR GOVERNMENT	c. TYPED NAME (First, Middle Initial, Last)	
d. TITLE Ronald E. Elbe, Configuration Manager Production and Field Support Team	e. SIGNATURE Ronald E. Elbe	f. DATE SIGNED (YYYYMMDD) 20030925
15.a. ACTIVITY ACCOMPLISHING REVISION	b. REVISION COMPLETED (SIGNATURE)	c. DATE SIGNED (YYYYMMDD)

DD FORM 1695, AUG 96 (EG) Previous revisions are obsolete Statement A, UNLIMITED

controlling DOD office: AMSTA-AR-ESW

DISTRIBUTION STATEMENT A: APPROVED FOR PUBLIC RELEASE; DISTRIBUTION IS UNLIMITED

APPLICATION		REVISIONS			
NEXT ASSY	USED ON	LTR	DESCRIPTION	DATE(YR-MO-DA)	APPROVED
12285320	M1, M1A1	–	PRODUCT BASELINE ERR L2T3004	030424	RLV

NOTE: THIS DRAWING IS A MANDATORY REPLACEMENT PARTS LIST FOR GEARBOX ASSEMBLY REPAIR KIT REFERENCE NMWR 9-2350-200-50-3.

REV STATUS OF SHEETS	REV	–	–	–	–						
	SHEET	1	2	3	4						

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PART NO. 13004771

DO NOT SCALE DRAWING

PMIC

UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES TOLERANCES ON

DECIMAL	FRACTION
2 PL ±	
3 PL ±	±

THIRD ANGLE PROJECTION

MATL ENGR

CONTRACT NUMBER

CONTRACTOR

DRAWN BY RLV

DATE(YR-MO-DA) 03-04-24

CHECKER

ENGINEER TIMOTHY KARCHER

DRAWING APPROVAL

DESIGN APPROVAL Ronald Elbe

DESIGN ACTIVITY U.S.ARMY
ARMAMENT RESEARCH, DEVELOPMENT AND ENGINEERING CENTER
PICATINNY ARSENAL, NEW JERSEY 07806-5000

REPAIR KIT
GEARBOX ASSEMBLY

SIZE	CAGE CODE	
A	19200	13004771
SCALE	UNIT WT.	SHEET 1 OF 4

DRAWING SIZE A

GEARBOX ASSEMBLY REPAIR KIT
MANDATORY REPLACEMENT PARTS

ITEM NO.	NAME OF ITEM	QTY	DWG NO.	CAGE CODE	PART NO.	STOCK NO.
1	Screw, cap, hexagon	6	B1821BH025C063N	80204	B1821BH025C063N	5305-00-068-7837
2	Screw, cap, hexagon	1	B1821BH025C088N	80204	B1821BH025C088N	5305-00-071-2505
3	Screw, cap, hexagon	1	B1821BH025C100N	80204	B1821BH025C100N	5305-00-225-3843
4	Screw, cap, hexagon	3	B1821BH025C125N	80204	B1821BH025C125N	5305-00-068-0509
5	Screw, cap, hexagon	1	B1821BH038C125N	80204	B1821BH038C125N	5305-00-068-0511
6	Screw, cap, hexagon	1	B1821BH038C225N	80204	B1821BH038C225N	5305-00-838-8920
7	Ring, retaining	1	ASME-B18.27.1	96906	R271NAA0028NN056NNCE1	5325-00-282-5289
8	Ring, retaining	1	ASME-B18.27.1	96906	R27NAA0075NN056NNCE1	5325-00-282-6972
9	Ring, retaining	2	ASME-B18.24.3	96906	R27NAA0056NN056NNCE1	5325-01-388-4110
10	Spacer, sleeve	1	12285332	19200	12285332	5365-01-073-9792
11	Ring, retaining	2	ASME-B18.24.1	96906	R272NAA0075NN056NNCE1	5325-01-388-2363
12	Key, woodruff	1	AIA/NASM-35726	80205	AIA/NASM-35726	5315-00-616-5519
13	Screw, machine	2	MS51957	96906	MS51957-8	5305-00-054-5642
14	Bearing, ball, annular	1	97038X1E	24617	97038X1E	3110-00-277-0129
15	Bearing, ball, annular	1	111X01002X2000	81349	111X01002X2000	3110-00-144-8869
16	Cone and roller	3	12BC105PPOL	70413	12BC105PPOL	3110-00-554-5609
17	Knob	1	12273552	19200	12273552	5355-01-073-9752
18	Bearing, ball, annular	3	12273561	19200	12273561	3110-01-073-9732
19	Arm, switch actuator	1	12274078	19200	12274078	5930-01-073-9852
20	Gearshift, spur	1	12274152	19200	12274152	3040-01-073-9855
21	Setscrew	2	12274187	19200	12274187	5305-01-073-9776
22	Collar, shaft	1	12274188	19200	12274188	3040-01-073-9714
23	Marker, identification	1	12274205	19200	12274205	7690-01-073-9842
24	Connector, switch	1	12285323	19200	12285323	5999-01-073-9784
25	Gearshift, spur	1	12285324	19200	12285324	3040-01-316-0190
26	Actuator	1	12285327	19207	12285327-1	3010-01-316-0190
27	Gear, spur	1	12285337	19200	12285337	3020-01-073-9766
28	Gear, spur	1	12285338	19200	12285338	3020-01-073-9765
29	Gear, spur	1	12285339	19200	12285339	3020-01-073-9767
30	Gear, spur	1	12285342	19200	12285342	3020-01-073-9764
31	Collar, bearing	1	12287963	19200	12287963	3110-01-109-8091
32	Gearshift, spur	1	12288361	19200	12288361	3040-01-073-9854
33	Lockwasher	4	12387269	19207	12387269-38	5310-01-377-0882
34	Lockwasher	20	12387269	19207	12387269-39	5310-01-379-8318
35	Lockwasher	10	12387269	19207	12387269-40	5310-01-374-5430
36	Screw, machine	4	12387271	19207	12387271-54	5305-01-379-0010
37	Screw, machine	20	12387271	19207	12387271-74	5305-01-374-5614
38	Nut, plain, hexagon	2	12387277	19207	12387277-202	5310-01-378-8681

TITLE	SIZE	CAGE CODE	
REPAIR KIT GEARBOX ASSEMBLY	A	19200	13004771
		REVISION LEVEL –	SHEET 2

DRAWING SIZE A

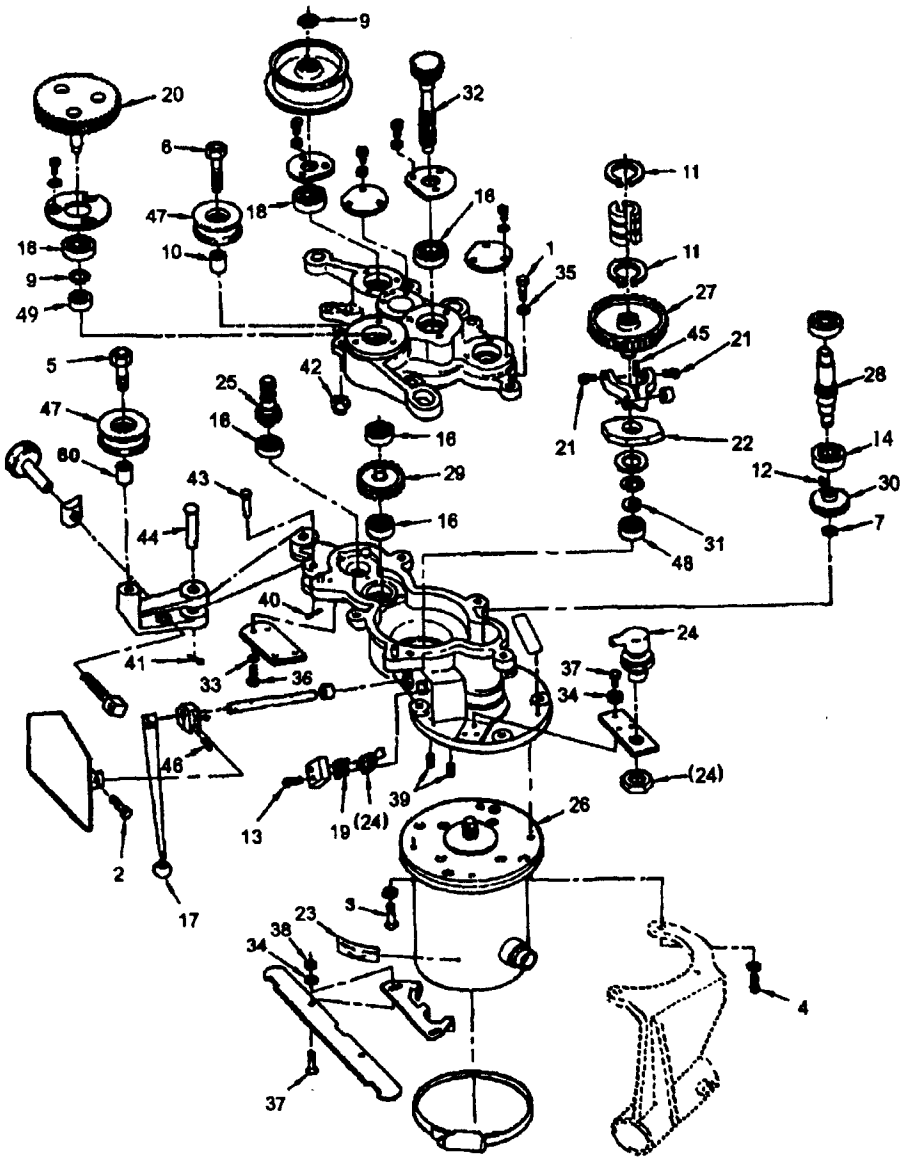
GEARBOX ASSEMBLY REPAIR KIT MANDATORY REPLACEMENT PARTS

ITEM NO.	NAME OF ITEM	QTY	DWG NO.	CAGE CODE	PART NO.	STOCK NO.
39	Setscrew	2	12387304	19207	12387304-67	5305-01-388-5223
40	Pin, cotter	1	12387310	19207	12387310-132	5315-01-379-7628
41	Pin, cotter	1	12387310	19207	12387310-283	5315-01-379-4228
42	Nut, self-locking, hexagon	1	12387349	19207	12387349-35	5310-01-379-8721
43	Pin, straight, headed	1	12387350	19207	12387350-3C33	5315-01-388-2357
44	Pin, straight, headed	1	12387350	19207	12387350-5C51	5315-01-388-2329
45	Pin, spring	1	12387355	19207	12387355-34	5315-01-387-0516
46	Pin, spring	3	12387355	19207	12387355-36	5315-01-379-7624
47	Roller assembly	2	12548909	19200	12548909-1	1015-01-258-8117
48	Bearing, ball, annular	1	713778	21450	713778	3110-01-073-8731
49	Bearing, ball, annular	1	7601956	19200	7601956	3110-00-829-0573

TITLE	SIZE	CAGE CODE	
REPAIR KIT GEARBOX ASSEMBLY	A	19200	13004771
		REVISION LEVEL	– SHEET 3

DRAWING SIZE A

GEARBOX ASSEMBLY REPAIR KIT
MANDATORY REPLACEMENT PARTS



TITLE	SIZE	CAGE CODE	
REPAIR KIT GEARBOX ASSEMBLY	A	19200	13004771
		REVISION LEVEL	– SHEET 4