

ROUTINE

MWO effective date is 1 June 1993 and completion date is 31 March 1997.

MWO 9-2320-279-20-4

MODIFICATION WORK ORDER

**MODIFICATION OF M977 SERIES 8 X 8
HEAVY EXPANDED MOBILITY TACTICAL TRUCK (HEMTT)
INSTALLATION OF THE ARMY OIL ANALYSIS PROGRAM (AOAP) VALVES**

MODEL	NSN	EIC
Truck, Cargo, w/WNVinch M977	2320-01-097-0260	B2D
Truck, Cargo, w/o Winch M977	2320-01-099-6426	B2G
Truck, Tank, Fuel, w/Winch M978	2320-01-097-0249	B2C
Truck, Tank, Fuel, w/oWinch M978	2320-01-100-7672	B2H
Truck, Tractor, w/Winch, w/o Crane M983	2320-01-097-0247	B2A
Truck, Wrecker, w/Winch M984	2320-01-097-0248	B2B
Truck, Wrecker, w/Winch M984A1	2320-01-195-7641	B2L
Truck, Cargo, w/Winch M985	2320-01-097-0261	B2E
Truck, Cargo, w/o Winch M985	2320-01-100-7673	B2J
Truck, Cargo, w/Winch M985E1	2320-01-194-7032	B2K

HEADQUARTERS, DEPARTMENT OF THE ARMY, WASHINGTON, DC

29 September 1993

REPORTING OF ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this MWO. If you find any mistakes or if you know a way to improve these procedures, please let us know. Mail your letter or DA Form 2028 (Recommended Changes to Publications and Blank Forms), direct to: Commander, U.S. Army Tank-Automotive Command, Attn: AMSTA-MB, Warren, MI 48397-5000. A reply will be provided to you.

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1. **PURPOSE.** Individual Army Oil Analysis Program (AOAP) sampling valves are being added to the HEMTT engine, transmission, and steering gear assembly. Oil contained in each of these systems can be sampled at individual ports and tested per the AOAP.

- 2. **PRIORITY.** This modification is classified ROUTINE.
- 3. **END ITEM(S) OR SYSTEM(S) TO BE MODIFIED.** Refer to Table 1.

Table 1. End Item to be Modified

NOMENCLATURE	NSN	Part Number	CAGEC	Model	Serial No. Range
Truck, Cargo, w/Winch	2320-01-097-0260	XM977WW	19207	M977	26631 and below
Truck, Cargo, w/o Winch	2320-01-099-6426	XM977WOW	19207	M977	
Truck, Tank, Fuel, w/Winch	2320-01-097-0249	XM978WW	19207	M978	
Truck, Tank, Fuel, w/oWinch	2320-01-100-7672	XM978WOW	19207	M978	
Truck, Tractor, w/Winch, w/o Crane	2320-01-097-0247	XM983WOC	19207	M983	
Truck, Wrecker, w/Winch	2320-01-097-0248	XM984WW	19207	M984	
Truck, Wrecker, w/Winch	2320-01-195-7641	XM984E1WW	19207	M984A1	
Truck, Cargo, w/Winch	2320-01-097-0261	XM985WW	19207	M985	
Truck, Cargo, w/o Winch	2320-01-100-7673	XM985WOW	19207	M985	
Truck, Cargo, w/Winch	2320-01-194-7032	XM985E1WW	19207	M985E1	

- 4. **MODULE(S) (COMPONENTS, ASSEMBLIES, SUBASSEMBLIES, BOARDS, AND CARDS) TO BE MODIFIED.**
The following items, whether installed or in depot stock, shall be modified.

Table 2. Assemblies to be Modified

Item Name	Part Number	CAGEC	Quantity per End Item	NSN
Diesel Engine	1319410U	45152	1	2815-01-132-1417
Transmission	1319420U	45152	1	2520-01-132-4262
Steering Gear Assembly	7536824	78222	1	2530-01-153-2771

- 5. **PARTS TO BE MODIFIED.** Not Applicable.
- 6. **APPLICATION.**
 - a. **Time Compliance Schedule.** The effective date of this MWO is 1 June 1993 and its completion date is 31 March 1997.
 - b. **Level of Maintenance.** Modification will be accomplished by unit maintenance.
 - c. **Applied By/Requirements.**

REQUIREMENTS

- | | |
|--|------------------|
| <u>WORK FORCE/SKILLS</u> | <u>MAN-HOURS</u> |
| 1 Heavy Wheeled Vehicle Mechanic (MOS 63S) | 1.5 hours |
- d. **MWO's to be applied prior to or Concurrently with this MWO.** Not Applicable.

- 7. **TECHNICAL PUBLICATIONS AFFECTED/CHANGED.**

TM 9-2320-279-20 (Apr 1987)	TM 9-2320-279-20P (Mar 1988)
TM 9-2320-279-34 (Jun 1987)	TM 9-2320-279-34P (Mar 1988)

- 8. **MWO KIT(S)/PART(S) AND THEIR DISPOSITION.** All parts required to accomplish installation of this MWO are listed in Table 3. The security classification of the Kit is unclassified. Shipping data is: Weight 1.12 lbs.; the Kit measures 6" X 7 1/2" X 1 1/4"; its volume is 56.25 cu in.

Table 3. Army Oil Analysis Program (AOAP) VALVE PARTS.

Item Name	Part Number	CAGEC	Quantity per End Item	NSN
AOAP Kit Includes:	57K1164	19207	1	2590-01-293-8294
Sampling valve (high-pressure)	P59-500	91816	1	4820-01-120-4532
Street elbow	MS39230-15	96906	1	4730-01-244-6013
Tee	203104-4-6S	01276	1	4730-01-244-7673
45-degree elbow	2088-6-6S	01276	1	4730-01-200-5615
Adapter	2018-4-6S	01276	1	4730-01-244-4670
Reducer bushing	8925325	72582	1	4730-01-216-3331
Sampling valve (low-pressure)	M81940/2-1	01276	1	4820-01-298-8416
Antiseizing tape	417043-2	96214	1	8030-00-889-3535

9. **SPECIAL TOOLS; JIGS; TEST MEASUREMENT AND DIAGNOSTIC EQUIPMENT (TMDE); AND FIXTURES REQUIRED.** Not applicable.
10. **MODIFICATION PROCEDURES.**
- a. **Engine Oil Sampling Valve Installation.**

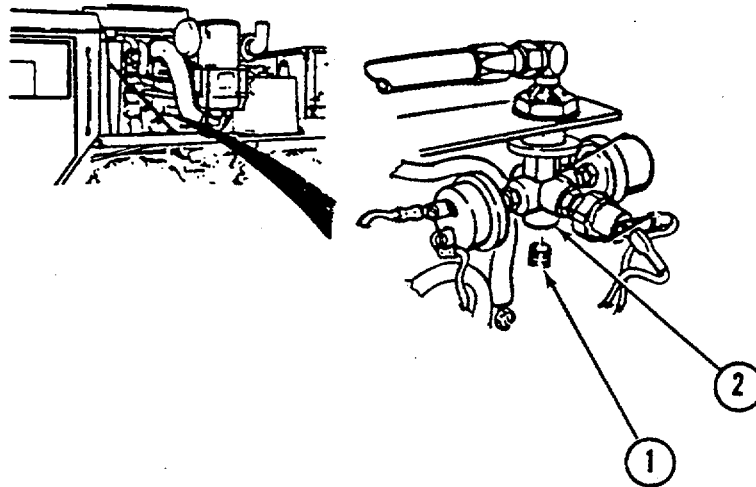


Figure 1. Oil Sending Unit Housing.

- (1) Open driver's side engine cover and remove engine cover side panel.
- (2) Remove plug (1) from oil sending unit housing (2). Discard plug.