

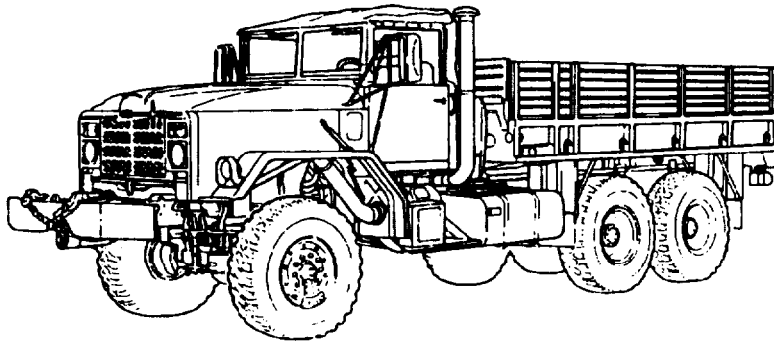
**\*ARMY TM 9-2320-272-24-3  
AIR FORCE TO 36A12-1C-1155-2-3**

This publication supersedes TM 9-2320-272-20-1, October 1985, and changes 1 through 4; TM 9-2320-272-20-2, October 1985, and changes 1 through 3; TM 9-2320-272-34-1, June 1986, and changes 1 through 2; TM 9-2320-272-34-2, June 1986, and changes 1 and 2; and TM 9-2320-358-24&P, October 1992

**TECHNICAL MANUAL  
VOLUME 3 OF 4**

**DIRECT SUPPORT (DS) MAINTENANCE 4-271  
(Contd)**

**UNIT, DIRECT SUPPORT, AND GENERAL SUPPORT  
MAINTENANCE MANUAL  
FOR  
TRUCK, 5-TON, 6X6, M939, M939A1, M939A2  
SERIES TRUCKS (DIESEL)**



**TRUCK, CARGO: 5-TON, 6X6, DROPSIDE,**

M923 (2320-01-050-2084) (EIC: BRY); M923A1 (2320-01-206-4087) (EIC: BSS); M923A2 (2320-01-230-0307) (EIC: BS7);  
M925 (2320-01-047-8769) (EIC: BRT); M925A1 (2320-01-206-4088) (EIC: BST); M925A2 (2320-01-230-0308) (EIC: BS8);

**TRUCK, CARGO: 5-TON, 6X6 XLWB,**

M927 (2320-01-047-8771) (EIC: BRV); M927A1 (2320-01-206-4089) (EIC: BSW); M927A2 (2320-01-230-0309) (EIC: BS9);  
M928 (2320-01-047-8770) (EIC: BRU); M928A1 (2320-01-206-4090) (EIC: BSX); M928A2 (2320-01-230-0310) (EIC: BTM);

**TRUCK, DUMP: 5-TON, 6X6,**

M929 (2320-01-047-8756) (EIC: BTH); M929A1 (2320-01-206-4079) (EIC: BSY); M929A2 (2320-01-230-0305) (EIC: BTN);  
M930 (2320-01-047-8755) (EIC: BTG); M930A1 (2320-01-206-4080) (EIC: BSZ); M930A2 (2320-01-230-0306) (EIC: BTO);

**TRUCK, TRACTOR: 5-TON, 6X6,**

M931 (2320-01-047-8753) (EIC: BTE); M931A1 (2320-01-206-4077) (EIC: BS2); M931A2 (2320-01-230-0302) (EIC: BTP);  
M932 (2320-01-047-8752) (EIC: BTD); M932A1 (2320-01-205-2684) (EIC: BS5); M932A2 (2320-01-230-0303) (EIC: BTQ);

**TRUCK, VAN, EXPANSIBLE: 5-TON, 6X6,**

M934 (2320-01-047-8750) (EIC: BTB); M934A1 (2320-01-205-2682) (EIC: BS4); M934A2 (2320-01-230-0300) (EIC: BTR);

**TRUCK, MEDIUM WRECKER: 5-TON, 6X6,**

M936 (2320-01-047-8754) (EIC: BTF); M936A1 (2320-01-206-4078) (EIC: BS6); M936A2 (2320-01-230-0304) (EIC: BTT).

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

**DEPARTMENTS OF THE ARMY AND THE AIR FORCE**

JUNE 1998

**WARNING****EXHAUST GASES CAN KILL**

1. DO NOT operate vehicle engine in enclosed area.
2. DO NOT idle vehicle engine with windows closed.
3. DO NOT drive vehicle with inspection plates or cover plates removed.
4. BE ALERT at all times for odors.
5. BE ALERT for exhaust poisoning symptoms. They are:
  - Headache
  - Dizziness
  - Sleepiness
  - Loss of muscular control
6. IF YOU SEE another person with exhaust poisoning symptoms:
  - Remove person from area
  - Expose to open air
  - Keep person warm
  - Do not permit person to move
  - Administer artificial respiration or CPR, if necessary\*
  - \* For artificial respiration, refer to FM 21-11.
7. BE AWARE: The field protective mask for Nuclear, Biological, or Chemical (NBC) protection will not protect you from carbon monoxide poisoning.  
THE BEST DEFENSE AGAINST EXHAUST POISONING IS ADEQUATE VENTILATION.

## WARNING SUMMARY

- Hearing protection is required for the driver and passenger. Hearing protection is also required for all personnel working in and around this vehicle while the engine is running (AR-40-5 and TB MED 501).
- If required to remain inside vehicle during extreme heat, occupants should follow the water intake, work/rest cycle, and other stress preventive measures (FM 21-10, Field Hygiene and Sanitation).
- If NBC exposure is suspected, all air filter media should be handled by personnel wearing protective equipment. Consult with your unit NBC officer or NBC NCO for appropriate handling or disposal instructions.
- This vehicle has been designed to operate safely and efficiently within the limits specified in this TM. Operation beyond these limits is prohibited by IAW AR 70-1 without written approval from the commander, U.S. Army Tank-automotive and Armaments Command, ATTN: AMCPEO-CM-S, Warren, MI 48397-5000.
- Never work under dump body unless safety braces are properly positioned. Failure to do this will result in injury to personnel.
- During winching operation, never stand between vehicles. Assistant must remain in secondary vehicle to engage service brake if cable snaps or automatic brake fails while towing vehicle. Failure to do this may result in injury to personnel.
- Accidental or intentional introduction of liquid contaminants into the environment is in violation of state, federal, and military regulations. Refer to Army POL (para. 1-7) for information concerning storage, use, and disposal of these liquids. Failure to do so may result in injury or death.
- Cleaning solvents are flammable and toxic. Do not use near open flame and always have a fire extinguisher nearby when solvents are used. Use only in well-ventilated places, wear protective clothing, and dispose of cleaning rags in approved container. Failure to do this will result in injury to personnel and/or damage to equipment.
- Eyeshields must be worn when cleaning with compressed air. Compressed air source will not exceed 30 psi (207 kPa). Failure to do so may result in injury to personnel.
- Extreme care should be taken when removing surge tank filler cap if temperature gauge reads above 175°F (79°C). Steam or hot coolant under pressure will cause injury.
- Alcohol used in the alcohol evaporator is flammable, poisonous, and explosive. Do not smoke when removing alcohol evaporator or adding fluid, and do not drink fluid. Failure to do this will result in injury or death.
- Do not perform electrical circuit testing fuel tank with fill cap or sending unit removed. Fuel may ignite, causing injury to personnel.
- When performing battery maintenance, ensure batteries are seated and clamped down, all rubber boots are installed, clamps are well down on battery posts, and all battery cables lie flat against the top of the batteries. Failure to do this may result in injury to personnel and/or damage to equipment.
- Ensure companion seatbelts are not caught inside battery box. This will cause belts to rot which may lead to injury of personnel.
- On M936/A1/A2 model vehicles, remove spare tire prior to changing tire and install tire in spare tire carrier after tire change is complete. Operation of crane and/or vehicle engine while vehicle is on jacks may result in injury to personnel or damage to equipment.
- Never assemble or disassemble tire and rim assembly while inflated, use inflation to seat locking on split rim or tire on two-piece rim, or inflate a tire without a tire inflation cage. Injury to personnel may result.
- Do not disconnect air lines or hoses, remove safety valves or CTIS components, or perform brake chamber repairs before draining air reservoirs. Small parts under pressure may shoot out with high velocity, causing injury to personnel.

Warning b

## WARNING SUMMARY (Contd)

- Remove all jewelry when working on electrical circuits. Jewelry coming in contact with electrical circuits may produce a short circuit, causing extreme heat, explosions, and fling particles of metal. Failure to do so will result in injury or death and damage to equipment.
- Use eyeshields and follow instructions carefully when performing assembling, disassembling, or maintenance on this device. Components of this device are under spring tension and may shoot out at a high velocity. Failure to do so will result in injury to personnel.
- Do not remove hoses with engine running or start engine with hoses removed. High-pressure fluids may cause hoses to whip violently and spray randomly. Failure to do so may result in injury to personnel.
- Keep hands out from between metal surfaces when removing heavy components. Failure to do so may result in injury to personnel.
- Keep personnel out from under equipment and components of equipment when supported by only a lifting device. Sudden loss of lifting power or shift in load may result in injury or death.
- Do not drain engine, transmission, or radiator fluids, or remove lines containing these fluids, when hot. Doing so may result in injury to personnel.
- Vehicle will become charged with electricity if it contacts or breaks high-voltage wires. Do not leave vehicle while high-voltage lines are in contact with vehicle. Failure to do so may result in injury to personnel.
- Wear hand protection when handling lifting and winching cables, hot exhaust components, and parts with sharp edges. Failure to do so may result in injury to personnel.
- Do not perform fuel system procedures while smoking or within 50 ft (15.2 m) of sparks or open flame. Diesel fuel is highly flammable and can explode easily, causing injury or death to personnel and/or damage to equipment.
- Ensure drainvalve on aftercooler is open when filling cooling system. Failure to do so may result in injury to personnel.
- Turbocharger intake fins are extremely sharp and turn at very high rpm. Keep hands and loose items away from intake openings. Failure to do so may result in injury to personnel.
- Do not place hands between frame and radiator when removing screws from trunion or lifting radiator. Sudden changes in support may cause the radiator to shift, causing injury to personnel.
- Air pressure may create airborne debris. Use eye protection or injury to personnel may result.
- Air system components are subject to high pressure. Always relieve pressure before loosening or removing air system components.
- Wear safety goggles when using a hammer.
- Ether is extremely flammable. Do not perform ether start system procedures near fire. Injury to personnel may result.

Warning c/(Warning d blank)

TECHNICAL MANUAL  
NO. 9-2320-272-24-3

HEADQUARTERS  
DEPARTMENTS OF THE ARMY AND THE AIR FORCE  
Washington, D.C., 30 JUNE 1998

TECHNICAL ORDER  
NO. 36A12-1C-1155-2-3

TECHNICAL MANUAL  
VOLUME 3 OF 4  
UNIT, DIRECT SUPPORT, AND  
GENERAL SUPPORT MAINTENANCE MANUAL  
FOR

TRUCK, 5-TON, 6X6, M939, M939A1, M939A2 SERIES TRUCKS (DIESEL)

TRUCK	MODEL	EIC	NSN WITHOUT WINCH	NSN WITH WINCH
Cargo, Dropside	M923	BRY	2320-01-050-2084	
Cargo, Dropside	M923A1	BSS	2320-01-206-4087	
Cargo, Dropside	M923A2	BS7	2320-01-230-0307	
Cargo, Dropside	M925	BRT		2320-01-047-8769
Cargo, Dropside	M925A1	BST		2320-01-206-4088
Cargo, Dropside	M925A2	BS8		2320-01-230-0308
Cargo	M927	BRV	2320-01-047-8771	
Cargo	M927A1	BSW	2320-01-206-4089	
Cargo	M927A2	BS9	2320-01-230-0309	
Cargo	M928	BRU		2320-01-047-8770
Cargo	M928A1	BSX		2320-01-206-4090
Cargo	M928A2	BTM		2320-01-230-0310
Dump	M929	BTH	2320-01-047-8756	
Dump	M929A1	BSY	2320-01-206-4079	
Dump	M929A2	BTN	2320-01-230-0305	
Dump	M930	BTG		2320-01-047-8755
Dump	M930A1	BSZ		2320-01-206-4080
Dump	M930A2	BTO		2320-01-230-0306
Tractor	M931	BTE	2320-01-047-8753	
Tractor	M931A1	BS2	2320-01-206-4077	
Tractor	M931A2	BTP	2320-01-230-0302	
Tractor	M932	BTD		2320-01-047-8752
Tractor	M932A1	BS5		2320-01-205-2684
Tractor	M932A2	BTQ		2320-01-230-0303
Van, Expansible	M934	BTB	2320-01-047-8750	
Van, Expansible	M934A1	BS4	2320-01-205-2682	
Van, Expansible	M934A2	BTR	2320-01-230-0300	
Medium Wrecker	M936	BTF		2320-01-047-8754
Medium Wrecker	M936A1	BS6		2320-01-206-4078
Medium Wrecker	M936A2	BTT		2320-01-230-0304

**REPORTING OF 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 (Recommended Changes to Publications and Blank Forms), or DA Form 2028-2 located in back of this manual, directly to: Director, Armament and Chemical Acquisition and Logistics Activity, ATTN: AMSTA-AC-NML, Rock Island, IL 61299-7630. A reply will be furnished to you. You may also provide DA Form 2028-2 information via datafax or e-mail:

- E-mail: amsta-ac-nml.@ria-emh2.army.mil
- Fax: DSN 783-0726 or commercial (309) 782-0726

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This publication is published in four volumes. TM 9-2320-272-24-1 contains chapters 1, 2, and 3 (through section IX). TM 9-2320-272-24-2 contains chapters 3 (sections X through XVI) and 4 (sections I through III). TM 9-2320-272-24-3 contains chapter 4 (sections IV through XVI). TM 9-2320-272-24-4 contains chapters 5 and 6 and appendices A through H. Volume 1 contains a table of contents for the entire manual. Volumes 1, 2, and 3 contain an alphabetical index covering tasks found in their respective volume. Volume 4 contains an alphabetical index covering all tasks found in the entire manual.

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## Section IV. ENGINE (M939A2) MAINTENANCE

### 4-38. ENGINE MAINTENANCE INDEX

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## 4-39. ENGINE MOUNTING BRACKETS AND ISOLATORS REPLACEMENT

**THIS TASK COVERS:**

**a. Removal**

**b. Installation**

INITIAL SETUP:

APPLICABLE MODELS

M939A2

TOOLS

General mechanic's tool kit (Appendix E, Item 1)  
Torque wrench (Appendix E, Item 144)

MATERIALS/PARTS

Nine locknuts (Appendix D, Item 301)  
Tiedown strap (Appendix D, Item 693)  
Five locknuts (Appendix D, Item 302)

PERSONNEL REQUIRED

Two

REFERENCES (TM)

TM 9-2320-272-10  
TM 9-2320-272-24P

EQUIPMENT CONDITION

- Parking brake set (TM 9-2320-272-10).
- Surge tank removed (para. 3-62).
- Vibration damper removed (para. 4-42).
- Air cleaner hose removed (para. 3-13).

**NOTE**

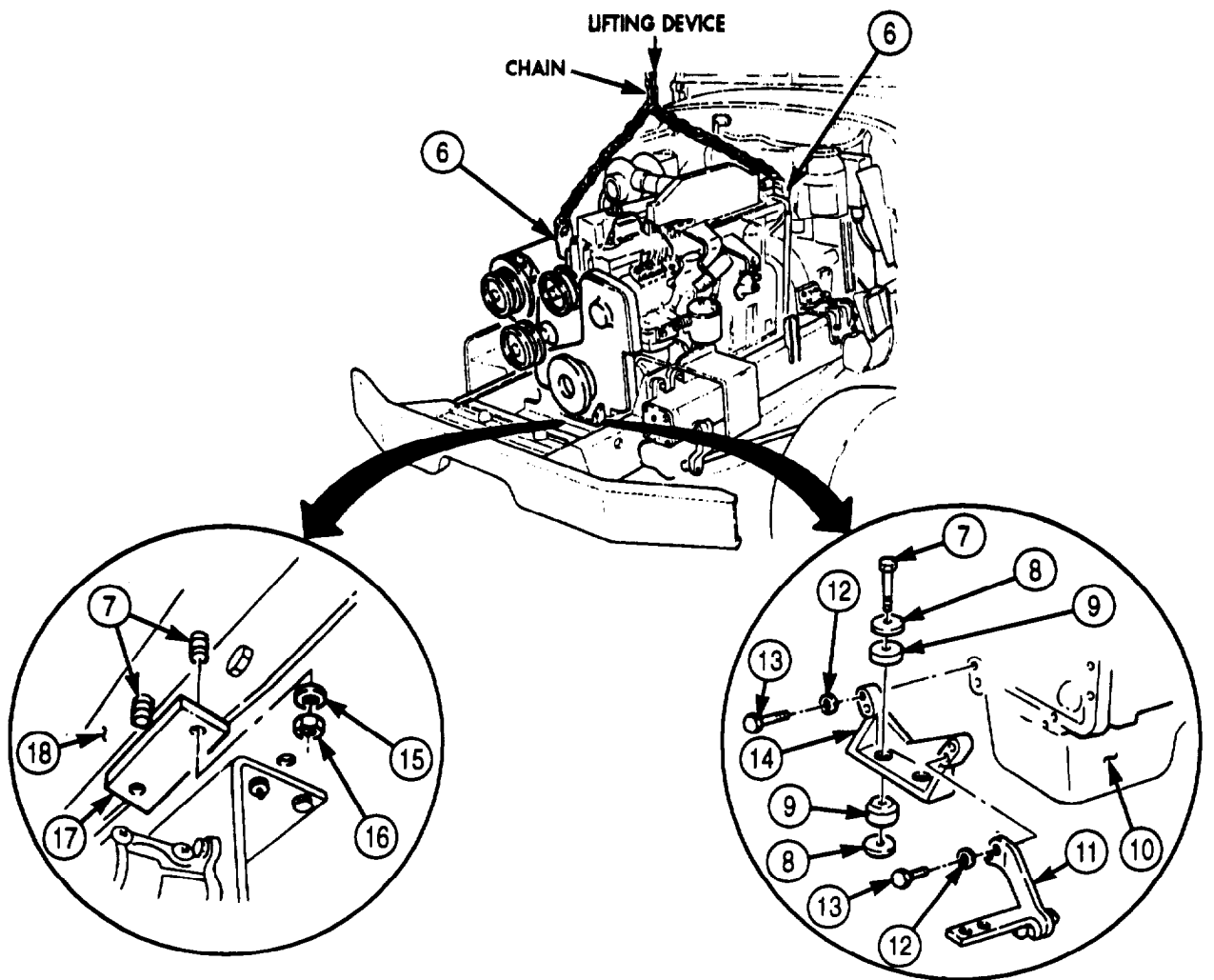
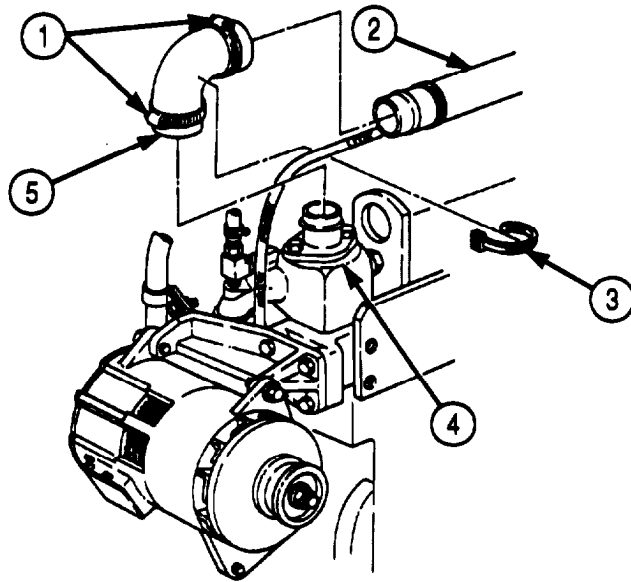
Assistant will help with this procedure.

**a. Removal**

1. Remove tiedown strap (3) from hose (5). Discard tiedown strap (3).
2. Loosen two clamps (1) and remove hose (5) from thermostat housing connector (4) and radiator inlet tube (2).
3. Remove two locknuts (16), washers (15), and backing plate (17) from two screws (7) and cross-member (18). Discard locknuts (16).
4. Install chain and lifting device on two engine lifting brackets (6). Place tension on chain.
5. Remove two screws (7), washers (8), isolators (9), washers (8), and isolators (9) from front bracket (14).
6. Remove four screws (13), washers (12), and front bracket (14) from engine (10) and radiator bracket (11).



**4-39. ENGINE MOUNTING BRACKETS AND ISOLATORS REPLACEMENT (Contd)**



## 4-39. ENGINE MOUNTING BRACKETS AND ISOLATORS REPLACEMENT (Contd)

### NOTE

- Tag mounting brackets for installation.
  - Perform steps 7 through 9 for removing right engine mounting brackets.
7. Remove two screws (1), washers (2), and four isolators (3) from upper mounting bracket (9) and lower mounting bracket (8).
  8. Remove four locknuts (7), washers (6), screws (4), and lower mounting bracket (8) from frame rail (5). Discard locknuts (7).
  9. Remove four screws (10), washers (11), and upper mounting bracket (9) from flywheel housing (12).

### NOTE

Perform steps 10 through 13 for removing left engine mounting brackets.

10. Remove two locknuts (13), washers (14), isolators (15), screws (21), and isolators (15) from upper mounting bracket (30) and lower mounting bracket (18). Discard locknuts (13).
11. Remove locknut (24), washer (25), screw (26), washer (25), locknut (27), washer (17), screw (16), washer (17), shim (29), and engine support (28) from frame rail (22) and lower mounting bracket (18). Discard locknuts (24) and (27).
12. Remove four locknuts (20), washers (19), screws (23), and lower mounting bracket (18) from frame rail (22). Discard locknuts (20).
13. Remove four screws (32), washers (31), and upper mounting bracket (30) from flywheel housing (12).

### b. Installation

### NOTE

Perform steps 1 through 4 for installing left engine mounting brackets.

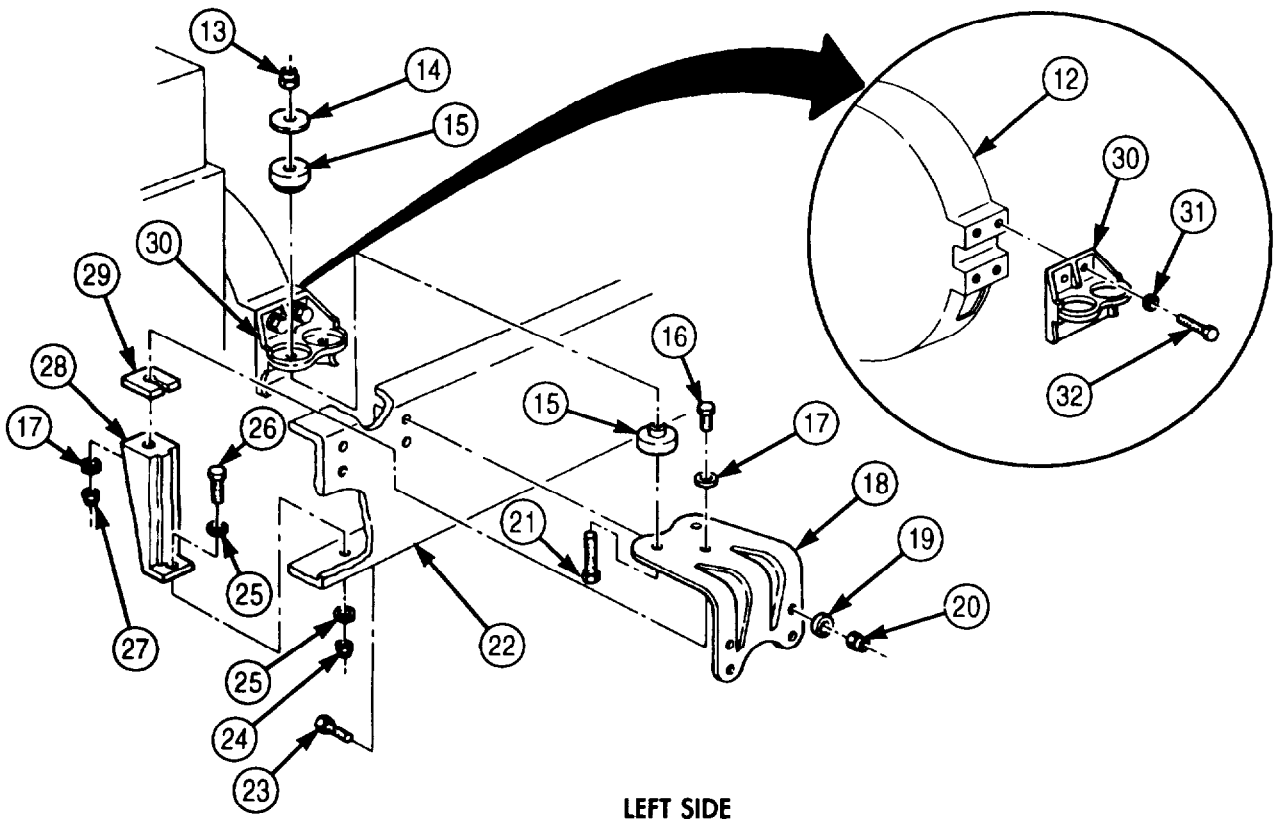
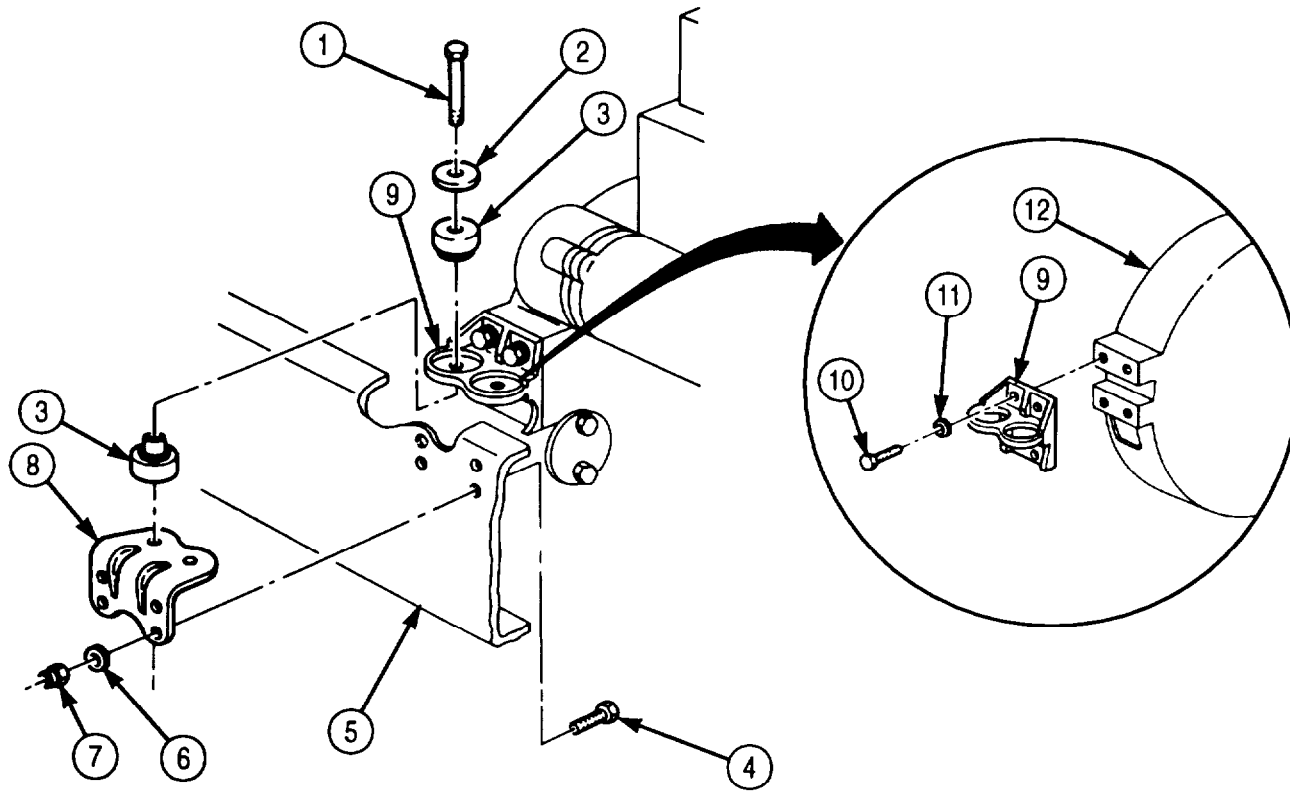
1. Install upper mounting bracket (30) on flywheel housing (12) with four washers (31) and screws (32). Tighten screws (32) 70-90-lb-ft (95-122 N·m).
2. Install lower mounting bracket (18) on frame rail (22) with four screws (23), washers (19), and new locknuts (20). Tighten top two locknuts (20) 80-95 lb-ft (109-129 N·m). Tighten bottom two locknuts (20) 55-70 lb-ft (75-95 N·m).
3. Install shim (29) and engine support (28) on frame rail (22) and lower mounting bracket (18) with washer (17), screw (16), washer (17), new locknut (27), washer (25), screw (26), washer (25), and new locknut (24). Tighten locknuts (24) and (27) 85 lb-ft (115 N·m).
4. Install four isolators (15) on upper (30) and lower (18) mounting brackets with two screws (21), washers (14) and new locknuts (13). Finger-tighten screws (21).

### NOTE

Perform steps 5 through 7 for installing right engine mounting brackets.

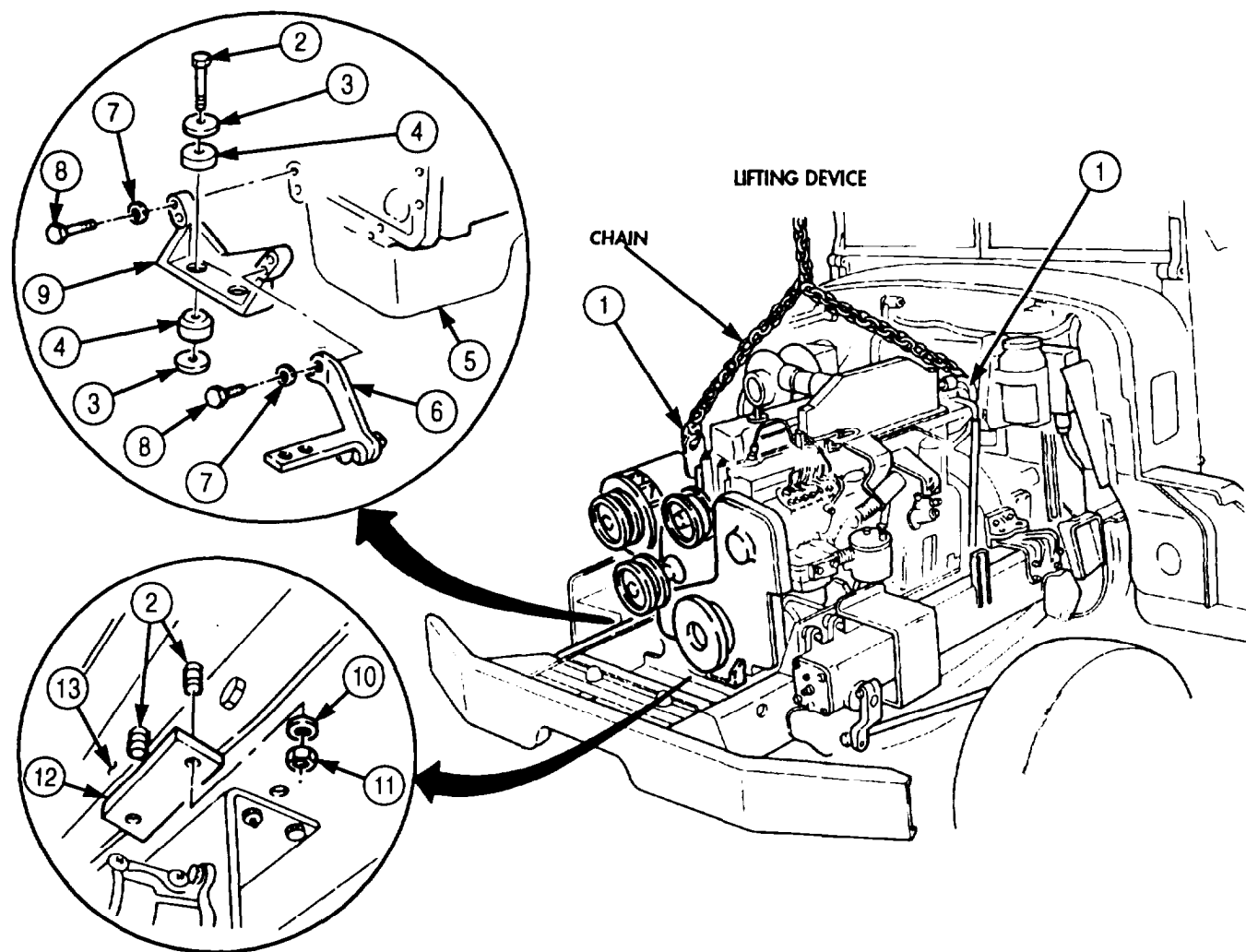
5. Install upper mounting brackets (9) on flywheel housing (12) with four washers (11) and screws (10). Tighten screws (10) 70-90 lb-ft (95-122 N·m).
6. Install lower mounting bracket (8) on frame rail (5) with four screws (4), washers (6), and new locknuts (7).
7. Install four isolators (3) on upper mounting bracket (9) and lower mounting bracket (8) with two washers (2) and screws (1). Finger-tighten screws (1).

**4-39. ENGINE MOUNTING BRACKETS AND ISOLATORS REPLACEMENT (Contd)**

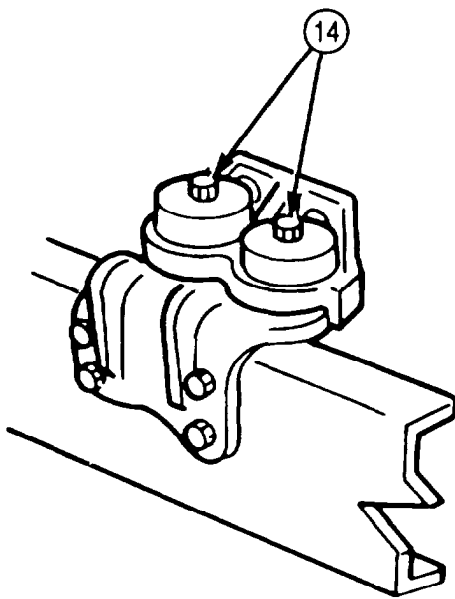


### 4-39. ENGINE MOUNTING BRACKETS AND ISOLATORS REPLACEMENT (Contd)

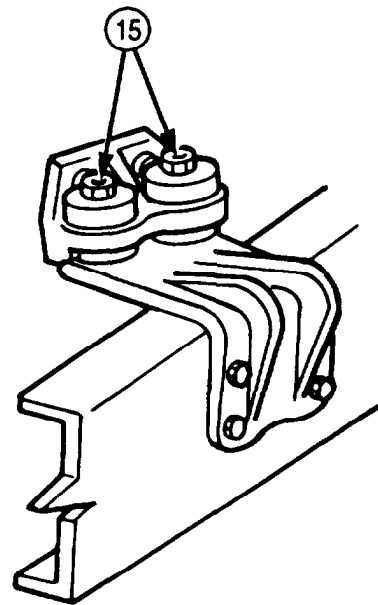
8. Position front bracket (9), four isolators (4), washers (3), and two screws (2) on crossmember (13) and install backing plate (12) with two washers (10) and new locknuts (11). Tighten locknuts (11) 75-85 lb-ft (102-115 N·m).
9. Slowly release tension on chain and lower engine (5) while aligning holes in front bracket (9) and radiator bracket (6) with holes in engine (5).
10. Install front bracket (9) and radiator bracket (6) on engine (5) with four washers (7) and screws (8). Tighten screws (8) 80 lb-ft (109 N·m).
11. Tighten two screws (14) and locknuts (15) 120-140 lb-ft (163-190 N·m).
12. Remove lifting device and chain from two engine lifting brackets (1).
13. Install hose (20) on radiator inlet tube (17) and thermostat housing connector (19) with two clamps (16) and new tiedown strap (18).



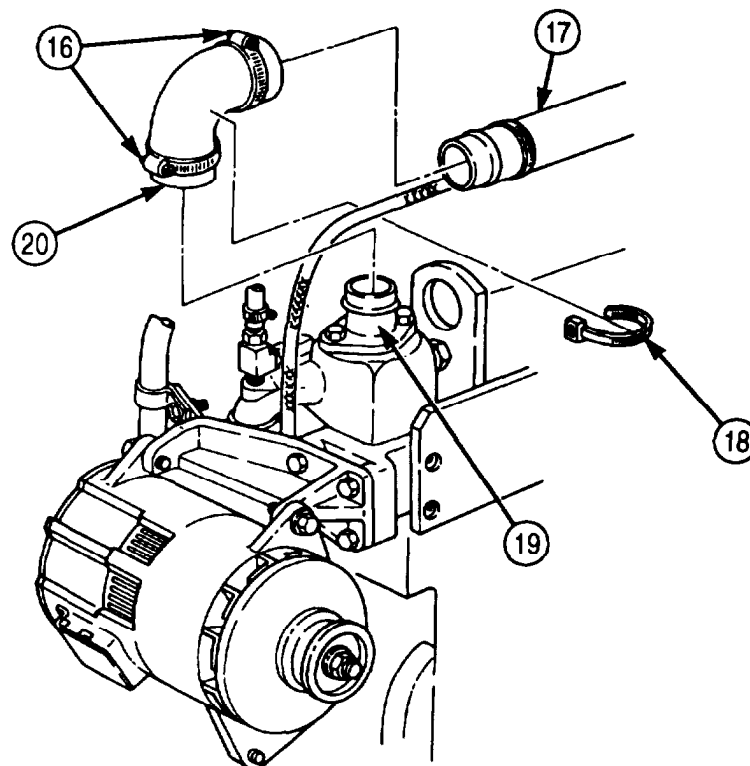
### 4-39. ENGINE MOUNTING BRACKETS AND ISOLATORS REPLACEMENT (Contd)



RIGHT SIDE



LEFT SIDE



- FOLLOW-ON TASKS:
- Install air cleaner hose (para. 3-13).
  - Install vibration damper (para. 4-42).
  - Install surge tank (para. 3-62).

## 4-40. ENGINE LIFTING BRACKETS REPLACEMENT

### THIS TASK COVERS:

#### a. Removal

#### b. Installation

#### INITIAL SETUP:

##### APPLICABLE MODELS

M939A2

##### TOOLS

General mechanic's tool kit (Appendix E, Item 1)

##### MATERIALS/PARTS

Tiedown strap (Appendix D, Item 690)

##### REFERENCES (TM)

TM 9-2320-272-10

TM 9-2320-272-24P

##### EQUIPMENT CONDITION

- Parking brake set (TM 9-2320-272-10).
- Hood raised and secured (TM 9-2320-272-10).
- Thermostat and thermostat housing removed (para. 3-66).

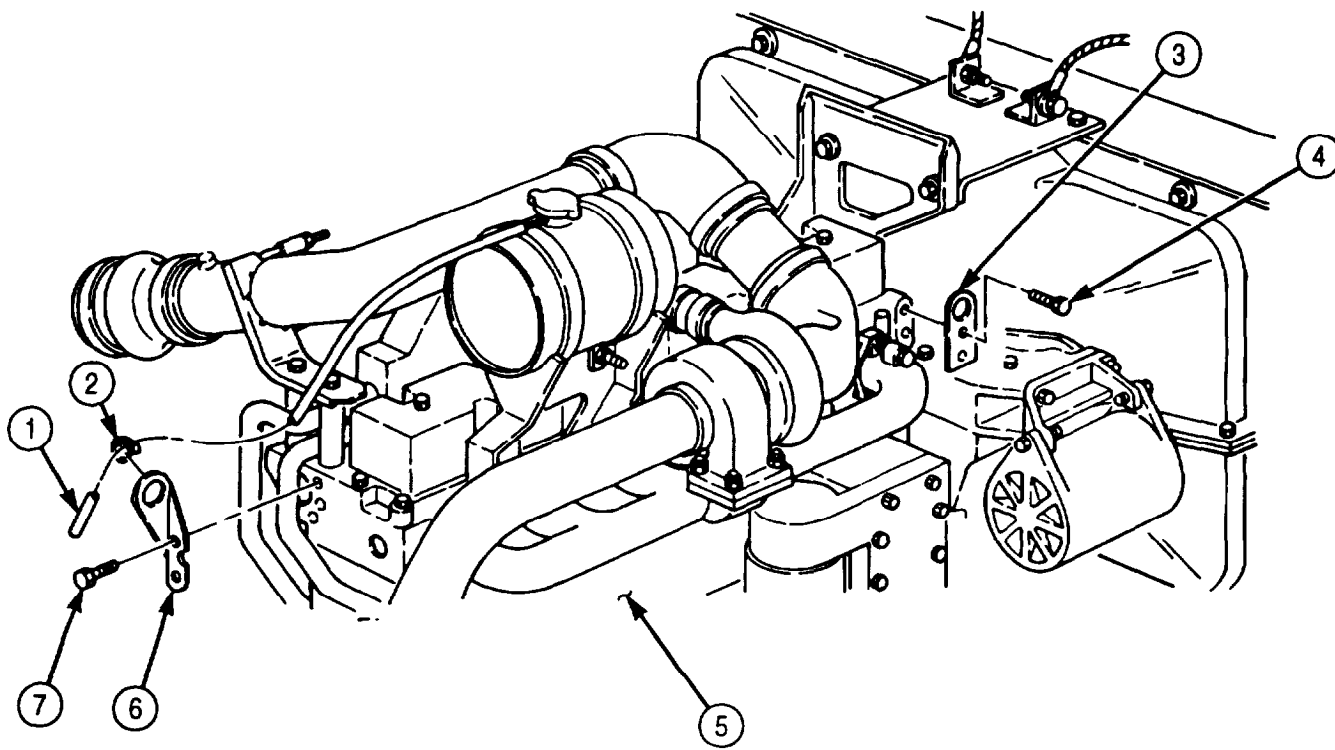
#### a. Removal

1. Remove tiedown strap (2) and overflow hose (1) from lifting bracket (6). Discard tiedown strap (2).
2. Remove two screws (7) and lifting bracket (6) from engine (5).
3. Remove two screws (4) and lifting bracket (3) from engine (5).

#### b. Installation

1. Install lifting bracket (3) on engine (5) with two screws (4).
2. Install lifting bracket (6) on engine (5) with two screws (7).
3. Install overflow hose (1) on lifting bracket (6) with new tiedown strap (2).

**4-40. ENGINE LIFTING BRACKETS REPLACEMENT (Contd)**



FOLLOW-ON TASK: Install thermostat and thermostat housing (para. 3-66).

## 4-41. ROCKER LEVERS, PUSH RODS, AND CYLINDER HEAD REPLACEMENT

### THIS TASK COVERS:

- |  |   |
|--|---|
| a. Rocker Levers and Push Rods Removal | c. Cylinder Head Installation               |
| b. Cylinder Head Removal               | d. Rocker Levers and Push Rods Installation |

### INITIAL SETUP:

#### APPLICABLE MODELS

M939A2

#### SPECIAL TOOLS

Torque angle gauge (Appendix E, Item 141)

#### TOOLS

General mechanic's tool kit (Appendix E, Item 1)  
Torque wrench (Appendix E, Item 144)

#### MATERIALS/PARTS

Seal (Appendix D, Item 598)  
Fuel filter (Appendix D, Item 135)  
Lockwasher (Appendix D, Item 364)  
Gasket (Appendix D, Item 188)  
Two washers (Appendix D, Item 645)  
Two washers (Appendix D, Item 644)  
Two washers (Appendix D, Item 714)  
Washer (Appendix D, Item 711)  
Lubrication oil (Appendix C, Item 48)  
Diesel fuel Appendix C, Item 42)

#### REFERENCES (TM)

TM 9-2320-272-24P

#### EQUIPMENT CONDITION

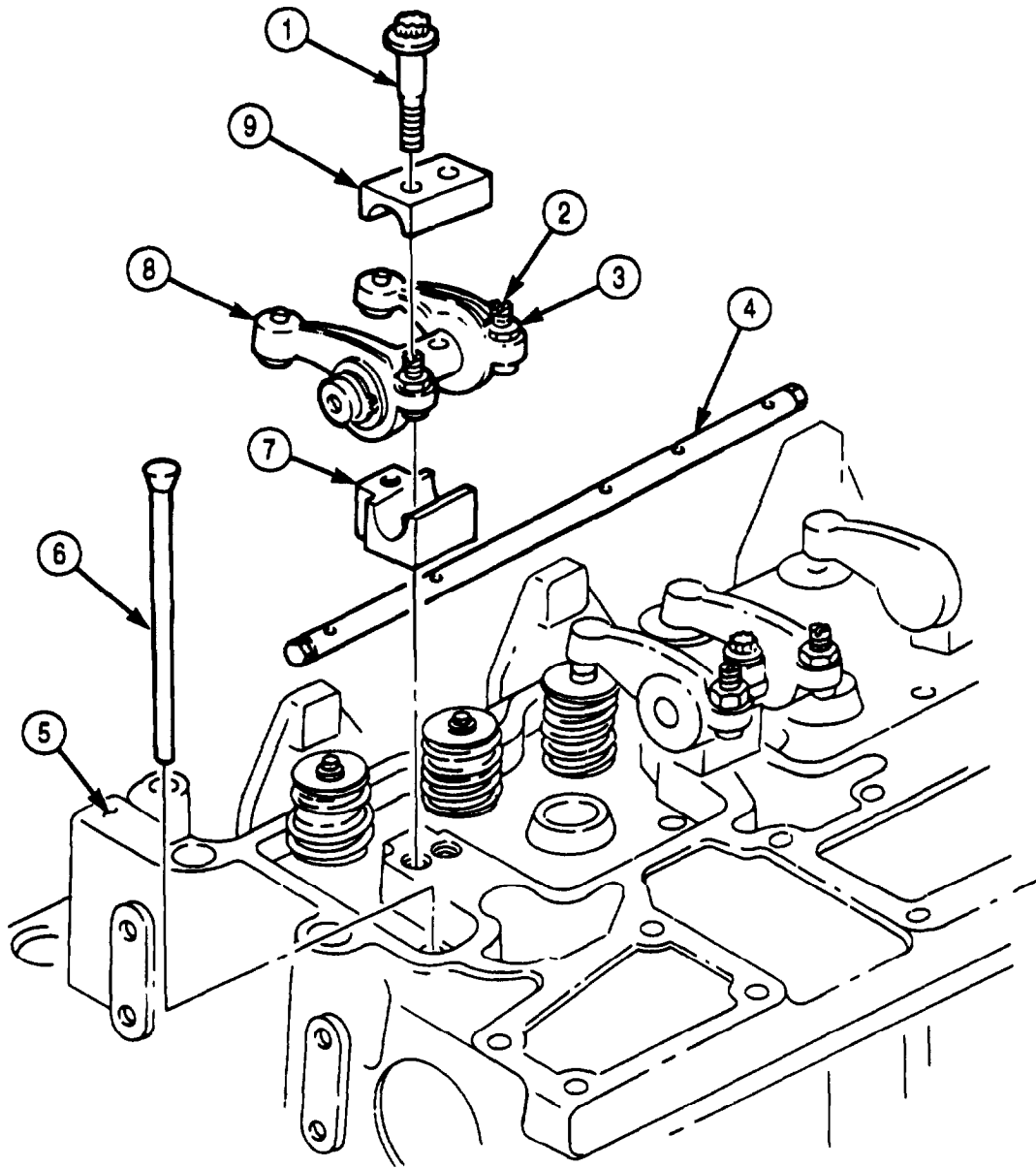
- Parking brake set (TM 9-2320-272-10).
- Aftercooler removed (para. 3-76).
- Exhaust manifold removed (para. 4-50).
- Fan clutch and hose removed (para. 3-74).
- Fuel injector tubes removed (para. 3-19).
- Valve covers removed (para. 3-6).

### a. Rocker Levers and Push Rods Removal

1. Loosen twelve locknuts (3) and turn adjusting screws (2) two full turns counterclockwise.
2. Remove twelve screws (1), six retaining clamps (9), rocker lever assemblies (8), and rocker lever supports (7) from cylinder head (5).
3. Remove oil manifold (4) from cylinder head (5).
4. Remove twelve push rods (6) from cylinder head (5).



4-41. ROCKER LEVERS, PUSH RODS, AND CYLINDER HEAD REPLACEMENT (Contd)



## 4-41. ROCKER LEVERS, PUSH RODS, AND CYLINDER HEAD REPLACEMENT (Contd)

### b. Cylinder Head Removal

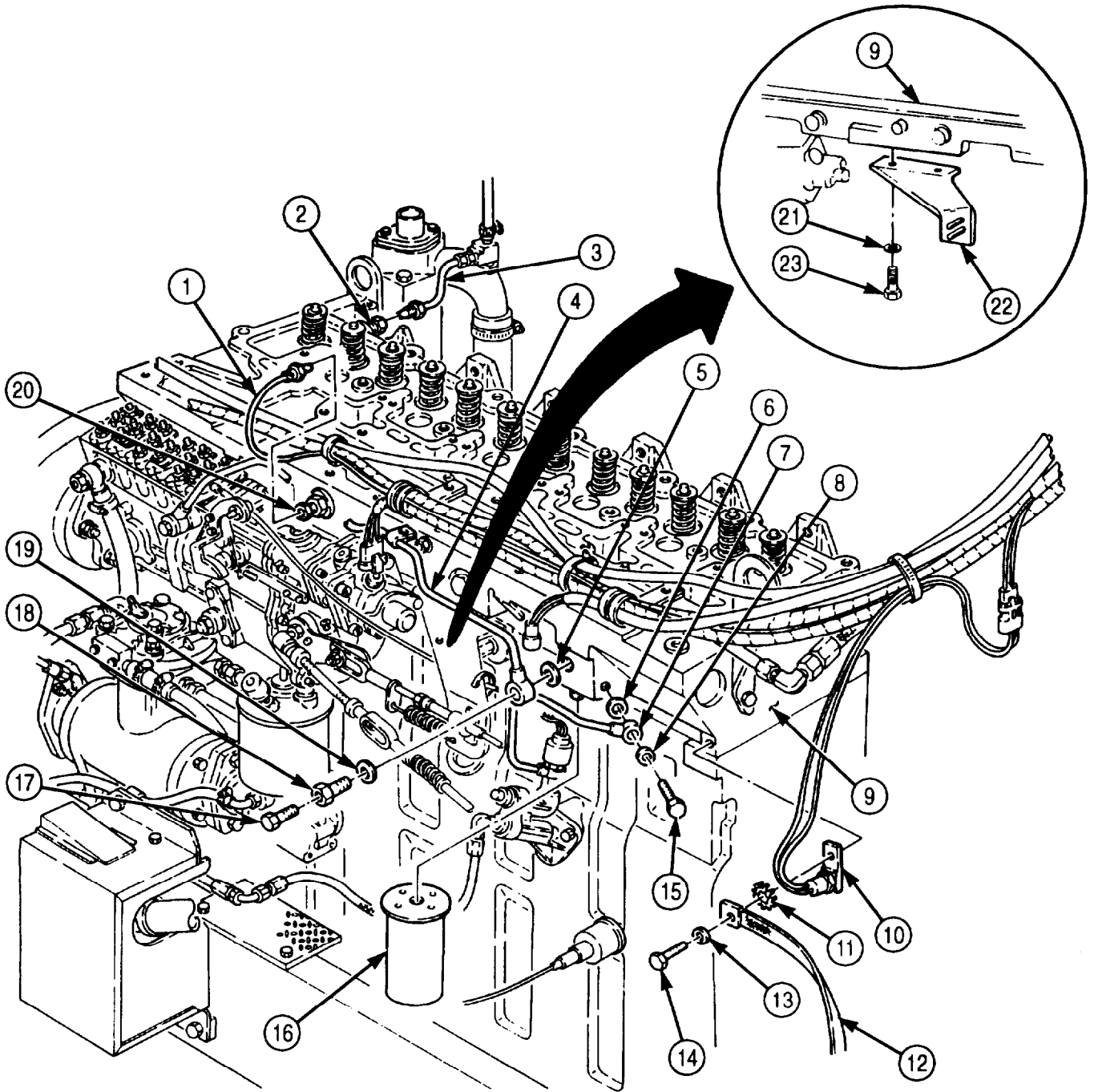
1. Disconnect ether supply tube (1) from atomizer nozzle (20).
2. Remove two screws (23), washers (21), and bracket (22) from cylinder head (9). Discard washers (21).
3. Remove screw (14), washer (13), ground strap (12), lockwasher (11), and temperature sensor (10) from cylinder head (9). Discard lockwasher (11).
4. Remove screw (15), washer (8), fuel supply tube (7), and washer (6) from cylinder head (9). Discard washers (6) and (8).
5. Remove screw (17), adapter (18), washer (19), fuel supply line (4), and washer (5) from cylinder head (9). Discard washers (5) and (19).
6. Remove fuel filter (16) from cylinder head (9). Discard fuel filter (16).

#### NOTE

Perform step 7 for engines equipped with external bypass system.

7. Disconnect tube (3) from adapter (2).

**4-41. ROCKER LEVERS, PUSH RODS, AND CYLINDER HEAD REPLACEMENT (Contd)**



#### 4-41. ROCKER LEVERS, PUSH RODS, AND CYLINDER HEAD REPLACEMENT (Contd)

8. Remove water inlet tube (5) and seal (4) from elbow (3). Discard seal (4).
9. Remove screw (7) from air supply tube (6).
10. Loosen clamp (1) and remove air supply tube (6) from coupling (2).

**NOTE**

- Tag all screws for installation.
- Assistant will help with step 11.

11. Remove fourteen screws (11) and twelve screws (12) from cylinder head (13).
12. Remove cylinder head (13) and gasket (22) from engine block (23). Discard gasket (22).
13. Remove adapter (24), atomizer (25), adapters (10), (20), and (21), elbow (19), plug (18), and washer (17) from cylinder head (13). Discard washer (17).
14. Remove nipple (16) from cylinder head (13).
15. Remove two screws (14) and (8) and lifting brackets (15) and (9) from cylinder head (13).

**NOTE**

Perform step 16 if coupling is damaged.

16. Remove coupling (26) from cylinder head (13).