### LOWER BRUSH GUARD REPLACEMENT

0019 00

#### THIS WORK PACKAGE COVERS

Removal, Cleaning and Inspection, Installation

### **INITIAL SETUP**

#### **Maintenance Level**

Unit

#### **Tools and Special Tools**

Tool Kit, General Mechanic's (Item 10, WP 0032 00)

Shop Equipment, Common No. 1 (Item 8, WP 0032 00)

Link, Lifting (2) (Item 6, WP 0032 00)

Sling (Item 9, WP 0032 00)

Lifting Device, (500-lb capacity)

#### Materials/Parts

Locknut (56)

#### References

WP 0011 00

WP 0034 00

### **Personnel Required**

Three

### **Equipment Conditions**

Vehicle parked on level ground (TM 9-2320-364-10)

Parking/Emergency Brake applied (TM 9-2320-364-10)

Engine off (TM 9-2320-364-10)

If equipped, Battery Disconnect Switch in OFF position (TM 9-2320-364-10)

Front Towing Shackles removed (TM 9-2320-364-20)

Headlights and Composite Lights removed (WP 0020 00)

Blackout Drive Light removed (WP 0021 00)

Right and Left Steps removed (TM 9-2320-364-20)

### REMOVAL



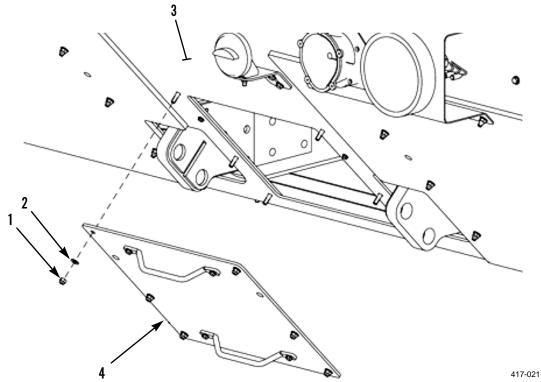
# **WARNING**

Use extreme caution when handling heavy parts. Provide adequate support and use assistance during procedure. Failure to follow this warning may cause injury.

### NOTE

Access cover assembly weighs 31 lb (14 kg).

1. Remove six locknuts (1), washers (2), and access cover assembly (4) from lower brush guard (3). Discard locknuts.



2. Remove 15 locknuts (9), washers (10), bolts (7), and washers (8) from bottom edge of lower brush guard (3).



# WARNING

Use extreme caution when handling heavy parts. Provide adequate support and use assistance during procedure. Ensure that any lifting device used is in good condition and of suitable load capacity. Keep clear of heavy parts supported only by lifting device. Failure to follow this warning may cause injury or death to personnel.

### **NOTE**

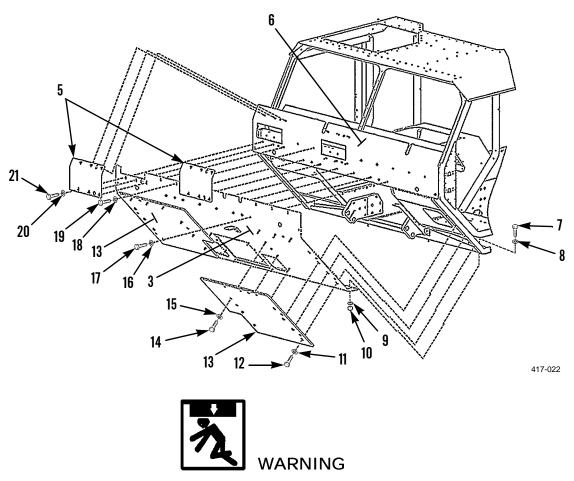
IED front panels weigh 60 lb (27 kg) each.

3. Using assistance, remove six locknuts (14) and washers (15), eight bolts (12), washers (11), and two IED panels (13) from lower brush guard (3). Discard locknuts.

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### **REMOVAL - CONTINUED**

4. Remove 12 locknuts (21), washers (20), and two gun mount covers (5) from upper brush guard (6) and lower brush guard (3). Discard locknuts.



Use extreme caution when handling heavy parts. Provide adequate support and use assistance during procedure. Ensure that any lifting device used is in good condition and of suitable load capacity. Keep clear of heavy parts supported only by lifting device. Failure to follow this warning may cause injury or death to personnel.

## NOTE

Lower brush guard weighs 316 lb (143 kg).

- 5. Attach two lifting links, sling, and lifting device to top edge of lower brush guard (3).
- 6. Remove six locknuts (17) and washers (16) from top of lower brush guard (3).
- 7. Using lifting device, remove remaining two bolts (19), washers (18), and lower brush guard (3) from front of vehicle.

### **REMOVAL - CONTINUED**

# NOTE

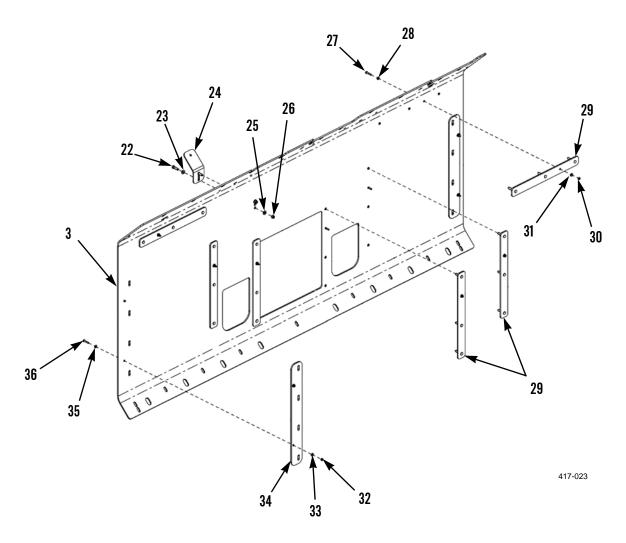
Use lifting device to support lower brush guard to allow removal of remaining components.

8. Remove locknut (26), washer (25), bolt (22), washer (23), and blackout light bracket (24) from lower brush guard (3). Discard locknut.

# **NOTE**

Note location of spacers and stud plates to ensure correct installation.

- 9. Remove four locknuts (32), washers (33), bolts (36), washers (35), and two spacers (34) from outside edges of lower brush guard (3). Discard locknuts.
- 10. Remove six locknuts (30), washers (31), bolts (27), washers (28), and stud plates (29) from lower brush guard (3). Discard locknuts.
- 11. Place lower brush guard (3) on flat surface.
- 12. Remove lifting device, sling, and two lifting links from lower brush guard (3).



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### **CLEANING AND INSPECTION**

Clean and inspect all parts IAW General Maintenance Instructions (WP 0011 00).

#### INSTALLATION



### WARNING

Use extreme caution when handling heavy parts. Provide adequate support and use assistance during procedure. Ensure that any lifting device used is in good condition and of suitable load capacity. Keep clear of heavy parts supported only by lifting device. Failure to follow this warning may cause injury or death to personnel.

#### NOTE

Lower brush guard weighs 316 lb (143 kg).

- 1. Attach two lifting links, sling, and lifting device to top edge of lower brush guard (3). Use lifting device to support lower brush guard, as needed, to allow installation of components.
- 2. Install six stud plates (29) to lower brush guard (3) with six washers (28), bolts (27), washers (31), and new locknuts (30).
- 3. Install two spacers (34) to outside edges of lower brush guard (3) with four washers (35), bolts (36), washers (33), and new locknuts (32).
- 4. Install blackout light bracket (24) to lower brush guard (3) with washer (23), bolt (22), washer (25), and new locknut (26).
- 5. With assistance, lift lower brush guard (3) into position at front of vehicle.

### **INSTALLATION - CONTINUED**

### NOTE

To assist in alignment and fit of armor plates, DO NOT fully tighten mounting hardware until all armor plates have been installed.

- 6. Install two washers (18), bolts (19), six washers (16), and new locknuts (17).
- 7. Remove lifting device, sling, and two lifting links from lower brush guard (3).
- 8. Install two gun mount covers (5), 12 washers (20) and new locknuts (21) to upper brush guard (6) and lower brush guard (3).



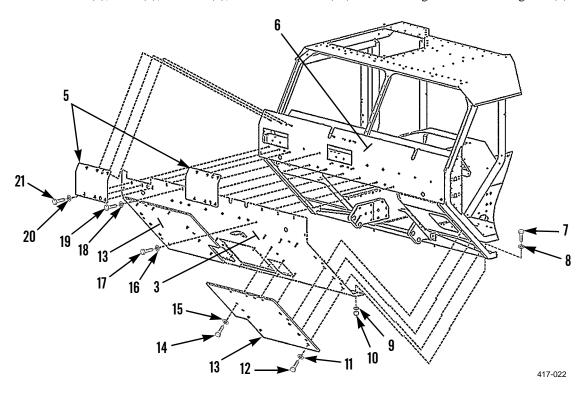
### WARNING

Use extreme caution when handling heavy parts. Provide adequate support and use assistance during procedure. Ensure that any lifting device used is in good condition and of suitable load capacity. Keep clear of heavy parts supported only by lifting device. Failure to follow this warning may cause injury or death to personnel.

### NOTE

IED front panels weigh 60 lb (27 kg) each.

- 9. With assistance, install two IED panels (13), six washers (15), new locknuts (14), eight washers (11), and bolts (12) to lower brush guard (3).
- 10. Install 15 washers (8), bolts (7), washers (9), and new locknuts (10) in bottom edge of lower brush guard (3).



### **INSTALLATION - CONTINUED**



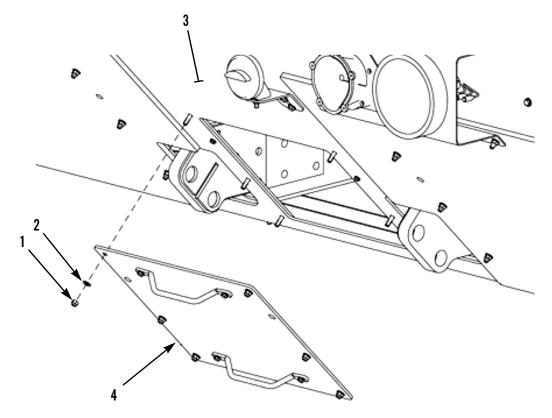
# **WARNING**

Use extreme caution when handling heavy parts. Provide adequate support and use assistance during procedure. Failure to follow this warning may cause injury.

## **NOTE**

Access cover assembly weighs 31 lb (14 kg).

11. Install access cover assembly (4) to lower brush guard (3) with six washers (2) and new locknuts (1).



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- 12. Ensure all bolts and locknuts are tightened to proper torque (WP 0034 00).
- 13. Install blackout drive light (WP 0021 00).
- 14. Install headlights and composite lights (WP 0020 00).
- 15. Install front towing shackles (TM 9-2320-364-20).
- 16. Install right and left steps (TM 9-2320-364-20).

#### **END OF WORK PACKAGE**