4-16. INSTRUMENT CLUSTER LIGHT REPLACEMENT

This task covers:

- a. Lamp Removal
- b. Lamp Installation

c. Light Assembly Removald. Light Assembly Installation

INITIAL SETUP:

Tools

General mechanic's tool kit: automotive (Appendix B, Item 1)

Equipment Condition

Battery ground cable disconnected (para. 4-73).

Manual References

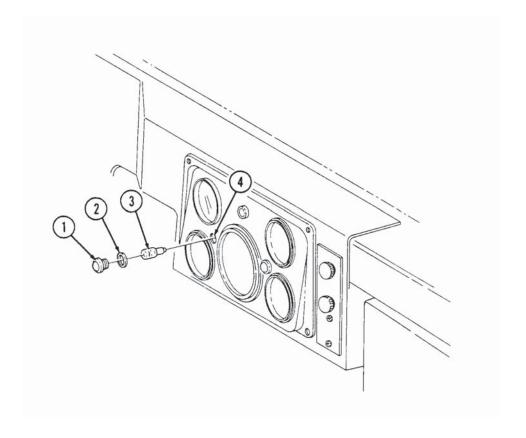
TM 9-2320-280-10 TM 9-2320-280-24P

a. Lamp Removal

- 1. Remove light lens (1) and gasket (2) from light assembly (4).
- 2. Remove lamp (3) from light assembly (4).

b. Lamp Installation

- 1. Install lamp (3) into light assembly (4).
- 2. Install gasket (2) and lens (1) to light assembly (4).



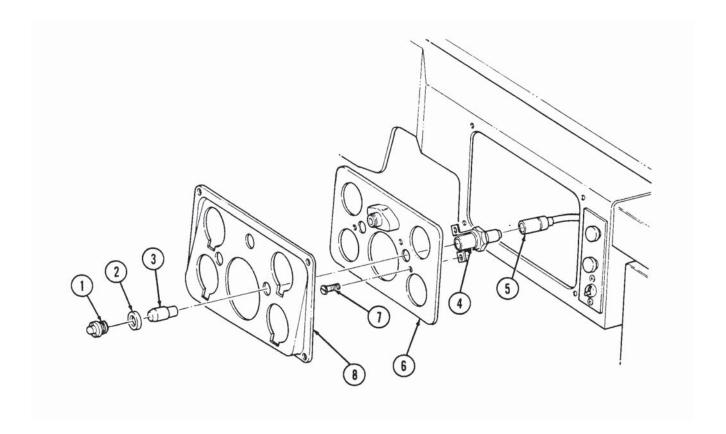
4-16. INSTRUMENT CLUSTER LIGHT REPLACEMENT (Cont'd)

c. Light Assembly Removal

- 1. Remove two light lenses (1) and gaskets (2) from light assemblies (4).
- 2. Remove lamp (3) from light assembly (4) being replaced.
- 3. Remove all electrical gauges (para. 4-13) and speedometer/odometer (para. 4-14).
- 4. Separate instrument cluster (8) from backing panel (6).
- 5. Disconnect harness lead 40B (5) from light assembly (4).
- 6. Remove two screws (7) and light assembly (4) from backing panel (6).

d. Light Assembly Installation

- 1. Install light assembly (4) to backing panel (6) with two screws (7).
- 2. Install backing panel (6) to instrument cluster (8).
- 3. Install all electrical gauges (para. 4-13) and speedometer/odometer (para. 4-14).
- 4. Connect harness lead 40B (5) to light assembly (4).
- 5. Install lamp (3) into light assembly (4).
- 6. Install two gaskets (2) and light lenses (1) on light assemblies (4).



FOLLOW-ON TASK: Connect battery ground cable (para. 4-73).

4-17. WAIT-TO-START LAMP REPLACEMENT

This task covers:

a. Removal

b. Installation

INITIAL SETUP:

Tools

General mechanic's tool kit: automotive (Appendix B, Item 1) Maintenance and repair shop equipment: automotive (Appendix B, Item 2)

Manual References

TM 9-2320-280-10 TM 9-2320-280-24P

Equipment Condition

- Battery ground cable disconnected (para. 4-73).
- Instrument cluster removed (para. 4-11).

NOTE

Prior to removal, tag leads and note position for installation.

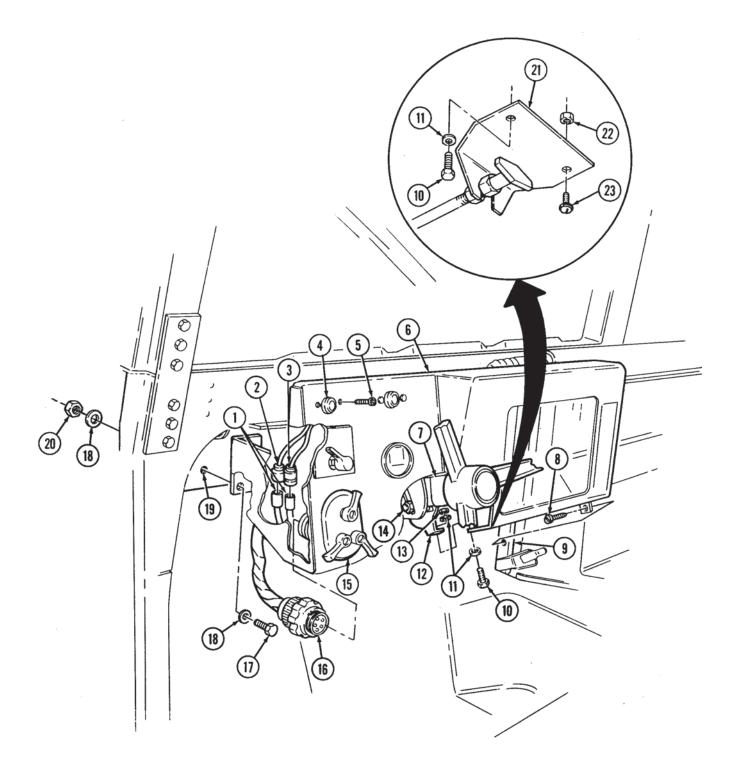
a. Removal

- 1. Loosen nut (14) and lower steering column (7).
- 2. Remove cannon plug (16) from main light switch (15).
- 3. Remove two capscrews (17), washers (18), nuts (20), and washers (18) from instrument panel (6) and body (19).
- 4. Remove nut (22) and screw (23) from hand throttle bracket (21) and instrument panel (6).
- 5. Remove nut (13), washer (11), capscrew (10), and washer (11) from instrument panel (6), hand throttle bracket (21), and steering column bracket (12).
- 6. Remove screw (8) from instrument panel (6) and cowl (9).
- 7. Pull instrument panel (6) away from body (19).
- 8. Remove two screws (5) from wait-to-start lamp (4) and instrument panel (6).
- 9. Disconnect lead 571 (2) and 27 (3) from wiring harness (1).
- 10. Remove wait-to-start lamp (4).

b. Installation

- 1. Connect lead 571 (2) and 27 (3) to wiring harness (1).
- 2. Install wait-to-start lamp (4) on instrument panel (6) with two screws (5).
- 3. Install instrument panel (6) on cowl (9) with screw (8).
- 4. Install instrument panel (6) and hand throttle bracket (21) on steering column bracket (12) with capscrew (10), washer (11), nut (13), and washer (11).
- 5. Install hand throttle bracket (21) to instrument panel (6) with screw (23) and nut (22).
- 6. Install instrument panel (6) to body (19) with two capscrews (17), washers (18), nuts (20), and washers (18).
- 7. Install cannon plug (16) on main light switch (15).
- 8. Raise steering column (7) and tighten nut (14) to 31 lb-ft (42 N·m).

4-17. WAIT-TO-START LAMP REPLACEMENT (Cont'd)



- FOLLOW-ON TASKS: Install instrument cluster (para. 4-11).

 - Connect battery ground cable (para. 4-73).
 Start engine (TM 9-2320-280-10) and check wait-to-start lamp assembly for operation.

4-17.1. BRAKE WARNING LAMP REPLACEMENT

This task covers:

a. Removal

b. Installation

INITIAL SETUP:

Tools

General mechanic's tool kit: automotive (Appendix B, Item 1)

Materials/Parts

Tape (Appendix C, Item 50)

Manual References

TM 9-2320-280-10 TM 9-2320-280-24P

Equipment Condition

• Battery ground cables disconnected (para. 4-73).

• Air restriction gauge removed (para. 3-17).

NOTE

Prior to removal, tag leads for installation.

a. Removal

- 1. Remove two screws (2) from brake warning lamp (1) and instrument panel (5).
- 2. Disconnect leads 67 (7) and 27 (3) from wiring harness leads (6).
- 3. Slide brake warning lamp (1) down toward steering column (4) and remove brake warning lamp (1).

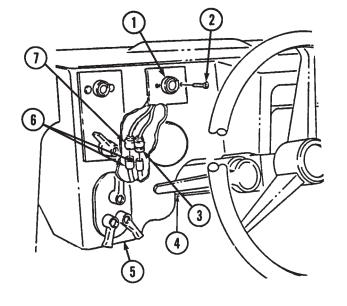
b. Installation

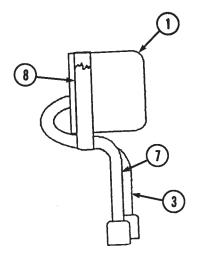
NOTE

Place tape around lead wires to keep lamp in proper position during installation.

- 1. Install tape (8) around lamp (1) and lead wires (7) and (3).
- 2. Slide brake warning lamp (1) up along steering column (4) and install brake warning lamp (1) on instrument panel (5) with two screws (2).
- 3. Connect leads 67 (7) and 27 (3) to wiring harness leads (6).

4-17.1. BRAKE WARNING LAMP REPLACEMENT (@nt'd)





- FOLLOW-ON TASKS: Install air restriction gauge (para. 3-17).

 - Connect battery ground cables (para. 4-73).
 Start engine (TM 9-2320-280-10) and check brake warning lamp for operation.

4-18. HIGH BEAM LAMP REPLACEMENT

This Task Covers:

a. Removal

b. Installation

INITIAL SETUP:

Tools

General mechanic's tool kit: automotive (Appendix B, Item

Manual References

TM 9-2320-280-24P

Equipment Condition

- Electrical gauges removed (para. 4-13).
- Speedometer/odometer removed (para. 4-14).

NOTE

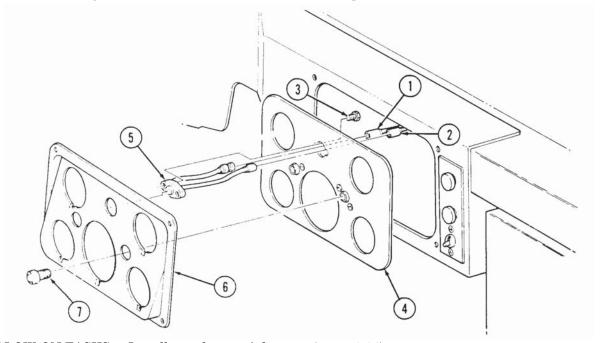
Prior to removal, tag leads for installation.

a. Removal

- 1. Remove two light lenses (7) from instrument cluster back panel (4).
- 2. Remove instrument cluster (6) from instrument cluster back panel (4).
- 3. Disconnect harness lead 57L (1) and lead 17B (2) from high beam lamp (5).
- 4. Remove two screws (3) and high beam lamp (5) from instrument cluster back panel (4).

b. Installation

- 1. Install high beam lamp (5) on instrument cluster back panel (4) with two screws (3).
- 2. Connect harness lead 57L (1) and lead 178 (2) to high beam lamp (5).
- 3. Install instrument cluster (6) on instrument cluster back panel (4).
- 4. Install two light lenses (7) on instrument cluster back panel (4).



FOLLOW-ON TASKS: • Install speedometer/odometer (para. 4-14).

• Install electrical gauges (para. 4-13).