FMTV TRUCK SALES

FMTV A0 QUICK-REFERENCE GUIDE

NOTE: THIS GUIDE IS FOR QUICK REFERENCE ONLY. OPERATORS SHOULD FAMILIARIZE THEMSELVES THOROUGHLY WITH ENTIRE OPERATOR AND MAINTENANCE TECHNICAL MANUALS FOUND HERE: www.fmtvtrucks.com/tm.

2-21. VEHICLE OPERATION

Starting.

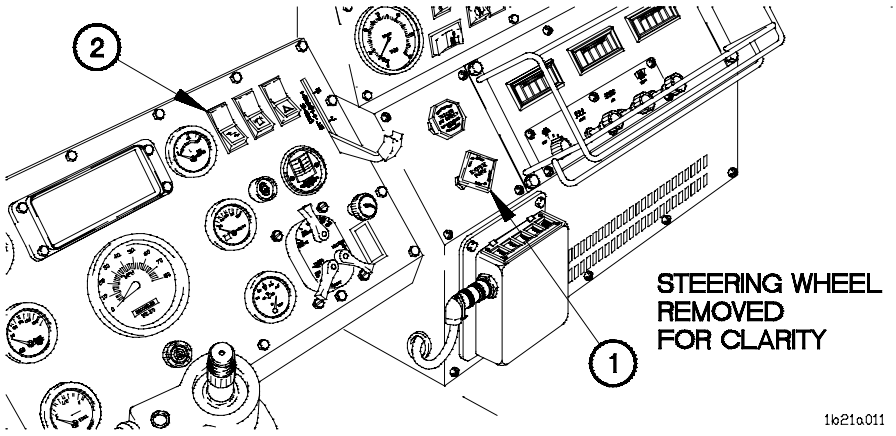
CAUTION

Cold weather radiator cover will be installed if temperatures are consistently below 40° F (4° C). It should be removed if temperatures are above 40° F (4° C), and must be removed if temperatures reach 70° F (21° C). Failure to comply may result in damage to equipment.

NOTE

If cold weather radiator cover has not been installed or needs to be removed, Notify Unit Maintenance.

a. Cold Engine Start.

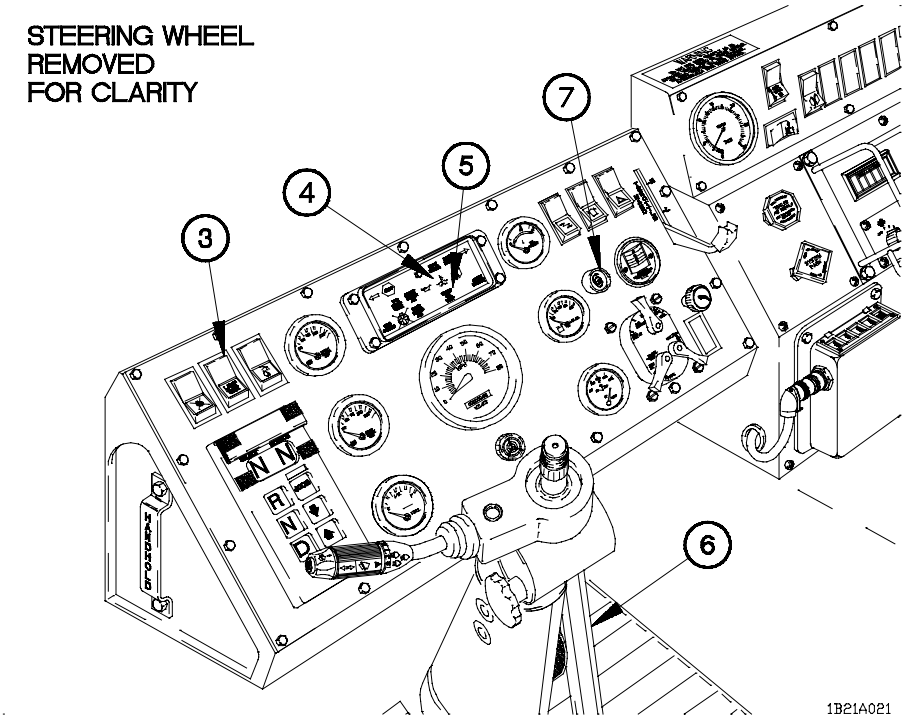


NOTE

If outside temperature is expected to remain below 40°F (4°C), notify Unit Maintenance to install the cold weather radiator cover.

(1) Pull out SYSTEM PARK control (1).

(2) Position master power switch (2) to on.



NOTE

Vehicles with the following serial numbers are not equipped with Lamp Test Switch: 0002 through 0017, 0019 through 0025, 0027 through 0031, 0033 through 0038, 0040 and 0041, 0043 through 0053, 0055 through 0089, 0091 through 0254, 0256 through 0258, 0260 and 0261, 0263 through 2400, and 2402 through 3091.

(3) Press LAMP TEST switch (3) to verify that high engine temperature (4) and TRANS OIL TEMP (5) indicators illuminate.

(4) Press down accelerator pedal (6) fully, then release it.

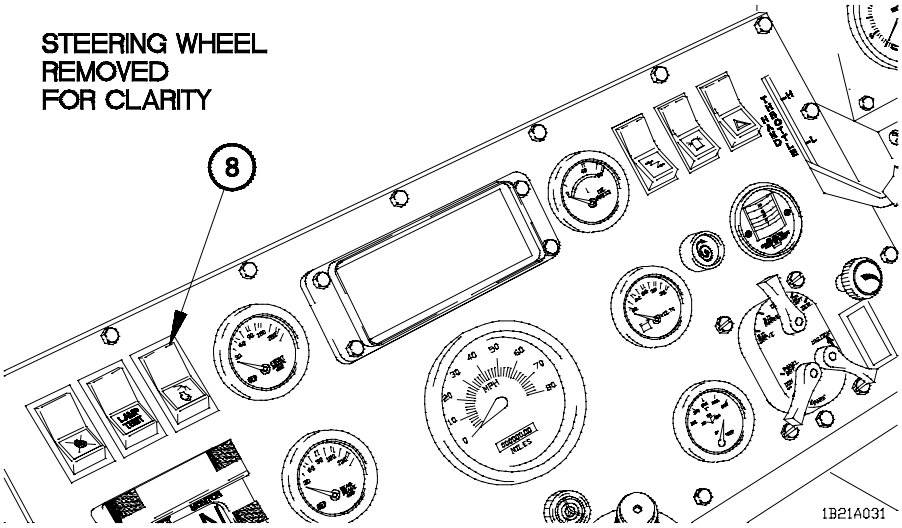
(5) Press down and hold accelerator pedal (6) at approximately 1/3 of travel.

CAUTION

Do not engage starter pushbutton for more than 30 seconds. If engine fails to start within this period, release starter pushbutton and wait two minutes before attempting to start engine again. Failure to comply may result in damage to equipment.

(6) Press and hold starter pushbutton (7).

2-21. VEHICLE OPERATION (CONT)



CAUTION

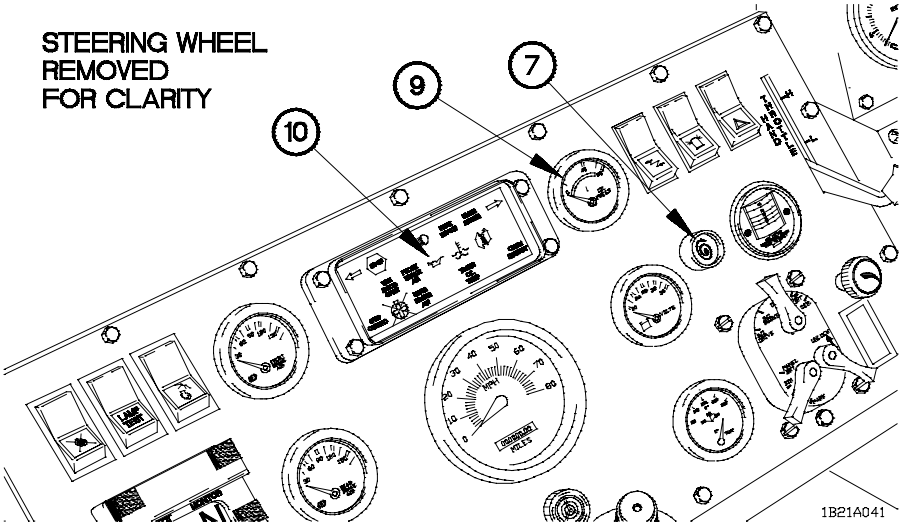
- Do not press ether start switch unless engine is cranking. Failure to comply may result in damage to engine.
- Do not use ether after the engine has reached idle speed (750 rpm) and is no longer in danger of stalling. Failure to comply may result in damage to engine.

NOTE

- Continue to inject ether if engine has started but will not run without ether.
- If outside air temperature is 32° F to -25° F (0° C to -32° C) perform step (6) and (7).

(7) Press and hold ether start switch (8) for approximately three seconds and release for two seconds.

(8) Repeat step (7) until engine has started, engine speed has increased over cranking speed, and engine maintains speed.



(9) Release starter pushbutton (7) when engine starts or after 30 seconds.

CAUTION

- If STOP indicator illuminates (red) to warn Operator when a potential engine failure (e.g., low oil pressure, low coolant, coolant overheating, etc.) has occurred, shut down engine immediately (para 2-21f) and perform Engine System Troubleshooting (para 3-3). Failure to comply may result in damage to equipment.

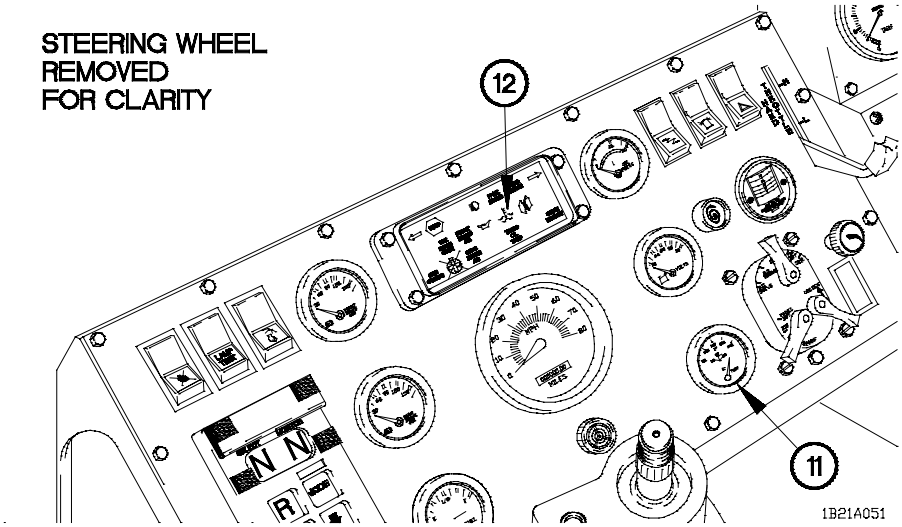
- If OIL PRESS gage does not show engine oil pressure of 15-80 psi (103-552 kPa) within 10-15 seconds after starting engine, shut down engine immediately (para 2-21f) and perform Engine System Trouble-shooting (para 3-3). Failure to comply may result in damage to equipment.

NOTE

Oil pressure will increase when engine speed increases and will decrease when engine speed decreases.

(10) Check that OIL PRESS gage (9) reads between 15-80 psi (103-552 kPa). If OIL PRESS gage reads in red zone and engine oil pressure indicator (10) is illuminated, shut down engine (para 2-21f) and perform Engine System Troubleshooting (para 3-3).

2-21. VEHICLE OPERATION (CONT)



NOTE

- Water Temperature must be a minimum of 100° F (38° C) in order to drive vehicle. Engine will warm up to normal operating temperature of 165° F (74° C) more quickly if engine is under a load condition such as driving.

- Vehicle performance, including heater/defroster, will be reduced when engine operating temperature is between 100°F to 165°F (38°C to 74°C). Avoid conditions requiring maximum performance until engine reaches 165° F (74° C).

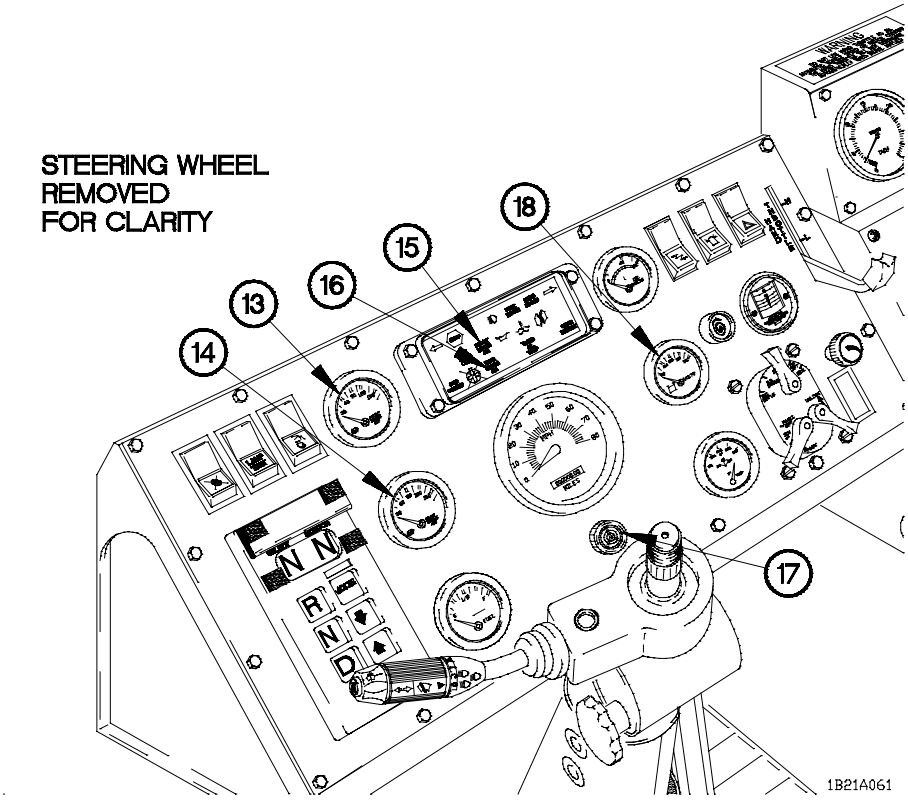
(11) Operate engine at idle (750 rpm) to warm-up engine until WATER TEMP gage (11) reaches a minimum of 100° F (38° C) to begin driving or normal operating temperature of 165° F (74° C).

NOTE

Perform step (12) in outside temperatures of 32°F to -25°F (0°C to - 32°C), if extreme or unusual conditions exist such as heavy windshield frost or when it is difficult to achieve normal operating temperature of 165° F (74° C).

(12) Perform Rapid Engine Warm-Up (para 2-59).

(13) Check that WATER TEMP gage (11) reads between 100° F to 230° F (38° C to 110° C). If WATER TEMP gage reads in the red zone or high engine temperature indicator (12) is illuminated, shut down engine (para 2-21f) and perform Engine System Troubleshooting (para 3-3).



NOTE

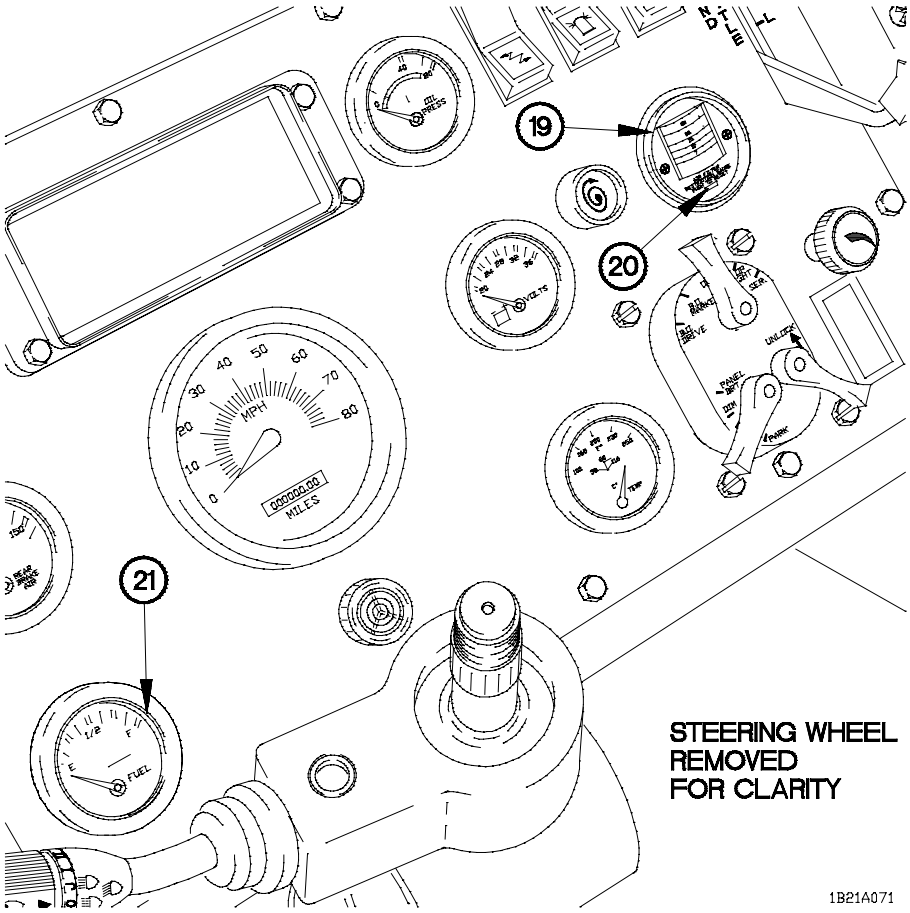
- If FRONT BRAKE AIR and REAR BRAKE AIR pressure gages do not read between 65-120 psi (448-827 kPa) after engine warm-up, shut down engine (para 2-21f) and perform Air System Troubleshooting (para 3-3).

- FRONT BRAKE AIR and REAR BRAKE AIR indicators will illuminate (red) and audible alarm will sound until air pressure is approximately 65 psi (448 kPa).

(14) Check that FRONT BRAKE AIR pressure gage (13) and REAR BRAKE AIR pressure gage (14) read between 65-120 psi (448-827 kPa). FRONT BRAKE AIR indicator (15) and REAR BRAKE AIR indicator (16) illuminate (red) and audible alarm (17) will sound until both gages reach approximately 65 psi (448 kPa).

(15) Check that VOLTS gage (18) reads between 26 and 30 volts.

2-21. VEHICLE OPERATION (CONT)



(16) Check that AIR FILTER RESTRICTION GAUGE (19) reads below 25 in.

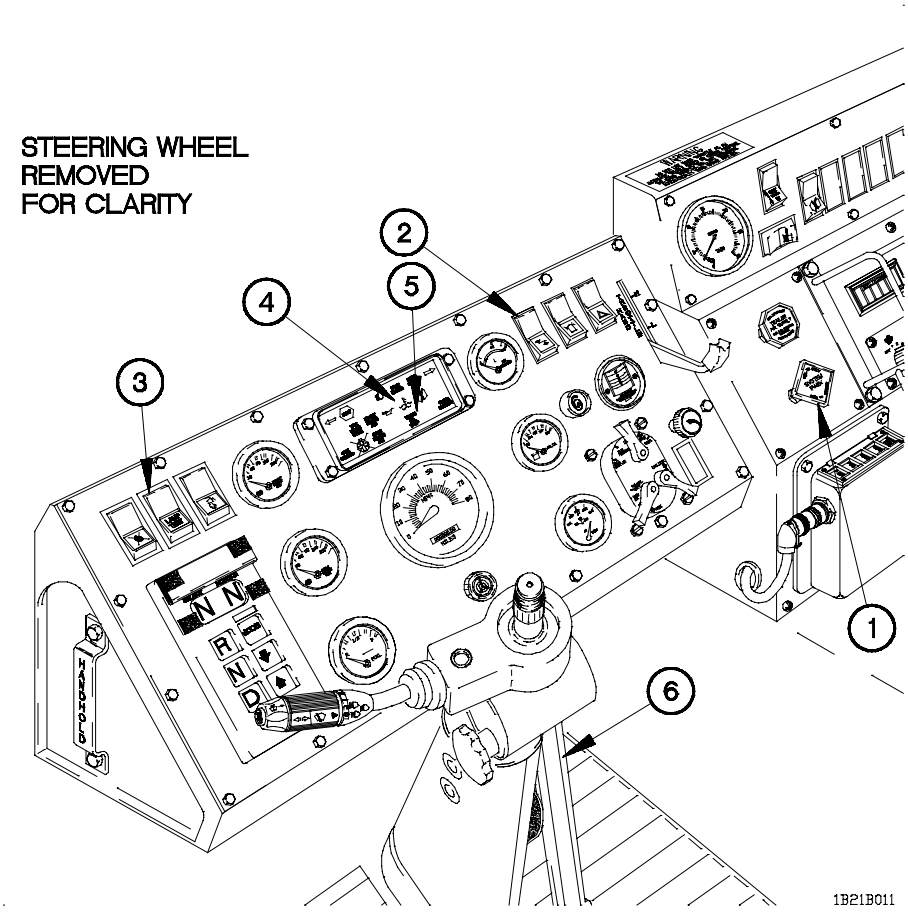
(a) Press reset button (20) if AIR FILTER RESTRICTION GAUGE (19) reads greater than 25 in. (in red area).

(b) Shut down engine (para 2-21f) and service air filter (para 3-9) if AIR FILTER RESTRICTION GAUGE still reads greater than 25 in. (in red area).

(17) Check that FUEL gage (21) shows sufficient fuel to accomplish mission.

(18) Select desired transmission gear (para 2-21e).

b. Warm Engine Start.



(1) Pull out SYSTEM PARK control (1).

(2) Position master power switch (2) to on.

NOTE

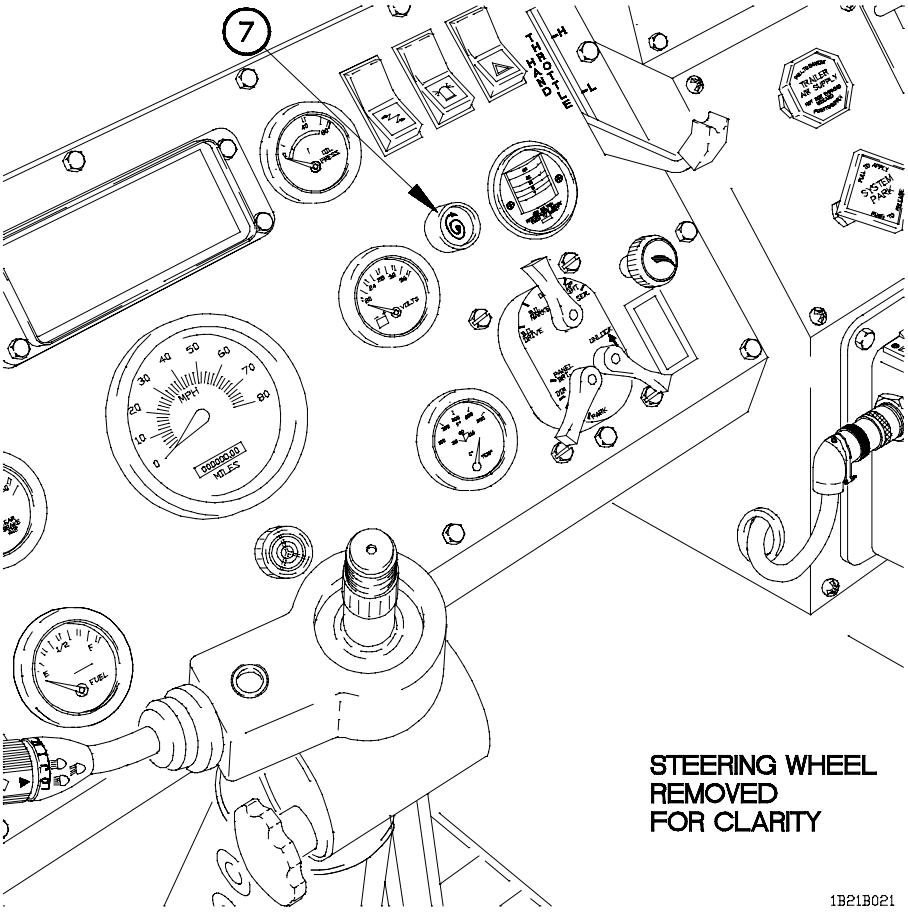
Vehicles with the following serial numbers are not equipped with Lamp Test Switch: 0002 through 0017, 0019 through 0025, 0027 through 0031, 0033 through 0038, 0040 and 0041, 0043 through 0053, 0055 through 0089, 0091 through 0254, 0256 through 0258, 0260 and 0261, 0263 through 2400, and 2402 through 3091.

(3) Press LAMP TEST switch (3) to verify that high engine temperature (4) and TRANS OIL TEMP (5) indicators illuminate.

(4) Press down accelerator pedal (6) fully, then release it.

(5) Press down and hold accelerator pedal (6) at approximately 1/3 of travel.

2-21. VEHICLE OPERATION (CONT)

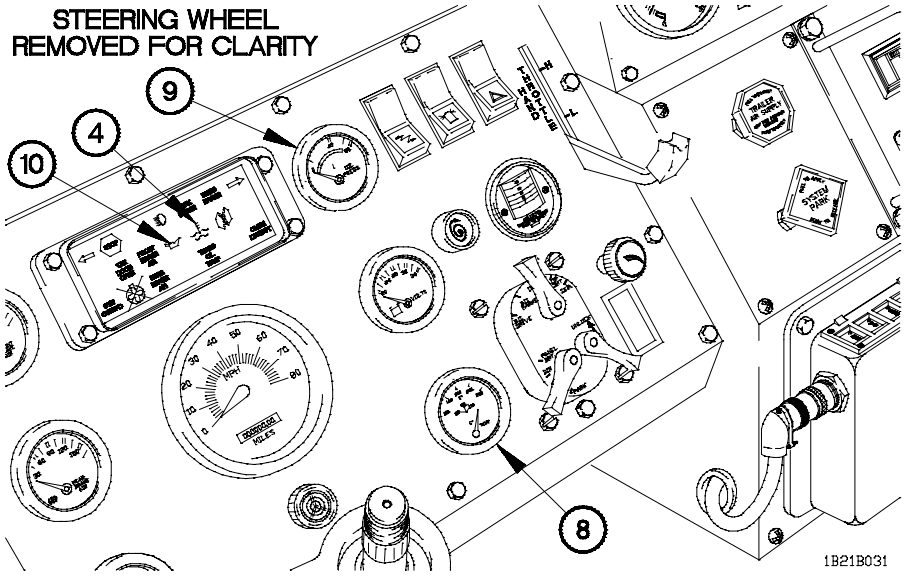


CAUTION

Do not engage starter pushbutton for more than 30 seconds. If engine fails to start within this period, release starter pushbutton and wait two minutes before attempting to start engine. Failure to comply may result in damage to equipment.

(6) Press and hold starter pushbutton (7).

(7) Release starter pushbutton (7) when engine starts.



CAUTION

- If STOP indicator illuminates (red) to warn Operator when a potential engine failure (e.g., low oil pressure, low coolant, coolant over-heating, etc.) has occurred, shut down engine immediately (para 2-21f) and perform Engine System Troubleshooting (para 3-3). Failure to comply may result in damage to equipment.

- If OIL PRESS gage does not show engine oil pressure of 15-80 psi (103-552 kPa) within 10-15 seconds after starting engine, shut down engine immediately (para 2-21f) and perform Engine System Troubleshooting (para 3-3). Failure to comply may result in damage to equipment.

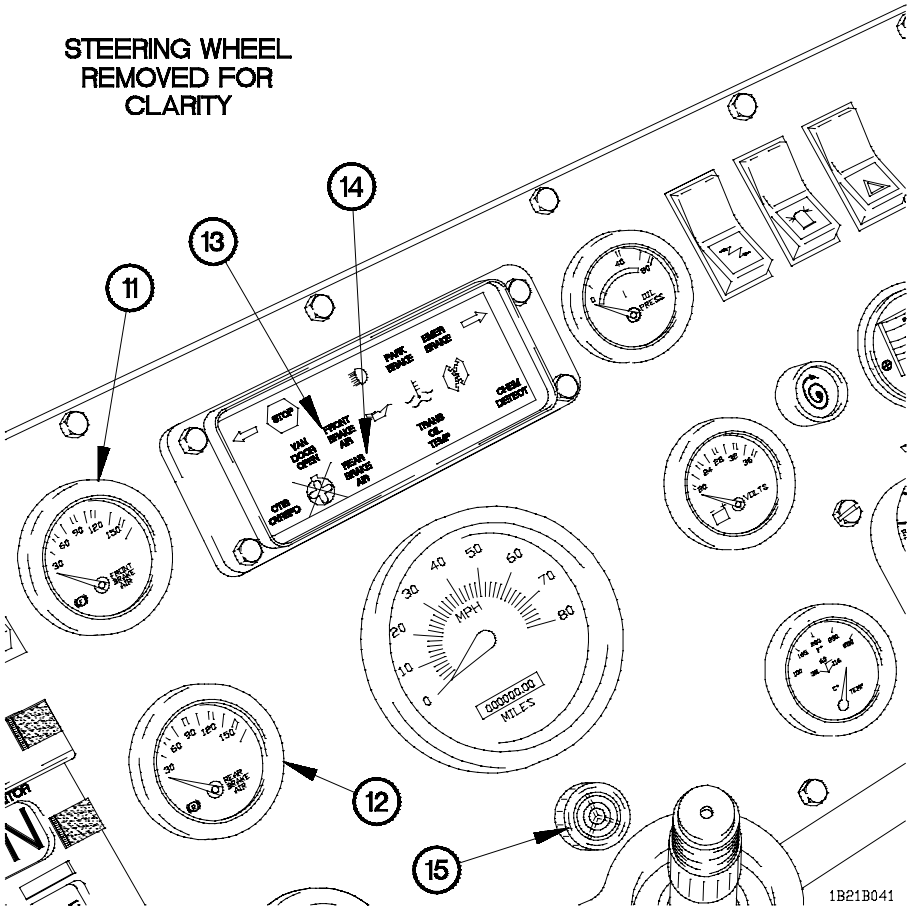
(8) Check that WATER TEMP gage (8) reads between 100° F to 230° F (38° C to 110° C). If WATER TEMP gage reads in red zone and high engine temperature indicator (4) is illuminated, shut down engine (para 2-21f) and perform Engine System Troubleshooting (para 3-3).

NOTE

Oil pressure will increase when engine speed increases and will decrease when engine speed decreases.

(9) Check that OIL PRESS gage (9) reads between 15-80 psi (103-552 kPa). If OIL PRESS gage reads in red zone and engine oil pressure indicator (10) is illuminated, shut down engine (para 2-21f) and perform Engine Troubleshooting (para 3-3).

2-21. VEHICLE OPERATION (CONT)

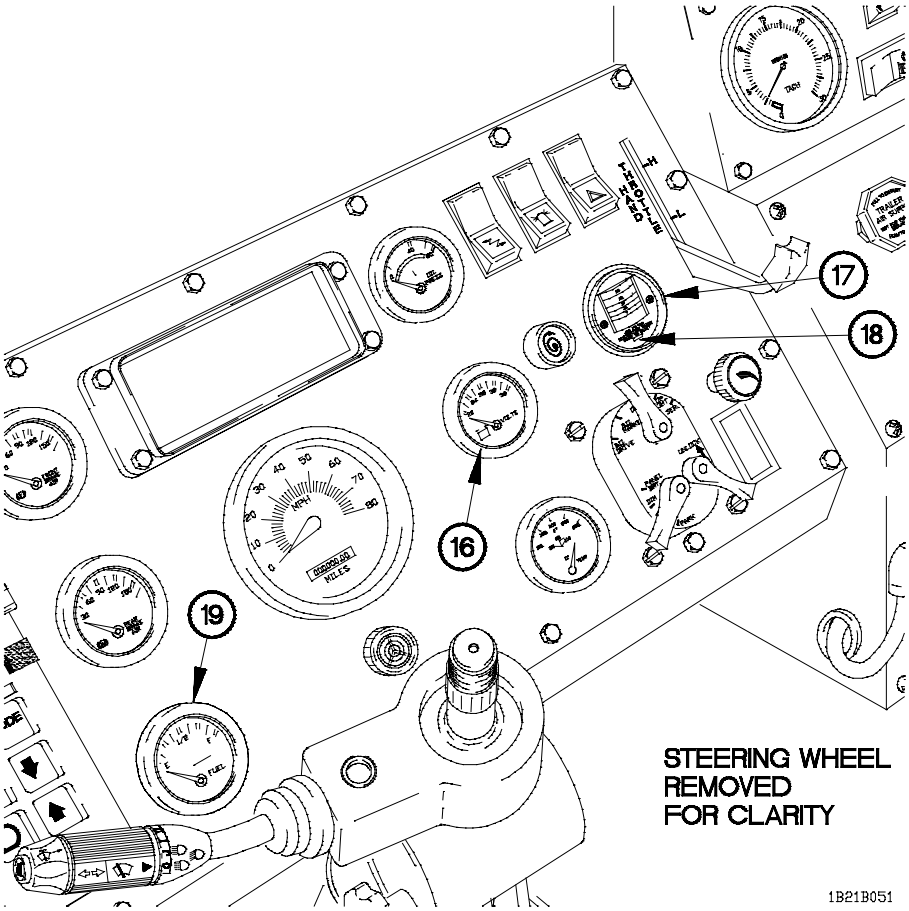


NOTE

- If FRONT BRAKE AIR and REAR BRAKE AIR pressure gages do not read between 65-120 psi (448-827 kPa) after engine warm-up, shut down engine (para 2-21f) and perform Air System Troubleshooting (para 3-3).

- FRONT BRAKE AIR and REAR BRAKE AIR indicators will illuminate (red) and audible alarm will sound until air pressure is approximately 65 psi (448 kPa).

(10) Check that FRONT BRAKE AIR pressure gage (11) and REAR BRAKE AIR pressure gage (12) read between 65-120 psi (448-827 kPa). FRONT BRAKE AIR indicator (13) and REAR BRAKE AIR indicator (14) illuminate (red) and audible alarm (15) will sound until both gages reach approximately 65 psi (448 kPa).



(11) Check that VOLTS gage (16) reads between 26 and 30 volts.

(12) Check that AIR FILTER RESTRICTION GAUGE (17) reads below 25 in.

(a) Press reset button (18) if AIR FILTER RESTRICTION GAUGE (17) reads greater than 25 in. (in red area).

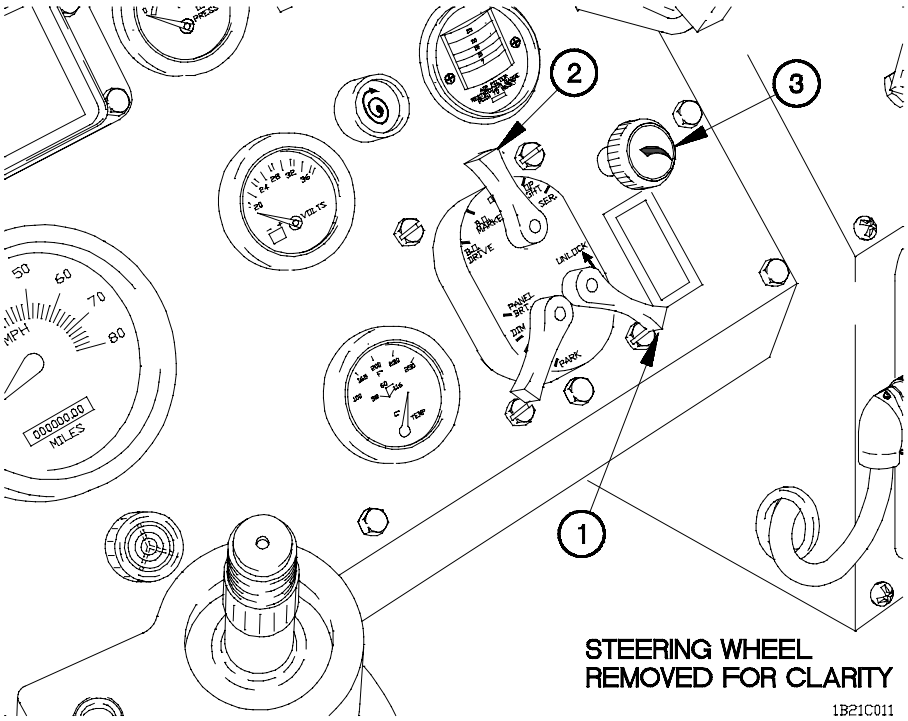
(b) Shut down engine (para 2-21f) and service air filter (para 3-9) if AIR FILTER RESTRICTION GAUGE still reads greater than 25 in. (in red area).

(13) Check that FUEL gage (19) shows sufficient fuel for mission requirements.

(14) Select desired transmission gear (para 2-21e).

2-21. VEHICLE OPERATION (CONT)

c. Operating Vehicle Lights.



(1) Operate Instrument Panel Lights.

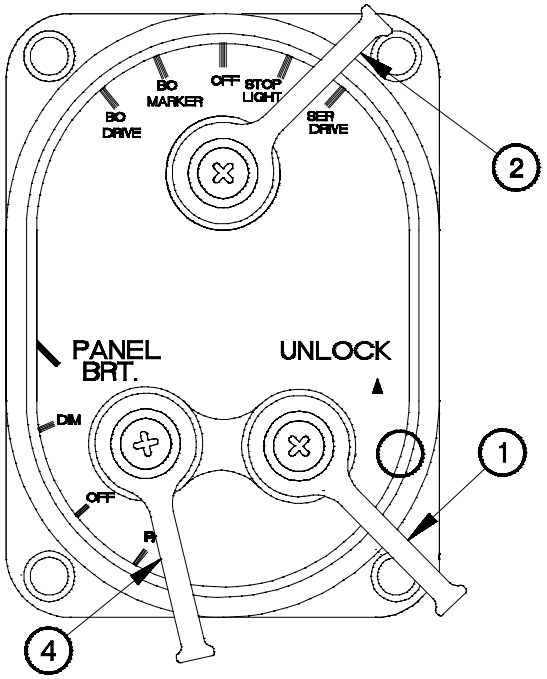
(a) Lift up and hold UNLOCK lever (1).

(b) Set main selector lever (2) to any position except OFF.

(c) Release UNLOCK lever (1).

(d) Turn dimmer switch (3) left to increase brightness or right to decrease brightness.

(e) Set main selector lever (2) to OFF.



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(2) Operate Parking Lights.

(a) Lift up and hold UNLOCK lever (1).

(b) Set main selector lever (2) to SER DRIVE.

(c) Set auxiliary lever (4) to PARK.

(d) Release UNLOCK lever (1).

(e) Set auxiliary lever (4) to OFF to shut off only parking lights.

(f) Set main selector lever (2) to OFF. All vehicle lights will go off.

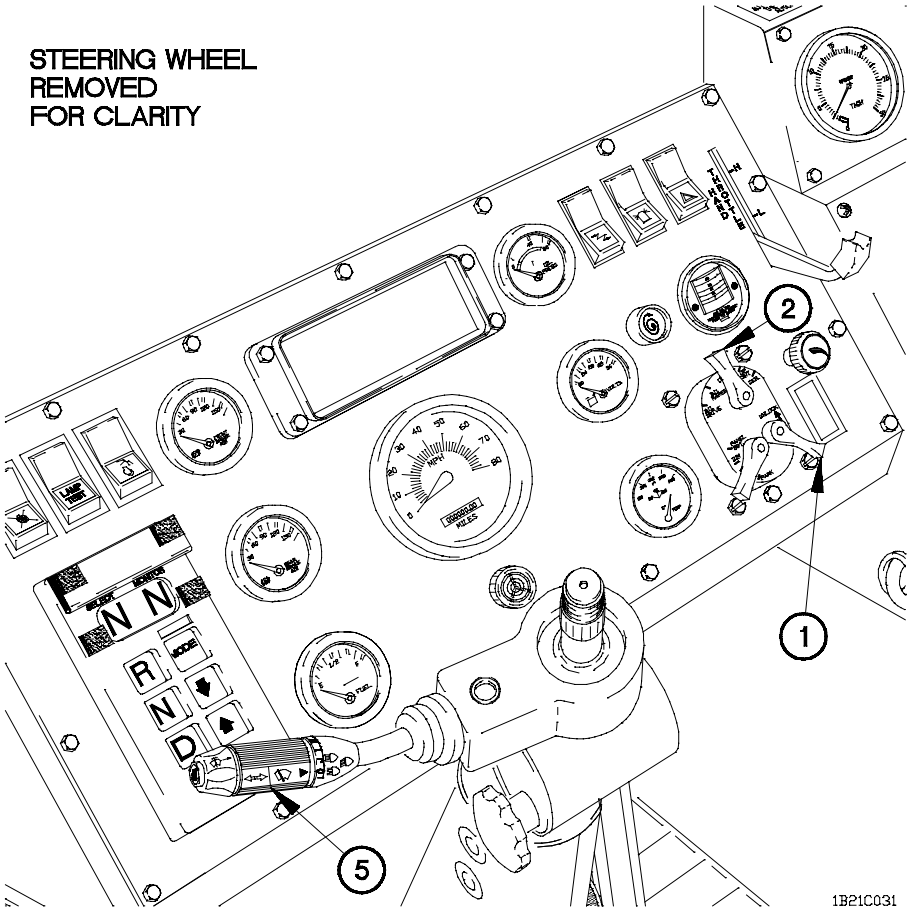
(3) Operate Service Drive and Back-Up Lights.

(a) Lift up and hold UNLOCK lever (1).

(b) Set main selector lever (2) to SER DRIVE.

(c) Release UNLOCK lever (1).

2-21. VEHICLE OPERATION (CONT)



(3) Operate Service Drive Lights (Cont).

(d) Pull headlight dimmer control (5) to operate headlights at high beam or low beam.

(e) Set main selector lever (2) to OFF.

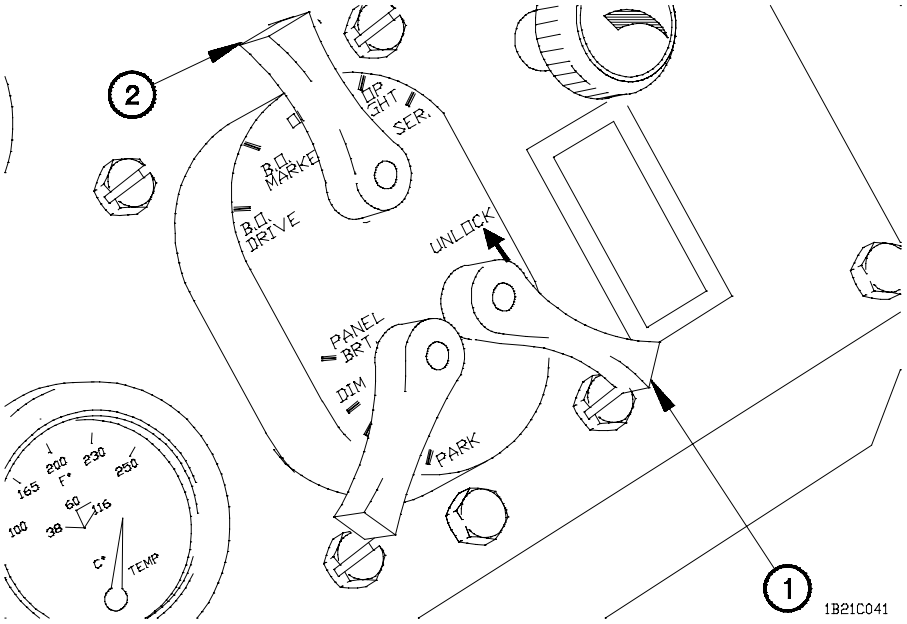
(4) Operate Stoplights.

(a) Lift up and hold UNLOCK lever (1).

(b) Set main selector lever (2) to STOP LIGHT.

(c) Release UNLOCK lever (1).

(d) Set main selector lever (2) to OFF.



WARNING

Vehicle speed should be reduced to 5-10 mph (8-16 km/h) during blackout conditions. Failure to comply may result in serious injury or death to personnel.

(5) Operate Blackout Drive Lights.

(a) Lift up and hold UNLOCK lever (1).

(b) Set main selector lever (2) to BO DRIVE.

(c) Release UNLOCK lever (1).

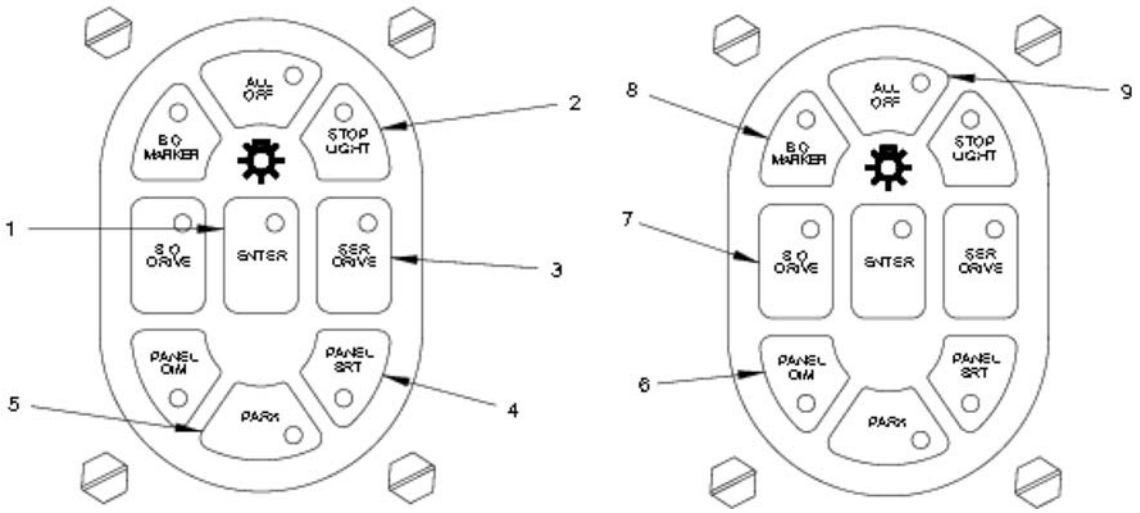
(d) Set main selector lever (2) to OFF.

(6) Operate Blackout Marker Lights.

(a) Set main selector lever (2) to BO MARKER.

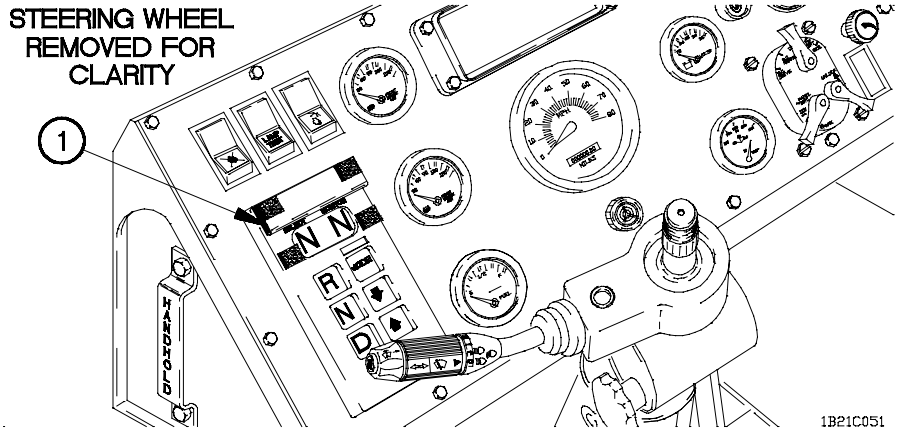
(b) Set main selector lever (2) to OFF.

Push-Button Style Light Switch Operation



Key	Control/Indicator	Function
1	ENTER key	**NOTE** If there are no blue indicator lights illuminated on the keypad, then no external vehicle lights are turned on. Amber back light is for keypad illumination only. Touch any key on keypad to illuminate main light switch before making a selection. Enters desired function after selection has been made. If ENTER key is not pressed within 5 seconds after selection has been made, switch will reset to previous mode. This prevents accidental switching.
2	STOP LIGHT key	When selected, stoplights will operate when brake pedal is pressed.
3	SER DRIVE key	When selected, all service drive lights will operate.
4	PANEL BRT key	When selected, illuminates all dashboard switches and gages.
5	PARK key	When selected, parking lights will illuminate.
6	PANEL DIM key	When selected, turns off all dashboard illuminations.
7	B.O. DRIVE key	When selected, all blackout lights operate.
8	B.O. MARKER key	When selected, blackout marker lights illuminate.
9	ALL OFF key	When selected, turns off all main light switches.

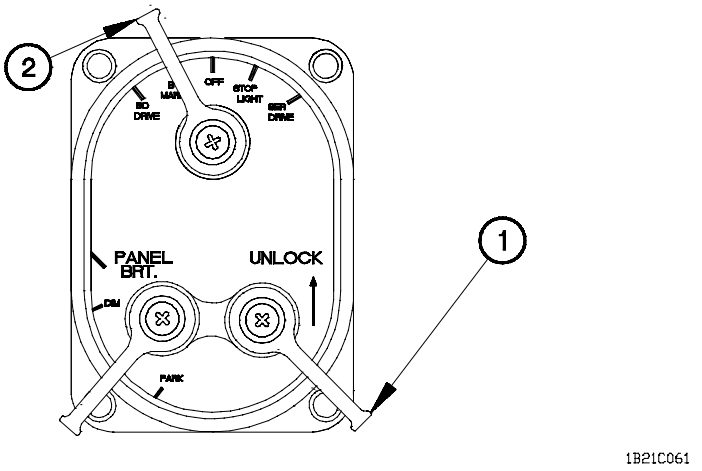
2-21. VEHICLE OPERATION (CONT)



(7) Operate WTEC II TEPSS Blackout Filter cover.

(a) Lift blackout filter cover (1) from upper velcro.

(b) Lower blackout filter cover (1) and attach to lower velcro.



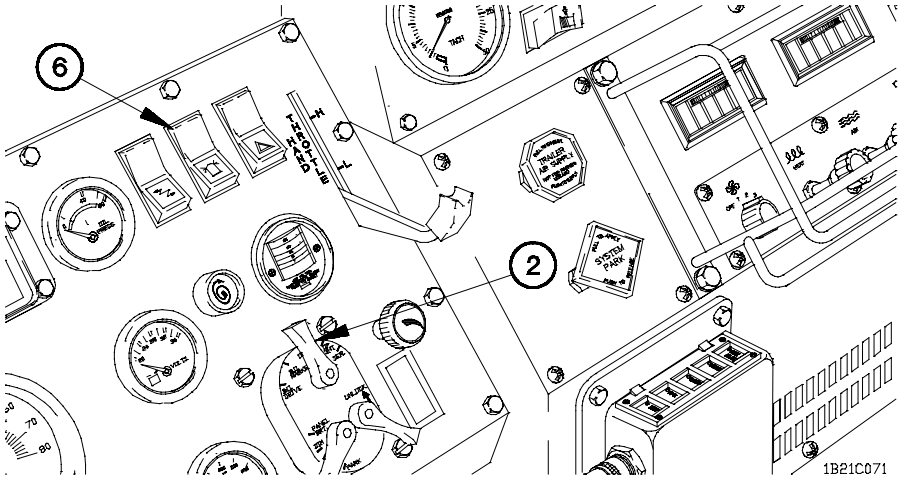
(8) Operate Warning Light.

(a) Install amber warning light (para 2-61a).

(b) Lift up and hold UNLOCK lever (1).

(c) Set main selector lever (2) to SER DRIVE or STOP LIGHT.

(d) Release UNLOCK lever (1).

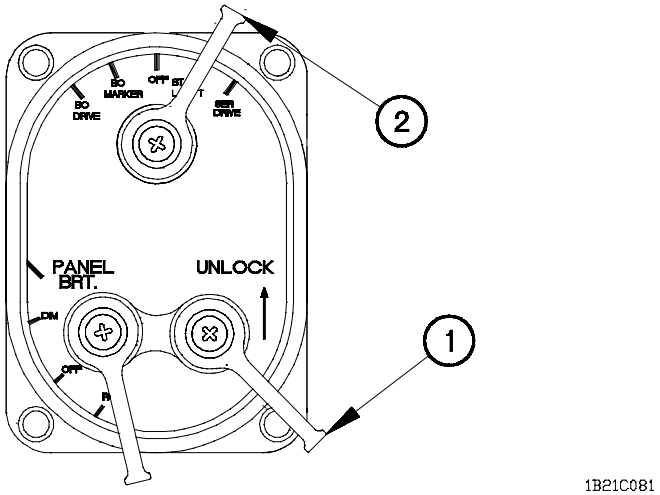


(8) Operate Warning Light (Cont).

(e) Position warning light switch (6) to on.

(f) Position warning light switch (6) to off.

(g) Set main selector lever (2) to OFF.



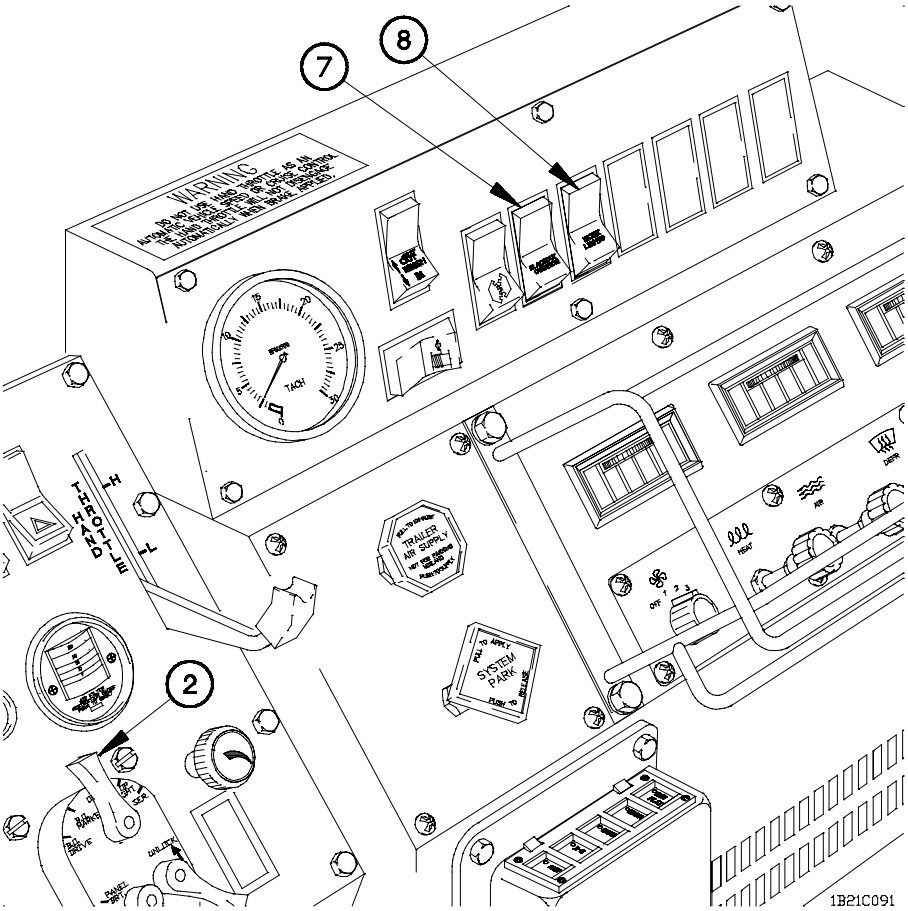
(9) Operate Work Lights.

(a) Lift up and hold UNLOCK lever (1).

(b) Set main selector lever (2) to any position except OFF.

(c) Release UNLOCK lever (1).

2-21. VEHICLE OPERATION (CONT)



NOTE

Perform step (9d) only if main selector lever is positioned to BO DRIVE or BO MARKER.

(9) Operate Work Lights (Cont).

(d) Position BLACKOUT OVERRIDE switch (7) to on.

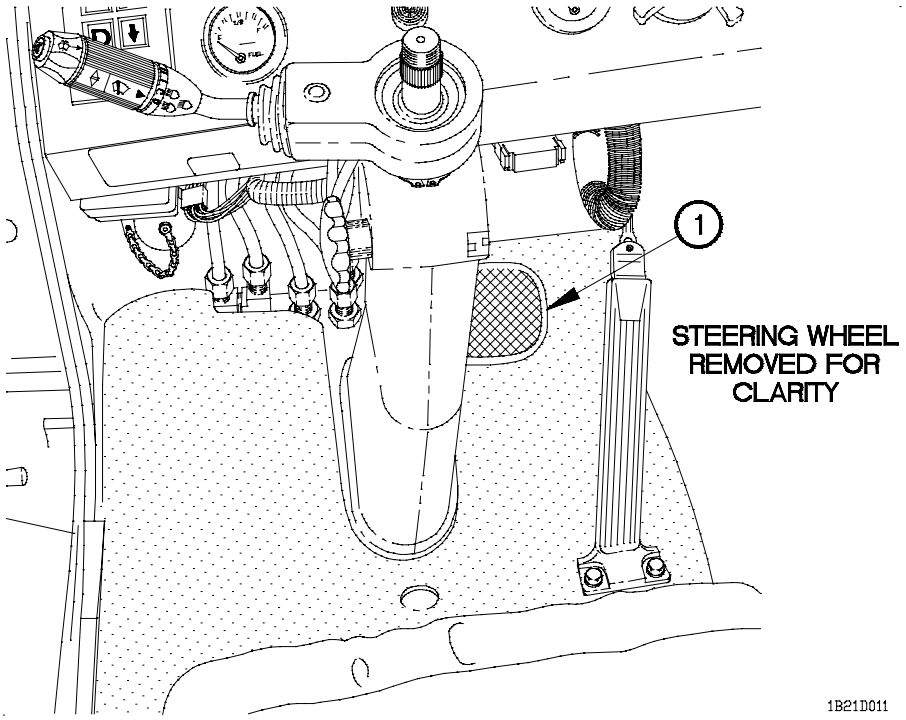
(e) Position work lights switch (8) to on.

(f) Position work lights switch (8) to off.

(g) Position BLACKOUT OVERRIDE switch (7) to off.

(h) Set main selector lever (2) to OFF.

d. Operate Service Brakes.



WARNING

- **Operating in water or mud causes brake linings to get wet and can impair vehicle braking. Dry brakes by driving vehicle about 500 ft (150 m) while applying service brakes often. If adequate braking is not restored by drying brakes, notify Unit Maintenance. Failure to comply may result in injury to personnel or damage to equipment.**

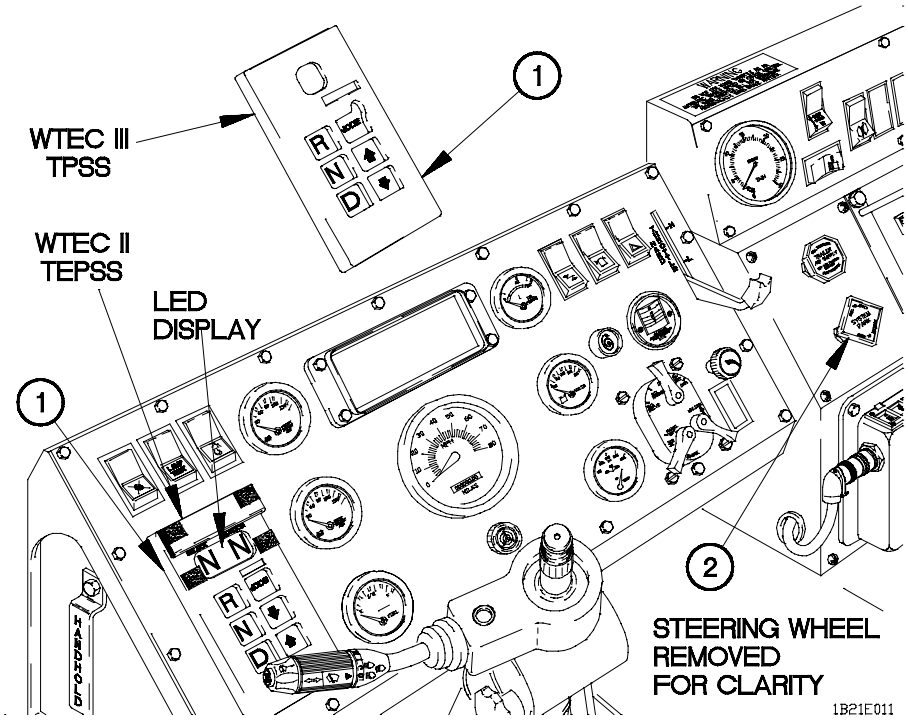
- **Do not press brake pedal hard three or four times in a row. Air supply will be used up and service brakes will not work until air pressure builds up again. Do not operate vehicle until FRONT and REAR BRAKE AIR pressure reaches at least 100 psi (690 kPa). Failure to comply may result in serious injury or death to personnel or damage to equipment.**

Push down and hold brake pedal (1) to slow or stop vehicle.

e. Selecting Transmission Operating Range.

(1) Start engine (para 2-21a or b).

2-21. VEHICLE OPERATION (CONT)



CAUTION

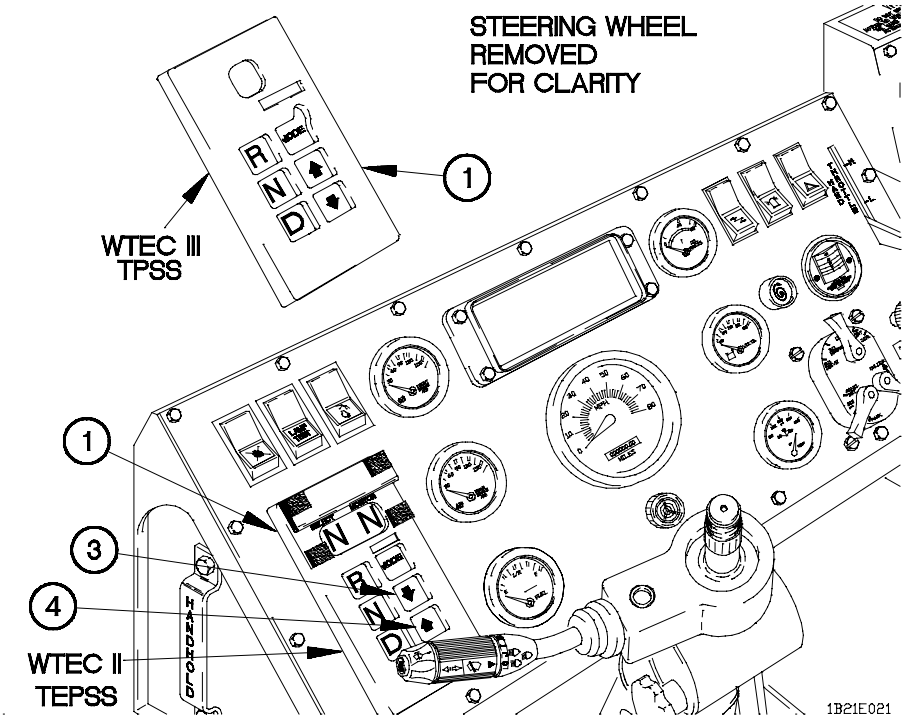
- Engine rpm must be at idle (750 rpm) prior to selecting any forward or reverse gear. Failure to comply may result in damage to equipment.
- Do not allow vehicle to coast in N (Neutral). Failure to comply may result in damage to equipment.

NOTE

When transmission is operating normally, left side of LED display will indicate selected gear and right side of LED display will indicate current operating gear.

(2) Select desired travel direction (D for Drive or R for Reverse) on WTEC II TEPSS (1) or WTEC III TPSS (1).

(3) Push in SYSTEM PARK control (2).



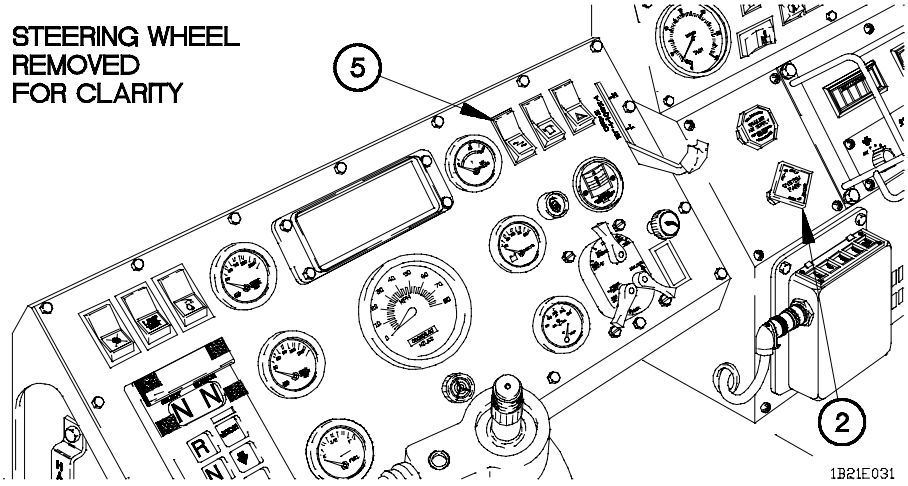
WARNING

Transmission incorporates a hold feature to prohibit upshifting above selected gear during normal driving. However, during downhill operation, transmission may upshift above selected gear. On downgrades, vehicle speed may need to be restricted by using service brakes. Failure to comply may result in serious injury or death to personnel or damage to equipment.

(4) Press down arrow button (3) on WTEC II TEPSS (1) or WTEC III TPSS (1) to shift transmission to lower gear.

(5) Press up arrow button (4) on WTEC II TEPSS (1) or WTEC III TPSS (1) to shift transmission to higher gear.

2-21. VEHICLE OPERATION (CONT)



CAUTION

If illumination of last selected gear (in left side of LED display) goes out, WTEC II TEPSS or WTEC III TPSS has detected a problem that needs correcting. Do not attempt to shift transmission to N (Neutral) or any other gear. Operate vehicle at reduced speed to a safe parking location. Failure to comply may result in damage to equipment.

NOTE

Perform steps (6) through (9) if left side of LED display is not showing a selected gear.

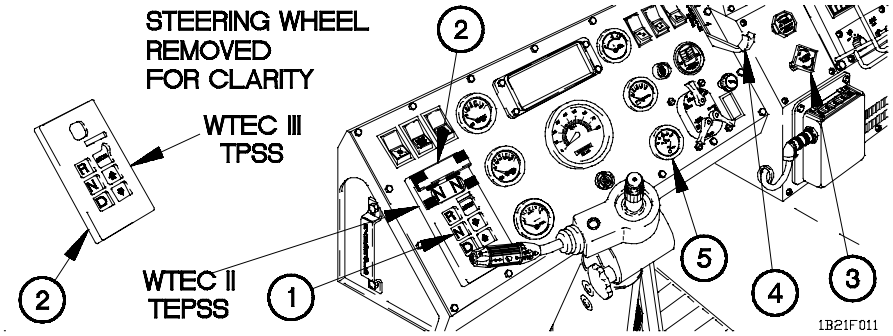
(6) Stop vehicle (para 2-21d).

(7) Position master power switch (5) to off.

(8) Pull out SYSTEM PARK control (2).

(9) Notify Unit Maintenance.

f. Shut Down Engine.



(1) Stop vehicle (para 2-21d).

(2) Press N (Neutral) button (1) on WTEC II TEPSS (2) or WTEC III TPSS (2).

(3) Pull out SYSTEM PARK control (3).

CAUTION

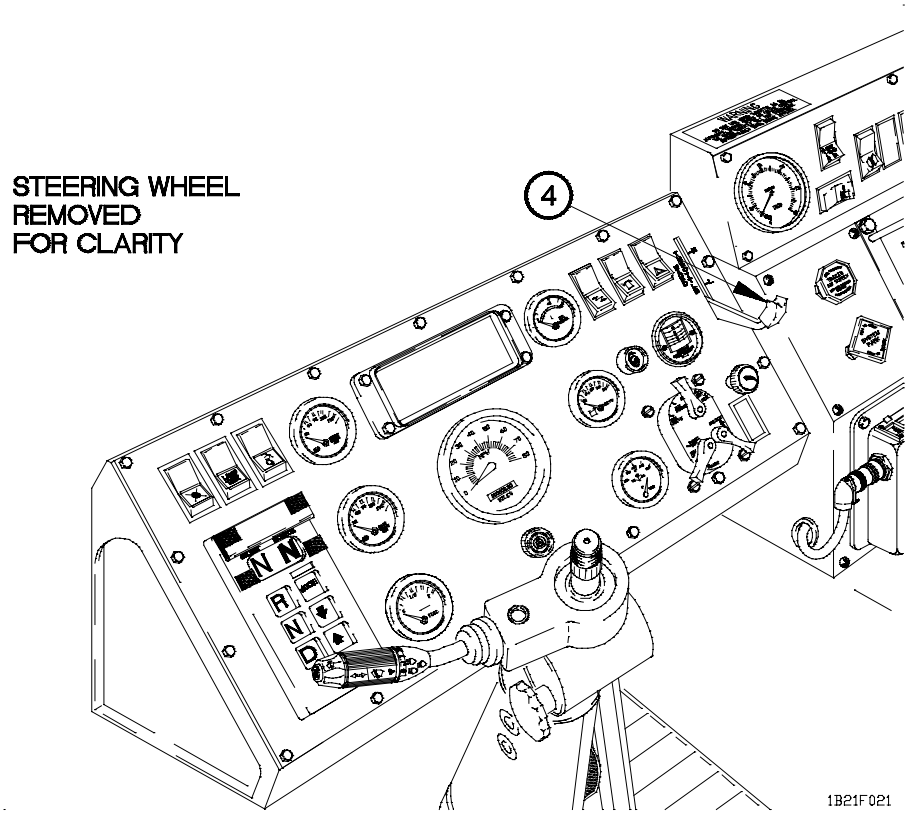
- Engine temperature must be maintained at a minimum of 165° F (74° C) for final 15 minutes prior to engine shutdown. Failure to comply may result in damage to engine.
- When outside temperatures are below 32° F (0° C) do not continuously operate engine above 1,250 to 1,450 rpm or HAND THROTTLE lever above L. Failure to comply may result in damage to equipment.

NOTE

- Steps (4) through (6) are only necessary to meet 165° F (74° C) requirements.
- Perform step (4) if it is necessary to increase WATER TEMP to 165° F (74° C) and it can be accomplished using accelerator pedal or HAND THROTTLE lever, within approximately 20 minutes.
- In the event of a tachometer failure a HAND THROTTLE lever positioned to L is approximately 1,250 to 1,450 rpm.

(4) Set engine speed to 1,250 to 1,450 rpm or place HAND THROTTLE lever (4) to L until WATER TEMP gage (5) reaches and maintains 165° F (74° C) for 15 minutes.

2-21. VEHICLE OPERATION (CONT)



(5) Set engine speed to idle (750 rpm) or decrease HAND THROTTLE lever (4) to full down position.

NOTE

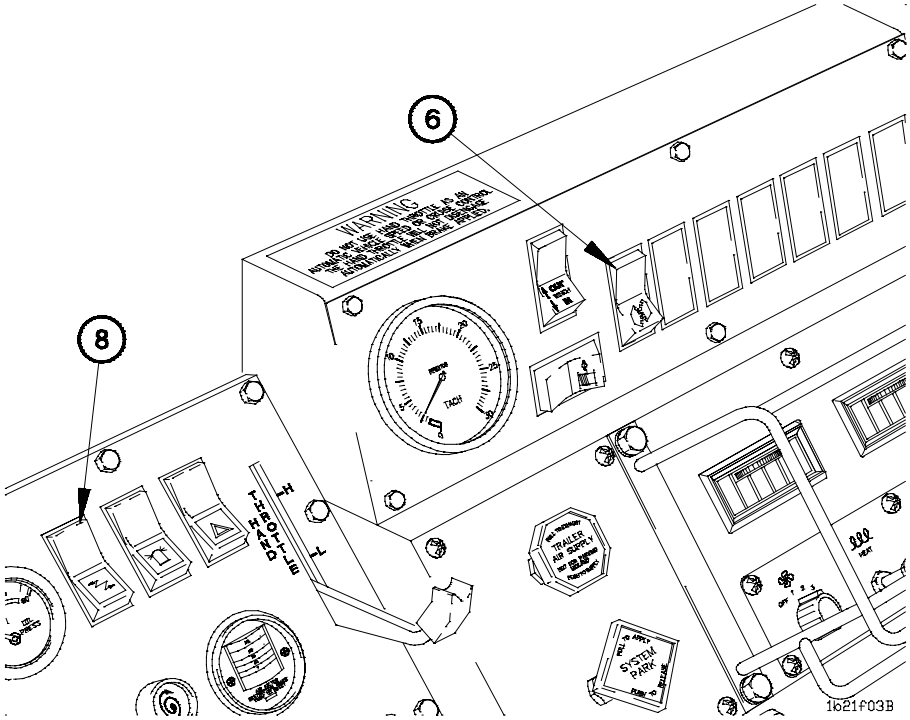
Perform step (6) only when it is difficult to achieve normal operating temperature of 165° F (74° C) due to extreme low outside temperatures.

(6) Perform Rapid Engine Warm-Up (para 2-59) to reach and maintain 165° F (74° C) for 15 minutes.

CAUTION

A coast down time of one to three minutes is required for turbocharger before engine can be shut down. Failure to comply may result in damage to equipment.

(7) Run engine at idle (750 rpm) for one to three minutes.



NOTE

Perform step (8) only if vehicle is equipped with PTO.

(8) Position PTO switch (6) to off (if PTO is engaged).

(9) Turn off lights and electrical accessories (para 2-21c).

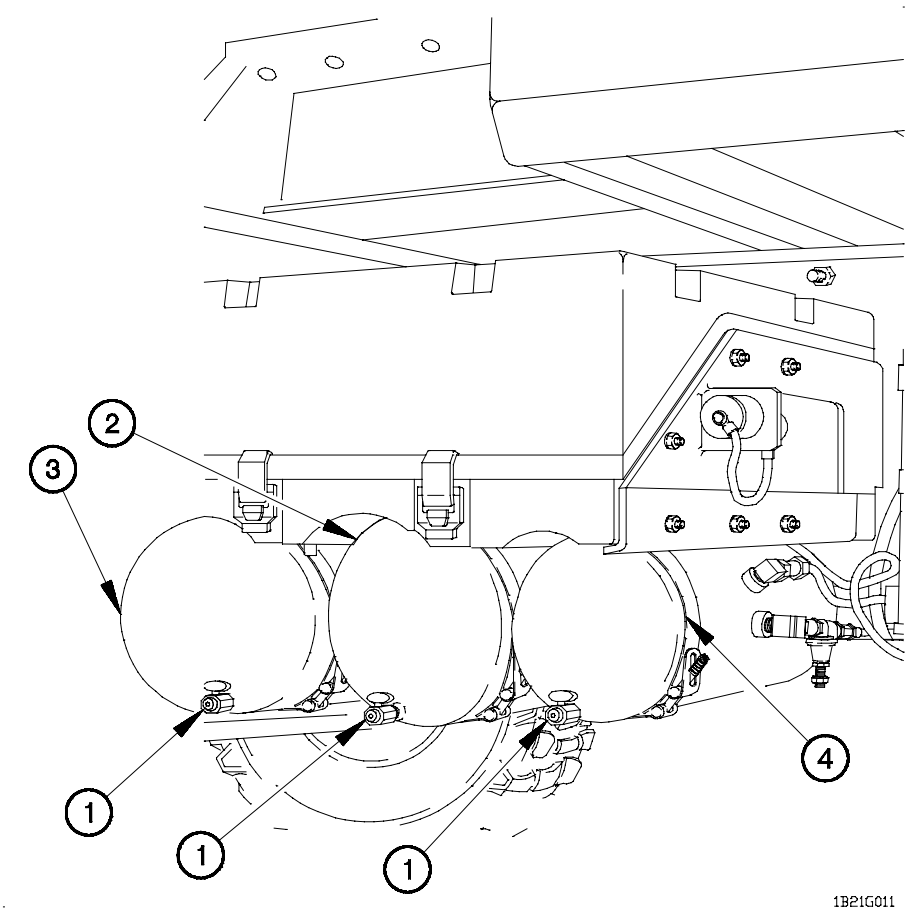
(10) Deleted.

(11) Position master power switch (8) to off.

(12) Chock wheels (para 2-21h).

2-21. VEHICLE OPERATION (CONT)

g. Draining Air Tanks.



NOTE

When vehicle will not be operated for 12 hours or more or when operating in temperatures below 50° F (10° C), air tanks should be drained.

(1) Open drain valves (1) on primary air tank (2), secondary air tank (3), and wet tank (4) until air cannot be heard escaping.

(2) Close drain valves (1) on primary air tank (2), secondary air tank (3), and wet tank (4).

2-4. STEERING COLUMN CONTROLS

Figure 2-10 shows all controls on the steering column.

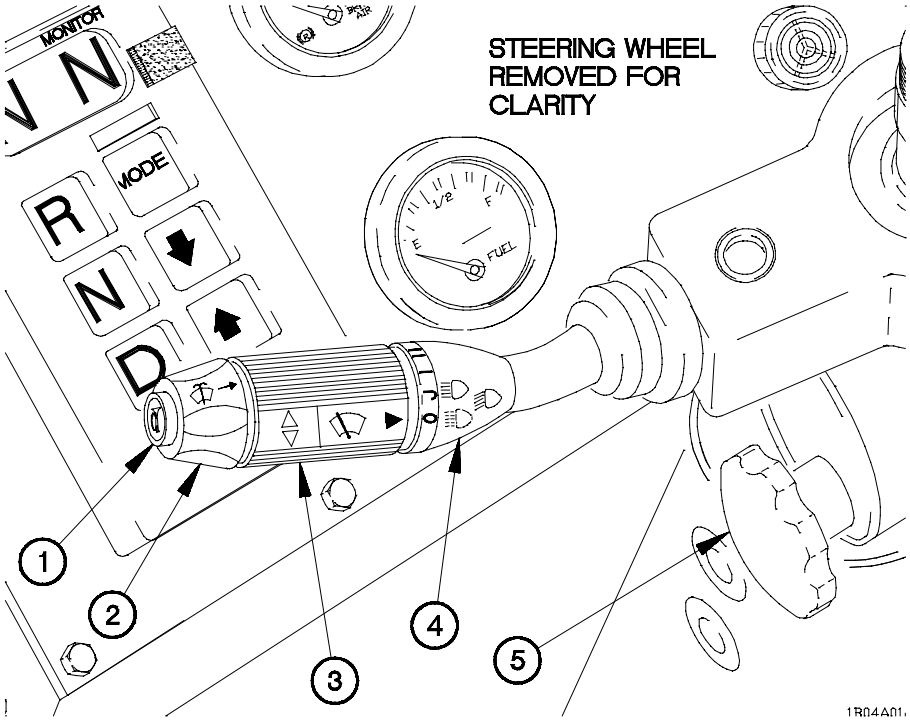


Figure 2-10. Steering Column Controls

1. **Horn Button.** Sounds horn when pressed.

2. **Windshield Washer Switch.** Activates windshield washer when pushed in.

3. **Windshield Wiper Switch.** Four-position switch used to operate and control the speed of the windshield wipers. Windshield wipers operate intermittently when switch is placed in the 'J' position. Windshield wipers operate at low or high speed when switch is placed in the 'I' or 'II' position.

4. **Turn Signal/Headlight Dimmer Control.** Operates turn signals and controls headlight dimming. Right turn signal indicator will flash when control is pushed up. Left turn signal indicator will flash when control is pushed down. Headlight dimming is controlled by pulling the control toward the Operator. High beam headlight indicator lights when high beam headlights are on.

5. **Steering Wheel Tilt/Telescope Control.** Adjusts angle and height of steering wheel.

2-5. FLOOR-MOUNTED CONTROLS

Figure 2-11 shows all floor-mounted controls.

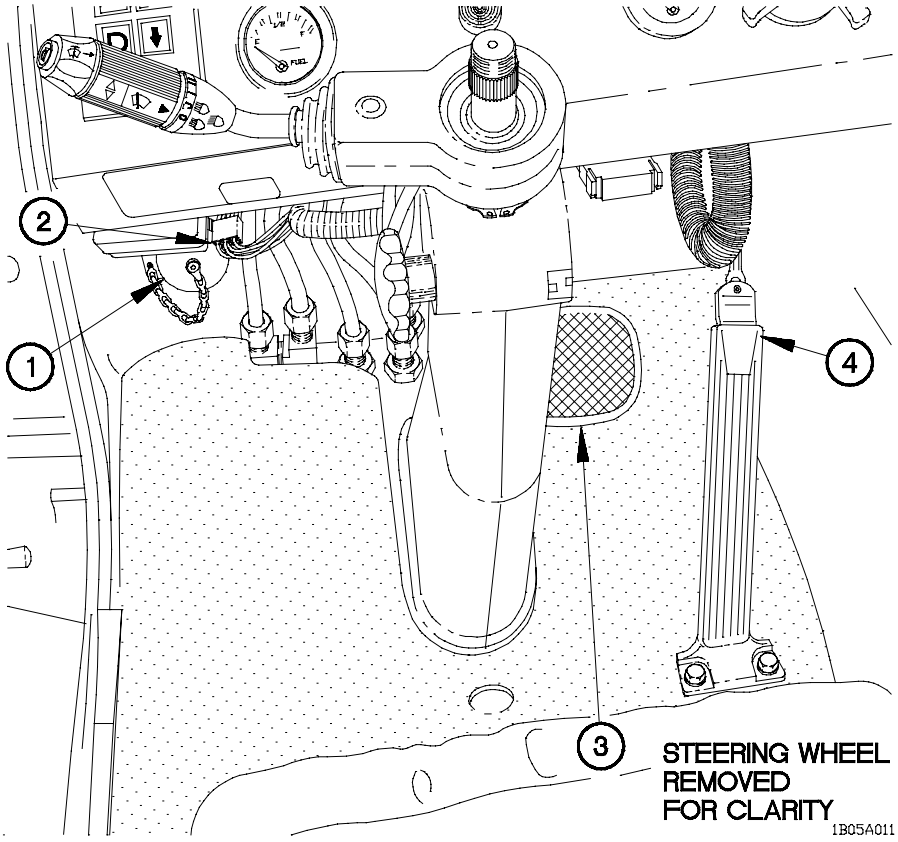


Figure 2-11. Floor-Mounted Controls

1. **STE/ICE-R Receptacle.** Connects Simplified Test Equipment/Internal Combustion Engine-Reprogrammable (STE/ICE-R).

2. **STE/ICE-R Zero Offset Switch.** Resets STE/ICE-R instrument connected to STE/ICE-R receptacle to zero.

3. **Brake Pedal.** Applies service brakes when pressed. Also applies trailer service brakes when the vehicle is coupled to a trailer and TRAILER AIR SUPPLY control is pushed in.

4. **Accelerator Pedal.** Controls engine speed.

2-6. DOOR-MOUNTED CONTROLS

Figure 2-12 shows all door-mounted controls.

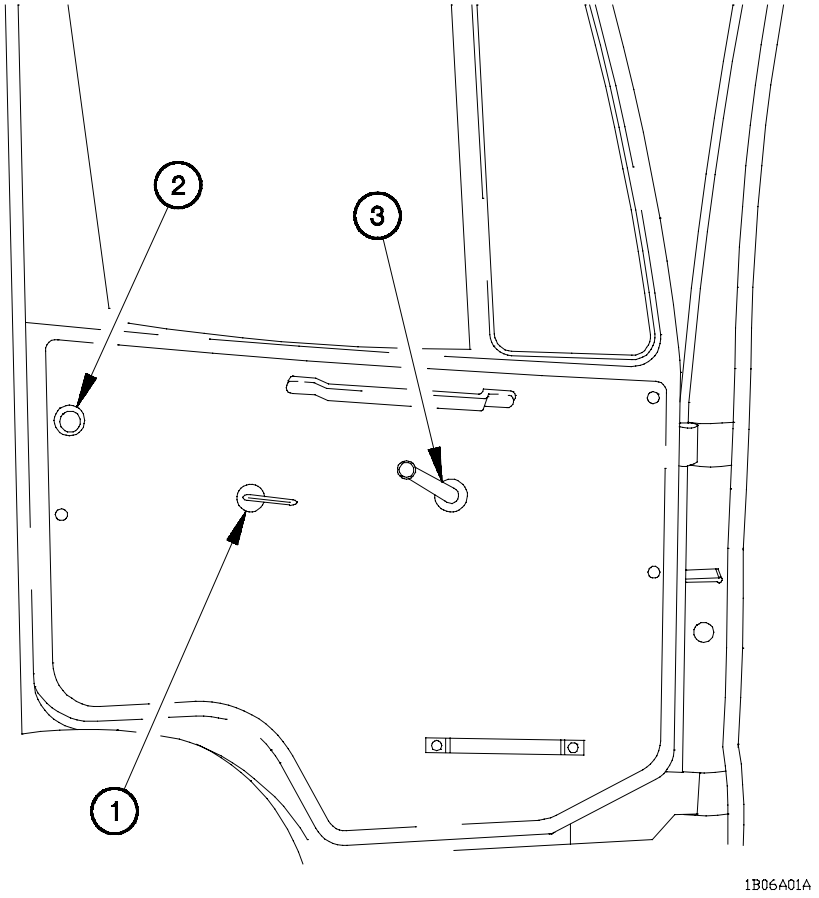


Figure 2-12. Door-Mounted Controls

1. **Cab Door Latch.** Opens cab door from inside or outside of vehicle when pulled.

2. **Cab Door Lock.** Locks door so that it cannot be opened from the inside or outside of the vehicle.

3. **Cab Door Window Glass Regulator.** Raises and lowers window glass when handle is turned.

2-7. SEAT CONTROLS

a. Driver's Seat Controls. Figure 2-13 shows all controls on the driver's seat.

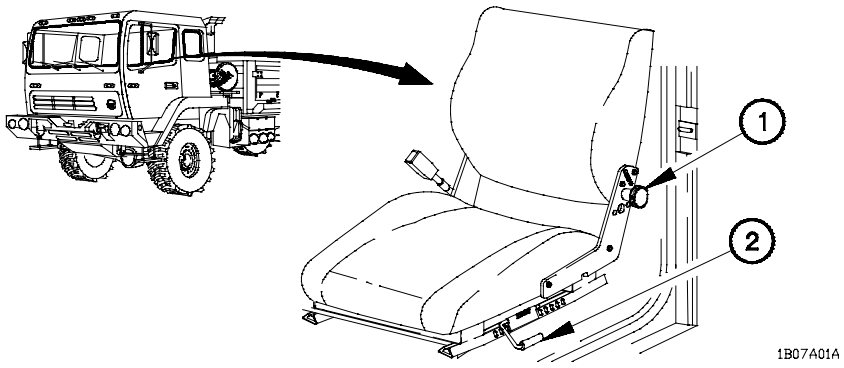


Figure 2-13. Driver's Seat Controls

1. **Seat Back Release Knob.** Allows the seat back to fold forward to allow access to stowage area behind seat.

2. **Forward/Backward Adjustment Control.** Pulling outward (towards door) allows the seat to be moved forward or backward.

b. Right Passenger Seat Control. Figure 2-14 shows the control on the right passenger seat.

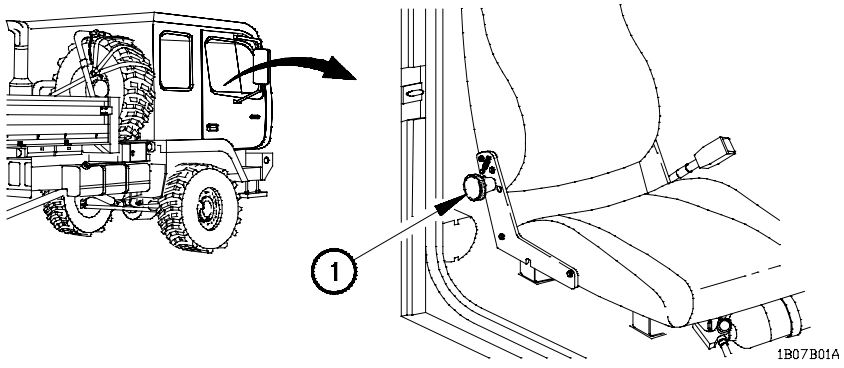


Figure 2-14. Right Passenger Seat Controls

1. **Seat Back Release Knob.** Allows the seat back to fold forward to allow access to stowage area behind seat.

2-8. EXTERIOR CONTROLS AND INDICATORS

a. Passenger Side Exterior Controls and Indicators. Figure 2-15 shows all controls on the exterior passenger side of the vehicle.

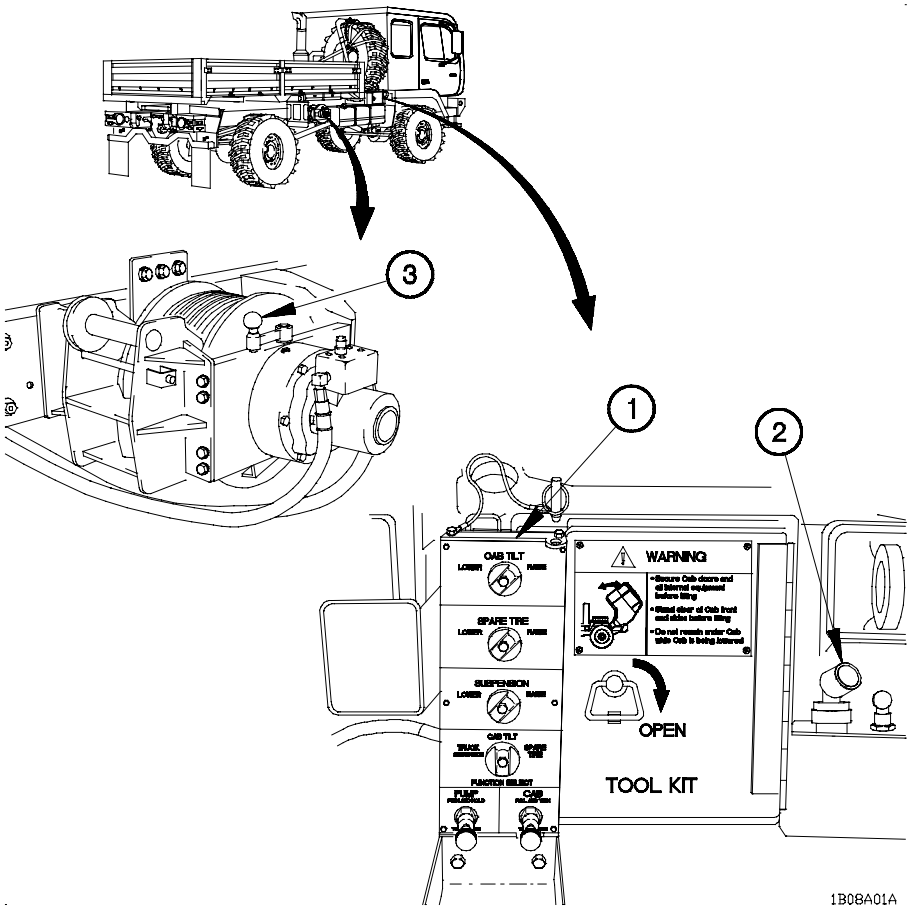


Figure 2-15. Passenger Side Exterior Controls

1. **Hydraulic Manifold.** Used to raise and lower the cab and spare tire, and to compress the suspension for internal air transport. Figure 2-16 shows all controls on hydraulic manifold.

2. **Back-up Pump.** Hydraulic hand pump that provides backup power in case of failure to the hydraulic manifold.

3. **Winch Clutch Control Lever (Models with 11K Self-Recovery Winch [SRW]).** Engages and disengages 11K SRW clutch. When disengaged, winch drum will spool freely and cable can be payed out by hand. When engaged, winch operation is controlled from the WINCH IN/OUT switch inside cab.

2-8. EXTERIOR CONTROLS AND INDICATORS

b. Hydraulic Manifold Controls. Figure 2-16 shows all controls on the hydraulic manifold.

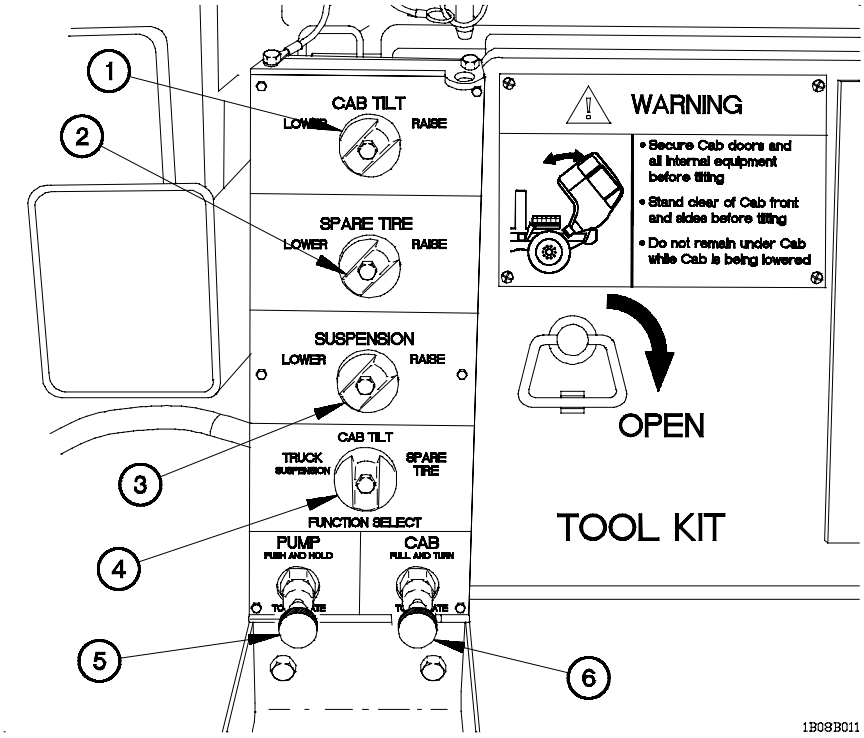


Figure 2-16. Hydraulic Manifold Controls

1. **CAB TILT Knob.** Allows operator to raise or lower cab.

2. **SPARE TIRE Knob.** Allows operator to raise or lower spare tire.

3. **SUSPENSION Knob.** Allows operator to raise or lower suspension.

4. **FUNCTION SELECT Knob.** Allows operator to determine which component will receive hydraulic pressure.

5. **PUMP Knob.** Pushing in and holding PUMP knob will activate selected system; SUSPENSION, CAB TILT, or SPARE TIRE. Works with FUNCTION SELECT Knob.

6. **CAB Knob.** Turn knob to the left and pull out to deflate cab air springs. Press and turn knob to the right to inflate cab air springs.

c. Driver's Side Exterior Controls and Indicators. Figure 2-17 shows all controls and indicators on the exterior driver's side of the vehicle.

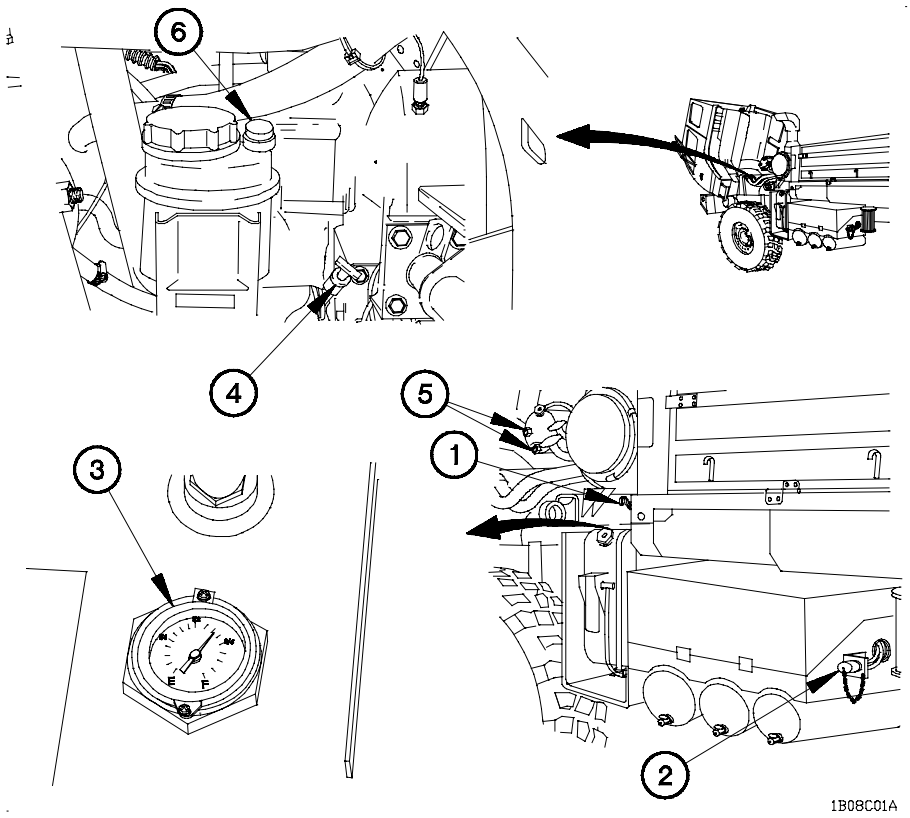


Figure 2-17. Driver's Side Exterior Controls and Indicators

1. **XMSN (Transmission) DIPSTICK.** Indicates oil level in the transmission.

2. **NATO Receptacle.** Receptacle used for starting the vehicle using external power.

3. **Hydraulic Reservoir Gage (Models equipped with 11K Self-Recovery Winch [SRW]).** Indicates oil level in the hydraulic reservoir.

4. **Engine Oil Dipstick.** Indicates oil level in the engine.

5. **Radiator Overflow Tank Sight Glasses.** Top sight glass indicates safe coolant level with the engine not running.

6. **Power Steering Dipstick.** Indicates oil level in the power steering reservoir.

2-3. CENTER CONSOLE CONTROLS AND INDICATORS (CONT)

c. CTIS Electronic Control Unit (ECU). Figure 2-9 shows all CTIS controls and indicators on the center console.

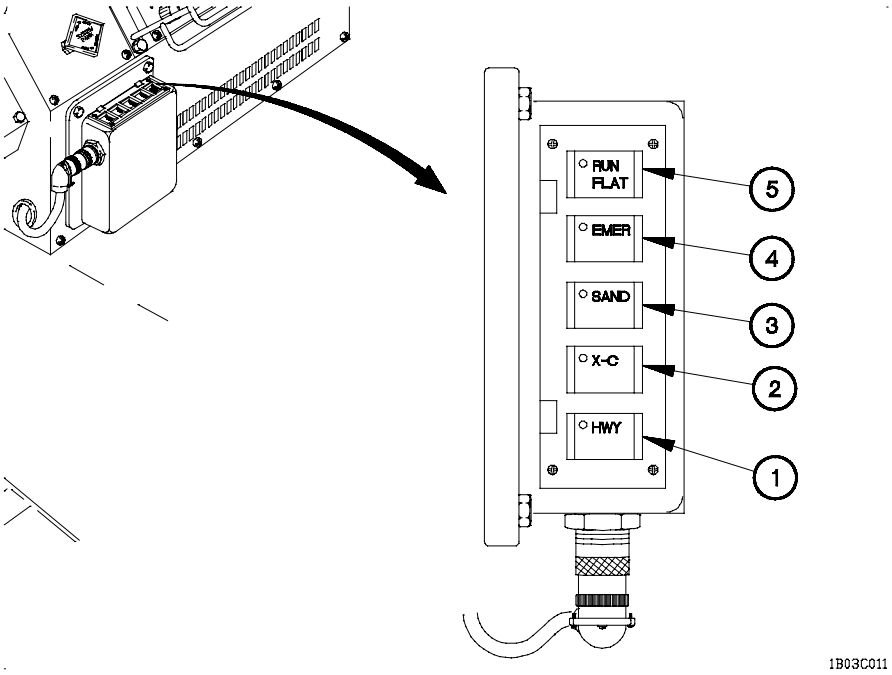


Figure 2-9. Central Tire Inflation System (CTIS) Electronic Control Unit (ECU) Controls and Indicators

1. **HWY (Highway) Mode Button and Indicator.** Pressed to set CTIS in highway mode. Indicator illuminates steady when tire pressure is 55 psi (379 kPa). Maximum speed is 55 mph (88 km/h) in HWY mode.

2. **X-C (Cross-Country) Mode Button and Indicator.** Pressed to set CTIS in cross-country mode. Indicator illuminates steady when tire pressure is 33 psi (228 kPa). Maximum speed is 40 mph (64 km/h) in X-C mode.

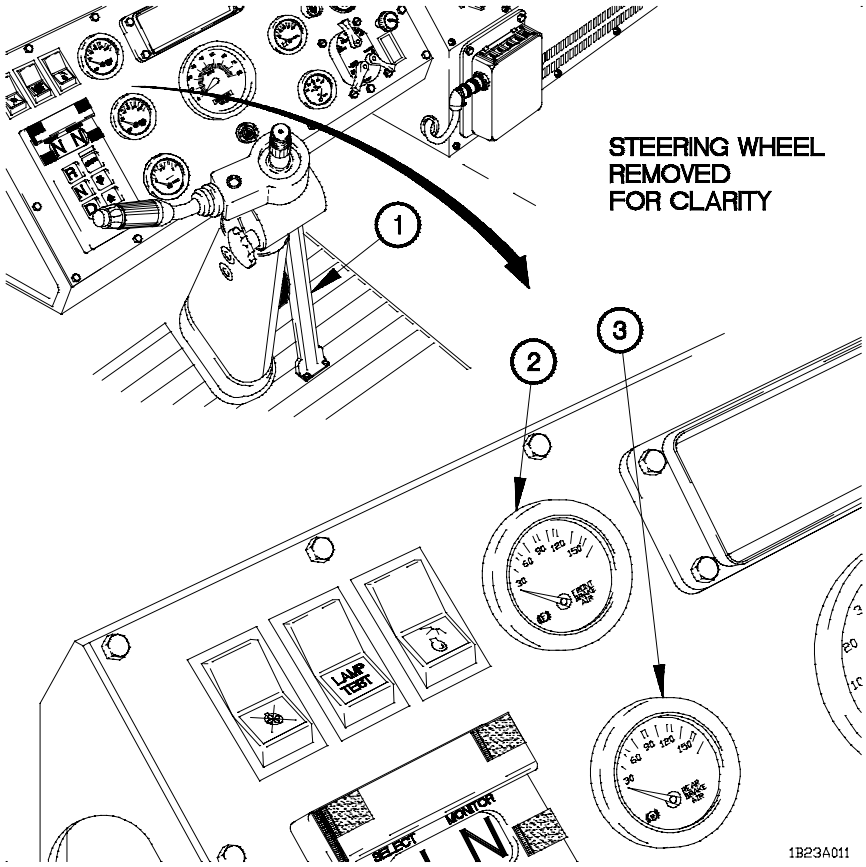
3. **SAND (Soft Terrain) Mode Button and Indicator.** Pressed to set CTIS in soft terrain mode. Indicator illuminates steady when tire pressure is 20 psi (138 kPa). Maximum speed is 12 mph (19 km/h) in SAND mode.

4. **EMER (Emergency) Mode Button and Indicator.** Pressed to set CTIS in emergency mode. Indicator illuminates steady when tire pressure is 14 psi (97 kPa). Maximum speed is 5 mph (8 km/h) in EMER mode.

5. **RUN FLAT Mode Button and Indicator.** Mode used to maintain tire air pressure in the event of a leak.

2-23. CENTRAL TIRE INFLATION SYSTEM (CTIS) OPERATION

a. Normal CTIS Operation.

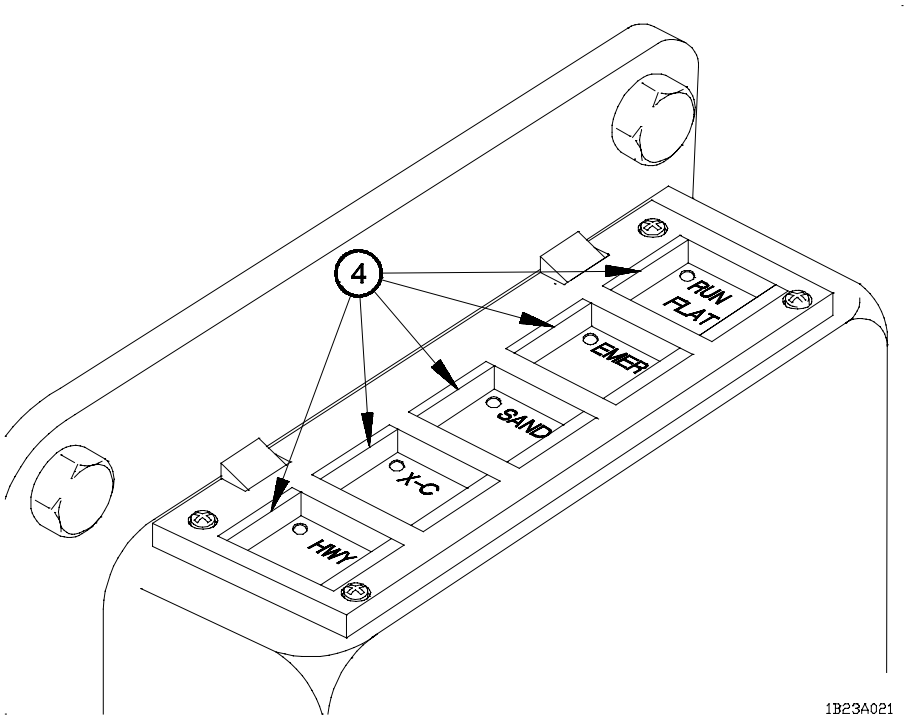


(1) Start engine (para 2-21a or b).

NOTE

- If vehicle is stopped when CTIS mode is changed, it may be necessary to increase engine speed to provide adequate air supply to tires.
- CTIS will automatically shut off when air system pressure drops below 74 psi (510 Kpa), or when CTIS malfunction occurs.

(2) Slowly press down on accelerator pedal (1) if FRONT BRAKE AIR pressure gage (2) and REAR BRAKE AIR pressure gage (3) read less than 100 psi (690 kPa).



NOTE

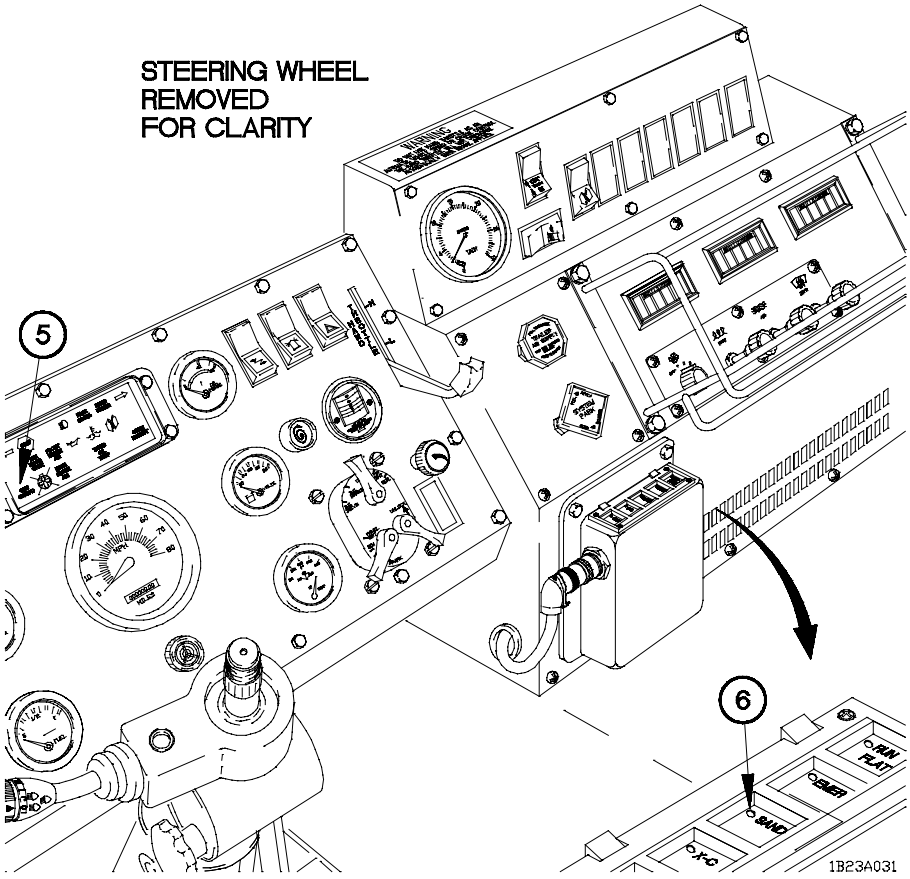
Mode light on CTIS ECU will flash when tire pressure is changing to air pressure setting for that mode. Mode light will illuminate steady when tire reaches air pressure setting for that mode.

(3) Press appropriate CTIS mode button (4) for vehicle speed and terrain conditions (Refer to Table 2-5. Central Tire Inflation System (CTIS) Tire Pressures and Restrictions).

Table 2-5. Central Tire Inflation System (CTIS) Tire Pressures and Restrictions

Operating Mode	Maximum Speed	Time Restriction	Tire Pressure
Highway	55 mph (88 km/h)	NONE	55 psi (379 kPa)
Cross-Country	40 mph (64 km/h)	NONE	33 psi (228 kPa)
Sand	12 mph (19 km/h)	NONE	20 psi (138 kPa)
Emergency	5 mph (8 km/h)	10 MINUTES	14 psi (97 kPa)

2-23. CENTRAL TIRE INFLATION SYSTEM (CTIS) OPERATION (CONT)

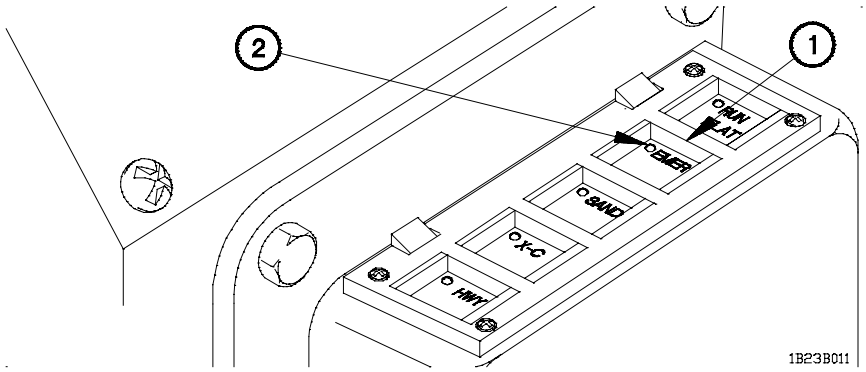


NOTE

If average speed of vehicle exceeds speed limit of selected CTIS mode for one minute, CTIS OVRSPD indicator will flash. If average speed of vehicle exceeds speed limit of selected CTIS mode for two minutes, CTIS will automatically inflate tires to pressure setting of next higher mode.

(4) If CTIS OVRSPD indicator (5) flashes, reduce vehicle speed until CTIS OVRSPD indicator goes out. Check that CTIS mode light (6) illuminates steady. Steady illumination of CTIS mode light indicates vehicle speed is correct for CTIS mode selected.

b. Operate in Emergency (EMER) Mode.



CAUTION

- Do not exceed 5 mph (8 km/h) when CTIS is operating in EMER mode. Operating vehicle in EMER mode is limited to ten minutes. Failure to comply may result in damage to equipment.
- Continued operation in EMER mode will result in eventual reduction in tire life. Failure to comply may result in damage to equipment.

NOTE

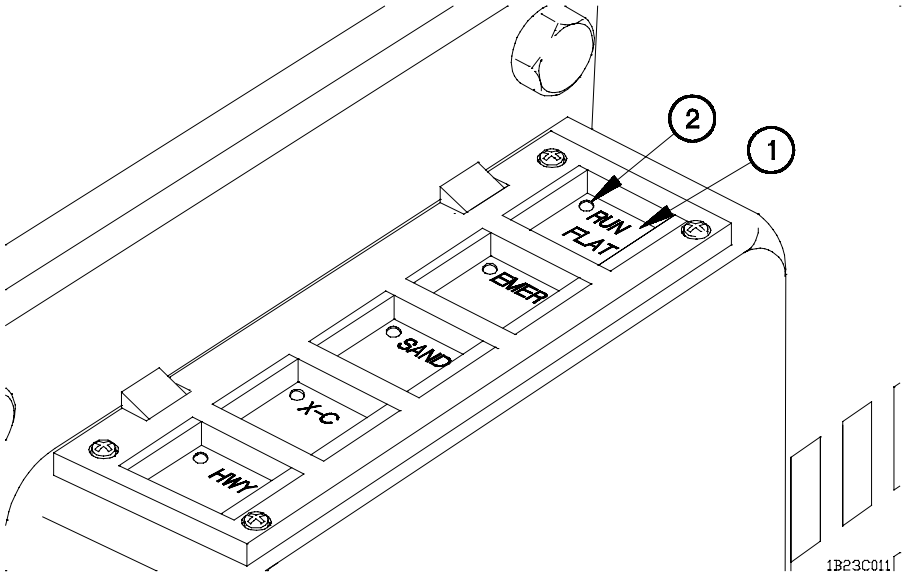
- CTIS OVRSPD indicator will flash when in EMER mode, regardless of speed.
- CTIS is operated in EMER mode when a lower tire pressure (14 psi) (97 kPa) is needed to free vehicle from a stuck condition or to travel a short distance over terrain that is known to require tire pressure less than 25 psi (172 kPa). Time at this pressure is limited to ten minutes after which time inflation to SAND will begin. If Operator still requires EMER mode, then EMER mode button must be pressed again.

(1) Press EMER mode button (1). EMER mode light (2) will illuminate while CTIS is operating in EMER mode.

(2) If operating CTIS in EMER mode is no longer required, press EMER mode button (1) again. EMER mode light (2) will go out.

2-23. CENTRAL TIRE INFLATION SYSTEM (CTIS) OPERATION (CONT)

c. Operate in Run Flat Mode.



CAUTION

CTIS operation in RUN FLAT mode is limited to ten minutes. To continue operating CTIS in RUN FLAT mode after ten minutes, RUN FLAT mode button must be pressed again or CTIS will shut down completely. Failure to comply may result in damage to equipment.

NOTE

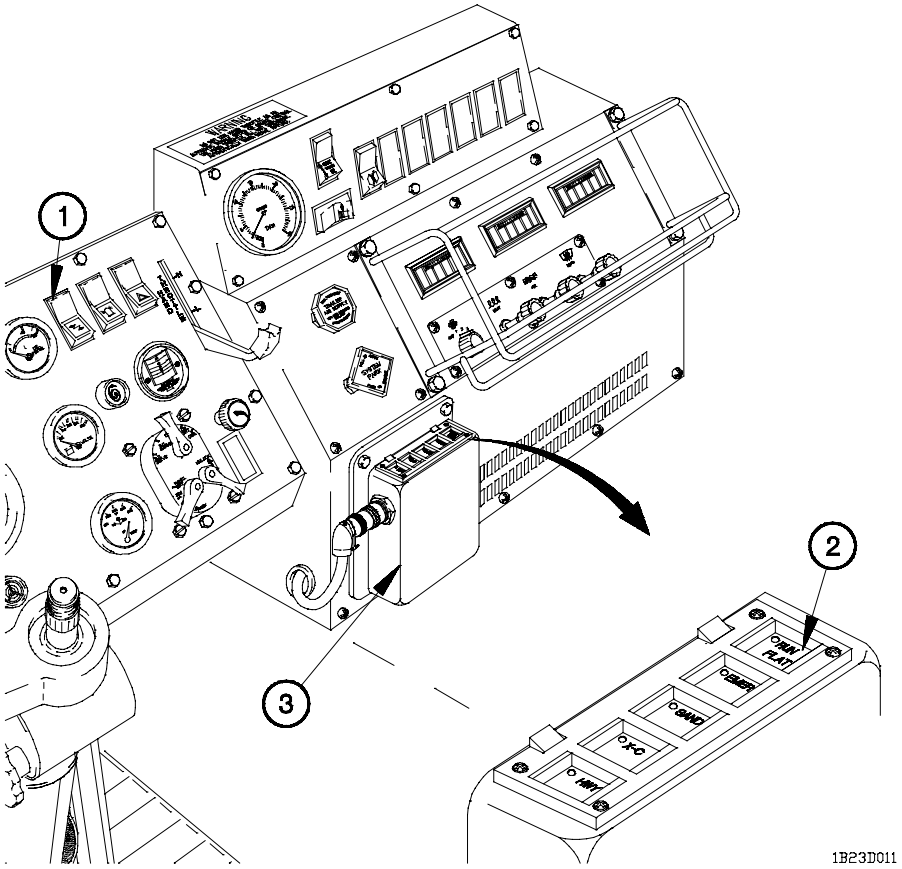
CTIS is operated in RUN FLAT mode when tire(s) have been punctured. RUN FLAT mode causes CTIS to check tire pressure every 15 seconds (normal interval is every 15 minutes). If low air pressure is sensed, CTIS will supply air in wet tank to leaking tire(s) every 15 seconds.

(1) Press RUN FLAT mode button (1). RUN FLAT mode light (2) will illuminate when CTIS is operating in RUN FLAT mode.

(2) If operating CTIS in RUN FLAT mode is no longer required, press RUN FLAT mode button (1) again. RUN FLAT mode light (2) will go out.

(3) Change leaking tire(s) (para 3-5) as soon as possible.

d. Reset CTIS.



NOTE

- If all five CTIS ECU mode lights flash, perform steps (1) through (4).
- If all five CTIS ECU mode lights continue to flash, notify Unit Maintenance.

(1) Position master power switch (1) to off.

(2) Position master power switch (1) to on.

(3) Press RUN FLAT mode button (2) on CTIS ECU (3).

(4) Start engine (para 2-21a or b).