

[FTV-260]

[BASIC OPERATIONS HANDBOOK]



EDITION 02.1

[03]

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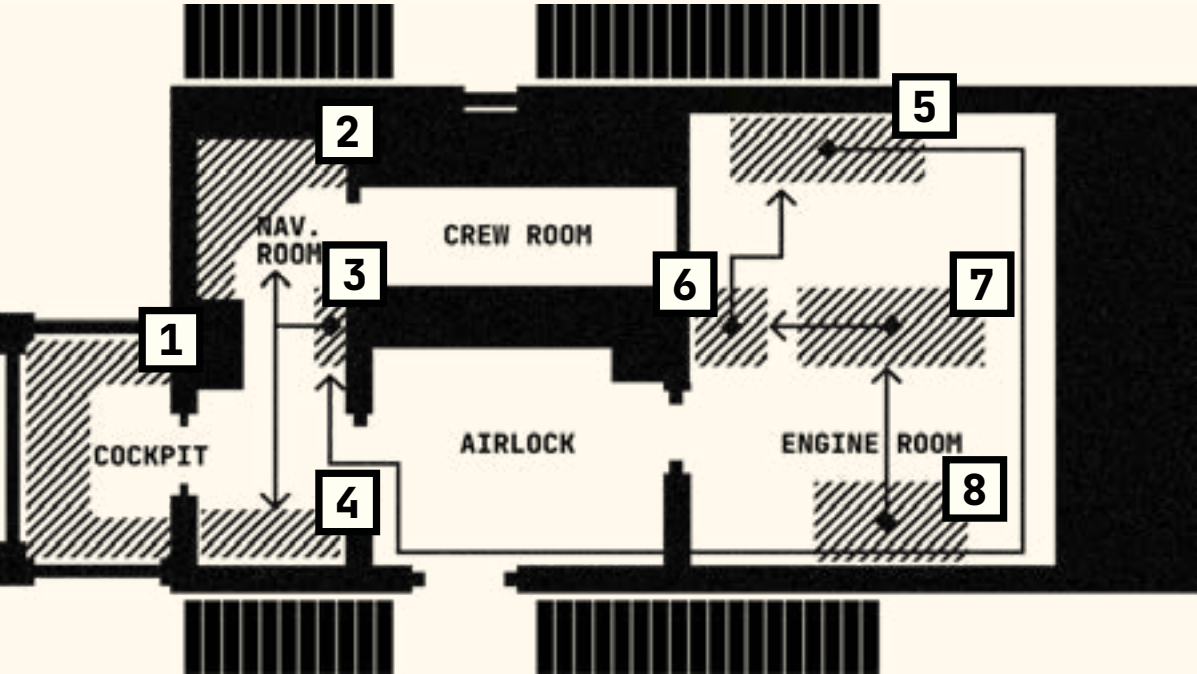
[08.5][POWER LOW / SYSTEM OFF]

[illegible]

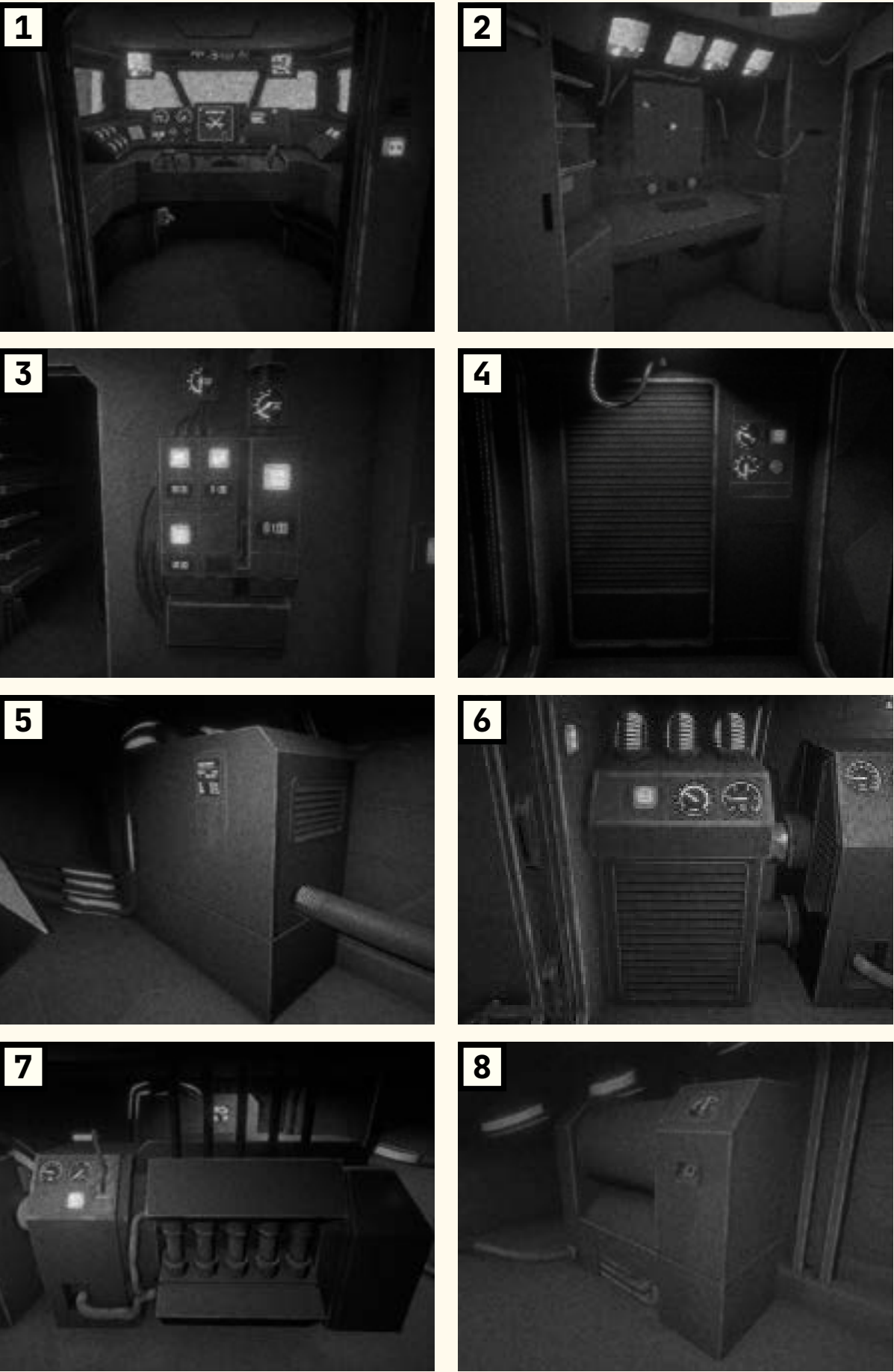
A large, multi-axle heavy-duty truck, possibly a military transport or construction vehicle, shown in a dark, grainy image. The vehicle has a boxy, industrial design with multiple windows and a prominent front grille. It is equipped with numerous large, heavy-duty tires. The image is very dark and has a high level of contrast, making details difficult to discern.

----- Missing Text

[01.1]
[VEHICLE FLOORPLAN]



- | | |
|----------------------|--------------------|
| 1. Cockpit | 5. Power Storage |
| 2. Navigation System | 6. Power Generator |
| 3. Power Manager | 7. Engine |
| 4. Radiator | 8. Fuel Storage |

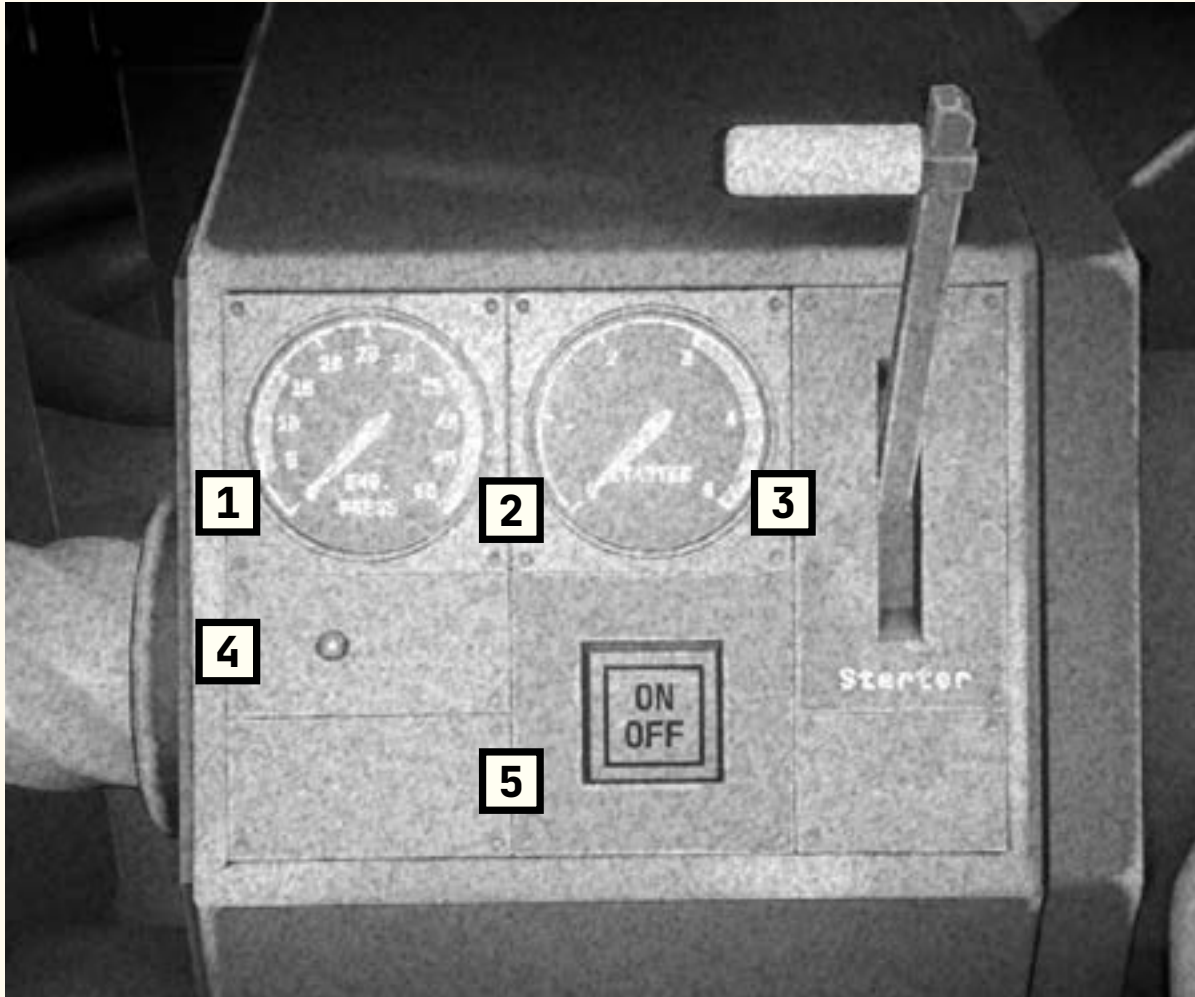


[02]

[PREPARATIONS & STARTUP]

[02.2]

[ENGINE OVERVIEW]



- | | |
|-------------------------|-------------------------------|
| 1. Engine Pressure | 4. Overpressure Warning Light |
| 2. Starter Charge gauge | |
| 3. Starter Crank Lever | 5. Ignition button |

[02.3]

[ENGINE SYSTEM]

The engine is equipped with an illuminated ignition button indicating the state of the engine, represented by the following three states:

OFF → ENGINE NOT RUNNING
ON → ENGINE RUNNING
BLINKING → ENGINE READY TO START

[02.4]

[STARTING THE ENGINE]

1. Check fuel presence
2. Pull starter crank lever fully down
3. Repeat until starter charge > 3
4. While starter charge > 3, press the ignition button to START/STOP
5. Verify that the power generator is running

[02.5]

[STOPPING THE ENGINE]

1. Press the ignition button
2. Verify by checking the ignition button's state, which must extinguish when stopped

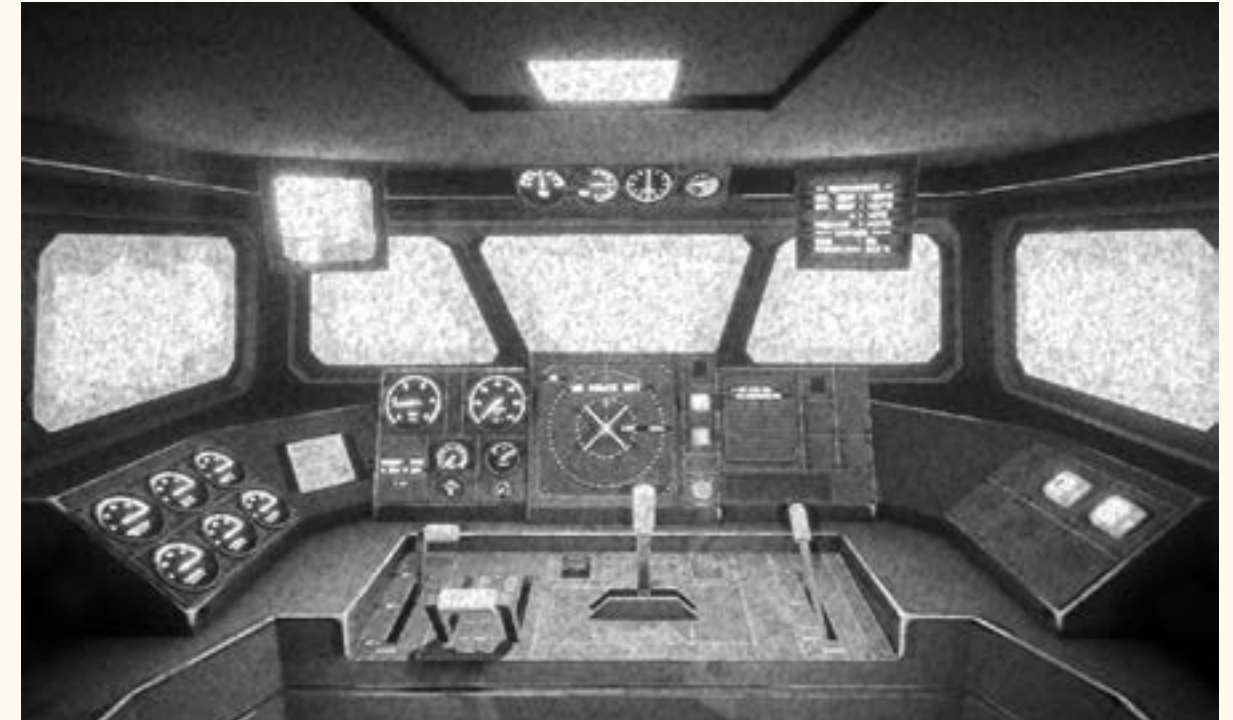
NOTES

[03]

[DRIVING]

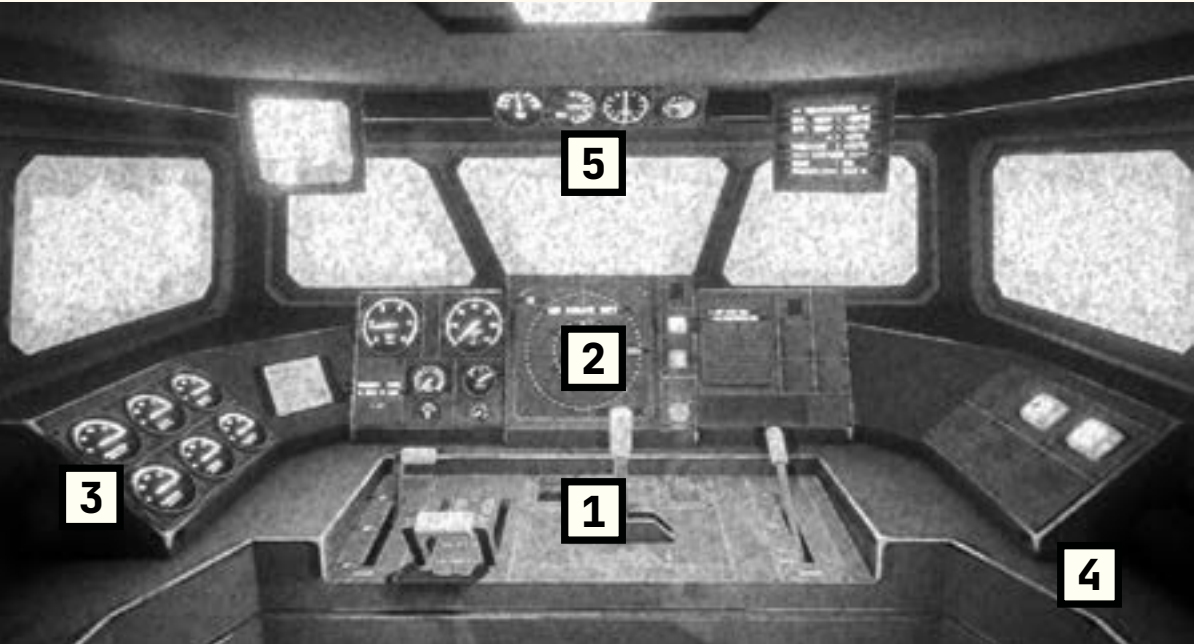
[03.1]

[DRIVING INTRODUCTION]



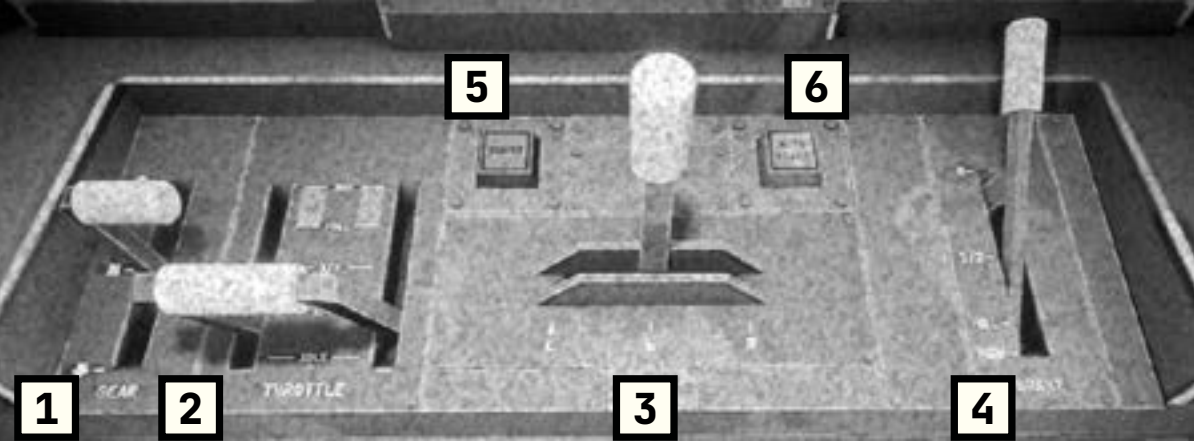
The FTV-260's cockpit features an extensive deck designed for single driver operation. It provides controls for all essential driving related systems as well as various overview gauges and displays.

[03.2]
[COCKPIT OVERVIEW]



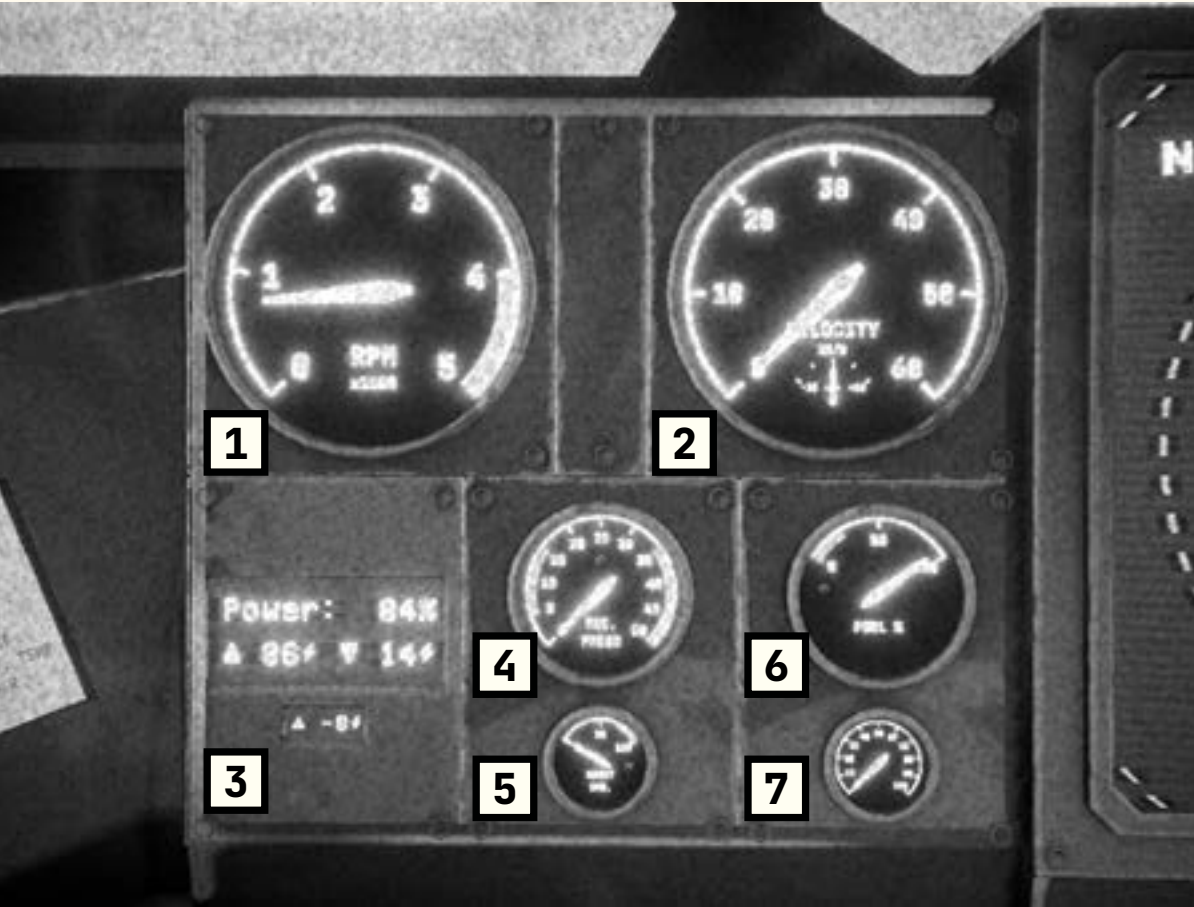
- | | |
|----------------------------|------------------------------|
| 1. Primary Controls | 4. Secondary Control Panel |
| 2. Primary Instruments | 5. Overhead Instrument Panel |
| 3. Vehicle Condition Panel | |

[03.3]
[PRIMARY CONTROLS]



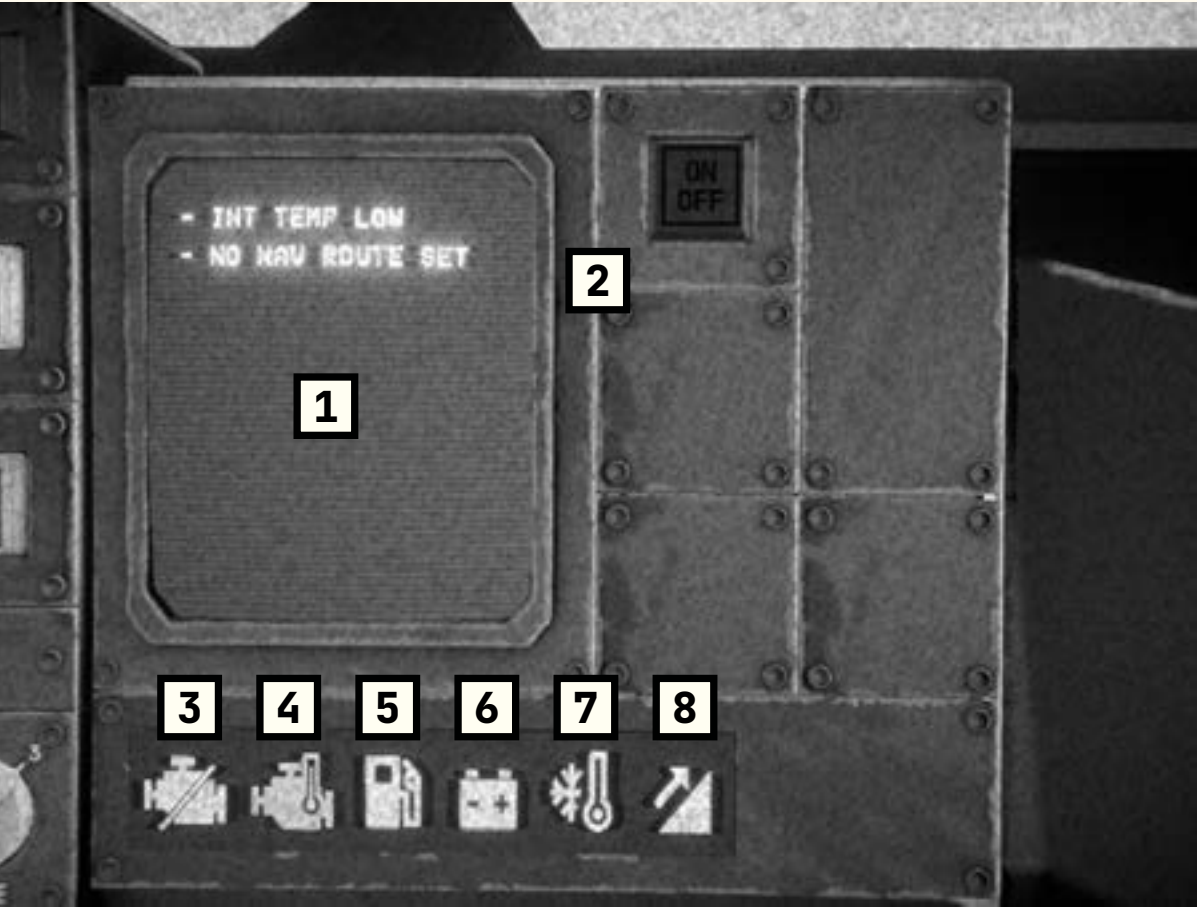
- | | |
|--------------------------------|----------------------------|
| 1. Gear Lever | 5. Boost Activation Button |
| 2. Throttle Lever | 6. Autopilot Toggle |
| 3. Steering Lever | |
| 4. Brake / Parking Brake Lever | |

[03.4]
[MAIN SYSTEMS - LEFT HAND SIDE]



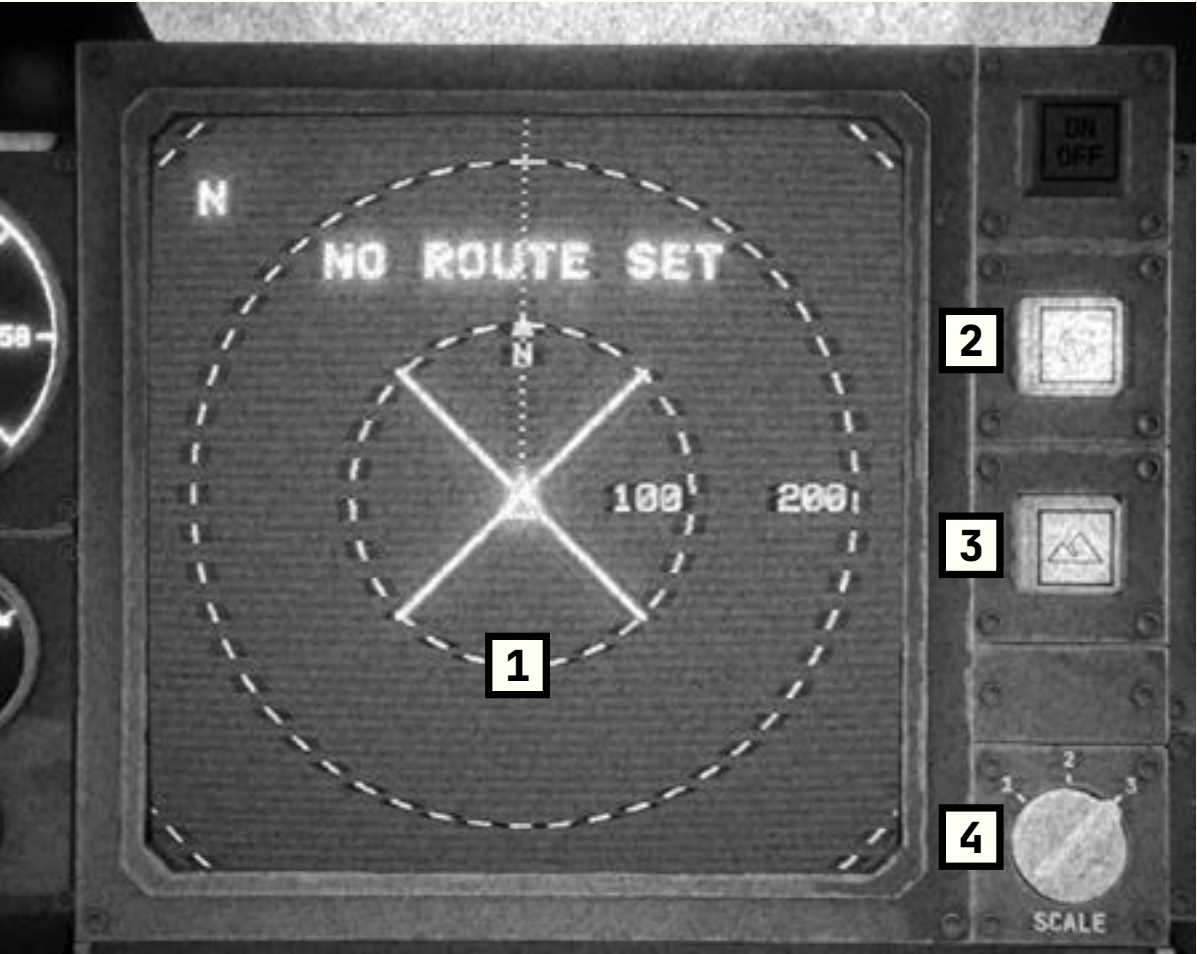
- | | |
|--------------------------------------|------------------------|
| 1. Engine RPM | 3. Battery Overview |
| 2. Vehicle Velocity & Velocity Trend | 4. Engine Pressure |
| | 5. Engine Boost Charge |

[03.5]
[MAIN SYSTEMS - RIGHT HAND SIDE]



- | | |
|--------------------------------|--------------------------|
| 1. Status Screen | 5. Fuel Low |
| 2. Warning Light /Alarm Cutoff | 6. Battery Low |
| 3. Engine Off | 7. Interior Temp. Low |
| 4. Engine Overpressure | 8. Steep Terrain Warning |

[03.6]
[MAIN SYSTEMS - CENTER]



- | | |
|-------------------------------|-------------------------|
| 1. Primary Navigation Display | 3. Toggle Terrain Lines |
| 2. Toggle North Rotation | 4. Map Scale Selector |

[03.7]

[TO START DRIVING]

1. Set gear in desired direction (FORWARD / BACK)
2. Disengage the brakes by moving the brake lever
3. Gently advance the throttle lever

[03.8]

[THROTTLE SETTINGS]

- 1/4 → SLOW DRIVE / CHECKPOINT APPROACH
- 1/2 → NORMAL DRIVE ON LEVEL TERRAIN
- FULL → UPHILL DRIVE UP TO 15
- MAX → EMERGENCY / STEEP CLIMB

*** INCREASING THE TROTTLE PAST FULL WILL BUILD UP PRESSURE OVER TIME. WHEN THE PRESSURE EXCEEDS 50 UNITS, THE ENGINE WILL FAIL. ONLY USE THE MAXIMUM SETTING FOR SHORT TIME PERIODS.***

[03.9]

[ENGINE BOOST]

The engine booster will start charging when running the engine with an increased throttle setting. The engine booster becomes available when charged above 70%. While active, engine power output will be increased substantially.

[03.10]

[BOOST USAGE]

1. Keep throttle at or above 1/2
2. Wait for BOOST to charge up
3. Press BOOST while button is villuminated
4. Boost will remain active until charge drops to 0%

[04]**[NAVIGATION]**

[04.1]

[NAVIGATION INTRODUCTION]

The navigation screen shows the currently planned path and the surrounding terrain.

Under normal circumstances, the path will direct the vehicle to the next planned checkpoint. Once the destination is reached, the path will be cleared.

Paths are planned in designated control rooms at checkpoints. Checkpoints will open only when a path is selected and locked.

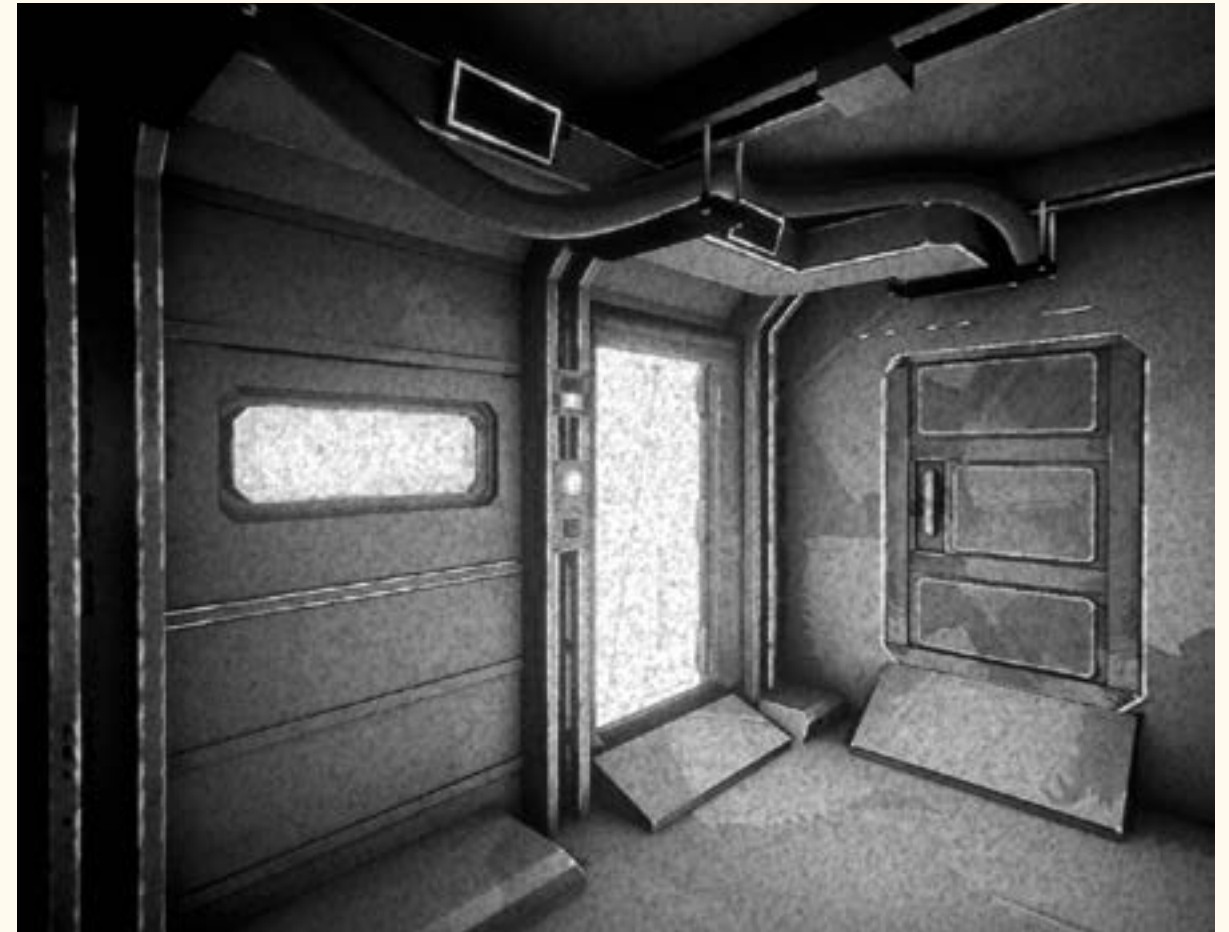
NOTES

This image shows a single sheet of white paper with horizontal blue ruling lines. The lines are evenly spaced and run across the width of the page. There are no margins, text, or other markings on the paper.

[05]
[AIRLOCK]

[05.1]

[AIRLOCK INTRODUCTION]



The vehicle uses an Airlock system to protect the interior from outside weather. The exit door remains locked while the parking brake is not set.

To exit the vehicle, make sure the parking brake is set and the vehicle isn't moving, then press the TOGGLE DOORS button. Pressing the TOGGLE DOORS button again will close exit again.

*** BEWARE OF EXTREME OUTSIDE WEATHER! NEVER OPEN THE EXTERIOR AIRLOCK DOOR WHEN NOT PREPARED.**

NOTES

[illegible]

[06] [TEMPERATURE MANAGEMENT]

[06.1]

[TEMPERATURE MANAGEMENT INTRODUCTION]

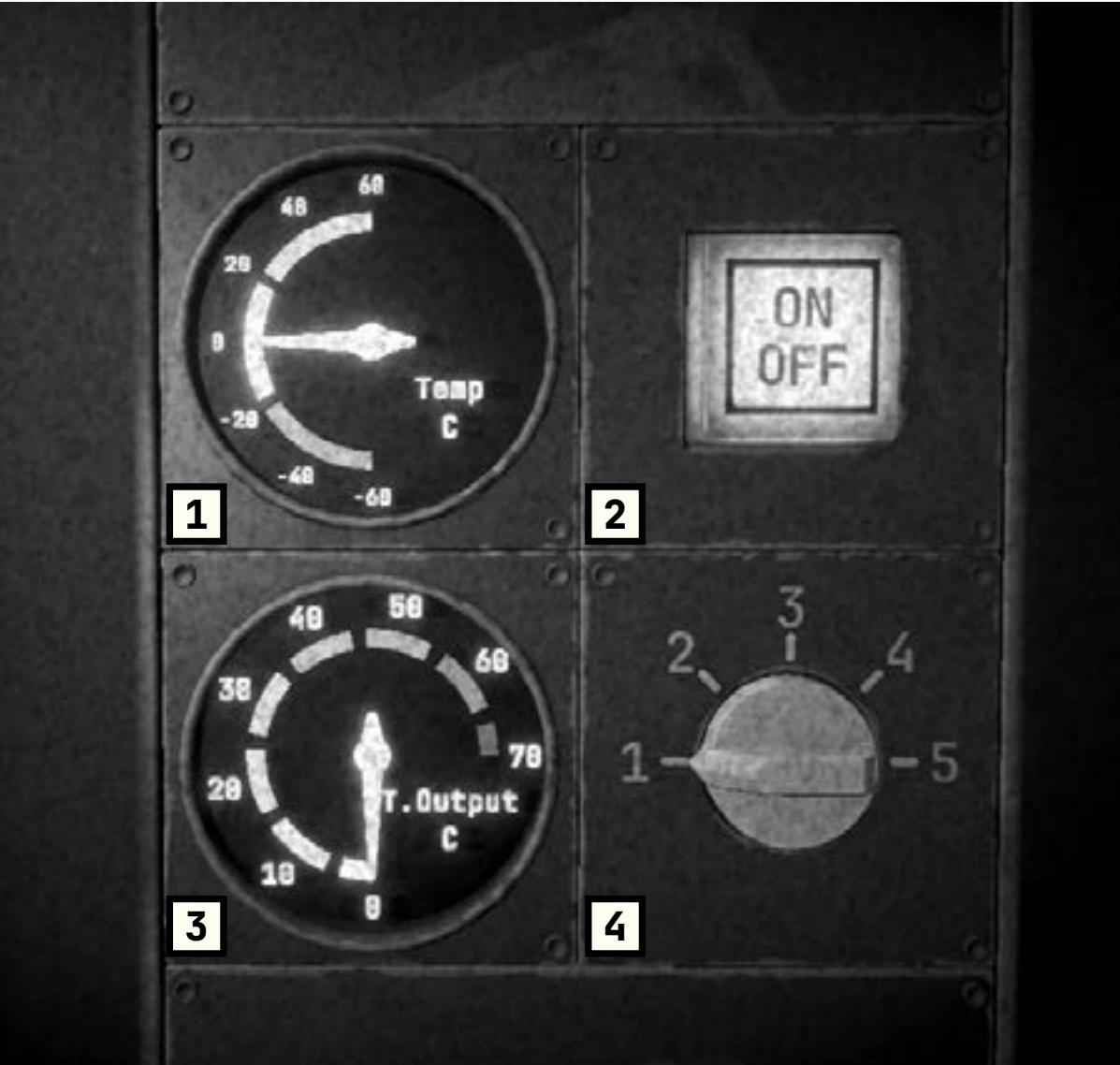


The vehicle is equipped with a ventilation system connected to a radiator to provide warm air against the extreme outside temperatures.

The radiator is located to the side of the passage between the airlock and the cockpit. The generated heat is transferred to the rest of the vehicle through overhead ventilation ducts.

Using the radiator enables the vehicle to maintain a comfortable climate above 0°C in environments of down to -100 °C during normal vehicle condition.

[06.2]
[RADIATOR CONTROL UNIT]



1. Interior Temperature

2. Radiator Toggle Button
3. Radiator Output

4. Heating Stage Selector

[06.3]
[HEATING STAGES PERFORMANCE METRICS]

STAGE	OUTPUT	POWER DRAW
MIN →	+10°C →	60 PU/MIN
LOW →	+20°C →	120 PU/MIN
MED →	+30°C →	240 PU/MIN
HIGH →	+40°C →	480 PU/MIN
MAX →	+50°C →	960 PU/MIN

Depending on outside weather conditions and hull integrity, the temperature may need to be adjusted. In the event of hull damage, the radiator must be increased to counter the temperature loss from the leaks. Repair the damage at the nearest checkpoint.

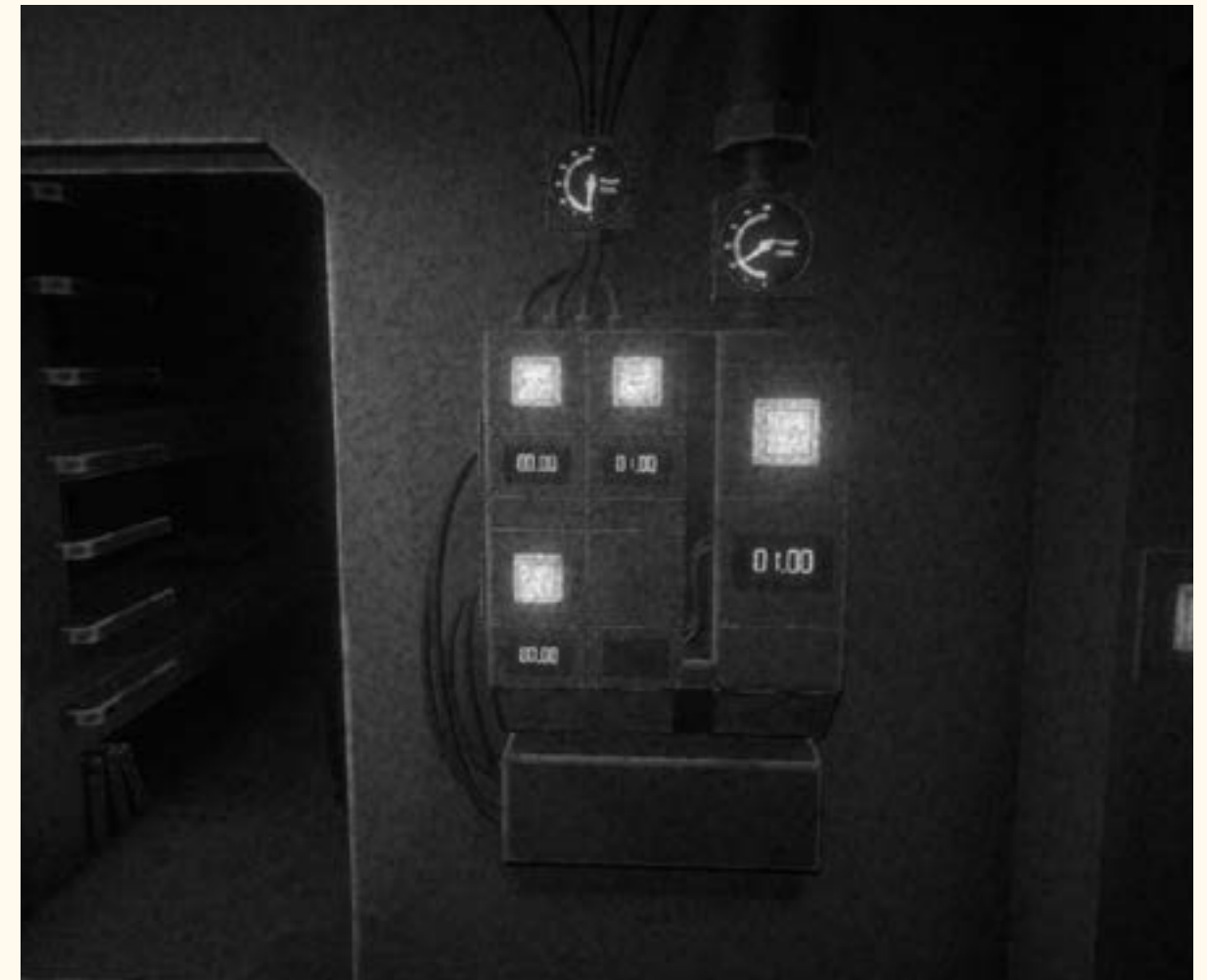
*** HIGHER HEATING STAGES CONSUME INCREASINGLY LARGE AMOUNTS OF POWER. CHECK BATTERY STATUS REGULARLY TO PREVENT POWER OUTAGES.**

NOTES

[07]
[POWER SYSTEM]

[07.1]

[POWER SYSTEM INTRODUCTION]



Electrical power to the FTV-260's systems is distributed via the central power manager, fed by a battery unit located in the engine room. The batteries can be charged externally using the external maintenance port located on the back of the vehicle. During operations, an onboard power generator connected to the main engine shaft provides a variable supply of current depending on the engine's RPM.

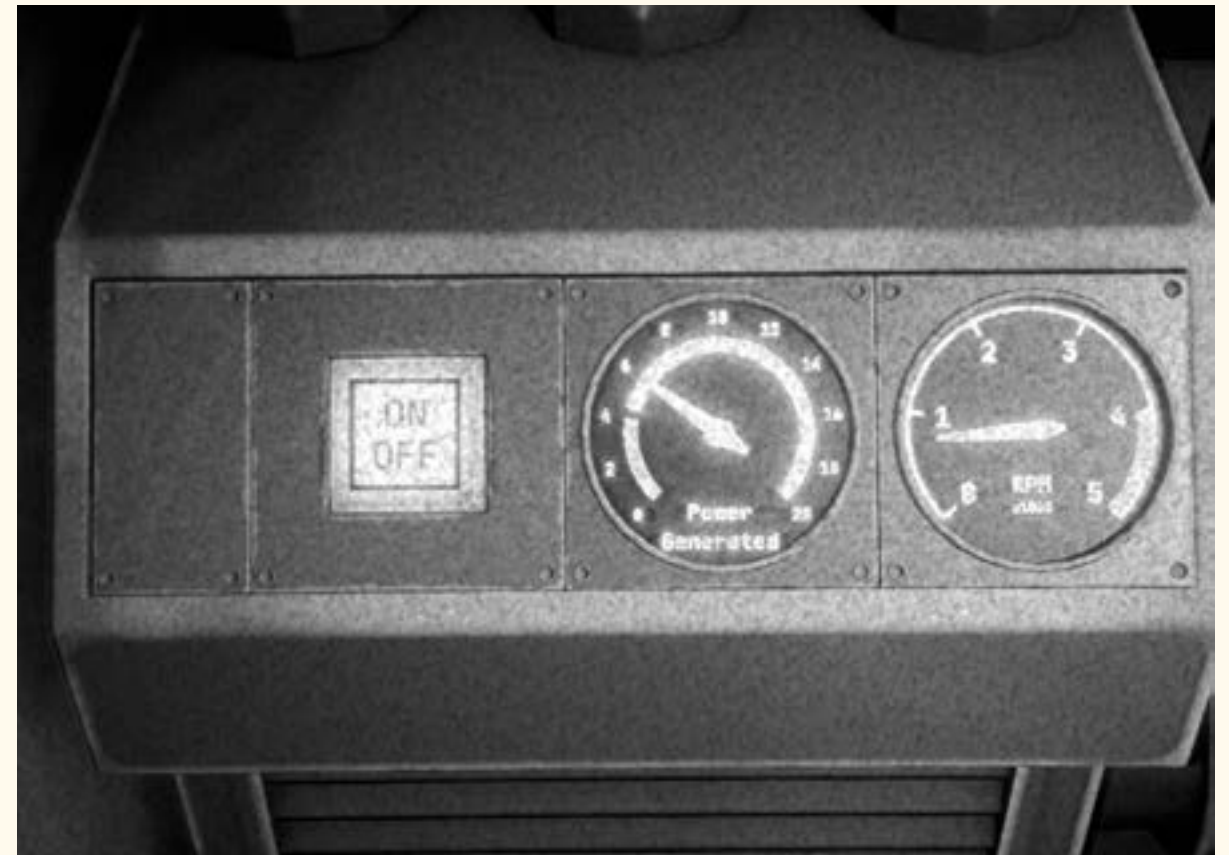
[08.2]

[POWER STORAGE]

Located in the engine room, the battery unit can store up to 800 Units of power and is connected to the generator via three high voltage power cables.

The power storage unit includes a screen showing detailed readings about its charging status, input and output currents.

[08.3]

[POWER GENERATOR]

The generator is placed right next to the main engine and provides power for the battery unit during operation. The output generated is correlated to the RPM of the engine.

Power can therefore be generated passively by driving. In case of increased power demand or need to recharge the batteries, the engine can be put into neutral gear with a high RPM setting to temporarily increase the power output:

1. Check engine running
2. Engage parking brake (pull brake lever fully aft)
3. Set gear to NEUTRAL
4. Increase throttle to increase RPM (do not increase past FULL)
5. Monitor power status via the power overview panel

[08.4]
[POWER OUTPUT METRICS]

RPM		THROTTLE		OUTPUT
1000	→	IDLE	→	360 PU/MIN
2000	→	1/4	→	540 PU/MIN
3000	→	1/2	→	760 PU/MIN
4000	→	FULL	→	960 PU/MIN
5000	→	MAX (!)	→	1200 PU/MIN

MAKE SURE THE POWER GENERATOR IS TURNED ON AT ALL TIMES. LEAVING THE GENERATOR OFF SHOULD ONLY BE DONE DURING ABNORMAL OPERATIONS.

[08.5]
[POWER MANAGER]



Power is distributed to all systems via the central power manager located in the navigation room. The manager is equipped with two layers of circuit breakers, one master circuit breaker and individual circuit breakers for each power grid.

Pressing the circuit breaker button will cut off all power to the related power grid. The breaker button has three states:

- Green: System Functional
- Red: System OFF
- Not Lit: System Fault

[08.6]
[POWER CONSUMERS]

CONSUMER		POWER DRAW
<u>LIGHTS</u>		
HEADLIGHTS	→	240 PU/MIN
INT. LIGHTS	→	60 PU/MIN EACH
<u>HEATING</u>		
RADIATOR	→	60-960 PU/MIN (SEE [06.3])
<u>NAVIGATION</u>		
NAV SYSTEM	→	300 PU/MIN

[08]
[TROUBLESHOOTING]

[08.1]
[INT TEMP CRITICAL / INT TEMP LOW]

RADIATOR	→	ON
HEATING STAGE	→	SET AS REQUIRED
INTERIOR TEMP	→	CHECK

[08.2]
[HULL LEAK / HULL CRITICAL]

INTERIOR TEMP	→	CHECK
IF TEMPERATURE LOW:		
↘ RADIATOR	→	ON
↘ HEATING STAGE	→	SET AS REQUIRED
AT CHECKPOINT	→	REPAIR

[08.3]
[ENGINE OVERLOAD]

THROTTLE	→	REDUCE
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[08.4]
[FUEL LOW / FUEL CRITITCAL]

THROTTLE	→	MINIMAL AS REQUIRED
REFUEL	→	ASAP

[08.5]
[POWER LOW / SYSTEM OFF]

POWER STORAGE	→	CHECK
IF STORED POWER LOW:		
↘ POWER GENERATOR	→	ON
↘ GEAR SHIFTER	→	NEUTRAL
↘ THROTTLE	→	INCREASE
↘ POWER MANAGER	→	CHECK & TOGGLE GRID
IF STORED POWER HIGH:		
↘ POWER MANAGER	→	CHECK & TOGGLE GRID