

OPERATOR USER'S MANUAL
for
COMMON DRIVER TRAINER (CDT)
WITH VARIANTS
DEVICE # 17-260-1

VOLUME II: Stryker

REPORTING ERRORS AND RECOMMENDING IMPROVEMENTS

You can help improve this manual. If you find any mistakes or know of a way to improve the procedures, please contact us. Mail your letter, DA Form 2028 (Recommended Changes to Publications and Blank Forms), located in the back of this manual directly to: Program Executive Office, Simulation Training and Instrumentation (PEO STRI), ATTN: SFAE-STRI-PS-Q, 12350 Research Parkway, Orlando, FL 32826-3276. A reply will be furnished to you.

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1 GENERAL INFORMATION, EQUIPMENT DESCRIPTION AND THEORY OF OPERATION

1.1 General Information

1.1.1 Scope

The information contained in this volume is specific to the Stryker variant. For all other operational information, refer to Volume I.

1.2 Equipment Description and Data

1.2.1 Equipment Data

1.2.1.1 DVE Steering

With the CDT/SV system, a Driver Vision Enhancer (DVE) is also included. The DVE, as shown in Figure 1, is a Liquid Crystal Display (LCD) screen located directly in front of the steering wheel that provides a thermal image of the area directly in front of the vehicle.

NOTE

Do not turn the DVE on and off repeatedly. This can cause it to shut down and go into standby mode. The DVE should be left on all day during training. If it is powered off for any reason, leave it off for at least 10 minutes to allow it to reset prior to power on.

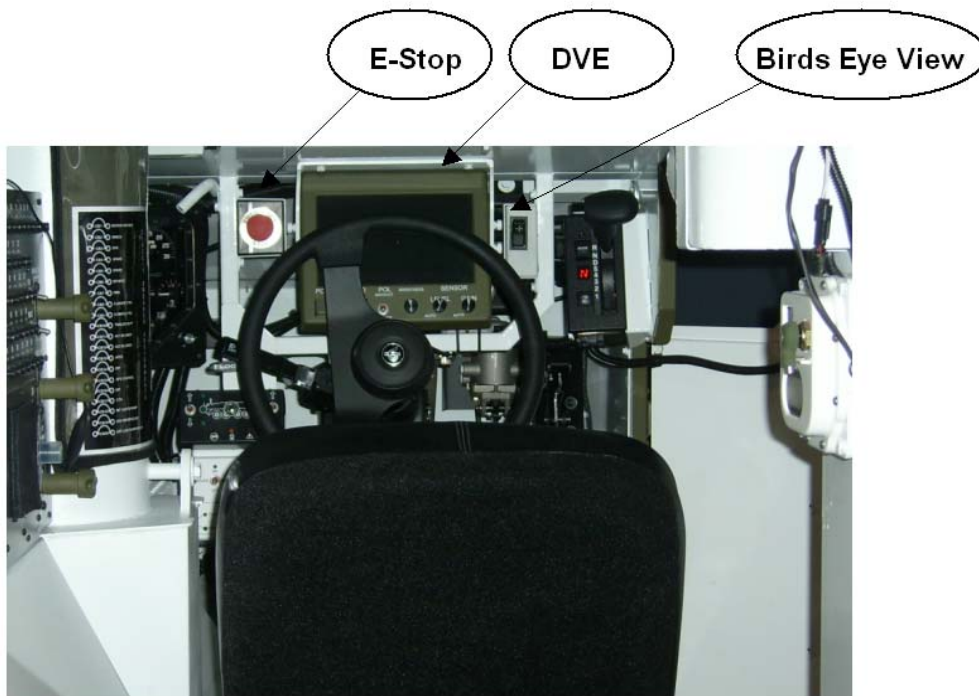


Figure 1. Driver Vision Enhancer

1.2.1.2 Instrument Cluster

The Stryker instrument cluster is shown below.

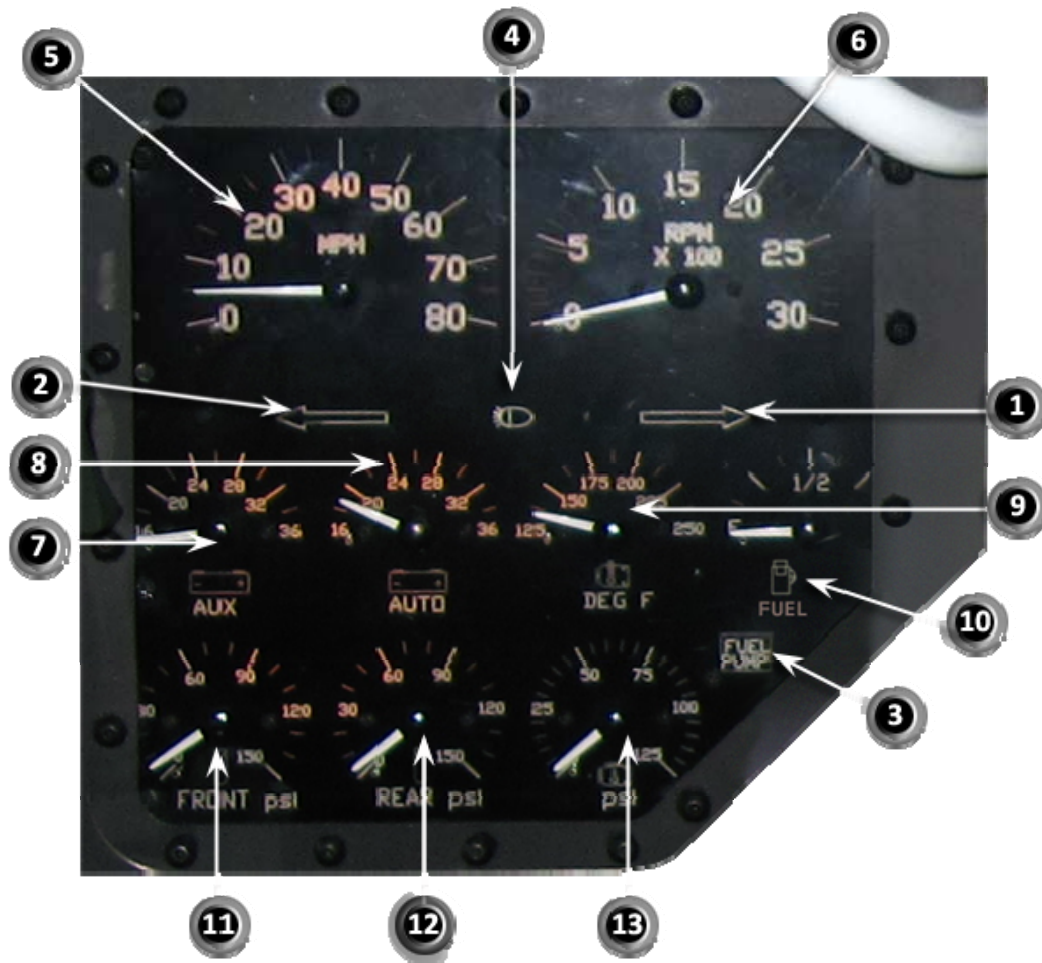
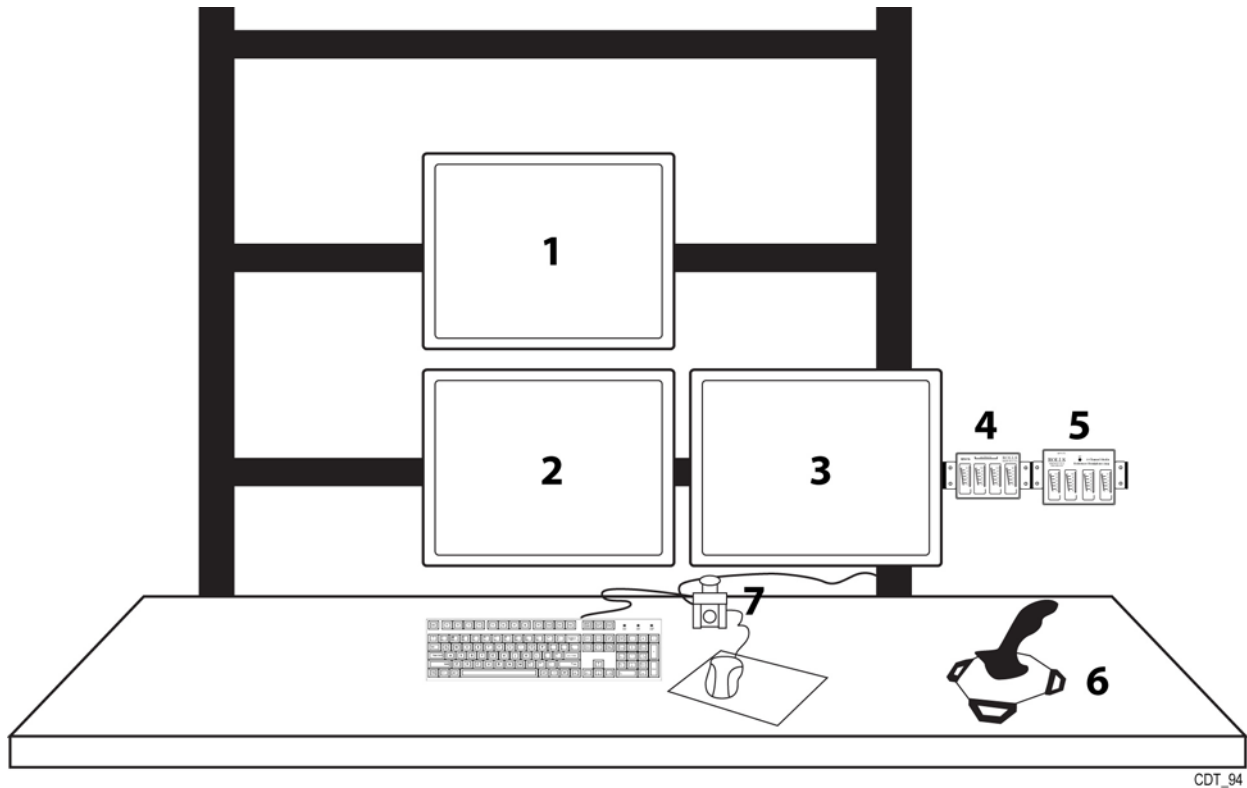


Figure 2. Stryker Instrument Cluster

1. Right Turn Indicator
2. Left Turn Indicator
3. Fuel Pump 1 & 2 Indicator
4. High Beam Indicator
5. Speedometer
6. Tachometer
7. Battery 1
8. Battery 2
9. Engine Temperature
10. Fuel Level
11. Front Air Pressure
12. Rear Air Pressure
13. Engine Oil Pressure

1.2.1.3 Instructor Operator Station (IOS) Layout



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Figure 3. IOS Layout

Table 1. IOS Layout

Item	Control or Indicator	Description
1	Stealth view	Bird's eye view of vehicle
2	IOS scenario monitor	Monitor that IOS Application is run from
3	CCTV	Closed Circuit Television
4	Mixer	4-Channel Stereo Mixer
5	Amp	4-Channel Headphone Amplifier
6	Joy stick	IOS override control
7	E-STOP	Motion only stop

1.2.2 IOS Screens

1.2.2.1 Main Screen

The Stryker Main IOS screen is shown below.

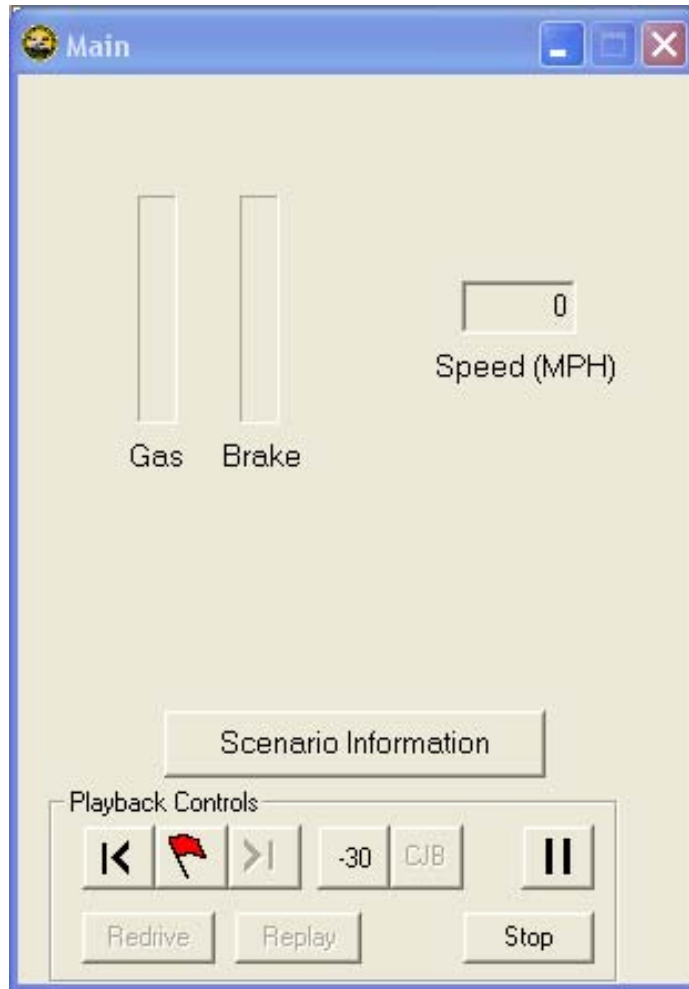


Figure 4. Stryker Main IOS Screen

1.2.2.2 Gauges Screen

The Stryker Gauges IOS screen is shown below.

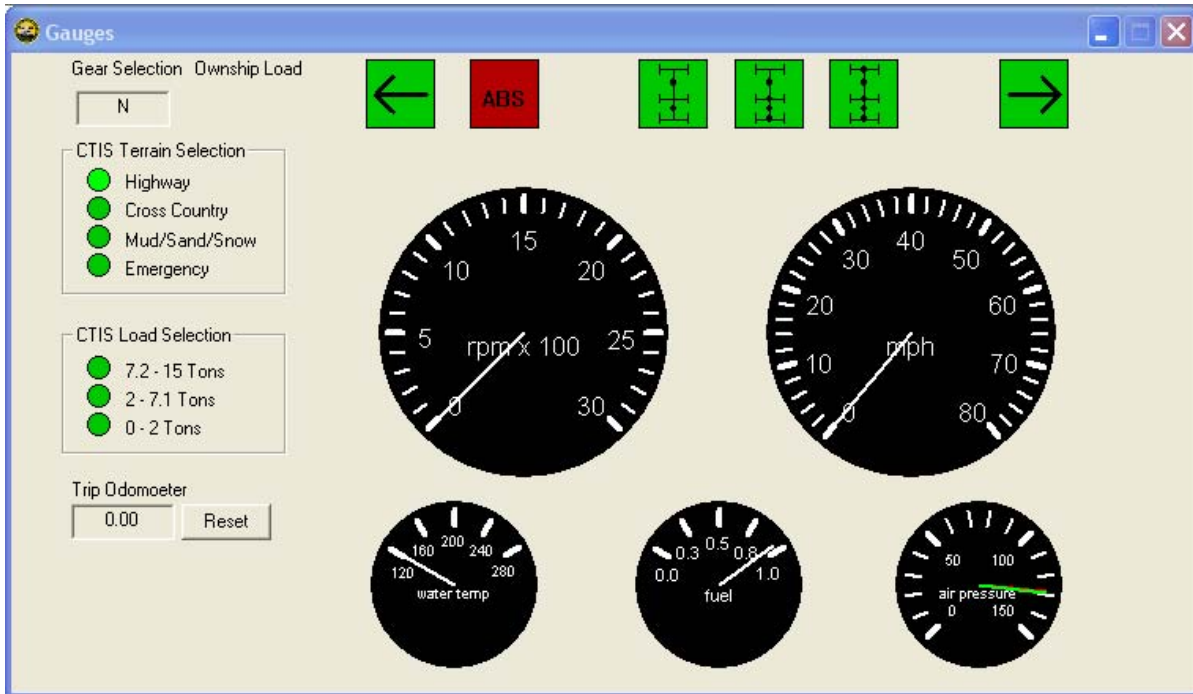


Figure 5. Stryker Gauges IOS Screen

1.2.2.3 Scores Screen

The Stryker Scores IOS screen is shown below.

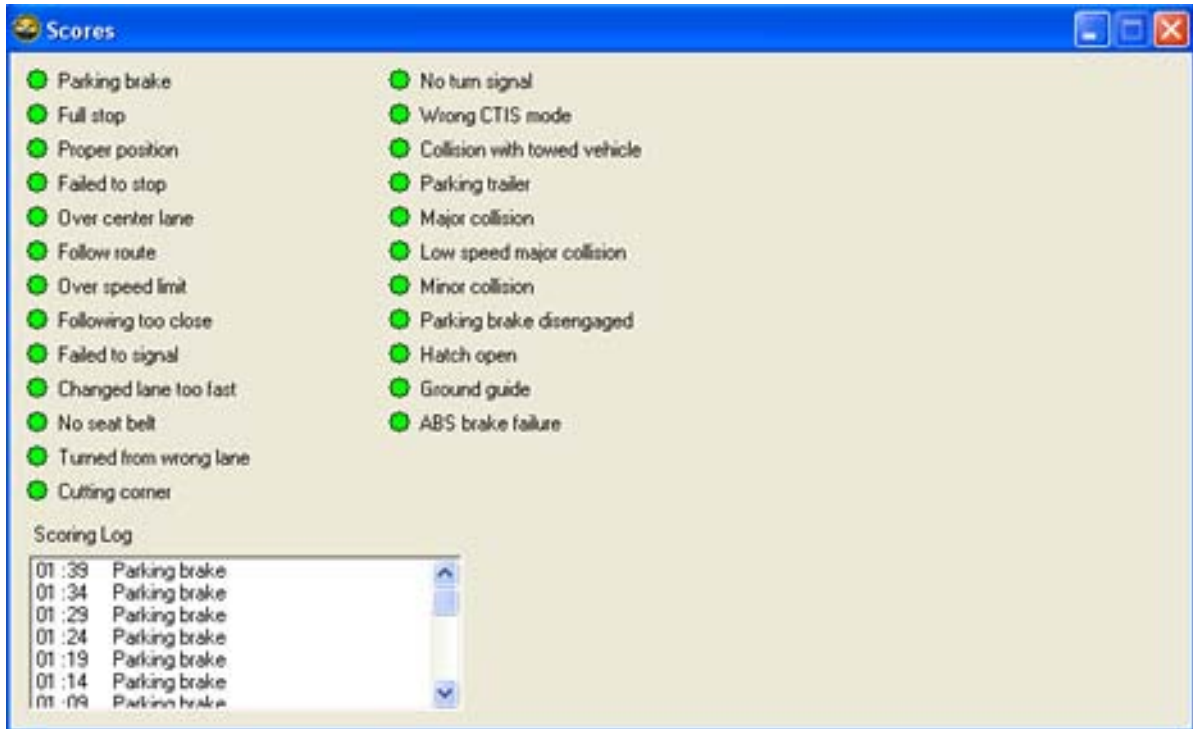


Figure 6. Stryker Scores IOS Screen

1.2.2.4 Failures/Maneuvers Screen

The Stryker Failures/Maneuvers IOS screen is shown below.

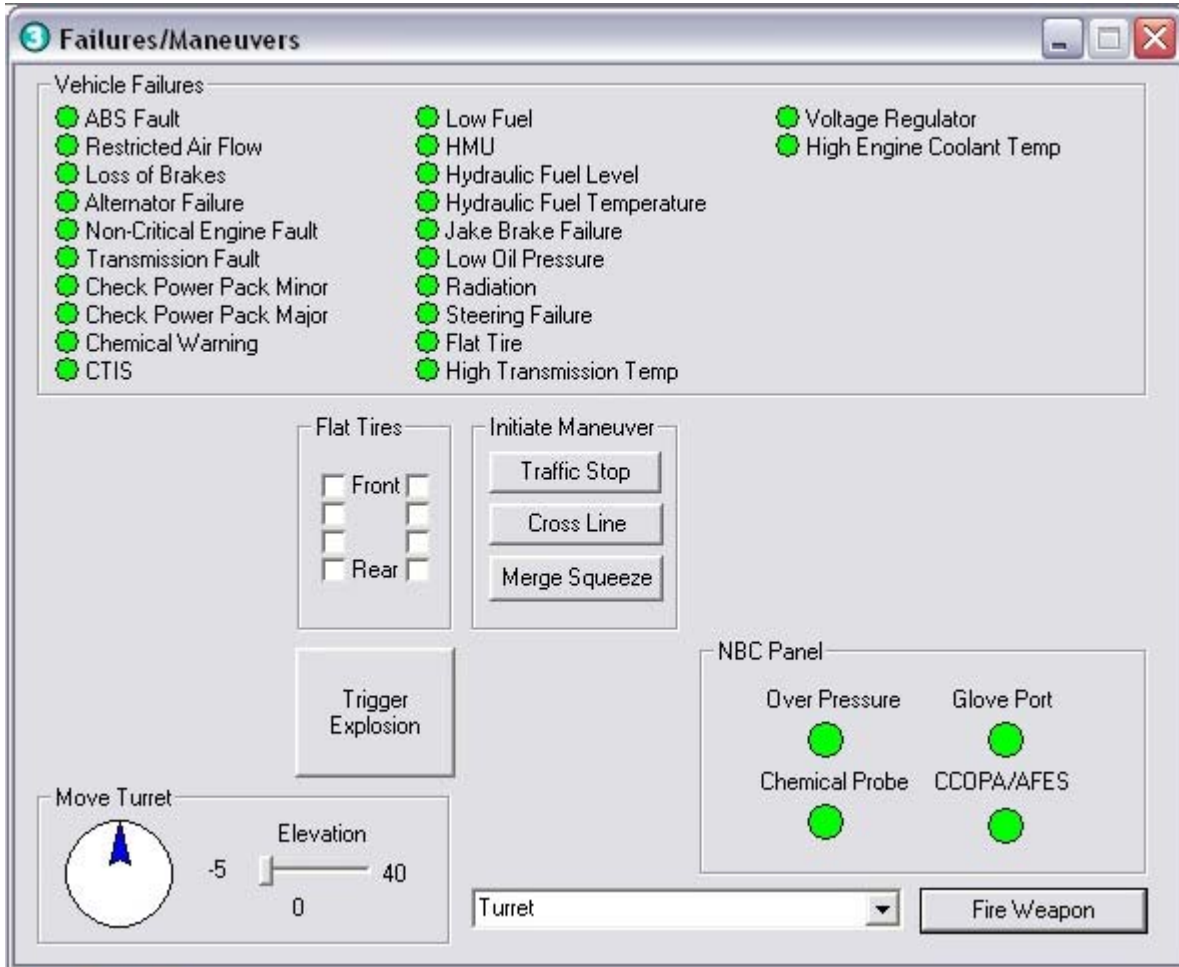


Figure 7. Stryker Failures/Maneuvers IOS Screen

1.2.2.5 Failures and Effects

Below is a list of Stryker variant failures and their effect.

FAILURE	EFFECT
ABS Fault	Failure ABS light goes on and ABS functionality is lost.
Alternator Failure	Alternator Failure light goes on.
Chemical Warning	Chemical Warning light goes on.
Check Power Pack Minor	Check Power Pack Minor light goes on.
Check Power Pack Major	Check Power Pack Major light goes on.

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CTIS	CTIS light goes on.
Flat Tire	Flat Tire light goes on and vehicle pulls towards direction of the flat tire.
High Engine Coolant Temp	High Engine Coolant Temp light goes on.
High Transmission Temp	High Transmission Oil Light goes on.
HMU	HMU light goes on.
Hydraulic Fuel Level	Hydraulic Fuel Level light goes on.
Hydraulic Fuel Temperature	Hydraulic Fuel Temperature light goes on.
Jake Brake Failure	Jake Brake Failure light goes on.
Loss of Brakes	Loses Brake Air Pressure, brakes lockup.
Low Fuel	Fuel Level declines rapidly (5-10 min).
Low Oil Pressure	Low Engine Oil Pressure light goes on.
Non-Critical Engine Fault	Non-critical engine light goes on.
Radiation	Radiation light goes on.
Restricted Airflow	Air Filter light goes on. Power is lost.
Steering Failure	Failure light goes on and steering wheel locks up; vehicle continues to go straight.
Transmission Fault	Check Transmission light goes on.
Voltage Regulator	Voltage Regulator light goes on.

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