

Motor Coach Trip Computer

Operator's Manual MODEL 2510-X

Trademarks

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Quick Reference Series 2510 07/24/04

Oil Can:

If an oil can is displayed on any screen or "Engine Maintenance" is blinking on the CHECK LIST a maintenance item needs attention. Refer to information on "MAINTENANCE" screen in this manual.

Maintenance/Setup/Information screens:

To get access to these screens press up and down keys simultaneously. (Ref this manual)

Maintenance Data:

Miles or hours have been preset at the factory to satisfy engine, transmission and generator break in periods. Check MAINTENANCE SETUP screen to verify accurate breakin period.

After break in period reset mile and hour intervals to an appropriate setting to match your preferred cycle.

If miles and/or hours are being set in mid cycle, set interval to accommodate remainder of cycle. After maintenance cycle, change mile and/or hour intervals to full cycle period.

MPG Average:

To activate MPG Average on the COACH screen refer to the COACH MPG ON/OFF screen under SETUP MENU. Reference Maintenance, Setup and Adjustment Screens section in manual.

Operator's Manual Series 2510

06/01/04

Overview

TripTek is a trip and coach management computer designed for motorhomes. By receiving data from multiple sources, i.e. electronic engine computer, compass and temperature sensors (optional), and other sources, the system collects, analyzes, and saves data in memory and then displays information on the rear vision monitor.

Description

TripTek is comprised of multiple parts: a keypad, computer (behind dash), compass and temperature sensors (optional), and utilization of the rear vision monitor for display.

Display

When the ignition is turned on, a pre-trip CHECK LIST is displayed to guide the operator through a list of items to verify readiness of coach for travel.

To make efficient use of the data collected, and to best serve an actual vehicle trip, the system offers the operator four separate travel screens: TODAY, LEG, TRIP, and COACH. Time, Day, Date and Year are also included on these screens.

The TODAY screen is designed to give daily information. It provides miles to scheduled destination, time to destination, miles traveled, time traveled, average MPG and average MPH. As an option, it will also give you both inside and outside coach temperature and compass heading.

The LEG screen is designed to give information from fill to fill or for a trip. It provides average MPH, time traveled, miles traveled, gallons used (by engine), average MPG, road speed, and cruise control status and compass heading.

The TRIP screen is designed for long term data tracking for a complete trip or longer. It provides average MPH, hours traveled, miles traveled, gallons used (by engine), average MPG and current MPG and compass heading.

The COACH screen is designed to give you both coach and engine/transmission performance and operational data. It provides gears select & monitor, turbo boost, engine temperature, transmission temperature, oil pressure, average MPG and oil temperature and compass heading.

Note: If referenced information is not shown on one of these screens, that information is not offered or currently being received from engine or transmission.

On a second level of screens there will be MAINTENANCE, SETUP MENU (COMPASS ZONE ADJUSTMENT, COMPASS CALIBRATION, MAINTENANCE SETUP, SET CLOCK SCREEN, COACH MPG ON/OFF), CUSTOMER SERVICE and VERSION INFORMATION.

The MAINTENANCE screen displays when to change engine oil, eng. fuel filter, transmission oil, generator oil and gen. fuel filter. If Oil Can is displayed on travel screens a maintenance item needs attention. Line item will be blinking.

The COMPASS ZONE ADJUSTMENT screen is used to maintain compass accuracy by state. To achieve maximum accuracy, it is recommended to change the zone setting when traveling from state to state.

The COMPASS CALIBRATION screen is for calibration of the compass after its initial installation or anytime the compass sensor is replaced or relocated.

The MAINTENANCE SETUP screen is to set the interval (miles for engine and hours for generator) for maintenance.

The SET CLOCK screen is to set all parameters of the clock, i.e. time zone, daylight savings, month, day, year, time, am/pm and format (small, large or off).

The COACH MPG ON/OFF screen is to give the operator a way of turning MPG Average (COACH screen) on or off.

The CUSTOMER SERVICE screen is to give the operator easy access to the phone numbers and web page of the coach manufacturer.

Keypad Keys

(Maintain rear vision monitor in "on" position to display trip data)

Use the up \triangle and down ∇ keys to step through each line item of the CHECK LIST.

Use the VIEW key to move out of the CHECK LIST screen and go to the travel screens.

The <u>VIEW</u> key displays the four travel screens: TODAY, LEG, TRIP, and COACH. By pressing this key, with the monitor on, the computer will sequence through the four data screens and one blank screen. The system is also designed to sequence forward or backward, depending on which side of the key is pressed.

The **SCREEN** key will change data/picture contrast by changing the text background.

Successive presses to the $\underline{\text{VIEW}}$ or $\underline{\text{SCREEN}}$ keys will give the following options:

Data on picture: The ability to view a data screen and still see the rear vision image.

Data only: View data screen only with either a dark or light background for great contrast.

Picture only: View rear vision image only.

The **RESET** key will zero all or part of the data on the currently viewed screen.

The up \triangle and down ∇ keys set miles to be traveled today. Holding down a key will scroll through numbers. This is operational only on the TODAY screen.

To get the second level SCREEN SELECTION screen, push the up Δ and down ∇ keys simultaneously.

SECOND LEVEL

Use the up \triangle or down ∇ key to change selection.

Use RESET key to select screen.

Use **VIEW** key to return to TODAY screen (or as noted).

Clock Battery

The TripTek computer utilizes a replaceable battery # CR1632 to retain its clocks memory when the system is off.

Battery replacement:

- Disconnect TripTek computer from coach. Most connectors utilize a latch to retain their position. Compress latch arm to remove connectors.
- 2. With the removal of four screws from the two long sides of the computer lift off the back cover and expose the inside of the system.
- 3. Locate battery on back surface of computer
- 4. Slide battery out from under metal spring clip.
- 5. Replace with positive side (+) of battery facing up.
- 6. Reverse steps 1 through 4 to reassemble system.

Operating the TripTek Computer Model 2510X

6/01/04



Turn the ignition switch ON.

Turn the rear vision monitor ON. Display rear vision picture.

Press the <u>SCREEN</u> key on the keypad to change contrast of displayed data to the picture.

Note: If vehicle is put into reverse, the rear vision system will override the computer and clear TripTek data from the screen until transmission is taken out of reverse.



With the above steps completed, the "CHECK LIST" screen will be displayed on the backup monitor.

There will be multiple screens displaying checklist items.

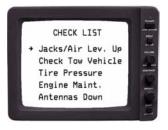
"CHECK LIST" will only come up when ignition is first turned on.



Press the <u>VIEW</u> key on the keypad. The "TODAY" screen will display on the backup monitor.

Check List Screen

The CHECK LIST screen is designed to give you a list of items to verify readiness of coach for travel.



This screen will give you a list of items to check off to insure readiness of coach for travel.

If a line item is blinking (i.e. "Engine Maint."), it would imply that service is required.



Using the up \triangle and down ∇ keys will let you step down each line item and check them off as you verify completion of task.

If a line item is blinking, press <u>VIEW</u> to move to the appropriate screen (i.e. "MAINTENANCE") to evaluate the problem.

Press **▼ VIEW** key again to return to "CHECK LIST".

Press <u>VIEW</u> key to move out of "CHECK LIST" and into "TODAY" screen. Will function only on non-blinking lines.

The "CHECK LIST" is only visible when ignition is first turned on.

Today Screen

The TODAY screen is designed to give you daily information.

NW: Compass Heading (optional)

Oil Can: If Oil Can is displayed a maintenance item needs attention

(Ref. "MAINTENANCE" screen).

Time/Date: Time, Day, Date and Year. Line can be configured to large

text (default as pictured), small or off.

Out/In Temp: Outside and inside coach temperature (optional).

Miles To Go: Remainder of user entered miles to scheduled destination.

Time To Go: Approximate time to scheduled destination, utilizing "Miles To

Go" and current speed.

Mi Traveled: Miles traveled since "TODAY" screen reset.

Time Traveled: Time traveled since "TODAY" screen reset.

MPG Average: Average miles per gallon since "TODAY" screen reset.

MPH Average: Average miles per hour since "TODAY" screen reset.

Press **RESET** and follow screen instructions to zero out "TODAY" screen.

Using the up \triangle and down ∇ keys, set the miles you will travel today. The longer the key is held down, the faster the number will scroll. Miles can be changed throughout the day.

Press VIEW to return to "TODAY" screen.

Note: As "Miles Travld" changes, "Miles To Go" and "Time To Go" will also change accordingly.

Press **SCREEN** to change data/picture contrast.

Press VIEW to move to the "LEG" screen.

Note: To move forward or backward through the screens, press the side of the <u>VIEW</u> key that displays chosen direction.





Leg Screen

The LEG screen is designed to give you information from fill to fill.



NW: Compass heading (optional)

Oil Can: If Oil Can is displayed a maintenance item needs

attention (Ref. "MAINTENANCE" screen)

MPH Average: Average miles per hour since "LEG" screen reset.

Time Traveled: Time traveled since "LEG" screen reset.

Mi Traveled: Miles traveled since "LEG" screen reset.

Gallons Used: Gallons of fuel utilized by engine from the time of

"LEG" screen reset. Data from engine computer.

MPG Average: Average miles per gallon since "LEG" screen reset.

Road Speed: Current coach speed.

Cruise OFF: Status of cruise control and its set speed. Displays

preset speed while cruise is off and actual speed

while cruise is on.

Press RESET and follow screen instructions to zero out "LEG" screen.

Press **SCREEN** to change data/picture contrast.

Press VIEW to move to the "TRIP" screen.



Trip Screen

The TRIP screen is designed for long term data tracking for a complete trip or longer.

NW: Compass heading (optional)

Oil Can: If Oil Can is displayed a maintenance item needs

attention (Ref. "MAINTENANCE" screen).

MPH Average: Average miles per hour since "TRIP" screen reset.

Hrs Traveled: Hours traveled since "TRIP" screen reset.

Mi Traveled: Miles traveled from time of "TRIP" screen reset.

Gallons Used: Gallons of fuel utilized by engine from time of

"TRIP" screen reset. Data from engine computer.

MPG Average: Average miles per gallon since "TRIP" screen reset.

MPG Current: Instantaneous miles per gallon.





Press **RESET** and follow screen instructions to zero out "TRIP" screen.

Press **SCREEN** to change data/picture contrast.

Press VIEW to move to the "COACH" screen.

Coach Screen

The COACH screen is for coach and engine performance.

NW: Compass heading (optional)

Oil Can: If Oil Can is displayed a maintenance item needs

attention (Ref. "MAINTENANCE" screen)

Gear: Transmission gears selected and attained.

N=Neutral, C=Converter, L=Converter Lock

Turbo PSI: Turbocharger boost pressure.

Eng Temp: Engine coolant temperature.

Tran Temp: Transmission oil temperature.

Oil Pres: Engine Oil Pressure.

MPG Average: Average miles per gallon for life of coach.

Oil Temp: Engine oil temperature.

Note: If referenced information is not shown on your "COACH" screen, that

information is not offered from engine or transmission.

Note: MPG Average can be turned ON or OFF in the next level of screens, ref.

Maintenance, Setup and Adjustment Screens.

Press **SCREEN** to change data/picture contrast.

Press VIEW to move to the "BLANK" screen.



Maintenance, Setup and Adjustment Screens





Using the up \triangle and down ∇ keys will let you step through each line item to choose the appropriate screen.

Press **RESET** key to display screen.

TripTek Computer: Return to travel screens.

Maintenance: Maintenance screen.

Setup Menu: All setup screens.

Customer Service: Coach customer service screen.

Version Info: Product version information.

Maintenance Screen

The MAINTENANCE screen displays when to change oil and filters.



Engine Oil: Miles since last oil change.

Fuel Fltr: Miles since last fuel filter change.

Trans Oil: Miles since last transmission oil change.

Gen Oil: Hours since last generator oil change.

Fuel Fltr: Hours since last generator fuel filter change.

Note: To change line item duration refer to "MAINT. SETUP" screen.

Note: If Oil Can is displayed on top level screens the maintenance line item that

is blinking needs attention.



Press the up $\underline{\Delta}$ or down $\underline{\nabla}$ key to select the line item desired.

Press <u>RESET</u> and follow screen instructions to zero out line item after oil or filter change.

Press VIEW key to return to "TODAY" screen.

Press the up $\underline{\Delta}$ and down $\underline{\nabla}$ keys simultaneously to return to the "SCREEN SELECTION" screen.

Press the up Δ or down ∇ key to select the "SETUP MENU" screen.

Press **RESET** key to display screen.

Setup Menu Screen

The SETUP MENU screen will display all setup screens.



Set Compass State: Set compass zone by state.

Compass Calibration: Compass calibration procedure.

Maintenance Setup: Setup maintenance parameters.

Setup Clock: Clock setup screen.

Coach MPG ON/OFF: Turn on or off MPG average on coach screen.

EXIT: Exit setup menu screen.



Press the up Δ or down ∇ key to step through each line item to choose the appropriate screen.

Press **RESET** key to display screen.

Compass Zone Adjustment Screen

The SET COMPASS STATE screen is to maintain compass accuracy by state.



STATES: Alphabetical listing of all states to easily set zones to

maximize compass accuracy.

→: Pointer to current location of coach.



Using the up \triangle or down \bigvee key will let you scroll through the list of states to pick the state of your current location.

Pressing <u>RESET</u> will change the zone to the chosen state and return to "TODAY" screen.

Press the up $\underline{\Delta}$ and down $\underline{\nabla}$ keys simultaneously to return to the "SCREEN SELECTION" screen.

Press the up Δ or down ∇ key to select the "SETUP MENU" screen.

Press **RESET** key to display screen.

Compass Calibration

The compass must be calibrated after its initial installation or at anytime it is replaced or relocated. Compass calibration can be accomplished at two levels of accuracy. Standard Calibration – more than adequate for normal use. This is where the coach is driven in a full circle. 4 Point Calibration – where greater accuracy is sought or when the sensor has been put in an environment that affects compass accuracy. The procedure requires the coach to be pointed in each of the four true compass headings, i.e. North, East, South and West..



Press **RESET** key to begin compass calibration.

Press VIEW key to skip calibration and return to the "TODAY" screens.



Drive the coach in a full circle.

Press <u>VIEW</u> key after successful calibration and proceed to "COMPASS ADJ." Ref. below.

Press **RESET** key to proceed with 4-point calibration if desired.



Follow screen instructions and point coach true North and then press **RESET**.

Screen will then instruct you to point coach true East, press RESET again.

Continue process through South and West pressing RESET after each step.



Using the up \triangle or down \bigvee key will let you scroll through the list of states to pick the state of your current location.

Pressing \underline{RESET} will change the zone to the chosen state and return you to the "TODAY" screens. Calibration is complete.



Press the up Δ and down $\overline{\nabla}$ key simultaneously to return to the "SCREEN SELECTION" screen.

Maintenance Setup Screen

The MAINTENANCE SETUP screen is to preset the service interval of miles or hours.



Engine Oil: Selected maintenance item to set. Ref. Engine Oil,

Eng. Fuel Filter, Transmission Oil, Generator Oil

and Fuel Filter

12000 mi: Resetable miles or hours for maintenance

replacement interval.



Press VIEW key to change maintenance line item.

Press the up $\underline{\Delta}$ or down $\underline{\nabla}$ key to set desired miles (eng or trans) or hours (genset) for maintenance replacement interval.

Press **RESET** to exit back to "TODAY" screen.

Press the up \triangle and down ∇ key simultaneously to return to the "SCREEN SELECTION" screen.

Set Clock Screen

The SET CLOCK screen is used to set all parameters of the clock



Mountain Timezone: Time zone within the United States/Canada.

Auto Daylight Savings: Able to DISABLE or ENABLE.

Wed Jun 9 2004: Month, Day and Year

1:52.02 PM mdt: Time, am/pm and Time zone

designation.

Clock Display Format: Clock data line and text size.

Large: 1:52 Wed. Jun 9
Small: 1:52 PM mdt Wed. Jun 9, 2004



Press the up Δ or down ∇ key to change value of the item blinking.

Press VIEW key to go back one from the blinking item.

Press <u>VIEW</u> ▶ key to go forward to next settable item.

Press **RESET** key to return to SCREEN SELECTION screen.

Coach MPG ON/OFF Screen

The COACH MPG ON/OFF screen is to give operator a way of turning MPG Average on or off. This is lifetime data that is on the COACH screen.



ENABLED: The ability to disable or enable MPG Average on

the COACH screen.



Press the up \triangle or down ∇ key to disable or enable MPG Average.

Press **RESET** key to select option and return to TODAY screen.

Press the up Δ and down ∇ keys simultaneously to return to the "SCREEN SELECTION" screen.

Customer Service Screen

The CUSTOMER SERVICE screen is to give operator easy access to phone numbers and web page of the coach manufacturer



1-800-: Phone number of customer service department for

coach manufacturer.

www.: Web page of coach manufacturer.



Press any key to return to the "TODAY" screen.

TripTek Product Warranty

Coretronics, Inc. (the Company) warrants the Triptek computer to be free of defects in material and workmanship under normal use and service maintenance for a period of 12 months. In the event the Computer shall prove to be defective in material or workmanship during said 12-month warranty period, Coretronics, Inc. will, at its option, repair or replace the Computer, at no charge to Customer except as set forth below. All replaced parts and equipment shall become the property of Coretronics.

This limited warranty does not apply to any damage to the Computer resulting from accident, physical or electrical misuse or abuse, improper installation, alteration, any use contrary to its intended function, unauthorized service (i.e. service by anyone other than the Company or its authorized service personnel), fire, flood, lighting, or other acts of God.

This warranty limits the Company's liability to the repair or replacement of the product. The Company shall not be responsible for removal and/or reinstallation charges, loss or damage in transit and shipping and mailing costs to the warranty service location.

The Company reserves the right to make changes or improvements in its products without incurring any obligation to similarly alter products previously purchased.

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