



## **TECH TIP**

### **DX3 VEHICLE SPEED AND CRUISE SETTINGS**

***SUPERSEDES TT-15-031***

**GROUP: 0-GENERAL  
TECH TIP NO: TT-23-006  
DATE: 1-5-23**

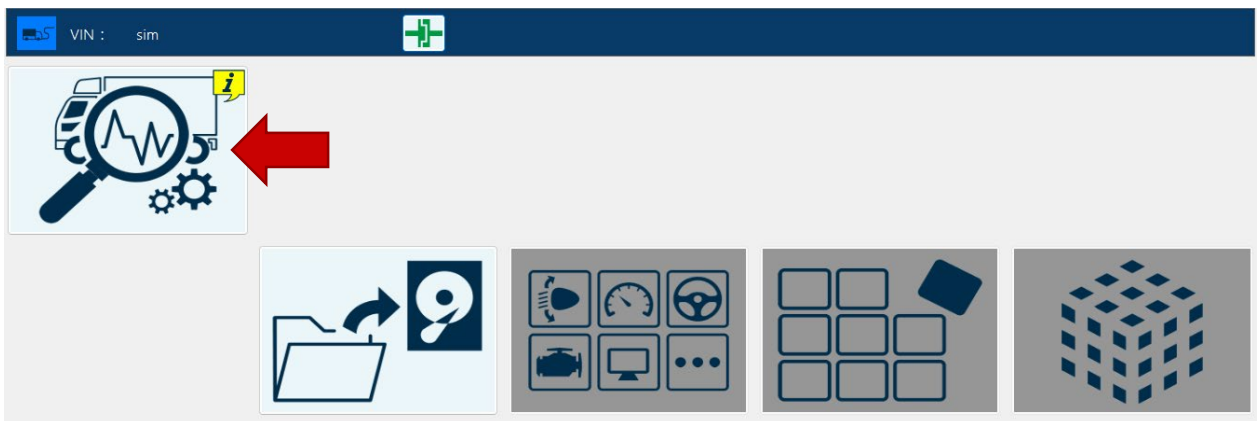
**SUBJECT VEHICLES:** 11MY-21MY Conventional Trucks (238, 258, 268, or 338) and 13MY-20MY COE (Cab over Engine) Trucks (195, 195h)

**Note:** This tech tip is provided as technical information and is not authorization for a warrantable repair.

## OVERVIEW:

The tech tip below is to set or change road speed on a Hino Conventional or COE truck using DX3. The below procedure and screen shots were taken from a Conventional truck.

1. Connect to the truck using DX3, see image below.



## 2. Highlight *VCS (Vehicle Control System)*.

System	Commun...	Software No.	No cat...	Present	Past	Pending	Informa...
Engine	CAN	89663-E3017	-	0	3	-	
DCU(Doser)(500K)	CAN	89550E0122	-	0	1	-	
BCU (Bumer)	CAN	2606	1	-	-	-	
Meter	CAN	83800-E0T90	-	0	0	-	
Meter (7 inch)	CAN	83800-E0T90	-	0	0	-	
VCS (Vehicle Control System)	Serial(K...	S8992-E0151	-	0	1	-	

3. On the left side of the screen, select *Inspection Menu*, then select *Setting and Learning / Speed Limit Setting Change Window*. Double click on the setting or click the *Check Mark* on the right also known as *OK*.

Inspection

System: 08 VCS (Vehicle Control System) Serial(K line)

Category	Menu
Setting and learning	ES start window
Setting and learning	Speed limit setting change window

OK

## 4. Click **Start**.

Speed limit setting change window

Items	Set value	Unit
Change cruise settings		
Changed value		
Change speed limiter setting		
Changed value		

Explanation

[Cruise setting]  
Maximum speed setting in setting control with which maximum speed can be set while controlling cruise can be done.

[Speed limiter settings]  
Upper limit of the speed limiter can be set within statutory speed limit.

The set upper limit of the speed limiter varies according to vehicle model, as shown in the following table.

	Set upper limit	Set lower limit
Heavy-duty (general)	90km/h	35km/h
Heavy-duty (with NR)	50.58km/h	35km/h

Caution

[Cruise settings]  
Initial value varies according to vehicle model, as shown in the following table.

	Set upper limit	Set lower limit

Start Writing Initialization  
Changed value UP Changed value DOWN

## 5. Highlight **Changed Value** (under Cruise) and use the **Change Value Up** and **Change Value Down** buttons to the desired value.

Speed limit setting change window

Items	Set value	Unit
Change cruise settings	78	Mph
Changed value	70	Mph
Change speed limiter setting		Mph
Changed value		Mph

Explanation

[Cruise setting]  
Maximum speed setting in setting control with which maximum speed can be set while controlling cruise can be done.

[Speed limiter settings]  
Upper limit of the speed limiter can be set within statutory speed limit.

The set upper limit of the speed limiter varies according to vehicle model, as shown in the following table.

	Set upper limit	Set lower limit
Heavy-duty (general)	90km/h	35km/h
Heavy-duty (with NR)	50.58km/h	35km/h

Caution

[Cruise settings]  
Initial value varies according to vehicle model, as shown in the following table.

	Set upper limit	Set lower limit

Close Writing Initialization  
Changed value UP Changed value DOWN

6. Once the value has been selected for cruise, click **Writing**, note that the new value has been written (**Change Cruise Settings** and **Changes Value** for cruise will now match).

**Important:** It is necessary to click **Writing** after changing each value, both values for cruise and speed limiter cannot be written at the same time.

Speed limit setting change window

Items	Set value	Unit
Change cruise settings	70	Mph
Changed value	70	Mph
Change speed limiter setting	75	Mph
Changed value	75	Mph

Explanation

[Cruise setting]  
Maximum speed setting in setting control with which maximum speed can be set while controlling cruise can be done.

[Speed limiter settings]  
Upper limit of the speed limiter can be set within statutory speed limit.

The set upper limit of the speed limiter varies according to vehicle model, as shown in the following table.

	Set upper limit	Set lower limit
Heavy-duty (general)	90km/h	35km/h
Heavy-duty (with NR)	50.58km/h	35km/h

Caution

heavy-duty;55 km/h  
Medium-duty;50 km/h  
If you set a value lower than this speed, it will be invalid.  
If you want to check the set value, go to "Data display" "Data monitor" "Settings" and check "Speed limiter speed rewritten by the user".

Close Writing Initialization  
Change value UP Changed value DOWN

7. Repeat this process to change **Speed Limiter Setting**. Highlight the **Changed Value** under **Speed Limiter Setting**, Use **Changed Value Up** and **Changed Value Down** to change speed limiter. Once complete, click **Writing** to confirm the selection. Confirm that the **Change Speed Limiter Setting** and **Changed Value** under change speed limiter setting now match.

**Important:** It is necessary to click **Writing** after changing each value, both values for cruise and speed limiter cannot be written at the same time.

Speed limit setting change window

Items	Set value	Unit
Change cruise settings	70	Mph
Changed value	70	Mph
Change speed limiter setting	68	Mph
Changed value	68	Mph

Explanation

[Cruise setting]  
Maximum speed setting in setting control with which maximum speed can be set while controlling cruise can be done.

[Speed limiter settings]  
Upper limit of the speed limiter can be set within statutory speed limit.

The set upper limit of the speed limiter varies according to vehicle model, as shown in the following table.

	Set upper limit	Set lower limit
Heavy-duty (general)	90km/h	35km/h
Heav-duty (with NR)	50.58km/h	35km/h

Caution

heavy-duty;55 km/h  
Medium-duty;50 km/h  
If you set a value lower than this speed, it will be invalid.  
If you want to check the set value, go to "Data display" "Data monitor" "Settings" and check "Speed limiter speed rewritten by the user".

Close Writing Initialization  
Changed value UP Changed value DOWN

**IMPORTANT:** Step 8 is for Conventional trucks only!

**8. NOTE:** If the numbers don't change on a Conventional truck, use the value list for all speed limiter function types.

Select **Device Specification** (left side of screen), allow the page load, and locate **Type of Speed Limiter Function**, parameter **No.145**. Input the set value number using the chart on the next page and click **Write** (upper right of screen), then follow the screen prompts.

**IMPORTANT:** The ignition must remain off for 60 seconds for the value to write. Turn the ignition back on after the 60 seconds has past, follow steps 1 thru 7 again.

The screenshot shows the 'Device specification' window for '08 VCS (Vehicle Control System) Serial(K line)'. A table lists various parameters with their manufacturer set values, initial values, set values, and units. Parameter 145, 'Type of speed limiter function', is selected and highlighted in blue. A red arrow points to the 'Write to ECU' button in the top right corner. Another red arrow points to the 'Type of speed limiter function' row in the table. A third red arrow points to the 'Signal description' area below the table, which reads: 'Change the function (vehicle speed) of the speed limiter by purpose.'

No.	Manufacturer set value	Initial value	Set value	Unit	Write to ECU
<input type="checkbox"/> 20	High torque differential identification		OFF		
<input type="checkbox"/> 21	Identification with engine start assist		ON		
<input type="checkbox"/> 22	HX07 manual identification		OFF		
<input type="checkbox"/> 23	Engine shutdown setting identification	Enabled	Enabled		
<input type="checkbox"/> 25	Air flow sensor characteristic value	1	1		
<input type="checkbox"/> 26	Meter correction coefficient	1.000	1.000		
<input type="checkbox"/> 27	Tire dynamic radius	0.407	0.407	m	
<input type="checkbox"/> 28	Differential ratio	4.110	4.110		
<input type="checkbox"/> 30	Refrigeration compressor identification		OFF		
<input type="checkbox"/> 34	Type of suspension	Rear air suspension	Rear air suspension		
<input type="checkbox"/> 40	Identification of side turn availability	None	None		
<input type="checkbox"/> 47	Specifications of rear combination lights	None	None		
<input type="checkbox"/> 47	Identification of brake lock		OFF		
<input type="checkbox"/> 68	Identification of idle shutdown		OFF		
<input type="checkbox"/> 69	Identification of concrete pump		OFF		
<input type="checkbox"/> 78	Pulse conversion rate	1.238	1.238		
<input checked="" type="checkbox"/> 145	Type of speed limiter function	0			

## SPEED LIMITER FUNCTION TYPES

The single digit 0, 6, 9 are the speed limiter function type set value options. The values represented here are what the maximum settings speed can be, using the function types in the chart below. Use the tire manufacturer's website or tire specification sheet to confirm the exact tire size and using the Chassis workshop manual, (Electrical Equipment Section) find the chart depending on transmission, (automatic or manual) to confirm the rear axle ratio.

<b>Setting Number</b>	<b>Maximum Settings Speed</b>
0	78 Cruise and (No Speed Limit) Road
6	78 Cruise and 70 Road
9	78 Cruise and 65 Road