

Part 573 Safety Recall Report

19E-009

Manufacturer Name : ASA Electronics, LLC.

Submission Date : MAY 23, 2019

NHTSA Recall No. : 19E-009

Manufacturer Recall No. : NR



Manufacturer Information :

Manufacturer Name : ASA Electronics, LLC.

Address : 2602 Marina Drive

Elkhart IN 46514

Company phone : 266-3135

Population :

Number of potentially involved : 15,290

Estimated percentage with defect : 100 %

Equipment Information :

Brand / Trade 1 : Voyager

Model : VOM74MM

Part No. : VOM74MM

Size : 1 1/4" X 4 3/4" X 10 1/16"

Function : Mirror Monitor

Descriptive Information : ASA performed a root cause analysis in cooperation with the fabricating manufacturer. ASA determined that the conditions causing the recall can be replicated on all revision A thru revision C. If a voltage drop (below 7 volts) takes place at a precise moment during powerup of the monitor (such as vehicle start) the monitor can skip the user defined settings and load the factory default settings which can invert the camera image on the monitor

Revision D changed the default settings for the image to match the user setting preventing this image from inverting.

The alphanumeric serial code at the bottom of the label can be used to identify the affected items. As an Example (C1118SLCN02142) the first letter is the revision "C." The following four numbers are a date code in MMY format. The affected products will have serial number starting with A, B, or C.

NOTE: 100% are possible, however, it does take a voltage drop of the vehicle at a specific time frame during the power-up of the monitor for it to occur.

Production Dates : MAY 01, 2017 - DEC 13, 2018

Description of Defect :

Description of the Defect : The monitor has factory DEFAULT and User-defined defaults within the monitors software. The details below describe how the monitor can “Miss” the loading of the User-defined settings and revert to the factory default settings.

Mirror monitor image setting:

- a. DEFAULT setting for the camera image is “MIRROR” mode
- b. User-defined camera image setting for the vehicle application is “NORMAL” mode

Monitor simplified power up sequence:

1. Keypad illumination
2. User- defined programmed settings loaded (includes camera image load of NORMAL)
3. LCD panel activation

If the power up sequence is interrupted by a power drop at a precise time during the loading of the programmed settings the monitor uses the DEFAULT settings which would invert the image. The default settings are now the user-defined settings until manually changed.

Application specific contribution to the cause: (Key from off/run/start/run)

1. Driver turns key from OFF to RUN (starts power up sequence of the monitor)
2. Driver turns key from RUN to Start as engine cranks. At a specific moment voltage can drop below 7 volts to the monitor which can disrupt the loading of the User-defined settings.
3. Driver releases the key to the run position as the monitor has loaded the factory default settings which can put the image in “Mirror” mode.
4. In some conditions it is noted that Power/Trigger wires were tied to reverse so the unit would power up and down every time the truck is put in reverse. This can increase the occurrence and is not ideal.

NOTE: This has to happen at a specific point of the boot-up sequence of the monitor. Monitor startup should only happen at startup of vehicle (t. The image inverting will not happen during in-use driving. It will, however, stay inverted until the setting is manually changed. This also loads other default settings such as volume and brightness and auto Turn-ON.

FMVSS 1 : NR

FMVSS 2 : NR

Description of the Safety Risk : The rear view monitor image, as displayed to the driver is a mirror image of the normal image (left and right are reversed). This could influence the driver to make a decision that could lead to an accident.

Description of the Cause : Cause 1: Mirror Monitor tries one time during the startup process to load user settings, if interrupted it can load the default factory settings and then continue with startup.

Cause 2: Vehicle voltage dropping at a precise time during the monitor being powered up leading to an interruption of the startup.

- Identification of Any Warning that can Occur :
1. When the unit powers up using the factory default settings the mirror monitor Auto On will be OFF. The Monitor, if the factory default settings are loaded, has to be manually turned ON instead of coming on by itself.
 2. When the user manually turns ON the unit the factory default for volume will be at 50% instead of 0 (user-defined) which allows outside noise, which is a nuisance.
 3. At this point the default of the image is inverted or put into Mirror mode (Safety issue).
 4. This would all happen before the driver puts the vehicle in Drive (if they notice the monitor is actually OFF)

Supplier Identification :

Component Manufacturer

Name : Shenzhen Luvview Co LTD
Address : 2nd Floor 1 Building Industrial Park
Shunchengii Dalang Longhua Shenzhen FOREIGN STATES
Country : China

Chronology :

11/05/18 – Rockport complaint of possible image inverting on mirror monitor
11/05/18 – Complaint from Frito customers having an inverting image issue.

12/10/18 – Received a call about a set of vehicles with images inverting on Amazon Mercedes Sprinters. Paul Klemm from Utilimaster was going to customer to investigate.
12/12/18 – Conference call between Utilimaster (Paul Klemm) and ASA. Sample being sent overnight.
12/13/18 - ASA able to recreate image inverting with sample
12/14/18 – New Software to change default setting from Mirror to Normal and Auto-ON to ON to create rev D.
12/14/18 – A SCAR (18-1358) assigned to Luvview in regard to image mode changing, AutoON changing, and Volume changing during crank
12/18/18 – ASA Tested samples that were sent
12/18/18 – LuView to try to supply 1000 Rev D units by the end of this week
12/21/18 – All rev C product put on hold at ASA
12/27/18 – Rev D product received at ASA
1/11/19 - Conference Call with customer (Utilimaster) – Requesting root cause with LuView
1/14/19 – Determined software fix on Rev D corrects image inverting, however does not fix the default to factory settings
1/16/19 – LuView working on a software fix to correct the drop to default settings. Also LuView working on field fix options.
1/17/19 – LuView working on a solution for a field fix that involves a relay and capacitor circuit.
1/19/19 – ASA approved software/hardware evaluation of Rev E to prevent the software from reverting to the

default settings

1/20/19 – Samples of field fix modules shipped from China to ASA by UPS express

1/24/19 – ASA approved the field fix modules and asked for some to be made ASAP.

1/25/19 – ASA Product Safety Investigation/Notification Report started (HS001)

1/30/19 – Corrective Action (SCAR 913) issued to ASA from Spartan Motors (Ulilimaster) – Shane Shance

2/4/19 – Received 200 field fix modules, 2000 more coming later in the week

Description of Remedy :

Description of Remedy Program : Install a Relay/Capacitor Module in field products. The base part is PVOM74MMFFK which is a field fix part number. For some large fleets we are modifying them (adding connectors) for ease of installation and giving them a different part number. The actual field fix is simple (10 minutes). The worst case so far is 30 minutes (this required the seat to be removed to get to the wiring on one chassis). ASA is supplying and sending the repair modules at no cost. ASA is allowing 0.75 hours of labor for installation at normal repair rates (expecting \$45 to \$100).

How Remedy Component Differs from Recalled Component : Field Fix kit is added. The repair module will hold power on the monitor at least four seconds after the power is removed. This prevents the power drop during the critical time the monitor is loading the user settings. Part numbers for Field Fix Modules are below.
PVOM74MMFFKTRA (is for Frito Lay - Transit trucks ONLY) - has specific connectors added.
PVOM74MMFFKPRO (is for Amazon Promaster trucks ONLY)
PVOM74MMFFKSPR (is for Amazon Sprinter trucks ONLY)
PVOM74MMFFKISU (for Isuzu truck ONLY)
PVOM74MMFFKGEN - This is the generic version that will have extra connectors and extra wire

Identify How/When Recall Condition was Corrected in Production : This was corrected after 12-15-18 when the product was changed to Revision D. This change included the ROM chip set settings (default) to be Normal mode instead of Mirror mode. If the default settings get loaded it does not change or invert the image.

Recall Schedule :

Description of Recall Schedule : Started contacting all customers by phone and Email to gather information and inform them of a recall around 3/11/18. Before this time we were mainly in discussion with the largest customer.

Planned Dealer Notification Date : MAR 11, 2019 - APR 03, 2019

Planned Owner Notification Date : APR 03, 2019 - APR 11, 2019

Purchaser Information :

The following manufacturers purchased this defective/noncompliant equipment for possible use or installation in new motor vehicles or new items of motor vehicle equipment:

Name : See Uploaded file of Purchasers

Address : NR

NR

Country : US

Company Phone : NR

* NR - Not Reported