OMB Control No.: 2127-0004

Part 573 Safety Recall Report

19E-009

Manufacturer Name: ASA Electronics, LLC.

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 : 18,762 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 MMYY 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:

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

Monitor simplified power up sequence:

- **Keypad illumination** 1.
- User- defined programmed settings loaded (includes camera image 2. load of NORMAL)
- 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 userdefined 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)
- 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.
- 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. 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 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

that can Occur: loaded, has to be manually turned ON instead of coming on by itself.

- 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.
- At this point the default of the image is inverted or put into Mirror mode (Safety issue).
- 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 Luview 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 Luview 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: NR
How Remedy Component Differs NR
from Recalled Component:

Identify How/When Recall Condition NR
was Corrected in Production:

Recall Schedule:

Description of Recall Schedule: NR

Planned Dealer Notification Date : NR - NR Planned Owner Notification Date : NR - NR

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: NR

Address: NR

NR

Country: NR

Company Phone: NR

^{*} NR - Not Reported