

Title: Cab Tilt Velocity Fuse 4-Door Cab, Full Tilt

Date: August 20, 2019

Vehicles: KME Custom Pumpers

Problem: See Recall NHTSA 19V528 / Transport Canada 2019344

Corrective Action: Ensure correct fuse.

Work Instructions: See Attachment.

Tools Required: PART A. DETERMINE ACTION TO BE TAKEN

• Under Truck Creeper

#### PART B. INSTALLING CORRECT VELOCITY FUSE

Common Hand Tools

• 5/8" Wrench - Cab Tilt Pressure Line

• 7/8" Wrench – Velocity Fuse

Personal Protective Equipment

Fluid Drain Pan

• Cab Tilt Fluid - See Plate Inside Cab

Plastic Sheet

Rags

• Oil Dry

Thread Sealant

KME Parts Required: If necessary, (2) - 1.5 (113861V) Closing Flow Velocity Fuses

KME Contact: Jim Hauser, Technical Support Manager

Telephone: 570-656-0903

E-Mail: jhauser@kmefire.com

Mailing Address KME Fire Apparatus

Plant #8

One Industrial Complex Nesquehoning, PA 18240

ATTENTION: Mr. Jim Hauser



### **WORK INSTRUCTIONS**

- 1. Do the following before beginning these work instructions:
  - Park the vehicle on a flat, level surface.
  - Ensure the park brake is set and the wheels are chocked.
  - Proper personal protective equipment should be worn.

#### PART A. DETERMINE ACTION TO BE TAKEN

NOTE: There are two determining factors as to whether or not further action is required: Check under the front of the chassis for a Tee Fitting and Check the size of the velocity fuse.

 Use a creeper to check for a Tee fitting that splits the hydraulic supply from the pump to the tilt cylinders. The Tee fitting will be located behind the front bumper on the front engine support crossmember.

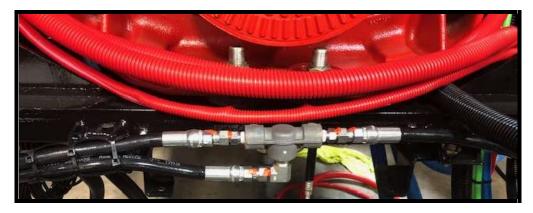


Figure 1 Tee Fitting on Engine Support Crossmember



Figure 2 Close-up of Tee Fitting



# WORK INSTRUCTIONS CONTINUED

NOTE: If you do not have a Tee fitting behind the front bumper on the front engine support crossmember, there is no further action required. Report the findings to KME using the Recall Response Card.

- 3. If you do have a Tee fitting that splits the hydraulic supply from the pump to the tilt cylinders, go to Step 4.
- 4. Tilt the cab.

NOTE: THE CAB TILT CONTROL IS EQUIPPED WITH AN INTERLOCK THAT DISABLES THE CAB TILT SYSTEM IN THE EVENT THE PARKING BRAKE IS NOT APPLIED.



- REMOVE ALL LOOSE ITEMS FROM THE CAB COMPARTMENT INCLUDING THE INSIDE COMMAND DESK AREA BEFORE TILTING AS CONTENTS MAY SHIFT OR DROP CAUSING PROPERTY DAMAGE OR PERSONAL INJURY.
- NEVER WORK AROUND OR UNDER A TILTED CAB UNLESS THE STAY ARM OR MECHANICAL SUPPORT IS SECURED IN THE SUPPORT POSITION. HYDRAULIC CYLINDERS CAN LEAK AND DRIFT AND CANNOT BE RELIED UPON TO SUPPORT THE CAB ON THEIR OWN. FAILURE TO ENSURE THAT THE STAY ARM IS SECURELY IN ITS SUPPORT POSITION COULD CAUSE SEVERE PERSONAL INJURY OR DEATH.
- ALWAYS CHECK THE CAB FOR PEOPLE WORKING ON OR AROUND THE CAB BEFORE RAISING OR LOWERING THE CAB. FAILURE TO ENSURE THAT EVERYONE IS CLEAR OF THE CAB COULD CAUSE SEVERE PERSONAL INJURY OR DEATH.
- CHECK FRONT BUMPER EXTENSION TO ENSURE THE WINCH COVER IS SHUT AND NO TOOLS OR ADDED EQUIPMENT IS OUT OF THE WAY BEFORE TILTING CAB TO AVOID POSSIBLE INTERFERENCE AND SUBSEQUENT PROPERTY DAMAGE WHEN THE CAB IS FULLY TILTED.
- ALWAYS ENSURE THAT THE VEHICLE IS ON A FLAT AND LEVEL SURFACE BEFORE TILTING THE
  CAB. TILTING THE CAB ON AN INCLINED OR NON-FLAT SURFACE MAY PRODUCE
  INTERFERENCE BETWEEN COMPONENTS AS THE CAB IS LOWERED CAUSING DAMAGE TO THE
  AIR INTAKE SEAL AND ENGINE TUNNEL.
- IF THE CAB FAILS TO LOWER AFTER FOLLOWING THE PROPER INSTRUCTIONS, DO NOT ATTEMPT TO FORCE IT. HAVE THE SYSTEM CHECKED BY A QUALIFIED TECHNICIAN AND REFER TO THE CAB TILT SYSTEM INSTRUCTIONS IN THE SERVICE MANUAL.



# WORK INSTRUCTIONS CONTINUED

#### **RAISING THE CAB**

The controls for raising the cab are located either inside the Officer Side Stepwell Compartment or on the Officer Side Discharge Panel. The Park Brake must be set.

- 1. To raise the cab, hold the momentary "ON" Toggle Switch "UP" and hold the black Pushbutton Switch "IN" until the cab is fully raised.
- 2. Turn the safety bar control knob counterclockwise, pull "OUT", and turn clockwise to lock.



**STEP 1 CONTROL** 

**STEP 2 CONTROL** 





Figure 3 Close-up of Cab Tilt Controls

The Safety Bar is located at the bottom of the Officer Side, Front Body Compartment or lower-right Officer Side Discharge Panel.

5. Locate the Velocity Fuse. See Figures on next page.





# WORK INSTRUCTIONS CONTINUED





Figure 4 Velocity Fuse Location and Close-up

6. Ensure that the closing flow is 1.5; if so, no further action is required. Go to lowering the cab instructions.

If the fuse is 2.5, the fuse must be replaced with a 1.5 closing flow fuse. Go to Step 7.

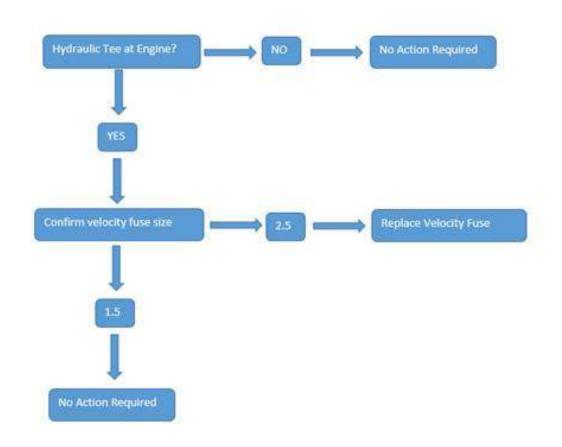


Figure 5 Velocity Fuse Close-up



# WORK INSTRUCTIONS CONTINUED

#### **SERVICE BULLETIN SUMMARY**



- 7. Contact Jim Hauser, Technical Support Manager, for proper velocity fuse.
- 8. Lower Cab.

#### **LOWERING THE CAB**

NOTE: FOLLOW THE PREVIOUS WARNINGS AND CHECK THAT ALL TOOLS AND PERSONNEL ARE FREE AND CLEAR FROM THE PATH OF THE CAB.



## WORK INSTRUCTIONS CONTINUED

- 1. To lower the cab, turn the Safety Bar Control Knob counterclockwise, push-in, and turn clockwise to lock. Push the Toggle Switch "DOWN". Cab will begin to lower.
- 2. Keep the silver Toggle Switch in the "DOWN" position after cab is fully down and in place.

#### PART B. INSTALLING CORRECT VELOCITY FUSE

Do the following before continuing these work instructions:

- Park the vehicle on a flat, level surface.
- Ensure the park brake is set and the wheels are chocked.
- Proper personal protective equipment should be worn.
- 1. Tilt Cab. Follow the warnings and instructions in Part A, Step 4 of this bulletin.

NOTE: FOLLOW THE PREVIOUS WARNINGS AND CHECK THAT ALL TOOLS AND PERSONNEL ARE FREE AND CLEAR FROM THE PATH OF THE CAB.

- 2. Locate the velocity fuse near the driver side cab tilt cylinder.
- 3. Cover the wires and tubing in the area with plastic.
- 4. Place a fluid drip pan underneath the velocity fuse assembly.
- 5. Rotate or loosen the fuse assembly to the side of the cylinder to have clearance to thread-off the complete fuse assembly, including the 90° fitting.
- Remove the velocity fuse. Dispose of the fuse properly.
- Clean the threads of the existing pieces of the fuse assembly.
- 8. Inspect the existing pieces of the fuse assembly for cracks or damaged threads. Replace, if needed.

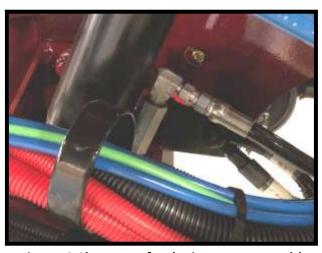


Figure 6 Close-up of Velocity Fuse Assembly



# WORK INSTRUCTIONS CONTINUED

- 9. Ensure that a thread sealant is used when replacing any necessary couplings, fittings, etc.
- 10. Ensure to catch the starter thread while threading on the replacement velocity fuse.
- 11. Connect the cab tilt line on both sides of the velocity fuse. See attachment for correct torque requirements.
- 12. Carefully, remove plastic and fluid drain pan. Use rags to clean any spills on loom, tubing or shop floor. Dispose of any items with hydraulic fluid properly.
- 13. Repeat Steps 2 to 12, Part B, for the passenger side of the unit.
- 14. Lower the cab. Follow the warnings and instructions in Part A, Step 8 of this bulletin.

NOTE: FOLLOW THE PREVIOUS WARNINGS AND CHECK THAT ALL TOOLS AND PERSONNEL ARE FREE AND CLEAR FROM THE PATH OF THE CAB.

15. Inform Jim Hauser, Technical Support Manager, that the work has been completed. See first page of this bulletin.



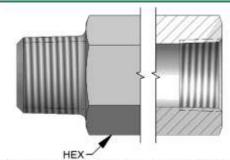
### ATTACHMENT



#### TORQUE SPECIFICATIONS

INLINE NPTF CONNECTIONS

#### CONNECTION IMAGE



DRYSEAL AMERICAN STANDARD TAPER PIPE THREAD (NPTF)

#### CONNECTION DETAILS / PERFORMANCE

SEE SAE J476a - DRYSEAL PIPE THREADS

#### CAUTIONS

- EXCESSIVE TAPE MAY CAUSE DISTORTION OR CRACKING OF ONE OR BOTH COMPONENTS!
- USE WRENCHES WITH FLAT ENGAGEMENT SURFACES (i.e. – OPEN END OR CRESCENT WRENCH), PIPE WRENCHES CAN DAMAGE VALVE BODY!
- USING WRENCH HANDLE EXTENSIONS OR "CHEATER BARS" CAN LEAD TO OVER-TORQUE OF CONNECTION AND VALVE DAMAGE, MALFUNCTION, OR FAILURE!
- WRENCH TO BE POSITIONED AS CLOSE TO THREADS AS POSSIBLE TO PREVENT SIDE LOAD ON THREADS!

#### DESCRIPTION

- INSPECT MALE AND FEMALE THREADS TO ENSURE THAT BOTH ARE FREE OF BURRS, NICKS OR ANY FOREIGN MATERIAL.
- APPLY SEALANT/LUBRICATION TO MALE PIPE THREADS. WITH ANY SEALANT, THE FIRST 1-2 THREADS SHOULD BE LEFT UNCOVERED TO AVOID SYSTEM CONTAMINATION.

NOTE: IF PTFE TAPE IS USED, IT SHOULD BE WRAPPED 1 1/2 – 2 TURNS IN CLOCKWISE DIRECTION WHEN VIEWED FROM THE MALE PIPE THREAD END.

- SCREW THE VALVE INTO THE MATING PORT OR FITTING TO THE FINGER TIGHT POSITION.
- WRENCH TIGHTEN THE VALVE TO THE "TURNS PAST FINGER TIGHT" VALUES SHOWN IN THE TABLE BELOW.

NOTE: NEVER BACK OFF (LOOSEN) PIPE THREADED CONNECTORS TO ACHIEVE ALIGNMENT.

NOTE: TORQUE RECOMMENDATIONS BELOW ARE FOR VALVE CONNECTED TO A COMPATIBLE FITTING, ADAPTER, OR BLOCK. IF VALVE IS CONNECTED TO FEMALE SWIVEL CONNECTION, REFER TO SWIVEL MANUFACTURER'S TORQUE RECOMMENDATION FOR THAT JOINT.

NPTF THREAD SIZE	TURNS PAST FINGER TIGHT	HEX (TYPICAL) (in.)		
		MALE → MALE	FEMALE → FEMALE	MALE ←→ FEMALE
1/8 – 27	2-3	0.438	0.625	0.625
1/4 - 18	2-3	0.825	0.750	0.750
3/8 - 18	2-3	0.750	0.875	0.875
1/2 - 14	2-25	0.875	1,125	1.125
3/4 - 14	2-25	1.125	1.375	1.375
1 11 1/2	1.5 - 2.5	1.375	1.625	1.625
1 1/4 - 11 1/2	1.5 - 2.5	1.750	2.000	2.000
1 1/2 - 11 1/2	1.5 - 2.5	2.000	2.375	2.375

This course it is not will usually, provided provided by Noting this work of active provided product of control of the condension by continuous photos subtleshold experted as the same product of the control of the co



3800 Industrial Avenue • Rolling Meadows, IL 60008-1085 USA © 2012 phone: 847/259/3800 • fax: 847/259/3997 • email: info@vonberg.com

V00\_APR2013