



ONRD – 00008282019- 24

TECHNICAL SERVICE BULLETIN

Title: Cab Tilt Velocity Fuse 2-Door Cab

Date: August 28, 2019

Vehicles: *KME Custom Pumpers*

Problem: See Recall 19V528

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: (2) - 1.0 (113861V002) Closing Flow Velocity Fuses
(1) – Fitting Pipe to JIC (039683V)
(1) – JIC 90 Degree Female to Male Fitting (044938V013)

KME Contact: Jim Hauser, Technical Support Manager

Telephone: 570-656-0903

E-Mail: jhauser@kmeffire.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.

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 inside the rear officer side door. Open the locking panel located under the officer side rearward seat. Inside this compartment is the remote control to raise and lower the cab.

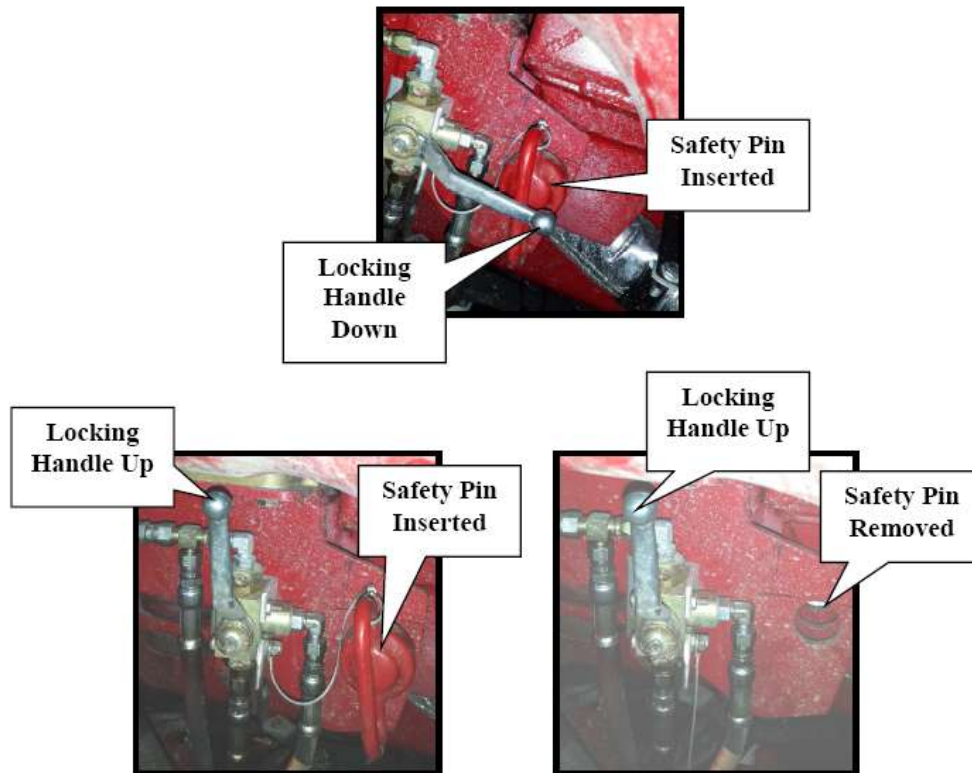


Figure 1 Inside Front Cab Wheel Well

1. Ensure all loose equipment inside the front of the cab is secure. Follow previous warnings.
2. Close front doors of the cab, remove guide posts from bumper, and check the front discharge and swivel are clear before fully tilting.
3. Remove the Safety Pin from both sides of the cab. See picture above.

WORK INSTRUCTIONS

CONTINUED

4. Lift the hydraulic valve handle UP on both sides of the cab. See previous Figure.
 5. Remove the locking latches on the compartment under the rearward, officer side seat in the back of the cab.
 6. Remove the remote control.
 7. To raise the cab, hold the “UP” arrow button “IN” until the cab is fully raised.
 8. A safety bar will lock the cab in place to avoid suddenly falling down.
 9. Ensure the safety bar is in place.
5. Locate the Velocity Fuse. See Figures on next page.



Figure 4 Cab Lift Remote Control



Figure 5 Velocity Fuse Location and Close-up

WORK INSTRUCTIONS

CONTINUED

6. Ensure that the closing flow is 1.0; 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 1.0 closing flow fuse. Go to Step 7.



Figure 6 Velocity Fuse Close-up

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.



Figure 7 Safety Bar Release

1. Pull the T-handle on the Safety Bar to release. This control is located under the passenger side door.
2. Press the “DOWN” arrow button on the remote control in until the cab is all the way down.
3. Pull the locking handle down on both sides of the vehicle.
4. Insert the Safety Pins on both sides of the vehicle.



Figure 8 Cab Tilt Control

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.

WORK INSTRUCTIONS

CONTINUED

6. Remove the velocity fuse. Dispose of the fuse properly.
7. 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. Thread the adapter and then the 90 degree JIC fitting on the upper portion (outlet or top) of the velocity fuse and reconnect hydraulic line.



Figure 9 Close-Up of Velocity Fuse Assembly

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.

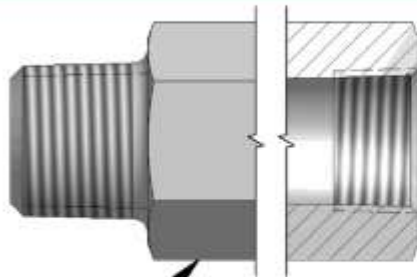
ATTACHMENT



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

1. INSPECT MALE AND FEMALE THREADS TO ENSURE THAT BOTH ARE FREE OF BURRS, NICKS OR ANY FOREIGN MATERIAL.
2. 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.

3. SCREW THE VALVE INTO THE MATING PORT OR FITTING TO THE FINGER TIGHT POSITION.
4. 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	0.625	0.750	0.750
3/8 – 18	2 – 3	0.750	0.875	0.875
1/2 – 14	2 – 2.5	0.875	1.125	1.125
3/4 – 14	2 – 2.5	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

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