Purpose:

The purpose of this Policy is to define the responsibilities of personnel operating Fire Department apparatus and vehicles, and identify Department expectations regarding ensuring safe driving practices when backing-up apparatus and vehicles.

Scope:

This policy applies to all uniformed and non-uniformed members of the Des Plaines Fire Department who operate emergency apparatus, staff cars, and utility vehicles owned by the City, and applies to all situations where apparatus and vehicles are required to back-up.

Policy:

It is the policy of the Department to promote and enforce these procedures to ensure that members operate in and around emergency apparatus and staff vehicles in the safest manner possible.

Responsibility:

Members are expected to understand and comply with all elements of this policy. Officers and acting officers are expected to enforce all procedures contained in this policy.

All personnel should expect circumstances that will require the apparatus to come to a sudden and complete stop and all must be prepared to issue the stop command at all times.

Definitions:

Apparatus: A specialized emergency vehicle used for rescue, fire suppression, EMS or other specialized functions. Generally, not a common type of passenger vehicle (i.e. SUV, cars)

Hazards: Overhead doors in operation, people or other apparatus/vehicles in station / bay or roadway, cabinet doors open, light standards not in retracted position, members who slip/trip/fall, etc..

Safety Observer: The safety observer shall be the company officer or acting officer responsible for an apparatus, or the non-driver of an ambulance, and will work in conjunction with the jumpseat crew member, if applicable, to safely back the apparatus into position.

Vehicle: A passenger type vehicle used for routine driving and selected emergency responses.
Procedure:

1. Backing of Apparatus – General Procedures
   a. Drivers of Fire Department apparatus shall not drive in reverse without a safety observer.
      i. If, as a last resort, no member is available to act as a safety observer due to emergency scene deployments or other situations, the driver shall get out of the apparatus and physically check behind the apparatus prior to backing.
      1. Use available in-station personnel or on-scene personnel to assist in backing when no crew member is available.
      ii. If there is any question as to safety during backing, the driver shall not back-up the apparatus without obtaining assistance.
      iii. The driver of an ambulance arriving at a hospital receiving area will exercise extreme caution when backing without the use of a safety observer. If there is any question regarding safe clearance of an ambulance in these circumstances, the patient care attendant may view out the back window of the ambulance to assist, or may exit the ambulance and perform safety observer duties unless it will compromise patient care. In that case, the driver may exit the ambulance or use hospital staff to assist in determining safe clearance.
   b. The safety observer shall have an unobstructed view of the rear of the apparatus and be in visual and radio contact with the apparatus driver, directing the driver as to pedestrian and vehicle traffic or other obstructions.
   c. Any member who is operating on the outside of an actively-backing apparatus is required to be monitoring a portable radio on the same frequency as the driver.
   d. An apparatus may reverse once the safety observer is in position and the jumpseat member, if any, has safely exited the apparatus on the apron or in a safe area if not at the fire station.
   e. Drivers of Fire Department vehicles (staff/command vehicles) that have complete and unobstructed views through windows and with mirrors shall be exempt from safety observer requirements but shall only back-up after checking for obstructions, personnel or pedestrians.
   f. Additional spotters may be used at the rear of the apparatus, especially in a complicated or lengthy reverse-direction situation such as an emergency incident scene. Additional spotters are not permitted to walk behind or position themselves in the line-of-travel directly behind the apparatus, and must always be visible to the driver.
2. Backing of Apparatus into Fire Stations
   a. Due to the varied and dangerous circumstances that may be encountered when backing Fire Department apparatus into fire stations, the apparatus driver shall take extraordinary precautions including, but not limited to, the operation of warning and headlights and the use of a safety observer.
      i. If the apparatus driver is alone and has no other member riding on the apparatus, the driver shall request that a safety observer be detailed from the fire station to assist in the backing process. Ensure that each safety position has a portable radio on the same channel.
   b. Apparatus drivers returning to a fire station shall strictly observe the following procedure:
      i. The driver will activate all emergency lights on approach to the station to allow traffic to have ample time to react.
         1. Ambulances with turn around room completely within the boundaries of the ramp will not have to activate emergency lights.
      ii. Back apparatus onto the ramp prior to any personnel exiting the apparatus.
         1. The apparatus operator will exercise extreme caution in watching for any vehicles or pedestrians who do not adhere to the operating emergency warning lights or audible back-up alarms.
         2. Members in each seated position should monitor traffic that may attempt to pass the apparatus backing onto the ramp, and verbally alert the driver of any potential hazards.
      iii. The Officer of the apparatus shall be assigned as the safety observer and exit the apparatus once on the ramp and while the apparatus is at a complete stop.
      iv. When an ambulance returns to the station and is safely positioned on the ramp, the passenger shall exit and perform the functions of safety observer.
      v. An engine or truck safety observer is responsible for the safe backing of the apparatus into the fire station and shall take a position to the front right corner of the apparatus, within view of the driver.
      vi. An ambulance safety observer is responsible for the safe backing of the ambulance into the fire station and shall take a position alongside the passenger side of the ambulance.
      vii. The safety observer shall have an unobstructed view of the rear area of the apparatus and be in visual and radio contact with the driver.
      viii. The driver shall not back the apparatus without the permission of the safety observer and shall obey all commands of the safety observer.
c. A Plymovent exhaust removal system will be used on apparatus so-equipped while backing into quarters.
   
   i. With the apparatus at a complete stop, apply the Plymovent until the Plymovent hose is properly secured. See SOP P901 Plymovent System for system instructions.
   
   ii. Once the Plymovent is attached, the jumpseat member, or non-driver ambulance member, as applicable, will walk to the final stop position to visually ensure that no obstructions are present and signal to the officer or ambulance driver that they are ready for the vehicle to back-up until it reaches the desired location.
      
      1. An open-handed stop signal, along with a loud verbal STOP statement on the portable radio, will be used by the jumpseat firefighter or safety observer if that person determines the reverse movement must stop.
   
   d. The safety observer shall monitor the speed of the apparatus and make any corrections to the path-of-travel using the portable radio.
      
   i. Urgent actions required of the apparatus operator shall cause the safety observer to say STOP and the apparatus operator to immediately cease reverse travel and wait further direction from the safety observer.
   
   e. The safety observer will remain in contact with the driver until the apparatus reaches its desired position, the apparatus is taken out of reverse gear, and the brakes are applied.
Purpose: To ensure that all Department members are protected from exposure to vehicle exhaust emissions in the apparatus floor area, and to prevent contamination of the work, living and sleeping areas.

Scope: This policy applies to all Plymovent exhaust removal systems. This policy covers normal operation of the system when apparatus is moving in/out of the station and while parked in the station while routine maintenance or training is occurring.

Policy: All Department vehicles that can use the “Plymovent” exhaust removal system shall do so when exiting and backing-into the station vehicle bays. The following procedure shall be used to insure the health and safety of Department personnel. For backing of Apparatus, see P606.3 procedures

Responsibility: It is the responsibility of all Company Officers to ensure that their company members follow this policy. It is the responsibility of all members of the Des Plaines Fire Department to understand and comply with this policy.

Definitions:

Plymovent – The exhaust removal system for Department vehicles.

Plymovent Coupling – The pneumatic attachment component of the system that attaches to the exhaust pipes of Department vehicles.

Procedure:

1. The Plymovent coupling shall be in good working order and attached to the exhaust of all Department vehicles adapted for its use.
   a. The Engineer or driver of the vehicle will ensure the system is connected and operational at the beginning of their shift.
2. The officer shall ensure that the system is used any time a vehicle exits or returns to the apparatus bay floor or any time a vehicle motor is run inside the apparatus bay.
3. The driver of any vehicle shall exit the station at a safe speed to allow the coupling nozzle to disconnect from the vehicle exhaust tailpipe in a safe manner and without causing the coupling to hit the apparatus door frame or to be violently whipped about in the apparatus floor area.
4. When returning to the station, the Plymovent coupling shall be reconnected to the vehicle in accordance with the Backing of Apparatus policy. (P606.3)
   a. The vehicle shall be backed-into the station until the exhaust tailpipe of the vehicle is inside the threshold of the bay, as signaled by a spotter or safety observer as defined in P606.3 Backing of Apparatus.
5. The driver will stop the vehicle, and the coupling shall be connected to the exhaust pipe of the vehicle by the jumpseat or other crew member.
   a. Once attached, the spotter or safety observer shall signal the driver to proceed backing into the station.

6. The crew member will walk to the final stop position of the vehicle and confirm that no obstructions or hazards in the way of the backing apparatus and signal to the officer or the driver that they are ready for the vehicle to back up.

7. The Plymovent fan will turn-on automatically for three minutes any time a vehicle is started. If a longer run time is needed, the fan shall be turned-on manually.
   a. Operation of vehicle motors above idle speed while stationary in the fire station shall be limited to a maximum of 1500 RPM’s and 5 minutes of run time.

8. In the event that any component of the Plymovent system is damaged or becomes inoperable, proper maintenance documentation and notifications to the on-duty Shift Commander will be completed by the officer in charge of that vehicle.
   a. Apparatus operation in the station should be limited to start-up and shut-down of engines. Do not operate engines as part of routine apparatus checks or training when Plymovent components are inoperable.
**Revised Vehicle Backing Policy**

**SOP:** P606.3 Backing of Apparatus

**Related:** P901 Plymovent System

**Purpose:** Promote safe backing operations by positioning of spotters and clear direction to apparatus operators.

### Key Points

1. Activate lights and back onto ramp with all members on board.
2. Officer exits apparatus and holds door open until jumpseat FF is in bay.
3. FF positions at Plymovent and waits for apparatus to enter and come to complete stop.
4. Apply Plymovent to apparatus after it is stopped inside the station.
5. Walk on same side of vehicle confirming that there are no obstructions and go to rear stopping position.
6. Firefighter will position at rear of apparatus and signal to officer when ready for vehicle to back up.
7. Ensure apparatus is clear and stops at designated point. Keep all others away from behind vehicle at all times.

### Important

- Do not exit vehicle until officer instructs to do so.

### Notes

- Plymovent will activate once it is moved forward in the track and once inflated, eliminate emissions in the station.
- If damage occurs to Plymovent, notify station officer immediately.
- Ambulances may turn onto ramp and allow for passenger to exit at front of station.
- Ambulance passenger should position at the rear stopping position and keep others away from path of vehicle.
- All members assigned to apparatus and while backing must be on same radio channel to alert of hazards or directions.