

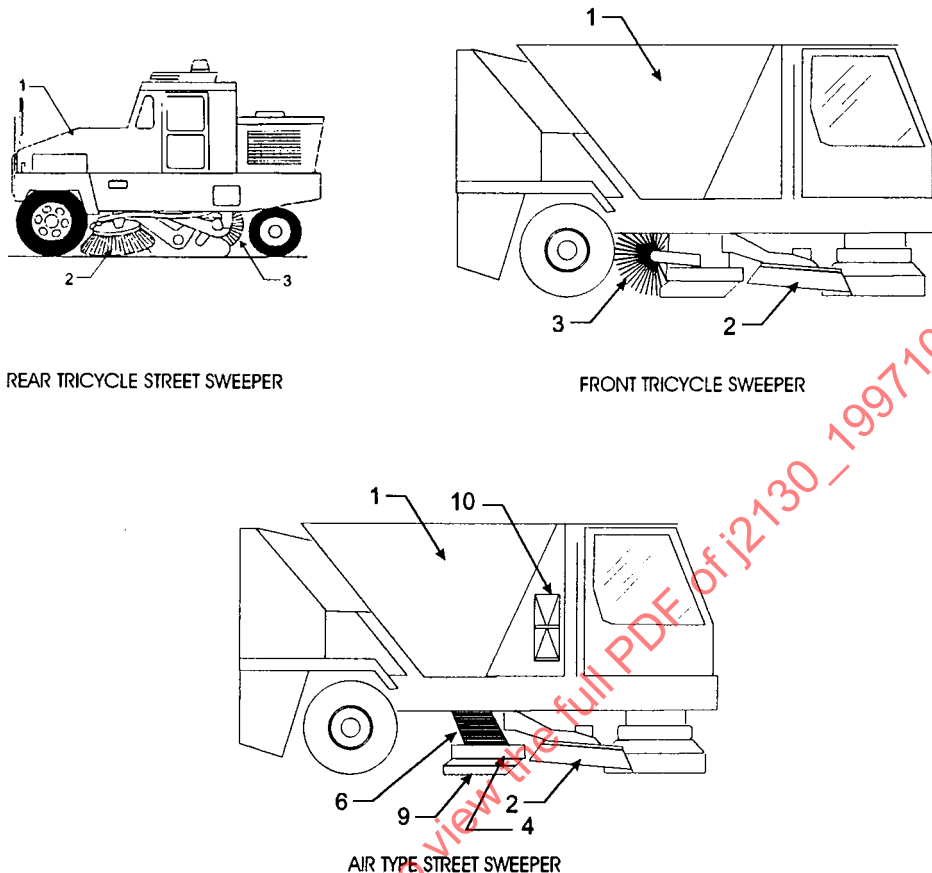
(R) SELF-PROPELLED SWEEPERS AND CLEANING EQUIPMENT

1. **Scope**—This SAE Standard applies to all self-propelled machines that are designed to clean material from highways, parking lots, and floors in non-residential buildings. Primary methods for removing material can be by mechanical means, pneumatic, washing system, or a combination.
- 1.1 **Purpose**—To identify self-propelled cleaning equipment, which are grouped into street and industrial sweepers and scrubbers.
2. **References**—There are no referenced publications specified herein.
3. **Definitions**
 - 3.1 **Street Sweepers**—Self-propelled machines primarily designed to sweep material from highways, parking lots, construction sites, and road repaving work. These machines can move material to a hopper or other type of container attached to the machine by mechanical or pneumatic means, or by combinations of each.
 - 3.2 **Industrial Sweepers**—Self-propelled or operator-assisted machines used to clean up material inside Industrial and Commercial areas. These machines can be mechanical, pneumatic, or combinations of each with or without floor scrubbing attachments.
 - 3.3 **Industrial Scrubbers**—Self-propelled machines which use a washing system to remove material. This washing system consists of a tank of cleaning solution, a method for applying the cleaning solution to the surface and a collection system to recover the cleaning solution.
 - 3.4 **Combination Industrial Sweepers/Scrubbers**—Self-propelled machines which incorporate both a sweeping and a scrubbing system.
4. **Identification**
 - 4.1 Integral mechanical tricycle configuration sweepers with a maximum transport speed of less than 40 km/h. (See Figure 1).

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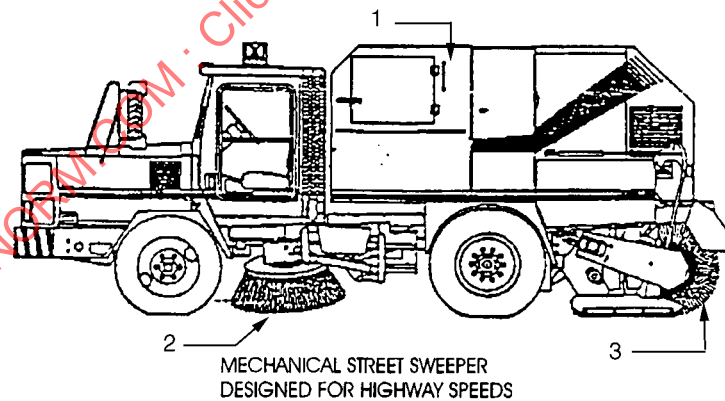
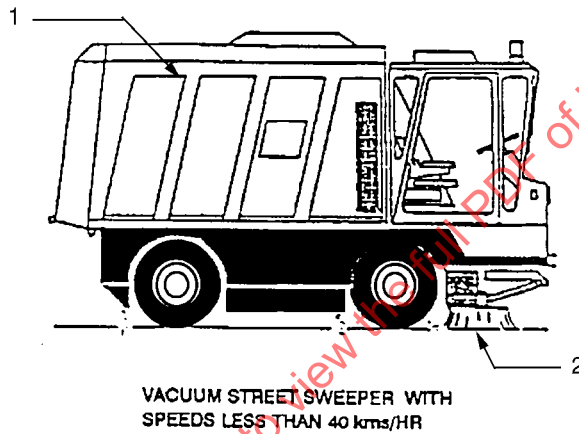
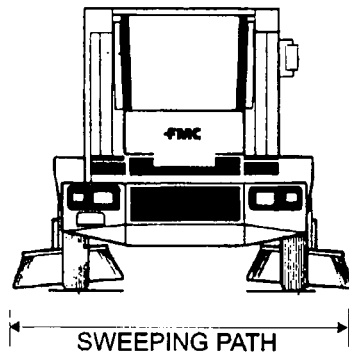
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- | | |
|---|-------------------|
| 1. Hopper | 6. Vacuum Hose |
| 2. Gutter Broom | 7. Transfer Broom |
| 3. Main Broom | 8. Caster Wheel |
| 4. Pick-up Head | 9. Skids |
| 5. Pick-up Nozzle (If less than Full width) | 10. Fan |

FIGURE 1—SELF-PROPELLED CLEANING EQUIPMENT—
REAR TRICYCLE STREET SWEEPER, FRONT TRICYCLE SWEEPER,
AND AIR TYPE STREET SWEEPER

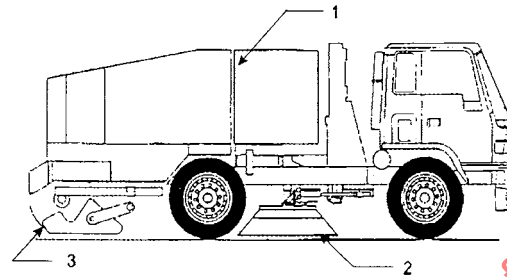
- 4.1.1 Hoppers can be high dump (being able to dump into refuse container or low dump (being able to dump into refuse container).
- 4.1.2 The machine can be front or rear wheel steer with steering controls located either center, left, right, or both left/right.
- 4.1.3 Material can be placed in the hopper via mechanical or pneumatic means or by combinations of each.
- 4.2 Integral chassis sweepers some of which have a top speed less than 40 km/h and some of which are designed to transport at highway speeds. (See Figure 2).



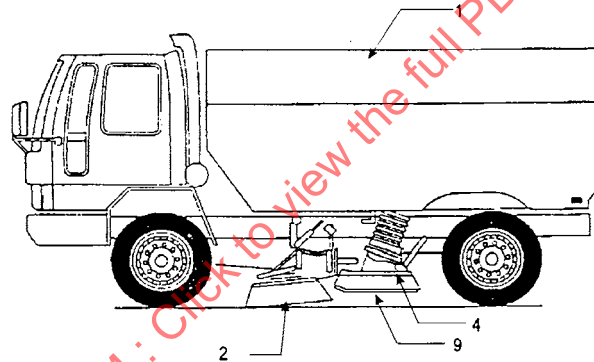
- 1. Hopper
- 2. Gutter Broom
- 3. Main Broom

FIGURE 2—SELF-PROPELLED CLEANING EQUIPMENT—
VACUUM STREET SWEEPER WITH SPEEDS LESS THAN 40 KM/H
AND MECHANICAL STREET SWEEPER DESIGNED FOR
HIGHWAY SPEEDS

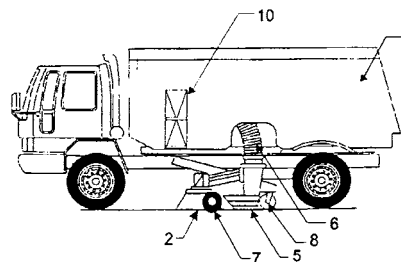
- 4.2.1 Hoppers can be high dump (being able to dump into refuse container) or low dump (being able to dump on the ground only).
- 4.2.2 Steering controls can be located in the center, on the left or right side or both.
- 4.2.3 Material can be placed in the hopper by mechanical or pneumatic means or by combinations of each.
- 4.3 Truck chassis mounted sweepers that are able to transport at highway speeds. (See Figure 3).



MECHANICAL STREET SWEEPER



REGENERATIVE AIR STREET SWEEPER

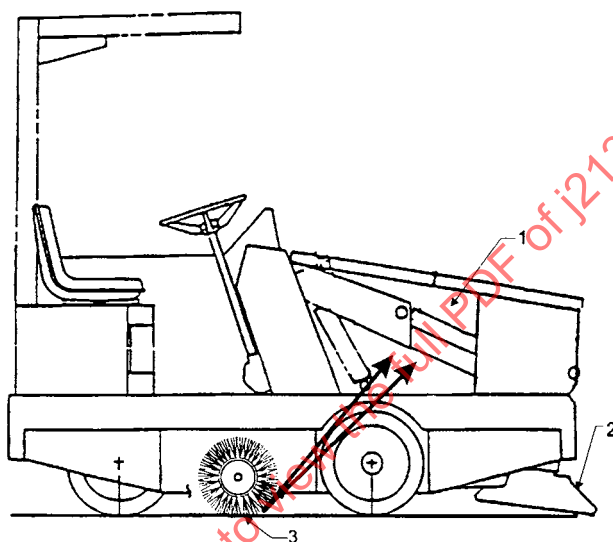


VACUUM STREET SWEEPER

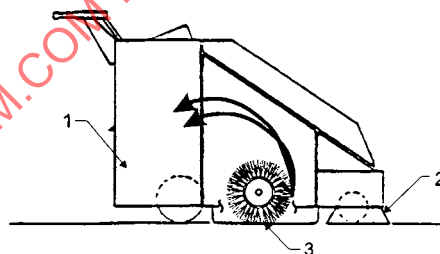
- | | |
|---|-------------------|
| 1. Hopper | 6. Vacuum Hose |
| 2. Gutter Broom | 7. Transfer Broom |
| 3. Main Broom | 8. Caster Wheel |
| 4. Pick-up Head | 9. Skids |
| 5. Pick-up Nozzle (If less than Full width) | 10. Fan |

FIGURE 3—SELF-PROPELLED CLEANING EQUIPMENT—
MECHANICAL STREET SWEEPER, REGENERATIVE AIR STREET SWEEPER,
AND VACUUM STREET SWEEPER

- 4.3.1 Hoppers can be high dump (being able to dump into refuse container) or low dump (being able to dump on the ground only).
- 4.3.2 Steering controls can be located on the left or right side or both.
- 4.3.3 Material can be placed in the hopper by mechanical or pneumatic means, or by combinations of each.
- 4.4 Industrial sweepers are designed to work in buildings, general parking areas, and other off-highway applications with speeds less than 20 km/h. (See Figure 4.) Industrial sweepers can also include walk-behind style sweepers.



DIRECT THROW RIDER INDUSTRIAL SWEEPER

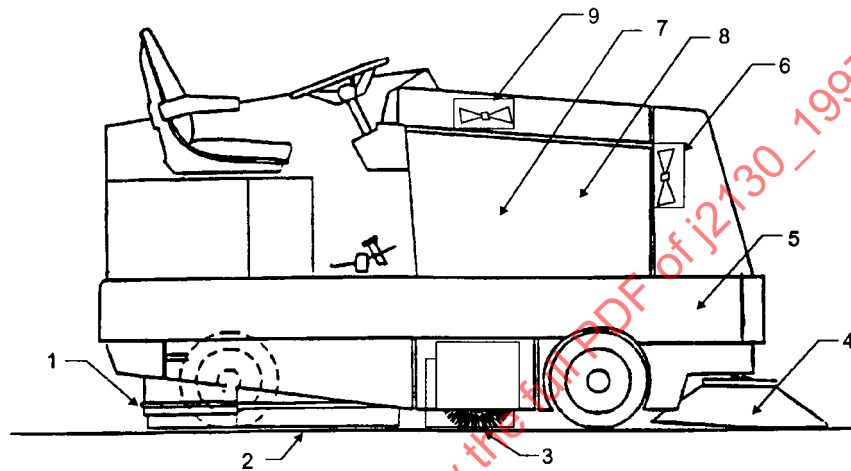


OVER THROW WALKBEHIND INDUSTRIAL SWEEPER

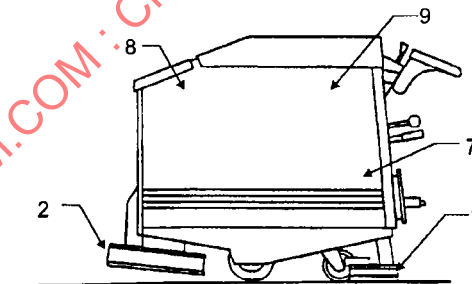
- 1. Hopper
- 2. Side Sweeping Broom
- 3. Main Sweeping Broom

FIGURE 4—SELF-PROPELLED CLEANING EQUIPMENT—
DIRECT THROW RIDER INDUSTRIAL SWEEPER AND
OVER THROUGH WALK-BEHIND INDUSTRIAL SWEEPER

- 4.4.1 Hoppers can be high dump (being able to dump into refuse container) or low dump (being able to dump on the ground only).
- 4.4.2 Steering controls can be located in the center, on the left or right side or both (rider machines only).
- 4.4.3 Material can be placed in the hopper by mechanical or pneumatic means, or by combinations of each.
- 4.5 Industrial scrubbers are designed to work in buildings, general parking areas, and commercial applications with speeds less than 20 km/h. (See Figure 5.) Industrial scrubbers can also include walk-behind style scrubbers.



INDUSTRIAL RIDER SWEEPER/SCRUBBER COMBINATION



INDUSTRIAL WALK BEHIND SCRUBBER

- | | |
|------------------------|----------------------|
| 1. Squeegee | 6. Dust Control Fan |
| 2. Scrub Brush | 7. Recovery Tank |
| 3. Main Sweeping Broom | 8. Solution Tank |
| 4. Side Sweeping Broom | 9. Water Pick-Up Fan |
| 5. Hopper | |

FIGURE 5—SELF-PROPELLED CLEANING EQUIPMENT—
INDUSTRIAL RIDER SWEEPER/SCRUBBER COMBINATION AND
INDUSTRIAL WALK-BEHIND SCRUBBER