





Soft Tissue Injury Prevention Tool

Tip Sheets Trade: Heavy Highway

Job Task: Roadway Painting – Hand Striping/Painting

General Tasks

- > Remove paint machine from truck.
- Dry ground and remove dust and debris with gas blower.
- Use propane torch to dry pavement as necessary.
- Lay out boards/templates to mark spray patterns.
- Use walk behind painter to apply paint at ground level.
- Occasional hand painting using hand held spray gun attached to walk behind painter requiring intermittent bending to ground level.
- Manually throw out glass beads to adhere to wet paint and reduce paint glare.

Common Tools

- Walk Behind Painter
- (Airless Sprayer on Wheels)
- ➤ Gas Back Pack Blower (~20 lbs)
- Propane Torch and Tank (~20 lbs)

Potential Risk Factors

Risk Factors can lead to increased risk for Work Related Musculoskeletal Disorders (WMSD's)

Continuous Forward/Backward Neck Bending

 Moderate Risk with sustained side bending of neck when looking down and around walk behind paint machine when striping.

Continuous Moderate Forward Back Bending

 Moderate Risk with sustained side bending of back when looking down and around walk behind paint machine when striping.

Continuous Extreme Forward Back Bending

 Moderate Risk with frequent extreme forward bending to ground level when hand painting/striping with hand held sprayer.

High Hand Grip Force

 Moderate Risk with frequent gripping of trigger with 1-2 fingers to control paint flow and mobility of sprayer.

Heavy Lifting

 Moderate Risk with intermittent to frequent lifting of heavy walk behind paint sprayer (300-400 lbs).

Possible Solutions

Awkward Posture & Lifting Solutions:

- Use a paint sprayer extension for ground level hand painting to promote upright work postures.
- If using two worker crews, rotate to other job tasks at least every 4 hours to intereven on awkward neck and back postures.
- Evaluate the use of a rear view type mirror attached to the front of a paint sprayer at the point of application. If positioned correctly, this may make it easier for a painter to view paint application while maintaining upright neck and back postures.
- Use truck lift to always raise and lower walk behind sprayer onto and off of flat bed truck.

Potential Benefits

- Reduced exertion of lower back because of reduced weight.
- Blood flows through body and extremities and muscles are less strained.

Feasibility

- Work Practice Control
- Engineer Control
- Administrative Control

Estimated Cost of Intervention

None