

Ray-Tech Infrared Total Maintenance Vehicle (TMV)

The most efficient pavement restoration vehicle available for making complete and permanent asphalt pavement repairs!

A combination Reclaimer and Infrared Pavement Heater that can be custom mounted onto a truck chassis (customer supplied) 18,000 GVW and up. Ray-Tech will custom design the unit based on truck dimensions and specifications with selected options.



4-Ton Reclaimer and 8' x 6' Infrared Pavement Heater



3-Ton Reclaimer and 8' x 6' Infrared Pavement Heater

- Infrared provides thermal bonding for superior quality repairs and increases production with just a crew of two.
- Fuel efficient and easy to operate.
- Eliminates cold patching method.
- Bonds old and new asphalt joint free.
- Low maintenance and quality construction.
- Proven reliability and profitability.
- Available in two, three, four and six ton reclaimer configurations.
- Made in the U.S.A.

The Ray-Tech TMV can reclaim waste asphalt into permanent patch material and hold fresh asphalt at the proper working temperature. The infrared pavement heater enables the user to make year-round permanent restorations.



2-Ton Reclaimer and 8' x 6' Infrared Pavement Heater

 **Ray-Tech Infrared Corp.**
Manufacturer of Infrared Road Maintenance Equipment

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Ray-Tech Total Maintenance Vehicle (TMV)

4-TON RECLAIMER

Reclaimer

- Located directly behind cab.
- Heating System**
- **Energy Converters** – Four (4) 22,000 BTU Infrared type converters. Secured in heating chamber.
- **Fuel** – Propane gas (vapor withdrawal) drawn from two (2) 100 gallon cylinders central supply.
- **Safety Controls** – 100% shutoff gas valve, controlled by electronic ignition module, with a direct spark electrode and flame sensing probe. High-pressure hose with reusable fittings, regulator to reduce withdrawal pressure to 11" water column. External emergency shut-off valve.

Temperature Controls

- Cold material placed in unit will be totally reclaimed within 16 hours.
- Skin temperature will not exceed 320 degrees while reclaiming.
- Controls will automatically reduce skin temperature to 300 degrees maximum after material has been reclaimed, allowing material to be held for an extended period of time (approximately 48 hours).

Construction

- **Storage Bin** – Double wall to hold heated air to prevent heat loss from asphalt. 10, 12 and 16 gauge steel double and triple wall throughout.
- **Insulation** – Outer skin contains two (2) inches of rigid insulation. Strategic areas coated with 1250° aluminum paint for proper infrared reflection and heat distribution.
- **Loading Doors** – manually opened top doors form chute for loading asphalt. 2" rigid insulation.
- **Shoveling Doors** – Four (4) doors, 2 each side of unit with double action linkage, sheer angle base for maximum positive cutoff.
- **Reclaimer** – Operates on 12 volt system

Dimensions

- **Length** – Box only, 4' 9"
- **Width** – 7' 8"
- **Height** – 9' 0"
- **Height:** Chassis rails to top of box – 3' 2" plus hardware.
- **Weight** – 3,625 lbs.

Platform With Ladder

- Directly behind the reclaimer is a diamond

plate deck with a ladder each side to gain access to propane storage on deck, batteries and charger under deck.

Waste Bin

- Directly behind the propane storage area deck is the side dump waste bin which measures 34" x 54" x 15". The 24 volt pivoting winch (same as chamber winch) activates the waste bin; also swings to opposite side of truck to load compactor into compartment opposite waste bin.

Pavement Heater

- Located to rear of waste bin/compactor compartment on the rear of truck.

Operating Principle

- The infrared is created by premixed gas and air delivered under pressure to energy converters. Infrared does not flame or alter the binding characteristics of asphalt.
- Unit has dual systems that operate individually and will fire in any position from vertical to horizontal.
- Each system consists of three (3) high efficiency, long life alloy converters.

Reflector Chamber

- Vented and reinforced 16 gauge stainless steel 8' x 6'. Support structure primed and finished with high heat aluminum paint.
- The reflector chamber is raised and lowered by a heavy-duty worm drive gear reducer and a 24 volt heavy-duty motor. *This custom built winch is backed by a 10 year warranty from Ray-Tech.*

Maximum fuel Input

- Each system consumes 9,000 BTU's per square foot maximum.

Fuel Delivery

- Each system consists of propane gas (vapor withdrawal) fed from the central supply two (2) 100 gallon cylinders connected to high pressure gas hose with reusable fittings. Reduced to 11" water column by a regulator. Gas passes through a 24V solenoid valve and controlled by a limiting orifice valve. High-pressure gas hose with reusable fittings connects to 24V long life brushless motor/blower mixer system.

Power

- Each heavy-duty 24V system powered by (4) 220 amp 6V batteries wired in series for deep power reserves, will assure rapid high production heating. Built-in 24V on-board battery chargers.

Operating Controls

- Each system consists of a pressure switch, controlling solenoid valve.
- Lockable electrical control panel to secure operation of unit. Weatherproof outside switches and 110 volt receptacle for chargers.
- Electrically powered winch for raising and lowering reflector chamber with safety switch. (same as waste bin winch)

Overall dimensions

- **Length** – 14' 8" installed on truck
- **Width** – 8' 0"
- **Shipping weight (all components)** 8,000 lbs.

Options

- 13' x 6' Folding Chamber
- 24 volt Alternator
- Dual floodlight package
- Time delay system (TDS)
- Tool storage tray
- Trailer hitch
- Aluminum wind guards

2-TON RECLAIMER SPECIFICATIONS

Reclaimer

- Located directly behind truck cab.

Shoveling Doors –

- Two (2) vertical track doors; one on each side of unit.

Energy Converters

- Two (2) 35,000 BTU Infrared Type Converters; secured in heating chamber.

Dimensions

- **Length** – Box only, 3' 2"
- **Width** – 7' 6"
- **Height:** Chassis rail to top of box – 6' 3" plus hardware.
- **Weight** – 1,900 lbs.

Overall Dimensions

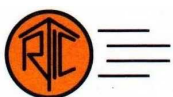
- **Length** – 11' 2" plus chamber
- **Width** – 8' 0"
- **Shipping weight** – 5,700 lbs.

Waste Bin and Winch

- Same as 4 ton above.

* Note – All specifications pertain to both 4 and 2-ton units except those listed above under 2-ton specifications.

Call for details on 3 and 6-ton configurations



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198 Springfield Rd. – P.O.Box 1119
Charlestown, NH 03603

PHONE 1-800-884-2072 FAX: 1-603-826-3447
www.raytechinfrared.com info@raytechinfrared.com