



Wabtec

Equipamientos para la Industria Ferroviaria.

Fuel Oil Pre-Heater

Features

- Brass tubes, headers, shell and end hubs
- Cast iron end bonnets
- Brass baffles
- Steel mounting brackets



Pressure and Temperature Ratings

Operating Pressure

Tubes 150 psi
Shell 250 psi

Test Pressure

Tubes 225 psi
Shell 300 psi

Operating Temperature

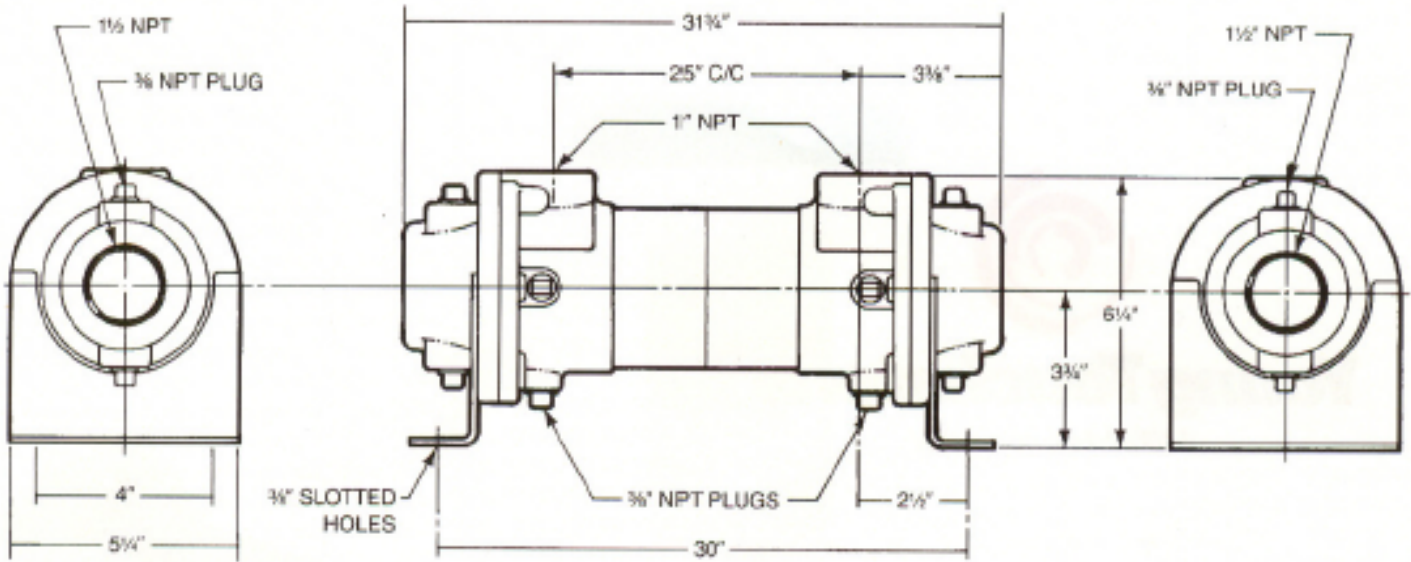
350° F

Young Touchstone Part Number: 354620

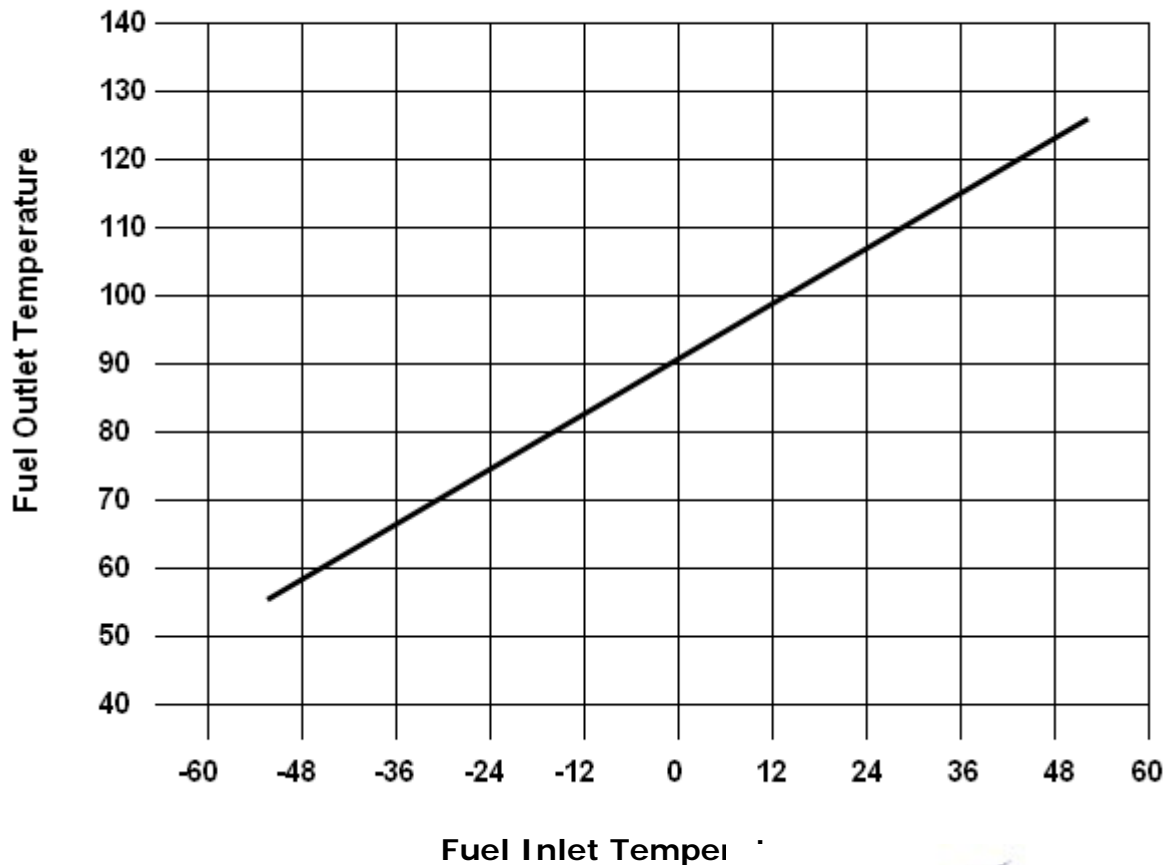
Replaces EMD Part Number: 9517269

Young Touchstone
7270 S 13th St, Ste 201
Oak Creek, WI 53154
PH: (414) 768-7420
FX: (414) 762-0632

WATER 140F, 20 GPM FUEL OIL 4 GPM



Young Touchstone Fuel Oil Pre Heater Performance



The advanced technology you need today and tomorrow.

Rely on the leader in advanced cooling technology for performance-proven solutions in locomotive cooling systems. Let our engineers recommend custom solutions that fit your space and performance specifications precisely.

FLAT-ROUND® Mechanical-Bond Technology

Our signature core provides leak-free radiators and air-to-water charge-air cooling in the most punishing diesel engine cooling applications. Single and dual core designs, side-by-side or front-to-back arrangements, can be configured with various tube rows and fin densities for optimal performance.

Heavy duty headers and mechanical-bond tube-to-header joints eliminate the number-one leak path in soldered or brazed-header cores. There is no solder to corrode or crack, no braze to fatigue, no rubber grommets to replace. Young Touchstone's exclusive O-Ring tank seals replace conventional gaskets, and eliminate the second-most common leak path in soldered- or brazed-header cores.

Flat plate fins are soldered to brass tubes for maximum core strength. Welded-seam heavy-wall brass tubes have no soldered lock-seams to corrode or leak.

FLAT-ROUND® is a registered trademark of Young Touchstone



CuproBraz® Technology teams with FLAT-ROUND® construction for stronger more efficient cooling systems.

We've combined cutting edge CuproBraz® technology with proven FLAT-ROUND® Mechanical-Bond tube-to-header construction to produce the toughest, most efficient cooling systems in the industry.

CuproBraz® cores provide leak-free radiators and air-to-air charge-air cooling using anneal resistant copper and brass developed to meet the high temperature and pressure requirements facing the next levels of emissions regulations.

CuproBraz® cores combine high strength copper fins with flat brass tubes to provide heat exchangers that are more durable, compact and efficient than conventional brazed aluminum.

CuproBraz® core design and construction incorporate features that provide maximum durability especially important in radiator and charge-air-cooling applications where severe thermal stress, excessive shock and vibration, thermal cycling, and high operating pressures are present.

CuproBraz® is a



FLAT-ROUND® Mechanical-Bond Locomotive Radiators

FLAT-ROUND® Mechanical-Bond radiators have been used in heavy-rail locomotive service for more than 40 years. Typical construction is built to last the life of the locomotive.

FLAT-ROUND® Mechanical-Bond radiators combine the superior air-flow and heat transfer of flat tubes with the durability of round tube mechanical bonding.

FLAT-ROUND® Mechanical-Bond radiators are the premium heat exchanger for continuous operation in severe applications.

FLAT-ROUND® Mechanical-Bond radiator cores are available with flat plate fins or with CuproBraz® serpentine fins.

Normal maintenance is cleaning of core face with high pressure steam and straightening of fins. Infrequent tube leaks or tube-to-header leaks are repaired through a simple tube-plugging procedure; no messy or dangerous solder or braze is required.



Quality

At Young Touchstone, quality and performance are our top priorities. That's why we employ advanced engineering and quality procedures to ensure our products are designed and manufactured to the highest standards. Techniques such as Failure Mode and Effects Analysis prevent field problems on new products before they leave the factory. Plus, our process quality is continually improved using Statistical Engineering, SPC and problem-solving techniques that identify and remedy problems at the root cause.

Engineering

Using the industry's most advanced engineering technology, Young Touchstone engineers use the latest tools including FEA, CFD and simulation software to optimize design and market requirements. All drawings are completed in three dimensional solid models and can be shared and translated in most formats.

Applications

Young Touchstone Applications Engineers use advanced computer modeling tools to accurately predict component performance.

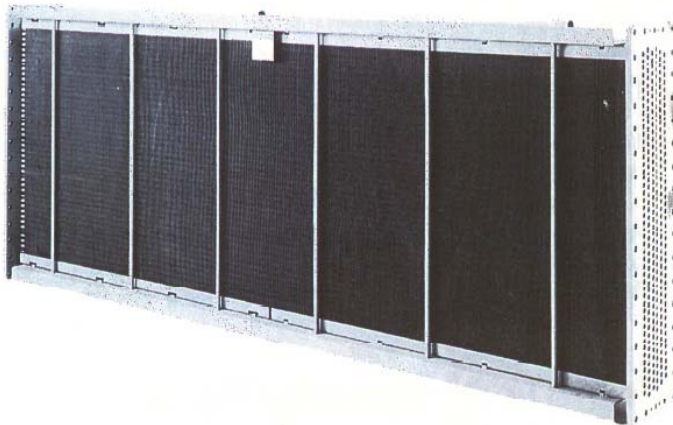
Customer Service

Dedicated Customer Service representatives provide fast response to all customer inquiries. That means up to the minute status on all orders, including shipment tracing and product availability.

Single 6, Double 6 and Triple 6 Radiators

Features:

- Built to last the life of the locomotive
- Tubes are mechanically bonded into headers
- Heavy duty fin construction, 10 fins per inch
- Precision tooled headers
- Unique bolted deflection free side expansion joint
- Available in Single 6", Double 6", or Triple 6"



Triple 6

Replaces EMD Part Numbers:

9504784

9583760

40017115

- or any combination of 1 single
length 6 row and double length 6 row
core

Double 6

Replaces EMD

Part Numbers:

3010256

3027016

3036850

8356205

8462344

8366731

8389388

9315655

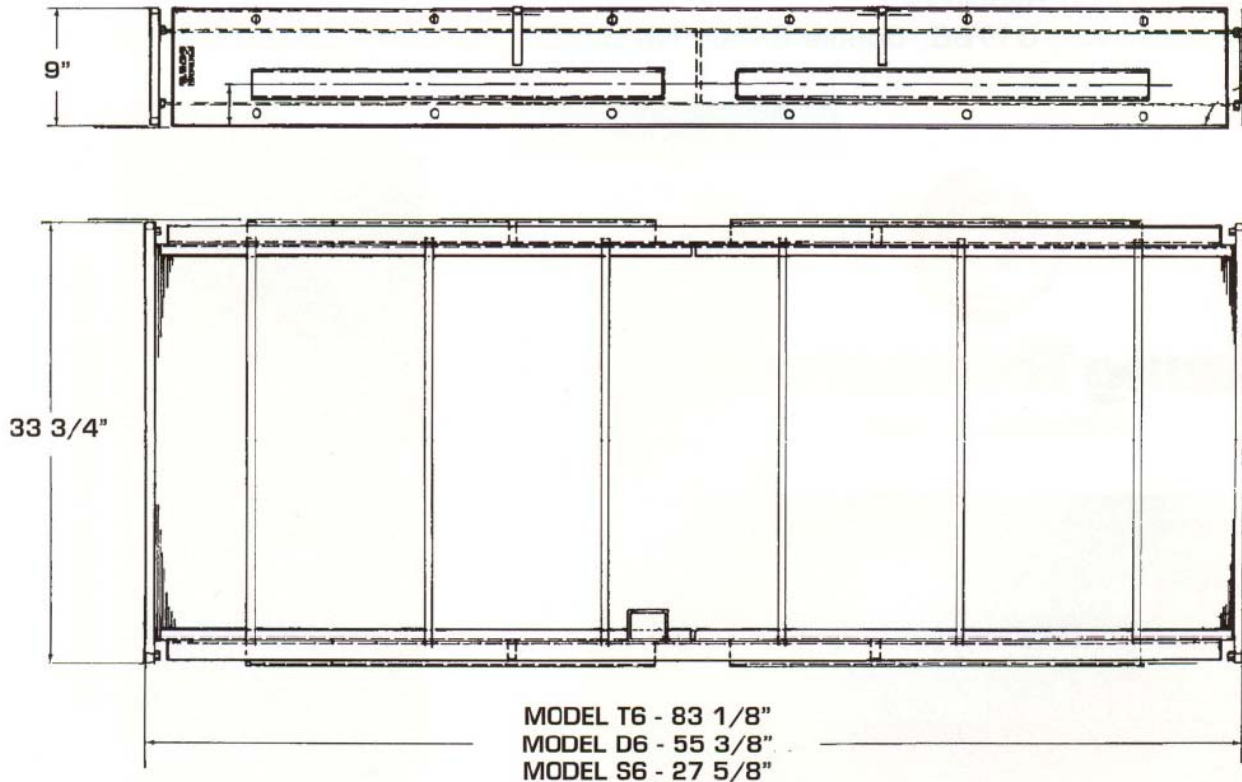


Single 6 (not pictured)

Replaces EMD Solder Bonded Radiator Part Numbers: 3129131, 8206685, 8490482,
92526642

Young Touchstone
7270 S 13th St, Ste 201
Oak Creek, WI 53154
PH: (414) 768-7420
FX: (414) 762-0632

Single 6, Double 6 and Triple 6 Radiators



Description

Young Touchstone's Flat-Round® Mechanical Bond Radiator cores are your best choice for long service life and eliminating downtime. Young Touchstone begins construction with thick heavy copper fins which resist damage and maintain consistent heat transfer. The fins are inserted with flat, heavy wall tubes which have proven reliability. The tube ends are mechanically brought to a perfectly round shape then bonded to a heavy duty steel header plate with the Young Touchstone's Mechanical Bond process. Young Touchstone's unique bolted, deflection free side rails with patented expansion joints are added for strength and rigidity.

Young Touchstone's Mechanical Bond EMD replacement radiator cores are available in Single length 6 row, Double length 6 row, or Triple length 6 row cores. Two Triple length 6 row cores can be substituted for three conventional Double length 6 row cores. One Triple length core can be substituted for one Single and one Double length 6 row core bank. Young Touchstone's Mechanical Bond Radiators are also available in 8 row and 4 row configurations.

Specify Young Touchstone Mechanical Bond Radiator core replacements:

Singe 6	Part Number 01788
Double 6	Part Number 02190
Triple 6	Part Number 02192