

Square Corner Clamp Seminar for MNRA MCR Div 10, 11/2/14

So you Want Square Corners! Why? Because I Found This Neat Kit!

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Various tools for right angle clamping: Most are useless for us.

We as model railroaders have a unique need to clamp flat items to build a box.

Some helpful tools: pan with magnets, various squares, magnetic plastic squares

Inspiration:

First encounter with cast resin in early 90s at Lake County Model RR Club, Hooked on Resin!

Injection molded vs Resin detail, variety and fidelity to prototype

Sunshine Models sponsors Prototype Modelers Seminars in Naperville IL, & Friends of the Freight Car

Collection of white boxes

Quest for a precision clamp

3 man panel talk on building the kits, a failure

Idea in a dream, A patent, A small business

The Right Clamp:

Clamp concept & parts: Base Angle, Clamping Tube with Pad

How it works: End Adjustment Screw for thickness, Thumb Nut to tighten

How to use:

Adjusting: End Screw & Captivated Nut adjust to part thickness

Inserting parts: Overlapping part first

Hold angle, part & tube between thumb and forefinger, Snug up Thumb Nut

Add second part, adjust both & tighten Thumb Nuts

Gluing: Access to inside corner via window

Silicone as mould release on Base Angle

For Resin: 1st choice: ACC - Super Glue, Viscosities, Insta-Set, Un-cure, Wax Paper

Technique option: 4 sides at once for a precision box

For Wood: Elmer's vs Tight Bond I, II, III

For plastics only: Solvent type, some may deteriorate plastic over time

Other options: Epoxy (brittle), GOO (can shift with heat)

Now that we have the tool, what's become available over the years?

Variety of cast resin freight, caboose and Pass car kits from variety of manufacturers

Books of catalog sheets, Welcome to browse

Others with mixed components

Also laser and plastic kits, See addendum at end.

The Right Clamp family grows: Different Clamp Models & Best uses

Long, Large, Mini, 4 Inch & 7 Inch, Pass around clamp samples

The Splice Clamps: Original, Long, 4 Inch & 7 Inch, Pass around samples

10 years of Custom clamps for special situations

Combine into Combo Right Clamps

Soldering – Silicone pads

Resistance, Iron vs Soldering Station, Torch

Extension at end for holding in vice

Wire and Round Stock

Clearance at corner for parts with boss

Open notch at end for structural shapes

Thumb nuts on end screws

38 Thousand clamps made and counting!

Thank you!

Post Seminar Addendum:

Cast Resin & Other Craftsman type car kit manufacturers mentioned:

**Sunshine: Resin, Inactive, Large variety of 50s era Frt, Hi quality, good info & Inst
Some 1 piece bodies, No website or email, Un-official information at: sunshinekits.com**

**Westerfield: Resin, Active, Large variety 1900 -50s Frt, Hi quality, good info & Inst
Some 1 piece bodies, New owner re-releasing kits, Website: www.westerfieldmodels.com**

**Funaro & Camerlingo: Resin, Active, Large variety 50s frt, Hi quality, good info & inst
Some 1 piece bodies, Run by a young family, sales through: www.fandckits.com**

**Rocket Express: Resin, Active, Small variety RI 50s frt & cab, Hi quality, good info & inst
Web: www.rocketexpress.biz**

**Speedwitch Media, Resin, Ltd Prod, 50s era freight cars, Hi quality, good info & inst, Also books
Researcher/pattern maker/display builder for Sunshine, web: speedwitchmedia.com**

**Southern Car and Foundry, Resin, Active, Harr Pass & Tank 50s, Hi quality, good info & inst
Web: southerncarandfoundry.com**

**Dennis Storszak: Resin, Inactive, SOO & related 50s, Hi quality, good info & inst
Some patterns were sold to Des Planes Hobbies, Web search: Dennis Storszak HO Car Kits**

**Wright Trak, Resin, Active, Ltd Prod, Cab & Refr, 60s era, Hi quality, Text inst, no proto info
Web: www.wrighttrak.com**

**Yarmouth Model Works, Active, New, Wab Stock car 50s, Hi Quality, good info & Inst
Web: yarmouthmodelworks.com**

**West Shore Line, Resin, Inactive, East frt 50s, Hi Quality, Ave info & Inst
Patterns by Stephen Funaro, Thru Central Hobby Supply, Web search: West Shore Line LTD**

Non resin kits:

**Mullet River Model Works, Laser wood, Active, M-W cab of 50s, Hi quality, good info & inst
Specializes in photo-etched details, some hobby shops, Website: mulletrivermodelworks.com**

**AMB-LaserKit, Laser wood, Active, Mostly mid-western cabooses of 50s, good info & inst
Carried by many hobby shops, Website: www.laserkit.com**

**Stanley Rydarowicz, Resin & mixed, Active, 50s refrigerator cars, Ltd info & inst
Resin with commercial parts, Web: sunshinekits.com/stanpage.html**

**Modelers Choice, Mixed components, Inactive in car kits, 60s-70s BN Family
Laser with commercial parts, Now a maker of car components. Web: www.modelerschoice.com**

Other older technology car kits that could use Right Angle Clamps:

Athern, Menzies, Ulrich, Red Ball, Wabash Valley, etc. Web: prototypespecificproducts.com/freight/