## Service Tips from the Pros

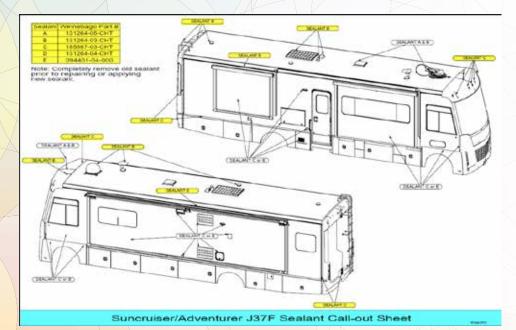


Sealants Call-Out Sheets

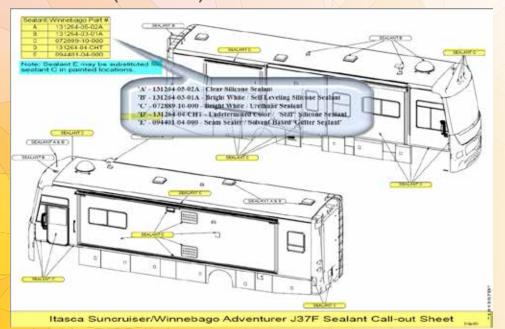
Can you recall a time you have sat around the campfire with another RV owner and conversed about exterior sealants? Have you ever attended a seminar that focused on the varieties and properties of the sealants used by an RV manufacturer or questioned why one brand is recommended versus the other? Are you aware that some sealants require ambient humidity/moisture to initiate the curing process while others remain in a liquid state until oxygen is excluded? What applications would make this necessary? For those of you that enjoy doing your own home improvements and maintenance tasks, it is likely you have experienced that intimidating sealants aisle at your local home improvement store. The variety of sealants is vast and the price range can be an eye-opener; should it be assumed the higher dollar products perform best? One would expect that an RV dealer would have a good command of this subject and their parts department would certainly have the "factoryapproved" sealants on-hand, too. Could this be wishful thinking?

Service Life of Sealants: During their entire service life, the exterior sealants on an RV are exposed to significant amounts of mechanical strain and a variety of environmental factors – some sealants more than others. Engineers design RVs to be tough, yet remain flexible enough to absorb the worst that highway driving and campground off-roading can dish out. Simply, a motorhome is exposed to constant dynamic loads (i.e., cyclic joint movement) so the adhesion and cohesion characteristics of the sealant used are extremely important considerations during the design phase of an RV. Additionally, due to their large size, a high percentage of RVs are stored in the great outdoors; therefore, sealants must be resistant to degradation due to UV rays (sunlight) and remain flexible while tolerating extreme temperature variations.

Example: 2015 J-Series (Model J37F)



## Example: 2013 J-Series (Model J37F)



April / May 2016 PDF processed with CutePDF evaluation edition <u>www.CutePDF.com</u> The design of a *sealing system* involves more than merely choosing a sealant material with the desired physical and chemical properties. The following considerations are also essential to obtain optimum performance:

- The *Joint* design including the backup or bedding materials.
- The *Type and Nature* of the substrates being sealed.
- The Application methods, curing times, and performance characteristics of the sealant.

If an ideal sealant did exist, it would be one that would stick to any unprimed substrate, yet easily dispense from a caulking gun and flow easily into the joint. The ideal sealant would form smooth beads that are easily cleaned and would become tack-free very quickly, minimizing dust pickup. The ideal sealant would cure out quickly to become impervious to the environment and it would shrink very little while curing, but once cured, it would remain plastic and flexible for life. The ideal sealant would be capable of being painted over, but this would not be necessary due to its outstanding resistance to weathering. This sealant would be as long-lived as the substrate(s) that it seals and, finally, this dream sealant would be inexpensive! Since there is no one single sealant that meets all of these qualifications, there are always a few compromises necessary with regard to the selection of the material and to the design of the joint.

Unfortunately, the best sealants used when an RV is built will not last the life of the vehicle and the ambient conditions and each customer's usage of an RV can have direct effects as well. Fortunately,

the hard part has already been done for you! The folks that designed and built your coach have provided you a Sealants Call-Out Sheet to identify the sealants recommended and ensured these sealants are available. Our Operator's Manual stresses the importance of timely inspections and monitoring of the exterior sealants, but that is just a good beginning. Proper resealing efforts are very time consuming and labor intensive and there are really no shortcuts - not to mention you are working 11+ feet above the ground. Usage of the proper tools and cleaners is critical because surface preparation is the key and the usage of factory recommended sealants seals the deal! If you are a hands-on do-ityourselfer, this is all under your control. If you elect to have your dealer perform this work for you, would it be prudent to ask a few questions regarding the sealant they have selected to use on your coach?

Part Numbers Versus Identifying a Type of Sealant: The popularity of full-body painted coaches and colored gel-coat fiberglass has been a game changer for RV manufacturers and their suppliers of sealants. The exterior sealants must now be available in colors allowing it to blend into a paint scheme or the sealant must be translucent and allow the underlying color to show through. The chemistry between different brands and even between a brand's lineup of products can be significant. WARNING: One should not assume that all sealants are compatible with another, even within a type of sealant. This is the primary reason that the Engineering Department at Winnebago Industries® has two Sealants Engineers on staff whose responsibilities include: identifying the best sealant for the application; sourcing a quality product from a reputable supplier; and ensuring the sealant is appropriate for our manufacturing process.

## Sealant Identification

Sealant	Winnebago	Part #
А	131264-05	-CHT
В	131264-03	-CHT
С	185987-03	-CHT
D	131264-04	-CHT
E	094401-04	1-000

The CHT (chart) characters shown on the Sealants Call-Out Sheet are an indicator that additional information is necessary; specifically, the color of the sealant needs to be identified. Most RV dealers retail a variety of RV brands and model coaches – new and used, so this information is very important for them.

Sealants A, B, and D are Silicone Sealants: Part Number 131264-05-CHT is a silicone-based sealant which happens to be a "rigid" product and; therefore, requires tooling/smoothing out. Part Number 131264-03-CHT is a silicone-based sealant which has "Self-Leveling" properties.

Sealant E is a Seam Sealer: Part Number 094401-04-000 is a solvent-based sealer, versus a silicone or urethane. This product is milky when applied and becomes translucent when curing, allowing the underlying paint or gelcoated fiberglass to show through.

**Urethane Sealant**: Sealant "C" / 185987-03-CHT is a polyurethane-based sealant. Unfortunately, the part number listed is not valid for dealers or the coach owner (i.e., the part number for the sealant identified here is used by manufacturing and packaged in what is referred to as a sausage pack versus a caulk tube). Obviously, this can make things a bit more difficult and confusing.

DEALER PART PRICE LIST			
PART 1859870301A	DESC. SEALANT-BRIGHT WHITE TUBE UOM EA MIN ORD	Θ	
	WHOLESALE PRICE .00 RETAIL PRICE .00		
	QTY BREAK 0 SERVICE PART N		
	QTY PRICE00 P/S ONHAND		
REPLACED BY PART			
PART 07288910000	DESC. SEALANT-URETHANE(HV) BRTWHT UOM EA MIN ORD	Ð	
	WHOLESALE PRICE RETAIL PRICE		
-	QTY BREAK SERVICE PART Y		
	QTY PRICE P/S ONHAND		
SERV DESC:	SEALANT/URETHANE (HV) - TUBE W/NOZZLE TIP - BRIGHT WHITE		
COMMENT 1:	CANNOT SHIP AS AIR SHIPMENT		

Winnebago<sup>®</sup> Parts Sales provides authorized dealers a cross-reference to the correct Service part number for a urethane sealant. In this example, the Bright White (-01A) product is replaced by Part Number 072889-10-000.

NOTE: For assistance with Retail Parts questions, please email wgoparts@wgo.net or go to www.winnebagooutdoor.com