

## ***ArmaKleen Technical Service Report Summary***

**Cleaning Trial Type:** Aqueous

**Industry:** Plant sterol production

**Segment:** 29 – Mfg - Miscellaneous

**Soil:** baked on tall oil (tree sap)

**Substrate:** Steel

**Description of Part(s):** Five steel bolts with steel washers

**Customer objective:** The customer was looking to improve their cleaning performance.

**Cleaner used:**

- 10% by volume solution of ArmaKleen™ M-100 BCR
- 5% by volume solution of ArmaKleen™ 4 in 1 Cleaner

**Machine used:** Spray Washer (JRI TL3, JRI FL250, JRI FL500, Better Engineering G-2000)

**Temperature used:** 160°F

**Time required:** 1 hour

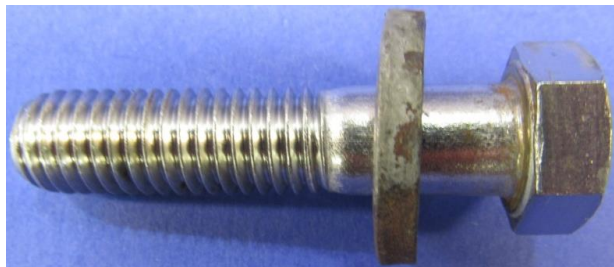
**Post Cleaning:** Fresh water rinse and air pressure dried. *Several areas of the threaded bolt were lightly brushed with a stainless steel bristle brush during the fresh water rinse.*

**Recommendation to Customer:** The ArmaKleen Technical Center recommends using a 10% by volume solution of ArmaKleen™ M-100 BCR at 160°F in a Spray Washer or a 5% by volume solution of ArmaKleen™ 4 in 1 Cleaner at 160°F in a Spray Washer for a minimum of 1 hour.

**Before Picture**



**After Picture**



**Source:** TSR #17-A-094