

## ▶ 120 AND 121 SERIES INSERTS, POTTED-IN METHOD

1. Degrease Inserts using acetone or M.E.K prior to installation to assure proper adhesion.
2. Drill recommended installation hole.
3. Clean core and panel skin residue from installation hole by vacuum or other appropriate means.
4. Prepare potting compound for use in accordance with manufacturer's Instructions.
5. Fill Sealant gun cartridge with potting compound.
6. Partially prepot (approximately 2/3 full) by injecting the potting compound into the installation hole. Do not completely fill the hole.
7. Coat the entire surface of the insert with potting compound.
8. Place the insert into the installation hole by applying sufficient mechanical pressure to provide a flush mount for the 120 series and flange protrusion for the 121 series.
9. Clean excess potting compound from the insert area.
10. Allow the potting compound to cure in accordance with the manufacturer's recommendations.



## ▶ 130, 140, 141, 150, 151, 155, 156, 2253, NAS1832, NAS1835 AND NAS1836 INSERTS, POTTED-IN METHOD FOR SOLID LAMINATE MATERIALS

1. Degrease Inserts using acetone or M.E.K prior to installation to assure proper adhesion.
2. Drill recommended installation hole. The depth of the hole should be a minimum of .030 deeper than the length of the part.
3. Clean residue from installation hole by vacuum or other appropriate means.
4. Prepare potting compound for use in accordance with manufacturer's Instructions.
5. Fill Sealant gun cartridge with potting compound.
6. Partially prepot (approximately 1/3 full) by injecting the potting compound into the installation hole. Do not completely fill the hole.
7. Place the insert into the installation hole. For 130, 140, 150, 155, NAS1832, NAS1835 and NAS1836 series inserts, use the installation tabs provided to hold the insert in position. Peel off the tab backing and place onto inserts while aligning the holes with the holes or slots of the insert. For 141, 151, 156 and 2253 series, snap-in the insert to retain it in position.
8. Inject the potting compound through on the potting holes until the potting compound flows from the other hole.
9. Clean excess potting compound from the insert area.
10. Allow the potting compound to cure in accordance with the manufacturer's recommendations.
11. After potting compound is cured, remove the installation tabs from the 130, 140, 150, 155, NAS1832, NAS1835 and NAS1836 series inserts.



## ▶ 130, 140, 141, 150, 151, 155, 156, 2253, NAS1832, NAS1835 AND NAS1836 INSERTS, POTTED-IN METHOD FOR CORE TYPE MATERIALS

1. Degrease Inserts using acetone or M.E.K prior to installation to assure proper adhesion.
2. Drill recommended installation hole. The depth of the hole should be a minimum of .030 deeper than the length of the part.
3. Undercut the core around the hole approximately .50 inch larger in diameter than the diameter of the installation hole in the panel skin.
4. Clean core and panel skin residue from installation hole by vacuum or other appropriate means.
5. Prepare potting compound for use in accordance with manufacturer's instructions.
6. Fill sealant gun cartridge with potting compound.
7. Partially prepot (approximately 2/3 full) by injecting the potting compound in the installation hole. Do not completely fill the hole.
8. Place the insert into the installation hole. For 130, 140, 150, 155, NAS1832, NAS1835 and NAS1836 series inserts, use the installation tabs provided to hold the insert in position. Peel of the tab backing and place onto insert while aligning holes with the holes or slots in the insert. For 141, 151, 156 and 2253 series, snap-in the insert to retain it in position.
9. Inject the potting compound through one of the potting holes until the potting compound flows from the other hole.
10. Clean excess potting compound from the insert area.
11. Allow the potting compound to cure in accordance with the manufacturer's recommendations.
12. After potting compound is cured, remove the installation tabs from the 130, 140, 150, 155, NAS1832, NAS1835 and NAS1836 series inserts.





## **352, 354, AND 355 SERIES INSERTS, POTTED-IN METHOD FOR CORE TYPE MATERIALS**

1. Degrease Inserts using acetone or M.E.K prior to installation to assure proper adhesion.
2. Drill recommended installation hole.
3. Clean core and panel skin residue from installation hole by vacuum or other appropriate means.
4. Prepare potting compound for use in accordance with manufacturer's Instructions.
5. Fill Sealant gun cartridge with potting compound.
6. Coat the entire surface of the insert with potting compound.
7. Place the insert into the installation hole by applying sufficient mechanical pressure to position the insert.
8. Inject potting compound same as 181.
9. Clean excess potting compound from the insert area.
10. Allow the potting compound to cure in accordance with the manufacturer's recommendations.





## **352, 354, AND 355 SERIES INSERTS, POTTED-IN METHOD FOR SOLID LAMINATE MATERIALS**

1. Degrease Inserts using acetone or M.E.K prior to installation to assure proper adhesion.
2. Drill recommended installation hole.
3. Clean core and panel skin residue from installation hole by vacuum or other appropriate means.
4. Prepare potting compound for use in accordance with manufacturer's Instructions.
5. Fill Sealant gun cartridge with potting compound.
6. Coat the entire surface of the insert with potting compound.
7. Place the insert into the installation hole by applying sufficient mechanical pressure to position the insert.
8. Clean excess potting compound from the insert area.
9. Allow the potting compound to cure in accordance with the manufacturer's recommendations.





## 180, 181, NASI833 AND NASI834 SERIES INSERTS, POTTED -IN METHOD FOR SOLID LAMINATE MATERIALS

1. Degrease Inserts using acetone or M.E.K prior to installation to assure proper adhesion.
2. Drill recommended installation hole thru the panel.
3. Clean residue from installation hole by vacuum or other appropriate means.
4. Prepare potting compound for use in accordance with manufacturer's instructions.
5. Fill Sealant gun cartridge with potting compound.
6. Place the insert into the installation hole using the installation tabs provided to hold the insert in position. Peel off the tab backing and place onto inserts while aligning the holes with the holes or slots of the insert. Masking tape may be placed over the underside of the insert to avoid adhesive leakage.
7. Inject the potting compound through on the potting holes until the potting compound flows from the other hole.
8. Clean excess potting compound from the insert area.
9. Allow the potting compound to cure in accordance with the manufacturer's recommendations.
10. After potting compound is cured, remove the installation tabs from the inserts.





## 180, 181, NAS1833 and NAS1834 SERIES INSERTS, POTTED-IN METHOD FOR CORE TYPE MATERIALS

1. Degrease Inserts using acetone or M.E.K prior to installation to assure proper adhesion.
2. Drill recommended installation hole thru the panel.
3. Undercut the core around the hole approximately 1.00 inch larger in diameter than the diameter of the installation hole in the panel skin.
4. Clean core and panel skin residue from installation hole by vacuum or other appropriate means.
5. Prepare potting compound for use in accordance with manufacturer's instructions.
6. Fill sealant gun cartridge with potting compound.
7. Place the insert into the installation hole using the installation tabs provided to hold the insert in position. Peel of the tab backing and place onto insert while aligning holes with the holes or slots in the insert. Masking tape may be placed over the under side of the insert to avoid adhesive leakage.
8. Inject the potting compound through one of the potting holes until the potting compound flows from the other hole.
9. Clean excess potting compound from the insert area.
11. Allow the potting compound to cure in accordance with the manufacturer's recommendations.
12. After potting compound is cured, remove the installation tabs from the inserts.



## ▶ 2235 SERIES INSERTS, POTTED RIVET NUT

1. Degrease Inserts using acetone or M.E.K prior to installation to assure proper adhesion.
2. Drill recommended installation hole. The depth should be a minimum of .030 deeper than length of part.
3. Clean residue from installation hole by vacuum or other appropriate means.
4. Prepare potting compound for use in accordance with manufacturer's instructions.
5. Fill sealant gun cartridge with potting compound.
6. Partially prepot (approximately 2/3 full) by injecting the potting compound in the installation hole. Do not completely fill the hole.
7. The fastener is threaded onto the pull-up stud of an installation tool.
8. The fastener , on the pull-up stud, is inserted into the drilled or punched hole.
9. The pull-up stud retracts and bulges the unthreaded portion of the fastener shank against the flat undersurface.
10. The installation tool stud is removed, leaving the fastener secure and ready for the attachment screw.
11. Clean excess potting compound from the insert area.
12. Allow the potting compound to cure in accordance with the manufacturer's recommendations.







## 2445 SERIES INSERTS FOR METALLIC FACE SHEETS THREADED AND NON-THREADED

### 1. **PANEL PREPARATION;**

THE WITTEN Co. 2445 SERIES INSERT REQUIRES ONLY A SINGLE DIAMETER HOLE DRILLED THROUGH THE ENTIRE PANEL. THE DIAMETER OF THIS HOLE IS COMPARABLE TO THE BODY DIAMETER OF THE FASTENER.

### 2. **FASTENER INSTALLATION;**

THERE ARE SEVERAL METHODS OF APPLYING THE NECESSARY PRESSURE TO COMPLETE THE INSTALLATION. THE MOST COMMON IS THE USE OF A SUPPORT BASE AND PNEUMATIC OR HYDRAULIC PUNCH APPLYING PRESSURE TO THE HEAD OF THE FASTENER ONLY. ALIGNMENT TOOLS CAN BE MANUFACTURED TO SUIT INSTALLATION EQUIPMENT.

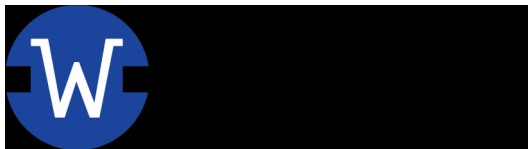
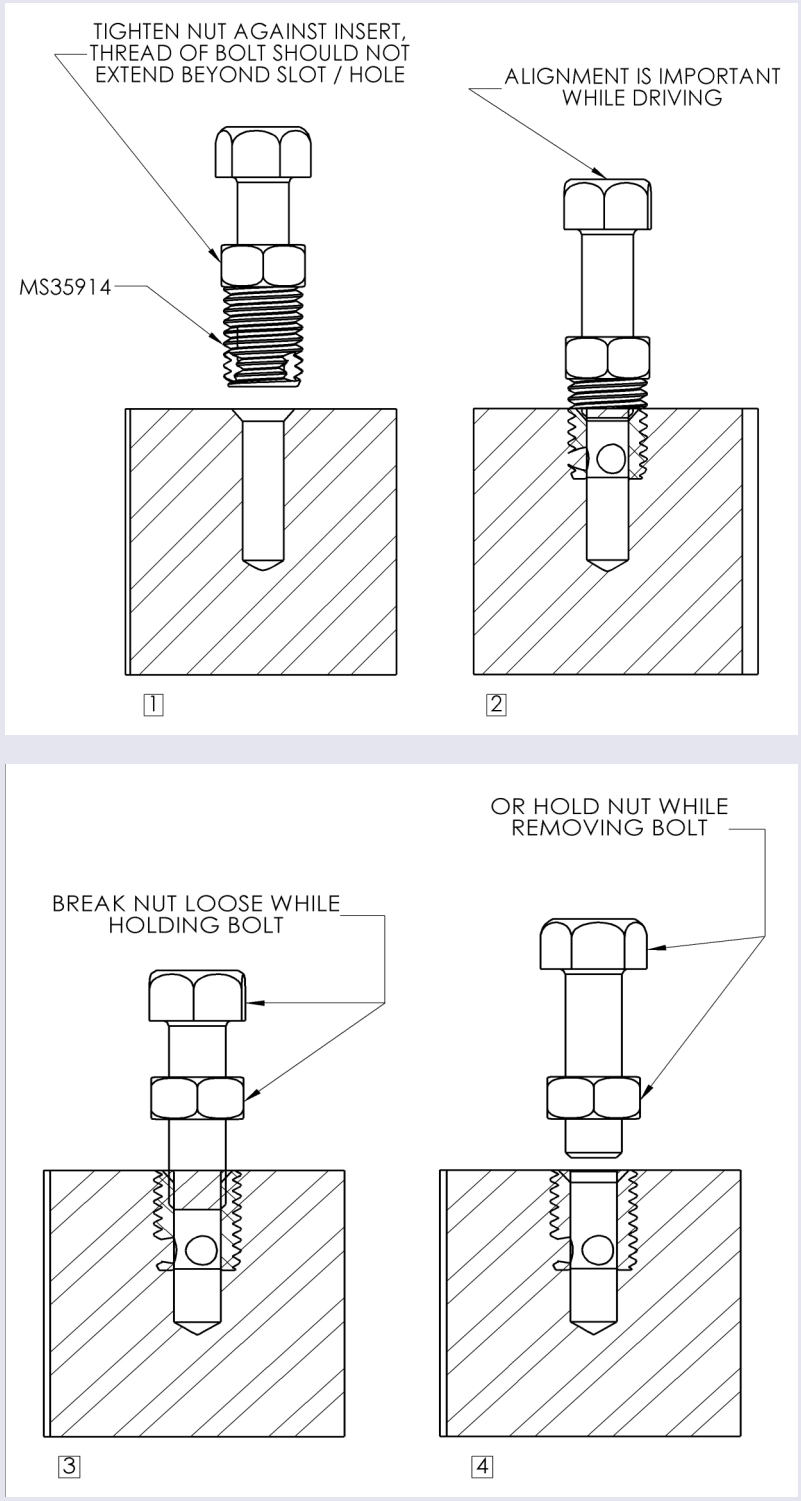
### 3. **COMPLETED INSTALLATION;**

PERMANENTLY INSTALLED AT SUB-ASSEMBLY. THE 2445 SERIES FASTENERS ARE SELF-RETAINED THROUGH A TELESCOPIC PRESS FIT. A FUNCTION OF THE SLEEVE AND PLUG SECTIONS.

WHEN EXTREMELY HEAVY SHEETS ARE EMPLOYED, THE SPRING BACK MAY FORCE THE HEAD OF THE FASTENER SLIGHTLY ABOVE A FLUSH CONDITION. HOWEVER, WHEN THE COMPONENT IS BOLTED DOWN TO THE PANEL, THE FASTENER WILL AGAIN BECOME FLUSH WITH THE COVER SHEET SURFACE.



# MS35914 INSTALLATION PROCEDURE



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