

# SOLIDWORKS WORLD 2015

FEBRUARY 8-11

PHOENIX CONVENTION CENTER | PHOENIX, AZ



## Sharing Assemblies

Without giving it all away!

Presented By: Jim Krivoshein  
Sr. Application Engineer  
Computer Aided Technology, Inc.

# Sharing Assemblies *without giving it all away!*

## Agenda/Outline

- Who, What, When, Where, Why
- How: Methods of Sharing Assemblies
  - Pack and Go & eDrawings
  - Neutral File Format
  - Save Assembly as a Part
  - Insert, New Part, Join
  - SpeedPak
  - Defeature
- Comparison/Results.



# WHO?

## Sharing Assemblies *without giving it all away!*

### Who – Who's Involved w/Sharing?

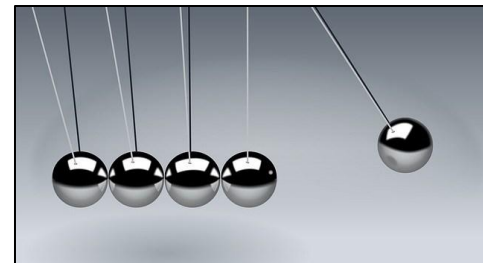
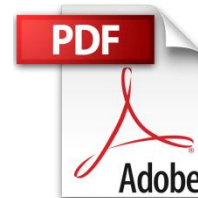
- Designers & Engineers who use your product in their designs:
  - Have you ever wanted someone else's product to add into your assembly model?
  - Have you ever ended up “NOT” finding their product for download?
- Component/Sub-System Manufacturers Marketing & Sales:
  - Have you ever thought of sharing your product but chose not too because of the fear of sharing too much?
  - This is a real, daily occurrence and it's serious.
  - The risks are missed opportunities and competitive copying..

# Sharing Assemblies *without giving it all away!*

# WHAT?

## What – What Information To Share

- Metadata: Part #, Description, Specifications
- Volume / Shape
- Position / Configurations
- Mass Properties
- Motion
- Updates / Changes.

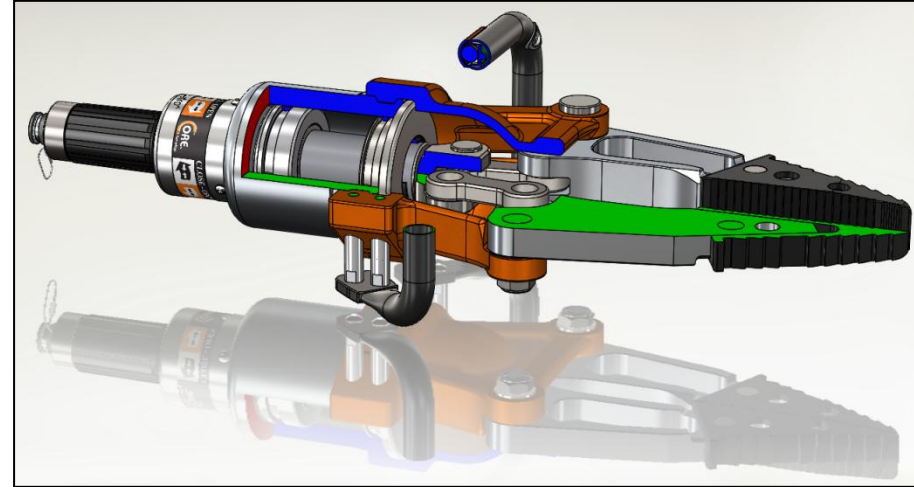


# Sharing Assemblies *without giving it all away!*

# WHERE?

**When/Where** – When/Where Will Recipients Use Our Data?

- Component Proximity (Section View)
- Interference Detection (Static Position)
- Collision Detection (Dynamic)
- Total Weight
- Weight / Center of Mass
- Product Images (Marketing) (Service).



# WHY?

## Sharing Assemblies *without giving it all away!*

### Why – Wouldn't You Share?

- Have you ever thought of sharing your product but chose not to because of the fear of sharing too much?
- This is a real, daily occurrence, many industries, and it's serious..

# WHY?

## Sharing Assemblies *without giving it all away!*

### Why – Would/Wouldn't You Share?

- Positives/Benefits:
  - Market Awareness
  - Test; Fit, Form, Function
  - Minimize Repeated Effort
  - Speed/Confirm Selection
  - Complete the Design
  - Builds Relationships
  - Drive Sales.
- Negatives/Risks:
  - Loss of Proprietary Info
  - Loss of Competitive Advantage
  - Aids Knock-off Efforts
  - Source Elsewhere
  - Managing The Data.



# Sharing Assemblies *without giving it all away!*

## How: Target Benefits

- Volume/Shape
- Section View
- Position/Configs
- Mass Properties
- Interference Detection
- Motion
- Updates/Changes
- Collision Detection
- Images.





# Sharing Assemblies *without giving it all away!*

## How: Target Benefits

- Volume/Shape
- Section View
- Position/Configs
- Mass Properties
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- Updates/Changes
- Collision Detection
- Images.



# HOW?

## Sharing Assemblies *without giving it all away!*

### How: Methods of Sharing Assemblies

- Pack and Go & eDrawings
- Neutral File Format
- Save Asm as Part
- Insert, New Part, Join
- SpeedPak
- Defeature.



# Sharing Assemblies *without giving it all away!*

## How: Methods of Sharing Assemblies

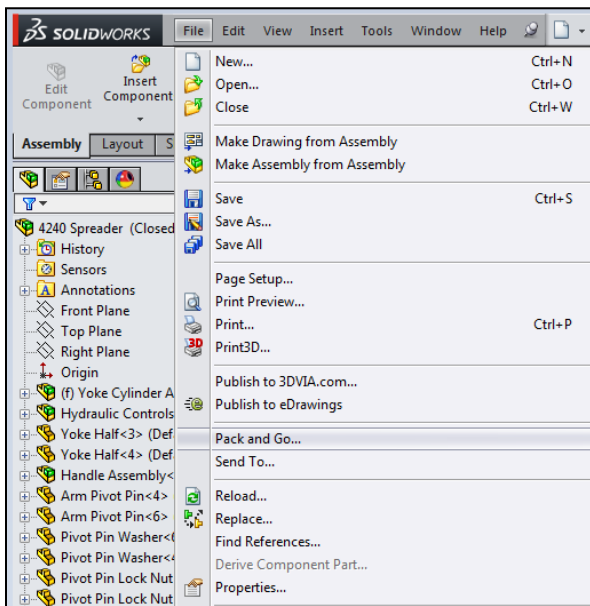
- Pack and Go & eDrawings



# Sharing Assemblies *without giving it all away!*

## How: Methods of Sharing Assemblies

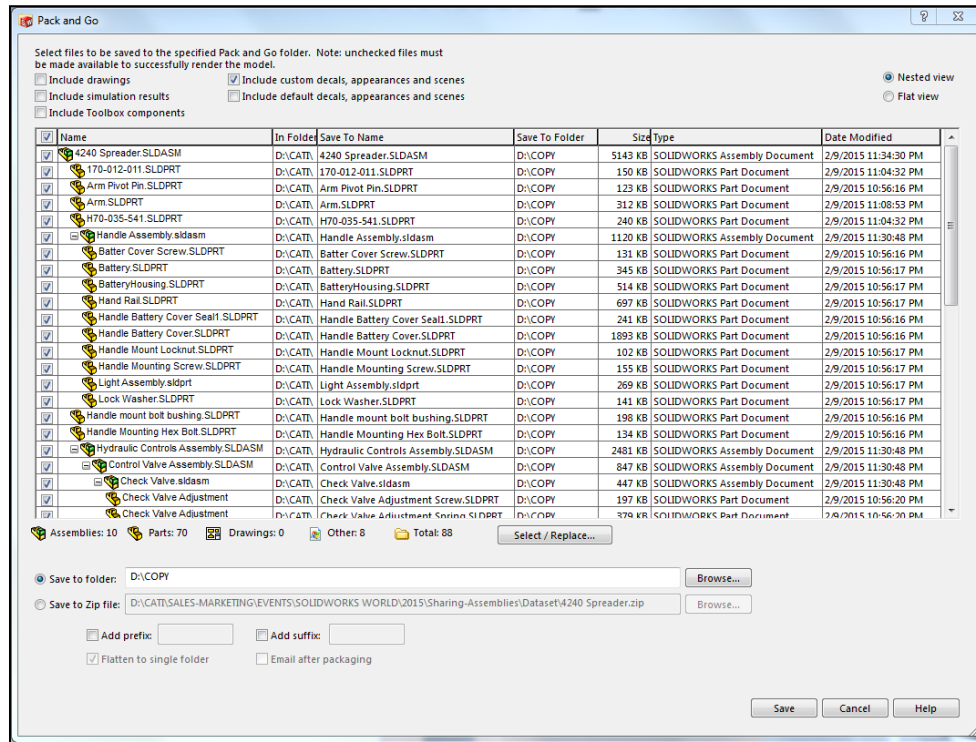
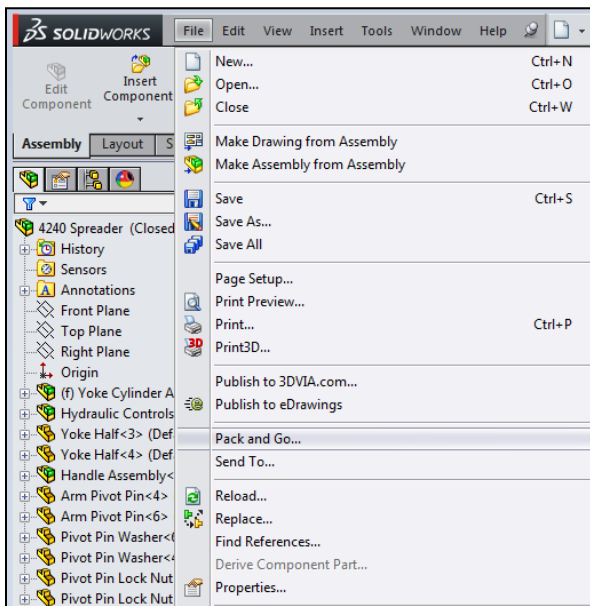
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# Sharing Assemblies *without giving it all away!*

## How: Methods of Sharing Assemblies

- Pack and Go & eDrawings



# Sharing Assemblies *without giving it all away!*

## How: Pack and Go & eDrawings

- Positives/Benefits:

- Volume/Shape
- Section View
- Position/Configs
- Mass Properties(Center of Mass)
- Images.

- Negatives/Risks:

- Mass Properties
- Motion
- Updates/Changes
- Collision Detection.



# Sharing Assemblies without giving it all away!

How: ~~Pack and Go~~ & eDrawings

- Positives/Benefits:

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# Sharing Assemblies *without giving it all away!*

## How: Methods of Sharing Assemblies

- Neutral File Format
  - Parasolid (\*.x\_t)
  - Step (\*.STEP)
  - Iges (\*.igs)
  - ACIS (\*.SAT)
  - Check Export Options
  - Check Import Options.

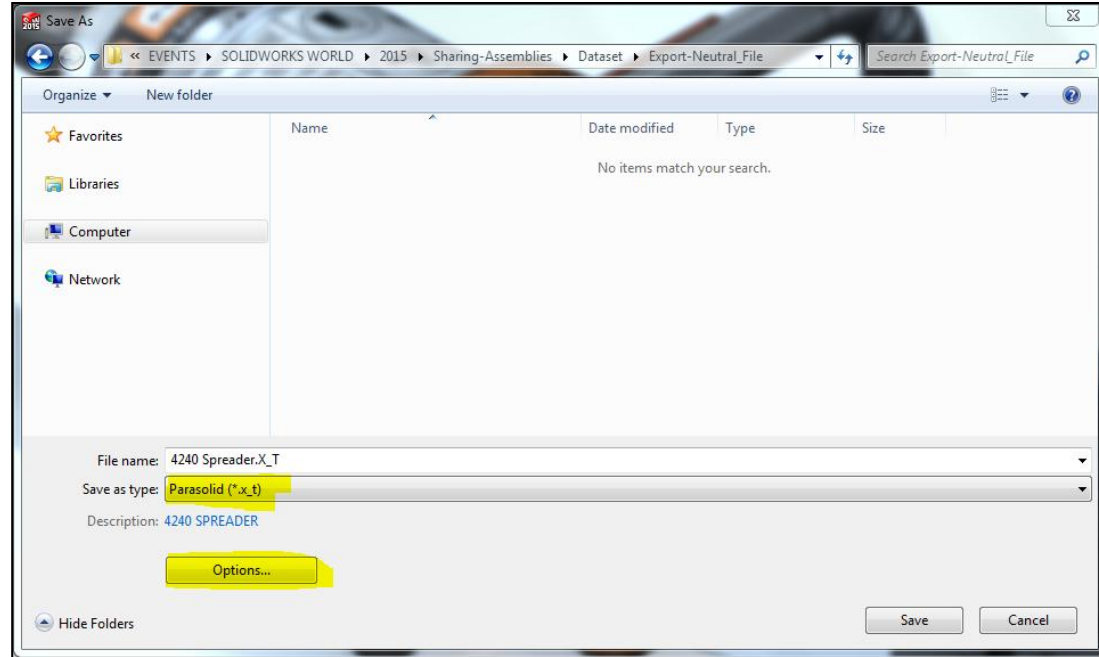




# Sharing Assemblies *without giving it all away!*

## How: Methods of Sharing Assemblies

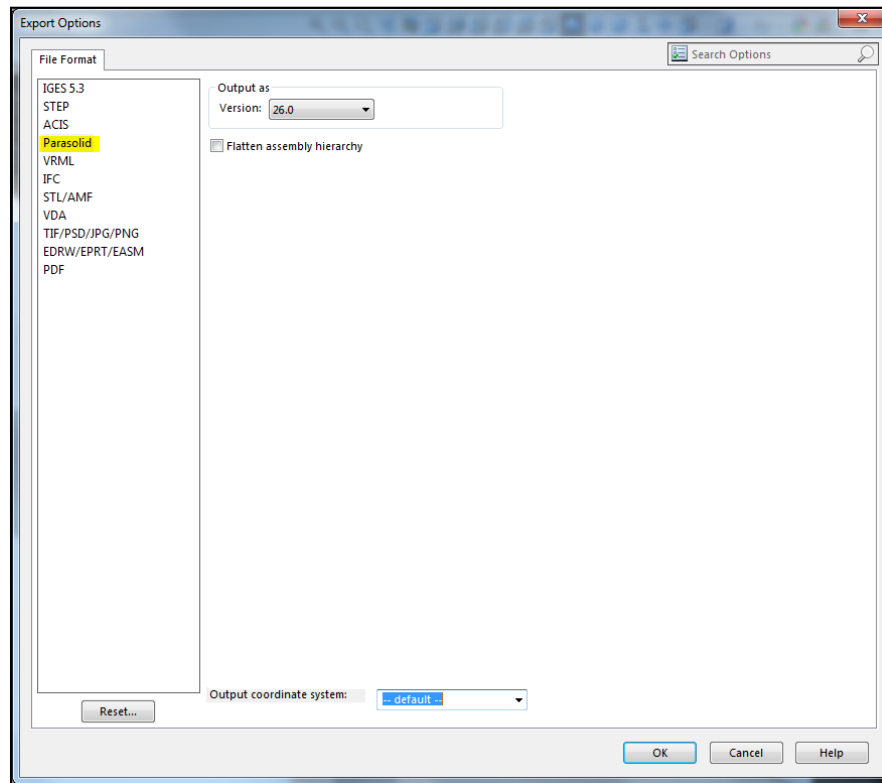
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# Sharing Assemblies *without giving it all away!*

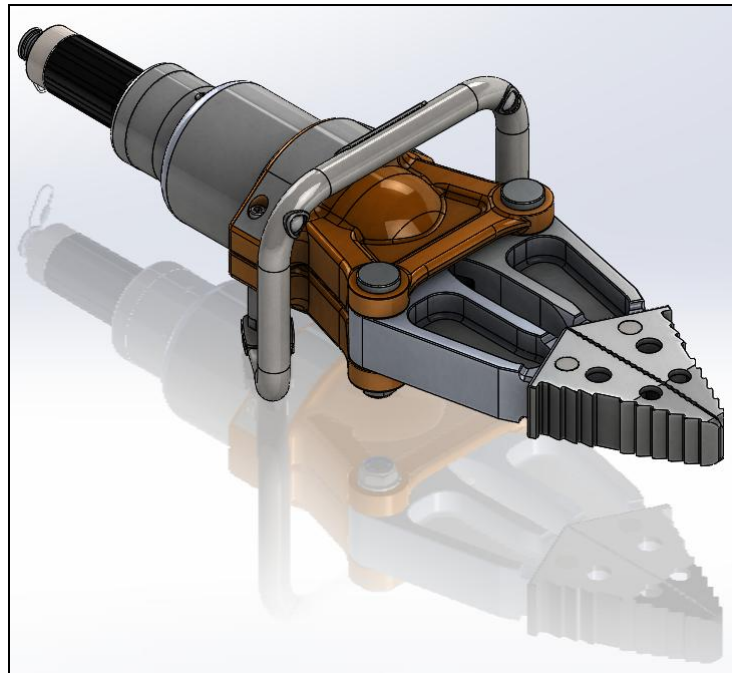
## How: Methods of Sharing Assemblies

- Neutral File Format
  - Parasolid (\*.x\_t)
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  - Check Export Options
  - Check Import Options.



# Sharing Assemblies *without giving it all away!*

**How:** Neutral File Format



# Sharing Assemblies *without giving it all away!*

## How: Neutral File Format

- Positives/Benefits:

- Volume/Shape
- Section View
- Interference Detection
- Images (60%).

- Negatives/Risks:

- Position/Configs
- Mass Properties
- Motion
- Updates/Changes
- Collision Detection.



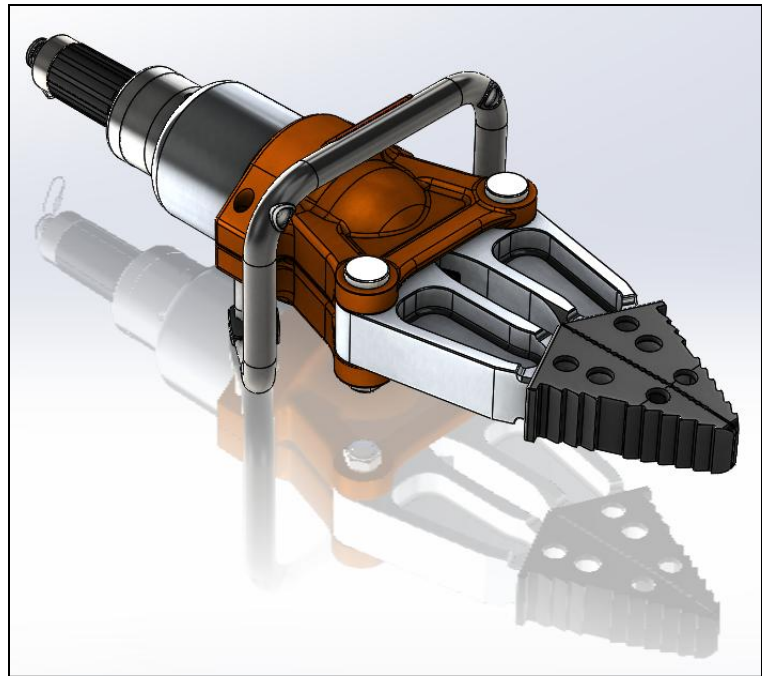
# Sharing Assemblies *without giving it all away!*

**How:** Save Asm as Part



# Sharing Assemblies *without giving it all away!*

**How:** Save Asm as Part



# Sharing Assemblies *without giving it all away!*

## How: Save Asm as Part

- Positives/Benefits:

- Volume/Shape
- Section View
- Interference Detection
- Images (90%).

- Negatives/Risks:

- Position/Configs
- Mass Properties
- Motion
- Updates/Changes
- Collision Detection.





# Sharing Assemblies *without giving it all away!*

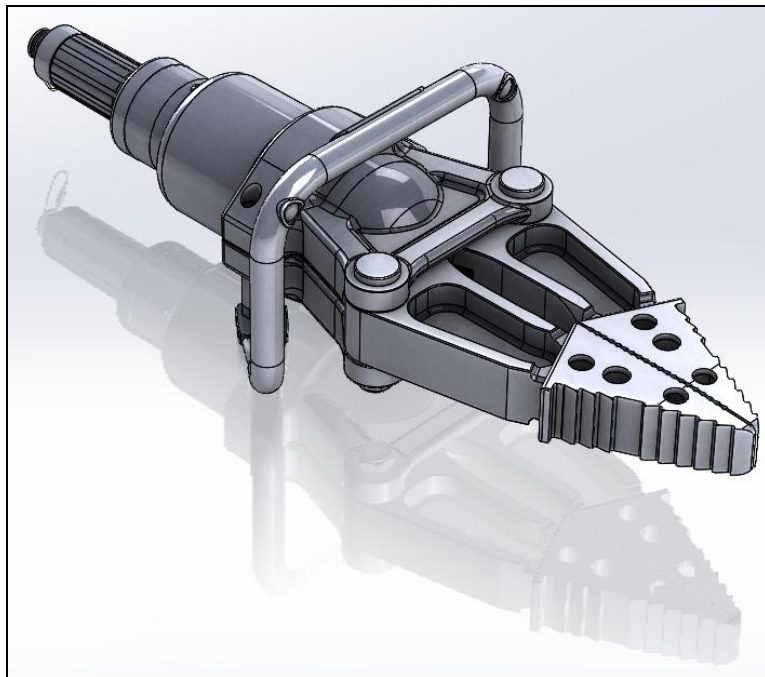
**How:** Insert, New Part, Join





# Sharing Assemblies *without giving it all away!*

**How:** Insert, New Part, Join



# Sharing Assemblies *without giving it all away!*

**How:** Insert, New Part, Join

- Positives/Benefits:

- Volume/Shape
- Updates/Changes
- Section View
- Interference Detection
- Images (60%?).

- Negatives/Risks:

- Position/Configs
- Mass Properties
- Motion
- Collision Detection.



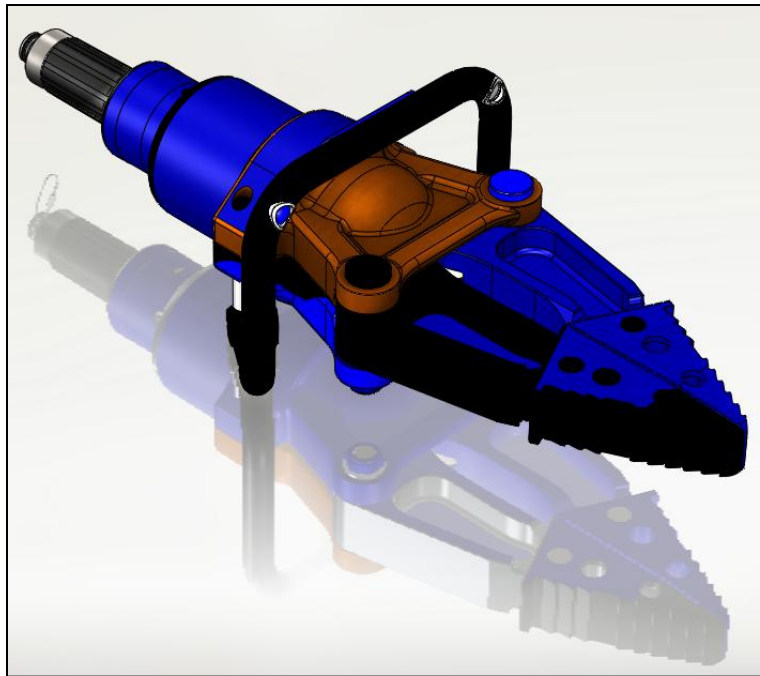
# Sharing Assemblies *without giving it all away!*

How: SpeedPak



# Sharing Assemblies *without giving it all away!*

How: SpeedPak



# Sharing Assemblies *without giving it all away!*

## How: SpeedPak

- Positives/Benefits:

- Volume/Shape
- Updates/Changes.

- Negatives/Risks:

- Position/Configs
- Mass Properties
- Motion
- Section View
- Interference Detection
- Collision Detection
- Images. ☹

# Sharing Assemblies *without giving it all away!*

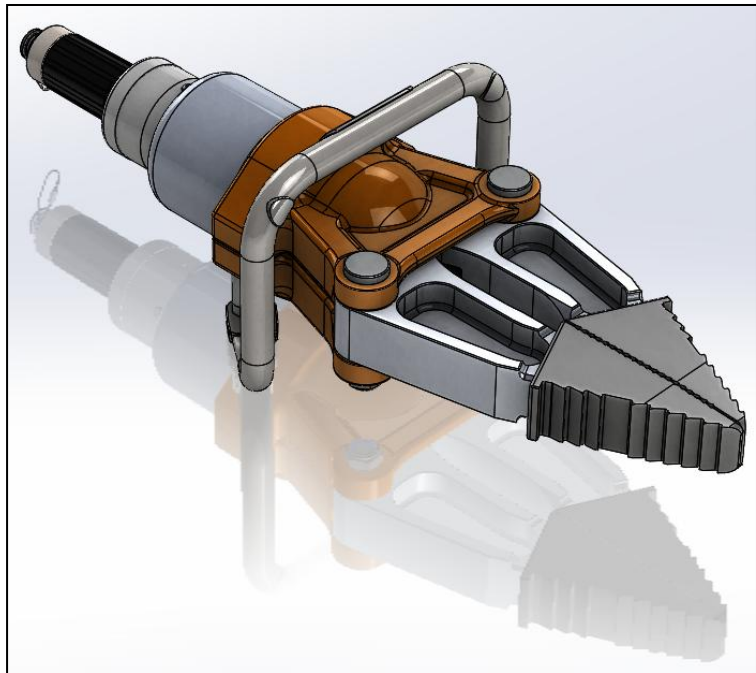
How: Defeature





# Sharing Assemblies *without giving it all away!*

How: Defeature



# Sharing Assemblies *without giving it all away!*

## How: Defeature

- Positives/Benefits:

- Volume/Shape
- Section View
- Mass Properties\*
- Interference Detection
- Motion
- Updates/Changes
- Collision Detection
- Images (90%).

- Negatives/Risks:

- Position/Configs
- ?
- More Detailed Initial Setup..





# Sharing Assemblies *without giving it all away!*

# WHICH?

## Comparison

- Pack and Go & eDrawings

# Sharing Assemblies *without giving it all away!*

# WHICH?

## Comparison

- ~~Pack and Go & eDrawings~~

# Sharing Assemblies *without giving it all away!*

# WHICH?

## Comparison

- ~~Pack and Go & eDrawings~~
- Neutral File Format



More Negative

# Sharing Assemblies *without giving it all away!*

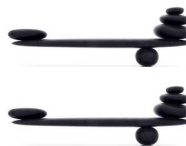
# WHICH?

## Comparison

- ~~• Pack and Go & eDrawings~~

- Neutral File Format

- Save Asm as Part



More Negative

More Negative

# Sharing Assemblies *without giving it all away!*

# WHICH?

## Comparison

- ~~Pack and Go & eDrawings~~

- Neutral File Format



More Negative

- Save Asm as Part



More Negative

- Insert, New Part, Join



More Positive

# Sharing Assemblies *without giving it all away!*

# WHICH?

## Comparison

- ~~Pack and Go & eDrawings~~

- Neutral File Format



More Negative

- Save Asm as Part



More Negative

- Insert, New Part, Join



More Positive

- SpeedPak



More Negative

# Sharing Assemblies *without giving it all away!*

# WHICH?

## Comparison

- ~~Pack and Go & eDrawings~~

- Neutral File Format



More Negative

- Save Asm as Part



More Negative

- Insert, New Part, Join



More Positive

- SpeedPak



More Negative

- Defeature



More Positive/Most Positive.

# CATI and InFlow Presentation Schedule

## Monday February, 9th

- **Discovering and Understanding SOLIDWORKS Dismissed Messages** - 1:30pm-2:30pm - Room North 229, Bryan Pawlak and Phil Whitaker
- **SOLIDWORKS Composer: As Easy as Building with Legos** - 1:30pm-2:30pm – Room North-225B, Brian Reel
- **Achieving Extreme SOLIDWORKS Performance: Hardware/Configuration** - 2:45-3:45pm - Room North-121A-C, Adrian Fanjoy and Josh Altergott
- **Configuring SOLIDWORKS Toolbox** - 2:45-3:45pm - Room North-124A/B, John Van Engen
- **Successfully Prepare for Your EPDM File/Data Migration** - 2:45-3:45pm - Room North-120B-C, Jeff Barker

## Tuesday February, 10th

- **SOLIDWORKS Duct Tape & Bailing Wire: Creative Solutions to Everyday Problems**- 1:30-2:30pm - Room North 129A/B, Josh Altergott and Adrian Fanjoy
- **Drawings: Setup of Templates and Sheet Formats**- 1:30-2:30pm - Room North-221, Jim Krivoshein
- **EPDM Web: Implementing and Configuring** - 1:30pm-2:30pm - Room North-121A-C, Justin Webster
- **How to Build and Maintain Effective Design Tables** - 2:45-3:45pm - Room North-120D, Josh Altergott
- **DriveWorksXpress Essentials Hands-On Lab** – 4:30pm-6:00pm - Room North-227C, Ryan Dally

## Wednesday February, 11th

- **Achieving Extreme SOLIDWORKS Performance: Modeling Methodology** - 2:45-3:45pm - Room North-120D, Josh Altergott, and Adrian Fanjoy
- **Sharing Assemblies—Without Giving It All Away**- 2:45-3:45pm - Room North-221, Jim Krivoshein

For a copy of all CATI and InFlow presentations please go to <http://www.cati.com/sww2015>



