

# CLASSIC TEARDROP TRAILER

CONSTRUCTION AND PLANS SUPPORT MANUAL NORMAN J. BOULARD

# CLASSIC TEARDROP TRAILER

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FOR MY CHILDREN AND GRANDCHILDREN, WHO INSPIRE ME

# **FIRST EDITION**

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# **ACKNOWLEDGMENTS**

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SPECIAL THANKS TO DEANNA BOULARD FOR REVIEWING AND EDITING THE COPY IN THIS MANUAL.

THANK YOU TO ALL WHO HAVE PURCHASED THESE PLANS. MAY YOU ENJOY A FLAWLESS BUILD AND HAPPY TRAVELS IN YOUR CLASSIC TEARDROP TRAILER.

# INTRODUCTION

THESE CLASSIC TEARDROP TRAILER PLANS INCORPORATE DESIGN, MATERIALS, AND CONSTRUCTION METHODS USED DURING THE 1940S. THE TRAILER FEATURED IN THESE PLANS IS A 5-FOOT-WIDE DESIGN INTERPRETATION, HEAVILY INFLUENCED BY THE CLASSIC 4-FOOT-WIDE 1946-47 KEN-SKILL MODEL 10 TEARDROP TRAILER. MEASUREMENTS FOR THESE PLANS ORIGINATE FROM TRAILERS #483 AND #527, WHICH ARE ORIGINAL AT THE TIME OF THIS WRITING, ALTHOUGH THESE TRAILERS HAVE SOME ADDED WIRING OR ROOF VENT UPDATES, THEY ARE NOT REBUILT INTERPRETATIONS. SOME ORIGINAL MANUFACTURED PARTS WERE MEASURED FROM ONE REBUILT TRAILER, #234. ADDITIONALLY, SOME PARTS MEASURED AND DOCUMENTED WERE NOS (NEW OLD STOCK) PARTS SOURCED THROUGH INTERNET SEARCHES. MOST PARTS ARE METAL, AS THEY WERE ON THE ORIGINALS, AND FUNCTION EXACTLY AS THEY DID IN THE 1940S. THE MAIN GOAL IN CREATING THESE PLANS WAS TO MAINTAIN THE ORIGINAL DESIGN AND CAMPING FLAVOR FROM THAT TIME PERIOD. HOWEVER, SOME SPECIFIC FEATURES AND DETAILS WERE UPDATED TO CURRENT DESIGN AND SAFETY STANDARDS. SAFETY REGULATIONS, AS THEY RELATE TO EXTERIOR LIGHTING AND TRANSPORTING OF FUEL, WERE THE MAIN REQUIRED UPDATES. WATER SAFETY ISSUES ALSO REQUIRED MATERIAL CHANGES. ELECTRICAL OUTLETS WERE ADDED WITH ALL CONNECTIONS GROUNDED, CEILING AND ICEBOX INSULATION ARE UPDATED. MOST CHANGES ARE MECHANICAL OR HIDDEN TO THE UNTRAINED EYE. YOUR TRAILER SHOULD LOOK AND FEEL LIKE IT CAME RIGHT OUT OF THE MID-1940S.

# WELCOME TO CLASSIC TEARDROP TRAILER

CONGRATULATIONS ON PURCHASING THE MOST PRECISE, COMPREHENSIVE CLASSIC TEARDROP TRAILER PLANS AVAILABLE ON THE MARKET TODAY. WE ARE CONFIDENT THESE PLANS WILL PROVIDE YOU WITH THE INFORMATION AND INSPIRATION THAT YOU NEED TO ENJOY YOUR BUILD EXPERIENCE. THERE SHOULD BE NO GUESSWORK WHEN BUILDING YOUR TRAILER DUE TO UNFORESEEN ISSUES THAT ARISE WHEN USING VAGUE OR INCOMPLETE PLANS. THE LEVEL OF DETAIL INCLUDED IN THESE PLANS SHOULD ENABLE YOU TO MAKE ALL OF THE PARTS AND ASSEMBLIES WITHOUT HAVING TO REMAKE OR REDO ANY PART OR ASSEMBLY. PLEASE CONTACT US AT CLASSICTEARDROPTRAILER.COM IF YOU HAVE ANY QUESTIONS OR ADDITIONAL INPUT THAT YOU'D LIKE TO SHARE. ENJOY YOUR BUILD EXPERIENCE!

# IMPORTANT NOTES AND INSTRUCTIONS

# **MANUAL & DRAWINGS**

EACH ASSEMBLY AND PART DRAWING IS DIMENSIONED, HAS ITS OWN MATERIAL AND TECHNICAL SPECIFICATIONS, WITH BRIEF INSTRUCTIONS PROVIDED IF NEEDED. THIS MANUAL IS DESIGNED TO COMPLEMENT THE DRAWINGS. ADDITIONAL DIMENSIONS OR INFORMATION NEEDED DURING THE BUILD ARE PROVIDED IN THIS MANUAL. IF CLARIFICATION OF SPECIFIC DETAILS ARE NEEDED, YOU WILL NOTICE SOME OVERLAP IN DRAWINGS. IN SOME CASES, WHEN THERE ARE MIRRORED PARTS OR ASSEMBLIES, A DUPLICATE DRAWING WAS CREATED FOR CLARITY AS WELL.

# **CONSTRUCTION NOTES**

## STEEL TRAILER FRAME

THE STEEL TRAILER FRAME REQUIRES A SKILLED METAL WORKER AND EXPERIENCED WELDER TO

FABRICATE. IF YOU DO NOT HAVE THE TOOLS OR ABILITY TO DO THIS WORK, HIRE A LOCAL WELDING SHOP. ALTERNATELY, OUR TRAILER FRAMES USE HIGH QUALITY STEEL COMPONENTS, ARE WELDED ACCURATELY USING A FIXTURE, AND CAN BE ORDERED FROM CLASSICTEARDROPTRAILER.COM.

# KITCHENETTE CABINET/CLOSET CASEWORK

TYPICALLY IN THIS ERA, CABINET CASEWORK COMPONENTS WERE ASSEMBLED USING GLUE, FINISH NAILS, AND SCREWS. METAL FASTENERS ARE USED TO HOLD WOOD PARTS IN PLACE AS THE GLUE JOINTS SET, ADDING CREEP RESISTANCE. WITH THE EXCEPTION OF SHOWING WHERE CORRUGATED FASTENERS COULD BE USED, THE PLANS LEAVE CASEWORK CONSTRUCTION OPEN TO YOUR CHOSEN METHOD. CABINET JOINERY CONSTRUCTION METHODS COULD INCLUDE SPLINE, DOWEL, OR BISCUIT JOINERY, WITH A POCKET & SELF-DRILLING SCREW SYSTEM.

## **CABINET DOORS**

DOORFRAME CORNERS AS DESIGNED IN THIS ERA WERE GLUED AND STAPLED, OR USED CORRUGATED FASTENERS. GLUING END GRAIN ALONE THAT IS CUT AT A 45° ANGLE IS POSSIBLE, BUT NOT GENERALLY GOOD PRACTICE TO RELY ON. CONSIDER THE EXPANSION AND CONTRACTION OF WOOD THROUGH EACH SEASON AND NOTICE THAT THE FRAMES ARE NAILED INTO PLACE ON THE DOOR PLYWOOD BACK FACES. THEY ARE NOT GLUED TO THE DOOR PLYWOOD BACK FACE.

#### WOOD GLUE

USE GLUES DESIGNED FOR EXTERIOR APPLICATIONS. GLUE SET TIMES ARE CRITICAL FOR STRONG WOOD JOINTS SO WHEN GLUING LARGER PLYWOOD PANEL ASSEMBLIES, USE A SLOWER SETTING POLYURETHANE OR POLYVINYL ACETATE (PVA) GLUE. IF USING A STRATEGY TO EXTEND GLUE SET TIMES SUCH AS REFRIGERATING TO A LOWER SPECIFIC TEMPERATURE, OR BY THINNING 5% WITH WATER, CONTACT YOUR GLUE MANUFACTURER AND BE SURE TO USE AN APPROVED METHOD.

# **CONSTRUCTION ADHESIVE**

WHEN SECURING THE SIDE PANELS TO THE OUTER FLOOR SUPPORTS, KITCHENETTE CABINET ASSEMBLY, CLOSET ASSEMBLY, AND ROOF SUPPORTS, USE A POLYURETHANE CONSTRUCTION ADHESIVE WITH THE SPECIFIED SCREWS. THIS TYPE OF ADHESIVE ADDS STRUCTURAL RIGIDITY TO THE TRAILER AND PARTS OR ASSEMBLIES CAN BE SEPARATED DURING FUTURE SERVICE OR REPAIRS. CONSTRUCTION ADHESIVE SHOULD EXCEED ASTM D-3498 AND ASTM C-557 SPECIFICATIONS.

#### **ALUMINUM**

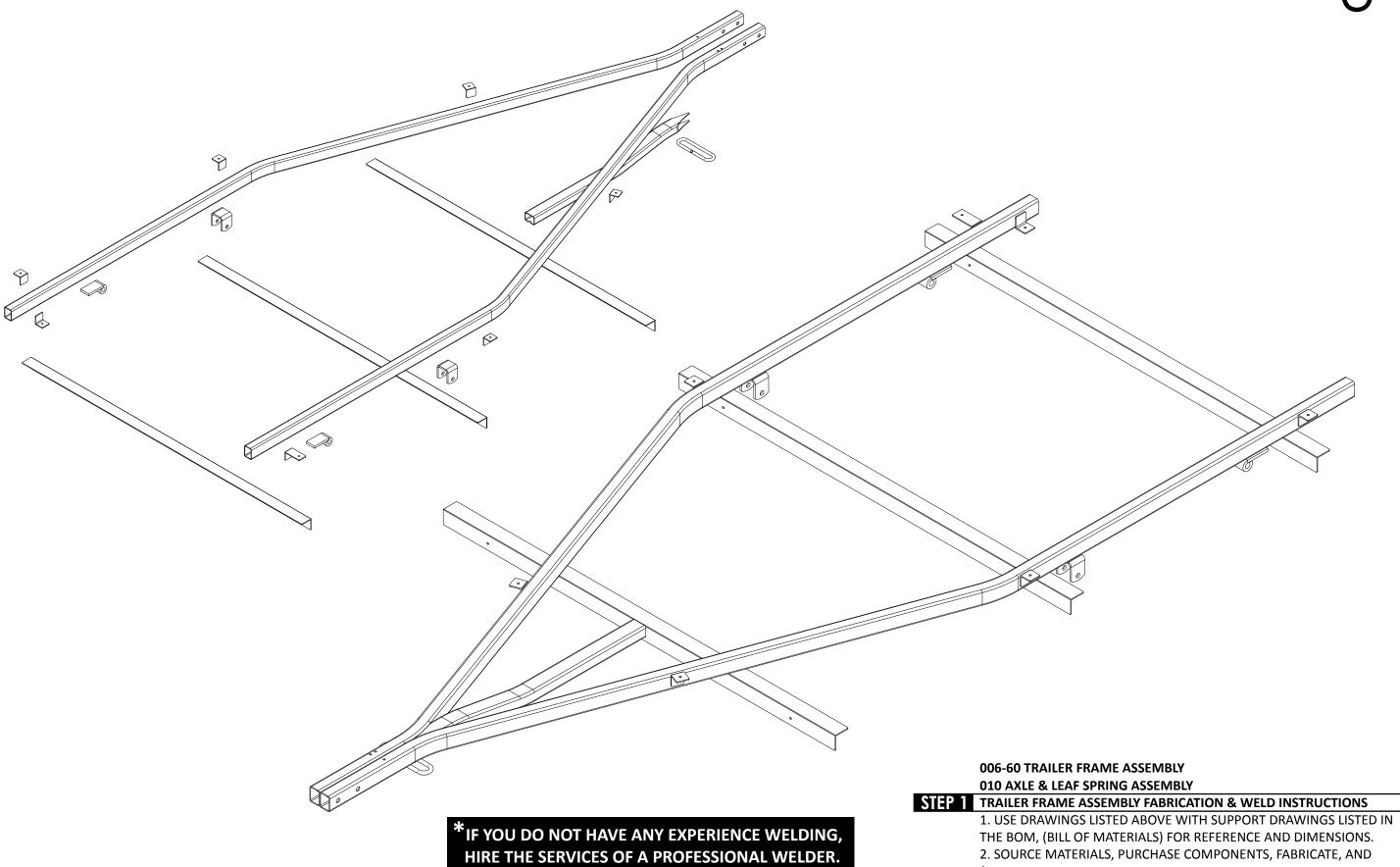
IT IS GOOD PRACTICE TO BUILD FIXTURES TO FORM ALUMINUM PROFILES AROUND A SHAPE BEFORE INSTALLING INTO AN ASSEMBLY. YOU MAY FIND NEED FOR THIS, ESPECIALLY ON THE DOORS AND PLYWOOD/ALUMINUM SIDE OPENING TRIM. EXTRUSIONS ARE GENERALLY AVAILABLE IN LENGTHS THAT CAN BE SHIPPED COST-EFFECTIVELY, SO YOU MAY WANT TO CONSIDER BRAZING THE EXTRUSION ENDS TOGETHER FOR LONGER LENGTHS IF NEEDED.

## DEPARTMENT OF MOTOR VEHICLES [DMV]/CERTIFIED ENGINEER

TO MEET SAFETY STANDARDS, FAMILIARIZE YOURSELF WITH DMV REQUIREMENTS IN YOUR STATE OR PROVINCE, AND CONSULT WITH A CERTIFIED PROFESSIONAL ENGINEER DURING YOUR BUILD.

#### **AS YOU BEGIN**

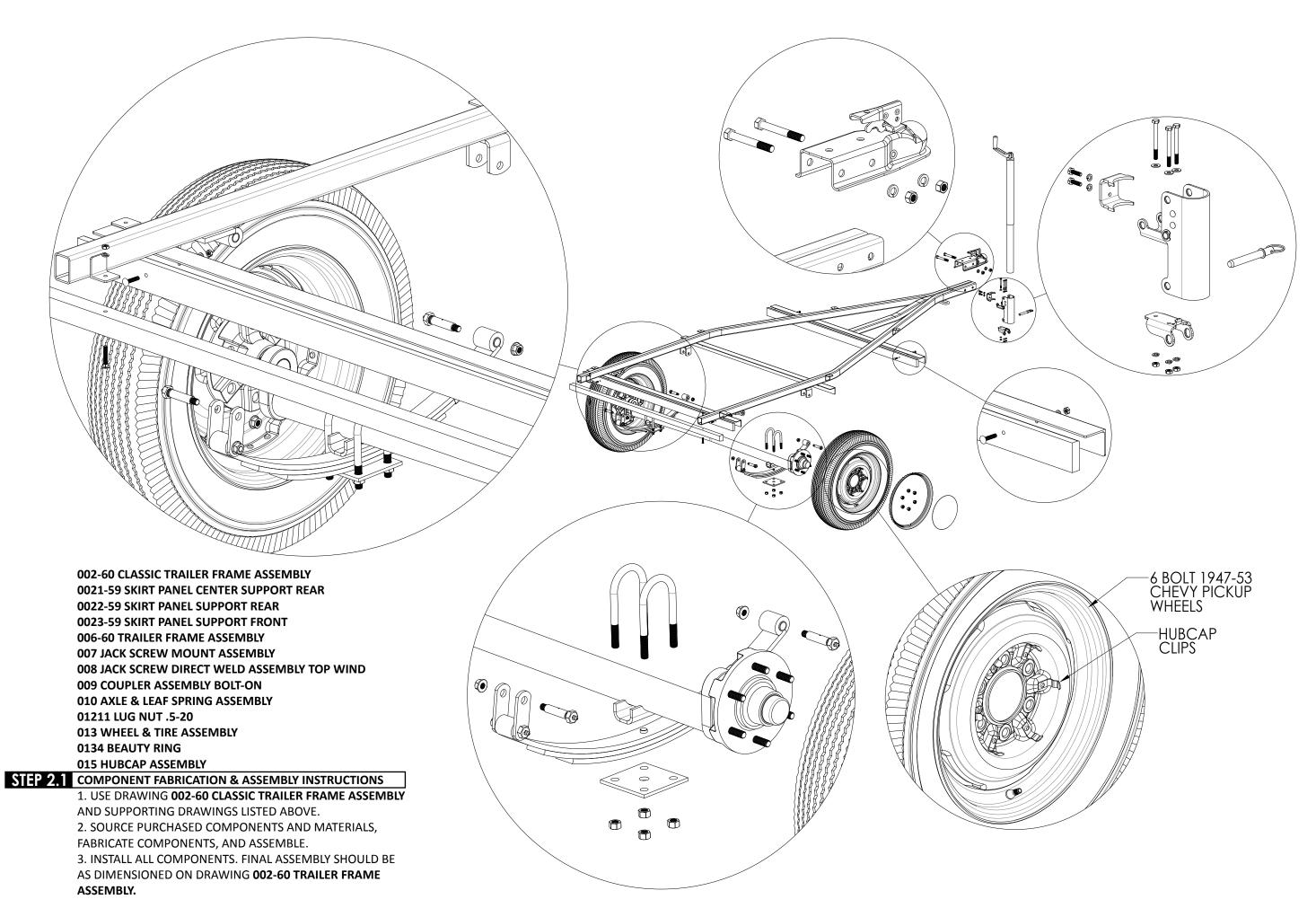
READ THE **DESIGN DETAILS EPILOGUE** IN SECTION 9 TO GET A SENSE OF HOW THESE TRAILERS WERE TYPICALLY DETAILED AND WHY, THEN... ENJOY YOUR BUILD!

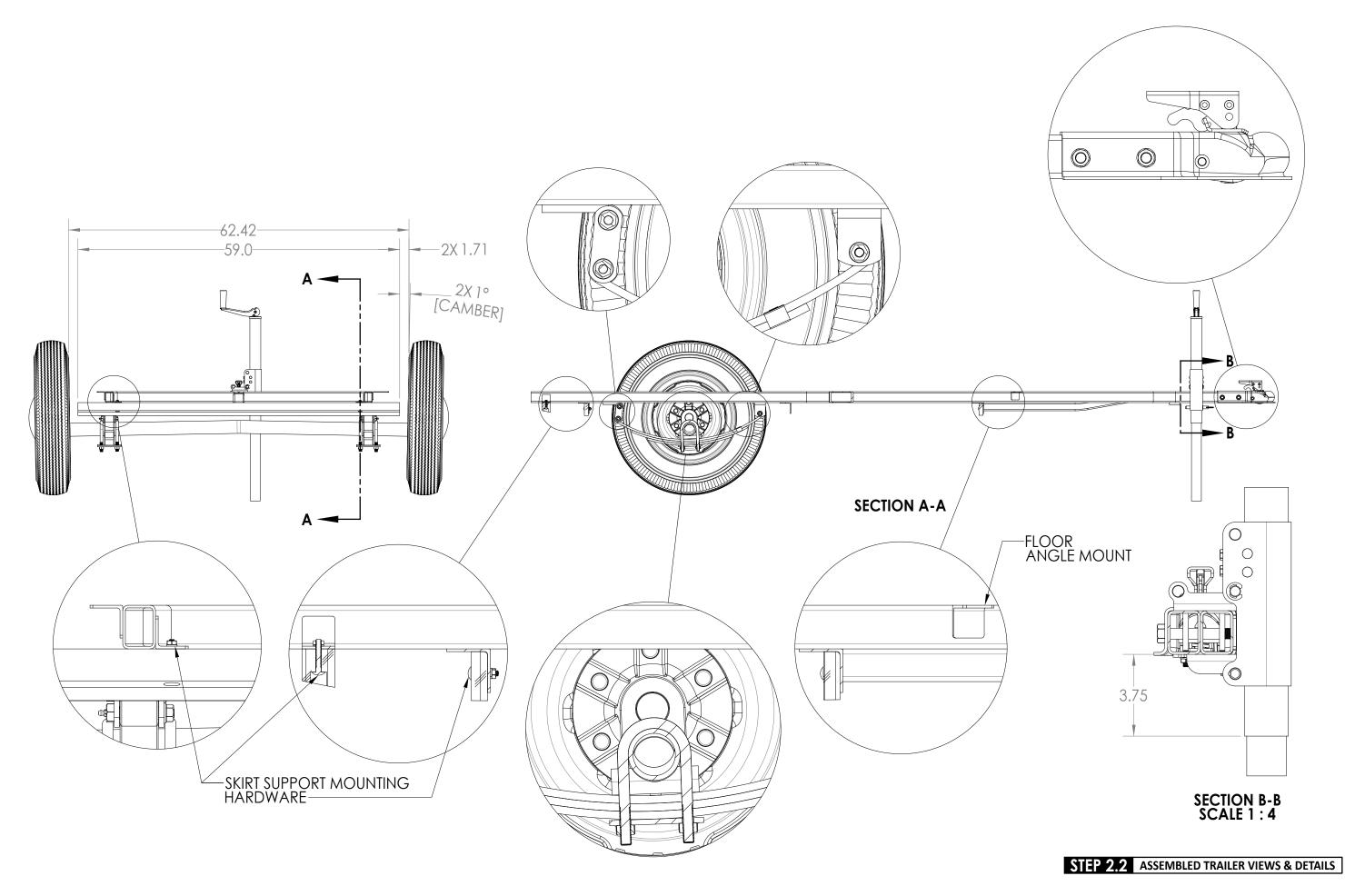


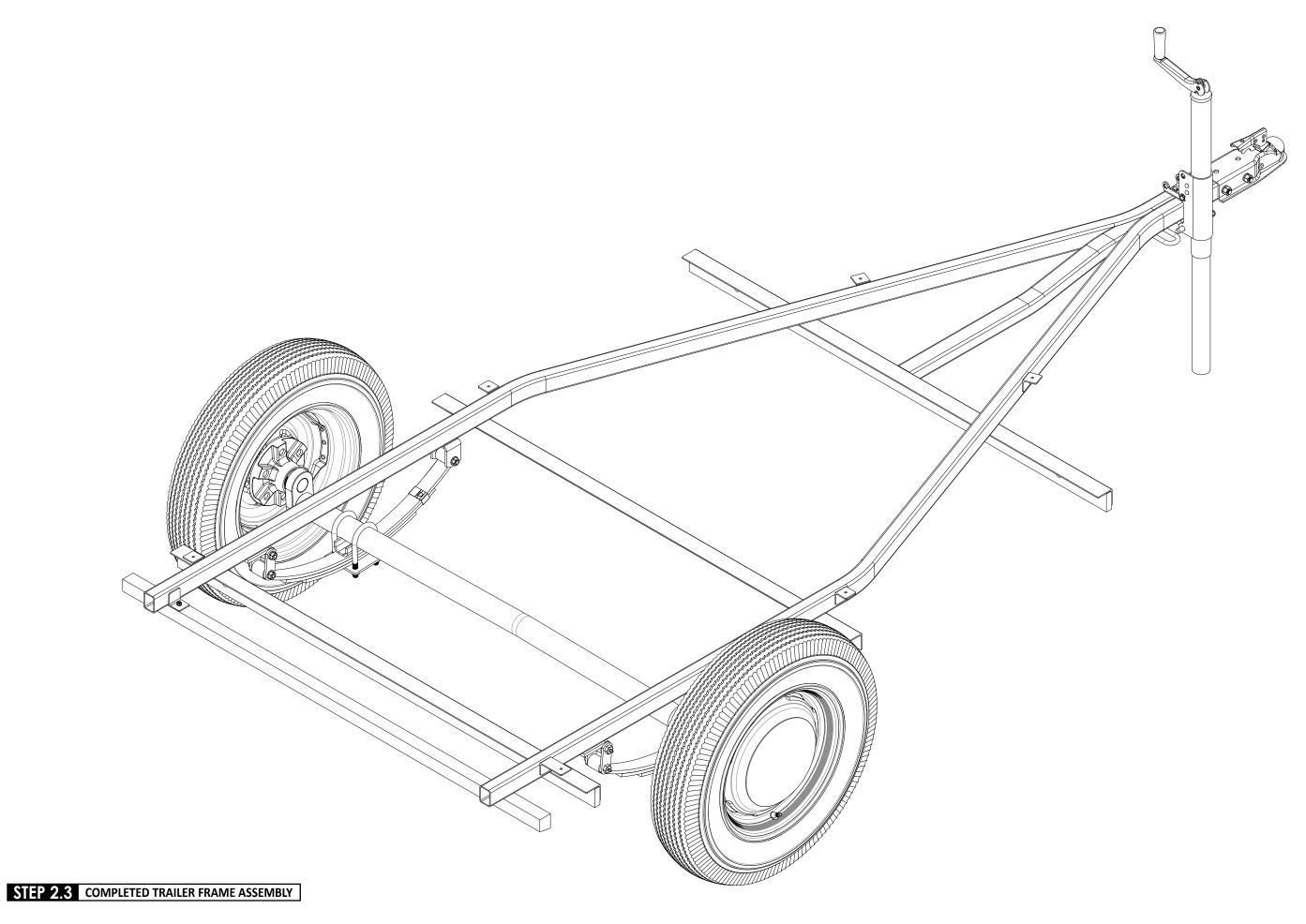
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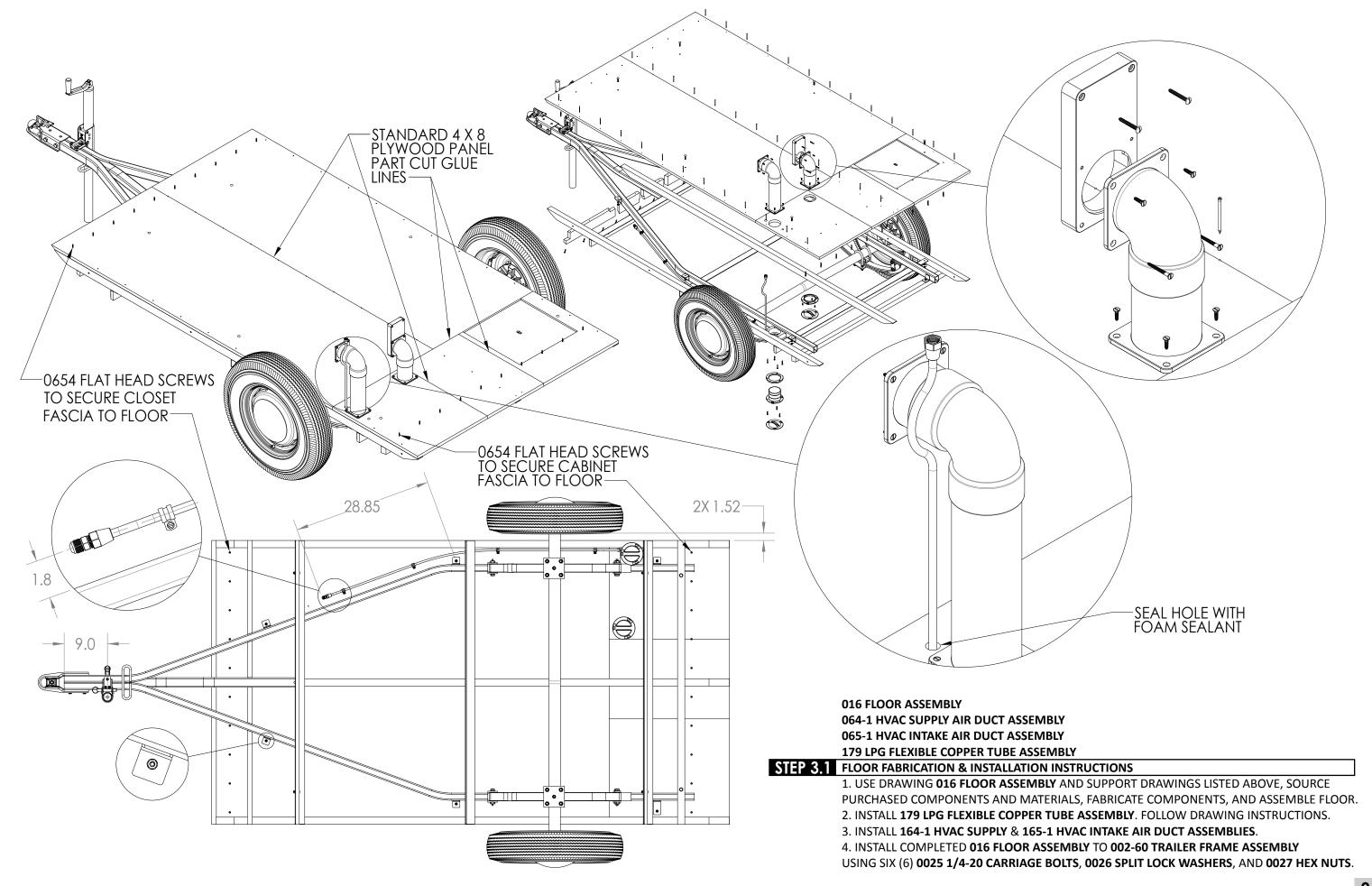
\*WELD ASSEMBLY ACCORDING TO LATEST **AWS D1.1** STANDARDS.

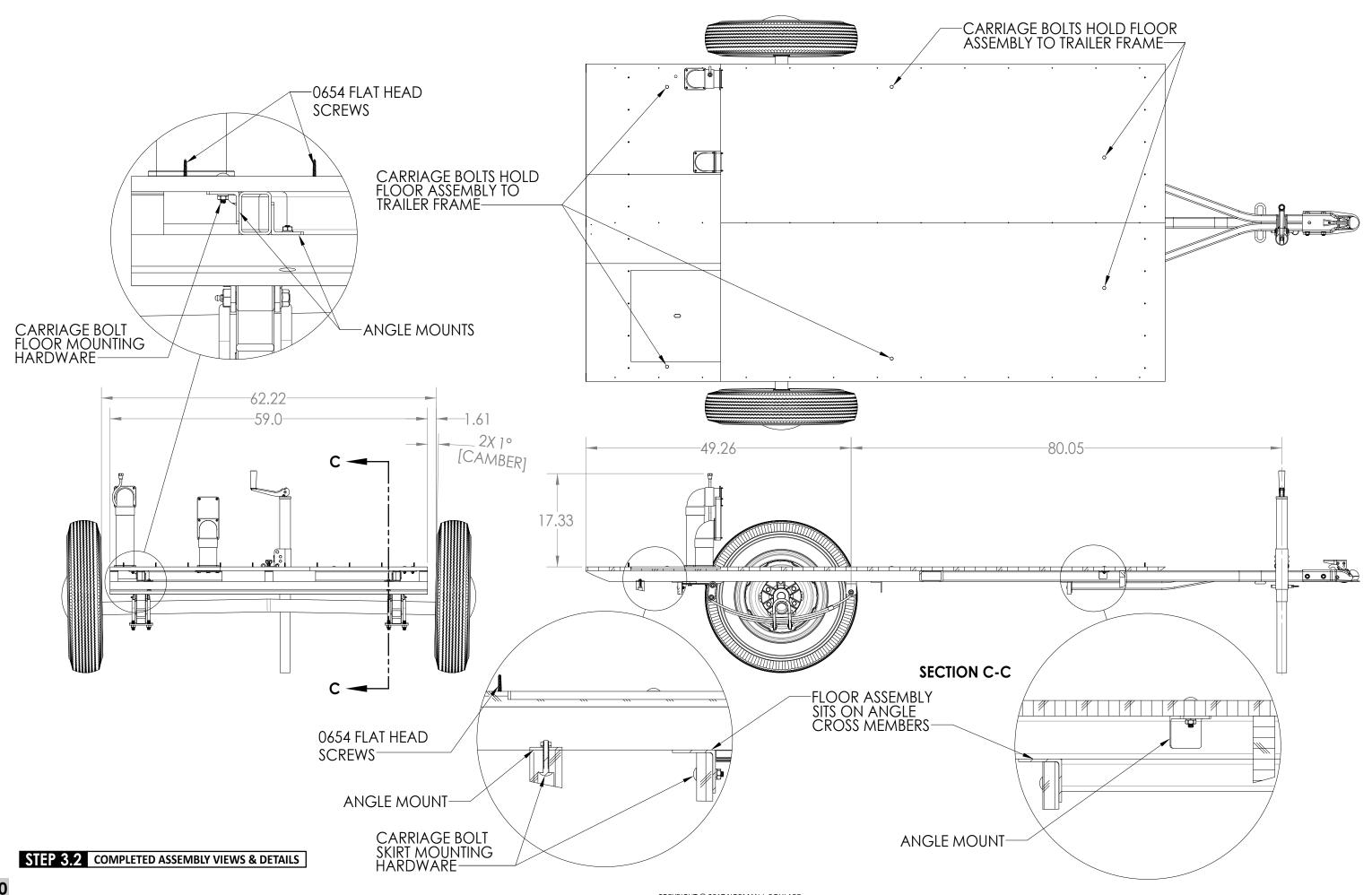
3. CLEAN, PREP, AND PAINT COMPLETED FRAME ASSEMBLY.

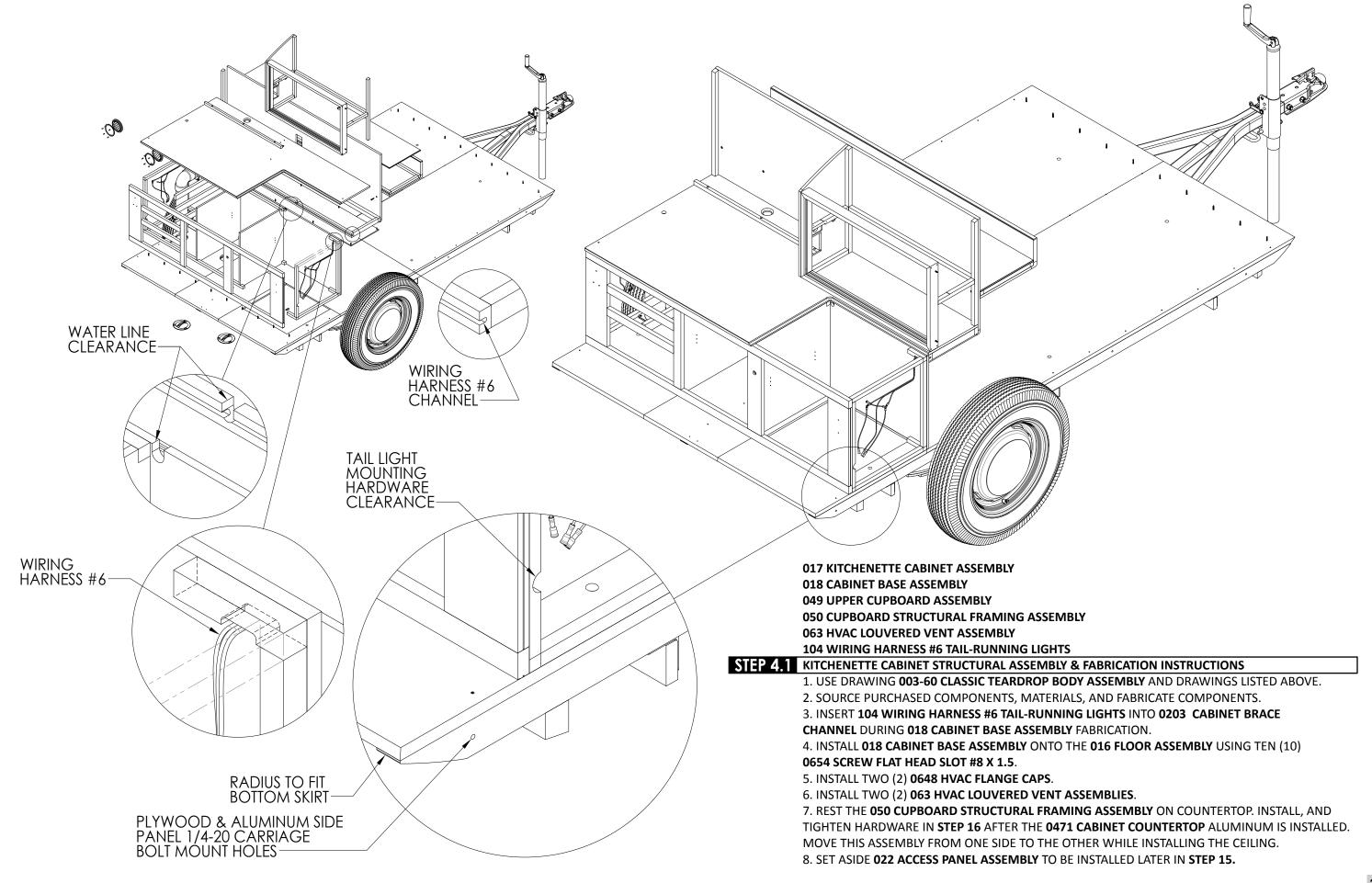


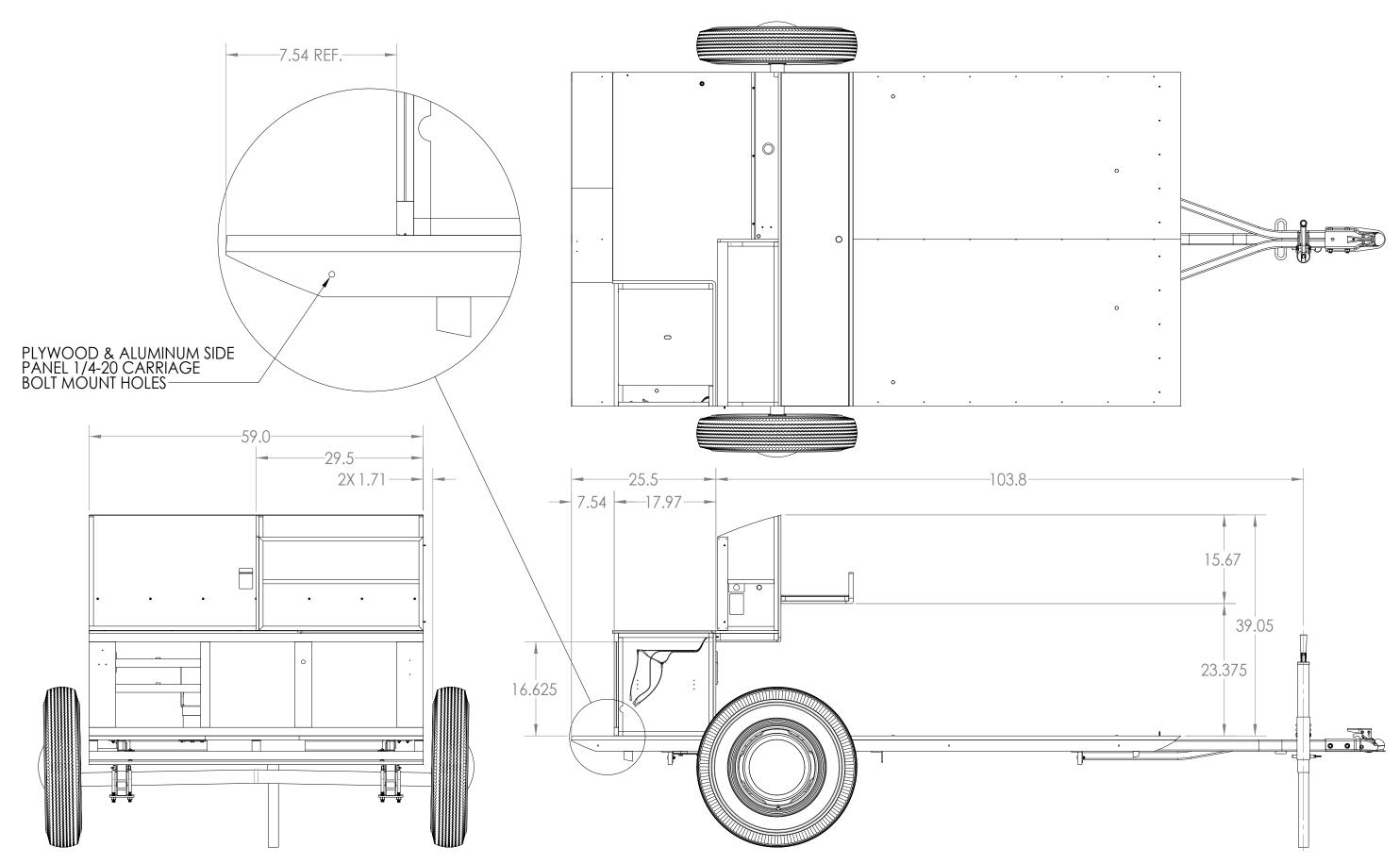




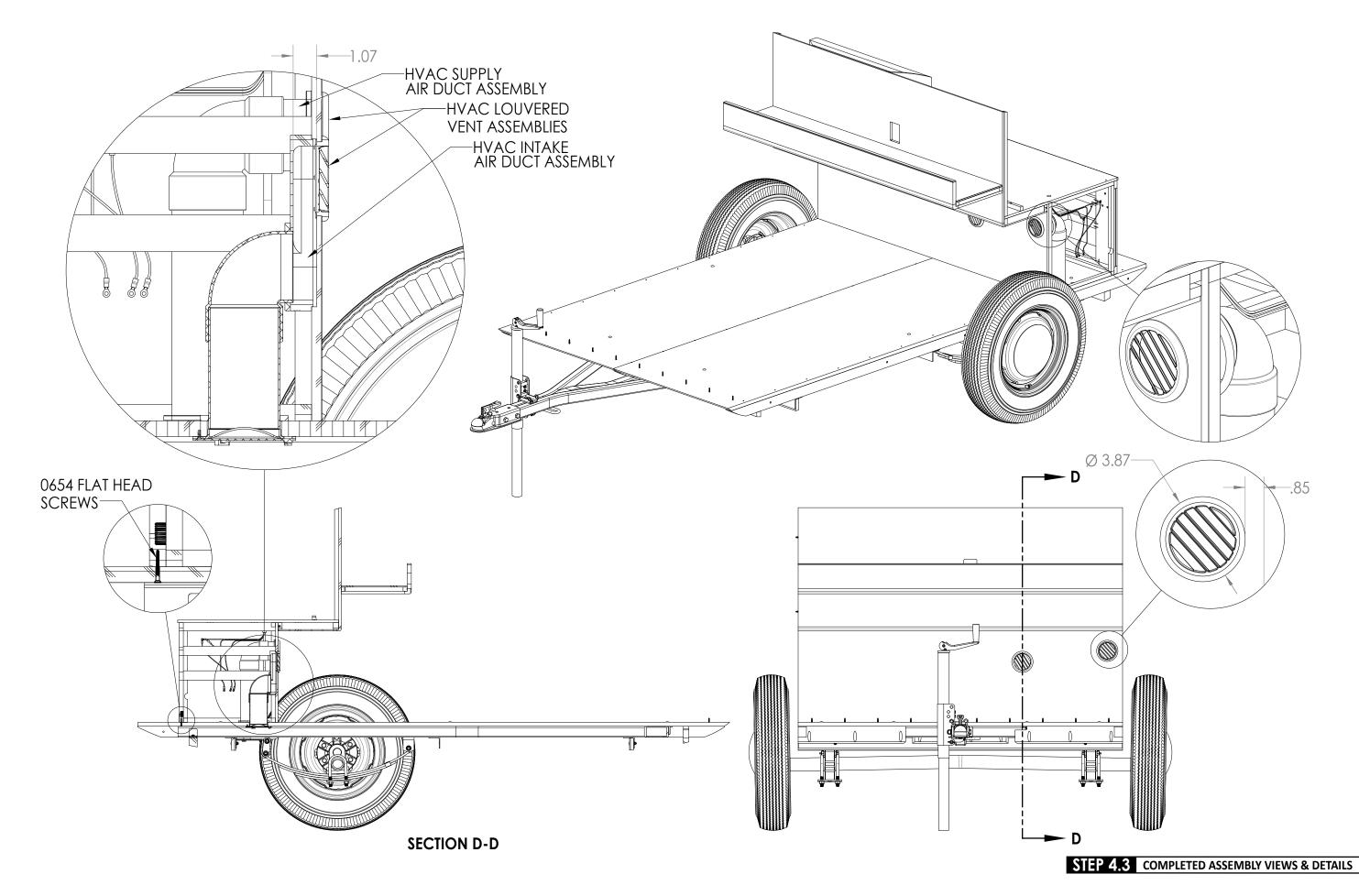


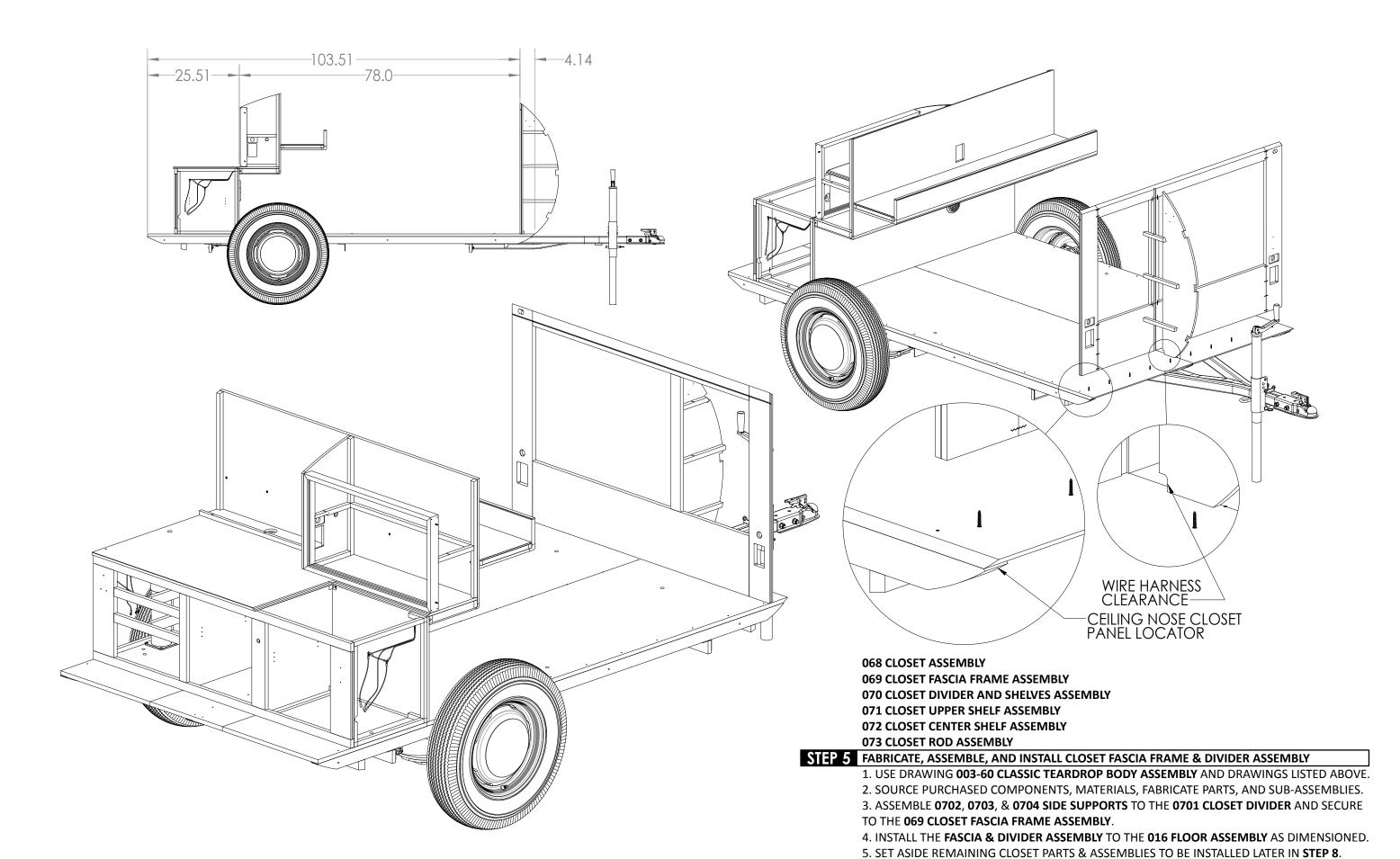


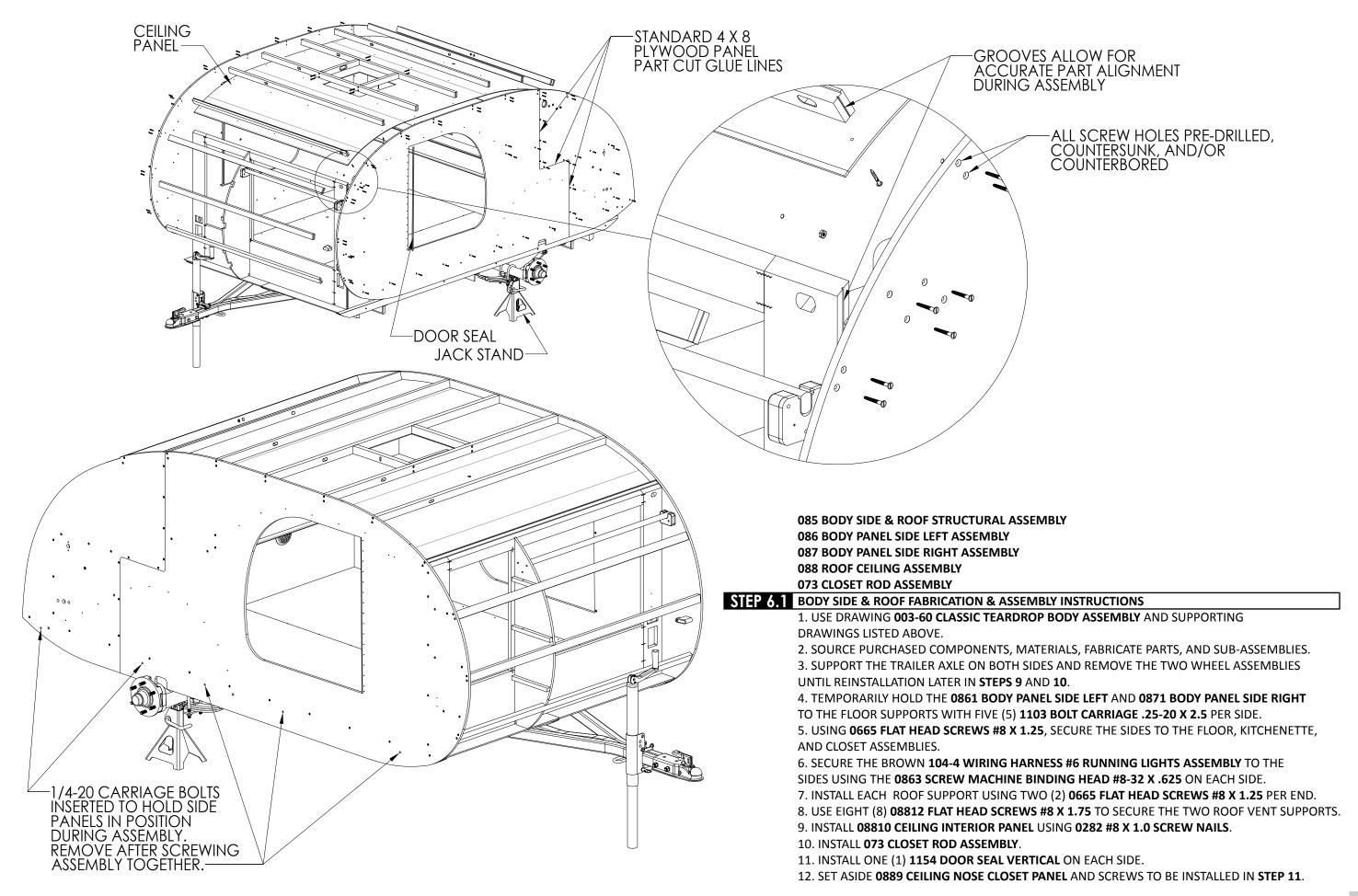




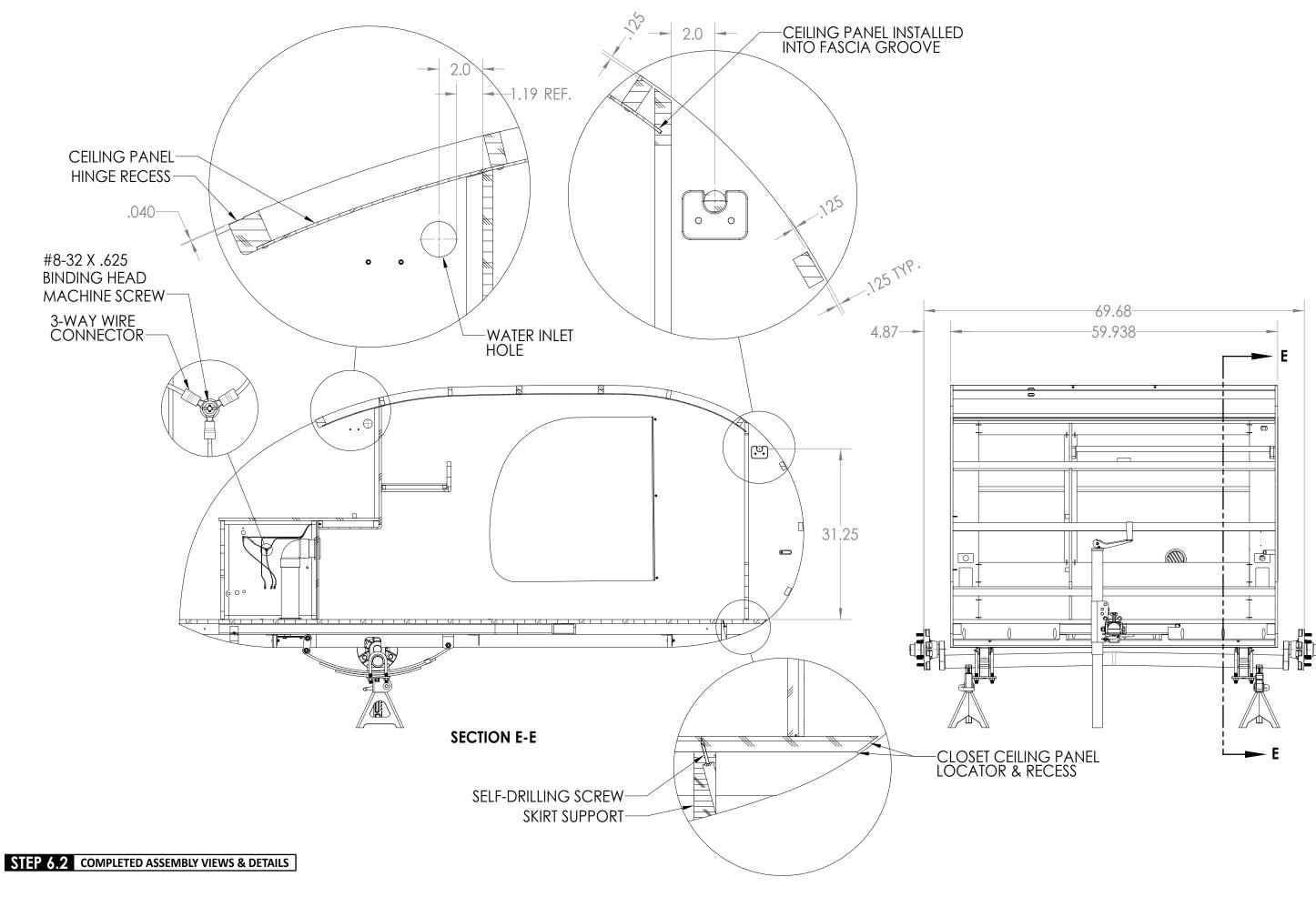
STEP 4.2 COMPLETED ASSEMBLY VIEWS & DETAILS

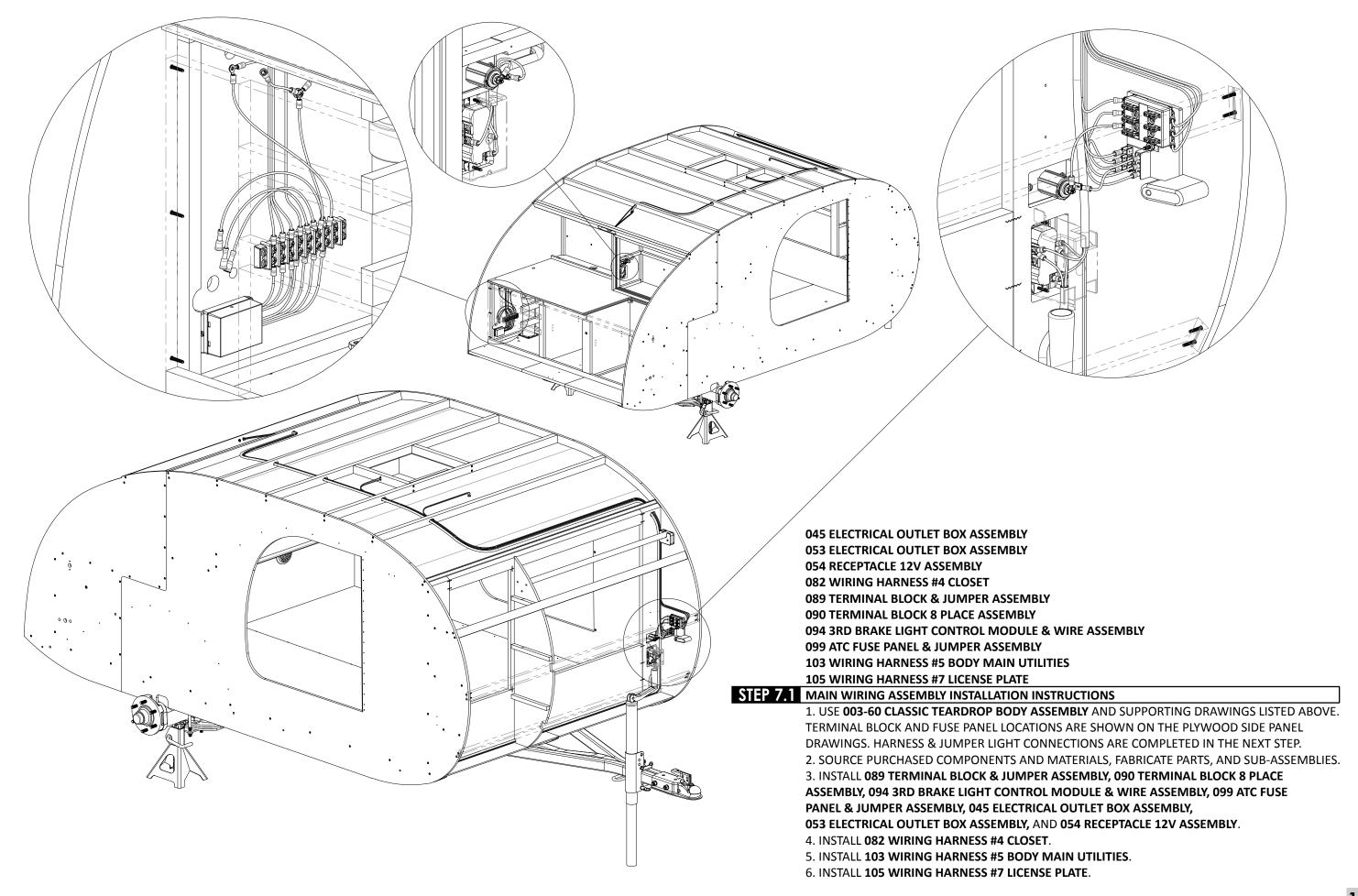


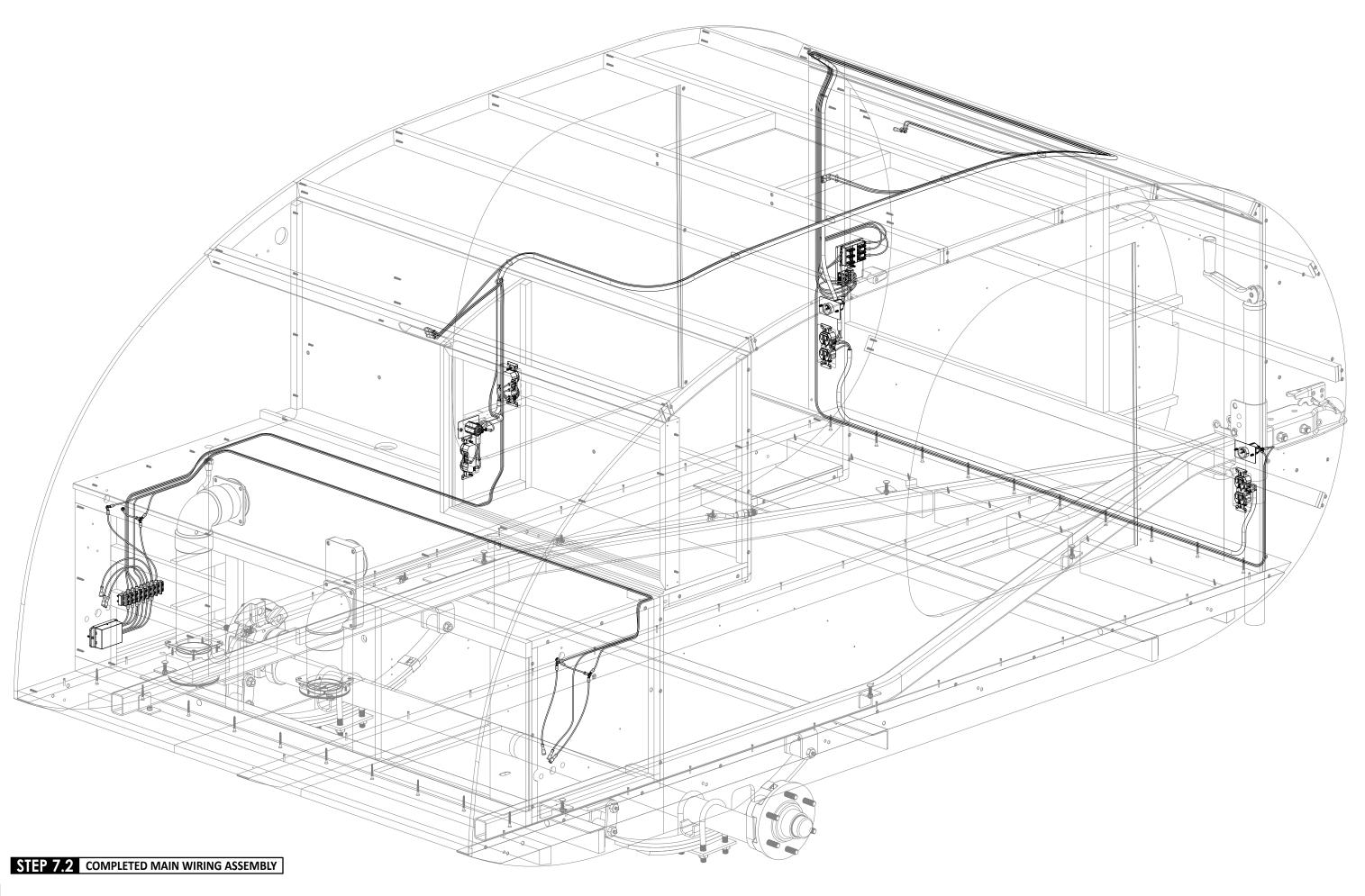




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# BOM

**RAW MATERIALS** 

# WOOD

#### **PLYWOOD**

2 - .75" X 4' X 8' PLYWOOD

[PA FLOOR, STORAGE/CLOSET PARTS]

[PB FLOOR, GALLEY LID CURVED RIBS]

5 - .5" X 4' X 8' PLYWOOD

[PC BODY PANEL RIGHT SIDE LARGE, DOOR]

[PD BODY PANEL LEFT SIDE LARGE, DOOR]

[**PE** CABINET COUNTERTOP, INTERIOR SHELF BOTTOM]

[PF BODY PANEL LEFT & RIGHT SIDES SMALL, CLOSET DIVIDER & SHELVES]

[**PG** CABINET PANELS/DIVIDERS/CENTER SHELF, CUPBOARD SIDE/SHELF, HVAC FLANGE WASHER]

1 - .375" X 4' X 8' PLYWOOD

[PH CABINET/CLOSET/CUPBOARD DOORS, DRAWER FRONTS, STORAGE DIVIDERS, ELECTRICAL FRONT COVER]

1 - .25" X 4' X 4' PLYWOOD

[PI INTERIOR SHELF TOP/ACCESS PANEL, CLOSET ROD ANTI-ROTATE PAD, ELECTRICAL COVER FRONT/SIDE]

3 - .125" X 5' X 5' PLYWOOD OR MASONITE

[PJ CEILING TOP REAR]

[PK CEILING TOP FRONT]

[PL CEILING NOSE CLOSET, DRAWER BOTTOMS]

#### CLEAR C SELECT HARDWOOD/SOFTWOOD

1 - 2.0" X 10" X 10' (1.5" X 9.25" NOMINAL) SOFTWOOD/HARDWOOD CLEAR
[WA FLOOR STRUCTURE/REAR SKIRT SUPPORT, PROPANE SUPPORT, ELECTRICAL TOP
COVER, HVAC FLANGE SUPPORT]

1 - 1.0" X 8" X 10' (7.25" NOMINAL) PLANED THICKNESS C SELECT SOFTWOOD/HARDWOOD [WB FRONT SKIRT SUPPORTS, ROOF SUPPORTS, INTERIOR SHELF BRACE, STORAGE SHROUD RAILS, ELECTRICAL COVER BRACE, PROPANE SUPPORT]

1 - .5" X 8.0" X 8' (7.25" NOMINAL) PLANED THICKNESS C SELECT SOFTWOOD/HARDWOOD [WC CABINET DRAWER FRONT MOUNT/REAR/SIDES, HVAC FLANGE SUPPORT]

1 - 1.0" X 10.0" X 10' (.75" X 9.25" NOMINAL) CLEAR PINE/FIR/SPRUCE

[WD ROOF SUPPORTS]

2 - 1.0" X 12.0" X 8' (.75" X 11.25" NOMINAL) CLEAR PINE/FIR/SPRUCE

[**WE** CABINET BRACING, DRAWER RAILS, WATER TANK SHIELD SUPPORT, ICEBOX FRAME] [**WF** SKIRT/GALLEY SUPPORTS, ELECTRICAL COVER MOUNTS, KILL SWITCH TOP COVER]

3 - 1.0" X 12.0" X 8' (.75" X 11.25" NOMINAL) C SELECT SOFTWOOD OR HARDWOOD

[WG CABINET/CLOSET FASCIA PARTS, DOOR FRAMES, CUPBOARD FRAME, HVAC VENTS]
[WH CLOSET FASCIA PARTS, GALLEY LID BOTTOM FRAME, CABINET CORNER MOLDING]
[WI DOOR FRAMES, CLOSET HEADBOARD]

1 - 2.0" X 6.0" X 8' (1.5" X 5.5" NOMINAL) C SELECT HARDWOOD

[WJ SHELF CORNER MOLDING, GALLEY LID FRAME/ROOF SUPPORT, HVAC INTAKE MOUNT]

1 - 1.0" OD X 37.188" DOWEL

[WK CLOSET ROD] (NOT IN BOM ILLUSTRATIONS)

# SHEET METAL

# **ALUMINUM**

1 - .025" [22 GA] X 6" X 6" 5052-H32 ALUMINUM

[GALLEY HINGE END CAPS] (NOT IN THE BOM ILLUSTRATIONS)

2 - .032" [20 GA] X 4' X 10' 5052-H32 ALUMINUM

[AA EXTERIOR SIDE RIGHT/DOOR SIDE RIGHT]

[AB EXTERIOR SIDE LEFT/DOOR SIDE LEFT]

1 - .032" [20 GA] X 4' X 8' 5052-H32 ALUMINUM

[AC INTERIOR SIDES, DOOR/GALLEY/COUNTER U-TRIM, SHELF SUPPORTS, ICEBOX TRIM]

1 - .040" [18 GA] X 5' X 12' 5052-H32 ALUMINUM

[AD ROOF PANEL]

2 - .040" [18 GA] X 5' X 10' 5052-H32 ALUMINUM

[AE GALLEY LID EXTERIOR/INTERIOR PANELS, FRONT SKIRT, FLOOR COVER]
[AF REAR SKIRT, COUNTERTOP, WATER TANK SHIELD, STORAGE TOP & BOTTOM

SHROUDS/ENDS, ICEBOX INSIDE DOOR PANEL]

1 - .0747" [12 GA] X 24" X 5' 5052-H32 ALUMINUM

[AG STORAGE BOTTOM/DIVIDER SUPPORTS, FLOOR TRIM]

#### **GALVANIZED STEEL**

1 - .0276" [24 GA] X 4' X 8' GALVANIZED STEEL [**GA** ICEBOX PARTS]

# **METAL PROFILES**

#### **TUBING**

2 - 1.5" X 2.0" X 135.0" A513 STEEL 11 GAUGE [.120"] TUBING

[**SA** SIDE RAILS]

1 - 1.5" X 2.0" X 33.75" A513 STEEL 11 GAUGE [.120"] TUBING

[SA COUPLER TONGUE TUBE SUPPORT]

#### **ROD**

1 - .4375" X 15.25" A513 STEEL ROD

[SB SAFETY CHAIN MOUNT]

#### **ANGLE**

3 - .125" X 2.0" X 2.0" X 58.25" A36 STEEL ANGLE

[SC CROSSMEMBERS]

1 - 1.5" X 1.5" X 10.0" A36 STEEL ANGLE [TO FABRICATE FIVE (5) PARTS]

[SD ANGLE MOUNTS]

1 - 1.5" X 3.0" X 1.5" A36 STEEL ANGLE

[**SE** ANGLE MOUNT LONG]

1 - 1.0" X 1.0" X 43.5" A36 STEEL ANGLE

[**SG** STORAGE FRAME LEFT 8.0"]

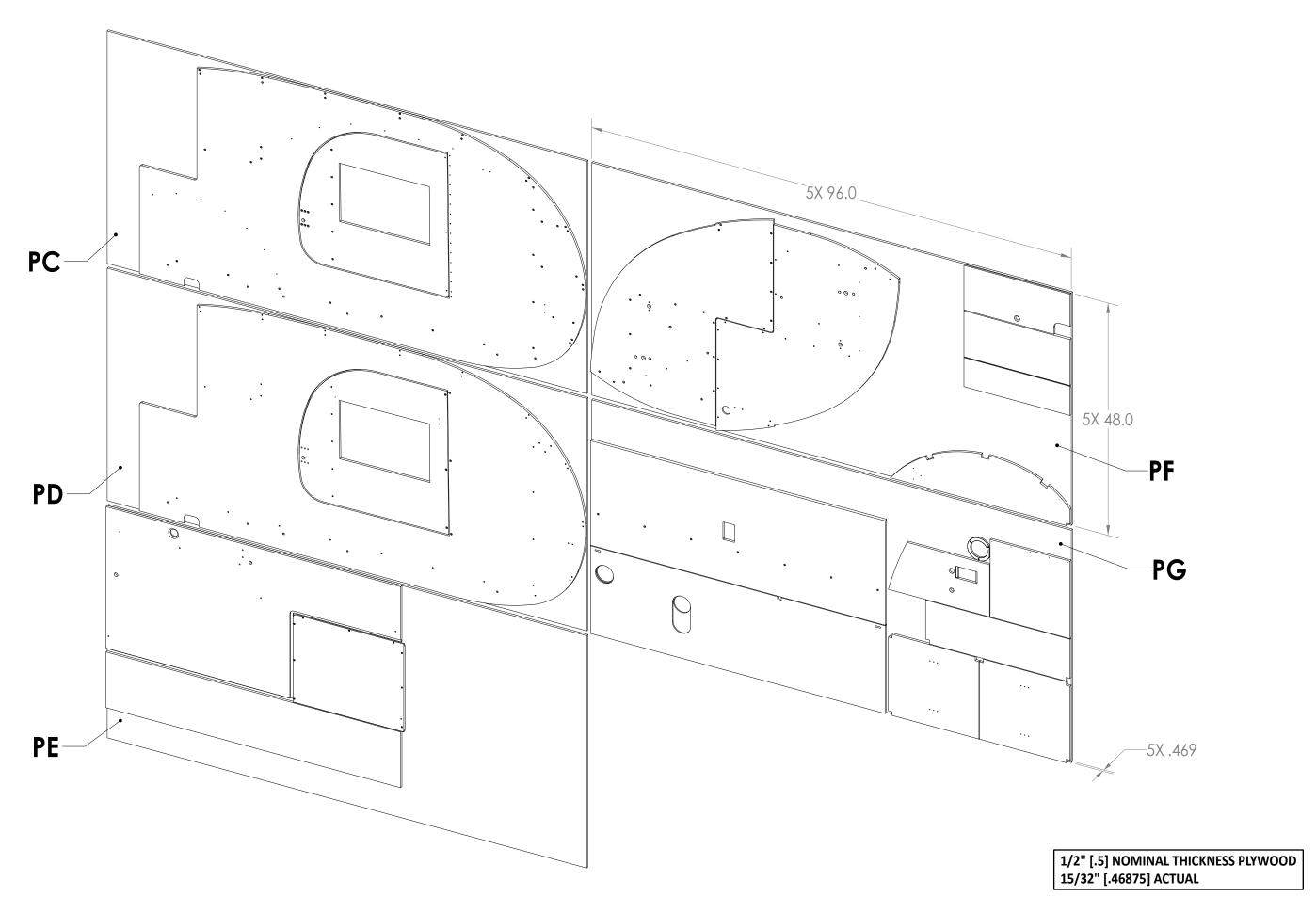
[SG STORAGE FRAME RIGHT 9.0"]

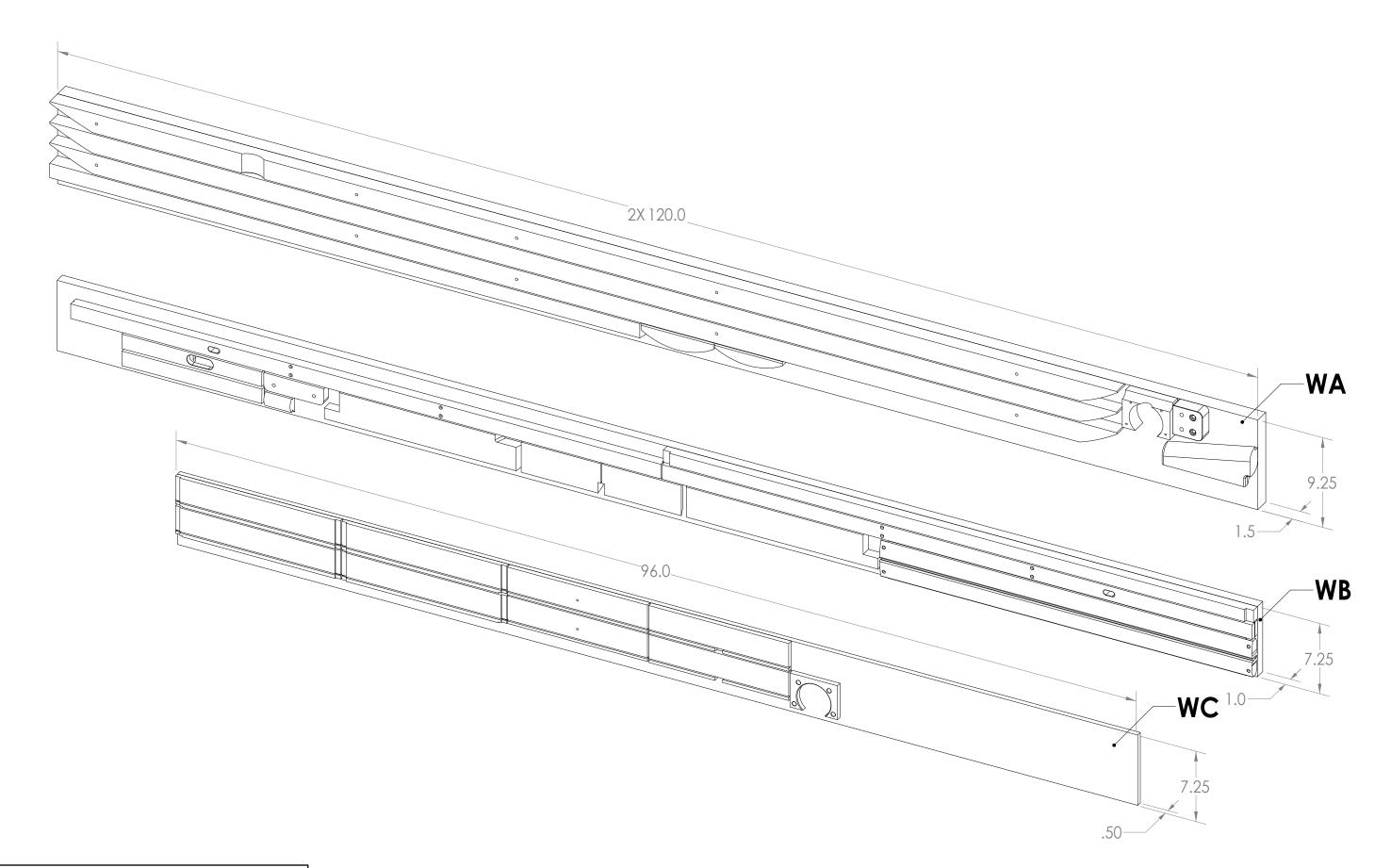
[SG STORAGE FRAME CENTER 26.5"]

#### HINGE ASSEMBLY

1 - 5' HINGE ASSEMBLY \*ZINC PLATED SHEET METAL FORMED

[EF, EG GALLEY LID \*IF NOT USING AN EXTRUSION 6063-T5 HINGE SET]





# **DRAWINGS LIST\***

# 001-60 CLASSIC TEARDROP TRAILER ASSEMBLY 002-60 CLASSIC TRAILER FRAME ASSEMBLY

006-60 TRAILER FRAME ASSEMBLY

0061 COUPLER TONGUE TUBE SUPPORT

0062 SAFETY CHAIN MOUNT

0063-60 SIDE RAIL TUBE LEFT

0064-60 SIDE RAIL TUBE RIGHT

0065-60 CROSSMEMBER ANGLE

0066 ANGLE MOUNT

0067 ANGLE MOUNT LONG

01121 SPRING HANGER FRONT

01131 SPRING HANGER REAR

## 007 JACK SCREW MOUNT ASSEMBLY

007-1 JACK SCREW U-BODY ASSEMBLY

0071 JACK SCREW U-BODY

007-2 JACK SCREW RIVET NUT MOUNT PLATE ASSEMBLY

0072 JACK SCREW RIVET NUT MOUNT PLATE

0073 RIVET NUT .25-20 X .58

0074 RIVET SOLID DOMED HEAD .25 OD X .375

007-3 JACK SCREW TUBE MOUNT CLAMP ASSEMBLY

0075 JACK SCREW TUBE MOUNT CLAMP

0076 BOLT HEX HEAD .25-20 X .875

0077 JACK SCREW MOUNT BRACKET TOP

0078 JACK SCREW MOUNT PIVOT SHAFT

0079 E-CLIP HEAVY DUTY .5

007-4 JACK SCREW MOUNT BRACKET ASSEMBLY BOTTOM

00710 JACK SCREW MOUNT BRACKET BOTTOM

00711 BOLT HEX HEAD .25-20 X 2.75

1104 WASHER FLAT .25 .281 ID X .625 OD

007-6 QUICK-RELEASE PIN .5 X 2.5

008 JACK SCREW TOP WIND DIRECT WELD ASSEMBLY

009 COUPLER ASSEMBLY BOLT-ON

009-1 COUPLER ASSEMBLY

0091 BOLT HEX HEAD .5-20 X 4

0092 WASHER SPLIT LOCK .512 ID X .869 OD

0093 NUT HEX .5-20

010 AXLE & LEAF SPRING ASSEMBLY

010-1 AXLE & HUB ASSEMBLY

010-60 AXLE ASSEMBLY

01011 AXLE TUBE ROUND

01012 AXLE DROP PLATE

01013 SPINDLE 1.375 X 1.063 BEARINGS

01014 SPRING SEAT

011 LEAF SPRING ASSEMBLY

011-1 DOUBLE EYE LEAF SPRING ASSEMBLY

01114 BUSHING .568 ID X .688 OD X 1.77

011-2 SPRING HANGER ASSEMBLY FRONT

01121 SPRING HANGER FRONT

011-3 SPRING HANGER ASSEMBLY REAR

01131 SPRING HANGER REAR

011-4 SHACKLE LINK ASSEMBLY

01141 SHACKLE LINK

010-5 U-BOLT KIT

01051 TIE PLATE

01052 U-BOLT .5-20 X 5.5

01053 HEX NUT LOCK .5-20

010-6 BOLT SHACKLE WET HEX .438-20 X 2.75

01123 HEX NUT LOCK .438-20

#### 012 HUB 6 LUG ON 5.5 ASSEMBLY

0121 HUB ASSEMBLY 008-251-05

0122 INNER BEARING RACE L68111

0123 INNER BEARING ASSEMBLY L68149

0124 GREASE SEAL 010-019-00

0125 OUTER BEARING RACE L44610

0126 OUTER BEARING ASSEMBLY L44649

0127 OUTER BEARING WASHER

0128 CASTLE NUT 1-14

0129 COTTER PIN

01210 GREASE CAP

#### 013 WHEEL & TIRE ASSEMBLY

014 WHEEL ASSEMBLY 6 BOLT X 5.5

0131 R16 INNER TUBE

0132 INNER TUBE VALVE BUSHING [OPTIONAL]

0133 TIRE 600-16

0134 BEAUTY RING

01211 LUG NUT .5-20

#### 015 HUBCAP ASSEMBLY

0021-59 SKIRT PANEL CENTER SUPPORT REAR

0022-59 SKIRT PANEL SUPPORT REAR

0023-59 SKIRT PANEL SUPPORT FRONT

0024 BOLT CARRIAGE .25-20 X 1.5

0025 BOLT CARRIAGE .25-20 X 1.25

0026 WASHER SPLIT LOCK .26 ID X .487 OD

0027 NUT HEX .25-20

002-1 SAFETY CHAIN ASSEMBLY

002-2 QUICK LINK ASSEMBLY

# 003-60 CLASSIC TEARDROP BODY ASSEMBLY 016 FLOOR ASSEMBLY

0161 FLOOR PANEL

0162 FLOOR SUPPORT LEFT

0163 FLOOR SUPPORT CENTER

0164 FLOOR SUPPORT RIGHT

# **BUILD A CLASSIC TEARDROP TRAILER**

USING PLANS DEVELOPED BY AN INDUSTRIAL DESIGNER WITH OVER 30 YEARS' EXPERIENCE IN DESIGN FOR MANUFACTURE. THIS TEARDROP TRAILER DESIGN IS BASED ON THE ORIGINAL KEN-SKILL MODEL 10 BUILT IN 1946-47. YOU WILL UNDERSTAND HOW THESE BEAUTIFUL TRAILERS WERE DETAILED AND BUILT, AS YOU BUILD AN IMPRESSIVE VINTAGE TEARDROP TRAILER YOURSELF. ALL MAJOR EXTERIOR COMPONENTS ARE METAL AS THE ORIGINALS WERE. WHEELS, HUBCAPS, AND

# PLANS FOR THE CLASSIC TEARDROP TRAILER

ARE VERY COMPREHENSIVE AND CLEAR. DRAWINGS ARE DIMENSIONED AND DETAILED IN-DEPTH, ENABLING YOU TO MAKE PARTS AND ASSEMBLIES USING STANDARD WOODWORKING AND METALWORKING TOOLS. CNC ROUTERS, LOCAL SHOPS, OR RAPID PROTOTYPE SERVICES CAN ALSO BE UTILIZED. FOR CONFIDENT SOURCING OF PURCHASED MATERIALS, PARTS, OR HARDWARE, INDUSTRY TERMINOLOGY AND SPECIFICATIONS ARE USED. IN MANY CASES, MANUFACTURER PART



# **CLASSIC TEARDROP TRAILER DESIGN**

UPDATES INCLUDE 12V AND 120V OUTLETS WITH GROUNDED ELECTRICAL WIRING HARNESSES USING ELECTRICAL CONNECTORS, TO BE INSTALLED AS COMPLETE ASSEMBLIES. A 3RD BRAKE LIGHT HAS BEEN ADDED TO THE LICENSE PLATE LIGHT. SIX INCHES OF TRAILER WIDTH WAS ADDED TO EACH SIDE, ALLOWING FOR USE OF AN RV QUEEN MATTRESS AND AN UNOBTRUSIVE HVAC HOOKUP. THE PROPANE TANK IS REMOVABLE FOR FILLING.

# TOWING THE CLASSIC TEARDROP TRAILER

IS EASY WITH A SMALL CAR, TRUCK, OR 4X4 VEHICLE DUE TO ITS VERY LOW WEIGHT OF ABOUT 850 LBS. A CLEVER JACK SCREW MOUNT DESIGN ALLOWS FOR THE JACK TO BE POSITIONED AND STORED HORIZONTALLY DURING TRAVEL. AN INNOVATIVE FRONT STORAGE UNIT HOUSES THE PROPANE TANK, 12V BATTERY, AND 12V/120V POWER SUPPLY, WHICH CAN BE CONNECTED TO SHORE LINE POWER. A GENERATOR HOOKUP CAN ALSO BE USED FOR OFF-THE-GRID OR OFF-ROAD CAMPING.