RC Designs

Custom shelve and CD20 Refrigerator

Prepared for LIRR • September, 2016

1. Purpose

This bracket is designed to hold in place a small refrigerator "Dometic CD20". The shelf will be hold in place by two ¼ inch dia screws to the back wall, one ¼ inch dia screw to the right wall and by an adjustable arm to the left side by attaching it to the ceiling of the compartment with ½ inch dia bolt.
The refrigerator will be removable at any time by removing the whole bracket itself. The left arm can stay in place just remove two vertical screws holding the refrigerator to the bracket.

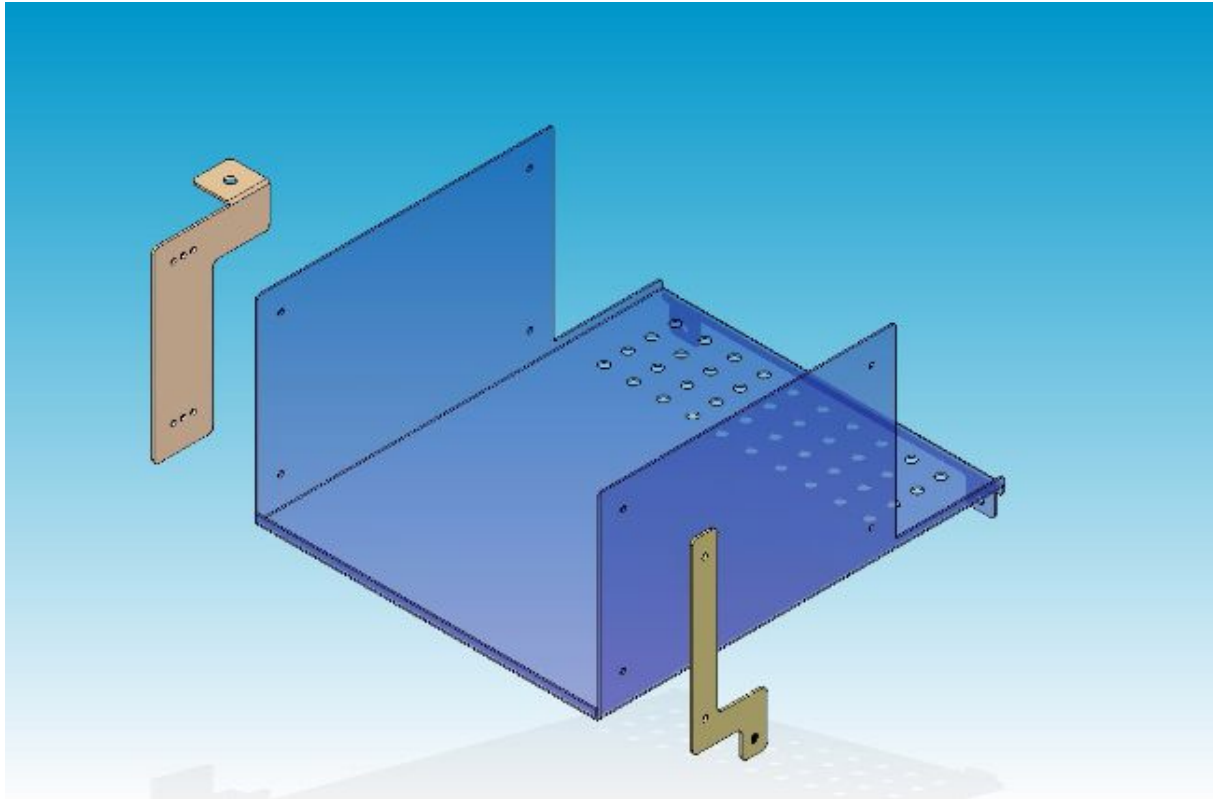| Device	Weight
Dometic CD20	60 Lbs.

2. Product

2.1. Material
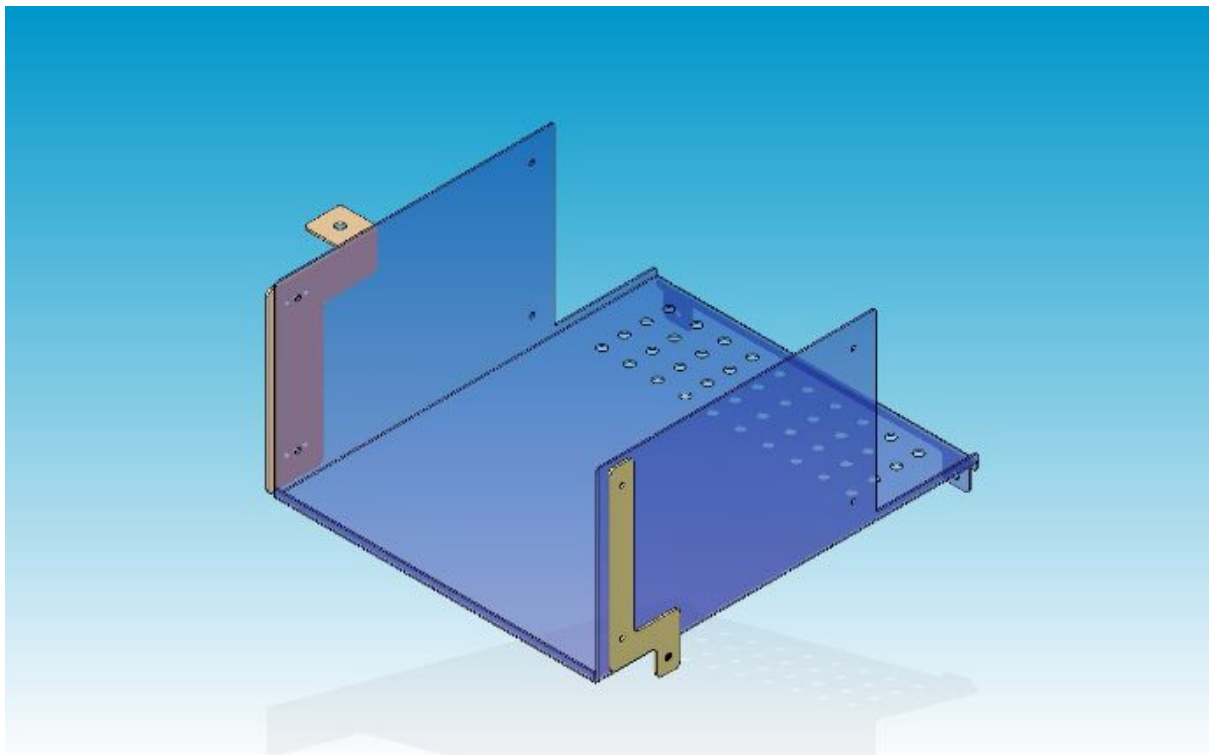
Powder coated steel
The parts are made from cold rolled steel, gauges 11 and 12, to provide better support for the mounted device.
This shelf will be mounted with two ¼ rivet nuts to the back wall, one rived nut to the right wall and adjustable arm on the left side attached to the ceiling with ½ inch dia bolt.

Exploded View

Mounted View

BOM:

Item #/Level	Description	Quantity/Assembly
0	DE/DM DC20 Refrigerator Installation kit, Rainbow Crow P/N **RCD-CD20-RFS-D65-C**	1
1	Dometic CD20 Drawer Refrigerator, 115V AC, Rainbow Crow P/N CD20-ACWL-D65-C	1
2	Shelf, Rainbow Crow P/N RCD2217RFSCD20-001	1
3	Right arm, Rainbow Crow P/N RCD2217RFSCD20-003	1
4	Left adjustable arm, Rainbow Crow P/N RCD2217RFSCD20-002	1
5	Cap Screw, Steel, M6, M6 - 1.0 X 30 MM LG, High-Strength Zinc Yellow-Chromate Plated, McM #:90854A142	8
6	Cap Screws, Serrated Flange, Vibration-Resistant, 1/4-20x1.5"LG, Grade 8 Steel, McM P/N 94239A104	2
7	Cap Screw , Flat-Head Socket (Allen wrench), 1/4-20x.75"LG, Alloy Steel, Black Oxide, McM P/N 91253A540	1
8	Rivet Nut , Heavy-Duty, Open End, 1/4"-20 Interior Thread,.027"-.165" Material Thickness, Steel, Zinc-Plated, McM P/N 95105A143	2
9	Rivet Nut , Heavy-Duty, Open End, 1/4"-20 Interior Thread,.165" -.225" Material Thickness, Steel, Zinc-Plated, McM P/N 95105A147	2
10	Cap Screws, ½"-13x2"LG, High-Strength Grade 8 Steel, Zinc-Plated, McM P/N 91257A720	1
11	Hex Nut, High-Strength Grade 8 Steel, Zinc Yellow-Chromate Plated, 1/2"-13, McM P/N 94895A823	1
12	Lock Washer, Split, 1/2", Steel, Zinc Yellow-Chromate Plated, 0.512" ID, 0.869", McM P/N 91104A033	1
13	Flat Washer, 1/2" 18-8 Stainless Steel, 0.531" ID, 1.25" OD, McM P/N 92141A033	1

Combined Part number:

RCD-CD20-RFS-D65-C

Design and manufactured in America

2.2. Installation

1. The shelf comes assembled with the refrigerator. One arm is partially attached to it, while the second arm and the remaining hardware (in plastic bag) are packed and supplied in the same box.
2. Attach arms to the shelf-refrigerator subassembly:
   2.1 Mount both left and right arms through the shelf to the refrigerator with M6 screws as follows:
   2.1.1 Unscrew two M6 screws from the left front side of the shelf and then attach the left arm (it's adjustable for depth) using same M6 screws,
   2.1.2 Unscrew lower M6 screw from the right front side of the shelf, then pivot the right arm and attach it. (see pictures above for more info)
3. Use the supplied hydraulic jack to lift the shelf-refrigerator assembly and to locate it to it's appointed place;
4. Using hand scriber or permanent marker mark the exact position of the mounting holes to the back, to the left and to the ceiling;
5. Remove the shelf-refrigerator assembly and drill 4 holes:
   5.1 Two back holes with 25/64" (.391") dia. drill,
   5.2 One right hole with 9/32" (.281") dia. drill,
   5.3 One ceiling hole with 17/32" (.531") dia. Drill.
6. Use a rivet crimping tool to install two rivet nuts to the back wall. There are total of four rivet nuts supplied: two for wall thickness .027" to .165" and two for .165" to .260" walls. Depending of the real thickness on the mounting wall use the appropriate set of two rivet nuts;
7. Use the hydraulic jack to lift the assembly to its place and secure it with provided screws to the back, right and top.