

# MECHANICAL CORNER

STAINLESS STEEL C00164A



## FUNCTION

The **MECHANICAL CORNER** is used to alter the direction of cable travel by 90 degrees. It can be bolted to a Direct Drive Upper Funnel (140154) and used as a discharge point, or it can be used in the empty returning section of a system. A bearing mounted idler wheel with teeth supports the conveyor cable, thus reducing the cable drag in the system.

The Mechanical Corner can only be used in an **EMPTY** section of system unless it is used as a final cleanout.

## INSTALLATION

1. The Mechanical Corner may be installed at any angle in a conveyor system. It is placed in the conveyor system at a point after the product has been discharged. It may also be used as a final discharge point (See funnels attached on the next page). Also, note that the side port and front plate (Parts 14 and 19 in Part Assembly) may be interchanged giving the corner the ability to be used as a 180° corner.

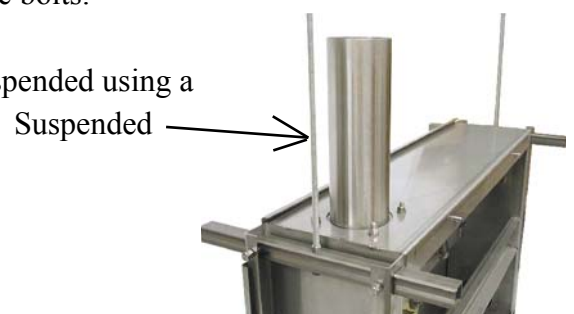
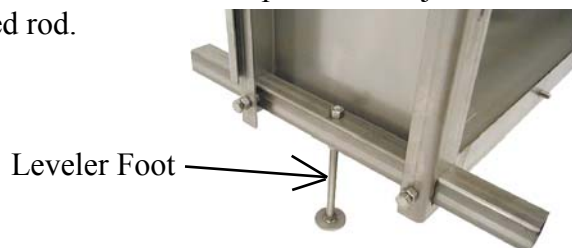
2. Cable direction is not important; the cable can enter or exit either port.

3. When installing the cable with discs in the idler wheel tooth section, position the coned end of the cable against the tooth section (shown to right). This will assure timing of the sprocket teeth and cable discs when the system is started.

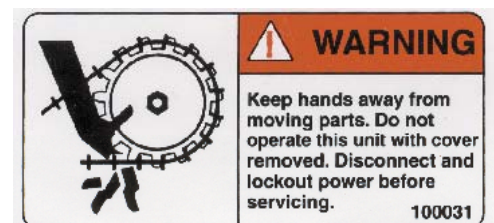


4. The tubing attaches to the Mechanical Corner tubing with a compression coupler. Use either a 4-bolt or 6-bolt compression coupler. Place half the compression coupler over the corner tubing after loosening the bolts. Place the tubing in the remaining half and tighten the bolts.

5. The Mechanical Corner can be placed on adjustable feet or suspended using a 3/8 threaded rod.



6. Take care to adhere to the following warning label on the Mechanical Corner.

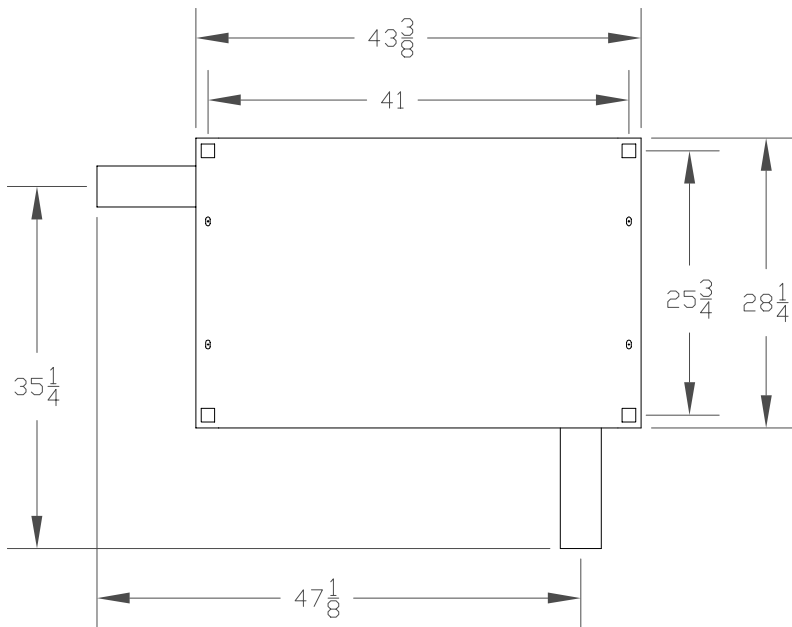


# MECHANICAL CORNER

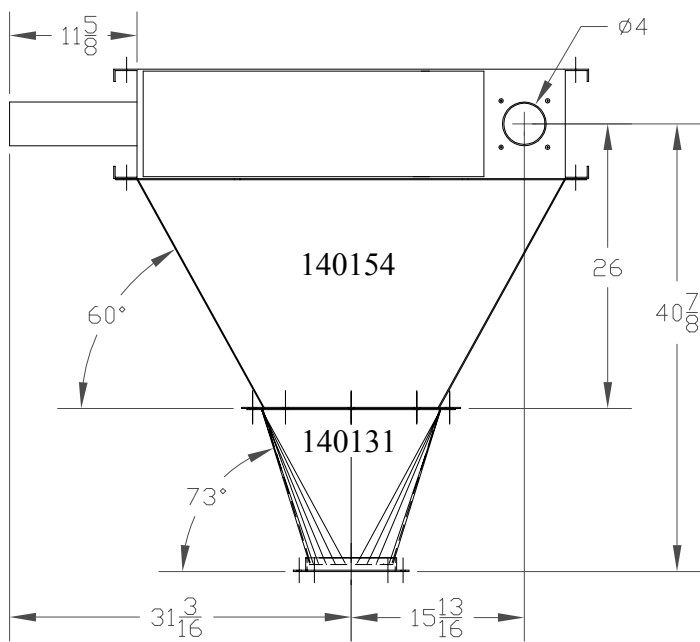
STAINLESS STEEL C00164A



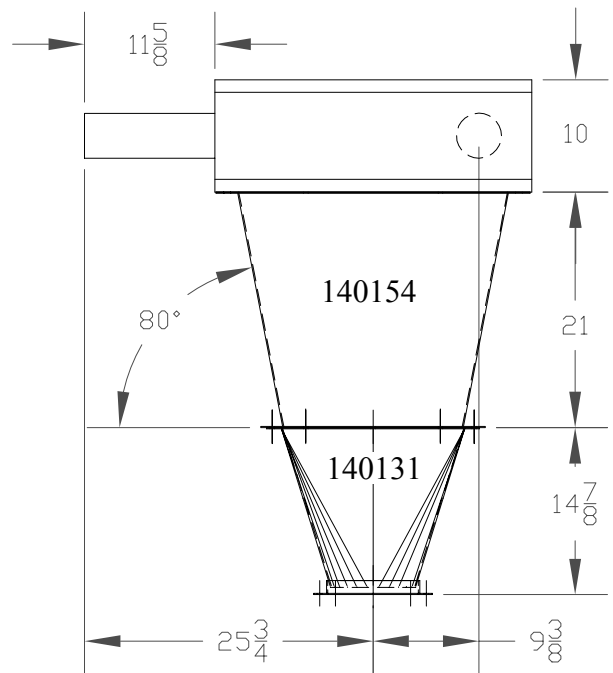
## DIMENSIONS



**TOP VIEW**



**FRONT VIEW**



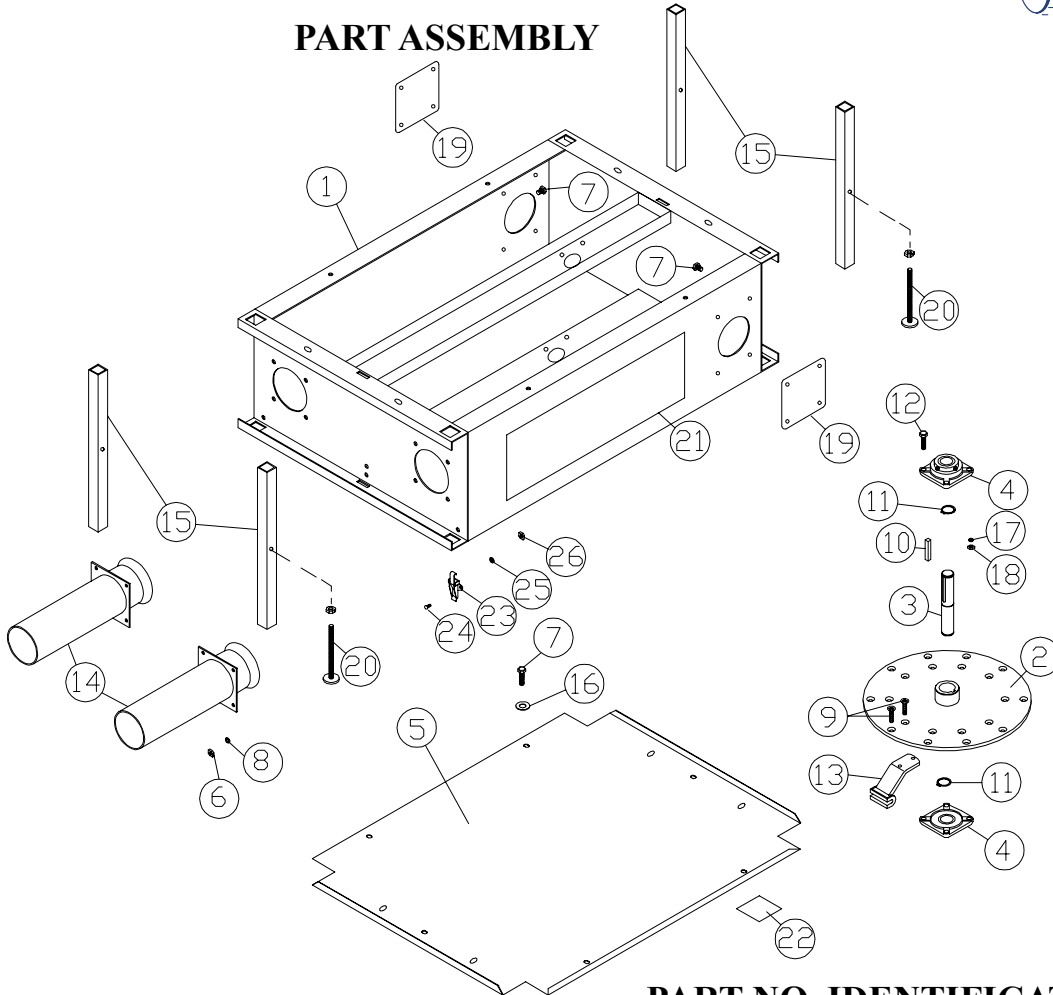
**SIDE VIEW**

# MECHANICAL CORNER

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## PART ASSEMBLY



## PART NO. IDENTIFICATION

ITEM	PART NO.	DESCRIPTION	QTY.
1	140171SS	SS 4" CORNER FRAME	1
2	140162	IDLER WHEEL WELDMENT	1
3	140175	IDLER SHAFT	1
4	140022	4 BOLT 1 IN. FLANGE BEARING	2
5	140174SS	SS TOP AND BOTTOM COVER	2
6	01020S	3/8-16 HEX NUT STAINLESS	40
7	01076S	3/8-16 X 1.0 HEX SCREW STAINLESS	56
8	01034S	3/8 LOCK WASHER STAINLESS	16
9	01910	3/8-16 X 1-1/2 FLAT SOCKET CAP	20
10	02008	3/8 X 3/8 X 2-1/4 SQ KEY	1
11	02019	1-3/16 SNAP RING	2
12	01905S	7/16-14 X 1-1/4 HEX BOLT STAINLESS	8
13	140010S	STAINLESS TOOTH SECTION	10
14	140173SS	SS FLARED PORT	2
15	140143SS	SS LEG STAND	4
16	01077S	3/8 STAINLESS FLAT WASHER	16
17	01907S	STAINLESS 7/16 LOCKWASHER	8
18	01906S	7/16-14 HEX NUT STAINLESS	8
19	140064S	SS 4 IN. PORT PLATE	2
20	160043SS	SS LEVELER, 3/8-16 X 6.0	2
21	100068	14.5 X 4.5 WHITE CABLEVEY DECAL	2
22	100031	WARNING DECAL	4
23	02079S	SS ADJUSTABLE HOOK, DRAW LATCH	2
24	01012S	#10-24 X 1/2 SS RD. HD. SCREW	4
25	01010S	#10 SS LOCKWASHER	4
26	01015S	#10-24 SS HEX NUT	4

# SWEEP CORNERS

## STAINLESS STEEL

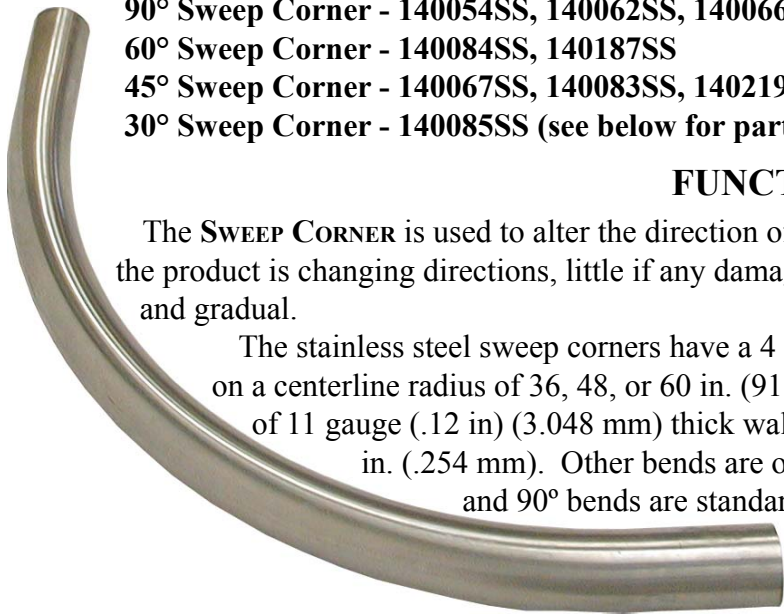


90° Sweep Corner - 140054SS, 140062SS, 140066S

60° Sweep Corner - 140084SS, 140187SS

45° Sweep Corner - 140067SS, 140083SS, 140219SS

30° Sweep Corner - 140085SS (see below for part descriptions)



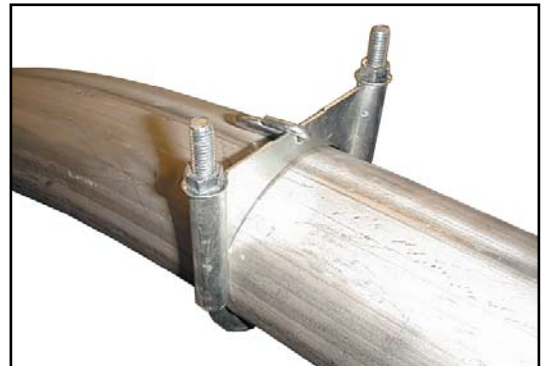
### FUNCTION

The SWEEP CORNER is used to alter the direction of cable and product travel in a conveyor. While the product is changing directions, little if any damage occurs to the product as the transition is slight and gradual.

The stainless steel sweep corners have a 4 in. (10.16 cm) outside diameter and are formed on a centerline radius of 36, 48, or 60 in. (91.44, 121.92, or 152.4 cm). They are constructed of 11 gauge (.12 in) (3.048 mm) thick wall and any internal seam should not exceed .010 in. (.254 mm). Other bends are obtainable, but sweep corners with 30°, 45°, 60°, and 90° bends are standard.

### INSTALLATION

1. Before joining sweep corners to conveyor tubes, the end cuts should be square and free of dents. File the sweep corner ends to eliminate sharp edges and burrs. Check the ends for roundness, sharp edges and burrs before attaching the coupler. Assure that the tube and sweep ends touch and that they are held together squarely while the compression coupler is tightened.
2. The tubing attaches to the sweep corner with a compression coupler. Use either a 4-bolt or 6-bolt compression coupler. Place half the compression coupler over the sweep after loosening the bolts. Place the tubing in the remaining half and tighten the bolts.
3. To give support to the sweep, use the full circle U-bolt (shown to right). To attach the full circle U-bolt, either slide it over end of sweep before attaching coupler *or* remove bolts, attach to tube and replace bolts. Tighten the bolts so the full circle U-bolt is snug around the sweep.



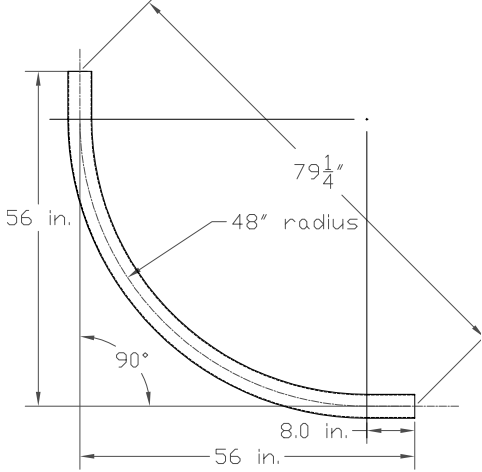
<b>Angle</b>	<b>Part Number</b>	<b>Description</b>
<i>90° Sweeps</i>	140062SS	4" O.D. x 90° x 60" Center Line Radius
	140054SS	4" O.D. x 90° x 48" CLR
	140066S	4" O.D. x 90° x 36" CLR
<i>60° Sweeps</i>	140187SS	4" O.D. x 60° x 60" CLR
	140084SS	4" O.D. x 60° x 48" CLR
<i>45° Sweeps</i>	140219SS	4" O.D. x 45° x 60" CLR
	140067SS	4" O.D. x 45° x 48" CLR
	140083SS	4" O.D. x 45° x 36" CLR
<i>30° Sweep</i>	140085SS	4" O.D. x 30° x 48" CLR

# SWEEP CORNERS

## STAINLESS STEEL



### 48" RADIUS

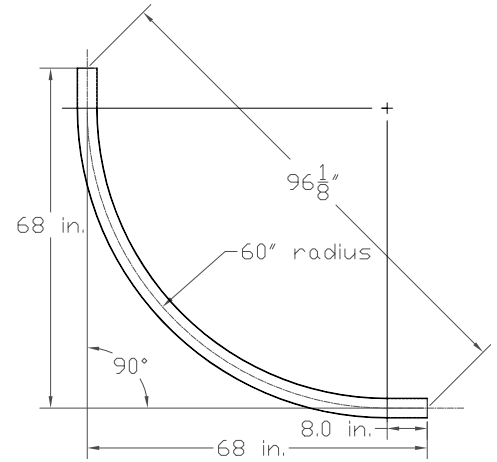


**140054SS**

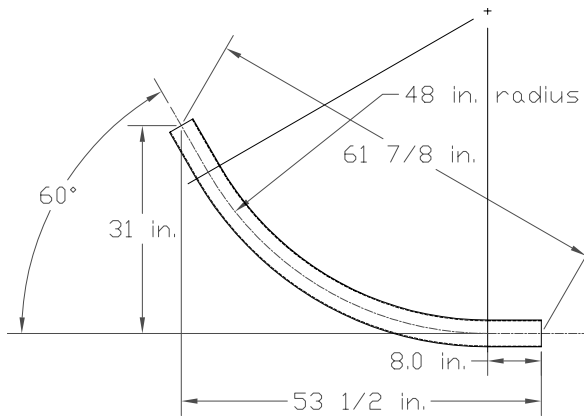
### DIMENSIONS

90 Degree Sweeps

### 60" RADIUS

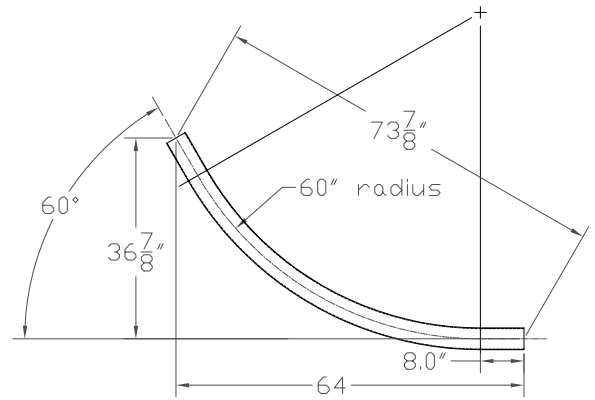


**140062SS**

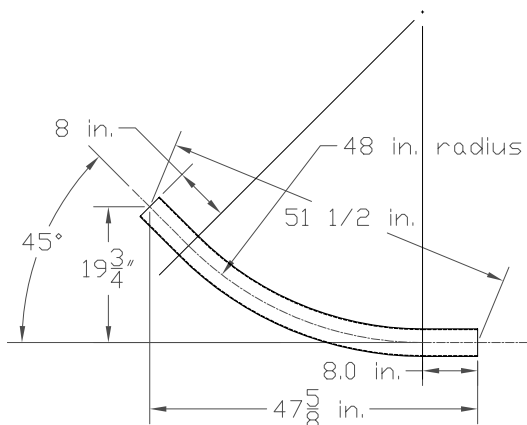


**140084SS**

60 Degree Sweeps

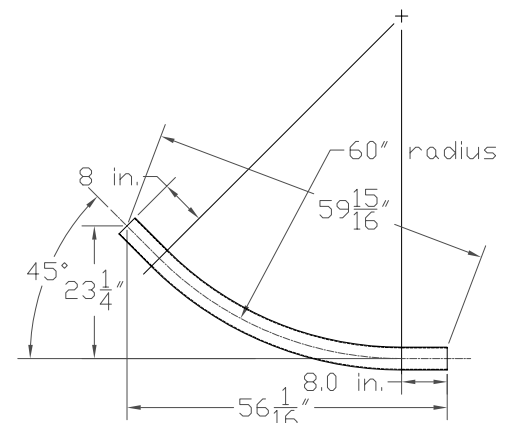


**140187SS**



**140067SS**

45 Degree Sweeps



**140219SS**