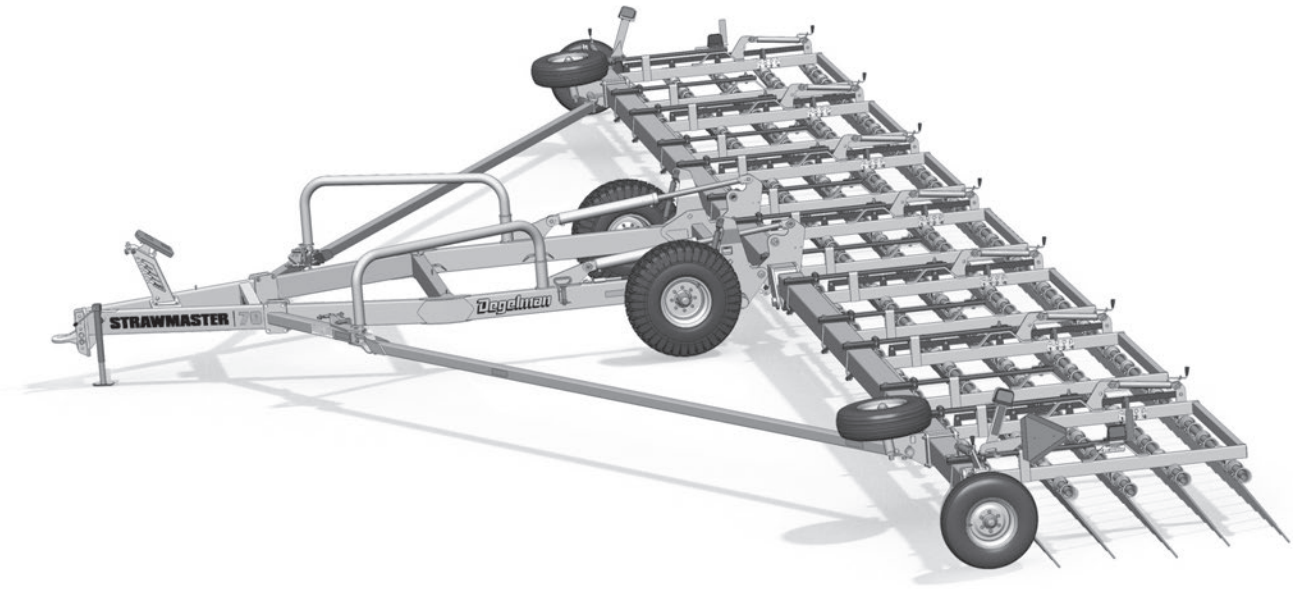
Degelman

COMPONENT OVERVIEW & PARTS MANUAL

PRO-CAST | 80

PRECISION GRANULAR APPLICATOR



STRAWMASTER | 70 | 82

143092 v1.0

DEGELMAN INDUSTRIES LP
BOX 830-272 INDUSTRIAL DRIVE,
REGINA, SK, CANADA, S4P 3B1
FAX 306.543.2140 PH 306.543.4447
1.800.667.3545 DEGELMAN.COM

PRO-CAST 80

STRAWMASTER 70/82 DISTRIBUTION KIT

Overview of Mounting Pro-Cast Applicator

Mounting Steps

The following is an overview and suggested guide for mounting a Pro-Cast Applicator onto a 70/82 Strawmaster.

(Refer to the overview and part pages for general installation locations and component breakdowns.)

Pro-Cast to Trailer-Frame Mounting:

1. Clean and prepare your Strawmaster, as desired, for mounting the Pro-Cast applicator & kit components.
2. The front leg brackets slide under the existing hydraulic hoses on the front beam when installing. It is recommended to loosen some of the hose clamps to provide some slack prior to positioning assembly.

3. Center the main Pro-Cast unit *(legs attached)* over the rear Strawmaster Trailer Frame and lower into place.
4. Secure the front and rear legs with the appropriate bolt clamp plates and 1/2" bolts / hardware.
5. Re-position and secure any hoses & hose clamps that were loosened from Step 2.

Hydraulic Hoses and ISOBUS Cable Routing:

6. Hydraulic hoses and ISOBUS Cable will come installed. Secure hydraulic hoses and ISOBUS cable to the trailer frame with zip-ties. Follow existing hydraulic hose routing.

   IMPORTANT: *Ensure that the ISOBUS cable is supported as it comes out of the ECU and secured to the hitch frame so that it does not pull on the ECU.*

Distribution Hose Mount Routing Bracket:

7. Center and install the Distribution Hose Mount Routing Bracket mounted on the Center Beam.

Y-Splitter Mounting Brackets:

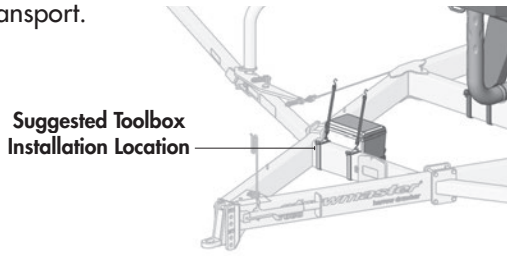
8. Pre-assemble and install the Y-Splitter mounting bracket assemblies centered on the harrow frames using the location overview pages to show the positioning information. These brackets vary and are configured differently for the Strawmaster 70 and 82 models. Please pay attention to the configurations and directions of the Y-Splitter assemblies.

Deflector Mounting Brackets:

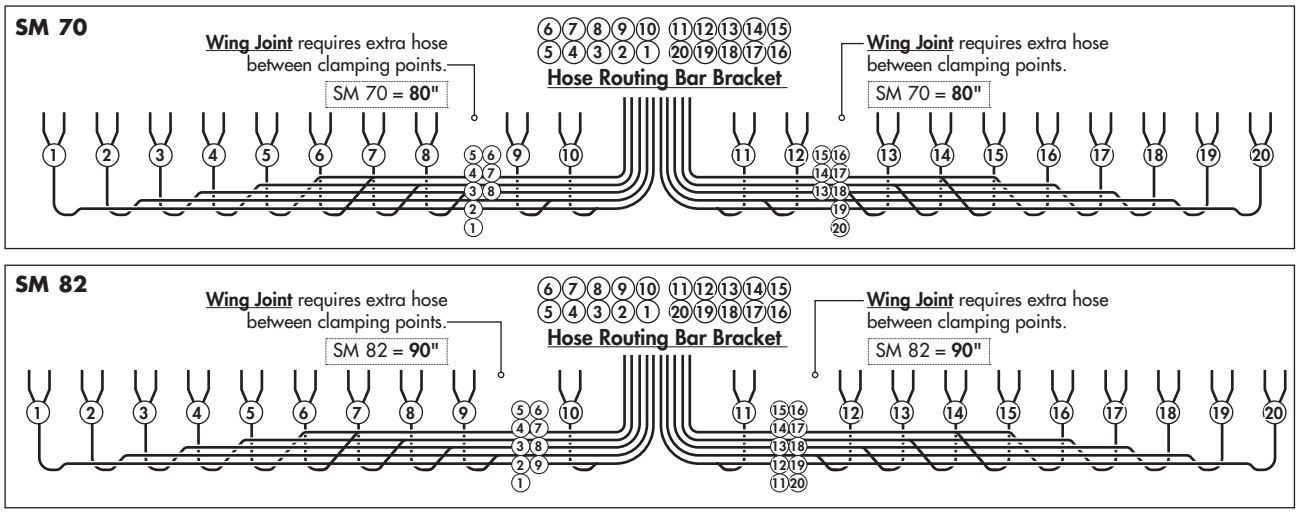
9. Pre-assemble and install the hose deflector bracket assemblies by attaching the correct brackets to the front of the harrow sections. The location overview pages show the positioning information for where they are to be installed on the Strawmaster. These brackets vary and are configured differently for the Strawmaster 70 and 82 models. Please pay attention to the configurations.

Toolbox Holder Bracket:

10. A suggested location to install the toolbox holder bracket and tool box is shown below. Customers may choose to locate the toolbox in a different location, but please be advised it is recommended to install facing inward as to avoid tractor wheel/track contact during turns, or other locations that may allow the toolbox to be damaged during operation or folding for transport.

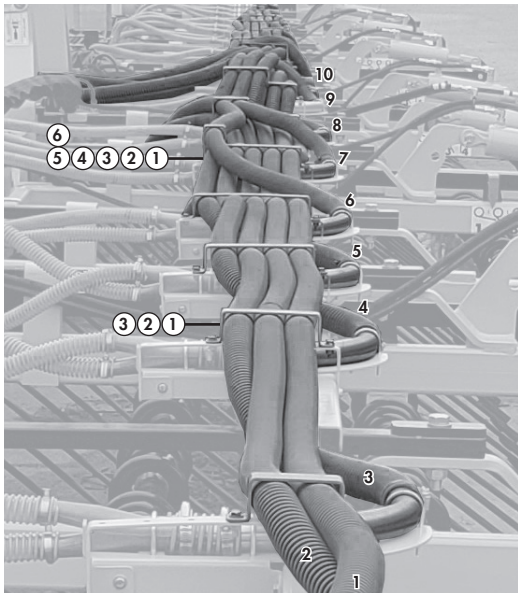


Overview of Mounting Pro-Cast Applicator

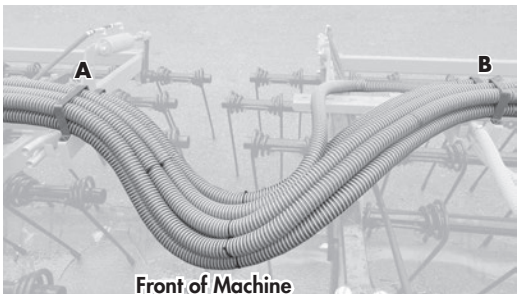


Distribution Hose Installation / Routing

The main distribution hose positions are numbered 1 thru 20 from left to right across the back of the machine. The hoses are rough cut and then trimmed to length at the distribution head. The hoses are secured in place on the **Y-Splitter Mounting Brackets** and then route towards the front through a number of hose clamp brackets in a specific configuration. To optimize hose positions and avoid unnecessary crisscrossing, refer to the hose routing diagrams which show how the hoses should be bundled together relative to each other. *(Refer to Location Overview Pages for hose lengths.)*



At the Wing Joint, extra hose slack between the harrow section clamps (**A** & **B**) is required to allow for movement into and out of transport position. Secure the LH hoses at "**A**", measure out and mark



the hose length of hose "1" to **80"** for (SM 70) or **90"** for (SM 82). Align the mark at clamp "**B**" and clamp. The remaining hoses, 2 through 8, should curve along with hose "1" smoothly to the clamp. Secure the hoses in place. Repeat on RH side with hoses "20" and then "19-13".

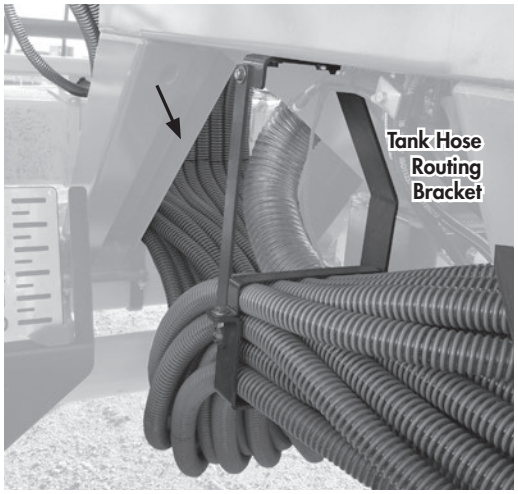
At the center beam, the hoses are then secured to the **Hose Routing Bar Bracket,** in the specific configuration shown. *(Hose Routing Bracket components are shown on the Common Bracket Component Pages).*

LH 6 7 8 9 10 11 12 13 14 15 / 5 4 3 2 1 20 19 18 17 16 RH

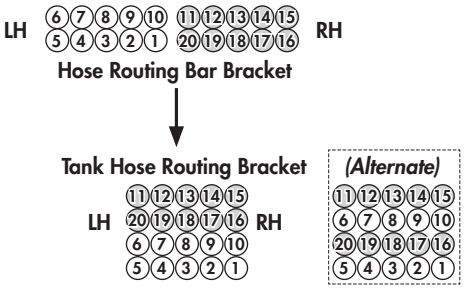
Hose Routing Bar Bracket

The hoses continue between the rear mounting legs towards the tank mounted hose bracket.

Overview of Mounting Pro-Cast Applicator



As the hoses are routed through the tank mounted hose bracket, the orientation of the hoses transitions into a group of hoses five wide by four deep.

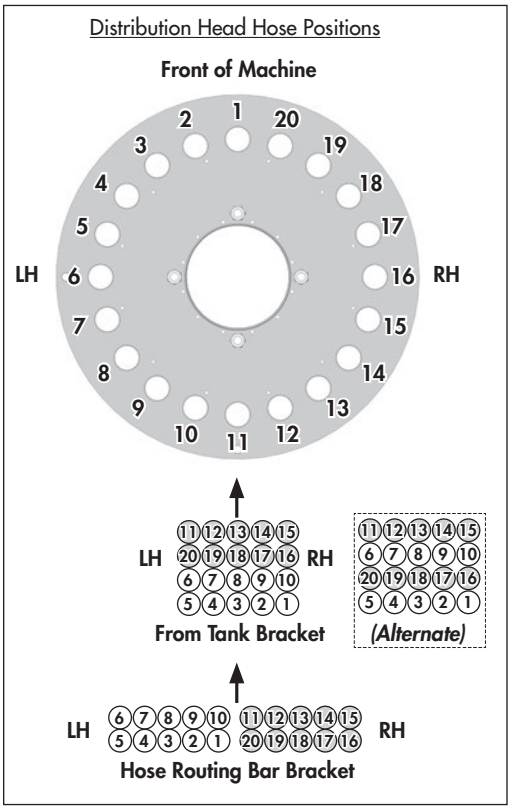


The hoses then continue through the front mounting legs up to the distribution head.

The distribution hoses have specific connection positions on the distribution manifold. Each hose *(1-20)* has a specific attachment location.

(Refer to Location Overview Pages for hose lengths.)

NOTE: Ensure the specific additional nozzles for hoses 6-15 are installed in their proper locations. *(Refer to details on Location Overview Pages for proper nozzle and location information.)*



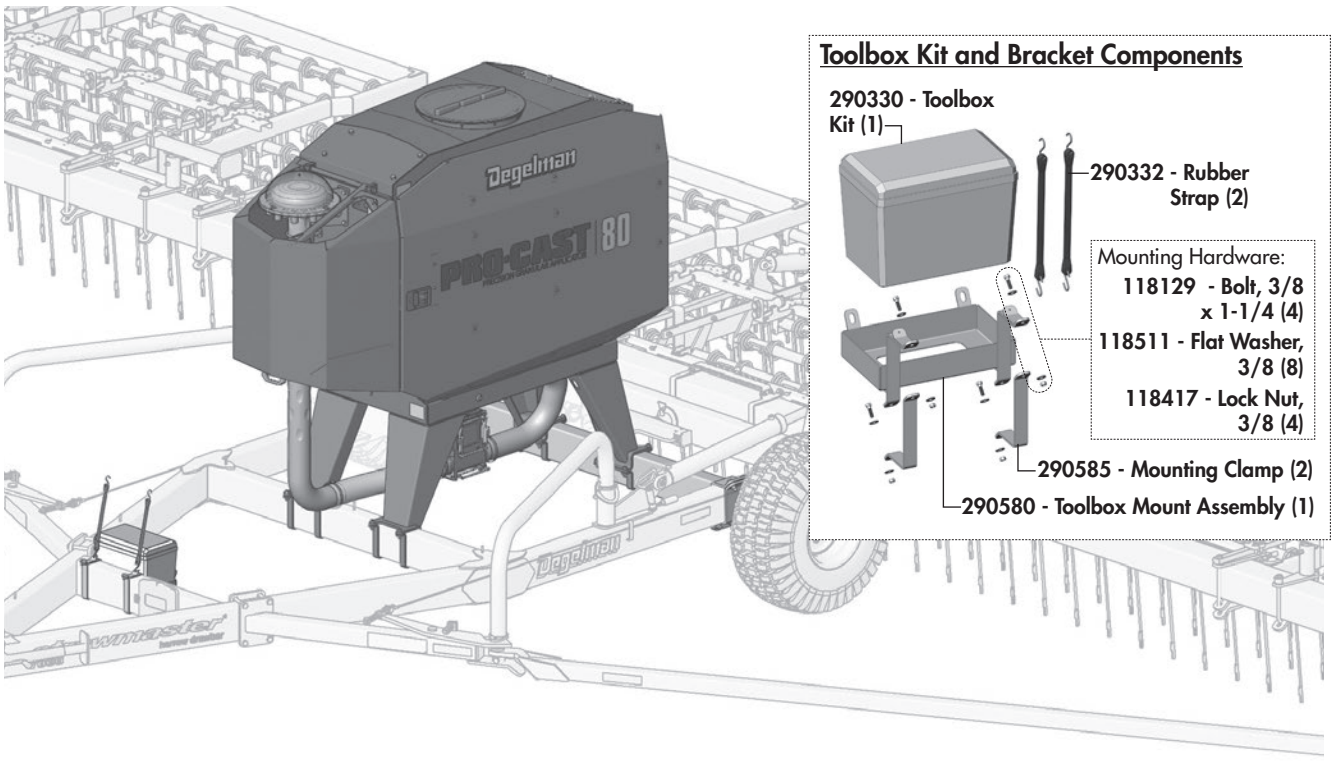
NOTE: Before trimming the hoses to length, fold the machine to ensure no changes are required. Use caution and observe pinch points while folding. Inspect hose connections, routings and appearances. Once satisfied, trim hoses as required.

Deflector Hose Installation

The deflector hoses route from the Y-Splitter to the deflector bracket assemblies. *(Refer to Location Overview Pages for general overview.)*

These hoses will vary in length and should be routed in the most direct path without interference and secured in place with hose clamps on each end.

Pro-Cast Leg Component & Mounting Location



Toolbox Kit and Bracket Components

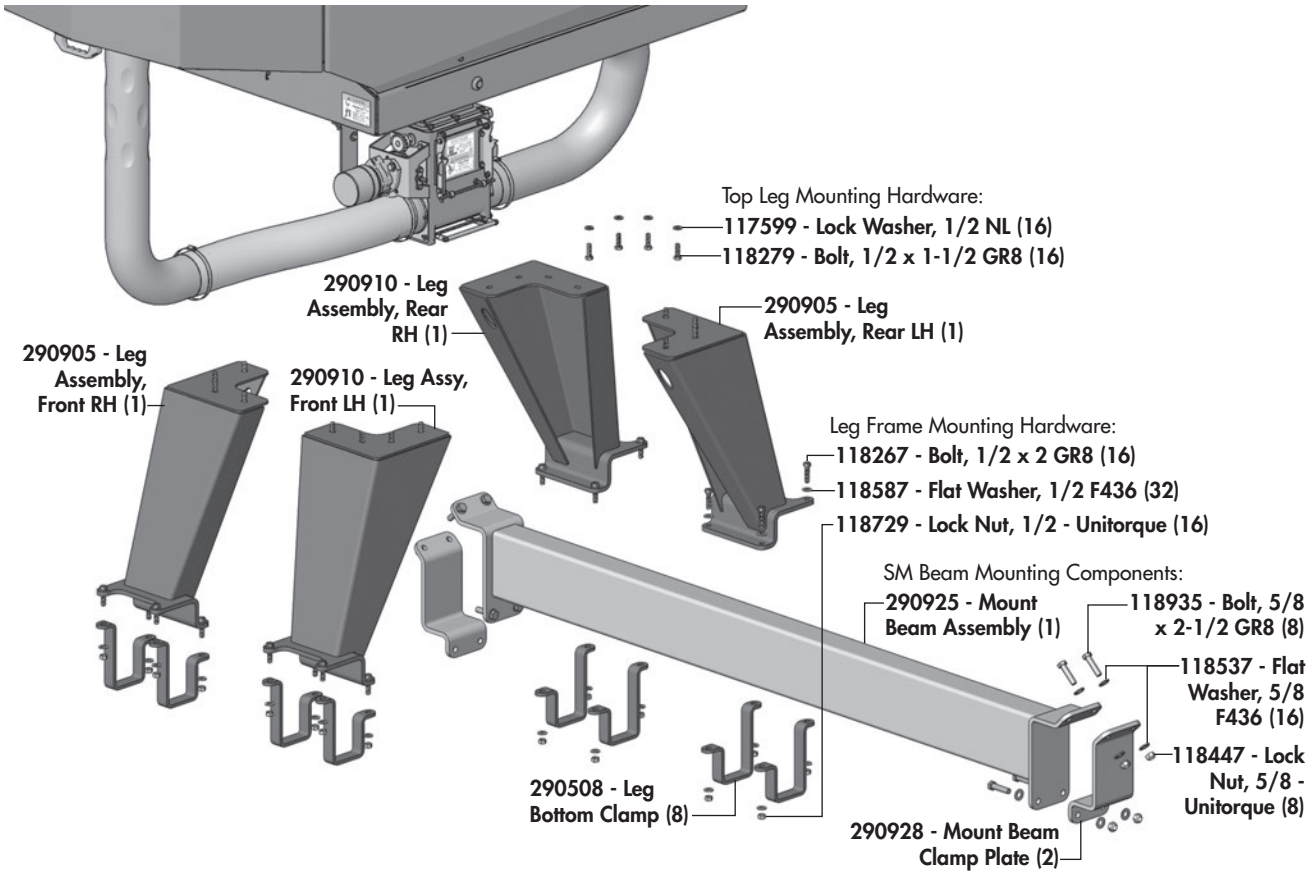
290330 - Toolbox Kit (1)

290332 - Rubber Strap (2)

Mounting Hardware:
- 118129 - Bolt, 3/8 x 1-1/4 (4)
- 118511 - Flat Washer, 3/8 (8)
- 118417 - Lock Nut, 3/8 (4)

290585 - Mounting Clamp (2)

290580 - Toolbox Mount Assembly (1)



Top Leg Mounting Hardware:
- 117599 - Lock Washer, 1/2 NL (16)
- 118279 - Bolt, 1/2 x 1-1/2 GR8 (16)

290910 - Leg Assembly, Rear RH (1)

290905 - Leg Assembly, Rear LH (1)

290905 - Leg Assembly, Front RH (1)

290910 - Leg Assy, Front LH (1)

Leg Frame Mounting Hardware:
- 118267 - Bolt, 1/2 x 2 GR8 (16)
- 118587 - Flat Washer, 1/2 F436 (32)
- 118729 - Lock Nut, 1/2 - Unitorque (16)

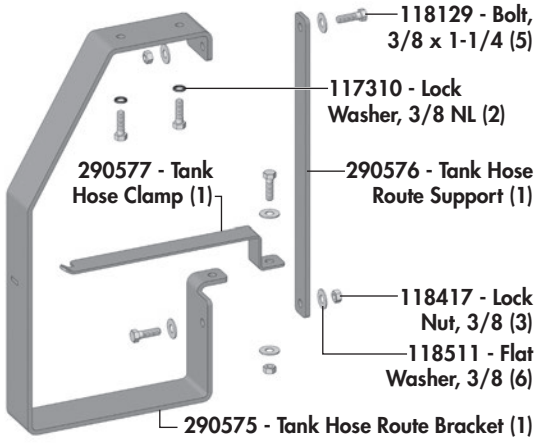
SM Beam Mounting Components:
- 290925 - Mount Beam Assembly (1)
- 118935 - Bolt, 5/8 x 2-1/2 GR8 (8)
- 118537 - Flat Washer, 5/8 F436 (16)
- 118447 - Lock Nut, 5/8 - Unitorque (8)

290508 - Leg Bottom Clamp (8)

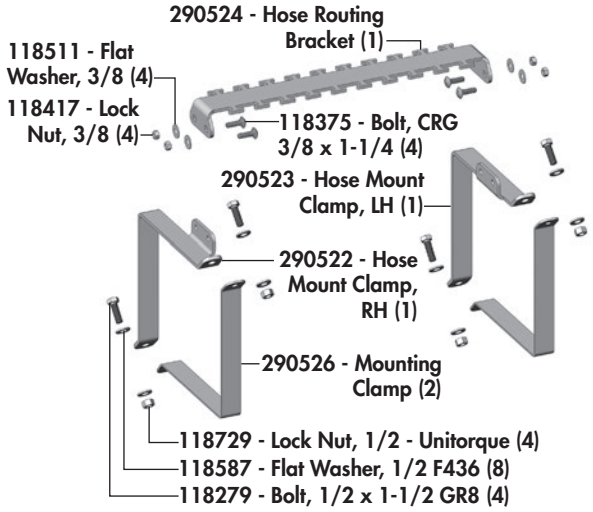
290928 - Mount Beam Clamp Plate (2)

Common Bracket Components

Tank Mounted Hose Routing Bracket

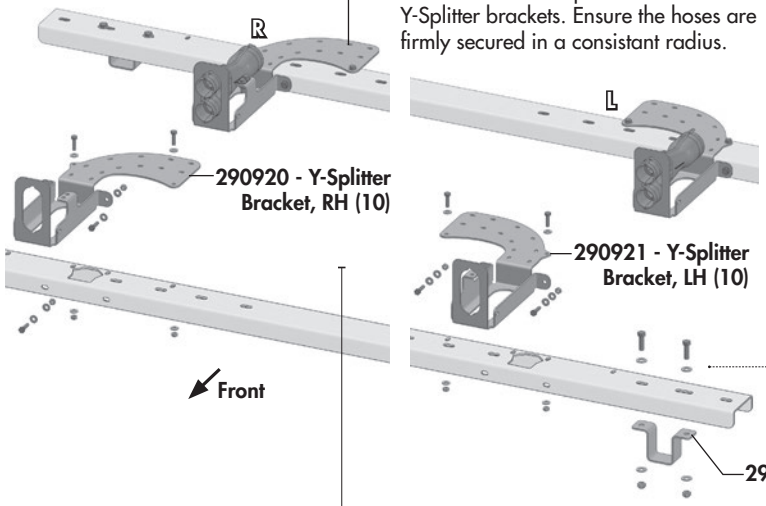


Distribution Hose Routing Bar Bracket



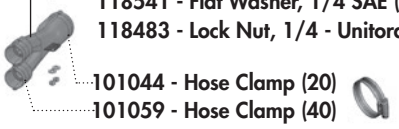
Y-Splitter Bracket Overview

NOTE: Use supplied ***zip-ties*** to secure hoses to the radius pattern on the Y-Splitter brackets. Ensure the hoses are firmly secured in a consistant radius.



290550 - Y-Splitter (20)

Mounting Hardware *(per Y-Splitter)*:
- **118123 - Bolt, 1/4 x 1 (2)**
- **118541 - Flat Washer, 1/4 SAE (4)**
- **118483 - Lock Nut, 1/4 - Unitorque (2)**



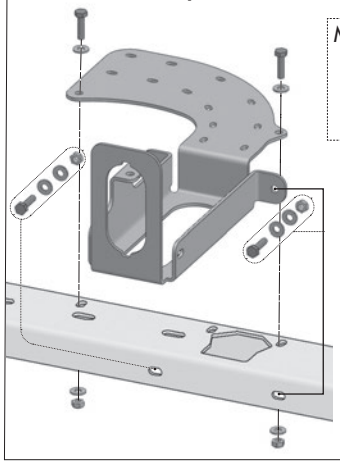
101044 - Hose Clamp (20)
101059 - Hose Clamp (40)

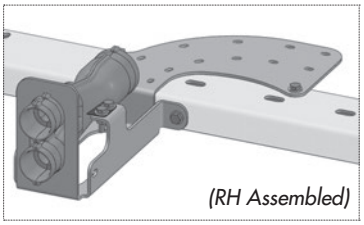
Mounting Hardware *(per clamp)*:
- **118129 - Bolt, 3/8 x 1-1/4 (2)**
- **118511 - Flat Washer, 3/8 (4)**
- **118679 - Lock Nut, 3/8 - FlexLoc (2)**

290544 - Harrow Clamp *(2 per mount)*

Y-Splitter Bracket, Mounting Detail *(LH Shown)*

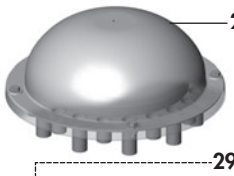
Mounting Hardware *(per bracket)*:
- **118123 - Bolt, 1/4 x 1 (4)**
- **118541 - Flat Washer, 1/4 SAE (8)**
- **118483 - Lock Nut, 1/4 - Unitorque (4)**



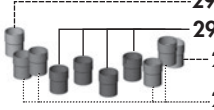


(RH Assembled)

Other Components



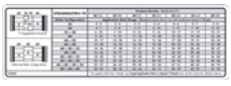
290139 - Distribution Head Assembly (1)



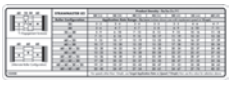
290129 - Nozzle, 27mm (1)
290127 - Nozzle, 22.5mm (4)
290129 - Nozzle, 27mm (1)
290128 - Nozzle, 25mm (4)

101044 - Hose Clamp (30)

143457 - Rate Decal, SM+ 70 (1) *(Same as SM+)*

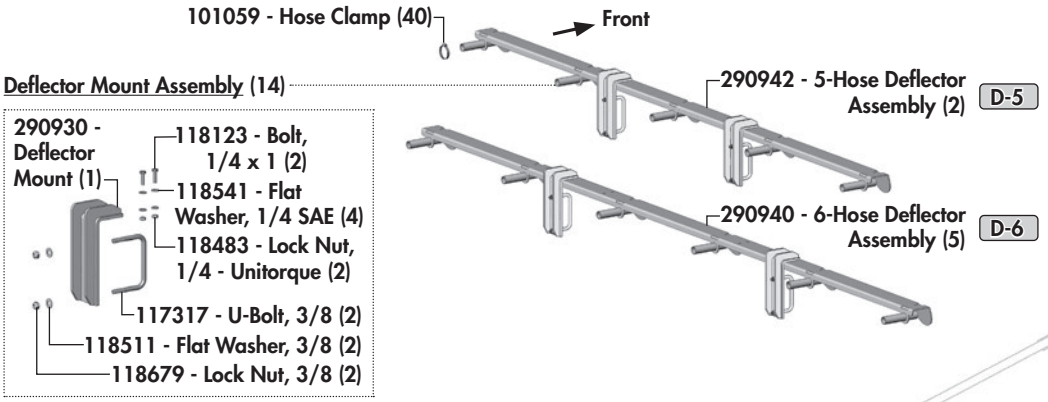


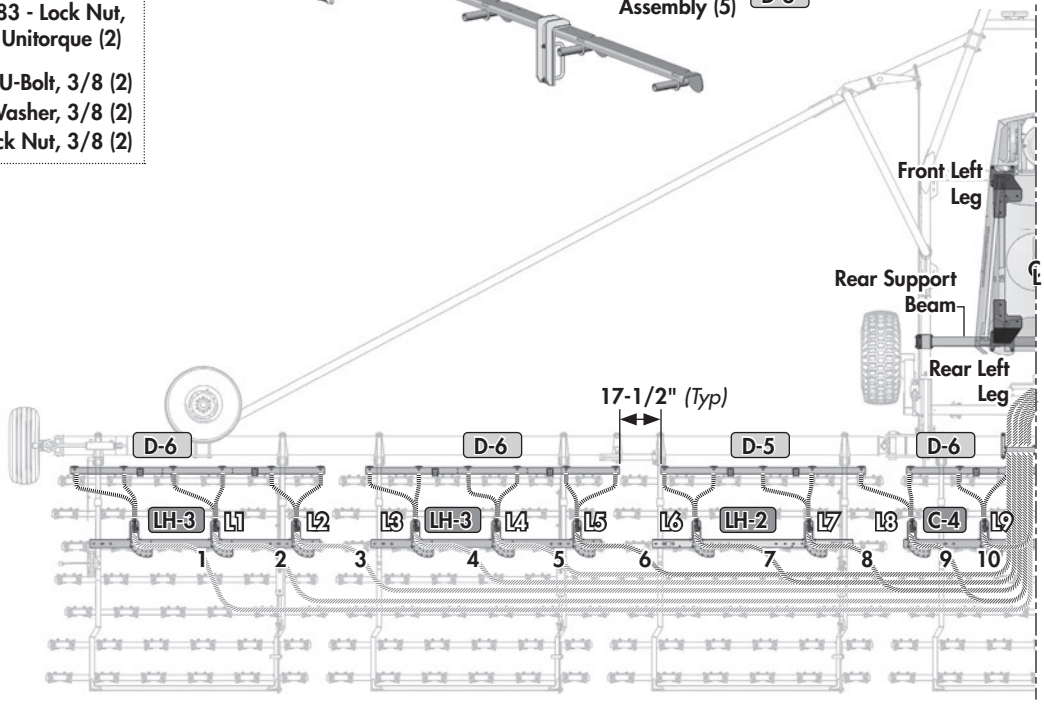
143459 - Rate Decal, SM 82 (1)



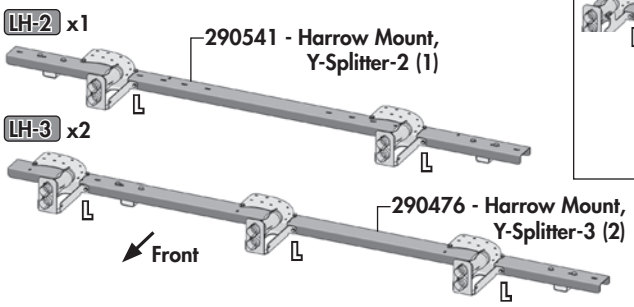
SM 70/Pro-Cast Location Overview (LH)

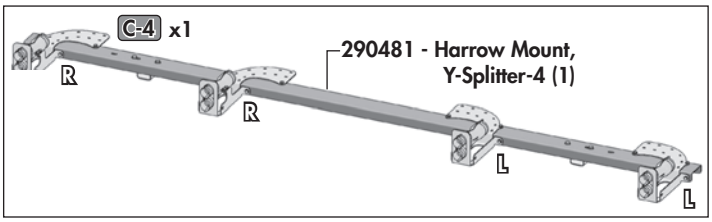
Deflector Assembly Mount Components

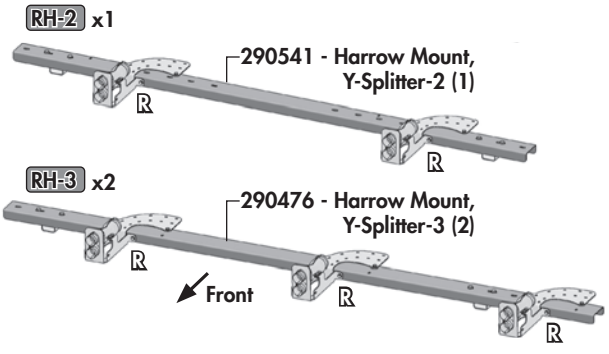


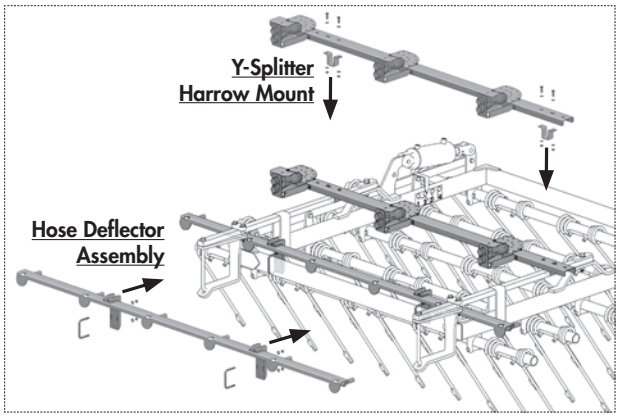


Y-Splitter Harrow Mount Overview

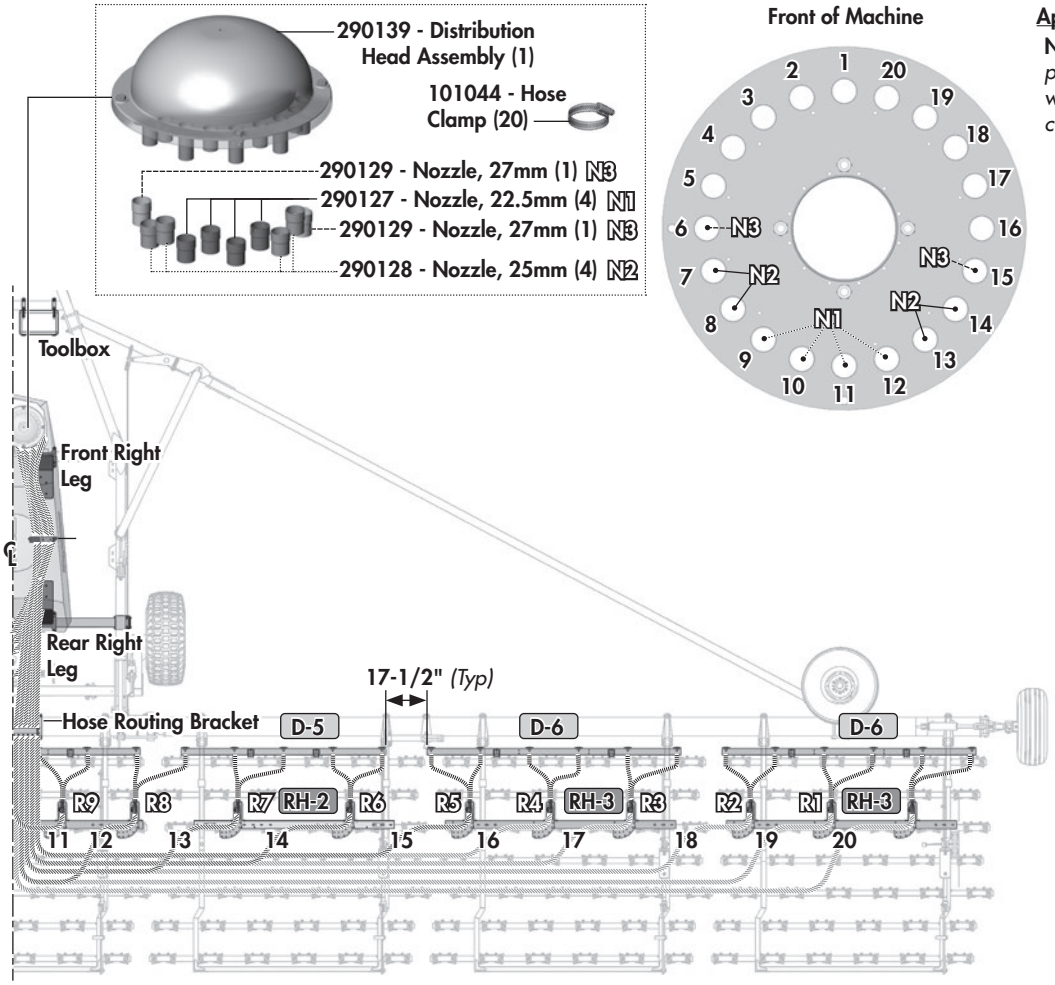








SM 70/Pro-Cast Location Overview (RH)



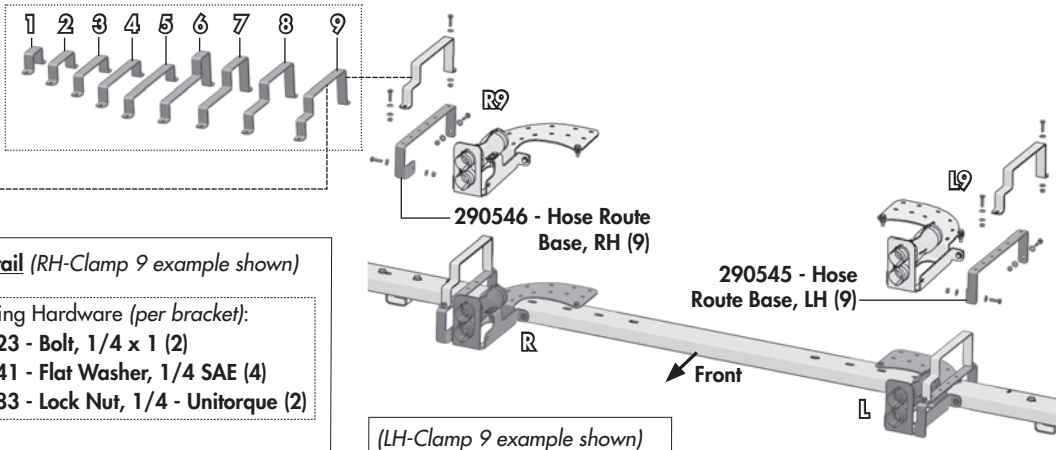
Approx. Hose Lengths **SM 70**

Note: *Suggested hose cut lengths per roll are listed below. You may wish to label hoses as they are cut. Trim as required once routed.*

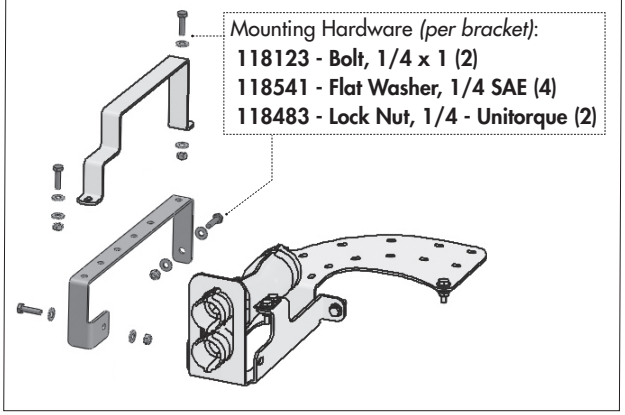
Hose#/Length	Hose#/Length
(Roll-01)	*(Roll-05)*
1 - 57 ft	14 - 36 ft
6 - 41 ft	13 - 34 ft
(Roll-02)	12 - 30 ft
2 - 54 ft	*(Roll-06)*
5 - 44 ft	18 - 51 ft
(Roll-03)	17 - 47 ft
3 - 51 ft	*(Roll-07)*
4 - 47 ft	19 - 54 ft
(Roll-04)	16 - 44 ft
7 - 36 ft	*(Roll-08)*
8 - 34 ft	20 - 57 ft
9 - 30 ft	15 - 41 ft
	(Roll-09)
	11 - 27 ft
	10 - 27 ft

290566 - Hose Clamp, 1 (2)
290567 - Hose Clamp, 2 (2)
290568 - Hose Clamp, 3 (2)
290569 - Hose Clamp, 4 (2)
290570 - Hose Clamp, 5 (2)
290571 - Hose Clamp, 6 (2)
290572 - Hose Clamp, 7 (2)
290573 - Hose Clamp, 8 (2)
290574 - Hose Clamp, 9 (2)

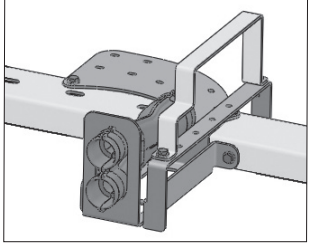
Hose Routing Clamp Components



Routing Clamp Mounting Detail *(RH-Clamp 9 example shown)*

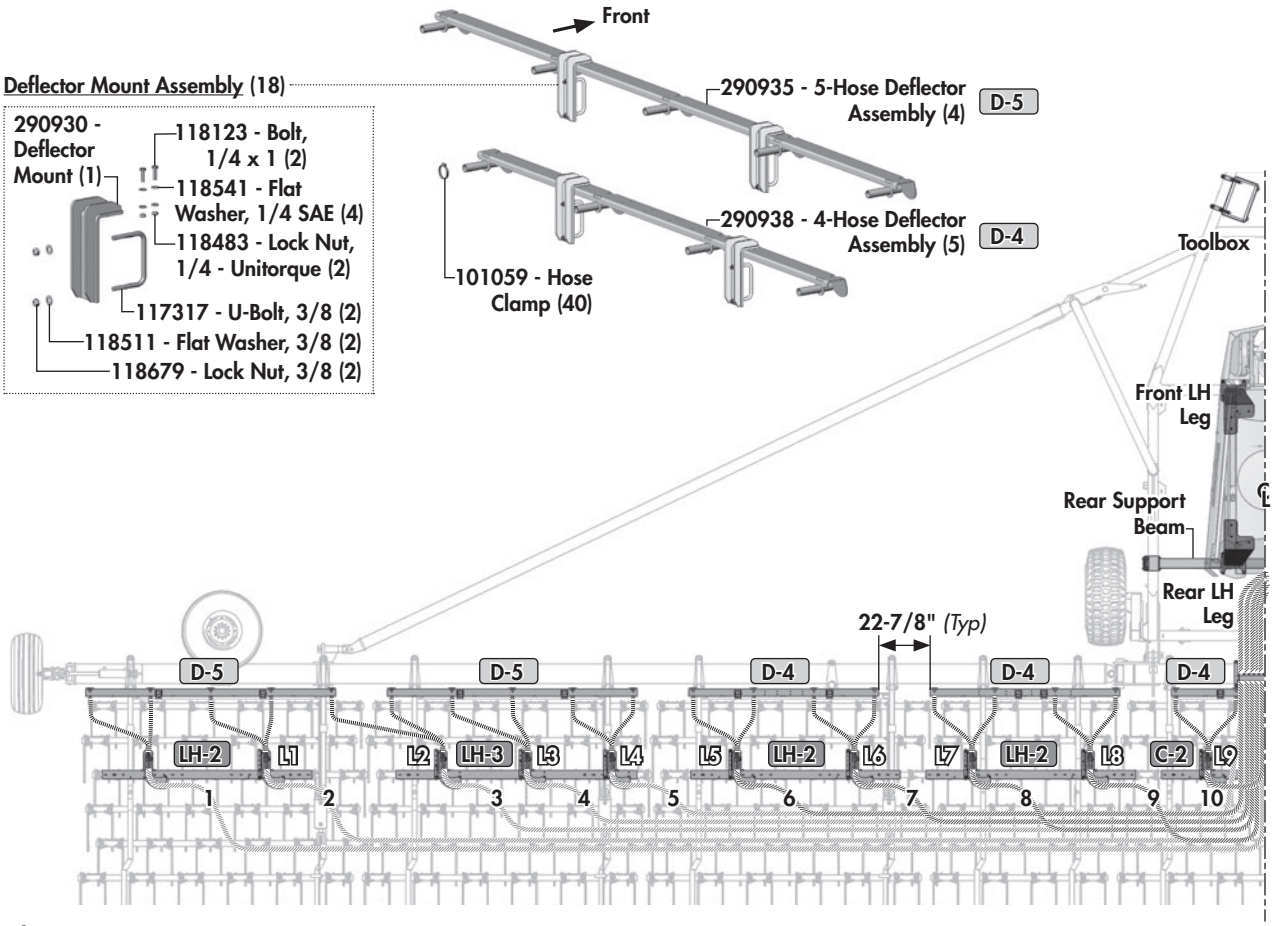


(LH-Clamp 9 example shown)

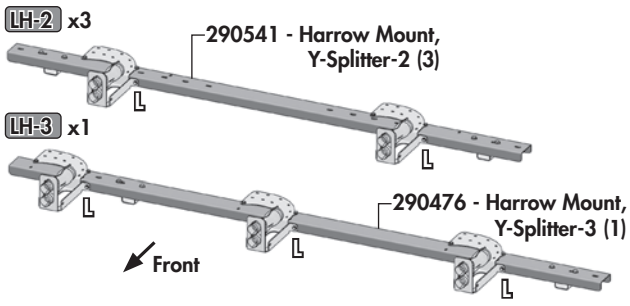


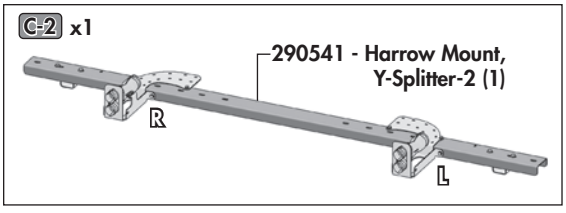
SM 82/Pro-Cast Location Overview (LH)

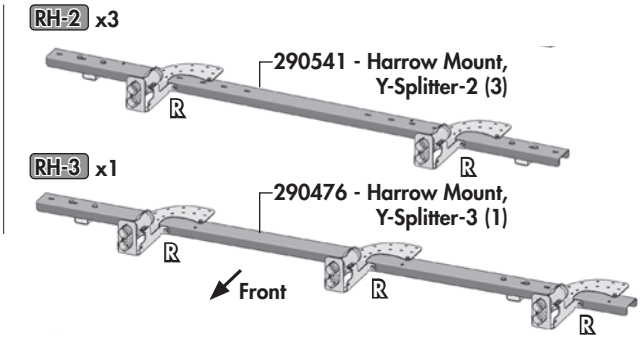
Deflector Assembly Mount Components

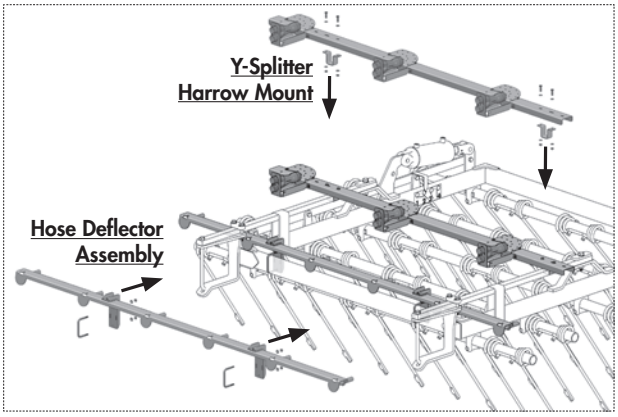


Y-Splitter Harrow Mount Overview

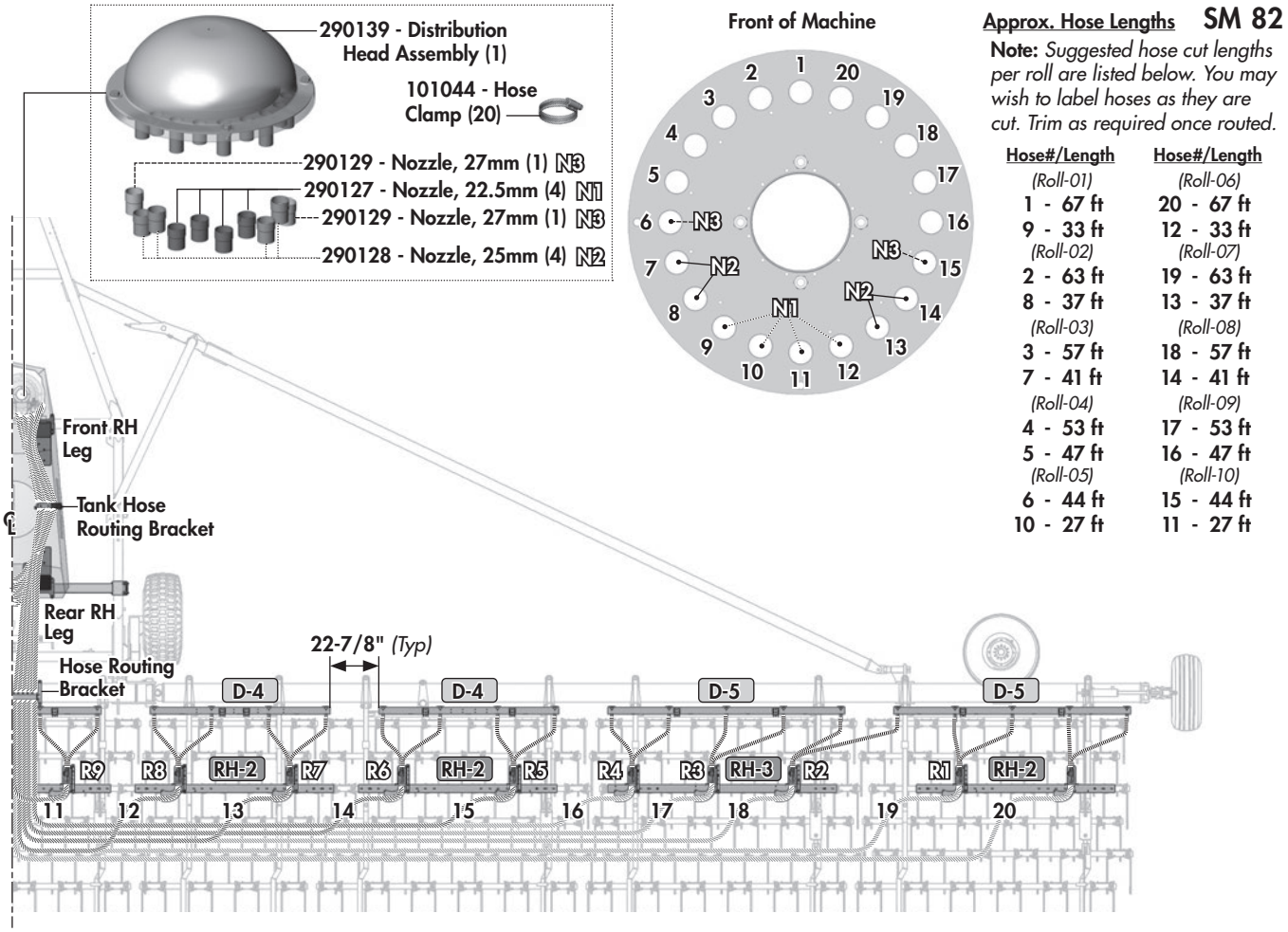








SM 82/Pro-Cast Location Overview (RH)



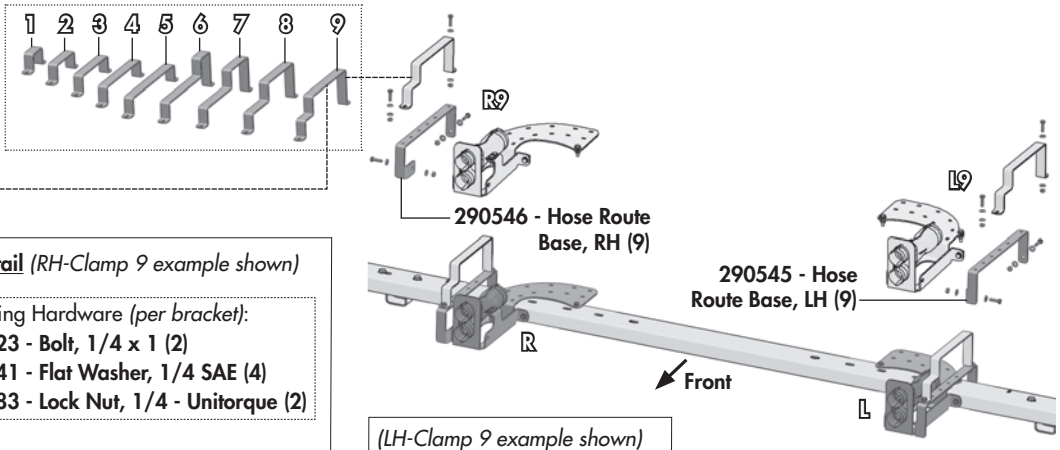
Approx. Hose Lengths **SM 82**

Note: *Suggested hose cut lengths per roll are listed below. You may wish to label hoses as they are cut. Trim as required once routed.*

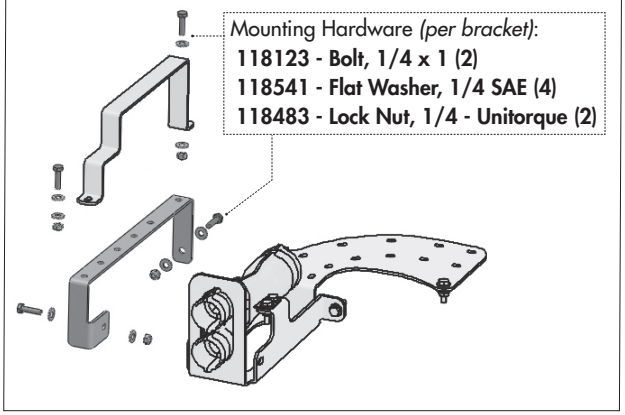
Hose#/Length	Hose#/Length
(Roll-01)	*(Roll-06)*
1 - 67 ft	20 - 67 ft
9 - 33 ft	12 - 33 ft
(Roll-02)	*(Roll-07)*
2 - 63 ft	19 - 63 ft
8 - 37 ft	13 - 37 ft
(Roll-03)	*(Roll-08)*
3 - 57 ft	18 - 57 ft
7 - 41 ft	14 - 41 ft
(Roll-04)	*(Roll-09)*
4 - 53 ft	17 - 53 ft
5 - 47 ft	16 - 47 ft
(Roll-05)	*(Roll-10)*
6 - 44 ft	15 - 44 ft
10 - 27 ft	11 - 27 ft

290566 - Hose Clamp, 1 (2)
290567 - Hose Clamp, 2 (2)
290568 - Hose Clamp, 3 (2)
290569 - Hose Clamp, 4 (2)
290570 - Hose Clamp, 5 (2)
290571 - Hose Clamp, 6 (2)
290572 - Hose Clamp, 7 (2)
290573 - Hose Clamp, 8 (2)
290574 - Hose Clamp, 9 (2)

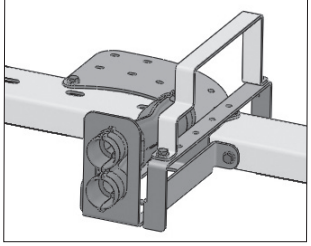
Hose Routing Clamp Components



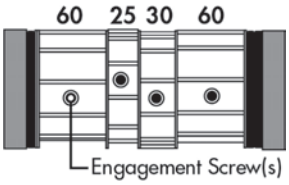
Routing Clamp Mounting Detail *(RH-Clamp 9 example shown)*

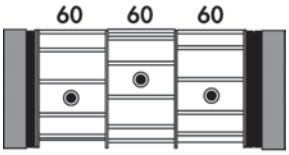


(LH-Clamp 9 example shown)



Metering Reference Charts





(Alternate Roller Configuration)

CALIBRATION FACTOR CHART	Product Density - lbs/bu *(lbs/ft3)*						
	30 *(24)*	35 *(28)*	40 *(32)*	45 *(36)*	50 *(40)*	55 *(44)*	60 *(48)*
Roller Configuration	Calibration Factor - lbs/rev						
25	0.07	0.08	0.1	0.11	0.12	0.13	0.14
30	0.12	0.14	0.17	0.19	0.21	0.23	0.25
25 + 30	0.2	0.23	0.26	0.29	0.33	0.36	0.39
60	0.25	0.29	0.33	0.37	0.41	0.46	0.5
60 +25	0.32	0.37	0.43	0.48	0.53	0.59	0.64
60 + 30	0.37	0.43	0.5	0.56	0.62	0.68	0.75
60 + 30 + 25	0.44	0.52	0.59	0.67	0.74	0.82	0.89
60 + 60	0.5	0.58	0.66	0.75	0.83	0.91	0.99
60 + 60 + 25	0.57	0.66	0.76	0.85	0.95	1.04	1.14
60 + 60 + 30	0.62	0.72	0.83	0.93	1.04	1.14	1.24
60 + 60 + 30 + 25	0.69	0.81	0.92	1.04	1.16	1.27	1.39
60 + 60 + 60	0.75	0.87	0.99	1.12	1.24	1.37	1.49

STRAWMASTER 70	Product Density - lbs/bu *(lbs/ft3)*						
	30 *(24)*	35 *(28)*	40 *(32)*	45 *(36)*	50 *(40)*	55 *(44)*	60 *(48)*
Roller Configuration	Application Rate Range - lbs/acre (values shown are with implement speed at **10mph**)						
25	2 - 4	3 - 4	3 - 5	3 - 6	4 - 6	4 - 7	5 - 8
30	4 - 7	5 - 8	5 - 9	6 - 10	7 - 11	7 - 12	8 - 13
25 + 30	6 - 10	7 - 12	8 - 14	9 - 16	10 - 17	11 - 19	12 - 21
60	8 - 13	9 - 15	11 - 18	12 - 20	13 - 22	14 - 24	16 - 26
60 +25	10 - 17	12 - 20	14 - 23	15 - 26	17 - 28	19 - 31	20 - 34
60 + 30	12 - 20	14 - 23	16 - 26	18 - 30	20 - 33	22 - 36	24 - 40
60 + 30 + 25	14 - 24	17 - 28	19 - 31	21 - 35	24 - 39	26 - 43	28 - 47
60 + 60	16 - 26	18 - 31	21 - 35	24 - 40	26 - 44	29 - 48	32 - 53
60 + 60 + 25	18 - 30	21 - 35	24 - 40	27 - 45	30 - 50	33 - 55	36 - 60
60 + 60 + 30	20 - 33	23 - 38	26 - 44	30 - 49	33 - 55	36 - 60	40 - 66
60 + 60 + 30 + 25	22 - 37	26 - 43	29 - 49	33 - 55	37 - 61	40 - 67	44 - 74
60 + 60 + 60	24 - 47	28 - 55	32 - 63	36 - 71	40 - 79	43 - 87	47 - 95
For speeds other than 10mph, use **Target Application Rate x (*Speed* /10mph)** then use this value for selection above.							

STRAWMASTER 82	Product Density - lbs/bu *(lbs/ft3)*						
	30 *(24)*	35 *(28)*	40 *(32)*	45 *(36)*	50 *(40)*	55 *(44)*	60 *(48)*
Roller Configuration	Application Rate Range - lbs/acre (values shown are with implement speed at **10mph**)						
25	2 - 3	2 - 4	3 - 4	3 - 5	3 - 5	4 - 6	4 - 7
30	3 - 6	4 - 7	4 - 7	5 - 8	6 - 9	6 - 10	7 - 11
25 + 30	5 - 9	6 - 10	7 - 12	8 - 13	9 - 15	10 - 16	11 - 18
60	7 - 11	8 - 13	9 - 15	10 - 17	11 - 19	12 - 21	13 - 22
60 +25	9 - 15	10 - 17	12 - 19	13 - 22	15 - 24	16 - 27	17 - 29
60 + 30	10 - 17	12 - 20	13 - 22	15 - 25	17 - 28	19 - 31	20 - 34
60 + 30 + 25	12 - 20	14 - 23	16 - 27	18 - 30	20 - 34	22 - 37	24 - 40
60 + 60	13 - 22	16 - 26	18 - 30	20 - 34	22 - 37	25 - 41	27 - 45
60 + 60 + 25	15 - 26	18 - 30	21 - 34	23 - 39	26 - 43	28 - 47	31 - 52
60 + 60 + 30	17 - 28	20 - 33	22 - 37	25 - 42	28 - 47	31 - 52	34 - 56
60 + 60 + 30 + 25	19 - 31	22 - 37	25 - 42	28 - 47	31 - 52	35 - 58	38 - 63
60 + 60 + 60	20 - 40	24 - 47	27 - 54	30 - 61	34 - 67	37 - 74	40 - 81
For speeds other than 10mph, use **Target Application Rate x (*Speed* /10mph)** then use this value for selection above.							