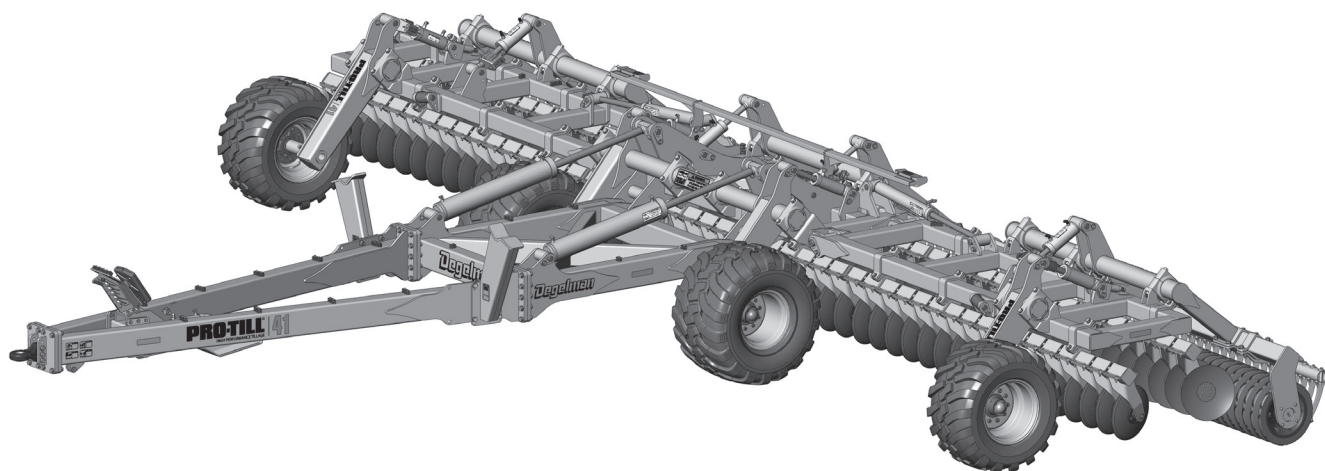


PRO-CAST 80

PRECISION GRANULAR APPLICATOR



PRO-TILL 41/45

HIGH PERFORMANCE TILLAGE

143088 v2.0

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
PRO-TILL 41/45 DISTRIBUTION KIT

Overview of Mounting Pro-Cast Applicator

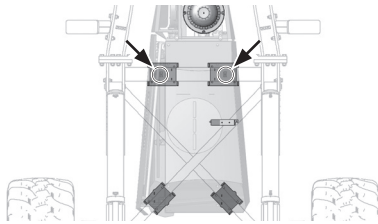
Mounting Steps

The following is an overview and suggested guide for mounting a Pro-Cast Applicator to a Pro-Till 41/45.

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

Pro-Till Frame Preparation:

On some Pro-Till models, there may be two welded plates located on the front center X-Frame beam (for hose clamps) that can interfere with the flush mounting of the Pro-Cast front support legs. These will need to be cut off and the welds ground flush so the front legs can clamp properly to the frame. The hyd hoses should be routed behind the Pro-Cast legs.



Pro-Cast to X-Frame Mounting:

1. Clean and prepare your Pro-Till, as desired, for mounting the Pro-Cast applicator & kit components.
2. Center the main Pro-Cast unit (legs attached) over the Pro-Till X-Frame and lower into place.
3. Secure the front legs with the appropriate front bolt plates and 1/2" x 12" bolts / hardware.
4. Secure the rear legs with the appropriate RH/LH bolt plates and 1/2" x 10" bolts / hardware.

Hydraulic Hoses and ISOBUS Cable Routing:

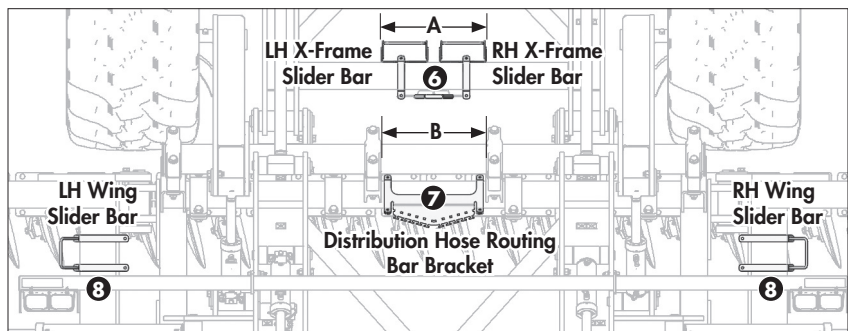
5. Hydraulic hoses and ISOBUS Cable will come installed. Secure hydraulic hoses and ISOBUS cable to the hitch frame with zip-ties. Follow existing hydraulic hose routing.

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.

X-Frame Slider Brackets (LH & RH):

6. Center and install both LH and RH Slider Brackets and the SMV sign hose protector on the rear beam of the Pro-Till X-Frame, behind the applicator.

IMPORTANT: When installing, ensure that overall width of the **Slider Brackets** "A" is less than the width between the **Rockshaft Bearings** "B" to avoid interference.



Distribution Hose Routing Bar Bracket:

7. Center and install the Distribution Hose Routing Bar Bracket mounted to front center frame beam.

Wing Frame Slider Brackets (LH & RH):

8. Install the Slider Brackets on the LH & RH wing frames in position shown in reference image below. Install bracket towards front of center frame to ensure it will not impact light bar when folding into transport.

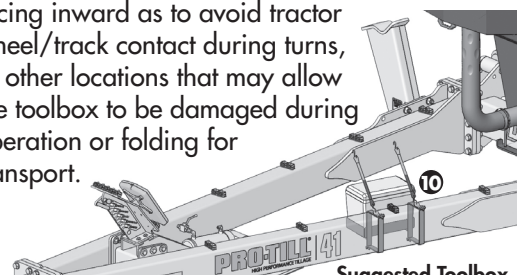
Deflector Mounting Brackets:

9. **Note:** The *location overview pages* show the positioning information for assembling these brackets and where they are to be installed on the Pro-Till. These brackets vary and are configured differently for the Pro-Till 41 and Pro-Till 45 models. Please pay attention to the configurations.

Pre-assemble the deflector bracket assemblies by attaching the correct clamp style (A or B) onto the correct deflector bracket bolt locations then install the assemblies in the correct locations.

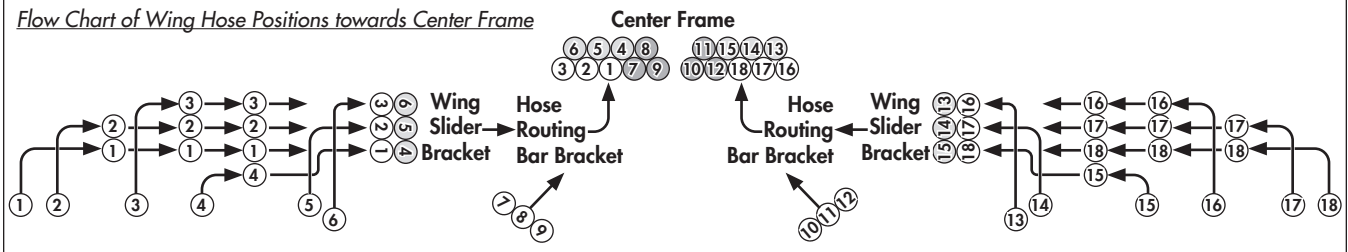
Toolbox Holder Bracket:

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

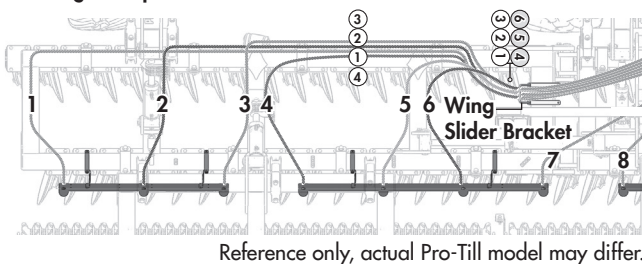
Flow Chart of Wing Hose Positions towards Center Frame



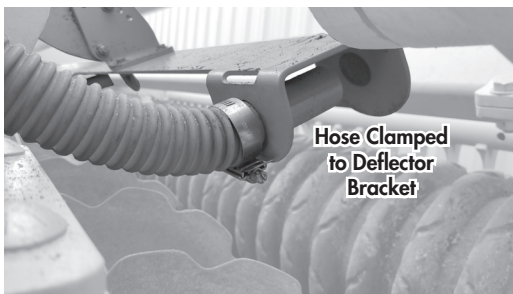
Distribution Hose Installation / Routing

The hose positions are numbered 1 thru 18 from left to right across the back of the machine. Hoses are rough cut and then trimmed to length at the distribution head. To optimize hose positions and avoid unnecessary crisscrossing, refer to the cross sectional hose routing diagrams which show how the hoses should be bundled together relative to each other. (Refer to [Location Overview Pages](#) for hose lengths.)

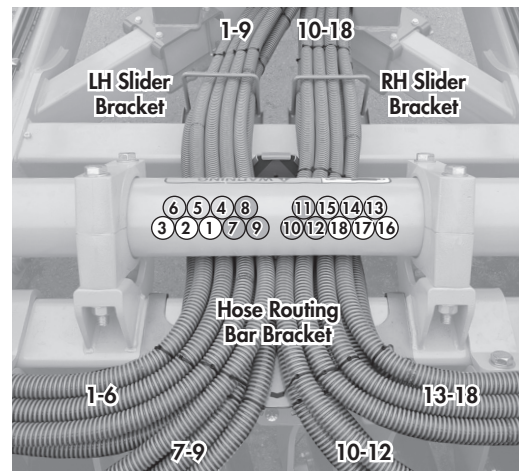
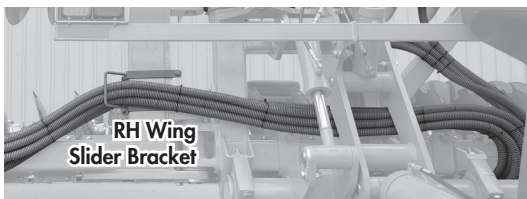
LH Wing Example:



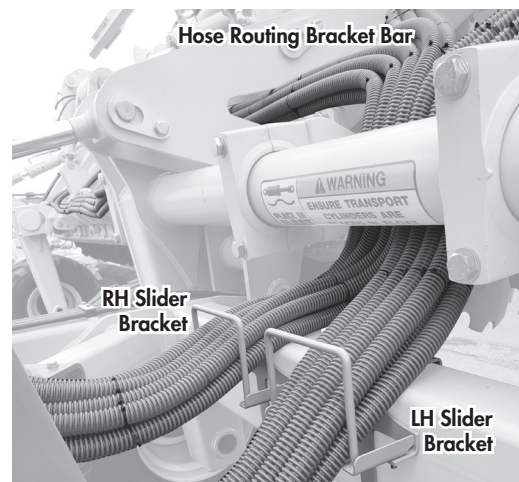
Secure the hoses in place on the **Deflector Mounting Brackets**, hoses 1-18 from left-to-right, and then route towards the front. (Refer to [Hose Routing Bracket details on the Location Overview Pages](#)).



As the wing hoses are routed towards the center frame, groups of hoses, (1-6 on LH wing or 13-18 on RH wing), pass through a Wing Slider Bracket to prevent hoses from getting damaged when folding the Pro-Till into or out of transport position.

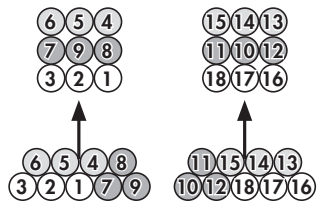
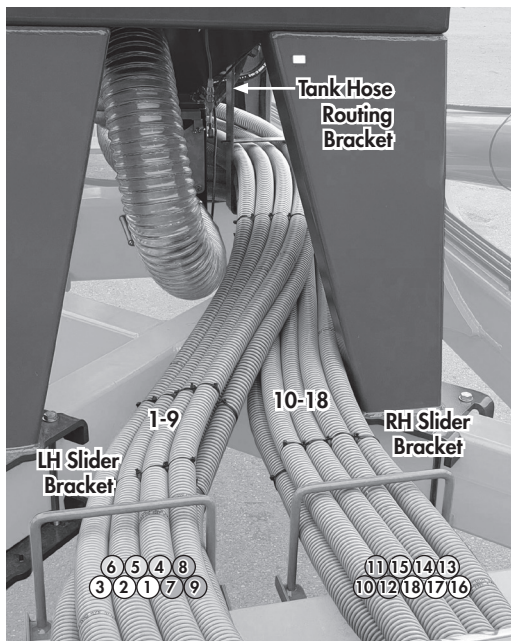


The hoses continue to the **Hose Routing Bar Bracket** and are attached with zip ties in a specific order as shown above. The hoses continue in-between the **X-Frame Slider Brackets** (LH - Hoses 1-9 & RH Hoses 10-18).



Overview of Mounting Pro-Cast Applicator

The hoses continue between the rear mounting legs towards the tank mounted hose bracket (located on the RH side).



As the hoses are routed through the tank mounted hose bracket, the orientation of the hoses transitions into a square block of nine for both the RH & LH groups of hoses.

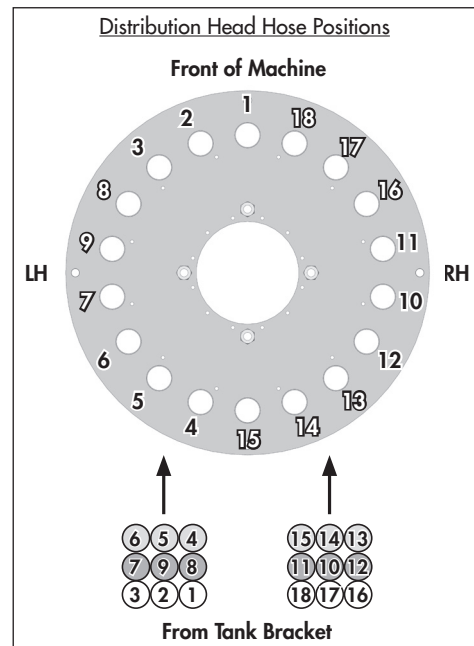


The hoses then continue through the front mounting legs up to the distribution head.

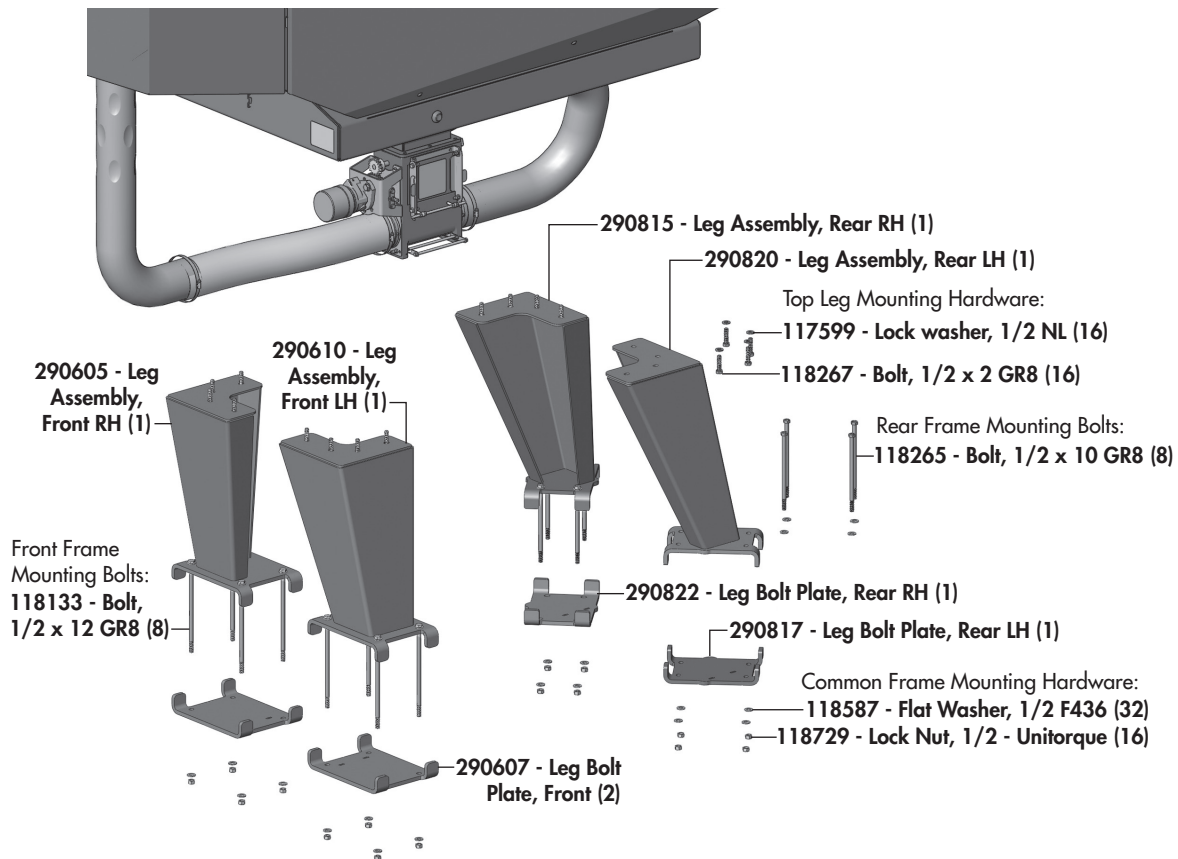
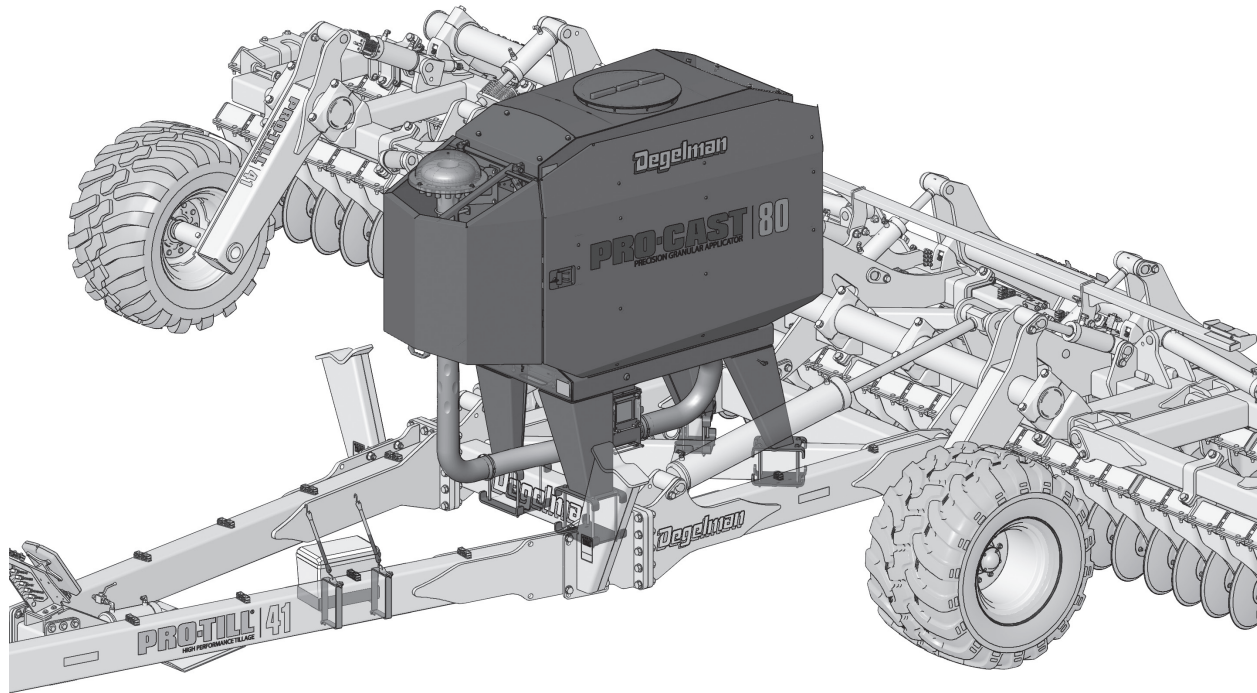
The distribution hoses have specific connection positions on the distribution manifold. Each hose (1-18) has a specific attachment location.

(Refer to [Location Overview Pages](#) for hose lengths.)

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.

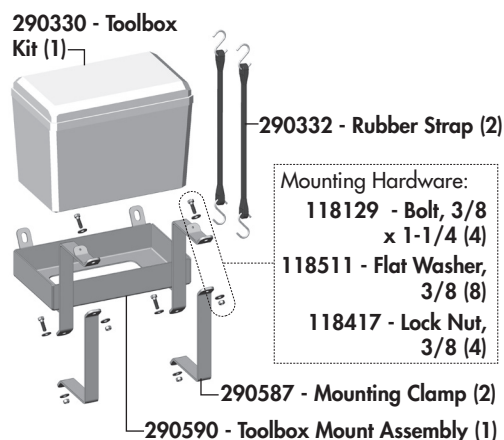


Pro-Cast Leg Component & Mounting Location

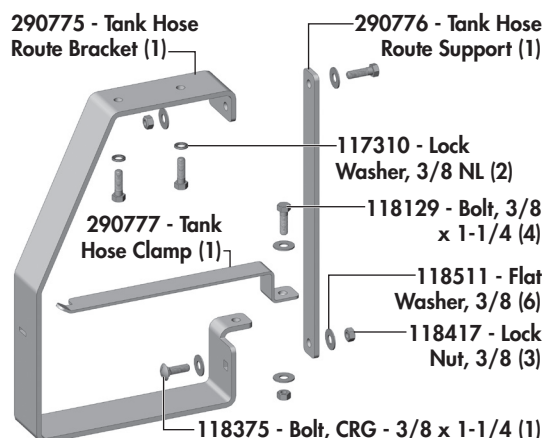


Common Bracket Components

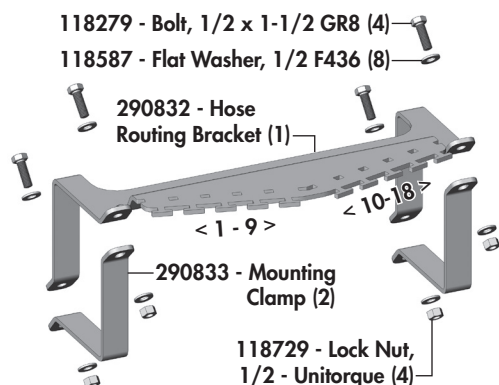
Toolbox Kit and Bracket Components



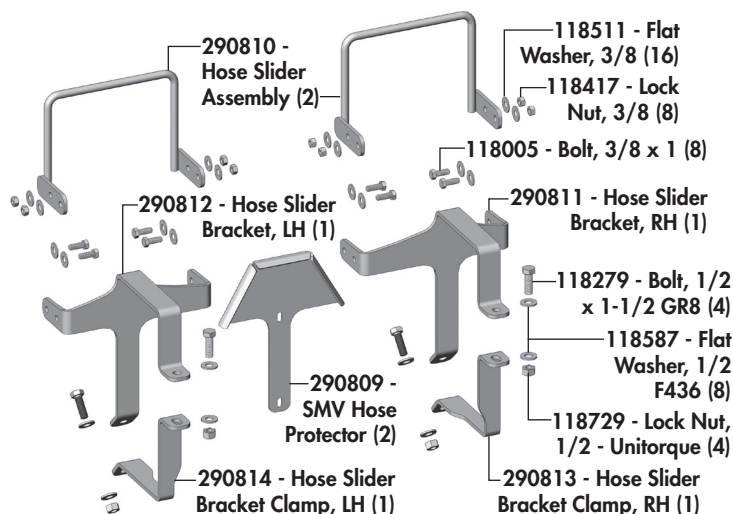
Tank Mounted Hose Routing Bracket



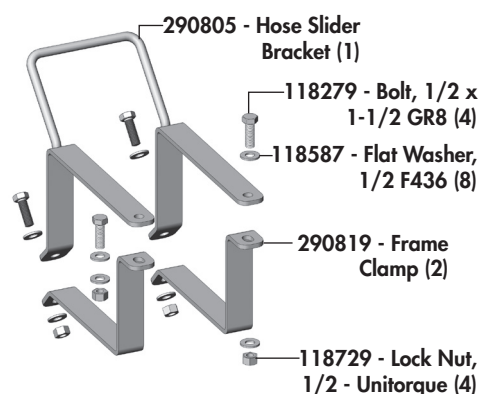
Distribution Hose Routing Bar Bracket



X-Frame Slider Brackets (LH & RH)



Wing Frame Slider Brackets (2)



Other Components

290138 - Distribution Head Assembly (1)



101044 - Hose Clamp (18)

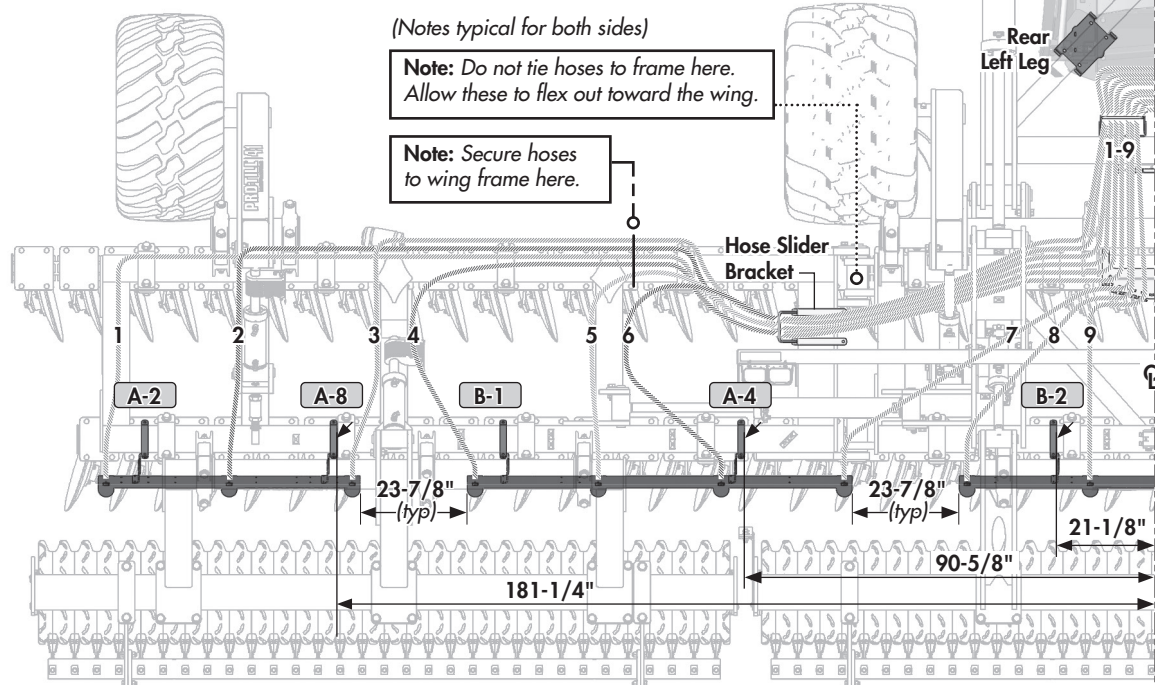
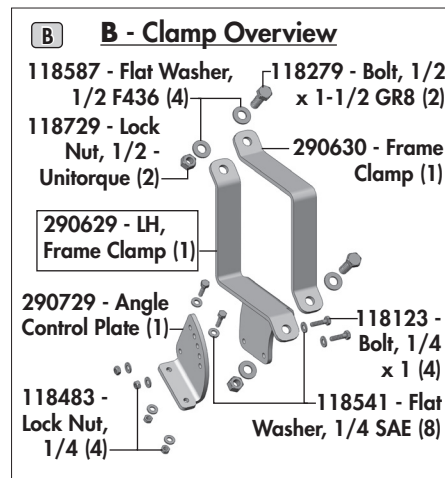
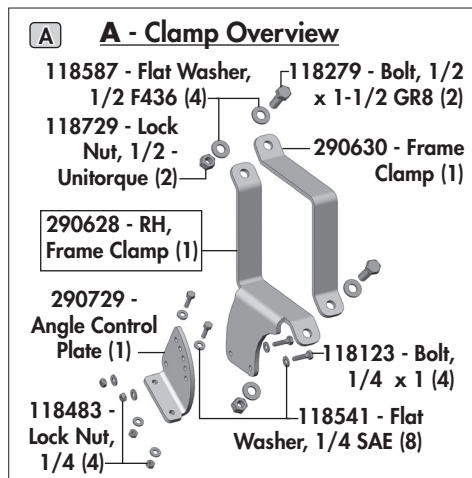
143455 - Rate Decal, Pro-Till 41 (1)

Pro-Till 41		Rate Decal	
Flow Rate (GPM)	Flow Rate (LPM)	Flow Rate (GPM)	Flow Rate (LPM)
10	37.8	10	37.8
20	75.6	20	75.6
30	113.4	30	113.4
40	151.2	40	151.2
50	188.9	50	188.9
60	226.7	60	226.7
70	264.4	70	264.4
80	302.1	80	302.1
90	339.8	90	339.8
100	377.5	100	377.5

143456 - Rate Decal, Pro-Till 45 (1)

Pro-Till 45		Rate Decal	
Flow Rate (GPM)	Flow Rate (LPM)	Flow Rate (GPM)	Flow Rate (LPM)
10	37.8	10	37.8
20	75.6	20	75.6
30	113.4	30	113.4
40	151.2	40	151.2
50	188.9	50	188.9
60	226.7	60	226.7
70	264.4	70	264.4
80	302.1	80	302.1
90	339.8	90	339.8
100	377.5	100	377.5

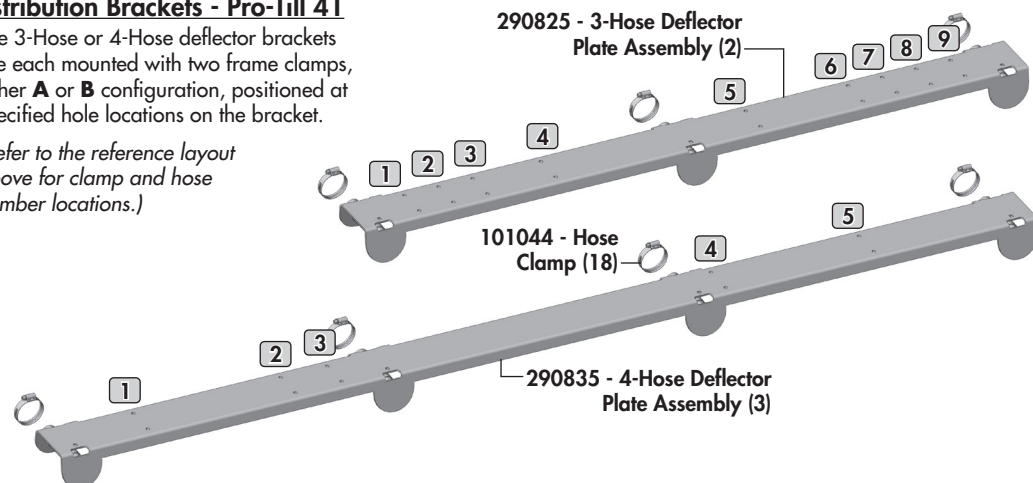
Pro-Till 41/Pro-Cast Location Overview (LH)



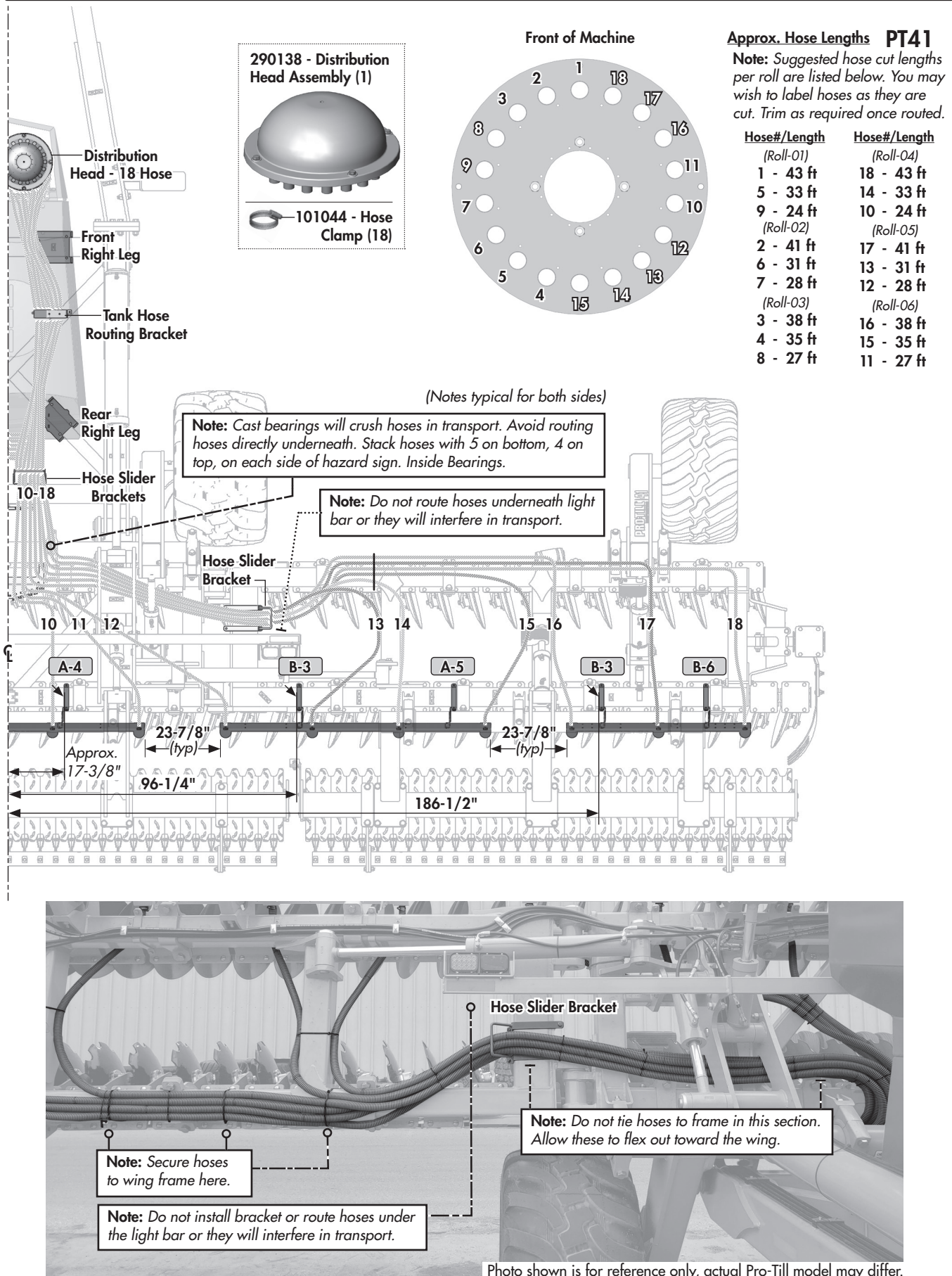
Distribution Brackets - Pro-Till 41

The 3-Hose or 4-Hose deflector brackets are each mounted with two frame clamps, either **A** or **B** configuration, positioned at specified hole locations on the bracket.

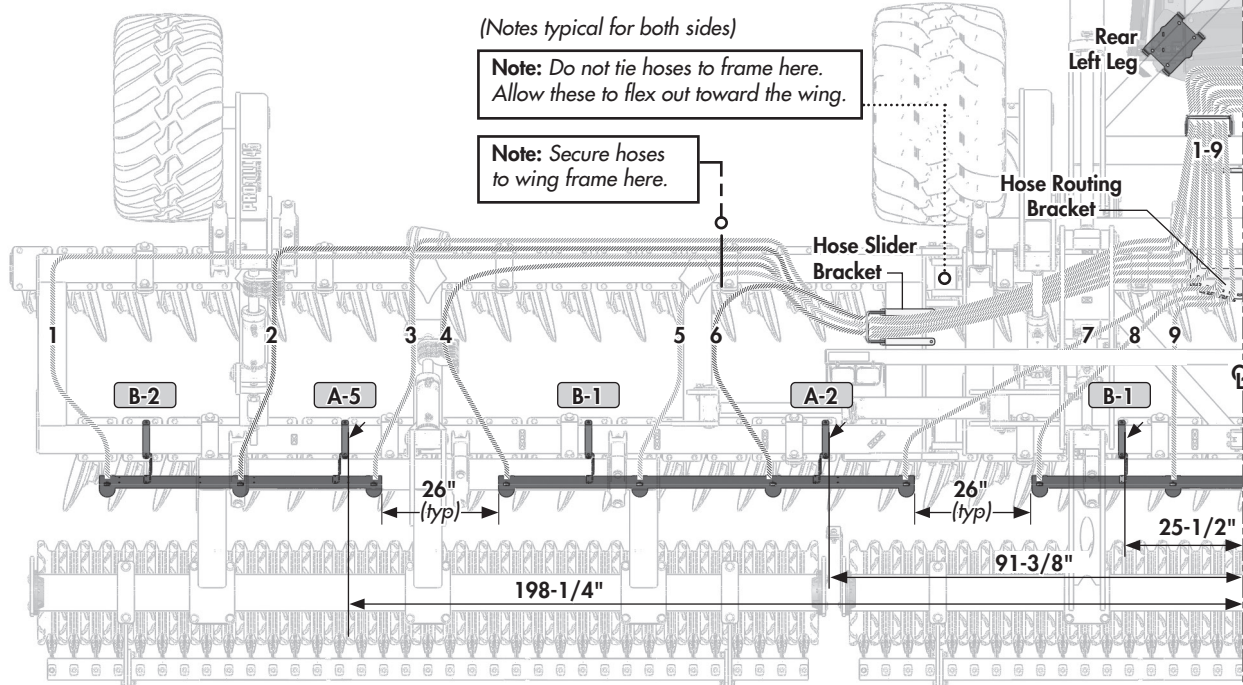
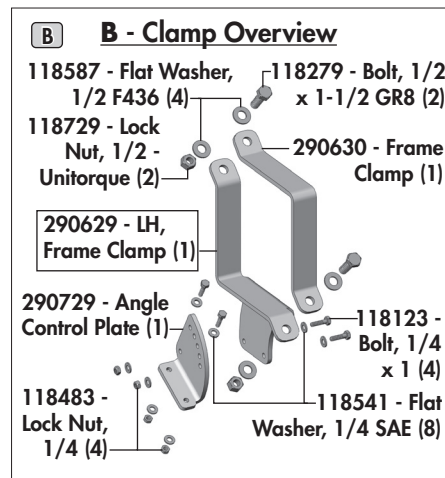
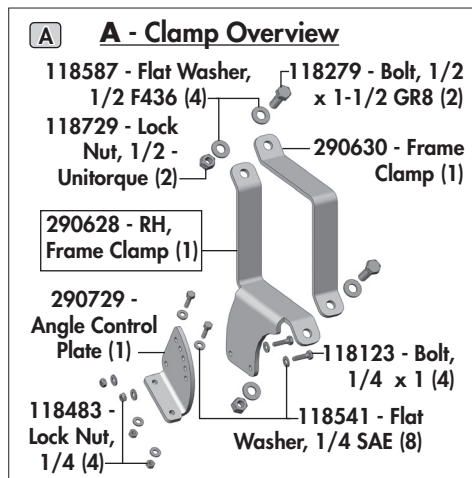
(Refer to the reference layout above for clamp and hose number locations.)



Pro-Till 41/Pro-Cast Location Overview (LH)



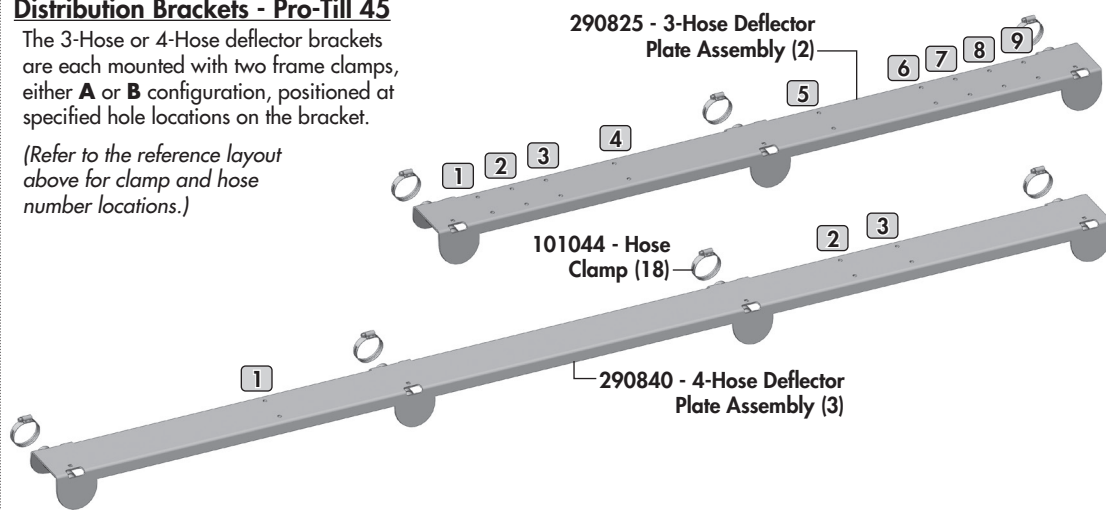
Pro-Till 45/Pro-Cast Location Overview (LH)



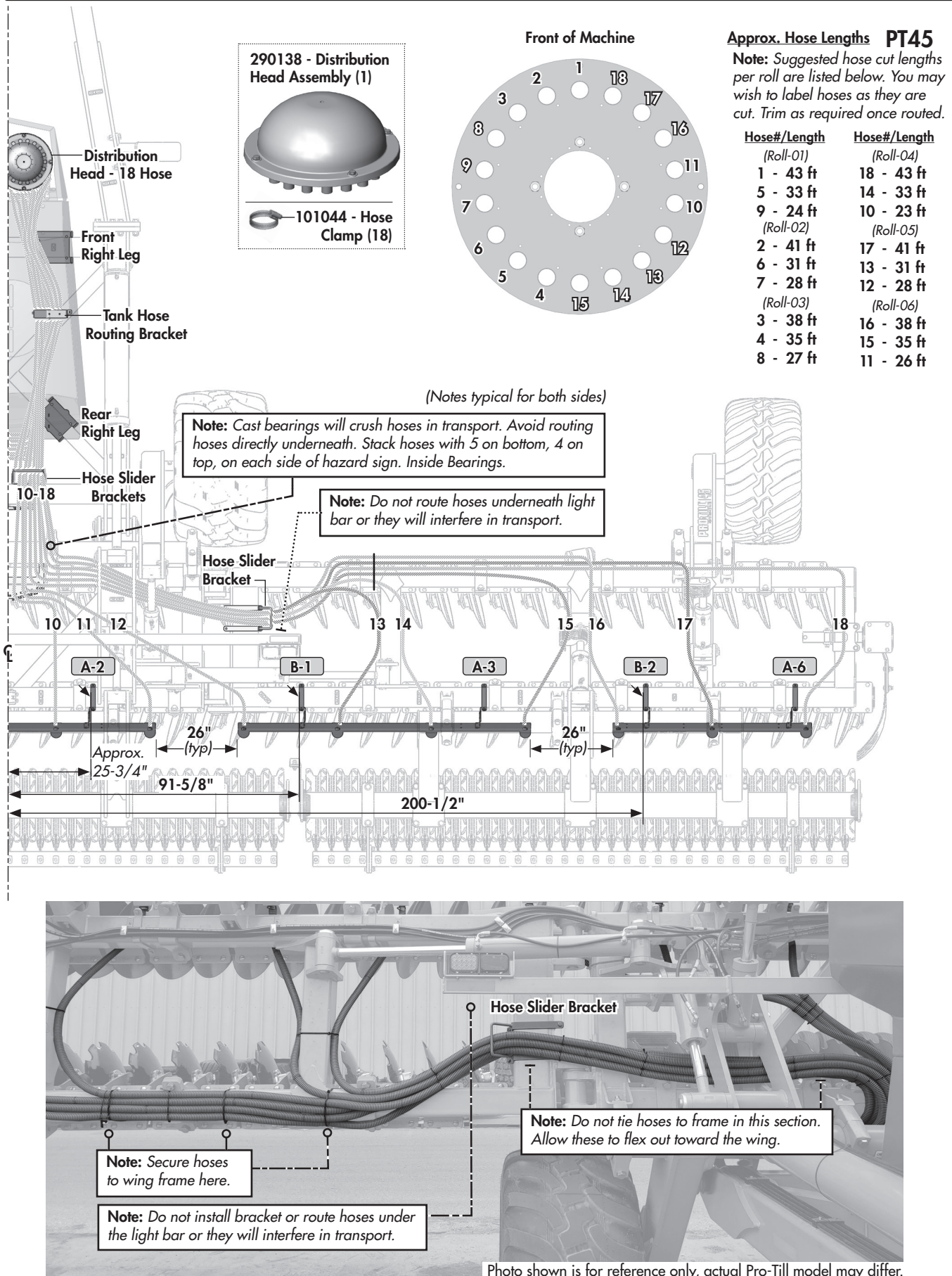
Distribution Brackets - Pro-Till 45

The 3-Hose or 4-Hose deflector brackets are each mounted with two frame clamps, either **A** or **B** configuration, positioned at specified hole locations on the bracket.

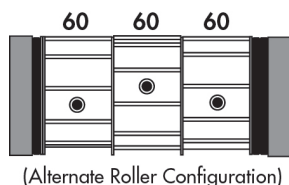
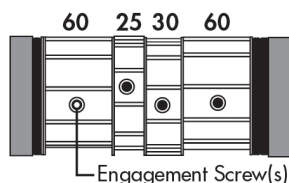
(Refer to the reference layout above for clamp and hose number locations.)



Pro-Till 45/Pro-Cast Location Overview (RH)



Metering Reference Charts



CALIBRATION FACTOR CHART	Product Density - lbs/bu (lbs/ft ³)						
	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

Pro-Till 41	Product Density - lbs/bu (lbs/ft ³)						
	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	4 - 7	5 - 8	5 - 9	6 - 10	7 - 11	7 - 12	8 - 13
30	7 - 11	8 - 13	9 - 15	10 - 17	11 - 19	12 - 21	13 - 22
25 + 30	11 - 18	12 - 21	14 - 24	16 - 27	18 - 30	20 - 33	21 - 36
60	13 - 22	16 - 26	18 - 30	20 - 34	22 - 37	25 - 41	27 - 45
60 + 25	17 - 29	20 - 34	23 - 39	26 - 44	29 - 48	32 - 53	35 - 58
60 + 30	20 - 34	24 - 39	27 - 45	30 - 51	34 - 56	37 - 62	40 - 67
60 + 30 + 25	24 - 40	28 - 47	32 - 54	36 - 60	40 - 67	44 - 74	48 - 81
60 + 60	27 - 45	31 - 52	36 - 60	40 - 67	45 - 75	49 - 82	54 - 90
60 + 60 + 25	31 - 52	36 - 60	41 - 69	46 - 77	52 - 86	57 - 94	62 - 103
60 + 60 + 30	34 - 56	39 - 66	45 - 75	51 - 84	56 - 94	62 - 103	67 - 112
60 + 60 + 30 + 25	38 - 63	44 - 73	50 - 84	56 - 94	63 - 105	69 - 115	75 - 126
60 + 60 + 60	40 - 81	47 - 94	54 - 108	61 - 121	67 - 135	74 - 148	81 - 162

For speeds other than 10mph, use **Target Application Rate x (Speed / 10mph)** then use this value for selection above.

Pro-Till 45	Product Density - lbs/bu (lbs/ft ³)						
	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	4 - 6	4 - 7	5 - 8	5 - 9	6 - 10	7 - 11	7 - 12
30	6 - 10	7 - 12	8 - 14	9 - 15	10 - 17	11 - 19	12 - 20
25 + 30	10 - 16	11 - 19	13 - 22	15 - 24	16 - 27	18 - 30	19 - 32
60	12 - 20	14 - 24	16 - 27	18 - 31	20 - 34	23 - 38	25 - 41
60 + 25	16 - 26	19 - 31	21 - 35	24 - 40	26 - 44	29 - 48	32 - 53
60 + 30	18 - 31	22 - 36	25 - 41	28 - 46	31 - 51	34 - 56	37 - 61
60 + 30 + 25	22 - 37	26 - 43	29 - 49	33 - 55	37 - 61	40 - 67	44 - 73
60 + 60	25 - 41	29 - 48	33 - 55	37 - 61	41 - 68	45 - 75	49 - 82
60 + 60 + 25	28 - 47	33 - 55	38 - 63	42 - 70	47 - 78	52 - 86	56 - 94
60 + 60 + 30	31 - 51	36 - 60	41 - 68	46 - 77	51 - 85	56 - 94	61 - 102
60 + 60 + 30 + 25	34 - 57	40 - 67	46 - 76	51 - 86	57 - 95	63 - 105	69 - 114
60 + 60 + 60	37 - 74	43 - 86	49 - 98	55 - 111	61 - 123	68 - 135	74 - 148

For speeds other than 10mph, use **Target Application Rate x (Speed / 10mph)** then use this value for selection above.