



DirtCub
Setup/Parts
Manual



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Installation of DirtCub to ProPass 180 Tow Behind Chassis

The DirtCub is a hydraulic powered dumping material hauler. It is designed to directly mount to a ProPass 180 Tow Behind Chassis.

Before assembling the DirtCub, the Tow Behind Chassis must be partially assembled. Following the Tow Behind Chassis (Bolted Model) setup instructions (found in your Tow Behind Chassis crate), complete steps 1 through 4 and steps 10 through 12 **making sure to leave all fasteners only finger tight.**

***Note:** All of the included pins serve one particular purpose. You will find 2 Grooved Pins with Clips, 1 Cylinder Pin with holes drilled either end (with a cotter, 2 washers and a hitch clip) as well as, 1 Clevis Style Pin with a Hitch Clip. Test fit each pin before beginning assembly to place each in its correct location. (See Parts breakdown for clarification.)*

DirtCub Setup

1. Install the 5/16" X 1-1/4" (7.9mm x 32mm) bolts in the corners of the Tow Behind Chassis. These were included in your Tow Behind Chassis crate. Figure 1 shows the location of these fasteners (Top black arrows).
2. Pre-assemble the stiffener tube to the Front Cylinder Mount using a 3/8" X 2-1/2" (9.5mm x 63.5mm) GR8 bolt, washers and nylock nut. Figure 1, bottom black arrow shows the tube already assembled before installing the Front Cylinder Mount to the chassis.
3. The DirtCub mounting brackets must be installed on the Tow Behind Chassis. Referring to Figure 1 (Bottom white arrow), install the Front Cylinder Mount using the included 1/2" X 1-1/4" (12.7mm x 31.8mm) GR8 bolts, washers and nylock nuts.

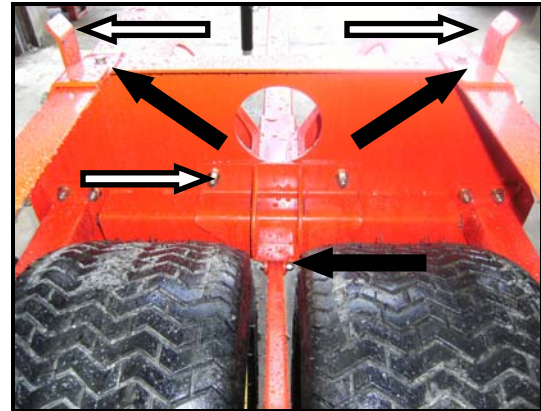


Figure 1

4. Install the Box Guides, as shown in Figure 1 (Top white arrows), by removing and then reinstalling 4 of the Tow Behind Chassis upper cross member bolts. The guides are side specific and will not fit correctly if installed on the wrong side.
5. Install the Rear Box Mount using the included 3/8" X 1" (9.5mm x 25.4mm) GR8 bolts, washers and nylock nuts. Refer to Figure 2 for fastener identification. Arrows in Figure 2 specify bolts that exist in the Tow Behind Chassis and will have to be removed and reinstalled.

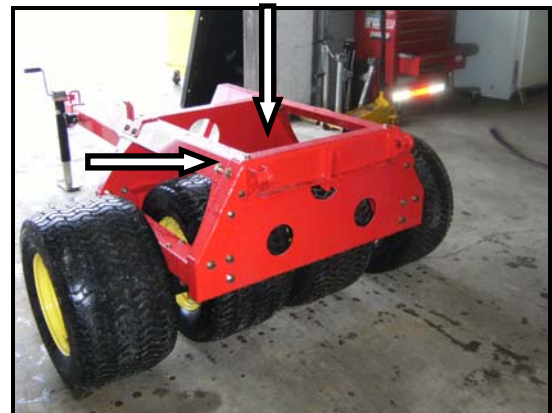


Figure 2

6. Position the stiffener tube (pre-assembled to Front Cylinder Mount and now hanging between tires) into the Rear Box Mount, attach using the included 3/8" X 2-1/2" (9.5mm x 63.5mm) GR8 bolts, washers and nylock nuts.

7. Tighten and torque (see torque specs at end of manual) all of the previously finger tightened bolts on the chassis. Start with the bolts on the suspension tubes then move to the Upper Cross Member bolts.

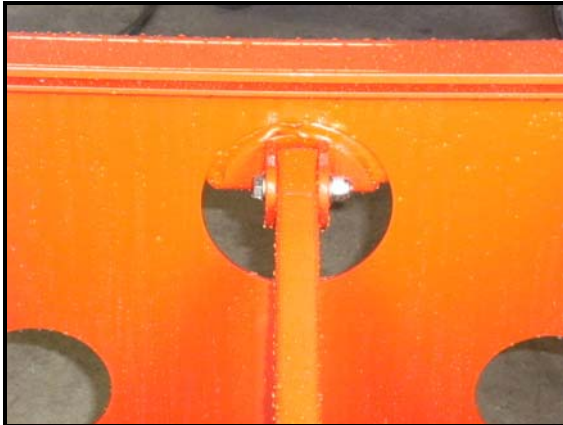


Figure 3

8. Locate the Hydraulic Cylinder and the included Hydraulic Hoses. Included in the DirtCub package are hoses measuring 93”(2.4m) (white arrow) and 84”(2.1m) (black arrow). Install the hoses, as shown in Figure 4, to the Hydraulic Cylinder.



Figure 4

9. Install the Hydraulic Cylinder into the Front Cylinder Mount using the included 1” (25.4mm) Clevis Style Pin and a cotter pin (see Figure 5). The black arrow is pointing to the end that will be placed in the Front Cylinder Mount (known as the body cross tube). Route the Hydraulic Hoses through the large hole in the front of the Tow Behind Chassis.

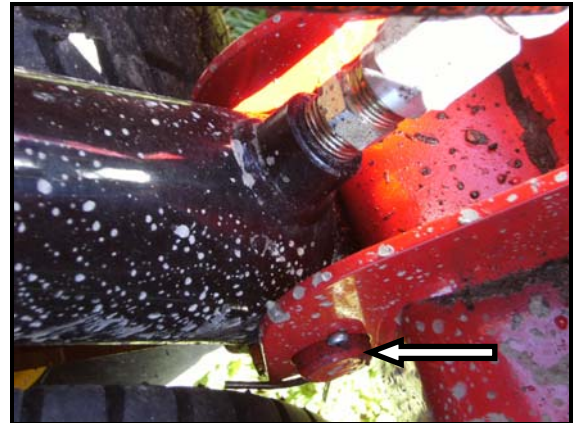


Figure 5

10. Install the Hose Tending Guide between the Jack and the Hitch Clevis on your Tow Behind Chassis using the 5/16” X 4” (7.9mm x 101.6mm) GR8 bolt, washers and nylock nut (see Figure 6). Route the hoses as shown.



Figure 6

11. With the aid of at least one other person, lift the DirtCub bed into place on the Tow Behind Chassis. Align the Hinge Clevis on the bed with the Hinge Points on the Rear Box Mount (see Figure 7). Install the 2 included Grooved Cylinder Pins and their retaining clips.

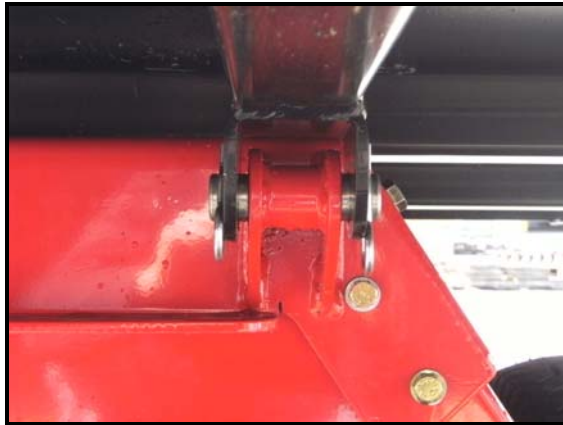


Figure 7

12. As shown in Figure 8, pre-assemble the Upper Cylinder Pin with a cotter pin in one of the holes and a 1" (25.4mm) GR8 washer.



Figure 8

13. Reaching under the bed position the Hydraulic Cylinder into place (an assistant may be required) until the rod end cross tube lines up with the slots in the bed. Install the Upper Cylinder Pin through either side of the slot. Install the included hitch clip, you may or may not be required to install the included 1" GR8 washer (see Figure 9 – Box Lifted for clarity, washer installed) **DO NOT LIFT BOX WHEN TRYING TO INSTALL TOP CYLINDER PIN.**

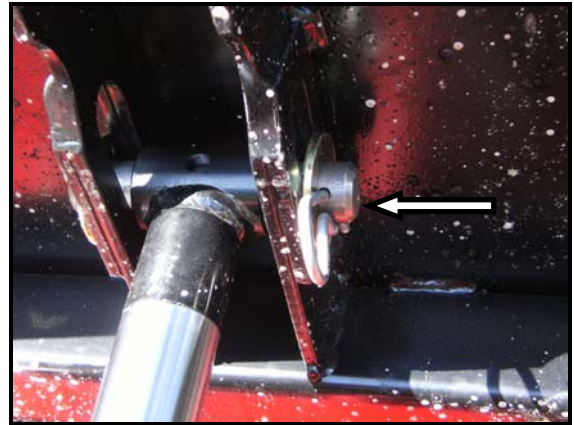


Figure 9

14. Install both side walls with the included 3/8" X 1" (9.5mm x 25.4mm) bolts, washers and nylock nuts. The Corner Post of each wall is fastened to the bed with a 5/16" X 1-1/4" (7.9mm x 31.8mm) bolt, washers and nylock nut (refer to Figure 10). *Only install the bolt shown in Figure 10.*



Figure 10

15. Install the front wall, as shown in Figure 11 (note orientation). Use 3/8" X 1" (9.5mm x 25.4mm) bolts, washers and nylock nuts to the bed and 5/16" X 1-1/4" (7.9mm x 31.8mm) bolts, washers and nuts in the corners to the side walls.



Figure 11

16. Locate the driver side Tailgate Mount Bracket (the driver side bracket will have the pin bushing closer to the top bolt when installed, see Figure 12). Install the bracket using 5/16" X 1-1/4" (7.9mm x 31.8mm) bolts, washers and nylock nuts. *Leave these bolts loose as the Tailgate may require shimming to close correctly.*



Figure 12

17. Have an assistant hold the Tailgate in place while installing the passenger side Tailgate Mount Bracket. Snug the bolts on both Tailgate Mount Brackets and test the gap of the Tailgate to the side walls when the tailgate is closed. If there is interference with any part of the corner post of the bed, install the included shims behind the Tailgate Mount Brackets (see Figure 13 – Arrow depicts where shim will be used). Be sure to install both sides if any shims are to be used.

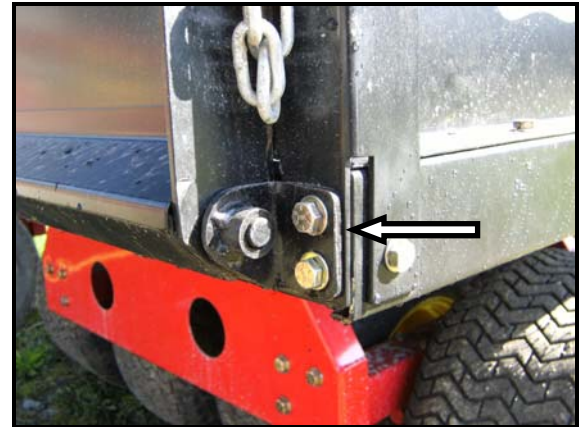


Figure 13

18. Install the Deflector Plate to the Tailgate using the included 1/4" X 3/4" (6.35mm x 19.1mm) bolts, washers and nylock nuts. Refer to Figure 14 – bolt heads should be on inside of tailgate.



Figure 14

19. Mount the Latch Plates to the Tailgate with the included 1/4" X 1" (6.35mm x 25.4mm) bolts, washers and nylock nuts (see Figure 15). *Some DirtCubs will have welded Latch Plates and this step may be skipped.*



Figure 15

20. Allow the Tailgate to hang from the brackets and locate the 15" (381mm) Plated Chain and the 10" (254mm) Galvanized Chain. Referring to Figure 16, attach the chains by installing the 3/8" X 2-3/4" (9.5mm x 69.9mm) bolts, washers and nylock nuts through the Corner Post, Galvanized Chain (only one end will fit), Plated Chain and then side walls. *Install the chains in this order.*



Figure 16

21. Attach the Plated Chain to the tailgate using the 3/8" X 1-3/4" (9.5mm x 44.5mm) bolts, 3 washers per side and nylock nuts. The order of installation should be followed as: bolt head, washer, chain link, washer, Chain Spacer, Tailgate Side, washer and nylock nut, refer to Figure 17 for clarification. Do not over-tighten the bolt so that the chain may still freely rotate on the bolt.

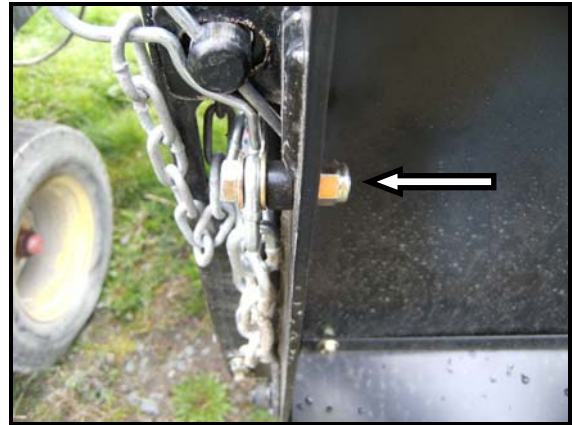


Figure 17

22. With both Plated Chains attached to the tailgate, lift the gate into its closed position. Attach the included hitch clip to the galvanized chain as shown in Figure 18 and then insert the clips into the Tailgate Pins (Figure 18).



Figure 18



Figure 19

- 23. Install the Stake Pockets using the included 1/4" x 3/4" (6.4mm x 19mm) GR8 bolts, washers and nylock nuts. See Figure 20.



Figure 20

- 24. Proceed to the DirtCub operators manual for connection to a tow vehicle and operation of the Hydraulic System.
- 25. Inspect entire DirtCub unit, tighten and torque all bolts to the following specifications:

Torque Specifications

1/4" GR8 Bolt (6.35mm)	5 ft-lbs / 20.3 Nm
5/16" GR8 Bolt (7.9mm)	30 ft-lbs / 40.6 Nm
3/8" GR8 Bolt (8.5mm)	50 ft-lbs / 67.8 Nm
1/2" GR8 Bolt (12.7mm)	120 ft-lbs / 162.7 Nm

The DirtCub is shipped without Quick Couplers for connection to the selected tow vehicle. This is due to the large number of tow vehicles in the industry. Quick Couplers will be required to operate the DirtCub, contact your tow vehicle supplier for information on the hydraulic system.

Please Contact our Service Department if you have any questions.

Paul Berger / Walt Neufeld

TYCROP Manufacturing Ltd.

Ph: 1-800-845-7249

Fax: 1-604-794-3446

Email: service@tycrop.com



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Parts Ordering

Replacement parts must have the same measurements and strength as those removed.

When ordering genuine TYCROP replacement parts, please supply the following information from the identification plate (see Figure 1 in the Operator's Manual):

- Product serial number
- Part number and description
- Quantity

All orders will be shipped ground from TYCROP Manufacturing, unless otherwise specified by the distributor or customer.

Descriptions and specifications contained in the MH-400 manuals were in effect at time of publication and are subject to change without notice or liability.

Order parts by contacting your local authorized TYCROP distributor, or by contacting:

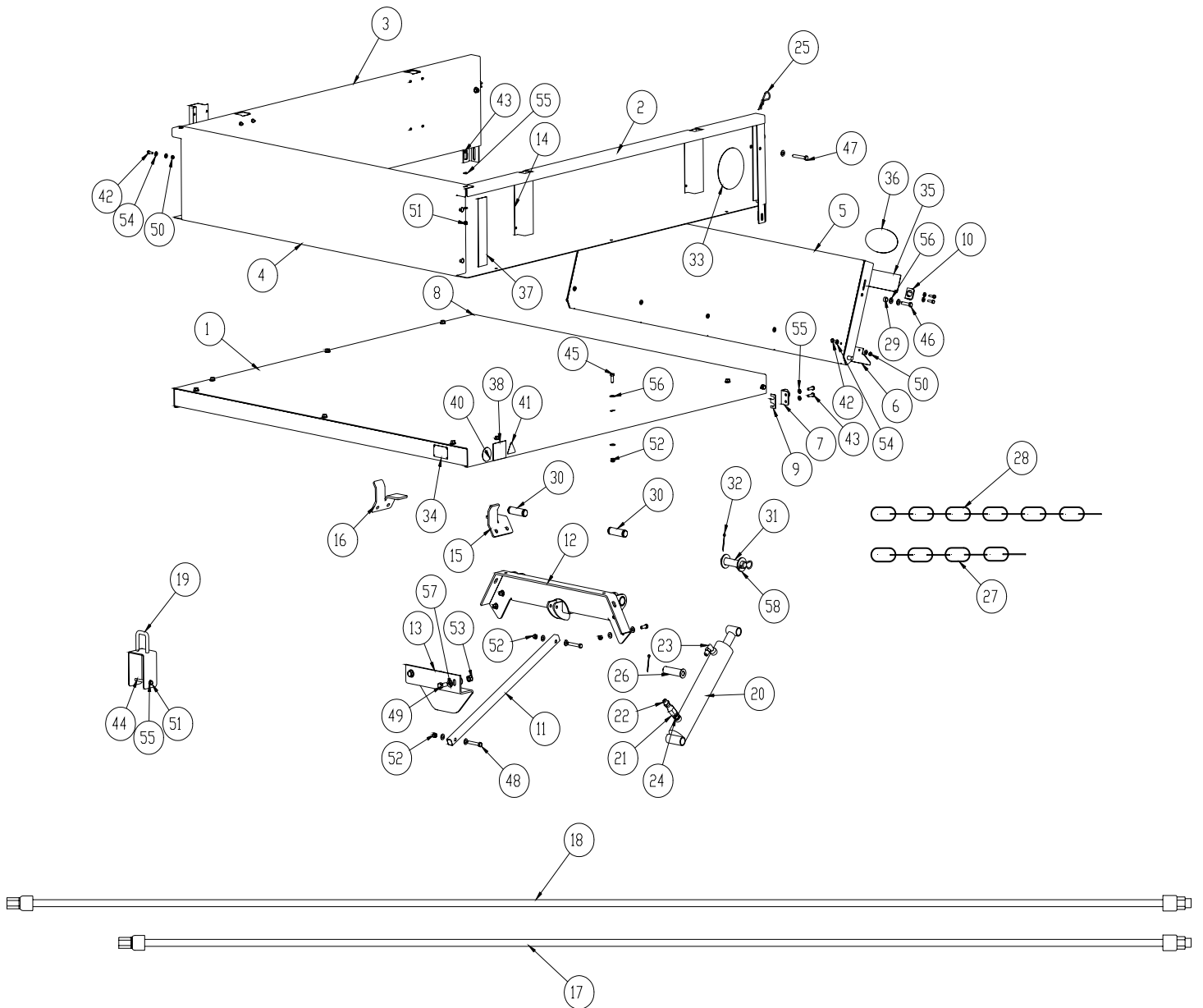
TYCROP Manufacturing Ltd.

9880 McGrath Rd
Rosedale, B.C.
Canada, V0X 1X0
1-877-892-7671

Joel Fast, Parts
Walt Neufeld, Service
Paul Berger, Service



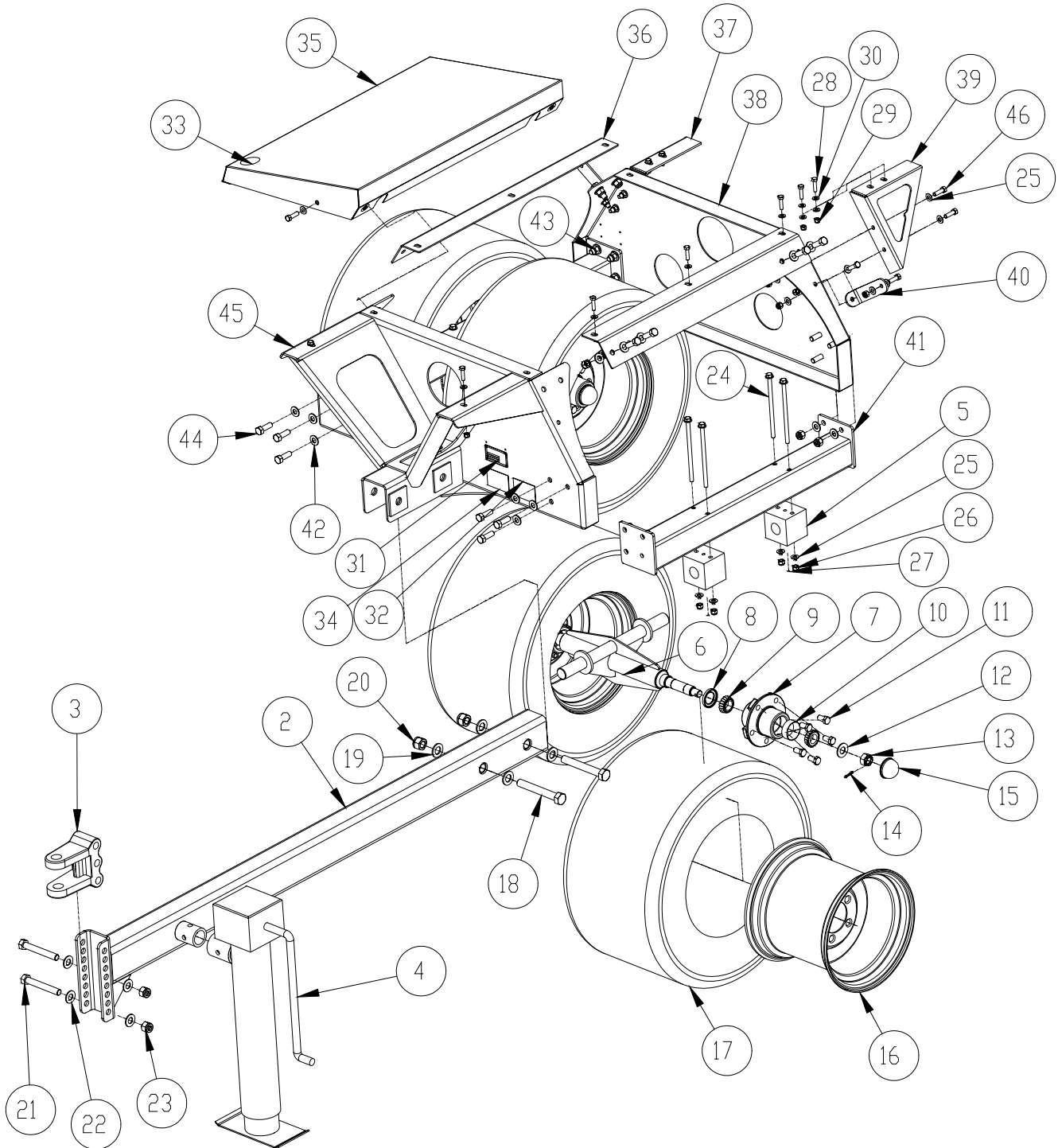
ITEM	PART DESCRIPTION	BATCH	TO BATCH	PART NO.	QTY
1	FLOOR WELDMENT – DIRTCUB			36071000	1
2	WALL – LH			36071010	1
3	WALL – RH			36071020	1
4	WALL – FRONT			36071030	1
5	TAILGATE			36071040	1
6	DEFLECTOR – TAILGATE			36071050	1
7	HINGE LH TAILGATE			36071060	1
8	HINGE RH TAILGATE			36071070	1
9	SHIM – TAILGATE			36071080	2
10	TAILGATE LATCH PLATE			36071090	2
11	TUBE – STIFFENER			36071100	1
12	BRACKET – REAR HINGE			36071105	1
13	BRACKET – CYLINDER FRONT			36071110	1
14	STAKE POCKET			36071115	4
15	GUIDE – BOX LH			36071120	1
16	GUIDE – BOX RH			36071125	1
17	HYDRAULIC HOSE – PRESSURE (84")			360711200	1
18	HYDRAULIC HOSE – RETURN (93")			36071210	1
19	GUIDE – HOSE			36053035	1
20	CYLINDER – HYDRAULIC			36071215	1
21	VALVE – THROTTLE			0002-0718	1
22	ADAPTER 1/2FPT X 1/2 MJIC			0002-0719	1
23	ELBOW 90 1/2MJIC - 1/2MPT			56091184	1
24	CONN NIPPLE 1/2MPT - 1/2MPT			56091114	1
25	HITCH PIN 5/32 X 3-5/16			50992360	3
26	PIN – BOTTOM CYLINDER			36071300	1
27	CHAIN – TAILGATE-HITCH PIN			36071305	2
28	CHAIN – TAILGATE-DIRTCUB			36071310	2
29	SPACER – TAILGATE CHAIN			36071315	2
30	PIN – BOX PIVOT WITH PINS			0002-0979	2
31	PIN – UPPER CYLINDER			36071320	1





ITEM	PART DESCRIPTION	BATCH	TO BATCH	PART NO.	QTY
32	COTTER PINS			50991016	2
33	DECAL – GET DUMPED			0002-0988	2
34	SERIAL PLATE			CALL DISTRIBUTOR	1
35	DECAL – TAILGATE			0002-0990	1
36	DECAL – TYCROP BRAND 2-1/2"X7"			0000-6033	1
37	DECAL – WALL "DIRTCUB"			0002-0989	2
38	DECAL – PAYLOAD			0002-1034	2
40	DECAL – TY-400 ISO "NO RIDERS"			60033505	2
41	DECAL – TY-398 ISO "FLUID HAZARD"			60033503	2
42	BOLT – GR8 ¼" x ¾"			50031002	21
43	BOLT – GR8 5/16" x 1-1/4"			50031038	8
44	BOLT – GR8 5/16" x 4"			50031060	1
45	BOLT – GR8 3/8" x 1"			50031070	17
46	BOLT – GR8 3/8" x 1-3/4"			50031076	2
47	BOLT – GR8 3/8" x 2-1/2"			50031082	2
48	BOLT – GR8 3/8" x 2-3/4"			50031084	2
49	BOLT – GR8 ½" x 1-1/4"			50031132	2
50	NUT – NYLOCK GR8 ¼"			50251000	21
51	NUT – NYLOCK GR8 5/16"			50251003	9
52	NUT – NYLOCK GR8 3/8"			50251002	23
53	NUT – NYLOCK GR8 ½"			50251004	2
54	WASHER – FLAT GR8 ¼"			50421029	42
55	WASHER – FLAT GR8 5/16"			50421026	18
56	WASHER – FLAT GR8 3/8"			50421028	48
57	WASHER – FLAT GR8 ½"			50421030	4
58	WASHER – FLAT GR8 1"			50421036	2

Tow Chassis

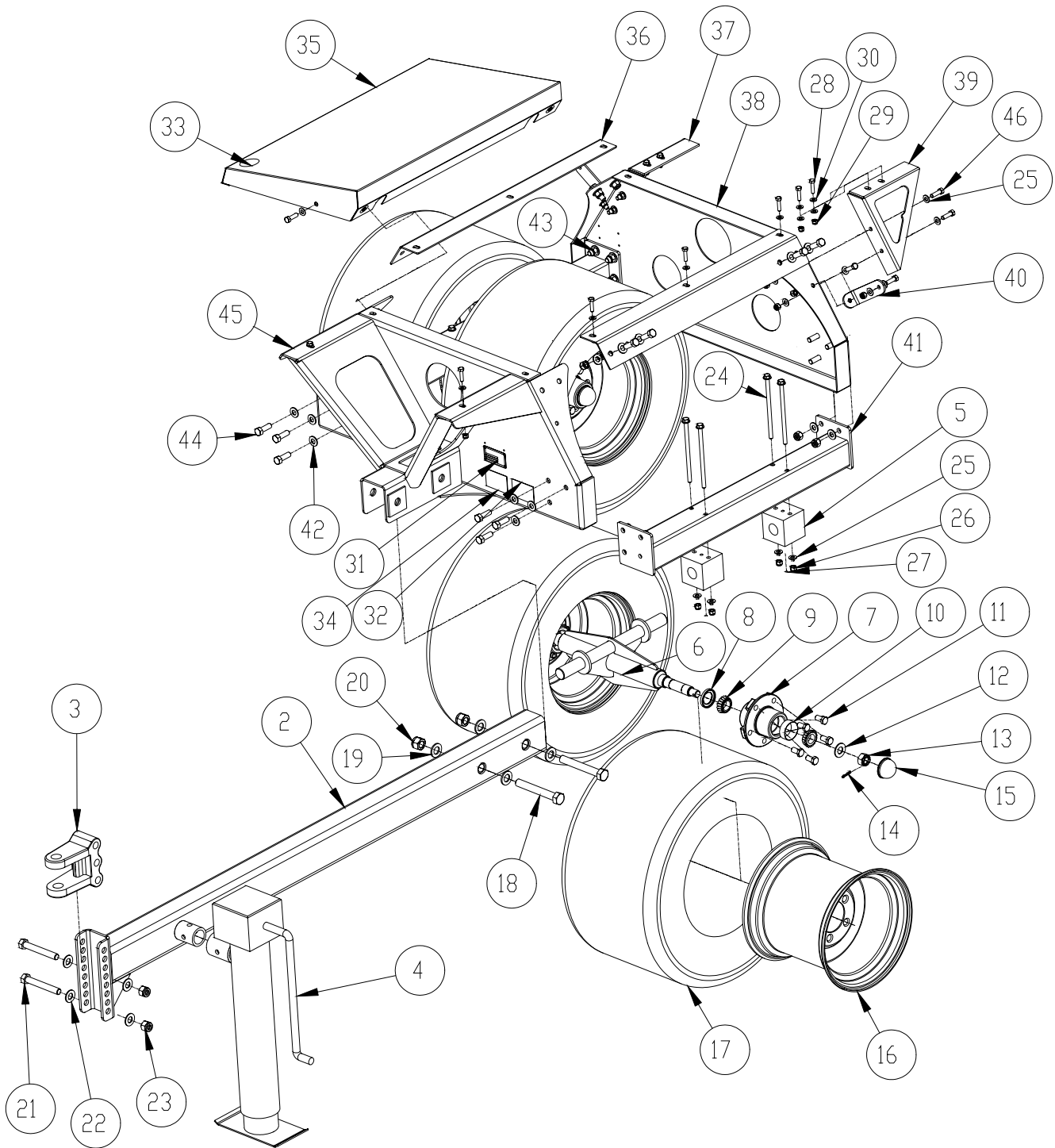


0002-1929



ITEM	PART DESCRIPTION	BATCH	TO BATCH	PART NO.	QTY
1	SUSPENSION CHASSIS—BOLTED	33625	-----	36052000	1
2	HITCH TUBE	33625	-----	36052110	1
3	HITCH CLEVIS	33625	-----	0001-9740	1
4	JACK - SIDEWIND	33625	-----	0000-3423	1
5	BEARING - WALKING BEAM	33625	-----	36032010	4
6	WALKING BEAM	33625	-----	36032020	2
7	HUB - 1250LB (Incl. Items 8,9,10,11,15)	33625	-----	54031034	4
8	SEAL - BEARING	33625	-----	54051017	4
9	BEARING - HUB	33625	-----	54050950	8
10	RACE - HUB	33625	-----	54051039	8
11	STUD - HUB	33625	-----	54051052	20
12	WASHER - SPINDLE	33625	-----	54051067	4
13	NUT - SPINDLE	33625	-----	54051057	4
14	COTTER PIN - 5/32" x 1-1/4"	33625	-----	50991013	4
15	CAP - HUB	33625	-----	54051031	4
16	WHEEL 12 x 10.5 x 5 BOLT	33625	-----	54011017	4
17	TIRE 24 x 13 12NHS ULTRA	33625	-----	68021070	4
18	BOLT - GR8 3/4" x 5"	33625	-----	50031258	2
19	WASHER - FLAT GR8 3/4"	33625	-----	50421034	4
20	NUT - NYLOCK GR8 3/4"	33625	-----	50251007	2
21	BOLT GR8 5/8" X 4-1/2"	33625	-----	50031214	2
22	WASHER - GR8 5/8"	33625	-----	50421032	4
23	NUT - NYLOCK GR8 5/8"	33625	-----	50251006	2
24	BOLT - GR8 3/8" x 6"	27341	33275	50031098	8
24	BOLT - GR8 3/8" X 7"	33625	-----	0001-6043	8
25	WASHER - FLAT GR8 METALOY 3/8"	33625	-----	50421028	40
26	NUT - NYLOCK GR8 3/8"	33625	-----	50251002	20
27	GREASE FITTING	33625	-----	50991112	4
28	BOLT - GR8 5/16" X 1-1/4"	33625	-----	50031040	12
29	NUT - NYLOCK GR8 5/16"	33625	-----	50251003	12
30	WASHER - FLAT GR8 METALOY 5/16"	33625	-----	50421026	24
31	SERIAL NUMBER PLATE	33625	-----	CALL DISTRIB.	1
32	DECAL - TY-399 ISO LOAD CAPACITY	33625	-----	60033504	1

Tow Chassis



0002-1929



ITEM	PART DESCRIPTION	BATCH	TO BATCH	PART NO.	QTY
33	DECAL - TY-416 ISO NO STEP (N/A TO DIRT CUB)	33625	-----	60033520	2
34	DECAL - TY-411 ISO NO TRAVELLING	33625	-----	60033516	1
35	FENDER – PROPASS BOLT-ON (N/A TO DIRT CUB)	33625	-----	36052320	2
36	CROSS MEMBER – PROPASS TOP	33625	-----	36052305	2
37	GUSSET – PASS REAR (N/A TO DIRT CUB)	33625	-----	36052306	1
38	BRACE—FRAME	33625	-----	36052300	1
39	GUSSET – DRIVER REAR (N/A TO DIRT CUB)	33625	-----	36052307	1
40	SUPPORT – FENDER (N/A TO DIRT CUB)	33625	-----	36052325	4
41	CROSS MEMBER – PROPASS BOTTOM	33625	-----	36052340	2
42	WASHER - FLAT GR8 1/2"	33625	-----	50421030	40
43	NUT - NYLOCK GR8 1/2"	33625	-----	50251004	20
44	BOLT - GR8 1/2" x 1-1/2"	33625	-----	50031134	20
45	BRACE - FRONT FRAME	33625	-----	36052302	1
46	BOLT – GR8 3/8" x 1-1/4"	33625	-----	50031072	4