

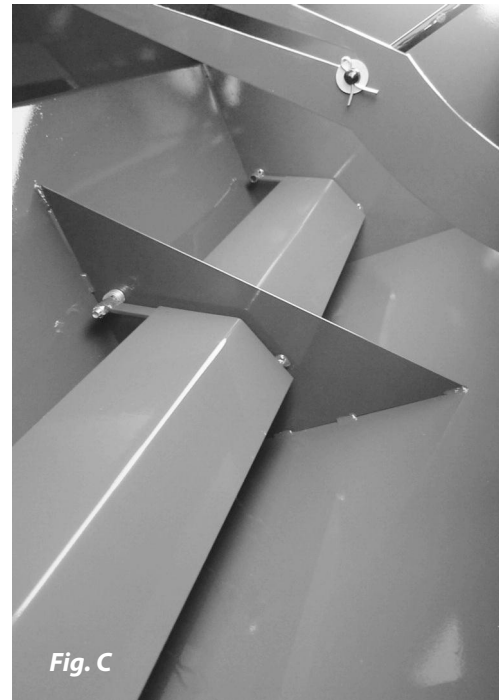
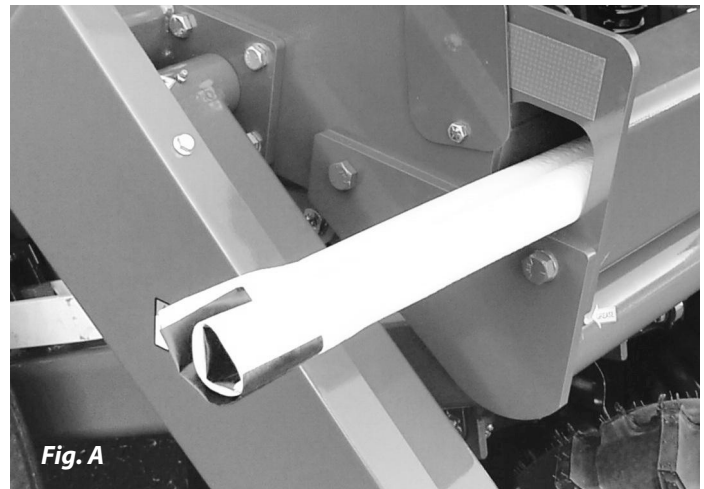
ESCH 5610 DRILL

Operator's Manual and Parts List



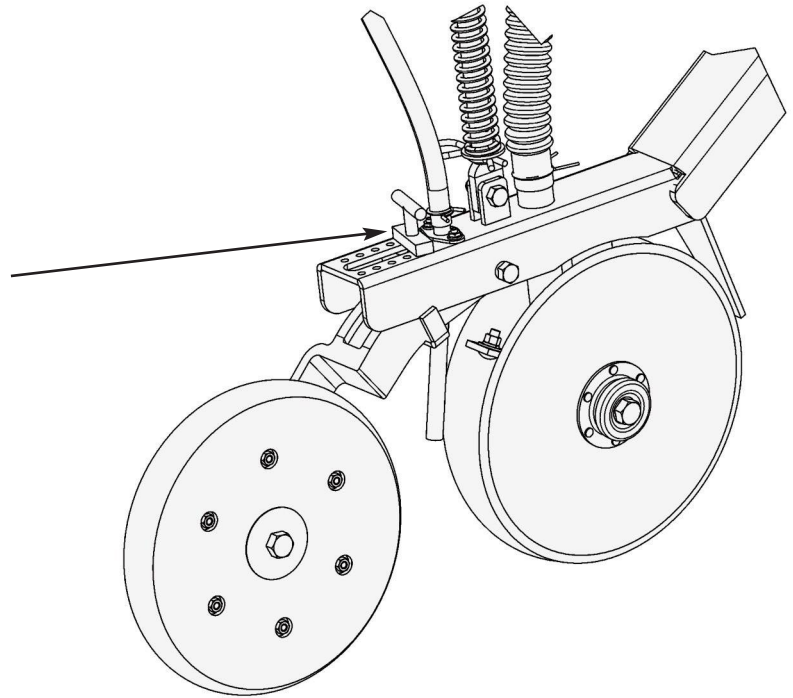
Seed Calibrations and Settings

- Remove plastic from frame (see Fig. A).
- Place plastic under drill to collect seeds for calibration (see Fig. B).
- See seed chart on lid for further instructions. Note: Be sure to turn drive wheel the correct direction. **WARNING: turning drive wheel too fast will result in wrong calibration. Turn wheel at ground speed.**
- When placing seed in hopper, keep seed baffles down (see Fig.C).
- Keep baffles in up position when seeding fluffy seed.



Setting Seeding Depth

- No-till coulters depth can only be set by lowering and raising drill.
- Set no-till coulters approximately 1/2" to 1" deeper than seeding depth.
- Seeding depth can be adjusted by sliding T-handle forward for shallow and backward for deeper.



Safety

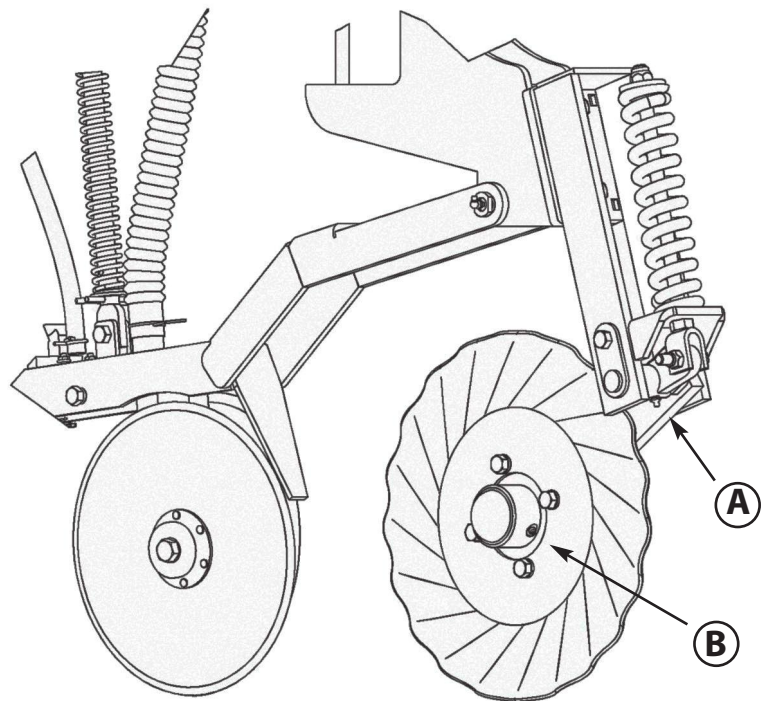
- Do not ride on drill while moving.
- Do not make sharp turns while drill is down.
- Raise drill when going over rocks that are above ground.

Storage

- Do not store in area where there are lots of mice. Mice like to chew the foams if they can get in the seed box.

Maintenance

- Grease coulters arms: every 10 hours. **(A)**
- Grease coulters hubs: every 50 hours. **(B)**
- Grease all other zerks: every 20 hours.



Replacing Foams

- Remove shield on back side of drill (wing nuts).
- Remove shield on left side of seed box.
- Loosen set screws where square shaft slides into round coupler.
- Now shaft is ready to pull out.
- Foam can be cut from plate with a sharp knife or razor.
- Set foams and plate on a piece of card board.
- Spray foams and plates with a spray adhesive.
- Leave set for approximately 1 minute before setting foam on plate.

Trouble Shooting

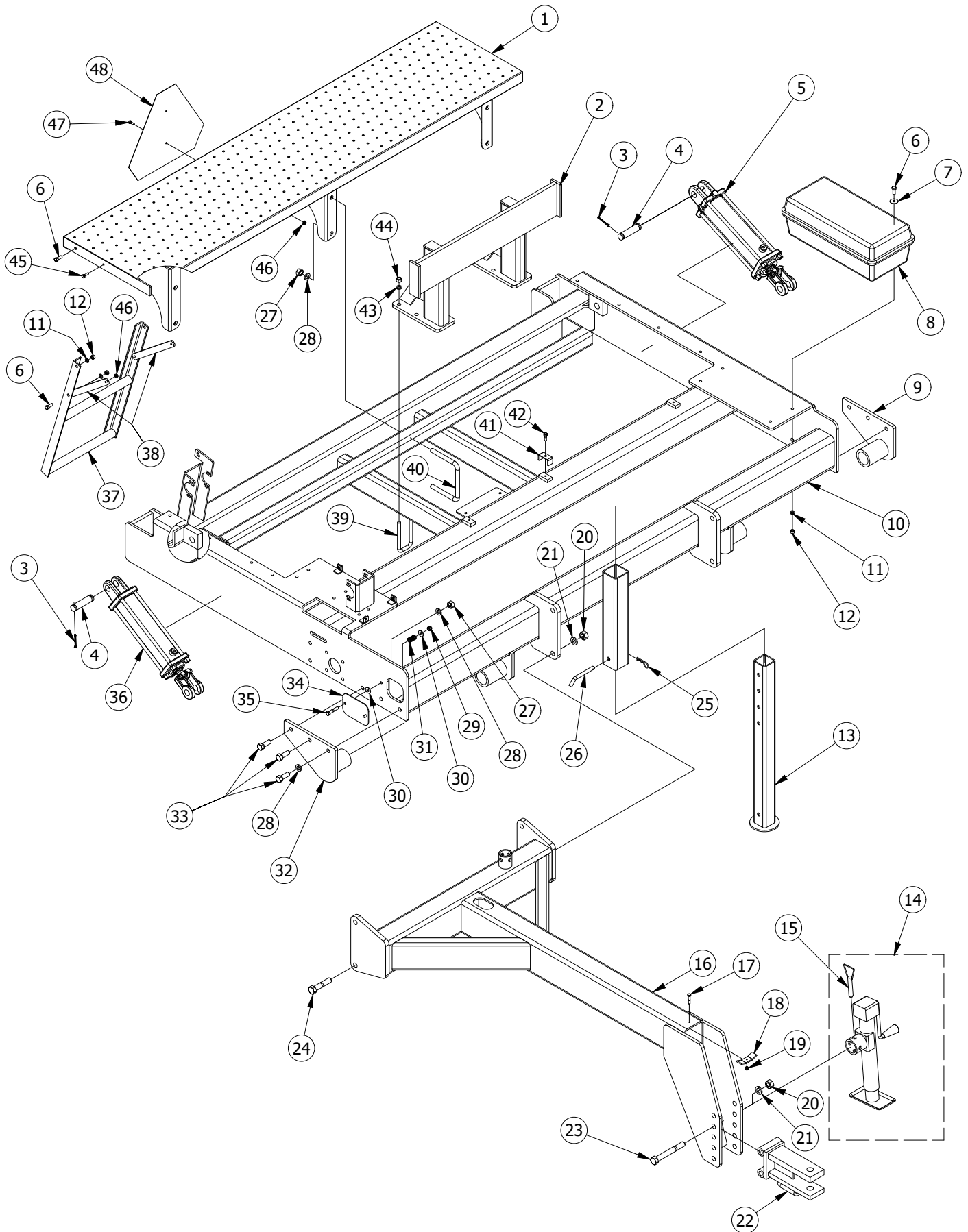
1 - Seed flows faster on one row:

Foam may be torn or mouse may have chewed a hole in the foam.

2 - One side of drill is lower than other side:

Raise drill the whole way up to reallign.

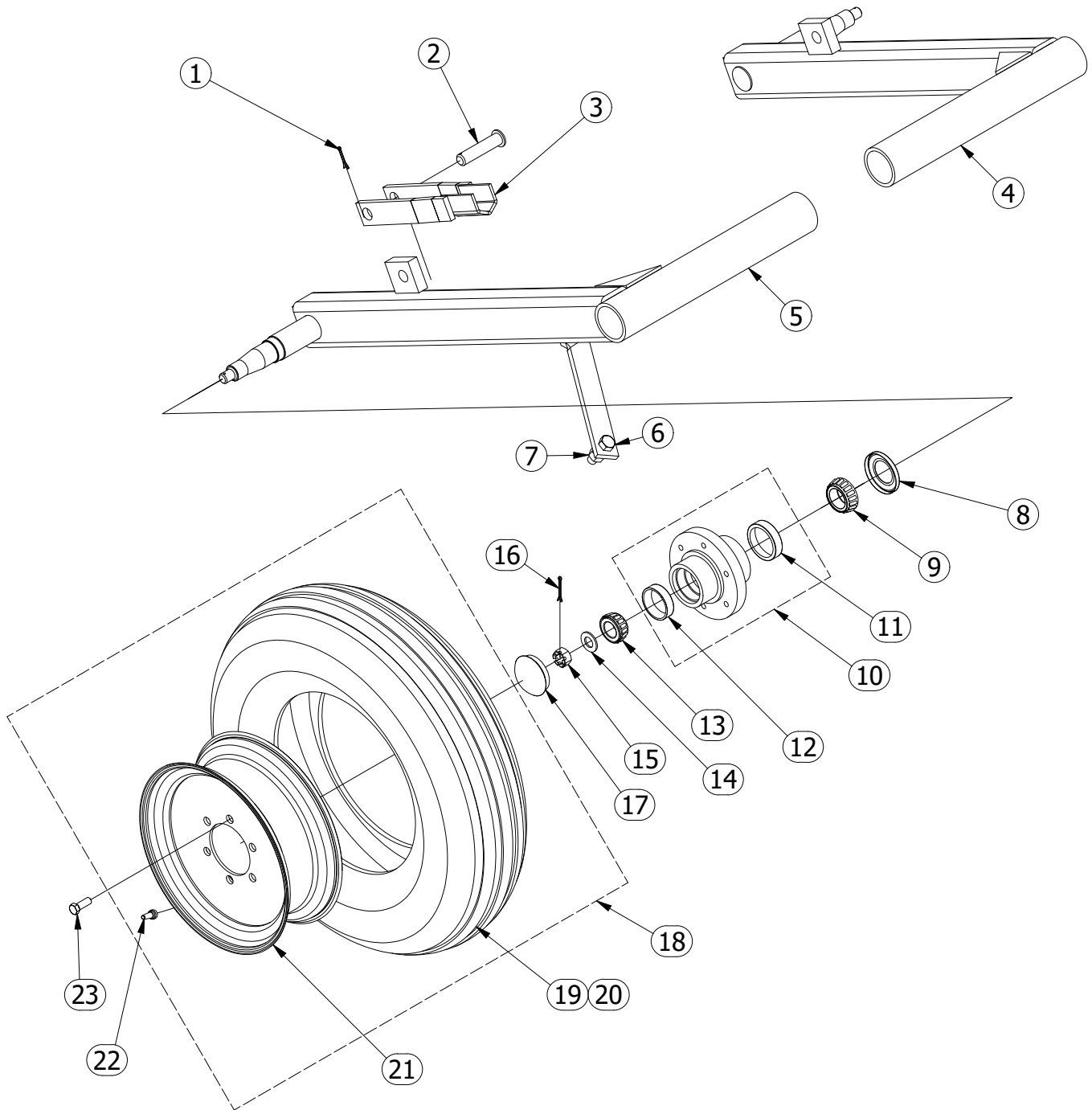
FRAME ASSEMBLY - 5610 DRILL



FRAME ASSEMBLY - 5610 DRILL

PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	COMMENTS
1	1	112620	PLATFORM	
2	2	111620	WEIGHT BRACKET	
3	4	91100800	5/32 x 2 COTTER PIN	
4	2	1124	PIN	
5	1	1127	HYDRAULIC CYLINDER	SEAL KIT - 1127K
6	8	12416045	3/8-16 UNC X 1 HEX BOLT	
7	4	72405000	FENDER WASHER	
8	1	1115	TOOL BOX	
9	1	110820	SUPPORT - LEFT	
10	1	112520	FRAME - 10 FT DRILL	
11	8	62400000	3/8 LOCK WASHER	
12	8	32416005	3/8 - 16 HEX NUT	
13	1	111020	TRANSPORT JACK	
14	1	1101	JACK	
15	1	1102	PIN	
16	1	110420	TONGUE	
17	1	11620065	HEX BOLT	
18	1	111220	HOSE CLAMP	
19	1	51620002	1/4 - 20 HEX LOCK NUT	
20	6	34810005	3/4 - 10 HEX NUT	
21	6	64800000	3/4 LOCK WASHER	
22	1	110320	HITCH	
23	2	14810245	3/4-10 UNC X 6 HEX BOLT	
24	4	14810145	3/4-10 UNC X 3.5 HEX BOLT	
25	1	1128	1/8 HAIRPIN	
26	1	1111	PIN	
27	11	34011005	5/8 - 11 HEX NUT	
28	10	64000000	5/8 LOCK WASHER	
29	1	52416005	3/8 - 16 HEX LOCK NUT	
30	1	72400000	3/8 WASHER	
31	1	1613	SPRING	
32	1	110920	SUPPORT RIGHT	
33	6	14011075	5/8-11 UNC X 1.75 HEX BOLT	
34	1	112320	TARP COVER	
35	1	12416085	3/8-16 UNC X 2 HEX BOLT	
36	1	1106	HYDRAULIC CYLINDER	SEAL KIT - 1106K
37	1	112020	LADDER	
38	2	112120	BRACE	
39	8	1117	U BOLT	
40	3	1118	U BOLT	
41	6	1075	HOSE CLIP	
42	6	12018045	5/16-18 UNC X 1 HEX BOLT	
43	16	63200000	1/2 LOCK WASHER	
44	16	33213005	1/2 - 13 HEX NUT	
45	2	11620045	1/4-20 UNC X 1 HEX BOLT	
46	4	41620005	1/4 - 20 HEX FLANGE NUT	
47	2	11620035	1/4-20 UNC X 0.75 HEX BOLT	
48	1	1122	SMV	

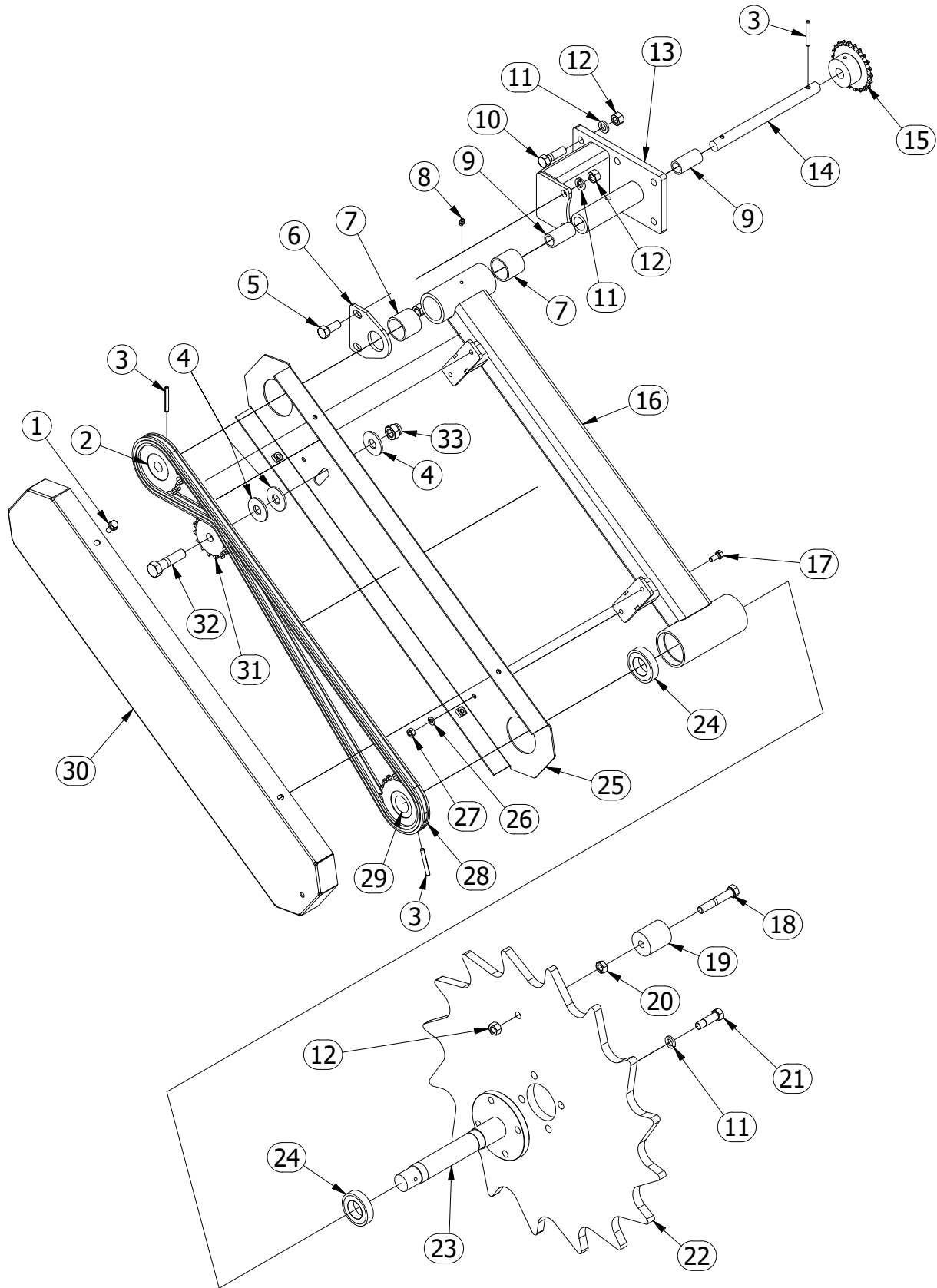
LIFT WHEEL ASSEMBLY - 5610 DRILL



LIFT WHEEL ASSEMBLY - 5610 DRILL

PARTS LIST				
ITEM	QTY	PART #	DESCRIPTION	COMMENTS
1	2	91120600	3/16 x 1 1/2 COTTER PIN	
2	2	1167	PIN	
3	2	1166	CYLINDER PROP	
4	1	117120	WHEEL ARM LEFT	
5	1	117220	WHEEL ARM RIGHT	
6	1	14810105	3/4-10 UNC X 2.5 HEX BOLT	
7	1	34810005	3/4 - 10 HEX NUT	
8	2	1174	WHEEL SEAL	
9	2	1176	BEARING	
10	2	117320	WHEEL HUB - 6 HOLE	INCLUDES #1175, 1177
11	2	1175	BEARING CUP	
12	2	1177	BEARING CUP	
13	2	1178	BEARING	
14	2	85600000	7/8 SAE WASHER	
15	2	1663	7/8 - 14 SLOTTED HEX NUT	
16	2	91100800	5/32 x 2 COTTER PIN	
17	2	117920	HUB CAP	
18	1	116520	WHEEL ASSEMBLY	INCLUDES 1164, 116320, 1162, 1190
19	2	1162	TIRE	
20	2	1164	INNER TUBE	
21	2	116320	RIM	
22	2	1190	VALVE STEM	
23	12	1180	LUG BOLT	

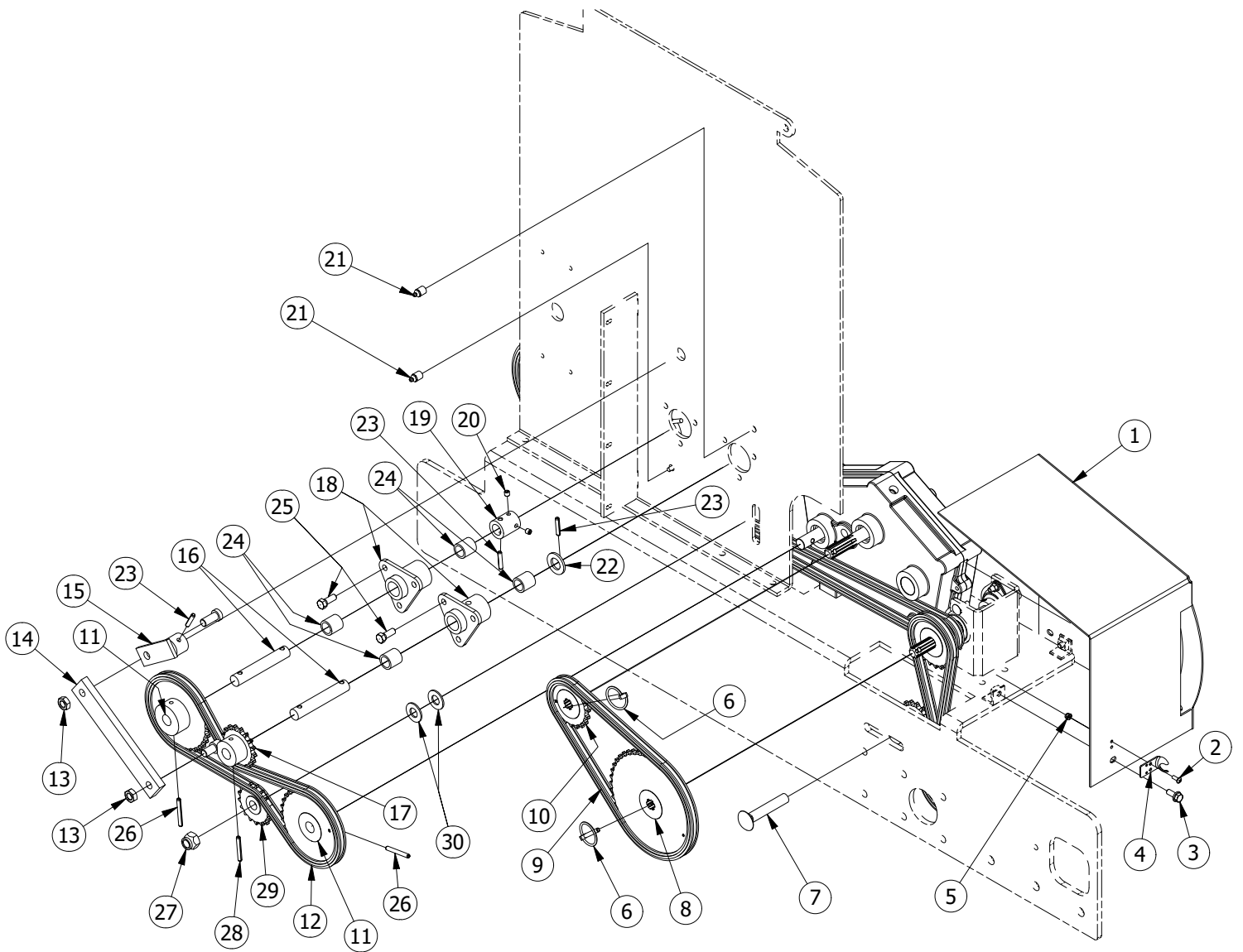
DRIVE ARM - 5610 DRILL



DRIVE ARM - 5610 DRILL

PARTS LIST				
ITEM	QTY	PART #	DESCRIPTION	COMMENTS
1	4	12018032	5/16-18 X 0.75 FLANGE BOLT	
2	1	1517	SPROCKET - 20T	
3	3	93160800	1/4 x 2 ROLL PIN	
4	3	74000000	5/8 WASHER	
5	2	13213055	1/2-13 UNC X 1.25 HEX BOLT	
6	1	150220	SUPPORT	
7	2	1518	BUSHING	
8	1	Z1428	ZERK	
9	2	1519	BUSHING	
10	6	13213075	1/2-13 UNC X 1.75 HEX BOLT	
11	12	63200000	1/2 LOCK WASHER	
12	9	33213005	1/2 - 13 HEX NUT	
13	1	150120	SUPPORT	
14	1	1520	SHAFT	
15	1	1527	SPROCKET - 22T	
16	1	153120	DRIVE WHEEL ARM	
17	4	12018035	5/16-18 UNC X 0.75 HEX BOLT	
18	1	13213128	1/2-13 UNC X 3 HEX BOLT	
19	1	1511	SLEEVE	
20	1	53213002	1/2 - 13 HEX JAM NUT	
21	4	13220075	1/2-20 UNF X 1.75 HEX BOLT	
22	1	1521	STEEL DRIVE WHEEL	
23	1	153220	DRIVE WHEEL SPINDLE	
24	2	153320	BEARING	
25	1	153520	DRIVE ARM INNER SHIELD	
26	4	62000000	5/16 LOCK WASHER	
27	4	32018005	5/16 - 18 HEX NUT	
28	1	1515	#50 CHAIN - 112 LINKS	
29	1	1514	SPROCKET - 20T	
30	1	153620	DRIVE ARM OUTER SHEILD	
31	1	1516	IDLER SPROCKET	
32	1	14011105	5/8-11 UNC X 2.5 HEX BOLT	
33	1	54011005	5/8 - 11 HEX LOCK NUT	

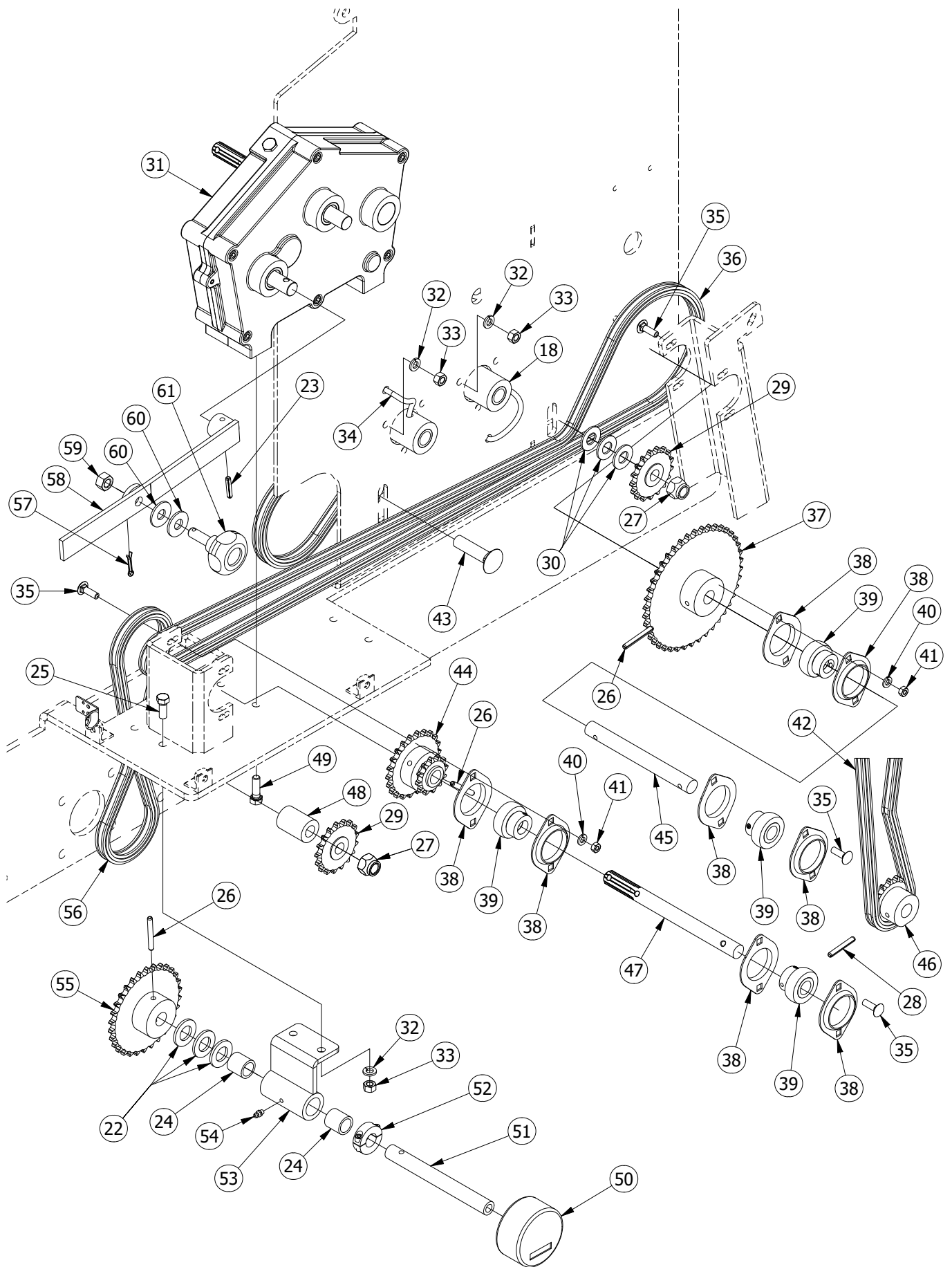
DRIVE ASSEMBLY - OUTSIDE - 5610 DRILL



DRIVE ASSEMBLY - OUTSIDE - 5610 DRILL

PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	COMMENTS
1	1	140320	GEARBOX SHIELD	
2	2	11024022	10 - 24 X 1/2 PAN HEAD SCREW	
3	3	12018032	5/16-18 X 0.75 FLANGE BOLT	
4	1	1404	HOOD LATCH SUPPORT	
5	2	51024002	No. 10 - 24 HEX LOCK NUT	
6	2	1421	LINCH PIN	
7	1	24011145	5/8-11 X 3.5 CARRIAGE BOLT	
8	1	1419	SPROCKET - 45T	
9	1	1420	#40 CHAIN 67 LINKS	
10	1	1418	SPROCKET - 20T	
11	2	1410	SPROCKET - 32T	
12	1	1426	#40 CHAIN 84 LINKS	
13	2	53213002	1/2 - 13 HEX JAM NUT	
14	1	1407	AGITATOR LINK	
15	1	1406	AGITATOR ARM	
16	2	1412	SEED BOX JACK SHAFT	
17	1	1408	SPROCKET - 17T	
18	2	141620	TRIANGLE HUB	
19	1	1411	SQUARE COUPLER	
20	2	1414	5/16-18 X 0.31 SET SCREW	
21	2	Z18FP	ZERK	
22	1	84800000	3/4 SAE WASHER	
23	3	93160500	1/4 x 1 1/4 ROLL PIN	
24	4	1415	BRONZE BUSHING	
25	6	12416045	3/8-16 UNC X 1 HEX BOLT	
26	2	93160800	1/4 x 2 ROLL PIN	
27	1	54011005	5/8 - 11 HEX LOCK NUT	
28	1	93160700	1/4 x 1 3/4 ROLL PIN	
29	1	1409	IDLER SPROCKET	
30	2	84000000	5/8 SAE WASHER	

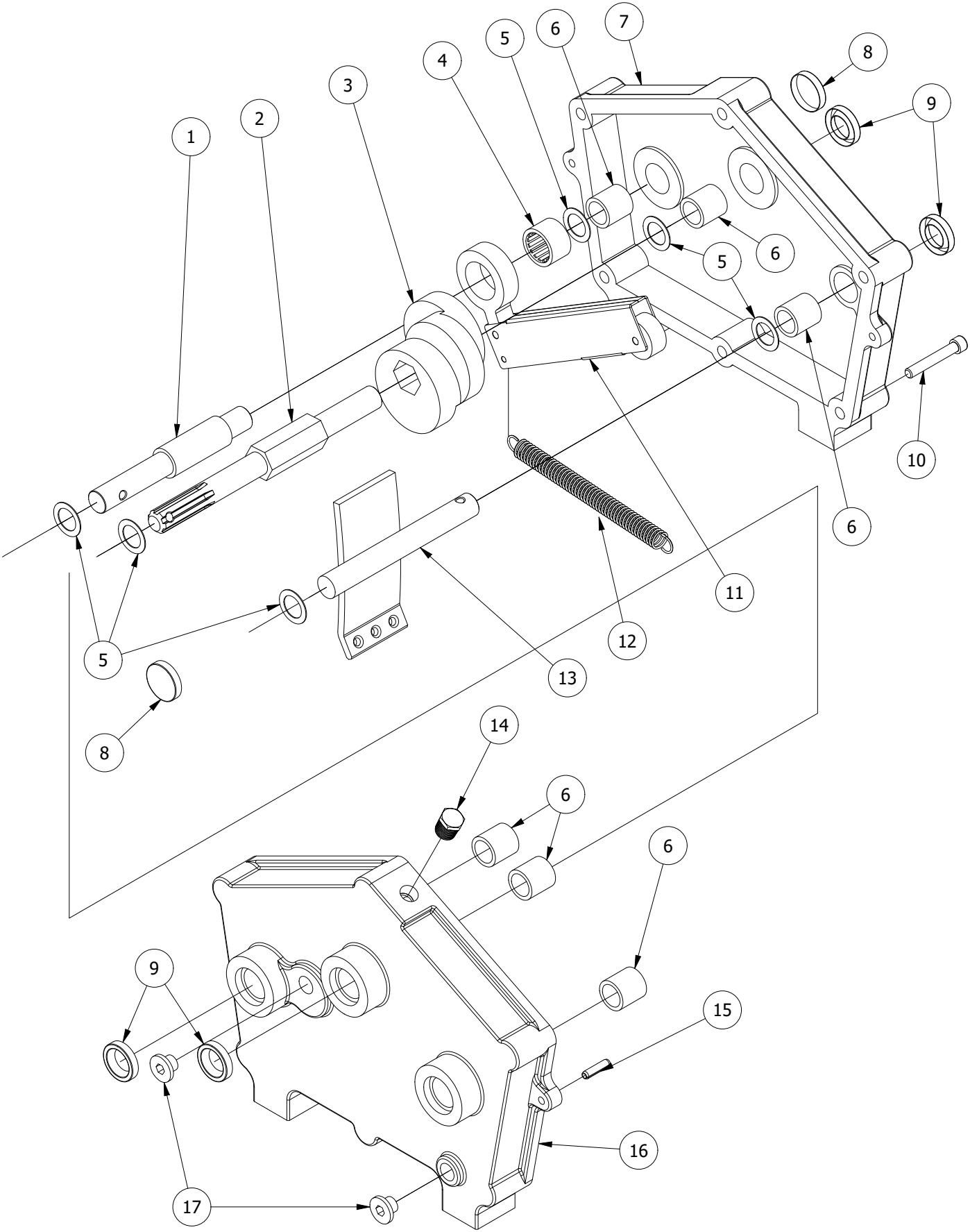
DRIVE ASSEMBLY - INSIDE - 5610 DRILL



DRIVE ASSEMBLY - INSIDE - 5610 DRILL

PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	COMMENTS
22	3	84800000	3/4 SAE WASHER	
23	1	93160500	1/4 x 1 1/4 ROLL PIN	
24	2	1415	BRONZE BUSHING	
25	2	12416045	3/8-16 UNC X 1 HEX BOLT	
26	3	93160800	1/4 x 2 ROLL PIN	
27	2	54011005	5/8 - 11 HEX LOCK NUT	
28	1	93160700	1/4 x 1 3/4 ROLL PIN	
29	2	1409	IDLER SPROCKET	
30	3	84000000	5/8 SAE WASHER	
31	1	1401	GEARBOX	
32	12	62400000	3/8 LOCK WASHER	
33	8	32416005	3/8 - 16 HEX NUT	
34	2	1417	GREASE HOSE	
35	8	22018042	5/16-18 X 1 CARRIAGE BOLT	
36	1	1439	#40 CHAIN 172 LINKS	
37	1	1435	SPROCKET - 42T	
38	8	1424	BEARING FLANGE	
39	4	1423	BEARING	
40	8	62000000	5/16 LOCK WASHER	
41	8	32018005	5/16 - 18 HEX NUT	
42	1	1438	#40 CHAIN 93 LINKS	
43	2	24011105	5/8-11 X 2.5 CARRIAGE BOLT	
44	1	1425	SPROCKET - 22T, 12T	
45	1	1436	SHAFT	
46	1	1437	SPROCKET - 16T	
47	1	1422	SPLINE SHAFT	
48	1	1428	SPACER	
49	4	12416055	3/8-16 UNC X 1.25 HEX BOLT	
50	1	1440	ACRE METER	
51	1	1430	ACRE METER SHAFT	
52	1	1433	SHAFT COLLAR	
53	1	143220	SUPPORT	
54	1	Z1428	ZERK	
55	1	1441	SPROCKET - 27T	
56	1	1434	#40 CHAIN 67 LINKS	
57	1	91100400	5/32 x 1 COTTER PIN	
58	1	1402	GEARBOX LEVER	
59	1	33213005	1/2 - 13 HEX NUT	
60	2	73200000	1/2 WASHER	
61	1	1405	KNOB	

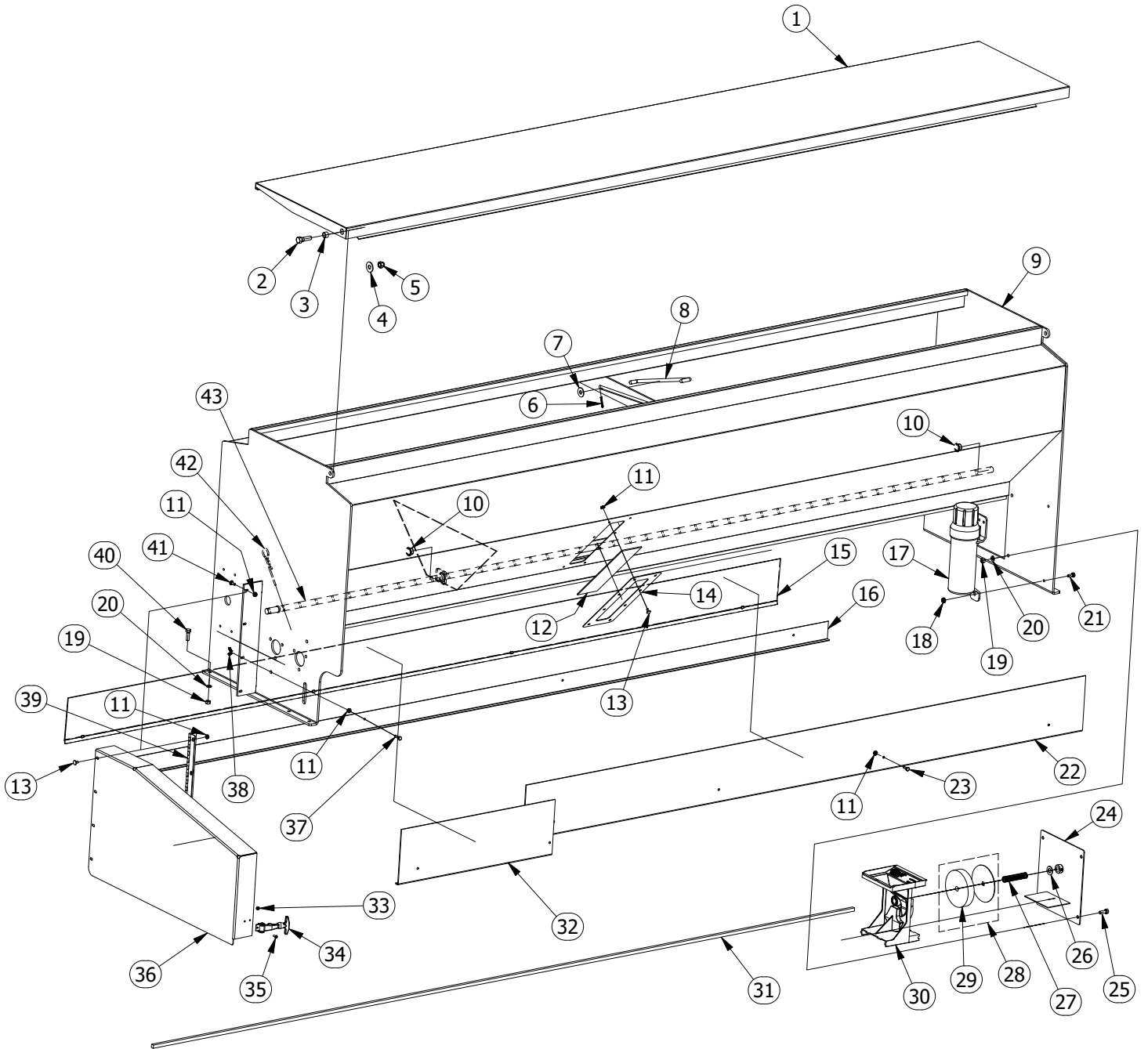
GEARBOX - 5610 DRILL



GEARBOX - 5610 DRILL

PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	COMMENTS
1	1	1308	CAM ARM SHAFT	
2	1	1304	SHAFT	
3	1	1305	GEARBOX CAM	
4	3	1307	CLUTCH BEARING	
5	6	1316	SHIM WASHER	
6	6	1415	BRONZE BUSHING	
7	1	1301	GEARBOX LEFT CASTING	INCLUDES #1310, 1311, 1415
8	2	1311	CAP	
9	4	1310	SEAL	
10	6	1312	SOCKET HEAD BOLT	
11	3	1306	GEARBOX ARM	
12	3	1309	GEARBOX SPRING	
13	1	1303	CAM GUIDE	
14	1	1315	BREATHER PLUG	
15	2	93160400	1/4 x 1 ROLL PIN	
16	1	1302	GEARBOX RIGHT CASTING	INCLUDES #1310, 1415
17	2	1314	PLUG	

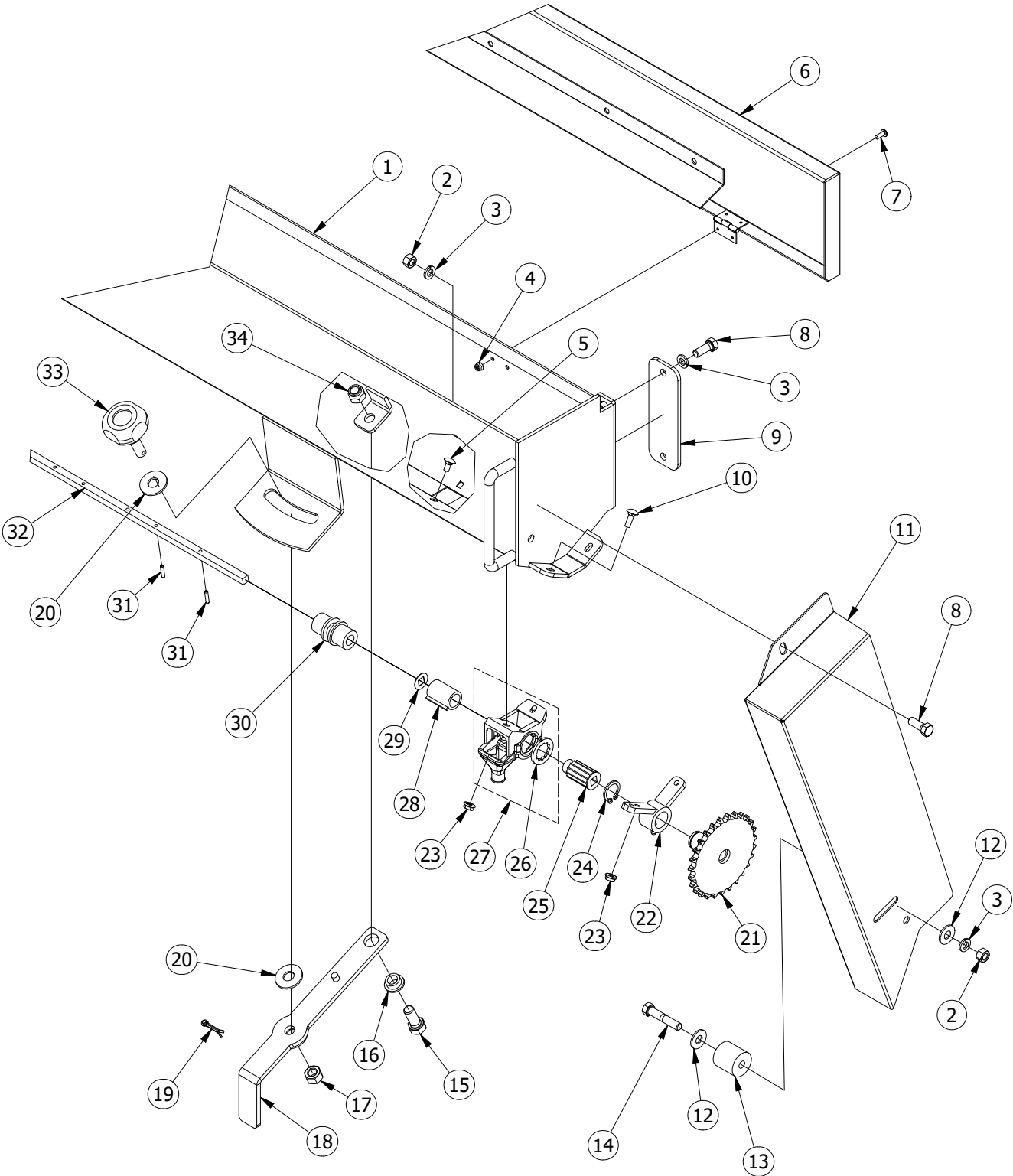
SEED BOX ASSEMBLY - 5610 DRILL



SEED BOX ASSEMBLY - 5610 DRILL

PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	COMMENTS
1	1	122220	SEED BOX LID	
2	2	13213075	1/2-13 UNC X 1.75 HEX BOLT	
3	2	1658	BUSHING	
4	2	73200000	1/2 WASHER	
5	2	53213005	1/2 - 13 HEX LOCK NUT	
6	2	91100400	5/32 x 1 COTTER PIN	
7	1	72800000	7/16 WASHER	
8	1	1203	LID GUIDE	
9	1	122120	SEED BOX	
10	5	1214	BUSHING	
11	33	41620005	1/4 - 20 HEX FLANGE NUT	
12	1	1254	SEED BOX WINDOW	
13	12	21620022	1/4-20 X 0.5 CARRIAGE BOLT	
14	1	125520	SEED BOX WINDOW FRAME	
15	1	122520	REAR SHEILD REMOVABLE	
16	1	122420	REAR SHIELD	
17	1	1220	MANUAL HOLDER	
18	2	41818005	5/16 - 18 HEX FLANGE NUT	
19	12	32416005	3/8 - 16 HEX NUT	
20	12	62400000	3/8 LOCK WASHER	
21	2	12018035	5/16-18 UNC X 0.75 HEX BOLT	
22	1	1229	FRONT SHIELD - LEFT	
23	6	11620035	1/4-20 UNC X 0.75 HEX BOLT	
24	1	120820	COVER	
25	4	12416045	3/8-16 UNC X 1 HEX BOLT	
26	21	83600000	9/16 SAE WASHER	
27	21	1212	SPRING	
28	21	1210	FOAM PLATE	
29	21	1211	FOAM	
30	21	1209	SEED CHUTE	
31	1	1226	SEED BOX DRIVE SHAFT	
32	1	1223	FRONT SHIELD - RIGHT	
33	2	51024002	10 - 24 HEX LOCK NUT	
34	1	1219	HOOD LATCH	
35	2	11024022	10 - 24 X 1/2 PAN HEAD SCREW	
36	1	121820	GEARBOX SHIELD	
37	11	11620045	1/4-20 UNC X 1 HEX BOLT	
38	4	1207	WING NUT	
39	1	121720	HINGE	
40	8	12416055	3/8-16 UNC X 1.25 HEX BOLT	
41	4	21620032	1/4-20 X 0.75 CARRIAGE BOLT	
42	43	1216	AGITATOR CLIP	
43	1	1227	AGITATOR SHAFT	

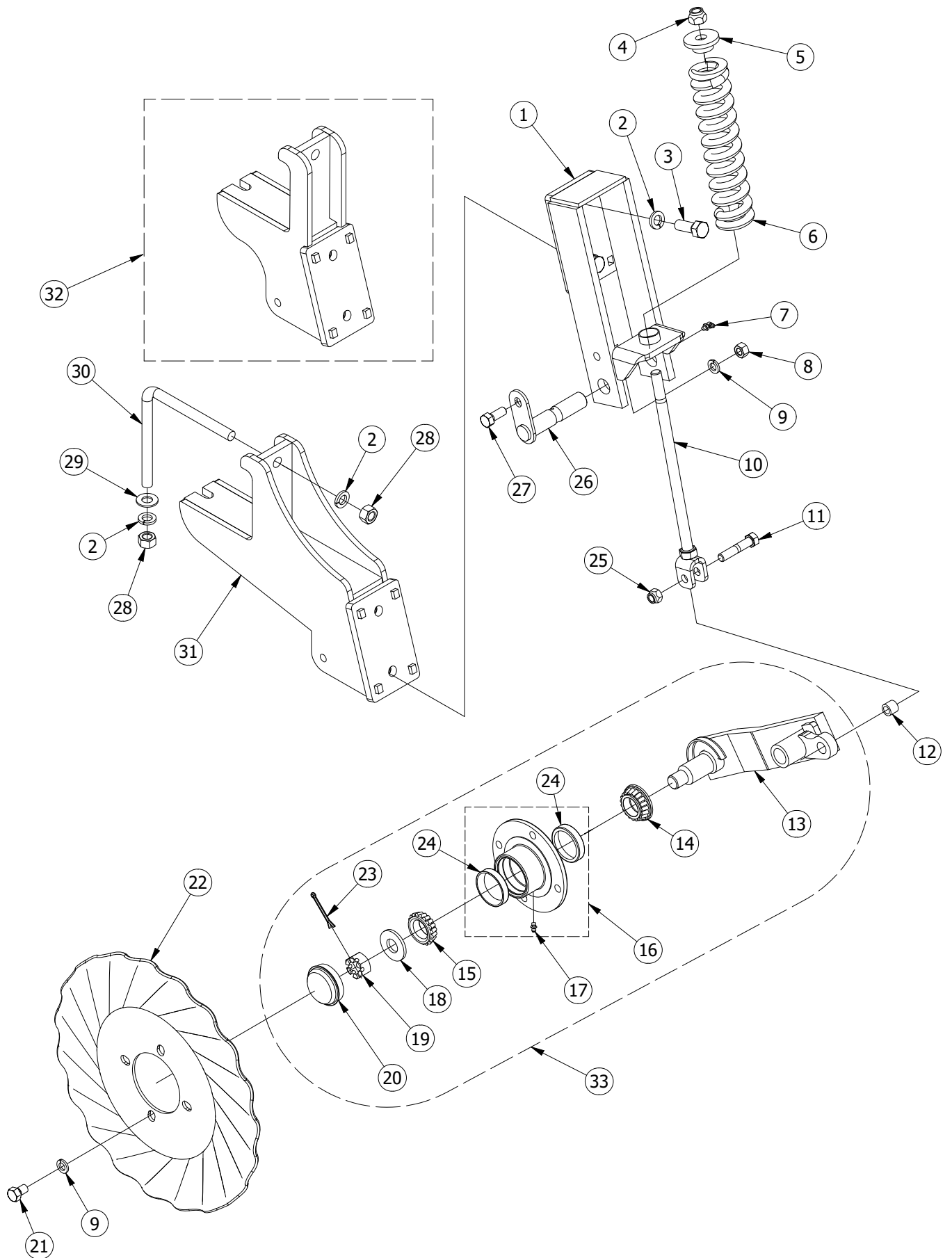
SMALL SEED BOX - 5610 DRILL



SMALL SEED BOX - 5610 DRILL

PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	COMMENTS
1	1	192120	SEED BOX	
2	2	32416005	3/8 - 16 HEX NUT	
3	6	62400000	3/8 LOCK WASHER	
4	6	51024002	10 - 24 HEX LOCK NUT	
5	42	21620022	1/4-20 X 0.5 CARRIAGE BOLT	
6	1	192220	LID	
7	6	11024022	10 - 24 X 1/2 PAN HEAD SCREW	
8	5	12416045	3/8-16 UNC X 1 HEX BOLT	
9	2	190020	SMALL SEED BOX SUPPORT	
10	2	21620032	1/4-20 X 0.75 CARRIAGE BOLT	
11	1	191420	SHIELD	
12	2	72400000	3/8 WASHER	
13	1	1915	CHAIN TIGHTNER	
14	1	12416085	3/8-16 UNC X 2 HEX BOLT	
15	1	13213055	1/2-13 UNC X 1.25 HEX BOLT	
16	1	1916	SMALL SEED BOX LEVER BUSHING	
17	1	33213005	1/2 - 13 HEX NUT	
18	1	1910	SMALL BOX LEVER	
19	1	91100400	5/32 x 1 COTTER PIN	
20	2	73200000	1/2 WASHER	
21	1	1912	SPROCKET 27T	
22	1	1911	BEARING	
23	44	41620005	1/4 - 20 HEX FLANGE NUT	
24	1	1913	EXTERNAL RETAINING RINGS	
25	21	1906	SEED SPROCKET	
26	21	1905	SEED WASHER	
27	21	1904	SEED CUP	
28	21	1907	SLEEVE	
29	21	1908	WASHER	
30	1	1909	ADJUSTMENT COLLAR	
31	43	93100300	5/32 x 3/4 ROLL PIN	
32	1	1923	SMALL SEED BOX SHAFT	
33	1	1405	KNOB	
34	1	53213005	1/2 - 13 HEX LOCK NUT	

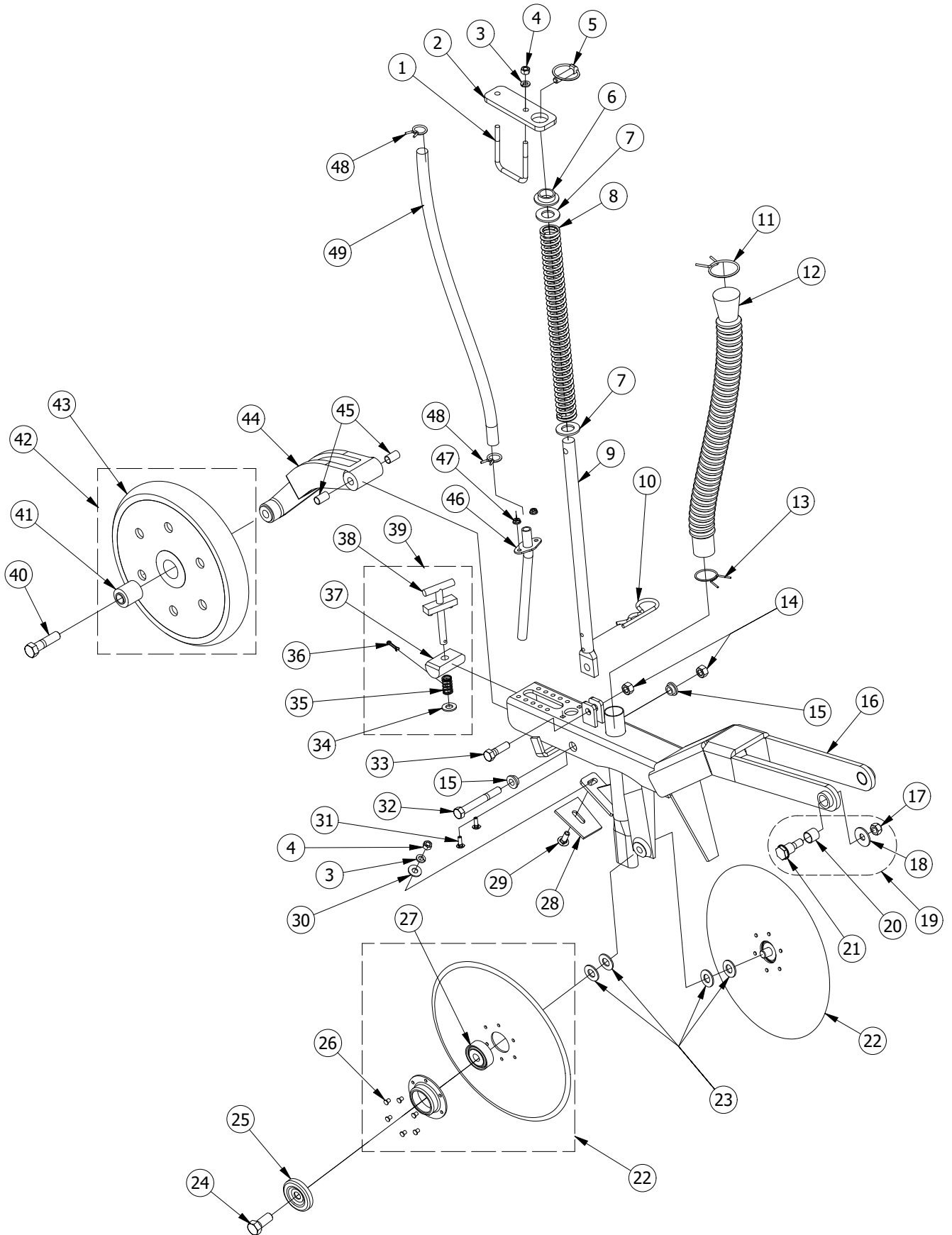
COULTER UNIT - 5610 DRILL



COULTER UNIT - 5610 DRILL

PARTS LIST				
ITEM	QTY	PART NUMBER	DESCRIPTION	COMMENTS
1	21	165320	COULTER ARM MOUNT	
2	84	64000000	5/8 LOCK WASHER	
3	42	14011075	5/8-11 UNC X 1.75 HEX BOLT	
4	21	54011005	5/8 - 11 HEX LOCK NUT	
5	21	1655	COULTER SPRING CAP	
6	21	1656	COULTER SPRING	
7	21	Z1490	ZERK , 90 deg	
8	21	33213005	1/2 - 13 HEX NUT	
9	105	63200000	1/2 LOCK WASHER	
10	21	1657	COULTER SPRING BOLT	
11	21	13213108	1/2-13 UNC X 2.5 HEX BOLT	
12	21	1658	WEAR BUSHING	
13	21	165920	COULTER ARM	
14	21	1660	BEARING WITH SEAL	
15	21	1661	BEARING	
16	21	166520	COULTER HUB	INCLUDES 1662, Z1428
17	11	Z1428	ZERK	
18	21	1667	COULTER SPINDLE WASHER	
19	21	1663	7/8 - 14 SLOTTED HEX NUT	
20	21	166420	HUB CAP	
21	84	13220035	1/2-20 UNF X 0.75 HEX BOLT	
22	21	1666	COULTER BLADE	
23	21	91100800	5/32 x 2 COTTER PIN	
24	42	1662	BEARING CUP	
25	21	53213005	1/2 - 13 HEX LOCK NUT	
26	21	165420	COULTER ARM PIN	
27	21	13213055	1/2-13 UNC X 1.25 HEX BOLT	
28	42	34011005	5/8 - 11 HEX NUT	
29	21	84000000	5/8 SAE WASHER	
30	21	1652	L BOLT	
31	11	165020	LONG MOUNTING BRACKET	
32	10	165120	SHORT MOUNTING BRACKET	
33	21	166920	COULTER ARM ASSEMBLY	

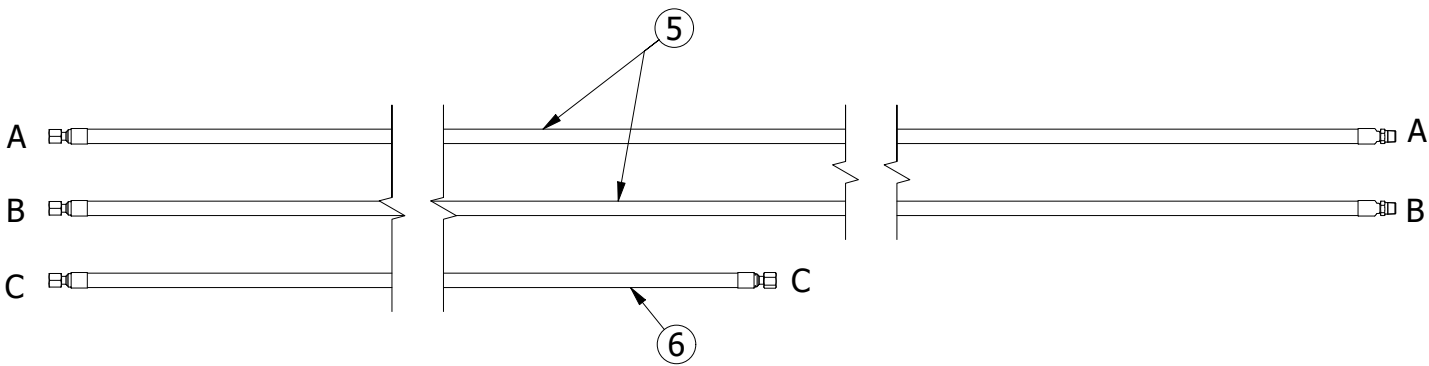
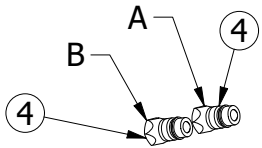
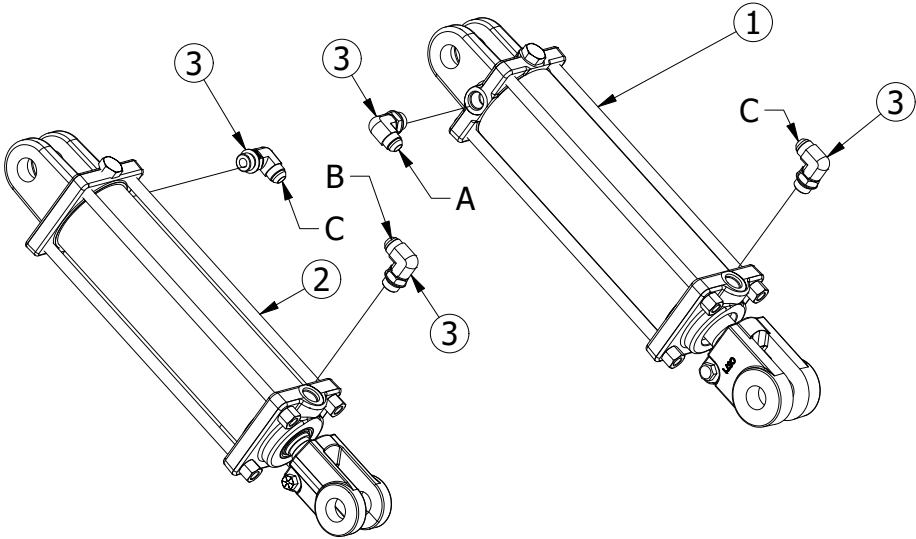
DISC UNIT - 5610 DRILL



DISC UNIT - 5610 DRILL

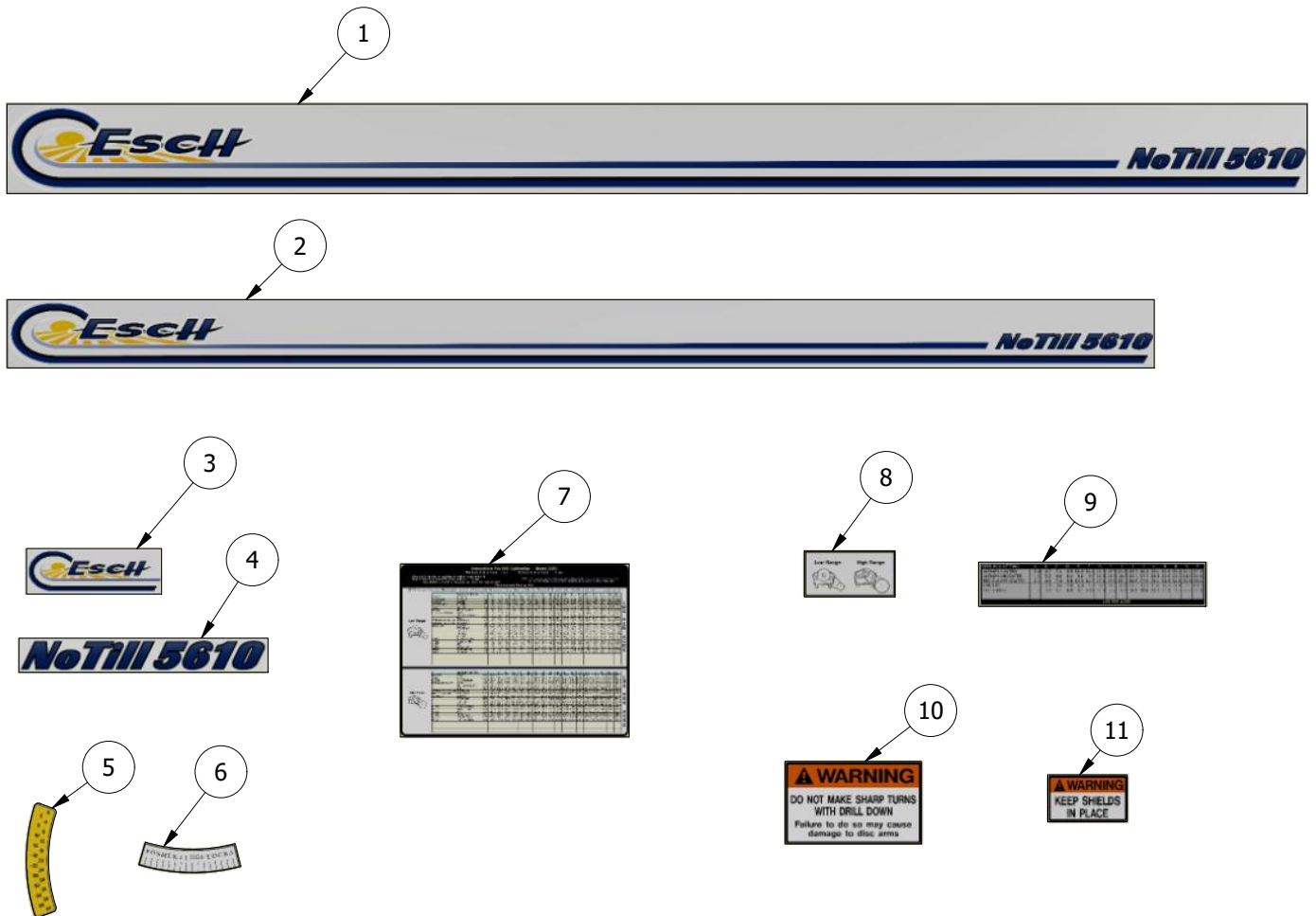
PARTS LIST				
ITEM	QTY	PART #	DESCRIPTION	COMMENTS
1	21	1623	U BOLT	
2	21	162220	ROD PLATE	
3	63	62400000	3/8 LOCK WASHER	
4	63	32416005	3/8 - 16 HEX NUT	
5	21	1620	LINCH PIN	
6	21	1621	BUSHING	
7	42	85600000	7/8 SAE WASHER	
8	21	1619	SPRING	
9	21	161720	SPRING ROD	
10	21	1618	HAIRPIN	
11	21	1626	TOP HOSE CLAMP	
12	21	1625	HOSE	
13	21	1624	BOTTOM HOSE CLAMP	
14	42	53213006	1/2 - 13 REV LOCK NUT	
15	42	1608	BUSHING	
16	21	160320	DOUBLE DISC ARM	
17	42	53212008	STOVER LOCK NUT	
18	42	1600	SPRING WASHER	
19	21	1645	WEAR BOLT KIT	
20	42	1642	DISC ARM BUSHING	
21	42	1641	SHOULDER BOLT	
22	42	1605	DISC BLADE	
23	84	84000000	5/8 SAE WASHER	
24	42	14011065	5/8-11 UNC X 1.5 HEX BOLT	
25	42	1604	DUST CAP	
26	42	1627	BOLT KIT	
27	42	1606	BEARING	
28	21	1607	SCRAPER	
29	21	22416042	3/8-16 X 1 CARRIAGE BOLT	
30	21	72400000	3/8 WASHER	
31	42	21620032	1/4-20 X 0.75 CARRIAGE BOLT	
32	21	13213168	1/2-13 UNC X 4 HEX BOLT	
33	21	13213075	1/2-13 UNC X 1.75 HEX BOLT	
34	21	83200000	1/2 SAE WASHER	
35	21	1613	SPRING	
36	21	91100400	5/32 x 1 COTTER PIN	
37	21	1612	DEPTH BLOCK	
38	21	1611	T HANDLE	
39	21	1628	T HANDLE ASSEMBLY	
40	21	14011105	5/8-11 UNC X 2.5 HEX BOLT	
41	21	1630	PRESS WHEEL BEARING	
42	21	1610	PRESS WHEEL	
43	21	1631	PRESS WHEEL TIRE	
44	21	160920	PACKER WHEEL ARM	
45	42	1640	PACKER ARM BUSHING	
46	21	161420	SEED TUBE	
47	42	41620005	1/4 - 20 HEX FLANGE NUT	
48	42	1616	SMALL HOSE CLAMP	
49	21	1615	SEED HOSE	

HYDRAULICS - 5610 DRILL



PARTS LIST			
ITEM	QTY	PART NUMBER	DESCRIPTION
1	1	1127	HYDRAULIC CYLINDER
2	1	1106	HYDRAULIC CYLINDER
3	4	680188	ADAPTER
4	2	1012	MALE QUICK COUPLER
5	2	1006	HYDRAULIC HOSE
6	1	1005	HYDRAULIC HOSE

DECALS - 5610 DRILL



PARTS LIST				
ITEM	QTY	PART #	DESCRIPTION	COMMENTS
1	1	183520	FRONT LOGO DECAL	
2	1	183620	REAR LOGO DECAL	
3	2	1818	SIDE DECAL	
4	2	180620	SIDE DECAL - NO TILL	
5	1	1801	NUMBER GAUGE DECAL	
6	1	1802	LETTER GAUGE DECAL	
7	1	183720	SEED CHART	
8	1	1803	GEARBOX RANGE DECAL	
9	1	1809	SMALL SEED BOX CHART	
10	1	1804	WARNING SHARP TURN DECAL	
11	2	1805	WARNING SHIELDS DECAL	