

## Parts List

Ref #	Part #	Qty	Description	Ref #	Part #	Qty	Description
1	20070	1	Lower Gear	22	*8173	1	Jack Handle
2	20071	1	Head Gear	23	*7794	1	Spring - 1/2 OD x 2"
3	21920	1	Lift Arm	25	*821	2	Spring - 1 ID x 3-1/2"
4	8236	1	A-Frame Assembly - Compact	26	90453	2	3/8"-16 U-bolt RD Bend Gr. 5 YZP
5	8155	2	Head Gear Brace (14-3/4" OAL)	27	*90361	5	3/8" Lock Washer
6	8229	1	Chain 1/4 x 84"	28	*90334	6	3/8"-16 Nut
7	8183	1	Jack Stand	29	*90210	5	1/2-13 x 1-1/2" Gr. 5 Cap Screw
8	8184	1	Jack Leg	30	!20182	1	Torsion Spring—3 coil
9	!90571	1	3/8"-16 U-bolt RD Bend Gr. 2 ZP	31	!21083	1	Tab
11	!90352	2	3/8"-16 Locknut	32	*90572	5	1/2" Gr. 8 Flat Washer
12	8202	1	Release Rod	33	*90575	7	1/2-13 x 1-1/4" Gr. 5 Cap Screw
13	8180	1	Jack Lever	34	*90364	7	1/2" Lock Washer
14	A5108	2	Flexible Blade Guide	35	*90337	7	1/2"-13 Nut
15	*6815	2	Connecting Pin w/ Handle	36	!20187	2	Gusset
16	*6817	1	Pivot Pin - 1 x 6"	37	20185	1	Torsion Spring Kit
17	*6814	2	Clevis Pin - 1 x 3-5/16"	26,27, 28	A6148K	2	U-Bolt Assembly (not shown)
18	*4289	2	3/4 x 1-7/8" Machine Pin	15,25, 20	6920	2	Connecting Pin Assembly (not shown)
19	*90658	3	5/32 x 1-1/4" Cotter Pin				
20	*90601	4	1/4 x 1-1/2" Cotter Pin				
21	*90013	1	1/4 x 2" Cotter Pin				

\* Part of 8553 Bolt Bag




! Part of 20185 Torsion Spring Kit

**NOTE:** Two hole tab and gusset will be welded on lower gear assembly.

## Installation Instructions

**NOTE: Installation of angle cylinders and A-Frame to blade are covered in the hydraulic instructions, Section 1.**

- Attach the A-frame (4) to the blade with the 1 x 6" pivot pin (16). The pivot pin should be inserted down through the blade and A-frame and secured with a 1/4 x 2" cotter pin (21). After installing the A-Frame to the blade, place a 1-1/2" block in the center of the A-frame rear cross member. **The A-frame cross member should be parallel to the blade.**
- Install a 3/8" U-bolt (26) through a link in the lift/carrying chain (6) 32" from the end—see lift/carrying chain illustration. Attach U-bolt and chain to the two front holes on the passenger side of the A-frame (4) with two 3/8" lock washers (27) and nuts (28). Do not fully tighten. **The other end of the lift chain will be attached to driver side of the A-frame after lift arm is installed.**
- To assemble connecting pins (15) to lower gear (1), insert springs (25) in pin holders—see connecting pin illustration. Then insert the connecting pin through all three holes with the pin handles toward the vehicle. Position cotter pin hole flush with inside plate. Pull back on the spring and install 1/4 x 1-1/2" cotter pins (20). **Bend both legs of cotter pins around connecting pins for proper clearance.**
- Place headgear (2) on front end of lower gear (1). Insert four 1/2 x 1-1/4" cap screws (33) with Gr. 8 flat washers (32) through the holes in lower gear into the head gear. Do not fully tighten

DIAMETER- THREADS PER INCH	NC FASTENER TORQUE (FT-LB)		
	GRADE		
			
	G2	G5	G8
1/4 - 20	6	9	13
5/16 - 18	11	18	28
3/8 - 16	19	31	46
7/16 - 14	30	50	75
1/2 - 13	45	75	115
9/16 - 12	66	110	165
5/8 - 11	93	150	225
3/4 - 10	150	250	370
7/8 - 9	150	378	591
1 - 8	220	583	893

5. Insert jack leg (8) up through jack stand (7) and engage jack lever when four slots are visible. Install one 3/8" nut (28) on jack handle (22) and insert into top round hole on jack leg. Fasten with one 3/8" lock washer (27) and nut (28).
6. Using the jack lever (13), insert lever through the three holes on jack stand (7) to clean out paint before assembling. Place jack lever spring (23) between ear and guide on jack stand (7)—see jack stand illustration. Insert the jack lever (13) through ear until cotter pin hole is flush with jack guide. Pull back on spring and install 5/32 x 1-1/4" cotter pin (19).
7. Install headgear braces (5) to each side of headgear—bent end on top—and to lower gear tab—bottom of braces to rear of tab—using four 1/2 x 1-1/2" cap screws (29), lock washers (34) and nuts (35). Tighten all fasteners on headgear/lower gear assembly.
8. Align holes in headgear/lower gear assembly with holes in the blocked up A-frame. Insert clevis pins (17) through ears and secure with two 1/4 x 1-1/2" cotter pins (20).
9. Pivot the upper and lower gear assembly away from the blade. Install the torsion spring with the loop between the two holes on the tab, in center of angle on lower gear and legs of spring on the top angle of "A" frame. Install a 3/8" U-bolt over loop of spring. Fasten with two 3/8" locknuts. See torsion spring illustration on page 2. Tighten each fastener a little at a time to draw tension evenly on spring.
10. Attach jack stand (7) to tabs on rear of headgear with three 1/2 x 1-1/4" cap screws (33), lock washers (34) and nuts (35). Tighten all fasteners.
11. Check to be certain all fasteners are tight. Attach lift arm (3) to head gear (2) with two machine pins (18) and cotter pins (19). **After hydraulic lift package has been installed tip the head gear assembly forward until stops hit A-frame.** Insert long end of chain through the loop on the lift arm. Fasten the end link to the two front holes in the driver side of the A-frame using a 3/8" U-bolt (26), lock washer (27) and nut (28). Tighten. When the plow is lifted, the A-frame should hit the upper gear just before lift cylinder is fully extended (10"). Adjust the chain on the passenger side if needed to accomplish the above. Tighten the U-bolt. Hook 32" chain in chain plate on head gear.
12. Install the blade guides (14) on each end of the top bar on the blade.
13. See the release rod instructions, attached to the release rod, regarding its use.
14. Attach to vehicle according to the installation decal located in the upper, driver-side corner of the blade.