

Instructions for installing Series 2 Sickle Bar, with
hydraulic lift for General & Bullet Tractors.

A. First install the side power take-off kit #TK-644 as described below:

1. Remove drain plug from transmission on right side and drain transmission entirely. Replace plug.
2. Remove side plate from right side of transmission by unscrewing the six cap screws.
3. Being careful to use the three paper gaskets provided, insert the power take-off and bolt it to the transmission with 6 $\frac{3}{8}$ NC x 1 cap screws and 6 - $\frac{3}{8}$ reg. lock washers.
4. Refill transmission with transmission oil, adding an extra $1\frac{1}{2}$ lbs. of grease for power take-off. Total 7 lbs. #90 winter, #140 summer.

B. Bolt the ball-socket bracket (TS-618-4 cylinder, TS-651-6 cylinder) to the belly-band on underside of tractor by power take-off in the holes provided. (See pg. 6, ref. #23 in owner's manual), using a 3214-5 $\frac{5}{8}$ NF x 2 cap screw with a 3253-8 - $\frac{5}{8}$ lock washer and a 3219-6 $\frac{5}{8}$ NF hex full nut.

C. Bolt the front sickle draw bar bracket #TS-189 (see pg. 9, ref. #101) to the front two holes provided on the right side of the tractor frame with (2) 3214-4 - $\frac{5}{8}$ NF $1\frac{3}{4}$ cap screws; (2) 3253-8 - $\frac{5}{8}$ reg. washers; and (2) 3219-6 - $\frac{5}{8}$ NF hex full nuts, don't tighten down until sickle assembly is attached.

D. Bolt the sickle lift attachment plate (TS-625), (see pg. 11, ref. #177) to the right side of the tractor frame in the holes provided, using (2) 3213-3 - $\frac{1}{2}$ NF x $1\frac{1}{2}$ cap screws, (2) 3253-7 - $\frac{1}{2}$ reg. washers, and (2) 3219-5 - $\frac{1}{2}$ NF hex full nuts, and (1) $\frac{1}{2}$ NF x $2\frac{1}{4}$ cap screw in front hole of plate.

E. Connect ram assembly (353-14) to rear ram bracket, (see pg. 13, ref. #292), then bolt the rear ram bracket (HL-27) to the right side of the rear of the frame (see pg. 13, ref. #275), use (4) 325-6 - $\frac{1}{2}$ x $1\frac{1}{2}$ NC reg. bolts, (4) 3217-9 - $\frac{1}{2}$ NC reg. nuts and (4) 3253-7 - $\frac{1}{2}$ reg. lock washers.

NOTE: On the General Tractor, the rear ram bracket comes already installed by the spring.

CAUTION: On the Bullet Tractor it is necessary to chip the excess weld material off the frame before installing the bracket to avoid cracking bracket.

F. Bolt the front ram bracket, HL-30 (see pg. 13, ref. #280) to the frame using (2) 327-4 - $5/8$ x $1\frac{1}{2}$ NC reg. bolts, (2) 3217-11 - $5/8$ nuts, and (2) 3253-8 - $5/8$ reg. lock washers. Then connect ram assembly to lift arm (HL-29) with HL-33 pin. (see pg. 13, ref. #285)

G. Bolt the hydraulic pump under engine fan on right side of tractor in holes provided with (2) $3/8$ x $1\frac{1}{2}$ NF cap screws and (2) $3/8$ cut washers, and (2) $3/8$ nuts. Place "V" belt over pulleys during installation of pump.

NOTE: If the spare pulley needed to drive the pump is not on the drive pulley, install the spare pulley provided in the kit by bolting it onto the drive pulley on the motor. For proper belt tension slide pump on the bracket for normal "V" belt adjustment.

H. Mount hydraulic tank to frame in holes provided, on right side of driver's seat with (4) 3/8 x 1 1/4 NF cap screws and (2) 3/8 lock washers, and (2) 3/8 nuts.

1. Connect the smaller hose (see pg. 13, reg. #279), HL-38 from the tank to the ram assembly, clamping it to the frame in the holes provided with the 298-4 clamp assembly. (See schematic, pg. 5)
2. Connect the two large hoses (HL-68) to the hydraulic pump, place the 4-0660 hose cover over the two hoses for protection from the floor plate. Connect the inlet (outside) hose to the bottom of the tank, and the outlet (inside) hose to top of tank. (See schematic, pg. 5)

I. Mount sickle assembly to the brackets previously installed as outlined below:

1. Install sickle draw bar, TS-637A (see pg. 9, ref. #113) to sickle assembly, using the TS-638A pin (see pg. 9, ref. #115). Insert cotter pins. Attach draw bar to TS-189 bracket with (1) 5/8 NF x 3 cap screw with lock washer and 5/8 nut.

2. Swing sickle assembly back and install "V" belts 2 - #271-19 (see pg. 6, ref. #3) on power take-off and sickle pulleys.
3. Loosen lock nut on screw adjusting ball (see pg. 6, ref. #22) and turn ball all the way in the hinge yoke (TS-615), place ball in bracket and bolt on TS-619 ball socket cap (see pg. 6, ref. #21) with (2) 5/8 NF x 2 $\frac{1}{4}$ stud screws and reg. lock washers.
4. Hook the 5-P-38A vertical spring (see pg. 11, reg. #193) to sickle assembly with T-182 pin.
5. Hook the TS-649 booster spring assembly (see Pg. 11, ref. #182) to side plate with TS-75 clevis pin.
6. Place inner shoe lock TS-626 (see pg. 11, ref. #178) on side plate with TS-89 pin (pg. 11, ref. 195)
7. Assemble cable through pulley (hinge sheave TS-627), (see pg. 11, ref. #173) and hook up to HL-29 lift arm. Leave little slack.
8. Tighten TS-189 draw bar bracket
9. Screw out screw adjusting ball TS-617 (see pg. 6, reg. #22) to proper belt tension.
10. Install stop switch wire (see pg. 9, ref. #118) from dash to stop switch. Pull button out 1/2" before tightening cable to stop switch for proper function of safety stop switch.
11. Hook up ground wire from stop switch to distributor.