

# Simplicity®

## POWER TAKE-OFF

For operation of Rotary Mower and Sickle Bar attachments, a power take-off attachment is required. This consists of the power take-off assembly, "V" pulley for bevel gear shaft, drive belt, belt guard, and belt stop packaged in one carton.

For ease of attachment follow the steps outlined below.

1. Mount "V" pulley to shaft of bevel gear assembly ( see figure 1 ) and secure in place with key and set screw. Hub of "V" pulley is to face inward. Place drive belt on "V" pulley and mount belt guard support to inside surface of side plate nearest drive pulley. See figure 5 for mounting bolt location. Attach the belt guard to the guard support as shown in figure 1. Allow approximately  $\frac{3}{16}$ " clearance between belt and guard.

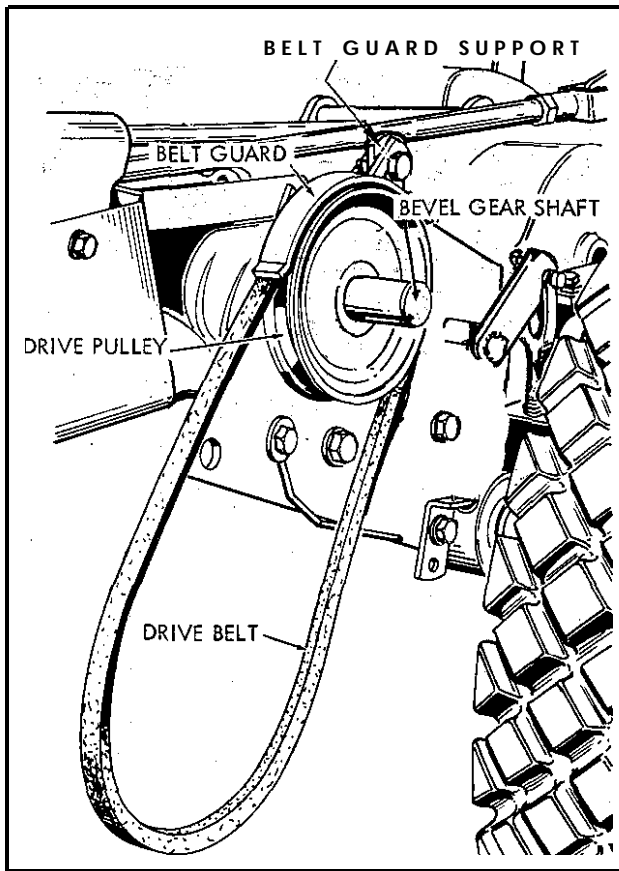


Fig. 1

2. Holding the power take-off assembly in left hand as shown in figure 2, position the tube of the drive bracket assembly between the bevel gear housing side plates. Align the holes in side plates with the hole in drive bracket assembly tube and insert pivot pin through holes in side plates and drive bracket assembly tube.

3. Push pivot pin through the holes in bracket and tube until the position of cotter pin hole in pivot pin is as shown in figure 3. Secure in position with cotter pin furnished.

**SIMPLICITY MANUFACTURING COMPANY / PORT WASHINGTON, WIS.**

## POWER TAKE-OFF KIT

Mfr's. No. 317  
for

LANDLORD RIDING TRACTOR

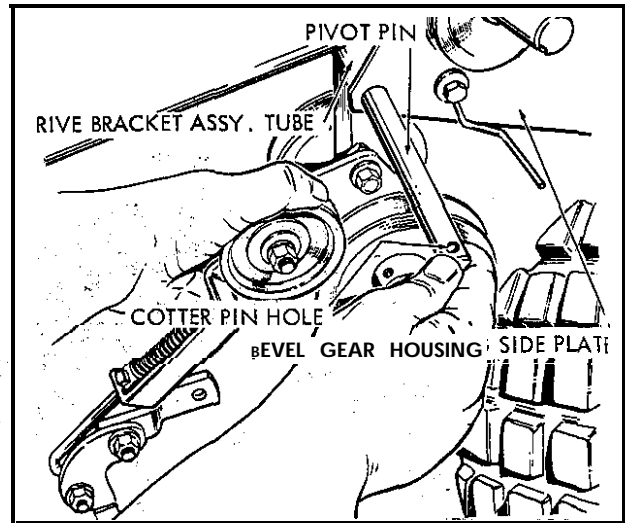


Fig. 2

4. Remove hex cap screw "D" from frame of tractor and mount bracket in place under lift lever quadrant. See figure 4. Position the pivot bar assembly flush against bottom of lift quadrant and re-install hex cap screw and tighten securely. Check alignment of drive pulley on bevel gear shaft, driven pulley of power take-off, and idler pulley, and adjust driving pulley if necessary.

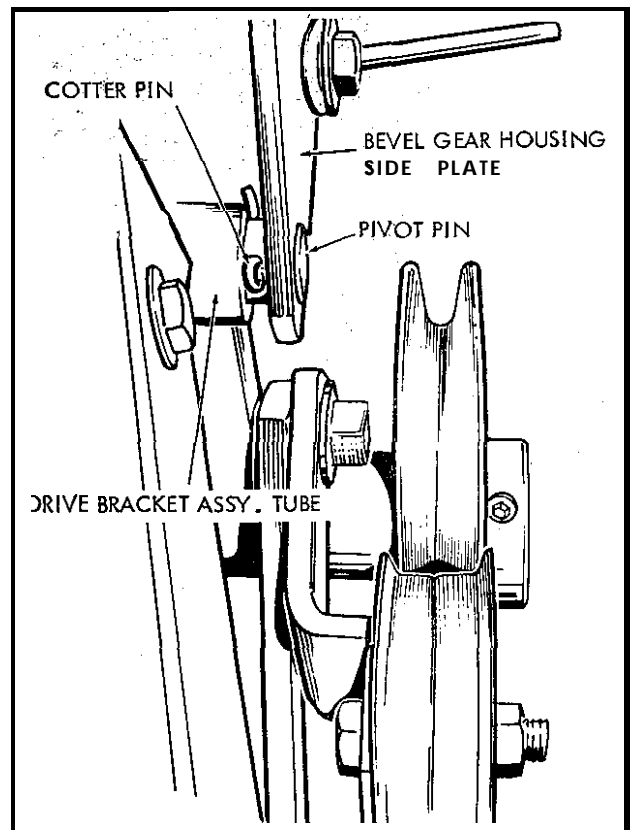
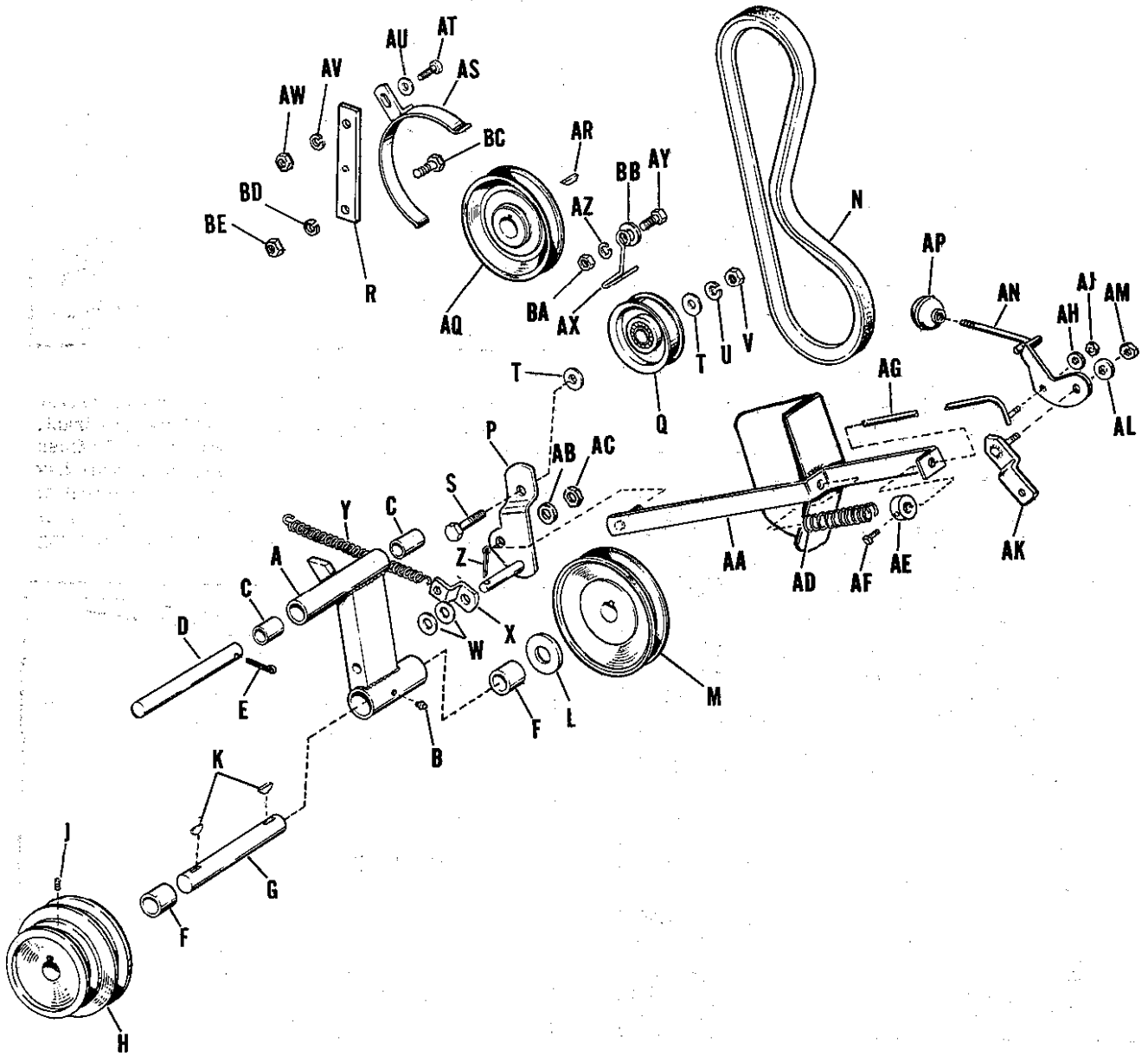


Fig. 3

# POWER TAKE-OFF



Order by Part Number

# POWER TAKE-OFF

Order **by** Part Number

Reference Letter	Part No.	Description
A	154228	Bracket Assembly, Drive
B	727006	Fitting, Grease
C	8051038	Bushing
D	154233	Rod, Pivot
E	122001	Pin, Cotter
F	154258	Bearing, Needle
G	157116	Shaft, Power Take-Off
H	1.57116	Pulley, Power Take-Off
J	113503	Screw, Set, Cup Point, Socket Hd., 5/16" - 18 N. C. x 5/16" lg.
K	125003	Key, Woodruff
L	108182	Washer
M	154308	Pulley
N	106390	Belt, "V", Power Take-Off
P	154360	Lever Assembly, Idler
Q	154534	Pulley, Idler
R	157050	Guard Support
S	105016	Capscrew, Hex Hd., 3/8" - 16 N.C. x 1-1/4" lg.
T	119002	Washer, Plain, 5/16"
U	120002	Washer, Lock, 3/8"
V	111003	Nut, Hex, Full, 3/8" - 16 N.C.
W	119001	Washer, Plain, 3/8"
X	154368	Clip, Spring
Y	154369	Spring, Tension
Z	122009	Pin, Cotter, 1/8" x 3/4" lg.
AA	154540	Guide Assembly, Rod
AB	119001	Washer, Plain, 3/8"
AC	717510	Nut, Lock, Hex Hd., Full, 3/8" - 16 N.C.
AD	8191045	Spring
AE	8191022	Collar, Set
AF	113001	Screw, Set. Sq. Hd. Cup Pt., 1/4" - 20 N.C. x 3/8" lg.
AG	154364	Rod Assembly, Clutch
AH	719002	Washer, Plain, 5/16"
AJ	711511	Nut, Lock, Hex Hd., Full, 5/16" - 18 N. C.
AK	154362	Pivot Bar Assembly
AL	719001	Washer, Plain, 3/8"
AM	111510	Nut, Lock, Hex Hd. Full, 3/8" - 16 N. C.
AN	154356	Lever Assembly, Clutch
AP	122005	Knob
AQ	157121	Pulley
AR	8061081	Key
AS	157132	Guard Assembly, Belt
AT	105005	Capscrew, 3/8" - 16 N. C. x 1" lg.
AU	719001	Washer, Plain, 3/8"
AV	120002	Washer, Lock, 3/8"
AW	111003	Nut, Hex, Full, 3/8" - 16 N. C.
Ax	8021014	Stop, Belt
AY	705031	Capscrew, 3/8" - 16 N. C. x 7/8" lg.
AZ	120002	Washer, Lock, 3/8"
BA	111003	Nut, Full, Hex, 3/8" - 16 N.C.
BB	119001	Washer, Plain, 3/8"
BC	705007	Hex Capscrew, 5/16"-18 x 1" lg.
BD	720001	Lockwasher, 5/16"
BE	717001	Hex Nut, 5/16"-18

5. Mount "V" belt in place on driven pulley as shown in figure 5 and attach spring to bottom hole in the spring holder and hook other end of the spring to the idler lever spring holder. Mount belt stop as shown with  $\frac{3}{8}$ " bolt, flat washer, lockwasher and hex nut. When idler pulley is engaged,  $\frac{1}{8}$ " clearance between belt stop and back of "V" belt is required. Note: "V" belt runs under idler pulley. See figure 5.

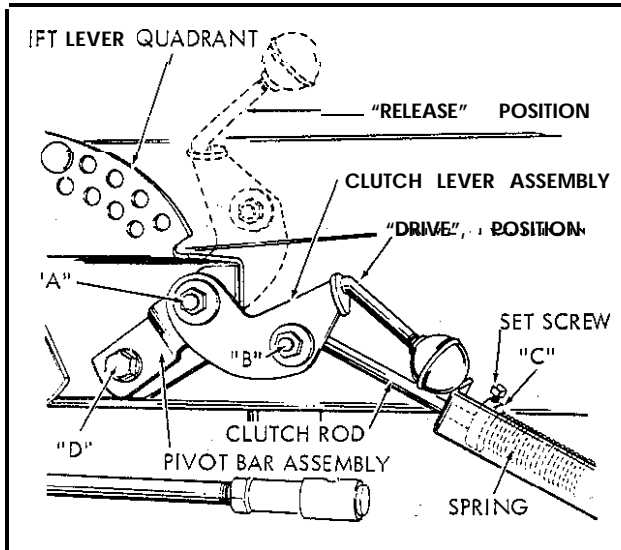


Fig. 4

#### LUBRICATION

The power take-off is lubricated by means of one grease fitting located on the bottom front of the drive bracket assembly. Occasionally apply grease by means of a standard grease gun loaded with automotive type grease. Be sure to wipe dirt and grit from grease fitting before applying grease gun. Lubricate all pivot points and idler pulley bearings with SAE 20 oil every few hours of operation.

#### OPERATION

Operation of the power take-off is controlled by movement of the clutch lever assembly. See figure 4. When the clutch lever is in the forward raised position, the clutch rod releases the tension holding the idler pulley against the drive belt, and power will not be transmitted to the driven pulley of the power take-off assembly. When the clutch lever is in the back, depressed position, the clutch rod applies tension to the idler pulley and as the idler pulley takes up the slack in the drive belt, power is transmitted from the drive pulley on bevel gear box shaft to the driven pulley of the power take-off. Figure 4 shows clutch lever in drive position.

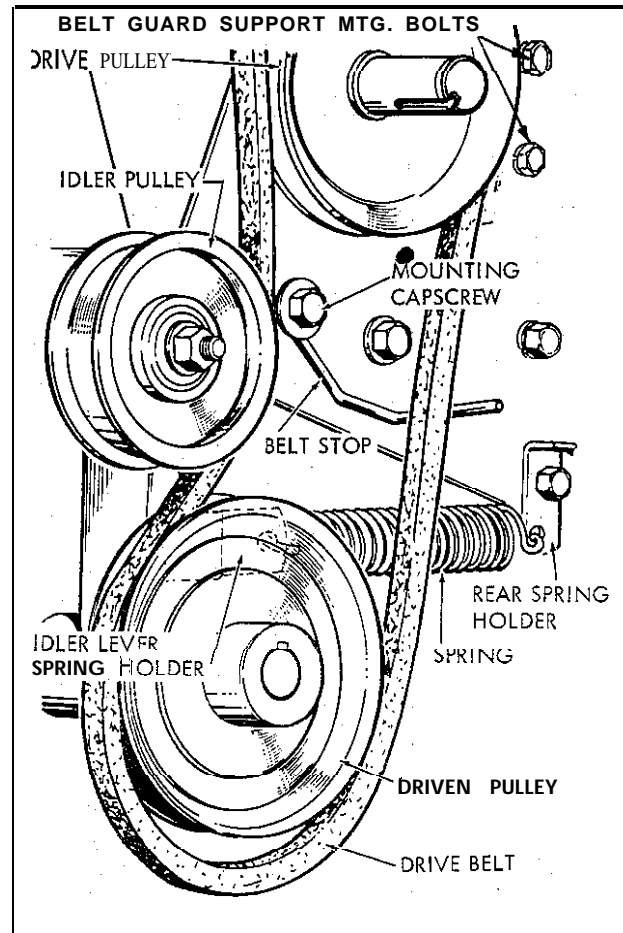


Fig. 5

#### ADJUSTMENT

At points "A" and "B" of figure 4, check tightness of hex nut to be sure that clutch lever assembly and clutch rod are free to pivot without binding.

Place clutch lever in "drive" position and observe clearance between collar "C" (figure 4) and end of bracket. This clearance should normally be approximately  $\frac{3}{4}$  inch; at this setting the idler pulley should be snugly against the drive belt. If additional tension is required, release clutch lever and loosen set screw on collar and slide collar farther back on clutch rod. Retighten set screw in collar and put clutch lever in drive position. Recheck clearance. The tension of the idler pulley against the drive belt must be sufficient to operate whichever tractor attachment is being used. Any additional tension is unnecessary and will only cause premature failure of belts and idler pulley bearings.