

# **BERCOMAC**

LIMITÉE

## **OWNER'S MANUAL**

**MODEL NUMBER**

**700217A**

### **CAUTION:**

Read and Follow  
All Safety Rules  
and Instructions  
Before Operating  
Your Equipment



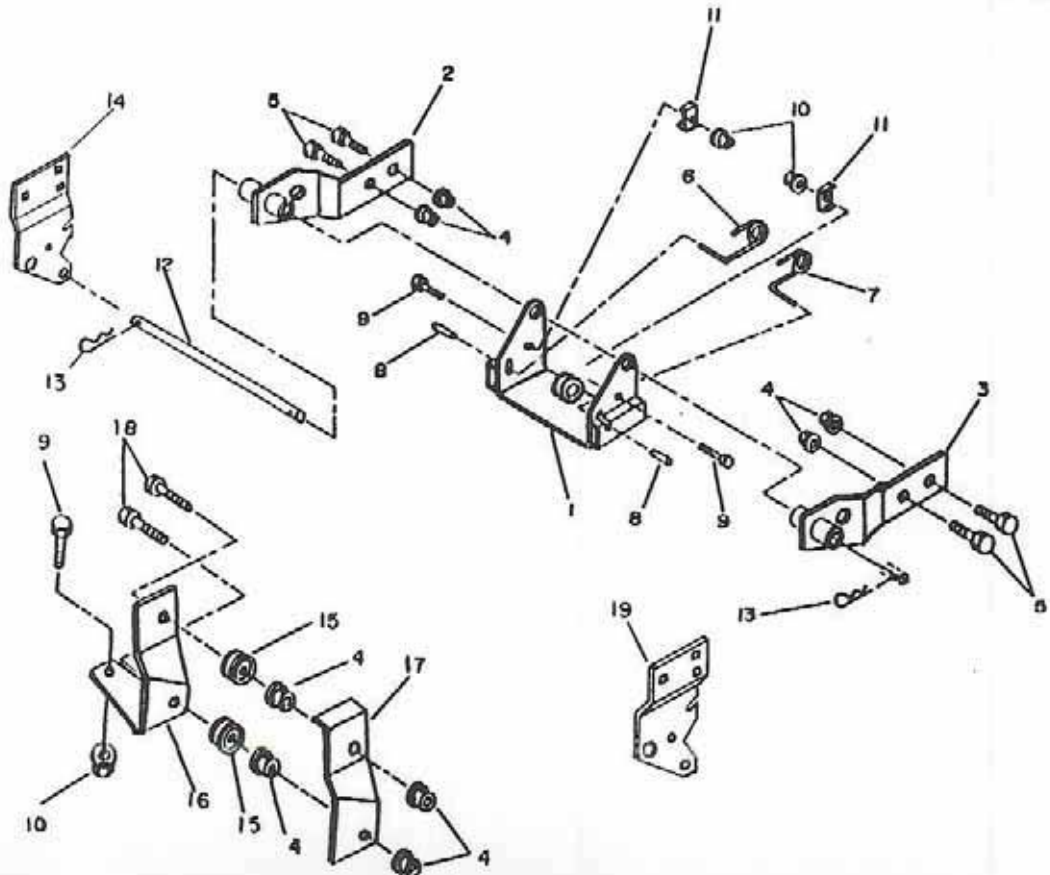
- \* ASSEMBLY
- \* OPERATION
- \* MAINTENANCE
- \* REPAIR PARTS

**BERCO SUBFRAME  
FOR HUSQVARNA / POULAN  
RALLYE / YARD PRO**

## PUSH FRAME

REF	DESCRIPTION	QTY	PART NO
1	Pivot support female hitch .....	1	102655
2	Front support bracket R.H. ....	1	102215
3	Front support bracket L.H. ....	1	102220
4	Flange nut 3/8" .....	8	O/L
5	Hex bolt 3/8 X 1" .....	4	O/L
6	Right spring lock .....	1	102209
7	Left spring lock .....	1	102208
8	Plastic hand grip .....	2	102248
9	Hex bolt 5/16 X 1" .....	4	O/L
10	Flange nut 5/16" .....	4	O/L
11	Spring fixation .....	2	102210
12	Pivot pin .....	1	102216
13	Hair pin 3mm .....	2	102617
14	Right support bracket .....	1	102666
15	Idler pulley .....	2	102057
16	Idler support .....	1	102409
17	Idler guard .....	1	102410
18	Hex bolt 3/8 X 2" .....	2	O/L
19	Left support bracket .....	1	102667

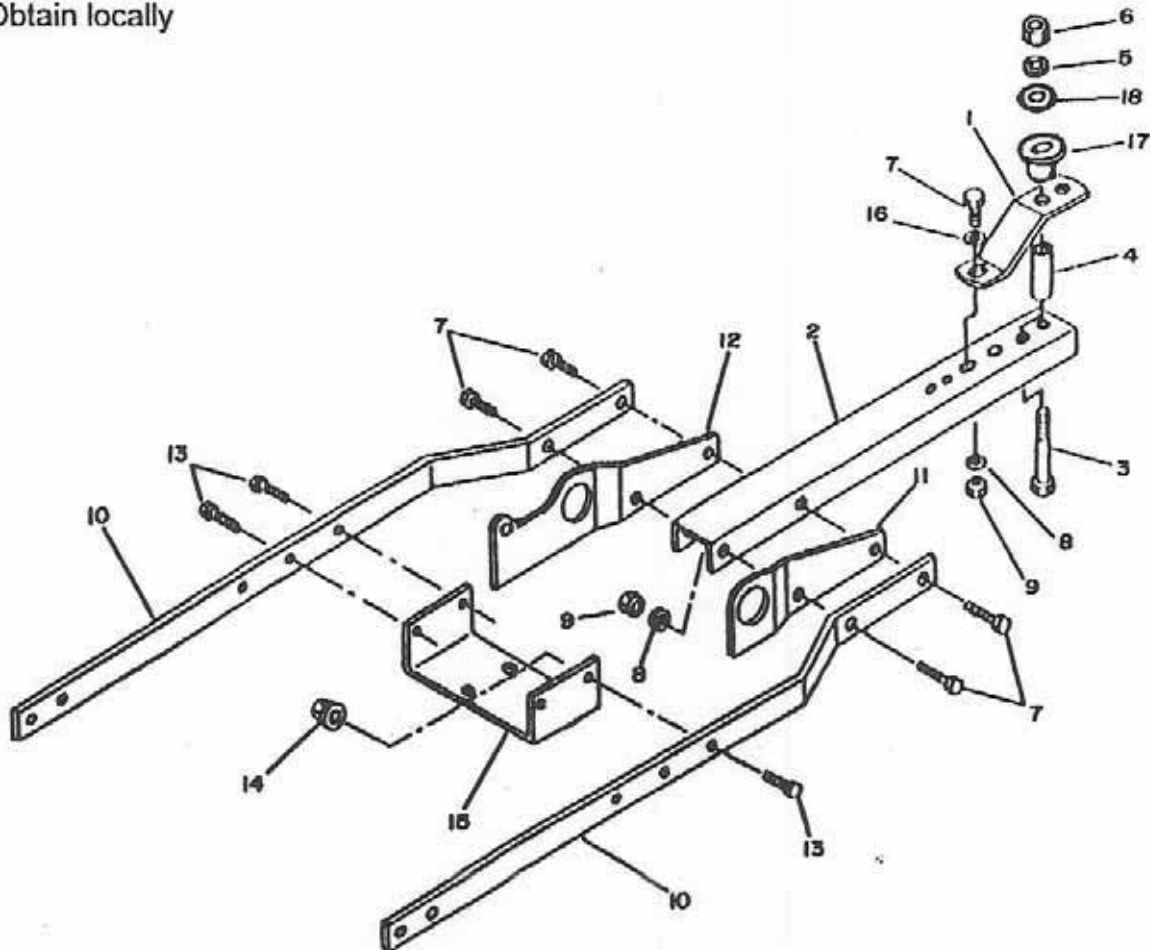
\* O/L: Obtain locally



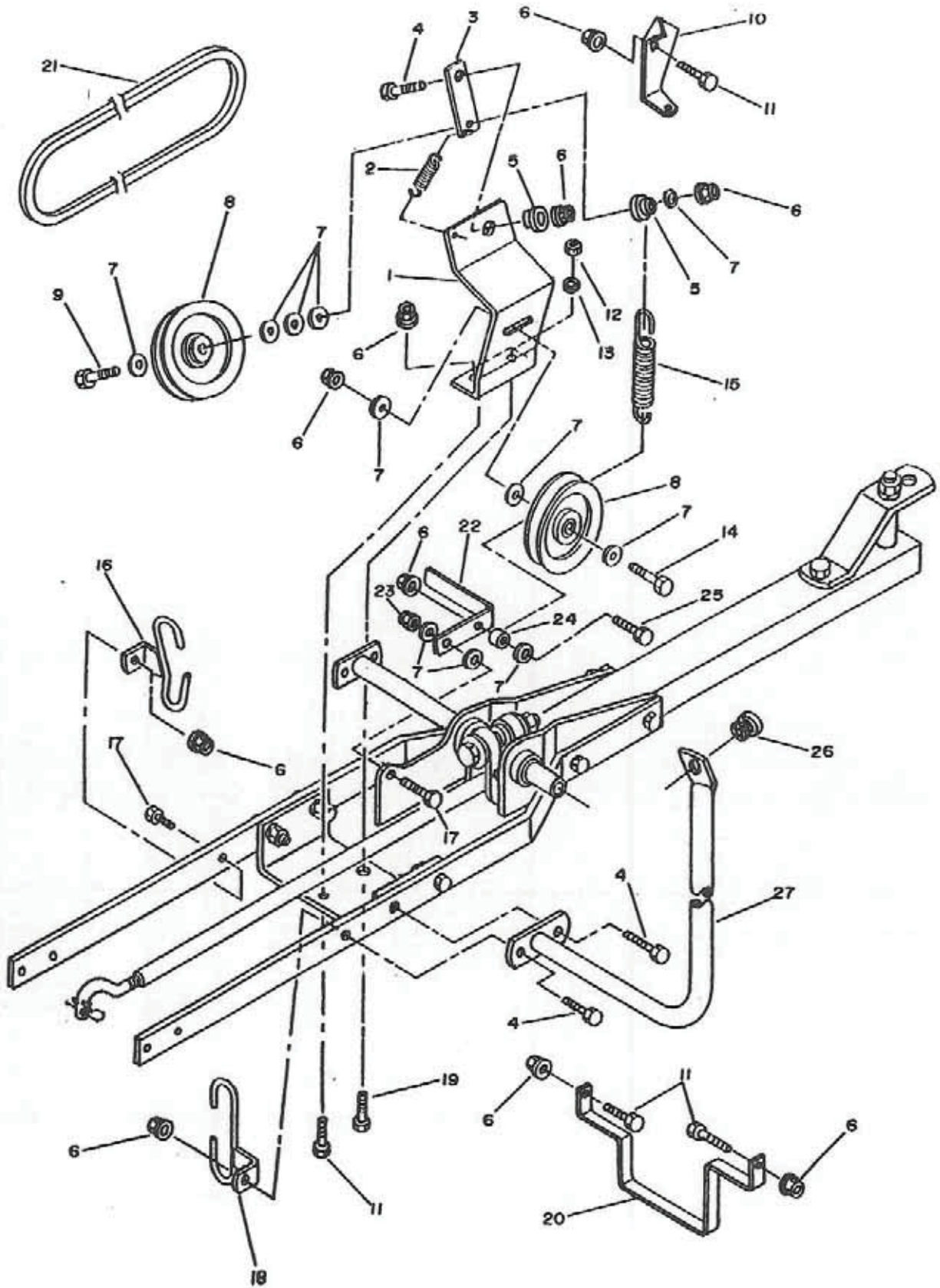
### SUBFRAME

REF	DESCRIPTION	QTY	PART NO
1	Hitch plate .....	1	102064
2	Channel.....	1	102065
3	Bolt 5/8 X 4 1/2" .....	1	O/L
4	Tube spacer 2 1/4".....	1	102066
5	Lock washer 5/8".....	1	O/L
6	Hex nut 5/8" .....	1	O/L
7	Hex bolt 7/16 X 1 1/4" .....	5	O/L
8	Lock washer 7/16" .....	5	O/L
9	Hex nut 7/16" .....	5	O/L
10	Subframe flatbar .....	2	102214
11	Lift support bracket L.H.....	1	102068
12	Lift support bracket R.H. ....	1	102411
13	Hex bolt 3/8 X 1" .....	3	O/L
14	Flange nut 3/8".....	3	O/L
15	Support plate.....	1	102070
16	Flat washer 1/2" dia. hole .....	1	O/L
17	Flange sleeve .....	1	102636
18	Flat washer 11/16" dia hole .....	1	O/L

\* O/L: Obtain locally



# DRIVE MECHANISM



## DRIVE MECHANISM

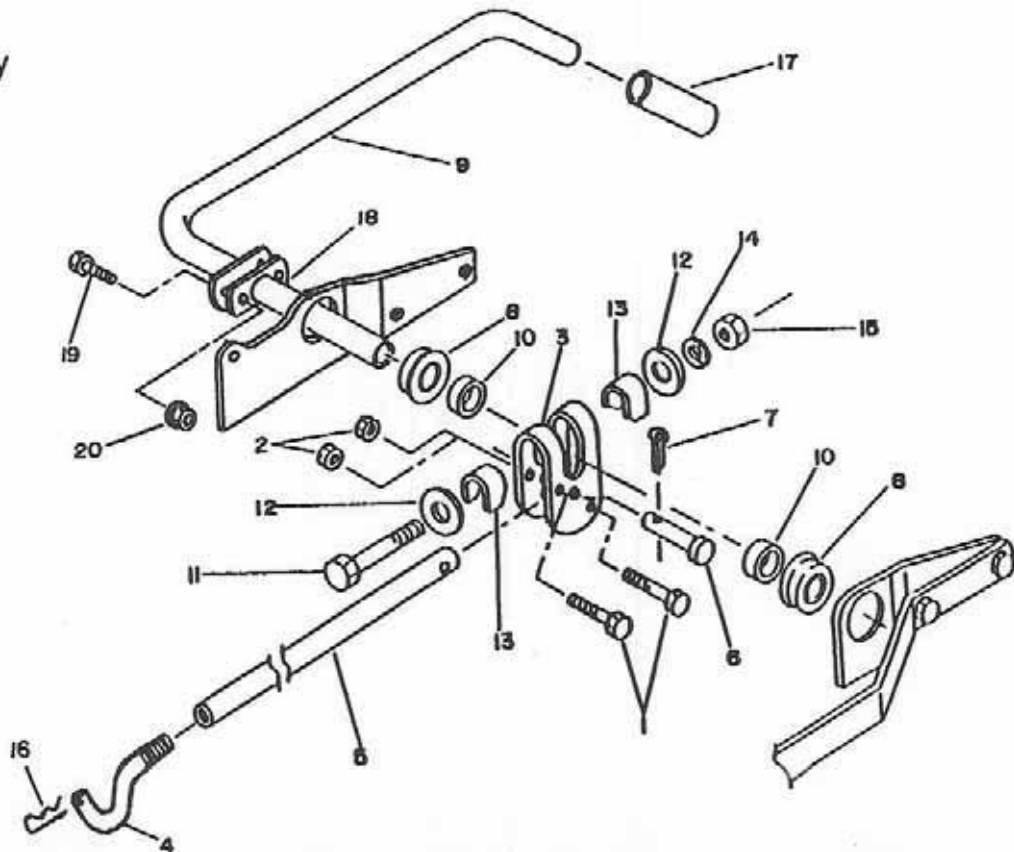
REF	DESCRIPTION	QTY	PART NO
1	Pulley support bracket .....	1	102082
2	Spring 1/2" dia.....	1	102003
3	Tension arm .....	1	102089
4	Bolt 3/8 X 1 1/4" .....	3	O/L
5	Flange washer .....	2	102081
6	Flange nut 3/8" .....	11	O/L
7	Flat washer 7/16" dia. hole .....	11	O/L
8	Idler pulley.....	2	102086
9	Bolt 3/8 X 2 1/2" .....	1	O/L
10	Clutch lever .....	1	102085
11	Hex bolt 3/8 X 3/4" .....	4	O/L
12	Nut 7/16" .....	1	O/L
13	Lock washer 7/16" .....	1	O/L
14	Bolt 3/8 X 1 3/4" .....	1	O/L
15	Spring 1 1/8" .....	1	102004
16	Belt guide R.H.....	1	102240
17	Bolt 3/8 X 1" .....	2	O/L
18	Belt guide L.H. ....	1	102083
19	Bolt 7/16 X 1" .....	1	O/L
20	Drive belt guide .....	1	102088
21	V-belt 5/8" wide .....	1	102048
22	Tension arm .....	1	102412
23	Stover locknut 3/8" .....	1	O/L
24	Sleeve .....	1	102418
25	Bolt 3/8 X 2" .....	1	O/L
26	Plastic grommet .....	1	102063
27	Handle support.....	1	102243

\* O/L: Obtain locally

## LIFT MECHANISM ASSEMBLY

REF	DESCRIPTION	QTY	PART NO
1	Hex bolt 3/8 X 2 1/4" .....	2	O/L
2	Lock nut 3/8" .....	2	O/L
3	Lift lever .....	1	102072
4	Adjustment rod .....	1	102653
5	Push arm .....	1	102074
6	Pin 17/32 X 2 1/4" .....	1	102079
7	Cotter pin 5/32" dia. x 1" .....	1	O/L
8	Bearing flange .....	2	102075
9	Arm lift .....	1	102656
10	Tube spacer .....	2	102077
11	Bolt 5/8 X 4" .....	1	O/L
12	Flat washer 11/16" dia. hole .....	2	O/L
13	Bent retainer plate .....	2	102078
14	Lock washer 5/8" .....	1	O/L
15	Nut 5/8" .....	1	O/L
16	Hair pin 3mm dia. .....	1	102617
17	Handle grip .....	1	102025
18	Arm lift extension .....	1	102406
19	Bolt 5/16 X 3/4" .....	2	O/L
20	Flange nut 5/16" .....	2	O/L

\*  
/L: Obtain locally



## ASSEMBLY

**IMPORTANT:** Torque all bolts according to torque specification table on page 17, unless otherwise specified.

### STEP 1: SUBFRAME PREPARATION

- a) Unfold the subframe by loosening the two bolts (fig. 1, item 2), place the channel (item 3) in straight position and install two  $7/16 \times 1\ 1/4$ " bolts (item 1), locks and nuts. Do not tighten yet. Extend the front portion (item 4) by loosening the bolts (item 5) and insert two bolts  $3/8 \times 1$ " with nuts. Secure the four bolts loosely. Adjust the overall length of push arm on garden tractor to  $32\ 3/16$ ", and on the lawn tractor to 32" by screwing the adjusting rod (item 7). Place the adjusting rod on the support pivot hitch hole (item 15) and secure with 3mm hair pin.

**IMPORTANT:** Place the subframe on a flat surface to be sure the channel (fig. 1, item 3) and the under portion of the front attaching bracket (item 4) are in line with the flat bars. Tighten all bolts securely.

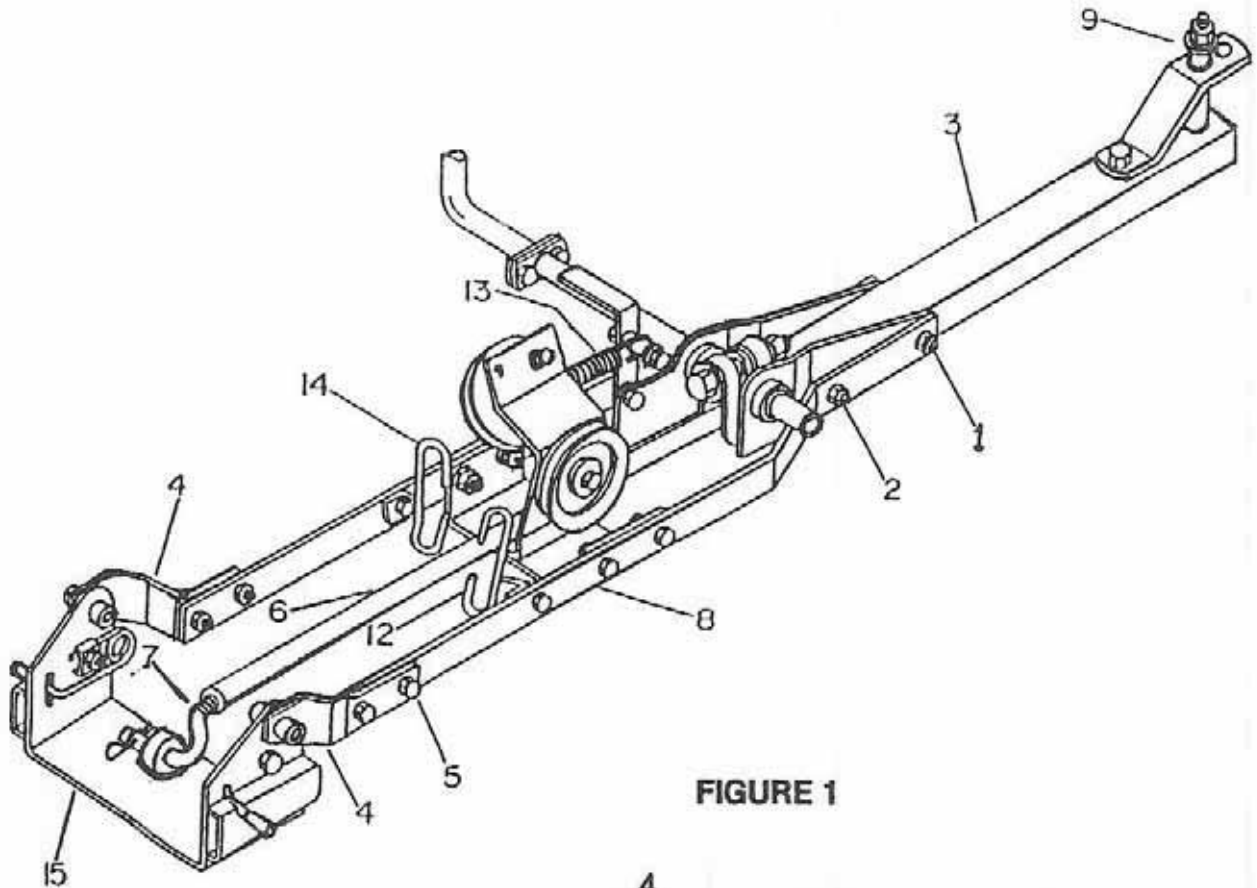


FIGURE 1

## ASSEMBLY

- b) Tractor with electric clutch (PTO): Leave the subframe as is and go to section d).
- c) Tractor with manual clutch (PTO) Remove the spring tension arm (fig. 2, item 1) and the spring sleeve holder (fig. 2, item 2).
- d) Install the rotation support (fig. 3, item 1) on left hand side of subframe by using the existing bolts  $3/8 \times 1 1/4$ " (item 2 & 3), making sure the belt guide is  $90^\circ$  to subframe flatbar. Secure bolts with nuts. Insert plastic grommet (item 7) in rotation support (item 1).
- e) Garden Tractor: Loosen the bolts (fig. 4, item 1 & 2). Be sure they are installed in the first set of holes (item 4) with the flange sleeve (item 5), the flange face up.  
Lawn Tractor: Remove the hitch plate (fig. 4, item 6) and re-install loosely in the second set of holes (item 3) with the flange sleeve (item 5), the flange face down.

### STEP 2: SUBFRAME INSTALLATION

**NOTE:** On lawn tractor: if you do not have a  $13/16$ " dia. hole on front frame brackets (fig. 5, item 1), replace the brackets with the ones supplied in kit (page 12, ref. 14 and 19).

- a) Carefully place the subframe under the tractor by the left hand side between the front and rear wheels.
- b) Lift the front portion of subframe between the tractor mounting plates (fig. 5, item 1) and hold in place with  $3/4" \times 13.50$ " pin. Secure the pin with 3mm hair pins.

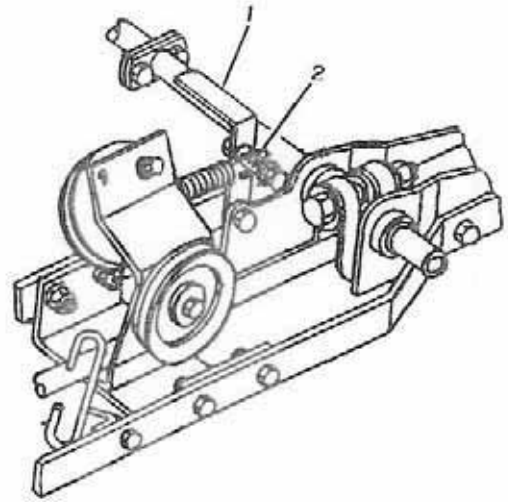


FIGURE 2

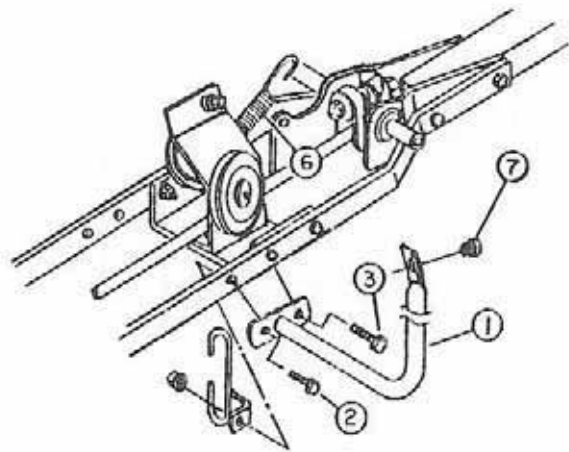


FIGURE 3

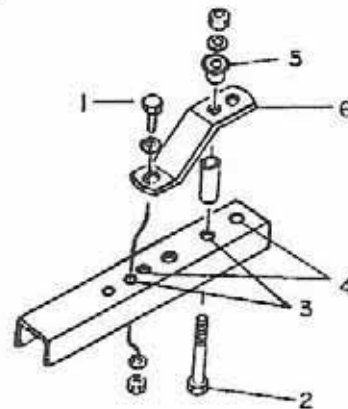


FIGURE 4



## ASSEMBLY

- c) Attach the rear portion of the subframe (fig. 4) to tractor tow hitch with the flange sleeve under the tow hitch, using bolts already installed with a flatwasher, a lockwasher and a nut on top of tractor tow hitch. Tighten securely.

**NOTE:** If you install this subframe on the older model with the higher tow hitch you will need part #102071 tube spacer 2 11/16" long and 5/8" x 6 1/2" bolts to maintain the subframe parallel to the ground.

- d) Install arm lift (fig. 6, item 2) on arm lift extension (item 3) using two 5/16 X 3/4" bolts with nuts. Tighten securely.
- e) Install 1 X 4 1/2" handle grip (fig. 6, item 1) on arm lift (item 2).
- f) Lift the lift mechanism by pulling back the arm lift. The arm lift's top portion should be 1" outside the rear fender and 2 1/2" to 3" above tire. If your tractor is equipped with a cab, adjust the arm lift on top of the rear fender, the bottom part of arm lift as close as possible to footrest to permit using the arm lift inside the cab. For adjustment, loosen the bolt (fig. 6, item 4) and adjust properly. After the arm lift has been adjusted properly, tighten 5/8" bolt (item 4) very firmly. Using a hinge handle or torque wrench at 85 to 90 ft./lbs. to be sure the arm lift does not slide on the lift lever.
- g) Tractor with manual PTO clutch: Install the clutch extension bracket (fig. 7, item 5) on the tractor clutch lever (item 4), using a 3/8 X 3/4" bolt and nut (placing bent portion of bracket against front side of tractor clutch lever). Tighten securely and attach free end of spring (item 6) to extension bracket.

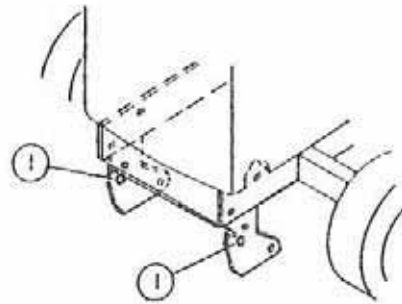


FIGURE 5

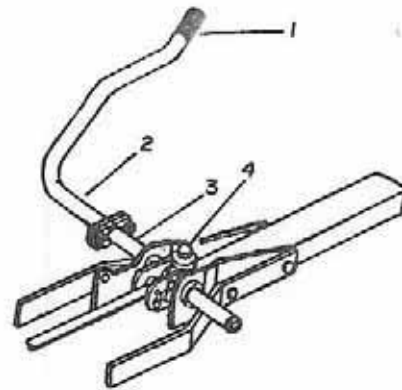


FIGURE 6

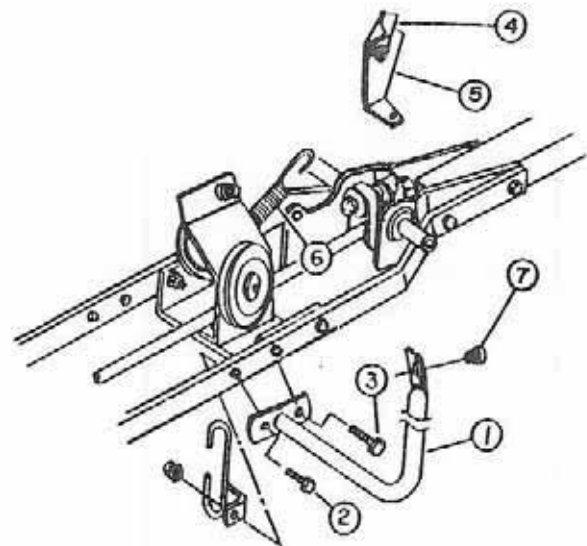


FIGURE 7

# ASSEMBLY

## STEP 3: ATTACHMENT MOUNTING INSTRUCTIONS



**WARNING:** For your safety, use the Owner's Manual attachment for snowblower, broom and blade Installation Instructions. Read all the Safety Precautions, Assembly and Operation Instructions.

**NOTE:** If attachment does not raise appx. 3" (76mm) above ground level, check and adjust tractor tire pressures as follows:

- Front tires - 14-15 psi
- Rear tires - 7-8 psi

### SNOWBLOWER



**WARNING:** See Snowblower Owner's Manual for Safety Precautions, Assembly and Operation Instructions.

- a) Install the idler support (fig. 8, item 5) on snowblower male hitch (item 4) using two 5/16 X 1" bolts and nuts. Tighten securely.
- b) Remove the idler guard (fig. 8, item 1). Place the bottom section of the V-belt on top of the bottom idlers (item 3) and the top section of the V-belt under the top idler (item 2). Reinstall the guards, using 3/8" nuts, tighten securely.
- c) Attach the snowblower to the tractor subframe by placing the male hitch flat bar into subframe's female channel hitch (fig. 9). Be sure the male hitch is entered to it's maximum and is locked by the springs.

**IMPORTANT:** On Garden Tractor if the snowblower angle is not adjusted at 91° the spout touches the tractor hood. See Snowblower Owner's Manual for adjustment instructions.

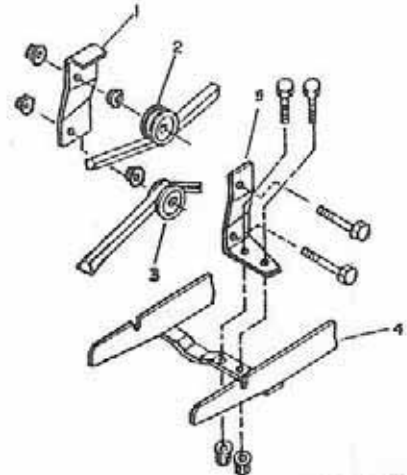


FIGURE 8

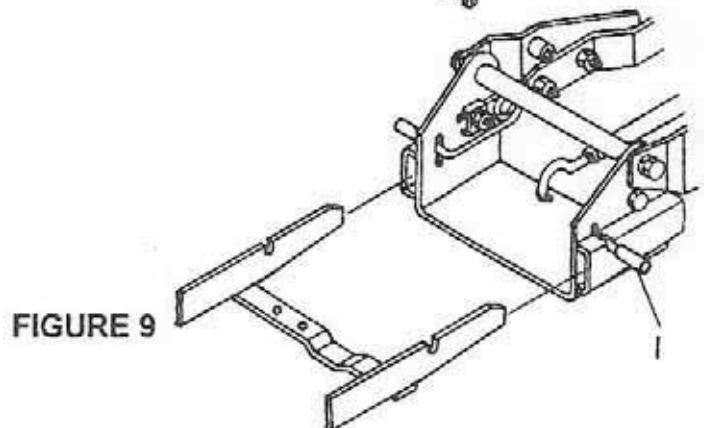


FIGURE 9

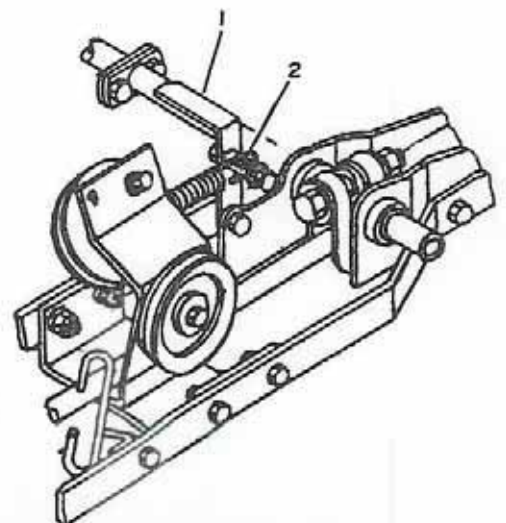


FIGURE 10

## ASSEMBLY

**WARNING:** Set the parking brake, stop the engine, and remove tractor ignition key. Disconnect engine spark plug wire and keep away from plug to prevent accidental starting.

- d) Tractor with electric PTO clutch: Loosen the belt tensioner (fig.10, item 1) by moving the lever forward. Put tension on the V-belt after it is installed by moving the lever (item 1) toward the rear.
- e) Tractor with manual PTO clutch: Loosen the belt tension by moving the tractor (PTO) clutch backwards.
- f) Route the snowblower drive belt in the subframe inside left belt guide (fig. 1, item 12), around the "V" idler pulley (fig. 11, item 1), inside the right belt guide (fig. 1, item 14), around "V" idler pulley (fig. 11, item 2) and around the tractor drive pulley (fig. 11, item 3).

**NOTE:** Be careful the left V-belt section between the two pulleys (fig. 11, item 6 and 1) is not twisted.

- g) On tractor with manual PTO clutch: Remove the belt guide on the tractor engine attachment drive pulley and install the bent flat bar drive pulley guide (fig. 12, item 1) inside the tractor frame. On the left hand side, use the tractor hole 7 11/16" from the center of the front axle. The left hand side of the guide should be higher. On the right side, use the hole 8 5/16" rear of the center of the front axle. Secure tightly with two 3/8 X 3/4" bolts and nuts.

**NOTE:** Store belt guide in a safe place, as it must be re-installed when snowblower is removed.

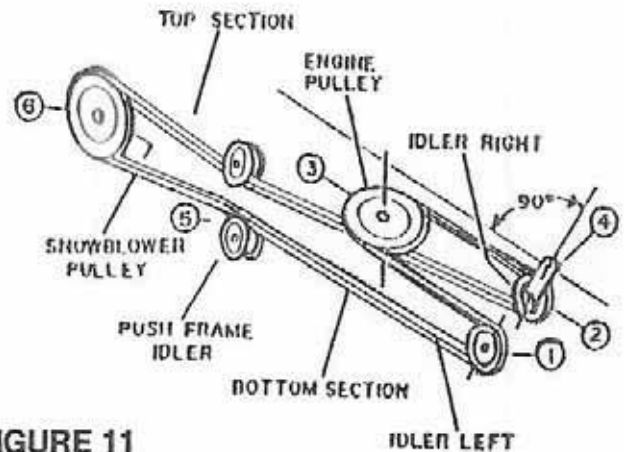


FIGURE 11

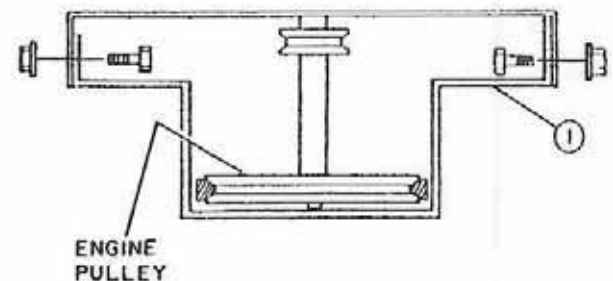


FIGURE 12

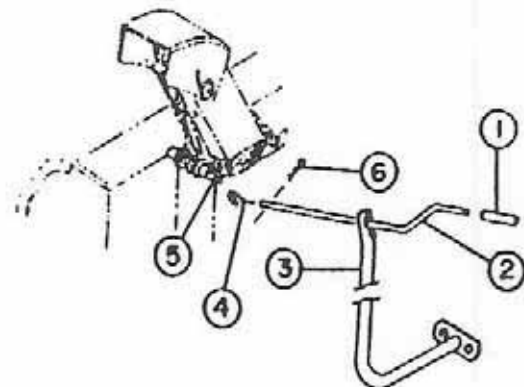


FIGURE 13

## ASSEMBLY

- h) Reconnect engine spark plug wire and close tractor hood.
- i) Install 1/2 X 3" handle grip (fig. 13, item 1) on chute rotation handle (item 2) and place handle through grommet in rotation support bracket (item 3).
- j) Install hook (fig. 13, item 4) on rotation worm (item 5). Insert hook in rotation handle and lock in place with a 2.5mm hair pin (item 6).
- k) Go to Step 4 for V-Belt adjustment.

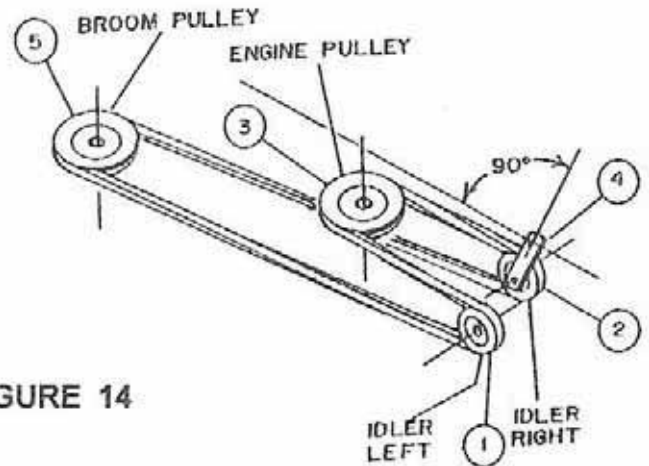


FIGURE 14

### BROOM



**WARNING:** See broom Owner's Manual for Safety Precautions, Assembly and Operation instructions.

- a) Attach broom to the tractor subframe by placing the male hitch flat bar into the subframe's female channel hitch (fig. 9). Be sure the male hitch is entered to its maximum and is locked by the springs.



**WARNING:** Set the parking brake, stop the engine, and remove tractor ignition key. Disconnect engine spark plug wire and keep away from plug to prevent accidental starting.

- b) Tractor with electric PTO clutch: Loosen the belt tensioner (fig. 10, item 1) by moving the lever forward. Put tension on the V-belt after it is installed by moving the lever (item 1) toward the rear.
- c) Tractor with manual PTO clutch: Loosen the belt tension by moving the tractor (PTO) clutch backwards.

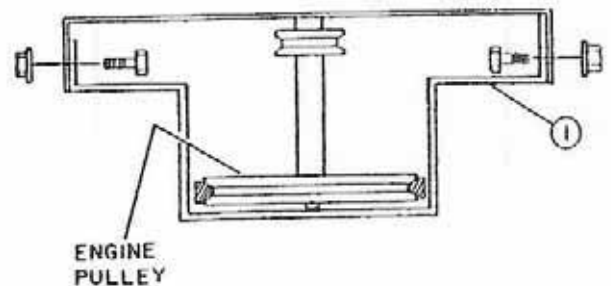


FIGURE 15

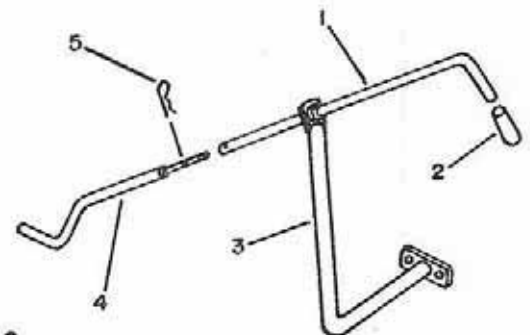


FIGURE 16

## ASSEMBLY

- d) Route the broom drive belt in the subframe, inside left belt guide (fig. 1, item 12), around the "V" idler pulley (fig. 14, item 1) inside the right belt guide (fig. 1, item 14), around "v" idler pulley (fig. 14, item 2) and around the tractor drive pulley (fig. 14, item 3).

**NOTE:** Be careful the left V-belt section between the two pulleys (fig. 14 item 1 & 5) is not twisted.

- e) On tractor with manual PTO clutch: Remove the belt guide on the tractor engine attachment drive pulley and install the bent flatbar drive pulley guide (fig. 15, item 1) inside the tractor frame. On the left hand side, use the tractor hole 7 11/16" or 10 1/4" from the center of the front axle. The left hand side of the guide should be higher. On the right side, use the hole 8 5/16" or 8 7/8" rear of the center of the front axle. Secure tightly with two 3/8 X 3/4" bolts and nuts. Tighten securely.

**NOTE:** Store belt guide in safe place, as it must be re-installed after the broom is removed.

- f) Reconnect the engine spark plug wire and close tractor hood.
- g) Install 1/2 X 3" handle grip (fig. 16, item 2) on angle handle (item 1).
- h) Insert handle through the grommet on support (fig. 16, item 3) and insert on handle extension (item 4). Secure with 2.5mm hair pin (item 5).
- i) Go to Step 4 for V-belt adjustment.

### BLADE



**WARNING:** See blade Owner's Manual for Safety Precautions, Assembly and Operation Instructions.

- a) Attach the blade to the tractor subframe by placing the male hitch flat bar into the subframe's female channel hitch (fig. 9). Be sure the male hitch is entered to its maximum and is locked by the springs.
- b) Install 1/2 X 3" handle grip (fig. 16, item 2) on angle handle (item 1).
- c) Insert handle through a grommet on the support (fig. 16, item 3) and insert on handle extension (item 4). Secure with 2.5mm hair pin.

### STEP 4: V-BELT ADJUSTMENT



**WARNING:** Set the parking brake, stop the engine and remove tractor ignition key. Disconnect engine spark plug wire and keep away from plug to prevent accidental starting.

- a) Belt Adjustment with Manual PTO clutch: When the clutch mechanism is in engaged position, the pulley lever (fig. 11 or 14, item 4) must be approximately 90° with the subframe. The spring should be lengthened between 3/4" to 7/8". If it is not like this, adjust the belt tension, using the left adjustable idler pulley (item 1). Disengage the clutch, loosen the middle bolt, slide the idler in the slot and retighten the bolt. Engage the manual PTO clutch and recheck to be sure the spring length is between 3/4" to 7/8". The lever pulley angle should be appx. 90° with subframe.

## ASSEMBLY

- b) Belt Adjustment with electric PTO clutch:  
The pulley lever (fig. 11 or 14, item 4) must be approx. 90° with the subframe and the spring lengthened between 3/4" to 7/8". If it is not like this, loosen the belt by moving the tension arm forward. Adjust the belt tension, using the left adjustable idler pulley (item 1). Loosen the middle bolt, slide the idler in the slot and retighten the bolt. Retighten the V-belt by moving the tension arm toward the rear. Check to be sure the spring has between 3/4" to 7/8" length, the pulley lever angle should be approx. 90° with the subframe.

### STEP 5: SUBFRAME DISMOUNTING

- a) See: Attachment Owner's Manual (Snowblower, Broom or Blade) for attachment dismounting instructions.
- b) Remove the rear counterweight.
- c) Tractor with manual clutch only: Remove the clutch extension bracket (fig. 7, item 5) and unhook the spring (item 6) if installed.
- d) Dismount subframe by loosening the 5/8" bolt securing subframe on the rear tractor tow hitch. Place a piece of wood under the front subframe. Remove the hair pin from the 3/4" front pin. Remove this pin and lower the front subframe carefully. Remove the 5/8" rear bolt and carefully lower the back.
- e) Carefully pull out the subframe by the middle of tractor on left hand side between the front and rear wheels.

# **BERCOMAC**

LIMITÉE

## OWNER'S MANUAL

MODEL NUMBER

**700217A**

**CAUTION:**

Read and Follow  
All Safety Rules  
and Instructions  
Before Operating  
Your Equipment



- \* ASSEMBLY
- \* OPERATION
- \* MAINTENANCE
- \* REPAIR PARTS

**BERCO SUBFRAME  
FOR HUSQVARNA / POULAN  
RALLYE / YARD PRO**

# BERCOMAC

LIMITÉE

## MANUEL DU PROPRIÉTAIRE

MODELES NUMERO  
700217A

*Att. Darryl*



### ATTENTION:

Lire et Suivre  
Attentivement  
Toutes les Règles  
de Sécurité et  
Instructions Avant  
d'Utiliser Votre  
Equipement

- \* ASSEMBLAGE
- \* OPERATION
- \* ENTRETIEN
- \* PIECES DE  
REPLACEMENT

**BERCO SOUS-CHASSIS  
POUR HUSQVARNA / POULAN  
RALLYE / YARD PRO**

102651 - maj 17/04/97

*CHANTAL*



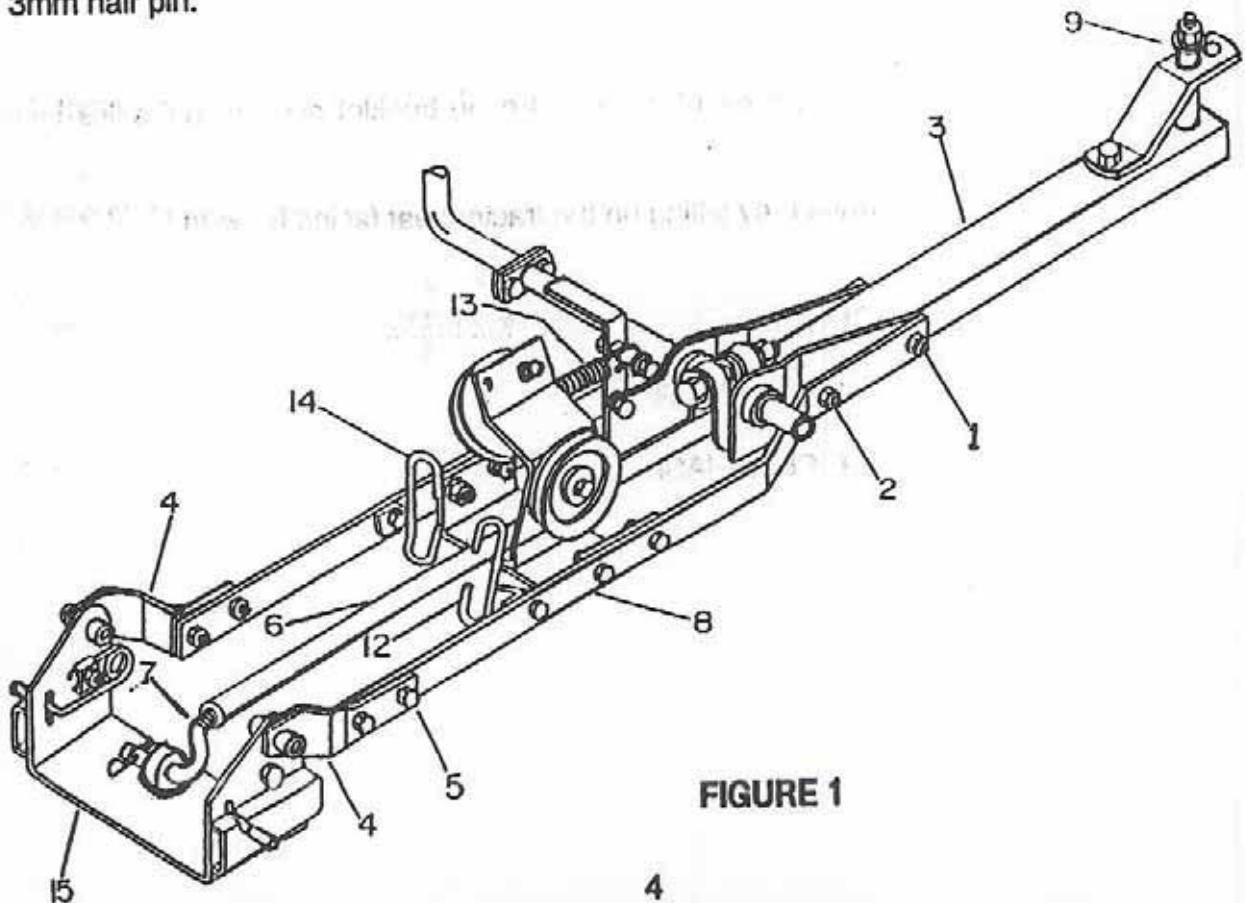
## ASSEMBLY

**IMPORTANT:** Torque all bolts according to torque specification table on page 17, unless otherwise specified.

**IMPORTANT:** Place the subframe on a flat surface to be sure the channel (fig. 1, item 3) and the under portion of the front attaching bracket (item 4) are in line with the flat bars. Tighten all bolts securely.

### STEP 1: SUBFRAME PREPARATION

- a) Unfold the subframe by loosening the two bolts (fig. 1, item 2), place the channel (item 3) in straight position and install two  $7/16 \times 1 \frac{1}{4}$ " bolts (item 1), locks and nuts. Do not tighten yet. Extend the front portion (item 4) by loosening the bolts (item 5) and insert two bolts  $3/8 \times 1$ " with nuts. Secure the four bolts loosely. Adjust the overall length of push arm on garden tractor to  $32 \frac{3}{16}$ ", and on the lawn tractor to 32" by screwing the adjusting rod (item 7). Place the adjusting rod on the support pivot hitch hole (item 15) and secure with 3mm hair pin.



## ASSEMBLY

- b) Tractor with electric clutch (PTO): Leave the subframe as is and go to section d).
- c) Tractor with manual clutch (PTO) Remove the spring tension arm (fig. 2, item 1) and the spring sleeve holder (fig. 2, item 2).
- d) Install the rotation support (fig. 3, item 1) on left hand side of subframe by using the existing bolts  $3/8 \times 1 \frac{1}{4}$ " (item 2 & 3), making sure the belt guide is  $90^\circ$  to subframe flatbar. Secure bolts with nuts. Insert plastic grommet (item 7) in rotation support (item 1).
- e) Garden Tractor: Loosen the bolts (fig. 4, item 1 & 2). Be sure they are installed in the first set of holes (item 4) with the flange sleeve (item 5), the flange face up.  
Lawn Tractor: Remove the hitch plate (fig. 4, item 6) and re-install loosely in the second set of holes (item 3) with the flange sleeve (item 5), the flange face down.

### STEP 2: SUBFRAME INSTALLATION

**NOTE:** On lawn tractor: if you do not have a  $13/16$ " dia. hole on front frame brackets (fig. 5, item 1), replace the brackets with the ones supplied in kit (page 12, ref. 14 and 19).

- a) Carefully place the subframe under the tractor by the left hand side between the front and rear wheels.
- b) Lift the front portion of subframe between the tractor mounting plates (fig. 5, item 1) and hold in place with  $3/4" \times 13.50"$  pin. Secure the pin with 3mm hair pins.

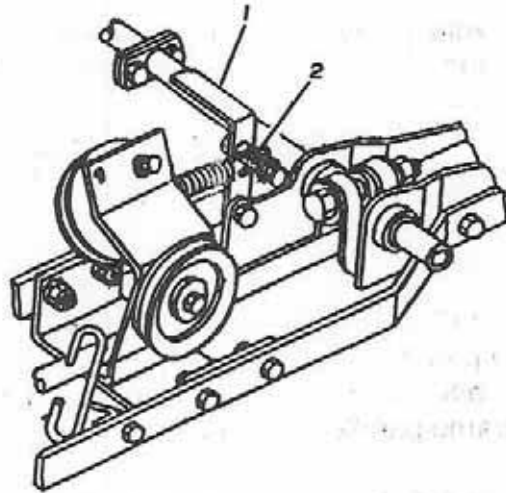


FIGURE 2

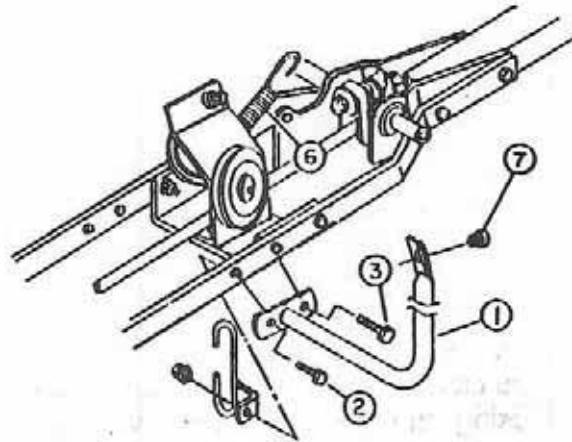


FIGURE 3

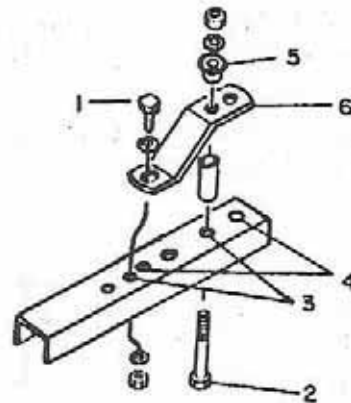


FIGURE 4

## ASSEMBLY

- c) Attach the rear portion of the subframe (fig. 4) to tractor tow hitch with the flange sleeve under the tow hitch, using bolts already installed with a flatwasher, a lockwasher and a nut on top of tractor tow hitch. Tighten securely.

**NOTE:** If you install this subframe on the older model with the higher tow hitch you will need part #102071 tube spacer 2 11/16" long and 5/8" x 6 1/2" bolts to maintain the subframe parallel to the ground.

- d) Install arm lift (fig. 6, item 2) on arm lift extension (item 3) using two 5/16 X 3/4" bolts with nuts. Tighten securely.

- e) Install 1 X 4 1/2" handle grip (fig. 6, item 1) on arm lift (item 2).

- f) Lift the lift mechanism by pulling back the arm lift. The arm lift's top portion should be 1" outside the rear fender and 2 1/2" to 3" above tire. If your tractor is equipped with a cab, adjust the arm lift on top of the rear fender, the bottom part of arm lift as close as possible to footrest to permit using the arm lift inside the cab. For adjustment, loosen the bolt (fig. 6, item 4) and adjust properly. After the arm lift has been adjusted properly, tighten 5/8" bolt (item 4) very firmly. Using a hinge handle or torque wrench at 85 to 90 ft./lbs. to be sure the arm lift does not slide on the lift lever.

- g) Tractor with manual PTO clutch: Install the clutch extension bracket (fig. 7, item 5) on the tractor clutch lever (item 4), using a 3/8 X 3/4" bolt and nut (placing bent portion of bracket against front side of tractor clutch lever). Tighten securely and attach free end of spring (item 6) to extension bracket.

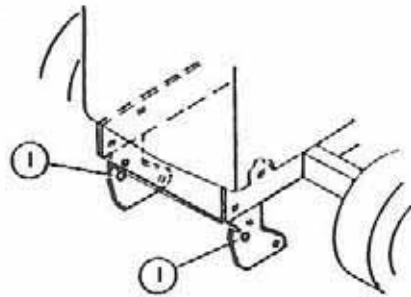


FIGURE 5

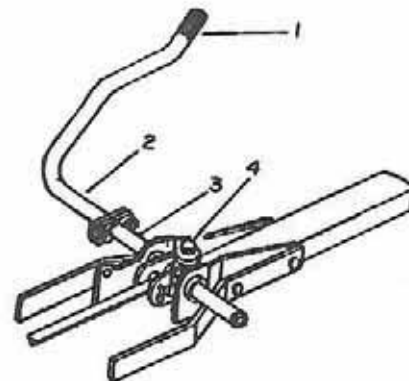


FIGURE 6

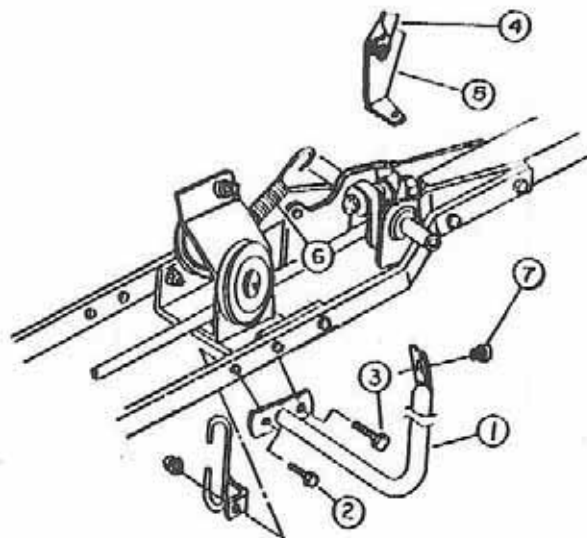


FIGURE 7

## ASSEMBLY

### STEP 3: ATTACHMENT MOUNTING INSTRUCTIONS

**WARNING:** For your safety, use the Owner's Manual attachment for snowblower, broom and blade Installation Instructions. Read all the Safety Precautions, Assembly and Operation Instructions.

**NOTE:** If attachment does not raise appx. 3" (76mm) above ground level, check and adjust tractor tire pressures as follows:

Front tires - 14-15 psi  
Rear tires - 7-8 psi

### SNOWBLOWER

**WARNING:** See Snowblower Owner's Manual for Safety Precautions, Assembly and Operation Instructions.

- Install the idler support (fig. 8, item 5) on snowblower male hitch (item 4) using two 5/16 X 1" bolts and nuts. Tighten securely.
- Remove the idler guard (fig. 8, item 1). Place the bottom section of the V-belt on top of the bottom idlers (item 3) and the top section of the V-belt under the top idler (item 2). Reinstall the guards, using 3/8" nuts, tighten securely.
- Attach the snowblower to the tractor subframe by placing the male hitch flat bar into subframe's female channel hitch (fig. 9). Be sure the male hitch is entered to it's maximum and is locked by the springs.

**IMPORTANT:** On Garden Tractor if the snowblower angle is not adjusted at 91° the spout touches the tractor hood. See Snowblower Owner's Manual for adjustment instructions.

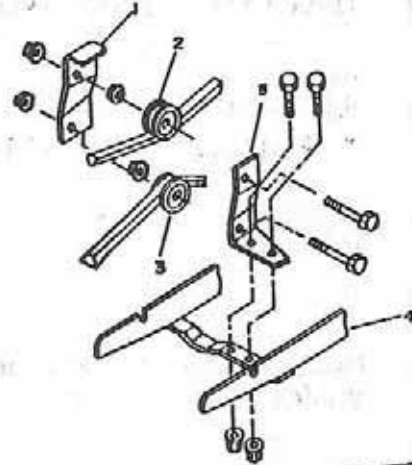


FIGURE 8

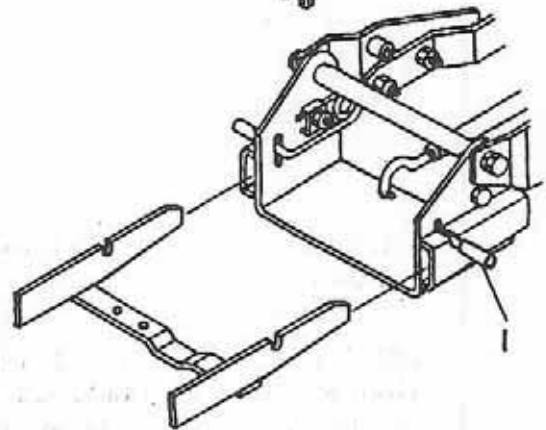


FIGURE 9

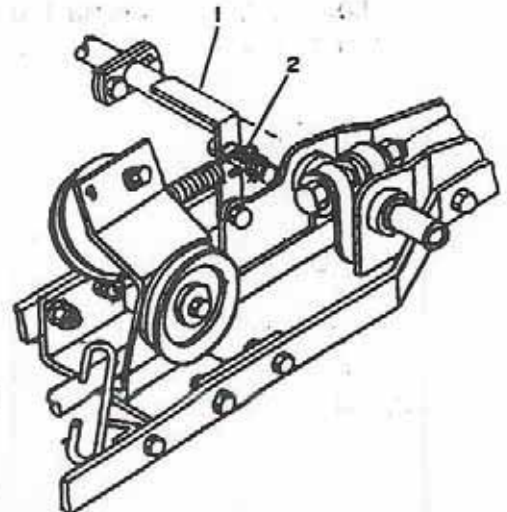


FIGURE 10

## ASSEMBLY

**WARNING:** Set the parking brake, stop the engine, and remove tractor ignition key. Disconnect engine spark plug wire and keep away from plug to prevent accidental starting.

- d) Tractor with electric PTO clutch: Loosen the belt tensioner (fig.10, item 1) by moving the lever forward. Put tension on the V-belt after it is installed by moving the lever (item 1) toward the rear.
- e) Tractor with manual PTO clutch: Loosen the belt tension by moving the tractor (PTO) clutch backwards.
- f) Route the snowblower drive belt in the subframe inside left belt guide (fig. 1, item 12), around the "V" idler pulley (fig. 11, item 1), inside the right belt guide (fig. 1, item 14), around "V" idler pulley (fig. 11, item 2) and around the tractor drive pulley (fig. 11, item 3).

**NOTE:** Be careful the left V-belt section between the two pulleys (fig. 11, item 6 and 1) is not twisted.

- g) On tractor with manual PTO clutch: Remove the belt guide on the tractor engine attachment drive pulley and install the bent flat bar drive pulley guide (fig. 12, item 1) inside the tractor frame. On the left hand side, use the tractor hole  $7 \frac{11}{16}$ " from the center of the front axle. The left hand side of the guide should be higher. On the right side, use the hole  $8 \frac{5}{16}$ " rear of the center of the front axle. Secure tightly with two  $\frac{3}{8}$  X  $\frac{3}{4}$ " bolts and nuts.

**NOTE:** Store belt guide in a safe place, as it must be re-installed when snowblower is removed.

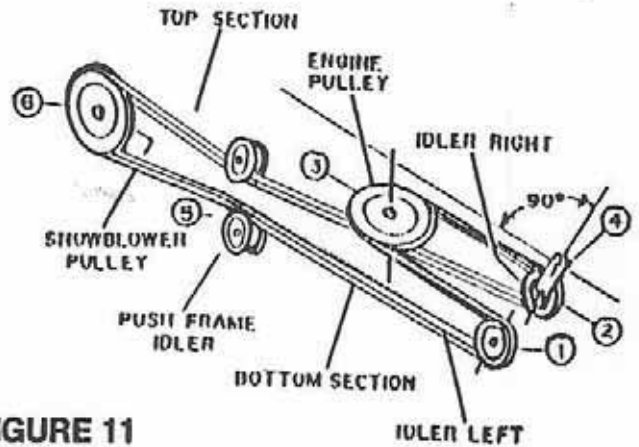


FIGURE 11

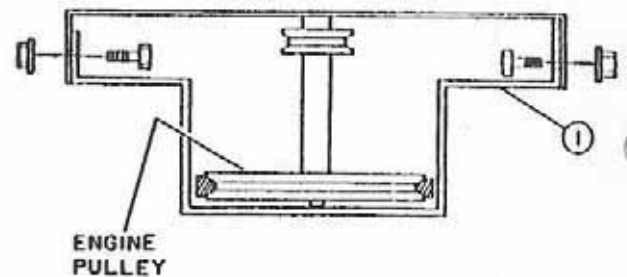


FIGURE 12

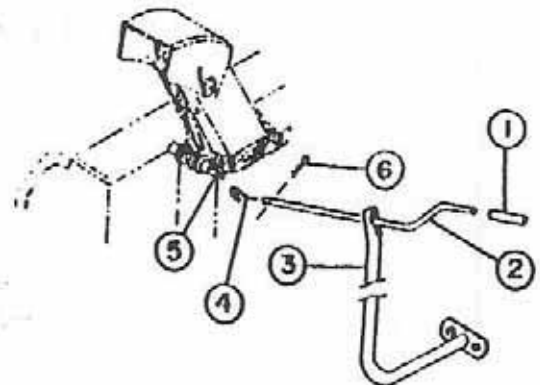


FIGURE 13

## ASSEMBLY

- h) Reconnect engine spark plug wire and close tractor hood.
- i) Install 1/2 X 3" handle grip (fig. 13, item 1) on chute rotation handle (item 2) and place handle through grommet in rotation support bracket (item 3).
- j) Install hook (fig. 13, item 4) on rotation worm (item 5). Insert hook in rotation handle and lock in place with a 2.5mm hair pin (item 6).
- k) Go to Step 4 for V-Belt adjustment.

### BROOM

**WARNING:** See broom Owner's Manual for Safety Precautions, Assembly and Operation instructions.

- a) Attach broom to the tractor subframe by placing the male hitch flat bar into the subframe's female channel hitch (fig. 9). Be sure the male hitch is entered to its maximum and is locked by the springs.

**WARNING:** Set the parking brake, stop the engine, and remove tractor ignition key. Disconnect engine spark plug wire and keep away from plug to prevent accidental starting.

- b) Tractor with electric PTO clutch: Loosen the belt tensioner (fig. 10, item 1) by moving the lever forward. Put tension on the V-belt after it is installed by moving the lever (item 1) toward the rear.
- c) Tractor with manual PTO clutch: Loosen the belt tension by moving the tractor (PTO) clutch backwards.

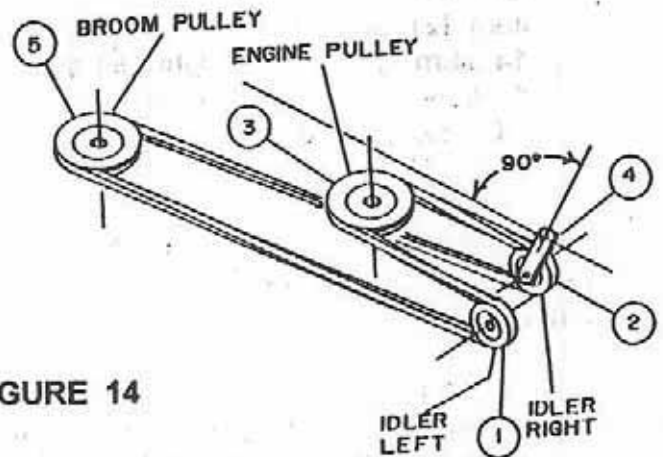


FIGURE 14

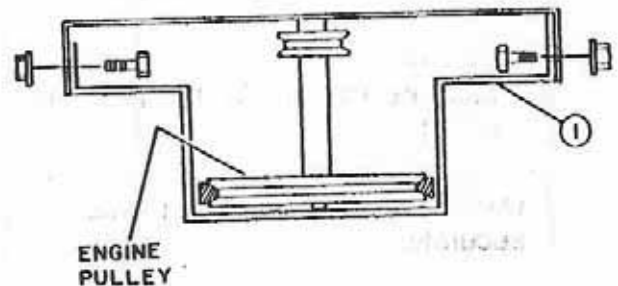


FIGURE 15

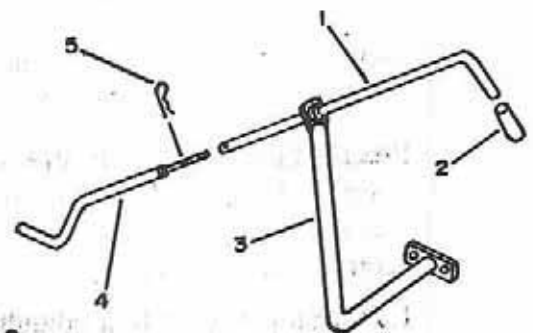


FIGURE 16

## ASSEMBLY

- d) Route the broom drive belt in the subframe, inside left belt guide (fig. 1, item 12), around the "V" idler pulley (fig. 14, item 1) inside the right belt guide (fig. 1, item 14), around "v" idler pulley (fig. 14, item 2) and around the tractor drive pulley (fig. 14, item 3).

**NOTE:** Be careful the left V-belt section between the two pulleys (fig. 14 item 1 & 5) is not twisted.

- e) On tractor with manual PTO clutch: Remove the belt guide on the tractor engine attachment drive pulley and install the bent flatbar drive pulley guide (fig. 15, item 1) inside the tractor frame. On the left hand side, use the tractor hole 7 11/16" or 10 1/4" from the center of the front axle. The left hand side of the guide should be higher. On the right side, use the hole 8 5/16" or 8 7/8" rear of the center of the front axle. Secure tightly with two 3/8 X 3/4" bolts and nuts. Tighten securely.

**NOTE:** Store belt guide in safe place, as it must be re-installed after the broom is removed.

- f) Reconnect the engine spark plug wire and close tractor hood.
- g) Install 1/2 X 3" handle grip (fig. 16, item 2) on angle handle (item 1).
- h) Insert handle through the grommet on support (fig. 16, item 3) and insert on handle extension (item 4). Secure with 2.5mm hair pin (item 5).
- i) Go to Step 4 for V-belt adjustment.

### BLADE



**WARNING:** See blade Owner's Manual for Safety Precautions, Assembly and Operation Instructions.

- a) Attach the blade to the tractor subframe by placing the male hitch flat bar into the subframe's female channel hitch (fig. 9). Be sure the male hitch is entered to it's maximum and is locked by the springs.
- b) Install 1/2 X 3" handle grip (fig. 16, item 2) on angle handle (item 1).
- c) Insert handle through a grommet on the support (fig. 16, item 3) and insert on handle extension (item 4). Secure with 2.5mm hair pin.

### STEP 4: V-BELT ADJUSTMENT



**WARNING:** Set the parking brake, stop the engine and remove tractor ignition key. Disconnect engine spark plug wire and keep away from plug to prevent accidental starting.

- a) Belt Adjustment with Manual PTO clutch: When the clutch mechanism is in engaged position, the pulley lever (fig. 11 or 14, item 4) must be approximately 90° with the subframe. The spring should be lengthened between 3/4" to 7/8". If it is not like this, adjust the belt tension, using the left adjustable idler pulley (item 1). Disengage the clutch, loosen the middle bolt, slide the idler in the slot and retighten the bolt. Engage the manual PTO clutch and recheck to be sure the spring length is between 3/4" to 7/8". The lever pulley angle should be appx. 90° with subframe.

# BERCOMAC

LIMITÉE

## MANUEL DU PROPRIETAIRE

MODELES NUMERO  
700217A

### ATTENTION:

Lire et Suivre  
Attentivement  
Toutes les Règles  
de Sécurité et  
Instructions Avant  
d'Utiliser Votre  
Equipement



- \* ASSEMBLAGE
- \* OPERATION
- \* ENTRETIEN
- \* PIECES DE  
REPLACEMENT

**BERCO SOUS-CHASSIS  
POUR HUSQVARNA / POULAN  
RALLYE / YARD PRO**

102651 - maj 17/04/97

CHANTAL



## ASSEMBLAGE

### ETAPE 2: PREPARATION DU SOUS-CHASSIS

- a) Déplier le sous-châssis en dévissant les deux boulons (fig. 6, item 2). Placer le profilé en U (item 3) dans la position allongée et installer les deux boulons 7/16 X 1 1/4" (item 1), rondelles de blocage et écrous. Serrer légèrement. Allonger la partie avant (item 4) en desserrant les boulons (item 5). Fixer en place avec deux autres boulons de 3/8 X 1" et écrous. Serrer légèrement. Ajuster la longueur hors tout du bras de poussée à 32 3/16" sur le Tracteur de Jardin et à 32" sur le Tracteur à Pelouse en vissant ou dévissant le tige d'ajustement (item 7). Insérer la tige d'ajustement dans le trou du support de pivot (item 15) et fixer en place avec une goupille à ressort de 3mm.

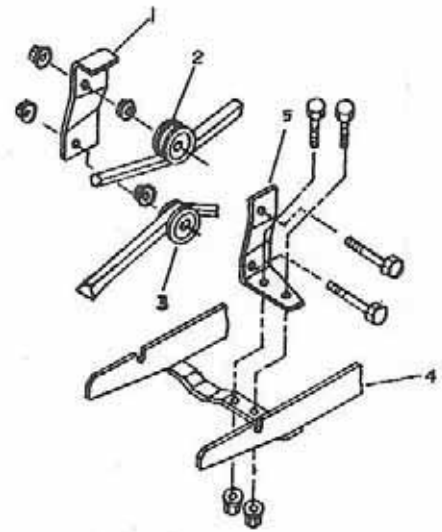


FIGURE 5

**IMPORTANT:** Placer le sous-châssis sur une surface plate et assurez-vous que le profilé en U (fig. 6, item 3) et les plaques d'attache (item 4) soient bien en ligne avec le fer plat (item 8). Serrer fermement les boulons.

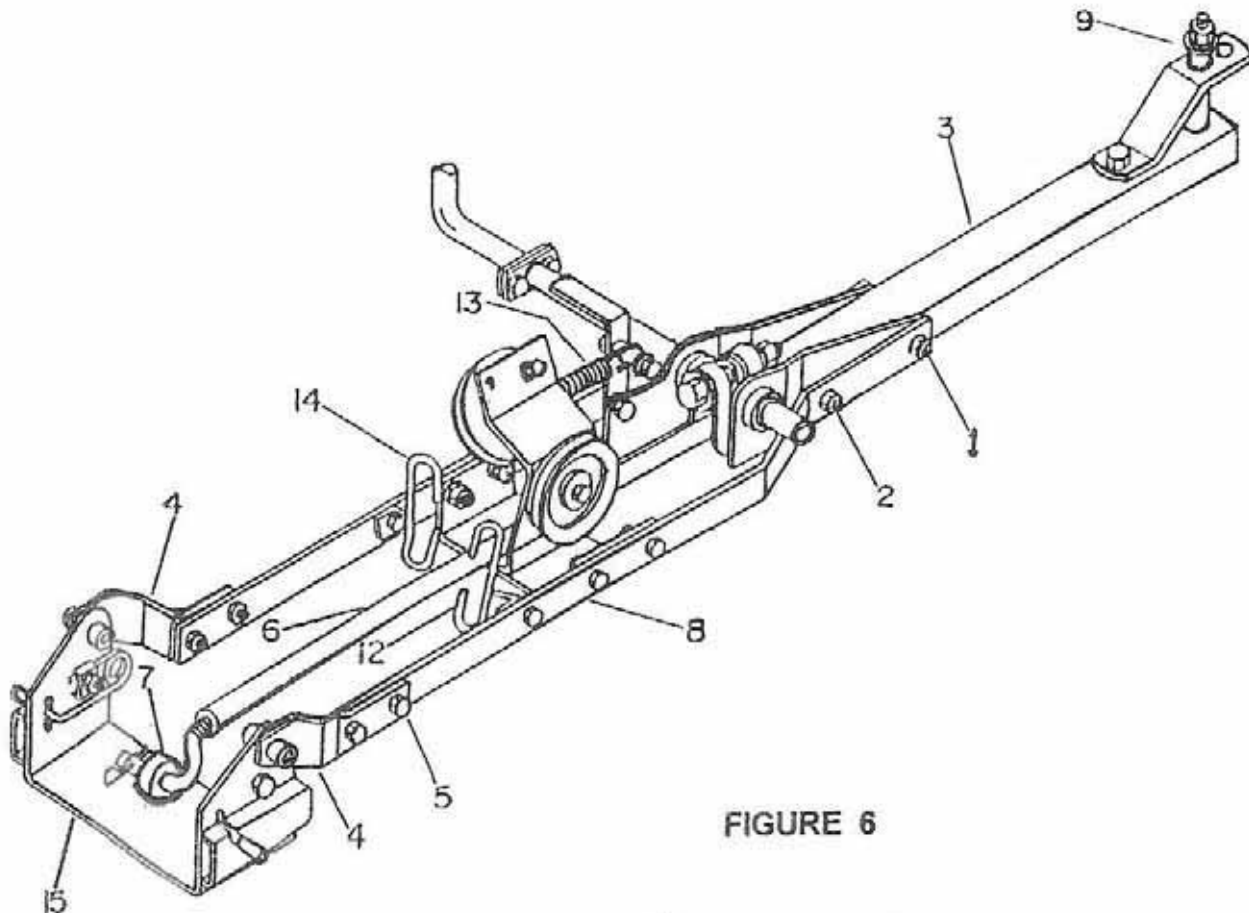


FIGURE 6





## ERRATUM 700217

FOR TRACTORS WITH MANUAL P.T.O. WHICH USES A CABLE FOR ATTACHMENTS PLEASE REPLACE THE FOLLOWING INSTRUCTIONS AS INDICATED.

PAGE 5-c

### STEP 1: SUBFRAME PREPARATION

c) Remove the spring tension arm (fig. 2, item 1) and the spring sleeve holder (item 2).

c-1) Disconnect the tension pulley complete with the spring from the right side (fig. B, item 1) and reinstall as follows: install the bolt (fig. A, item 1), the flat washer (item 2), the spring holder (item 3) the flange washer (item 4) the flat washer (item 5), the tension pulley (item 6) 3 flat washers (item 7), and the tension arm (item 8 or fig. B, item 3). Secure in place using a flange nut (item 9). Tighten firmly. Make sure the spring holder (item 3) moves freely.

Page 6-g

### STEP 2: SUBFRAME INSTALLATION

g-1) Install the cable (fig. B, item 5) into the fixation plate (item 4). Secure in place with hair pin 2mm. (item 6). Attach the spring (item 7) to the spring holder (item 2). Install the cable holder (item 4) to the frame. To identify the correct position, follow these steps: when clutch is disengaged, the tension pulley (fig. B item 1) must touch the belt guide (item 8) and the cable must be slightly tightened. Secure with two hex bolts 1/4 x 3/4" and flange nuts. Tighten firmly.

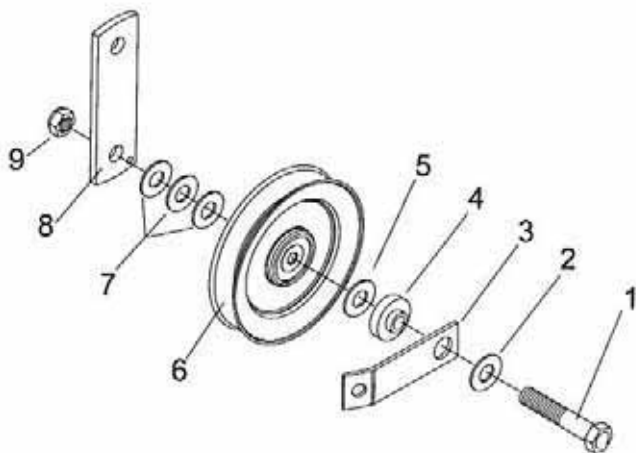


FIGURE A

POUR LES TRACTEURS AVEC EMBRAYAGE MANUEL (P.D.F.) DES ATTACHEMENTS QUI FONCTIONNENT AVEC UN CÂBLE VEUILLEZ TENIR COMPTE DES INSTRUCTIONS SUIVANTES.

Page 5-c

### ETAPE 1: PREPARATION DU SOUS-CHASSIS

c) Enlever le bras de tension du ressort (fig. 2, item 1) et la douille d'attache du ressort (item 2).

c-1) Démontez la poulie de tension du côté droit (fig. B, item 1) au complet avec le ressort et la réinstallez de la manière suivante: installer le boulon (fig. A, item 1), une rondelle plate (item 2) le lien d'attache du ressort (item 3) la douille à bride (item 4) une rondelle plate (item 5) la poulie de tension (item 6) 3 rondelles plates (item 7) le bras de tension (item 8 ou fig. B item 3) et fixer avec un écrou à bride (item 9). Serrer fermement. Assurez-vous que le lien du ressort (item 3) bouge librement.

Page 6-g

### ETAPE 2: INSTALLATION DU SOUS-CHASSIS

G-1) Installer le câble (fig. B, item 5) dans la fixation (item 4). Fixer avec une goupille à ressort 2mm. (item 6). Accrocher le ressort (item 7) au lien d'attache (item 2) et installer la fixation du câble (item 4) au châssis. Pour identifier la bonne position, procéder comme suit: l'embrayage débrayer, la poulie de tension (fig. B, item 1) doit toucher au guide courroie (item 8) et le câble doit être légèrement tendu. Fixer avec deux boulons hex. 1/4 x 3/4" et écrous à bride. Serrer fermement.

FIGURE B