# Installation

## Instructions

2000 RPM Rear PTO Mfg. No. 1692891

For Legacy / 2000 / 2900 Series Garden Tractors

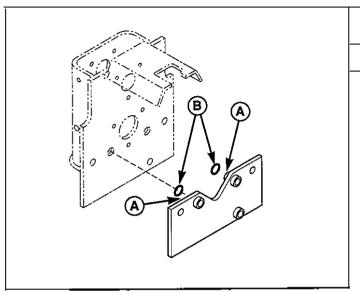


Figure 1. Install O-Rings
A. Mounting Plate Alignment Pins
B. O-Rings



### WARNING

Before beginning installation, engage the parking brake, shut the PTO off, turn the ignition off, and remove the key.

#### **ASSEMBLY**

- 1. Install the two o-rings (B, Figure 1) on the mounting plate alignment pins (A)
- 2. Grease the front and back bearing grease zerks (see Figure 2).

#### **INSTALLATION**

#### install PTO Box

- 1. Remove the rear bumper and mounting hardware.
- 2. Remove the set screw (A, Figure 3) from the hydro pump shaft and fan assembly.

NOTE: For easier access to the set screw (A, Figure 3), remove the capscrew (B, Figure 3) retaining the fan, and remove the fan.

3. Remove the fan and shaft assembly from the output shaft.

This kit equips Legacy/2000/2900 Series tractors with a 2000 RPM rear PTO.

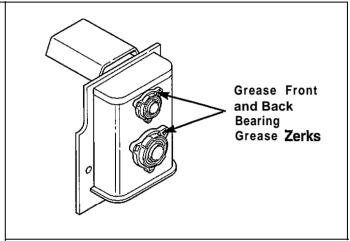


Figure 2. Grease Bearings

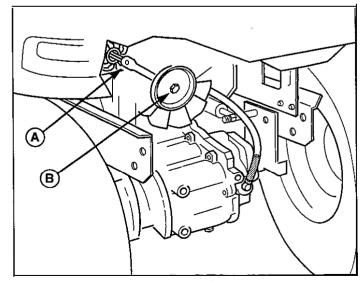


Figure 3. Remove Hydro Fan & Shaft Assembly A. Setscrew

B. Capscrew

- 4. Attach the mounting plate (A, Figure 4) to the transmission using two socket-head capscrews (B) as shown. Torque capscrews to 60-65 ft. lbs. DO NOT over-torque. Be sure the alignment pins and O-rings are facing toward the back of the tractor.
- 5. Grease the hydro pump output shaft with lithium grease.

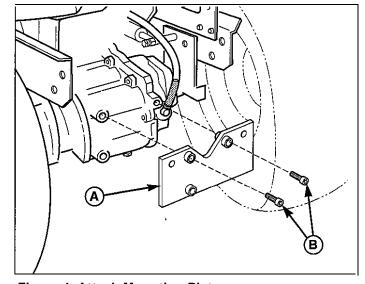


Figure 4. Attach Mounting Plate
A. Mounting Plate
B. 1/2-13 X 1-3/4 Socket Head Capscrews

- 6. Align the input shaft of the PTO box with the output shaft of the hydro pump and slide the PTO box into position (see Figure 5). Be sure to push the PTO box fully into position so that the alignment pins support the weight of the box; DO NOT allow the hydro pump output shaft to support the full weight of the PTO box.
- 7. Secure the PTO box to the mounting plate (A, Figure 5) using two 1/2-13 x 1-1/4 capscrews (B), lock washers (C), and nylon locknuts (D).
- 8. Secure the PTO box to the transmission using one 1/2-13 x 1-3/4 capscrew (E, Figure 5) and lockwasher (C). Torque to 60-65 ft. lbs. DO NOT over-torque.
- 9. Remove the fill level plug (G, Figure 5) and oil fill plug (F).
- 10. Add SAE 30 weight engine oil to the fill fitting until oil runs out of the fill level hole. The PTO box oil capacity is approximately 16 oz (1/2 quart).
- 11. Reinstall the fill level and oil fill plugs.

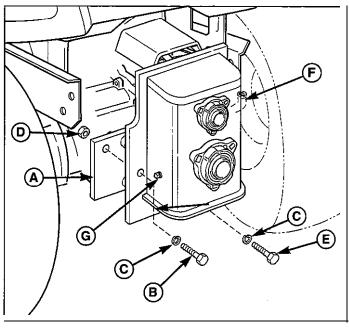


Figure 5. Mount and Secure PTO Box

- A. Mounting Plate
- B. 1/2-13 x 1-1/4 Capscrew
- C. Lo&washer
- D. Locknut
- E. 1/2-13 x 1-3/4 Capscrew
- F. Fill Plug
- G. Fill Level Plug

#### Install Rear PTO Switch

- 1. Using the template (A, Figure 6) and a scratch awl, scribe the switch hole pattern into the lower left corner of the dashboard as shown.
- 2. Drill out the corners of the area to be cut out.
- Cut the plastic dashboard along the scribed pattern.
   BE CAREFUL NOT TO CUT AWAY TOO MUCH
   MATERIAL. If the hole is made too large, the switch will pull out of the dashboard. Excess material can be easily removed with a flat file.

NOTE: If you should accidentally remove too much material, the template can be used as a switch mounting p/ate, Remove an additional 1/16" of material from the hole and secure the template to the dashboard using two 10-32 x 1/2 truss head screws, washers, and nuts.

4. Install the switch into the dashboard. Test the fit by activating the switch several times.

### **Connect Wiring**

- Locate the rear PTO switch plug on the main wiring harness behind the dashboard. Remove the jumper (A, Figure 7) from the harness plug and connect the harness to the rear PTO switch.
- Connect the rear electric PTO clutch to the plug (A, Figure 8) located on the rear wire harness under the right rear wheel well.

#### **Burnish PTO Clutch**

After installing the PTO box and the attachment to be used with the PTO box, the electric clutch must be burnished. The purpose of burnishing the electric clutch is to burn off coatings on parts that are there to prevent corrosion before initial use. Burnishing is necessary to assure correct stopping times.

- Select a safe area to operate the PTO. With the parking brake engaged, the PTO switch disengaged, and an operator in the seat, start the tractor engine. Run the engine at full throttle.
- 2. Engage the PTO switch and run the attachment for fifteen seconds. Disengage the PTO switch and wait for the PTO to stop.
- 3. Repeat step 2 ten times.

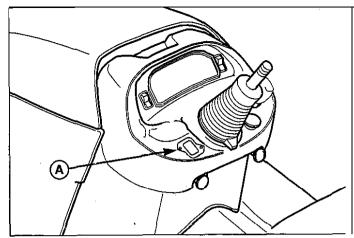


Figure 6. Switch Template A. Switch Hole Template

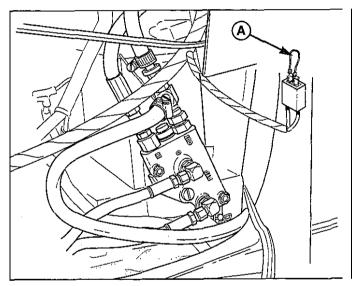


Figure 7. Connect PTO Switch A. Jumper

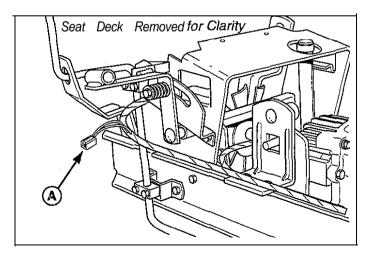
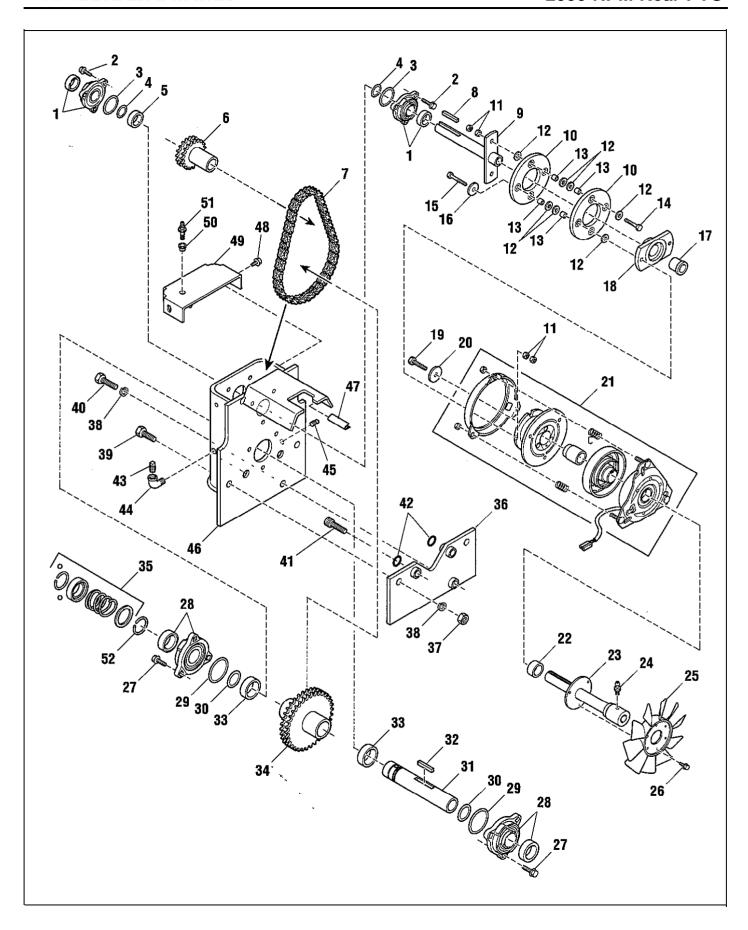


Figure 8. PTO Clutch Plug Location A. PTO Clutch Plug



DEENO	DADTNA	QTY.	DESCRIPTION
REFNO.	PART NO.	QII.	DECOMI HON
1	1716434	2	Bearing
2	1960373	6	Taptite Screw, 5/16-I8 x 1
3	1717639	2	O-Ring, 1.610 ID
4	1717638	2	O-Ring, ,989 ID
5	1716950	1	Spacer
6	1716392	1	Sprocket Assy, 19 Tooth
7	1717599	1	Chain, #40-2 x 46 Pitches
8	154096	1	Key
9	1716401	1	Shaft Assy
10	1676829	2	Flex Coupling
11	1923362	8	Locknut, 5/16-18
12	1919326	14	Washer, <b>5/1</b> 6
13	156150	8	Spacer
14	1921977	2	Capscrew, 5/16-18 x 1-1/4
15	1921978	2	Capscrew, 5/16-18 x 2
16	1933468	2	Washer, 11/32 x 1-1/4 x 1/8
17	1678998	1	Bushing Hub Accor
18 19	1676999	1	Hub Assy
20	1921968 1678997	4	Capscrew, <b>3/8-18</b> x 2 Washer, <b>13/32</b>
21	1709199	<b>J</b>	Electric Clutch
22	1718585	1	Spacer
23	1716383	1	Shaft Assy
24	1704314	•	Grease Fitting
25	1716387	i	Fan
26	1929477	3	Taptite Screw, #10-24 x 1/2
27	1927187	6	Taptite Screw, 3/8-16x 1
28	1716431	ž	Bearing-Flange
29	1717641	2	O-Ring, 2.238
30	1717640	2	O-Ring, 1.372 ID
3 1	1716403	1	Shaft
32	905856	1	Key, 1/4 x 1/4 x 1-1/2
33	1716427	2	Spacer
34	1716393	1	Sprocket Assy, 34 Tooth
35	1718475	1	Spring Lock Kit
36	1716955	1	Plate Assy
37	1916951	2	Nut, 1/2-13
38	1916966	3	Lockwasher, 1/2
39	1921176	2	Capscrew, 1/2-13 x 1-1/4
40	1921535	1	Capscrew, 1/2-13 x 1-3/4
41	1960597	2	Socket Hd. Capscrew, 1/2-13 x 1-3/4
42	176111	2	O-Ring
43	1673452	1	Pipe Plug, 3/8
44	1673453	 	Elbow, 3/8 NPT
45	901652	1	Pipe Plug, 1/4 NPT, Square Hd
46 48	1716402	l o	Case Assy Taptito Scrow 5/16-18 v 1/2
48 49	1924856	2	Taptite Screw, 5/16-18 x 1/2 Cover Assy
49 50	1717078 1654930	1	Bushing, Rubber
5 U 5 1	1654930	4	Breather Assy
5 1 5 2	1709905 1718938	1	Retaining Ring
5 Z *	1716332	1	Switch Mounting Template
*	1930531	2	Truss Hd. Screw, #10-32 x 1/2
*	1960096	2	Washer
*	1930627	2	Nut, <b>#10-32</b>

**NOTES** 

