



## Application Systems PTO Sprayer Pump

### Used with:

- 3P300
- TA500



When you see this symbol, the subsequent instructions and warnings are serious - follow without exception. Your life and the lives of others depend on it!

## General Information

These instructions explain how to install the Application Systems PTO pump. The pump pressurizes sprayer contents for application.

These instructions apply to:

507-041A	PUMP TA 540 DRIVE SHAFT ASSY
507-042A	PUMP TA 1000 1 3/8 DRV SHAFT
507-051A	PUMP 3-POINT 540 ASSY
507-052A	PUMP 3-POINT 1000 1-3/8 ASSY

## Manual Update

Refer to the operator's manual for detailed information on safely operating, adjusting, troubleshooting and maintaining the Application Systems PTO pump. Refer to the parts manual for part identification.

- 3P300 Operator's Manual .....500-103M
- 3P300 Parts Manual. ....500-062P
- TA500 Operator's Manual. ....500-102M
- TA500 Parts Manual. ....500-061P

## Before You Start

Beginning on page 3 are detailed listings of parts included in the Application Systems PTO pump packages. Use these lists to inventory parts received.

## Assembly Instructions

### TA500 Assembly

Refer to Figure 1

1. Attach driveline-bearing mount (1) to sprayer tongue (2) using 3/8-inch bolts and flange nuts.
2. Mount pump (3) onto output shaft of driveline-bearing mount. Secure shaft coupler (4) with 1/2-inch bolts and nylock nuts.

3. Mount torque arm (5) on pump using 5/16-inch carriage bolts and flange nuts.

4. Thread set screws (6) into yoke of PTO shaft and install key (7) into input shaft of bearing mount.

5. Install 1-inch hose (8) between pump outlet and Whirlfilter inlet. Secure with worm clamps.

6. Cut 1 1/2-inch hose into a 6-inch-long section and a 45-inch-long section.

7. Using 1 1/4-by-1 1/2-inch elbow (9), install 6-inch section of hose (10) onto pump inlet. Install 1 1/2-inch elbow (11) in other end of 6-inch section. Secure with worm clamps.

8. Install 45-inch section of hose (12) between elbow and tee prior to Quick-Fill inlet under sprayer tank. Secure with worm clamps.

9. Mount driveline shield (13) onto driveline-bearing mount using 5/16-inch flange bolts.

10. Mount torque-arm stop (14) onto left side of tongue using u-bolt and flange nuts. Adjust stop to line up with torque arm.

11. Tighten all hardware and clamps. Refer to operator's manual for setup and operating instructions.

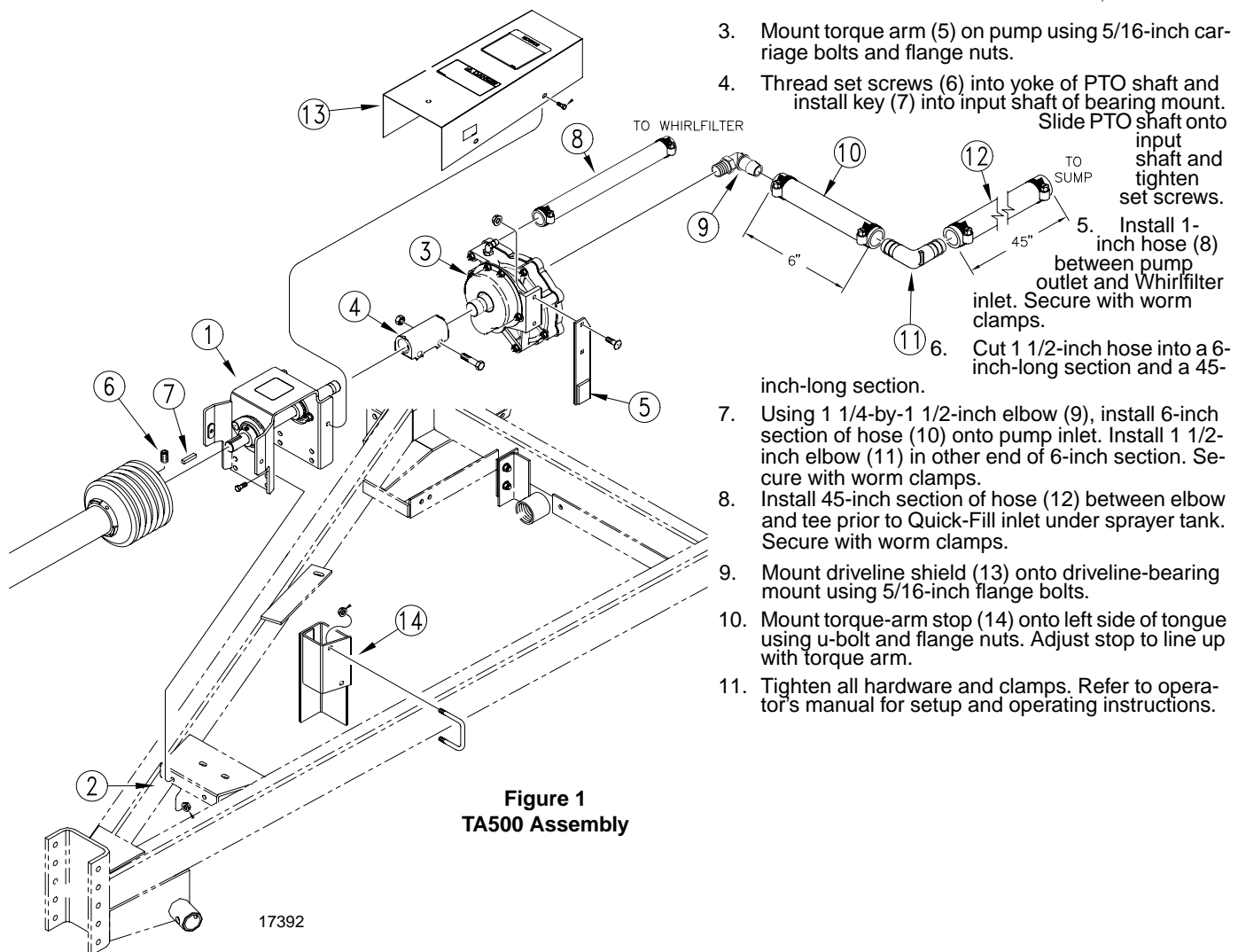


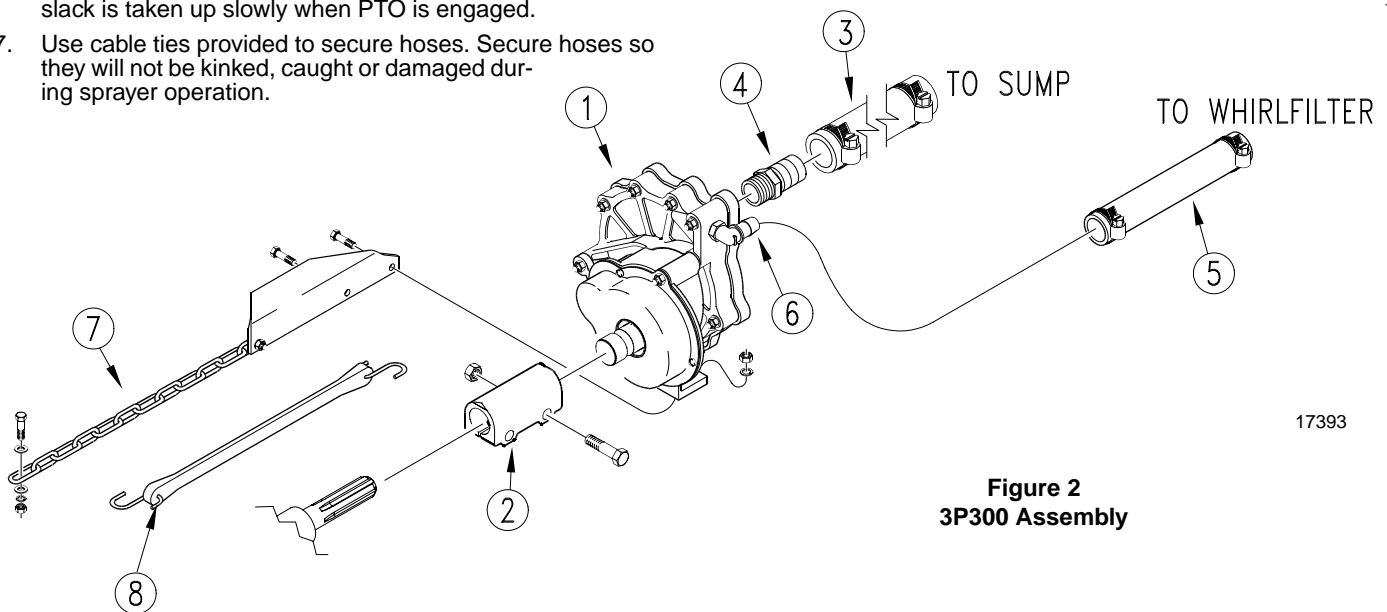
Figure 1  
TA500 Assembly

## Assembly

### 3P300 Assembly

Refer to Figure 2.

1. Mount pump (1) on tractor PTO shaft using shaft coupler (2). Leave 1/2-inch bolt and nylock nut on tractor end of coupler loose. Turn pump so coupler is aligned with notch in tractor PTO shaft. Tighten bolt in coupler.
2. Using 1 1/2-inch hose (3), connect pump inlet (4) to hose barb on sump valve under sprayer tank. Use worm clamps to secure hose.
3. Using 1-inch hose (5), connect pump outlet (6) to Whirlfilter. Use worm clamps to secure hose.
4. Turn PTO shaft by hand to make sure pump and its hardware does not interfere with PTO shields. When satisfied with pump mounting, torque bolts in shaft coupler to 105 foot-pounds.
5. Use 5/16-inch bolts, flat washers and nuts to secure chain (7) to tractor drawbar.
6. Hook tarp strap (8) to chain and tractor drawbar so chain slack is taken up slowly when PTO is engaged.
7. Use cable ties provided to secure hoses. Secure hoses so they will not be kinked, caught or damaged during sprayer operation.



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**Figure 2**  
**3P300 Assembly**

## Listing of Parts

**507-041A Pump TA 540 Drive Shaft Assy**

Your Kit Includes:

Qty.	Part No.	Part Description
1	161-104D	5/16 SQ CR X 1 1/2 LONG
1	507-014K	540 PUMP ASSY
1	507-017D	SHIELD - TA DRIVELINE 540 R
1	507-025D	DRIVELINE SHAFT PUMP COUPLI
1	507-046H	TA DRIVELINE PUMP MOUNT WLD
1	507-050K	DRIVELINE TORQUE ARM W/RUBB
1	507-054K	DRIVELINE BRG MOUNT ASSY 54
2	800-123C	CLAMP WRM DRV #16 SS (.68-1
4	800-125C	CLAMP WRM DRV#28 SS(1.31-2.
2	801-023C	SCREW SET SH 3/8-16X3/8 TYP
4	802-017C	HHCS 3/8-16X1 GR5
2	802-282C	RHSNB 5/16-18X1 GR5
2	802-365C	HHCS 1/2-13X3 GR8
4	802-387C	HFS 5/16-18X3/4 GR5
6	803-068C	NUT HEX FLANGE 3/8-16 PL +
2	803-147C	NUT HEX NYLOCK 1/2-13
2	803-199C	NUT HEX FLANGE 5/16-18 PLT
1	806-111C	U-BOLT 3/8-16 X 4 1/32 X 2
1	818-142C	DECAL DANGER PTO DRIVELINE
1	818-349C	DECAL GREASE 10 HRS LH
1	818-464C	DECAL DRVLNE ATTACH SPECS 5
1	826-236C	PTO 540 2200 X 18.11 NO CLU
1	830-106C	EL 1 1/2HB POLYPROP
1	830-131C	EL 1 1/4MNPT X 1 1/2HB POLY
4.250	990-079R	HOSE 1 1/2ID EPDM SUCTION H
1.833	990-082R	HOSE 1 ID 200PSI EPDM

**507-042A Pump TA 1000 Drive Shaft Assy**

Your Kit Includes:

Qty.	Part No.	Part Description
1	161-104D	5/16 SQ CR X 1 1/2 LONG
1	507-015K	1000 PUMP ASSY
1	507-018D	SHIELD - TA DRIVELINE 1000
1	507-025D	DRIVELINE SHAFT PUMP COUPLI
1	507-046H	TA DRIVELINE PUMP MOUNT WLD
1	507-050K	DRIVELINE TORQUE ARM W/RUBB
1	507-055K	DRIVELINE BRG MOUNT ASSY 10
2	800-123C	CLAMP WRM DRV #16 SS (.68-1
4	800-125C	CLAMP WRM DRV#28 SS(1.31-2.
2	801-023C	SCREW SET SH 3/8-16X3/8 TYP
4	802-017C	HHCS 3/8-16X1 GR5
2	802-282C	RHSNB 5/16-18X1 GR5
2	802-365C	HHCS 1/2-13X3 GR8
4	802-387C	HFS 5/16-18X3/4 GR5
6	803-068C	NUT HEX FLANGE 3/8-16 PL +
2	803-147C	NUT HEX NYLOCK 1/2-13
2	803-199C	NUT HEX FLANGE 5/16-18 PLT
1	806-111C	U-BOLT 3/8-16 X 4 1/32 X 2
1	818-142C	DECAL DANGER PTO DRIVELINE
1	818-349C	DECAL GREASE 10 HRS LH
1	818-465C	DECAL DRVLNE ATTACH SPECS 1
1	826-237C	PTO 1000 2200X 22.05 NO CLU
1	830-106C	EL 1 1/2HB POLYPROP
1	830-131C	EL 1 1/4MNPT X 1 1/2HB POLY
4.25	990-079R	HOSE 1 1/2ID EPDM SUCTION H
1.833	990-082R	HOSE 1 ID 200PSI EPDM

## Listing of Parts

### 507-051A Pump 3-Point 540 Assy

Your Kit Includes:

Qty.	Part No.	Part Description
1	507-006D	507P025 - 540
1	507-007D	TORQUE BAR
1	507-013D	CHAIN - TORQUE BAR
1	507-014K	540 PUMP ASSY
1	507-095M	MANUAL INSTALL, AS PTO PUMP
4	800-082C	CABLE TIE 21" LONG
2	800-123C	CLAMP WRM DRV #16 SS (.68-1
2	800-124C	CLAMP WRM DRV #24 SS (1.06-
4	802-159C	HHCS 5/16-18X1 GR5
2	802-365C	HHCS 1/2-13X3 GR8
4	803-008C	NUT HEX 5/16-18 PLT
2	803-147C	NUT HEX NYLOCK 1/2-13
4	804-009C	WASHER LOCK SPRING 5/16 PLT
2	804-036C	WASHER FLAT 5/16 SAE PLT
1	816-169C	TARP STRAP 15 WITH HOOKS +
1	830-092C	AD 1 1/4MNPT X 1 1/2HB POLY
4	990-079R	HOSE 1 1/2ID EPDM SUCTION H
4	990-082R	HOSE 1 ID 200PSI EPDM

### 507-052A Pump 3-Point 1000 1 3/8 Assy

Your Kit Includes:

Qty.	Part No.	Part Description
1	507-001D	COUPLER - 1000 1 3/8
1	507-007D	TORQUE BAR
1	507-013D	CHAIN - TORQUE BAR
1	507-015K	1000 PUMP ASSY
1	507-095M	MANUAL INSTALL, AS PTO PUMP
4	800-082C	CABLE TIE 21" LONG
2	800-123C	CLAMP WRM DRV #16 SS (.68-1
2	800-124C	CLAMP WRM DRV #24 SS (1.06-
4	802-159C	HHCS 5/16-18X1 GR5
2	802-365C	HHCS 1/2-13X3 GR8
4	803-008C	NUT HEX 5/16-18 PLT
2	803-147C	NUT HEX NYLOCK 1/2-13
4	804-009C	WASHER LOCK SPRING 5/16 PLT
3	804-036C	WASHER FLAT 5/16 SAE PLT
1	816-169C	TARP STRAP 15 WITH HOOKS +
1	830-092C	AD 1 1/4MNPT X 1 1/2HB POLY
4	990-079R	HOSE 1 1/2ID EPDM SUCTION H
4	990-082R	HOSE 1 ID 200PSI EPDM