

GENERAC[®]

POWER SYSTEMS, INC.

PRODUCT INFORMATION BULLETIN

DATE: January 2003

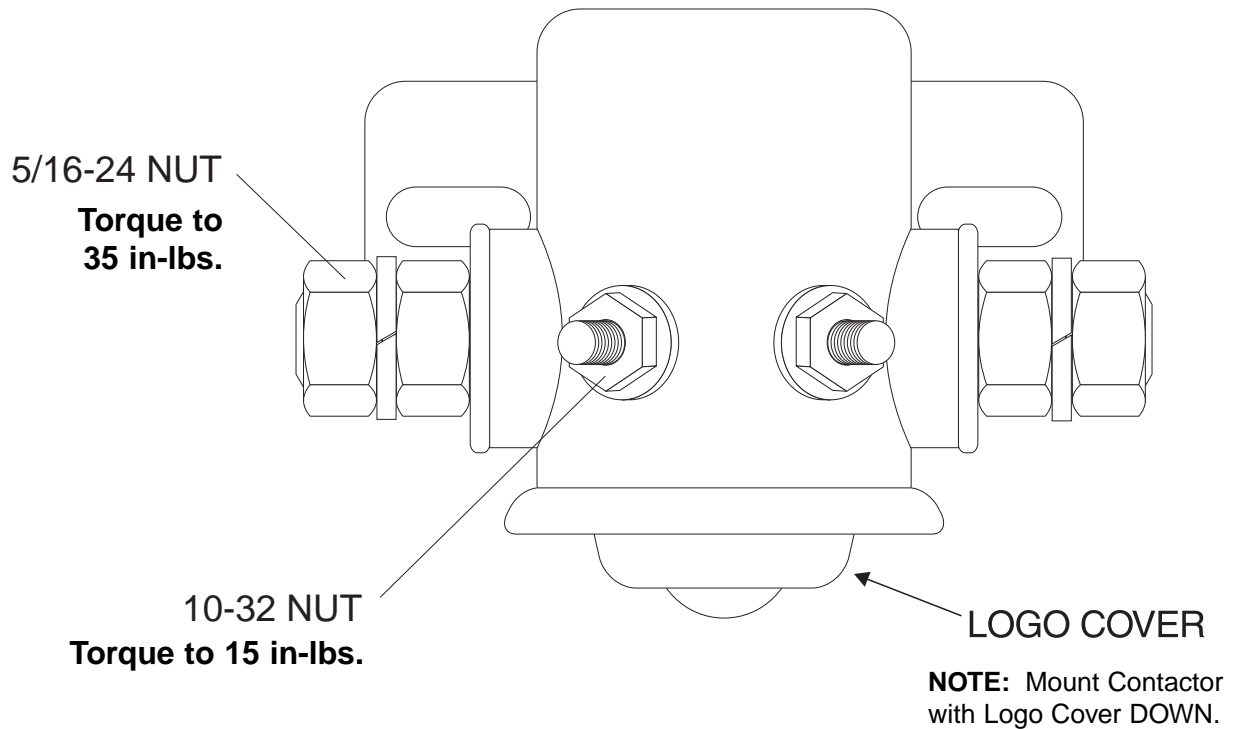
SUBJECT: 12 Volt (part # 056739) and 24 Volt (part # 082982) Starter/Pre-heat Contactors (Metal Case)

MODELS AFFECTED: Any unit having either the start or pre-heat contactor replaced.

PROBLEM: Over torquing connections

CORRECTIVE ACTION: The terminals must be torque tightened to the following specifications.
 "Large" terminals to 35 in-lbs.
 "Small" terminals to 15 in-lbs.

NOTE: Over torquing can cause the contacts to rotate internally. This can cause component failure.



Warranty: Informative only.

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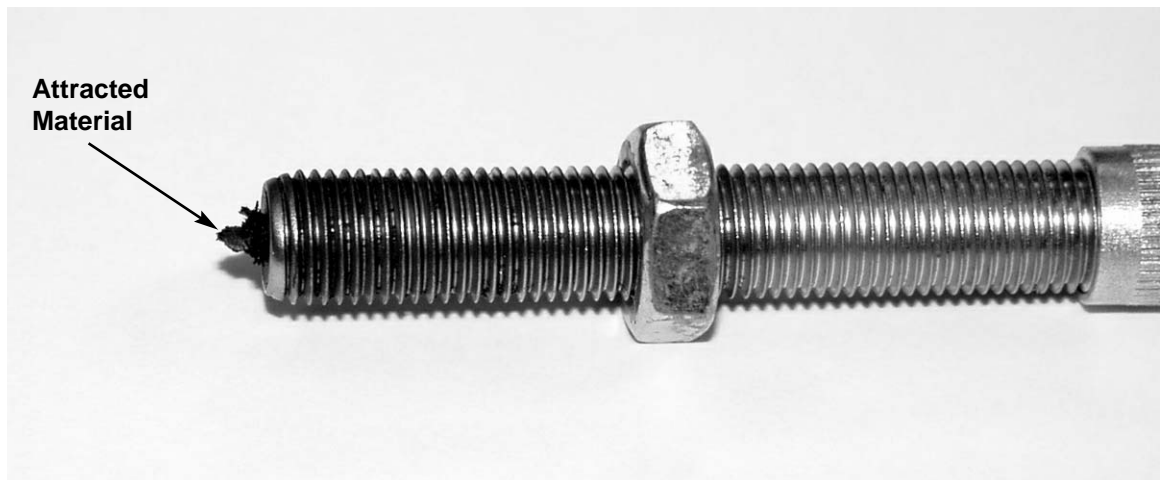
SUBJECT: Magnetic Pick Up (RPM Sensor, Governor Sensor, Ignition Sensor)

MODELS AFFECTED: All units that utilize a RPM Sensor

PROBLEM: Distorted signals to the PCB causing speed related shutdowns.

CORRECTIVE ACTION: During the semi-annual Maintenance trip, or every six months, remove any Magnetic Pick Up(s) and clean off anything attracted to the tip of the Pick Up(s).

Once the Sensor(s) has been cleaned off, install the Sensor(s) and set to 1/2 to 3/4 out from the flywheel. Ensure the Sensor(s) are bottoming out on a tooth and not between two teeth. If not on a tooth, use a screwdriver to move the flywheel to get a tooth. **DO NOT USE ENGINE FAN TO MOVE THE FLY-WHEEL.**



WARRANTY: Informative only.

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POWER SYSTEMS, INC.

PRODUCT INFORMATION BULLETIN

DATE: April 2003

SUBJECT: Battery Care and Maintenance

MODELS AFFECTED: All (including new units)

Read ALL Dangers, Warnings, and Cautions (on page 2) before proceeding!

1. **Disconnecting and connecting batteries** — Always disconnect and connect the Negative or Ground Cable first.

NOTE:

Always remove fuses from the panel and battery charger PRIOR to disconnecting and connecting batteries.

2. **Keep batteries topped off** — Use only distilled or deionized water and never overfill.
3. **Check electrical connections** — Make sure battery terminals and cable connections are clean and tight. Posts and terminals should be brushed until shiny and the terminals spread with battery pliers - DO NOT HAMMER ON THEM.

NOTE:




New batteries will typically have a dark “oxidation” coating on the positive post - this needs to be removed with a brush prior to installation.

4. **Coat the terminals and exposed metal parts** — Coat with a good quality protective spray or petroleum jelly.
5. **Testing and loading** — Follow manufactures recommendations for specific gravity, volts and load testing.





WARNING:


This product contains or emits chemicals known to the state of California to cause cancer, birth defects or other reproductive harm.



—  **DANGER**  —

-  Standby generators installed with automatic transfer switches will crank and start automatically when normal (utility) source voltage is removed or is below an acceptable preset level. To prevent such automatic start-up and possible injury to personnel, do not connect battery cables until you are certain that normal source voltage at the transfer switch is correct and you are ready to place the system into operation.
-  Storage batteries give off explosive hydrogen gas. This gas can form an explosive mixture around the battery for several hours after charging. The slightest spark can ignite the gas and cause an explosion. Such an explosion can shatter the battery and cause blindness or other injury. Any area that houses a storage battery must be properly ventilated. Do not allow smoking, open flame, sparks or any spark producing tools or equipment near the battery.
-  Battery electrolyte fluid is an extremely caustic sulfuric acid solution that can cause severe burns. Do not permit fluid to contact eyes, skin, clothing, painted surfaces, etc. Wear protective goggles, protective clothing and gloves when handling a battery. If you spill the fluid, flush the affected area immediately with clear water.

—  **WARNING**  —

-  Do not dispose of the battery in a fire. The battery is capable of exploding.
-  Do not open or mutilate the battery. Released electrolyte can be toxic and harmful to the skin and eyes.
-  The battery represents a risk of high short circuit current. When working on the battery, always remove watches, rings or other metal objects, and only use tools that have insulated handles.

—  **CAUTION**  —

-  The electrolyte is a dilute sulfuric acid that is harmful to the skin and eyes. It is electrically conductive and corrosive. The following procedures are to be observed:
 - Wear full eye protection and protective clothing,
 - Where electrolyte contacts the skin, wash it off immediately with water,
 - Where electrolyte contacts the eyes, flush thoroughly and immediately with water and seek medical attention, and
 - Spilled electrolyte is to be washed down with an acid-neutralizing agent. A common practice is to use a solution of one pound (500 grams) bicarbonate of soda to one gallon (4 liters) of water. The bicarbonate of soda solution is to be added until the evidence of reaction (foaming) has ceased. The resulting liquid is to be flushed with water and the area dried.
-  Lead acid batteries present a risk of fire because they generate hydrogen gas. The following procedure are to be followed:
 - DO NOT SMOKE when near batteries,
 - DO NOT cause flame or spark in battery area, and
 - Discharge static electricity from body before touching batteries by first touching a grounded metal surface.

WARRANTY: Informative only.

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POWER SYSTEMS, INC.

PRODUCT INFORMATION BULLETIN

- DATE: November 2002
- SUBJECT: GV220 , GH220, GV410, and GH410 Starter Motor
Part Number D9230.
- MODELS AFFECTED: Recreational Vehicle: 00940-2, 00941-2, 04700-0, 02010-2
Engine Model: EHF 000935-2, EHC 004276-0
Home Standby: 04389-1, 04758-0, 04673
- SYMPTOM: Starter motor C-clip comes off, causing impaired starter bendix operation.
- CORRECTIVE ACTION: Replace C-clip, retainer and cap. Use service Kit Number 0E6225.
(Figure 1).
1. Remove the starter motor from engine.
 2. Remove and discard cap, C-clip and retainer. **Retain the original spring.**
(Figure 2).
 3. Re-install the spring and new retainer. (Figure 3).
 4. Using a pair of pliers, spread new C-clip just enough to fit around starter shaft. Using pliers slip C-clip back into position in groove near tip of shaft and flex tight.
 5. Use a small gear puller and grab the retainer with the puller jaws. Pull the retainer over the c-clip. It will snap into place. (Figure 4). Install plastic dust cap. (Figure 5).
- WARRANTY: 15 minutes additional time will be allowed for this repair. It will be added to the regular flat rate time for starter removal for the specific model number generator or engine. This Product Information Bulletin is effective for the original warranty period of the generator or engine application.**

PIB03-4-M, P, S

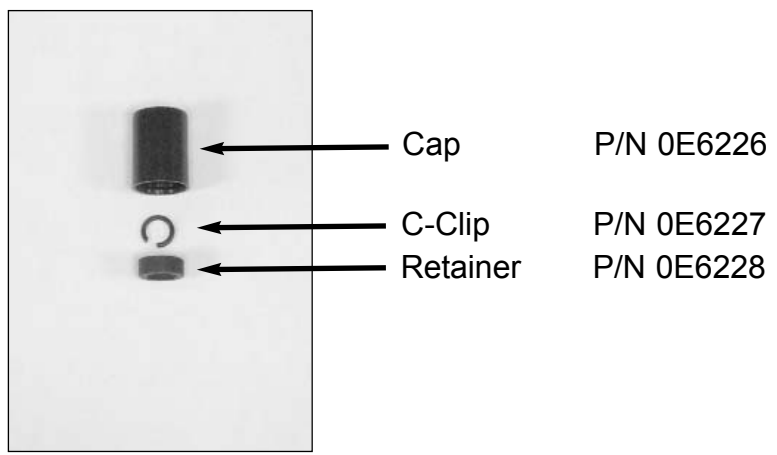


Figure 1



Figure 2

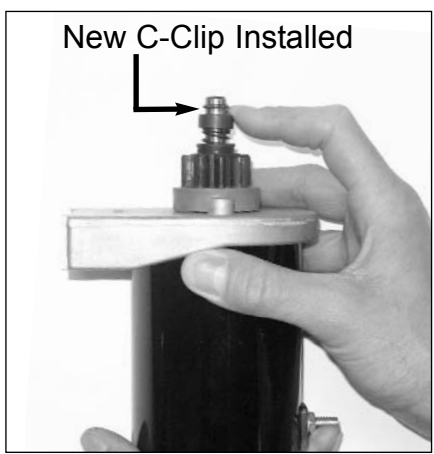


Figure 3



Figure 4

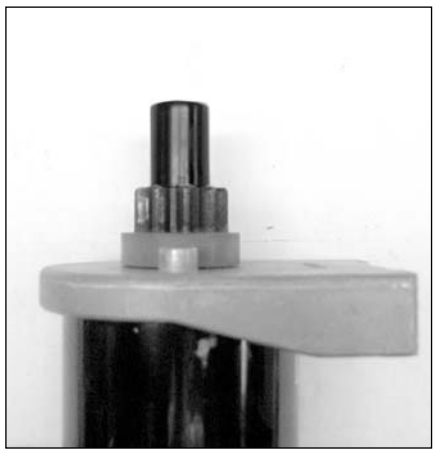


Figure 5

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POWER SYSTEMS, INC.

PRODUCT INFORMATION BULLETIN

DATE: May 2003

SUBJECT: Required D, E and F (including POWER MANAGER (PM) & Power Manager Generator Controller (PMGC) Panel Parameter Downloads for Warranty Repairs.

MODELS AFFECTED: Any unit with a D, E, F, PM or PMGC Panel/Controller

CORRECTIVE ACTION: The **Alarm History** and **Panel Parameters** for any of the above mentioned panel/modules **MUST** be downloaded **PRIOR TO** any warranty work being performed. After recording the parameters and while the technician is at the site, contact the Generac Technical Service Group at 262-544-4811 ext. 4351. After diagnostics, the service department will instruct as to what action should be taken.

NOTE: You may be instructed to e-mail or fax the downloaded parameters to the service department. The fax number is 262-544-5689.

If a laptop and GenLink are **not available**, the attached forms must be used in the field.

These parameters **MUST** be sent in with the warranty claim and part.

FAILURE TO COMPLY WILL RESULT IN DENIED CLAIMS.

Reminder: All parameters should be downloaded during the Start-Up. This information should be saved at a dealer level for future reference.

Warranty: Informative only.

Please complete the following information from your unit's control panel and fax/email it back.

Dealer Name _____

E-Panel Settings Site: _____ Date: _____

SYSTEM ALARM MENU

Setting Name	Current Value
Low fuel shutdown enable	
Low fuel shutdown setpt	
Fuel level low enable	
Fuel level low setpoint	
Fuel level high enable	
Fuel level high setpoint	
Under freq alarm type	
Under freq setpoint	
Over freq alarm type	
Over freq setpoint	
Under voltage alarm type	
Under voltage setpoint	
Over voltage alarm type	
Over voltage setpoint	
Overspeed shutdown setpt	
Underspeed alarm type	
Underspeed alarm setpt	
Battery volts high setpt	
Battery volts low setpt	
Coolant temp low setpt	
Coolant temp shutdn spt	
Coolant temp high setpt	
Oil temp shutdown enable	
Oil temp shutdown setpt	
Oil temp warn enable	
Oil temp warn setpt	
Oil Press shutdown setpt	
Oil Press Warn setpt	

ENGINE PARAMETER MENU

Setting Name	Current Value
RS232 PORT	
Restore all values	
Voltage Scaling Factor	
Flywheel teeth	
Panel I.D.	
User Password	
Preheat option	
Load accept frequency	
Load accept voltage	
Starter disengage speed	
Number of start attempts	
Generator cool down time	
Generator warm up time	
Alarm hold off time	
Start attempt pause time	
Start timer	
Preheat timer	

DIGITAL I/O MENU

Setting Name	Current Value
Input ch 8 alarm enable & setting	
Input ch 7 alarm enable & setting	
Input ch 6 alarm enable & setting	
Input ch 5 alarm enable & setting	
Input ch 4 alarm enable & setting	
Input ch 3 alarm enable & setting	
Input ch 2 alarm enable & setting	
Input ch 1 alarm enable & setting	

Technicians Name _____

Technicians Phone _____

Model Number _____

Serial Number _____

Please complete the following information from your unit's control panel and fax/email it back.

Dealer Name _____

E-Panel Settings Site: _____ Date: _____

ALARM HISTORY - Logged alarm number

- | | |
|----------|----------|
| 1 _____ | 26 _____ |
| 2 _____ | 27 _____ |
| 3 _____ | 28 _____ |
| 4 _____ | 29 _____ |
| 5 _____ | 30 _____ |
| 6 _____ | 31 _____ |
| 7 _____ | 32 _____ |
| 8 _____ | 33 _____ |
| 9 _____ | 34 _____ |
| 10 _____ | 35 _____ |
| 11 _____ | 36 _____ |
| 12 _____ | 37 _____ |
| 13 _____ | 38 _____ |
| 14 _____ | 39 _____ |
| 15 _____ | 40 _____ |
| 16 _____ | 41 _____ |
| 17 _____ | 42 _____ |
| 18 _____ | 43 _____ |
| 19 _____ | 44 _____ |
| 20 _____ | 45 _____ |
| 21 _____ | 46 _____ |
| 22 _____ | 47 _____ |
| 23 _____ | 48 _____ |
| 24 _____ | 49 _____ |
| 25 _____ | 50 _____ |

Technicians Name _____

Technicians Phone _____

Model Number _____

Serial Number _____



PRODUCT INFORMATION BULLETIN

DATE: MAY 2003

SUBJECT: Enclosure Care and Maintenance

MODELS AFFECTED: All Enclosed Units

Under normal conditions, use a mild detergent soap (mixed with water) to clean the enclosure and rinse with clean water.

WARNING: Avoid excessive or aggressive cleaners and NEVER use a pressure washer.

Clean the unit when it gets dirty, or, set up a preventative maintenance program that coincides with a normal maintenance schedule. A quality car wax can also be utilized, follow the wax manufacturer's directions.

Note: If the unit is in a "corrosive" environment (salt air, chemicals, etc.) Generac highly recommends utilizing a quality car wax at normal intervals.

WARRANTY: Informative only.

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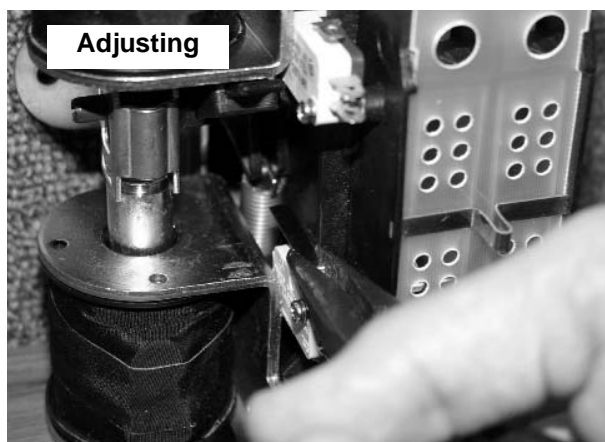
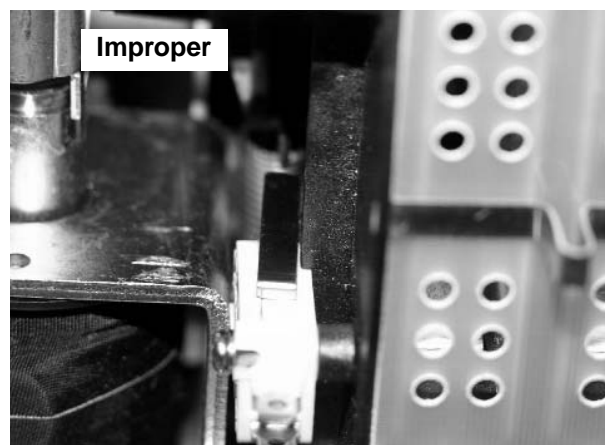
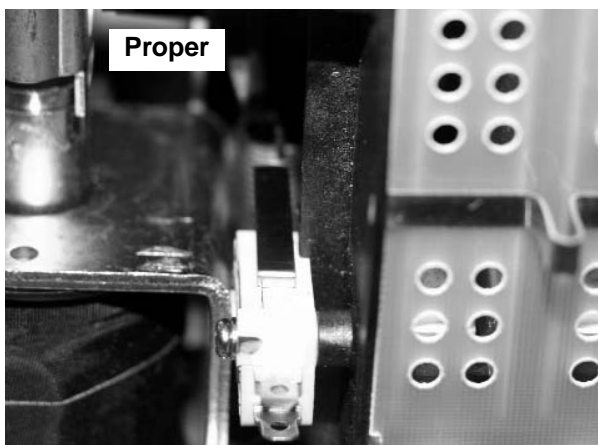
DATE: July, 2003

SUBJECT: Transfer Switch - 100 Amp "V" Type Limit Switches

MODELS AFFECTED: Any switchgear built prior to April 2003 (date is marked on side of mechanism) which uses the 100 Amp "V" type mechanism.

SYMPTOM: Limit switch actuating lever catches on switch housing.

CORRECTIVE ACTION: During the maintenance visit, visually inspect both limit switches using the guidelines below. If an adjustment is required, use a pair of needlenose pliers to GENTLY bend lever away from the housing.



WARRANTY: Informative only.

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PRODUCT INFORMATION BULLETIN

DATE: August 2003

SUBJECT: 18.0 and 22.0 Liter Boost Pump J box Retro Fit

MODELS AFFECTED: All DHI engines, prior to this notification.

PROBLEM: Possible concerns due to vibration.

CORRECTIVE ACTION: Order and install kit 0E7635

WARRANTY: One hour is allowed for this repair that should be performed during a routine maintenance visit.

Reference PIB03-8-S on warranty claim form.

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PRODUCT INFORMATION BULLETIN

DATE: September 2003

SUBJECT: 18.0 and 22.0 Liter Filter Assembly/Transfer Pump

MODELS AFFECTED: All 18.0 and 22.0 Liter DHI engines with unit mounted electric fuel transfer pump, prior to this notification.

PROBLEM: Possible fuel leakage.

PRIORITY: Very High

CORRECTIVE ACTION: Order and install kit 0D8470

NOTE: Read instruction manual prior to site visit. It is necessary to fabricate a pressure gauge and "T" fitting assembly (these are not part of the kit).

WARRANTY: Two (2) hours will be allowed for this procedure and adjustment.

Reference PIB03-9-S on warranty claim form.

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PRODUCT INFORMATION BULLETIN

DATE: November 2003

SUBJECT: Fan Drive Hub

MODELS AFFECTED: 6.8 Liter Gear Driven Units Manufactured Prior to 10/16/03

PROBLEM: Possible Fan Drive Failure

CORRECTIVE ACTION: Replacement of Fan Drive Hub with 0E8909. With each ordered, direction will be sent out as to how to remove and replace the 0E8909.

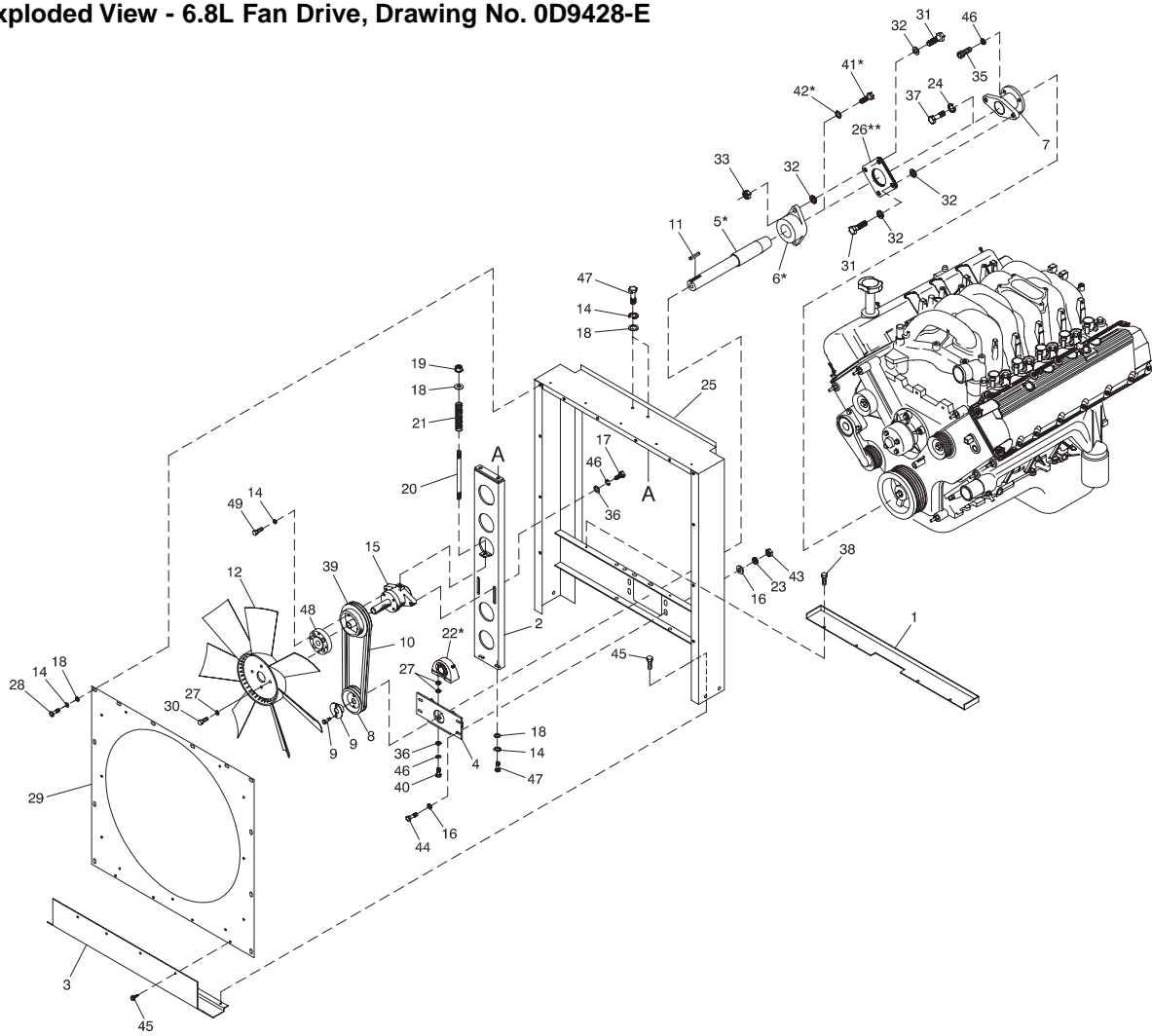
1. Remove the fan.
2. Loosen the lock down bolts, located behind the bearing housing.
3. Loosen the tensioner ring.
4. Remove belts.
5. Remove the Sheave Hub (Item #9).
6. Remove Pulley (Item #8).
7. Remove bearing support bolt (Pillow Block Bearing).
8. Remove two (2) 5/16 inch bolts on flange. **DO NOT REMOVE NUTS, ONLY THE BOLTS!**
9. Remove the jackshaft assembly
10. The Hub (Item #7) can now be accessed and removed.
11. Install new Hub (part no. 0E8909).
12. Repeat process in reverse.

NOTE: Make sure that the larger washer removed from the flange goes on first, convex side going towards the hole. This is used to center the bolt. The smaller washer goes before the flex plate, with the convex side going towards the flex plate also.

WARRANTY: For units with enclosure, labor time is 5 hours. For units without enclosures, labor time is 2.5 hours. Standard travel times are to be used.

Reference PIB03-10-S on warranty claim form.

Exploded View - 6.8L Fan Drive, Drawing No. 0D9428-E



ITEM	PART NO.	QTY.	DESCRIPTION	ITEM	PART NO.	QTY.	DESCRIPTION
1	0D3352	1	BLOCKOFF LOWER RADIATOR	24	051769	1	WASHER LOCK M12
2	0D3335	1	WELDMENT RADIATOR FAN BRACE	25	0D3259	1	WELDMENT RADIATOR SUPPORT
3	0D3309	1	BAFFLE LOWER RADIATOR	26 **	0C7043	12	DISK FLEX
4	0D5136	1	BRACKET BEARING SUPPORT	27	0C8126	4	WASHER BELLVILLE .442 I.D.
5 *	0D6796	1	SHAFT 6.8L FLEX DRIVE	28	042907	23	SCREW HHC M8-1.25 X 16 G8.8
6 *	0C8309	1	HUB FLEX COUPLING	29	0D9414	1	VENTURI RAD. FAN 6.8L FORD
7	0E8909	1	COUPLING, HUB FLEX (MACH)	30	042909	4	SCREW HHC M8-1.25 X 30 G8.8
8	0D7056	1	PULLEY 2-GROOVE FAN DRIVE (100KW)	31	0C8146	4	BOLT 5/16-24 X 1.25
	0D6656	1	PULLEY 6.8L FAN DRIVE 2-GROOVE (130KW)	32	0C8145	8	WASHER FLEX (THIN)
9	0C4326	1	SHEAVE HUB H 1.125	33	0C8165	2	NUT LOCK HEX 5/16-24 NYL INS
10	0A3356	2	V-BELT 1/2 X 57 A55K (100KW)	35	052625	3	SCREW SHC M10-1.5 X 35 G12.9
	0D6657	2	V-BELT 1/2 X 56.0" (130KW)	36	022131	7	WASHER FLAT 3/8-M10 ZINC
11	023138	1	KEY SQ 1/4 X 1 STEEL	37	0D6795	1	SCREW HHC M12-1.5 X 60 G10.9
12	098184	1	FAN COOLING 26"	38	0C2267	4	SCREW HHTT M5-0.8 X 12 BP
13	074908	4	SCREW TAPTITE M5-0.8 X 10 BP	39	058793	1	PULLEY AUTO 7.00 PD
14	022129	31	WASHER LOCK M8-5/16	40	049814	2	SCREW HHC M10-1.5 X 25 G8.8
15	0C4649	1	ASSY FAN SUPPORT	41 *	049814	1	SCREW HHC M10-1.5 X 25 G8.8
16	0A5768	8	WASHER FLAT HEAVY DUTY	42 *	052644	1	SPACER .5 X 1.5 X .25 ST/ZNC
17	057642	2	SCREW HHC M10-1.5 X 40 G10.9	43	022241	4	NUT HEX 3/8-16 STEEL
18	022145	23	WASHER FLAT 5/16 ZINC	44	029745	4	SCREW HHC 3/8-16 X 1 G5
19	052858	1	NUT LOCK FLANGE M8-1.25	45	090388	8	SCREW HHTT M6-1.0 X 12 YC
20	04576100BY	1	STUD M8-1.25 X 200 G5 ZINC	46	046526	7	WASHER LOCK M10
21	042962	1	SPRING COMPRESSION	47	055173	4	SCREW HHC M8-1.25 X 20 G10.9
22 *	0C8364	1	ASSY PILLOW BLOCK	48	0A7885	1	ADAPTOR FAN 7.4
23	022237	4	WASHER LOCK 3/8	49	049821	4	SCREW SHC M8-1.25 X 30 G12.9

* KIT, DRIVE SHAFT P/N 0E3395B

** KIT, FLEX DISK P/N 0E3394 (SERVICE KIT)