

NAVISTAR

Model 100
Parts Bulletin P1

VA 8518A FUEL RETURN CHECK VALVE REPLACEMENT

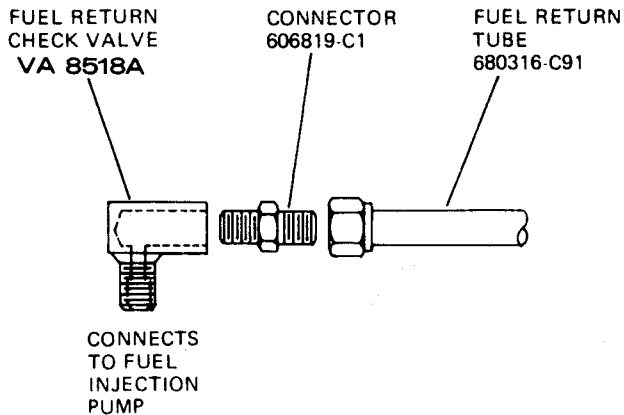
PRODUCT AFFECTED:

Model 100 Fuel Injection Pumps on International Harvester Engines

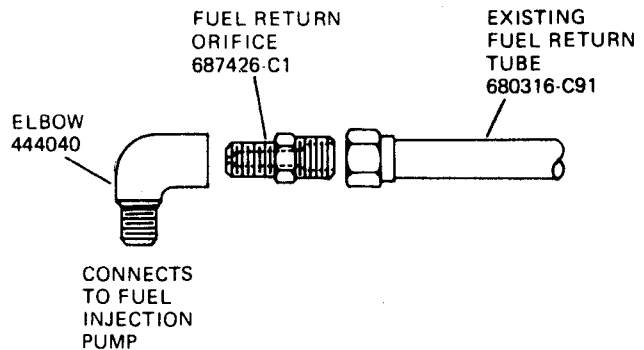
INFORMATION:

Fuel return check valve VA 8518A has been discontinued as a service replacement.

When a VA 8518A requires replacement, the fuel return circuit should be updated in accordance with I.H. service bulletins for specific engine installations: Agricultural Equipment Bulletin No. S-3624, Truck Service Bulletin SLF-78-13 and Construction Equipment (Pay Line) No. 12H-78-02.



OLD Installation



NEW Installation

FIGURE 1.

ALL APPLICATIONS USING FUEL RETURN TUBE

Model 100 Parts Bulletin P2

MODEL 100 GOVERNOR WEIGHT SHAFTS

INFORMATION:

The undercut in the Model 100 governor weight shaft has been eliminated. Latest shafts are now machined with a radius blend in that area. See Figure 1.

Pressing tool, TSE 79106 can be used to correctly reposition the bushing in governor sleeve, SV 8522A. See Figure 3.

SV 8537A has superseded SV 8522A and incorporates the .100" (2.54 mm) recessed bushing. It can be used with either type shaft.

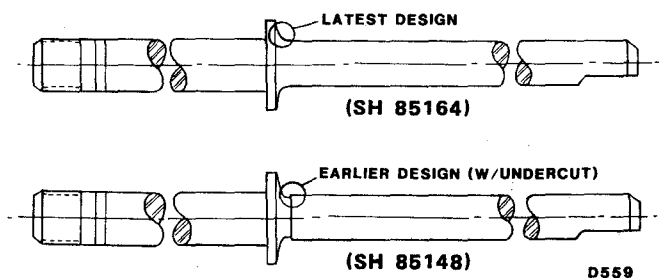


FIGURE 1.

Because of this change in design, the governor sleeve used with the new shaft **must** have a bushing recessed to a greater depth than present SV 8522A requirement. Refer to Figure 2.

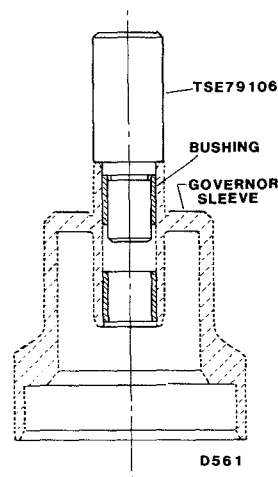


FIGURE 3.

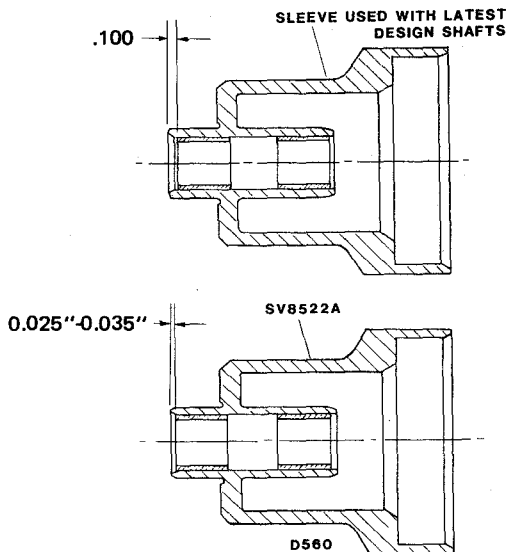


FIGURE 2.

INSTRUCTIONS:

When a new governor weight shaft, SH 85164 (or a weight and shaft assembly which contains this shaft) is installed in a M-100 pump, check the governor sleeve and reposition the bushing to .100" (2.54 mm) dimension if it is not at that depth. Information form (IF8536) will be packaged with appropriate shafts and assemblies indicating the need of the new (or modified) sleeve.

When a governor sleeve is being replaced and it is uncertain which governor weight shaft the pump contains, make certain governor sleeve bushing is recessed .100" (2.54 mm).

Use TSE 79106 to correctly position the bushing and to maintain concentricity.

**PLUNGER SLEEVE PINS USED IN M-100 PUMPS APPLIED TO
BRITISH LEYLAND ENGINES****INFORMATION:**

- Late production fuel injection pumps (1006A100A9398-1 and 9399-1) supplied to British Leyland contained plunger sleeve pin, PN 8557. The same pin was also contained in 1006A100A9378C1 and 9379C1 pumps.
- PN 8557 is the replacement for PN 8525 in Model 100 pumps applied to British Leyland engines **only**.
- Control unit assembly, CU 8522-1A, is equipped with PN 8557.
- Late production PN 8557 pins are identified by a drill spot (hole) in the pin face (See fig. 1). Early production PN 8557 pins did not have any identification and their appearance was the same as PN 8525.

INSTRUCTIONS:

- (1) Replace PN 8525 pins with late production PH 8557 pins in all British Leyland pumps received for repair.
- (2) Stamp an "M" suffix behind the British Leyland part number on the nameplate when a PN 8557 or CU 8522-1A is installed in a pump - (Example: AAU 6953M). This will provide a means for identifying pumps that have been updated.

IMPORTANT: Select a pin that will provide a .001" maximum clearance between the pin shaft and control unit bore. Dip the pin in clean calibrating oil and insert the shaft into the control unit bore. If the clearance is correct, a suction fit will result.

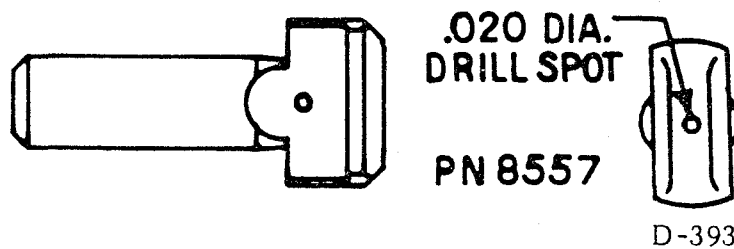


FIGURE 1.

DUAL RANGE INTRAVANCE® TIMING DEVICES CT 8599A AND CT 85100A

PRODUCT AFFECTED: Model 100 pumps used on International Harvester engines.

REASON FOR BULLETIN:

To advise of replacement units for CT 8592A and CT 8596A.

INFORMATION:

CT 8592A (I.H. Part #687223C91) has been superseded by CT 8599A (I.H. Part #687223C92). CT 8596A (I.H. Part #1802 347C92) has been superseded by CT 85100A (I.H. Part #1802 347C93).

The new units were introduced because of the noise complaints and "miss" experienced with CT 8592A and CT

8596A. Both new Intravance timing devices are hydraulically damped and incorporate the same timing advance characteristics as the superseded units.

Inventory of CT 8592A and CT 8596A (new material) should be returned through normal "New Defective" procedures in the original packaging. Service Distributors should forward their stock to their C.D. who will then return the units to AMBAC, attention John Marshall. Credit will be issued for the returned units.

The specific current pumps which are equipped with the CT 8592A and will use the **CT 8599A** are as follows:

United Technologies Diesel Systems Spec. Number	International Harvester Part Number	Application	Engine Model and Horse Power
9401-1	688842C91	Pay Star, Load Star ("S" Series)	DTI-466B (210 BHP)
9401-2	688881C92 (or C91)	Fleet Star, Pay Star ("S" Series)	DT-466B (190 BHP)
9401-3	688842C91	California Motor Truck	DTI-466B (210 BHP)
9401-4	688881C92	California Motor Truck	DT-466B (190 BHP)
9402-1	688843C91	Cargo Star	DRI-466B (210 BHP)
9402-2	688882C92 (or C91)	Cargo Star	DT-466B (190 BHP)
9402-3	688843C91	California Motor Truck	DTI-466B (210 BHP)
9402-4	688882C92	California Motor Truck	DT-466B (190 BHP)
9411-1	689645C91	Federal Truck	DT-466B (210 BHP)
9411-2	689645C91	Federal Truck	DT-466B (210 BHP)
9411-3	689647C91	Federal Truck	DT-466B (180 BHP)
9411-4	691341C91	Federal Truck	DT-466B (160 BHP)
9412-1	689644C91	Federal Truck	DT-466B (210 BHP)
9412-2	689644C91	Federal Truck	DT-466B (210 BHP)
9412-3	689646C91	Federal Truck	DT-466B (180 BHP)
9412-4	691156C91	Federal Truck	DT-466B (160 BHP)
9412-5	691211C91	Seddon Atkinson	DTI-466B (230 BHP)
9413-2	4070231 R91	A210F Refuse Packer	DT-466B (210 BHP)
9413-3	4070233 R91	A180F Refuse Packer	DT-466B (180 BHP)
9414-2	4070230 R91	A210F Refuse Packer	DT-466B (210 BHP)
9414-3	4070232 R92	A180F Refuse Packer	DT-466B (180 BHP)
9552-2	689645C91	Federal Truck	DT-466B (210 BHP)
9552-3	689647C91	Federal Truck	DT-466B (180 BHP)
9552-4	691341C91	Federal Truck	DT-466B (160 BHP)
9552-6	1806060C91	Marine	DTI-466N (230 BHP)

SERVICE INSTRUCTIONS

AMBAC

INTERNATIONAL

MODEL 100
PARTS BULLETIN P5

IDENTIFICATION OF MODEL 100 FACE GEARS GE 8527 THRU GE 8527-5

INFORMATION:

The following chart is an aid for customers to identify which face gear will accompany a particular pump application when the pump is equipped with a 2-piece face

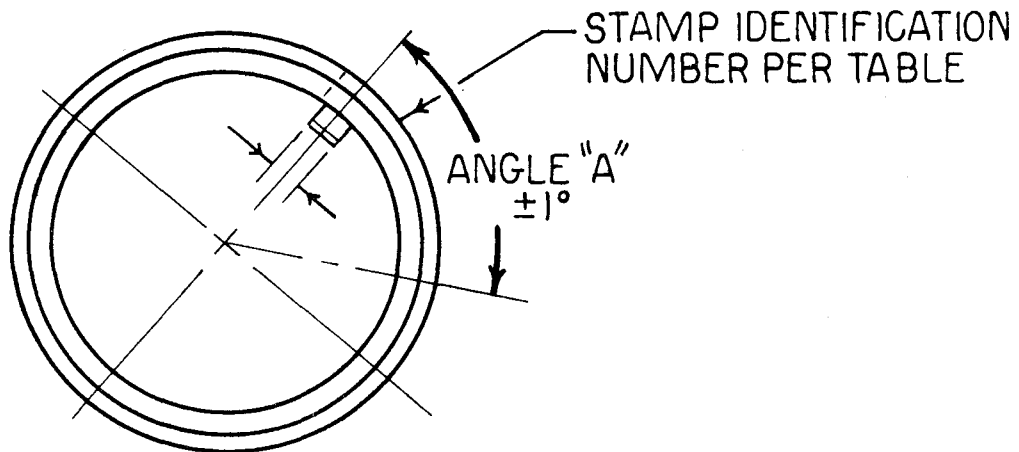
gear/hub. Face gears must not be interchanged when replaced.

EXAMPLE: GE 8527-1 cannot be replaced by GE 8527-5.

CUSTOMER	FACE GEAR	ANGLE A	IDENT. NO.
International Harv. (Std.)	GE 8527	60°	None
Hercules	GE 8527-1	180°	1
British Leyland	GE 8527-2	10°	2
	GE 8527-3	70°	3
International Harv. (1980 California)	*GE 8527-4	65°	4
Allis-Chalmers	GE 8527-5	240°	5

*On GE 8527-4 only, a yellow stripe of dykem will extend over the full length of timing mark.

NOTE: "A" is the angle between center of pin and timing mark.





SERVICE INSTRUCTIONS

ALLIS-CHALMERS

Model 100
Parts Bulletin P6

NEW SINGLE RANGE, HYDRAULICALLY DAMPED INTRAVANCE® TIMING DEVICE CT 85117A

PRODUCT AFFECTED:

Model 100 pumps applied to Allis-Chalmers 670 engine applications.

REASON FOR BULLETIN:

To advise of replacement unit for dual range Intravance timing device CT 8593A.

INFORMATION:

Model 100 pumps used on Allis-Chalmers 670 engine applications have previously been equipped with dual range Intravance timing device CT 8593A. The CT 8593A assembly

has been superseded by CT 85117A and these new units are currently available in our Service Stock.

Although the CT 8593A is a dual range device and the CT 85117A is a single range unit, CT 85117A can be used to replace Intravance timing devices in earlier applications. The total timing advance of both units is 20 degrees.

Inventory of CT 8593A (new material) should be returned to the factory through normal procedures in the original packaging. Service Distributors should forward their stock to their C.D., who will then return the units to United Technologies Diesel Systems, Attention: John Marshall. Credit will be issued for the returned units.

ALLIS-CHALMERS

MODEL 100
PARTS BULLETIN P7

LATEST MODEL 100 PUMP SPECIFICATIONS FOR ALLIS-CHALMERS 670 ENGINE APPLICATION

REASON FOR BULLETIN:

To advise of part changes on subject specifications

INFORMATION:

An edition letter change has been made on current Model 100 pump specifications which apply to Allis-Chalmers engines. The change in edition letter covers component changes with the most significant being:

1. Intravance® timing device change from CT 8593A to CT85117A.
2. Elimination of angled hand primer adapter from supply pump. (New service stage supply pump is SGF 15C-831).
3. Elimination of droop screw from fulcrum lever.
4. Port closure lock plug change from PG854 to PG8511 with gasket GA7711.
5. Change in governor shaft and operating shaft "o" rings from GA1139 to GA1213.

PORT CLOSURE PLUG

The new port closing lock plug (PG8511) and gasket (GA7711) were introduced for Allis-Chalmers on pumps

above serial number 7V34326. (Refer to fig. 1 below). A different procedure is required when using new plug and gasket than was used with PG854. When pump is timed for port closing position at #1 outlet (after calibration) proceed as follows:

1. Remove port closing lock plug PG 8511 and discard copper gasket GA7711.
2. Reinstall plug (with new copper gasket, tag 1F404084 and insert 1T8521) into pump housing.
3. Torque plug to 30-35 lb.-in. (3.4-4.0 Nm.) so camshaft is locked in place.

IMPORTANT:

When pump is installed and timed to engine, the following **MUST** be done **before** engine is cranked/rotated:

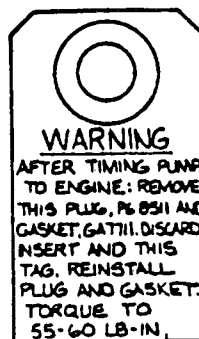
1. Remove plug PG 8511 from housing and then remove insert and tag from plug.
2. Reinstall plug with copper gasket.
3. Torque plug to 55-60 lb.-in. (6.0-7.0 Nm).



PG 8511



GA 7711



IF 404084

FIGURE 1. PORT CLOSING PLUG, GASKET AND TAG