

PARTS & SERVICE NEWS

REF NO.	AA02158A
DATE	September 09, 2002

This Parts & Service News supersedes the previous issuance, AA02158, dated June 6, 2002. AA02158 should be discarded.

SUBJECT:	FUEL SYSTEM IMPROVEMENT KIT
PURPOSE:	To introduce to the field a new fuel system component kit for use on 12V140 engines.
APPLICATION:	Komatsu Mechanical Drive Dump Trucks: 330M: A10190 thru A10223, A10225 thru A10227, A10231 & A10232; HD785-5LC: A10224, A10228 thru A10279; Komatsu Wheel Loaders: WA800-2LC A20020 & Up; WA800-3LC A50001 & A50022; WA900-1LC A20008 & Up; WA900-3LC A50001 thru A50018
FAILURE CODE:	A7W0Z9
DESCRIPTION:	Fuel System Kit (XA2088)

Fuel system kit (XA2088) is now available for making improvements to the fuel system on 12V140 engines. The kit contains several components for enhancing fuel system reliability. Refer to Figure 1 and the following table for kit component identification, location, and installation torques. A brief description of kit components and improvements are outlined below.

NOTE: Engines with serial number 372071190 and above were built with the fuel system improvements and do not require installation of this kit.

- A new fuel filter (600-311-5110) has been developed which increases fuel filtration for use on 12V140 engines. It is capable of 10 micron (0.0004 in.) filtration, in addition to water separation. The new filter mounts directly to the existing filter head, and is a direct replacement for fuel filters (6216-74-6170 & Y38004).
- The kit contains a check valve that is intended to prevent the introduction of air into the fuel system. This can occur if the drain back valve on the filter is opened and the fuel tank level is below filter level. Air in the fuel system will result in hard starting conditions. Check valve (5, Figure 1) is to be mounted to the fuel inlet manifold and reduces the possibility of this problem from occurring.

Included in the check valve is a 300 micron filter screen that can be removed separately from the check valve for cleaning. When cleaning the filter screen, the fuel tank supply must be isolated, the supply hose removed, and the filter fitting removed from the check valve. The check valve must remain in the manifold to prevent fuel drain back from the engine.

NOTE: In the event of a low power complaint or the presence of fault codes, 423 or 423R, the filter screen should be inspected for debris, and cleaned.

- An additional banjo check valve (4 psi, 27.6 kPa) is included in the kit. The purpose of banjo check valve (7) is to relieve pressure from the supply side of manifold (8) to the drain side of the manifold during shutdown. The pressure relief prevents damage to fuel filter seals when normal fuel expansion occurs after shutdown. The check valve mounts on the top of the fuel manifold on the supply side. The new manifold included in the kit is equipped with ports for the installation of the new check valve, making the previous manifold obsolete.

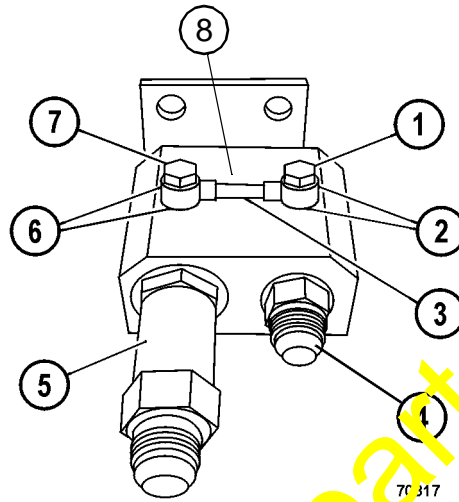


FIGURE 1. FUEL SYSTEM KIT COMPONENTS

FUEL SYSTEM KIT (XA2088)				
Reference Number	Part Number	Description	Quantity	Installation Torque
Not shown	600-311-3110	Fuel Filter	2	-
1	07206-30568	Banjo Bolt	1	62 in. lbs. (7 Nm)
2	07005-00812	Sealing Washer	2	-
3	6216-74-5-10	Fuel Bypass Tube	1	-
4	6216-74-8150	Fuel Drain Fitting	1	59 ft. lbs (80 Nm)
5	6216-74-5530	Fuel Supply Fitting (Check Valve)	1	59 ft. lbs (80 Nm)
6	07005-01012	Sealing Washer	2	-
7	6216-74-5540	Banjo Check Valve	1	97 in. lbs. (11 Nm)
8	6216-74-5420	Fuel Inlet Manifold	1	-



Always take the necessary precautions when working on fuel systems. Refer to the appropriate engine service manuals for specific instructions and safety precautions during fuel system maintenance.