

# SERVICE INFORMATION BULLETIN

**Subject:**  
**Supply Pump Suction Control Valve Design Change – J05D Engines**  
*Supersedes SB-07-006 dated 04-07-2008*  
*(Revised 2-24-2009 to include 2010 model year vehicles)*

This bulletin provides diagnostic information for monitoring the engine running data to determine if the Suction Control Valve is defective, and a service procedure for replacing the Suction Control Valve when necessary. The SCV should be tested and replaced when necessary before replacing the supply pump assembly for a fuel pressure related concern.

## 1. RELEVANT MODELS

2005-2010 NA6J (145), NB6J (165) and NC6J (185) Conventional Cab all Models equipped with a J05D engine.

## 2. CONTENTS

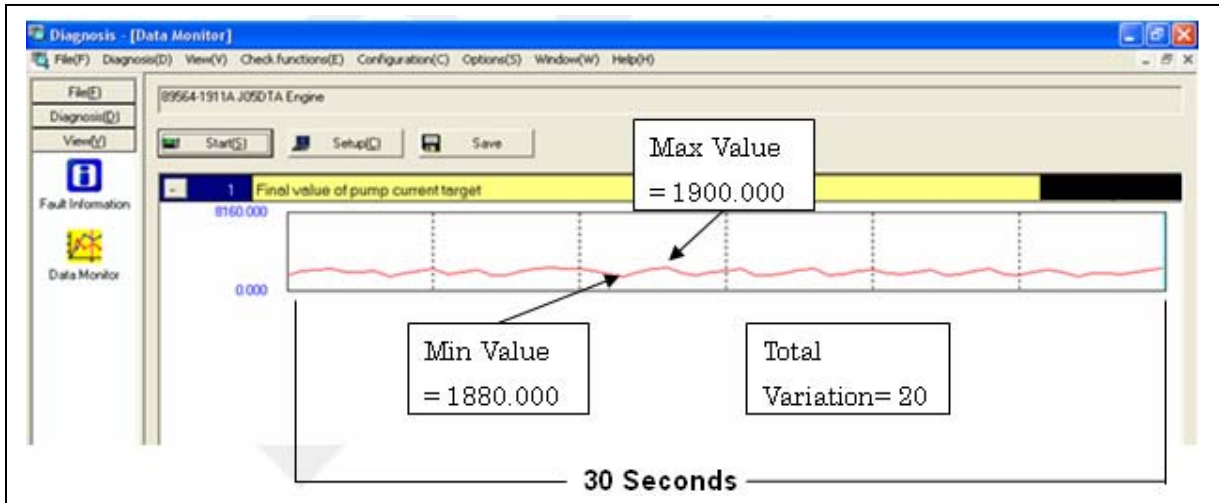
2005-2010 model year vehicles may exhibit a low or fluctuating idle, low power complaint, or a Final Pump current value that is higher or lower than expected. In the past it was necessary to replace the supply pump to correct an incorrect pump current value reading. Hino has released the Suction Control Valve as a service part and in the following will provide a service procedure for diagnoses and replacement of the SCV.

Part Name	Part NO.	Quantity	Engine Model
Valve Pump Control Kit	S227311100	1	J05D – 2005-2007 EPA04
Valve Pump Control Kit	S227311121	1	J05D – 2008-2010 EPA07

# SERVICE INFORMATION BULLETIN

## DIAGNOSES:

- 1) Allow the engine to reach normal operating temperature. ( 70° C or 158° F )
- 2) With engine at base idle and all extra loads turned off such as A/C, PTO, etc., monitor the “ Final value of pump current target “ using Diagnostic eXplorer
- 3) Monitor the “Final value of pump current target “ for 30 seconds.



- 4) Record the Maximum and Minimum values reached during the 30 second time frame
  - Take note of the average current value.
  - Calculate the maximum current variation value. Maximum variation is calculated by subtracting the Minimum value from the Maximum value
  - Reference the table below

## JUDGEMENT:

Model Year	Engine Model	Base Idle (RPM)	Maximum Allowable Variation	Expected Average Current Value
2005-2007	J05D – TA	750	120	1550~1950mA
2008-2010	J05D – TF	750	160	

### SCV GOOD

- Average pump current values are within expected range
- Total Variation is less than 120 for J05D - TA engines and less than 160 for J05D - TF engines.

### SCV NO GOOD

- Average pump current target is less than or greater than expected average
- Total Variation is greater than 120 for J05D - TA engines and greater than 160 for J05D – TF engines.

- 5) Continue to service procedure if the SCV was found to be No Good during diagnoses.

## SERVICE INFORMATION BULLETIN

### SERVICE PROCEDURE:

- 1) Disconnect the SCV connector.  
Do not use excessive force when disconnecting or connector damage will result.



- 2) Clean the SCV and mounting area.  
Be sure to keep the area around the SCV clean to prevent dirt or foreign material from sticking to the pump housing or installation surface.

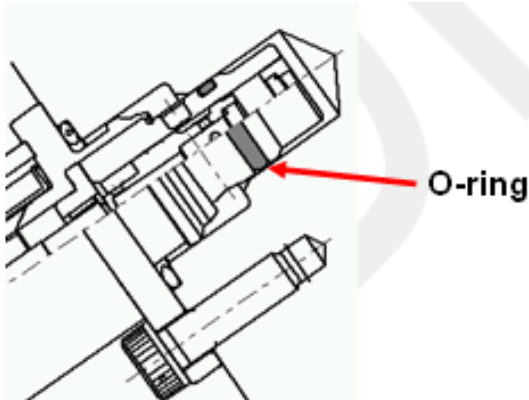


- 3) Remove the two SCV mounting bolts.

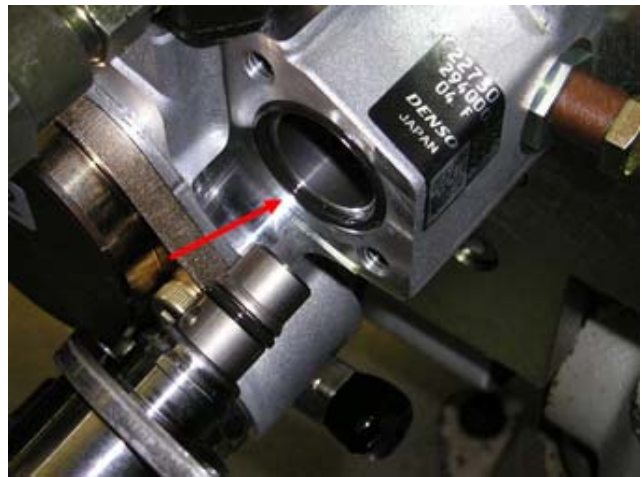


## SERVICE INFORMATION BULLETIN

- 4) Remove the SCV by rotating right and left while gently pulling to disengage the O-ring.



- 5) Remove the O-ring from the pump housing and discard.



- 6) Confirm that the SCV replacement kit contains all the parts shown in the picture.

**PARTS:**

- SCV
- 2 Bolts
- Large O-ring
- Small O-ring



## SERVICE INFORMATION BULLETIN

- 7) Install new O-ring into the pump housing. Make sure the O-ring groove is free from dirt and debris.



- 8) Apply a light coat of fresh oil to the small O-ring to ease installation, and to prevent O-ring damage.



- 9) Insert the SCV into the pump housing by gently rotating right and left until the SCV is flush with the pump housing.



## SERVICE INFORMATION BULLETIN

- 10) Hand tighten the SCV mounting bolts making sure the bolts are equally tightened to prevent binding.

**NOTE:**  
Make sure the connector faces the correct direction. Direction will vary with part number.



- 11) Torque the SCV mounting bolts. Make sure the tool is not on an incline or hexagon bolt damage/breakage will result.

**78.3 in. lbs. (8.85 Nm)**



- 12) Reconnect the SCV connector.



