

Revisions to this document are noted
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2019FA07, Rev. A
January 28, 2020
Product Code(s): 65, 66
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SUBJECT: Special Coverage for TIDB Aluminum Main Valve Body – Reactive

MODELS AFFECTED: 3000 Series™, 4000 Series™, B200™, B300™, B3400 xFE™, B400™, B500™, T200™, T300™, T400™, T500™ Series Models

VOCATIONS AFFECTED: All Vocations

Introduction:

Allison Transmission, Inc. has identified a potential concern with the TIDB Aluminum Main Valve Body. As a Global Customer Satisfaction initiative, Allison Transmission, Inc. will support the reactive repair of units with symptoms attributable to the subject part in the serial number ranges identified in [Table 1](#) for five years from the in-service date of the vehicle. This Field Action does not cover transmission service work unrelated to the symptoms described within.



NOTE: The purpose of this Field Action is to provide a reactive repair (after a failure has occurred) of the covered condition. Refer to the following instructions to identify affected transmissions, obtain authorization to perform the repair, and submit the proper warranty claim.

The following symptoms may be present with a suspect TIDB Main Valve Body:

- Harsh upshifts when C2 clutch is oncoming (6 speed: 3-4 upshift, 7 speed: 3-4 or 4-5 upshift)
- Premature P088A Transmission Filter Maintenance Alert, and/or P088B Transmission Filter Maintenance Required DTCs
- Premature P2789 Transmission Clutch Life Expired (Clutch Adaptive Learning at Limit) DTC
- Premature TRANSHEALTH Transmission Health Monitor failure

Table 1. Affected Serial Number Range, Models and Vocations

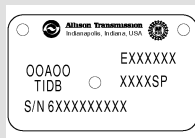

Global Customer Satisfaction Initiative TIDB Main Valve Body				
	Product Code	Affected Serial Number (S/N) Range	Affected Transmission Models	Affected Vocations
	Starts with S/N 651	6511516207 6511680891	3000 Series™, B200™, B300™, B400™, T200™, T300™	All

Table 1. Affected Serial Number Range, Models and Vocations (cont'd)

Global Customer Satisfaction Initiative TIDB Main Valve Body			
Product Code	Affected Serial Number (S/N) Range	Affected Transmission Models	Affected Vocations
Starts with S/N 651	6511516236 6511687928	3700	All
Starts with S/N 652	6520201013 6520222681	3000 Series™, B300™, T200™, T300™	All
Starts with S/N 661	6610507871 6610578390	4000 Series™, B500™, T400™	All
Starts with S/N 661	6610507990 6610582232	4700/4800	All
Starts with S/N 662	6620030644 6620036700	4000 Series™, B500™, T500™	All
Starts with S/N 662	6620030654 Break TBD*	4700/4800	All
* Serial Number breakpoint not yet established.			



NOTE: There are a small number of trial run transmissions within the affected serial number ranges assembled with anodized TIDB main valve bodies in the factory. Those serial numbers are ineligible for this Field Action. The Field Action Authorization Tool will not return an authorization number for those units.



NOTE: Anodize implementation dates for 6-speed and 7-speed models were not simultaneous. As a result, eligible serial number ranges between those models differ.

Vehicle Configuration Category - Service Plan:

Determine classification of vehicle based upon [Table 2](#).

Table 2. Vehicle Classification

Vehicle State	Classification
6-Speed - Upon Arrival - Prognostics Enabled	Category 1
6-Speed - Upon Arrival - Prognostics Disabled	Category 2
6-Speed - Upon Arrival - Prognostics Disabled then Enabled at Customer Request	Category 1
7-Speed (no Filter Life Body Present)	Category 2

Category 1 Service Action:

Install anodized Main Valve Body, current configuration Main Regulator Valve, current configuration Filter Life Indicator Spring, and reflash TCM to software level C191 or later if pre-C191 present. If C191 or later software level is present, force Fast Adapt using Clear All Shift Adaptive Data command in Allison DOC® Action Request.



NOTE: Some OEMs are on Flexible Release Timing (FRT) and, as a result, are held at a specific software level. If the attempt to reflash the TCM to C191 or later software level is unsuccessful, FRT may be applicable to the OEM. If this occurs, force Fast Adapt using Clear All Shift Adaptive Data command in Allison DOC® Action Request.

Category 2 Service Action:

Install anodized Main Valve Body, current configuration Main Regulator Valve, and force Fast Adapt using Clear All Shift Adaptive Data command in Allison DOC® Action Request.



NOTE: Prior to performing work, please read SILs 22-WT-19, 23-WT-19, and 27-WT-19 related to the 3000/4000 Series™ TIDB Aluminum Main Valve Body and Main Regulator Valve.

Field Action Transmission Identification:

Prior to the repair of a suspect transmission, verify that the Field Action repair has NOT already been performed. Login to <https://sap.allisontransmission.com/extranet/fieldactions>. Enter the transmission serial number, vehicle vocation code, and request an authorization. If you receive an authorization number, then this is confirmation that the Field Action has NOT been performed. If the Field Action has NOT been performed, proceed with the repair. Include the authorization number in the warranty claim narrative prior to submitting the claim. If you are unable to obtain an authorization number, and you believe the transmission qualifies for the Field Action based on the serial number range, contact the Allison Technical Assistance Center (TAC) at 1-800-252-5283 or 317-242-0700 or E-mail: Allison.TAC@allisontransmission.com.

Allison Service Outlet Field Action Responsibility:

When a Customer has a vehicle in the affected S/N range that displays the symptoms previously listed, the service outlet shall take the following steps to support the customer:

1. Confirm the transmission is within the affected S/N range per [Table 1](#).
2. Verify the transmission nameplate does not have the “X” Identification Mark indicating Field Action service work has already been performed (refer to [Figure 3](#)).
3. Request a 2019FA07 authorization number for the transmission serial number to be repaired.
4. For six-speed models, determine whether Prognostics are enabled or disabled.
 - If, when keying-on the vehicle, the wrench indicator illuminates, Prognostics are enabled.
 - Not all vehicles with Prognostics enabled will display the wrench icon at key-on. The icon is disabled at key-on in some calibrations.
 - [Table 3](#) may be used to determine if Prognostics are enabled using the shift selector.
 - Allison DOC® may also be used to determine if Prognostics are enabled.

Table 3. Shift Selector Function

	Pushbutton Shift Selector - Press Up & Down Arrows Simultaneously				
	Bump Lever Shift Selector - Press Diagnostics Button (Allison Logo) Once				
	Button Press Count (Bold Indicates Prognostics Function)				
3000/4000 Series™ Configuration	1	2	3	4	5
With Prognostics With Oil Level Sensor	Fluid Level	Oil Life	Filter Life	Trans Health	Diagnostics
With Prognostics Without Oil Level Sensor	Oil Life	Filter Life	Trans Health	Diagnostics	
Without Prognostics With Oil Level Sensor	Fluid Level	Diagnostics			
Without Prognostics Without Oil Level Sensor	Diagnostics				

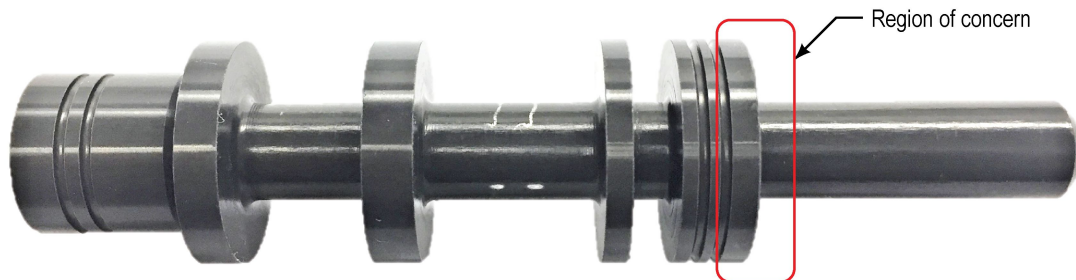
5. If the Aluminum Main Valve Body has NOT already been replaced, order required parts for Field Action per [Table 4](#), [Table 5](#), [Table 6](#), [Table 7](#), [Table 8](#), or [Table 9](#).
 - Use [Table 4](#) to support a Product Code 65 3000 Series™ 6-speed unit in a Category 1 vehicle.
 - Use [Table 5](#) to support a Product Code 65 3000 Series™ 6-speed unit in a Category 2 vehicle.
 - Use [Table 6](#) to support a Product Code 65 3000 Series™ 7-speed unit in a Category 2 vehicle.
 - Use [Table 7](#) to support a Product Code 66 4000 Series™ 6-speed unit in a Category 1 vehicle.
 - Use [Table 8](#) to support a Product Code 66 4000 Series™ 6-speed unit in a Category 2 vehicle.
 - Use [Table 9](#) to support a Product Code 66 4000 Series™ 7-speed unit in a Category 2 vehicle.
6. Replace parts listed in [Table 4](#), [Table 5](#), [Table 6](#), [Table 7](#), [Table 8](#), or [Table 9](#) per the Service Manual SM4013 or SM4014 Control Module Overhaul procedures.



NOTE: Prior to re-using the PS1 Switch Assembly or PS2 Switch Assembly, closely inspect the O-ring of each switch for damage. If either O-ring is questionable, replace the part.



NOTE: Closely inspect the Main Regulator Valve P/N 29563501 for the presence of a manufacturing burr shown in [Figure 1](#) and [Figure 2](#) below. See SIL 01-WT-20 for additional clarification.



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Figure 1.

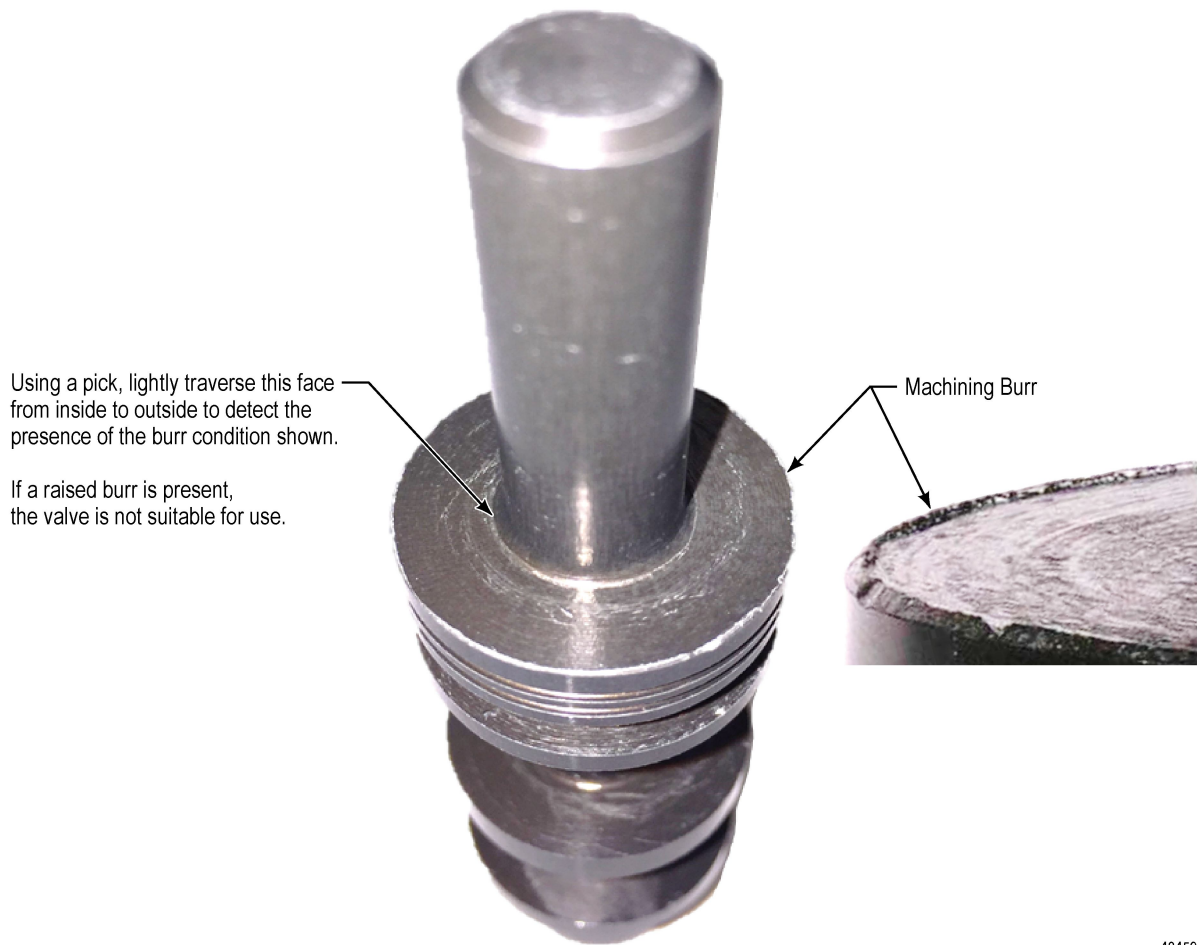


Figure 2.

7. In vehicles with six-speed transmissions and Prognostics enabled (Category 1), if the software level is prior to C191, reflash the TCM to C191 or later software level. If C191 or later software level is already present, force Fast Adapt using Clear All Shift Adaptive Data command in Allison DOC[®] Action Request.
8. In vehicles with six-speed transmissions and Prognostics disabled (Category 2), or in vehicles with seven-speed transmissions (Category 2), use the Allison DOC[®] Action Request command Clear All Shift Adaptive Data to force Fast Adapted shifts. There is no need to reflash the TCM to C191 or later software level in these vehicles.



NOTE: The Clear All Shift Adaptive Data Action Request forces the TCM to use the Fast Adaptive algorithm to adapt shifts.

9. Fill transmission with the same type of fluid that was drained. Reset Fluid Life Monitor as-required.
10. Stamp or etch an "X" identification mark into the transmission nameplate in the location shown in [Figure 3](#).



4345312

Figure 3. Identification Mark

11. File AWAARE claim per [Table 10](#), [Table 11](#), [Table 12](#), [Table 13](#), [Table 14](#), [Table 15](#), or [Table 16](#).

Required Service Parts:

The following tables provide the required service parts for this Global Customer Satisfaction Field Action 2019FA07 initiative.

Table 4. Product Code 65 – 3000 Series™, B200™, B300™, B400™, T200™, T300™ Series – Category 1

Mandatory/As-Required	Part Number	Part Name	Quantity
Mandatory	23019664	Drain Plug O-ring	1
Mandatory	23046376	Seal, Face	3
Mandatory	29503283	Gasket, Case	1
Mandatory	29503382	O-ring, 14.0 mm ID	1
Mandatory	29503384	O-ring, 18.8 mm ID	1
Mandatory	29507437	Filter Cover O-ring	2
Mandatory	29512863	O-ring, Standoff, 47.2 mm ID	1
Mandatory	29524449	Filter Cover Gasket	2
Mandatory	29535518	O-ring, 13.0 mm ID	6
Mandatory	29537066	Gasket, Suction Filter	1
Mandatory	29542976	O-ring, 10.5 mm ID	6
Mandatory	29542991	Seal, Face	1
Mandatory	29548953	Filter Cover O-ring	2
As-Required	29549658	Switch Assembly, Pressure (PS2)	1
As-Required	29552364	Switch Assembly, Pressure (PS1)	1
Mandatory	29557154	Body, Main Control Valve	1
Mandatory	29557345	Gasket, Channel Plate	1
Mandatory	29562588	FLI Spring	1
Mandatory	29563501	Valve, Main Regulator	1

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Table 5. Product Code 65 – 3000 Series™, B200™, B300™, B400™, T200™, T300™ Series – Category 2

Mandatory/As-Required	Part Number	Part Name	Quantity
Mandatory	23019664	Drain Plug O-ring	1
Mandatory	23046376	Seal, Face	3
Mandatory	29503283	Gasket, Case	1
Mandatory	29503382	O-ring, 14.0 mm ID	1
Mandatory	29503384	O-ring, 18.8 mm ID	1
Mandatory	29507437	Filter Cover O-ring	2
Mandatory	29512863	O-ring, Standoff, 47.2 mm ID	1
Mandatory	29524449	Filter Cover Gasket	2
Mandatory	29535518	O-ring, 13.0 mm ID	6
Mandatory	29537066	Gasket, Suction Filter	1
Mandatory	29542976	O-ring, 10.5 mm ID	6
Mandatory	29542991	Seal, Face	1
Mandatory	29548953	Filter Cover O-ring	2
As-Required	29552364	Switch Assembly, Pressure (PS1)	1
Mandatory	29557154	Body, Main Control Valve	1
Mandatory	29557345	Gasket, Channel Plate	1
Mandatory	29563501	Valve, Main Regulator	1

Table 6. Product Code 65 – 3700 Series™ – Category 2 – FLI Body Not Present

Mandatory/As-Required	Part Number	Part Name	Quantity
Mandatory	23019664	Drain Plug O-ring	1
Mandatory	23046376	Seal, Face	3
Mandatory	29503283	Gasket, Case	1
Mandatory	29503382	O-ring, 14.0 mm ID	1
Mandatory	29503384	O-ring, 18.8 mm ID	1
Mandatory	29507437	Filter Cover O-ring	2
Mandatory	29512863	O-ring, Standoff, 47.2 mm ID	1
Mandatory	29524449	Filter Cover Gasket	2
Mandatory	29535518	O-ring, 13.0 mm ID	6
Mandatory	29537066	Gasket, Suction Filter	1
Mandatory	29542976	O-ring, 10.5 mm ID	6
Mandatory	29542991	Seal, Face	1
Mandatory	29548953	Filter Cover O-ring	2
As-Required	29552364	Switch Assembly, Pressure (PS1)	1
Mandatory	29557155	Body, Main Control Valve	1
Mandatory	29557346	Gasket, Channel Plate	1
Mandatory	29563501	Valve, Main Regulator	1

Table 7. Product Code 66 – 4000 Series™, B500™, T400™, T500™ Series – Category 1

Mandatory/As-Required	Part Number	Part Name	Quantity
Mandatory	23019664	Drain Plug O-ring	1
Mandatory	23046376	Seal, Face	3
Mandatory	29501099	Gasket, Case	1
Mandatory	29503382	O-ring, 14.0 mm ID	1
Mandatory	29503384	O-ring, 18.8 mm ID	1
Mandatory	29507437	Filter Cover O-ring	2
Mandatory	29512863	O-ring, Standoff, 47.2 mm ID	1
Mandatory	29524449	Filter Cover Gasket	2
Mandatory	29535518	O-ring, 13.0 mm ID	6
Mandatory	29537066	Gasket, Suction Filter	1
Mandatory	29542976	O-ring, 10.5 mm ID	6
Mandatory	29542991	Seal, Face	1
Mandatory	29548953	Filter Cover O-ring	2
As-Required	29549658	Switch Assembly, Pressure (PS2)	1
As-Required	29552364	Switch Assembly, Pressure (PS1)	1
Mandatory	29557154	Body, Main Control Valve	1
Mandatory	29557347	Gasket, Channel Plate	1
Mandatory	29562588	FLI Spring	1
Mandatory	29563501	Valve, Main Regulator	1

Table 8. Product Code 66 – 4000 Series™, B500™, T400™, T500™ Series – Category 2

Mandatory/As-Required	Part Number	Part Name	Quantity
Mandatory	23019664	Drain Plug O-ring	1
Mandatory	23046376	Seal, Face	3
Mandatory	29501099	Gasket, Case	1
Mandatory	29503382	O-ring, 14.0 mm ID	1
Mandatory	29503384	O-ring, 18.8 mm ID	1
Mandatory	29507437	Filter Cover O-ring	2
Mandatory	29512863	O-ring, Standoff, 47.2 mm ID	1
Mandatory	29524449	Filter Cover Gasket	2
Mandatory	29535518	O-ring, 13.0 mm ID	6
Mandatory	29537066	Gasket, Suction Filter	1
Mandatory	29542976	O-ring, 10.5 mm ID	6
Mandatory	29542991	Seal, Face	1
Mandatory	29548953	Filter Cover O-ring	2
As-Required	29552364	Switch Assembly, Pressure (PS1)	1
Mandatory	29557154	Body, Main Control Valve	1
Mandatory	29557347	Gasket, Channel Plate	1
Mandatory	29563501	Valve, Main Regulator	1

Table 9. Product Code 66 – 4700 Series™, 4800 Series™ – Category 2 – FLI Body Not Present

Mandatory/As-Required	Part Number	Part Name	Quantity
Mandatory	23019664	Drain Plug O-ring	1
Mandatory	23046376	Seal, Face	3
Mandatory	29501099	Gasket, Case	1
Mandatory	29503382	O-ring, 14.0 mm ID	1
Mandatory	29503384	O-ring, 18.8 mm ID	1
Mandatory	29507437	Filter Cover O-ring	2
Mandatory	29512863	O-ring, Standoff, 47.2 mm ID	1
Mandatory	29524449	Filter Cover Gasket	2
Mandatory	29535518	O-ring, 13.0 mm ID	6
Mandatory	29537066	Gasket, Suction Filter	1
Mandatory	29542976	O-ring, 10.5 mm ID	6
Mandatory	29542991	Seal, Face	1
Mandatory	29548953	Filter Cover O-ring	2
As-Required	29552364	Switch Assembly, Pressure (PS1)	1
Mandatory	29557155	Body, Main Control Valve	1
Mandatory	29557348	Gasket, Channel Plate	1
Mandatory	29563501	Valve, Main Regulator	1

Warranty Information:

Allison service outlets shall submit an AWAARE claim on each vehicle completed under the Field Action. Claim any Field Action work separately even if performed simultaneously with another transmission repair, such as an overhaul or solenoid replacement.



NOTE: If a Customer requests reimbursement for a “Customer paid main valve body replacement” on a transmission listed in [Table 1](#) of this Field Action, the authorized Allison service outlet that performed the repair may request reimbursement for these repairs via AWAARE. The service outlet shall follow all applicable procedures outlined in the above Field Action Letter and attach the original customer paid invoice to the AWAARE claim. Total reimbursement to the service outlet will not exceed the standard labor and parts identified in Field Action 2019FA07. A Claim Type 4 reimbursement from Allison shall be credited back to the customer from the authorized Allison service outlet. Customer reimbursement credit documents must be retained for Allison audit.



NOTE: If a Customer believes they have experienced an unacceptable failure rate within their fleet and requests proactive replacement of the transmission main valve body, see Field Action Letter **2019FA08 – Special Coverage for TIDB Aluminum Main Valve Body – Proactive.**



NOTE: If a customer has a vehicle that has had Prognostics disabled to prevent the occurrence of premature P088A, P088B, or P2789 Diagnostic Codes, and the customer requests the Prognostics function to be re-enabled, reactivate the function while the vehicle is in the shop and submit the labor involved as a warranty claim per the Claim Submittal Information section below.

Claim Submittal Information:

Approved authorized Allison service outlets must submit work performed per this Field Action as outlined in [Table 10](#), [Table 11](#), [Table 12](#), [Table 13](#), [Table 14](#), [Table 15](#), or [Table 16](#). This Global Customer Satisfaction Field Action initiative remains active until five years from the in-service date of the vehicle. The Claim Type and related details are determined based on the coverage that is available at the time of main valve body replacement.

Table 10. Claim Information

Does Unit Have ETC, Standard or Edge Coverage Still in Effect?	No	Yes
Claim Type	4	Available Claim Type (01, 02, 09)
Special Activity Indicator	2019FA07	2019FA07
Primary Failed Part	29557154 or 29557155	29557154 or 29557155
Complaint Code	Applicable Customer Complaint	Applicable Customer Complaint
Failure Code	AD15	AD15
Field Action Authorization Number	*	*
* Provided from Extranet, must be listed in claim narrative.		

Table 11. Labor Codes/Hours

Product Code 65 – 3000 Series™, B, T Models – Category 1		
Labor Operation Code	Labor Hours	Labor Operation Description
00094006	0.2	Steam Clean (Control Module Area ONLY)
00094700	1.0	R&R Control Module
00096100	2.0	Overhaul Control Module
00096900	0.1	Re-enable Prognostics at Customer Request
00096501	1.0	Reprogram to C191 or later software level (if required)
00096900	0.1	Clear All Shift Adaptive Data (if reprogramming to C191 not required)

Table 12. Labor Codes/Hours

Product Code 65 – 3000 Series™, B, T Models – Category 2		
Labor Operation Code	Labor Hours	Labor Operation Description
00094006	0.2	Steam Clean (Control Module Area ONLY)
00094700	1.0	R&R Control Module
00096100	2.0	Overhaul Control Module
00096900	0.1	Clear All Shift Adaptive Data

Table 13. Labor Codes/Hours

Product Code 65 – 3700 Series™ – Category 2 (FLI Body Not Present)		
Labor Operation Code	Labor Hours	Labor Operation Description
00094006	0.2	Steam Clean (Control Module Area ONLY)
00094700	2.0	R&R Control Module
00096100	2.0	Overhaul Control Module
00096900	0.1	Clear All Shift Adaptive Data

Table 14. Labor Codes/Hours

Product Code 66 – 4000 Series™, B, T Models – Category 1		
Labor Operation Code	Labor Hours	Labor Operation Description
00094006	0.2	Steam Clean (Control Module Area ONLY)
00094700	1.2	R&R Control Module
00096100	2.0	Overhaul Control Module
00096900	0.1	Re-enable Prognostics at Customer Request
00096501	1.0	Reprogram to C191 or later software level (if required)
00096900	0.1	Clear All Shift Adaptive Data (if reprogramming to C191 not required)

Table 15. Labor Codes/Hours

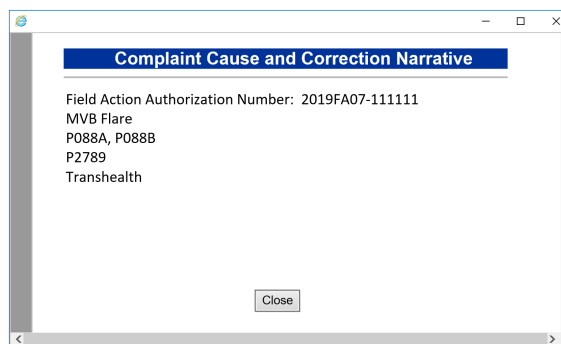
Product Code 66 – 4000 Series, B, T Models – Category 2		
Labor Operation Code	Labor Hours	Labor Operation Description
00094006	0.2	Steam Clean (Control Module Area ONLY)
00094700	1.2	R&R Control Module
00096100	2.0	Overhaul Control Module
00096900	0.1	Clear All Shift Adaptive Data

Table 16. Labor Codes/Hours

Product Code 66 – 4700, 4800 Series™ – Category 2 (FLI Body Not Present)		
Labor Operation Code	Labor Hours	Labor Operation Description
00094006	0.2	Steam Clean (Control Module Area ONLY)
00094700	1.2	R&R Control Module
00096100	2.0	Overhaul Control Module
00096900	0.1	Clear All Shift Adaptive Data

Claim Narrative Example:

1. As shown in [Figure 4](#):



4843044

Figure 4. Claim Narrative Example

- Include the 2019FA07 authorization number in the first line of the AWAARE Claim Narrative
 - For a harsh upshift when C2 clutch is oncoming, include “MVB Flare” in the next line of the Claim Narrative
 - For a P088A and/or P088B DTCs, include the applicable DTCs in the next line of the Claim Narrative separated by a comma and single space as required
 - For a P2789 DTC, include “P2789” in the next line of the Claim Narrative
 - For a TRANSHEALTH Red failure, include “Transhealth” in the next line of the Claim Narrative
2. Omit lines of any symptoms that do not apply to the unit being repaired.

Replaced Parts:

Tag replaced parts with transmission serial number and hold until the AWAARE claim is approved. Scrap held parts after AWAARE claim approval.

This is a Global Customer Satisfaction Field Action. The intent is that the customer will bring their vehicle to an authorized Allison service outlet for the applicable repairs. If the authorized Allison service outlet determines the overall cost to Allison would be less if the repairs were performed at the customer location, a travel expense will be allowed. However, this justification must be clearly explained on the claim.

Any additional parts, labor, or travel costs deemed necessary to complete this Field Action must be described in detail in the claim narrative; if not, they will be deducted from the claim. Allison service outlets must follow the published Allison Transmission current labor time guide for work performed when adding any additional charges.

Contact Information:

For questions concerning this Global Customer Satisfaction initiative, please contact:

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Attn: 3000/4000 Service Group
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