DATE: 7-18-19

APPLIES TO: This service bulletin applies to 2018 through 2020 model year K2, K3 and K4 model motor home chassis equipped with an auxiliary compressor supplied by Hadley and built between October 26, 2016 and April 15, 2019.

CONDITION: Hadley system still active when ignition is off.

CORRECTION: Update the software within the Hadley module.

LABOR ALLOCATION: 3 hrs.

CLASSIFICATION: V3

PARTS NEEDED:

QTY	Part Number	Description
1	S-2668-001B	Service Kit-Hadley Aux Compressor
1	H00700L	Hadley System Programming Kit

Kit # S-2668-001B Contains:

QTY	Part Number	Description
1	CSB18-330-010B	Campaign Service Bulletin
1	4086-GG5-002	Harn-Hadley SLS Jack Interface Overlay
1	4087-GG5-001	Harn-Hadley ECU 6” Extension
5	T-50ioM4	Tie Strap
2	0636-GG5-G06	Deutsch Pin 16GA
1	4086-GG5	Print-Hadley SLS Jack Interface Overlay
1	4087-GG5	Print-Hadley ECU 6” Extension
1	3966-GG5	Print-Hadley SLS Jack Interface
1	0411-310-1605	Deutsch Pin Removal Tool
1	4499-MM5-003	Muffler
1	4669-MM5	Print-Muffler Installation
2	770678-1	TE Cavity plug for Hadley ECU Connector

Kit # H00700L Contains:

QTY	Part Number	Description
1	H00700-85	System Programmer Harness
1	H00700-86	Power Supply System Programmer
1	H18720	Red SD Card 128 MB(K2)

		Green SD Card 128 MB(K3/K4)
1	H18730	Melabs Programmer (Black Box)
1	H18739	Programming Instructions

GENERAL INSTRUCTIONS:

Thoroughly review entire service bulletin before starting work. If there are questions or concerns with steps defined in this service bulletin, contact Spartan Motors USA, Inc. Customer & Product Support Group.

All applicable industry safety standards must be followed when performing work identified in this procedure.

STEP-BY-STEP INSTRUCTIONS:

1. Turn disconnect switches off at rear of coach.

2. All work will be done on Hadley Interface Harness side of connectors.
    a. For Entegra, locate connectors (under steering wheel) behind kick panel directly to left of pedals.
    b. For Foretravel & Newmar, locate connectors (externally, below driver's window) in left front electrical compartment.

3. Locate Spartan Jack Controller (Item #2) on Hadley Interface Harness. Refer to FIG. 2-1 and FIG. 3-1

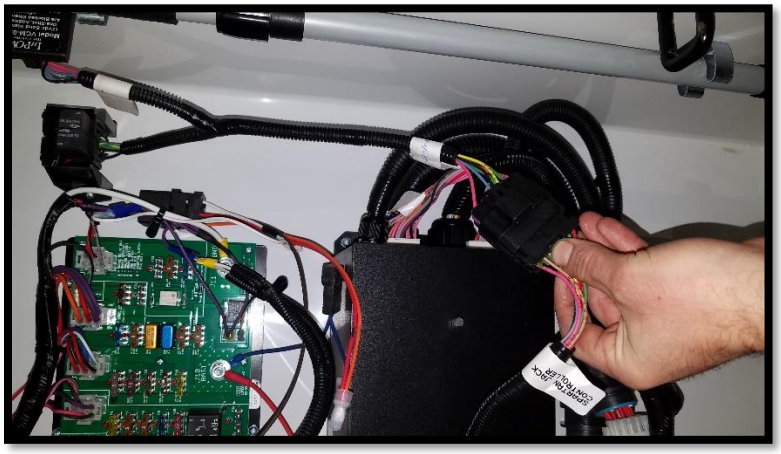
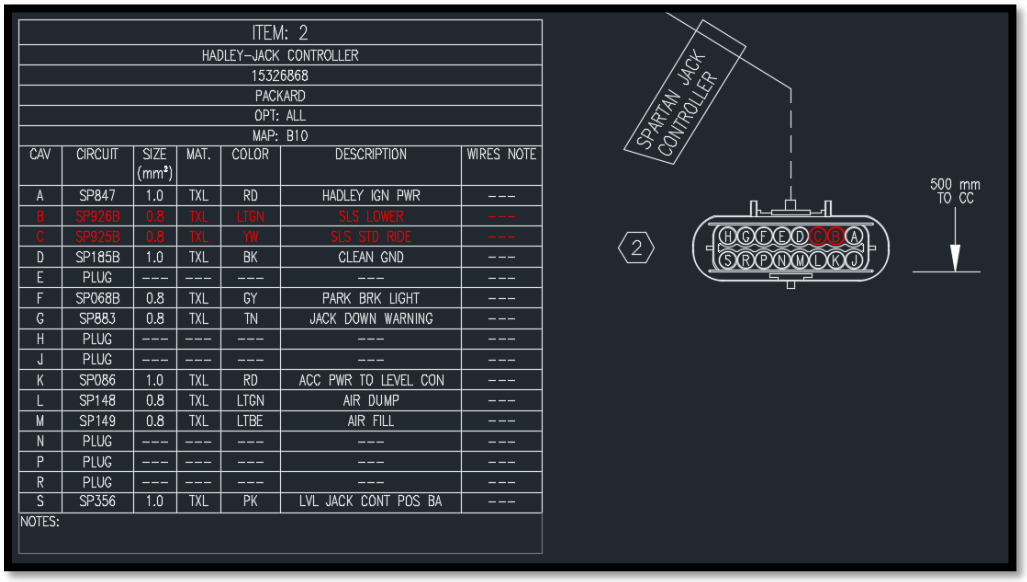


FIG. 2-1

4. Using 1mmx1mm single face blade tool to de-pin circuit SP926B (LTGN-18GA) from Spartan Jack Controller (Item #2) cavity B, cut and discard terminal and apply heat shrink to wire.

5. Using a 1mmx1mm single face blade tool to De-pin circuit SP925B (YW-18GA) from Spartan Jack Controller (Item #2) cavity C, cut and discard terminal off and apply heat shrink to wire.



ITEM: 2
HADLEY–JACK CONTROLLER
15326868
PACKARD
OPT: ALL
MAP: B10

CAV	CIRCUIT	SIZE (mm²)	MAT.	COLOR	DESCRIPTION	WIRES NOTE
A	SP847	1.0	TXL	RD	HADLEY IGN PWR	---
B	SP926B	0.8	TXL	LTGN	SLS LOWER	---
C	SP925B	0.8	TXL	YW	SLS STD RIDE	---
D	SP185B	1.0	TXL	BK	CLEAN GND	---
E	PLUG	---	---	---	---	---
F	SP068B	0.8	TXL	GY	PARK BRK LIGHT	---
G	SP883	0.8	TXL	TN	JACK DOWN WARNING	---
H	PLUG	---	---	---	---	---
J	PLUG	---	---	---	---	---
K	SP086	1.0	TXL	RD	ACC PWR TO LEVEL CON	---
L	SP148	0.8	TXL	LTGN	AIR DUMP	---
M	SP149	0.8	TXL	LTBE	AIR FILL	---
N	PLUG	---	---	---	---	---
P	PLUG	---	---	---	---	---
R	PLUG	---	---	---	---	---
S	SP356	1.0	TXL	PK	LVL JACK CONT POS BA	---

NOTES:

FIG. 3-1

6. Locate Hadley SLS Jack Interface Overlay harness. (4086-GG5-001)

7. Insert Delphi Pin, circuit SP148Z (LTGN-18GA) into Spartan Jack Controller (Item #2) cavity B. Refer to FIG. 4-1.

8. Insert Delphi Pin, circuit SP149Z (LTB-18GA) into Spartan Jack Controller (Item #2) cavity C.

9. Tape back heat shrink wires. Reconnect Spartan jack controller connector

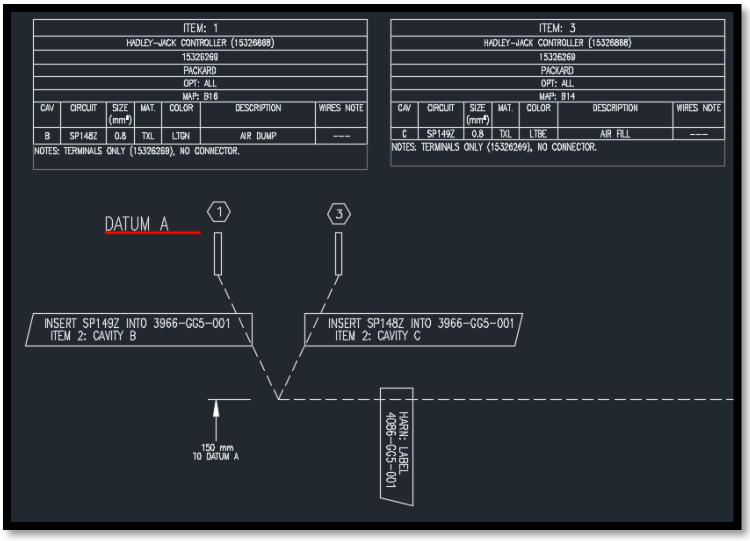
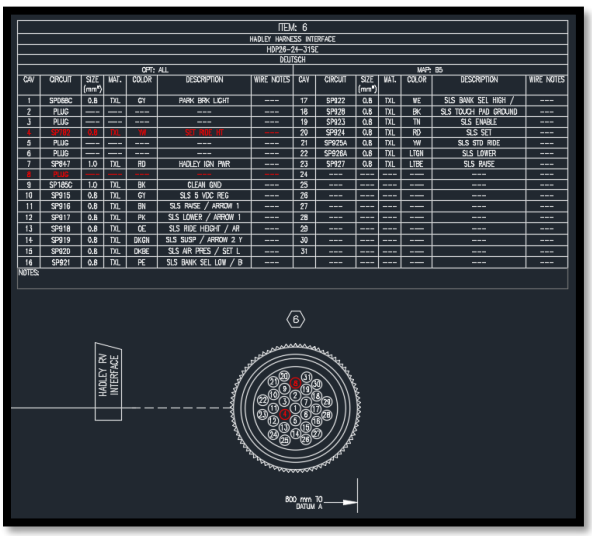


FIG. 4-1

10. Locate Hadley RV Interface (Item #6) on Hadley Interface Harness. Refer to FIG. 4-2, (Harness P/N 3966-GG5-001).

11. De-pin circuit SP782 (YW-18GA) from Hadley RV Interface (Item #6) cavity 4, cut and discard terminal and apply heat shrink to wire.

12. Remove cavity plug from Hadley RV Interface (Item #6) cavity 8.



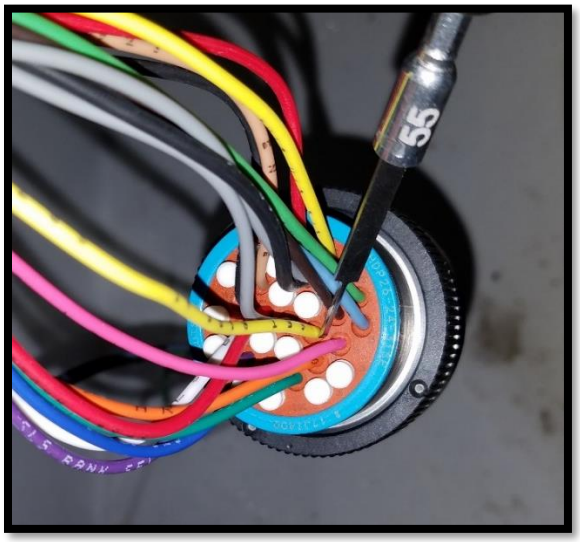


FIG. 4-2

Service Bulletins are intended for use by Professional Technicians only. They are written to guide Professional Technicians in performing service to vehicles of specific nature in conjunction with industry standards. Professional Technicians should be appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.

13. Insert Deutsch Socket, circuit SP148Z (LTGN-18GA) into Hadley RV Interface (Item #6) cavity 4. Refer to FIG. 5-1 and FIG. 5-2.

14. Insert Deutsch Socket, circuit SP149Z (LTB-18GA) into Hadley RV Interface (Item #6) cavity 8.

FIG. 5-1

15. Tape back heat shrink wire SP782, reconnect connector #6

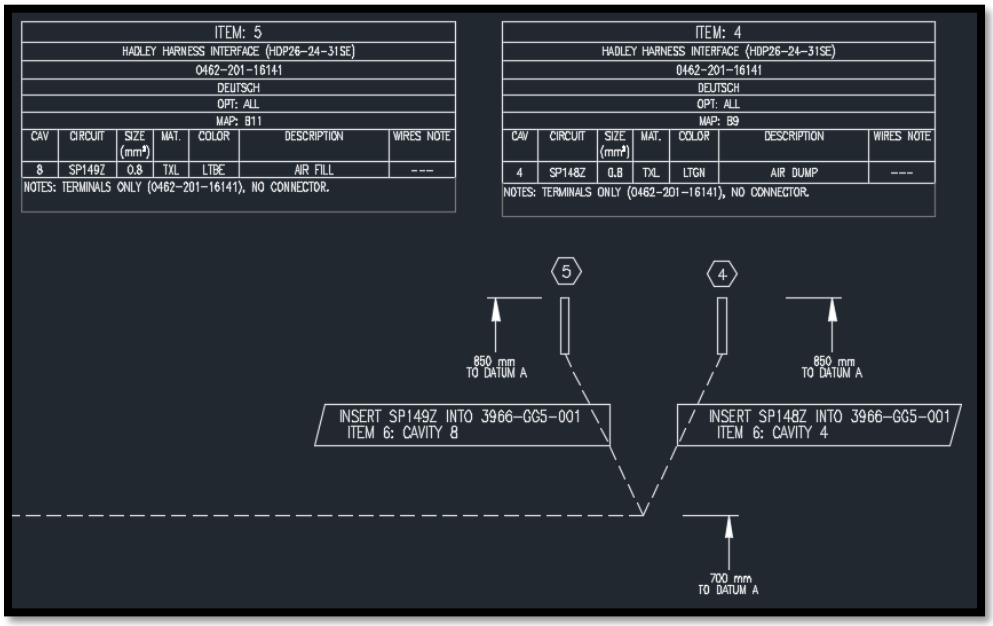


FIG. 5-2

Service Bulletins are intended for use by Professional Technicians only. They are written to guide Professional Technicians in performing service to vehicles of specific nature in conjunction with industry standards. Professional Technicians should be appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.

16. Locate Hadley ECU, which is mounted on driver's side frame rail, forward front axle. Find blue and black 35-way connectors on Hadley ECU, which are located behind manifold assembly. Refer to FIG. 6-1.

FIG. 6-1

17. Disconnect deutsch connectors (Item's 1 & 2) from Hadley ECU 6" Extension harness (4087-GG5-001) and remove wedge lock from item 2. Refer to FIG. 6-2.

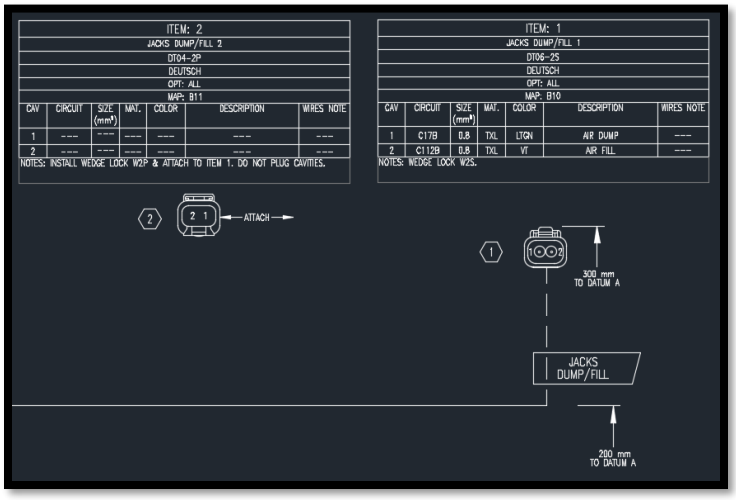


FIG. 6-2

Service Bulletins are intended for use by Professional Technicians only. They are written to guide Professional Technicians in performing service to vehicles of specific nature in conjunction with industry standards. Professional Technicians should be appropriately trained on industry standards and have the tools and equipment to perform procedures safely and properly.

18. De-pin C1.7 (LTGN-18GA) from blue connector (cavity 7) Remove red lock on inside connector on Hadley ECU, cut terminal off and crimp a 0460-202-16141 deutsche pin onto wire, using approved crimping tool#AID18880 and making sure wire strands can be seen in hole in terminal. Insert deutsche pin into cavity 1 of item 2 (connector without any wires) on Hadley ECU 6" Extension harness. Refer to FIG. 7-1. Place 770678-1 cavity plug into cavity 7 of blue Hadley ECU connector.

19. De-pin C1.12 (VT-18GA) from blue connector (cavity 12) on Hadley ECU, cut terminal off and crimp a 0460-202-16141 deutsche pin onto the wire, using approved crimping tool #AID18880 and making sure wire strands can be seen in hole in terminal. Insert deutsche pin into cavity 2 of item 2 (connector without any wires) from Hadley ECU 6" Extension harness. Place 770678-1 cavity plug into cavity 12 of blue Hadley ECU connector.

20. Install wedge lock on Item#2 (2 pin deutsche).

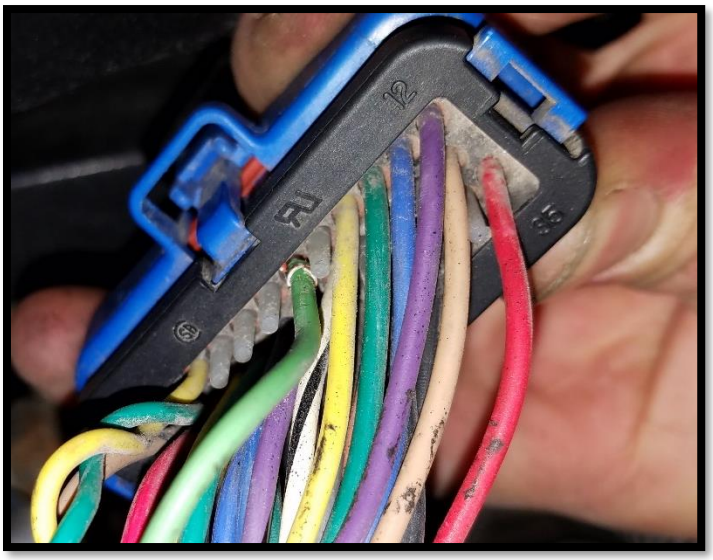


FIG. 7-1

21. De-pin C1.12 (LTBE-16GA) from black connector (cavity 12), Remove red lock on inside connector on Hadley ECU, cut terminal off and apply heat shrink to wire.

22. Install Hadley ECU 6” Extension harness by connecting Item’s 1 & 2. Refer to FIG. 8-1.

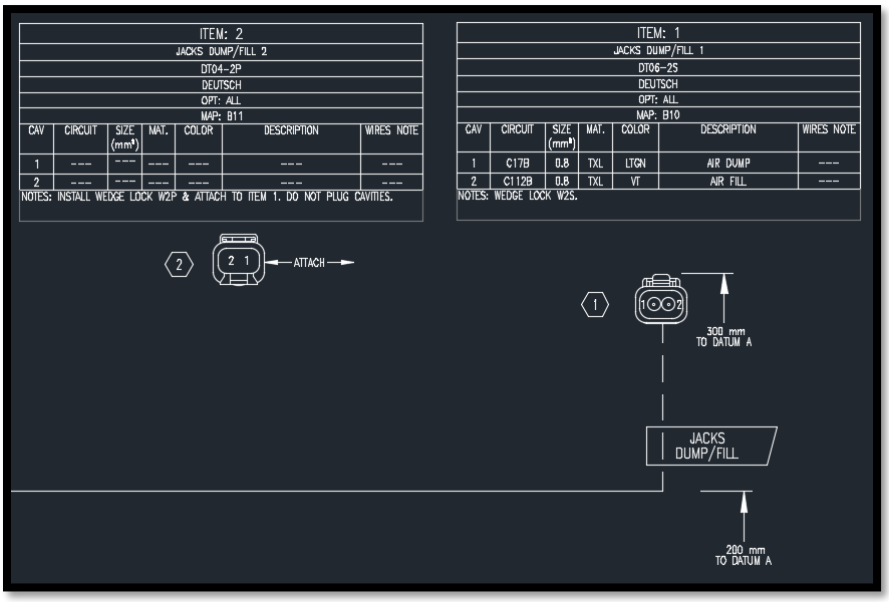


FIG. 8-1

23. Insert C17B (LTGN-18GA) into black connector on Hadley ECU (cavity 12). Refer to FIG. 8-2.

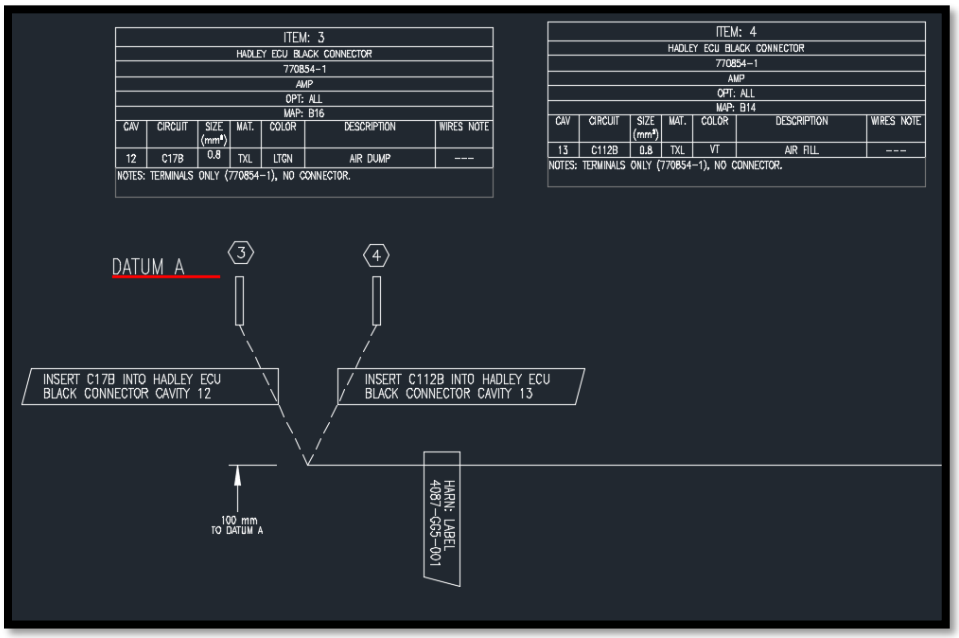


FIG. 8-2

24. Remove plug in Cavity 13.

25. Insert C112B (VT-18GA) into black connector on Hadley ECU (cavity 13).

26. Insert red locks back into ECM connectors on Hadley Harness.

27. Reconnect Blue Connector to ECM. Wait on black to perform calibration section.

28. Verify that engine is off, with key in “off” position (if Passive Keyless Start, verify lamp on push start is not illuminated) and parking brake applied.

29. Locate black Hadley Melabs programmer and verify correct flash memory card is installed into memory slot. Red SD Card(K2) or Green SD Card(K3/K4).

30. Locate power supply and plug 12VDC gray connector into programmer harness.

31. Plug AC line cord into a 120 VAC outlet.

32. Firmware will be loaded to Hadley controller, which is located on driver side frame rail ahead of front tire. Controller has (2) 35-pin connectors (blue and black in color).

33. Unplug black connector/harness from Hadley ECU by pulling center locking tab back and up. While holding the tab, carefully pull connector, rocking it side to side until unplugged.

34. Locate 35-pin black connector on Hadley programmer harness. Plug black programming connector into Hadley ECU. The LED on controller box should be solid green, indicating connector is properly attached.

35. Locate push button switch on Hadley Melabs programmer. Press switch for one second (LED light will change from solid green to solid red). The program loading process will take approximately 50 seconds. Once complete and if programming was successful, LED should change from solid red to solid green.

36. If programming was unsuccessful, LED will blink red. If this occurs, recheck all connections/wires and verify memory card is fully inserted in Hadley Melabs programmer and repeat the previous step.

37. Unplug 12-volt grey connector to prevent voltage spike. Unplug Black programming connector using technique in step 26 and re-install black connector to Hadley ECU.

38. Re-calibrate X and Y level sensors by verifying engine is running and coach is on a level surface. (Note: Park Brake must be Set)

39. Press and hold SLS button on Hadley touchpad for at least 15 seconds until the SET LED illuminates for approximately 1 second (Note: Do not need to use 2 pin connector). Once illuminated, level sensors are fully calibrated.

40. Remove any existing components from exhaust port labeled EXH. Refer to FIG. 10-1.

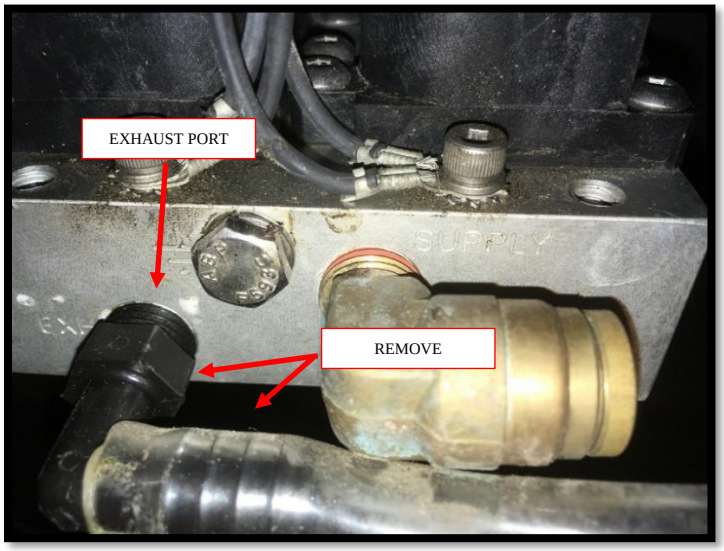


FIG. 10-1

41. Inspect port and muffler to ensure that threads are free of dirt, burrs and excessive nicks.

42. Apply pipe thread sealer w/Teflon as required to pipe threads only. The first three threads should be left uncovered to avoid system contamination.

43. Insert muffler into exhaust port labeled EXH.

44. Turn muffler into port to a finger tight position.

45. Wrench tighten muffler 2 to 3 turns from finger tight (T.F.F.T.). Typically, a proper engagement would be between 3 ½ and 6 threads. In cases where thread engagement is less than 3 ½, tighten connector further, but no less than one full turn. I thread engagement is greater than 6 threads, check both parts and replace any part with out of tolerance threads.