SERVICE MANUAL

CVT 6130
CVT 6145
CVT 6160

Basic instructions

SHIMMING

For each adjustment operation, select adjusting shims and measure individually using a micrometer, then add up the recorded values. Do not rely on measuring the entire shimming set, which may be incorrect, or the rated value indicated on each shim.

ROTATING SHAFT SEALS

For correct rotating shaft seal installation, proceed as follows:

- before assembly, allow the seal to soak in the oil it will be sealing for at least thirty minutes
- thoroughly clean the shaft and check that the working surface on the shaft is not damaged
- position the sealing lip facing the fluid; with hydrodynamic lips, take into consideration the shaft rotation direction and position the grooves so that they will deviate the fluid towards the inner side of the seal
- coat the sealing lip with a thin layer of lubricant (use oil rather than grease) and fill the gap between the sealing lip and the dust lip on double lip seals with grease
- insert the seal in its seat and press down using a flat punch, do not tap the seal with a hammer or mallet
- whilst inserting the seal, check that it is perpendicular to the seat; once settled, make sure that it makes contact with the thrust element, if required
- to prevent damaging the seal lip on the shaft, position a protective guard during installation operations

O-RING SEALS

Lubricate the O-RING seals before inserting them in the seats, this will prevent them from overturning and twisting, which would jeopardize sealing efficiency.

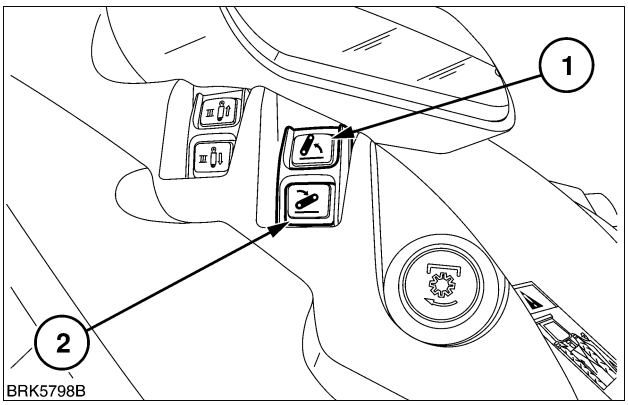
SEALING COMPOUNDS

Only use the sealants which are recommended in this manual! Before applying the sealing compound, prepare the surfaces as follows:

- remove any incrustations using a metal brush;
- thoroughly de-grease the surfaces using one of the following cleaning agents: trichlorethylene, petrol or a water and soda solution.

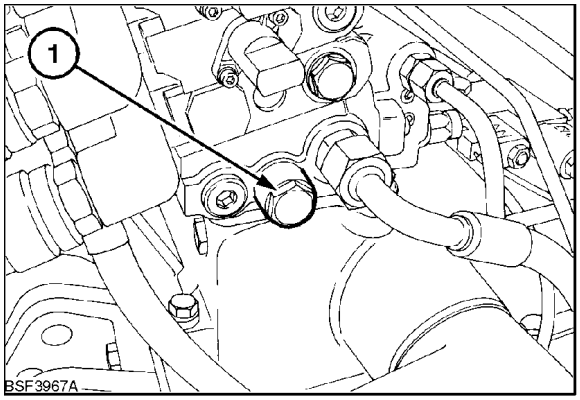
COTTER PINS

When fitting split cotter pins, ensure that the pin notch is positioned in the direction of the force required to stress the pin. Spiral cotter pins do not require special positioning.



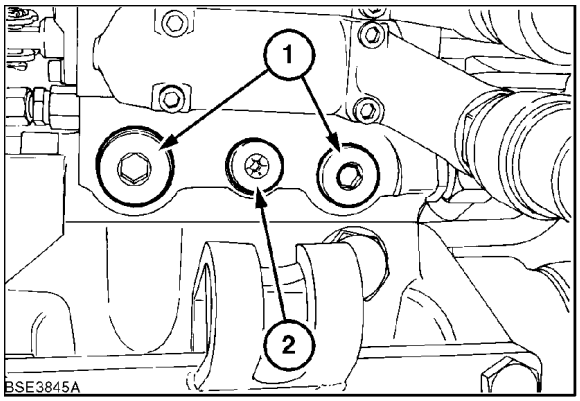
BRK5798B 12

The raise and lowering functions of the electronic draft control lift system can also be operated from the rear fender switches **(1)** and **(2)**



BSF3967A_430 13

Located below the Electronic Draft Control valve (Where fitted), is the Hydraulic Power Tapping port (Power Beyond) block. This includes a priority valve and also a low pressure regulating valve **(1)**.



BSE3845A 14

1. Power Beyond Ports
2. Pressure Relief Valve

14. Turn the steering wheel quickly in the following order with a 2-3 second delay between each movement.
    - 1/2 turn to the right.
    - 1/2 turn to the left.
    - Full left-hand lock and hold to the left.
    - Return the steering wheel to the centre.
    - Full right-hand lock and hold to the right.
    - Return the steering wheel to the centre.
15. Release the pressure from the flow meter and return the EHRs to the neutral position.
    switch off the engine and capture the results.
16. The results below show the relationship between the steering signal line (red) and the EHR flow (blue) and pressure (brown). When the steering wheel is moved sharply the steering demands hydraulic oil from the pump **(1)**. Due to the load on the hydraulic oil pump from the EHRs the oil supply is taken very briefly from the EHRs **(2)** and supplied as a priority to the steering. When the steering wheel is turned slowly, the hydraulic oil pump can cope with supplying both systems and therefore pressure and supply from the EHRs is not affected.
    Within the graphic the steering system signal line **(3)** is showing that the steering is taking the hydraulic oil supply as priority from the EHRs **(4)** for a longer period of time and then recovering due to the steering wheel being moved a full turn.
    This is a good example of a steering priority valve which is working correctly.
    The lubrication pressure line (green) is showing a response with the steering indicating that it is maintaining the lubrication pressure circuit during the operation of this test.

20. Raise the rear of the tractor and remove the axle stands.

NOTE: *If applicable, attach the lift rods to the lower links.*

21. Remove the front wheels chocks.

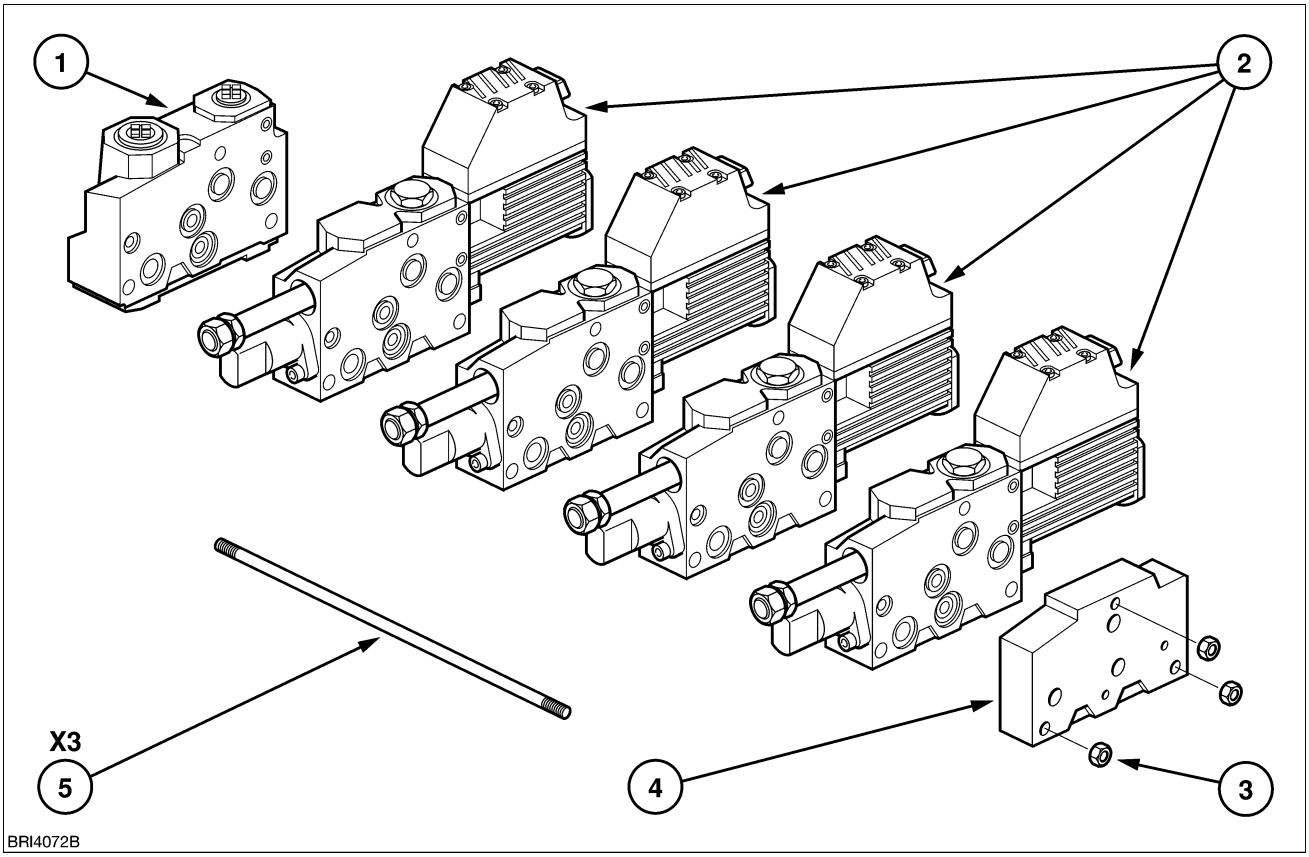
Index

HYDRAULIC, PNEUMATIC, ELECTRICAL, ELECTRONIC SYSTEMS - A

PRIMARY HYDRAULIC POWER SYSTEM Closed center mechanical remote valve - 10.B

Mid-mount remote control valve - Disassemble

Prior operation:
Mid-mount remote control valve - Remove (A.10.C)



BAIL06CCM092FSA 1

1. Inlet Manifold
2. Electronic Remote Valves
3. Tie Rod Nuts
4. End Plate
5. Tie Rod

1. Loosen and remove the tie rod nuts **(3)** from the end plate **(4)** .
2. Remove the end plate .
3. Remove the remote valve slices **(2)** taking care not to dislodge the load sensing valves and 'O' rings seated in the valve face.
4. Unscrew the tie rod bolts from inlet manifold
5. Refer to **Mid-mount remote control valve - Exploded view (A.10.C)** to view valve components and **Mid-mount remote control valve - Assemble (A.10.C)** for reassembly.

Contents

HYDRAULIC, PNEUMATIC, ELECTRICAL, ELECTRONIC SYSTEMS - A

HYDRAULIC COMMAND SYSTEM - 14.A

Air reservoir - Remove

⚠ WARNING

Heavy objects!
Lift and handle all heavy components using lifting equipment with adequate capacity. Always support units or parts with suitable slings or hooks. Make sure the work area is clear of all bystanders.
Failure to comply could result in death or serious injury.

W0398A

⚠ WARNING

Avoid injury!
Handle all parts carefully. Do not place your hands or fingers between parts. Use Personal Protective Equipment (PPE) as indicated in this manual, including protective goggles, gloves, and safety footwear.
Failure to comply could result in death or serious injury.

W0208A

1. Make sure that the vehicle is parked on a level surface.
2. Chock the front wheels using suitable wheels stops.
3. Raise the rear of the vehicle and place a suitable axle stands under the rear of the vehicle.

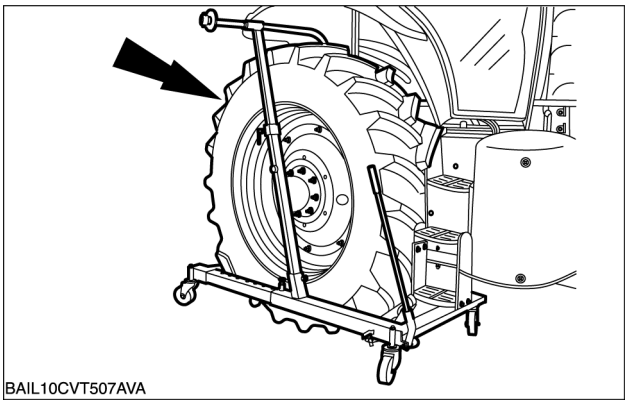
NOTE: *If required, detach the lift rods from the lower links.*

⚠ WARNING

Crushing hazard!
The wheels on this vehicle are very heavy. Always use a wheel remover or chain hoists to remove and install the wheels. Use an assistant as required.
Failure to comply could result in death or serious injury.

W0149A

Remove the right-hand rear wheel.



BAIL10CVT507AVA 1

SERVICE

Alternator

Battery

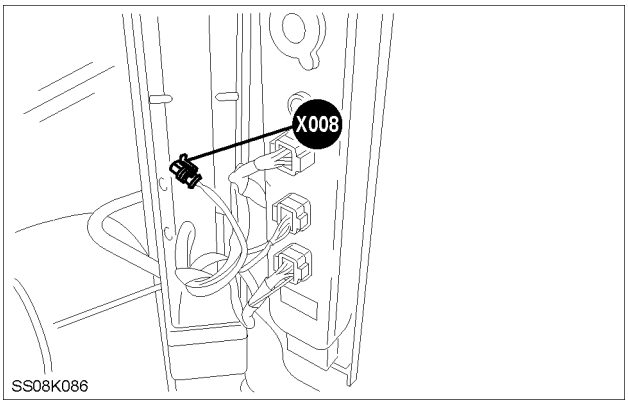
DIAGNOSTIC

Battery

X008 Keypad

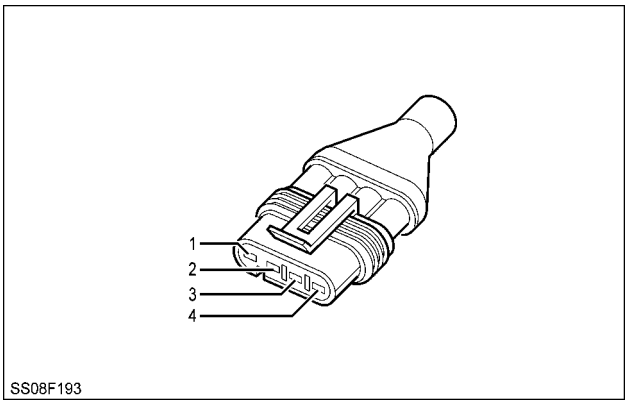
POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	GN	1050	ACCESSORY FEED
2	GN	5420	CAN L
3	YE	5400	CAN H
4	BK	61	CASE GROUND

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS08K086 15

BEHIND INSTRUMENT CLUSTER

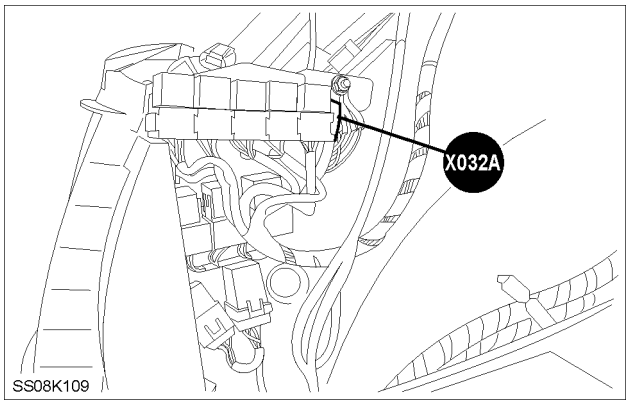


SS08F193 16

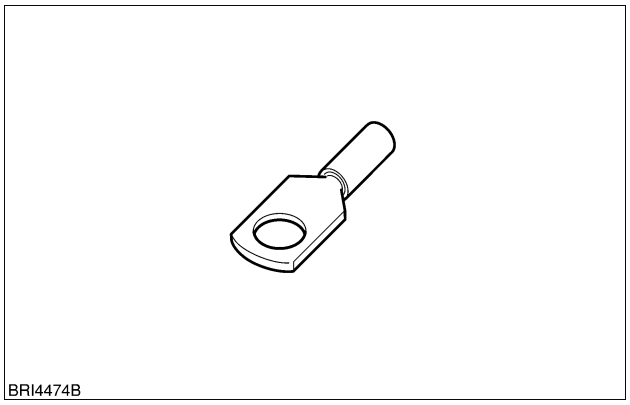
X032A Earth Header 2

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	BK	57	EARTH (ALL)

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS08K109 13



BRI4474B 14

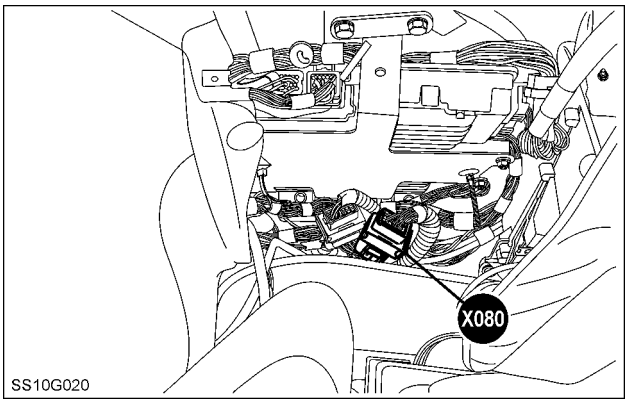
BEHIND RIGHT HAND TRIM

Connector - Component diagram 08

X080 Armrest Control Unit 1

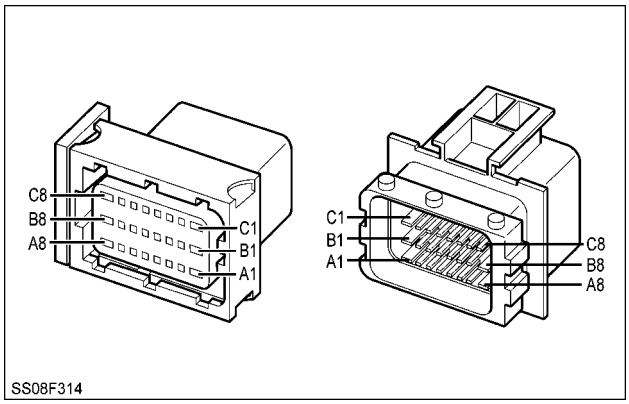
POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
A1	BR	5200	EDC VALVE SUPPLY
A2	YE	5400	CAN H
A3	GN	5420	CAN L
A4	RD	5500	EHR CAN HIGH
A5	BL	5510	EHR CAN LOW
A6	GN	5955	RS232 INPUT TECU
A7	WH	5960	RS232 OUTPUT TECU
A8	PK	2250	PTO FRONT - SUPPLY
B1	BL	7000	TRANS CONTROL SUPPLY
B2	OR	2045	PTO SWITCH TO MODULE
B3	OR	2046	PTO SWITCH (VCC)
B4	PK	2248	PTO FRONT - SWITCH (VCCS)
B5	PK	2245	PTO FRONT - SWITCH TO MODULE (MOM)
B6	BR	2065	PTO ENGAGED
B7	OR	2270	PTO FRONT - WARNING LAMP
B8	BK	57	EARTH (ALL)
C2	BK	5915	ISO BUS CAN SUPPLY GROUND
C3	GN	5900	ISO BUS CAN SIGNAL LOW
C4	YE	5910	ISO BUS CAN SIGNAL HIGH
C5	RD	5920	ISO BUS CAN SUPPLY POSITIVE
C8	BK	57	EARTH (ALL)

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS10G020 1

CAB RIGHT HAND BEHIND OPERATOR`S SEAT

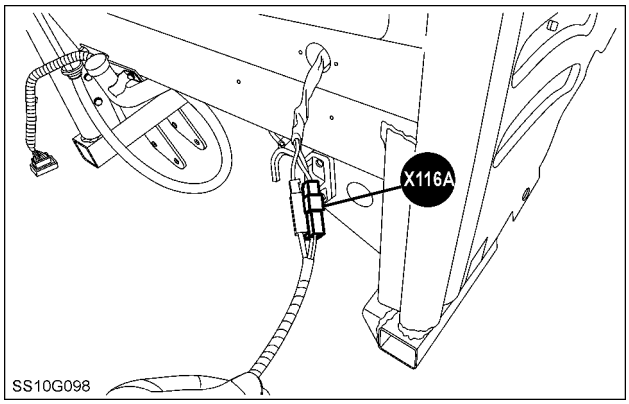


SS08F314 2

X116A Rear Power Socket Implement Plus

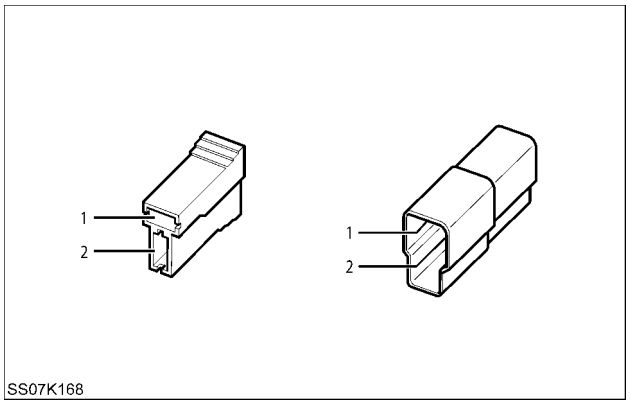
POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	BR	150	BATTERY FEED (UNFUSED)(ALL)
2	YE	9032	IGN+ TO POWER SKT.

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS10G098 13

CAB RIGHT HAND BEHIND OPERATOR'S SEAT

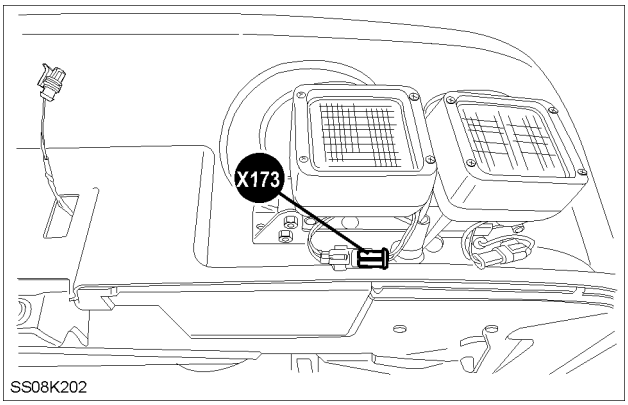


SS07K168 14

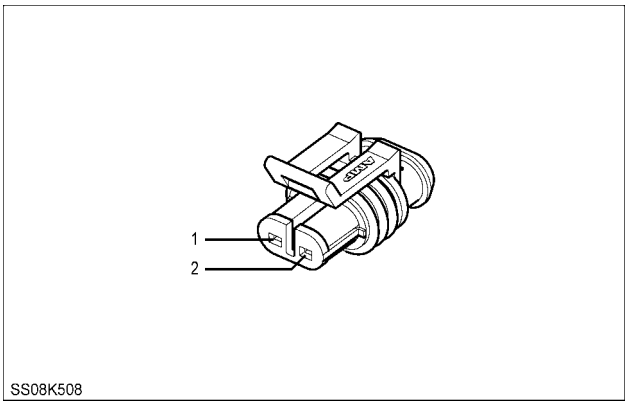
X173 Worklamp Rear Right Hand

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	GN	997	WORK LAMP-REAR FEED (OUTER)
2	BK	57	EARTH (ALL)

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS08K202 7



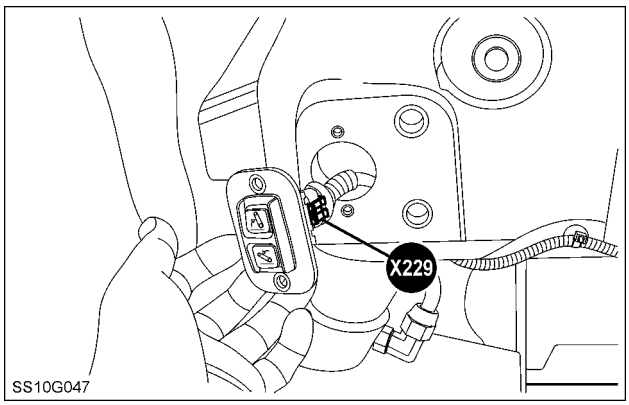
SS08K508 8

REAR RIGHT HAND CAB ROOF

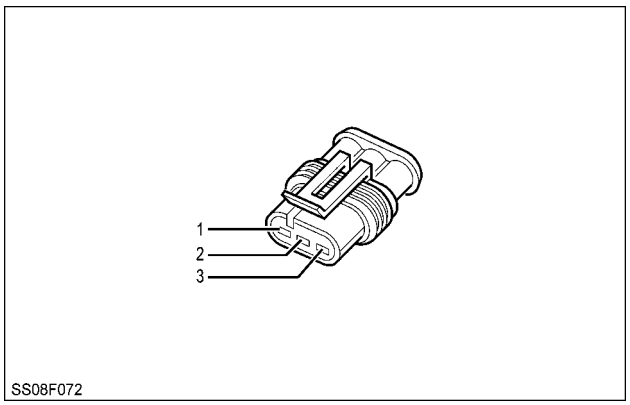
X229 Front Hitch Switch

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	TN	2590	EXTERNAL SWITCH FHPL UP
2	PK	2250	PTO FRONT - SUPPLY
3	TN	2591	EXTERNAL SWITCH FHPL DOWN

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS10G047 15



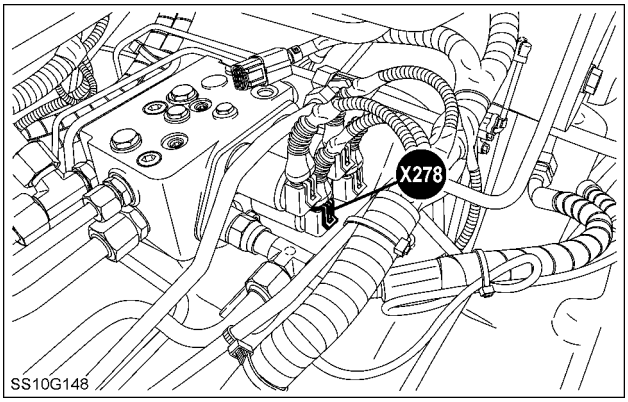
SS08F072 16

LEFT HAND SIDE ENGINE

X278 Rear PTO Solenoid

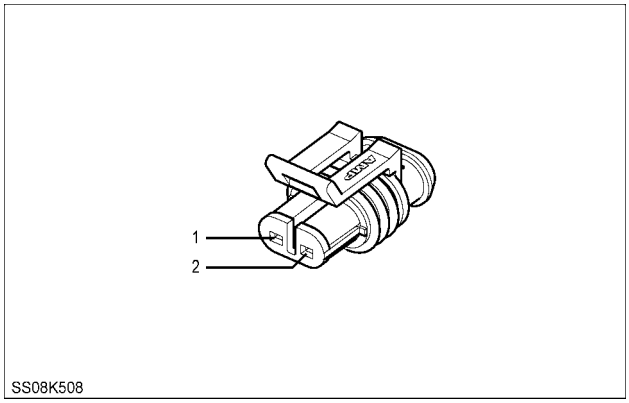
POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	OR	2042	PTO SOLENOID-REAR
2	OR	2051	PTO SOLENOID RETURN (-)

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS10G148 7

REAR LEFT HAND TOP OF TRANSMISSION

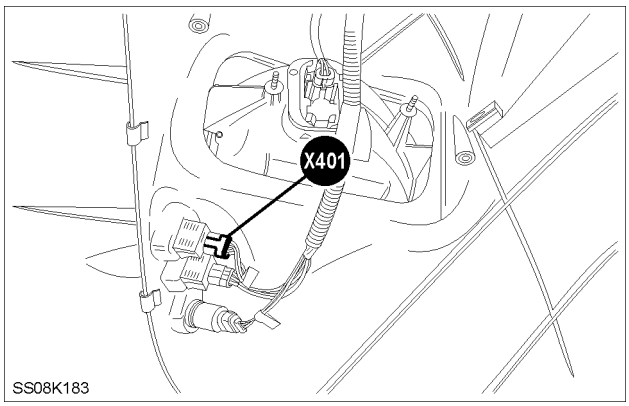


SS08K508 8

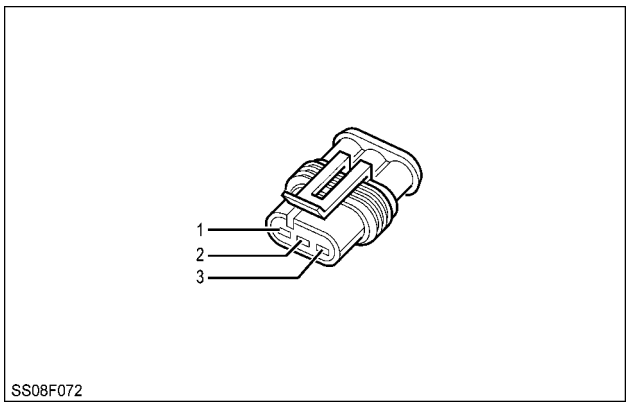
X401 EHR External Switch Fender Right and Left Hand

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	VT	5574	FENDER 3RD EHR SWITCH – UP
2	BR	5200	EDC VALVE SUPPLY
3	VT	5576	FENDER 3RD EHR SWITCH – DOWN

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*

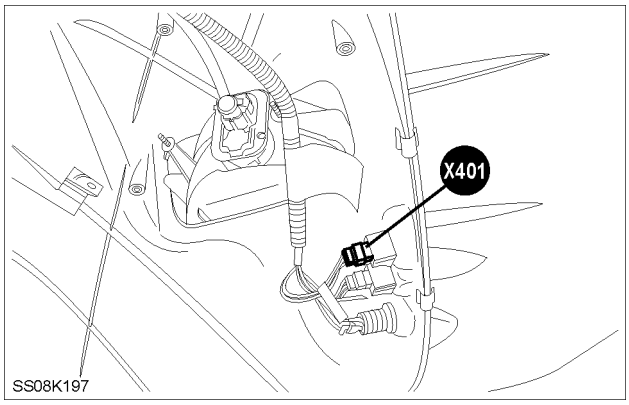


SS08K183 3

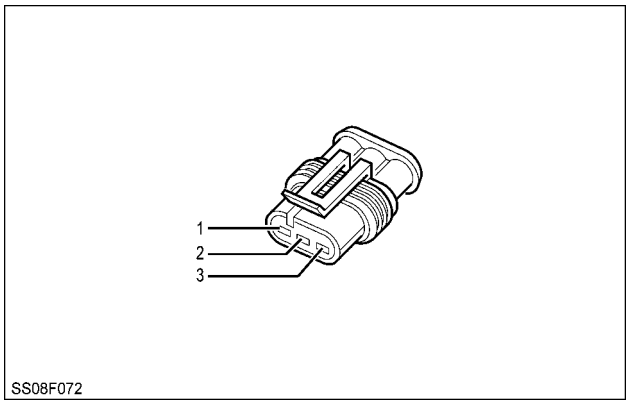


SS08F072 4

RIGHT HAND REAR FENDER



SS08K197 5



SS08F072 6

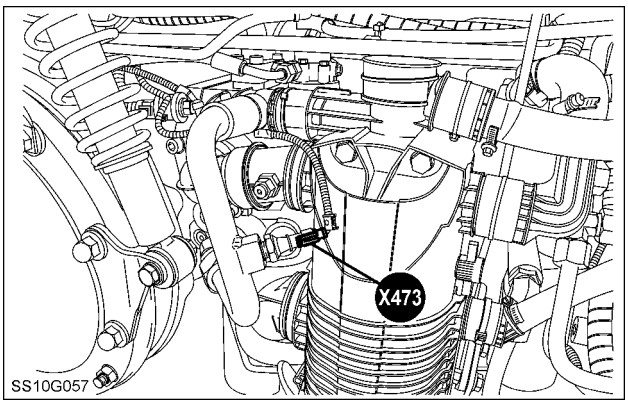
LEFT HAND REAR FENDER

Connector - Component diagram 47

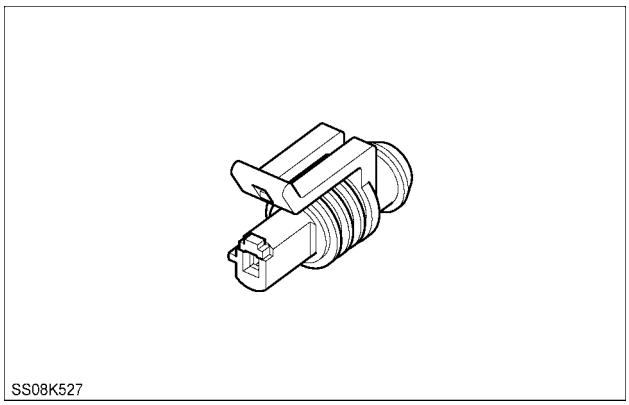
X473 Low Hydraulic Charge Switch

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
A	RD	7160	HYD LOW CHARGE WARNING

NOTE: For the wiring color code refer to, **Wiring harness - Identification (A.30.A)**.



SS10G057 1



SS08K527 2

REAR RIGHT HAND TRANSMISSION

X553 Relaisblock Lamps (K-025, K-026, K-027, K-028, K-029)

K025

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
30	VT	1072	WORKLAMP FRONT RELAY SUPPLY
85	BK	57	EARTH (ALL)
86	GN	997	WORK LAMP-REAR FEED (OUTER)
87	RD	1097	FEED FRONT WORKLAMP OUTER

K026

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
30	VT	1072	WORKLAMP FRONT RELAY SUPPLY
85	BK	57	EARTH (ALL)
86	WH	1098	FRONT WORKLAMP RELAY GROUND
87	YE	998	WORK LAMP-REAR FEED (INNER)

K027

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
30	RD	1099	FEED FRONT WORKLAMP INNER
85	BK	57	EARTH (ALL)
86	BR	1098	FRONT WORKLAMP RELAY GROUND
87	GN	998	WORK LAMP-REAR FEED (INNER)

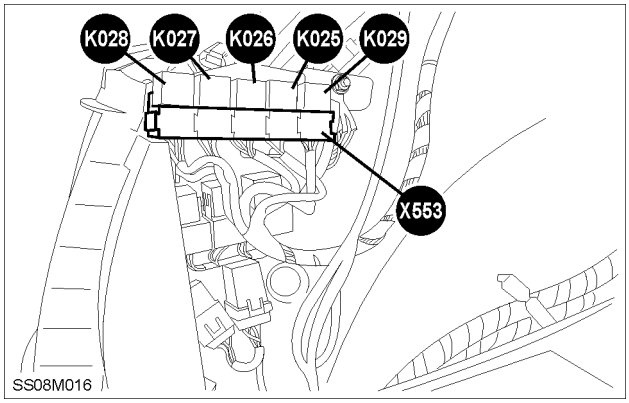
K028

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
30	BL	1030	HEADLAMP DIP BEAM
85	BK	57	EARTH (ALL)
86	BL	1027	HEADLAMP MAIN BEAM
87	BL	1030	HEADLAMP DIP BEAM
87A	BL	1030	HEADLAMP DIP BEAM

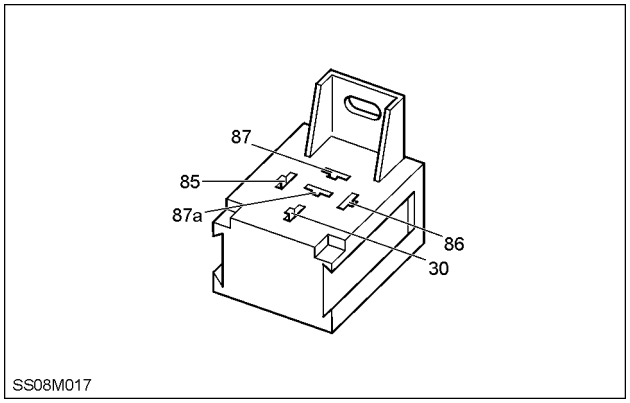
K029

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
30	BL	1027	HEADLAMP MAIN BEAM
85	BK	57	EARTH (ALL)
86	BL	1027	HEADLAMP MAIN BEAM
87	BL	1027	HEADLAMP MAIN BEAM
87A	BL	1027	HEADLAMP MAIN BEAM

NOTE: For the wiring color code refer to, **Wiring harness - Identification (A.30.A)**.



SS08M016 3



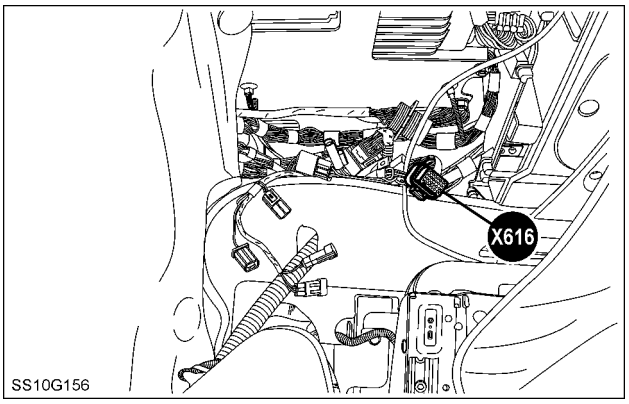
SS08M017 4

BEHIND RIGHT HAND TRIM

X616 ISO BUS Interface Controller CN1 (TECU)

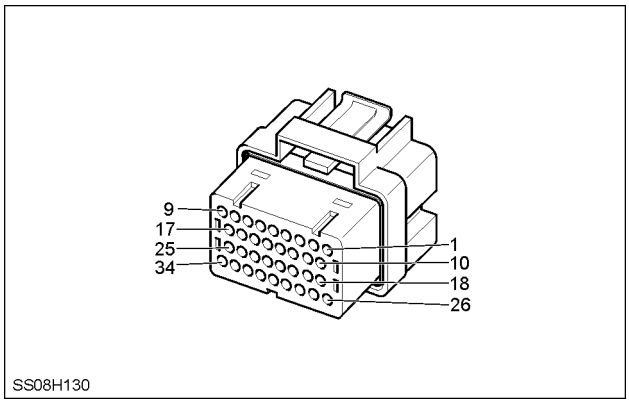
POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	YE	5910	ISO BUS CAN SIGNAL HIGH
2	GN	5900	ISO BUS CAN SIGNAL LOW
4	YE	5400	CAN H
5	GN	5420	CAN L
10	VT	5000	EDC MEMORY POWER
11	BK	57	EARTH (ALL)
14	BL	5980	ISO BUS IMPLEMENT SIGNAL
15	OR	5970	ISO BUS ECU SIGNAL
16	BL	7000	TRANS CONTROL SUPPLY
21	BK	61	CASE GROUND

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS10G156 9

IN CAB RIGHT HAND BEHIND OPERATOR'S SEAT



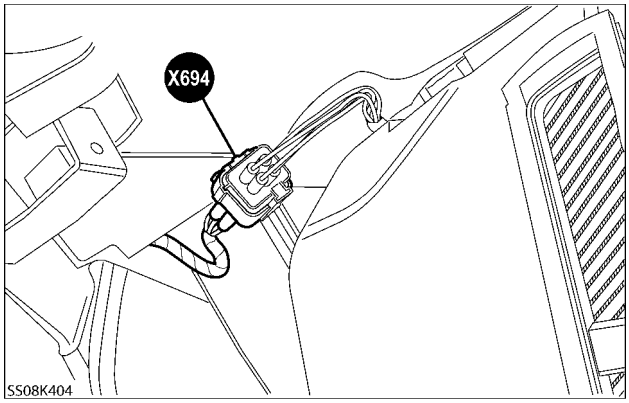
SS08H130 10

Connector - Component diagram 69

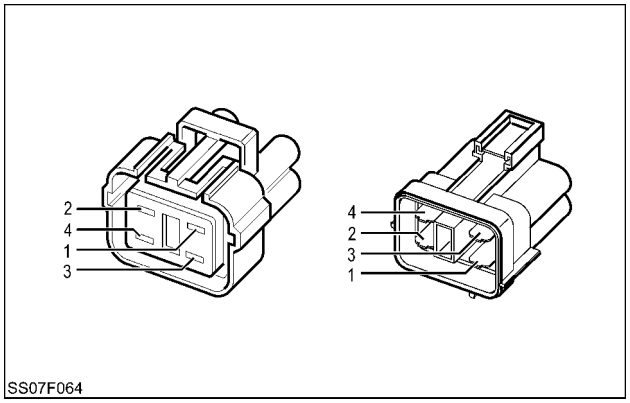
X694 Air Condition Power

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	GN / RD	982	BLOWER MOTOR FEED
2	GN / RD	982	BLOWER MOTOR FEED
3	BK	57	EARTH (ALL)
4	BK	57	EARTH (ALL)

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS08K404 1



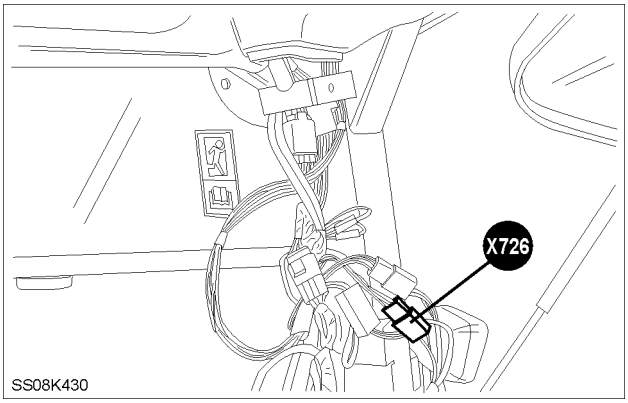
SS07F064 2

LEFT HAND REAR TRACTOR BEHIND OPERATOR'S SEAT

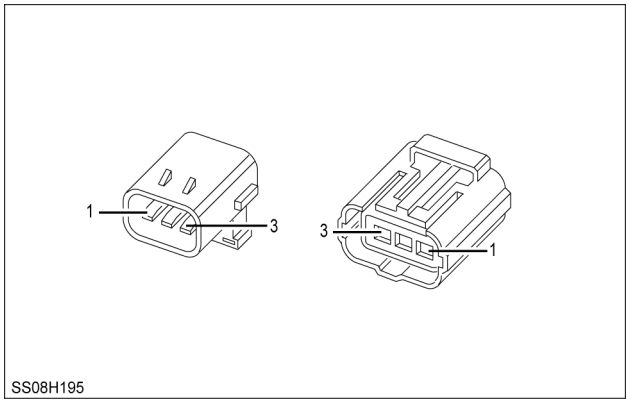
X726 Auto Guidance Power Supply Roof

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	BR	5200	EDC VALVE SUPPLY
2	GY	3186	CERES PPS IN
3	BK	57	EARTH (ALL)

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS08K430 9



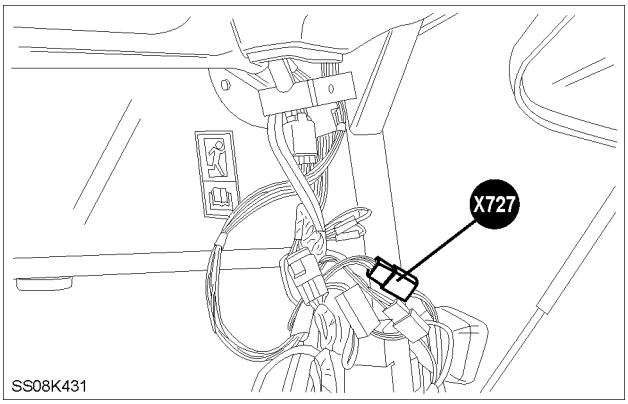
SS08H195 10

BEHIND RIGHT HAND C-PILLAR COVER

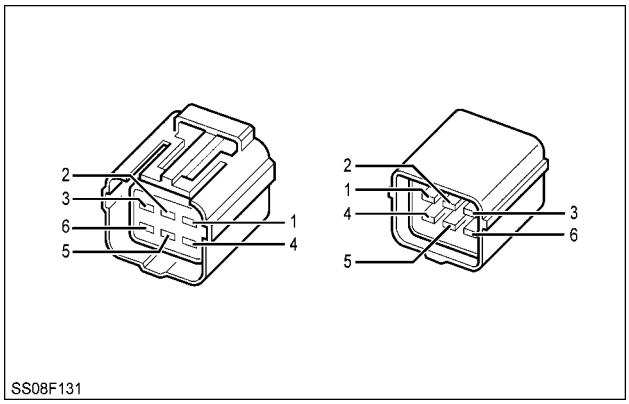
X727 Auto Guidance EHR CAN Roof 2

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	RD	5500	EHR CAN HIGH
2	BL	5510	EHR CAN LOW
5	TN	7640	DIAGNOSTIC PLUG RS232 IN
6	WH	7650	DIAGNOSTIC PLUG RS232 OUT

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS08K431 11



SS08F131 12

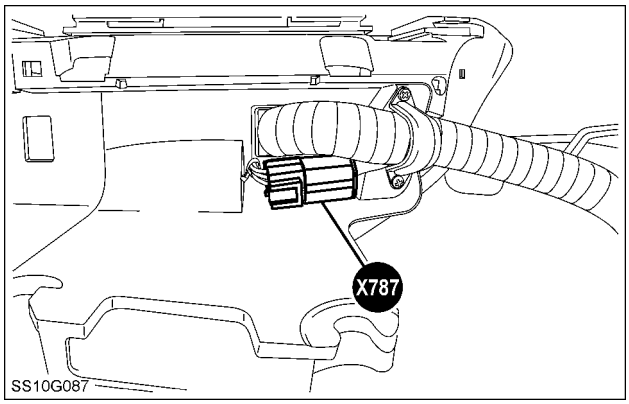
BEHIND RIGHT HAND C-PILLAR COVER

Connector - Component diagram 78

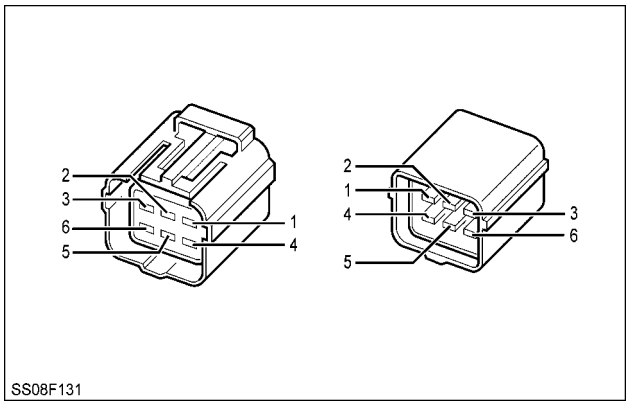
X787 Armrest Adjust Motor

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	GN	181	BLOWER/GARU MOTOR FEED
2	BK	57	EARTH (ALL)
3	BK	57	EARTH (ALL)
4	GN	181	BLOWER/GARU MOTOR FEED
5	BR	9000	DIVERTER VALVE

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS10G087 1



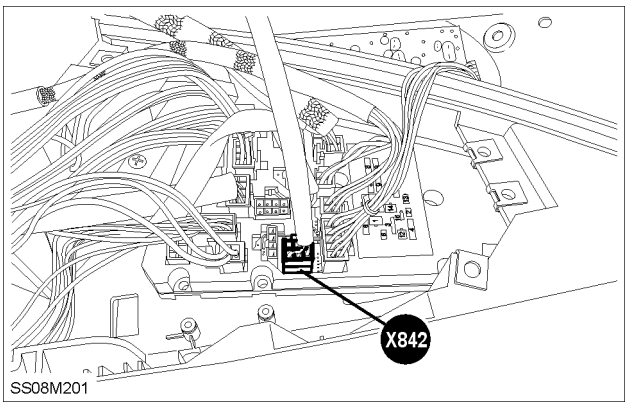
SS08F131 2

OUTSIDE OF THE ARMREST UNIT

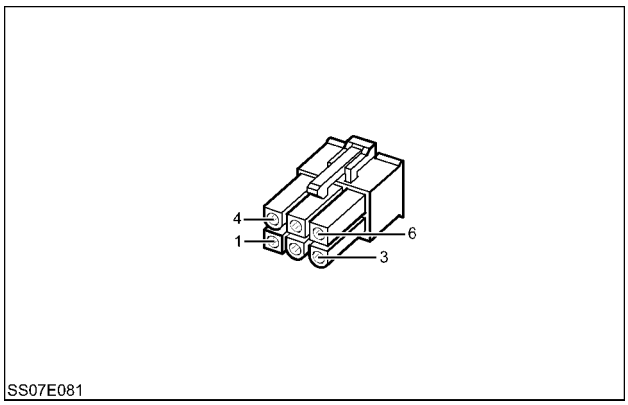
X842 EHR Flow Control Encoder

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	GN	-	OUTPUT SIGNAL SWITCH
2	BL	-	ENCODER OUTPUT B
3	YE	-	ENCODER OUTPUT A
4	BK	-	GROUND
5	RD	-	SUPPLY +5V

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS08M201 5



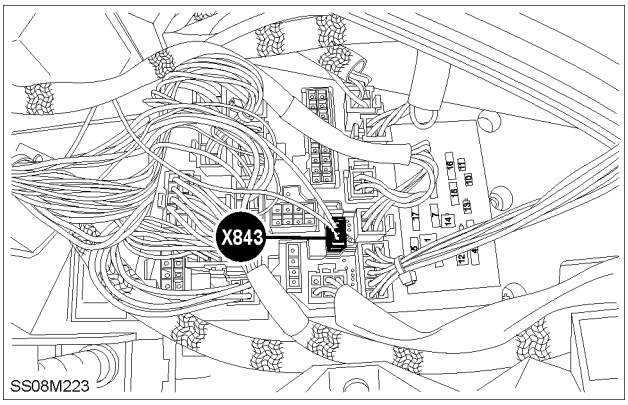
SS07E081 6

IN ARMREST

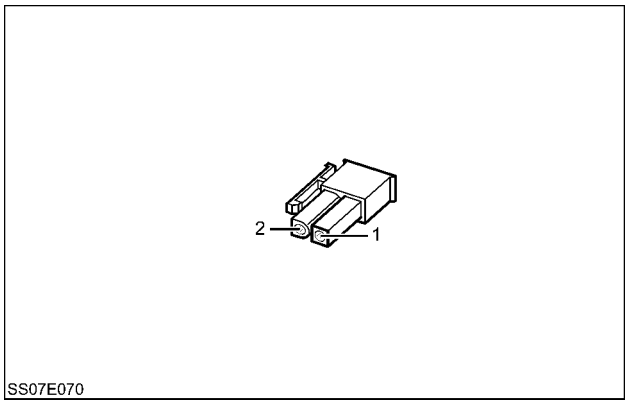
X843 EHR Float Switch / Joystick

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	RD	-	SUPPLY +5V
2	BK	-	OUTPUT SWITCH

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS08M223 7



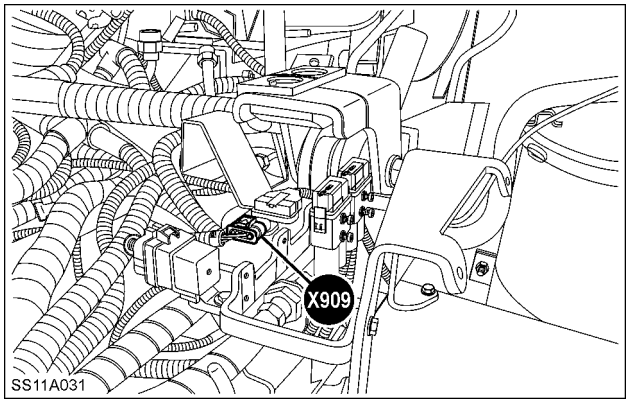
SS07E070 8

IN ARMREST

X909 Converter NOx-Sensor (AC/DC)

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	BR	9272	24V FUSED SUPPLY
2	BK	57	EARTH (ALL)
3	GN	5420	CAN L
4	YE	5400	CAN H

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



SS11A031 17

RIGHT HAND BEHIND STEPS

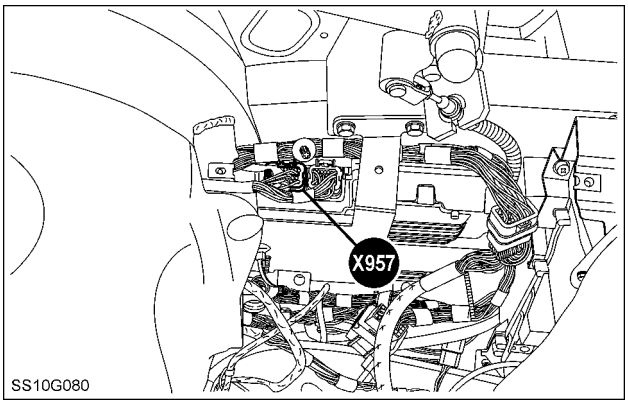
IMAGE NOT AVAILABLE

INA 18

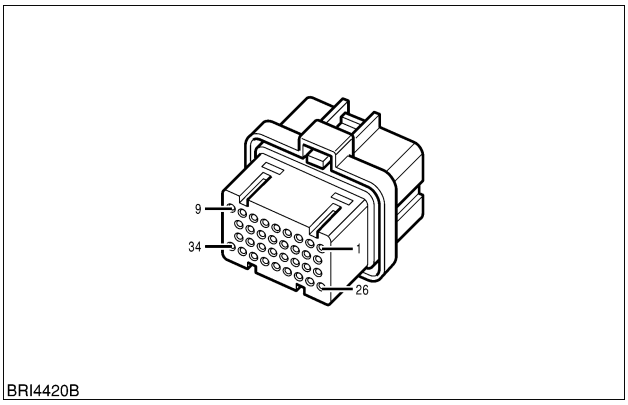
X957 Universal Controller (UCM)

POS.	COLOR	WIRE NUMBER	CIRCUIT REFERENCE
1	YE	7800	TRANS FR / REV INPUT DIGITAL FEEDBACK (CVT)
2	WH	9501	UCM FUSE 1
10	GN	7810	TRANS PWM SOLENOID C1
13	BR	2556	FRONT HITCH SWITCH COMMON RAIL
14	YE	2007	AIR CONDITIONER LOW PRESSURE
15	PK	2248	PTO FRONT - SWITCH (VCCS)
16	PK	2245	PTO FRONT - SWITCH TO MODULE (MOM)
17	GN	7500	TRANS OIL TEMP. SENSOR
21	GY	7260	TRANSMISSION REVERSE SIGNAL
22	GY	7250	TRANSMISSION FORWARD SIGNAL
27	BK	57	EARTH (ALL)
30	PK	5080	EDC ROCKSHAFT
31	BR	2510	FRONT HITCH POSITION SIGNAL
34	BK	57	EARTH (ALL)

NOTE: *For the wiring color code refer to,* ***Wiring harness - Identification (A.30.A)****.*



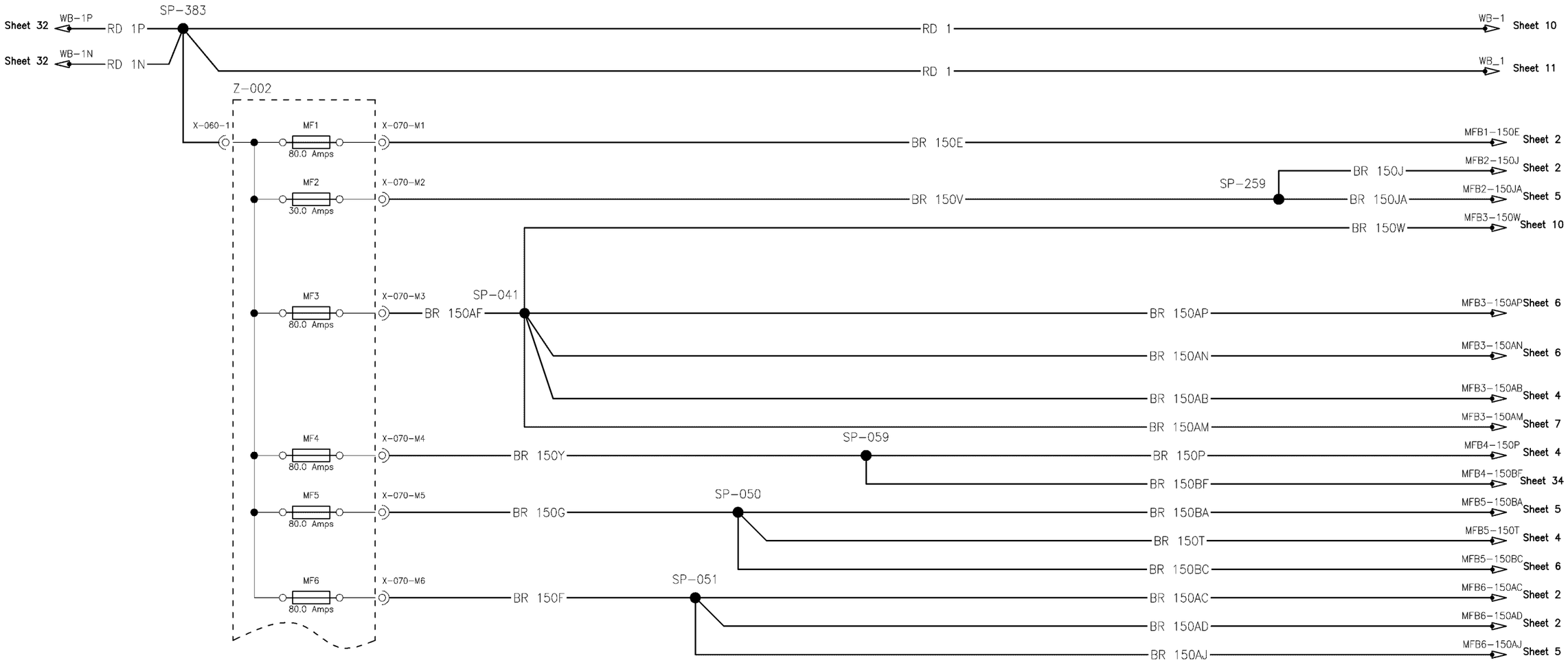
SS10G080 15



BRI4420B 16

IN CAB RIGHT HAND BEHIND OPERATORS SEAT

CIRC	COLOR	DESCRIPTION
1031	RD (R)	INSTRUMENT ILLUMINATION
1032	LG	URN SIGNAL WARNING LAMP (TERM C)
1033	LG	TURN SIGNAL WARNING LAMP (TERM C2)
1034	LG	TURN SIGNAL WARNING LAMP (TERM C3)
1035	WH (W)	ENGINE OIL PRESSURE WARNING LAMP
1036	BR (N)	IGNITION SWITCH (BATTERY)
1037	LG	FLASHER UNIT (TERM 49A)
1038	TN (LN)	WINDSHIELD WIPER FEED-REAR
1039	LG	NASO LIGHTS INPUT
1040	LG	FLASHER SWITCH TO RELAY-RHS CUT OUT
1041	LG	FLASHER SWITCH TO RELAY-LHS CUT OUT
1042	BL (U)	RELAY FEED ELECTRONICS
1043	BL (U)	RELAY FEED TO FUSES
1044	WH (W/U/S)	GRID HEATER FEEDBACK
1050	GN (G)	ACCESSORY FEED
1051	YE (Y)	SIDE LIGHTS RELAY COIL FEED
1052	YE (Y)	GET U HOME LIGHTS RELAY
1070	RD (R)	FRONT WORKLAMP SWITCH FEED
1071	VT (P)	WORKLAMP FRONT FEED
1072	VT (P)	WORKLAMP FRONT RELAY SUPPLY
1073	VT (P)	WORKLAMP FRONT FEED
1090	RD (R)	REAR WORKLAMP RELAY SIGNAL
1080	RD (R)	FRONT SCREEN HEATER
1082	YE (Y)	REAR SCREEN HEATER
1085	BR (N)	FRONT SCREEN HEATER RELAY CONTROL
1086	BR (N)	REAR SCREEN HEATER RELAY CONTROL
1091	RD (R)	FRONT WORKLAMP LOWER RELAY SIGNAL
1092	RD (R)	FRONT WORKLAMP RELAY SIGNAL
1093	RD (R)	FENDER WORKLAMP RELAY SIGNAL
1096	RD (R)	WORKLAMP FENDER MOUNTED
1097	RD (R)	FEED FRONT WORKLAMP OUTER
1098	WH (W)	FRONT WORKLAMP RELAY GROUND
1099	RD (R)	FEED FRONT WORKLAMP INNER
1119	GN (G)	RR WINDSHIELD WIPER
1120	GN (G)	RR WINDSHIELD WIPER PARK RETURN
1121	GN (G)	RR WINDSHIELD WASH
1130	BR (N)	ENGINE HEATER CONTROL TO IGN SWITCH
1135	GN (G)	THERMOSTART WARNING LAMP
1140	PK (K)	THERMOSTART INITIATE SIGNAL TO RELAY
1141	BR (N)	GRID HEATER +
1142	BR (N)	GRID HEATER FUSE TO PWR. RELAY
1143	BR (N)	POWER RELAY TO GRID HEATER
1150	BR (N)	CAL/SEL SWITCH
1160	RD (R)	REVERSE ALARM
1900	LG (LG/B/S)	HEATED FRONT WINDSCREEN SW SIGNAL
1901	TN (LN/LG/S)	HEATED FRONT WINDSCREEN POWER
1902	OR (O/LN/S)	HEATED FRONT WINDSCREEN WARNING LAMP
1903	VT (P/B/S)	HEATED REAR SCREEN SW SIGNAL
1904	YE (Y/B/S)	HEATED REAR SCREEN POWER
1905	BL (U/W/S)	HEATED REAR SCREEN WARNING LAMP
1920	OR (O)	LH MIRROR CONTROL SIDE-SIDE
1921	YE (Y)	LH MIRROR CONTROL UP-DOWN
1922	GN (G)	MIRROR CONTROL COMMON
1923	OR (O)	RH MIRROR CONTROL SIDE-SIDE



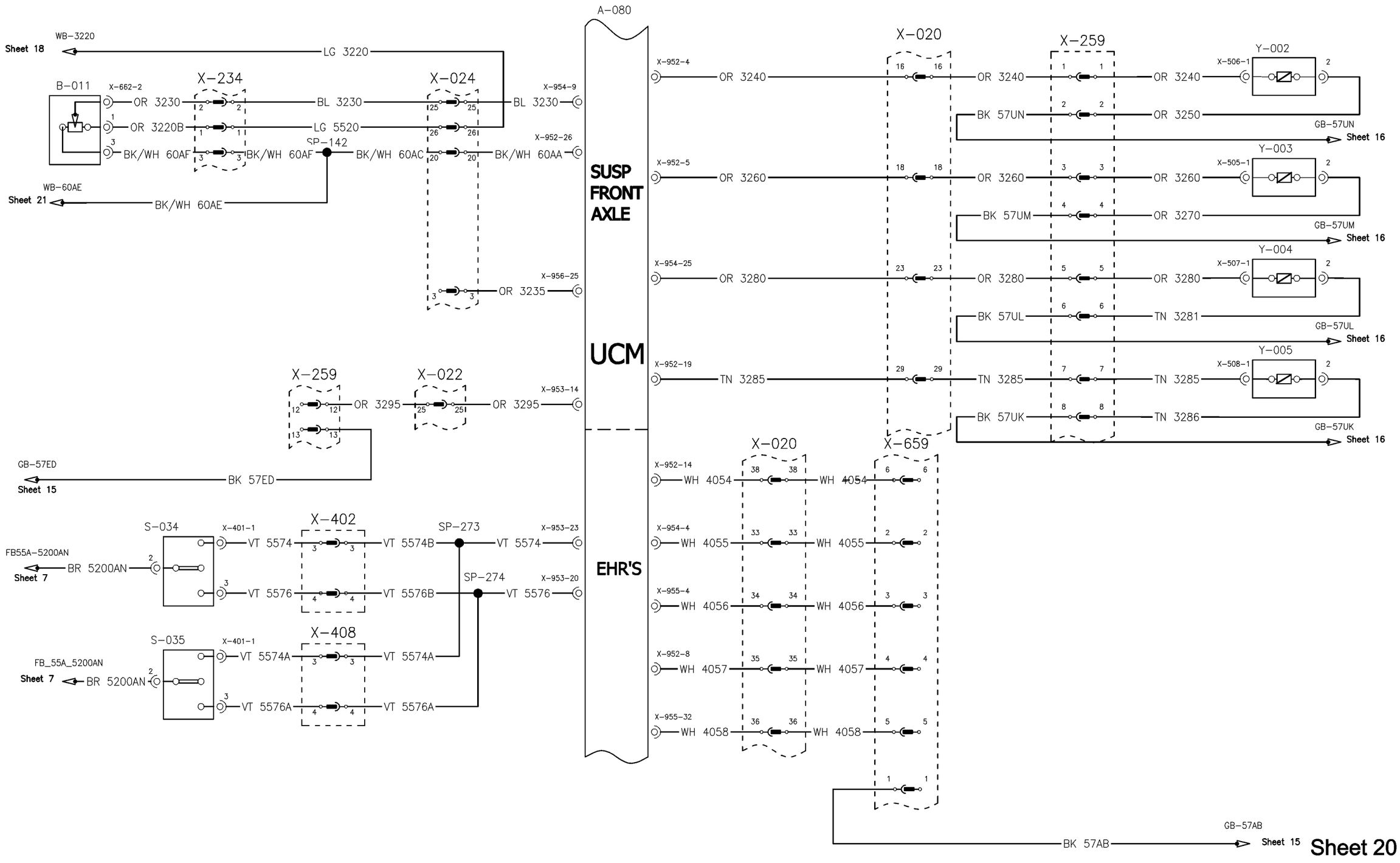
Sheet 1

SS10M001 1

Wiring harness - Electrical schematic frame 11 START/CHARGING (less Battery Isolator)

Component	Connector	Description
F-100	**X923**	Supply Memory
F-101	**X924**	Reserve
G-001	**X605**, **X608**, **X892**, **X815**, **X890**	**12 V** Battery
G-002	**X236**, **X237**	Alternator
M-003	**X231**, **X232**	Starter Motor
PF1	**X920**	Power Fuse, Main Power Supply B+ (**250 A**)
PF2	**X921**	Power Fuse, Power Supply UCM, PTO rear, **ICU 3**
PF8	**X823**	Mega Fuse, Grid & Fuel Heater (**125 A**)
PF9	**X922**	Power Fuse, Power Supply **SCR** System
Additional Connectors: **X021**, **X023**, **X902**		

Wire Colour Codes			
BK Black	**GN** Green	**PK** Pink	**BL** Blue
TN Light Brown	**BR** Brown	**OR** Orange	**LG** Light Green
RD Red	**GY** Grey	**LB** Light Blue	
WH White	**YE** Yellow	**VT** Violet	

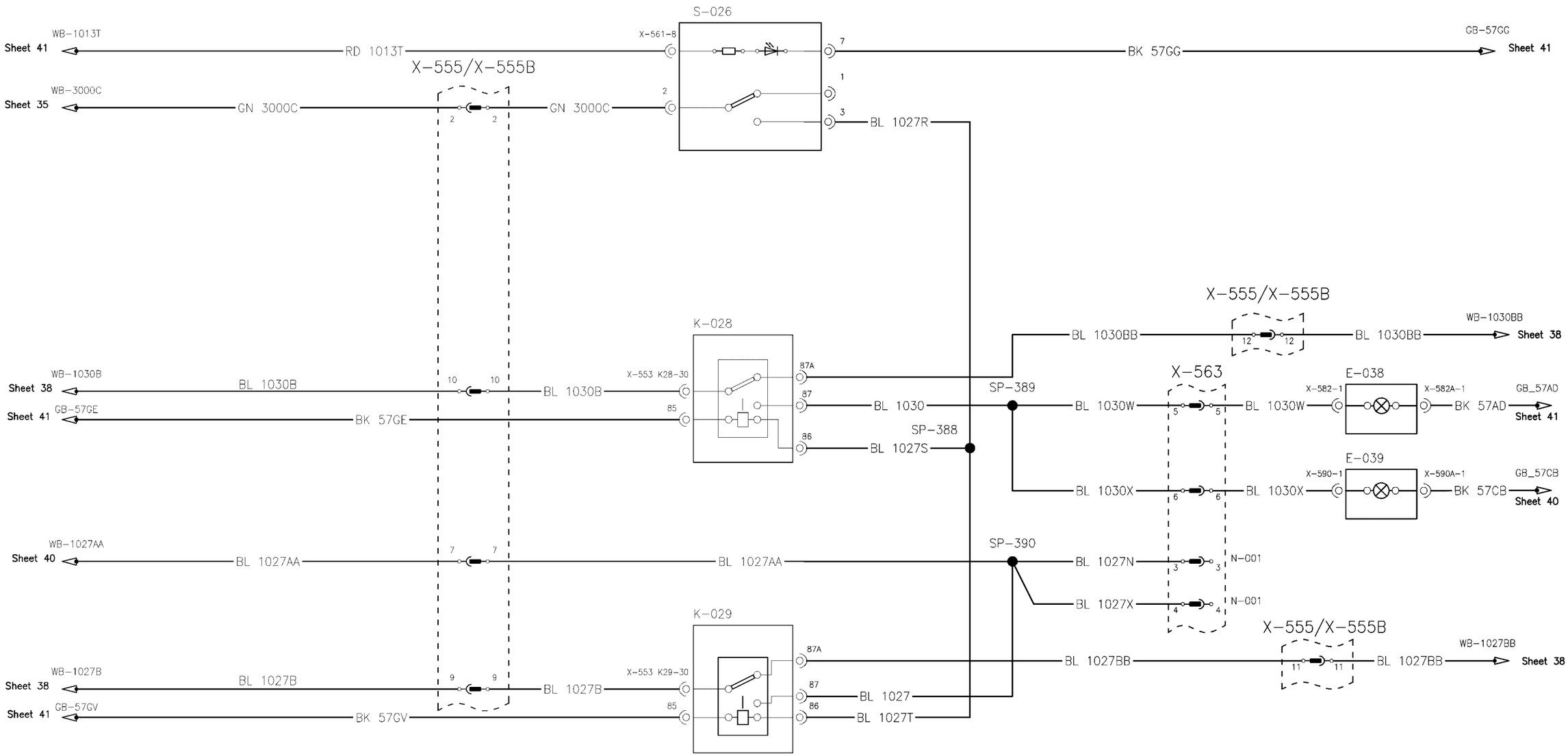

A-080
SUSP FRONT AXLE
UCM
EHR'S
WB-3220
Sheet 18
LG 3220
B-011
X-662-2
X-234
X-024
OR 3230
BL 3230
BL 3230
X-954-9
OR 3220B
LG 5520
SP-142
BK/WH 60AF
BK/WH 60AF
BK/WH 60AC
BK/WH 60AA
X-952-26
WB-60AE
Sheet 21
BK/WH 60AE
X-956-25
OR 3235
X-259
X-022
OR 3295
OR 3295
X-953-14
GB-57ED
Sheet 15
BK 57ED
S-034
X-401-1
X-402
SP-273
X-953-23
FB55A-5200AN
Sheet 7
BR 5200AN
VT 5574
VT 5574B
VT 5574
VT 5576
VT 5576B
SP-274
X-953-20
VT 5576
S-035
X-401-1
X-408
FB_55A_5200AN
Sheet 7
BR 5200AN
VT 5574A
VT 5574A
VT 5576A
VT 5576A
X-020
X-259
X-952-4
OR 3240
OR 3240
OR 3240
Y-002
X-506-1
BK 57UN
OR 3250
GB-57UN
Sheet 16
X-952-5
OR 3260
OR 3260
OR 3260
Y-003
X-505-1
BK 57UM
OR 3270
GB-57UM
Sheet 16
X-954-25
OR 3280
OR 3280
OR 3280
Y-004
X-507-1
BK 57UL
TN 3281
GB-57UL
Sheet 16
X-952-19
TN 3285
TN 3285
TN 3285
Y-005
X-508-1
BK 57UK
TN 3286
GB-57UK
Sheet 16
X-020
X-659
X-952-14
WH 4054
WH 4054
X-954-4
WH 4055
WH 4055
X-955-4
WH 4056
WH 4056
X-952-8
WH 4057
WH 4057
X-955-32
WH 4058
WH 4058
BK 57AB
GB-57AB
Sheet 15
Sheet 20

SS11D355 1

Wiring harness - Electrical schematic frame 30 HEATING - AIR CONDITION (Manual)

Component	Connector	Description
K-019	**X074**	Air Condition Clutch Relay
M-001	**X759**	Blower Motor
S-013	**X758**	Blower Speed Switch
S-014	**X757**	Air Condition Operating Mode Switch
S-017	**X225**	Air Condition Pressure Switch
S-018	**X756**	Low Pressure Switch
Y-082	**X226**	Air Condition Clutch
Additional Connectors: **X024**, **X694**, **X695**		

Wire Colour Codes			
BK Black	**GN** Green	**PK** Pink	**BL** Blue
TN Light Brown	**BR** Brown	**OR** Orange	**LG** Light Green
RD Red	**GY** Grey	**LB** Light Blue	
WH White	**YE** Yellow	**VT** Violet	



Sheet 39

SS10M248 1

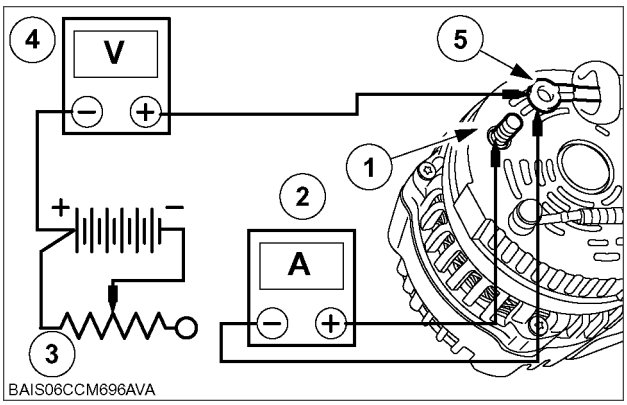
Wiring harness - Electrical schematic frame 49 ISO-BUS SYSTEM (Controller, Front & Rear Socket)

Component	Connector	Description
A-015	**X657**	Electronic **ISO BUS** Terminator Rear
A-016	**X812**	Electronic **ISO BUS** Terminator Front
A-054	**X616**	**ISO BUS** Interface Controller CN1 **(TECU)**
J-003	**X601**, **X657**	**ISO BUS** Implement Socket (Rear)
J-004	**X600**, **X812**	**ISO BUS** Implement Socket (Front)
K-040	**X602**	**ISO BUS** Relay 1 Rear
K-041	**X603**	**ISO BUS** Relay 2 Rear
K-042	**X629**	**ISO BUS** Relay 1 (Front)
K-043	**X628**	**ISO BUS** Relay 2 (Front)
PF4	**X606**	Power Fuse, **ISO BUS** Rear
PF5	**X607**	Power Fuse, **ISO BUS** Rear
PF6	**X813**	Power Fuse, **ISO BUS** Front
PF7	**X814**	Power Fuse, **ISO BUS** Front
Additional Connectors: **X024**, **X613**, **X614**, **X620**, **X660**		

Wire Colour Codes			
BK Black	**GN** Green	**PK** Pink	**BL** Blue
TN Light Brown	**BR** Brown	**OR** Orange	**LG** Light Green
RD Red	**GY** Grey	**LB** Light Blue	
WH White	**YE** Yellow	**VT** Violet	

Charging Circuit Volt Drop Tests
(a) Insulated-Side Volt Drop Tests

3. With reference to Figure **3**.
   Ensure the key start switch is in the `off' position.
   1. Disconnect the battery negative cable and disconnect the B+ cable **(1)** from the alternator
   2. Connect a millivoltmeter **(4)** between the battery positive terminal and the B+ cable **(5)**. (Positive side to cable).
   3. Securely connect an ammeter **(2)** between the B+ terminal of the alternator and the B+ cable (negative side to cable)
   4. Reconnect the battery negative cable and connect a variable load resistor **(3)**, with the slider in the minimum current draw position (maximum resistance), across the battery terminals.
   5. Start the engine and increase the speed to **2000 RPM**.
   6. Slowly increase the current loading of the resistor (decrease resistance) until the ammeter registers **150 / 200 Amperes**.
   7. Observe the millivoltmeter reading which should not exceed **400 millivolts**.
   If the reading is in excess of **400 millivolts**, a high resistance fault is indicated in the external circuitry.
   If the required alternator output cannot be achieved and the millivoltmeter reading is less than 400 millivolts, then a faulty alternator component is indicated.
   8. Stop the engine.



BAIS06CCM696AVA 3

F100 (30)
MF6 (30)
MF5(30)
MF3 (30)
IGNITION I (15)
IGNITION II (15)

F100 (30)
MF6 (30)
MF5(30)
MF3 (30)
IGNITION I (15)
IGNITION II (15)

F100 (30)
MF6 (30)
MF5(30)
MF3 (30)
IGNITION I (15)
IGNITION II (15)

F16
F15
F51

H_REC_STATUS_TO_IC

+12 Switched
+12 Hot

C1
A1

EPL MOTOR
5 VRef
HALL EFFECT SENSOR
OUTPUT STAGE
M
2

H_REC_STATUS_TO_IC
A7

VIEW OF EPB MODULE

A8 B8 C8 A1 B1 C1
X-745

3
+12V to HYDRAULIC BRAKE SYSTEM
+12V to AIR BRAKE SYSTEM
TRAILER BRAKE RELAY
A2

1
EPL ECU

C7
SHUTTLE_PARK_SW_INPUT
UCM
A4
SHUTTLE_PARK_SW_GROUND
UCM

CAN_HI
CAN_LO
C4
C5

4
5
6

NOT USED
A3

CAN_HI
NO CAN TERMINATION.
CAN_LO

B3 B4 C2 C3 A8

CRANK_DETECT

HANDBRAKE_SW_EPL
HANDBRAKE_SW_EPL
HANDBRAKE_SW_EPL

HANDBRAKE_SW
HANDBRAKE_SW
HANDBRAKE_SW
HANDBRAKE_SW

CAN BUS 1
CAN BUS 1
CAN BUS 1
CAN BUS 1

BRAKE_L_SW
BRAKE_R_SW
ADIC_SERVICE_SW
NASO_LIGHTS
CRANK_RELAY

BRAKE_L_SW
BRAKE_R_SW
ADIC_SERVICE_SW
NASO_LIGHTS
CRANK_RELAY

BRAKE_L_SW
BRAKE_R_SW
ADIC_SERVICE_SW
NASO_LIGHTS
CRANK_RELAY

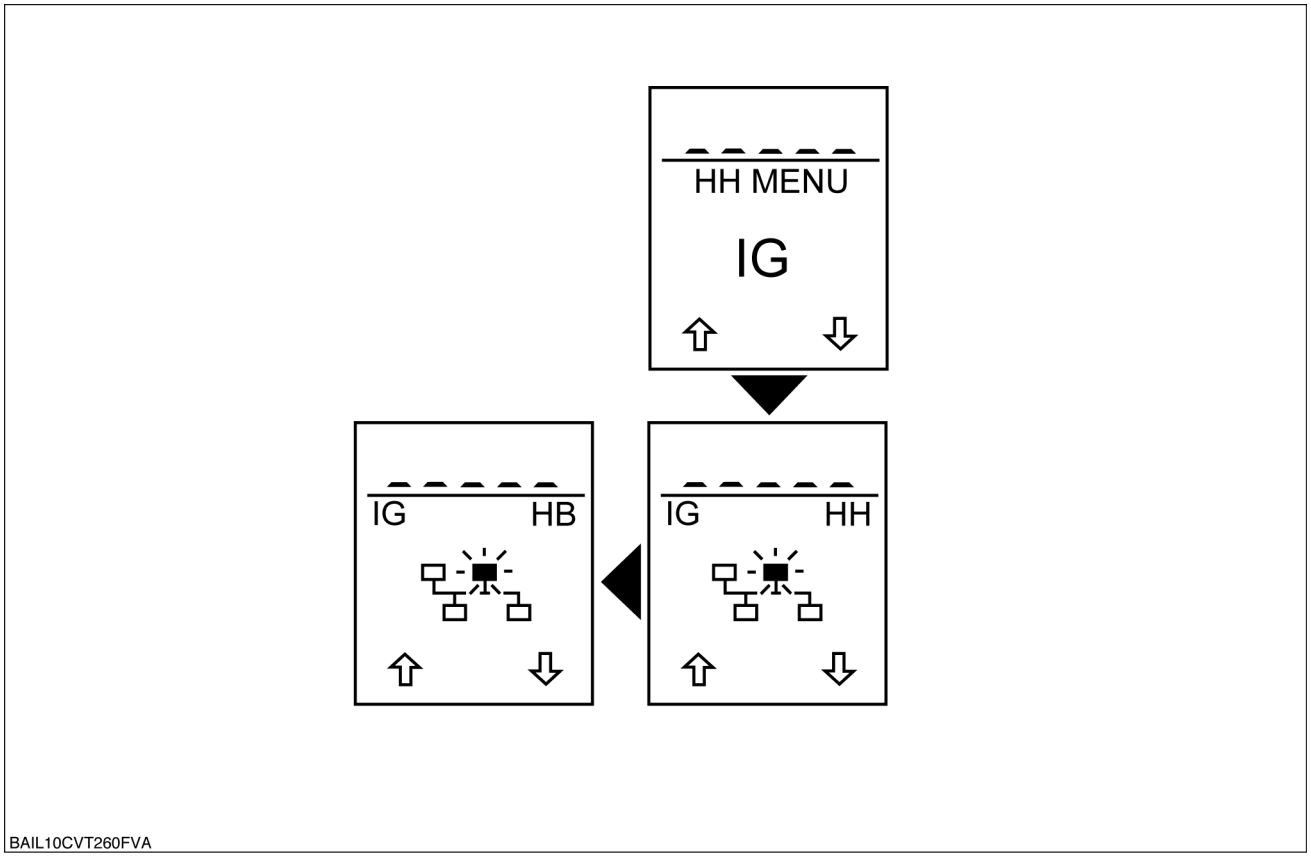
SS10M126 1

Code	Description
18005	Engine droop control - voltage too low
18006	Engine droop control - voltage too high
18007	Multi-function handle – switch error
18008	Multi-function handle – voltage too low
18009	Multi-function handle – voltage too high
18010	Powershift throttle – voltage too low
18011	Powershift throttle – voltage too high
18012	CVT mode switch error
18013	Multi-function handle – encoder position error
18014	Rear hitch position control potentiometer – voltage too low
18015	Rear hitch position control potentiometer – voltage too high
18016	Rear hitch draft control potentiometer – voltage too low
18017	Rear hitch draft control potentiometer – voltage too high
18018	Rear hitch height limit potentiometer – voltage too low
18019	Rear hitch height limit potentiometer – voltage too high
18020	Rear hitch drop rate potentiometer – voltage too low
18021	Rear hitch drop rate potentiometer – voltage too high
18022	Rear hitch sensitivity control potentiometer – voltage too low
18023	Rear hitch sensitivity control potentiometer – voltage too high
18024	EHR flow encoder position error
18025	Rear hitch slip control potentiometer – voltage too low
18026	Rear hitch slip control potentiometer – voltage too high
18027	EHR 5 lever position – voltage too low
18028	EHR 5 lever position – voltage too high
18029	EHR 6 lever position – voltage too low
18030	EHR 6 lever position – voltage too high
18031	Front hitch position / pressure control potentiometer – voltage too high
18032	Front hitch position / pressure control potentiometer – voltage too low
18033	Front hitch position / pressure mix potentiometer – voltage too high
18034	Front hitch position / pressure mix potentiometer – voltage too low
18035	Front hitch position height limit potentiometer – voltage too high
18036	Front hitch position height limit potentiometer – voltage too low
18037	Front hitch height limit enable switch error
18038	Front hitch position drop rate potentiometer – voltage too high
18039	Front hitch position drop rate potentiometer – voltage too low
18040	EHR 1 lever position – voltage too low
18041	EHR 1 lever position – voltage too high
18042	EHR 2 lever position – voltage too low
18043	EHR 2 lever position – voltage too high
18044	EHR 3 lever position – voltage too low
18045	EHR 3 lever position – voltage too high
18046	EHR float control switch error
18047	EHR 4 lever position – voltage too low
18048	EHR 4 lever position – voltage too high
18049	Joystick 1 X-axis position – voltage too low
18050	Joystick 1 X-axis position – voltage too high
18051	Joystick 1 Y-axis position – voltage too low
18052	Joystick 1 Y-axis position – voltage too high
18053	Joystick 1 proportional rocker switch – voltage too low
18054	Joystick 1 proportional rocker switch – voltage too high
18055	Joystick 2 X-axis position – voltage too low
18056	Joystick 2 X-axis position – voltage too high
18057	Joystick 2 Y-axis position – voltage too low
18058	Joystick 2 Y-axis position – voltage too high
18059	Joystick 2 proportional rocker switch – voltage too low

Control module Instrument controller - HB - Display stored fault codes

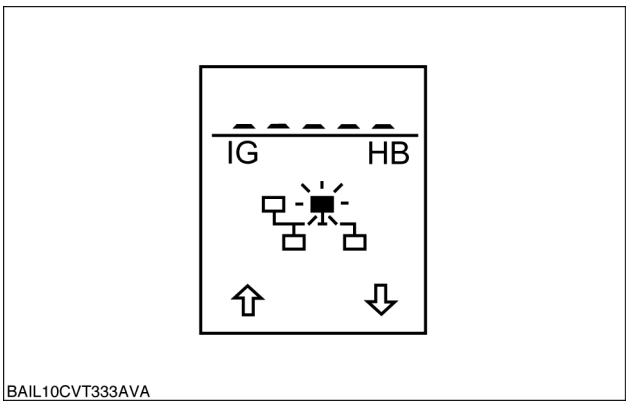
This menu is used to display fault codes which are stored in the EEPROM of the controller.

HB Menu Screen Select Diagram



BAIL10CVT260FVA 1

Select the HB menu by depressing the “menu" key.

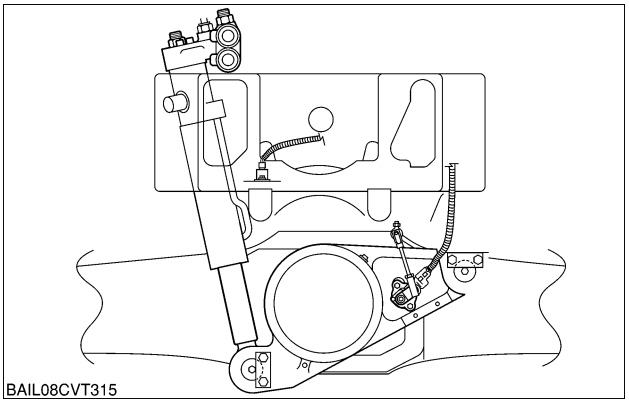


BAIL10CVT333AVA 2

The ACP will activate the raise valve and the unload levelling valve until the front axle reaches the maximum height for a period of 4 seconds.
The potentiometer value at this maximum height will then be stored.

NOTE: *When the axle reaches the maximum position the hydraulic pump will reach the high pressure standby pressure.*

The ACP will activate the unload levelling valve until the front axle reaches the minimum height for a period of 4 seconds.
The potentiometer value at this minimum height will then be stored.



BAIL08CVT315 35

The ACP will activate the raise and unload levelling valves until the front axle reaches the nominal position.

The will show "END" when the ACP has finished.

All components of the suspension system are now calibrated.

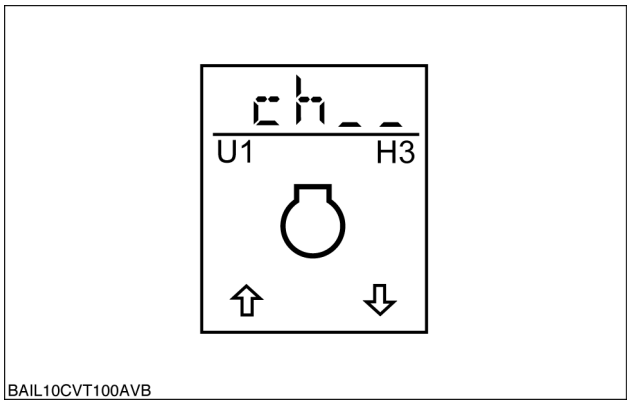
Set engine to low idle and key OFF to store the calibration values.

NOTE: *If an error occurs during calibration, a "U" code will be displayed and the procedure will need to be repeated. Refer to the "U" code listing in* ***Control module - Fault code index (A.50.A)****.*

NOTE: *If the calibration procedure needs to be stopped, press the suspension switch once.*

Electronic Engine Options

Use the "up", "down", and the "menu" keys to navigate the HH menus to H3 and the engine symbol on the U1 controller.
The upper section of the display will show "Ch_ _"



BAIL10CVT100AVB 9

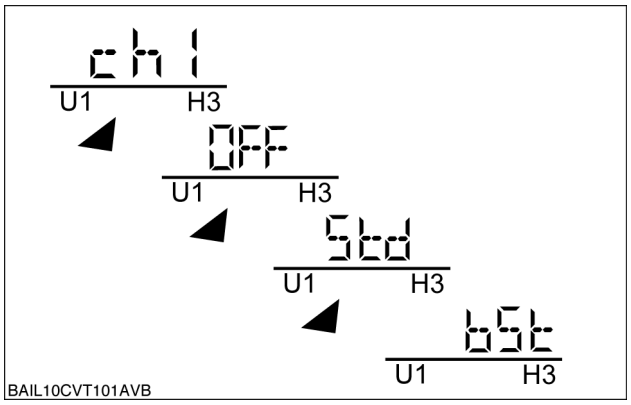
The required channel can be selected by using the navigation “up" and “down" keys.
After a delay the current option setting will be displayed, (refer to the table below for a description of each channel).

Channel Number	Description
Ch 1	Dyno power boost test
Ch 2	Not used
Ch 3	Grid heater selection
Ch 4	Fuel filter heater selection
Ch 5	Engine brake selection
Ch 6	Engine fan selection

Channel 1 - Dyno Power Boost Test

This channel is used to allow the tractor to be dynamometer tested with maximum powerboost.

Use the "up" and "down" keys to toggle between the available options:
"OFF" - dyno power boost test mode is off (normal vehicle operation).
"Std" - dyno power boost test mode is on (straight unboosted curve without any limitations).
"bSt" - dyno power boost test mode is on (straight boosted curve without any limitations).



BAIL10CVT101AVB 10

NOTE: *If enabled, the dyno power boost test will only be active for 45 minutes.*

NOTE: *The default setting for this option is “OFF”.*

Depress and hold the "up" or "down" key until the instrument cluster bleeps, indicating the selection has been stored.

Depress the "menu" key to continue navigating the "HH" menus.

Channel 2 - Not Used

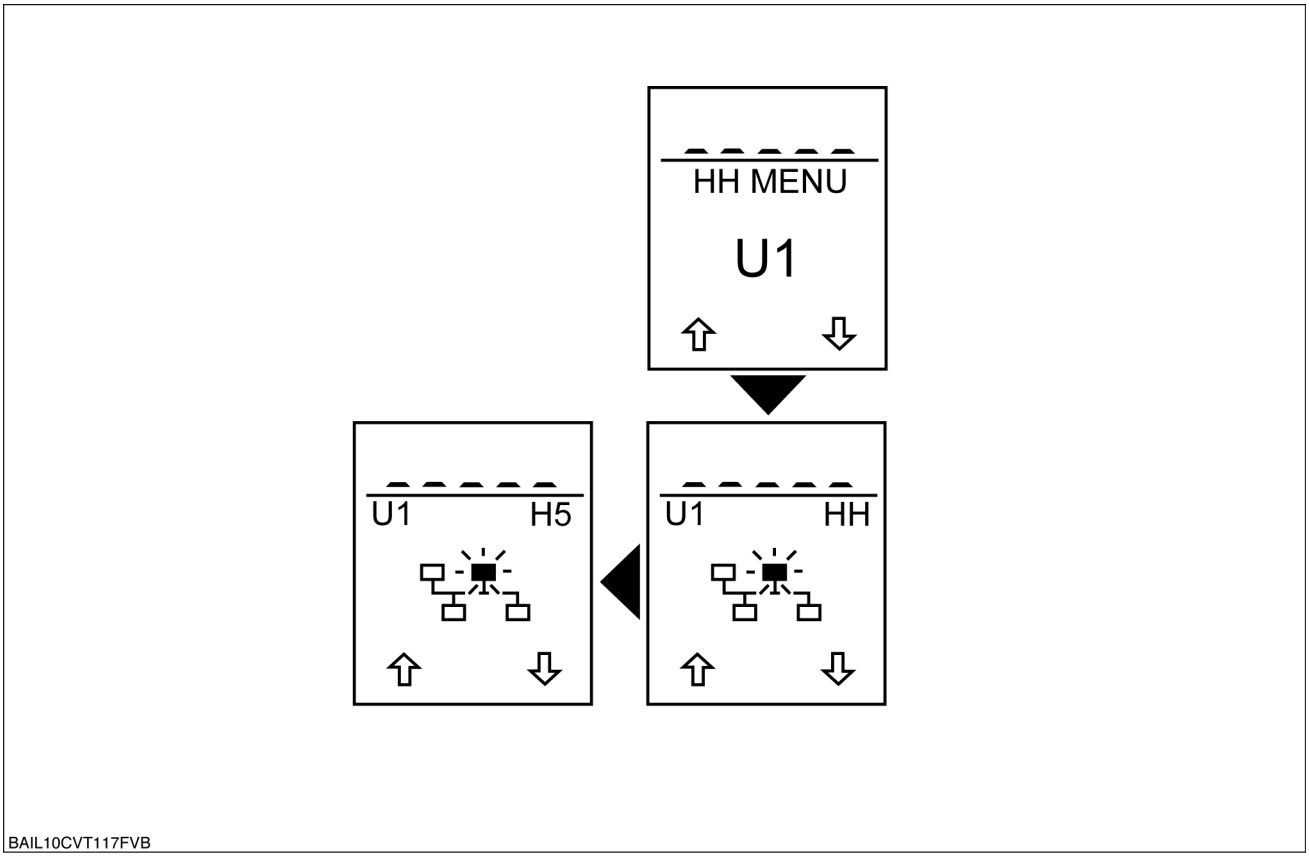
This channel is not used and "_ _ _" will be displayed.

Control module Universal controller - H5 - Switch operation test

NOTE: *This menu displays a designated code when a switch transition is detected.*

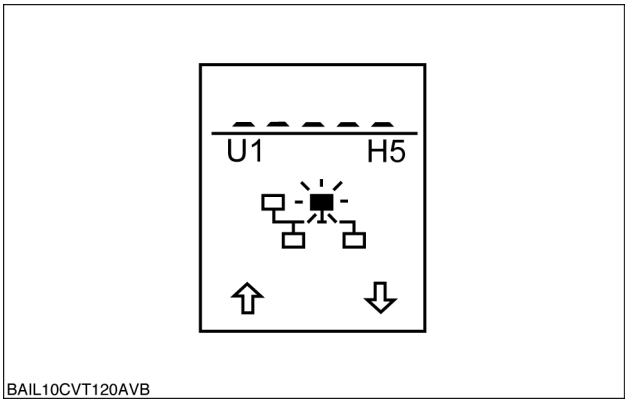
NOTE: *Common to all sub systems.*

H5 Menu Screen Select Diagram



BAIL10CVT117FVB 1

1. Select the H5 menu by depressing the “menu" key.



BAIL10CVT120AVB 2

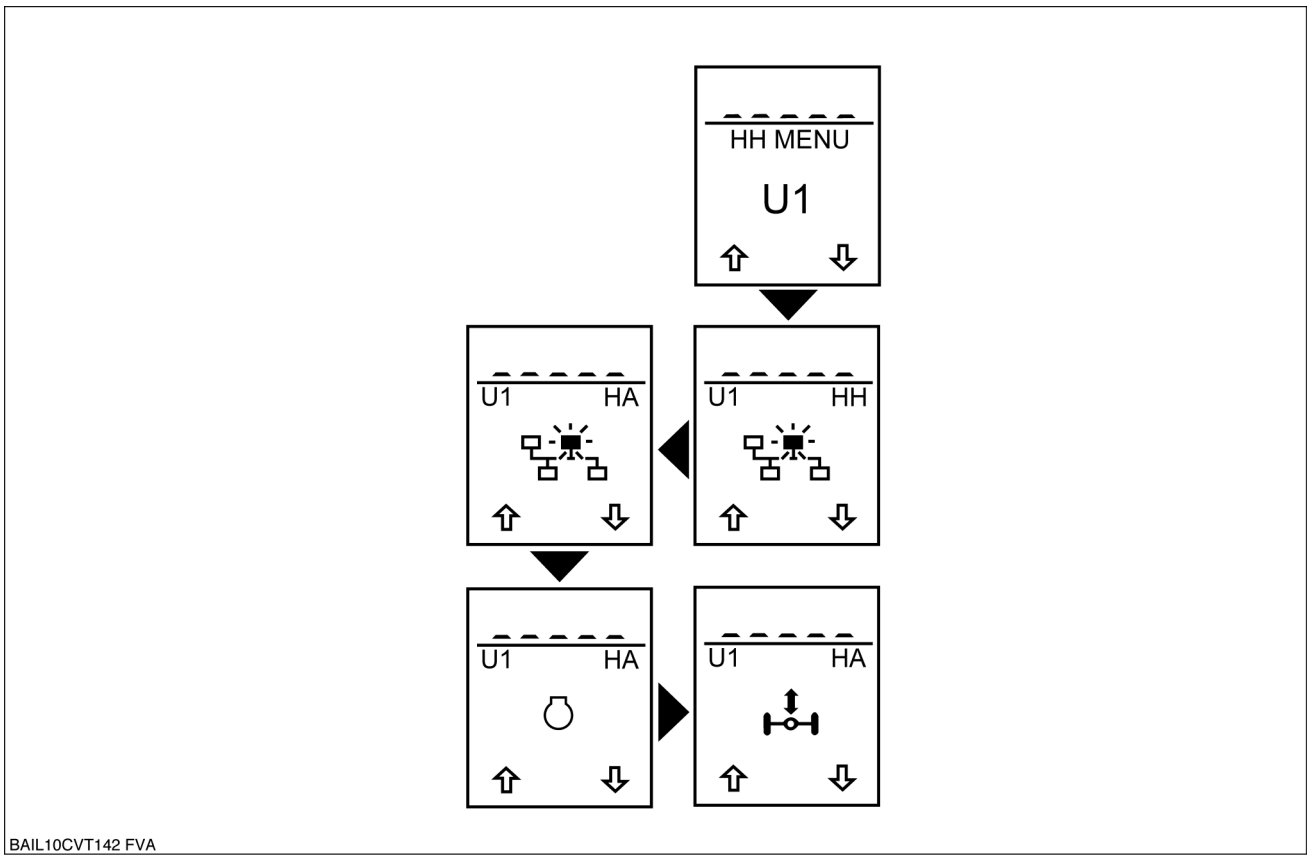
Control module Universal controller - HA - Demonstration mode

NOTE: *The HA diagnostic menu is used to allow specific performance features of the vehicle to be turned off. This makes it possible for dealers to demonstrate the advantages of these features.*

The features that can be demonstrated in this menu are:

- Engine power boost
- Front suspension

HA Menu Screen Select Diagram

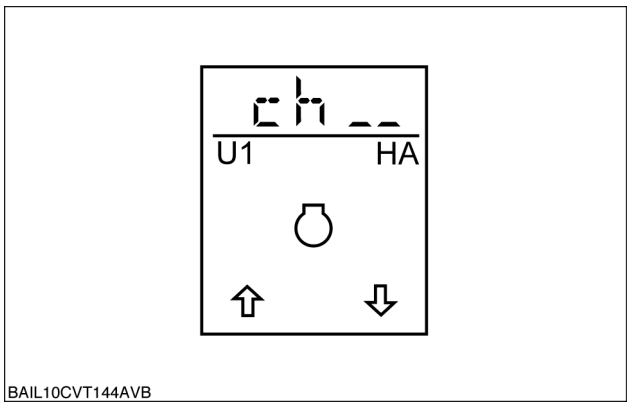


BAIL10CVT143FVA 1

Engine Power Boost Demonstration

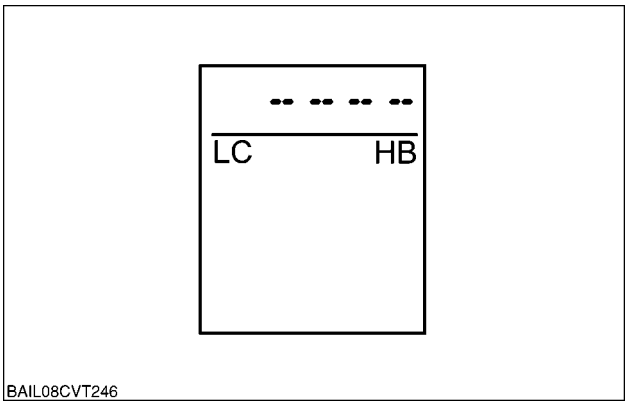
Start the engine and allow it to idle.

Use the "up", "down", and the "menu" keys to navigate the HH menu's to HA and the engine symbol on the U1 controller.
The upper section of the display will show "Ch_ _"



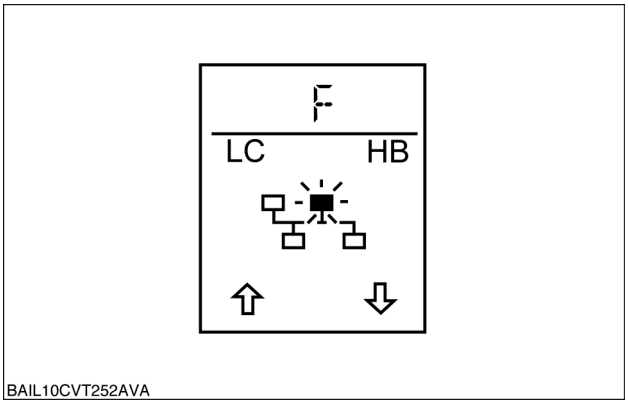
BAIL10CVT144AVB 2

"_ _ _ _" is displayed in the upper section of the display, when no fault code is stored in the selected sub-system.



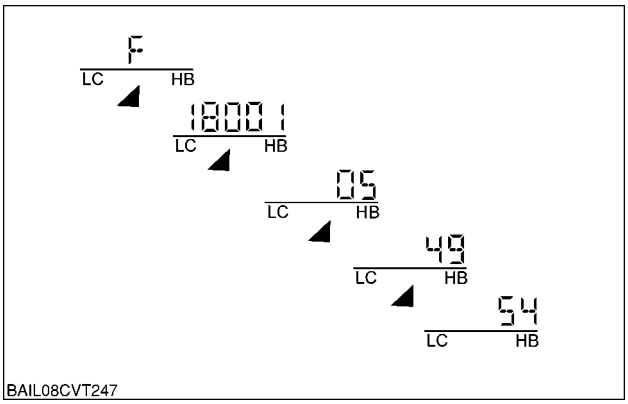
BAIL08CVT246 3

"F" is shown in the upper section of the display, if a fault code is stored in the selected sub-system.



BAIL10CVT252AVA 4

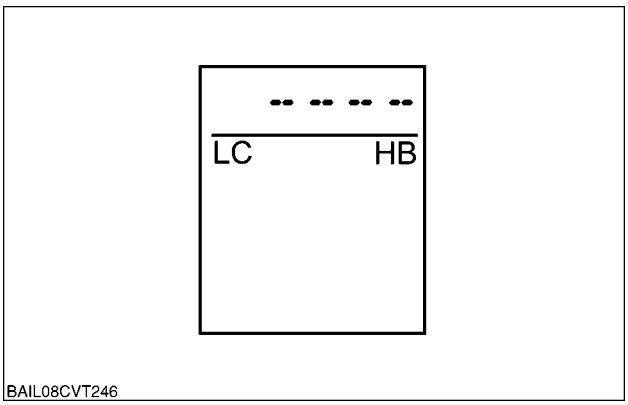
The upper section of the display will automatically cycle through as the example:
18001 Fault code
05 Operating hours at the time of the first occurrence
49 Operating hours at the time of the last occurrence
54 Frequency of occurrence



BAIL08CVT247 5

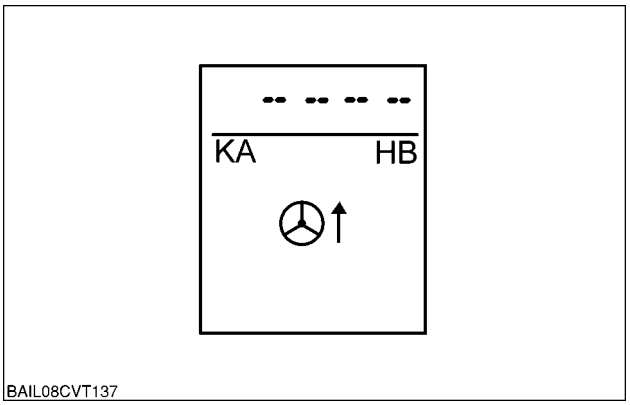
Press the "Up" or "Down" navigation key to change to the next fault code in the list.

As soon as the end of the list is reached, "_ _ _" is shown in the upper section of the display.



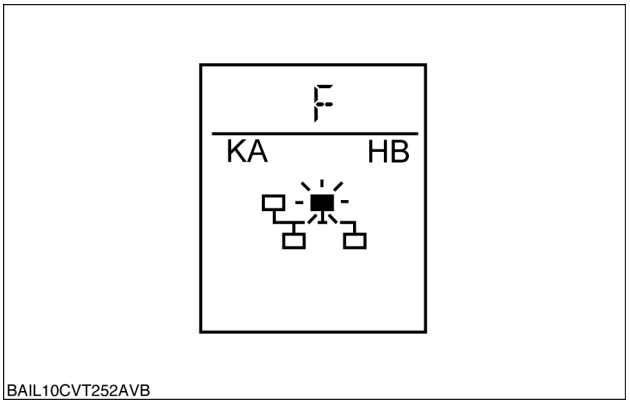
BAIL08CVT246 6

The upper section of the display will show "_ _ _", if no fault codes are stored.



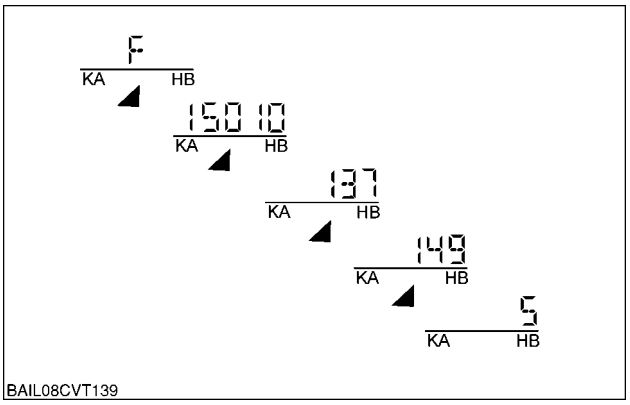
BAIL08CVT138 3

The upper section of the display will show "F", if any fault codes are stored.



BAIL10CVT252AVB 4

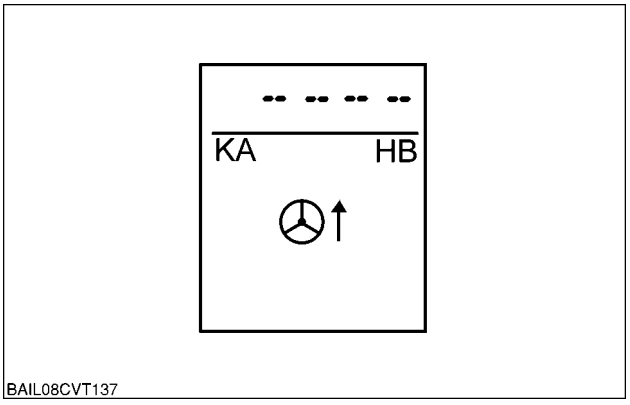
The display will then automatically cycle through as the example:
15010 Fault code
137 Hour of first occurrence
149 Hour of last occurrence
5 Number of occurrences of the fault



BAIL08CVT139 5

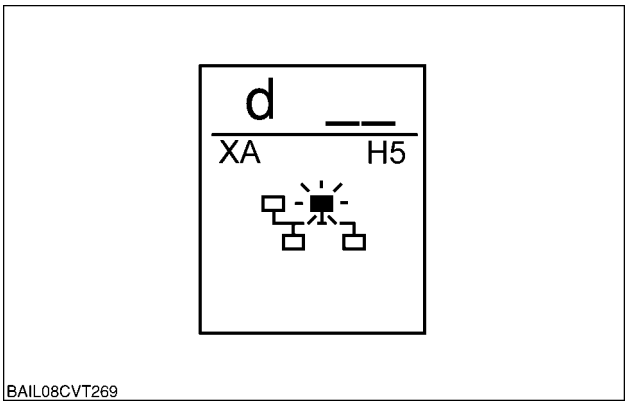
Depress the “up" or “down" key to change to the next fault code in the list.

The upper section of the display will show "_ _ _", at the end of the list.



BAIL08CVT138 6

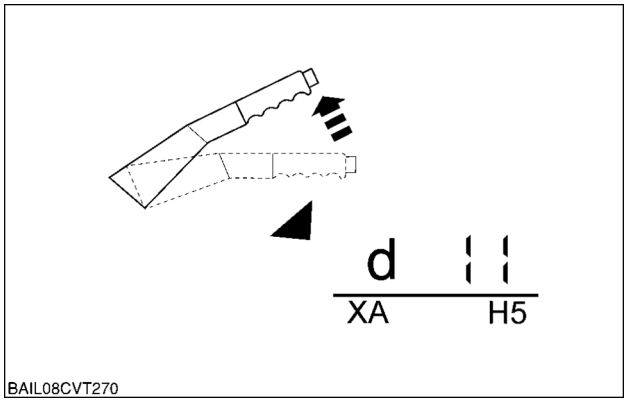
The upper section of the display will show "d_ _"



BAIL08CVT269 3

When a switch is operated, a code will be displayed and an audible tone should be heard to indicate the correct function.

If a switch code is not displayed and the audible tone not heard, a 'wiggle' test can be performed on the related wiring, while watching the display or listening for the audible tone, to help locate the fault.



BAIL08CVT270 4

Identifier	Controller Pin number	Switch / Input
d8	B4	Cranking status
d11	B3	Parking brake switch
d28	C7	Shuttle lever park switch

Contents

HYDRAULIC, PNEUMATIC, ELECTRICAL, ELECTRONIC SYSTEMS - A

FAULT CODES - 50.A

Reference	Description	Controller
4144	Rear Remote No.4 EEPROM Error	
4145	Rear Remote No.4 Switched To Failsafe	
4146	Rear Remote No.4 Under Voltage	
4147	Rear Remote No.4 Over Voltage	
4148	Rear Remote No.4 Spool Movement Too Low	
4149	Rear Remote No.4 Spool Movement Too High	
4150	Rear Remote No.4 Float Position Not Reached	
4151	Rear Remote No.4 Manually Operated	
4152	Rear Remote No.4 Driver Faulty	
4153	Rear Remote No.4 Potentiometer Faulty	
4154	Rear Remote No.4 Unable To Reach Neutral	
4155	Rear Remote No.4 Spool Not In Neutral At Key On	
4156	Rear Remote No.5 No Control Message received	
4157	Rear Remote No.5 Control Message Not Plausible	
4158	Rear Remote No.5 EEPROM Error	
4159	Rear Remote No.5 Switched To Failsafe	
4160	Rear Remote No.5 Under Voltage	
4161	Rear Remote No.5 Over Voltage	
4162	Rear Remote No.5 Spool Movement Too Low	
4163	Rear Remote No.5 Spool Movement Too High	
4164	Rear Remote No.5 Float Position Not Reached	
4165	Rear Remote No.5 Manually Operated	
4166	Rear Remote No.5 Driver Faulty	
4167	Rear Remote No.5 Potentiometer Faulty	
4168	Rear Remote No.5 Unable To Reach Neutral	
4169	Rear Remote No.5 Spool Not In Neutral At Key On	
4170	Rear EHR Control No.1 Not Calibrated	
4173	Rear EHR Control No.2 Not Calibrated	
4177	Rear EHR Control No.3 Not Calibrated	
4180	Rear EHR Control No.4 Not Calibrated	
4190	Rear Remote No.1 No Communications	
4191	Rear Remote No.2 No Communications	
4192	Rear Remote No.3 No Communications	

Timing gear housing - Install

Prior operation:
Timing gear housing - Cleaning (B.10.A)

NOTE: *Before any assembly operation, be sure that the hole and bolt threads have no wear or dirt.*

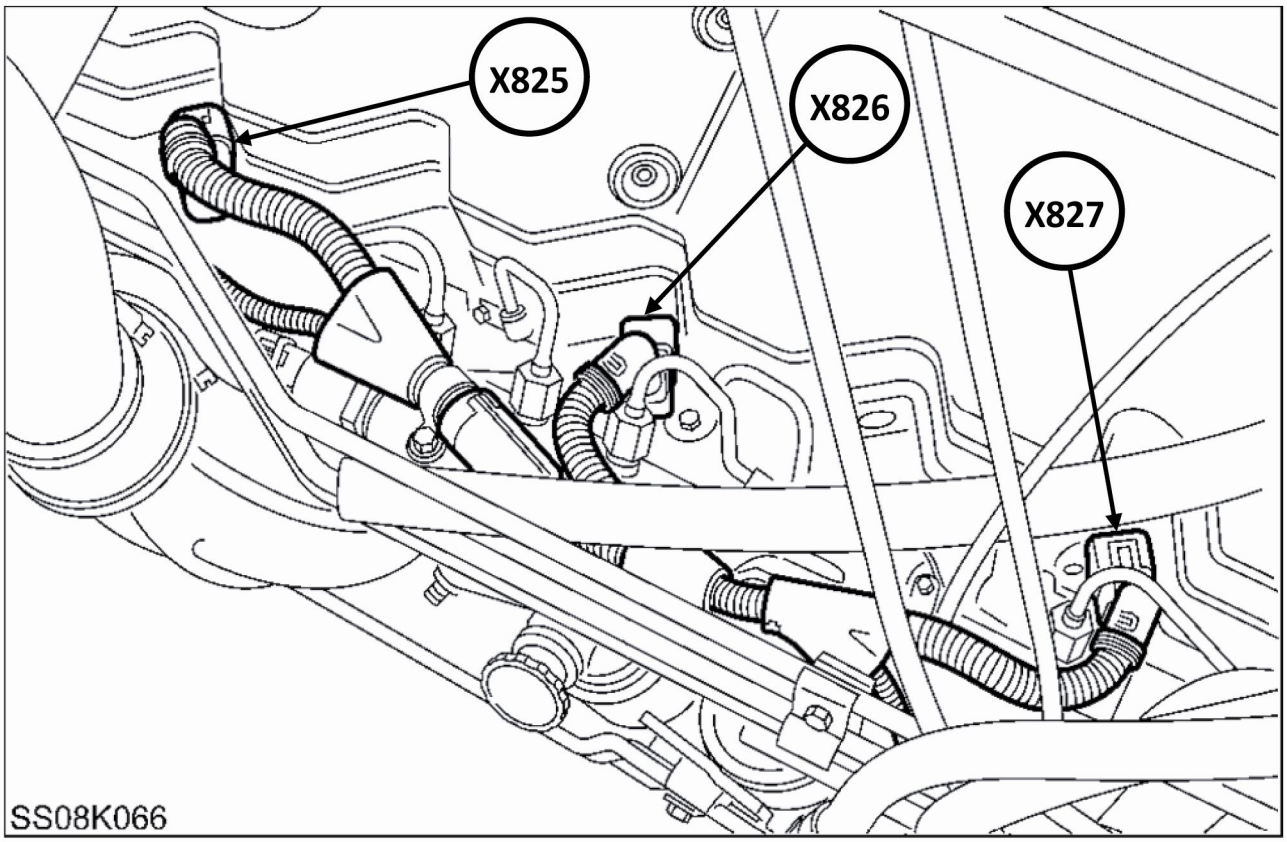
1. Install the housing **(1)** on the engine block.
2. Insert the fastening bolts in the same position found upon disassembly and tighten them to the torque.

Fuel injector - Electrical test

By testing the current and voltage of an injector, a general state of operation can be seen. This can give a good indication of a sticking or leaking injector by the values of current and voltage, in comparison to the other injectors on the same unit.
Any malfunctions can lead to the incorrect amount fuel being injected into the cylinder. If the valve sticks open, then the cylinder will be flooded with fuel causing black smoke. If the valve sticks closed, then the absence of fuel in the cylinder will cause the engine to burn lean.

1. Channel configuration for DATAR scope
   - Channel A Injector Current (Blue):
   - Channel B Voltage on the Hot side of the injector (red)
   - Channel C Voltage on the Camshaft (Green): only used to confirm injection timing against camshaft rotation
   - Channel D Voltage on the Cold side of the injector (Brown):

NOTE: *Tested using a 6-cylinder engine, there are three fuel injector connectors (located at the left-hand side of the tractor, top engine), one for each pair of cylinders*



BAIL10CVT079FMA 1

Injector connector locations

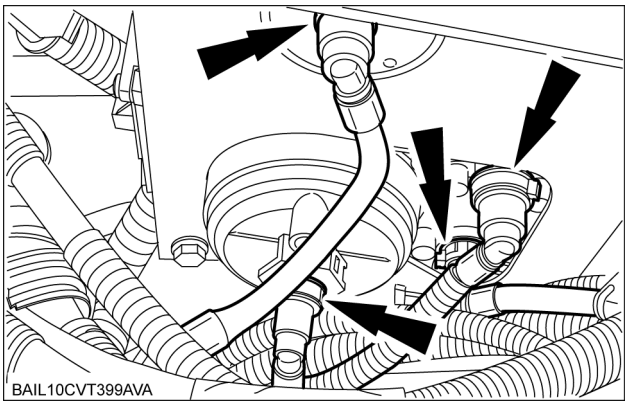
X825 For cylinders 1 and 2
X826 For cylinders 3 and 4
X827 For cylinders 5 and 6

Contents

ENGINE AND PTO IN - B

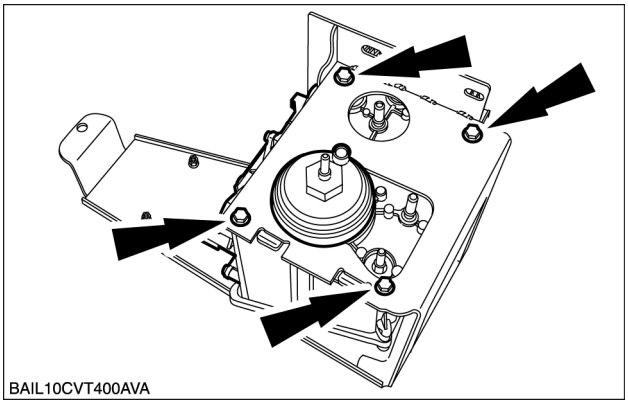
EXHAUST SYSTEM - 40.A

8. Disconnect the urea and coolant lines and remove the SCR supply module and mounting bracket.



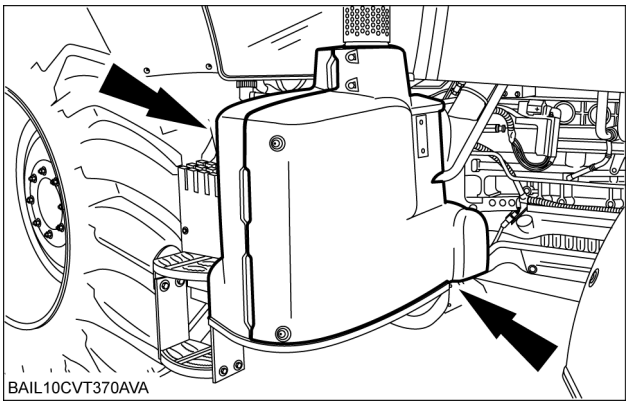
BAIL10CVT399AVA 7

9. Remove the SCR supply module from the mounting bracket.



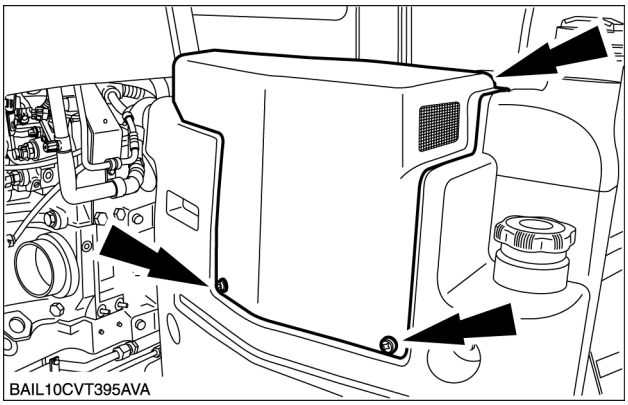
BAIL10CVT400AVA 8

12. Install the SCR muffler covers.



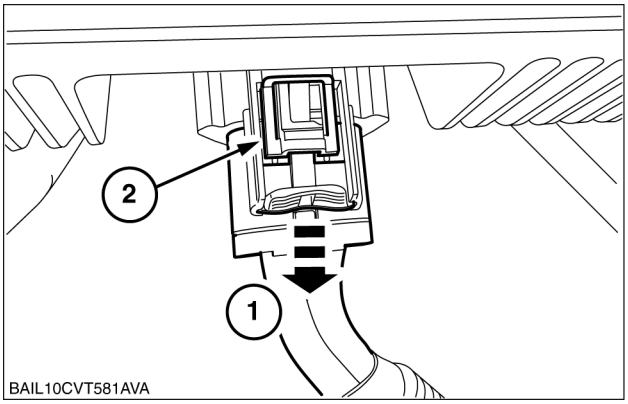
BAIL10CVT370AVA 11

4. Remove the cover.



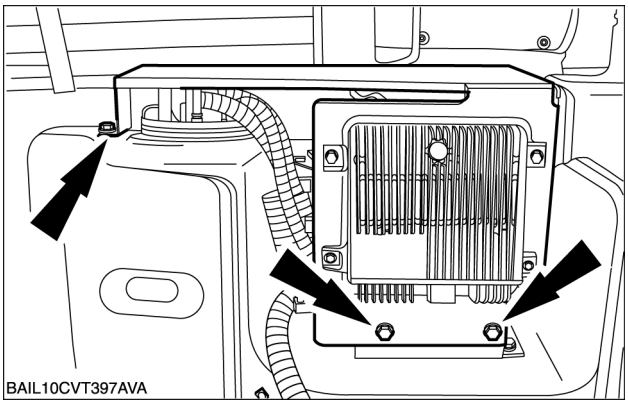
BAIL10CVT395AVA 3

5. Pull back the slider **(1)**, fully depress the locking latch **(2)** and pull on the connector body to disconnect the electrical connector from the SCR power converter.



BAIL10CVT581AVA 4

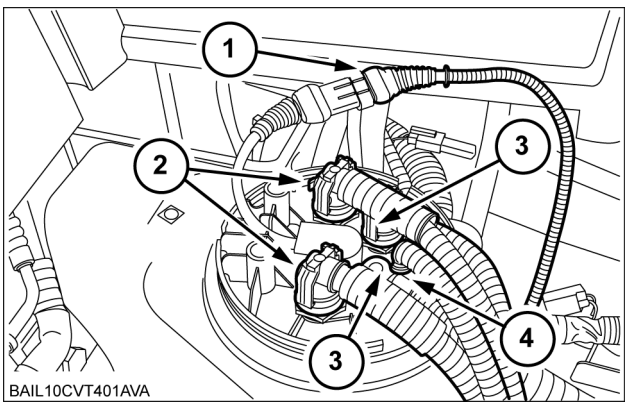
6. Detach the SCR supply module mounting bracket.



BAIL10CVT397AVA 5

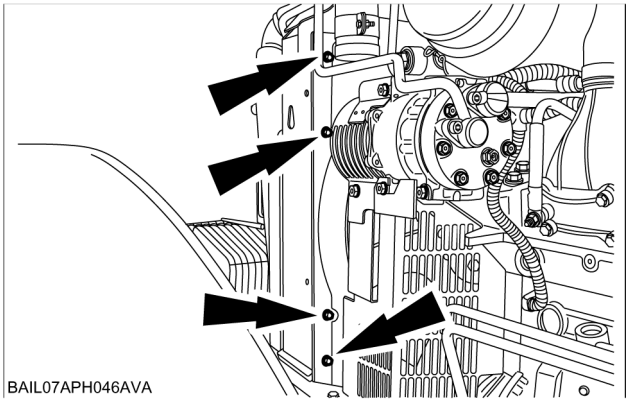
7. Disconnect the electrical connector **(1)**, coolant lines **(2)**, urea lines **(3)** and the breather pipe **(4)**.

NOTE: *To disconnect the breather pipe **(4)**, hold down the collet while pulling on the pipe.*



BAIL10CVT401AVA 6

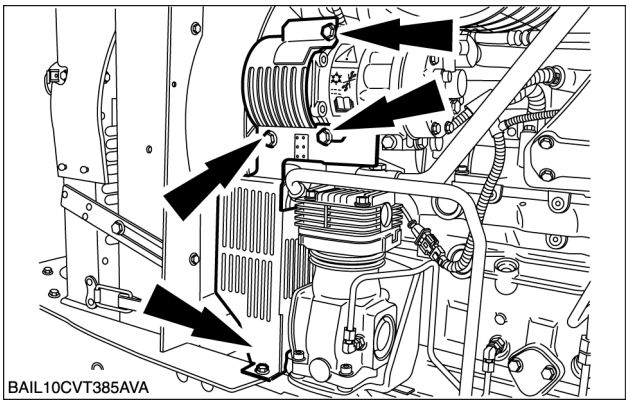
4. Remove the fan shroud left-hand retaining bolts.



BAIL07APH046AVA 4

Vehicles with pneumatic trailer brakes

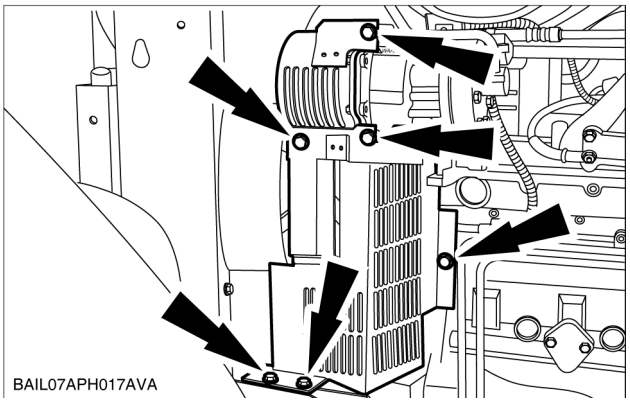
5. Remove the drive belt left-hand guard.



BAIL10CVT385AVA 5

Vehicles without pneumatic trailer brakes

6. Remove the drive belt left-hand guard.

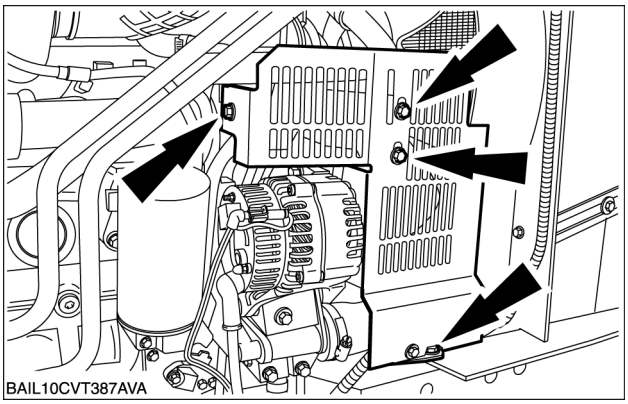


BAIL07APH017AVA 6

Fan reversing system - Remove Fan

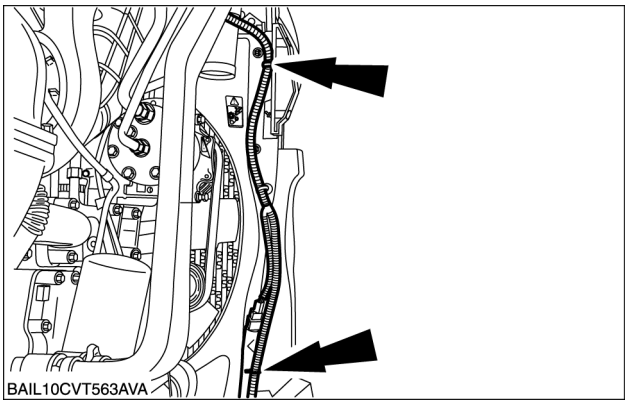
Prior operation:
Disconnect the battery ground (negative) cable from the battery, for further information refer to **Battery - Disconnect (A.30.A)**

1. Remove the drive belt right-hand guard.



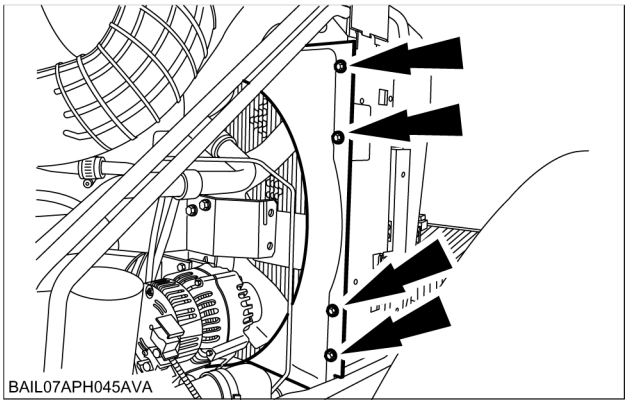
BAIL10CVT387AVA 1

2. Detach the wiring harness at the cable ties from the right-hand side of the fan shroud.



BAIL10CVT563AVA 2

3. Remove the fan shroud right-hand retaining bolts.



BAIL07APH045AVA 3

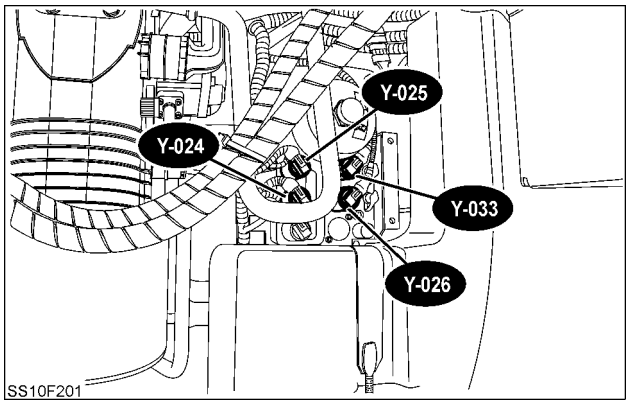
Tool number	Name / Use
(X) 380200181	Form Sleeve - Piston Sealing (shift cylinder - synchroniser)

List of commercially available tools that can be obtained from specialized stores:

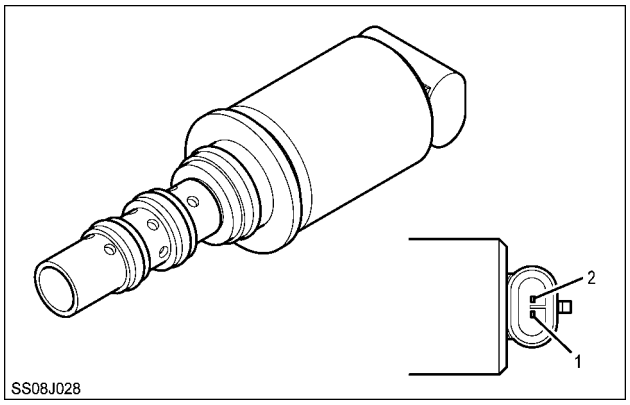
Name	Use
"Pivotable" assembly block	To dismantle and reassemble the transmission
Socket (key width **60 mm**)	For hexagon nut
Ring bolt, M14x1.5	For removing / installing clutch A/B

ATTENTION: *The assembly block must be licensed for a minimum bearing load of* ***800 kg*** *(****1764 lb****)!*

Control valve - Overview (Solenoid valves)



SS10F201 1



SS08J028 2

PWM solenoid valves F2 (Y-026), R1 (Y-033), coupling A (Y-025) and B (Y-024)

Valve switching behaviour	Proportional (PWM)
Rated voltage supply (clocked)	**12 V**
Clock frequency	**100 Hz**
Voltage (measured using digital multimeter)	**7.5 V**
Resistance of the coil at **20 °C** (**68 °F**)	**9.9 Ω +/- 5 %**
Insulating resistance	**>100 k Ω**
Current consumption	**100 - 750 mA**
Power consumption	**14 W**
Tightening torque	**6 - 8 Nm** (**4.4 - 5.9 lb ft**)

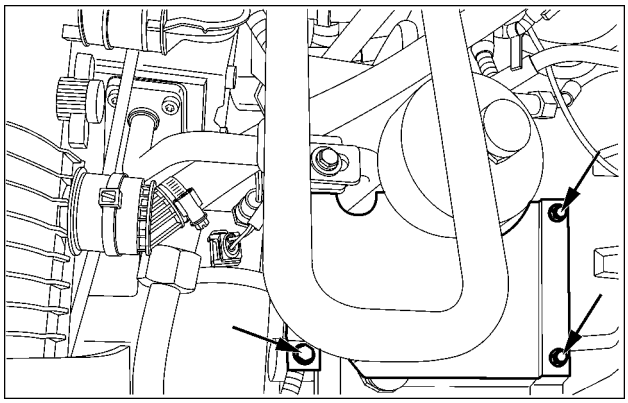
Valve block - Remove

TRANSMISSION Continuously Variable Transmission (CVT) - Exploded view (Solenoid valves, sensors, hydraulic lines) (C.20.G)

Prior operation:
Remove the auxiliary fuel tank - see **Fuel tank - Remove (B.20.A)**.

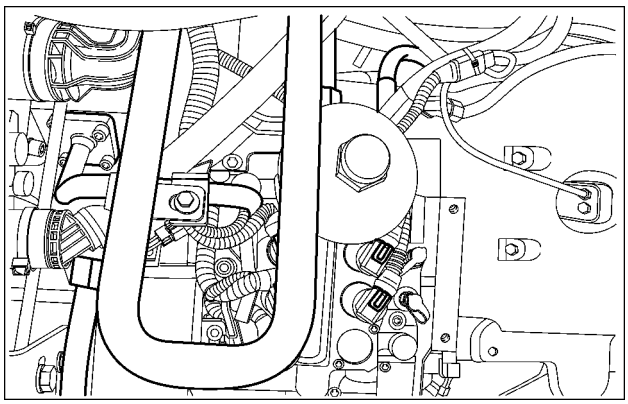
NOTE: *If the transmission has been removed, work steps **1** to **2** are not necessary.*

1. Remove the screws and take off the cover.



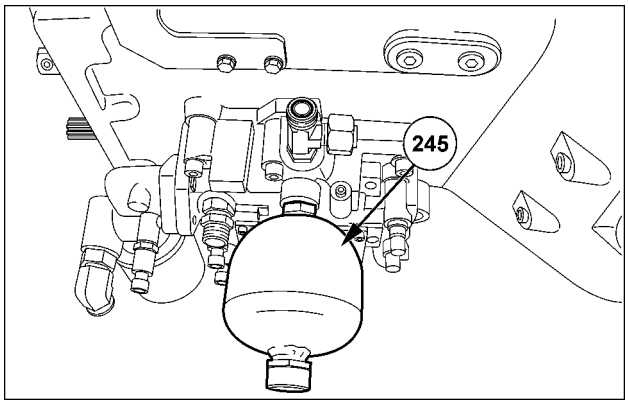
SS11C153 1

2. Mark the electrical connectors and remove them. Remove the hydraulic lines.



SS11C146 2

3. Remove the bubble reservoir **(245)**.



SS10F056 3

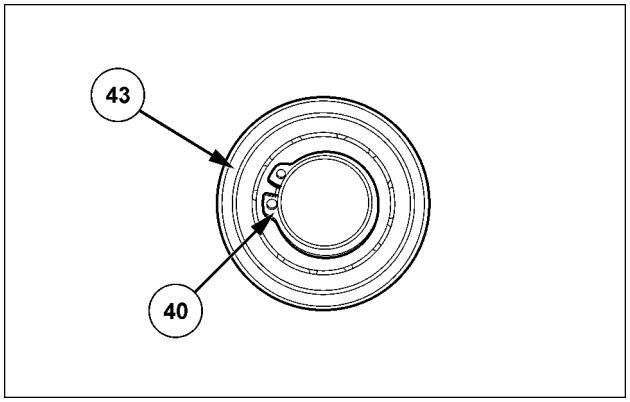
Summing planetary gear - Assemble

TRANSMISSION Continuously Variable Transmission (CVT) - Exploded view (Transmission input) (C.20.G)

Prior operation:
Summing planetary gear - Disassemble (C.20.G)

NOTE: *All parts must be oiled prior to assembly.*

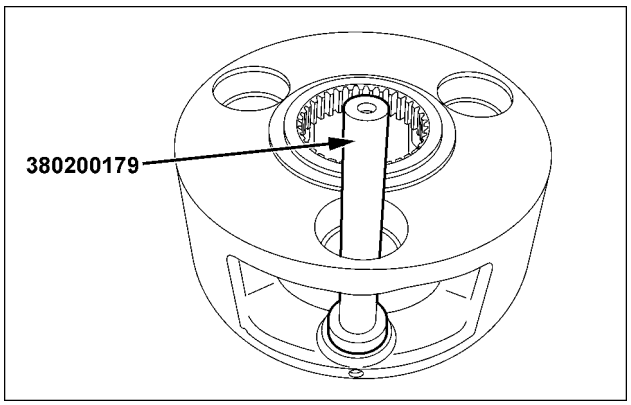
1. Fit the bearings **(43)** onto the bearing bolts **(41)** and insert the circlips **(45)**.



SS10F111 1

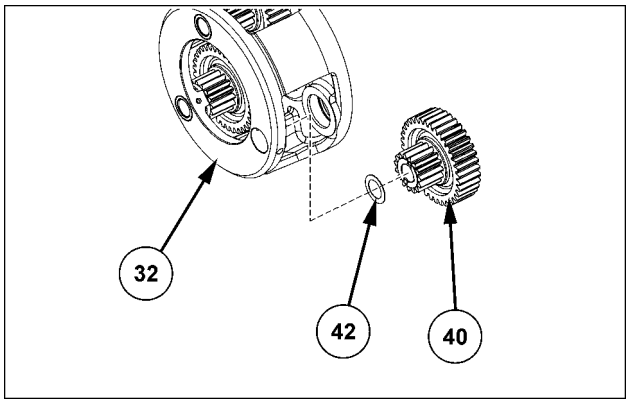
2. Insert the needle bearing **(39)** using the drift **380200179**.

NOTE: *The drift **380200179** must be seated against the planetary carrier **(32)** in order to ensure that there is a gap between the needle bearing **0.2 mm** (**0.01 in**) and the thrust washer **(42)**.*



SS10F136 2

3. Insert the planetary gears **(40)** with thrust washers **(42)** into the planetary carrier **(32)**.



SS10F137 3

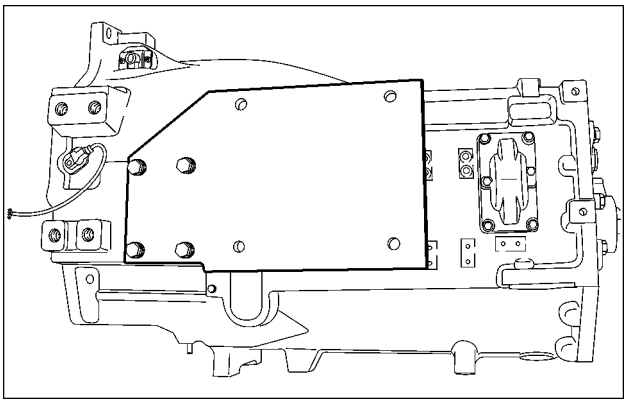
Gear and synchroniser - Remove (F2/R1)

TRANSMISSION Continuously Variable Transmission (CVT) - Exploded view (Transmission input) (C.20.G)
TRANSMISSION Continuously Variable Transmission (CVT) - Exploded view (Transmission output) (C.20.G)

Prior operation:
Remove the transmission - see **TRANSMISSION Continuously Variable Transmission (CVT) - Remove (C.20.G)**.
Remove the valve block - see **Valve block - Remove (C.20.G)**.

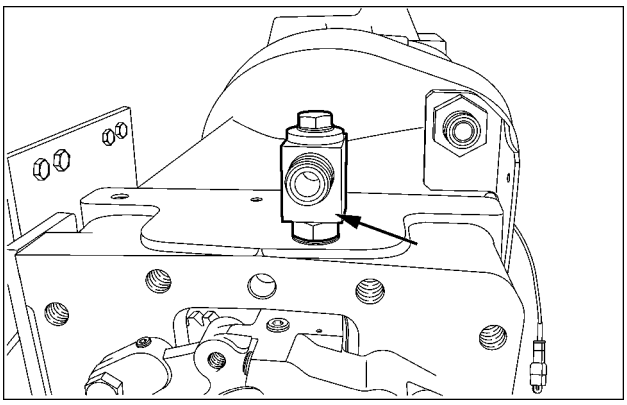
1. For dismantling, the transmission must be mounted on a commercially available pivotable assembly block. To this end an adaptor plate (which must be made by the workshop) is fitted to the left side of the transmission housing. Adaptor plate - see **TRANSMISSION Continuously Variable Transmission (CVT) - Special tools (C.20.G)**.

NOTICE: *The assembly block must be licensed for a bearing load of at least* ***550 kg*** *(****1213 lb****).*



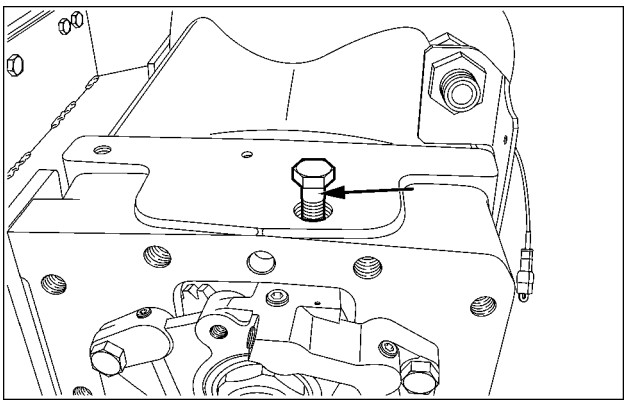
SS10F083 1

2. Remove the tee fitting.



SS10F057 2

3. Pull out the connecting piece **(62)** using a screw M14x1.5.



SS10F058 3

Sensing system Temperature sensor - Replace

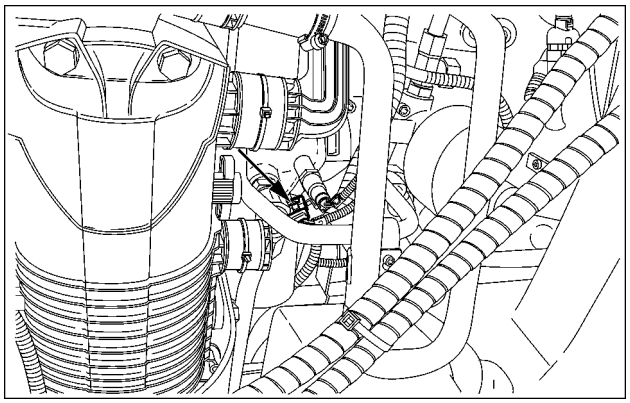
TRANSMISSION Continuously Variable Transmission (CVT) - Exploded view (Solenoid valves, sensors, hydraulic lines) (C.20.G)

Prior operation:
Remove the rear right wheel - see **Rear wheel - Remove (D.50.C)**.

Removal

NOTE: *Thoroughly clean the area around the temperature sensor.*

1. Remove the electrical connector from the temperature sensor.

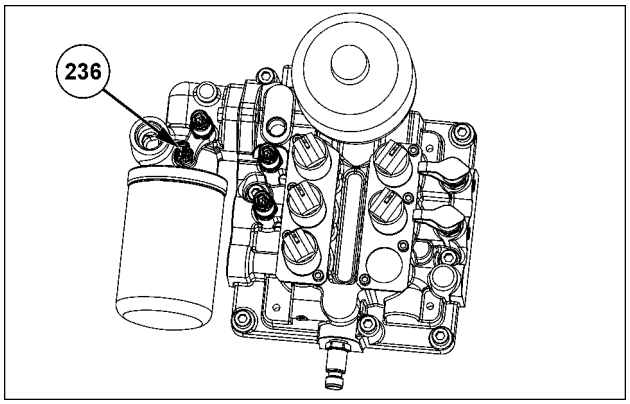


SS11C135 1

2. Remove the temperature sensor **(236)**.

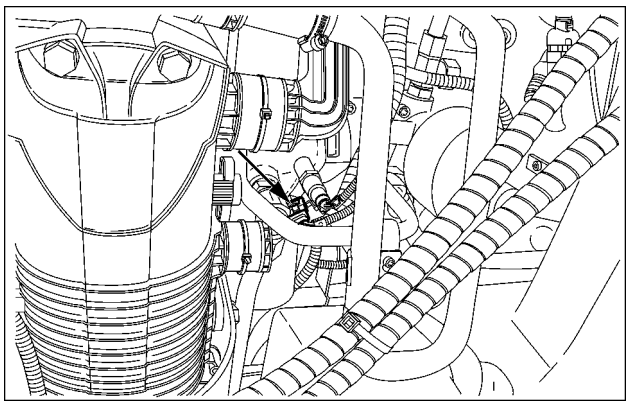
Assembly

3. Fit the sensor **(236)** with a new sealing washer **(237)** and tighten to **14 - 18 Nm** (**10.3 - 13.3 lb ft**).



SS10F218 2

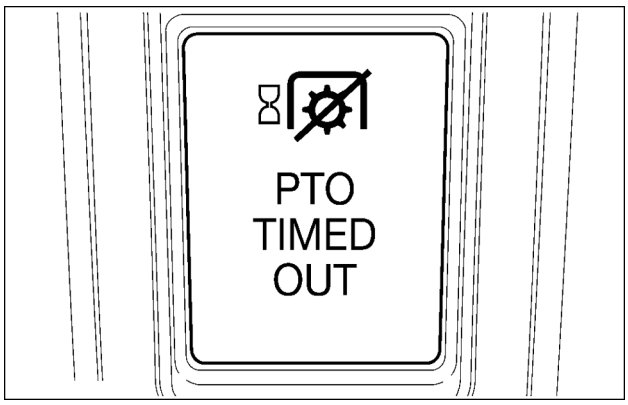
4. Reconnect the electrical connector.



SS11C135 3

Next operation:
Fit the rear right wheel - see **Rear wheel - Install (D.50.C)**.

When engaging the PTO the movement should be decisive in its application. Hesitance or incorrect operation may cause the PTO to "Time Out". Should this occur a non critical alarm will sound for **4 seconds** and the PTO will become inoperable for **10 seconds**. During the **10 seconds** "Timed Out" period the display will show a timed out symbol. When the timed out period is complete the symbol will disappear from the display and normal operation of the PTO is re-enabled.



BRK5782E 2

REAR PTO Hydraulic - Disassemble

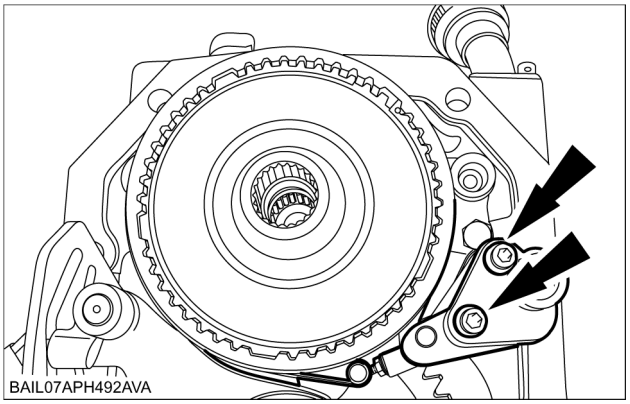
Prior operation:
Housing - Remove (C.40.C)

⚠ **WARNING** ⚠

Handle all parts carefully. Do not put your hands or fingers between parts. Wear suitable safety clothing - safety goggles, gloves and shoes.

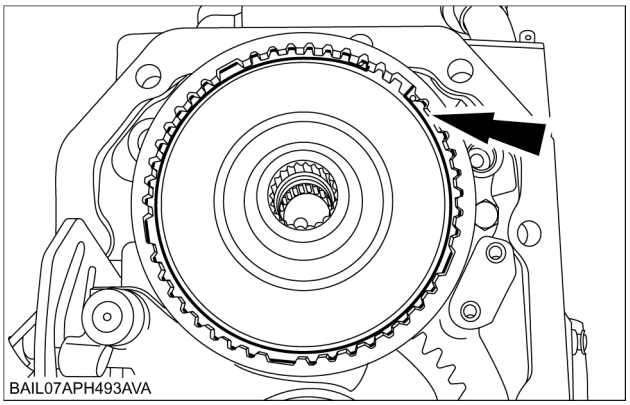
B026

1. Place the power take off (PTO) assembly on a suitable clean working surface or stand if available.
2. Remove the brake band and the brake piston housing.



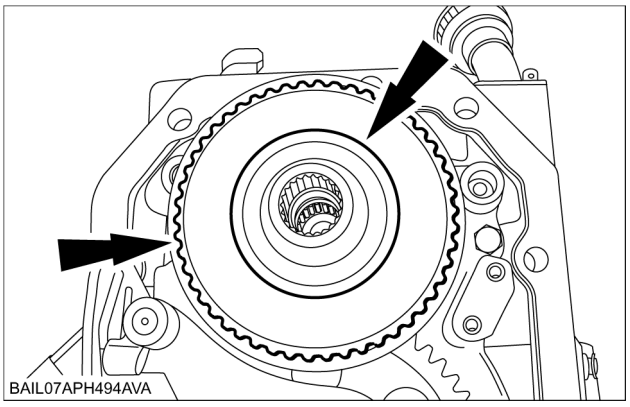
BAIL07APH492AVA 1

3. Remove the PTO clutch housing end plate circlip.



BAIL07APH493AVA 2

4. Remove the PTO clutch housing end plate and clutch hub.



BAIL07APH494AVA 3

Housing - Remove

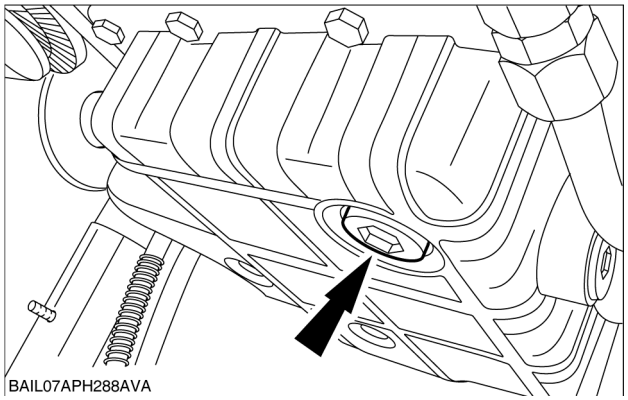
Prior operation:
Disconnect the battery, for further information refer to **Battery - Connect (A.30.A)**

⚠ **WARNING** ⚠

Handle all parts carefully. Do not put your hands or fingers between parts. Wear suitable safety clothing - safety goggles, gloves and shoes.

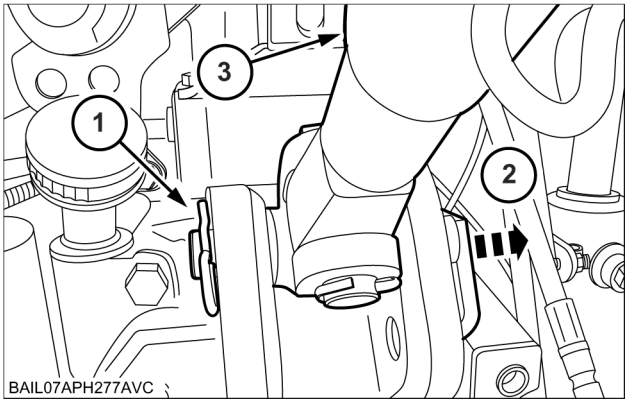
B026

1. Remove the transmission housing drain plug and drain the transmission oil into a suitable container. Install the drain plug and tighten to **68 - 82 Nm** (**50 - 60 lbft**).



BAIL07APH288AVA 1

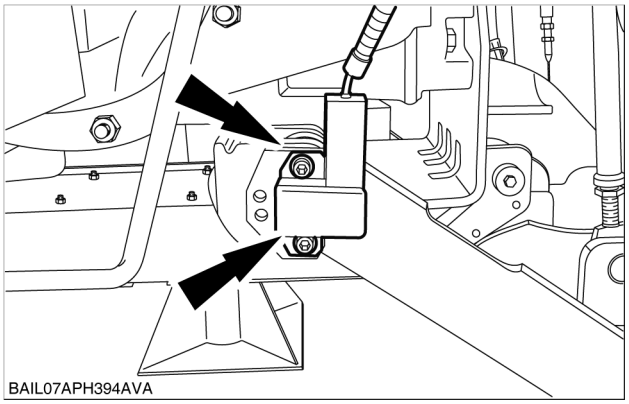
2. Remove the retaining clip **(1)**, pin **(2)** and remove the top link **(3)**.



BAIL07APH277AVC 2

3. Remove the sensor retaining bolts.

NOTE: *Repeat this step for the right-hand side.*



BAIL07APH394AVA 3

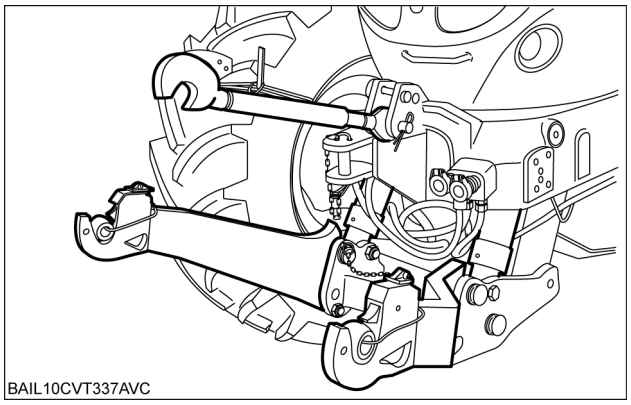
Shaft - Remove

⚠ WARNING

Avoid injury!
Handle all parts carefully. Do not place your hands or fingers between parts. Use Personal Protective Equipment (PPE) as indicated in this manual, including protective goggles, gloves, and safety footwear.
Failure to comply could result in death or serious injury.

W0208A

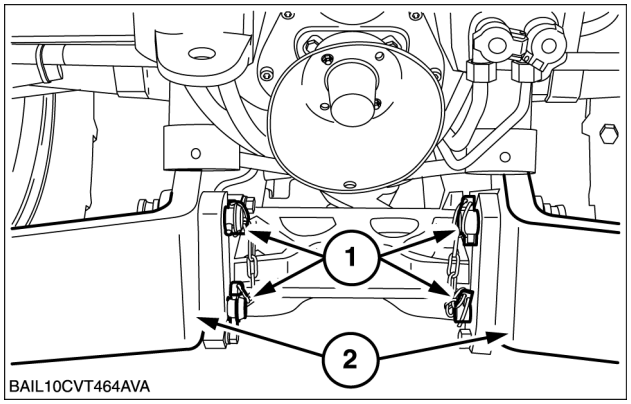
1. Fully raise the front hydraulic lift arms.
   Disconnect the battery, for further information refer to **Battery - Disconnect (A.30.A)**.



BAIL10CVT337AVC 1

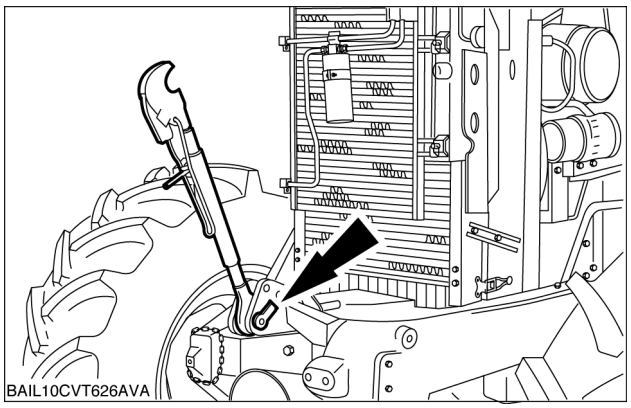
2. Remove the lower lift arm retaining pins **(1)** and remove lower lift arms **(2)**.

NOTE: *The lengths of the upper and lower pins are different.*

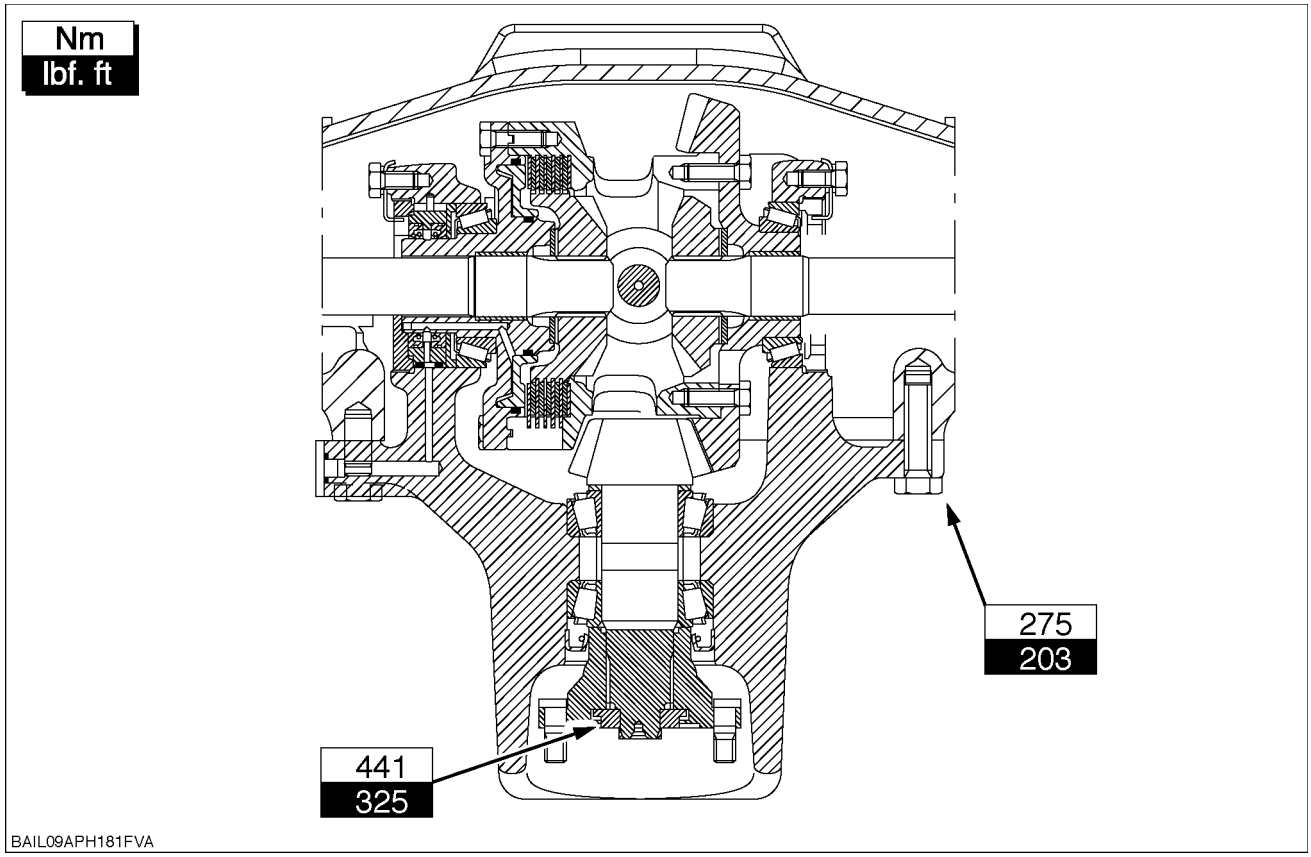


BAIL10CVT464AVA 2

3. Remove the top link.

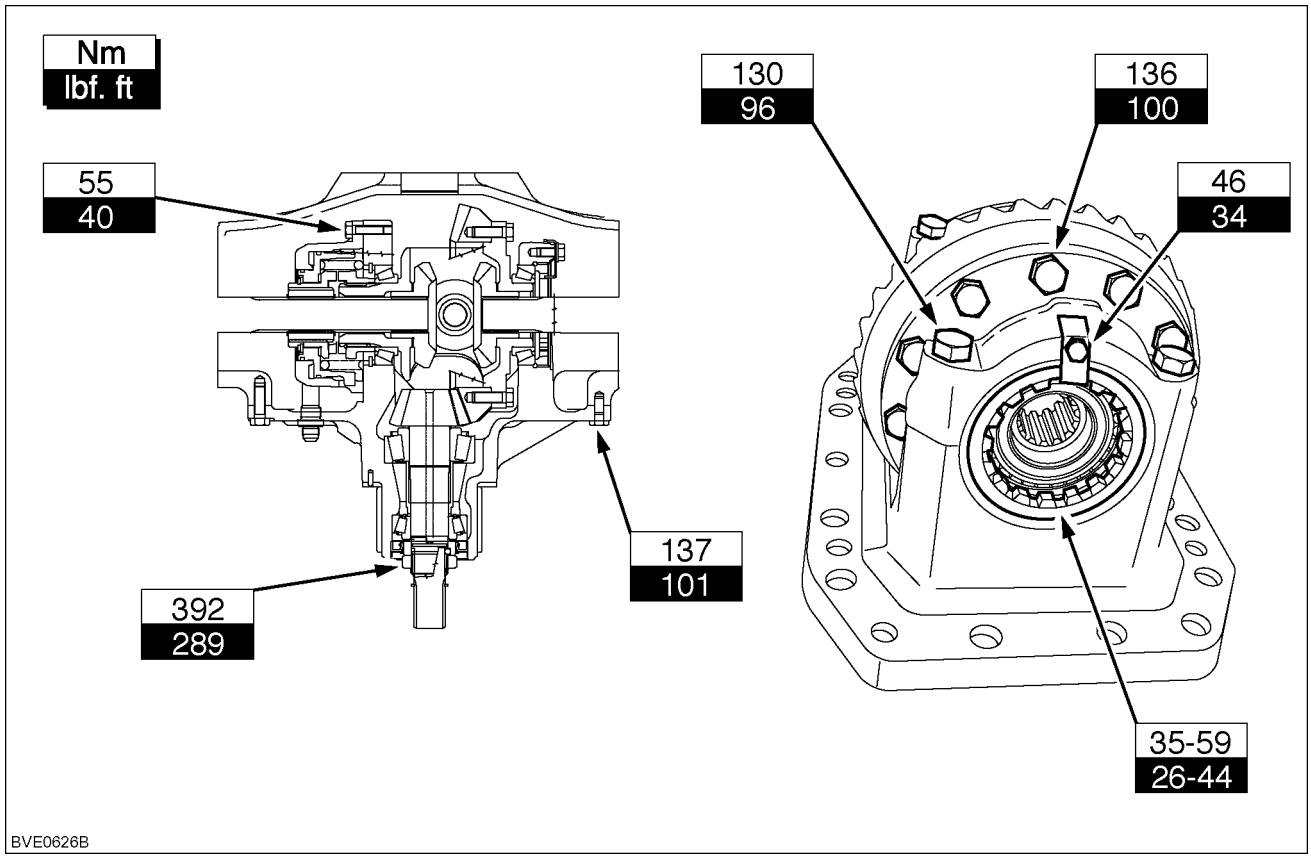


BAIL10CVT626AVA 3



BAIL09APH181FVA 2

Suspended Front Axle



BVE0626B 3

Dog Clutch Differential Lock

FRONT AXLE - Remove (Standard Axle)

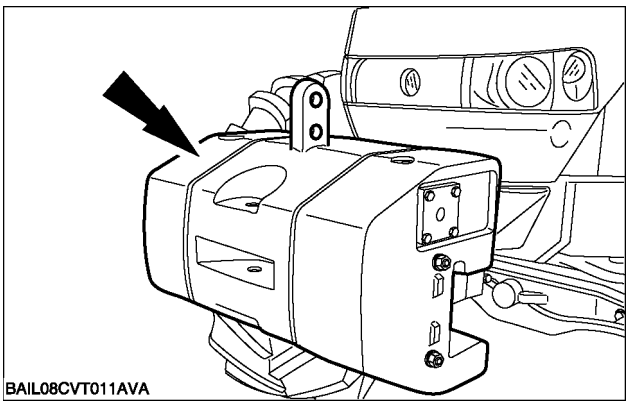
Prior operation:
Disconnect the battery, for further information refer to **Battery - Disconnect (A.30.A)**

⚠ WARNING

Heavy objects!
Lift and handle all heavy components using lifting equipment with adequate capacity. Always support units or parts with suitable slings or hooks. Make sure the work area is clear of all bystanders.
Failure to comply could result in death or serious injury.

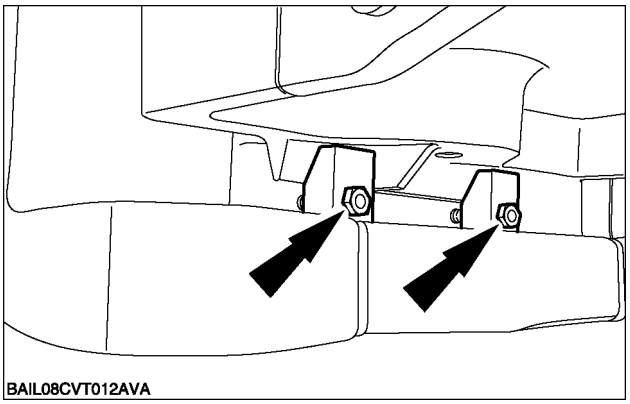
W0398A

1. Using suitable lifting equipment support the front weights.



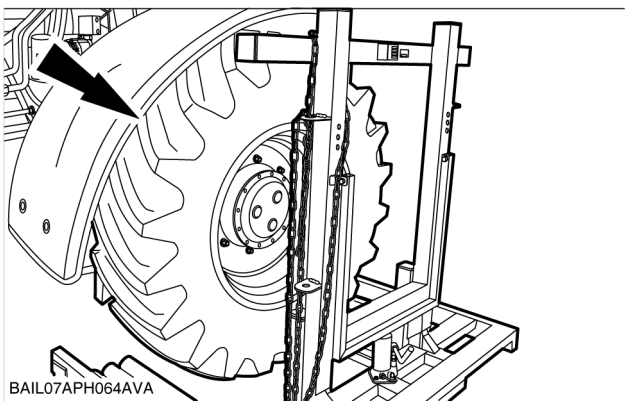
BAIL08CVT011AVA 1

2. Disconnect and remove the front weights from the weight carrier.



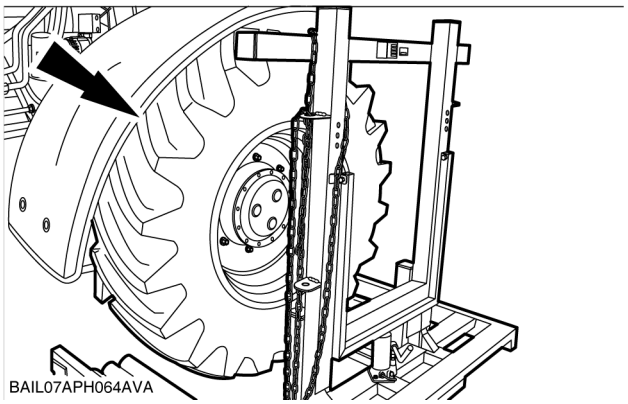
BAIL08CVT012AVA 2

3. Raise the front of the vehicle and support with suitable axle stands under the front weight carrier. Remove both front wheels.



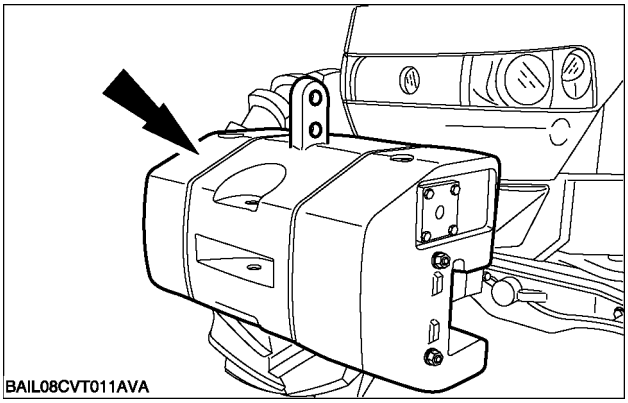
BAIL07APH064AVA 3

19. Install both front wheels.
Tighten to the specified torque, for further information refer to **Front wheel - Torque (D.50.C)**.



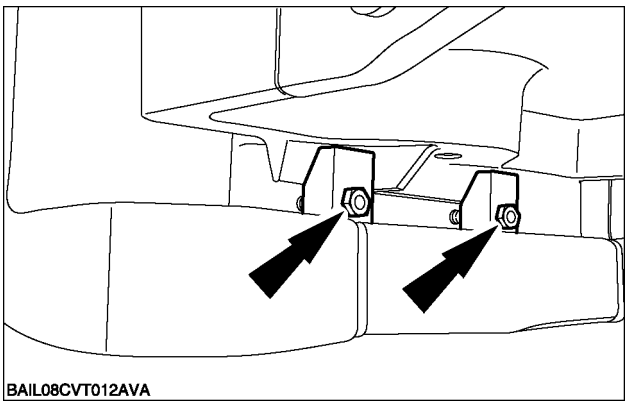
BAIL07APH064AVA 19

20. Using suitable lifting equipment install the front weights onto the weight carrier.



BAIL08CVT011AVA 20

21. Secure the front weights to the weight carrier.

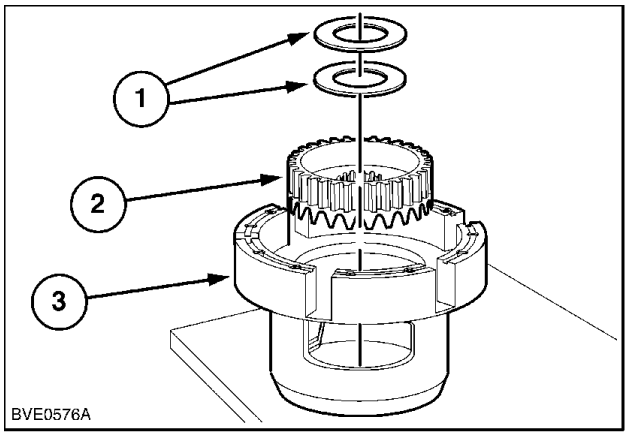


BAIL08CVT012AVA 21

Next operation:
Connect the battery, for further information refer to **Battery - Connect (A.30.A)**

7. Install two thrust washers **(1)** and the sun gear **(2)** into the differential cage **(3)**.

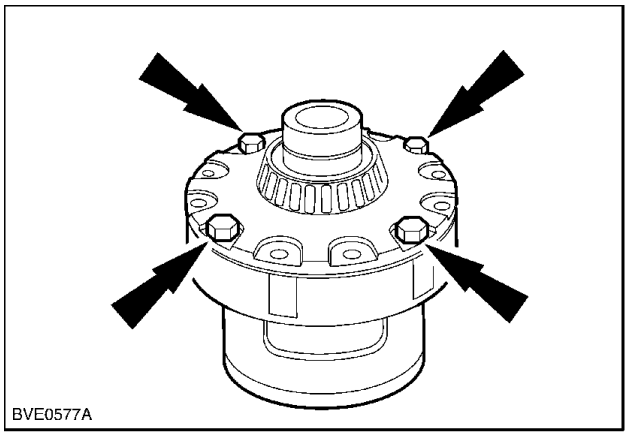
NOTE: *Two thrust washers are required to lock the sun gear against the planet gears. These can be the original thrust washer and a new thrust washer or two new thrust washers.*



BVE0576A 4

8. Hand tighten the clutch pack cover retaining bolts.

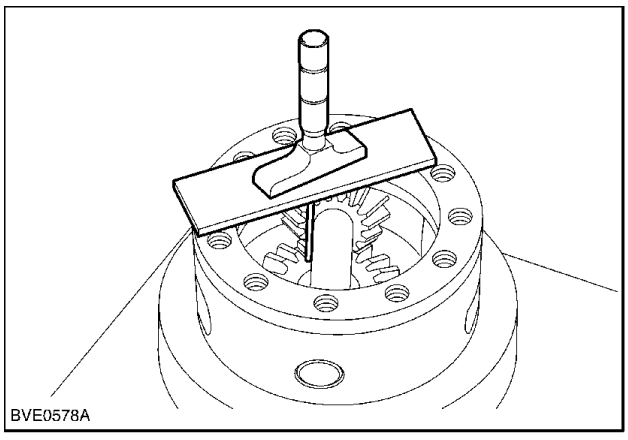
NOTE: *Make sure the clutch pack cover is fitted evenly.*



BVE0577A 5

9. The end float required between the sun and planet gears is **0.25 mm**. To calculate the size of thrust washer required, carry out the following:

10. Using a depth gauge and the locally fabricated depth gauge adaptor plate, measure against the front of the sun gear. Do this measurement in two opposite positions and take a mean calculation of the two readings. This measurement is H1.



BVE0578A 6

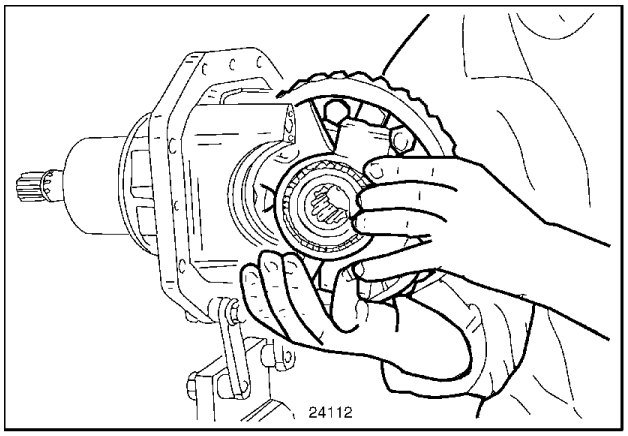
11. Carry out the same measurement again but using only one thrust washer as a test shim. This measurement is H2.

12. Determine the thickness of the shim to be installed as follows:
Remove the thrust washer and measure the thickness. This measurement is S1.
Thrust washer size = (H2 - H1) + S1 - **0.25 mm**.

Bevel gear - Backlash (Class 3+ Axle)

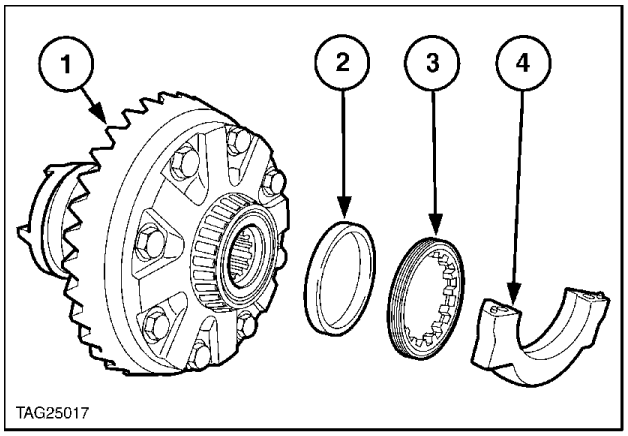
Adjustment of the crown wheel bearings and the backlash between the pinion and crown wheel.

1. Install the differential assembly complete with crown wheel and inner crown wheel bearing rings in the differential housing.



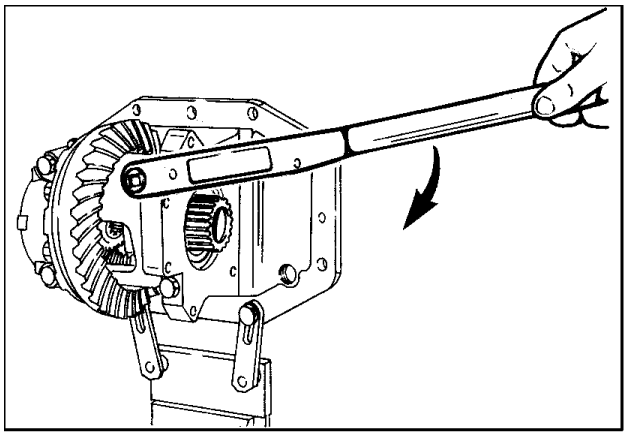
24112 1

2. Insert the outer bearing rings in the differential housing, fit the differential support caps **(4)**, ensuring correct orientation of the threaded adjustment ring **(3)**, smooth edge facing outwards.



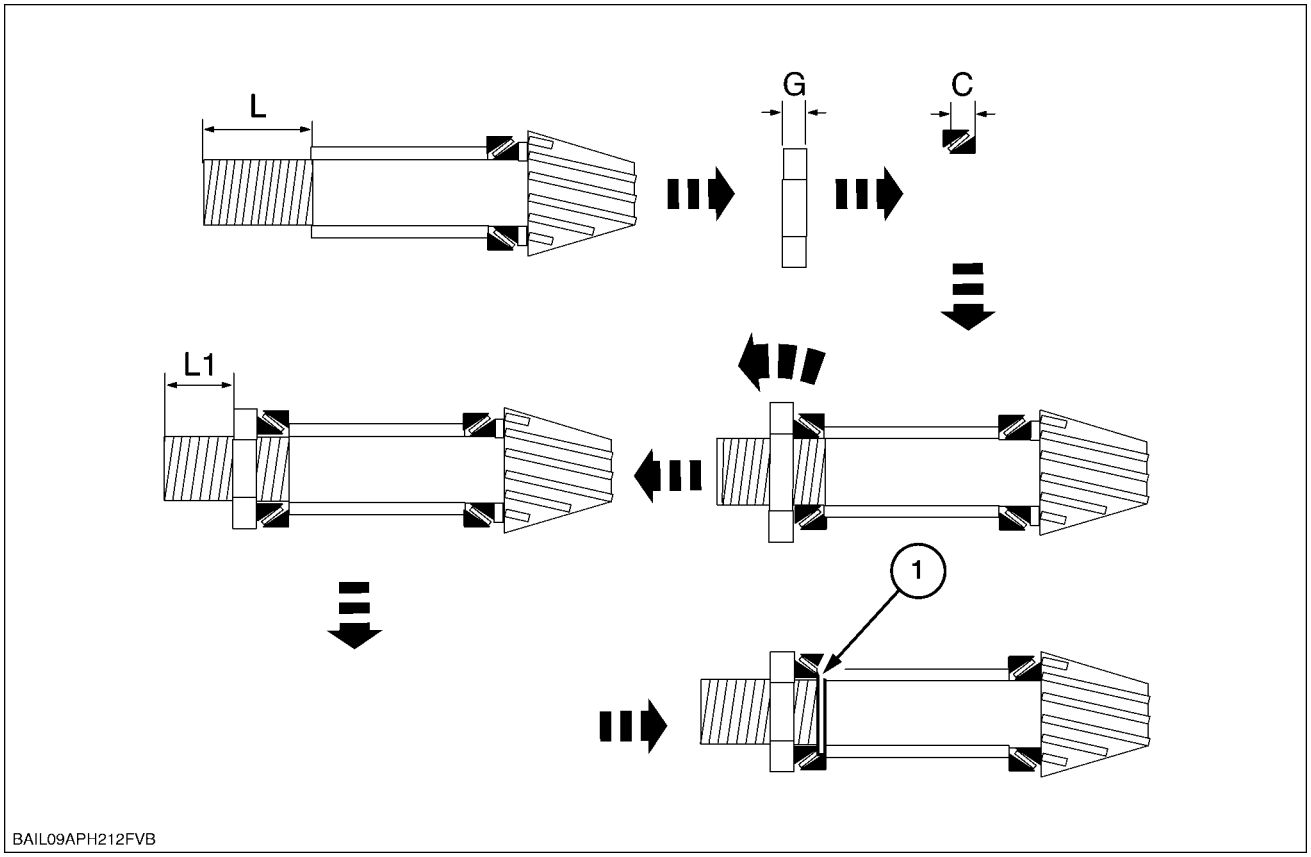
TAG25017_348 2

3. Tighten the retaining bolt to the specified torque value of **59 Nm**, then slacken the retaining bolts and re-tighten to a torque of **20 Nm**.



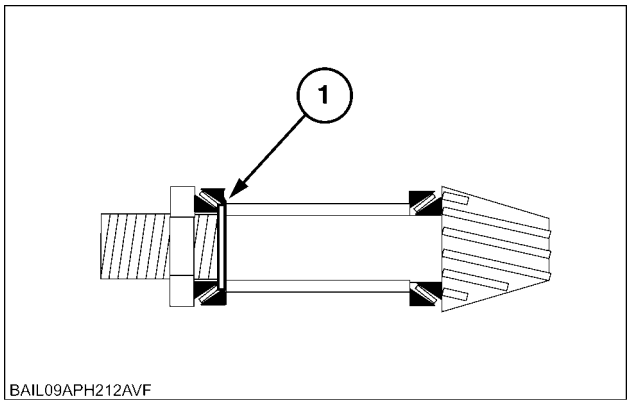
1b0o2004061034 3

7. Using the previously recorded measurements calculate the required thickness of the bearing preload adjustment shim to obtain measurement **(S)**.
The bearing preload adjustment shim **(1)** will be calculated as follows:
(S) = L- L1-C-G +0.05mm.
For information on available shims refer to **FRONT AXLE - General specification (D.10.A)**.



BAIL09APH212FVB 7

8. Remove the pinion shaft from the differential housing. Install the correct thickness preload adjustment shim **(1)** and reassemble the pinion shaft into the differential housing,
Lubricate the bearings.
Apply **LOCTITE® 243** to the pinion nut.

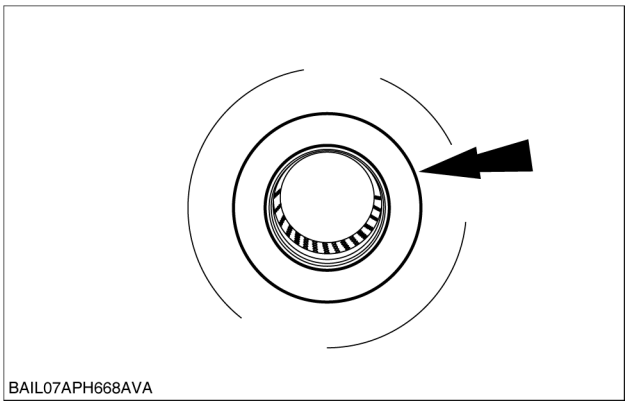


BAIL09APH212AVF 8

Housing - Disassemble

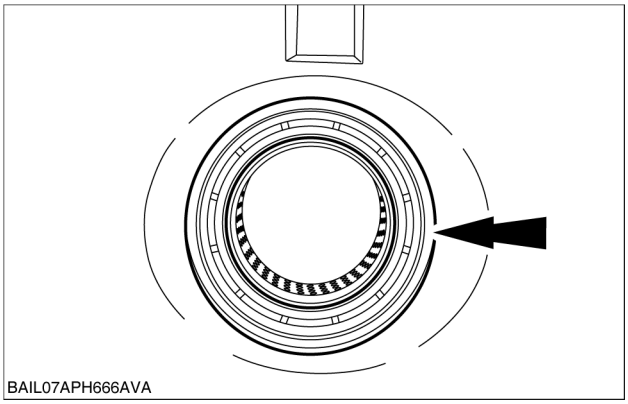
Prior operation:
Remove the steering cylinders, for further information refer to **Steering cylinder - Remove (D.20.C)**.
Prior operation:
Remove the differential, for further information refer to **Differential - Remove (D.10.A)**.

1. Remove the brass protection washer from the hub carrier.



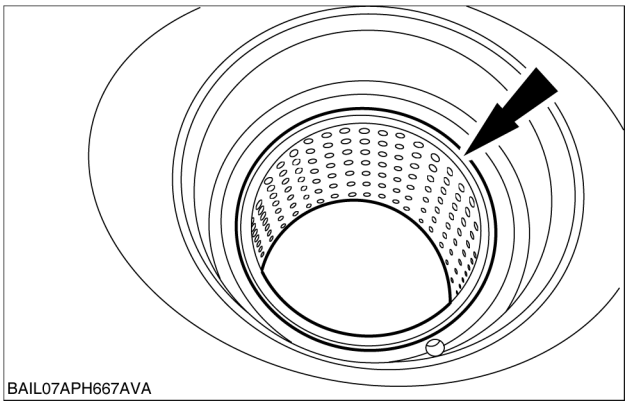
BAIL07APH668AVA 1

2. Remove the cassette seal.



BAIL07APH666AVA 2

3. Remove the brass lubricating bushing.



BAIL07APH667AVA 3

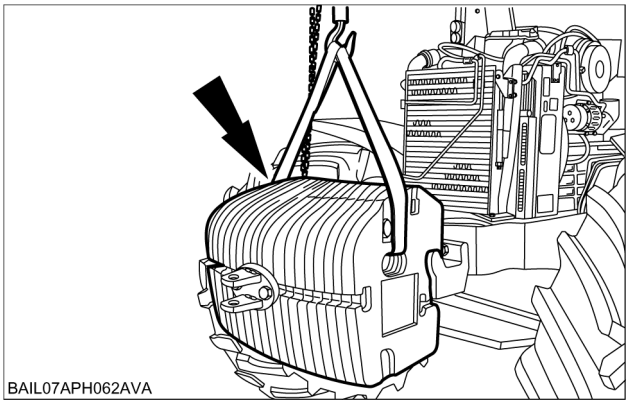
Hub - Disassemble

⚠ **DANGER** ⚠

Lift and handle all heavy components using lifting equipment of appropriate lifting capacity. Make sure that units or parts are supported by suitable slings or hooks. Make sure that no-one is in the vicinity of the load to be lifted. Failure to comply could result in serious injury or death.

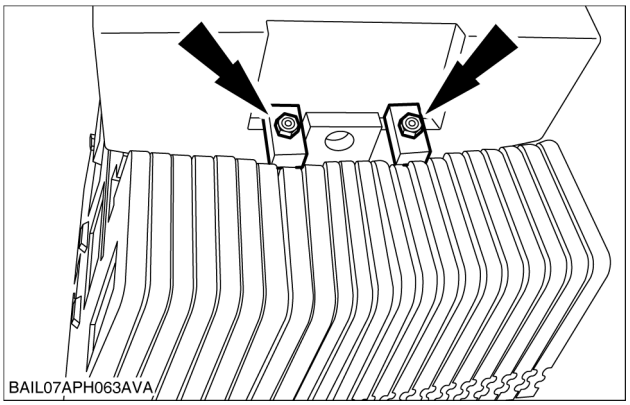
B012

1. Using suitable lifting equipment, support the front weights.



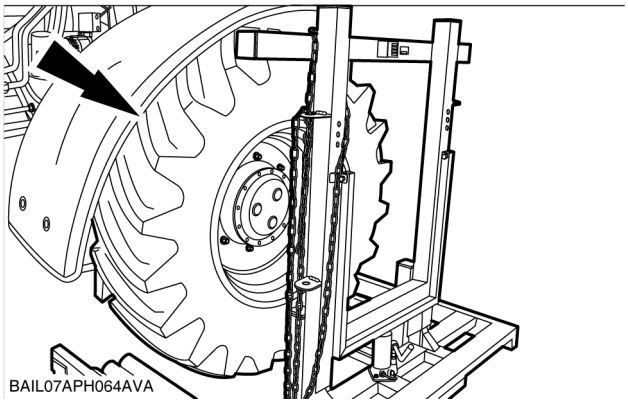
BAIL07APH062AVA 1

2. Disconnect and remove the front weights from the weight carrier.



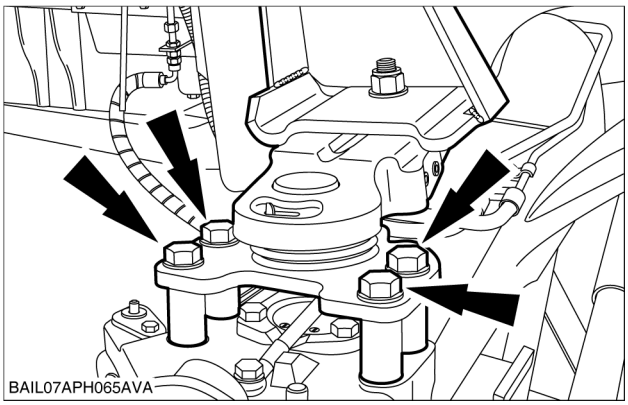
BAIL07APH063AVA 2

3. Raise the front of the vehicle and support with suitable axle stands under the front weight carrier. Remove the front wheel.



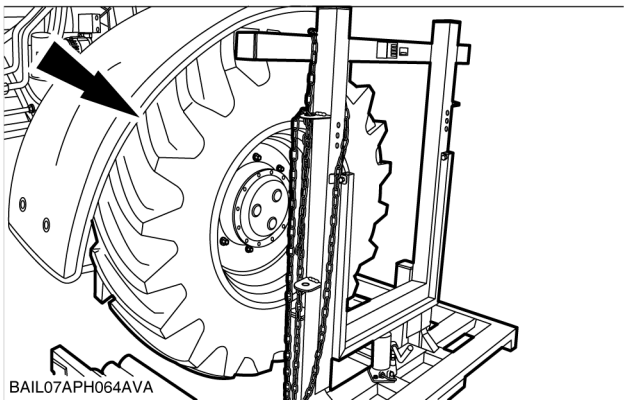
BAIL07APH064AVA 3

34. Install the dynamic front fender (if equipped).



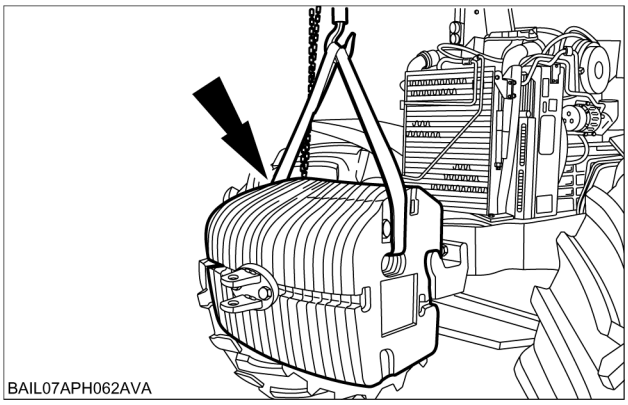
BAIL07APH065AVA 35

35. Install the front wheel.
Tighten the wheel nuts to the specified torque, for further information refer to **Front wheel - Torque (D.50.C)**.



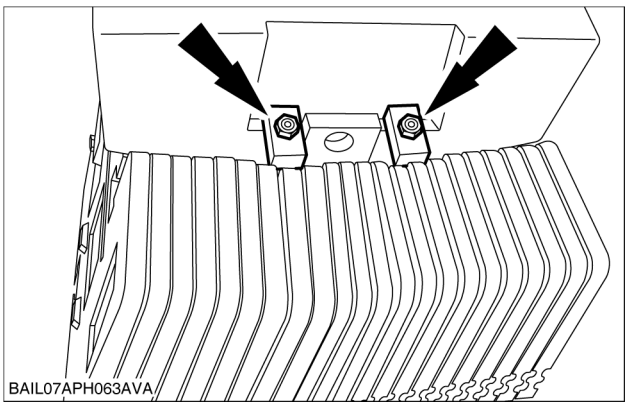
BAIL07APH064AVA 36

36. Using suitable lifting equipment, install the front weights.



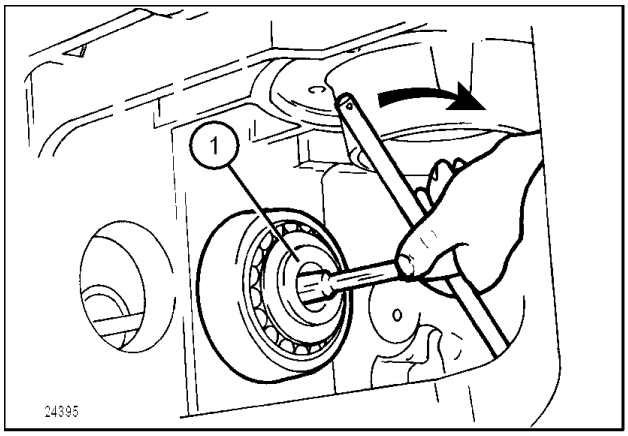
BAIL07APH062AVA 37

37. Install the retaining bolts to the front weights.



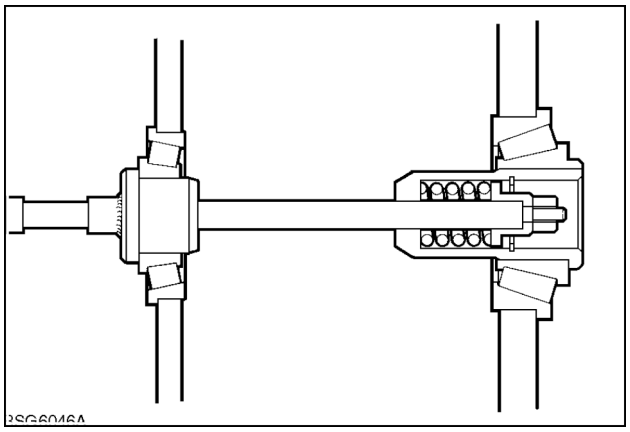
BAIL07APH063AVA 38

2. Assemble special tool number **380000470 (1)** complete with the bearings into the rear axle housing. Lock the nut while turning the bearings.



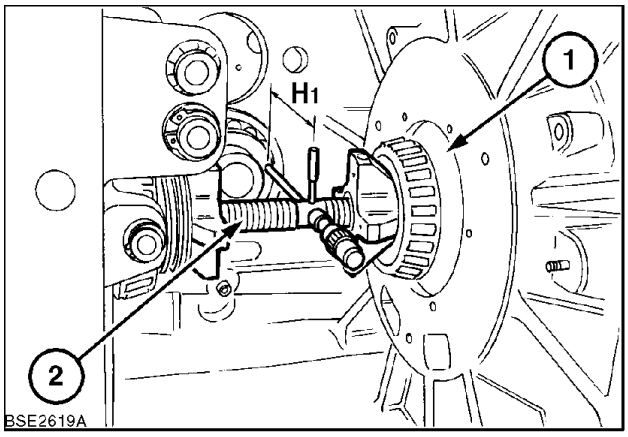
24395 2

3.



BSG6046A 3

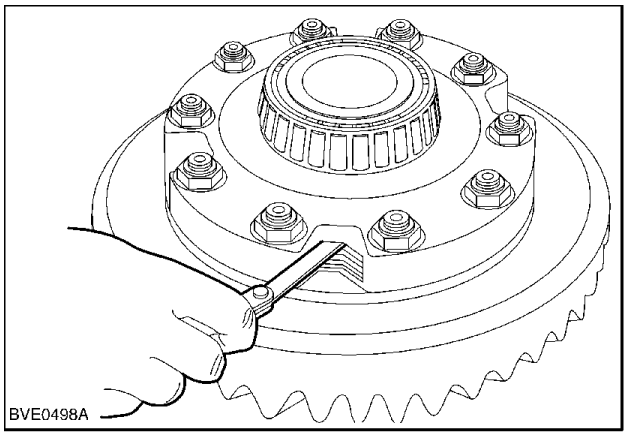
4. Assemble universal tool number **380000249 (2)** on crown wheel caps **(1)** complete with the bearing outer cups.
Bring the rod of tool number **380000249** (H) to contact bearing inner cup and measure dimension (H1).
Determine correct nominal dimension, H2 **(2)** between the crown wheel centre line and pinion base:
H2 = H3 ± C
where:
H3 = **183 mm**. Nominal dimension between the crown wheel centre line and pinion base.
C = Correction factor stamped on the pinion, expressed in mm and prefixed by + or - if other than 0, to be added to or subtracted from the nominal dimension (H3), depending on the sign.



BSE2619A 4

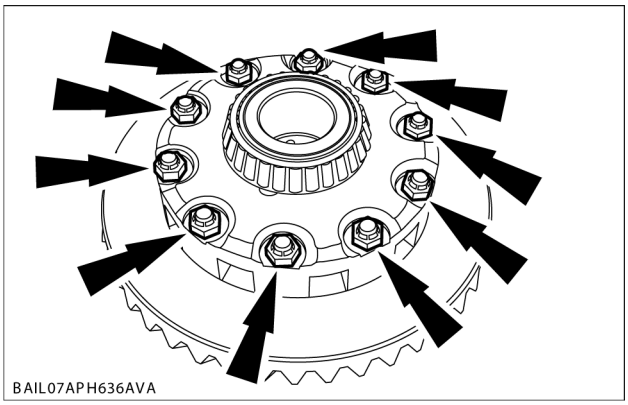
Differential lock Multi plate clutch - Overhaul

1. Using suitable feeler gauges, check the clearance between the multi-wet plate clutch friction and steel discs. If the clearance is not between **1.35 - 3.1 mm** (**0.05 - 0.12 in**), install new multi-wet plate clutch friction and steel discs.



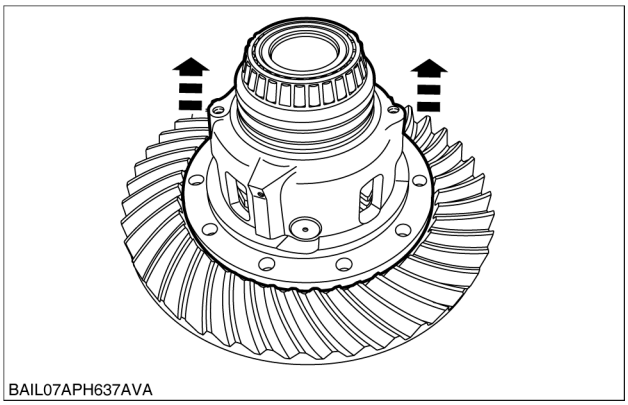
BVE0498A 1

2. Remove the crown wheel retaining nuts and bolts.



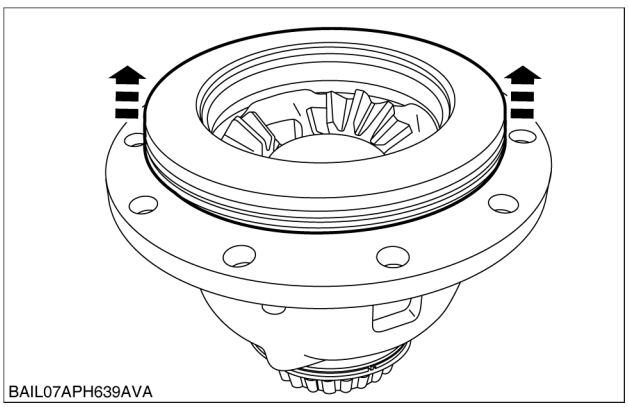
BAIL07APH636AVA 2

3. Remove the differential housing from the crown wheel.



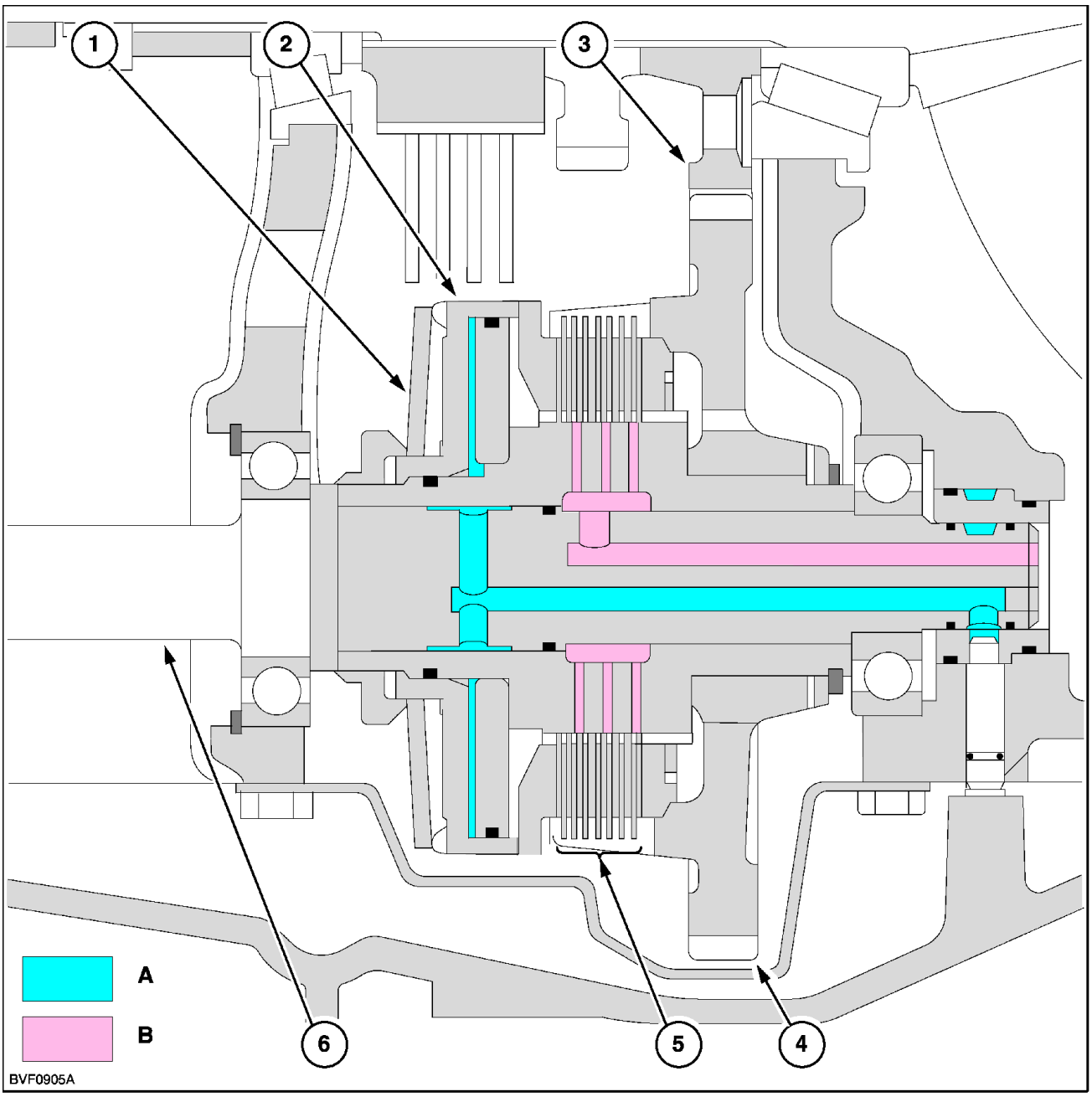
BAIL07APH637AVA 3

4. Remove the differential lock piston.



BAIL07APH639AVA 4

Clutch - Dynamic description



BVF0905A 1

Four Wheel Drive Multi-Wet Plate Clutch (Engaged)

1 Belleville washer
2 Control piston
3 Drive gear
4 Driven gear
5 Friction and steel plates
6 Drive shaft

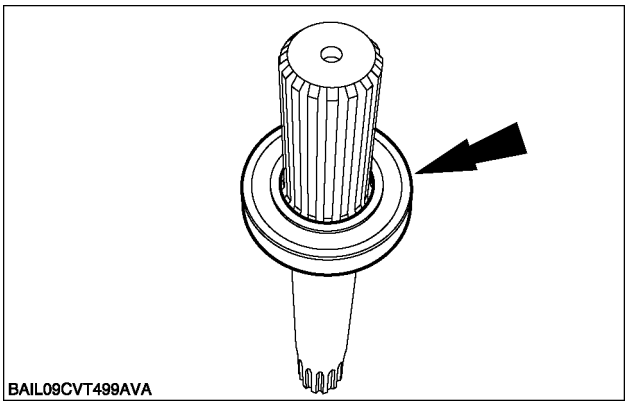
Figure Colour Key

A. Return to reservoir

B. Lubrication

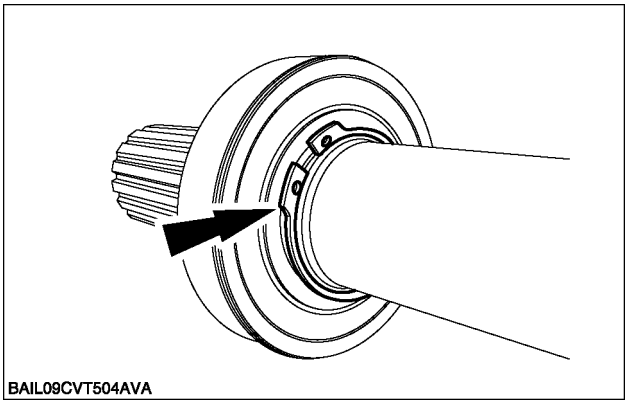
The four wheel drive clutch solenoid is de-energized and the Belleville washer **(1)** applies a force to the control piston **(2)** which compresses the friction and steel plates **(5)**. Drive is transferred from the drive gear **(3)** mounted on the rear axle pinion to the driven gear **(4)** and through the clutch to the front axle via the drive shaft **(6)**.

9. Install the bearing onto the shaft.



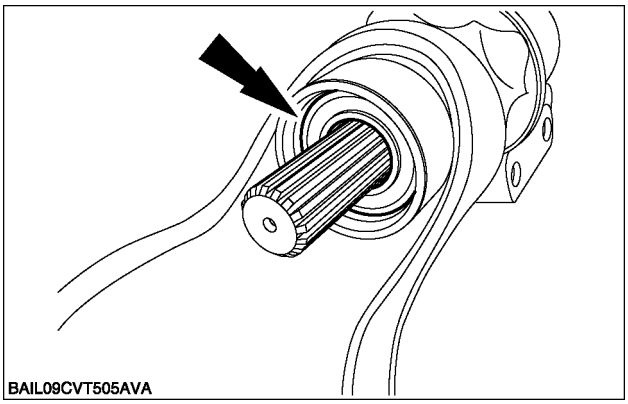
BAIL09CVT499AVA 9

10. Install the bearing retaining circlip.



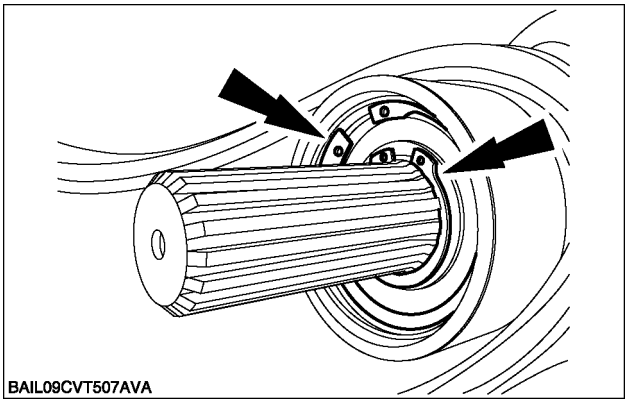
BAIL09CVT504AVA 10

11. Install the shaft into the housing.



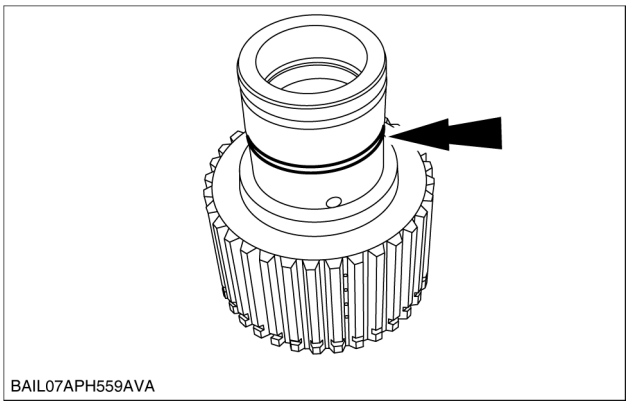
BAIL09CVT505AVA 11

12. Install the shaft retaining circlips.



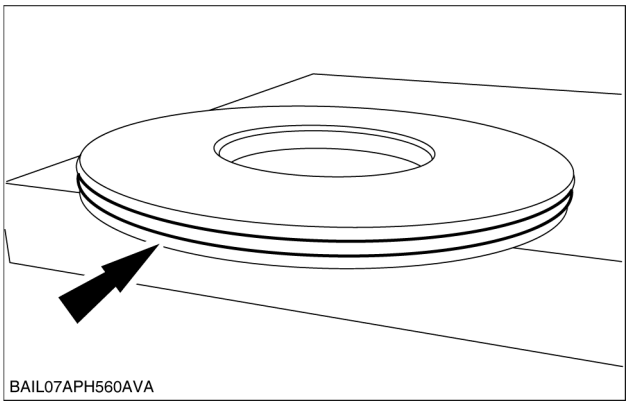
BAIL09CVT507AVA 12

13. Remove the oil seal from the shaft.



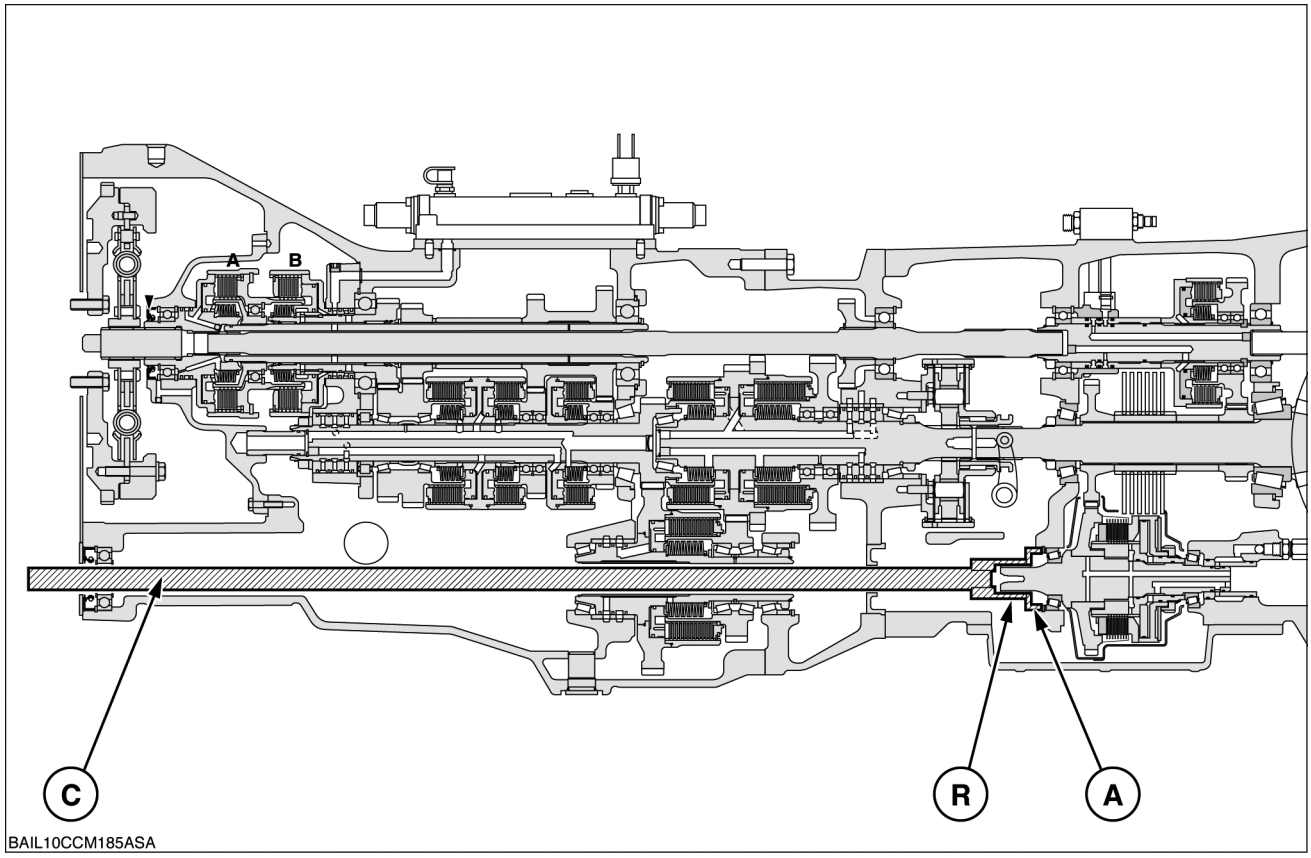
BAIL07APH559AVA 12

14. Remove the oil seal from the carrier.



BAIL07APH560AVA 13

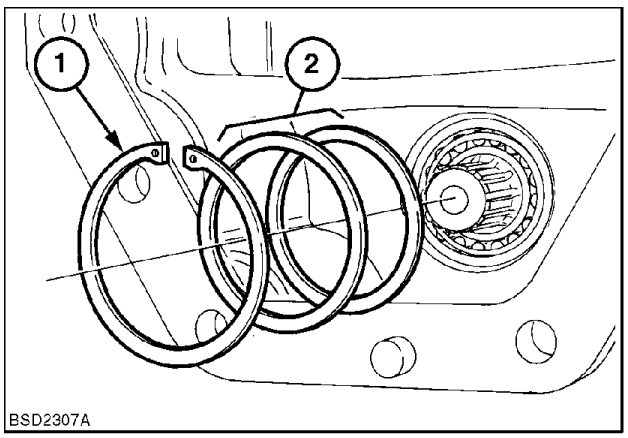
11. Install part C through the front of the transmission, into part B, as shown below. A copper face mallet can then be used to gently knock the end of part C, in order to tap the bearing outer casing into position. Once in position the tool can be removed and the correct shims and retaining clip put into place.



BAIL10CCM185ASA 15

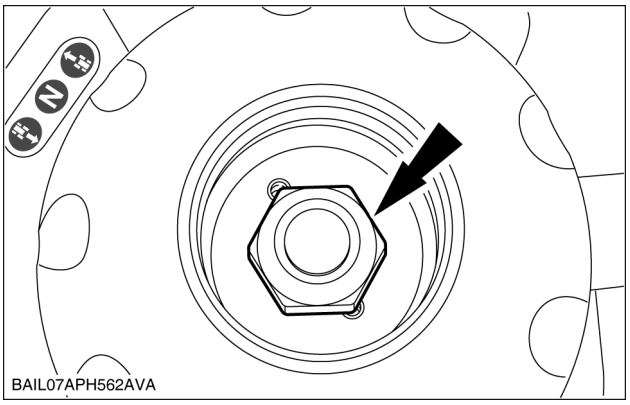
12. Install the shims **(2)** that were removed and the retaining clip **(1)**. Please ensure that the retaining clip is seated correctly.

NOTE: *Illustration shows transmission removed for clarity.*



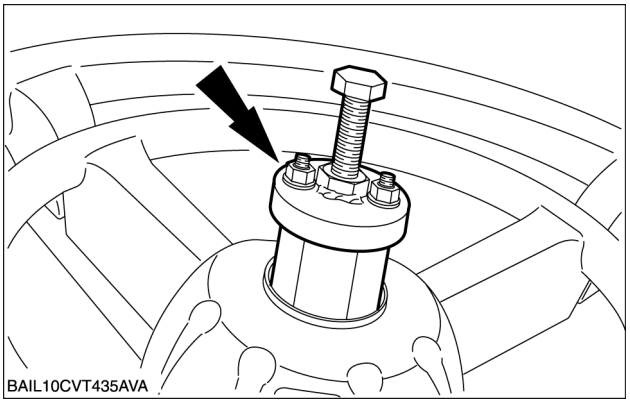
BSD2307A 16

4. Remove the steering wheel retaining nut.



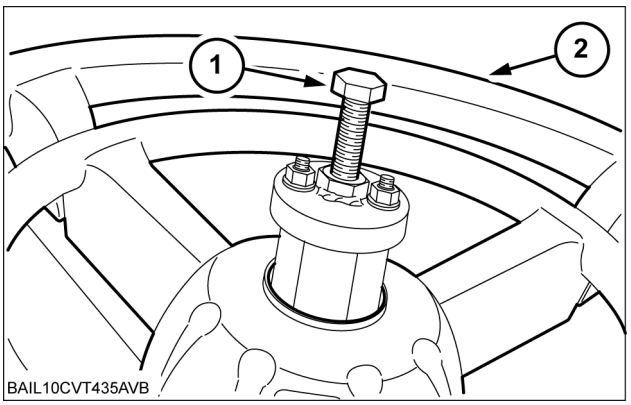
BAIL07APH562AVA 4

5. Install special tool **380200133**.



BAIL10CVT435AVA 5

6. Tighten the special tool bolt **(1)** to release the steering wheel from the steering column.
Remove the special tool and remove the steering wheel **(2)**.



BAIL10CVT435AVB 6

Shock relief valves (11)

These valves are used to protect the system from over pressurisation (relief at **220 - 240 bar** (**3190.0 - 3480.0 psi**)) due to external forces applied to the steering wheels of the tractor.

Steering control unit relief valve (13)

The relief valve within the Steering Control Unit is used to limit the maximum differential system pressure to **185 - 190 bar** (**2682.5 - 2755.0 psi**), between ports P and T.

Contents

AXLES, BRAKES AND STEERING - D

SERVICE BRAKE Pneumatic - 30.E

Index

AXLES, BRAKES AND STEERING - D

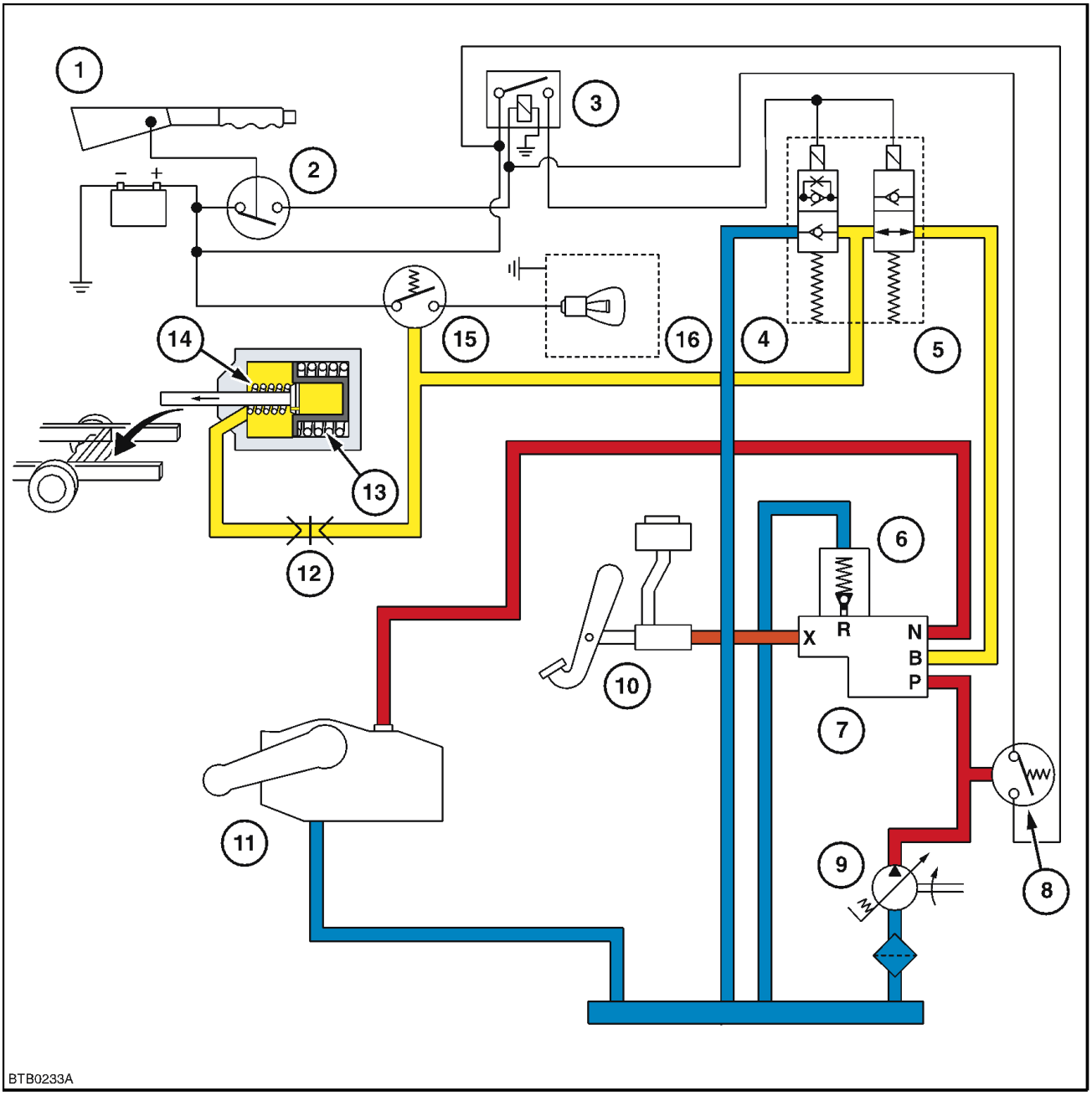
PARKING BRAKE Mechanical - 32.B

Italian Trailer Brake Valve - Engine Running Brakes Applied

When the tractor brake pedal is depressed the control of oil flow through the trailer brake valve **(7)** is the same as described for tractors with the standard trailer brake system, refer to **Trailer brake valve - Dynamic description (D.34.C)** and the outlet pressure through port 'B' will be **12 - 150 bar**(**174 - 2180 lbf/in 2**) depending on the pressure applied to the brake pedal.

The delivery solenoid **(5)** is open and the discharge solenoid **(4)** is closed. Oil exiting port `B' flows through the `Open' delivery solenoid valve **(5)** to the trailer brake coupler **(12)**.

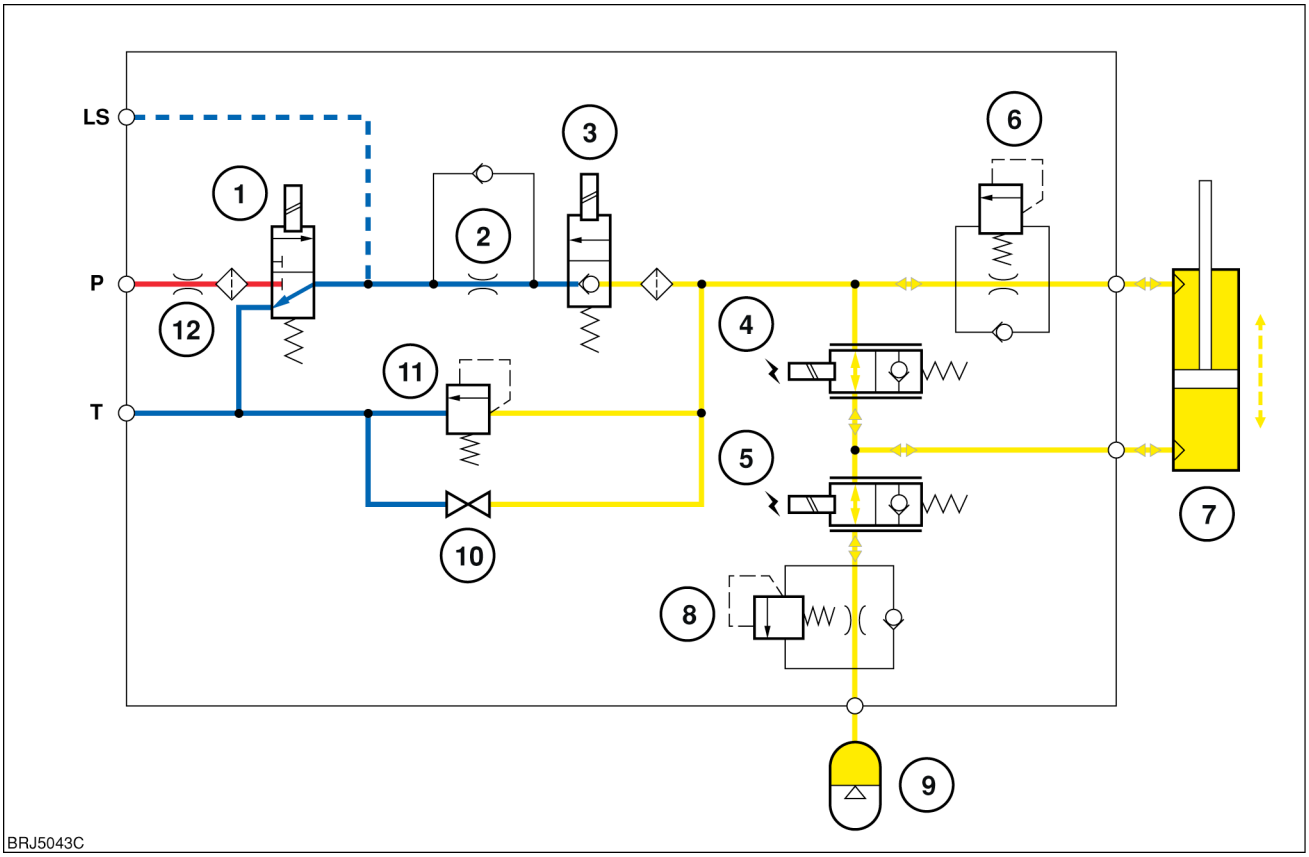
When a trailer is connected to the coupler the pressure passing through the coupling to the trailer braking mechanism overcomes the spring force (**(13)** and **(14)**) and moves the actuating pin forward to apply the brakes on the trailer.



BTB0233A 2

Italian Trailer Brake Valve Schematic- Engine Running Brakes Applied

Transition Mode



BAIL07APH377FSA 4

Slow opening of coil **(4)** allows oil from the rod side of the cylinder to the piston chamber and the accumulator. If **(5)** is energised the slow opening of this coil allows oil to flow to the piston side of the cylinder , (as in the suspension raise mode).

Contents

FRAME AND CAB - E

FRAME Primary frame - 10.B

Instrument panel Digital instrument cluster - Static description ICU3

NOTICE: *For tractors with* ***S- tech*** *monitors some of the displays and setting procedures vary. You can find further information about this in the operating instructions for the* ***S- tech*** *monitor.*

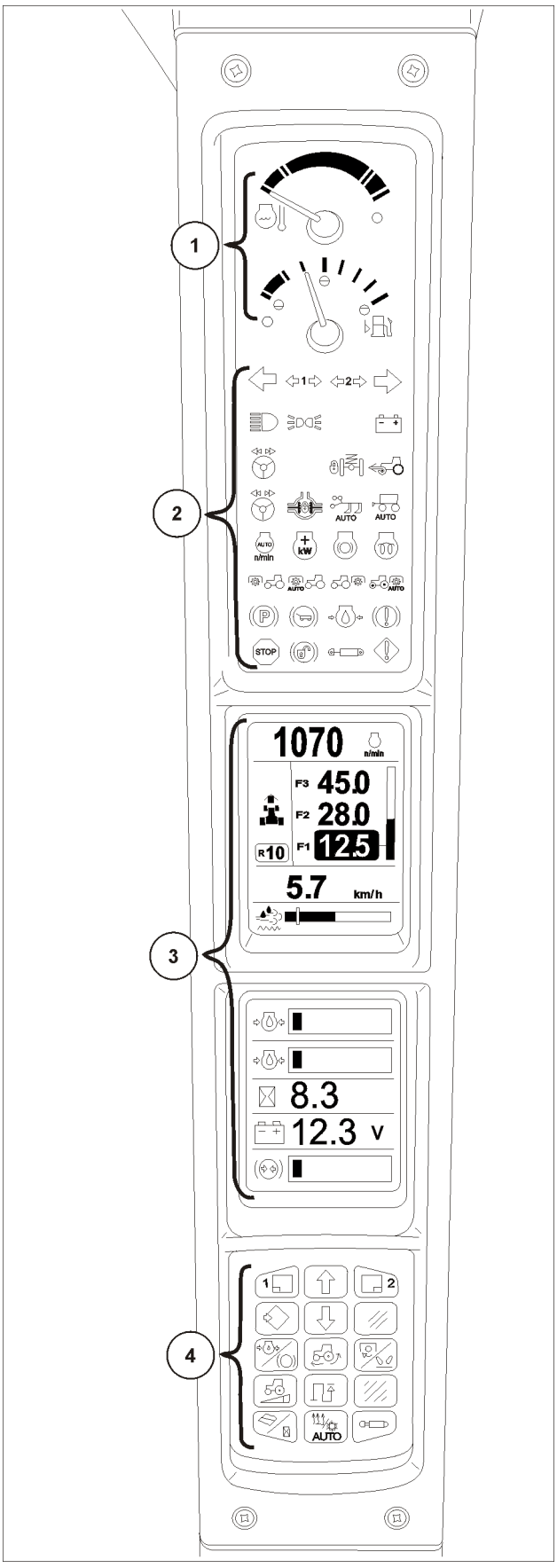
The combi-instrument **ICU3** is offered in two versions:

- Basic combi-instrument
- Combi-instrument with enhanced keypad and performance monitor

The combi-instrument contains the following displays and operating elements:

1. Analogue displays
2. Display and warning lights
3. Displays
4. Keypad
5. Acoustic warning device (positioned on the reverse of the combi-instrument)

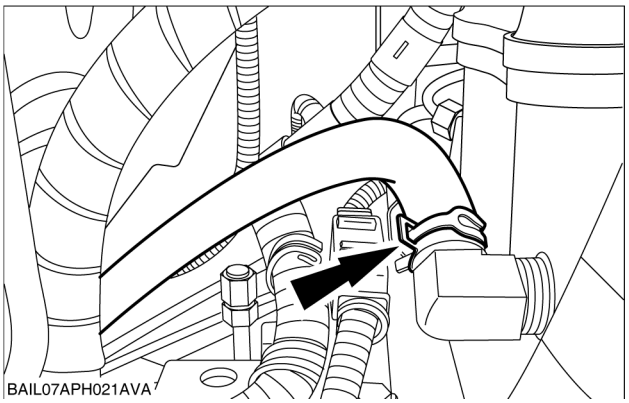
NOTE: *Any operations, functions or applications that are not described in the repair manual can be found in the operating instructions.*



SS10J173 1

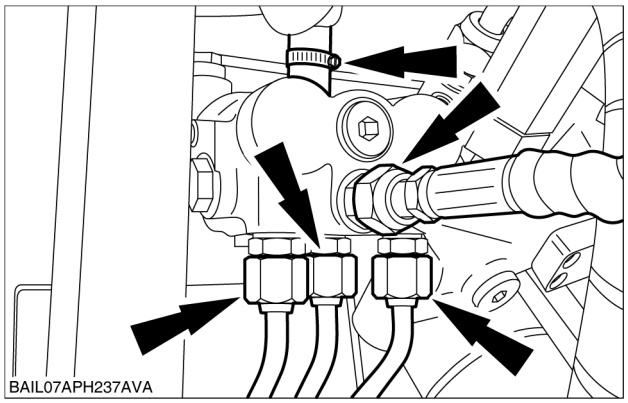
Symbol on display	Indicator light	Warning light	Acoustic warning	Cause	Signal
 **DEF/AdBlue LEVEL VERY LOW**	-	 flashes **4 s**/ illuminates	Non-critical	**DEF/AdBlue** supply is < **5 % (MY2010)**: Reduction in the engine performance. **DEF/AdBlue** supply is < **5 % (MY2011)**: Further reduction in the engine performance.	**CAN** message
 **DEF/AdBlue LEVEL VERY LOW**	-	 flashes	Critical	**DEF/AdBlue** supply is < **2.5 % (MY2010)**: Reduction in the engine performance. **DEF/AdBlue** supply is < **2.5 % (MY2011)**: Further reduction in the engine performance.	**CAN** message
 **DEF/AdBlue TANK EMPTY**	-	 flashes	Critical	**DEF/AdBlue** Tank is empty **(MY2010)**: Reduced engine performance and "Engine STOP" then activated.	**CAN** message
 **DEF/AdBlue TANK EMPTY**	-	 flashes	Critical	**DEF/AdBlue** Tank is empty **(MY2011)**: Maximum reduction in engine performance.	**CAN** message
 **30** **DEF/AdBlue TANK EMPTY** 	-	 flashes	Critical	**DEF/AdBlue** Tank is empty **(MY2010)**: Engine runs idle, timer shows the remaining time until the automatic engine shutdown function is activated.	**CAN** message
				DEF/AdBlue Tank is empty **(MY2011)**: Engine has been switched off by driver and restarted (emergency restart). Timer shows the remaining time until the automatic engine shutdown function is activated.	
 **POOR DEF/AdBlue QUALITY**	-	 flashes **4 s**/ illuminates	Non-critical	**DEF/AdBlue** bad quality **(MY2010)**: Reduction in the engine performance.	**CAN** message
 **POOR DEF/AdBlue QUALITY**	-	 flashes **4 s**/ illuminates	Non-critical	**DEF/AdBlue** bad quality **(MY2011)**: Reduction in the engine performance.	**CAN** message

40. Connect the heater supply hose to the rear of the engine cylinder head.



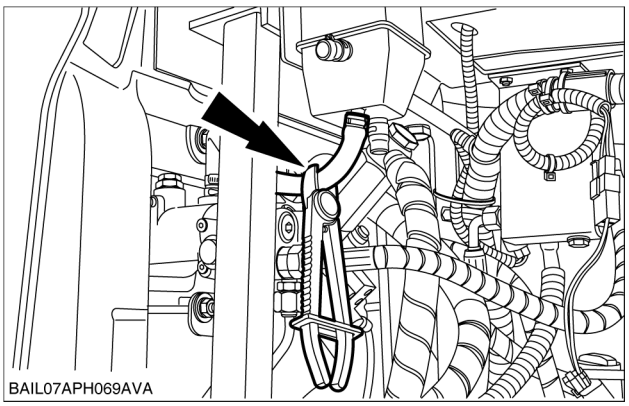
BAIL07APH021AVA 39

41. Connect the brake master cylinder pipe and hose connections.



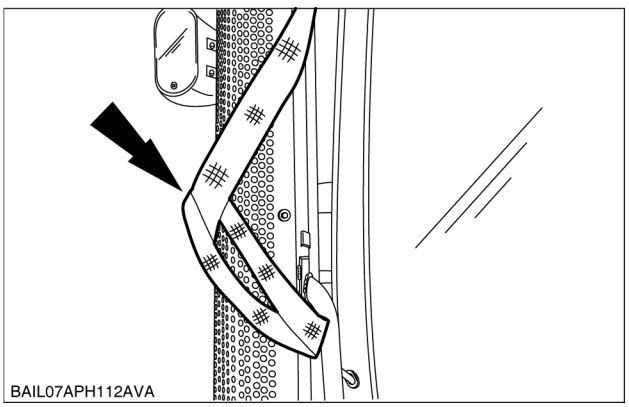
BAIL07APH237AVA 40

42. Remove the clamp from the brake master cylinder reservoir hose.



BAIL07APH069AVA 41

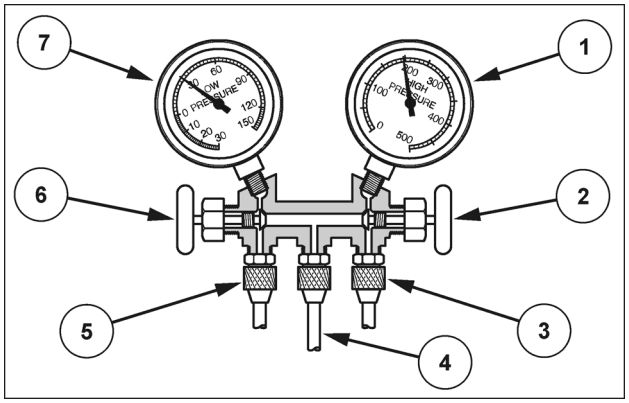
43. Using a suitable sling install the exhaust muffler to the exhaust.



BAIL07APH112AVA 42

PERFORMANCE TEST EXAMPLE 3

1 High Side Normal
2 High Side Hand Valve Closed
3 High Side Hose Connected to High Side Service Connector
4 Not Used
5 Low Side Hose Connected to Low Side Service Connector
6 Low Side Hand Valve Closed
7 Low Side Low



SS11E027 3

PROBLEM:
Insufficient cooling.

CAUSE:
Air in system.

CONDITIONS*
Low side pressure reading does not change when compressor cycles “on" and “off".
High side pressure slightly high or slightly low. Gauge should read **16 - 18 bar** (**232 - 261 psi**).
Evaporator air not cold.

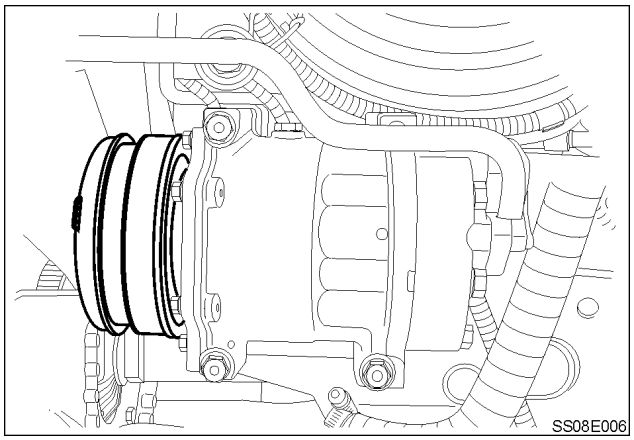
CORRECTIVE PROCEDURES

1. Leak test the system. Give special attention to the compressor seal area.
2. Discharge and recover the refrigerant from the system.
3. Repair leaks.
4. Replace the receiver/dryer.
5. Check compressor oil to ensure no loss.
6. Evacuate the system.
7. Charge the system.
8. Performance test the system.

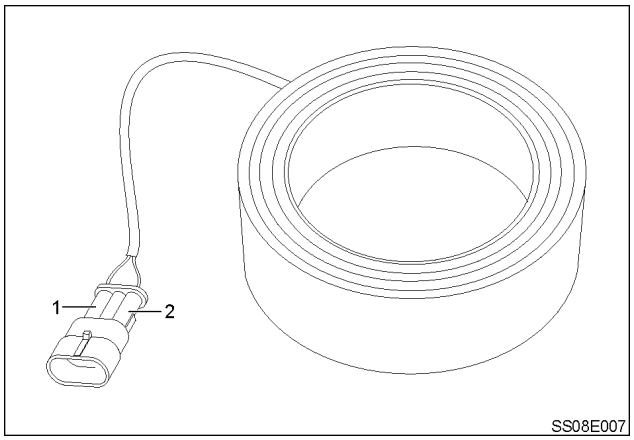
DIAGNOSIS: Air or moisture in system. System not fully charged.

NOTE: *Test procedure based upon ambient temperature of* ***35 °C (95 °F****). For proper high side gauge reading for other ambient temperatures, refer to the pressure temperature chart* ***ENVIRONMENT CONTROL Heating, ventilation and air-conditioning - Service instruction (E.40.D)****.*

Compressor Magnetic clutch - Overview



SS08E006 1



SS08E007 2

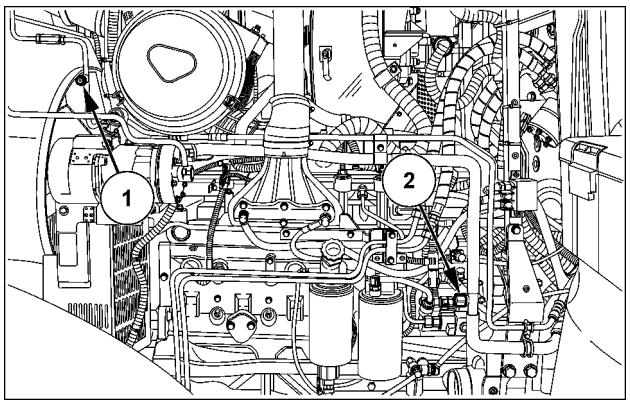
Location: on left side of engine

Nominal voltage	**12 V**
Pull-in voltage min.	**7,5 V**
Power consumption	**3,6 - 4,2 A**
Power output	**43 W**
Resistance	**2,9 - 3,6 Ω**
Coupling gap	**0.4 - 0.8 mm** (**0.016 - 0.031 in**)

ENVIRONMENT CONTROL Heating, ventilation and air-conditioning - Charging

NOTE: *Make sure that there are no leaks in the air conditioning (A/C) system and that the A/C system has been fully evacuated. Observe all safety recommendations when handling refrigerant R-134a - see* ***ENVIRONMENT CONTROL Heating, ventilation and air-conditioning - Service instruction (E.40.D)****.*

1. Make sure that the charging unit is correctly connected to the vehicle A/C system in accordance with the manufacturers instructions.
   High Side Service Valve **(1)**
   Low Side Service Valve **(2)**



SS11E042 1

2. If a charging unit, in conjunction with the manifold gauge set is used, open the high and low side hand valves on the manifold.
3. Charge the A/C system with the corresponding filling quantity of refrigerant - see **ENVIRONMENT CONTROL Heating, ventilation and air-conditioning - General specification (E.40.D)**.
4. If the charging rate becomes very slow close the high side valve, start the engine and set the engine speed to idle. Turn the A/C ON so that the compressor can pull the remainder of the refrigerant into the A/C system.
5. If the refrigerant charge will not completely transfer to the A/C system, recover and recharge the A/C system.
6. Close the high and low side valves on the units control panel, or manifold gauge set if being used and test the A/C system as detailed in Performance Testing The Air Conditioning System on **ENVIRONMENT CONTROL Heating, ventilation and air-conditioning - Service instruction (E.40.D)**.

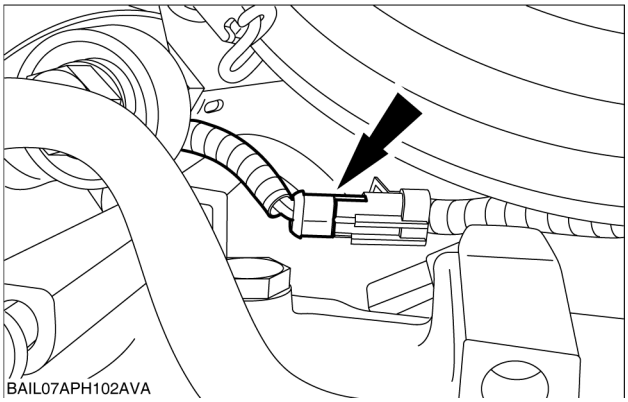
NOTE: *After charging an A/C system use the following start up procedure to make sure that the lubricating oil is properly dispersed around the A/C system:*

7. Make sure that the A/C system is switched OFF.
8. Start the engine and bring the engine speed down to idle.
9. Turn the A/C ON and allow the system to operate for at least one minute before increasing engine speed.

Compressor - Remove

Prior operation:
Discharge the air conditioning system, for further information refer to **ENVIRONMENT CONTROL Heating, ventilation and air-conditioning - Discharging (E.40.D)**
Prior operation:
Remove the air conditioning drive belt, for further information refer to **Fan and drive Belt - Remove (B.50.A)**

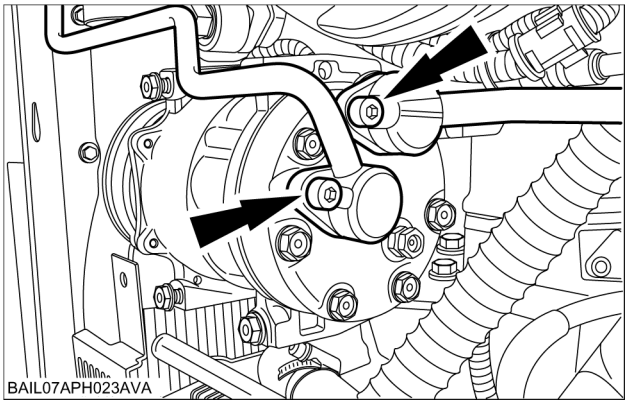
1. Disconnect the compressor electrical connector.



BAIL07APH102AVA 1

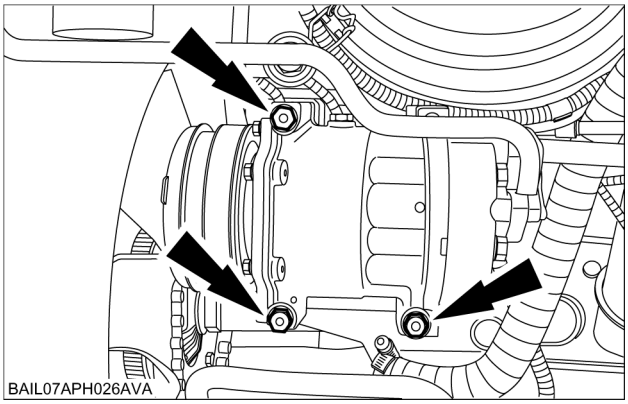
2. Disconnect the compressor supply and return pipes.

NOTE: *Cap and plug all fittings to prevent any dirt entering the system.*



BAIL07APH023AVA 2

3. Remove the compressor.



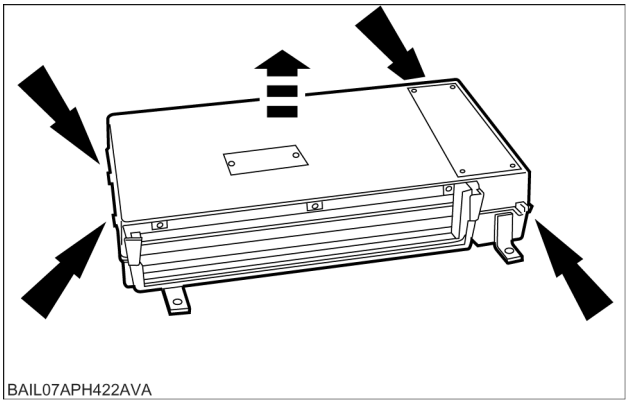
BAIL07APH026AVA 3

Expansion valve - Replace

Prior operation:
Remove the heating and air conditioning unit - see **ENVIRONMENT CONTROL Heating, ventilation and air-conditioning - Remove (E.40.D)**.

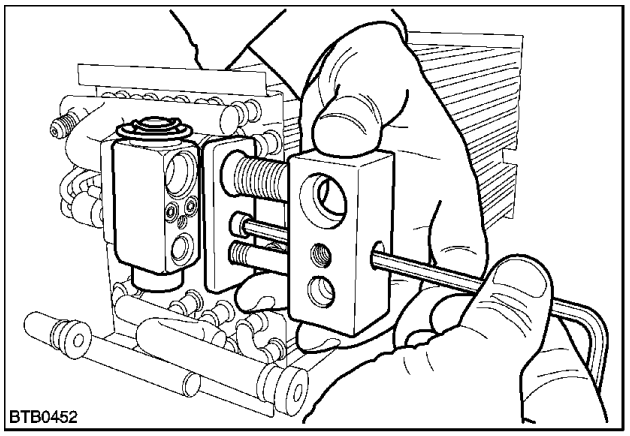
Removal

1. Remove the four retaining clips on the housing and lift out the evaporator to gain access to the expansion valve.



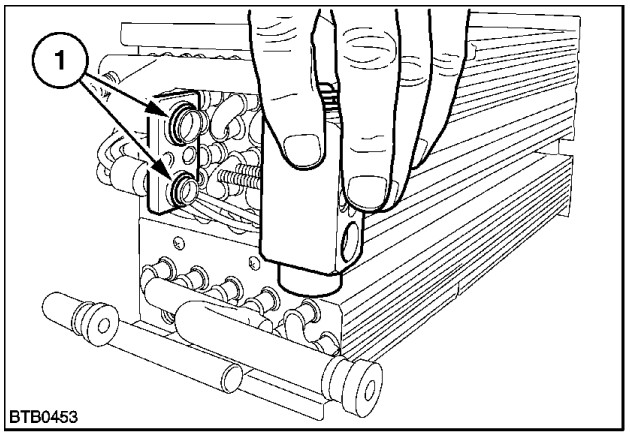
BAIL07APH422AVA 1

2. Loosen the socket head screw on the inlet/outlet fitting at the expansion valve and remove the fitting.



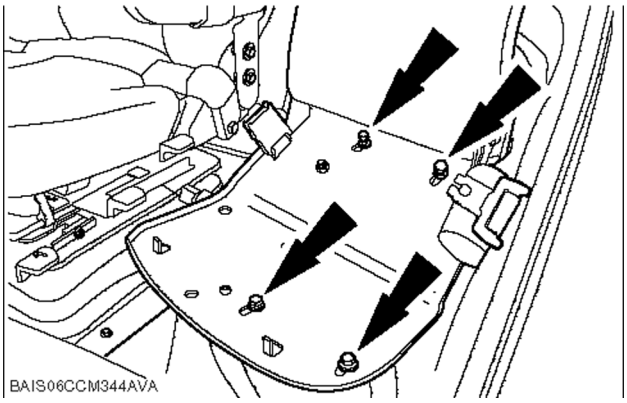
BTB0452 2

3. Remove the expansion valve and the O-rings **(1)**.



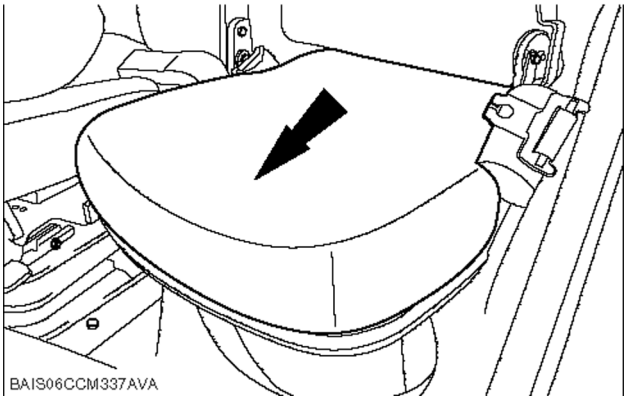
BTB0453 3

12. Fit the retaining plate.
Install the passenger seat.



BAIS06CCM344AVA 12

13. Place the seat cushion on the passenger seat.



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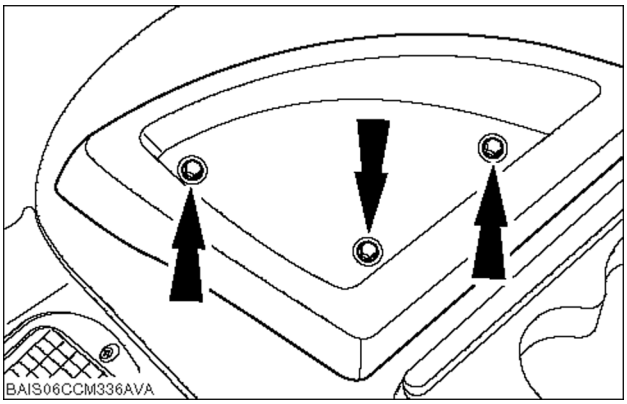
14. Fit the repository on the left side.



BAIS06CCM336AVA 14

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