TORQUE SPECIFICATIONS - DECIMAL HARDWARE

Use the torques in this chart when special torques are not given. These torques apply to fasteners with both UNC and UNF threads as received from suppliers dry, or when lubricated with engine oil. Not applicable if special graphites, Molydisulfide greases, or other extreme pressure lubricants are used.

Grade 5 Bolts, Nuts, and Studs



Size	Pound-Inches	Newton metres
1/4 inch	108 to 132	12 to 15
5/16 inch	204 to 252	23 to 28
3/8 inch	420 to 504	48 to 57
Size	Pound-Feet	Newton metres
7/16 inch	54 to 64	73 to 87
1/2 inch	80 to 96	109 to 130
9/16 inch	110 to 132	149 to 179
5/8 inch	150 to 180	203 to 244
3/4 inch	270 to 324	366 to 439
7/8 inch	400 to 480	542 to 651
1.0 inch	580 to 696	787 to 944
1-1/8 inch	800 to 880	1085 to 1193
1-1/4 inch	1120 to 1240	1519 to 1681
1-3/8 inch	1460 to 1680	1980 to 2278
1-1/2 inch	1940 to 2200	2631 to 2983

Grade 8 Bolts, Nuts, and Studs



Size	Pound-Inches	Newton metres
1/4 inch	144 to 180	16 to 20
5/16 inch	288 to 348	33 to 39
3/8 inch	540 to 648	61 to 73
Size	Pound-Feet	Newton metres
7/16 inch	70 to 84	95 to 114
1/2 inch	110 to 132	149 to 179
9/16 inch	160 to 192	217 to 260
5/8 inch	220 to 264	298 to 358
3/4 inch	380 to 456	515 to 618
7/8 inch	600 to 720	814 to 976
1.0 inch	900 to 1080	1220 to 1465
1-1/8 inch	1280 to 1440	1736 to 1953
1-1/4 inch	1820 to 2000	2468 to 2712
1-3/8 inch	2380 to 2720	3227 to 3688
1-1/2 inch	3160 to 3560	4285 to 4827

NOTE: *Use thick nuts with Grade 8 bolts.*

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CASE IH

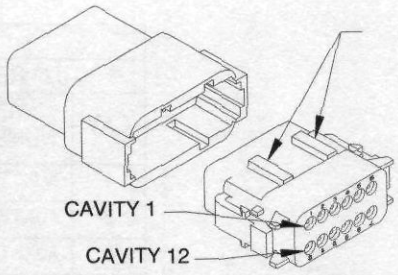
MX Magnum - Service Manual
Book 2 - Table of Contents

Description	Book Number	Section Number
Electrical System How it Works and Troubleshooting	2	4001

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51F
PIN HOUSING
FNRP HARNESS
223672A1

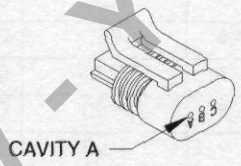


51M
SOCKET HOUSING
CAB HARNESS
223671A1

CONNECTOR 51M		
FNRP SWITCH		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	623A	START INPUT
2	172B	START OUTPUT
3	550J	RUN INPUT
4	511A	FNRP - NOT PARK
5	552B	FNRP-REVERSE
6	551D	FNRP-FORWARD
7	553F	FNRP-NOT NEUTRAL
8	561B	FNRP GROUND
9	723A	HORN
10	178AB	RT/LT TURN COMMON GND
11	752A	FNRP RIGHT TURN INDICATOR
12	751A	FNRP LEFT TURN INDICATOR

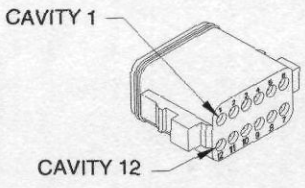
CONNECTOR 51F		
FNRP SWITCH		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1		START INPUT
2		START OUTPUT
3		RUN INPUT
4		FNRP - NOT PARK
5		FNRP-REVERSE
6		FNRP-FORWARD
7		FNRP-NOT NEUTRAL
8		FNRP GROUND
9		HORN
10		RT/LT TURN COMMON GND
11		FNRP RIGHT TURN INDICATOR
12		FNRP LEFT TURN INDICATOR

52
SOCKET HOUSING
CAB HARNESS
198550A1



CONNECTOR 52		
ELECTRIC CLUTCH		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
A	557D	CLUTCH POTENTIOMETER GROUND
B	555D	CLUTCH POSITION
C	556D	SUPPLY (8V DC)

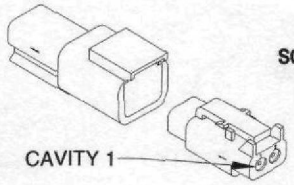
53M
SOCKET HOUSING
223671A1



CONNECTOR 53M		
J1 - REMOTE CONTROLLER (AUX) - GRAY		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	900A	REMOTE (AUX) B+ - 1
2	179AR	CLEAN GROUND - 1
3	AUX5 TOP 1	B+ REMOTE (AUX) 5 B RAISE
4	AUX5 BOT 1	B+ REMOTE (AUX) 5 A LOWER
5	AUX4 TOP 1	B+ REMOTE (AUX) 4 B RAISE
6	AUX4 BOT 1	B+ REMOTE (AUX) 4 A LOWER
7	AUX4 BOT 2	RETURN REMOTE (AUX) 4 A LOWER
8	AUX4 TOP 2	RETURN REMOTE (AUX) 4 B RAISE
9	AUX5 BOT 2	RETURN REMOTE (AUX) 5 A LOWER
10	AUX5 TOP 2	RETURN REMOTE (AUX) 5 B RAISE
11	179AS	CLEAN GROUND - 2
12	900B	REMOTE (AUX) B+ - 2

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CONNECTOR 237F		
RIGHT FENDER WIDE MARKER LIGHT		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	754F	MARKER LIGHT
2	174U	GROUND

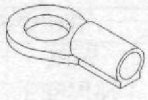
CONNECTOR 237M		
RIGHT FENDER WIDE MARKER LIGHT		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	LAMP LEADS	MARKER LIGHT B+
2	LAMP LEADS	GROUND

239F
CAB HARNESS

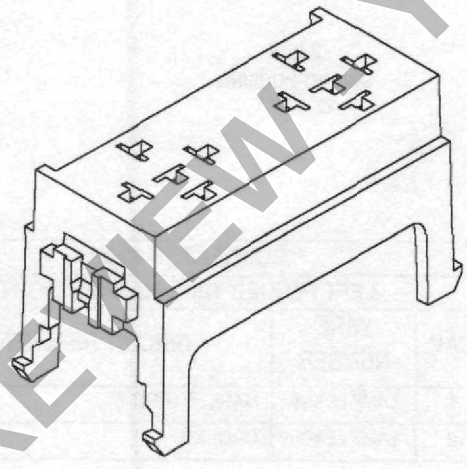


CONNECTOR 239F		
RING TERMINAL		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	104A	IGNITION FEED

240F
CAB HARNESS



CONNECTOR 240F		
RING TERMINAL		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
1	101A	UNSWITCHED B+



CONNECTOR 241F		
CONTROLLER RELAY		
CAV	WIRE NUMBER	CIRCUIT REFERENCE
A1	177H	COIL GND
A2	106A 106C	IGNITION FEED
A3	102A	SWITCHED B+
A4		B+ (NORMALLY CLOSED)
A4	200A	B+ (NORMALLY OPEN)
B1		OPEN
B2		OPEN
B3		OPEN
B4		OPEN
B5		OPEN

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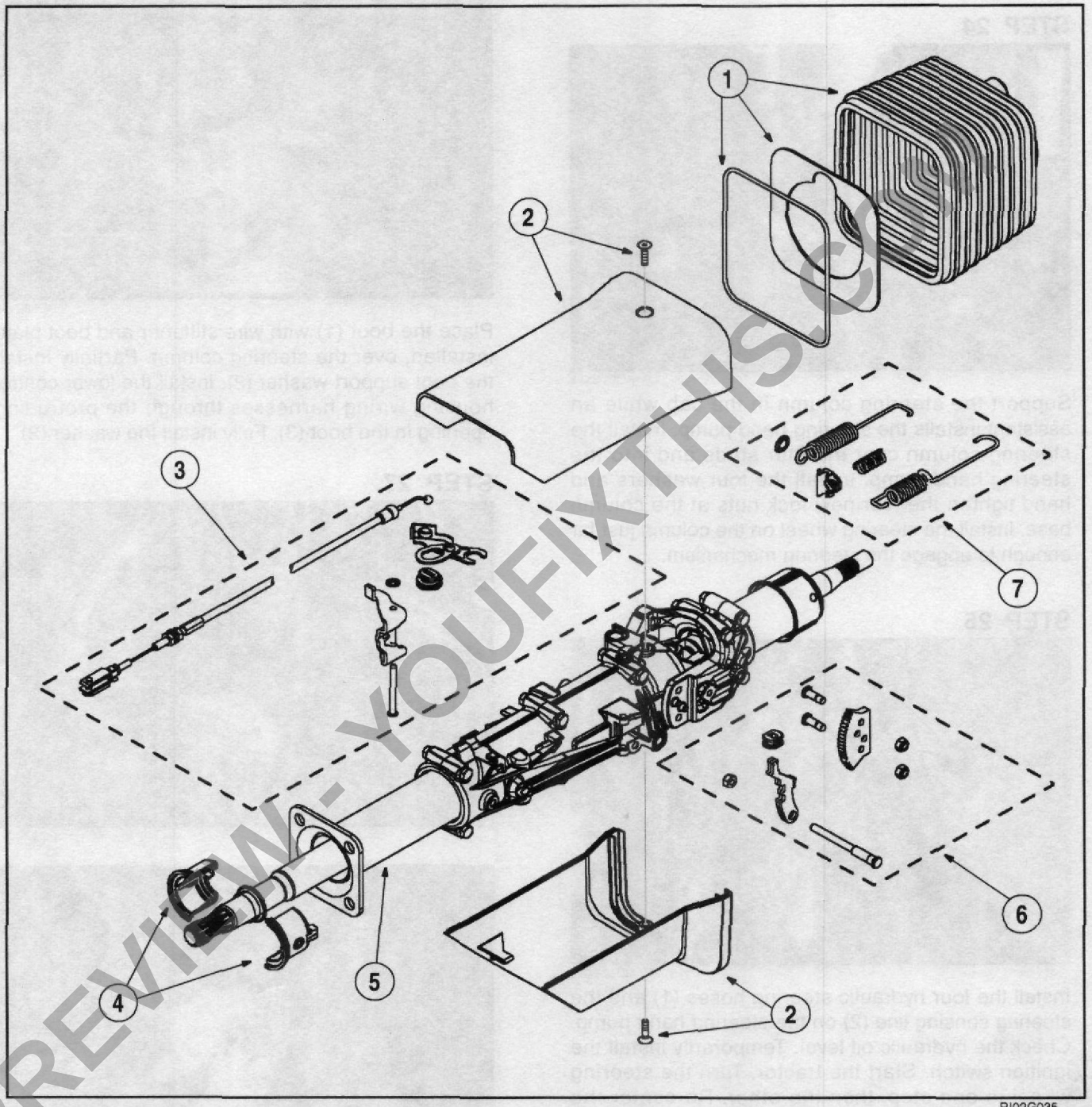
C - Engine Oil Pressure Sender Circuit Test

	Test point	Good Reading	Possible Cause of Bad Reading
1	Ignition in Run position. Remove electrical connector 216 from engine oil pressure sender. Measure voltage at engine oil pressure sender connector 216 terminal B.	5 volts If good reading, go to test point 5.	Open in 255(R) signal circuit from instrument cluster. Go to next test point.
2	Measure voltage at in-line connector 334 terminal 9.	5 volts If good reading, repair open in 255C(R).	Open in 255(R) signal circuit from instrument cluster. Go to next test point.
3	Measure voltage at in-line connector 60 terminal L.	5 volts If good reading, repair open in 255B(R).	Open in 255(R) signal circuit from instrument cluster. Go to next test point.
4	Measure voltage at instrument cluster connector 61 terminal 18.	5 volts If good reading, repair open in 255A(R).	Instrument cluster.
5	Measure resistance from engine oil pressure sender connector 216 terminal A to ground.	Less than 1 ohm If good reading, go to next test point.	Open in circuit from connector 216 terminal A to ground.
6	Ignition Off. Remove electrical connector 61 from instrument cluster. Measure resistance from engine oil pressure sender connector 216 terminal C to instrument cluster connector 61 terminal 27.	Less than 1 ohm If good reading, circuits okay. Replace engine oil pressure sender.	Open in 256(Y) circuit from instrument cluster. Go to next test point.
7	Measure resistance from in-line connector 334 terminal 22 to instrument cluster connector 61 terminal 27.	Less than 1 ohm If good reading, repair open in 256C(Y) circuit.	Open in 256(Y) circuit from instrument cluster. Go to next test point.
8	Measure resistance from in-line connector 60 terminal 23 to instrument cluster connector 61 terminal 27.	Less than 1 ohm If good reading, repair open in 256B(Y) circuit.	Open in 256A(Y) circuit.

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STEERING COLUMN ASSEMBLY



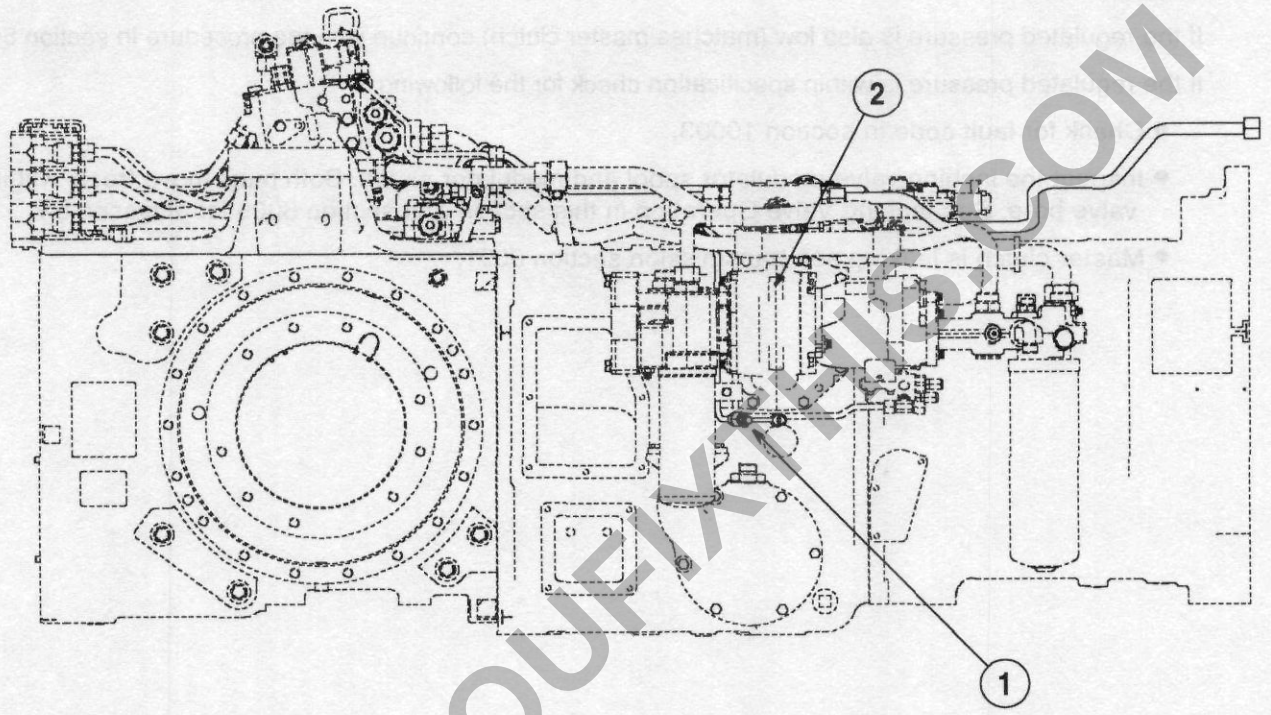
RI02G035

1. BELLOW SET
2. COVER SET
3. RELEASE DEVICE SET
4. BEARING SET
5. STEERING COLUMN
6. SEGMENT SET
7. SPRING SET

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MASTER CLUTCH PRESSURE CHECK



RH98F161

1. DIAGNOSTIC TEST PORT
2. PUMP DRIVE GEAR HOUSING

The master clutch pressure diagnostic test port is located on the right hand side of the transmission below the pump drive gear housing.

Test Fitting and Tool Requirements:

- 400 PSI (28 bar) pressure gauge with extension hose long enough to reach into cab.

IMPORTANT: *The tractor must be driven to perform this test. Perform this test in an open outdoor location free of obstacles and people.*

- Connect the gauge/extension hose to the diagnostic port.

- Turn the Differential Lock OFF.

- Place the transmission control lever in "P" Park. Start and run the tractor at low idle.

- Using the gear selection switch select gear number 1.

- Press and hold the inching pedal to the floor.

- Place the transmission control lever in forward.

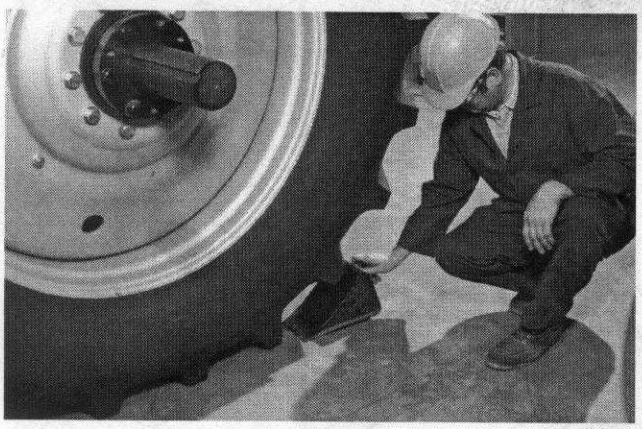
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SPEED TO RANGE TRANSMISSION SPLIT

Removal

STEP 1



96RS28A

Prepare for removal as follows:

1. Park the tractor on a hard, level surface.
2. Put the shift control lever in PARK.
3. Fully lower the rear three-point hitch.
4. Stop the engine and remove the key.
5. Put blocks behind and in front of the rear wheels.
6. See Section 9008 for hood removal information and remove the hood.
7. See Section 9005 for cab removal information and remove the cab.
8. See Section 3001 for fuel tank removal information and remove the fuel tanks.
9. See Section 6016 for MFD drive shaft removal information and remove the MFD drive shaft.

STEP 2



91S17

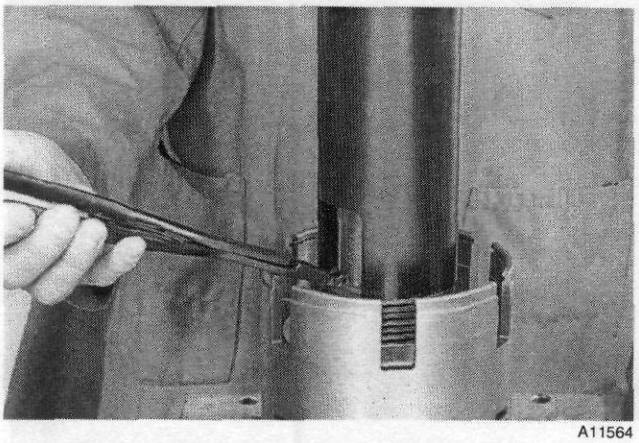
Drain the transmission fluids from the range, speed, and rear frame. Drain fluid into clean drain pans.

NOTE: *The transmission capacity is approximately 172 liters (45 gallons)*

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STEP 163

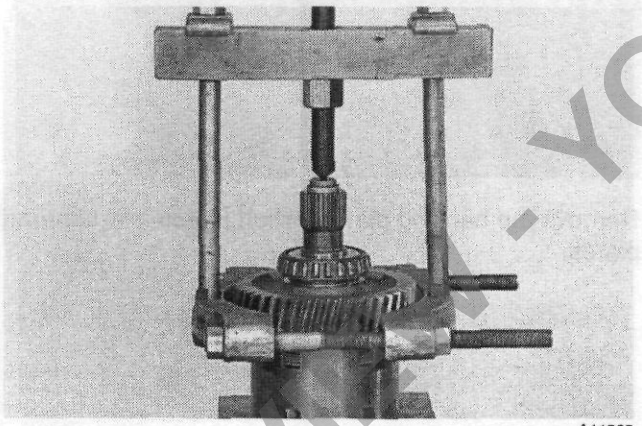


A11564

Remove Belleville washers as follows:

1. Install the compression sleeve with the notch CAS1903-3 over the piston return Belleville washers. The opening in the sleeve must be over the ends of the snap ring.
2. Compress the Belleville washers with a hydraulic press and remove the snap ring.
3. Remove the Belleville washers.

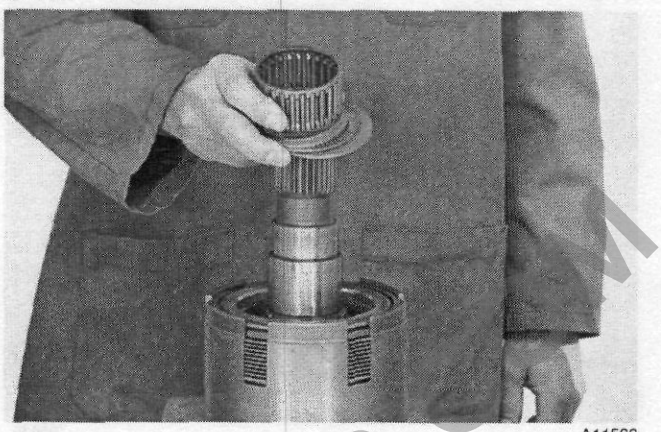
STEP 164



A11565

Turn the shaft over. Use a bearing puller to remove the (1st-2nd) driven gear, two bearing thrust washers, needle thrust bearing and the rear bearing cone.

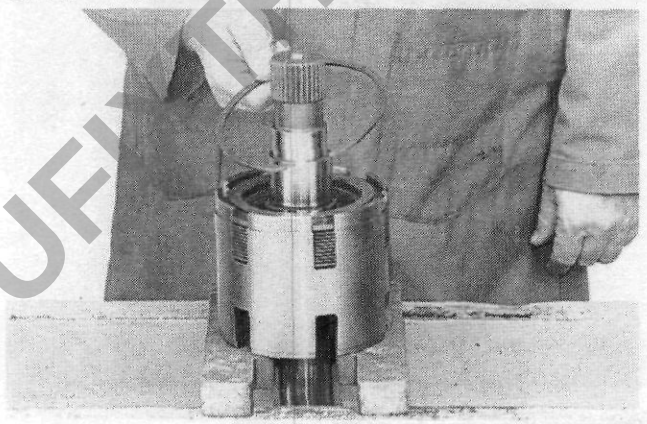
STEP 165



A11566

Remove the caged needle bearing and the two bearing thrust washers and needle thrust bearing.

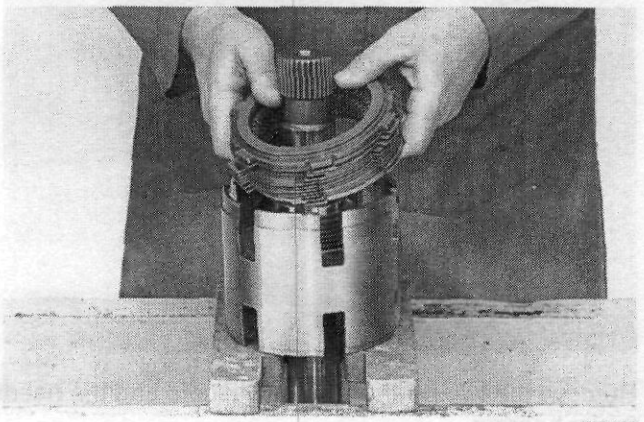
STEP 166



T95460

Remove the snap ring from inside the clutch plate carrier.

STEP 167



T95461

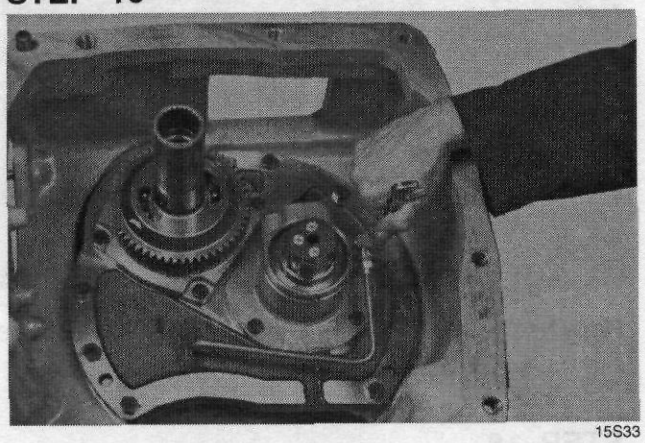
Remove the backing plate, friction plates and separator plates.

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Removing the Input Shaft, Countershaft, and Mechanical Front Drive (MFD) Clutch Shaft

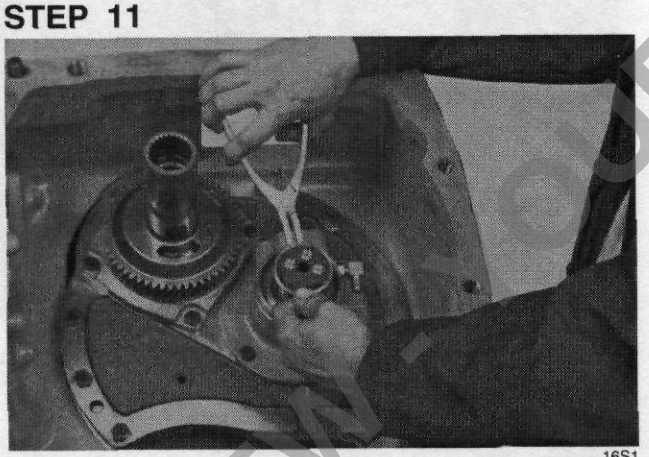
STEP 10



15S33

Remove the lubrication tube from the input shaft bearing cage.

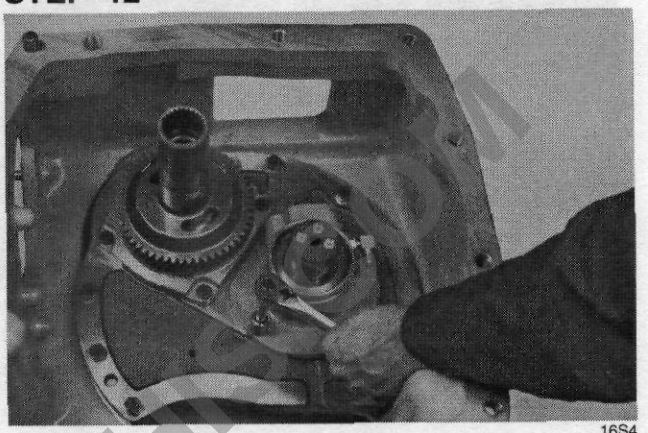
STEP 11



16S1

Remove the master clutch carrier rear retaining ring from the input shaft.

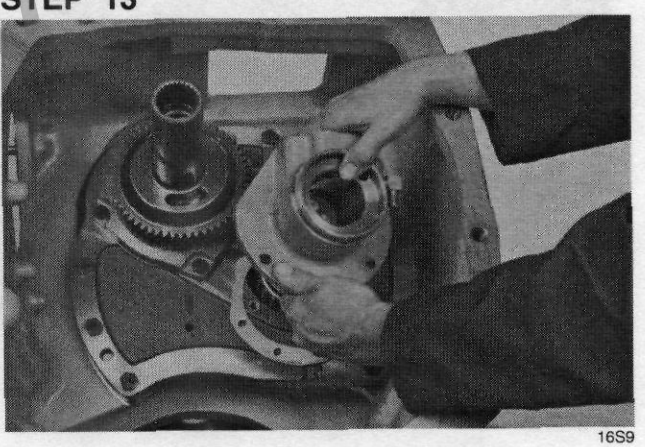
STEP 12



16S4

Remove the mounting bolts from the input shaft bearing cage.

STEP 13



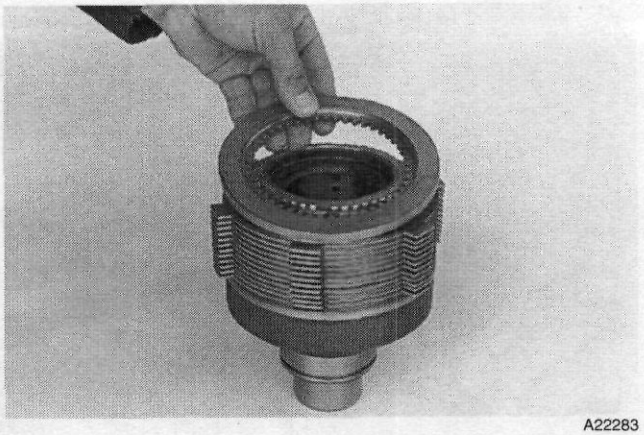
16S9

Remove the input shaft bearing cage.

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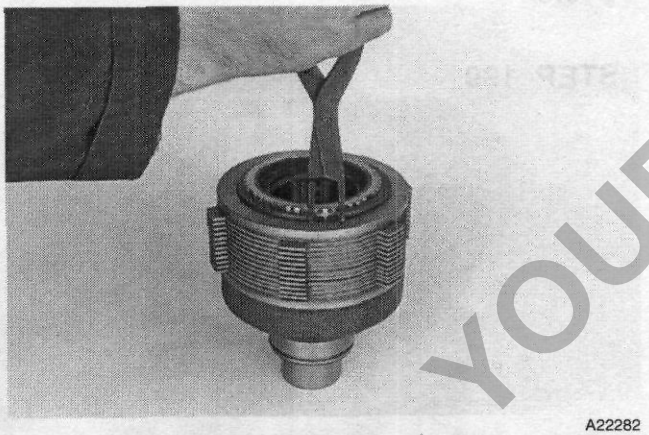
STEP 192



A22283

Install the clutch backing plate, flat side down, on top of the last friction plate.

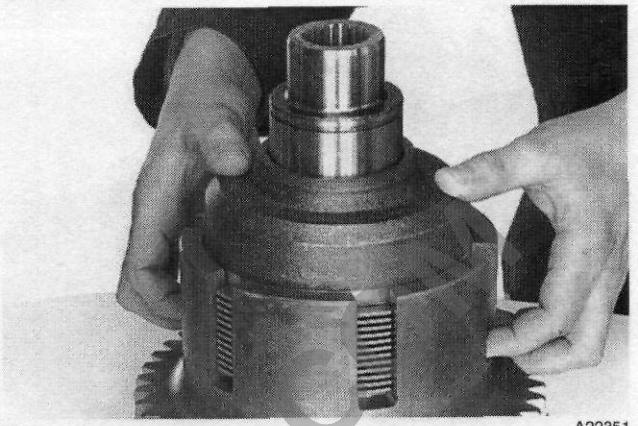
STEP 193



A22282

Install the snap ring into the groove in the hub assembly.

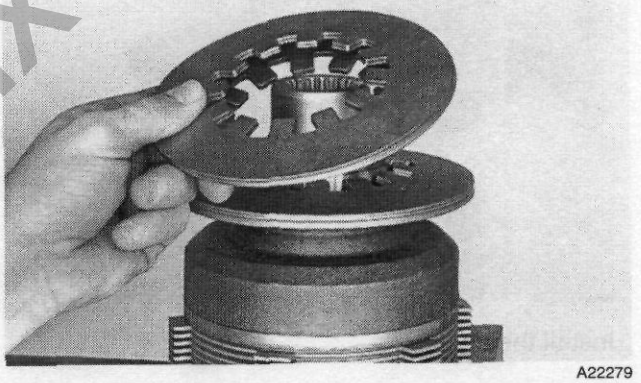
STEP 194



A22351

Install the hub assembly into the gear/carrier to align the separator plate tabs. Once the separator plate tabs are aligned, carefully remove the hub assembly.

STEP 195



A22279

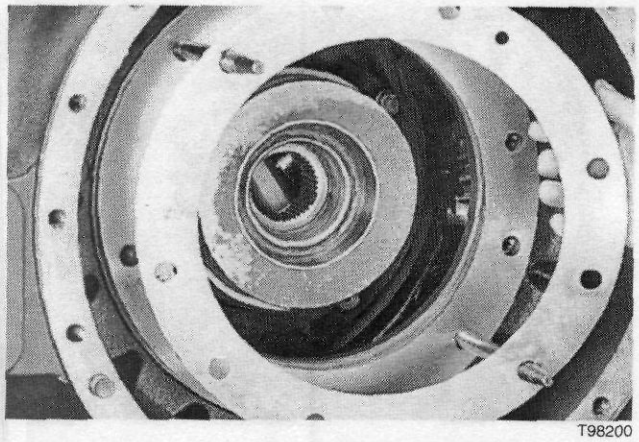
Without moving the separator plates, place the hub assembly in a hydraulic press. Install a Belleville spring concave side up and a second concave side down. Install the next two pairs of Belleville springs in the same way.

For 255/285 models, install a third pair of springs in the same way.

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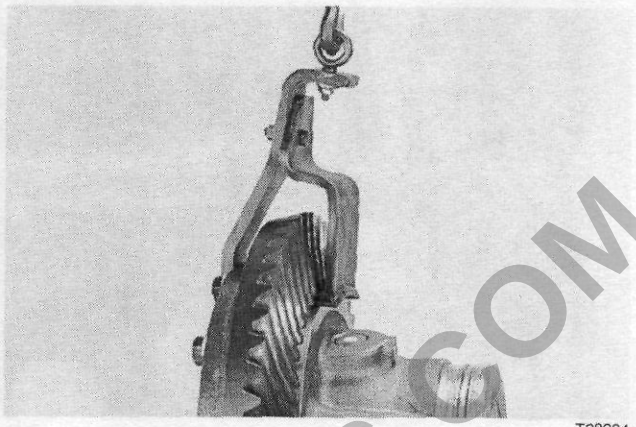
STEP 33



T98200

Remove the right-hand bearing retainer shims from the housing and tag for location.

STEP 34



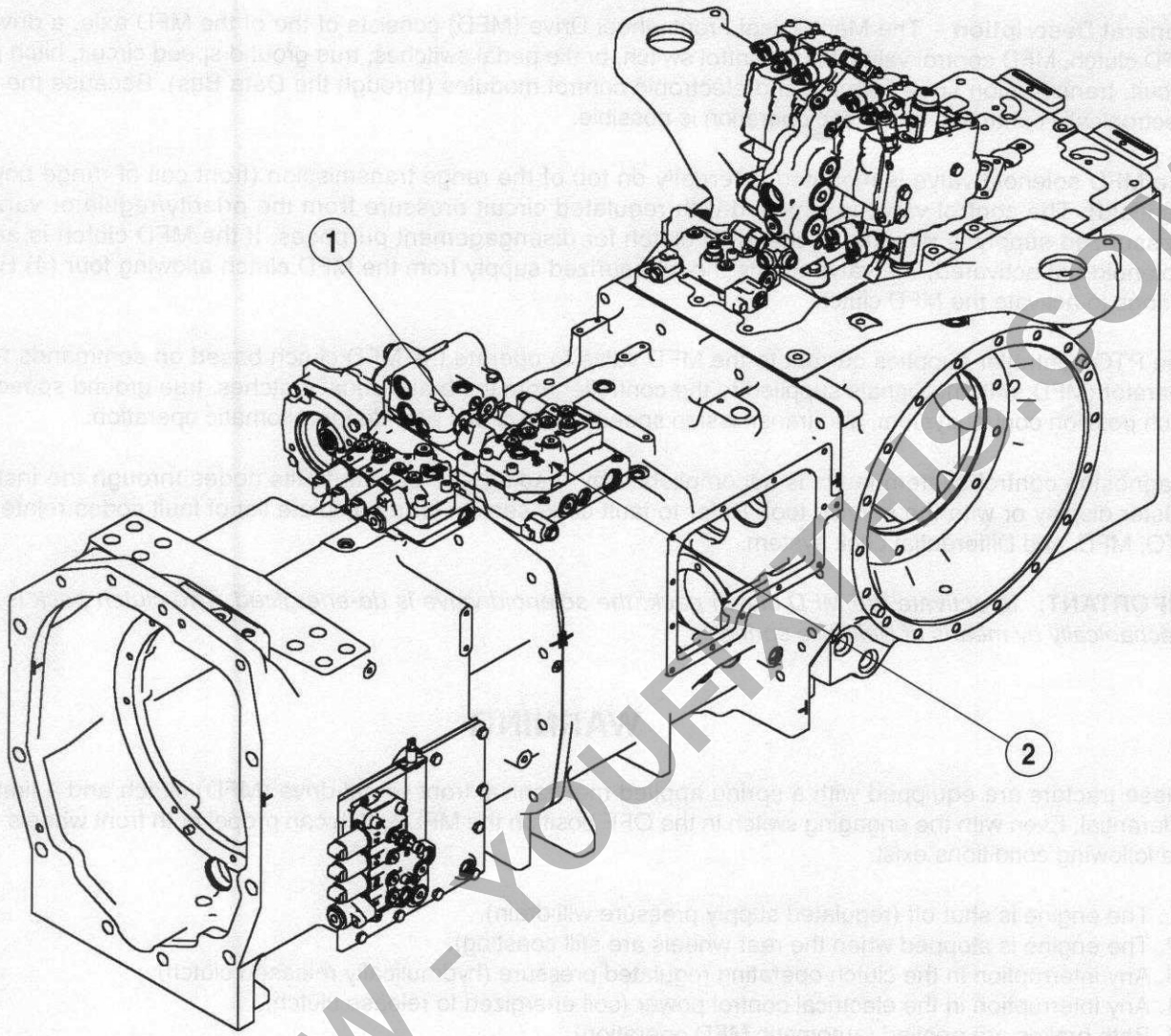
T98204

Remove and set up the differential assembly as follows:

1. Remove the differential assembly from the rear frame.
2. Place the differential assembly on a clean workbench with the ring gear facing up.
3. Support the assembly on a wood block(s) to provide clearance for bolt removal.

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1. MFD SOLENOID
2. POWERSHIFT VALVE RANGE

RI02E086

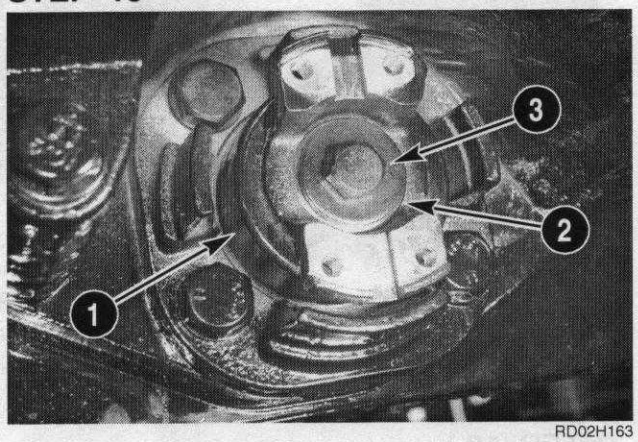
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Installation

MFD Standard Axle

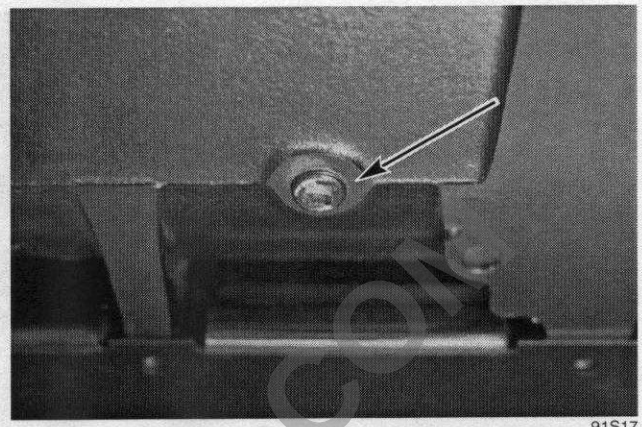
STEP 13



RD02H163

Install a new oil seal in the transmission bearing cage (1). The seal must be installed 8.5mm (0.335 inch) below the surface of the bearing cage. Lubricate the inner diameter of the seal with clean Case HY-TRAN ® ULTRA oil. Use a suitable seal installer to install the seal. Use the alignment marks from the disassembly procedure to install the transmission yoke. Install the O-ring, shims, retaining washer (2), and the bolt (3). Refer to Section 6015, Assembly of MFD Output Shaft for the procedure. Tighten the bolt to a torque of 252 to 280 Nm (186 to 206 lb ft).

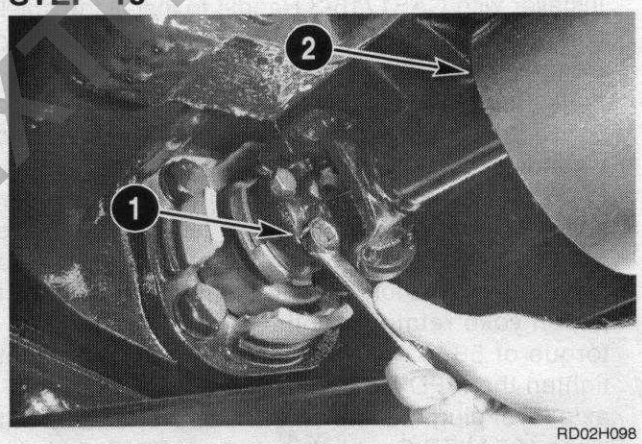
STEP 14



91S17

Install the speed transmission drain plug and fill the transmission.

STEP 15



RD02H098

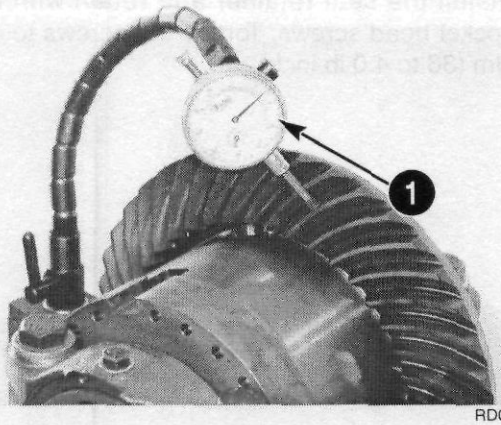
Properly support the drive shaft. Check the position of the directional arrow decal on the drive shaft. Use the alignment marks from the disassembly procedure to position the universal joint on the transmission yoke. Install the four drive shaft to transmission yoke retaining bolts (1). Tighten the bolts to a torque of 58 to 64 Nm (43 to 47 lb ft). Slide the drive shaft protector (2) on the MFD drive shaft.

NOTE: *When installing the drive shaft, make sure the mating surfaces of the drive shaft universal joint and yoke are free of paint, burrs, and chips. Use a rubber mallet to lightly tap the outside edge of the top bearing end cap to position it into the keyway of the yoke. Do not use the bolts to pull the bearing end caps into the yoke keyway.*

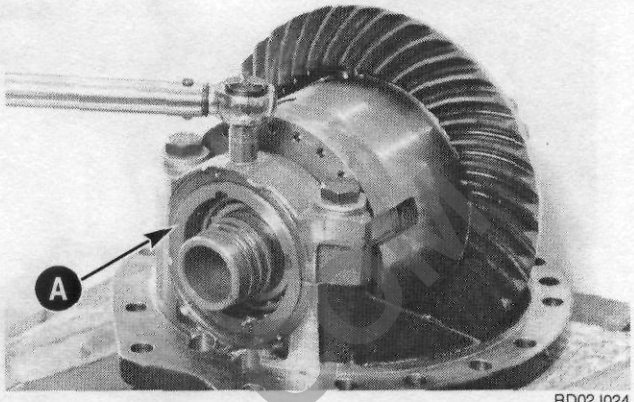
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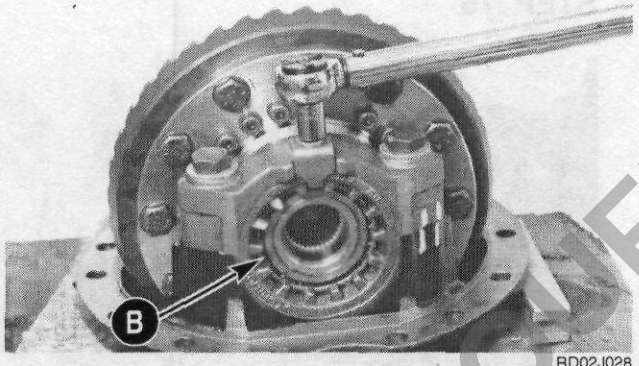
STEP 72



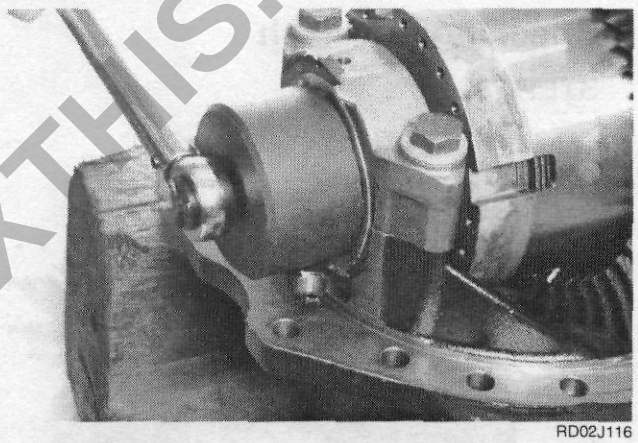
RD02J023



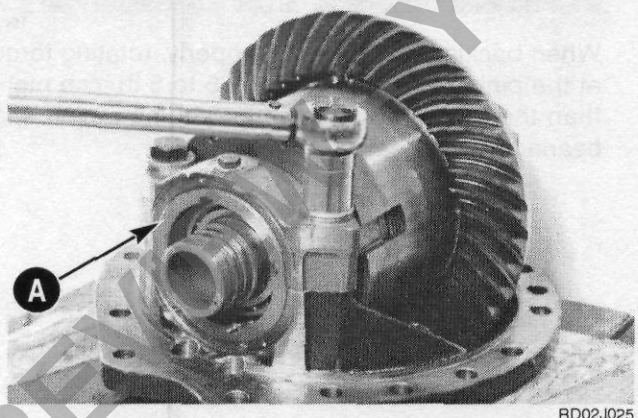
RD02J024



RD02J028



RD02J116



RD02J025

Position dial indicator (1) on lip of differential housing and indicate to side of one tooth on ring gear.

Loosen adjusting nut (B) until backlash is approximately 0.127 mm (0.005 inch). Continue loosening adjusting nut (B) until adjusting ring cap bolt, washer and clip can be installed. Torque bolt to 27 to 40 Nm (20 to 30 lb ft). Tighten all of the bearing cap bolts to a torque of 240 to 270 Nm (180 to 200 lb ft).

Tighten adjusting nut (A) to a torque of 75 to 88 Nm (55 to 65 lb ft) (with the differential locknut wrench tool). Which will result in a bearing preload of 1.13 to 2.26 Nm (10 to 20 lb inch). (When measured through the pinion will read 2.5 to 5 lb inch more than the original pinion torque setting).

Install the bolt and washer for adjusting nut (A) and torque to 27 to 40 Nm (20 to 30 lb ft). Advance to next hole if required.

Final backlash to be 0.076 to 0.3 mm (0.003 to 0.012 inch) (0.127 to 0.2 mm[0.005 to 0.008 inch] preferred).

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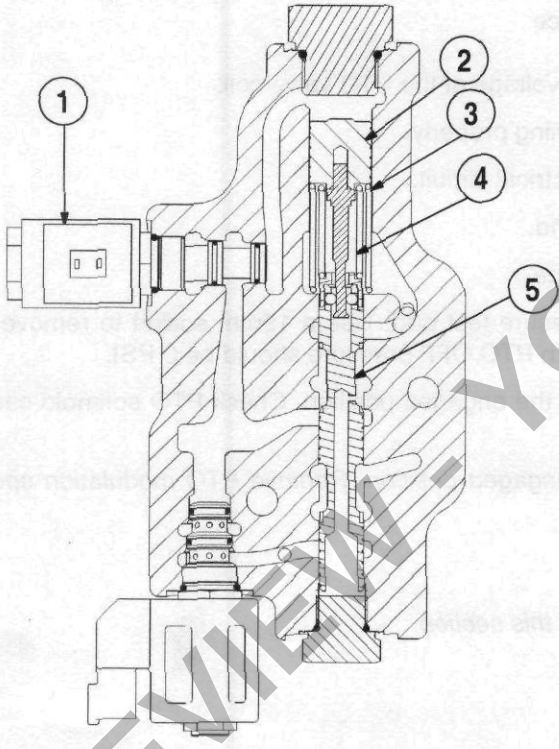
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PTO Clutch Engaged

When the PTO switch is actuated, the PTO controller sends a fixed current signal to the PTO solenoid. The solenoid spool shifts, metering oil to the top of the modulator piston (2). As pressure builds the piston moves down against the force of both the inner and outer modulator springs (3 and 4). As the piston moves down the center stem of the piston moves into the bore of the modulator spool (5). The piston assembly does not directly shift the modulator spool. The inner modulator spring force begins to shift the modulator spool. As the modulator spool first begins to move, the metered lubrication oil supply to the PTO clutch is increased to prevent clutch wear as the clutch is gradually engaged.

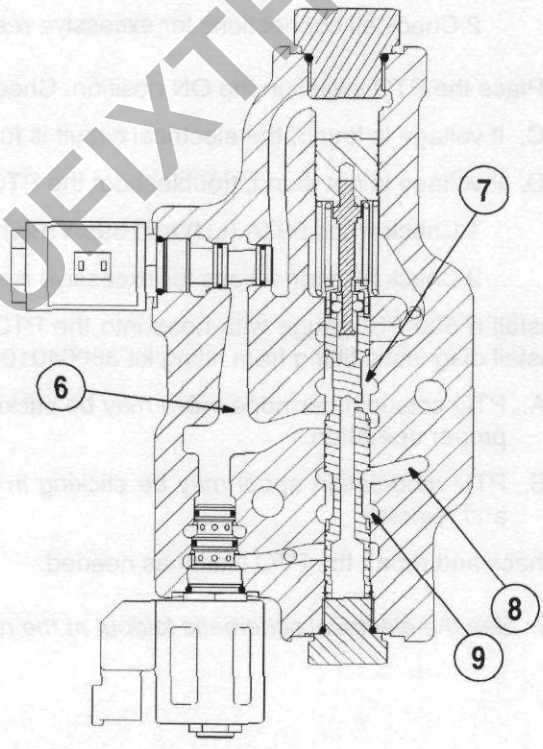
As the modulator spool shifts down it simultaneously blocks the PTO clutch return and begins increasing the clutch supply pressure. The pressure available to the PTO clutch is also ported through a cross drilled and end drilled holes to the bottom of the modulator spool. The balance between the increasing inner modulator spring force against the increasing clutch pressure causes the pressure to gradually increase.

The engagement time for the PTO can range from approximately 2-6 seconds and is completely controlled by the PTO controller based on monitored conditions (load, engine RPM, PTO shaft RPM).



RT98H067

MODULATION MODE



RT98A024

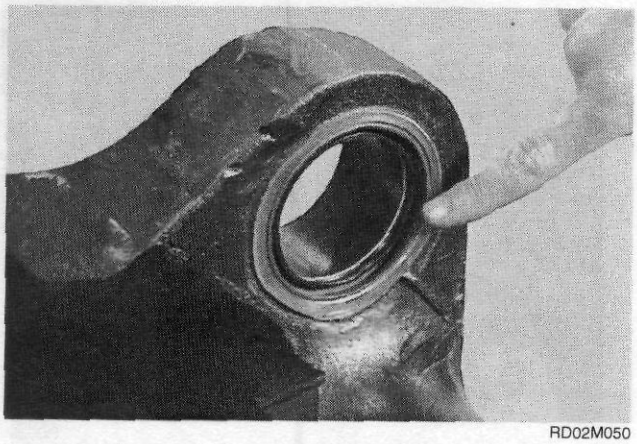
PTO CLUTCH LOCK UP

1. PTO SOLENOID
2. MODULATOR PISTON
3. PRELOAD SPRING (OUTER)
4. MODULATION SPRING
5. MODULATOR SPOOL
6. VALVE INLET/SUPPLY PASSAGE
7. PTO CLUTCH OUTLET PORT
8. LUBE SUPPLY
9. LUBE OUTLET

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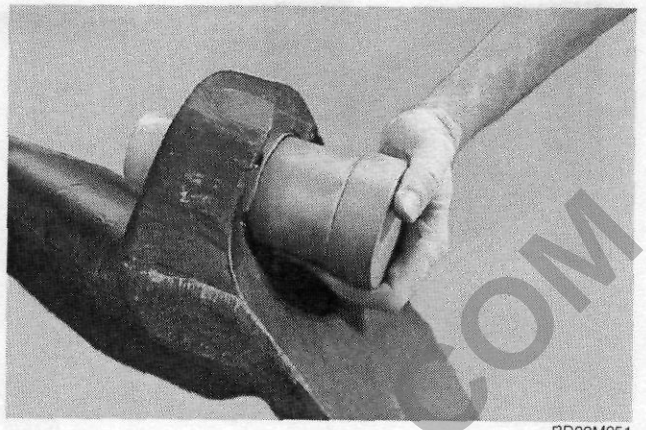
STEP 49



RD02M050

Remove the seals from the upper swing arm.

STEP 50



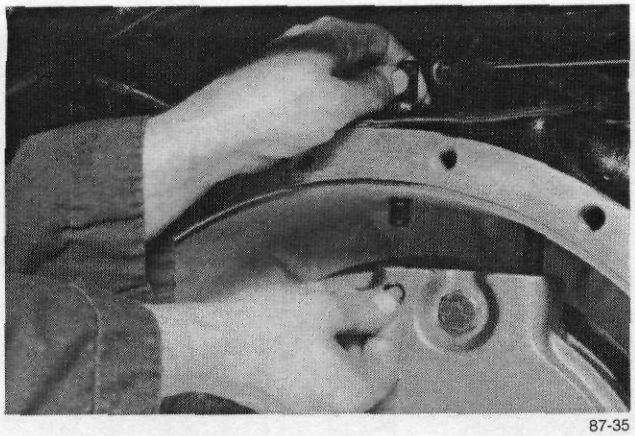
RD02M051

Use a driver to remove the bushings from the swing arm bores.

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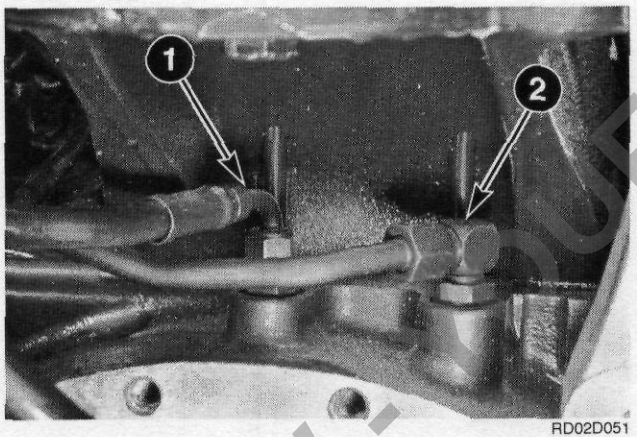
STEP 25



87-35

Lubricate new O-rings with petroleum jelly and install the O-rings on the supply tubes. Install the tubes into the brake cover.

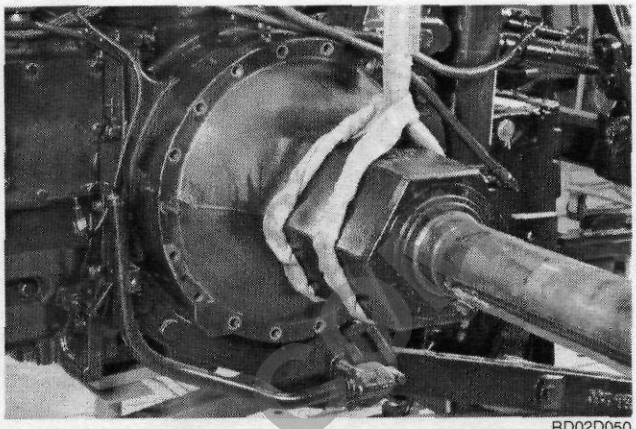
STEP 26



RD02D051

Install the brake supply tube (1) and connect the diff lock tube (2). Repeat installation procedures for the other brake cylinder.

STEP 27



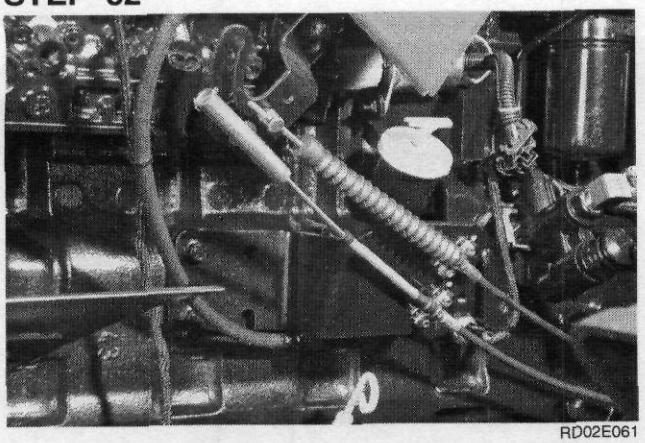
RD02D050

See Section 6019, Rear Axle and Planetaries for the installation of the rear axle housing.

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STEP 82

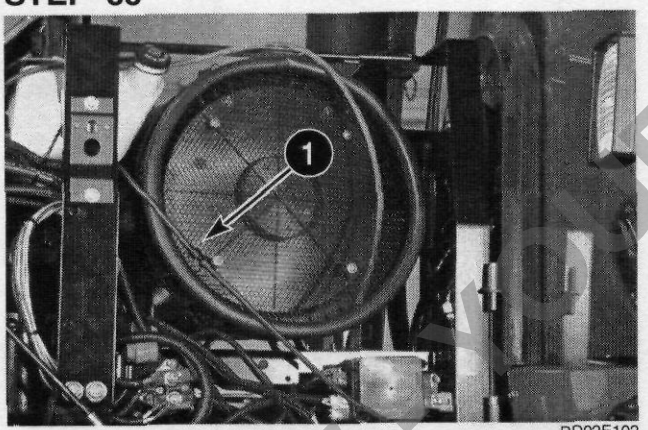


RD02E061

Connect the throttle linkage.

NOTE: *Only on Models MX210 and MX230 tractors.*

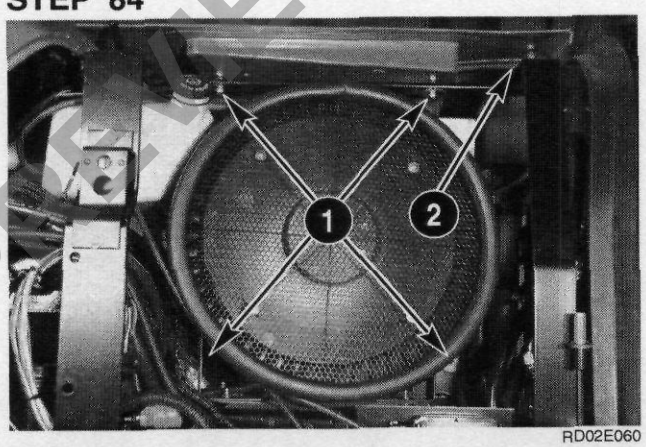
STEP 83



RD02E102

Install the cab rear window washer hose (1) at the check valve, if equipped.

STEP 84



RD02E060

Install the fixed hood on the right side of the tractor. Install and tighten the four nuts (1). Install the front windshield washer hose (2) to the nozzle on the fixed hood. Install the air cleaner door on the left side of the tractor.

STEP 85



RD02E069

Connect the positive (+) battery cable, first. Connect the negative (-) battery cable. Install the battery cover and toolbox. Tighten the four thumbscrews.

STEP 86



RD02C070

Install the rear wheels, if removed. Apply antiseize to the wheel hub bolts and tighten in a crossing pattern to a torque of 530 to 570 Nm (390 to 420 lb ft). Remove the rear axle supports, if the rear wheels were removed. Fill the cooling system. Refer to the Operators Manual for cooling system capacity. Check the hydraulic fluid level. Add fluid as needed. Remove the front axle wheel blocks.

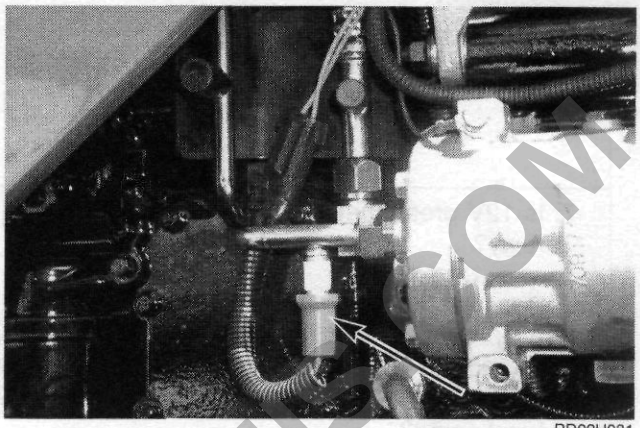
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HIGH AND LOW PRESSURE SWITCH CLUTCH LATCHING CIRCUIT

Background

High pressure switch activation is generally caused by a restriction or clog on the high pressure side of the system. However, a refrigerant or SP-20 PAG oil overcharge, the presence of refrigerants other than R134A or engine cooling problems can also cause high pressure switch activation.



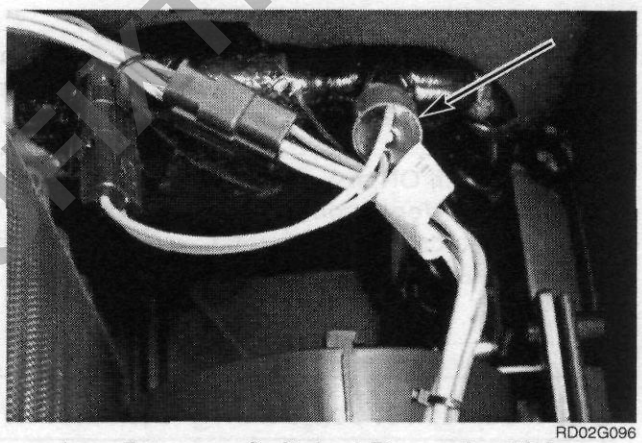
RD02H031

High Pressure Switch at Compressor

Low pressure switch activation is generally caused by low refrigerant level resulting from a leak(s). Sometime low pressure switch activation, however, is caused by a restriction, where because of the location either pressure switch may activate first. For example, a restriction at the output of the receiver-drier could cause either high or low pressure switch activation.

Refer to the **A/C Troubleshooting Foldout** and performance testing to locate the cause for your system.

When either pressure switch opens within the smart pressure counting conditions, a fault code displays on the LCD, and the compressor clutch is latched OFF by the controller.



RD02G096

Low Pressure Switch at Expansion Valve

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Power Circuit

The sensor is grounded to the HVAC ground stud.

Minimal voltage is fed to the sensor - about 0.5V at 70°F (21°C) - and voltage drops as the temperature increases. Current is fed to the evaporator sensor from pin B at the controller (CCU1).

Service Note: Too Little Cooling/Too Much Heating without Symptoms

The sensor should be suspect when the complaint is too little cooling when cooling and too much heating when heating ("the cab is too hot or too cold all the time"), and obvious symptoms are absent:

- System pressures are normal, and system is properly charged.
- Coolant system operating normally.
- Compressor and heater valve are functioning normally.

The sensor fails in a consistent pattern: It senses a lower temperature then is actually present.

In cooling mode, actual temperature at the evaporator is 50°F (10°C), but the sensor senses 45°F (7°C) and the compressor is not engaged with sufficient frequency. In heating mode, actual evaporator temperature is 80°F (27°C), but the sensor senses 75°F (24°C) and heater valve is opened too widely.

Perform the resistance versus temperature test on the sensor.

Evaporator Temperature Sensor and Circuit Test

Steps and Test Point	Corrective Actions
1. Keyswitch OFF. Disconnect the cab temperature sensor from harness. Measure the resistance across the sensor leads. Measure the ambient temperature at the sensor. Compare the readings to the Temperature versus Resistance table on page 93. Is the resistance reading within the minus or plus 2.5% range in the table?	YES - Go to next Step. NO - Replace the sensor.
2. Keyswitch and A/C switch ON. Measure voltage at pin 1 to sensor. Is voltage present? **NOTE:** *Voltage reading will be very low: 0.5V at 70°F (21°C); and voltage decreases as temperature increases.*	YES - Go to next Step 4. NO - Locate open and repai.
3. Is voltage present at pin B (CCU1) at the controller?	YES - Go to next Step. NO - Locate and repair open condition between pin B and sensor.
4. Measure resistance from sensor to the HVAC ground stud. Less than 1 ohm?	YES - Test the controller. See **Standard Controller Test**, page 71, in this Section. NO - Locate open circuit and correct.

NOTE: *Verify that the evaporator temperature sensor is installed in the right location. The temperature sensor must be installed 4.2 inches (107 mm) from the left hand rear side of the evaporator. The sensor must be installed below the second refrigeration tube row at a 30° downward angle. Insert the sensor in the evaporator core up to the angled section.*

NOTE: *While installing the sensor in the wrong location causes faulty system performance, it will not cause the sensor to fail or provide a faulty resistance reading for a given temperature. Replace the sensor if it tests out of range for a given temperature.*

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Precautions

> **WARNING:** *Do NOT use solvent containing alcohol, lacquer thinner, brake cleaner or other non-approved solvents. Use only Case IH approved flushing solvent. Other flushing agents or solvents may damage A/C system components.* M815

Case IH A/C flushing solvent is a hazardous material. Read all warnings on the flushing solvent container prior to use and observe these safety precautions:

1. The flushing solvent is combustible. Avoid heat, sparks and open flame.
2. Use only in a well ventilated area. Mechanical exhaust and an appropriate respirator may be needed in warm and confined areas to protect your safety.
3. Avoid breathing mist and vapor.
4. Wear chemical splash safety goggles.
5. Wear rubber gloves and a rubber apron when handling the solvent or flushing components.
6. Observe all local, state and federal regulations regarding the safe disposal of used flushing solvent. M802

The goal of flushing is to remove contaminants from the A/C system. Your shop air must be properly filtered and dried with coalescing filter, or you will simply replace one source of contamination with another using dirty, moisture saturated air.

The compressor, receiver-drier and thermal expansion valve must be bypassed (removed) when performing circuit flushing. The compressor and receiver-drier may never be flushed; the thermal expansion valve can be back flushed.

Keep the lid on the flushing recovery bucket closed when flushing to minimize the circulation of solvent vapors.

Never allow the flushing solvent to remain in or on the hoses for an extended period of time. Overexposure of the hoses to the solvent, especially the exterior, may cause hose swelling.

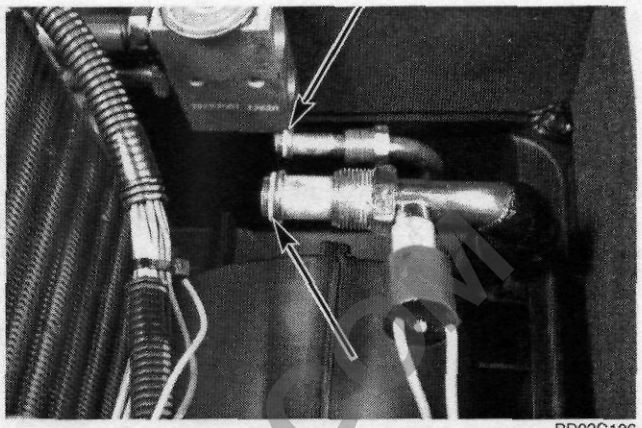
Do not open the fill cap on the flush reservoir when the reservoir is under pressure. Release pressure before removing cap.

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STEP 171

Lubricate new O-rings with clean mineral oil and *install in the fittings on the suction and liquid lines.* Connect the liquid and suction lines to the expansion valve using the two hand, two wrench method.



RD02G106

STEP 172

Remove air and moisture from the system and charge the system. Leak test all connections with OEM1437 before reapplying any thermal insulation tape.

STEP 173

Replace all thermal insulation tape and reconnect the low pressure cutout switch.

NOTE: *The thermal insulation tape is available in 30 ft (9150 mm) bulk rolls - 1954475C1 - 0.12 x 2.5 inches x 30 ft [3 x 63.5 x 9150 mm].*

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Recovery Process

IMPORTANT: *If a recovery tank becomes full during a recovery, the float switch will automatically turn off the scavenger. See Step 35 for changing tanks in the middle of a recovery.*

STEP 23

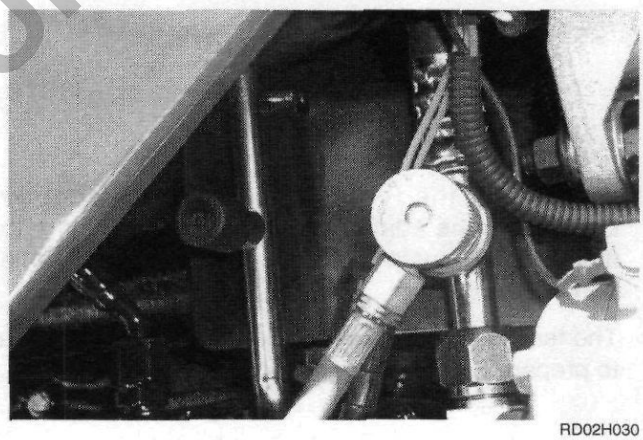
> **WARNING:** *Do not operate the vehicle or the A/C system if the refrigerant identifier shows more than 2% hydrocarbon in the mixture.* M801

Start the tractor and run the engine at 1500 RPM. If possible, operate the air conditioner for a few minutes at maximum cooling and maximum blower speed, with ATC switch set to DEFOG/DEFROST, or standard A/C switch to ON. Tests have shown that more refrigerant will be recovered if this action is performed.

NOTE: *Turn the system and tractor OFF before connecting the station.*

STEP 24

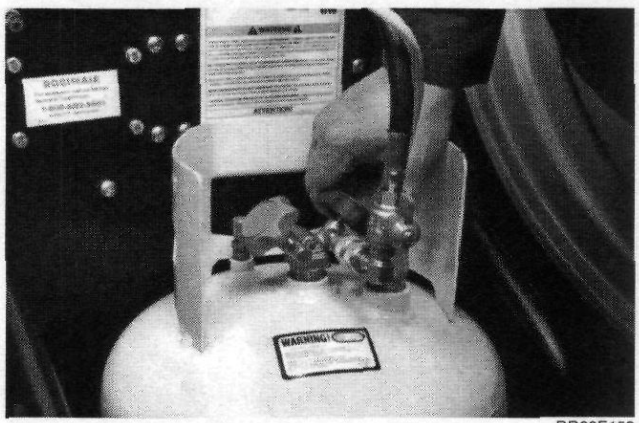
Remove the cap on the low pressure port at the compressor. Connect the blue R134a recovery hose from the station to the low side service port at the compressor.



RD02H030

STEP 25

Open the tank valve for the R134a hose. Open the valve at the service port.

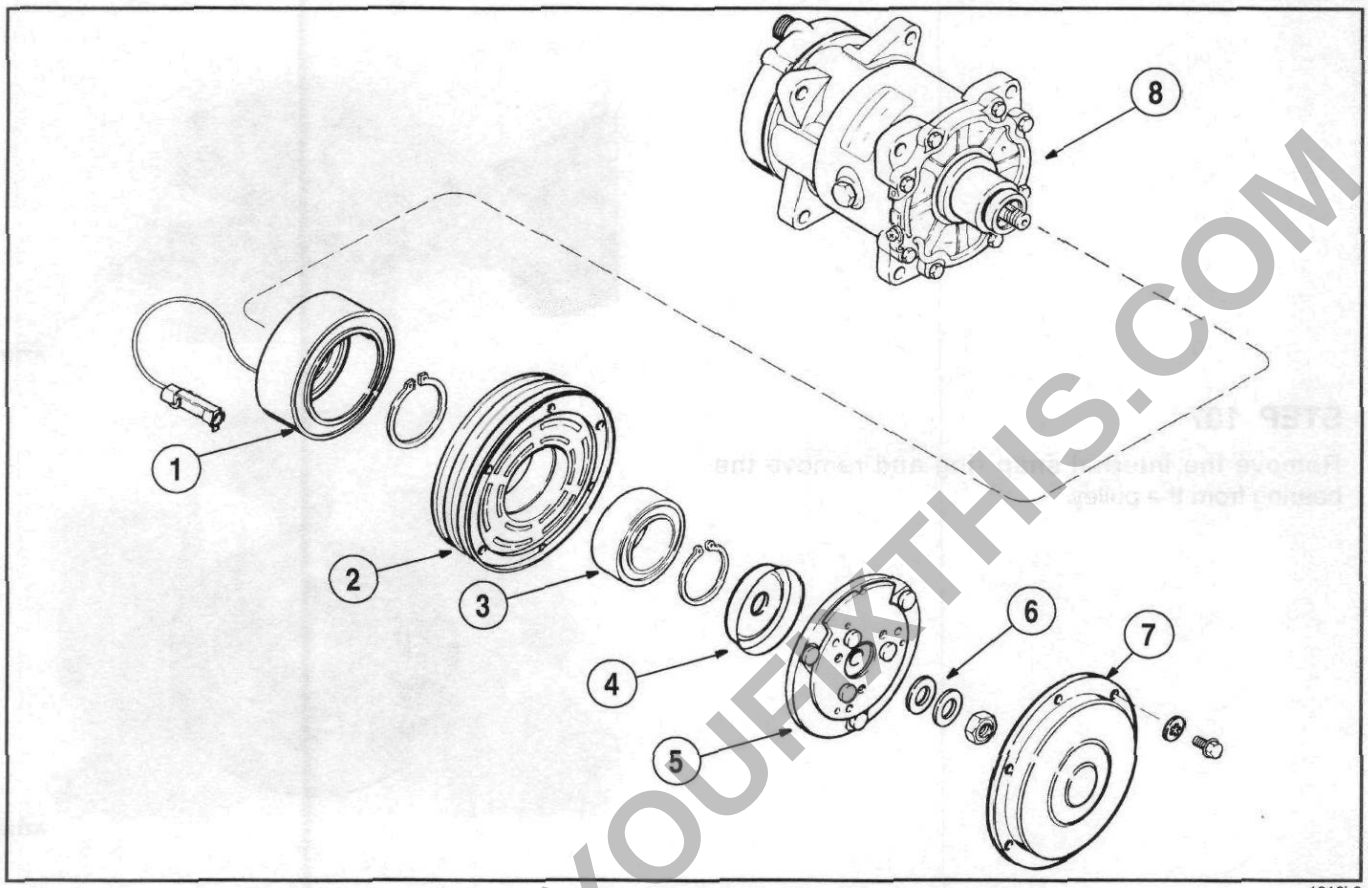


RR00E159

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Exploded View of Clutch



1016L9

1. COIL ASSEMBLY
2. PULLEY
3. BEARING
4. BEARING DUST COVER
5. FRONT PLATE
6. SHIM(S)
7. DUST COVER
8. COMPRESSOR

Compressor Clutch Replacement

STEP 108

Method 1: Use a ammeter, voltmeter and a 12 volt battery to check the amperage of the clutch coil. The current draw must be 3.6 to 4.2 amperes at 12 volts.

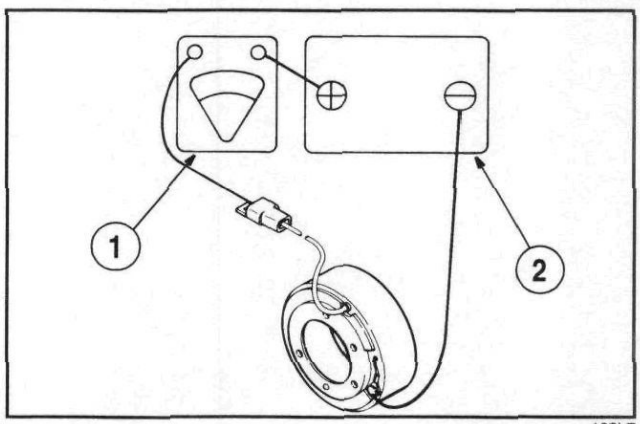
A reading of more than 4.2 amperes indicates a short within the coil.

No amperage reading indicates an open circuit in the coil.

Replace the clutch coil if the amperage reading is not correct.

OR

Method 2: Measure resistance. Resistance must be 2.86 to 3.3 ohms. Replace the clutch coil if the resistance reading is not correct.



102L7

1. AMMETER
2. 12V BATTERY

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