Form No.
913241

RS5-34
RS6-34

Telescopic Handler



SERVICE MANUAL

GEHL®

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SAFETY

The above Safety Alert Symbol means **ATTENTION! ALWAYS BE ALERT! YOUR SAFETY IS INVOLVED!** When you see this symbol, carefully read the message that follows and be alert to the possibility of injury or death.

Gehl Company always takes safety into consideration when designing its products, and designs guards for exposed moving parts whenever it is possible and practical to do so. However, even with todays state-of-the-art technology, it must be recognized that in order to assure machine functionality for specific purposes not all machine hazards can be guarded or shielded.

Decals are placed on the machine to warn of additional hazards and must be read and strictly followed.

Gehl Company cannot anticipate every situation that may constitute a hazard. Therefore, the following safety rules and reminders are not all-inclusive and do not replace federal, state or local regulations, insurance needs or other safety code requirements.

MANDATORY SAFETY SHUTDOWN PROCEDURE

Before cleaning, lubricating or servicing this equipment:

1. Bring the machine to a full stop on level surface. (If parking on a slope or hillside cannot be avoided, park across the slope and block the tires.)
2. Fully retract the boom and lower the attachment to the ground.
3. Place controls in **NEUTRAL** and set the park brake.
4. Idle the engine for gradual cooling.
5. Turn the key switch to OFF position and remove key (take key with you for security reasons).

ONLY when you have taken these precautions can you be sure its safe to proceed. Failure to follow the above procedure could lead to serious personal injury or death.

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SAE FASTENER TORQUE CHART

NOTE: *Use these torques, unless special torques are specified. Values are for UNC and UNF thread fasteners, plated or unplated, as received from supplier. Fasteners can be dry or lubricated with normal engine oil. Values do not apply if graphite, moly-disulphide or other extreme pressure lubricant is used.*

SAE Grade No.	2				5				8*			
Bolt head identification (See Note 1)												
Bolt Size	LB FT		Nm		LB FT		Nm		LB FT		Nm	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
1/4	5	6	7	8	9	11	12	15	12	15	16	20
5/16	10	12	14	16	17	20.5	23	28	24	29	33	39
3/8	20	23	27	31	35	42	48	57	45	54	61	73
7/16	30	35	41	47	54	64	73	87	70	84	95	114
1/2	45	52	61	70	80	96	109	130	110	132	149	179
9/16	65	75	88	102	110	132	149	179	160	192	217	260
5/8	95	105	129	142	150	180	203	244	220	264	298	358
3/4	150	185	203	251	270	324	366	439	380	456	515	618
7/8	160	200	217	271	400	480	542	651	600	720	814	975
1	250	300	339	406	580	696	787	944	900	1080	1220	1464
1-1/8					800	880	1085	1193	1280	1440	1736	1953
1-1/4					1120	1240	1519	1681	1820	2000	2468	2712
1-3/8					1460	1680	1980	2278	2380	2720	3227	3688
1-1/2					1940	2200	2631	2983	3160	3560	4285	4827

NOTE 1: *Bolt head identification marks as per grade. Manufacturing marks will vary. *Thick nuts must be used with Grade 8 bolts.*

METRIC FASTENER (ISO) TORQUE CHART

NOTE: *Use these torques, unless special torques are specified. Values are for UNC and UNF thread fasteners, plated or unplated, as received from supplier. Fasteners can be dry or lubricated with normal engine oil. Values do not apply if graphite, moly-disulphide or other extreme pressure lubricant is used.*

ISO Grade No.	8.8				10.9				12.9			
Bolt head identification (See Note 1)												
Bolt Size	LB FT		Nm		LB FT		Nm		LB FT		Nm	
	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max	Min	Max
M4	3	4	2	3	4	5	3	4				
M5	6.5	8	5	6	9.5	11	7	8				
M6	10.5	12	8	9	15	17.5	11	13				
M8	26	31	19	23	37	43	27	32				
M10	52	61	38	45	73	87	54	64				
M12	90	107	66	79	125	150	93	112				
*M14	144	172	106	127	200	245	149	179				
M16	217	271	160	200	310	380	230	280				
M20	434	515	320	380	610	730	450	540				
M24	675	815	500	600	1050	1275	780	940				
M30	1250	1500	920	1100	2000	2400	1470	1770				
M36	2175	2600	1600	1950	3500	4200	2580	3090				

Because of the low ductility of these fasteners, the torque range is to be determined individually for each application. As a general rule, the torque ranges specified for grade 10.9 fasteners can be used satisfactorily.

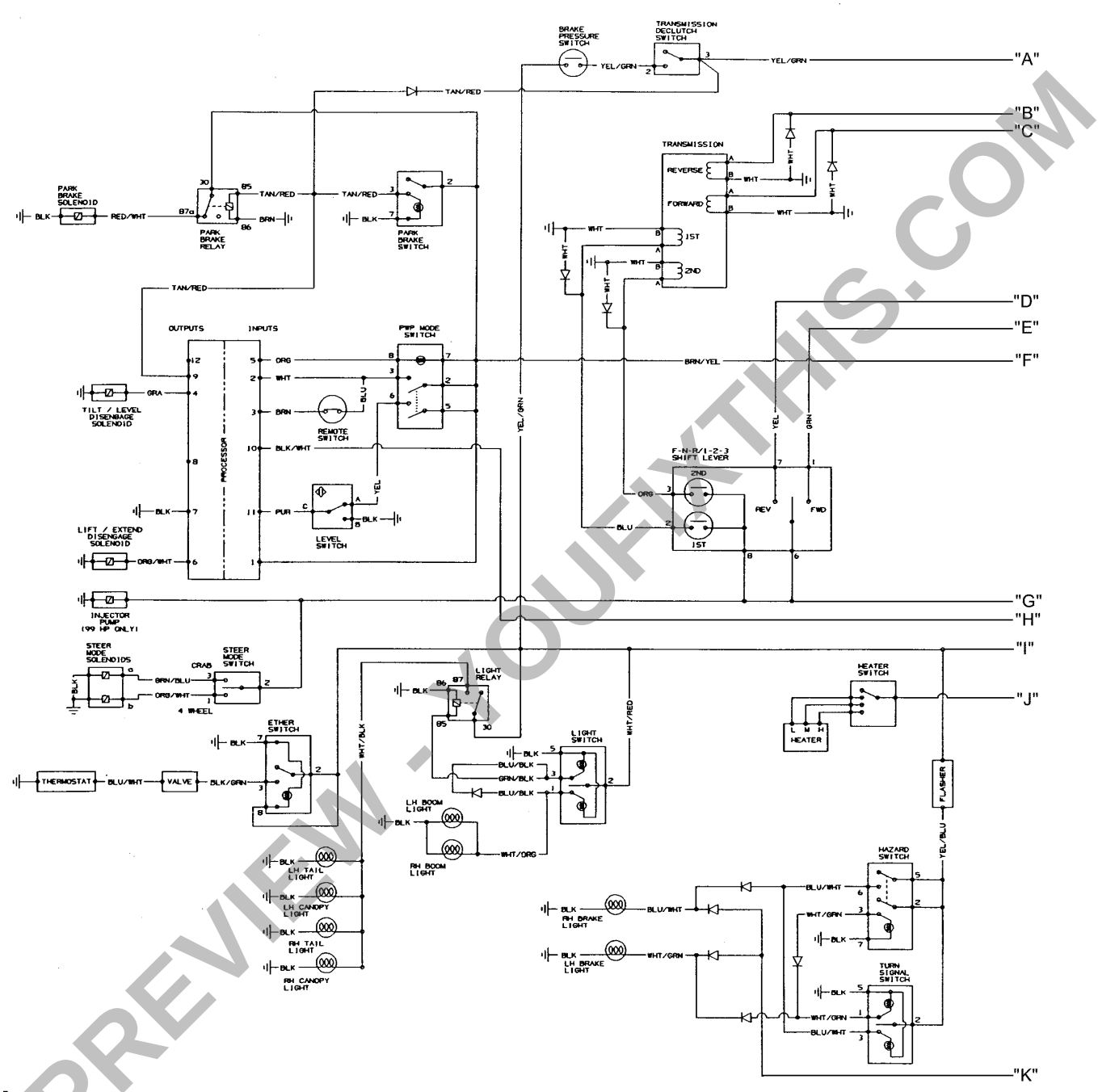
*M14 is not a preferred size

NOTE 1: *Bolt head idenficiation marks as per grade. Manufacturing marks will vary.*

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ELECTRICAL SCHEMATICS



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STARTER CIRCUIT TROUBLESHOOTING

The engine does not start. Does the starter engage and turn over the engine?

YES
Is there 12 volts of current at the fuel shut off solenoid?

YES
Check the fuel system pressure before replacing the fuel solenoid.

NO
Is the fuel shut off solenoid fuse open?

YES
Replace the fuel shut off fuse.

NO
Repair or replace the wires between the fuel shut off solenoid and the fuse.

NO
Is the transmission shift lever in neutral?

YES
Is the battery fully charged?

NO
Move the shift lever to the neutral position.

YES
Is the battery properly grounded?

NO
Charge or replace the battery.

YES
Is the ignition fuse open?

NO
Replace the battery ground cable.

YES
Replace the ignition fuse.

NO
Is there 12 volts at the power terminal of the ignition fuse?

YES
Is the gear selector fuse open?

NO
Replace the 60 amp in-line fuse between the battery terminal of the starter relay and the fuse box.

YES
Replace the gear selector fuse.

NO
With the key switch ON, is there 12 volts to the power terminal of the gear selector fuse?

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MANDATORY SAFETY SHUTDOWN PROCEDURE

BEFORE cleaning, adjusting, lubricating, or servicing this unit:

1. Stop machine on a level surface. (AVOID parking on a slope, but if necessary, park across the slope and block the tires.)
2. Fully retract the boom and lower the attachment tool to the ground. Idle engine for gradual cooling.
3. Place controls in neutral and apply parking brake.
4. Shut off the engine and remove the key.

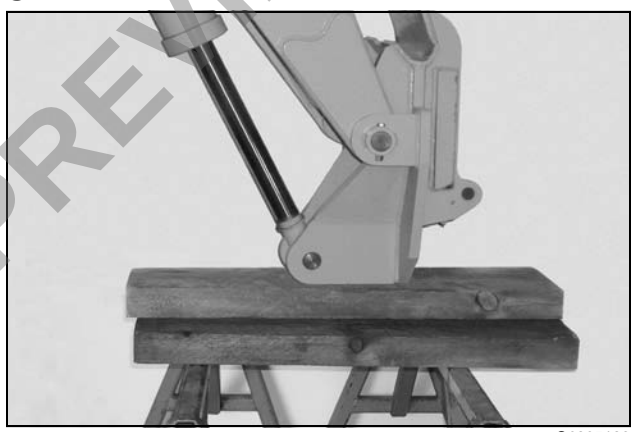
ONLY when you have taken these precautions can you be sure it is safe to proceed. Failure to follow the above procedure could lead to death or serious injury.

RELIEVE HYDRAULIC OIL PRESSURE:

1. Engage the park brake.
2. Lower equipment to the ground. Return the engine to idle for 30 seconds then shut down the engine.
3. Turn the key switch on. Operate the joystick in each direction. Confirm that there is no attachment or unit movement. This should ensure there is no residual pressure trapped in the control circuit.

ENGINE REMOVAL

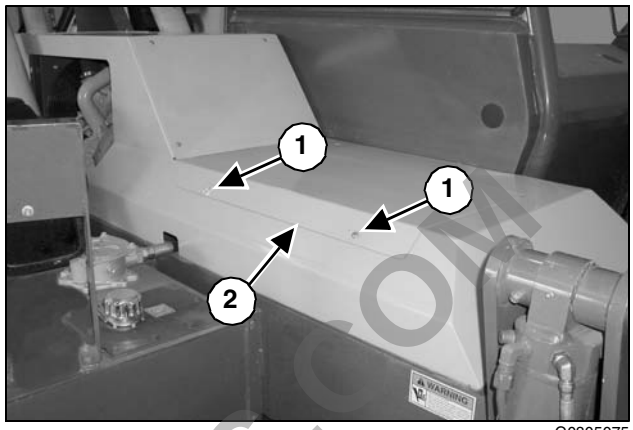
STEP 1



G0805189

Raise the telescopic boom approximately 60 inches (1.5 m) to allow a hoist to be used for removal and installation. Support the boom on a support stand.

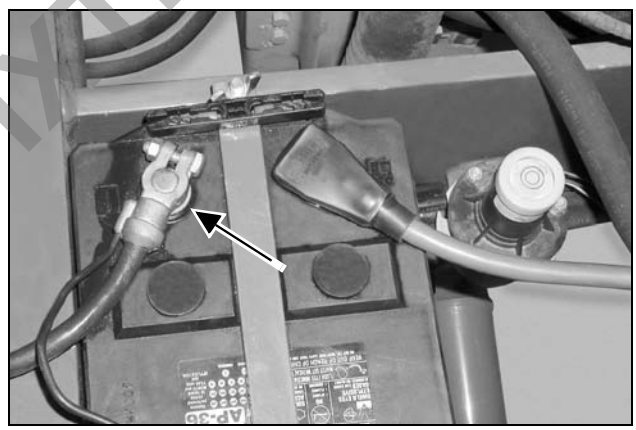
STEP 2



G0805075

Loosen the two thumbscrews and remove the battery access cover (2).

STEP 3



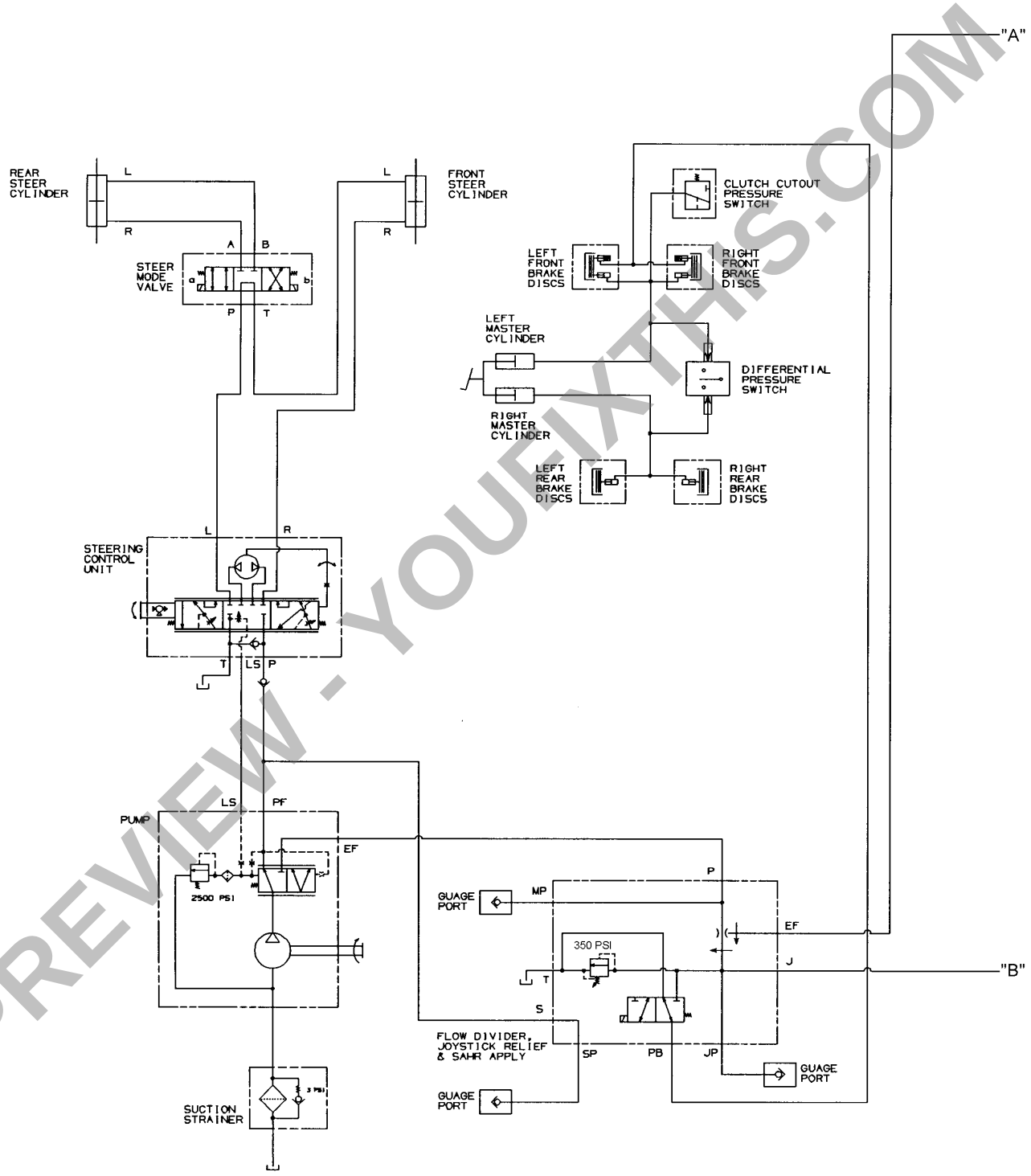
G0905001

Disconnect the negative (-) battery cable from the battery.

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HYDRAULIC SCHEMATICS

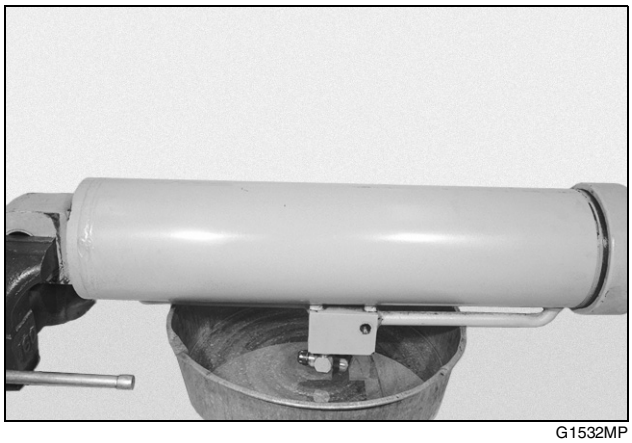


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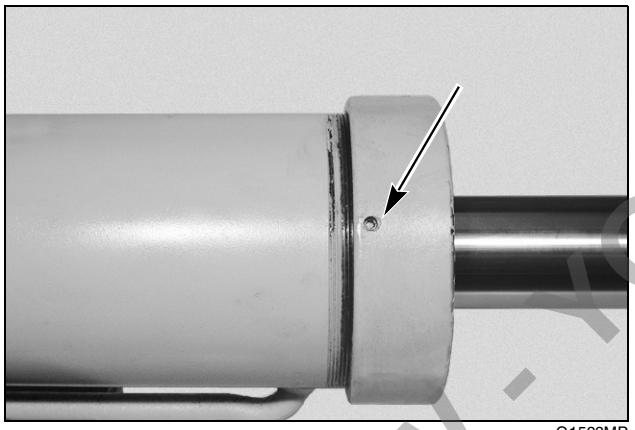
STEP 2



G1532MP

Put the base end of the cylinder in a vise. With a drain pan positioned under the cylinder, move the rod in and out slowly to remove the fluid.

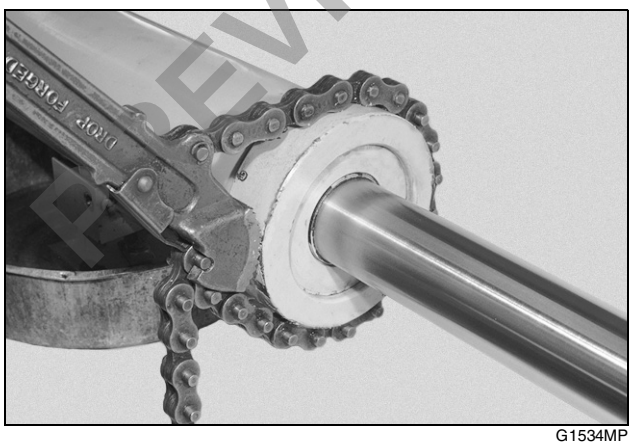
STEP 3



G1533MP

Loosen and remove the set screw from the cylinder gland ring nut.

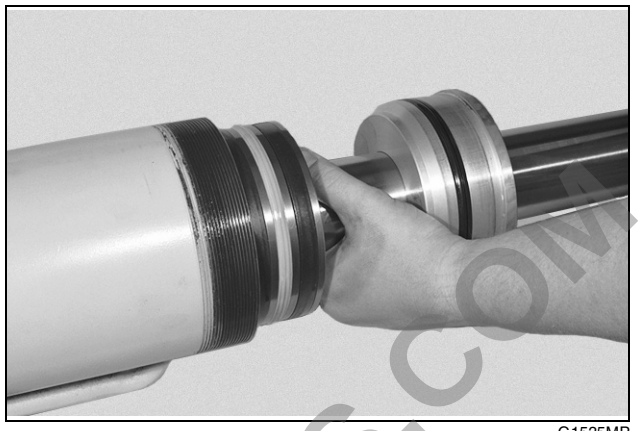
STEP 4



G1534MP

Loosen and remove the gland nut from the cylinder.

STEP 5



G1535MP

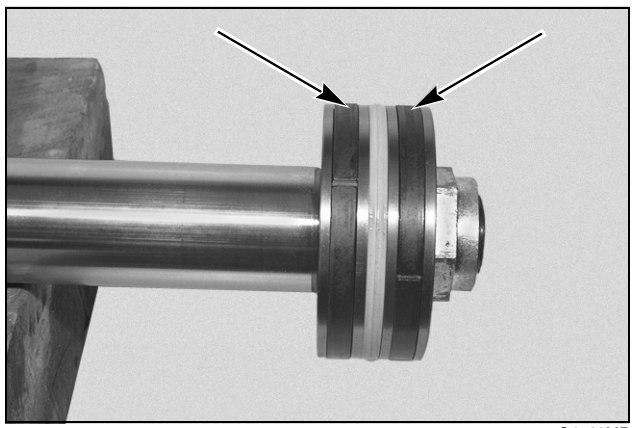
Remove the rod assembly from the cylinder.

IMPORTANT: *Protect the chrome finish on the cylinder rod at all times. Damage to surface of the rod can cause premature seal failure.*

STEP 6

Remove the cylinder barrel from the vise. Put the rod end in the vise. Support the rod on a wood block.

STEP 7



G1538MP

Remove and discard the two wear rings from the piston.

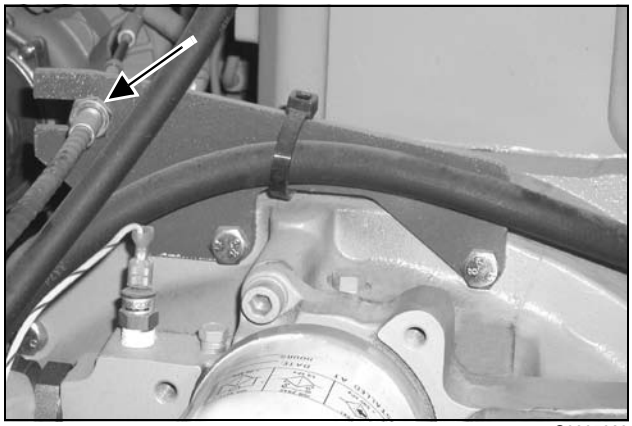
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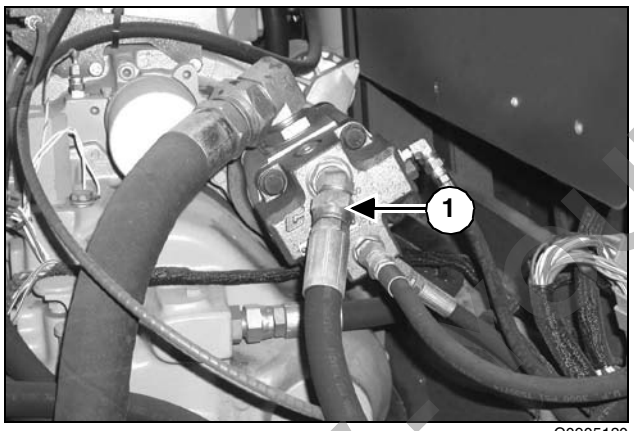
STEP 11



G0905086

Remove the throttle linkage from the mounting bracket.

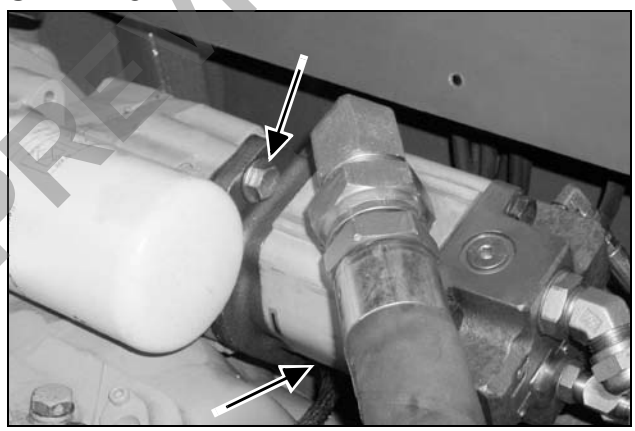
STEP 12



G0905130

Remove the flow divider IN port hydraulic hose (1) from the hydraulic pump. Install a plug in the hose and a cap on the fitting.

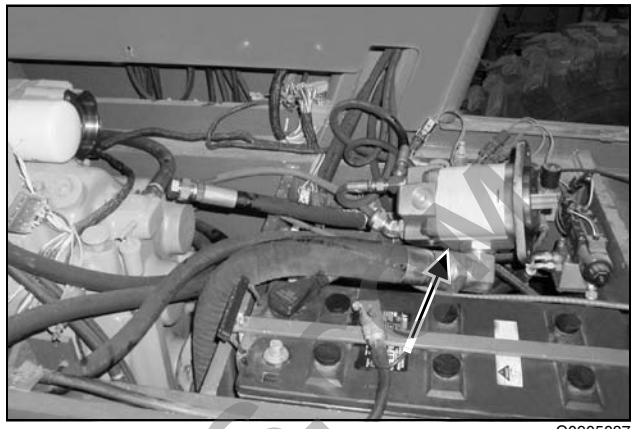
STEP 13



G0905131

Remove the two hydraulic pump mounting bolts.

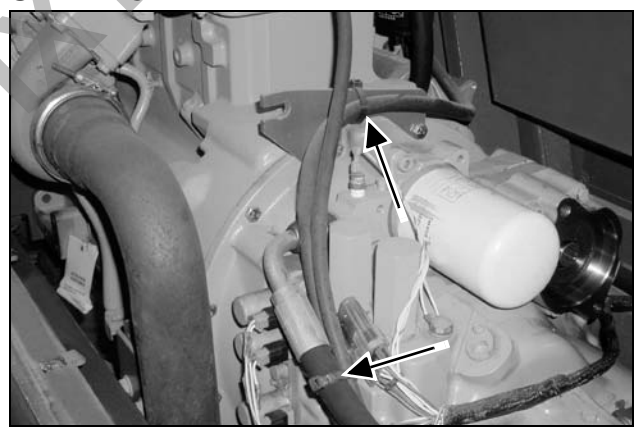
STEP 14



G0905087

Remove the hydraulic pump. Position the pump where it will not interfere with transmission removal or installation.

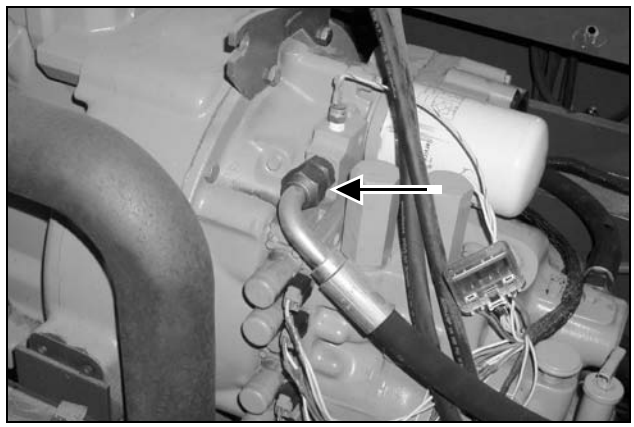
STEP 15



G0905088

Remove the cable ties from the upper transmission cooling line and fuel lines.

STEP 16



G0905089

Remove the upper cooling line. Install a plug in the line and a cap on the fitting.

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