750K and 850K Crawler Dozer Repair

(PIN: 1T0750KX_ _F271593—)

(PIN: 1T0850KX_ _F271510—)

REPAIR TECHNICAL MANUAL

750K and 850K Crawler Dozer (PIN: 1T0750KX_ _F271593—) (PIN: 1T0850KX_ _F271510—)

TM13282X19 08MAY17 (ENGLISH)

For complete service information also see:

750K and 850K Crawler Dozer Operation and Test	TM13280X19
750K and 850K Crawler Dozer Operator's Manual	OMT355293X19
PowerTech™ 6.8 L OEM Diesel Engines — Final Tier 4/Stage IV Platform	CTM120019
100, 120, 125, 185, 225 Series Hydraulic Cylinders	CTM120519
JDLink™ (MTG) Technical Manual	TM114519
Undercarriage Appraisal Manual	SP326VOL1
Specifications Manual	SP458VOL2

Worldwide Construction And Forestry Division
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Prevent Fires

Handle Fluids Safely: All fuels, most lubricants, and some coolant mixtures are flammable. Store flammable fluids away from fire hazards. Never refuel machine while smoking or when near sparks or flame.

Clean Machine Regularly: Keep flammable debris (trash, leaves, twigs, straw, and so forth), grease and oil from accumulating in engine compartment, around fuel lines, hydraulic lines, exhaust components, and electrical wiring. Never store oily rags or flammable materials inside a machine compartment.

Maintain Hoses, Tubes, and Wiring: Replace hoses and tubes immediately if they begin to leak, and clean up any oil spills. Examine electrical wiring and connectors frequently for damage.

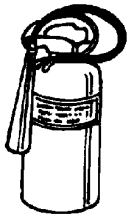
Keep A Fire Extinguisher Available: Always keep a multipurpose fire extinguisher on or near the machine. Know how to use an extinguisher properly.

Be Aware of the Operating Environment: Airborne debris may contain sparks or embers. Do not operate near any flame.

T133552 —UN—15APR13

T133553 —UN—07SEP00

T133554 —UN—07SEP00



TX,PREVENT,FIRE -19-09JUN16-1/1

Prevent Battery Explosions

Keep sparks, lighted matches, and open flame away from the top of battery. Battery gas can explode.

Never check battery charge by placing a metal object across the posts. Use a voltmeter or hydrometer.

Do not charge a frozen battery; it may explode. Warm battery to 16°C (60°F).

Keep battery electrolyte levels properly maintained.

TS204 —UN—15APR13

Battery Explosions

KR46761,00010B4 -19-26JAN16-1/1

Park and Prepare for Service Safely

Warn others of service work. Always park and prepare your machine for service or repair properly.

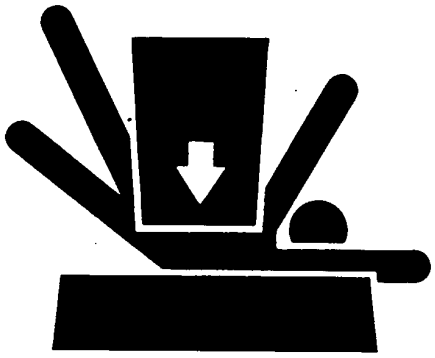
- Park machine on a level surface and lower blade and attachments to the ground.
- Place park lock lever(s) in “up” (locked) position. Stop engine.
- Attach a “Do Not Operate” tag in an obvious place in the operator's station.

Securely support machine or attachment before working under it.

- Do not support machine with blade or attachments.
- Do not support machine with cinder blocks or wooden pieces that may crumble or crush.
- Do not support machine with a single jack or other devices that may slip out of place.

Understand service procedures before beginning repairs. Keep service area clean and dry. Use two people whenever the engine must be running for service work.

T133332 —19—17APR13



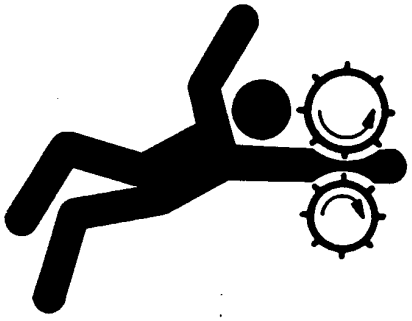
TS229 —UN—23AUG88

TX,PARK,CRW -19-30JAN12-1/1

Service Machines Safely

Tie long hair behind head. Do not wear a necktie, scarf, loose clothing, or necklace when working near machine tools or moving parts. If these items were to get caught, severe injury could result.

Remove rings and other jewelry to prevent electrical shorts and entanglement in moving parts.



TS228 —UN—23AUG88

Service Machines Safely

KR46761,00011BA -19-28JUN16-1/1

Service Cooling System Safely

Explosive release of fluids from pressurized cooling system can cause serious burns.

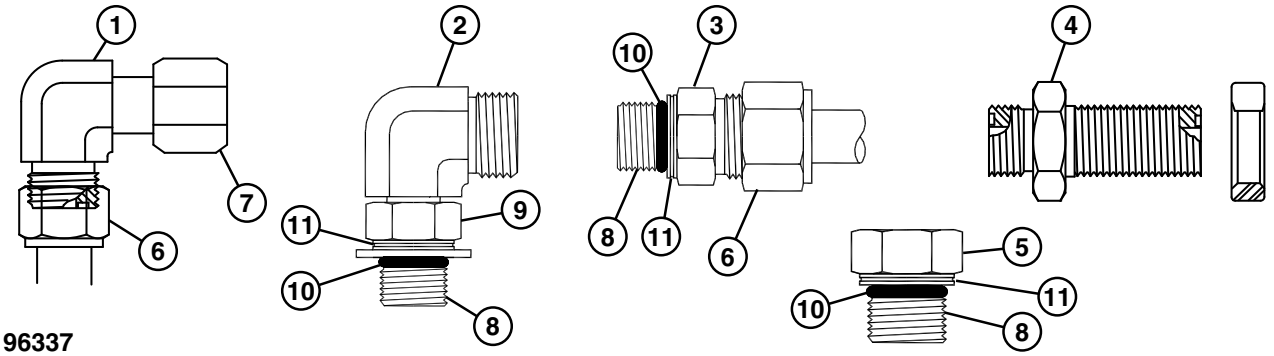
Do not service radiator through the radiator cap. Only fill through the surge tank filler cap. Shut off engine. Only remove surge tank filler cap when cool enough to touch with bare hands. Slowly loosen cap to relieve pressure before removing completely.

TS281 —UN—15APR13

TX,SURGE -19-19JAN11-1/1

O-Ring Face Seal Fittings With Metric Hex Nut and Stud End for High-Pressure Service Recommendations

O-RING FACE SEAL FITTINGS WITH METRIC HEX NUT AND STUD END FOR HIGH-PRESSURE, ABOVE 27 600 kPa (275.8 bar) (4000 psi), TORQUE VALUES—Tolerance is +15 -20% unless otherwise specified.



T196337

O-Ring Face Seal Fittings

1— 90° Swivel Elbow
2— 90° Adjustable Stud Elbow
3— Stud Straight
4— Bulkhead Union and Nut
5— External Hex Stud End Plug
6— Tube Nut
7— Swivel Nut
8— Stud End
9— Hex Nut
10— O-Ring
11— Identification Groove

T196337 —UN—15APR13

Nominal Tube OD or Hose ID			O-Ring Face Seal Hose or Tube Swivel Nut			Bulkhead Nut	
Metric Tube OD	Inch Tube OD or Hose ID		Thread Size	Hex Size	Torque	Hex Size	Torque
mm	Dash Size	mm (in)	in	mm	N·m (lb·ft)	mm	N·m (lb·ft)
4	-2	3.18 (0.125)	—	—	—	—	—
5	-3	4.78 (0.188)	—	—	—	—	—
6	-4	6.35 (0.250)	9/16-18	17	24 (18)	22	32 (24)
8	-5	7.92 (0.312)	—	—	—	—	—
10	-6	9.53 (0.375)	11/16-16	22	37 (27)	27	42 (31)
12	-8	12.70 (0.500)	13/16-16	24	75 (55)	30	93 (69)
16	-10	15.88 (0.625)	1-14	30	103 (76)	36	118 (87)
20	-12	19.05 (0.750)	1-3/16-12	36	152 (112)	41	175 (129)
22	-14	22.23 (0.875)	1-3/16-12	36	152 (112)	41	175 (129)
25	-16	25.40 (1.000)	1-7/16-12	41	214 (158)	46	247 (182)
28	—	—	—	—	—	—	—
32	-20	31.75 (1.250)	1-11/16-12	—	286 (211)	50	328 (242)
38	-24	38.10 (1.500)	2-12	—	326 (240)	60	374 (276)

O-RING STRAIGHT, ADJUSTABLE, AND EXTERNAL HEX PLUG WITH METRIC STUD END FOR HIGH PRESSURE, ABOVE 27 600 kPa (275.8 bar) (4000 psi), TORQUE VALUES—Tolerance is +15 -20% unless otherwise specified.

Thread Size[a]	Straight Hex Size[b]	Adjustable Nut Hex Size	Steel or Gray Iron Torque
mm	mm	mm	N·m (lb·ft)
M8 x 1	12	12	8 (6)
M10 x 1	14	14	15 (11)
M12 x 1.5	17	17	35 (26)
M14 x 1.5	19	19	45 (33)
M16 x 1.5	22	22	55 (41)
M18 x 1.5	24	24	70 (52)
M22 x 1.5	27	27	100 (74)
M27 x 2	32	32	170 (125)
M30 x 2	36	36	215 159)
M33 x 2	41	41	260 (192)
M38 x 2	46	46	320 (236)
M42 x 2	50	50	360 (266)

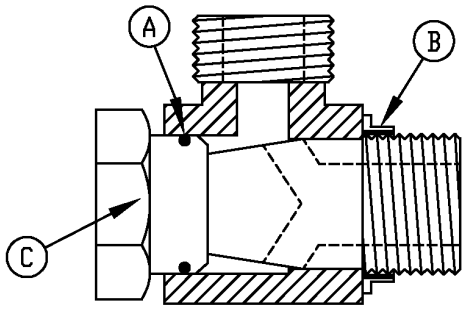
Continued on next page

Service Recommendations For Non-Restricted Banjo (Adjustable) Fittings

1. Inspect all fitting sealing surfaces. They must be free of dirt and defects.
2. Inspect O-ring (A). It must be free of damage or defects.
3. Inspect sealing ring (B) for damage or defects.
4. Hold body in desired position while tightening stud by hand.
5. Tighten stud (C) to torque value shown on the chart. Do not allow body to twist when tightening stud.

NOTE: The L in the Tube Fitting OD Size column indicates "light" designed fitting and the S indicates "heavy" designed fitting.

	Torque Value		
Tube Fitting O.D. Size	**Metric Thread**	**N·m**	**lb-ft**
6 L	M 10 x 1	30	22
8 L	M 12 x 1.5	40	30
10 L	M 14 x 1.5	60	44
12 L	M 16 x 1.5	100	74
15 L	M 18 x 1.5	130	96
18 L	M 22 x 1.5	160	118
22 L	M 26 x 1.5	250	184
28 L	M 33 x 2	400	295
35 L	M 42 x 2	600	443
42 L	M48 x 2	800	590
6 S	M 12 x 1.5	40	30
8 S	M 14 x 1.5	60	44
10 S	M 16 x 1.5	100	74
12 S	M 18 x 1.5	130	96
14 S	M 20 x 1.5	160	118
16 S	M 22 x 1.5	160	118
20 S	M 27 x 2	250	184
25 S	M 33 x 2	400	295
30 S	M 42 x 2	600	443
38 S	M 48 x 2	800	590

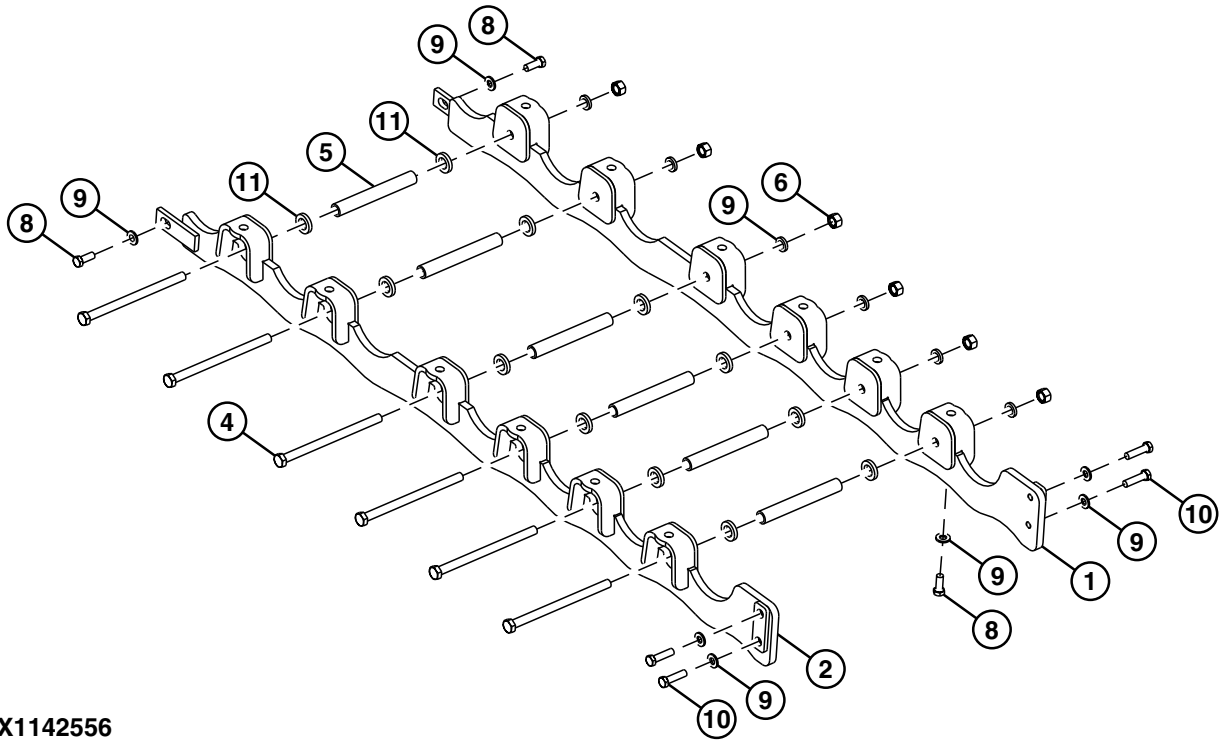


T113948

T113948 —UN—06MAR98

	Torque Value		
Tube Fitting O.D. Size	**Inch Size**	**N·m**	**lb-ft**
6 L	1/8	25	18
8 L	1/4	50	37
10 L	1/4	50	37
12 L	3/8	90	66
15 L	1/2	130	96
18 L	1/2	150	111
22 L	3/4	250	184
28 L	1	400	295
35 L	1-1/4	600	443
42 L	1-1/2	800	590
6 S	1/4	50	37
8 S	1/4	50	37
10 S	3/8	90	66
12 S	3/8	100	74
14 S	1/2	130	96
16 S	1/2	150	111
20 S	3/4	250	184
25 S	1	400	295
30 S	1-1/4	600	443
38 S	1-1/2	800	590

BS40810,000011E -19-10FEB15-1/1



Rock Guards

1— Guard (left side, outside/right side, inside) (2 used)
2— Guard (right side, outside/left side, inside) (2 used)
4— Cap Screw (10 used on standard track) (12 used on long track)
5— Spacer (10 used on standard track) (12 used on long track)
6— Nut (10 used on standard track) (12 used on long track)
8— Cap Screw (12 used on standard track) (14 used on long track)
9— Washer (16 used on standard track) (18 used on long track)
10— Cap Screw (4 used)
11— Washer (as required) (if equipped)

CAUTION: Prevent possible injury from crushing. Heavy component, use appropriate lifting device.

Specification	
Rock Guard—Weight (approximate)	73 kg (160 lb.)

1. **Rock Guards Remove and Install—**remove parts (1—11).

NOTE: Washers (11) are installed at factory on either side of spacer (5), as needed, to prevent rock guard-to-track chain interference. Depending on track frame, rock guards may have 0, 1, or 2 washers (11) installed per spacer (5).

Match factory installation of washers (11) during assembly. Rock guards should be parallel to each other and not tipped inward towards track chain.

2. Inspect rock guards (1 and 2) for wear and damage. Repair or replace parts as necessary.

3. Apply Loctite® 271™ Threadlocker (high strength) to cap screws (4, 8, and 10).

4. Install inner and outer rock guard, washers (9), and cap screws.

5. Put cap screws through inner guard, washer (11) (if equipped), spacer, washer (11) (if equipped), outer guard, washer (9), and nut. Tighten nuts to specification.

Specification	
Rock Guard-to-Track Frame Cap Screw—Torque	275 N·m (200 lb.-ft.)

Specification	
Inner Rock Guard-to-Outer Rock Guard Nut—Torque	530 N·m (390 lb.-ft.)

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PM10405,00005DB -19-30AUG13-4/4

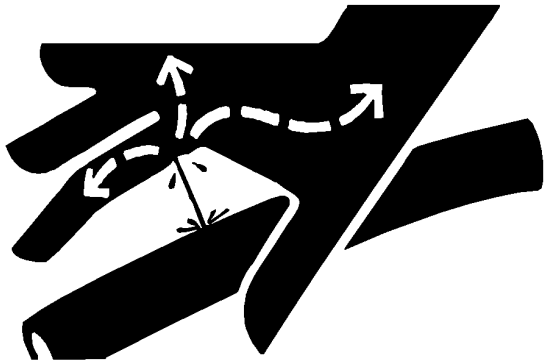
CAUTION: Escaping fluid under pressure can penetrate the skin causing serious injury. Do not remove grease fitting to increase track sag. Do not tamper with relief valve. It is fitted with a cover. Slowly loosen check valve fitting to release grease from track tension adjuster.

2. Slowly turn check valve fitting (3) counterclockwise one turn to release track tension. Put a piece of pipe between the sprocket and the track chain and rotate track to retract the adjusting cylinder if required. See Check and Adjust Track Sag. (Operator's Manual.)

CAUTION: Prevent possible injury from unexpected track movement. Raise the machine off the ground and support with 20-ton floor stands and floor stand kit.

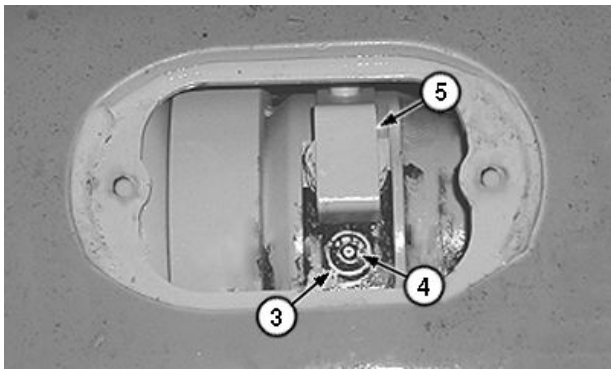
3. Raise machine off the ground. See Machine Supporting Procedure. (Group 9026-25.)
4. Remove center track guide or inner and outer rock guards if installed. See Track Guides and Rock Guards Remove and Install. (Group 0130.)

3— Check Valve Fitting
4— Grease Fitting
5— Relief Valve



T133509 —UN—15APR13

High Pressure Fluid



TX1098968A —UN—10OCT11

Track Adjuster Check Valve

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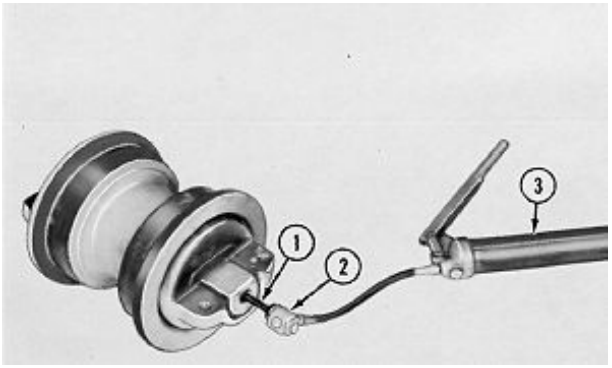
AB06447,0000BBC -19-11FEB15-2/3

23. Thoroughly clean nozzle (1), from JD313A Front Idler Lube Nozzle Kit, and around the plug end of track roller shaft.
24. Insert nozzle in roller shaft with flat side up, as far as possible.
25. Slowly pump recommended oil into shaft using adapter (2) and grease gun (3) until oil without air bubbles is seen leaking past the flat on nozzle. See Track Rollers, Front Idler, Carrier Roller and Track Frame Pivot Oil. (Operator's Manual.)

NOTE: Perform Track Roller Leakage Test BEFORE installing plugs.

26. Perform Track Roller Leakage Test. (Group 0130.)



T6090AI —UN—26OCT88

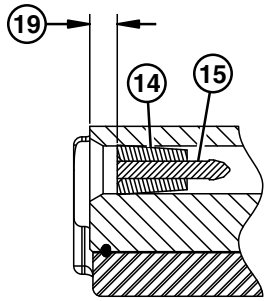
1— JD313-1 Lube Nozzle
2— JD313-2 Adapter
3— Grease Gun

AB06447,0000BBD -19-18NOV14-15/16

27. Install new plastic plug (15) into rubber plug (14). Install plug assembly into shaft to specified depth (19).

Specification	
Track Roller Oil Plug—Depth	10 mm 0.39 in.

28. Install track roller. See Track Roller Remove and Install . (Group 0130.)



T210171 —UN—07APR05

14— Plug (rubber)
15— Plug (plastic)
19— Track Roller Oil Plug Depth

AB06447,0000BBD -19-18NOV14-16/16

Track Link Height Inspection

SPECIFICATIONS	
750K Track Link Height (new)	119.0 mm 4.69 in.
750K Track Link Height (100% worn)	108.0 mm 4.24 in.
850K Track Link Height (new)	132.0 mm 5.20 in.
850K Track Link Height (100% worn)	118.5 mm 4.67 in.

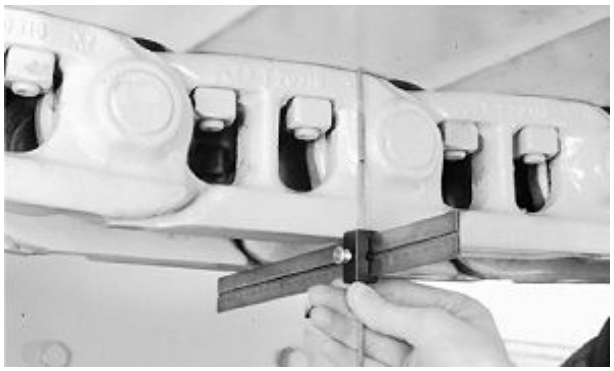
SERVICE EQUIPMENT AND TOOLS
JT05518A Undercarriage Inspection Kit

1. Using depth gauge from JT05518A Undercarriage Inspection Kit measure outer side of track link against pin boss as shown.
2. Measure two track links to nearest 0.5 mm (0.020 in.).

Specification

750K Track Link—Height (new)..... 119.0 mm
4.69 in.

750K Track Link—Height (100% worn)..... 108.0 mm
4.24 in.



T5802AD —UN—02NOV88

Measure Track Link Height

850K Track Link—Height (new)..... 132.0 mm
5.20 in.

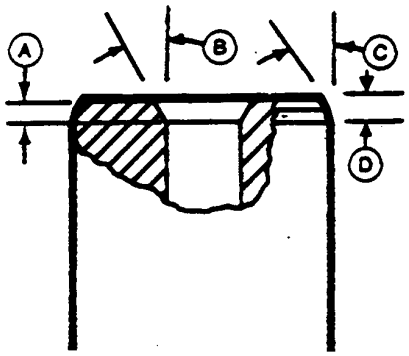
850K Track Link—Height (100% worn)..... 118.5 mm
4.67 in.

NOTE: For additional information, see 655K, 750J, 750K Link Height or see 755K, 850J, 850K Link Height. (SP326.)

AB06447,0000BC2 -19-10FEB15-1/1

15. Inspect pin ends. If the chamfer is missing due to wear, grind a 3 mm (0.12 in.) x 15° chamfer on pin. If chamfer is missing in plug hole, add new 4 mm (0.16 in.) x 30° chamfer.
16. Clean pins, bushings, and thrust rings in solvent.

A—4 mm (0.16 in.)
B—30°
C—15°
D—3 mm (0.12 in.)



T96269 —UN—27OCT88

Pin Ends

BS40810,000011D -19-09FEB15-5/18

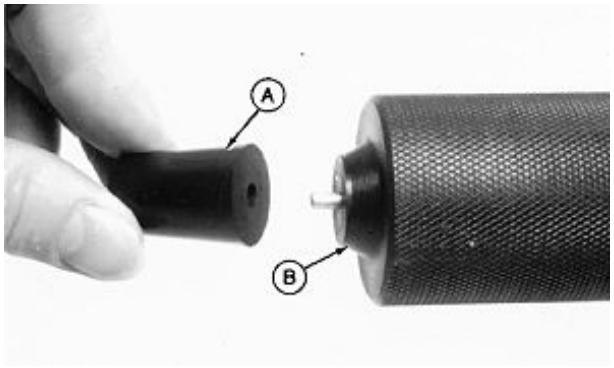
CAUTION: Prevent possible injury make sure all control levers of press are in the neutral position.

17. Assemble track using the following track press tool sets.

NOTE: Tooling listed below is purchased through WTC Machinery Corporation (800) 248-8405.

750K "91" Series Adjustable Tooling	
	800001—Jaw (2 used) 912001—Adjustable Tool Holder (2 used) 912002—Stationary Tool Holder (2 used) 913019—Pin Disassembly Tool (2 used) 914133—Bushing Disassembly Tool (2 used) 915080—Pin Assembly Tool (2 used) 916242—Bushing Assembly Tool (2 used) 917059—Shim Group 918001—Right Hand Tool Bar 918002—Left Hand Tool Bar
"C" Style (Spring Loaded) Tooling	
	(A2656-302).

850K "91" Series Adjustable Tooling	
	910025—Jaw 910114—Side Plate (2 used) 910214—Side Plate (2 used) 910314—Shims (4 used) 912003—Adjustable Tool Holder (2 used) 912004—Stationary Tool Holder (2 used) 913013—Pin Disassembly Tool (2 used) 914015—Bushing Disassembly Tool (2 used) 915175—Pin Assembly Tool (2 used) 916240—Bushing Assembly Tool (2 used) 917060—Shim Group
"C" Style (Spring Loaded) Tooling	
	(A2656-303).



T96272 —UN—27OCT88

Rubber Plug

A—Rubber Plug
B—JDG190 Plug Installer

18. Apply a mixture of 50% alcohol and 50% water to rubber plug (A) and install using JDG190 Plug Installer (B).

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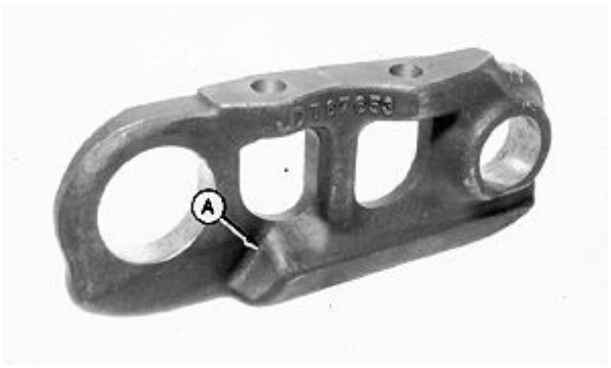
BS40810,000011D -19-09FEB15-6/18

13. Smooth area of track link wear (A) using a grinder, if necessary.

A—Track Link



T96289 —UN—27OCT88

Track Link Wear

AB06447,0000BE8 -19-10FEB15-5/11

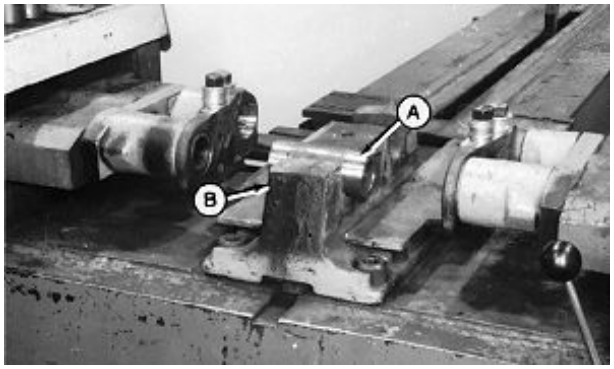
14. Assemble track links using the following track press tool sets.

NOTE: Tooling listed below is purchased through WTC Machinery Corporation (800) 248-8405.

750K "91" Series Adjustable Tooling
800001—Jaw (2 used) 912001—Adjustable Tool Holder (2 used) 912002—Stationary Tool Holder (2 used) 913019—Pin Disassembly Tool (2 used) 914133—Bushing Disassembly Tool (2 used) 915080—Pin Assembly Tool (2 used) 916242—Bushing Assembly Tool (2 used) 917059—Shim Group 918001—Right Hand Tool Bar 918002—Left Hand Tool Bar
"C" Style (Spring Loaded) Tooling
(A2656-302).

850K "91" Series Adjustable Tooling
910025—Jaw 910114—Side Plate (2 used) 910214—Side Plate (2 used) 910314—Shim (4 used) 912003—Adjustable Tool Holder (2 used) 912004—Stationary Tool Holder (2 used) 913013—Pin Disassembly Tool (2 used) 914015—Bushing Disassembly Tool (2 used) 9157175—Pin Assembly Tool (2 used) 916240—Bushing Assembly Tool (2 used) 917060—Shim Group
"C" Style (Spring Loaded) Tooling
(A2656-303).

NOTE: The pin end halves of master split link must be temporarily assembled to bushing end halves of link for proper positioning of plungers. Pin end halves will later have to be separated for installation at end of chain.



T96273 —UN—27OCT88

Bushing in Front Saddle

A—Bushing **B—Saddle**

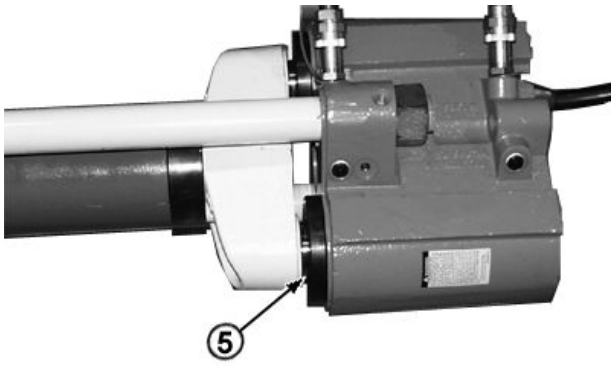
15. Assemble master split link halves using master shoe bolts and washers (as required). Tighten bolts just enough to hold link together.
16. Install assembled split links on ram plungers.
17. Install bushing (A) in front seat of saddle (B) so the mark is 180° opposite original location to expose a new wear surface.

Continued on next page

AB06447,0000BE8 -19-10FEB15-6/11

13. Slowly release hydraulic pressure so spring is allowed to decompress. Close valve when hydraulic rams (5) are 12.7 mm (0.5 in) from bottoming out as shown.

5— Hydraulic Ram (2 used)



T125871B —UN—16NOV99

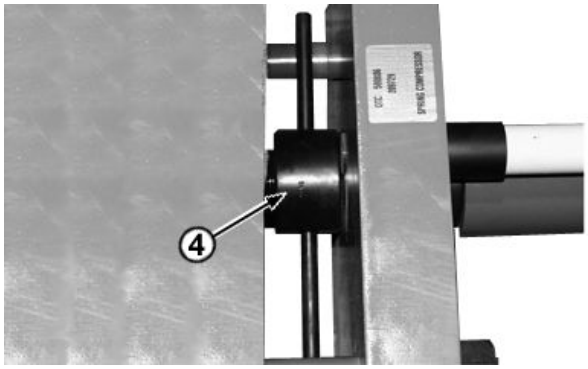
Hydraulic Rams Released

BS40810,0000110 -19-06APR17-7/20

⚠ CAUTION: Prevent possible injury use only the handles on the retaining collar to thread it against end plate. DO NOT place hands on threaded push rod between retaining collar and end plate.

14. Carefully reach in access door and thread the retaining collar (4) tight against the end plate as shown.

4— Retaining Collar



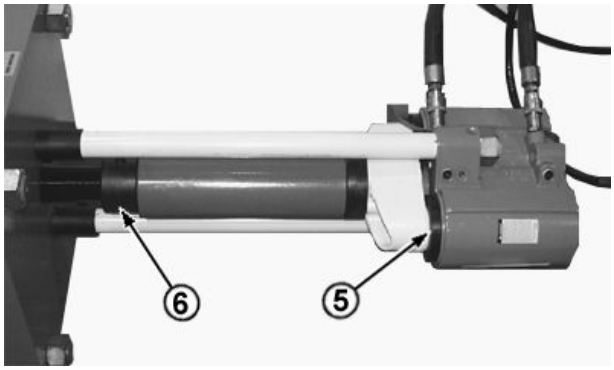
T125872B —UN—16NOV99

Retaining Collar Adjustment

BS40810,0000110 -19-06APR17-8/20

15. Release hydraulic pressure from hydraulic rams (5) so adjustment collar (6) is free to turn.

5— Hydraulic Ram (2 used) **6— Adjustment Collar**



T125919B —UN—16NOV99

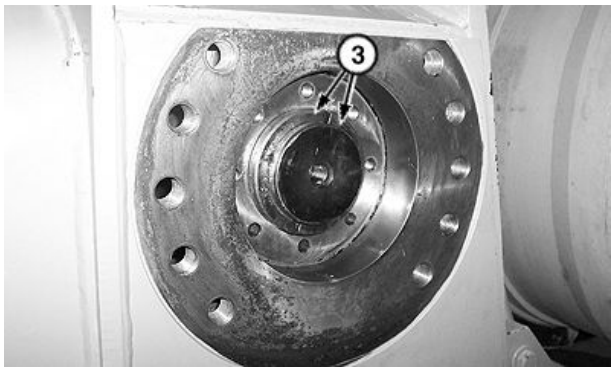
Adjustment Collar Adjustment

Continued on next page

BS40810,0000110 -19-06APR17-9/20

16. Apply petroleum jelly to track frame retainers (3) and install on pivot shaft.
17. Apply Loctite® 277™ Threadlocker (high strength) to pivot shaft cover.
18. Apply Loctite® 271™ Threadlocker (high strength) to pivot shaft cover cap screws.

3— Track Frame Retainer (2 used)



TX1182215A —UN—14JAN15

Track Frame Retainer

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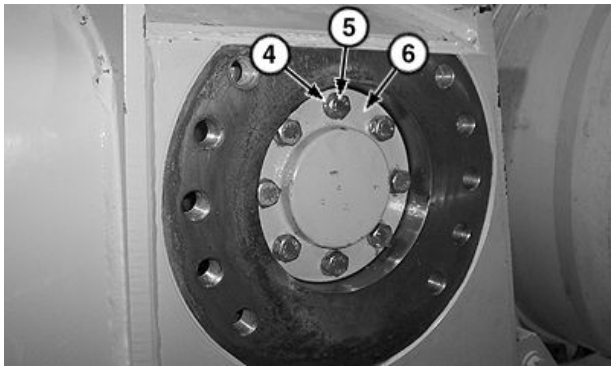
BS40810,0000112 -19-11FEB15-8/13

19. Install pivot shaft cover (6), washers (4), and cap screws (5). Tighten cap screws to specification.

Specification

Pivot Shaft Cover Cap Screw—Torque.....130 N·m
96 lb.-ft.

4— Washer (8 used)
5— Cap Screw (8 used)
6— Pivot Shaft Cover



TX1182233A —UN—14JAN15

Pivot Shaft Cover

BS40810,0000112 -19-11FEB15-9/13

20. Install crossbar-to-track frame pin, bushing, and cap screw. Tighten cap screw to specification.

Specification

Pivot Pin-to-Track Frame Cap Screw—Torque.....275 N·m
200 lb.-ft.

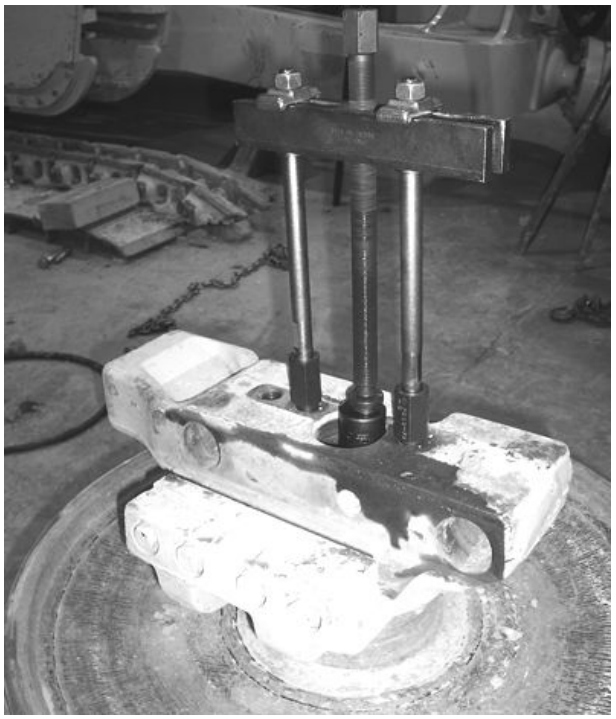
T2100015A —UN—31MAR05

Crossbar-to-Track Frame Pivot Pin

Continued on next page

BS40810,0000112 -19-11FEB15-10/13

6. Remove bracket (7 or 14) using puller.
7. Remove cap screws (12) and washers (11).



T211338A —UN—19MAY05

Front Idler Bracket Removal

BS40810,0000115 -19-29JAN15-2/11

8. Remove shaft (2) and bushing cover (8) from idler using a 2 inch disk from D01045AA Bushing, Bearing, and Seal Driver Set and a press.
9. Remove shaft from bushing case. Remove O-rings from shaft and bushing case.

NOTE: Tape metal face seals together to keep them in matched sets.

10. Remove metal face seals (13) and tape together.
11. Lift second bracket off idler.
12. Remove cap screws (12) and washers (11) from second bushing case.
13. Turn idler over. Use a 4 inch disk to remove second bushing case from idler. Remove O-ring from bushing case.

NOTE: Tape metal face seals together to keep them in matched sets.

14. Remove metal face seals (13) and tape together.
15. Inspect all parts for excessive wear or damage. Replace if necessary.

T211339A —UN—19MAY05

Front Idler Shaft Removal

Continued on next page

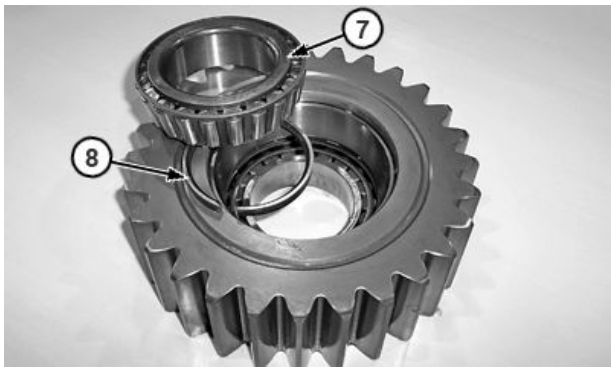
BS40810,0000115 -19-29JAN15-3/11

Section 02
Axles and Suspension Systems

Contents

5. Remove planet pinion bearing cones (7) and spacer (8).

7— Planet Pinion Bearing Cone (2 used) **8— Spacer**



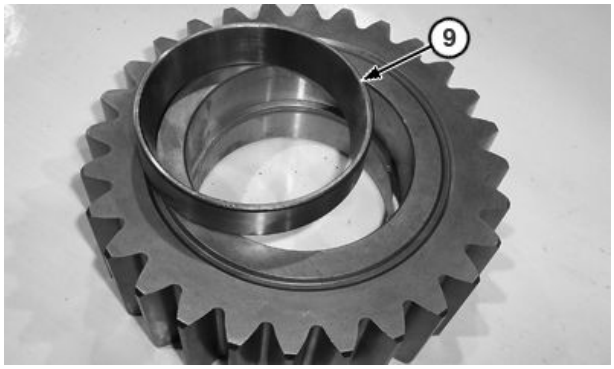
T211866A —UN—10JUN05

Planet Pinion Bearing Cone and Spacer

DA93471,00000DD -19-28JAN15-3/9

6. Planet pinion bearing cups (9) are a press fit. Remove bearing cups from planet pinion using a puller.

9— Planet Pinion Bearing Cup (2 used)



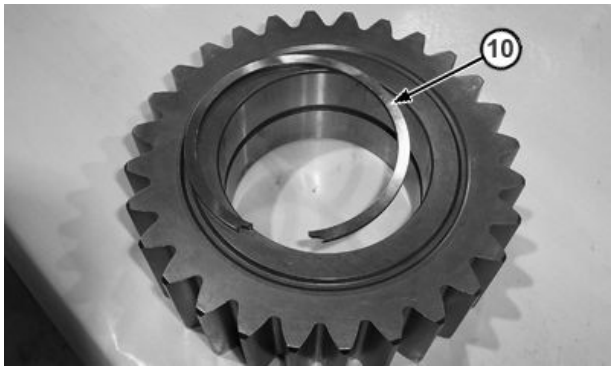
T211876A —UN—10JUN05

Planet Pinion Bearing Cup

DA93471,00000DD -19-28JAN15-4/9

7. Remove planet pinion snap rings (10).
8. Inspect all parts. Replace if necessary.

10— Planet Pinion Snap Ring (2 used)



T211877A —UN—10JUN05

Planet Pinion Snap Ring

Continued on next page

DA93471,00000DD -19-28JAN15-5/9

46. Apply Loctite® 277™ Threadlocker (high strength) to threads of retaining plate cap screws (3).
47. Install original shim pack, or new shim pack, if bearing preload had to be adjusted, retaining plate (4), and cap screws (3). Tighten cap screws (3) evenly until planetary housing assembly is bottomed on final drive housing.
48. Tighten retaining plate cap screws to specification.

Specification	
Retaining Plate Cap Screws—Torque	130 N·m 95 lb.-ft.

49. Rotate planetary housing in one direction four revolutions.
50. Check retaining plate cap screws to make sure they are to specifications.

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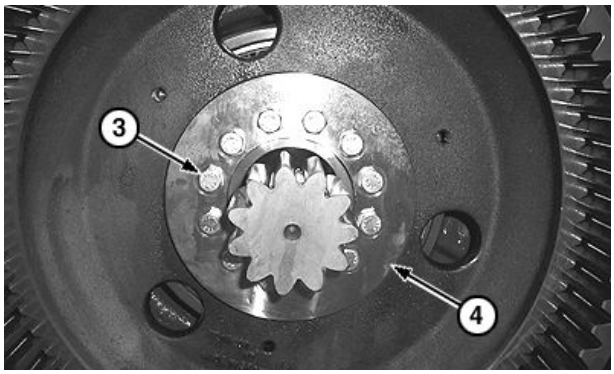

TX1035747A —UN—30JAN08

Planetary Housing Installation

3— Cap Screw M12 x 40 (12 used) **4— Retaining Plate**

PM10405,00005EA -19-02DEC14-11/13

IMPORTANT: Loose or broken hardware can cause segments to wear excessively. Install new cap screws, see parts catalog for correct part number.

51. Apply Loctite® 277™ Threadlocker (high strength) to threads of new sprocket segment cap screws (2).

IMPORTANT: When thread lock and sealer is applied to cap screws, use the dry torque specification to retain sprocket segments. Cap screw holes must be thoroughly cleaned before installing cap screws to this higher torque specification.

52. Install sprocket segment and cap screws. Tighten cap screws to specification.

Specification	
Sprocket Segment Cap Screw (zinc-plated)—Torque (dry)	712 N·m 525 lb.-ft.

53. Install new O-ring on planetary pinion carrier if required, install planetary pinion carrier to planetary housing. See Planet Carrier Remove and Install. (Group 0250.)
54. Install planetary pinion carrier to planetary housing cap screws. Tighten cap screws to specification.

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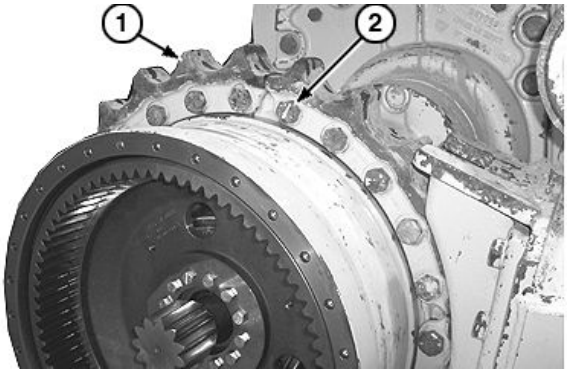


TX1035746A —UN—30JAN08

Sprocket Segment Installation

1— Sprocket Segment (5 used) **2— Cap Screw (25 used)**

Specification	
Planetary Pinion Carrier to Planetary Housing Cap Screws.—Torque	130 N·m 95 lb.-ft.

55. Install drain plug, tighten drain plug to specification.

Specification	
Final Drive Drain Plug—Torque	74 N·m 54 lb.-ft.

Continued on next page

PM10405,00005EA -19-02DEC14-12/13

Section 03
Transmission

Contents

Hydrostatic Motor Remove and Install

SPECIFICATIONS	
750K (S.N. —297255) Hydrostatic Motor Weight (approximate)	81 kg 178.57 lb
750K (S.N. 297256—) Hydrostatic Motor Weight (approximate)	62.4 kg 137.57 lb
850K Hydrostatic Motor Weight (approximate)	87.7 kg 193.35 lb
Hydrostatic Motor Mounting Cap Screw Torque	320 N·m 236 lb·ft
Hydrostatic Reservoir Capacity	115 L 30 gal

ESSENTIAL TOOLS 750K (S.N. —297255)
DFT1250 Lifting Bracket
DFT1243 Lifting Bracket Extension
DFT1137 Hydrostatic Motor Removal and Installation Tool

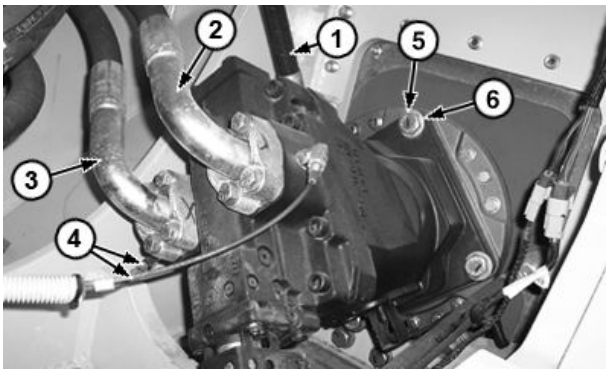
OTHER MATERIAL
Loctite® 7649™ Primer N™ Cure Primer
Loctite® 242® Threadlocker (medium strength)

REMOVAL

1. Park and prepare machine for service. See Park and Prepare for Service Safely. (Group 0001.)
2. Turn battery disconnect switch to OFF position.
3. Drain or apply a vacuum to hydrostatic reservoir. See Drain and Refill Transmission Oil and Replace Hydrostatic Charge Oil Filter. (Operator's Manual.)
4. Remove rear access cover or optional rear mounted equipment from machine.
5. Remove bottom access cover.

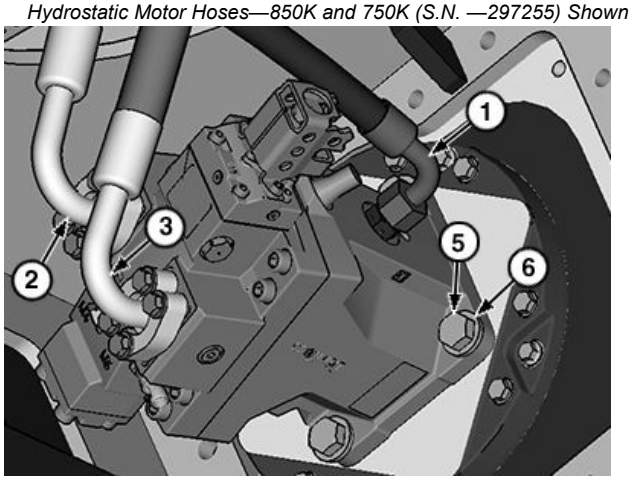
CAUTION: To avoid injury from escaping fluid under pressure, stop engine and relieve the pressure in the system before disconnecting or connecting hydrostatic or other lines. Tighten all connections before applying pressure.

6. Install identification tags and disconnect hoses (1—4). Close all openings using caps and plugs.



TX1184121A —UN—03FEB15

Hydrostatic Motor Hoses—850K and 750K (S.N. —297255) Shown



XJ12180064A —UN—23JUN16

Hydrostatic Motor Hoses—750K (S.N. 297256—)

1— Case Drain Hose
2— Forward Direction Hose
3— Reverse Direction Hose
4— Diagnostic Hose (2 used)
5— Cap Screw (4 used)
6— Washer (4 used)

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DA93471,00000C1 -19-19JUL16-1/4

11. Remove rod end lock nut (8).

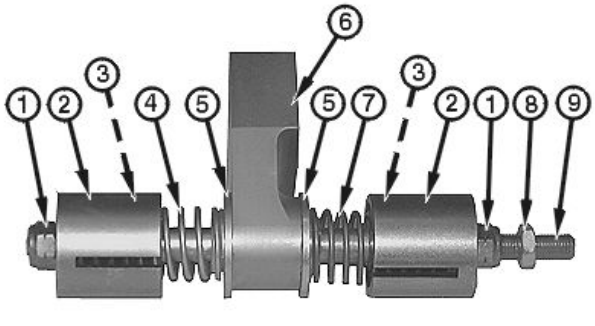
NOTE: Used two wrenches to loosen spring end lock nuts (1).

NOTE: Springs are color coded to aid in assembly.

12. Remove one spring end lock nut (1), spring guide (2), spacer (3), spring (4) or (7) and spring seat (5) from one side of steering plate (6).

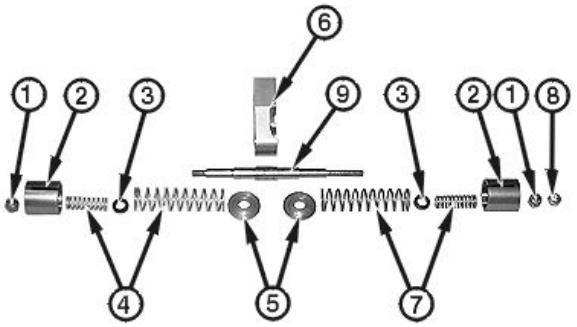
13. Place steer shaft (9) in soft jaw vise and remove spring end lock nut (1), spring guide (2), spacer (3), spring (4) or (7) and spring seat (5) from other side of steering plate.

1— Spring End Lock Nut (2 used)
2— Spring Guide (2 used)
3— Spacer (2 used)
4— Spring (chrome)
5— Spring Seat (2 used)
6— Steering Plate
7— Spring (gold)
8— Rod End Lock Nut
9— Steer Shaft



T119641B —UN—19JAN99

Steer Shaft Assembly



T119642B —UN—19JAN99

Steer Shaft Disassemble

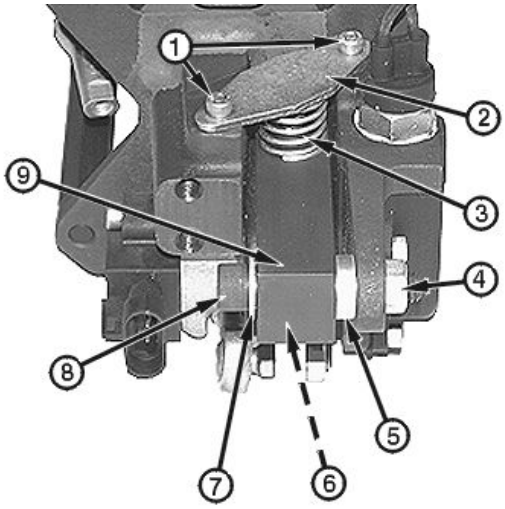
DA93471,00000C3 -19-06MAY15-9/38

14. Remove socket head cap screws (1), retaining plate (2) and detent spring (3).

15. Remove nut (4), socket head cap screw (8), spacer (5), washer (7), and detent lever (9).

16. Remove bushing (6) from detent lever.

1— Socket Head Cap Screw (2 used)
2— Retaining Plate
3— Detent Spring
4— Nut
5— Spacer
6— Bushing
7— Washer
8— Socket Head Cap Screw
9— Dentent Lever



T119643B —UN—19JAN99

Plate and Lever Assembly

Continued on next page

DA93471,00000C3 -19-06MAY15-10/38

59. If removed, install boot (3) and switch (2) in grip (1).

1— Grip
2— Switch
3— Boot

T124646B —UN—17SEP99

Grip Assembly

DA93471,00000C3 -19-06MAY15-36/38

60. Install and tighten screws (1—3).

1— Screw (2 used)
2— Screw
3— Screw With Nut (2 used)

T124645B —UN—17SEP99

TCL Assembly

Continued on next page

DA93471,00000C3 -19-06MAY15-37/38

19. Remove mechanical safety support lock pin and lower operator's station. See Operator's Station Tilting Procedure. (Operator's Manual.)

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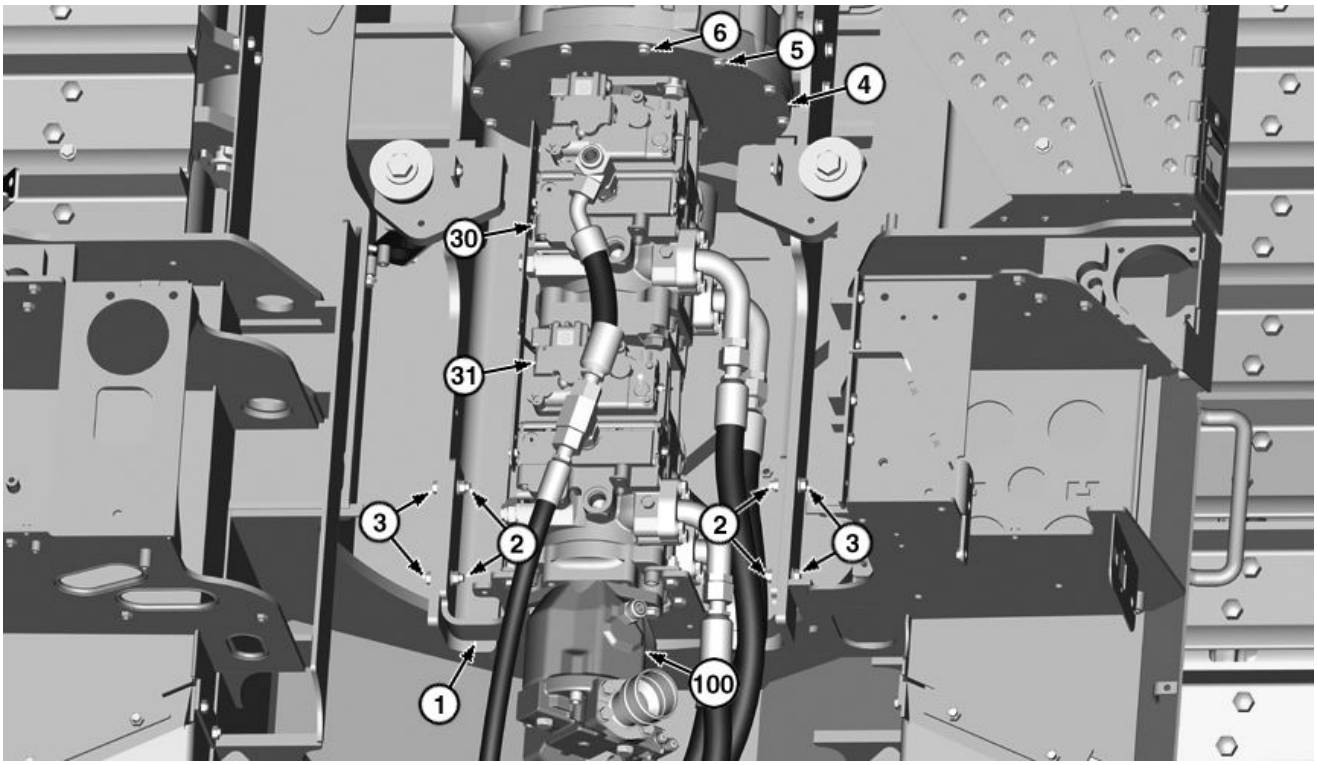
DA93471,00000C6 -19-05FEB15-3/6

850K Damper Drive Remove and Install



TX1181242 —UN—07JAN15

Hydrostatic and Hydraulic Pump Assembly

1— Hydraulic Pump Support Bracket
2— Nut (4 used)
3— Cap Screw (4 used)
4— Flywheel Cover
5— Cap Screw (10 used)
6— Cap Screw (2 used)
30— Front Hydrostatic Pump (right track)
31— Rear Hydrostatic Pump (left track)
100— Hydraulic Pump

1. Lower equipment to the ground and remove rear access cover.
2. Tilt operator's station and install mechanical safety support lock pin. See Operator's Station Tilting Procedure. (Operator's Manual.)

⚠ CAUTION: Prevent possible crushing injury from heavy component. Use appropriate lifting device.

3. Install appropriate lifting straps around hydrostatic pumps (30 and 31) and hydraulic pump (100).

Specification	
Hydrostatic and Hydraulic Pump Assembly—Weight (approximate)	327 kg 721 lb.

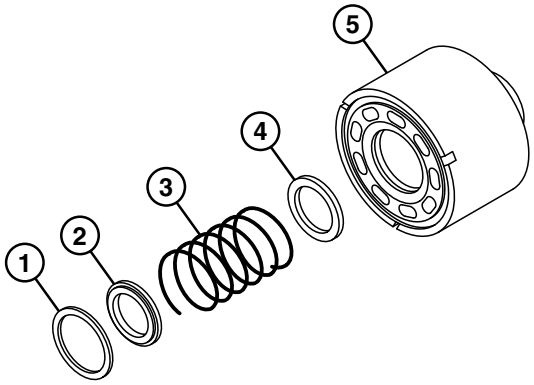
4. Disconnect pump control pilot (PCP) electrical connectors on hydrostatic pumps. See Engine Auxiliary Harness (W11) Component Location. (Group 9015-10.)
5. Remove cap screws (3) and nuts (2).

Continued on next page

DA93471,00000C6 -19-05FEB15-4/6

41. Compress the cylinder block (5) and remove the spiral retaining ring (1), retainer (2), spring (3), and spring seat (4). Clean cylinder block components and assemble.

1— Spiral Retaining Ring
2— Retainer
3— Spring
4— Spring Seat
5— Cylinder Block



TX1181657 —UN—06JAN15

Cylinder Block Components

DA93471,00000C7 -19-10FEB15-16/16

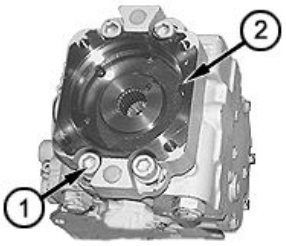
Charge Pump Disassemble and Assemble

SPECIFICATIONS	
750K Charge Pump Retaining Plate Cap Screw Torque	16 N·m 142 lb.-in.
850K Charge Pump Retaining Plate Cap Screw Torque	33 N·m 24 lb.-ft.
Flange Adapter Socket Head Screw Torque	298 N·m 220 lb.-ft.

IMPORTANT: Absolute cleanliness is essential when working on hydrostatic components.

1. Remove cap screws (1), flange adapter (2) and O-ring.

1— Socket Head Screw (4 used)
2— Flange Adapter



T199994A —UN—17MAY04

Remove Flange Adapter

DA93471,000013E -19-15MAY15-1/10

2. Remove cap screws (3) and retaining plate (4).

3— Cap Screw (6 used)
4— Retaining Plate

T199995A —UN—17MAY04

Pump Retaining Screws

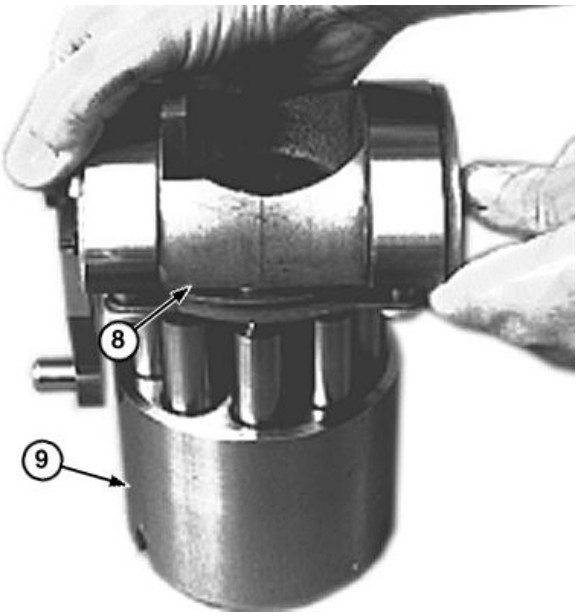
Continued on next page

DA93471,000013E -19-15MAY15-2/10

NOTE: The pistons and bores are not selectively fitted; specific piston and bore orientation is not required.

8. Lubricate the pistons and cylinder block bores. Install the assembled swash plate (8) into the cylinder block (9).

8— Swash Plate **9— Cylinder Block**



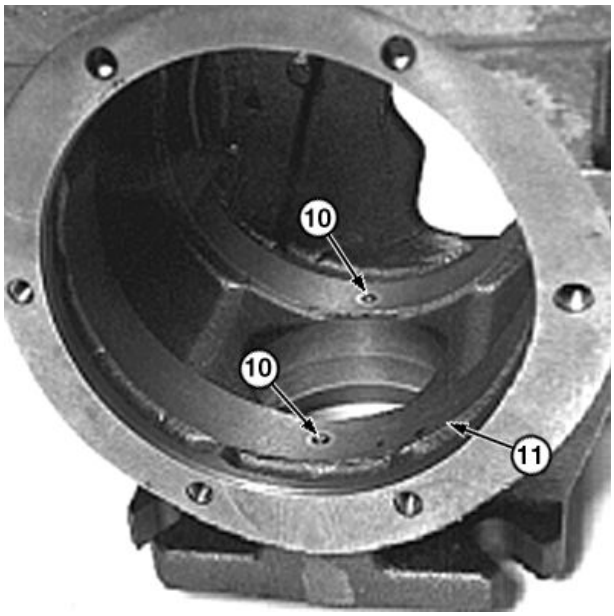
TX1125508A —UN—28NOV12

Pistons and Cylinder Block

DA93471,00000CC -19-10FEB15-4/31

9. Confirm pins (10) are secure in housing (11).

10— Pin (2 used) **11— Housing**



TX1125509A —UN—28NOV12

Swash Plate Bearing Race Locating Pins

Continued on next page

DA93471,00000CC -19-10FEB15-5/31

30. Install end cap alignment pins (36) into housing.

NOTE: The arrow cutouts in the valve plate must point in the direction of pump rotation when viewed from the shaft end.

31. Apply hydrostatic oil on running surface of cylinder block and install valve plate on alignment pins.

36— End Cap Alignment Pin (2 used)

TX1125536A —UN—28NOV12

End Cap Alignment Pins

DA93471,00000CC -19-10FEB15-23/31

32. Install new gasket (37) on housing. Be careful that gasket does not get caught on dowel pins.

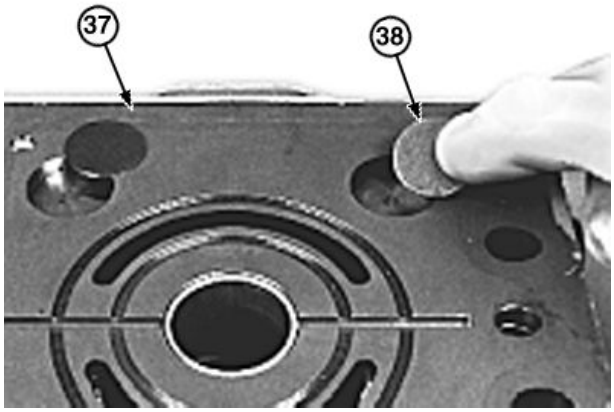
IMPORTANT: To prevent damage to hydrostatic pump use only hardened swash plate leveler spring shims only. Using other shimming materials could cause damage to pump.

NOTE: Thickness of a new shim is 0.5 mm (0.20 in.).

33. Lubricate end cap journal bearings. Install shims (38) into end cap pockets as removed during disassembly. Retain shims using petroleum jelly.

    If quantity of shims removed is unknown, consult specifications to determine number of shims needed.

Specification	
4.5 mm (0.177 in.) Pocket Depth—Quantity	One shim each pocket
6 mm (0.24 in.) Pocket Depth—Quantity	Add enough shims to get 3.5—4 mm (0.14—0.16 in.) pocket depth
7 or 7.5 mm (0.28 or 0.29 in.) Pocket Depth—Quantity	One shim each pocket



TX1125540A —UN—28NOV12

End Cap Gasket

37— Gasket

38— Shim (as required)

Continued on next page

DA93471,00000CC -19-10FEB15-24/31

17. Pull shaft assembly (55) out of rotating group housing (50), taking care to not damage shaft assembly and speed ring (57). DO NOT damage pistons. Use attachments from D01173AA 17-1/2 Ton Puller Set and JT01800 Driver Set.
18. Remove piston ring seals (56) from pistons using a small retaining ring pliers and an O-ring pick.

T199010A —UN—01APR04

Shaft Assembly

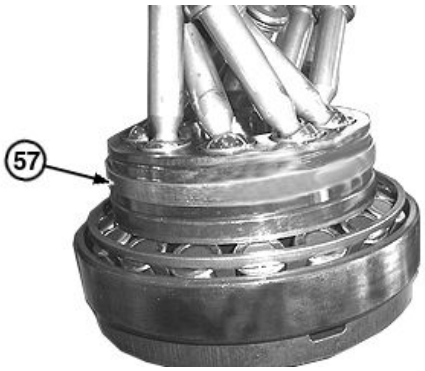
DA93471,00000CD -19-19JUL16-6/23

NOTE: Remove speed ring ONLY if replacement is necessary.

IMPORTANT: To prevent damage to the sealing surface of the cylinder block, use a hammer and a brass drift to remove the speed ring.

19. If required, remove speed ring (57) from shaft assembly by gently tapping on ring using a hammer and brass drift.
20. Clean and inspect all components. Replace as required.

57— Speed Ring



TX1061876A —UN—17JUL09

Shaft Assembly

DA93471,00000CD -19-19JUL16-7/23

750K (S.N. 297256—) and 850K Hydrostatic Motor Disassemble

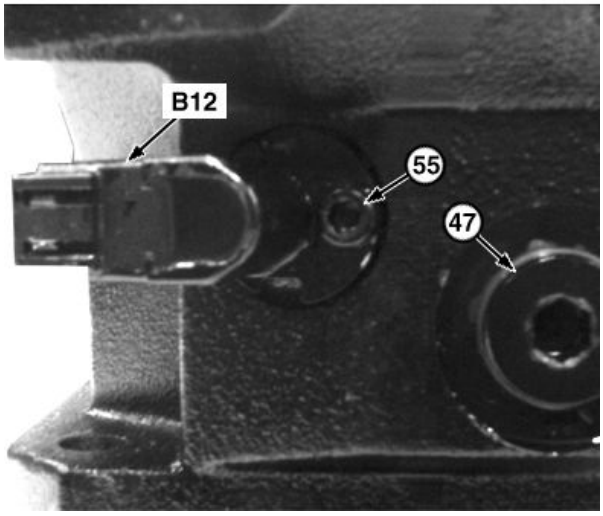
SERVICE EQUIPMENT AND TOOLS
D01173AA 17-1/2-Ton Puller Set

Continued on next page

DA93471,00000CD -19-19JUL16-8/23

12. Remove left motor speed sensor (B12) with O-ring (54).

47— Plug (2 used)
55— Cap Screw
B12— Left Motor Speed Sensor



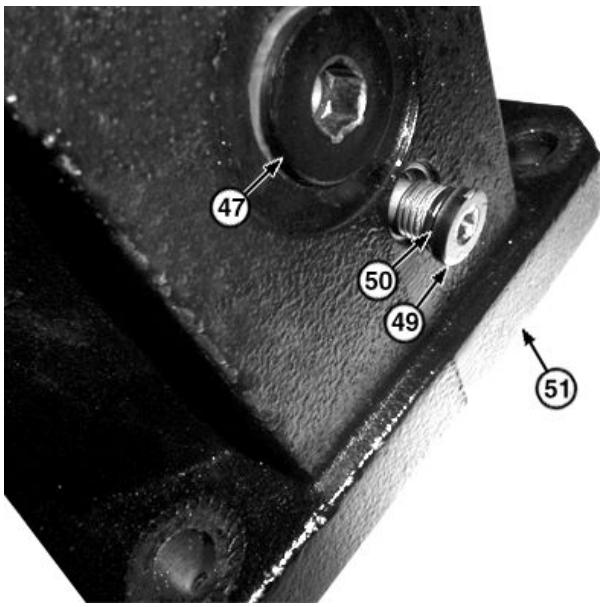
TX1183222A —UN—28JAN15

Left Motor Speed Sensor (550K/650K hydrostatic motor shown)

DA93471,00000CD -19-19JUL16-20/23

13. Remove dowel pin (49) with O-ring (50).

47— Plug (2 used)
49— Dowel Pin
50— O-Ring
51— Rotating Group Housing



TX1183217A —UN—04FEB15

Dowel Pin (550K/650K hydrostatic motor shown)

Continued on next page

DA93471,00000CD -19-19JUL16-21/23

28. Install seal (53) and O-ring (54) in flange (51).

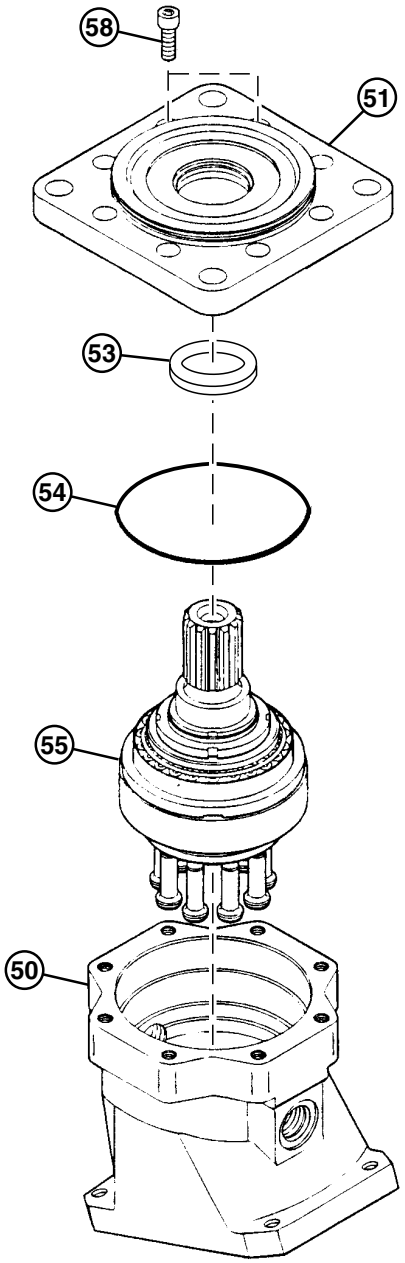
    Position shaft assembly (55) in rotating rotating group housing (50). Align scribe mark between housing and flange (51). Install flange over shaft assembly as far as possible.

    Install two cap screws (M12 x 65 mm) 180° apart on flange. Alternately tighten cap screws until bottomed to seat flange and shaft assembly. Remove two 65 mm (2.56 in) cap screws and repeat procedure using 50 mm (1.97 in) cap screws. Remove cap screws.

    Install socket head cap screws (58). Alternately tighten socket head cap screws to seat shaft assembly and flange against rotating group housing. Torque screws to specification.

Specification	
Flange-to-Rotating Group Housing Socket Head Cap Screw—Torque	110 N·m 81 lb·ft

50— Rotating Group Housing
51— Flange
53— Seal
54— O-Ring
55— Shaft Assembly
58— Socket Head Cap Screw (8 used)



TX1184140 —UN—09FEB15

Shaft Assembly

Continued on next page

DA93471,00000CE -19-19JUL16-9/32

1— Cap Screw (4 used)
2— Cover
3— O-Ring
4— Cap Screw
5— Seal
6— Ring
7— Bushing
8— Set Pin
9— Retaining Cap Screw
10— Valve Segment
11— O-Ring (3 used)
12— Plug (3 used)
13— Flushing Valve Spool
14— O-Ring (2 used)
15— Plug (2 used)
16— Spring (2 used)
17— Cap Screw (8 used)
18— Piston
19— Pin
20— Set Screw
21— Spring
22— Spring Seat
23— O-Ring
24— Operating Charge Relief Valve
25— O-Ring
26— End Cap Housing
27— Gasket
28— Servo Cover
29— O-Ring (3 used)
30— Plug (3 used)
31— Plug
32— O-Ring
33— Spool Valve
34— Motor Shift Solenoid Spool Valve
35— Cap Screw (4 used)
36— O-Ring
37— Cap Screw (3 used)
38— Cap Screw (2 used)
39— Guard
40— Bearing Plate
41— Cylinder Block
42— Synchronizing Shaft
43— Shaft Assembly
44— Gasket
45— Dowel Pin (2 used)
46— Minimum Displacement Stop Screw
47— Plug (2 used)
48— O-Ring (2 used)
49— Dowel Pin
50— O-Ring
51— Rotating Group Housing
52— Seal
53— Snap Ring
54— O-Ring
55— Cap Screw
56— Synchronizing Shaft Support Pin (2 used)
57— Filter (850K [S.N. 292426—]) (2 used)
B6— Left Hydrostatic Pressure Sensor
B12— Left Motor Speed Sensor
Y1— Left Motor Shift Solenoid

NOTE: Procedure shown is for left hydrostatic motor. Procedure for right hydrostatic motor is the same.

Continued on next page

DA93471,00000CE -19-19JUL16-18/32

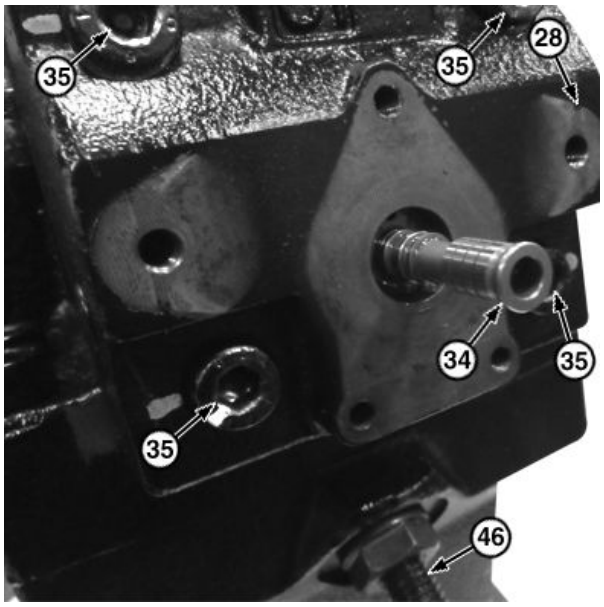
20. Install motor shift solenoid spool valve (34).
21. Install O-ring (36) and left motor shift solenoid (Y1) with cap screws[1] (37). Tighten to specification.

Specification

Cap Screw (37)—Torque.....6 N·m (53 lb·in)

22. Install guard[1] (39) with cap screws[1] (38).
23. Rotate shaft 360° to check final assembly.

28— Servo Cover
34— Motor Shift Solenoid Spool Valve
35— Cap Screw (4 used)
46— Minimum Displacement Stop Screw



TX1183202A —UN—27JAN15

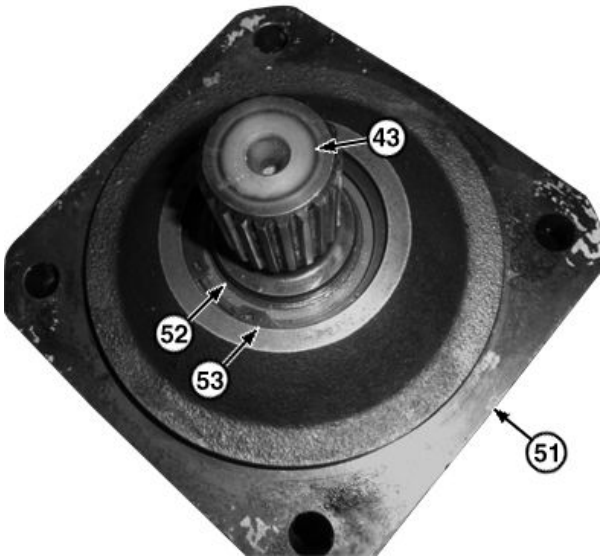
Motor Shift Solenoid Spool Valve

[1]*Component shown in exploded graphic at front of this section.*

DA93471,00000CE -19-19JUL16-31/32

24. Install seal (52) into rotating group housing (51).
25. Install snap ring (53).

43— Shaft Assembly
51— Rotating Group Housing
52— Seal
53— Snap Ring



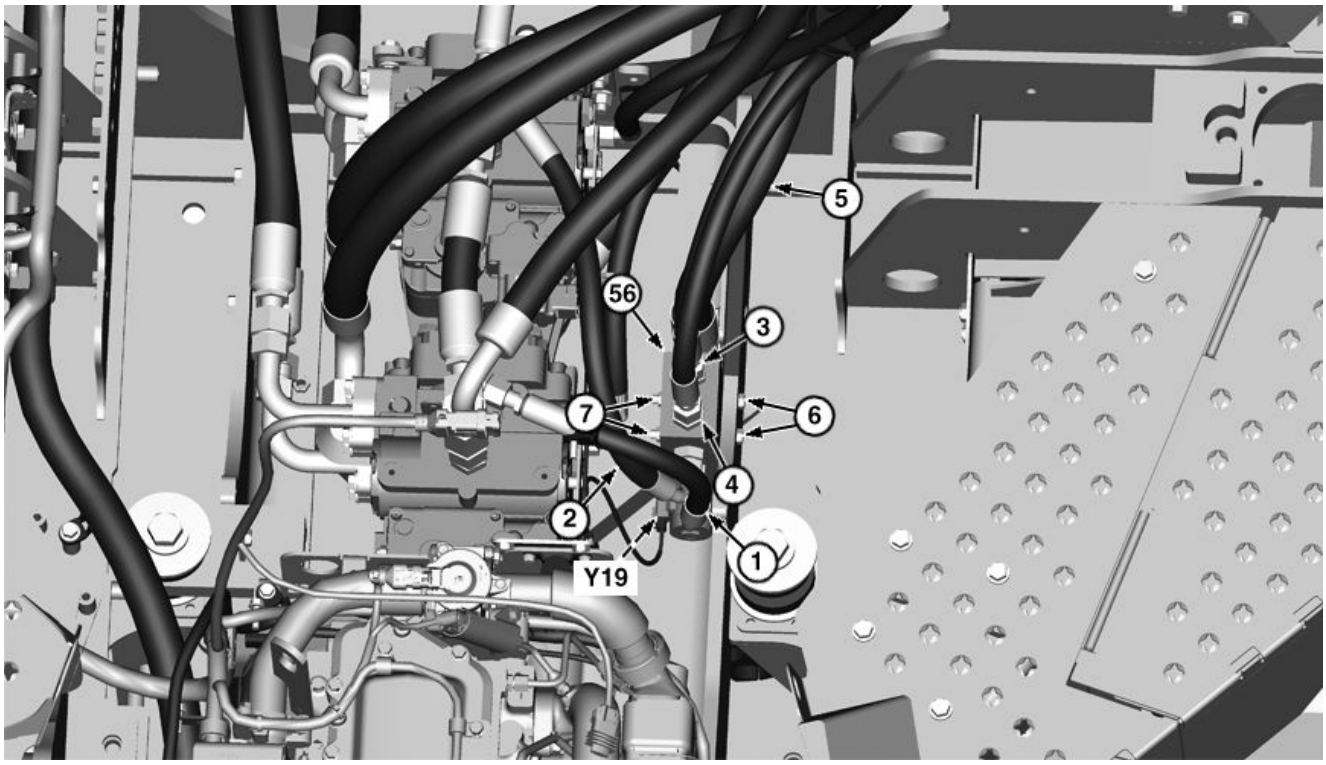
TX1183201A —UN—24JAN15

Seal and Snap Ring (550K/650K hydrostatic motor shown)

DA93471,00000CE -19-19JUL16-32/32

Hydrostatic Cold Start Valve Remove and Install

1. Park and prepare machine for service. See Park and Prepare for Service Safely. (Group 0001.)
2. Tilt operator's station and install mechanical safety support lock pin. See Operator's Station Tilting Procedure. (Operator's Manual.)



Hydrostatic Cold Start Valve

1— Front Hydrostatic Pump (port D)-to-Hydrostatic Cold Start Valve (port CHRG4) Line
2— Rear Hydrostatic Pump (port D)-to-Hydrostatic Cold Start Valve (port CHRG3) Line
3— Hydrostatic Cold Start Valve (port CHRG1)-to-Hydraulic Integrated Circuit (HIC) Valve (port CHG_IN) Line
4— Hydrostatic Cold Start Valve (port CHRG2)-to-Hydraulic Integrated Circuit (HIC) Valve (port CHG_IN) Line
5— Hydrostatic Tank Line
6— Cap Screw (2 used)
7— Nut (2 used)
56— Hydrostatic Cold Start Valve
Y19— Transmission Cold Start Solenoid

3. Disconnect transmission cold start solenoid (Y19) connector.
4. Apply vacuum or drain hydrostatic reservoir. See Drain and Refill Transmission Oil and Replace Hydrostatic Charge Oil Filter. (Operator's Manual.)

CAUTION: To avoid injury from escaping fluid under pressure, stop engine and relieve the pressure in the system before disconnecting or connecting hydraulic or other lines. Tighten all connections before applying pressure.

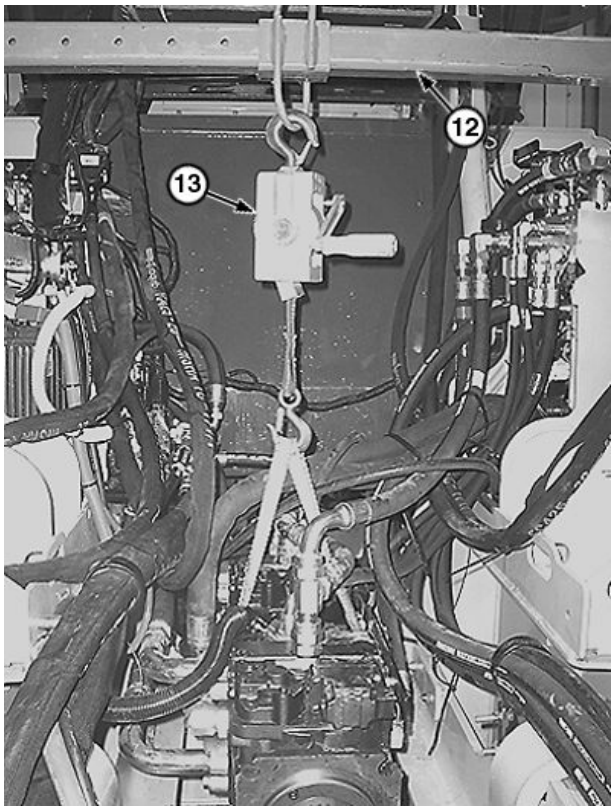
5. Install identification tags and disconnect hydraulic lines (1—5). Close all openings using caps and plugs.
6. Remove cap screws (6) and nuts (7).
7. Remove hydrostatic cold start valve (56).
8. Clean and inspect parts. Replace parts as needed.
9. Install hydrostatic cold start valve.
10. Install cap screws and nuts. Tighten to specification.
11. Connect hydraulic lines.
12. Fill hydrostatic reservoir to specification. See Drain and Refill Transmission Oil and Replace Hydrostatic Charge Oil Filter. (Operator's Manual.)
13. Connect transmission cold start solenoid (Y19) connector.
14. Remove mechanical safety support lock pin and lower operator's station. See Operator's Station Tilting Procedure. (Operator's Manual.)

DA93471,00000D2 -19-11FEB15-1/1

22. Support hydrostatic pump using JT07184 Pump Support Bracket (12) and a ratchet lifting device (13).

12— JT07184 Pump Support Bracket

13— Ratchet Lifting Device



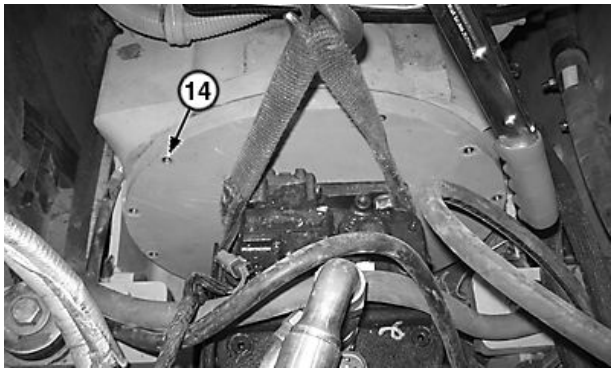
TX1089705A —UN—22MAR11

Pump Support

RE59955,0000F33 -19-05MAY15-8/10

23. Remove flywheel cover cap screws (14).

14— Flywheel Cover Cap Screw (10 used)



TX1089706A —UN—22MAR11

Hydrostatic Pump

Continued on next page

RE59955,0000F33 -19-05MAY15-9/10

Cooling Package Plenum Remove and Install

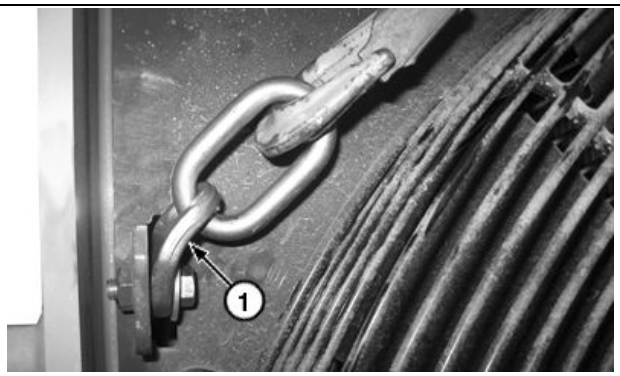
1. Remove grille. See Grille Remove and Install. (Group 1921.)

CAUTION: Prevent possible crushing injury from heavy component. Use an appropriate lifting device.

2. Remove hinge bars and install lifting eyes (1).
3. Support cooling package plenum.

Specification

Cooling Package Plenum—Weight (approximate)	86.2 kg 190 lb.



Lifting Eye

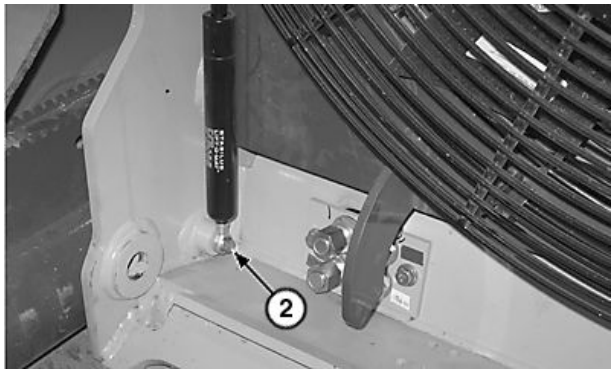
TX1089719A —UN—22MAR11

1— Lifting Eye (2 used)

RE59955,0000F45 -19-09JAN15-1/4

4. Remove cap screws (2).
5. Swing struts forward past frame.
6. Using appropriate lifting device, lower cooling package plenum forward.

2— Cap Screw (2 used)



Strut

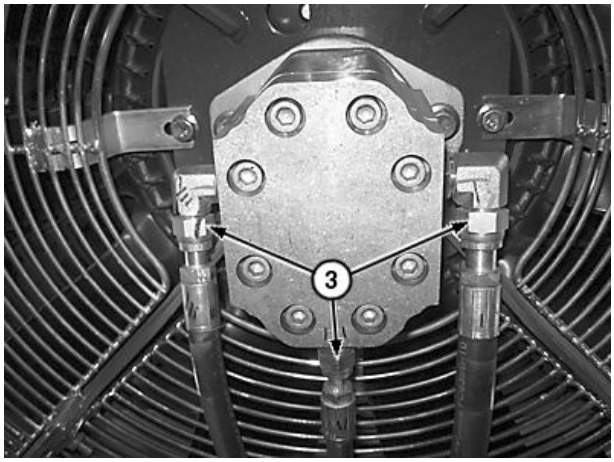
TX1089720A —UN—22MAR11

RE59955,0000F45 -19-09JAN15-2/4

CAUTION: To avoid injury from escaping fluid under pressure, relieve the pressure in the system before disconnecting or connecting hydraulic or other lines. Tighten all connections before applying pressure.

7. Tag and disconnect hydraulic lines (3). Close all openings using caps and plugs.
8. Raise cooling package plenum to upright position.

3— Hydraulic Line (3 used)



Hydraulic Lines

TX1089721A —UN—22MAR11

Continued on next page

RE59955,0000F45 -19-09JAN15-3/4

Charge Air Cooler Remove and Install

SPECIFICATIONS	
750K Charge Air Cooler Weight (approximate)	24.5 kg 54 lb.
850K Charge Air Cooler Weight (approximate)	31 kg 68 lb.

1. Park and prepare machine for service. See Park and Prepare for Service Safely. (Group 0001.)
2. Turn battery disconnect switch to the OFF position.
3. Remove grille housing cover and engine side shields. See Hood Remove and Install. (Group 1910.)
4. Remove upper and lower charge air cooler hoses at charge air cooler (1).
5. Remove clamp (2).
6. Remove cap screws (4) and bracket (5).
7. Remove hydrostatic oil cooler (3). See Hydrostatic Oil Cooler Remove and Install—750K or see Hydrostatic Oil Cooler Remove and Install—850K. (Group 0510.)

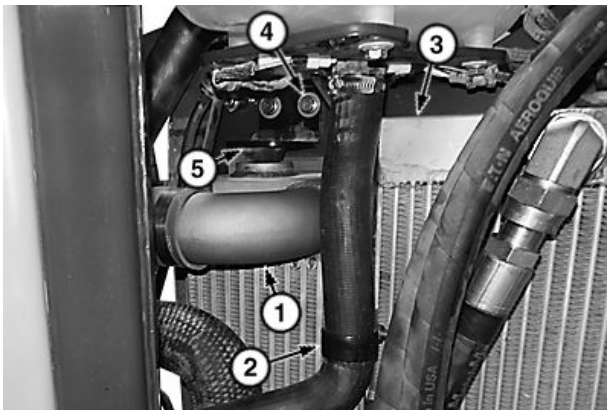
CAUTION: Prevent possible crushing injury from heavy component. Use appropriate lifting device.

8. Attach appropriate lifting device and remove charge air cooler.

Specification

750K Charge Air Cooler—Weight (approximate) ..... 24.5 kg 54 lb.

850K Charge Air Cooler—Weight (approximate) ..... 31 kg 68 lb.



TX1184166A —UN—04FEB15

Charge Air Cooler (850K shown)

1— Charge Air Cooler
2— Clamp
3— Hydrostatic Oil Cooler
4— Cap Screw (2 used)
5— Bracket

9. Clean and inspect parts. Repair or replace as necessary.
10. Place charge air cooler into cooling package, do not seat into locating hole at this time.
11. Install hydrostatic oil cooler.
12. Install charge air cooler.
13. Install cap screws and bracket.
14. Install upper and lower charge air cooler hoses.
15. Install clamp.
16. Install grille housing cover and engine side shields.
17. Turn battery disconnect switch to ON position.

RE59955,0000F47 -19-26FEB15-1/1

Large Debris Precleaner Remove and Install—If Equipped

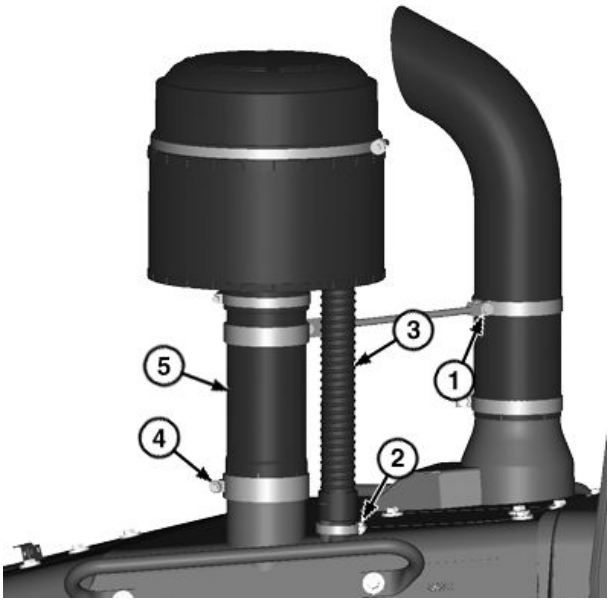
REMOVAL

1. Remove cap screw (1).
2. Remove hose clamp (2) from aspiration hose (3).
3. Remove pipe clamp (4) and pipe (5).

INSTALLATION

Install is reverse of removal procedure.

1— Cap Screw
2— Hose Clamp
3— Aspiration Hose
4— Pipe Clamp
5— Pipe



TX1183057A —UN—02FEB15

Large Debris Precleaner

RE59955,0000F58 -19-10FEB15-1/1

Aftertreatment Assembly Remove and Install

SPECIFICATIONS	
Aftertreatment Assembly Weight (approximate)	180 kg 400 lb.
Aftertreatment Inlet NOx Sensor Torque	50 N·m 37 lb.-ft.

REMOVAL

1. Park and prepare machine for service. See Park and Prepare for Service Safely. (Group 0001.)

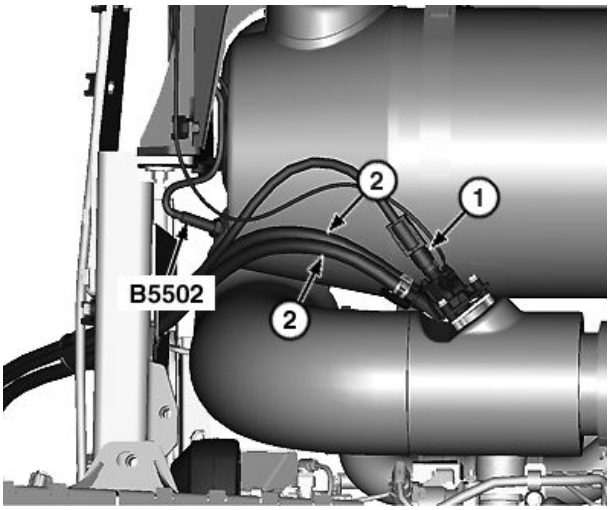
IMPORTANT: Do not remove battery leads for at least 4 minutes after engine stops. The selective catalytic reduction (SCR) system automatically purges itself of diesel exhaust fluid (DEF) immediately after the engine is stopped. If adequate time is not allowed for lines to be purged, residual DEF can freeze and possibly damage components of the SCR system during cold-weather exposure.

2. Disconnect negative (-) battery lead.
3. Remove engine side shields. See Engine Side Shields Remove and Install. (Group 1910.)
4. Remove hood. See Hood Remove and Install. (Group 1910.)

CAUTION: Prevent possible burning injuries. Allow exhaust components sufficient time to cool before performing service.

IMPORTANT: Prevent DEF system contamination. Absolute cleanliness is essential when working on DEF components. Clean component and adjacent areas before starting work. Close all openings using caps and plugs.

5. Disconnect DEF dosing injector line (1). See DEF Dosing System Coolant Lines — Removal. (CTM120019.)



TX1182085A —UN—02FEB15

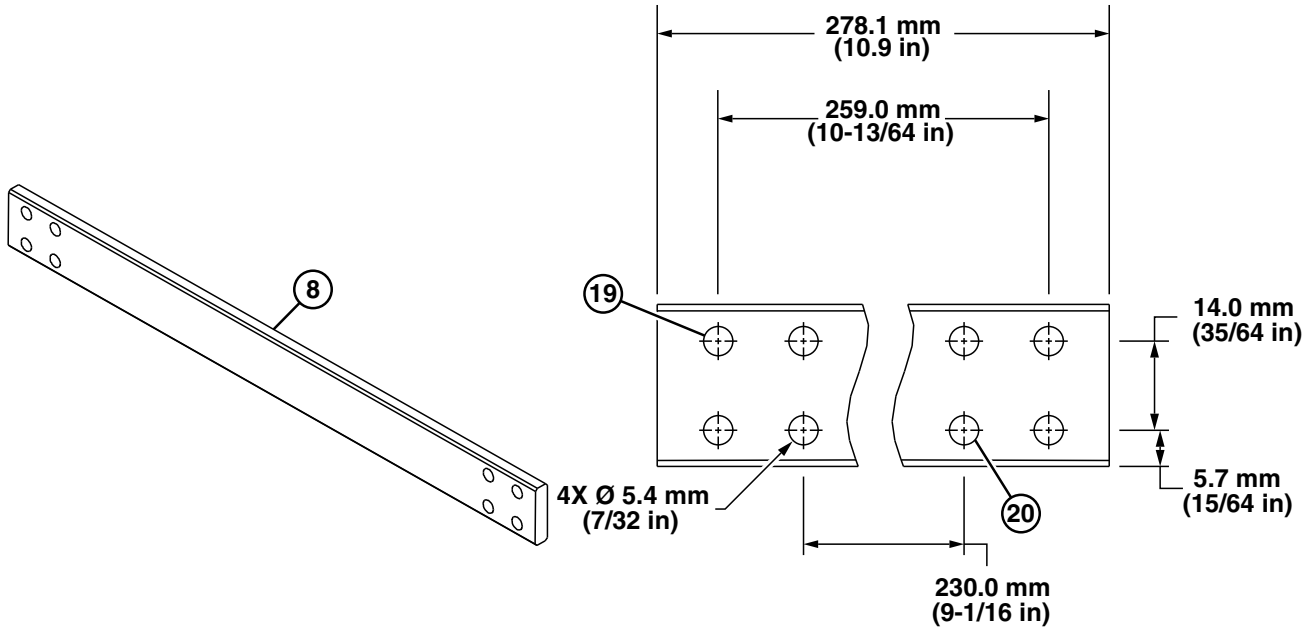
DEF Dosing Injector Line

1— Diesel Exhaust Fluid (DEF) Dosing Injector Line
2— Coolant Line (2 used)
B5502—Aftertreatment Inlet NOx Sensor

Continued on next page

RE59955,0000F43 -19-03MAR15-1/6

Bar Modification Configuration D



TX1212063

JDG11335P3P1 Configuration D

8— JDG11335P3P1 Bar (2 used) **19— Existing Drilling (4 used)** **20— Configuration D Drilling (4 used)**

To modify JDG11335P3P1 Bars (8) for machines requiring configuration D, measure and drill (20) as indicated.

VD76477,000059B -19-02MAY17-6/6

Service Filter Cleaning

For more information on service filter cleaning, see Service Filter Cleaning. (Group 9010-20.)

PM10405,0000632 -19-24MAR11-1/1

Diesel Exhaust Fluid (DEF) Decomposition Tube Remove and Install

CAUTION: Prevent possible burning injuries. Allow exhaust components sufficient time to cool before performing service.

Machine Preparation

1. Park and prepare machine for service. See Park and Prepare for Service Safely. (Group 0001.)
2. Remove right engine side shield. See Engine Side Shields Remove and Install. (Group 1910.)

Additional Information

- See DEF Decomposition Tube — Removal. (CTM120019.)
- See DEF Decomposition Tube — Installation. (CTM120019.)

RE59955,0000F40 -19-14JAN15-1/1

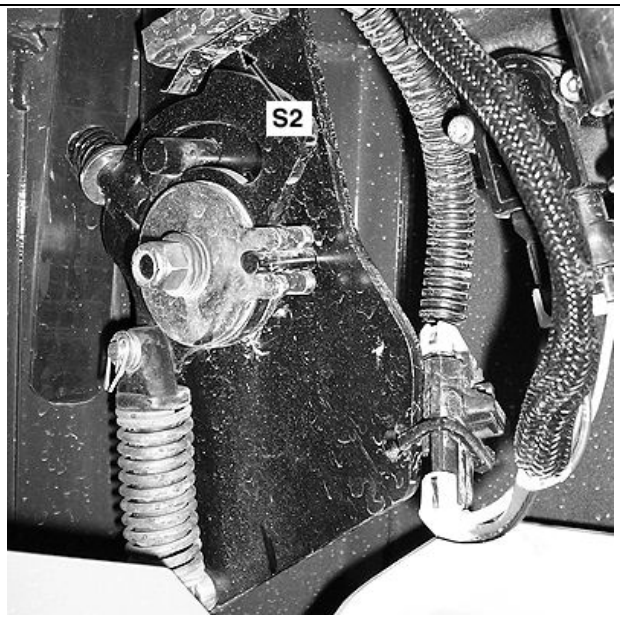
Park Lock Linkage Remove and Install

SPECIFICATIONS	
Park Lock Lever Mounting Cap Screw Torque	73 N·m 54 lb.-ft.
Control Lever Knob Nut Torque	23 N·m 204 lb.-in.

NOTE: Procedure shown is for left side park lock linkage. Procedure for right side is similar.

1. Lower all equipment to ground and stop engine.
2. Turn battery disconnect switch to OFF position.
3. Cut tie band and disconnect left park lock lever switch (S2) connector from cab harness.
4. Remove park lock lever knob.

S2— Left Park Lock Lever Switch



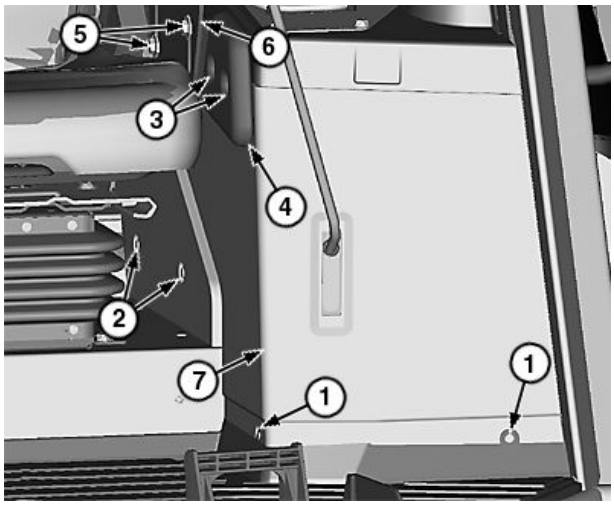
TX1182805A —UN—02MAR15

Park Lock Lever Switch

DA93471,00000D3 -19-02MAR15-1/3

5. Remove cap screws (1—3).
6. Remove pad (4).
7. Remove cap screws (5).
8. Remove armrest (6).
9. Remove cover (7).

1— Cap Screw (2 used)
2— Cap Screw (2 used)
3— Cap Screw (2 used)
4— Pad
5— Cap Screw (2 used)
6— Armrest
7— Cover



TX1091208A —UN—20JAN15

Left Side Cover

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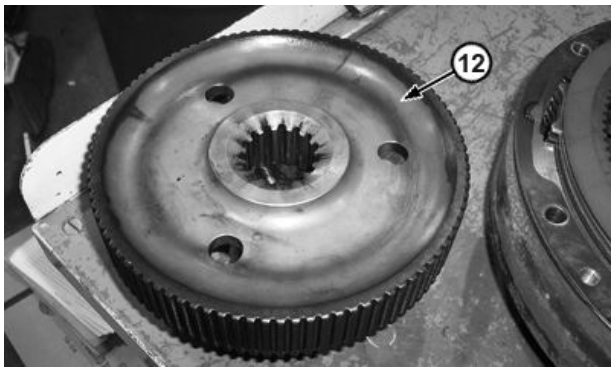
DA93471,00000D3 -19-02MAR15-2/3

7. Install hub (12).

12— Hub



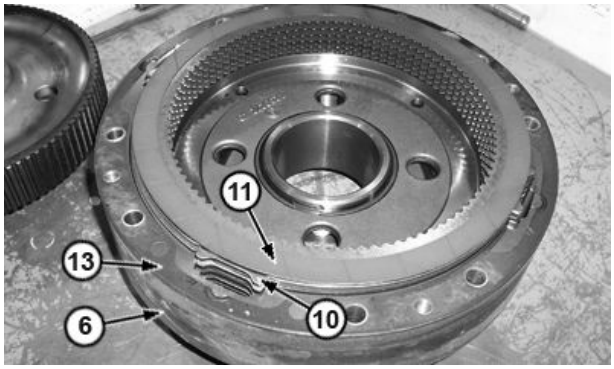
T211633A —UN—25MAY05

Brake Hub

DA93471,00000DE -19-28JAN15-12/15

8. Start with separator plate (10) and alternating install friction disks (11) and separator plates (10).

6— Housing
10— Separator Plate (4 used)
11— Friction Disk (4 used)
13— Gasket



T211634A —UN—25MAY05

Friction Disks and Separator Plates

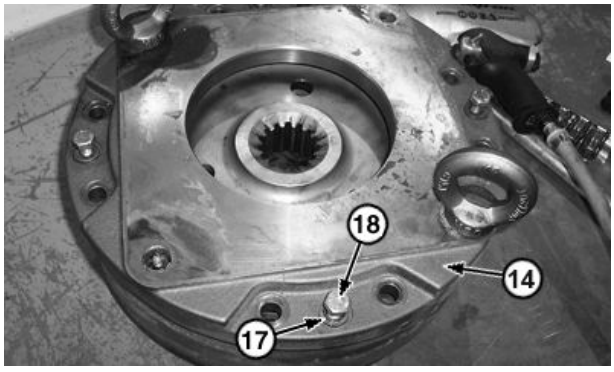
DA93471,00000DE -19-28JAN15-13/15

9. Install gasket (13) and cover (14). Install and carefully tighten cap screws (18) with lock washers (17) to compress springs. Tighten to specification.

Specification

Park Brake
Cover—Torque..... 66—73 N·m
49—54 lb.-ft.

14— Cover
17— Lock Washer (4 used)
18— Cap Screw (4 used)



TX1182666A —UN—15JAN15

Brake Cover

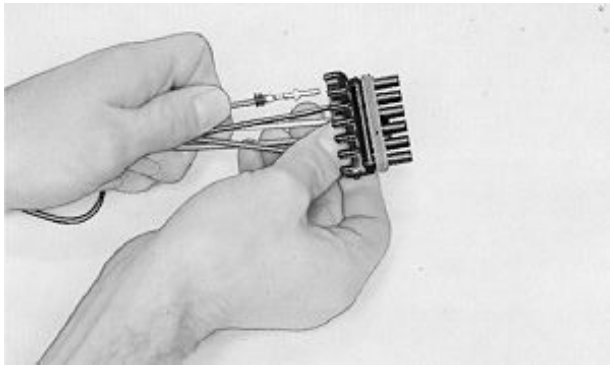
Continued on next page

DA93471,00000DE -19-28JAN15-14/15

IMPORTANT: Carefully spread contact lances to assure good seating on connector body.

NOTE: Connector bodies are "keyed" for proper contact mating. Be sure contacts are in proper alignment.

4. Push contact into new connector body until fully seated.
5. Pull on wire slightly to be certain contact is locked in place.
6. Transfer remaining wires to correct terminal in new connector.
7. Close connector body.



TS0130 —UN—23AUG88

DX,ECONN,O -19-03NOV94-2/2

Install WEATHER PACK™ Contact

NOTE: Cable seals are color coded for three sizes of wire:

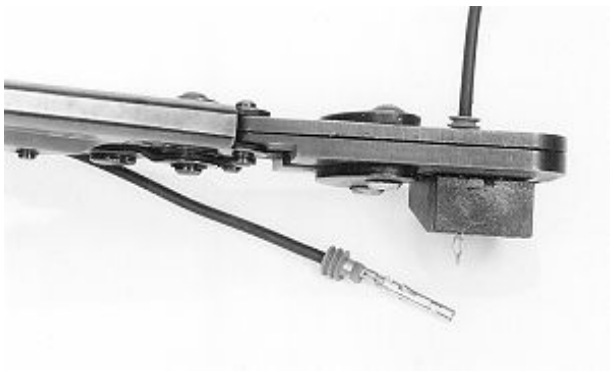
- *Green - 18 to 20 gauge wire*
- *Gray - 14 to 16 gauge wire*
- *Blue - 10 to 12 gauge wire*

1. Slip correct size cable seal on wire.
2. Strip insulation from wire to expose 6 mm (1/4 in.) and align cable seal with edge of insulation.

NOTE: Contacts have numbered identification for two sizes of wire: a) #15 for 14 to 16 gauge wire b) #19 for 18 to 20 gauge wire

3. Put proper size contact on wire and crimp in place with a "W" type crimp, using JDG783 Terminal Applicator.

TS0136 —UN—23AUG88



TS1623 —UN—02NOV94

WEATHER PACK is a trademark of Packard Electric.

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DX,ECONN,AA -19-04JUN90-1/2

Replace (Pull Type) Metri-Pack™ Connectors

Disconnect the Metri-Pack[1] connector (A). Remove tie bands and tape.

Insert a “T” pin (B) 6.4 mm (1/4 in.) into connector body socket (C).

NOTE: Use JDG777[2] Terminal Extraction Tool or “T” pin to remove terminals.

Angle “T” pin so pin tip slides close to the plastic socket edge pushing terminal locking tab (D) inward.

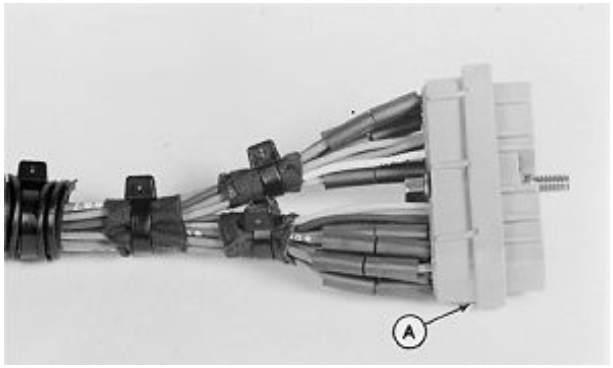
Remove “T” pin and push terminal (E) out of socket.

Remove terminal, cut strip and crimp wire through connector.

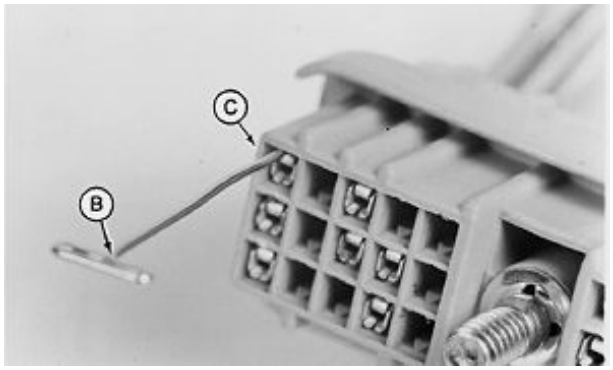
Check to make sure locking tab on new terminal is in outward position, then pull on wire until terminal locks in connector body socket.

NOTE: Terminal will seat only one way. If terminal does not pull into the connector body socket, check to make sure terminal is aligned correctly.

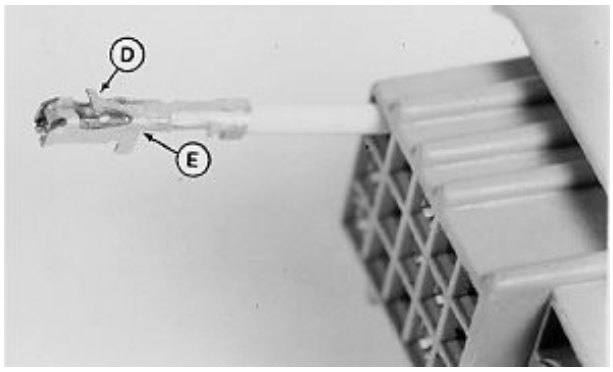
A—Connector
B—“T” Pin
C—Body Socket
D—Locking Tab
E—Push Terminal



RW16933 —UN—26APR89



RW16934 —UN—26APR89



RW16935 —UN—26APR89

[1]Metri-Pack is a trademark of Packard Electric
[2]Included in JT07195A Electrical Repair Kit

LW86157,00003B5 -19-08FEB08-1/1

Additional Rear Counterweight Remove and Install—If Equipped

SPECIFICATIONS	
Rear Counterweight Weight (approximate)	498 kg 1098 lb.
Additional Rear Counterweight Weight (approximate)	338 kg 746 lb.
Additional Rear Counterweight Cap Screw Torque	1200 N·m 885 lb.-ft.

NOTE: Additional counterweight is available on the 850K only.

1. Remove drawbar (if equipped). See Extended Rigid Drawbar Remove and Install or see Rigid Drawbar Remove and Install. (Group 1511.)

CAUTION: Prevent possible crushing injury from heavy component. Do not loosen cap screws (2) on the rear weight access doors. Once cap screws (4) are removed the rear counterweight will no longer be attached to the machine, and will be resting on the rear weight access doors.

CAUTION: Prevent possible crushing injury from heavy component. Use appropriate lifting device.

2. Support rear counterweight (1) to prevent it from sliding off rear weight access doors.

Specification

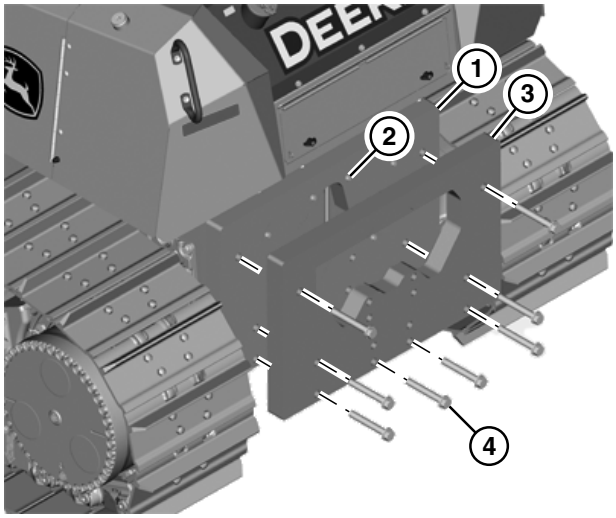
Rear Counterweight—Weight (approximate)..... 498 kg
1098 lb.

CAUTION: Prevent possible crushing injury from heavy component. Use appropriate lifting device.

3. Attach lifting device to additional rear counterweight (3).

Specification

Additional Rear Counterweight—Weight (approximate)..... 338 kg
746 lb.



TX1181428A —UN—02JAN15

Additional Rear Counterweight

1— Rear Counterweight
2— Cap Screw (7 used)
3— Additional Rear Counterweight
4— Cap Screw (8 used)

4. Remove cap screws (4) and additional rear counterweight.
5. Clean and inspect parts. Repair or replace as necessary.
6. Install additional rear counterweight and tighten cap screws to specification.

Specification

Additional Rear Counterweight Cap Screw—Torque..... 1200 N·m
885 lb.-ft.

7. Install drawbar (if equipped).

BS40810,000010E -19-13JAN15-1/1

1— Rear Window
2— Left Side Window
3— Front Window
4— Right Side Window
5— Nut (2 used)
6— Sealing Washer (4 used)
7— Hinged Windowpane
8— Screw (2 used)
9— Washer (2 used)
10— Door Handle
11— Spacer
12— Door Windowpane
13— Cap Screw (3 used)
14— Cover
15— Screw (2 used)

NOTE: Use this procedure to replace all door windowpanes and rear/front windowpanes.

Use a urethane auto glass adhesive sealant to hold windowpanes in place. Also use the primers, that are recommended for the adhesive formulation which has been selected. DO NOT use any other type of adhesive other than a urethane. It is also recommended that an auto glass dealer install the windowpanes.

IMPORTANT: Windowpanes must have an ultraviolet barrier around the edge of the glass since ultraviolet rays will deteriorate the adhesive. Windowpanes ordered through John Deere Parts have the ultraviolet barrier. If the windowpane is purchased through a glass dealer, the dealer must put an ultraviolet barrier on the glass. DO NOT apply paint to the border of the glass.

If an auto glass dealer is not installing the windowpanes, use the following procedure:

Remove and install cab windows (1—4) as shown.

1. Purchase urethane adhesive and appropriate primers from your local auto glass dealer.
2. If window frame is removable, remove frame from cab.
3. Scrape broken glass off existing adhesive. DO NOT remove adhesive from window frame or cab.
4. Trim existing adhesive so it has a smooth surface.
5. Inspect and clean both replacement glass and window frame. Use water with a mild detergent and allow to dry.
6. Apply primers according to adhesive manufacturer's recommendations.
7. Apply a 12.5 mm (1/2 in.) bead of adhesive on top of the existing adhesive. Bead must be high enough to fill gap between frame and installed window.
8. Put the new windowpane into position. Use light hand pressure to force windowpane down around the edges until even with metal frame. DO NOT over press adhesive.
9. If windowpane is installed directly on cab, use tape to hold it in place while adhesive cures.
10. Allow adhesive to cure for 24 hours before operating machine.

Door Windowpane Remove and Install:

1. Remove window wiper motors from doors. See Window Wiper Motor Remove and Install. (Group 1810.)
2. Remove screws (15) and cover (14).
3. Remove cap screws (13), spacer (11), and door handle (10).
4. Support and remove door windowpane (12).
5. Repair or replace as needed.
6. Install door windowpane, spacer, and door handle.
7. Install cover to door.
8. Install window wiper motors. See Window Wiper Motor Remove and Install. (Group 1810.)

Hinged Windowpane Remove and Install:

1. Remove screws (8) and washers (9).
2. Support hinged windowpane (7).
3. Remove nuts (5) and sealing washers (6). Remove hinged windowpane.
4. Repair or replace as needed.
5. Install hinged windowpane.

IMPORTANT: Do not overtighten nuts (5). Damage to hinged windowpane will result.

6. Install nuts and sealing washers.
7. Install screws and washers.

BS40810,00000FA -19-05DEC14-2/2

R134a Refrigerant Cautions and Proper Handling

SERVICE EQUIPMENT AND TOOLS
Refrigerant Identifier

CAUTION: DO NOT allow liquid refrigerant to contact eyes or skin. Liquid refrigerant will freeze eyes or skin on contact. Wear goggles, gloves, and protective clothing.

If liquid refrigerant contacts eyes or skin, DO NOT rub the area. Splash large amounts of COOL water on affected area. Go to a physician or hospital immediately for treatment.

DO NOT allow refrigerant to contact open flames or very hot surfaces such as electric welding arc, electric heating element, and lighted smoking materials.

DO NOT heat refrigerant over 52°C (125°F) in a closed container. Heated refrigerant will develop high pressure which can burst the container.

Keep refrigerant containers away from heat sources. Store refrigerant in a cool place.

DO NOT handle damp refrigerant container with bare hands. Skin may freeze to container. Wear gloves.

If skin freezes to container, pour COOL water over container to free the skin. Go to a physician or hospital immediately for treatment.

IMPORTANT: To meet government standards relating to the use of refrigerants, R134a is used in the air conditioning system. Because it does not contain chlorine, R134a is not detrimental to the ozone in the atmosphere. However, it is illegal to discharge any refrigerant into the atmosphere. It must be recovered using the appropriate recovery stations.

Use correct refrigerant recovery, recycling, and charging stations. Do not mix refrigerants, hoses, fittings, components, or refrigerant oils.

Use only John Deere approved R134a refrigerant products. Mixing of products not compatible will cause system damage and contaminate recovery, recycling, and charging station equipment. Care must be taken to identify and use equipment, refrigerant oil, and refrigerant designed only for R134a refrigerant systems. Refrigerant should be tested for type and purity before recovery, recycling, or charging of system. Refrigerant identifier should be used before any testing or repair to system is performed.

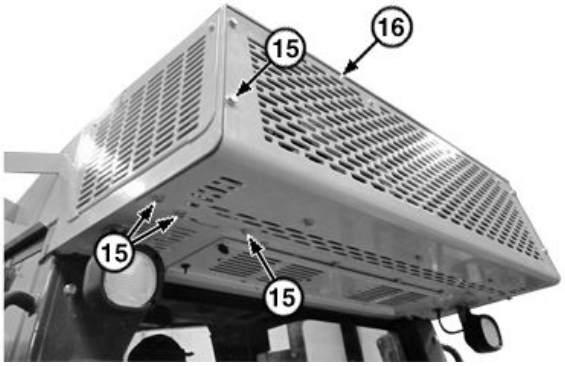
AS79221,00005A0 -19-03MAR16-1/2

Refrigerant Identifier	Used to safely and correctly identify type and check purity of refrigerant prior to recovery, recycling, and charging of air conditioning systems.

AS79221,00005A0 -19-03MAR16-2/2

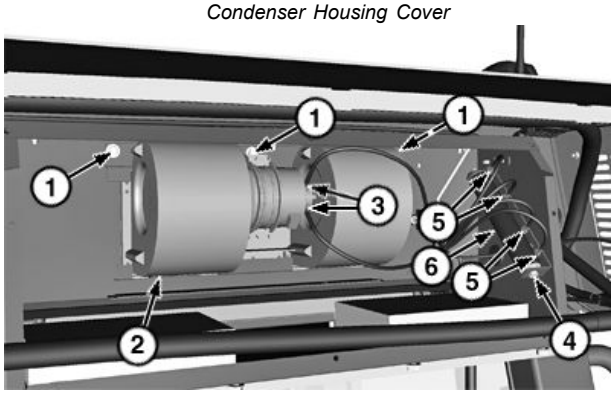
Blower Motor and Blower Motor Speed Resistor Remove and Install

1. Park and prepare machine for service. See Park and Prepare for Service Safely. (Group 0001.)
2. Turn battery disconnect switch to OFF position. See Battery Disconnect Switch. (Operator's Manual.)
3. Remove cap screws (15) and lower condenser housing cover (16).
4. Remove air conditioner and heater access covers.
5. Remove blower motor cover (for blower motor only).
6. Disconnect blower motor connectors (3). Remove cap screws (1).
7. Remove blower motor (2).
8. Disconnect resistor wire leads (5) and remove cap screw (4). Remove heater resistor (6).
9. Clean and inspect parts. Repair or replace as necessary.
10. Install new heater resistor, connect wire leads, and install cap screw (4).
11. Install blower motor and connect electrical connectors. Secure blower motor with cap screws (1).
12. Install blower motor cover.
13. Install access covers and condenser housing cover. Tighten cap screws.
14. Turn battery disconnect switch to ON position. See Battery Disconnect Switch. (Operator's Manual.)
15. Verify operation of blower motor. See Heater Blower Motor Check. (Group 9005.)



TX1182747A —UN—24JAN15

Condenser Housing Cover



TX1178269A —UN—04FEB15

Blower Motor

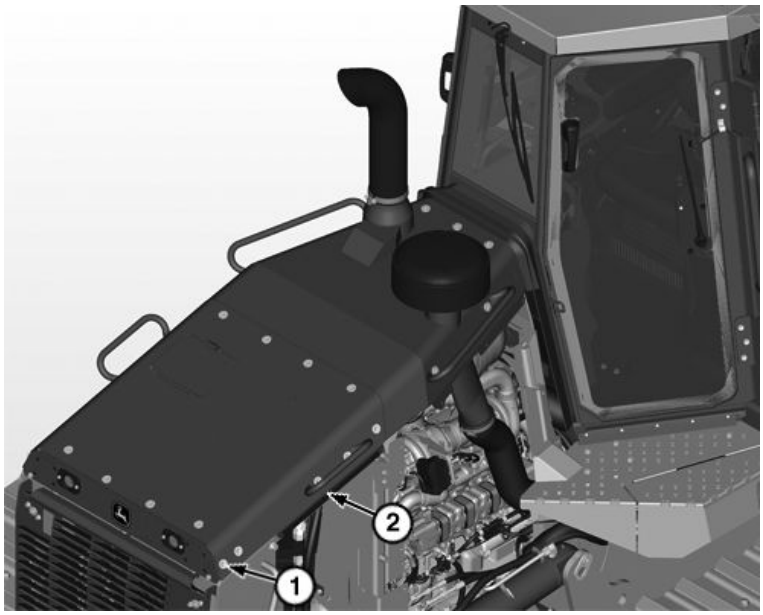
1— Cap Screw (3 used)
2— Blower Motor
3— Blower Motor Connector (2 used)
4— Resistor Cap Screw
5— Resistor Wire Lead (4 used)
6— Heater Resistor
15— Cap Screw (10 used)
16— Condenser Housing Cover

MM12851,00003FF -19-04FEB15-1/1

Hood Remove and Install

SPECIFICATIONS	
750K Grille Housing Cover Weight (approximate)	27 kg 59 lb.
850K Grille Housing Cover Weight (approximate)	32 kg 70 lb.
750K Hood Weight (approximate)	37 kg 82 lb.
850K Hood Weight (approximate)	55 kg 120 lb.

1. Remove engine side shields. See Engine Side Shields Remove and Install. (Group 1910.)



TX1180682A —UN—12DEC14

Grille Housing Cover

1— Cap Screw (14 used) **2— Grille Housing Cover**

2. Remove cap screws (1).

CAUTION: Prevent possible crushing injury from heavy component. Use appropriate lifting device.

3. Attach lifting device and remove grille housing cover (2).

	Specification
750K Grille Housing Cover—Weight (approximate)	27 kg 59 lb.
850K Grille Housing Cover—Weight (approximate)	32 kg 70 lb.

Continued on next page

BS40810,00000F2 -19-09MAR15-1/2

Section 20
Safety and Convenience

Contents

9. Clean all hydrostatic hoses and lines using Ultra Clean® Hose Kit.

NOTE: During installation, fill hydraulic components, hoses, and lines with clean hydraulic oil where possible to prevent a dry start-up.

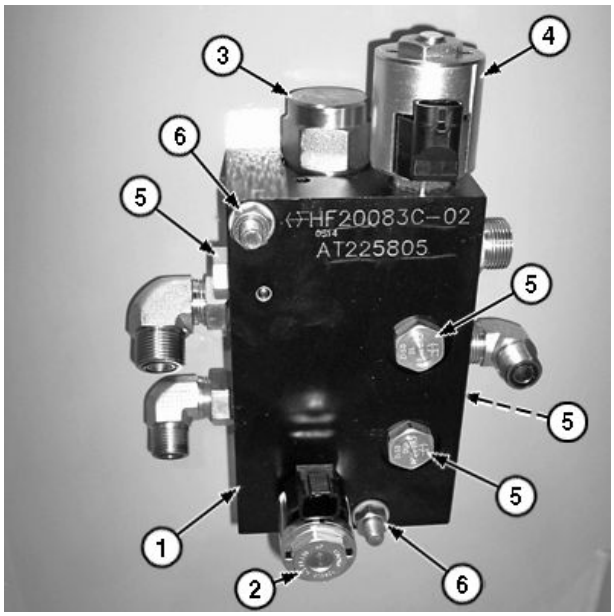
10. Install all cleaned hydrostatic components, hoses, and lines.
11. Replace transmission charge oil filter. See Drain and Refill Transmission Oil and Replace Hydrostatic Charge Oil Filter. (Operator's Manual.)
12. With all components installed, fill reservoir to proper level. See Check Hydrostatic Transmission Oil Level. (Operator's Manual.)
13. Turn battery disconnect switch to the ON position. See Battery Disconnect Switch. (Operator's Manual.)
14. Remove remaining air from hydrostatic system. See Hydrostatic Pump and Motor Initial Start-Up Procedure. (Group 0300.)
15. Remove residual oil contaminants using JDG10712 Super Caddy III. Perform General Oil Cleanup Procedure. (Group 2160.)

Super Caddy is a trademark of Deere & Company
Ultra Clean is a trademark of Ultra Clean Technologies Corp.

BS40810,00000DF -19-20APR16-3/3

Hydraulic Fan Reversing Valve Disassemble and Assemble

1— Fan Reversing Valve Block
2— Reversing Solenoid
3— Directional Valve
4— Proportional Solenoid
5— Check Valve (4 used)
6— Cap Screws, Washers, and Nuts



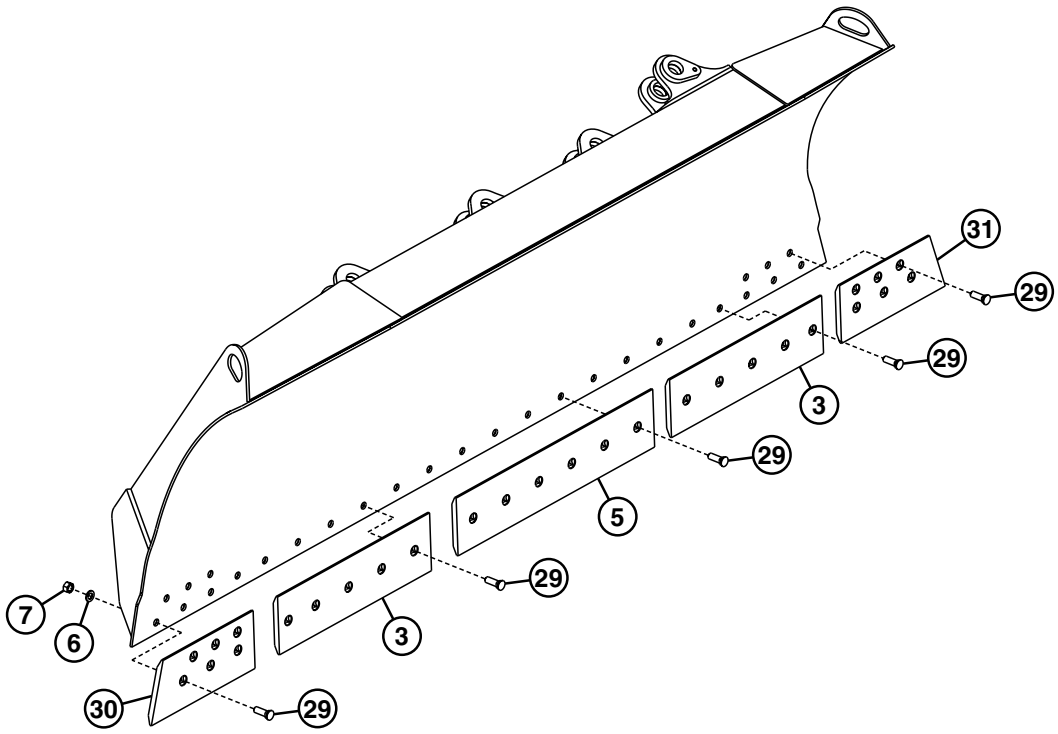
T212474A —UN—05JUL05

Item	Name	Torque Value
2	Reversing Solenoid	27 N·m (20 lb.-ft.) Coil Nut: 6.1 N·m (54 lb.-in.)
3	Directional Valve	Cartridge: 68 N·m (50 lb.-ft.)
4	Proportional Solenoid	Cartridge: 47 N·m (35 lb.-ft.) Coil Nut: 6.1 N·m (54 lb.-in.)
5	Check Valve	Cartridge: 27 N·m (20 lb.-ft.)

For more information see Hydrostatic System Schematic—Neutral (Park Brake On). (Group 9026-15.)

BS40810,00000E5 -19-06NOV14-1/1

Cutting Edges and End Bits Remove and Install



T212231 —UN—23JUN05

T212231

Cutting Edges and End Bits

3— Cutting Edge (2 used)
5— Cutting Edge
6— Washer (28 used)
7— Nut (28 used)
29— Cap Screw (28 used)
30— End Bit
31— End Bit

1. Block frame securely with cutting edge above ground level.

CAUTION: Prevent possible crushing injury from heavy cutting edges. Use an appropriate lifting device to remove and install cutting edges.

2. Remove cutting edges (3 and 5) and end bits (30 and 31).

Specification

Cutting Edge (5)—Weight	41 kg (90 lb)
Cutting Edge (3)—Weight	32 kg (70 lb)

3. Inspect parts and replace as necessary.
4. Install cutting edges (3 and 5) and end bits (30 and 31).

BS40810,00000C8 -19-03NOV14-1/1

Blade Adjustment

NOTE: Strut length of 1667 mm (65-5/8 in.) is a starting dimension. Further adjustment to this length may be needed if center pin travel does not fall within 38.1 mm (1-1/2 in.) of travel range when blade is tilted from level to full tilt in either direction.

1. Check position of center pin using dimension (35).
   a. Measure from center of ball stud (28) to center of pin (29) in lower yoke assembly.
   b. If necessary, adjust length of lower strut assembly to 1667 mm (65-5/8 in.) by rotating lower yoke assembly.
2. Lift blade off ground so ends will not collide with anything when tilted.

Specification	
Blade-to-Ground—Height (approximate)	1067 mm 42 in.

3. Fully tilt blade each direction and hold in tilted position for 15 seconds each cycle to fill lines and cylinders.

CAUTION: Escaping fluid under pressure can have sufficient force to penetrate skin, causing serious personal injury. Hydraulic fluid can be pressurized from mechanical leverage on cylinders, ambient temperature rise, and machine system pressure. Before disconnecting fittings, be sure to relieve all pressure.

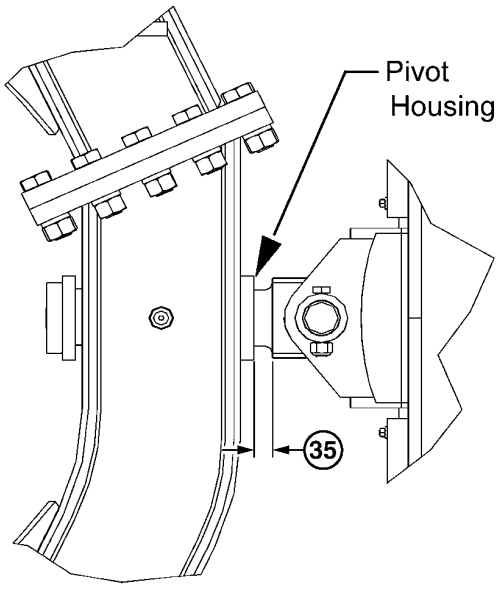
4. If cylinders do not reach maximum stroke measurements, open lines between rod end of cylinders briefly to bleed air. Close lines and repeat cycle.

Specification	
Cylinder—Length (fully retracted)	1038 mm 40-7/8 in.
Cylinder—Length (fully extended)	1184 mm 46-5/8 in.

IMPORTANT: Avoid damage to surface of swivel pin and blade assembly.

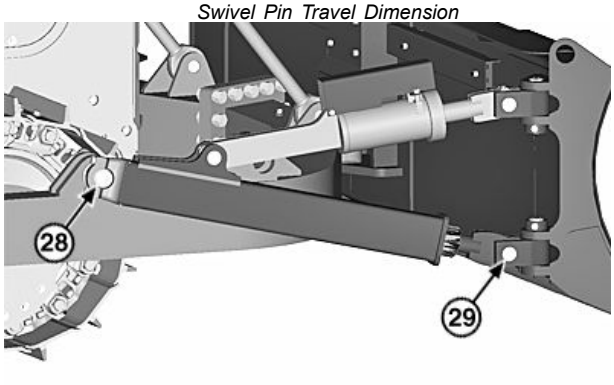
Adjust lower strut assembly correctly to prevent pin from bottoming out in either direction, causing binding between surface of swivel pin and blade assembly.

NOTE: The center swivel pin of the pushbeam is designed to move in and out of the pushbeam pivot housing. It has a travel range of 38.1 mm (1-1/2 in.).



TX1159788 —UN—02MAY14

Swivel Pin Travel Dimension



TX1159945A —UN—06MAY14

Strut Measuring Points (right side strut shown)

28— Ball Stud
29— Pin
35— 38.1 mm (1-1/2 in.)

When blade is not tilted, pin is pulled forward toward blade. When blade is at full tilt, pin will move back about 25.4 mm (1 in.). For correct setup, adjust the length of lower strut so 25.4 mm (1 in.) of travel falls within 38.1 mm (1-1/2 in.) range allowed. Make sure that the pin does not bottom out in either direction.

5. Tilt blade fully in both directions and check that swivel pin does not bottom out in either direction.
6. If swivel pin does bottom out, adjust the length of lower strut by rotating lower yoke assemblies so 25.4 mm (1 in.) of travel falls within 38.1 mm (1-1/2 in.) range allowed.

BS40810,00000CA -19-03NOV14-9/9

CAUTION: Avoid personal injury from heavy component. Use appropriate lifting device.

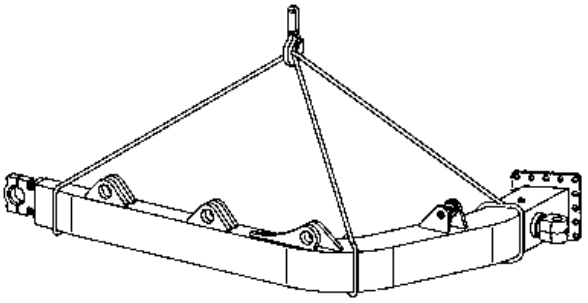
Specification	
Left Pushbeam Assembly—Weight (approximate)	910 kg 2006 lb.
Right Pushbeam Assembly—Weight (approximate)	850 kg 1874 lb.

NOTE: If width over track shoes is wider than inside width of pushbeam assembly, attach pushbeam halves to dozer trunnions first and then assemble bolt flanges. Perform steps 7—10 then proceed with steps 4—6.

4. Attach appropriate lifting device and position left and right pushbeam assemblies (4 and 5) with bolt flanges together.
5. Install cap screws (6), lock washers (7), and nuts (8) finger tight.
6. Align outer edges of both pushbeam flanges and tighten cap screws to specification.

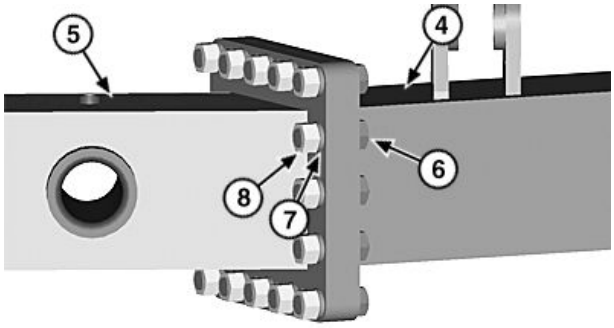
Specification	
Pushbeam Flange Cap Screws—Torque	1830 N·m 1350 lb.-ft.

4— Left Pushbeam Assembly
5— Right Pushbeam Assembly
6— Cap Screw 1-1/4 x 4 in. (16 used)
7— Lock Washer (16 used)
8— Nut 1-1/4 in. (16 used)



TX1159701 —UN—01MAY14

Pushbeam Half Lifting Points



TX1159668A —UN—01MAY14

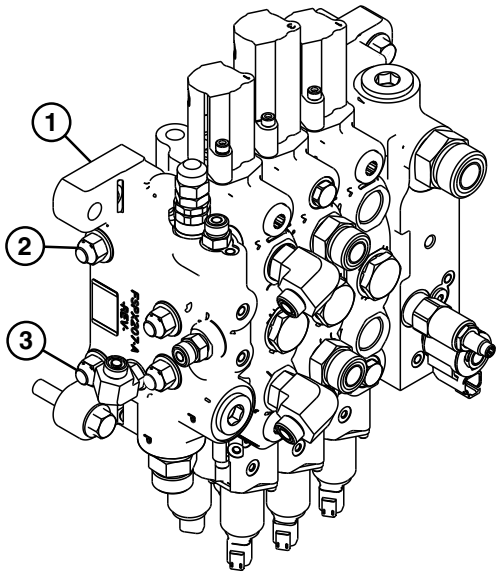
Left and Right Pushbeam Assemblies

Continued on next page

BS40810,00000D3 -19-04NOV14-7/9

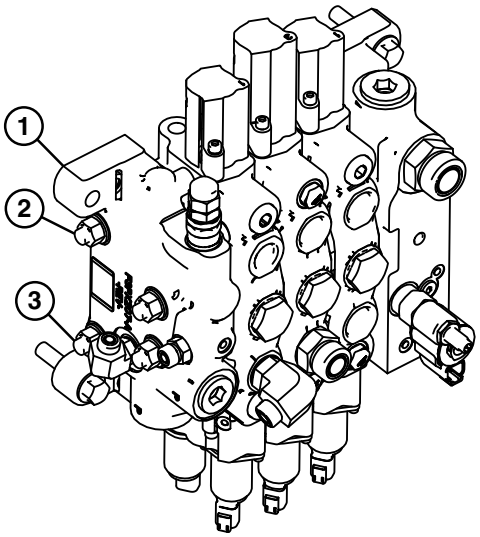
Hydraulic Control Valve Disassemble and Assemble—IGC

1— Main Control Valve
2— Nut (4 used)
3— Tie Rod (4 used)



TX1185002 —UN—11FEB15

Main Control Valve—IGC (early machines)



TX1195445 —UN—16JUN15

Main Control Valve—IGC (later machines)

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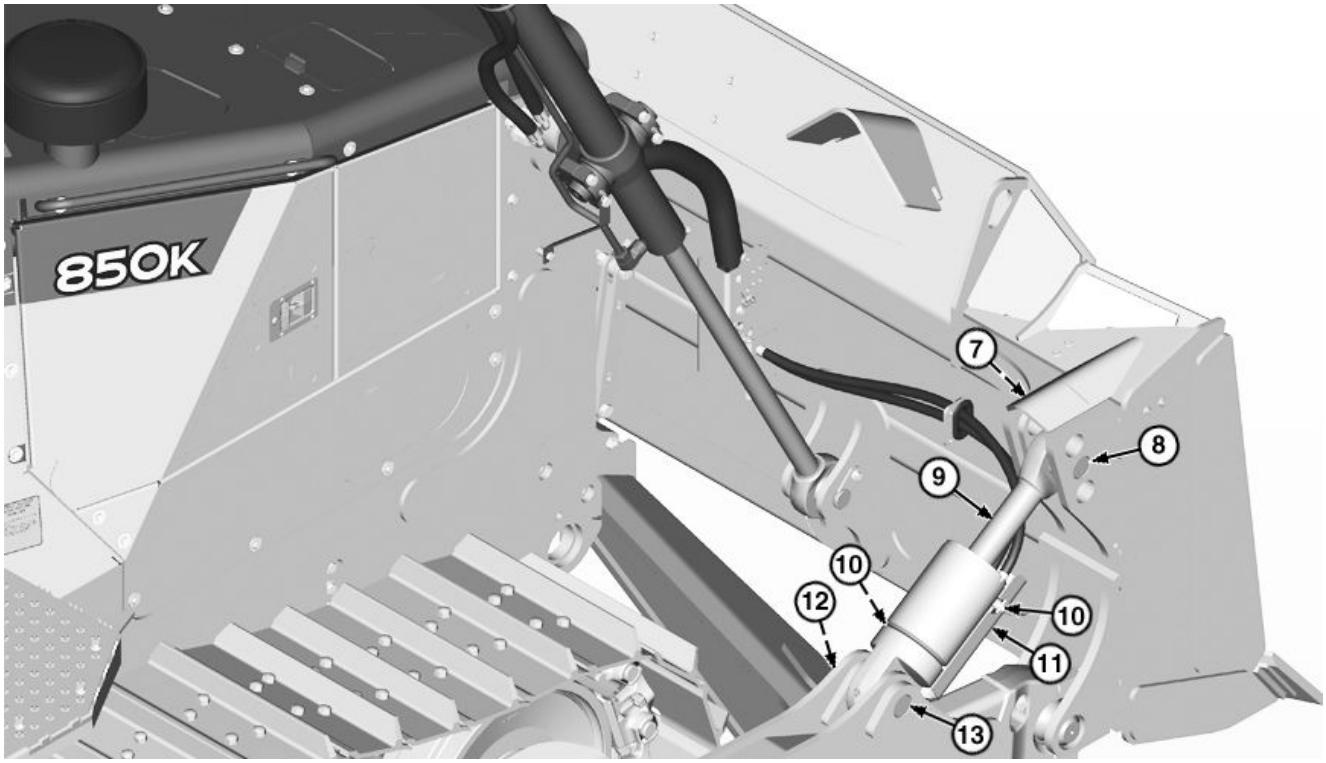
BS40810,00000D8 -19-09JUL15-1/2

Tilt and Pitch Cylinder

⚠ CAUTION: To avoid injury from escaping fluid under pressure, stop engine and relieve the pressure in the system before disconnecting or connecting hydraulic or other lines. Tighten all connections before applying pressure.

1. Stop engine and relieve hydraulic system pressure. See Hydraulic System Pressure Release. (Operator's Manual.)



Cylinder (tilt cylinder shown)

7— Cap Screw
8— Pin
9— Cylinder
10— Cap Screw (2 used)
11— Hose Guard
12— Cap Screw
13— Pin

2. Remove cap screws (10) and hose guard (11) from cylinder (9).
3. Install identification tags and disconnect hydraulic lines from cylinder. Close all openings using caps and plugs.

⚠ CAUTION: Prevent possible crushing injury from heavy component. Use appropriate lifting device.

4. Attach lifting device to tilt cylinder.

Specification

Tilt Cylinder—Weight (approximate)	68.8 kg (152 lb.)
Pitch Cylinder—Weight (approximate)	68.8 kg (152 lb.)

5. Remove cap screw (7) and pin (8) from end.
6. Remove cap screw (12) and pin (13) from head end.
7. Remove cylinder.
8. Clean and inspect parts. Repair or replace parts as necessary. See Hydraulic Cylinder Repair. (Group 3260.)
9. Install cylinder.
10. Install pin and cap screw to head end. Tighten cap screw to specification.

Specification

Cylinder Head End Cap Screw—Torque	350 N·m (255 lb.-ft.)

11. Install pin and cap screw to rod end. Tighten cap screw to specification.

Specification

Cylinder Rod End Cap Screw—Torque	140 N·m (105 lb.-ft.)

12. Connect hydraulic lines to cylinder.

Continued on next page

BS40810,00000EB -19-10FEB15-3/4

Auxiliary Pilot Control Valve Remove and Install

1. Park and prepare machine for service. See Park and Prepare for Service Safely. (Group 0001.)
2. Operate all hydraulic controls to release pressure in hydraulic system. See Hydraulic System Pressure Release. (Operator's Manual.)
3. Turn battery disconnect switch to the OFF position. See Battery Disconnect Switch. (Operator's Manual.)
4. Open right rear service door.
5. Apply vacuum to hydraulic oil reservoir.

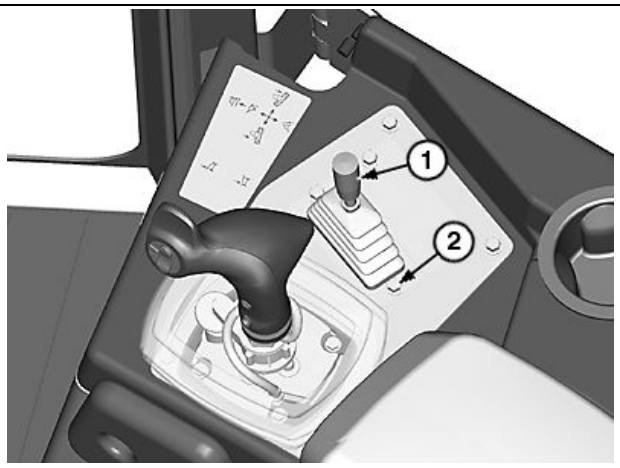
CAUTION: To avoid injury from escaping fluid under pressure, stop engine and relieve the pressure in the system before disconnecting or connecting hydraulic or other lines. Tighten all connections before applying pressure.

6. Tag and disconnect hydraulic hoses (3). Close all openings using caps and plugs.
7. Remove cap screws (2) and nuts (4). Remove auxiliary pilot control valve (1).

NOTE: Auxiliary pilot control valve is not serviceable and must be replaced as an assembly.

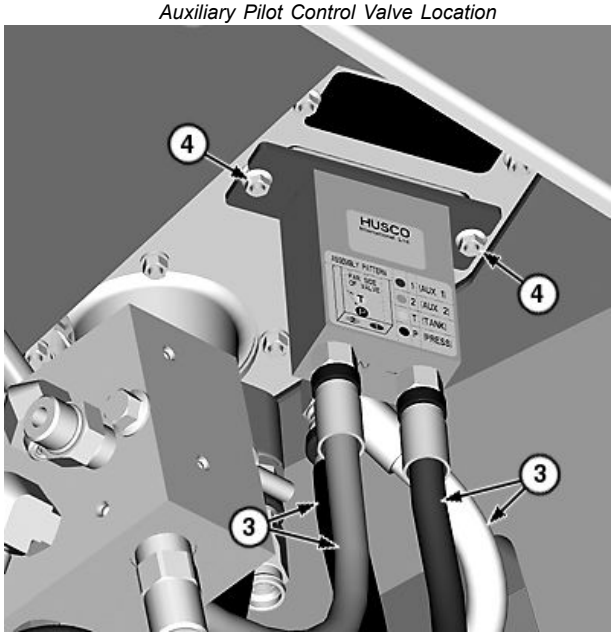
8. Replace auxiliary pilot control valve as needed.
9. Install auxiliary pilot control valve.
10. Connect and tighten hydraulic hoses.
11. Turn battery disconnect switch to the ON position.
12. Start engine and verify operation of ripper.
13. Check hydraulic oil level. See Check Hydraulic System Oil Level. (Operator's Manual.)

1— Auxiliary Pilot Control Valve
2— Cap Screw (2 used)
3— Hydraulic Hose (4 used)
4— Nut (2 used)



Auxiliary Pilot Control Valve Location

TX1090828A —UN—14APR11

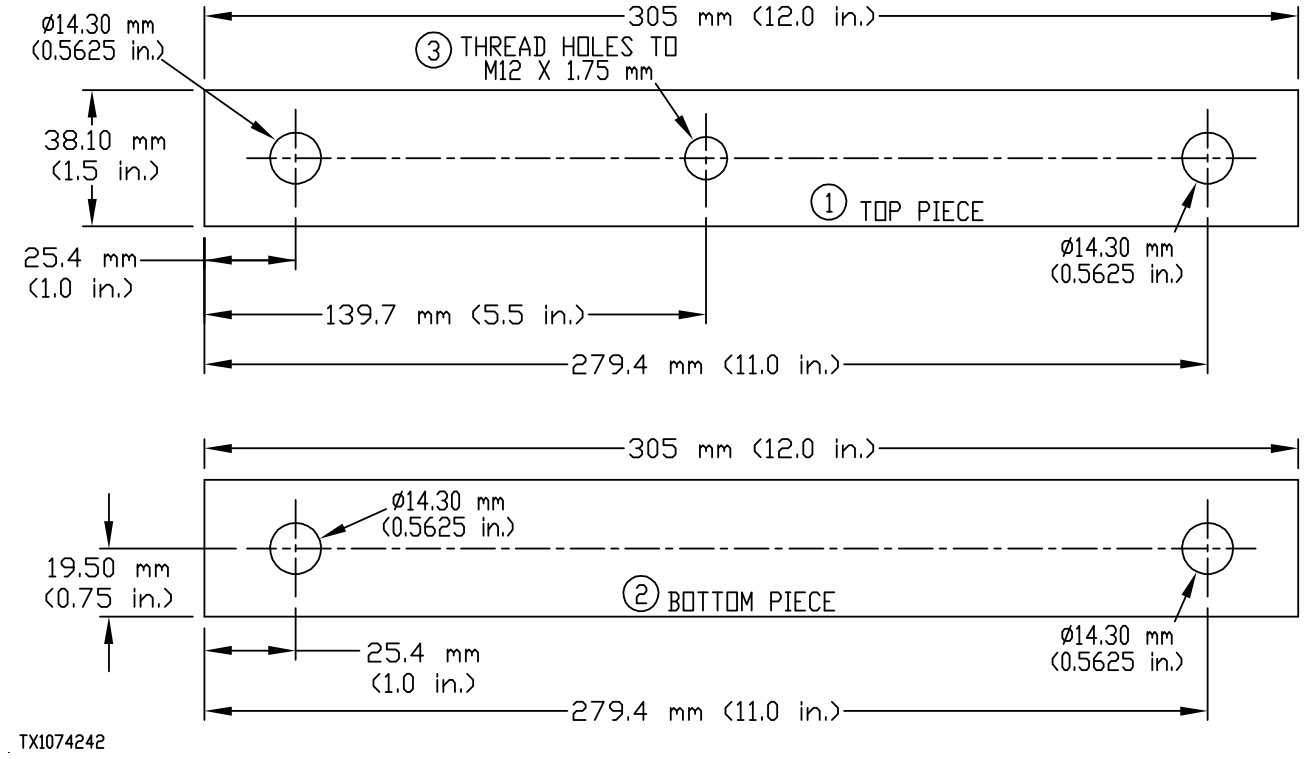


Auxiliary Pilot Control Valve (bottom view)

TX1090831A —UN—14APR11

BS40810,00000D1 -19-10FEB15-1/1

DFT1137 Hydrostatic Motor Removal and Installation Tool



DFT1137 Hydrostatic Motor Removal and Installation Tool

1— Top Piece **2— Bottom Piece**

This tool is used with DFT1132 to remove and install hydrostatic motors from rear of machine.

Material required:

- 1-1/2 in. x 3/4 in. x 12 in. long steel bars (2 used)
- M12 x 1.75 eyebolt
- 750J—1/2 in. x 9 in. cap screws (2 used)
- 850J—1/2 in. x 10 in. cap screws (2 used)

Install and tighten eyebolt in bracket. Trim any excess eyebolt material so it is even with bottom surface of bracket.

BS40810,0000103 -19-19DEC14-1/1