

7200 Pro and 8900 Series Tractor Service Manual No. 7-67882 Table of Contents

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Section 1001

GENERAL INFORMATION 7200 Pro and 8900 Series Tractors

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NOTE: Case Corporation reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

CONVERSION FACTORS




U.S. Customary to SI (Metric) Units

SI (Metric) Units to U.S. Customary

	Multiply	By	To Obtain:	Multiply By	To Obtain
Area:	square foot (ft ²)	0.092 903	square meter (m ²)	10.763 91	square foot (ft ²)
	acre	0.404 686	hectar (ha)	2.471 05	acre
Force:	ounce force (ozf)	0.278 014	newton (N)	3.598 942	ounce force (ozf)
	pound force (lbf)	4.448 222	newton (N)	0.224 809	pound force (lbf)
Length:	inch (in)	25.4	millimetre (mm)	0.039 370	inch (in)
	foot (ft)	0.304 8	meter (m)	3.280 804	foot (ft)
	mile	1.609 344	kilometer (km)	0.621 371	mile
Mass:	pound (lb)	0.453 592	kilogram (kg)	2.204 622	pound (lb)
Mass/Area:	ton/acre	2241.702	kilogram per hectare (kg/ha)	0.000 416	ton/acre
Mass/Energy: (Fuel Consumption)	pound per brake horsepower-hour (lb/bhp-h)	608.277 4	gram per kilowatt hour (g/kwh)	0.001 644	pound per brake horsepower-hour (lb/bhp-h)
Mass/Volume: (Density)	pound per cubic yard (lb/yd ³) 0.593276	0.593 276	kilogram per cubic meter (kg/m ³)	1.685 555	pound per cubic yard (lb/yd ³)
Power	horsepower - U.S. customary (hp - U.S. customary)	0.745 700	kilowatt (kw)	1.341 02	horsepower - U.S. customary (hp - U.S. customary)
Pressure	pound per square inch (psi)	6.894 757	kilopascal (kPa)	0.145 038	pound per square inch (psi)
Temperature:	degrees Fahrenheit (°F)	TC=5/9 (TF-32)	degree celsius (°C)	TF=1.8 TC+32	degree Fahrenheit (°F)
Torque:	pound inch (lb in)	0.112 985	newton meter (Nm)	8.850 748	pound inch (lb in)
	pound foot (lb ft)	1.355 818	newton meter (Nm)	0.737 562	pound foot (lb ft)
Velocity (Speed):	miles per hour (mph)	1.609 344	kilometer per hour (km/h)	0.621 371	miles per hour (mph)
Volume:	cubic inch (in ³)	16.387 06	cubic centimeter (cm ³)	0.621 024	cubic inch (in ³)
	cubic foot (ft ³)	0.028 317	cubic meter (m ³)	35.314 66	cubic foot (ft ³)
	cubic yard (yd ³)	0.764 555	cubic meter (m ³)	1.307 950	cubic yard (yd ³)
	ounce-U.S. fluid (oz)	29.573 53	millimeter (ml)	0.033 814	ounce-U.S. fluid (oz)
	quart-U.S. liquid (qt)	.946 353	liter (l)	1.056 688	quart-U.S. liquid (qt)
	quart-Imperial (qt)	1.136 523	liter (l)	0.879 877	quart-Imperial (qt)
	gallon-U.S. liquid (gal)	3.785 412	liter (l)	0.264 172	gallon-U.S. liquid (gal)
	gallon-Imperial (gal)	4.546 092	liter (l)	0.219 969	gallon-Imperial (gal)
Volume/Area:	bushel (U.S.) per acre	0.087 078	cubic meter per hectare (m ³ /ha)	11 484 000	bushel (U.S.) per acre
Volume/Time: (Flow)	gallon per minute (U.S.) (gpm U.S.)	3.785 412	liter per minute (l/m)	0.264 172	gallon per minute (U.S.) (gpm U.S.)
	gallon per minute (Imperial)(gpm Imp.)	4.546 092	liter per minute (l/m)	0.219 969	gallon per minute (Imperial) (gpm Imp.)
Horsepower:	U.S. customary hp	1.014	metric horsepower	0.986.3	U.S. customary hp
	net engine hp	0.815*	P.T.O. observed hp		
	net engine hp	0.70*	max drawbar hp		

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	976
1	250	300	339	406	580	696	787	944	900	1080	1220	1464
1-1/8					800	880	1085	1300	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 coarse 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 Class No.	8.8				10.9				12.9			
Bolt head identification (See Note 1)												
Bolt Size	Nm		LB FT		Nm		LB FT		Nm		LB FT	
	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				

NOTE: Bolt head identification marks as per grade. Manufacturing marks will vary.

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 on 12.9 fasteners.

*M14 is not a preferred size

STANDARD TORQUE DATA FOR HYDRAULIC TUBES AND FITTINGS

TUBE NUTS FOR 37° FLARED FITTINGS							O-RING BOSS PLUGS, ADJUSTABLE FITTING LOCK NUTS, SWIVEL JIC - 37° SEATS				
SIZE	TUBING O.D.		THREAD SIZE	LB FT		Nm		LB FT		Nm	
	Inches	mm		Min.	Max.	Min.	Max.	Min.	Max.	Min.	Max.
4	1/4	6.4	7/16-20	9	12	12	16	6	10	8	14
5	5/16	7.9	1/2-20	12	15	16	20	10	15	14	20
6	3/8	9.5	9/16-18	21	24	29	33	15	20	20	27
8	1/2	12.7	3/4-18	35	40	47	54	25	30	34	41
10	5/8	15.9	7/8-14	53	58	72	79	35	40	47	54
12	3/4	19.1	1-1/16-12	77	82	104	111	60	70	81	95
14	7/8	22.2	1-3/16-12	90	100	122	136	70	80	95	109
16	1	25.4	1-5/16-12	110	120	149	163	80	90	108	122
20	1-1/4	31.8	1-5/8-12	140	150	190	204	95	115	129	156
24	1-1/2	38.1	1-7/8-12	160	175	217	231	120	140	163	190
32	2	50.8	2-1/2-12	225	240	305	325	250	300	339	407

Above torque figures are recommended for plain, cadmium or zinc plated fittings, dry or wet installations and swivel nuts either swaged or brazed. These torques are not recommended for tubes 1/2 inch (12.7 mm) O.D. and larger with wall thickness of 0.035 inch (0.889 mm) or less. The torque is specified for 0.035 inch (0.889 mm) wall tubes on each application individually.

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FLUID CAPACITIES AND TYPES

Engine Crankcase Capacity, without Filter Change	19 Litres (5 Gallons)
with Filter Change	21 Litres (5.5 Gallons)
Fluid Type	Case No. 1 Multi-Viscosity Engine Oil
Transmission/Hydraulic System Capacity	172 Litres (45.5 Gallons)
Fluid Type	Hy-Tran Plus® Fluid

Differential Housing Capacity - MFD	11 Litres (3 Gallons)
Planetary Housing Capacity - MFD (Each).....	0.9 Litres (1 Quart)
Fluid Type	Case 135H EP Gear Lubricant, SAE 85W-140
	Use one pint of Limited Slip additive in the differential

Cooling System Capacity - with Cab	
8910 and 8920 (7210 and 7220 Pro)	27.6 Litres (29 Quarts)
8930 (7230 Pro)	29.4 Litres (31 Quarts)
8940 and 8950 (7240 and 7250 Pro)	31.3 Litres (33 Quarts)
Fluid Type	50 Percent Ethylene Glycol Coolant

Engine Speeds

Governed Engine Speed without Load	2370 to 2530 RPM
Rated Engine Speed	2200 RPM
Engine Idle Speed	925 to 1025 RPM

Fuses

Dome Lamp and Radio Clock.....	5 Amp
Fuel Shut-off	5 Amp
Shut Down Override	15 Amp
Instrument Cluster - Run Position.....	7.5 Amp
Instrument Cluster - Accessory Position, PTO	10 Amp
Radio	5 Amp
Electronic Hitch System.....	7.5 Amp
Cigar Lighter	10 Amp
Ether Starting Aid	15 Amp
Differential Lock	10 Amp
Tail Lamps	10 Amp
Warning Lamps	15 Amp
Cab Roof Work Lamps	15 Amp
Air Seat	20 Amp
Mechanical Front Drive (If Equipped) (Less 3 Point Hitch).....	7.5 Amp
Mechanical Front Drive (If Equipped) (With 3 Point Hitch)	5 Amp
Creeper Drive (If Equipped).....	7.5 Amp

Bulb and Lamp Replacement

Dome Lamp Bulb	K913579
Console Lamp Bulb	No. 194
Flasher Lamp Bulb	No. 1156
Head Lamps	No. H4
Front and Rear Flood Lamps.....	No. H3
Tail Lamp Bulbs	No. 168
Rocker Switch Bulb	No. 3141107R1
Three Point Hitch Indicator Bulb.....	No. 182
Instrument Cluster Illuminating Bulb.....	No. 161

STEERING AND OSCILLATION STOPS

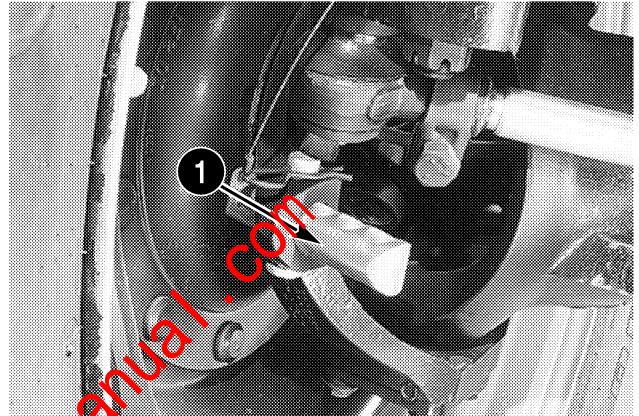
Mechanical Front Drive (MFD)

Tractors with mechanical front drive (MFD) are equipped with steering and oscillation stops. The steering and oscillation stops are used to give the required steering clearance between the front tires

and tractor frame. The front tire size and tread width being used, will determine the required steering and oscillation angles.

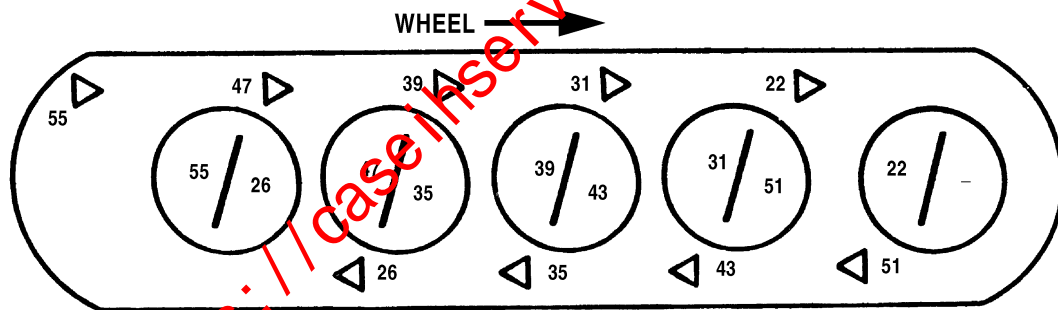
Steering Stop

Each adjustment hole in the steering stop (1) is identified with an arrow and a number. With the arrow pointing toward the wheel, the number indicates the turn angle when the mounting pin is installed in that hole. With the pin installed in the desired hole, the angle number will be visible outside the steering knuckle casting. The steering stop can be installed in either direction depending on the tire size and tread width being used.



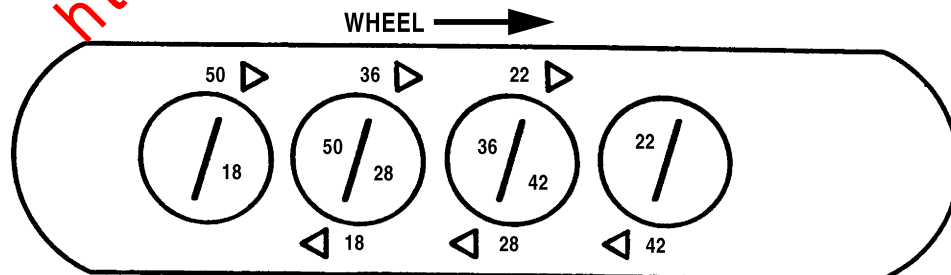
RP96H043

Standard Steering Stop



RB96H024

Optional Steering Stop



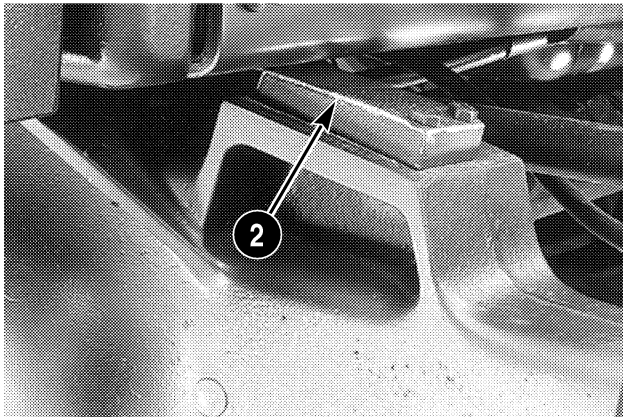
755L93

An optional steering stop is available thru service. This stop allows the use of MFD fenders at a 64 inch tread and can be used to improve turning radius with some MFD tire options.

NOTE: If the steering angle recommended on the steering stop chart is not available on the stop rod that your tractor is equipped with, you should use the next smaller angle.

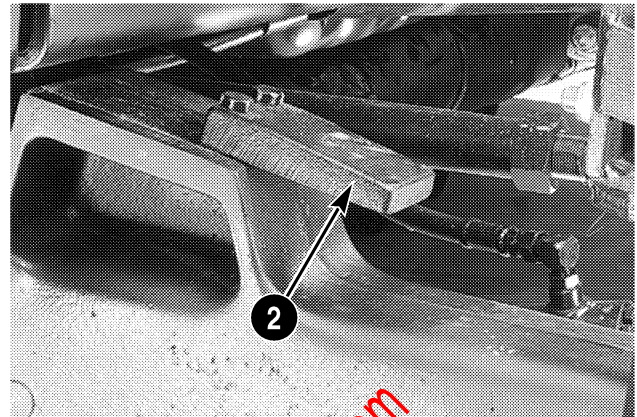
Oscillation Stop

Oscillation stops (2) are required for some tire size and tread width combinations. The oscillation stops are installed on the axle stop pad on each side of the tractor.



RP96H035

LIMITS OSCILLATION TO 6 DEGREES



RP96H036

ALLOWS 11 DEGREES OF OSCILLATION

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Steering and Oscillation Stop Charts - without Fenders

The following charts show the steering stop turn angle and oscillation stop requirement for each tread width and tire size combination for tractors without fenders.

8900 SERIES MAGNUM

STEERING AND OSCILLATION STOP CHARTS - WITHOUT FENDERS									
TIRE/WHEEL SIZE		TREAD WIDTHS (INCHES)							
		60	64	68	72	76	80	84	88
16.9R26 (W15L X 26)	Steer	22	31	35 or 36*	39	43	47	51	55
	Osc.	6	6	6	6	11	11	11	11
18.4R26 (W15L X 26)	Steer	18*	26 or 28*	31	39	43	47	51	55
	Osc.	6	6	6	6	11	11	11	11
13.6R28 (W12 X 28)	Steer	31	39	43	51	55	55	55	55
	Osc.	6	6	6	6	11	11	11	11S
14.9R28 (W12 X 28)	Steer	26	35 or 36*	39	47	51	55	55	55
	Osc.	6	6	6	6	11	11	11	11
16.9R28 (W15L X 28)	Steer	18* or 22	31	35 or 36*	39	43	51	55	55
	Osc.	6	6	6	6	11	11	11	11
14.9R30 (DWW13 X 30)	Steer	26	35 or 36*	39	43	47	51	55	55
	Osc.	6	6	6	6	11	11	11	11
16.9R30 (DWW15 X 30)	Steer	18*	26 or 28*	35 or 36*	39	43	47	47	55
	Osc.	6	6	6	6	11	11	11	11
480/70R28 (W15L X 28)	Steer	18*	26 or 28*	35 or 36*	39	43	51	55	55
	Osc.	6	6	6	6	11	11	11	11
600/65R28 (W18L X 28)	Steer	NA	NA	26	35 or 36*	39	47	47	51
	Osc.			6	6	11	11	11	11
480/70R30 (DWW15 X 30)	Steer	18*	26 or 28*	35 or 36*	39	43	47	51	55
	Osc.	6	6	6	6	11	11	11	11

*Requires the use of the optional steering stop rod available through service parts.

NOTE: N.A. indicates that the tread width is not approved for these tire sizes because of clearance requirements.

NOTE: See your dealer for information on any tire size not included in the chart.

Steering and Oscillation Stop Charts - with Fenders

The following charts show the steering stop turn angle and oscillation stop requirement for each tread width and tire size combination for tractors equipped with fenders.

8900 SERIES MAGNUM

STEERING AND OSCILLATION STOP CHARTS - WITH FENDERS									
TIRE/WHEEL SIZE		TREAD WIDTHS (INCHES)							
		60	64	68	72	76	80	84	88
16.9R26 (W15L X 26)	Steer	NA	18*	22	22 or 26**	26	31	39	43
	Osc.		6	6	6	6	11	11	11
18.4R26 (W15L X 26)	Steer	NA	18*	22	22 or 26**	26	31	39	43
	Osc.		6	6	6	6	11	11	11
13.6R28 (W12 X 28)	Steer	NA	18*	22	22 or 26**	26	31	39	43
	Osc.		6	6	6	6	11	11	11
14.9R28 (W12 X 28)	Steer	NA	18*	22	22 or 26**	26	31	39	43
	Osc.		6	6	6	6	11	11	11
16.9R28 (W15L X 28)	Steer	NA	18*	22	22 or 26**	26	31	39	43
	Osc.		6	6	6	6	11	11	11
14.9R30 (DWW13 X 30)	Steer	NA	18*	22	22 or 26**	26	31	39	43
	Osc.		6	6	6	6	11	11	11
16.9R30 (DWW15 X 30)	Steer	NA	18*	22	22 or 26**	26	31	39	43
	Osc.		6	6	6	6	11	11	11
480/70R28 (W15L X 28)	Steer	NA	18*	22	22 or 26**	26	31	39	43
	Osc.		6	6	6	6	11	11	11
600/65R28 (W18L X 28)	Steer	NA	NA	NA	22 or 26**	26	31	39	43
	Osc.			NA	6	6	11	11	11
480/70R30 (DWW15 X 30)	Steer	NA	18*	22	22 or 26**	26	31	39	43
	Osc.		6	6	6	6	11	11	11

*Requires the use of the optional steering stop rod available through service parts.

**The steering stop rod setting depends on the MFD fender configuration used.

NOTE: N.A. indicates that the tread width is not approved for these tire sizes because of clearance requirements.

NOTE: See your dealer for information on any tire size not included in the chart.

TIRE LOAD AND INFLATION CHARTS

NOTE: Load and Inflation Charts are based on (40 km/h) 25 MPH travel speed.

Front Tires (2WD) U.S. Standard

TIRE SIZE	MAXIMUM FRONT TRACTOR WEIGHT (LBS) AT VARIOUS COLD INFLATION PRESSURES (PSI)									
	24	28	32	36	40	44	48	52	56	60
11.00-16 (12 ply) F2M	3740	4180	4540	4940	5200	5520	5820	6160	6600	6840
14L-16.1 (10 ply) F2M	4540	5080	5660	6000	6400	6840				

Front Tires (MFD) U.S. Standard

TIRE SIZE	MAXIMUM FRONT TRACTOR WEIGHT (LBS) AT VARIOUS COLD INFLATION PRESSURES (PSI)												
	6	8	10	12	14	16	18*	20	22	24**	26	28	30***
13.6R28 3* R1	2940	3480	3980	4420	4840	5240	5660	5960	6320	6840	6960	7280	7480
14.9-28 (10 ply) R1				5260	5760	6240	6680	7100	7500	7900	8280	8640	9000
14.9R28 3* R1	3520	4160	4740	5260	5760	6240	6600	7120	7520	7920	8280	8640	9080
14.9R30 3* R1, R1W	3620	4280	4880	5440	5940	6440	6840	7320	7760	8160	8560	8920	9360
16.9-28 (10 ply) R1						7560	8100	8620	9120	9600	10,060	10,500	
16.9R28 2* R1, R1W, R2	4260	5040	5740	6400	7000	7560	8160	8640	9120	9880			
16.9R30 3* R1, R1W	4400	5200	5940	6600	7240	7800	8360	8880	9400	10,160	10,400	10,720	11,360
480/70R28 143A8 R1W	5250	6050	6470	7280	7880	8350	9690	10,010	10,470				
480/70R30 152A8 R1W	5380	5660	6700	7530	8071	8610	9680	10,250	10,770	11,750	12,250	13,130	13,920
600/65R28 150A8 R1W	6830	7280	8630	9680	10,350	11,050	12,410	13,400	14,030				

Front Tires (2WD) Metric

TIRE SIZE	MAXIMUM FRONT TRACTOR WEIGHT (kg) AT VARIOUS COLD INFLATION PRESSURES (kPa)									
	165	193	221	248	276	303	331	359	386	414
11.00-16 (12 ply) F2M	1700	1900	2060	2240	2360	2500	2640	2790	2990	3100
14L-16.1 (10 ply) F2M	2060	2300	2570	2720	2900	3100				

Front Tires (MFD) Metric

TIRE SIZE	MAXIMUM FRONT TRACTOR WEIGHT (kg) AT VARIOUS COLD INFLATION PRESSURES (kPa)													
	41	55	69	83	97	110	124*	138	152	165**	179	193	207***	
13.6R28 3* R1	1330	1580	1800	2000	2200	2380	2570	2700	2870	3100	3160	3300	3390	
14.9-28 (10 ply) R1				2390	2610	2830	3030	3220	3400	3580	3760	3920	4080	
14.9R28 3* R1	1600	1890	2150	2390	2610	2830	3000	3230	3410	3590	3760	3920	4120	
14.9R30 3* R1, R1W	1640	1940	2210	2470	2690	2920	3100	3320	3520	3700	3880	4050	4250	
16.9-28 (10 ply) R1						3430	3670	3910	4140	4360	4560	4760		
16.9R28 2* R1, R1W & R2	1930	2290	2600	2900	3180	3430	3700	3920	4140	4480				
16.9R30 3* R1, R1W	2000	2360	2690	2990	3280	3540	3790	4030	4260	4610	4720	4860	5150	
480/70R28 143A8 R1W	2380	2740	2940	3300	3570	3790	4260	4540	4750					
480/70R30 152A8 R1W	2440	2570	3040	3420	3660	3900	4390	4650	4890	5330	5560	5960	6310	
600/65R28 150A8 R1W	3100	3300	3920	4390	4700	5000	5630	6080	6360					

Rear Tires (used as singles) U.S. Standard

TIRE SIZE	MAXIMUM REAR TRACTOR WEIGHT (LBS) AT VARIOUS COLD INFLATION PRESSURES (PSI)												
	6	8	10	12	14	16	18*	20	22	24**	26	28	30***
14.9R46 3* R1	4520	5340	6080	6760	7400	8000	8600	9120	9680	10,160	10,640	11,120	11,680
420/80R46 3* R1	6020	6470	7570	8440	9040	9860	11,090	11,510	12,140	13,240	14,250	14,680	15,720
18.4R38 1* R1	5920	7000	7960	8880	9720	10,520	11,360						
18.4R42 2* R1, R1W, R2	6240	7400	8400	9360	10,240	11,080	12,000	12,600	13,300	13,900			
18.4R46 3* R1	6560	7760	8840	9840	10,800	11,640	12,300	13,300	14,000	14,800	15,500	16,200	17,100
20.8R38 1* R1, R2	7160	8480	9680	10,760	11,760	12,700	13,600						
20.8R38 153A8 R1W	7160	8480	9680	10,760	11,760	12,700	13,600	14,500	15,300	16,100			
20.8R42 2* R1, R1W	7560	8960	10,200	11,360	12,400	13,400	14,300	15,300	16,200	17,100			
620/70R42 160A8 R1W	9390	9860	11,450	13,240	13,810	14,800	16,660	17,930	18,780	20,480			
710/70R38 166A8 R1W	11,090	11,770	13,630	15,310	16,510	17,750	19,970	21,080	22,190	24,210			

Rear Tires (used as duals)

14.9R46 3* R1	7960	9400	10,720	11,880	13,040	14,080	15,120	16,040	17,040	17,880	18,720	19,560	20,560
420/80R46 3* R1	10,590	11,440	13,330	14,860	15,870	17,360	19,530	20,260	21,320	23,260	25,140	25,840	27,680
18.4R38 1* R1	10,400	12,320	14,000	15,640	17,120	18,520	20,000						
18.4R42 2* R1, R1W, R2	11,000	13,040	14,800	16,480	18,040	19,520	21,120	22,160	23,400	24,480			
18.4R46 3* R1	11,560	13,640	15,560	17,320	19,000	20,480	21,640	23,400	24,640	26,040	27,280	28,520	30,080
20.8R38 1* R1, R2	12,600	14,920	17,040	18,920	20,680	22,360	23,920						
20.8R38 153A8 R1W	12,600	14,920	17,040	18,920	20,680	22,360	23,920	25,520	26,920	28,320			
20.8R42 2* R1, R1W	13,320	15,760	17,960	20,000	21,840	23,600	25,160	26,920	28,520	30,080			
620/70R42 160A8 R1W	16,550	17,360	20,160	23,300	24,290	26,040	29,300	31,570	33,040	36,040			

Rear Tires (used as triples)

14.9R46 3* R1	11,100	13,140	14,940	16,620	18,180	19,680	21,180	22,440	23,820	25,020	26,160	27,360	28,740
420/80R46 3* R1	14,770	15,940	18,590	20,730	22,250	24,210	27,310	28,320	29,870	32,590	35,140	36,150	38,730

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Rear Tires (used as singles) Metric

TIRE SIZE	MAXIMUM REAR TRACTOR WEIGHT (kg) AT VARIOUS COLD INFLATION PRESSURES (kPa)												
	41	55	69	83	97	110	124*	138*	152	165**	179	193	207***
14.9R46 3* R1	2050	2420	2760	3070	3360	3630	3900	4140	4390	4610	4830	5040	5300
420/80R46 3* R1	2730	2940	3430	3830	4100	4470	5030	5220	5510	6010	6460	6660	7130
18.4R38 1* R1	2690	3180	3610	4030	4410	4770	5150						
18.4R42 2* R1, R1W, R2	2830	3360	3810	4250	4650	5030	5440	5720	6030	6310			
18.4R46 3* R1	2980	3520	4010	4460	4900	5280	5580	6030	6350	6710	7030	7350	7760
20.8R38 1* R1, R2	3250	3850	4390	4880	5330	5760	6170						
20.8R38 153A8 R1W	3250	3850	4390	4880	5330	5760	6170	6580	6940	7300			
20.8R42 2* R1, R1W	3430	4060	4630	5150	5630	6080	6490	6940	7350	7760			
620/70R42 160A8 R1W	4260	4470	5190	6010	6260	6710	7560	8130	8520	9290			
710/70R38 166A8 R1W	5030	5340	6180	6950	7490	8050	9060	9560	10,070	10,980			
Rear Tires (used as duals)													
14.9R46 3* R1	3610	4260	4860	5390	5920	6390	6860	7280	7730	8110	8490	8870	9330
420/80R46 3* R1	4800	5190	6050	6740	7200	7870	8860	9190	9670	10,550	11,400	11,720	12,560
18.4R38 1* R1	4720	5590	6350	7090	7770	8400	9070						
18.4R42 2* R1, R1W, R2	4990	5920	6710	7480	8180	8850	9580	10,050	10,610	11,100			
18.4R46 3* R1	5240	6190	7060	7860	8620	9290	9820	10,610	11,180	11,810	12,370	12,940	13,640
20.8R38 1* R1, R2	5720	6770	7730	8580	9380	10,140	10,850						
20.8R38 153A8 R1W	5720	6770	7730	8580	9380	10,140	10,850	11,580	12,210	12,850			
20.8R42 2* R1, R1W	6040	7150	8150	9070	9910	10,710	11,410	12,210	12,940	13,640			
620/70R42 160A8 R1W	7510	7870	9150	10,570	11,020	11,810	13,290	14,320	14,990	16,350			
Rear Tires (used as triples)													
14.9R46 3* R1	5040	5960	6780	7540	8250	8930	9610	10,180	10,800	11,350	11,870	12,410	13,040
420/80R46 3* R1	6700	7230	8430	9400	10,090	11,010	12,390	12,850	13,550	14,780	15,940	16,400	17,570

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Section

3001

FUEL SYSTEM SPECIFICATIONS
6-830, 6T-830 and 6TA-830 Engine
8900 and 7200 Pro Tractors

<https://caseinsevicemanual.com>

CASE CORPORATION
700 State Street
Racine, WI 53404 U.S.A.

CASE CANADA CORPORATION
450 Sherman Avenue
Hamilton, ON L8N 4C4 CANADA

Rac 7-87430

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FUEL SYSTEM SPECIFICATION DETAILS

Fuel Filters

Primary Fuel Filter	Full Flow, Turn on Type
Secondary Fuel Filter	Full Flow, Turn on Type
In-Line Fuel Filter.....	In-Line Filter
Water Trap	
Without Auxiliary Tank.....	Located in Bottom of Main Tank
With Auxiliary Tank.....	Located in Bottom of Auxiliary Tank
Filter Replacement (Primary and Secondary)	Every 500 Hours or when Loss of Horsepower Occurs
In-Line Fuel Filter.....	Every 500 Hours or when Loss of Horsepower Occurs
Fuel System Operating Pressure	140 to 172 kPa (20 to 25 PSI)

Fuel Injection Pump

Type : Inline

8910 and 8920 (7210 and 7220 Pro)	Robert Bosch, Type MW
8930 and 8940 (7230 and 7240 Pro)	Robert Bosch, Type MW
8950 (7250 Pro)	Robert Bosch, P3000
Rotation	Counterclockwise
Mounting.....	Left Hand Side of Engine
Drive	Gear Driven at 1/2 Engine Speed
Governor.....	Variable Speed, Part of Pump
Backlash :	
Camshaft to Injection Pump Gear	0.152 to 0.254 mm (0.005 to 0.009 inch)

Fuel Injectors

Type.....	Robert Bosch, 17 mm
Opening Pressure :	
New and Serviced	260 to 268 Bar (3770 to 3887 PSI)
Used.....	234 to 268 Bar (3394 to 3887 PSI)
Variation Between each Cylinder.....	1034 kPa (150 PSI)
Valve Leakage Rate	No Leakage Permissible Slight Moistening of Nozzle Tip Permissible

Special Torques

Fuel Filters.....	Hand Tighten 1/2 Turn Past Gasket Contact Loosen and Tighten 3/4 Turn Past Contact
Fuel Air Removal Bolt.....	8 Nm (6 lb ft)
Fuel Filter Inlet Nut	15 Nm (11 lb ft)
Fuel Filter Inlet Bolt.....	32 Nm (24 lb ft)
Fuel Line Fitting (High Pressure).....	24 Nm (18 lb ft)
Fuel Line Fitting (Low Pressure).....	15 Nm (11 lb ft)
Injection Pump Drive Gear Nut:	
Robert Bosch, Type MW.....	104 Nm (77 lb ft)
Robert Bosch, P3000	195 Nm (144 lb ft)
Injection Pump Retaining Nuts	43 Nm (32 lb ft)
Injector Leak Off Bolt	8 Nm (6 lb ft)
Injector Retaining Bolt	24 Nm (18 lb ft)

Section 3004

FUEL TANK

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3004

CASE CORPORATION
700 State Street
Racine, WI 53404 U.S.A.

CASE CANADA CORPORATION
450 Sherman Avenue
Hamilton, ON L8N 4C4 CANADA

Rac 7-87440

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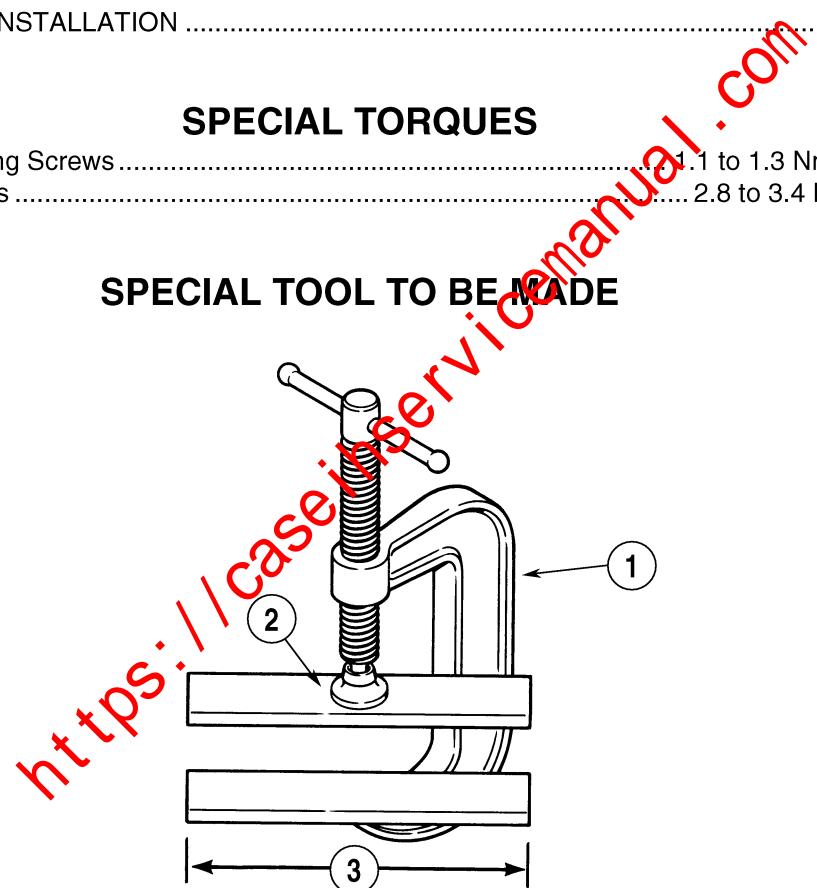
AUXILIARY FUEL TANK INSTALLATION 13

SPECIAL TORQUES

Fuel Level Sensor Mounting Screws 1.1 to 1.3 Nm (10 to 11.5 lb in)

Fuel Inlet Mounting Screws 2.8 to 3.4 Nm (25 to 30 lb in)

SPECIAL TOOL TO BE MADE



- 1. 4 INCH "C" CLAMP
- 2. WELD BARS TO "C" CLAMP

3. 6 INCH (150 mm)

120L7

NOTE: Case Corporation reserves the right to make improvements in design or changes in specifications at any time without incurring any obligation to install them on units previously sold.

REPLACING THE MAIN FUEL TANK SENSOR

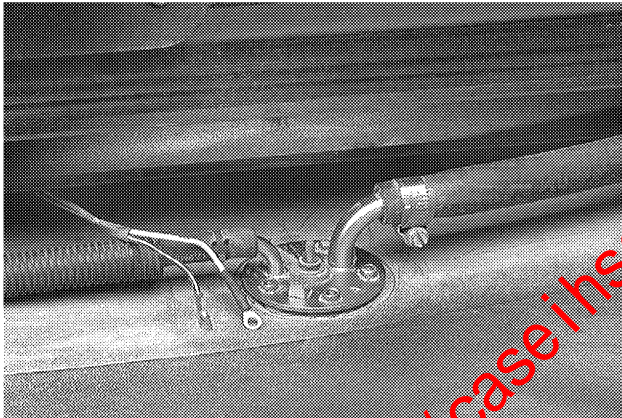
STEP 1



RD98A059

Remove the two screws and the tail lamp panel from the back of the cab.

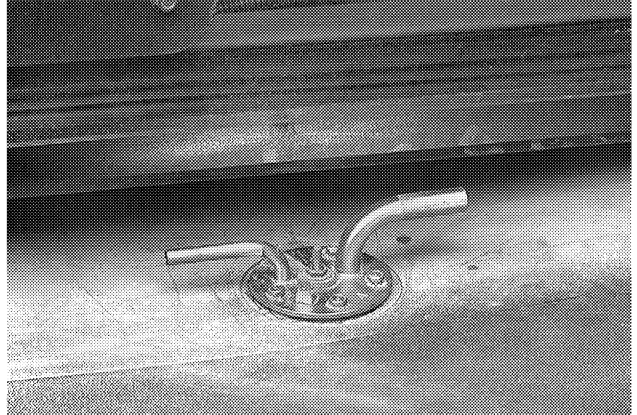
STEP 2



RD98A062

Remove the wiring harness from the sensor.

STEP 3



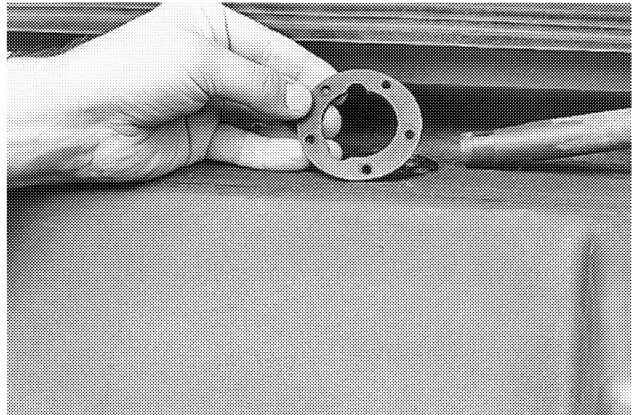
RD98A063

Loosen the hose clamp(s) and remove the fuel tank vent hose(s) from the sensor.

Remove the sensor mounting screws and remove the sensor from the fuel tank.

NOTE: Tractors without auxiliary fuel tanks only have one vent hose attached to the sensor.

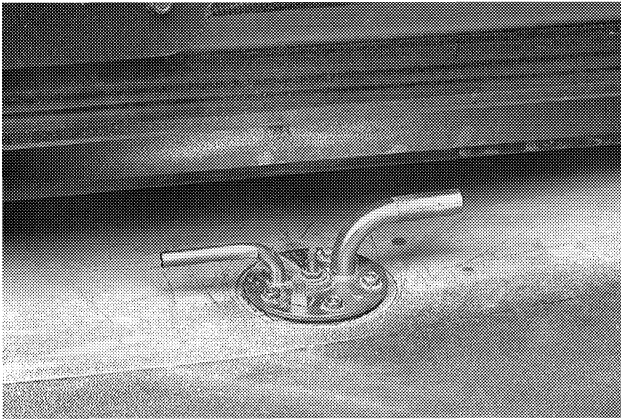
STEP 4



T97841

Remove the used sensor gasket from the fuel tank, and install a new sensor gasket.

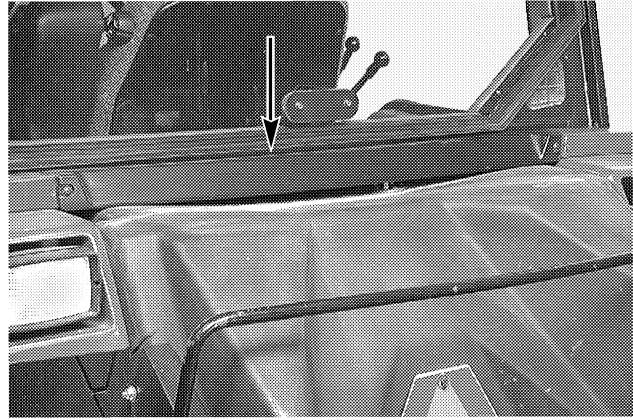
STEP 5



RD98A063

Install the new sensor in the fuel tank and install the mounting screws through the sensor and gasket and into the fuel tank. Tighten the screws to a torque of 1.1 to 1.3 Nm (10 to 11.5 lb in).

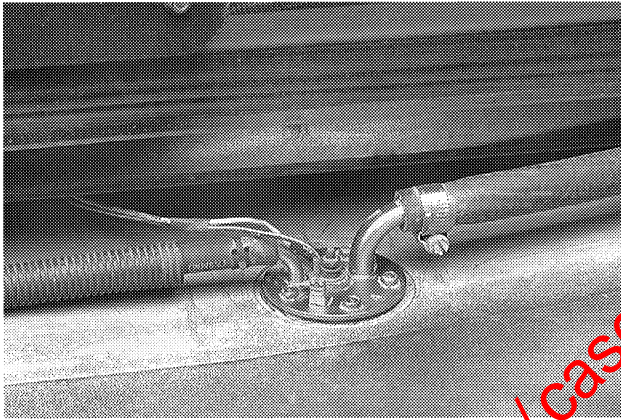
STEP 7



RD98A058

Install the tail light panel on the tractor cab.

STEP 6



RD98A061

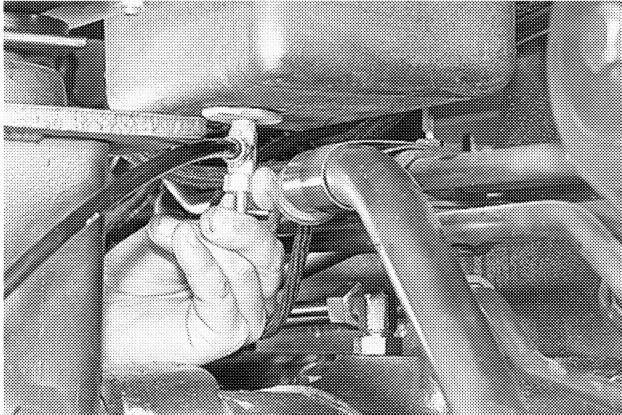
Install the fuel tank vent hose(s) and the wiring harness on the sensor.

NOTE: Tractors without auxiliary fuel tanks only have one vent hose attached to the sensor.

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MAIN FUEL TANK REMOVAL

STEP 8



T97849

Before the main fuel tank can be removed from the tractor, all the fuel must be drained. If the tractor is equipped with an auxiliary fuel tank, drain the fuel from the main fuel tank through the auxiliary fuel tank.

STEP 10



RD98A063

Remove the wiring harness and the fuel tank vent hose(s) from the sensor.

NOTE: Tractors without auxiliary fuel tanks only have one vent hose attached to sensor.

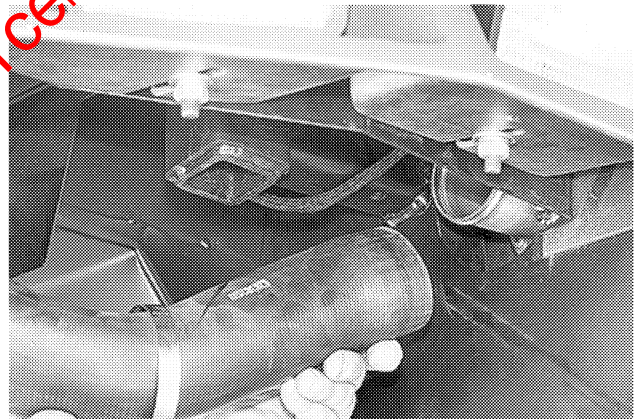
STEP 9



RD98A059

Remove the two screws and the tail lamp panel from the back of the cab.

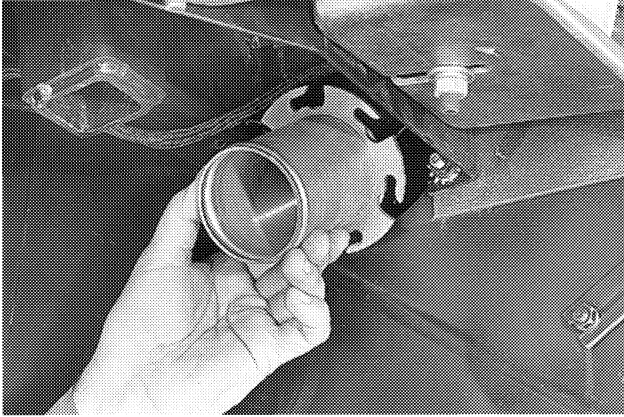
STEP 11



T97850

Loosen the hose clamp and remove the fuel inlet hose from the fuel tank.

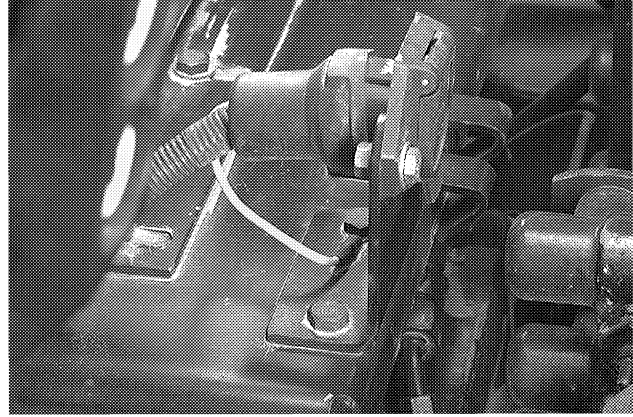
STEP 12



T97852

Loosen the mounting screws for the fuel tank inlet. Twist the inlet in a counterclockwise direction and remove from the fuel tank.

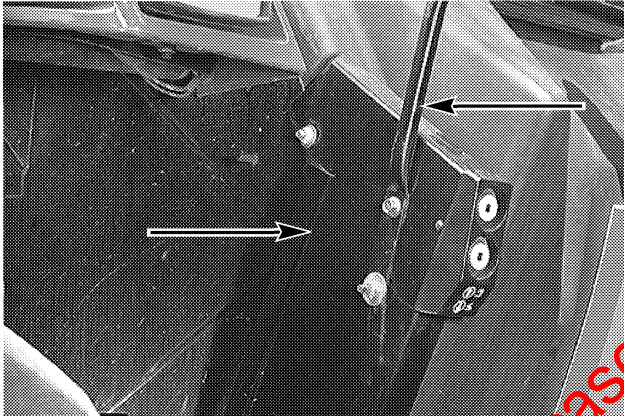
STEP 14



RD98A065

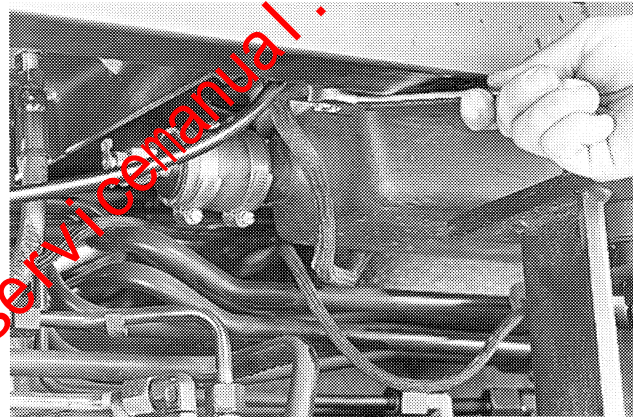
Remove the 7 pin electrical outlet from the fuel tank support.

STEP 13



RD98A064

STEP 15



T97855

Remove the four mounting nuts and bolts from the fuel tank support.



RD98A067

Remove the rear assist handle and the right and left remote hitch switch housing (if equipped).