⚠ SAFETY FIRST

This symbol, the industry's "Safety Alert Symbol", is used throughout this manual and decals on the machine itself to warn of the possibility of personal injury. Read these instructions carefully.

It is essential that you read the instructions and safety regulations before you attempt to repair or use this unit.

⚠ **DANGER : Indicates an imminently hazardous situation which, if not avoided, will result in death or serious injury.**

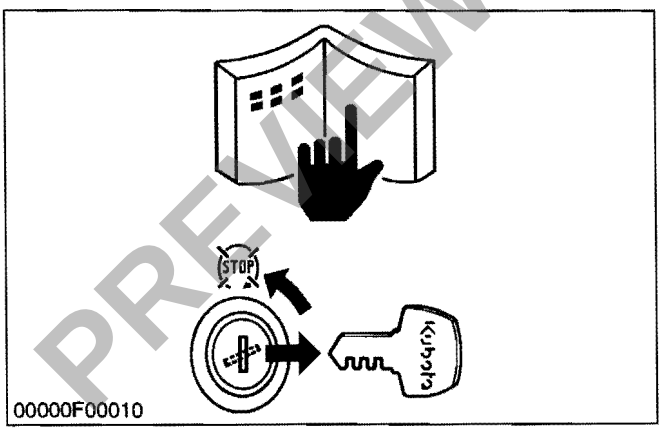
⚠ **WARNING : Indicates a potentially hazardous situation which, if not avoided, could result in death or serious injury.**

⚠ **CAUTION : Indicates a potentially hazardous situation which, if not avoided, may result in minor or moderate injury.**

■ **IMPORTANT : Indicates that equipment or property damage could result if instructions are not followed.**

■ **NOTE : Gives helpful information.**

00000Z00010



00000F00010

BEFORE SERVICING AND REPAIRING

(1) Read all instructions and safety instructions in this manual and on your machine safety decals.
(2) Clean the work area and machine.
(3) Park the machine on a firm and level ground, and set the parking brake.
(4) Lower the implement to the ground.
(5) Stop the engine, and remove the key.
(6) Disconnect the battery negative cable.
(7) Hang a **"DO NOT OPERATE"** tag in operator station.

00000Z00020

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

GENERAL

CONTENTS

[1] FEATURES G-1
[2] TRACTOR IDENTIFICATION G-2
[3] GENERAL PRECAUTIONS G-3
[4] HANDLING PRECAUTIONS FOR ELECTRICAL PARTS AND WIRING .. G-4
(1) Wiring G-4
(2) Battery G-6
(3) Fuse G-6
(4) Connector G-6
(5) Handling of Circuit Tester G-8
[5] LUBRICANTS, FUEL AND COOLING WATER G-9
[6] TIGHTENING TORQUES (GENERAL USE SCREWS, BOLTS AND NUTS) G-10
[7] MAINTENANCE G-11
[8] CHECK AND MAINTENANCE G-12
(1) Daily Check G-12
(2) Check Points of Initial 50 Hours G-12
(3) Check Points of Every 50 Hours G-16
(4) Check Points of Every 100 Hours G-17
(5) Check Points of Every 200 Hours G-20
(6) Check Points of Every 400 Hours G-22
(7) Check Points of Every 600 Hours G-23
(8) Check Points of Every 800 Hours G-23
(9) Check Points of Every 1 Year G-24
(10) Check Points of Every 2 Years G-24
(11) Others G-26
[9] SPECIAL TOOLS G-27
[10] TIRES G-37
(1) Type of Tire G-37
(2) Tread Adjustment G-38
(2)-1 Front Wheels [2WD] G-38
(2)-2 Front Wheels [4WD] G-38
(2)-3 Rear Wheels G-39
(3) Wheel Hub G-39
(4) Tire Pressure G-40
(5) Tire Liquid Injection G-41
[11] IMPLEMENT LIMITATIONS G-44

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

SPECIFICATIONS

Model			M4700		M5400	
			2WD	4WD	2WD	4WD
PTO power (Factory observed)			31.3 kW (42 HP, 2600 rpm)		37.3 kW (50 HP, 2700 rpm)	
Engine	Model		F2803-LA		F2803-A	
	Type		Vertical, water-cooled, 4-cycle diesel engine			
	Number of cylinders		5			
	Total displacement		2746 cm^3 (167.6 cu.in.)			
	Bore and stroke		87 × 92.4 mm (3.4 × 3.6 in.)			
	Engine rated output		35.1 kW (47 HP)		40.3 kW (54 HP)	
	Rated revolution		2600 rpm		2700 rpm	
	Maximum torque		158 N·m (16.1 kgf·m, 116.5 ft-lbs)/ 1400 to 1600 rpm		175 N·m (17.9 kgf·m, 129 ft-lbs)/ 1400 to 1600 rpm	
	Battery		CCA 615 K, RC150 min (12 V)			
	Fuel		Diesel fuel No.1-D [below −10 °C (14 °F)] Diesel fuel No. 2-D [above −10 °C (14 °F)]			
	Fuel tank capacity		65 L (17.2 U.S.gal., 14.3 Imp.gal.)			
	Engine crankcase capacity		8.0 L (8.5 U.S.qts., 7.03 Imp.qts.)			
	Engine coolant capacity		6.2 L (6.6 U.S.qts., 5.7 Imp.qts.)		8.0 L (8.5 U.S.qts., 7.03 Imp.qts.)	
Dimensions	Overall length		3495 mm (137.6 in.)	3405 mm (134.1 in.)	3495 mm (137.6 in.)	3405 mm (134.1 in.)
	Overall width (Minimum tread)		1706 mm (67.2 in.)		1850 mm (72.8 in.)	
	Overall height (with ROPS)		2357 mm (93.0 in.)		2375 mm (93.5 in.)	
	Wheel base		2000 mm (78.7 in.)			
	Tread	Front	1420 to 1820 mm (55.9 to 71.7 in.)	1330 mm (52.4 in.) 1430 mm (56.3 in.)	1420 to 1820 mm (55.9 to 71.7 in.)	1330 mm (52.4 in.) 1430 mm (56.3 in.)
		Rear	1420 to 1720 mm (55.9 to 67.7 in.)			
	Minimum ground clearance		430 mm (16.9 in.) (BRACKET DRAWBAR)		460 mm (18.1 in.) (BRACKET DRAWBAR)	
Weight (with ROPS)			1700 kg (3748 lbs)	1800 kg (3968 lbs)	1750 kg (3858 lbs)	1850 kg (4078 lbs)
Travelling system	Standard tire size	Front	6.5-16	9.5-22	7.5-16	9.5-22
		Rear	14.9-28		16.9-28	
	Clutch		Dry, Single plate			
	Steering		Full hydrostatic power steering			
	Transmission		Shuttle synchromesh, 8F/4R (with creep speed 12F/4R)			
	Brake	Travelling	Wet type, multiple discs (mechanical)			
		Parking	Connected with the travelling brake			
	Differential		Bevel gears (with differential lock)			
Hydraulic system	Hydraulic control system		Position, draft and mix control			
	Pump-up capacity		35.4 L (9.4 U.S.gal., 7.8 Imp.gal.)/min.		42.7 L (11.3 U.S.gal., 9.4 Imp.gal.)/min.	
	Three point hitch		Category I & II			
	Maximum lifting force		1900 kg (4189 lbs) at lower link end 1500 kg (2307 lbs) at 610 mm (24 in.) behind lifting point			
	System pressure		19.1 MPa (195 kgf/cm^2, 2773 psi)			
PTO	Independent clutch		Wet type, multiple discs			
	Live PTO	Direction of turning	Clockwise, viewed from tractor rear			
		PTO speed	540 rpm at 2295 engine rpm			
Traction system			Swing drawbar, adjustable in direction			

11790Z00041

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

[7] MAINTENANCE

No.	Item	Period	Indication on hour meter															After purchase		Reference page
			50	100	150	200	250	300	350	400	450	500	550	600	650	700	750	800	1 year	2 years	
1	Engine oil	Change	★	☆		☆		☆		☆		☆		☆		☆		☆			G-12
2	Engine oil filter	Replace	★			☆				☆				☆				☆			G-13
3	Hydraulic oil filter	Replace	★			☆				☆				☆				☆			G-13
4	Transmission fluid	Change	★											☆							G-14
5	Front axle case oil	Change	★											☆							G-14
6	Front axle pivot	Adjust	★											☆							G-15
7	Greasing			☆		☆		☆		☆		☆		☆		☆		☆			G-17
8	Engine start system	Check	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆			G-16
9	Wheel bolt torque	Check	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆	☆			G-16
10	Battery condition	Check		☆		☆		☆		☆		☆		☆		☆		☆			G-17
11	Air cleaner element [Double type] — Primary element *	Clean		☆		☆		☆		☆		☆		☆		☆		☆			G-19
		Replace																	☆		G-19
	Secondary element	Replace																	☆		G-19
12	Filter element	Clean		☆		☆		☆		☆		☆		☆		☆		☆			G-19
		Replace								☆								☆			G-22
13	Fan belt	Adjust		☆		☆		☆		☆		☆		☆		☆		☆			G-20
14	Clutch	Adjust	★	☆		☆		☆		☆		☆		☆		☆		☆			G-15
15	Brake	Adjust		☆		☆		☆		☆		☆		☆		☆		☆			G-20
16	Radiator hose and clamp	Check				☆				☆				☆				☆			G-21
		Replace																		☆	G-21
17	Power steering oil line	Check				☆				☆				☆				☆			G-21
		Replace																		☆	G-21
18	Fuel line	Check				☆				☆				☆				☆			G-21
		Replace																		☆	G-21
19	Toe-in	Adjust				☆				☆				☆				☆			G-22
20	Greasing (2WD front wheel hub)									☆								☆			G-22
21	Engine valve clearance **	Adjust																☆			G-23
22	Cooling system	Flush																		☆	G-24
23	Coolant	Change																		☆	G-25
24	Fuel system ✦	Bleed																			G-26
25	Clutch housing water ✦	Drain																			G-26
26	Fuse ✦	Replace																			G-26
27	Light bulb ✦	Replace																			G-27

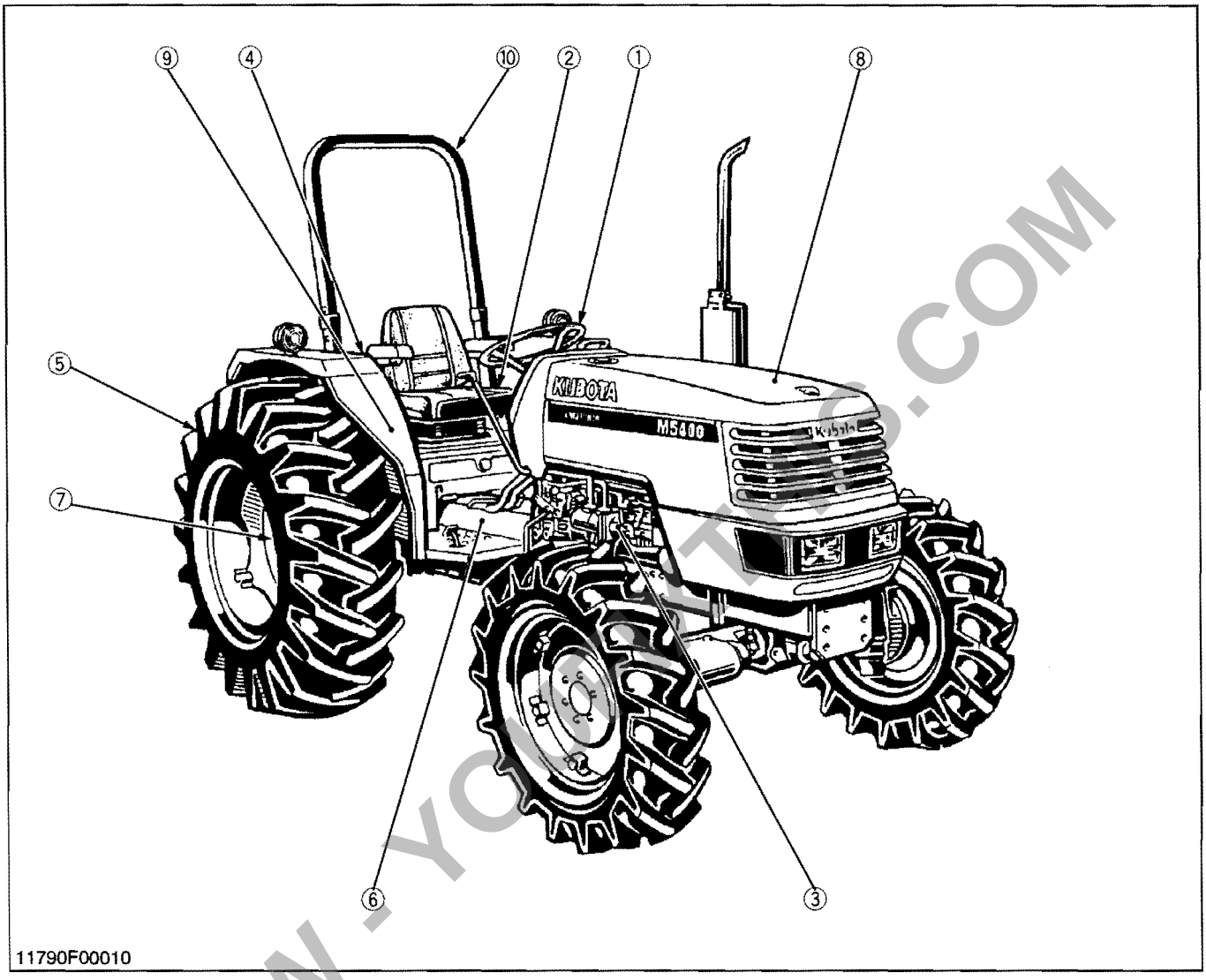
Note : The jobs indicated by ★ must be done by all means 50 hours after the break-in respectively.
The jobs indicated by ✦ service as required.
*** Air cleaner should be cleaned more often in dusty conditions than in normal conditions.**
**** Consult your local KUBOTA dealer for this service.**

11790G00770

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

[1] FEATURES



11790F00010

(1) Full Hydrostatic Power Steering
(2) Synchro Shuttle Shift (Lo-Reverse)
(3) E-TVCS (Three Vortex Combustion System) Diesel Engine
(4) Independent PTO
Hydraulic PTO Clutch System
(5) Three Point Hitch with Big Lift Power
Three Point Hitch Fully Equipped with Position, Draft and Mixed Control
(6) Creep Transmission (Option)
(7) Wet Disc Brake
(8) New Design
(9) Auxiliary Control Valve (Option)
(10) ROPS

11790G00010

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

[6] TIGHTENING TORQUES (GENERAL USE SCREWS, BOLTS AND NUTS)

Screws, bolts and nuts whose tightening torques are not specified in this Workshop Manual should be tightened according to the table below.

Indication on top of bolt	⬡ ④ No-grade or 4T						⑦ 7T						⑨ 9T		
Material of bolt	SS400, S20C						S43C, S48C						SCr435, SCM435		
Material of opponent part	Ordinariness			Aluminum			Ordinariness			Aluminum			Ordinariness		
Diameter	N·m	kgf·m	ft-lbs	N·m	kgf·m	ft-lbs	N·m	kgf·m	ft-lbs	N·m	kgf·m	ft-lbs	N·m	kgf·m	ft-lbs
M6 (6 mm, 0.24 in.)	7.84 to 9.31	0.80 to 0.95	5.79 to 6.87	7.84 to 8.83	0.80 to 0.90	5.79 to 6.51	9.80 to 11.2	1.00 to 1.15	7.24 to 8.32	7.84 to 8.83	0.80 to 0.90	5.79 to 6.51	12.3 to 14.2	1.25 to 1.45	9.05 to 10.5
M8 (8 mm, 0.31 in.)	17.7 to 20.5	1.8 to 2.1	13.0 to 15.2	16.7 to 19.6	1.7 to 2.0	12.3 to 14.5	23.6 to 27.4	2.4 to 2.8	17.4 to 20.2	17.7 to 20.6	1.8 to 2.1	13.0 to 15.2	29.4 to 34.3	3.0 to 3.5	21.7 to 25.3
M10 (10 mm, 0.39 in.)	39.2 to 45.0	4.0 to 4.6	29.0 to 33.2	31.4 to 34.3	3.2 to 3.5	23.1 to 25.3	48.1 to 55.8	4.9 to 5.7	35.5 to 41.2	39.2 to 44.1	4.0 to 4.5	28.9 to 32.5	60.8 to 70.5	6.2 to 7.2	44.9 to 52.1
M12 (12 mm, 0.47 in.)	62.8 to 72.5	6.4 to 7.4	46.3 to 53.5				77.5 to 90.1	7.9 to 9.2	57.2 to 66.5	62.8 to 72.5	6.4 to 7.4	46.3 to 53.5	103 to 117	10.5 to 12.0	76.0 to 86.8
M14 (14 mm, 0.55 in.)	108 to 125	11.0 to 12.8	79.6 to 92.5				124 to 147	12.6 to 15.0	91.2 to 108				167 to 196	17.0 to 20.0	123 to 144
M16 (16 mm, 0.63 in.)	167 to 191	17.0 to 19.5	123 to 141				196 to 225	20.0 to 23.0	145 to 166				260 to 303	26.5 to 31.0	192 to 224
M18 (18 mm, 0.71 in.)	245 to 284	25.0 to 29.0	181 to 210				275 to 318	28.0 to 32.5	203 to 235				343 to 401	35.0 to 41.0	254 to 297
M20 (20 mm, 0.79 in.)	334 to 392	34.0 to 40.0	246 to 289				368 to 431	37.5 to 44.0	272 to 318				490 to 568	50.0 to 58.0	362 to 420

11790G00760

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

TROUBLESHOOTING

Symptom	Probable Cause	Solution	Reference Page
Engine Does Not Start	• No fuel	Replenish fuel	–
	• Air in the fuel system	Bleed	G-26
	• Water in the fuel system	Change fuel and repair or replace fuel system	–
	• Fuel pipe clogged	Clean	–
	• Fuel filter clogged	Change	G-22
	• Excessively high viscosity of fuel or engine oil at low temperature	Use specified fuel or engine oil	G-9
	• Fuel with low cetane number	Use specified fuel	G-9
	• Fuel leak due to loose injection pipe retaining nut	Tighten retaining nut	1-S19
	• Incorrect injection timing	Adjust	1-S52
	• Fuel camshaft worn	Replace	1-S32
	• Injection nozzle clogged	Clean	1-S54
	• Injection pump malfunctioning	Repair or replace	1-S28, S52
	• Seizure of crankshaft, camshaft, piston, cylinder or bearing	Repair or replace	–
	• Compression leak from cylinder	Replace head gasket, tighten cylinder head screw, glow plug and nozzle holder	1-S16
	• Improper valve timing	Correct or replace timing gear	1-S31
	• Piston ring and cylinder worn	Replac	1-S40, S47
	• Excessive valve clearance	Adjust	1-S18
(Starter Does Not Run)	• Battery discharged	Charge	9-S6
	• Starter malfunctioning	Repair or replace	9-S10 to S13
	• Main switch malfunctioning	Repair or replace	9-S7, S8
	• PTO safety switch improperly adjusted or defective	Repair or replace	2-S13
	• Starter relay defective	Replace	9-S8
	• Wiring disconnected	Connect	–
Engine Revolution Is Not Smooth	• Fuel filter clogged or dirty	Change	G-22
	• Air cleaner clogged	Clean or replace	G-19
	• Fuel leak due to loose injection pipe retaining nut	Tighten retaining nut	1-S19
	• Injection pump malfunctioning	Repair or replace	1-S28, S52
	• Incorrect nozzle injection pressure	Adjust	1-S54
	• Injection nozzle stuck or clogged	Repair or replace	1-S19, S55
	• Governor malfunctioning	Repair	1-S29, S32
Either White or Blue Exhaust Gas Is Observed	• Excessive engine oil	Reduce to specified level	1-S11
	• Piston ring and cylinder worn or stuck	Repair or replace	1-S40, S47
	• Incorrect injection timing	Adjust	1-S52
	• Deficient compression	Adjust top clearance	1-S17

11790S10550

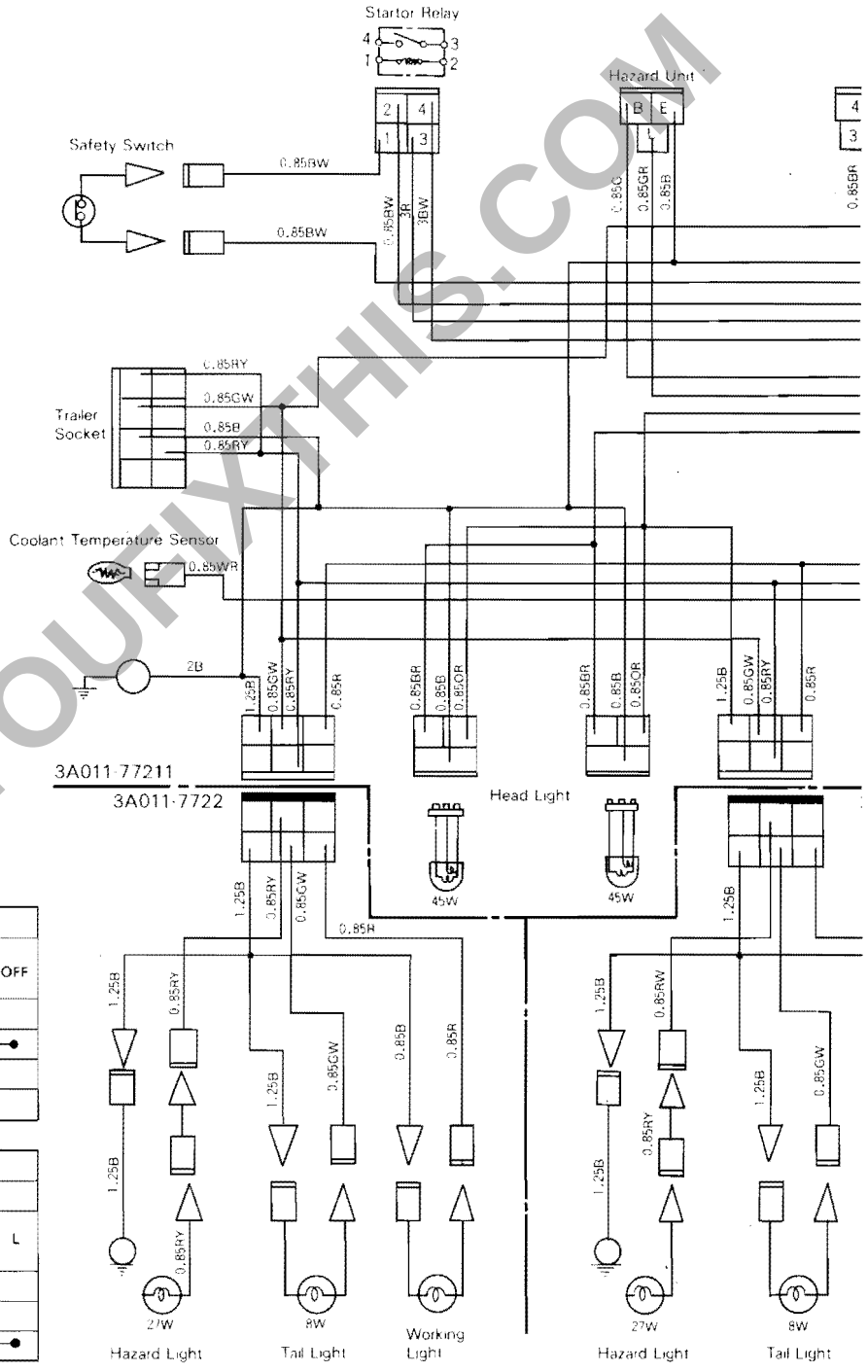
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

[1] WIRING DIAGRAM

- **Color of Wiring**

B	Black
W	White
R	Red
G	Green
Or	Orange
Y	Yellow
Br	Brown
L	Blue
Lg	Light Green
WB	White/Black
WR	White/Red
WG	White/Green
BL	Black/Blue
BG	Black/Green
BR	Black/Red
BW	Black/White
BY	Black/Yellow
BrB	Brown/Black
RB	Red/Black
RW	Red/White
RY	Red/Yellow
GB	Green/Black
GW	Green/White
GR	Green/Red
GY	Green/Yellow
YR	Yellow/Red
YB	Yellow/Black
YG	Yellow/Green
LW	Blue/White
LR	Blue/Red
OrW	Orange/White



Main Switch Table

Key Position \ Terminal	B	G1	G2	ST	AC	OFF
PREHEAT	●	●			●	
OFF	●					●
ON	●				●	
START	●		●	●	●	

Combination Switch

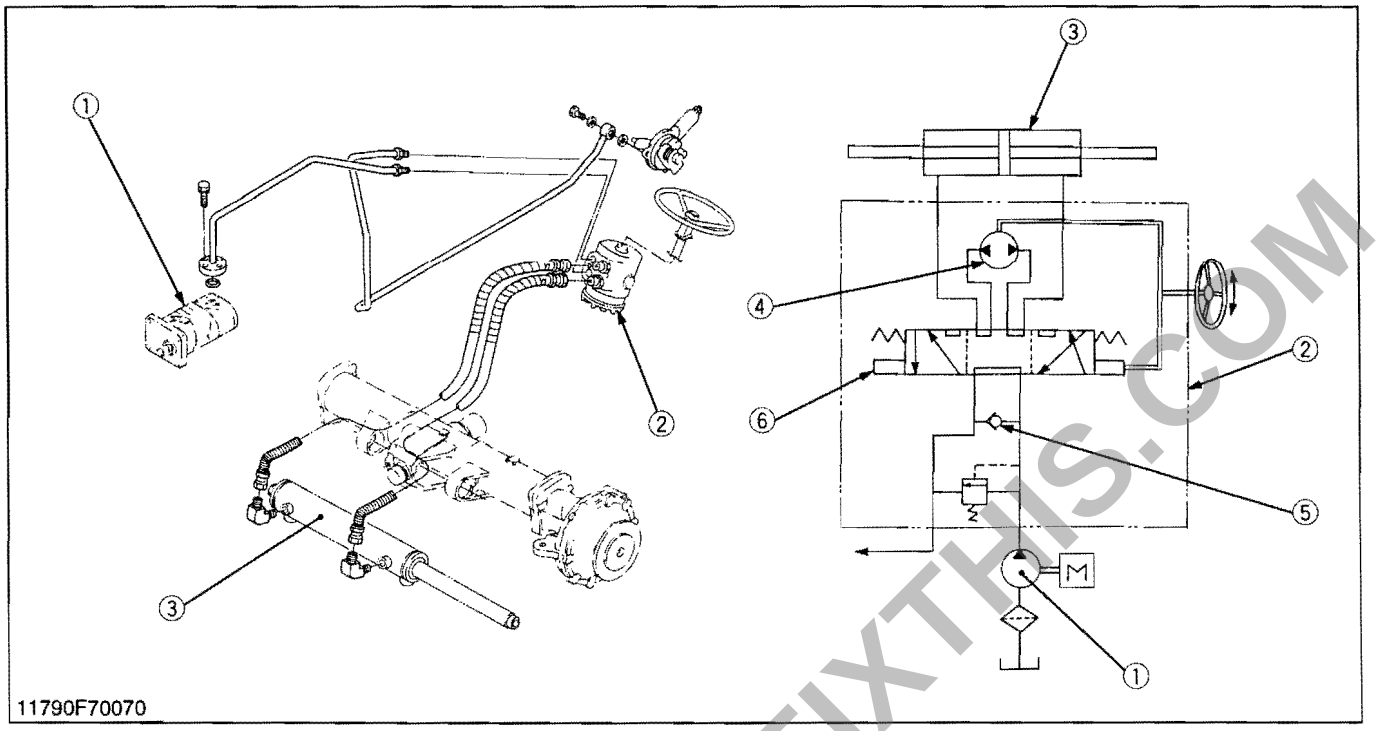
	Head Light					Hazard Light			
PO \ TM	B1	T	1	2	PO \ TM	B2	R	L
OFF	●				1	●		
1	●	●	●		OFF	●		
2	●	●		●	2	●		●

11790F90591

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

[2] POWER STEERING HYDRAULIC CIRCUIT



11790F70070

(1) Hydraulic Pump
(2) Steering Controller
(3) Steering Cylinder
(4) Gerotor
(5) Check Valve
(6) Control Valve

■ Hydraulic Oil Flow

When the engine starts, the hydraulic pump (1) of the power steering system pressure-feeds the oil drawn from the transmission case through the suction pipe.

The oil which has entered steering controller (2) is directed to control valve (6).

As the steering wheel is turned, control valve (6) operates and the oil passes through gerotor (4) and into steering cylinder (3). The cylinder rod then moves to control the directional movement of the front wheels.

Return oil from steering cylinder (3) passes through control valve (6) is sent to the PTO clutch valve.

When the engine is not operating, and the steering wheel is turned, gerotor (4) rotates to supply oil to steering cylinder (3). Thus the machine can be steered manually.

11790M70020

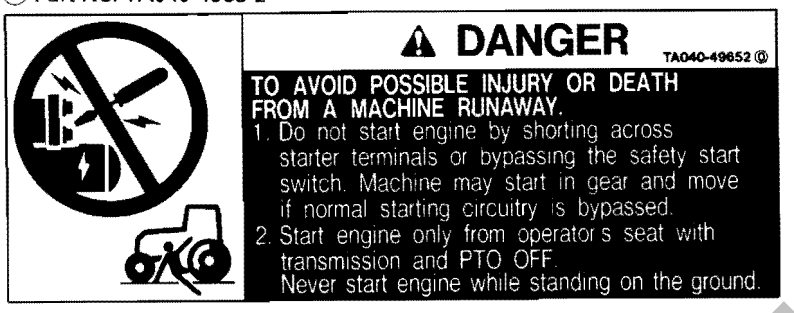
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

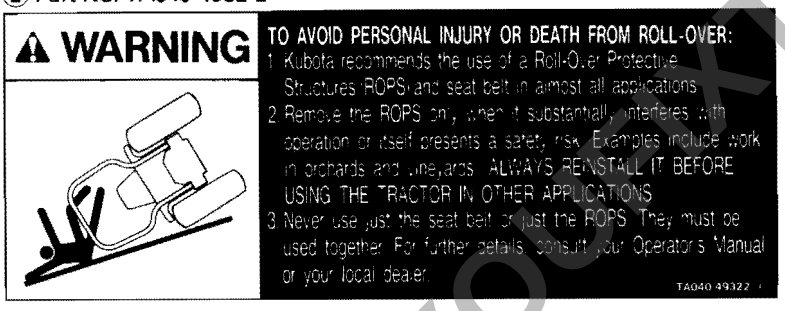
SAFETY DECALS

- **The following safety decals are installed on the machine.**
  If a decal becomes damaged, illegible or is not on the machine, replace it. The decal part number is listed in the parts list.

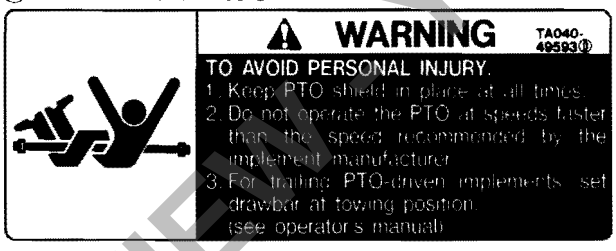
① Part No. TA040-4965-2



② Part No. TA040-4932-2



③ Part No. TA040-4959-3



④ Part No. TA040-4935-1



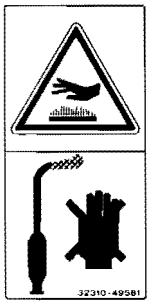
⑤ Part No. 6C040-4741-1
No fire

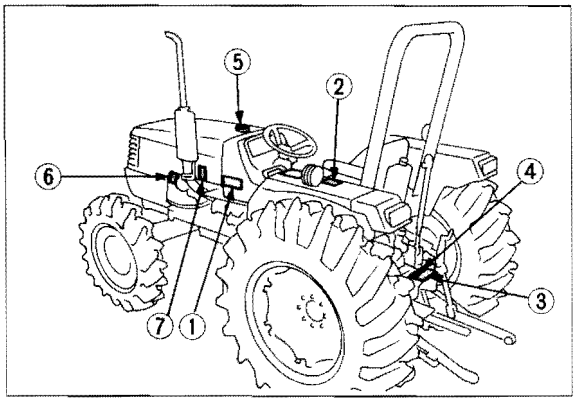


⑥ Part No. 32751-4958-1
Stay clear of engine fan and fanbelt.



⑦ Part No. 32310-4958-1
Do not touch hot surface like muffler, etc.





11790F00760

11790Z00020

PREVIEW ONLY YOUFIXTHIS.COM

Download full manual at youfixthis.com

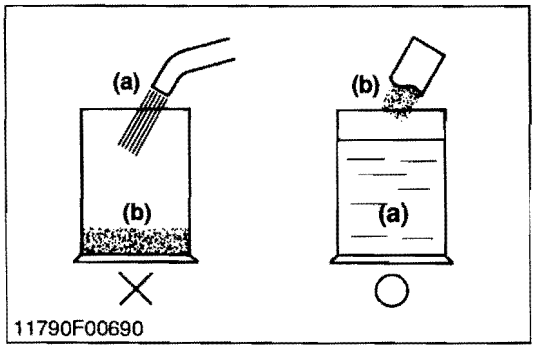
(5) Tire Liquid Injection

Auxiliary weights can be used to increase traction force for plowing in fields or clayey grounds.

Another way is to inject water or another liquid, such as a calcium chloride solution in the tires. Water must not be used in winter since it freezes at 0 °C (32 °F). The calcium chloride solution will not freeze and moreover, affords higher effect than water since its specific gravity is higher than that of water by about 20 %. Below is an explanation of calcium chloride solution injection.

■ IMPORTANT

- **Do not fill the front tires with liquid.**



11790F00690

Preparation of Calcium Chloride Solution

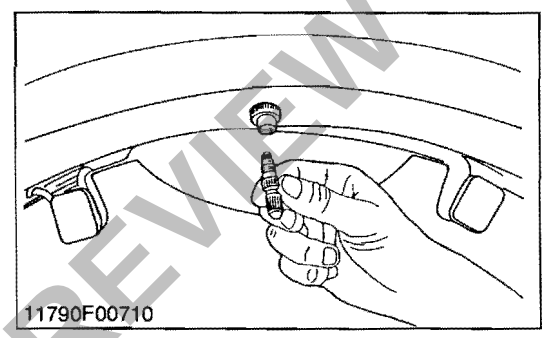
⚠ CAUTION

- **When making a calcium chloride solution, do not pour water over calcium chloride since this results in chemical reaction which will cause high temperature. Instead add a small amount of calcium chloride to the water at a time until the desired solution is achieved.**

Freezing temp.	Weight of $CaCl_2$ to be dissolved in 100 L (26.5 U.S.gals., 22.0 imp.gals.) of water
– 5 °C (23 °F)	12 kg (26.4 lbs)
– 10 °C (14 °F)	21 kg (46.3 lbs)
– 15 °C (5 °F)	28 kg (61.7 lbs)
– 20 °C (– 4 °F)	34 kg (75.0 lbs)
– 25 °C (– 13 °F)	40 kg (88.2 lbs)
– 330 °C (– 22 °F)	44 kg (97.0 lbs)
– 35 °C (– 31 °F)	49 kg (108.0 lbs)
– 40 °C (– 40 °F)	52 kg (114.6 lbs)
– 45 °C (– 49 °F)	56 kg (123.5 lbs)
– 50 °C (– 58 °F)	61 kkg (134.5 lbs)

(a) Water **(b) $CaCl_2$ (Calcium Chloride)**

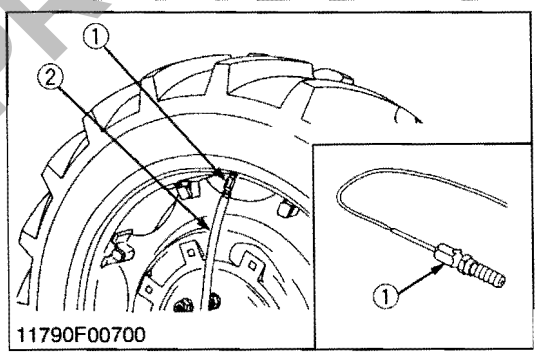
11790G00690


11790F00710

Attaching Injector

1. Lift the rear tires off the ground.
2. Turn the tire so that the air valve is at the top.
3. Remove the air valve, and attach the injector. (Code No. 07916-52501)

(1) Injector (2) Hose

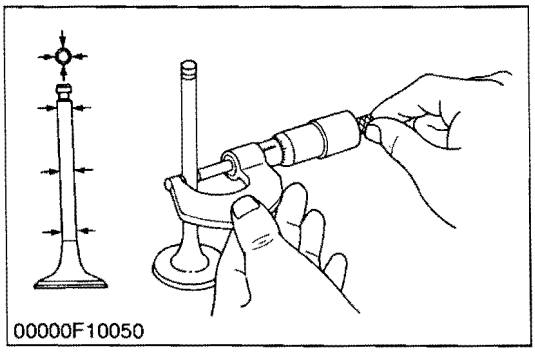


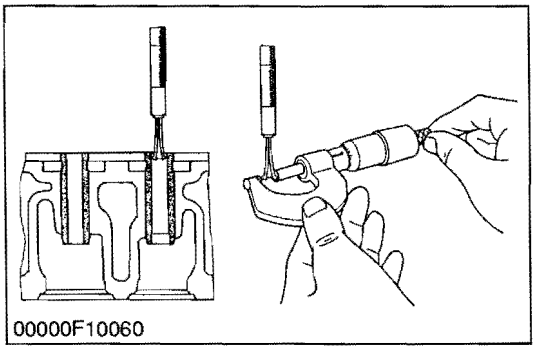
11790F00700

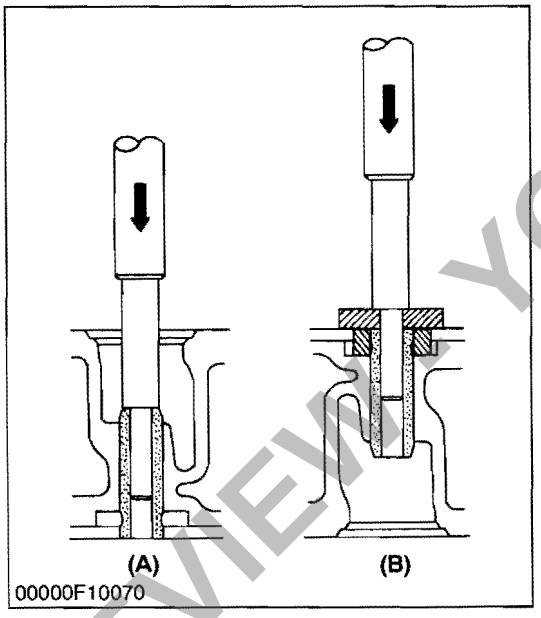
11790G00700

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com


00000F10050


00000F10060



00000F10070

Clearance between Valve Stem and Valve Guide

1. Remove carbon from the valve guide section.
2. Measure the valve stem O.D. with an outside micrometer.
3. Measure the valve guide I.D. with a small hole gauge, and calculate the clearance.
4. If the clearance exceeds the allowable limit, replace the valves. If it still exceeds the allowable limit, replace the valve guide.

Clearance between valve stem and valve guide	Factory spec.	0.040 to 0.070 mm 0.00157 to 0.00276 in.
	Allowable limit	0.10 mm 0.0039 in.
Valve stem O.D.	Factory spec.	7.960 to 7.975 mm 0.31339 to 0.31398 in.
Valve guide I.D.	Factory spec.	8.015 to 8.030 mm 0.31555 to 0.31614 in.

00000S10040

Replacing Valve Guide

(When reassembling)

1. Press out the used valve guide using a valve guide replacing tool.

(When installing)

1. Clean a new valve guide and valve guide bore, and apply engine oil to them.
2. Press in a new valve guide using a valve guide replacing tool.
3. Ream precisely the I.D. of the valve guide to the specified dimension.

Valve guide I.D. (Intake and exhaust)	Factory spec.	8.015 to 8.030 mm 0.31555 to 0.31614 in.

■ IMPORTANT

- **Do not hit the valve guide with a hammer during replacement.**

(A) When Removing **(B) When Installing**

00000S10050

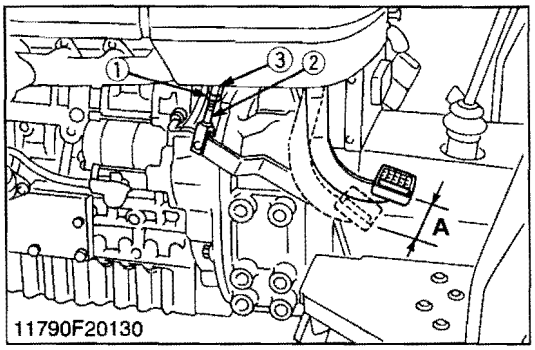
PREVIEW IT YOU FIX THIS.COM

Download full manual at youfixthis.com

CHECKING, DISASSEMBLING AND SERVICING

[1] TRAVELLING CLUTCH

CHECKING AND ADJUSTING



11790F20130

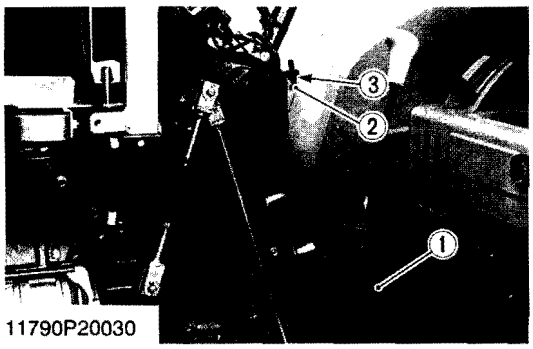
Clutch Pedal Free Play

1. Stop the engine and remove the key.
2. Slightly depress the clutch pedal and measure free play **(A)** at top of pedal.
3. If adjustment is needed, loosen the lock nut (1), and turn the turnbuckle (3) to adjust the clutch rod (2) length.
4. Retighten the lock nut (1).

Clutch pedal free play **(A)** on the pedal	Factory spec.	35 to 45 mm 1.4 to 1.8 in.

(1) Lock Nut
(2) Clutch Rod
(3) Turnbuckle

11790S20030



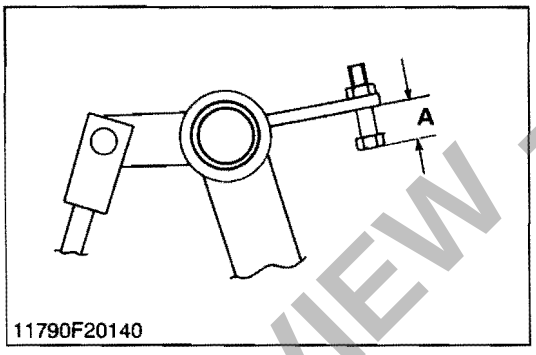
11790P20030

Clutch Pedal Stopper Bolt

1. Measure the height **(A)** of stopper bolt (2).
2. If the measurement is not within the factory specifications, adjust it.
3. After adjustment, tighten the lock nut (3) firmly.

Height **(A)** of clutch pedal stopper bolt	Factory spec.	18 to 20 mm 0.70 to 0.79 in.

(1) Clutch Pedal
(2) Stopper Bolt
(3) Lock Nut

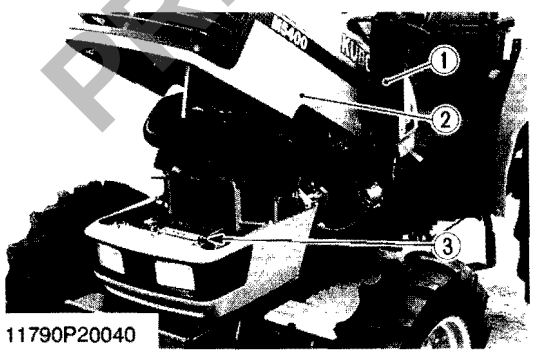


11790F20140

11790S20040

DISASSEMBLING AND ASSEMBLING

(1) Removing Clutch Pedal and Shaft



11790P20040

Muffler and Bonnet

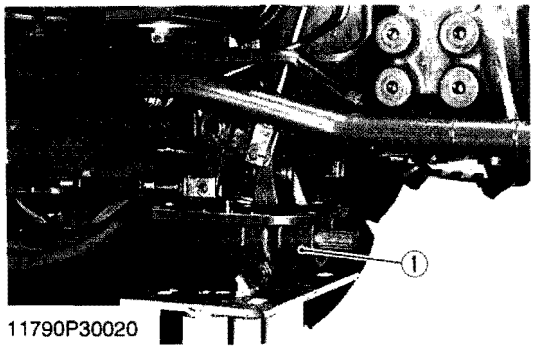
1. Remove the muffler (1).
2. Remove the bonnet (2).
3. Disconnect the battery's ground cable (3).

(1) Muffler
(2) Bonnet
(3) Battery's Ground Cable

11790S20050

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



11790P30020

DT Gear Case (4WD Only)

1. Remove the DT shift rod.
2. Remove the DT gear case (1).

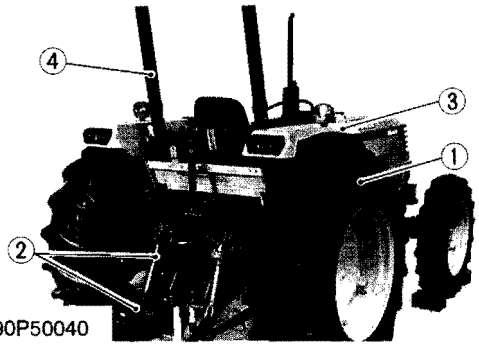
(When reassembling)

- Apply liquid gasket (Three Bond 1216 or equivalent) to joint face of the clutch housing and DT gear case.

Tightening torque	DT gear case mounting screw	48.1 to 55.8 N·m 4.9 to 5.7 kgf·m 35.4 to 41.2 ft-lbs

(1) DT Gear Case

11790S30031



11790P50040

Rear Wheel, Fender and ROPS

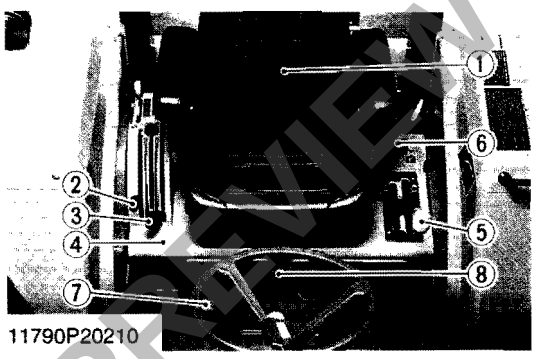
1. Check the clutch housing case and transmission case are securely mounted on the disassembly stands.
2. Remove the rear wheels (1).
3. Disconnect the jumper leads for hazard and tail light.
4. Disconnect the jumper leads for PTO safety switch.
5. Remove the 3-point hitch link (2).
6. Remove the fenders (3).
7. Remove the ROPS (4).

(When reassembling)

Tightening torque	ROPS mounting screw	M16, grade 9 screw	260 to 304 N·m 26.5 to 31.0 kgf·m 192 to 224 ft-lbs
		9/16-18 UNF, grade 8 screw	149.1 to 179.5 N·m 15.2 to 18.3 kgf·m 110 to 132 ft-lbs
	Rear wheel mounting nut		260 to 304 N·m 26.5 to 31.0 kgf·m 192 to 224 ft-lbs

(1) Rear Wheel
(2) 3-point Hitch Link
(3) Fender
(4) ROPS

11790S30221



11790P20210

Seat and Center Frame

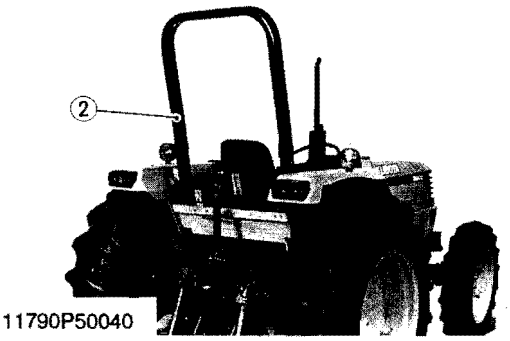
1. Remove the seat (1).
2. Remove the draft and position control lever grips (2), (3).
3. Remove the auxiliary speed change lever grip (5).
4. Remove the DT shift lever grip (6) and three point hitch lowering speed control grip (8).
5. Remove the center frame (4).
6. Remove the differential lock pedal (7).

(1) Seat
(2) Grip
(3) Grip
(4) Center Frame
(5) Grip
(6) DT Shift Lever Grip
(7) Differential Lock Pedal
(8) Three Point Hitch Lowering Speed Control Grip

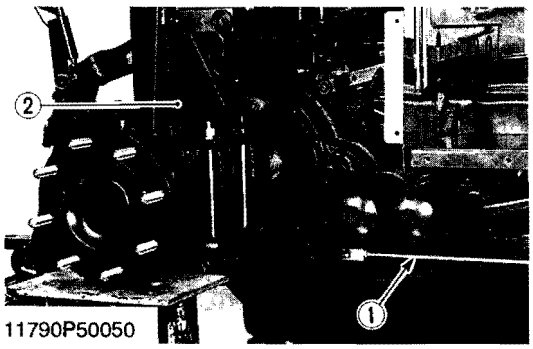
11790S30230

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



11790P50040



11790P50050

Rear Wheel, Fender and ROPS

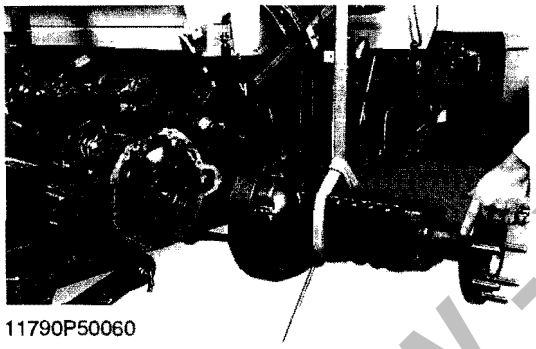
1. Check the rear axle and transmission case are securely mounted on the disassembly stands.
2. Loosen the rear wheel mounting nuts.
3. Take out the rear wheel.
4. Remove the brake rod (1).
5. Disconnect the jumper leads for hazard and tail lights.
6. Disconnect the jumper leads for PTO safety switch. (If removing the right side fender.)
7. Remove the fender mounting screws and nuts.
8. Remove the fender.
9. Remove the ROPS (2).

(When reassembling)

Tightening torque	ROPS mounting screw	M16, grade 9 screw	260 to 304 N·m 26.5 to 31.0 kgf·m 192 to 224 ft-lbs
		9/16-18 UNF, grade 8 screw	149.1 to 179.5 N·m 15.2 to 18.3 kgf·m 110 to 132 ft-lbs
	Rear wheel mounting nut		260 to 304 N·m 26.5 to 31.0 kgf·m 192 to 224 ft-lbs

(1) Brake Rod (2) ROPS

11790S50121


11790P50060

Rear Axle Case

1. Remove the DT shift rod. (If separating left side.)
2. Remove the differential lock rod. (If separating right side.)
3. Remove the rear axle case mounting screws and nuts.
4. Support the rear axle case with nylon lift strap and hoist.
5. Separate the rear axle case from transmission case.

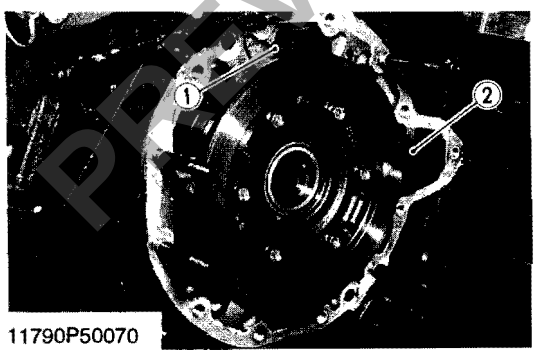
(When reassembling)

- Apply liquid gasket (Three Bond 1216 or equivalent) to joint face of the rear axle case and transmission case, after eliminate the water, oil and stuck liquid gasket.

Tightening torque	Rear axle case mounting screw and nut	77.5 to 90.2 N·m 7.9 to 9.2 kgf·m 57.1 to 66.5 ft-lbs

11790S50130

(2) Disassembling Brake Case



11790P50070

Brake Cam Plate

1. Remove the return spring (1).
2. Remove the brake cam plate (2).

(When reassembling)

- Apply grease to the brake ball seats. (Do not grease excessively.)

(1) Return Spring (2) Brake Cam Plate

11790S50140

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

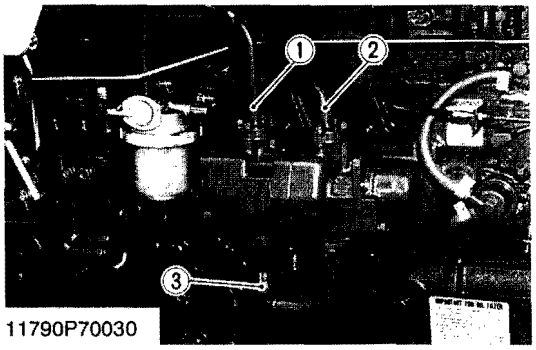
DISASSEMBLING AND ASSEMBLING

■ **IMPORTANT**

- **The hydraulic pump is precision machined and assembled : if disassembled once, it may be unable to maintain its original performance. Therefore, when the hydraulic pump fails, replacement should be carried out with the hydraulic pump assembled except when emergency repair is unavoidable.**
- **When repair is required, flow the disassembly and servicing procedures shown below with utmost care.**
- **Be sure to test the hydraulic pump with a flowmeter before disassembling.**
- **After reassembly, be sure to perform break-in operation and ensure that there is nothing abnormal with the hydraulic pump.**

11790S70020

(1) M4700



11790P70030

Removing Three Point System Hydraulic Pump and Power Steering Hydraulic Pump

1. Disconnect the delivery pipe (1), (2) from the hydraulic pump.
2. Disconnect the suction pipe (3) from the hydraulic pump.
3. Remove the hydraulic pump assembly mounting screws and nuts.
4. Take out the hydraulic pump assembly.

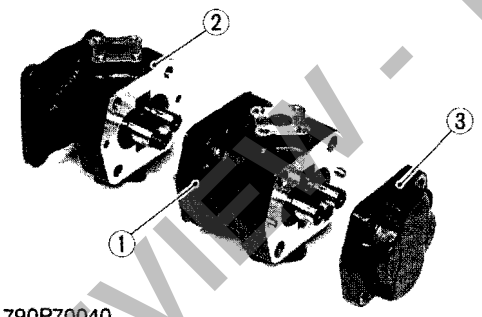
(When reassembling)

- Apply grease to the O-ring and take care not to damage it.

Tightening torque	Hydraulic pipe mounting screw	17.7 to 20.6 N·m 1.8 to 2.1 kgf·m 13.0 to 15.2 ft-lbs
	Hydraulic pump assembly mounting screw and nut	23.6 to 27.4 N·m 2.4 to 2.8 kgf·m 17.4 to 20.2 ft-lbs

(1) Delivery Pipe
(2) Delivery Pipe
(3) Suction Pipe

11790S70030



11790P70040

Separating Power Steering Hydraulic Pump

1. Remove the pump cover mounting screws.
2. Separating the power steering hydraulic pump (1) from the three point system hydraulic pump (2).

(When reassembling)

- Take care not to damage the O-ring.

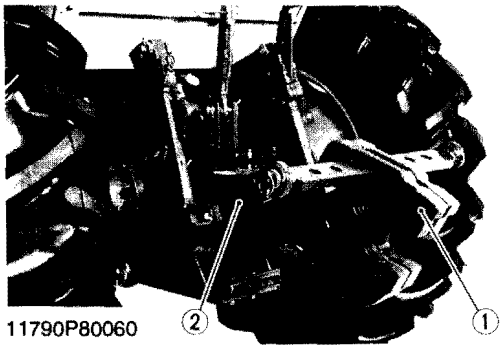
(1) Power Steering Hydraulic Pump
(2) Three Point System Hydraulic Pump
(3) Pump Cover

11790S70040

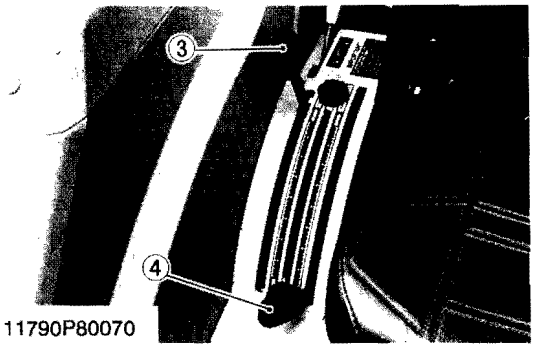
PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

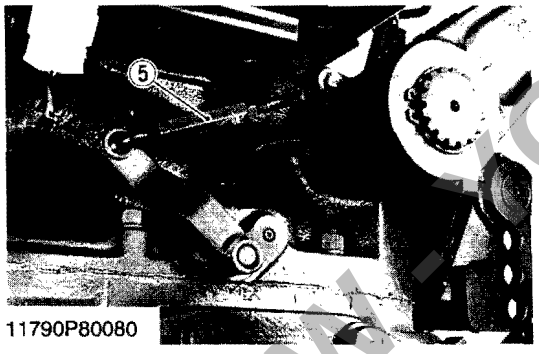
[2] POSITON CONTROL AND DRAFT CONTROL LINKAGE CHECKING AND ADJUSTING



11790P80060



11790P80070



11790P80080


11790P80090

Adjusting Uppermost Position

1. Attach the weight (1) of 490 N (50 kgf, 110 lbs) to the end of lower link (2).
2. Set the position control lever (3) and draft control lever (4) to the lowest position.
3. Start the engine, and set the engine speed at the 1000 rpm.
4. Set the position control lever (3) to the uppermost position.
5. Shorten the feedback rod by turning the turnbuckle (5) until the relief valve begins to be operated.
6. From the feedback rod position obtained above 5, turn the turnbuckle by 1.5 turn to lengthen the feedback rod, then tighten the lock nut.
7. Move the position control lever down then all the way up. Stop the engine and check that the lift arm has 5 to 20 mm (0.20 to 0.79 in.) play upward on its edge.
8. If the specified play is not obtained, repeat from 4 again.

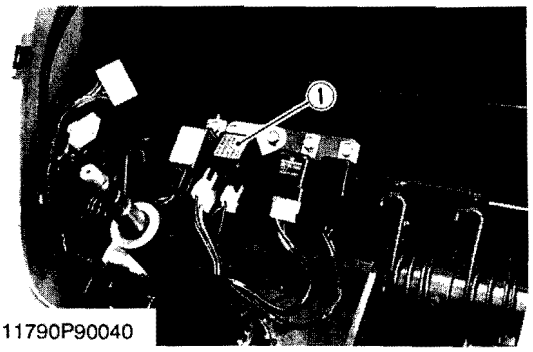
Position control feedback rod **A**	Factory spec.	Approx.125 mm 4.92 in.

(1) Weight
(2) Lower Link
(3) Position Control Lever
(4) Draft Control Lever
(5) Turnbuckle

11790S80091

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com



11790P90040

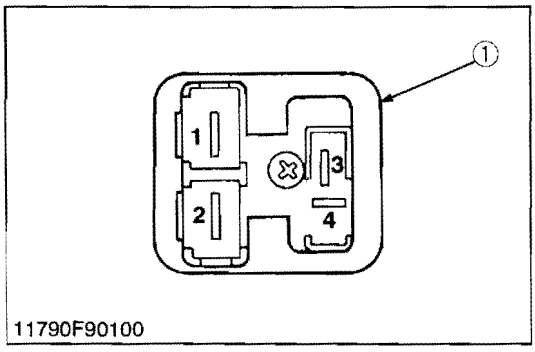
Glow Relay

1) Connector Voltage

1. Turn the main switch off.
2. Disconnect the **1P** connectors and **2P** connector from glow relay (1).
3. Measure the voltage with a voltmeter across the **1P** connector **R** terminal (Positive) and chassis (Negative).
4. If the voltage differs from the battery voltage, the wiring harness is faulty.
5. Turn the main switch on.
6. Measure the voltage with a voltmeter across the **2P** connector **RW** terminal (Positive) and chassis (Negative).
7. If the voltage differs from the battery voltage, the wiring harness is faulty.

(1) Glow Relay

11790S90140



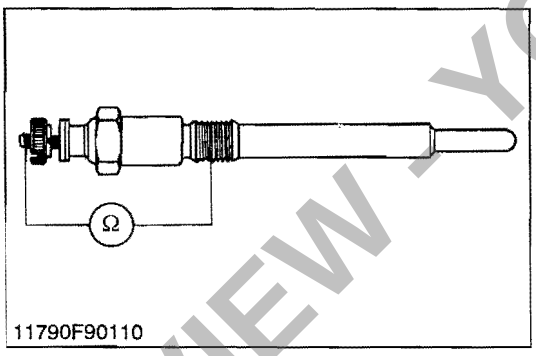
11790F90100

2) Glow Relay Test

1. Remove the glow relay (1).
2. Apply battery voltage across terminals **3** and **4**, and check for continuity across terminals **1** and **2**.
3. If continuity is not established across terminals **1** and **2**, replace the glow relay (1).

(1) Glow Relay

11790S90150



11790F90110

Glow Plug

1. Disconnect the leads from the flow plugs.
2. Measure the resistance with an ohmmeter across the glow plug terminal and chassis.
3. If 0 ohm is indicated, the screw at the tip of the glow plug and the housing are short-circuited.
4. If the factory specification is not indicated, the glow plug is faulty.

Glow plug resistance	Factory spec.	Approx. 0.5 ohms

11790S90160

PREVIEW - YOUFIXTHIS.COM

Download full manual at youfixthis.com

PREVIEW ONLY

You're viewing 18 of 442 pages

The full manual includes:

- All 442 pages, complete
- Searchable PDF (find any keyword)
- No watermarks
- Instant download
- Print-ready quality

GET FULL MANUAL NOW

Kubota M4700, M5400, M5400DT-N Service Manual

Scan or click anywhere
youfixthis.com

Click anywhere on this page to get the full manual