WSM

WORKSHOP MANUAL

KUBOTA EXCAVATOR

MANUEL D'ENTRETIEN

EXCAVATEUR KUBOTA

WERKSTATTANLEITUNG

BAGGER KUBOTA

U-10,20,35,45

Kubota

Code No.97899-60501

MidWestTech | Kubota U-10, U-20, U-35, U-45 Bagger Service Manual | Publication 97899-60501

Order the manual at mid-west-tech.com >

Additional Contents : U-10α

[1] Major change points
1-1 List of major change points 1
1-2 Paint color; EU-version 2
1-3 Rubber track; Upgraded anti-wear characteristic 2
1-4 System pressure and control valve section sequence 3
1-5 Noise level 4
1-6 Control device 4
1-7 Oil hose list 5

[2] Hydraulic components
1. Control valve 6
1-1 Outline of control valve 6
1-2 Structure and function 8
2. Hydraulic pump 10
2-1 Disassembly and reassembly 10
3. List of hydraulic components and circuit diagram 13
3-1 List of hydraulic components 13
3-2 Hydraulic circuit diagram 14
3-3 Hydraulic components and layout 15

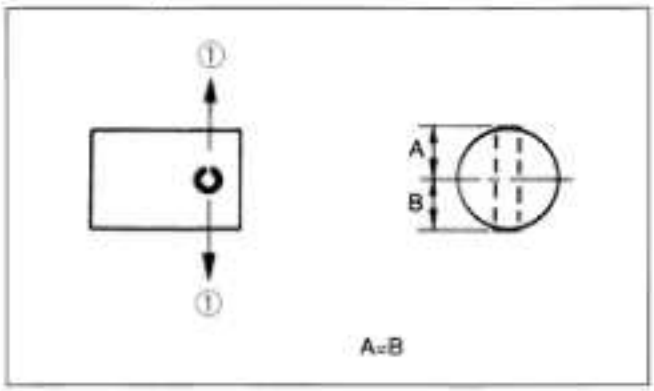
[3] Electric system
3-1 Engine starting device 17
3-2 Generating and charging system 19
3-3 Engine stop device 21
3-4 Others; oil, fuel, glow plug 23
3-5 Electric circuit diagram 29
3-6 Electric components and layout 30

[4] Attachment interchangeability

MidWestTech | Kubota U-10, U-20, U-35, U-45 Bagger Service Manual | Publication 97899-... Order the manual at mid-west-tech.com >

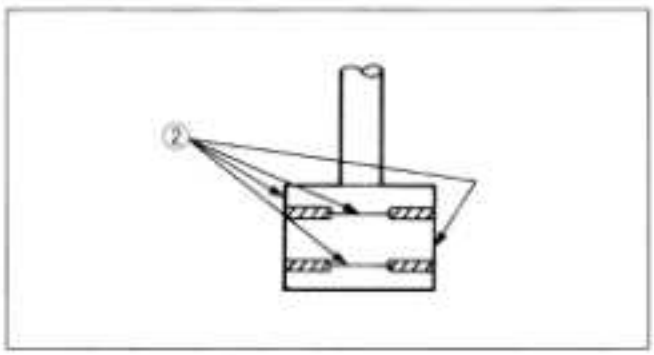
(2) Control Lever and Cable : U-10

1 Lever adjustment



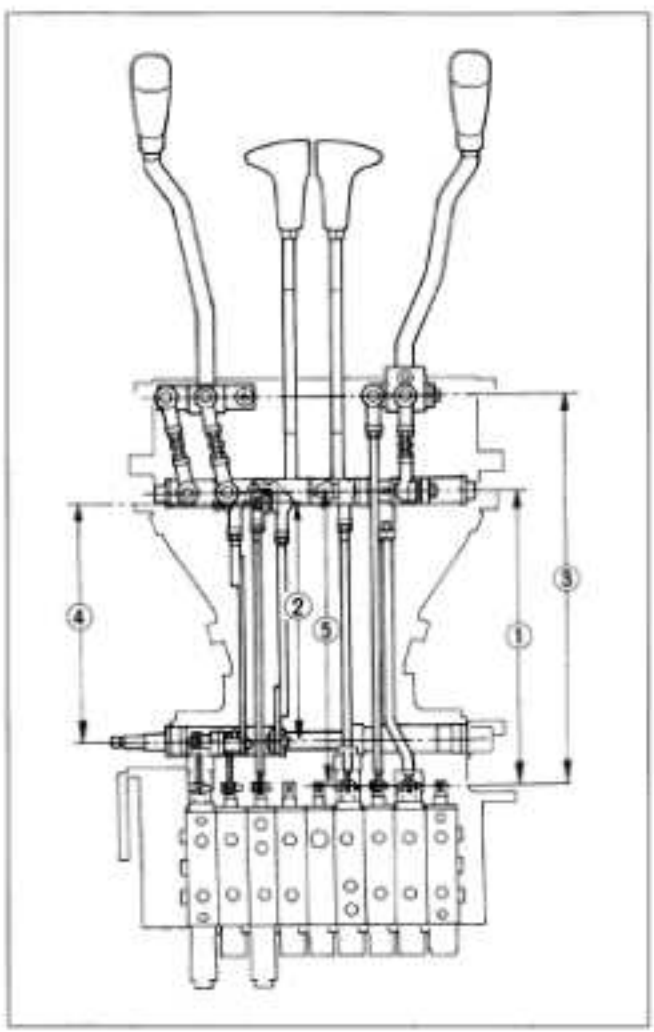
1. Installing spring pin.
- The slit of the spring pin should be at a rotating direction of the shaft.
- Spring pin length should be evenly placed. Otherwise,
fail symptom are;
loosening, coming off

① Rotating direction



2. Apply grease on the internal surface of lever, as shown in left Fig..
Otherwise,
Fail symptom are; excessive operating force, the other lever turns together.

② Apply grease



3. Length of rod for your information. (mm)

①	Boom	309
②	Arm	255
③	Bucket	415
④	Swivel	260
⑤	Travel R	309
⑥	Travel L	309

4. Tightening torque of link ball rod end.
24~28N·m(2.4~2.8kgf·m) Apply loctite.
5. Set control rod with control valve spool end with pin from side way and tighten locknut.
- Locknut tightening torque:
76~81N·m(7.8~8.1kgf·m)

Notice !
Control spools and rods should move smoothly.

MidWestTech | Kubota U-10, U-20, U-35, U-45 Bagger Service Manual | Publication 97899-... Order the manual at mid-west-tech.com >

(9) Durites

1 U-10

1) Durites d'aspiration et de refoulement

Réf.	Durite		
	Couleur du ruban	Dimension	Longueur (mm)
100	Blanc	1/4	465
110	Gris	1/4	465
080	—	—	

1. Assurer un jeu de 4mm ou plus entre le flexible d'alimentation (côté P1) et le moteur.
2. Assurer un jeu de 5mm ou plus entre le flexible d'alimentation (côté P2) et le réservoir à carburant.
3. Assurer un jeu de 3mm ou pus entre les flexibles d'alimentation P1 et P2. Faire passer le flexible d'alimentation P1 en-dessous du flexible du flexible du moteur de déplacement, mais au-dessus du flexible de moteur de rotation de la tourelle.
4. Prévoir un intervalle de 3mm ou davantage entre les durites de refoulement P1 et P2. Passer la durite de refoulement P1 au-dessous de la durite de déplacement gauche, mais au-dessus de la durite de pivotement.

2) Durite de retour

Réf.	Durite		
	Couleur du ruban	Dimension	Longueur (mm)
010	—	—	175
020	—	—	145
060	—	—	890

1. Garder le flexible de retour, le flexible de moteur de rotation et les flexibles des orifices P et A de la valve de sélection de réglage de voie hors de contact l'un de l'autre.

3) Durite du moteur de dêport

Réf.	Durite		
	Couleur du ruban	Dimension	Longueur (mm)
040	Brun	1/4	425
050	Rose	1/4	425

※ **Aucun flexible ne doit être vrillé.**

1. Assurer un jeu de 2-5mm entre le flexible de moteur de rotation et les renforts verticaux de la tourelle.

(9) Schlauch

1 U-10

1) Ansaug- und Förderschläuche

Ref-Nr.	Schlauch		
	Bandfarbe	Größe	Länge (mm)
100	Weiß	1/4	465
110	Grau	1/4	465
080	—	—	

1. Ein Spiel von 4mm oder mehr zwischen Zulaufschlauch (P1 Seite) und Motor einhalten.
2. Ein Spiel von 5mm oder mehr zwischen Zulaufschlauch (P2 Seite) und Kraftstofftank einhalten.
3. Ein Spiel von 3mm oder mehr zwischen Zulaufschläuche P1 und P2 einhalten. Den Zulaufschauch P1 unter den Fahrmotorschlauch, aber über den Drehmotorschlauch verlegen.
4. Sicherstellen, daß zwischen den Förderschläuchen P1 und P2 ein Abstand von wenigstens 3mm besteht. Den Förderschlauch P1 unter dem linken Fahrantriebsschlauch verlegen (jedoch über dem Schwenkmechanismus-Schlauch).

2) Rücklaufschlauch

Ref-Nr.	Schlauch		
	Bandfarbe	Größe	Länge (mm)
010	—	—	175
020	—	—	145
060	—	—	890

1. Den Rücklaufschlauch, den Drehmotorschlauch und die Schläuche, die an die Anschlüsse P und A des Spurverstellungsventil gehen, außer gegenseitigem Kontakt halten.

3) Schwenkmechanismus-Schlauch

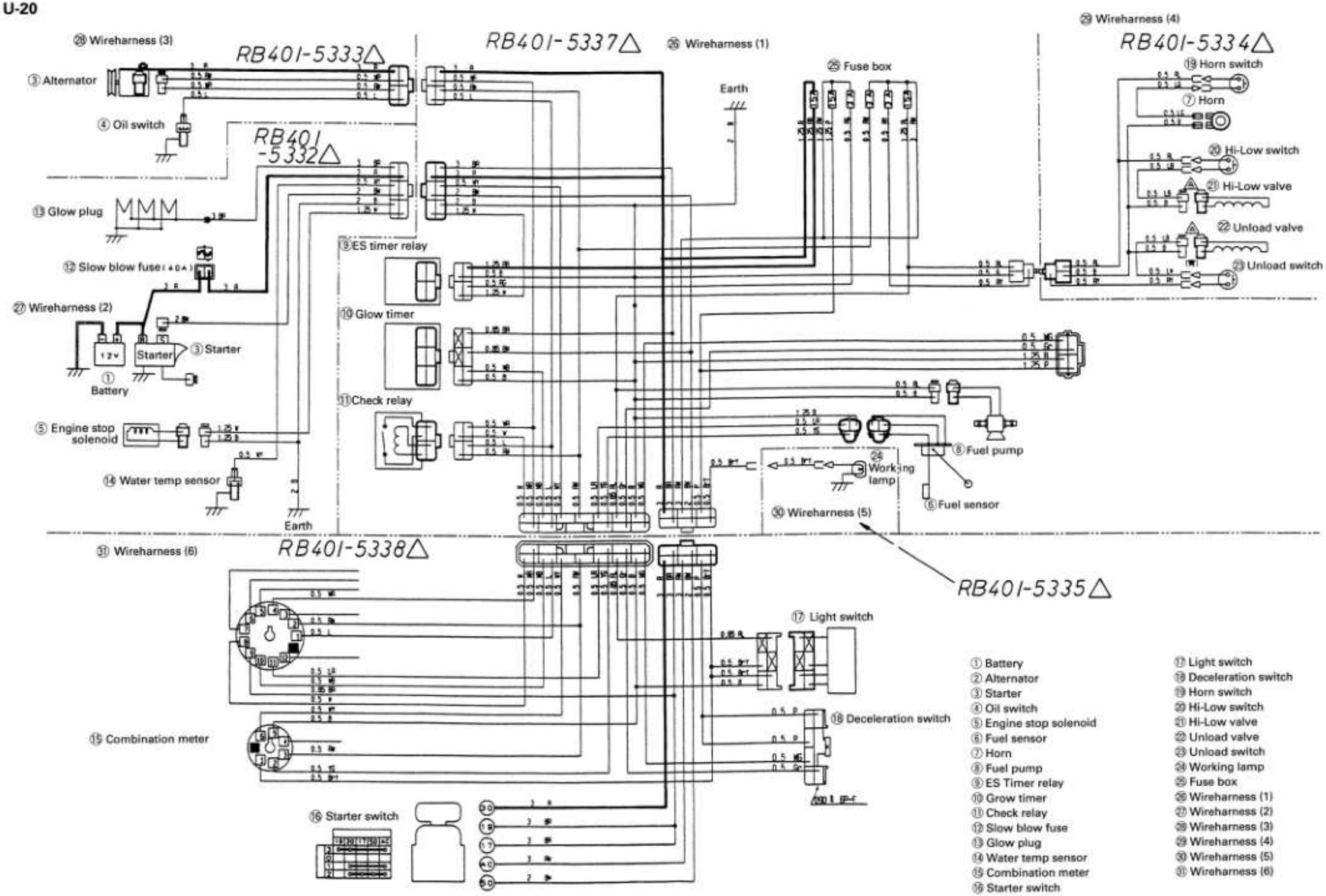
Ref-Nr.	Schlauch		
	Bandfarbe	Größe	Länge (mm)
040	Braun	1/4	425
050	Rot	1/4	425

※ **Kein Schlauch darf verdreht sein.**

1. Ein Spiel von 2-5mm zwischen Drehmotorschlauch und vertikalen Vertäkungsplatten des Unterwagens einhalten.

MidWestTech | Kubota U-10, U-20, U-35, U-45 Bagger Service Manual | Publication 97899-... Order the manual at mid-west-tech.com >

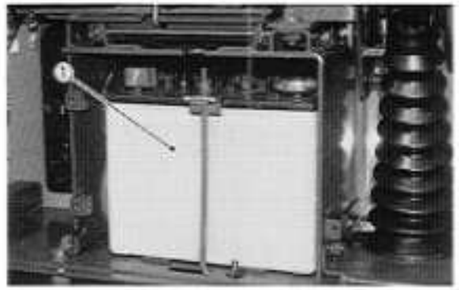
(2) U-20

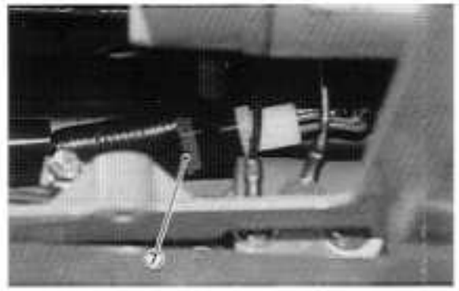


① Battery
② Alternator
③ Starter
④ Oil switch
⑤ Engine stop solenoid
⑥ Fuel sensor
⑦ Horn
⑧ Fuel pump
⑨ ES Timer relay
⑩ Grow timer
⑪ Check relay
⑫ Slow blow fuse
⑬ Glow plug
⑭ Water temp sensor
⑮ Combination meter
⑯ Starter switch
⑰ Light switch
⑱ Deceleration switch
⑲ Horn switch
⑳ Hi-Low switch
㉑ Hi-Low valve
㉒ Unload valve
㉓ Unload switch
㉔ Working lamp
㉕ Fuse box
㉖ Wireharness (1)
㉗ Wireharness (2)
㉘ Wireharness (3)
㉙ Wireharness (4)
㉚ Wireharness (5)
㉛ Wireharness (6)

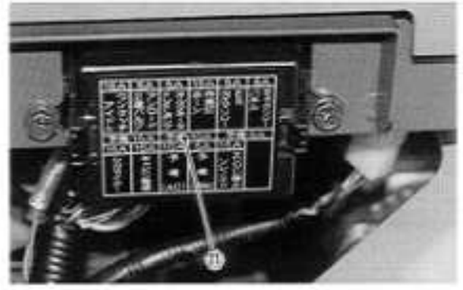
MidWestTech | Kubota U-10, U-20, U-35, U-45 Bagger Service Manual | Publication 97899-60501
Order the manual at mid-west-tech.com >

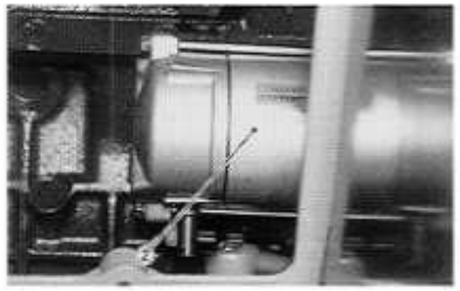
(3) U-35 Layout

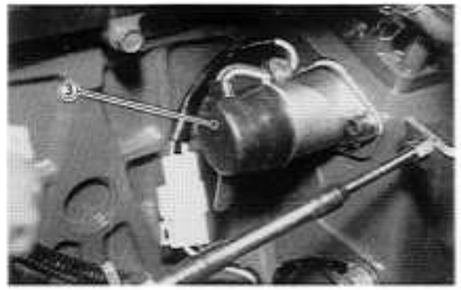


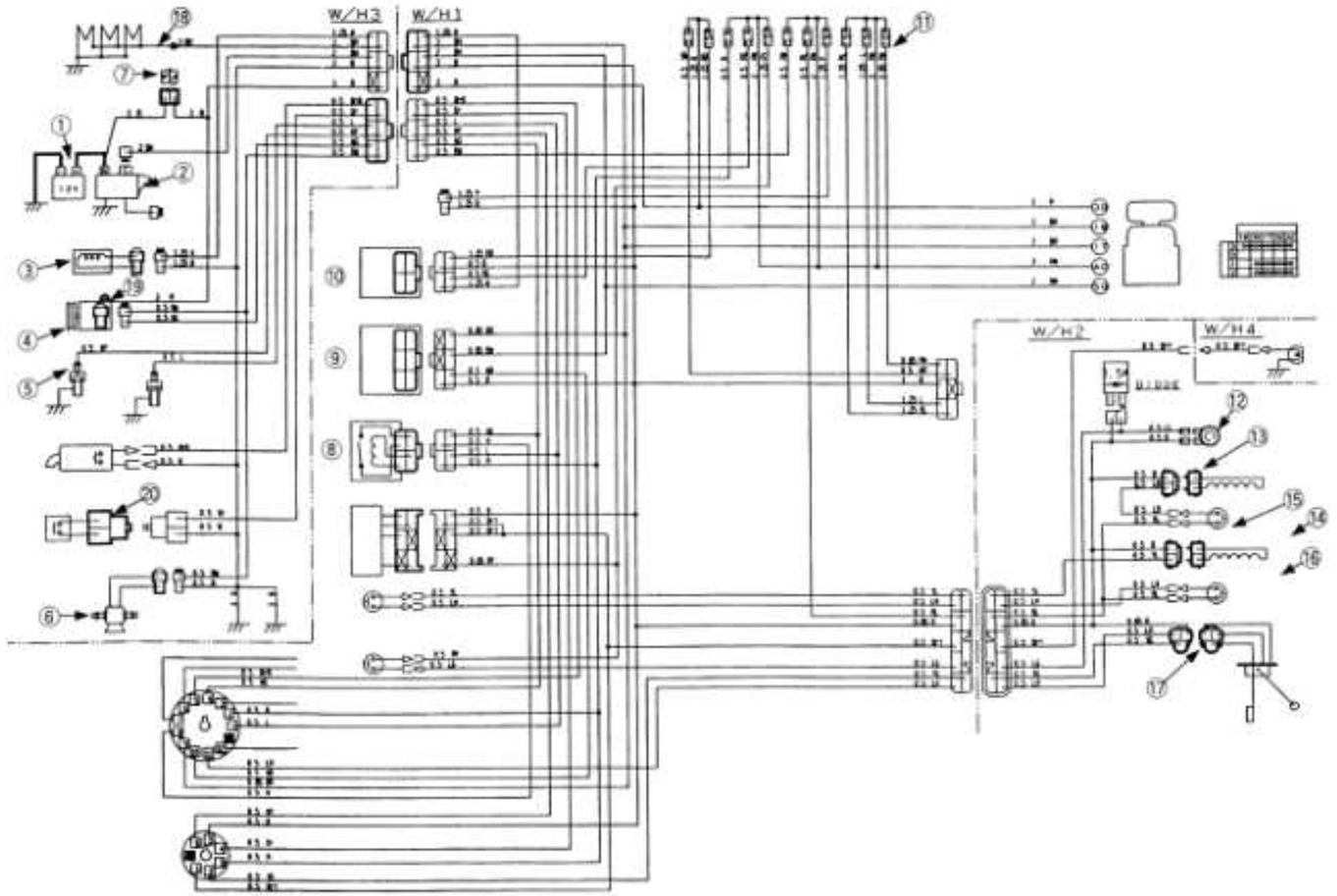


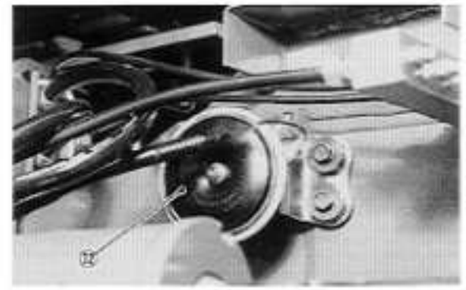


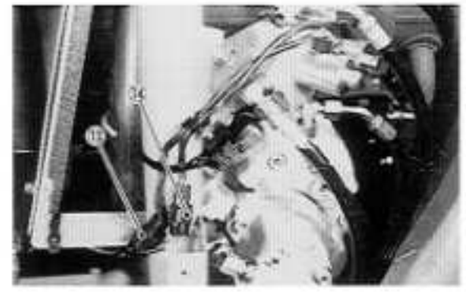


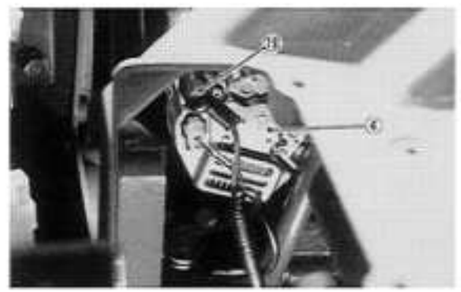


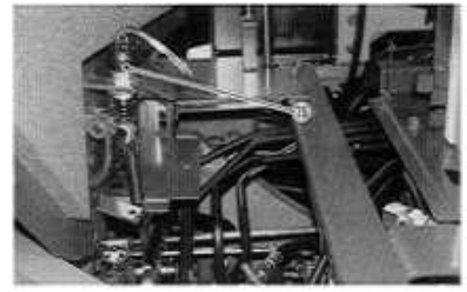






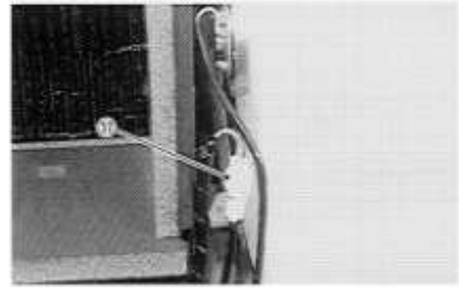














MidWestTech | Kubota U-10, U-20, U-35, U-45 Bagger Service Manual | Publication 97899-60501

Order the manual at mid-west-tech.com >