

S940A series
Service Manual

Oct.05.2015 V0

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The numbers shown in this service manual is just for reference. The part numbers should be in accordance with current exploded drawing

1. Introduction

The purpose of this manual is to provide dealers and/or distributors with the product information and instructions that are required for servicing the [S940A scooter](#).

2. Service Guide

The [S940A scooter](#) consists of four main parts:

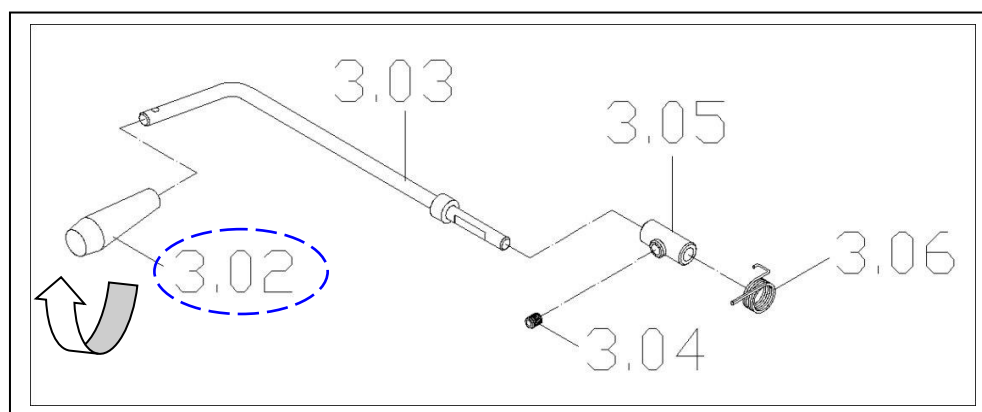
- Seat Assembly
- Batteries
- Body Assembly (Front section ; Rear section)
- Tiller

2.1. How to replace or repair the seat assembly

The Seat assembly includes seat body, seat base plate, slide and left / right armrests.

2.1.1. To remove seat body assembly

Pull the swivel lever (3.02) under the seat up to unlock it and rotate the seat a little bit to the position where you can feel the seat rotate freely. Lift the seat body assembly upward. [see [Illus. 01](#)]

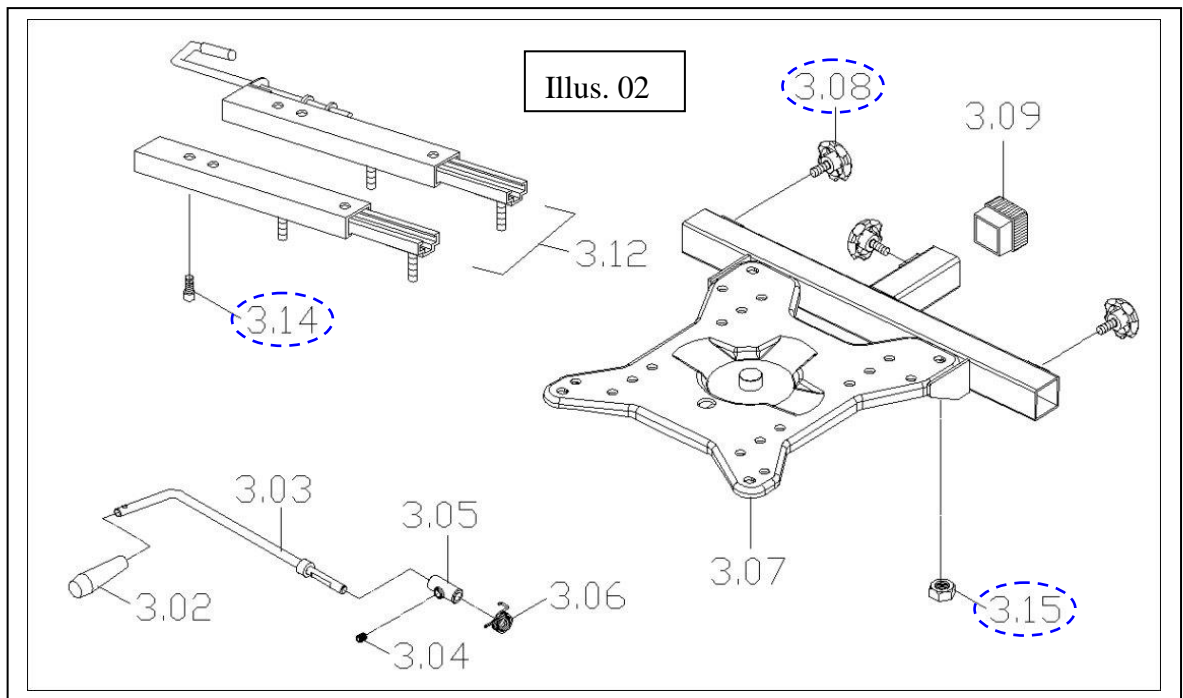


Illus. 01

2.1.2. To replace the seat base plate

- ◆ When you should replace the seat base plate?
 - ◇ If the seat base plate is deformation.
 - ◇ If the seat base plate out of shape due to an accident.
- ◆ How to replace the seat base plate?
 - ◇ Please proceeding steps as follows if it has to replace.

Use ratchet & socket to loosen four screws (3.15) from the bottom of the seat body assembly, then remove the seat base plate. [see Illus. 02]



2.1.3. To replace the slide

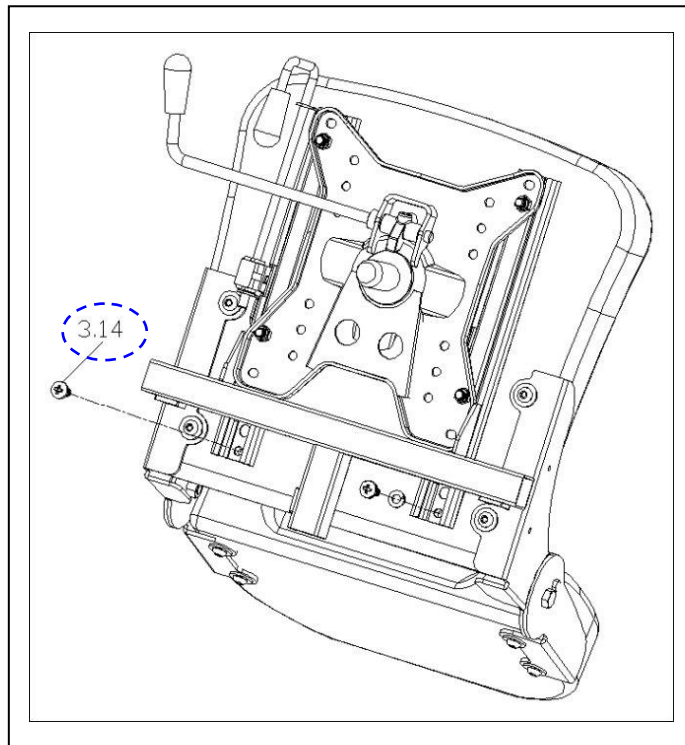
- ◆ When you should replace the slide?
- ◇ If the seat base plate is deformation.
- ◇ If the seat base plate out of shape due to an accident.
- ◆ How to replace the slide?
- ◇ Please proceeding steps as follows if it has to replace.

Use hex. tools to loosen four screws (3.14) from the bottom of the seat body assembly, then remove the slide (3.12). [see Illus. 02]

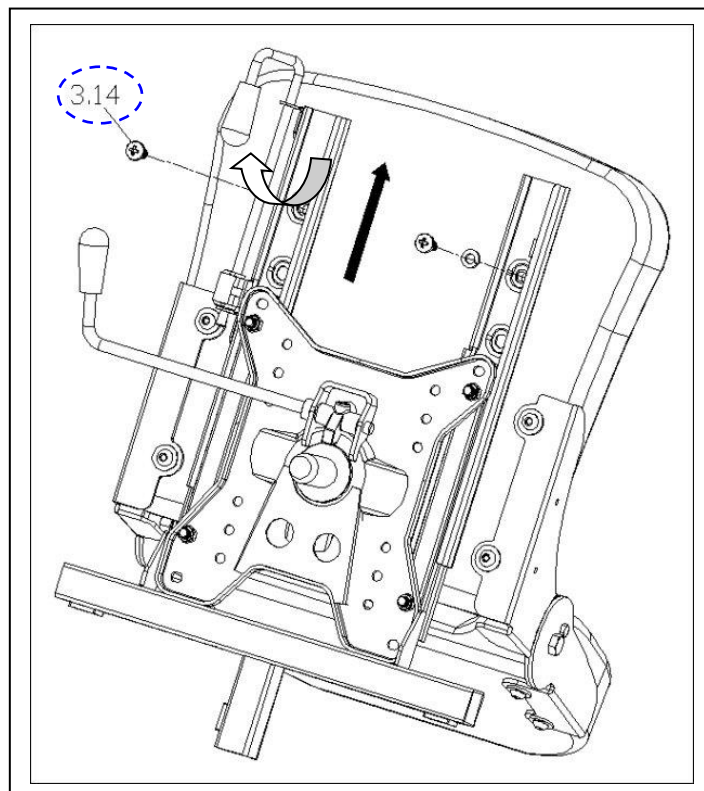
2.1.4. To replace seat body

- ◆ When you should replace the seat body?
- ◇ If the seat body is worn out.
- ◇ If the seat body is pierced or scratched by something.
- ◇ If the scooter crashed cause the seat body out of shape.
- ◆ How to replace the seat body?
- ◇ Please proceeding steps as follows if it has to replace.

Follow the following step to disassemble seat body. a) Remove seat body assembly (see section 2.1.1). b) Use ratchet & socket to loosen rear two screws (3.14) fixed the slide rails [see Illus. 03]. c) Pull the slide swivel lever up, then slide the seat body forward to limit [see Illus. 04]. d) Use hex. tools to loosen the other screws (3.14) fixed the slide rails. Remove the seat body and replace the new one.



Illus. 03

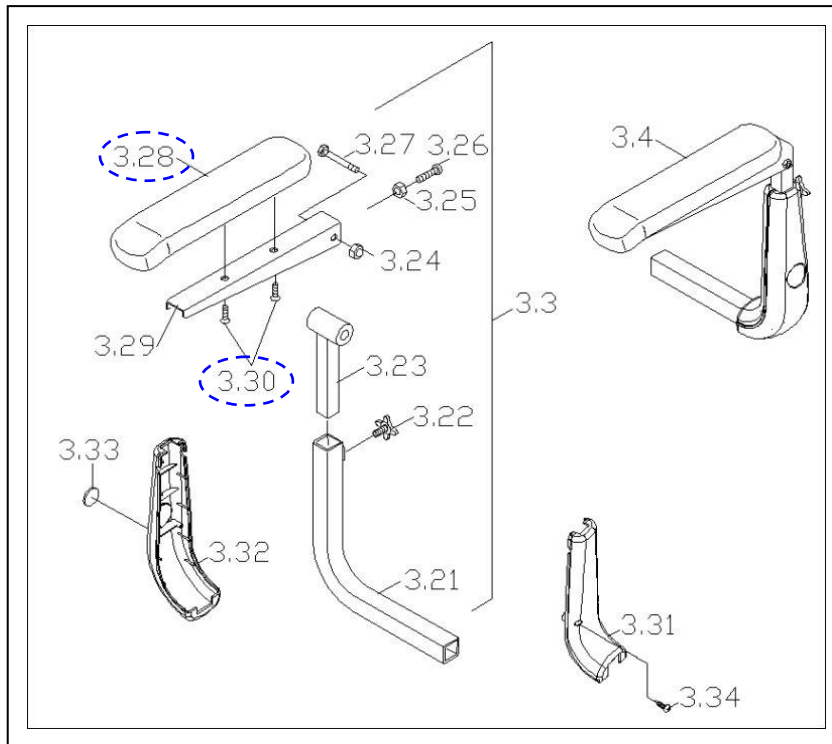


Illus. 04

2.1.5. To replace the arm pad

- ◆ When you should replace the arm pad?
 - ◇ If the arm pad is worn out.
 - ◇ If the arm pad is pierced or scratched by something.
 - ◇ If the scooter crashed cause the arm pad out of shape.
- ◆ How to replace the arm pad?
 - ◇ Please proceeding steps as follows if it has to replace.

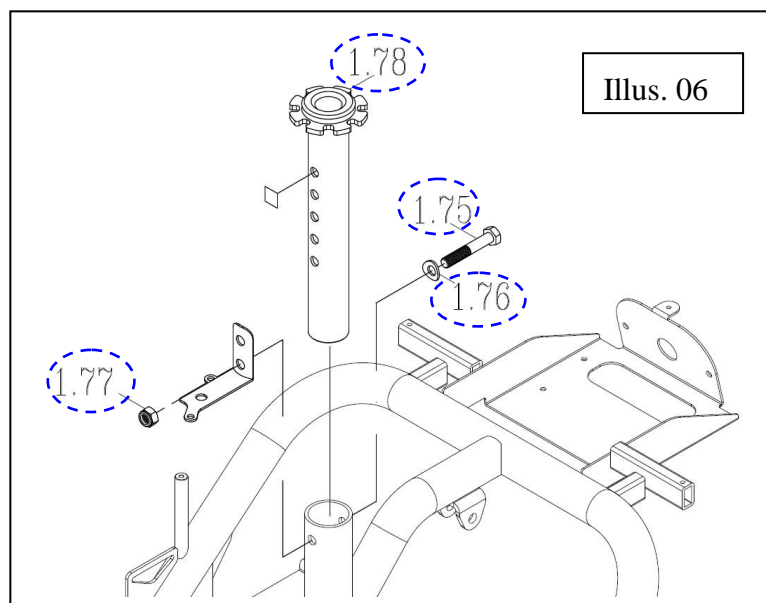
Revolve the knob (3.08) and pull the armrest assembly outside [see Illus. 02]. If the arm pad (3.28) is broken, use the screwdriver to loosen two screws (3.30) and replace it. [see Illus. 05]



Illus. 05

2.1.6. To replace the seat post [see Illus. 06]

- ◆ When you should replace the seat post?
 - ◇ If the seat post is deformation.
 - ◇ If the seat post out of shape due to an accident.
- ◆ How to replace the seat post?
 - ◇ Please proceeding steps as follows if it has to replace.



Illus. 06

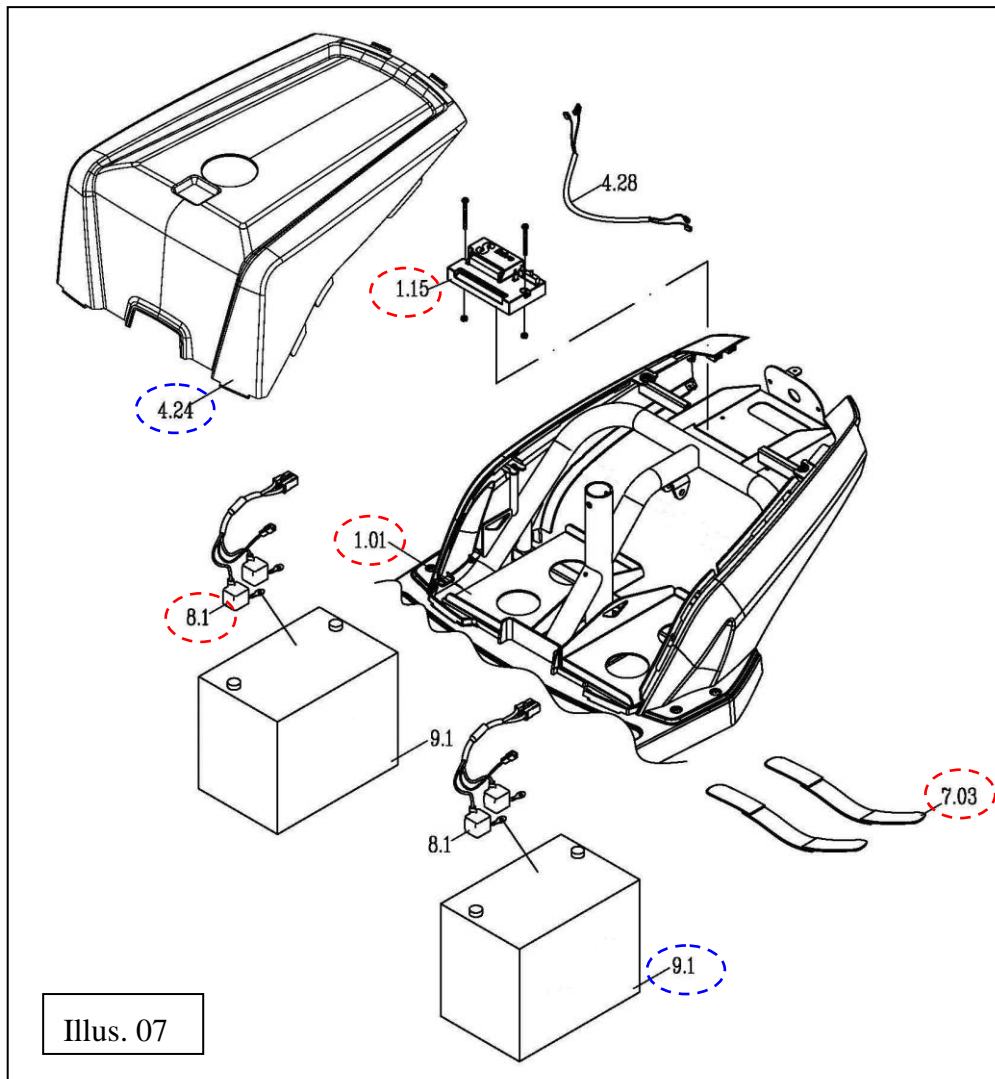
Use two open-end wrenches to loosen hexagon fixed bolt (1.77) and screw (1.75), washer (1.76). Adjust the seat height based (1.78) to the demanded position (there are 5 holes on the tube for adjusting the seat height). Then insert and tighten the bolt.

2.2. How to replace or repair the batteries

The batteries supply the power to drive the scooter. Connect with the harness and controller.

2.2.1. To replace the batteries [see Illus. 07]

- ◆ When you should replace the batteries?
- ◇ If the battery pack can not charge or batteries seem weak.
- ◆ How to replace the batteries?
- ◇ Please proceeding steps as follows if it has to replace.



1. Lift the rear shroud (4.24) upward.
2. Untie the battery strap (7.03) and unplug the connector of battery harness (8.1) from controller (1.15).

3. Remove the batteries (9.1) from the front frame (1.01).
4. Use the screwdriver to loosen battery's screws and nuts with battery harness (8.1).
5. To replace the new batteries (9.1), then reverse the 4~1 step to reinstall the scooter.

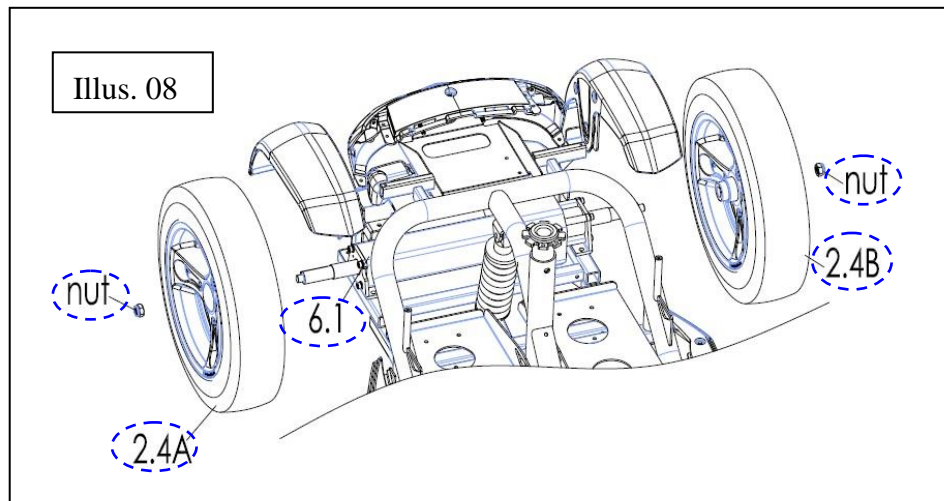
2.3. How to replace or repair the rear section assembly

The rear section assembly includes rear frame, rear shroud, transaxle assembly, rear wheel assembly.

Note : The step of separate.

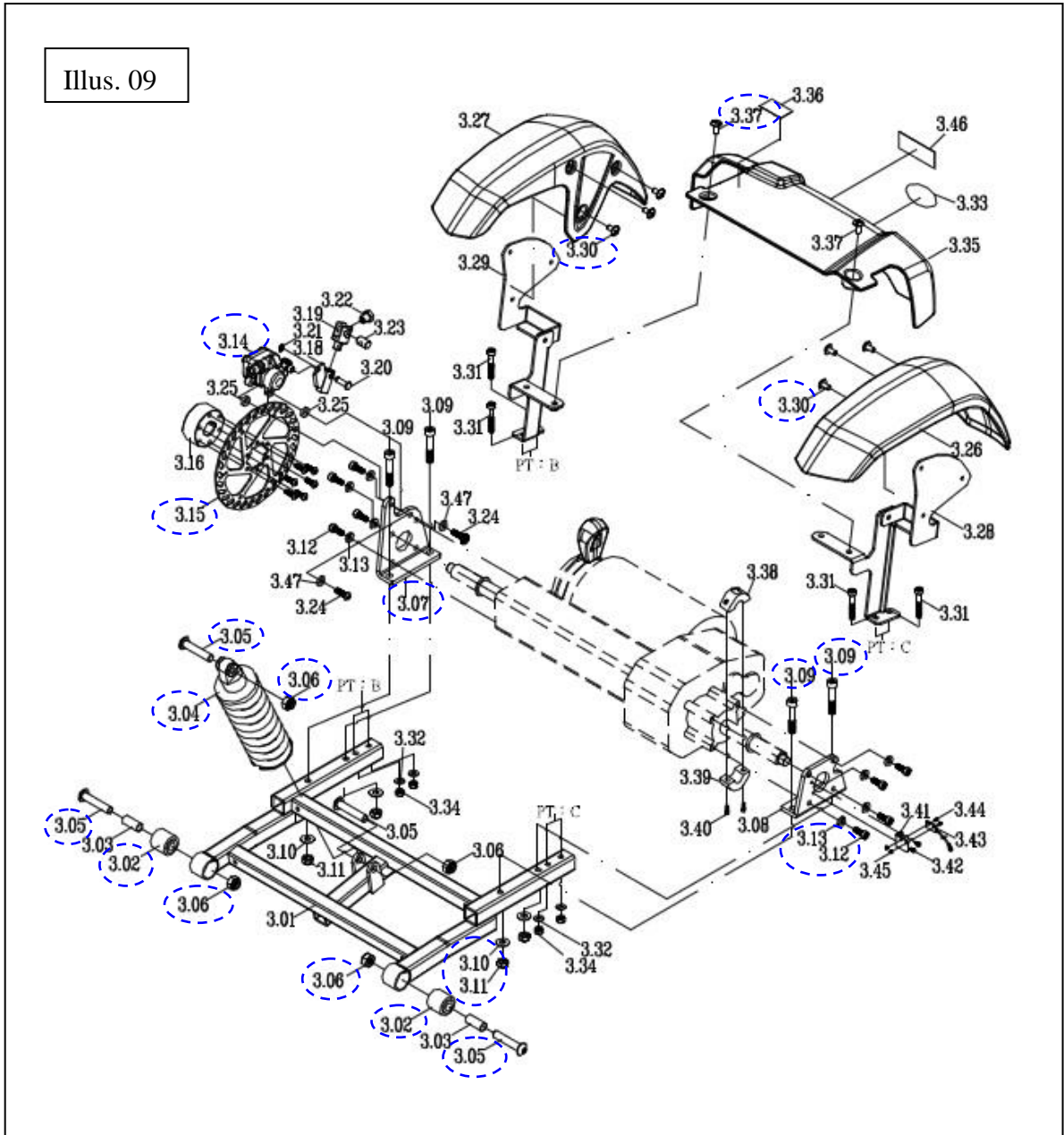
When you want to disassemble the front and rear section assembly. You must proceeding steps as follows.

1. Use the hex. tools to loosen two nuts from the transaxle (6.1) and rear wheels (2.4A, 2.4B). Then take off two rear wheels. [see Illus. 08]



2. Use the hex. tools to loosen mounting screw, washers from the release transaxle fixing bracket (3.07) and disk brake (3.14). Then use the hex. tools to loosen mounting six screws. Then remove the brake disk (3.15) and disk brake mounting ring (3.14). [see Illus. 09]
3. Use the hex. tools to loosen two screws (3.05), nuts (3.06) from the suspensions (3.04) and front frame. Then the rear section assembly will fall down. [see Illus. 09]

Illus. 09



2.3.1. To replace the fender and the motor shroud [see Illus. 09]

◆ When you should replace the fender and the motor shroud?

◇ If your scooter can not avoid knocked or bumped cause the shroud broken.

◆ How to replace the fender and the motor shroud shroud?

◇ Please proceeding steps as follows if it has to replace.

1. Use the screwdriver to loosen screws (3.30, 3.37).

2. Replace the new front shroud and reverse disassembly step.

2.3.2. To replace the suspension [see Illus. 09]

◆ When you should replace the suspension?

◇ If the suspension has no function.

◆ How to replace the transaxle assembly?

◇ Please proceeding steps as follows if it has to replace.

1. Use the hex. tools to loosen two screws (3.05), nuts (3.06).
2. Remove the suspensions (3.04) and replace the new one.

2.3.3. To replace the transaxle assembly [see Illus. 09]

◆ When you should replace the transaxle assembly?

◇ If the transaxle assembly has noise.

◇ If the transaxle assembly can't drive the scooter.

◇ If the transaxle assembly out of shape due to an accident.

◇ If the transaxle assembly is deformation.

◆ How to replace the transaxle assembly?

◇ Please proceeding steps as follows if it has to replace.

1. Use the wrench to loosen four screws (3.09), washers (3.10), nuts (3.11) from rear frame assembly (3.01).
2. Remove the transaxle assembly and transaxle fixing bracket (3.07) away.
3. Use the hex. tools to loosen eight screws (3.12), washers (3.13) from the transaxle fixing bracket (3.07). Then take its away.
4. Replace the new one.

2.3.4. To replace the rear wheel assembly [see Illus. 10]

◆ When you should replace the rear wheel assembly?

◇ If your rear wheel assembly is deformation.

◇ If the rear wheel assembly out of shape due to an accident.

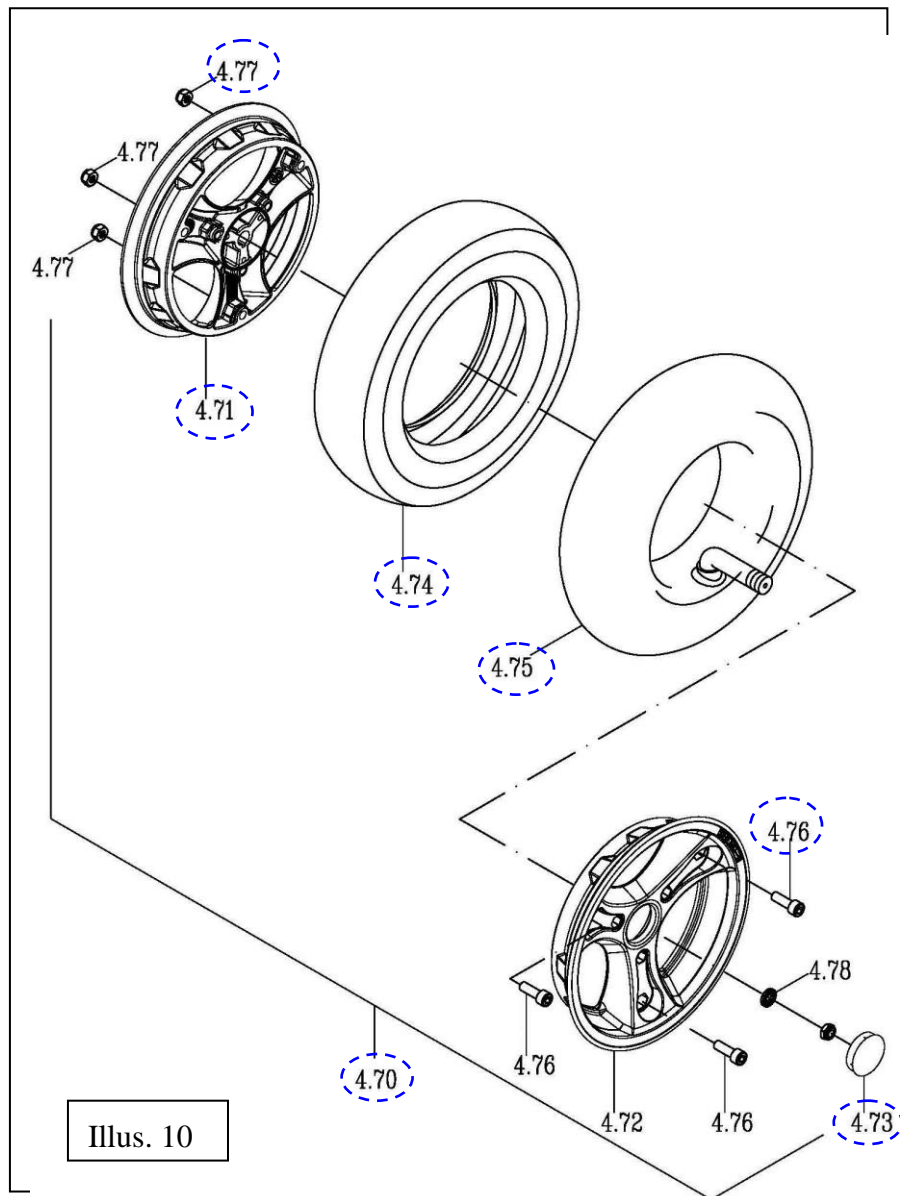
◇ If the rear wheel assembly is worn out.

◇ If the rear wheel assembly is pierced by something.

◆ How to replace the rear wheel assembly?

◇ Please proceeding steps as follows if it has to replace.

1. Use the clamp to remove the screw cover (4.73).
2. Use the hex. tools to loosen hexagon fixed nuts from the transaxle assembly.
3. Take the rear wheel assembly (4.7) out.



2.3.5. To replace the rear tire [see Illus. 10]

1. Release the air from valve of inner tire (4.75).
2. Use the wrench to loosen three screws (4.76) and nuts (4.77).
3. Disassemble the outer rear rime (4.72), inner rear rime (4.71).
4. Take the tire (4.74, 4.75) out and replace new one.

2.3.6. To replace the rear frame [see Illus. 09]

- ◆ When you should replace the rear frame?
 - ◇ If your rear frame is deformation.
 - ◇ If the rear frame out of shape due to an accident.
- ◆ How to replace the rear frame?
 - ◇ Please proceeding steps as follows if it has to replace.

1. When you proceeding steps as follows.
2. Use the punch tools to take off two rubber bushings (3.02).
3. Replace the new the rear frame.

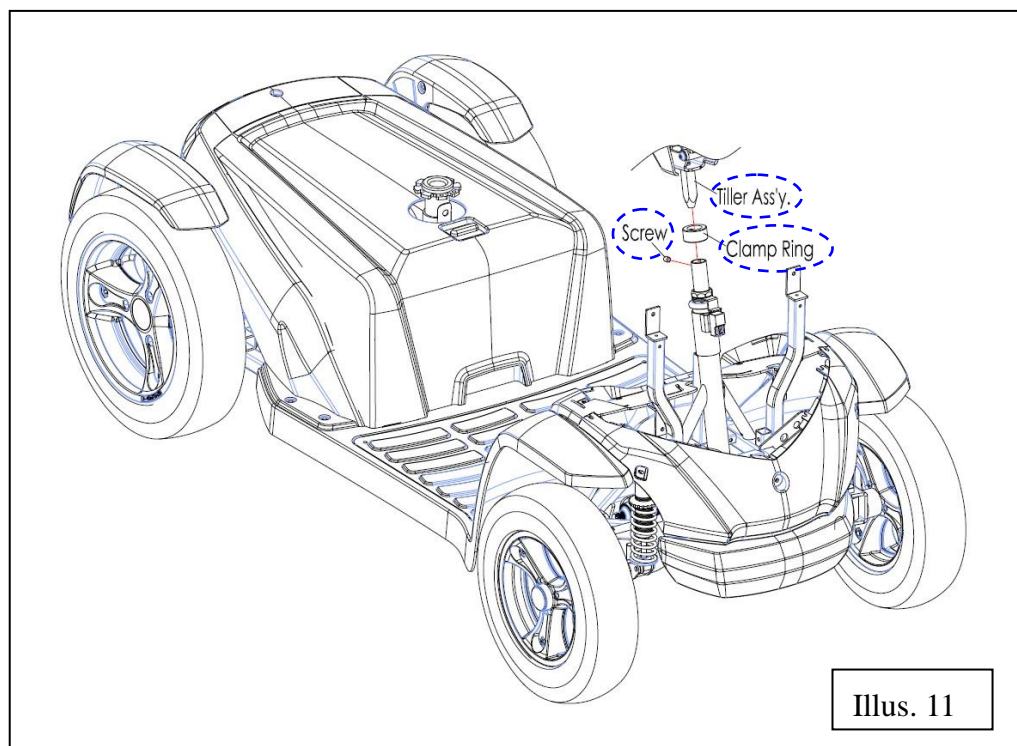
2.4. How to replace or repair the front section assembly

The front section assembly includes front frame, front shroud, controller, front wheel assembly, carpet, front / rear bumper, steering mechanism, rear anti-tip assembly. Let the user comfortable drive.

Note : The step of separate. [see Illus. 11]

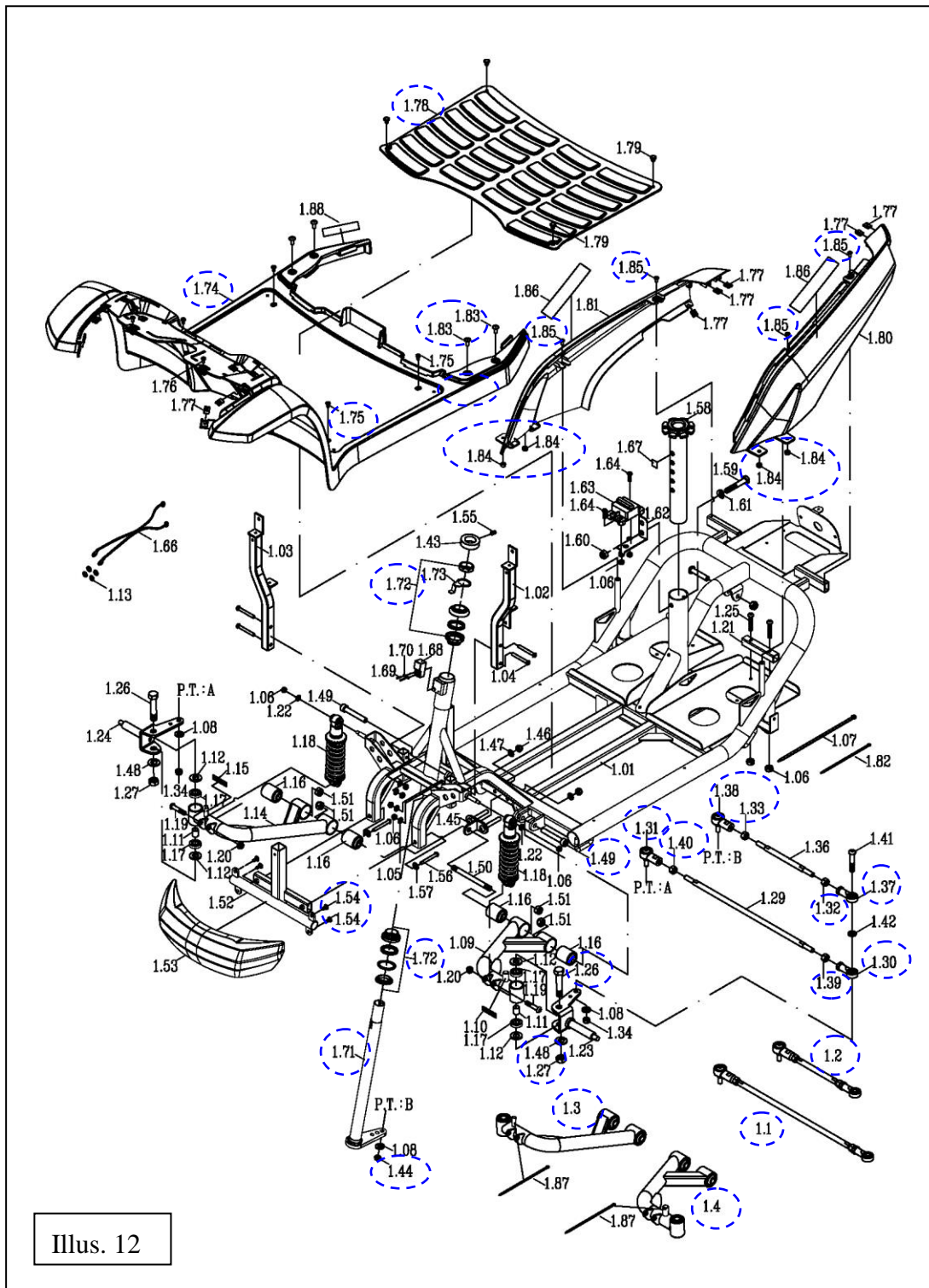
When you want to maintain the front section assembly. You must to disassemble the tiller assembly with front section assembly. You must proceeding steps as follows.

1. Unplug the tiller's main cable from the controller.
2. Use the hex. tools to loosen screw, clamp ring. Then take the lower lever bracket upward from the turn tube assembly.



2.4.1. To replace the front bumper [see Illus. 12]

- ◆ When you should replace the front bumper?
 - ◇ If the front bumper out of shape due to an accident.
 - ◇ If the front bumper is deformation.
 - ◆ How to replace the front bumper?
 - ◇ Please proceeding steps as follows if it has to replace.
1. Use the hex. tools to loosen four screws (1.54).
 2. Then remove the front bumper (1.53) and replace the new one.



Illus. 12

2.4.2. To replace the front shroud [see Illus. 12]

◆ When you should replace the front shroud?

◇ If your scooter can not avoid knocked or bumped cause the shroud broken.

◆ How to replace the front shroud?

◇ Please proceeding steps as follows if it has to replace.

1. Remove the rug (1.78) from the front shroud (1.74). Then use the screwdriver to loosen screws (1.75, 1.83, 1.85), nuts (1.84) .

2. Replace the new front shroud and reverse disassembly step.

2.4.3. To replace the front windshield shroud [see Illus. 13]

◆ When you should replace the front windshield shroud?

◇ If your scooter can not avoid knocked or bumped cause the shroud broken.

◆ How to replace the front windshield shroud?

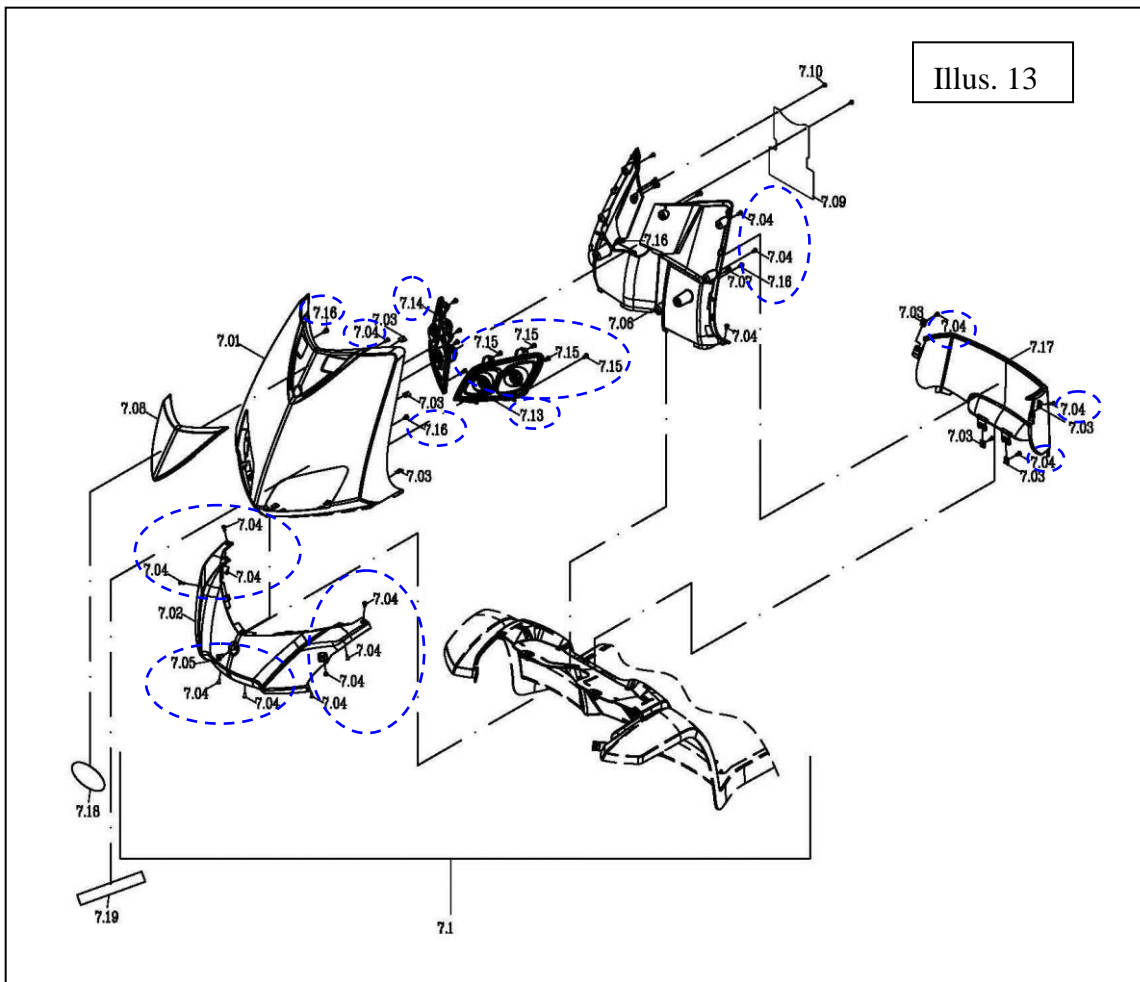
◇ Please proceeding steps as follows if it has to replace.

1. Use the screwdriver to loosen screws (7.04, 7.05, 7.16).

2. Unplug the head light set (7.13, 7.14) with the tiller's cable loom

3. Use the screwdriver to loosen screws (7.15) between the head light set and front windshield shroud. Then remove the head light set.

4. Replace the new front shroud and reverse disassembly step.



2.4.4. To replace the front wheel assembly [see Illus. 14]

◆ When you should replace the front wheel assembly?

◇ If your front wheel assembly is deformation.

◇ If the front wheel assembly out of shape due to an accident.

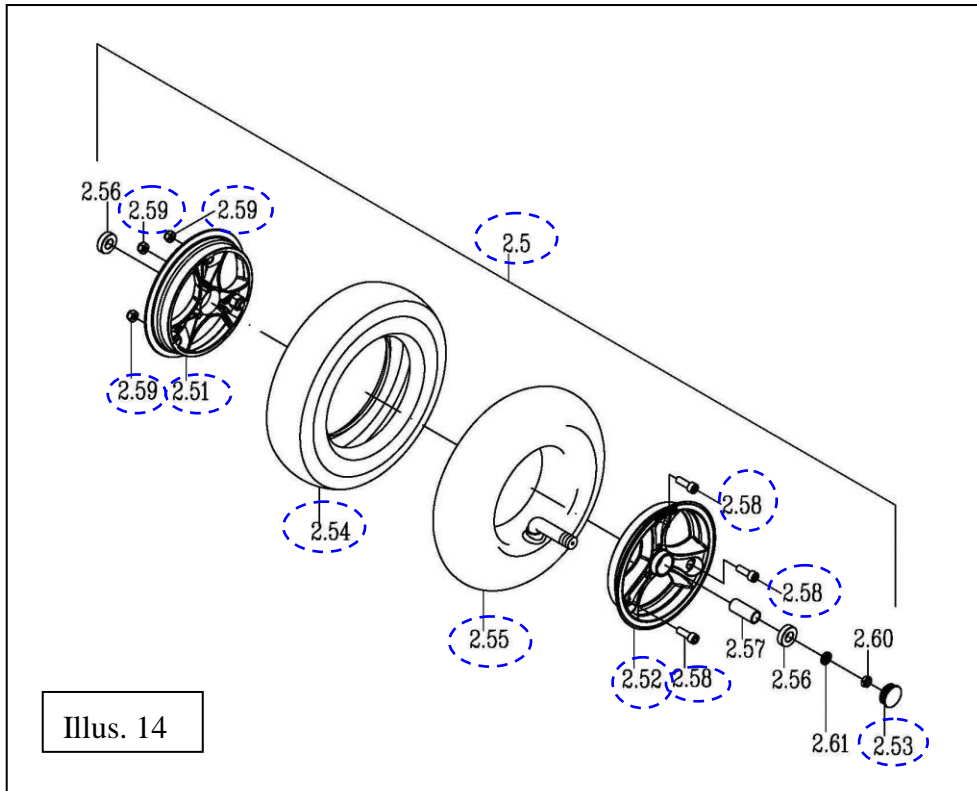
◇ If the front wheel assembly is worn out.

◇ If the front wheel assembly is pierced by something.

◆ How to replace the front wheel assembly?

◇ Please proceeding steps as follows if it has to replace.

1. Use the clamp to remove the screw covers (2.53).
2. Use the hex. tools to loosen the nuts from the arm spindle assembly. Then remove the front wheel assembly (2.5).



2.4.5. To replace the front tire [see Illus. 14]

1. Release the air from valve of inner tire (2.55).
2. Use the wrench to loosen three screws (2.58) and nuts (2.59).
3. Disassemble the outer rear rime (2.52), inner rear rime (2.51).
4. Take the tire (2.54, 2.55) out and replace new one.

2.4.6. To replace the controller [see Illus. 07]

◆ When you should replace the controller?

- ◇ If your scooter can't drive the transaxle assembly.
- ◇ If the indicator light show error signal sustained.
- ◇ If the operator has mistake.

◆ How to replace the controller?

◇ Please proceeding steps as follows if it has to replace.

1. Disconnect the power-harness from controller (1.15).
2. Disconnect the harness of the transaxle assembly from controller.
3. Use the screwdriver to loosen three screws and nuts from mounting plate and install new controller.

2.4.7. To replace the steering mechanism [see Illus. 12]

◆ When should you replace the steering mechanism?

- ◇ If the steering mechanism out of shape due to an accident.
- ◇ If the steering mechanism is deformation.
- ◇ If the steering mechanism has noise.
- ◇ If the steering mechanism is hard to steer.

◆ How to replace steering mechanism?

◇ Please proceeding steps as follows if it has to replace.

1. Use wrench hex. tools to loosen nut (1.44).
2. Remove the Rod-1.1 and Rod-1.2. If necessary, loosen the nuts (1.32, 1.33, 1.39, 1.40) and related parts like a joint (1.30, 1.31, 1.37, 1.38), then you can wholly separate Rod-1.1 and Rod 1.2.
3. Use two open-end wrenches to loosen the headset bearing (1.72), then remove the spindle with arm.
4. Use two open-end wrenches to loosen two screws (1.26), washers (1.48), and nuts (1.27). Then remove the front suspension ass'y LH (1.23) and front suspension ass'y RH (1.24).
5. Use two hex. tools to loosen two screws (1.49,1.50) and nuts (1.51). Then take off front wheel alex (1.3,1.4).

2.4.8. To replace the front frame

◆ When you should replace the front frame?

- ◇ If your front frame is deformation.
- ◇ If the front frame out of shape due to an accident.

◆ How to replace the front frame?

◇ Please proceeding steps as follows if it has to replace.

1. Separate front frame and rear frame.
2. Use the hex. tools to loosen screws (1.75, 1.83, 1.85, 7.04, 7.05, 7.16), nuts (1.84) from shroud. [see Illus.12,13]
2. Replace the new one.

2.5. How to replace or repair the tiller assembly

The Tiller assembly includes tiller, control units, main harness, shroud, charger plug-in unit, adjustable component, cable loom and switch.

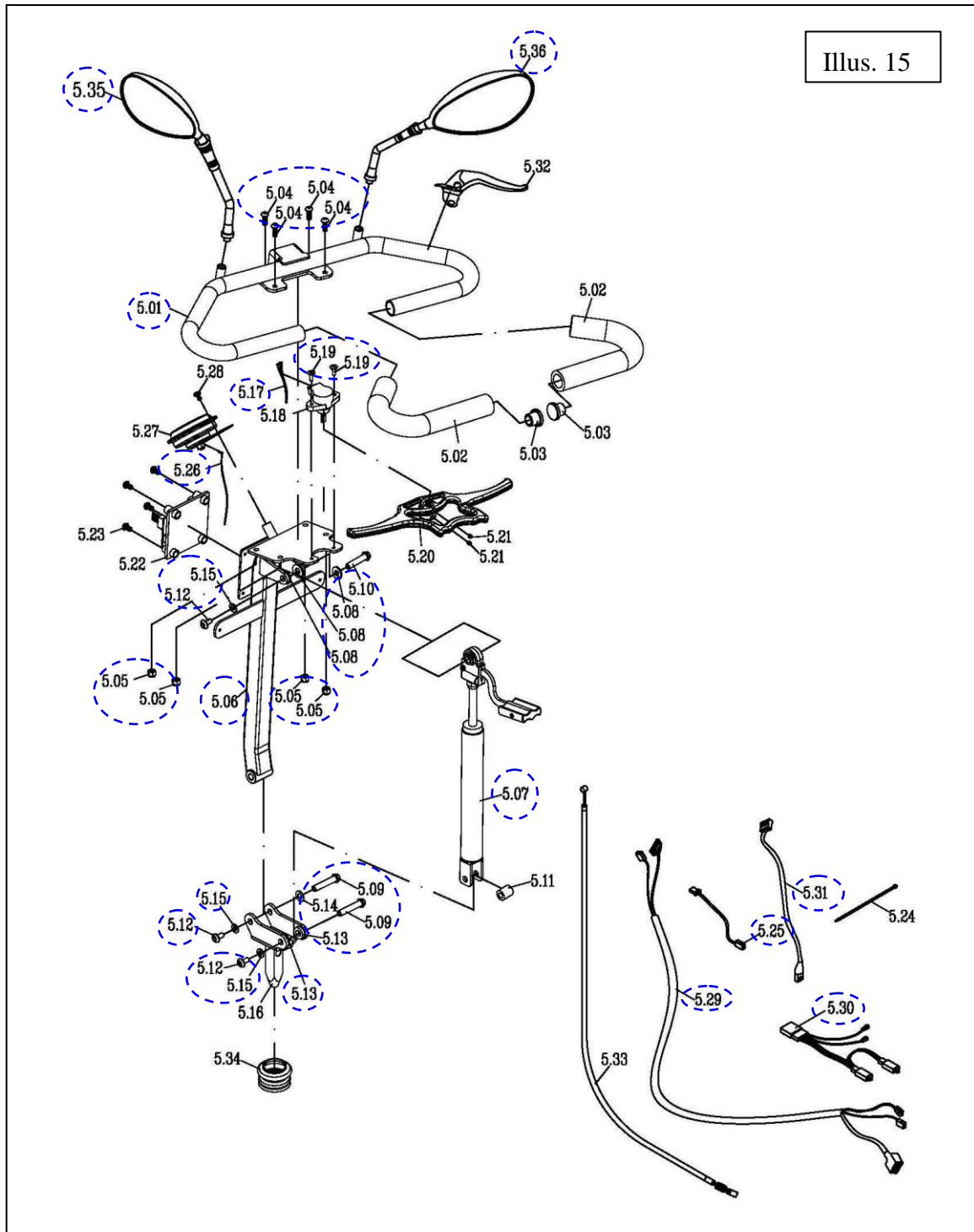
2.5.1. To remove the tiller assembly

Follow the following step to remove the tiller assembly:

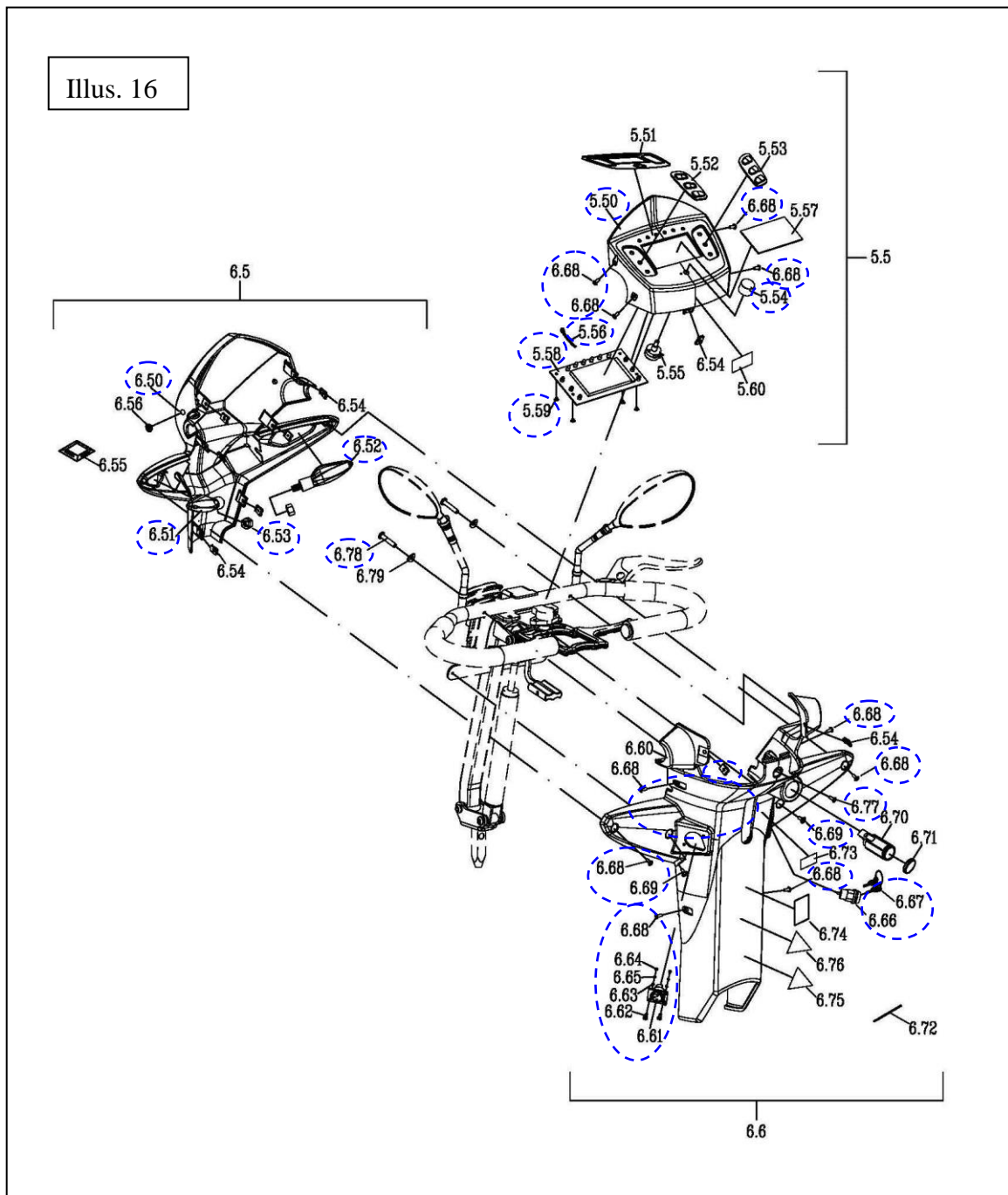
Step: 2.4 Notes 1, 2 [see Illus. 11]

2.5.2. To remove the front & rear shroud assembly [see Illus. 15,16]

- ◆ When you should remove the front & rear shroud assembly?
- ◇ If your front & rear shroud assembly is deformation.
- ◇ If the front & rear shroud assembly out of shape due to an accident.
- ◇ If your front & rear shroud assembly is broken.
- ◆ How to remove the front & rear shroud assembly?
- ◇ Please proceeding steps as follows if it has to remove.



Illus. 16



1. Use the screwdriver to loosen screws (6.54, 6.68, 6.69, 6.78). Then take off the rear shroud assembly (6.8), front shroud assembly (6.5), the dash board assembly (5.5).
2. Unplug the indicator light set (6.51, 6.52) of the cable loom (5.30).

2.5.3. To replace the indicator light set [see Illus. 16]

- ◆ When you should replace the indicator light set?
- ◇ If the indicator light set have no function.
- ◆ How to replace the indicator light set?
- ◇ Please proceeding steps as follows if it has to replace.

1. Use the hex. tools to loosen two screws (6.53) from the front shroud.
2. Remove the indicator light set (6.51, 6.52) and replace new one.

2.5.4. To replace the handle bar set [see Illus. 15]

◆ When you should replace the handle bar set?

- ◇ If your handle bar set is deformation.
- ◇ If the handle bar set out of shape due to an accident.

◆ How to replace the handle bar set?

- ◇ Please proceeding steps as follows if it has to remove.

1. Use the hex. tools to loosen four screws (5.04), nuts (5.05) from the tiller assembly (5.06).
2. Take off the handle bar set (5.01).

2.5.5. To replace the rear-view mirror [see Illus. 15]

◆ When you should replace the rear-view mirror?

- ◇ If your rear-view mirror is deformation.
- ◇ If the rear-view mirror was broken.

◆ How to replace the rear-view mirror?

- ◇ Please proceeding steps as follows if it has to remove.

1. Use the hex. tools to loosen the rear-view mirror (5.35, 5.36) from the handle bar set (5.01).
2. Remove the rear-view mirror and replace new one.
3. Reverse the steps to reinstall the rear-view mirror.

2.5.6. To replace the elevating cylinder [see Illus. 15]

◆ When you should replace the elevating cylinder?

- ◇ If your elevating cylinder is no fuction.

◆ How to replace the elevating cylinder?

- ◇ Please proceeding steps as follows if it has to remove.

1. Use the hex. tools to loosen the screw (5.09, 5.10, 5.12), washer (5.08, 5.13, 5.14, 5.15) from the tiller assembly.
2. Remove the adjustable mechanical lock (5.07) and replace new one.

2.5.7. To replace the PCB modular [see Illus. 15,16]

◆ When you should replace the PCB modular?

- ◇ If your scooter can't drive.
- ◇ If the indicator light show error signal sustained.
- ◇ If the operator has mistake.

◆ How to replace the PCB modular?

- ◇ Please proceeding steps as follows if it has to replace.

1. Disconnect all harness (5.17, 5.25, 5.26, 5.29, 5.31, 5.56) connected with in PCB modular (5.58).
2. Use the hex. tools to loosen four screws (5.59) from dash board (5.50).
3. Remove the PCB modular from and replace new one.

2.5.8. To replace the key and key switch [see Illus. 16]

◆ When you should replace the key and key switch?

◇ If your scooter can't drive.

◇ If your key and key switch is deformation.

◆ How to replace the key and key switch?

◇ Please proceeding steps as follows if it has to replace.

1. Remove the key (6.67).
2. Unplug the key switch (6.66) of the PCB modular (5.58).
3. Use the hex. tools to loosen key switch's (6.66) nut and washer.
4. Remove key switch and replace the new one.

2.5.9. To replace the charger plug assembly [see Illus. 16]

◆ When you should replace the charger plug assembly?

◇ If your charger plug assembly no function.

◆ How to replace the charger plug assembly?

◇ Please proceeding steps as follows if it has to replace.

1. Unplug the charger plug assembly (6.61) of the PCB modular.
2. Use the screwdriver to loosen two screws (6.62), washers (6.63, 6.65) and nuts (6.64).
3. Remove the charger plug assembly and replace new one.

2.5.10. To replace the speed knob and potentiometer (adjustable) [see Illus. 16]

◆ When you should replace the speed knob and potentiometer?

◇ If your speed knob is deformation.

◇ If the potentiometer no function with speed knob.

◆ How to replace the speed knob and potentiometer?

◇ Please proceeding steps as follows if it has to replace.

1. Unplug the potentiometer (adjustable) (5.56) of the PCB modular.
2. Use the hex. tools to loosen potentiometer's (5.56), speed control knob (5.54).
3. Remove the potentiometer and replace new one.

2.5.11. To replace the potentiometer (movement) [see Illus. 15]

◆ When you should replace the potentiometer?

◇ If the potentiometer no function with throttle lever.

◆ How to replace the potentiometer?

◇ Please proceeding steps as follows if it has to replace.

1. Unplug the speed pot wire (5.17) of the PCB modular.
2. Use the hex. tools to loosen two screws (5.19) from the upper tiller (5.01).
3. Use the hex. tools to loosen two screws (5.30) from the throttle lever ass'y (5.06).
4. Remove the potentiometer and replace new one.