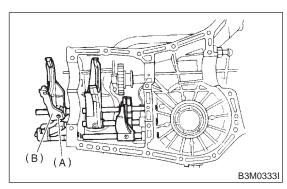
# 21. Shifter Fork and Rod S503255

## A: REMOVAL S503255A18

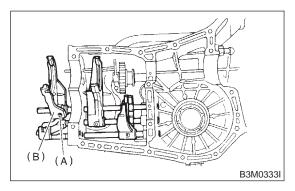
- 1) Remove the manual transmission assembly from vehicle. <Ref. to MT-27 REMOVAL, Manual Transmission Assembly.>
- 2) Remove back-up light switch and neutral position switch. <Ref. to MT-36 REMOVAL, Switches and Harness.>
- 3) Remove transfer case with extension case assembly. <Ref. to MT-39 REMOVAL, Transfer Case and Extension Case Assembly.>
- 4) Remove transmission case. < Ref. to MT-51 REMOVAL, Transmission Case.>
- 5) Removes drive pinion shaft assembly. <Ref. to MT-59 REMOVAL, Drive Pinon Shaft Assembly.>
- 6) Remove main shaft assembly. <Ref. to MT-54 REMOVAL, Main Shaft Assembly.>
- 7) Remove differential assembly. <Ref. to MT-69 REMOVAL, Front Differential Assembly.>
- 8) Drive out straight pin with ST, and 5th shifter fork.
- ST 398791700 STRAIGHT PIN REMOVER



- (A) Straight pin
- (B) 5th shifter fork
- 9) Remove plugs, springs and checking balls.
- 10) Drive out straight pin, and pull out 3-4 fork rod and shifter fork.

#### NOTE:

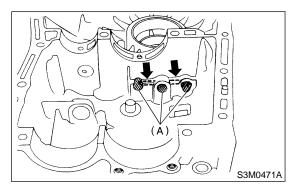
When removing rod, keep other rods in neutral. Also, when pulling out straight pin, remove it toward the inside of the case so that it does not hit against the case.



- (A) Straight pin
- (B) 3-4 fork rod
- (C) Shifter fork
- 11) Drive out straight pin, and pull out 1-2 fork rod and shifter fork.

### B: INSTALLATION S503255A11

1) Position interlock plungers (5.56×19.6), one plunger in the hole between 1-2 and 3-4 fork rod holes, and one plunger in the hole between 3-4 and reverse fork rod holes.



- (A) Rod holes
- 2) Install 1-2 fork rod into 1-2 shifter fork via the hole on the rear of the transmission case.
- 3) Align the holes in rod and fork, and drive straight pin  $(6\times22)$  into these holes using ST.

### **CAUTION:**

Replace straight pin with a new one.

#### NOTE:

- Set other rods to neutral.
- Make sure interlock plunger (5.56×19.6) is on the 3-4 fork rod side.

ST 398791700 STRAIGHT PIN REMOVER

4) Install interlock plunger (3×11.9) onto 3-4 fork rod.

### **CAUTION:**

Apply a coat of grease to plunger to prevent it from falling.

5) Install 3-4 fork rod into 3-4 shifter fork via the hole on the rear of transmission case.

6) Align the holes in rod and fork, and drive straight pin (6×22) into these holes.

#### **CAUTION:**

Replace straight pin with a new one.

### NOTE:

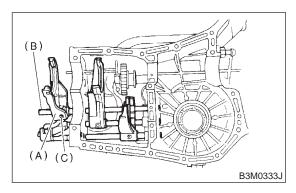
- Set reverse fork rod to neutral.
- Make sure interlock plunger (installing before) is on the reverse fork rod side.

ST 398791700 STRAIGHT PIN REMOVER 7) Install 5th shifter fork onto the rear of reverse fork rod. Align holes in the two parts and drive straight pin into place.

### **CAUTION:**

Replace straight pin with a new one.

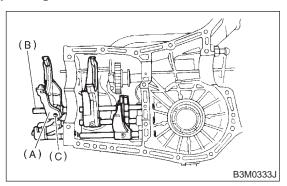
ST 398791700 STRAIGHT PIN REMOVER



- (A) 5th shifter fork
- (B) Reverse fork rod
- (C) Straight pin
- 8) Position balls, checking ball springs and gaskets into 3-4 and 1-2 rod holes, and install plugs.

### **CAUTION:**

Replace gasket with a new one.



- 9) Install differential assembly. <Ref. to MT-69 INSTALLATION, Front Differential Assembly.>
- 10) Install main shaft assembly. <Ref. to MT-54 INSTALLATION, Main Shaft Assembly.>
- 11) Install drive pinion shaft assembly. <Ref. to MT-59 INSTALLATION, Drive Pinon Shaft Assembly.>

- 12) Install transmission case. <Ref. to MT-51 INSTALLATION, Transmission Case.>
- 13) Install transfer case with extension case assembly. <Ref. to MT-39 INSTALLATION, Transfer Case and Extension Case Assembly.>
- 14) Install back-up light switch and neutral position switch. <Ref. to MT-36 INSTALLATION, Switches and Harness.>
- 15) Install the manual transmission assembly from vehicle. <Ref. to MT-30 INSTALLATION, Manual Transmission Assembly.>

### C: INSPECTION S503255A10

Check the shift shaft and shift rod for damage. Replace if damaged.