



SUPPLEMENTARY SERVICE MANUAL 2008

PHAZER

venture

**PZ50X
PZ50GTX
PZ50RTX
PZ50MTX
PZ50VTX
PZ50MPX**

FOREWORD

This Supplementary Service Manual has been prepared to introduce new service and new data for the PZ50X, PZ50GTX, PZ50RTX, PZ50MTX, PZ50VTX, PZ50MPX. For complete information, on service procedures, it is necessary to use this Supplementary Service Manual together with following manual:

**PZ50W, PZ50GTW, PZ50FXW, PZ50MW, PZ50VTW, PZ50MPW SERVICE MANUAL:
8GC-28197-10 (LIT-12618-02-58)**

**PZ50X, PZ50GTX, PZ50RTX, PZ50MTX,
PZ50VTX, PZ50MPX
SUPPLEMENTARY SERVICE MANUAL
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NOTICE

This manual was written by the Yamaha Motor Company primarily for use by Yamaha dealers and their qualified mechanics. It is not possible to put an entire mechanic's education into one manual, so it is assumed that persons using this book to perform maintenance and repairs on Yamaha snowmobiles have a basic understanding of the mechanical concepts and procedures inherent in snowmobile repair. Without such knowledge, attempted repairs or service to this model may render it unfit and/or unsafe to use.

This model has been designed and manufactured to perform within certain specifications in regard to performance and emissions. Proper service with the correct tools is necessary to ensure that the vehicle will operate as designed. If there is any question about a service procedure, it is imperative that you contact a Yamaha dealer for any service information changes that apply to this model. This policy is intended to provide the customer with the most satisfaction from his vehicle and to conform to federal environmental quality objectives.

Yamaha Motor Company, Ltd. is continually striving to improve all models manufactured by Yamaha. Modifications and significant changes in specifications or procedures will be forwarded to all authorized Yamaha dealers and will, where applicable, appear in future editions of this manual.

HOW TO USE THIS MANUAL

Particularly important information is distinguished in this manual by the following notations:



The Safety Alert Symbol means ATTENTION! BE ALERT! YOUR SAFETY IS INVOLVED!



Failure to follow WARNING instructions could result in severe injury or death to the snowmobile operator, a bystander, or a person inspecting or repairing the snowmobile.

CAUTION:

A CAUTION indicates special precautions that must be taken to avoid damage to the snowmobile.

NOTE:

A NOTE provides key information that can make procedures easier or clearer.

MANUAL FORMAT

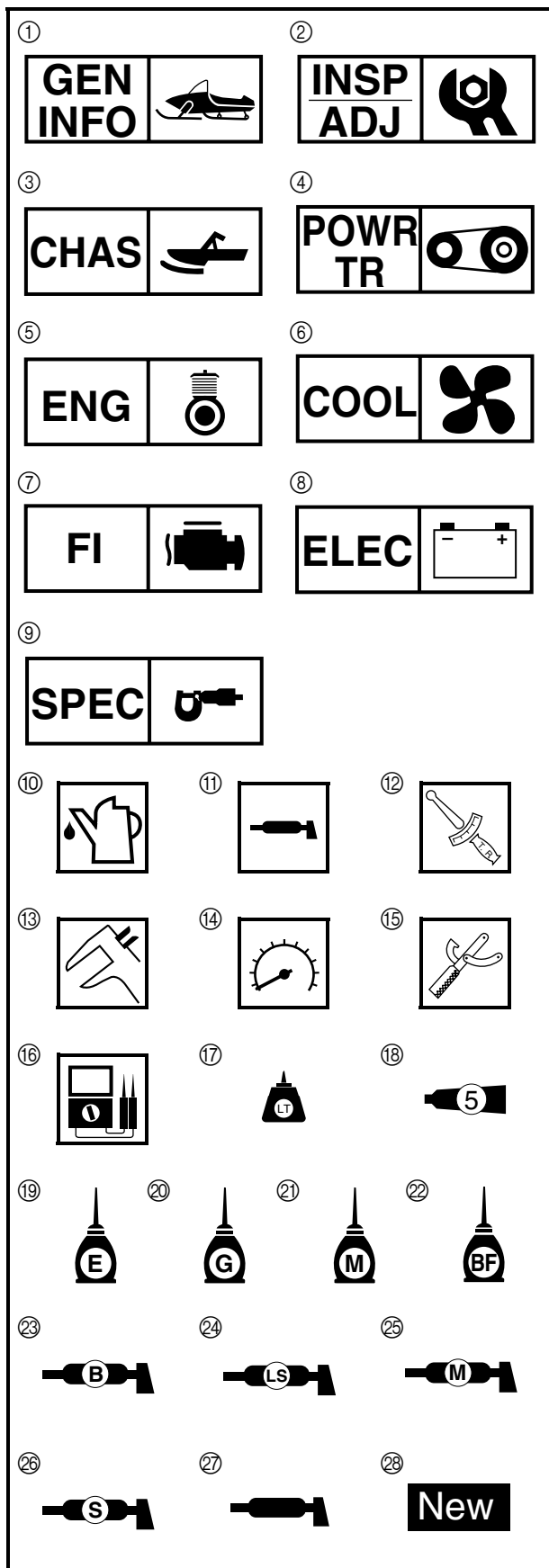
All of the procedures in this manual are organized in a sequential, step-by-step format. The information has been compiled to provide the mechanic with an easy to read, handy reference that contains comprehensive explanations of all inspection, repair, assembly, and disassembly operations.

In this revised format, the condition of a faulty component will precede an arrow symbol and the course of action required to correct the problem will follow the symbol, e.g.,

- Bearings
Pitting/damage → Replace.

EXPLODED DIAGRAM

Each chapter provides exploded diagrams before each disassembly section to facilitate correct disassembly and assembly procedures.



ILLUSTRATED SYMBOLS (Refer to the illustration)

Illustrated symbols ① to ⑨ are designed as thumb tabs to indicate the chapter's number and content.

- ① General information
- ② Periodic inspection and adjustment
- ③ Chassis
- ④ Power train
- ⑤ Engine
- ⑥ Cooling system
- ⑦ Fuel injection system
- ⑧ Electrical
- ⑨ Specifications

Illustrated symbols ⑩ to ⑯ are used to identify the specifications which appear.

- ⑩ Filling fluid
- ⑪ Lubricant
- ⑫ Tightening torque
- ⑬ Wear limit, clearance
- ⑭ Engine speed
- ⑮ Special tool
- ⑯ Electrical data (Ω , V, A)

Illustrated symbols ⑰ to ⑳ in the exploded diagram indicate grade of lubricant and location of lubrication point.

- ⑰ Apply locking agent (LOCTITE®)
- ⑱ Apply Yamabond No.5®
- ⑲ Apply engine oil
- ⑳ Apply gear oil
- ㉑ Apply molybdenum disulfide oil
- ㉒ Apply brake fluid
- ㉓ Apply wheel bearing grease
- ㉔ Apply low-temperature lithium-soap-based grease
- ㉕ Apply molybdenum disulfide grease
- ㉖ Apply silicone grease
- ㉗ ESSO beacon 325 grease or Aeroshell grease #7A
- ㉘ Use new one

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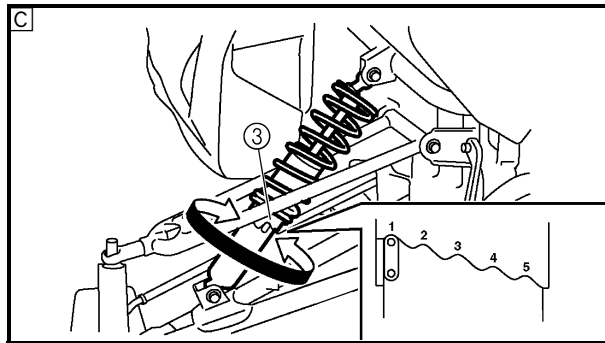
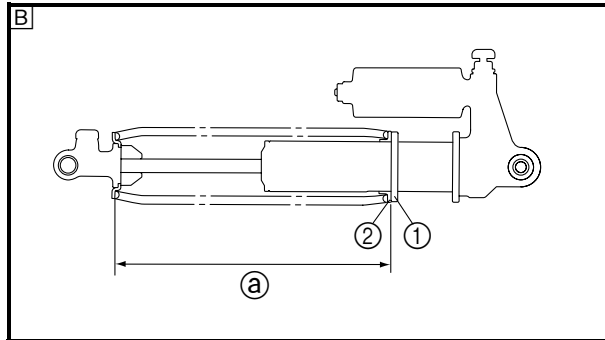
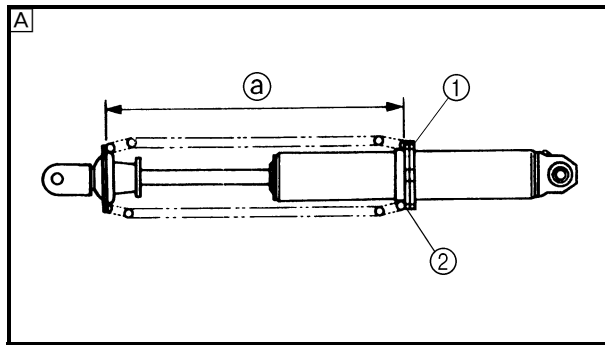
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PERIODIC INSPECTION AND ADJUSTMENT

TUNING

FRONT SUSPENSION

Spring preload

1. Adjust:

- Spring preload

Adjustment steps:

- Loosen the locknut ①.
- Turn the spring seat ② in or out.

PZ50GT

Spring seat distance	Standard		
	Shorter ←		→ Longer
Preload	Harder ← → Softer		
Length ①	Min.		Max.
	172 mm (6.77 in)	182 mm (7.17 in)	182 mm (7.17 in)

PZ50MT “Europe”

Spring seat distance	Standard		
	Shorter ←		→ Longer
Preload	Harder ← → Softer		
Length ①	Min.		Max.
	215 mm (8.46 in)	225 mm (8.86 in)	226 mm (8.90 in)

PZ50VT “Europe”/PZ50MP

Spring seat distance	Standard		
	Shorter ←		→ Longer
Preload	Harder ← → Softer		
Length ①	Min.		Max.
	205 mm (8.07 in)	215 mm (8.46 in)	216 mm (8.50 in)

- Turn the adjusting ring ③ to the proper position.

PZ50/PZ50MT “USA/Canada”/PZ50VT “USA/Canada”

Spring adjuster position	1	2	3	4	5
Preload	Softer ← → Harder				
Standard	1				

A PZ50MT “Europe”/PZ50VT “Europe”/PZ50MP

B PZ50GT

C PZ50/PZ50MT “USA/Canada”/PZ50VT “USA/Canada”

CAUTION:

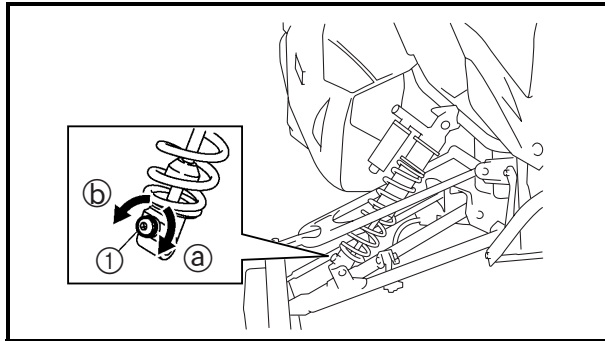
Be sure that the left and right spring preload are the same.

⚠ WARNING

These shock absorber contain highly pressurized nitrogen gas.

Do not tamper with or attempt to open the shock absorber assemblies.

Do not subject the shock absorber assemblies to flames or high heat, which could cause it to explode.



Rebound damping force adjustment (PZ50GT)

The rebound damping force can be adjusted by turning the adjuster ①.

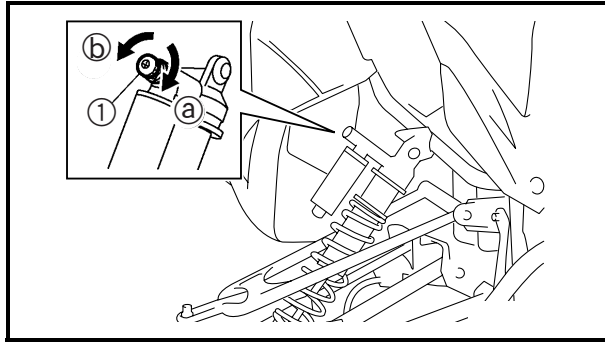
Adjuster position	20 clicks out	12 clicks out	3 clicks out
	Minimum	Standard	Maximum
	Turns out (b)* ← → Turns in (a)		
Rebound damping force	Soft ← → Hard		

* With the adjuster fully turned lightly in direction (a)

CAUTION:

- Do not continue to turn the adjuster in direction (a) after it stops. The shock absorber can be damaged and rebound damping force adjustments cannot be made.
- Do not turn the adjuster in direction (b) more than 20 clicks. Even if the adjuster is continually turned after 20 clicks, there will be no change in the rebound damping force.
- Be sure to stop the adjuster at a position where there is a click.

FRONT SUSPENSION/ AIR PRESSURE ADJUSTMENT (PZ50RT)



Compression damping force adjustment (PZ50GT)

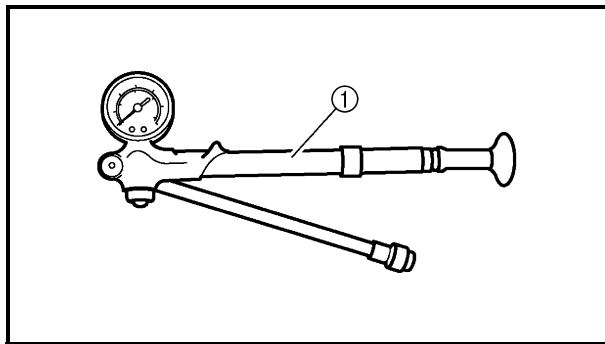
The compression damping force can be adjusted by turning the adjuster ①.

Adjuster position	12 clicks out	7 clicks out	2 clicks out
	Minimum	Standard	Maximum
	Turns out (b)* ← → Turns in (a)		
Compression damping force	Soft ← → Hard		

* With the adjuster fully turned lightly in direction (a)

CAUTION:

- Do not continue to turn the adjuster in direction (a) after it stops. The shock absorber can be damaged and compression damping force adjustments cannot be made.
- Do not turn the adjuster in direction (b) more than 12 clicks. Even if the adjuster is continually turned after 12 clicks, there will be no change in the compression damping force.
- Be sure to stop the adjuster at a position where there is a click.



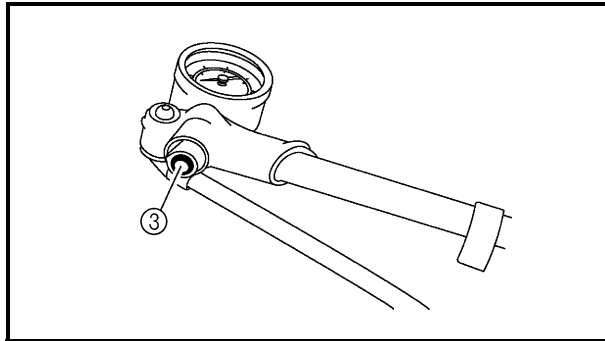
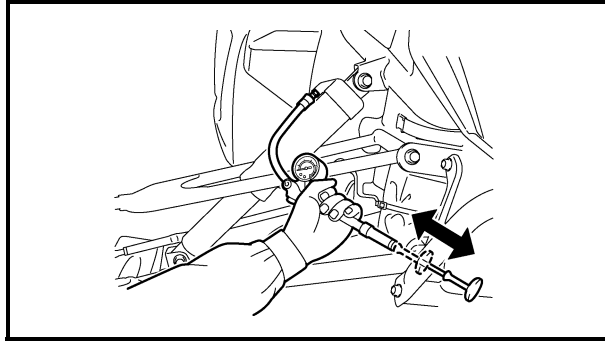
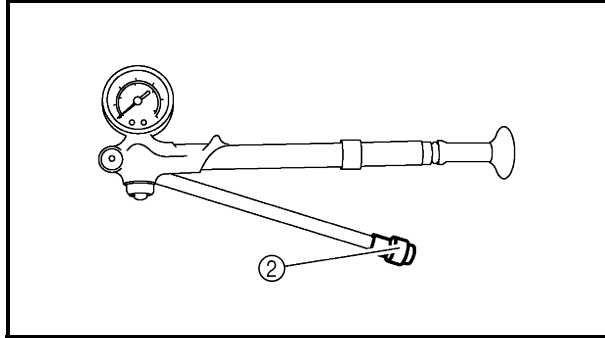
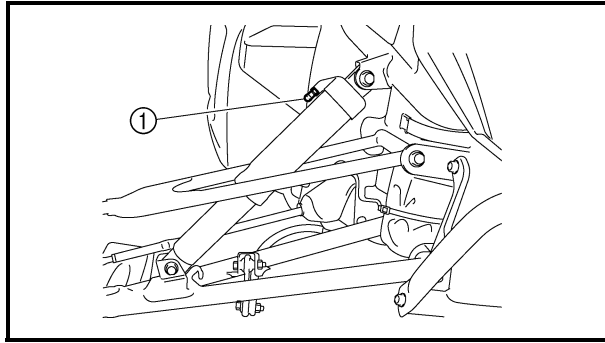
AIR PRESSURE ADJUSTMENT (PZ50RT)

CAUTION:

The left and right shock absorber air pressure must be set to the same setting. Uneven settings can cause poor handling and loss of stability.

This snowmobile is equipped with FOX shock absorbers as standard equipment.

The air pressure of the shock absorbers can be adjusted using the shock absorber pump ① included with your snowmobile.



Adjustment steps:

⚠ WARNING

Support the snowmobile securely on a suitable stand before adjusting the shock absorbers.

CAUTION:

Make sure that there is no load on the shock absorbers and that they are fully extended before making any air pressure adjustments.

1. Place the snowmobile on a level surface and apply the parking brake.
2. Lift the front of the snowmobile onto a suitable stand to raise the skis off the ground.
3. Remove the air valve cap ① from the shock absorber.
4. Install the hose connector ② of the shock absorber pump onto the air valve of the shock absorber and tighten it approximately six turns until the pressure registers on the pump gauge.

CAUTION:

Do not overtighten the connector onto the air valve as this will damage the connector seal.

NOTE:

If the shock absorber has no air pressure, the gauge reading will be zero.

5. To increase the air pressure, operate the pump a few times. The pressure should increase slowly. If the pressure increases rapidly, check to make sure that the pump is properly connected and tightened onto the air valve. To decrease the air pressure, push the black bleed valve button ③.

NOTE:

To allow pressure to escape from the pump and the shock absorber, push the button halfway down and hold it. To allow only a small amount of pressure to escape, push the button all the way down and quickly release it.

6. Remove the hose connector from the air valve.

NOTE: _____

When removing the connector, the sound of air escaping may be heard, but this is from the pump hose, not the shock absorber.

Air pressure range:

**345 kPa (3.4 kgf/cm², 50 psi) to 1,034 kPa
(10.3 kgf/cm², 150 psi)**

Recommended air pressure:

483 kPa (4.8 kgf/cm², 70 psi)

CAUTION: _____

Do not exceed 1,034 kPa (10.3 kgf/cm², 150 psi).

7. Install the air valve cap.

NOTE: _____

If the front suspension bottoms too easily or rolls too much during cornering, increase the air pressure by 34 kPa (0.3 kgf/cm², 5 psi). If the suspension is too firm and you want a more compliant ride, decrease the air pressure by 34 kPa (0.3 kgf/cm², 5 psi).

REAR SUSPENSION

Stopper band

1. Adjust:

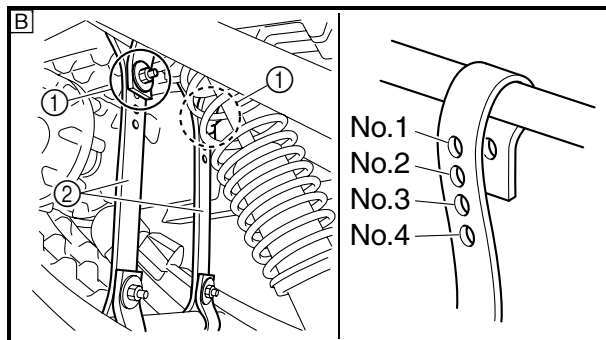
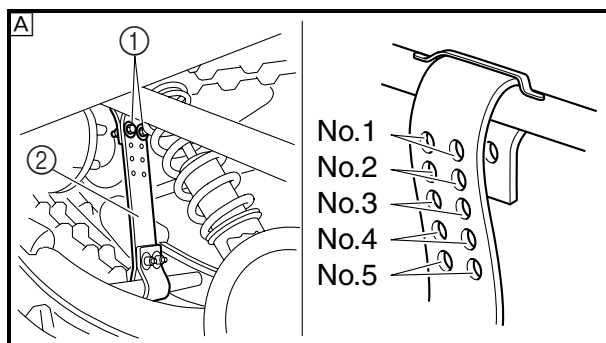
- Stopper band length

CAUTION: _____

Make sure the left and right rear suspension stopper bands are adjusted evenly. (PZ50VT, PZ50MP)

NOTE: _____

This adjustment affects the handling characteristics of the machine.



Adjustment steps:

- Remove the stopper band bolts ①, nuts and washers.
- Adjust the length of the stopper bands ② by inserting the bolts in different holes.

Standard setting:

No. 1 hole (PZ50/PZ50VT “Europe”/PZ50MP)

No. 2 holes (PZ50GT/PZ50RT)

No. 3 holes (PZ50MT)

No. 4 hole (PZ50VT “USA/Canada”)

- Tighten the stopper band nuts.



Stopper band nut:

4 Nm (0.4 m · kg, 2.9 ft · lb)

- ☐ A PZ50/PZ50GT/PZ50RT/PZ50MT
☐ B PZ50VT/PZ50MP

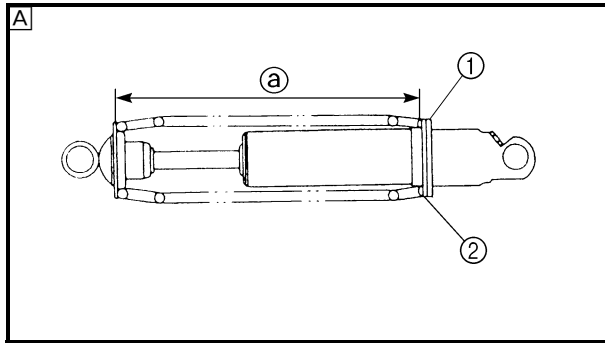
Choosing other settings:

CAUTION:

The standard settings work well under most general riding conditions. The suspension can be adjusted to work better in one condition, but only at the expense of another. Keep this in mind when you adjust the suspension.

A: No. 5 hole B: No. 4 hole (shortest)	No. 1 hole (longest)
More weight on skis: • Heavy steering/oversteer • More maneuverability Favors: hardpack snow, ice, smooth trails, tight turns	Less weight on skis: • Light steering/understeer • Better acceleration and speed Favors: deep snow, straight line acceleration, top speed

- ☐ A PZ50/PZ50GT/PZ50RT/PZ50MT
☐ B PZ50VT/PZ50MP



Spring preload

1. Adjust:

- Spring preload

Adjustment step:

Front side

- Loosen the locknut ①.
- Turn the spring seat ② in or out.

PZ50GT “Europe”/PZ50RT “USA/Canada”/ PZ50MT “Europe”

Spring seat distance	Standard		
	Shorter ←		→ Longer
Preload	Harder ← → Softer		
Length ②	Min.		Max.
	180 mm (7.09 in)	190 mm (7.48 in)	191 mm (7.52 in)

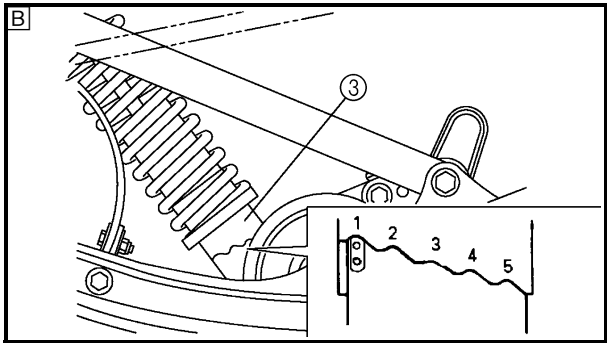
PZ50RT “Europe”

Spring seat distance	Standard		
	Shorter ←		→ Longer
Preload	Harder ← → Softer		
Length ②	Min.		Max.
	178 mm (7.01 in)	188 mm (7.40 in)	189 mm (7.44 in)

PZ50VT “Europe”/PZ50MP

Spring seat distance	Standard		
	Shorter ←		→ Longer
Preload	Harder ← → Softer		
Length ②	Min.		Max.
	194 mm (7.64 in)	204 mm (8.03 in)	205 mm (8.07 in)

A PZ50GT “Europe”/PZ50RT/PZ50MT “Europe”/
PZ50VT “Europe”/PZ50MP



- Turn the adjusting ring ③ to the proper position.

PZ50/PZ50GT “USA/Canada”/PZ50MT “USA/Canada”/PZ50VT “USA/Canada”

Spring adjuster position	1	2	3	4	5
Preload	Softer ← → Harder				
Standard	1				

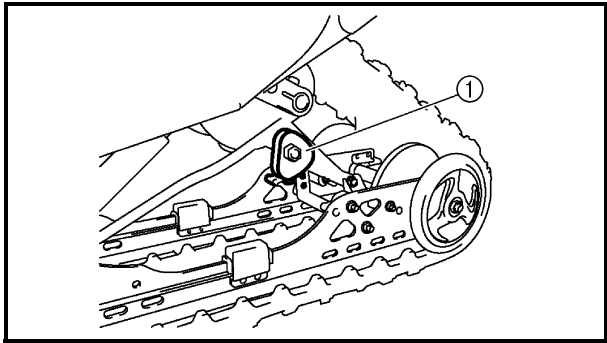
⚠ WARNING

This shock absorber contains highly pressurized nitrogen gas.

Do not tamper with or attempt to open the shock absorber assembly.

Do not subject the shock absorber assembly to flames or high heat, which could cause it to explode.

ⓑ PZ50/PZ50GT “USA/Canada”/PZ50MT “USA/Canada”/PZ50VT “USA/Canada”



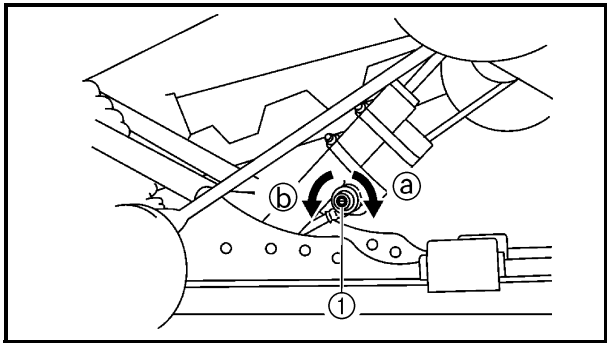
Rear side

- Turn the adjuster ① to proper position.

Spring adjuster position	S	M	H
Spring rate	Soft	Medium	Hard
Standard	M		

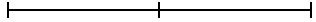
⚠ WARNING

Always adjust both spring preload (left and right) to the same setting. Uneven adjustment can cause poor handling and loss of stability.



Rear suspension damping force adjustment
The damping force can be adjusted by turning the adjuster ①.

PZ50RT

Adjuster position	20 clicks out	11 clicks out	1 click out
			
	Minimum	Standard	Maximum
	Turns out ⑥* ← → Turns in ⑤		
Damping force	Soft ← → Hard		

* With the adjuster fully turned lightly in direction ⑤

CAUTION:

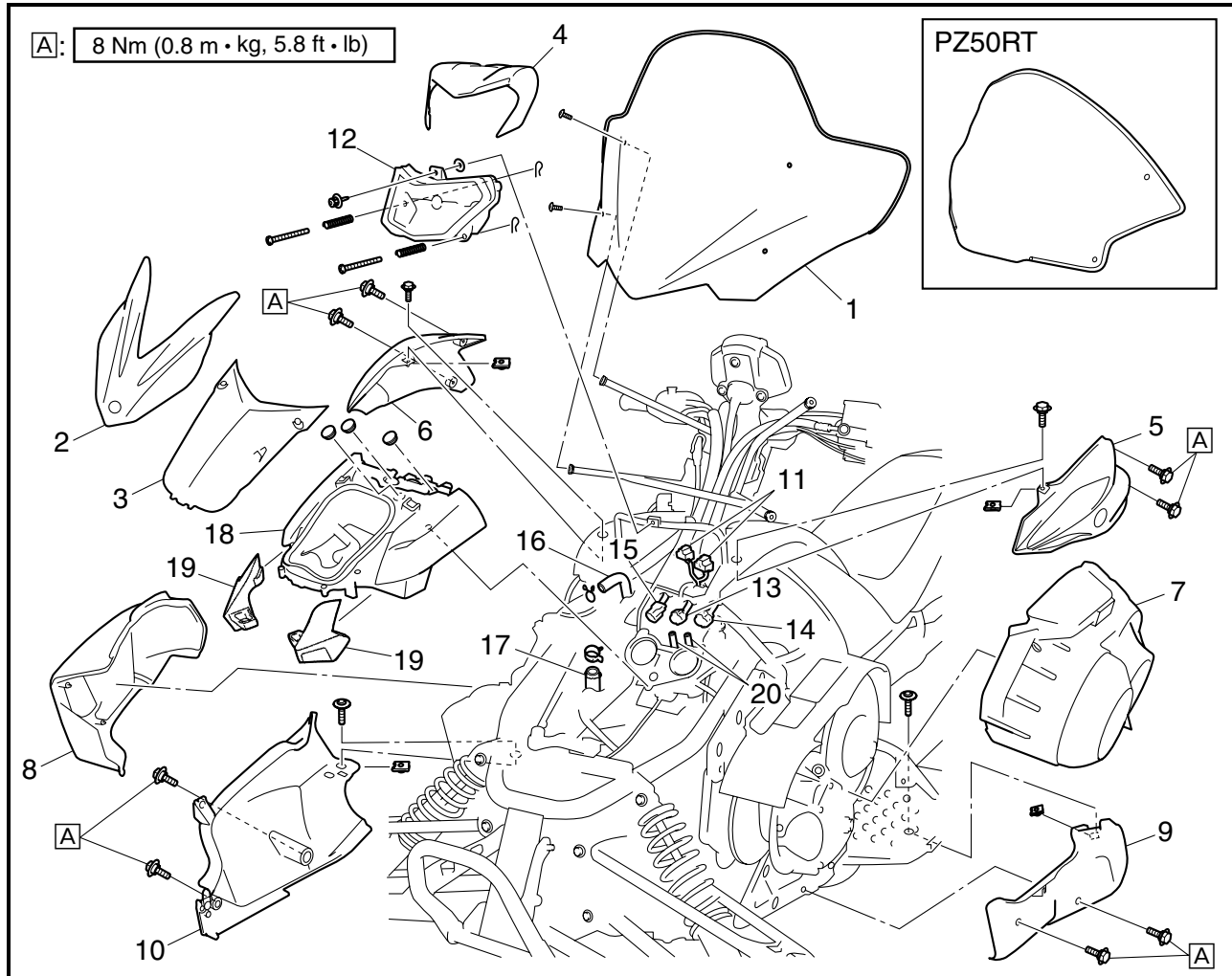
- Do not continue to turn the adjuster in direction ⑤ after it stops. The shock absorber can be damaged and damping force adjustments cannot be made.
- Do not turn the adjuster in direction ⑥ more than 20 clicks. Even if the adjuster is continually turned after 20 clicks, there will be no change in the damping force.
- Be sure to stop the adjuster at a position where there is a click.



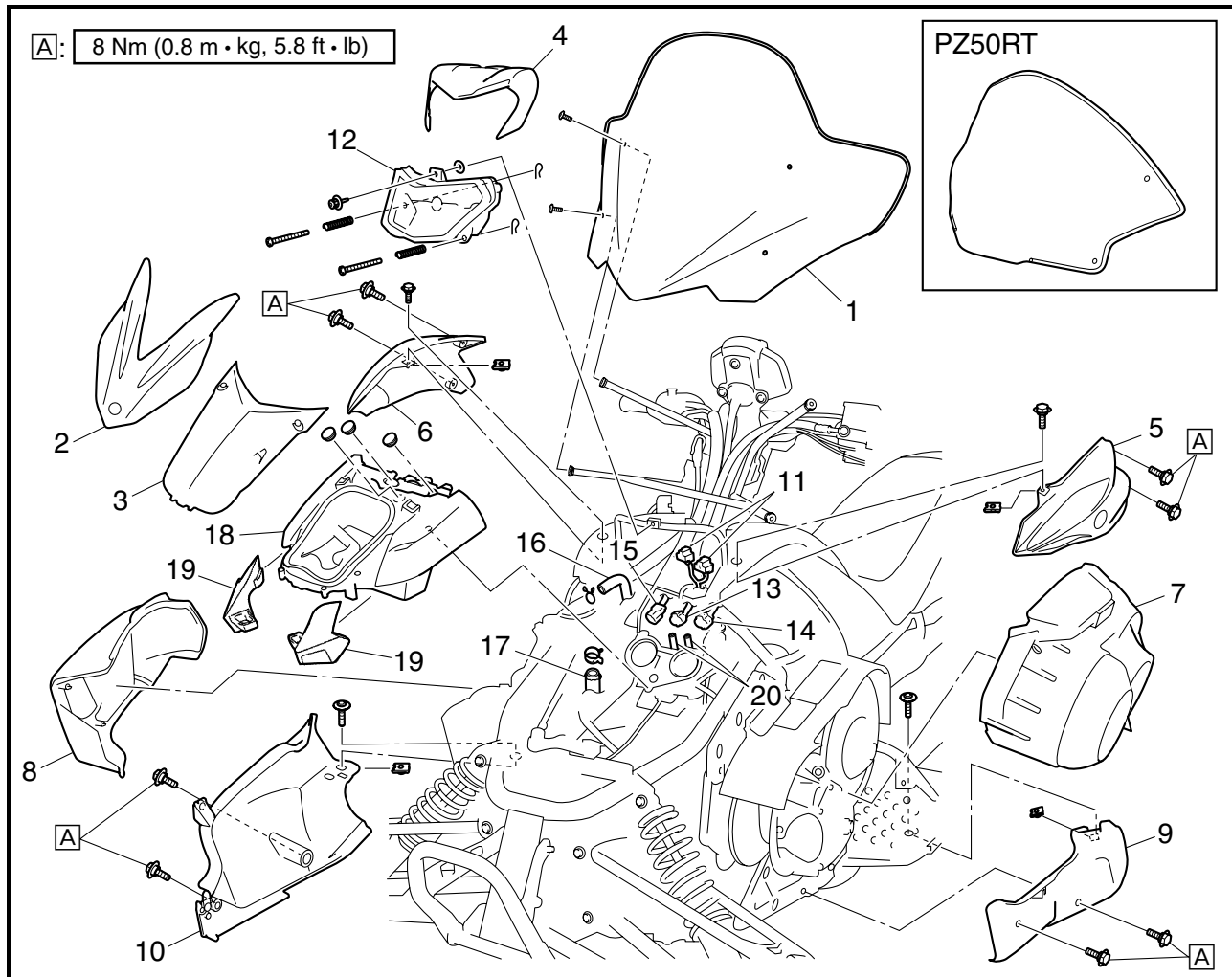
CHASSIS

COWLINGS

PZ50/PZ50GT/PZ50RT/PZ50MT



Order	Job name/Part name	Q'ty	Remarks
	Cowling removal		
1	Windshield	1	Remove the parts in the order listed below. PZ50GT
2	Front panel	1	
3	Air filter case cover	1	
4	Headlight cover	1	
5	Left side panel	1	
6	Right side panel	1	
7	Left side cover	1	
8	Right side cover	1	
9	Left lower cover	1	
10	Right lower cover	1	
11	Headlight coupler	2	
12	Headlight assembly	1	
13	Cylinder-#2 intake air pressure sensor coupler	1	
			Disconnect.

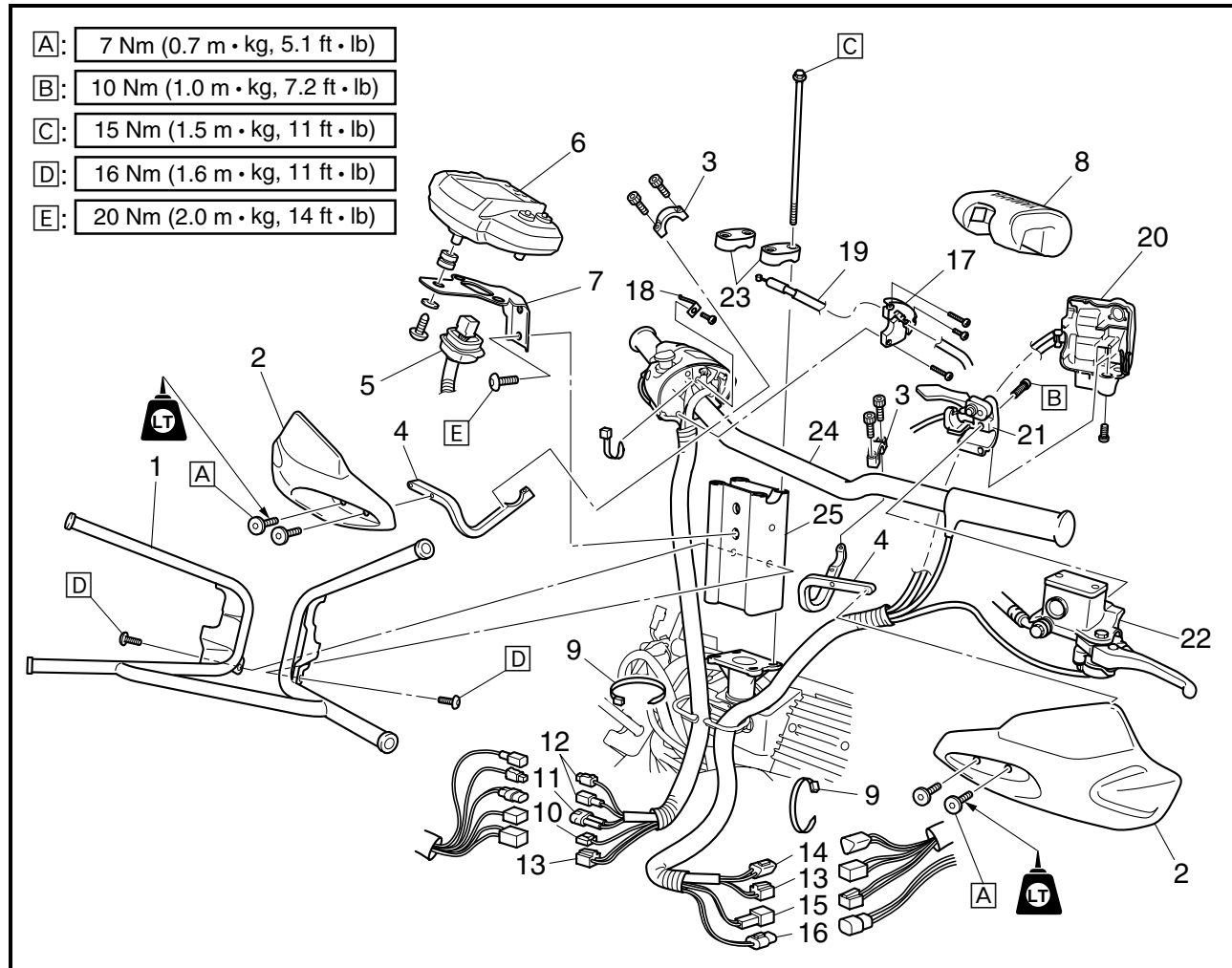


Order	Job name/Part name	Q'ty	Remarks
14	Cylinder-#1 intake air pressure sensor coupler	1	Disconnect.
15	Intake air temperature sensor coupler	1	Disconnect.
16	Cylinder head breather hose	1	Disconnect.
17	Oil tank breather hose	1	Disconnect.
18	Air filter case assembly	1	
19	Air filter case assembly pad (left and right)	2	
20	Intake air pressure sensor hose	2	
			For installation, reverse the removal procedure.

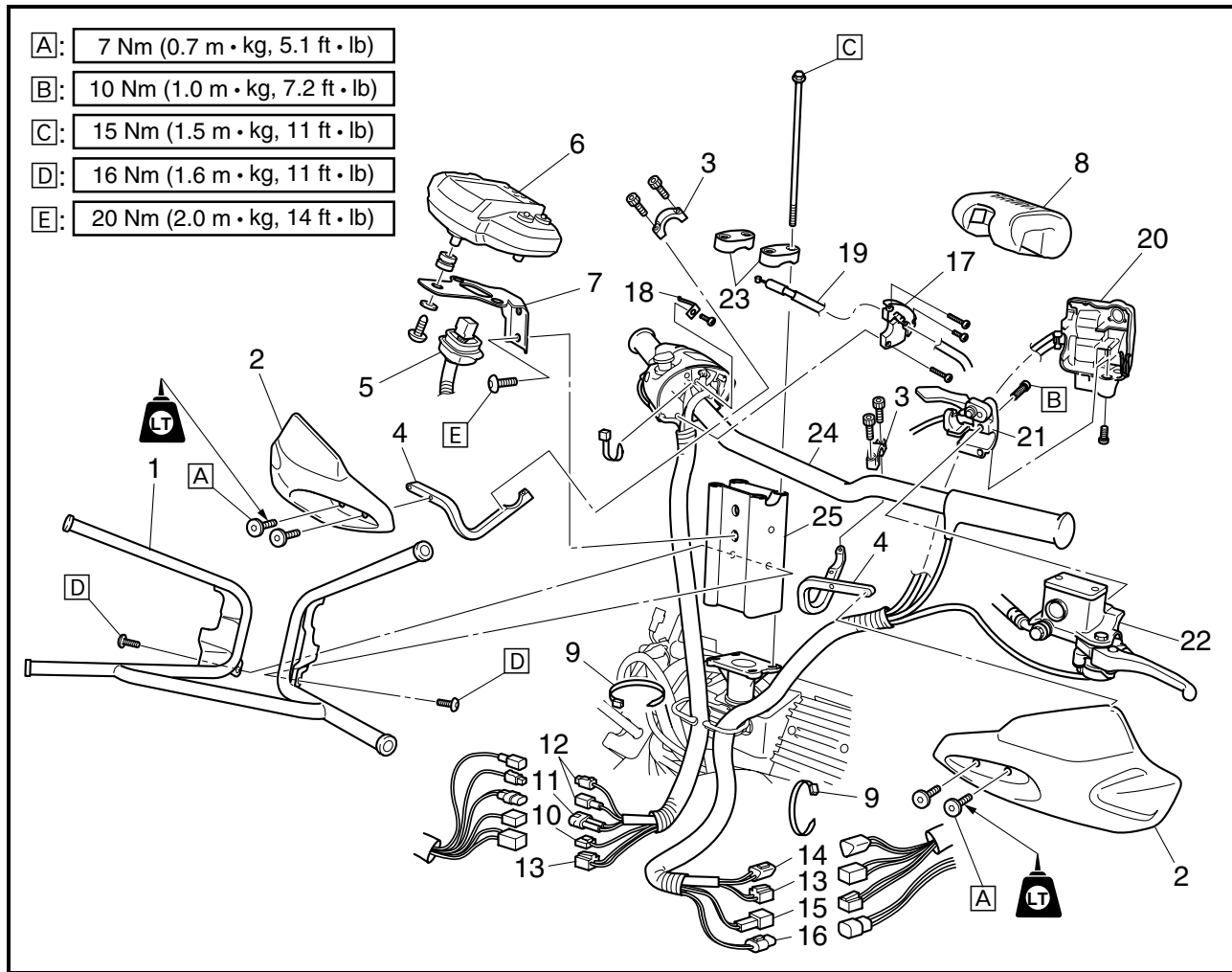


STEERING

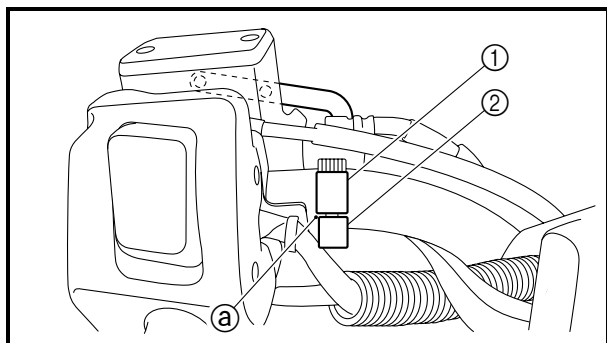
PZ50/PZ50GT/PZ50RT/PZ50MT



Order	Job name/Part name	Q'ty	Remarks
	Handlebar removal		Remove the parts in the order listed below. Refer to "COWLINGS".
	Windshield/left side panel/right side panel		PZ50GT/PZ50RT/PZ50MT
1	Windshield bracket	1	PZ50RT
2	Wind deflector (left and right)	2	PZ50RT
3	Wind deflector bracket holder	2	PZ50RT
4	Wind deflector bracket	2	PZ50RT
5	Multi-function meter coupler	1	
6	Multi-function meter	1	
7	Multi-function meter bracket	1	
8	Steering pad	1	PZ50GT/PZ50RT/PZ50MT
9	Plastic band	2	
10	Thumb warmer lead coupler	1	Disconnect.
11	Engine stop switch coupler	1	Disconnect.
12	Throttle switch coupler	2	Disconnect.
13	Grip warmer lead connector	2	Disconnect.
14	Grip thumb warmer adjustment switch lead coupler	1	Disconnect.



Order	Job name/Part name	Q'ty	Remarks
15	Brake light switch coupler	1	Disconnect.
16	Headlight beam switch coupler	1	Disconnect.
17	Right handlebar switch cover	1	
18	Throttle cable holder	1	
19	Throttle cable	1	
20	Left handlebar switch	1	
21	Brake master cylinder holder	1	
22	Master cylinder assembly	1	
23	Handlebar holder	2	
24	Handlebar	1	
25	Steering joint	1	
NOTE: After installing all parts, refer to "CABLE ROUTING", to check the cable and lead routings. For installation, reverse the removal procedure.			



1. Install:

For PZ50RT

- Wind deflector bracket holder ①
- Wind deflector bracket ②

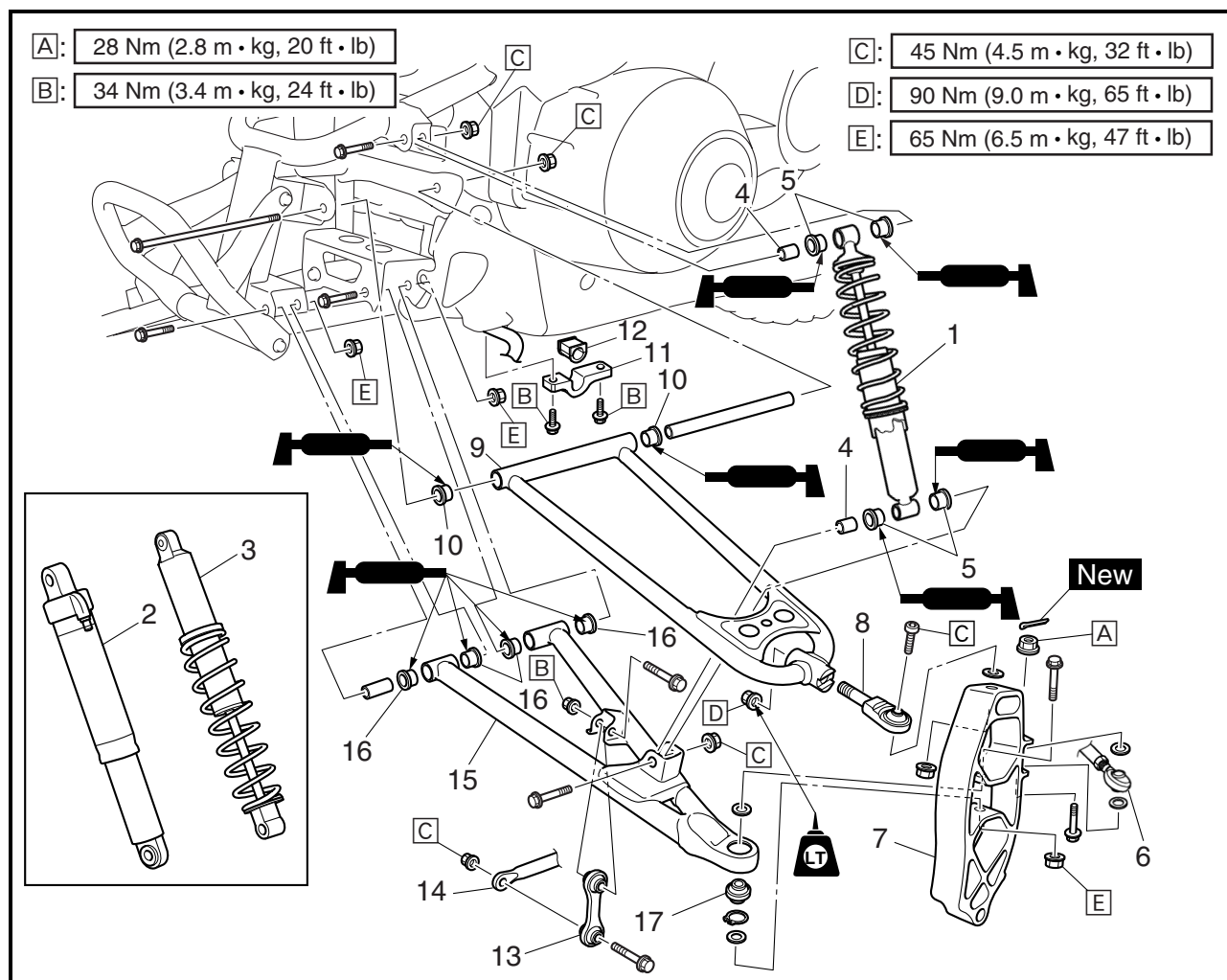
NOTE:

Align the end of the wind deflector bracket with the punch mark ② on the handlebar.

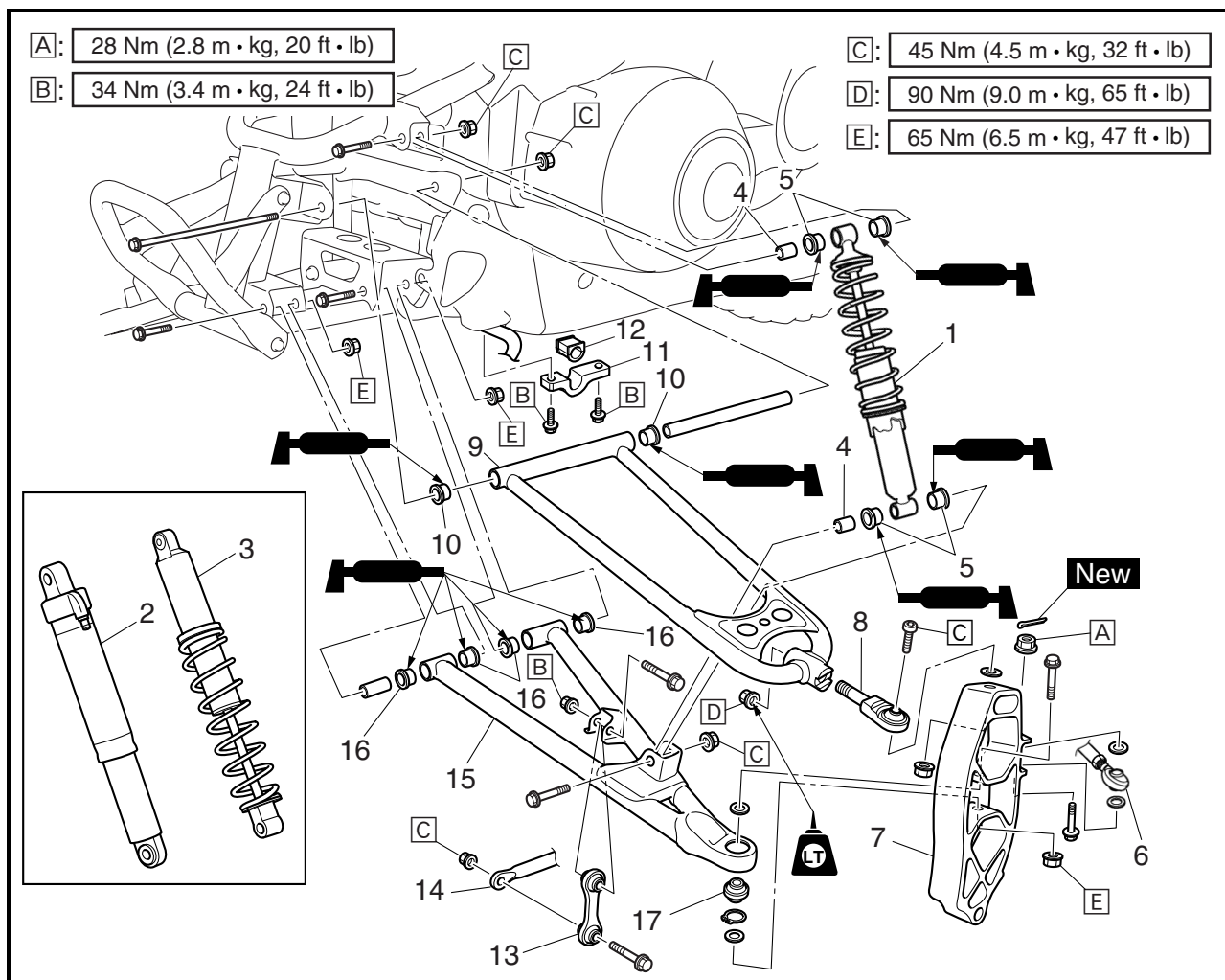


FRONT SUSPENSION

PZ50/PZ50RT/PZ50MT



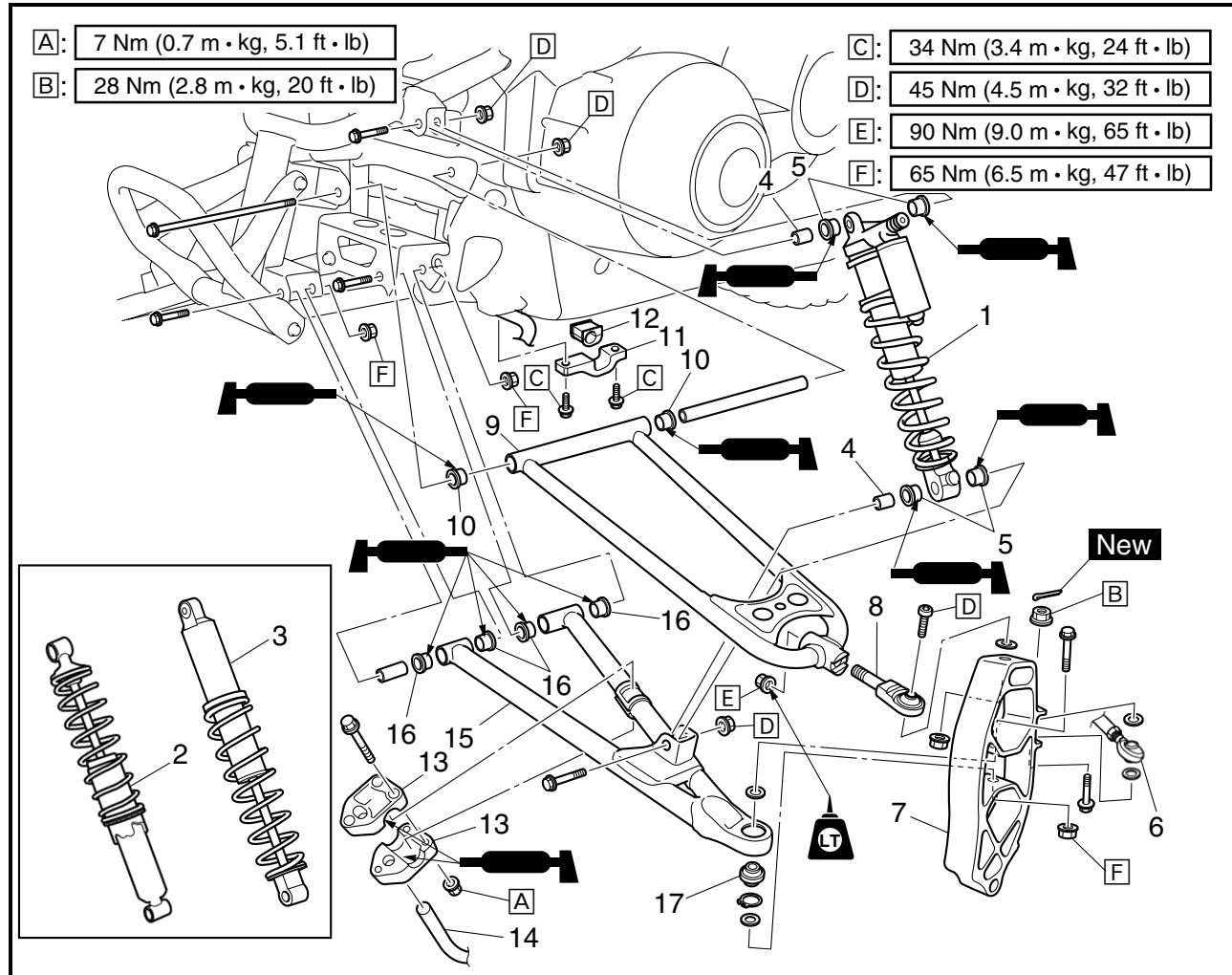
Order	Job name/Part name	Q'ty	Remarks
	Front suspension removal		Remove the parts in the order listed below.
	Air filter case cover		Refer to "COWLINGS".
	Pivot arm cover		Refer to "STEERING".
	Ski		Refer to "SKI" in CHAPTER 3.
1	Shock absorber	1	PZ50/PZ50MT "USA/Canada"
2	Shock absorber	1	PZ50RT
3	Shock absorber	1	PZ50MT "Europe"
4	Collar	2	PZ50/PZ50MT
5	Bushing	4	PZ50/PZ50MT
6	Tie rod	1	Disconnect.
7	Steering knuckle	1	
8	Upper arm ball joint	1	
9	Upper arm	1	
10	Bushing	2	
11	Stabilizer holder	1	
12	Bushing	1	



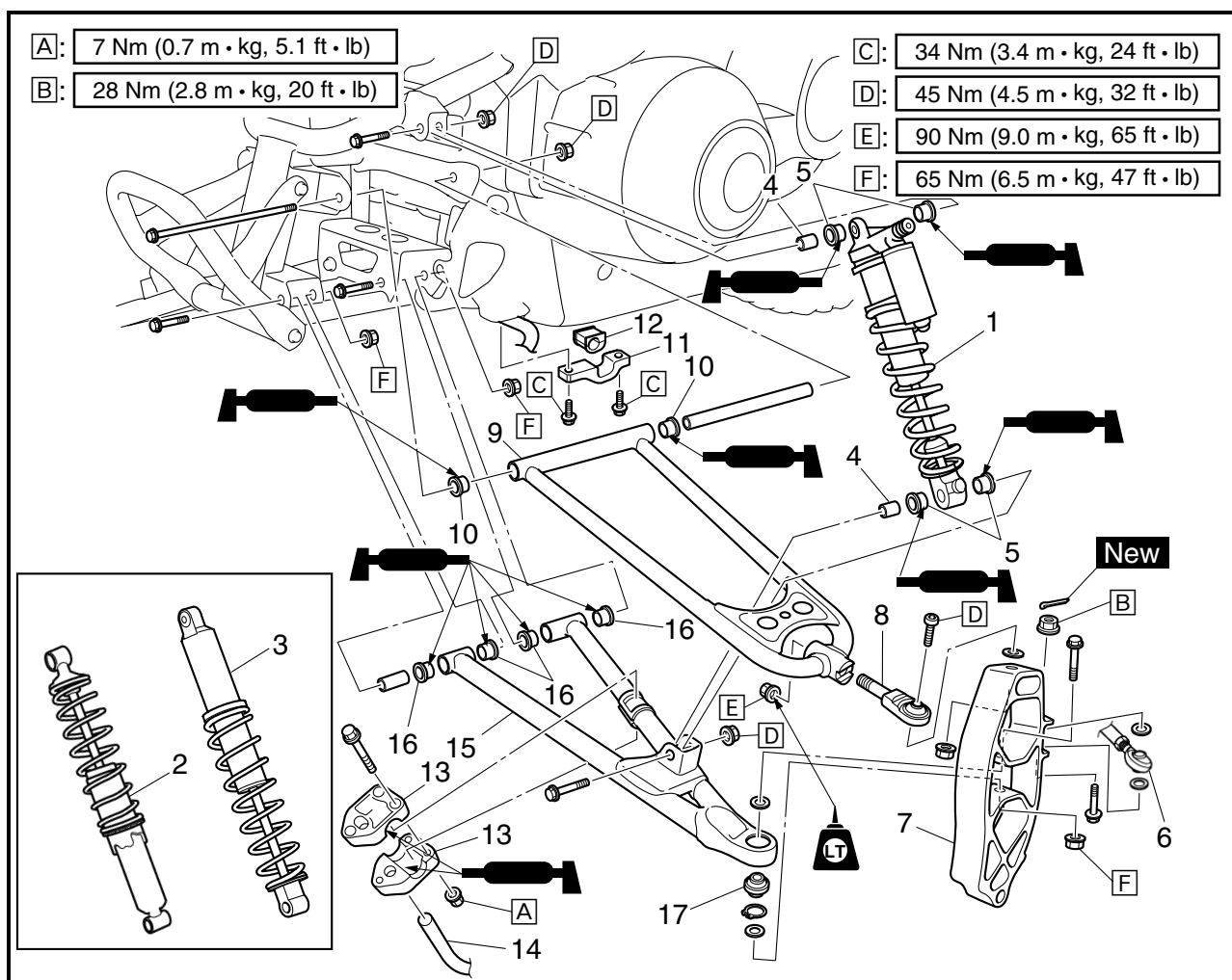
Order	Job name/Part name	Q'ty	Remarks
13	Stabilizer joint	1	For installation, reverse the removal procedure.
14	Stabilizer	1	
15	Lower arm	1	
16	Bushing	4	
17	Lower arm ball joint	1	



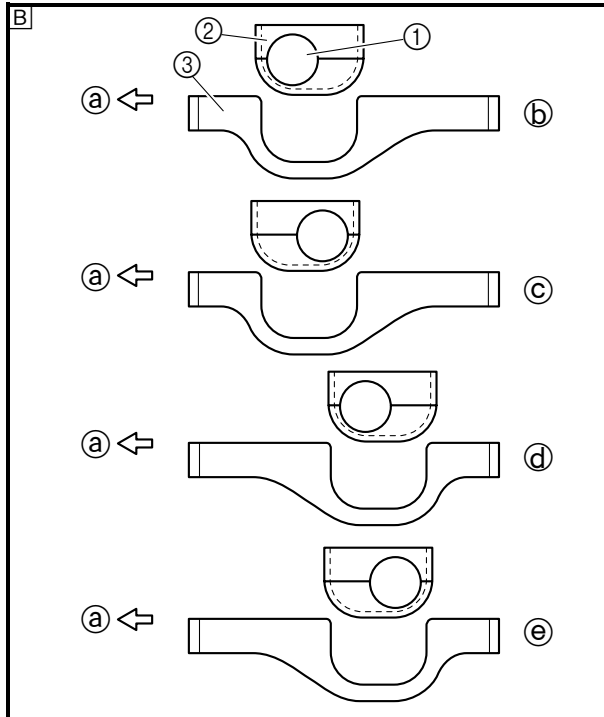
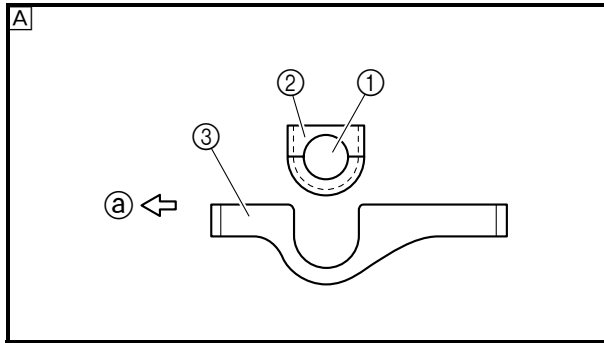
PZ50GT/PZ50VT/PZ50MP



Order	Job name/Part name	Q'ty	Remarks
	Front suspension removal		Remove the parts in the order listed below.
	Air filter case cover		Refer to "COWLINGS".
	Pivot arm cover		Refer to "STEERING".
	Ski		Refer to "SKI" in CHAPTER 3.
1	Shock absorber	1	PZ50GT
2	Shock absorber	1	PZ50VT "USA/Canada"
3	Shock absorber	1	PZ50VT "Europe"/PZ50MP
4	Collar	2	
5	Bushing	4	
6	Tie rod	1	Disconnect.
7	Steering knuckle	1	
8	Upper arm ball joint	1	
9	Upper arm	1	
10	Bushing	2	
11	Stabilizer holder	1	
12	Bushing	1	



Order	Job name/Part name	Q'ty	Remarks
13	Stabilizer bracket	2	For installation, reverse the removal procedure.
14	Stabilizer	1	
15	Lower arm	1	
16	Bushing	4	
17	Lower arm ball joint	1	



INSTALLATION

1. Install:

- Stabilizer ①
- Bushing ②
- Stabilizer holder ③

CAUTION:

Always install the stabilizers, bushings, and stabilizer holders in the same positions on both sides of the snowmobile, otherwise poor handling and loss of stability may result. (PZ50GT/PZ50VT/PZ50MP)

NOTE:

- Install the stabilizer holder in the direction shown in the illustration. (PZ50/PZ50RT/PZ50MT)
- The stabilizer force can be adjusted by changing the installation positions of the stabilizer, bushing, and stabilizer holder. (PZ50GT/PZ50VT/PZ50MP)

A PZ50/PZ50RT/PZ50MT

B PZ50GT/PZ50VT/PZ50MP

a Forward

b Very hard

c Hard

d Medium

e Soft

Stabilizer, bushing, and stabilizer holder standard installation positions:

d (PZ50GT)

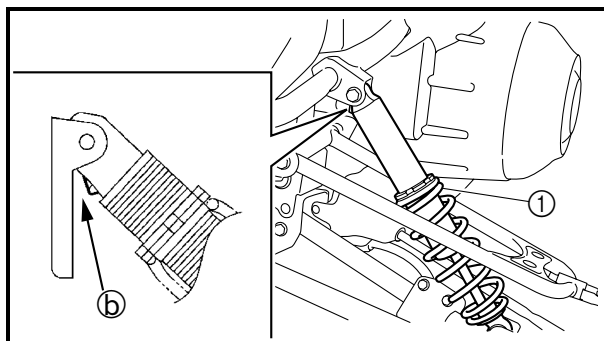
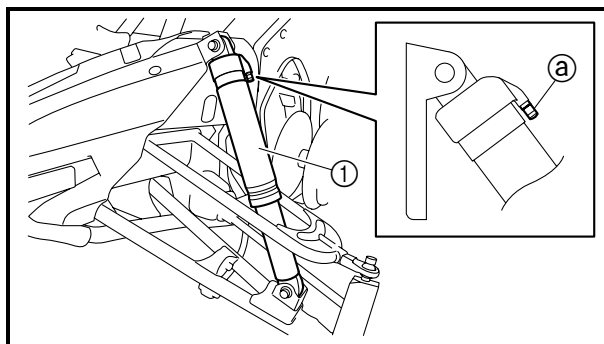
b (PZ50VT/PZ50MP)

2. Install:

- Shock absorber ①

NOTE:

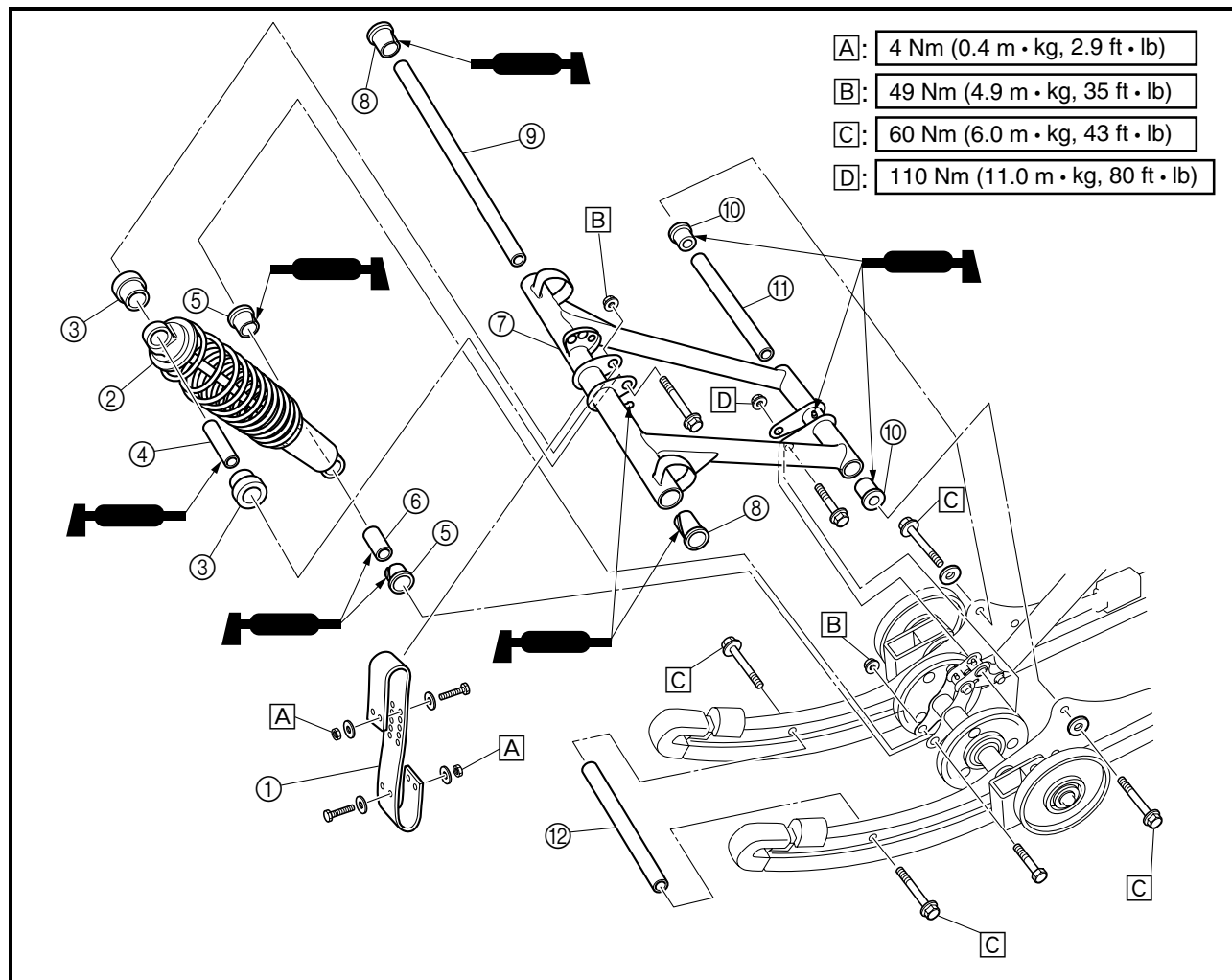
- Install the shock absorber with the air valve (a) facing outward. (PZ50RT)
- Install the shock absorber with the charging valve (b) facing inward. (PZ50MT "Europe"/PZ50VT "Europe"/PZ50MP)



POWER TRAIN

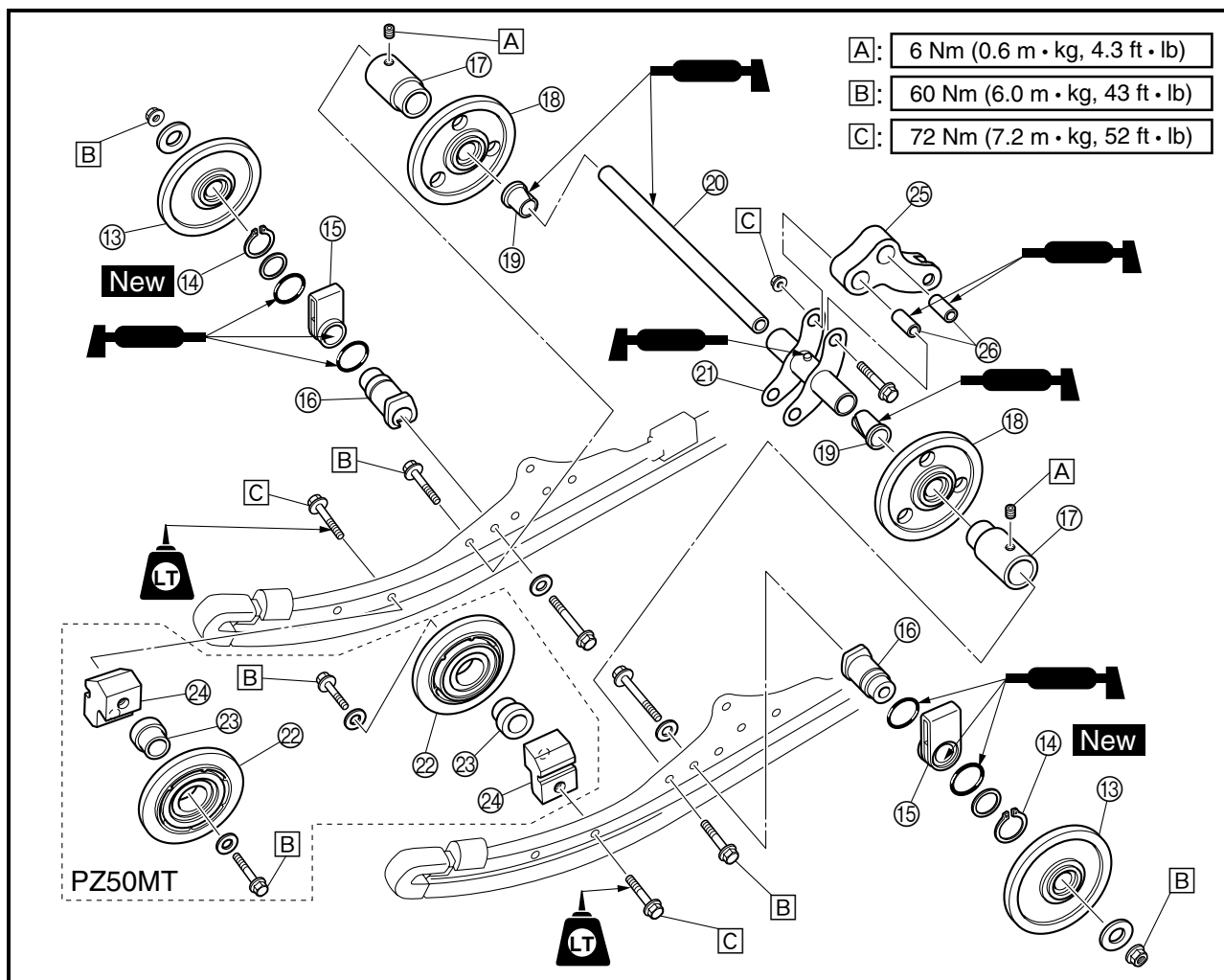
SLIDE RAIL SUSPENSION

PZ50/PZ50GT/PZ50RT/PZ50MT



Order	Job name/Part name	Q'ty	Remarks
	Slide rail suspension disassembly		Remove the parts in the order listed below.
①	Stopper band	1	
②	Front shock absorber	1	
③	Bushing	2	
④	Collar	1	
⑤	Bushing	2	
⑥	Collar	1	
⑦	Front pivot arm	1	
⑧	Bushing	2	
⑨	Shaft	1	
⑩	Collar	2	
⑪	Shaft	1	
⑫	Shaft	1	

SLIDE RAIL SUSPENSION



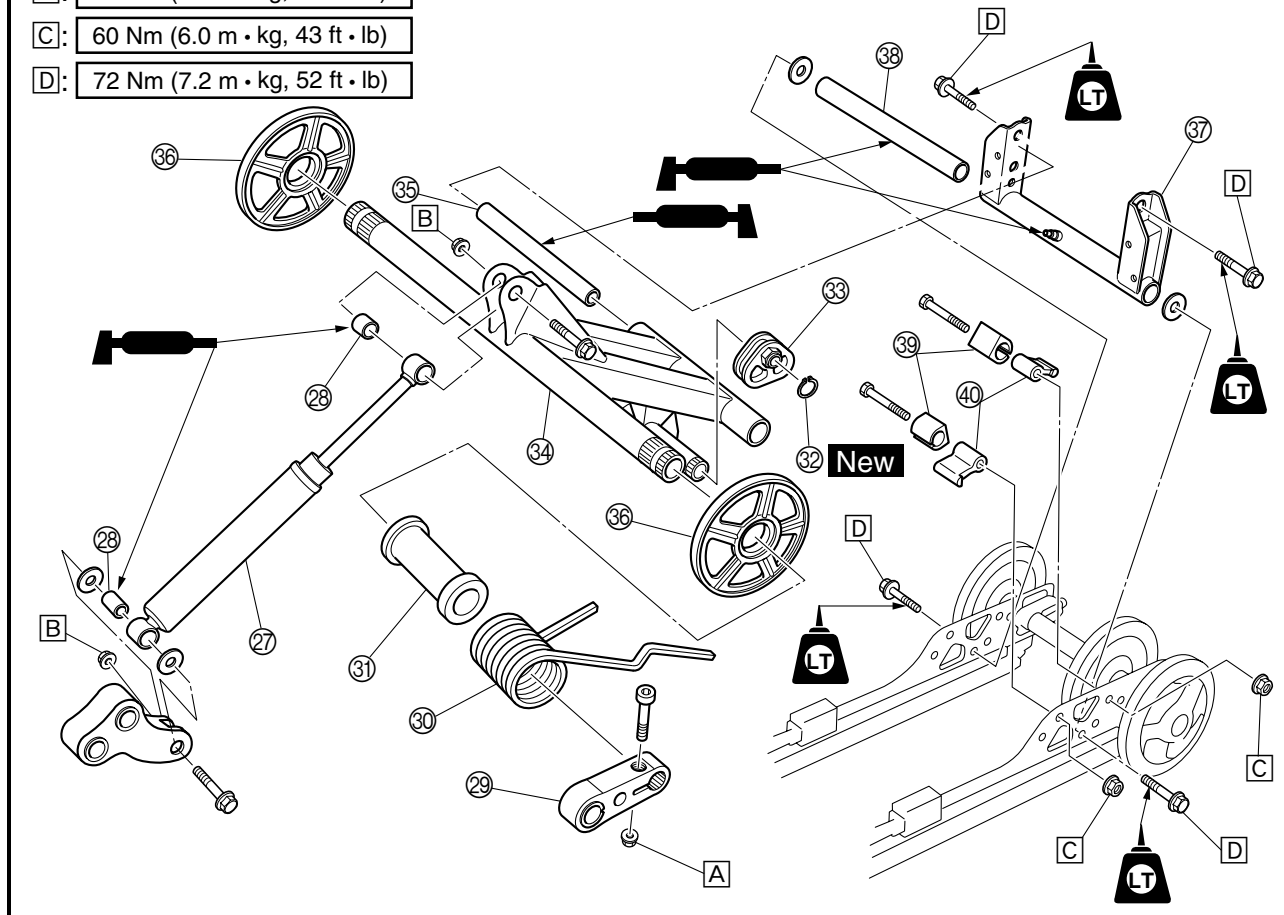
Order	Job name/Part name	Q'ty	Remarks
13	Suspension wheel	2	NOTE: _____ Apply grease to the inner surface of each spring end guide.
14	Circlip	2	
15	Spring end guide	2	
16	Spring end guide bracket	2	
17	Wheel bracket	2	
18	Suspension wheel	2	
19	Bushing	2	
20	Shaft	1	
21	Front suspension bracket	1	
22	Suspension wheel	2	
23	Collar	2	
24	Wheel bracket	2	
25	Connecting arm	1	
26	Collar	2	

[A]: 35 Nm (3.5 m • kg, 25 ft • lb)

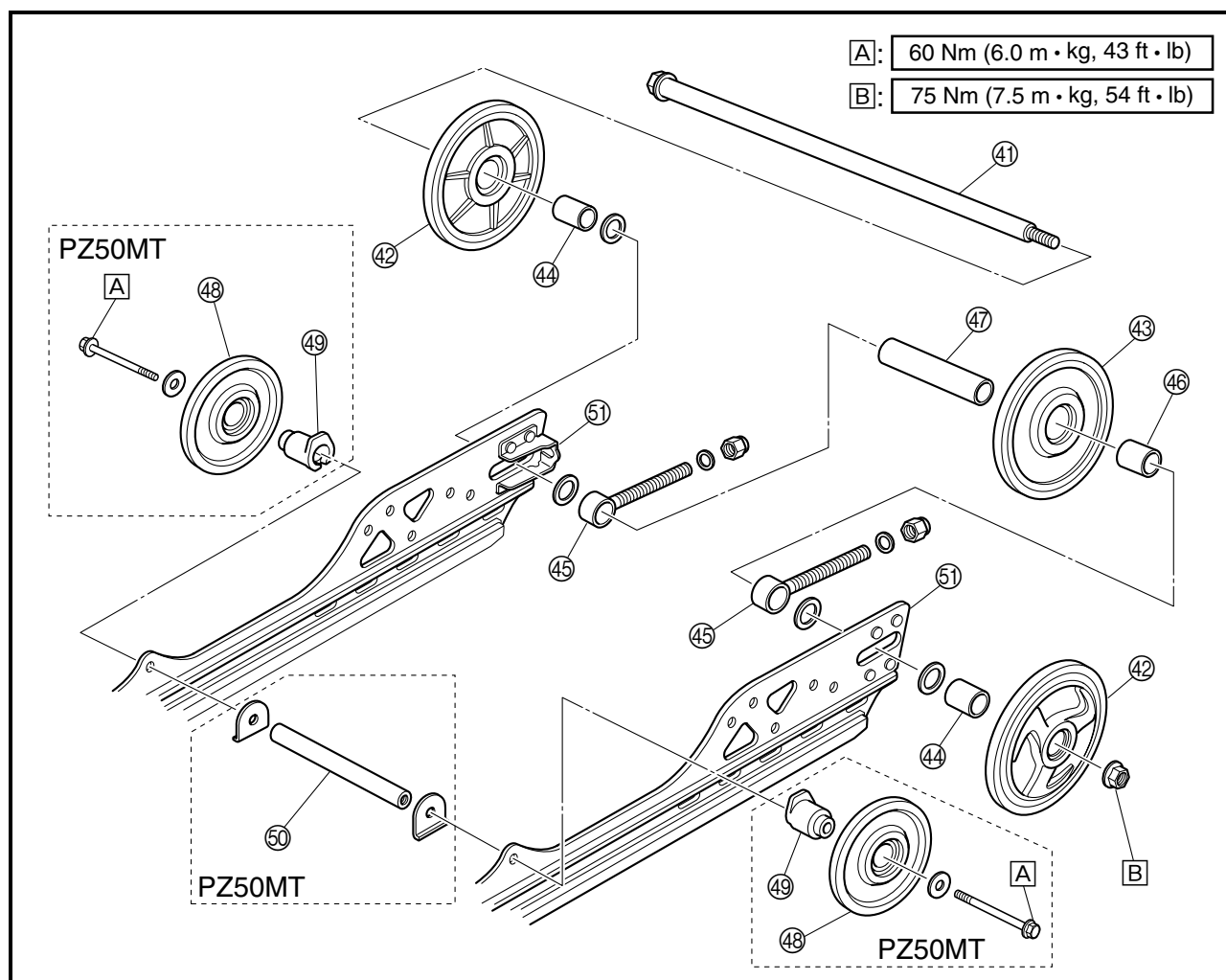
[B]: 49 Nm (4.9 m • kg, 35 ft • lb)

[C]: 60 Nm (6.0 m • kg, 43 ft • lb)

[D]: 72 Nm (7.2 m • kg, 52 ft • lb)

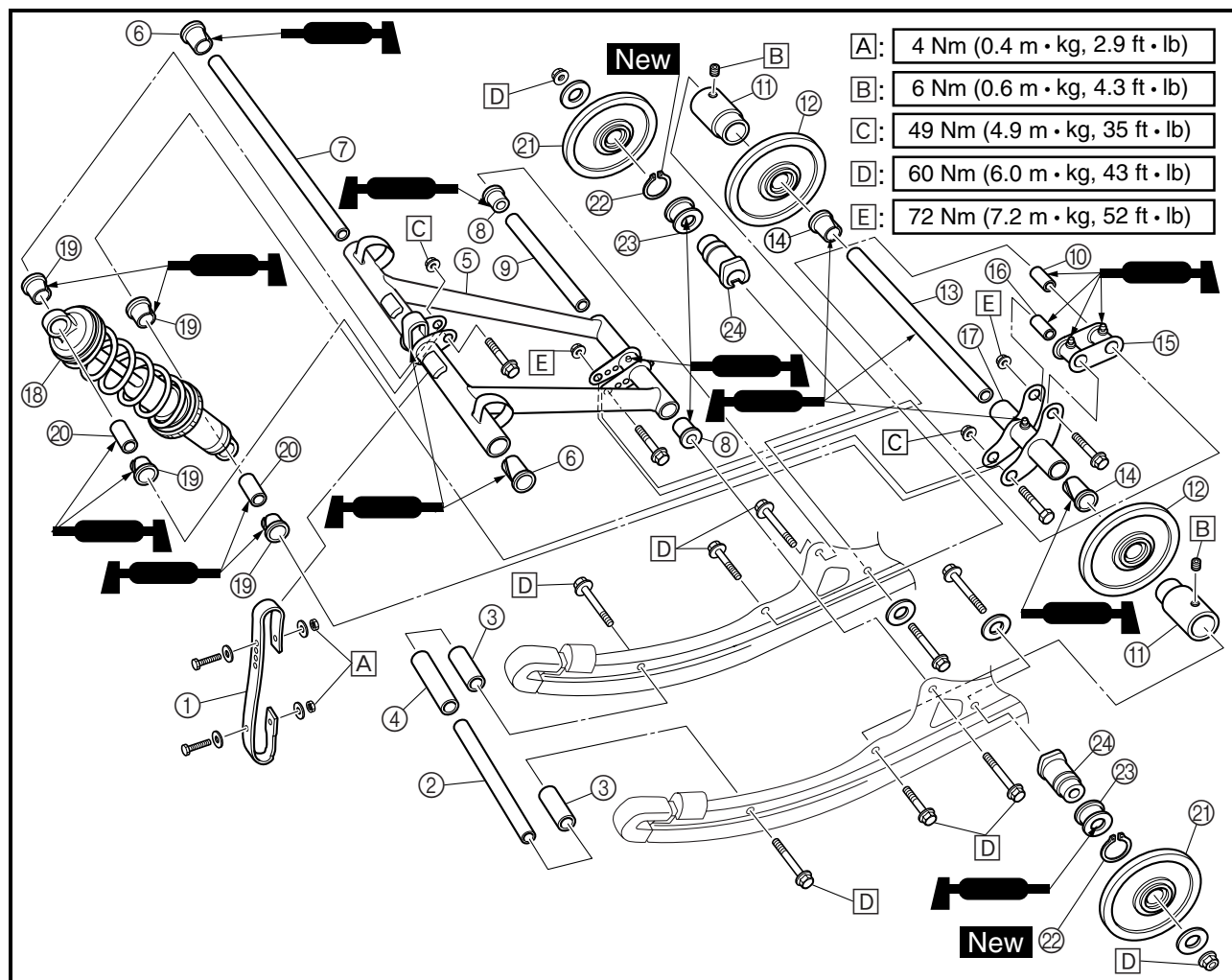


Order	Job name/Part name	Q'ty	Remarks
②7	Rear shock absorber	1	
②8	Collar	2	
②9	Rear pivot arm joint	2	
③0	Torsion spring	2	
③1	Rear pivot arm protector	2	
③2	Circlip	2	
③3	Adjuster	2	
③4	Rear pivot arm	1	
③5	Shaft	1	
③6	Guide wheel	2	
③7	Rear pivot arm bracket	1	
③8	Shaft	1	
③9	Collar	4	
④0	Stopper	4	

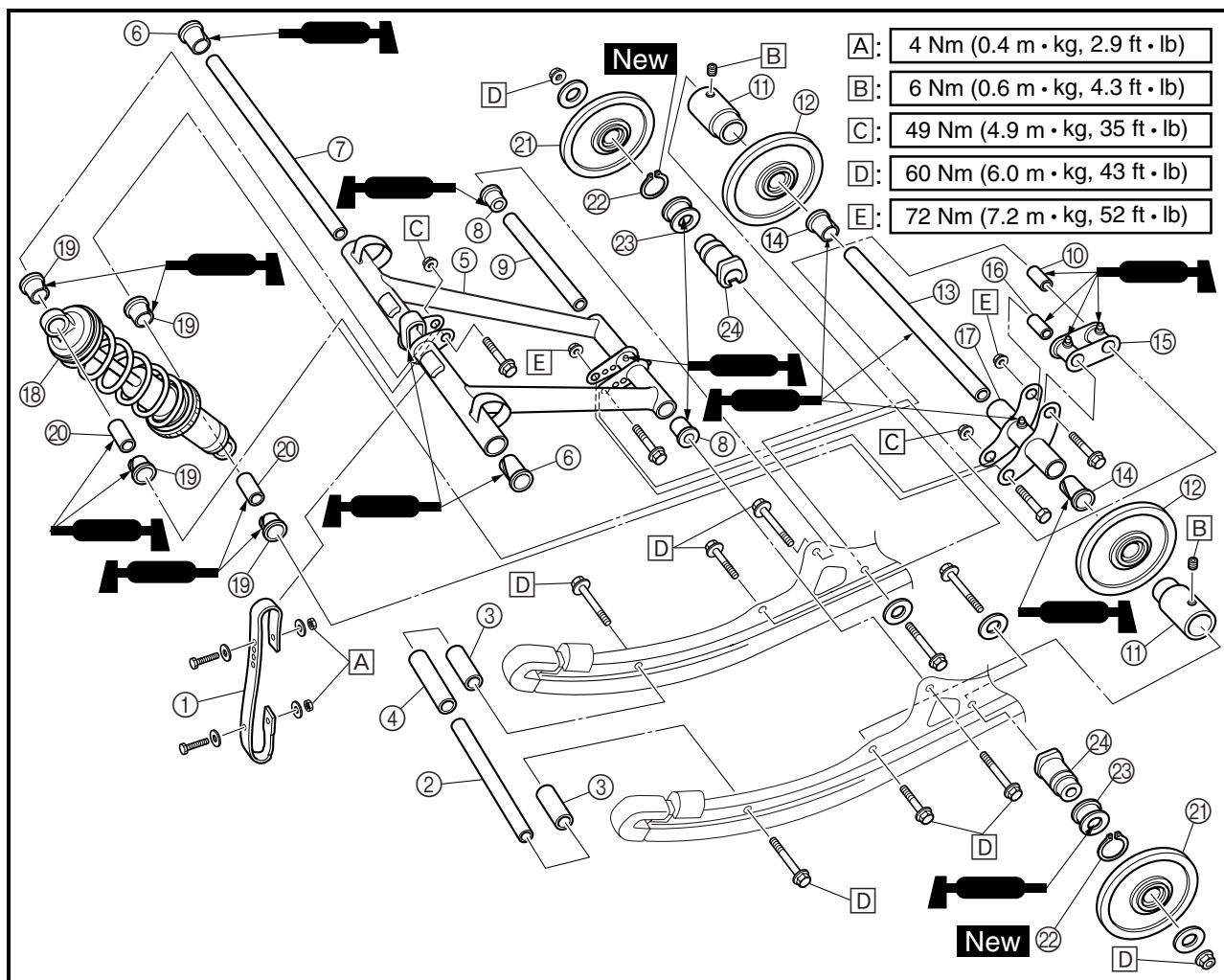


Order	Job name/Part name	Q'ty	Remarks
④①	Rear axle	1	For assembly, reverse the disassembly procedure.
④②	Guide wheel	2	
④③	Guide wheel	1	
④④	Collar	2	
④⑤	Tension adjuster	2	
④⑥	Collar	1	
④⑦	Collar	1	
④⑧	Suspension wheel	2	
④⑨	Wheel bracket	2	
⑤①	Sliding frame	2	

PZ50VT/PZ50MP



Order	Job name/Part name	Q'ty	Remarks
	Slide rail suspension disassembly		Remove the parts in the order listed below.
①	Stopper band	2	
②	Shaft	1	
③	Collar	2	
④	Collar	1	
⑤	Front pivot arm	1	
⑥	Bushing	2	
⑦	Shaft	1	
⑧	Collar	2	
⑨	Shaft	1	
⑩	Collar	1	
⑪	Wheel bracket	2	
⑫	Suspension wheel	2	
⑬	Shaft	1	

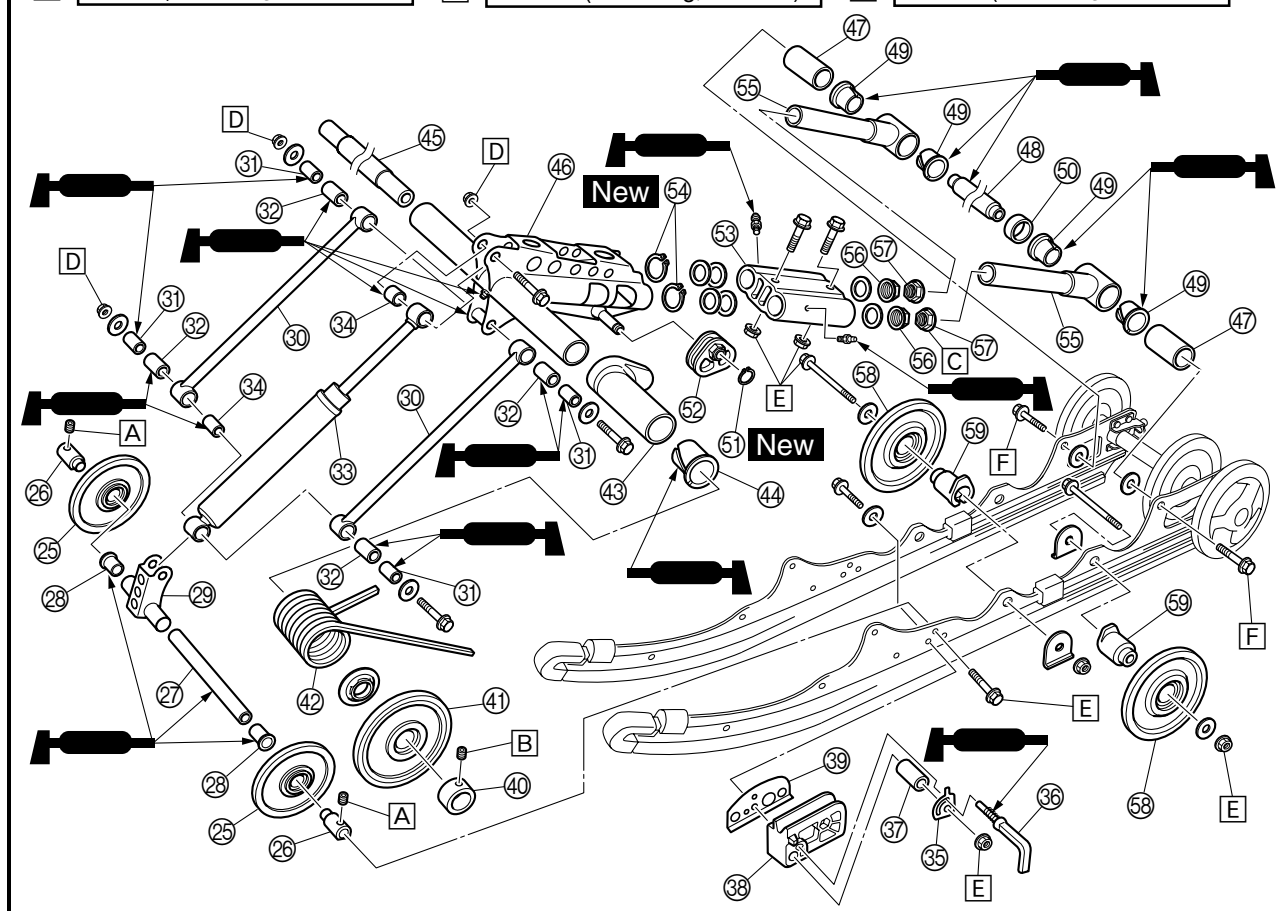


Order	Job name/Part name	Q'ty	Remarks
⑭	Bushing	2	NOTE: _____ Apply grease to the inner surface of each spring end guide. _____
⑮	Connecting arm	1	
⑯	Collar	1	
⑰	Front suspension bracket	1	
⑱	Front shock absorber	1	
⑲	Bushing	4	
⑳	Collar	2	
㉑	Suspension wheel	2	
㉒	Circlip	2	
㉓	Spring end guide	2	
㉔	Spring end guide bracket	2	

SLIDE RAIL SUSPENSION



A: 6 Nm (0.6 m • kg, 4.3 ft • lb)	C: 25 Nm (2.5 m • kg, 18 ft • lb)	E: 60 Nm (6.0 m • kg, 43 ft • lb)
B: 9 Nm (0.9 m • kg, 6.5 ft • lb)	D: 49 Nm (4.9 m • kg, 35 ft • lb)	F: 72 Nm (7.2 m • kg, 52 ft • lb)

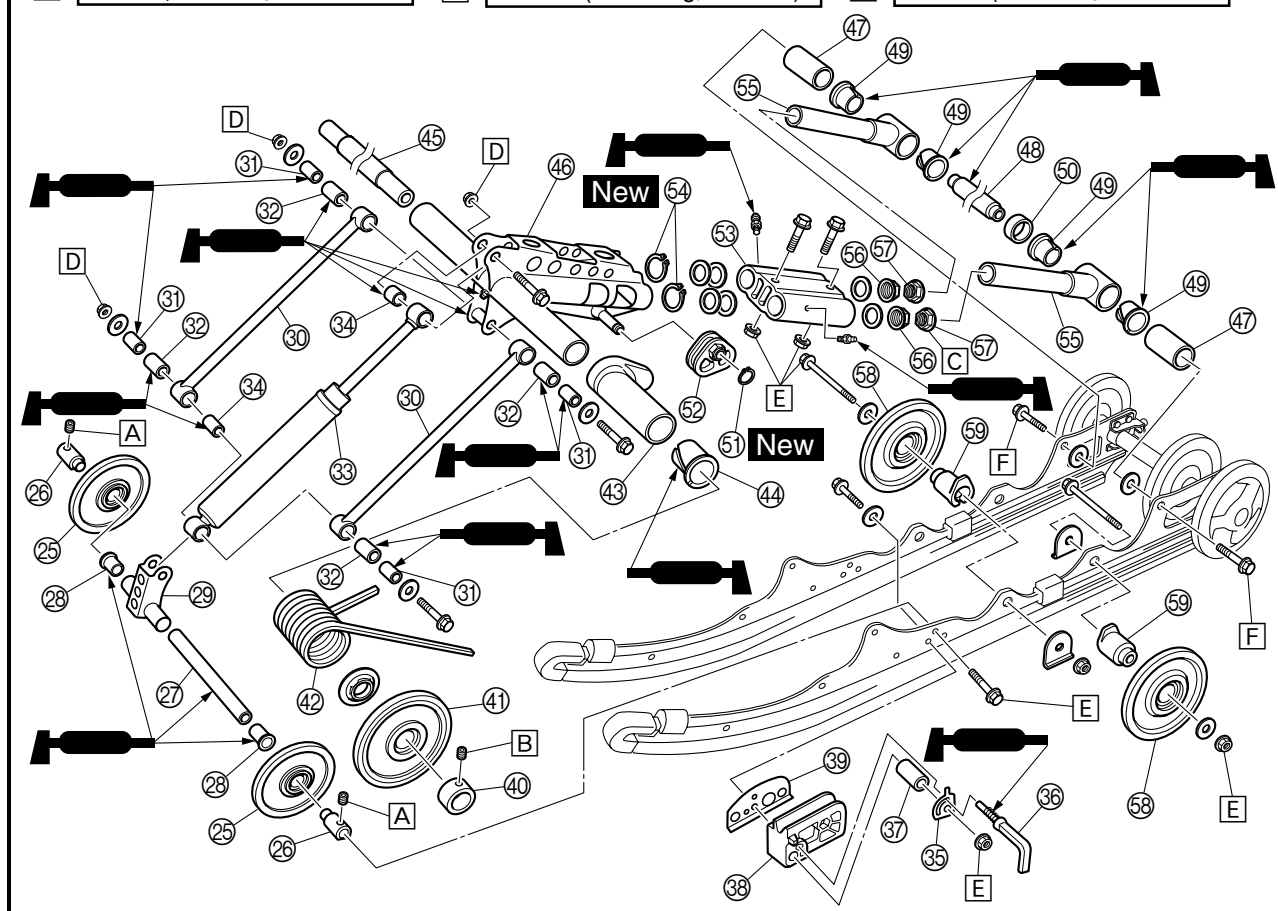


Order	Job name/Part name	Q'ty	Remarks
25	Suspension wheel	2	
26	Wheel bracket	2	
27	Shaft	1	
28	Bushing	2	
29	Rear suspension bracket	1	
30	Pull rod	2	
31	Collar	4	
32	Bushing	4	
33	Rear shock absorber	1	
34	Collar	2	
35	Lock lever guide plate	2	
36	Lock lever	2	
37	Collar	2	
38	2-up adjusting block	2	
39	2-up adjusting block plate	2	
40	Collar	2	
41	Guide wheel	2	
42	Torsion spring	2	

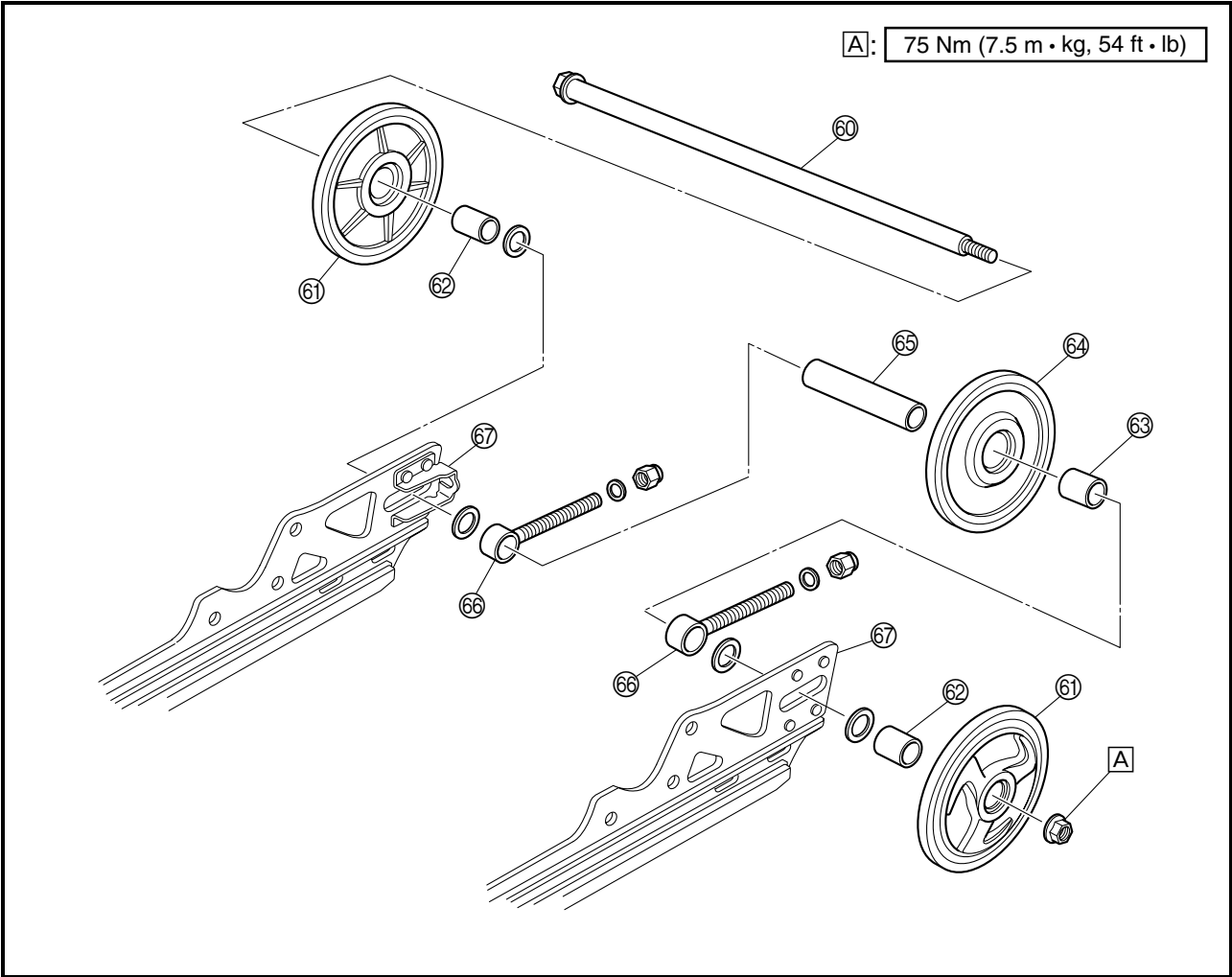
SLIDE RAIL SUSPENSION



A: 6 Nm (0.6 m • kg, 4.3 ft • lb)	C: 25 Nm (2.5 m • kg, 18 ft • lb)	E: 60 Nm (6.0 m • kg, 43 ft • lb)
B: 9 Nm (0.9 m • kg, 6.5 ft • lb)	D: 49 Nm (4.9 m • kg, 35 ft • lb)	F: 72 Nm (7.2 m • kg, 52 ft • lb)



Order	Job name/Part name	Q'ty	Remarks
43	Rear pivot arm protector	2	
44	Bushing	2	
45	Shaft	1	
46	Rear pivot arm	1	
47	Collar	2	
48	Shaft	1	
49	Bushing	4	
50	Collar	1	
51	Circlip	2	
52	Adjuster	2	
53	Control rod stopper	1	
54	Circlip	2	
55	Control rod	2	
56	Locknut	2	
57	Adjuster nut	2	
58	Suspension wheel	4	
59	Suspension wheel bracket	4	



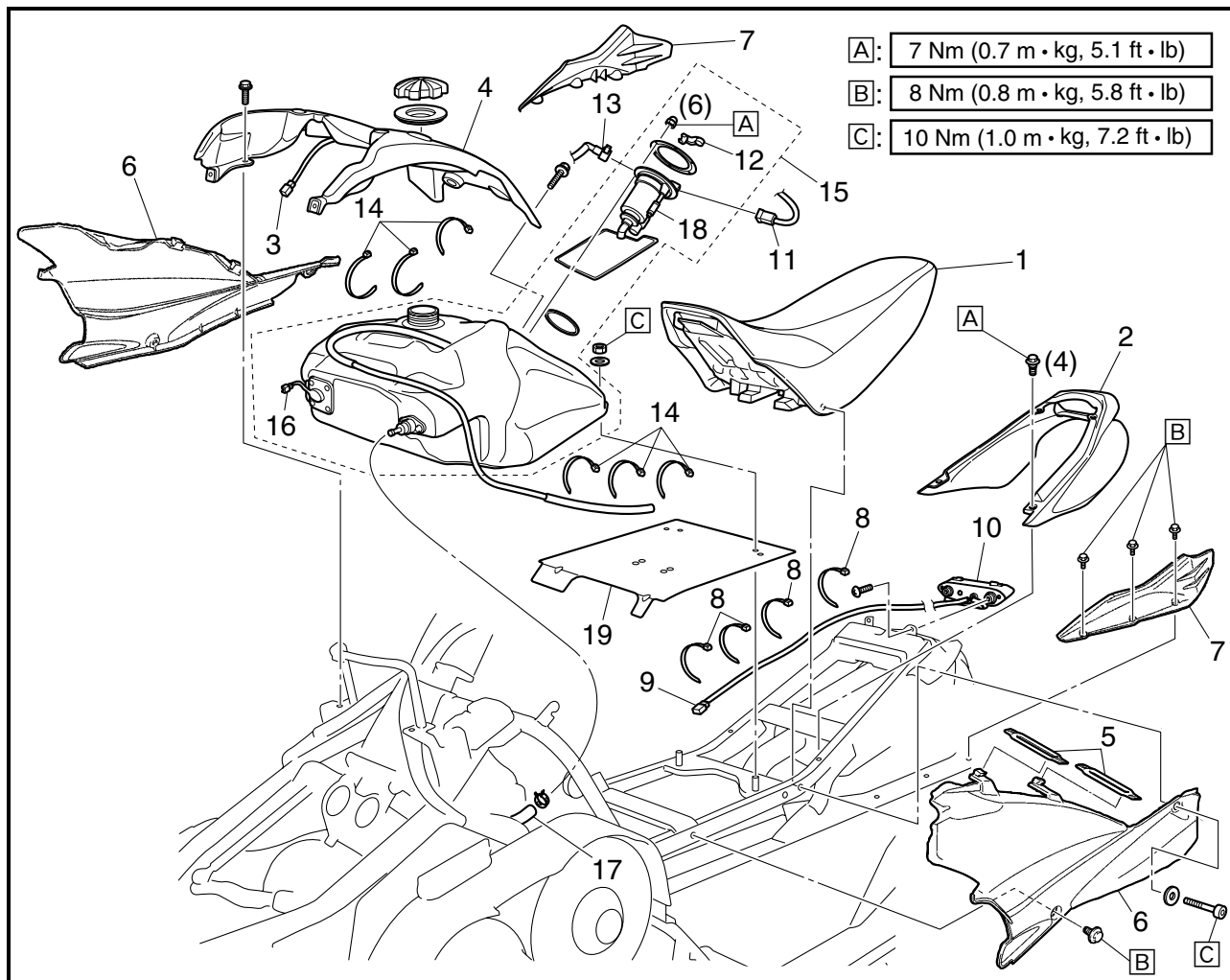
Order	Job name/Part name	Q'ty	Remarks
60	Rear axle	1	For assembly, reverse the disassembly procedure.
61	Guide wheel	2	
62	Collar	2	
63	Collar	1	
64	Guide wheel	1	
65	Collar	1	
66	Tension adjuster	2	
67	Sliding frame	2	



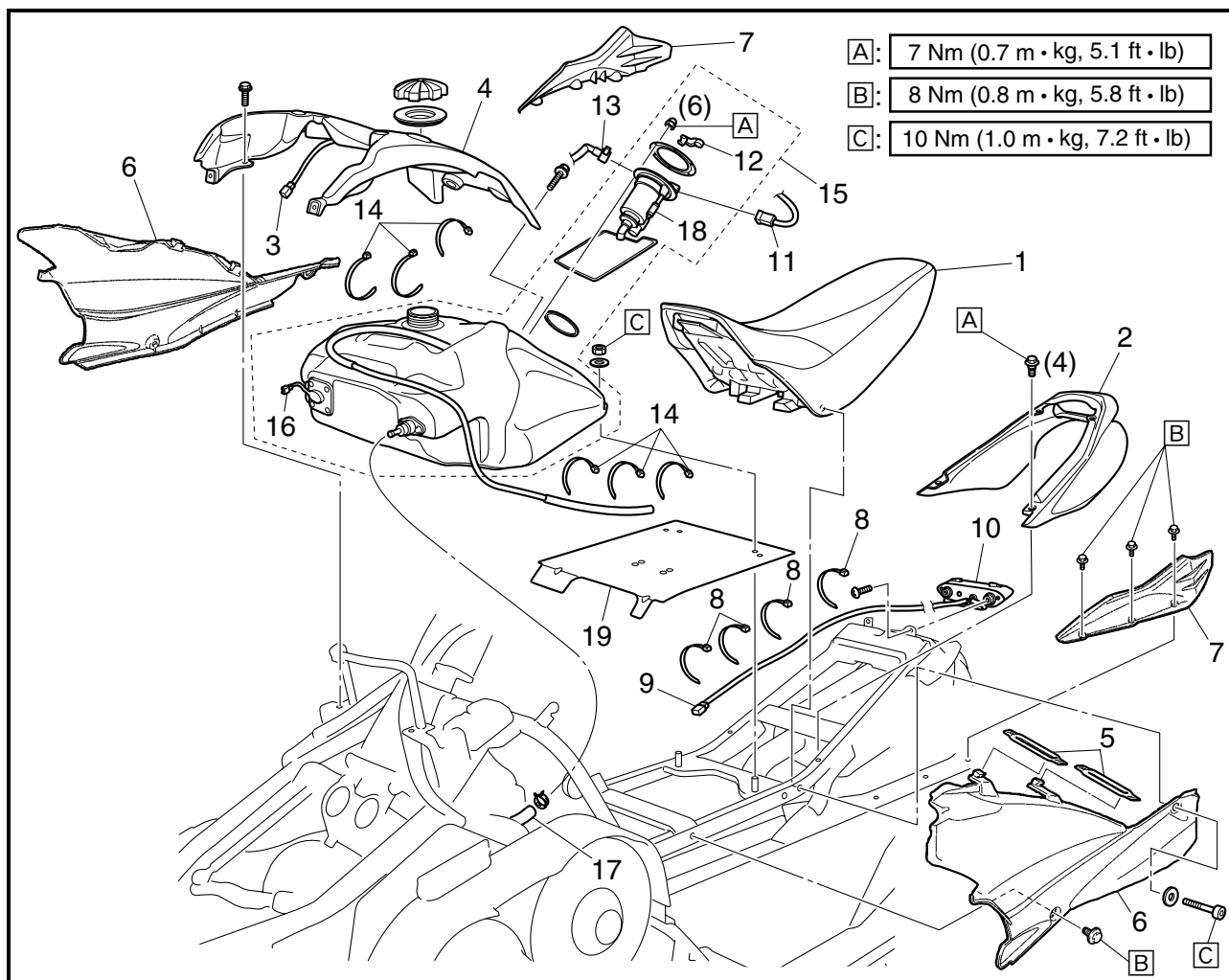
ENGINE

SEAT AND FUEL TANK

PZ50/PZ50GT/PZ50RT/PZ50MT



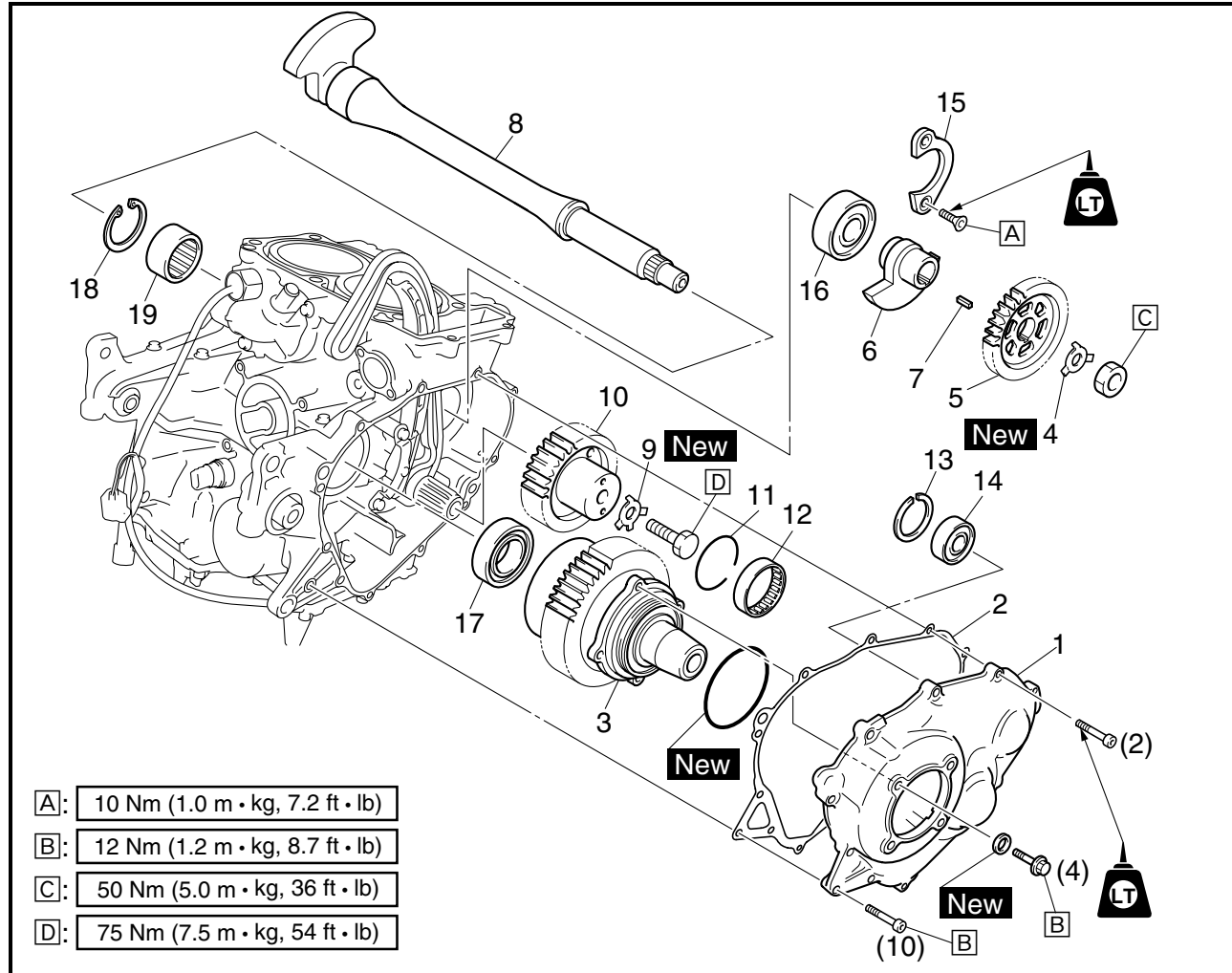
Order	Job name/Part name	Q'ty	Remarks
	Seat and fuel tank removal		Remove the parts in the order listed below.
1	Seat	1	
2	Rear cover	1	
3	Main switch coupler	1	Disconnect.
4	Fuel tank cover	1	
5	Fuel tank side cover band	2	
6	Fuel tank side cover (left and right)	2	
7	Rear side cover (left and right)	2	
8	Plastic band	4	
9	Tail/brake light coupler	1	Disconnect.
10	Tail/brake light assembly	1	
11	Fuel pump coupler	1	Disconnect.
12	Fuel hose connector holder	1	
13	Fuel hose	1	Disconnect.



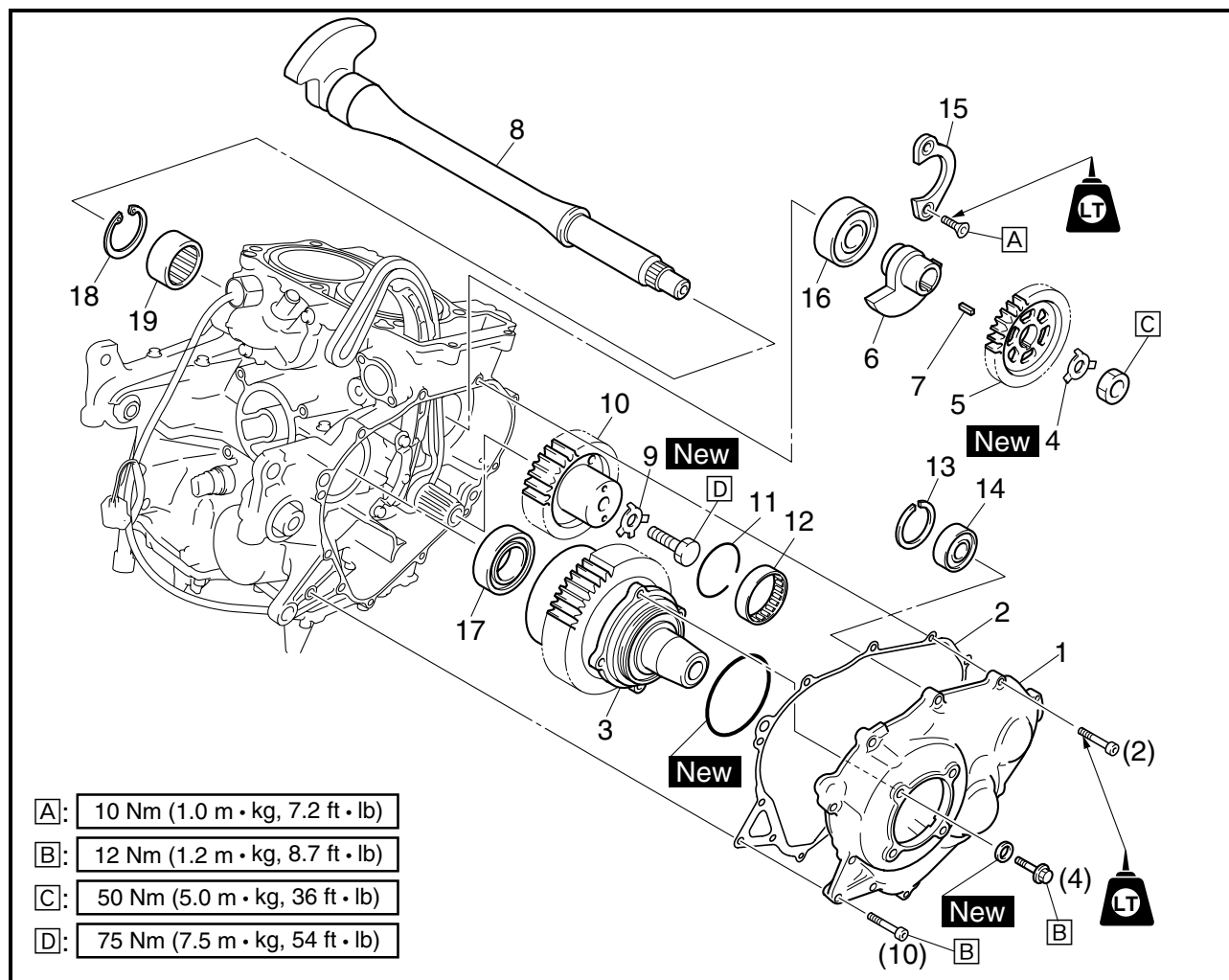
Order	Job name/Part name	Q'ty	Remarks
14	Plastic band	6	
15	Fuel tank assembly	1	
16	Fuel sender coupler	1	Disconnect.
17	Fuel hose	2	Disconnect.
18	Fuel pump	1	
19	Fuel tank lower plate	1	
For installation, reverse the removal procedure.			



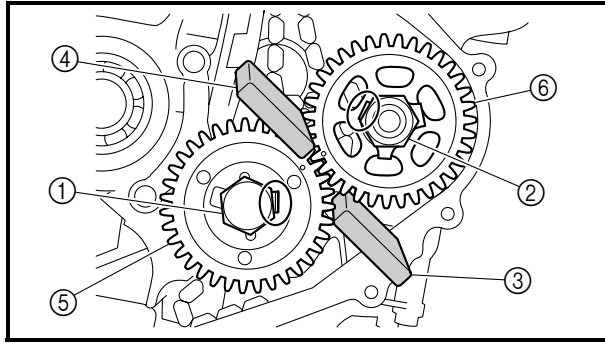
BALANCER



Order	Job name/Part name	Q'ty	Remarks
	Balancer shaft removal		Remove the parts in the order listed below.
	Engine		Refer to "ENGINE ASSEMBLY" in CHAPTER 5.
	Cylinder head		Refer to "CYLINDER HEAD" in CHAPTER 5.
	A.C. magneto rotor/starter clutch gear		Refer to "A.C. MAGNETO ROTOR AND STARTER CLUTCH" in CHAPTER 5.
1	Primary sheave drive shaft cover	1	
2	Gasket	1	
3	Primary sheave drive shaft assembly	1	
4	Lock washer	2	
5	Balancer shaft driven gear	1	
6	Balancer weight	1	
7	Straight key	1	
8	Balancer shaft	1	
9	Lock washer	1	
10	Balancer shaft drive gear	1	



Order	Job name/Part name	Q'ty	Remarks
11	Circlip	1	For installation, reverse the removal procedure.
12	Bearing	1	
13	Circlip	1	
14	Bearing	1	
15	Bearing retainer	1	
16	Bearing	1	
17	Bearing	1	
18	Circlip	1	
19	Bearing	1	



REMOVAL

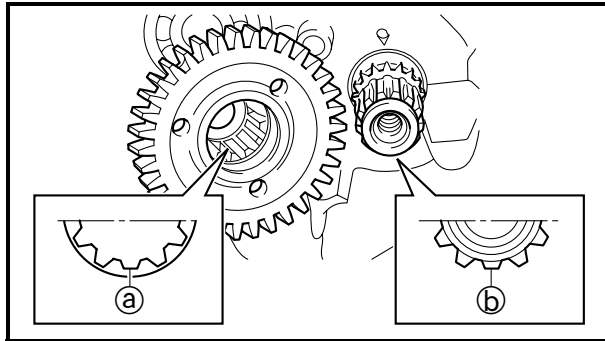
1. Straighten the lock washer tabs.
2. Loosen:
 - Balancer shaft drive gear bolt ①
 - Balancer shaft driven gear nut ②

CAUTION:

The balancer shaft drive gear bolt and balancer shaft driven gear nut has left-handed threads. To loosen the bolt and nut, turn it clockwise.

NOTE:

Place an aluminum plate ③ or ④ between the teeth of the balancer shaft drive gear ⑤ and balancer shaft driven gear ⑥.

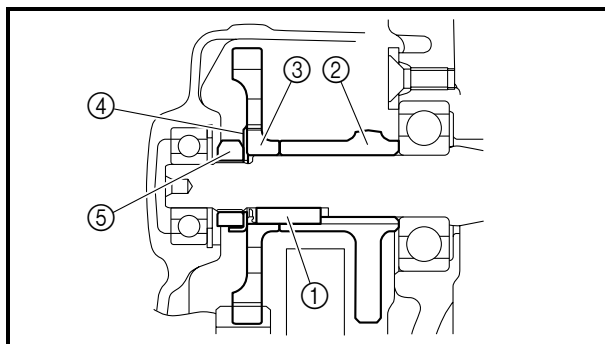


INSTALLATION

1. Install:
 - Balancer shaft drive gear
 - Lock washer
 - Balancer shaft drive gear bolt

NOTE:

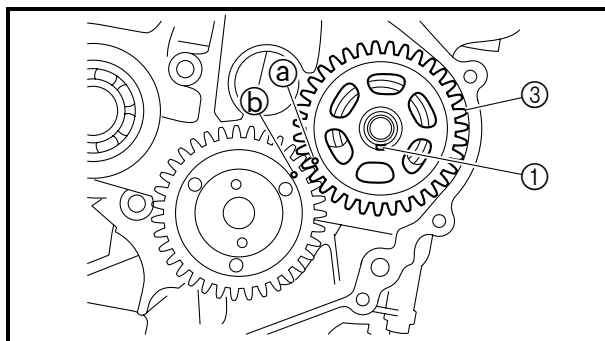
Align the shallow groove (a) in the balancer shaft drive gear with the low spline (b) of the crankshaft.



2. Install:
 - Straight key ①
 - Balancer weight ②
 - Balancer shaft driven gear ③
 - Lock washer ④
 - Balancer shaft driven gear nut ⑤
 - Balancer shaft drive gear bolt

NOTE:

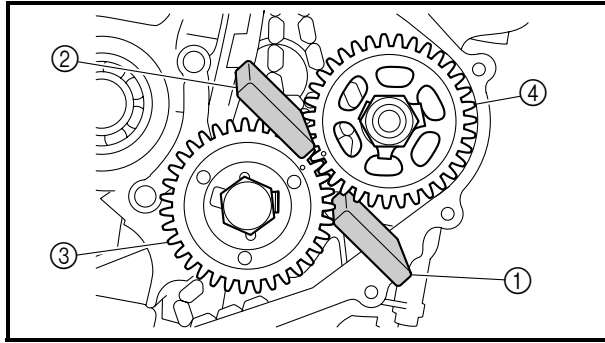
Align the punch mark (a) on the balancer shaft driven gear with the punch mark (b) on the balancer shaft drive gear.



3. Tighten:
 - Balancer shaft driven gear nut
 - Balancer shaft drive gear bolt



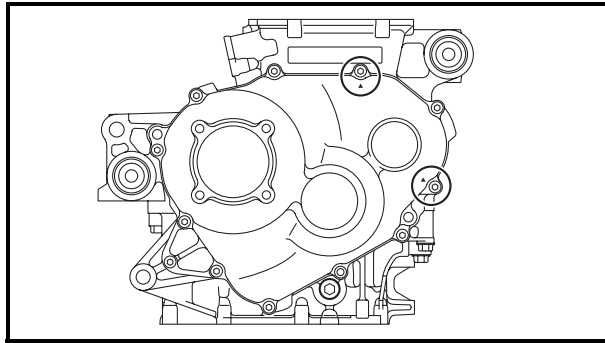
Balancer shaft driven gear nut:
50 Nm (5.0 m · kg, 36 ft · lb)
Balancer shaft drive gear bolt:
75 Nm (7.5 m · kg, 54 ft · lb)

**CAUTION:**

The balancer shaft driven gear nut and balancer shaft drive gear bolt has left-handed threads. Turn the retainer counterclockwise to tighten it.

NOTE:

Place an aluminum plate ① or ② between the teeth of the balancer shaft drive gear ③ and balancer shaft driven gear ④.



4. Tighten:

- Primary sheave drive shaft cover bolt

**Primary sheave drive shaft cover bolt:**

12 Nm (1.2 m · kg, 8.7 ft · lb)

LOCTITE®

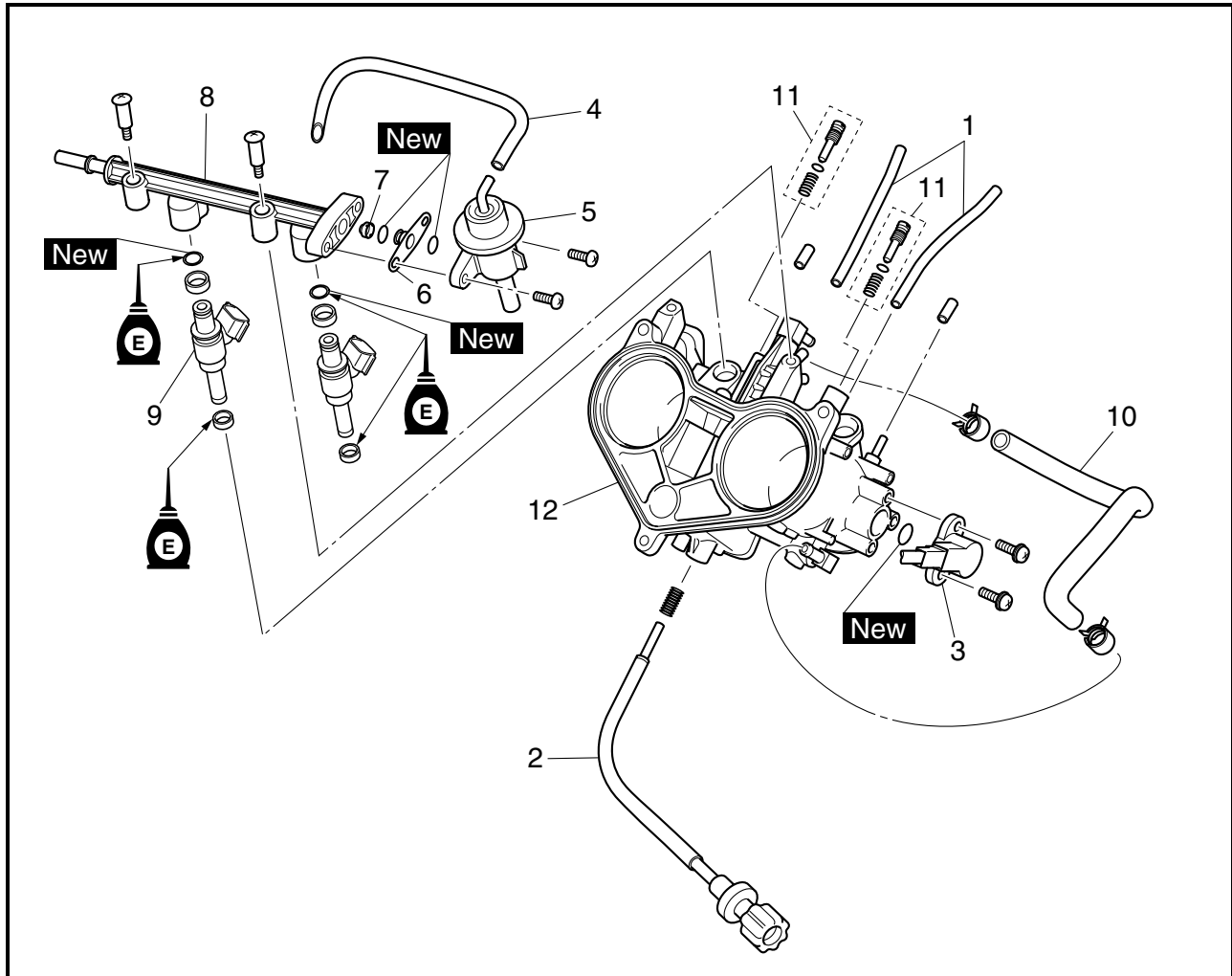
NOTE:

Apply LOCTITE® to the bolts (black) indicated by the “▲” marks on the primary sheave drive shaft cover.



FUEL INJECTION SYSTEM

THROTTLE BODY INJECTORS



Order	Job name/Part name	Q'ty	Remarks
	Injector removal		Remove the parts in the order listed below.
1	Negative pressure hose	1	
2	Idle adjusting screw	1	
3	Throttle position sensor	1	
4	Pressure regulator hose	1	
5	Pressure regulator	1	
6	Fuel strainer seat	1	
7	Fuel strainer	1	
8	Fuel rail	1	
9	Injector	4	
10	Throttle body heater hose	1	
11	Air screw	2	
12	Throttle body assembly	1	
			For installation, reverse the removal procedure.

FI	
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SPECIFICATIONS

GENERAL SPECIFICATIONS

Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Model code number:	8GC3 (PZ50) 8GK3 (PZ50GT "USA/Canada") 8GK4 (PZ50GT "Europe") 8GN3 (PZ50RT "USA/Canada") 8GN4 (PZ50RT "Europe") 8GP3 (PZ50MT "USA/Canada") 8GP4 (PZ50MT "Europe") 8GJ3 (PZ50VT "USA/Canada") 8GJ4 (PZ50VT "Europe") 8GR3 (PZ50MP "Canada") 8GR4 (PZ50MP "Europe")
Dimensions:	
Overall length	2,820 mm (111.0 in) (PZ50/PZ50GT/PZ50RT) 3,195 mm (125.8 in) (PZ50MT) 3,150 mm (124.0 in) (PZ50VT "USA/Canada") 3,160 mm (124.4 in) (PZ50VT "Europe"/PZ50MP)
Overall width	1,215 mm (47.8 in) (PZ50/PZ50GT/PZ50RT/PZ50VT "USA/Canada") 1,165 mm (45.9 in) (PZ50MT) 1,265 mm (49.8 in) (PZ50VT "Europe"/PZ50MP)
Overall height	1,190 mm (46.9 in) (PZ50/PZ50RT/PZ50MT) 1,340 mm (52.8 in) (PZ50GT) 1,380 mm (54.3 in) (PZ50VT/PZ50MP)
Weight:	
Dry weight	216 kg (476.2 lb) (PZ50) 222 kg (489.4 lb) (PZ50GT "USA/Canada"/PZ50RT "USA/Canada") 223 kg (491.6 lb) (PZ50GT "Europe"/PZ50RT "Europe") 234 kg (515.9 lb) (PZ50MT "USA/Canada") 235 kg (518.1 lb) (PZ50MT "Europe") 269 kg (593.0 lb) (PZ50VT "USA/Canada") 272 kg (599.7 lb) (PZ50VT "Europe") 263 kg (579.8 lb) (PZ50MP "Canada") 273 kg (601.9 lb) (PZ50MP "Europe")
Minimum turning radius:	
Clockwise	3.7 m (12.14 ft) (PZ50/PZ50GT/PZ50RT) 4.0 m (13.12 ft) (PZ50MT) 4.2 m (13.78 ft) (PZ50VT/PZ50MP)
Counterclockwise	3.4 m (11.16 ft) (PZ50/PZ50GT/PZ50RT) 4.2 m (13.78 ft) (PZ50MT) 3.9 m (12.80 ft) (PZ50VT/PZ50MP)



Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Engine: Engine type Cylinder type Displacement Bore × stroke Compression ratio Maximum horse power r/min Maximum torque r/min Vacuum pressure at engine idling speed Standard compression pressure (at sea level) Starting system	Liquid-cooled, 4-stroke, DOHC Backward-inclined parallel 2-cylinder 499 cm ³ (30.45 cu.in) 77.0 × 53.6 mm (3.03 × 2.11 in) 12.4 : 1 58.8 kw (80.0 PS)/11,250 r/min 51.0 Nm (5.2 kgf)/9,000 r/min 20.27 ~ 22.93 kPa (0.20 ~ 0.23 kg/cm ² , 2.88 ~ 3.26 psi) 900 kPa (9.0 kg/cm ² , 128.0 psi) at 400 r/min Electric starter
Lubrication system:	Dry sump
Engine oil: Type Recommended grade Oil capacity Periodic oil change With oil filter replacement Total amount Oil tank capacity	YAMALUBE 4-S (0W-30) or SAE 0W-30 (USA/Canada) SAE 10W-30 (Europe) API service SG type or higher, JASO standard MA 2.45 L (2.16 Imp qt, 2.59 US qt) 2.63 L (2.31 Imp qt, 2.78 US qt) 3.00 L (2.64 Imp qt, 3.17 US qt) 2.00 L (1.76 Imp qt, 2.11 US qt)
Oil filter: Oil filter type	Cartridge (paper)
Drive chain oil: Type Capacity	SAE 75W or 80W API GL-4 Gear oil 0.25 L (0.22 Imp qt, 0.26 US qt)
Coolant: Filler cap opening pressure Capacity	93.3 ~ 122.7 kPa (0.93 ~ 1.23 kg/cm ² , 13.2 ~ 17.5 psi) 3.60 L (3.17 Imp qt, 3.81 US qt) (PZ50/PZ50GT/PZ50RT/ PZ50MT) 3.70 L (3.26 Imp qt, 3.91 US qt) (PZ50VT/PZ50MP)
Fuel: Type Tank capacity	Premium unleaded gasoline Pump Octane (R + M)/2; 91 or higher (USA/Canada) Research Octane; 95 or higher (Europe) 26.7 L (5.9 Imp gal, 7.1 US gal) (PZ50/PZ50GT/PZ50RT/ PZ50MT) 32.9 L (7.2 Imp gal, 8.7 US gal) (PZ50VT "USA/Canada"/ PZ50MP "Canada") 36.0 L (7.9 Imp gal, 9.5 US gal) (PZ50VT "Europe"/ PZ50MP "Europe")
Throttle body: Type/Quantity Manufacture	TSK43 × 1 KEIHIN
Spark plug: Type Manufacture Gap	CR9EKB NGK 0.6 ~ 0.7 mm (0.024 ~ 0.028 in)



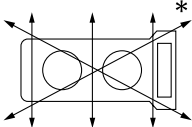
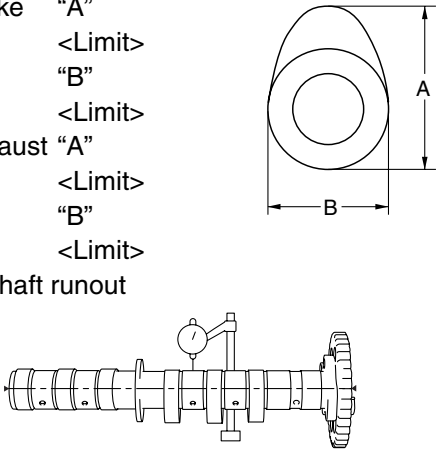
Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Transmission: Primary reduction system Primary reduction ratio Clutch type Secondary reduction system Secondary reduction ratio Reverse system Reverse gear ratio	V-Belt 3.80 ~ 0.95 : 1 Automatic centrifugal engagement Chain 2.28 (41/18) (PZ50/PZ50RT) 2.05 (41/20) (PZ50GT) 2.41 (41/17) (PZ50MT "USA/Canada") 2.16 (41/19) (PZ50MT "Europe") 2.37 (45/19) (PZ50VT "USA/Canada") 2.50 (45/18) (PZ50VT "Europe"/PZ50MP) No (PZ50) Yes (PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP) 2.73 (PZ50GT) 3.04 (PZ50RT) 3.21 (PZ50MT "USA/Canada") 2.88 (PZ50MT "Europe") 3.16 (PZ50VT "USA/Canada") 3.33 (PZ50VT "Europe"/PZ50MP)
Chassis: Frame type Caster Ski stance (center to center)	Monocoque 18.0° 1,080 mm (42.5 in) (PZ50/PZ50GT/PZ50RT/PZ50VT/PZ50MP) 980 mm (38.6 in) (PZ50MT)
Suspension: Front suspension type Rear suspension type	Double wishbone Slide rail suspension
Track: Track type Track width Length on ground Track deflection mm/100 N (10 kg, 22 lb)	Internal drive type 355.6 mm (14.00 in) (PZ50/PZ50GT/PZ50RT/PZ50MT) 381.0 mm (15.00 in) (PZ50VT) 406.4 mm (16.00 in) (PZ50MP) 769 mm (30.28 in) (PZ50/PZ50GT/PZ50RT) 1,084 mm (42.68 in) (PZ50MT) 985 mm (38.78 in) (PZ50VT/PZ50MP) 30 ~ 35 mm (1.18 ~ 1.38 in)
Brake: Brake type Operation method	Caliper type disc brake Handlebar, left hand operated
Electrical: Ignition system Generator system	T.C.I. A.C. magneto



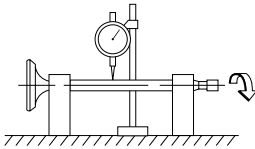
Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Headlight bulb type:	Halogen bulb
Bulb wattage × Quantity:	
Headlight	12 V, 60/55 W × 2
Tail/brake light	LED
Meter light	LED
Warning light	LED
High beam indicator light	LED
Low coolant temperature indicator light	LED
Knock control system indicator light	LED
Drive position indicator light	LED (PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP)
Reverse position indicator light	LED (PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP)



MAINTENANCE SPECIFICATIONS ENGINE

Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Cylinder head: Volume (with spark plug) <Warpage limit> 	13.82 ~ 14.62 cm³ (0.84 ~ 0.89 cu.in) 0.10 mm (0.0039 in) * Lines indicate straight edge measurement.
Cylinder: Material Bore size <Taper limit> <Out of round>	Aluminum alloy with dispersion coating 77.000 ~ 77.010 mm (3.0315 ~ 3.0319 in) 0.050 mm (0.0020 in) 0.050 mm (0.0020 in)
Camshaft: Drive system Camshaft cap inside diameter Camshaft journal diameter Camshaft-journal-to-camshaft-cap clearance Camshaft dimensions Intake "A" <Limit> "B" <Limit> Exhaust "A" <Limit> "B" <Limit> Camshaft runout 	Chain drive (left) 22.000 ~ 22.021 mm (0.8661 ~ 0.8670 in) 21.959 ~ 21.972 mm (0.8645 ~ 0.8650 in) 0.028 ~ 0.062 mm (0.0011 ~ 0.0024 in) 30.450 ~ 30.550 mm (1.1988 ~ 1.2028 in) 30.350 mm (1.1949 in) 22.610 ~ 22.710 mm (0.8902 ~ 0.8941 in) 22.510 mm (0.8862 in) 30.700 ~ 30.800 mm (1.2087 ~ 1.2126 in) 30.600 mm (1.2047 in) 22.593 ~ 22.693 mm (0.8895 ~ 0.8934 in) 22.493 mm (0.8856 in) 0.03 mm (0.0012 in)
Timing chain: Model/Number of links Tensioning system	98XRH2015/118 Automatic

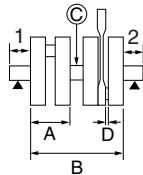


Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Valves, valve seats, valve guides:	
Valve clearance (cold)	
Intake	0.11 ~ 0.20 mm (0.0043 ~ 0.0079 in)
Exhaust	0.21 ~ 0.25 mm (0.0083 ~ 0.0098 in)
Valve dimensions	
Valve head diameter A	
Intake	23.4 ~ 23.6 mm (0.9213 ~ 0.9291 in)
Exhaust	24.9 ~ 25.1 mm (0.9803 ~ 0.9882 in)
Valve face width B	
Intake	1.76 ~ 2.90 mm (0.0693 ~ 0.1142 in)
Exhaust	1.76 ~ 2.90 mm (0.0693 ~ 0.1142 in)
Valve seat width C	
Intake	0.9 ~ 1.1 mm (0.0354 ~ 0.0433 in)
Exhaust	0.9 ~ 1.1 mm (0.0354 ~ 0.0433 in)
Valve margin thickness D	
Intake	0.5 ~ 0.9 mm (0.0197 ~ 0.0354 in)
Exhaust	0.5 ~ 0.9 mm (0.0197 ~ 0.0354 in)
Valve stem diameter	
Intake	3.975 ~ 3.990 mm (0.1565 ~ 0.1571 in)
<Limit>	3.945 mm (0.1553 in)
Exhaust	3.960 ~ 3.975 mm (0.1559 ~ 0.1565 in)
<Limit>	3.930 mm (0.1547 in)
Valve guide inside diameter	
Intake	4.000 ~ 4.012 mm (0.1575 ~ 0.1580 in)
<Limit>	4.050 mm (0.1594 in)
Exhaust	4.000 ~ 4.012 mm (0.1575 ~ 0.1580 in)
<Limit>	4.050 mm (0.1594 in)
Valve-stem-to-valve-guide clearance	
Intake	0.010 ~ 0.037 mm (0.0004 ~ 0.0015 in)
<Limit>	0.08 mm (0.0031 in)
Exhaust	0.025 ~ 0.052 mm (0.0010 ~ 0.0020 in)
<Limit>	0.10 mm (0.0039 in)
Valve stem runout limit	0.01 mm (0.0004 in)
	
Valve seat width	
Intake	0.9 ~ 1.1 mm (0.0354 ~ 0.0433 in)
<Limit>	1.6 mm (0.0630 in)
Exhaust	0.9 ~ 1.1 mm (0.0354 ~ 0.0433 in)
<Limit>	1.6 mm (0.0630 in)



Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Valve spring: Free length Intake <Limit> Exhaust <Limit> Installed length (valve closed) Intake Exhaust Compressed spring force (installed) Intake Exhaust Spring tilt Intake Exhaust Winding direction (top view) Intake Exhaust	36.51 mm (1.44 in) 34.68 mm (1.37 in) 37.92 mm (1.49 in) 36.02 mm (1.42 in) 30.13 mm (1.19 in) 30.50 mm (1.20 in) 120.7 ~ 138.9 N (12.3 ~ 14.2 kg, 27.1 ~ 31.2 lb) 150.6 ~ 173.2 N (15.4 ~ 17.7 kg, 33.9 ~ 38.9 lb) 2.5°/1.6 mm (0.06 in) 2.5°/1.7 mm (0.07 in) Clockwise Clockwise
Valve lifter: Valve lifter outside diameter Intake <Limit> Exhaust <Limit> Valve lifter hole inside diameter Intake <Limit> Exhaust <Limit>	19.982 ~ 19.988 mm (0.7867 ~ 0.7869 in) 19.957 mm (0.7857 in) 22.482 ~ 22.488 mm (0.8851 ~ 0.8854 in) 22.457 mm (0.8841 in) 20.000 ~ 20.018 mm (0.7874 ~ 0.7881 in) 20.048 mm (0.7893 in) 22.500 ~ 22.518 mm (0.8858 ~ 0.8865 in) 22.548 mm (0.8877 in)
Piston: Piston size (D) Measuring point (H) Piston to-cylinder clearance <Limit> Piston pin bore off set Off-set direction Piston pin bore inside diameter <Limit>	76.955 ~ 76.970 mm (3.0297 ~ 3.0303 in) 11.0 mm (0.43 in) 0.030 ~ 0.055 mm (0.0012 ~ 0.0022 in) 0.120 mm (0.0047 in) 0.5 mm (0.0197 in) Intake side 17.002 ~ 17.013 mm (0.6694 ~ 0.6698 in) 17.043 mm (0.6710 in)
Piston pin: Piston pin outside diameter <Limit> Piston pin length Piston pin to piston pin bore clearance <Limit>	16.991 ~ 17.000 mm (0.6689 ~ 0.6693 in) 16.971 mm (0.6681 in) 42.7 ~ 43.0 mm (1.6811 ~ 1.6929 in) 0.002 ~ 0.022 mm (0.0001 ~ 0.0009 in) 0.072 mm (0.0028 in)



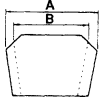
Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Piston ring: Sectional sketch Top ring Ring type Dimensions (B × T) 2nd ring Top ring (same or no) Ring type Dimensions (B × T) Oil ring Dimensions (B × T) End gap (installed) Top ring 2nd ring Oil ring Side clearance (installed) Top ring 2nd ring Oil ring Plating/coating Top ring 2nd ring	Barrel 0.90 × 2.75 mm (0.035 × 0.108 in) No Taper 0.80 × 2.75 mm (0.031 × 0.108 in) 1.50 × 2.25 mm (0.059 × 0.089 in) 0.15 ~ 0.25 mm (0.006 ~ 0.010 in) 0.30 ~ 0.45 mm (0.012 ~ 0.018 in) 0.10 ~ 0.40 mm (0.004 ~ 0.016 in) 0.030 ~ 0.065 mm (0.0012 ~ 0.0026 in) 0.020 ~ 0.055 mm (0.0008 ~ 0.0022 in) 0.040 ~ 0.160 mm (0.0016 ~ 0.0063 in) Chrome plated/parkerizing Ferox coating
Connecting rod: Small end diameter Big end diameter Crankshaft-pin-to-big-end-bearing clearance Bearing color code	17.005 ~ 17.018 mm (0.6695 ~ 0.6700 in) 37.000 ~ 37.016 mm (1.4567 ~ 1.4573 in) 0.034 ~ 0.058 mm (0.0013 ~ 0.0023 in) 0 = White 1 = Blue 2 = Black 3 = Brown
Crank pin: Crank pin outside diameter	33.976 ~ 34.000 (1.3376 ~ 1.3386 in)
Crankshaft:  Measuring point 1 Measuring point 2 Width A Width B Crankshaft runout C Big end side clearance D Crankshaft-journal-to-crankshaft-journal-bearing clearance Bearing color code	57.5 mm (2.26 in) 88.0 mm (3.46 in) 61.0 ~ 61.6 mm (2.402 ~ 2.425 in) 144.0 ~ 145.2 mm (5.67 ~ 5.72 in) 0.03 mm (0.0012 in) 0.160 ~ 0.262 mm (0.0063 ~ 0.0103 in) 0.020 ~ 0.044 mm (0.0008 ~ 0.0017 in) 0 = White 1 = Blue 2 = Black 3 = Brown 4 = Green



Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Throttle body: Type × Quantity Manufacturer I.D. mark Throttle valve (Th.V) Throttle cable free play Engine idle speed	TSK43 × 1 KEIHIN 8GC3 10 N503-89A00 (θ = 8°) 2.0 ~ 3.0 mm (0.08 ~ 0.12 in) 1,700 ~ 1,900 r/min
Fuel pump: Type Model/Manufacturer	Electrical 8GC/DENSO
Oil filter: Oil filter type Bypass valve opening pressure	Cartridge (paper) 78 ~ 118 kPa (0.78 ~ 1.18 kg/cm ² , 11.1 ~ 16.8 psi)
Oil pump: Oil pump type Inner-rotor-to-outer-rotor-tip clearance Outer-rotor-to-oil-pump-housing clearance Relief valve operating pressure Oil pressure (hot)	Trochoidal Less than 0.12 mm (0.005 in) 0.09 ~ 0.15 mm (0.004 ~ 0.006 in) 430 ~ 550 kPa (4.3 ~ 5.5 kg/cm ² , 61.1 ~ 78.2 psi) 50 kPa (0.5 kg/cm ² , 7.11 psi) at 1,500 r/min
Cooling system: Filler cap opening pressure Thermostat opening temperature Valve lift Water pump type Coolant type Coolant mixing ratio (coolant: water) Capacity Max. impeller shaft tilt	93.3 ~ 122.7 kPa (0.93 ~ 1.23 kg/cm ² , 13.2 ~ 17.5 psi) 80.0 ~ 84.0 °C (176.0 ~ 183.2 °F) 7.0 mm/95.0 °C (0.28 in/203.0 °F) Single-suction centrifugal pump (Impeller type) High quality silicate-free ethylene glycol antifreeze containing corrosion inhibitors 3 : 2 (60% : 40%) 3.60 L (3.17 Imp qt, 3.81 US qt) (PZ50/PZ50GT/PZ50RT/PZ50MT) 3.70 L (3.26 Imp qt, 3.91 US qt) (PZ50VT/PZ50MP) 0.15 mm (0.0059 in)



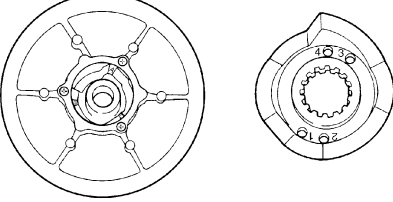
POWER TRAIN

Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Transmission: Type Range of ratio Engagement speed r/min Shift r/min Sheave distance Sheave offset Secondary sheave free play (clearance) V-belt height (standard)	V-belt automatic 3.80 ~ 0.95 : 1 3,700 ~ 4,100 r/min (PZ50/PZ50GT/PZ50RT) 4,100 ~ 4,500 r/min (PZ50MT "USA/Canada") 3,900 ~ 4,300 r/min (PZ50MT "Europe") 3,300 ~ 3,700 r/min (PZ50VT "USA/Canada") 2,900 ~ 3,300 r/min (PZ50VT "Europe"/PZ50MP) 10,800 ~ 11,800 r/min 267 ~ 270 mm (10.51 ~ 10.63 in) 14.5 ~ 17.5 mm (0.57 ~ 0.69 in) 1.0 ~ 2.0 mm (0.04 ~ 0.08 in) -0.5 ~ 1.5 mm (-0.02 ~ 0.06 in)
V-belt: Part number/Manufacturer Circumference Width "A" Wear limit "B"	8GS-17641-00/MITSUBOSHI 1,132 ~ 1,138 mm (44.6 ~ 44.8 in) 34.1 mm (1.34 in) 32.5 mm (1.28 in)
	
Primary sheave spring: Part number Color code Outside diameter Wire diameter Preload Spring rate Number of coils	90501-606G9 (PZ50/PZ50GT/PZ50RT) 90501-605G7 (PZ50MT) 90501-556G7 (PZ50VT "USA/Canada") 90501-526G4 (PZ50VT "Europe"/PZ50MP) Pink-Blue-Pink (PZ50/PZ50GT/PZ50RT) Green-Yellow-Green (PZ50MT) Yellow-Blue-Yellow (PZ50VT "USA/Canada") Blue-Gold-Blue (PZ50VT "Europe"/PZ50MP) 60.0 mm (2.36 in) 6.0 mm (0.236 in) (PZ50/PZ50GT/PZ50RT/PZ50MT) 5.5 mm (0.217 in) (PZ50VT "USA/Canada") 5.2 mm (0.205 in) (PZ50VT "Europe"/PZ50MP) 196 N (20.0 kg, 44.1 lb) (PZ50/PZ50GT/PZ50RT/PZ50VT "USA/Canada") 235 N (24.0 kg, 52.9 lb) (PZ50MT) 147 N (15.0 kg, 33.1 lb) (PZ50VT "Europe"/PZ50MP) 29.4 N/mm (3.00 kg/mm, 168 lb/in) (PZ50/PZ50GT/PZ50RT) 26.9 N/mm (2.74 kg/mm, 153 lb/in) (PZ50MT) 24.5 N/mm (2.50 kg/mm, 140 lb/in) (PZ50VT "USA/Canada") 19.6 N/mm (2.00 kg/mm, 112 lb/in) (PZ50VT "Europe"/PZ50MP) 4.86 (PZ50/PZ50GT/PZ50RT) 5.00 (PZ50MT) 4.36 (PZ50VT "USA/Canada") 4.32 (PZ50VT "Europe"/PZ50MP)



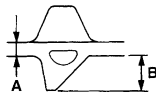
Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Free length	72.1 mm (2.84 in) (PZ50/PZ50GT/PZ50RT) 74.1 mm (2.92 in) (PZ50MT) 73.4 mm (2.89 in) (PZ50VT "USA/Canada") 72.9 mm (2.87 in) (PZ50VT "Europe"/PZ50MP)
Set length	65.4 mm (2.57 in)
Primary sheave weight arm: Part number (with bush)	8GC-17605-00 (PZ50/PZ50GT/PZ50RT/PZ50VT/PZ50MP) 8DN-17605-30 (PZ50MT)
Weight (without bush and rivets)	47.28 g (1.669 oz) (PZ50/PZ50GT/PZ50RT/PZ50VT/ PZ50MP) 39.76 g (1.404 oz) (PZ50MT)
Additional weight type	Rivet
Rivet:	
Outer	
Part number	90261-06019 (PZ50/PZ50GT/PZ50RT) 90261-06015 (PZ50MT "USA/Canada") 90261-06034 (PZ50MT "Europe") 90261-06033 (PZ50VT/PZ50MP)
Material	Steel
Size	13.3 mm (0.524 in) (PZ50/PZ50GT/PZ50RT) 10.3 mm (0.406 in) (PZ50MT "USA/Canada") 13.9 mm (0.547 in) (PZ50MT "Europe") 17.2 mm (0.677 in) (PZ50VT/PZ50MP)
Quantity	3 pcs
Hole quantity	3 pcs
Center	None (PZ50MT)
Part number	90261-06015 (PZ50/PZ50GT/PZ50RT) 90261-06033 (PZ50VT/PZ50MP)
Material	Steel
Size	10.3 mm (0.406 in) (PZ50/PZ50GT/PZ50RT) 17.2 mm (0.677 in) (PZ50VT/PZ50MP)
Quantity	3 pcs
Hole quantity	3 pcs
Inner	None (PZ50MT "USA/Canada")
Part number	90261-06015 (PZ50/PZ50GT/PZ50RT) 90261-06034 (PZ50MT "Europe"/PZ50VT "USA/Canada") 90261-06033 (PZ50VT "Europe"/PZ50MP)
Material	Steel
Size	10.3 mm (0.406 in) (PZ50/PZ50GT/PZ50RT) 13.9 mm (0.547 in) (PZ50MT "Europe"/PZ50VT "USA/ Canada") 17.2 mm (0.677 in) (PZ50VT "Europe"/PZ50MP)
Quantity	3 pcs
Hole quantity	3 pcs



Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Secondary sheave spring: Part number Color code Outside diameter Wire diameter Hole position Sheave side-spring seat side (twist angle)  Spring rate Compression Torsion Number of coils Free length Torque cam angle	90508-55007 (PZ50/PZ50GT/PZ50RT/PZ50MT) 90508-58007 (PZ50VT/PZ50MP) Red (PZ50/PZ50GT/PZ50RT/PZ50MT) Blue (PZ50VT/PZ50MP) 66.0 mm (2.598 in) 5.5 mm (0.217 in) (PZ50/PZ50GT/PZ50RT/PZ50MT) 5.8 mm (0.228 in) (PZ50VT/PZ50MP) A-1 (45°) (PZ50/PZ50GT/PZ50RT) B-1 (55°) (PZ50MT) A-1 (50°) (PZ50VT/PZ50MP) 10.58 N/mm (1.08 kg/mm, 60.41 lb/in) (PZ50/PZ50GT/PZ50RT/PZ50MT) 11.33 N/mm (1.16 kg/mm, 64.69 lb/in) (PZ50VT/PZ50MP) 9,131 N · mm/rad (931 kg · mm/rad, 52,137 lb · in/rad) (PZ50/PZ50GT/PZ50RT/PZ50MT) 10,098 N · mm/rad (1,030 kg · mm/rad, 57,659 lb · in/rad) (PZ50VT/PZ50MP) 5.33 (PZ50/PZ50GT/PZ50RT/PZ50MT) 5.99 (PZ50VT/PZ50MP) 85 mm (3.35 in) 39° (PZ50/PZ50GT/PZ50RT) 37° (PZ50MT/PZ50VT/PZ50MP)
Drive chain: Type Number of links Secondary reduction ratio Maximum 14 link drive chain section length <Limit>	Borg Warner Morse TEC 23RH302.5-80ASM (PZ50/PZ50GT/PZ50RT/PZ50MT) Borg Warner Morse TEC 23RH302.5-82ASM (PZ50VT/PZ50MP) 80L (PZ50/PZ50GT/PZ50RT/PZ50MT) 82L (PZ50VT/PZ50MP) 2.28 (41/18) (PZ50/PZ50RT) 2.05 (41/20) (PZ50GT) 2.41 (41/17) (PZ50MT “USA/Canada”) 2.16 (41/19) (PZ50MT “Europe”) 2.37 (45/19) (PZ50VT “USA/Canada”) 2.50 (45/18) (PZ50VT “Europe”/PZ50MP) 133.35 mm (5.25 in) 137.35 mm (5.41 in)



Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Track: Part number	8GK-47110-00 (PZ50/PZ50RT) 8GN-47110-00 (PZ50GT) 8GP-47110-00 (PZ50MT) 8ET-47110-10 (PZ50VT) 8GR-47110-00 (PZ50MP)
Width	355.6 mm (14.0 in) (PZ50/PZ50GT/PZ50RT/PZ50MT) 381.0 mm (15.0 in) (PZ50VT) 406.4 mm (16.0 in) (PZ50MP)
Length	3,072.4 mm (120.96 in) (PZ50/PZ50GT/PZ50RT) 3,648.5 mm (143.64 in) (PZ50MT/PZ50VT/PZ50MP)
Pitch	64.0 mm (2.52 in)
Number of links	48 (PZ50/PZ50GT/PZ50RT) 57 (PZ50MT/PZ50VT/PZ50MP)
Thickness "A"	5.1 mm (0.20 in) (PZ50/PZ50GT/PZ50RT/PZ50VT/ PZ50MP)
Height "B"	5.5 mm (0.22 in) (PZ50MT) 25.4 mm (1.00 in) (PZ50/PZ50GT/PZ50RT) 50.8 mm (2.00 in) (PZ50MT) 31.8 mm (1.25 in) (PZ50VT/PZ50MP)
Track deflection at 100 N (10 kg, 22 lb)	30 ~ 35 mm (1.18 ~ 1.38 in)
Slide rail suspension (rear suspension): Front travel	221.0 mm (8.70 in) (PZ50/PZ50GT/PZ50RT) 205.0 mm (8.07 in) (PZ50MT) 184.0 mm (7.24 in) (PZ50VT) 216.0 mm (8.50 in) (PZ50MP)
Rear travel	412.0 mm (16.22 in) (PZ50/PZ50GT/PZ50RT) 364.0 mm (14.33 in) (PZ50MT) 292.0 mm (11.50 in) (PZ50VT) 313.0 mm (12.32 in) (PZ50MP)
Suspension spring rate Front	40.00 N/mm (4.08 kg/mm, 228.40 lb/in) (PZ50/PZ50GT/ PZ50RT "Europe") 33.00 N/mm (3.36 kg/mm, 188.43 lb/in) (PZ50RT "USA/ Canada") 22.00 N/mm (2.24 kg/mm, 125.62 lb/in) (PZ50MT "USA/ Canada") 29.40 N/mm (3.00 kg/mm, 167.87 lb/in) (PZ50MT "Europe") 34.00 N/mm (3.47 kg/mm, 194.14 lb/in) (PZ50VT "USA/ Canada") 31.00 N/mm (3.16 kg/mm, 177.01 lb/in) (PZ50VT "Europe"/ PZ50MP)
Rear	2,500 N · mm/deg (254.9 kg · mm/deg, 14,274 lb · in/deg) (PZ50/PZ50RT/PZ50MP) 2,100 N · mm/deg (214.1 kg · mm/deg, 11,991 lb · in/deg) (PZ50GT) 1,700 N · mm/deg (173.3 kg · mm/deg, 9,707 lb · in/deg) (PZ50MT) 3,000 N · mm/deg (305.9 kg · mm/deg, 17,130 lb · in/deg) (PZ50VT)





Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Suspension wire diameter	
Front	8.8 mm (0.346 in) (PZ50/PZ50GT "Europe"/PZ50RT "Europe") 9.0 mm (0.354 in) (PZ50GT "USA/Canada") 8.2 mm (0.323 in) (PZ50RT "USA/Canada"/PZ50VT "Europe"/PZ50MP) 7.5 mm (0.295 in) (PZ50MT "USA/Canada") 8.0 mm (0.315 in) (PZ50MT "Europe") 8.5 mm (0.335 in) (PZ50VT "USA/Canada")
Rear	11.2 mm (0.441 in) (PZ50/PZ50RT/PZ50MP) 10.9 mm (0.429 in) (PZ50GT) 10.3 mm (0.406 in) (PZ50MT) 11.5 mm (0.453 in) (PZ50VT)
Shock absorber: Damping force	
Front	
Extension	830.0 N/0.3 m/s (84.6 kg/0.3 m/s, 186.6 lb/0.3 m/s) (PZ50) 870.0 N/0.3 m/s (88.7 kg/0.3 m/s, 195.6 lb/0.3 m/s) (PZ50GT/PZ50VT "Europe"/PZ50MP) 920.0 N/0.3 m/s (93.8 kg/0.3 m/s, 206.8 lb/0.3 m/s) (PZ50RT "USA/Canada") 1,690.0 N/0.3 m/s (172.3 kg/0.3 m/s, 379.9 lb/0.3 m/s) (PZ50RT "Europe") 610.0 N/0.3 m/s (62.2 kg/0.3 m/s, 137.1 lb/0.3 m/s) (PZ50MT "USA/Canada") 1,600.0 N/0.3 m/s (163.1 kg/0.3 m/s, 359.7 lb/0.3 m/s) (PZ50MT "Europe") 770.0 N/0.3 m/s (78.5 kg/0.3 m/s, 173.1 lb/0.3 m/s) (PZ50VT "USA/Canada")
Compression	690.0 N/0.3 m/s (70.4 kg/0.3 m/s, 155.1 lb/0.3 m/s) (PZ50) 640.0 N/0.3 m/s (65.3 kg/0.3 m/s, 143.9 lb/0.3 m/s) (PZ50GT/PZ50MP) 680.0 N/0.3 m/s (69.3 kg/0.3 m/s, 152.9 lb/0.3 m/s) (PZ50RT "USA/Canada") 1,030.0 N/0.3 m/s (105.0 kg/0.3 m/s, 231.5 lb/0.3 m/s) (PZ50RT "Europe") 710.0 N/0.3 m/s (72.4 kg/0.3 m/s, 159.6 lb/0.3 m/s) (PZ50MT "USA/Canada") 1,550.0 N/0.3 m/s (158.1 kg/0.3 m/s, 348.4 lb/0.3 m/s) (PZ50MT "Europe") 800.0 N/0.3 m/s (81.6 kg/0.3 m/s, 179.8 lb/0.3 m/s) (PZ50VT "USA/Canada") 720.0 N/0.3 m/s (73.4 kg/0.3 m/s, 161.9 lb/0.3 m/s)



Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Rear Extension	3,170.0 N/0.3 m/s (323.2 kg/0.3 m/s, 712.6 lb/0.3 m/s) (PZ50) 1,450.0 N/0.3 m/s (147.9 kg/0.3 m/s, 326.0 lb/0.3 m/s) (PZ50GT) 2,690.0 N/0.3 m/s (247.3 kg/0.3 m/s, 604.7 lb/0.3 m/s) (PZ50RT "USA/Canada") 2,470.0 N/0.3 m/s (251.9 kg/0.3 m/s, 555.3 lb/0.3 m/s) (PZ50RT "Europe") 1,430.0 N/0.3 m/s (145.8 kg/0.3 m/s, 321.5 lb/0.3 m/s) (PZ50MT) 1,170.0 N/0.3 m/s (119.3 kg/0.3 m/s, 263.0 lb/0.3 m/s) (PZ50VT "USA/Canada") 1,330.0 N/0.3 m/s (135.6 kg/0.3 m/s, 299.0 lb/0.3 m/s) (PZ50VT "Europe"/PZ50MP)
Compression	730.0 N/0.3 m/s (74.4 kg/0.3 m/s, 164.1 lb/0.3 m/s) (PZ50) 630.0 N/0.3 m/s (64.2 kg/0.3 m/s, 141.6 lb/0.3 m/s) (PZ50GT) 1,070.0 N/0.3 m/s (109.1 kg/0.3 m/s, 240.5 lb/0.3 m/s) (PZ50RT "USA/Canada") 1,150.0 N/0.3 m/s (117.3 kg/0.3 m/s, 258.5 lb/0.3 m/s) (PZ50RT "Europe") 710.0 N/0.3 m/s (72.4 kg/0.3 m/s, 159.6 lb/0.3 m/s) (PZ50MT) 610.0 N/0.3 m/s (62.2 kg/0.3 m/s, 137.1 lb/0.3 m/s) (PZ50VT "USA/Canada") 1,870.0 N/0.3 m/s (190.7 kg/0.3 m/s, 420.4 lb/0.3 m/s) (PZ50VT "Europe"/PZ50MP)
Slide runner: Thickness Wear limit	18.3 mm (0.72 in) 10.5 mm (0.41 in)
Track sprocket wheel: Material Number of teeth	Quadruple polyethylene 9 T (PZ50/PZ50GT/PZ50RT/PZ50VT/PZ50MP) 8 T (PZ50MT)
Rear guide wheel: Material Outside diameter	High molecular weight polyethylene with rubber 178.0 mm (7.01 in)
Brake: Recommended brake fluid Pad thickness Pad wear limit Pad to disc clearance Parking brake cable distance Disc outside diameter Disc thickness Disc minimum thickness	DOT 4 9.4 mm (0.37 in) 4.7 mm (0.19 in) 0.08 ~ 0.20 mm (0.0031 ~ 0.0079 in) 43.5 ~ 46.5 mm (1.713 ~ 1.831 in) 200.0 mm (7.87 in) 4.0 mm (0.16 in) 3.5 mm (0.14 in)



CHASSIS

Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Frame: Frame material Seat height Luggage box location	Monocoque (Aluminum and Steel) 719 mm (28.31 in) (PZ50/PZ50GT/PZ50RT/PZ50MT) 724 mm (28.50 in) (PZ50VT/PZ50MP) Not available
Steering: Lock-to-lock angle (left) (right) Ski alignment Toe-out size Caster angle Ski stance (center to center)	32.4° (R ski) 37.6° (L ski) 37.6° (R ski) 32.4° (L ski) Toe-out 0 ~ 15 mm (0 ~ 0.59 in) 18.0° 1,080 mm (42.5 in) (PZ50/PZ50GT/PZ50RT/PZ50VT/ PZ50MP) 980 mm (38.6 in) (PZ50MT)
Ski: Ski material Length Width Ski runner material Ski cover Ski runner wear limit Plastic ski wear limit	Plastic 1,021.0 mm (40.20 in) (PZ50/PZ50GT/PZ50RT/PZ50MT/ PZ50VT "USA/Canada") 1,073.0 mm (42.24 in) (PZ50VT "Europe"/PZ50MP) 132.0 mm (5.20 in) (PZ50/PZ50GT/PZ50RT/PZ50VT "USA/Canada") 182.0 mm (7.17 in) (PZ50MT) 180.0 mm (7.09 in) (PZ50VT "Europe"/PZ50MP) Steel No 6 mm (0.24 in) 13 mm (0.51 in) (PZ50/PZ50GT/PZ50RT/PZ50VT "USA/ Canada") 24 mm (0.95 in) (PZ50MT/PZ50VT "Europe"/PZ50MP)
Ski suspension (front suspension): Type Travel Spring type Spring rate	Independent wishbone 219.0 mm (8.62 in) (PZ50/PZ50RT) 198.0 mm (7.80 in) (PZ50GT) 220.0 mm (8.66 in) (PZ50MT) 165.0 mm (6.50 in) (PZ50VT "USA/Canada") 166.0 mm (6.54 in) (PZ50VT "Europe") 208.0 mm (8.19 in) (PZ50MP) Coil spring (PZ50/PZ50GT/PZ50MT/PZ50VT/PZ50MP) Air spring (PZ50RT) 30 N/mm (3.06 kg/mm, 171.3 lb/in) (PZ50) 28 N/mm (2.86 kg/mm, 159.9 lb/in) (PZ50GT) 21~ 32 N/mm (2.14 ~ 3.26 kg/mm, 119.9 ~ 182.7 lb/in) (PZ50MT "USA/Canada") 27 N/mm (2.75 kg/mm, 154.2 lb/in) (PZ50MT "Europe") 34 N/mm (3.47 kg/mm, 194.1 lb/in) (PZ50VT "USA/Can- ada") 35 N/mm (3.57 kg/mm, 199.9 lb/in) (PZ50VT "Europe"/ PZ50MP)



Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Wire diameter	8.5 mm (0.335 in) (PZ50) 8.0 mm (0.315 in) (PZ50GT) 8.2 mm (0.323 in) (PZ50MT/PZ50VT "USA/Canada") 8.8 mm (0.346 in) (PZ50VT "Europe"/PZ50MP)
Shock absorber: Damping force	
Extension	2,260 N/0.3 m/s (230.4 kg/0.3 m/s, 508.0 lb/0.3 m/s) (PZ50) 1,045 N/0.3 m/s (106.6 kg/0.3 m/s, 234.9 lb/0.3 m/s) (PZ50GT) 490 N/0.3 m/s (50.0 kg/0.3 m/s, 110.2 lb/0.3 m/s) (PZ50MT "USA/Canada") 480 N/0.3 m/s (48.9 kg/0.3 m/s, 107.9 lb/0.3 m/s) (PZ50MT "Europe") 660 N/0.3 m/s (67.3 kg/0.3 m/s, 148.4 lb/0.3 m/s) (PZ50VT "USA/Canada") 2,690 N/0.3 m/s (274.3 kg/0.3 m/s, 604.7 lb/0.3 m/s) (PZ50VT "Europe"/PZ50MP)
Compression	890 N/0.3 m/s (90.8 kg/0.3 m/s, 200.0 lb/0.3 m/s) (PZ50) 630 N/0.3 m/s (64.2 kg/0.3 m/s, 141.6 lb/0.3 m/s) (PZ50GT) 850 N/0.3 m/s (86.7 kg/0.3 m/s, 191.1 lb/0.3 m/s) (PZ50MT "USA/Canada") 540 N/0.3 m/s (55.1 kg/0.3 m/s, 121.4 lb/0.3 m/s) (PZ50MT "Europe") 970 N/0.3 m/s (98.9 kg/0.3 m/s, 218.1 lb/0.3 m/s) (PZ50VT "USA/Canada") 1,020 N/0.3 m/s (104.0 kg/0.3 m/s, 229.3 lb/0.3 m/s) (PZ50VT "Europe"/PZ50MP)



ELECTRICAL

Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Voltage	12 V
Ignition system: Ignition timing (B.T.D.C.) Advanced type	5° at 1,800 r/min Digital type
Ignition coil: Model/Manufacturer Ignition spark gap Primary coil resistance Secondary coil resistance	F6T567/MITSUBISHI 6.0 mm (0.24 in) 1.19 ~ 1.61 Ω at 20 °C (68 °F) 8.5 ~ 11.5 k Ω at 20 °C (68 °F)
Charging system: Type Nominal output	A.C. magneto 14 V/less than 35 A at 5,000 r/min
DC-T.C.I.: Magneto model/Manufacturer Standard Stator coil resistance (color code) ECU model/Manufacturer	F4T39471/MITSUBISHI 14 V 31.5 A, 440 W at 5,000 r/min 0.22 ~ 0.26 Ω at 20 °C (68 °F) (White – White) F8T83573/MITSUBISHI (PZ50/PZ50GT/PZ50RT/PZ50VT/ PZ50MP) F8T83574/MITSUBISHI (PZ50MT)
Rectifier/regulator: Type Model/Manufacturer No load regulated voltage (DC) Capacity (DC) Withstand voltage	Short circuit type FH012/SHINDENGEN 14.2 ~ 14.8 V 50 A 40 V
Battery: Manufacturer Type Ten hour rate amperage	YUASA YTX14-BS 12V-12Ah 1.2 A
Electric starter system: Type	Constant mesh type
Starter motor: Model/Manufacturer Output Armature coil resistance Continuity check Insulation check Brush Overall length <Wear limit> Spring pressure Commutator diameter <Wear limit> Mica undercut	8GC/YAMAHA 0.90 kW 0.009 ~ 0.011 Ω at 20 °C (68 °F) More than 100 k Ω at 20 °C (68 °F) 10.8 mm (0.43 in) 3.65 mm (0.14 in) 5.28 ~ 7.92 N (538 ~ 808 g, 19.01 ~ 28.51 oz) 24.5 mm (0.96 in) 23.5 mm (0.93 in) 1.5 mm (0.06 in)
Starter relay: Model/Manufacturer Amperage rating Coil resistance	MS5F-571/JIDECO 180 A 4.18 ~ 4.62 Ω at 20 °C (68 °F)

[illegible]



Model	PZ50/PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP
Speed sensor: Model/Manufacture	8EK/NIPPON SEIKI
Cylinder identification sensor: Model/Manufacture	8GC/NIPPON SEIKI
Crankshaft position sensor: Model/Manufacture Resistance	8GC/MITSUBISHI 189 ~ 231 Ω at 20 °C (68 °F) (Gray – Black)
Intake air pressure sensor: Model/Manufacture	5PS/DENSO
Intake air temperature sensor: Model/Manufacture Resistance	8FP/MITSUBISHI 290 ~ 390 k Ω at 80 °C (176 °F)
Knock sensor: Model/Manufacture Resistance	8GC/MITSUBISHI 504 ~ 616 k Ω at 20 °C (68 °F)



TIGHTENING TORQUE

ENGINE

Parts to be tightened	Tightening torque			Remarks
	Nm	m · kg	ft · lb	
Spark plug	13	1.3	9.4	Apply the engine oil.
Cylinder head bolt (M10 × 1.25)	See NOTE.*1			
Cylinder head bolt	12	1.2	8.7	
Camshaft cap and cylinder head	9	0.9	6.5	
Cylinder head cover	12	1.2	8.7	
Cylinder identification sensor	8	0.8	5.8	
Ignition coil	10	1.0	7.2	
Camshaft and camshaft sprocket	24	2.4	17	
Oil check bolt	10	1.0	7.2	
Timing chain tensioner	12	1.2	8.7	
Timing chain guide (intake)	12	1.2	8.7	Apply LOCTITE®
Thermostat housing cover	10	1.0	7.2	Apply LOCTITE®
Coolant temperature sensor	23	2.3	17	
Hose band	2	0.2	1.4	
Water pump	12	1.2	8.7	
Coolant reservoir tank	10	1.0	7.2	
Radiator	10	1.0	7.2	
Radiator fan motor	8	0.8	5.8	
Water jacket joint	10	1.0	7.2	
Knock sensor	27	2.7	19	
Oil cooler	10	1.0	7.2	
Rear engine mounting bolt spacer	7	0.7	5.1	Apply LOCTITE®
Front engine mounting nut (left and right)	65	6.5	47	
Rear engine mounting nut	40	4.0	29	
Engine mounting bracket	23	2.3	17	
Oil pan	10	1.0	7.2	
Oil pan engine oil drain bolt	30	3.0	22	
Oil filter cartridge	17	1.7	12	
Oil filter bolt	30	3.0	22	
Oil pressure switch	15	1.5	11	
Oil pump	12	1.2	8.7	
Oil pump drive chain guide	10	1.0	7.2	Apply LOCTITE®
Oil pump housing cover	5	0.5	3.6	Apply LOCTITE® (PZ50/PZ50GT/PZ50RT/PZ50MT)
Oil tank engine oil drain bolt	16	1.6	11	
Oil tank and frame	10	1.0	7.2	
Exhaust pipe joint	25	2.5	18	
Exhaust pipe joint upper cover	6	0.6	4.3	
Exhaust pipe joint lower cover	8	0.8	5.8	
Exhaust pipe band	18	1.8	13	
Exhaust pipe/muffler	33	3.3	24	
Muffler dumper holder	10	1.0	7.2	
Muffler end cover	10	1.0	7.2	
Crankcase (M9 × 1.25)	See NOTE.*2			Apply the engine oil.
Crankcase (M6 × 1.0)	12	1.2	8.7	Apply the engine oil.
Primary sheave drive shaft cover	12	1.2	8.7	
Primary sheave drive shaft assembly bolt	12	1.2	8.7	
Balancer shaft drive gear	75	7.5	54	



Parts to be tightened	Tightening torque			Remarks
	Nm	m · kg	ft · lb	
Balancer shaft driven gear	50	5.0	36	Apply LOCTITE®
Bearing retainer	10	1.0	7.2	
Connecting rod and cap	See NOTE.*3			Apply the engine oil.
A.C. magneto rotor	130	13.0	94	
A.C. magneto rotor cover bolt (M6 × 1.0) × 7	12	1.2	8.7	Apply LOCTITE®
A.C. magneto rotor cover bolt (M6 × 1.0) × 6	12	1.2	8.7	
Starter clutch	12	1.2	8.7	Apply LOCTITE®
Stator coil	10	1.0	7.2	Apply LOCTITE®
Pickup coil	7	0.7	5.1	Apply LOCTITE®
A.C. magneto lead holder	10	1.0	7.2	Apply LOCTITE®
Starter motor	12	1.2	8.7	
Fuel pump	7	0.7	5.1	
Fuel tank	10	1.0	7.2	
Starter motor lead	7	0.7	5.1	
Throttle cable locknut	6	0.6	4.3	
Rectifier/regulator	7	0.7	5.1	
Frame ground lead (rectifier/regulator)	7	0.7	5.1	
Engine ground lead (water jacket joint)	10	1.0	7.2	
Frame rear cross member (front)	25	2.5	18	
Frame rear cross member (rear)	30	3.0	22	

NOTE:

- *1: Tighten the cylinder head bolts to 25 Nm (2.5 m · kg, 18 ft · lb) in the proper tightening sequence, loosen and retighten the cylinder head bolts to 25 Nm (2.5 m · kg, 18 ft · lb) in the proper tightening sequence, and then tighten the cylinder head bolts further to reach the specified angle 175 ~ 185° in the proper tightening sequence.
- *2: Tighten the crankcase bolts to 15 Nm (1.5 m · kg, 11 ft · lb) in the proper tightening sequence, loosen and retighten the crankcase bolts to 15 Nm (1.5 m · kg, 11 ft · lb) in the proper tightening sequence, and then tighten the crankcase bolts further to reach the specified angle 65 ~ 70° in the proper tightening sequence.
- *3: Tighten the connecting rod nuts to 20 Nm (2.0 m · kg, 14 ft · lb), and then tighten the connecting rod nuts further to reach the specified angle 120 ~ 150°.



POWER TRAIN

Parts to be tightened	Tightening torque			Remarks
	Nm	m · kg	ft · lb	
Primary sheave	See NOTE.			Apply engine oil.
Spider and sliding sheave	200	20.0	145	Left-hand thread. Apply LOCTITE®
Primary sheave cap and sliding sheave	14	1.4	10	
Roller and weight (primary sheave)	6	0.6	4.3	
Secondary sheave	60	6.0	43	
Bushing stopper bolt (secondary sheave)	7	0.7	5.1	
Drive chain cover and frame	24	2.4	17	
Drive chain oil drain bolt	16	1.6	11	
Drive chain adjusting locknut	25	2.5	18	
Driven sprocket	48	4.8	35	Apply LOCTITE®
Bearing holder (secondary shaft)	24	2.4	17	
Set bolt (secondary shaft)	9	0.9	6.5	Apply LOCTITE®
Frame and secondary shaft assembly	10	1.0	7.2	(PZ50GT/PZ50RT/PZ50MT/ PZ50VT/PZ50MP)
Gear motor and secondary shaft assembly	17	1.7	12	(PZ50GT/PZ50RT/PZ50MT/ PZ50VT/PZ50MP)
Right reverse gear case and left reverse gear case	6	0.6	4.3	(PZ50GT/PZ50RT/PZ50MT/ PZ50VT/PZ50MP)
Drive position switch	17	1.7	12	(PZ50GT/PZ50RT/PZ50MT/ PZ50VT/PZ50MP)
Reverse position switch	17	1.7	12	(PZ50GT/PZ50RT/PZ50MT/ PZ50VT/PZ50MP)
Battery bracket	23	2.3	17	
Brake caliper bracket and drive chain cover	48	4.8	35	
Brake caliper bleed screw	6	0.6	4.3	
Brake caliper retaining pin	18	1.8	13	
Brake hose union bolt	30	3.0	22	
Parking brake assembly and drive chain cover	10	1.0	7.2	
Lever and parking brake assembly	16	1.6	11	
Brake master cylinder holder and brake master cylinder	10	1.0	7.2	
Brake master cylinder holder and parking brake lever	23	2.3	17	
Parking brake cable and parking brake lever	10	1.0	7.2	
Parking brake cable locknut	6	0.6	4.3	
Slide rail suspension mounting bolt (M10)	72	7.2	52	Apply LOCTITE® (PZ50VT/PZ50MP)
Slide rail suspension mounting bolt (M10) (front side)	72	7.2	52	Apply LOCTITE® (PZ50/PZ50GT/PZ50RT/PZ50MT)
Slide rail suspension mounting bolt (M10) (rear side)	110	11.0	80	Apply LOCTITE® (PZ50/PZ50GT/PZ50RT/PZ50MT)
Stopper band	4	0.4	2.9	
Shock absorber and front pivot arm	49	4.9	35	
Shock absorber and front suspension bracket	49	4.9	35	
Shaft and sliding frame	60	6.0	43	
Front pivot arm and connecting arm	110	11.0	80	(PZ50/PZ50GT/PZ50RT/PZ50MT)



Parts to be tightened	Tightening torque			Remarks
	Nm	m · kg	ft · lb	
Front pivot arm and connecting arm	72	7.2	52	(PZ50VT/PZ50MP)
Front pivot arm and sliding frame	60	6.0	43	
Front suspension bracket and connecting arm	72	7.2	52	
Sliding frame and wheel bracket	72	7.2	52	Apply LOCTITE® (PZ50MT)
Suspension wheel	60	6.0	43	
Front suspension bracket shaft and sliding frame	60	6.0	43	
Set bolt (wheel bracket)	6	0.6	4.3	
Shock absorber and connecting arm	49	4.9	35	(PZ50/PZ50GT/PZ50RT/PZ50MT)
Pull rod, shock absorber, and rear suspension bracket	49	4.9	35	(PZ50VT/PZ50MP)
Rear suspension bracket shaft and sliding frame	60	6.0	43	(PZ50VT/PZ50MP)
Rear pivot arm and pull rod	49	4.9	35	(PZ50VT/PZ50MP)
Shock absorber and rear pivot arm	49	4.9	35	
2-up adjusting block	60	6.0	43	(PZ50VT/PZ50MP)
Set bolt (collar)	9	0.9	6.5	(PZ50VT/PZ50MP)
Rear pivot arm joint	35	3.5	25	(PZ50/PZ50GT/PZ50RT/PZ50MT)
Rear pivot arm and rear pivot arm bracket	72	7.2	52	Apply LOCTITE® (PZ50/PZ50GT/PZ50RT/PZ50MT)
Rear pivot arm bracket and sliding frame	72	7.2	52	Apply LOCTITE® (PZ50/PZ50GT/PZ50RT/PZ50MT)
Rear pivot arm bracket stopper and sliding frame	60	6.0	43	(PZ50/PZ50GT/PZ50RT/PZ50MT)
Wheel bracket, shaft, and sliding frame	60	6.0	43	(PZ50MT)
Rear pivot arm and control rod stopper	60	6.0	43	(PZ50VT/PZ50MP)
Control rod adjusting locknut	25	2.5	18	(PZ50VT/PZ50MP)
Control rod shaft and sliding frame	72	7.2	52	(PZ50VT/PZ50MP)
Rear axle	75	7.5	54	
Set bolt (front axle)	9	0.9	6.5	Apply LOCTITE®
Bearing holder (front axle)	24	2.4	17	Inside
Bearing holder (front axle)	24	2.4	17	Apply LOCTITE® Outside
Speed sensor	24	2.4	17	
Bearing housing	24	2.4	17	
Gear unit (speed sensor)	40	4.0	29	

NOTE:

Tightening steps:

1. Tighten the bolt to a torque at 120 Nm (12.0 m · kg, 85 ft · lb).
2. Loosen the bolt completely.
3. Retighten the bolt to a torque of 60 Nm (6.0 m · kg, 43 ft · lb).



CHASSIS

Parts to be tightened	Tightening torque			Remarks
	Nm	m · kg	ft · lb	
Front bumper	23	2.3	17	
Wind shield bracket	16	1.6	11	(PZ50GT/PZ50RT/PZ50MT)
Mirror	18	1.8	13	(PZ50VT/PZ50MP)
Headlight bracket	10	1.0	7.2	(PZ50/PZ50GT/PZ50RT/PZ50MT)
Side panel	8	0.8	5.8	(PZ50/PZ50GT/PZ50RT/PZ50MT)
Lower cover	8	0.8	5.8	
Seat rail assembly bolt	47	4.7	34	(PZ50/PZ50GT/PZ50RT/PZ50MT)
Seat rail assembly nut	23	2.3	17	(PZ50/PZ50GT/PZ50RT/PZ50MT)
Seat/fuel tank side cover bolt (rear side)	10	1.0	7.2	(PZ50/PZ50GT/PZ50RT/PZ50MT)
Rear side cover bolt	8	0.8	5.8	(PZ50/PZ50GT/PZ50RT/PZ50MT)
Fuel tank side cover bolt (front side)	8	0.8	5.8	(PZ50/PZ50GT/PZ50RT/PZ50MT)
Rider seat	23	2.3	17	(PZ50VT/PZ50MP)
Rear cover	7	0.7	5.1	(PZ50/PZ50GT/PZ50RT/PZ50MT)
Side cover	11	1.1	8.0	(PZ50VT/PZ50MP)
Passenger grip warmer and frame	23	2.3	17	(PZ50VT/PZ50MP)
Passenger grip warmer and rear carrier	7	0.7	5.1	(PZ50VT/PZ50MP)
Rear side cover	8	0.8	5.8	(PZ50VT/PZ50MP)
Rear side lower cover	8	0.8	5.8	(PZ50VT/PZ50MP)
Passenger seat bracket	23	2.3	17	(PZ50VT/PZ50MP)
Passenger seat	7	0.7	5.1	(PZ50VT/PZ50MP)
Rear cover	8	0.8	5.8	(PZ50VT/PZ50MP)
Sub frame panel	7	0.7	5.1	(PZ50VT/PZ50MP)
Rear carrier	23	2.3	17	(PZ50VT/PZ50MP)
Tail/brake light assembly	10	1.0	7.2	(PZ50VT/PZ50MP)
Handlebar holder	15	1.5	11	
Wind deflector bracket and wind deflector bolt	7	0.7	5.1	Apply LOCTITE® (PZ50RT)
Multi-function meter bracket	20	2.0	14	
Steering joint and steering joint bracket	21	2.1	15	(PZ50VT/PZ50MP)
Steering joint bracket and steering column	16	1.6	11	(PZ50VT/PZ50MP)
Steering column and relay rod	21	2.1	15	
Relay rod and steering control arm	21	2.1	15	
Steering column (upper)	23	2.3	17	
Steering column (lower)	23	2.3	17	
Steering control arm and steering control arm bracket	35	3.5	25	
Steering control arm bracket and frame	25	2.5	18	
Steering control arm and steering shaft	21	2.1	15	
Steering shaft and steering arm	35	3.5	25	
Steering arm pinch bolt	30	3.0	22	
Steering shaft end locknut	25	2.5	18	Apply LOCTITE®
Pivot arm bracket	35	3.5	25	
Pivot arm bracket and relay arm	38	3.8	27	
Pivot arm bracket and pivot arm shaft	90	9.0	65	
Pivot arm shaft and idler arm	65	6.5	47	
Relay arm and idler arm	65	6.5	47	
Idler arm and tie rod	25	2.5	18	
Tie rod and steering knuckle	28	2.8	20	
Tie rod end locknut	25	2.5	18	Apply LOCTITE®
Ski	48	4.8	35	

TIGHTENING TORQUE

SPEC



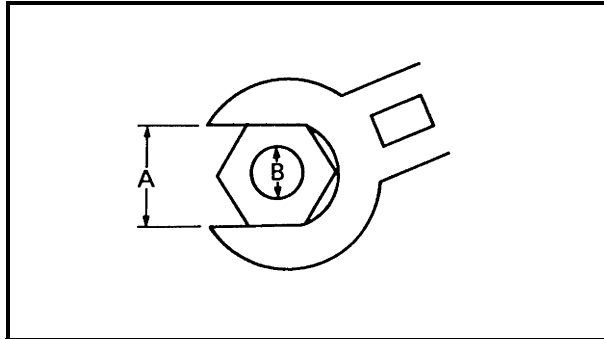
Parts to be tightened	Tightening torque			Remarks
	Nm	m · kg	ft · lb	
Ski runner	19	1.9	14	Apply LOCTITE®
Ski and ski handle (M8 × 55)	12	1.2	8.7	
Ski and ski handle (M8 × 100)	17	1.7	12	
Shock absorber (upper)	45	4.5	33	
Shock absorber (lower)	45	4.5	33	
Upper arm ball joint and upper arm	90	9.0	65	
Upper arm and frame	45	4.5	32	
Upper arm ball joint and steering knuckle	45	4.5	32	
Lower arm and frame	65	6.5	47	
Lower arm and steering knuckle	65	6.5	47	
Stabilizer and stabilizer joint	45	4.5	32	(PZ50/PZ50RT/PZ50MT)
Stabilizer joint and lower arm	34	3.4	25	(PZ50/PZ50RT/PZ50MT)
Stabilizer bracket	7	0.7	5.1	(PZ50GT/PZ50VT/PZ50MP)
Stabilizer holder	34	3.4	25	



GENERAL TORQUE SPECIFICATIONS

This chart specifies torque for standard fasteners with standard I.S.O. pitch threads. Torque specifications for special components or assemblies are included in the applicable sections of this book. To avoid warpage, tighten multi-fastener assemblies in a crisscross fashion, in progressive stages, until full torque is reached. Unless otherwise specified, torque specifications call for clean, dry threads. Components should be at room temperature.

A (nut)	B (bolt)	General torque specifications		
		Nm	m · kg	ft · lb
10 mm	6 mm	6	0.6	4.3
12 mm	8 mm	15	1.5	11
14 mm	10 mm	30	3.0	22
17 mm	12 mm	55	5.5	40
19 mm	14 mm	85	8.5	61
22 mm	16 mm	130	13.0	94

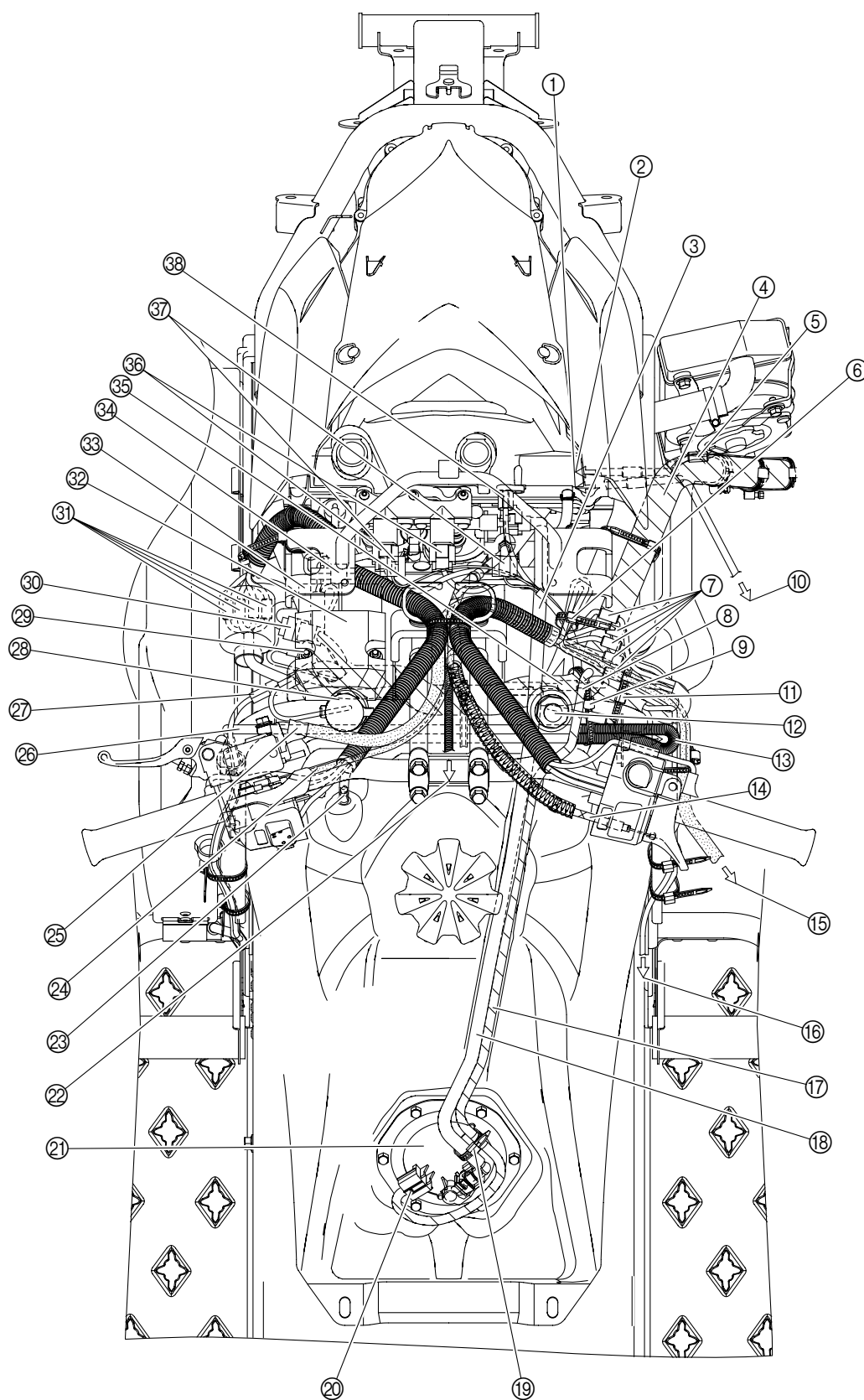


A: Distance across flats

B: Outside thread diameter

DEFINITION OF UNITS

Unit	Read	Definition	Measurement
mm	Millimeter	10^{-3} meter	Length
cm	Centimeter	10^{-2} meter	Length
kg	Kilogram	10^3 gram	Weight
N	Newton	$1 \text{ kg} \times \text{m/sec}^2$	Force
Nm	Newton meter	$\text{N} \times \text{m}$	Torque
m · kg	Meter kilogram	$\text{m} \times \text{kg}$	Torque
Pa	Pascal	N/m^2	Pressure
N/mm	Newtons per millimeter	N/mm	Spring rate
L	Liter	—	Volume or capacity
cm^3	Cubic centimeter	—	Volume or capacity
r/min	Rotations per minute	—	Engine speed

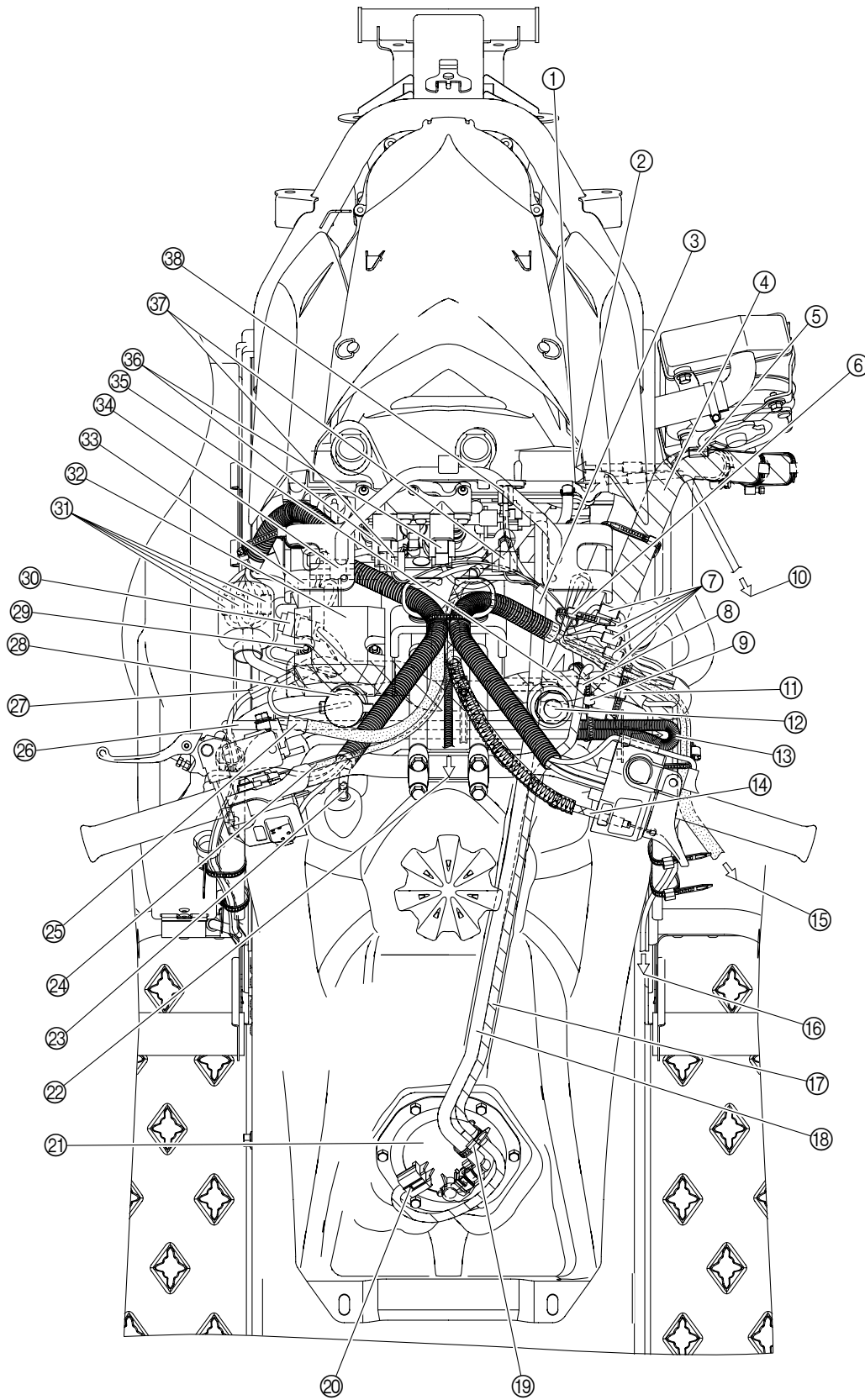




CABLE ROUTING

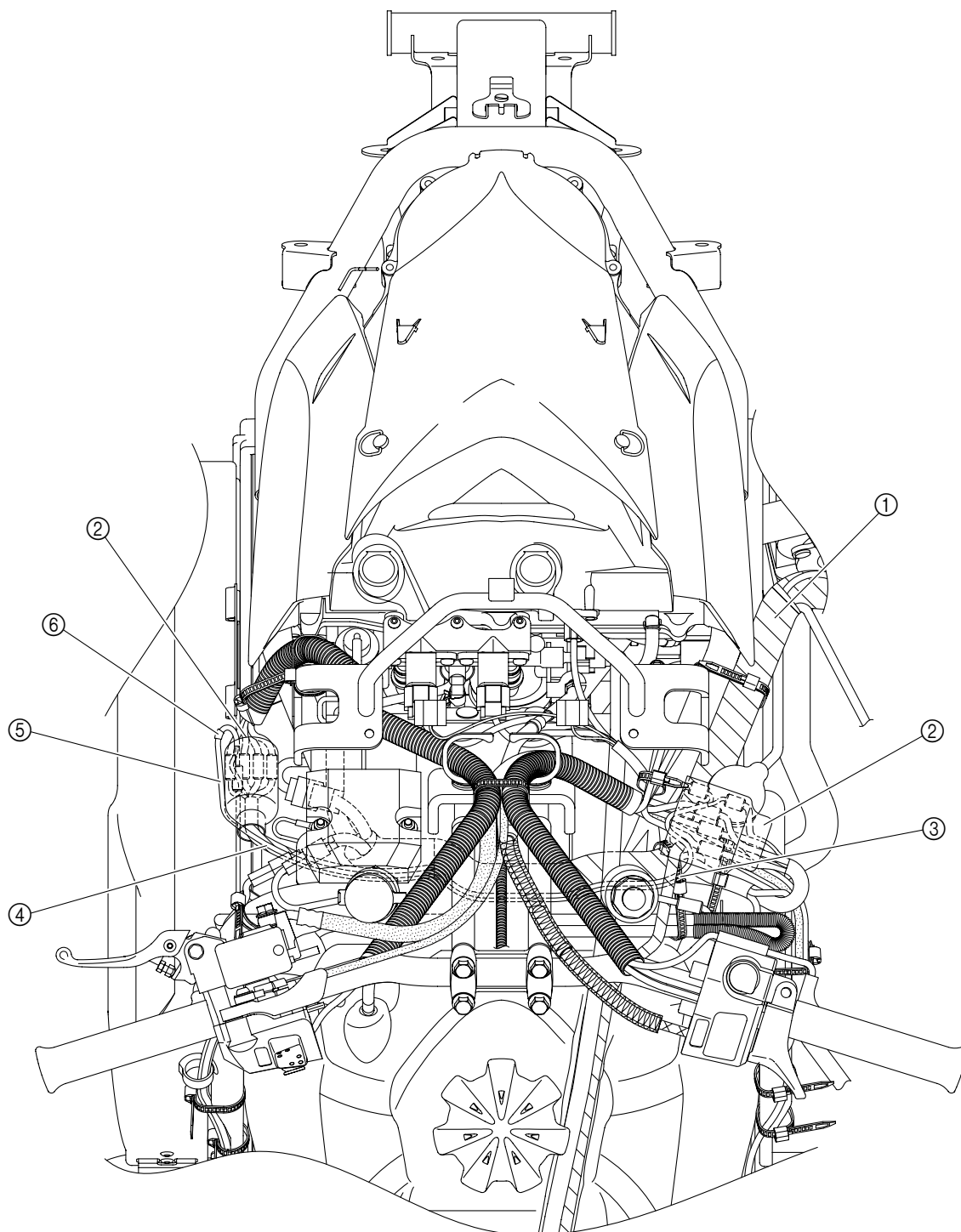
PZ50/PZ50GT/PZ50RT/PZ50MT

- ① To the coolant temperature sensor
- ② To the knock sensor
- ③ Route the fuel hose over the wire harness and fuel tank breather hose.
- ④ Wire harness
- ⑤ Radiator fan motor lead coupler
- ⑥ Bundle the slack in the wire harness and fasten it with the plastic band.
- ⑦ Right handlebar switch lead couplers
- ⑧ Route the sub-wire harness over the wire harness and fuel tank breather hose.
- ⑨ Fasten the wire harness and fuel tank breather hose to the frame rear cross member with the plastic band.
- ⑩ To the oil level switch
- ⑪ Fasten the wire harness, parking brake cable, and brake hose to the frame rear cross member with the plastic band.
- ⑫ Main switch
- ⑬ Fuel tank breather hose
- ⑭ Throttle cable
- ⑮ To the brake caliper
- ⑯ To the tail/brake light
- ⑰ Fuel pump lead
- ⑱ Fuel hose
- ⑲ Fasten the fuel pump lead at the white tape to the fuel hose with the plastic band.
- ⑳ Fuel pump coupler
- ㉑ Fuel pump
- ㉒ To the multi-function meter
- ㉓ Install the fuel tank breather hose to the fuel tank with the hose clamp. Be sure to connect the hose end that does not have a paint mark to the fuel tank.





- ②4 Parking brake cable
- ②5 Brake hose
- ②6 Route the fuel tank breather hose along the frame rear cross member.
- ②7 Speed sensor coupler
- ②8 Auxiliary DC jack (PZ50GT/PZ50RT/PZ50MT) (optional)
- ②9 Install the frame ground lead terminal and the Rectifier/regulator using the same nut.
- ③0 Sub-wire harness coupler
- ③1 Left handlebar switch lead couplers
- ③2 Rectifier/regulator
- ③3 Connect the wire harness coupler to the Rectifier/regulator coupler shown in the illustration.
- ③4 Crankshaft position sensor coupler
- ③5 Fuel sender lead coupler
- ③6 Intake air pressure sensor coupler
- ③7 Headlight coupler
- ③8 Intake air temperature sensor coupler



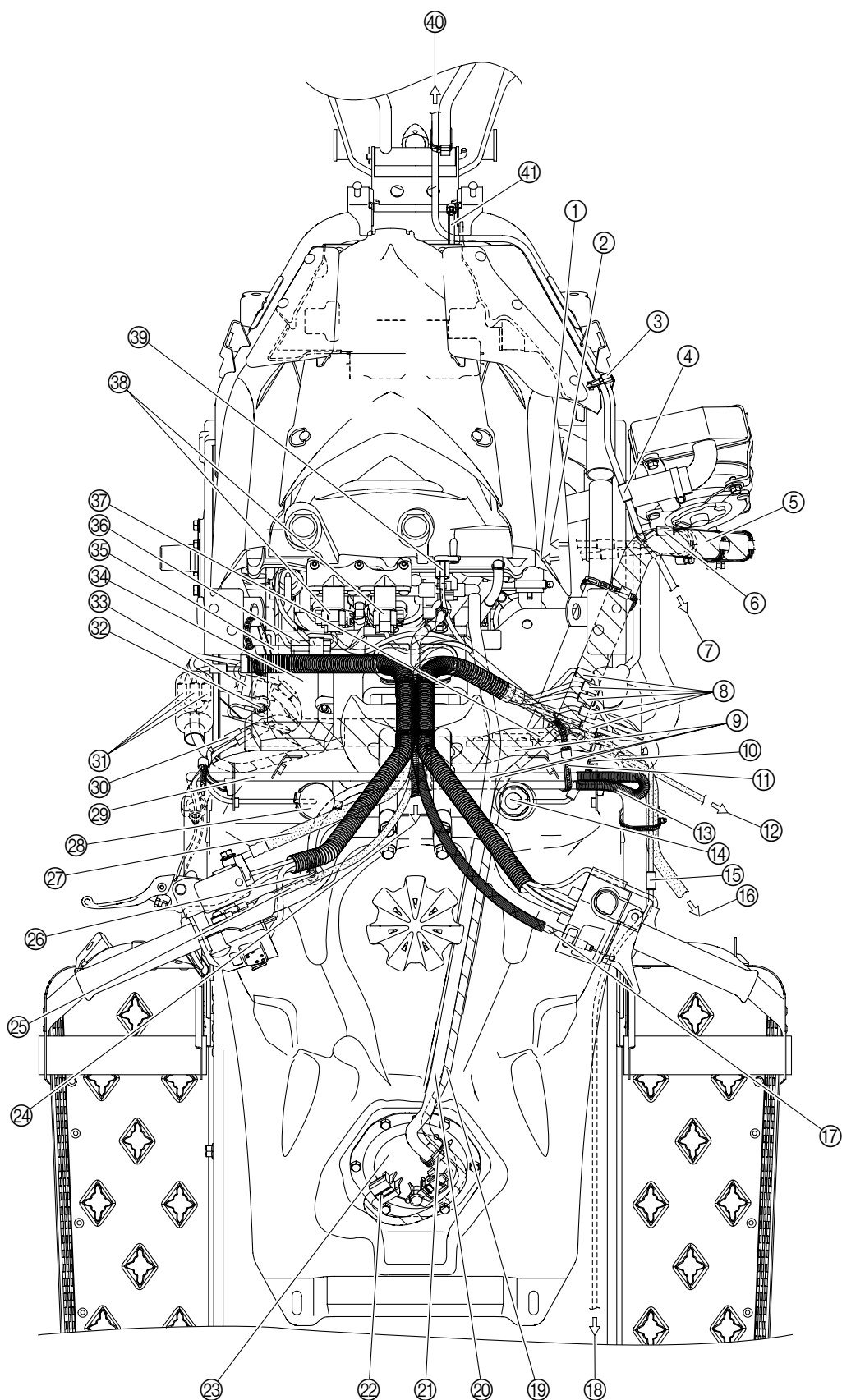


PZ50GT/PZ50MT

NOTE:

The following items are for routing the grip warmer sub-wire harness.

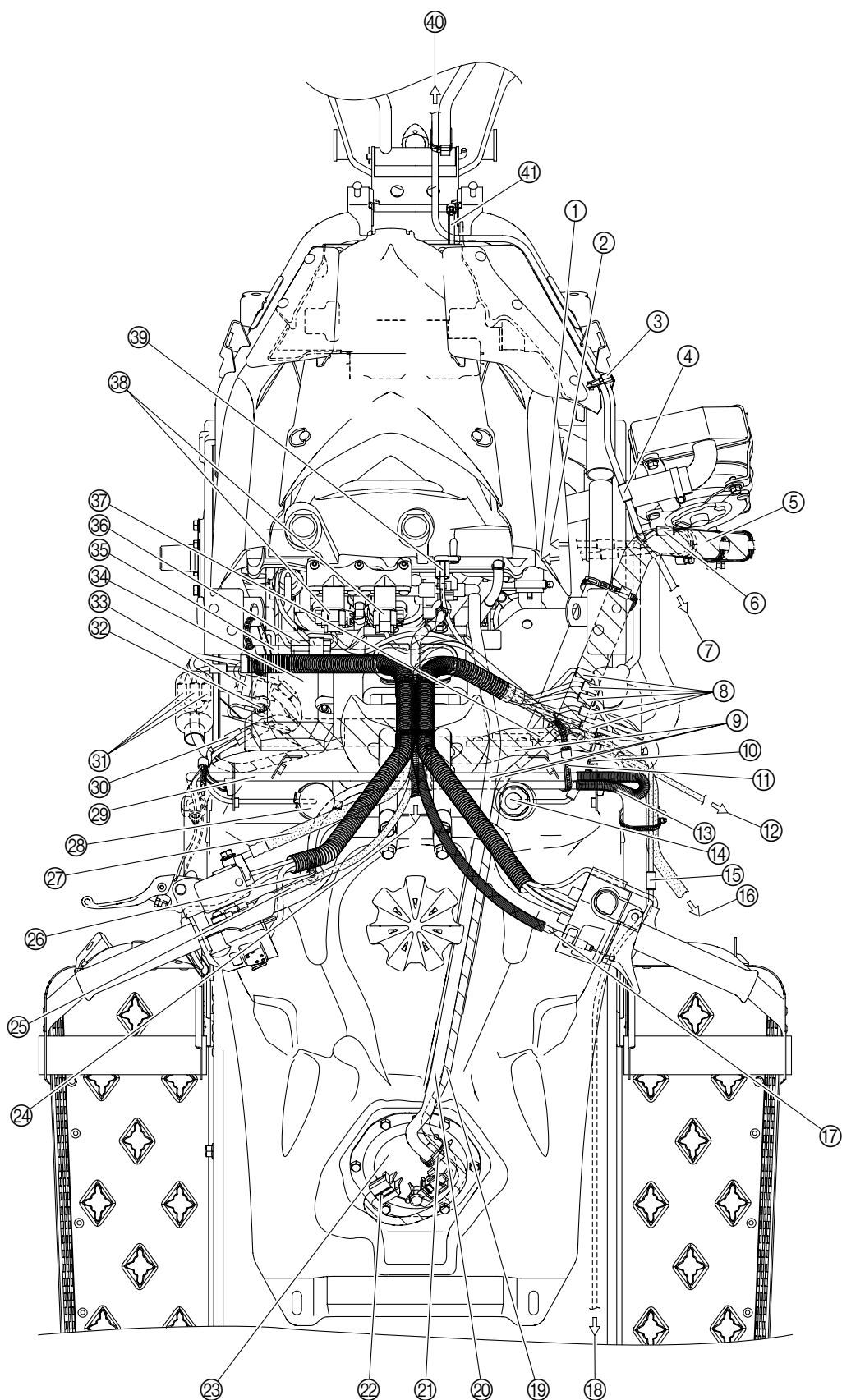
- ① Wire harness
- ② Slide the rubber cover over the couplers.
- ③ Fasten the wire harness, grip warmer sub-wire harness, and fuel tank breather hose to the frame rear cross member with the plastic band.
- ④ Route the grip warmer sub-wire harness along the wire harness.
- ⑤ Grip warmer sub-wire harness
- ⑥ Connect the grip warmer sub-wire harness coupler to the wire harness coupler, making sure to connect the end of the sub-wire harness that is marked with tape.





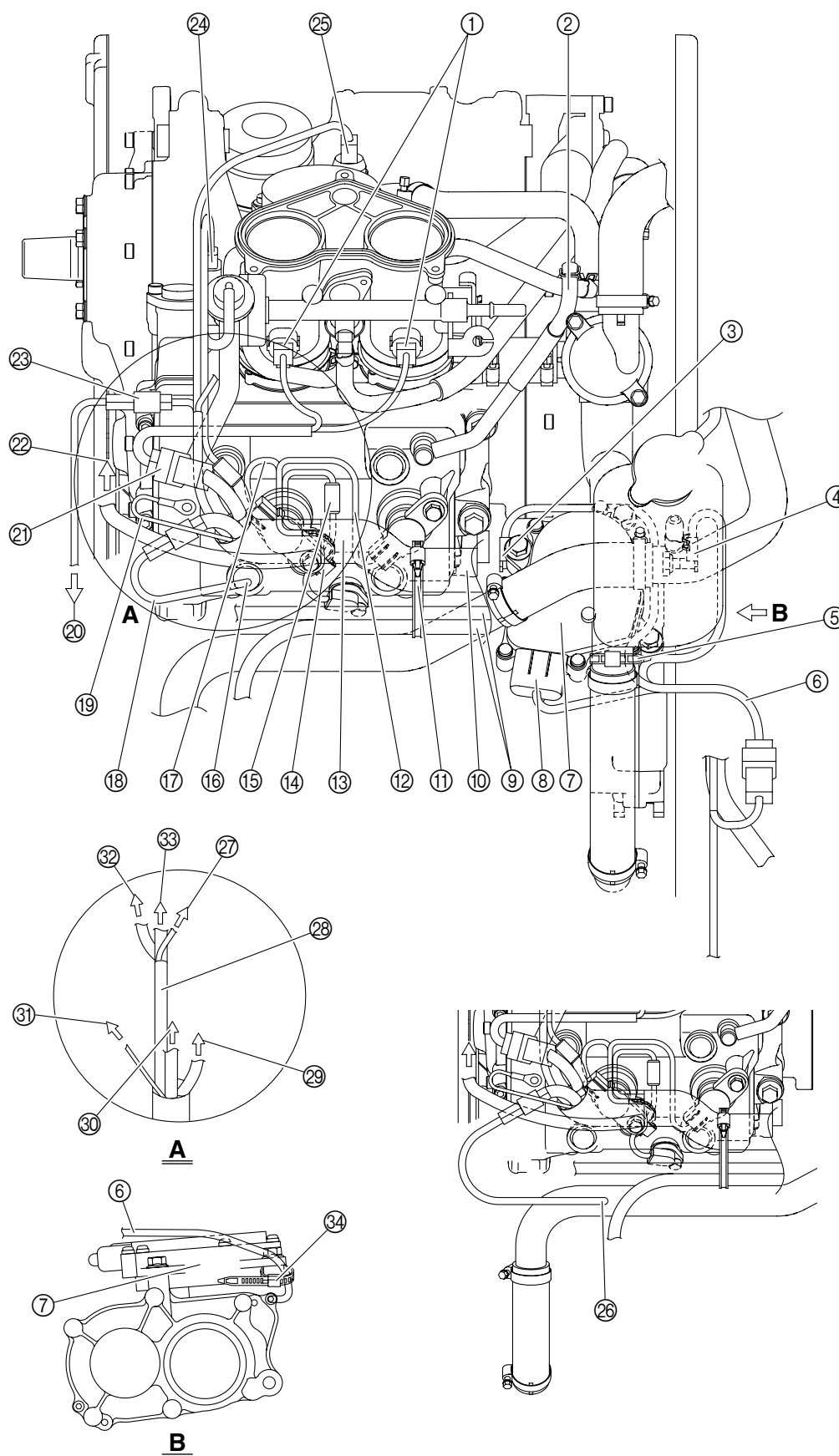
PZ50VT/PZ50MP

- ① To the coolant temperature sensor
- ② To the knock sensor
- ③ Pass the plastic band through the hole in the frame front cross member, and then fasten the wire harness with the band. Position the buckle of the plastic band on top of the leads, with the end facing to the left.
- ④ Headlight lead coupler
- ⑤ Wire harness
- ⑥ Radiator fan motor lead coupler
- ⑦ To the oil level switch
- ⑧ Right handlebar switch lead couplers
- ⑨ Route the fuel hose and sub-wire harness over the wire harness and fuel tank breather hose.
- ⑩ Fasten the wire harness, parking brake cable, and brake hose to the frame rear cross member with the plastic band.
- ⑪ Fasten the wire harness and fuel tank breather hose to the frame rear cross member with the plastic band.
- ⑫ To parking brake
- ⑬ Fuel tank breather hose
- ⑭ Main switch
- ⑮ Tail/brake light harness coupler
- ⑯ To the brake caliper
- ⑰ Throttle cable
- ⑱ To the tail/brake light
- ⑲ Fuel pump lead
- ⑳ Fuel hose
- ㉑ Fasten the fuel pump lead at the white tape to the fuel hose with the plastic band.
- ㉒ Fuel pump coupler
- ㉓ Fuel pump
- ㉔ To the multi-function meter



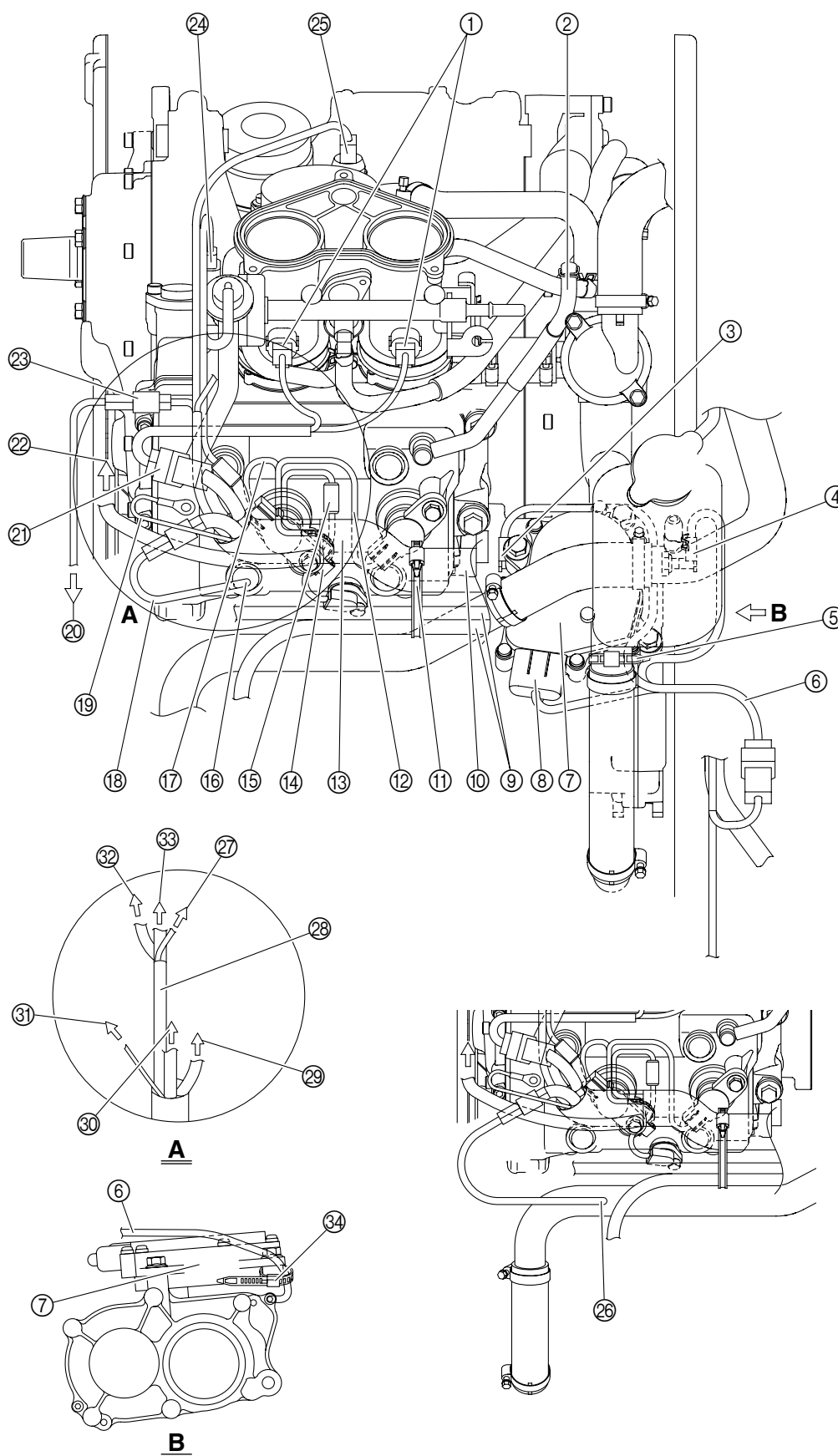


- ②⑤ Parking brake cable
- ②⑥ Install the fuel tank breather hose to the fuel tank with the hose clamp. Be sure to connect the hose end that does not have a paint mark to the fuel tank.
- ②⑦ Brake hose
- ②⑧ Auxiliary DC jack
- ②⑨ Route the fuel tank breather hose along the frame rear cross member.
- ③⑩ Speed sensor coupler
- ③⑪ Left handlebar switch lead couplers
- ③⑫ Install the frame ground lead terminal and the Rectifier/regulator using the same nut.
- ③⑬ Sub-wire harness coupler
- ③⑭ Rectifier/regulator
- ③⑮ Connect the wire harness coupler to the Rectifier/regulator coupler shown in the illustration.
- ③⑯ Crankshaft position sensor coupler
- ③⑰ Fuel sender coupler
- ③⑱ Intake air pressure sensor coupler
- ③⑲ Intake air temperature sensor coupler
- ④⑩ To the Headlight
- ④⑪ Fasten the headlight lead to the frame front cross member with the plastic band.



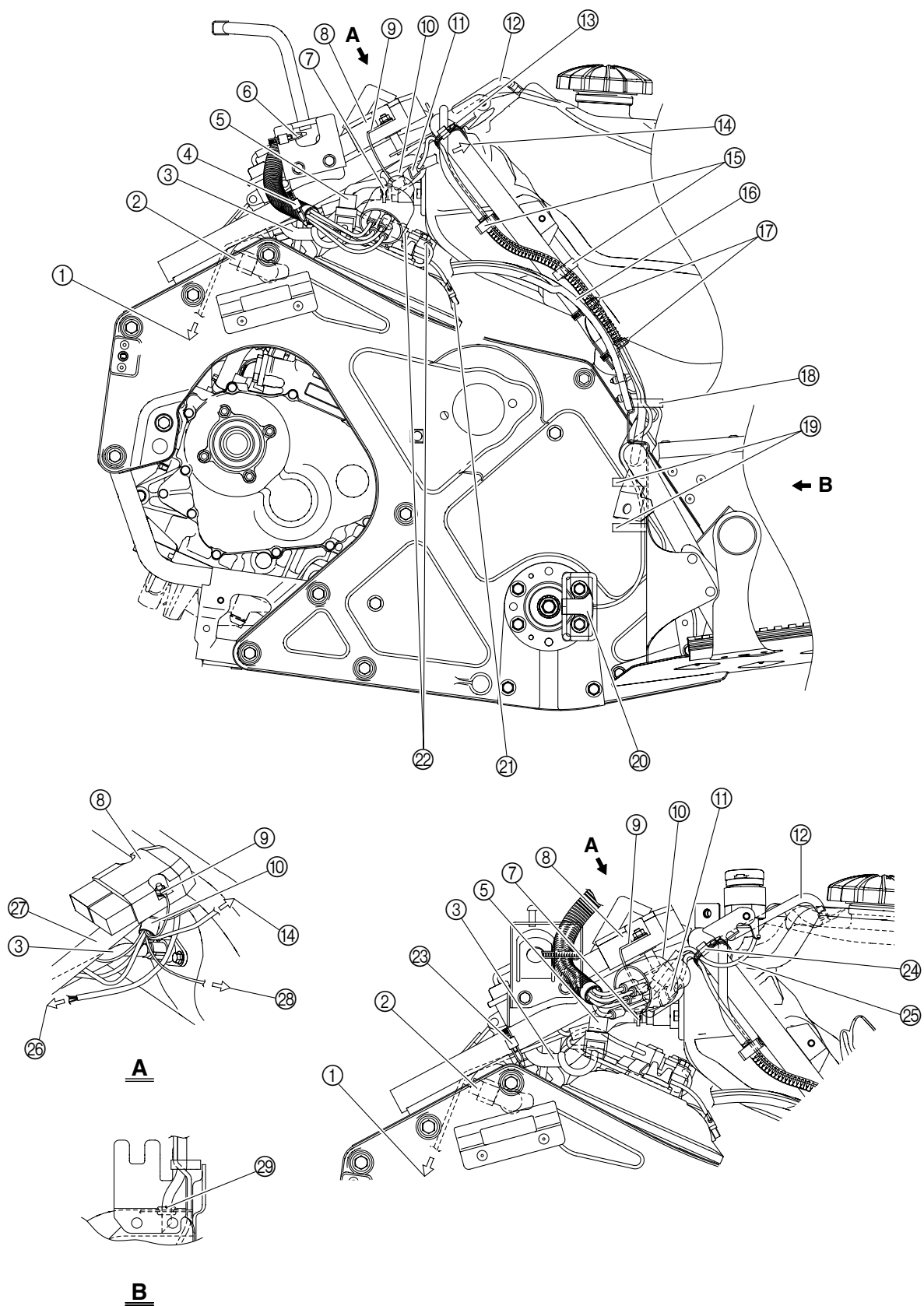


- ① Injector coupler
- ② Cylinder head breather hose
- ③ Reverse position switch coupler
(PZ50GT/PZ50RT/PZ50MT/
PZ50VT/PZ50MP)
- ④ Drive position switch coupler
(PZ50GT/PZ50RT/PZ50MT/
PZ50VT/PZ50MP)
- ⑤ Fasten the reverse position
switch lead to the coolant reser-
voir tank with the plastic band.
Install the plastic band with its
buckle positioned on top of the
coolant reservoir tank and its end
facing to the right. (PZ50GT/
PZ50RT/PZ50MT/PZ50VT/
PZ50MP)
- ⑥ Sub-wire harness
- ⑦ Gear motor (Except for PZ50)
- ⑧ Gear motor coupler (PZ50GT/
PZ50RT/PZ50MT/PZ50VT/
PZ50MP)
- ⑨ Fuel tank breather hose
- ⑩ Wire harness
- ⑪ Fasten the wire harness and fuel
tank breather hose to the frame
rear cross member with the plas-
tic band, making sure to fasten
the hose before and after the
bend in the hose.
- ⑫ Cylinder #1 ignition coil lead
- ⑬ Route the wire harness under the
frame rear cross member.
- ⑭ Fasten the cylinder identification
sensor lead to the cylinder head
cover with the plastic band.
- ⑮ Cylinder identification sensor
lead coupler
- ⑯ To the auxiliary DC jack
(PZ50GT/PZ50RT/PZ50MT)



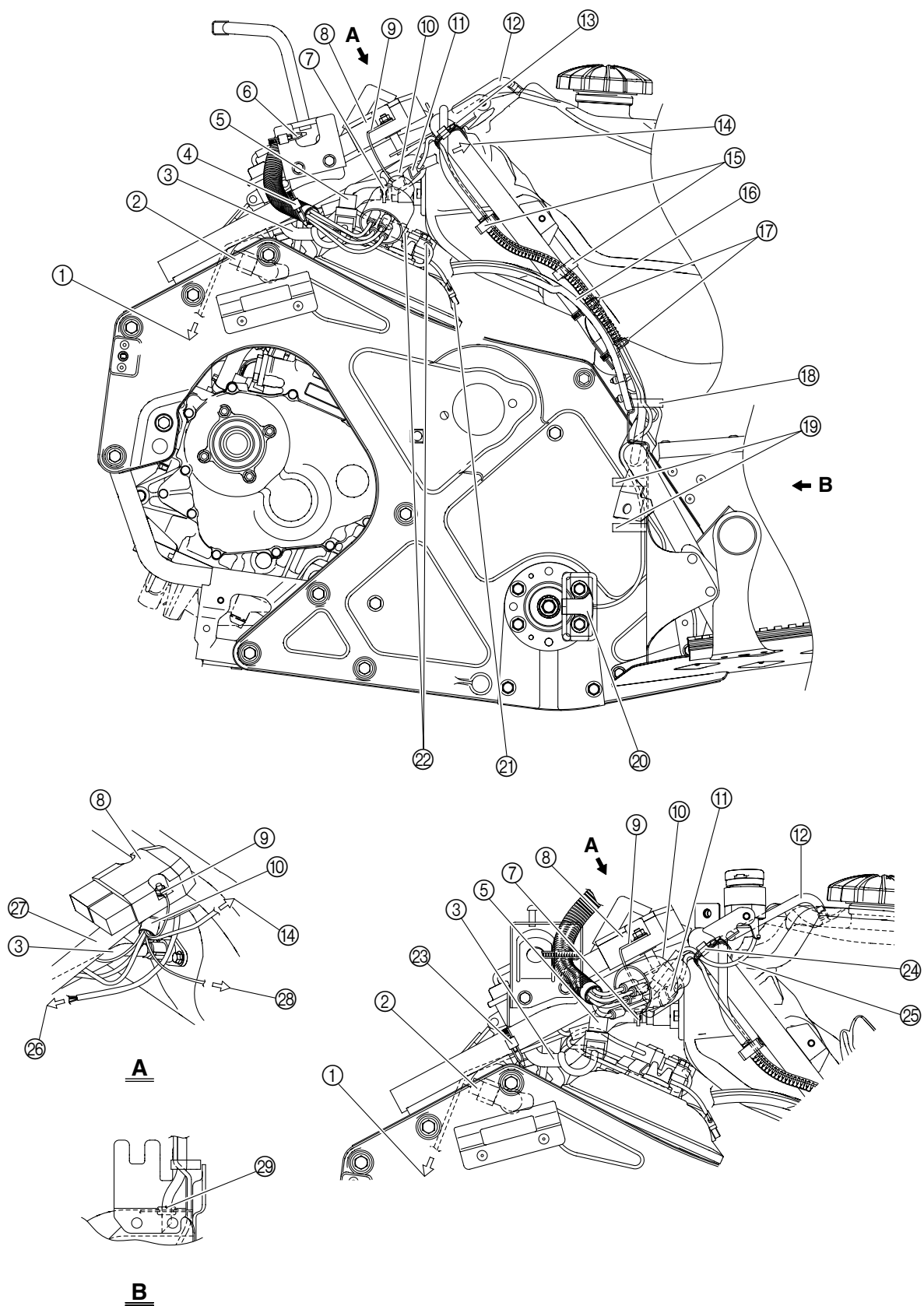


- ⑰ Cylinder #2 ignition coil lead
- ⑱ Auxiliary DC jack lead
- ⑲ Frame ground lead
- ⑳ To the speed sensor
- ㉑ Connect the sub-wire harness coupler to the wire harness coupler.
- ㉒ To the handlebar switch
- ㉓ Speed sensor lead coupler
- ㉔ Throttle position sensor coupler
- ㉕ Oil pressure switch coupler
- ㉖ To the auxiliary DC jack lead (PZ50VT/PZ50MP)
- ㉗ To the Rectifier/regulator
- ㉘ Wire harness
- ㉙ To the sub-wire harness
- ㉚ To the throttle position sensor
- ㉛ To the frame ground lead
- ㉜ To the speed sensor
- ㉝ To oil pressure switch coupler.
- ㉞ Fasten the sub-wire harness at the white tape with the plastic band.



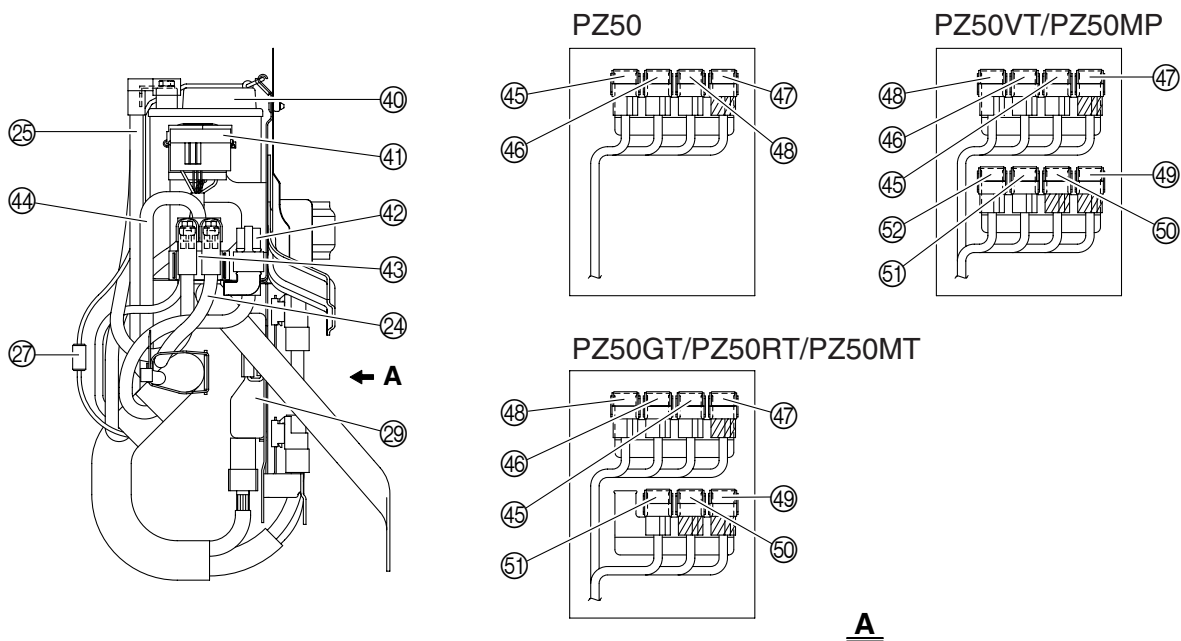
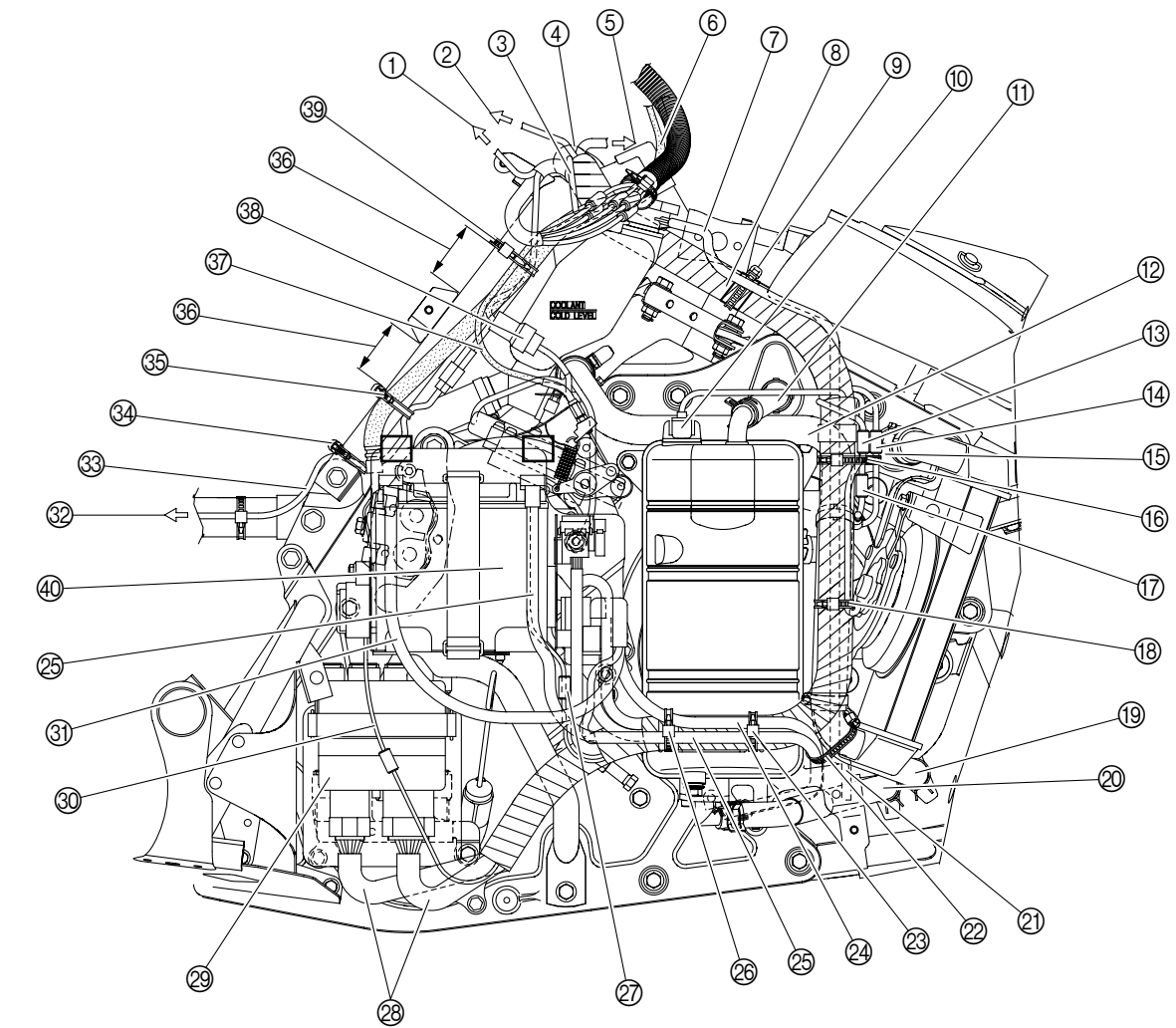


- ① To the oil pressure switch
- ② Throttle position sensor coupler
- ③ Fuel hose
- ④ Fasten the corrugated tube and wire harness to the frame front cross member with the plastic band. (PZ50/PZ50GT/PZ50RT/PZ50MT)
- ⑤ Sub-wire harness coupler
- ⑥ Fasten the corrugated tube to the headlight stay with the plastic band. (PZ50/PZ50GT/PZ50RT/PZ50MT)
- ⑦ Fasten the fuel hose with the hose clamp. Face the ends of the hose clamp outward, angled 45° downward.
- ⑧ Rectifier/regulator
- ⑨ Frame ground lead
- ⑩ Wire harness
- ⑪ Speed sensor coupler
- ⑫ Fuel tank breather hose
- ⑬ Fasten the speed sensor lead and fuel tank breather hose to the frame rear cross member with the plastic band.
- ⑭ To the auxiliary DC jack (PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP)
- ⑮ Fasten the speed sensor lead and fuel tank breather hose with the holder.
- ⑯ Drive guard
- ⑰ Fasten the speed sensor lead and fuel tank breather hose with a plastic locking tie.
- ⑱ Fasten the speed sensor lead and fuel tank breather hose with the holder. Be sure to bend the holder so that the lead and hose will not come loose.
- ⑲ Fasten the speed sensor lead with the holder. Be sure to bend the holder so that the lead will not come loose.
- ⑳ Speed sensor



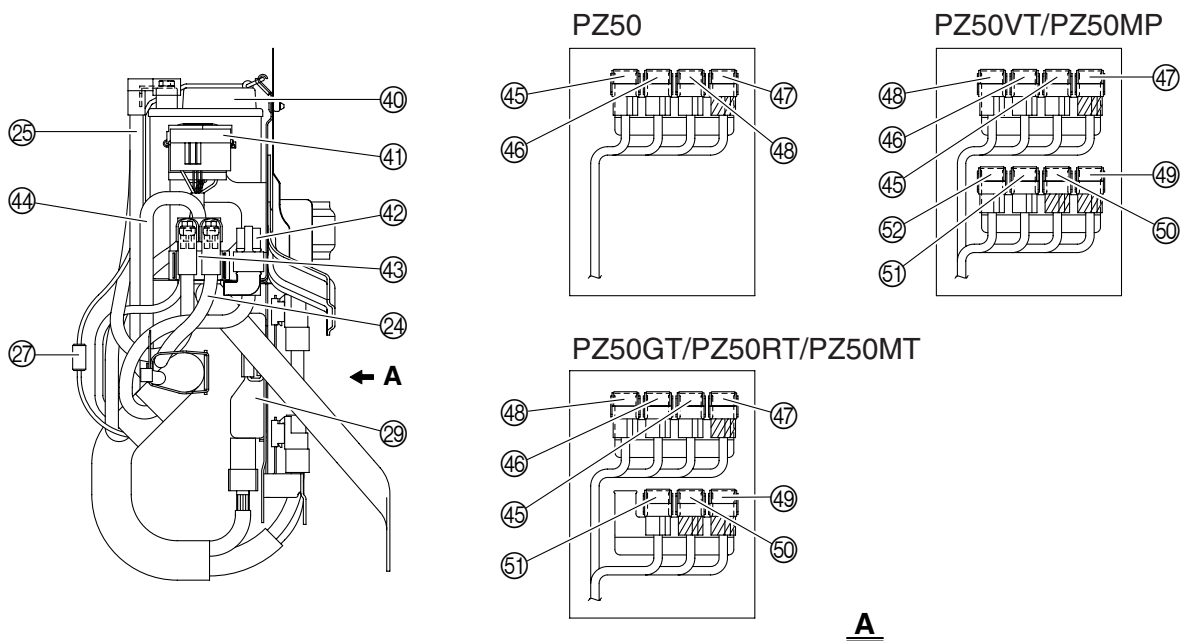
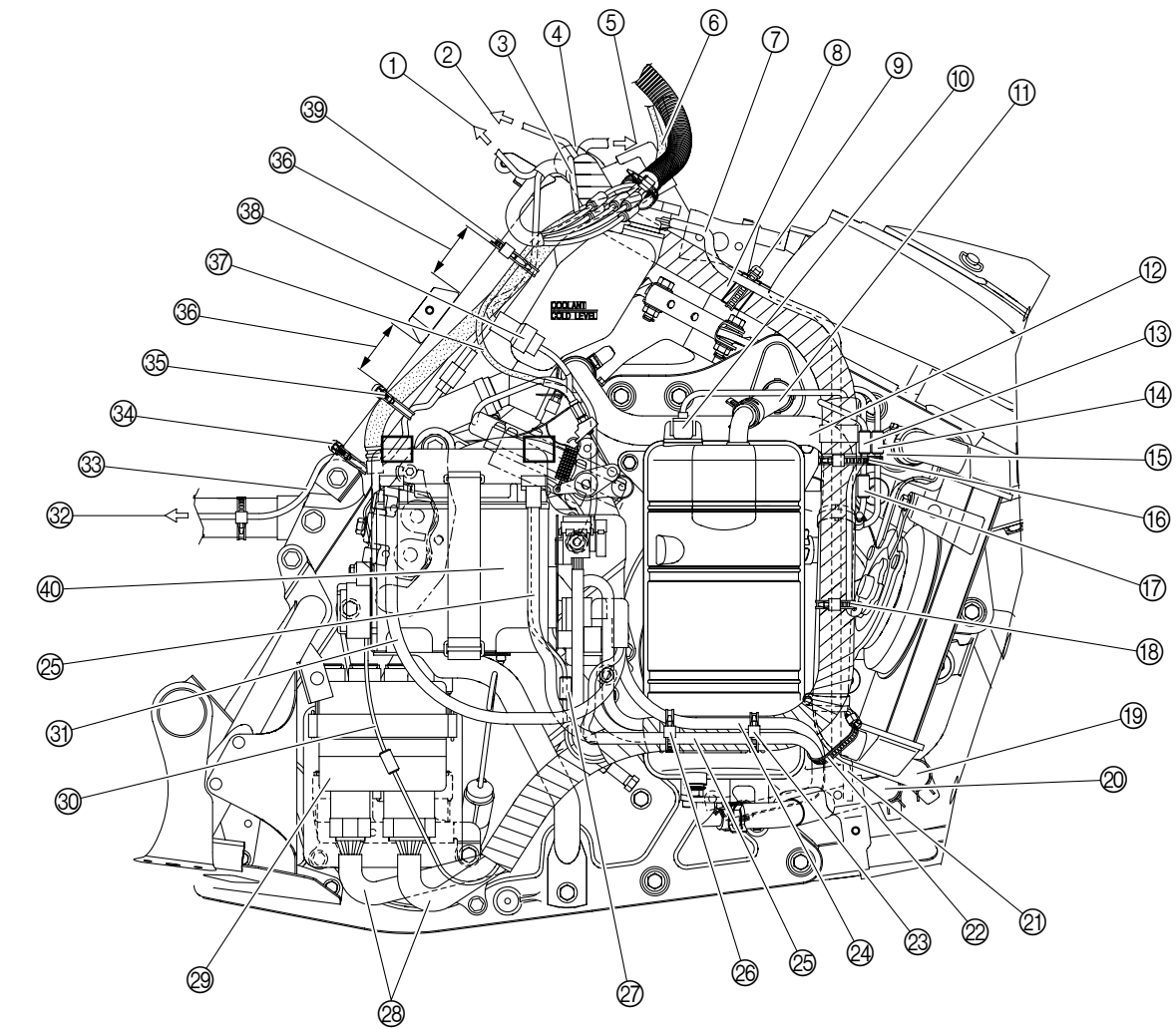


- ②① Cylinder identification sensor
- ②② Ignition coil
- ②③ Fasten the wire harness to the frame front cross member with the plastic band. (PZ50VT/PZ50MP)
- ②④ Fasten the fuel tank breather hose, auxiliary DC jack lead, and speed sensor with the plastic band. (PZ50VT/PZ50MP)
- ②⑤ Auxiliary DC jack lead (PZ50VT/PZ50MP)
- ②⑥ To the left handlebar switch
- ②⑦ Frame rear cross member
- ②⑧ To the speed sensor
- ②⑨ Align the paint mark on the fuel tank breather hose with the top of the grommet.



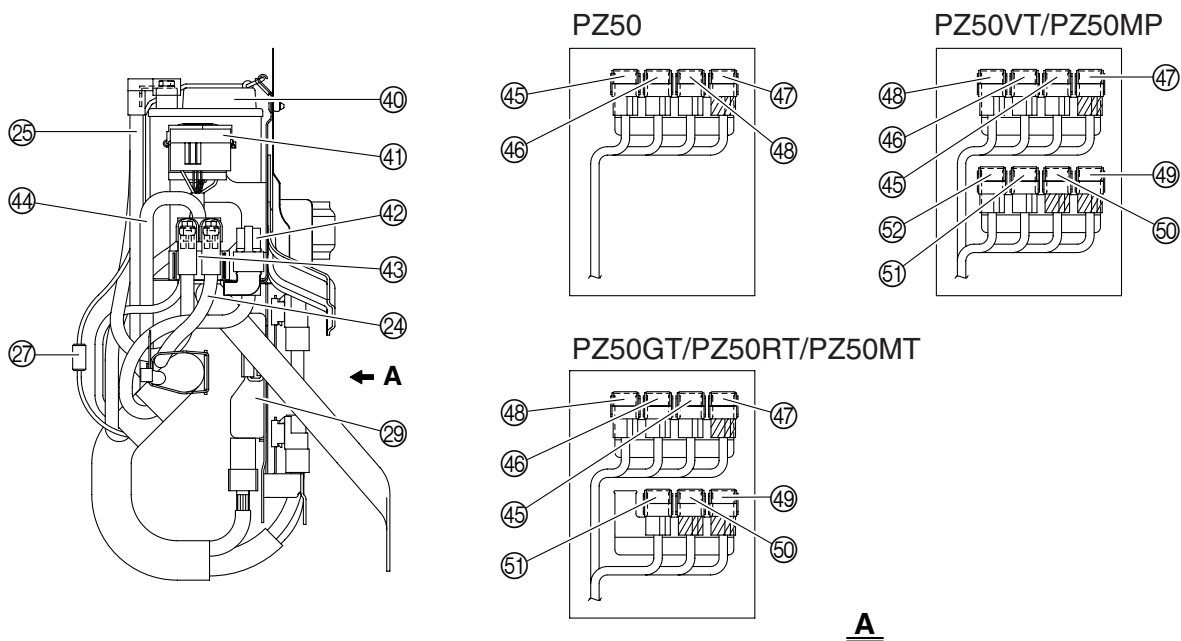
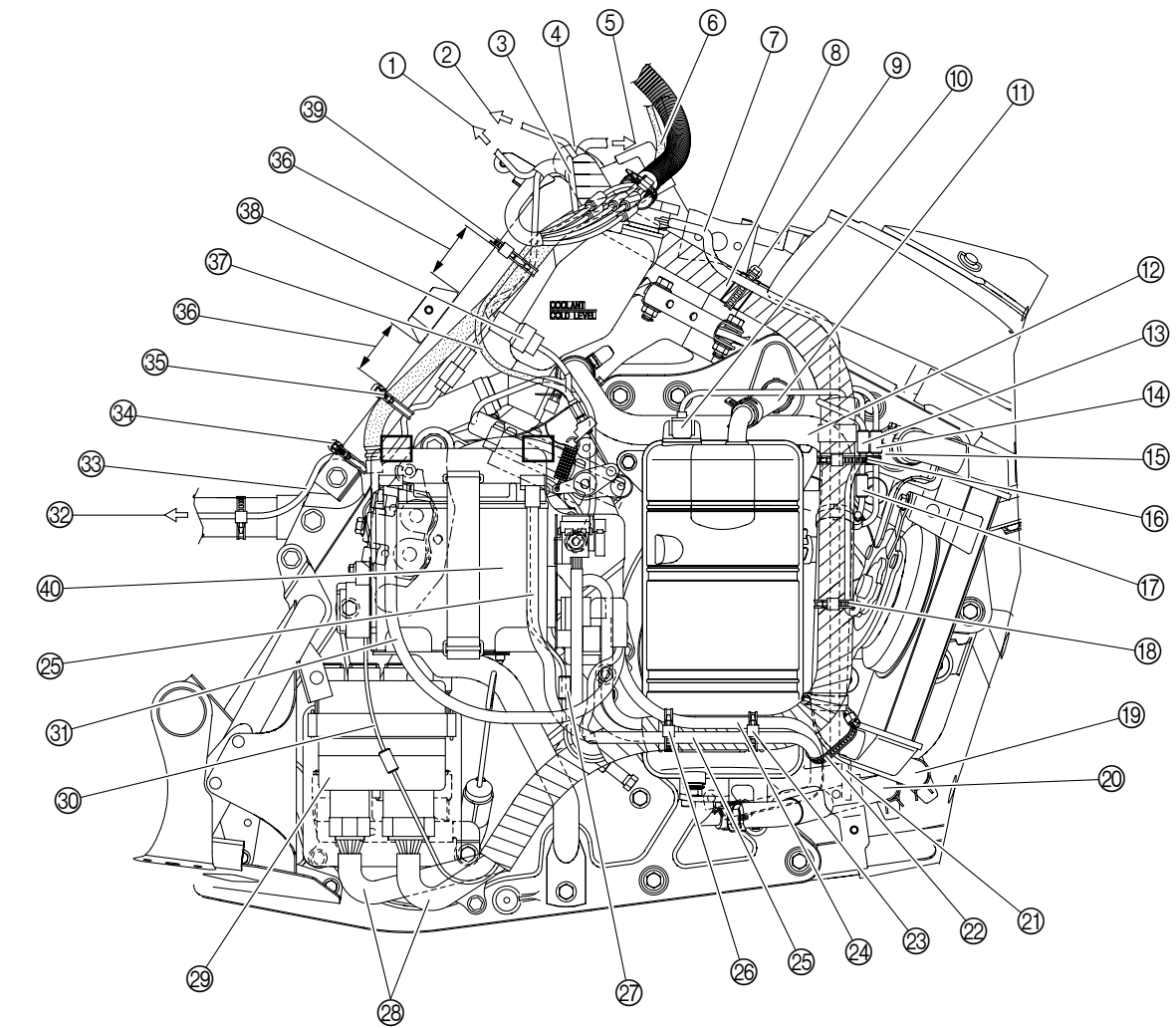


- ① To the main switch
- ② To the main switch
- ③ To the fuel sender
- ④ Route the wire harness over the frame rear cross member.
- ⑤ To the multi-function meter unit
- ⑥ Brake hose
- ⑦ Coolant reservoir breather hose
- ⑧ Wire harness
- ⑨ Fasten the wire harness at the white tape to the frame rear cross member with the plastic band. Install the plastic band with its buckle positioned on top of the wire harness and its end facing to the left.
- ⑩ Oil level switch coupler
- ⑪ Oil tank breather hose
- ⑫ Radiator outlet pipe
- ⑬ Radiator fan motor coupler
- ⑭ Knock sensor coupler
- ⑮ Radiator inlet hose
- ⑯ Fasten the wire harness, radiator fan motor lead and knock sensor lead to the radiator outlet pipe with the plastic band, making sure to align the radiator fan motor coupler with the wire harness joint coupler. Install the plastic band with its buckle positioned to the outside of the pipe and its end facing rearward.
- ⑰ Coolant temperature sensor coupler
- ⑱ Fasten the wire harness and radiator fan motor lead to the radiator outlet hose with the plastic band. Install the plastic band with its buckle positioned to the outside of the hose and its end facing rearward.



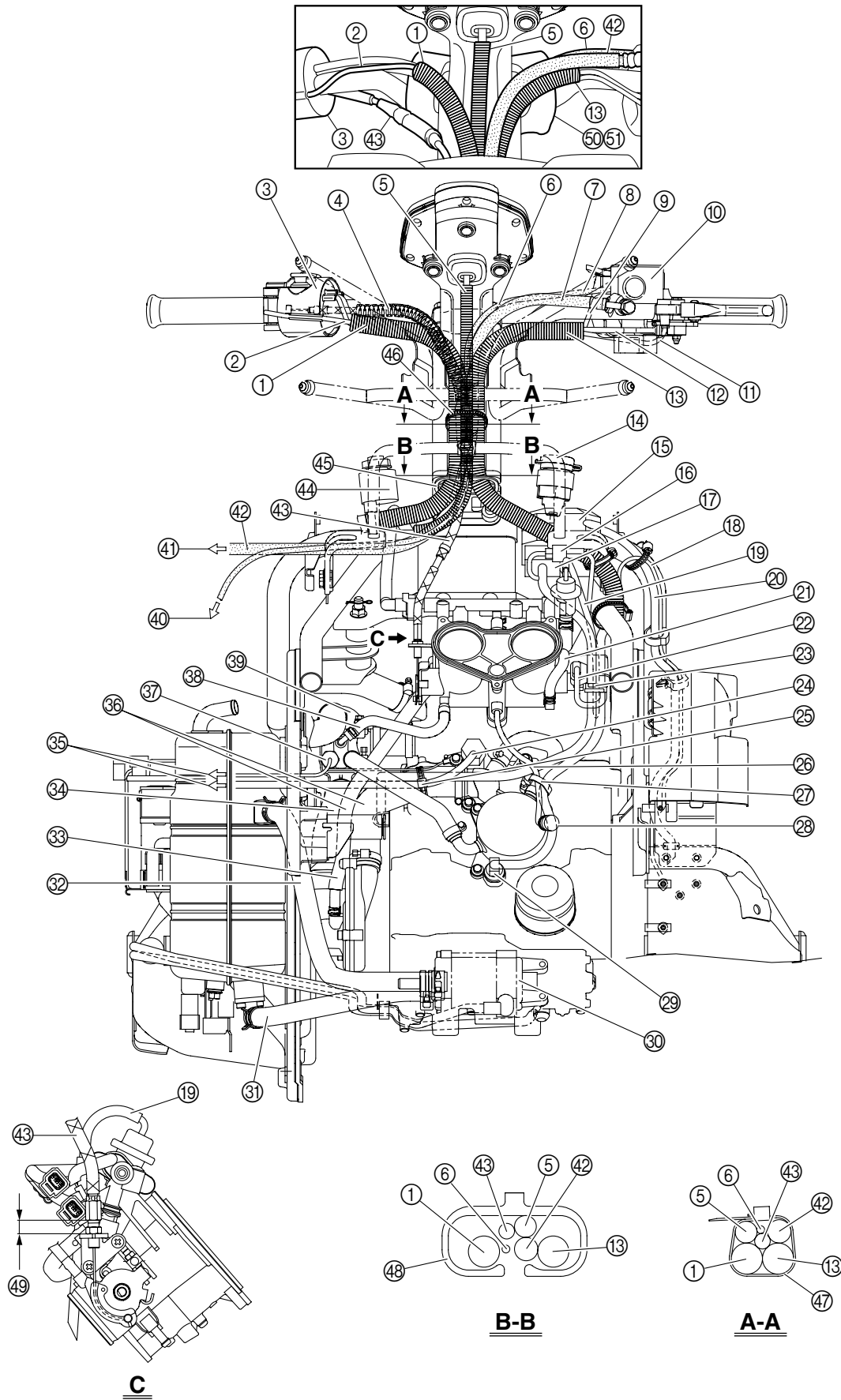


- ⑲ Oil tank inlet hose
- ⑳ Oil tank outlet hose
- ㉑ Place the end of the coolant reservoir breather hose to the inside of the frame front cross member.
- ㉒ Fasten the starter motor lead and negative battery lead to the radiator joint pipe with the plastic band.
- ㉓ Fasten the wire harness, starter motor lead, and negative battery lead to the oil tank with the plastic band. Face the end of the plastic band upward.
- ㉔ Starter motor lead
- ㉕ Negative battery lead
- ㉖ Fasten the starter motor lead, negative battery lead, and wire harness at the white tape to the oil tank with the plastic band. Face the end of the plastic band upward.
- ㉗ Negative battery lead coupler
- ㉘ ECU lead
- ㉙ ECU
- ㉚ DC back buzzer lead (PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP)
- ㉛ Positive battery lead
- ㉜ To the tail/brake light
- ㉝ Tail/brake light lead
- ㉞ Fasten the tail/brake light lead to the frame rear cross member with the plastic band, making sure to route the lead to the inside of the cross member. Install the plastic band with its buckle positioned towards the rear of the machine and its end facing to the right.





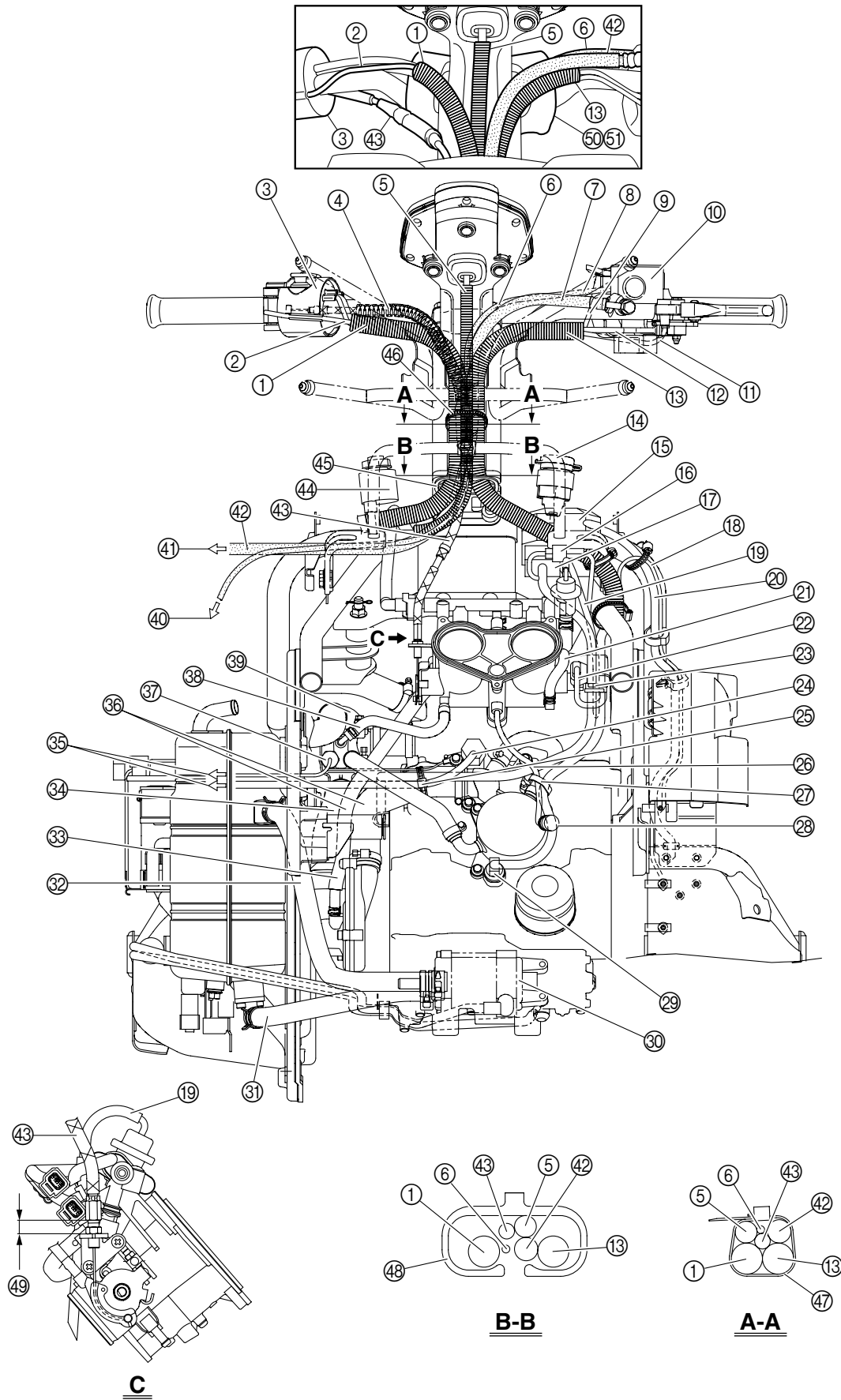
- ③⑤ Fasten the tail/brake light lead and brake hose to the frame rear cross member with the plastic band. Install the plastic band with its buckle positioned towards the rear of the machine and its end facing to the right.
- ③⑥ 40 ~ 50 mm (1.6 ~ 2.0 in)
- ③⑦ Parking brake cable
- ③⑧ Gear motor lead coupler (PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP)
- ③⑨ Fasten the wire harness, brake hose, and parking brake cable with the plastic band.
- ④⑩ Battery
- ④⑪ Fuse box
- ④⑫ Main fuse
- ④⑬ Starter relay
- ④⑭ Starter relay lead
- ④⑮ Load control relay
- ④⑯ Fuel injection system relay
- ④⑰ Headlight relay
- ④⑱ Radiator fan motor relay
- ④⑲ Gear motor relay 1 (PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP)
- ⑤⑩ Gear motor relay 2 (PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP)
- ⑤⑪ Gear motor relay 3 (PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP)
- ⑤⑫ Passenger grip warmer relay (PZ50VT/PZ50MP)





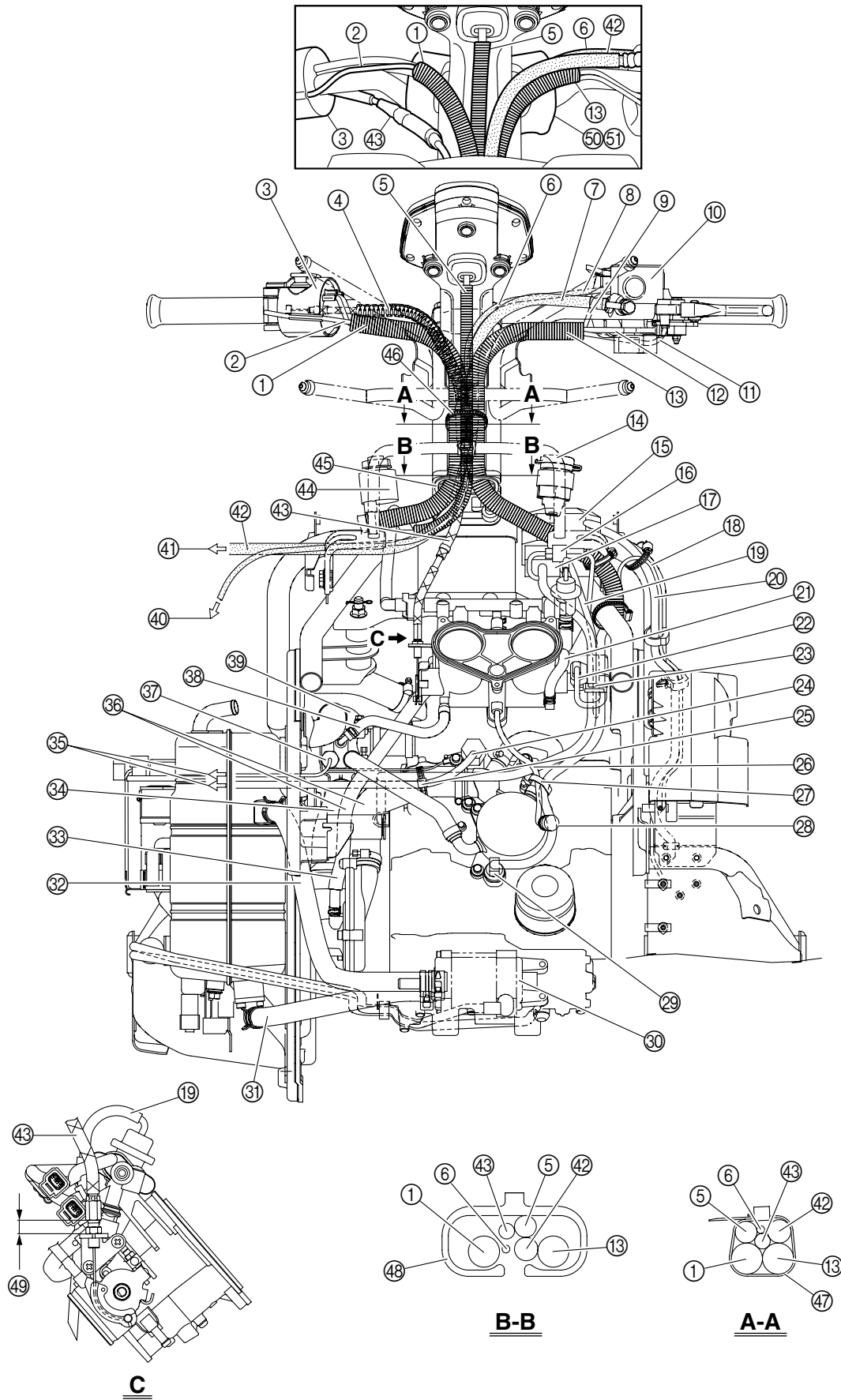
PZ50/PZ50GT/PZ50RT/PZ50MT

- ① Corrugated tube (engine stop switch lead, throttle switch lead, right grip warmer lead, and thumb warmer lead)
- ② Right grip warmer lead
- ③ Right handlebar switch
- ④ Route the throttle cable over the handlebar.
- ⑤ Multi-function meter unit lead
- ⑥ Parking brake cable
- ⑦ Route the brake hose in front of the top rod of the windshield bracket. (Except for PZ50)
- ⑧ Route the parking brake cable behind the top rod of the windshield bracket. (Except for PZ50)
- ⑨ Route the left handlebar switch leads behind the handlebar.
- ⑩ Brake master cylinder
- ⑪ Left grip warmer lead
- ⑫ Brake light switch lead
- ⑬ Corrugated tube (left grip warmer lead, grip/thumb warmer adjustment switch lead, brake light switch lead, and headlight beam switch lead)
- ⑭ Auxiliary DC jack (PZ50GT/PZ50RT/PZ50MT) (optional)
- ⑮ Rectifier/regulator
- ⑯ Crankshaft position sensor coupler
- ⑰ A.C. magneto coupler
- ⑱ Speed sensor lead
- ⑲ Pressure regulator hose
- ⑳ Fuel tank breather hose
- ㉑ Throttle body heater hose
- ㉒ Throttle position sensor coupler
- ㉓ Fasten the A.C. magneto lead, oil pressure switch lead, and pressure regulator hose with the holder.
- ㉔ Knock sensor
- ㉕ Fasten the A.C. magneto lead, water pump outlet hose, and knock sensor lead with the plastic band.



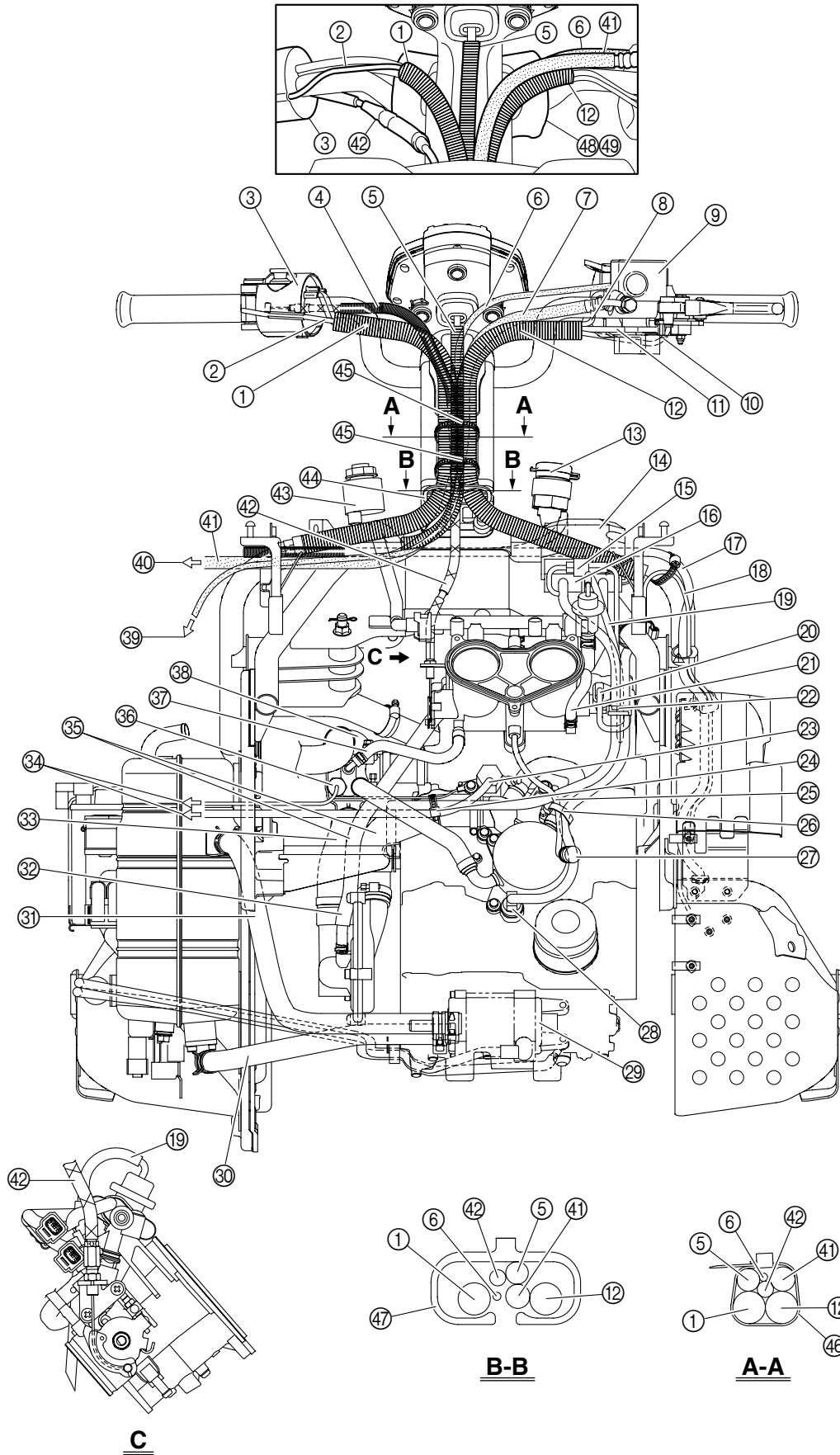


- ②⑥ Route the A.C. magneto lead behind the idling adjusting screw.
- ②⑦ Fasten the idling adjusting screw and oil pressure switch lead at the white tape with the plastic band. Install the plastic band with its buckle positioned towards the rear of the machine and its end facing to the right.
- ②⑧ Route the oil pressure switch lead under the idling adjusting screw, making sure that the lead is not too taut.
- ②⑨ Oil pressure switch coupler
- ③⑩ Starter motor
- ③⑪ Oil tank outlet hose
- ③⑫ Oil tank inlet hose
- ③⑬ Throttle body heater outlet hose
- ③⑭ Water pump inlet hose
- ③⑮ To the wire harness
- ③⑯ Route the water pump outlet hose and throttle body heater outlet hose behind the engine mounting bracket.
- ③⑰ Coolant temperature sensor
- ③⑱ Throttle body heater inlet hose
- ③⑲ Thermostat cover
- ④⑩ To the parking brake
- ④⑪ To the brake caliper
- ④⑫ Brake hose
- ④⑬ Throttle cable
- ④⑭ Main switch
- ④⑮ Pass the corrugated tube (engine stop switch lead, throttle switch lead, right grip warmer lead, and thumb warmer lead), corrugated tube (left grip warmer lead, grip/thumb warmer adjustment switch lead, brake light switch lead, and headlight beam switch lead), parking brake cable, throttle cable, multi-function unit lead, and brake hose with the holder.





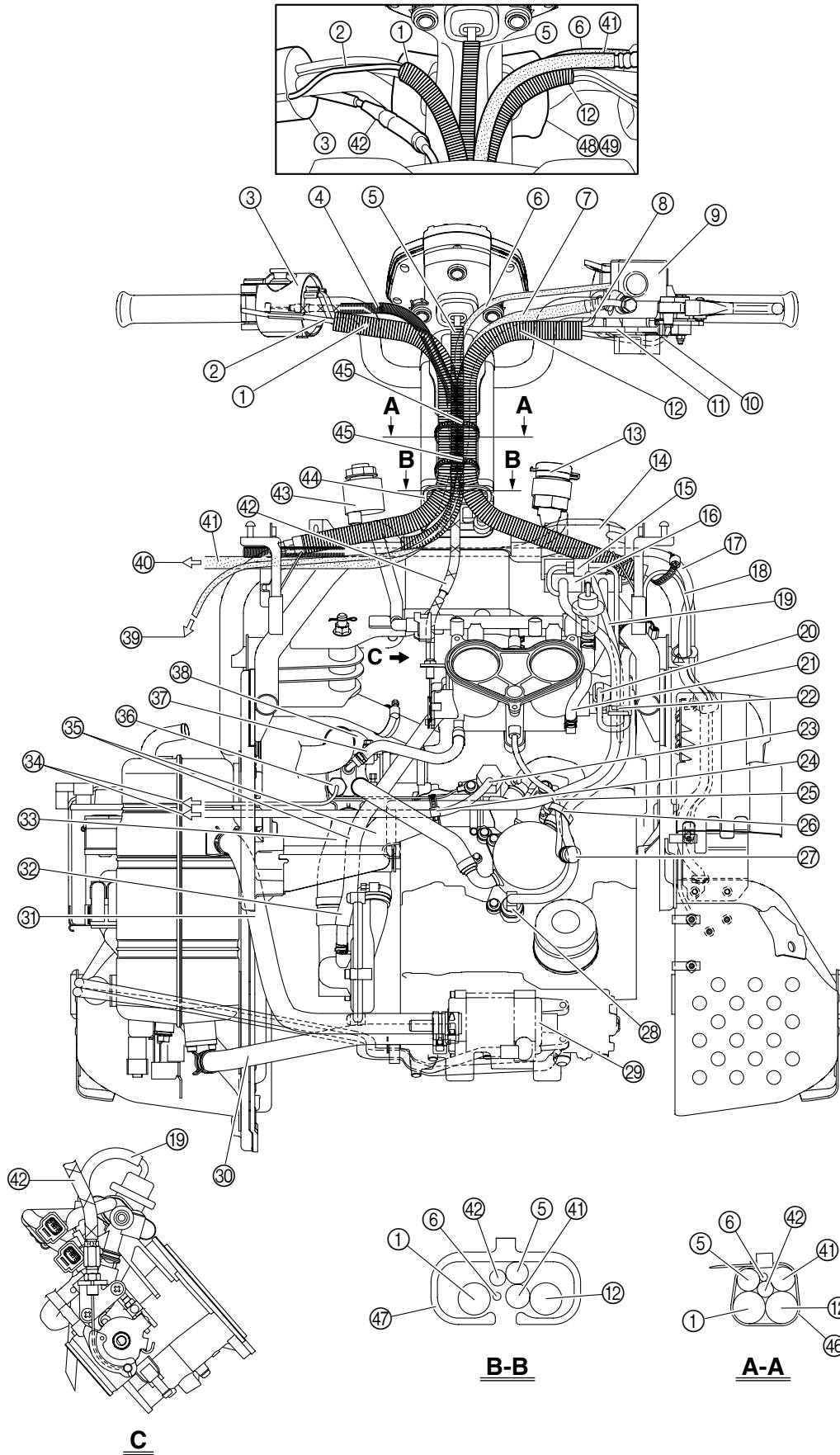
- ④⑥ Fasten the corrugated tube (engine stop switch lead, throttle switch lead, right grip warmer lead, and thumb warmer lead), corrugated tube (left grip warmer lead, grip/thumb warmer adjustment switch lead, brake light switch lead, and headlight beam switch lead), parking brake cable, throttle cable, speedometer unit lead, and brake hose with the plastic band.
- ④⑦ Install the plastic band with its buckle positioned behind the leads, cables, and hose and its end facing to the right. Be sure to position the corrugated tube (engine stop switch lead, throttle switch lead, right grip warmer lead, and thumb warmer lead) and corrugated tube (left grip warmer lead, grip/thumb warmer adjustment switch lead, brake light switch lead, and headlight beam switch lead) towards the front and fasten the throttle cable at the throttle cable adjusting nut.
- ④⑧ Position the corrugated tube (engine stop switch lead, throttle switch lead, right grip warmer lead, and thumb warmer lead) and corrugated tube (left grip warmer lead, grip/thumb warmer adjustment switch lead, brake light switch lead, and headlight beam switch lead) towards the front of the guide.
- ④⑨ 10 mm (0.39 in)
- ⑤⑩ Steering pad
- ⑤⑪ Install the steering pad, making sure not to pinch the cables, leads, etc.





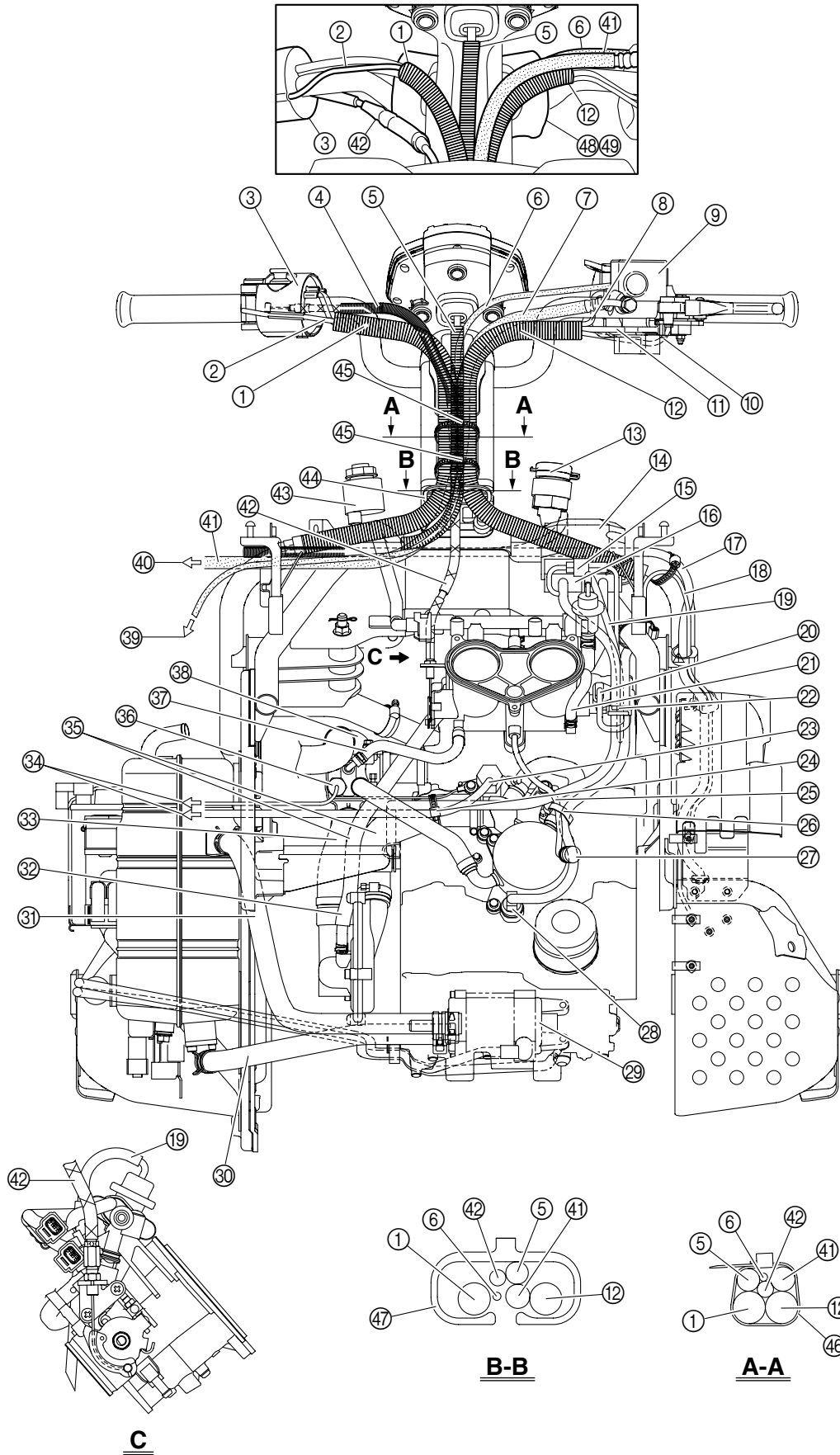
PZ50VT/PZ50MP

- ① Corrugated tube (engine stop switch lead, throttle switch lead, right grip warmer lead, and thumb warmer lead)
- ② Right grip warmer lead
- ③ Right handlebar switch
- ④ Route the throttle cable over the handlebar.
- ⑤ Multi-function meter unit lead
- ⑥ Parking brake cable
- ⑦ Route the brake hose in front of the handlebar.
- ⑧ Route the left handlebar switch leads behind the handlebar.
- ⑨ Brake master cylinder
- ⑩ Left grip warmer lead
- ⑪ Brake light switch lead
- ⑫ Corrugated tube (left grip warmer lead, grip/thumb warmer adjustment switch lead, brake light switch lead, and headlight beam switch lead)
- ⑬ Auxiliary DC jack
- ⑭ Rectifier/regulator
- ⑮ Crankshaft position sensor coupler.
- ⑯ A.C. magneto coupler
- ⑰ Fuel tank breather hose
- ⑱ Speed sensor lead
- ⑲ Pressure regulator hose
- ⑳ Throttle position sensor coupler
- ㉑ Throttle body heater hose
- ㉒ Fasten the A.C. magneto lead, oil pressure switch lead, and pressure regulator hose with the holder.
- ㉓ Knock sensor
- ㉔ Fasten the A.C. magneto lead, water pump outlet hose, and knock sensor lead with the plastic band.
- ㉕ Route the A.C. magneto lead behind the idling adjusting screw.



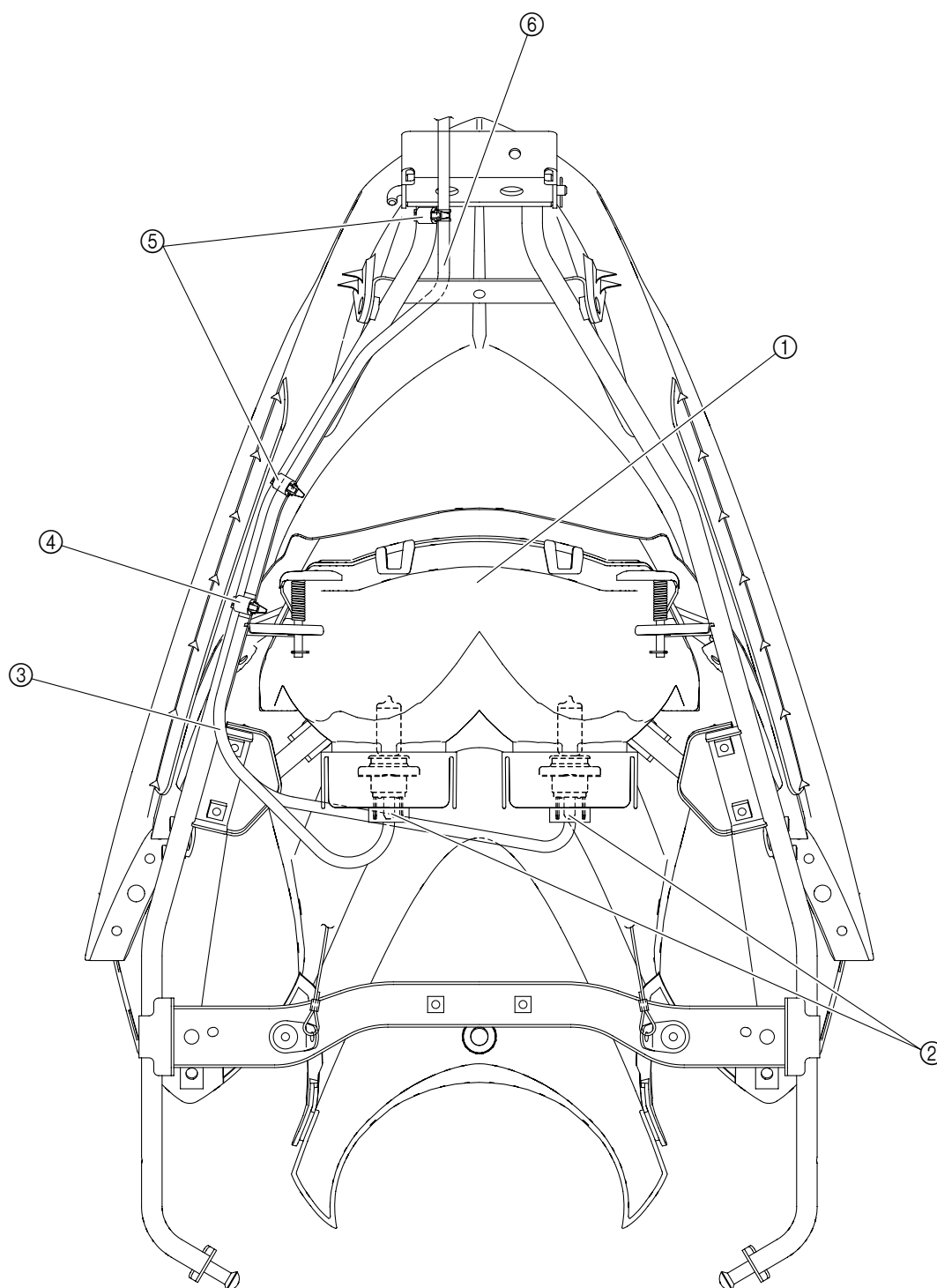


- ②⑥ Fasten the idling adjusting screw and oil pressure switch lead with the plastic band. Install the plastic band with its buckle positioned towards the rear of the machine and its end facing to the right.
- ②⑦ Route the oil pressure switch lead under the idling adjusting screw, making sure that the lead is not taut.
- ②⑧ Oil pressure switch coupler
- ②⑨ Starter motor
- ③⑩ Oil tank outlet hose
- ③⑪ Oil tank inlet hose
- ③⑫ Throttle body heater outlet hose
- ③⑬ Water pump inlet hose
- ③⑭ To the wire harness
- ③⑮ Route the water pump outlet hose and throttle body heater outlet hose behind the engine mounting bracket.
- ③⑯ Coolant temperature sensor
- ③⑰ Throttle body heater inlet hose
- ③⑱ Thermostat cover
- ③⑲ To the parking brake
- ④⑩ To the brake caliper
- ④⑪ Brake hose
- ④⑫ Throttle cable
- ④⑬ Main switch
- ④⑭ Pass the corrugated tube (engine stop switch lead, throttle switch lead, right grip warmer lead, and thumb warmer lead), corrugated tube (left grip warmer lead, grip/thumb warmer adjustment switch lead, brake light switch lead, and headlight beam switch lead), parking brake cable, throttle cable, speedometer unit lead, and brake hose with the holder.





- ④⑤ Fasten the corrugated tube (engine stop switch lead, throttle switch lead, right grip warmer lead, and thumb warmer lead), corrugated tube (left grip warmer lead, grip/thumb warmer adjustment switch lead, brake light switch lead, and headlight beam switch lead), parking brake cable, throttle cable, speedometer unit lead, and brake hose with the plastic band.
- ④⑥ Install the plastic band with its buckle positioned behind the leads, cables, and hose and its end facing to the right. Be sure to position the corrugated tube (engine stop switch lead, throttle switch lead, right grip warmer lead, and thumb warmer lead) and corrugated tube (left grip warmer lead, grip/thumb warmer adjustment switch lead, brake light switch lead, and headlight beam switch lead) towards the front and fasten the throttle cable at the throttle cable adjusting nut.
- ④⑦ Position the corrugated tube (engine stop switch lead, throttle switch lead, right grip warmer lead, and thumb warmer lead) and corrugated tube (left grip warmer lead, grip/thumb warmer adjustment switch lead, brake light switch lead, and headlight beam switch lead) towards the front of the guide.
- ④⑧ Steering pad
- ④⑨ Install the steering pad, making sure not to pinch the cables, leads, etc.



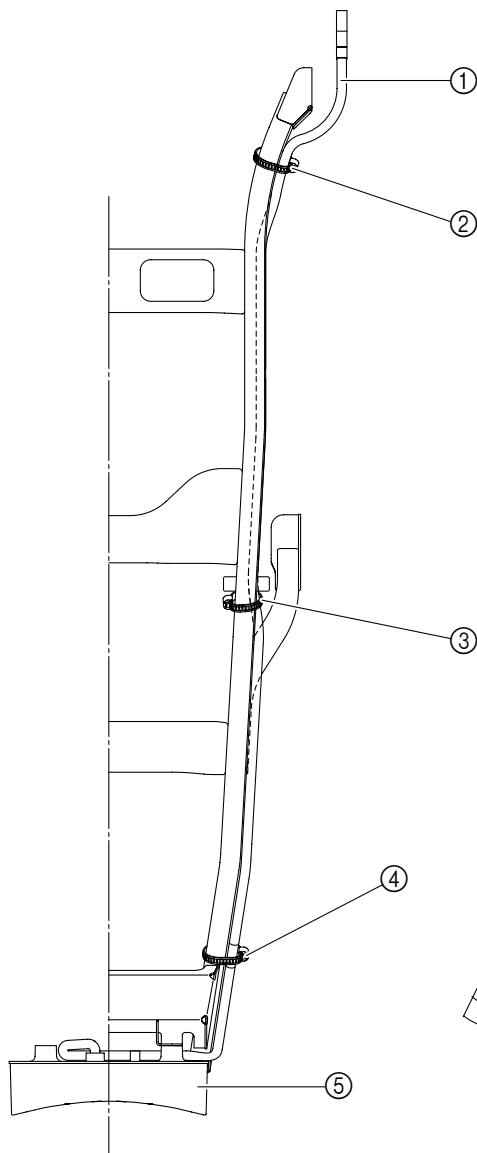


PZ50VT/PZ50MP

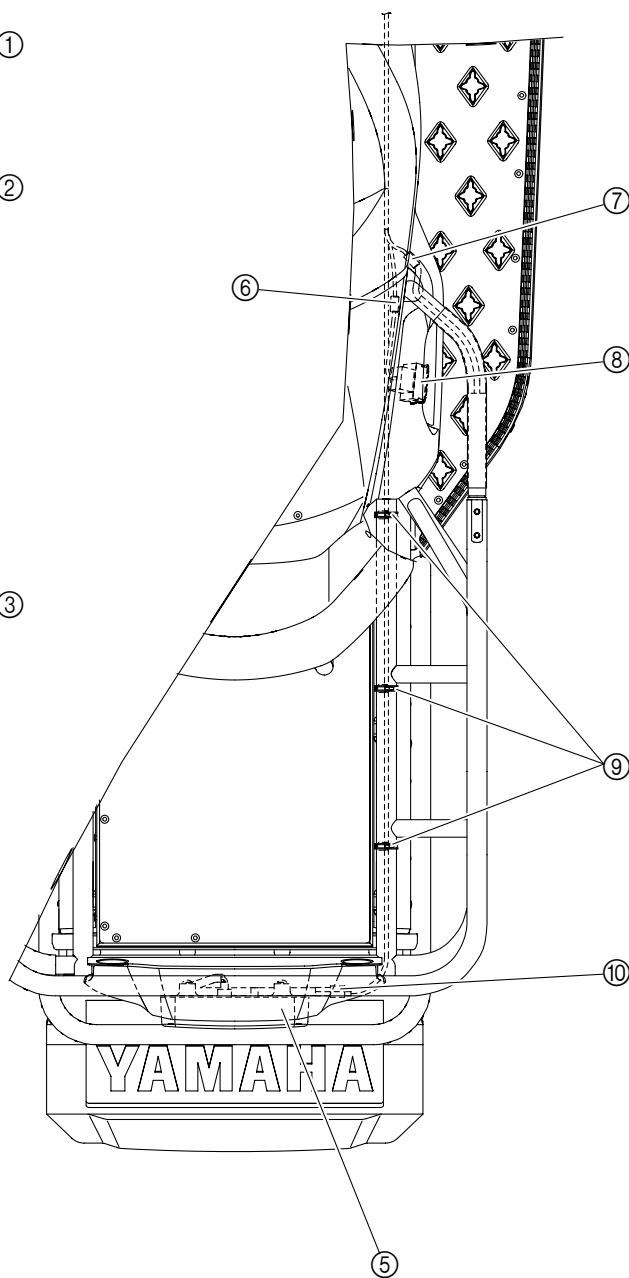
- ① Headlight unit
- ② Headlight lead coupler
- ③ Headlight lead
- ④ Fasten the headlight lead at the white tape to the shroud frame with the plastic band, making sure to position the band near the bracket.
- ⑤ Fasten the headlight lead to the shroud frame with the plastic band, making sure to route the lead along the bend in the frame.
- ⑥ Route the headlight lead to the inside of the shroud frame.



PZ50/PZ50GT/PZ50RT/PZ50MT



PZ50VT/PZ50MP





- ① Tail/brake light lead
- ② Fasten the tail/brake light lead with the plastic band. Face the end of the plastic band downward.
- ③ Fasten the tail/brake light lead with the plastic band. Install the plastic band with its buckle positioned to the inside of the tail/brake light lead and its end facing downward.
- ④ Fasten the tail/brake light lead at the white tape with the plastic band. Face the end of the plastic band downward.
- ⑤ Tail/brake light
- ⑥ Passenger grip warmer switch coupler
- ⑦ Connect the passenger grip warmer coupler, and then place it in the rear lower cover.
- ⑧ Passenger grip warmer switch
- ⑨ Fasten the tail/brake light lead to the rear carrier with the plastic band.
- ⑩ Connect the tail/brake light coupler, and then place it in the tail/brake light cover.

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WIRING DIAGRAM
PZ50 2008
8GC-0F001-20

- ① Crankshaft position sensor

② A.C. magneto

③ Rectifier/regulator

④ Main switch

⑤ Main fuse

⑥ Load control relay

⑦ Fuel injection system fuse

⑧ Starter relay

⑨ Starter motor

⑩ Battery

⑪ Diode

⑫ Engine stop switch

⑬ Throttle switch

⑭ Grip warmer

⑮ Thumb warmer

⑯ Oil pressure switch

⑰ ECU (engine control unit)

⑱ Cylinder-#1 ignition coil

⑲ Spark plug

⑳ Cylinder-#2 ignition coil

㉑ Fuel injection system relay

㉒ Injector #1

㉓ Injector #2

㉔ Fuel pump

㉕ Throttle position sensor

㉖ Speed sensor

㉗ Cylinder identification sensor

㉘ Cylinder-#1 intake air pressure sensor

㉙ Cylinder-#2 intake air pressure sensor

㉚ Knock sensor

㉛ Coolant temperature sensor

㉜ Intake air temperature sensor

㉝ Grip/thumb warmer adjustment switch

㉞ CO adjustment coupler

㉟ Engine ground

㊱ Frame ground

㊲ Brake light switch

㊳ Tail/brake light

㊴ Fuel sender

㊵ Oil level switch

㊶ Speedometer unit

㊷ Multi-function meter

㊸ Warning light
- ④④ Low coolant temperature indicator light

④⑤ Knock control system indicator light

④⑥ High beam indicator light

④⑦ Headlight

④⑧ Headlight relay

④⑨ Headlight beam switch

⑤⑩ Radiator fan motor

⑤⑪ Radiator fan motor relay

⑤⑫ Ignition fuse

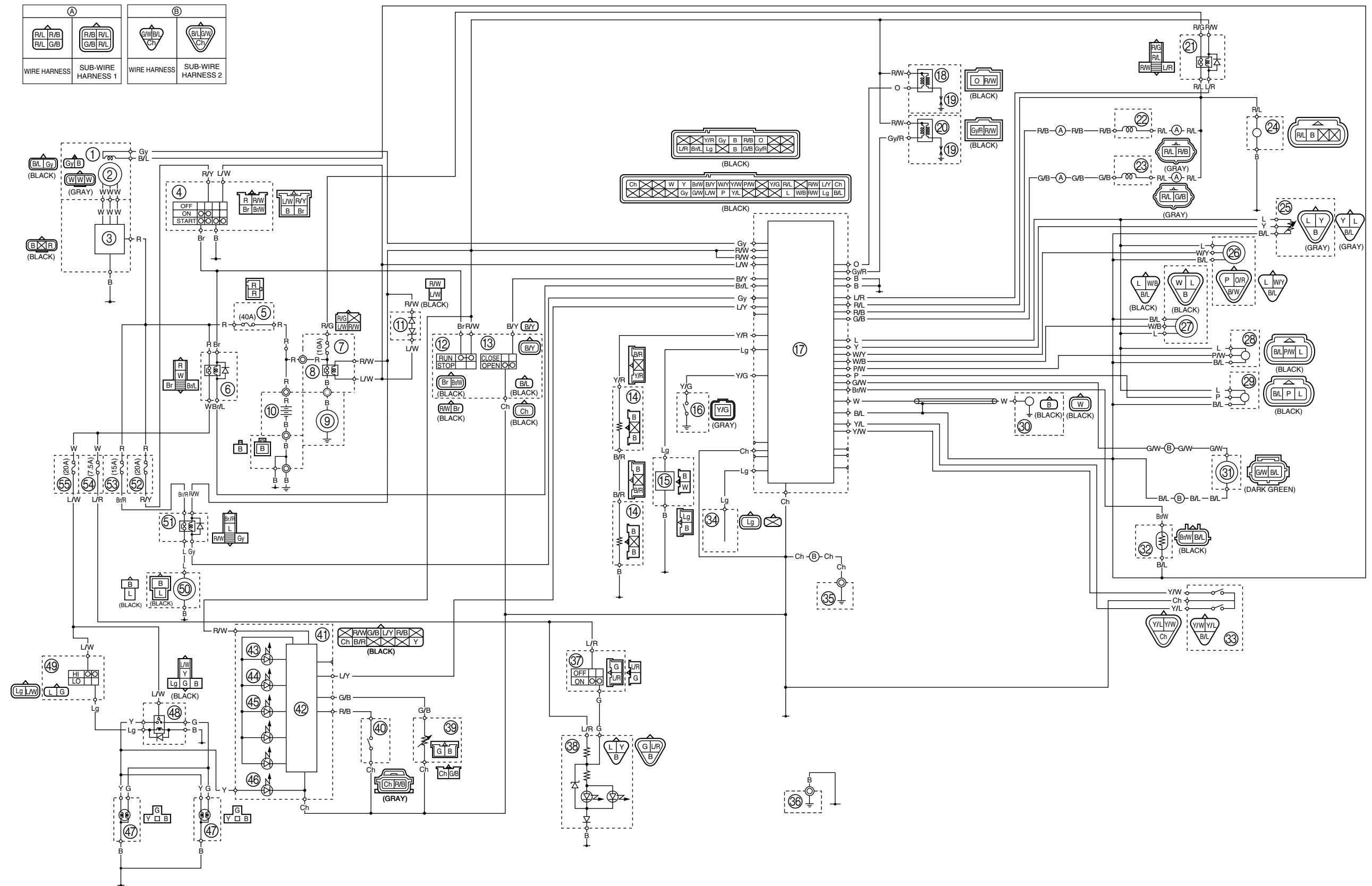
⑤⑬ Radiator fan motor fuse

⑤⑭ Signal fuse

⑤⑮ Headlight fuse

COLOR CODE	
B	Black
Br	Brown
Ch	Chocolate
G	Green
Gy	Gray
L	Blue
Lg	Light green
O	Orange
P	Pink
R	Red
W	White
Y	Yellow
B/L	Black/Blue
B/R	Black/Red
B/W	Black/White
B/Y	Black/Yellow
Br/L	Brown/Blue
Br/R	Brown/Red
Br/W	Brown/White
G/B	Green/Black
G/W	Green/White
Gy/R	Gray/Red
L/R	Blue/Red
L/W	Blue/White
L/Y	Blue/Yellow
P/W	Pink/White
R/B	Red/Black
R/G	Red/Green
R/L	Red/Blue
R/W	Red/White
R/Y	Red/Yellow
W/B	White/Black
W/Y	White/Yellow
YG	Yellow/Green
Y/L	Yellow/Blue
Y/R	Yellow/Red
Y/W	Yellow/White

8GC-0F001-20



WIRING DIAGRAM

PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP 2008

8GK-0F001-20/8GN-0F001-20/8GJ-0F001-20

① Crankshaft position sensor	④③ Engine ground	COLOR CODE
② A.C. magneto	④④ Passenger grip warmer relay	
③ Rectifier/regulator	④⑤ Frame ground	B.....Black
④ Main switch	④⑥ Passenger grip warmer switch	Br.....Brown
⑤ Main fuse	④⑦ Passenger grip warmer	Ch.....Chocolate
⑥ Load control relay	④⑧ Brake light switch	G.....Green
⑦ Fuel injection system fuse	④⑨ Tail/brake light	Gy.....Gray
⑧ Starter relay	⑤① Fuel sender	L.....Blue
⑨ Starter motor	⑤② Oil level switch	Lg.....Light green
⑩ Battery	⑤③ Speedometer unit	O.....Orange
⑪ Diode	⑤④ Multi-function meter	P.....Pink
⑫ Engine stop switch	⑤⑤ Warning light	R.....Red
⑬ Throttle switch	⑤⑥ Low coolant temperature indicator light	Sb.....Sky blue
⑭ DC back buzzer	⑤⑦ Knock control system indicator light	W.....White
⑮ Grip warmer sub-wire harness	⑤⑧ Drive position indicator light	Y.....Yellow
⑯ Grip warmer	⑤⑨ Reverse position indicator light	B/L.....Black/Blue
⑰ Thumb warmer	⑤⑩ High beam indicator light	B/W.....Black/White
⑱ Oil pressure switch	⑥① Headlight	B/R.....Black/Red
⑲ Drive position switch	⑥② Headlight relay	B/Y.....Black/Yellow
⑳ Reverse position switch	⑥③ Headlight beam switch	Br/B.....Brown/Black
㉑ ECU (engine control unit)	⑥④ Radiator fan motor	Br/L.....Brown/Blue
㉒ Cylinder-#1 ignition coil	⑥⑤ Radiator fan motor relay	Br/R.....Brown/Red
㉓ Spark plug	⑥⑥ Auxiliary DC jack	Br/W.....Brown/White
㉔ Cylinder-#2 ignition coil	⑥⑦ Ignition fuse	G/B.....Green/Black
㉕ Fuel injection system relay	⑥⑧ Radiator fan motor fuse	G/R.....Green/Red
㉖ Injector #1	⑥⑨ Signal fuse	G/W.....Green/White
㉗ Injector #2	⑥⑩ Headlight fuse	G/Y.....Green/Yellow
㉘ Fuel pump	⑦① Auxiliary DC jack fuse	Gy/R.....Gray/Red
㉙ Throttle position sensor	⑦② Gear motor fuse	L/B.....Blue/Black
㉚ Speed sensor	㉑ PZ50VT/PZ50MP	L/R.....Blue/Red
㉛ Cylinder identification sensor	㉒ PZ50VT (STANDARD)/PZ50MP (OPTION)	L/W.....Blue/White
㉜ Cylinder-#1 intake air pressure sensor	㉓ PZ50VT/PZ50MP (STANDARD)/PZ50GT/PZ50RT/PZ50MT (OPTION)	L/Y.....Blue/Yellow
㉝ Cylinder-#2 intake air pressure sensor	㉔ PZ50RT	O/B.....Orange/Black
㉞ Knock sensor	㉕ PZ50GT/PZ50MT	O/R.....Orange/Red
㉟ Coolant temperature sensor		P/W.....Pink/White
㊱ Intake air temperature sensor		R/B.....Red/Black
㊲ Grip/thumb warmer adjustment switch		R/G.....Red/Green
㊳ Gear motor relay 1		R/L.....Red/Blue
㊴ Gear motor relay 2		R/W.....Red/White
㊵ Gear motor relay 3		R/Y.....Red/Yellow
㊶ Gear motor		Sb/W.....Sky blue/White
㊷ CO adjustment coupler		W/B.....White/Black

WIRING DIAGRAM
PZ50GT/PZ50RT/PZ50MT/PZ50VT/PZ50MP 2008

8GK-0F001-20/8GN-0F001-20/8GJ-0F001-20

