



AIRCRAFT  
MAINTENANCE MANUAL

**FREE-FALL CONTROL CABLES - ADJUSTMENT/TEST**

EFFECTIVITY: ALL

1. General

- A. This section gives the procedure to do the check and adjustment of the free-fall control cables.
- B. The procedures in this section are given in the sequence below. The tasks identified with (♦) are part of the Scheduled Maintenance Requirements Document (SMRD).

TASK NUMBER	DESCRIPTION	EFFECTIVITY
32-34-03-700-801-A ♦	FREE-FALL CONTROL CABLES - CHECK	ALL
32-34-03-700-802-A	FREE-FALL CONTROL CABLES - ADJUSTMENT	ALL



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TASK 32-34-03-700-801-A

EFFECTIVITY: ALL

2. FREE-FALL CONTROL CABLES - CHECK

A. General

- (1) This procedure does not give the specified value for the tension of the control cables. Do the check with the free-fall lever pulled and locked and the rigging pin installed. The rigging pin must move freely.
- (2) If there is interference when you install the rigging pin, adjust the free-fall control cables ([AMM TASK 32-34-03-700-802-A/500](#)).

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 28-41-00-200-801-A/600	-
<a href="#">AMM TASK 29-10-00-860-802-A/200</a>	HYDRAULIC SYSTEM - PRESSURIZATION WITH EMDP
<a href="#">AMM TASK 32-00-01-910-801-A/200</a>	LG SAFETY PIN - INSTALLATION AND REMOVAL
<a href="#">AMM TASK 32-00-02-910-801-A/200</a>	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
<a href="#">AMM TASK 32-34-03-700-802-A/500</a>	FREE-FALL CONTROL CABLES - ADJUSTMENT
<a href="#">SB145-32-0036</a>	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
155	155FZ	LH MLG wheelwell
155	155GZ	LH MLG wheelwell

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 058	Rigging Pin Kit	To lock the quadrant to do the check of the control cable	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expandable Parts

Not Applicable



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## H. Persons Recommended

QTY	FUNCTION	PLACE
1	Does the task	NLG wheelwell, MLG wheelwell, wing stub, and cockpit

## I. Preparation

## SUBTASK 841-002-A

- (1) For aircraft PRE-MOD [SB145-32-0036](#), make sure that the pressure in hydraulic system No. 1 is fully released ([AMM TASK 29-10-00-860-802-A/200](#)).
- (2) For aircraft POST-MOD [SB145-32-0036](#), install the safety pin of the NLG doors solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).
- (3) Make sure that the landing-gear safety pins are installed ([AMM TASK 32-00-01-910-801-A/200](#)).
- (4) Remove access panels 155FZ and 155GZ (AMM MPP 06-41-01/100).

J. Functional Check of Condition and Tension of Free-fall Control Cables ([Figure 501](#))

## SUBTASK 720-002-A

- (1) Pull and lock the free-fall lever (actuated position).
- (2) With the free-fall lever pulled and locked, put a rigging pin into the orifice of the quadrant of the free-fall selector valve. Make sure that the rigging pin can move freely in the orifice.
- (3) With the free-fall lever pulled and locked, put a rigging pin into the orifice of the quadrant of the NLG uplock box. Make sure that the rigging pin can move freely in the orifice.
- (4) With the free-fall lever pulled and locked, put a rigging pin into the orifice of the center quadrant installed in the wing stub. Make sure that the rigging pin can move freely in the orifice.
- (5) With the free-fall lever pulled and locked, put a rigging pin into the orifice of the quadrant of the LH MLG uplock box. Make sure that the rigging pin can move freely in the orifice.
- (6) With the free-fall lever pulled and locked, put a rigging pin into the orifice of the quadrant of the RH MLG uplock box. Make sure that the rigging pin can move freely in the orifice.
- (7) Do an inspection on the fuel-quantity indication harness (AMM TASK 28-41-00-200-801-A/600).

**NOTE:** The inspection of fuel-quantity indication harness is a part of Critical Design Configuration Control Limitations (CDCCL) in the Airworthiness Limitations (Section 6) of the Maintenance Review Board Report (MRB).

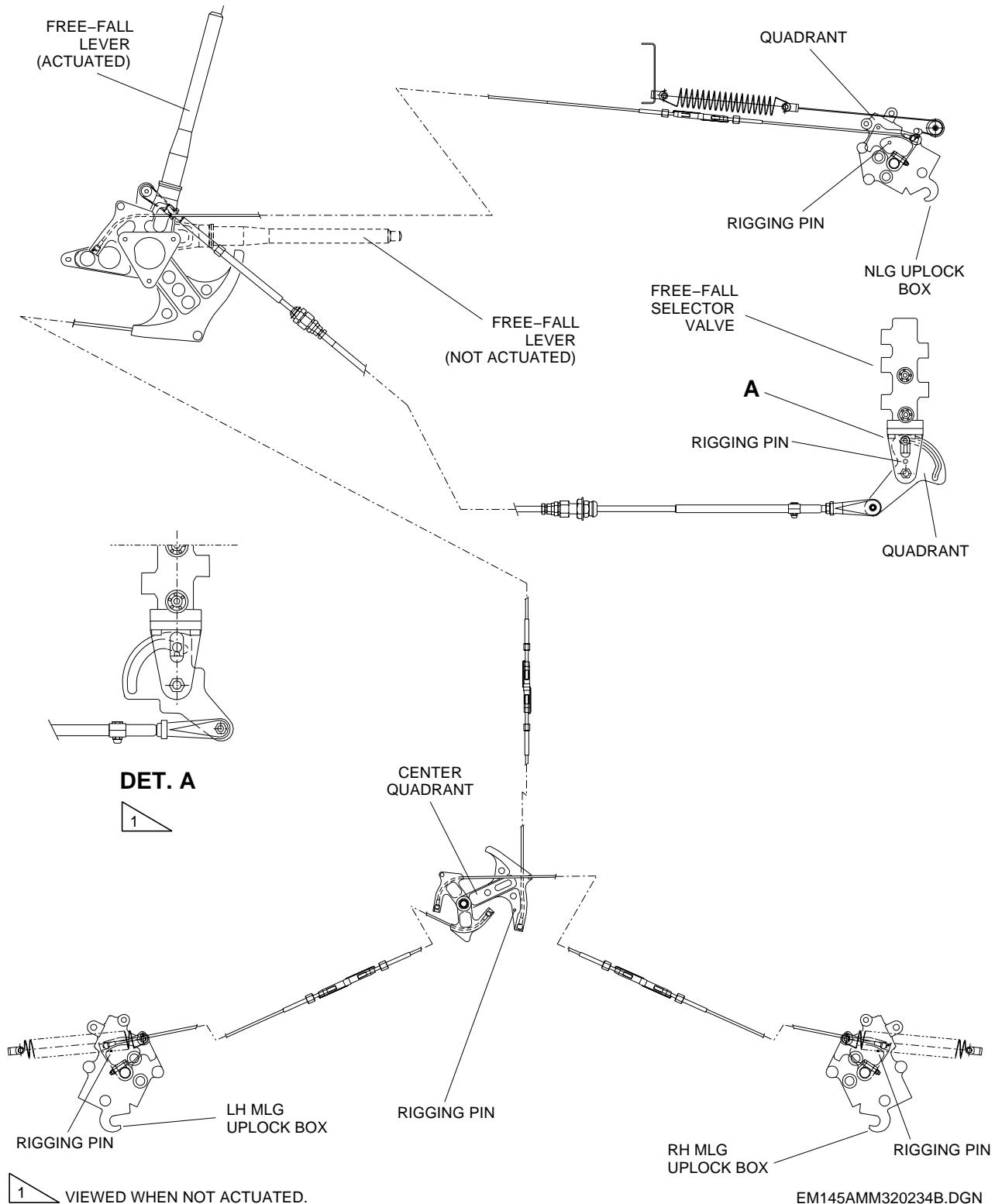
- (8) Remove all rigging pins.
- (9) Move the free-fall lever to its usual position (nonactuated position).



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- (10) Install access panels 155FZ and 155GZ back (AMM MPP 06-41-01/100).

**EFFECTIVITY: ALL**  
Free-fall Control Cables - Check  
Figure 501





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TASK 32-34-03-700-802-A

EFFECTIVITY: ALL

3. FREE-FALL CONTROL CABLES - ADJUSTMENT

A. General

- (1) This task gives the procedure to adjust the free-fall control cables and the teleflex cable of the free-fall selector valve.

B. References

REFERENCE	DESIGNATION
AMM MPP 06-41-01/100	-
AMM TASK 28-41-00-200-801-A/600	-
AMM TASK 32-00-01-910-801-A/200	LG SAFETY PIN - INSTALLATION AND REMOVAL
AMM TASK 32-00-02-910-801-A/200	SAFETY PIN OF THE NLG DOORS SOLENOID VALVE - INSTALLATION AND REMOVAL
AMM TASK 32-34-00-700-801-A/500	LG EMERGENCY EXTENSION - OPERATIONAL AND FUNCTIONAL CHECKS
IPC 32-34-00	LDG EMERGENCY EXTENSION - FREE-FALL
SB145-32-0036	-

C. Zones and Accesses

ZONE	PANEL/DOOR	LOCATION
192	192BR	Wing stub
155	155KZ/155MZ	LH MLG wheelwell

D. Tools and Equipment

ITEM	DESCRIPTION	PURPOSE	QTY
GSE 058	Rigging Pin Kit	To lock the quadrant to adjust the control cable	

E. Auxiliary Items

Not Applicable

F. Consumable Materials

Not Applicable

G. Expendable Parts

ITEM	IPC REFERENCE (VENDOR REFERENCE)	QTY
Cotter pin	IPC 32-34-00	1
Lockwire	IPC 32-34-00	AR
Locking clip	IPC 32-34-00	2

**H. Persons Recommended**

<i>QTY</i>	<i>FUNCTION</i>	<i>PLACE</i>
1	Does the task	NLG wheelwell, MLG wheelwells and wing stub
1	Helps the other technician	NLG wheelwell, MLG wheelwells, wing stub, and cockpit

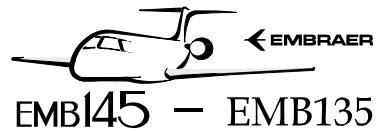
**I. Preparation**
**SUBTASK 841-003-A**

- (1) To adjust the NLG uplock box control cable, it is necessary to get access to it through the NLG wheelwell.
- (2) To adjust the free-fall selector valve teleflex cable, it is necessary to get access to it through the NLG wheelwell.
- (3) To adjust the center quadrant control cable (in the wing stub), it is necessary to get access to it through panels 192BR, 155KZ, and 155MZ (AMM MPP 06-41-01/100).
- (4) To adjust the LH MLG uplock box control cable, it is necessary to get access to it through the LH MLG wheelwell.
- (5) To adjust the RH MLG uplock box control cable, it is necessary to get access to it through the RH MLG wheelwell.
- (6) To make sure that the installation of the rigging pin is correct, always pull the control cable tightly.
- (7) Make sure that the landing-gear safety pins are installed ([AMM TASK 32-00-01-910-801-A/200](#)).
- (8) Remove access panels 192BR, 155KZ, and 155MZ (AMM MPP 06-41-01/100).
- (9) For aircraft POST-MOD [SB145-32-0036](#), install the safety pin of the NLG doors solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).

**J. Adjustment ([Figure 502](#))**
**SUBTASK 720-003-A**

- (1) Adjust the teleflex cable of the free-fall selector valve as follows:
  - (a) Disconnect the teleflex-cable fork end from the free-fall selector valve.
  - (b) Loosen the jam nut of the teleflex-cable fork end.
  - (c) Pull and lock the free-fall lever.
  - (d) Move the quadrant of the free-fall selector valve to the free-fall position and put a rigging pin into its orifice.
  - (e) Adjust the length of the teleflex cable fork end to install its bolt without interference.
  - (f) Tighten the jam nut of the teleflex-cable fork end.

- (g) Use a piece of lockwire to safety the thread of the teleflex-cable fork end. Put the lockwire through the safety hole to make sure that the thread of the teleflex-cable fork end engages sufficiently.
  - (h) Put the bolt through the teleflex-cable fork end, and through the quadrant of the free-fall selector valve.
  - (i) Put the washer and nut on the bolt.
  - (j) Tighten the nut.
  - (k) Safety the nut with a cotter pin.
  - (l) Remove the rigging pin.
  - (m) Push and lock the free-fall lever.
  - (n) Do the operational check of the free-fall system ([AMM TASK 32-34-00-700-801-A/500](#)).
- (2) Adjust the NLG uplock-box control cable as follows:
- (a) Remove and discard the locking clips.
  - (b) Do a check to see that the cable is tight.
  - (c) Pull and lock the free-fall lever.
  - (d) Pull the cable through the turnbuckle until you can put the rigging pin into the orifice that locks the quadrant of the uplock box without interference.
  - (e) Remove the rigging pin.
  - (f) Push and lock the free-fall lever.
  - (g) Install new locking clips.
  - (h) Do the operational check of the free-fall system ([AMM TASK 32-34-00-700-801-A/500](#)).
- (3) Adjust the MLG uplock-box control cable as follows:
- NOTE: This procedure is applicable to the LH and RH MLG uplock-box control cables.
- (a) Remove and discard the locking clips.
  - (b) Do a check to see that the cable is tight.
  - (c) Pull and lock the free-fall lever and install the rigging pin to lock the center quadrant.
  - (d) Pull the cable through the turnbuckle until you can put the rigging pin into the orifice that locks the quadrant of the MLG uplock box without interference.
  - (e) Remove the rigging pins.
  - (f) Push and lock the free-fall lever.



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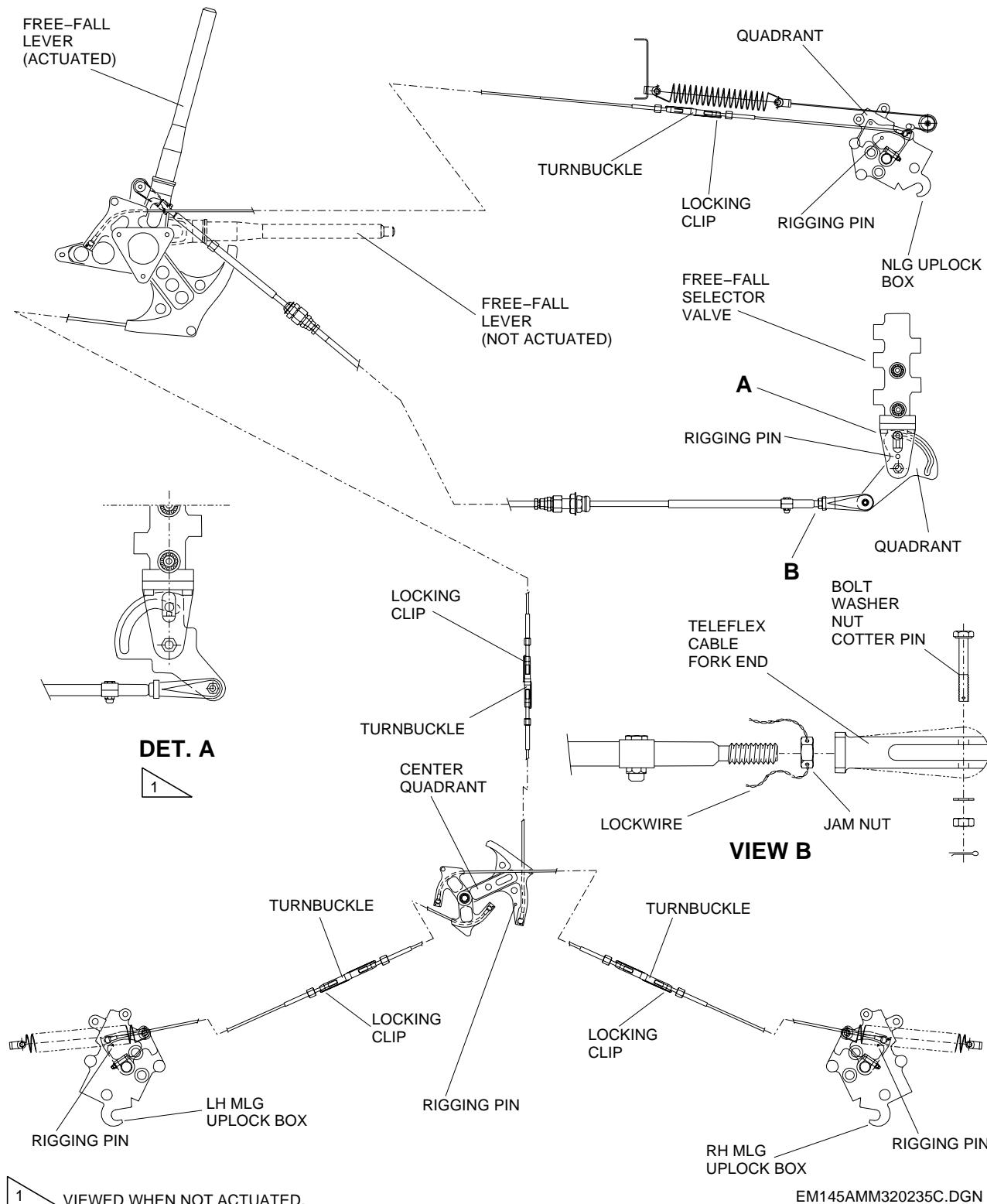
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- (g) Install new locking clips.
  - (h) Do the operational check of the free-fall system ( [AMM TASK 32-34-00-700-801-A/500](#)).
- (4) Adjust the interconnecting control cable of the center quadrant as follows:
- (a) Do a check to see that the cable is tight. If it is OK, go to step (5). If it is not satisfactory, do as follows.
  - (b) Remove and discard the locking clips.
  - (c) Pull and lock the free-fall lever.
  - (d) Pull the cable through the turnbuckle until you can put the rigging pin into the orifice that locks the center quadrant without interference.
  - (e) Remove the rigging pin.
  - (f) Push and lock the free-fall lever.
  - (g) Install new locking clips.
  - (h) Do the operational check of the free-fall system ( [AMM TASK 32-34-00-700-801-A/500](#)).
- (5) Do an inspection on the fuel-quantity indication harness (AMM TASK 28-41-00-200-801-A/600).
- NOTE: The inspection of fuel-quantity indication harness is a part of Critical Design Configuration Control Limitations (CDCCL) in the Airworthiness Limitations (Section 6) of the Maintenance Review Board Report (MRB).
- (6) Install access panels 192BR, 155KZ, and 155MZ back (AMM MPP 06-41-01/100).
- (7) For aircraft POST-MOD [SB145-32-0036](#), remove the safety pin of the NLG doors solenoid valve ([AMM TASK 32-00-02-910-801-A/200](#)).

**EFFECTIVITY: ALL**

Free-fall Control Cables - Adjustment

Figure 502



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