35 TAPE READER BASES (FOR ASR SETS)

ADJUSTMENTS AND LUBRICATION

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1. GENERAL

1.01 This section is reissued to include in-
formation pertinent to new models, and
to rearrange text. Lubrication procedures,
formerly covered in section 574-223-701 have
been included in this section.

1.02 The primary concern of this section is
the description, adjustment and lubri-
cation of the bases which mount 35 tape readers
and answer-back or distributor units in ASR
sets. For information regarding principles of
operation and description, refer to other re-
lated 574-223-series sections.

2. ADJUSTMENTS

2.01 General. Gear arrangements vary from
base to base depending upon the type of
drive motor and the number and types of equip-
ment mounted on the base. The gear adjustments
following treat the bases in four major groups;
single reader (low speed motor), double reader
(low speed motor), single reader (high speed
motor), and double reader (high speed motor).

* "Tape reader" is a general term applying to
units often referred to as transmitters or
transmitter distributors.

Figure 1 - 35 Tape Reader Base (Typical)
2.02 Single Reader Bases (Low Speed Motor)

Note: The procedure following is for a complete adjustment. Removal of a single component (motor, reader, or answer-back) will not normally require a complete re-adjustment. Perform adjustment in order given ((A), (B), (C), etc). Loosen reader, motor, and answer-back mounting screws before beginning a complete adjustment.

(A) TAPE READER

Requirement
Tape reader should be positioned midway between left and right adjustment extremes.

To Adjust
Position reader to meet requirement. Tighten reader mounting screws.

(B) READER DRIVE PINION

Requirement
There should be a
Min 0.004 inch---Max 0.008 inch backlash between the reader drive pinion and reader gear at the point of minimum clearance.

To Adjust
Position motor to meet requirement. Tighten motor mounting screws.

(C) ANSWER-BACK IDLER GEAR

Requirement
With all play in answer-back mounting holes taken up in the direction toward the motor. There should be
Min 0.004 inch---Max 0.008 inch backlash between idler gear and answer-back mainshaft gear and between idler gear and answer-back drive pinion, at the point of minimum clearance.

To Adjust
Loosen answer-back idler gear bracket. Take up adjustment play toward motor and tighten answer-back mounting screws. Position idler gear to meet requirement and tighten bracket locking screws.
2.03 Double Reader Bases (Low Speed Motor)

(A) READER IDLER GEARS

Requirement
Reader idler gear shaft should be positioned midway between left and right extremes.

To Adjust
Position the shaft brackets at their mid-adjustment position and tighten bracket mounting screws.

Note: The procedure following is for a complete adjustment. Removal of a single component (motor, reader, or answer-back) will not normally require a complete readjustment. Perform adjustment in order given (A), (B), (C), etc. Loosen reader, idler gear shaft, motor, and answer-back mounting screws before beginning complete adjustment.

(B) TAPE READER GEARS

Requirement
There should be a
Min 0.004 inch---Max 0.008 inch backlash between the reader idler gear and its associated reader gear at the point of minimum clearance.

To Adjust
Position each reader to meet requirement and tighten reader mounting screws.
2.03 Double Reader Bases (Low Speed Motor) (Continued)

(C) READER DRIVE PINION

Requirement
There should be
Min 0.004 inch --- Max 0.008 inch backlash
between the rear reader gear and the reader
drive pinion at the point of minimum backlash.

To Adjust
Position the motor to meet requirements.
Tighten motor mounting screws.

(D) ANSWER-BACK IDLER GEAR

Requirement
With all play in answer-back mounting holes taken up
in the direction toward the motor, there should be
Min 0.004 inch --- Max 0.008 inch backlash
between idler gear and answer-back mainshaft
gear and between idler gear and answer-back
drive pinion measured at point of minimum
clearance.

To Adjust
Loosen answer-back idler gear bracket locking
screw. Take up play and tighten mounting screws.
Position idler gear to meet requirements and
tighten locking screw.
2.04 Single Reader Bases (High Speed Motor)

Note: The procedure following is for a complete adjustment. Removal of a single component (motor, reader, or answer-back, or distributor) will not normally require a complete readjustment. Perform adjustments in the order given ((A), (B), (C), etc). Loosen reader, connector bracket (if so equipped), drive shaft bracket, motor, and answer-back or distributor unit mounting screws before beginning a complete adjustment.

(A) DRIVE GEAR SHAFT

Requirement
The drive gear shaft should be positioned midway between left and right mounting extremes.

To Adjust
Position the shaft brackets at their mid-adjustment position and tighten bracket mounting screws.

(B) TAPE READER GEAR

Requirement
There should be
Min 0.004 inch --- Max 0.008 inch backlash between the reader gear and reader drive gear at the point of minimum clearance.

To Adjust
Position reader to meet requirement and tighten reader mounting screws.

(C) CONNECTOR BRACKET ADJUSTMENT

(For those bases on which the reader mating connector is rigidly fixed)

Requirement
The connector should mate with the connector on the bottom of the reader and be fully engaged.

To Adjust
Position connector bracket to meet requirements and tighten mounting screws.
2.04 Single Reader Bases (High Speed Motor) (Continued)

(D) MOTOR PINION

Requirement
There should be
Min 0.004 inch—Max 0.008 inch backlash between the reader gear and motor pinion at the point of minimum clearance.

To Adjust
Position motor to meet requirements and tighten motor mounting screws.

(E) DISTRIBUTOR MAINSHAFT GEAR

(Appplies only to bases which mount distributor units)

Requirement
There should be
Min 0.004 inch—Max 0.008 inch backlash between answer-back/distributor drive gear and distributor mainshaft gear at the point of minimum clearance.

To Adjust
Position distributor unit to meet requirements and tighten mounting screws.

(F) ANSWER-BACK IDLER GEAR

(Appplies only to bases which mount answer-back units)

Requirement
With all play in answer-back mounting holes taken up in the direction toward the motor, there should be
Min 0.004 inch—Max 0.008 inch backlash between idler gear and answer-back/distributor drive gear measured at the point of minimum clearance.

To Adjust
Loosen answer-back idler gear bracket locking screw. Take up play and tighten unit mounting screws. Position idler gear to meet requirement and tighten locking screws.
2.05 Double Reader Bases (High Speed Motor)

Adjustment of gears on double reader bases (below) is the same as for single unit bases (2.04) except that one additional reader must be positioned.

3. LUBRICATION

3.01 The tape reader base should be lubricated just prior to placing the unit in service. Thereafter, lubricate every 1500 hours of operation or every six months, whichever occurs first.

3.02 Apply a thin film of KS7471 grease to the surface of all gears EXCEPT THE ANSWER-BACK DRIVE GEAR (OR PINION), THE ANSWER-BACK IDLER GEAR, AND THE ANSWER-BACK MAIN SHAFT GEAR (see adjustment illustrations). On those bases which mount a distributor unit rather than an answer-back, both the distributor drive gear and main-shaft gear should be lubricated along with all other gears.

3.03 Apply a few drops of KS7470 oil to the oiler holes at each end of the motor.