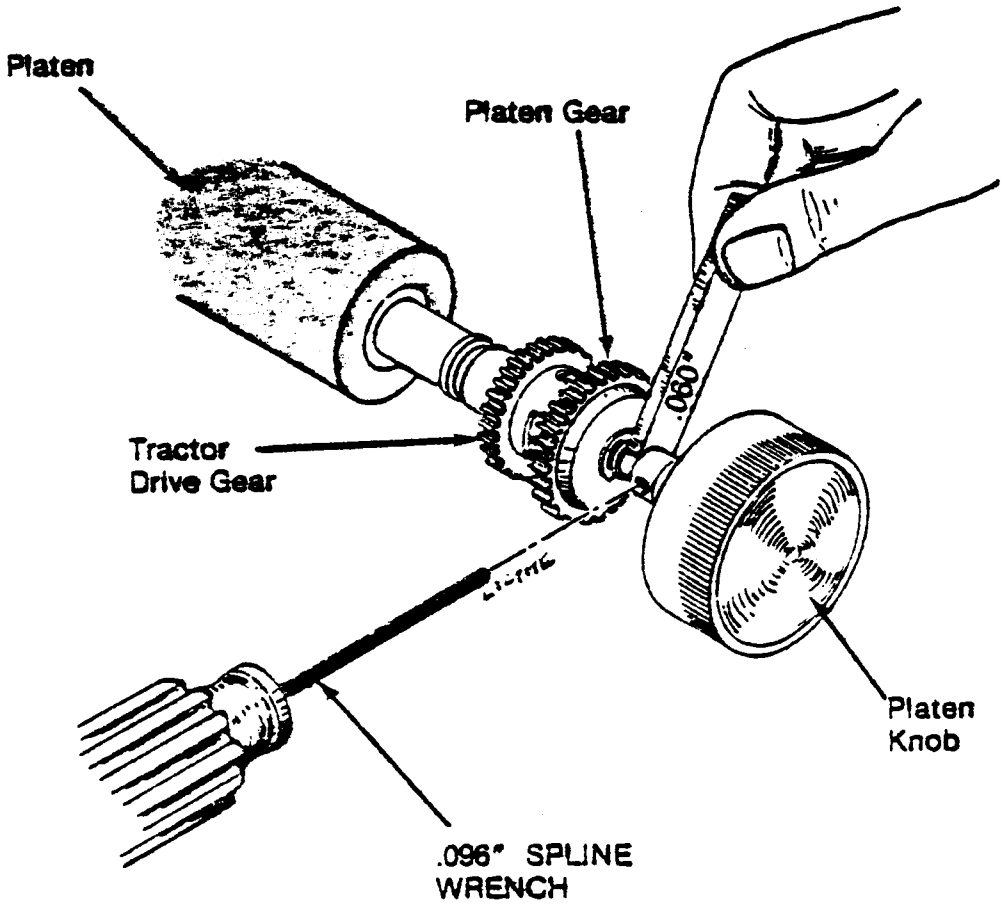
ILLUSTRATIONS

- Mechanical Adjustments
- Lubrication Points
- Recommended Lubricants & Cleaners
- Qume Printer Tools
- General Hand Tools

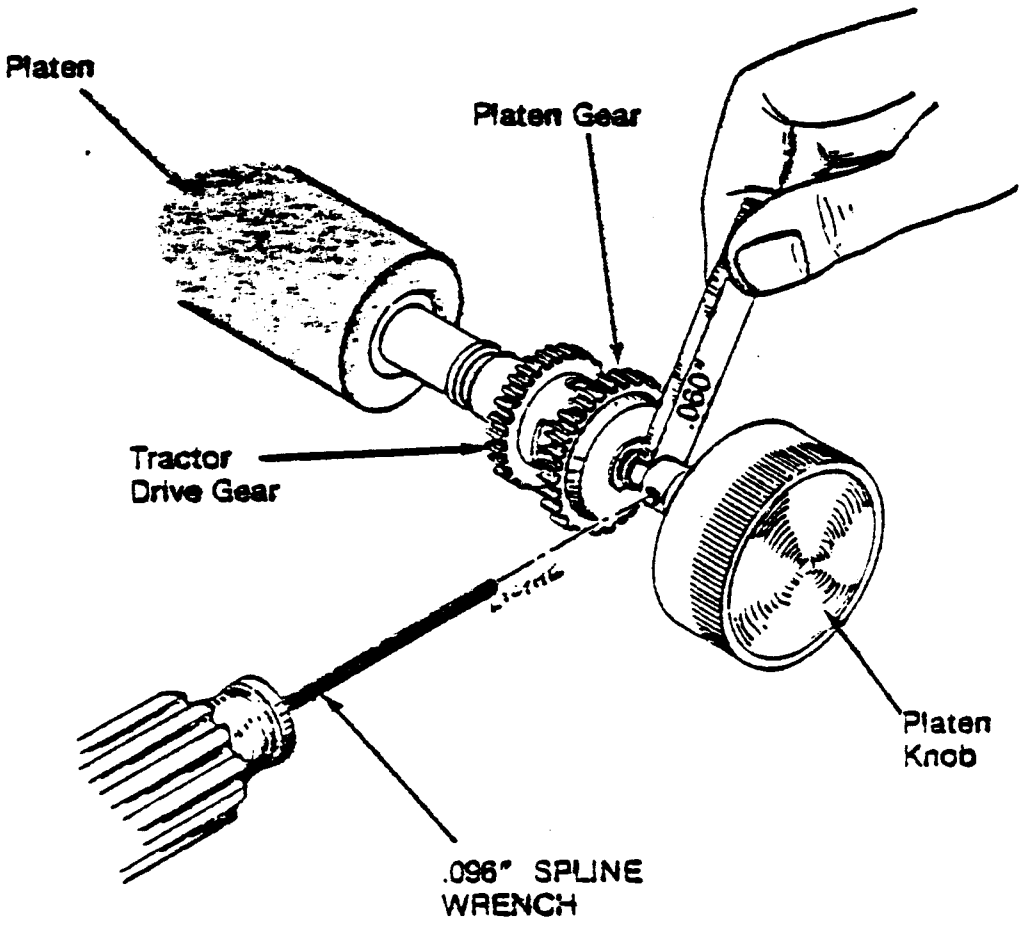
PLATEN CLUTCH RELEASE ADJUSTMENT

Adjust For .060" ± .005"

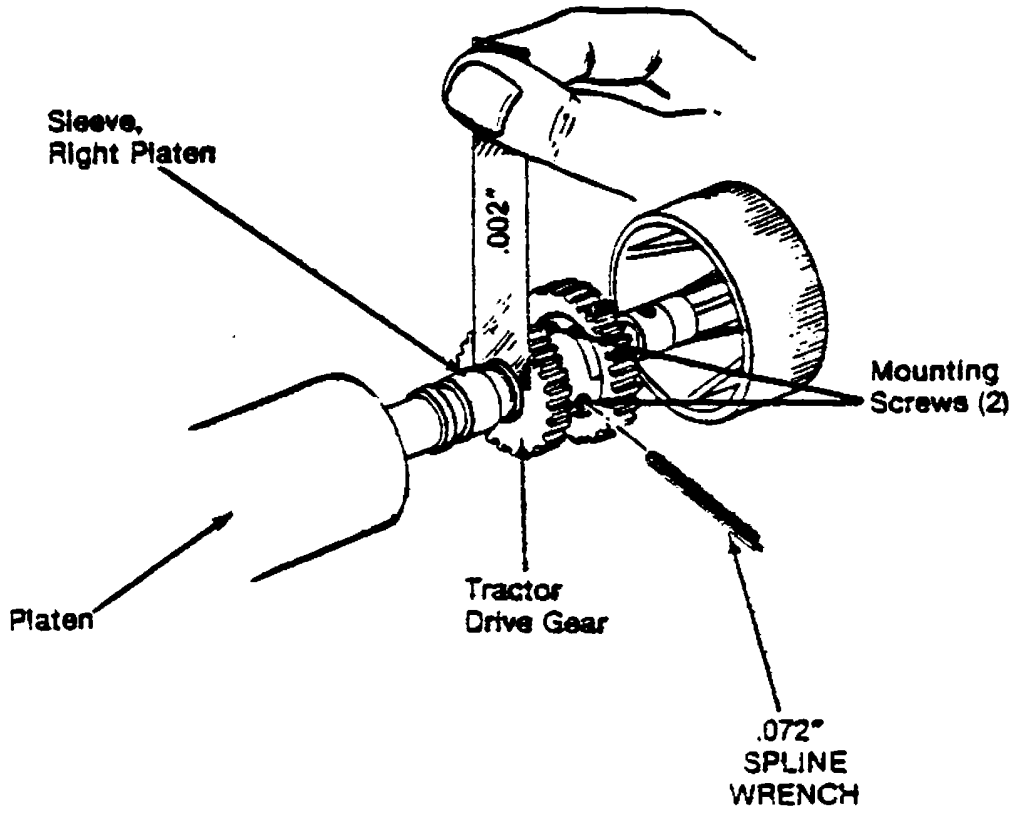


PLATEN CLUTCH RELEASE ADJUSTMENT

Adjust For .060" ± .005"

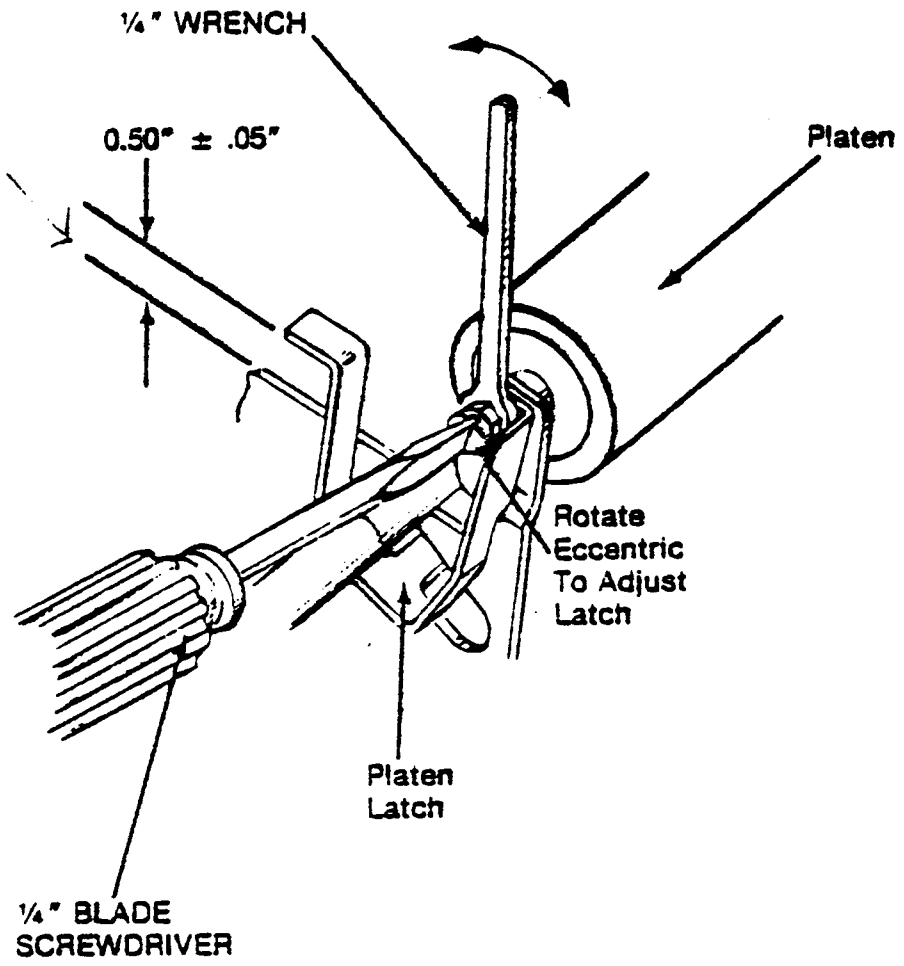


TRACTOR DRIVE GEAR ADJUSTMENT

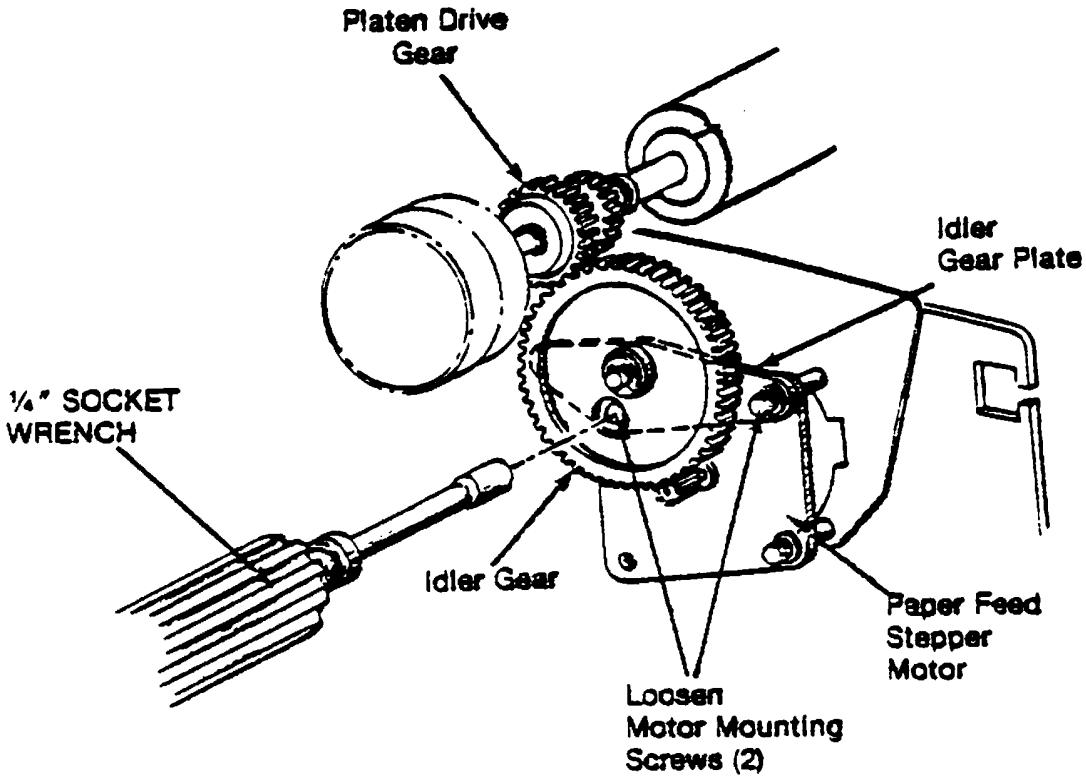


Adjust For Minimum Clearance
(.004" Max, No Bind)

PLATEN LATCH ADJUSTMENT

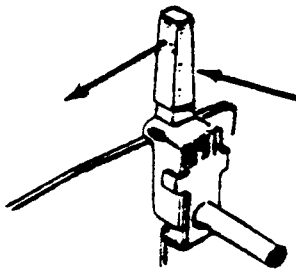


PLATEN DRIVE IDLER GEAR ADJUSTMENT



Adjust Idler Gear Plate
For No Backlash, No Bind
Between Gears

PLATEN DEPTH AND HEIGHT ADJUSTMENT, STEP 1

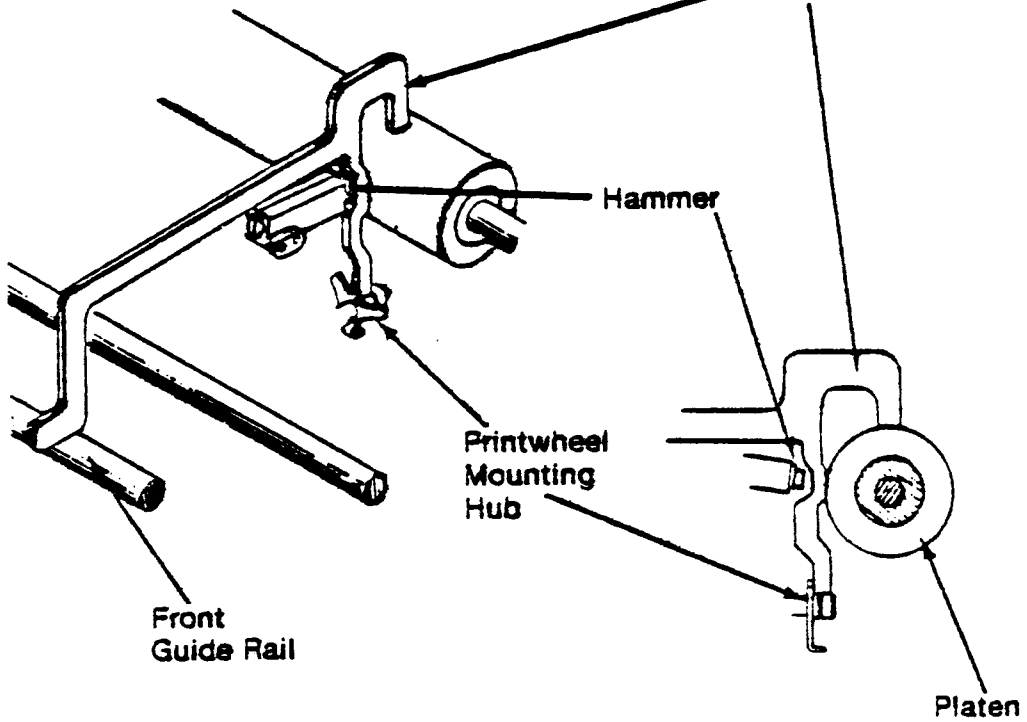


(1) Rotate Multi-Copy Lever Forward

(3) Move Carriage To Right Or Left Hand Travel Limit

(2) Remove Ribbon And Printwheel

INSERT TOOL PART NO. 80751



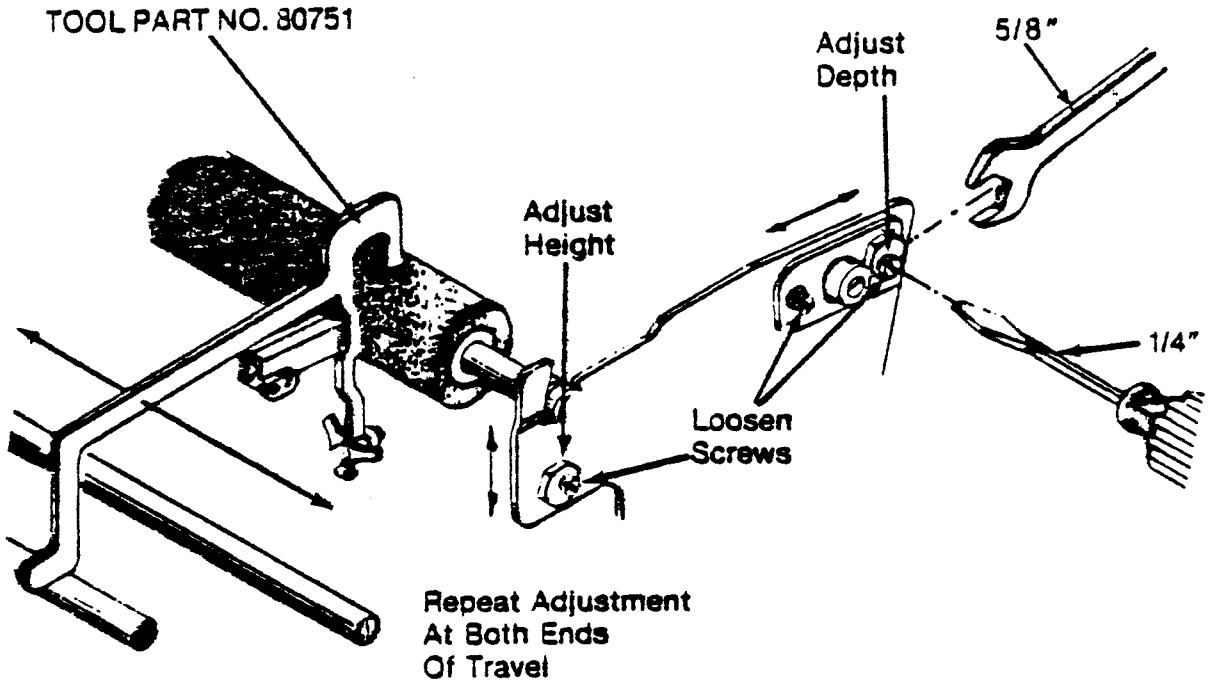
Hammer

Printwheel Mounting Hub

Front Guide Rail

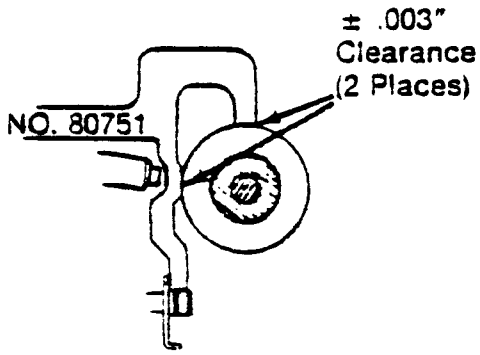
Platen

PLATEN DEPTH AND HEIGHT ADJUSTMENT
STEP 2

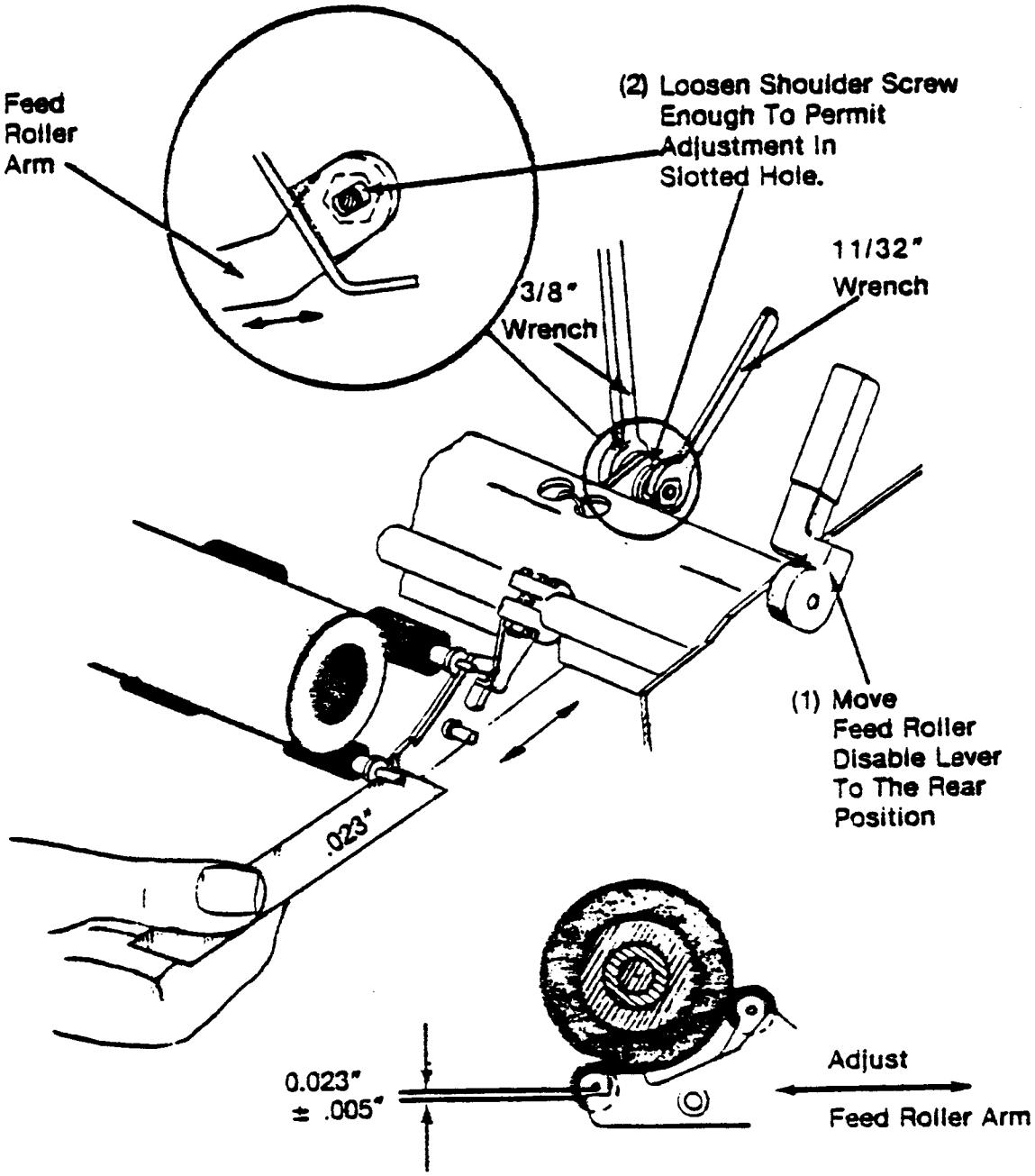


Repeat Adjustment
At Both Ends
Of Travel

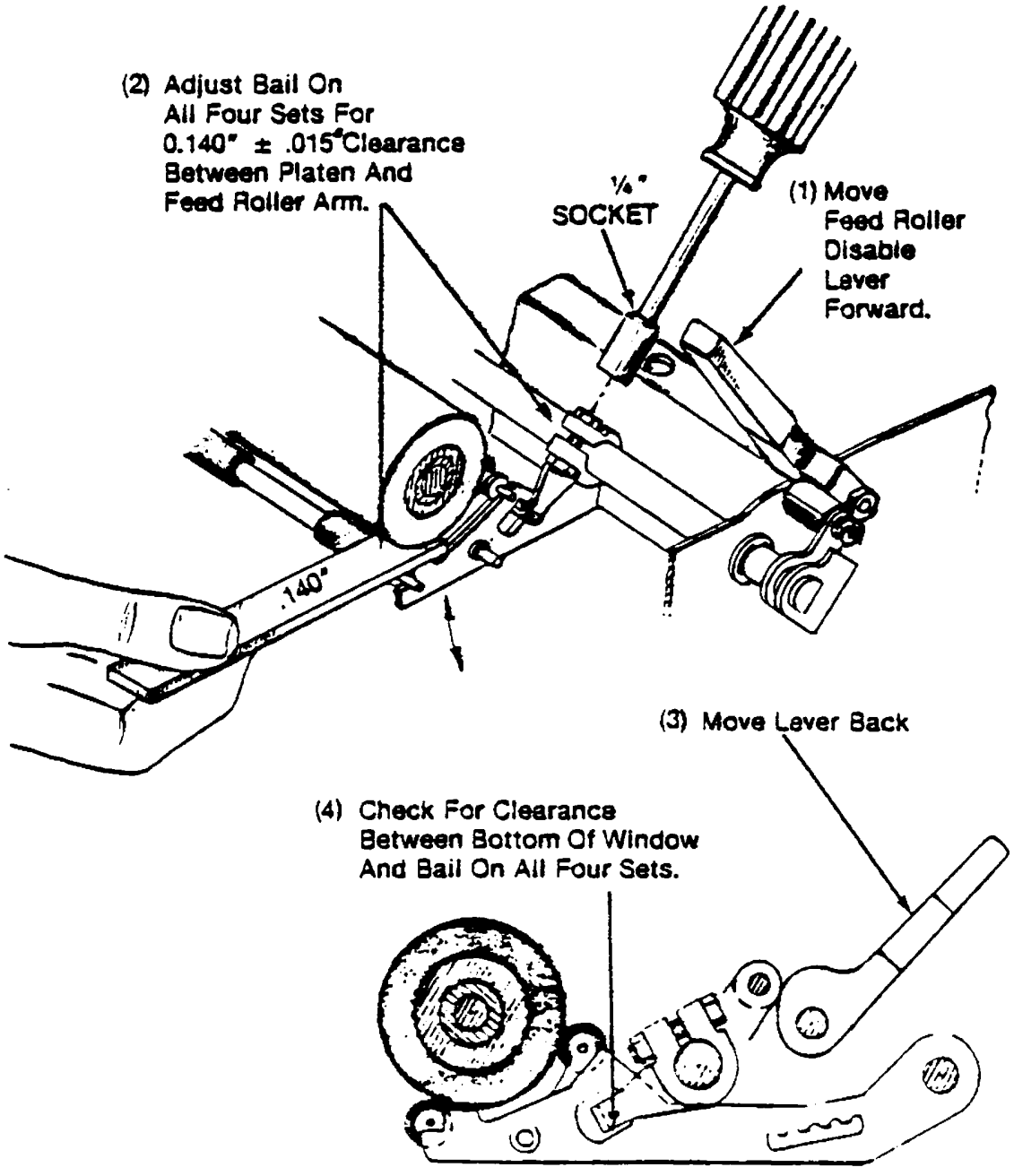
Insure That The High Point Of The Height Eccentric Faces Forward, And Faces Upward On The Depth Eccentric Prior To Making The Final Settings.



FEED ROLLER DEPTH ADJUSTMENT



FEED ROLLER DISABLE LEVER ADJUSTMENT



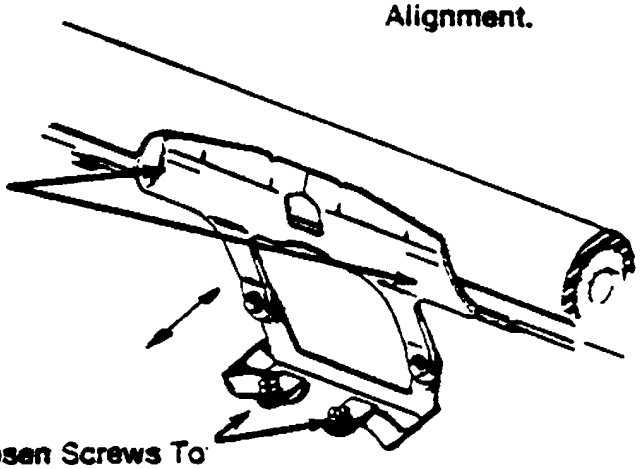
CARD GUIDE FORWARD, HORIZONTAL, AND HEIGHT ADJUSTMENT

NOTE: Platen Must Be Properly Adjusted Prior To Making This Alignment.

FORWARD ADJ.

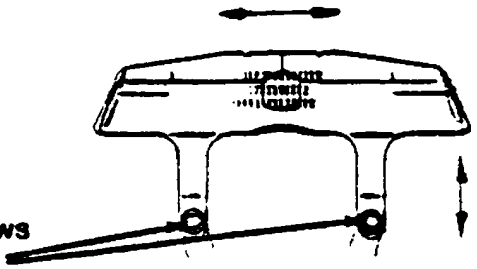
Set Multi-Copy Lever Forward To Properly Locate The Platen Depth.

Card Guide Should Rest Lightly On Platen



Loosen Screws To Adjust.

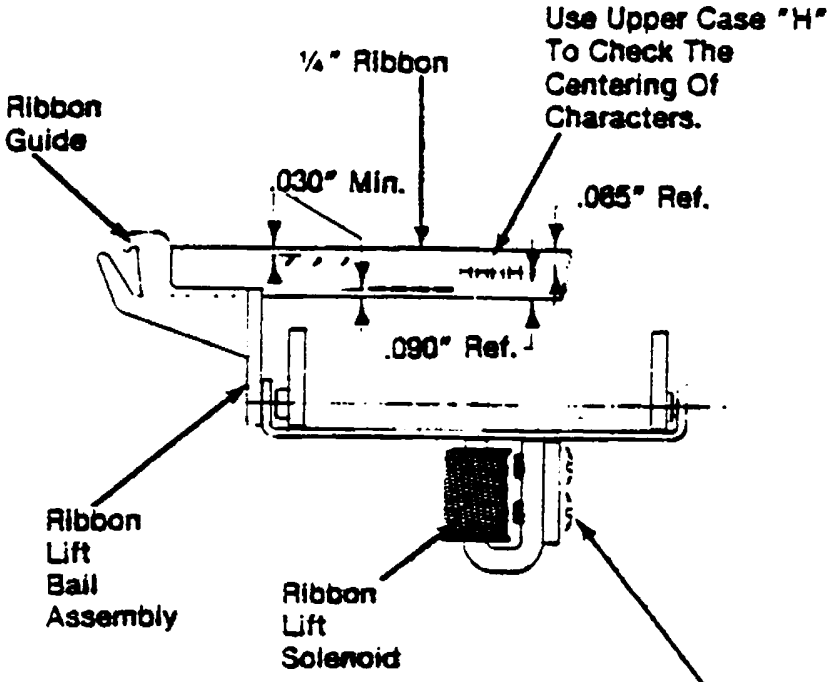
HORIZONTAL AND HEIGHT ADJUSTMENT



To Adjust, Loosen Shoulder Head Screws And Align Card Guide To Pre-Printed Upper Case I's.

After Adjustment, Slide Carriage Assembly Back And Forth, And Check For Clearance Between Feed Rollers And Card Guide.

RIBBON LIFT HEIGHT ADJUSTMENT

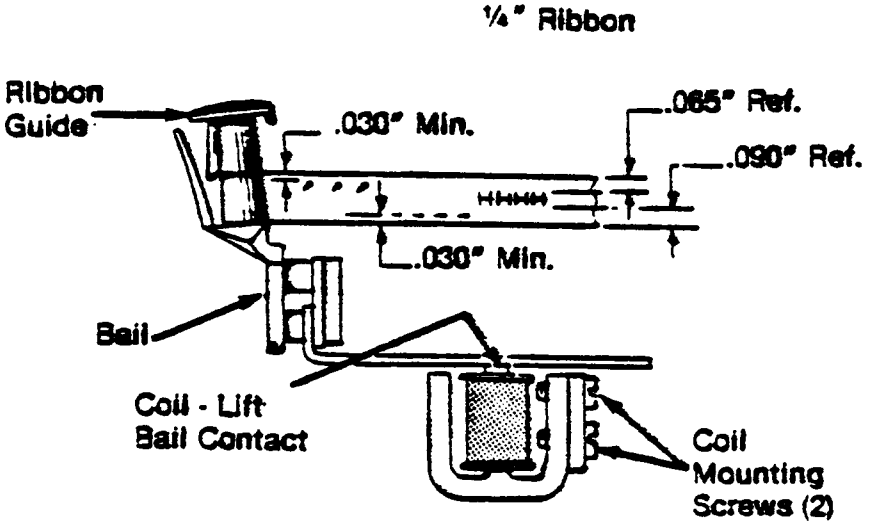


The APOSTROPHE And UNDERSCORE are Representative Of Characters That Print Near The Upper And Lower Edge Of The Ribbon.

Loosen The Solenoid Mounting Screws, Energize The Solenoid, And Adjust The Ribbon Height So That An "APOSTROPHE" Prints At Least 0.030" Below The Top Edge Of The Ribbon And An "UNDERSCORE" Prints At Least 0.030" Above The Bottom Edge Of The Ribbon.

RIBBON LIFT HEIGHT ADJUSTMENT
DUAL RIBBON OPTION

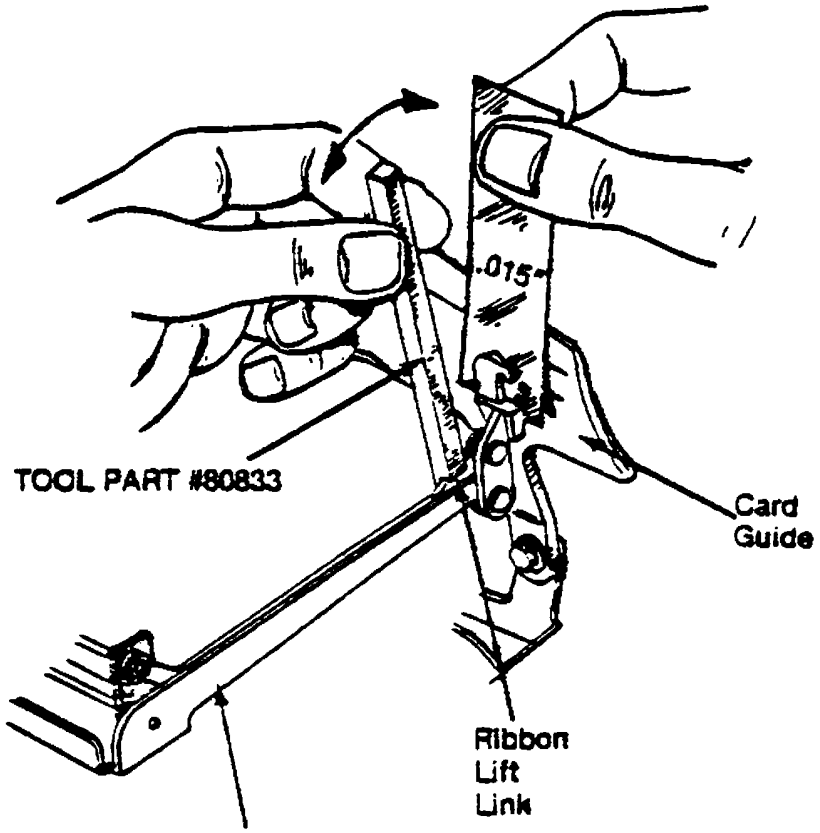
NOTE: The "APOSTROPHE" And "UNDERSCORE" Are Used As Examples Of Characters That Print Near The Top And Bottom Edge Of The Ribbon. Other Characters Could Be Used Where Applicable.



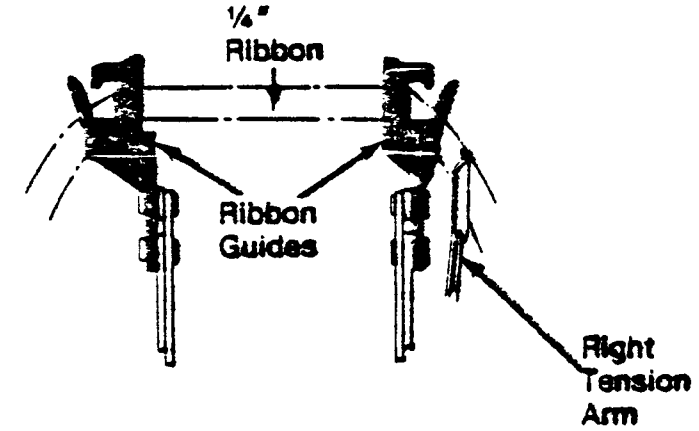
Loosen The Coil Mounting Screws,
Energize The Coil
Adjust The Ribbon Height So That
An "APOSTROPHE" Prints At Least 0.030"
Below The Top Edge Of The Ribbon, And
An "UNDERSCORE" Prints At Least 0.030"
Above The Bottom Edge Of The Ribbon.

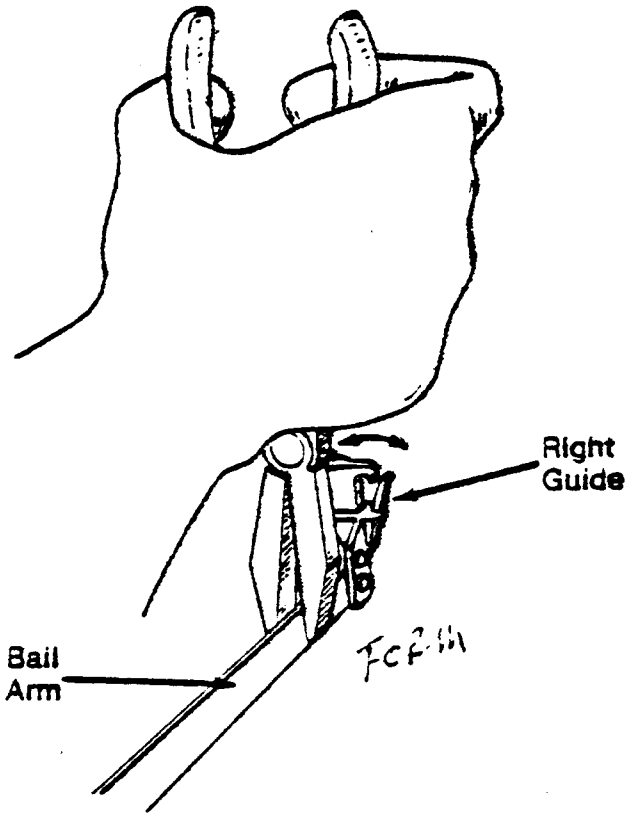
RIBBON LIFT SPACING ADJUSTMENT

NOTE: Platen And Card Guide Adjustment Must Be Made Prior To This Alignment.



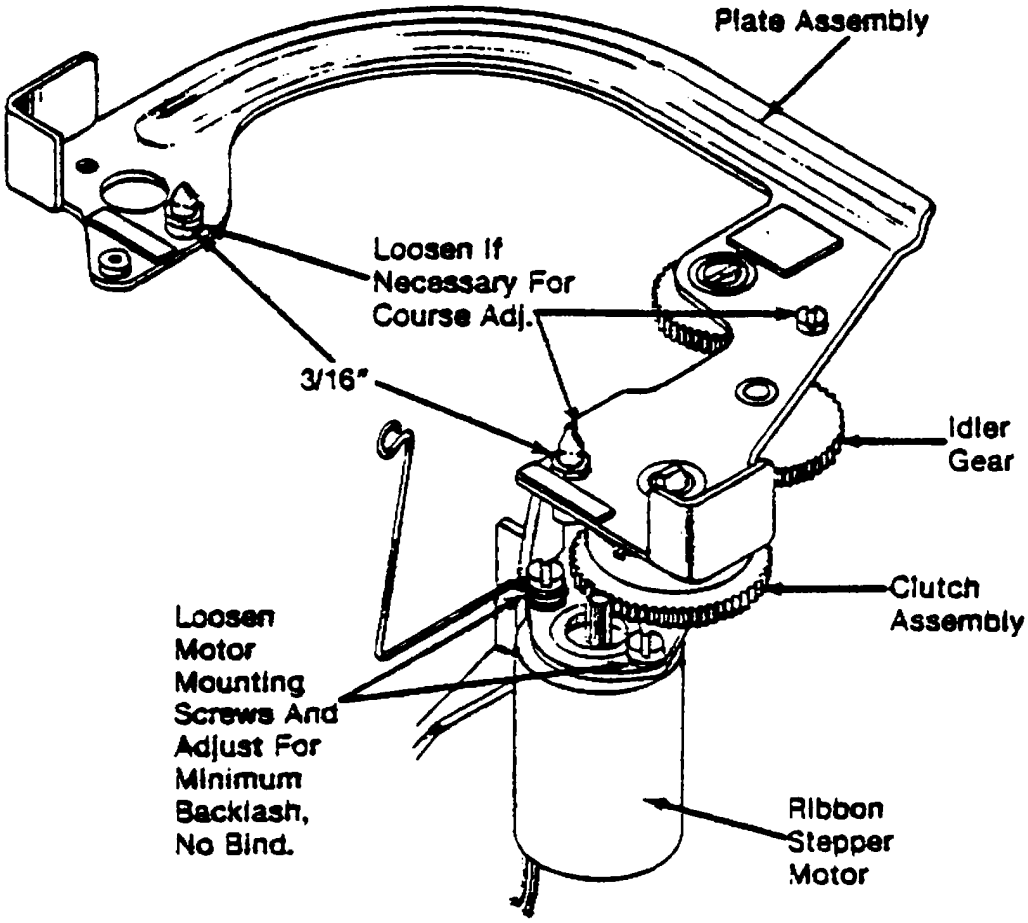
RIBBON TRACKING ADJUSTMENT



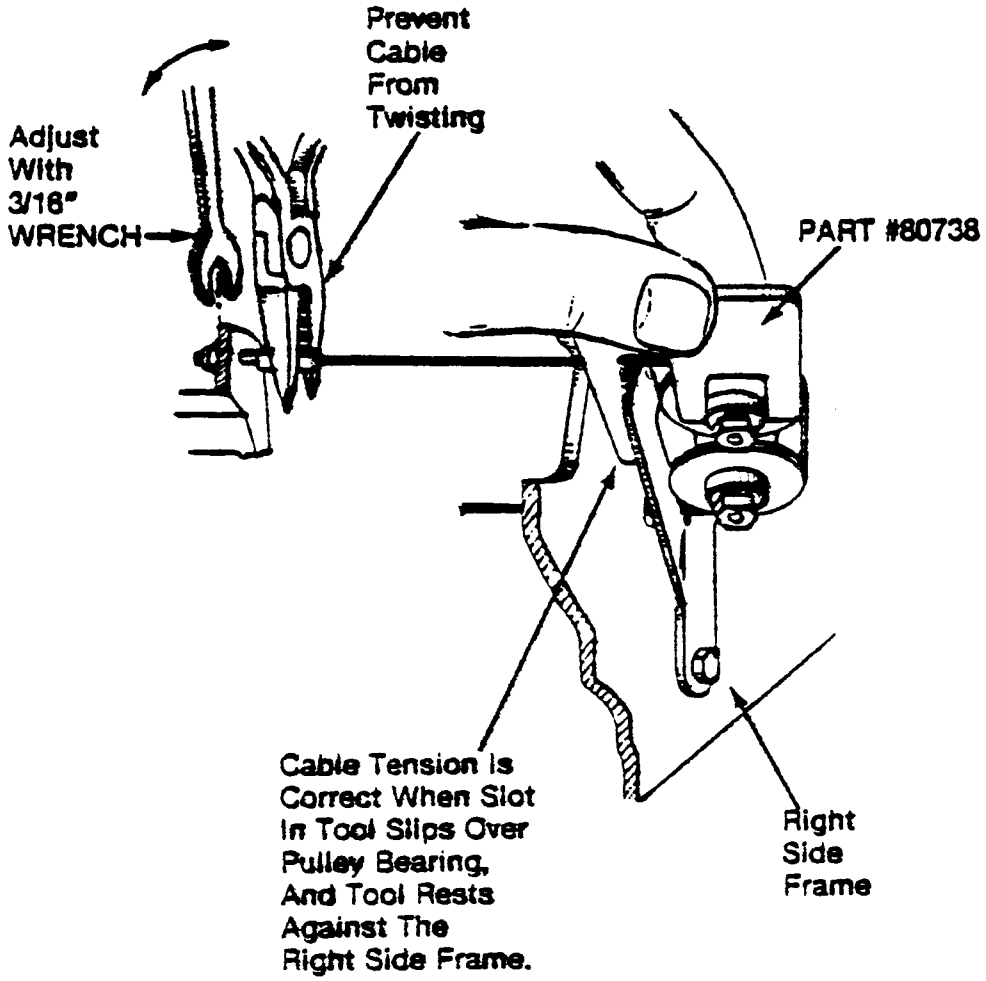


Adjust Ribbon Guides
For Correct Tracking,
No Ribbon Curling

RIBBON DRIVE GEAR ADJUSTMENT



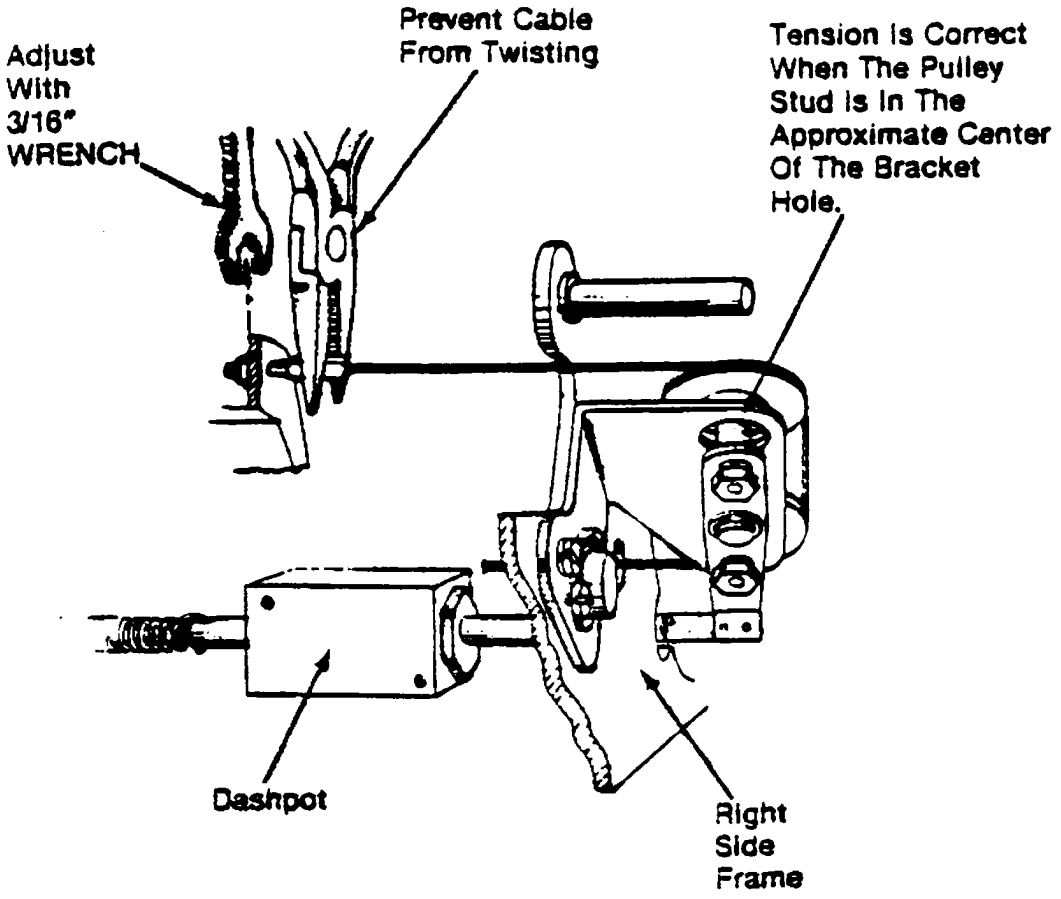
CABLE TENSION ADJUSTMENT
(S5-45; SM3-35,-45)



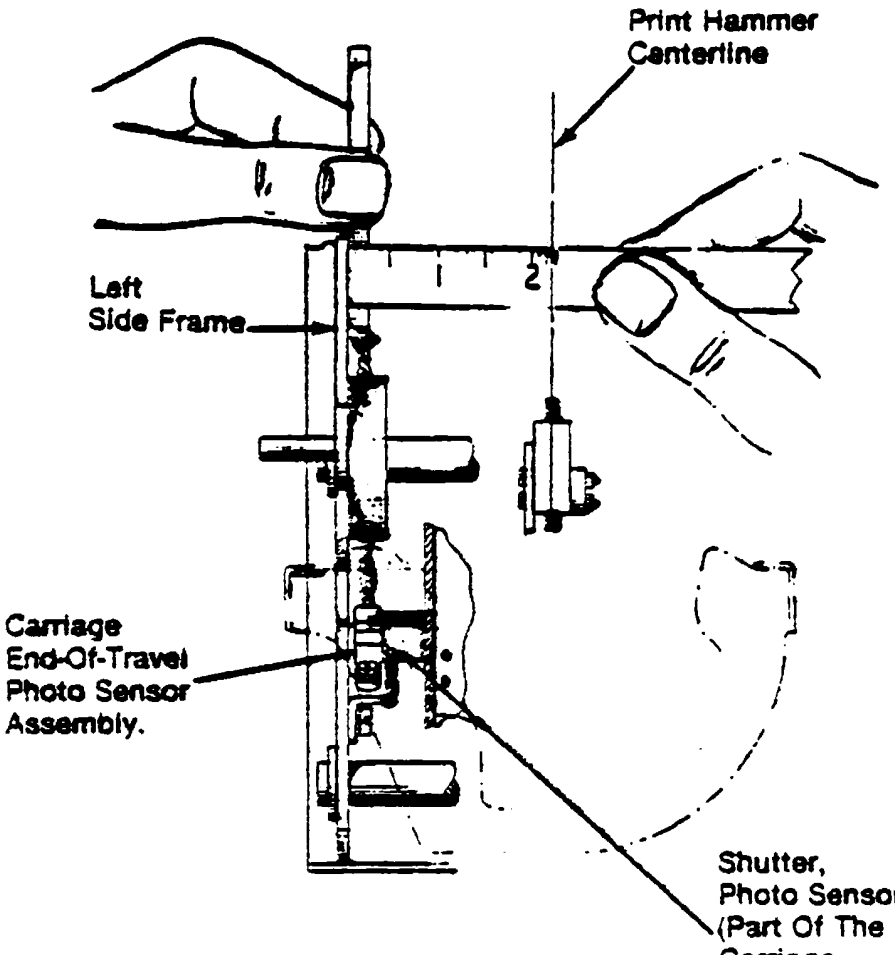
TENSIOMETER
CHECKLINE MODEL = DXK-2 KG
ELECTROMATIC EQUIPMENT CORP.
CEDARHURST, N.Y.

CABLE TENSION ADJUSTMENT

(S5-55; SM3-55,-X30,-X40, WT, TT)



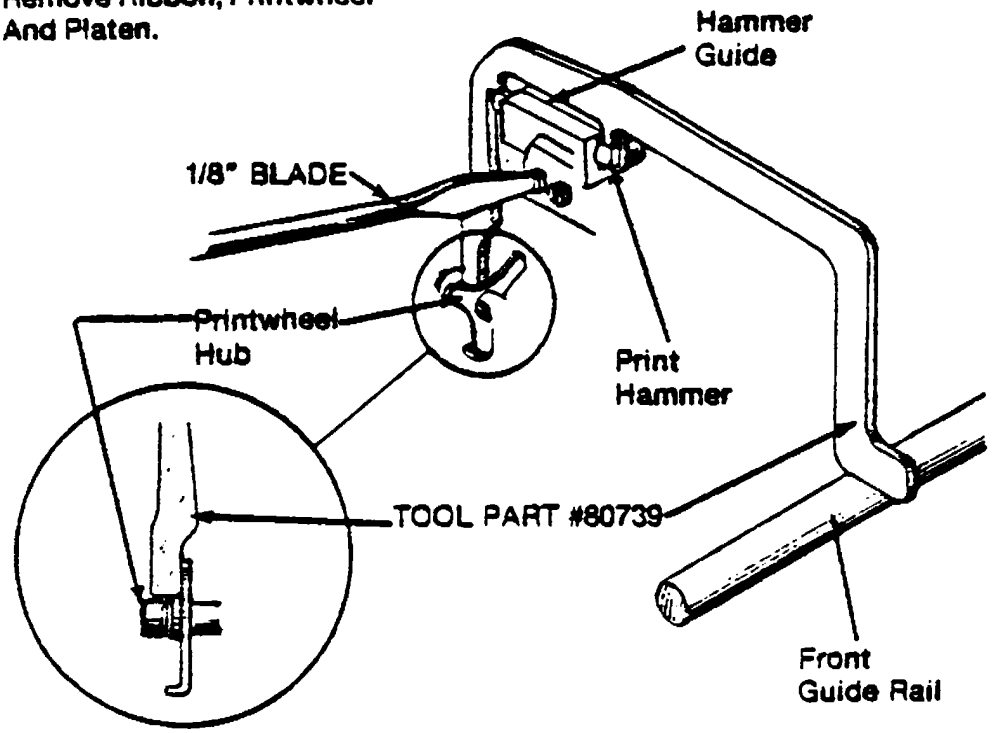
CARRIAGE END-OF-TRAVEL SENSOR ADJUSTMENT

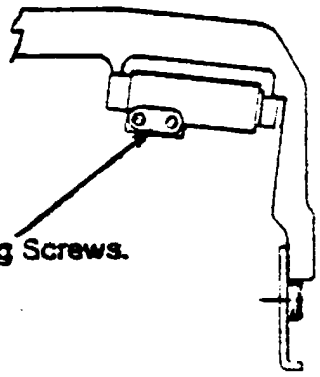


The Distance From Inside Left Side Frame To Print Hammer Centerline is 2.025" ± .020" After Printer Is Initialized.

PRINT HAMMER VERTICAL ADJUSTMENT (HEIGHT AND ANGLE)

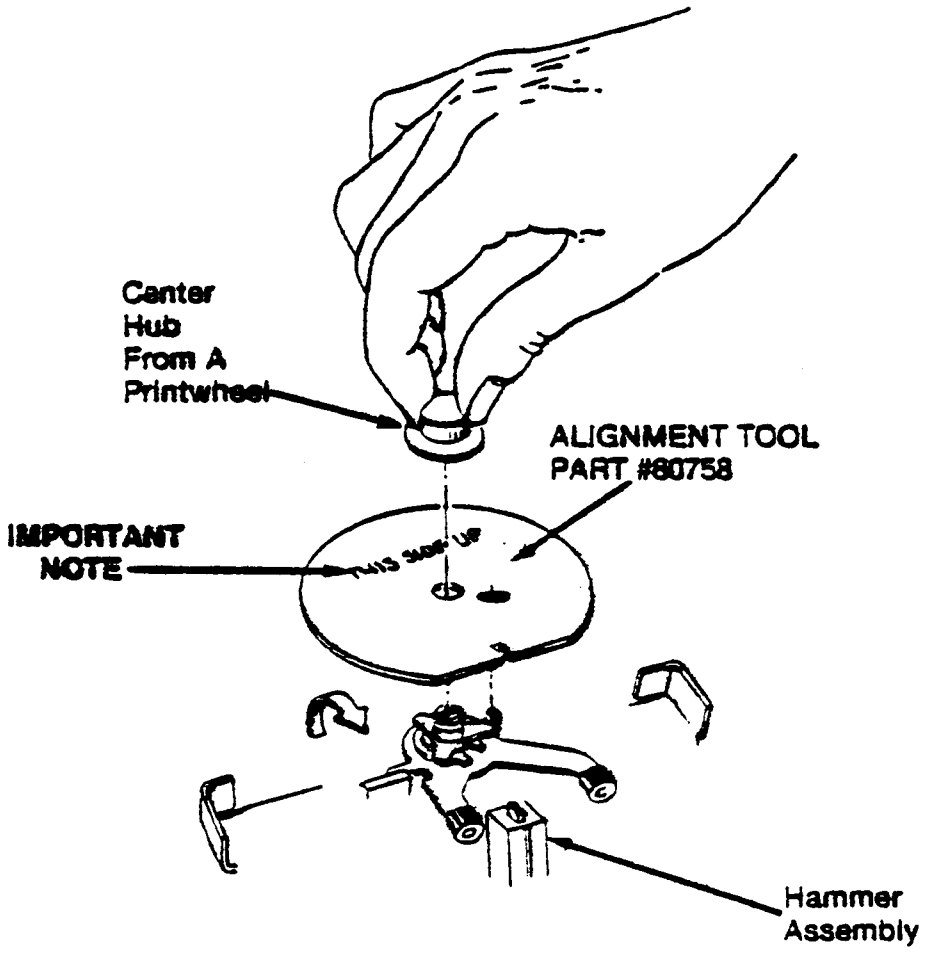
Remove Ribbon, Printwheel And Platen.





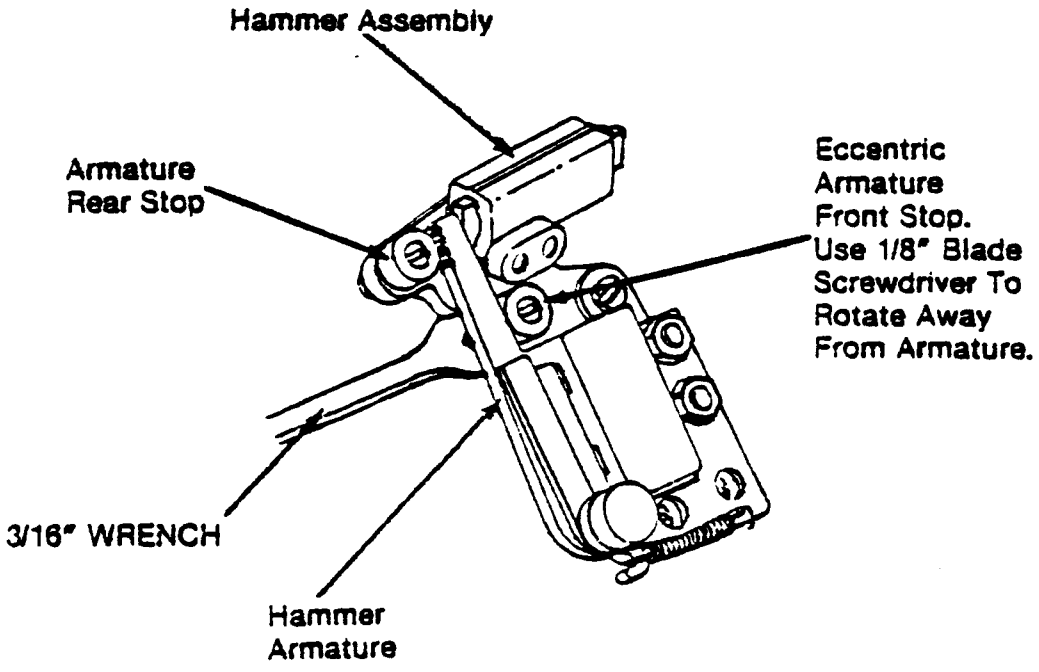
Loosen Hammer Assembly Mounting Screws. Use The #80739 Tool As Shown, For Making The Initial Settings. Final Adjustment Depends On The Quality Of A Print Sample.

HAMMER ARMATURE CORE ADJUSTMENT (PENETRATION), STEP 1



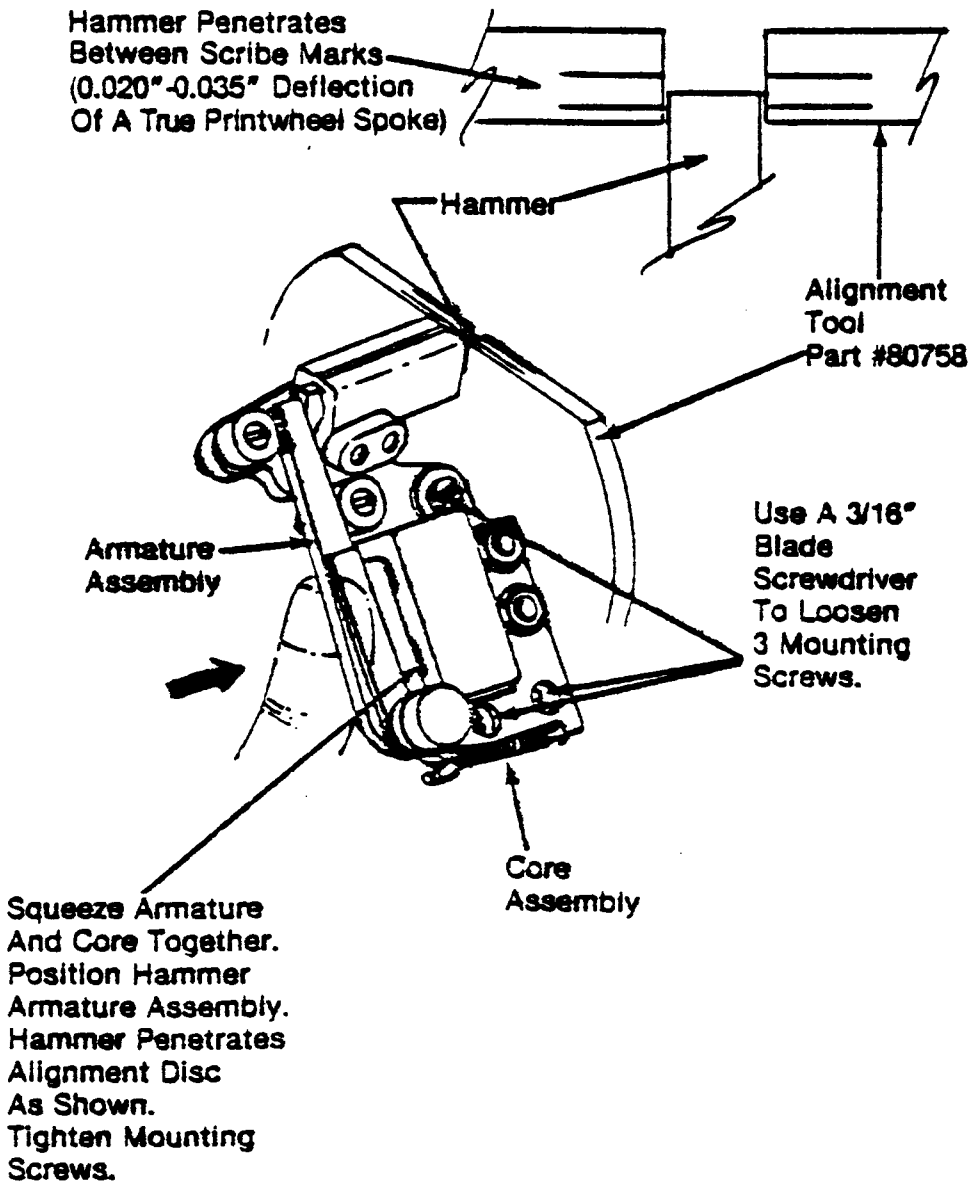
Remove Ribbon, Printwheel.
Tilt Inner Carriage.
Install Alignment Tool, #80758.

HAMMER ARMATURE CORE ADJUSTMENT (PENETRATION), STEP 2

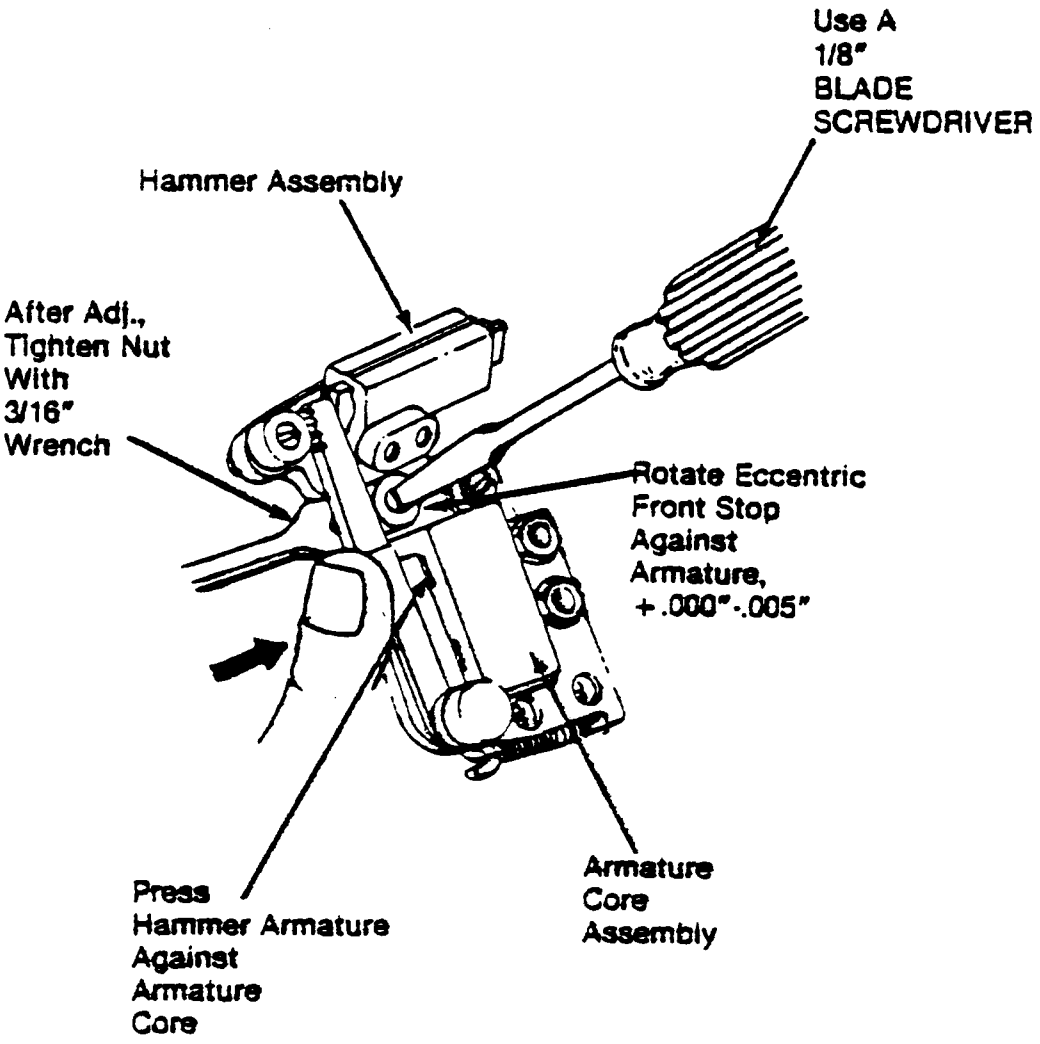


Rotate Front Stop Away From Armature Prior To Core Penetration Adjustment In Step 3.

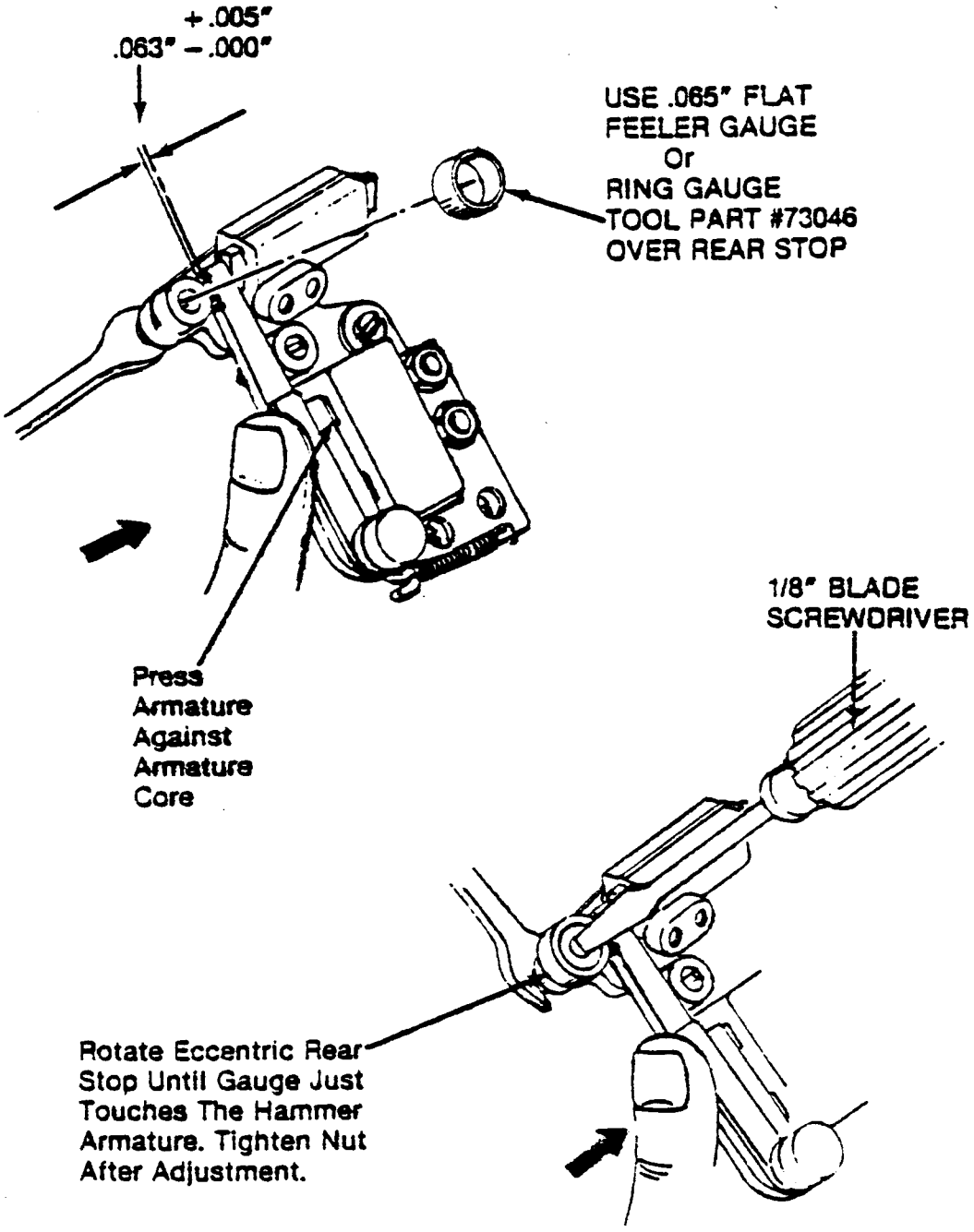
HAMMER ARMATURE CORE ADJUSTMENT (PENETRATION), STEP 3



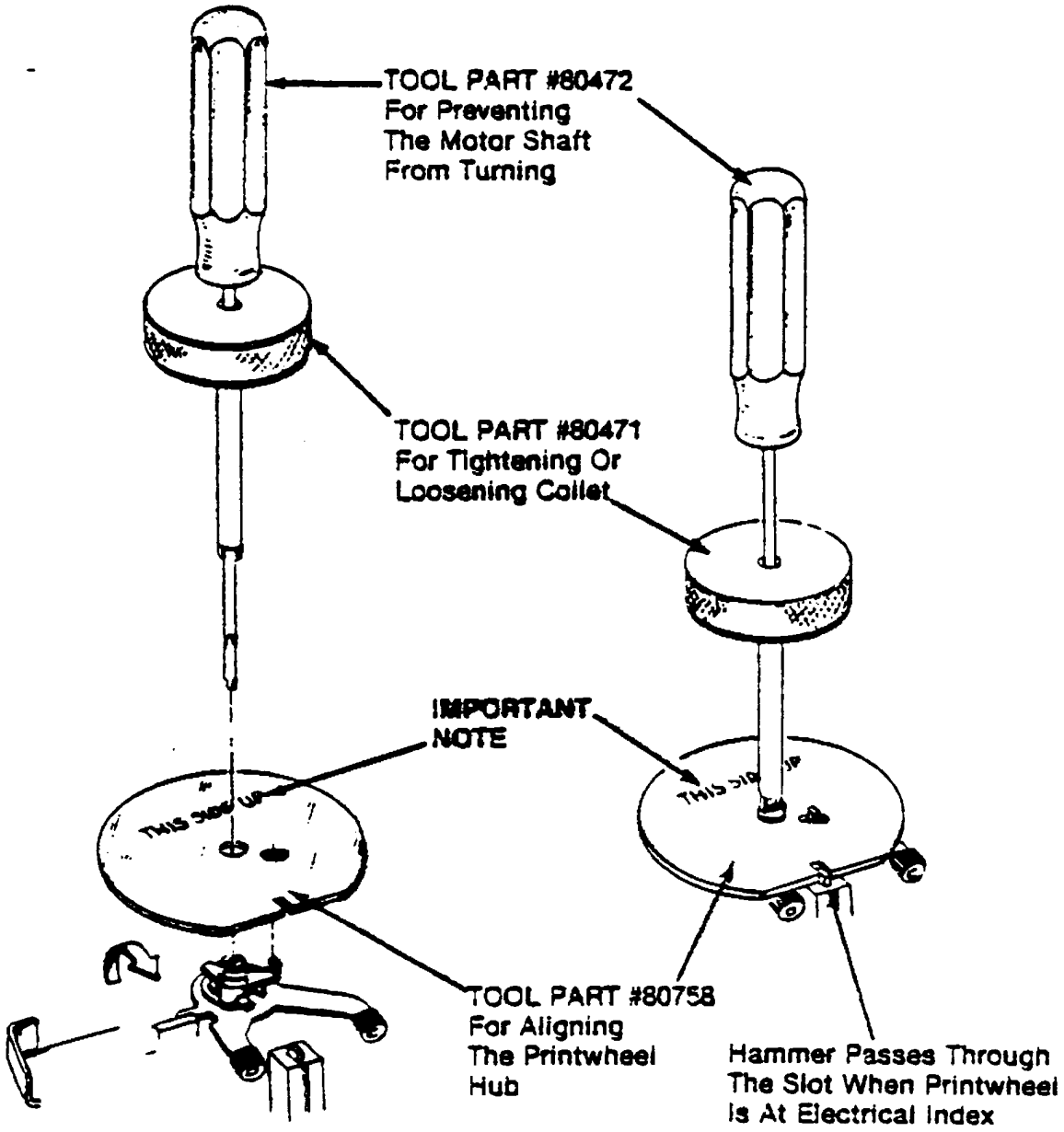
HAMMER ARMATURE CORE ADJUSTMENT (FRONT STOP), STEP 4



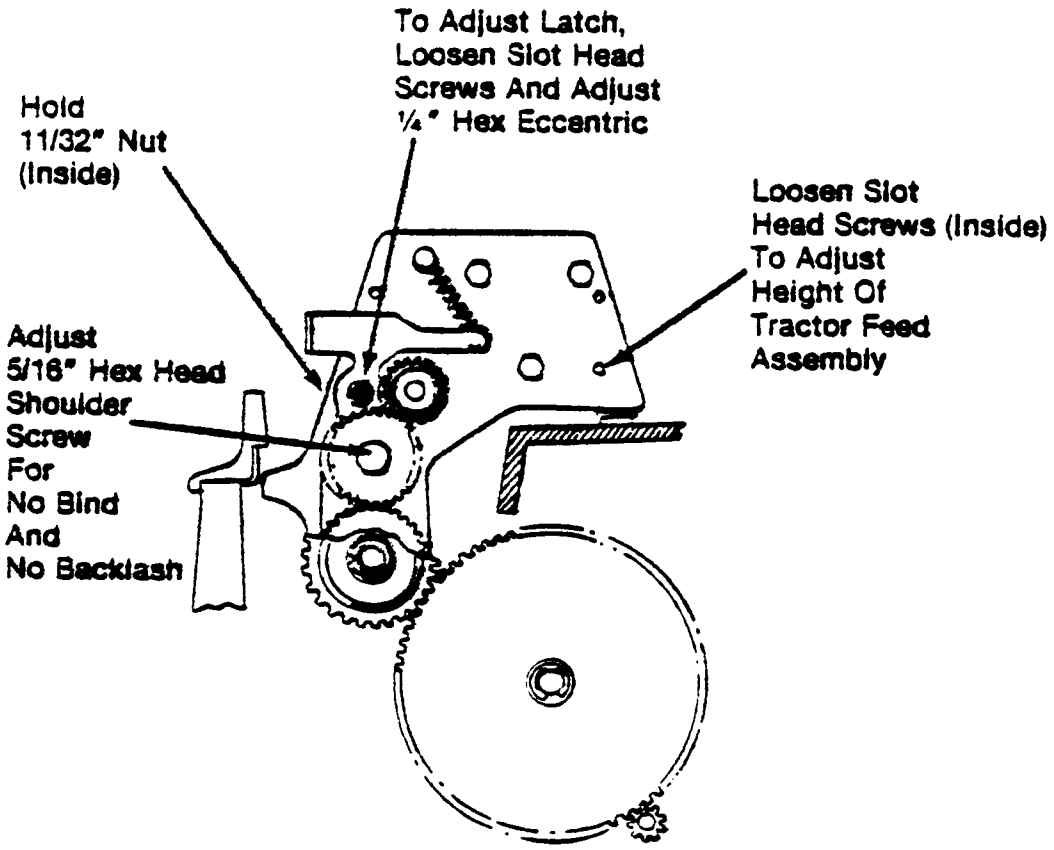
HAMMER ARMATURE CORE ADJUSTMENT (REAR STOP), STEP 5



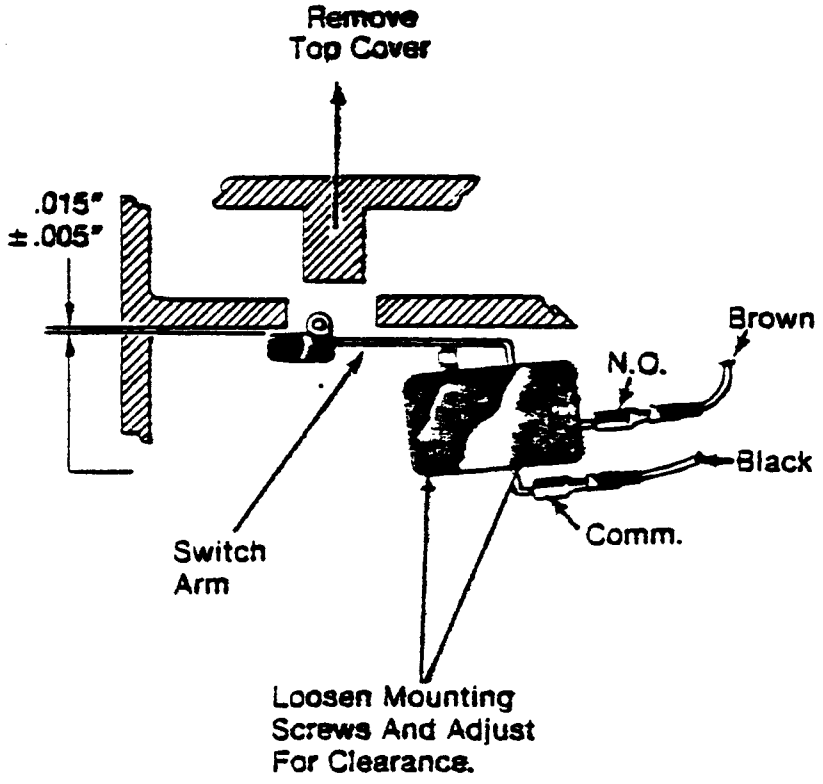
PRINTWHEEL HUB (INDEX) ADJUSTMENT



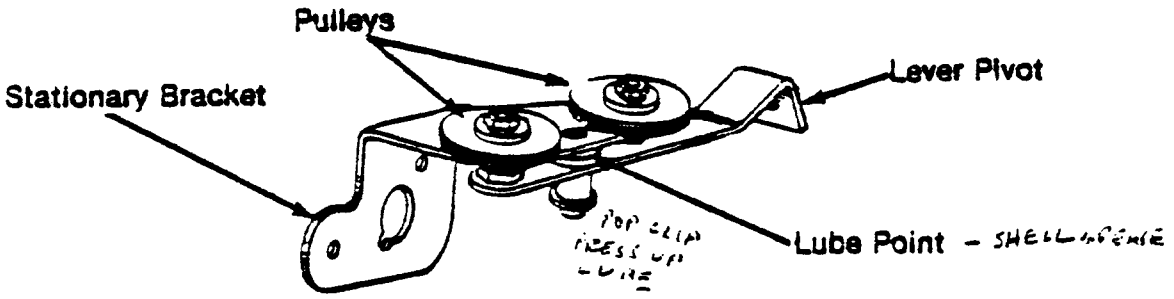
TRACTOR FEED ADJUSTMENTS



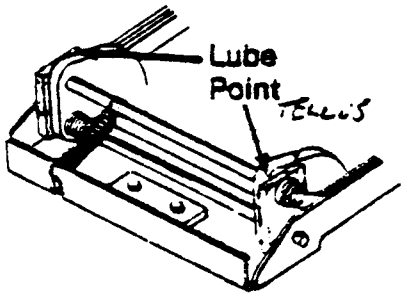
COVER INTERLOCK SWITCH ADJUSTMENT



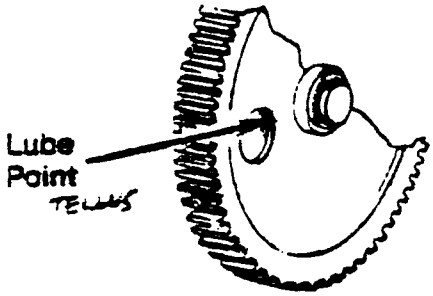
6 MONTH OR 1,000 HOUR LUBRICATION



CARRIAGE PULLEY LEVER LUBRICATION
(S5-55; SM3-55,-X30,-X40, WT, TT)



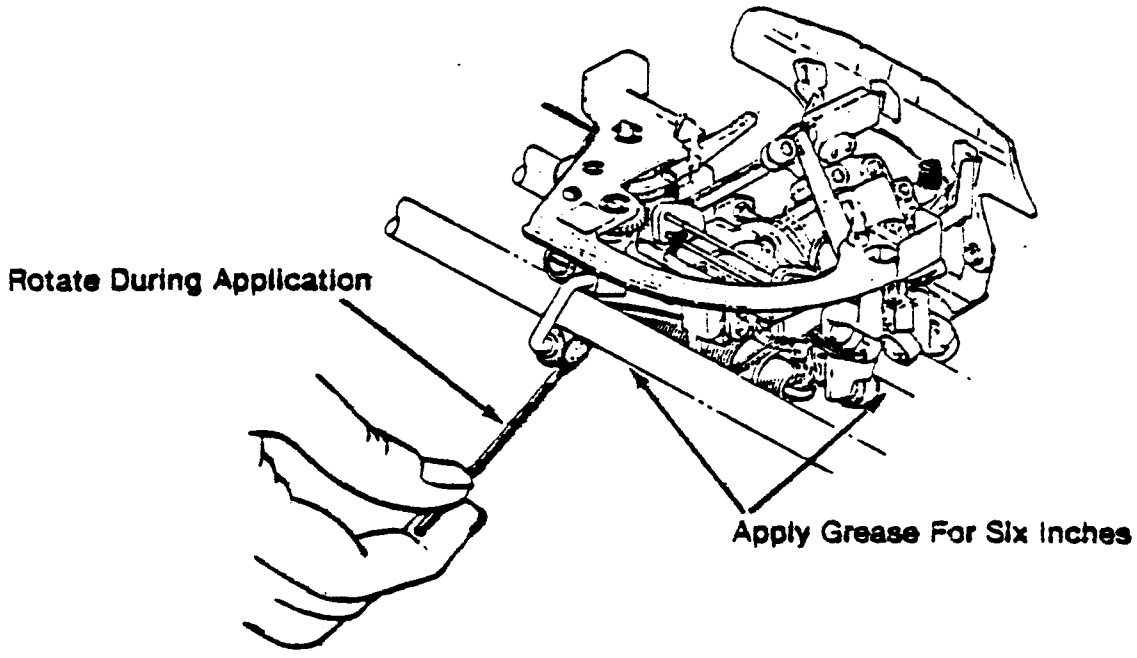
RIBBON BAIL
LUBRICATION



PAPER FEED IDLER
GEAR LUBRICATION

LUBE WITH ONE DROP TELLUS OIL #80342

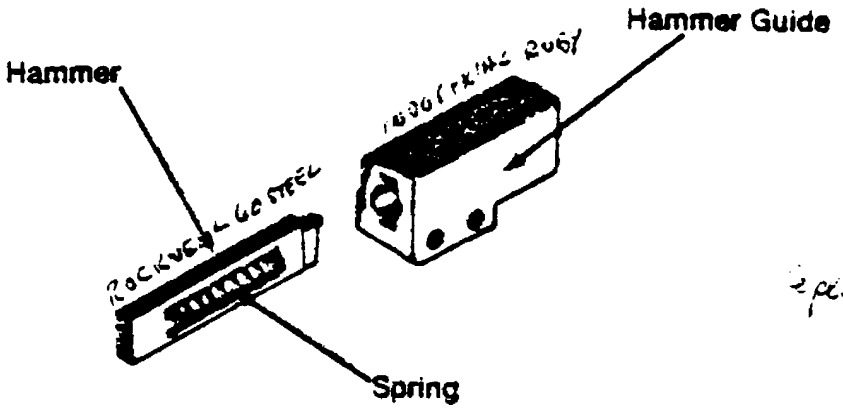
6 MONTH OR 1,000 HOUR LUBRICATION
CARRIAGE BEARINGS



LOWER CARRIAGE BEARINGS AND RAILS LUBRICATION

Clean With Isopropyl Alcohol. Apply
a Light Coating Of Shell Darina-AX
Grease #85179 As Shown.
Remove Excess

6 MONTH OR 1,000 HOUR LUBRICATION
PRINT HAMMER

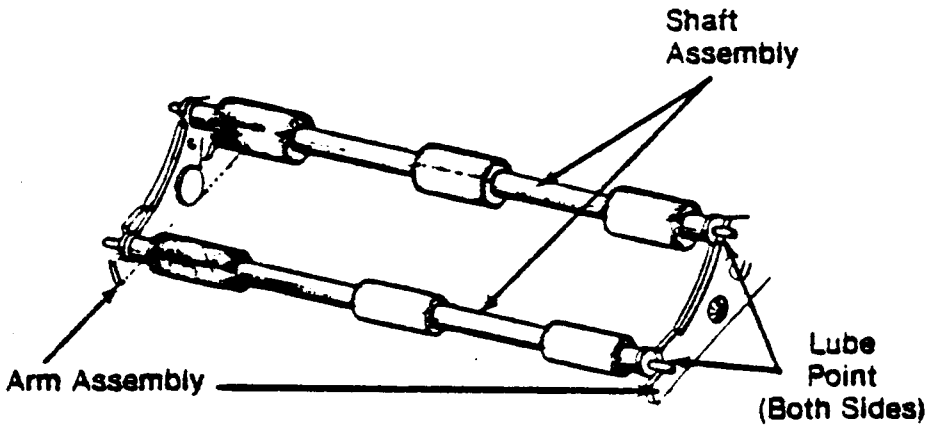


PRINTHAMMER ASSEMBLY LUBRICATION

Clean Hammer And Hammer Guide
With Isopropyl Alcohol. Lubricate
Lightly With Watch Oil #80341
And Re-Assemble.

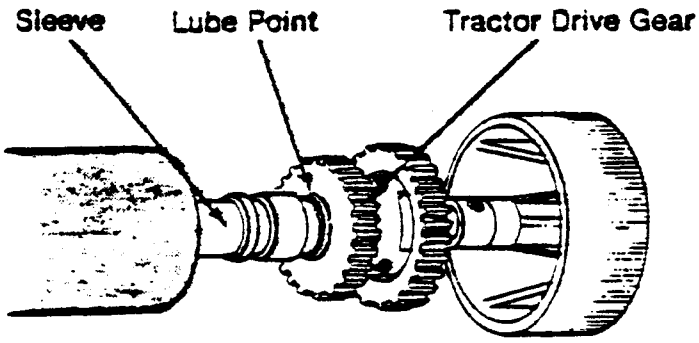
12 MONTH OR 2,000 HOUR LUBRICATION

Lubricate With One Drop Of Tellus Oil #80342 At The Lube Points. Clean Off Excess.



AND RAIL ROLLERS

FEED ROLLER SHAFT LUBRICATION



PLATEN SLEEVE LUBRICATION

Lubricate Platen Sleeves (1 On Each End Of Platen) With One Drop Of Tellus Oil. Clean Off Excess.

RECOMMENDED LUBRICANTS & CLEANERS

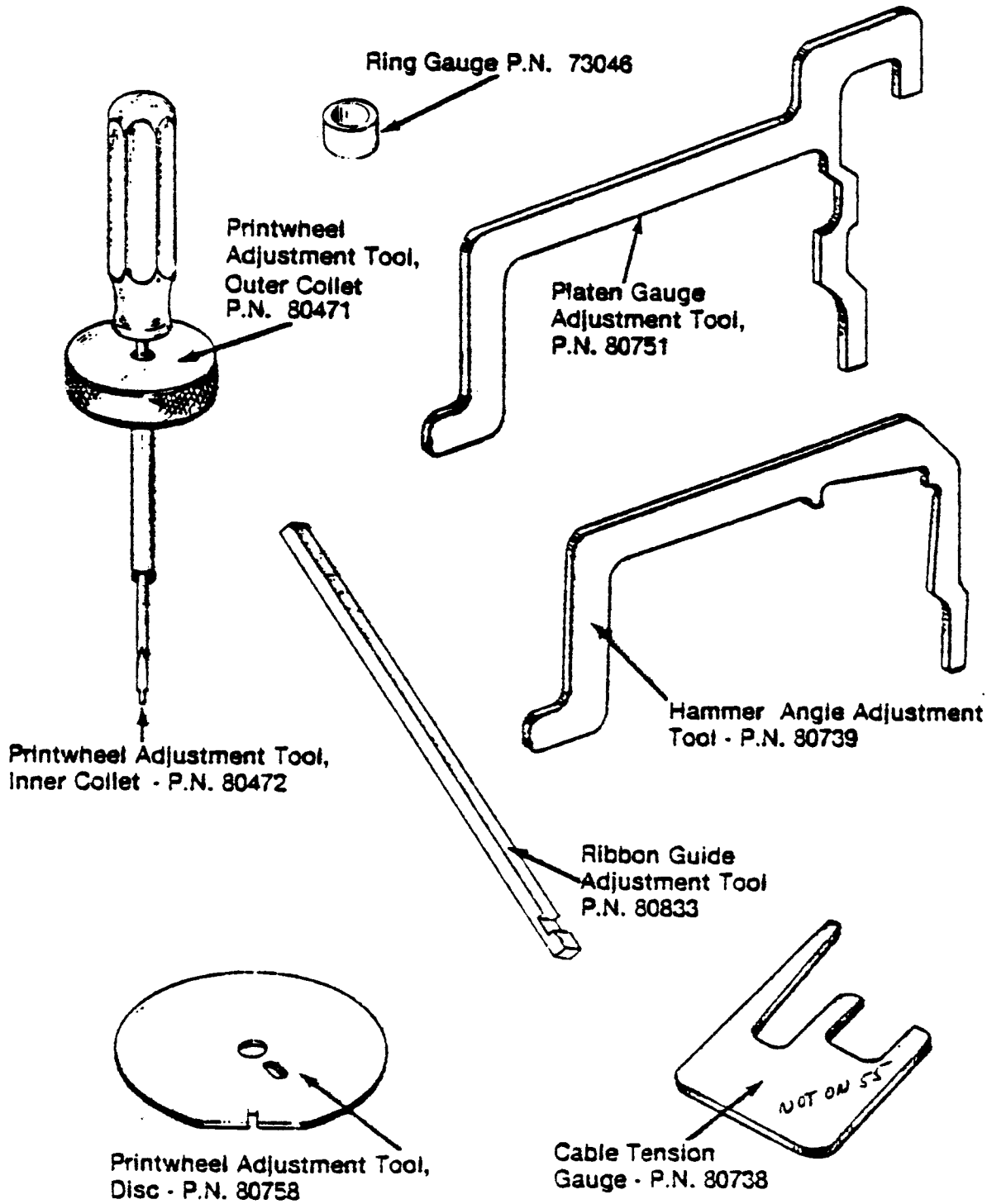
LUBRICANTS

	QUME P/N
■ Watch Oil (Moebius Oil "Art. 8000")	85179-04
■ Tellus Oil (Shell Oil "Tellus 25")	80342-00
■ Polygrease	80346-00
■ Shell Darina-AX Grease	

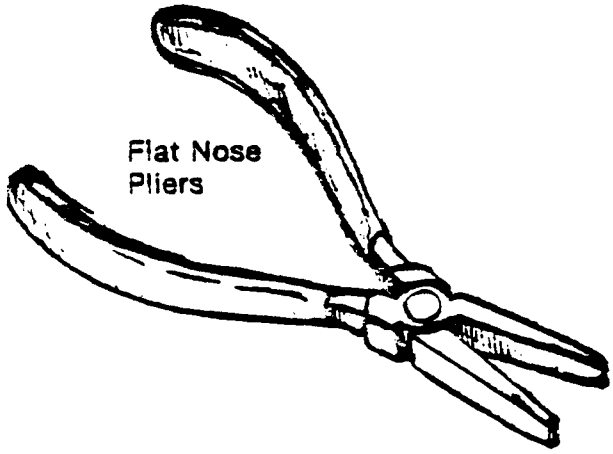
CLEANERS

- Isopropyl Alcohol (Metal Parts)
- Fedron (Platen, Feed Rollers, Bail Rollers)
- Zoom, Formula 409, Fantastic (Covers, Printwheel)
- Mild Soap and Warm Water (Column Scale, Card Guide)

QUME TOOL KIT, #73054



RECOMMENDED HAND TOOLS



Flat Nose Pliers

Screwdriver
1/4"
1/8"

Nutdriver
1/4"
3/16"

Feeler Gauge Set

Spring Hook

Open-end Wrench
5/8"
11/32"
5/16"
3/8"
1/4"
3/16"

Spline Wrench
.096"
.072"

Scale

CARRIAGE CRASH (SLAM) PROBLEM

CHANGE BOARD #1

PROBLEM CORRECTED? YES → END

NO

CHANGE BOARD #2

PROBLEM CORRECTED? YES → END

NO

CHECK ENCODER SIGNALS ON BOARD #1

SIGNALS PRESENT? NO → CHECK FOR BAD CRIMPS AND INCORRECT ORIENTATION OR WIRES ACCORDING TO ABOVE DIAGRAM &

YES

REPLACE CARRIAGE HEATSINK

ARE ENCODER SIGNALS PRESENT? YES → PROBLEM CORRECTED? NO

NO

YES → END

PLUG IN TEST CARRIAGE MOTOR

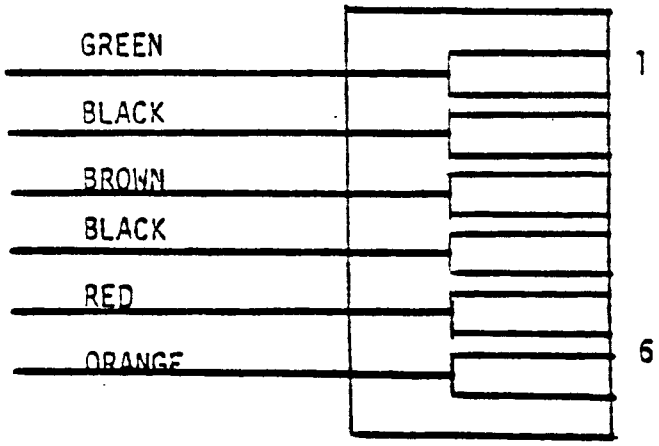
PROBLEM CORRECTED? NO → GO BACK TO START

YES

*

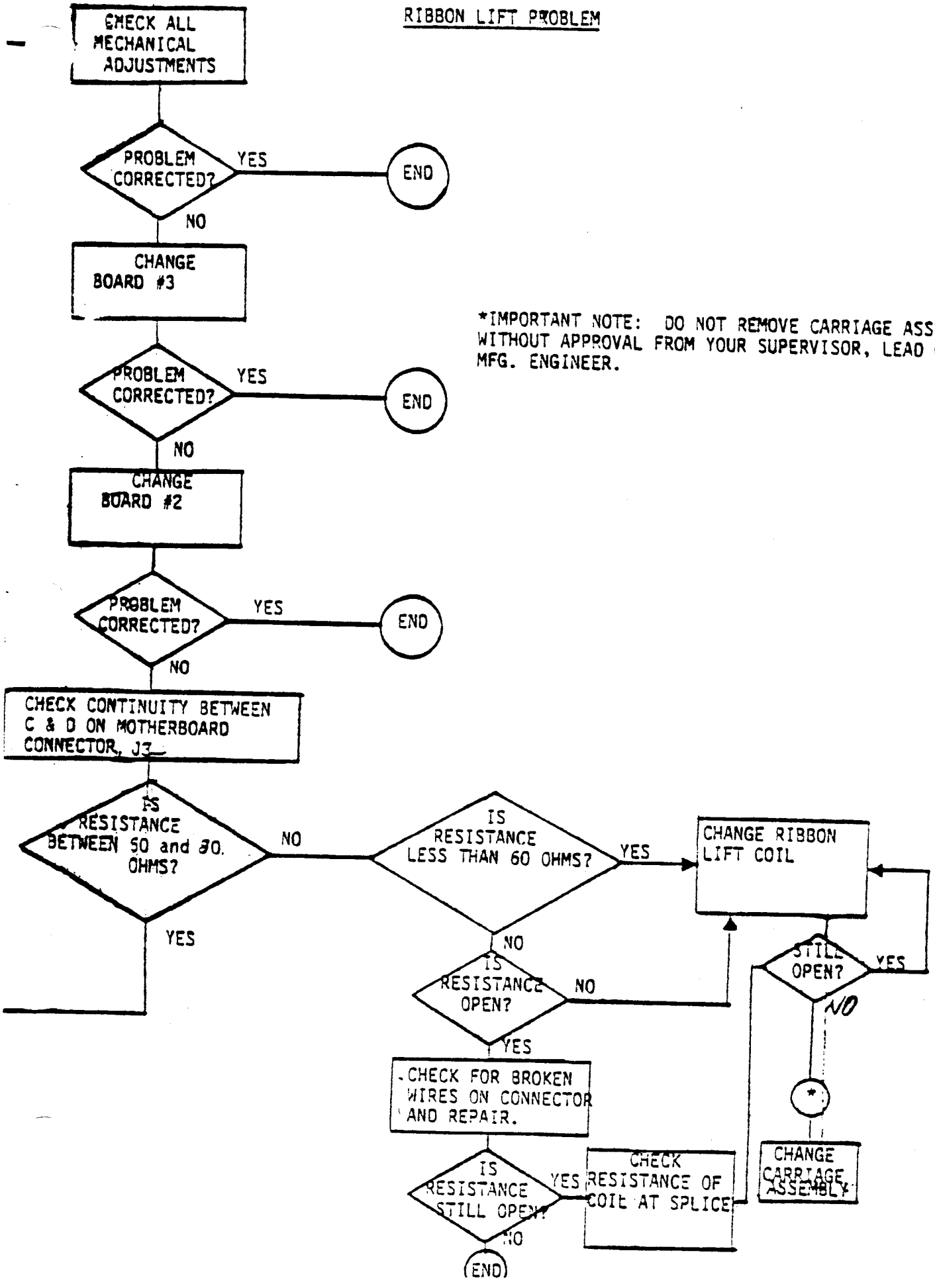
REPLACE CARRIAGE MOTOR

CARRIAGE MOTOR CONNECTOR



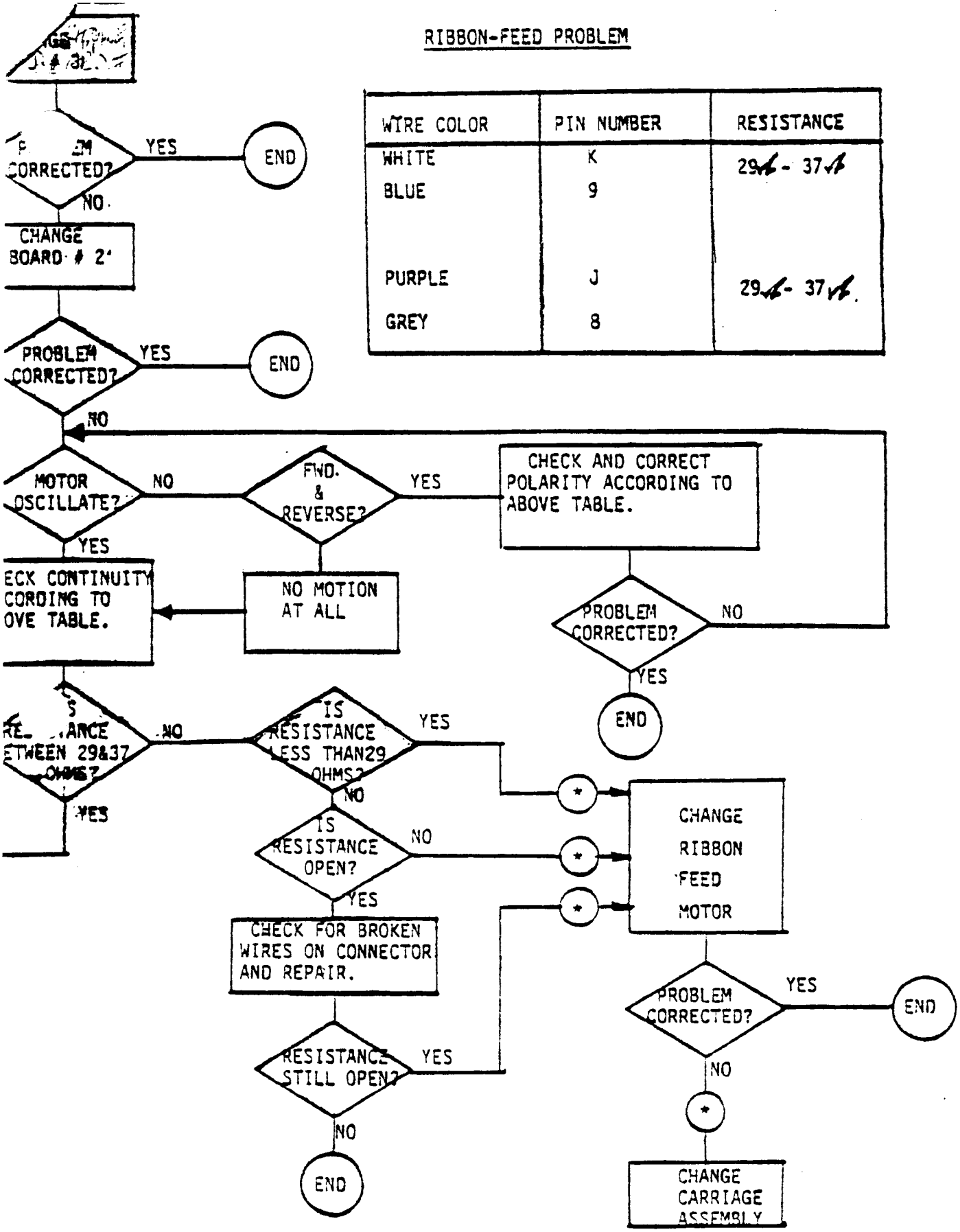
*IMPORTANT NOTE: DO NOT REMOVE CARRIAGE MOTOR WITHOUT APPROVAL FROM YOUR LEAD, SUPERIVSOR, OR MANUFACTURING ENGINEER.

RIBBON LIFT PROBLEM



*IMPORTANT NOTE: DO NOT REMOVE CARRIAGE ASSEMBLY WITHOUT APPROVAL FROM YOUR SUPERVISOR, LEAD OR MFG. ENGINEER.

RIBBON-FEED PROBLEM



WIRE COLOR	PIN NUMBER	RESISTANCE
WHITE	K	29Ω - 37Ω
BLUE	9	
PURPLE	J	29Ω - 37Ω.
GREY	8	

*IMPORTANT NOTE: DO NOT REMOVE CARRIAGE ASSEMBLY WITHOUT APPROVAL FROM YOUR LEAD, SUPERVISOR OR MANUFACTURING ENGINEER.

ORIENTATIO
WIRES AT
INS REPAIR.

PROBLEM CORRECTED? YES → END

NO

CHANGE BOARD #3

PROBLEM CORRECTED? YES → END

NO

CHECK ORIENTATION OF WIRES ON CONNECTOR ACCORDING TO THE DIAGRAM.

PROBLEM CORRECTED? NO → CORRECT ORIENTATION → PROBLEM CORRECTED? YES → END

NO

YES

CUT EOR WIRES

MEASURE EOR CONTINUITY FROM CUT WIRE TO CONNECTOR ACCORDING TO ABOVE DIAGRAM.

CONTINUITY GOOD? YES → REPLACE EOR SENSOR → PROBLEM CORRECTED? YES → END

NO

CHECK FOR BROKEN WIRES AT MOTHERBOARD CONNECTOR AND REPAIR.

PROBLEM CORRECTED? YES → END

NO

(*)

CHANGE CARRIAGE ASSEMBLY

EOR PROBLEM

MOTHERBOARD CONNECTOR

WIRE COLOR	PIN NUMBER
YELLOW	H
YELLOW	H
BROWN	G
ORANGE	F

*IMPORTANT NOTE: DO NOT REMOVE CARRIAGE ASSEMBLY WITHOUT THE APPROVAL FROM YOU SUPERVISOR, LEAD OR MFG. ENGINEER.

PAPERFEED PROBLEM

CHECK FUSES F4 and re- p ± if bad.

PROBLEM CORRECTED? YES → END

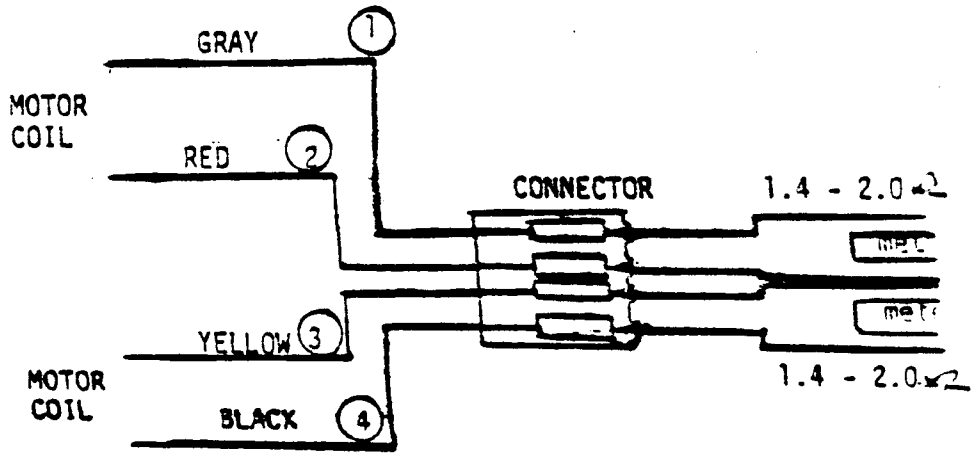
NO → CHANGE BOARD #1

PROBLEM CORRECTED? YES → END

NO → CHANGE BOARD #2

PROBLEM CORRECTED? YES → END

NO



*IMPORTANT NOTE: DO NOT REMOVE PAPERFEED MOTOR WITHOUT THE APPROVAL FROM YOUR LEAD, SUPERVISOR OR MANUFACTURING ENGINEER.

MOTOR OSCILLATE? NO → MOTOR RUN IN REVERSE? YES → CHECK AND CORRECT POLARITY ACCORDING TO THE ABOVE DIAGRAM.

CHECK AND CORRECT POLARITY ACCORDING TO THE ABOVE DIAGRAM. → PROBLEM CORRECTED? NO → (back to MOTOR OSCILLATE?)

PROBLEM CORRECTED? YES → END

MOTOR RUN IN REVERSE? NO → NO MOTION AT ALL → CHECK CONTINUTIY ACCORDING TO ABOVE DIAGRAM

MOTOR OSCILLATE? YES → CHECK CONTINUTIY ACCORDING TO ABOVE DIAGRAM

CHECK CONTINUTIY ACCORDING TO ABOVE DIAGRAM → RESISTANCE BETWEEN 1-4 ? NO → IS RESISTANCE LESS THAN 1Ω ? YES → (*) USE TEST MOTOR

RESISTANCE BETWEEN 1-4 ? YES → CHANGE PAPER FEED FUSES.

CHANGE PAPER FEED FUSES. → PROBLEM CORRECTED? NO → (back to RESISTANCE BETWEEN 1-4 ?)

PROBLEM CORRECTED? YES → END

IS RESISTANCE LESS THAN 1Ω ? NO → IS RESISTANCE OPEN? NO → (*) USE TEST MOTOR

IS RESISTANCE OPEN? YES → CHECK FOR BROKEN WIRES ON M.B. CONNECTOR AND REPAIR → RESISTANCE STILL OPEN? YES → (*) USE TEST MOTOR

RESISTANCE STILL OPEN? NO → END

USE TEST MOTOR → PROBLEM CORRECTED? YES → END

PROBLEM CORRECTED? NO → GO BACK TO START.

HAMMER PROBLEM

CHECK POWER SUPPLY VOLTAGES

CHECK ALL MECHANICAL ADJUSTMENTS & SWITCHES AND MAKE CORRECTIONS. (HAMMER SWITCH IS ON BOARD #3)

PROBLEM CORRECTED? YES → END

NO

CHANGE BOARD #3

PROBLEM CORRECTED? YES → END

NO

CHANGE BOARD #2

PROBLEM CORRECTED? YES → END

NO

CHECK HAMMER RESISTOR(5 OHMS) FOR BAD CONNECTION OR WRONG RESISTANCE. CORRECT IF BAD.

PROBLEM CORRECTED? YES → END

NO

CHECK CONTINUITY BETWEEN PINS 3 & 5 ON MOTHERBOARD CONNECTOR, J3.

IS RESISTANCE BETWEEN OHMS? NO

YES

IS RESISTANCE LESS THAN .3 OHMS? YES → * → CHANGE CARRIAGE ASSEMBLY

NO

IS RESISTANCE OPEN? NO → *

YES

CHECK FOR BROKEN WIRES ON MOTHERBOARD CONNECTOR AND REPAIR

IS RESISTANCE STILL OPEN? NO → END

YES → *

* IMPORTANT NOTE: DO NOT REMOVE CARRIAGE ASSEMBLY WITHOUT APPROVAL FROM YOUR SUPERVISOR, LEAD OR MFG. ENGINEER.