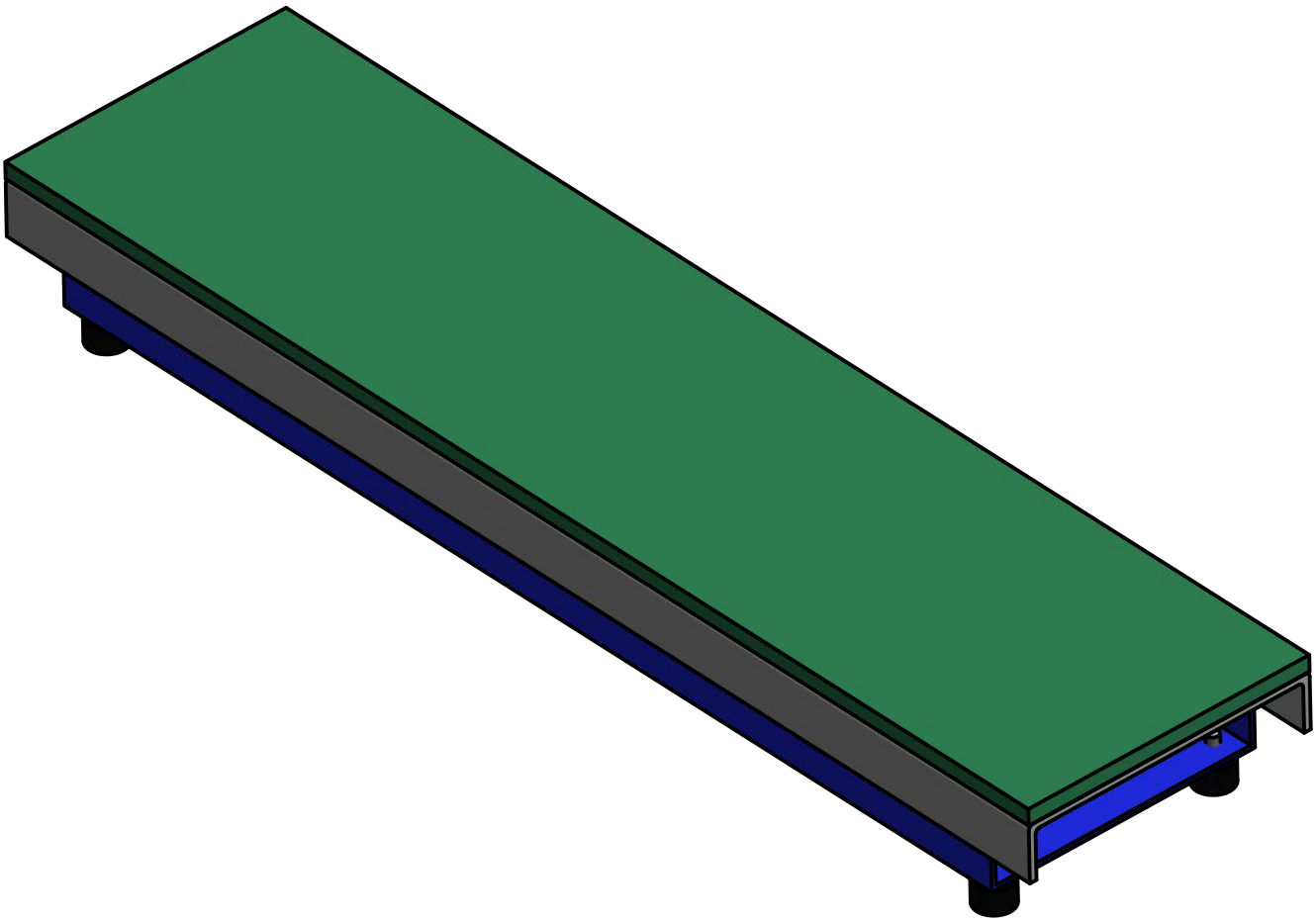
RoboShop Inc.

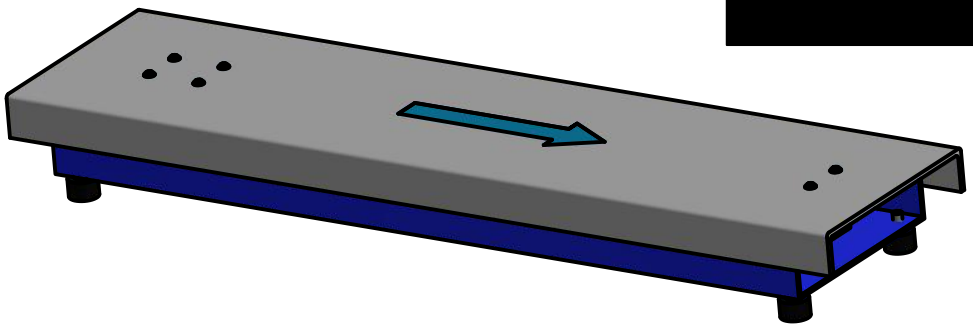
MAINTENANCE MANUAL FOR INTEGRATED BLOCK VIBRATORY FEEDER



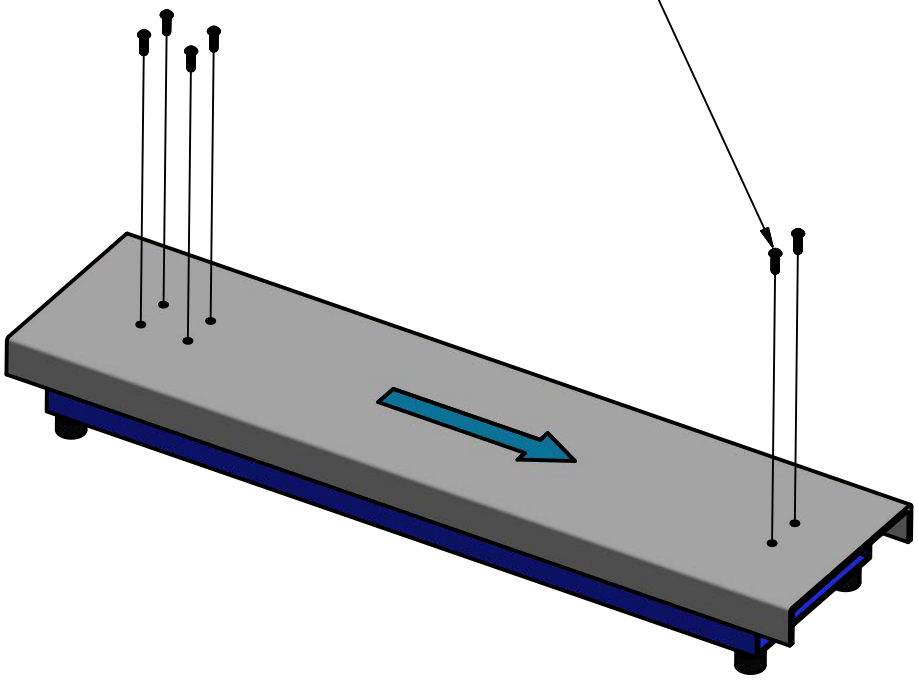
DISASSEMBLY INSTRUCTIONS

STEP 1: REMOVE SURFACE MATERIAL, EXPOSING THE TOP MOUNT SCREWS

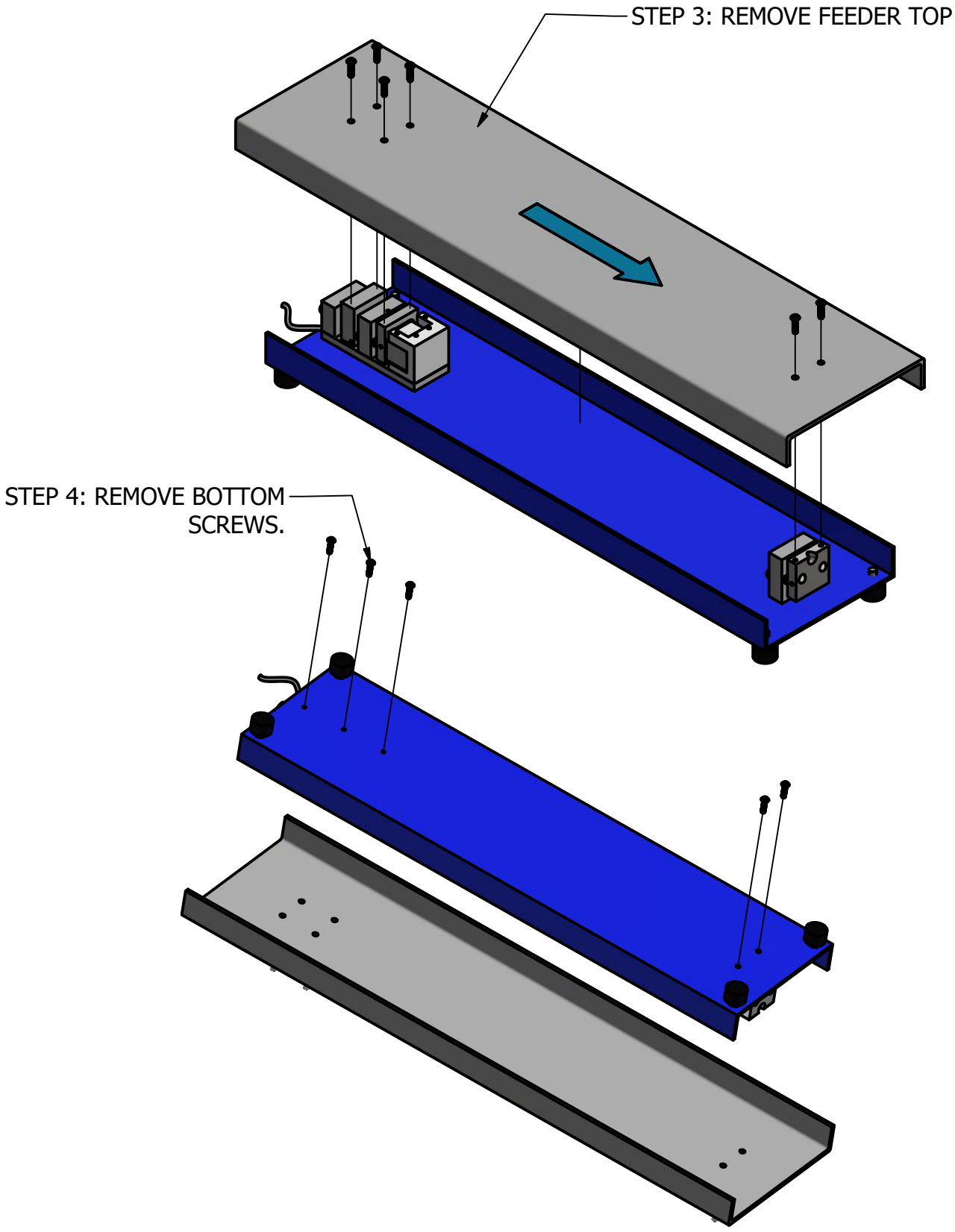
[redacted]



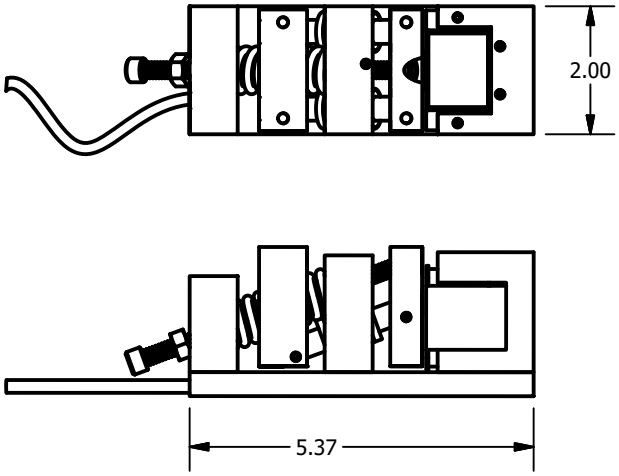
STEP 2: REMOVE FEEDER TOP SCREWS



DISASSEMBLY INSTRUCTIONS

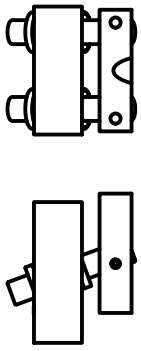


STEP 5. IDENTIFY THE DRIVE ASSEMBLY



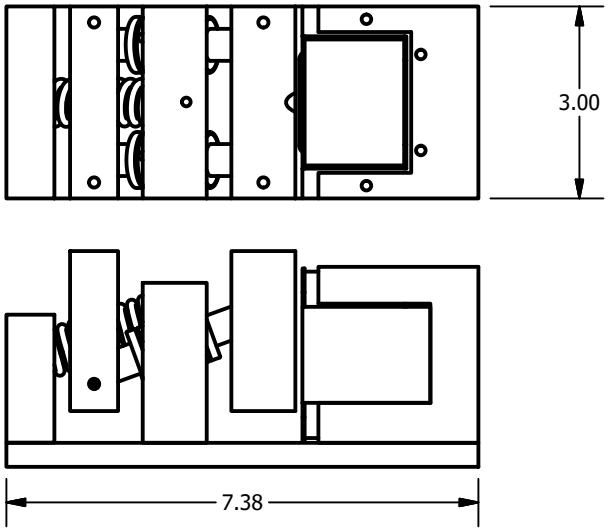
LOW PROFILE
DRIVE ASSEMBLY

PART # LPDA-19-xxxxxxx
(xxxxx = Job ID or Serial #)



LOW PROFILE
IDLER ASSEMBLY

PART # LPIA-19



HEAVY DUTY
DRIVE ASSEMBLY

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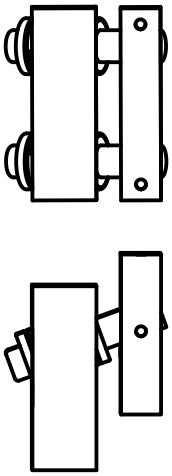
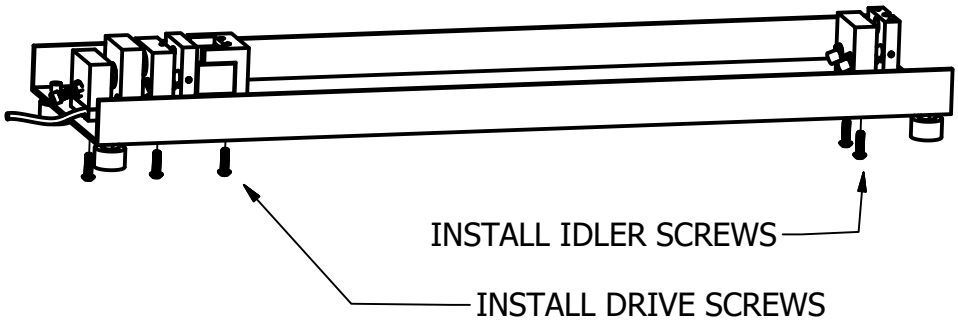
(xxxxxx = Job ID or Serial #)

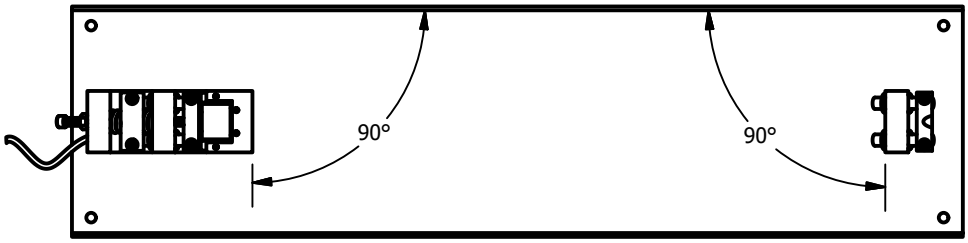


HEAVY DUTY
IDLER ASSEMBLY

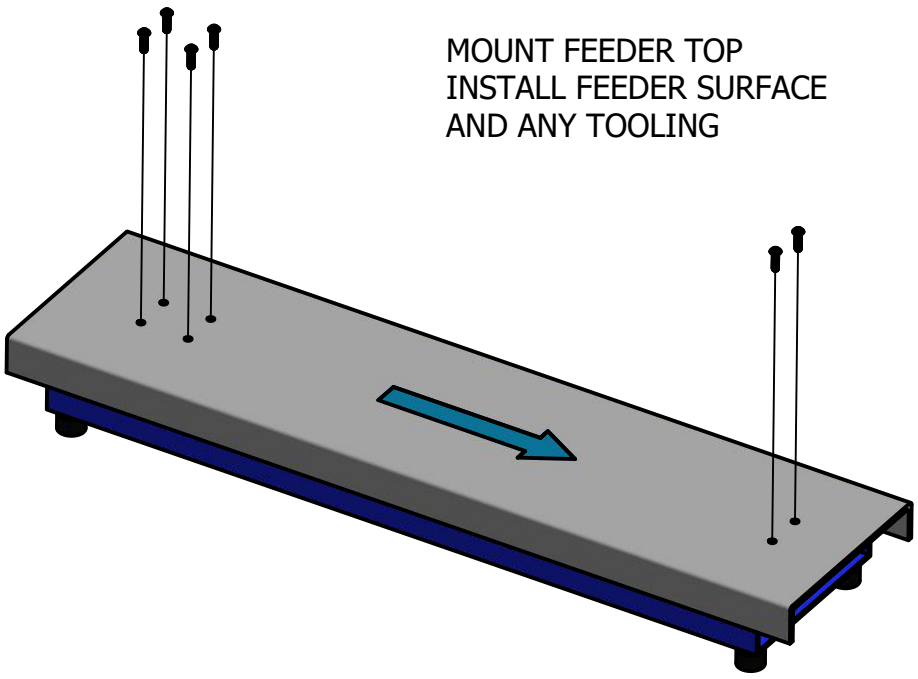
PART # HDIA-19

ASSEMBLY INSTRUCTIONS





MAKE SURE COMPONENTS ARE SQUARE TO EACH OTHER BEFORE TIGHTENING SCREWS



MOUNT FEEDER TOP
INSTALL FEEDER SURFACE
AND ANY TOOLING

ASSEMBLY AND TUNING GUIDE

REPLACEMENT VIBRATION DRIVE UNITS ARE PRETUNED AT ASSEMBLY, HOWEVER THERE MAY BE SOME TUNING ADJUSTMENTS NEEDED FOR OPTIMAL FEEDER PERFORMANCE.

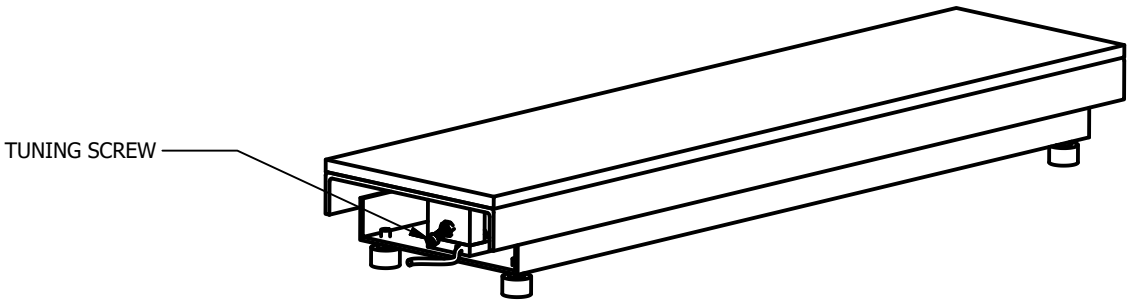
ASSUMING THE FREQUENCY AND POWER SETTINGS OF THE CONTROLLER HAVE NOT CHANGED, THE TUNING SCREW IN THE DRIVE CAN BE ADJUSTED TO CHANGE THE VIBRATION OF THE FEEDER.

BEFORE MAKING TUNING ADJUSTMENTS MAKE SURE:

THE FEEDER IS FULLY ASSEMBLED, WITH THE SIDE WALLS, BRUSH MATERIAL, AND ANY TOOLING ALL MOUNTED.

THE FEEDER IS CLEAR OF ANY OBSTRUCTIONS. THIS INCLUDES THE BRUSH MATERIAL, WHICH SHOULD NOT BE TOUCHING THE BRUSH MATERIAL OF ANY ADJACENT FEEDERS.

THE FEEDER FEET ARE SECURED TO THE BASE WITH THE ORIGINAL FOOT RINGS.



TUNING SCREW ADJUSTMENT:

WE HIGHLY RECOMMEND YOU CONSULT ROBOSHOP PRIOR TO CHANGING ANY FEEDER TUNING!

IF THE FEEDER HAS POOR VIBRATION: TURN SCREW 1/4 TURN AT A TIME, AND OBSERVE VIBRATION THIS BRINGS THE PULL PLATE CLOSER TO THE COIL. IF YOU GO TOO FAR THE PULL PLATE MAY START BANGING AGAINST THE COIL. DO NOT RUN WITH THIS NOISE!!! BACK THE SCREW OFF, LOWER THE POWER SETTING ON THE CONTROLLER, OR INCREASE THE FREQUENCY.

AS A GENERAL RULE OF THUMB, HIGHER FREQUENCIES USE TIGHTER TUNING. LOWER FREQUENCIES USE LOOSER TUNING; HOWEVER EVERY PART IS UNIQUE, AND EACH FEEDER GETS OPTIMIZED FOR THE APPLICATION FOR RUNOFF.

REVIEW YOUR RUNOFF VIDEO TO SEE THE OPTIMAL PERFORMANCE OF THE FEEDER FOR YOUR PART. THIS COMBINATION OF POWER, FREQUENCY, AND TUNING WAS DETERMINED AFTER MANY HOURS OF TESTING BY EXPERIENCED PERSONELL.

TROUBLESHOOTING

YOUR ROBOSHOP FEEDER HAS BEEN EXTENSIVELY TESTED AND RUN TOGETHER WITH THE REST OF THE FEEDERS IN YOUR SYSTEM TO PRODUCE THE DESIRED PART MOVEMENT.

IF YOUR FEEDER SYSTEM DOES NOT PERFORM AS IT DID IN YOUR RUNOFF VIDEO, BEFORE MAKING ADJUSTMENTS CHECK THE FOLLOWING:

CHECK EACH FEEDER HAS ROOM TO VIBRATE. THE MOST COMMON CAUSE OF POOR VIBRATION IS PHYSICAL INTERFERENCE. THIS INCLUDES THE EDGES OF THE BRUSH SURFACE ON ADJACENT FEEDERS, GUARDING, OTHER EQUIPMENT, STATIONARY TOOLING (MOUNTED TO THE FEEDER BASE, NOT THE TOP), AND ANY PART NESTS AT THE PART EXIT.

CHECK THAT NOTHING WAS ADDDED O THE VIBRATING SECTION OF THE TABLE. ANY CHANGES IN THE WEIGHT OF THE VIBRATING MASS CAN IMPACT THE VIBRATION OF THE FEEDER.

CHECK TO MAKE SURE THE INDIVIDUAL FEEDERS ARE CORRECTLY SITTING IN THEIR FOOT RETAINING RINGS

CHECK THE SYSTEM BASE TO MAKE SURE ALL THE FLOOR PADS ARE ON THE FLOOR AND THE ENTIRE UNTI DOES NOT ROCK

CHECK FOR ADEQUATE LIGHTING FOR THE HOPPER CONTROL CAMERA, IF YOUR SYSTEM IS SO EQUIPPED. REFER TO THE CONTROLS MANUAL FOR CAMERA SET-UP INSTRUCTIONS

CHECK THE VIBRATION SETTINGS AGAINST THE RUNOFF VIDEO.

CHECK THE PARTS YOU ARE FEEDING, AND THE BRUSH SURFACE. IF IT'S A NEW SYSTEM, WAS IT DESIGNED FOR THESE PARTS? ARE THEY COVERED IN OIL? IS THE BRUSH SURFACE CONTAMINATED?