

MODEL "770" HYDRAULIC HOG SPLITTER

INSTALLATION OPERATING MAINTENANCE PARTS LIST

USDA APPROVED

CE

BEST & DONOVAN

5570 CREEK ROAD, CINCINNTI, OHIO 45242, USA TOLL FREE: 1-800-553-2378 TEL.: 1-513-791-9180 FAX: 1-513-791-0925 CABLE: WEPCO

MODEL "770" HYDRAULIC HOG BACKBONE SPLITTING SAW

WARRANTY

Best & Donovan warrants the machine against defective parts & workmanship for six (6) months from date of factory shipment. In the fulfillment of its warranty, the sole obligation of Seller shall be to repair or replace, at its option F.O.B. its factory, shipping charges prepaid, and which after inspection by Seller are found to be defective. Buyer shall notify Seller of defect in writing, promptly upon discovery, within the warranty period. This warranty does not cover defects caused by corrosion or normal deterioration. It does not extend to consequential damage, loss or delay associated with a warranty defect and it does not cover any costs of labor, travel or other expenses associated with the repair or replacement of defective parts. Seller assumes no liability for product loss or other claims whatsoever arising out of the use or application of the machine in Meat Slaughtering/Processing operations, whether the machine is used alone or in conjoint use with other Meat Slaughtering/Processing Machines or Processes.

This warranty is voided if repairs, replacements or alterations are made by others without prior authorization by Seller. Notwithstanding the foregoing, Seller's warranty obligations with respect to any items not manufactured by Seller shall not exceed the obligations undertaken by the manufacturer thereof under express warranty to the Seller. This express warranty is in lieu of all other warranties of fitness of the machine for any particular purpose.

SERVICE INFORMATION AND PREVENTATIVE MAINTENANCE SCHEDULE FOR BEST & DONOVAN

BEST & DONOVAN REALIZES THAT THERE MAY BE MANY DIFFERENT APPROACHES TO PROPER MAINTENANCE, ASSEMBLY, DISASSEMBLY, AND ADJUSTMENT PROCEDURES. THE FOLLOWING PROCEDURES SHOULD BE USED AS A GUIDELINE AND WHETHER ACCEPTED OR USED IN THEIR ENTIRETY OR PARTIALLY, IS NOT A SUBSTITUTE FOR PROPER MECHANICAL ABILITY AND/OR KNOWLEDGE.

ONLY PERSONNEL WITH PROPER MECHANICAL AND TECHNICAL SKILLS SHOULD ATTEMPT ANY SERVICE PROCEDURES.

THE FOLLOWING SERVICE INFORMATION WILL DESCRIBE IMPORTANT NOTATIONS REQUIRING SPECIAL ATTENTION BY THE TECHNICIAN(S) PERFORMING SERVICE TASKS. THEY ARE: WARNING, CAUTION, and NOTE.

WARNING: WILL DESCRIBE CONDITIONS THAT EXIST OR POTENTIALLY

EXIST THAT CAN CAUSE INJURY OR DEATH.

CAUTION: WILL DESCRIBE CONDITIONS THAT EXIST OR POTENTIALLY

EXIST THAT CAN CAUSE INJURY OR EQUIPMENT FAILURE.

NOTE: WILL DESCRIBE A SPECIFIC HELPFUL PROCEDURE.

MODEL "770" HYDRAULIC HOG BACKBONE SPLITTER TOOL SPECIFICATIONS

NET WEIGHT 100 LBS. (45.36 Kilos.)

COUNTERBALANCE PART NO. 6343200

MOTOR 7710051

HYDRAULIC UNIT 9710003

FLOW RATE: 12.5 G.P.M. (PRESET)

POWER SUPPLY TO PUMP UNIT

CONTROL VOLTAGE

220/440 VOLT

24 VOLT

RESERVOIR FLUID CAPACITY

30 GALLONS

RESERVOIR FLUID TEXACO - RANDO 32 0R

ITS EQUIVALENT

NOTE: PUMP UNIT BUILT FOR "270" & "770" SAWS ONLY - G.P.M. SET AT TIME OF ASSEMBLY FOR INDIVIDUAL MODEL.

NOTE: TEMPERATURE OF INSTALLATION AREA MAY REQUIRE A DIFFERENT VISCOSITY IN FLUID. CHECK WITH FLUID DEALER FOR CORRECT OIL.

SAW BLADES AVAILABLE

TRIPLE SKIP - SHIPPED WITH TOOL 6110000
DOUBLE SKIP 6109000
STANDARD 6103300

TOOL APPLICATIONS: GENERAL BACKBONE SPLITTING OF PIGS & SOWS.

SAFETY RULES

- 1. WHEN HANDLING THE "770" SAW, IT IS TO BE HELD BY THE REAR HANDLE AND THE MAIN BODY EXTENSION HOUSING AT THE SAME TIME.
- 2. THE SAW CAN ONLY BE USED AS DESCRIBED IN THE APPLICATIONS SECTION.
- 3. ONLY PROPERLY TRAINED PERSONNEL SHOULD OPERATED THIS SAW.
- 4. DO NOT USE THE SAW WITH A DULL BLADE.

WARNING: FOR CHECKING. CLEANING, MAINTENANCE, SAW BLADE CHANGING,

SUSPENDING ON THE BALANCER AND AFTER SHIFT, THE SAW MUST BE

DISCONNECTED FROM ITS POWER SOURCE.

WARNING: NEVER HANDLE THE BLADES UNLESS WEARING PROPER SAFETY GLOVES.

CAUTION: WHILE OPERATING. USE EXTREME CAUTION TO AVOID THE DANGER OF

ACCIDENTS. ANY MISUSE OF THE TOOL CAN LEAD TO CONSIDERABLE

INJURIES AND/OR DAMAGES.

RECEIVING & INSPECTION

INSPECT YOUR B & D MODEL "770" HYDRAULIC HOG SPLITTER FOR POSSIBLE DAMAGE AS SOON AS YOU RECEIVE IT. IF YOU DISCOVER ANY DAMAGE, NOTIFY CARRIER'S AGENT AT ONCE AND REQUEST HIM TO INSPECT THE DAMAGE, ALSO NOTIFY BEST & DONOVAN. CHECK PACKING LIST AGAINST THE CONTENTS.

MAINTENANCE INSTRUCTIONS

WARNING

MAKE SURE THAT THE "770" SPLITTER IS DISCONNECTED FROM ITS POWER SOURCES WHENEVER MAINTENANCE OR ADJUSTMENTS ARE BEING MADE.

ALWAYS EXERCISE CARE WHEN OPERATING OR PERFORMING MAINTENANCE REPAIRS, CHANGING BLADES AND MAKING ADJUSTMENTS.

PREVENTIVE MAINTENANCE IS THE FIRST STEP OF GOOD MAINTENANCE. A PERIODIC CHECK SHOULD BE MADE TO REPLACE WORN PARTS. A WORN PART REPLACED IN TIME MAY SAVE EXTENSIVE REPAIRS LATER.

THIS IS A PRECISION TOOL MADE UP OF PRECISION PARTS AND SHOULD BE MAINTAINED WITH EXTREME CARE. DO NOT SQUEEZE THE TOOL OR PARTS IN A HOLDING DEVICE OR OTHERWISE MISUSE. TOO MUCH PRESSURE EXERTED IN HOLDING THE TOOL MAY CAUSE DISTORTION OF THE PARTS. BE SURE YOU HAVE THE CORRECT TOOLS AND FIXTURES BEFORE DISASSEMBLING OR ASSEMBLING THIS TOOL. WHEN ASSEMBLING OR DISASSEMBLING PARTS WHICH HAVE A PRESS FIT, APPLY PRESSURE EVENLY TO THE PART. TO ASSEMBLE OR DISASSEMBLE BEARINGS, THE PRESSURE SHOULD BE APPLIED TO THE FACE OF THE INNER OR OUTER RACE, WHICHEVER IS ADJACENT TO THE MATING PART.

BEFORE DISASSEMBLING THIS TOOL, THE AREA AROUND THE WORK BENCH SHOULD BE CLEAN AND FREE FROM METAL CHIPS AND OTHER FOREIGN MATTER. IT IS A GOOD PRACTICE TO SPREAD A CLEAN CLOTH ON THE WORK BENCH TO HELP PREVENT THE LOSS OF SMALL PARTS.

IT IS IMPORTANT THAT ALL PARTS ARE THOROUGHLY CLEANED AND INSPECTED BEFORE ASSEMBLING. THE SLIGHTEST PARTICLES OF DIRT CAN CREATE EXCESSIVE RUN-OUT IN SPINDLE OR OUT OF SQUARENESS IN THE BEARING MOUNTING, CAUSING VIBRATIONS AND LOSS OF SPEED, ULTIMATELY DAMAGING THE TOOL.

BEFORE REASSEMBLING, ALL PARTS SHOULD BE WASHED AND INSPECTED. REPLACE ANY WORN OR DEFECTIVE PART. LUBRICANT IS RECOMMENDED FOR INSTALLATION OF "O" RINGS.

"770" SAW & HYDRAULIC POWER UNIT INSTALLATION INSTRUCTIONS

THE #9710003 HYDRAULIC UNIT DIMENSIONS FOR INSTALLATION ARE 24" (61 cm) W. x 36" (91.5 cm) L. x 36" (91.5 cm) H. THE UNIT SHOULD BE LOCATED IN AN AREA WHERE WASH DOWN WILL NOT DAMAGE THE ELECTRICAL SYSTEM OR CONTAMINATE THE HYDRAULIC FLUID OF THE HYDRAULIC UNIT.

THE AMBIENT TEMPERATURE AT THE HYDRAULIC UNIT WILL EFFECT THE VISCOSITY OF THE HYDRAULIC FLUID. FOR THE RECOMMENDED FLUID, WHICH IS LISTED ON THE SPECIFICATIONS PAGE. THE AMBIENT TEMPERATURE IS 60 TO 85 DEGREES. IF THE AMBIENT TEMPERATURE IS DIFFERENT OR IT CHANGES FROM THESE SPECIFICATIONS, CHECK WITH YOUR FLUID DEALER FOR SUGGESTED REPLACEMENT HYDRAULIC FLUID.

WHEN THE "770" HYDRAULIC HOG SPLITTER & 9710003 HYDRAULIC PUMP UNIT ARE PURCHASED TOGETHER. THE PRESSURE AND RETURN LINES WILL BE CORRECT FOR PROPER ROTATION UPON INSTALLATION. DUE TO WIRING OF THE UNIT AT THE USERS LOCATION, PLEASE FOLLOW THE DIRECTIONS GIVEN BELOW.

REFER TO THE INSTALLATION MANUAL FURNISHED WITH THE BEST & DONOVAN 9710003 HYDRAULIC POWER UNIT. CONNECT THE MOTOR TO A POWER SOURCE THAT MATCHES THE SPECIFICATIONS ON THE MOTOR IDENTIFICATION PLATE ON THE HYDRAULIC UNIT. MAKE SURE THAT ALL CODES AND SAFETY FACTORS ARE FOLLOWED WHEN INSTALLING.

<u>CAUTION</u>: INSTALLATION SHOULD BE DONE BY AN EXPERIENCED ELECTRICIAN & HYDRAULIC TECHNICIAN FOR PROPER OPERATION.

<u>CAUTION</u>: INSTALL WITH A DISCONNECT THAT IS EQUIPPED WITH A HYDRAULIC & ELECTRICAL LOCK-OUT FITTING FOR MAINTENANCE OR REPAIR PURPOSES.

<u>CAUTION</u>: IF POWER SUPPLY OTHER THAN THE BEST & DONOVAN #9710003, REDUCE THE FLOW RATE

BEFORE "BUMPING" TO CHECK THE DIRECTION OF ROTATION. REDUCING THE FLOW RATE WILL

PREVENT INTERNAL THREADED PARTS FROM LOOSENING IF DIRECTION IS INCORRECT.

#9710003 HYDRAULIC UNIT HOOK-UP

WARNING

"DO NOT" TEST HYDRAULIC UNIT OR SAW WITH BLADE ATTACHED

CAUTION

BEFORE ANY HOOK-UP TO TOOL, CHECK THE ROTATION OF THE MOTOR ON THE HYDRAULIC UNIT. MAKE SURE THE ROTATION IS IN THE DIRECTION OF THE ARROW ON THE FAN HOUSING. TO TEST THE ROTATION, "BUMP" THE STARTER TO THE PUMP UNIT TO CHECK THE DIRECTION OF THE FAN. DO NOT CONNECT THE FLUID LINES TO THE SAW AT THIS POINT. THE 24 VDC SAW TRIGGER CONNECTION WILL BE USED TO "BUMP" UNIT.

<u>CAUTION</u>: "DO NOT"

- A. TEST THE HYDRAULIC UNIT WITHOUT FIRST FILLING THE PUMP CASING WITH FILTERED HYDRAULIC FLUID TO ENABLE THE PUMP TO PRIME & PROVIDE LUBRICATION.
- B. TEST PUMP ROTATION WITH THE HYDRAULIC UNIT CONNECTED TO SAW
- 1. MAKE SURE THE HYDRAULIC LINES TO TOOL ARE CLEAN.
- 2. CONNECT THE HYDRAULIC UNIT TO THE CUSTOMER SUPPLIED PRESSURE & RETURN LINES INSTALLED TO OPERATE THE "770" SAW.
- 3. FILL RESERVOIR. TO SIGHT GUAGE, WITH FILTERED HYDRAULIC FLUID.
- 4. FILL THE PUMP CASING WITH FILTERED HYDRAULIC FLUID. THIS CAN BE DONE WHERE THE CASE DRAIN CONNECTS TO THE PUMP. IN SOME CASES THE "FILL PLUG" IS LOCATED DIRECTLY OVER THE CASE DRAIN PORT, THUS ALLOWING AN EASY METHOD OF FILLING THE PUMP HOUSING.
- 5. AFTER MAKING SURE THAT ROTATION IS CORRECT ON THE HYDRAULIC UNIT, HOOK TOGETHER THE PRESSURE & RETURN SIDES, TOOL OMITTED, TO CLEAN OUT ANY FOREIGN MATERIAL BACK TO THE HYDRAULIC UNIT.
- 6. AFTER PURGING, REFILL HYDRAULIC UNIT WITH FILTERED OIL. (LEAVE ROOM FOR EXPANSION.)

"770" SAW HOOK-UP

<u>CAUTION</u>: DO NOT TEST WITH A BLADE ATTACHED TO THE SAW GEAR.

<u>CAUTION:</u> DO NOT TEST SAW UNIT WITHOUT FILLING THE MOTOR CASE DRAIN

<u>CAUTION</u>: IF NOT USING THE BEST & DONOVAN #9710003 HYDRAULIC UNIT, REDUCE THE FLOW

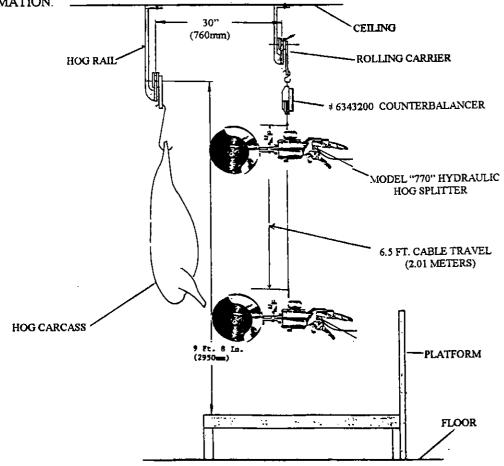
RATE FOR TESTING THE CORRECT ROTATION OF THE SAW ITSELF.

NOTE: THE PRESSURE SIDE OF THE SAW SHOULD HAVE A FEMALE QUICK COUPLING & THE RETURN SIDE SHOULD HAVE THE MALE QUICK COUPLING AT THE END OF THE SAW FLUID HOSES IF SAW REMOVAL IS TO BE DONE OTHER THAN AT THE THREADED CONNECTIONS AT THE REAR OF THE SAW MOTOR. THE PRESSURE HOSE IS LOCATED ON THE LEFT SIDE (B" PORT) OF THE SAW MOTOR LOOKING FROM THE REAR HANDLE OF THE SAW. THEIR MATES ARE TO BE ON THE CUSTOMER SUPPLIED HYDRAULIC UNIT LINES. THIS WILL ALLOW THE REMOVAL & INSTALLATION OF THE SAW CORRECT EACH TIME.

- 1. TURN THE "770" SAW OVER & FILL THE CASE DRAIN WITH FILTERED HYDRAULIC OIL. WITH THE LINE FULL, HOOK IT TO THE CASE DRAIN RETURN LINE TO THE UNIT RESERVOIR.
- 2. CONNECT THE PRESSURE & RETURN LINES TO THE SAW.
- 3. CONNECT THE 24 VOLT CONTROL FROM THE SAW TO THE POWER UNIT.
- 4. JUST LIKE TESTING THE HYDRAULIC UNIT, "BUMP" THE SAW BY DEPRESSING THE TRIGGERS.
- 5. WATCH THE SAW GEAR. THE CORRECT ROTATION IS IN THE COUNTERCLOCKWISE DIRECTION. IF THE DIRECTION IS INCORRECT, REVERSE THE PRESSURE & RETURN HOSES AT THE HYDRAULIC UNIT.
- 6. WHEN DIRECTION IS CORRECT, INCREASE THE FLOW RATE IF REDUCED.
- 7. THE "770" SAW IS READY TO USE.

MODEL "770" INSTALLATION

THE "770" HOG SPLITTER SHOULD BE INSTALLED ACCORDING TO THE DIAGRAM BELOW FOR MAXIMUM PERFORMANCE AND THE EASE OF OPERATION OF THE EMPLOYEE. REFER TO THE SPECIFICATIONS SHEET FOR OTHER INFORMATION.



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HOG SPLITTER SAW BLADES

WARNING

SHUT OFF HYDRAULIC UNIT & DISCONNECT TOOL FROM HYDRAULIC POWER UNIT BEFORE CHANGING OR INSTALLING SAW BLADE.

DO NOT OPERATE THE "770" SPLITTER WITH ANY TYPE OF DEFECTIVE BLADE. ALWAYS INSPECT SAW BLADES BEFORE INSTALLATION FOR DAMAGE.

CARE OF BLADE

<u>CAUTION</u>: EVEN A DULL BLADE IS SHARP TO THE HUMAN SKIN. WEAR SAFETY GLOVES WHENEVER HANDLING THESE SAW BLADES.

AFTER CLEANING & DRYING SAW BLADES, APPLY A LIGHT COAT OF USDA APPROVED OIL TO BOTH SURFACES OF THE BLADE BEFORE STORING..

WHEN THE BLADE BECOMES DULL AND NEEDS TO BE RE-SHARPENED, IT IS IMPORTANT TO HAVE THE TEETH SET (.006 - .008 PER SIDE ALTERNATELY) BEFORE PLACING THE SAW BLADE BACK INTO SERVICE.

CLEANING "770" SPLITTER

WHEN CLEANING THE TOOL OUTER SURFACES, KEEP THE HIGH PRESSURE HOSE SPRAY AWAY FROM THE HANDLE AREAS.

CLEANING AGENTS CAN BE USED ON THE EXTERIOR OF THE SAW. USE A SOFT CLEANING PAD TO REMOVE ANY FOREIGN MATTER THAT THE CLEANING AGENTS AND THE HIGH PRESSURE HOSE CAN NOT REMOVE.

NOTE: IT IS RECOMMENDED THAT "770" HYDRAULIC HOSE QUICK DISCONNECTS BE SNAPPED INTO EACH OTHER WHEN THE SAW IS UNHOOKED FROM THE HYDRAULIC POWER UNIT HOSES. THIS WILL KEEP THE FITTINGS FREE FROM CLEANUP OR ANY OTHER ACCIDENTAL DAMAGE.

<u>IMPORTANT</u>

INSPECT ALL BLADES WHEN THEY ARE REMOVED FROM THE "770" SAW. DISCARD ANY NON-REPAIRABLE BLADES. NUMBERING THE BLADES WHEN PURCHASED IS A GOOD WAY TO KEEP TRACK OF LIFE AND WEAR ON THE BLADES.

SAW BLADE INSTALLATION

<u>CAUTION</u>: ALWAYS WEAR SAFETY GLOVES WHEN HANDLING ANY SAW BLADE

- 1. MAKE SURE THAT THE SAW IS DISCONNECTED FROM ITS POWER SOURCES.
- 2. PLACE THE SAW BLADE ONTO THE BLADE GEAR #7826093 MAKING SURE THAT THE FOUR (4) NOTCHES IN THE BLADE FIT OVER THE BLADE PINS STICKING UP FROM THE FACE OF THE BLADE GEAR.

NOTE: CHECK TO MAKE SURE THAT ALL FOUR (4) PINS ARE NOT DAMAGED AND ARE STRAIGHT. REPLACE THE BLADE GEAR.

3. MAKE SURE THAT THE BLADE-LOC INSERT #7826090 IS IN THE BLADE GEAR.

WARNING

CHECK TO MAKE SURE THAT THE INSERT LOCATOR PIN INSIDE THE BLADE GEAR IS NOT WORN OR BROKEN.

4. THREAD THE BLADE RETAINER NUT # 7826092 (RIGHT HAND THREADS) ONTO THE SAW GEAR HAND TIGHT. USE THE SAW NUT WRENCH # 6117250 TO TIGHTEN THE NUT ONTO THE BLADE.

WARNING

OVER TIGHTENING OF THE BLADE RETAINER NUT WILL DAMAGE THE THREADS. INSPECT THE BLADE RETAINER AT EACH BLADE CHANGE.

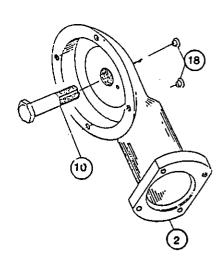
5. THREAD THE RETAINER #7826091 (LEFT HAND THREADS) THROUGH THE RETAINER NUT #7826092 INTO THE INSERT #7826090 AND TIGHTEN COUNTERCLOCKWISE WITH A WRENCH

SAW BLADE REMOVAL

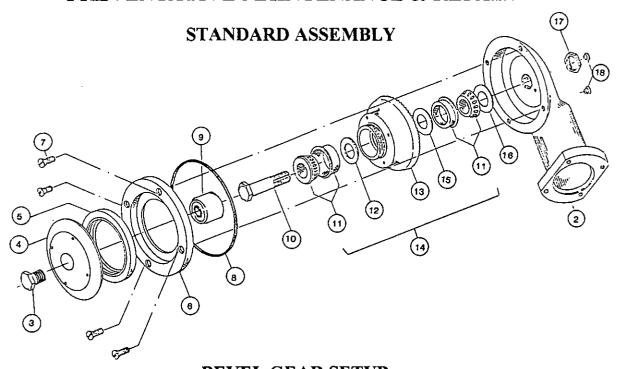
FOLLOW THE INSTRUCTIONS FOR SAW BLADE INSTALLATION IN REVERSE.

LUBRICATION

THE BEVEL GEAR STUD #10 & STANDARD #2 ARE EQUIPPED WITH GREASE FITTINGS #18. USE A GOOD GRADE OF USDA APPROVED GREASE AND APPLY TWO SHOTS TO EACH OF THE FITTINGS AT THE NOON BREAK AND AFTER CLEAN-UP IS. ONCE A WEEK THE SAW GEAR COVER #6 SHOULD BE REMOVED AND THE OLD GREASE CLEANED OUT BY HAND. DO NOT FLUSH THE SAW HEAD OUT WITH ANYTHING. PURGE THE OLD GREASE OUT OF THE BLADE GEAR #13 AND PINION GEAR #7826030 AREA WITH NEW GREASE FROM THE GREASE GUN. PURGE ONLY UNTIL NEW GREASE IS SEEN THROUGH THE BLADE GEAR BEARINGS #11 AND FROM UNDER THE PINION GEAR.



PREVENTATIVE MAINTENANCE & REPAIR



- BEVEL GEAR SETUP
- 1. PRESS THE GREASE FITTING #18 INTO THE STUD # 10 EVENLY.
- 2. IN A PRESS OR VISE, PRESS THE OUTER RACE HALVES #11 INTO THE BEVEL GEAR #13.

<u>CAUTION</u>: MAKE SURE THAT THE RACES ARE SEATED AGAINST THE BEVEL GEAR. TAKE CARE TO PROTECT THE GEAR TEETH FROM DAMAGE WHEN PRESSING THE BEARING HALVES IN.

- 3. PRESS ONE OF THE BEARING INNER RACES #11 (LARGE O.D. FIRST) ONTO THE BEVEL GEAR STUD #10 USING A PIPE NIPPLE THAT MATCHES THE ROLLER BEARINGS INNER RACE. MAKE SURE THAT THE BEARING IS SEATED AGAINST THE HEAD OF THE STUD FOR PROPER SHIMMING OF THE BEVEL GEAR.
- 4. SLIDE THE LUBRICATING SPACER #12 OVER THE STUD #10.
- 5. INSERT THE STUD ASSEMBLY THROUGH THE THREADED COLLAR SIDE OF THE BEVEL GEAR #13.
- 6. TO SHIM THE BEVEL GEAR ROLLER BEARINGS, START WITH APPROX. .015 TO .020 SHIMS # 15 AGAINST THE LUBRICATING SPACER #12.
- 7. SLIDE THE OTHER HALF OF THE ROLLER BEARING #11, BEVEL SIDE IN, OVER THE THREADED END OF THE STUD #10 ON THE GEARED SIDE.
- 8. IN A VISE, USE THE PIPE NIPPLE OVER THE THREADED END OF THE STUD #10 AND A SOLID BLOCK THE SIZE OF THE STUD HEAD TO COMPRESS THE BEARINGS #11 TOGETHER SLOWLY. BE SURE THAT THE BEVEL GEAR #13 CAN ROTATE THE ENTIRE TIME THE TIGHTENING IS BEING DONE. IF THE GEAR BEGINS TO TIGHTEN, TAKE THE THREADED SIDE INNER BEARING OFF AND INSERT SHIMS TILL THE BEVEL GEAR IS ABLE TO TURN FREELY WITHOUT ANY SIDE PLAY AT A TORQUE PRESSURE OF 80 90 FT. LBS. THE BEVEL GEAR IS NOW SET.

NOTE: IF STUD ASSEMBLY NEEDS TO BE TAKEN OUT, HOLD THE BLADE GEAR ASSEMBLY IN ONE HAND AND USE A RUBBER MALLET TO TAP THE STUD ASSEMBLY OUT FROM THE GREASE FITTING END OF THE STUD.

SETTING THE BEVEL GEAR TO THE PINION

1. SCREW THE BEVEL GEAR ASSEMBLY INTO THE FRAME SLOWLY BEING CAREFUL TO MATCH UP THE PINION #7826030 & BEVEL GEAR #13 TEETH.

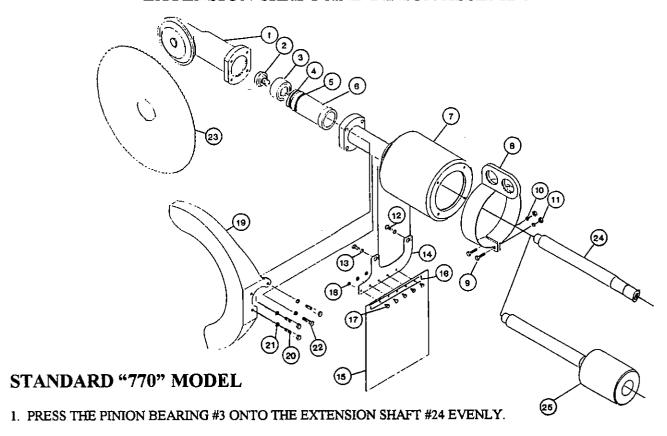
NOTE: THE BEVEL GEAR STUD #10 HAS LEFT HAND THREADS.

2. AS THE TORQUE BEGINS TO BUILD, MAKE SURE THAT THERE IS A SMALL AMOUNT OF BACKLASH BETWEEN THE PINION & BEVEL GEAR. AS STATED ABOVE, THE TORQUE ON THE BEVEL GEAR TO THE STANDARD IS APPROX. 70 - 80 FT. LBS.

NOTE: BACKLASH IS WHEN THE BEVEL GEAR TEETH CAN BE MOVED SIDE TO SIDE WITHOUT MOVING THE PINION GEAR AT ALL. IF THERE IS NO BACKLASH PREMATURE WEAR AND POSSIBLE BREAKAGE OF THE PINION AND BEVEL GEAR WILL OCCUR.

- 3. IF THERE IS A POINT WHERE THERE IS NO BACKLASH, REMOVE THE BEVEL GEAR ASSEMBLY AND ADD SHIMS #16 TO THE UNDERSIDE OF THE BEVEL GEAR #13 THAT MEETS THE STANDARD #2.
- 4. ONCE THE BACKLASH IS SET, THE BEVEL GEAR #13 IS READY TO BE LOCKED IN PLACE. HOLD THE TORQUE PRESSURE ON THE BEVEL GEAR STUD #10 WHILE TIGHTENING THE STUD LOCKNUT #17. YOU DO NOT WANT THE BEVEL GEAR TO LOOSEN UP AT THIS TIME.

EXTENSION SHAFT AND PINION ASSEMBLY



NOTE: PRESS THE BEARING ONTO THE SHAFT WITH PRESSING FORCE ON THE INNER RACE. FORCE ON THE OUTER RACE WILL DAMAGE THE BEARING.

2. TIGHTEN OPPOSITE END OF THE EXTENSION SHAFT #24 IN A SOFT JAW VISE IN THE UPRIGHT POSITION.

EXTENSION SHAFT & PINION ASSEMBLY CONTINUED

- 3. SCREW THE PINION GEAR #2 INTO THE EXTENSION SHAFT #24. USE A THIN WRENCH TO SNUG THE PINION INTO THE SHAFT.
- 4. WIPE A THIN COAT OF LUBRICANT ON O-RINGS #4 & #5 BEFORE SLIDING THEM OVER THE EXTENSION SHAFT SLEEVE #6.
- 5. SLIDE THE SLEEVE ASSEMBLY (0-RING END FIRST) OVER THE EXTENSION SHAFT #24 FROM THE SPLINED END UP TO THE PINION BEARING #3.

"770" SET UP WITH COUNTERWEIGHT FOR SOWS

- 1. SLIDE THE EXTENSION SHAFT #25 UP THROUGH THE BODY #7.
- 2. WIPE A THIN COAT OF LUBRICANT ON O-RINGS #4 & #5 BEFORE SLIDING THEM OVER THE EXTENSION SHAFT SLEEVE #6.
- 3. SLIDE THE SLEEVE #6 OVER THE EXTENSION SHAFT #25.
- 4. PRESS THE PINION BEARING #3 ONTO THE EXTENSION SHAFT #25 MAKING SURE THAT THE BEARING IS FLUSH WITH THE END OF THE SHAFT.
- 5. SCREW THE PINION GEAR #2 INTO THE EXTENSION SHAFT #25. USE A THIN WRENCH TO SNUG THE PINION INTO THE SHAFT.

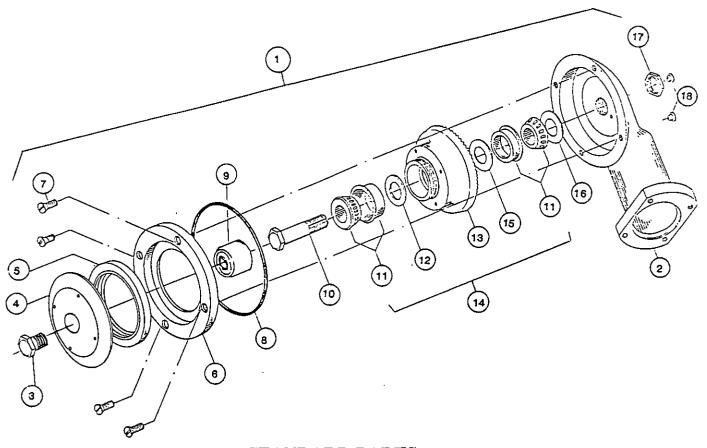
ASSEMBLING STANDARD, EXTENSION SHAFT & HOUSING

- 1. PRESS GREASE FITTINGS #6361201 INTO STANDARD #7705600.
- 2. SLIDE THE STANDARD #7705600 OVER THE PINION GEAR #2, BEARING #3 AND SPACING SLEEVE #6.
- 3. SLIDE THE EXTENSION SHAFT #25 OR #25 INTO THE EXTENSION HOUSING & BODY #7 & MATCH UP THE FLATS ON BOTH PIECES.
- 4. ATTACH THE SAW GUARD #19 TO THE STANDARD #7705600 AND THE EXTENSION HOUSING #7 USING THREE (3) LONG BOLTS #20 THROUGH THE SAW GUARD AND ONE (1) BOLT #22 THROUGH THE HOUSING TO THE STANDARD. TIGHTEN ALL FOUR BOLTS.

MOUNTING MOTOR TO SAW

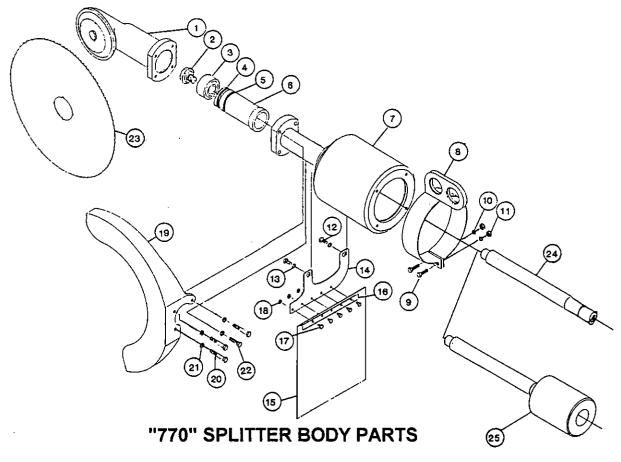
- 1. ATTACH THE MOTOR MOUNTING PLATE #7710045 TO THE BODY & HOUSING #7710012 USING FOUR (4) #9801412 BOLTS.
- 2. LINE UP THE SPLINES OF THE MOTOR #771051 WITH THE EXTENSION SHAFT # 24 OR #25.
- 3. SLIDE THE MOTOR UP TO THE MOUNTING PLATE #771045 AND ATTACH WITH FOUR (4) #9801296 BOLTS.

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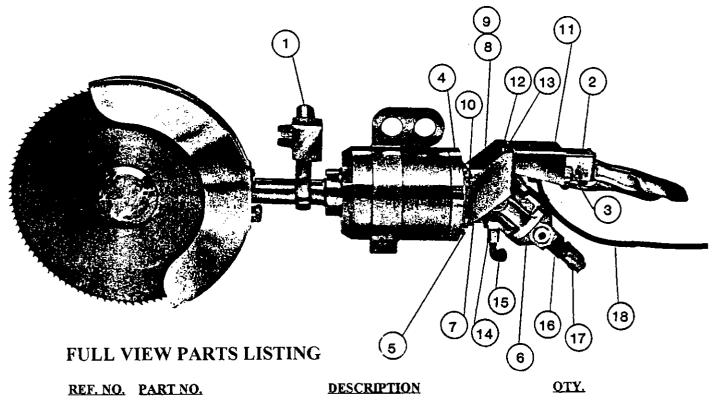
STANDARD PARTS

REF. NO.	PART NO.	DESCRIPTION	QTY.
1	7703051	STANDARD FRAME ASSEMBLY	
2	7705600	STANDARD	1
3	7826091	BLADE LOC RETAINER	1 .
4	7826092	BLADE RETAINER NUT	1
5	7706 4 93	GEAR COVER SEAL	l
6	7706100	GEAR COVER	l
7	9800358	GEAR COVER SCREWS	4
8	7706093	GEAR COVER O-RING	1
9	7826090	BLADE LOC INSERT	1
10	7706500	STUD	1
11	6032093	ROLLER BEARING SET	2
12	7581500	LUBRICATING SPACER	I
13	7826093	BLADE GEAR	1
14	7826130	BLADE GEAR ASSEMBLY	
15	6032700	.020 SHIM END PLAY	AS NEEDED
	6032800	.005 SHIM "	AS NEEDED
	6032900	.003 SHIM "	AS NEEDED
	6033000	.002 SHIM "	AS NEEDED
16	7572700	.010 SHIM BACKLASH	AS NEEDED
	7572600	.005 SHIM "	AS NEEDED
	7572500	.003 SHIM "	AS NEEDED
17	7705900	JAM NUT	. 1
18	6361201	GREASE FITTINGS	2
N/S	6117250	BLADE NUT WRENCH	



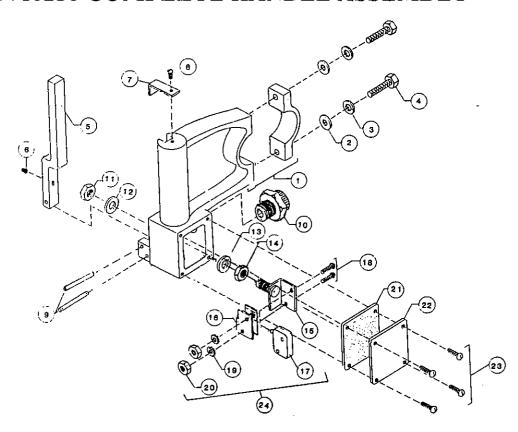
REF. NO.	PART NO.	DESCRIPTION	QTY.
1	7703051	STANDARD COMPLETE	1
2 3	7826030	3/4" PINION	1
3	7826032	PINION BEARING	1
4	7820673	O"-RING (SMALL)	1
5	7820674	O"-RING (LARGE)	1
6 7	7826031	SLEEVE	. 1
	7710012	BODY & HOUSING	1
8	7710039	HANGER	1
9	9801410	HANGER BOLT	2 2 2 2
10	9801935	HANGER LOCK WASHER	2
11	9801678	HANGER NUT	2
12	9801408	BONE SHIELD MOUNTING BOLTS	2
13	9801935	BONE SHIELD MOUNTING LOCK WASHERS	2
14	7704600	BONE SHIELD MOUNTING BRACKET	1
15	7546100	BONE SHIELD FLAP	1
16	7546200	BONE SHIELD STRAP	1
17	9802670	SHIELD MOUNTING BOLTS	5
18	9801670	SHIELD MOUNTING NUTS	5
19	7596300	BLADE GUARD	1
20	9801419	BLADE GUARD BOLT - LONG	3
21	9801935	BLADE GUARD WASHERS	
22	9801413	BLADE GUARD BOLT - SHORT	1
23	6110000	TRIPLE SKIP BLADE	1
24	7710018	DRIVE SHAFT - STANDARD	1
25	7710024	DRIVE SHAFT /COUNTERBALANCE - SOW	1

NOTE: OTHER BLADE CONFIGURATIONS AVAILABLE



REF. NO.	PART NO.	DESCRIPTION	QTY.
1	7710250	FRONT HANDLE COMPLETE	
2	7710109	REAR HANDLE COMPLETE	
3	9801298	REAR HANDLE MOUNTING BOLTS	2
4	7710045	MOTOR MOUNTING PLATE	I
5	9801412	MOUNTING PLATE BOLTS	4
6	7710051	MOTOR	1
7	9801327	MOTOR MOUNTING BOLTS	+
8	7235130	REAR HANDLE MOUNTING BRACKET (LEFT)	1
9	7235125	REAR HANDLE MOUNTING BRACKET (RIGHT)	1
10	9801296	REAR HANDLE BRACKET MOUNTING BOLTS	4
11	7235115	REAR HANDLE COUNTERBALACE	1
12	9801427	COUNTERBALANCE/BRACKETS BOLTS	2
13	9801936	COUNTERBALANCER/BRACKETS LOCK WASHER	2
14	7710206	MOTOR CASE DRAIN ADAPTER FITTING	1
15	7710207	CASE DRAIN HOSE ADAPTER FITTING	1
16	7710204	MOTOR ADAPTER FITTING	2
17	7710205	HYDRAULIC HOSE FITTING	2
18	1117193	18-3 LINE WIRE	12 ft.
	ELECTRI	CAL COMPONENTS NOT SHOWN	
	6523193	FRONT HANDLE ELECTRICAL FITTING	1
	6523391		2 ft.
	6254093	REAR HANDLE ELECTRICAL FITTING	1
	9739935	FITTING ADAPTER	1
	1133093	STRAIN RELIEF	1
		ULIC COMPONENTS NOT SHOWN	
		CASE DRAIN HOSE	1
	77 10160	PRESSURE & RETURN HOSE	1 each

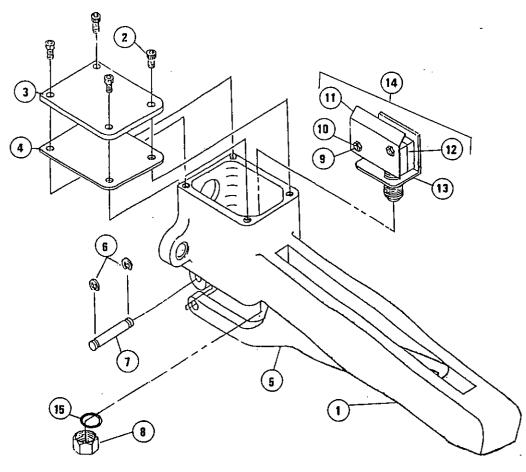
MODEL "270" & "770" FRONT HANDLE 7710250 COMPLETE HANDLE ASSEMBLY



REF. NO	PART NO.	DESCRIPTION	<u>QTY</u>	
1	7710200	Handle, Clamp & Cover	1	
2	9901986	Washer	2	
3	9901935	Lockwasher	2	
4	9901411	Hex Head Bolt	2	
5	7710220	Trigger	1	
6	9901857	Set Screw	1	
7	7235110	Trigger Retainer	1	
8	9902762	Screw	1	
9	9902036	Trigger Roll Pins	2	
11	6045500	Switch Nut	1	
12	6046093	Seal Ring	1	
13	6046093	Seal Ring	1	
14	6045500	Switch Nut	1	
15	6047660	Switch Bracket	1	
16	6048500	Insulator	1	
17	6048600	Switch	1	
18	9900037	Screws	2	
19	9901951	Lockwashers	1	
20	9901671	Nuts	2	
21	7710235	Gasket	1	
22	7710230	Electrical Cover	1	
23	9902668	Screws	4	
24	6047559	Switch Complete	1	
(7710250 Handle Complete includes parts 1 thru 24)				

(7710260 Handle, Clamp & Cover includes 1 & 22)

MODELS "270" & "770" REAR HANDLE 7710109 COMPLETE HANDLE ASSEMBLY



REF. NO.	PART NO.	DESCRIPTION	<u>OTY.</u>
1	7710108	Handle Only	1
2	9902668	Screws	4
3	7706700	Handle Cover	1
4	7706900	Gasket	1
5	7706800	Trigger	1
6	1208193	Retaining Clips	2
7	6044500	Trigger Pin	1
8	6045500	Switch Locknut	1
9	9901671	Nuts	2
10	9901951	Lockwasher	2
11	6048500	Insulator	1
12	6048600	Switch	1
13	6047660	Switch Bracket	1
14	6047559	Switch Complete	1
15	6046093	Seal Ring	1
7710	109 Handle C	omplete (includes parts i	l thru 15)

WARRANTY

Best & Donovan warrants the machine against defective parts & workmanship for six (6) months from date of factory shipment. In the fulfillment of its warranty, the sole obligation of Seller shall be to repair or replace, at its option F.O.B. its factory, shipping charges prepaid, and which after inspection by Seller are found to be defective. Buyer shall notify Seller of defect in writing, promptly upon discovery, within the warranty period. This warranty does not cover defects caused by corrosion or normal deterioration. It does not extend to consequential damage, loss or delay associated with a warranty defect and it does not cover any costs of labor, travel or other expenses associated with the repair or replacement of defective parts. Seller assumes no liability for product loss or other claims whatsoever arising out of the use or application of the machine in Meat Slaughtering/Processing operations, whether the machine is used alone or in conjoint use with other Meat Slaughtering/Processing Machines or Processes.

This warranty is voided if repairs, replacements or alterations are made by others without prior authorization by Seller. Notwithstanding the foregoing, Seller's warranty obligations with respect to any items not manufactured by Seller shall not exceed the obligations undertaken by the manufacturer thereof under express warranty to the Seller. This express warranty is in lieu of all other warranties of fitness of the machine for any particular purpose.

NOTICE ON WARRANTY WORK

ANY WARRANTY WORK THAT IS TO BE CONSIDERED BY BEST & DONOVAN ON THE "770" HYDRAULIC HOG SPLITTER WILL BE DONE BY A SERVICE REPRESENTATIVE OF BEST & DONOVAN AT THE PLACE OF USE OR THE ENTIRE "770" SPLITTER IN QUESTION MUST BE SENT TO BEST & DONOVAN FOR EVALUATION AND CONSIDERATION FOR WARRANTY.

USE ONLY GENUINE BEST & DONOVAN REPLACEMENT PARTS FOR THE REPAIR OF THE "770" HOG SPLITTER. ANY OTHER PARTS USED MAY VOID THE WARRANTY.

PARTS NOT MANUFACTURED BY BEST & DONOVAN AND USED FOR THE REPAIR OF THE "770" SPLITTER CAN CAUSE POWER LOSS. A PERFORMANCE DECREASE AND SHORTER LIFE OF THE TOOL CAN BE EXPECTED. CHECK TO MAKE SURE THE CORRECT PARTS ARE BEING USED.