

EZTC717 ASME TANK CARRIER

Parts Manual



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Manufactured in the USA



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Introduction

The EZTC717 ASME Propane Tank Carrier consists of three components: A single power unit, and two independent wheel jack assemblies. Within these three components are various sub-assemblies, some more important to you (the end user) than others. For purposes of clarity, most welded assemblies have been omitted from this manual. The descriptions and specifications in this manual are subject to change. Renaldo Sales & Service, Inc. reserves the right to change the design of our equipment at any time as part of the normal product improvement process. Upgrades and enhancements may have taken place after this manual was published. For the latest technical information and specifications, please feel free to contact us at 800-424-5564. Or, you may also find useful parts information for this unit on our web site at www.renaldo.org.

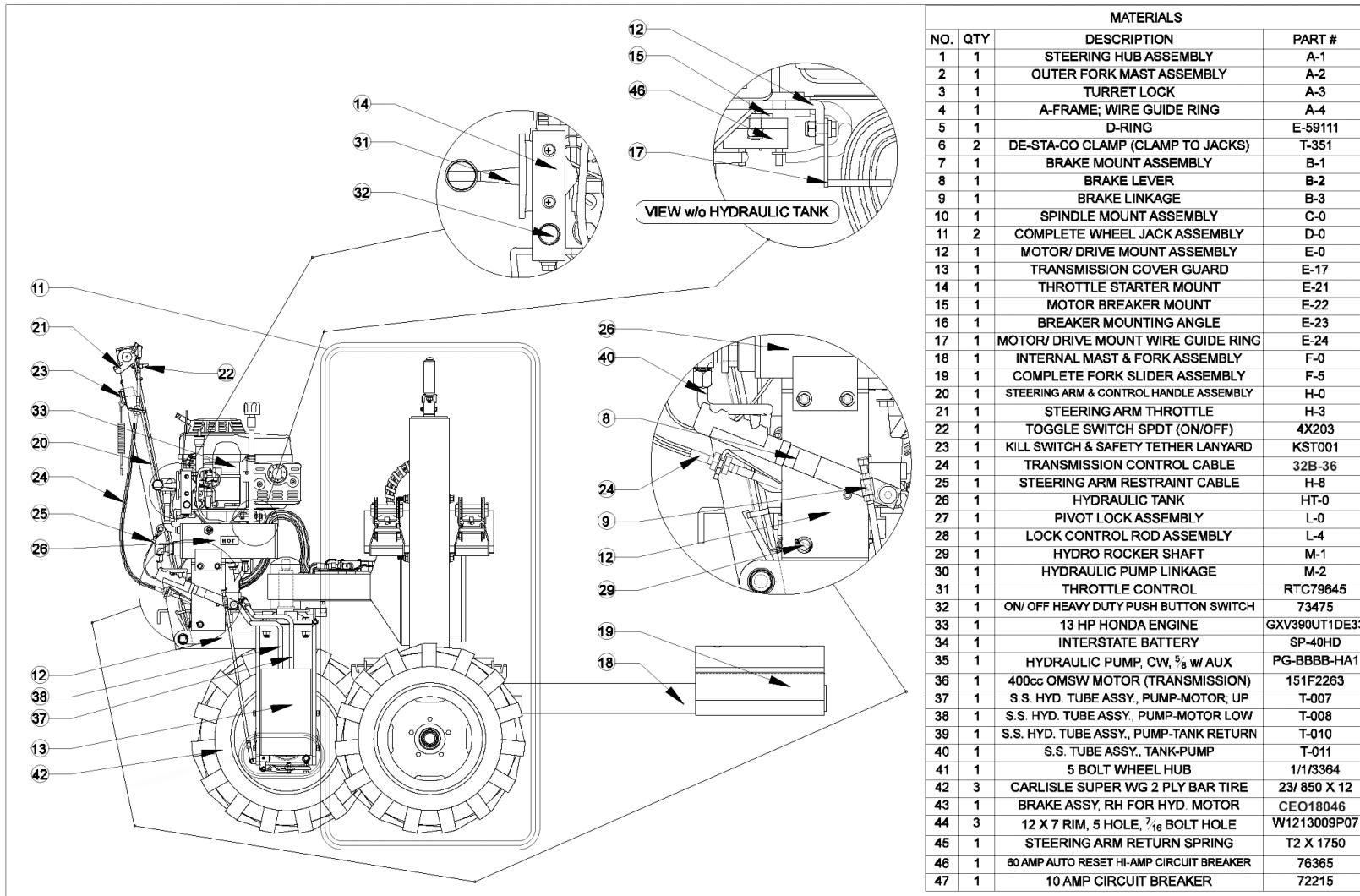
We stock a limited amount of Honda Engine Parts for the convenience of our customers. In many cases your local Honda small engine parts dealer, or repair center will be your more immediate solution. Models manufactured after 2017 to Current Date are being supplied with a 13 HP Honda Engine: GXV390UT1DE33

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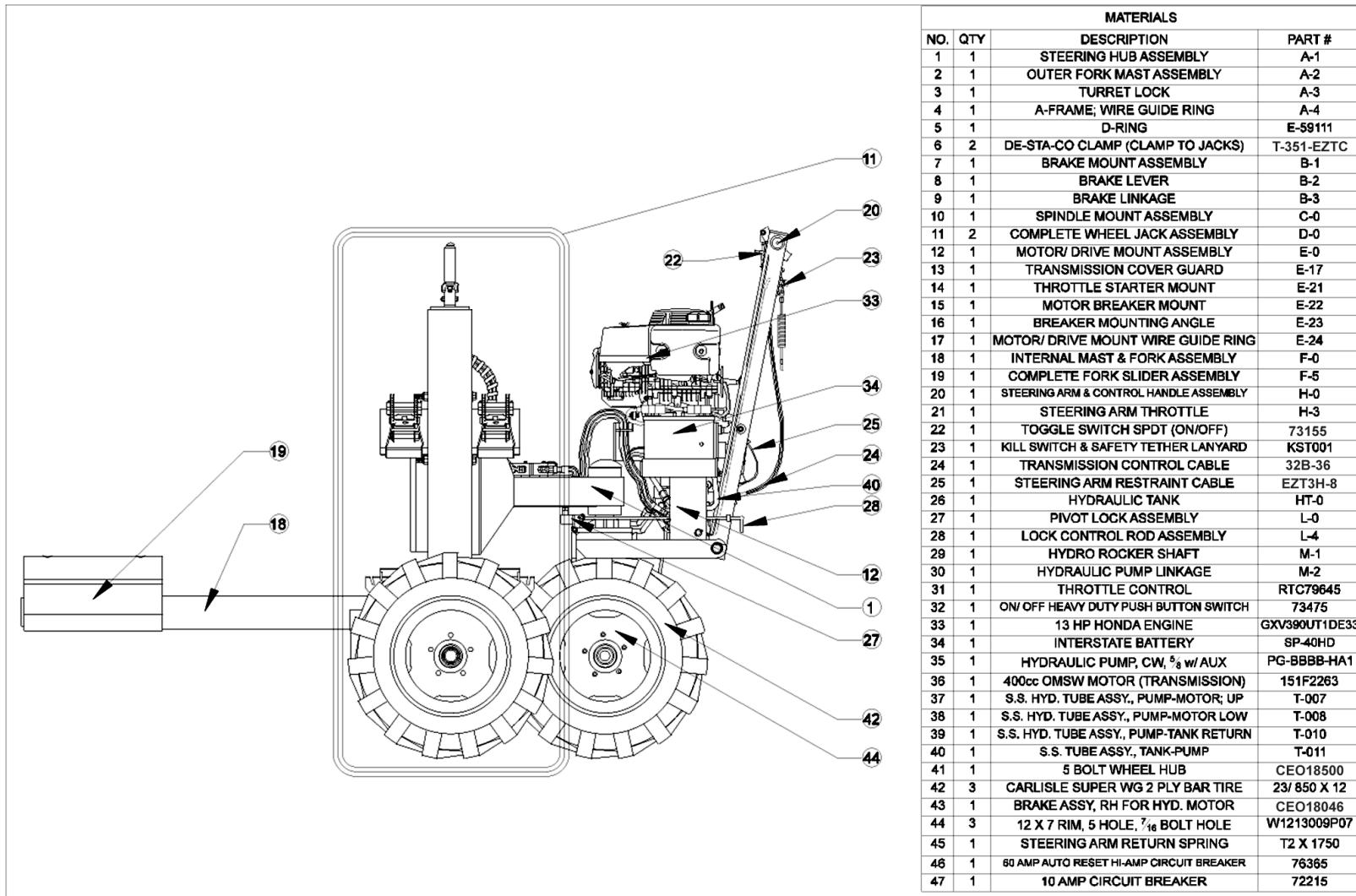


Section 1: General Overview



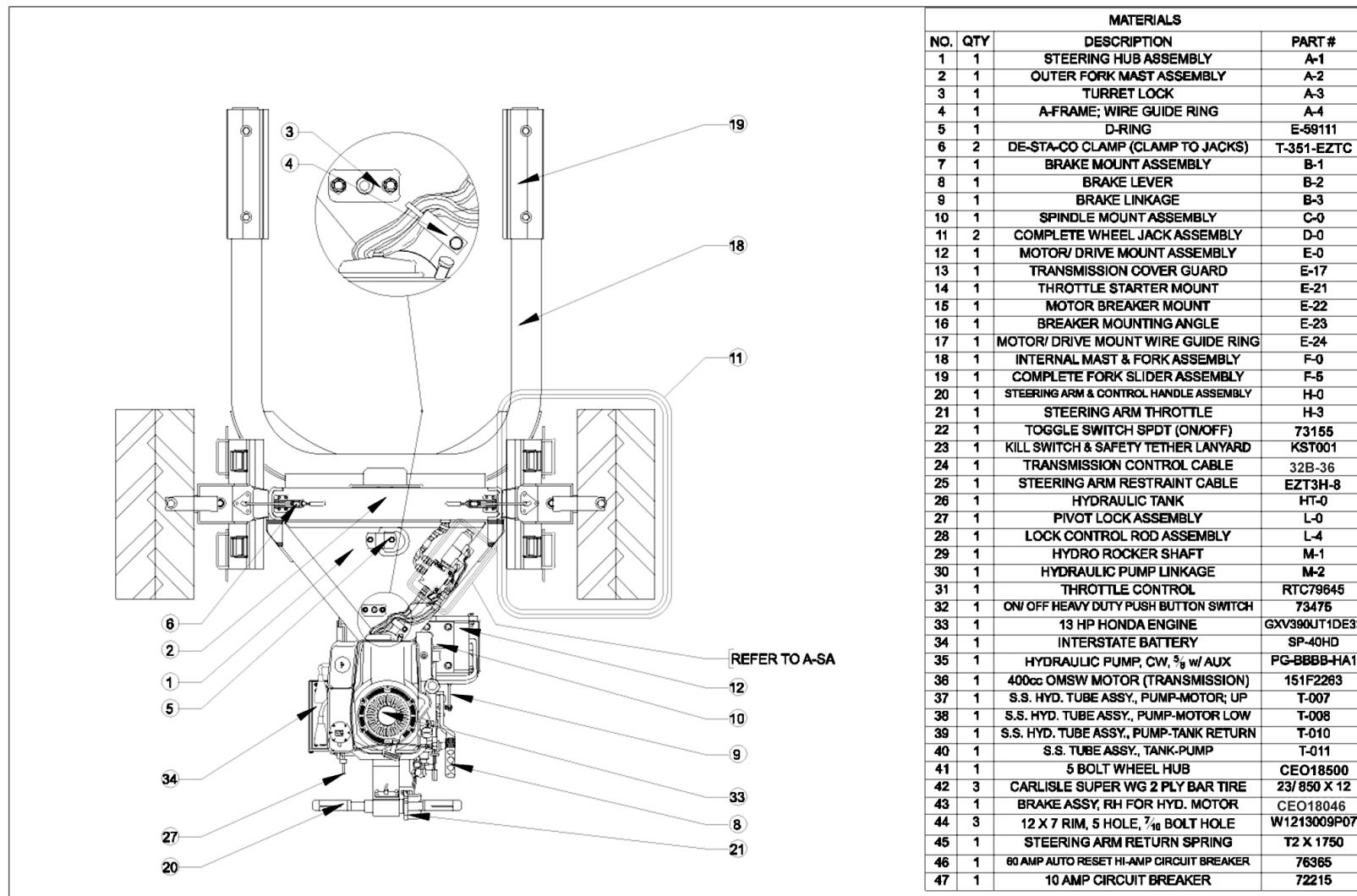


Left View



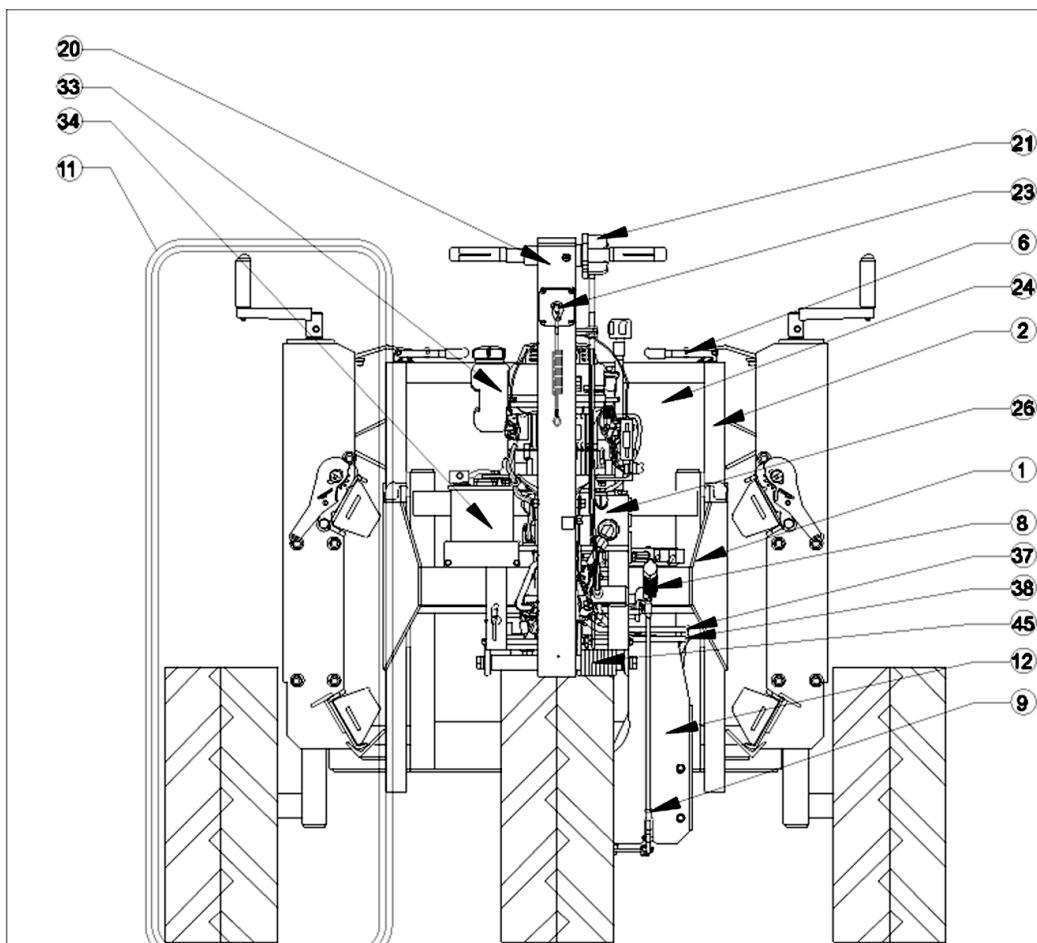


Top View





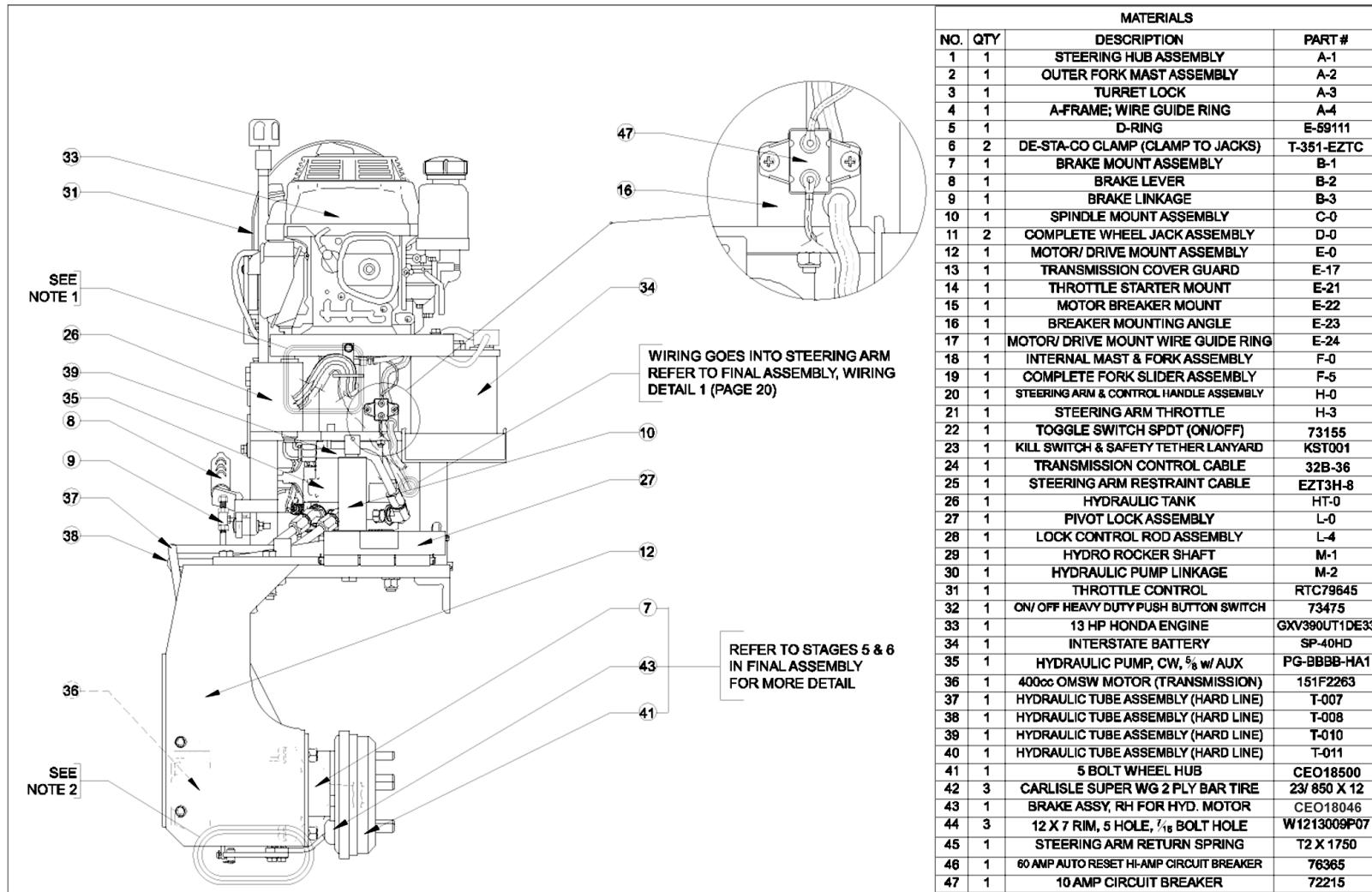
Rear View



MATERIALS			
NO.	QTY	DESCRIPTION	PART #
1	1	STEERING HUB ASSEMBLY	A-1
2	1	OUTER FORK MAST ASSEMBLY	A-2
3	1	TURRET LOCK	A-3
4	1	A-FRAME; WIRE GUIDE RING	A-4
5	1	D-RING	E-59111
6	2	DE-STA-CO CLAMP (CLAMP TO JACKS)	T-351-EZTC
7	1	BRAKE MOUNT ASSEMBLY	B-1
8	1	BRAKE LEVER	B-2
9	1	BRAKE LINKAGE	B-3
10	1	SPINDLE MOUNT ASSEMBLY	C-0
11	2	COMPLETE WHEEL JACK ASSEMBLY	D-0
12	1	MOTOR/ DRIVE MOUNT ASSEMBLY	E-0
13	1	TRANSMISSION COVER GUARD	E-17
14	1	THROTTLE STARTER MOUNT	E-21
15	1	MOTOR BREAKER MOUNT	E-22
16	1	BREAKER MOUNTING ANGLE	E-23
17	1	MOTOR/ DRIVE MOUNT WIRE GUIDE RING	E-24
18	1	INTERNAL MAST & FORK ASSEMBLY	F-0
19	1	COMPLETE FORK SLIDER ASSEMBLY	F-5
20	1	STEERING ARM & CONTROL HANDLE ASSEMBLY	H-0
21	1	STEERING ARM THROTTLE	H-3
22	1	TOGGLE SWITCH SPDT (ON/OFF)	73155
23	1	KILL SWITCH & SAFETY TETHER LANYARD	KST001
24	1	TRANSMISSION CONTROL CABLE	32B-36
25	1	STEERING ARM RESTRAINT CABLE	EZT3H-8
26	1	HYDRAULIC TANK	HT-0
27	1	PIVOT LOCK ASSEMBLY	L-0
28	1	LOCK CONTROL ROD ASSEMBLY	L-4
29	1	HYDRO ROCKER SHAFT	M-1
30	1	HYDRAULIC PUMP LINKAGE	M-2
31	1	THROTTLE CONTROL	RTC79645
32	1	ON/OFF HEAVY DUTY PUSH BUTTON SWITCH	73475
33	1	13 HP HONDA ENGINE	GXV390UT1DE33
34	1	INTERSTATE BATTERY	SP-40HD
35	1	HYDRAULIC PUMP, CW, $\frac{5}{8}$ w/ AUX	PG-BBBB-HA1
36	1	400cc OMSW MOTOR (TRANSMISSION)	151F2263
37	1	S.S. HYD. TUBE ASSY., PUMP-MOTOR; UP	T-007
38	1	S.S. HYD. TUBE ASSY., PUMP-MOTOR LOW	T-008
39	1	S.S. HYD. TUBE ASSY., PUMP-TANK RETURN	T-010
40	1	S.S. TUBE ASSY., TANK-PUMP	T-011
41	1	5 BOLT WHEEL HUB	CEO18500
42	3	CARLISLE SUPER WG 2 PLY BAR TIRE	23/850 X 12
43	1	BRAKE ASSY, RH FOR HYD. MOTOR	CEO18046
44	3	12 X 7 RIM, 5 HOLE, $\frac{1}{16}$ BOLT HOLE	W1213009P07
45	1	STEERING ARM RETURN SPRING	T2 X 1750
46	1	60 AMP AUTO RESET HI-AMP CIRCUIT BREAKER	76365
47	1	10 AMP CIRCUIT BREAKER	72215



Section 2: Power Unit & Steering Hub Assembly





Steering Hub & Spindle

SECTION VIEW

LEFT SIDE VIEW

MATERIALS				
NO.	QTY	DESCRIPTION	MAT'L	PART #
E-0	1	MOTOR/ DRIVE MOUNT	N/A	E-0
A-0	1	OUTER FORK MAST & STEERING HUB	N/A	A-0
C-0	1	SPINDLE MOUNT	N/A	C-0
10	1	STEERING SPINDLE HUB CAP	IN STOCK	P502008
11	1	SEAL FOR STEERING HUB	IN STOCK	NA473242
12	2	INNER CONE BEARING, INCLUDES BEARING & RACE CUP	IN STOCK	BLLM501349/10
13	1	2 1/4" O.D. (5/16" I.D.) WASHER	IN STOCK	COMMON
14	1	CASTLE NUT	IN STOCK	COMMON
15	1	COTTER PIN	IN STOCK	COMMON

STEP 1:

1. FIRST GREASE THE SEAL & BOTTOM BEARING, THEN ASSEMBLE THEM AT THE BOTTOM OF THE SPINDLE HUB.
2. GREASE THE OTHER BEARING AND PLACE IT ON TOP OF THE SPINDLE HUB.
3. NEXT PLACE THE SPINDLE (C-0) INSIDE THE SPINDLE HUB

E-0
SPINDLE HUB w/ PARTS
C-0

STEP 2:

1. MAKE SURE ALL COMPONENTS ARE IN LINE & PUT IN THE CORRECT PLACE. THEN ASSEMBLE THE WASHER, CASTLE NUT & COTTER PIN TO SPINDLE.
2. NEXT, APPLY SILICONE TO THE HUB CAP, THEN TAKE THE HAMMERING JIG TO ATTACH THE HUB CAP TO THE STEERING HUB.



Section 3: Internal Mast Assembly

TOP VIEW

MATERIALS				
F-0	1	INTERNAL MAST & FORKS	N/A	F-0
A-0	1	OUTER FORK MAST & STEERING HUB	N/A	A-0
1	1	HYDRAULIC CYLINDER	IN STOCK	219-650
2	1	HYDRAULIC VALVE w/ DC COILS	IN STOCK	SV10-34-04-12-DN-B-6S
3	2	ALUM. HYDRAULIC VALVE SPACER	AUMINUM	A-7
4	1	TURRET LOCK	S.S.	A-3
5	1	SURFACE TIE DOWN D-RING	IN STOCK	E-59111
6	1	DE-STA-CO CLAMP (CLAMP TO JACKS)	IN STOCK	T-351
7	1	'A' FRAME, WIRE GUIDE RING	CRS	A-4
8	1	HYDRAULIC HOSE; 34" LG	HOSE	N/A
9	1	HYDRAULIC HOSE; 18" LG	HOSE	N/A



Rear View

BACK VIEW

MATERIALS				
NO.	QTY	DESCRIPTION	MATL	PART #
F-0	1	INTERNAL MAST & FORKS	N/A	F-0
A-0	1	OUTER FORK MAST & STEERING HUB	N/A	A-0
1	1	HYDRAULIC CYLINDER	IN STOCK	219-650
2	1	HYDRAULIC VALVE w/ DC COILS	IN STOCK	SV10-34-04-12-DN-B-6S
3	2	ALUM. HYDRAULIC VALVE SPACER	AUMINUM	A-7
4	1	TURRET LOCK	S.S.	A-3
5	1	SURFACE TIE DOWN D-RING	IN STOCK	E-59111
6	1	DE-STA-CO CLAMP (CLAMP TO JACKS)	IN STOCK	T-351
7	1	'A' FRAME, WIRE GUIDE RING	CRS	A-4
8	1	HYDRAULIC HOSE; 34" LG	HOSE	N/A
9	1	HYDRAULIC HOSE; 18" LG	HOSE	N/A

18"

34"



Fork Assembly, Pads & Bumpers

MATERIALS			
NO.	QTY	DESCRIPTION	MAT'L
1	1	FORK ARM	ALUM.
2	2	FORK ARM ROUND CAP	AL. FLAT
3	1	UNDER FORK SUPPORT BRACKET	AL. FLAT
4	2	FORK ROLLER MOUNT	AL. TUBE
5	2	FORK ROLLER MOUNT TOP END CAP	AL. FLAT
6	4	ROLLER PINS	ALUM.
7	1	UPPER ANGLE BRACKET	AL. FLAT
8	2	OUTSIDE FORK BRACKET	AL. FLAT
9	2	INSIDE FORK BRACKET	AL. FLAT
10	2	HYDRAULIC CYLINDER MOUNT BRACKET	AL. FLAT
11	1	NOSE BUMPER BRACKET	AL. PLATE
12	2	HORIZONTAL CROSS SUPPORT	AL. FLAT
13	1	FORK SIDE SUPPORT, LEFT	AL. FLAT
14	1	TANK NOSE BUMPER	HUSCO BUMPER
15	4	FORK ROLLER SHIM	RUBBER
16	4	FORK ROLLER	NOIL RD X 3000
17	2	FORK SLIDER TUBE	ALUM PIPE
18	2	FORK SLIDER CHANNEL	AL. FLAT
19	2	FORK SLIDER BUMPER	HUSCO BUMPER
20	2	FORK SLIDER BUMPER PLATE	GALV.
21	2	FORK SLIDER SHIM	RED URETHANE
22	4	$\frac{3}{8}$ " ALLEN HEAD BOLT	IN STOCK
23	1	FORK SIDE SUPPORT, RIGHT	AL. FLAT
24	4	$\varnothing \frac{1}{2}$ " GRADE A BOLT; 1 $\frac{1}{2}$ " LONG	IN STOCK
25	4	$\frac{1}{4}$ " LOCK NUT	IN STOCK
N/A	8	1 $\frac{1}{4}$ " FENDER WASHER	IN STOCK
N/A	8	$\frac{1}{4}$ " STEEL RIBBIT	IN STOCK



Section 4: Wheel Jack Overview, Straps & Tires

NO.	QTY	DESCRIPTION	MAT'L	PART #
1	2	OUTER WHEEL JACK HOUSING	SEE NOTE 3	D-1A
2	2	WHEEL JACK POST END CAP	AL FLAT	D-1B
3	4	BUMPER MOUNT	AL FLAT	D-1C
4	4	MODIFIED WHEEL JACK RATCHETS	IN STOCK	D-1D (804)
5	4	STRAP/CHAIN BRACKET	HR FLAT	D-1E
6	4	STRAP/CHAIN ROD	HR ROD	D-1E1
7	2	TURN THREAD BUSHING	SEE NOTE 4	D-2
8	2	UPPER JACK MOUNT BUMPER	SEE NOTE 4	D-3
9	8	WHEEL JACK ROLLER	SEE NOTE 4	D-4
10	4	WHEEL JACK SHIM	24 GAGE	D-5
11	2	CRANK POST	AL. SL. TUBE	D-6A
12	2	CRANK POST TOP CAP	AL FLAT	D-6B
13	2	CRANK POST BOTTOM CAP	AL FLAT	D-6C
14	2	CRANK POST AXLE BUSHING	ALUM	D-6D
15	2	WHEEL JACK SPINDLE	IN STOCK	D-6E (SA-1)
16	4	WHEEL JACK BUMPER	IN STOCK	D-7 (ER-34-0-1)
17	4	WHEEL JACK BUMPER PLATE	GALV.	D-7A
18	2	SIDE CRANK THREADED ROD	IN STOCK	D-8A
19	2	CRANK POST SCREW NUT STOP PLATE 1	GALV.	D-8B1
20	4	CRANK POST SCREW NUT STOP PLATE 2	GALV.	B-8B2
21	2	LEG MODIFIED ACME NUT	IN STOCK	D-8C
22	2	THREADED ROD BUSHING	CRS	D-8D
23	2	CRANK HANDLE BASE	AL BAR	D-9A
24	2	CRANK HANDLE ROLLER	NYLON 6	D-9B
25	2	CRANK HANDLE ROLLER BUSHING	GALV.	D-9C
26	2	CRANK HANDLE ARM	AL PLATE	D-9D
27	2	CRANK HANDLE CARRIAGE BOLT	IN STOCK	D-9E
28	2	WHEEL HUB	IN STOCK	H5-C
29	2	WHEEL HUB CUP	L44610	BK-1
30	2	WHEEL HUB CONE	L44643	
31	2	WHEEL JACK CLAMP PLATE	S.S.	
C1	8	$\varnothing \frac{7}{16}$ " SQ. HD. CARRIAGE BOLT; 2" LONG	IN STOCK	COMMON
C2	8	$\frac{7}{16}$ " NC JAM NUT	IN STOCK	COMMON
C3	8	$\frac{7}{16}$ " SAE WASHER	IN STOCK	COMMON
C4	10	$\varnothing \frac{1}{2}$ " FINE THREAD BOLT; 5" LONG	IN STOCK	COMMON
C5	10	$\frac{1}{2}$ " HALF JAM NUT	IN STOCK	COMMON
C6	2	$\frac{7}{16}$ " - NC JAM NUT	IN STOCK	COMMON
C7	6	S.S. $\varnothing \frac{1}{4}$ " BOLT, $\frac{3}{4}$ " LONG	IN STOCK	COMMON
C8	6	S.S. $\frac{1}{4}$ " NUT	IN STOCK	COMMON
C9	6	CARLISLE SUPER LUG TIRE, RIM & TUBE	IN STOCK	EZT3 D-10
C10	6			

STRAPS

POWER UNIT STRAP
PART NO. 77T9500-156 PAD

POWER UNIT RATCHET
PART NO. TIE10200

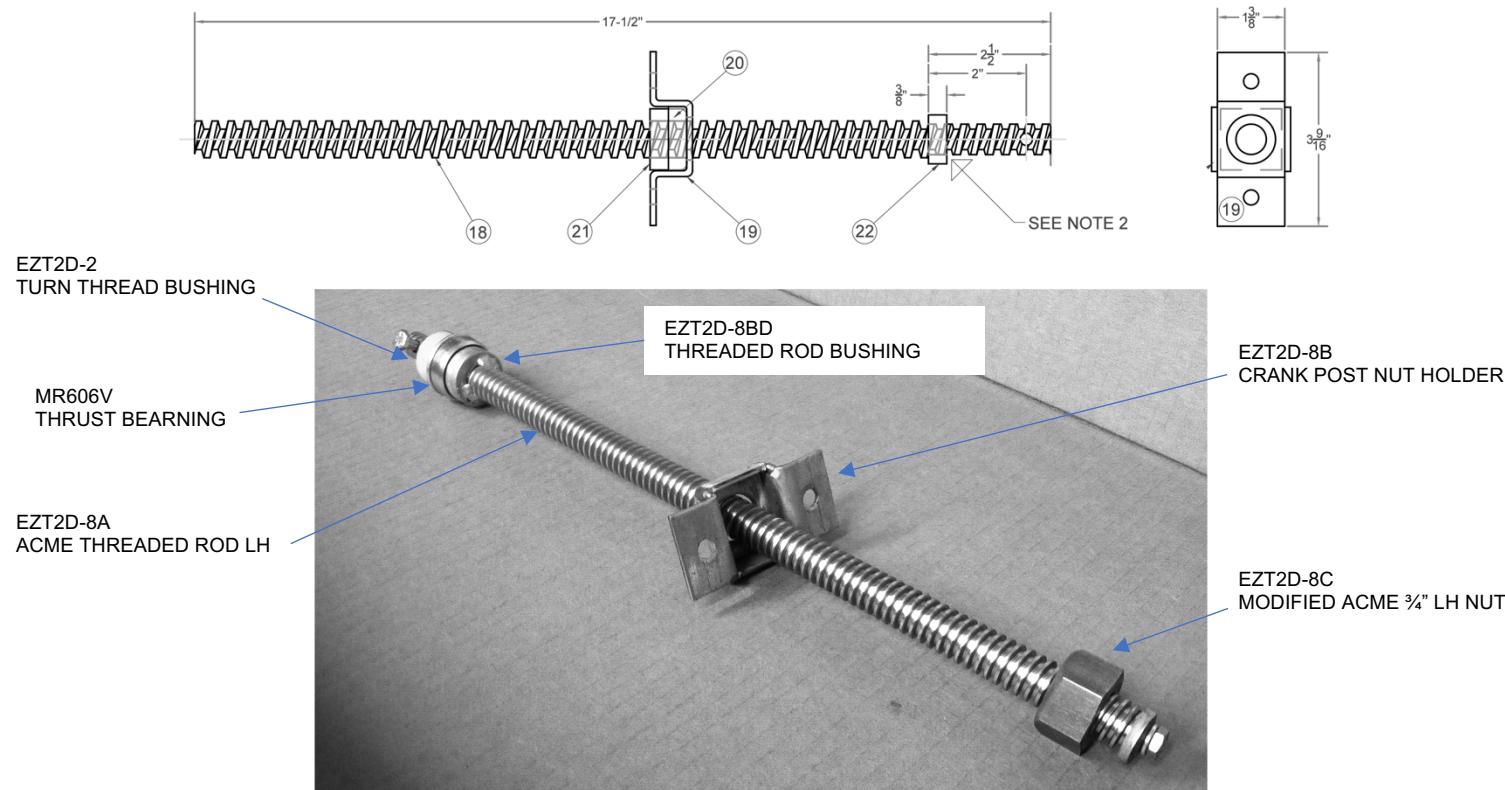
WHEEL JACK STRAPS (2)
PART NO. 221327



Wheel Jack Threaded Rod Assembly

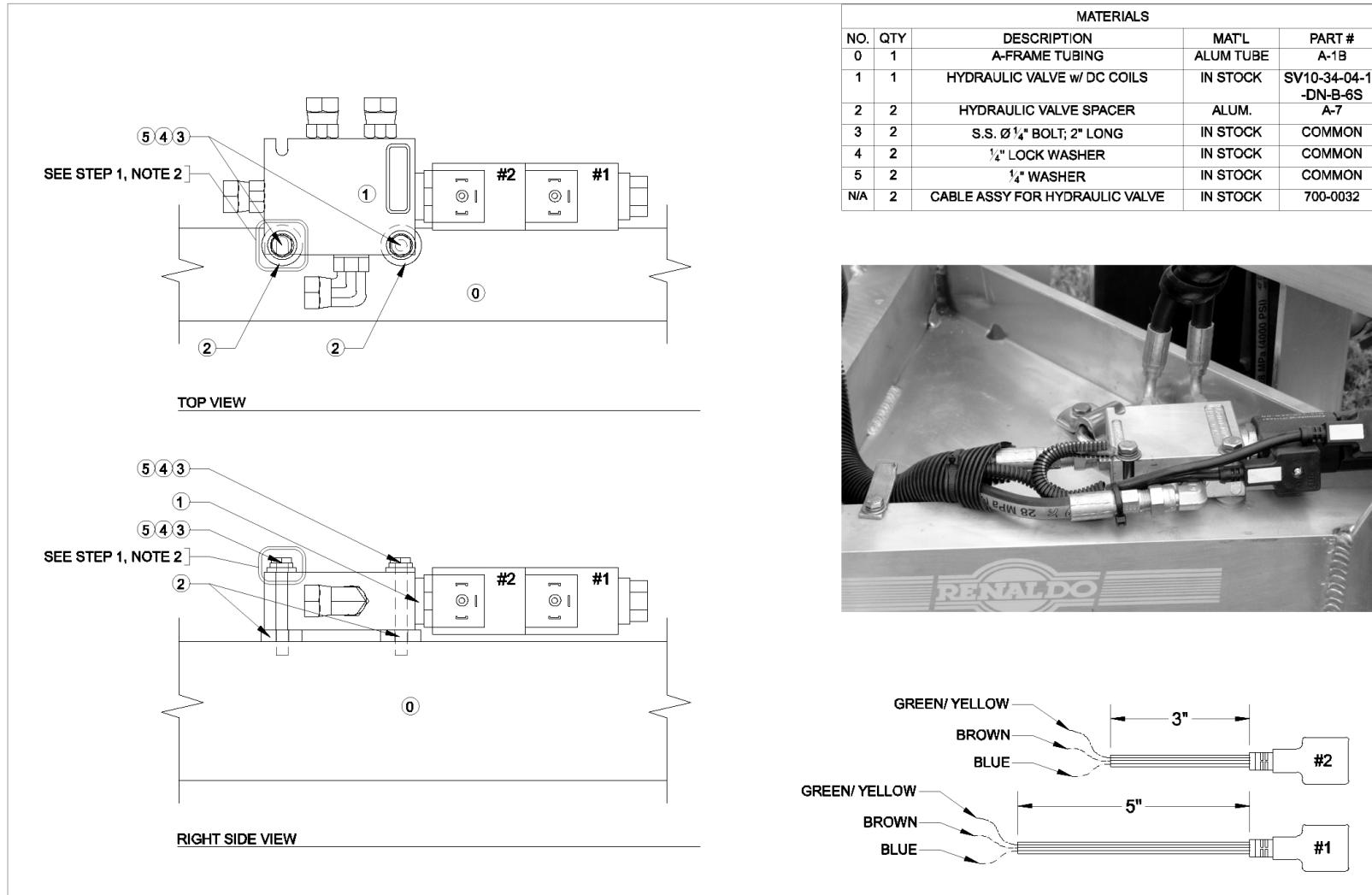
**Wheel Jack Threaded Rod Assembly
EZT2D-8 (Pictured Below)**

MATERIALS				
NO.	QTY	PART TITLE	MAT'L	PART #
18	2	SIDE CRANK TREADED ROD	IN STOCK	D-8A
19	2	CRANK POST SCREW NUT STOP PLATE 1	GALV.	D-8B1
20	4	CRANK POST SCREW NUT STOP PLATE 2	GALV.	D-8B2
21	2	LEG MODIFIED ACME NUT	IN STOCK	D-8C
22	2	TREADED ROD BUSHING	CRS	D-8D



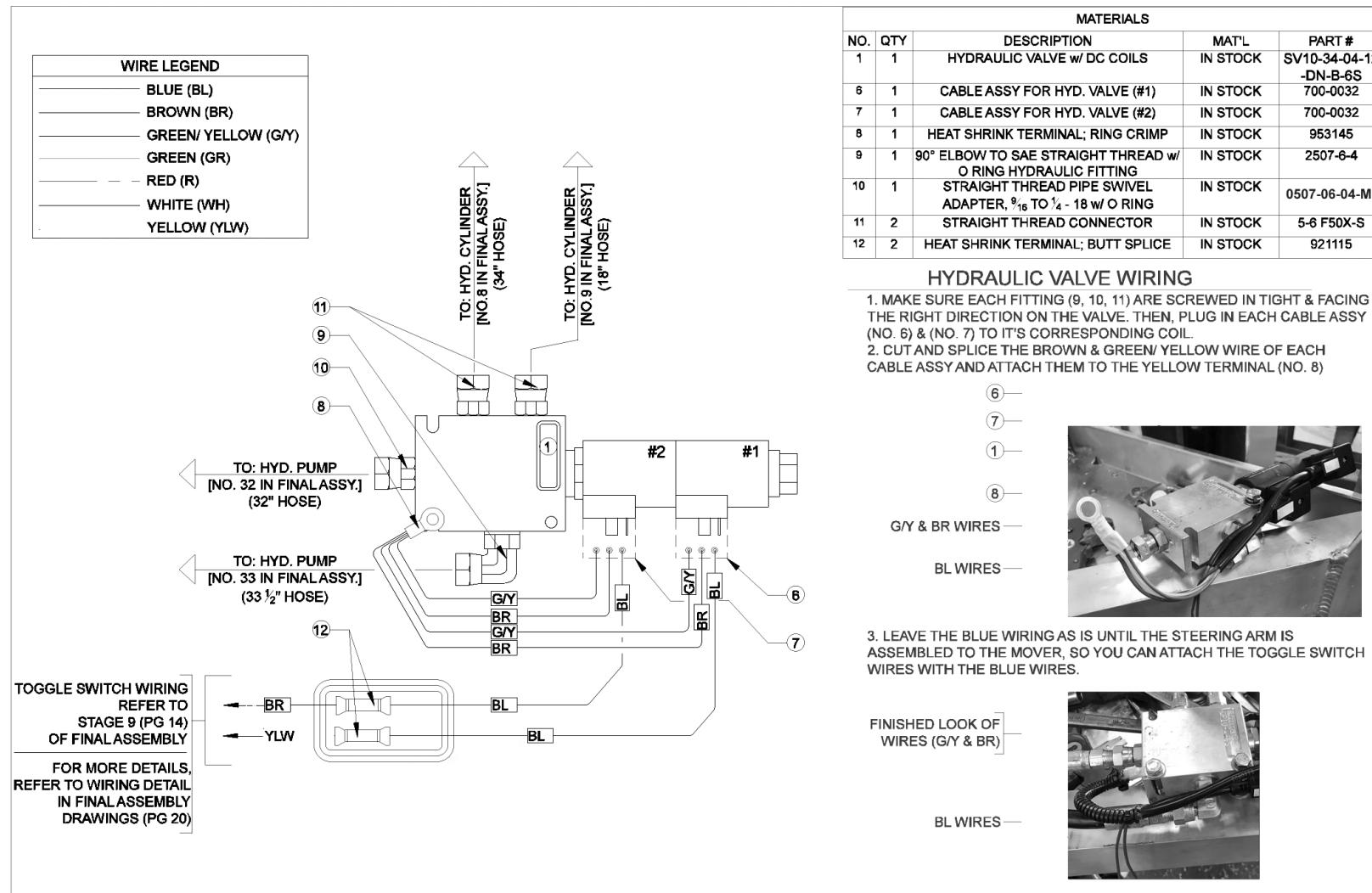


Section 5: Hydraulic Components





Circuit/Schematic A-SA



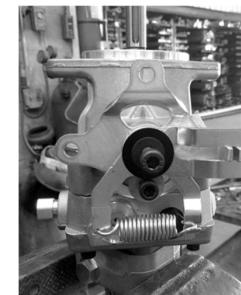
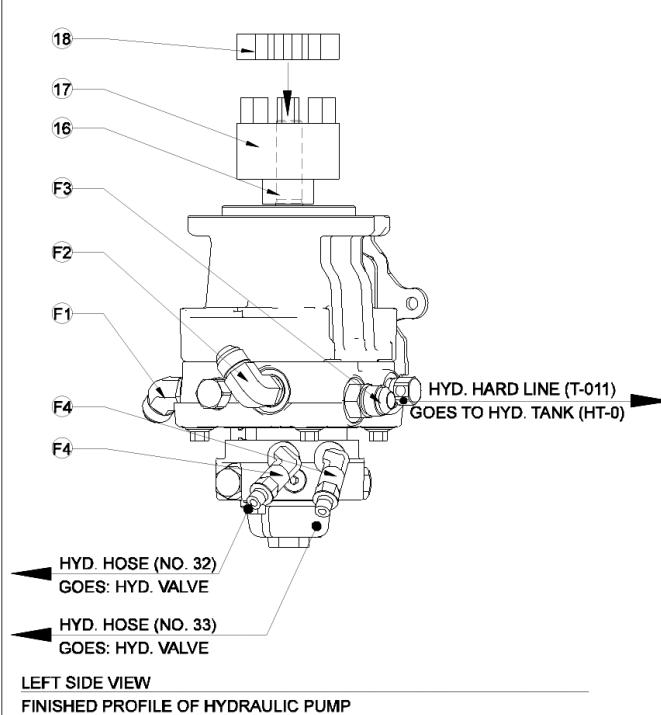
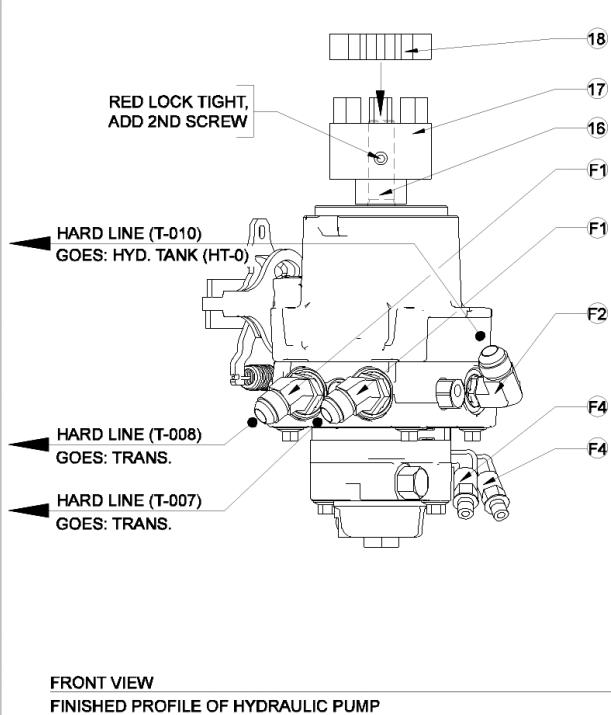


Hydraulic Pump: Hydro-Gear PG-BBBB-HA1

NOTES:

1. THE 2 DIAGRAMS SHOWN IS WHERE EACH FITTING IS PLACED ON THE PUMP
2. EACH FITTING WILL HAVE A CORRESPONDING HYDRAULIC HOSE OR TUBE
3. WHEN IT IS TIME TO ASSEMBLE A HOSE AND/ OR TUBE, PUT IN A FITTING (MAKE SURE YOU DON'T SPILL THE OIL FROM THE PUMP)

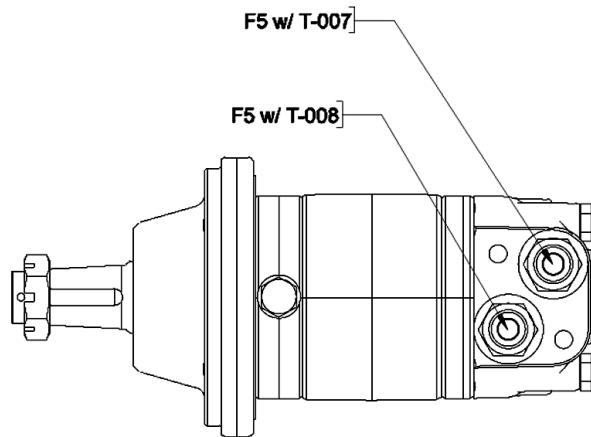
MATERIALS				
NO.	QTY	DESCRIPTION	MAT'L	PART #
F1	2	TRIPLE-LOK 37°, 45° ELBOW V50X; $\frac{1}{2} \times \frac{3}{4}$ - 16 UNF/UNF	IN STOCK	8 V50X-S
F2	1	TRIPLE-LOK THREAD ELBOW 37°, FLARE/ SAE-ORB; $\frac{1}{2} \times \frac{3}{8}$ - 18 UNF/UNF-2A	IN STOCK	8-6 C50X-S
F3	1	TRIPLE-LOK STRAIGHT THREAD CONNECTOR	IN STOCK	8-6 F50X-S
F4	2	TRIPLE-LOK LONG MALE ELBOW 37°, FLARE/ NPTF; $\frac{1}{4} \times \frac{7}{16}$ - 20 UNF/UNF-2A	IN STOCK	4CC50X-S
16	1	HYDRAULIC PUMP SPACER	PLATED	M-3
17	1	$\frac{5}{8}$ " LOVEJOY COUPLING HUB	IN STOCK	L100X5/8
18	1	LOVEJOY COUPLING INSERT	IN STOCK	L099/ 100U





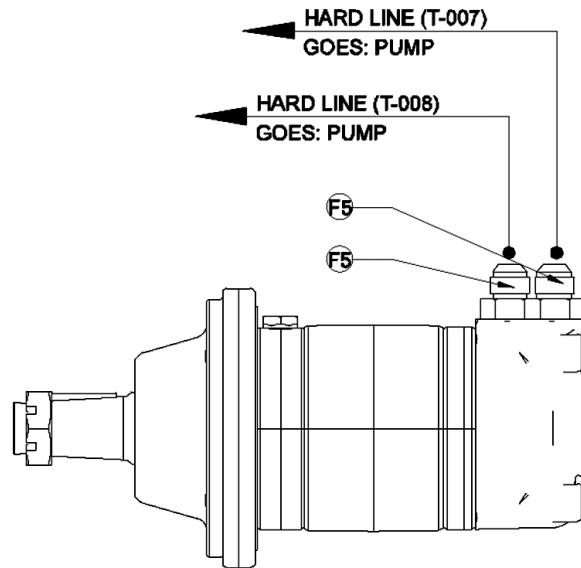
Danfoss Hydraulic Motor 151F2263

MATERIALS				
NO.	QTY	DESCRIPTION	MAT'L	PART #
F5	2	TRIPLE-LOK 37° STRAIGHT F5OX; $\frac{1}{2}$ X $\frac{7}{8}$ - 14 UN/UNF-2A	IN STOCK	8-10 F5OX-S



TOP VIEW

FINISHED PROFILE OF HYDRAULIC MOTOR



BACK VIEW

FINISHED PROFILE OF HYDRAULIC MOTOR



Parts Breakdown

Hydraulic Motor 810-580C & 810-581C

The diagram illustrates the exploded view of the Hydraulic Motor 810-580C & 810-581C. It shows the main motor body at the bottom, with various internal components like bearings, seals, and a drive shaft assembly. Numbered callouts point to specific parts: (1) and (2) point to a hub assembly; (3) points to a bearing; (4) points to a seal; (5) points to another seal; (6) points to a bearing; (7) points to a seal; (8) points to a key; (9) points to a seal; (10) points to a bearing; (11) points to a rear housing seal; (12) points to a metal shim; (13) points to a dust seal; (14) points to a white nut kit; and (15) points to a white brake hub 5 bolt.

1	30339303P	WHITE NUT KIT
2	400018009	WHITE BRAKE HUB 5 BOLT
3	N/A	DUST SEAL
4	N/A	REAR HOUSING SEAL
5	N/A	METAL SHIM
6	NA	BACK UP SEAL
7	N/A	SHAFT SEAL
8	500449106	WHITE KEY KIT
9	400110043	WHITE OUTPUT DRIVE SHAFT
10	500018002	WHITE REAR HOUSING BEARING
11	N/A	BODY SEALS
12	N/A	ENCOVER SEAL
13	400180051	WHITE BRAKE SHOE PAIR
14	400444300E	WHITE SEAL KIT FOR FRONT BEARING
15	400180046	WHITE BRAKE KIT, RIGHT SIDE
15	400180047	WHITE BRAKE KIT, LEFT SIDE
16	N/A	FRONT HOUSING BEARING

Images for Reference Purposes Only
Verify Attributes on Products Page



Hydraulic Lines & Hoses

RIGHT SIDE VIEW

REFER TO HYDRAULIC
VALVE ASSEMBLY DRAWING;
A-SA

MATERIALS			
NO.	QTY	DESCRIPTION	MAT'L
A-0	1	OUTER FORK MAST & STEERING HUB	N/A
E-0	1	MOTOR/ DRIVE MOUNT	N/A
32	1	HYDRAULIC HOSE; 32" LONG	HOSE
33	1	HYDRAULIC HOSE; 33 1/2" LONG	HOSE
34	1	S.S. HYDRAULIC TUBE ASSEMBLY, PUMP TO MOTOR, UPPER (HARD LINE)	IN STOCK
35	1	S.S. HYDRAULIC TUBE ASSEMBLY, PUMP TO MOTOR; LOWER (HARD LINE)	IN STOCK
36	1	S.S. HYDRAULIC TUBE ASSEMBLY, PUMP TO MOTOR RETURN	IN STOCK
37	1	S.S. HYDRAULIC TUBE ASSEMBLY, TANK TO PUMP (HARD LINE)	IN STOCK
			PART #
			A-0
			E-0
			431-4-33
			431-4-34
			T-007
			T-008
			T-010
			T-011

EZT3T-011 (#37)

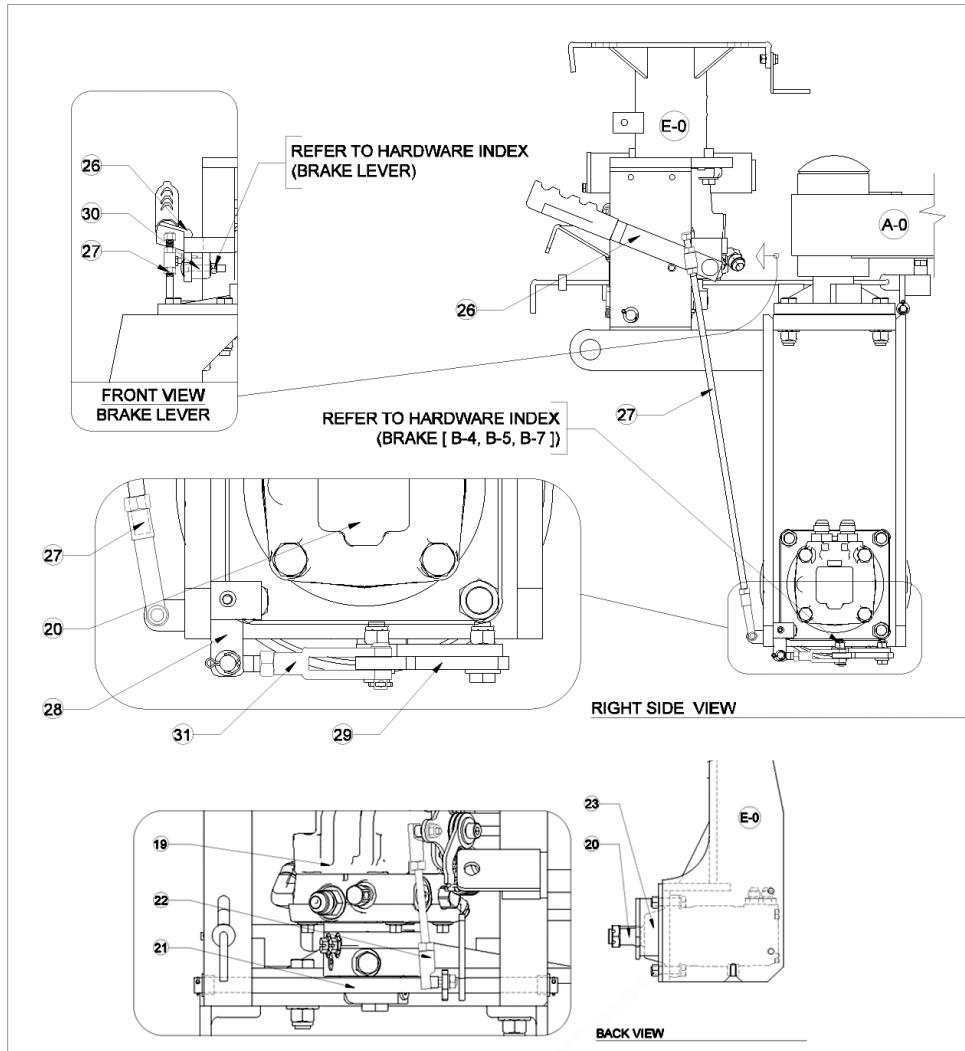
EZT3T-010 (#36)

EZT3T-007 (#34 & 35)

32.1 32.2
 32"
 33.1 33.2
 33 1/2"



Section 6: Brake and Pump Linkages



MATERIALS			
NO.	QTY	DESCRIPTION	MAT'L
E-0	1	MOTOR/ DRIVE MOUNT	N/A
24	1	BRAKE ASSY, RH FOR HYD. MOTOR	IN STOCK
25	1	5 BOLT WHEEL HUB	IN STOCK
26	1	BRAKE LEVER	N/A
27	1	BRAKE LINKAGE	N/A
28	1	BRAKE PIVOT ARM	STEEL
29	1	BRAKE ACTUATION EXTENSION	STEEL
30	1	BRAKE NYLON BUSHING	NYLON
31	1	BRAKE LINKAGE w/ BEND	N/A



MATERIALS			
NO.	QTY	DESCRIPTION	MAT'L
E-0	1	MOTOR/ DRIVE MOUNT	N/A
19	1	HYDRAULIC PUMP, CW, 5/8 w/AUX	IN STOCK
20	1	400cc OMSW MOTOR (TRANSMISSION)	IN STOCK
21	1	HYDRO ROCKER SHAFT	N/A
22	1	HYDRAULIC PUMP LINKAGE	N/A
23	1	BRAKE MOUNT ASSEMBLY	STEEL



Hub & Disk Brake Assembly

MATERIALS				
NO.	QTY	DESCRIPTION	MAT'L	PART #
E-0	1	MOTOR/ DRIVE MOUNT	N/A	E-0
23	1	BRAKE MOUNT ASSEMBLY	STEEL	B-1
24	1	BRAKE ASSY, RH FOR HYD. MOTOR	IN STOCK	CEO18046
25	1	5 BOLT WHEEL HUB	IN STOCK	CEO18500
26	1	BRAKE LEVER	N/A	B-2
27	1	BRAKE LINKAGE	N/A	B-3
28	1	BRAKE PIVOT ARM	STEEL	B-4
29	1	BRAKE ACTUATION EXTENSION	STEEL	B-5
30	1	BRAKE NYLON BUSHING	NYLON	B-6
31	1	BRAKE LINKAGE w/ BEND	N/A	B-7

**DISK BRAKE ASSEMBLY
PART NUMBER: CEO18046**

LEFT VIEW:

LEFT VIEW:

SECTION D-D

1. TAKE THE CASTLE NUT OFF THE TRANSMISSION. THEN, ATTACH THE WHEEL HUB (NO. 25) TO BRAKE ASSY. (NO. 24). USE A TOOTH LOCK WASHER AND THE CASTLE NUT TO FINISH THE BRAKE ASSEMBLY.

TOOTH LOCK WASHER

FINISHED LOOK



Section 7: Electrical Wiring

NOTES:

1. NEGATIVE BATTERY CABLE IS ASSEMBLED TO THE ENGINE MOUNTING PLATE (E-11) OF THE MOTOR/ DRIVE MOUNT (E-0)
2. RESTRAINT CABLE IS ASSEMBLED TO THE STEERING HANDLE CABLE MOUNT (E-15) OF THE MOTOR/ DRIVE MOUNT (E-0)

RIGHT SIDE VIEW

MATERIALS

NO.	QTY	DESCRIPTION	MAT'L	PART #
A-0	1	OUTER FORK MAST & STEERING HUB	N/A	A-0
E-0	1	MOTOR/ DRIVE MOUNT	N/A	E-0
E-17	1	TRANSMISSION COVER GUARD	S.S.	E-17
38	1	10 AMP CIRCUIT BREAKER	IN STOCK	72215
39	1	BREAKER MOUNTING ANGLE	S.S.	E-23
40	1	RED WIRE; 4 1/2" LONG	WIRE	W-003
41	1	MOTOR BREAKER MOUNT	ALUMINUM	E-22
42	1	60 AMP AUTO RESET HI-AMP CIRCUIT BREAKER	IN STOCK	76365
43	1	POSITIVE BATTERY CABLE, AMP TO BATTERY; 9" LONG	WIRE	W-004
44	1	POSITIVE BATTERY CABLE, AMP TO ENGINE SOLENOID; 14 1/2" LONG	WIRE	W-005
45	1	NEGATIVE BATTERY CABLE; 5 1/2" LONG	WIRE	W-006
46	1	STEERING ARM RESTRAINT CABLE	IN STOCK	H-8

**FRONT VIEW
10 AMP BREAKER w/
EZT3 E-23**

1. ATTACH THE 10 AMP BREAKER TO ITS MOUNT (E-23). NEXT TAKE RED WIRE w/ HEAT SHRINK TERMINALS ATTACHED TO BOTH ENDS AND PLACE IT ON THE BATTERY SIDE OF BREAKER. THEN ASSEMBLE THE UNIT TO THE MOTOR/ DRIVE MOUNT.

60 AMP END E-0

RED WIRE (4 1/2" LG) 40

10 AMP END 38

39

1. ATTACH THE 60 AMP BREAKER TO ITS MOUNT (E-22). NEXT TAKE (2) POSITIVE BATTERY CABLES, ATTACH THEM TO BOTH SIDES OF THE BREAKER. (SHORTER CABLE GOES TO BATTERY SIDE)
2. NEXT TAKE THE OTHER END OF THE SMALL RED WIRE AND ATTACH IT TO THE BATTERY SIDE OF THE 60 AMP BREAKER (SHOWN IN DETAIL/ PHOTO)

44

41

42

43

40



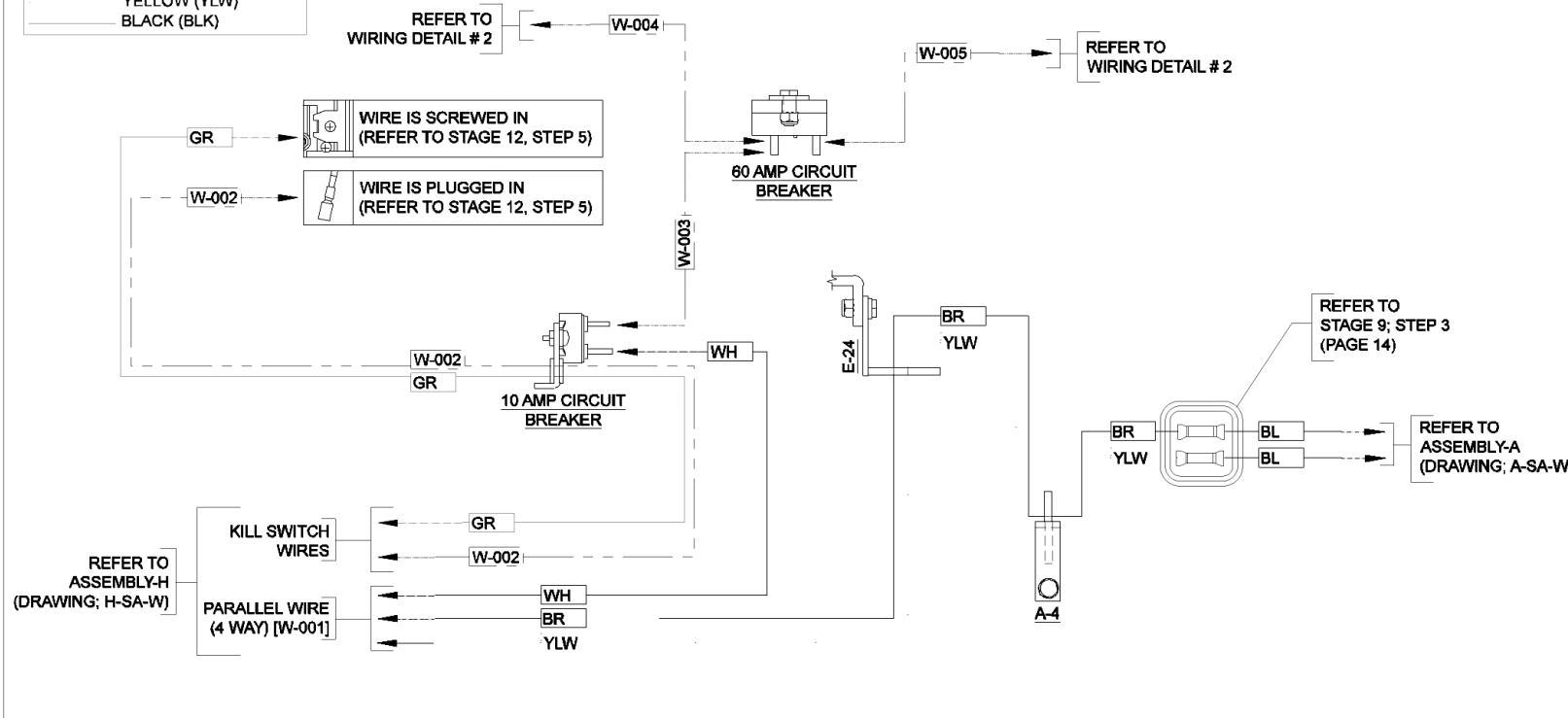
Wiring Schematic #1

WIRING DETAIL # 1

NOTES:

1. PARALLEL WIRE (4 WAY) CONSISTS OF 4 WIRES: GREEN, WHITE, BROWN, & YELLOW
2. REFER TO DRAWING: H-SA-W... FOR PARALLEL WIRE INSTRUCTIONS

WIRE LEGEND	
BLUE (BL)	
BROWN (BR)	
GREEN/YELLOW (G/Y)	
GREEN (GR)	
RED (R)	
WHITE (WH)	
YELLOW (YLW)	
BLACK (BLK)	





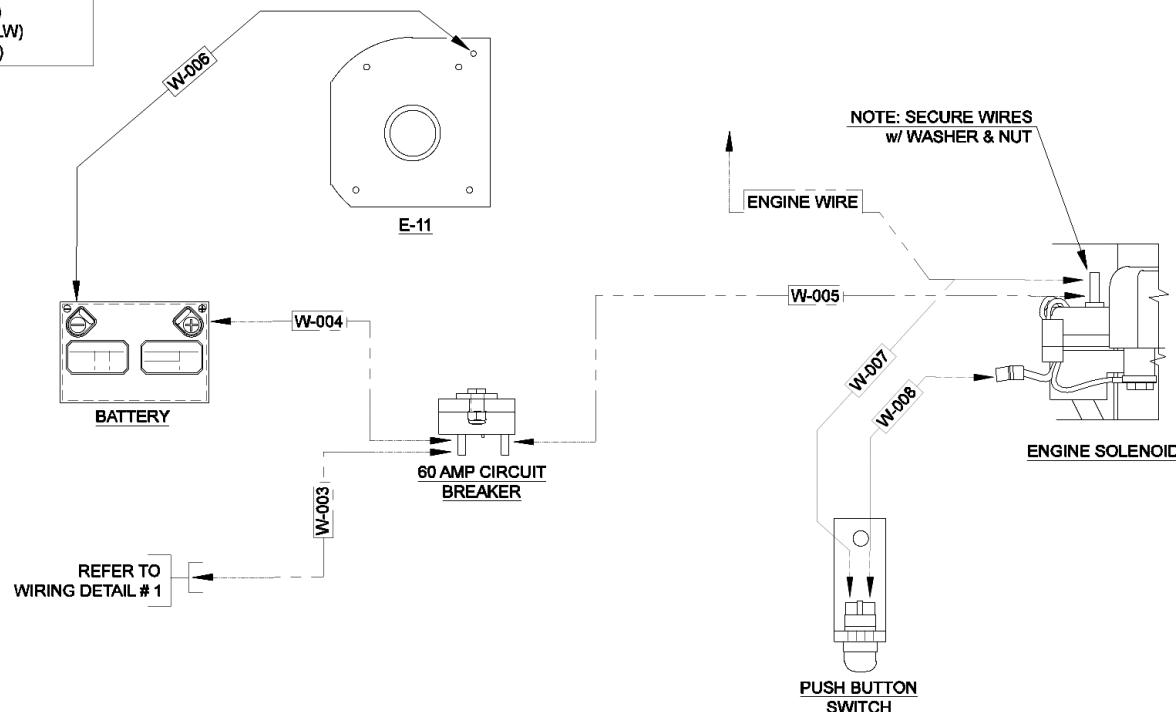
Wiring Schematic #2

WIRING DETAIL # 2

NOTES:

1. PARALLEL WIRE (4 WAY) CONSISTS OF 4 WIRES; GREEN, WHITE, BROWN, & YELLOW
2. REFER TO DRAWING; H-SA-W... FOR PARALLEL WIRE INSTRUCTIONS

WIRE LEGEND	
BLUE (BL)	
BROWN (BR)	
GREEN/ YELLOW (G/Y)	
GREEN (GR)	
RED (R)	
WHITE (WH)	
YELLOW (YLW)	
BLACK (BLK)	



MATERIALS				
NO.	QTY	DESCRIPTION	MAT'L	PART #
-	1	PARALLEL WIRE (4 WAY); 70" LONG	WIRE	W-001
-	1	SINGLE RED WIRE; 70" LONG	WIRE	W-002
40	1	SINGLE RED WIRE; 4 1/2" LONG	WIRE	W-003
43	1	POSITIVE BATTERY CABLE, AMP TO BATTERY; 9" LONG	WIRE	W-004
44	1	POSITIVE BATTERY CABLE, AMP TO ENGINE SOLENOID; 14 1/2" LONG	WIRE	W-005
45	1	NEGATIVE BATTERY CABLE; 5 1/2" LONG	WIRE	W-006
55	1	SINGLE GREEN WIRE; 10" LONG	WIRE	W-007
64	1	SINGLE GREEN WIRE; 3" LONG	WIRE	W-008



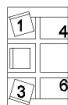
Steering Arm Toggle Switch Wiring Instructions

STEP 1: TOGGLE SWITCH

1. TAKE OUT ALL 6 SCREWS IN EACH PRONG
2. CUT/ REMOVE NUMBER 4, 5 & 6 PRONGS



BOTTOM VIEW
PRE-CUT



BOTTOM VIEW
AFTER-CUT



SWITCH BOOT
73100



TOGGLE SWITCH
PRE-CUT



TOGGLE SWITCH
AFTER CUT

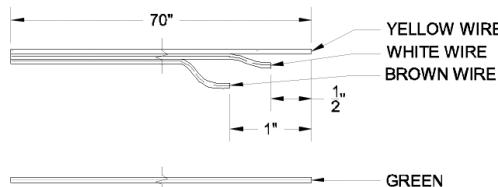


TOGGLE SWITCH
73155

STEP 2: PARALLEL WIRE (4 WAY WIRE)

NOTE: 4 WAY CONSISTS OF 4 DIFFERENT COLORED WIRES:
GREEN, WHITE, BROWN & YELLOW

1. CUT WIRE(S) @ 70" LONG
2. COMPLETELY SEPARATE THE GREEN WIRE (GREEN IS USED IN KILL SWITCH)
3. CUT OFF $\frac{1}{2}$ " OF WHITE WIRE
4. CUT OFF 1" OF BROWN WIRE



MATERIALS			
QTY	DESCRIPTION	MAT'L	PART #
1	TOGGLE SWITCH SPDT (ON/OFF)	IN STOCK	73155
1	TOGGLE SWITCH BOOT	IN STOCK	73100
1	KILL SWITCH & SAFETY TETHER LANYARD	IN STOCK	KST001
1	PARALLEL WIRE (4 WAY) @ 70" LONG	IN STOCK	W-001
1	SINGLE RED WIRE @ 70" LONG	IN STOCK	W-002
3	HEAT SHRINK TERMINAL, RING CRIMP/ SHRINK	IN STOCK	452085
2	HEAT SHRINK TERMINAL, BUTT SPLICING CRIMP/ SHRINK	IN STOCK	921115

STEP 3: TOGGLE & PARALLEL WIRE (4 WAY WIRE)

1. (3) HEAT SHRINK TERMINALS; RING (PT# 452085) ARE CRIMPED & HEATED TO THE WHITE, BROWN & YELLOW WIRES
2. TAKE EACH WIRE AND A SCREW TO ATTACH TO ONE OF THE PRONGS:
 - YELLOW WIRE: ATTACHED TO THE #1 PRONG
 - WHITE WIRE: ATTACHED TO THE #2 PRONG
 - BROWN WIRE: ATTACHED TO THE #3 PRONG



FINISHED LOOK OF TOGGLE SWITCH

- YELLO WIRE W/ TERMINAL
- BROWN WIRE W/ TERMINAL
- WHITE WIRE W/ TERMINAL

STEP 4: TOGGLE & PARALLEL WIRE (4 WAY WIRE)

1. USE ELECTRICAL TAPE TO WRAP AROUND WIRES & TOGGLE (FOR COMPONENTS TO STAY IN PLACE)



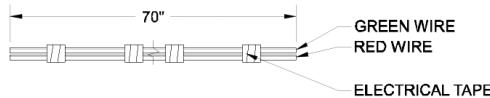
ELECTRICAL TAPE



Steering Arm Kill Switch Wiring Instructions

STEP 5: GREEN WIRE (FROM 4 WAY WIRE)

1. PAIR GREEN WIRE WITH SINGLE RED WIRE (CUT RED WIRE @ 70" LONG)
2. TO HELP FISH THE WIRE THROUGH THE STEERING ARM, TAPE BOTH WIRES TOGETHER IN A FEW SPOTS

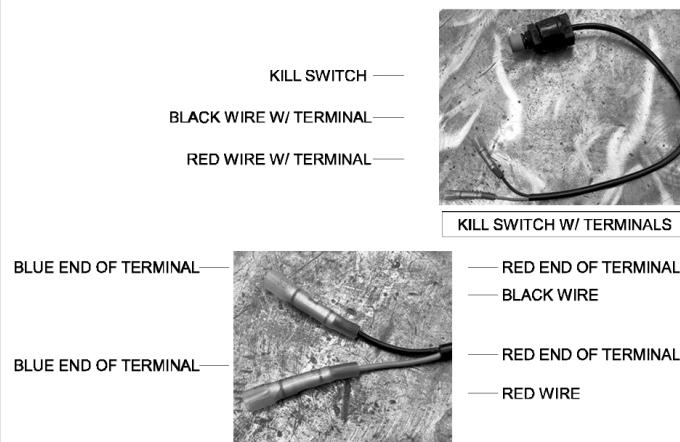


STEP 6: KILL SWITCH

1. CUT OFF EXISTING WIRING HARDWARE FROM KILL SWITCH
2. (2) HEAT SHRINK TERMINALS; BUTT SLICE (PT# 921115) ARE CRIMPED & HEATED TO BLACK & RED WIRES FROM THE KILL SWITCH

****IMPORTANT****

- THE BUTT SLICE TERMINAL HAVE 2 COLOR RINGS SHOWN AT EACH END OF THE TERMINAL (RED RING AT ONE END, BLUE RING ON THE OTHER END)
- BLACK & RED WIRE FROM KILL SWITCH GETS THE RED SIDE OF TERMINAL



STEP 7: KILL SWITCH & GREEN/ RED WIRES

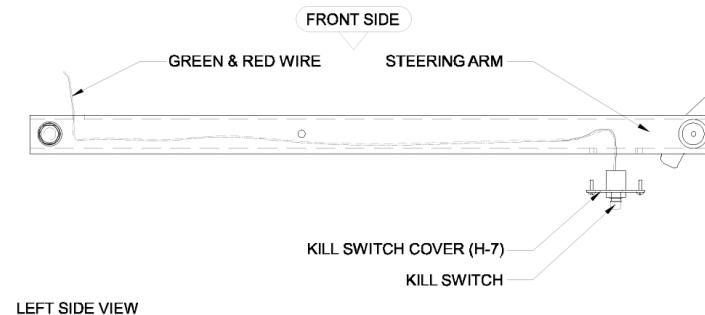
1. THE PAIRED GREEN & RED WIRE WILL ATTACH TO THE OTHER ENDS OF THE HEAT SHRINK TERMINALS
 - GREEN WIRE CONNECTS WITH THE BLACK WIRE
 - RED WIRE CONNECTS WITH THE RED WIRE



FINISHED WIRING

STEP 8: FISH KILL SWITCH WIRING

1. FISH KILL SWITCH WIRING THROUGH THE BACK SIDE 2" HOLE OF STEERING ARM TO THE $\frac{5}{8}$ " HOLE ON FRONT SIDE
2. ATTACH KILL SWITCH TO IT'S COVER (H-7) THEN SCREW COVER TO THE STEERING ARM
NOTE: TETHER LANYARD WILL BE APPLIED TO KILL SWITCH WHEN MOVER IS COMPLETE



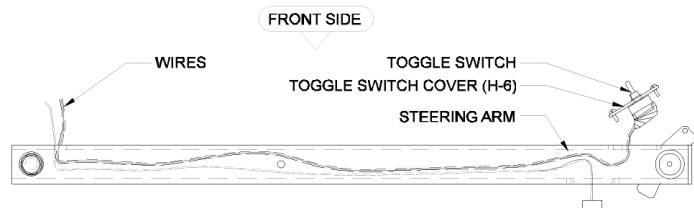


Steering Arm Handle Misc.

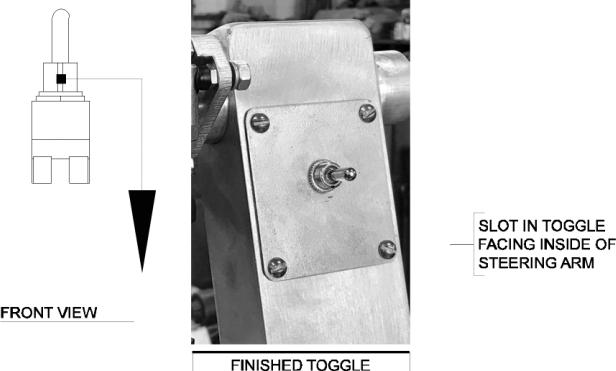
STEERING ARM & CONTROL HANDLE: WIRING DIAGRAM

STEP 9: FISH TOGGLE SWITCH WIRING

1. FISH TOGGLE SWITCH WIRING THROUGH THE FRONT SIDE 2" HOLE OF STEERING ARM TO THE $\frac{5}{8}$ " HOLE ON FRONT SIDE
 2. ATTACH TOGGLE SWITCH TO IT'S COVER (H-6) THEN SCREW COVER TO THE STEERING ARM
- NOTE: WHEN ASSEMBLING THE TOGGLE TO ITS PARTS, MAKE SURE THE SLOT IN THE THREADS IS FACING THE INSIDE OF STEERING ARM



LEFT SIDE VIEW

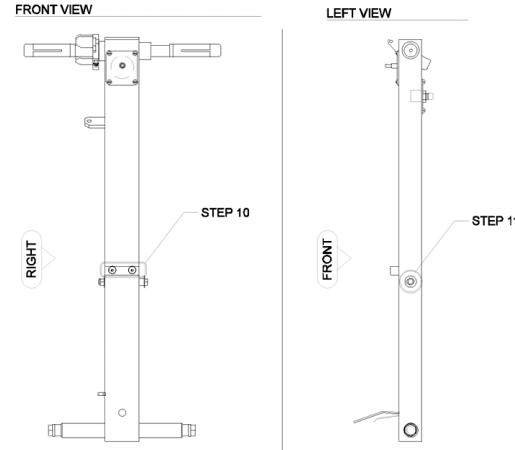


STEP 10: STEERING ARM BUMPER (H-5)

1. ASSEMBLE THE STEERING ARM BUMPER TO THE STEERING ARM

STEP 11: STEERING ARM RESTRAINT CABLE (H-8)

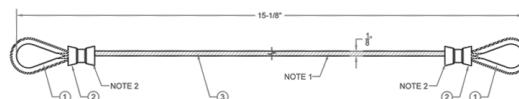
1. ASSEMBLE THE RESTRAINT CABLE (H-8), BUSHING (H-9) & IT'S HARDWARE TO THE STEERING ARM



STEERING ARM RESTRAINT CABLE (H-8)

MATERIALS				
NO.	QTY	DESCRIPTION	MATL.	PART #
1	2	$\frac{3}{8}$ " THIMBLE	IN STOCK	G-419
2	2	$\frac{3}{8}$ " ALUM. OVAL SLEEVE	IN STOCK	45014
3	1	$\frac{3}{8}" \times 7" \times 19" \times 20\frac{1}{2}"$ LONG CABLE	IN STOCK	WIR40080

1. CABLE FOR SMALL THIMBLE: $20\frac{1}{2}"$ LONG (NEW STYLE)
CABLE FOR LARGE THIMBLE: $21\frac{1}{2}"$ LONG (OLD STYLE)
CABLE FOR THE FIRST THIMBLE: $19\frac{1}{2}"$ LONG (VERY OLD STYLE)
2. CRIMP FLUSH WITH THE END OF THE CABLE



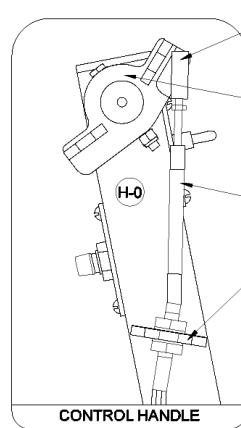


Steering Arm Control Cable

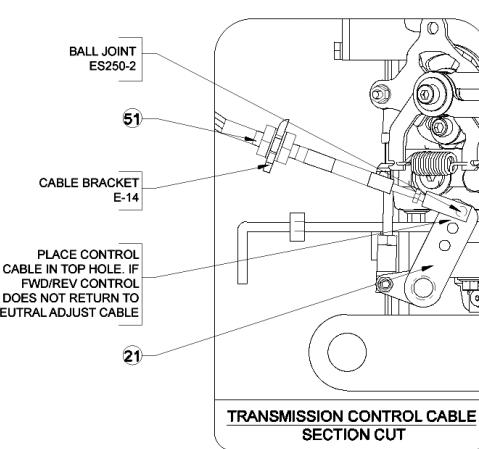


WHEN REPLACING THE TRANSMISSION CONTROL CABLE, FINDING THE NEUTRAL POSITION IN THE FORWARD/REVERSE THUMB CONTROL IS IMPORTANT. THE THUMB CONTROL MUST RETURN TO THE NEUTRAL POSITION WHEN RELEASED. IF NOT, YOU NEED TO ADJUST THE CONTROL CABLE ACCORDINGLY.

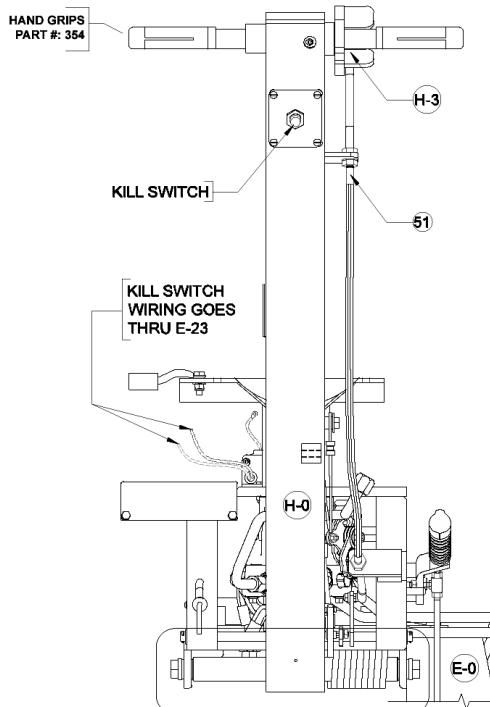
MAY NEED TO ADJUST BRACKET (H-1F)
TO ACCOMMODATE CABLE



MAY NEED TO ADJUST BRACKET (E-14)
TO ACCOMMODATE CABLE



MATERIALS				
NO.	QTY	DESCRIPTION	MAT'L	PART #
A-0	1	OUTER FORK MAST & STEERING HUB	N/A	A-0
E-0	1	MOTOR/ DRIVE MOUNT	N/A	E-0
H-0	1	STEERING ARM & CONTROL HANDLE	N/A	H-0
H-3	1	STEERING ARM THROTTLE	N/A	H-3
21	1	HYDRO ROCKER SHAFT	N/A	M-1
51	1	TRANSMISSION CONTROL CABLE	IN STOCK	32B-36





Circuit Breakers

RIGHT SIDE VIEW

MATERIALS				
NO.	QTY	DESCRIPTION	MAT'L	PART #
A-0	1	OUTER FORK MAST & STEERING HUB	N/A	A-0
E-0	1	MOTOR/ DRIVE MOUNT	N/A	E-0
H-0	1	STEERING ARM & CONTROL HANDLE	N/A	H-0
H-3	1	STEERING ARM THROTTLE	N/A	H-3
47	2	STEERING ARM FASTENER BUSHING	CRS	H-4
48	2	Ø 5/8" NF BOLT; 1 1/2" LG	IN STOCK	COMMON
49	2	5/8" LOCK WASHER	IN STOCK	COMMON
50	1	STEERING ARM RETURN SPRING	IN STOCK	T2 X 1750
51	1	TRANSMISSION CONTROL CABLE	IN STOCK	32B-36



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North Collins, NY 14111

(800) 424-5564 or (716) 337-3760 | Fax: (716) 337-2756

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