A&A MELTERS

WARRANTY

A&A STEEL ENTERPRISES of Canada warrants its product to be free from defects in material and workmanship under normal use and service for a period of one year from date of end-user purchase. Our obligation shall be limited to the repair or replacement of any parts at our option, F.O.B. our factory. Defect of a part or parts of a unit which can be replaced shall not be construed to indicate that the unit is defective. This warranty shall not apply to any part which has been subject to accident, alteration, abuse, misuse, damage or flood, fire or act of god.

A&A STEEL ENTERPRISES of Canada shall not be liable for service, labour or transportation charges or for damages or delay caused by defective material or workmanship or for personal injuries or damages to property caused directly or indirectly by any A&A STEEL product or by its use or operation, or for work done or repairs effected by others. In the case of components purchased by A&A STEEL ENTERPRISES such as controls, gear reduction, motor, pump, etc., the warranty the manufacturer will be extended to the purchaser in lieu of any warranty by the company.

The above warranties are in lieu of all other warranties expressed or implied. No representative or other person is authorised or permitted to make any warranty or assume for the company any liability not strictly in accordance with the foregoing.

Our A&A STEEL melters are designed for long, trouble free life under a wide variety of application conditions with a minimum of maintenance, however, the purchaser and or user should read the maintenance and operation manual before firing and operating any equipment.

January 2021

A & A STEEL ENTERPRISES LTD.
220 Myrnam St. Coquitlam, B.C. Canada V3K 6G4

WARRANTY REGISTRATION CARD

MODEL #:	DATE PURCHASED:	
SERIAL NUMBER:		
CUSTOMER NAME:		
TELEPHONE/FAX		
ADDRESS:		
CITY:	STATE:	ZIP:
DEALER:		
TELEPHONE/FAX:		

A&A Melters - Model - A-40

IMPORTANT NOTE: TO OPERATE YOUR A&A STEEL MELTER SAFELY AND EFFICIENTLY, FOLLOW THESE OPERATING INSTRUCTIONS. FAILURE TO COMPLY MAY RESULT IN VOIDING WARRANTY AND MAY CAUSE SERIOUS INJURIES.

A) INITIAL START UP:

When melter has been purchased and is ready to be placed into service, an overall check should be performed to ensure that the melter is in working order as described in INSPECTION AND FAMILIARIZATION below.

IT IS **VERY IMPORTANT** that the melter is connected to a LIQUID DRAW PROPANE GAS cylinder for which it was designed to operate! If connected to a vapour draw propane tank, incorrect heating characteristics will result.

B) INSPECTION AND FAMILIARIZATION:

1. Read operator's manual for the engine, gear reduction unit and this manual thoroughly to become familiar with the operation of your A&A Steel melter.

2. Ensure all moving components are clear of any objects and are free to move (including interior of melter).

3. Check all mounting bolts are tight, drive belt is correctly aligned (gas engine only) and cotter pins and keys are in place.

4. Grease all moving parts, check engine and reduction gear oil levels. Use manufacturers recommended oil, add if required.

5. Ensure all guards are in place and securely mounted

6. Gas engine only. Engage and disengage Agitator Engaging Lever and Locking Pin to familiarize yourself with their operation (lock in the disengaged position).

C) START UP

1. Move melter to a suitable, level working surface and lock caster wheels. Open exhaust rain cover.

2. Gas engine only. Follow engine manufacturer's procedures and start engine while Engaging Lever is in the disengaged position. Allow sufficient time for warm up. NOTE: The Agitation Rack may move even though disengaged. This is normal as there may be little or no resistance from the Agitation Rack to prevent it from "free-wheeling".

CAUTION: Do **not** wear loose clothing near moving belts or other moving parts.

Once the melter has been inspected and connected to Liquid Propane Gas, the melter is ready to be charged with the first load of material.

IT IS VERY IMPORTANT that the material is of small enough size to allow it to be in direct contact with the bottom surface. This allows the heat to be directly transferred to the material in the least amount of time to avoid any excessive heat build-up. When the material has started to melt into a liquid, it will transfer the heat to the rest of the material very quickly.

3. Follow recommended propane safety precautions and propane torch light up procedures, adjust outlet pressure to 10 psi and light torch. Insert lit torch into Torch Holder. Open exhaust stack

4. Adjust torch to ensure correct position. Tighten Torch Securing Bolt on Torch Holder. Start with low flame for 5 minutes to allow melter to warm up, then open ball valve until firing at a high rate while still maintaining complete combustion (no back flame out of fire tube).

WARNING: DO NOT OVERLOAD ! If the Agitator Engaging Lever is locked in the drive position, or electric motor started before the material has partially melted, the excessive solid material may cause damage to the Agitation Rack or drive mechanism.

5. Always open Material Loading Door from the opposite side of melter to prevent injury from spontaneous ignition which may occur due to a sudden rush of incoming air. Add material to centre of Agitation Rack.

6. Once material has BEGUN to melt (about 10 minutes),
Gas engine - engage Agitator Engaging Lever gradually by removing Locking Pin and increasing tension slowly.
Electric motor - turn power switch ON

Observe:

- material has melted sufficiently (not completely) to allow complete movement of Agitation Rack, if large chunks of material bind Agitation Rack, allow more time for them to melt
- Gas engine only - drive belt is not slipping,
- all moving parts have a uniform motion.

When confirmed all of the above is correct:

Gas engine - the Agitator Engaging Lever can be locked in the drive position.
Electric motor - the power switch can remain ON.

Never run machine empty, this can cause damage to the tub.

NOTE: This melter will heat material very quickly and should NEVER be left unattended. Even when the propane torch is extinguished, temperatures will continue to rise due to the remaining thermal energy stored in the Superheated Air Chamber below (Depending on the amount of material in the melter, the temperature can rise aprox 50 - 100 degrees Fahrenheit).

7. When material is melting and has become a thick, uniform consistency, more material can be added.

8. Check temperature regularly. Heat material to manufacturer's specifications.

9. Once the material has reached correct temperature, adjust propane torch as necessary.

10. Open material Loading Door (from opposite side), add material to centre of moving Agitation Rack.

11. Add material as required.

C) SHUT DOWN:

1. Upon completion of working period, the melter should be as empty as possible. This will ensure a quick warm up for the following working period and prevent any stress on moving components due to excessive solid material.

2. Remove propane torch. Close all valves.

3. Before transporting, melter should be as empty as possible, cool to the touch and the residual material should be solidified.

D) LIFTING - BY CRANE:

The A&A Steel A-40 can be lifted vertically by utilizing the 4 eye bolts at each corner.

The weight of the A-40 is approximately 800 lbs. empty.

It should be as empty as possible, cool to the touch and the residual material should be solidified before lifting.

E) LIFTING - MANUALLY:

The A-40 can be manually lifted (the power pack can be removed to reduce its weight).

1. The melter must be completely empty and cool to the touch.
2. Remove the safety guard(s).
3. Remove the Connecting Link cotter pins and remove the arm.
4. Remove the Engine/Reduction Power Pack. (To prevent any gasoline leaks, the gas cap should be tightened and taped shut - gas motor only).

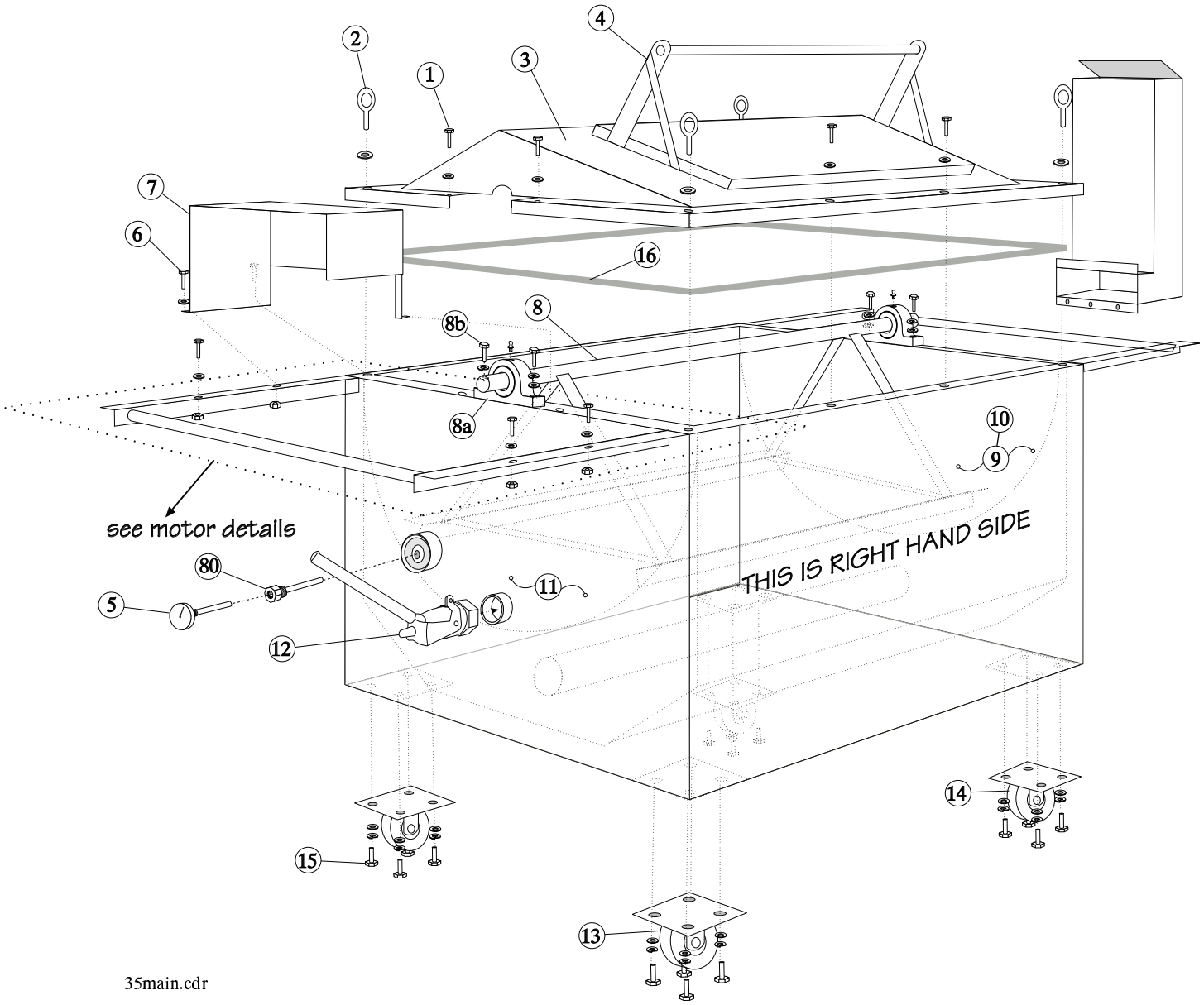
A&A STEEL - A-40 PARTS LIST

January 2013

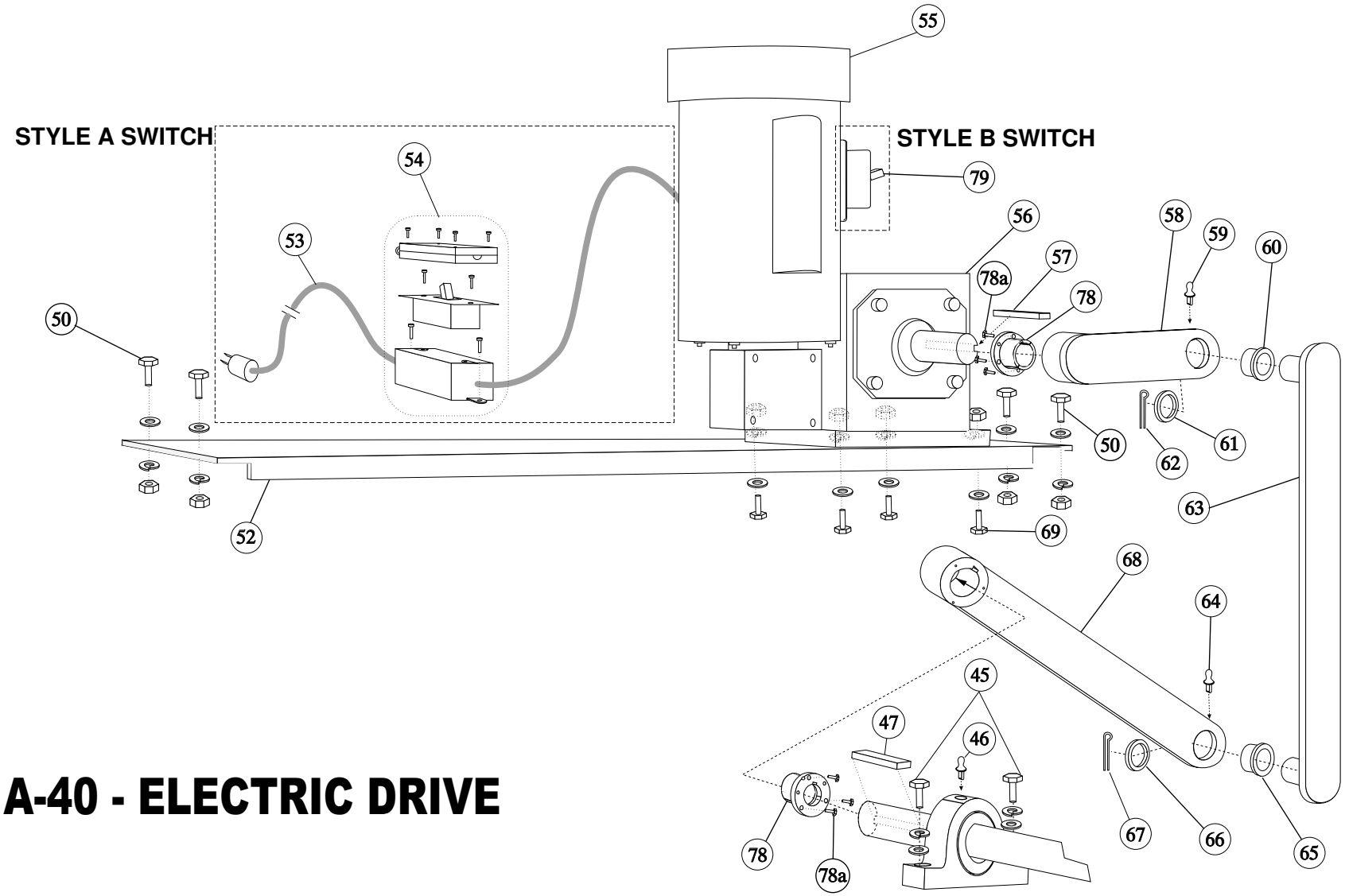
NO. - DESCRIPTION

1 - 1/2" x 1 1/4" UNC c/w Flat Washer
2 - 1/2" x 1" Eye Bolt (2000lb) c/w Flat Washer
3 - Top Cover
4 - Loading Door
5 - 4" Thermometer (200-700 F)
6 - 1/2" x 1 1/2" UNC c/w Flat Washer
7 - Protective Guard Arm
8 - Agitation Rack (complete assembly)
8b - **Bearing Bolts, 8A** Bearings - P207
9 - Side Cover (right)
10 - Side Cover (left)
11 - End Cover
12 - Material Tap Valve (gate valve)
13 - Pivoting Caster Wheel
14 - Fixed Caster Wheel
15 - 1/2" x 1 1/2" UNC
16 - Gasket
17 - Engine Drive Pulley
18 - Engine Drive Pulley Insert
19 - Agitator Engage Pulley
20 - Agitator Drive Pulley Insert
21 - B39 Drive Belt
22 - Reduction Drive Pulley
23 - Reduction Drive Pulley Insert
24 - 3/16" Key
25 - 5/16" Key
26 - 1/2" x 1 1/4" UNC Pivot Bolt
27 - 1/2" Locknut, Flat Washer
28 - Agitator Engaging Lever
29 - Agitator Lever 6" Return Spring
30 - Agitator Locking Pin
31 - Agitator Lever Mounting Bracket
32 - 1/4" Key
33 - Reduction Unit Drive Arm
34 - Connecting Link Insert Bushing
35 - 1" Flat Washer
36 - 1/8" x 2" Cotter Pin
37 - 1/8" NPT Grease Nipple
38 - Connecting Link
39 - Connecting Link Insert Bushing
40 - 1" Flat Washer
41 - 1/8" x 2" Cotter Pin
42 - 1/8" NPT Grease Nipple
43 - Agitator Drive Arm
44 - Reduction Unit
45 - 1/2" x 2 1/2" UNC c/w Flat Washer & Lock Washer
46 - NTN Grease Nipple
47 - 3/8" Key
48 - 4 HP I/C Honda Gas Engine
49 - 3/8" x 2 1/2" UNC c/w Lock Washer
50 - 1/2" x 1 1/2" UNC c/w Lock Washer & Nut
51 - Gas Drive Base
52 - Electric Drive Base
53 - 14 ga. 3 Wire Cord
54 - Switch w Overload Protection
55 - 1/2 HP 115V Single Phase Motor
56 - Reduction Unit
57 - 1/4" Key
58 - Reduction Unit Drive Arm
59 - 1/8" NPT Grease Nipple
60 - Connecting Link Insert Bushing
61 - 1" Flat Washer
62 - 1/8" x 2" Cotter Pin
63 - Connecting Link
64 - 1/8" NPT Grease Nipple
65 - Connecting Link Insert Bushing
66 - 1" Flat Washer
67 - 1/8" x 2" Cotter Pin
68 - Drive Arm Agitator
69 - 1/2" x 1 1/2" UNC Bolt c/w Lock Washer
70 - Exhaust Cover (left)
71 - Exhaust Cover (right)
72 - Exhaust Stack
72a - 1/4" Hex Bolts
73 - Exhaust Manifold
74 - Torch
74a - Torch Oriface Plug
74b - Goose Neck
74c - Appollo Ball Valve
74d - 3/8" x 20' Hose
74e - Regulator
74f - M 306
74g - 486 B
74h - 486 C
75 - Torch Holder
75a - 3/8" UNC Bolt c/w Lock Washer
76 - 1/4" x 1" UNC Torch Securing Bolt
76a -
77 - Belt Guard
78 - P 1 x 1 1/4" Bushing (cut to size)
78a - 1/4" UNC Bolt
79 - Style B Type Toggle
80 - Thermowell Sleeve

A&A STEEL ENTERPRISES - MODEL A-40



A&A STEEL ENTERPRISES



A-40 - ELECTRIC DRIVE

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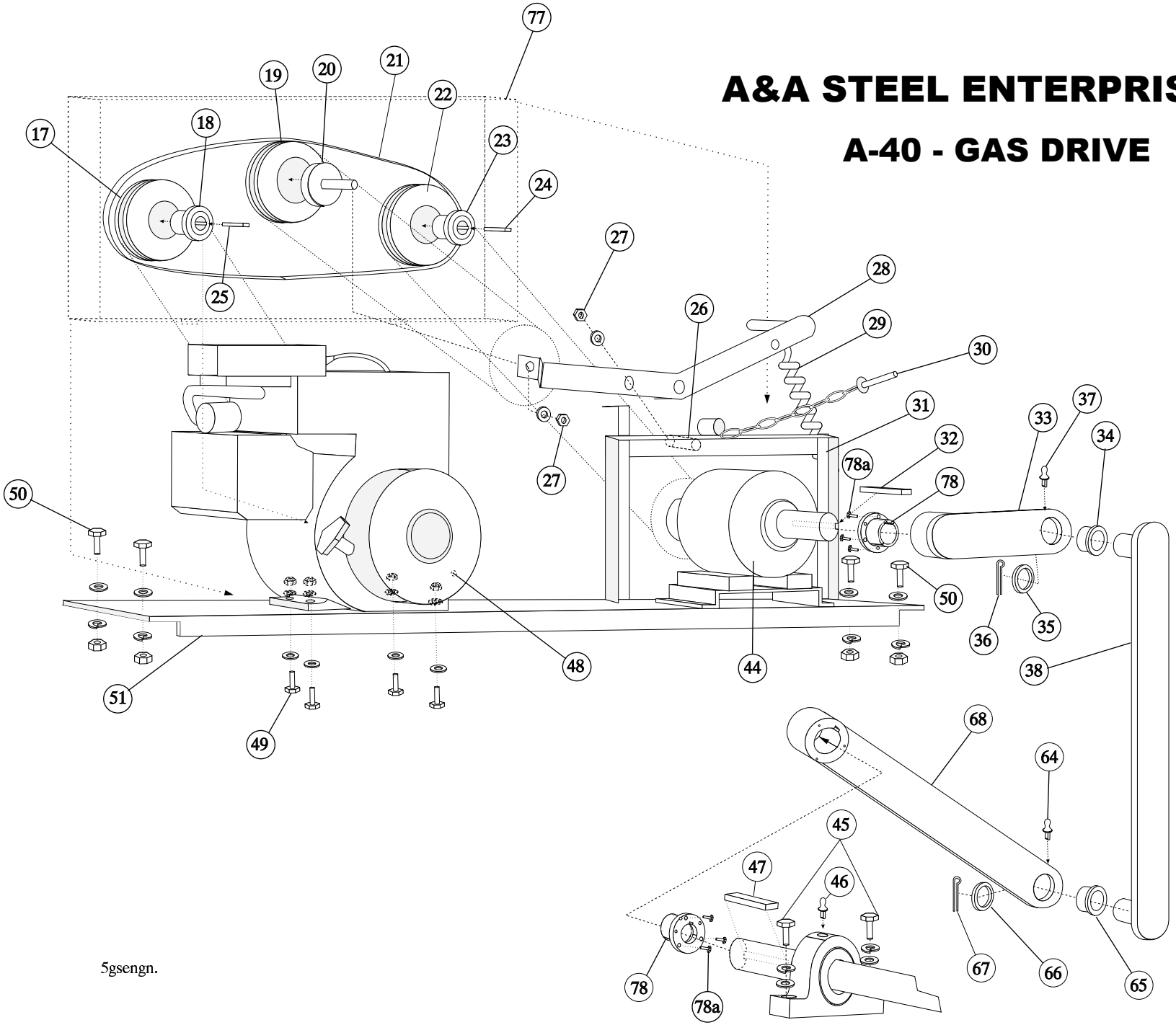
A&A STEEL ENTERPRISES

A-40 - GAS DRIVE



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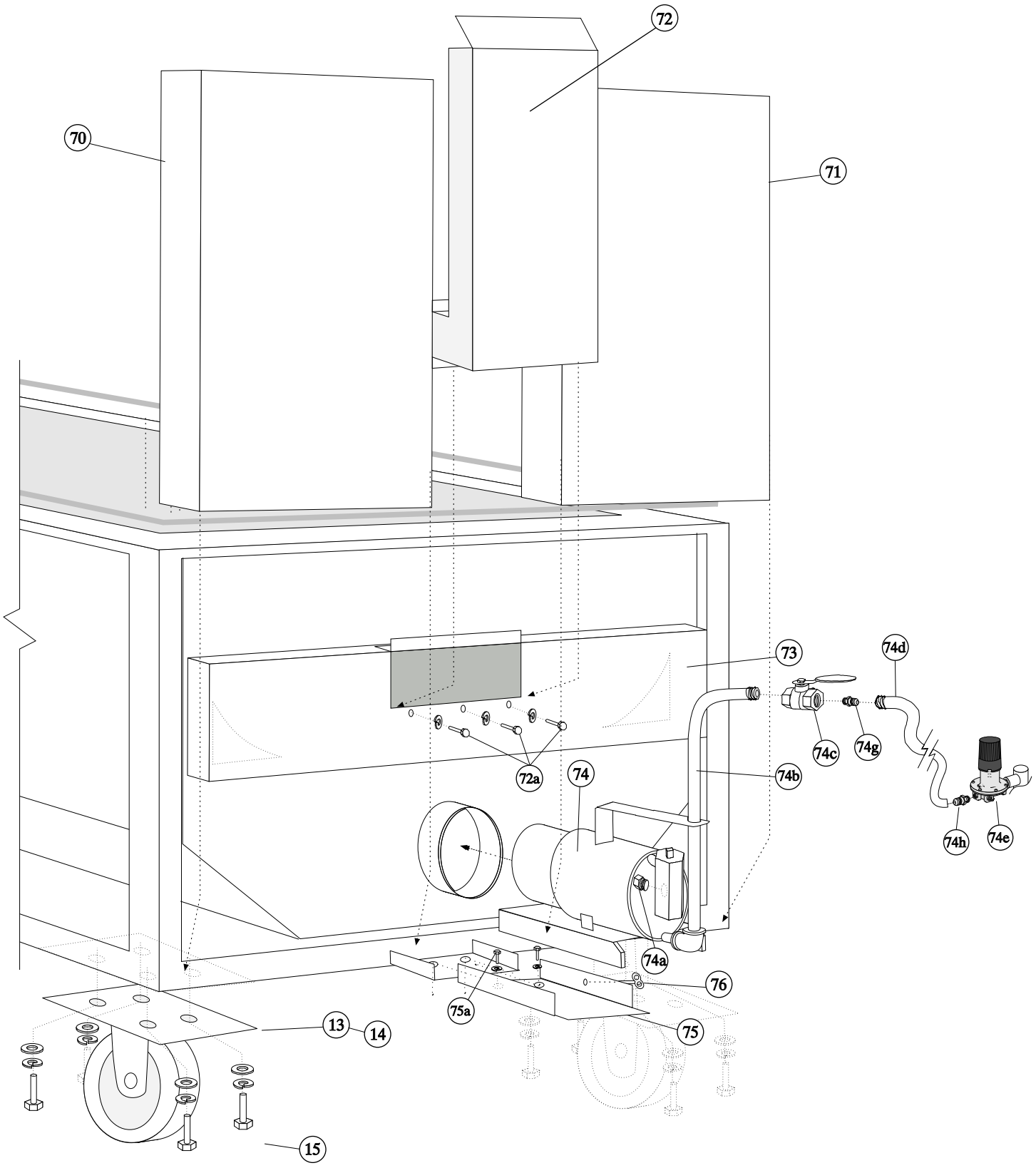
A-40 - EXHAUST END



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A&A Melters
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Recommended Maintenance schedule

Daily - Check motor and crankcase oil level, trailer lights, torch alignment, Breakaway battery charge

50 hours - Check all nuts, bolts, belts, pulley alignments + grease all nipples

100 hours - Clean air filter, change motor oils, and check propane fittings for leaks

300 hours – Clean sediment bowl in motor

500 hours – Check all drive arm bolts, bushings, wheel nuts, gear box oil level, tire pressure

1000 hours – Clean tub out, pull agitator, check clearances between tub and agitator, check pillow block bearings, brakes, wheel bearings, material valve, kettle mounting bolts, safety chains, coupler